TERRAIN MINERALS

Gallium (REE), Gold, Nickel & Copper

Investor Presentation

ASX:TMX | JULY 2024

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The information in this presentation that relates to exploration results within Terrain Minerals' tenements has been compiled by Mr Benjamin Bell, consultant to Terrain Minerals. Mr Bell has over 20 years' experience in exploration and evaluation of mineral properties throughout Australia and overseas. Mr Bell is a Member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and types of deposits under consideration and to the activities that he is undertaking to qualify as a Competent Person as defined in the JORC Code 2012. Mr Bell has consented to the inclusion of statements made by him, in the form and context in which they appear within this presentation and has not withdrawn consent prior to the release of this presentation.

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References

1. Terrain Minerals Ltd, ASX announced dated 11 March 2024
2. Terrain Minerals Ltd, ASX announced dated 27 May 2024
3. Terrain Minerals Ltd, ASX announced dated 27 May 2024
4. Terrain Minerals Ltd, ASX announced dated 11 March 2024
5. Terrain Minerals Ltd, ASX announced dated 11 March 2024
6. Terrain Minerals Ltd, ASX announced dated 22 February 2024
7. Terrain Minerals Ltd, ASX announced dated 22 February 2024
8. Terrain Minerals Ltd, ASX announced dated 27 May 2024
9. Terrain Minerals Ltd, ASX announced dated 27 May 2024
10. Terrain Minerals Ltd, ASX announced dated 22 February 2024
11. Terrain Minerals Ltd, ASX announced dated 22 February 2024
12. Terrain Minerals Ltd, ASX announced dated 23 October 2023
13. Terrain Minerals Ltd, ASX announced dated 23 October 2023

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Why Terrain Minerals?

Smokebush Project - (Larin's Lane)

- Gallium and Rare Earth Element (REE) mineralisation extending over 9 kilometres (1).
- Multiple high-grade zones up 53.74 g/t (ppm) Ga_2O_3 (2).
- 70% of holes retuned impressive intersection of Gallium up to 64 metres wide (2).
- Total Rare Earth Oxide (TREO) grades up to 3,254 ppm (2), MREO averaging 25% of TREO (3).
- Alternative REE processing solutions currently being assessed.
- Three historic gold targets, currently under assessment for potential drilling.

Lort River Project

- Potential repetition of Nova nickel "eye" feature present (6).
- Bedrock conductor already detected within Terrain's "eye" feature (7).
- 1,281 kilometre Vtem line survey now completed (May 2024) (8).
- Vtem survey data currently being processed & due in 6 to 8 weeks (estimate).

Project Pipeline

- Lithium and Copper/Gold - See Appendixes.
  (Priority is being given to advancing the grant of these tenements).

TERRAIN MINERALS

Company Profile

Capital Structure

Shares on Issue:	1.423 Million
Unlisted Options	
Various expiry dates / prices	41 Million
Market Cap (Million):	4.3
Cash at Hand (Million):	(March Q end) $0.761
Asset Sales (Million):	(16/05/2024) $0.300
Debt	Nil
Share Price	$0.003

Major Shareholders

Top 20:	37.52%
Top 100:	70.56%
Board & Associated:	12.7%
No. of Shareholders:	1,198

Board Members

Justin Virgin	Executive Director
Jason MacDonald	Non-Executive Director
Johannes Lin	Non-Executive Director

ASX code: TMX

Key

- Gold Projects
- Lithium Projects
- Gallium Projects
- Rare Earths Projects
- Copper Projects

*Application pending

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Smokebush Project

Larins Lane

31 Ga Gallium	Ree Rare Earth Elements	79 Au Gold

Located 350 kilometres north of Perth.

300km² of tenure within Western Australia's emerging Midwest REE district.

Proven host of high grade Clay Gallium and REE mineralisation.

Three historic gold targets, currently under assessment for potential drilling.

Benefits from close proximity to existing mining and related infrastructure.

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Smokebush Project | Gallium

Larins Lane

High grade Gallium Clays appear to be sitting above the layers of REE.

Selected holes include(9):

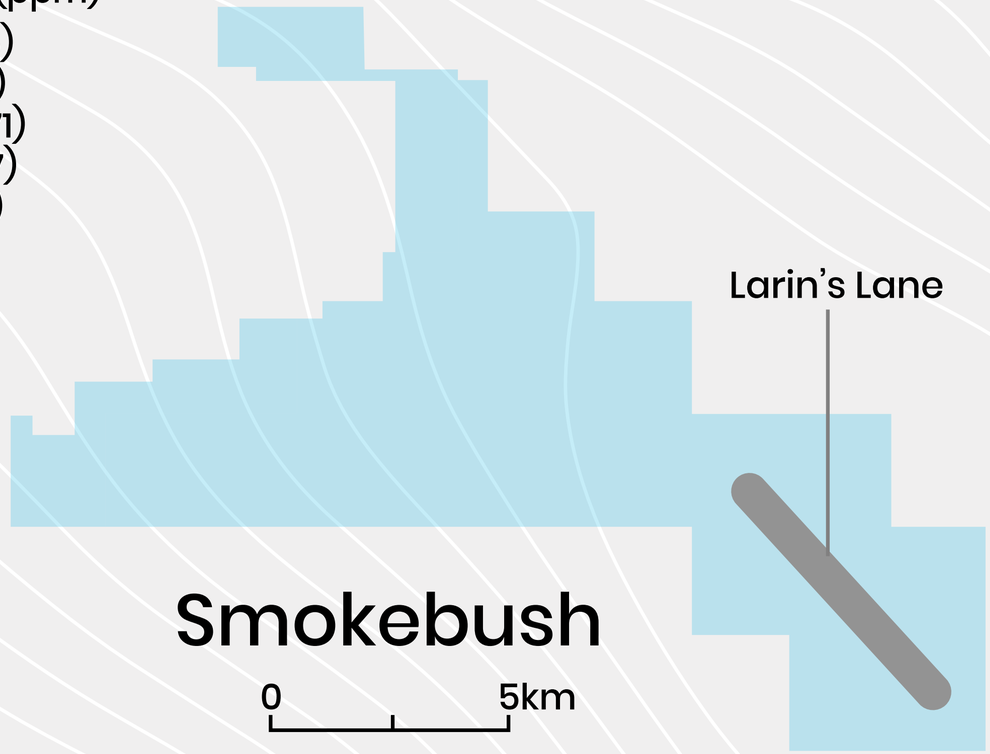
Applying: Gallium Oxide (Ga203) cut-off 40.32 g/t (ppm)

