ASX Announcement

3 April 2023

ASX: OD6

Very High Magnet Rare Earth Recoveries Achieved at Splinter Rock Project

OD6 Metals Limited (**OD6** or the **Company**) is delighted to announce that very high metallurgical recoveries have been achieved from samples tested at the Australian Nuclear Science Organisation (ANSTO).

Highlights:

- **Very high metallurgical recoveries**, up to 96%, of Magnet Rare Earth Elements (MagREE) achieved in multiple Prospect areas utilising a simple hydrochloric acid leach
- **Highest recoveries were achieved** centrally within the main clay basins
  - Prop Prospect – **44% to 96% recovery of MagREE (average 71%)**
  - Centre Prospect – **54% to 78% recovery of MagREE (average 62%)**
  - Scrum & Flanker Prospects – **64% and 76% recovery of MagREE respectively** (one sample each)
- **Impressive leach response observed**, suggesting reductions in acid strength are possible
- ~80-90% of magnet rare earth oxides (MagREO) are located in the fine clay hosted size fraction (<75µm).
- 30-50% reductions in material to be leached can be achieved by removing the coarse grained clays
- The results provide **considerable confidence to proceed with further optimisation test work in parallel with targeted infill drill programs** at the four main Prospect Areas
- Assay results from the Splinter Rock infill drilling program are expected Q2 2023

Brett Hazelden, Managing Director, commented:

"These metallurgical results, undertaken by a specialist team at ANSTO, are a watershed moment for OD6. Results provide comfort that high recoveries can be achieved utilising a simple hydrochloric acid leach. Testing has spotlighted the potential for additional process optimisation through lowering acid strengths, increasing leach times and removal of coarse grain clay material.

OD6 has deliberately selected a wide variety of different samples, locations and depths to understand the bookends of recovery so as to enable targeted future drilling and metallurgical testing. It is becoming clear that the areas within the clay basins at distance from the source granites provides the best target zones. This underlines the importance of utilising the Airborne Electromagnetic Survey results to target these highly weather clay areas.

Our immediate focus is to conduct targeted infill drilling in these clay basins and proceed with further optimisation testwork, bringing us closer to our near-term goal of declaring a significant, high-quality maiden JORC Mineral Resource Estimate."

MagREE (Magnet Rare Earths) = Nd + Pr + Tb + Dy

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

Metallurgical sample selection and ANSTO testing

A total of 25 samples were selected from a wide variety of distinct clay and non-clay types at the Splinter Rock Project to identify the various potential mineral recovery variations across the four main Prospects (Prop, Centre, Scrum and Flanker). Samples were selected based on differing geographic location, REE grade, colour, chemical composition, AEM Conductivity, proximity to granite, basinal position (including paleo valley/channel positions) and inferred different geological genesis.

The Splinter Rock clay hosted prospect areas are characterised by a combination of ionically adsorbed, acid soluble and refractory rare earth elements (REEs). Future potential commercial production of REE is significantly improved through successful leaching of both ionic and acid soluble REEs.

ANSTO was selected to complete Splinter Rock metallurgical testing given their extensive experience in rare earth process development. The objective of the work program was to:

- determine the leachability of rare earths, under acidic conditions
- assess the potential to upgrade the REEs by separating out a fine fraction
- identify areas of high recoveries and grades to prioritise advanced-stage infill drilling

The diagnostic leach tests were conducted under two separate acidic conditions on each sample (25 and 100 g/L hydrochloric acid), at notionally ambient conditions and pressures, over a 6 hour period with interim 3 hour liquor sample to determine leaching kinetics. 6 hour recoveries are calculated based on the delta of the assayed solid head and solid residue.

The high acid condition was selected to reflect a likely upper limit for extraction, with the lower acid level selected to determine if recoveries could be maintained. The comparable MagREE recoveries observed suggest further optimisation of acid conditions will be possible.

Recoveries were also calculated after 3 and 6 hours of leaching (liquid assays) to assess the speed that REE leach into solution, to determine if lower acid conditions over a longer period of leaching time could achieve similar recoveries to high acid conditions over shorter time periods.

Initial solid samples were screened by size to determine distribution of mass and REE in each size fraction. This was undertaken to assess the potential to increase REE grade and decreased regent (acid) requirements by removing lower grade, course material from the process.

Results of the test work are presented in Tables 1, 2 and 3, with corresponding drill hole locations outlined in Figures 1, 2 and 3. Test work results should be viewed in the context of geological setting and the vast areas of clay basins currently identified by OD6.

Summary of results	- A number of areas of Excellent metallurgical recoveries have been identified at all four prospects, with highest recoveries achieved at Prop, Centre and Flanker. - The best metallurgical results came from areas within the clay basins and channel areas and away from the granite boundaries - Prop Prospect: five clay-basin composite samples with 44% to 96% recovery of MagREE (average 71%) - Centre Prospect: three clay-basin composite samples with 54-78% recovery of MagREE (average 62%) - Flanker Prospect: one clay-basin composite sample with 76% recovery of MagREE - Scrum Prospect: one clay-basin composite sample with 64% recovery of MagREE - Control samples on margin of fresh granite or saprock (partially weathered granite) or areas of carbonaceous shales or paleo-channel sediments show lower recoveries. - Metallurgical results and Airborne Electromagnetic Survey (AEM) correlate the areas of high recoveries within clay basins and channel areas (**target areas**) and areas located on the margins of the granites that have shown lower recoveries, (**avoidance areas**) - Impressive leach response with similar MagREE recoveries being achieved between a 3 hour and 6 hour leach suggesting fast reaction kinetics - Low acid conditions over a longer leach duration achieved similar recoveries, to higher concentration suggesting further reductions in acid strength will be possible - Particle size analysis reveals ~80-90% of MagREE are hosted in -75µm size fraction. - Potential to remove 30-50% of the gangue material with a corresponding upgrade in head grade for only a minor loss in REEs identified through removal of coarse grained clays size fraction (>75um) material. - The results provide confidence to proceed with highly targeted optimisation test work and infill drill programs at the four main Prospect Areas - Fusion digest can increase head grade by up to 30% over a 4-acid leach assay - Mineralogy comparison of selected solid samples are underway with results expected Q2 2023

Based on the positive initial diagnostic leach outcomes and the potential to upgrade the REE by removal of coarse material, further stages of work are proposed to be undertaken at ANSTO, which will involve more diagnostic tests to define optimum leach conditions. This will include existing and new samples from the recently completed infill drilling campaign at Splinter Rock to target the identified areas of high grades and recoveries.

