ASX ANNOUNCEMENT

26 August 2024

Slurry Leach Results from Process Development Testing of Narraburra REE Project Identify Conditions for Optimal Rare Earth Extraction

- **Initial series of slurry leach tests for Process Development Testing are completed.**
- **Phase 3 Metallurgical Test Work Program is completed, highlighting good Magnet Rare Earth Oxide ('MREO') extraction rates with typical concentrations of impurities in leach solutions and low acid consumption**
- **Slurry leach results indicate MREO extraction rates up to 81% with limited deleterious element (impurity) extraction and low (1.0 - 3.3kg/t) acid consumption**
- **Process development testing has been designed to identify the leach conditions needed to process Narraburra REE mineralisation and was undertaken by Australian Nuclear Science and Technology Organisation (ANSTO)**
- **Slurry leach results indicate optimal leaching conditions to process Narraburra's mineralisation, which are 40wt% solids/liquid slurry density at pH 2.2, with 0.3 – 0.5M ammonium sulphate reagent at 50°C for 24 hours**
- **Process Development Testing continues towards creation of our Mixed Rare Earth Carbonate (MREC) product, which will enable discussions to commence with potential off take partners**
- **Testwork program is anticipated to be completed by September 2024**

Godolphin Resources Limited (ASX: GRL) ("**Godolphin**" or the "**Company**") is pleased to advise that it successfully completed the slurry leach phase of the Process Development Testing metallurgical testwork program on samples from the Narraburra Rare Earth Element ("REE") Project ("Narraburra" or "the Project"). This initiative is part of the Company's third stage of metallurgical testwork and yielded encouraging results. The Process Development Testing program includes slurry leach testing, solid/liquid separation, impurity removal and the production of a Mixed Rare Earth Carbonate (MREC) product.

The slurry leach phase highlighted results of up to 81% Magnet Rare Earth Oxide ("MREO") extraction with low deleterious element (impurity) extraction and low acid consumption of 1.0 - 3.3kg/t.

This indicates that the optimal conditions to process Narraburra's mineralisation are a 40wt% solids/liquid slurry density at pH 2.2, with the addition of 0.3M – 0.5M ammonium sulphate reagent, at 50°C for 24 hours.

Narraburra is located 12km northeast of Temora in central west New South Wales and hosts a Mineral Resource Estimate (**MRE**) of **94.9 million tonnes at 739ppm TREO[1],** which includes a **higher-grade component of 20 million tonnes at 1,079ppm TREO** using a 600ppm cutoff in accordance with JORC (2012) (refer ASX: GRL announcements: 19 April 2023 and 21 April 2023).

Management Commentary

Managing Director Ms Jeneta Owens said: *"We are excited to have completed the slurry leach phase of our phase three metallurgical test work program at Narraburra. This is a critical step in understanding the optimal conditions to process the Project's REE mineralisation in an efficient and cost effective manner."*

[1] "TREO" is Total Rare Earth Oxide: La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3.

"The results from the slurry leach phase have highlighted the optimal conditions required for processing the Narraburra REE mineralisation and demonstrated good MREO extraction with limited deleterious element extraction and importantly low acid consumption. These are critical factors when considering the economics of the Project and will bode well for any future development initiatives. We are looking forward to the next steps of the metallurgical program, which include the solid/liquid separation and impurity removal steps, both of which are very important stages in processing REE mineralisation and the production of our first Mixed Rare Earth Carbonate or MREC sample, which will allow us to commence discussions with potential off take partners."

"We look forward to providing updates on the progress of the program as the results of these metallurgical tests are received, especially the production of the first ever MREC product from Narraburra."

Process Development Testing (Stage 3) testwork

The Process Development Testing program has been designed to identify the conditions for the leaching stage in the processing flow sheet, to extract the REE's from the Narraburra REE mineralisation. It is anticipated that this testwork will provide GRL with an understanding of this key step in the processing flow sheet under development.

GRL provided two composite samples for the third phase of metallurgical test work respectively GNB011 (Composite 1) and GNB017 (Composite 2), both of which include an 11m thick interval from drill holes. These intervals have been selected because they are interpreted to represent possible mining intervals through the Narraburra Project's existing Mineral Resource Estimate (refer Figure 1. below).