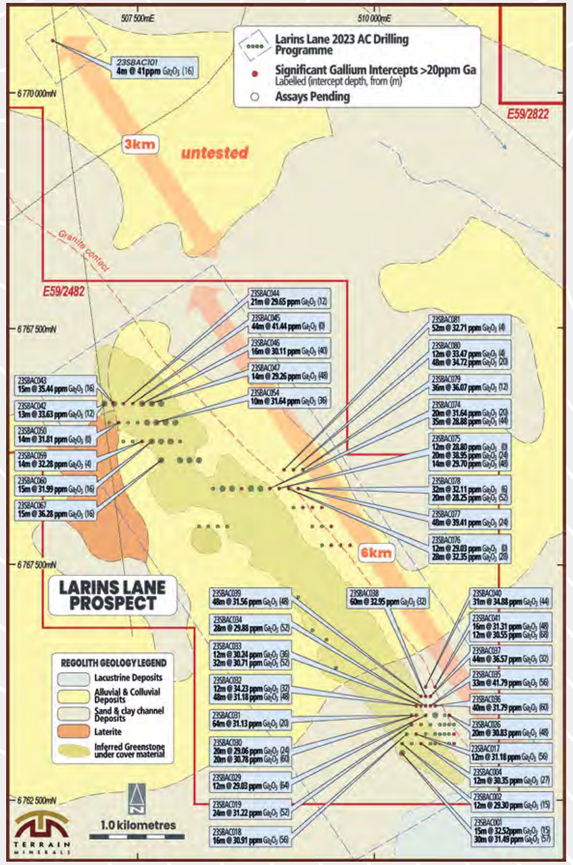
- 16m @ 53.74 ppm Ga_2O_3 from 64m - (23SBAC035)
- 20m @ 48.33 ppm Ga_2O_3 from 4m - (23SBAC045)
- 30m @ 40.32 ppm Ga_2O_3 from 24m - (23SBAC071)
- 24m @ 46.34 ppm Ga_2O_3 from 32m - (23SBAC077)
- 8m @ 52.62 ppm Ga_2O_3 from 20m - (23SBAC080)

70% of holes returned impressive intersection of Gallium up to 64 metres wide(2).

Planning underway for a follow up drill program scheduled to commence in the third quarter.

On-going discussions with prospective industry and offtake partners.





100%
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31
Ga
Gallium

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What is Gallium?

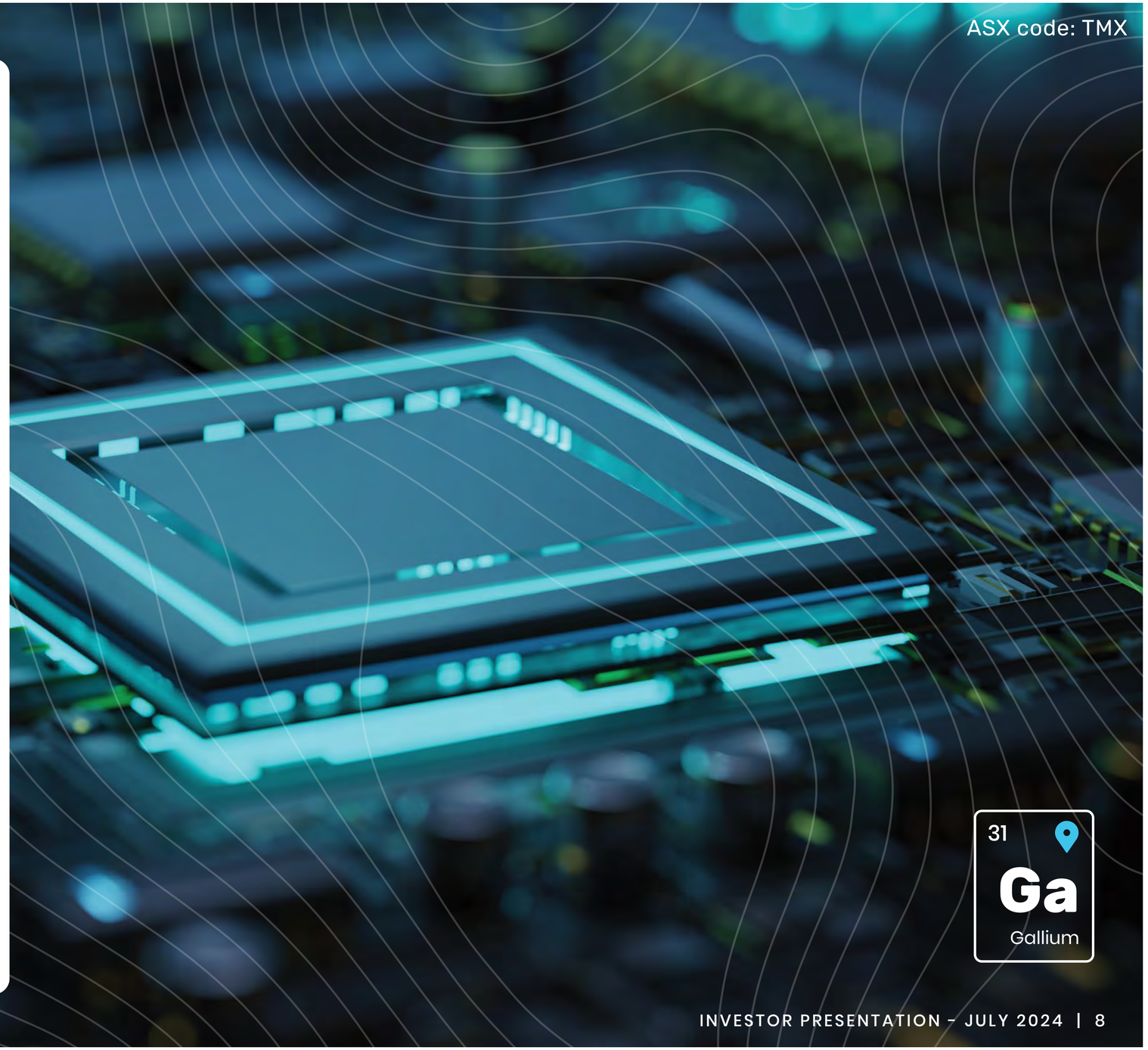
Gallium is classified as a critical metal by the USA, United Kingdom , European Union and Australia.

Main applications are in defence, semi-conductors and computer chips, electronic circuitry and photovoltaic cells.

Presently, 98% of global supply is ex-China USA and European semi-conductors manufactures actively encouraging a more geographically balanced supply chain.

Terrain is rapidly expanding its Gallium focus to dovetail with the exponential growth of generative AI (and the associated demand for semi-conductors).

Gallium chips and other electrical components draw less power, are faster and allow for miniaturisation.



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Smokebush Project | REE

Larins Lane

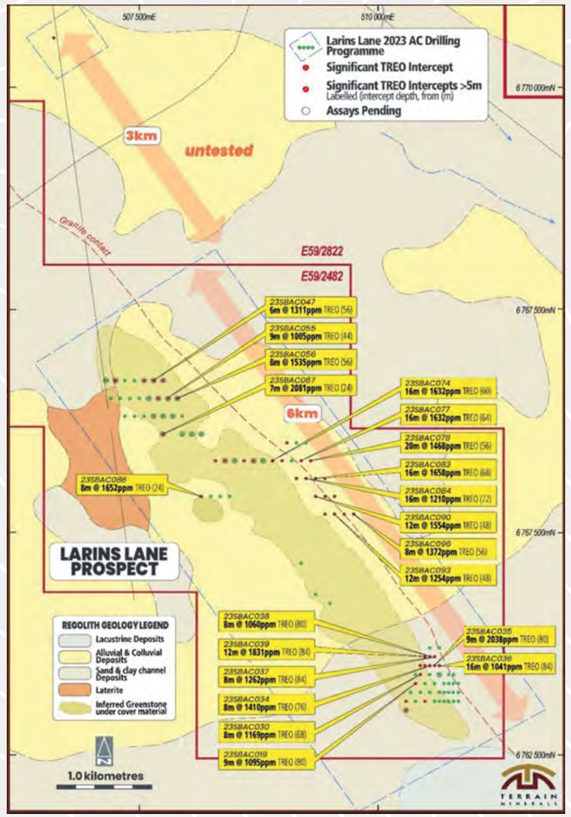
Maiden drilling totalling 6,611 metres returned thick zones of high grade Clay REE mineralisation.

