



ASX ANNOUNCEMENT

16 January 2025

Drilling to Commence at Heavy Minerals Titanium discovery

Marmota Limited (ASX:MEU) ('Marmota')

Drilling program of 89 holes is to commence at the new Muckanippie Heavy Minerals Titanium discovery that just yielded bonanza Heavy Mineral assays *in every discovery hole* [ASX:MEU [14 Jan 2025](#)].

Heavy Mineral sands Drill Program

- **AC Drill program:** 89 planned holes (may vary)
- **Hole depths:** ~ 30m (average, or to refusal)

Hole depths are purposefully shallow as the target is the titanium-bearing mineral sands *from surface*.

Figure 1 provides a plan view of the 4 discovery holes, every one of which yielded bonanza Heavy Mineral assays, and the 89 planned holes along the interpreted titanium-hosting palaeochannel.

Timeline

Marmota's exploration team departed Adelaide yesterday for our base camp at Aurora Tank located north of Muckanippie to prepare for the program. All drilling supplies will be arriving on site in the coming days.

Drilling is expected to commence *next week*, and to complete around the end of January.

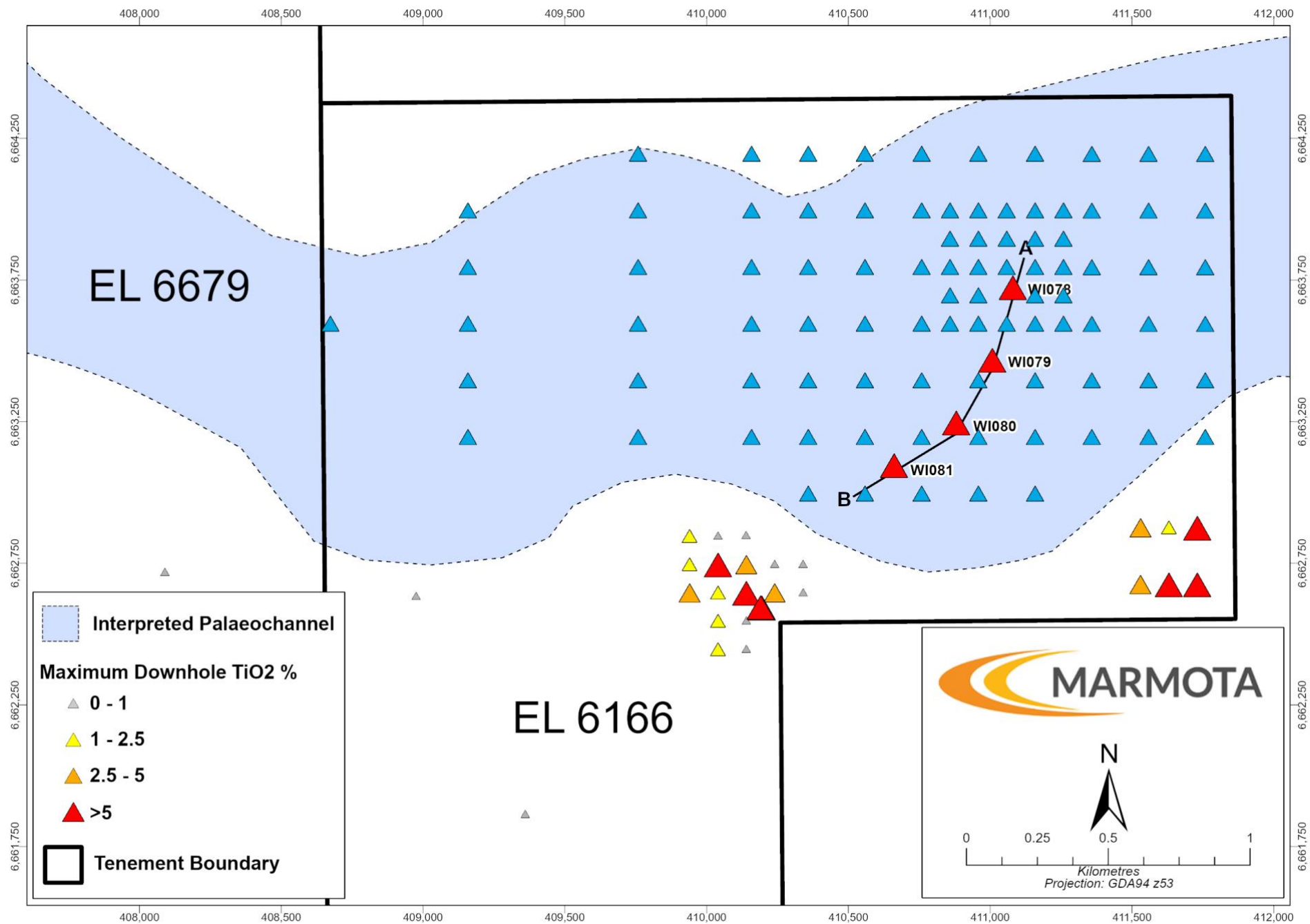
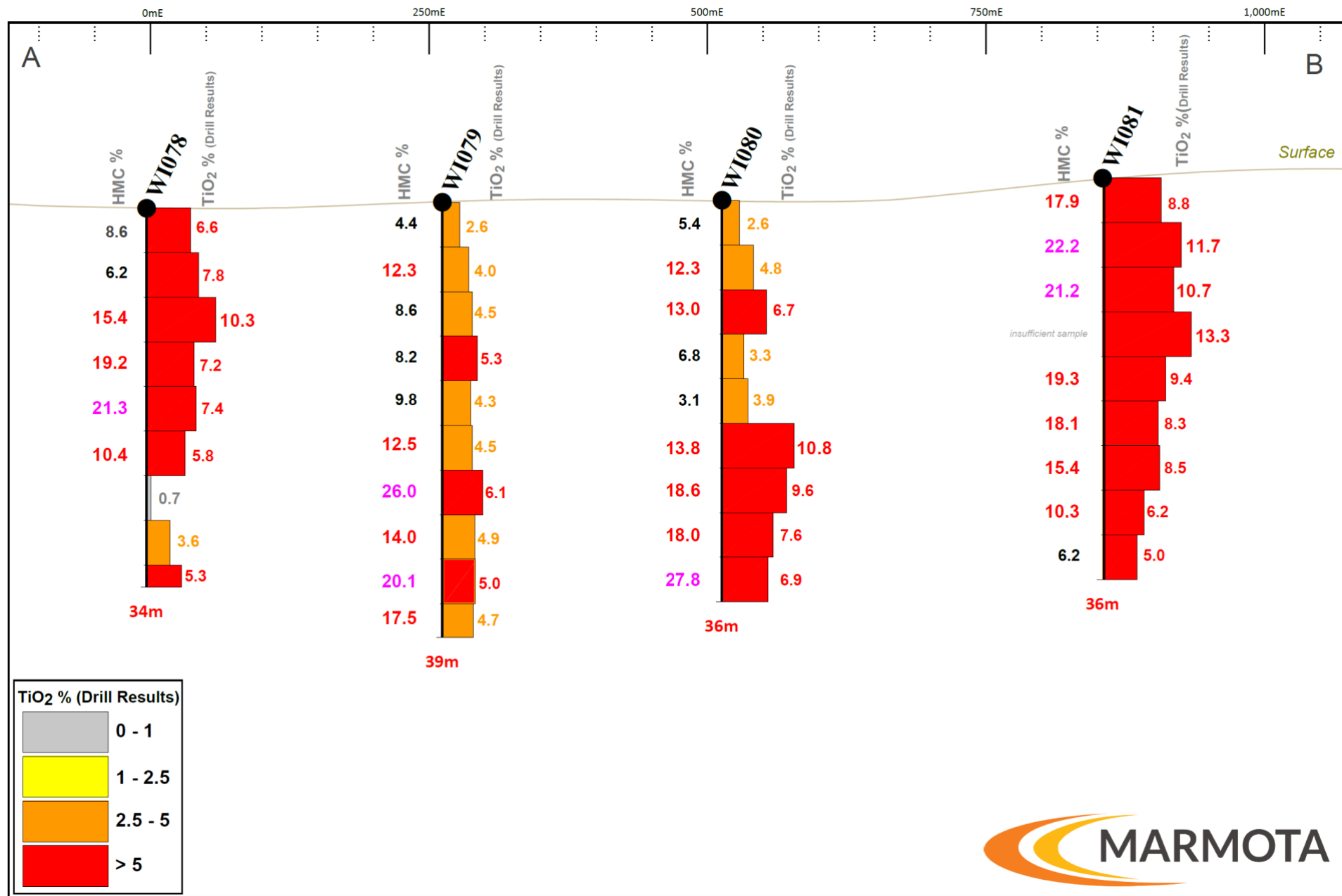


