

ASX Announcement

9 October 2025

ASX: OD6

Metallurgical Core Drilling Successfully Completed Core samples to be sent to ANSTO for optimisation and offtake product development

OD6 Metals Limited (OD6 or the Company) is pleased to advise that metallurgical core drilling has been completed at Splinter Rock Rare Earth Project, located in Western Australia. Core samples will be sent to ANSTO as part of the planned optimisation and scale-up program aimed at refining the heap leach and impurity removal flowsheet and providing final product samples for offtake discussions.

Splinter Rock hosts a JORC Mineral Resource of 682Mt @ 1,338ppm TREO.

Highlights:

- Metallurgical Diamond Core Program Successfully Completed: Drilling successfully completed at the Inside Centre prospect, delivering high-quality core samples for metallurgical testing
- 2 to 2.5 tonne of Rare Earth Bearing Core Collected to support ongoing metallurgical optimisation and feasibility studies.
- Advanced Testwork Program to Commence: Samples to be sent to ANSTO for heap leach, impurity removal, and rare earth product optimisation testwork.
- Offtake Samples: MREC and MREH samples will be utilised for offtake discussions, to assess commercial payability options for the products
- Inside Centre Resources Upside: Significant upside remains to increase the <u>existing JORC</u>
 Indicated Resource of 119Mt @ 1,632ppm TREO with the mineralisation open to the NE & SW
- Strategic partnerships with ANSTO and CPC Engineering continue to guide the testwork program and optimal development pathway
- Phase 2 drilling at Gulf Creek Copper Project to commence imminently to target large geophysical anomalies which may represent repeats of the high grade historical mine

Managing Director Brett Hazelden, commented:

"Completion of the metallurgical diamond drilling program marks another important milestone for OD6. The bulk core samples will enable ANSTO and our technical team to refine and scale-up our flowsheet, while producing sufficient MREC product for customer evaluation. This is a critical step toward advancing Splinter Rock as one of Australia's leading emerging clay-hosted rare earth projects.

With this program complete we now turn our minds to the next drilling program at our Gulf Creek Copper Project in NSW. Our drill and geological crews are scheduled be on site next week with more details to follow.

It's a good time to be in both Rare Earths and Copper given the positive fundamentals. "



Metallurgical Drill Core Details

Six Metallurgical drill locations have ben completed (Table 1 and Figure 1) utilising PQ diamond core (85mm core), which have been twinned next to existing AirCore drill hole locations previously utilised metallurgical testwork conducted at ANSTO.

The diamond drilling program targeted key areas of the Inside Centre Deposit, designed to obtain representative material for metallurgical and processing testwork. The bulk rare earth bearing material will provide ~2.0 to 2.5 tonnes of core samples that were logged and prepared for dispatch to ANSTO in Sydney.

Table 1: Metallurgical core drill hole locations

Hole ID	Twin Hole ID	Туре	Easting	Northing	RL (m)	Dip (degrees)	Depth(s)
SRDD005	SRAC0225	Aircore	501815	6336021	204.1	-90	33-86
SRDD006	SRAC0226	Aircore	501953	6335879	204.4	-90	21-81
SRDD004	SRAC0266	Aircore	501399	6336445	205.4	-90	21-58
SRDD003	SRAC0357	Aircore	502068	6336999	204.9	-90	39-90
SRDD002	SRAC0358	Aircore	502177	6336615	204.0	-90	36-84
SRDD001	SRAC0359	Aircore	501939	6336293	203.5	-90	27-87

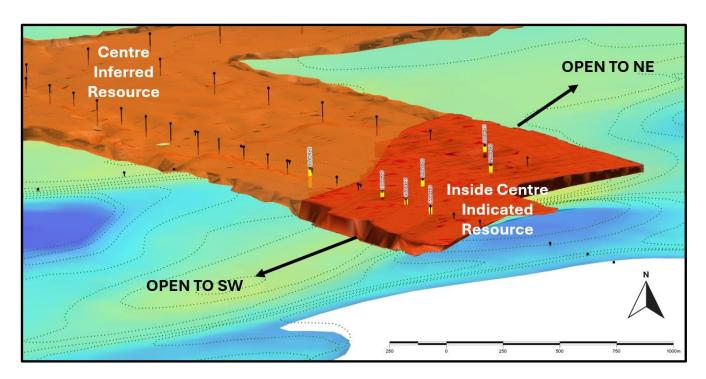


Figure 1: The Inside Centre Indicated Resource (shown in red) and the selected holes twinned (shown in yellow). The figure also shows the Existing Centre Inferred Resource (shown in orange) plus shows mineralisation remains open to the SW and NE within the modelled clay basin airborne electromagnetic survey



