# **ASX Announcement**

26 March 2025



ASX: TMX FRA: T4Y

# High-grade rare-earth mineralisation approaching 1% TREO intersected at Lort River Project

Terrain Minerals Limited ("Terrain" or the "Company") is pleased to report that reconnaissance drilling at its Lort River Project, near Esperance in Western Australia, returned high-grade clay-hosted rare-earths, with the grades of individual samples approaching 1% TREO (total rare earth oxide; see Table 1 and Appendix 2).

In keeping with the Company's previously communicated strategy of advancing exploration across this site for both nickel-copper and rare earth elements (REEs), Terrain has now confirmed the project's potential to host the in-demand magnet rare earths of neodymium (Nd) and praseodymium (Pr) with assays as high as 2,362ppm  $Nd_2O_3$  and 647ppm  $Pr_6O_{11}$  being intersected in the latest round of drilling (see Table 1 and Appendix 2). Neodymium (Nd) and praseodymium (Pr) grades at this level compare extremely favourably to existing Australian and Brazilian clay-hosted rare earth projects.

The January 2025 drilling tested the two of five interpreted bedrock conductor targets, initially modelled as possible sulphide (nickel-copper) mineralisation<sup>1</sup> by geophysicists from a leading geophysical consulting firm<sup>2</sup>. The program comprised one reverse circulation (RC) hole into the modelled airborne electromagnetic (AEM or VTEM) conductor LRT-01 (being hole LTRC03) and two holes into AEM conductor LRT-02 (being holes LTRC01 and LTRC02) for a total of 829 metres drilled. The geological logs from these holes suggest the source of the conductors is potentially an alteration zone associated with an interpreted shear system with no economically significant base metal or gold values returned from this drilling campaign (See Table 2). The Company is presently reviewing the data for the remaining three modelled conductors in light of the results from this recent drilling. However, the results from hole LTRC03 obviously warrant further drilling focused on REEs across the Lort River Project, with a follow-up air core program currently being planned.

# Significant intersections from the reconnaissance drill program include:

- 8 metres @ 4,037ppm TREO from 23 metres down hole (LTRC03), including
  - 1 metres @ 9,842ppm (or 0.98%) TREO from 25 metres down hole and
    - $_{\odot}$  ~ 1 metres @ 9,022ppm (or 0.90%) TREO from 27 metres down hole

The results from hole LTRC03 (See diagram 2) indicate the need for further drilling focused on REEs within the Lort River Project. Terrain is now planning to create a regolith map over hole LTRC03 by reprocessing data from its VTEM survey. The primary area of interest sits along the margins of the circular mafic intrusive feature, which measures approximately 5km by 3km (refer to diagram 3). Since hole LTRC03 is situated within this margin, it is possible that the intrusion is influencing the elevated drill results. This insight will be valuable for targeting of the follow-up air core program currently in development.

Commenting on the results, Justin Virgin Executive Director of Terrain Minerals stated, "We are incredibly pleased to have intersected such impressive, rare-earth grades for our maiden drilling program within this new target

<sup>&</sup>lt;sup>1</sup> As reported by Terrain Minerals via the ASX Market Announcements Platform on 13 August 2024

<sup>&</sup>lt;sup>2</sup> As reported by Terrain Minerals via the ASX Market Announcements Platform on 24 January 2025

area, which compare more than favourably to the grades reported from other Australian and Brazilian clayhosted rare earth projects. Understanding, therefore, we will be accelerating our follow up (air core) drilling campaign across this area with the objective of rapidly seeking the understand the scale of the Lort River REE mineralisation, culminating in an anticipated Exploration Target early in the second half of the year".

Terrain remains heavily committed to 'future facing' commodities including gallium, copper and rare earths (in tandem with accelerating its gold program) with the Company being an active participant strategic government co-funded research projects into optimising the processing and extracting of these critical minerals<sup>3</sup>.

The thesis underpinning the Company's approach is that, as reaffirmed by Benchmark Mineral Intelligence earlier this year (see Appendix 1), western nations are increasingly taking steps to derisk their supply chains from China. As supply in many raw materials such as gallium and rare earths are driven primarily by Chinese production, Terrain expects to see meaningful investment in Australian-based critical minerals projects over the coming years from economies including the USA, the European Union and northeast Asia (i.e. Japan and Korea) as they continue to look to secure supply of these minerals to meet their rising domestic demand.

#### Table 1: Drill hole coordinates, orientations and depths

The data for the collars are provided in the Geocentric Datum Australia (GDA2020 Zone 51) Elevation is nominal height above mean sea level.

Drill hole	Easting (mE)	Northing (mN)	Elevation (m)	Down hole depth (m)	Azimuth	Dip
LTRC01	354307	6288196	182	300	125	-60
LTRC02	354243	6287986	182	277	120	-60
LTRC03	354697	6288891	182	252	140	-60

#### Table 2: Assay results

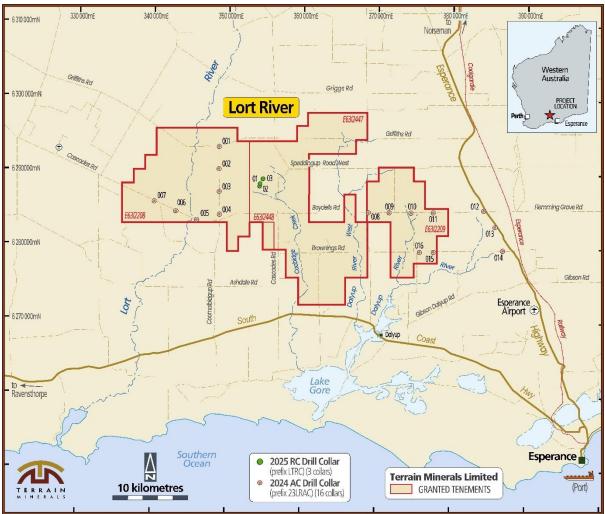
Lower cut of >1000ppm TREO, >1000ppm nickel, >1000ppm copper and no internal dilution.

Note to shareholders: the drill chip samples from all three reverse circulation holes (being LTRC01, LTRC02 and LTRC03) were submitted to Intertek for gold and base metal analysis by fire assay and four acid digestion respectively (with no significant gold or base metal intersections returned from the samples from all three holes). Only drill chip samples from hole LTRC03 were also submitted to Intertek for rare earth elements analysis via sodium peroxide fusion. Thus, at this time of this report, no analysis for rare earth elements have been undertaken on samples from drill holes LTRC01 and LTRC02.

