



TAITON RESOURCES  
LIMITED

ASX: T88

ANNOUNCEMENT

3<sup>rd</sup> February 2023

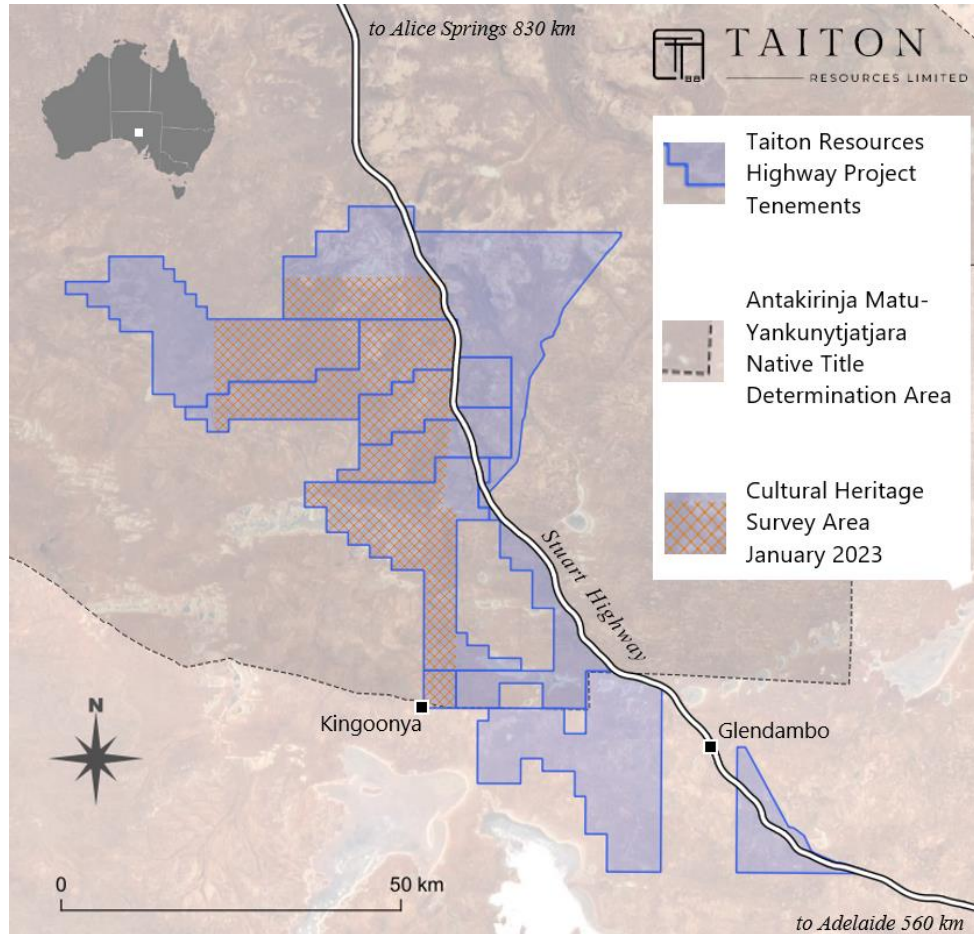
## Highway Project, South Australia Heritage Survey Completed

**Taiton Resources Limited (“T88” or “the company”)** is pleased to announce that the Heritage survey over our Highway project in South Australia has been completed.

The purpose of the Aboriginal cultural heritage survey is to determine whether the proposed work program (Figure 1) would damage, disturb or interfere with any area(s) of significance as defined in the Aboriginal Heritage Act (SA) 1988 or the Aboriginal and Torres Strait Islander Heritage Protection Act 1984. Clearance of all areas surveyed is also subject to DMITRE conditions and rehabilitation of all drill sites.

The anthropology and archaeology (cultural heritage) survey was conducted by the Antakirinja Matu-Yankunytjatjara Aboriginal Corporation (AMYAC) in conjunction with Sandra Jarvis and Fraser J Vickery.

A member of the company accompanied the team to conduct the survey which was completed safely and without incidents.



**Figure 1: Completed Cultural Heritage Survey at the Highway project in South Australia.**

The final report has been received and the company is now cleared to pursue exploration activities.

Members of AMYAC will be required to monitor the clearing of the drill pads.