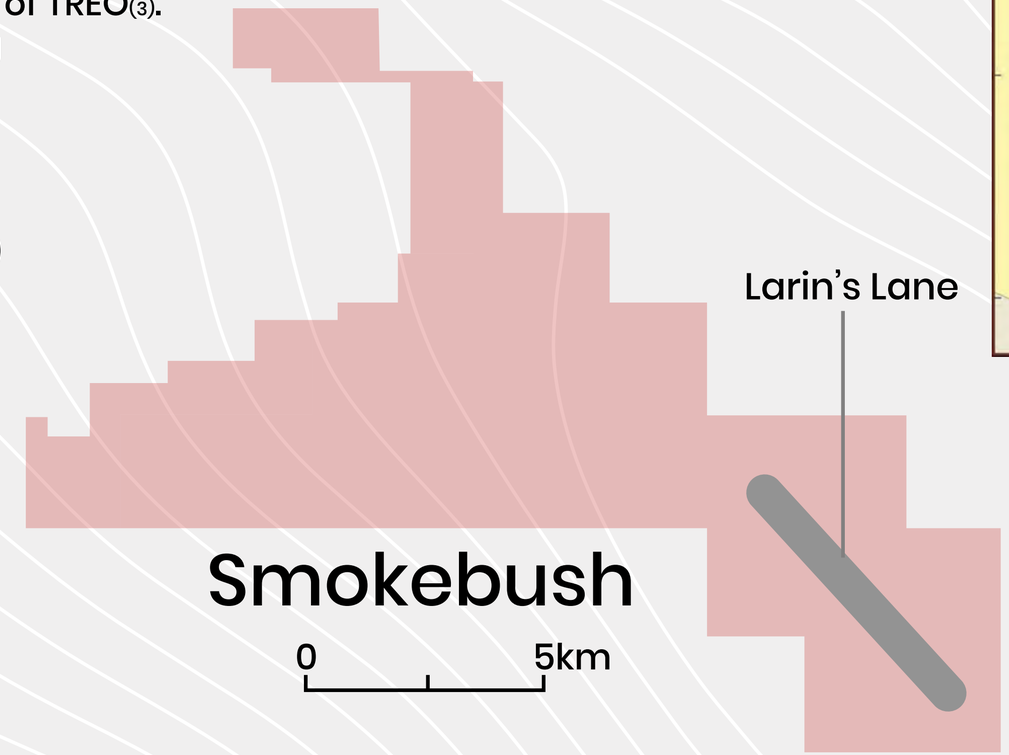
- Total Rare Oxide (TREO) grades up to 3,254ppm(2).
- Magnetic Rare Earth Oxide (MREO) averaging 25% of TREO(3).
- Neodymium (Nd) + Praseodymium (Pr) averaging 80% of MREO(4).

Selected holes include(8):

- 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)
- 12m at 1831.44 ppm TREO from 84m - (23SBAC039)
- 8m at 1535.90 ppm TREO from 56m - (23SBAC056)

Alternative metallurgical process currently being considered.





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Ree Rare Earth Elements

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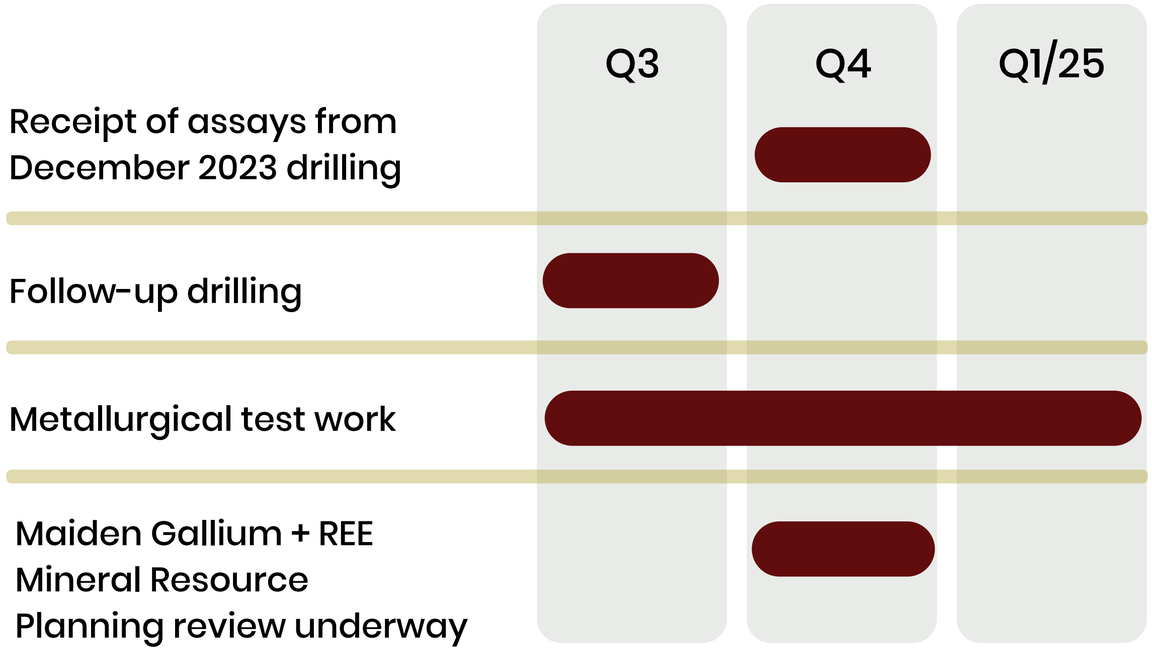
Smokebush Project - Larins Lane Forward Program



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Lort River Project

28 **Ni** Nickel

31 **Ga** Gallium

Ree Rare Earth Elements

Located 650 kilometres southeast of Perth.

640km2 of tenure along interpreted strike of IGO's Nova nickel-copper mine.

Nova-style "eye" feature (with conductor) identified within project (10).

Terrain has confirmed Gallium and REE mineralisation across the tenement package.

28
Ni
Nickel

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Lort River Project | Nickel

Same geological belt as Nova- Bollinger nickel-copper ore body.

