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ENCOURAGING RARE EARTH ELEMENT RESULTS AT CLOUD NINE KAOLIN PROJECT

HIGHLIGHTS

- **Geochemical analyses confirm widespread clay-hosted rare earth element (REE) mineralisation.**
- **Up to 3617 ppm, 0.36% total rare earth oxide (TREO) in <45 µm fraction from halloysite-kaolinite units.**
- **Cloud Nine is enriched in the high-value 'magnet feed' rare earths, magnetic rare earth oxides (MREO).**
- **MREOs are a critical component of high-performance magnets used for climate economy products such as electric vehicles and wind turbines.**

Latin Resources Limited (ASX: LRS) ("**Latin**" or "the **Company**") is pleased to report the results from the recent rare earth element (REE) analysis at its 100% owned Cloud Nine Halloysite-Kaolin Deposit ("**Cloud Nine**") in Western Australia. The results have confirmed REE mineralisation with anomalous concentrations in 38% of the samples.

Analysis was conducted on a small random selection (one out of every 20) of existing <45 µm fraction samples collected from the recent infill drill programme at Cloud Nine. Results from 30 of 78 samples submitted for analysis have returned anomalous total rare earth oxide (TREO) concentrations of >1000 ppm; five have TREO concentrations >3500 ppm, with a maximum TREO value of 3617 ppm.

Importantly, a large proportion of the TREO encountered in analysis are the in-demand magnetic rare earth oxides (MREO), which are a critical component of high-performance magnets used for climate economy products such as electric vehicles and wind turbines. The key magnetic rare earth oxides are neodymium (Nd) and praseodymium (Pr) which form the majority of the MREO mix in the samples.

The Company believes these results are encouraging and warrant further analyses to identify the extent of the REE mineralisation encountered at Cloud Nine.

Latin has engaged RSC, an experienced geological consulting service company, to provide an independent review of the REE data, incorporated in this update.

Significant results from the sampling are presented in Table 1, with full results included in Appendix 1.

Latin Resources Managing Director, Chris Gale commented:

"The initial analyses for REEs are highly encouraging with a high proportion of magnetic rare earth oxides which are critical to the battery evolution.

"In particular, these rare earth commodities are key components in the creation of permanent magnets used in wind turbines and electric vehicle motors, making them crucial for the ever-growing renewable energy transition.

"These findings warrant additional evaluations to explore the potentiality of REEs within our halloysite-kaolin deposits at Cloud Nine. We see these early findings as an exciting step in further expanding Latin's efforts to build projects to progress global efforts to net zero emissions"

Background

Kaolinite and halloysite are the primary hosts of REEs in regolith-hosted REE deposits. During weathering of granite and breakdown of feldspar to halloysite and kaolinite, REEs from the granite are retained in the regolith profile and can be adsorbed to the surface of the two clay minerals. This process leads to REE enrichment from primary granite to its weathering product.

Clay-hosted REE deposits are targeted for exploration because they have low Th and U concentrations, and REEs can often be extracted via weak acids or ionic solutions. Therefore, REE concentrations in commercially extracted clay-hosted deposits can be low — typically in the range of 500–2000 ppm TREO (Borst et al. 2020[1]). The lower grade is largely offset by easier mining and lower processing costs. These deposits are generally mined by open-pit methods and little beneficiation is required.

Table 1: Significant REE analyses of the one-metre intervals

Sample ID	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Y	TREO	MREO
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
1007848	854	1380	158	473	52.5	10	27	2.5	9.5	2	3		3		32	3607	24
1008088	609	1410	140	472	79.5	11	62	7.5	31.5	5	11		7	0.5	109	3553	26
1008428	931	1210	139	412	44	7	31	3.5	15	3	10	1	8	1.5	141	3549	21
1008488	633	1170	137	511	80	11	71	9.5	51.5	10	25	3	18	2.5	215	3539	28
1008548	666	1300	142	471	76	4	63	9	48	9	20	2	11	1.5	187	3617	26
1008628	495	1060	120	432	65	10.5	44	6	31.5	5	15	2	14	1.5	114	2901	28
1008848	725	1140	139	476	68	10.5	50	5.5	23	4	8		4	0.5	82	3278	27

[1] Borst, Anouk M., et al. "Adsorption of rare earth elements in regolith-hosted clay deposits." Nature communications 11.1 (2020): 1-15.

