# **ASX Announcement**



31 October 2023

#### ABN: 45 116 153 512 ASX: TMX

## Quarterly Activities Report: September 2023

**Terrain Minerals Limited (ASX: TMX)** (**Terrain**) is pleased to provide the following update on its extensive exploration and marketing activities for the September 2023 quarter:

## **HIGHLIGHTS:**

#### Smokebush 100% – Exploration Project for Gold, Gallium, Copper/Nickel & Lithium

#### Phase 1 - Drilling Highlights (Gallium discovery):

- High Grade Gallium zones discovered in drilling (F/note 1).
- Testing for other rare metals including Germanium now underway.
- Rabbit Warren Prospect
  - o **10m @ 37.6 g/t Ga<sub>2</sub>O<sub>3</sub>** within **86m @ 17.4 g/t Ga<sub>2</sub>O<sub>3</sub>** from surface 23SBRC001
- Paradice City Prospect
  - 4m @ 28.2 g/t Ga<sub>2</sub>O<sub>3</sub> within 30m @ 20.1 g/t Ga<sub>2</sub>O<sub>3</sub> from 80m 23SBRC002
  - o 9m @ 30.9 g/t Ga<sub>2</sub>O<sub>3</sub> within 16m @ 24.1 g/t Ga<sub>2</sub>O<sub>3</sub> from 11m 23SBRC005
  - 7m @ 30.9 g/t Ga<sub>2</sub>O<sub>3</sub> within 11m @ 28.2 g/t Ga<sub>2</sub>O<sub>3</sub> from surface 23SBRC00

#### Phase 2 - Drilling Highlights (Gold & Lithium):

- <u>Results expected back early November (released once processed)</u>
- Drilling was completed safely with no reported LTI or environmental incidents.
- Twelve (12) RC holes completed for 1,383 meters in total.
- Six (6) holes targeting IP generated anomalies for Gold;
  - All six (6) holes successfully intercepted sulphides (pyrite) spatially related to the modelled geophysics.
  - One (1) pegmatite hole unexpectedly intersected sulphide (pyrite) in mafic volcanics.
  - Six (6) holes targeting mapped pegmatite units for Lithium;
    - Five (5) holes intercepted zones between 10m to 20m wide (F/note 2).
    - No visual spodumene was seen in pulverised spoils, (assay's now pending results).
    - Unexpected pyrite zones will be assayed for gold and base metals.

#### Larin's Lane - Mobile Metal Ion (MMI) Soils Survey (extension program completed)

- Target 1 New large gold anomaly identified ~700m by ~250m (refer to diagrams 6 to 8).
- Target 3 Copper and Nickel ~1,100m by ~350m Nickel, Copper, Silver & Gold.
- Target 4 Open to south/east ~900m by ~400m (potential poly-metallic) Nickel, Copper, Gold & Silver.
- Highly successful MMI extension over a 9km<sup>2</sup> released after Quarters end, <u>results in ASX release</u>:
  - **18 October 2023 -** Larin's Lane MMI stage 2 New Poly-metallic target. New anomalies within similar geological setting to Golden Grove.
- Maiden drill program testing two (2) existing and one (1) new target, starting November 2023.

Headlines continued on page two (2):

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## Continuation of Headlines from the first page:

#### Foot note (page 1):

1 - Refer to jorc table in ASX release: 16 August 2023 - Gallium (Ga) Discovered at Smokebush RC drilling campaign

2 - Refer to jorc table in ASX release on 6 June 2023 - Commencement of Pegmatite Drilling at Smokebush.

## Lort River Exploration Project (100% owned) - Rare Earth & "Gallium Clays"

- Subsequent to the quarter end, highly successful drilling campaign results released:
  - **19 October 2023** <u>Rare Earth Element (REE)</u> Mineralisation Intersected across the Lort River project area.
  - 23 October 2023 <u>Gallium Clays Mineralisation</u> Intersected in all Drill holes at the Lort River (REE) Project.
- Drilling was completed safely, with no reported LTI or environmental incidents.
- Clay zones started at depth between 1 to 2 meters, in all holes.
- Air-core program 16 holes for ~300m, completed, deepest hole was to 38 meters depth to blade refusal.
- All three tenements drill tested along public road verges.
- Bulk sample material will be submitted for the MRIWA district study for analysis.
- Heritage clearance approvals received back during the quarter.
- Internal exploration program design refinement underway for large program subject to results.

### Exciting New Queensland Copper & Gold tenement package 100% owned

- Biloela Project Tenement applications totalling ~2,500 square kilometres 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 Fields Limited and Newcrest Mining Ltd.
- Treatment application numbers have been issued and grant is expected to take ~6 months' , refer to ASX release 21 June 2023.

## **Corporate Update**

- Capital Raising & Non-Renounceable Rights Issue combined \$1,216,028 before costs.
  - Successful Capital Raising targeting \$500,000 was strongly oversubscribed and raised \$785,000 (being the total allowable capacity) and headed by Novus Capital Ltd Sydney.
  - Subsequent to the Quarters end:
    - Non-Renounceable Right Issue Successfully raised (not underwriting):
      - \$431,028 from Non-Renounceable Rights Issue.
      - \$354,999 shortfall can be placed at the board's discretion for three months following closure of the Non-Renounceable Rights Issue.
- Accelerated exploration strategy at Smokebush (3 parts) and Lort River REE rolling out as planned.
- Trade Opportunities: commercial discussions of full/partial sales and or JV of assets is now open.
- New web page under construction, alongside with new sustainability policies currently being established.
- Open to new opportunities, with the current strategy focusing on extracting value from the extensive project pipeline within Western Australia and Queensland (once granted).

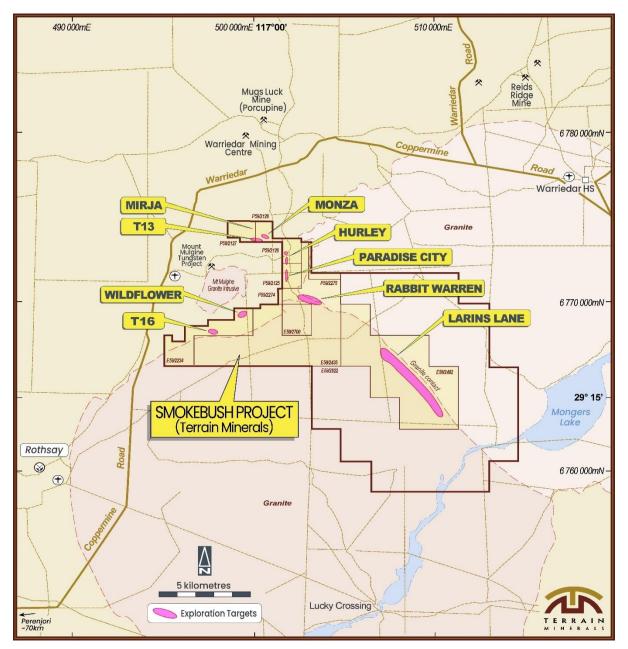
## **Smokebush Project Exploration Project**

During the Quarter, Terrain continued with advancing its three (3) exploration initiatives over multiple areas at its 100% owned Smokebush project. Targeting Gold, Copper/nickel and Lithium as part of the Company's focus of making a discovery during 2023.