ANSTO Testwork Program Overview

The metallurgical core program has targeted zones within Inside Centre that best represent an area of consistent geology, prior metallurgical outcomes, low striping ratios, significant grades and planned early-stage mining areas. Samples will be composited at ANSTO for a series of advance campaigns focused on:

• Heap leach Optimisation;

- Heap Leach duration and kinetics
- o Acid strength and consumption
- Counter current heap configuration
- Particle agglomeration methodology

• Impurity Removal Verification:

- Nanofiltration (NF) acid recovery and liquor concentration tuning
- o Ion Exchange (IX) selectivity and elution to reduce Fe/Al and trace U/Th prior to precipitation
- o Impurity removal (IR) two stage pH optimisation to achieve target impurity specifications

Bulk MREC and MREH Production

 Precipitation to produce >1 kg of MREC and/or MREH for customer qualification, offtake discussions, and to assess commercial payability options for the products.

Pathway to Offtake

The core program directly supports OD6's ongoing testwork and studies with ANSTO and CPC Engineering by supplying bulk test material and enabling production of more than 1 kg of a premium, high grade and low impurity Mixed Rare Earth Carbonate (MREC) and Mixed Rare Earth Hydroxide (MREH).

Offtake Samples of MREC and MREH can then be sent to global separation facilities that will **be utilised for offtake discussions** and to assess commercial payability options for the products.

Engagement with potential offtake partners is continuing.

Why Inside Centre?

Inside Centre has delivered standout metallurgy and forms the Indicated component of the current resource (119Mt @ 1,632ppm TREO), supporting near-term development studies. There remains significant upside to increase the existing JORC with mineralisation open to the SW and NE within the modelled clay basins (Refer to Figure 1 and <u>ASX Announcement Mineral Resource Estimate Doubles</u>)

Prior work shows heap leach recoveries of ~79% MagREE (Nd, Pr, Dy, Tb) at Inside Centre, with consistently high Nd/Pr recoveries (~80%). The adoption of NF has demonstrated acid recovery of ~84.5%, materially lowering acid consumption and shrinking downstream IR circuit size, which together are expected to improve project economics.



Preferred Process Flowsheet Plus Metallurgical and Study Outcomes to Date

OD6, CPC and ANSTO have successfully demonstrated and recommended a multi-stage processing pathway outlined in Figure 1, that efficiently produces a superior quality product with low impurities, that has achieved high REE element total flowsheet recoveries.

The Preferred Process flowsheet has built on the metallurgical and optioneering study outcomes to date which have been progressively reported to the ASX as per the following:

- Heap Leaching Simple, low-acid usage leaching of rare earth-bearing clays to generate enriched leachate solution (refer <u>ASX 16 October 2024</u>)
- Nanofiltration (NF) Recycling of Acid, concentration of REEs and reduction of liquid volume produced downstream (refer <u>ASX 4 August 2025</u>)
- 3. **Ion Exchange (IX)** Concentration of rare earth elements and enhanced removal of iron (Fe) and aluminium (Al) reducing downstream processing risk (refer <u>ASX 7 August 2025</u>)
- 4. **Impurity Removal (IR)** Final removal of residual deleterious elements (e.g. Al, Ca, Fe, U, Th, P) to meet high product quality and low impurity specifications.
- 5. **Product Precipitation** Recovery of high-grade Mixed Rare Earth Carbonate (**MREC**) or Mixed Rare Earth Hydroxide (**MREH**) from purified solution (refer <u>ASX 13 August 2025</u>)
- 6. **Chlor-Alkali Facility (CAF)** Confirmed as a cost-reduction measure, producing key reagents onsite and materially lowering operating costs (refer <u>ASX 2 September 2025</u>)
- 7. **Low Cost Route** The Optioneering Study supports heap leaching as the lower cost and higher recovery option when compared to conventional agitated tank leaching for the Splinter Rock Rare Earth Project at the Inside Centre Deposit (refer <u>ASX 11 September 2025</u>)
- 8. **Innovative Process Flow Sheet Selected -** The Optioneering Study recommends preferred process flowsheet moving forward (refer ASX 1 October 2025)

The final MREC/MREH products contain elevated concentrations of **Nd**, **Pr**, **Dy and Tb**, collectively representing a **high-value magnetic rare earth mix** highly sought after in permanent magnet supply chains. Benchmark payability for MREC and MREH typically ranges between 70–85% of REO basket value.

