

ANNOUNCEMENT

1 February 2024

BREAKTHROUGH METALLURGICAL LEACH TEST RESULTS ON THE NEW SYBELLA RARE EARTH OXIDE DISCOVERY

The Board of Red Metal is very pleased to announce outstanding leach results received from our initial metallurgical testing at the Company's new Sybella discovery which we now perceive as a heap leachable source of rare earth oxide (REO) minerals with the potential for highly competitive capital and operating costs.

HIGHLIGHTS

Phase 1 test work shows strong REO extraction with low levels of impurities can be achieved on coarse non-pulverised, RC chip samples using low levels of sulphuric acid at ambient temperature, which points to simple processing options potentially involving heap leach methods.

Most notably, results from intermittent bottle roll tests (IBRT) on 20 composite RC chip samples collected from the one kilometre wide, Boundary Fence East traverse returned:

- Neodymium extractions averaging 78% (maximum 90%)
- Praseodymium extractions averaging 79% (maximum 90%)
- Terbium extractions averaging 48% (maximum 64%)
- Dysprosium extractions averaging 44% (maximum 60%)
- A low average sulphuric acid consumption rate of 37 kg/t (minimum 23kg/t)
- Low average impurity extractions of 7% aluminium (minimum 4%)
- Low average impurity extractions of 22% iron (minimum 10%)
- Low average deleterious element extractions of 20 g/t thorium and 1 g/t uranium, with
- Broadly similar REO and impurity extractions and acid consumption results for both the oxidised and fresh granite samples.

These tests were completed on 5 metre composite samples collected from surface to about 35 metres depth in three nearby holes. The samples have an average particle size of 1.8 mm (P₈₀) - a size fraction potentially amenable to stacking and heap leaching.

Importantly, data suggest further improvement in REO extractions (revenue) and potential reduction in the acid consumption rate and impurity extraction (the major operating costs) can be achieved by **increasing the particle size, increasing the residence time, optimising the leach pH** and focussing exploration on the better performing **Boundary Fence East** area.

A seismic refraction trial surveyed along the Boundary Fence traverse allows the interpretation of weathered granite rock that hosts the shallow mineralisation to about 20 metres below surface. This softer near surface material would be potentially rippable offering significant mining and comminution cost advantages.

Phase 2 metallurgical research involving comminution tests and size fraction leach tests on crushed core samples and impurity removal trials are in progress. Preparations for commencement of step-out drilling are underway.

Although subject to more detailed studies and step-out drilling, the positive Phase 1 leach tests and peer project comparisons underline the significant value potential of the new Sybella REO discovery.

Managing Director Rob Rutherford said:

“These breakthrough metallurgical results have far exceeded our expectations and underlined the potential for heap leachable REO ore at Sybella.

The Sybella results, as received to date, have been reviewed against peer projects using publicly available leach data and can be compared favourably to the recent exciting Brazilian discoveries. The metallurgical work has indicated opportunities to further enhance these recovery results and Red Metal will accelerate its exploration programs.

Sybella has many of the attributes of the Clay-Hosted Ionic deposits, but without the clay content which can cause problems and added costs in processing. This provides Red Metal with the confidence that a highly competitive project could be developed with low capital and low operating costs.”

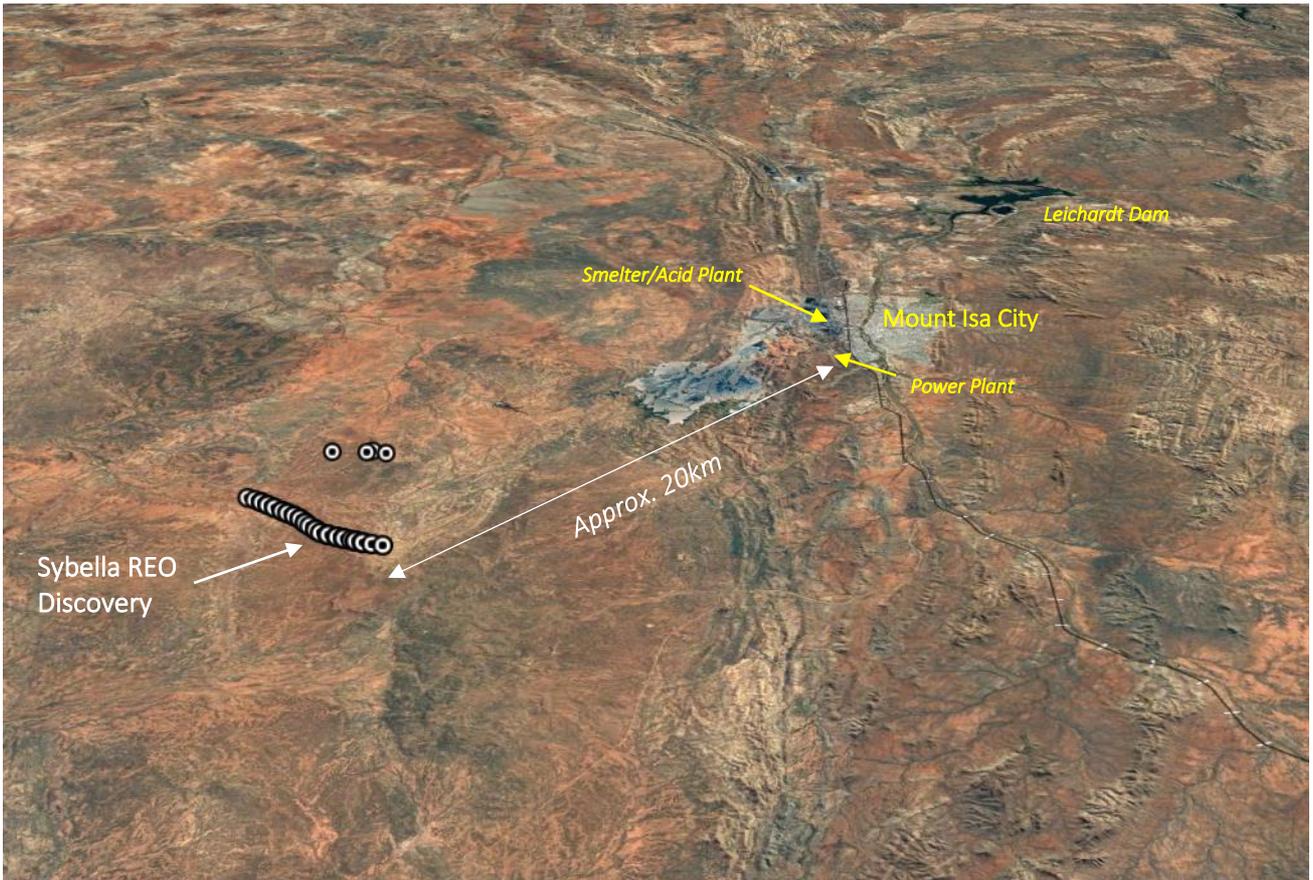


[Figure 1] Sybella Project: REO-enriched granite, oxidised, transitional and fresh. Note the coarse grain-size, weak biotite deformation fabric and increased fracture density with increased weathering.

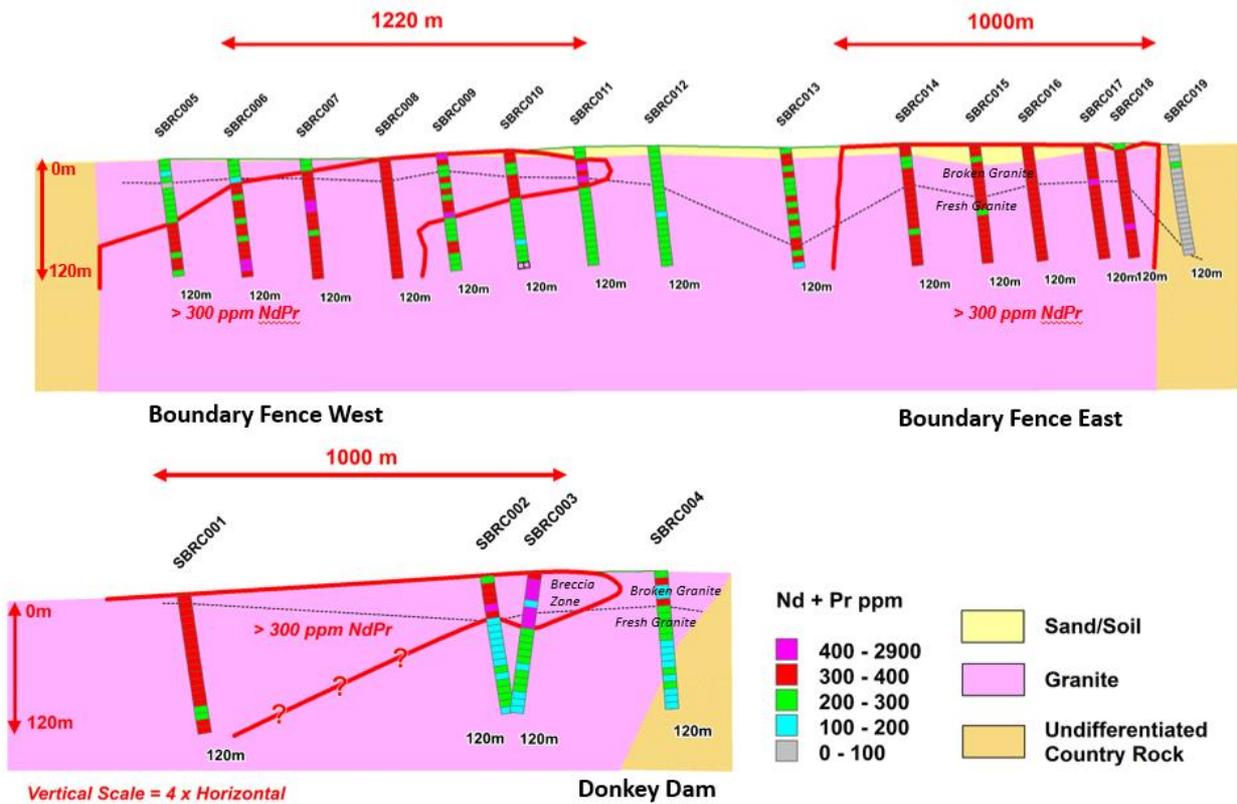
OUR DISCOVERY

In August 2023, Red Metal announced the exciting new Sybella rare earth oxide (REO) discovery just 20 kilometres southwest of Mount Isa in Northwest Queensland (Figure 2) which we believe is a new REO deposit style for Australia and potentially a “world first” (Table 3). The target is a partially weathered and fresh REO-enriched granite (Figure 1) over 12 kilometres long and 3 kilometres wide and almost all within Red Metal’s 100% owned tenements.

The initial RC drilling program discovered large widths of granite-hosted REO mineralisation at relatively high grades starting at surface (Figure 3). Although limited by the number of drill lines, three broad areas of interest were identified - Boundary Fence East, Boundary Fence West and Donkey Dam (Figures 3 and 4).



[Figure 2] Oblique aerial view facing north showing Sybella discovery RC drill holes in relationship to the city of Mount Isa highlighting the associated infrastructure advantages.



[Figure 3] Sybella Project: Drill sections showing variation in **NdPr oxide assay** values at depth and between holes in the granite.

The Phase 1 metallurgical test work, summarised below, shows **strong REO extraction** with **low levels of impurities** can be achieved on coarse non-pulverised, RC chip samples using **low levels of sulphuric acid** at **ambient temperature**, which points to simple processing options potentially involving heap leach methods.

PHASE 1 METALLURGY

The Core Group, a Queensland-based hydrometallurgical specialist, were supplied with a series of pulverised RC assay pulp samples and non-pulverised RC chip samples and tasked with assessing the leach response with variations in temperature, acid type and pH, residence time and grind size for oxidised and fresh granite samples.