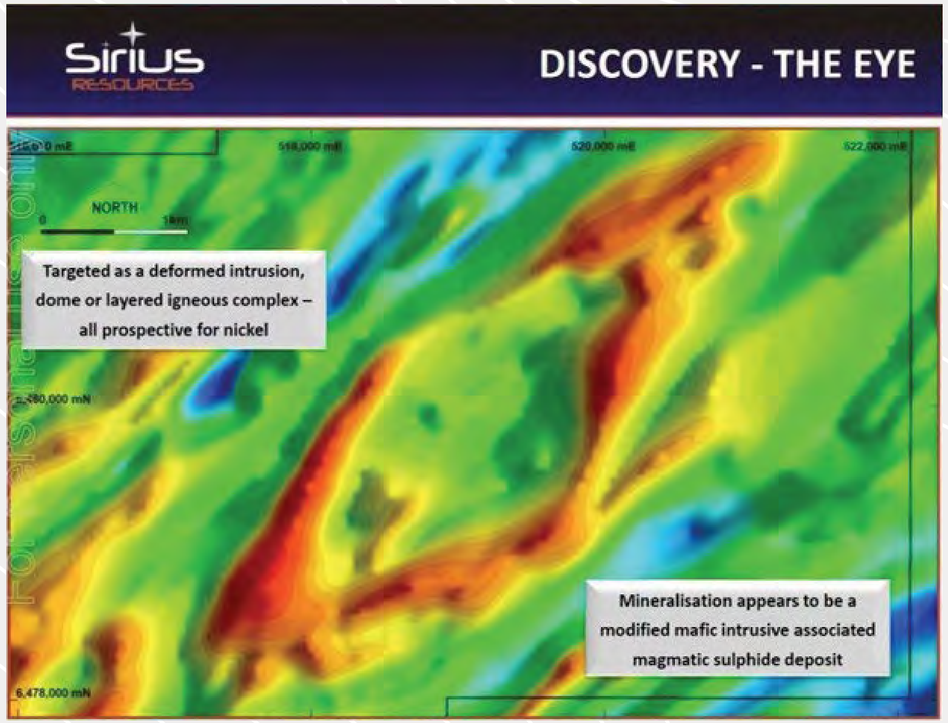
Same characteristics "eye"(11) feature in our aeromagnetic data.

We know that Nova-style nickel-copper ore bodies occur as clusters.

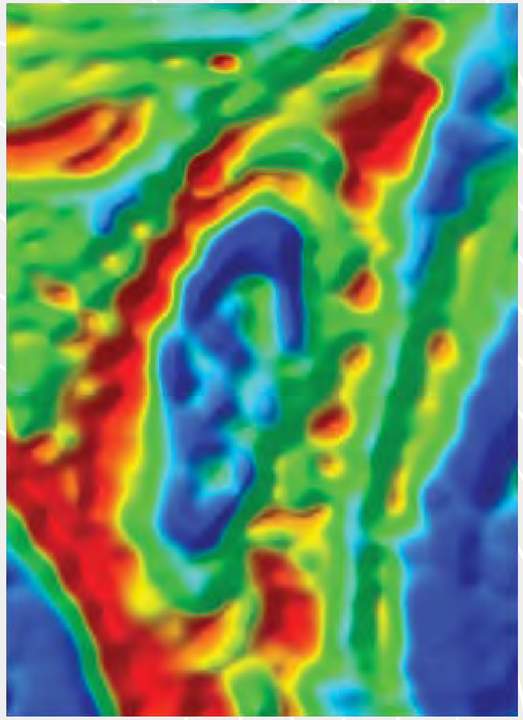
And we know that IGO purchased Nova for $1.8 billion back in 2015.

Airborne EM (Vtem) survey to test for sulphide bodies has been completed after flying a 1,281 km line survey.

The data is currently being processed & estimated to be back in 6 to 8 weeks.



Nova "eye"



Terrain Minerals' "eye"

28
Ni
Nickel

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Lort River Project | Nickel

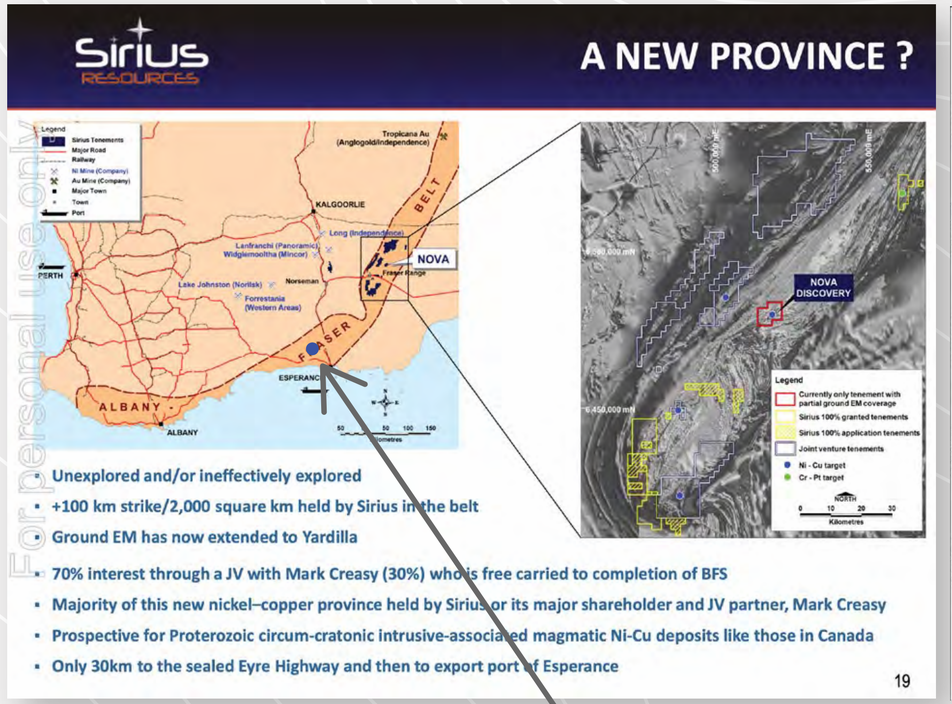
Nova was meant to be part of a "New Province". So where are the other nickel-copper orebodies?

Following the discovery of the Nova orebody, Sirius Resources were adamant that:

- Nova is not a standalone deposit.

- the entire Albany – Fraser Belt appears perspective for magmatic nickel-copper mineralisation.

Terrain Minerals' Lort River Project is located squarely within the Albany Fraser Belt, approximately 300 kilometres southwest of the Nova orebody.



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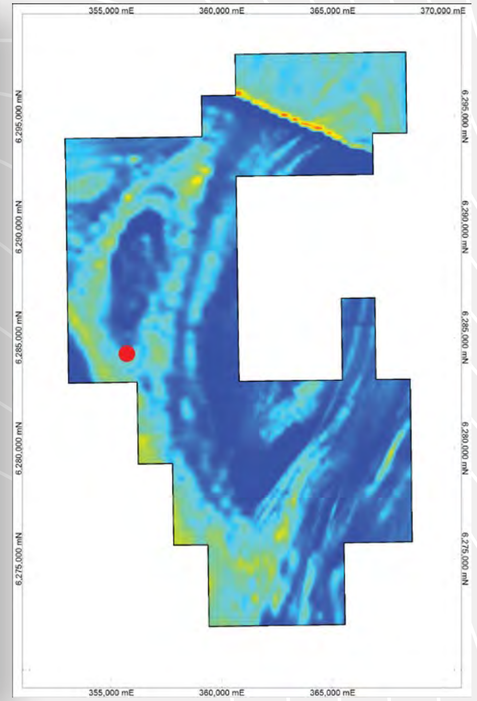

Location of Terrain Minerals' Lort River Project

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Lort River Project | REE & Gallium

31 Ga Gallium

Ree Rare Earth Elements

- Highly successful reconnaissance drilling campaign, 16 holes for 300m, drilled with 7 returning encouraging Clay REE mineralisation.
- First pass, drilling consisted of wide-spaced (3km) completed along road verges across the three tenements with all returning significant intersections.
- Remarkably High Magnetic Rare Earth Oxide (MREO) content that includes the in-demand permanent magnetic metals of Neodymium (Nd) and Praseodymium (Pr), which were encountered during the drill program and run as high as 43% of the Total Rare Earth Oxide (TREO) grade (12).

