Transition Minerals Limited
13–15 Rheola Street
West Perth WA 6005
Australia
+61 8 9467 1444
ABN 86 641 565 139

15/12/2023

METALLURGY UPDATE:
74% NdPr EXTRACTION ACHIEVED

Transition Minerals Limited is pleased to announce significant achievements in the recovery and concentration of rare-earth elements (REE) through first-phase metallurgical test work from its Barkly REE project.

Key Highlights

- **Common acid leach yields extraction rates of up to 74% Nd and Pr, within an overall 73% extraction of total rare earth elements (TREE).**
- **Second flotation test achieved a 9.6 x concentration of TREE.**
- **Size-fraction analysis of the -53 µm fraction recovers 56% of the rare earths in only 31% of the mass, resulting in a TREE grade of 169% of the original concentration.**

Toby Foster, Managing Director, commented:

"*The extraction rates achieved, in conjunction with the exceptional grade and composition recently determined, firmly place the Barkly rare earths deposit on the map as a globally significant, regolith-hosted, critical minerals deposit. These metallurgical test results supplement the recent announcement of an Inferred Mineral Resource, reported in accordance with the JORC Code (2012), and provide a clear pathway for enhanced metallurgical testing in 2024. The potential for beneficiation of the rare earth minerals through simple size screening and/or a traditional flotation system may facilitate efficiencies in infrastructure size, as well as reagent and energy consumption in a future mining scenario.*"

Updated Results

Further to the metallurgical results and sample selection described in announcement dated 15 September 2023, significant results include the following.

Acid Leaching

Warm acid leaching, via a two-step process, yielded the following extraction rates tabulated in Table 1 and graphed in Figure 1:

Table 1 Extraction rates following warm acid leaching.

	La %	Ce %	Pr %	Nd %	Sm %	Eu %	Gd %	Tb %	Dy %	Ho %	Er %	Tm %	Yb %	Lu %	Y %	Sc %	Ga %
High REE*	73	74	75	74	71	72	74	60	71	57	61	0	49	0	62	100	100
Mod REE*	66	69	69	69	65	67	67	41	56	41	35	0	29	0	45	100	100

