

20 June 2023

Excellent Initial Metallurgical Results for Rare Earth Element Clays from Neo prospect, Paddys Well Project.

Highlights

- Step 1 beneficiation tests show rare earth element (REE) enriched clays at the Neo prospect are highly amenable to upstream beneficiation.
- By selectively removing 'coarse' (large) particles from the Neo clay samples, several significant benefits have been demonstrated (see *Figures 3 6*):
 - Significant boost in REE grades up to 67% increase in valuable MREO¹ & 66% in TREO;
 - Substantial reduction in waste / 'gangue', implying likely reduced reagent consumption & equipment requirements for a full-scale REE process plant.
- Encouraging indicators for REE ionic adsorption deposit (IAD) potential (alumina-rich, low iron, low calcium, and halloysite).
- Step 2 leach metallurgical testing now underway to characterise the REE species present.

Voltaic Strategic Resources Limited (ASX:VSR) is pleased to advise that step one (beneficiation) of the two-step sighter metallurgical test program is complete for the REE-enriched clays identified at the Neo prospect, Paddy's Well Project, and the results are very encouraging.

Voltaic Chief Executive Officer Michael Walshe said the 'size by assay' analysis work has demonstrated that the majority of REEs within the clay system at Neo are hosted in the ultrafine (<20µm) size fraction and are highly amendable to upstream beneficiation.

"This presents Voltaic with an opportunity to significantly upgrade REE grade, reduce the quantity of material processed, reduce deleterious elements, and substantially decrease reagent consumption and equipment requirements for full-scale operation," Mr Walshe said.

"Up to 94% of the valuable magnetic (Nd, Pr, Dy, Tb) REE mass can be recovered in the -20μ m size fraction (particles $<20\mu$ m), whilst removing $\sim40\%$ of the total mass as waste (see Fig. 4 & 6).

"This represents is a major step forward in proving the economic viability of a REE project at Neo.

"We are eagerly awaiting step two leaching testwork results, which we should have in approximately four weeks," he said.

¹ TREO: Total Rare Earth Element Oxide including yttrium oxide (Y₂O₃); "Magnet" REEs = Nd, Pr, Tb, Dy





Figure 1. Location of the Neo prospect area, Paddys Well project.

There are several encouraging indicators for economic potential at Neo:

- <u>Alumina-rich, low iron kaolinitic clay confirmed</u> with Al₂O₃ grades up to 36% (by mass) & very high Al₂O₃ / Fe₂O₃ ratio (favourable for ionic adsorption deposit potential) (*see Table 8*).
- Low CaO content within clay (maximum 0.4% by mass) potentially favourable for reduced acid consumption during leaching stage (*see Table 8*).
- <u>Halloysite</u> previously identified (favourable for ionic adsorption potential)².

Favourable IAD test results are critical to the economic viability of REE clay deposits. The key evaluation metric is the recovery of the magnetic REEs under 'ionic' test conditions whereby ammonium sulphate is employed as the ion-exchange medium, and the pH is kept mildly acidic (*see Fig. 2*). If very low pH (highly acidic) conditions are required, then the material will likely contain more refractory forms of REEs as opposed to ionically adsorbed species, and unwanted impurity elements such as AI and Fe may also solubilise.

² See ASX:VSR release date 17/04/2023, 'Met test work on REE-enriched clays at Paddys Well'





Figure 2. (A) Beneficiated -20µm composite samples, (B) Leaching vessels at the met. laboratory





Figure 3. (A) TREO grade (B) MREO grade comparison between head sample & ultrafine fraction





Figure 4. Distribution of total & magnetic REE mass in the ultrafine size fraction (4 samples)



Figure 5. Total & magnetic REE grade uplift in the ultrafine size fraction vs. head sample





Figure 6. Percentage of sample mass removed by processing ultrafine fraction only (compared to head sample)

No further clay-focused drilling is planned until the leaching results are known, which Voltaic believes is the most prudent use of capital going forward, and concurrently, exploration continues focusing on the Company's several primary carbonatite REE & niobium targets within Paddys Well (see *Fig. 7*).



Figure 7. The strategy ahead at Paddy's Well



Release authorised by the Board of Voltaic Strategic Resources Ltd.