Table 1: MagREE acid leach recovery at different acid concentrations and over time for clay-basin samples

Sample ID	Composite Depth (m)	Prospect	25 g/L HCl		100 g/L HCl		Sample Selection / position
			3-hr liquor % MagREE Recovery	6-hr Solid % MagREE Recovery	3-hr liquor % MagREE Recovery	6-hr Solid % MagREE Recovery	
SR149A	18-33	Prop	67	**91**	72	**96**	Clay Basin (mixed clays)
SR150A	24-36	Prop	32	**46**	40	**44**	Clay Basin (mixed clays)
SR150B	36-42	Prop	46	**52**	55	**51**	Clay Basin (red, brown, grey clays)
SR150C	42-60	Prop	49	**77**	69	**78**	Clay basin (red, brown, grey clays)
SR150D	60-95	Prop	39	**76**	79	**85**	Clay Basin (mixed clays)
SR033B	27-45	Centre	22	**46**	63	**78**	Clay Basin (cream & grey clays)
SR042A	21-39	Centre	29	**47**	44	**55**	Clay Basin (cream & grey clays)
SR043A	21-31	Centre	37	**54**	44	**54**	Clay Basin (cream & grey clays)
SR056B	33-45	Scrum	38	**56**	51	**64**	Clay Basin (grey-brown clays)
SR021A	6-39	Flanker	32	**62**	65	**76**	Clay Basin (grey-brown clays)

Note:

TREO (Total Rare Earth Oxide) = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$

Mag REO (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.

AEM aids prioritisation of metallurgical samples

OD6 has utilised the Airborne Electromagnetic Survey (AEM) results to map metallurgical samples selected against their proximity to:

- granite (greens and blues)
- clay basin position, including localised clay pools, clay channels, wide clay basins and paleochannel positions (orange and red)
- high conductivity, salt water and salt lake areas (pink)

Based on the recovery result tables and AEM maps (refer Figures 1, 2 and 3) it can be observed that:

- areas of wide clay basins, clay pools and clay channels have higher recoveries, are likely to represent highly weathered clays with REEs transported by groundwater action

- areas on the margin of granites and semi-weathered granite saprock and areas of either carbonaceous shales or paleo-channel sediments (non-clay areas) have lower recovery, most likely a result of REE being bound in refractory REE minerals such as monazite, xenotime or phosphates (e.g. apatite)
- highly conductive areas may outline salty lakes and salt-water channels that are potentially leaching out REEs and leaving behind residual not leachable REEs

Following these observations, advanced-stage infill drilling and further metallurgical test work on areas of wide clay basins, clay pools and clay channels will be prioritised

Once assays are received from Phase 2 drilling at Splinter Rock, additional metallurgical samples will be submitted and diagnostic acids leaches will be performed, further optimising acid conditions and leach time frames.

Table 2: MagREE acid leach recovery at different acid concentrations and over time for low/nonclay basin samples

Sample ID	Composite Depth (m)	Prospect	25 g/L HCl		100 g/L HCl		Sample Selection / position
			3-hr liquor % MagREE Recovery	6-hr Solid % MagREE Recovery	3-hr liquor % Mag REE Recovery	6-hr Solid % MagREE Recovery	
SR149B	33-39	Prop	32	**28**	34	**33**	Carbonaceous shale
SR151A	18-27	Prop	14	**10**	18	**17**	Basal Paleo channel (carbonaceous shale)
SR151B	27-56	Prop	8	**4**	5	**10**	Basal Paleo channel (carbonaceous shale)
SR033A	18-27	Centre	8	**13**	15	**21**	Basin-Granite margin
SR039A	21-27	Centre	7	**13**	14	**14**	Basin-granite margin
SR039B	27-42	Centre	7	**10**	14	**16**	Basin-Granite Margin (Carbonaceous shale)
SR056A	21-35	Scrum	14	**20**	25	**30**	Clay soak/pond
SR072A	27-39	Scrum	14	**-3**	14	**16**	Basin-granite margin
SR072B	39-56	Scrum	8	**4**	10	**8**	Carbonaceous shale
SR075A	33-57	Scrum	8	**4**	9	**8**	Basin-granite margin
SR077A	27-60	Scrum	24	**23**	25	**1**	Basin-granite margin (carbonaceous shales)
SR022A	6-21	Flanker	1	**7**	1	**5**	Basin-granite margin
SR022B	21-36	Flanker	2	**7**	3	**10**	Basin-granite margin
SR023A	6-21	Flanker	3	**5**	6	**5**	Basin-granite margin
SR023B	21-35	Flanker	10	**31**	26	**36**	Basin-granite margin