Figure 1: 89 Planned drill holes  around MEU's Titanium Discovery on EL 6166 with interpreted hosting palaeochannel



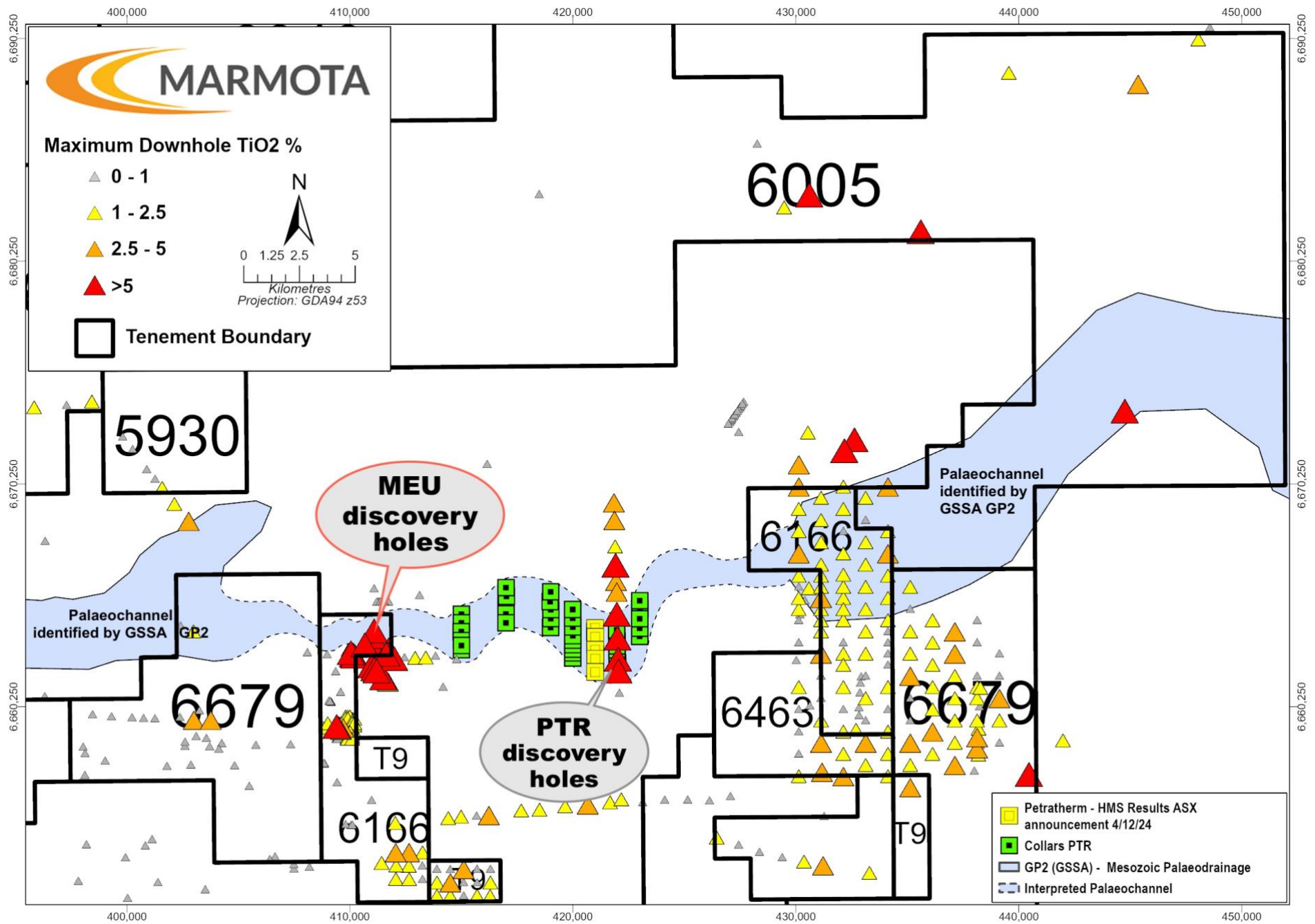


Figure 3: Palaeochannel interpretation over the regional area of Marmota's Titanium Discovery on EL 6166 (Muckanippie) and Petratherm's Titanium discovery, and adjacent MEU tenements [ASX:MEU 7 Jan 2025]