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UPCOMING NEWS FLOW

June/July 2023:	Paddys Well geophysical data (radiometric / magnetic / photogrammetry) acquisition update
June/July 2023:	Further drill sample assays from Link prospects
June/July 2023:	Update on Metallurgical testing of REE-enriched clays from Neo

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

	April	Мау	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. Furthermore, this announcement contains forward-looking statements which may be identified by words such as "potential", "believes", "estimates", "expects', "intends", "may", "will", "would", "could", or "should" and other similar words that involve risks and uncertainties. These statements are based on a number of assumptions regarding future events and actions that, as at the date of this announcement, are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company. These and other factors could cause actual results to differ materially from those expressed in any forward-looking statements. The Company cannot and does not give assurances that the results, performance, or achievements expressed or implied in the forward-looking statements.



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.









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



Appendix: Size by Assay Data

Table 1. Composite sample 1 'size by assay' data

Composite 1 Individual

					Assays			Distribution			Upgrade	
_	Size fraction (µm)	Mass (g)	Mass (%)	MREO	OTHER_REO	TREO	MREO	OTHER_REO	TREO	MREO	OTHER	TREO
_					ppm		%				REE	
	+106	32.9	7.24	74	420	494	1.18	2.19	1.94	0.16	0.30	0.27
	+(75 & 53)	19.3	4.25	167	619	786	1.56	1.89	1.81	0.37	0.45	0.43
	-53+38	19.0	4.18	224	735	958	2.06	2.21	2.17	0.49	0.53	0.52
	-38+20	32.2	7.09	227	698	925	3.54	3.56	3.56	0.50	0.50	0.50
74	-20	351	77.2	539	1,621	2,160	91.7	90.1	90.5	1.19	1.17	1.17
	Calc Head	454	100	454	1,389	1,843	100	100	100			
-	Head Assay			1,521	143	1,664						

Composite 1 Cumulative

			Mass	Mass		Assays			Distribution			Upgrade	
	Size fraction (µm)	Mass (g)	Recovered	Rejected	MREO	OTHER_REO	TREO	MREO	OTHER_REO	TREO	MDEO	OTHER	TREO
			(%)	(%)		ppm			%		MREO	REE	TREO
	-20	351	77.2	22.8	539	1,621	2,160	91.7	90.1	90.5	1.19	1.17	1.17
	-38	383	84.3	15.7	513	1,543	2,056	95.2	93.7	94.1	1.13	1.11	1.12
	-53	402	88.5	11.5	499	1,505	2,005	97.3	95.9	96.2	1.10	1.08	1.09
9	-75	421	92.8	7.2	484	1,465	1,949	98.8	97.8	98.1	1.07	1.05	1.06
	+106	454	100	0.0	454	1,389	1,843	100	100	100.0	1.00	1.00	1.00
	Calc Head	454	100		454	1,389	1,843	100	100	100			
	Head Assay				1,521	143	1,664						

 $- \qquad \mathbf{MREO} = \mathbf{Pr}_{6}\mathbf{O}_{11} + \mathbf{Nd}_{2}\mathbf{O}_{3} + \mathbf{Dy}_{2}\mathbf{O}_{3} + \mathbf{Tb}_{4}\mathbf{O}_{7}$

 $- \qquad \textbf{OTHER REO} = La_2O_3 + CeO_2 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3 + CeO_2 + Sm_2O_3 + Gd_2O_3 + Gd_2O_3 + Ho_2O_3 + Fr_2O_3 +$



Table 2. Composite sample 2 'size by assay' data

Composite 2 Individual											
				Assays			Distribution			Upgrade	
Size fraction (µm)	Mass (g)	Mass (%)	MREO	OTHER_REE	TREO	MREO	OTHER_REE	TREO	MREO	OTHER	TREO
				ppm			%			REE	
+106	20.1	6.98	237	833	1,071	2	1.29	1.34	0.22	0.18	0.19
+(75 & 53)	24.6	8.54	484	1,591	2,075	4	3.02	3.18	0.45	0.35	0.37
-53+38	25.2	8.75	739	2,430	3,169	6	4.72	4.98	0.69	0.54	0.57
-38+20	30.5	10.6	923	3,055	3,979	9	7.18	7.56	0.86	0.68	0.71
-20	188	65.1	1,302	5,800	7,102	79	83.8	82.9	1.22	1.29	1.27
Calc Head	288	100	1,068	4,508	5,576	100	100	100			
Head Assay			1,280	4,090	5,369						