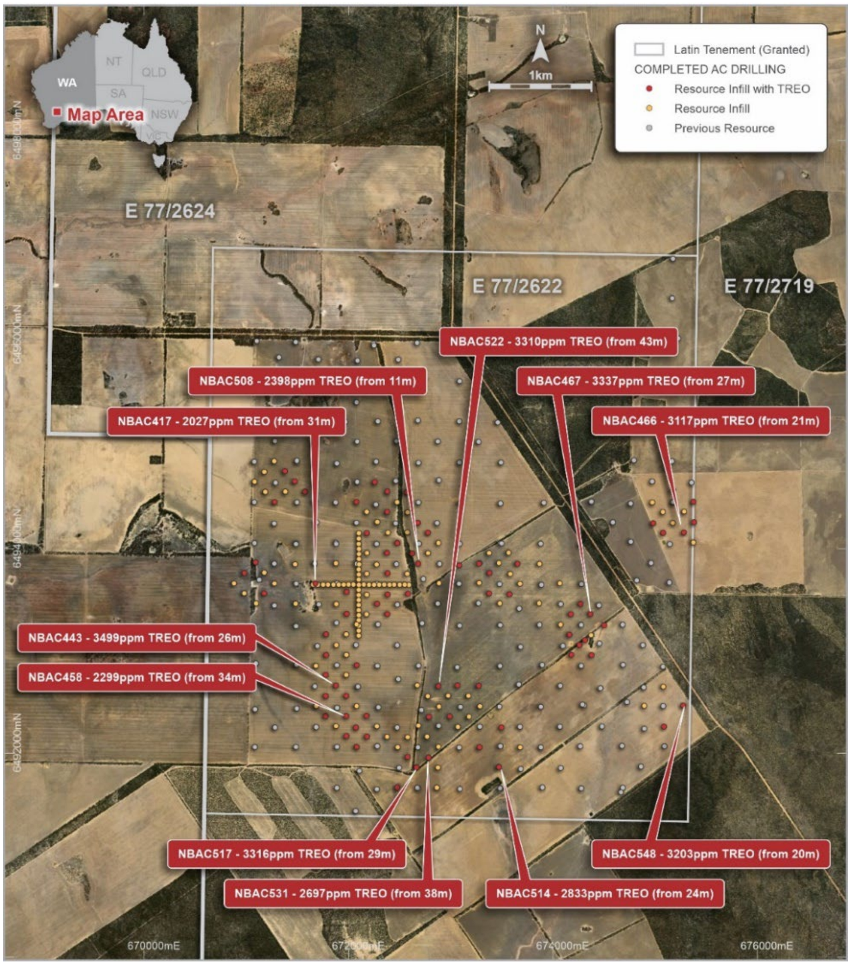

Figure 1: Location of significant REE samples from infill drilling at Cloud Nine

Next Steps

The results of these wide-spaced samples show the potential for REE at Cloud Nine; additional samples will now be analysed to define the extent of REE mineralisation. Leach tests (e.g. weak aqua regia, ammonium sulphate) will also be performed to determine whether the REE mineralisation can be classified as ionic-adsorption-type (weakly adsorbed to the surface of kaolinite and halloysite) or whether REEs are related to other mineral species in the regolith profile.

Since the geology and geometry of the kaolinite-halloysite domains and the weathering profile at Cloud Nine are well established[2], the resource estimate model can be rapidly updated with REE concentrations once further analyses are received.

This announcement has been authorised for release to ASX by the Board of Latin Resources.

