MARMOTA

2017 ADVANCES at MARMOTA'S GAWLER and AURORA TANK GOLD PROJECTS

SOUTH AUSTRALIAN EXPLORATION AND MINING CONFERENCE
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Information in this exploration update relating to Exploration Targets, Exploration Results and Mineral Resources 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, 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.

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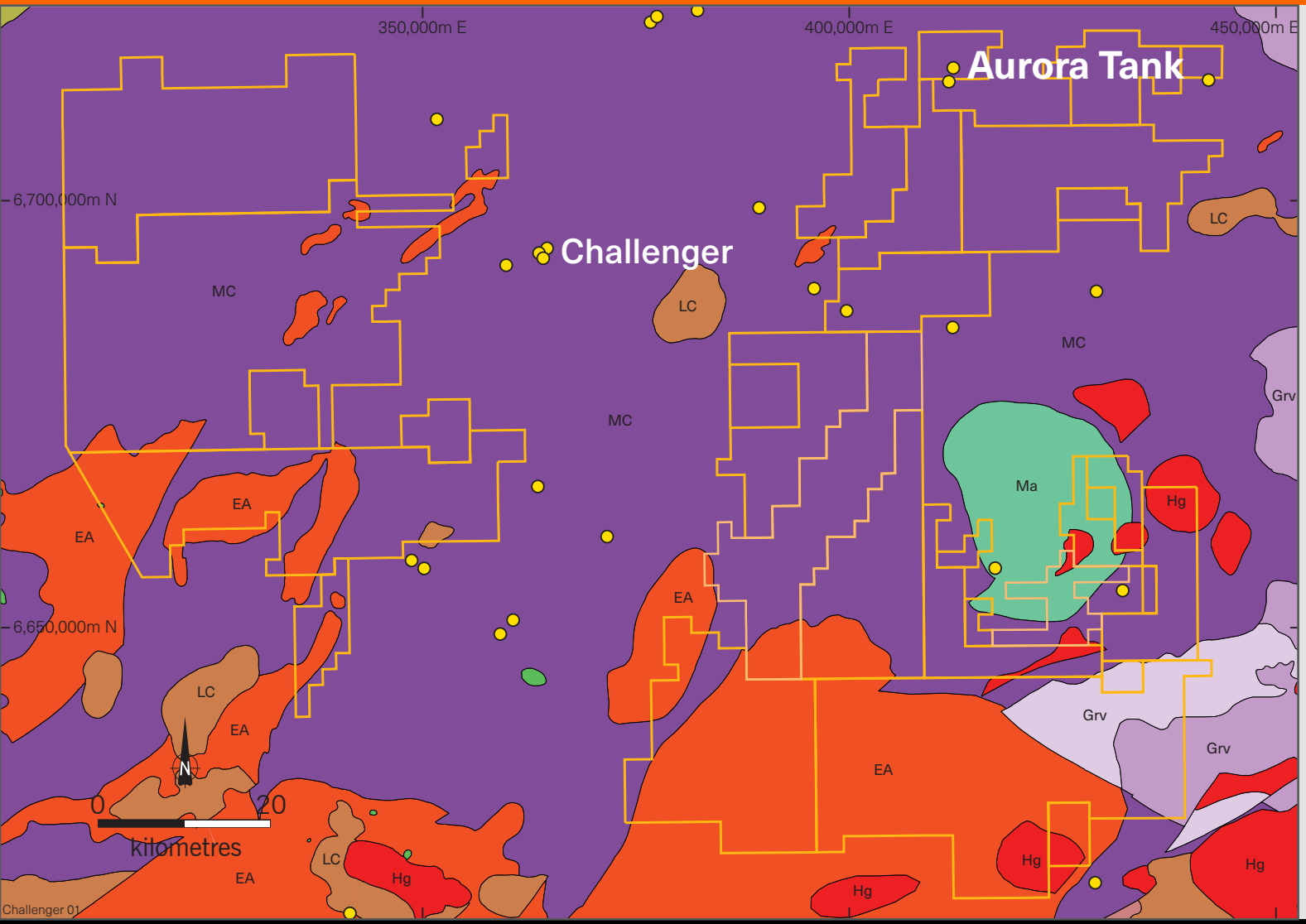
Outline

- Gold discovery in the NW Gawler Craton
- Marmota's regional gold exploration program
- Gold deposit at Aurora Tank
- Future milestones

Gold discovery in the NW Gawler Craton

- Archean rocks of NW Gawler Craton highly prospective for gold.
- ‘Old timers’ found a few deposits such as Earea Dam & Malbooma by prospecting.
- No drainage or exposure over most of Craton so prospecting is generally ineffective.
- Recognition in 1992 that calcrete enabled gold to be found under shallow cover.
- This led to the Challenger discovery in 1995.
- A period of intense calcrete sampling followed with many new gold systems discovered.
- Generally agreed that area is underexplored.
- Now in a second exploration phase following up second order anomalies
  - not for smaller orebodies - they could be bigger
  - just a different surface expression.

Marmota's Gawler Craton gold tenements



Marmota's tenements in the Gawler Craton around the Challenger Gold Mine

- Total area 6,000km^2.
- Centred on the Challenger Gold Mine.
- Large coverage of prospective Archean Mulgathing Complex–Christie Gneiss.
- Numerous gold prospects.
- Gold province remains underexplored.
- New gold deposit recently discovered at Aurora Tank.

