# **ASX Announcement**



29 July 2024

ABN: 45 116 153 514 ASX: TMX

# Quarterly Activities Report: June 2024

**Terrain Minerals Limited (ASX: TMX**) (**Terrain**) is pleased to provide the following update across multiple exploration campaigns, projects and marketing activities during the June 2024 quarter:

#### **HIGHLIGHTS:**

#### <u>Lort River 100% - Nickel/Copper Project</u> - VTEN Survey Completed

- Helicopter AEM Survey (VTEM Max) completed in May 2024, flying over 1,281km km line survey.
- The aim of the Vtem survey was to better define the New Conductor, recently identified by Terrain and to test the whole 'EYE' feature & tenement for additional targets.
- Flight data has been received by Terrain and is now currently with Southern Geo Science with results expected back in August 2024.
- Nova-Bollinger style "EYE" feature interpreted within Terrain's tenement E63/2447. Evidence suggests that magmatic nickel-copper ore bodies tend to occur as clusters along a geological-belts.
- The Lort River project is located within the Albany-Fraser belt which hosting the Nova-Bollinger ore bodies and the Tropicana gold mine. The majority of the past exploration has been focused on the northern part of the belt, with minimal exploration conducted over the southern areas which is predominantly located over freehold cropping land.

#### Smokebush 100% -Gallium (REE) & Gold Project

#### Larin's Lane Project - Highly successful Gallium (Ga) drilling results:

- Excitingly ~70% of holes returned impressive intersections of Gallium up to **64m wide**.
- Multiple higher-grade zones up to 53.74 ppm Ga<sub>2</sub>O<sub>3</sub>.
- Target area is currently 9km long and up to 2km wide and remains open.
- The Gallium appears to sit in the upper zones above the REE mineralisation, within layers of clay regolith.
- The Larin's Lane REE + Gallium Project is located within the newly Emerging Midwest clay-hosted rare earth elements (REE) district of Western Australia. With 27 holes have so far retuned REE above the 1,000ppm TREO lower cut-off.

Note: JORC information for above results ASX release; 19 October 2023 and 27 May 2024.

• Three historic gold targets. Currently under assessment for potential drilling, quotes being assessed.

#### Continues to page 2:

Address: Suite 2, 28 Outram Street, West Perth WA 6005 Postal: PO Box 79, West Perth, WA 6872

T: +61 8 9381 5558 E: terrain@terrainminerals.com.au W: www.terrainminerals.com.au

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#### **Corporate Update**

- **Successful Raise \$1,045,074** (before costs) via a placement of ordinary shares at an issue price of \$0.003 per share, after the June Quarters end.
  - Director participation: The Placement has been supported by a commitment from Executive Director Mr Justin Virgin who has subscribed for \$102,000, subject to shareholder approval.
- **Asset Sale:** The Wildviper E37/1214 tenement was successful sold to Northern Star Resources Limited (ASX:NST) during the quarter for **\$300,000 (plus GST) cash**.

#### Marketing activities:

- o In May 2024, Terrain representatives attended the RIU Sydney Resources Round-Up Conference Resources held at the Hyatt Regency Sydney. Terrain also took the opportunity to invite shareholders to an informal event with key management, which was very well attend and more such events will be scheduled in the future alongside other marketing activities.
- In June 2024 Terrain also attended the MiningNews Select Perth conference and presented to investors. The event was held at the Pan Pacific Hotel Perth.
- Trade Opportunities: commercial discussions of full/partial sales and/or JV of assets ongoing.
  - Terrain has prioritised the grant process for its Carlindie East Pilbara WA tenement applications circular +850km2 (under soil cover) prospective for lithium and iron ore.
  - $_{\odot}$  Terrain has been advancing discussions with project partners at its 100% owned Larins Lane Gallium (REE) project.
- Open to new opportunities, with the current strategy focusing on extracting value from the extensive project pipeline within Western Australia and Queensland (once granted).
- · All Exploration activities completed safely, with no reported LTI or environmental incidents.

**News Highlight:** Given the large number of promising exploration targets across its current flagship projects Smokebush, Lort River and Carlindie East Pilbara (pending grant) and along with Terrains commitment to fully test all targets in a rapid, methodically, and systemically manner, the Board anticipates exciting and regular news flow throughout 2024 and beyond.

# **Lort River Exploration Project - Nickel/Copper**

#### Lort River Nickel and Copper Target - New "EYE" Feature identified

The focus at Lort River has now switched towards testing the exciting geological 'EYE' feature that is located on the granted E63/2447 tenement (granted early February 2024). Terrain's internal review has identified an exiting Nova-Bollinger Style 'EYE' feature which has an conductor identified on its southern edge (refer to ASX release 22 February 2024).

The Lort River project is located in the Albany-Fraser Belt in southwest of Western Australia amongst a proven host of company-making deposits. In addition to the 5-million-ounce Tropicana Gold project, the Belt also plays host to the Nova-Bollinger nickel-copper deposit, which was discovered by Sirius Resources (former ASX code SIR) in 2012 and was subsequently purchased by Independence Group (ASX: IGO) for \$1.8 billion (see IGO's announcement dated 25 May 2015 for full details of this transaction) (refer to diagram 1).

The discovery of the Nova-Bollinger nickel-copper deposit (refer to diagram 2) was a result of Sirius Resources recognising the importance of an "eye" feature within the aeromagnetic images over their Fraser Range tenement, which proved to be the geophysical signature of the intrusion associated with the nickel-copper ore bodies (refer to diagram 3).

Terrain intends to leverage on the considerable resources already committed to searching for repetitions of this eye-like feature within the northern half of the Albany-Fraser Belt which include Independent Group and Legend Mining to name only two (see the ASX announcement Legend Mining dated 14 February 2023 as just one example of the companies placing an importance on the eye-feature when exploring for nickel-copper within the Albany-Fraser Belt).

Magmatic nickel-copper deposits, such as Nova-Bollinger, usually occur as clusters suggesting that just like the equivalent Thompson Belt in Canada. To quote Independence Group (ASX: IGO) "The Nova-Bollinger discovery, along with other known magmatic nickel copper sulphide occurrences in the Fraser Range, are proof of the

fertility of the region for more discoveries, and IGO's exploration team is convinced that this belt should host multiple significant magmatic Ni-Cu sulphide deposits. Additional information at this web page: https://www.igo.com.au/site/exploration/fraser-range-project).

Recognising that the industry's focus had yet to extend to the southern half of the Belt, Terrain undertook a review of the open-file aeromagnetic data covering the favourable geological settings south of the Nova-Bollinger ore bodies. Terrain's geological teams internal review of work was rewarded when a possible repetition of the Nova-style eye feature was observed within a vacant tenement area between Terrain's existing Lort River tenements package (refer to diagram 3). Appreciating the significance of this distinctive "eye" feature in the aero magnetics, Terrain subsequently submitted a tenement application over this prospective nickel-copper target, with the resulting tenement (E63/2447) having now been granted to the Company. As a result of the grant of E63/2447, Terrain's tenement package within the Albany-Fraser Belt totals 640km2 of granted tenure.

Terrain is committed to fast-tracking exploration in tenement E63/2447 and signed a contract only ~8 weeks after being granted the tenement with UTS Geophysics flying an airborne electromagnetic (AEM) (UTS, operate the VTEM Max Time Domain Electromagnetic System or VTEM for short). The survey was flown by helicopter over a three-week period.

The Vtem survey was completed in May 2024, flying over 1,281km km line survey that was designed to better define the New Conductor, recently identified by Terrain & test the whole 'EYE' feature & tenement for additional targets. The flight data set has been received by Terrain and is now currently with Southern Geo Science. Results are expected back in August 2024.

AEM offers a proven, fast, and inexpensive method for detecting potential nickel-copper ore bodies across the Albany-Fraser Belt, with Sirius Resources repeatedly expressing a view that electromagnetics continued to be a reliable exploration tool during their exploration and development of the Nova-Bollinger nickel-copper deposit.

