



ASX ANNOUNCEMENT

20 November 2017

## Aurora Tank Gold

### Diamond Drilling Completed on Schedule

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

Marmota is pleased to advise that the first programme of diamond drilling at Aurora Tank has just completed on schedule. In addition to the 5 planned holes, an extra 6<sup>th</sup> diamond core hole was also drilled at the mid-point of Section 28 [ Hole 17ATDD005 in [Fig. 5](#) ]

#### KEY POINTS

- Six diamond core holes drilled
- A total of 186m of triple tubed HQ diameter core obtained

#### ASSAYS

- Drill core is on its way to the cutting centre to be cleaned, logged, cut, and prepared for assaying



**Figure 1:** MJ Drilling rig set up on hole 17ATDD001



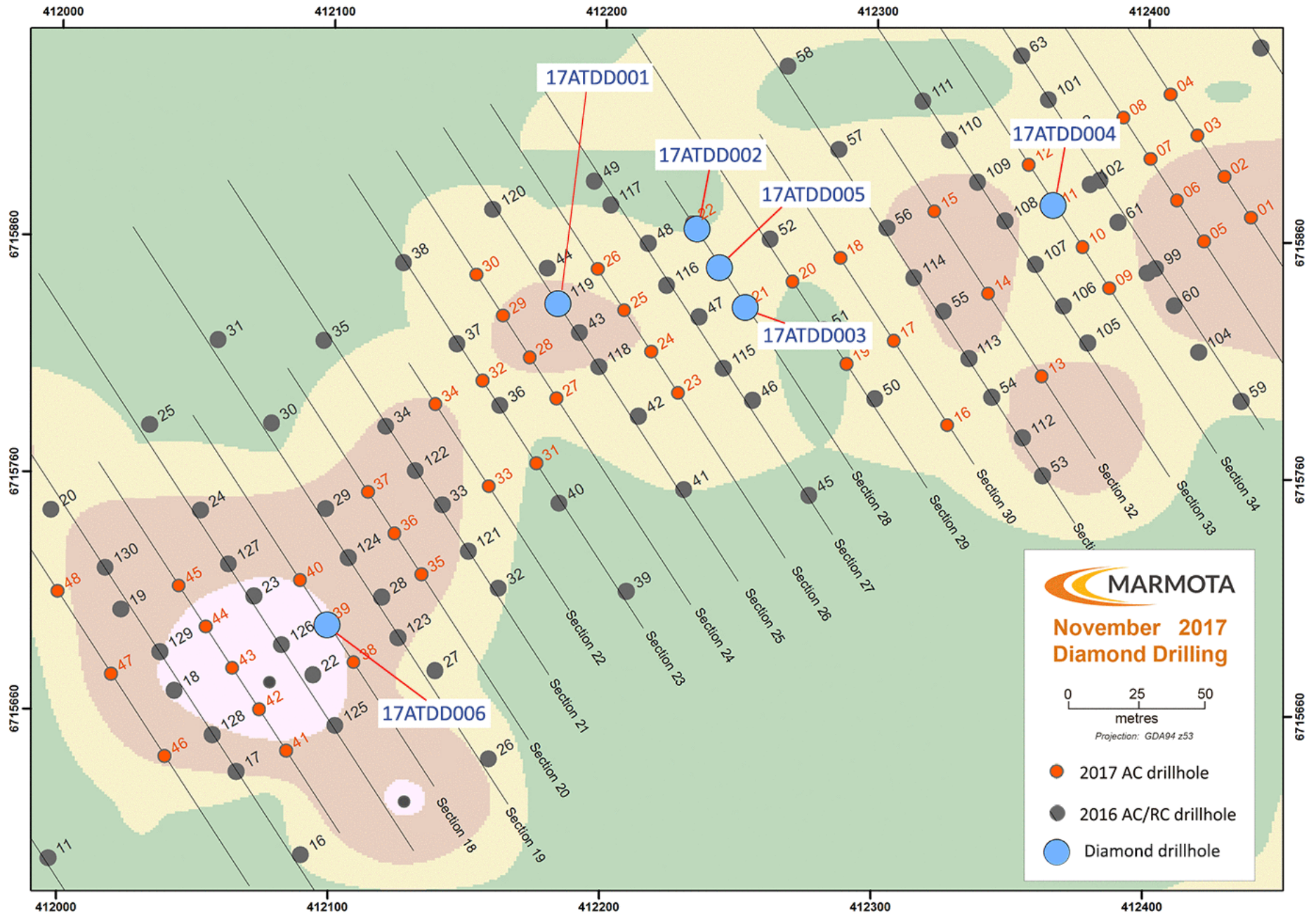
**Figure 2:** Tourmaline-rich quartz-feldspar rock from a vein margin  
**Source:** Hole 17ATDD003 (from 21.2m)



