Simple Beneficiation Lowers Acid Consumption and Costs at Splinter Rock Project

OD6 Metals Limited (**OD6** or the **Company**) is pleased to report further positive results from metallurgical testing conducted by the Australian Nuclear Science Organisation (**ANSTO**).

Highlights:

- Removal of coarse material (greater than 75um) improves TREO grades by up to 224% (157% average).
- Metallurgical testing of screened material delivered up to 79% reduction in hydrochloric acid (**HCl**) consumption (35% average reduction) to approximately 10kg HCl/t total screened ore.
- Opportunity exists for screening size to be further optimised to maximise rare earth recovery while reducing acid consumption.
- Lowering acid consumption improves future potential project economics. A single chlor-alkali electrolyser is indicatively capable of treating more than 5Mtpa of REE bearing clay.

Brett Hazelden, Managing Director, commented:

"These latest results demonstrate that a significant increase in TREO grades can be achieved by removing coarse material greater than 75um. Leaching of the finer faction material has the corresponding benefit of consuming an average of 35% less acid as a total of product processed. This provides a potential benefit to the overall cost profile of any future operation by reducing the amount of material that needs to be leached with acid by approximately 40%. Additional screening size optimisation will occur in future phases of work providing the potential for further improvements. "

Darren Holden, Non-Executive Chair, commented:

"OD6 has demonstrated that the application of clever science and solid engineering is the key to the future development of clay REE in Australia. We have already proven, with drilling, that OD6 has some of the best thickness and grades of clay REE in Australia. This work will be applied to our on-going geometallurgical exploration programs—where we are steadfastly prioritising the 'best of the best' zones within our vast thick clay basins—as well as to metallurgical programs and ultimately our economic studies. "

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 Testing Approach

A total of 13 Phase 1 samples were selected from a wide variety of clays, locations and depths to further develop a geo-metallurgical understanding of acid consumption and recovery across the various regolith types at our four large prospects at Splinter Rock (Prop, Centre, Scrum and Flanker).

Head samples were assayed prior to, and then post, screening out of material with greater than 75um particle size. The screened and unscreened samples were subjected to the standard ANSTO diagnostic leach tests at 25 g/L hydrochloric, at notionally ambient conditions and pressures, over a 6-hour period.

The objectives of the tests were to determine if screening material resulted in decreased acid consumption and to identify any impacts (positive or negative) on MagREO recovery. A high-level assessment could then determine if screening was beneficial or not for each sample.

Results of the test work are presented in Table 1 and 2, which 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.

Further screening tests will be undertaken from samples from the Phase 2 and 3 drilling programs that are currently undergoing or have completed bottle roll testing.

Summary of Results

Results shown in Table 1 below correlate well with the previous work conducted in 2023 (refer ASX release, 3 April 2023) which demonstrate that:

- In the vast majority of samples, REE grades are significantly higher in the finer fraction (<75um)
- The finer fraction generally contains 80% to 90% of both TREO and MagREO
- The coarse fraction generally represents 30% to 60% of the original mass
- TREO grades were upgraded by between 109% and 224% (157% average) through removal of coarse material greater than 75um.

The results in the Table 2 review the benefit of screening at 75um on lowering acid consumption and to identify any impacts (positive or negative) on MagREO recovery. Results show that:

- Screening at 75um reduced overall comparative acid consumption by between 10% and 79% (35% average)
- Average acid consumption of 16 kg HCl/t in unscreened decreases to ~10 kg HCl/t in finer faction material
- Metallurgical recovery benefits were variable – both positive and negative. Further testing on preferred development areas eg Inside Centre and Prop to occur in next Phase of testing
- The selected 75um screening size requires further optimisation for each prospect to maximise the benefit of reduced acid consumption with rare earth recovery.
- A number of areas of low acid consumption and strong metallurgical recoveries have been identified at all four prospects (Prop, Centre, Scrum and Flanker).
- The best results came from areas within the clay basins and channel areas and away from the granite boundaries.
- Further screening tests need to be undertaken on samples from the Phase 2 and 3 drilling programs that are currently undergoing or have completed bottle roll testing

