ASX Announcement

12 November 2025

ASX: OD6

CSIRO Research Paper Publication

Multi-Disciplinary Characterisation of the Splinter Rock Clay-Hosted REE Prospect, Western Australia

OD6 Metals Limited (**OD6** or the **Company**) is pleased to advise that a peer reviewed scientific paper detailing research undertaken at its flagship Splinter Rock Rare Earth Project, northeast of Esperance in Western Australia, has been published in the international journal *Ore Geology Reviews*.

Highlights:

- The Paper entitled, **"Multi-disciplinary characterisation of the splinter rock clay-hosted REE prospect, Western Australia"** has been compiled by lead author, Dr Nathan Reid from Australia's national science agency, CSIRO
- The Paper consolidates three years of collaborative geological and geochemical research undertaken by CSIRO, Murdoch University, Monash University and OD6 Metals at the Splinter Rock Rare Earth Project, all of whom have representatives as co-authors
- In simple terms the research paper explains how:
    - Integrating landscape evolution, mineralogy, geophysics, and geochemistry aids in understanding processes for REE enrichment.
    - Three regolith units — saprock, saprolite, and transported were identified, with the highest REE concentrations in saprolite.
    - Changes in conductivity (AEM) and kaolinite crystallinity (hyperspectral) identified key interfaces within the regolith.
    - Combined mineralogy identified REE-bearing mineral phases, including REE phosphates, Al-REE Phosphates and REE carbonates.

Brett Hazelden, Managing Director, commented:

"OD6 continues to work closely with Australia's leading research institutions to build a deep scientific understanding of the Splinter Rock Rare Earth Project and develop advanced technologies for REE discovery and extraction.

We are proud to be one of the few companies globally that base development decisions on such detailed, peer-reviewed science. The collaboration with CSIRO, Murdoch and Monash has provided valuable insights into how and where rare earths occur at Splinter Rock.

In the current geopolitical environment, and as one of Australia's largest and highest-grade clay-hosted REE deposits, Splinter Rock provides governments and industry with a project based on real science, plus in-depth research and development, sourced from a stable jurisdiction."

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Multi-disciplinary characterisation of the splinter rock clay-hosted REE prospect, Western Australia

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ABSTRACT

Global efforts to find rare earth elements (REEs – including La to Lu, Y, and Sc) are increasingly focusing on clay-rich layers found in weathered landscapes, especially those formed from alkaline granites. These REEs are vital for modern technologies. In southern Western Australia, the Esperance region is now seen as a promising area for REEs in clay-rich regolith. However, how natural processes and climate have moved REEs into these materials is not fully understood. This study used a multi-disciplinary approach to better understand the Splinter Rock REE project. We combined detailed regolith mapping with airborne electromagnetic (AEM) surveys to study the regolith and identify different clay layers. We also combined detailed geochemical and spectral mineralogy to analyse the regolith layers and figure out which ones are most important for REE accumulation.

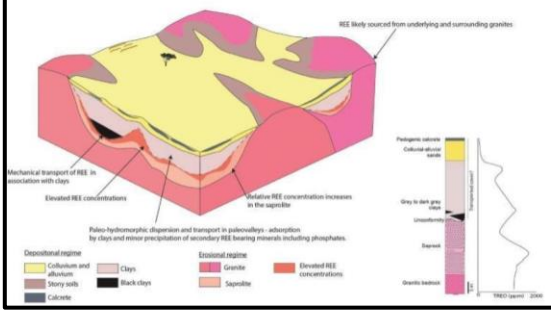
At Splinter Rock, three main regolith layers were identified, starting from the bedrock and moving upward:

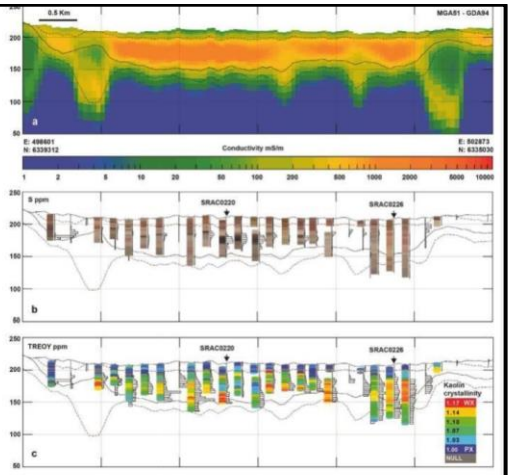
Saprock – the weathered rock just above the bedrock.
Saprolite – a deeper, in-place weathered layer.
Transported sediments – materials moved and deposited in low-lying areas, often along palaeo-drainage.

The boundaries between these layers helped distinguish between materials formed in situ and those transported from further afield. The highest REE concentrations were found in the saprolite layer, especially near its top. Some enrichment in REEs was also found at the base of the transported sediments, but in much lower concentrations. To explore REEs effectively in these terrains, it's important to understand how physical and chemical processes move and concentrate these elements. By combining knowledge of landscape evolution models with data on mineralogy, geochemistry, and geophysics, it is possible to better understand how REEs become enriched in certain areas. REE phosphate phases were detected with no direct evidence for weakly bound REEs; the phosphate minerals increase in concentration with depth. Further detailed work is recommended to determine whether the REE minerals are primary (hard to leach) or secondary (easier to leach). Mineralogy and leachability will be key for these types of prospects to determine future economic potential.

Understanding a clay hosted REE deposit

A multi-disciplinary approach combining airborne electromagnetics, regolith mapping, downhole geochemistry, spectral mineralogy, X-ray diffraction, scanning electron microscopy, and landscape evolution modelling





Can be successfully applied to understand the morphology, formation and mineralogy of a clay hosted Rare Earth Element deposit in SW Western Australia.
This leads to the development of block models to aid exploration and follow up sampling

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).

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.

Rare Earth Elements

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

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

An innovative Process Flow sheet has been selected utilising Heap Leaching, Nano-filtration and Ion Exchange Technologies that have achieved ~75% Nd & Pr overall recovery, produced a high-quality Mixed Rare Earth Carbonate or Hydroxide (MREC/H) of ~56-59% TREO, with low levels of impurities (Al, Fe, P, Si) and extremely low uranium and thorium content (<0.001% U + Th).

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

Copper

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

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

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

Corporate Directory

Managing Director	Mr Brett Hazelden
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Non-Executive Director	Dr Mitch Loan
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