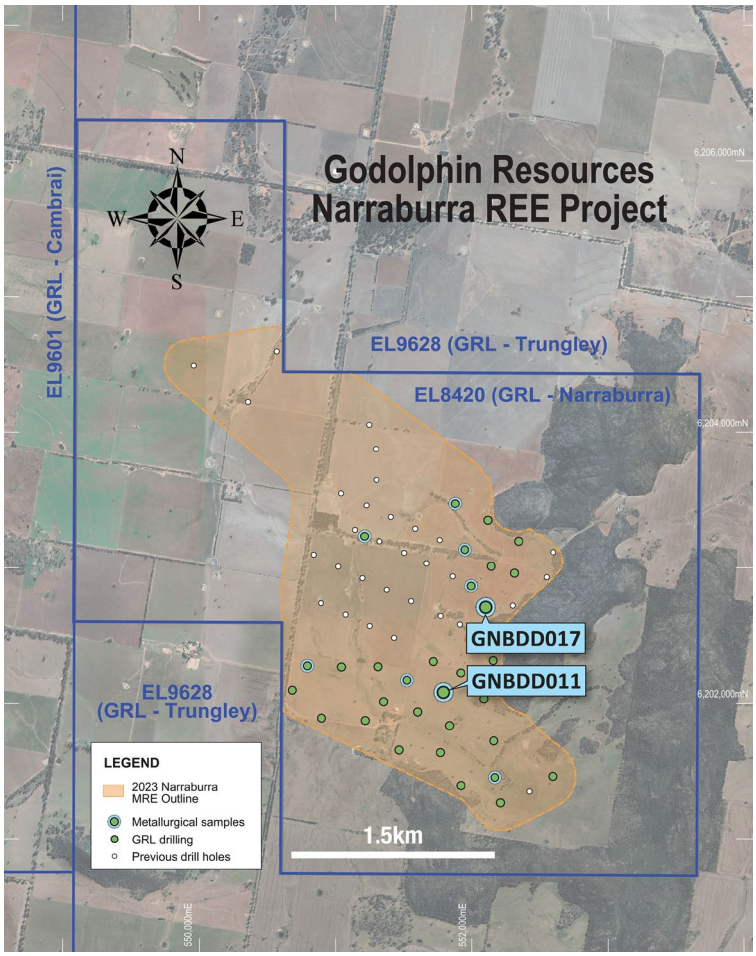

Figure 1: Location of the two drill holes from where the composite samples were collected for the slurry leach testing stage of the Phase Three metallurgical program

Stage 3 testwork is being undertaken by The Australian Nuclear Science and Technology Organisation (ANSTO) which comprises the slurry leach testing reported here, to be followed by solid/liquid separation, impurity removal and the production of a Mixed Rare Earth Carbonate (MREC) product.

The slurry leach phase of the Process Development Testing program has been completed and results indicated that the optimal slurry leach conditions to process the Narraburra REE Project mineralisation are: 40wt% solids/liquid slurry density at pH 2.2, with the addition of 0.3M – 0.5M ammonium sulphate (AS or $(NH_4)_2SO_4$) reagent, at 50°C for 24 hours. The slurry leach under these conditions produced 61 - 81% MREO extraction with deleterious element levels in the pregnant leach solution (**PLS**) of 157 - 286mg/L Al, 116 - 179mg/L Fe and low acid consumption of 1.0 - 3.3kg/t feed (see details in Table 1).

During the slurry leach phase, temperature was also varied to understand its effect on MREO/Impurity extraction percentage and process kinetics (time taken for optimised extraction). Slurry leach results indicated that 50°C appears optimal for MREO/impurity extraction from the Narraburra mineralisation. However, results from a test with the leach temperature decreased to 40°C at pH2.0, indicated that the MREO extraction is slightly decreased, but with lower impurity extraction for Al. The effect of leaching at 40°C compared to 50°C will be investigated further in future studies to examine the trade-off between lower extractions, cost reduction from lower energy requirements and lower impurity levels in the mixed rare earth carbonate product.

The PLS produced is currently being subjected to impurity removal testing, which is a critical step as certain impurities must be removed by pH adjustment, i.e. addition of ammonium bicarbonate, prior to precipitation of the MREC product. The final stage of precipitating a MREC product will be undertaken on the clean liquor from the impurity removal stage. The MREC product will be used to initiate the Company's engagement with potential off take partners.

Results from the remaining Process Development Testing program are expected in early September 2024 and will provide Godolphin with robust processing cost estimates, as well as an indicative MREC composition and value. These results will also form a key component of discussions with potential off take partners.

Project Background

The Narraburra area was first explored in 1999 for Rare Earth Elements associated with the Devonian-aged Narraburra Granite. Narraburra is listed as a Critical Minerals Project by the Critical Minerals Office of the Australian Government's Department of Industry, Science, Energy and Resources, and the Australian Trade and Investment Commission. Godolphin's objective at Narraburra has been to define a bulk tonnage disseminated deposit of REE in free-digging weathered clays and saprock that would be amenable to low-cost mining from a shallow open pit. Processing would include low-cost atmospheric pressure, and acid leaching to recover REE for sale to local and international customers.

To date, diamond drilling undertaken by Godolphin at Narraburra has intersected broad zones of REE mineralisation in clay, saprock (clay-weathered rock) and underlying fresh rock protolith material (refer ASX: GRL announcements: 11 November 2022 and 13 December 2022), the latter mineralisation has not been included in the reported MRE calculations.