* Composite Sample

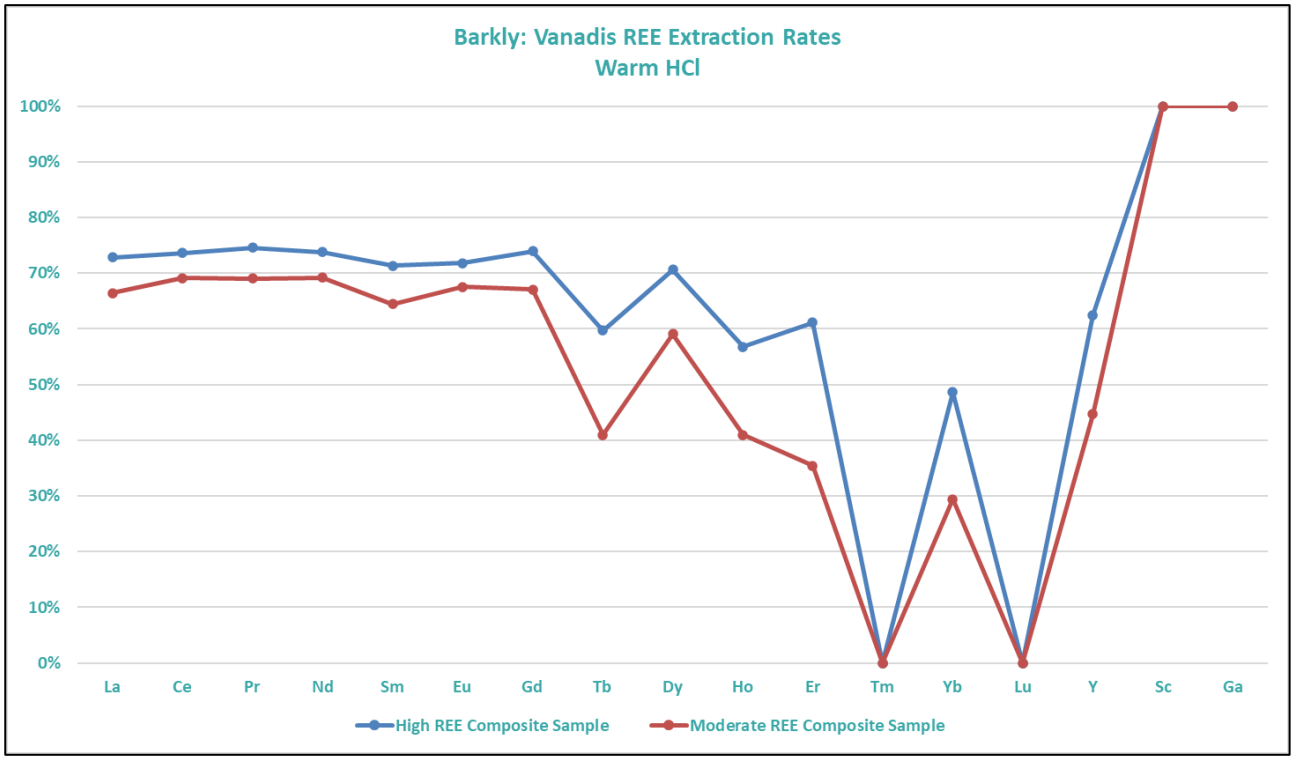

Figure 1: REE extraction rates following warm acid leaching.

These extraction rates imply that the Barkly rare-earth-element deposit may extract the highest mass of magnet REE (Pr, Nd, Tb, Dy) per resource tonne, relative to other regolith-hosted rare-earth deposits (Figure 2).

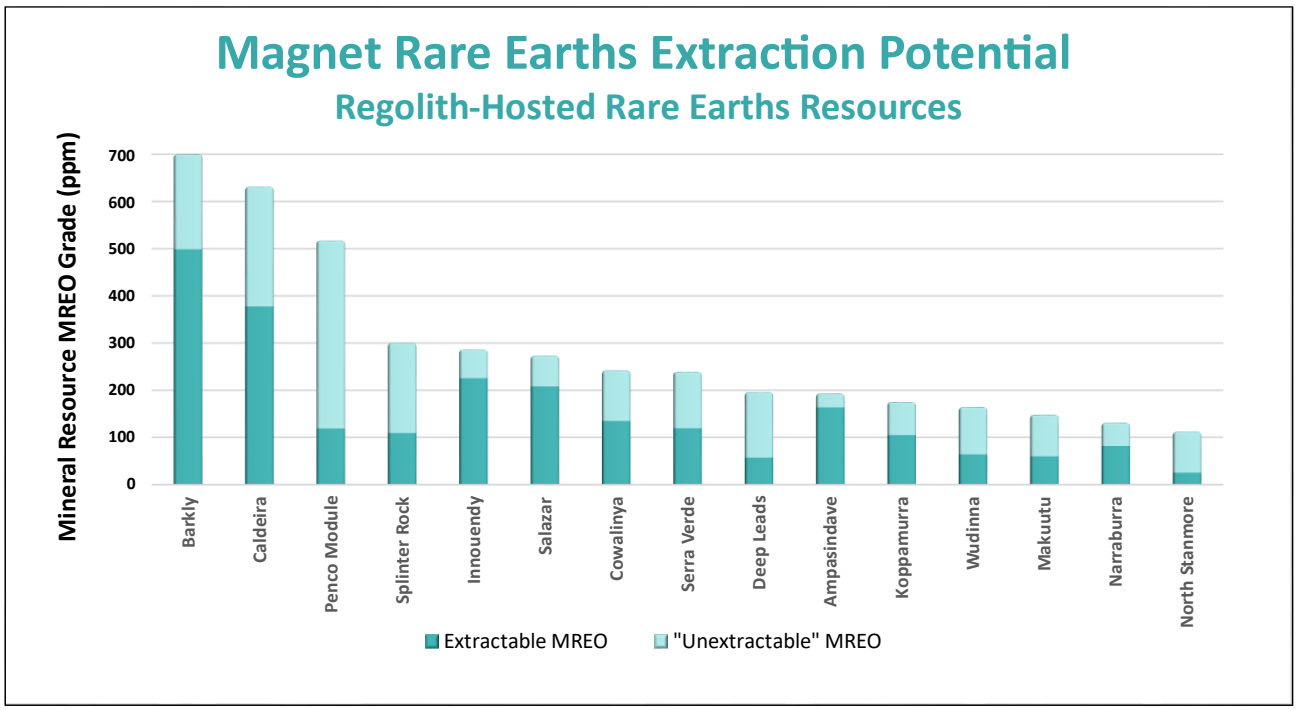

Figure 2: Regolith-hosted rare earth resources and their magnet rare-earth extractability, from publicly published metallurgical extraction rates.

