ASX Announcement

13 May 2024

ASX: OD6

High Metallurgical Recoveries Continue at Splinter Rock Project

OD6 Metals Limited (**OD6** or the **Company**) is pleased to announce that high metallurgical recoveries continue to be achieved at Splinter Rock, from Phase 3 samples tested at the Australian Nuclear Science Organisation (**ANSTO**).

Highlights:

- **Achieved high metallurgical recoveries**, up to 90%, of Magnet Rare Earth Elements (**MagREE**) in multiple Prospect areas, across 71 new samples
- **Average ~60% MagREE recovery** at 25g/l HCl (excluding basin edges and carbonaceous shales)
  - Centre Prospect: **42% to 90% recovery of MagREE**
  - Inside Centre Prospect: **44% to 76% recovery of MagREE**
  - Prop Prospect: **41% to 77% recovery of MagREE**
- Importantly **recoveries for all magnet rare earth oxides (MagREO) inclusive of Nd, Pr, Dy, Tb are similar**. This is the key to overall project economics for any clay hosted rare earth project.
- The data is being considered as part of the future Mineral Resource Estimate Upgrade expected to be available this quarter.
- Further Phase 4 metallurgical leaching and processing optimisation work underway at ANSTO
- All assays contained in this ASX announcement are based on the 4-Acid soluble digestion method, aligning with the reporting of geological drill assays and the Mineral Resource Estimate.

Brett Hazelden, Managing Director, commented:

"The results continue to show that the Splinter Rock Recoveries are as good as or better than the Brazilian Clay hosted Rare Earth plays that have gained so much attention over the last 12 months, and continues to affirm that we are Australia's premier clay-hosted rare earth deposit.

The Inside Centre recoveries of ~60% when combined with grades of between 1,400 to 2,200ppm TREO, across an extensive 2km by 1km areas, with substantial thicknesses between 20 to 77m, a low stripping ratio, plus low acid consumptions continues to be a standout for the company.

These metrics align closely with the essential value drivers we believe are crucial for the economic viability of clay-hosted rare earth projects both in Australia and globally. At the Splinter Rock Project we have no private royalties, do not sit over farming land, are located in a known wind and solar renewable energy corridor, plus we are only a short distance to the major port of Esperance.

We look forward to these factors being considered as part of our future Mineral Resource Estimate upgrade scheduled for later this quarter"

MagREE (Magnet Rare Earths) = Nd + Pr + Tb + Dy)
MagREO (Magnet Rare Earth Oxide) = Nd_2O_3 + Pr_6O_{11} + Tb_4O_7 + Dy_2O_3
TREO (Total Rare Earth Oxide) = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3.

Metallurgical Sample Selection

A total of 71 samples were selected from a wide variety of clays, locations and depths to further develop a geo-metallurgical understanding of recovery across the various regolith types at our two large prospects at Splinter Rock (Centre and Prop).

Samples were chosen based on differing geographic locations, REE grades, colours, chemical compositions, AEM conductivity, proximity to granite, basin position (including paleo valley/channel positions) and inferred geological genesis. Refer to figures 1, 2 and 3 for Phase 3 sample locations along with those previously completed during Phases 1 and 2.

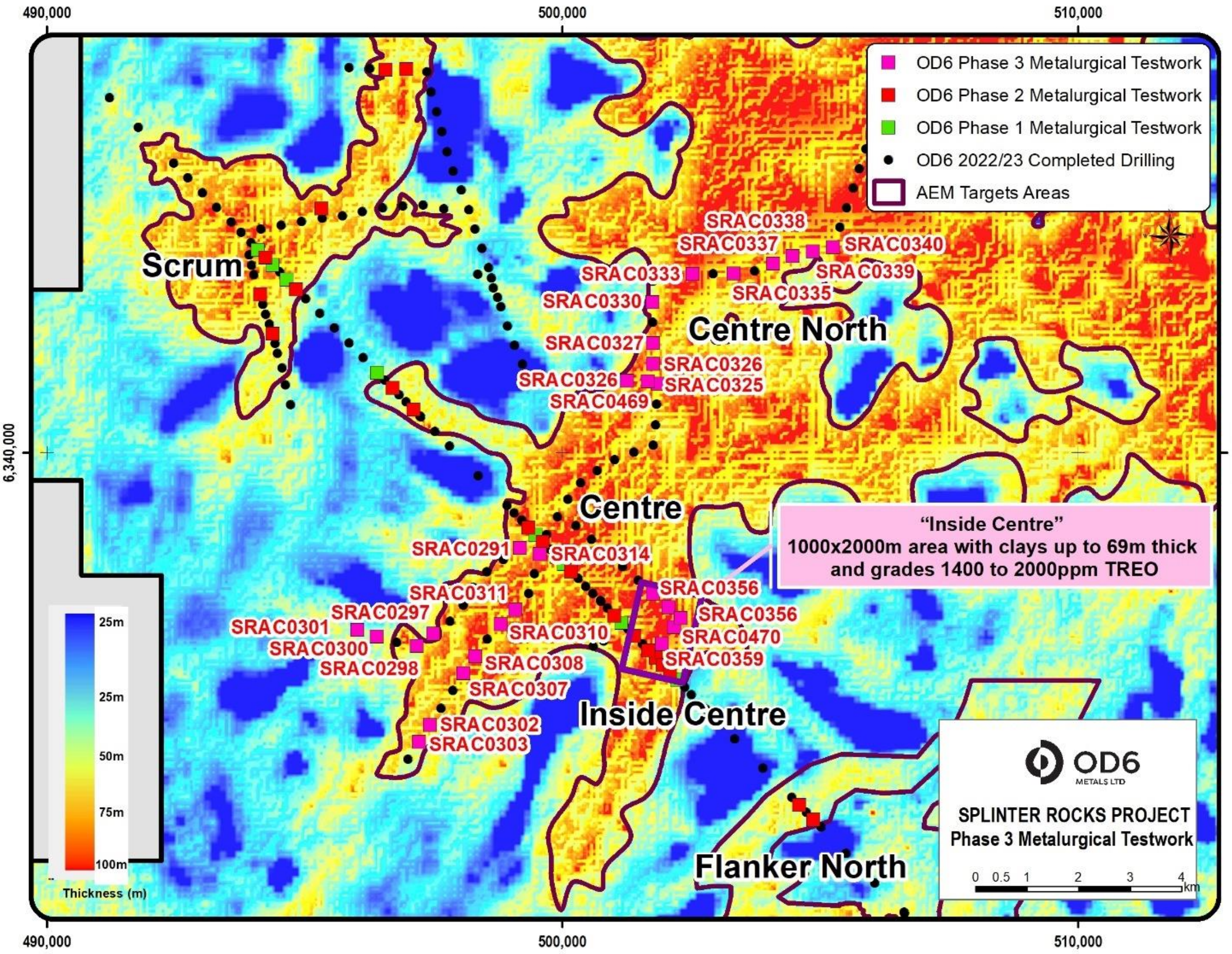


Figure 1: Splinter Rock Scrum and Centre metallurgical sample drill hole locations on AEM model clay thickness