**Phase 1 Drilling -** Has identified for large and high-grade zones of Gallium, additional assays results will now be done testing for other rare/specialty metals, including germanium that was not included in the initial assay sweep.

**Phase 2 Drilling –** Results pending due back late October 2023 – Testing for gold, lithium and specialty metals including Gallium, as a full element sweep has been conducted on all phase 2 samples. These results will determine is the phase 1 samples receive additional testing.

**Larin's Lane** – MMI has identified 3 exciting potential poly-metallic targets. Maiden drilling program November 2023, targeting Golden Grove style targets and mineralisation.



**Diagram 1:** Indicative location of the key prospects within Terrain Mineral's 100% owned Smokebush tenement area.

## Gallium (Ga) Discovered at Smokebush Phase 1 Drilling

Terrain has successfully identified multiple zones of Gallium ( $Ga_2O_3$ ) mineralisation hosted in mafic units at Rabbit Warren & Paradise City during the phase 1 RC drilling campaign.

#### Highlights:

- Rabbit Warren Prospect
  - 10m @ 37.6 g/t Ga<sub>2</sub>O<sub>3</sub> within 86m @ 17.4 g/t Ga<sub>2</sub>O<sub>3</sub> from surface 23SBRC001
- Paradice City Prospect
  - 4m @ 28.2 g/t Ga<sub>2</sub>O<sub>3</sub> within 30m @ 20.1 g/t Ga<sub>2</sub>O<sub>3</sub> from 80m 23SBRC002
  - 9m @ 30.9 g/t Ga<sub>2</sub>O<sub>3</sub> within 16m @ 24.1 g/t Ga<sub>2</sub>O<sub>3</sub> from 11m 23SBRC005
  - o 7m @ 30.9 g/t Ga<sub>2</sub>O<sub>3</sub> within 11m @ 28.2 g/t Ga<sub>2</sub>O<sub>3</sub> from surface 23SBRC007

Note: JORC tables in ASX release: 16 August 2023 - Gallium (Ga) Discovered at Smokebush RC drilling campaign.

- Gallium is a critical metal used in the defence industry (refer to diagram 2) and computer chip, semiconductors, transistors, including light emitting diodes (LED) and electronic circuitry.
- Until 1 August 2023, 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 3).
- China's strict export bans of Gallium came into effect on 1 August 2023.
- It is anticipated that USA and European semiconductor chip makers will actively seek to establish long term supply contracts with future Gallium suppliers (outside of China), such as Australia.
- Terrain is rapidly expanding its Gallium (and Germanium) focus to dove-tale with the exponential growth of generative AI (and the associated demand for semiconductor).

Gallium's Revolutionary Properties: The chemical and physical properties of gallium makes it well suited for use in high-performance applications such as advanced military equipment. Gallium may be combined with other materials to produce a special class of chips known as wide bandgap semiconductors. These chips can handle higher temperatures, voltages, and frequencies than conventional silicon chips, making them smaller, faster, and more efficient.

Also, a recent patent expiry has allowed for solar panel producers to use gallium, improves stability, rises voltage and potentially lowering manufacturing costs. **Reference:** NSW University article - The sunlight that powers solar panels also damage them. 'Gallium doping' is providing a solution. Date 23/06/2021 by M Wright, B Hallam & B Stefani.

Gallium is a crucial element in the defence and advance electronics (such as semiconductors) industries. Until recently, China was the dominant global supplier and the likely sole supplier to many American and European semiconductor manufacturers.

This changed on 1 August 2023 when China imposed a strict ban on all exports of Gallium (and Germanium (Ge)). Terrain is now retesting assays for Germanium.

The ban by China on all Gallium exports is expected to create significant supply chain issues for every non-Chinese semiconductor manufacturer around the world, given that there is presently no obvious alternate Gallium supplier of scale. This comes at a time when the generative AI (artificial intelligence) industry is growing exponentially, accompanied by an equal exponential growth in the demand for of semiconductors (and by extension, demand for elements such as Gallium).

By positioning itself as a first mover in the Gallium exploration sector, Terrain is seeking to place itself at the forefront of this globally important and crucial market with the goal of potentially becoming a preferred future supplier to the USA and European semiconductor chip makers over the medium term.

The Company is presently undertaking a detailed analysis of gallium mineralisation and its market. This is inspired by the (unsolicited) interest the Company has received over the past few months from a number of parties since

Terrain made its first gallium announcement on 16 August 2023 at Smokebush and again at Lort River on the 23 October 2023.

Additionally, Terrain is undertaking a series of investigations as to the preferred host lithologies and geological setting for Gallium and Geranium within its existing portfolio of tenements for the purposes of testing for higher grades of these crucial metals, with a particular emphasis on areas that are prospective for complementary mineralisation such as rare earth elements and base metal mineralisation. This would include potential copper target at Larins Lane (refer to diagram 1) as well as the Company's Lort River project, which has returned exciting REE and Gallium results situated in shallow clay units, as referenced above.

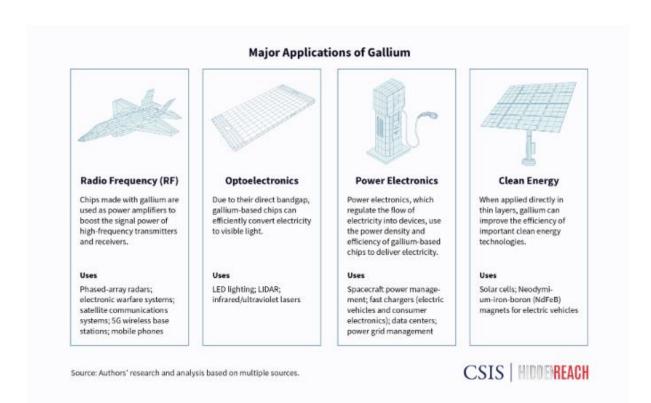


Diagram 2: Major Applications for Gallium (reference listed in diagram 3).

## What is Gallium (Ga)

Gallium is a chemical element with the symbol Ga and atomic number 31. Gallium is in group 13 of the periodic table and is similar to the other metals of the group (aluminium, indium, and thallium). Since its discovery in 1875, gallium has widely been used to make alloys with low melting points. It is also used in semiconductors, as a dopant in semiconductor substrates.

Gallium is a soft, silvery metal, at standard temperature and pressure and Elemental gallium is a liquid at temperatures greater than 29.76C (85.57F) (slightly above room temperature), where it becomes silvery white. If enough force is applied, solid gallium may fracture conchoidally. **Source:** <u>https://strategicmetalsinvest.com/gallium-prices/</u>

#### **Gallium Uses**

Solid gallium alloys are used in optics, electronics, and nuclear engineering because of their non-toxicity and resistance to neutron radiation and beta decay.