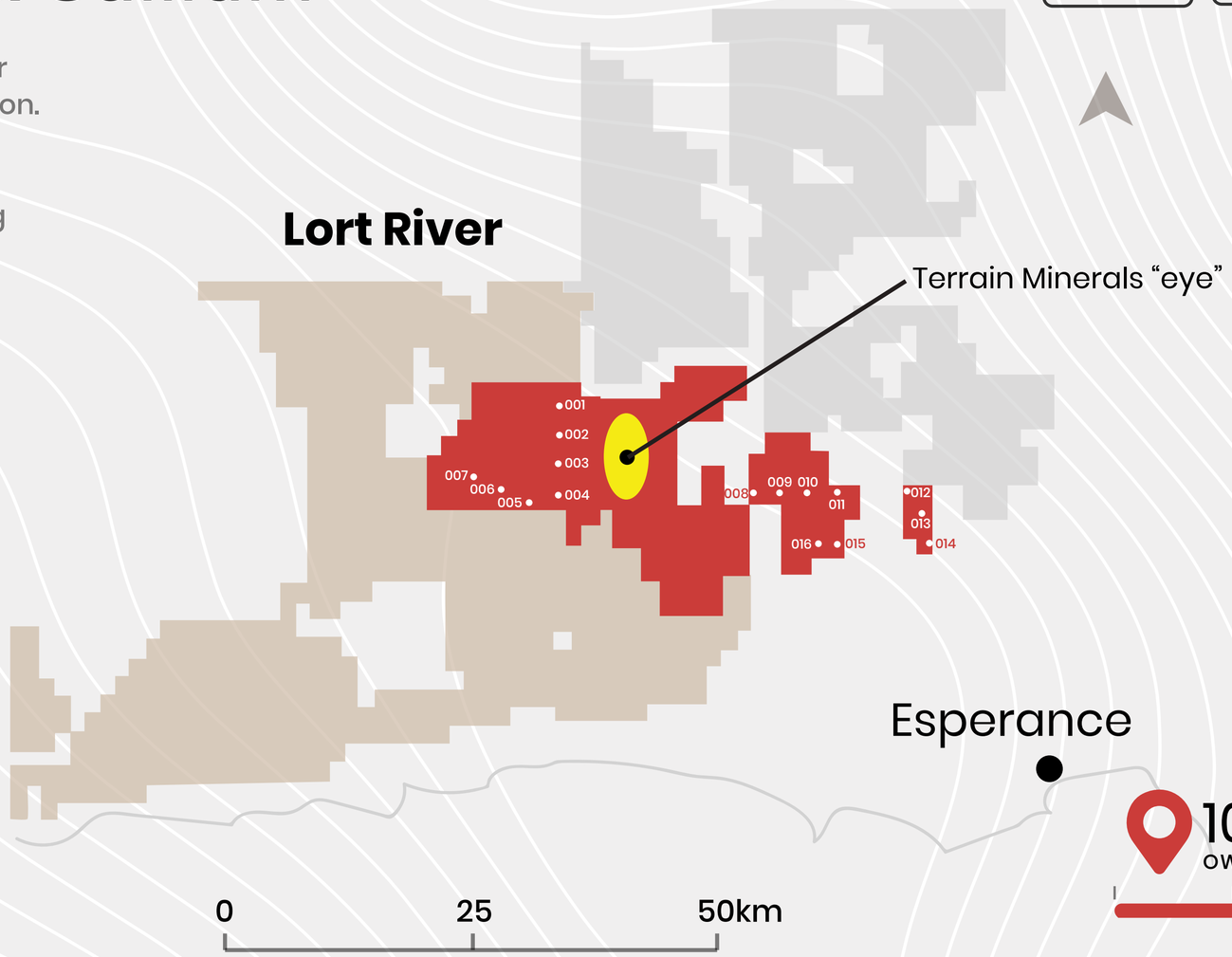
Selected drilling intersections included (13)**:**

- **12m @ 614ppm TREO** from 26m down hole (hole 23LRAC001)#
  38m @ 34.1g/t - Ga2o3 from surface (hole 23LRAC001)#

- **6m @ 900ppm TREO** from 18m down hole (hole 23LRAC005)#
  32m @ 36.8 g/t - Ga2o3 from 13m down hole (hole 23LRAC005)#

Note: Above same drilling campaign/holes with Lort River Gallium results.
Gallium mineralization also identified in these REE intersections.

- **Terrain is part of the Minerals Research Institute of Western Australia. (MRIWA) projects M10500 partly industry funded study on WA REE including metallurgical analysis.**