The REE's at Narraburra are hosted in clay and saprock, which is the result of weathering of REE rich host rocks (peralkaline granite). The clays and clay-weathered saprock become enriched in REE through water table effects and occur as flat lying sheets within the in-situ clay rich weathered material. The REE's are contained within three well-defined layers that vary in thickness, with the layers increasing in thickness from surface towards the bedrock, and the upper layer is an average 1-2m below surface.

The four magnet Rare Earth Elements – Nd, Pr, Tb and Dy have all been identified at Narraburra. These four elements are crucial for producing high-strength permanent magnets which are used in many future-facing manufactured products, notably for electric vehicles where currently conventional internal-combustion-engine vehicles already use many rare earth magnets for operations such as windows, heating and cooling, door controls and navigation/entertainment systems. Plug in hybrids are recorded as requiring two to three times more magnets than traditional vehicles and full EV's three to four times more, including the motors[2]. Other permanent magnet usage includes generators in wind turbines, medical devices and everyday appliances such as computer hard drives and mobile phones.

<<ENDS>>

This market announcement has been authorised for release to the market by the Board of Godolphin Resources Limited.

For further information regarding Godolphin, please visit https://godolphinresources.com.au/ or contact:

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[2] https://global-reia.org/rare-earth/

About Godolphin Resources

Godolphin Resources (ASX: GRL) is an ASX listed resources company, with 100% controlled Australian-based projects in the Lachlan Fold Belt ("LFB") NSW, a world-class gold-copper & REE province. A strategic focus on critical minerals and green metals through ongoing exploration and development in central west NSW. Currently the Company's tenements cover over 3,500km^2 of highly prospective ground focussed on the Lachlan Fold Belt, a highly regarded province for the discovery of Rare Earth Elements, Copper, Gold and Base Metal deposits. Additional prospectivity attributes of GRL's tenure include the McPhillamys gold hosting Godolphin Fault and the Boda gold-copper hosting Molong Volcanic Belt.

Godolphin is exploring for clay hosted REE's, structurally hosted & epithermal gold, base-metal deposits and large, gold-copper Cadia style porphyry deposits in the Lachlan Fold Belt. Continuing exploration efforts are aimed towards defining new targets for unlocking the potential of its East Lachlan tenement holdings and increasing the mineral resources of its advanced Narraburra Rare Earth Project, Lewis Ponds Gold & Base Metals Project and the Yeoval Copper Gold Project. Systematic and scientific exploration efforts across the tenement package is the key to discovery and represents a transformational stage for the Company and its shareholders.

COMPLIANCE STATEMENTS: The information in this report that relates to reporting of metallurgical test work results is based on REE exploration information reviewed by Dr Christopher Hartley, a Competent Person who is a Member (#41781) of the Institute of Materials, Minerals and Mining (IoM3) since 1981. The exploration information was compiled by Godolphin Resources Limited (GRL, see secondary CP Statement below). Dr Christopher Hartley is a Non-Executive Director of Godolphin Resources. Dr Hartley has sufficient experience that is relevant to the REE style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person (CP) as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Hartley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Dr Hartley's CP Statement is given on the basis that GRL takes responsibility to a Competent Persons level (as given below) for the collection and integrity of the source data.

The actual REE exploration information in this report that relates to Exploration data, Sampling Techniques or Geochemical Assay Methodology is based on information compiled by Ms Jeneta Owens, Competent Person who is a Member of the Australian Institute of Geoscientists. Ms Owens is the Managing Director and full-time employee of Godolphin Resources Limited. Ms Owens has sufficient experience 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. Ms Owens consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

Information in this announcement is extracted from reports lodged as market announcements referred to above and available on the Company's website www.godolphinresources.com.au.

The Company confirms that it is not aware of any new information that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

List of Symbols Used

Symbol	Meaning
µm	Micrometre
ANSTO	Australian Nuclear Science and Technology Organisation
C	Centigrade
Ce	Cerium
Dy	Dysprosium
Er	Erbium
Eu	Europium
g	Gram
Gd	Gadolinium
h	Hour
Ho	Holmium
HRE	Heavy Rare Earths (Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu)
ICP-MS	Inductively Coupled Plasma-Mass Spectrometry
JORC (2012)	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves effective 20 December 2012
kg	Kilogram
La	Lanthanum
LRE	Light Rare Earths (La, Ce, Pr, Nd)
Lu	Lutetium
m	Metre
Magnets	Key Magnet Rare Earths (Pr, Nd, Dy, Tb)
mm	Millimetres
MRE	Mineral Resource Estimate
Nd	Neodymium
NH4 2SO4	Ammonium sulphate
pH	Potential of hydrogen, used to specify the acidity or basicity of aqueous solutions
ppm	Parts per million
Pr	Praseodymium
REE	Rare Earth Element
REO	Rare Earth Oxide
Sm	Samarium
Tb	Terbium
Tm	Thulium
TREY	Total REEs plus yttrium
TREY-Ce	TREY minus Ce
TREYO	Total Rare Earth Oxides plus Yttrium Oxide
wt%	Weight percentage
XRF	X-ray fluorescence
Y	Yttrium
Yb	Ytterbium