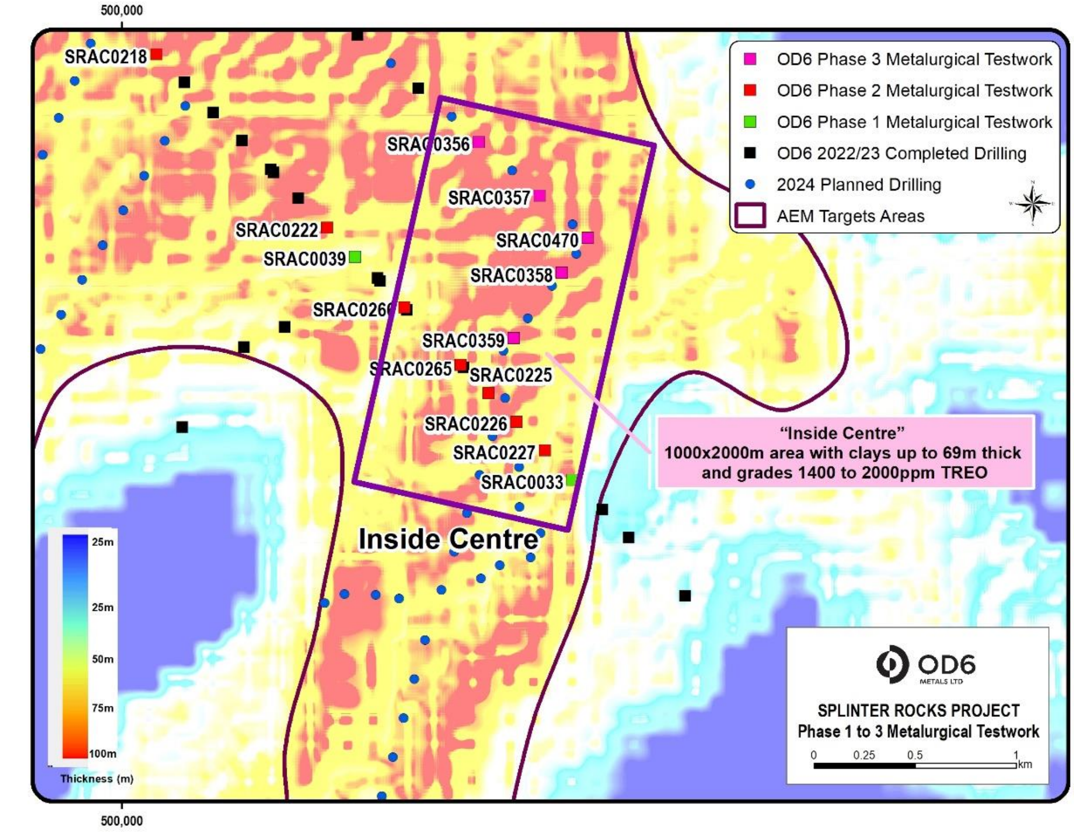


Figure 2: Splinter Rock Inside Centre metallurgical sample drill hole locations on AEM model clay thickness

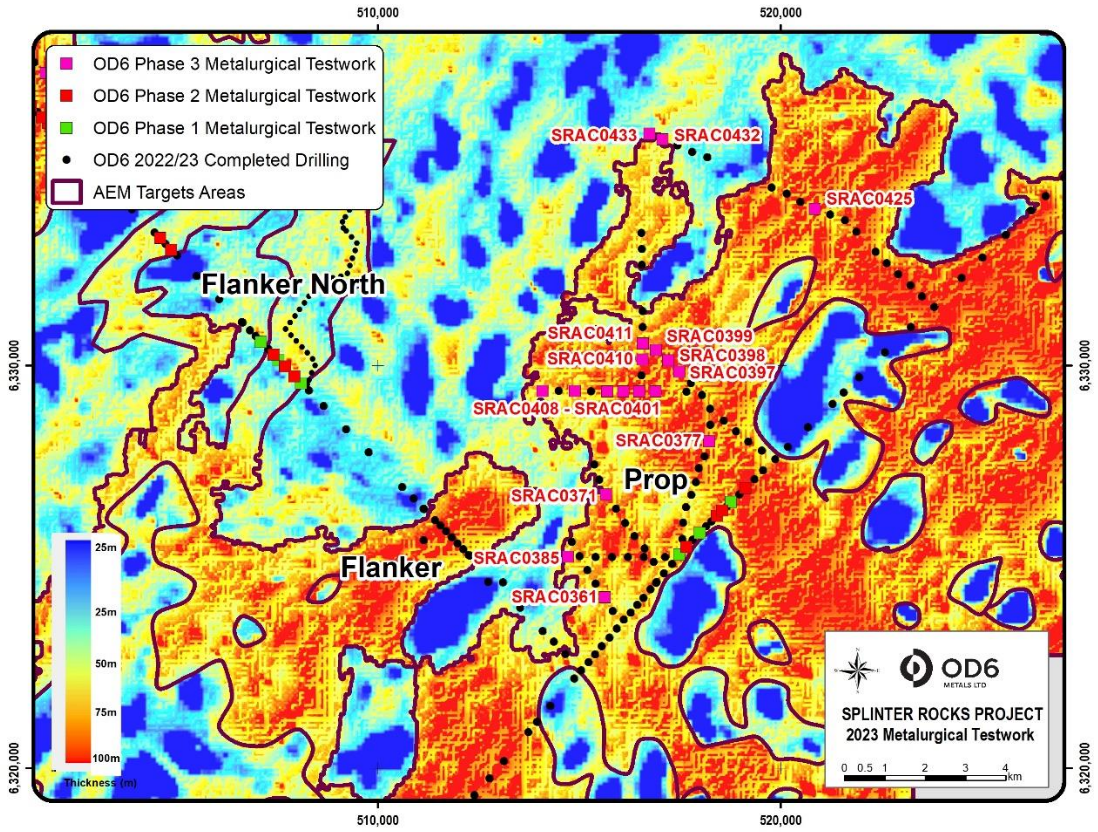


Figure 3: Splinter Rock Prop and Flanker metallurgical sample drill hole locations on AEM Model clay thickness

Centre Prospect Results

Centre Prospect results are presented in Table 1 and Figure 4. These results are based on three geological locations, each with its own clay setting and granite basin boundaries. The main Centre Prospect is a large clay basin located within an elevated tableland, featuring multiple feeder channels and Booanya granite to the north.