**Figure 3:** Dense tourmaline crystals on the margin of a quartz vein – Hole 17ATDD002 (from 39.5m)



**Figure 4:** Pyrite-rich fracture in quartz-tourmaline vein – Hole 17ATDD002 (from 39.5m)



**Figure 5: November 2017 – Diamond Drill Holes (DDH) at Aurora Tank (Goshawk)**

## Background

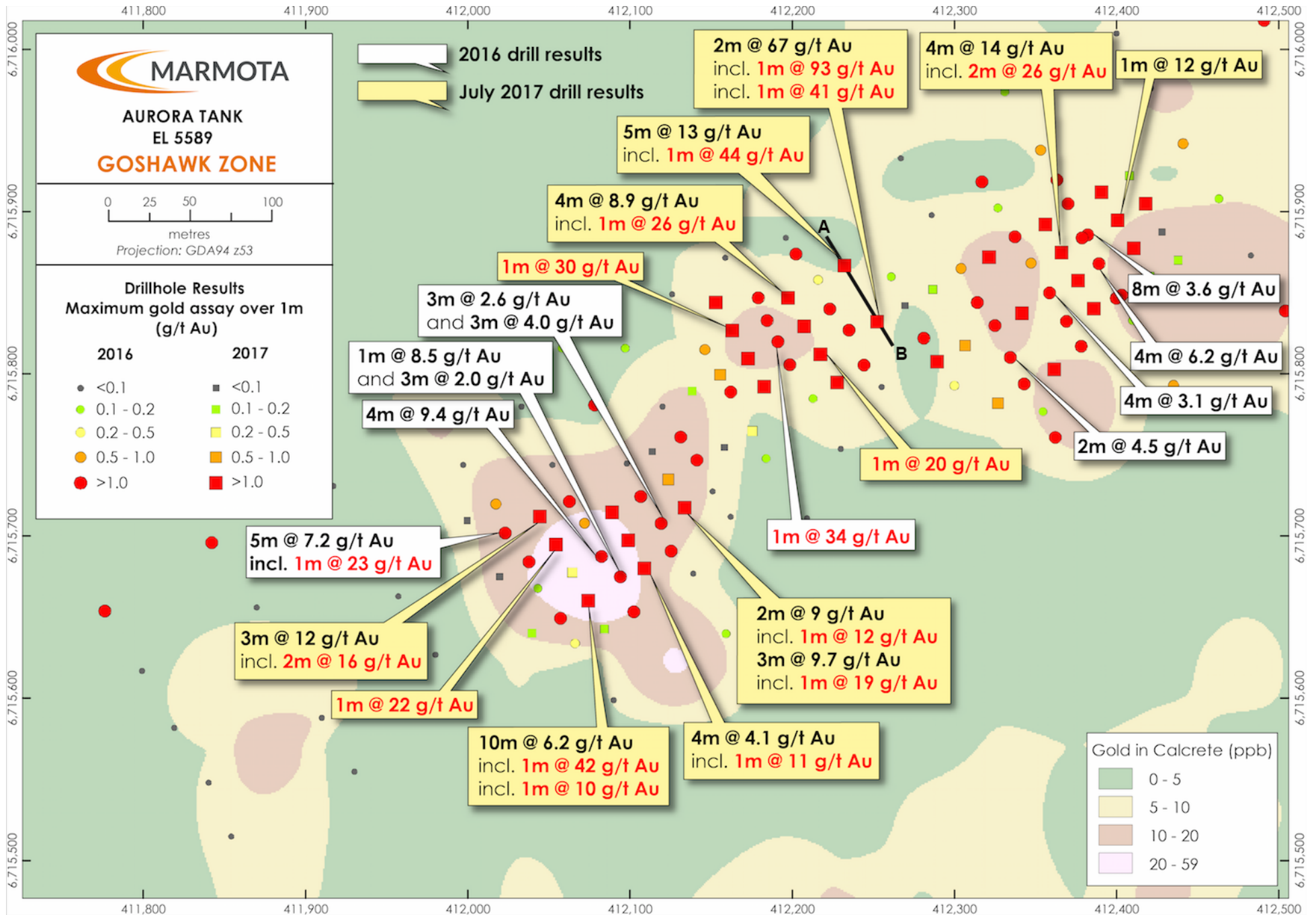
- Aurora Tank (EL 5589) is located 50km NE of the Challenger Gold Mine (ASX:WPG); the latter has produced over 1 million ounces of gold.
- Aurora Tank is 100% owned by Marmota.
- In September 2016, Marmota carried out its first drilling program at Aurora Tank (Goshawk).
- In September 2017, Marmota reported **outstanding 1m intersections** including **101 g/t gold** (with duplicate samples at 85 g/t and 93 g/t, averaging 93 g/t).