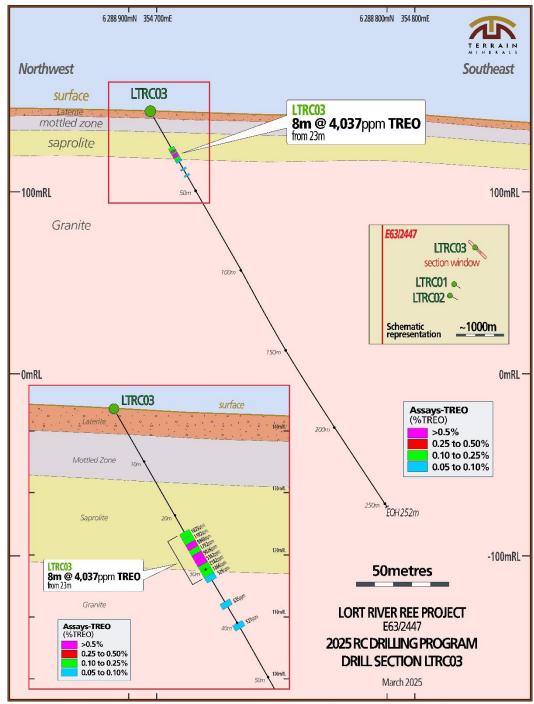
Hole ID	From (m)	To (m)	TREO (ppm)	Nickel (%)	Copper (%)	Expression
LTRC01	-	I	Awaiting assaying	NSI	NSI	-
LTRC02	-	-	Awaiting assaying	NSI	NSI	-
LTRC03	23	31	4,037	NSI	NSI	8 metres @ 4,037ppm TREO
including	25	26	9,842			1 metre @ 9,842ppm TREO
including	27	28	9,022			1 metre @ 9,022ppm TREO
including	28	29	5,352			1 metre @ 5,352ppm TREO

\* NSI: no significant intersection returned

<sup>&</sup>lt;sup>3</sup> As reported by Terrain Minerals via the ASX Market Announcements Platform on 5 December 2024

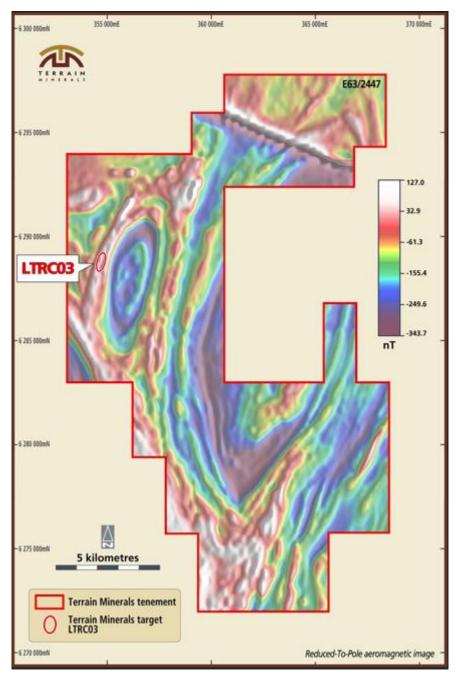


**Diagram 1:** Drill collar location plan for the three-hole reverse circulation (RC) drilling campaign completed by Terrain Minerals over its Lort River Project in January 2025.



**Diagram 2**: Schematic geological cross section of hole LTRC03, which formed part of Terrain Minerals' January 2025 drilling campaign at its Lort River Project in southwest Western Australia. Rare earth mineralisation within the Lort River Project appears to occur within the saprolite (or weathered bedrock) horizon immediately above the granitic bedrock. With only one hole having tested this mineralisation horizon at Lort River to date, the mineralisation (whose maximum grade is 0.98% total rare earth oxide, or TREO over individual metres) is therefore considered open in all directions. Importantly, the uranium levels reported in drill hole LTRC03 were less than 2ppm. For reference, the uranium levels of a standard household granite kitchen benchtop is between 10 and 20ppm<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> Source: https://www.psu.edu/news/research/story/probing-question-could-your-kitchen-counters-be-radioactive



**Diagram 3:** Hole LTRC03 can be seen on the edge of the mafic intrusive unit at Lort River.

Note: For additional information refer to ASX announcement on Lort River:

- 5 May 2022 Lort River (320km2) Rare Earth Project Highly Prospective Tenements Granted.
- 30 May 2022 High-Grade Clay Type Rare Earths (REE) Soil Anomaly Identified at Lort River Project.
- 21 Nov 2022 Rare Earths (REE) Exploration Planning for 2023 has Commenced at Lort River.
- 14 August 2023 Heritage approval received for maiden REE drilling at Lort River & Smokebush Exploration Update.
- 22 August 2023 Lort River 'REE' Maiden Drilling has Commenced.
  28 August 2023 Lort River 'REE' Drilling Intersected Large Clay Zones.
- 19 October 2023 Rare Earth Element (REE) Mineralisation Intersected across the Lort River project area
- 23 October 2023 Gallium Clays Mineralisation Intersected in all Drill holes at the Lort River (REE) Project.
- 22 February 2024 Nova-style "eye" feature identified within Albany-Fraser tenement; Conductor also identified within "eye" feature Detailed airborne electromagnetic survey to commence.
- 16 April 2024 Airborne electromagnetic contract awarded over the Nova-style "EYE" Target Commencing early May 2024 at Lort River Exploration Project.
- 07 May 2024 Airborne electromagnetic (VTEM) survey has now commenced over the Nova-style "EYE" at Lort River.
- 13 August 2024 High-Priority Nickel-Copper Targets Identified in Lort River Project's "Eye" Feature.
- 09 December 2024 Commencement of EM Survey at Lort River Testing Four Bedrock Sulphide Conductors (Nickel/Copper).
- **08 January 2025** 2025 Exploration Outlook: Gallium, Gold, Copper & Nickel.

Justin Virgin Executive Director

For further information, please contact:

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# **ABOUT TERRAIN MINERALS LIMITED:**

Terrain Minerals Limited (ASX: TMX) is a mineral exploration company with an asset portfolio that includes:

#### **Trade Opportunities:**

Terrain is open to commercial discussions in relation to the full or partial sale, and/or joint venture of the Company's non-core assets.

# **Smokebush Exploration Project**

100% owned exploration project located within the prospective Yalgoo Mineral Field of Western Australia which neighbours Warriedar Resources Limited's (ASX: WA8) Golden Dragon Project. The Company's previous exploration campaign have targeting gold, and other commodities across the tenement package:

#### Larin's Lane - Gallium (& REE) Project:

The maiden drilling program in late 2023 intersected broad zones of Gallium mineralisation over a ~9km by ~3km of interpreted strike. This mineralisation remains open in all directions and has the potential to grow into a significant clay/oxide hosted Gallium project. The project area benefits from year-round access and within close proximity to established mining infrastructure. A JORC compliant exploration target refer to ASX release on 06 September 2024 and Metallurgical studies have commended refer to ASX releases 05 December 2024.