The Company aims to be a 6,000 plus tonnes per annum (tpa) producer of REO, in either the form of Mixed Rare Earth Carbonate (MREC) or Mixed Rare Earth Hydroxide (MREH) in 5 years (refer ASX 11 September 2025)



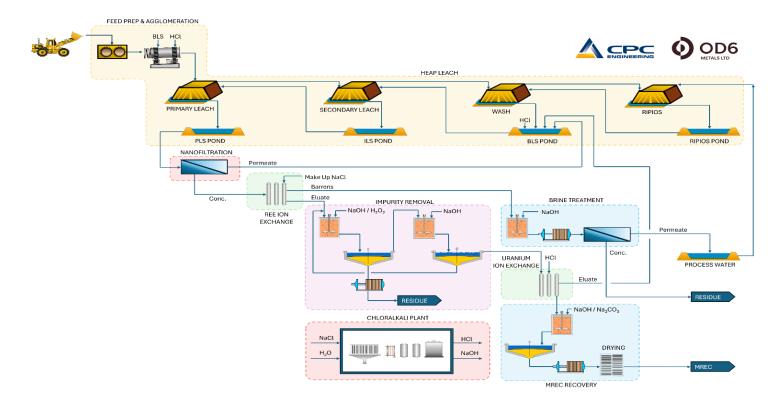


Figure 1: Preferred Process Flowsheet from ANSTO Testwork and CPC Optioneering Study (refer ASX 1 -10-2025)

Next Steps

ANSTO Testwork Scale Up: Heap Leach and Impurity Removal testwork as described above

Optioneering Study: CPC Engineering (CPC) and ANSTO are continuing to review the testwork performed with the aim to identify a preferred flowsheet based on cost, recovery, scalability, and product quality.

Engagement with potential offtake partners: To assess commercial payability options for MREC and MREH products.

Engagement with government and potential financing partners: OD6 has and continues to engage government and potential financing organisations. This is anticipated to be a continuous process over the development cycle.



Competent Persons Statement

The scientific and technical information that relates to process metallurgy is based on information reviewed by Mr Brett Haze Iden (Managing Director and CEO) of OD6 Metals Limited. Mr HazeIden is a Member of the AusIMM and has sufficient experience relevant to hydrometallurgical processes to qualify as a Competent Person as defined by the JORC Code. Mr HazeIden owns shares in the Company and participates in the Company's employee securities incentive plan. Mr HazeIden consents to the inclusion in this announcement of the matters based on their information in the form and context in which it appears.

Information in this report relating to Mineral Resource estimation and 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 clay-hosted rare earth mineralisation 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 inclusi on of the data in the form and context in which it appears.

Aspirational Production Target Cautionary Statement

The Company cautions that the above aspirational statement of prospective production and the aspirational production target ranges adopted in the optioneering study (refer ASX 11 September 2025) are conceptual in nature and the target ranges were adopted solely to support comparative techno-economic assessment within the optioneering study. They are not production targets or forecast financial information derived from production targets for the purposes of the Corporations Act or ASX Listing Rules and there is a low level of geological confidence associated with any potential production parameters at this stage. Further exploration, engineering, and feasibility work are required before OD6 can determine the likelihood of establishing Ore Reserves and/or production targets or before making any final investment decision. There is no certainty that the conceptual ranges adopted within the optioneering study will be realised.

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', 'm ay', '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 forwardlooking 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).

No new information

Except where explicitly stated, this announcement contains references to prior exploration results, all of which have been cross-referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements.

The information in this report relating to the Mineral Resource estimate for the Splinter Rock Project is extracted from the Company's ASX announcements dated 24 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 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 minerals sector, namely rare earths and copper.

