



ASX ANNOUNCEMENT

9 March 2021

Phase 1 complete: largest sampling program

Accelerated Discovery Initiative

Marmota Limited (ASX: MEU) ("Marmota")

Marmota is pleased to advise that it has completed Phase 1 of our largest sampling program, extending outwards from the gold discovery at Aurora Tank to surrounding tenements.

Key Points

- Marmota is testing 1,768 individual sample locations, covering approximately 300km² of ground on a 400m spaced sample grid.
- Exploration work is being jointly funded by the SA Government under a \$225,000 grant awarded to Marmota under the *Accelerated Discovery Initiative* [ASX:MEU [24 June 2020](#)].
- The exploration ground:
 - a) includes some of the *least* explored tenements surrounding the Challenger Gold mine;
 - b) is adjacent to Marmota's gold discovery at Aurora Tank, and
 - c) the first time that Marmota has ever carried out work on these adjacent tenements.

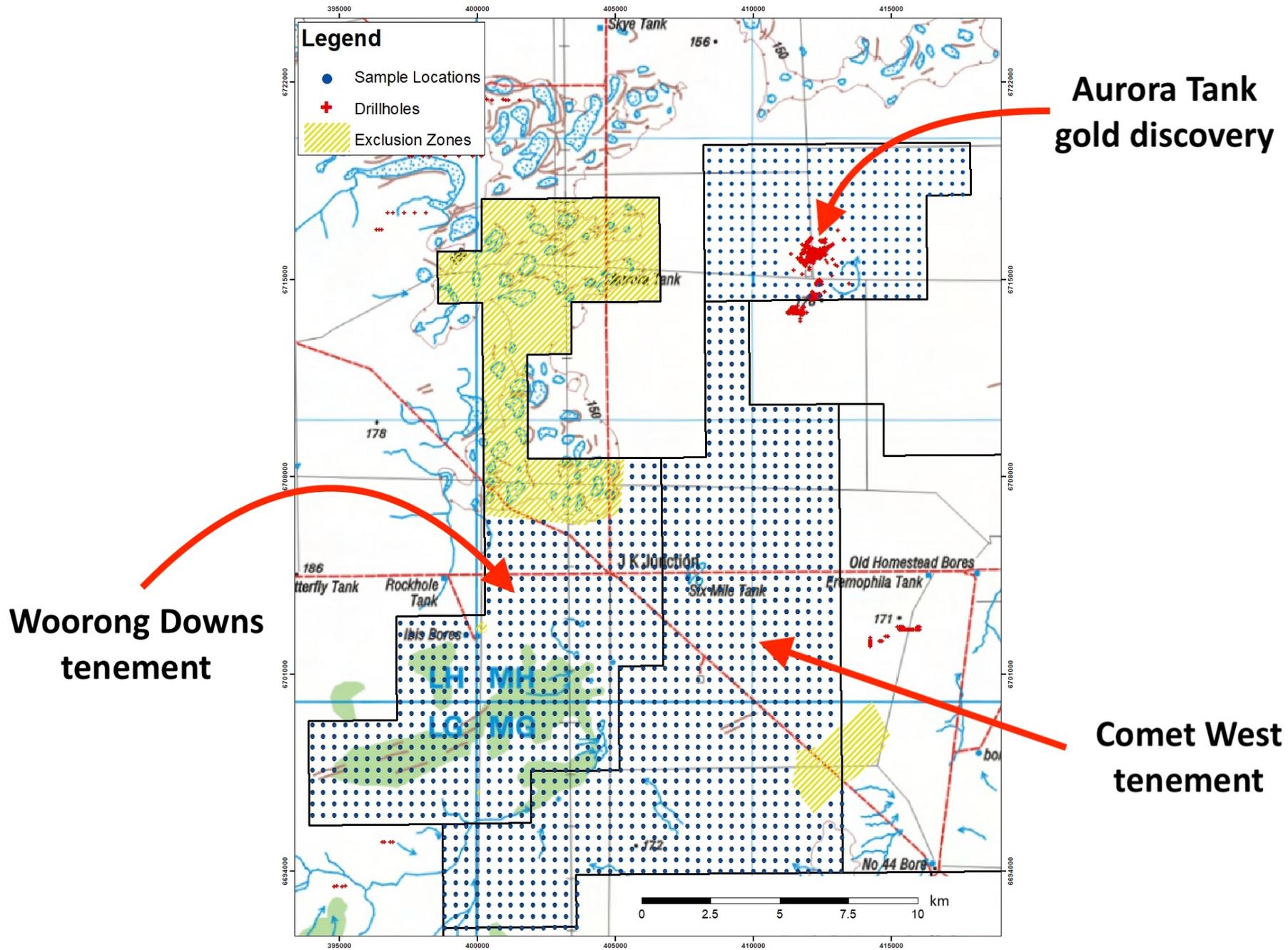


Figure 1: ■■■ 1768 NEW sample locations (on 400m grid)