TAITON RESOURCES  
LIMITED

ASX: T88

## ANNOUNCEMENT

**Managing Director Noel Ong commented:**

***“This has been a great team effort to have the ground cleared for exploration activities just weeks after our listing on the Australian Stock Exchange (ASX).***

***Our exploration team is currently on the ground and will be conducting mapping and surface sampling in anticipation for our IP survey and impending maiden drilling program.***

***Our focus is now to complete the mapping and surface sampling within a week. This will allow the exploration team to refine our IP Survey. ”***

**This announcement does not contain any material changes from the information in the Prospectus dated 23 September 2022**

**This announcement has been approved for release by the Board.**

**For further information please contact**

**Noel Ong**

**Managing Director**

**E: [noel.ong@taiton.com.au](mailto:noel.ong@taiton.com.au)**

**P: +61 (3) 8648 6431**



TAITON RESOURCES  
LIMITED

## ANNOUNCEMENT

ASX: T88

### COMPETENT PERSONS STATEMENT

The information in this report that relates to exploration results is based on and fairly represents information and supporting documentation prepared by Mr Noel Ong, an employee of the company. Mr Ong is a member of The Australasian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Ong consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.

### COMPLIANCE STATEMENT

Taiton advises that it is not aware of any new information or data that materially affects the previous exploration results or mineral resource estimate contained in this announcement.

### About Taiton Resources Limited

Taiton Resources Limited (ASX: T88) is an early-stage mineral exploration and development company that has a Shallow Mineral System within the Olympic Dam Mineralising Event.

Our dominant land holding at the Highway Project will allow us to potentially uncover the Next Elephant Deposit in Australia.

The Company has assembled a portfolio of projects across both South Australia and Western Australia comprising the following:

- (a) Highway Project – total land holding of 2,980 sq km, located in South Australia,
- (b) Lake Barlee Project – total land holding of 668.7 sq km, located in Western Australia; and
- (c) Challenger West Project – total land holding of 997 sq km, located in South Australia.



TAITON RESOURCES  
LIMITED

ASX: T88

## ANNOUNCEMENT

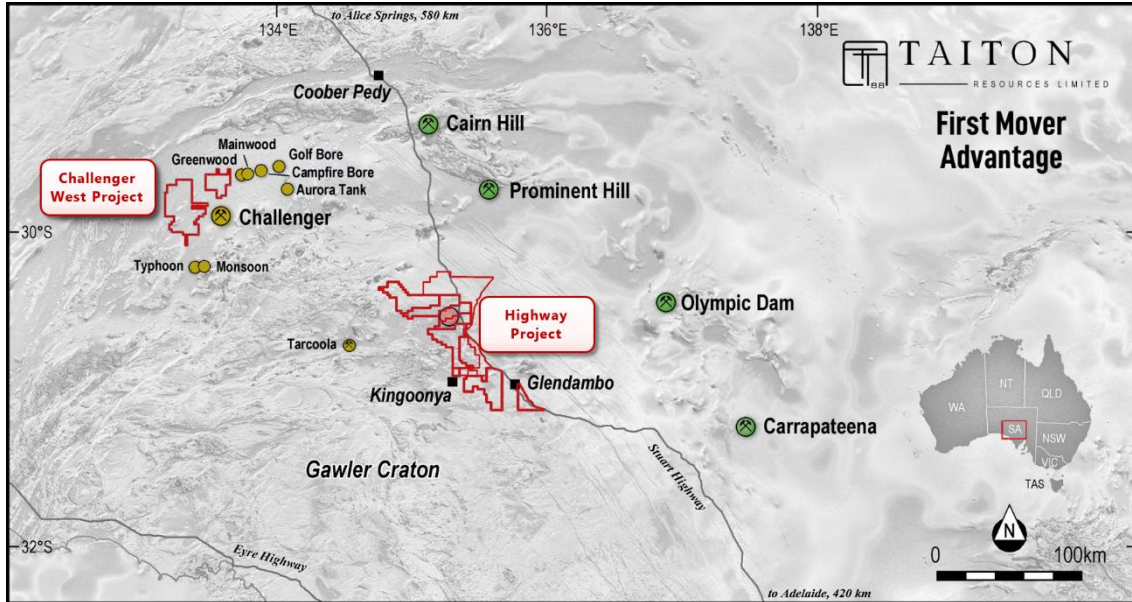
The projects have a range of exploration activities planned. The company will be undergoing a series of grassroots exploration and also several walk-up drilling targets.



