ASX Announcement

5 October 2022

ASX: OD6

OD6 Engages CSIRO on Splinter Rock Critical Rare Earth Minerals Project

OD6 Metals Limited (**OD6** or the **Company**) is pleased to advise that they have engaged Australia's national science agency, CSIRO, on a project to increase the understanding of the geochemical and geophysical signatures of rare earth targets at the Company's Splinter Rock and Grass Patch Projects.

Highlights:

- CSIRO and OD6 Metals to collaborate on techniques to improve rare earth exploration
- CSIRO will combine traditional and cutting-edge exploration tools in a multidisciplinary approach using geophysical, remote sensing, geochemical, mineralogical and spectral analyses
- Initial works using existing airborne electromagnetic geophysical survey data has confirmed it as a suitable technique for identifying clay horizons

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Brett Hazelden, OD6 Managing Director, commented:

"OD6 is pleased to be working with Australia's national science agency, CSIRO, to help generate new knowledge and develop new technologies to increase confidence in clay base rare earth exploration. We, as a company, are committed to working with some of the more innovative and collaborative organisations so we can minimise discovery risk and unlock the full value of our rare earth projects."

Dr Sandra Occhipinti, CSIRO Research Director Discovery, commented:

"Australia is well positioned to capitalise on its geology by developing a robust and long-term rare-earth industry, which will help decarbonise the global economy. CSIRO has had many successes in the development of new techniques to assist in the discovery and processing of new resource projects. We are pleased to be able to support this project through the CSIRO Kick-Start program, which provides companies with funding support and access to CSIRO's research expertise and capabilities to help grow and develop their business."

Project Engagement Highlights

CSIRO and OD6 Metals have entered into an agreement supported through CSIRO's Kick-Start program to conduct an initial first-stage project that will provide improved geochemical and geophysical understanding to increase confidence in rare earth elements (REE) exploration at the Company's Splinter Rock and Grass Patch Projects. The Kick-Start project has been designed to:

- identify and characterise the cover and clay horizons using existing data
- investigate the extent of these clay horizons
- identify potential sources of the REE
- investigate whether these clay horizons can be extrapolated or improved using geophysical tools
- propose appropriate surface exploration techniques.

The collaboration will:

- Use existing airborne electromagnetic geophysical survey data to determine if this technique is suitable for identifying clay horizons
- Review other hyperspectral techniques as tools for rare earth exploration
- Utilise CSIROs advanced mineral analysis and logging system, HyLogger
- Identify potential sources of the clay-hosted rare earth elements

By defining the host, identifying potential sources and dispersion processes in a 3D landscape context, CSIRO will support the development of an improved exploration workflow to enable exploration with increased confidence.

CSIRO Kick-Start

CSIRO Kick-Start is an initiative for innovative Australian start-ups and businesses, providing funding support and access to CSIRO's research expertise and capabilities to help grow and develop their business.

OD6 Metals has been approved for a $50k Kick-Start voucher, which provides matched funding support and access to CSIRO's research expertise and capabilities to help grow and develop its business.

Airborne electromagnetic geophysical surveys can identify thick clay horizons

Geoscience Australia's AusAEM survey (collected across Australia since 2017) includes several 20km spaced lines across the Company's projects. This survey is an airborne electromagnetic technique that maps sub-surface conductivity. Conductivity can be a product of salty groundwater, conductive regolith (e.g. clays), graphitic layers or bedrock conductors (e.g. sulphide accumulations).

CSIRO's reprocessing of the existing wide spaced airborne electromagnetic geophysical survey data will be used to identify near-surface conductive zones that are interpreted to be the main clay horizons and to assess the technique for further data collection. Early assessment of this reprocessed and modelled data shows that this technique can indeed map regolith (clay) thicknesses and deep channels that are targets and identify areas of sub-cropping fresh rock or thick sand-dunes to be avoided (Figures 1, 2 & 3).