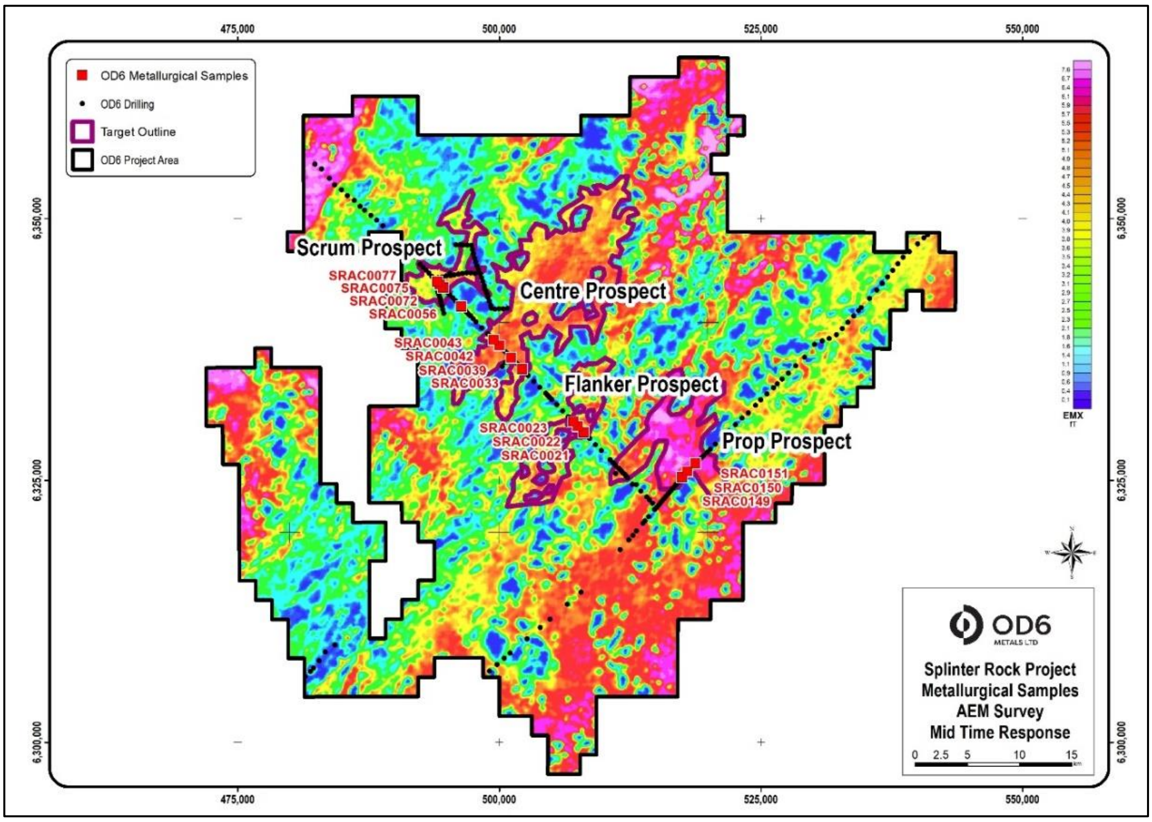


Figure 1: AEM Mid time electromagnetic conductivity model of all Prospects with metallurgical drill hole locations shown in red. Orange and red areas are interpreted as thicker clay zones, with blue and green areas being the granites.

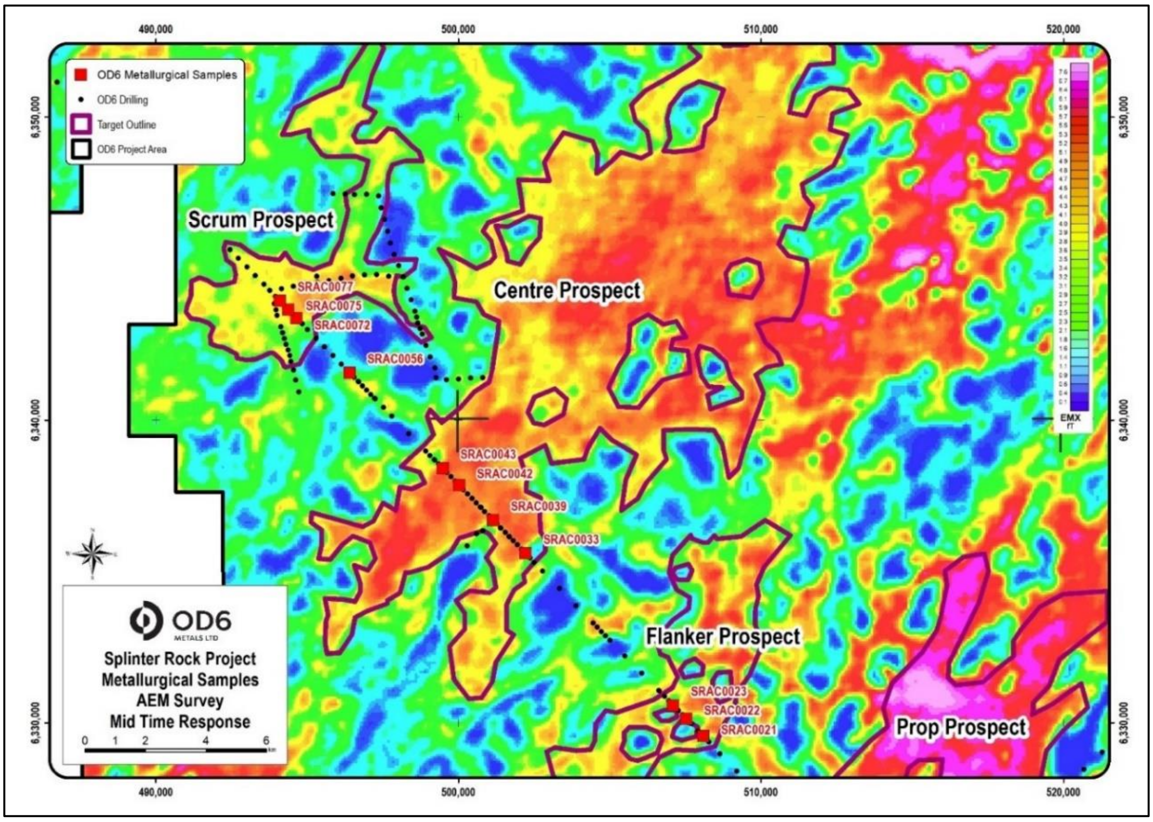


Figure 2: AEM Mid time electromagnetic conductivity model of Scrum and Centre Prospects with metallurgical drill hole locations shown in red. Orange and red area interpreted as thicker clay zones, with blue and green areas being the granites.