In addition, gallium is used in alloys with other metals such as aluminium, copper, and tin to create gallium arsenide (GaAs). This is 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.

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:** <u>https://strategicmetalsinvest.com/gallium-prices/</u>



Picture 1: Gallium, 31 Ga

## What Factors Determine the Price of Gallium

In metals, supply and demand is always in charge, and the price of Gallium is determined purely by the market.

The demand for gallium is driven by the need for the final products that use this strategic metal. As noted above, gallium has various vital uses, such as in solar panels, computer chips, and TVs. So, increased solar panel sales would lead to increased gallium demand.

The high scarcity of gallium is a crucial factor that determines the asking price. As China dominates the production of gallium, geopolitical events and export quotas also impact gallium supply.

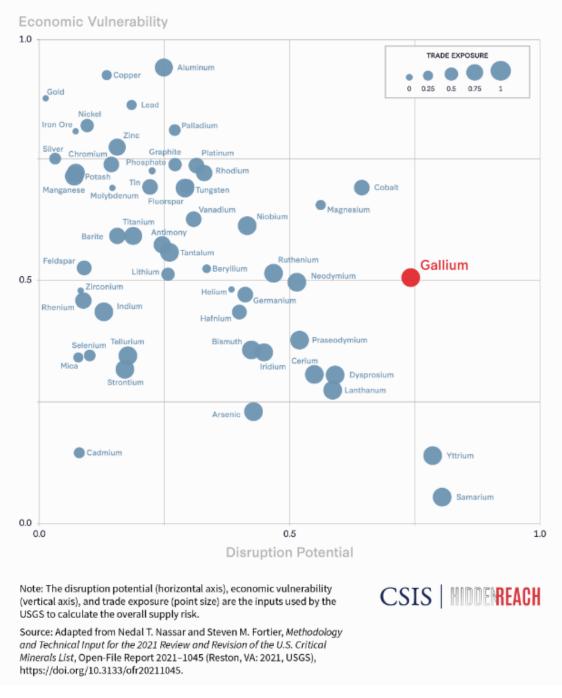
By understanding how the supply and demand of this rare metal work, we can better understand where gallium prices are headed. **Source:** <u>https://strategicmetalsinvest.com/gallium-prices/</u>

### Why does China produce so much Gallium

As of 2022, China produced a staggering 98 percent of the world's supply of raw gallium. This virtual monopoly is largely a result of China's position as the global leader in aluminium production— the process through which most gallium is extracted. Over the past few decades, deep government subsidies and tax incentives have fuelled the rapid rise of China's domestic metals industry, which has forced most global producers out of business, leaving China as one of the world's only remaining producers of gallium.

While relatively unknown to most people, gallium plays a critical and unique role in modern electronics supply chains, especially within the defence industry. Its unique properties allow for the production of specialized semiconductors that are vital to advanced capabilities like next-generation missile defence and radar systems, as well as electronic warfare and communications equipment. Disruptions in the gallium market could pose significant challenges for U.S. and allied defence industries and cost hundreds of billions of dollars in economic losses.

China's stranglehold on the supply of raw gallium is a critical vulnerability for the United States and its partners one that Beijing appears poised to exploit. Fortunately, there are clear steps the United States and its allies can take to limit their exposure to China's critical mineral monopolies.



## **Critical Minerals Commodity Supply Risk Assessment**

Diagram 3: 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-Riqqs / August 2023 https://www.csis.org/analysis/de-risking-gallium-supply-chains-national-security-case-eroding-chinas-critical-mineral#:~:text=As%200f%202022%2C%20China%20produced,which%20most%20gallium%20is%20extracted.

## Phase 2 RC Drilling Campaign – Smokebush

Terrain successfully tested multiple IP anomalies which Terrain identified at Monza, Hurley, Paradise City and Mirja as well as one other isolated IP targets will be tested, all concealed under cover. Additionally, Pegmatites near Monza and Hurley are also being tested for Lithium, as part of the Phase 2 drilling program.

## Phase 2 - Drilling Highlights (Gold, Lithium & specialty metals, Gallium)

- Results expected back later October 2023 (and released once processed)
- Drilling was completed safely with no reported LTI or environmental incidents.
- Twelve (12) RC holes completed for 1,383 meters in total.
- Six (6) holes targeting IP generated anomalies for Gold;
  - All six (6) holes successfully intercepted sulphides (pyrite) spatially related to the modelled geophysics (refer to diagram 4 & 5). One (1) pegmatite hole unexpectedly intersected sulphide (pyrite) in mafic volcanics.

  - Six (6) holes targeting mapped pegmatite units for Lithium;
    - Five (5) holes intercepted zones between 10m to 20m wide (F/note 3).
    - No visual spodumene was seen in pulverised spoils, (assay's now pending results).
    - Unexpected pyrite zones will be assayed for gold and base metals.

The phase 2 RC drilling program targeted six (6) induced polarisation (IP) chargeability anomalies defined under cover at depths ranging from 20m to 100m. All six (6) anomalies are now explained by the presence of sulphides (pyrite) within mafic units, which are known regionally to host gold mineralisation. The presence of sulphide minerals identified during the phase 2 drilling, combined with historical drilling results within 50m to 300m of this drilling is an indication that the Smokebush Project shows the hallmarks (at this early stage of exploration) of a gold-bearing system.

Caution: No direct relationship has been established between sulphide abundance and gold mineralisation in the area. However, Terrain is encouraged by the fact the IP anomalies are not related to lithologies that are known to be baron of gold, such as graphitic sediments or saline ground water aquifers. In addition, the findings from historic gold drilling intersections that are all within an interpreted 'Halo Zone' being around 50m to 300m from all IP targets (refer to select historic gold drill intersections in the next section below).

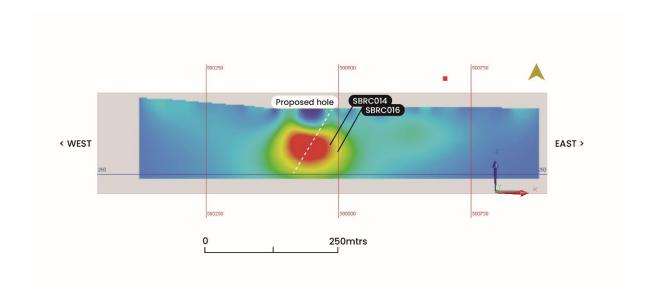
Terrain also tested six (6) pegmatites with intervals dominated by quartz and feldspar intersections between 10m to 20m wide, which is the same as observed and reported in Phase 1 of drilling (refer ASX announcement released on 6 June 2023). No visual spodumene was visually detected in the heavenly pulverised drill spoils. It is important to note only results from the now pending assay's will be able to determine the existence of lithium in drill samples.