Composite 2 Cumulative

P			Mass	Mass		Assays			Distribution			Upgrade	
	Size fraction (µm)	Mass (g)	Recovered	Rejected	MREO	OTHER_REE	TREO	MREO	OTHER_REE	TREO	MDEO	OTHER	TREO
			(%)	(%)		ppm			%		WIREO	REE	TREO
-	-20	188	65.1	34.9	1,302	5,800	7,102	79.4	83.8	82.9	1.22	1.29	1.27
	-38	218	75.7	24.3	1,249	5,416	6,665	88.5	91.0	90.5	1.17	1.20	1.20
	-53	243	84.5	15.5	1,196	5,106	6,303	94.6	95.7	95.5	1.12	1.13	1.13
	-75	268	93.0	7.0	1,131	4,783	5,914	98.4	98.7	98.7	1.06	1.06	1.06
	+106	288	100	0.0	1,068	4,508	5,576	100	100	100	1.00	1.00	1.00
Ŧ	Calc Head	288	100		1,068	4,508	5,576	100	100	100			
	Head Assay				1,280	4,090	5,369						

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 $\begin{array}{l} \textbf{MREO} = Pr_6O_{11} + Nd_2O_3 + Dy_2O_3 + Tb_4O_7 \\ \textbf{OTHER REO} = La_2O_3 + CeO_2 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3 \\ \end{array}$



Table 3. Composite sample 3 'size by assay' data

	Composite 3 Individual											
>					Assays			Distribution			Upgrade	
	Size fraction (µm)	Mass (g)	Mass (%)	MREO	OTHER_REE	TREO	MREO	OTHER_REE	TREO	MREO	OTHER	TREO
					ppm			%		1	REE	
	+106	205	30.8	125	475	600	4.07	4.88	4.68	0.13	0.16	0.15
	+(75 & 53)	22.2	3.34	147	488	636	0.52	0.54	0.54	0.16	0.16	0.16
	-53+38	18.0	2.71	256	841	1,097	0.73	0.76	0.75	0.27	0.28	0.28
	-38+20	23.2	3.49	220	705	925	0.81	0.82	0.82	0.23	0.23	0.23
	-20	396	59.6	1496	4,677	6,172	93.9	93.0	93.2	1.57	1.56	1.56
	Calc Head	664	100	950	2,999	3,949	100	100	100			
าเ	Head Assay			152	558	710						

Composite 3 Cumulative

J			Mass	Mass		Assays			Distribution			Upgrade	
	Size fraction (µm)	Mass (g)	Recovered	Rejected	MREO	OTHER_REE	TREO	MREO	OTHER_REE	TREO	MDEO	OTHER	TREO
			(%)	(%)		ppm			%		MIREO	REE	IREO
\mathcal{P}	-20	396	59.6	40.4	1,496	4,677	6,172	93.9	93.0	93.2	1.57	1.56	1.56
	-38	419	63.1	36.9	1,425	4,457	5,882	94.7	93.8	94.0	1.50	1.49	1.49
	-53	437	65.8	34.2	1,377	4,308	5,685	95.4	94.6	94.8	1.45	1.44	1.44
	-75	460	69.2	30.8	1,317	4,124	5,441	95.9	95.1	95.3	1.39	1.37	1.38
1	+106	664	100	0.0	950	2,999	3,949	100	100	100	1.00	1.00	1.00
Ð	Calc Head	664	100		950	2,999	3,949	100	100	100			
	Head Assay				152	558	710						

MREO = $Pr_6O_{11} + Nd_2O_3 + Dy_2O_3 + Tb_4O_7$

_ **OTHER REO** = $La_2O_3 + CeO_2 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$