Wildflower & Monza/Lightning Gold Targets/Project

- Wildflower/Cota/T16 and Lightning/Monza Gold Prospects:
  - Refer to ASX release 28 January 2025 for more details on recent drilling campaign and pending results.

# **Lort River Exploration Project**

100% owned exploration project that covers more than ~550km2 square kilometres of highly prospective exploration acreage located approximately 50 kilometres northwest of Esperance, Western Australia.

# • Lort River - Nickel Project:

Is situated within the highly prospective Albany-Fraser Belt, Refer to the above release for most recent update.

#### **Project Review**

Terrain continues to investigate potential projects across various commodities including gold, copper, nickel, and industrial minerals. Whilst Western Australian based projects are the Company's current focus, other parts of Australia are being seriously examined and considered as are other jurisdictions including, but not limited to, Africa, Europe, and the Americas across all commodities.

# **Pending Applications**

Terrain has several pending tenement (packages) applications across Australia. These applications include:

**Biloela: Copper & Gold Project** is located along strike of the Cracow Gold Mine in Queensland (See ASX release dated 21 June 2023 for more information on the rationale, geological setting and walk-up drill targets already identified within this key project area).

**Carlindie: Lithium Project** is strategically located between Wildcat Resources (ASX: WC8) and Kali Metals (ASX: KM1) tenements in the East Pilbara of Western Australia. The Company has prioritised the granting of its Carlindie tenement package and is continuing to work successfully towards achieving its goal.

**Note:** Terrain incurs no addition costs until pending applications are granted. Terrain's board also believes that having a strong project pipeline into the future ensures investors are able to see future value opportunities by being a shareholder of the Terrain Minerals Limited (ASX:TMX).

# Authority

This announcement has been authorised for release by Mr. Justin Virgin, Executive Director, Terrain Minerals.

# **Competent Person's Statement**

The information in this report is based on information compiled by Mr. Ben Jupp who is a Member of the Australian Institute of Geoscientists (AIG). Mr Jupp is not a shareholder or options holder of Terrain Minerals Limited, nor does Mr Jupp have any financial interest in Terrain Minerals. Mr Jupp is Principal Consultant (Geology) at SRK Consulting (Australia) Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Jupp consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# **ASX Listing Rule 5.23**

Previous Exploration Results re-issued in this report are extracted from the following Terrain Minerals reports, available to view on <a href="http://terrainminerals.com.au/investor-relations/asx-releases-reports">http://terrainminerals.com.au/investor-relations/asx-releases-reports</a>:

- "High-priority nickel-copper targets identified in Lort River Project's eye feature" created on 13 August 2024. Competent Person: Karen Gillgallon
- "Commencement of EM survey at Lort River Testing four bedrock sulphide conductors (Nickel/Copper)" created on 9 December 2024. Competent Person: Karen Gillgallon
- "Commencement of drilling of (vtem) bedrock sulphide conductors at the 100% owned Lort River Project" create on 16 January 2025. Competent Person: Karen Gillgallon

Terrain Minerals confirms that is it not aware of any new information or data that materially affects the information included in the original market announcements. Terrain Minerals confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

# **ASX Listing Rule 14.3**

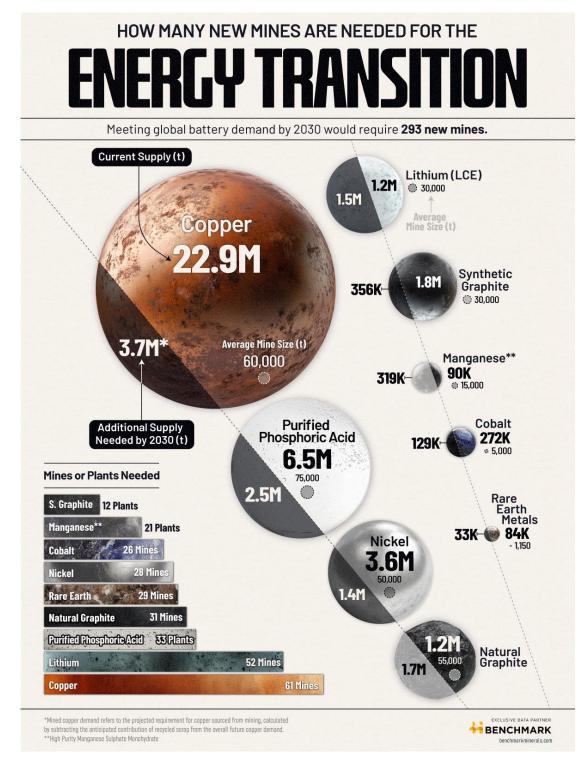
In accordance with ASX Listing Rule 14.3 and its Constitution, the Company advises that valid nominations for the position of Director remain open throughout the year.

# Disclaimer

Information included in this report constitutes forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue" and "guidance" or other similar words, and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs. Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the company's actual results, performance, and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the company operates or may in the future operate environmental conditions including extreme weather conditions, staffing and litigation. Forward looking statements are based on the company and its management's assumptions made in good faith relating to the financial, market, regulatory and other relevant environments that exist and effect the company's business operations in the future. Readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements are only current and relevant for the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the company does not undertake any obligation to publicly update or revise any of the forward-looking statements or advise of any change in events, conditions or circumstances on which such statement is based.

# Appendix 1

Benchmark: How many mines are needed for the energy transition?<sup>5</sup>



<sup>5</sup> Source: <u>https://source.benchmarkminerals.com/article/how-many-mines-are-needed-for-the-energy-</u> transition#/

# Appendix 2

Lort River Project: Stoichiometric oxide results returned from drill hole LTRC03

The following table provides a summary of rare earth oxide (REO) results (in parts per million; ppm) for each one-metre sample from reverse circulation (RC) drill hole LTRC03, which was drilled by Terrain Minerals in January 2025. The Company is yet to submit the samples from holes LTRC01 and LTRC02 (which were also drilled by Terrain Minerals in January 2025) to the laboratory for rare earth element analysis.

