

HIGH QUALITY MIXED RARE EARTH CARBONATE PRODUCED AT THE SPLINTER ROCK RARE EARTH PROJECT

**OD6 Produces High Quality MREC and MREH Utilising Recent Flowsheet Developments
with Low Impurities and High Payability Potential at Splinter Rock REE deposit
– JORC Mineral Resource of 682Mt @ 1,338ppm TREO**

Highlights:

- **High-quality Mixed Rare Earth Carbonate (MREC) of ~56% TREO produced** via a simplified and scalable heap leach and impurity removal process flowsheet
- **High-quality Mixed Rare Earth Hydroxide (MREH) of ~59% TREO** also produced utilising the same process but utilising Sodium Hydroxide (NaOH) to precipitate the saleable product
- **The significant MREC and MREH production results position the company to deliver a premium product, distinguishing it from peers and ranking it among the top global rare earth projects. Key highlights include:**
 - +90% of product value expected from Magnetic Rare Earth content (Nd + Pr + Dy + Tb)
 - Superior product quality with low levels of impurities (Al, Fe, P, Si)
 - Extremely low uranium and thorium content (<0.001% U + Th)
 - No expected refinery penalties, ensuring optimal commercial payability.
- **OD6's product quality meets or exceeds global MREC and MREH benchmarks**, positioning it for premium payability and a competitive advantage in future offtake agreements.
- **Strategic partnerships with ANSTO and CPC Engineering are driving an Optioneering Study to select the optimal development pathway.**
- **The company is engaging with potential offtake partners** to assess commercial payability options, while expanding its network of potential high-value downstream customers across North America, Europe, and Asia.
- OD6's future product is crucial for high-tech applications in defence, electronics, and renewable energy due to their unique magnetic and electronic properties.

Managing Director Brett Hazelden, commented:

"This is a significant milestone for OD6 and reinforces Splinter Rock's potential to become a competitive and scalable producer of high value rare earth products. Our innovative processing pathway – using a combination of nanofiltration, ion exchange and impurity control - has enabled us to produce a high-quality, low-impurity MREC and MREH product that meets or exceeds global benchmarks.

This opens the door to a wide range of potential offtake partners and is expected to result in favourable payability. We believe the ability to deliver a high quality, magnet-rich mixed rare earth product from a low-cost leaching system gives us a unique strategic advantage. We look forward to engaging with international separation facilities, end users and governments."

OD6 Metals Limited (OD6 or the Company) is pleased to report that Mixed Rare Earth Carbonate (MREC) and Mixed Rare Earth Hydroxide (MREH) products have been produced from heap leach liquor via metallurgical testing conducted by the Australian Nuclear Science and Technology Organisation (ANSTO). This work is the culmination of nine months of testing and refining of the processing flowsheet that has significantly enhanced the processing efficiency and rare earth product quality at the Splinter Rock Rare Earth Project.

Technical Overview

As part of its advanced metallurgical program, OD6 and ANSTO has successfully demonstrated a **multi-stage processing pathway** (Figure 1) that efficiently extracts and purifies rare earth elements from Splinter Rock's clay-hosted deposits. The flowsheet consists of:

1. **Heap Leaching** – Simple, low-acid usage leaching of rare earth-bearing clays to generate enriched leachate solution (refer [ASX 16 October 2024](#))
2. **Nanofiltration (NF)** – Recycling of Acid, concentration of REEs and reduction of liquid volume produced downstream (refer [ASX 4 August 2025](#))
3. **Ion Exchange (IX)** – Concentration of rare earth elements and enhanced removal of iron (Fe) and aluminium (Al) reducing downstream processing risk (refer [ASX 7 August 2025](#))
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 Hydroxide (MREH) from purified solution.

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.

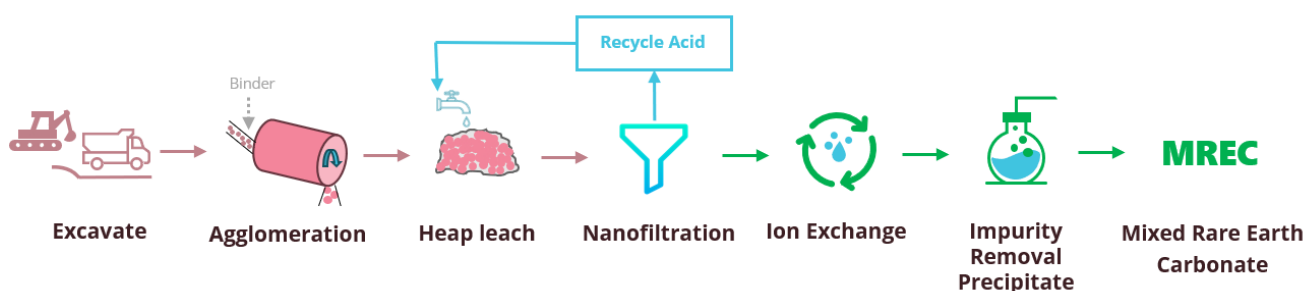


Figure 1: Indicative processing steps including Heap Leach, Nanofiltration plus Ion Exchange & Impurity Removal