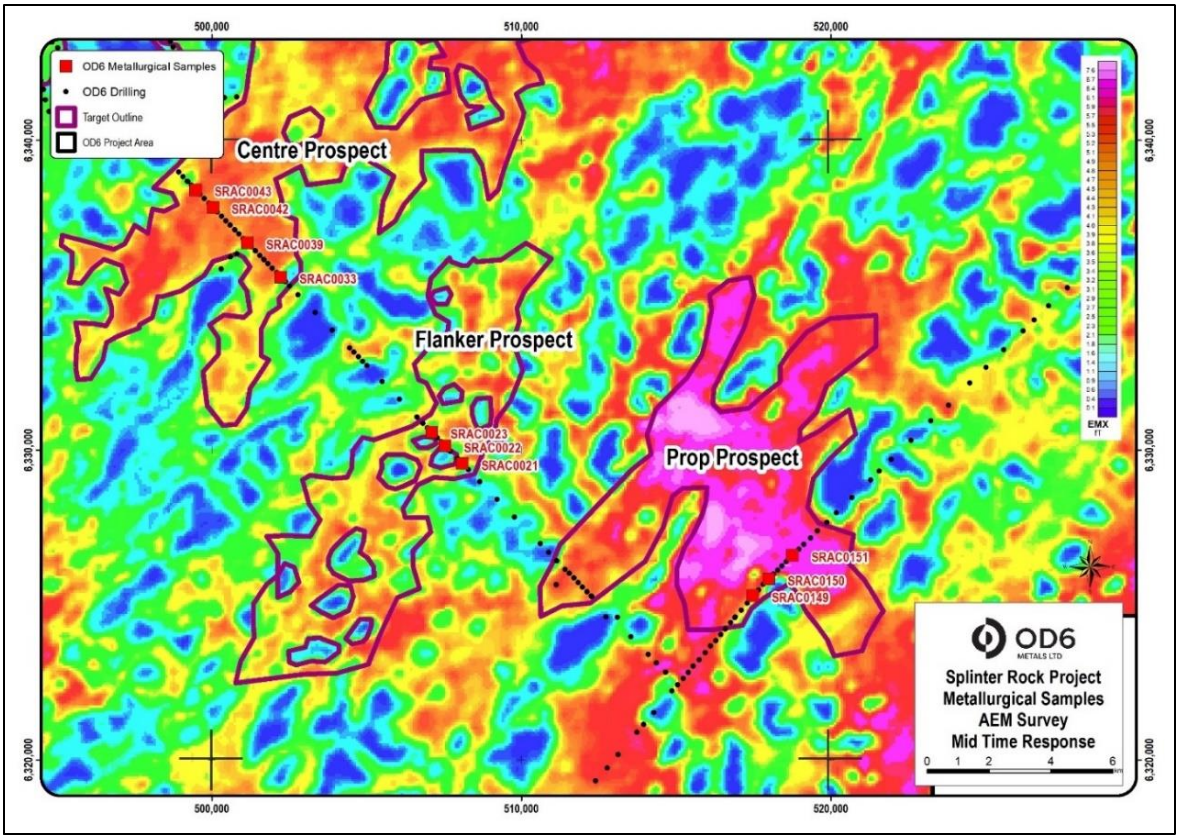


Figure 3: AEM Mid time electromagnetic conductivity model of Flanker and Prop Prospects with metallurgical drill hole Locations shown in red. Orange and red areas are interpreted to indicate thicker clay zones, with blue and green areas being the granites.

80-90% of MagREO hosted in –75um size fraction

The original metallurgical samples were also screened at 4 separate size fractions to determine if the REEs were evenly spread in both the coarse and fine fractions, or if there was a natural preferential concentration of REEs based on size. Results are detailed in Table 3 below.

It is important to note that:

- In the vast majority of samples, the 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

Results show that coarse material greater than 75um could be removed from a future processing plant via a screening method for a potential minor loss in total REE recovery. This is of particular interest as it could potentially decrease acid consumption due to less material being leached.

Further optimisation test work will occur to determine if the coarse and fine materials have the same acid leach recoveries plus determine if the coarse fraction contains a larger portion of the resistate ("refractory") non-acid soluble REE minerals.

Table 3: 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	**40**	36	36	2,870	2,495	**6%**
		<75	**60**	64	64		3,028	
SR0149B	Prop	>75	**47**	14	14	626	184	**60%**
		<75	**53**	86	86		999	
SR0150A	Prop	>75	**45**	15	16	814	289	**48%**
		<75	**55**	85	84		1,206	
SR0150B	Prop	>75	**51**	19	20	2,516	2,593	**-4%**
		<75	**49**	81	80		2,411	
SR0150C	Prop	>75	**45**	21	23	795	406	**37%**
		<75	**55**	79	77		1,091	
SR0150D	Prop	>75	**59**	16	16	683	181	**100%**
		<75	**41**	84	84		1,367	
SR0151A	Prop	>75	**22**	7	7	590	193	**17%**
		<75	**78**	93	93		689	
SR0151B	Prop	>75	**41**	6	7	1,681	274	**54%**
		<75	**59**	94	93		2,593	
SR033A	Centre	>75	**33**	6	6	2,201	406	**35%**
		<75	**67**	94	94		2,980	
SR033B	Centre	>75	**50**	14	14	2,161	593	**67%**
		<75	**50**	86	86		3,617	
SR039A	Centre	>75	**31**	7	7	412	87	**32%**
		<75	**69**	93	93		543	
SR039B	Centre	>75	**43**	3	3	1,313	83	**66%**
		<75	**57**	97	97		2,174	
SR042A	Centre	>75	**40**	9	9	2,490	540	**48%**
		<75	**60**	91	91		3,674	
SR043A	Centre	>75	**53**	17	20	1,473	556	**67%**
		<75	**47**	83	80		2,458	
SR056A	Scrum	>75	**49**	17	17	1,650	556	**59%**
		<75	**51**	83	83		2,623	
SR056B	Scrum	>75	**51**	21	21	1,365	551	**58%**
		<75	**49**	79	79		2,157	
SR072A	Scrum	>75	**52**	6	6	644	75	**93%**
		<75	**48**	94	94		1,244	
SR072B	Scrum	>75	**39**	5	5	1,310	168	**52%**
		<75	**61**	95	95		1,997	
SR075A	Scrum	>75	**34**	6	7	1,313	260	**38%**
		<75	**66**	94	93		1,810	
SR077A	Scrum	>75	**39**	18	18	973	431	**33%**
		<75	**61**	82	82		1,295	
SR021A	Flanker	>75	**63**	15	14	703	156	**126%**
		<75	**37**	85	86		1,587	
SR022A	Flanker	>75	**45**	17	17	993	358	**49%**
		<75	**55**	83	83		1,477	
SR022B	Flanker	>75	**42**	5	5	1,305	161	**61%**
		<75	**58**	95	95		2,105	
SR023A	Flanker	>75	**42**	9	9	614	127	**52%**
		<75	**58**	91	91		931	
SR023B	Flanker	>75	**48**	7	7	2,102	321	**74%**
		<75	**52**	93	93		3,663	

Difference in 4-acid digest vs fusion digest geological test results

Geological drill assays at Splinter Rock were performed utilising the ALS 4-acid soluble digestion method as opposed to the ALS Lithium Borate Fusion Digest method. Typically, the Fusion Digest method returns results for resistate (refractory) non-acid soluble REE minerals, thus inflating the overall TREO grade.

As can be seen in Table 4 below the Fusion Digest method returns TREO head grades up to 31% higher than the 4-acid method. This is an important difference when undertaking geo-met modelling.