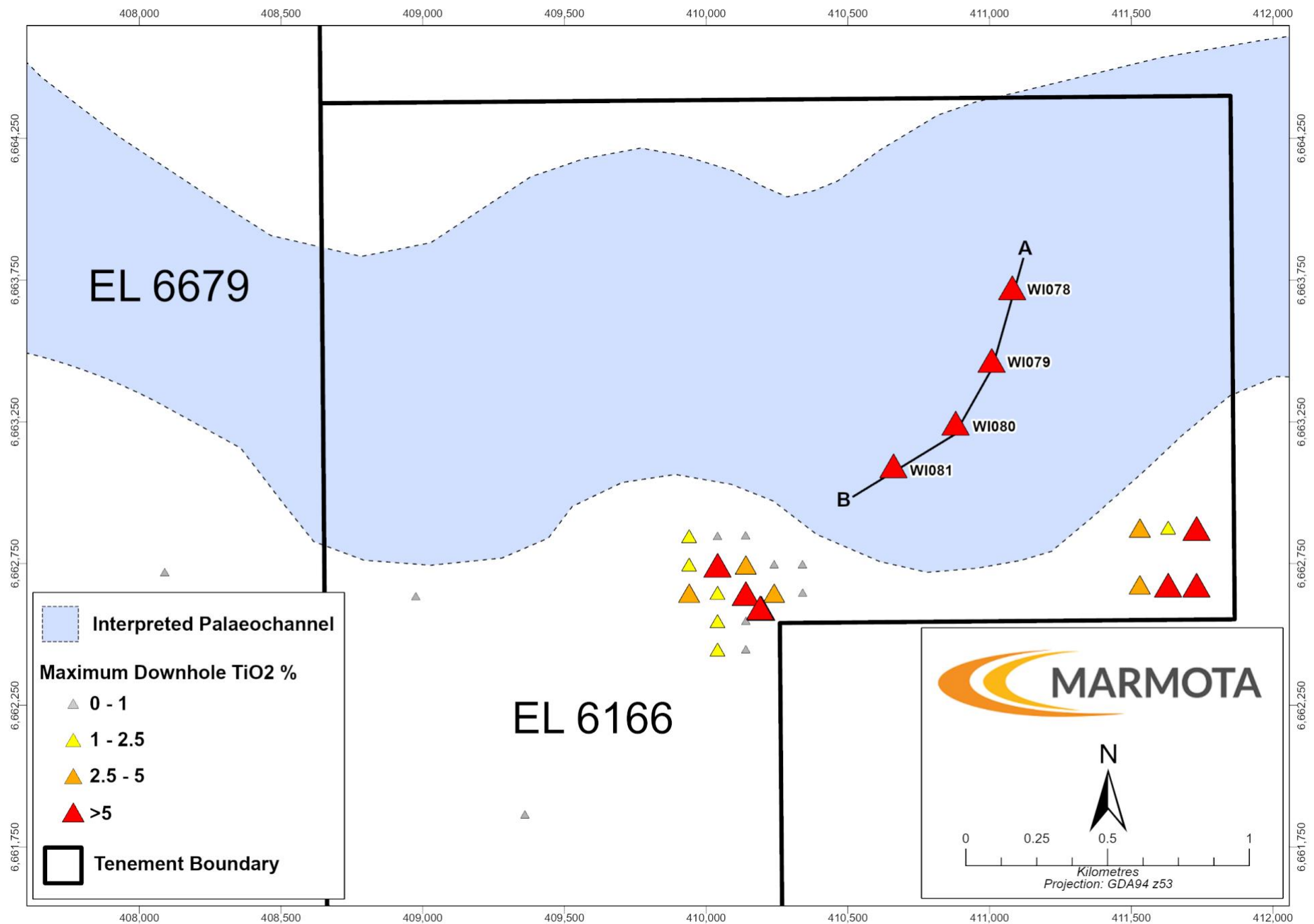


Figure 4: DETAIL VIEW: Marmota's Titanium Discovery on EL 6166 (Muckanippie) with interpreted