- Gold deposit
- Marmota exploration tenure
- MC — Archean Mulgathing Complex
- LC / EA — Paleoproterozoic Lincoln Complex/ Engenia Adamelite
- Ma — Mesoproterozoic Muckanippie Anorthosite
- Hg — Mesoproterozoic Hiltaba Granites
- Grv — Mesoproterozoic Gawler Range Volcanics

Marmota's gold exploration strategy

- Seeking the next Challenger – or something new – with higher ounces per vertical metre.
- Challenger (right) has produced over 1 million ounces of high-grade profitable gold.
- Marmota has highly prospective tenement holding of 6,000 km^2 around Challenger.
- Marmota's strategies have been refined and updated.
- Calcrete sampling remains most cost effective method of locating anomalies & defining drill targets:
  - Sample areas where anomalies can fit between existing sites (fishing net analogy).
  - Sample areas with suspect previous sampling e.g. dune covered areas.
  - Follow up low order anomalies which can be over thicker cover.

Challenger Pit
Source: Kingsgate Consolidated Limited

Challenger Pit
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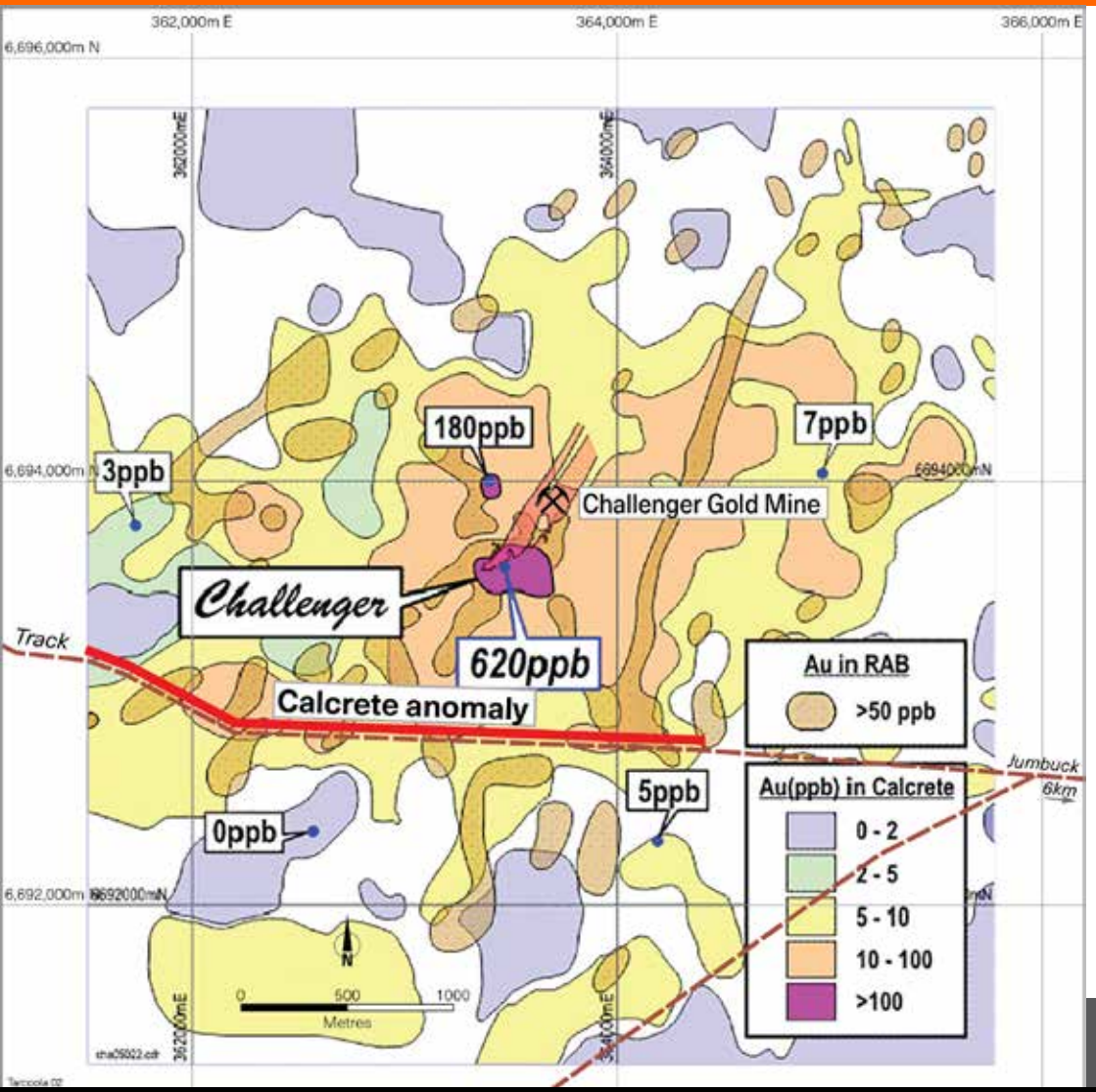
Challenger gold discovery geochemistry