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[2] Refer to ASX announcement dated 31 May 2021 for details

About Latin Resources

Latin Resources Limited (ASX: LRS) is an Australian-based mineral exploration company, with projects in South America and Australia, that is developing mineral projects in commodities that progress global efforts towards Net Zero emissions.

The Company is focused on its flagship Salinas Lithium Project in the pro-mining district of Minas Gerais Brazil, where the Company has its maiden resource drilling definition campaign underway. Latin has appointed leading mining consultant SGS Geological Services to establish a JORC Mineral Resource and commence feasibility studies at the Salinas Lithium Project. Latin also holds the Catamarca Lithium Project in Argentina and through developing these assets, aims to become one of the key lithium players to feed the world's insatiable appetite for battery metals.

The Australian projects include the Cloud Nine Halloysite-Kaolin Deposit. Cloud Nine Halloysite is being tested by CRC CARE aimed at identifying and refining halloysite usage in emissions reduction, specifically for the reduction in methane emissions from cattle.

Forward-Looking Statement

This ASX announcement may include forward-looking statements. These forward-looking statements are not historical facts but rather are based on Latin Resources Ltd.'s current expectations, estimates and assumptions about the industry in which Latin Resources Ltd operates, and beliefs and assumptions regarding Latin Resources Ltd.'s future performance. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements. Forward-looking statements are only predictions and are not guaranteed, and they are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of Latin Resources Ltd. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Actual values, results or events may be materially different to those expressed or implied in this ASX announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Latin Resources Ltd does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions or circumstances on which any such forward looking statement is based.

Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled under the supervision of Mr René Sterk, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Sterk is Managing Director of RSC. The full nature of the relationship between Mr Sterk and Latin Resources Limited, including any issue that could be perceived by investors as a conflict of interest, has been disclosed. Mr Sterk has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Sterk consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

APPENDIX 1

*Table 2: REE analyses of the one-metre intervals of the recent infill drilling program at Cloud Nine**