hosting palaeochannel

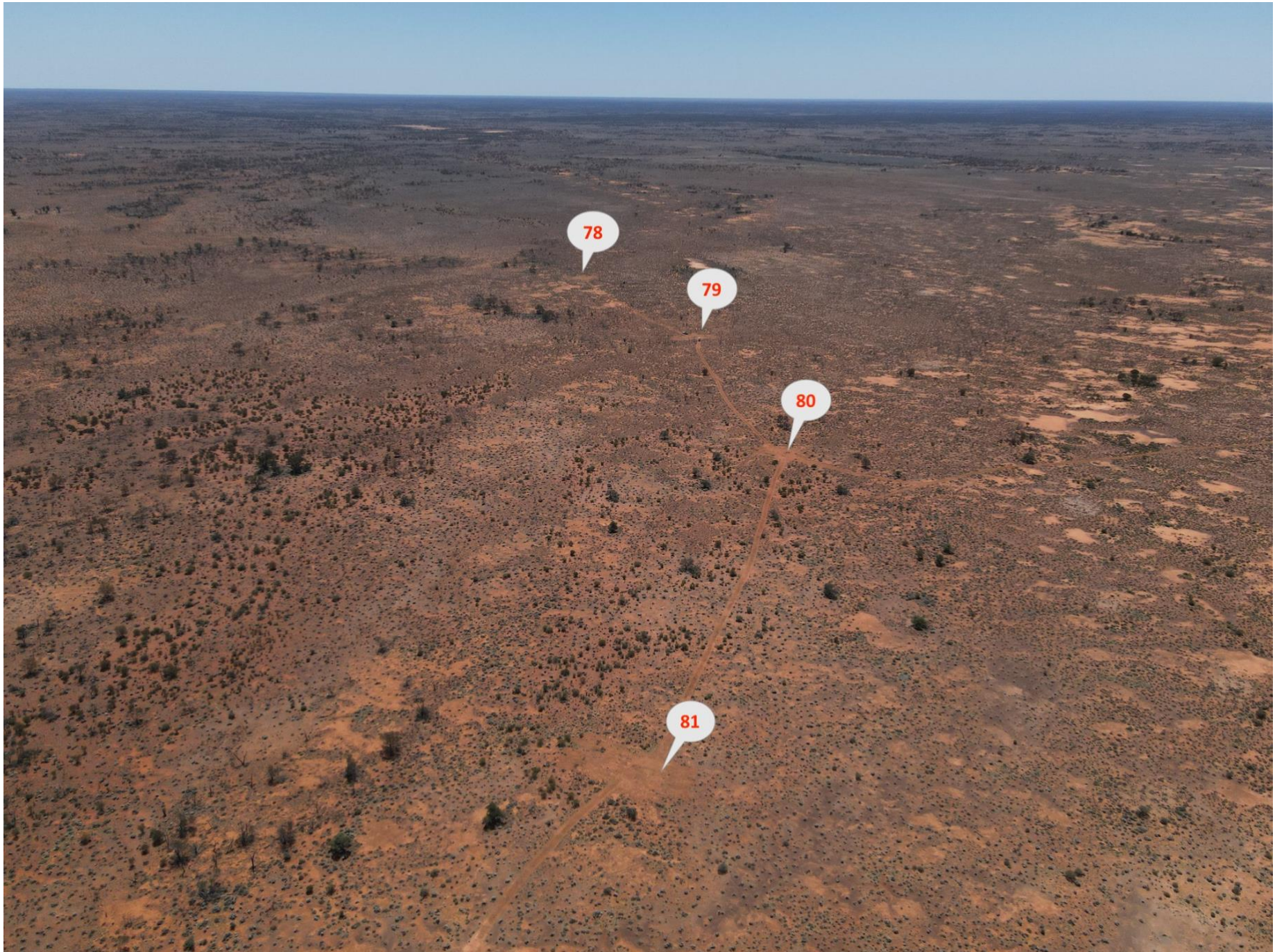


Figure 5: Titanium discovery holes WI-078 to WI-081 (aerial drone view)