From early comparative studies under the same leach pH and temperature, it became clear that the finely pulverised RC assay sample (beaker leached) significantly underperformed the coarser non-pulverised RC chip sample (bottle rolled). This significant difference may be attributed to the increased surface area for the pulverised RC assay sample, while most importantly, highlighting the potential for heap leach processing.

Based on these initial results, further test work on RC assay pulp samples was ceased, and additional test work was focused on **heap leach evaluation** using bottle roll methods on the coarser non-pulverised RC chip samples.

Intermittent Bottle Roll Leach Testing on Non-Pulverised RC Chip Samples

Intermittent bottle roll tests (IBRT) are used to simulate the leaching mechanism inherent in heap leaching. The bottle rolls are agitated (turned on rollers) for 5 minutes every hour, such that diffusion is the dominant mechanism for lixiviant transfer into the ore particles. This is the same mechanism that dominates in heap leaching.

Following some initial bottle roll trials to determine key leach parameters, a program of 36 IBRT was carried out on as-received, non-pulverised, RC chip composite samples using the best trialled, but unoptimised, leach condition (pH 1, 96 hour residence time, ambient temperature and 33% solids). One metre RC chip samples were composited over five metres for the IBRT work.

At Boundary Fence East, the composite sampling was continuous down the length of 3 nearby holes SBRC014, SBRC016, SBRC018 from the surface to about 35 metres depth (Figures 13 to 16, Table 1). Single holes were sampled from surface at Boundary Fence West, Donkey Dam West and the Donkey Dam Breccia (Table 2).

Results show highest average REO extractions, accompanied by lowest acid consumption rate and lowest impurity extraction along the Boundary Fence East traverse (Figures 13 to 16, Table 3).

Most notably, IBRT results on 20 composite RC chip samples collected from the one kilometre wide, Boundary Fence East traverse returned:

- Neodymium extractions averaging 78% (maximum 90%)
- Praseodymium extractions averaging 79% (maximum 90%)
- Terbium extractions averaging 48% (maximum 64%)
- Dysprosium extractions averaging 44% (maximum 60%)
- A low average sulphuric acid consumption rate of 37 kg/t (minimum 23kg/t)
- Low average impurity extractions of 7% aluminium (minimum 4%)
- Low average impurity extractions of 22% iron (minimum 10%)
- Low average deleterious element extractions of 20 g/t thorium and 1 g/t uranium, with
- Broadly similar REO and impurity extractions and acid consumption results for both the oxidised and fresh granite samples (Figure 8).

IBRT samples from the Boundary Fence East traverse had an average particle size of 1.8 mm (P_{80}) - a size fraction potentially amenable to stacking and heap leaching (Table 1).

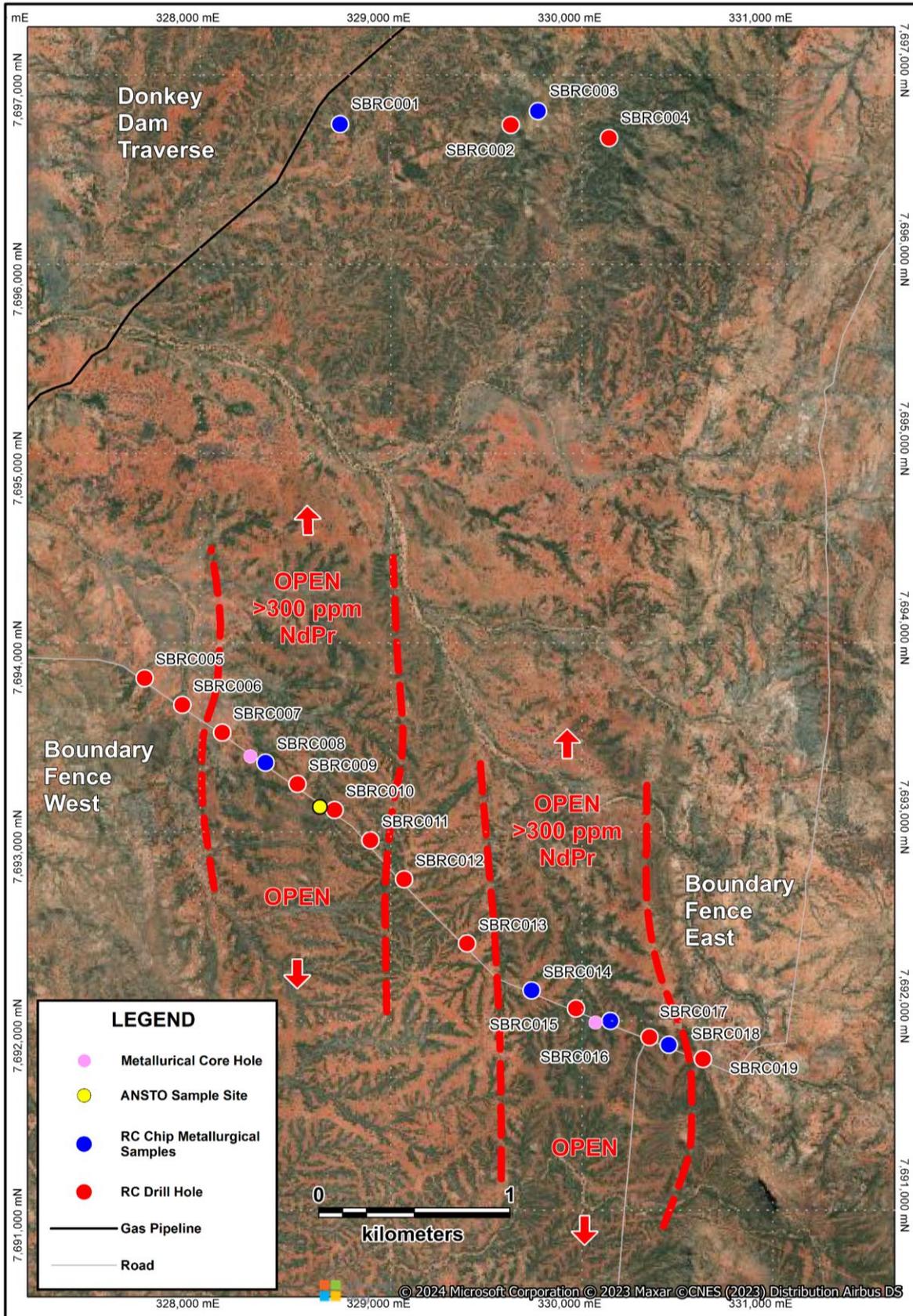
Importantly, IBRT results show further improvement in REO extractions (revenue) and potential reduction in the acid consumption rate and impurity extraction (the major operating costs) can be achieved by increasing the particle size, increasing the residence time, optimising the leach pH and focussing exploration on the better performing Boundary Fence East area as discussed below:

- **Increasing the particle size** was shown to reduce the acid consumption rate and iron extraction rate, while neodymium extraction slightly increased (Figure 7) suggesting the REO minerals can be easily liberated from within the granite.
- **Increasing the residence time** from 48 to 96 hours resulted in an increase of more than 25% (absolute) in neodymium and praseodymium extraction at pH 1 (Figure 9). In addition, the REOs are extracted more selectively over the impurities and with respect to the acid consumption rate. These outcomes suggest a significantly lower cost of extraction could be achieved for the same REO extraction using longer residence times. Core Group noted that a 96-hour residence time is unusually short for IBRT simulations of a heap leach process, where 14-day and 28-day tests are more typical.
- **Optimisation of leach pH** is highly recommended as preliminary results show the leach pH (Figure 9) has a significant impact on REO extraction and leach operating costs (acid consumption, impurity extraction).
- IBRT on the **Boundary Fence East** traverse outperformed those from the Donkey Dam and Boundary Fence West traverses and is considered the higher priority area for future step-out drilling and metallurgical work (Tables 1 and 2, Figures 13 to 16).

Geophysical Trials

Geophysical techniques including passive seismic, deep ground penetrating radar and seismic refraction were trialled along the Boundary Fence traverse to image the boundary between fresh and oxidised granite (Figure 1). Ground penetrating radar and seismic refraction proved the most effective.

S-wave and P-wave analysis of the seismic refraction data successfully highlighted softer, potentially rippable, weathered granite rock to about 20 metres below surface (Figures 10 to 12), which could offer significant mining and comminution cost advantages during the early stage of any future development.



[Figure 4] Sybella Project: Recent Red Metal drill hole locations on satellite image highlighting wide zones of >300 ppm NdPr oxide. ANSTO surface sample site used for mineralogical and preliminary leach test highlighted as yellow circle. Note: blue traces highlight.

[Table 1] Boundary Fence East: intermittent bottle roll test results on as-received, non-pulverised RC chip at pH 1.

Drill Hole	Interval			Lithology	Oxidation	Particle Size	Assayed Head (g/t)						Extraction (%)						Acid Consumption	Impurity Head Grade (wt%)		Impurity Extraction (%)		Th & U Extraction (g/t)	
	From	To	m				P ₈₀ mm	TREO	MREO	Pr ₆ O ₁₁	Nd ₂ O ₃	Tb ₄ O ₇	Dy ₂ O ₃	TREE	MREE	Pr	Nd	Tb		Dy	kg/t H ₂ SO ₄	Al	Fe	Al	Fe
SBRC014	0	5	5	Granite	Oxide	1.9	1,381	306	62	220	3.6	20	21	9	5	9	16	10	34	4.6	2.8	4	11	6	0
	5	10	5	Granite	Oxide	2.0	1,663	369	74	266	4.2	25	32	28	27	29	11	20	27	3.7	3.4	3	7	16	0
	10	15	5	Granite	Oxide	2.7	1,385	310	64	220	3.8	23	69	72	75	74	45	43	34	3.7	3.1	6	17	14	1
	15	20	5	Granite	Oxide	2.9	1,303	292	58	212	3.3	19	77	80	83	83	51	46	48	4.6	2.7	7	25	13	1
	20	25	5	Granite	Transitional	1.5	1,554	340	69	244	4.0	24	71	73	74	74	56	52	50	4.4	2.9	8	25	14	1
	25	30	5	Granite	Transitional	1.1	1,829	394	83	283	3.8	24	63	65	68	68	27	32	40	4.4	3.3	7	27	15	1
30	35	5	Granite	Transitional	1.1	1,939	410	86	293	4.4	28	70	71	75	73	30	34	39	4.4	3.5	6	25	17	1	
SBRC016	0	6	6	Granite	Oxide	2.2	1,782	398	81	282	4.9	29	76	77	80	79	55	53	23	3.7	3.0	4	10	22	1
	6	12	6	Granite	Oxide	2.0	1,843	395	80	281	5.3	30	79	81	84	84	60	54	25	3.6	3.1	4	10	23	1
	12	15	3	Granite	Oxide	1.8	1,894	411	86	290	5.1	29	76	80	83	83	55	44	43	3.0	3.1	10	17	22	1
	15	20	5	Granite	Oxide	1.7	1,798	389	80	275	5.1	29	73	77	80	80	50	39	41	4.1	3.0	8	19	22	1
	25	30	5	Granite	Transitional	1.1	1,880	406	85	288	4.9	28	76	79	83	82	56	45	67	3.7	3.0	15	52	18	1
	30	35	5	Granite	Transitional	1.1	1,810	394	80	278	5.1	31	69	72	75	76	45	41	52	4.1	3.3	11	39	18	1
	35	40	5	Granite	Fresh	1.1	1,837	396	83	279	5.0	29	70	72	78	76	29	25	30	4.5	3.4	5	25	21	1
40	45	5	Granite	Fresh	1.1	1,866	398	83	281	5.0	29	69	72	76	75	35	34	27	4.6	3.1	5	23	23	1	
45	48	3	Granite	Fresh	1.3	1,868	402	83	285	5.0	29	70	73	76	76	41	38	43	4.5	3.3	7	30	18	1	
SBRC018	0	5	5	Granite	Oxide	2.0	1,700	375	75	264	5.2	32	64	58	58	59	51	50	25	3.7	2.9	5	12	15	1
	5	10	5	Granite	Oxide	1.5	1,849	401	82	281	5.3	32	77	80	83	83	60	53	26	3.7	3.1	4	10	21	1
	10	15	5	Granite	Oxide	1.8	1,875	414	83	294	5.3	32	80	83	85	86	60	56	28	5.1	3.1	4	13	26	1
	15	20	5	Granite	Oxide	2.4	1,954	434	87	308	5.3	34	84	87	90	90	64	60	28	4.8	3.1	4	13	25	2
	20	25	5	Granite	Transitional	2.7	1,724	381	78	267	5.0	31	76	80	84	83	46	44	31	4.3	2.9	6	22	21	2
	25	30	5	Granite	Transitional	2.0	1,676	374	75	262	5.1	31	75	78	85	82	38	35	33	4.0	3.0	6	28	21	2
Average¹						1.8	1,768	386	79	273	4.8	29	73	76	79	78	48	44	37	4.1	3.1	7	22	20	1

1 - Average of SBRC014 10-35m, SBRC016 0-48m, SBRC018 0-30m

[Table 2] Donkey Dam & Boundary Fence West: intermittent bottle roll test results on as-received, non-pulverised RC chip at pH 1.