Table 1: Results from Slurry Leach phase of the Process Development Testing (Stage 3 metallurgical testwork program)

Feed			Conditions					Final Extraction (%) (Based on Solids)																			
ID	TREY	Test ID	Reagent	Acidity	Slurry	Temperature	Duration	Nd-Pr	Tb-Dy	Magnets	TREY	TREY-Ce	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Y
	ppm		mol/L	pH	wt%	°C	h	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Comp 1	1243	GOD-3-7	0.3 M AS	2.0	40	50	24	63	68	65	55	68	58	21	61	63	64	71	74	67	68	67	65	56	46	47	74
Comp 1	1243	GOD-3-8	0.3 M MgSO4	2.0	40	50	24	65	65	65	50	67	60	21	64	66	70	78	74	65	65	63	59	49	39	41	72
Comp 1	1243	GOD-3-9	0.3 M AS	2.2	40	50	24	68	67	68	50	67	67	15	68	68	68	72	75	70	67	63	55	44	27	27	73
Comp 1	1243	GOD-3-10	0.3 M AS	2.5	40	50	24	61	62	61	48	63	60	8	61	61	58	58	68	64	62	59	55	48	38	42	69
Comp 1	1243	GOD-3-11	0.3 M AS	2.0	40	40	24	58	65	61	46	65	59	16	58	59	59	71	68	66	64	62	61	56	46	50	72
Comp 1	1243	GOD-3-12	0.3 M AS	2.0	40	30	24	41	53	46	47	58	42	10	41	41	97	51	54	53	53	56	56	53	39	44	68
Comp 1	1243	GOD-3-13	0.5 M AS	2.0	40	50	24	56	65	59	54	66	55	22	58	55	68	64	72	67	65	63	62	59	49	50	73
Comp 1	1243	GOD-3-14	0.5 M AS	2.2	40	50	24	61	62	61	47	65	57	13	58	61	69	87	74	67	62	63	56	55	34	39	72
Comp 2	1143	GOD-3-15	0.5 M AS	2.0	40	50	24	82	83	82	81	82	81	69	81	82	82	81	86	84	83	80	75	73	57	59	85
Comp 2	1143	GOD-3-16	0.5 M AS	2.2	40	50	24	80	82	81	79	81	80	62	81	80	83	82	86	83	81	78	76	70	51	54	85

Feed			Conditions					Element (mg/L) Final PF											
ID	TREY	Test ID	Reagent	Target pH	Slurry	Temperature	Duration	Al	Ca	Fe	K	Mg	Mn	Na	S	Si	U	Th	Acid Add.	TREY: Al
	ppm		mol/L		wt%	°C	h	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	kg/t	Ratio
Comp 1	1243	GOD-3-7	0.3 M AS	2.0	40	50	24	331	61	200	47	146	142	138	13283	243	2	5	2.0	1.3
Comp 1	1243	GOD-3-8	0.3 M MgSO4	2.0	40	50	24	334	72	172	47	7474	145	154	12809	238	3	5	1.4	1.3
Comp 1	1243	GOD-3-9	0.3 M AS	2.2	40	50	24	255	62	165	81	169	152	150	12626	207	2	4	1.0	1.6
Comp 1	1243	GOD-3-10	0.3 M AS	2.5	40	50	24	191	57	115	60	158	152	144	11706	164	2	3	0.8	1.8
Comp 1	1243	GOD-3-11	0.3 M AS	2.0	40	40	24	276	55	209	74	159	144	142	12983	201	2	4	1.2	1.3
Comp 1	1243	GOD-3-12	0.3 M AS	2.0	40	30	24	230	55	175	48	143	132	132	12261	128	2	2	0.5	1.2
Comp 1	1243	GOD-3-13	0.5 M AS	2.0	40	50	24	363	65	228	55	149	147	144	20075	266	3	5	4.0	1.2
Comp 1	1243	GOD-3-14	0.5 M AS	2.2	40	50	24	286	64	179	45	147	108	139	20146	234	2	4	3.3	1.4
Comp 2	1143	GOD-3-15	0.5 M AS	2.0	40	50	24	203	108	167	71	161	21	44	19300	202	2	4	3.3	3.2
Comp 2	1143	GOD-3-16	0.5 M AS	2.2	40	50	24	157	95	116	57	153	19	42	17911	161	1	4	2.5	3.8