Sample ID	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Y	TREO	MREO	MREO
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
1007348	51	37	6	18.5	3		3		1						4	147	37	25
1007368	17	28	4	9	2.5	1	2	1	1.5		1		1		3	85	23	28
1007388	85	116	11	34.5	5	1	3		2						8	319	65	20
1007408	225	367	46	175	32	4.5	30	4	17	3	7	1	6	1.5	63	1177	356	30
1007428	381	323	84	264	42	4	25	2.5	9.5	2	4		3		32	1400	501	36
1007448	10	13	2	4.5	1				1.5				1		6	47	11	22
1007468	19	34.5	4	12	2.5		2		2		1		2		8	105	26	25
1007488	207	287	23	60	9	1	6	0.5	2.5						7	724	119	16
1007508	45	61	6	16.5	2.5	0.5	2		1						3	165	33	20
1007528	12	18.5	2	5.5	1										3	51	10	20
1007548	515	749	62	170	16.5	4	10	1	4.5		2		3		25	1876	310	17
1007568	52	84	7	19	2.5	0.5	2		2		1		2		9	218	38	18
1007588	578	734	85	247	34	3.5	21	2	8.5	1	3		3		29	2095	467	22
1007608	63	102	10	30.5	5.5		4	0.5	2.5		1		1		10	276	62	22
1007628	74	131	14	48	7		5	0.5	2.5		1		1		9	352	90	26
1007648	450	779	80	230	28	4.5	16	2	8	1	4		3		32	1967	427	22
1007668	44	79.5	7	21	3	0.5	2		1.5		1		1		7	201	40	20
1007688	120	237	22	72.5	9	2	7	1	4		2		3		21	602	135	22
1007708	116	130	24	80	10	1.5	7	1	4.5		2		1		15	468	148	32
1007728	275	508	53	168	24.5	2.5	16	2	9	2	4		4		40	1331	320	24
1007748	98	211	15	40	5	1	3		2.5		1		1		8	465	77	17
1007768	18	30	3	9.5	1.5		2		1.5						5	85	20	24
1007788	81	127	12	39	5.5	1	4		2.5		1				10	340	74	22
1007808	108	177	16	44.5	6.5	1.5	5	0.5	3		1				9	447	89	20
1007828	32	80	7	29	4	1	4		2.5		1		1		11	208	54	26
1007848	854	1380	158	473	52.5	10	27	2.5	9.5	2	3		3		32	3607	848	24
1007868	187	270	23	62	5.5	1.5	4		1.5				1		8	677	113	17
1007888	16	27	3	6.5	1				1						3	69	14	20
1007908	2	5		2											1	12	2	19
1007928	77	61.5	8	20.5	2.5	0.5	2		1						2	209	40	19
1007948	56	61.5	7	20.5	3.5		2		1.5						4	187	40	22
1007968	43	74.5	7	18	2.5		2		1						3	182	36	20
1007988	402	589	65	186	21	4	11	1	4.5		2		2		17	1565	339	22
1008008	326	464	54	159	17	2.5	7	0.5	3				1		10	1252	283	23
1008028	332	468	37	94.5	9	1.5	5		2.5		2		2		15	1164	174	15
1008048	102	94	8	22	2.5	1	2								3	281	41	14
1008068	647	838	105	295	31	5.5	15	1.5	6.5	1	3		3		23	2365	533	23
1008088	609	1410	140	472	79.5	11	62	7.5	31.5	5	11		7	0.5	109	3553	928	26
1008108	82	154	16	52.5	9	1	8	1	4		2		2		23	426	106	25
1008128	58	100	9	27.5	4.5		3		2.5						8	256	54	21
1008148	25	39.5	4	11	2		2		1				1		5	109	23	22
1008168	326	546	53	154	20.5	3	13	1.5	8	2	4		4		39	1411	293	21
1008188	142	250	25	75	11.5	1	6	0.5	3		1		1		10	632	142	22
1008208	371	707	80	288	46.5	4.5	38	4.5	19	3	8		7	0.5	80	1989	557	28
1008228	286	432	39	114	11	2.5	7	0.5	3		2		2		13	1095	205	19
1008248	99	188	20	64	10	1	7	1	4.5		2		1		15	495	125	25
1008268	130	235	24	77	11	1.5	9	1	5.5		2		2		20	622	149	24
1008288	293	518	55	179	25.5	2.5	16	1.5	6		2		2		24	1350	332	25
1008308	253	431	47	156	22.5	2.5	15	1.5	6		2		2		23	1154	291	25
1008328	127	133	8	18.5	2.5		1		1				1		4	355	36	10
1008368	234	420	44	147	23.5	2.5	21	2.5	13.5	2	7		5	1	54	1173	295	25
1008388	650	1100	118	410	53.5	9.5	35	4	17	3	7		4	0.5	59	2963	747	25
1008728	262	413	39	117	13	2.5	8	1	5.5	1	4		4	0.5	39	1093	215	20
1008748	217	169	22	58.5	4.5	1	2		1						3	571	103	18