Dual medium sampling

Marmota is also implementing, for the first time on a regional scale exploration program, two sampling methods at each sample location, namely:

- (i) calcrete sampling: 1,786 sample locations on a 400m x 400m grid AND
- (ii) biogeochem sampling: 1,786 sample locations on approximately the same grid¹

At each sample location, this gives rise to 4 possible outcomes (A to D):

		Calcrete Sample	
		Anomalous in Gold	Not Anomalous
Biogeochem Sample (tree sample)	Anomalous in Gold	A	B
	Not Anomalous	C	D

Table 1: 4 Possible Outcomes at each sampling location

¹ Nearest appropriate species of tree to sample grid location

Calcrete sampling and Biogeochemical sampling

1. Calcrete sampling

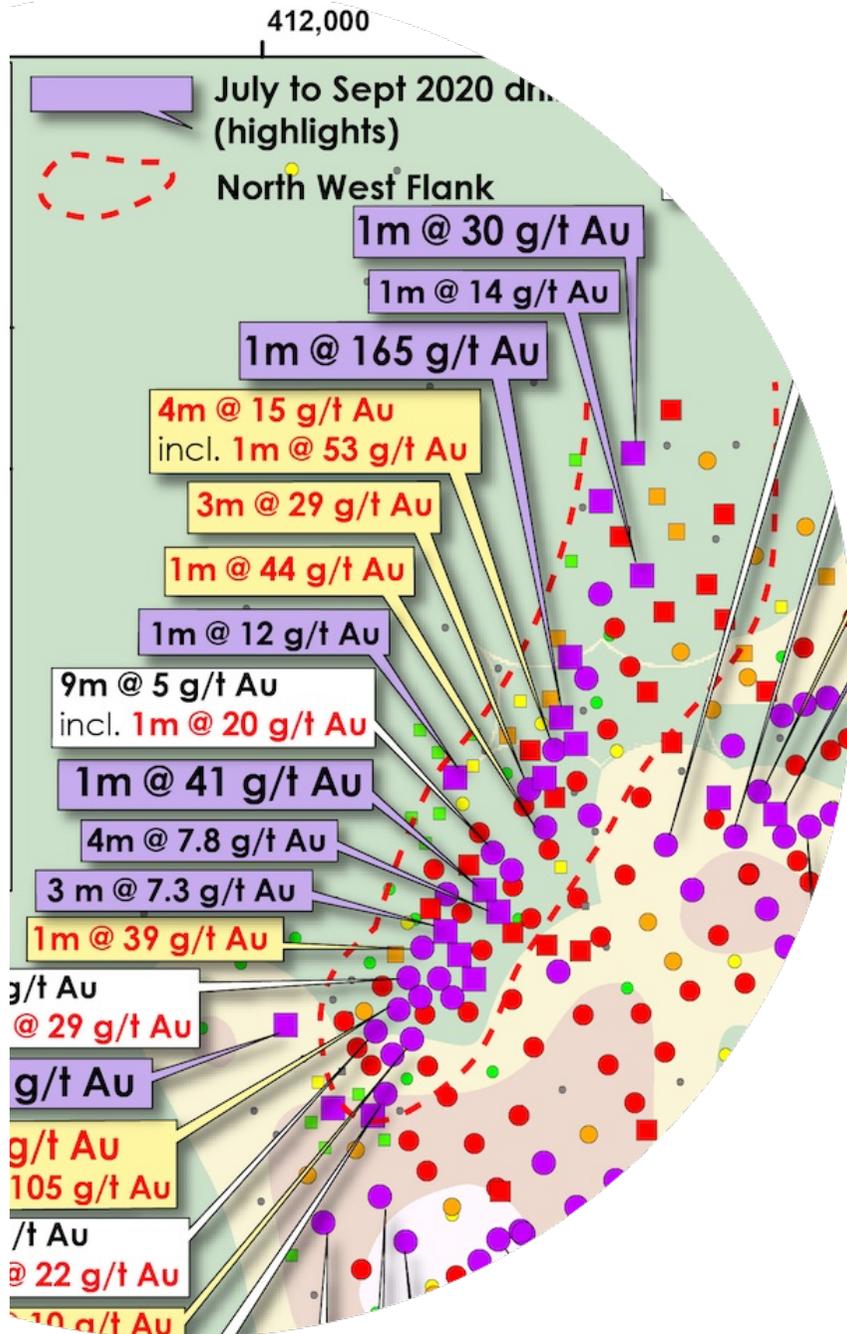
Both the nearby Challenger Gold mine (approx. 40km to west) and Marmota's Aurora Tank gold discovery were found by testing near surface calcrete for anomalous gold. The CSIRO originally identified anomalous gold-in-calcrete near the surface to be an indicator of gold below surface.