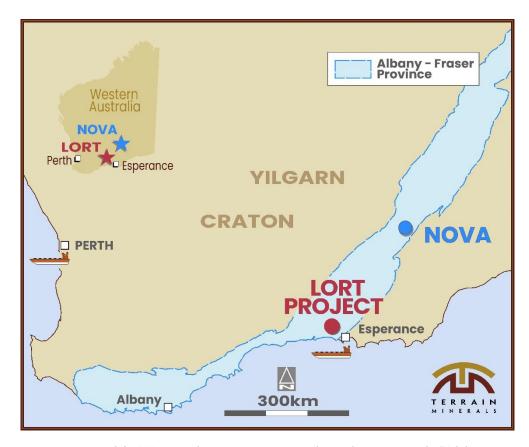
It should be noted that a single line of AEM has previously been flown over Terrain's tenement E63/2447 by Geoscience Australia as part of the Australian Government's ongoing effort to acquire AEM data over the continent. The line spacing of the Geoscience Australia airborne survey was 20 kilometres and had limited depth penetration. Encouragingly this single survey line appears to have successfully detected an interpreted conductor at the southern end of Terrain's "eye" feature (refer to diagram 5).

Further work is continuing in relation to modelling the Geoscience Australia AEM data. However, the presence of such a conductor only serves to strengthen Terrain's commitment to exploring E63/2447, given the project seems to keep ticking boxes in terms of its prospectivity for Nova-Bollinger-style nickel-copper mineralisation.

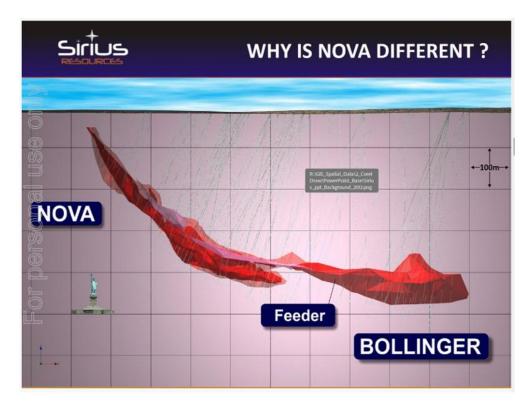
- $\checkmark$  We are in the same geological belt as that hosting the Nova-Bollinger ore bodies,
- ✓ We have an interpreted characteristic "eye" feature in the aeromagnetic data over our tenement,
- ✓ We have a conductor within the southern part of the "eye" feature,
- ✓ We know that Nova-Bollinger style magmatic nickel-copper ore bodies tend to occur as clusters along a Belt (as it's the case for across the equivalent Thomson Belt in Canada),
- ✓ We know that exploration by others to date have focused on the northern half of the Albany-Fraser Belt, but have had limited exploration success to date,
- ✓ We assume, that this means that the clusters of yet-to-be-discovered magmatic nickel-copper ore bodies are more likely to be located in the southern half of the Belt,
- Terrain holds a strategic land position in the southern half of the Belt (with is virtually untouched by historic magnetic nickel-copper focused exploration), and
- $\checkmark$  We are committed to fast track our exploration with the goal of exploration success similar to other companies operating in the belt.



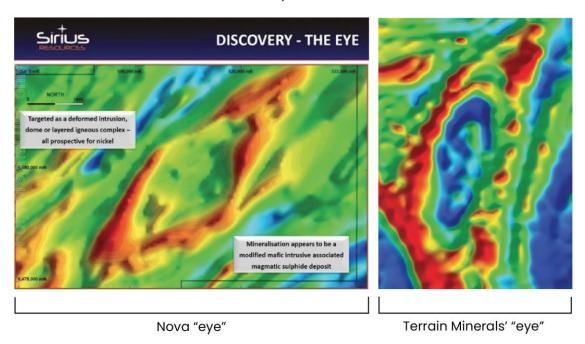
**Picture 1:** Helicopter with VTEM survey sensor array over the Lort River Project.



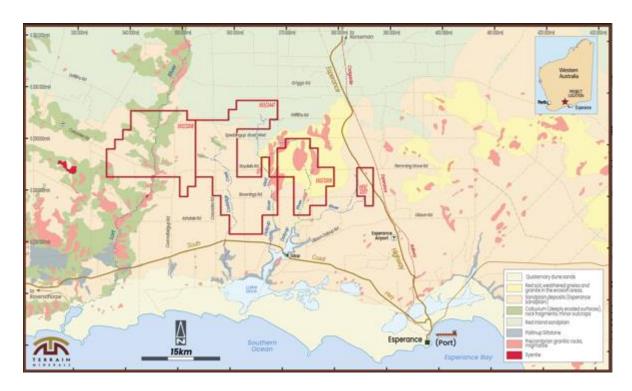
**Diagram 1.** Terrain Minerals' 100% owned Lort Rover Project is located approximately 50 kilometres northwest of Esperance, and within the highly prospective Albany-Fraser Belt, being home to Nova-Bollinger nickel-copper ore bodies.



**Diagram 2.** Cross-section of Sirus Resources (now IGO Group's) Nova-Bollinger nickel-copper ore body, which represents the style of mineralisation being pursued by Terrain Mineral at its Lort River Project. (Source: Sirius Resources' ASX announcement dated 4 October 2012).



**Diagram 3.** Host geology of the Nova-Bollinger nickel-copper orebody appears as a very distinctive 'EYE' in the aeromagnetic data (left image). Terrain has identified a possible repetition of the Nova-style eye feature within its recently granted tenement E63/2447 (right image) (Source: Sirius Resources' ASX announcement dated 4 October 2012).



**Diagram 4:** Lort River project location map.

#### **Lort River - Location & Access**

The tenements cover a total area of ~640km2 of highly prospective exploration acreage with now priority Nickel/copper exploration underway, also clay REE and Gallium has also been identified over the area which sits within southern Albany Fraser Belt.

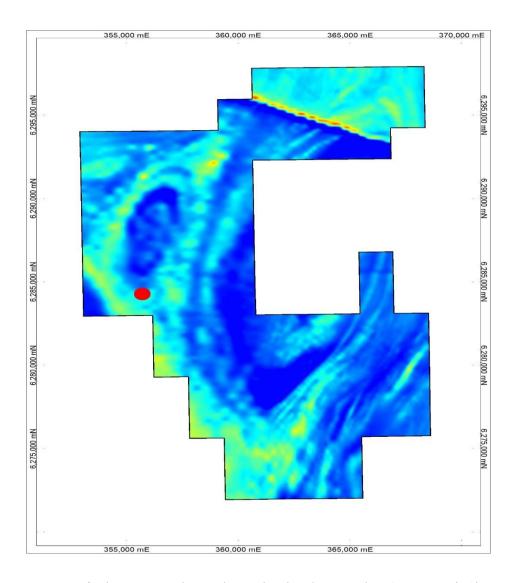
The project areas are predominately situated over freehold agricultural land and located within 50km (northwest) radius of the town and port of Esperance and easily accessed by an extensive network of gazetted agricultural service roads.

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.



**Diagram 5.** Location of a late time conductor observed within the Australian Government's SkyTEM airborne electromagnetic survey (marked in red) over the linear reduced-to-pole pseudocolour image of the Geological Survey of Western Australia open file merge aeromagnetic data. Significantly, the SkyTEM conductor appears to be located near the rim of the 'EYE' feature. The electromagnetic conductor that marked the discovery of the Nova ore body was, likewise, located near the rim of Sirius Resources' 'EYE' feature.

# Smokebush - 100% Exploration - Gallium, REE & Gold

The Company's 100% owned Smokebush Project, is located approximately 350 kilometres north of Perth, Western Australia. Terrain has been actively exploring multiple targets using various geological techniques over the Smokebush tenement package, exploring for multiple commodities including Gold, Gallium, REE. Terrain is also Three historic gold targets. Currently under assessment for potential drilling.

## **Exciting Gallium & REE drilling results at Larin's Lane**

#### Larin's Lane - Gallium & REE:

Encouraging REE mineralisation were also identified layers of clay regolith and appear to be located under the gallium mineralisation (refer to diagram 6).

- Total Rare Earth Oxide (TREO) grades up to 3,254ppm (223SBAC054 from downhole).
- Valuable magnetic rare earth oxides (MREO) considerable great than 25% of TREO mineralisation.
- Latest drilling increases grade, thickness and scale of interpreted rare earth mineralisation.

**Gallium Project:** Excitingly  $\sim 70\%$  of holes returned impressive intersections of Gallium up to **64m wide** and with multiple higher-grade zones up to **53.74 ppm Ga<sub>2</sub>O<sub>3</sub>**, across the **6km long** (open) project area. The Gallium appears to sit in the upper zones above the REE mineralisation and within layers of clay regolith. The Gallium results have been presented in two groups and only show intersections 8m and above. Group one uses a **40.32ppm Ga<sub>2</sub>O<sub>3</sub> cut off** and group two uses a **26.88ppm Ga<sub>2</sub>O<sub>3</sub> cut off** grade (refer to diagram 7).