Based on positive field observations all samples from the pegmatite drill program will be analysed for gold and base metals. Results from the Phase 2 program are expected to be received back in late October 2023, the Company would like to highlight that it will need time to analyse results. The market will be kept updated accordingly.

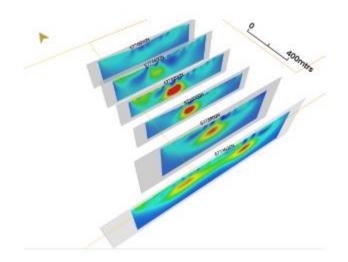
Background information on gold mineralisation across Yalgoo Mineral Field, which includes gold mineralisation reported by Warriedar Resources Limited (ASX: WA8) (F/note 4) that was previously mined by Minjar Gold and reported a historic production grade averaging 3.3 g/t (F/note 5). These historic mines appear to be structurally controlled and related to north to northeast-trending shear zones and also having a relationship between gold mineralisation and the presence of sulphide minerals within the system. Warriedar Resources reported gold and sulphide association at its Windinne Well pit project (F/note 6). Four of Terrain's IP targets sit on the same orientated sheer zones and also have sulphides present as also seen in Terrain's previous drilling campaigns at the Monza and Paradise City prospects.

#### Foot Notes (F/note):

- 3 Refer to jorc table in the back of this release and for the phase one (1) jorc tables in ASX release on 6 June 2023.
- 4 See Warriedar Resources Limited (ASX: WA8) ASX announcement dated 28 November 2022.
- 5 See: Minjar Gold District, Yalgoo Shire, Western Australia, Australia (mindat.org)
- https://www.mindat.org/loc-264404.html.
- 6 See Warriedar Resources (ASX: WA8) ASX announcement dated 9 March 2023.



**Diagram 4:** Monza Gold Prospect: Two-dimensional (2D) inversion chargeability sections on 6774000N looking north with Terrain Minerals Limited's 2020/21 drill holes with superimposed (Refer to ASX announcement dated 22 May 2023 for JORC related data). Drilling tested this geophysical anomaly, shown (as a dashed line) during the now completed Phase 2 reverse circulation (RC) at the Smokebush Project (Refer to ASX announcement dated 22 May 2023 for JORC related data).



**Diagram 5:** Monza Gold Prospect: New identified 600m long chargeability anomaly identified parallel to historic Monza drilling (Refer to ASX announcement dated 22 May 2023 for JORC related data).



Picture 2. Smokebush RC drilling near Hurley IP target.

## Historic Drill Results within the IP Survey Area

All of the newly identified IP survey targets have been defined at depths ranging from  $\sim$ 20m to  $\sim$ 100m undercover. The following historical gold intercepts are located between  $\sim$ 50m and  $\sim$  300m from the IP targets.

Terrain's current theory is that the below gold intersections may be geologically related to the sulphide mineralisation associated with the IP anomalies (refer to diagrams 4 & 5 which highlights Terrain's historic drilling at Monza and its proximity to the newly identified IP anomaly).

## Monza Historical RC drilling - Best Gold (Au) Results Include:

- 4m @ 4.46 g/t Au (incl 1m at 10.3 g/t) from 51 metres SBRC003.
- **7m @ 2.72 g/t Au** (incl 1m at 11.1 g/t) from 25 metres and 1m at 0.85g/t from 43m SBRC005.
- 6m @ 2.12 g/t Au (incl 1m at 7.2 g/t) from 80 metres SBRC011.
- 8m @ 1.37 g/t Au from 85 metres and 2m at 0.8 g/t from 96m SBRC006.
- 2m @ 11.3g/t Au from 70m MMRC162 (not Terrain).
- 2m @ 9.2g/t Au from 24m MMRC154 (not Terrain).

#### Hurley & T17 areas:

- **10m @ 1.4g/t Au** from 15m MM084 RAB (not Terrain).
- 2m @ 2.5g/t Au from 51m MMRC074 RC (not Terrain).

Note: JORC information for MMI survey 12 October 2020 - Exciting Drilling Results at Smokebush Gold Project.

**Paradise City Gold Prospect** – Historic RC Drilling Results (not Terrain):

- 3m @ 2.17 g/t Au from 10m PCRC001.
- 5m @ 1.35 g/t Au from 13m PCRC002.
- 2m @ 3.61 g/t Au from 15m PCRC007.
- 3m @ 1.94 g/t Au from 19m PCRC008.

**Note:** JORC information for MMI survey **03 December 2020** - New Application Granted with Exciting Historic Results at the Paradise City Gold Prospect - Smokebush Gold Project (In the release refer to Diagram 2 & Table 1 for Historic Significant Intercepts).



Picture 3. Smokebush RC Drilling at the Monza IP target.

## Larin's Lane - Mobile Metal Ion (MMI) Soils

#### Mobile Metal Ion (MMI) Soils Survey (extension program completed)

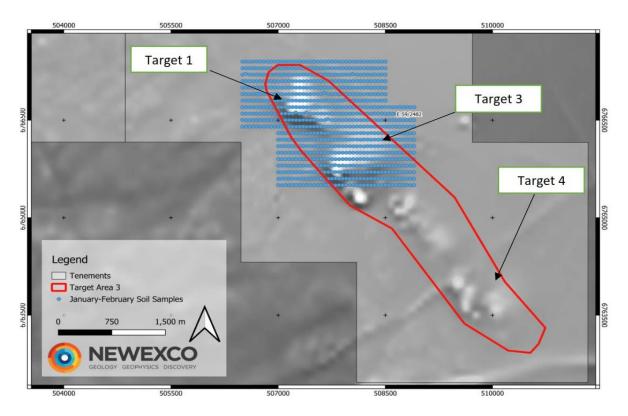
- Target 1 New large gold anomaly identified ~700m by ~250m (refer to diagrams 6 to 8).
- Target 3 Copper and Nickel ~1,100m by ~350m Nickle, Copper, Silber & Gold.
- Target 4 Open to south/east ~900m by ~400m (potential poly-metallic) Nickel, Copper, Gold & Silver.
   Highly successful MMI extension over a 9km2 released after Quarters end, results in ASX release:
- 18 October 2023 Larin's Lane MMI stage 2 New Poly-metallic target.
- New anomalies within similar geological setting to Golden Grove.
- Maiden drill program testing two existing and one new target commending November 2023.

Larin's Lane prospect, located in the southeast of the Smokebush Project and interpreted as an Archean greenstone unit, potentially part of the Yalgoo-Singleton greenstone belt, host of 29Metals (ASX: 29M) Golden Grove Copper + Gold + Silver + Zinc + Lead Mine (refer to diagram 1 & 9).

