# **ASX Announcement**



7 February 2023

ABN: 45 116 153 514 ASX: TMX

# Smokebush – 2023 Field Season Now Underway, IP Survey & MMI Soils Programs

Terrain Minerals Limited (ASX: TMX) (Terrain) is pleased to provide the following update;

Terrain has kick started its 2023 field program with two separate programs underway over multiple target areas at its 100% owned Smokebush Project, located 350 kilometres north of Perth, Western Australia. These works are the commencement of an extensive 2023 exploration program, which is targeting to make a potential company-making discovery this calendar year.

#### Induced Polarisation (IP) Survey over Monza, Hurley and Paradise City

Terrain is pleased to announce that it is working with leading geophysical consultants Newexco Exploration to supervise a high resolution induced polarisation (IP) survey (refer to diagram 2) across the Company's priority gold targets of Monza, Hurley, and Paradise City (tenements P59/2128, P59/2126, P59/2125 and E59/2425).

This IP survey is designed to detect and map the location of any sulphides present within the underlying bedrock, which is potentially associated with the high-grade gold mineralisation. This exploration technique for discovering gold mineralisation has proven successful in the past across the Yalgoo gold province including the nearby Windinne Well and Austin deposits (refer foot note 1). Previous drilling by Terrain at its Monza target appears to have established a possible positive relationship between the increased occurrence of sulphide mineralisation and higher recorded gold grades (refer foot note 2).

The specifications and details of the IP survey include 200 metre line spacing (with infill 100 metre line spacing order any anomaly), and 50 metre along line sample spacing. Modelling and interpretation of the resulting data is anticipated to be completed by early in the second quarter, following which the Company will seek to move quickly to commence a targeted Reverse circulation (RC) drilling campaign to test any and all IP anomalies.

#### Soil Sampling Program - Larin's Lane

Terrains is also pleased to have a team from XM Logistic on site who are currently conducting a large and close spaced soil sampling program over Larins Lane target (refer to diagram 3) located in the eastern section of the broader Smokebush project area (refer to pictures 1,2 & 3). The soil sampling program utilises the mobile metal ion (or MMI) soil sampling technique that has been used with much success across the region, including at the nearby Yidby gold discovery.

The Larins Lane MMI sampling program is anticipated to be completed later this month, with the subsequent assay results expected early in the second quarter.

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

Drill testing of any resulting geochemical anomalies arising from this survey is the natural next step, with the timing of the drilling to be confirmed (an announced) once the assays from the MMI survey have been received by the Company (refer foot note 3).

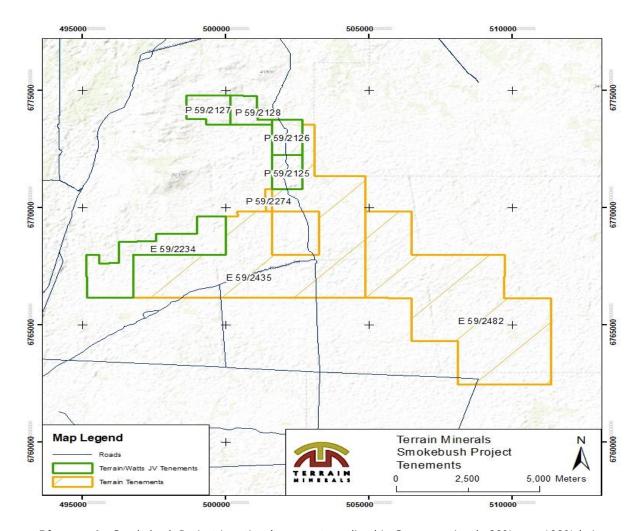
#### **Foot Notes:**

- 1. See Anova Metals Limited (ASX: AWV) announcement of 12 January 2023 titled "drilling commences at Golden Dragon).
- 2. See Terrain Minerals 2022 Annual Report, released 21 September 2022.
- 3. See Surefire Resource announcement of 28 September 2022 titled "Successful drill testing of MMI geochemical anomalies confirms 2 new gold mineralised prospects".

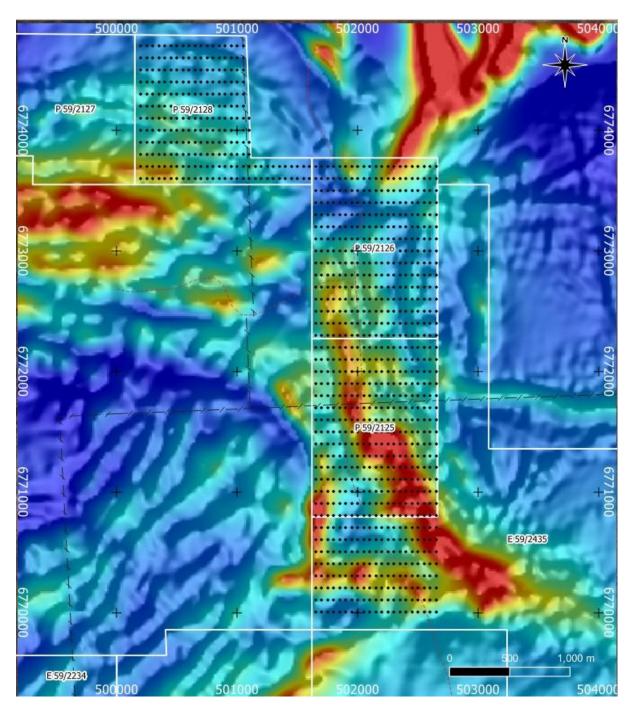
#### Smokebush - Pending Samples:

Terrain has recently identified 20+ pegmatites during several site visits. These samples are being tested for the existence of Lithium ore with result expected sometime in February 2023.