Appendix 1 – JORC Code, 2012 Edition, Table 1 report

Section 1 Sampling Techniques and Data (Criteria in this section applies to all succeeding sections)

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Sampling techniques</td><td>• 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.</td><td>• Composite 1 and Composite 2 metallurgical samples were respectively taken from drill holes GNBDD011 and GNBDD017, which were part of a 31-hole diamond core drilling program for 1,397.8m completed by GRL in 2022.
• All drill holes were drilled at a vertical angle.
• The metallurgical samples are all ¼ diamond core sampled from the remaining ½ diamond core samples left over from the routine sampling and analysis.
• The Composite 1 and Composite 2 metallurgical samples were both composed from the ¼ core samples that were originally sampled for Stage 2 metallurgical test work completed by ANSTO and announced on the 13 December 2023 and 19 February 2024.
• Details for Composite 1 and Composite 2 metallurgical samples are:
<table>
<tr><th>Composite Metallurgical sample ID</th><th>Original Metallurgical Sample ID</th><th>Hole ID</th><th>Downhole Depth From (m)</th><th>Downhole Depth To (m)</th><th>Interval (m)</th></tr>
<tr><td rowspan="3">Composite 1</td><td>GNB011_1</td><td>GNBDD011</td><td>26.00</td><td>31.00</td><td>5.00</td></tr>
<tr><td>GNB011_2</td><td>GNBDD011</td><td>31.00</td><td>35.00</td><td>4.00</td></tr>
<tr><td>GNB011_3</td><td>GNBDD011</td><td>35.00</td><td>37.00</td><td>2.00</td></tr>
<tr><td rowspan="3">Composite 2</td><td>GNB017_1</td><td>GNBDD017</td><td>20.00</td><td>22.00</td><td>2.00</td></tr>
<tr><td>GNB017_2</td><td>GNBDD017</td><td>22.00</td><td>26.00</td><td>4.00</td></tr>
<tr><td>GNB017_3</td><td>GNBDD017</td><td>26.00</td><td>31.00</td><td>5.00</td></tr>
</table>
• ¼ diamond core sample still remains in the core trays in GRL's secured storage.
• All mineralised intervals in each drill hole from the 31-hole diamond core drilling program were subject to routine sampling and analysis (½ core samples).
• The Competent Person ensured all sampling was to industry standard and in-line with previous sampling protocols. All relevant sampling details were continuously monitored and recorded.
• All drill holes were logged and recorded in a GRL Narraburra-specific template and saved in the Company's database. Data includes: from and to measurements, colour, weathering, regolith profile, lithology, magnetic susceptibility, specific gravity, rock quality designation, rock strength characterisation including penetrometer readings, structures, and alteration.</td></tr>
<tr><td>Drilling techniques</td><td>• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details.</td><td>• Diamond Drilling (DD) with PQ core size using a triple tube. Multi-shot surveys were taken at the end of the hole whilst pulling the rods. All holes were drilled vertically. Holes were not orientated.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• Drill core recovery was determined by comparing the drilled length of each interval with the physical core in the tray. The drill depth and drill run length data is recorded on the core blocks by the drilling company and checked by GRL's geologists. GRL's geologists attributed any core loss to the likely position it came from within a drill run. • Diamond core recoveries were recorded in logging sheets and also via a digital photograph of core trays. • Overall estimated recoveries were on average high (over 90%). Care was taken to ensure the core was representatively sampled in the broken or friable zones and that sample intervals aligned with core loss.
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.*	• The drill core was geologically logged by a GRL geologist and geotechnically logged by a suitably trained technician. The log includes detailed datasets for: lithology, alteration, mineralisation, veins, structure, geotechnical logs, core recovery and magnetic susceptibility. • The data is logged and quality checked by a qualified geologist and is suitable for use in any future geological modelling, resource estimation, mining and/or metallurgical studies.
Sub-sampling techniques and sample preparation	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• Metallurgical sample intervals were allocated by a GRL geologist using geological boundaries or material type boundaries as a guide. Then the samples were composited together to provide a composite sample for each drill hole that is representative of the mineralised interval. • The PQ ½ core was split using hand methods for weathered material, which involved using stainless steel tools to split the remaining in half lengthways. For hard material, a core saw was used to cut the ½ core sample in half lengthways. • Sample sizes are appropriate for the nature of mineralisation.