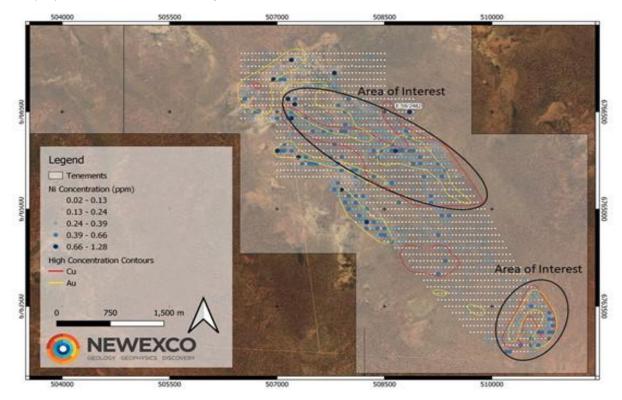
The initial MMI soil sampling over the northern part of the interpreted Archean greenstone unit at the Larin's Lane prospect successfully identified a large ~700 metre by ~250 metre low level gold-in-soil geochemical anomaly plus a separate 600 metre by 350 metre copper and nickel-in-soil geochemical anomaly, now being extend a further 500m longer, from positive results from MMI extension program. The extension program also identified Target 4 which remains open to south/east ~900m by ~400m (potential poly-metallic) made up of Nickel, Copper, Gold & Silver anomaly.

Note: Refer to ASX release and <u>JORC information for MMI survey</u>:

- 16 May 2023 Smokebush New Gold & Copper/Ni Anomalies.
- 18 October 2023 Larins Lane MMI Extends & Identifies New Copper/Nickel/Gold & Silver Anomalies.



**Diagram 6:** Initial MMI soil sampling locations over total magnetic intensity. The above blue dots show phase 1 MMI sampling location. The 2<sup>nd</sup> phase infilled inside of the red outline areas, coving the key magnetic features, sample points can be identified in diagram 7 & 8.



**Diagram 7:** Cu and Au contours overlying Ni sample concentrations (ppm), with defined areas of interest.

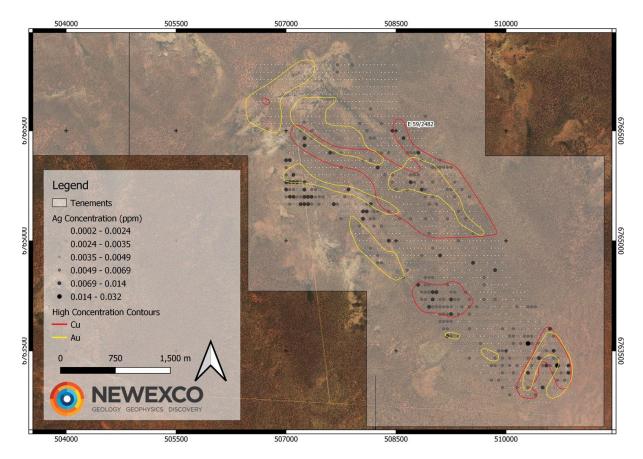
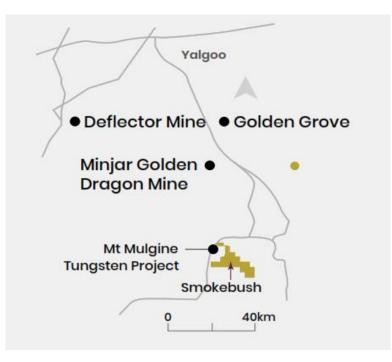
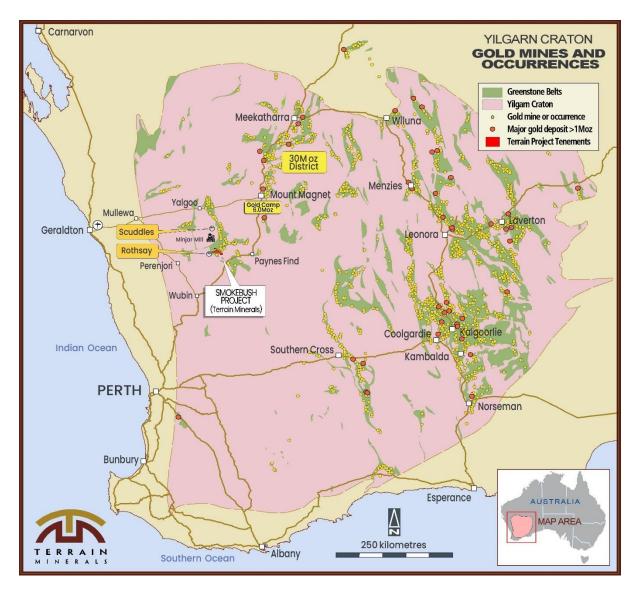


Diagram 8: Cu and Au contours overlying Ag sample concentrations (ppm).



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



**Diagram 10:** Terrain Minerals' 100% owned Smokebush Gold and Lithium Project is located within the Yalgoo-Singleton Greenstone Belt in Western Australia.

## **Location & Access**

The Smokebush Project 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 fences lines.

The now 100% owned project consist of Prospecting Licenses (P59/2125, 2126, 2127, 2128 & 2774) and Exploration Licence E59/2234, 2435, 2482 & 2700 (refer to Diagram 1) and E59/2822 was granted after the quarters end and is not show no corresponding diagrams (wraps around E59/2428).

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 (refer to diagram 1). 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).

Note: For additional information refer to ASX announcement:

- 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 Project.
- **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 Larins Lane MMI Extends & Identifies New Copper/Nickel/Gold & Silver Anomalies.

## **Lort River Exploration Project Rare Earth & Gallium Clays**

The maiden proof-of-concept air-core (blade, to refusal) drilling campaign was completed alongside road vergers, across all three tenements and designed to test depth of clay zones, Rear Earth Elements (REE) grades and to assist with the design of the next stage of exploration. Holes were spaced  $\sim$ 3km apart and provide a broad geological cross section, over the high and low laying areas across the Lort River project. Many of the holes were located close to the historic one-meter-deep auger soils program, which returned positive REE results and highlighted the prospectivity of this project (refer to diagram 12 & 13) (F/note 7).