Table 1: TREO and MagREO distribution by sample mass and TREO grade upgrade

Sample ID	Prospect	Size (µm)	Wt %	Distribution %		Total Head Assay	Fraction Assay	%TREO Upgrade to <75um
				MagREO	TREO	TREO ppm	TREO ppm	
SR0149A	Prop	>75	35	27%	27%	3,077	2,357	**109%**
		<75	65	73%	73%		3,460	
SR0149B	Prop	>75	44	12%	13%	648	185	**184%**
		<75	56	88%	87%		1,016	
SR0150A	Prop	>75	41	13%	14%	822	277	**149%**
		<75	59	87%	86%		1,196	
SR0150B	Prop	>75	45	14%	40%	2,494	2,190	**115%**
		<75	55	86%	60%		2,742	
SR0150C	Prop	>75	43	20%	22%	805	411	**150%**
		<75	57	80%	78%		1,108	
SR0150D	Prop	>75	57	15%	15%	674	178	**224%**
		<75	43	85%	85%		1,330	
SR033A	Centre	>75	32	7%	7%	2,002	462	**127%**
		<75	68	93%	93%		2,723	
SR033B	Centre	>75	48	15%	15%	2,056	657	**152%**
		<75	52	85%	85%		3,333	
SR042A	Centre	>75	43	12%	12%	2,173	590	**155%**
		<75	57	88%	88%		3,362	
SR043A	Centre	>75	46	12%	16%	1,526	541	**152%**
		<75	54	88%	84%		2,356	
SR056A	Scrum	>75	47	16%	47	1,646	575	**152%**
		<75	54	84%	54		2,576	
SR056B	Scrum	>75	49	20%	49	1,3625	548	**152%**
		<75	51	80%	51		2,067	
SR021A	Flanker	>75	62	14%	14%	661	148	**221%**
		<75	38	86%	86%		1,483	
SR023B	Flanker	>75	45	7%	6%	2,037	291	**161%**
		<75	55	93%	94%		3,488	

Note:

TREO (Total Rare Earth Oxide) = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O + 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

MagREO (Magnet Rare Earth Oxide) = Nd_2O_3 + Pr_6O_{11} + Tb_4O_7 + Dy_2O_3

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.

Table 2: MagREO recovery and acid consumption comparison with screened and unscreened material

Sample ID	Prospect	Size (µm)	Recovery % MagREO	Acid Consumption Unscreened kg/t	Acid Consumption Screened kg/t	Acid Consumption Screened as Combined Total kg/t	Reduction in Acid Consumption %
SR0149A	Prop	>75	97	105.1	33.1	92.6	**12%**
		<75	82		141.8		
SR0149B	Prop	>75	7	15.6	5.2	10.1	**35%**
		<75	35		18.1		
SR0150A	Prop	>75	44	30.8	12.2	18.7	**39%**
		<75	38		31.5		
SR0150B	Prop	>75	71	13.6	6.9	7.2	**47%**
		<75	49		13.1		
SR0150C	Prop	>75	87	11.5	8.6	9.5	**18%**
		<75	70		16.7		
SR0150D	Prop	>75	80	17.6	10.1	3.7	**79%**
		<75	58		8.6		
SR033A	Centre	>75	20	8.1	9.3	7.3	**10%**
		<75	10		10.7		
SR033B	Centre	>75	67	7.8	4.2	6.4	**18%**
		<75	27		12.2		
SR042A	Centre	>75	77	24.3	43.2	12.7	**48%**
		<75	33		22.2		
SR043A	Centre	>75	59	41.4	46.1	24.1	**42%**
		<75	38		44.4		
SR056A	Scrum	>75	21	9.6	6.8	6.0	**37%**
		<75	23		11.3		
SR056B	Scrum	>75	61	19.5	12.5	8.8	**55%**
		<75	38		17.2		
SR021A	Flanker	>75	48	8.4	5.2	5.3	**37%**
		<75	51		13.8		
SR023B	Flanker	>75	42	7.5	4.7	6.5	**14%**
		<75	21		11.8		

Note:

Acid Consumption Screened as a Combined Total is the weighted average acid consumption of the >75 and <75um Screened material reported. i.e. it assumes that the >75um material is not treated with acid and thus assumed to have zero consumption. This figure is important as it is an input into the total cost per tonne mined.