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.* • *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.*	• Multiple slurry leach tests at varying conditions (reagent type, reagent strength, pH, temperature) were carried out on the metallurgical samples to determine the optimal Slurry Leaching conditions for the Narraburra REE Project mineralisation. See Table 1 in announcement for details of conditions on any individual Slurry Leach test. • Slurry leach tests were carried out on a ~1 L scale using 400g of clay (<1 mm, dry weight, dried at 50 °C). Intermediate thief slurry samples were taken and processed at 4, 8 and 12 h for solid and liquor analysis. The thief liquors and the final primary filtrate were analysed with: ➢ ICP-MS for Ce, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Mn, Nb, Nd, Pr, Sc, Sm, Tb, Th, Tm, U, Y, Yb (ALS); ➢ ICP-OES for Al, Ca, Fe, K, Mg, Mn, Na, P, Si, Zn, Zr (ANSTO). ➢ These techniques are considered total. • The final solids filter cake was then washed on the filter with two displacement washes of 450mL each of lixiviant, followed by a 300mL water wash. All of the final washed filter cake was then pulverised, and a sub-sample taken for drying at 105°C. This sub-sample was then analysed for the following elements: ➢ Fusion digest/MS (ALS) - Ce, Dy, Er, Eu, Gd, Ho, La, Lu, Nd, Pr, Sc, Sm, Tb, Th, Tm, U, Y, Yb; ➢ XRF (ANSTO) - Al, As, Ba, Ca, Co, Cr, Cs, Cu, Fe, Hf, K, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, S, Si, Sn, Ta, Ti, V, Zn, Zr. ➢ These techniques are considered total. • The 2 wash liquors (combined lixiviant and water wash) were also analysed as for the final leach liquor. • Intermediate RE extractions were then calculated using the head and thief residue assays. The final RE extractions were then calculated based on the head assay and both the final solids assay, and the assays and volumes of the final filtrate, the combined lixiviant washes and the water wash. • Head assays of the composited intervals for metallurgical testwork were compared favorably against the routine sample assays used in the estimation of the Narraburra Mineral Resource. • GRL also inserted QAQC samples into the routine sampling sequence. • All of the QAQC data has been statistically assessed. GRL has undertaken its own further review of QAQC results of the ALS routine standards. The results are considered to be acceptable and suitable for reporting.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Verification of sampling and assaying</td><td>• The verification of significant intersections by either independent or alternative company personnel.
• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
• Discuss any adjustment to assay data.</td><td>• Head assays of the composited intervals for metallurgical testwork were compared favorably against the routine sample assays.
• All data and logging were recorded directly into field laptops. Visual validation, as well as numerical validation were completed by two or more geologists.
• REE/RM oxides were calculated for all reported ICP-MS results. The oxides were calculated according to the following factors listed below:
La2O3: 1.173 (i.e. ppm La x 1.1728 = ppm La2O3); CeO2: 1.2284; Pr6O11: 1.2082; Nd2O3: 1.1664; Sm2O3: 1.1596; Eu2O3: 1.1579; Gd2O3: 1.1526; Tb4O7: 1.1762; Dy2O3: 1.1477; Ho2O3: 1.1445; Er2O3: 1.1435; Tm2O3: 1.1421; Yb2O3: 1.1387; Lu2O3: 1.1371; Y2O3: 1.2699; Ga2O3: 1.3442; HfO2: 1.1793; Nb2O5: 1.4305; Rb2O: 1.0936; ZrO2: 1.3508
• Total rare earth oxide is the industry standard and accepted form of reporting rare earth elements. TREO, TLREO, THREO, MREO as calculated as below
• TREO (total rare earth oxides) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3 + Y2O3
• TLREO (total light rare earth oxides) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3
• THREO (total heavy rare earth oxides) = Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3 + Y2O3
• MREO (magnet rare earth oxides) = Pr6O11 + Nd2O3 + Tb4O7 + Dy2O3</td></tr>
<tr><td>Location of data points</td><td>• 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.</td><td>• A handheld GPS was used to locate the drilling, with an averaged waypoint measurement: accuracy of less than 5 m.
• A DGPS was used after drilling to pick up the final collar location: accuracy of less than 0.77m
• Coordinates used are WGS84 and transformed into Map Grid of Australia 1994 Zone 55
• Hole paths have been systematically surveyed at 6m intervals by the drill contractor</td></tr>
<tr><td>Data spacing and distribution</td><td>• Data spacing for reporting of Exploration Results.
• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.
• Whether sample compositing has been applied.</td><td>• Early-stage drilling program for Narraburra. Target is broad disseminated flat lying mineralisation above fresh igneous rock, as a result the drill density for this program is representative to indicate variability across the project area.
• The data spacing and distribution of drill holes into the Narraburra mineralised area were deemed to be sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.
• Narraburra REE Project Mineral Resource Estimate (MRE) of 94.9 million tonnes at 739ppm TREO, which includes a higher-grade component of 20 million tonnes at 1,079ppm TREO using a 600ppm cutoff in accordance with JORC (2012) (refer ASX: GRL announcements: 19 April 2023 and 21 April 2023).
• Composite 1 and Composite 2 metallurgical samples were respectively taken from drill holes GNBDD011 and GNBDD017.
• The two metallurgical samples discussed in this report were composited together to provide a composite sample for each drill hole that is representative of the mineralised interval.
• Details for Composite 1 and Composite 2 metallurgical samples are:

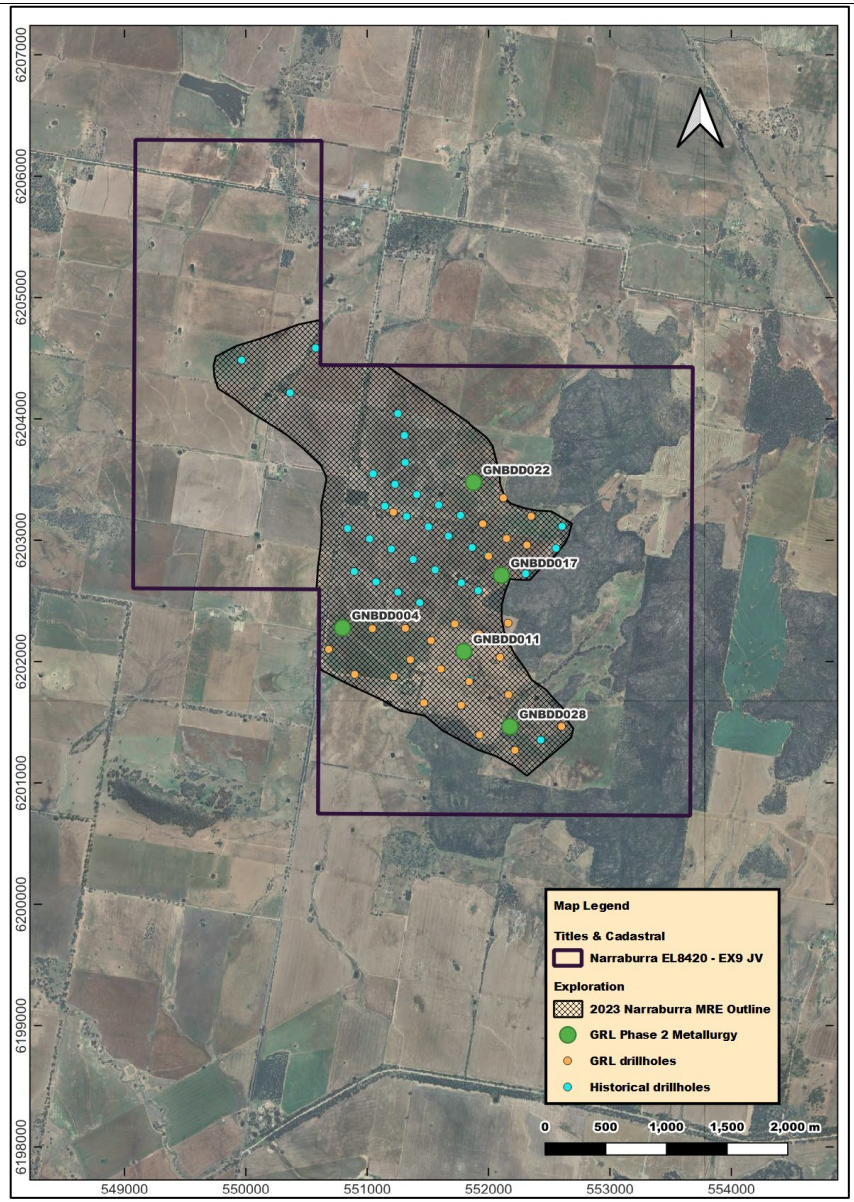
<table>
<tr><th>Composite Metallurgical sample ID</th><th>Original Metallurgical Sample ID</th><th>Hole ID</th><th>Downhole Depth From (m)</th><th>Downhole Depth To (m)</th><th>Interval (m)</th></tr>
<tr><td rowspan="2">Composite 1</td><td>GNB011_1</td><td>GNBDD011</td><td>26.00</td><td>31.00</td><td>5.00</td></tr>
<tr><td>GNB011_2</td><td>GNBDD011</td><td>31.00</td><td>35.00</td><td>4.00</td></tr>
</table>
</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		<table><tr><td></td><td>GNB011_3</td><td>GNBDD011</td><td>35.00</td><td>37.00</td><td>2.00</td></tr><tr><td rowspan="3">Composite 2</td><td>GNB017_1</td><td>GNBDD017</td><td>20.00</td><td>22.00</td><td>2.00</td></tr><tr><td>GNB017_2</td><td>GNBDD017</td><td>22.00</td><td>26.00</td><td>4.00</td></tr><tr><td>GNB017_3</td><td>GNBDD017</td><td>26.00</td><td>31.00</td><td>5.00</td></tr></table>
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.*	• Mineralisation is interpreted to be in flat lying layers associated with weathering profiles of the underlying granite. Vertical orientation of the drillholes was deemed suitable to target mineralisation of this style. • No significant bias is likely as a result of the pattern of intersection angles.
Sample security	• *The measures taken to ensure sample security.*	• All samples were collected and accounted for by GRL employees/consultants during drilling. All logging was done by GRL personnel. All samples were bagged into calico bags by GRL's contractors under the instruction of GRL personnel. • GRL personnel or contractors were present at the drill rig daily during the drilling • Diamond Drill core was geotechnically logged at the drill rig prior to transportation and collected from the site and taken to the secure GRL shed in Orange for further processing. • All drill core was securely storage in GRL's shed in Orange. • Metallurgical samples were securely courier to ANSTO.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Surveys, Assays, Geology, previous resource estimates were studied internally for factors likely to introduce bias. • No external audits have been done on this data.