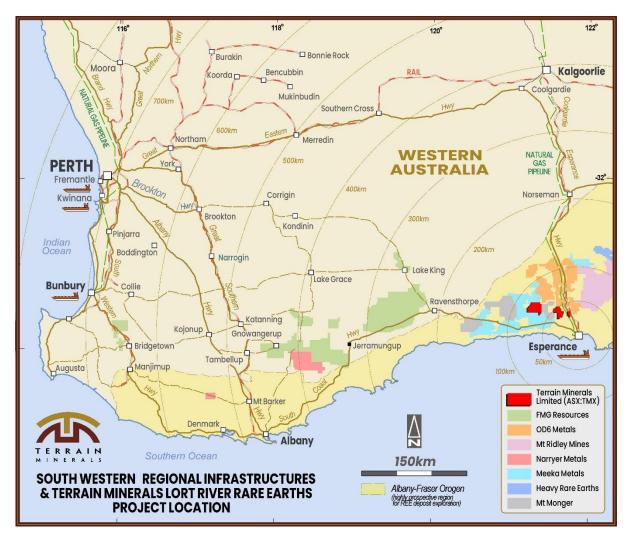
#### Lort River Project 100% – Clay hosted Rare Earth Elements (REE) & Gallium

- Highly successful drilling campaign released after Quarters end, results in ASX releases:
  - **19 October 2023** <u>Rare Earth Element (REE)</u> Mineralisation Intersected across the Lort River project area.
  - October 2023 <u>Gallium Clays Mineralisation</u> Intersected in all Drill holes at the Lort River (REE) Project.
- Drilling was completed safely, with no reported LTI or environmental incidents.
- Clay zones started at depth between 1 to 2 meters, in all holes.
- Air-core program 16 holes for ~300m, completed, deepest hole was to 38 meters depth to blade refusal.
- All three tenements drill tested along road vergers (refer to diagram 14 for drill locations).
- Bulk sample material will be submitted for the MRIWA district study for analysis.
- Heritage clearance approvals received back during the quarter.
- Internal exploration program design refinement underway for large program subject to results.

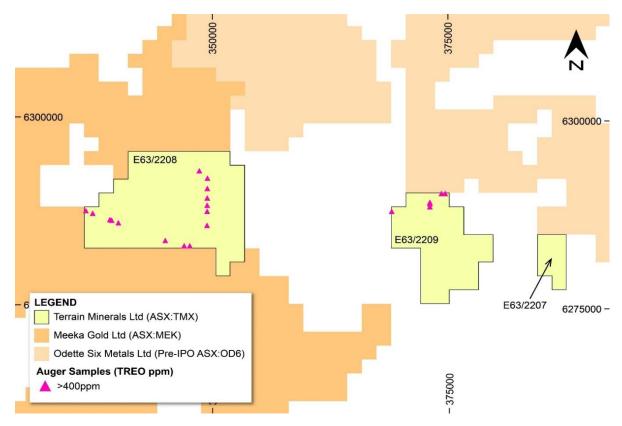
**Commodities focused study:** Terrain is proud to be part of a study by **The Minerals Research Institute of WA (MRIWA) project M10500:** <u>Characterisation of clay-hosted rare-earth element (REE) deposits in Western</u> <u>Australia (WA).</u> The study is a part WA government and industry funded study which has nine WA exploration companies participating. The study is aimed at advancing the WA REE sector forward. Other Esperance based companies also participating include Mt Ridley Mines Ltd and MTM Critical Metals Ltd.

#### Foot Notes (F/note)

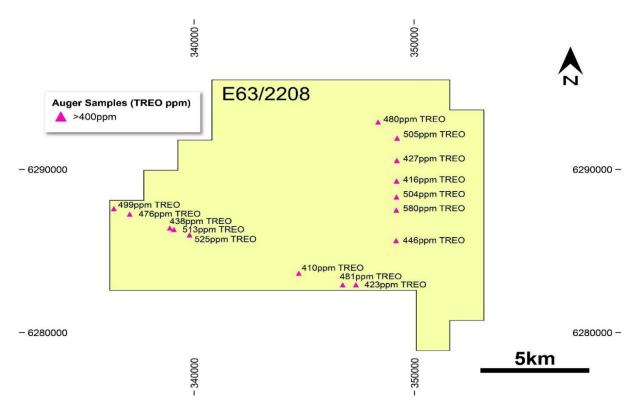
7 - Refer to JORC table in the back of Terrains ASX release on: **30 May 2022** - High-Grade Clay Type Rare Earths (REE) Soil Anomaly Identified at Lort River Project.



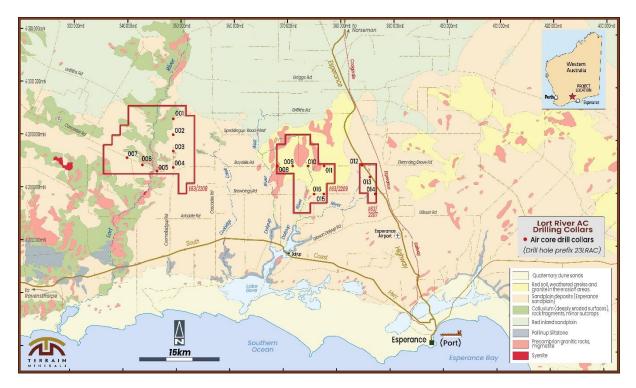
**Diagram 11**: Location of Terrain Mineral's 100% owned Lort River Rare Earths Project within the highly prospective Esperance region of Western Australia. The majority of the Company's 320 square kilometre Lort River tenement package encompasses privately owned (third party) freehold land, used for cropping and other agricultural activities.



**Diagram 12**: Higher-grade rare earth surface sample locations (JORC table information, refer to diagram 13).



**Diagram 13:** Some of the Higher-grade rare earth surface assays within this large tenement E63/2208 (JORC table information in ASX release: 30 May 2022 High-Grade Clay Type Rare Earths (REE) Soil Anomaly Identified at Lort River Project).



**Diagram 14:** Collar location map for Terrain Minerals' August 2023 first pass, reconnaissance scale air core drill program, whose results the subject of this release (refer to ASX release 19 October 2023 for JORC and drill hole locations).



**Picture 4 –** Raglan air core drilling at Terrain's 100% Lort River REE project.

## Lort River - Location & Access

The new tenements cover a total area of 320km2 of highly prospective exploration acreage for REE within the now tightly held and emerging southern Esperance clay hosted REE province of Western Australia. The new tenements are all situated between other ASX explorers who have already demonstrated the existence of clay hosted REE within the region (refer to Diagram 12 and 13).

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.

Exploration Licence	Status	Area	Registered Holder	Grant Date	Renewal Date
E63/2207	Granted	20km2	Terrain Minerals Ltd	29 April 2022	29 April 2027
E63/2208	Granted	100km2	Terrain Minerals Ltd	29 April 2022	29 April 2027
E63/2209	Granted	200km2	Terrain Minerals Ltd	29 April 2022	29 April 2027

#### **Tenement Details - Lort River Project**

#### Relevant references for previously released ASX information listed above:

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.

## Biloela Project - Queensland Copper Gold Package 100%

#### **New Project Applications**

- Tenement applications totalling  $\sim 2,500$  square kilometres 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.**
- Treatment application numbers have been issued with tenements expected to be fully granted in ~6 months' time, refer to ASX release 21st June 2023 for additional information.

### **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 announcement:

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 15) at the Company's 100% owned (under application) Biloela Project (Biloela) in Queensland. Terrain estimates that it will take around six 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 15) 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.