For reference, 1,000 ppm = 1,000 grams (or 1 kilogram) per tonne = 0.1%

From	То	CeO2	Dy203	Er203	Eu2O3	Gd2O3	Ho2O3	La2O3	Lu203	Nd2O3	Pr6011	Sm203	Tb407	Tm2O3	Y2O3	Yb2O3	TREO
		(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)									
0	1	73	6	3	2	7	1	49	0	42	12	8	1	0	35	3	242
1	2	56	4	2	1	4	1	27	0	23	7	5	1	0	21	2	153
2	3	32	2	1	1	2	0	11	0	10	3	2	0	0	10	1	78
3	4	16	1	0	0	1	0	11	0	5	1	1	0	0	3	1	39
4	5	14	1	0	0	1	0	10	0	5	1	1	0	0	4	1	37
5	6	11	0	0	0	0	0	9	0	2	1	0	0	0	2	0	27
6	7	20	1	1	0	1	0	15	0	5	2	1	0	0	3	0	48
7	8	11	0	0	0	0	0	9	0	3	1	0	0	0	2	0	28
8	9	10	0	0	0	1	0	8	0	3	1	1	0	0	2	0	26
9	10	11	0	0	0	0	0	9	0	3	1	1	0	0	2	0	28
10	11	12	0	0	0	0	0	10	0	3	1	0	0	0	2	0	30
11	12	24	1	0	0	1	0	20	0	7	2	1	0	0	3	0	61
12	13	14	1	0	0	0	0	11	0	3	1	1	0	0	3	1	35
13	14	14	1	1	0	1	0	8	0	3	1	1	0	0	3	1	33
14	15	16	1	1	0	1	0	5	0	3	1	1	0	0	3	1	31
15	16	11	0	0	0	0	0	6	0	2	1	0	0	0	2	1	25
16	17	19	1	0	0	1	0	12	0	5	2	1	0	0	3	0	43
17	18	87	5	2	2	6	1	47	0	39	11	8	1	0	16	1	227
18	19	59	2	2	1	2	0	12	0	13	4	3	0	0	12	2	113
19	20	67	3	2	1	3	1	21	0	19	5	4	0	0	13	1	140
20	21	35	1	1	0	1	0	8	0	8	2	2	0	0	8	1	69
21	22	45	1	1	0	1	0	5	0	6	2	2	0	0	11	1	78
22	23	256	6	4	2	7	1	39	1	50	14	10	1	1	35	4	431
23	24	843	30	15	10	36	6	286	2	277	78	53	5	2	153	13	1808
24	25	738	12	7	3	14	2	81	1	99	27	19	2	1	64	6	1076
25	26	1682	291	149	94	361	56	2122	14	2362	647	470	54	19	1414	109	9842
26	27	662	35	19	11	44	7	301	2	328	89	60	6	2	196	14	1778
27	28	2864	215	132	59	251	46	1555	13	1645	437	303	37	17	1355	93	9022
28	29	1810	125	83	30	138	28	869	9	805	216	153	21	11	991	64	5352
29	30	829	50	31	13	55	10	320	3	332	90	63	8	4	335	23	2168
30	31	427	32	24	6	31	8	154	3	158	41	30	5	3	310	19	1251
31	32	177	12	8	3	12	3	74	1	74	20	14	2	1	104	6	510
32	33	143	7	4	2	7	1	62	1	61	17	11	1	1	38	4	360
33	34	142	8	4	2	9	2	58	1	63	18	11	1	1	41	4	365
34	35	146	8	5	2	8	1	61	1	66	18	12	1	1	41	4	376
35	36	166	10	6	3	11	2	75	1	75	21	14	2	1	63	5	453
36	37	223	13	8	4	16	3	111	1	106	30	19	2	1	81	6	623
37	38	97	5	3	2	5	1	46	0	41	12	7	1	0	26	3	248
38	39	146	8	5	2	10	2	65	1	68	19	13	2	1	46	4	391
39	40	174	10	6	3	13	2	84	1	81	21	16	2	1	53	4	471
40	41	183	11	6	3	14	2	87	1	85	23	17	2	1	61	5	500
41	42	141	8	5	3	10	2	67	0	64	17	13	2	1	45	3	381
42	43	180	8	5	3	10	2	96	0	71	20	13	2	1	45	3	460
43	44	167	8	4	3	10	1	86	0	67	19	12	1	1	43	3	424
44	45	101	6	3	2	7	1	46	0	45	12	10	1	0	31	3	270
45	46	109	7	4	2	8	1	50	0	51	14	10	1	1	37	3	298
46	47	120	6	4	2	8	1	57	0	54	15	11	1	0	38	3	322
47	48	120	7	4	2	8	1	54	0	56	15	11	1	0	34	3	317
48	49	115	7	4	2	9	1	52	0	52	14	10	1	0	40	3	310
49	50	94	5	3	2	7	1	43	0	42	12	8	1	0	29	2	249
50	51	154	9	5	3	11	2	73	1	72	19	14	2	1	49	4	418
51	52	126	8	5	2	9	2	56	0	62	16	12	1	1	41	4	344
52	53	128	6	3	2	8	1	57	0	57	16	11	1	0	31	3	325
53	54	147	5	3	2	7	1	69	0	61	18	10	1	0	25	2	350
54	55	134	4	2	2	5	1	63	0	54	16	9	1	0	19	1	311
55	56	109	5	2	2	5	1	49	0	48	13	8	1	0	23	2	268
56	57	132	3	2	2	5	1	59	0	53	15	8	1	0	17	1	299
57	58	107	3	2	2	5	1	49	0	46	13	8	1	0	15	1	252