Relative extraction proportions of NdPr, Tb_4O_7, and Dy_2O_3 have also been calculated where these data are publicly available for regolith-hosted rare earth deposits, as displayed in Figure 3 (a), (b), and (c), respectively.

In consideration of each project's individual rare-earth extraction rates, a neodymium-equivalent resource chart has been provided in Figure 3 (d). This is based on each project's stated resource grades for Pr_6O_{11}, Nd_2O_3, Tb_4O_7, and Dy_2O_3, assessing their published metallurgical extraction rates and forecast rare earth oxide prices. It is the Company's opinion that all MREOs included in the metal equivalents calculation have a reasonable potential to be recovered and sold.

Data sources, forecast MREO prices, and equivalence calculation formula applied are provided in Appendix 1.

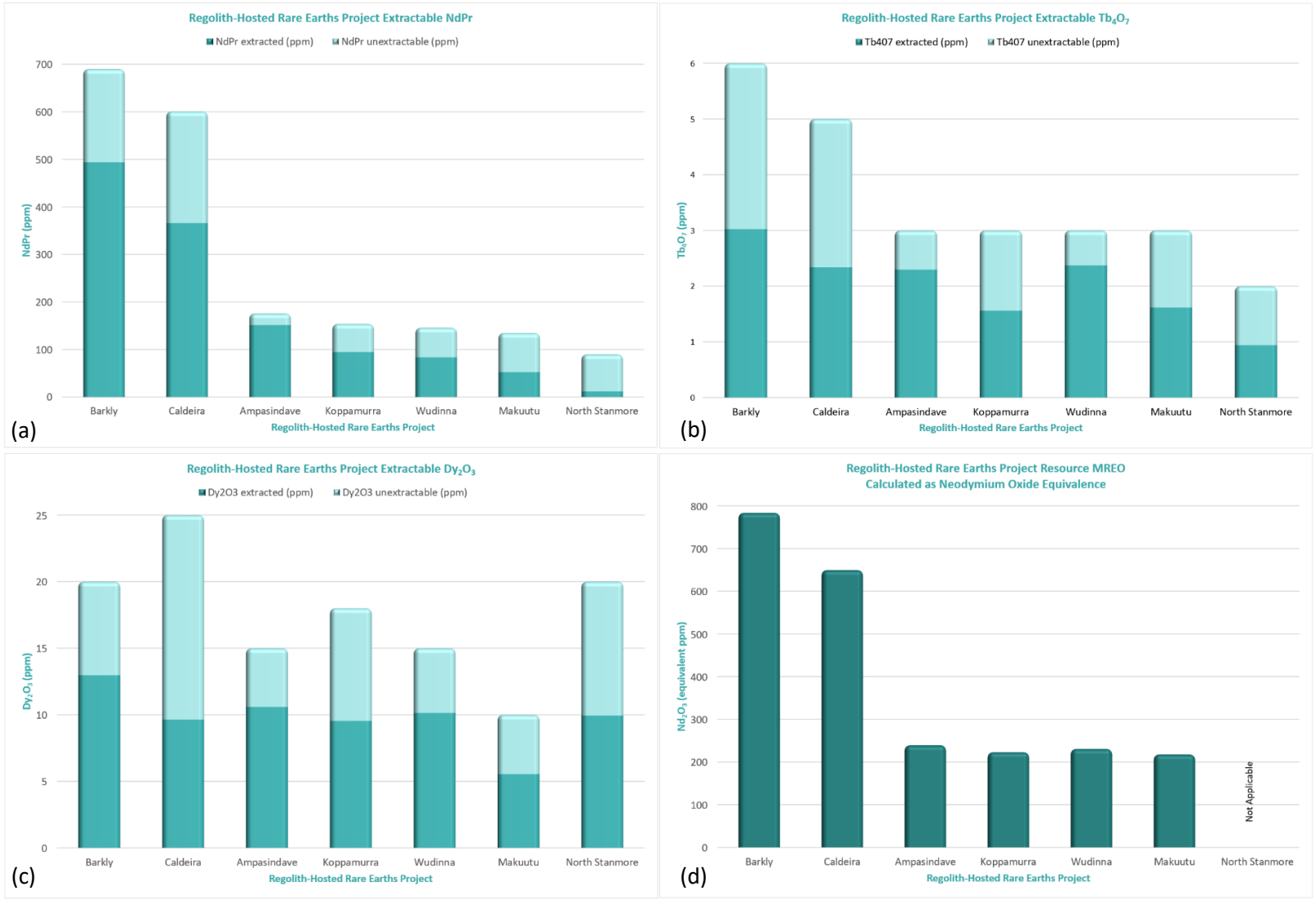

Figure 3: Project comparison (a) relative extractable NdPr; (b) relative extractable Tb_4O_7; (c) relative extractable Dy_2O_3; (d) Total Resource MREO grade stated in Nd_2O_3 equivalence. Note that because the North Stanmore Resource's neodymium makes a minor contribution to its metal equivalence, under JORC (2012) clause 50, a neodymium equivalent value cannot be reported. Refer to Appendix 1 for full disclosure of sources, resource classifications, individual grades, commodity prices, recoveries, and formula used.

Size-Fraction Analysis

Solid samples were screened by size to determine distribution of mass and rare earths in each size fraction. This step was taken to assess the potential to increase the rare earths' concentration and decrease reagent consumption by screening to remove lower-grade fractions. By crushing the samples to <2.36 mm, approximately 56% of the rare earths were enriched in the fine fraction (<53 µm). Remarkably, this fraction comprised just 30.7% and 33.2% of the original mass of the original composite samples. This resulted in an increase in rare earth grade by 69% and 62% respectively.

Sighter Flotation

The sighter flotation test highlights the potential benefit of using flotation to separate the rare earth minerals into a smaller mass fraction for more efficient processing. The test demonstrated an effective concentration process with a significant upgrade factor. The test, undertaken on TM001, concentrated 55.9% of the TREE from 13.9% of the original sample mass, delivering a concentrate grade of 1.0% TREE. This represents an upgrade of over 380%. Included in the test results was the concentration of 19.9% of the rare earths within 2.6% of the sample mass, achieving a grade of 1.8% total TREE and showcasing an upgrade of over 720%.

