

## ASX Release

17 May 2023

# Drilling confirms significant Rare Earths system at Neo prospect, Paddys Well project

### Highlights

Assays from first two (2) RB<sup>1</sup> drillholes confirm multiple, thick zones of rare earth elements (REE) mineralisation in clay from surface at the Neo prospect, Paddy's Well Project.

- Grades up to **10,072 ppm TREO<sup>2</sup> (1.0% w/w TREO)**.
- Significant mineralised REE intercepts up to 78m from surface, **one of widest reported in Australia**.
- Encouraging high ratio of in-demand 'magnet'<sup>2</sup> REEs to TREO ('Magnet REO') (**peak: 30%**)
- Significant assay results from the initial two (2) drillholes from Phase 1B with mineralisation remaining open at depth and along strike (*assays from all remaining holes pending*):
  - **78m @ 1,001 ppm TREO (23% Magnet REO) from surface (NEORB002)**
    - incl: **52m @ 1,270 ppm TREO (24% Magnet REO) (from 21m)**
    - incl: **12m @ 3,402 ppm TREO (25% Magnet REO) (from 50m)**
    - with peak of: **1m @ 10,072 ppm TREO (30% Magnet REO) (from 55m)**
  - **40m @ 583 ppm TREO from surface (NEORC001) (21% Magnet REO)**
- Large mineralised REE clay system now confirmed at Neo with metallurgical testing underway.
- Neo forms part of an expanding regional 6 x 2km anomalous area with multiple >1,000 ppm TREO zones identified at surface and only a fraction of the area tested to date. Follow-up surveys in progress.

Voltaic Strategic Resources Limited (ASX:VSR) has confirmed the presence of a large REE-enriched clay system at the Neo prospect, Paddy's Well Project. Works commenced earlier this year to test the upper clay zone and determine the basement depth within an area where historical drilling identified REEs.

The drilling has confirmed the continuity of clay-hosted REE mineralisation and scale potential of the project with intersections of almost 80m identified from surface, which the Company believes, is the largest clay-hosted REE intersection reported in Australia to date (to the best of its knowledge).

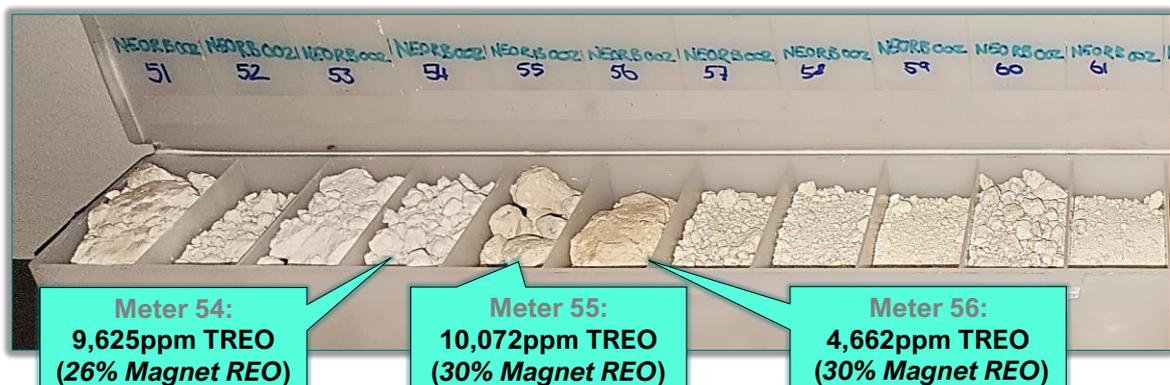


Figure 1. Chip tray photo of NEORB002 significant intercepts.

<sup>1</sup> RB: Reverse circulation/blade (RB) drilling. The RB rig used utilised an RC drill rod string with a blade.

<sup>2</sup> TREO: Total Rare Earth Element Oxide incl. including yttrium oxide (Y<sub>2</sub>O<sub>3</sub>). MREO:TREO: ratio of "Magnet" REEs to Total REEs in oxide form. "Magnet" REEs = Nd, Pr, Tb, Dy.

This program comprised 14 RB holes for 710m at Neo, and 8 holes for 405m at Link, with assays for all remaining holes pending. Sighter metallurgical testwork is also underway (*Fig. 2*) to determine the extractability of the REE-enriched clay zone identified at Neo and establish whether it may be characterised as ion-adsorption (IAD) type. No further clay-focused drilling is planned until these results are received, which the Company believes is the most prudent use of capital going forward.

Concurrently, exploration targeting is underway focusing on the Company’s several primary carbonatite REE targets within Paddys Well. Primary REE mineralisation was previously identified in historical hole GAD004<sup>3</sup> and mineralogical characterisation of these zones will soon commence.

**Voltaic Chief Executive Officer Michael Walshe commented:**

“The results provide **unequivocal evidence for the presence of a large REE clay system at Neo**, with individual metre values up to 1% TREO, high tenor ‘magnet REE’ percentages up to 30%, and very large, mineralised intercepts up to 78m in width. We are now eagerly awaiting the results of the metallurgical testing on the clays to determine their preliminary economic viability. **Halloysite has already been identified<sup>4</sup> from scanning electron microscope (SEM) analysis (*Fig. 7*), which is a kaolinitic clay mineral commonly found in true IADs**” Mr Walshe said.

“Most IADs have the REEs contained predominantly within the ultrafine fraction (i.e. <45µm portion containing the majority of the valuable ‘magnet REE’ mass). Hence, we will undertake ‘size by assay’ analysis upfront to determine REE deportment by particle size and will likely only undertake leaching on the fraction that contains the majority of the REE mass. This is considered the most logical approach as it should minimise the amount of reagents required, maximise the ‘magnet REE’ head grade, and is analogous to how a full-scale plant would likely be designed to operate in practice (*ref. Figure 8*)” he said.

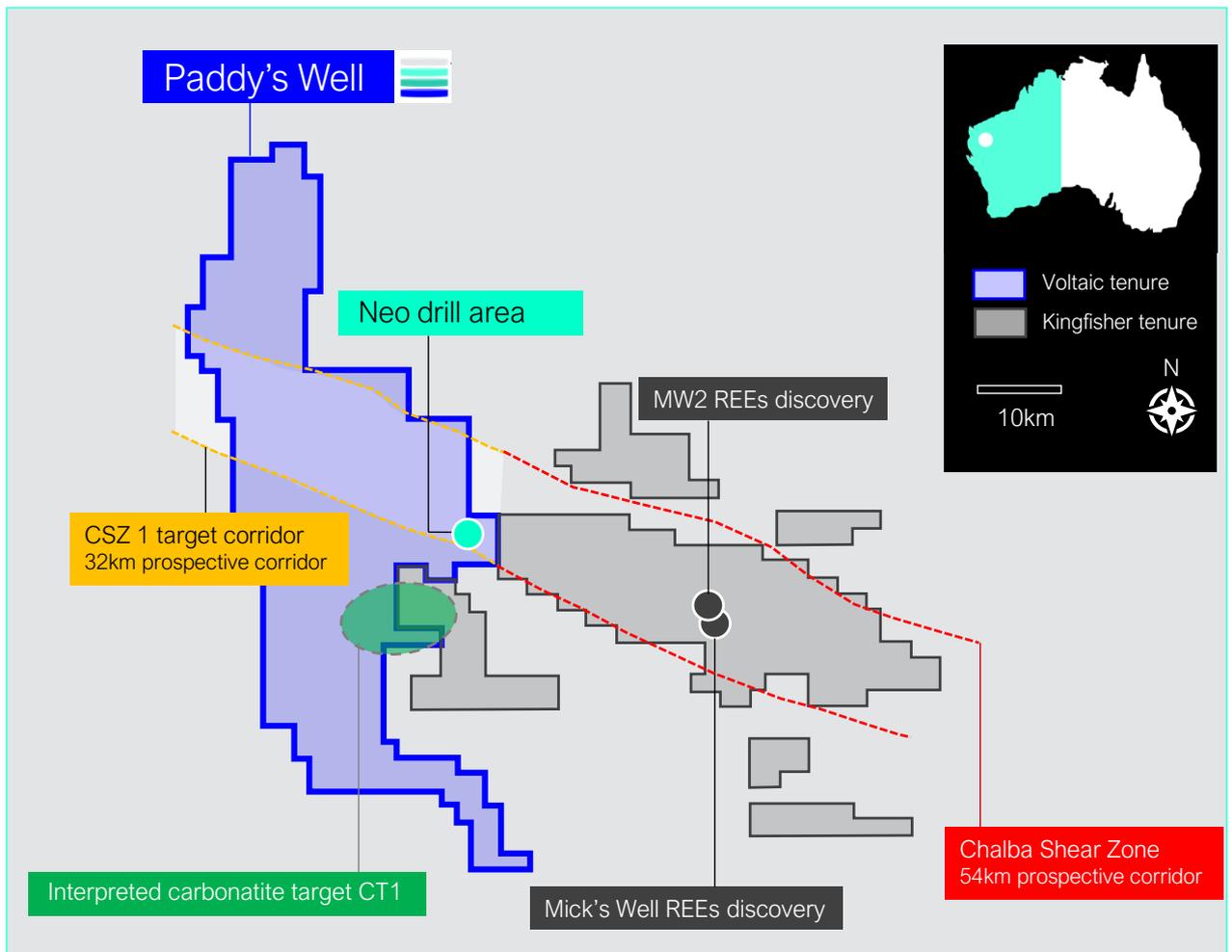
“Simultaneously, in the field **our focus is now on primary carbonatite targets**. We will soon undertake several field surveys including: airborne magnetics / radiometrics, photogrammetry, and soil sampling. **These programs will increase our pool of priority targets and ensure several months of highly active and material news flow over the remainder of 2023**” Mr Walshe said.