Rare Earth Elements

OD6 Metals has successfully identified clay hosted rare earths at its 100% owned **Splinter Rock Project** which is located in the Esperance-Goldfields region of Western Australia.

The Company released a Mineral Resource Estimate (MRE) for Splinter Rock in May 2024, confirming that the project hosts one of the largest and highest-grade clay-hosted rare earths deposits in Australia with an Indicated Resource of 119Mt @ 1,632ppm TREO and an Inferred Resource of 563Mt @ 1,275ppm TREO with an overall ratio of ~23% high-value Magnetic Rare Earths (MagREE).

OD6 Metals believes that Splinter Rock has all the hallmarks of a world class rare earths project with a conceptual heap leach development which utilises the large and high-grade Splinter Rock resource to support a long-life REE operation.

Copper

The Company is advancing the **Gulf Creek Copper-Zinc VMS Project** located near the town of Barraba in NSW, Australia.

Gulf Creek was mined at around the turn of the 20th century and was once regarded as the highest-grade copper mine (2% to 6.5% Cu) in NSW until its closure due to weak copper prices in 1912. Very little exploration has occurred at the project in over 100 years, with OD6 aiming to apply modern day exploration technologies.

The 2025 maiden drilling program successfully defined high grade copper below the historical mine plus confirmed the strong relationship between magnetism and massive sulphide mineralisation. Geophysical modelling has identified multiple, high priority and untested targets ready for drilling providing over >3km of untested strike in the immediate mine-stratigraphy, and over >10km across the tenement.

Corporate Directory

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Non-Executive Director
Financial Controller/ Joint Company Secretary
Joint Company Secretary

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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. Where noted OD6 is also reporting Diamond Drill Holes (DDH). Core enclosed in plastic and then laid out systematically into core trays. The core will be used for bulk metallurgical samples and has not been cut or sampled. Certified reference samples, duplicates and blank samples were inserted into the drill sample stream such as to represent approximately 5% of the samples submitted to the laboratory for analysis. The DDH core was measured and marked into metres and lithological logged (including regolith). Two composite samples were collected overthree 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. Drill intercept samples for the two heap leaching metallurgical composites were obtained from the 'B' samples located on the company's Exploration Licenses. Samples were sent to ANSTO for making up the composites and completing the testwork.
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. Diamond drilling carried out used a PQ sized diamond impregnated drill bit. Triple tube was also used to maximise recovery, producing continuous cylinders of sample for a maximum run length of 3m.
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. Recovery was visually assessed for AC and considered to be acceptable within industry standards. The majority of sample were of good quality. Samples were visually checked for recovery, moisture, and contamination. A cyclone was used to deliver the sample into buckets. DDH's were measured and marked up every metre. Recovery and core loss was noted and marked accordingly by the driller and geologist. The relationship between sample recovery and grade influencing sample bias is unknown at this stage.
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. 	 Geological logging was complete in full for every hole (AC & DDH), this includes lithology, weathering, oxidation state, alteration, veining, mineralisation if present. Considered appropriate for this style of drilling and the stage of the project. All holes were chipped for the entire hole for a complete chip tray record. Geological logging is inherently qualitative. More specific logging may be undertaken if chemical analyses warrant it. All holes were logged for the entire length of the hole.



JORC Code explanation Commentary Sub-sampling techniques If core, whether cut or sawn and whether quarter, half or all core taken. and sample preparation If non-core, whether riffled, tube sampled, testina rotary split, etc and whether sampled wet or drv. For all sample types, the nature, quality and appropriateness of the sample preparation technique. stored on site as a reference sample. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. and stage of the project. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half to the laboratory for analysis. sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. Quality of assay data The nature, quality and appropriateness of Diamond core has not yet been analysed. the assaying and laboratory procedures and laboratory tests used and whether the technique is considered partial or total. analytical techniques including: For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the as a coarse reject for storage 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. included. following techniques were used: range of minor elements Laboratory, Brisbane. with good precision in most cases. Verification of sampling Significant intersections are calculated by experienced The verification of significant intersections and assaying by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage logging data.

- (physical and electronic) protocols.
- Discuss any adjustment to assay data.