Table 4: TREO Grade difference utilising 4-acid digest vs fusion digest

Sample ID	Depth (m)	Prospect	4-Acid Digest TREO ppm	Fusion Digest TREO ppm	Difference %
SR149A	18-33	Prop	2,359	2,935	**24.4**
SR149B	33-39	Prop	542	517	**-4.6**
SR150A	24-36	Prop	719	717	**-0.3**
SR150B	36-42	Prop	2,665	2,339	**-12.2**
SR150C	42-60	Prop	663	723	**9.0**
SR150D	60-95	Prop	609	559	**-8.2**
SR151A	18-27	Prop	494	503	**1.8**
SR151B	27-56	Prop	1,417	1,468	**3.6**
SR033A	18-27	Centre	1,854	2,075	**11.9**
SR033B	27-45	Centre	2,007	2,111	**5.2**
SR039A	21-27	Centre	388	432	**11.3**
SR039B	27-42	Centre	1,071	1,173	**9.5**
SR042A	21-39	Centre	1,977	2,035	**2.9**
SR043A	21-31	Centre	1,193	1,368	**14.7**
SR056A	21-35	Scrum	1,482	1,600	**8.0**
SR056B	33-45	Scrum	1,267	1,267	**0.0**
SR072A	27-39	Scrum	613	620	**1.1**
SR072B	39-56	Scrum	1,137	1,142	**0.4**
SR075A	33-57	Scrum	1,166	1,215	**4.2**
SR077A	27-60	Scrum	872	887	**1.7**
SR021A	6-39	Flanker	589	621	**5.4**
SR022A	6-21	Flanker	799	911	**14.0**
SR022B	21-36	Flanker	1,043	1,274	**22.1**
SR023A	6-21	Flanker	451	549	**21.7**
SR023B	21-35	Flanker	1,536	2,021	**31.6**

Mineralogy characterisation	Mineralogy characterisation and testing is currently being conducted in conjunction with **CSIRO, ANSTO and Murdoch University.** The REE and clay host mineralogy is important for in depth understanding of why higher recoveries can be achieved in particular Prospect areas. Geometallurgy (GeoMet) refers to the practice of combining variables such as geology, grade, volume, geochemistry, mineralogy and metallurgy to combine economic models with exploration. The aim is to optimise the economics of a deposit to facilitate the identification and ranking of preferred initial mining areas across clay hosted prospects. As Splinter Rock's GeoMet relationships are systemically mapped, clay areas containing the highest grades and metallurgical recoveries of rare earth elements can be identified and targeted for advanced stage work streams. Various mineralogy testing methods are currently being undertaken including quantitative XRD, SEM/EDS and QEMSCAN. Determining the mineralogical composition of the high-grade areas is key to designing an economically successful processing facility.
Geological setting and characteristics	Each Prospect (Prop, Flanker, Centre and Scrum) has similar, but individual, geological features that may result in regional clay differences and characteristics. Some geological variations of note are: 1. The significant elevation change referred to as **the Ravensthorpe Ramp** may be a key exploration driver of potential clay types, deposition thickness, grade and REE recoveries. The elevation modelling allows identification of basins where granites, rich in REE minerals, have been progressively weathered into clays and transported, through groundwater and chemical weathering, to be deposited in as accumulations in clay saprolite/sediment basins (refer Figures 4 and 5). 2. The **Booanya Granites** are described in Geoscience Australia's database as **"heavily enriched in REE"** and as such their locations may result in localised enrichment of REEs in the clay. Refer to Figure 6 below as to the location of current drilling in relation to the Booanya granites. 3. The AEM survey also **collected Total Magnetic Intensity (TMI) data** which measures variations in the intensity of the magnetic field caused by the contrasting magnetic mineral content of rock. The model below in Figure 7 shows there are magnetic highs in pink and lows in blue with each of the prospects being positioned over different magnetic intensities which suggest potential variations in basement mineral characteristics (refer Figure 7). 4. **Regional Salt Lakes** - the Prop Prospect contains **several ephemeral acid saline lakes** characterised by high salinity and low pH conditions. These areas shows up as a bright pink colour on the AEM data representing high conductivity. The highly acidic environment increases the possibility that REE's within these areas have already partially leached and mobilised around the edges of the salt lakes (refer Figure 8).

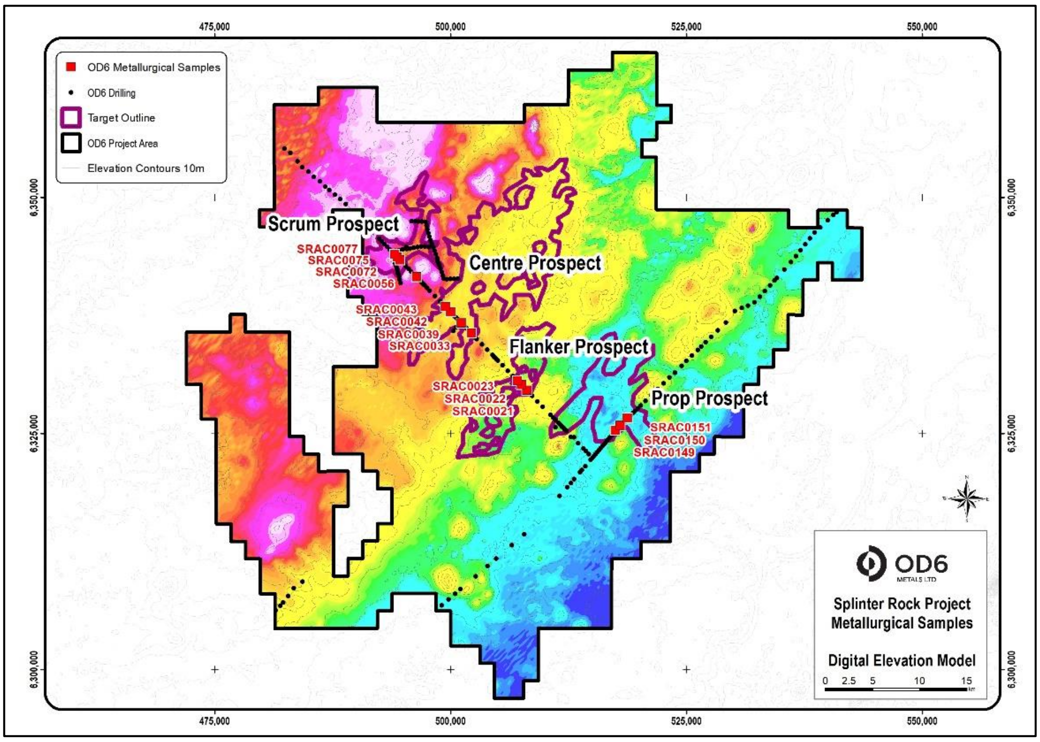


Figure 4: Splinter Rock elevation model showing highest points in white and lowest points in blue.