#### **REE Samples - Selected holes include:**

Applying: 1,000ppm TREO lower cut-off

- 9m at 1095.23 ppm TREO from 80m 23SBAC019
- 8m at 1410.23 ppm TREO from 76m 23SBAC034
- 9m at 2038.79 ppm TREO from 80m 23SBAC035
- 16m at 1041.87 ppm TREO from 84m 23SBAC036
- 8m at 1262.78 ppm TREO from 84m 23SBAC037
- 8m at 1060.76 ppm TREO from 80m 23SBAC038
- 12m at 1831.44 ppm TREO from 84m 23SBAC039
- 9m at 1005.00 ppm TREO from 44m 23SBAC055
- 8m at 1535.90 ppm TREO from 56m 23SBAC056

#### REE and Gallium results continue over the next three pages.

<u>Continued REE Samples - Selected holes include:</u>
Applying: <u>1,000ppm TREO lower cut-off</u>

- 7m at 2081.06 ppm TREO from 24m 23SBAC067
- 16m at 1632.05 ppm TREO from 60m 23SBAC074
- 16m at 1632.75 ppm TREO from 64m 23SBAC077
- 20m at 1468.16 ppm TREO from 56m 23SBAC078
- 16m at 1658.17 ppm TREO from 68m 23SBAC083
- 16m at 1210.51 ppm TREO from 72m 23SBAC084
- 8m at 1652.02 ppm TREO from 24m 23SBAC086
- 12m at 1554.74 ppm TREO from 48m 23SBAC090
- 12m at 1254.00 ppm TREO from 48m 23SBAC093
- 8m at 1372.50 ppm TREO from 56m 23SBAC096

#### **Gallium Oxide Samples - Selected holes include:**

Applying: Gallium Oxide (Ga203) cut-off 40.32ppm and plus 8m intersections all in regolith

- **16m @ 53.74 ppm Ga<sub>2</sub>O<sub>3</sub> from 64m 23SBAC035**
- 8m @ 46.10 ppm Ga<sub>2</sub>O<sub>3</sub> from 44m 23SBAC037
- **20m @ 48.33 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m 23SBAC045**
- 30m @ 40.32 ppm Ga<sub>2</sub>O<sub>3</sub> from 24m 23SBAC071
- 24m @ 46.34 ppm Ga<sub>2</sub>O<sub>3</sub> from 32m 23SBAC077
- 8m @ 48.32 ppm Ga<sub>2</sub>O<sub>3</sub> from 16m 23SBAC079
- 8m @ 52.62 ppm Ga<sub>2</sub>O<sub>3</sub> from 20m 23SBAC080

# Gallium Oxide Samples Selected holes include (Lower Cut-off): Applying: Gallium Oxide (Ga203) cut-off 26.88ppm and plus 8m intersections all in regolith

- 15m at 32.52 ppm Ga2O3 from 15m 23SBAC001
- 30m at 31.49 ppm Ga2O3 from 57m 23SBAC001
- 12m at 29.30 ppm Ga2O3 from 15m 23SBAC002
- 12m at 30.35 ppm Ga2O3 from 27m 23SBAC004
- 9m at 29.47 ppm Ga2O3 from 33m 23SBAC005
- 8m at 30.06 ppm Ga2O3 from 68m 23SBAC013
- 8m at 27.55 ppm Ga2O3 from 36m 23SBAC015
- 8m at 27.89 ppm Ga2O3 from 8m 23SBAC017
- 12m at 31.18 ppm Ga2O3 from 56m 23SBAC017
- 8m at 30.11 ppm Ga2O3 from 16m 23SBAC018
   16m at 30.91 ppm Ga2O3 from 56m 23SBAC018
- 8m at 29.30 ppm Ga2O3 from 32m 23SBAC019
- **24m at 31.22 ppm Ga2O3** from 52m 23SBAC019
- 8m at 28.49 ppm Ga2O3 from 40m 23SBAC021
- 8m at 27.42 ppm Ga2O3 from 44m 23SBAC023
- 8m at 27.35 ppm Ga2O3 from 64m 23SBAC023
- **20m at 30.83 ppm Ga203** from 48m 23SBAC026
- 8m at 30.91 ppm Ga2O3 from 64m 23SBAC027
- 12m at 29.03 ppm Ga2O3 from 64m 23SBAC029
- 20m at 29.06 ppm Ga<sub>2</sub>O<sub>3</sub> from 24m 23SBAC030
- 8m at 30.11 ppm Ga<sub>2</sub>O<sub>3</sub> from 48m 23SBAC030
- 20m at 30.78 ppm Ga<sub>2</sub>O<sub>3</sub> from 60m 23SBAC030
- 64m at 31.13 ppm Ga<sub>2</sub>O<sub>3</sub> from 20m 23SBAC031
- $\bullet \qquad \textbf{12m at 34.23 ppm } \textbf{Ga}_{\textbf{2}}\textbf{O}_{\textbf{3}} \text{ from } 32\text{m} 23\text{SBAC032}$
- 48m at 31.18 ppm Ga<sub>2</sub>O<sub>3</sub> from 48m 23SBAC032
- 12m at 30.24 ppm Ga<sub>2</sub>O<sub>3</sub> from 36m 23SBAC033
- 32m at 30.71 ppm Ga<sub>2</sub>O<sub>3</sub> from 52m 23SBAC033
- 8m at 29.97 ppm Ga<sub>2</sub>O<sub>3</sub> from 40m 23SBAC034
- 33m at 41.79 ppm Ga<sub>2</sub>O<sub>3</sub> from 56m 23SBAC035

28m at 29.88 ppm Ga<sub>2</sub>O<sub>3</sub> from 52m - 23SBAC034

- 8m at 27.55 ppm Ga<sub>2</sub>O<sub>3</sub> from 32m 23SBAC036
- 40m at 31.79 ppm Ga<sub>2</sub>O<sub>3</sub> from 60m 23SBAC036
- 44m at 36.57 ppm Ga<sub>2</sub>O<sub>3</sub> from 32m 23SBAC037
- 8m at 30.24 ppm Ga<sub>2</sub>O<sub>3</sub> from 84m 23SBAC037
- 8m at 29.77 ppm Ga<sub>2</sub>O<sub>3</sub> from 0m 23SBAC038
- 60m at 32.95 ppm Ga<sub>2</sub>O<sub>3</sub> from 32m 23SBAC038
- 48m at 31.56 ppm Ga<sub>2</sub>O<sub>3</sub> from 48m 23SBAC039
- 31m at 34.88 ppm Ga<sub>2</sub>O<sub>3</sub> from 44m 23SBAC040
- **16m at 31.31 ppm Ga<sub>2</sub>O<sub>3</sub> from 48m** 23SBAC041
- 12m at 30.55 ppm Ga<sub>2</sub>O<sub>3</sub> from 68m 23SBAC041
- 13m at 33.63 ppm Ga<sub>2</sub>O<sub>3</sub> from 12m 23SBAC042
- **15m at 35.44 ppm Ga<sub>2</sub>O<sub>3</sub> from 16m 23SBAC043**
- 21m at 29.65 ppm Ga<sub>2</sub>O<sub>3</sub> from 12m 23SBAC044