**Taiton Resources Limited (ASX: T88) project locations.**

### Highway Project

The Highway Project is situated approximately 590 km from the state capital of Adelaide and 186 km north of Port Augusta and is bisected by the Stuart Highway (A87).



**Figure 3: Tenement location for Highway and Challenger West.**

The nearest town is Glendambo which is an important stopping point on the Stuart Highway as there are no further facilities until Coober Pedy 254 km to the north.

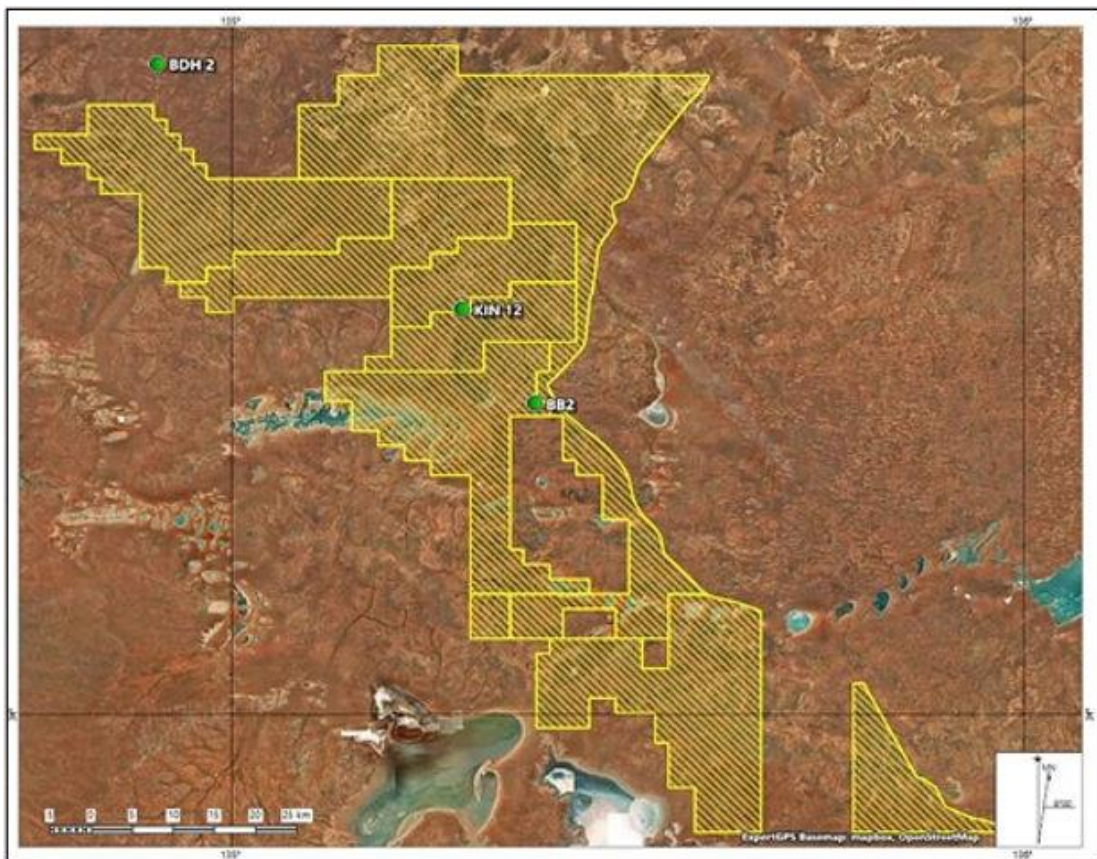
Access to site is via tracks off the main Stuart Highway (Figure 3) by the Bil La Kalin Road to the east and the Hawks Nest Bore Road for a northern access. An all-weather airstrip is situated at Glendambo.

**Zircons Indicating Olympic Metallurgical Event (OME)**

The zircon geochronological work has now been completed by the Company and this provides compelling evidence for not only an extension to the OME Domain, but also that Merino itself is likely a shallow hydrothermal system (i.e., by way of the zircon isotope analyses.)