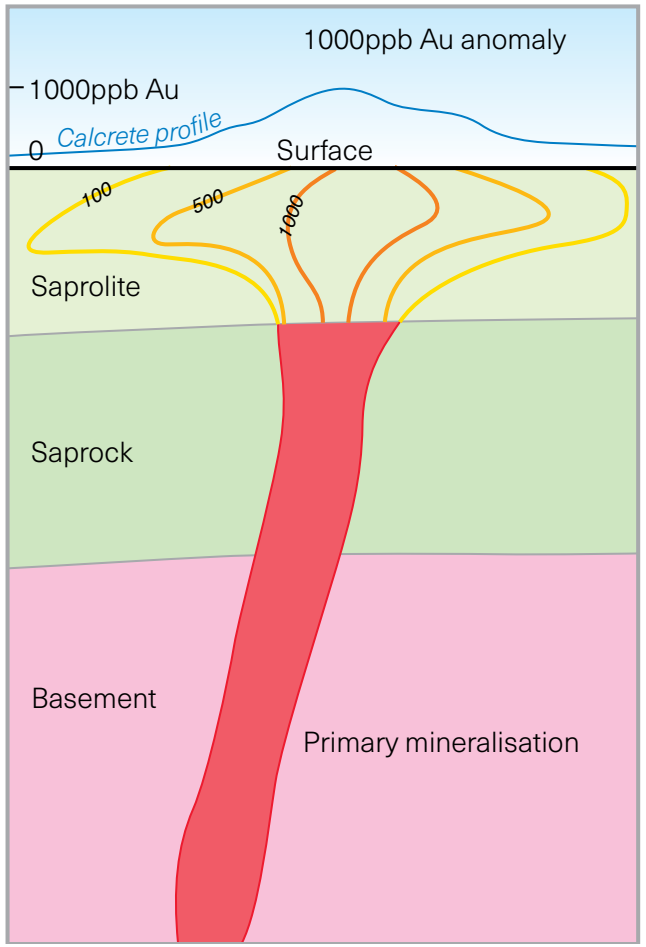
- October 1994 1.6km spaced sampling gave 180ppb gold anomaly with 3-7ppb halo.
- Infill located a major anomaly peaking at 620ppb.
- Drilling confirmed Challenger discovery in May 1995.
- If original sample was 200m away it would have assayed less than 10ppb (fishing net analogy).
- Anomalous bedrock 3km across about 8km west of Jumbuck Station.
- Could have been found by PIRSA's TTBDP if Jumbuck 100,000 sheet covered.

TTBDP = Tarcoola-Tallaringa Bedrock Drilling Program

Data from a talk by Tony Poustie to Adelaide AusIMM, September 2005

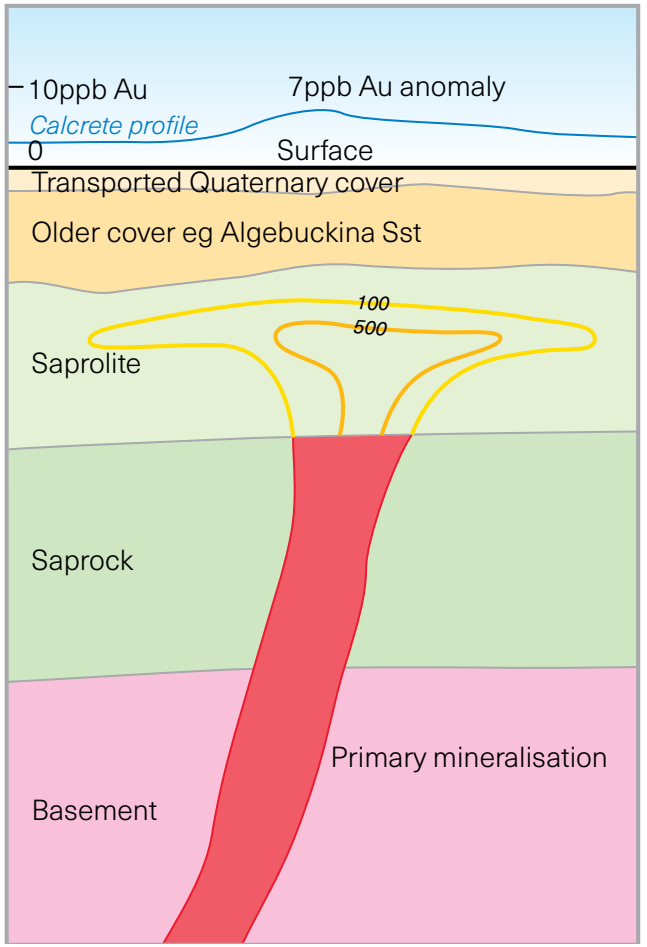
Calcrete sampling – thickness of cover

Gold-in-Calcrete:
Where there is no sedimentary cover anomalies may peak at 500–1000ppb gold.



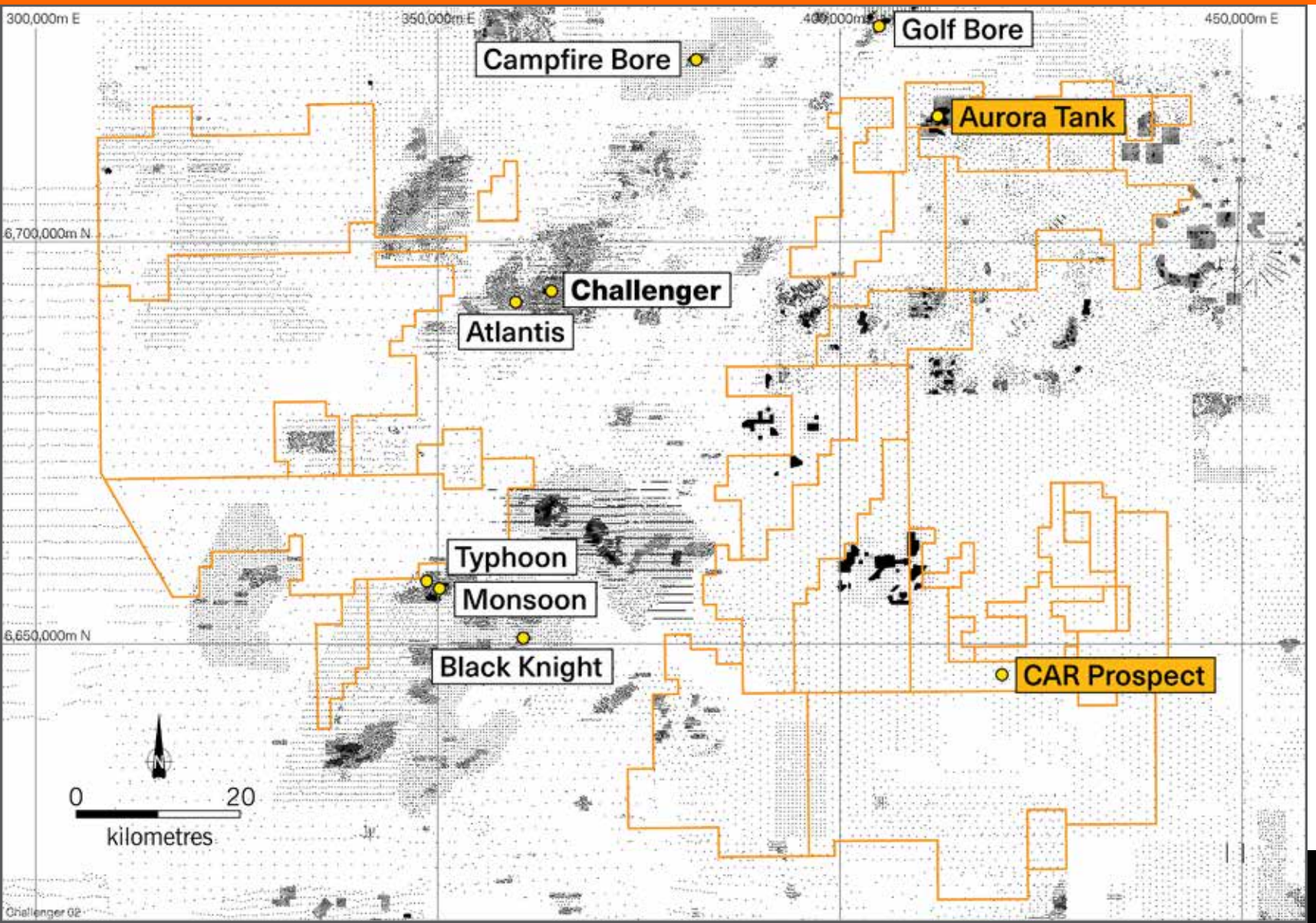
Weathered basement at/near surface.
Gold present near surface, e.g. Challenger.