Drill Hole	Interval			Lithology	Oxidation	Particle Size	Assayed Head (g/t)						Extraction (%)						Acid Consumption	Impurity Head Grade (wt%)		Impurity Extraction (%)		Th & U Extraction (g/t)	
	From	To	m				P ₈₀ mm	TREO	MREO	Pr ₆ O ₁₁	Nd ₂ O ₃	Tb ₄ O ₇	Dy ₂ O ₃	TREE	MREE	Pr	Nd	Tb		Dy	kg/t H ₂ SO ₄	Al	Fe	Al	Fe
SBRC001	0	5	5	Granite	Oxide	1.3	1,604	338	72	240	3.7	23	80	82	84	83	64	60	69	4.3	2.9	11	51	23	1
	5	10	5	Granite	Transitional	1.1	1,638	346	72	245	4.1	25	87	89	91	91	73	64	68	4.1	3.1	12	57	24	1
SBRC003	0	5	5	Breccia	Oxide	1.1	1,763	371	74	258	5.4	34	5	5	4	4	8	8	13	2.8	3.6	3	4	12	0
	5	10	5	Breccia	Oxide	1.9	1,692	350	69	243	4.9	34	6	6	2	6	13	11	19	4.4	4.0	3	3	6	1
	10	15	5	Breccia	Oxide	1.1	2,960	610	123	423	8.5	56	2	1	0	1	5	2	24	4.7	6.4	4	2	6	3
	15	20	5	Breccia	Oxide	1.1	1,986	424	84	295	6.1	39	9	7	8	6	14	14	23	4.4	3.3	3	6	9	2
	20	25	5	Breccia	Oxide	1.1	2,235	503	100	359	6.0	37	10	10	8	10	12	10	23	4.7	3.2	4	7	7	1
	25	30	5	Breccia	Oxide	1.1	585	108	19	67	2.5	19	21	22	24	25	12	13	34	3.7	3.8	6	9	3	1
	30	35	5	Breccia	Transitional	1.1	3,096	670	135	476	8.3	51	41	40	43	41	27	27	45	3.2	6.3	11	13	46	0
35	40	5	Breccia	Fresh	1.0	15,415	3257	639	2251	48.8	318	54	57	59	59	50	44	143	3.7	14.9	30	22	< 1	9	
SBRC008	0	5	5	Granite	Oxide	1.9	1,762	371	78	262	4.1	26	52	53	56	55	36	31	107	4.9	2.4	7	34	26	1
	5	10	5	Granite	Oxide	3.4	1,710	363	74	255	4.5	28	66	69	73	72	44	37	70	2.8	2.5	13	41	29	1
	10	15	5	Granite	Oxide	3.0	1,816	385	80	273	4.8	28	72	75	78	78	47	41	71	3.6	2.6	10	39	36	2
	15	20	5	Granite	Oxide	2.5	2,023	426	90	302	4.8	30	80	82	86	85	48	47	55	4.2	2.7	8	39	45	3
20	25	5	Granite	Transitional	1.5	1,855	392	82	276	4.8	29	79	81	85	84	48	46	64	4.5	3.0	9	40	35	3	

Refer Red Metal ASX announcement dated 21 August 2023 for collar coordinates and JORC tables

Future Work Programs

Exploration programs have been accelerated following the successful Phase 1 metallurgical test work that far exceeded expectations and recognised the potential for heap leachable ore at Sybella.

Phase 2 metallurgical research involving comminution tests and size fraction leach tests on crushed core samples *are underway*. Impurity extraction test work is also being trialled. Results from this research are expected during the first quarter of 2024 and will better simulate a heap leach setting and provide more optimised data for a preliminary economic model.

Detailed mineralogical studies and preparations for commencement of step-out drilling along the 12 kilometre by 3 kilometre granite body are progressing.

Peer Project Comparison

Sybella has many of the attributes of the Clay-Host Ionic deposits (Table 3) but without the clay content which can cause problems and added costs in processing. Typically, ambient (air) temperature, heap leach processing of oxidised and fresh rock like that proposed for Sybella offers significant capital and operating cost advantages and economies of scale when compared to tank leach methods on clays which have slightly higher capital costs and can potentially face high filtration costs and water balance issues.

The advantages of ambient temperature, heap leach processing provide Red Metal with the confidence that a highly competitive project can be developed at Sybella with low capital and low operating costs.

In support, a peer review study was prepared comparing results from the proof-of-concept leach tests at Boundary Fence East (unoptimised) with leach data publicly available from several emerging, low-temperature leachable, or LTL Clay-Hosted REO deposits (Table 4). Although all projects are subject to more detailed drilling and advanced metallurgical studies, this review underlines the significant value potential of the Sybella discovery – a promising new LTL REO deposit style hosted in granite.

[Table 3] Comparison of key deposit characteristics of the unique Sybella discovery with Clay-Hosted Ionic and mined Phosphatic Carbonatite REO deposits.

	Sybella Granite-Hosted	Clay-Hosted Ionic	Hard Rock Carbonatites
Main REE Minerals	Fluoro-carbonates	Ionic adsorption on regolith clays	Monazite / apatite / fluoro-carbonates
Host Rock	Weak weathered & fresh REO enriched granite	Strong weathered clays above REO enriched intrusion/volcanic rocks	Carbonatite
Host Rock Reaction	Low acid consuming granite	Variable reagent consumption by clays	Acid consuming carbonatite
Ore Geometry	Evenly dispersed disseminations & micro-fractures	Discrete layer or secondary enrichment blanket	Veins or Pipes
Tonnage Potential	Vast	Large	Veins low, pipes large
Mine Grades	Low	Low	Higher
Proposed Mining	Bulk tonnage open pit Rip plus drill and blast	Selective open pit No drill and blast	Selective open pit Drill and blast
Expected Strip	Zero-low	Low-moderate	Veins high, pipes lower
Expected Comminution	Soft weathered Moderate fresh	None Very soft	Soft weathered Moderate fresh
Mineral Concentration	None required	None required	Complex gravity, possible flotation (30-40% payable as monazite concentrate)
Expected Processing to Solubilise REO Minerals	Simple Low (ambient air) temperature Sulphuric acid leach pH1-2 Heap leach potential	Simple Low (ambient air) temperature Ammonia Sulphate wash at pH4 Tank leach or heap leach Clay filtration required for tank leach	Complex High temperature Acid "cracking" of mineral concentrate. Potential for radionuclide issues
Expected Processing Costs	Lower	Moderate	Higher
Product	MREO (70-80% payable)	MREO (70-80% payable)	MREO (70-80% payable)
Refining or REO Separation	Optional	Optional	Essential (adds to capex)
Possible Capex and Scale	Low Capex Scalable	Moderate Capex Scalable	High Capex Needs to be large scale from start
Locations	Australia - Sybella	China/Myanmar - Guangdong Brazil - Caldiera Uganda - Makuutu	China - Bayn Obo Australia - Mount Weld, Yangibana

[Table 4] Bench marking of leaching results - listed explorers and developers of Low-Temperature Leachable REO deposits (Clay-Hosted Ionic and Clay-Hosted Non-Ionic and Granite-Hosted).

Location	ASX Code	Project	Leach		MRE Grade (g/t)					Extraction (%)				Extracted RE (g/t ore)				Extracted Nd ₂ O ₃ Equivalent g/t ¹	
			pH	Proposed Process ²	TREO	Pr ₆ O ₁₁	Nd ₂ O ₃	Tb ₄ O ₇	Dy ₂ O ₃	TREO	Pr	Nd	Tb	Dy	Pr ₆ O ₁₁	Nd ₂ O ₃	Tb ₄ O ₇		Dy ₂ O ₃
Australia	RDM	Sybella	1	Heap	1,701	75	261	4.8	28	73	79	78	48	44	59	205	2.3	13	354
	AR3	Koppamurra	1	Tank	712	32	121	3.2	18	-	67	67	53	53	21	81	1.7	10	171
	OD6	Splinter Rock	1	Tank	1,308	63	220	2.6	15	-	60	62	58	53	37	136	1.5	8	230
Brazil	MEI	Caldeira	4	Tank	2,626	154	447	5	25	43	57	59	42	38	88	264	2.1	9	425
	TSX:ARA	Carina	4	Tank	1,510	66	231	6.9	42	-	56	57	50	45	37	132	3.5	19	305
Uganda	IXR	Makuutu	1	Heap	848	42	150	3	18	-	49	52	80	80	21	78	2.4	14	199

Notes

1 - The Nd₂O₃ equivalent calculation assumes the following REO prices: Nd₂O₃ US\$57/kg, Pr₆O₁₁ US\$57/kg, Tb₄O₇ US\$784/kg, Dy₂O₃ US\$267/kg

Nd₂O₃ Equivalent = ((Extracted Pr₆O₁₁ x Pr₆O₁₁Price) + (Extracted Nd₂O₃ x Nd₂O₃ Price) + (Extracted Tb₄O₇ x Tb₄O₇) + (Extracted Dy₂O₃ x Dy₂O₃)) / Nd₂O₃ Price.

Nd₂O₃ Equivalent value take into account the average IBRT Extraction % from SBRC014 10-35m, SBRC016 0-48m, SBRC018 0-30m for Sybella and Extraction % published by other listed companies.

Nd₂O₃ Equivalent does not take into account any REO losses during clay filtration and impurity removal, or assumption about treatment costs.

2 - Proposed process has been assumed to be tank leaching unless suggested otherwise.

References

RDM - Head Grade: average Boundary Fence East SBRC014-018 0-120 m drill data, Extraction from unoptimised Phase 1 bottle rolls on RC chip, average Boundary Fence East.