Based on the recovery results, the following observations can be made:

Inside Centre

- Is a significant feeder channel heading northeast into the main Centre Basin
- MagRE Recoveries (extractions) across all four MagRE elements average between 44% and 76%.
- Areas on the margin of the clay basin have lower recovery, likely due to the transition between clay and saprock due to weathering.
- No carbonaceous shales are found in this channel

Centre North

- Is a large Clay basin to the north and western edge of the main prospect
- MagRE Recoveries (extractions) across all four MagRE elements average between 42% to 90%.
- A carbonaceous shale (black clay) located in parts of the basin is likely the remnants of a historic estuary. Recoveries and grades of rare earth located in this carbonaceous material are generally lower and have a corresponding increase in sulphur levels.
- Below the carbonaceous shales recoveries and grades generally increase significantly.

Centre

- Is a large Clay Basin covering a vast area in the southern western area of the main prospect
- MagRE Recoveries (extractions) across all four MagRE elements average between 48% to 68%.
- Areas on the margin of clay basin have lower recovery, likely due to the transition between clay and saprock due to weathering.
- A carbonaceous shale (black clay) located in parts of the basin is likely the remnants of a historic estuary. Recoveries and grades of rare earth located in this carbonaceous material are generally lower and have a corresponding increase in sulphur levels.
- Below the carbonaceous shales recoveries and grades generally increase significantly.

Table 1: Centre Prospect MagRE acid leach recovery for various drill hole locations, intercepts and sample types

Composite ID		Head Assay		% MagRE Recovery					Sample Selection location, rock type, colour
		TREO	MagREO	Nd	Pr	Tb	Dy	MagRE	
		ppm	ppm	%	%	%	%	%	
Inside Centre	SRAC0356 51-72m	1842	454	44%	42%	48%	44%	44%	(brown, red, grey clay)
	SRAC0356 72-79m	952	193	75%	73%	75%	74%	74%	
	SRAC0357 39-54m	2108	479	44%	41%	40%	38%	43%	(grey clay)
	SRAC0357 54-90m	1787	409	65%	63%	66%	64%	64%	
	SRAC0358 36-54m	1473	282	76%	75%	71%	67%	76%	(cream, grey clay)
	SRAC0358 54-84m	1984	595	56%	55%	57%	56%	56%	
	SRAC0359 27-51m	1495	291	51%	51%	48%	46%	51%	(brown, green clay)
	SRAC0359 51-87m	1470	338	62%	60%	60%	58%	61%	
	SRAC0470 33-57m	2335	539	35%	38%	43%	39%	36%	(brown clay)

Composite ID		Head Assay		% MagRE Recovery					Sample Selection location, rock type, colour
		TREO	MagREO	Nd	Pr	Tb	Dy	MagRE	
		ppm	ppm	%	%	%	%	%	
Centre North	SRAC0325 33-43m	2457	682	44%	43%	49%	50%	44%	(black clay)
	SRAC0326 18-27m	2811	618	90%	90%	84%	80%	90%	(brown clay)
	SRAC0327 30-45m	1207	270	46%	46%	49%	48%	46%	(white clay)
	SRAC0328 24-42m	1564	348	69%	69%	66%	62%	69%	(grey clay)
	SRAC0328 42-52m	1160	252	1%	1%	20%	28%	3%	
	SRAC0330 30-45m	1696	338	52%	48%	49%	51%	51%	(grey clay)
	SRAC0333 30-42m	3218	1013	71%	70%	79%	79%	72%	(grey clay)
	SRAC0333 42-73m	1064	286	75%	73%	76%	73%	74%	
	SRAC0335 39-60m	1061	226	79%	78%	74%	70%	78%	(grey clay)
	SRAC0337 39-51m	870	181	46%	38%	47%	47%	44%	(grey clay)
	SRAC0337 51-63m	1287	327	56%	50%	66%	66%	56%	
	SRAC0338 30-42m	1338	351	9%	8%	15%	16%	10%	(grey clay)
	SRAC0339 51-63m	1616	411	43%	38%	50%	51%	42%	(brown, grey clay)
	SRAC0340 48-60m	1571	344	61%	58%	64%	64%	60%	(grey, brown clay)
	SRAC0340 60-72m	2033	377	57%	56%	58%	56%	57%	
	SRAC0469 39-48m	1265	342	51%	53%	54%	51%	52%	(brown, black clay)
	SRAC0469 48-70m	1638	367	49%	50%	56%	53%	49%	
Centre	SRAC0291 21-33m	1384	305	48%	47%	58%	55%	48%	(brown, grey, black clay)
	SRAC0291 33-49m	809	184	82%	81%	78%	74%	81%	
	SRAC0297 18-27m	1834	456	8%	8%	10%	8%	8%	(grey clay)
	SRAC0297 27-36m	1833	432	48%	48%	54%	54%	48%	
	SRAC0298 12-27m	1497	352	10%	9%	16%	16%	10%	(brown clay)
	SRAC0298 27-47m	1885	487	12%	9%	22%	20%	12%	
	SRAC0300 12-21m	2421	589	3%	3%	5%	5%	3%	(grey, brown clay)
	SRAC0300 21-39m	845	136	49%	46%	50%	45%	48%	
	SRAC0300 39-55m	1504	381	60%	58%	60%	56%	59%	
	SRAC0301 21-33m	940	175	34%	32%	43%	42%	34%	(brown, grey clay)
	SRAC0302 27-41m	1031	251	66%	68%	63%	61%	66%	(black clay)
	SRAC0303 21-39m	1024	221	53%	52%	52%	48%	53%	(dark grey clay)
	SRAC0307 18-27m	2605	624	27%	25%	24%	25%	27%	(brown clay)
	SRAC0308 12-24m	1629	342	12%	10%	14%	14%	12%	(cream, dark grey clay)
	SRAC0310 36-42m	973	231	20%	19%	20%	17%	20%	(grey clay)
	SRAC0310 42-50m	1502	374	68%	65%	73%	72%	67%	
	SRAC0311 42-60m	1138	285	58%	57%	62%	63%	59%	(grey clay)
	SRAC0314 27-39m	1615	242	39%	39%	42%	40%	39%	(grey clay)

Note: There will be some variation between original head grade total assay and the sum of residual solid and liquor assays which is not accounted for. Recoveries only reflect initial rare earth leaching, with further losses expected in precipitation, impurity removal, purification and drying.