- For DDH, PQ core has not been cut and sampled, core has been sent whole to ANSTO for bulk metallurgical
- For AC drilling, 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 for geochemical analysis.
- A second composite sample was similarly taken and
- Sampling technique is appropriate for the drilling method
- Certified reference samples, duplicates and blank samples were inserted into the sample stream such as to represent approximately 5% of the samples submitted
- Heap Leach test samples were composited from the B samples by weight to reflect the intercept length to maintain representativity and minimise any bias
- Sample size is considered appropriate for the grain size of the sampled material and is considered industry
- Aircore drilling "A Samples" were submitted for chemical analysis using industry standard sample preparation and
 - Riffle split all "A samples" to 50:50 bagging one half
 - 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 digeston 0.25g sample analysed via ICP-MS and ICP-AES. REEs
- The final column residues were also analysed. The
 - XRF at ANSTO for major gangue elements (AI, Ca, Cu, Fe, K, Mg, Mn, Na, Ni, P, Si, Sr, Zn) and a
 - The REEs along with Y, U, Th and Sc in the samples will be analysed by tetraborate fusion digest/ICP-MS (lithium tetraborate method) and four acid digest/ICP-MS at ALS Geochemistry
- Standards and laboratory checks have been assessed and show results within acceptable limits of accuracy,
- geologists and verified by an independent consultant.
- Diamond drillholes are twin holes of previously reported AC holes to provide material for metallurgical testwork.
- Data is stored in a database, with auto-validation of
- Raw assays are also databased with elemental values calculated to oxide for 15 REE's.
- Multielement results (REE) are converted to stoichiometric oxide (REO) using element-tostoichiometric conversion factors.

Element ppm	Conversion Factor	Oxide Form	
Ce	1.2284	CeO ₂	
Dy	1.1477	Dy ₂ O ₃	
Er	1.1435	Er ₂ O ₃	
Eu	1.1579	Eu ₂ O ₃	
Gd	1.1526	Gd ₂ O ₃	
Но	1.1455	Ho ₂ O ₃	
La	1.1728	La ₂ O ₃	
Lu	1.1371	Lu ₂ O ₃	



Cuitouio	IODC Code aurilmetica	Com				
Criteria	JORC Code explanation	Com	nmentary			
			Nd	1.1664	Nd_2O_3	
			Pr	1.2082	Pr ₆ O ₁₁	
			Sm	1.1596	Sm ₂ O ₃	
			Tb	1.1760	Tb ₄ O ₇	
			Tm	1.1421	Tm ₂ O ₃	
			Y	1.2699	Y ₂ O ₃	
			Yb	1.1387	Yb ₂ O ₃	
		•	reporting rare eal for compiling REI groups: TREO (Total Ral = La ₂ O ₃ + CeO ₂ - Gd ₂ O ₃ + Tb ₄ O ₇ + Yb ₂ O ₃ + Lu ₂ O ₃ +	rths. The following O into their report re Earth Oxide) + Pr ₆ O ₁₁ + Nd ₂ O ₃ + Dy ₂ O ₃ + Ho ₂ O ₃ Y ₂ O ₃ .	accepted form for gcalculations are us rting and evaluati + Sm ₂ O ₃ + Eu ₂ O ₃ + Er ₂ O ₃ + Tm ₂ O ₃ +	ion + +
Location of data points	 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. 	•	+/-5m accuracy. Grid system was Downholesurvey vertical. RL's estimated fr gained as a com datum may have	MGA 94 Zone 5 was not undertal om a digital eleva conent of an aero some error, but R	gahandheld GPS 1. ken, the holes bei tion model with poi magnetic survey. T L of holes should urpose on a hole	ing ints The I be
Data spacing and distribution	 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. 		to approximately elevated REE as drilled within 5m Aircore: Downho composite samp intervals. DDH: samples h This drilling indic when supported l Aeromagnetic Sulimits. Tempest Airborn undertaken by X Data collected us using fixed wing Nominal flight h GPS cycle rate of Altimeter accurace Flight line spaci Conductivity me approximately 1 This data when	200m centres who says. Diamond ho of existing AC hole samples were alles and bottom of avenoty the results of the rvey, which was a le Electromagnet calibur Multiphysing the TEMPES aircraft. eight of 120 m at 1 second, accurding 400 to 800m. asurements and 1 to 12 metres alcombined with fi	e taken on 3m of hole (BOH) 1m taken or analyse ntinuity, particulate Tempest Airborused to define bastic Survey (AEM), sics. ET EM system (50bove ground level gracy 0.5m.	ned bles ned arry rrne usin Hz)
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. 	•	to mineralisation Proterozoic clay This orientation Person to have if For AEM data: FI drainage and reg down from NW to dominantly NE-SThe thickness of is based on geop by the CSIRO. T Carlo simulation on Bodin and Schttps://doi.org/1 Minsley (2011) h	n hosted in flat ly saprolite. is not considere ntroduced mater ight lines are Norlolith patterns sho SE, whereas ge SW. regolith presented hysical inversion in is inversion maknown as RJMCN ambridge (2009)		tent s. ast: ope e is ions ited nte sed