50	50	102	2	1	2	4	0	46	0	45	14	7	1		11	1	227
58 59	59 60	102 96	3	1	2	4	0	46 44	0	45 39	14 11	7	1	0	11 22	1	237 235
60	61	52	3	2	1	3	0	25	0	20	6	4	0	0	16	1	133
61	62	60	3	2	1	4	1	28	0	27	7	5	1	0	21	2	164
62	63	58	4	2	2	4	1	27	0	25	7	5	1	0	18	2	154
63	64	67	3	2	2	4	1	30	0	29	8	5	1	0	19	2	173
64	65	24	3	2	1	3	1	10	0	12	3	3	0	0	18	2	82
65	66	20	2	1	1	2	0	9	0	11	3	2	0	0	10	1	63
66	67	38	3	2	1	4	1	14	0	20	5	4	1	0	19	2	115
67	68	14	1	1	1	1	0	6	0	7	2	2	0	0	6	1	41
68	69	9	1	0	1	1	0	4	0	4	1	1	0	0	4	0	25
69	70	8	1	0	1	1	0	4	0	4	1	1	0	0	4	0	24
70	71	6	1	0	1	1	0	3	0	3	1	1	0	0	4	1	22
71	72	9	1	1	1	1	0	4	0	5	1	1	0	0	9	1	34
72	73	6	1	0	1	1	0	3	0	3	1	1	0	0	4	0	20
73	74	6	1	1	1	1	0	3	0	3	1	1	0	0	4	1	22
74	75	12	1	1	1	1	0	6	0	6	2	1	0	0	7	1	39
75	76	21	1	1	1	2	0	9	0	10	3	2	0	0	8	1	58
76	77	23	1	1	1	2	0	9	0	11	3	2	0	0	8	1	62
77	78	25	2	1	1	2	0	10	0	10	3	2	0	0	9	1	67
78	79	35	3	2	2	4	1	14	0	18	5	4	1	0	21	2	111
79	80	20	2	1	1	2	0	9	0	11	3	2	0	0	13	2	66
80	81	23	1	1	1	2	0	10	0	10	3	2	0	0	7	1	61
81	82	16	1	1	1	1	0	7	0	8	2	2	0	0	9	1	49
82	83	8	1	1	1	1	0	3	0	5	1	1	0	0	9	1	34
83	84	5	0	0	1	0	0	2	0	3	0	0	0	0	3	0	17
84	85	8	2	1	1	1	0	3	0	5	1	1	0	0	10	1	35
85	86	21	1	1	1	1	0	9	0	10	3	2	0	0	7	1	57
86	87	52	3	1	1	3	0	23	0	23	6	4	0	0	15	1	134
87	88	55	4	2	1	4	1	23	0	26	7	5	1	0	22	2	154
88	89	91	4	2	2	6	1	39	0	40	10	7	1	0	25	2	230
89	90	103	5	2	2	6	1	45	0	44	12	8	1	0	26	2	256
90	91	124	6	3	2	8	1	54	0	57	16	11	1	0	33	3	319
91	92	134	8	4	2	9	1	56	0	63	17	12	1	1	38	3	350
92	93	117	8	4	2	9	1	49	1	56	15	12	1	0	39	4	317
93	94	142	7	4	2	9	1	62	0	62	17	11	1	0	40	4	363
94	95	143	8	4	3	9	1	62	0	64	17	11	1	0	42	3	371
95	96	121	7	4	2	8	1	51	0	56	15	11	1	1	40	4	323
96	97	151	10	5	3	11	2	64	1	68	19	13	2	1	57	5	408
97	98	146	9	5	3	10	2	61	1	64	19	12	2	1	53	5	390
98	99	153	7	4	2	9	1	68	0	65	18	11	1	1	38	3	381
99	100	161	7	4	2	9	1	71	0	69	10	11	1	0	39	3	401
100	100	176	7	3	2	9	1	71	0	70	20	12	1	0	39	3	401
100	101	103	5	3	2	6	1	44	0	45	12	7	1	0	26	2	256
101	102	74	4	2	2	4	1	32	0	43	9	5	1	0	20	2	187
102	103	100	4	2	2	4 5	1	43	0	31	9 11	7	1	0	21	2	237
103				2	2							7				2	
104	105 106	106 150	4	2	2	5	1	49 69	0	38 53	11 16	9	1	0	23 29	2	249 348
							1										
106	107	128	5	3	2	6	1	58	0	49	14	8	1	0	28 27	3	307 247
107	108	99	5	3	2	6	1	43	0	39	11		1	0		2	
108	109	108	5	3	2	6	1	45	0	45	13	8	1	0	29	3	268
109	110	97	4	3	2	6	1	41	0	40	11	7	1	0	27	3	242
110	111	93	5	3	2	6	1	38	0	41	11	8	1	0	29	3	240
111	112	102	5	3	2	6	1	43	0	45	12	8	1	1	30	3	261
112	113	99	4	3	2	6	1	43	0	41	11	7	1	0	25	3	247
113	114	125	6	3	2	8	1	54	0	53	14	10	1	0	31	3	310
114	115	141	7	4	3	9	1	63	0	61	17	11	1	1	41	3	364
115	116	161	8	4	3	11	1	73	1	70	19	12	2	1	43	3	412
116	117	155	8	4	3	10	2	68	1	70	19	12	1	1	43	3	399
117	118	144	7	4	3	9	1	64	0	61	16	11	1	0	41	4	368
118	119	147	7	3	3	8	1	66	0	62	17	11	1	0	38	3	368
119	120	136	7	4	3	8	1	60	0	57	15	11	1	1	39	3	347
120	121	139	6	3	2	7	1	65	0	53	15	10	1	0	31	2	336
121	122	143	5	3	2	7	1	66	0	54	15	9	1	0	30	2	339
122	123	130	4	2	2	5	1	61	0	43	13	7	1	0	22	2	293
123	124	118	3	2	2	5	1	56	0	40	12	6	1	0	18	1	265
124	125	119	3	1	2	4	0	57	0	40	12	6	1	0	16	1	263
125	126	134	5	3	2	7	1	65	0	55	16	9	1	0	30	3	331
126	127	177	7	4	3	10	1	85	0	75	21	13	1	1	39	3	441
127	128	138	6	3	2	8	1	64	0	59	16	11	1	0	34	3	347
128	129	137	4	2	2	6	1	70	0	51	15	8	1	0	19	1	318
129	130	120	5	2	2	6	1	58	0	47	13	8	1	0	24	2	289
129		-	-						-		-	-			1		