A second flotation test achieved a higher concentration of rare earths (2.4%), by recovering 16.3% of the available rare earths within 1.6% of the original mass. However, subsequent stages within the flotation test failed to recover significant concentrations of rare earths. Interpretation of results indicated that the duration of the second flotation test stages was insufficient to achieve improved results relative to the first flotation test. Future flotation test work is recommended to further improve flotation concentration results achieved to date.

Summary and Next Steps

The robust extraction rates achieved, and the potential for further enhancement through flotation or removal of coarse material, have provided guidance for additional phases of test work. A number of opportunities and recommendations have been identified as a result of the sighter test work programme.

- Review Barkly rare earths resource's mineralogy, lithologies, and rare earth mineral associations.
- Arrange for rare earth metallurgical composite and variability samples for further test work from a selection of contiguous drill core intervals.
- Further investigate and optimise rare earth concentration and recovery via flotation, including a review of optimal grain size, flotation reagents, and stages.
- Undertake a flotation test-work programme to upgrade the rare earths' metallurgical composite samples to a flotation concentrate, with a global rare earth recovery >60%, and assess the ability to reduce gangue minerals reporting to the concentrate.
- Further investigate the two-step acid leach process for its potential to optimise recovery, including an assessment of:
    - leaching duration, temperature, lixiviant type, concentration; and
    - the mineralogy of the feed and the products after each step of the extraction process.

These metallurgical test-work results supplement the assessment of the Barkly rare-earth-element Inferred resource recently announced, and provide substantial support for resource progression.

For further information, please contact:

Toby Foster
Managing Director
+61 460 344 628
t.foster@transitionminerals.com

Competent Person's Statement

The information presented here, that relates to Exploration Results, is reported in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012), and is based on information reviewed and compiled by Mr Richard Hall of Transition Minerals Limited. Mr Hall is a Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM). Mr Hall has sufficient experience that 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 in the 2012 Edition of the Joint Ore Reserves Committee (JORC) "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" 2012. Mr Hall consents to the inclusion in this announcement of matters based on the information in the form and context in which it appears.