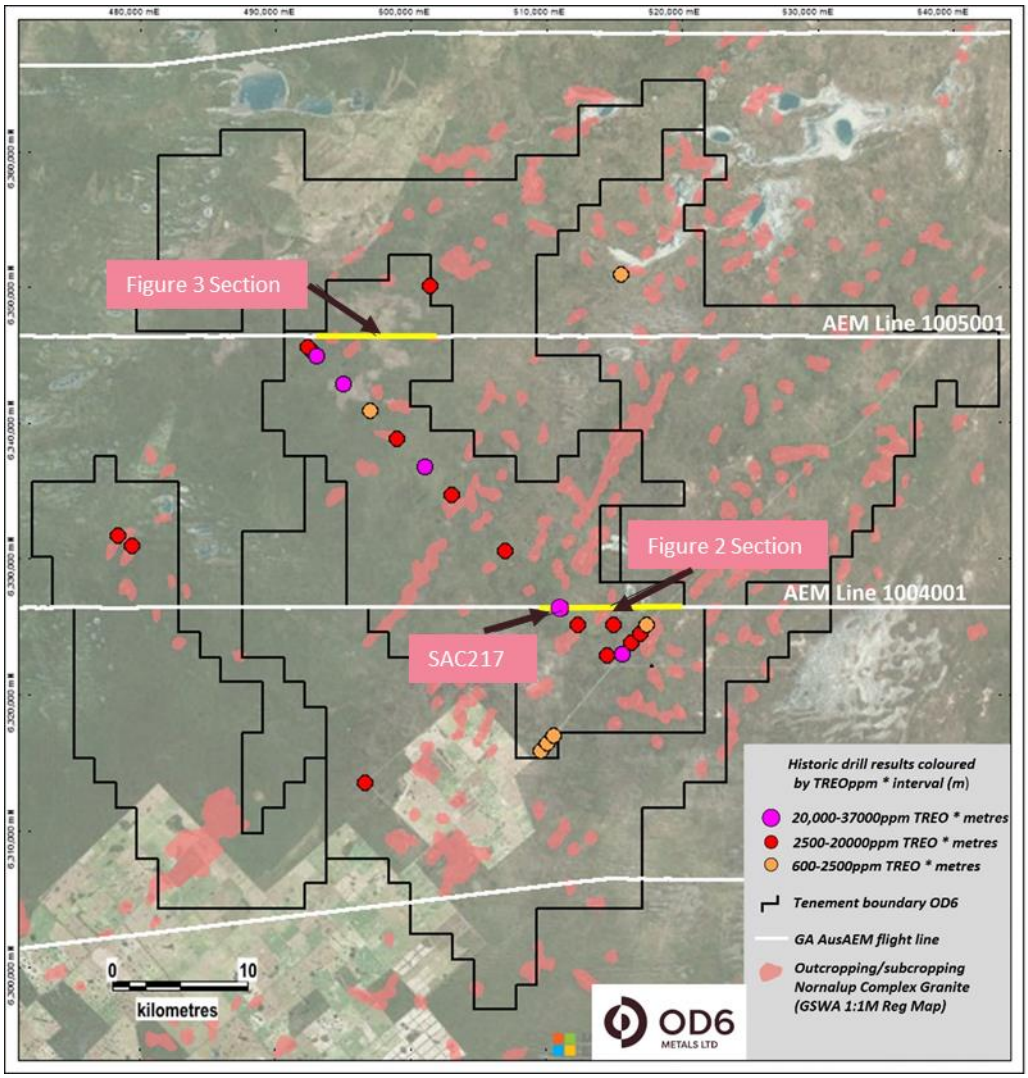


Figure 1 Map of AusAEM lines at Splinter Rock Project showing location of sections presented in Figures 2 & 3 along with historic drilling. Historic drilling intercepts previously reported in the Company's Prospectus.