Sample ID	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Y	TREO	MREO	MREO
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
1008768	197	358	35	114	16	1.5	8	1	3.5		2		2		19	909	208	23
1008788	227	346	35	101	16.5	1.5	11	1.5	5		2		2		20	922	199	22
1008808	63	92.5	8	25.5	3		3		2.5		2		2		14	259	49	19
1008828	282	437	41	125	15	3	9	1	4		1		1		12	1117	229	20
1008848	725	1140	139	476	68	10.5	50	5.5	23	4	8		4	0.5	82	3278	892	27
1008868	115	181	20	59	9	1.5	6	0.5	3						10	486	114	24
1008628	495	1060	120	432	65	10.5	44	6	31.5	5	15	2	14	1.5	114	2901	818	28
1008428	931	1210	139	412	44	7	31	3.5	15	3	10	1	8	1.5	141	3549	757	21
1008448	115	171	17	53.5	6.5	1	5	0.5	3		1				10	460	100	22
1008468	214	313	28	89.5	12.5	2	9	1	5		2		2		20	838	170	20
1008888	205	336	34	103	15	1.5	10	1	4.5		1		1		16	874	196	22
1008708	655	981	90	239	26.5	4	16	2	10.5	2	6		3		49	2504	451	18
1008408	13	21.5	2	5.5	1				0.5						4	57	11	18
1008648	389	629	67	228	31	5.5	22	3	14.5	2	6		4		54	1746	428	25
1008668	35	51	4	13	1										2	127	21	17
1008688	347	719	73	247	32.5	4	16	2	8	1	4		4		29	1786	444	25
1008508	156	269	27	92	14	2	10	1.5	6.5	1	4		3		36	747	177	24
1008588	63	110	12	35	6.5		5	0.5	3.5		1				15	302	73	24
1008488	633	1170	137	511	80	11	71	9.5	51.5	10	25	3	18	2.5	215	3539	1006	28
1008528	39	56.5	5	14	2		2		3		2		2		17	172	30	18
1008548	666	1300	142	471	76	4	63	9	48	9	20	2	11	1.5	187	3617	947	26
1008568	51	82	8	31.5	5	0.5	4	0.5	3		1		1		10	237	61	26
1008348	169	280	28	92	13.5	1.5	9	1	5.5	1	3		3		35	771	175	23
1008608	269	482	52	160	23.5	3.5	15	2	11	2	6		5	0.5	43	1291	309	24

*reference appendix 2, table 1, section 2 for conversions

APPENDIX 2

2012 Edition – Table 1

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 (e.g. 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 (e.g., '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• *This announcement relates to samples from the June-August 2021 drilling program, completed by LRS. It was undertaken using industry-standard air-core drilling methods. A total of 359 holes for 9,653 m were completed at the Noombenberry Project.* • *Samples selected for rare earth element (REE) analysis were removed from the sample sequence at the completion of the resource infill analysis which produced a <45µm fraction. The samples were selected at a ratio of 1:20 (that is, every 20^{th} sample was used regardless of where in the hole that sample was located). The selection was not based on lithology, brightness, kaolinite or halloysite grades, but based purely on the 1:20 sample ratio. Therefore, some holes were skipped due to the 1:20 sampling ratio and will not have REE results from this round of analyses.*
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented.* • *and if so, by what method, etc).*	• *LRS has completed air-core drilling, an industry-standard technique, and appropriate for the ground conditions.* • *All drill holes diameters were 3 inches.* • *AC drilling employed rotary blade-type bit, with compressed air returning the chip samples through reverse circulation up the innertube to a cyclone for sampling.*
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• *No water was encountered during the drilling process, all drill samples were dry samples.* • *Sample recovery is expected to have a minimal negative impact on the sample representativity.* ***INFILL DRILLING (2021)*** • *Individual 1-m bulk sample weights were measured and recorded on site at the time of drilling.* ***PHASE 1 & 2 DRILLING (2020–2021)*** • *Sample weights were not measured or recorded due to the preliminary nature of the project at the time of drilling. Sample recovery was not recorded. Recovery was assessed visually from the general consistency of the drill chip returned from the hole.*