### Features include:

- Significant gold mineralisation over 500m strike length
- More than 117 intersections greater than 1 g/t gold
- Mineralisation close to surface (consistently within 50m of surface)

## Objectives of the diamond drill program

- To provide high quality geological and mining information in areas of significant interest
- To determine true widths and grades of mineralised intersections
- To provide samples of fresh bedrock for detailed logging and petrological description of rock types and associated mineral system elements such as hydrothermal alteration.  
This will help provide validation of the solid geology model.
- To provide high-quality samples for density and geotechnical measurements and metallurgical testwork. Density measurements will be incorporated to the block model for tonnage calculations in the estimate of JORC Resources (already underway).
- To determine true orientation of geological structures and underlying geology
- To plan further holes targeting deeper primary mineralisation



**Figure 6: Aurora Tank – Best downhole gold results at Goshawk Prospect**



## New Geological Insights

Details already apparent from this diamond core include:

- An intermediate dip (40 to 50 degrees) of the main schistosity to the northwest has been confirmed
- The presence of an overlying unit of Jurassic Algebuckina Sandstone has been confirmed
- The primary lithology is a quartz-feldspar-biotite gneiss with a crude banding caused by variations of biotite content – this suggests a sequence of metasediments subjected to granulite facies metamorphism
- Strong weathering has induced a roughly horizontal regolith layering with an upper saprolite zone, being softer and lower density between about 10 and 40 metres vertical depth, and a lower saprock zone being harder and higher density below about 40 metres
- Zones in the saprock which correlate with mineralised zones in the twinned holes may represent weathered primary mineralisation and consist of zones of quartz veining with tourmaline and sulphides which are illustrated in Figures 2, 3 and 4
- These zones are associated with quartz-feldspar pegmatites suggesting mineralisation during late hydrothermal activity

A JORC Appendix 1 will be compiled and released when the assays are available.