#### Continued Gallium Oxide Samples Applying a Lower Cut-off:

- 44m at 41.44 ppm Ga<sub>2</sub>O<sub>3</sub> from 0m 23SBAC045
- 16m at 30.11 ppm Ga<sub>2</sub>O<sub>3</sub> from 40m 23SBAC046
- 14m at 29.26 ppm Ga<sub>2</sub>O<sub>3</sub> from 48m 23SBAC047
- **14m at 31.81 ppm Ga<sub>2</sub>O<sub>3</sub> from 0m 23SBAC050**
- 10m at 31.64 ppm Ga<sub>2</sub>O<sub>3</sub> from 36m 23SBAC054
- 14m at 32.28 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m 23SBAC059
- 15m at 31.99 ppm Ga<sub>2</sub>O<sub>3</sub> from 16m 23SBAC060
- 8m at 33.60 ppm Ga<sub>2</sub>O<sub>3</sub> from 0m 23SBAC063
- 8m at 29.03 ppm Ga<sub>2</sub>O<sub>3</sub> from 40m 23SBAC065
- **15m at 36.28 ppm Ga<sub>2</sub>O<sub>3</sub> from 16m 23SBAC067**
- 8m at 29.50 ppm Ga<sub>2</sub>O<sub>3</sub> from 36m 23SBAC069
- 8m at 30.84 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m 23SBAC074
- 20m at 31.64 ppm Ga<sub>2</sub>O<sub>3</sub> from 20m 23SBAC074
- 35m at 28.88 ppm Ga<sub>2</sub>O<sub>3</sub> from 44m 23SBAC074
- **12m at 28.80 ppm Ga<sub>2</sub>O<sub>3</sub> from 0m 23SBAC075**
- 20m at 38.95 ppm Ga<sub>2</sub>O<sub>3</sub> from 24m 23SBAC075
- 14m at 29.70 ppm Ga<sub>2</sub>O<sub>3</sub> from 48m 23SBAC075
- 12m at 29.03 ppm Ga<sub>2</sub>O<sub>3</sub> from 0m 23SBAC076
- **28m at 32.35 ppm Ga<sub>2</sub>O<sub>3</sub> from 28m 23SBAC076**
- **48m at 39.41 ppm Ga<sub>2</sub>O<sub>3</sub> from 24m 23SBAC077**
- 32m at 32.11 ppm Ga<sub>2</sub>O<sub>3</sub> from 16m 23SBAC078
- 20m at 28.25 ppm Ga<sub>2</sub>O<sub>3</sub> from 52m 23SBAC078
- 36m at 36.07 ppm Ga<sub>2</sub>O<sub>3</sub> from 12m 23SBAC079
- 12m at 33.47 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m 23SBAC080
- 48m at 34.72 ppm Ga<sub>2</sub>O<sub>3</sub> from 20m 23SBAC080
- **52m at 32.71 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m** 23SBAC081
- 24m at 30.40 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m 23SBAC082
- 40m at 36.46 ppm Ga<sub>2</sub>O<sub>3</sub> from 32m 23SBAC082
- 12m at 30.41 ppm Ga<sub>2</sub>O<sub>3</sub> from 0m 23SBAC083
- 32m at 35.54 ppm Ga<sub>2</sub>O<sub>3</sub> from 16m 23SBAC083
- **24m at 31.72 ppm Ga<sub>2</sub>O<sub>3</sub> from 52m 23SBAC083**
- 8m at 29.90 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m 23SBAC084
- 20m at 34.78 ppm Ga<sub>2</sub>O<sub>3</sub> from 24m 23SBAC084
- **36m at 31.21 ppm Ga<sub>2</sub>O<sub>3</sub> from 48m** 23SBAC084
- 28m at 32.61 ppm Ga<sub>2</sub>O<sub>3</sub> from 20m 23SBAC085
- **16m at 32.70 ppm Ga<sub>2</sub>O<sub>3</sub> from** 52m 23SBAC085
- **12m at 30.37 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m 23SBAC086**
- **16m at 32.66 ppm Ga<sub>2</sub>O<sub>3</sub> from 0m 23SBAC087**
- **12m at 29.30 ppm Ga<sub>2</sub>O<sub>3</sub> from 8m 23SBAC088**
- 8m at 33.47 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m 23SBAC090
- **24m at 32.05 ppm Ga<sub>2</sub>O<sub>3</sub> from 16m** 23SBAC090
- **16m at 32.30 ppm Ga<sub>2</sub>O<sub>3</sub> from 24m 23SBAC091**
- 60m at 31.38 ppm Ga<sub>2</sub>O<sub>3</sub> from 20m 23SBAC092
- 44m at 34.02 ppm Ga<sub>2</sub>O<sub>3</sub> from 20m 23SBAC093
- 8m at 31.92 ppm Ga<sub>2</sub>O<sub>3</sub> from 24m 23SBAC094

#### Continued Gallium Oxide Samples Applying a Lower Cut-off:

- 24m at 31.14 ppm Ga<sub>2</sub>O<sub>3</sub> from 40m 23SBAC094
- 44m at 35.02 ppm Ga<sub>2</sub>O<sub>3</sub> from 28m 23SBAC095
- 8m at 27.28 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m 23SBAC096
- 20m at 34.03 ppm Ga<sub>2</sub>O<sub>3</sub> from 20m 23SBAC096
- 12m at 37.00 ppm Ga<sub>2</sub>O<sub>3</sub> from 44m 23SBAC096
- 8m at 28.02 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m 23SBAC097
- 32m at 34.78 ppm Ga<sub>2</sub>O<sub>3</sub> from 4m 23SBAC100
- 12m at 27.78 ppm Ga<sub>2</sub>O<sub>3</sub> from 40m 23SBAC100
- 23m at 31.01 ppm Ga<sub>2</sub>O<sub>3</sub> from 36m 23SBAC101

Note: A table of the assay results received to date can be seen in Appendix 1 in ASX release 27 May 2024.

• JORC information for above results ASX release; 27 May 2024.

The first batch of samples only tested the interface zone (ASX Release 11 March 2024) from these results Terrain identified elevated clay gallium (Ga) and rare earth element (REE) across the Larin's Lane prospect, and the reason why the above samples were submitted for testing. **Note:** Results from  $\sim$ 180 samples bagged in 4m composites have only been tested with XRF and not reported and are yet to be submitted with 18 out of the 101 holes remaining partially incomplete.

It should be noted that Terrain has increased the lower cut-off value to 1,000 ppm total rare earth oxide (TREO), which mirrors the cut-off presently being using for clay hosted REE projects in Brazil (see for example, Meteoric Resources NL (ASX: MEI) announcement dated 7 December 2023). By comparison, typical REE projects across Australia seem to apply a significant reduced lower cut-off value. Terrain's REE clay hosted mineralisation at Larin's Lane appears, at this early stage, to support the increased 1,000 ppm TREO lower cut-off suggestive of the prospectivity of this project to host high grade REE mineralisation.

Terrain also intends to continue to advance the Gallium potential at Larin's Lane which has taken over as the priority Gallium target and REE. The next stages of work are now being assessed, including alternative routes for metallurgical extraction of the REE. This reflects the Company receiving interest from unrelated third parties in relation to these commodities, Terrain confirms that advanced discussions continue and seem to be working towards a potential cooperation.

#### **Details of the Maiden Larin's Lane Air-core Drilling Program:**

The maiden air core program consisted of 101 holes for 6,611 meters. All holes were widely spaced over the  $\sim$ 6 km long and  $\sim$ 1 km wide area and typically located  $\sim$ 100m apart along drill fences. It is important to note that large areas remain untested but appear to be highly prospective in all directions (over an estimated  $\sim$ 9km by  $\sim$ 2 km area, refer to see diagrams 6 and 7).

The depth of the regolith (clays) encountered in the Eastern end was  $\sim$ 95m in depth, and  $\sim$ 60m to  $\sim$ 70m within the middle area and  $\sim$ 20m to  $\sim$ 40m deep at western side of Larin's Lane.

A metallurgical testing program will be examined and incorporate both the clay hosted REE & Gallium materials from the Larin's Lane prospect. Terrain has reached out to a leading REE consulting group with the view of establishing a JORC compliant *Exploration Target* for the Larin's Lane REE and Gallium Project (refer to diagram 6 & 7). The latter is designed to enable Terrain's shareholders to form a view on the longer-term potential of this project as a REE and Gallium play.

#### What is Gallium (Ga)

Gallium (GA) atomic number 31, is a soft, silvery metal, at standard temperature and pressure. The elemental gallium is a liquid at temperatures greater than 29.76C (85.57F) (slightly above room temperature), where it becomes silvery white. **Source:** https://strategicmetalsinvest.com/gallium-prices/

Solid gallium alloys are used in optics, electronics, and nuclear engineering because of their non-toxicity and resistance to neutron radiation and beta decay. Used in alloys with other metals such as aluminium, copper, and tin to create gallium arsenide (GaAs) as well as being used in semiconductor fabrication, one of gallium's most important uses. It provides a critical component in multiple steps of the manufacturing process for computer chips and other electronic devices including photovoltaics (solar panels cells due to a recent patent expiring).