Figure 2: OD6 Splinter Rock Heap Leach MREC Product produced at ANSTO

MREC and MREH Results

Sodium Carbonate (Na_2CO_3) or Sodium Hydroxide (NaOH) has been utilised to precipitate a Mixed Rare Earth Carbonate (MREC) or Mixed Rare Earth Hydroxide (MREH) respectively. **Precipitation occurs from a starting point of ~4.1 to 4.4 pH to a finish pH of between 7.1 to 7.5.** This occurs post the two stage Impurity Removal (IR) precipitation process that has been enhanced by NF and IX to minimise REE co-precipitation losses and maximise overall REE recovery - refer to Figure 3 below.

The MREC and MREH precipitate is then washed with deionised water to remove and residual salts (eg Na, Cl) prior to being dried and assayed.

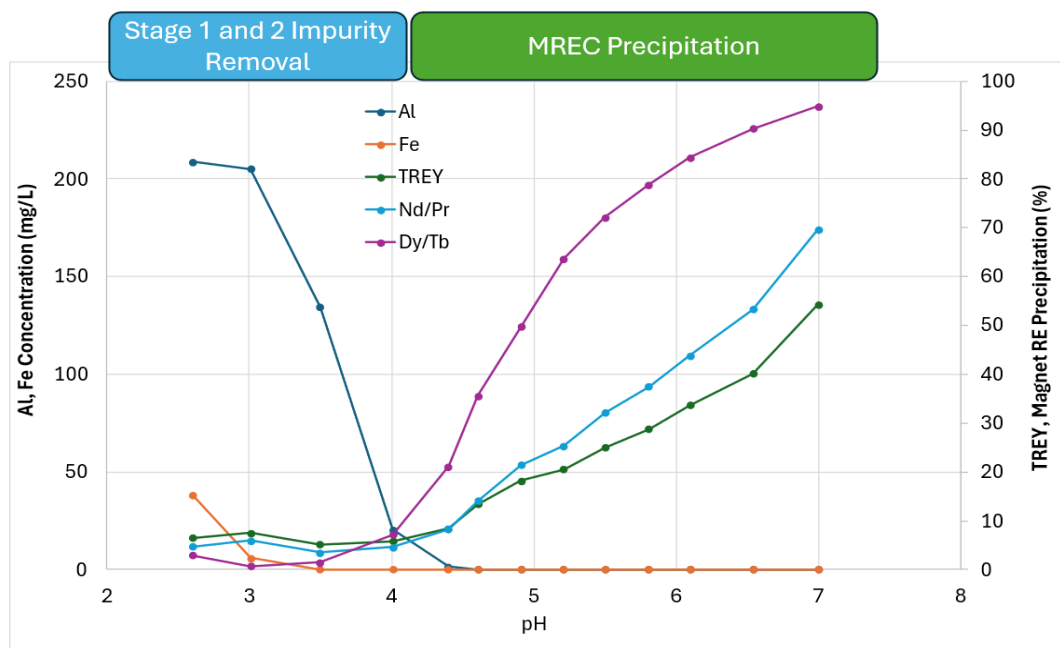


Figure 3: Impurity Removal Curve showing decreasing Al and Fe concentration as pH is increased

The assayed TREO Composition for both the MREC and MREH products are detailed in Table 1 with the Impurity Composition detailed in Table 2. These results show that the product quality of both is comparable to typical global MREC specifications. The final MREC and MREH products exhibits:

- >55% Total Rare Earth Oxide (TREO) equivalents
- High Magnetic Rare Earth content to represent +90% of product value (Nd + Pr + Dy + Tb)
- Low levels of impurities (Al + Fe + P)
- <0.001% Uranium and Thorium (U + Th)
- No refinery penalties would be expected

Benchmark payability for MREC and MREH typically ranges between 70–85% of REO basket value, depending on impurity levels and buyer requirements. **These results position OD6 for premium payability** in future offtake discussions. The high quality and low impurity nature of the product also **opens access to multiple potential downstream customers globally**, including separation plants in Asia, Europe and North America.

Further refinement of the MREC and MREH Composition will continue during the next phase of testwork, studies and feedback from potential customers.