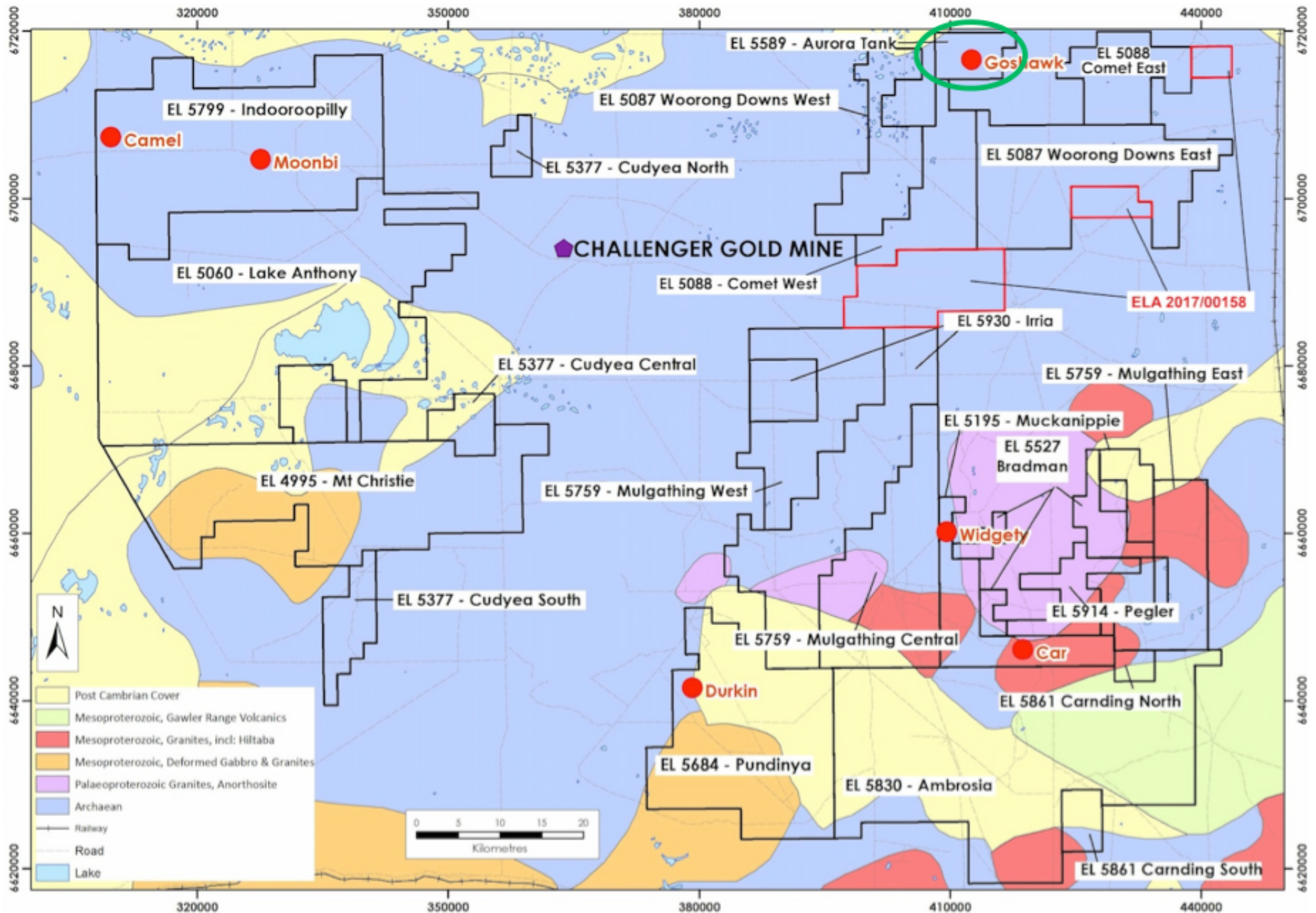


Figure 7: Marmota’s Aurora Tank tenement and tenements around the Challenger Gold Mine

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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 on the Yorke Peninsula. The Company's largest uranium project is at Junction Dam adjacent to the Honeymoon mine.

For more information, please visit: [www.marmota.com.au](http://www.marmota.com.au)

**Competent Persons Statement**

Information in this Release relating to Exploration Targets, Exploration Results and Mineral Resources is based on information compiled by Dr Kevin Wills, who is a Member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience which is relevant to the styles of mineralisation, metallurgical testwork 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.