Gold-in-Calcrete:
Where there is thicker sedimentary cover anomalies may peak at only 5–10ppb gold.



Mineralisation under Mesozoic cover,
e.g. Aurora Tank.

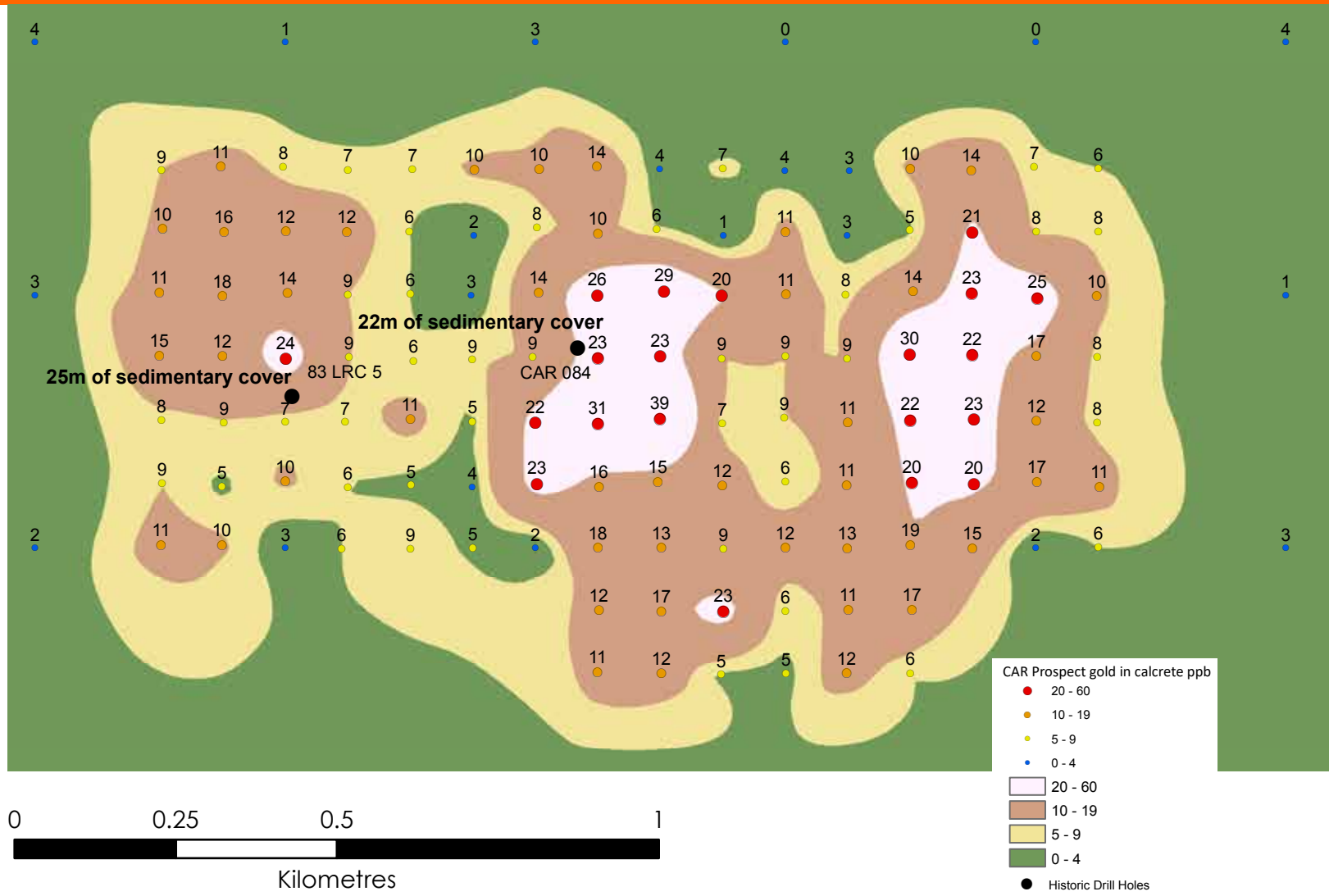
Previous regional calcrete sampling



- Mines Department data show most of Marmota's tenements have only been sampled at 1.6 or 1.0 km spacing.
- This can miss significant anomalies.
- Closer spaced sampling to at least 400m is planned to locate new mineralisation under shallow cover.
- At least ten new anomalies discovered to date, e.g. CAR Prospect.