**Figure 2.** Metallurgical testing on REE Clay underway at Independent Metallurgical Operations lab

<sup>3</sup> Refer ASX:VSR release dated 13 October 2022 ‘Rare Earths Confirmed at Gascoyne Project’

<sup>4</sup> Refer ASX:VSR release dated 17 April 2023 ‘Met test work on REE-enriched clays at Paddys Well’



**Figure 3.** Paddy's Well Project showing CSZ1 Corridor and drilling target area at Neo prospect.

**Release authorised by the Board of Voltaic Strategic Resources Ltd.**

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**UPCOMING NEWS FLOW**

May / June 2023:

Paddys Well geophysical data (radiometric / magnetic / photogrammetry) acquisition update

June 2023:

Further drill sample assays from Neo & Link prospects

July 2023:

Update on Metallurgical testing of REE-enriched clays from Neo

## PLANNED AND COMPLETED ACTIVITIES AT PADDYS WELL: Q2-Q3 2023

	April	May	June	July	August	September
Field reconnaissance			●—————●			●—————●
Auger vacuum & aircore/RC drilling	●—————●			●—————●		●—————●
Scanning electron microscope (SEM) / mineralogical characterisation			●—————●		●—————●	
Project data review and targeting			●—————●			
UAV drone survey			●—————●			
Sighter metallurgical testwork		●—————●				
Aeromag, radiometric survey			●—————●			
Phase 1B Drill Results		●—————●		●—————●		
Follow-up drill campaign			●—————●			
Ranking of targets	●—————●				●—————●	

## COMPETENT PERSON STATEMENT

The information in this announcement related to Exploration Results is based on and fairly represents information compiled by Mr Claudio Sheriff-Zegers. Mr Sheriff-Zegers is employed as an Exploration Manager for Voltaic Strategic Resources Ltd and is a member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration and to the activities undertaken 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. He consents to the inclusion in this announcement of the matters based on information in the form and context in which they appear.

The information in this document that relates to metallurgical test work and flowsheet development is based on, and fairly represents, information and supporting documentation reviewed by Mr Michael Walshe. Mr Walshe is engaged as Chief Executive Officer for Voltaic Strategic Resources Ltd. He holds a Bachelor of Chemical and Process Engineering (Hons.) and a Master of Business Administration (Finance). He is a chartered engineer with both Engineers Australia & the Institution of Chemical Engineers (IChemE), and is a member of the Australasian Institute of Mining & Metallurgy (AusIMM). He has over 15 years of experience in process engineering and metallurgy across a wide range of commodities including rare earths, and has approved and consented to the inclusion in this document of the matters based on his information in the form and context in which it appears.

## FORWARD-LOOKING STATEMENTS

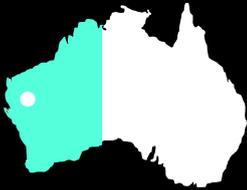
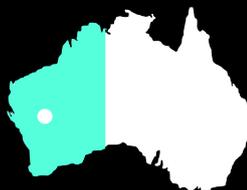
This announcement may contain forward-looking statements involving several risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update statements if these beliefs, opinions, and estimates should change or to reflect other future development.

## ABOUT VOLTAIC STRATEGIC RESOURCES

**Voltaic Strategic Resources Limited** explore for the next generation of mines that will produce the metals required for a cleaner, more sustainable future where transport is fully electrified, and renewable energy represents a greater share of the global energy mix.

The company has a strategically located critical metals portfolio led by lithium, rare earths, base metals, and gold across two of the world's most established mining jurisdictions: Western Australia & Nevada, USA.

Voltaic is led by an accomplished corporate and technical team with extensive experience in REEs, lithium and other critical minerals, and a strong skillset in both geology and processing / metallurgy.

 <p><b>Gascoyne Region</b> Western Australia</p> <ul style="list-style-type: none"> <li>• Emerging critical minerals province (REE, Li, Ni-Cu-Co-PGE).</li> <li>• Active neighbours in the region.</li> </ul> 	 <p><b>Meekatharra Region</b> Western Australia</p> <ul style="list-style-type: none"> <li>• Established gold district with two vanadium development projects.</li> <li>• Active neighbours in the region.</li> </ul> 	 <p><b>Stillwater Range</b> Nevada, USA</p> <ul style="list-style-type: none"> <li>• Ni-Cu-Co project containing formerly producing Co mine.</li> <li>• Global Energy Metals adjacent.</li> </ul> 
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## Appendix 1 Drill data

**Table 1. Neo blade/reverse circulation (RB) drilling – lab assay results, significant intersections**

Prospect	Hole ID	From (m)	To (m)	Interval (m)	TREO intercept (ppm)	COMMENT
Neo	NEORC001	0	40	40	40m @ 583ppm TREO (from surface) (21% MREO:TREO)	REE zone remains open
	NEORB002	0	78	78	78m @ 1,001ppm TREO (from surface) (23% MREO:TREO)	REE zone remains open
		0	14	14	14m @ 629ppm TREO (from surface) (22% MREO:TREO)	
		21	72	52	52m @ 1,270ppm TREO (from 21m) (24% MREO:TREO)	
		50	61	12	including 12m @ 3,402ppm TREO (from 50m) (25% MREO:TREO)	
		55	56	1	and 1m @ 10,072ppm TREO (1.01% TREO) (from 56m) (30% MREO:TREO)	
	NEORB003	0	78		Assays pending	
	NEORB004	0	78		Assays pending	
	NEORB005	0	35		Assays pending	
	NEORB006	0	65		Assays pending	
	NEORB007	0	63		Assays pending	
	NEORB008	0	75		Assays pending	
	NEORB009	0	15		Assays pending	
	NEORB010	0	11		Assays pending	
	NEORB011	0	17		Assays pending	
NEORB012	0	32		Assays pending		
NEORB013	0	63		Assays pending		
NEORB014	0	60		Assays pending		