The zircons analysed which was extracted from the porphyritic granite (as shallow as 7m depth), appear indicative of hydrothermal mixing of fluids concentrated in Pb, U and REEs. The inference here is that a near-surface, epithermal-style mineral deposit is responsible for producing these metalliferous anomalies.

Zircon grains extracted now indicate previously reported 1650 Ma-age lithologies to be well-constrained at  $1598 \pm 8.8$ Ma. contemporaneous to the OME (See Independent Geologist's Report in the Prospectus dated 23 September 2022).



**Figure 4: Distribution of drill holes with re-dated zircons returning a U-Pb age coincident with an OME age-extension. Such new data has both academic and economic significance.**

Taiton can also confidently state that the zircon geochemistry analyses indicate a magma related to mineralised porphyry and haematitic IOCG systems with high oxidation state, high-water content, and a high degree of fractionation.

Initial interpretation is for a large hydrothermal system at Merino, with successive overprinting and evidence of vectoring to a core yet to be discovered under shallow cover.

The three drill holes re-examined and re-dated by the Company have been referenced and include:

1. BB 2, SARIG DH No. 9610, 536717 E, 6608898 N' [https://minerals.sarig.sa.gov.au/Details.aspx?DRILLHOLE\\_NO=9610](https://minerals.sarig.sa.gov.au/Details.aspx?DRILLHOLE_NO=9610)
2. BDH 2, SARIG DH No. 6699, 491036 E, 6651392 N, [https://minerals.sarig.sa.gov.au/Details.aspx?DRILLHOLE\\_NO=6699](https://minerals.sarig.sa.gov.au/Details.aspx?DRILLHOLE_NO=6699)
3. KIN 12, SARIG DH No. 9672, 527957 E, 6620703 N, [https://minerals.sarig.sa.gov.au/Details.aspx?DRILLHOLE\\_NO=9672](https://minerals.sarig.sa.gov.au/Details.aspx?DRILLHOLE_NO=9672)

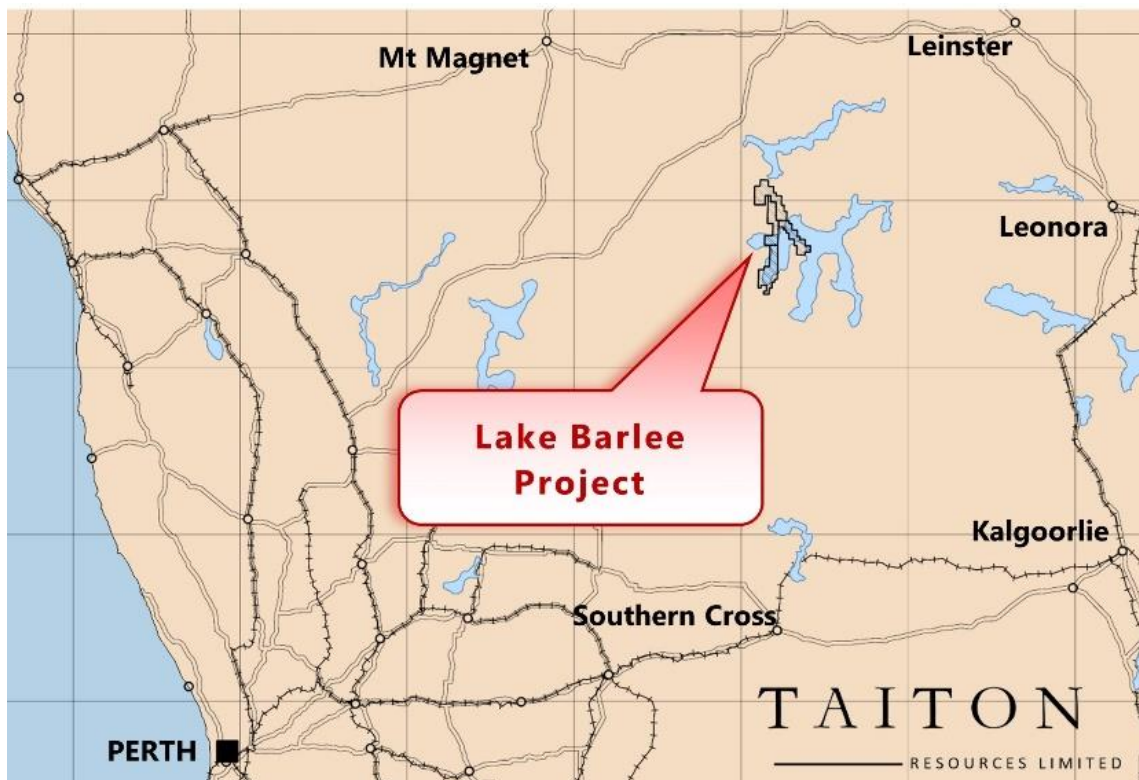
Besides the geochronological analyses, the zircon geochemistry indicates a magma potentially related to mineralised porphyry and haematitic IOCG-type systems with a high oxidation state, high water content and a high degree of fractionation. Taiton interprets these indices as a blind hydrothermal system lying in the vicinity of the Merino Prospect (See Independent Geologist's Report in the Prospectus dated 23 September 2022).