130	131	139	5	2	2	7	1	67	0	54	15	11	1	0	28	2	336
130	131	139	7	3	2	10	1	86	0	78	22	11	1	0	37	3	450
132	133	151	5	2	3	8	1	71	0	64	18	11	1	0	27	2	364
133	134	110	4	2	2	5	1	54	0	46	14	8	1	0	19	2	269
134	135	141	5	2	3	7	1	67	0	56	16	10	1	0	27	2	339
135	136	68	3	1	1	4	0	33	0	29	8	5	0	0	13	1	168
136	137	72	2	1	1	3	0	36	0	28	8	5	0	0	13	1	172
137	138	42	2	1	1	3	0	19	0	21	6	4	0	0	12	1	113
138 139	139 140	35 45	2	1	1	3	0	16 19	0	17 24	4	3 5	0	0	11 16	1	96 127
140	140	108	5	2	3	8	1	48	0	54	14	11	1	0	26	2	284
141	142	83	4	2	2	7	1	37	0	44	11	9	1	0	23	2	227
142	143	106	5	3	3	8	1	49	0	52	14	10	1	0	26	2	280
143	144	100	4	2	3	7	1	48	0	48	13	9	1	0	23	2	261
144	145	36	3	2	1	3	1	15	0	19	5	4	0	0	19	2	111
145	146	18	2	1	1	2	1	7	0	10	3	2	0	0	17	2	68
146 147	147 148	40 68	3 5	2	1	4	1	17 30	0	20 34	5 9	4	1	0	24 33	2	125 203
147	148	40	3	2	1	3	1	19	0	19	5	4	0	0	22	2	121
149	150	29	2	2	- 1	2	1	14	0	13	4	3	0	0	20	1	92
150	151	19	1	1	1	1	0	12	0	8	2	2	0	0	10	1	58
151	152	22	2	1	0	2	0	10	0	11	3	2	0	0	19	2	76
152	153	19	2	1	0	2	0	9	0	9	2	2	0	0	15	1	65
153	154	28	2	1	0	2	0	14	0	12	4	2	0	0	20	1	90
154 155	155	30	3	2	1	3 5	1	15 23	0	14	4	3	0	0	19 20	1	95 156
155	156 157	53 76	4	2	2	5	1	23 35	0	31 35	10	6	1	0	20	2	208
150	157	124	4	2	2	5	1	65	0	49	10	8	1	0	16	1	208
158	159	98	3	1	2	4	0	53	0	37	11	6	1	0	16	1	233
159	160	100	2	1	2	3	0	60	0	29	10	4	0	0	8	1	220
160	161	64	4	2	2	4	1	30	0	28	8	6	1	0	19	1	169
161	162	87	3	2	2	4	1	42	0	36	10	6	1	0	18	1	213
162	163	78	4	2	2	5	1	37	0	33	9	6	1	0	21	2	200
163 164	164 165	92 76	4	2	2	5 4	1	43 35	0	40 29	11 8	7 5	1	0	22 17	2	233 184
165	166	80	3	2	2	4	1	39	0	33	9	6	1	0	20	2	202
166	167	73	3	2	2	4	1	35	0	30	8	5	0	0	17	1	181
167	168	83	3	2	2	4	1	41	0	32	9	6	1	0	18	2	202
168	169	56	3	2	2	4	1	25	0	26	7	5	1	0	19	2	152
169	170	58	3	2	2	4	1	27	0	25	7	5	1	0	19	1	154
170	171	86	3	2	2	4	1	40	0	35 35	10	6	1	0	20	2	212
171 172	172 173	81 63	4	2	2	5 4	1	37 29	0	35	9 8	6 6	1	0	23 20	2	208 171
172	174	78	3	2	2	4	1	36	0	31	9	6	1	0	18	2	193
174	175	155	4	2	2	6	1	77	0	57	17	9	1	0	21	2	353
175	176	119	3	2	2	5	1	59	0	45	13	7	1	0	18	2	277
176	177	103	6	3	2	6	1	46	1	46	12	9	1	0	33	3	272
177	178	126	3	2	2	6	1	61	0	46	14	7	1	0	20	2	291
178	179	125	3	2	2	4	1	63	0	40	13	6 7	1	0	20	2	282 264
179 180	180 181	110 104	4	2	2	5	1	55 51	0	40 37	12 11	7	1	0	22 23	2	264 250
180	182	75	3	1	1	3	0	37	0	25	7	4	0	0	15	1	174
182	183	90	5	3	2	7	1	38	0	42	11	8	1	0	31	3	243
183	184	112	5	3	2	6	1	49	0	46	13	8	1	0	26	2	275
184	185	49	3	2	1	4	1	22	0	22	6	4	1	0	18	2	135
185	186	97	5	2	2	6	1	44	0	46	12	8	1	0	25	2	253
186 187	187 188	71 109	4	2	2	5 8	1	32 49	0	31 49	8 13	6 9	1	0	22 29	2	185 281
187	189	109 52	3	2	2	0 4	1	23	0	23	6	5	1	0	19	2	142
189	190	109	5	2	2	6	1	51	0	41	12	7	1	0	25	2	264
190	191	145	4	2	2	6	1	73	0	50	15	8	1	0	21	1	329
191	192	148	5	2	2	6	1	76	0	51	15	9	1	0	26	2	344
192	193	114	4	2	1	5	1	57	0	39	12	6	1	0	23	2	267
193	194	142	4	2	2	6	1	71	0	50	15	8	1	0	23	2	326
194	195	119	4	2	2	5	1	59 38	0	41 34	12	6	1	0	21	2	273
195 196	196 197	82 94	4	2	2	5	1	38 46	0	34 37	9 10	6 7	1	0	23 24	2	209 236
190	197	130	3	2	2	5	1	66	0	44	10	7	1	0	16	1	230
198	199	91	2	1	2	3	0	45	0	32	10	5	0	0	10	1	201
199	200	133	3	2	2	5	1	66	0	44	13	7	1	0	17	1	294
2.2.2	201	219	4	2	2	7	1	113	0	68	21	10	1	0	21	2	472
200 201	201	143	3	1	2	5	1	71	0	51	15	8		0	17	2	320

202	202	70	7	4	2	7	1	22	1	22	0	0	1	1	42	4	222
202	203 204	70 65	7	4	2	7	1	32 28	1	33 30	8	8	1	1	43 28	4	222
203			5	3	2	-	1	-	-		8	-	1	-	-	3	184
204	205	82	4	2	2	6	1	36	0	37	9	7	1	0	26	2	216
205	206	85	5	2	2	6	1	39	0	38	10	7	1	0	25	2	224
206	207	114	5	3	2	6	1	52	0	45	13	8	1	0	28	3	281
207	208	132	5	3	2	7	1	65 82	0	48 57	14 17	8	1	0	28	3	316
208	209	163	5	3	2	7	1		0			10	1	0	26	2	374
209	210	103	4	2	2	5	1	48	0	40	11	7	1	0	23	2	250
210	211	91	4	2	2	6	1	43 40	0	39 39	11 10	7	1	0	23 25	2	231
211	212	89	4	2	2		1		0				1			2	230
212	213	101 97	5	2	2	6	1	46 45	0	44 40	12 11	8	1	0	26 26	2	255 247
213	214	-			2		1	45	-	40	11	8	1		26	2	247
214 215	215 216	103 139	4	3	2	6 6	1	46 68	0	42 52	11	8	1	0	27	3	328
216 217	217	132 123	5	2	2	6 6	1	64 60	0	50 47	14 14	9 8	1	0	22 21	2	311
217	218 219	123	3	2	2	4	1	55	0	47 36	14	8 6	1	0	14	2	291 247
218	219	111 116	3	2	2	4	1	55	0	36 40	11	6 7	1	0	14 20	2	247
219	220	116	4	2	2	5	1	62	0	40	12	7	1	0	20	2	269
220	221	126	3	1	2	4	0	58	0	38	13	6	0	0	14	1	291 256
221	222	131	4	2	2	5	1	58 64	0	45	12	8	1	0	21	2	236
222	223	131	6	3	2	7	1	64 54	0	45	13	9	1		36	3	298
223	224	114	5	3	2	7	1	66	0	40 51	15	9	1	1	29	2	328
224	225	137	5	3	2	6	1	60	0	50	15	9	1	0	29	2	318
225	220	133	7	3	2	8	1	65	0	50	14	9 11	1	0	38	3	318
220	227	142	5	2	2	6	1	61	0	45	17	8	1	0	26	2	299
227	220	120	4	2	2	5	1	58	0	43	14	7	1	0	20	2	279
228	229	120	4	2	2	5	1	61	0	44	13	7	1	0	21	2	279
229	230	124	6	3	2	7	1	58	0	50	13	10	1	0	32	3	312
230	231	124	6	3	2	8	1	68	0	53	14	10	1	0	33	3	348
231	232	143	4	2	2	6	1	58	0	49	13	8	1	0	24	2	296
232	233	158	6	3	2	7	1	79	0	55	14	10	1	0	29	3	371
233	234	129	4	2	2	5	1	64	0	48	13	7	1	0	29	2	298
235	235	101	5	2	2	6	1	49	0	39	11	7	1	0	20	2	230
235	237	125	5	3	2	6	1	61	0	48	14	8	1	0	24	2	303
230	238	149	4	2	2	6	1	75	0	50	15	8	1	0	25	2	340
237	239	145	2	1	1	3	0	69	0	34	13	5	0	0	12	1	266
230	240	102	2	1	1	3	0	54	0	30	12	4	0	0	9	1	216
240	240	162	2	1	1	3	0	92	0	45	15	5	0	0	11	1	344
240	242	221	3	1	1	5	1	121	0	62	21	8	1	0	15	1	461
242	243	138	1	1	1	3	0	75	0	39	13	5	0	0	7	1	285
242	244	130	1	1	1	3	0	73	0	37	13	5	0	0	5	0	203
244	245	148	1	0	1	3	0	82	0	40	12	5	0	0	7	0	300
245	246	116	1	1	1	3	0	63	0	32	11	4	0	0	8	0	241
246	247	188	3	2	2	5	1	99	0	52	18	8	1	0	18	1	403
240	248	100	5	3	2	7	1	60	0	46	13	8	1	0	28	3	304
247	249	120	7	4	2	8	1	56	0	52	13	10	1	1	37	3	316
249	250	140	6	3	2	7	1	68	0	52	15	9	1	0	33	3	341
250	251	143	6	3	2	7	1	69	0	52	15	9	1	0	32	3	344
250	252	1.0	5	5	-	,	-		5	52	10		-	5	52	5	
231	232						l				I	I	I	1	I		<u> </u>