\* NOTE 1: cutoff of 300ppm TREO used

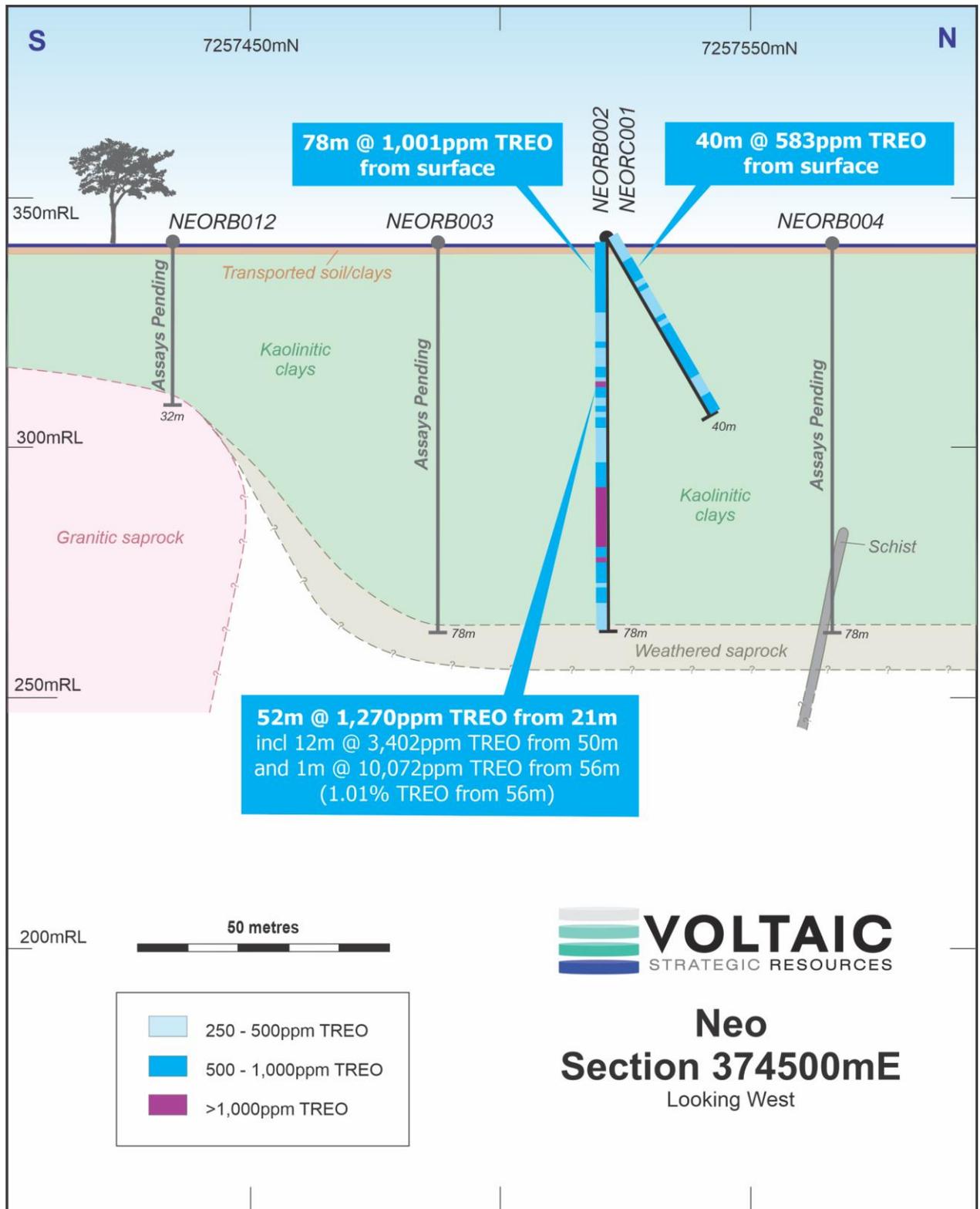


Figure 4. Neo 374500E cross section significant intercepts

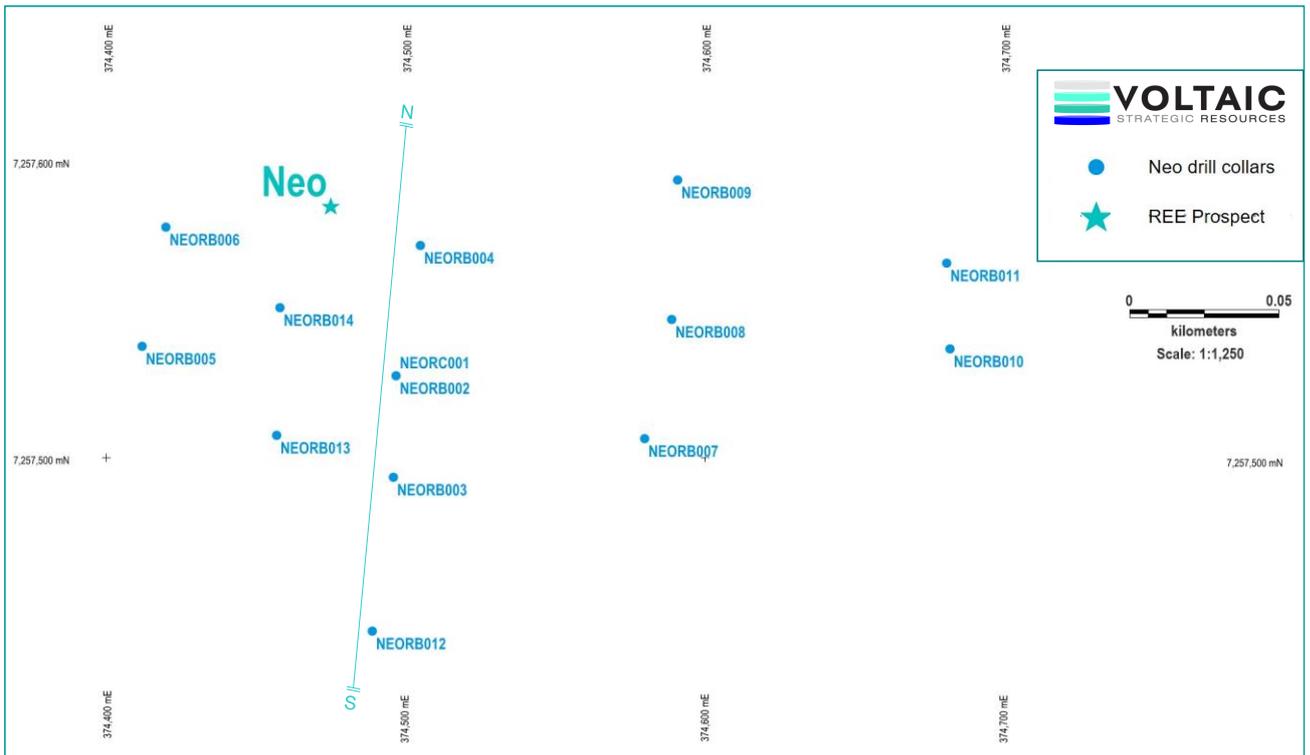


Figure 5 Map plan showing drill collars at the Neo prospect.

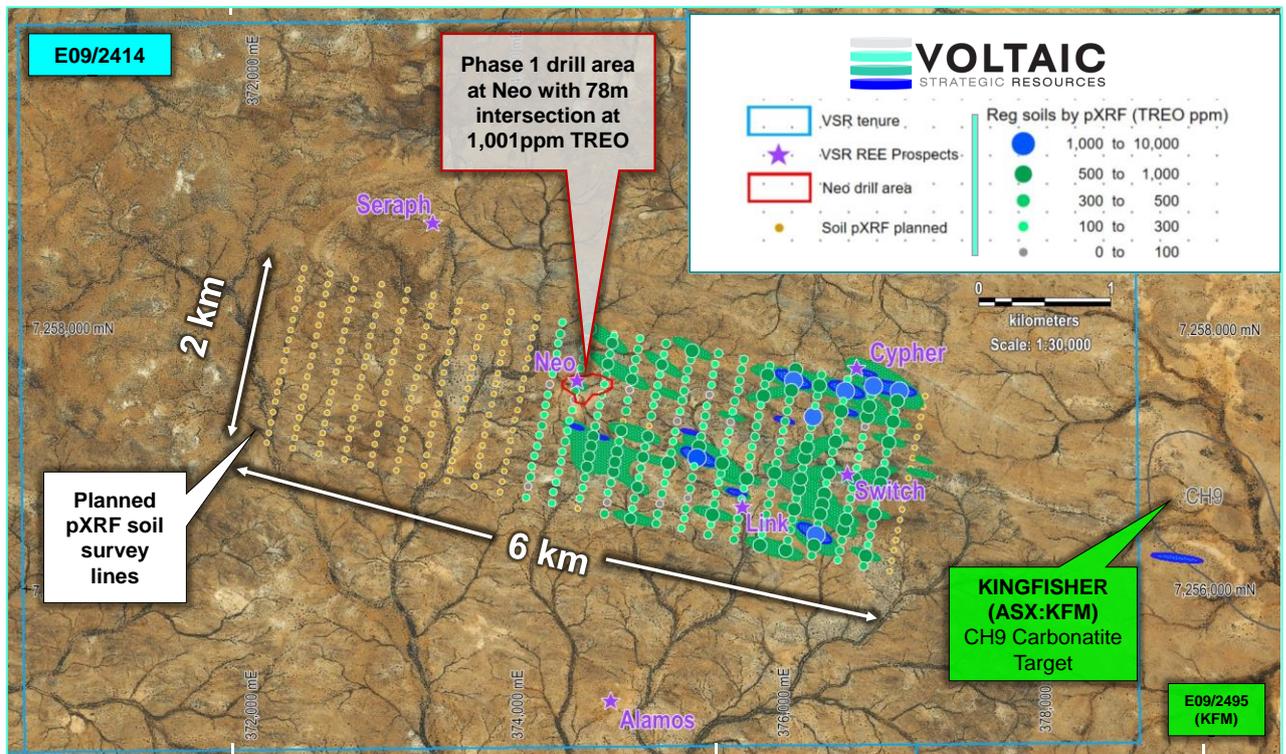
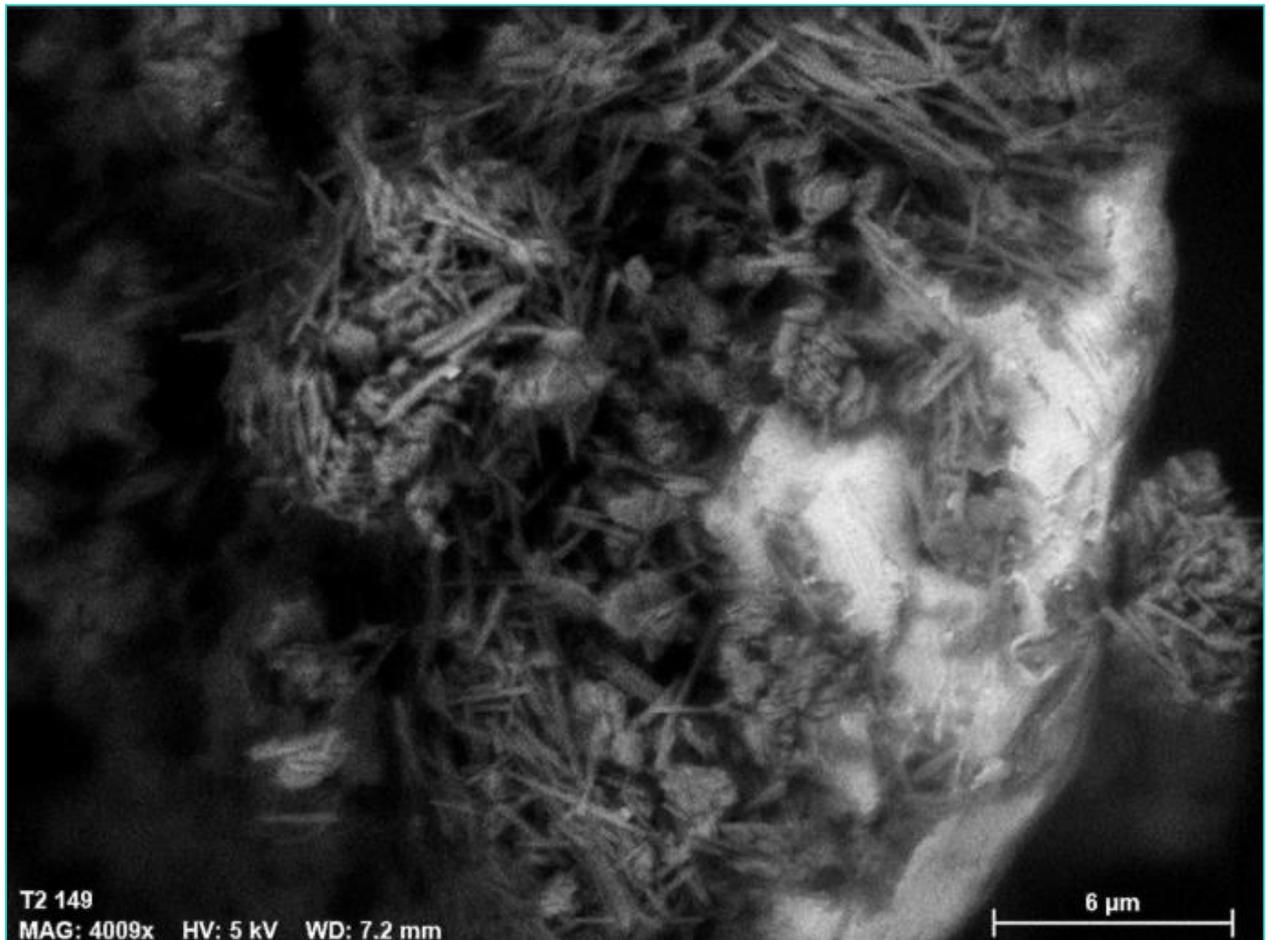