CAR Prospect

- One of Marmota's interesting targets is the CAR Prospect.
- Located by infill calcrete sampling around a gold-anomalous hole drilled in October 1991 in the TTBDP.
- This hole, CAR 84, drilled 22m of cover then went directly into gold-anomalous basement for 25m to the end of the hole at 47m.
- Gold assays peaked at 53 ppb from 22-24m (possibly partly detrital).
- The prospect is located near the contact of Gawler Range Volcanics, Hiltaba Granites and Archean Gneiss with anomalous Cu, Pb and Zn in nearby holes.
- The calcrete gold distribution is nicely coherent and has an interesting shape possibly representing a mineralised Hiltaba suite intrusive.

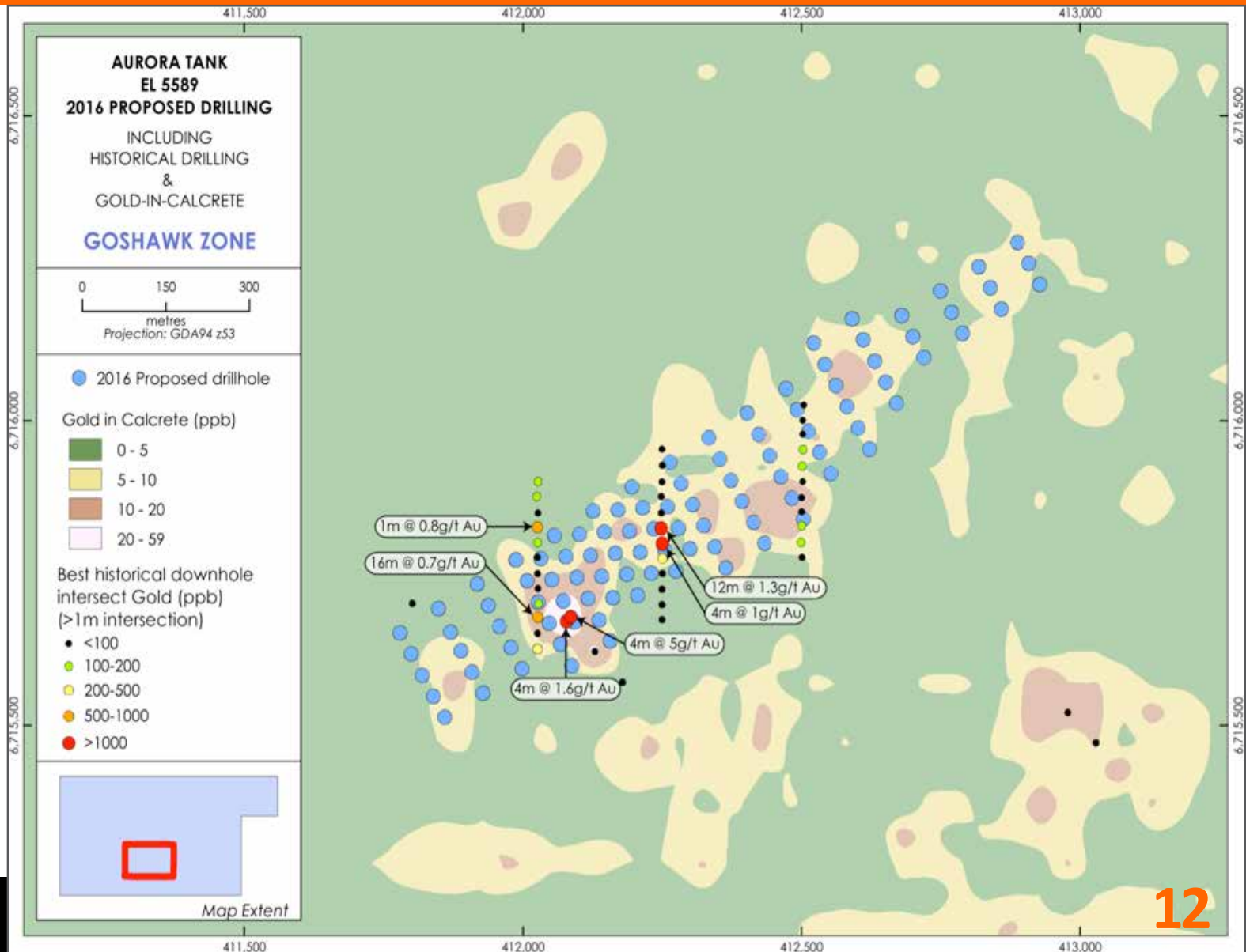


Aurora Tank history

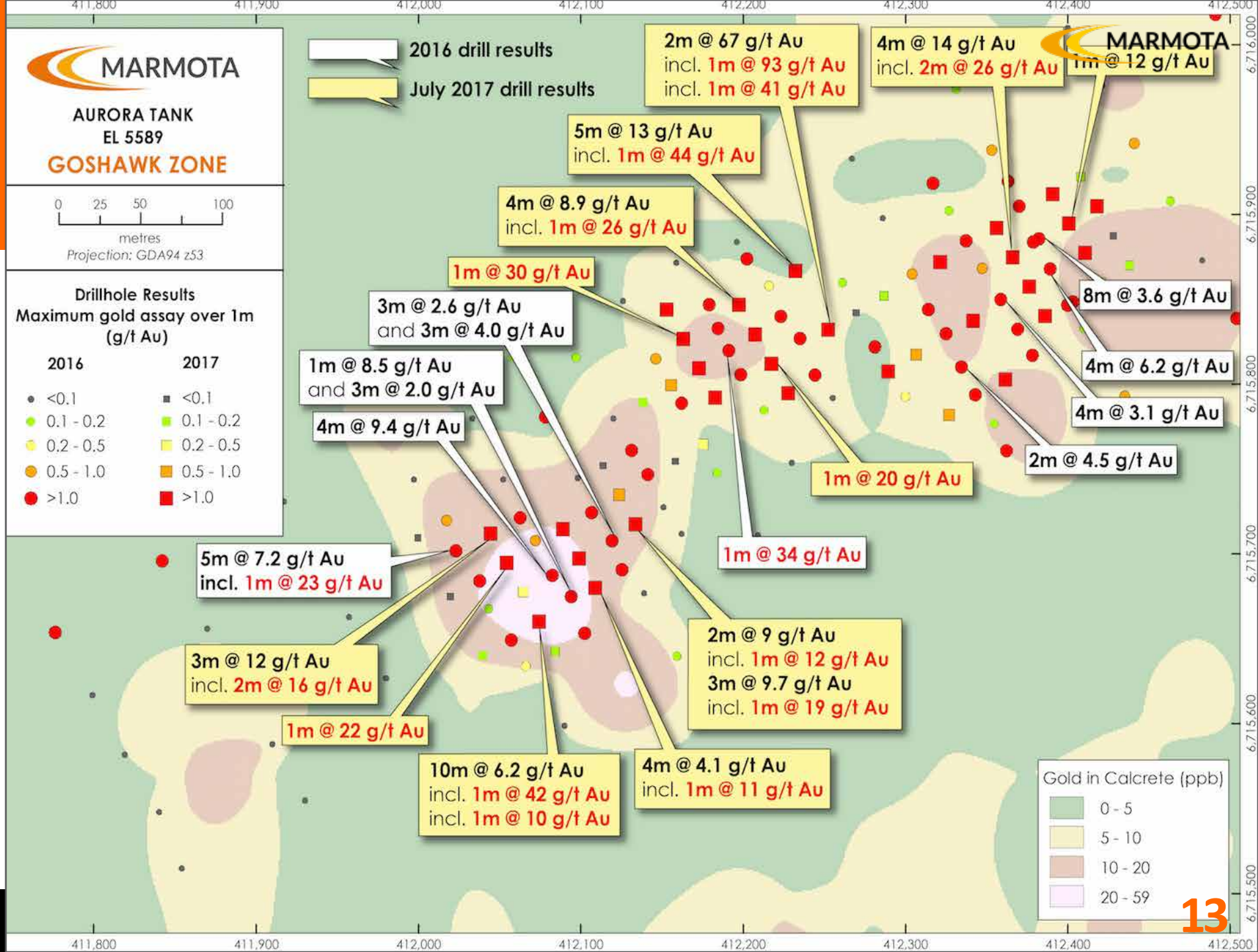
- Aurora Tank has been known as a gold prospect since it was discovered by calcrete sampling in 1997.
- Intermittent historical exploration consisted of calcrete sampling between 1997 and 2013 and drilling between 1999 and 2015.
- Historical drill holes were too widely spaced (fishing net analogy).
- Did show elevated gold at shallow depths.
- After a review, Marmota decided to carry out a program of more intense shallow drilling on an 80 by 40m grid over the best calcrete anomalies.
- This program was carried out in September 2016 and led to a number of significant intersections and follow up drilling – which is continuing.

Aurora Tank September 2016

- Aurora Tank calcrete anomaly peaks at 59ppb Au.
- Best historical result
  4m at 5.0g/t Au from 16m in hole 14AT003.
- September 2016 program of 98 holes on a 40 x 80m pattern outlined the best secondary dispersion gold anomalism.
- Marmota September 2016 drilling yielded
  4m from 25m at 9.0g/t Au including 1m at 34g/t Au.