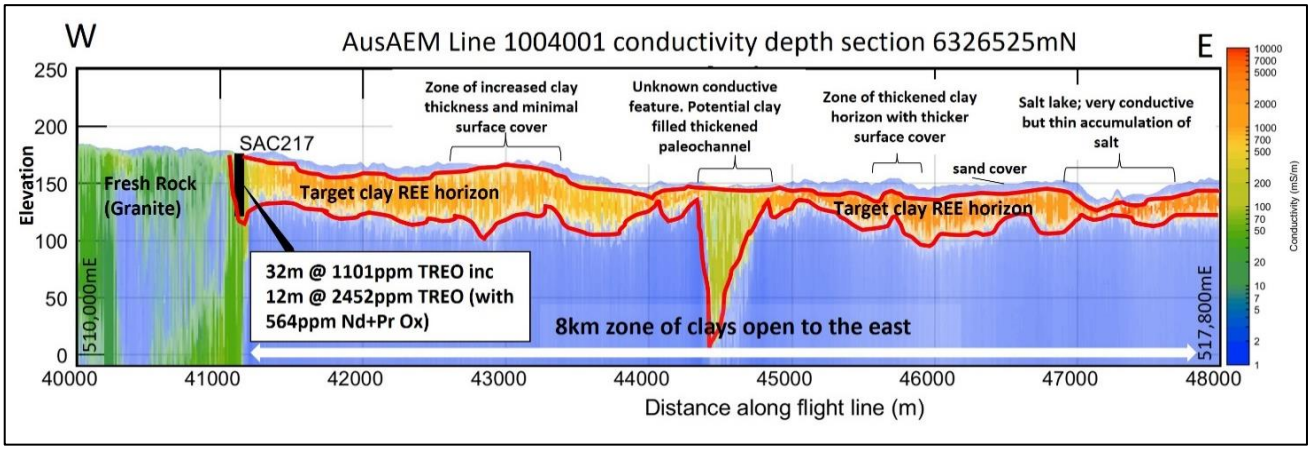


Figure 2 Cross-section of CSIRO modelled AEM data through part of the Splinter Rock Project. Interpretation by OD6. Cross-section vertically exaggerated x10. Red lines mark top and bottom of prospective clay horizons. Drill Hole SAC217 previously reported in the Company's Prospectus. Grid = MGA94 Zone 51.

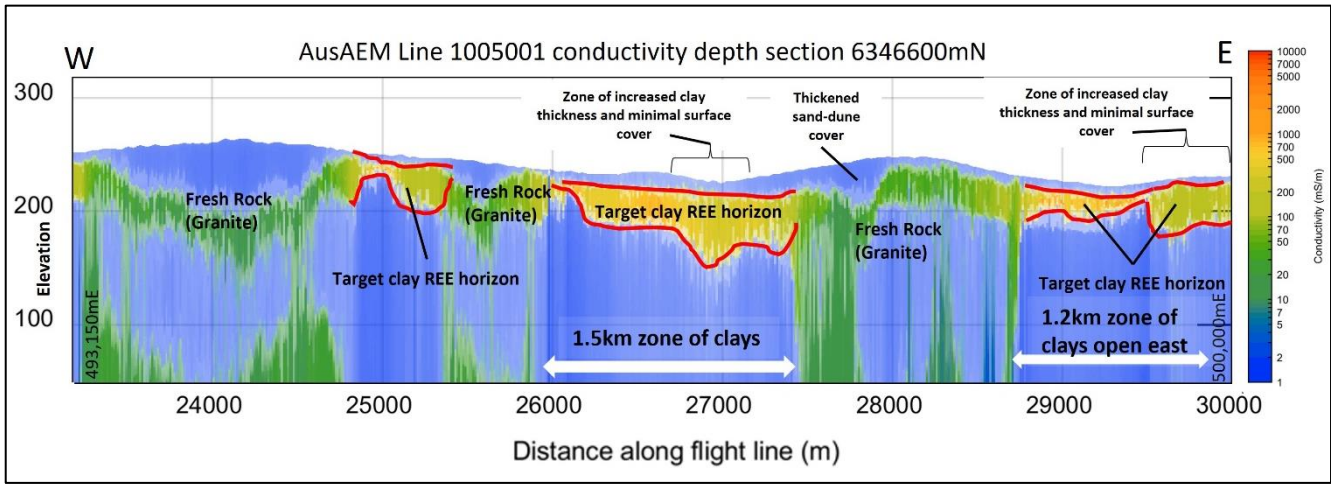


Figure 3 Cross-section of CSIRO modelled AEM data through part of the Splinter Rock Project. Interpretation by OD6. Cross-section vertically exaggerated x10. Red lines mark top and bottom of prospective clay horizons. Grid = MGA94 Zone 51.

Aerial Survey to Commence in Q4

Based on the early indications of the CSIRO and OD6 review of existing airborne electromagnetic geophysical survey data, the Company has confirmed it is undertaking a Tempest Airborne Electromagnetic Survey over both the Splinter Rock and Grass Patch Projects commencing in October.

The key outcome of the survey is to identify and map clay locations, expanse, depth and thickness across OD6's current tenement areas. The mapping of clays will then enable targeted drilling of our high priority exploration areas over the next 6 to 18 months.

Program Timeline

Initial works by CSIRO and OD6 are expected to be completed by Q1 2023, with potential further works and additional Kick-Start funding to be reviewed at the end of the program.

Completion of the airborne electromagnetic survey is currently scheduled for late October 2022. Analysis of the data will be completed during Q4 2022.

Competent Persons Statement

Information in this report relating to Exploration Results, particularly geophysical interpretation, is based on information compiled by OD6 Metals and CSIRO and 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).