Simplified Process Map to Deliver Rare Earth Products

OD6 metals is proposing the following simplified processing map (Figure 1) to deliver rare earth products based on the test work completed to date.

Central to the flowsheet is the use of a site based chlor-alkali facility that utilises salt and water to produce two reagents, namely hydrochloric acid (**HCl**) and sodium hydroxide (**NaOH**). HCl is used to leach the rare earth elements, before NaOH is used to remove impurities, precipitate a mixed rare earth product (**MREC/H**) and neutralise the clays prior to disposal.

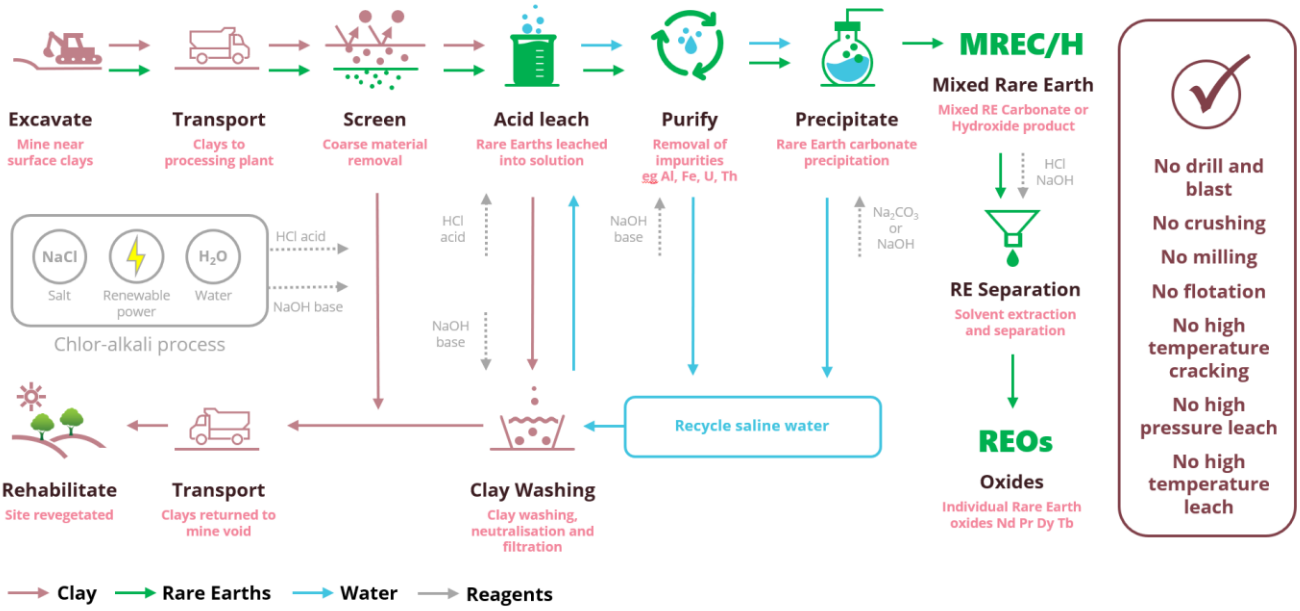


Figure 1: Indicative processing steps

Chlor-Alkali Process

The chlor-alkali process involves passing an electric current through high purity sodium chloride (NaCl or salt) brine to produce hydrogen, chlorine and caustic soda. The hydrogen and chlorine can then be combined into hydrochloric acid. The equations to create caustic soda and hydrogen chloride are:

$$2H_2O_{(l)} + 2NaCl_{(aq)} \text{ ----> } H_{2\,(g)} + Cl_{2\,(g)} + 2NaOH_{(aq)}$$

$$H_{2\,(g)} + Cl_{2\,(g)} \text{ -----> } 2HCl_{(g)}$$

OD6 has obtained information from chlor-alkali electrolyser vendors and experts to determine if owning and operating a site based facility is a viable option. To date all indications are that this is likely to provide the lowest operating cost for a long-term project that will form an integrated processing facility with storage tanks for HCl and NaOH to buffer any disruptions.