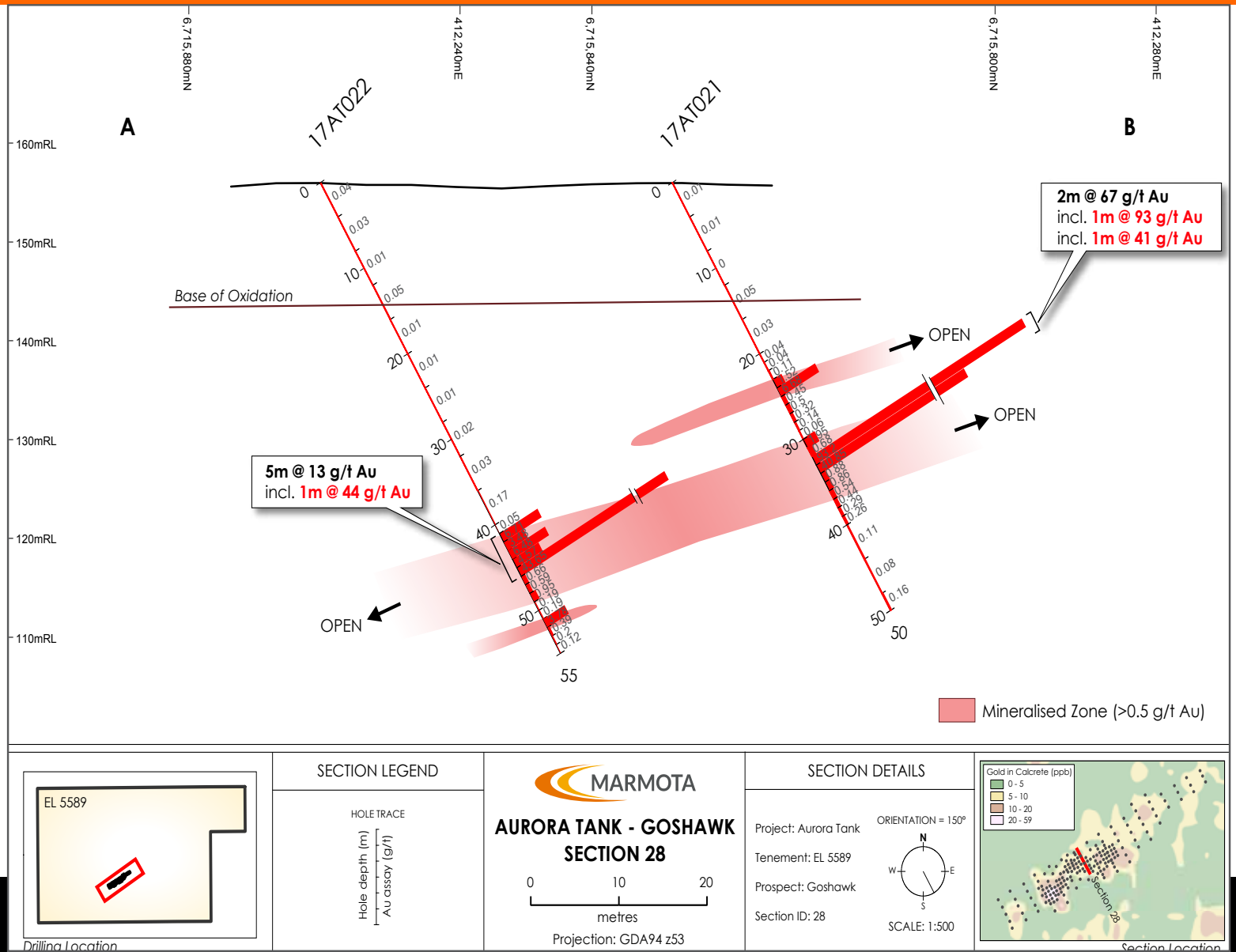


Aurora Tank Sept 2017



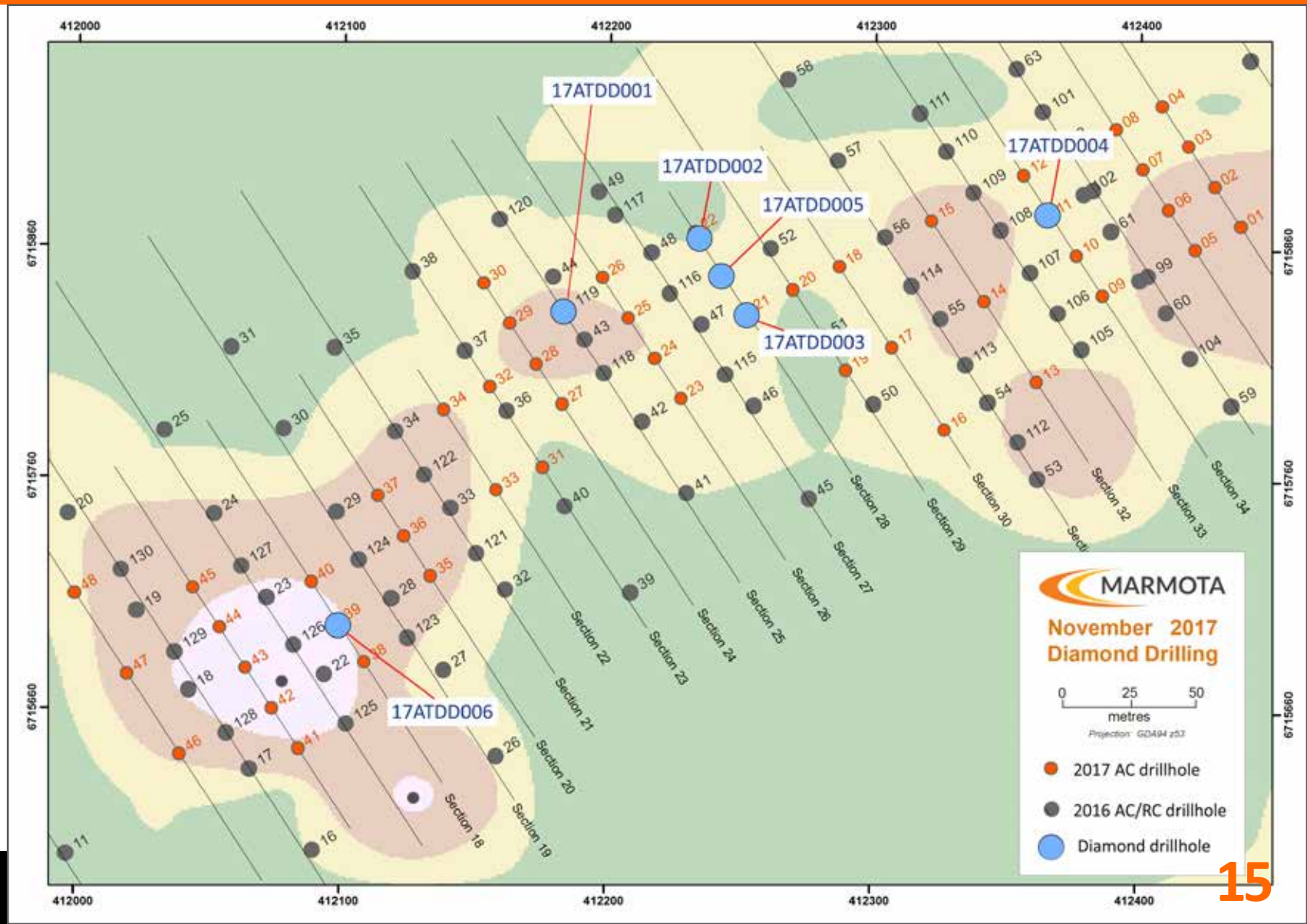
Goshawk cross section 28

- In cross section a zone of up to 8 metres width dipping at 30–40 degrees to the northwest has been located.