JORC Code, 2012 Edition: Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

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 drilling results are reported in this announcement. Sub-samples were collected from existing drill sample spoils and prepared for metallurgical analyses. • All information on previous sampling and drilling results is included in Table 1, as included in previous announcements.
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 is reported in this announcement. Sub-samples were collected from existing drill sample spoils and prepared for metallurgical analyses. • All information on previous sampling and drilling results is included in Table 1, as included in previous announcements.
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 is reported in this announcement. Sub-samples were collected from existing drill sample spoils and prepared for metallurgical analyses. • All information on previous sampling and drilling results is included in Table 1, as included in previous announcements.

Criteria	JORC Code explanation	Commentary
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 is reported in this announcement. Sub-samples were collected from existing drill sample spoils and prepared for metallurgical analyses. • All information on previous sampling and drilling results is included in Table 1, as included in previous announcements.
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 grain size of the material being sampled.*	• Sample preparation is integral to the analytical process, as it ensures a representative sample is presented for assay. The preparation process includes sorting, drying, crushing, splitting, and pulverising. Nagrom is an AQIS registered site and has a licence to import and quarantine geological material. • The prepared sample is fused in lithium borate flux, with lithium nitrate additive. The resultant glass bead is analysed by XRF. XRF is suitable for the total analysis of a range of geological ores, including REE. XRF suites are tailored to specific ore types, using predefined inter-element and matrix corrections. Loss on Ignition (LOI) is packaged with XRF suites to allow the determination of oxide totals. • The prepared sample is fused with sodium peroxide and digested in dilute hydrochloric acid. The resultant solution is analysed by ICP. This method offers total dissolution of the sample and is useful for mineral matrices that may resist acid digestion. • Solution samples are diluted and then analysed by ICP. Dilutions bring the concentration level to within the analytical range of the ICP instruments. Diluents are matched to sample matrix. • Twenty-seven drill spoil samples recovered from 25 individual drill holes at the Vanadis Prospect were batched into two test

Criteria	JORC Code explanation	Commentary
		samples: one sample comprising a high-grade REO composite (2,994 ppm (TREO); n=14 samples for 9.15 kg total weight i.e., TM001) and the other, a moderate grade REO composite (2,003 ppm (TREO); n=13 samples for a total of 8.12 kg weight, i.e., TM002). The Vanadis Prospect sample composite represents > 50% of all holes drilled and is considered representative of the extent of the Vanadis mineralisation. No samples were included from the Benmara Prospect. • The samples were weighed, bagged, and despatched to Nagrom Laboratory, per sample submission protocol, and composited under laboratory supervision. • Samples crushed initially to P100 2.36 mm and split, with sub-samples staged and crushed in a rod mill to P100 0.5 mm with the target at P80 0.355 mm, per instructions from Transition's metallurgical advisors Wave International. • Actual results achieved c.P90 0.355 mm.
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.*	• All sighter test work was carried out at Nagrom Laboratory, 49 Owen Rd, Kelmscott WA 6111. The company provides services to mining companies and their operations, both within Australia and overseas. Nagrom is considered a quality provider of metallurgical services.
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*	• No drilling is reported in this announcement. Sub-samples were collected from existing drill sample spoils and prepared for metallurgical analyses.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>entry procedures, data verification, data storage (physical and electronic) protocols.
• Discuss any adjustment to assay data.</td><td>• All information on previous sampling and drilling results is included in Table 1, as included in previous announcements.
• The conversion of elemental weight percent of REEs to oxide weight percent, in order to calculate TREO, NdPr, MREO and HREO, can use the following conversion factors:
<table><tr><td>La_2O_3</td><td>1.1728</td></tr><tr><td>CeO_2</td><td>1.2284</td></tr><tr><td>Pr_6O_{11}</td><td>1.2082</td></tr><tr><td>Nd_2O_3</td><td>1.1664</td></tr><tr><td>Sm_2O_3</td><td>1.1596</td></tr><tr><td>Eu_2O_3</td><td>1.1579</td></tr><tr><td>Gd_2O_3</td><td>1.1526</td></tr><tr><td>Tb_4O_7</td><td>1.1762</td></tr><tr><td>Dy_2O_3</td><td>1.1477</td></tr><tr><td>Ho_2O_3</td><td>1.1455</td></tr><tr><td>Er_2O_3</td><td>1.1435</td></tr><tr><td>Tm_2O_3</td><td>1.1421</td></tr><tr><td>Yb_2O_3</td><td>1.1387</td></tr><tr><td>Lu_2O_3</td><td>1.1371</td></tr><tr><td>Y_2O_3</td><td>1.2699</td></tr></table>• TREO= $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$
• HREO = $Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$
• MREO = $Pr_6O_{11} + Nd_2O_3 + Tb_4O_7 + Dy_2O_3$
• NdPr = $Pr_6O_{11} + Nd_2O_3$</td></tr>
<tr><td>Location of data points</td><td>• Accuracy and quality of surveys used to locate drillholes (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>• No drilling is reported in this announcement. Sub-samples were collected from existing drill sample spoils and prepared for metallurgical analyses.
• All information on previous sampling and drilling results is included in Table 1, as included in previous announcements.</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</td><td>• Sub-samples were collected from existing drill sample spoils, and composited by Nagrom Laboratory, per their protocols for metallurgical analyses.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	estimation procedure(s) and classifications applied. • *Whether sample compositing has been 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.*	• No drilling is reported in this announcement. • All information on previous drilling results is included in Table 1, as included in previous announcements.
Sample security	• *The measures taken to ensure sample security.*	• All samples have been in the custody of Transition Minerals. The samples were weighed, bagged, and dispatched to Nagrom Laboratory by Transition Minerals personnel, following sample submission protocols.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits have been undertaken.