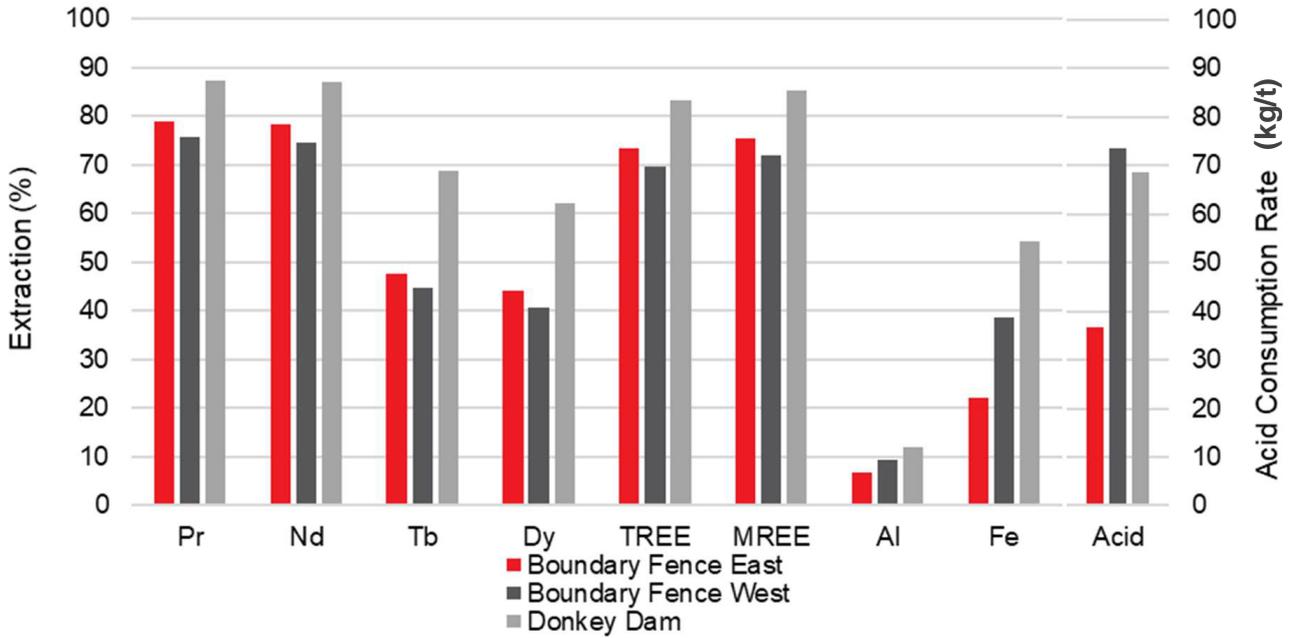
AR3 - MRE: ASX Release 19/09/23, Extraction: ASX Release 19/09/22 average of extractions in Figure 2

OD6 - MRE: ASX Release 18/07/23, Extraction: ASX Release 07/11/23, average 20 g/L HCl, 24-hour, Table 1.

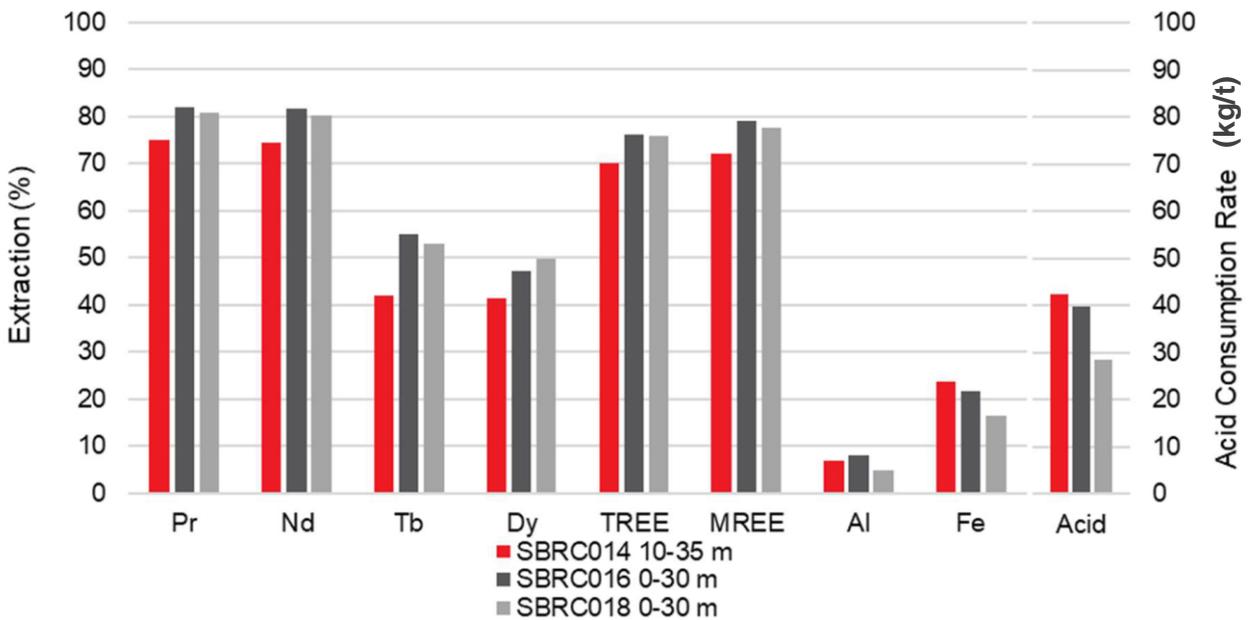
MEI - MRE: ASX Release 01/05/23, Extraction: ASX Release 07/12/23, average all clay and transition, Table 10.

IXR - MRE: Makuutuu DFS 20/03/23 Ore Reserve, Extraction: Makuutuu Scoping Study 29/04/21, Figure 18.

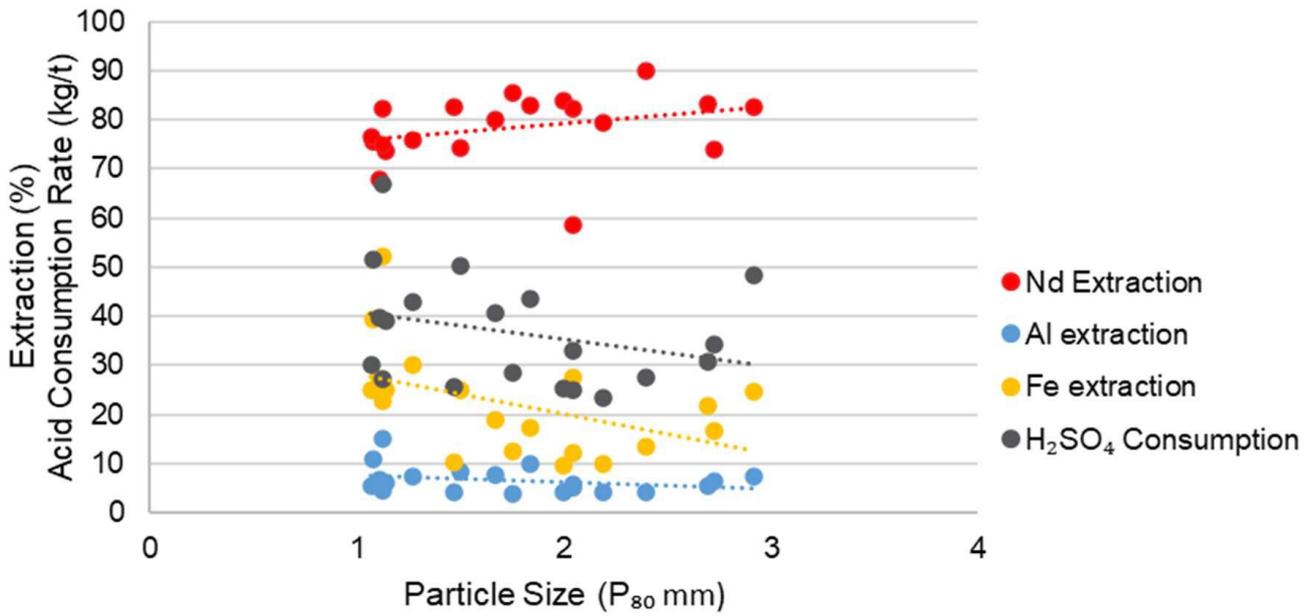
ARA - MRE: TSX Release 23/01/24, Carina PEA Table 1-6 and Table 17-1.



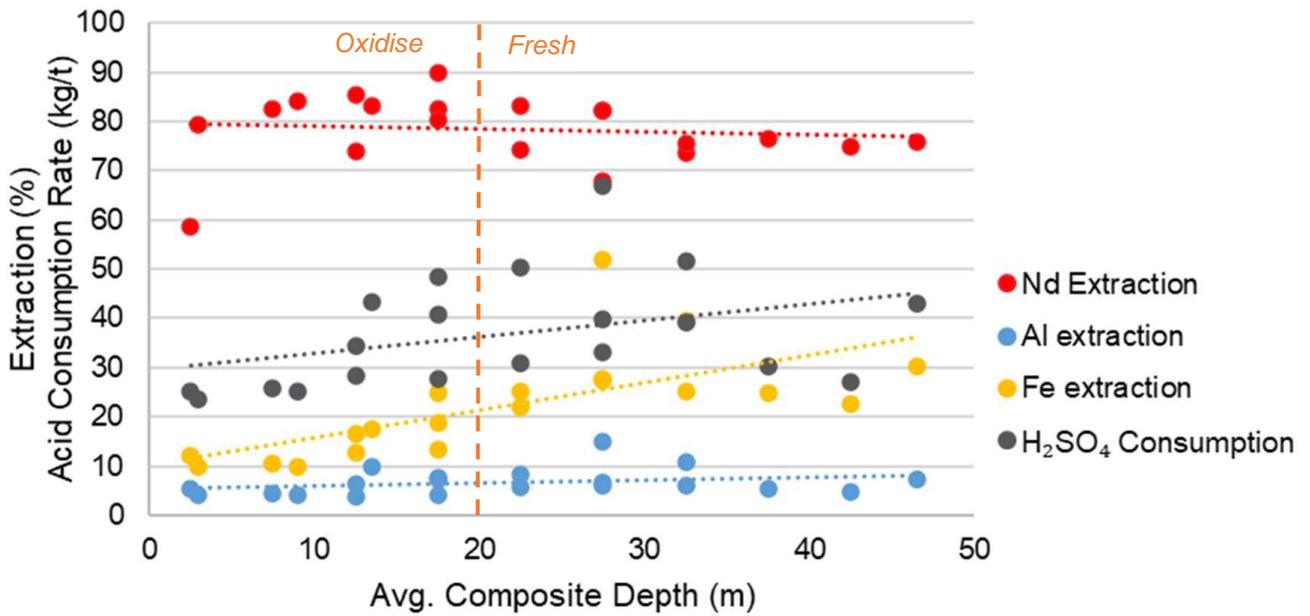
[Figure 5] Comparison of average metallurgical results between Sybella areas (IBRT, RC chip, pH 1, 96-hour residence time, ambient temperature, 33% w/w solids). Boundary Fence East has the highest REO extraction, lowest aluminium and iron extraction and lowest acid consumption rate prioritising this area for Phase 2 test work and step-out exploration drilling.



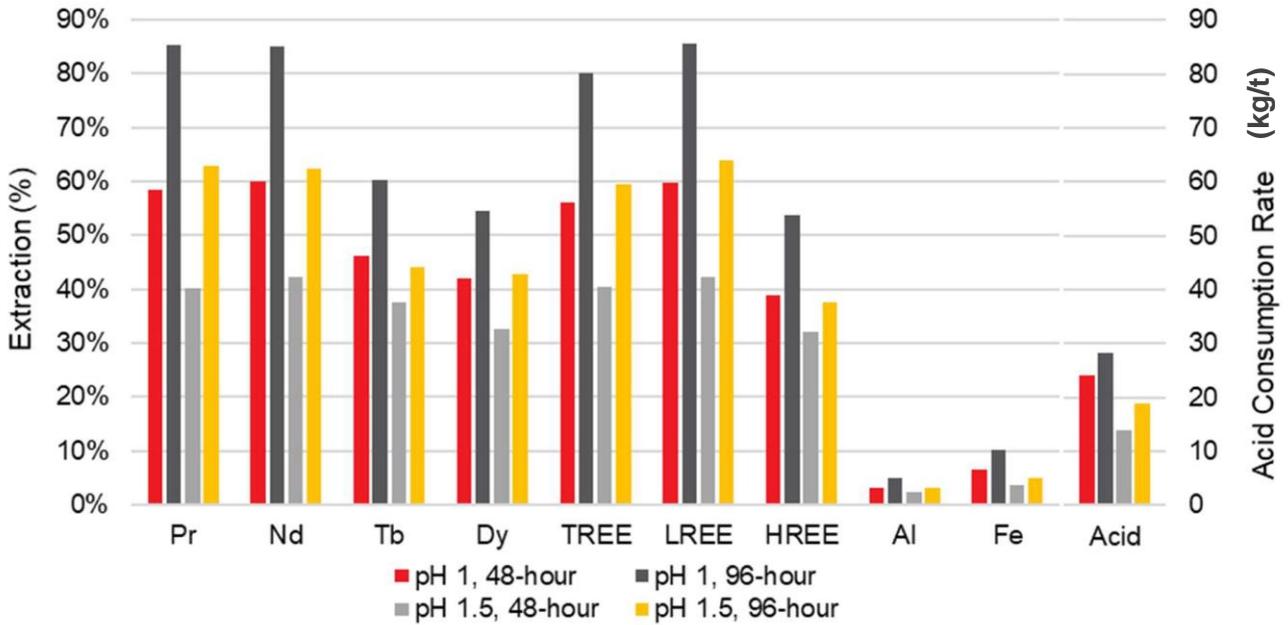
[Figure 6] Comparison of average metallurgical results between Boundary Fence East holes (IBRT, RC chip, pH 1, 96-hour residence time, ambient temperature, 33% w/w solids). Note the general improvement from west (SBRC014) to the east (SBRC018).