2. Biogeochemical sampling (sampling of tree leaves)

At the Aurora Tank gold discovery, Marmota successfully used tree sampling to identify a new zone of outstanding gold intersections which does *not* have a gold-in-calcrete anomaly, but does have a biogeochemical gold anomaly footprint. In simple words, the new NW flank at Aurora Tank shows up in anomalous gold in tree sampling, but not in calcrete sampling. Marmota's work on tree sampling at Aurora Tank has been featured both nationally and internationally, including feature articles in *The Economist* [25 May 2019] and *New Scientist* [17 Aug 2019].

Phase 1 sampling work has been carried out by two different teams: the first team specialising in calcrete sampling using auger drilling; and a separate team of 4 conducting the biogeochemical sampling layer. The samples have been sent to two different laboratories, specialising in the two respective assaying mediums.

Tree Sampling at Aurora Tank



Marmota discovered the NW flank at Aurora Tank (red-dashed line in Fig.2) while following up elevated gold in biogeochemical sampling (tree sampling)

[see ASX:MEU 31 July 2019 and 19 Sept 2019].

Over this zone, there is no gold-in-calcrete anomaly, possibly because the gold mineralisation starts deeper from surface (typically at 40m to 60m from surface), but still at a depth that tree roots may transport particles to surface.

Referring to the matrix of 4 possible outcomes in Table 1 above, Marmota is particularly interested to find not only new type A cases (anomalous gold in both calcrete and tree sampling), but also Type B cases (such as the NW flank) where tree sampling works (but calcrete sampling does not), and Type C cases.

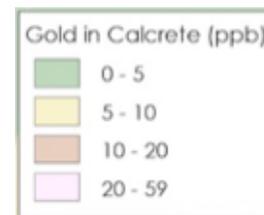


Fig. 2: NW Flank at Aurora Tank (red-dashed zone - - - -)

About the surrounding tenements: **introducing Woorong Downs and Comet**

- Marmota purchased the Woorong Downs and Comet tenements from a privately held entity in 2016 [see ASX:MEU [14 April 2016](#)].
- This is the first time that Marmota has carried out any exploration work on Woorong Downs or Comet.



Figure 3: Quad bikes being used to access remote terrain on Woorong Downs tenement much of which has almost no prior historical exploration

Click to SEE LIVE Quad bike flyby: <https://youtu.be/l2lfetEG15U>

Marmota Chairman, Dr Colin Rose, said:

“ With Marmota repeatedly obtaining outstanding gold intersections at the Aurora Tank gold discovery over multiple programs, it is not surprising that the focus of our attention has been on Aurora Tank. That has had the side-effect of ‘holding back’ our exploration program over very attractive ground in surrounding tenements.

The recent award to Marmota of a \$225,000 grant by the SA Government under the *Accelerated Discovery Initiative*, and the required timeline attached to that funding, has spurred us into carrying out our largest continuous calcrete and tree sampling program to date. I am delighted that Marmota is advancing again on multiple fronts, which in turn provides multiple blue-sky opportunities to our shareholders.