## LAKE BARLEE PROJECT



The Lake Barlee Project (Figure 5 ) is situated on the Yilgarn block and lies approximately 65 km southeast of Youanmi and 293 km north of the mining town of Southern Cross.

The project tenements lie predominantly on an intermittent playa salt lake, the second largest in Western Australia. The nearest town to Lake Barlee is Mount Magnet, some 163 km to the northwest (Figure 5 ).



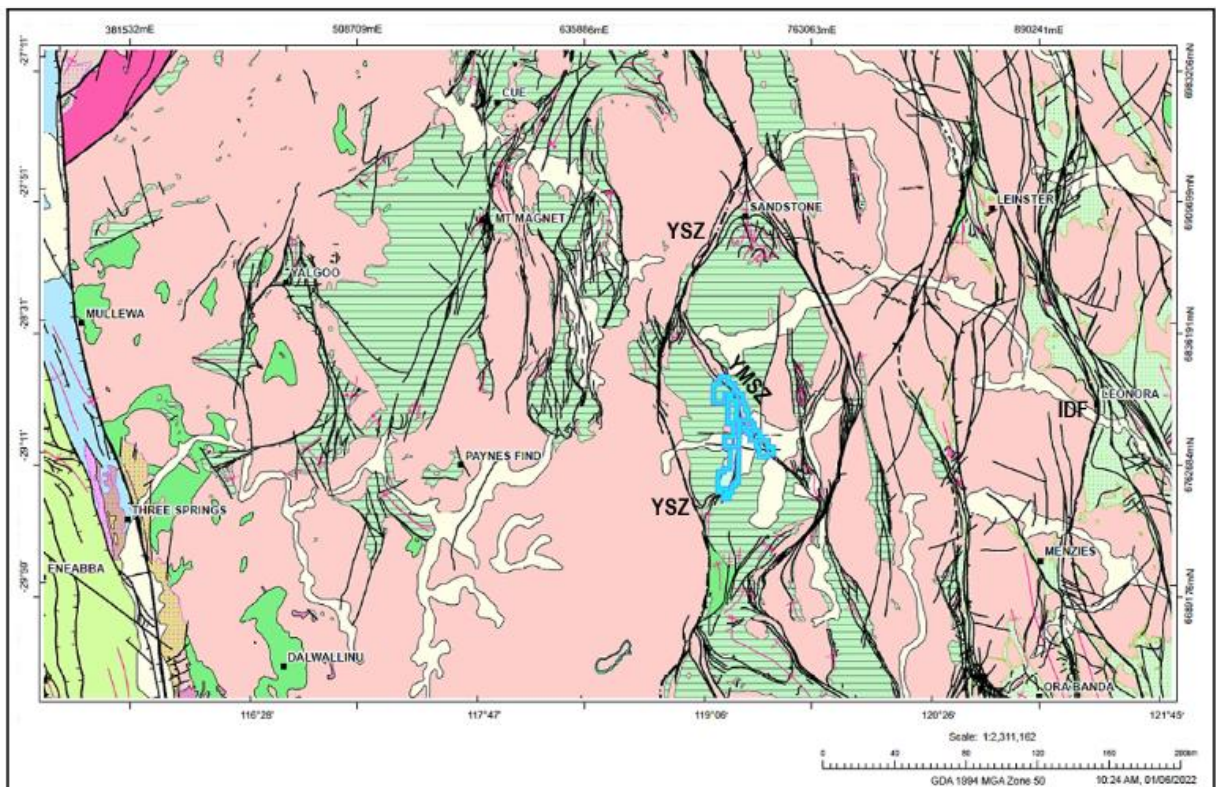
**Figure 5: Lake Barlee tenement location plan.**

A greenstone-associated gold target defined under Lake Barlee on E77/2700 during interpretation of magnetic data in 2009 has not been drill tested.