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*	• Barkly tenement status and security of tenure confirmed on NT STRIKE. • The tenements are in good standing with no known impediments.

Title ID	Status	Effect. Date	Grant. Date	Exp. Date	Area SqKm	Area Units
EL32472	Current	21/05/2021	21/05/2021	20/05/2027	802.94	249
EL32456	Current	21/05/2021	21/05/2021	20/05/2027	814.71	249
EL32474	Current	6/06/2023	21/05/2021	20/05/2027	742.5	233
EL32453	Current	6/06/2023	21/05/2021	20/05/2027	658.77	201
EL32473	Current	6/06/2023	21/05/2021	20/05/2027	658.82	201
EL32455	Current	21/05/2021	21/05/2021	20/05/2027	814.89	249
EL32452	Current	5/06/2023	21/05/2021	20/05/2027	727.66	222
EL32454	Current	6/06/2023	21/05/2021	20/05/2027	629.39	192
EL32450	Current	5/06/2023	21/05/2021	20/05/2027	747.23	228
EL32451	Current	5/06/2023	21/05/2021	20/05/2027	730.89	223
					7,327.80 km²	

Criteria	JORC Code explanation	Commentary
	impediments to obtaining a licence to operate in the area.	
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No relevant previous exploration has been undertaken by other parties.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Barkly tenements are situated within the Greater McArthur Basin, Northern Territory. • Transition Minerals is exploring for vanadium, REE deposits, and other base metals. • This release refers to REE mineralisation related to regolith development processes on Cretaceous marine sedimentary rocks (cf. Mullaman Beds).
Drillhole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* ○ *easting and northing of the drillhole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole 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*	• No drilling is reported in this announcement. Sub-samples were collected from existing 2022 Barkly drill sample spoils for metallurgical composite samples. • Refer to previous announcements for drillhole information relevant to sample intervals.

Criteria	JORC Code explanation	Commentary
	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 drilling is reported in this announcement. • All information on previous drilling results is included in Table 1, as included in previous announcements.
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 drillhole angle is known, its nature should be reported.* • *If it is not known and only the down*	• No drilling is reported in this announcement. • All information on previous drilling results is included in Table 1, as included in previous announcements.

Criteria	JORC Code explanation	Commentary
	hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
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 drillhole collar locations and appropriate sectional views.*	• Relevant images and tables have been included in the body of the report.
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 relevant data have been reported. • The information reported here is considered transparent, balanced, and inclusive of all relevant information.
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*	• No drilling is reported in this announcement. Sub-samples were collected from existing drill sample spoils and prepared for metallurgical analyses. • All information on previous sampling and drilling results is included in Table 1, as included in previous announcements. • In terms of deleterious minerals, the Barkly project has ubiquitously low U and, Th concentrations from metallurgical samples submitted to date, including 4.5 ppm U and 5.5 ppm Th. Such elements are significant in that they can be compounded in the processing of rare earth ores and the final marketable product. • As a result, U and Th can create considerable downstream cost, management, and environmental

Criteria	JORC Code explanation	Commentary
	results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	issues.
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.*	• Other phases of metallurgical test work will aim at optimising REE recoveries, including providing additional sample material through follow-up drilling. Recommendations for additional test work are expected to be received from consulting metallurgists, Wave International, upon completion of the current programme of work with Nagrom.