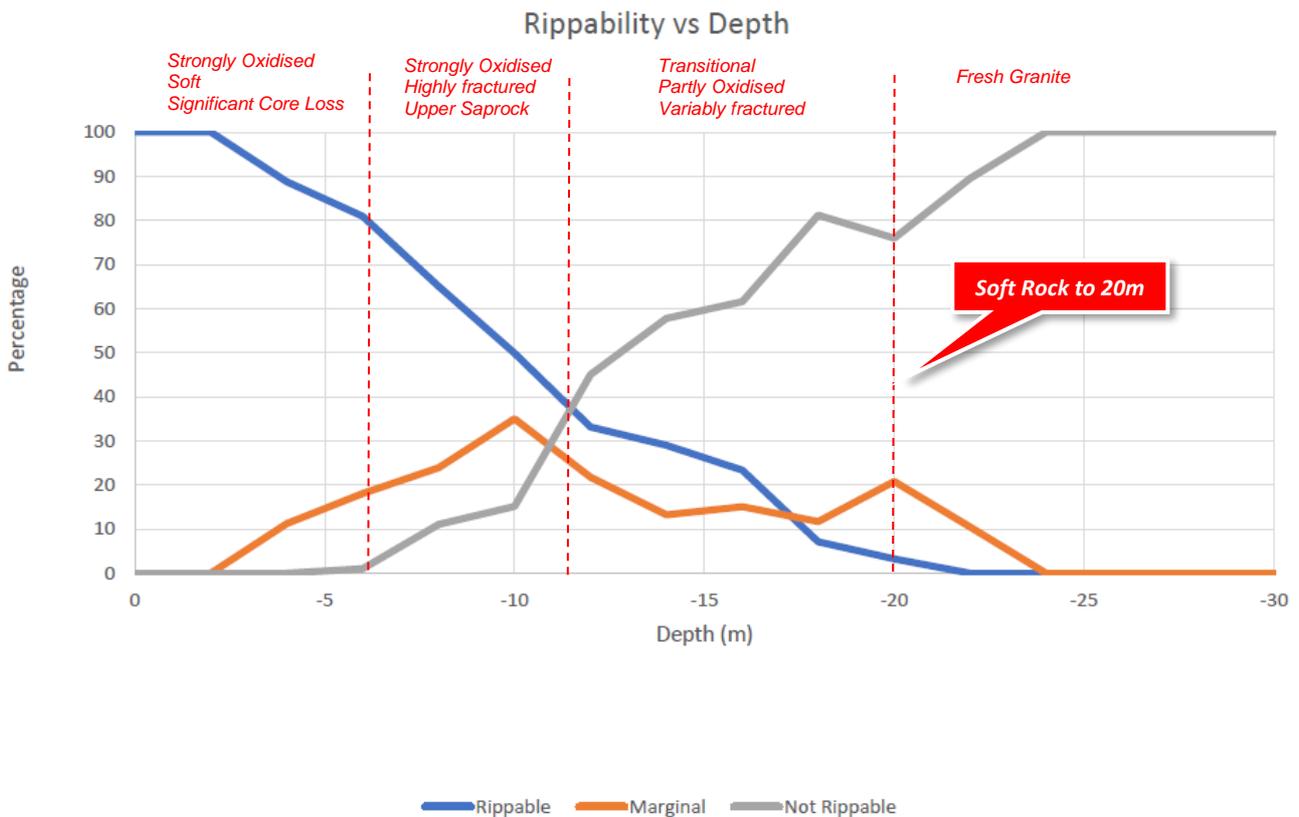
[Figure 7] IBRT – Relationship between particle size and Nd, Fe, Al extraction, acid consumption rate (Boundary Fence East RC Chip excluding SBRC014 0-10 m, pH 1, 96-hour, ambient temperature, 33% w/w solids)



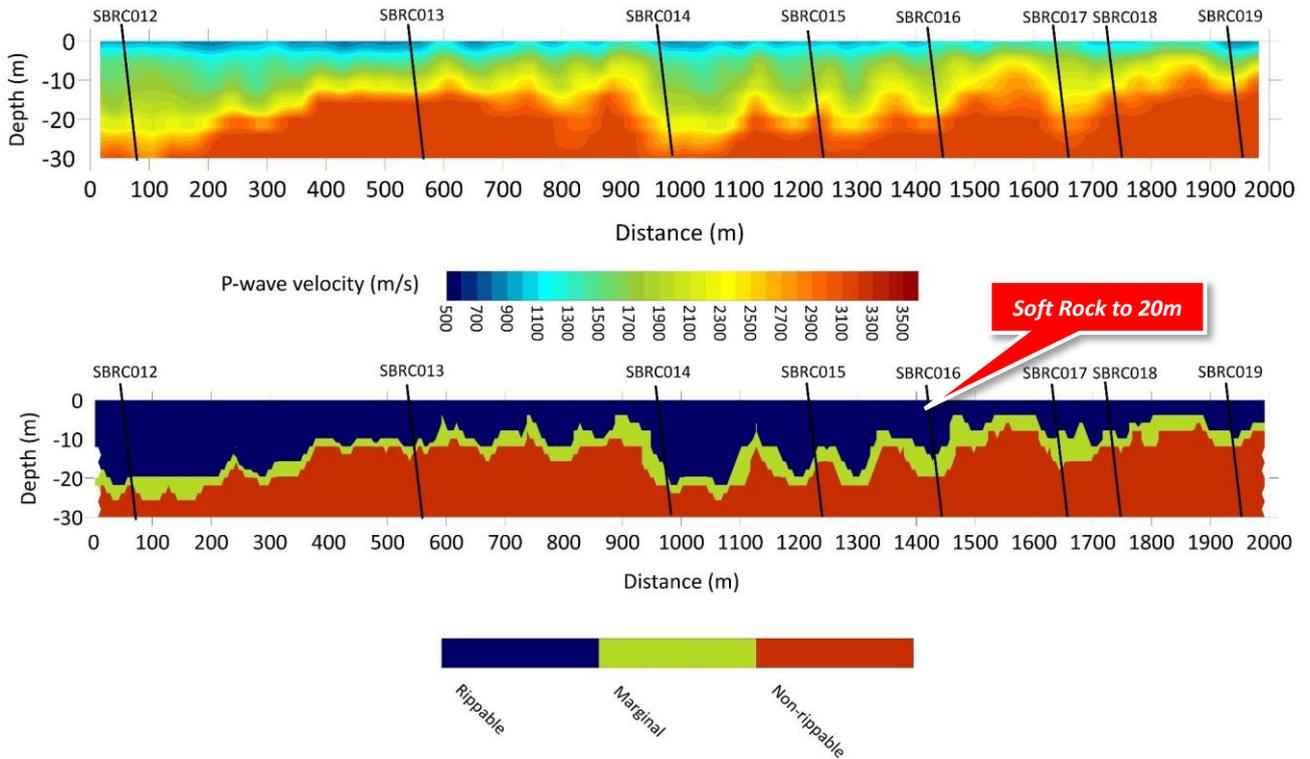
[Figure 8] IBRT – Relationship between sample depth and Nd, Fe, Al extraction, acid consumption rate (Boundary Fence East RC Chip excluding SBRC014 0-10 m, pH 1, 96-hour, ambient temperature, 33% w/w solids).



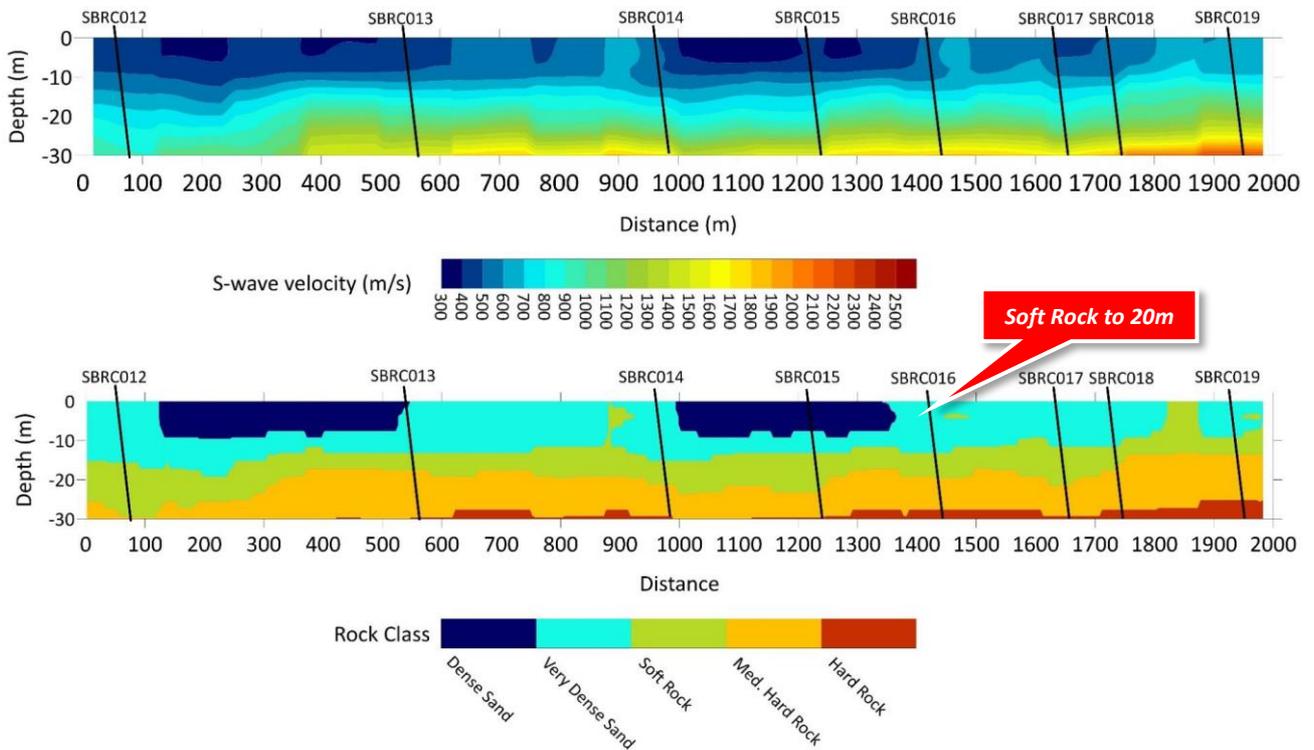
[Figure 9] IBRT - Comparison of leach pH and residence time (SBRC016 6-12m, -2mm RC chip, ambient temperature, 33% w/w solids). Most importantly, with longer residence time the REE are extracted more selectively over the impurities and with respect to acid consumption rate. Thereby, a significantly lower cost extraction could be achieved for the same REE extraction through using longer residence time. Note that a 96-hour residence time is unusually short for an IBRT simulating a heap leach process, where 14-day and 28-day tests are typical.