Criteria	JORC Code explanation	Commentary
		• *Sample recovery was controlled by best-practice SOPs for the drilling and by visual inspection of the sample returns by the rig geologist.* • *There is no observed relationship between recovery and grade.*
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.*	• *LRS geological logging has been completed for all holes and is representative across the mineralised body. The lithology, alteration, and characteristics of drill samples are logged on hard copy logs, and entered in excel using standardised geological codes. In the Competent Person's opinion, the detail of logging is suitable to support an Indicated Mineral Resource.* • *Logging is both qualitative and quantitative depending on field being logged.* • *Chip trays were photographed.* • *The logging was reviewed in 3-D and was consistent and was used to define the geological model.*
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.	***INFILL DRILLING (2021)*** • *Single-metre samples were split from the bulk sample bag using a three-tier riffle splitter with an 87.5:12.5 split ratio into numbered calico bags.* • *Sample bags containing single-metre samples were placed in zip-tied polyweave bags (~15 kg of sample) for transport, in bulka bags, to SGS Perth, Australia via Merredin Freightlines. Compositing was completed by SGS following guidelines provided by LRS (composite intervals of 1–4 m based on geological logging to include kaolinised saprolite of similar quality within each composite).* • *Sample preparation was conducted by SGS Perth. Single-metre sample weights were recorded before any compositing was completed. An 800-g 'A' and 'B' split were taken from each composite sample using a small rotary splitter. Split B is stored at SGS for any additional testing.* • *Samples were dried at a low temperature (<50°C) to avoid the destruction of halloysite.* • *Split A was wet sieved at 180 µm and 45 µm. The >180 µm and >45 µm fractions were filtered and dried with standard papers, then photographed. The <45 µm fraction was filtered and dried on 2-µm paper.* • *The <45 µm material was split for analysis (XRF, FTIR, brightness). The reserves are*

Criteria	JORC Code explanation	Commentary
		stored at SGS. • *XRF sample preparation was conducted at SGS Perth. A sub-sample of the <45 µm fraction was fused with a lithium borate flux into a glass disc for analysis.* • *XRD sample preparation: A 3-gram sub-sample was micronised, slurried, and spray dried to produce a spherical agglomerated sample for XRD analysis. Sample preparation and analysis was conducted by CSIRO, Division of Land and Water, South Australia; testing was conducted using selected <45 µm samples.* • *ISO-Brightness sample preparation was conducted by Microanalysis Australia. The <45 µm fraction was pressed into the test holder, making sure the test surface is blemish free. The sample was analysed using a Datacolour Elrepho instrument.* • *Field duplicate samples were not collected due to the bulk nature of the deposit, where variance and heterogeneity has been monitored by twin drilling and close-spaced drilling (50-m spacing).* • *A review of composite duplicate pairs indicates excellent correlation for halloysite, brightness, SiO2, Al2O3, Fe2O3, and LOI. The review did identify a ~5% bias towards the original sample for kaolinite.* • *LRS drilled 14 twin holes, with an average distance of 2.4 m between the holes. The twin holes were drilled to adjacent to holes from the Phase 1 & 2 and infill drill programmes. Distance buffer QQ plot analysis, using a distance buffer of 10 m, indicates there is good continuity and correlation for halloysite, SiO2, Fe2O3, Al2O3, and LOI; however, it does identify a bias towards the original hole for kaolinite. The distance buffer plot for brightness is variable, but brightness within the kaolinite and halloysite domain has good correlation.* • *The QC checks and balances in place indicate the sampling process was in control. A 5% bias was reported in the composite duplicate pairs. The bias is more predominant in sample with <70% kaolinite, which is below the cut-off grade.* • *The Competent Person considers the splitting method (riffle splitter) acceptable for the nature of the material.* • *The Competent Person notes that the sub-sampling and sample preparation methods are fit for the purpose of an Indicated Classified Mineral Resource.* **PHASE 1 & 2 DRILLING (2020–2021)**