Approximately 60,000 kg/Au @ 10.6g/t Au has been mined from Halleys East, located some 15km southwest of the Lake Barlee tenements.

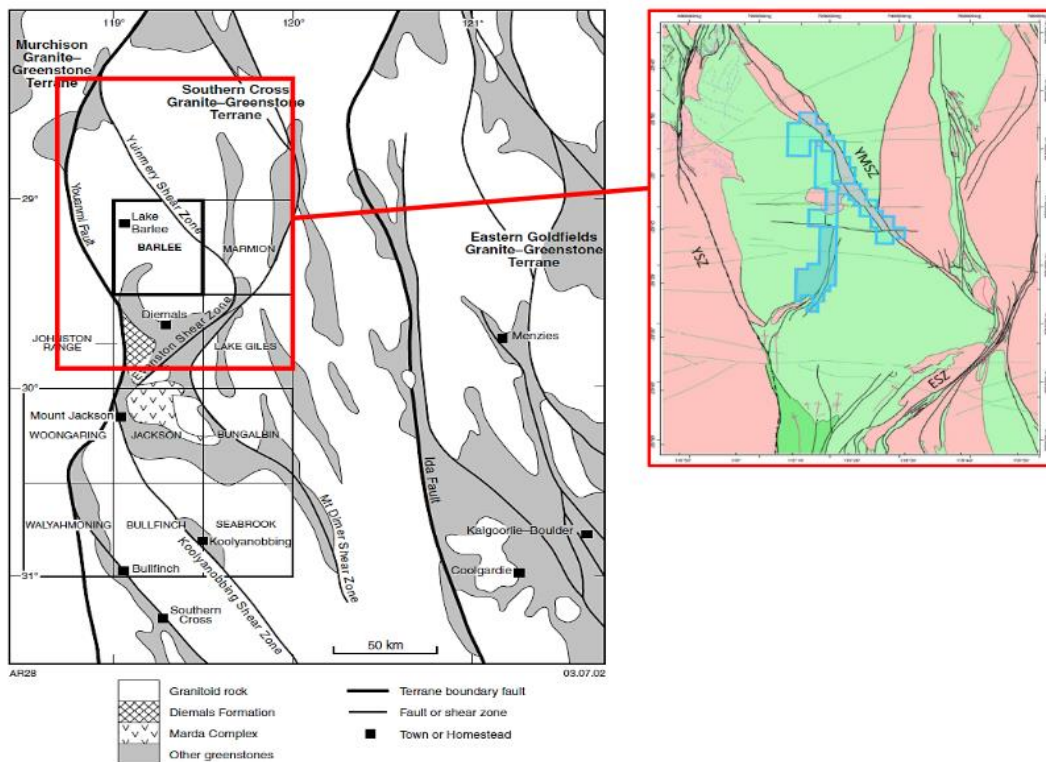
Geological mapping indicates no greenstone outcrop on Lake Barlee tenements and only little exploration has been reported in some areas of residual soil over granite proximal to greenstone on tenement E77/2700, or distal from greenstone on tenements E57/1158 and 1168.

The Yuimery Shear Zone which defines a highly prospective granite-greenstone boundary (cf. Figure 6, Figure 7) and is one of the principal exploration targets, along with a fault splay off the Youanmi Fault (inset). Both faulted and shear-zone structures seem to have formed as a competency (rheology) contrast between granite-greenstone contacts.