Recent diamond drill holes location

- In November 2017 a 6-hole diamond drilling program for 206 metres of core was completed. Assays are awaited.
- New geological insights:
  - an intermediate dip of schistosity of 30–40 degrees to the northwest.
  - an overlying unit of Algebuckina Sandstone about 10m thick.
  - mineralised zones of pegmatite and quartz veins associated with tourmaline and sulphides.



Goshawk photos of mineralisation

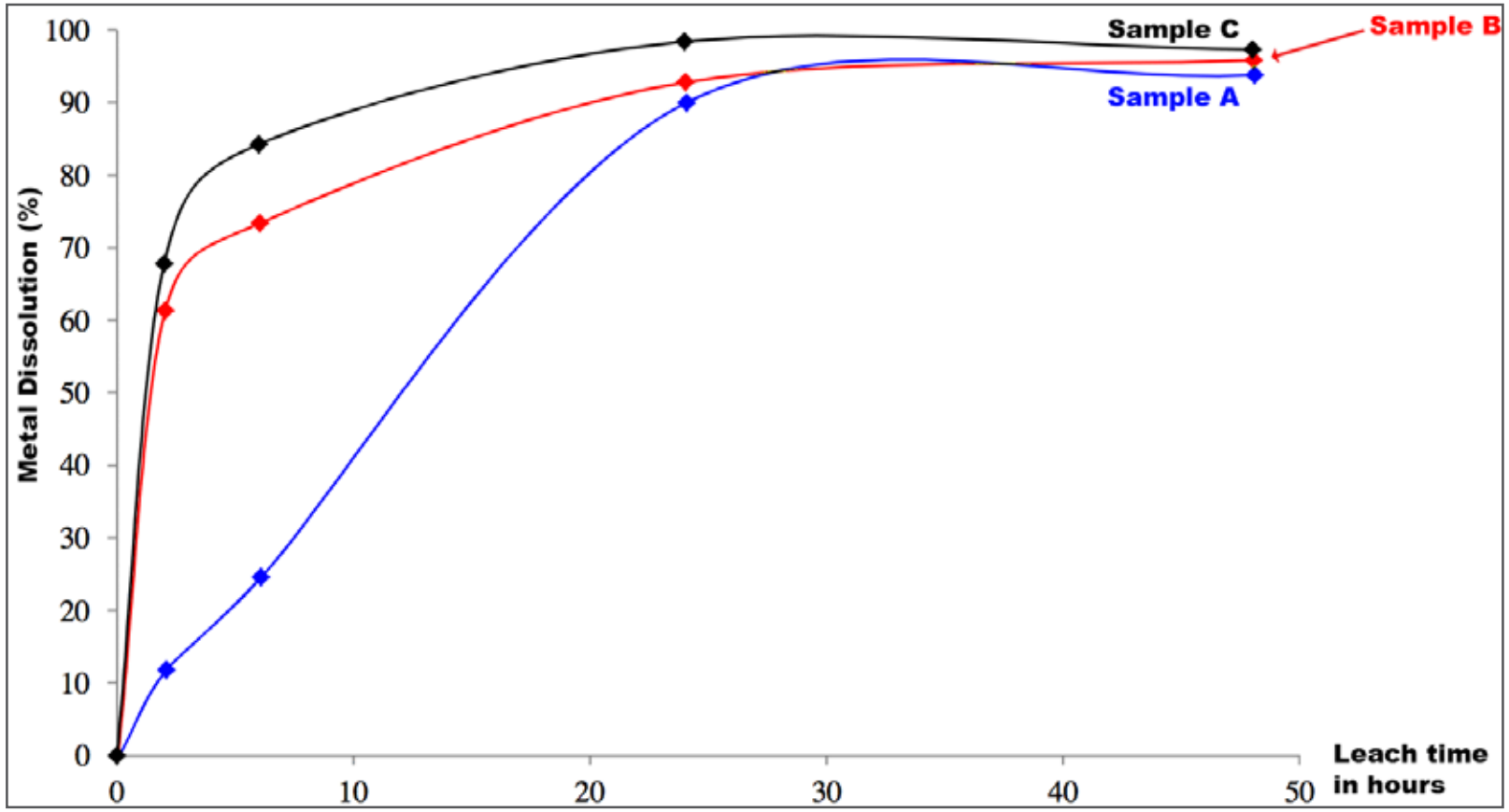
Pyrite-rich fracture in quartz-tourmaline vein.

Dense tourmaline crystals on the margin of a quartz vein.

Tourmaline-rich quartz-feldspar rock from a vein margin.

Gold recovery

Cyanide leach tests yield 94% to 97% gold recoveries



Gold recoveries (in %) vs leach times in hours (for the 3 test samples)

- Initial cyanide leach bottle roll tests on percussion samples indicate high recoveries.

Future program: *Transitioning towards production*

- Work on DDH core to include: geology, geotech, density, metallurgy, petrology.
- Maiden JORC compliant resource estimate for first 50m underway.
- Drill more RC holes to close off open intersections and to target primary mineralisation.
- Scoping/feasibility study.
- On 24 November Marmota and WPG announced a strategic alliance to investigate cooperation on the development and treatment of Aurora Tank gold ore through the Challenger Plant.