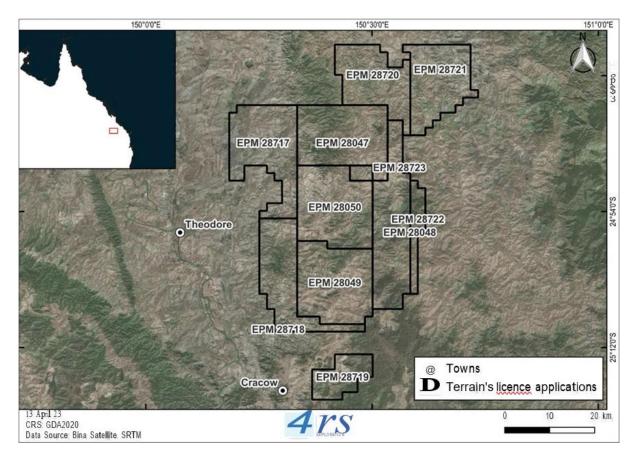
**Note:** The Company does not incur any holding or ongoing costs in relation to this pending application. It should also be noted that there is no guarantee that pending application will be granted.

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

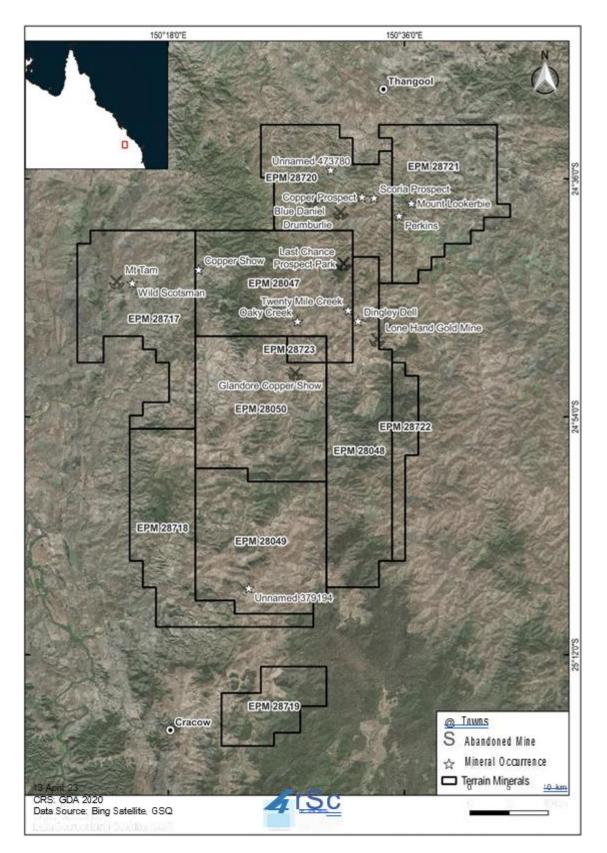
**Table 1.** Potential copper and gold sites within the Biloela Project (refer to diagram 16).

**Note:** For additional information refer to ASX announcement:

• 21 June 2023 Terrain Secures 100% ownership of historical Copper Mines Next door to Cracow Gold Mine, Queensland.



**Diagram 15.** 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 16.** 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

## Placement Oversubscribed & Non-Renounceable Rights Issue

#### Capital Raising and Rights Issue combine raised a total of \$1,216,028 (before costs).

Terrain was pleased with the strong support received during the recent capital raising that targeted \$500,000 and raised \$785,000 (before costs) through a placement to sophisticated and professional investors, many being existing shareholders and long-term supporters of the company. The offer was strongly oversubscribed, with bids scaled back.

A subsequent non-renounceable entitlement issue was offered to eligible shareholders at the same terms of the placement to raise up to \$786,027 before costs.

## Placement

Terrain received firm commitments from institutional and sophisticated investors to raise \$785,000 (before costs) through the issue of 174,444,451 shares at an issue price of \$0.0045 each (**Placement Shares**), together with one free-attaching option for every two (2) Placement Shares subscribed for and issued, split between 50% of the options exercisable at \$0.009 and expiring 20 January 2024 and 50% of the options exercisable at \$0.015 and expiring 20 May 2024 (together the **Placement Options**) (**Placement**). The Placement Shares and Placement Options were issued on 20 September 2023 using the Company's existing placement capacity under Listing Rule 7.1 and 7.1A.

The Company engaged Novus Capital Ltd (**Novus**) Sydney to act as broker to the Placement. Novus received a fee of up to 6% of the funds raised under the Placement and were issued on 10 October 2023 with 2,500,000 options (exercisable at \$0.009 and expiring 20 January 2024) and 2,500,000 options (exercisable at \$0.015 and expiring 20 May 2024), being the same terms and conditions as the Placement Options (**Broker Options**).

The Board would like to thank Novus and the 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 the large group of existing sophisticated shareholders and brokers who continue to strongly support Terrain.

## Non-Renounceable Rights Issue Offer – Completed after the Quarters End

The Board would like to thank all shareholder for their continued support of the company, as Terrain enters the next very exciting period of exploration.

- Raised \$432,028 total funds received (Not underwritten)
  - Entitlements \$210,120
  - Additional \$220,908
- 15.85% of shareholders participated (187 shareholders)
- Shortfall of \$354,999 (unallocated) shortfall can be placed at the board's discretion for three months after RI closing date.

The board is pleased with the results, as it was expecting a shareholders take up of circular \$300,000 considering current geopolitical events and difficult market conditions. Terrain will continue to ensure funds are allocated towards value adding endeavours aimed at increasing shareholder wealth. Funds received from the right issue and the September 2023 placement (effectively priced the same).

#### Refer to ASX releases for further details:

- 13 September 2023 Placement Oversubscribed & Non-Renounceable Rights Issue.
- 22 September 2023 Rights Issue Prospectus.
- 27 October 2023 Results of Successful Non-renounceable Entitlement Offer.

## **Strategy and Trade Opportunities**

Terrain remains focused on creating additional and meaningful wealth for its shareholders over the short, medium and longer term.

The Smokebush accelerated three stage exploration strategy is being rolled out as planned with the aim of achieving a company-defining discovery in 2023.

Terrain 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 to advance projects forward.

Terrain will continue to update its shareholders in a timely manner as exploration results come to hand and as exploration activities progress forward from the Smokebush Gold, Lithium & Copper project, as well as the other exciting projects pipeline already held within the Company's portfolio.

## **Marketing Activities**

A new website is currently under construction. This will also coincide with new sustainability policies which are being established by the Company.

## **New Opportunities & Project Review**

Terrain continues to search, assess potential 'company making' projects including Gold, Copper, Nickel, REE's 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 and new tenement areas have been applied for, in Queensland. Terrain's Western Australian assets currently remains the Company's main focus.

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 a Western Australian based asset portfolio consisting of:

#### Trade Opportunities: Terrain is always open to commercial discussions of full/partial sales and or JV of assets.

**Lort River** – WA Rare Earth Elements Exploration Project 100% owned. Covering 320km2 of highly prospective exploration acreage for REE within the now tightly held and emerging southern Esperance clay hosted REE province of Western Australia. Terrain has recently executed a roadside air core drilling program that has successfully intersected highly encouraging REE mineralisation, that appears to comparable to the other regional exploration companies as well as large zones of Gallium in all holes from the same drilling campaign. The Company's Lort River Project immediately adjoins Meeka Metals Limited's (ASX: MEK) Cascade REE Project and OD6 Metals Limited's (ASX: OD6) Grass Patch REE Project.