- Gallium is a critical metal used in the defence industry (refer to diagram 10) and computer chips (Gallium chips will potentially replacing silicon), semi-conductors, transistors, including electronic circuitry.
- Gallium nitride (GaN) is another important compound of gallium that has applications in light-emitting diodes (LEDs), laser diodes, power amplifiers, and solar cells. Source: https://strategicmetalsinvest.com/gallium-prices/
- Gallium increases component speed and miniaturization critical in generative AI (and the associated demand for semiconductor).
- Until 1 August 2023 export ban, China was ostensibly the sole supplier to Gallium to the semiconductor industry, producing a staggering ~98% of the world's supply of raw Gallium (refer to diagram 11).
- It is anticipated that USA, European and Asian, Sovereign states and semiconductor chip makers will actively seek to ensure reliable and secure supply outside of China, with the aim of safeguarding critical manufacturing and in country industrial production into the future.

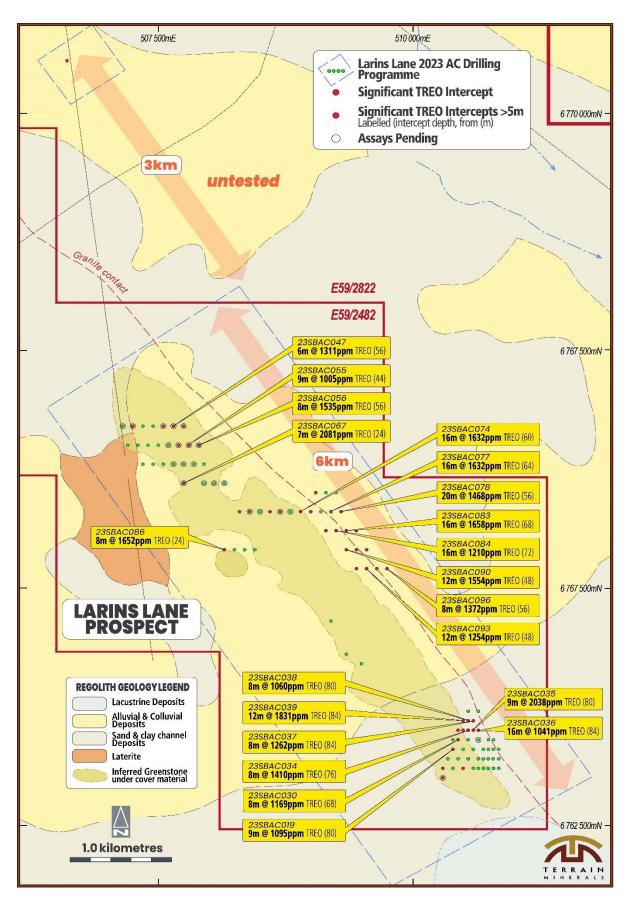
- Note: Gallium For addition information and references, refer to ASX releases:

  16 August 2023 Gallium (Ga) Discovered at Smokebush RC drilling campaign.
  - 31 October 2023 Quarterly Activities Report: September 2023.
  - 23 October 2023 Gallium Clays in drilling at Lort River.
  - 11 March 2024 Highly encouraging REE & Gallium results at Larins Lane Project, only  $\sim$ 25% of samples assayed to date. 27 May 2024 Exciting Gallium & REE drilling results at Larin's Lane.

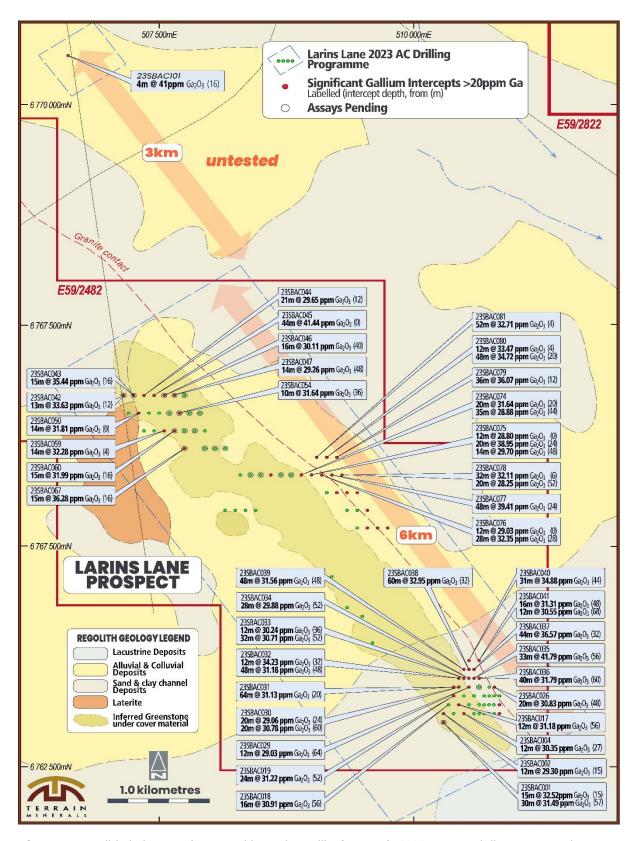
#### **Smokebush - Location & Access**

The Smokebush Project (100% owned) area is located approximately ~350km from Perth Western Australia and 85 kilometres east northeast of the Perenjori township and 65 kilometres west of Payne's Find. Located within the Yalgoo Mineral Field. The tenements can be accessed via the unsealed Perenjori - Warriedar Road, and via extensive historical exploration grid lines, station tracks and fence lines (refer to diagram 8 and 9).

The geology of the area consists predominantly of a complexly folded, regionally metamorphosed Archaean greenstone sequence at the southern end of the Yalgoo Singleton Greenstone Belt that has been subjected to multi-phase granitoid intrusion. Located adjacent to a large tungsten resource at Mt Mulgine (Tungsten Mining NL) and a number of historic gold open pit mines (Minjar Gold Pty Ltd).



**Diagram 6:** Drill hole location of Terrain's 2023 air core drill program at the Larins Lane Project with selected total rare earth oxide (TREO) grades highlighted. Intercepts are based on 1,000ppm TREO lower cut and up to four metres internal dilution. A significant TREO intercept, as referred to is this diagram, is an interval returning greater than 1,000ppm TREO over a minimum of one composite sample (generally being three or four metres).



**Diagram 7:** Drill hole location (Not possible to show all) of Terrain's 2023 air core drill program at the Larins Lane Project with selected gallium oxide grades highlighted. Intercepts are based on 20ppm gallium (26.88ppm  $Ga_2O_3$ ) lower cut and up to four metres internal dilution. A significant gallium oxide intercept, as referred to is this diagram, is an interval returning greater than 20ppm gallium (26.88ppm  $Ga_2O_3$ ) lower cut over a minimum of one composite sample (generally being three or four metres).

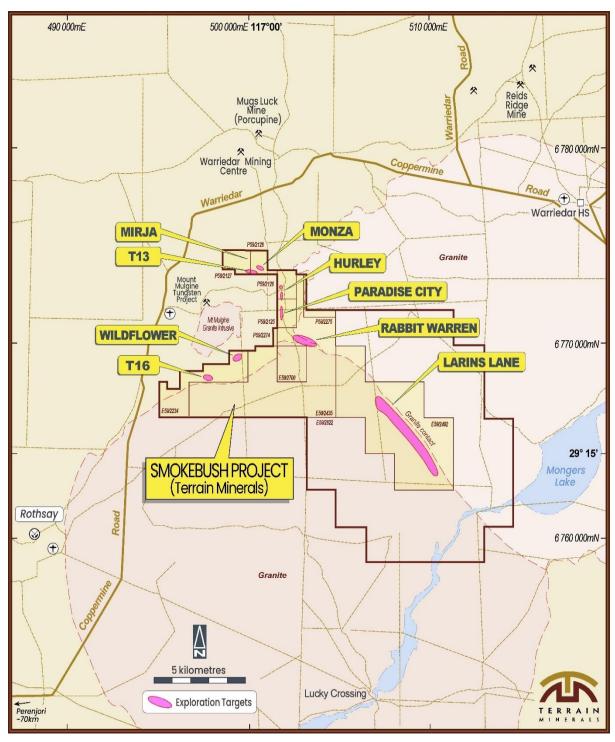


Diagram 8: Prospects map of Terrain Mineral's 100% owned Smokebush project.