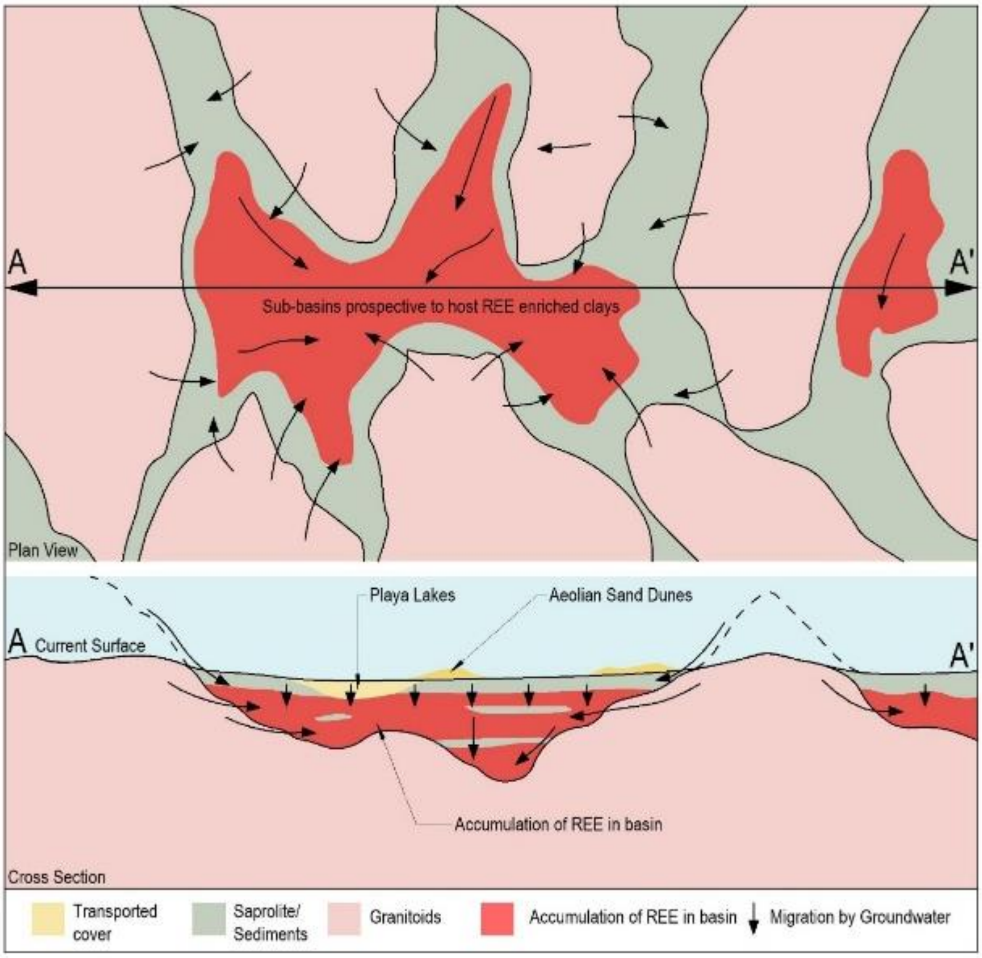


Figure 5: OD6 conceptual exploration model of granite source rocks weathered to form clay basins