Table 1: MREC and MREH TREO Composition

Element	MREC wt%	MREH wt%
La₂O₃	13.40	8.01
CeO₂	27.44	28.93
Pr₆O₁₁	2.86	3.82
Nd₂O₃	9.16	13.26
Sm₂O₃	1.11	1.63
Eu₂O₃	0.15	0.21
Gd₂O₃	0.54	0.84
Tb₄O₇	0.07	0.10
Dy₂O₃	0.26	0.40
Ho₂O₃	0.046	0.06
Er₂O₃	0.09	0.14
Tm₂O₃	0.01	0.02
Yb₂O₃	0.06	0.08
Lu₂O₃	0.01	0.01
Y₂O₃	1.14	1.75
TREO	56.37	59.25

Table 2: MREC and MREH Impurity Composition

Element	MREC wt%	MREH wt%
Al	0.38	0.58
Ca	3.62	0.04
Fe	0.01	0.02
K	0.27	0.03
Mg	0.08	<0.01
Mn	0.30	0.08
Na	1.83	1.00
P	<0.0125	<0.01
S	<0.124	0.07
Si	<0.0621	<0.07
Zn	0.05	0.08
F	<0.10	0.25
Th	<0.001	<0.001
U	<0.001	<0.001

Next Steps

Optioneering Study: As a result of the testwork performed over the last 9 months OD6 has engaged CPC Engineering (CPC) to undertake an Optioneering Study to evaluate the multiple technically viable flowsheets, to enable the techno economic assessment of each flowsheet. This study will identify a preferred flowsheet based on cost, recovery, scalability, and product quality, and is expected to be completed this quarter.

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

Testwork Scale Up: Heap Leach and Impurity Removal testwork would be scaled up by utilising twin holed diamond core material of the original 6 holes. Six PQ drill holes (85mm core) would provide about 1 tonne of REE bearing material, which can be utilised to conduct multiple optimisation and validation tests findings from the current reported testwork. This volume would also produce ~1kg of MREC which would enable multiple samples to be produced for testing and offtake discussions.

Competent Persons Statement

The scientific and technical information that relates to process metallurgy is based on information reviewed by Mr Brett Hazelden (Managing Director and CEO) of OD6 Metals Limited. Mr Hazelden 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 Hazelden owns shares in the Company and participates in the Company's employee securities incentive plan. Mr Hazelden 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 inclusion of the data in the form and context in which it appears.

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, tortious, 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).

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 18 July 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.

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.

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 the largest and highest-grade clay-hosted rare earths deposit 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 development which utilises the large and high-grade Splinter Rock resource to support a long-life REE operation supported by a low strip ratio.

Corporate Directory

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

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Metallurgical Sample Selection and Testing Approach

The Company has created a composite sample for the Inside Centre that represent an area of consistent geology, prior metallurgical outcomes, low striping ratios and significant grades.

A total 6 holes were selected (see table below) to composite at Inside Centre with samples combined by weight to reflect the intercept length to maintain representativity and minimise any bias.

Column (Heap) Leach tests agglomerated the samples with a small amount of flocculant (~300g/t) to wet the ore and bind the fines together. They are then irrigated with 25 g/l HCl lixiviant and run at ANSTO's standard column operating conditions for the duration of the tests. The column tests were conducted over an 80 day period with samples still extracting rare earths at the end of this period.