**Smokebush (SB):** 100% owned gold, copper, gallium and lithium exploration project located within the prospective Yalgoo Mineral Field of Western Australia. The Company's Smokebush Project neighbours Warriedar Resources Limited's (ASX: WA8) (formally Minjar, Golden Dragon Project), The Company's exploration campaigns are targeting both gold, lithium, and new Copper/Ni targets across the tenement package:

- **SB Gold IP Survey** IP survey program identified multiple drill targets, now drill tested with results pending expected late October 2023. Results not received back as of time of this release.
- **SB** Lithium multiple pegmatites identified, ranging up 20m wide and up to 200m long before appearing to go under cover. The pegmatite swarms run along a 4 km long zone with the most prospective targets around the Monza and Hurly areas.
- **SB Larin's Lane** MMI soil sampling results have identified potential polymetallic drill targets. Refer to above ASX realise on the 18 October 2023. <u>Targeting maiden drill program in November 2023</u>.

**Wild Viper Project:** 100% owned gold exploration project, located 70 kilometres north of Leonora, Western Australia, and incorporates the strategic land holding known as Wilsons Patch. The Company's Wild Viper Project is strategically located and surrounds Red5 Limited's (ASX; RED) Great Western Mine as well as being adjacent to Northern Star Resources Limited's (ASX: NST) Bundarra gold deposits.

**Project Review:** Terrain Minerals Limited continues to investigate potential projects across various commodities including gold, copper, nickel, rare earth elements, and other industrial minerals. Western Australian based projects are the Company's current focus, but other parts of Australia are being seriously examined and considered as are other jurisdictions like Africa, Europe, and the Americas. Several Canadian Lithium opportunities are currently being reviewed.

**Pending Applications:** Terrain has several pending tenement (packages) applications across Western Australian and now Queensland. These applications include:

- **Biloela Copper & Gold Project** located along strike of the Cracow Gold Mine in Qld (ASX release 21 June 2023);
- **Carlindie Lithium Project** located near Lithium Power International's Tabba Tabba Lithium Project in the Pilbara WA;
- **Mukinbudin (WA) Rare Earths and Lithium Project** which neighbours Rio Tinto's landholding in the region.

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

## 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 <u>Mr. B.</u> <u>Bell</u>, 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</u> <u>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 September 2023

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(945)	(945)
	(b) staff costs	(69)	(69)
	(c) administration and corporate costs	(87)	(87)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	2	2
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	47	47
1.9	Net cash from / (used in) operating activities	(1,052)	(1,052)

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	-	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 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	-	-

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	785	785
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	(57)	(57)
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	728	728

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,309	1,309
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,052)	(1,052)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	728	728
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	985	985

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	985	1,309
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)	985	1,309

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	-
Note: i	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must inclu	de a description of, and an

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

7.	<b>Financing facilities</b> 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 qu	larter end	
7.6	Include in the box below a description of eac rate, maturity date and whether it is secured facilities have been entered into or are propo- include a note providing details of those facil	or unsecured. If any add	tional financing

8.	Estim	ated cash available for future operating activities	\$A'000
8.1	Net ca	sh from / (used in) operating activities (item 1.9)	(1,052)
8.2		ents for exploration & evaluation classified as investing es) (item 2.1(d))	-
8.3	Total r	elevant outgoings (item 8.1 + item 8.2)	(1,052)
8.4	Cash a	and cash equivalents at quarter end (item 4.6)	985
8.5	Unuse	d finance facilities available at quarter end (item 7.5)	-
8.6	Total a	available funding (item 8.4 + item 8.5)	985
8.7	Estima item 8	ated quarters of funding available (item 8.6 divided by	0.94
	Note: if t Otherwis	the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8. se, a figure for the estimated quarters of funding available must be included in it	.3, answer item 8.7 as "N/A". tem 8.7.
			ing augusticas.
8.8	If item	8.7 is less than 2 quarters, please provide answers to the follow	ling questions:
8.8	lf item 8.8.1	8.7 is less than 2 quarters, please provide answers to the follow Does the entity expect that it will continue to have the current I cash flows for the time being and, if not, why not?	0 1
8.8		Does the entity expect that it will continue to have the current l cash flows for the time being and, if not, why not?	0 1
8.8	8.8.1	Does the entity expect that it will continue to have the current l cash flows for the time being and, if not, why not?	level of net operating steps, to raise further
8.8	8.8.1 Answe 8.8.2	Does the entity expect that it will continue to have the current l cash flows for the time being and, if not, why not? er: Yes Has the entity taken any steps, or does it propose to take any cash to fund its operations and, if so, what are those steps and	level of net operating steps, to raise further d how likely does it the non-renounceable
8.8	8.8.1 Answe 8.8.2	Does the entity expect that it will continue to have the current I cash flows for the time being and, if not, why not? er: Yes Has the entity taken any steps, or does it propose to take any cash to fund its operations and, if so, what are those steps and believe that they will be successful? er: On 27 October 2023, the Company announced the results of entitlement offer to raise funds of \$431,028 with the ability to p	level of net operating steps, to raise further d how likely does it the non-renounceable place the shortfall of
8.8	8.8.1 Answe 8.8.2 Answe	Does the entity expect that it will continue to have the current l cash flows for the time being and, if not, why not? er: Yes Has the entity taken any steps, or does it propose to take any cash to fund its operations and, if so, what are those steps and believe that they will be successful? er: On 27 October 2023, the Company announced the results of entitlement offer to raise funds of \$431,028 with the ability to p \$354,999. Does the entity expect to be able to continue its operations an objectives and, if so, on what basis?	level of net operating steps, to raise further d how likely does it the non-renounceable place the shortfall of

## Schedule of Exploration Tenements held as at 30 September 2023 - 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	100%		
Smokebush E59/2435 E59/2482 E59/2274 E59/2234 P59/2125 P59/2126 P59/2127 P59/2128 E59/2700 P59/2275* P59/2822	Western Australia	100%		
Calytrix E59/2692 E59/2694 E59/2744 E59/2745 E59/2730*	Western Australia	Relinquished		E59/2692 E59/2694 E59/2744 E59/2745 E59/2730
Lort River E63/2207 E63/2208 E63/2209	Western Australia	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/28722* EPM/28722* EPM/28723* EPM/28835* EPM/28836* EPM/28837* EPM/28839*	Queensland	100%		

Bassit Bore E09/2765* E06/2766*	Western Australia		
Carlindie E45/6522* E45/6523* E45/6524* E45/6525*	Western Australia	100%	

\* 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: 31 October 2023

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.
- 2. 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.