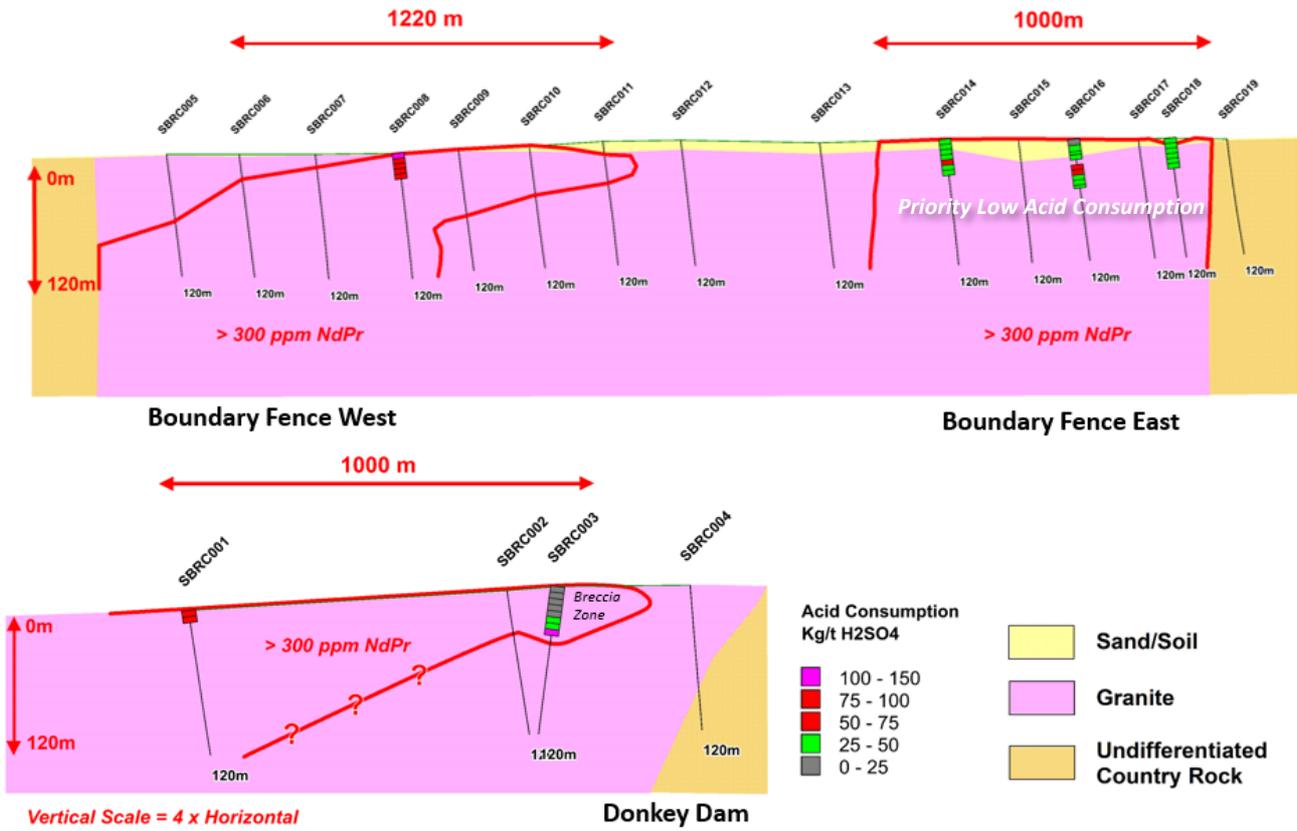
[Figure 10] Boundary Fence East: seismic refraction rock rippability with depth based on seismic velocity and interpreted weathering boundaries based on recent drilling (refer Figure 1).



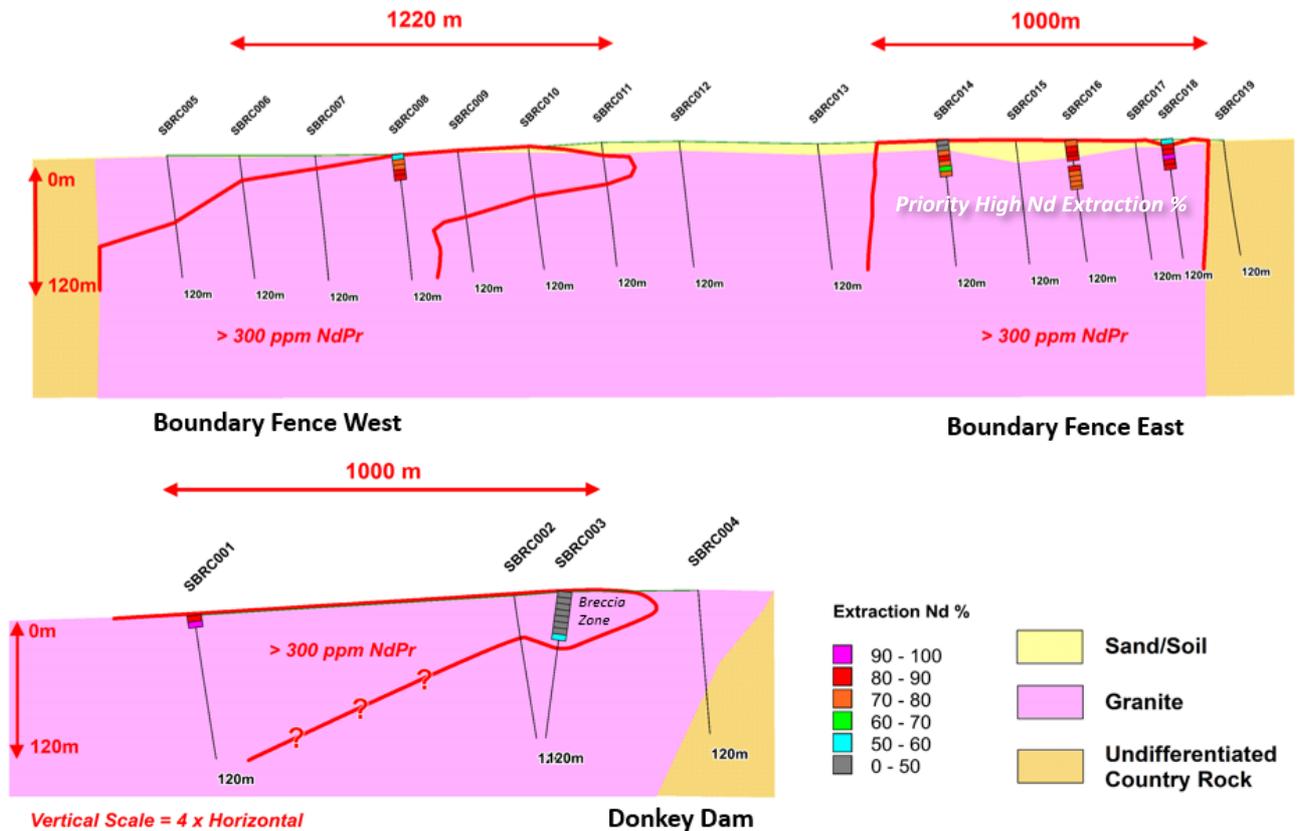
[Figure 11] Boundary Fence East: seismic refraction profile showing interpreted P-wave velocity profile for rock rippability.



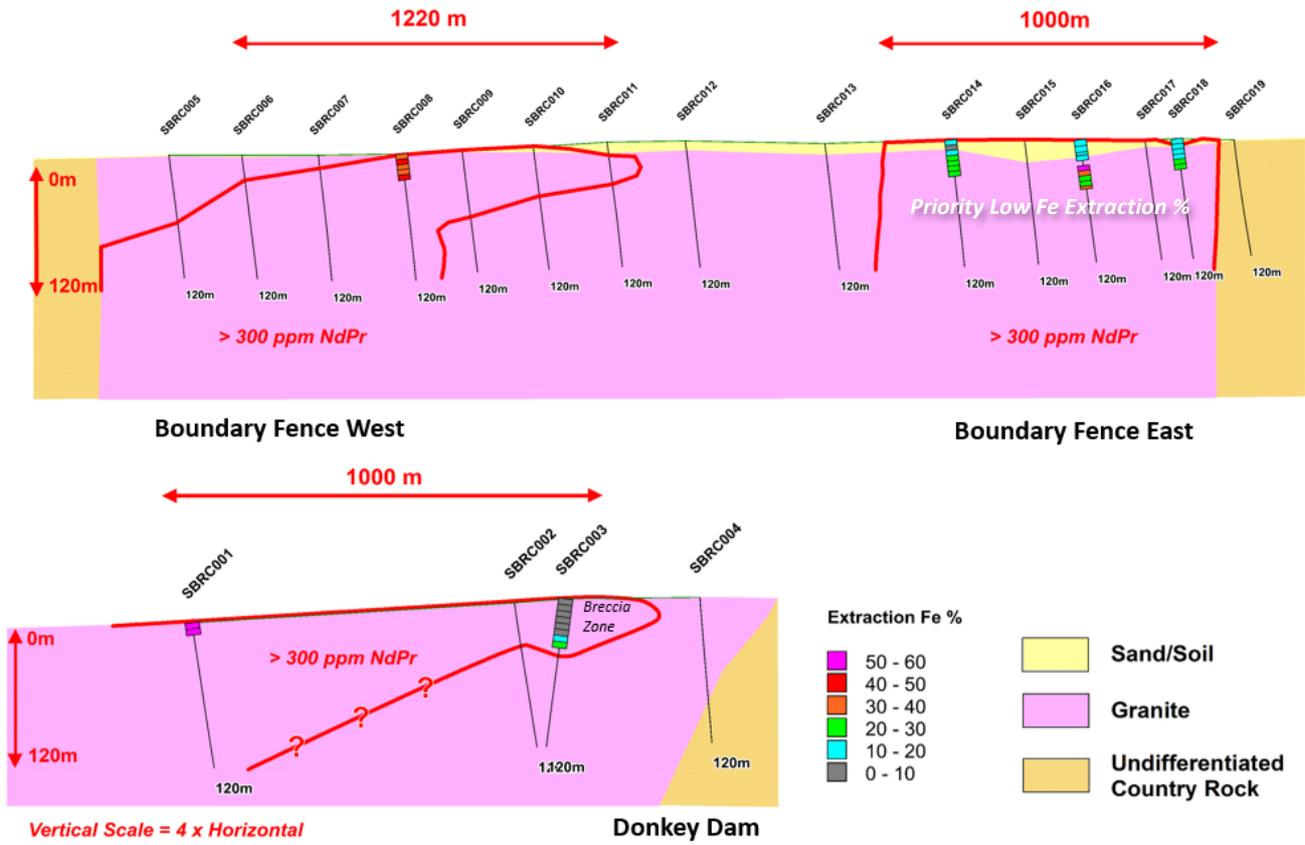
[Figure 12] Boundary Fence East: seismic refraction profile showing interpreted S-wave velocity profile and geotechnical rock class based on multichannel analysis of surface waves.