**Figure 6: Major geological and tectonic domains and structure of the Murchison granite-greenstone terrane. The Lake Barlee Prospect tenements are shown in blue overlying predominantly Cenozoic playa sediments of Lake Barlee. (YSZ = Youanmi Shear Zone, YMSZ = Yuinmery Shear Zone, IDF = Ida Fault).**

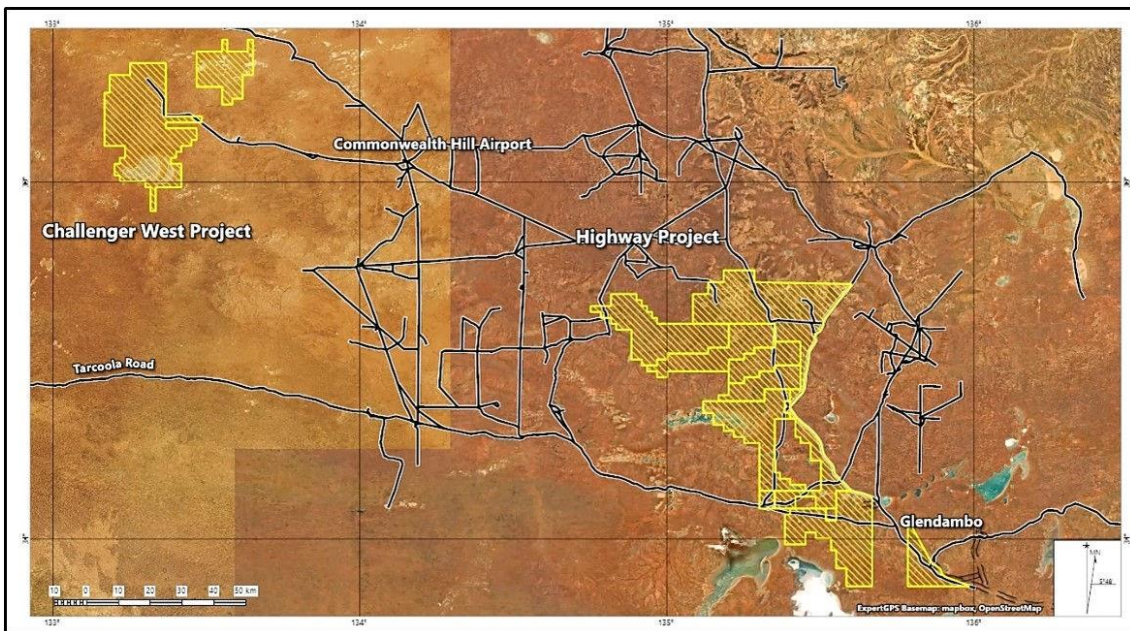
These spatial and temporal relationships across highly strained zones hosting compressional folding, traditionally act as mineralising conduits for concentrated hydrothermal fluid flow.



**Figure 7: Simplified regional geological and tectonic setting of the Lake Barlee area (Riganti, 2002). Lozenge-shape granite-greenstones and N/S trending fault and shear zones attest to E/W compression and shortening (e.g., Zibra, 2020) (YSZ = Youanmi Shear Zone, ESZ = Evanston Shear Zone, YMSZ = Yuinmery Shear Zone).**

## THE CHALLENGER WEST PROJECT

The Challenger West Prospect (Figure 3, Figure 8) lies c.190 km northwest of the Highway Prospect and approximately 135 km southwest of Coober Pedy. The tenements are accessible from the Commonwealth Hill Road, off the Stuart Highway to the east. The Commonwealth Hill airport lies centrally between the two prospects and is 78 km east of the Challenger West properties. From the Commonwealth Airport, the tenements are accessible by track (cf. Figure 8).