# Appendix 3

Lort River Project: JORC Table 1 The following table provides a summary of important assessment and reporting criteria used at the Lort River Project for the reporting of Exploration Results in accordance with the Table 1 checklist in The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition). Criteria in each section apply to all preceding and succeeding sections.

# SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	Commentary
Sampling techniques	The drilling was conducted as a reconnaissance program to assist in assessing the prospectivity of the Lort River Project.
	Drilling was supervised and samples collected by field personnel from both Terrain Minerals and Apex Geoscience, the latter being an independent geological consultancy.
	Drill holes on the 2025 program included three reverse circulation (RC) holes.
	Samples were collected at one-metre intervals from a rig-mounted cone splitter. The sample weights were approximately three kilograms in size.
	RC drill chip samples from all three holes (being LTRC01, LTRC02 and LTRC03) were submitted to Intertek in Perth, Western Australia for sample preparation (pulverise to 85% passing 75 microns) and analysis for gold by 50g fire assay with AAS finish and a suite of elements (including base metals) by four acid digestion.
	RC drill chip samples from hole LTRC03 (only) were also submitted to Intertek in Perth for analysis via sodium peroxide fusion (Intertek code FP6/OM55) in relation to the suite of rare earth elements.
	At this time of this report, no analysis for rare earth elements have been undertaken on samples from drill holes LTRC01 and LTRC02.
Drilling techniques	The drilling was completed in 2025 by KTE Mining Services using a truck mounted reverse circulation (RC) drill rig with auxiliary compressor.
	RC drilling used a 4 $\frac{1}{2}$ inch face sampling hammer.
	All holes have a nominal dip of -60°, with downhole orientation survey performed every ten metres for the entire length of each hole.
Drill sample recovery	An assessment of recovery was limited to visual assessment of the volume of sample collected from each interval.
	There is insufficient information available to determine whether there is a relationship between sample recovery and grade. Given the nature of the material and the sampling method, a significant relationship is not expected.
	The drill string and cyclone were flushed at the end of each hole to reduce the likelihood of contamination.
Logging	Geological logs were prepared for the entirety of all holes and provided in electronic form.
	The logging is qualitative and quantitative in nature and data have been collected over the total lengths of the holes. Logging included regolith, weathering, lithology and colour.
	The logs were prepared from a visual examination of the drill cuttings.

	The logging of the reverse circulation (RC) chips was done after sieving and washing of the material collected from the cyclone.
Sub-sampling techniques and sample preparation	The drill samples were collected at one metre intervals through a cone splitter mounted to a vertical cyclone. The samples were collected as approximately three-kilogram sub-sample splits.
	All samples were prepared and assayed by Intertek in Perth.
	The samples were prepared in a conventional manner, which included sorting, oven drying at 105°C, crushing to 90% passing 2 mm, and pulverising in a vibrating disc pulveriser to 85% passing 75 $\mu$ m. Where necessary, larger samples were split to <3 kilograms in size prior to crushing and pulverising.
	The sample sizes and analysis size are considered appropriate to correctly represent the mineralisation based on the style of mineralization, sampling methodology and assay value ranges for the commodities of interest.
	The weights of the one metre samples were not recorded.
	As outlined above, this work was conducted as part of a reconnaissance program. Procedures specifically designed to maximise recovery and monitor quality were not included.
	The sample size is considered to be suitable for this style of mineralisation.
Quality of assay data and laboratory tests	25-gram samples were used for gold analysis by fire assay with AAS finish and for a suite of elements (including base metals) by four acid digestion.
	Sodium peroxide fusion (Intertek code FP6/OM55) was used when analysing for rare earth elements in drill hole LTRC03 (only).
	At this time of this report, no analysis for rare earth elements have been un- dertaken on samples from drill holes LTRC01 and LTRC02.
	Quality control samples consisted of certified reference material (3:100) and field duplicates (2:100). Duplicates were created by replicating the sampling process from the primary sample, submitted with a separate sample number and submitted with the same batch.
	All the results were checked by Expedio before being used, and all the analysed batches performed within acceptable accuracy and precision limits for the style of mineralisation.
	No material contamination was noted in the laboratory process.
Verification of sampling and assaying	As outlined above, this work was conducted as part of a reconnaissance program; hence no twin drilling has been conducted to date.
	All logging and assay data are stored within an independently managed database, with auto-validation of all data.
	The assay data were provided by the laboratory in elemental form.
	Multi-element elemental results (REE) are converted to stoichiometric oxide (REO) using element-to-stoichiometric conversion factors.