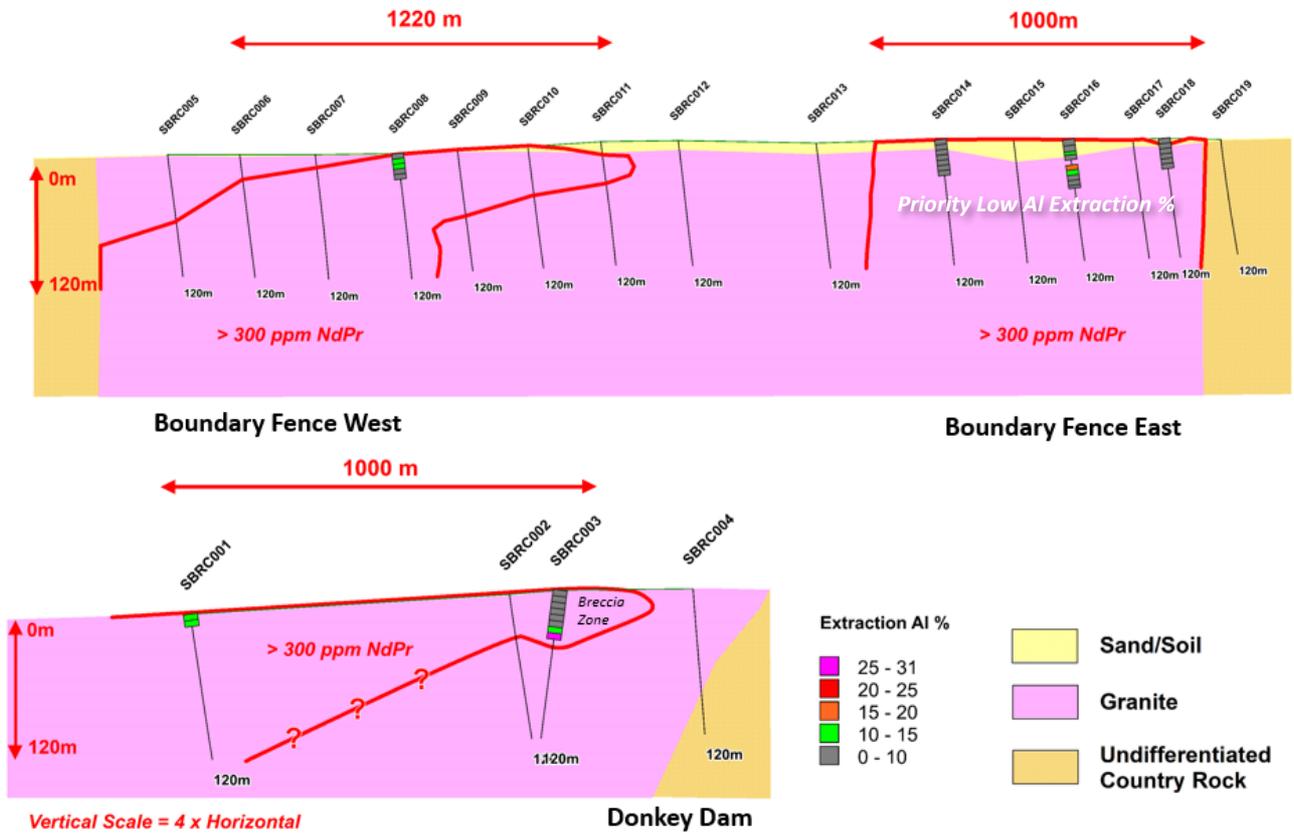
[Figure 13] Sybella Project: Drill sections showing variation in IBRT *Acid Consumption* at depth and between holes in the granite.



[Figure 14] Sybella Project: Drill sections showing variation in IBRT *Neodymium Extraction %* at depth and between holes in the granite.



[Figure 15] Sybella Project: Drill sections showing variation in IBRT Iron Extraction % at depth and between holes in the granite.



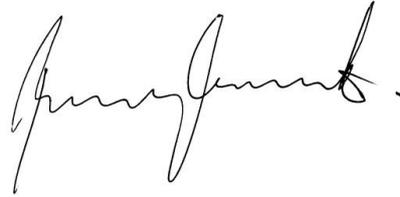
[Figure 16] Sybella Project: Drill sections showing variation IBRT Aluminium Extraction % at depth and between holes in the granite.

This announcement was authorised by the Board of Red Metal. For further information concerning Red Metal's operations and plans for the future please refer to the recently updated web site or contact Rob Rutherford, Managing Director at:

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Rob Rutherford
Managing Director



Russell Barwick
Chairman

Competent Persons Statement

The information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Mr Robert Rutherford, who is a member of the Australian Institute of Geoscientists (AIG). Mr Rutherford is the Managing Director of the Company. Mr Rutherford 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 in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). Mr Rutherford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Appendix 1: Table 1 Sybella Project - JORC 2012 metallurgical sampling techniques and data

Criteria	JORC 2012 Explanation	Commentary
Sampling Techniques	Nature and quality of sampling	<p><i>Wide spaced, reverse circulation percussion (RC) holes were drilled to test the extent of shallow rare earth mineralisation in granite to about 100m below surface and provide samples for proof-of-concept leach test work designed to seek an effective process for REO extraction (refer Red Metal ASX announcement dated 21 August 2023). A total of 19 wide spaced RC holes were drilled to assess REO grade and mineralogical variation across the granite, and discovered shallow, large widths of granite-hosted REO mineralisation at relatively high grades, with three broad areas of interest identified - Boundary Fence East, Boundary Fence West, and Donkey Dam (Figure 2)</i></p> <p><i>The method of drilling is considered to be of an acceptable quality for validating the leach properties the REO mineralisation within the granite and reporting of exploration results.</i></p> <p><i>The Core Group, a Queensland-based hydrometallurgical specialist, were supplied with a series of pulverised RC assay pulp samples and as-received, non-pulverised, RC chip samples from the 2023 program and tasked with assessing the leach response with variations in temperature, acid type and pH, residence time and grind size for the fresh and oxidised granite.</i></p> <p><i>From early comparative studies under the same leach pH and temperature, it became clear that the finely pulverised RC assay sample (beaker leached) significantly underperformed the coarser non-pulverised RC chip sample (bottle rolled). This significant difference may be attributed to the increased surface area for the pulverised RC assay sample but highlighted the potential for heap leach processing. Based on these initial results, further test work on RC assay pulp samples was ceased, and additional test work was focused on heap leach evaluation using intermittent bottle roll tests (IBRT) on the coarser non-pulverised RC chip samples.</i></p> <p><i>Following some initial bottle roll trials to determine key leach parameters, a program of 36 IBRT was carried out on as-received, non-pulverised, RC chip composite samples using the best trialled, but unoptimised, leach condition (pH 1, 96-hour residence time, ambient temperature and 33% solids).</i></p>
	Include reference to measures taken to ensure representativity samples and the appropriate calibration of any measurement tools or systems used.	<p><i>To ensure representativity, as received, non-pulverised, RC chip samples were collected every metre and composited over five metres for IBRT.</i></p> <p><i>At Boundary Fence East, composite sampling for the IBRT was continuous down the length of 3 nearby holes SBRC014, SBRC016, SBRC018 to assess spatial variability and representativity down-hole and between holes over this better performing area.</i></p> <p><i>Spatial variability across the larger granite is limited to selected IBRT composite samples at Boundary Fence East, Donkey Dam West and the Donkey Dam Breccia.</i></p>
	Aspects of the determination of mineralisation that are Material to the Public Report.	<p><i>IBRT are used to simulate the leaching mechanism inherent in heap leaching. The bottle rolls are agitated (turned on a roller) for 5 minutes every hour, such that diffusion is the dominant mechanism for lixiviant transfer into the ore particles. This is the same mechanism that dominates in heap leaching.</i></p>
Drilling Technique	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	<p><i>A track mounted, conventional RC rig with a face sampling bit was utilised from surface to end of hole.</i></p> <p><i>The RC hole was surveyed using an Axis Champ north seeking gyro.</i></p>
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<p><i>Sample recoveries were visually estimated and recorded for each metre. Chip recovery overall was very good with most intervals logged as 100% recovery with local areas reduced to 60%.</i></p>

Criteria	JORC 2012 Explanation	Commentary
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<i>Depths are checked against depths marked on the sample bags and rod counts are routinely performed by the drillers.</i>
	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.	<i>No sample recovery bias is observed due to homogenous distribution of the REO mineralisation in the granite.</i>
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.	<i>Qualitative codes and descriptions were used to record geological data such as lithology, weathering, hardness prior to sampling.</i>
	Whether logging is qualitative or quantitative in nature.	
	Core photography	<i>Chip trays are photographed.</i>
	The total length and percentage of the relevant intersections logged.	<i>The total lengths of all holes have been geologically logged.</i>
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	<i>No core was collected for IBRT work.</i>
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<i>Following some initial bottle roll trials to determine key leach parameters, a program of 36 IBRT were carried out on as-received, non-pulverised, RC chip composite samples using the best trialled, but unoptimised, leach condition (pH 1, 96-hour residence time, ambient temperature and 33% solids).</i> <i>IBRT work utilised 5 metres composite samples derived from cyclone split samples collected for each metre.</i> <i>Appropriateness - IBRT are used to simulate the leaching mechanism inherent in heap leaching. The bottle rolls are agitated (turned on a roller) for 5 minutes every hour, such that diffusion is the dominant mechanism for lixiviant transfer into the ore particles. This is the same mechanism that dominates in heap leaching.</i>
	Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.	<i>Head assay grade results from the 5 metre IBRT composite samples were checked against the average of five 1metre assays on RC pulps over the same interval, and consistently showed very good representativity.</i>
	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.	<i>No duplicate composite sampling for IBRT work has been run at this stage.</i> <i>Repeats of the IBRT results are being completed by an independent laboratory using the same composite sample and leach conditions. Results from this work are pending.</i>
	Whether sample sizes are appropriate to the grain size of the material being sampled.	<i>Five metre composite sampling of the as-received, non-pulverised RC sample for IBRT work is considered appropriate for REE minerals <2mm grainsize evenly distributed throughout the granite.</i>
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.	<i>All solid samples (including head and leach tail) were analysed using the following assay methods:</i> <i>Rare Earth Elements: ALS method ME-MS81 – Lithium borate fusion prior acid dissolution and ICP-MS analysis for Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sc, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tm, U, V, W, Y, Yb, Zr. ALS method ME-MS81 is the most common method for analysing for REE in clay samples. This method provides the most quantitative analytical approach for a broad suite of trace elements including REE.</i> <i>Base metals: Four acid digestion followed by OES-ICP analysis at Core's internal laboratory, including key impurity elements Al and Fe.</i>