Table 4. Composite sample 4 'size by assay' data

\geq					Assays			Distribution			Upgrade	
1	Size fraction (µm)	Mass (g)	Mass (%)	MREO	OTHER_REE	TREO	MREO	OTHER_REE	TREO	MREO	OTHER	TREO
					ppm			%			REE	
	+106	118	23.9	169	626	796	5.27	5.6	5.50	0.22	0.23	0.23
	-106+75	49.4	9.98	327	1,203	1,530	4.25	4.46	4.41	0.43	0.45	0.44
	-75+53	30.7	6.20	373	1,359	1,732	3.01	3.13	3.10	0.48	0.50	0.50
	-53+38	35.3	7.13	456	1,639	2,094	4.23	4.34	4.32	0.59	0.61	0.60
	-38+20	30.4	6.14	650	2,346	2,995	5.19	5.35	5.32	0.85	0.87	0.87
	-20	231	46.6	1,287	4,459	5,746	78.1	77.2	77.4	1.67	1.66	1.66
14	Calc Head	495	100	769	2,693	3,462	100	100	100			
	Head Assay			620	2,084	2,704						

Composite 4 Cumulative

7			Mass	Mass	Α	ssays			Distribution			Upgrade	
	Size fraction (µm)	Mass (g)	Recovered	Rejected	MREO	OTHER_REE	TREO	MREO	OTHER_REE	TREO	MREO	OTHER	TREO
			(%)	(%)		ррт			%		WIKEO	REE	IREO
	-20	231	46.6	53.4	1,287	4,459	5,746	78.1	77.2	77.4	1.67	1.66	1.66
	-38	261	52.7	47.3	1,213	4,213	5,426	83.3	82.5	82.7	1.58	1.56	1.57
	-53	296	59.9	40.1	1,123	3,906	5,029	87.5	86.8	87.0	1.46	1.45	1.45
	-75	327	66.1	33.9	1,052	3,667	4,720	90.5	90.0	90.1	1.37	1.36	1.36
$\left \right $	-106	376	76.1	23.9	957	3,344	4,301	94.7	94.4	94.5	1.25	1.24	1.24
G	+106	495	100	0.0	769	2,693	3,462	100	100	100	1.00	1.00	1.00
	Calc Head	495	100		769	2,693	3,462	100	100	100			
	Head Assay				620	2,084	2,704						

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 $\begin{array}{l} \textbf{MREO} = Pr_6O_{11} + Nd_2O_3 + Dy_2O_3 + Tb_4O_7 \\ \textbf{OTHER REO} = La_2O_3 + CeO_2 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3 \\ \end{array}$



Appendix: Supplementary Data

Table 5. 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



Table 6. Metallurgical composite samples make-up

	HOLE ID	Interval (From)	Interval (To)	Met Sample ID
COMP 1	NEORB002	50.00	51.00	NEO MS 021
-	NEORB002	51.00	52.00	NEO MS 022
	NEORB002	52.00	53.00	NEO MS 023
	NEORB002	53.00	54.00	NEO MS 024
COMP 2	NEORB002	54.00	55.00	NEO MS 025
	NEORB002	55.00	56.00	NEO MS 026
	NEORB002	56.00	57.00	NEO MS 027
	NEORB002	57.00	58.00	NEO MS 028
COMP 3	NEORB004	30.00	31.00	NEO MS 035
5	NEORB004	31.00	32.00	NEO MS 036
COMP 4	NEORB005	30.00	31.00	NEO MS 037
	NEORB005	31.00	32.00	NEO MS 038



Table 7. Rare Earth Element Assay Results (as Oxides) from 'Size by Assay' analysis program.