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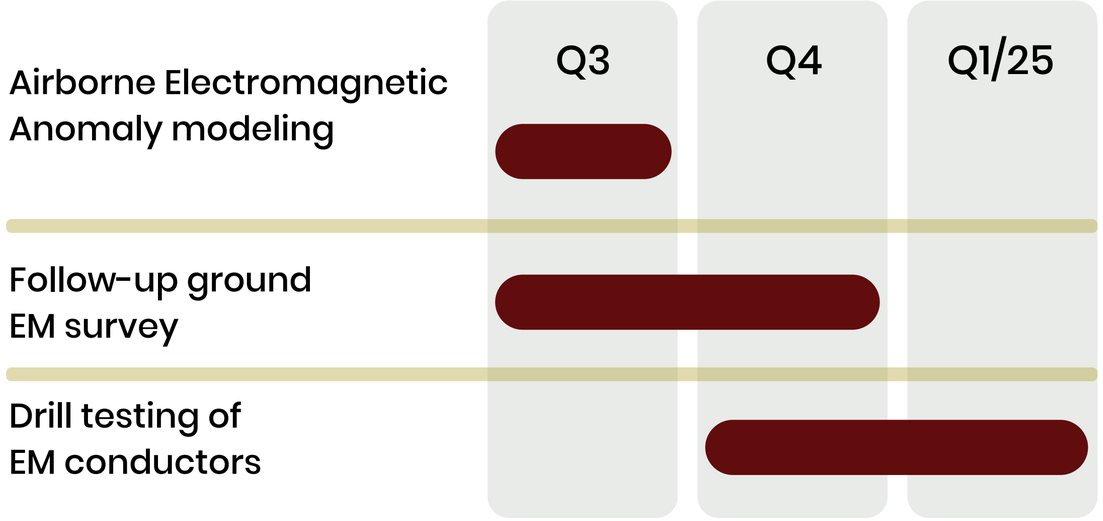
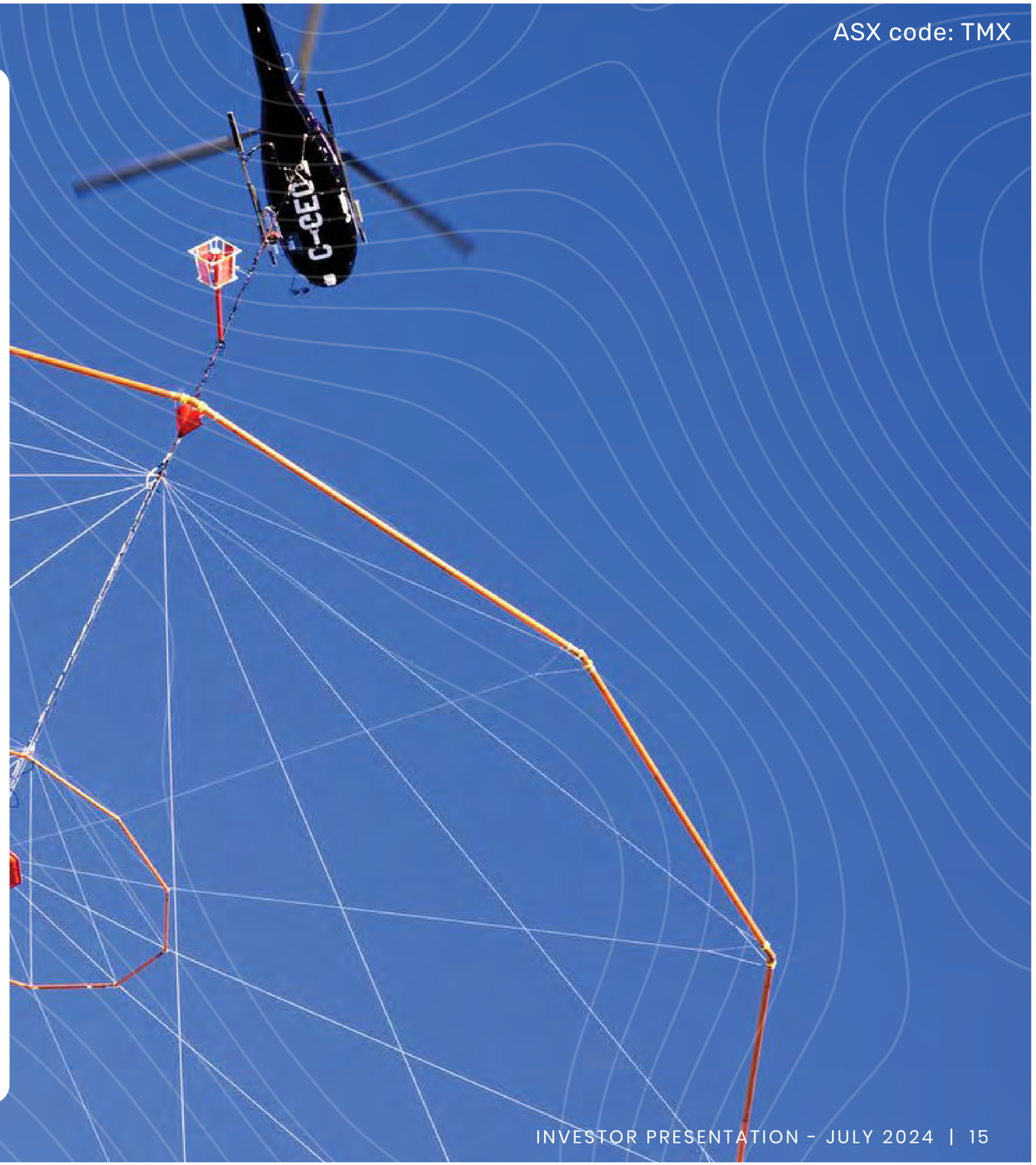
Lort River Project
Forward Program





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Summary

Smokebush – Larins Lane (Clay Gallium & REE) & Gold Prospects

- Located in the newly emerging WA Mid-West High Grade REE district.
- 70% of holes returned impressive intersection of Gallium up to 64 metres wide (2).
- Gallium clay mineralisation layers appear to be sitting above REE clay zones across the 9km long target area.
- Recent Gallium drilling results are currently being reviewed, along with next drilling campaign to advance the project towards a potential JORC compliant resource.
- Three historic gold targets, currently under assessment for potential drilling.

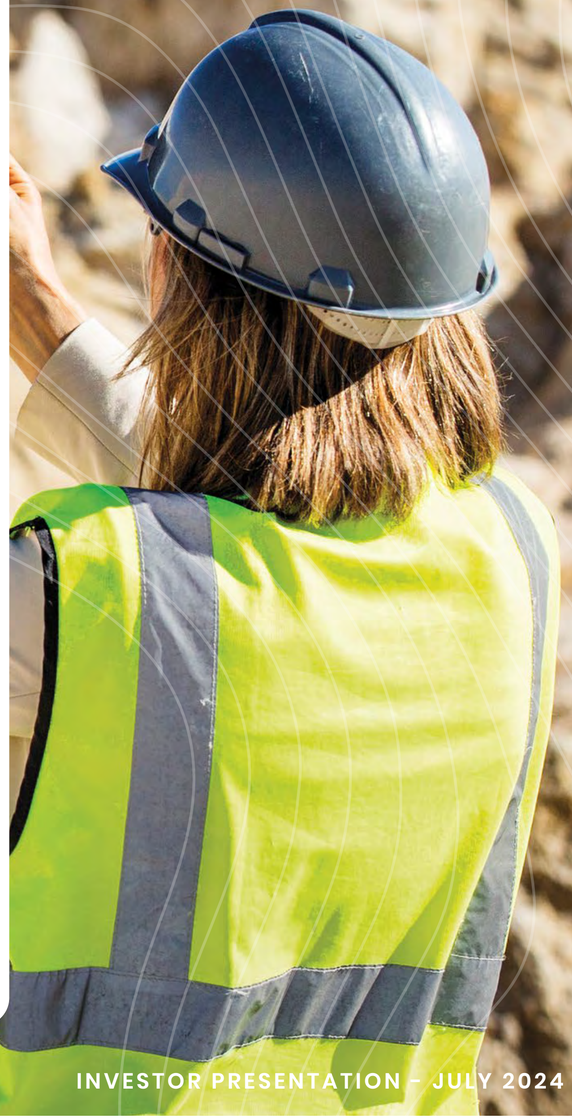
Lort River – Nickel "EYE"

- Exciting new "EYE" feature identified (with new conductor)
- Sulphide Ni/Cu deposits are known to exist in clusters. Only NOVA identified to date in the Albany-Fraser belt.
- "EYE" located in under explored farming district of the Southern Albany-Fraser mineralised belt.
- Maiden Airborne Electromagnetic (Vtem) survey to properly test sulphide bodies, now completed.
- Data processing expected to take an estimate 6-8 weeks to complete.
- Drilling to test of Conductors for Sulphide mineralisation in the second half of the year.

High Quality Project Pipeline

- Projects: Lithium, Copper/Gold and REE – Refer to following appendixes.

Priority is being given to advancing the grant of the Pilbara (Lithium/Fe) and Queensland (Copper/Gold) tenements as Terrain continues to reposition the company.



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Appendix

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Carlindie Project

3
Li
Lithium

Located 90 kilometres south-east of Port Hedland Western Australia.

Tenement applications cover + 850km².

Along strike of Wildcat Resources Bolt Cutter Lithium Project.

Neighbours SQM and Kali Metals Pilbara Lithium Project.

*Application pending.

3 Li Lithium

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Carlindie Project | Lithium

Located 90km S/E of Port Headland & covering + 850 km².
~50km N/E of Pilbara Minerals, Pilgangoora mine.