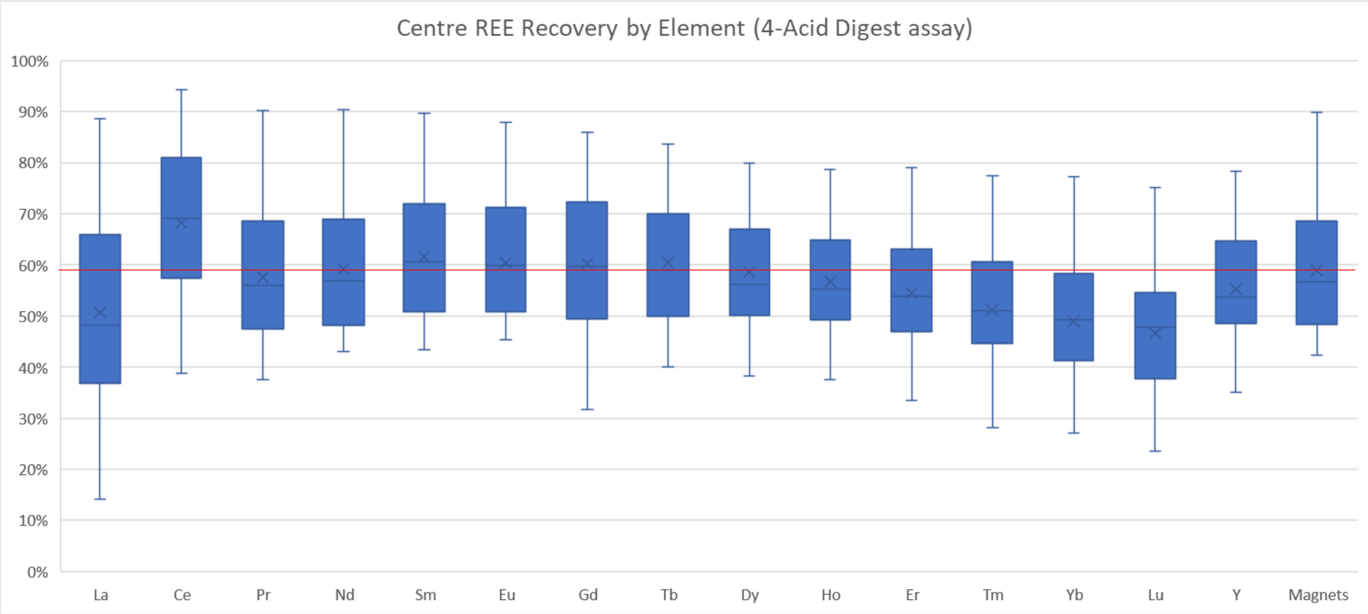


Figure 4: Centre Prospect REE Recovery by Element (>40% MagREO recovery)

Prop Prospect Results

Prop Prospect results are presented in Table 2 and Figure 5. The Prop Prospect is located at the lowest elevation at Splinter Rock and is surrounded by Booanya granite to the north and south, is interpreted to be a paleo-valley filled with clay, featuring multiple feeder channels.

Based on the recovery results it can be observed that:

- MagRE Recoveries (extractions) across all four MagRE elements are more variable, averaging between 41% and 77%.
- Areas on the margin of clay basin and also to the west have lower recovery, most likely due to the transition between clay and saprock caused by weathering.
- The highest recoveries are located in the centre of the Prop deposit along a central NW to SE channel
- Other rare earth elements are recovered in similar quantities with most elements exhibiting a broader range of recoveries
- Some black carbonaceous shales (black clay) have been located in parts of the basin and are likely remnants of a historic estuarine river. Recoveries and grades of rare earth located in this carbonaceous material are generally lower and have a corresponding increase in sulphur levels.

Table 2: Prop Prospect MagRE acid leach recovery for various drill hole locations, intercepts and sample types

Composite ID		Head Assay		% MagRE Recovery					Sample Selection location, rock type, colour
		TREO	MagREO	Nd	Pr	Tb	Dy	MagRE	
		ppm	ppm	%	%	%	%	%	
Prop	SRAC0361 30-42m	817	195	19%	14%	23%	21%	18%	(Red, brown clay)
	SRAC0371 48-56m	923	229	49%	48%	43%	44%	49%	(brown, green clay)
	SRAC0377 39-61m	1644	356	54%	51%	56%	58%	53%	(grey, brown, purple clay)

Composite ID	Head Assay		% MagRE Recovery					Sample Selection location, rock type, colour
	TREO	MagREO	Nd	Pr	Tb	Dy	MagRE	
	ppm	ppm	%	%	%	%	%	
SRAC0385 24-39m	1027	216	0%	-1%	4%	3%	0%	(red clay)
SRAC0397 24-33m	911	199	66%	61%	70%	69%	65%	(grey, red clay)
SRAC0397 54-68m	990	168	56%	50%	32%	27%	53%	
SRAC0398 21-33m	935	200	11%	14%	21%	20%	12%	(grey clay)
SRAC0398 33-45m	1229	262	50%	49%	44%	42%	49%	
SRAC0398 45-54m	677	146	48%	41%	59%	60%	47%	
SRAC0399 18-27m	715	160	67%	64%	68%	67%	66%	(grey clay)
SRAC0399 27-37m	779	174	69%	63%	66%	65%	68%	
SRAC0401 66-78m	543	165	47%	40%	51%	52%	46%	(brown clay)
SRAC0402 18-21m	3315	828	69%	68%	74%	72%	69%	(red clay)
SRAC0403 42-57m	843	207	41%	37%	32%	31%	39%	(brown clay)
SRAC0403 57-68m	1026	207	29%	25%	35%	32%	28%	
SRAC0404 12-24m	1510	358	-7%	-9%	-5%	-3%	-7%	(brown clay)
SRAC0406 24-33m	1114	264	-3%	-9%	-9%	-7%	-4%	(grey clay)
SRAC0406 33-56m	1502	361	49%	53%	29%	24%	49%	
SRAC0408 15-39m	1217	272	-4%	-1%	1%	2%	-3%	(grey clay)
SRAC0410 30-54m	1166	277	14%	17%	14%	11%	14%	(grey, brown clay)
SRAC0410 54-66m	988	241	43%	40%	30%	29%	41%	
SRAC0411 36-57m	905	242	33%	29%	43%	46%	33%	(grey, brown clay)
SRAC0425 45-82m	1590	401	37%	38%	39%	42%	37%	(black, grey clay)
SRAC0432 27-41m	1252	300	43%	45%	44%	42%	43%	(brown clay)
SRAC0433 12-27m	865	215	78%	76%	68%	66%	77%	(brown clay)