Sample ID	TREO (ppm)	MREO (ppm)	Nd₂O₃ (ppm)	Pr₀O₁₁ (ppm)	Tb₄O⁊ (ppm)	Dy₂O₃ (ppm)	La₂O₃ (ppm)	CeO₂ (ppm)	Sm₂O₃ (ppm)	Eu₂O₃ (ppm)	Gd₂O₃ (ppm)	Ho₂O₃ (ppm)	Er₂O₃ (ppm)	Tm₂O₃ (ppm)	Yb₂O₃ (ppm)	Lu₂O₃ (ppm)	Y₂O₃ (ppm)
Composite Sample 1 Head	1,616	391	289.3	89.3	2.5	10.1	337.8	759.2	45.8	7.5	22.5	1.5	4.2	0.5	3.1	0.4	42.4
Composite Sample 2 Head	5,350	1,280	941.3	286.3	10.3	41.7	1,034.4	2,591.9	160.0	37.3	85.8	5.9	14.3	1.8	9.9	1.3	128.3
Composite Sample 3 Head	682	152	114.0	35.5	0.6	1.8	154.8	342.7	16.2	1.5	6.6	0.3	0.5	0.1	0.4	0.1	6.7
Composite Sample 4 Head	2,682	620	456.1	135.3	5.0	23.3	581.7	1,214.9	72.4	14.0	42.4	4.0	11.0	1.4	8.5	1.2	110.9
Composite 1 +106	191	74	51.3	15.6	1.0	64	59.9	297.3	9.5	19	6.5	1.2	4.1	0.7	4.6	0.7	33.4
Composite 1 75+53	786	167	122.5	37.6	1.0	5.7	140.7	A15.2	19.5	3.4	10.3	1.2	2.7	0.4	2.5	0.4	23.4
Composite 1 38	958	224	165.6	50.0	1.2	6.5	191.2	413.2	25.5	3.4	12.4	1.0	2.1	0.4	2.5	0.4	27.8
Composite 1 20	925	227	168.0	51.6	1.0	5.9	184.1	442.2	26.1	3.8	12.4	0.9	2.0	0.3	2.0	0.3	23.6
Composite 1 -20	2 160	539	401.2	122.0	3.2	12.9	442.1	1 012 2	63.9	9.9	27.9	1.8	49	0.6	3.7	0.5	53.3
	2,100	000	101.2	122.0	0.2	12.0	112.1	1,012.2	00.0	0.0	21.0	1.0	1.0	0.0	0.1	0.0	00.0
Composite 2 106	1,071	237	178.5	55.8	0.8	2.4	255.7	530.7	24.9	2.6	9.9	0.3	0.7	0.1	0.4	0.1	8.3
Composite 2 75+53	2,075	484	349.9	100.3	5.9	28.1	376.5	956.9	64.5	15.6	43.5	4.5	13.0	1.8	11.7	1.6	101.2
Composite 2 38	3,169	739	538.9	160.7	7.1	32.6	647.4	1,461.8	93.9	21.2	56.8	4.9	12.8	1.6	9.9	1.3	118.4
Composite 2 20	3,979	923	673.0	206.6	8.3	35.5	835.0	1,830.3	117.1	25.8	66.9	5.5	14.5	1.8	10.7	1.5	146.0
Composite 2 -20	7,102	1,302	941.3	280.3	14.1	66.3	1,032.1	4,139.7	173.9	41.6	103.5	10.3	28.9	4.1	25.8	3.5	236.2
Composite 3 ±106	600	125	93.8	28.2	0.7	27	124.3	314.5	14.3	13	7.0	0.4	11	0.1	1.0	0.2	10.6
Composite 3 75+53	636	147	111.0	32.9	0.8	2.7	127.8	318.2	17.6	1.5	8.1	0.4	1.1	0.2	1.0	0.2	12.4
Composite 3 38	1.097	256	193.6	59.0	0.9	2.6	246.3	543.0	28.1	2.1	10.9	0.3	0.7	0.1	0.5	0.1	9.2
Composite 3 20	925	220	166.8	50.3	0.8	2.1	200.5	460.7	24.0	1.8	9.4	0.3	0.5	0.1	0.4	0.0	7.1
Composite 3 -20	6,172	1,496	1,101.1	335.9	11.9	46.7	1,231.4	2,935.9	187.9	43.8	98.0	6.5	15.7	1.9	10.7	1.4	143.5
Composite 4 +106	796	169	124.8	36.1	1.4	6.8	177.1	366.1	19.1	3.7	12.3	1.2	3.4	0.4	2.7	0.4	39.9
Composite 4 75	1,530	327	239.1	71.8	2.7	13.4	363.6	679.3	35.9	6.8	23.7	2.3	6.5	0.9	5.0	0.7	78.0
Composite 4 53	1,732	373	271.8	83.0	3.1	14.7	397.6	777.6	41.5	7.9	26.9	2.6	7.4	1.0	5.5	0.8	90.7
Composite 4 38	2,094	456	332.4	101.0	4.0	18.1	483.2	936.0	50.8	10.2	32.7	3.2	8.7	1.2	7.0	1.0	105.0
Composite 4 20	2,995	650	474.7	145.0	5.4	24.6	702.5	1,339.0	70.9	14.0	44.8	4.3	12.3	1.6	10.0	1.4	144.8
Composite 4 -20	5,746	1,287	950.6	281.5	10.0	45.2	1,313.5	2,591.9	146.1	29.4	85.4	7.6	20.7	2.7	15.5	2.3	243.8



Table 8. Assays of other Key Elements of Interest from 'Size by Assay' analysis program.