Figure 6. TREO contours at the Neo prospect within regional 6 x 2km anomalous area with multiple >1,000ppm TREO zones identified at surface and only a fraction of the area tested to date.



**Figure 7. Halloysite nanotubes** & associated kaolin<sup>5</sup> identified from SEM analysis of REE-enriched clay samples from historical drillhole GAD0004<sup>6</sup>. Halloysite is a common kaolinitic clay mineral ( $Al_2O_3 \cdot 2SiO_2 \cdot 2H_2O$ ) found in true REE ionic adsorption deposits (IADs)<sup>7</sup>

<sup>5</sup> Both halloysite (needles) and kaolinite (plates) are seen here intergrown with a REE-phosphate grain (bright phase on the right). The association between the minerals suggests that the REE phosphate formed contemporaneously with the clay minerals or after clay formation indicating that the REE phosphate is a secondary REE mineral and not a detrital REE phase.

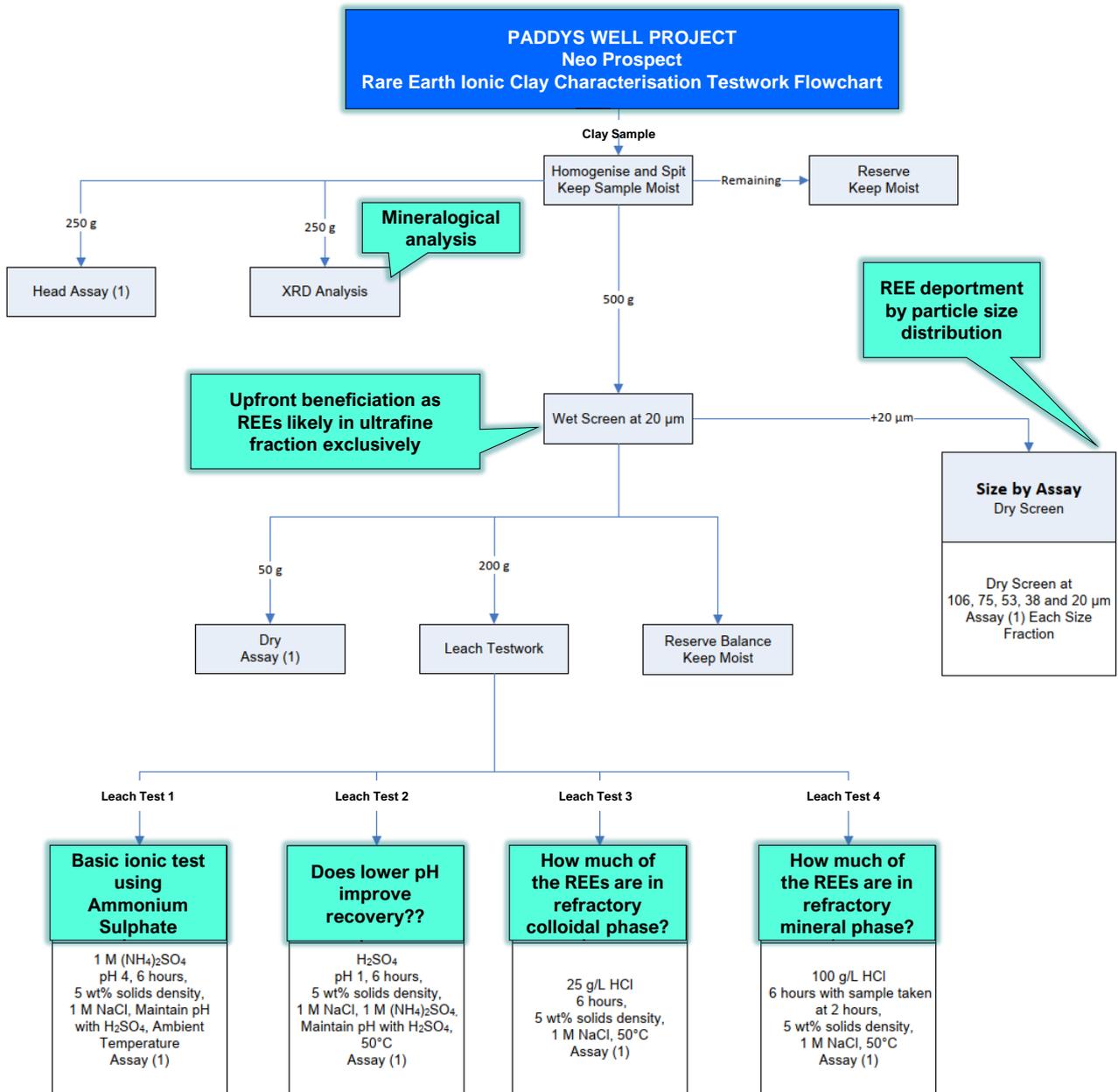
<sup>6</sup> Refer ASX release date 13 October 2022 'REEs confirmed at Paddys Well'

<sup>7</sup> Qiu S, Yan H, Hong B, Long Q, Xiao J, Li F, Tong L, Zhou X, Qiu T 2022, 'Desorption of REEs from Halloysite and Illite: A Link to the Exploitation of Ion-Adsorption RE Ore Based on Clay Species', *Minerals*, vol. 12, no. 8, <https://doi.org/10.3390/min12081003>.

## Appendix 2 Supplementary Data

*Table 3. Neo phase 1B drilling summary*

Hole ID	Easting GDA_94	Northing GDA_94	RL	Mag Azimuth	Dip	Depth (m)	Prospect	Drill Type
NEORC001	374497	7257528	341	010	-60	40	Neo	RC
NEORB002	374497	7257528	341	0	-90	78	Neo	RB
NEORB003	374496	7257494	341	0	-90	78	Neo	RB
NEORB004	374505	7257572	341	0	-90	78	Neo	RB
NEORB005	374412	7257538	341	0	-90	35	Neo	RB
NEORB006	374420	7257578	341	0	-90	65	Neo	RB
NEORB007	374580	7257507	341	0	-90	63	Neo	RB
NEORB008	374589	7257547	341	0	-90	75	Neo	RB
NEORB009	374591	7257594	341	0	-90	15	Neo	RB
NEORB010	374682	7257537	341	0	-90	11	Neo	RB
NEORB011	374681	7257566	341	0	-90	17	Neo	RB
NEORB012	374489	7257442	341	0	-90	32	Neo	RB
NEORB013	374457	7257508	341	0	-90	63	Neo	RB
NEORB014	374458	7257551	341	0	-90	60	Neo	RB