Based on the publicly available information associated with a **BICHLOR™ Electrolyser**, plus informal discussion, the following key details are noted for a single chlor-alkali electrolyser:

- Power consumption is the major cost at 1990 kWhr/te NaOH @ 6 kA/m2
- Normally allow for 350 days operation and 7kA/m2
- Normally operate at 385mbarg, 90°C and 32wt% NaOH

- Can produce up to 62ktpa HCl and 69ktpa of NaOH
- Indicative pricing for a chlor-alkali electrolyser is approximately £3M each (A$5.7M)
- Multiple smaller electrolysers can be utilised to provide operational flexibility

An example of an existing chlor-alkali facility is seen below in Figure 2 which provides an example of scale of two operational electrolysers.

At an average consumption of 16 kg HCl / tonne of material a single electrolyser based on the above information could provide sufficient reagents to treat ~4Mtpa of clay material.

At an average consumption of 10 kg HCl / tonne of material a single electrolyser based on the above information could provide sufficient reagents to treat >5Mtpa of clay material.

Given power being the main cost driver, OD6 envisages that low-cost power supply would be sourced from an owned and operated hybrid power system consisting of solar, wind turbines, energy storage and gas or diesel powered generators. It is understood that a similar facility currently powering the Esperance township and surrounding areas is achieving a 70% renewable power penetration rate which is a significant achievement that OD6 should aim to replicate.

On an owned and operated basis, utilising low-cost power supply, OD6 has an aspirational target to achieve an operational reagent consumption cost that would be equivalent to about A$5-6/t of processed clay ore, assuming sunk capital costs.

Figure 2: Two electrolysers in an operational environment (Source: Ineos)

Forward Works Program

- **Incorporation of Results into Mineral Resource Estimate:** Evaluate and potentially upgrade the Mineral Resource Estimate based on the latest results.
- **Sighter Bottle Roll Tests:** Conduct sighter bottle roll tests using selected Phase 3 drill samples.
- **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

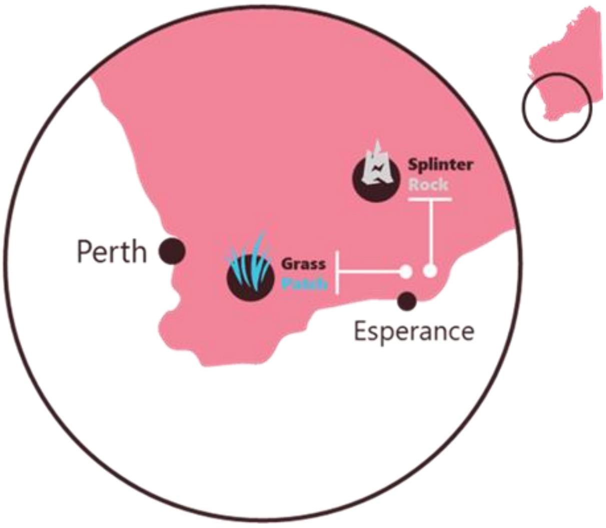
Information in this report relating to Mineral Resource estimation and Exploration Results is based on information reviewed by Mr Jeremy Peters who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Chartered Professional Geologist and Mining Engineer of that organisation. Mr Peters is a Director of Burnt Shirt Pty Ltd, consulting to OD6 and has sufficient experience which is relevant to 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.

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

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Metallurgical Drill Hole Location Details

Hole ID	Type	Easting	Northing	RL (m)	Dip (degrees)	End of Hole (m)
SRAC0021	Aircore	508100	6329561	178.8	-90	40
SRAC0023	Aircore	507103	6330585	173.2	-90	35
SRAC0033	Aircore	502230	6335591	206.2	-90	46
SRAC0042	Aircore	500036	6337842	207.3	-90	40
SRAC0043	Aircore	499486	6338407	204.3	-90	31
SRAC0056	Aircore	496417	6341560	229.5	-90	39
SRAC0149	Aircore	517485	6325298	161.8	-90	77
SRAC0150	Aircore	517999	6325835	151.7	-90	95

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*	• All chips were logged qualitatively and quantitatively. • A sample from each metre was collected and

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>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.</td><td>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.</td></tr>
<tr><td>Sub-sampling techniques and sample preparation</td><td>• 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.</td><td>• 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.</td></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</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		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.
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 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, ambient temperature, ambient pressure and 4 wt% solids for 6 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.