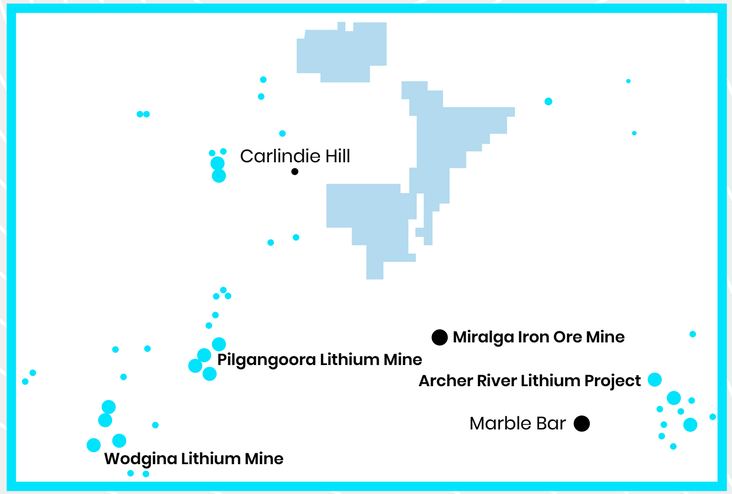
Terrain is seeking to fast track granting of this tenement. Terrain will then undertake a 500m x 500m soil sampling program over the entire tenement package area.

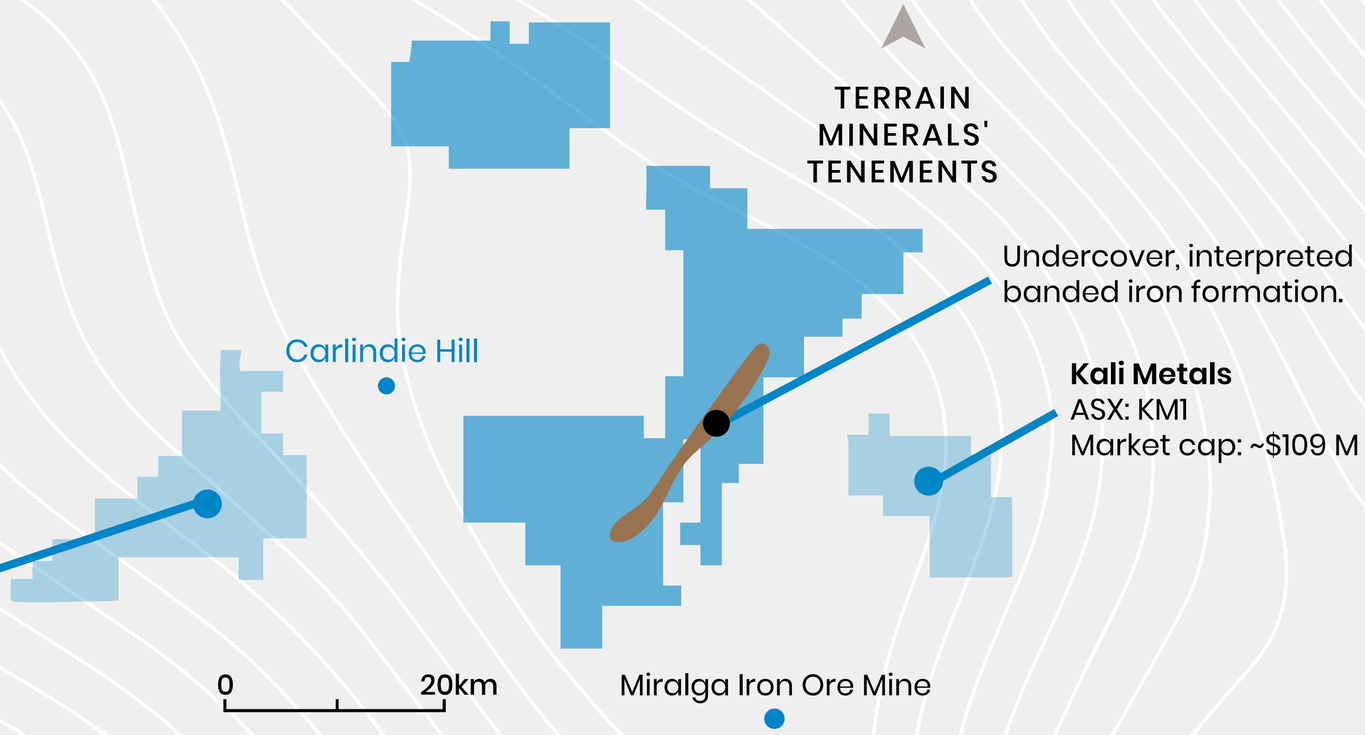
Field work to commence immediately following the grant of tenement including soil sampling and follow up drilling.

Desktop studies have identified key areas fitting to Terrain's internal geological modelling.

Terrain's Carlindie Project is under 3m of soil cover and in a favourable geological setting within WA's premier Lithium district.

*Application pending





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Biloela Project

29	79
Cu	Au
Copper	Gold

Located 400 kilometres northwest of Brisbane.

Exploration permits totalling 2,462km2 of tenure.

Seven historic copper-gold mines reported within Biloela Project.

Ten additional mineralisation occurrences reported across the project.

Independent review confirmed volcanogenic massive sulphide (VMS), porphyry copper-gold and epithermal gold mineral systems present within the project area.

*Application pending.

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Biloela Project | Copper

29
Cu
Copper

The Biloela Project lies 13 kilometres north of the Cracow Gold Mine in the Glandore and Theodore region of Queensland.

Extensive ~2,500km2 tenement area, first identified by Rio Tinto, Gold Fields Limited and Newcrest Mining Limited.

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.

Terrain's internal geological team has identified 7 potential copper and gold sites.