This is likely also the first time that shareholders will have heard of our Woorong Downs and Comet tenements. They contain some of the most prospective and least explored ground in Marmota’s tenement package and are situated adjacent to the Aurora Tank discovery. I am hopeful that our shareholders will soon hear a lot more about these tenements in the near future. At the same time, we have a very busy schedule planned for Aurora Tank both in drilling and new infrastructure, which means a very active period ahead. ”

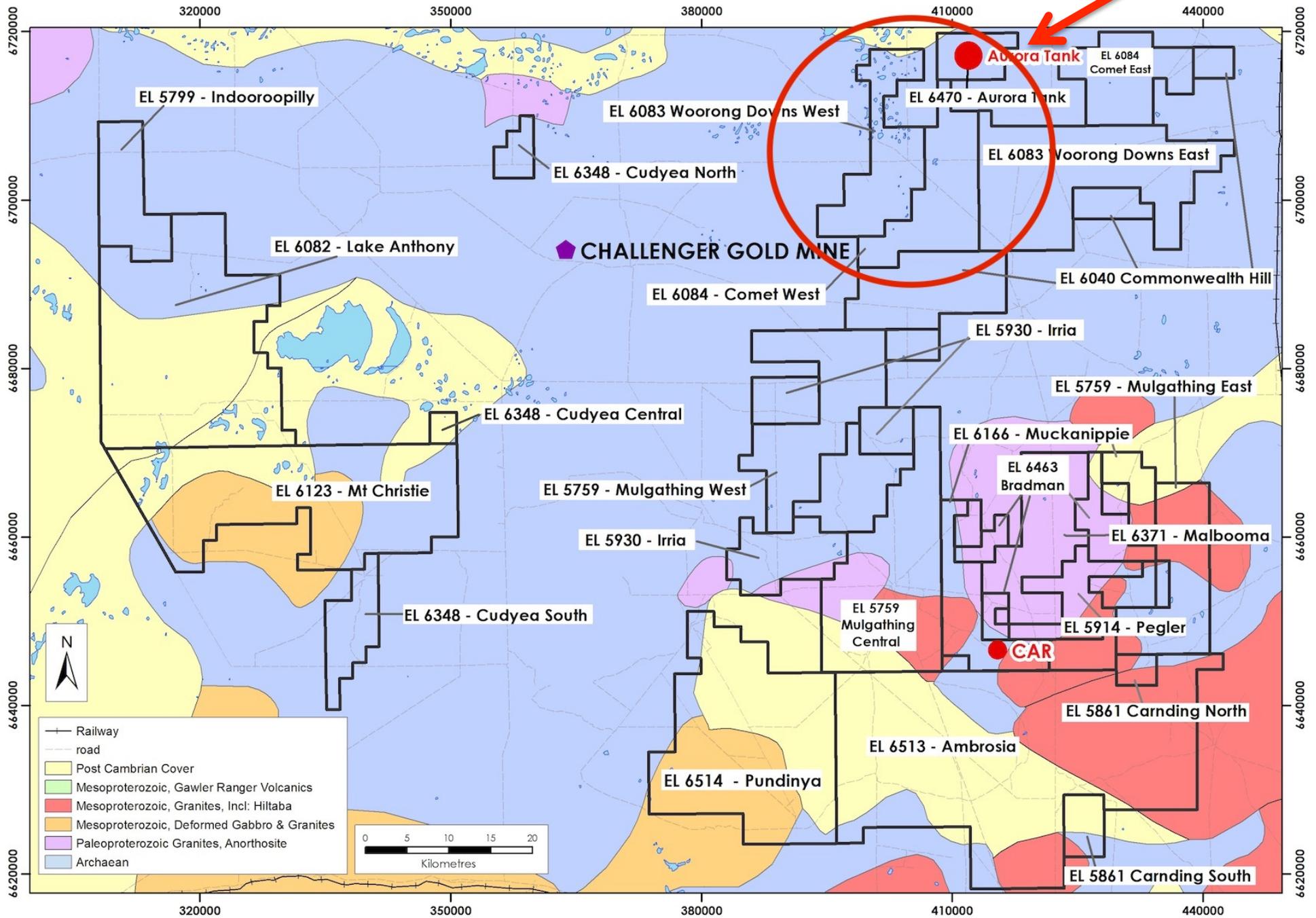


Figure 4: Marmota's Aurora Tank tenement and surrounding tenements

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About Marmota Limited

Marmota Limited (ASX: MEU) is a South Australian mining exploration company, focused on gold, copper and uranium. Gold exploration is centred on the Company's dominant tenement holding in the highly prospective and significantly underexplored Gawler Craton, near the Challenger gold mine, in the Woomera Prohibited Defence Area. The Company's copper project is based at the Melton project on the Yorke Peninsula. The Company's uranium JORC 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 Dr Kevin Wills, who is a Fellow of the Australasian Institute of Mining and Metallurgy. He has sufficient experience which is 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." Dr Wills consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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.