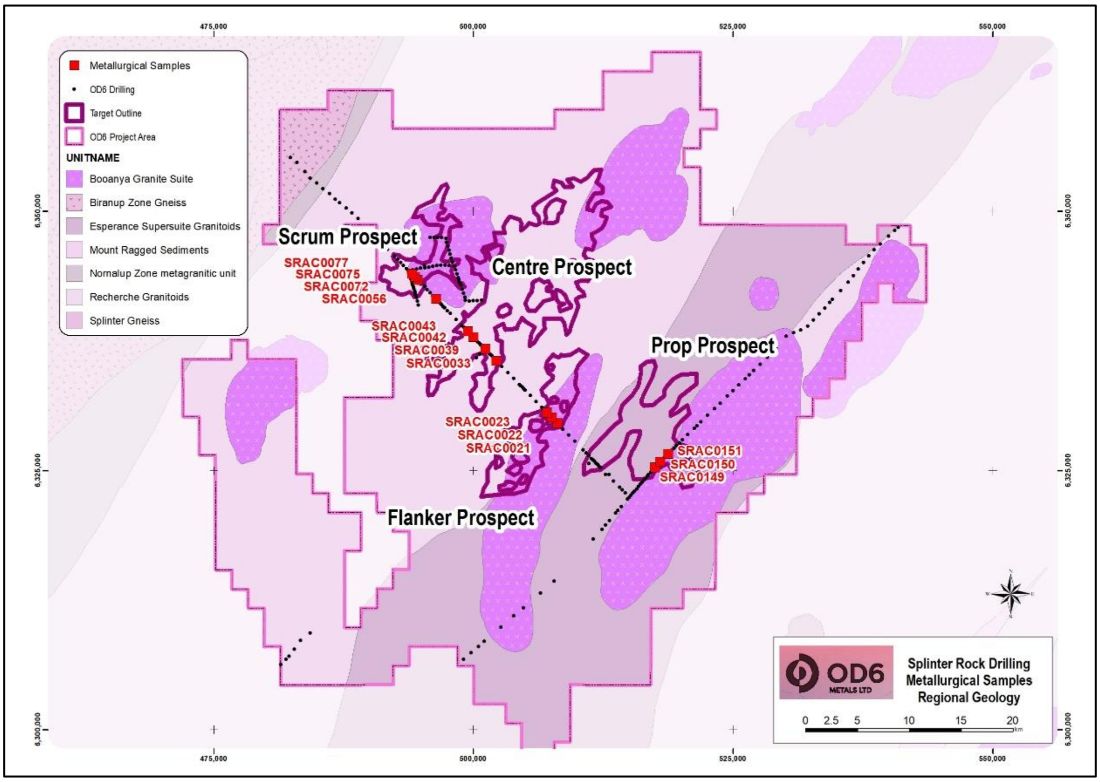


Figure 6: Booanya Granite locations at Splinter Rock

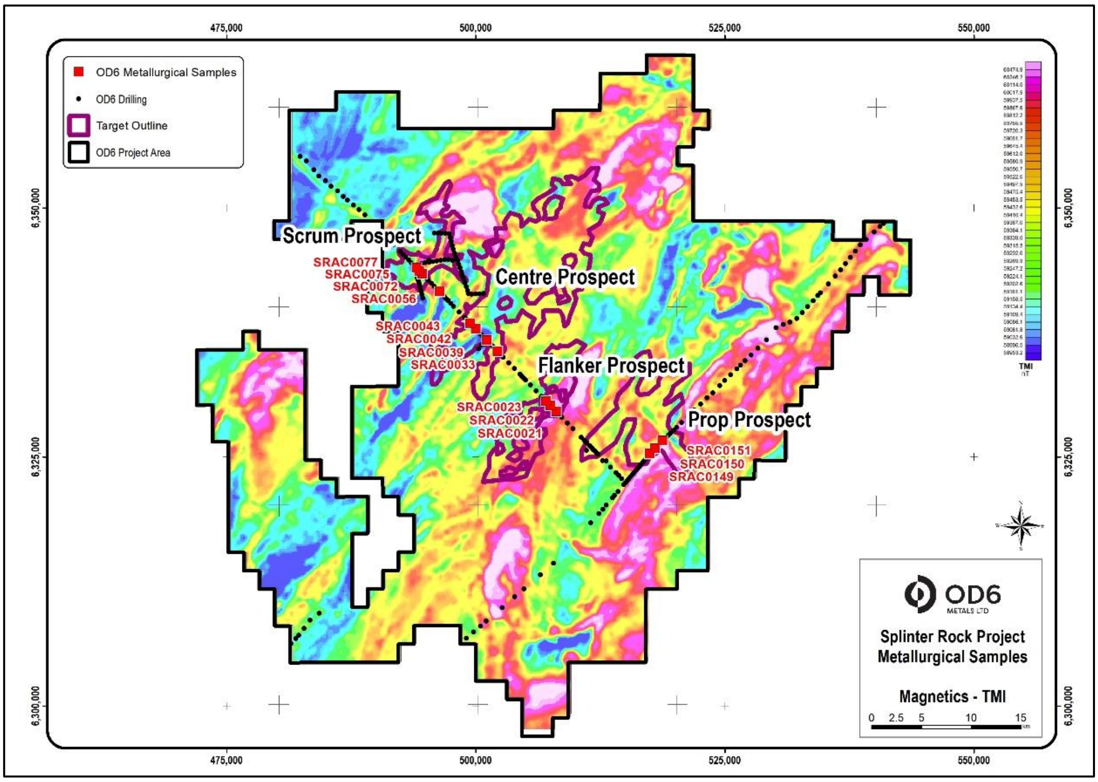


Figure 7: Splinter Rock Total Magnetic Intensity model showing magnetic highs in pink and lows in blue

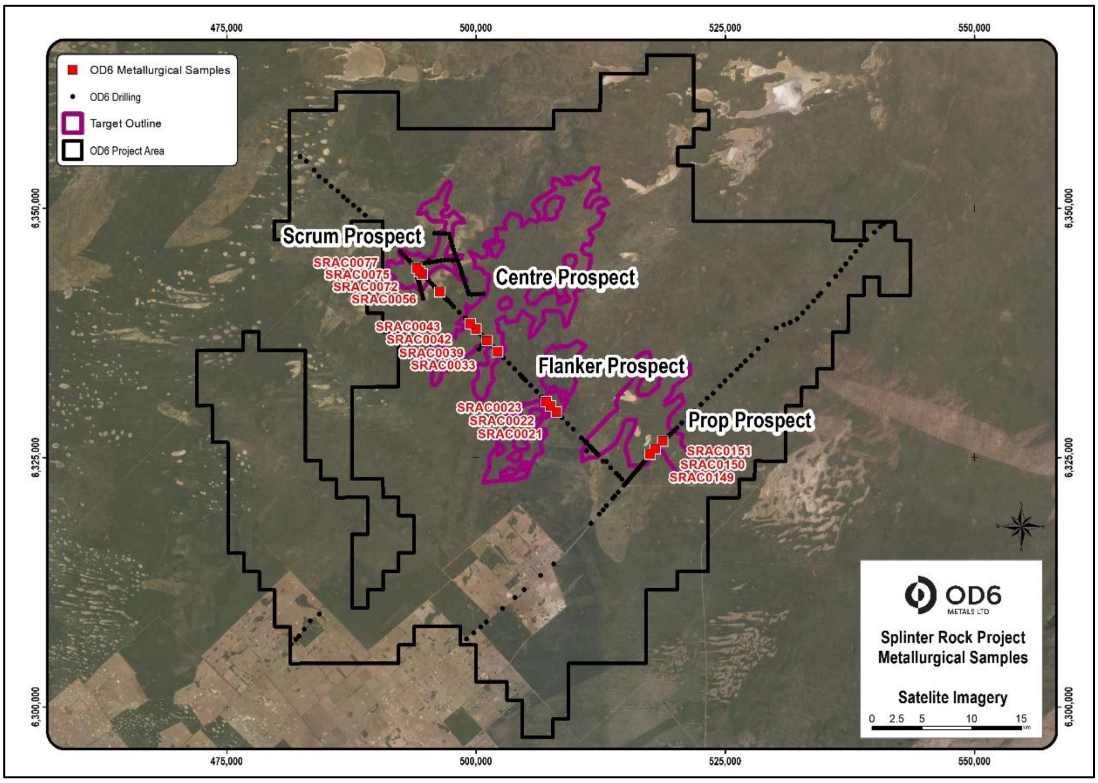


Figure 8: Splinter Rock Project Aerial image showing regional salt lakes

The geological settings and associated characteristic allow for the following observations:

- **Prop Prospect:** Lowest elevation, surrounded by Booanya Granites to the north and south and is also potentially a paleo valley eroded by historic glaciers and then filled up by the clays. It contains three salt lakes which show as bright pink on the AEM model
- **Flanker Prospect:** Resides on top of a magnetic high Booanya granite, which is part way up the Ravensthorpe Ramp and is most likely to have some channels of transported clays with a localised weathered granite profile
- **Centre Prospect:** Is large clay basin that sits within a tableland area at higher elevations. Clays have potentially pooled in this area with Booanya granites to the North
- **Scrum Prospect:** On a magnetic high with Booanya granite to the north then heads south to a lower point with low magnetic intensity. Is most likely to have some channels of transported clays plus a localised weathered granite profile
- It is noteworthy that there is regional prospectivity to the northeast of the Splinter Rock tenements which show thick clay zones surrounded by Booanya granites, within a potential palaeovalley, as well as a number of salt lakes. This is very similar to the Prop Prospect and will form part of a future regional exploration drill program. There is also further prospectivity to the west of the OD6 tenements.