**Figure 8. Metallurgical Testwork Flowchart for Rare Earth Ionic Clay Characterisation**

**Table 3. Rare Earth Element Assay Results (as Oxides) for Initial Two Drillholes from Phase 1B Campaign**

Hole ID	From (m)	To (m)	TREO (ppm)	MREO: TREO (%)	Nd <sub>2</sub> O <sub>3</sub> (ppm)	Pr <sub>2</sub> O <sub>3</sub> (ppm)	Tb <sub>2</sub> O <sub>3</sub> (ppm)	Dy <sub>2</sub> O <sub>3</sub> (ppm)	La <sub>2</sub> O <sub>3</sub> (ppm)	Ce <sub>2</sub> O <sub>3</sub> (ppm)	Sm <sub>2</sub> O <sub>3</sub> (ppm)	Eu <sub>2</sub> O <sub>3</sub> (ppm)	Gd <sub>2</sub> O <sub>3</sub> (ppm)	Ho <sub>2</sub> O <sub>3</sub> (ppm)	Er <sub>2</sub> O <sub>3</sub> (ppm)	Tm <sub>2</sub> O <sub>3</sub> (ppm)	Yb <sub>2</sub> O <sub>3</sub> (ppm)	Lu <sub>2</sub> O <sub>3</sub> (ppm)	Y <sub>2</sub> O <sub>3</sub> (ppm)
NEORB002	0	1	422	21.6%	67.3	21.0	0.6	2.3	94.6	196.8	11.1	1.3	5.5	0.4	0.9	0.1	0.6	0.1	10.2
	1	2	633	21.6%	102.3	30.7	0.8	3.2	147.8	291.7	16.2	1.6	7.8	0.5	1.1	0.1	0.8	0.1	14.3
	2	3	733	21.5%	116.6	36.6	1.0	3.8	167.7	343.2	18.4	1.7	9.6	0.5	1.2	0.1	0.7	0.1	15.4
	3	4	871	22.0%	142.3	43.5	1.2	4.4	207.6	395.9	23.0	2.0	11.8	0.6	1.3	0.1	0.8	0.1	17.4
	4	5	644	22.2%	105.7	32.7	1.0	3.9	147.8	292.8	17.6	1.4	8.9	0.5	1.2	0.1	0.8	0.1	15.0
	5	6	655	21.8%	106.0	33.0	0.9	3.1	152.5	303.4	16.7	1.2	8.3	0.5	0.9	0.1	0.5	0.1	13.0
	6	7	597	22.7%	101.7	30.7	0.7	2.2	137.2	278.8	14.6	1.2	6.9	0.3	0.6	0.1	0.4	0.1	8.0
	7	8	417	22.8%	71.4	21.3	0.5	1.8	92.2	194.4	10.8	1.0	5.5	0.2	0.6	0.1	0.4	0.0	7.0
	8	9	279	21.7%	45.0	13.7	0.4	1.3	61.0	132.4	7.6	0.7	3.8	0.2	0.4	0.0	0.3	0.1	5.2
	9	10	834	22.7%	142.3	41.7	1.0	4.3	190.0	381.8	21.2	1.6	10.5	0.6	1.4	0.2	1.1	0.2	17.4
	10	11	<b>1,169</b>	23.0%	200.6	61.4	1.4	5.0	261.5	542.3	29.2	2.0	13.6	0.7	1.6	0.2	1.2	0.2	21.7
	11	12	702	22.7%	119.0	37.0	0.8	2.9	157.2	329.1	17.4	1.4	8.4	0.4	0.8	0.1	0.6	0.1	11.2
	12	13	339	22.2%	56.6	16.7	0.4	1.5	73.9	161.6	8.4	1.0	4.1	0.2	0.5	0.1	0.4	0.1	6.0
	13	14	509	22.6%	85.7	26.2	0.6	2.4	115.9	234.3	13.2	1.4	6.5	0.4	0.8	0.1	0.6	0.1	9.3
	14	15	227	22.2%	37.7	11.2	0.3	1.2	53.9	101.7	6.1	1.0	3.0	0.2	0.4	0.1	0.4	0.1	5.1
	15	16	255	21.8%	41.4	12.7	0.4	1.3	57.5	119.5	6.4	1.1	3.3	0.2	0.5	0.1	0.4	0.0	4.9
	16	20	283	22.2%	47.1	13.8	0.4	1.5	61.0	133.5	7.1	1.2	3.5	0.2	0.5	0.1	0.4	0.1	5.7
	20	21	740	22.7%	126.0	38.1	0.8	3.0	164.2	347.9	18.6	1.6	8.5	0.4	0.9	0.1	0.8	0.1	12.0
	21	22	316	23.2%	54.8	16.7	0.4	1.4	73.2	142.9	8.2	1.3	3.8	0.2	0.4	0.1	0.4	0.0	5.5
	22	23	303	23.2%	52.4	16.1	0.4	1.5	67.1	139.4	7.8	1.3	3.6	0.2	0.5	0.1	0.4	0.1	5.5
	23	24	201	23.2%	34.8	10.5	0.3	1.0	44.8	91.6	5.1	1.2	2.5	0.1	0.3	0.0	0.3	0.0	3.5
	24	25	438	23.2%	75.5	23.0	0.6	2.4	92.4	202.6	12.1	1.7	5.9	0.4	1.0	0.1	0.8	0.1	9.1
	25	26	692	23.2%	120.1	36.0	0.9	3.6	150.1	320.9	17.9	1.8	8.9	0.5	1.3	0.2	1.3	0.2	13.0
	26	27	973	22.7%	166.8	49.5	1.0	3.6	226.4	449.8	23.9	2.1	11.5	0.5	1.1	0.1	0.9	0.1	14.1
	27	28	441	22.7%	75.6	22.6	0.5	1.6	101.8	205.0	11.1	1.4	5.0	0.2	0.4	0.1	0.4	0.1	5.7
	28	29	<b>1,042</b>	22.6%	177.3	53.9	1.0	3.7	241.6	483.7	25.5	2.2	11.4	0.5	1.3	0.2	1.2	0.2	14.2
	29	30	566	23.4%	99.1	30.2	0.6	2.4	124.3	261.2	14.6	2.0	6.3	0.4	1.1	0.1	1.2	0.2	9.7
	30	31	544	23.0%	93.7	28.0	0.6	2.7	120.8	249.5	13.8	1.9	6.8	0.4	1.0	0.1	1.0	0.2	11.3
	31	32	396	23.1%	68.7	20.3	0.5	1.9	87.8	181.6	10.3	1.9	4.9	0.3	0.6	0.1	0.5	0.1	8.1
	32	33	260	23.4%	45.5	13.8	0.3	1.3	56.3	118.3	7.3	1.7	3.3	0.2	0.5	0.0	0.4	0.1	5.0
	33	34	526	22.7%	88.8	27.1	0.7	2.7	114.1	244.8	13.9	2.0	6.8	0.4	0.9	0.1	0.8	0.1	10.6
	34	35	139	22.7%	23.2	6.7	0.5	1.2	26.3	64.7	4.3	0.6	2.7	0.2	0.6	0.1	0.5	0.1	4.8
	35	36	895	23.1%	155.1	47.6	0.9	3.4	195.9	420.5	23.7	2.8	10.1	0.5	1.1	0.1	0.9	0.1	11.9
	36	37	588	22.9%	101.0	30.2	0.7	2.6	126.7	277.6	15.8	1.8	7.6	0.4	0.7	0.1	0.6	0.1	9.1
	37	38	490	22.6%	82.7	25.4	0.6	2.3	108.7	228.4	12.6	1.9	6.1	0.4	0.7	0.1	0.6	0.1	8.4
	38	39	364	23.2%	63.5	19.3	0.4	1.4	79.6	171.0	9.2	1.9	3.9	0.2	0.4	0.0	0.3	0.0	4.8
	39	40	291	22.8%	49.7	15.2	0.3	1.1	64.7	135.9	7.8	1.7	3.3	0.1	0.3	0.0	0.2	0.0	3.6
	40	44	319	23.4%	56.3	16.4	0.4	1.4	69.3	147.6	8.6	1.8	3.7	0.2	0.4	0.0	0.3	0.1	4.9
	44	45	505	23.2%	87.8	26.5	0.6	2.4	110.1	233.1	13.1	1.8	5.8	0.4	0.9	0.1	0.8	0.1	9.9
	45	46	707	22.7%	119.0	37.6	0.8	3.5	152.5	332.6	16.9	2.5	7.7	0.5	1.3	0.2	1.3	0.2	14.6
	46	47	848	22.4%	140.0	44.0	1.2	5.0	183.0	394.7	20.1	3.2	10.0	0.8	2.0	0.3	1.9	0.3	22.5
	47	48	721	22.1%	116.6	38.4	0.9	3.7	156.0	342.0	16.8	2.7	7.8	0.6	1.4	0.2	1.3	0.2	15.9
	48	49	916	22.9%	154.0	49.1	1.3	5.5	194.7	422.8	23.0	3.6	11.2	0.9	2.2	0.3	2.2	0.3	24.9
	49	50	<b>1,128</b>	23.1%	192.5	59.6	1.5	6.6	236.9	523.6	28.4	4.7	13.8	0.9	2.4	0.3	2.1	0.3	29.3
	50	51	<b>1,630</b>	23.9%	285.8	90.9	2.4	10.1	344.8	730.9	43.4	7.3	21.8	1.6	4.2	0.5	3.8	0.5	46.5
	51	52	<b>2,186</b>	22.8%	367.4	116.3	2.9	12.3	424.6	1,050.7	56.4	9.5	27.0	1.9	4.6	0.6	3.9	0.6	55.7
	52	53	<b>2,408</b>	28.0%	496.9	153.4	4.5	19.4	585.2	886.7	78.7	15.5	37.7	2.8	6.9	0.9	5.4	0.7	70.4
	53	54	<b>1,775</b>	21.9%	286.9	90.7	2.1	8.9	337.8	885.5	43.9	7.6	20.1	1.4	3.3	0.4	2.7	0.4	40.5
	54	55	<b>9,625</b>	<b>25.9%</b>	<b>1,854.6</b>	<b>584.8</b>	<b>11.2</b>	<b>39.0</b>	<b>2,545.0</b>	<b>3,865.3</b>	<b>238.9</b>	<b>55.1</b>	<b>114.3</b>	<b>4.8</b>	<b>9.0</b>	<b>0.8</b>	<b>3.9</b>	<b>0.4</b>	<b>109.1</b>
	55	56	<b>10,072</b>	<b>29.9%</b>	<b>2,204.5</b>	<b>685.0</b>	<b>23.5</b>	<b>97.0</b>	<b>1,630.2</b>	<b>4,205.0</b>	<b>365.3</b>	<b>92.1</b>	<b>199.4</b>	<b>14.0</b>	<b>31.6</b>	<b>3.9</b>	<b>23.1</b>	<b>2.9</b>	<b>289.5</b>
	56	57	<b>4,662</b>	<b>30.1%</b>	<b>1,027.6</b>	<b>317.8</b>	<b>11.4</b>	<b>48.0</b>	<b>716.6</b>	<b>1,920.9</b>	<b>175.1</b>	<b>41.7</b>	<b>98.9</b>	<b>7.0</b>	<b>16.7</b>	<b>2.1</b>	<b>12.6</b>	<b>1.6</b>	<b>170.2</b>
	57	58	<b>2,715</b>	24.5%	487.6	151.0	4.9	21.0	322.5	1,417.3	80.9	17.8	42.4	3.2	7.3	1.0	6.5	0.9	81.4
	58	59	<b>1,885</b>	23.1%	318.4	98.8	3.3	14.9	381.2	856.2	52.8	10.0	28.9	2.3	5.6	0.8	5.0	0.7	64.3
	59	60	<b>1,276</b>	23.6%	221.6	67.4	2.3	10.5	265.1	566.9	35.7	6.1	19.6	1.7	4.4	0.6	3.9	0.6	42.4
	60	61	<b>1,459</b>	22.8%	243.8	75.4	2.4	10.6	303.8	671.2	37.9	7.6	21.3	1.6	4.2	0.5	3.3	0.5	41.9
	61	62	861	21.9%	140.0	43.0	1.0	4.5	194.7	401.8	19.9	3.2	9.7	0.7	1.7	0.2	1.4	0.3	18.8