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.*	• The Narraburra Rare Earth Element Project is located 12km to the northeast of the township of Temora in NSW and has an elevation approximately 315m above sea-level. • Narraburra Rare Earth Element Project Mineral Resource is located on EL8420. • GRL acquired EL8420 100% from EX9 Pty Ltd (currently awaiting Ministerial approval for transfer of title) • The land is owned by private land holders
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• See ASX announcements by Godolphin Resources (ASX: GRL) on 2 March 2022 and 11 November 2022, as well as Capitol Mining Limited (ASX: CMY) on 9 November 2011 • Previous exploration includes airborne magnetic surveys, re-processing of public Aster data, geological mapping, mineralogical studies, preliminary metallurgical test work, with irregular wide-spaced RAB and RC drilling.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Geology</td><td>• Deposit type, geological setting and style of mineralization.</td><td>• EL8420 is situated over part of the Narraburra Complex, comprising three suites of alkaline granite at the triple junction of the Tumut, Girilambone-Goonumbla and Wagga Zones, central southern New South Wales. EL8420 straddles the northern edge of the junction between the Gilmore Fault and the Parkes Thrust, both structures known for their relationship to precious and base metal mineralisation.
• The Narraburra rare earth element (REE) mineralisation is hosted within the saprolite and saprock cap of highly fractionated Devonian alkaline and peralkaline granites.
• Mineralisation occurs within these alkaline units as concentric bands, wrapping around the southern and western side of the largest sub-unit in the Narraburra complex, the Bodingerra Granite.</td></tr>
<tr><td>Drill hole Information</td><td>• 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:</td><td>Drill hole information for drill holes from which the metallurgical samples were taken:
<table>
<tr><th>Hole ID</th><th>Hole Type</th><th>Lease ID</th><th>MGA55 East</th><th>MGA55 North</th><th>MGA_RL</th><th>Dip</th><th>Depth m</th></tr>
<tr><td>GNBDD011</td><td>DD</td><td>EL8420</td><td>551793.894</td><td>6202082.586</td><td>320.53</td><td>90</td><td>53.4</td></tr>
<tr><td>GNBDD017</td><td>DD</td><td>EL8420</td><td>552102.872</td><td>6202710.411</td><td>325.95</td><td>90</td><td>44.9</td></tr>
</table></td></tr>
<tr><td>Data aggregation methods</td><td>• 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.</td><td>• Oxide equivalents have been calculated as discussed above
• TREO grades reported in Table 1 are head assays of the entire interval of the composite sample, not a weighted average calculation.</td></tr>
<tr><td>Relationship between mineralization widths and intercept lengths</td><td>• 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.</td><td>• The holes were drilled at an average of -90˚ declination (i.e. vertical).
• The mineralisation has been interpreted as relatively flat lying.
• Therefore, mineralised intervals should be a close approximation of the true thickness.</td></tr>
<tr><td>Diagrams</td><td>• 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.</td><td>• Map pertaining to the location of the drill holes used for metallurgical testwork relative to the Narraburra REE Project Mineral Resource (Figure 2 from GRL announcement dated 19 February 2024).</td></tr>
</table>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GNBDD022
GNBDD017
GNBDD004
GNBDD011
GNBDD028
Map Legend
Titles & Cadastral
Narraburra EL8420 - EX9 JV
Exploration
2023 Narraburra MRE Outline
GRL Phase 2 Metallurgy
GRL drillholes
Historical drillholes
0
500
1,000
1,500
2,000 m

Criteria	JORC Code explanation	Commentary
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 Results.*	• All known details of the metallurgical results have been reported.
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.*	• See ASX announcements by Godolphin Resources (ASX: GRL) on 2nd March 2022, and Godolphin Resources (ASX: GRL) on 11 November 2022, and Capitol Mining Limited (ASX: CMY) on 9 November 2011.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Process Development Testing (Stage 3 metallurgical testwork program) continuing with results of liquid/solid separation, impurity removal and precipitation of a Mixed Rare Earth Carbonate (MREC) product pending. • Further metallurgical activities are currently under assessment. • These metallurgical activities are part of the Narraburra REE Project Scoping Study.