Criteria	JORC Code explanation	Commentary
		• *Composite samples were collected from the bulk sample bag using a 'PVC-spear'.* • *Spear sampling was carried out by the onsite geologist. The spear samples were collected by inserting the spear from the top corner of the sample bag to the opposite bottom corner of the sample bag, to ensure a representative cross section of the full 1-m sample was collected.* • *Composite samples ranged from 1–5 m. Composite sample intervals were selected based on geological logging, in particular lithological boundaries and zones of Fe staining. Composites were prepared with the aim of including kaolinised saprolite of similar quality within each composite. However, in some cases, narrow bands of discoloured kaolinised saprolite were included in the composite.* • *Even though spearing is considered an inappropriate method for representative sample splitting, the Competent Person considers it acceptable for this material, given the low natural inherent variability of the mineralisation. Changes were made for the 2021 infill drill programme.* • *Composite sampling was undertaken on site by LRS representatives.* • *Sample preparation was carried out by Bureau Veritas Laboratories, Adelaide, Australia. Sample weights were recorded before any sampling or drying. Samples were dried at a low temperature (60°C) to avoid the destruction of halloysite. The dried sample was then pushed through a 5.6-mm screen prior to splitting.* • *A small rotary splitter is used to split an 800-g sample for sizing.* • *The 800-g split was wet sieved at 180 µm and 45 µm. The >180-µm and >45-µm fractions were filtered and dried with standard papers, then photographed. The <45 µm fraction was filtered and dried with 2-micron paper.* • *The <45 µm material is split for XRF, XRD and brightness analysis. The reserves are retained by LRS.* • *While there was limited QC for the early exploration drilling, the Competent Person considers, that in combination with the 2021 infill drilling, the sub-sampling and sample preparation methods are fit for the purpose of estimating and classifying an Indicated Mineral Resource.*
Quality of assay data and laboratory	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or*	• *An aliquot of sample is accurately weighed and fused with lithium metaborate at high temperature in a Pt crucible. The fused*

Criteria	JORC Code explanation	Commentary
tests	*total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	*glass is then digested in nitric acid. This process provides complete dissolution of most minerals including silicates. Volatile elements are lost at the high fusion temperatures.* • *Ce, Dy, Er, Eu, Gd, Ho, La, Lu, Nd, Pr, Sm, Tb, Tm, Y, Yb were determined by Inductively Coupled Plasma (ICP) Mass Spectrometry.* • *The analytical methods used are industry standard for this deposit type.*
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• *Reported intercepts are based on length.* • *No maximum or minimum grade truncations have been applied.* • *No metal equivalent values have been quoted.*
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• *Drill collar locations were positioned in the field using a handheld GPS with ±5 m accuracy.* • *Post drilling, drill collar locations were surveyed by an independent contractor using a Hemisphere S321+ RTK GNSS base equipment with stated accuracies of 8 mm + 1 ppm (horizontal) and 15 mm + 1 ppm (vertical), relative to the base station position.* • *The grid system used is UTM GDA 94 Zone 50.* • *A Digital Elevation Model (DEM) was created using Synthetic Aperture Radar from Sentinel-1 satellite radar.* • *RSC undertook an assessment of the collar Z-coordinate relative to this DEM with the following findings:* • *The DGPS collar data was imprecise relative to the DEM in the range of ±5 m.* • *GPS coordinates have a known low precision in the z-axis; as a result, all collars have been draped onto the DEM file.* • *Considering the horizontal nature of the ore body, and the expected precision of the DEM file (<1 m), the Competent Person considers the accuracy of the collar locations present here will not materially impact the Mineral Resource considering its current classification as Indicated and Inferred.*
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*	• *<45 µm sample intervals were selected solely on a 1:20 ratio and therefore cannot represent intervals greater than 1 m as that is the sample interval that was processed and the 1:20 sample selection*

Criteria	JORC Code explanation	Commentary
	Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • *Whether sample compositing has been applied.*	*means consecutive samples are not analysed.* • *No inference about the extent of mineralisation is made from these data.* • *Samples are not composited.*
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 mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• *Sampling is preferentially across the strike or trend of mineralised outcrops.* • *Drill holes are vertical, as the predominant geological sequence is a flat-lying weathering profile.* • *Drill intersections are reported as down hole widths.* • *The application of a semi-regular drilling grid over a laterally extensive, locally variable, mineralised regolith, combined with the horizontal nature of mineralisation and vertical hole dip is unlikely to have yielded a sampling bias.* • *All drill holes have been drilled in a vertical drilling orientation to achieve a high angle of intersection with the flat-lying mineralisation.* • *Drilling orientation is considered appropriate, with no obvious bias.*
Sample security	• *The measures taken to ensure sample security.*	• *<45 µm sample fractions were stored at SGS in Perth before being couriered to BV in Adelaide.*
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• *An RSC consultant has visited the exploration site while drilling was ongoing.* • *RSC has validated 5% of the data against the original logs to ensure robustness and integrity of the sampling and analysis methods.*