Appendix 1 Metallurgical data sources (Figure 2 and Figure 3)

This appendix and Figure 2 and Figure 3 include the most recent regolith-hosted mineral resources reported under different reporting codes, and by companies at varying stages of exploration and resource development, which have been disclosed, effective 7 September 2023. Where required, mineral resource categories have been combined to provide an average grade. Metallurgical test data was chosen to represent the companies' preferred test, or that which provided the highest extraction rates, but has included all samples subjected to that test as provided in public company data.

Project	Mineral Resource Data								Mean metallurgical extraction rate					Mineral Resource Data Citation	Test Conditions	Samples	Metallurgical data citation
	Resource Classification	Tonnage (Mt)	MRE TREO Grade	MREO Grade	Pr_6O_{11} (ppm)	Nd_2O_3 (ppm)	Tb_4O_7 (ppm)	Dy_2O_3 (ppm)	MREO %	Pr_6O_{11} %	Nd_2O_3 %	Tb_4O_7 %	Dy_2O_3 %				
Ampasindave	Measured	40.1	975	227	47	158	3	19	85	86	86	77	71	https://links.sgx.com/FileOpen/Updated%20NI%2043-101%20Technical%20Report%20issued%20by%20SGS%20Canada%20Inc%20-%2010%20June%202016%20-%20Final.ashx?App=ArchiveAnnouncement&FileID=413768&AnncID=LHQ3DXU7H7RN0R9F	1M $(NH_4)_2SO_4$ pH4	OE7-OE12, CM6	https://smedg.org.au/wp-content/uploads/2023/05/Phillip-Hellman-Rare-Earths-Assessment-of-Ionic-Adsorbed-Deposits.pdf
	Indicated	157.6	878	189	39	131	3	17									
	Inferred	430.0	894	196	42	137	3	15									
	Total	627.7	895	193	41	135	3	15									
Caldeira	Inferred	409	2626	631	154	447	5	25	60	52	64	47	39	https://wcsecure.weblink.com.au/pdf/MEI/02660657.pdf	2-4% $(NH_4)_2SO_4$ pH4-5	Sample1-Sample4	https://wcsecure.weblink.com.au/pdf/MEI/02614652.pdf
Cowalinya	Inferred	158.9	870.3	242	43.5	170	4.3	23.3	56					https://wcsecure.weblink.com.au/pdf/HRE/02720133.pdf	HCl, 50°C	SM01-SM13	https://wcsecure.weblink.com.au/pdf/HRE/02685825.pdf
Deep Leads Rubble Mound	Indicated	4	901	217	36	144	5.3	32	29					https://www.abxgroup.com.au/site/pdf/db1cb4cd-4f2b-4ce5-adc2-70a34a32d8d9/REE-Resource-Triples-at-Deep-Leads-Tasmania.pdf	0.5M $(NH_4)_2SO_4$ pH4	All 70 samples	https://www.abxgroup.com.au/site/pdf/be75ad7c-186e-4335-b309-75a4fa3b564d/WideSpread-High-Extractions-of-Ionic-Adsorption-Clay.pdf
	Inferred	24	801	195	33	128	4.8	29									
	Total	27	803	196	33	128	4.8	30									