Hole ID	From (m)	To (m)	TREO (ppm)	MREO: TREO (%)	Nd <sub>2</sub> O <sub>3</sub> (ppm)	Pr <sub>2</sub> O <sub>3</sub> (ppm)	Tb <sub>2</sub> O <sub>3</sub> (ppm)	Dy <sub>2</sub> O <sub>3</sub> (ppm)	La <sub>2</sub> O <sub>3</sub> (ppm)	Ce <sub>2</sub> O <sub>3</sub> (ppm)	Sm <sub>2</sub> O <sub>3</sub> (ppm)	Eu <sub>2</sub> O <sub>3</sub> (ppm)	Gd <sub>2</sub> O <sub>3</sub> (ppm)	Ho <sub>2</sub> O <sub>3</sub> (ppm)	Er <sub>2</sub> O <sub>3</sub> (ppm)	Tm <sub>2</sub> O <sub>3</sub> (ppm)	Yb <sub>2</sub> O <sub>3</sub> (ppm)	Lu <sub>2</sub> O <sub>3</sub> (ppm)	Y <sub>2</sub> O <sub>3</sub> (ppm)
NEORB002	62	63	855	22.9%	143.5	44.7	1.5	6.2	181.8	380.7	24.0	4.1	12.7	1.0	2.6	0.4	2.3	0.3	30.6
	63	64	<b>3,137</b>	<b>24.4%</b>	562.2	174.0	5.6	24.0	382.3	1,639.8	92.7	19.5	48.5	3.5	8.6	1.1	6.6	0.9	88.1
	64	68	659	22.0%	106.3	34.0	0.9	4.0	146.6	303.4	16.0	2.8	8.4	0.6	1.6	0.2	1.4	0.2	17.9
	68	69	442	22.1%	72.4	22.7	0.5	2.0	102.6	205.0	10.0	2.0	4.9	0.3	0.7	0.1	0.6	0.1	7.9
	69	70	760	22.0%	123.6	39.9	0.8	3.0	179.4	352.6	17.4	2.3	8.4	0.4	1.0	0.1	0.8	0.1	13.1
	70	71	832	<b>24.4%</b>	149.3	46.9	1.3	5.2	115.4	428.7	20.6	3.7	11.5	0.8	1.9	0.3	1.5	0.2	23.9
	71	72	506	21.6%	80.4	23.4	1.0	4.4	109.0	227.2	14.1	3.7	9.3	0.7	1.5	0.2	1.1	0.1	19.2
	72	76	261	22.1%	41.5	12.1	0.8	3.2	55.6	104.5	8.9	1.5	6.6	0.5	1.3	0.2	1.2	0.2	17.3
	76	77	151	21.0%	21.2	6.5	0.6	3.3	26.7	52.9	5.3	0.7	4.6	0.6	1.7	0.3	1.5	0.2	21.7
	77	78	477	20.0%	66.7	21.3	1.2	6.3	104.4	188.6	12.2	2.2	10.4	1.2	3.2	0.4	2.6	0.4	46.6
NEORC001	0	4	340	22.2%	56.0	16.6	0.6	2.3	76.5	153.4	9.1	0.9	5.1	0.4	0.8	0.1	0.6	0.1	9.7
	4	5	318	20.0%	46.4	15.0	0.4	1.8	69.0	157.0	7.8	0.9	4.2	0.3	0.5	0.1	0.3	0.1	6.7
	5	6	560	21.7%	89.3	27.7	0.9	3.8	126.7	256.5	15.1	1.2	8.3	0.6	1.3	0.1	0.8	0.1	15.4
	6	7	540	21.3%	85.1	25.6	0.9	3.4	123.1	249.5	14.0	1.1	7.8	0.5	1.3	0.1	0.9	0.1	14.5
	7	8	755	21.9%	122.5	37.5	1.1	4.0	168.9	353.7	19.8	1.4	10.2	0.6	1.4	0.2	1.0	0.2	15.4
	8	9	945	21.3%	149.3	46.5	1.2	4.7	218.1	445.1	24.2	1.7	12.2	0.6	1.4	0.2	1.1	0.2	16.8
	9	10	649	22.0%	106.4	32.6	0.8	2.9	151.3	301.0	17.2	1.2	8.4	0.4	0.9	0.1	0.6	0.1	10.6
	10	11	409	22.2%	67.3	21.0	0.6	2.2	91.9	188.6	11.7	1.1	6.0	0.3	0.8	0.1	0.5	0.1	8.1
	11	12	523	21.2%	82.2	26.2	0.6	2.0	123.1	247.1	12.8	1.3	6.0	0.3	0.6	0.1	0.5	0.1	7.8
	12	13	426	21.1%	67.1	20.5	0.5	1.7	102.6	197.9	10.4	1.2	5.0	0.3	0.7	0.1	0.5	0.1	7.8
	13	14	444	21.5%	71.4	22.5	0.4	1.5	106.0	209.7	10.4	1.1	4.7	0.2	0.4	0.1	0.3	0.0	5.5
	14	15	460	20.8%	70.7	22.8	0.5	1.6	111.3	217.9	10.5	1.1	4.7	0.2	0.5	0.1	0.4	0.1	6.9
	15	16	282	21.6%	45.1	14.1	0.4	1.3	65.1	131.2	7.8	0.6	3.9	0.2	0.4	0.0	0.2	0.0	5.3
	16	17	418	20.2%	62.2	20.5	0.4	1.5	103.6	197.9	9.4	1.0	4.3	0.2	0.5	0.1	0.4	0.1	6.4
	17	18	492	19.9%	71.9	23.9	0.5	1.7	123.1	233.1	11.2	1.1	5.0	0.3	0.6	0.1	0.5	0.1	7.4
	18	19	831	21.1%	130.6	42.3	0.7	1.9	199.4	400.6	18.7	1.5	7.7	0.3	0.5	0.1	0.3	0.0	6.5
	19	20	421	20.6%	64.0	21.3	0.3	1.1	104.4	201.5	9.1	1.1	3.8	0.1	0.3	0.0	0.1	0.0	3.7
	20	21	955	21.6%	154.0	48.3	0.8	2.8	225.2	455.6	22.5	2.0	9.2	0.4	0.9	0.1	0.5	0.1	10.5
	21	22	680	21.6%	110.3	33.7	0.6	1.9	160.7	324.5	16.2	1.3	7.1	0.3	0.5	0.1	0.3	0.1	6.7
	22	23	945	21.4%	150.5	48.3	0.8	2.4	221.7	453.3	22.0	2.2	9.5	0.3	0.8	0.1	0.6	0.1	10.3
	23	24	845	21.7%	137.6	43.1	0.7	2.1	198.2	404.1	20.2	1.7	8.0	0.3	0.5	0.1	0.5	0.1	7.9
	24	28	691	21.7%	112.0	35.2	0.6	2.1	163.0	328.0	16.8	1.8	7.2	0.2	0.6	0.1	0.4	0.1	7.0
	28	32	662	21.1%	104.3	32.9	0.7	2.2	159.5	313.9	15.4	2.0	6.9	0.3	0.7	0.1	0.4	0.1	7.6
	32	36	488	21.3%	77.2	24.3	0.5	1.7	116.3	229.6	11.3	1.6	5.5	0.3	0.5	0.1	0.4	0.1	7.0
	36	37	689	22.0%	112.7	35.0	0.9	3.1	152.5	322.1	18.2	4.0	8.7	0.5	1.1	0.1	0.8	0.1	13.7
	37	38	538	22.0%	88.2	27.3	0.6	2.1	120.8	255.3	13.7	2.9	6.0	0.3	0.7	0.1	0.5	0.1	7.3
	38	39	940	21.9%	155.1	47.4	0.8	2.7	218.1	445.1	23.2	3.5	9.9	0.4	0.9	0.1	0.6	0.1	10.3
	39	40	532	21.9%	87.2	26.7	0.6	2.1	119.6	250.7	13.5	2.9	6.0	0.3	0.7	0.1	0.6	0.1	8.6