Metallurgical Composite Drill Hole Location Details – Inside Centre Deposit

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

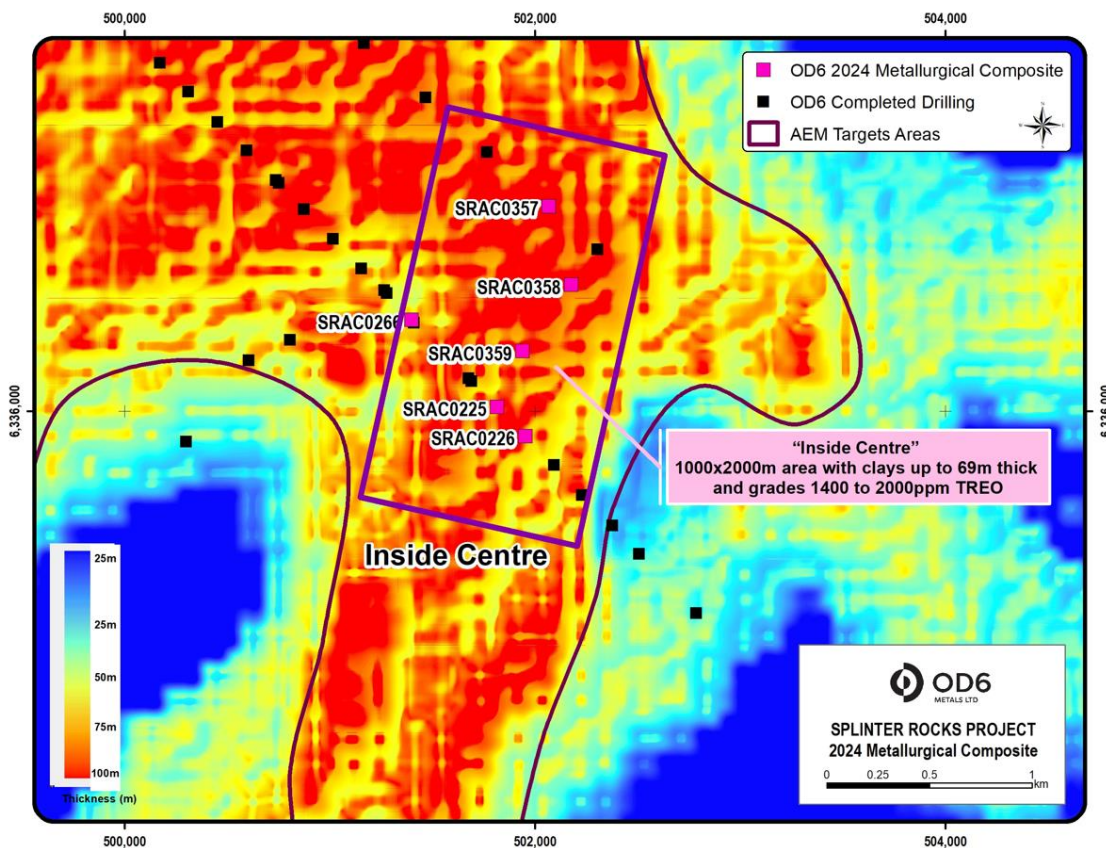


Figure 6: Inside Centre Composite Sample Locations overlain on airborne electromagnetic survey interpretation

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 drill 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. - 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.
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
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.
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	- 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 - Heap Leach test samples were composited from the B samples by weight to reflect the intercept length to

Criteria	JORC Code explanation	Commentary																																																
	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.	maintain representativity and minimise any bias																																																
Quality of assay data and laboratory tests	- 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.	"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. - The final column residues were also analysed. The following techniques were used: - XRF at ANSTO for major gangue elements (Al, Ca, Cu, Fe, K, Mg, Mn, Na, Ni, P, Si, Sr, Zn) and a range of minor elements - 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 Laboratory, Brisbane																																																
Verification of sampling and assaying	- 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.	- 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 - 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 border="1"> <thead> <tr> <th>Element ppm</th><th>Conversion Factor</th><th>Oxide Form</th></tr> </thead> <tbody> <tr><td>Ce</td><td>1.2284</td><td>CeO₂</td></tr> <tr><td>Dy</td><td>1.1477</td><td>Dy₂O₃</td></tr> <tr><td>Er</td><td>1.1435</td><td>Er₂O₃</td></tr> <tr><td>Eu</td><td>1.1579</td><td>Eu₂O₃</td></tr> <tr><td>Gd</td><td>1.1526</td><td>Gd₂O₃</td></tr> <tr><td>Ho</td><td>1.1455</td><td>Ho₂O₃</td></tr> <tr><td>La</td><td>1.1728</td><td>La₂O₃</td></tr> <tr><td>Lu</td><td>1.1371</td><td>Lu₂O₃</td></tr> <tr><td>Nd</td><td>1.1664</td><td>Nd₂O₃</td></tr> <tr><td>Pr</td><td>1.2082</td><td>Pr₆O₁₁</td></tr> <tr><td>Sm</td><td>1.1596</td><td>Sm₂O₃</td></tr> <tr><td>Tb</td><td>1.1760</td><td>Tb₄O₇</td></tr> <tr><td>Tm</td><td>1.1421</td><td>Tm₂O₃</td></tr> <tr><td>Y</td><td>1.2699</td><td>Y₂O₃</td></tr> <tr><td>Yb</td><td>1.1387</td><td>Yb₂O₃</td></tr> </tbody> </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) = La₂O₃ + CeO₂ + Pr₆O₁₁ + Nd₂O₃ + Sm₂O₃ + Eu₂O₃ + Gd₂O₃ + Tb₄O₇ + Dy₂O₃ + Ho₂O₃ + Er₂O₃ + Tm₂O₃ + Yb₂O₃ + Lu₂O₃ + Y₂O₃. Note that Y₂O₃ is included in the TREO calculation.	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	Ho	1.1455	Ho ₂ O ₃	La	1.1728	La ₂ O ₃	Lu	1.1371	Lu ₂ O ₃	Nd	1.1664	Nd ₂ O 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
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Criteria	JORC Code explanation	Commentary
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.	- 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
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.	- 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 - 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 (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	- 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

Criteria	JORC Code explanation	Commentary
	<i>to obtaining a licence to operate in the area.</i>	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 Booanyagranites 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 is 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 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 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

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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 hydrochloric 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 pH2 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 and synthetic heap leach solutions at ambient temperatures. NaOH is 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 (Na₂CO₃) 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.
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 in multiple directions. - 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 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 Techno-Economic Comparison: Develop process models and

Criteria	JORC Code explanation	Commentary
		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