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* • *license to operate in the area.*	• *Exploration license E77/ 2622 has been granted.*
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• *No historic exploration has been completed on the tenement areas.*
Geology	• *Deposit type, geological setting and style of mineralisation.*	• *The Noombenberry Project is located on the largely granitic, Archean Yilgarn Craton.* • *The basement geology at the Noombenberry Project, is undulating granite, with isolated outcrops in the project area.* • *A well-developed regolith profile overlies the basement geology. Immediately overlying the granite is a zone of partially weathered granite that transition up profile into saprolite clays. The saprolite clay profile varies in thickness from 1 m to >50 m in places, which is related to the undulating upper surface of the granite. The saprolite clay profile is the key mineralised unit and contains kaolinite and localised zones of halloysite. The clay unit does contain discontinuous pods of Fe-rich staining.* • *The deposit is overlain by sandy soil and colluvial cover, up to ~15 m in places.* • *The REE potential of the kaolin at Noombenberry is being assessed. The potentially REE enriched clay horizons are sub-horizontal zone overlying the unweathered granite.*

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 holes were located by handheld GPS at the time of drilling and not reported here.* • *An independent survey contractor completed a collar survey pickup utilising Hemisphere S321+ RTK GNSS DGPS equipment with stated accuracies of 8mm + 1mm (horizontal) and 15mm + 1mm (vertical), relative to the base station position.*
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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.*	• *Standard element to stoichiometric oxide conversion factors are used in calculating and reporting oxide equivalent elements.* • *Rare earth elements (REE) converted to oxide equivalents were aggregated as total rare earth elements TREE or total rare earth oxide elements TREO and combined as magnetic rare earth oxide (MREO) using industry standards. MREO as a percentage of TREO may also be reported.* • *Element-to-stoichiometric oxide conversion factors shown in table below: multiply wt% element by numerical value below for equivalent expressed as an oxide.* (see table below) • *TREO refers to the sum of all 15 REEs in their respective oxide equivalent* • *MREO refers to the 6 magnetic rare earth oxides (Nd2O3+Pr6O11+Sm2O3+Gd2O3+Tb4O7+Dy2O3)*
Relationship between mineralisation widths and intercept	• *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.*	• *Drilling is reported to have been carried out at right angles to target controlling structures and mineralised zones where possible.*

Element	Oxide	Conversion factor
Lanthanum	La_2O_3	1.1728
Cerium	CeO_2	1.2284
Praseodymium	Pr_6O_{11}	1.2082
Neodymium	Nd_2O_3	1.1664
Samarium	Sm_2O_3	1.1596
Europium	Eu_2O_3	1.1579
Gadolinium	Gd_2O_3	1.1526
Terbium	Tb_4O_7	1.1762
Dysprosium	Dy_2O_3	1.1477
Holmium	Ho_2O_3	1.1455
Erbium	Er_2O_3	1.1435
Thulium	Tm_2O_3	1.1421
Ytterbium	Yb_2O_3	1.1387
Lutetium	Lu_2O_3	1.1371
Yttrium	Y_2O_3	1.2699

lengths	• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	
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.*	• *The Company has included a map in the body of the announcement text showing the spatial distribution of the sample results.*
Balanc ed reporti ng	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high-grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.*	• *All analytical results have been reported in a balanced manner.*
Other Substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but no 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 information that is considered material has been reported, including drilling results*
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• *A selection of the remaining <45 µm fractions from the infill drilling will be analysed for REE enrichment in due course.* • *Leach tests (e.g. weak aqua regia, ammonium sulphate) will also be performed on a selection of samples to determine leachability of the REE.*