	Element	Conversion Factor	Oxide form	]
	Ce	1.2284	CeO <sub>2</sub>	
	Dy	1.1477	Dy <sub>2</sub> O <sub>3</sub>	
	Er	1.1435	Er <sub>2</sub> O <sub>3</sub>	
	Eu	1.1579	Eu <sub>2</sub> O <sub>3</sub>	
	Gd	1.1526	Gd <sub>2</sub> O <sub>3</sub>	
	Но	1.1455	Ho <sub>2</sub> O <sub>3</sub>	
	La	1.1728	La <sub>2</sub> O <sub>3</sub>	
	Lu	1.1371	Lu <sub>2</sub> O <sub>3</sub>	
	Nd	1.1664	$Nd_2O_3$	
	Pr	1.2082	$Pr_6O_{11}$	
	Sm	1.1596	Sm <sub>2</sub> O <sub>3</sub>	
	Tb	1.1762	Tb <sub>4</sub> O <sub>7</sub>	
	Tm	1.1421	Tm₂O₃	
	Y	1.2699	$Y_2O_3$	
	Yb	1.1387	Tb <sub>2</sub> O <sub>3</sub>	
	Minerals (as James Cook <u>Element-to-s</u> Rare Earth C earths metal	shown in the ab University (amo stoichiometric ox oxide (REO) is th s. The following	ove table) are ngst others.) s kide conversion e industry acc calculations a	n factors used by Terrain in line with that report by See <u>Advanced Analytical Centre</u> <u>n factors - JCU Australia</u> cepted form for reporting rare ire used for compiling REO into
	TREO (Total		$e) = La_2O_3 + 0$	CeO2 + Pr2O3 + Nd2O3 + Sm2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu20
	LREO (Light Eu2O3 + Gd24		$e) = La_2O_3 + 0$	$CeO_2 + Pr_2O_3 + Nd_2O_3 + Sm_2O_3$
		y Rare Earth Ox O <sub>3</sub> + Lu <sub>2</sub> O <sub>3</sub> + Y <sub>2</sub>		$+ Dy_2O_3 + Ho_2O_3 + Er_2O_3 +$
	MREO (Magr	et Rare Earth O	xide) = $Pr_2O_3$	+ $Nd_2O_3$ + $Tb_4O_7$ + $Dy_2O_3$
ocation of data points	accuracy of five	metres and the le database, pen	data were rec	eld Garmin GPS with an corded on a spreadsheet and curate surveying to be done at a
	The topography above mean sea		with an avera	ge elevation of 182 metres

	The data for the collars are provided in the Geocentric Datum of Australia (GDA202 zone 51)
	Downhole surveys were completed as part of this drill program.
Data spacing and Distribution	The drill hole spacing was not based on a regular grid but, rather, each hole was designed to test a specific modelled conductor plate. The location of each drill hole is shown diagrammatically within Diagram 1 within the main body of this report.
	The current data spacing is not sufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource Estimation.
Orientation of data in relation to geological structure	Drilling is mainly oriented perpendicular to the interpreted strike direction the plate model in each location; however, there may be multiple mineralisation events and there is insufficient data to confirm the geological model. Thus, no comment can be made at this point on whether the dip and direction of dip has resulted in biased sampling due to insufficient information.
Sample security	The sample security consisted of the samples being collected from the field into pre-numbered calico bags and loaded into polyweave bags for transport to the laboratory. The chain of custody for samples from collection to delivery at the laboratory was handled by Terrain personnel.
	The sample submission was submitted by email to the lab, where the sample counts and numbers were checked by laboratory staff.
Audits or reviews	No external audits have been performed at this early stage of the project.
	The database containing the data related to all Terrain Minerals exploration program is internally checked and reviewed periodically and no issue has been found for the reported data.

# SECTION 2: REPORTING OF EXPLORATION RESULTS

Criteria	Commentary
Mineral tenement and land tenure status	All Terrain Minerals tenements are kept with respect to the legislation in terms of obligations including minimum expenditure.
	The Lort River is located within Exploration Licence E63/2447, which is $100\%$ owned by Terrain Minerals and expires on $2^{nd}$ of April 2027.
	There are no material issues with third parties in relation to this tenement.
	There are no known implements to future exploration within this tenement.
Exploration done by other parties	The historic exploration across Terrain Minerals' Lort River Project by other parties are acknowledged, appraised and reported by Terrain Minerals via the ASX Market Announcements Platform on 30 May 2022. (Competent Person: Steven Nicholls).
	Terrain Minerals is unaware of any additional exploration beyond that described in its 30 May 2022 ASX announcement.

Geology	Terrain Minerals' working thesis mirrors that of IGO Limited (ASX: IGO) in that the Nova discovery, along with other known magmatic nickel-copper sulphide occurrences within the Albany-Fraser Belt (within which the Company's tenement E 63/2447 is located), are proof of the fertility of the region for more discoveries
	Like IGO's exploration team, Terrain Minerals is operating on the hypothesis that this belt should host multiple significant magmatic nickel-copper sulphide deposits, analogous to the Thompson Belt in Canada.
	The rare earth mineralisation within the Lort River Project appears to occur in the weathered profile (in-situ regolith clays) adjacent to and above granitoids of the Albany Fraser Orogen. Further test work is required before the Company can make any statements as to the nature of the rare earth mineralisation, including whether the mineralisation is iconic in nature.
Drill hole information	Table 1 of this report provides details of drill hole coordinates, orientation and length for all drill holes.
Data aggregation methods	Any average intercept grades represented in this report are length-weighted averages above 1000ppm total rare earth oxide (TREO) or 0.2g/t gold or 1000ppm nickel or 1000ppm copper with no internal dilution.
Relationship between mineralisation widths and intercept lengths	Insufficient data is available to confirm the geological model and, as such, all results are reported in downhole widths; the true width is still unknown.
Diagrams	Plans are included in the release as below:
	Regional location map and drillhole collar plan (Diagram 1) and Geological cross section of drillhole LTRC003 (Diagram 2)
Balanced reporting	Results above 1000ppm total rare earth oxide (TREO) or 0.2g/t gold or 1000ppm nickel or 1000ppm copper are reported for all three drilled holes. In the Competent Person's opinion, the Exploration Results reported in this announcement have been reported in a balanced manner.
Other substantive exploration data	All relevant data has been included in this release.
Further work	Terrain Minerals is still evaluating and interpreting the results from the January 2025 drill program and associated data, which will help guide the direction (if any) of further work in across the Lort River Project in 2025.
	Further work may include submitting the samples from holes LTRC01 and/or LTRC02 for rare earth element analysis via via sodium peroxide fusion, follow- up air core drilling across areas of interest and metallurgical test work of se- lected intervals from drill hole LTRC003 understand the nature of the REE min- eralisation.