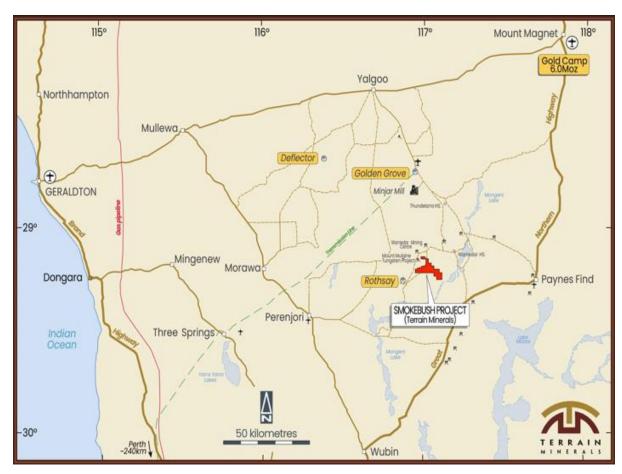


Diagram 9: Smokebush project location in relation to discoveries in the area.

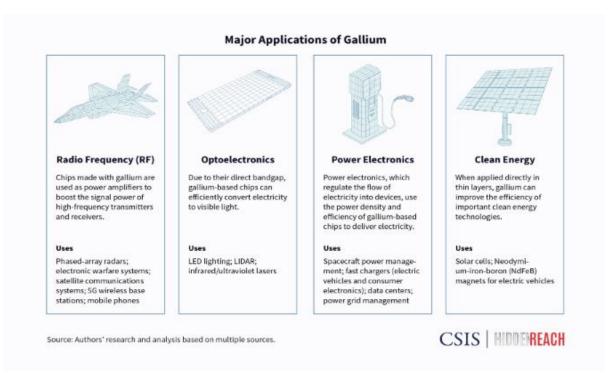


Diagram 10: Major Applications for Gallium (reference listed in diagram 11).

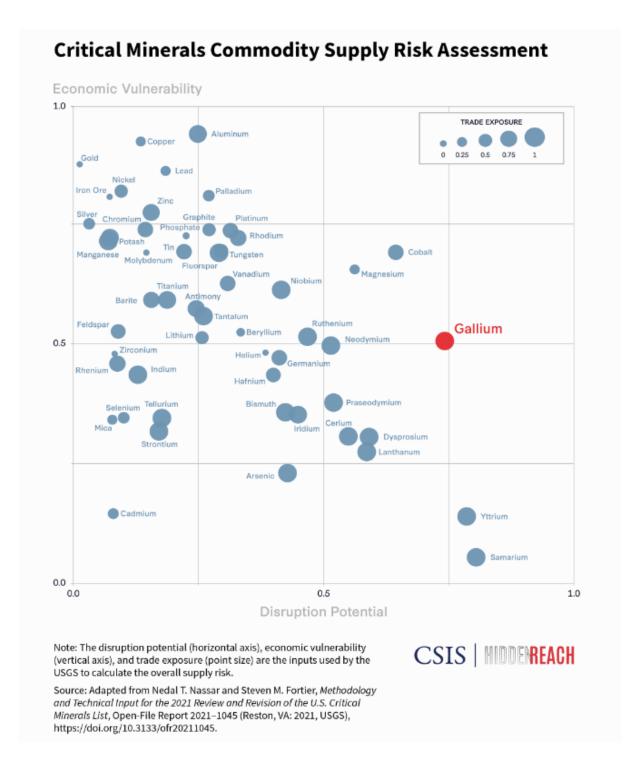


Diagram 11: Critical minerals Commodity Supply Rick Assessment.

#### Above information was source from an article:

De-risking Gallium Supply Chains The National Security Case for Eroding China's Critical Mineral Dominance By: Matthew P. Funaiole, Brian Hart, and Aidan Powers-Rigas | August 2023 https://www.csis.org/analysis/de-risking-gallium-supply-chains-national-security-case-eroding-chinas-critical-mineral#:~:text=As%20of%202022%2C%20China%20produced,which%20most%20gallium%20is%20extracted.

Note: For additional information refer to ASX releases:

- 02 December 2019 Farm-in Agreement for the Smokebush Gold Project at Mt Mulgine, 65km West of Paynes Find WA.
- 18 December 2019 Smokebush Exceptional Historic Drilling Results Identified During Project Due Diligence.
- 03 March 2020 Exciting Results from Smokebush Gold Project.
- 08 October 2020 High Grade Rock Chips at Smokebush Gold Project.

  12 October 2020 Exciting Drilling Results at Smokebush Gold Project.
- 03 December 2020 New Application Granted with Exciting Historic Results at the Paradise City Gold Prospect Smokebush Gold
- 12 February 2021 Ground Geophysics & Mapping Refines Targeting Matrix at Smokebush Gold Project.
- 17 March 2021 Drilling & Project Update Smokebush Gold Project.
  22 April 2021 2,100m RC Drilling Program Commenced at the Smokebush Gold Project.
- 27 May 2021 New Rock Chip Samples & Drilling Update Smokebush Gold Project.

  19 July 2021 Positive First Pass Drilling Results Smokebush Gold Project.
- 13 September 2021 New Geological Interpretation (Monza) & Exploration Update, Smokebush Gold Project.
- 23 August 2022 New Project Calytrix & Smokebush & Wild-viper Gold Project Updates.
- **02** December 2022 Acquisition Smokebush JV Tenement Now 100% owned. **06** December 2022 Smokebush Pegmatite Swarms Identified, Sampling for Lithium Mineralisation Underway. **07** February 2023 Smokebush 2023 Field Season Now Underway, IP Survey & MMI Soils Programs.
- 17 March 2023 Smokebush IP Survey & Lithium Update Priority Gold Drill Targets Emerging.
- 02 May 2023 Smokebush IP Survey Expanded & Update.
- 16 May 2023 Smokebush New Gold & Copper/Ni Anomalies.
  22 May 2023 600-metre-long chargeability anomaly identified parallel to Monza Gold prospect, Smokebush Project.
  06 June 2023 Commencement of Pegmatite Drilling at Smokebush.
- 19 June 2023 First phase of RC drilling successfully intersects pegmatites at Smokebush.
- 05 July 2023 Smokebush "Phase 2" Gold & Pegmatite RC Drilling has Commenced.
- 14 August 2023 Heritage approval received for maiden REE drilling at Lort River & Smokebush Exploration Update.
- 16 August 2023 Gallium (Ga) Discovered at Smokebush RC drilling campaign.
- 18 October 2023 Larin's Lane MMI Extends & Identifies New Copper/Nickel/Gold & Silver Anomalies.
- 14 November 2023 Smokebush high grade gold mineralisation intersected, confirming 600-metre-long gold target zone.
- 28 November 2023 Larin's Lane Maiden drilling testing poly-metallic targets.
- 19 December 2023 Larin's Lane, Maiden drill program completed.
- 11 March 2024 Highly encouraging REE & Gallium results at Larins Lane Project Only ~25% of samples assayed to date.
- 27 May 2024 Exciting Gallium & REE drilling results at Larin's Lane.

#### Biloela Project - Queensland Copper Gold Package 100%

#### **New Project Applications**

- Tenement applications totalling ~2,500km2 of highly prospective ground adjacent to, and along strike of, the Cracow Gold Mine in Queensland.
- Included within this extensive tenement application package is at least two known historic copper mines as well as numerous copper and gold targets, first identified by Rio Tinto, Gold Field Limited and **Newcrest Mining Ltd.**

#### **Highlights:**

Seven (7) potential copper and gold sites identified within the Biloela/Cracow region of Queensland, including:

- Prospect Park, where 8 rock chip samples collected returned values up to 2.33 g/t gold and 9.23% copper (refer to below ASX release).
- Mari, where secondary copper mineralisation has previously been reported.
- Lookerbie, which includes the historic Perkins copper occurrence.
- Drumburle, an abandoned copper mine initially discovered by CRA (now Rio Tinto).
- Wild Scotsman (Mt Tam), initially identified by Gold Fields Limited who discovered a copper and gold mineralisation.
- **Oaky Creek**, which is marked by an abandoned copper-gold-silver mine.
- **Auburn**, where soil sampling returned up to 0.45% copper and 3.2 g/t gold (refer to below ASX release).

Note: JORC related information and additional information refer to ASX releases: 21 June 2023 Terrain Secures 100% ownership of historical Copper Mines Next door to Cracow Gold Mine, Queensland.