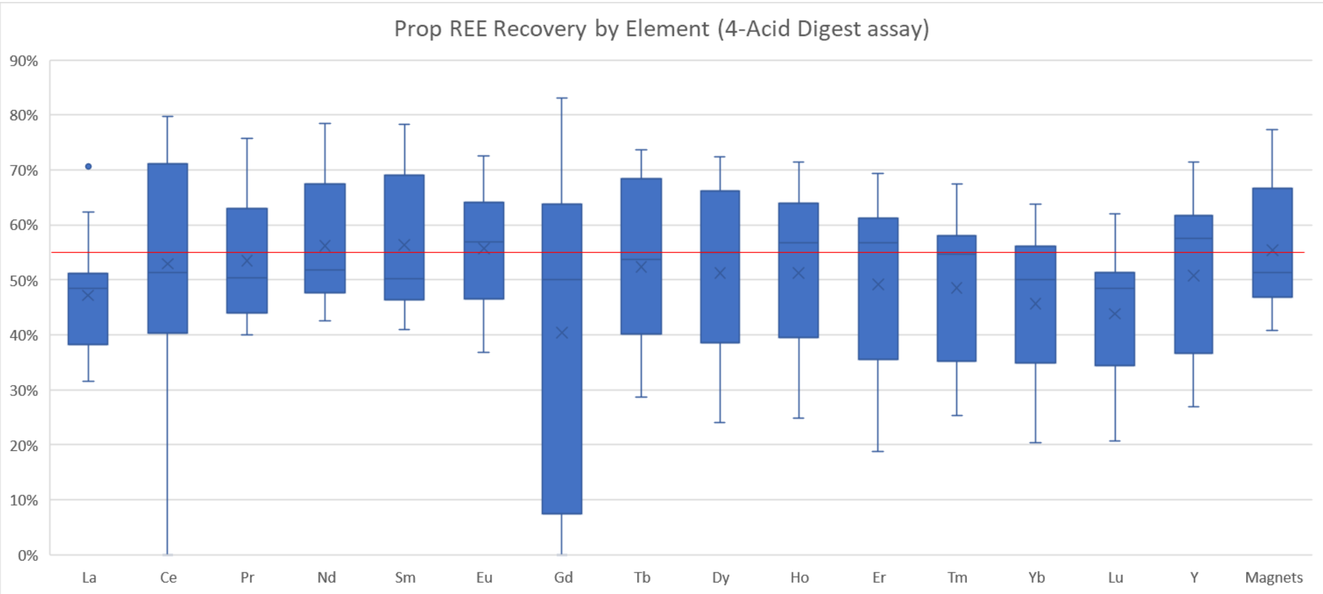


Figure 5: Prop Prospect REE Recovery by Element (>40% MagREO recovery)

Leach Conditions

OD6 and ANSTO have developed a project specific bottle roll test procedure utilising a 25 g/L hydrochloric acid solution, nominally maintained at 30°C and ambient pressure, with a 4 wt% solids density over a 24-hour period. Recoveries are then calculated based on the difference between the assayed solid head and solid residue using a 4-acid digestion method.

This procedure was developed and benchmarked against previous tests to achieve results equivalent to diagnostic leach tests using a 25 g/L hydrochloric acid, at notionally ambient conditions and pressures, over a 6-hour period. The leach conditions were selected based on previously announced works for consistency (refer ASX announcements, 27 February 2024, 7 November 2023 and 3 April 2023). Further optimisation works will be undertaken in future test work programs.

The bottle roll method is devised to be an inexpensive and fast technique for determining the leachability of samples. ANSTO utilises a 4 wt% solids density for all clay hosted rare earth projects inclusive of acid soluble and ionic diagnostic tests. Once further bench scale testing is undertaken, it is anticipated that a slurry density of between 25 and 30% is likely to be optimal, as has been recorded on a number of other projects, with little to no decrease in leach recoveries.

Test work results should be interpreted in the context of geological setting, selection of known non-clay samples to identify boundary limits, and OD6's objectives to test various clay types to identify areas of favourable geology and metallurgy whilst delineating the extent of these areas.

Assay Method

The Splinter Rock clay hosted prospect areas are characterised by a combination of ionically adsorbed, acid-soluble and refractory rare earth elements (REEs). Our chosen assay method (4-acid digestion) does not report the refractory rare earth component, aiming to eliminate the variable grade proportion of the refractory material, which could introduce modelling errors in the future.

Work conducted by OD6 continues to demonstrate that utilising the alternative Lithium Borate Fusion Digest method can increase the head grade by up to 30% compared to the 4-acid assay method. However, it is important to note that this extra grade is highly unlikely to be recoverable in any proposed clay hosted rare earth process flowsheet.

All assays contained in this ASX announcement are based on the 4-acid soluble digestion method, rather than the ALS Lithium Borate Fusion Digest method, aligning with OD6's reporting of geological drill assays and the Mineral Resource Estimate.

It should be acknowledged that future potential commercial production of REE is significantly improved through successful leaching of both ionic and acid-soluble REEs.

Forward Works Program

- **Incorporation of Results into Mineral Resource Estimate:** Evaluate and potentially upgrade the Mineral Resource Estimate based on the latest results.
- **Bench Scale Tests:** Perform bench scale tests to determine preferred slurry densities and further optimize leach conditions.
- **Slurry Leach Tests**: Conduct slurry leach tests to evaluate slurry handling, filtration, and washing processes.
- **Impurity Removal Trials:** Conduct impurity removal trials under various pH conditions, temperatures, and with different reagents.
- **Assessment of Resin Use:** Evaluate the potential use of resins in both pulp and liquid phases to assist in impurity removal.
- **Ion Exchange Assessment:** Assess ion exchange processes on "leach" liquor and investigate selective elution of REE versus impurities such as Al and Fe.
- **Nanofiltration Evaluation:** Evaluate nanofiltration processes to produce a retentate with increased REE concentration and a permeate containing clean acid for recycling.
- **Mixed Rare Earth Precipitation:** Investigate mixed rare earth precipitation methods, including carbonates and hydroxides.
- **Process Modelling and Techno-Economic Comparison:** Develop process models and conduct techno-economic comparisons of various flowsheet options.
- **Mini Pilot Scale Testing:** Conduct mini pilot scale testing using composited bulk samples to validate findings on a smaller scale.
- **Conversion of Rare Earth Carbonate/Hydroxide:** Apply process models to assess options for converting mixed rare earth carbonate/hydroxide in a downstream refinery to multiple potential rare earth oxides.