Next phase metallurgical test work	A future metallurgical test program will utilise the current metallurgical samples and additional samples sourced from the recently completed second phase drilling program at Splinter Rock and prioritising the Prop, Centre, Scrum and Flanker Prospects. The objectives of the metallurgical test program will include: • Expansion of the number of acid leach conditions to determine the optimal recovery/dosage rate • Investigation and understanding of lower acid dosage on leach duration • Completion of diagnostic leaches on screened material, removing the coarse material notionally greater than 75um • Calculation of acid consumption rates • Further identification of areas of high recoveries and grades to prioritise advanced-stage infill drilling • Observation of the impact on REE recoveries at higher solids percent slurries
Program timeline	Upcoming OD6 project advancement activities include: • Splinter Rock Project drilling assays results expected April 2023 • Final AEM data processing and 3D modelling by Southern Geoscience Consultants expected Q2 2023 • Splinter Rock Project Mineralogy assessments from ANSTO, CSIRO and Murdoch University expected Q2 2023 • Splinter Rock Exploration Target to be announced in Q2 2023 • Grass Patch Project metallurgical samples to be submitted to ANSTO for testing and mineralogy assessments during Q2/Q3 2023 • Splinter Rock Step out drilling through May and June 2023

Competent Persons Statement

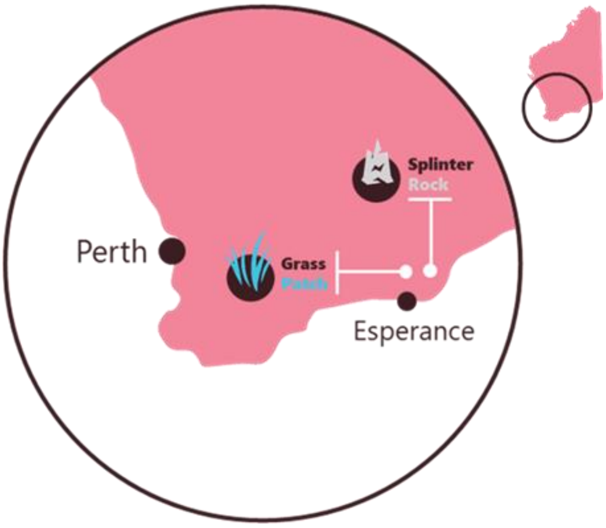
Information in this report relating to Exploration Results is based on information reviewed by Jeremy Peters, who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Chartered Professional Geologist and Mining Engineer of that organisation. Mr Peters is an independent consultant of Burnt Shirt Pty Ltd 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) and Praseodymium (Pr), 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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PO Box 277, North Beach, WA 6920

PO Box 2009, Esperance, WA 6450

Metallurgical Drill Hole Location Details

Hole ID	Type	Easting	Northing	RL (m)	Dip (degrees)	End of Hole (m)
SRAC0021	Aircore	508100	6329561	178.8	-90	40
SRAC0022	Aircore	507541	6330133	175.6	-90	36
SRAC0023	Aircore	507103	6330585	173.2	-90	35
SRAC0033	Aircore	502230	6335591	206.2	-90	46
SRAC0039	Aircore	501155	6336696	206.4	-90	44
SRAC0042	Aircore	500036	6337842	207.3	-90	40
SRAC0043	Aircore	499486	6338407	204.3	-90	31
SRAC0056	Aircore	496417	6341560	229.5	-90	39
SRAC0072	Aircore	494659	6343366	226.4	-90	56
SRAC0075	Aircore	494379	6343652	230.4	-90	57
SRAC0077	Aircore	494103	6343941	233.6	-90	60
SRAC0149	Aircore	517485	6325298	161.8	-90	77
SRAC0150	Aircore	517999	6325835	151.7	-90	95
SRAC0151	Aircore	518765	6326608	145.9	-90	56

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 aircore 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. • Holes are wide and irregular spaced regional exploration drilling designed to test anomalies • 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.*	• 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 collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the*	• 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

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>grain size of the material being sampled.</td><td></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 evaluation groups:
• TREO (Total Rare Earth Oxide)
$= La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$.
Note that Y_2O_3 is included in the TREO calculation.</td></tr>
<tr><td>Location of data points</td><td>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
• Specification of the grid system used.
• Quality and adequacy of topographic control.</td><td>• Drill hole collars were located using a handheld GPS to +/-5m accuracy
• Grid system was MGA 94 Zone 51
• Downhole survey was not undertaken, the holes being vertical
• No topography control was used, given the relatively flat topography</td></tr>
<tr><td>Data spacing and distribution</td><td>• Data spacing for reporting of Exploration Results.
• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.
• Whether sample compositing has been</td><td>• Drilling intervals were closed to approximately 200m centres where historic drilling returned elevated REE assays
• Downhole samples were taken on 1m intervals</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	applied.	
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
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 Sahara Natural Resources and included in the Company's Prospectus dated 10 May 2022. • Historic exploration for REEs 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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.*	• 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 above • No material has been excluded. • Assay results have yet to be received and are thus not included

Criteria	JORC Code explanation	Commentary
	• *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.*	
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 cut-off grades or data aggregation methods have been utilised • Multielement results (REE) are converted to stoichiometric oxide (REO) using element-to-stoichiometric conversion factors.
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.*	• Data is currently being compiled and reviewed whilst waiting for laboratory assays thus no cross sections are presented. • 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.*	• 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. Further work on the remainder of the project is underway
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 for test work conducted on acid leaching of rare earths. ANSTO conducted tests on a 2 w/v% slurry of Splinter Rock clay composites at 25 and 100 g/L free acidity from hydrochloric acid. With REE recoveries calculated from assay results of liquor and residue samples taken at the 3 and 6 hour marks. • 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.*	• Further work will include additional air core drilling, core drilling (e.g sonic or push-tube drilling, mineralogy, metallurgical testwork and study work.