*Application pending

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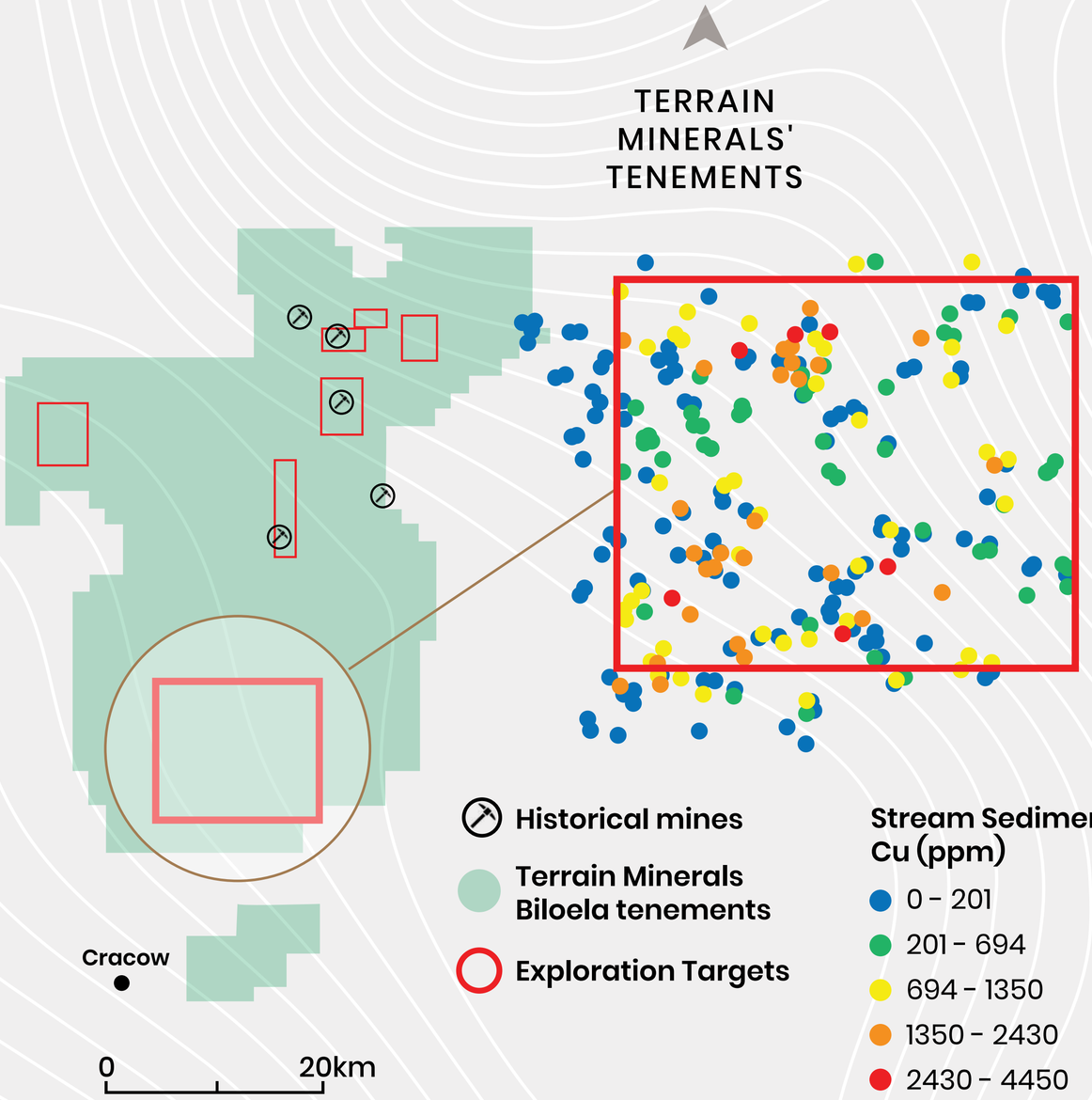

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Mukinbudin Project

Ree
Rare Earth Elements

Located within the Mukinbudin region of Western Australia, being approximately 300 kilometres east of Perth.

Extensive 1,408km2 tenement area adjoining both Rio Tinto's and IGO's tenement holdings.

Highly prospective for primary (hard rock hosted) light and heavy rare earth mineralisation.

Mukinbudin one of the very few regions of Australia known to host NYF (Niobium-Yttrium-Fluorine) pegmatites.

* Application pending

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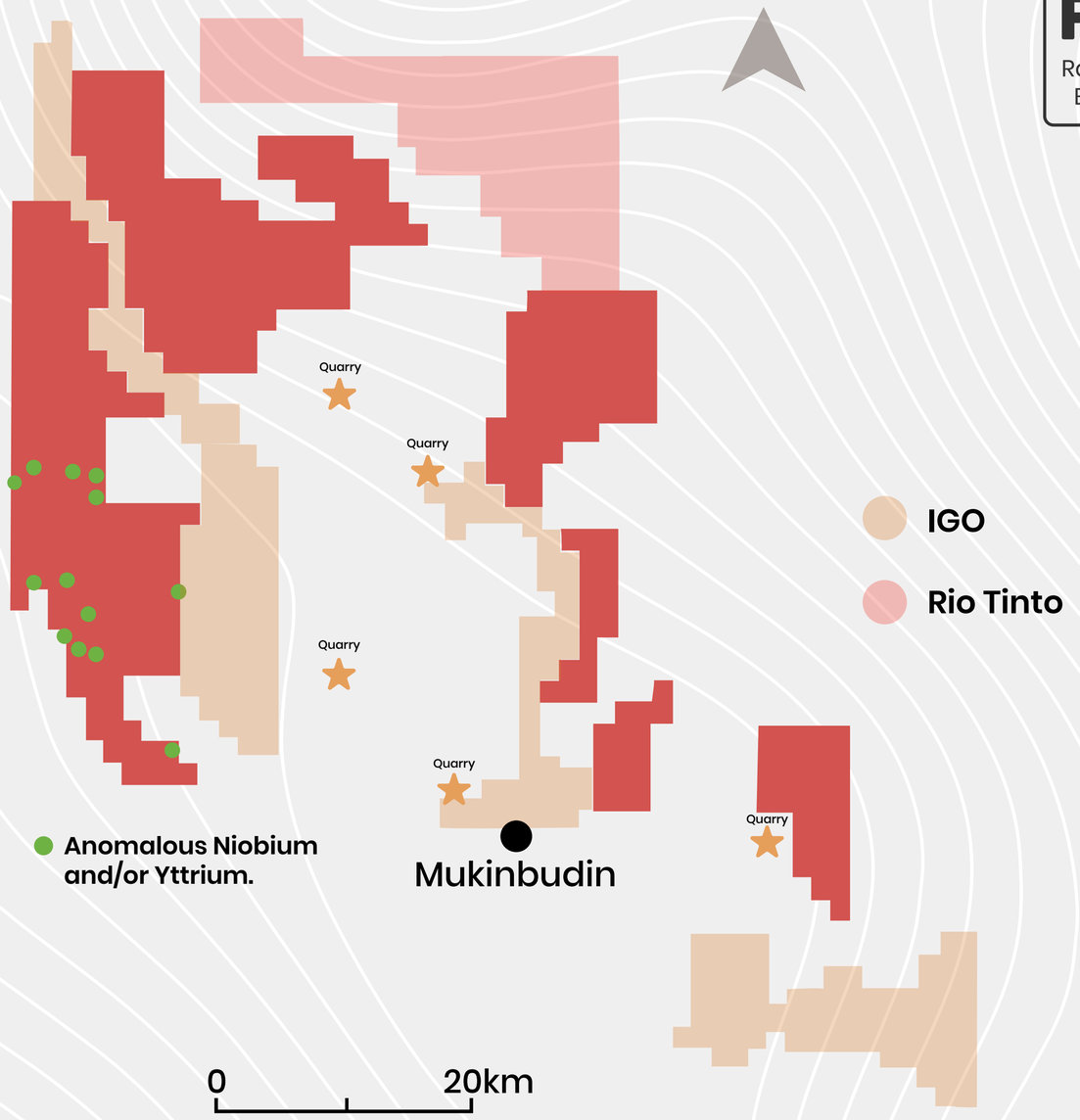
Mukinbudin Project | REE

NYF (Niobium-Yttrium-Fluorine) pegmatites enriched in light and heavy rare earth mineralisation as well as Gallium.

More than thirteen anomalous Niobium-Yttrium zones already identified within Terrain Minerals' Mukinbudin project area.

Drill testing of known Niobium-Yttrium anomalies to commence immediately after tenement is granted.

*Application pending



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Want to know more?
Contact **Terrain Minerals**

Principal Registered Office
Suite 2, 28 Outram Street,
West Perth, Western Australia, 6005
Australia
PO Box 79, West Perth WA 6872
Telephone: +61 8 9381 5558
terrain@terrainminerals.com.au

Share Register
Computershare Investor Services Pty Ltd
Level 11, 172 St Georges Terrace,
Perth, Western Australia, 6000
Australia
Telephone: +61 8 9323 2000

terrainminerals.com.au

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