#### Follow up "Desktop" Exploration Planning Underway

Terrain's internal geological team has identified seven potential copper and gold sites (see table 1 and diagram 13) at the Company's 100% owned (under application) Biloela Project (Biloela) in Queensland. Terrain estimates that it will take around four months until applications are granted, and heritage agreement will also need to be established.

The sites were identified as part of a comprehensive and independent, prospectivity study of existing geological and geophysical data sets by external consultants commissioned by Terrain revealed several zones of potential copper-gold mineralisation.

The Biloela Project lies  $\sim$ 13 kilometres north of the Cracow Gold Mine (refer to diagram 13) in the Glandore and Theodore region of Queensland. The northwest-trending faults within the north-eastern part of the Biloela

The project is similar to those present at the Cracow Gold Mine and are considered the most prospective for epithermal-style gold mineralisation.

The northwest-trending faults within the north-eastern part of the Biloela Project are similar to those present at the Cracow Gold Mine and are considered the most prospective for epithermal-style gold mineralisation.

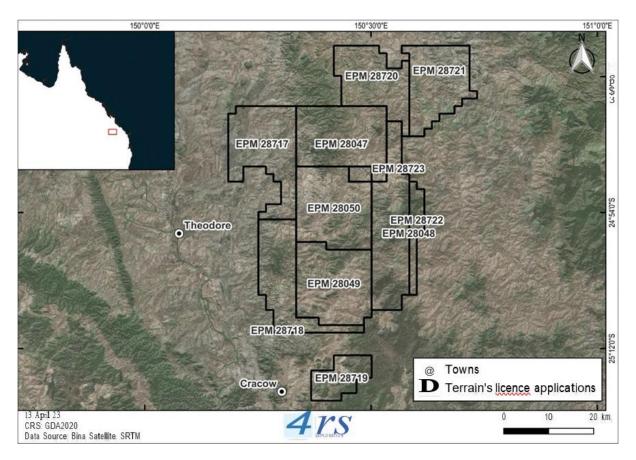
The Geological Survey of Queensland (GSQ) database reveals the Biloela Project has been subject to numerous historical exploration activities primarily focused on gold, copper and coal. GSQ reports a total of 19 mineral occurrences within Terrain's Biloela Project, of which seven sites include historical mining activities.

**Note:** The Company does not incur any holding or ongoing costs in relation to this pending application. It should also be noted that there is no guarantee that pending application will be granted.

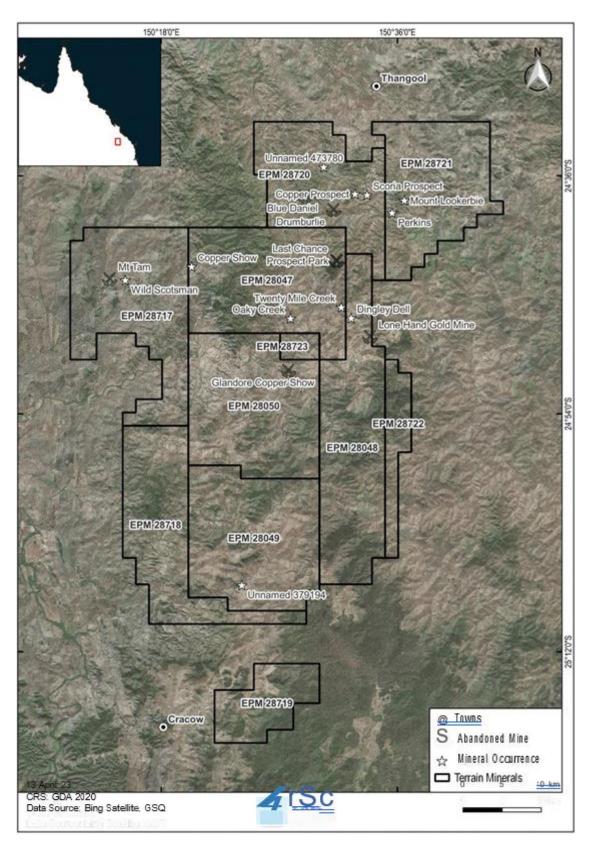
Mineral Occurrence	Commodity
Prospect Park	Copper/Gold
Mari - (Unnamed 473780)	Copper
Lookerbie	Copper
Wild Scotsman (Mt Tam)	Gold/Gold
Drumburle	Copper
Oaky Creek	Copper/Gold/Silver
<b>Auburn –</b> (Unnamed 379194)	Copper/Gold

**Table 1:** Potential copper and gold sites within the Biloela Project (refer to diagram 13).

**Note:** For additional information refer to ASX release: **21 June 2023** Terrain Secures 100% ownership of historical Copper Mines Next door to Cracow Gold Mine, Queensland.



**Diagram 12:** Terrain's Biloela project application EPM map. The Company estimates tenements will be in application status for at least six months before being granted, this includes establishing heritage agreements.



**Diagram 13:** Historic (abandoned) mine sites and historic mineral occurrences within the Biolela project area. Unnamed 473780, is now called "Mari" and Unnamed 379194 is now "Auburn".

### **Corporate Update**

#### Capital Raising - completed after the June Quarter end.

**Successful Raise \$1,045,074** (before costs) via a placement of ordinary shares at an issue price of \$0.003, from sophisticated and professional investors as the offer was heavily subscribed.

**Director participation:** The Placement has been supported by a commitment from Executive Director Mr Justin Virgin who has subscribed for \$102,000. Securities to be issued to Mr Virgin is subject to shareholder approval as required by the ASX Listing Rules and the Corporation Act.

Description	Placement Shares	Funds Raised
Sophisticated and professional investors	314,358,130	\$943,074
Deferred issue	34,000,000	\$102,000
Total	348,358,130	\$1,045,074

Placement Shares were issued on 29 July 2024 under the Company's existing placement capacity under ASX Listing Rules 7.1 and 7.1A, except to parties requiring shareholder approval. Shareholder approval for the deferred Placement issue is expected to be sought at a general meeting of shareholders in late August or early September, with allotment to occur shortly afterwards if approved.

The Company engaged Melbourne Capital Pty Ltd (**Melbourne Capital**) to act as broker to the Placement and will receive capital raising fees of 6% of funds raised (and will pay out 3% fees to ASFL holders).

Terrain has entered into a six-month corporate advisory mandate with Melbourne Capital for a fee of \$60,000 which was settled through the issue of 20,000,000 fully paid shares being the same price the above of placement shares on 29 July 2024.

The Board would like to thank Melbourne Capital and look forward to working with the company. Also like to welcome and thanks our new shareholders for their support at this very exciting stage of the Company's development. The Board would also like to point out and thank a group of Terrain's existing sophisticated shareholders and brokers who continue to strongly support the company.

The funds raised from the Placement will be used towards additional drilling at the Company's Smokebush Gold Project including the Larin's Lane Gallium project. In addition, Placement funds will be allocated against the Lort River Nickel/copper project which has recently had a large aerial Vtem survey conducted over a newly identified Nova/Bollinger nickel look alike 'eye' feature as well as advancing Gold exploration activities at Smokebush and across the Companies other projects and for general working capital requirements.

#### **Asset Sale**

Terrain sold the Wildviper E37/1214 tenement package to Northern Star Resources Limited (ASX:NST) for **\$300,000 (plus GST) cash**.

#### **Marketing Activities**

In May 2024, Terrain representatives attended the RIU Sydney Resources Round-Up Conference Resources held at the Hyatt Regency Sydney. Terrain also took the opportunity to invite shareholders to an informal event with key management, which was very well attend and more such events will be scheduled alongside other marketing activities.

In June 2024 Terrain also attended and presented to investors at the MiningNews Select Perth conference. The event was held at the Pan Pacific Hotel Perth.

#### **Trade Opportunities**

Commercial discussions of full/partial sales and/or JV of assets ongoing.

- Terrain has prioritised the grant process for its Carlindie East Pilbara WA tenement applications circular +850km2 (under soil cover) prospective for lithium and iron ore.
- Terrain has continued to advance discussions with project partners at its 100% owned Larins Lane Gallium (REE) project.

#### **Strategy & Trade Opportunities**

Terrain remains focused on creating additional and meaningful wealth for its shareholders over the short, medium and longer term, and as such is always open to commercial discussions of full/partial sales and/or JV of its assets as a means of unlocking value for shareholders and as a strategy of advancing projects forward.