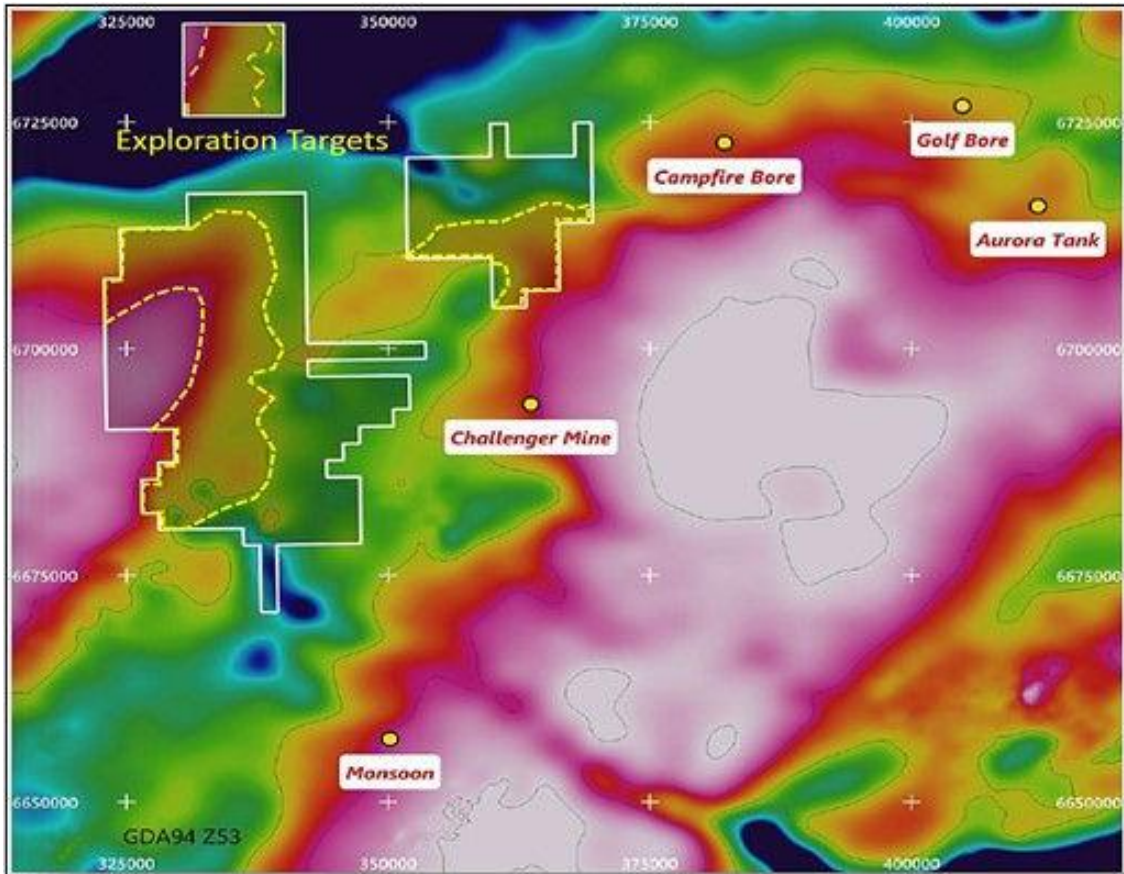


**Figure 8: tenement location plan for the Challenger West project.**

The Challenger West Prospect is located west of the Challenger Mine, approximately 150 km southwest of Coober Pedy. The Archaean para- and

orthogneisses with mafic to ultramafic intrusive and extrusive rocks of the Sleaford and Mulgathing Complexes form an older basement cropping out sporadically in the western and north-western parts of the Craton. The deposit hosts >500,000 oz of gold in granulite facies gneisses and pelitic migmatites.

Taiton is a new entrant to the area. The Company's primary source of confidence in being situated in the Challenger region, besides its proximity to an existing mining district, is due to the presence of gravity highs (isocontours in the 10Mgal Band) found in the same basement terrane setting as the Challenger deposit (cf. Figure 9).





TAITON RESOURCES  
LIMITED

ASX: T88

## ANNOUNCEMENT

### Figure 9: Bouger anomaly map

As mentioned, the regolith of the area is extremely prospected, based on the discovery of Challenger by sampling calcrete carapaces and regolith. This approach led to a flurry of district-scale calcrete sampling for over a decade. More recently, limitations have been identified in that approach. The Challenger gold camp is well understood, and Taiton is well-placed to capitalise on the vast amount of historic data available in the public domain and on SARIG. Taiton has only recently acquired its ground holdings at Challenger West and has not acquired any new data in the interim, other than to reprocess the gravity data to produce higher resolution Bouger anomaly maps that clearly highlight the relationship of the mineralisation to the gravity gradients

The Company believes that the existing data, which has a good historical indicator of district-scale mineralisation, supports a strategy for a new discovery at Challenger West. The Bouger gravity model supporting gold deposits developing marginal to a metamorphosed gravity ridge, is a compelling concept. The mirror-imaged gravity ridge boundary located in the west of the tenement EL 6785 bodes well for similar mineralisation to other significant and neighbouring gold deposits.