Criteria	JORC Code explanation	Commentary		
		 CSIRO. refer <u>ASX Announcement 5 October 2022</u> The RJMCMC method uses a comparison method to estimate the conductivity. 		
Sample security	The measures taken to ensure sample security.	 Standard industry practice is used when collecting, transporting, and storing samples for analysis. 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 (Jeremy Peters) 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 portionof 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. 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.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or	No cutting of grades has been engaged in



Criteria	JORC Code explanation	Commentary
	 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. 	 Data has been aggregated according to downhole intercept length above the cut-off grade and internal subgrade 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 publicly available technical data.
Relationship between mineralisation widths an 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. The interdependence of mineralisation width and length has not been established. To date the targeted mineralisation seems to be a flat-lying sheet, so vertical drilling suggests true width is similar to downhole width. The sheet margins have not been determined and mineralisation remains open in multiple directions.
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.
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.	 All drillhole results have been reported including those drill holes where no significant intersection was recorded. Electromagnetic data processing presented in this release is across all tenure at Splinter Rock. 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 exploration 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. Airborne Electromagnetics modelling used to assess clay thickness and depth to basement. ANSTO conducted hydrochloric acid tank leaching tests with samples at 25g/L hydrlochloric acid concentration, at 30°C, under ambient pressure and 4 wt% solids for 24 hours. Liquor samples were taken every 6 hours and assayed for rare earths and major impurities. The residue sample was assayed after the conclusion of the test. ANSTO's heap leaching involved samples undergoing a 25g/L hydrochloric acid leach at a 5 L/m²/hr irrigation rate, at 22 °C for 80 days in a 50mm diameter column of~1m bed height of 2.18 m³ volume. Liquor samples were taken every 2-4 days for the duration of the tests and assayed for rare earths and major impurities. The recoverability of rare earths are indicative only and do not currently account for additional losses that may occur during downstream processing. Nanofiltration (NF) Tests used both actual and synthetic heap leach solutions at 38 bar pressure and commercially available membranes ion Exchange (IX) Tests used both actual and synthetic heap leach solutions at 23°C over a time period utilising a commercially available membranes. The Resin was then "eluted" by utilising a NaCl solution acidified to pH 2 using HCl at a temperature of 23°C over 21 hours at a rate of 0,5 Bed Volume per hour. Impurity Removal (IR) Tested Tests used both actual



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Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Dilagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	and synthetic heap leach solutions at ambient temperatures. NaOHis the current preferred Alkali when increasing pH during IR Stage 1 and 2 Stage 1: ~pH 3.5 Stage 2: ~pH 4.1 – 4.4 Sodium Carbonate (Na ₂ CO ₃) or Sodium Hydroxide (NaOH) has been utilised to produce a Mixed Rare Earth Carbonate (MREC) or Mixed Rare Earth Hydroxide (MREH) respectively. Final MREC/H precipitation occurs from a starting point of ~4.1 to 4.4 pH to a finish pH of between 7.1 to 7.5. The metallurgical samples that have been provided to the laboratory for leaching assessment are detailed within this report. Mineralisation is open in multiple directions. Further work will include additional air core drilling, core drilling,, mineralogy, metallurgical test work and study work. Further Metallurgical work is detailed below Diamond core heap leaching: Conduct column leach tests on splinter rock diamond core clay samples with hydrochloric under the same conditions as the initial heap leach tests. Mixed Rare Earth Precipitation: Investigate mixed rare earth precipitation methods, including carbonates and hydroxides. Process Modelling and Economic assessment of preferred flowsheet. 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