**Smokebush** 100% - An internal Gold data review has highlighted three drilling worthy targets. Terrain is now preparing to drill test these in the near term. The Larins Lane Gallium project is also under review to work towards a JORC compliant exploration target and plans to advance to a JORC Resource.

**Lort River** 100% - Airborne VTEM survey was completed over the newly identified 'EYE' target. The survey report is due in August 2024.

**Carlindie** 100% - East Pilbara WA tenement applications pending. Terrain has prioritised its efforts to accelerate the applications to being granted. The tenements cover circular +850km2 and appear to be under soil cover that is potentially prospective for both lithium and iron ore.

**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).

Terrain will continue to update the market and shareholders in a timely manner as exploration results come to hand and as exploration activities progress, as well as the other exciting projects in the pipeline already held within the Company's portfolio.

#### **New Opportunities & Project Review**

Terrain continues to search, assess for potential 'company making' projects including Gold, Copper, Nickel, Lithium and industrial minerals throughout Australia, other regions are also being considered around the world with several jurisdictions of interest being identified. All economic commodities will be considered on their merits as indicated in previous Quarterly reports.

Geological assessment and discussion are ongoing on several opportunities. Terrain's Western Australian assets currently remain the company's focus, with a new project area pending grant in Queensland.

Justin Virgin

**Executive Director** 

#### For further information, please contact:

Justin Virgin - Executive Director Email: terrain@terrainminerals.com.au

Phone: +61 8 9381 5558

#### **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: Larin's Lane:

The maiden drilling program in late 2023 intersected broad zones of Gallium and REE mineralisation over a  $\sim 9$  kilometres of interpreted strike. This mineralisation remains open in all directions and has the potential to grow into a significant clay hosted Gallium project and REE. The project area benefits from year-round access and within close proximity to established mining infrastructure. A Stage One Mineral Resource definition drill program is presently being contemplated for this project with a currently proposed third quarter 2024 commencement date.

#### • Lightning/Monza Gold Prospect:

In 2023, a series of induced polarisation (IP) geophysical surveys identified multiple chargeability anomalies within the bedrock geology. These anomalies were interpreted to be related to sulphide mineralisation associated with gold bearing structures. The Lightning IP target was subsequently drill tested by the Company in late 2023, which appears to have confirmed the presence of gold mineralisation. Further details are available in the company's ASX release dated 14 November 2023. In light of the results described in the Company's 14 November 2023 ASX release, Terrain proposes to undertake a targeted 6-hole reverse circulation (RC) drill program at its Lightning Gold Prospect during 2024 to determine if gold grade and thickness increases at depth, as appears to be the case at the neighbouring Warriedar Resources project area (see Warriedar Resources announced of 1 February 2024 for further information). As well as testing if historic drilling was correctly orientated.

#### **Lort River Exploration Project**

100% owned exploration project that covers more than ~640km2 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, being home to Nova-Bollinger nickel-copper ore bodies. The host geology of the Nova-Bollinger nickel-copper orebody appears as a very distinctive "eye" in the aeromagnetic data. Terrain has identified a possible repetition of the Nova-style eye feature in its recently granted tenement E63/2447 within its Lort River Project.

An Airborne EM (Vtem) survey to test for sulphide bodies, flying over 1,281km km line survey. The survey data is now with the companies' geophysical consultants for interpretation and the market will be update accordingly.

#### • Lort River - Gallium and REE:

The maiden drilling campaign has confirmed clay Gallium and REE, mineralisation. The initial roadside drilling campaign targeting REEs in 2023, with the results released to the market via ASX announcements dated 19 October 2023 and 23 October 2023. The approvals for drilling (POW) have been delayed at the department. As well as focus moving to the above-mentioned Nickel target which is now the company's current priority at Lort River for the time being.

#### **Project Review:**

Terrain continues to investigate potential projects across various commodities including gold, copper, nickel, rare earth elements 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.

#### **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. Terrain will provide further updates on the grant process of this highly prospective tenement package over the course of the next 6 months.

**Mukinbudin: Niobium and Rare Earth Elements Project** is located within the Mukinbudin region of Western Australia, with the tenement package neighbouring both Rio Tinto's (ASX: RIO) and IGO Limited (ASX: IGO) landholdings in the region.

**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 the Board of Director of Terrain Minerals Limited.

#### **Related Party Transactions**

In accordance with ASX Listing Rule 5.3.5, payments to related parties of the Company and their associated during the quarter totalled \$69,000. Terrain advises that this relates to Executive Director salaries and entitlements and Non-Executive Director fees. Please refer to the Remuneration Report in the Annual Report for further details on Director remuneration.

#### **Competent Person Statement**

The information in this report that relates to Exploration Results are based on information compiled by Mr. B. Bell, who is a Member of the Australian Institute of Geoscientists and is a consultant retained by Terrain Minerals Ltd. Mr Bell is a shareholder and options holder of Terrain Minerals Ltd. Mr Bell 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. Bell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results are based on information compiled by <u>Mr. Xavier Braud</u>, who is a Member of the Australian Institute of Geoscientists and is a member of the board of Terrain Minerals Ltd. Mr Braud is a shareholder and options holder of Terrain Minerals Ltd. Mr Braud 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. Braud 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 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.

#### **Compliance Statement**

The Company notes that within the announcement all the information is referenced directly to the relevant original ASX market releases of that technical data.

Terrain would like to confirm to readers that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and, in the case of the estimates of mineral resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

#### **Disclaimer**

Information included in this release 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 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

#### Name of entity

Terrain Minerals Limited			
ABN	Quarter ended ("current quarter")		
45 116 153 514	30 June 2024		

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(473)	(1,961)
	(b) staff costs	(69)	(276)
	(c) administration and corporate costs	(90)	(459)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	1	6
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other - Net GST	19	116
1.9	Net cash from / (used in) operating activities	(612)	(2,574)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	300	300

ASX Listing Rules Appendix 5B (17/07/20)

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
	(c) property, plant and equipment	-	-
	(d) investments net sale of Red 5 shares	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other	-	-
2.6	Net cash from / (used in) investing activities	300	300

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	1,568
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(174)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	-	1,394

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	761	1,309
	Cash and cash equivalents at beginning of period (Prior Quarter Adjustment)	-	20
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(612)	(2,574)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	300	300
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	1,394

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Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	449	449

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	449	761
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	449	761

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	69
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include	de a description of, and an

explanation for, such payments.

7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other (please specify)		
7.4	Total financing facilities		
7.5	Unused financing facilities available at qua	arter end	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(612)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(612)
8.4	Cash and cash equivalents at quarter end (item 4.6)	449
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	449
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	0.7337
	Note: if the entity has reported positive relevant extrainer (is a not cook inflow) in item 9.	O:: 't O 7 "NI/A"

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: Yes

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: Yes, on 15 July 2024 after the end of the June 2024 quarter, the company raised \$1,045,000.00. before placement costs.

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Yes

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

# Schedule of Exploration Tenements held as at 30 June 2024 - Listing Rule 5.3.3 **Interests in Mining Tenements**

Project/Tenements	Location	Held at end of quarter	Acquired during the quarter	Disposed during the quarter
Wild Viper E37/1214	Western Australia	0%		100%
Smokebush E59/2234 E59/2435 E59/2482 E59/2700 P59/2822 E59/2274 P59/2275* P59/2125 P59/2126 P59/2127 P59/2128	Western Australia	100%		
Lort River E63/2207 E63/2208 E63/2209 E63/2447 E63/2448	Western Australia	100%		100%
Mukka E70/6352* E70/6380* E70/6381* E70/6382* E70/6383* E70/6384* E77/3043*	Western Australia	100%		
Biloela EPM/28717* EPM/28718* EPM/28719* EPM/28720* EPM/28721* EPM/28722* EPM/28723* EPM/28835* EPM/28836* EPM/28837* EPM/28839*	Queensland	100%		

Bassit Bore E09/2765* E09/2766*	Western Australia	100%		
Carlindie E45/6522* E45/6523* E45/6524* E45/6525* E45/6894* E45/6951* E45/6952*	Western Australia	100%	100% 100%	

<sup>\*</sup> Application pending

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:	29 July 2024
Authorised by:	
	Board of Directors

#### **Notes**

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.