Competent Persons Statement

Information in this report relating to Exploration Results is based on information reviewed by Mr Jeremy Peters who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Chartered Professional Geologist and Mining Engineer of that organisation. Mr Peters is a Director of Burnt Shirt Pty Ltd, consulting to OD6 and 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 by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Peters consents to the inclusion of the data in the form and context in which it appears.

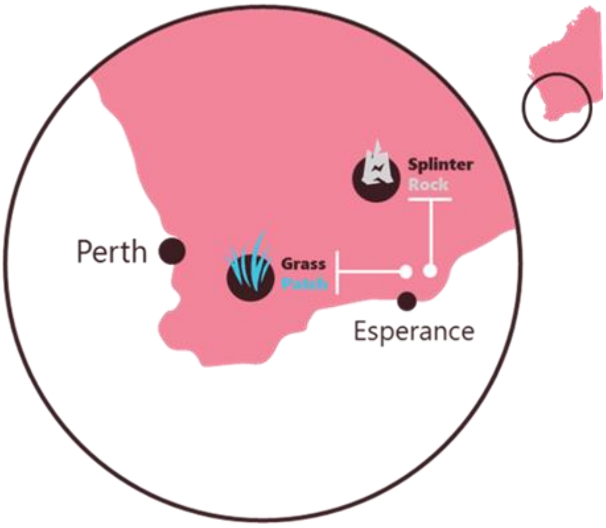
The information in this report relating to the Mineral Resource estimate for the Splinter Rock Project is extracted from the Company's ASX announcement dated 18 July 2023. OD6 confirms that it is not aware of any new information or data that materially affects the information included in the original announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimate continue to apply.

Forward Looking Statements

Certain information in this document refers to the intentions of OD6 Metals, however these are not intended to be forecasts, forward looking statements, or statements about the future matters for the purposes of the Corporations Act or any other applicable law. Statements regarding plans with respect to OD6 Metals projects are forward looking statements and can generally be identified by the use of words such as 'project', 'foresee', 'plan', 'expect', 'aim', 'intend', 'anticipate', 'believe', 'estimate', 'may', 'should', 'will' or similar expressions. There can be no assurance that the OD6 Metals plans for its projects will proceed as expected and there can be no assurance of future events which are subject to risk, uncertainties and other actions that may cause OD6 Metals actual results, performance, or achievements to differ from those referred to in this document. While the information contained in this document has been prepared in good faith, there can be given no assurance or guarantee that the occurrence of these events referred to in the document will occur as contemplated. Accordingly, to the maximum extent permitted by law, OD6 Metals and any of its affiliates and their directors, officers, employees, agents and advisors disclaim any liability whether direct or indirect, express or limited, contractual, tortuous, statutory or otherwise, in respect of, the accuracy, reliability or completeness of the information in this document, or likelihood of fulfilment of any forward-looking statement or any event or results expressed or implied in any forward-looking statement; and do not make any representation or warranty, express or implied, as to the accuracy, reliability or completeness of the information in this document, or likelihood of fulfilment of any forward-looking statement or any event or results expressed or implied in any forward-looking statement; and disclaim all responsibility and liability for these forward-looking statements (including, without limitation, liability for negligence).

This announcement has been authorised for release by the Board of OD6 Metals Limited

About OD6 Metals



OD6 Metals is an Australian public company pursuing exploration and development opportunities within the critical mineral sector. The Company has successfully identified clay hosted rare earths at its 100% owned Splinter Rock and Grass Patch Projects, which are located in the Esperance-Goldfields region of Western Australia - about 30 to 150km northeast of the major port and town of Esperance.

Drilling and geological analysis at its flagship Splinter Rock has shown widespread, thick, high-grade clay hosted REE deposits that extend over hundreds of square kilometres. Metallurgical testing using hydrochloric acid to leach the rare earths have resulted in positive REE recoveries with optimisation ongoing.

The Company aims to delineate and define economic resources and reserves of Rare Earth Elements (REE), in particular Neodymium (Nd), Praseodymium (Pr), Dysprosium (Dy) and Terbium (Tb), which can be developed into a future revenue generating mine. Clay REE deposits are currently economically extracted in China, which is the dominant world producer of REEs.

REE are becoming increasingly important in the global economy, with uses including advanced electronics and permanent magnets in electric motors. As an example, a neodymium magnet used in a wind turbine or electric vehicle motor is 18 times stronger than a standard ferrite magnet significantly increasing energy use efficiency.

As part of the exploration process the Company has entered into heritage agreements with Esperance Tjaltrjraak Native Title Aboriginal Corporation and the Ngadju Native Title Aboriginal Corporation that serves to both enable exploration and protect important cultural sites on Country.

Corporate Directory

Managing Director	Mr Brett Hazelden
Non-Executive Chairman	Dr Darren Holden
Non-Executive Director	Mr Piers Lewis
Non-Executive Director	Dr Mitch Loan
Financial Controller/ Joint Company Secretary	Mr Troy Cavanagh
Joint Company Secretary	Mr Joel Ives
Exploration Manager	Tim Jones

Contact

OD6 Metals Ltd
ACN 654 839 602
www.od6metals.com.au
Mail to: info@od6metals.com.au
Phone: +61 8 6189 8515
Level 1, 50 Kings Park Road, West Perth, WA 6005
PO Box 277, North Beach, WA 6920
PO Box 2009, Esperance, WA 6450