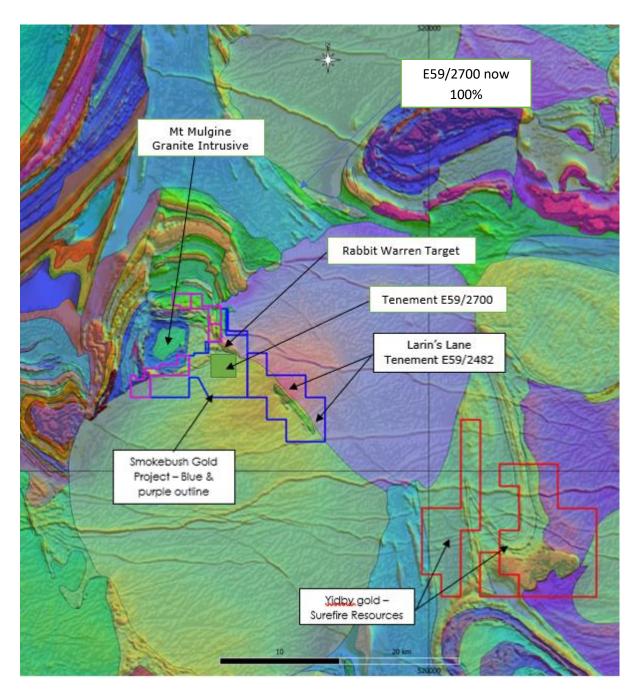
**Refer to ASX release: 6 December 2022 -** Smokebush - Pegmatite Swarms Identified, Sampling for Lithium Mineralisation Underway.



**Diagram 1:** Smokebush Project Location (tenements outlined in Green previously 80% now 100% being the same as the orange outlined tenements. E59/2700 was previously not owned by Terrain and is strategically situated along the structure that runs between Rabbit Warrens and down to Larin's Lane (refer to Diagram 3).



**Diagram 2:** The above plan shows the survey points for the current Induced Polarisation (IP) survey. The specifications and details of the IP survey include 200 metre line spacing (with infill 100 metre line spacing order any anomaly), and 50 metre along line sample spacing. The survey may change subject to the data received in the field.



**Diagram 3:** Smokebush Project Location: The Mt Mulgine granite intrusive can been identified and shows that Terrain pegmatites are in the so-called Goldilocks zone for potential lithium mineralisation. The area also hosts Terrains new Larin's Lane gold target a  $\sim$ 4.5km long by 200-300m wide untested and undercover greenstone that is wedged between two granites.



**Picture 1:** XM Logistics team member at Larins Lane. The soil sampling program utilised the mobile metal ion (or MMI) soil sampling technique.



**Picture 2:** XM Logistics team member sampling at Larins Lane.



Picture 3: XM Logistics on site office and accommodation at Larins Lane.

### **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 Paynes Find within the Yalgoo Mineral Field. The tenements can be accessed via the unsealed Perenjori - Warriedar Road, and thence 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).

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 recently developed gold open pit mines (Minjar Gold Pty Ltd).

Note: For additional information refer to ASX announcement:

- 2 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.
- 3 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.
- 3 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.
- 2 December 2022 Acquisition Smokebush JV Tenement Now 100% owned.
- 6 December 2022 Smokebush Pegmatite Swarms Identified, Sampling for Lithium Mineralisation Underway.

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:

- **Investments:** As of the date of this announcement, Terrain holds 650,000 Red 5 Limited shares (ASX: RED) from the GW sale.
- Lort River Western Australian 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 Cube Consulting has been appointed to ensure that all exploration drilling is compliant with JORC code. Terrain is currently planning for a large wide spaced 8,500m 1600m by 1600m, 60m deep air core program over tenement package under way. All holes will be drilled to be JORC compliant. Drilling aims to test two targets: Firstly: Shallow clay REE and Secondly: Bottom of hole samples will be testing for Tropical style gold and Nova style base metal targets.
- Smokebush (SB) WA Gold exploration Project 100% owned Terrain has identified multiple drill targets along with several other prospective areas. Terrain executed its extraordinarily successful maiden RC drill program in 2020, which followed up on historic drilling and extended mineralisation a further 400m, (now 700m in length). As well as identifying a new zone Monza Norths that appears to be on a different orientation. Exploration is underway for further exploration at Larin's Lane, Paradise City, Hurley and other areas. Refer to the above release for comprehensive update.
- **SB Lithium -** 15+ pegmatites identified to date, ranging from 5m to 30m wide and up to 200m long until appearing to go under cover. These areas have been sampled and results are expected first Q 2023. Terrain intends to drill these pegmatites subject to sample results identify Lithium mineralisation.
- **Wild-viper** WA gold exploration Project 100% owned which incorporates the strategic land holding known as Wilson Patch (WP). Wild-viper tenement package is strategically located and surrounds Red5 Ltd Great Western Project (GW) as well as being adjacent to Northern Stars (ASX: NST) Bundarra gold deposits.
- **Calytrix Exploration Project** Base metals and gold Exploration project, first pass filed exploration program was conducted and results are currently being assessed.
- Project Review Terrain Minerals continues to investigate potential projects across various commodities including Gold, Copper, Nickel, and other industrial minerals, REE and the platinoids groups of metals in Australia and in other jurisdictions like Africa, Continental Europe, and the Americas.

# **Authority**

This announcement has been authorised for release by the Board of Director of Terrain Minerals Limited.

## **Competent Person Statement:**

The information in this report that relates to historic exploration activities are based on information compiled by Mr. S Nicholls, who is a Member of the Australian Institute of Geoscientists and full time employee of Apex Geoscience Australia Pty Ltd. Mr Nicholls 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. Nicholls 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.