Background

- In November 2024, Marmota discovered **exceptional thick rich titanium** mineralisation at Muckanippie [ASX:MEU [13 Nov 2024](#)] from surface, *in every discovery hole* [see [Fig. 2](#)].
- In December 2024, Marmota submitted the first metallurgical testwork to specialist laboratories to determine the heavy mineral properties in the discovery holes.
- Last week, in January 2025, Marmota announced that a geological review at Muckanippie identified a **regional scale palaeochannel** [see [Fig. 3](#)] interpreted to transect both Marmota's recent discovery of exceptional thick rich titanium mineralisation at Muckanippie (EL 6166) [ASX:MEU [13 Nov 2024](#)] and Petrathern's discovery of thick rich titanium mineralisation also at Muckanippie [ASX:PTR [11 Sept 2024](#)]. The new interpretation of the Mesozoic palaeochannel has been aided by work published as recently as November 2024 by the Geological Survey of South Australia ('**GSSA**') GP2 project [ASX:MEU [7 Jan 2025](#)].
- **Marmota holds approximately 28km (in length) of the highly prospective titanium-bearing palaeochannel** on its tenements. Of the 28km, approximately 10km (in length) lies within Marmota's tenements to the west, and approximately 18km (in length) lies within Marmota's tenements to the east.
- The palaeochannel is interpreted to be up to ~ 5km in width over MEU tenements, as defined by the Geological Survey of South Australia GP2 project.

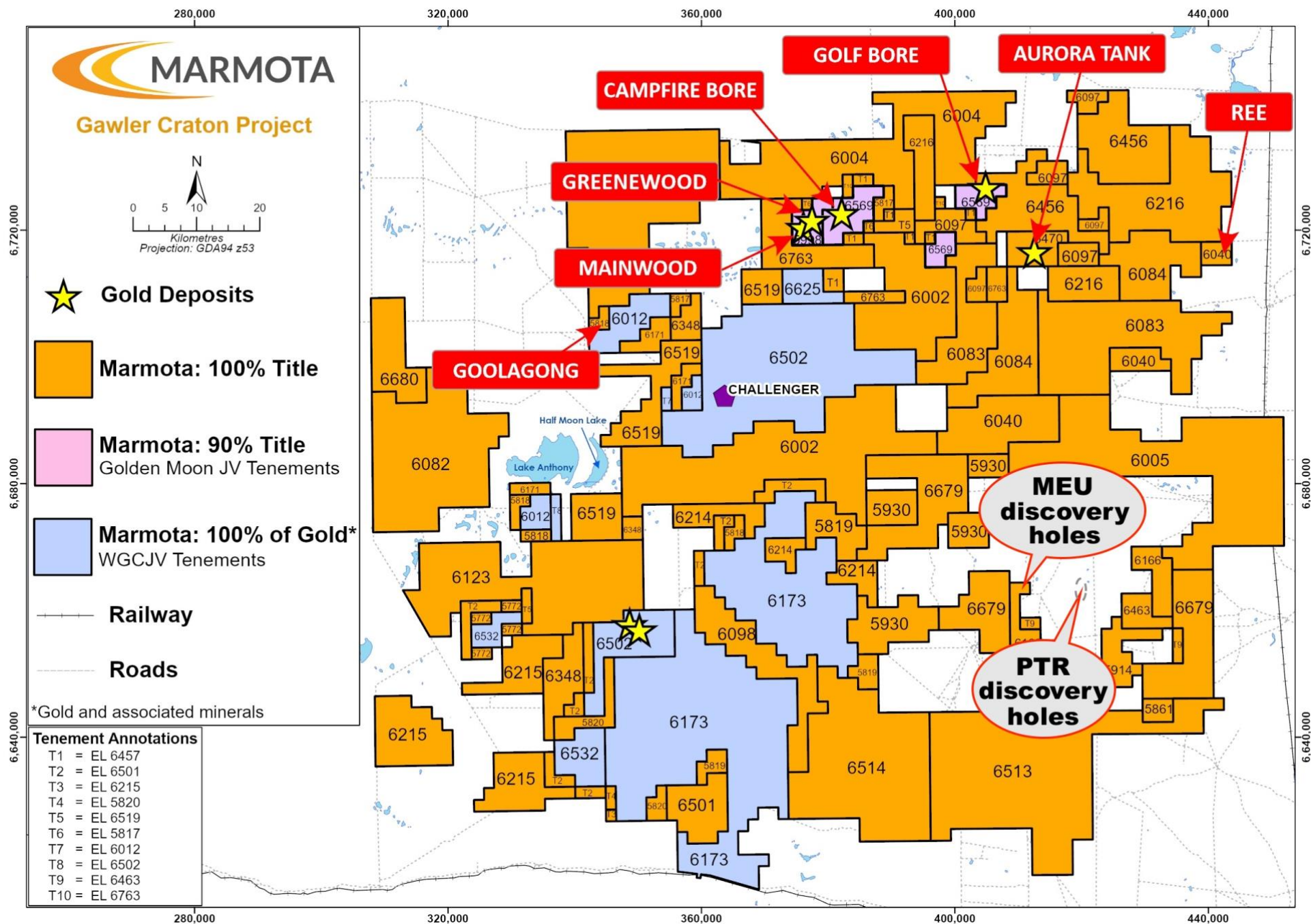
- Just two days ago, assay results [ASX:MEU 14 Jan 2025] yielded **outstanding Heavy Mineral (HM) concentrate percentages, with every discovery hole featuring bonanza HM grades over thick wide intervals from surface:**