Sample ID	Al ₂ O ₃ (%w/w)	Fe₂O₃ (%w/w)	Al₂O₃ / Fe₂O₃ Ratio	MgO (%w/w)	CaO (%w/w)	Na₂O (%w/w)
Composite Sample 1 Head	30%	0.7%	42	0.1%	0.0%	0.3%
Composite Sample 2 Head	34%	1.0%	33	0.2%	0.0%	0.3%
Composite Sample 3 Head	20%	0.8%	27	0.1%	0.0%	0.2%
Composite Sample 4 Head	24%	1.4%	17	3.1%	0.1%	0.4%
0	4%	0.9%	4	0.1%	0.1%	0.1%
	19%	0.6%	34	0.1%	0.1%	0.2%
Composite 1 75+55	23%	0.6%	36	0.2%	0.1%	0.1%
Composite 1 20	29%	0.8%	35	0.1%	0.1%	0.1%
Composite 1 -20	35%	0.9%	40	0.1%	0.1%	0.1%
Composite 2 106	36%	1.2%	31	0.2%	0.1%	0.1%
Composite 2 75+53	29%	1.3%	22	0.2%	0.1%	0.1%
Composite 2 38	31%	0.8%	37	0.2%	0.1%	0.1%
Composite 2 20	31%	0.8%	41	0.2%	0.1%	0.1%
Composite 2 -20	11%	4.4%	3	0.4%	0.1%	0.1%
	19/	0.6%	2	0.0%	0.0%	0.0%
Composite 3 +106	1.40/	0.0%	2	0.0%	0.0%	0.0%
Composite 3 75+53	14%	1.0%	14	0.1%	0.0%	0.1%
Composite 3 38	25%	1.2%	21	0.1%	0.1%	0.1%
Composite 3 20	30%	1.1%	28	0.1%	0.1%	0.1%
Composite 3 -20	36%	0.9%	41	0.2%	0.1%	0.1%
Composite 4 +106	23%	1.7%	14	7.6%	0.2%	0.2%
Composite 4 75	25%	1.1%	23	7.2%	0.3%	0.2%
Composite 4 53	26%	1.1%	23	7.1%	0.3%	0.2%
Composite 4 38	26%	1.2%	22	7.3%	0.3%	0.2%
Composite 4 20	26%	1.2%	22	5.7%	0.3%	0.2%
Composite 4 -20	30%	1.4%	21	2.4%	0.4%	0.1%



Appendix: JORC Tables

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 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. Rock chip samples were taken as individual rocks representing an outcrop (or grab samples). Surface rock samples can be biased towards higher grade mineralisation. 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. Drillholes were located using hand-held GPS. Sampling was carried out under Voltaic Strategic Resources Ltd protocols and QAQC procedures as per current industry practice. RC drilling was used to obtain 1m samples collected through a splitter into buckets and placed in bags as 1m samples, in rows of 20. Sample quality was supervised with any sample loss or moisture recorded. Composite samples were collected to tab y sample loss or moisture recorded. Samples will be on have been dispatched to LabWest laboratories in Perth. All samples will be analysed using Microwave digest (MD), Inductively Coupled Plasma Mass Spectrometry and Inductively Coupled Plasma (ICP) Mass Spectrometry (MS) and Optical Emission Spectrometry (OES) to finish. 62 element analysis including REEs by ICP-MS/OES. Composite samples for Metallurgical testing were collated as per Table 6 in ~ 10kg lots. Composite samples were homogenised and split prior to assay analysis. Screening and desliming/filtration were undertaken to split out samples into various size fractions.
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	 AC/RC drilling was completed by PNC Exploration/ESSO/Cameco utilising AC/RC drill methods. 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) & NQ (47.6mm) from surface for the collection of drill core samples. Current RB drilling was carried out utilising a slimline AC rig combining RC drill rod string with a blade from surface to basement. Prior Auger Vacuum (AV) drilling was carried out with an auger mounted tractor
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery & grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Cameco reported drill recoveries as being close to 100% for the historical drilling. Historical drill core sample bias has occurred given only 5cm of respective 1m core sample interval run was submitted through composite sampling. A review is being undertaken to assess the potential to re-submit entire mineralised intervals where drill core has been found & identified, & interval runs remain complete.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 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.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Current sampling includes comprehensive and industry standard QAQC inclusive of split and duplicate samples, and applicable and representative REE standards. 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. Sampling measured spectral parameters using the PIMA II spectrometer and also assayed as lithology-based composites. <u>pXRF Analysis</u> 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.



Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Recent drill sa microwave dig Spectrometry	amples were analy gest with an Induc	sed by Labwest Minerals Analysis Pt	v Ltd in Perth. The sample ar	
h	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external aboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	 Historical Cam gravity to analy pXRF screenin – NOTE NOTE NOTE Scanning elec a Hitachi SU Identification spectrometry RSC undertoo (2) basement investigate th microscope au the potential ii Metallurgical the screening of the screening	(MS) and Optical leco drill core sam yse 32-53 element g of samples and : 1: pXRF (portable 2: pXRF – Only 5 ctron microscope (I-3900 instrument and Characterisal (EDS), backscatte ok an initial charac t rock samples of e mineralogical dii nd SEM for this wo mplications for eve testing is being und	tively Coupled Plasma Mass Spectro- Emission Spectrometry (OES) finish. bles were analysed by Chemnorth usi s. soil points preliminary analysis is obta x-ray fluorescence) assay results are elements analysed with pXRF analyse SEM) analysis was undertaken by RSG which is capable of delivering aul ion System (AMICS). The instrume electron (BSE), secondary electron (terisation study of eleven (11) smear historical drillcore (GAD0004 hole) stribution of REE within the mineralis rk. Microcharacterisation of the samplin nual metallurgical performance. tertaken by IMO Pty Ltd.	metry and Inductively Couple ng four assay methods, ICP-C ined with an Olympus Vanta p semi-quantitative only. r: Ce, La, Nd, Pr, Y C Consulting Limited at their V comated mineralogy using ti nt has detectors for analysi SE) and can run on ultra-varia (say, three (3) epoxy resin en from the company's Paddys ied clay and vein horizons. F es provide an understanding of	alysis uses multi-acid ed Plasma (ICP) Mass DES, ICP-MS, AAS and bortable XRF West Perth office using he Advanced Mineral ing energy dispersive able pressure (UVD). Inbedded clay and two is Well REE project to XSC used their optical of REE distribution and
Verification of sampling and assaying • T • T • C a • E	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	Analytical QC Independent s Independent fi The procedure Rare earth ele concentrations - TREO + Luz Conversion factors	is monitored by the transformed by the transformed by the transformed by the led duplicates were seen to the transformed by transformed by the transformed by the transformed by the transformed by the transformed by the transformed by the transformed by the transformed by the transformed by the transformed by the tr	e laboratory using standards and repe mitted by the Company at a rate of 1: e not conducted for and were not com- ion of historical Cameco sampling an ere originally reported in elemental andards: $Pr_6O_{11}+Nd_2O_3+Sm_2O_3+Eu_2O_3+Gd_2O_4$ + $Dy_2O_3+Tb_4O_7$ m element to oxide:	at assays. 25 samples. sidered necessary for this ear d assaying are not known. form but have been conver $D_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Ho$	ly stage of exploration. ted to relevant oxide Er ₂ O ₃ + Tm ₂ O ₃ + Yb ₂ O ₃
			Element	Oxide Conversion Factor	Equivalent Oxide	
			Ce	1.2284	CeO ₂	
			Dy	1.1477	Dy ₂ O ₃	
			Er	1.1435	Er ₂ O ₃	
			Eu	1.1579	Eu ₂ O ₃	
			Gd	1.1526	Gd ₂ O ₃	
			Но	1.1455	Ho ₂ O ₃	-
			La	1.1728	La ₂ O ₃	
			Lu	1.1371	Lu ₂ O ₃	
			Nd	1.1664	Nd ₂ O ₃	
			Pr	1.2082	Pr ₆ O ₁₁	
			Sc	1.5338	Sc ₂ O ₃	
			Sm	1.1596	Sm ₂ O ₃	
			Tb	1.1762	Tb ₄ O ₇	
			Tm	1.1421	Tm ₂ O ₃	
			Y	1.2699	Y ₂ O ₃	
		•	Yb	1.1387	Yb ₂ O ₃	



Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Cameco early-stage exploration was completed to verify previous explorers interpretation and pursue lateral extents of uranium mineralisation. Neo drill spacing was undertaken on an initial 80x40m Regional soil pXRF survey was undertaken on a wide space 200 x 80m
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 The drilling that has been completed to date has not been structurally reviewed or validated to confirm the orientation of interpreted mineralisation 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. Drill orientations have targeted interpreted mineralised horizons and lithological boundaries, as perpendicular as possible. Oxide regolith drilling is vertical
Sample security	The measures taken to ensure sample security.	Sample security was not reported by Cameco. Samples were given individual samples numbers for tracking. Recent drilling and surface sample security and integrity is in place to industry standards
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 The sampling techniques and analytical data are monitored by the Company's geologists. 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.



Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The project area is located approximately 60km northeast of the Gascoyne Junction and 220km east of Carnarvon. 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 09/2774, E 09/2773. The tenements lie within Native Title Determined Areas of the Yinggarda, Baiyungu and Thalanyji People and Gnulli People. All the tenements are in good standing with no known impediments.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 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. 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). 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). 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: GA9514: 22-28m (6m) at 653 ppm U, including 1m at 1400 ppm U (25-25m – 25.75m) and 0.25m at 1000 ppm U (26.50 – 26.75m). GA9502: 19-28m (9m) at 833 ppm U, including 0.5m at 3900 ppm U (25.25m – 25.75m) and 0.25m at 1000 ppm U (26.50 – 26.75m). Test work determined that both secondary and primary (uraninite) mineralisation is present, and that the chemical signature of the chlorite



Criteria	JORC Code explanation	Commentary
Criteria Geology	JORC Code explanation Deposit type, geological setting and style of mineralisation.	 Commentary and whole-rock characterisation. The presence of coincidently elevated U, V, Zn, and Sr values in sample 471 is consistent with a strongly weathered black shale (WAMEX REPORT A 84272). 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. 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. REE discoveries in the Gascoyne area, such as Yangibana, are associated with ironstone (weathered ferrocarbonatite) 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 ferrocarbonatite intrusions. The deposit overlays the Gifford Creek Ferrocarbonatite Complex, which is located in the Neoarchean–Palaeoproterozoic Gascoyne Province, and comprises sills, dykes, and veins of ferrocarbonatite intruding the Pimbyana Granite and Yangibana Granite of the Durlacher Supersuite and metasedimentary rocks of the Pooranoo Metamorphics. 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
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report the Competent Person should clearly explain why this is the case 	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).
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Intervals that comprise more than one sample have been reported using length-weighted averages. A cut-off grade of 250ppm TREO (with a maximum 2m of internal waste) has been used for the reported drill intercepts.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 The orientation of the mineralisation is interpreted and yet to be structurally validated. All reported intervals, therefore intercepts, are down hole lengths.



Criteria	JORC Code explanation	Commentary
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. 	 Historical map plan figures were registered utilising 2-D software and respective coordinate datums. Hole drill collar ground truthing is expected to fine-tune actual collar positions. Workspaces of current and historical exploration have been constructed utilising 2&3D GIS software.
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. 	 No inference to economic mineralisation has been stated. A cut-off of 250ppm TREO was used in reporting of exploration results, to aid dismissing interpreted unrealistic anomalous mineralised sub-zones.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 All of the relevant historical exploration data has been included in this report. All historical exploration information is available via WAMEX.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not 	 On-going field reconnaissance exploration in the area continues and is a high priority for the Company. 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.
	commercially sensitive.	• For the metallurgical testwork program, leaching will be undertaken next utilising a stirred beaker where pH, reagents, reaction time and temperature will be variables.