## Appendix B JORC Tables

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Historical and recent AC/RB/RC drill samples were collected at 1m intervals and composited to 4m lengths for analysis. The 4m composite or 1m sample (where submitted) were crushed and a sub-fraction obtained for pulverisation.</li> <li>Rock chip samples were taken as individual rocks representing an outcrop (or grab samples). Surface rock samples can be biased towards higher grade mineralisation.</li> <li>Historical drillcore sampling was completed throughout drillholes by compositing variable widths (predominantly 5m) with a representative 5cm half core sample, representing each respective drill meter.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>AC/RC drilling was completed by PNC Exploration/ESSO/Cameco utilising AC/RC drill methods.</li> <li>Historical drilling by Cameco used Wallis Drilling to undertake diamond drilling using a UDR-1000 drill rig. The drilling was completed using HQ (63.5mm) &amp; NQ (47.6mm) from surface for the collection of drill core samples.</li> <li>Current RB drilling was carried out utilising a slimline AC rig combining RC drill rod string with a blade from surface to basement.</li> <li>AV drilling was carried out with an auger mounted tractor</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery &amp; grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Cameco reported drill recoveries as being close to 100% for the historical drilling.</li> <li>Historical drill core sample bias has occurred given only 5cm of respective 1m core sample interval run was submitted through composite sampling.</li> <li>A review is being undertaken to assess the potential to re-submit entire mineralised intervals where drill core has been found &amp; identified, &amp; interval runs remain complete.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul style="list-style-type: none"> <li>Current drilling is being logged to industry standard capturing recoveries, regolith logging, mineralisation, pXRF and CPS (radiation) monitoring Cameco logged drill holes for geology, mineralisation, structure, and alteration. The geological and geotechnical logging is consistent with industry standards.</li> </ul>

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Current sampling includes comprehensive and industry standard QAQC inclusive of split and duplicate samples, and applicable and representative REE standards.</li> <li>Historical drillcore sampling was completed throughout drillholes by compositing variable widths (predominantly 5m) with a representative a 5cm half core sample, representing each respective drill meter.</li> <li>Sampling measured spectral parameters using the PIMA II spectrometer and also assayed as lithology-based composites.</li> </ul> <p><u>pXRF Analysis</u></p> <ul style="list-style-type: none"> <li>pXRF analysis of AV/RB/RC sample piles is deemed fit for purpose as a preliminary exploration technique. pXRF provides a spot reading on sample piles with variable grain sizes and states of homogenisation. High grade results were repeated at multiple locations to confirm repeatability. The competent person considers this acceptable within the context of reporting preliminary exploration results.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Recent drill samples were analysed by Labwest Minerals Analysis Pty Ltd in Perth. The sample analysis uses multi-acid microwave digest with an Inductively Coupled Plasma Mass Spectrometry and Inductively Coupled Plasma (ICP) Mass Spectrometry (MS) and Optical Emission Spectrometry (OES) finish.</li> <li>Historical Cameco drill core samples were analysed by Chemnorth using four assay methods, ICP-OES, ICP-MS, AAS and gravity to analyse 32-53 elements.</li> <li>pXRF screening of samples and soil points preliminary analysis is obtained with an Olympus Vanta portable XRF <ul style="list-style-type: none"> <li>NOTE 1: pXRF (portable x-ray fluorescence) assay results are semi-quantitative only.</li> <li>NOTE 2: pXRF – Only 5 elements analysed with pXRF analyser: Ce, La, Nd, Pr, Y</li> </ul> </li> <li>Scanning electron microscope (SEM) analysis was undertaken by RSC Consulting Limited at their West Perth office using a Hitachi SU-3900 instrument which is capable of delivering automated mineralogy using the Advanced Mineral Identification and Characterisation System (AMICS). The instrument has detectors for analysing energy dispersive spectrometry (EDS), backscatter electron (BSE), secondary electron (SE) and can run on ultra-variable pressure (UVD).</li> <li>RSC undertook an initial characterisation study of eleven (11) smear clay, three (3) epoxy resin embedded clay and two (2) basement rock samples of historical drillcore (GAD0004 hole) from the company's Paddys Well REE project to investigate the mineralogical distribution of REE within the mineralised clay and vein horizons. RSC used their optical microscope and SEM for this work. Microcharacterisation of the samples provide an understanding of REE distribution and the potential implications for eventual metallurgical performance.</li> </ul>

Criteria	JORC Code explanation	Commentary																																																			
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Analytical QC is monitored by the laboratory using standards and repeat assays.</li> <li>Independent standards were submitted by the Company at a rate of 1:25 samples.</li> <li>Independent field duplicates were not conducted for and were not considered necessary for this early stage of exploration.</li> <li>The procedures used for verification of historical Cameco sampling and assaying are not known.</li> <li>Rare earth element analyses were originally reported in elemental form but have been converted to relevant oxide concentrations as per industry standards:               <ul style="list-style-type: none"> <li><b>TREO</b> = La<sub>2</sub>O<sub>3</sub> + CeO<sub>2</sub> + Pr<sub>6</sub>O<sub>11</sub>+Nd<sub>2</sub>O<sub>3</sub> +Sm<sub>2</sub>O<sub>3</sub> + Eu<sub>2</sub>O<sub>3</sub> + Gd<sub>2</sub>O<sub>3</sub> + Tb<sub>4</sub>O<sub>7</sub> + Dy<sub>2</sub>O<sub>3</sub> + Ho<sub>2</sub>O<sub>3</sub> + Er<sub>2</sub>O<sub>3</sub> + Tm<sub>2</sub>O<sub>3</sub> + Yb<sub>2</sub>O<sub>3</sub> + Lu<sub>2</sub>O<sub>3</sub> + Y<sub>2</sub>O<sub>3</sub></li> <li><b>MREO</b> = Pr<sub>6</sub>O<sub>11</sub> + Nd<sub>2</sub>O<sub>3</sub> + Dy<sub>2</sub>O<sub>3</sub> + Tb<sub>4</sub>O<sub>7</sub></li> </ul> </li> </ul> <p>Conversion factors used to convert from element to oxide:</p> <table border="1"> <thead> <tr> <th>Element</th> <th>Oxide Conversion Factor</th> <th>Equivalent Oxide</th> </tr> </thead> <tbody> <tr><td>Ce</td><td>1.2284</td><td>CeO<sub>2</sub></td></tr> <tr><td>Dy</td><td>1.1477</td><td>Dy<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Er</td><td>1.1435</td><td>Er<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Eu</td><td>1.1579</td><td>Eu<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Gd</td><td>1.1526</td><td>Gd<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Ho</td><td>1.1455</td><td>Ho<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>La</td><td>1.1728</td><td>La<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Lu</td><td>1.1371</td><td>Lu<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Nd</td><td>1.1664</td><td>Nd<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Pr</td><td>1.2082</td><td>Pr<sub>6</sub>O<sub>11</sub></td></tr> <tr><td>Sc</td><td>1.5338</td><td>Sc<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Sm</td><td>1.1596</td><td>Sm<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Tb</td><td>1.1762</td><td>Tb<sub>4</sub>O<sub>7</sub></td></tr> <tr><td>Tm</td><td>1.1421</td><td>Tm<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Y</td><td>1.2699</td><td>Y<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Yb</td><td>1.1387</td><td>Yb<sub>2</sub>O<sub>3</sub></td></tr> </tbody> </table>	Element	Oxide Conversion Factor	Equivalent Oxide	Ce	1.2284	CeO <sub>2</sub>	Dy	1.1477	Dy <sub>2</sub> O <sub>3</sub>	Er	1.1435	Er <sub>2</sub> O <sub>3</sub>	Eu	1.1579	Eu <sub>2</sub> O <sub>3</sub>	Gd	1.1526	Gd <sub>2</sub> O <sub>3</sub>	Ho	1.1455	Ho <sub>2</sub> O <sub>3</sub>	La	1.1728	La <sub>2</sub> O <sub>3</sub>	Lu	1.1371	Lu <sub>2</sub> O <sub>3</sub>	Nd	1.1664	Nd <sub>2</sub> O <sub>3</sub>	Pr	1.2082	Pr <sub>6</sub> O <sub>11</sub>	Sc	1.5338	Sc <sub>2</sub> O <sub>3</sub>	Sm	1.1596	Sm <sub>2</sub> O <sub>3</sub>	Tb	1.1762	Tb <sub>4</sub> O <sub>7</sub>	Tm	1.1421	Tm <sub>2</sub> O <sub>3</sub>	Y	1.2699	Y <sub>2</sub> O <sub>3</sub>	Yb	1.1387	Yb <sub>2</sub> O <sub>3</sub>
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Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>The Cameco holes were surveyed using the UTM coordinate system. The survey method and accuracy were not reported.</li> <li>Downhole surveys were completed using an Eastman downhole survey tool.</li> <li>Recent drilling is captured via GPS on GDA Z50 coordinates</li> </ul>																																																			
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Cameco early-stage exploration was completed to verify previous explorers interpretation and pursue lateral extents of uranium mineralisation.</li> <li>Neo drill spacing was undertaken on an initial 80x40m</li> <li>Regional soil pXRF survey was undertaken on a wide space 200 x 80m</li> </ul>																																																			

Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• The drilling that has been completed to date has not been structurally reviewed or validated to confirm the orientation of interpreted mineralisation</li> <li>• Rock chip samples were selected to target specific geology, alteration and mineralisation. The samples were collected to assist historical explorers develop their understanding of the geology and exploration potential of historical tenure.</li> <li>• Drill orientations have targeted interpreted mineralised horizons and lithological boundaries, as perpendicular as possible.</li> <li>• Oxide regolith drilling is vertical</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sample security was not reported by Cameco. Samples were given individual samples numbers for tracking.</li> <li>• Recent drilling and surface sample security and integrity is in place to industry standards</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The sampling techniques and analytical data are monitored by the Company's geologists.</li> <li>• A review of the historical core and compiled data is being undertaken to confirm historical results and assist in interpretation and targeting of further exploration.</li> </ul>

## 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	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The project area is located approximately 60km northeast of the Gascoyne Junction and 220km east of Carnarvon.</li> <li>The Paddys Well project comprises one granted Exploration Licence, E09/2414 (where all of the current reported activities too place) and four Exploration Licence Applications E 09/2663, E 09/2669, E 09/2774, E 09/2744, E 09/2773.</li> <li>The tenements lie within Native Title Determined Areas of the Yinggarda, Baiyungu and Thalanyji People and Gnulli People.</li> <li>All the tenements are in good standing with no known impediments.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Numerous exploration campaigns have been completed in the general area since the early 1970's focusing predominantly on uranium and diamonds, however work within tenement area E09/2414 has been limited and there is no documented exploration targeting rare earth elements or lithium.</li> <li>From 1974-1983 companies including Uranerz, Agip Nucleare, AFMECO, ESSO Minerals and Urangesellschaft explored the Gascoyne Region for uranium with little success. Most anomalies identified were limited to secondary uranium occurrences in basement metamorphic sequences (including some occurrences associated with pegmatites) and surficial groundwater calcrete sheets (WAMEX REPORT A 87808).</li> <li>Subsequently from 1992 – 1996, PNC Exploration explored the southern Gascoyne area actively targeting basement-hosted uranium mineralisation within the Morrissey Metamorphics (WAMEX REPORT A 46584).</li> <li>The exploration focussed on determining the source of U anomalies and their association with EM conductors. This led PNC to undertake nearly 100-line km of a Questem airborne EM survey as a follow-up to five regional traverses across regional geological trends. Additional EM was flown, as well as detailed airborne radiometrics, which identified several anomalies (WAMEX REPORT A 49947). Eleven (11) shallow percussion holes (average depth of ~60m) intersected strongly chloritised and graphitic metasedimentary rocks within a broader marble-calc-silicate gneiss sequence. The RC drilling program returned numerous +100 ppm U intercepts, including: <ul style="list-style-type: none"> <li>GA9514: 22-28m (6m) at 653 ppm U, including 1m at 1400 ppm U (22-23m).</li> <li>GA9515: 16-25m (9m) at 335 ppm U, including 2m at 730 ppm U (16-18m).</li> <li>GA9520: 19-28m (9m) at 633 ppm U, including 0.5m at 3900 ppm U (25.25m – 25.75m) and 0.25m at 1000 ppm U (26.50 – 26.75m).</li> </ul> </li> <li>Test work determined that both secondary and primary (uraninite) mineralisation is present, and that the chemical signature of the chlorite alteration is similar to that at Jabiluka. A follow-up program of RC drilling in 1996 (17 holes/1217m) returned several well mineralised intercepts at the main anomaly: <ul style="list-style-type: none"> <li>GAR9630: 41-49m (8m) at 860 ppm U, including 1m at 3700 ppm U, and 53-58m (5m) at 568 ppm U from 53m, incl. 1m at 1200 ppm U).</li> <li>GAR9625: 22-26m (4m) at 585 ppm U, including 1m at 1800 ppm U.</li> <li>GAR9626: 20-29m (9m) at 275 ppm U.</li> </ul> </li> <li>In 1999 Cameco completed a programme of two diamond holes for a total of 411 m, followed by another four diamond drill holes for a total of 863.3m in 2000. The drilling programme aimed to</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>test depth and lateral extensions to the mineralisation identified in the percussion holes; however, it failed to return intercepts of economic <b>uranium</b> grades. Cameco concluded that the strong structural disruption, radiometric response (peaked at 58 ppm U) and presence of graphite appear to be favourable for uranium mineralisation but went on to say that the minor remobilisation of radiogenic lead sourced from the decay of uranium downgrades the U potential of the area. Core samples were systematically analysed with a Portable Infrared Mineral Analyser (PIMA) and sent for petrophysical and petrographic characterisation as well as for Pb isotopes studies (WAMEX REPORT A 61566). Despite the presence of some marked hydrothermal alteration along brittle small scale structures, it failed to identify potential indicators of significant uranium mineralisation.</p> <ul style="list-style-type: none"> <li>U308 Limited reviewed the area from 2006-2010, and carried out an airborne magnetic and radiometric surveys, as well as reconnaissance field work with grab sampling for geochemical and petrographic studies. A total of nineteen (19) samples were sent for geochemical analysis to ALS-Chemex in Perth for trace element- and whole-rock characterisation. The presence of coincidentally elevated U, V, Zn, and Sr values in sample 471 is consistent with a strongly weathered black shale (WAMEX REPORT A 84272).</li> </ul>
Geology	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The project area has historically been considered prospective for unconformity vein style uranium, although it equally considered prospective for rare earth element (REE) mineralisation hosted in iron-rich carbonatite dykes or intrusions, or lithium-caesium-tantalum (LCT) pegmatites.</li> <li>The project area encompasses a portion of the Gascoyne Province of the Capricorn Orogen. This geological belt is positioned between the Archaean Yilgarn Craton to the south, and the Archaean Pilbara Craton to the north, and largely consists of a suite of Archaean to Proterozoic gneisses, granitic and metasedimentary rocks.</li> <li>REE discoveries in the Gascoyne area, such as Yangibana, are associated with ironstone (weathered ferrocarnatite) host rocks whereby weathering has enriched the REEs in situ. Yangibana is approximately 100km NE from the Paddys Well/West Wel project area and contains widespread occurrence of ironstone dykes that are spatially associated with the ferrocarnatite intrusions. The deposit overlays the Gifford Creek Ferrocarnatite Complex, which is located in the Neoproterozoic-Palaeoproterozoic Gascoyne Province, and comprises sills, dykes, and veins of ferrocarnatite intruding the Pimbyana Granite and Yangibana Granite of the Durlacher Supersuite and metasedimentary rocks of the Pooranoo Metamorphics.</li> <li>The ironstone dykes are commonly surrounded by narrow haloes of fenitic alteration, and locally associated with quartz veining. Fenite is a metasomatic alteration associated particularly with carbonatite intrusions</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>If the exclusion of this information is justified on the basis that the</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill collar and survey data are provided, along with various respective metadata. Historic drill holes collar and interval data were previously reported by Cameco and are available in open file (WAMEX REPORT A 61566).</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p>	
Data aggregation methods	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Intervals that comprise more than one sample have been reported using length-weighted averages.</li> <li>• A cut-off grade of 300ppm TREO (with a maximum 2m of internal waste) has been used for the reported drill intercepts.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>• The orientation of the mineralisation is interpreted and yet to be structurally validated.</li> <li>• All reported intervals, therefore intercepts, are down hole lengths.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Historical map plan figures were registered utilising 2-D software and respective coordinate datums.</li> <li>• Hole drill collar ground truthing is expected to fine-tune actual collar positions.</li> <li>• Workspaces of current and historical exploration have been constructed utilising 2&amp;3D GIS software.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No inference to economic mineralisation has been stated.</li> <li>• A cut-off of 300ppm TREO was used in reporting of exploration results, to aid dismissing interpreted unrealistic anomalous mineralised sub-zones.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All of the relevant historical exploration data has been included in this report.</li> <li>• All historical exploration information is available via WAMEX.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• On-going field reconnaissance exploration in the area continues and is a high priority for the Company.</li> <li>• Exploration is likely to include further lithological and structural mapping; rockchip sampling; acquisition of high-resolution geophysical radiometric and magnetic data to assist geological interpretation, target identification; as well as auger and percussion drilling of ranked drill targets.</li> </ul>