Hole WI-081	28m @ 19.2 %	HM	from 0m (from surface)	including 4m @ 22.2 %	HM
Hole WI-080	36m @ 13.5 %	HM	from 0m (from surface)	including 4m @ 27.8 %	HM
Hole WI-079	39m @ 13.2 %	HM	from 0m (from surface)	including 4m @ 26.0 %	HM
Hole WI-078	24m @ 13.5 %	HM	from 0m (from surface)	including 4m @ 21.3 %	HM

- Titanium is one of the critical minerals identified by governments worldwide with a range of uses in energy storage, defence, space, semiconductors, surgical implants, pigments and the production of metal alloys.
- The discovery features exceptional **TiO₂ grades over 10%** [ASX:MEU 13 Nov 2024], with every hole featuring remarkable intersections from surface.
- The titanium discovery is **located close to transport infrastructure**, adjacent to both the Adelaide to Darwin rail line, and the Adelaide to Perth rail line [see Fig. 6].

Marmota Chairman, Dr Colin Rose, said:

“ **Marmota announced just 2 days ago HM assays featuring bonanza grades in every discovery hole. Those assays confirm Marmota’s discovery at Muckanippie as a highly significant new Heavy Mineral sands discovery. Marmota is progressing with full speed a major follow-up drill program to rapidly advance, grow and develop this outstanding titanium Heavy Mineral discovery.** ”



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About Marmota Limited

Marmota Limited (ASX:MEU) is a South Australian mining exploration company focused on gold and uranium. Gold exploration is centred on the Company's gold discovery at Aurora Tank that is yielding outstanding intersections in the highly prospective and significantly underexplored Gawler Craton in the Woomera Prohibited Defence Area.

The Company's flagship uranium resource is at Junction Dam adjacent to the Honeymoon mine.

For more information, please visit: www.marmota.com.au

Competent Persons Statement

Information in this Release relating to Exploration Results is based on information compiled by Aaron Brown, who is a Member of The Australian Institute of Geoscientists and Executive Director of Exploration at Marmota. He has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Brown consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.

Where results from previous announcements are quoted, Marmota confirms 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 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.

For the purpose of ASX Listing Rule 15.5, the Board has authorised for this announcement to be released.