Criteria	JORC 2012 Explanation	Commentary																																																			
	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.	<i>No geophysical tools were used to report element concentrations at Sybella.</i>																																																			
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	<i>Core Group and ALS included standard and blank materials to monitor the performance of the laboratory in keeping with NATA accreditation. The standards and blanks used displayed acceptable levels of accuracy and precision.</i>																																																			
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	<i>Result reviewed by the Company's Exploration Manager, Database Manager and the Managing Director, and metallurgical specialists at Core Group. In addition, Five IRBT repeat tests have been ordered from an independent laboratory for added due diligence, but these results are not at hand.</i>																																																			
	The use of twinned holes.	<i>No holes have been twinned</i>																																																			
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	<i>Primary data is stored both in its source electronic form, and, where applicable, on paper. Assay data is retained in both the original certificate (.pdf) form, where available, and the text files received from the laboratory. Primary data was entered in the field into a portable logging device using standard drop-down codes. At this early stage, text data files are exported and stored in an Excel/Access database. MapInfo software is used to check and validate drill-hole data.</i>																																																			
	Discuss any adjustment to assay data.	<p><i>Rare earth elements are reported from both ME-MS81 and Core's internal liquor OES-ICP method as the elemental concentration. The rare earth elements were converted to the industry standard rare earth oxide format using the conversion factors available below which are based on the molar mass of each rare earth oxide.</i></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #ff0000; color: white;">Element</th> <th style="background-color: #ff0000; color: white;">Conversion Factor</th> <th style="background-color: #ff0000; color: white;">Oxide</th> </tr> </thead> <tbody> <tr><td>La</td><td>1.1728</td><td>La₂O₃</td></tr> <tr><td>Ce</td><td>1.2284</td><td>CeO₂</td></tr> <tr><td>Pr</td><td>1.2082</td><td>Pr₆O₁₁</td></tr> <tr><td>Nd</td><td>1.1664</td><td>Nd₂O₃</td></tr> <tr><td>Sm</td><td>1.1596</td><td>Sm₂O₃</td></tr> <tr><td>Eu</td><td>1.1579</td><td>Eu₂O₃</td></tr> <tr><td>Gd</td><td>1.1526</td><td>Gd₂O₃</td></tr> <tr><td>Tb</td><td>1.1762</td><td>Tb₄O₇</td></tr> <tr><td>Dy</td><td>1.1477</td><td>Dy₂O₃</td></tr> <tr><td>Ho</td><td>1.1455</td><td>Ho₂O₃</td></tr> <tr><td>Er</td><td>1.1435</td><td>Er₂O₃</td></tr> <tr><td>Tm</td><td>1.1421</td><td>Tm₂O₃</td></tr> <tr><td>Yb</td><td>1.1387</td><td>Yb₂O₃</td></tr> <tr><td>Lu</td><td>1.1371</td><td>Lu₂O₃</td></tr> <tr><td>Y</td><td>1.2699</td><td>Y₂O₃</td></tr> <tr><td>Sc</td><td>1.5337</td><td>Sc₂O₃</td></tr> </tbody> </table> <p><i>Rare earth abbreviations typically used in industry reporting and throughout this report were in accordance with IUPAC guidelines, and were as follows:</i></p> <p><i>REE - Rare Earth Elements, value presented as elemental assay.</i></p> <p><i>REO - Rare Earth Oxides, value presented as oxide assay.</i></p> <p><i>TREE - La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu plus Y and Sc.</i></p> <p><i>MREE - Pr, Nd, Tb, Dy.</i></p> <p><i>LREE - La, Ce, Pr, Nd and Sm.</i></p> <p><i>HREE - Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu plus Y.</i></p> <p><i>TREO - La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃ plus Y₂O₃ and Sc₂O₃</i></p> <p><i>MREO - Pr₆O₁₁, Nd₂O₃, Tb₄O₇, Dy₂O₃</i></p> <p><i>LREO - La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃</i></p> <p><i>HREO - Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃ plus Y₂O₃</i></p> <p><i>NdPr - is the sum of the oxide values for neodymium and praseodymium.</i></p>	Element	Conversion Factor	Oxide	La	1.1728	La ₂ O ₃	Ce	1.2284	CeO ₂	Pr	1.2082	Pr ₆ O ₁₁	Nd	1.1664	Nd ₂ O ₃	Sm	1.1596	Sm ₂ O ₃	Eu	1.1579	Eu ₂ O ₃	Gd	1.1526	Gd ₂ O ₃	Tb	1.1762	Tb ₄ O ₇	Dy	1.1477	Dy ₂ O ₃	Ho	1.1455	Ho ₂ O ₃	Er	1.1435	Er ₂ O ₃	Tm	1.1421	Tm ₂ O ₃	Yb	1.1387	Yb ₂ O ₃	Lu	1.1371	Lu ₂ O ₃	Y	1.2699	Y ₂ O ₃	Sc	1.5337	Sc ₂ O ₃
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Criteria	JORC 2012 Explanation	Commentary
		<p>There are three commonly applied approaches to calculating extraction for leaching:</p> <p><u>Tail over Head</u>, which is calculated as $1 - \text{tail grade}/\text{head grade}$. Where notable mass loss occurs in leaching, as is common for acid leaching, the tail grade is increased due to the mass loss and would result in an underestimated extraction. In this case, the tail grade is corrected via accounting for the solids mass loss, or via a "tie-in" with a non-soluble element such as Pb.</p> <p><u>Mass Basis</u>, which is calculated as $\text{element mass in liquor} / (\text{element mass in liquor} + \text{element mass in solids})$ for the discharge liquor and solids. This method ignores the head assay and somewhat eliminates sampling error impacting the head assay. It also accounts for any mass loss within the test.</p> <p><u>Liquor out over solids in</u>, which is calculated as $\text{element mass in liquor} / \text{element mass in solids in}$. This method is the most prone to error, as it includes sampling error on the head assay, error in the liquor assay and error in the liquor SG assay. Small errors in the liquor assay can result in large percentage differences in extraction when the extraction extent is high (>70%) due to the nature of the calculation.</p> <p>On Sybella, the <u>tail/head</u> extraction method, corrected for solids mass loss, has been used throughout the test work program for rare earth elements. The mass basis extraction method has been used throughout the test work program for impurity elements (Al and Fe). The tail/head method was verified against the mass basis method for calculating REE extraction for IBRT results reported. Calculated Nd and Pr extraction was within 1% (absolute) on average between the two extraction methods.</p>
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.	The collar positions were surveyed by handheld GPS using GDA94, Zone54 datum. GPS locations are accurate to about 3m.
	Specification of the grid system used.	GDA94_Zone54 datum.
	Quality and adequacy of topographic control.	Topographic relief has been extracted using the ELVIS digital terrain information at Geoscience Australia.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	<p>A total of 19 RC holes were drilled across the granite to assess REO grade and mineralogical variation and depth extent.</p> <p>A total of 36 coarse composite RC chip samples for IBRT work were collected across the granite to assess spatial variations in leach responses. At Boundary Fence East sampling was continuous down the length of 3 nearby holes SBRC014, SBRC016, SBRC018 to assess variability down-hole and between holes over this better performing area (total 20 samples). Spatial variability across the granite is limited to 16 selected IBRT composite samples at Boundary Fence East, Donkey Dam West and the Donkey Dam Breccia.</p> <p>The RC drill pierce point spacing is not sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation.</p> <p>The IBRT sample spacing was sufficient for proof-of-concept leach test work. Leach results from closer spaced samples on the Boundary Fence East traverse show good continuity down hole and between SBRC014, SBRC016, SBRC018 which are regularly spaced over about 800 metres (Table 3, Table 4, Figures 12-16).</p> <p>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.</p> <p>Whether sample compositing has been applied.</p> <p>IBRT work utilised 5 metres composite samples derived from cyclone split samples collected for each metre. The RC chip samples were received in calico bags, with each calico bag containing a 1 m interval with 1.5-2 kg of sample. The calico bags had been collated into interval composites, typically 5 m but occasionally 3 or 6 m, and contained</p>

Criteria	JORC 2012 Explanation	Commentary
		<i>within a large green plastic bag. The 1 m intervals in each composite were inventoried, blended together using a rotary splitter and representatively subdivided into suitable aliquots for test work, with a head sample split for sizing and assay. The rotary split head samples were sized using a RO-TAP sieve shaker at 2.36, 1.70 and 1.18 mm to generate a P80 for each sample. The head sample was then pulverised and assayed.</i>
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.	<i>The granite displays a deformation foliation that varies from steep west dipping to sub-vertical. Where access permitted, the drilling was oriented 60 degrees to the east across the dominant fabric.</i>
	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.	<i>Insufficient data to determine bias at this point.</i>
Sample security	The measures taken to ensure sample security.	<i>Chips were logged and sampled in the field with chip tray records and two split one metre samples collected and stored at Red Metal's Cloncurry base for future reference. 6 metres composite samples were transported directly to ALS Mt Isa for preparation and analysis.</i>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<i>Core Groups Phase 1 final report was externally reviewed by REO metallurgical specialists. Five IRBT repeat tests have been commissioned by an independent laboratory for added due diligence, but these results are not at hand.</i>

Appendix 1: Table 2 Sybella Project - JORC 2012 reporting of exploration results

Criteria	JORC 2012 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.	<i>The Sybella drilling is located within EPM 28001 situated in the Mount Isa region of north-west Queensland. EPM 28001 is owned 100% by Red Metal Limited subsidiary Sybella Minerals Pty Ltd. A landholder conduct and compensation agreement has been established with the pastoral lease holder at May Down and Ardmore Stations. An ancillary exploration access agreement has been established with the Kalkadoon native title party.</i>
	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.	<i>The tenement is in good standing.</i>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<i>No previous drilling by other parties has been directed towards REE, however the granite of interest was regularly drilled and sampled as part of a regional seismic traverse by Geoscience Australia in 1994 (line L138_94MTI_01). End of hole assays from this drill traverse provide regularly spaced REE analyses across the granite, highlighting its grade in fresh rock (refer RDM: ASX Release 26 July 2023). A total of 16 shallow holes intersected the targeted granite with many holes ending in greater than 300ppm neodymium plus praseodymium (NdPr) oxide.</i>
Geology	Deposit type, geological setting and style of mineralisation.	<i>Red Metal's experienced exploration team speculate the potential for a new granite-hosted, weak-acid soluble REO deposit style that can be broadly compared with other granite-hosted, weak-acid soluble mineral deposit types such as the giant Rossing and Husab soluble uranium deposits or the Morenci soluble copper deposits. These large tonnage deposit types are characterised by low-grades of soluble ore minerals hosted in low-acid consuming granite rock and can be bulk mined and then extracted using simple coarse grind and low-acid leach processing.</i>
Drill hole information	A summary of all information material to the understanding of the exploration results including a tabulation of survey information for all Material drill holes:	<i>Refer to Figures 3 and Red Metal ASX:RDM announcement dated 21 August 2023 for collar coordinates and JORC tables. A summary of key results from the 36 IBRT are presented in Tables 3 and Table 4.</i>
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of	<i>No data aggregation methods have been applied</i>

Criteria	JORC 2012 Explanation	Commentary
	high grades) and cut-off grades are usually Material and should be stated.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	<p>The Nd₂O₃ equivalent calculation assumes the following REO prices: Nd₂O₃ US\$57/kg, Pr₆O₁₁ US\$57/kg, Tb₄O₇ US\$784/kg, Dy₂O₃ US\$267/kg</p> <p>The Nd₂O₃ equivalent calculation uses the following formula: $\text{Nd}_2\text{O}_3 \text{ Equivalent} = ((\text{Extracted Pr}_6\text{O}_{11} \times \text{Pr}_6\text{O}_{11}\text{Price}) + (\text{Extracted Nd}_2\text{O}_3 \times \text{Nd}_2\text{O}_3 \text{ Price}) + (\text{Extracted Tb}_4\text{O}_7 \times \text{Tb}_4\text{O}_7) + (\text{Extracted Dy}_2\text{O}_3 \times \text{Dy}_2\text{O}_3)) / \text{Nd}_2\text{O}_3 \text{ Price}.$</p> <p>Nd₂O₃ Equivalent value take into account the average IBRT Extraction % from SBRC014 10-35m, SBRC016 0-48m, SBRC018 0-30m for Sybella and Extraction % published by other listed companies (Table 1).</p> <p>Nd₂O₃ Equivalent does not take into account any REO lose during impurity removal or clay filtration, or assumption about treatment costs.</p>
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 (e.g. 'down hole length, true width not known').	At this stage of exploration insufficient data exists to confidently estimate true widths.
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.	Refer to Figure 2, Figure 12 to 16, and Red Metal ASX:RDM announcement dated 21 August 2023 for collar coordinates and JORC tables.
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.	See text to this announcement and Table 3 and Table 4
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.	<p>A preliminary mineralogical study undertaken for Red Metal by ANSTO Minerals (ANSTO), show most of the rare earth elements within a typical fresh surface sample of the granite occur within the highly soluble fluoro-carbonate minerals bastnasite and synchysite (refer ASX:RDM 21 August 2023).</p> <p>A seismic refraction trial surveyed along the Boundary Fence traverse highlights softer, potentially rippable, granite rock to about 20 metres below surface, which could offer significant comminution and mining cost advantages.</p>
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	<p>Phase 2 metallurgical research involving comminution tests and size fraction leach tests on crushed core samples are underway. Impurity extraction test work is also being trialled. Results from this research are expected during the first quarter of 2024 and will better simulate a heap leach setting and provide more optimised data for a preliminary economic model. Detailed mineralogical studies and preparations for commencement of step-out drilling along the 12 kilometre by 3 kilometre granite body are progressing.</p> <p>This work will seek an effective process for REO extraction and provide a more certain indication of the size and grade potential of this exciting new REO discovery.</p>