Project	Mineral Resource Data								Mean metallurgical extraction rate					Mineral Resource Data Citation	Test Conditions	Samples	Metallurgical data citation
	Resource Classification	Tonnage (Mt)	MRE TREO Grade	MREO Grade	Pr_6O_{11} (ppm)	Nd_2O_3 (ppm)	Tb_4O_7 (ppm)	Dy_2O_3 (ppm)	MREO %	Pr_6O_{11} %	Nd_2O_3 %	Tb_4O_7 %	Dy_2O_3 %				
Innouendy	Exploration	N/A	N/A	286					79	80	80	72	65	No Mineral Resource Estimate for Innouendy. MREO Grade based on the metallurgical composite sample head assay.	HCl, pH0.3	Composite (no sample number)	https://www.desertmetals.com.au/site/pdf/4793067f-7de8-4e0f-9df1-b3faa89e3f76/Metallurgical-Testwork-at-Innouendy.pdf
Koppamurra	Measured	0.8							60	59	62	52	53	https://ar3.com.au/19-9-23-84-increase-to-koppamurra-resource/	0.3M $MgSO_4$ pH1.0	ARE <75 µm	Results may be overstated, as AR3 have not disclosed the proportion of TREO within the -75 µm fraction. https://ar3.com.au/16-5-23-metallurgical-tests-show-pathway-to-reduced-processing-costs/
	Indicated	95															
	Inferred	88															
	Total	183.8	818	175	32	122	3	18									
Makuutu	Indicated	404	670	153	30	110	3	10	40	36	40	54	55	https://wcsecure.weblink.com.au/pdf/IXR/02517527.pdf	1M $(NH_4)_2SO_4$ pH1	HY9133-HY9136	https://wcsecure.weblink.com.au/pdf/IXR/02262747.pdf
	Inferred	127	540	132	30	90	2	10									
	Total	531	640	148	30	105	3	10									
Narraburra	Indicated	47.4	698	135					63					https://godolphinresources.com.au/downloads/announcements/grl_2023041901.pdf	0.5M $(NH_4)_2SO_4$ pH2, 50°C	GD-15, GD-16	https://godolphinresources.com.au/downloads/announcements/grl_2023040501.pdf
	Inferred	47.6	780	126													
	Total	94.9	739	131													
North Stanmore	Inferred	250	520	112	20	70	2	20	23	13	13	47	50	https://clients3.weblink.com.au/pdf/VTM/02693394.pdf	0.5M $(NH_4)_2SO_4$ pH0.6 with H_2SO_4, 50°C	308490, 312198, VTM001 Blend	https://clients3.weblink.com.au/pdf/VTM/02660727.pdf
Salazar	Indicated	39	1216	299	51	206	6	36	76					https://www.investi.com.au/api/announcements/wc1/2753b06f-7f2.pdf	100g/L HCl, 24 hr	All 8 samples	https://www.investi.com.au/api/announcements/wc1/6acef2cb-842.pdf
	Inferred	151	1162	267	57	191	3	16									
	Total	190	1173	273	55	194	4	20									

Project	Mineral Resource Data								Mean metallurgical extraction rate					Mineral Resource Data Citation	Test Conditions	Samples	Metallurgical data citation
	Resource Classification	Tonnage (Mt)	MRE TREO Grade	MREO Grade	Pr_6O_{11} (ppm)	Nd_2O_3 (ppm)	Tb_4O_7 (ppm)	Dy_2O_3 (ppm)	MREO %	Pr_6O_{11} %	Nd_2O_3 %	Tb_4O_7 %	Dy_2O_3 %				
Splinter Rock	Inferred	344	1308	300	62.6	220.3	2.6	14.5	36					https://www.od6metals.com.au/wp-content/uploads/2023/07/61158738.pdf	100g/L HCl, 6 hr	All 25 samples, including clay and low/non clay samples	https://www.od6metals.com.au/wp-content/uploads/2023/04/61143594.pdf
Serra Verde	Measured	22	2100							51	51	45	43	https://clientesinterativa.com.br/bccc-events/uploads/files/2017-03/58c6d7b3e9c66.pdf	Column leach	Figure 1 – Central, North, SouthEast, SouthWest, West	The Serra Verde Rare Earth Deposit, Goias State, Brazil: Advancing to Production, Rocha et al, 2014
	Indicated	368	1500														
	Inferred	521	1000														
	Total	911	1229	239	49	158	5	27									
Wudinna	Inferred	41.6	699	164	33	113	3	15		47	60	79	68	https://polaris.brighterir.com/public/cobra_resources/news/rns/story/w0986pw	pH3, 6 hr	Sample composite LAM9170	https://cobraplc.com/wp-content/uploads/2023/09/Cobra-Resources-Sep-23_Final_130923-NB.pdf

In February 2022, Adamas Intelligence estimated rare earth oxide prices for Pr_6O_{11} (USD 201.00/kg), Nd_2O_3 (USD 212.00/kg), Tb_4O_7 (USD 2,493.00/kg), and Dy_2O_3 (USD 587.00/kg) as 2025–2030 average forecast values, as reported in Search Minerals PEA dated 31 May 2022.

Resource grade neodymium-equivalent formula:

$$Nd_2O_3(equivalent\ ppm) = Nd_2O_3(ppm) + \sum_{PTD}\left\{PTD\ (ppm)\ x\ \frac{PTD(extraction\ rate)}{Nd_2O_3(extraction\ rate)}\ x\ \frac{PTD(price)}{Nd_2O_3(price)}\right\}$$

where PTD = {Pr_6O_{11}, Tb_4O_7, Dy_2O_3}