Metallurgical Drill Hole Location Details

Hole ID	Type	Easting	Northing	RL (m)	Dip (degrees)	End of Hole (m)
SRAC0291	Aircore	499186	6338152	206	-90	49
SRAC0297	Aircore	497503	6336490	204	-90	36
SRAC0298	Aircore	497181	6336252	202	-90	47
SRAC0300	Aircore	496404	6336432	208	-90	55
SRAC0301	Aircore	496028	6336565	212	-90	36
SRAC0302	Aircore	497440	6334719	205	-90	41
SRAC0303	Aircore	497223	6334383	205	-90	43
SRAC0307	Aircore	498089	6335722	202	-90	27
SRAC0308	Aircore	498313	6336054	203	-90	27
SRAC0310	Aircore	498814	6336676	208	-90	50
SRAC0311	Aircore	499097	6336958	205	-90	60
SRAC0314	Aircore	499566	6338039	205	-90	41
SRAC0325	Aircore	501855	6341344	203	-90	43
SRAC0326	Aircore	501260	6341403	203	-90	55
SRAC0327	Aircore	501763	6341732	203	-90	60
SRAC0328	Aircore	501762	6342132	204	-90	52
SRAC0330	Aircore	501756	6342932	205	-90	49
SRAC0333	Aircore	502529	6343475	201	-90	73
SRAC0335	Aircore	503329	6343487	195	-90	60
SRAC0337	Aircore	504100	6343677	195	-90	63
SRAC0338	Aircore	504472	6343823	194	-90	56
SRAC0339	Aircore	504861	6343919	193	-90	63
SRAC0340	Aircore	505260	6344002	193	-90	72
SRAC0356	Aircore	501767	6337263	206	-90	79
SRAC0357	Aircore	502068	6336999	205	-90	95
SRAC0358	Aircore	502177	6336615	204	-90	84
SRAC0359	Aircore	501939	6336293	204	-90	87
SRAC0361	Aircore	515633	6324245	147	-90	49
SRAC0371	Aircore	515666	6326792	148	-90	56
SRAC0377	Aircore	518227	6328120	149	-90	61
SRAC0385	Aircore	514718	6325247	147	-90	40
SRAC0397	Aircore	517487	6329839	147	-90	68

Hole ID	Type	Easting	Northing	RL (m)	Dip (degrees)	End of Hole (m)
SRAC0398	Aircore	517215	6330131	143	-90	54
SRAC0399	Aircore	516907	6330385	146	-90	37
SRAC0401	Aircore	516895	6329352	149	-90	81
SRAC0402	Aircore	516495	6329353	146	-90	21
SRAC0403	Aircore	516095	6329354	147	-90	68
SRAC0404	Aircore	515694	6329357	147	-90	69
SRAC0406	Aircore	514893	6329362	149	-90	56
SRAC0408	Aircore	514091	6329364	146	-90	40
SRAC0410	Aircore	516577	6330149	150	-90	66
SRAC0411	Aircore	516580	6330549	146	-90	60
SRAC0425	Aircore	520849	6333885	158	-90	82
SRAC0432	Aircore	517069	6335615	154	-90	41
SRAC0433	Aircore	516744	6335759	153	-90	27
SRAC0469	Aircore	501662	6341390	203	-90	70
SRAC0470	Aircore	502305	6336788	203	-90	60

JORC 2012 – Table1: Splinter Rock

Section 1 Sampling Techniques and Data

(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Geochemical sampling was undertaken by sampling of metre interval samples returned from the cyclone of a conventional air core drilling rig. • Certified reference samples, duplicates and blank samples were inserted into the sample stream such as to represent approximately 5% of the samples submitted to the laboratory for analysis • Two composite samples were collected over three metre intervals – the first (the A sample) being submitted for laboratory analysis and the second (the B sample) being retained as a reference. A sample from each metre was collected and stored in a chip tray for logging and x-ray diffraction analysis
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Air core drilling was completed by hammer and blade industry standard drilling techniques • Aircore is considered to be an appropriate drilling technique for saprolite clay • Drilling used blade bits of 87mmØ with 3m length drill rods to blade refusal.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Air core recoveries were not recorded but are not considered to be materially biased, given the nature of the geology and samples. • The assay data will be analysed against control samples and historical assays for any indications of bias • The Competent Person considers that due to the nature of the drilling and geology, sample bias is unlikely to result from poor recovery.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All chips were logged qualitatively and quantitatively. • A sample from each metre was collected and stored in a chip tray for logging • Geological logs recorded lithology, colour and weathering. • The Competent Person considers that the logging protocols are sufficient to support estimation of a Mineral Resource.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• A composite sample of ~ 3kg for analysis was taken using a scoop from each metre pile to subsample 1 to 1.5kg sample. This was then dispatched to the laboratory. • A second composite sample was similarly taken and stored on site as a reference • Air core samples were a mix of wet and dry • Certified reference samples, duplicates and blank samples were inserted into the sample stream such as to represent approximately 5% of the samples submitted to the laboratory for analysis • The Competent Person considers to be appropriate the measures taken to demonstrate that sample protocols were appropriate and unbiased.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Quality of assay data and laboratory tests</td><td>

The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.
</td><td>

“A Samples” were submitted for chemical analysis using industry standard sample preparation and analytical techniques including:

Riffle split all “A samples” to 50:50 bagging one half as a coarse reject for storage
Pulverise the balance of the material via LM-5
Generate a standard 300g master pulp packet
Bag the balance as a bulk pulp master for storage

Multi-Element Ultra Trace method ME-MS61r for exploration in soils or sediments. 4-Acid digest on 0.25g sample analysed via ICP-MS and ICP-AES. REEs included.
</td></tr>
<tr><td>Verification of sampling and assaying</td><td>

The verification of significant intersections by either independent or alternative company personnel.
The use of twinned holes.
Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
Discuss any adjustment to assay data.
</td><td>

Certified reference samples, duplicates and blank samples were inserted into the sample stream such as to represent approximately 5% of the samples submitted to the laboratory for analysis
No holes were twinned (duplicated).
Data stored in a database, with auto-validation of logging data,
Multielement results (REE) are converted to stoichiometric oxide (REO) using element-to-stoichiometric conversion factors.

<table>
<tr><th>Element ppm</th><th>Conversion Factor</th><th>Oxide Form</th></tr>
<tr><td>Ce</td><td>1.1713</td><td>CeO_2</td></tr>
<tr><td>Dy</td><td>1.1477</td><td>Dy_2O_3</td></tr>
<tr><td>Er</td><td>1.1435</td><td>Er_2O_3</td></tr>
<tr><td>Eu</td><td>1.1579</td><td>Eu_2O_3</td></tr>
<tr><td>Gd</td><td>1.1526</td><td>Gd_2O_3</td></tr>
<tr><td>Ho</td><td>1.1455</td><td>Ho_2O_3</td></tr>
<tr><td>La</td><td>1.1728</td><td>La_2O_3</td></tr>
<tr><td>Lu</td><td>1.1371</td><td>Lu_2O_3</td></tr>
<tr><td>Nd</td><td>1.1664</td><td>Nd_2O_3</td></tr>
<tr><td>Pr</td><td>1.1703</td><td>Pr_6O_{11}</td></tr>
<tr><td>Sm</td><td>1.1596</td><td>Sm_2O_3</td></tr>
<tr><td>Tb</td><td>1.1510</td><td>Tb_4O_7</td></tr>
<tr><td>Tm</td><td>1.1421</td><td>Tm_2O_3</td></tr>
<tr><td>Y</td><td>1.2699</td><td>Y_2O_3</td></tr>
<tr><td>Yb</td><td>1.1387</td><td>Yb_2O_3</td></tr>
</table>

Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups:
TREO (Total Rare Earth Oxide) = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$.
Note that Y_2O_3 is included in the TREO calculation.
</td></tr>
<tr><td>Location of data points</td><td>

Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
Specification of the grid system used.
Quality and adequacy of topographic control.
</td><td>

Drill hole collars were located using a handheld GPS to +/-5m accuracy
Grid system was MGA 94 Zone 51
Downhole survey was not undertaken, the holes being vertical
No topography control was used, given the relatively flat topography
</td></tr>
<tr><td>Data spacing and distribution</td><td>

Data spacing for reporting of Exploration Results.
Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.
Whether sample compositing has been applied.
</td><td>

Drilling intervals were closed to approximately 200m centres where historic drilling returned elevated REE assays
Downhole samples were taken on 1m intervals
This drilling indicated excellent continuity, particularly when supported by the results of the Tempest Airborne Aeromagnetic Survey, which was used to define basin limits.
Tempest Airborne Electromagnetic Survey (AEM), undertaken by Xcalibur Multiphysics
</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		• Data collected using the TEMPEST EM system (50Hz) using fixed wing aircraft. • Nominal flight height of 120 m above ground level. • GPS cycle rate of 1 second, accuracy 0.5m • Altimeter accuracy of 0.05m • Flight line spacing 400 to 800m. • Conductivity measurements and sampling interval at approximately 11 to 12 metres along line. • This data when combined with further drilling will be utilised to guide future mineral resource estimation
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drillholes were vertical and approximately perpendicular to mineralisation hosted in flat lying clay-beds • This orientation is not considered by the Competent Person to have introduced material sampling bias. • For AEM data: Flight lines are North West- South East: drainage and regolith patterns show a regional slope down from NW to SE, whereas geological structure is dominantly NE-SW. • The thickness of regolith presented in the cross-sections is based on geophysical inversion modelling conducted by the CSIRO. This inversion modelling used Monte Carlo simulation known as RJMCMC regression based on Bodin and Sambridge (2009) https://doi.org/10.1111/j.1365-246X.2009.04226.x & Minsley (2011) https://doi.org/10.1111/j.1365-246X.2011.05165.x with modifying parameters by CSIRO. refer ASX Announcement 5 October 2022 • The RJMCMC method uses a comparison method to estimate the conductivity.
Sample security	• *The measures taken to ensure sample security.*	• Samples were taken and dispatched by road freight direct to the analytical laboratory
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The Independent Competent Person reviewed the sampling techniques and data collection. The Independent Competent Person has previously completed a site visit during drilling to verify sampling techniques and data collection.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Splinter Rock Project is held by Odette Six Pty Ltd which is a 100% owned subsidiary of OD6 Metals Ltd. • Granted exploration Licences include E63/2115, E69/3904, E69/3905, E69/3907, E69/3893, E69/3894. • The ELs predominantly overly vacant crown land with a small portion of freehold agricultural land used for crop and livestock farming to the south. • The Company has Native Title Land Access agreements with Ngadju Native Title Aboriginal Corporate and Esperance Tjaltjraak Native Title Aboriginal Corporation. The tenements are in good standing with no known impediments outside the usual course of exploration licenses.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• An Independent Geological Report was completed by of Sahara Natural Resources and included in the Company's Prospectus dated 10 May 2022. • Historic exploration for REE's was conducted by Salazar Gold Pty Ltd • The historical data has been assessed and is considered of good quality
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The rare earth mineralisation at the Splinter Rock project occurs in the weathered profile (in-situ regolith clays) adjacent to and above Booanya Granite of the East Nornalup Zone of the Albany-Fraser Orogen. • The Booanya granites are enriched in REEs. Factors such as groundwater dispersion and paleo-weathering environments may mobilise REEs away from the granite sources.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• All drill results are reported to the ASX in line with ASIC requirements.
		• A summary of material drill hole information ins included in the Drill Hole Data table included below.
		• No material has been excluded.
		• Some results occur outside the mineralised area of interest and have been excluded as not being of material interest.
		• Internal waste results have been included in the mineralised intercepts.
		• Mineralised intersections have been publicly reported by OD6 in accordance with the JORC Code and ASX Listing Rules and are not repeated here.
		• The Competent Person observes consistent broad intersections of REEs and is satisfied that the drilling information supports this interpretation.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No cutting of grades has been engaged in • Data has been aggregated according to downhole intercept length above the cut-off grade and internal sub-grade material has been included. • A lower cut-off grade of 300ppm TREO has been applied. OD6 considers this to be an appropriate cut-off grade for exploration data in a clay-hosted REE project • A 1,000ppm cut off grade has been applied to the Mineral Resource • Multielement results (REE) are converted to stoichiometric oxide (REO) using element-to-stoichiometric conversion factors. • These stoichiometric conversion factors are stated in the 'verification of sampling and assaying' table above and can be referenced in appropriate

Criteria	JORC Code explanation	Commentary
		publicly available technical data.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Drillholes drilled vertical and orthogonal to generally flat to shallow dipping clay mineralisation. • Drilled width is approximately true width.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Diagrams are included at relevant sections in this Report • Drilling is presented in long-section and cross section as appropriate.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Electromagnetic data processing presented in this release is across all tenure at Splinter Rock. Further work on the remainder of the project is underway • Mineralisation has been reported at a variety of cut-off grades
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All material data available is reported. • There have been various photogrammetric and geophysical surveys at Splinter Rock at various times that have contributed to understanding of the geology of the deposit. The Competent Person considers these to have been undertaken in an appropriate manner. • All material data available is reported for test work conducted on bottle roll acid leaching of rare earths. ANSTO conducted hydrochloric acid leaching tests with samples undergoing a bottle roll at 25g/L hydrlochloric acid concentration, 30'C temperature, ambient pressure and 4 wt% solids for 24 hours. • As mentioned in the report, the recoverability of rare earths are indicative only and do not currently account for additional losses that may occur during downstream processing. • The metallurgical samples that have been provided to the laboratory for leaching assessment are detailed within this report.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Mineralisation is open perpendicular to the drill traverses. The Competent Person recommends that OD6 drill traverses in this direction. • Further work will include additional air core drilling, core drilling (e.g sonic or push-tube drilling, mineralogy, metallurgical test work and study work. Further work will include additional air core drilling, core drilling (e.g sonic or push-tube drilling, mineralogy, metallurgical testwork and study work • Further Metallurgical work is detailed within this report.