No New Information

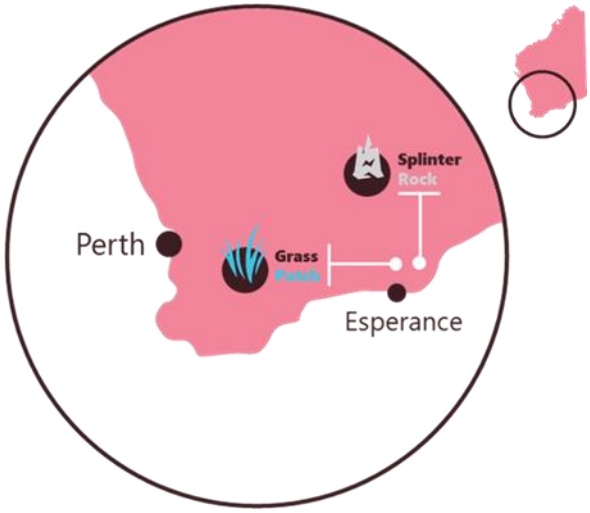
Except where explicitly stated, this announcement contains references to prior exploration results, which have been cross-referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included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

This announcement has been authorised for release by the Board of OD6 Metals Limited

About OD6 Metals

OD6 Metals is an Australian public company with a purpose to pursue exploration and development opportunities within the resources sector. The Company holds a 100% interest in the Splinter Rock Project and Grass Patch Project, which are located in the Goldfields-Esperance region of Western Australia, about 30 to 150km north of the major port and town of Esperance.

The projects are considered prospective for clay-hosted rare earth elements (REEs), with the Company's aim of delineating and defining economic resources and reserves to develop into a future revenue generating operational mine. Clay REE deposits are currently economically extracted in China, which is the dominant world producer of REEs.



Rare earth elements (in particular, Nd and Pr), are becoming increasingly important in the global economy, with uses including advanced electronics, permanent magnets in electric motors and electricity generators (such as wind turbines) and battery technologies.

Corporate Directory

Managing Director	Mr Brett Hazelden
Non-Executive Chairman	Dr Darren Holden
Non-Executive Director	Mr Piers Lewis
Non-Executive Director	Dr Mich Loan
Financial Controller/ Joint Company Secretary	Mr Troy Cavanagh
Joint Company Secretary	Mr Joel Ives
Exploration Manager	Tim Jones

Contact

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JORC 2012 – Table1: Splinter Rock

Section 1 Sampling Techniques and Data
(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• No sampling reported in this release
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).*	• No drilling reported in this release
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.*	• No drilling reported in this release
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.*	• No drilling reported in this release
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*	• No drilling reported in this release

Criteria	JORC Code explanation	Commentary
	grain size of the material being sampled.	
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• No drilling reported in this release
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No drilling reported in this release
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.*	• No drilling reported in this release • Grid system for geophysical cross-sections is MGA94 Zone 51
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.*	• Airborne Electromagnetic Data reported is derived from Geoscience Australia Goldfields 2020 survey as reported in public domain data "AusAEM (WA) 2020-21, Eastern Goldfields & East Yilgarn Airborne Electromagnetic Survey Blocks". • Geoscience Australia report number ECAT ID 144621 • Data collected using the TEMPEST EM system using fixed wing aircraft by CGG Geophysics. • Nominal flight height of 120 m above ground level. • GPS Sample Interval of 0.2 second. • Altimeter sampling of 0.1second • Flight line spacing 20km. • Conductivity measurements and sampling interval at approximately 11 to 12 metres along line.
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.*	• For AEM data: Flight lines are East-West: 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. • The RJMCMC method uses a comparison method to estimate the conductivity.
Sample security	• *The measures taken to ensure sample security.*	• No drilling reported in this release. Sample security with respect to geophysical is public domain and as presented by Geoscience Australia.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The Independent Competent Person has reviewed this release and the data presented and considers the information presented as appropriate.

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 Beau Nicholls, Principal Consultant of Sahara Natural Resources was included in the Company's Prospectus dated 10 May 2022 (Prospectus). The Report reviewed historic explorations results undertaken by Salazar Gold Pty Ltd, plus a CSA Global Report. • 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.*
		• No drill results reported in this release

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 drill results reported in this release

Criteria	JORC Code explanation	Commentary
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').*	• No drill results reported in this release
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.*	• Maps in the body of this release
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.*	• Selected cross-sections of electromagnetic data processing presented in this release as examples of the techniques. 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.
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.*	• Drilling results from OD6 Metal's 2022 drill program are pending completion. • The Company is planning a new close lined spaced (400m) AEM survey.