

Gold Anomaly Identify Potential Gold Mineralisation at the Challenger West Project In South Australia. ASX Release – 11th June 2024

Highlights

- Ultrafine soil sampling results returned highlighting multielement (including Au) anomalism across multiple targets
- Gold anomalism coincident with interpreted structures in a geological setting analogous to Challenger Deposit
- Tenement application (861 km²) increasing Challenger West Footprint to 1,858 km²

Taiton Resources Limited ("T88", "Taiton" or "the Company") is pleased to announce that all samples from the recently completed UltraFine (UF) soil sampling program in April have now been returned. The completed soil program was undertaken across three prospects within the Challenger West project. The Challenger West project is located between 10km and 40km west and north of the >1 M* ounce Challenger Gold deposit, as shown in Figure 1. The tenement has seen relatively little exploration work and remains underexplored.



The program consisted of a total of 990 samples (inc. QAQC samples) and was Taiton's first pass field-based assessment of selected prospects identified primarily from geophysical datasets.

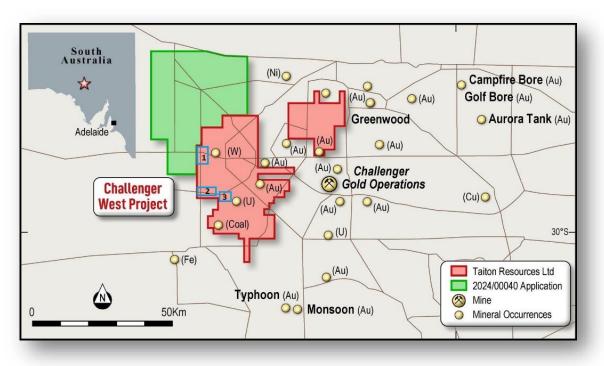


Figure 1. Location of Challenger West project with areas for soil sampling (blue boxes).

Area 1

Area 1 was sampled on a nominal 100m-by-200m grid, covering interpreted NNE trending features defined by discrete magnetic anomalism, expanding to a 200m-by-200m grid on the flanks (Figure 2).



The prospect is defined as a series of interpreted north-northeast trending structures that connect into a northeast trending shear based on magnetic imagery. Within the prospect two banded iron formations (BIF) and to the east are small mafic intrusions interpreted from magnetic imagery.

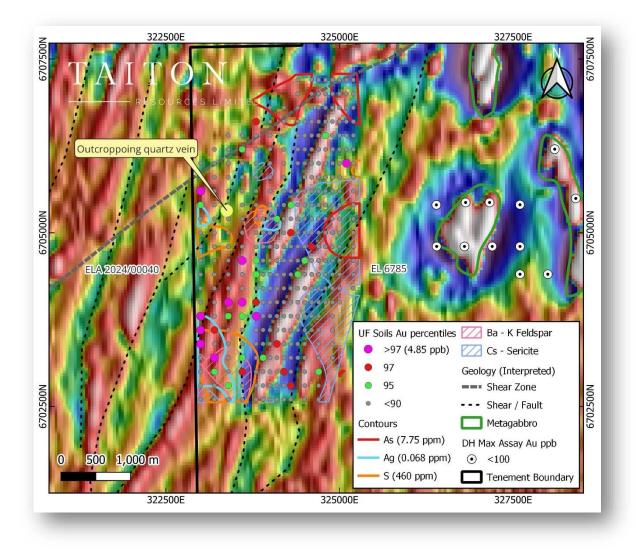


Figure 2. Area 1 UF soil results underlain by RTP 1VD magnetic image.

Registered office : Level 13, 200 Queen St, Melbourne, VIC 3000 t : +61 3 8648 6431 f : +61 3 8648 6480



ANNOUNCEMENT

ASX: T88

A coherent low-level gold (maximum value of 26.9 ppb Au) and Ag anomaly was identified coincident to an interpreted north-northeast trending structure (Figure 2). In addition, coincident pathfinder elements (As-S) and elements indicating favourable alteration; proximal K Feldspar (Ba) and broader sericite (Cs)¹. Outcrop is limited however an outcropping quartz vein (Figure 3) was observed coincident to an interpreted structure with proximal elevated Au-Ag-S anomalism.



Figure 3. Outcropping quartz vein located in Figure 2 coincident to an interpreted small range shear / fault proximal to multielement anomalism.

Taiton Resources Limited (ASX:T88) ACN 062 284 084 Registered office : Level 13, 200 Queen St, Melbourne, VIC 3000 t : +61 3 8648 6431 f : +61 3 8648 6480

w : taiton.com.au e : info@taiton.com.au



The combination of gold and pathfinder element (indicating both metal and alteration) anomalism coincident with lower order structures that are tapped into major shear zones demonstrates the potential of the prospect. In the short-term Taiton will complete infill sampling across the areas exhibiting multielement anomalism coincident with interpreted structures.

Area 2

Area 2 was sampled on a nominal 200m-by-400m grid covering a northeast trending shear interpreted from geophysical data (Figure 4).

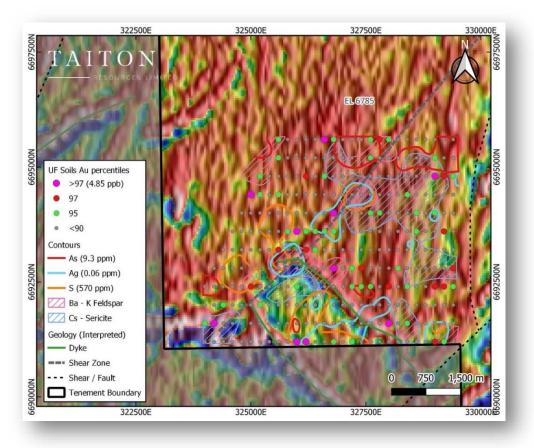


Figure 4. Area 2 UF soil results underlain by RTP 1VD magnetic image.

Taiton Resources Limited (ASX:T88) ACN 062 284 084 Registered office : Level 13, 200 Queen St, Melbourne, VIC 3000 t : +61 3 8648 6431 f : +61 3 8648 6480

w : taiton.com.au e : info@taiton.com.au



Results from this prospect has produced sporadic low level gold anomalism (maximum of 26.9 ppb Au) mostly associated with an interpreted northeast trending shear and a northwest trending dyke (Figure 4).

Area 3

Area 3 is being sampled on a nominal 200m-by-200m grid covering an area consisting of a series of BIFs (magnetic highs) within a metapelite (Figure 5). The prospect covers an area of interpreted structural complexity with magnetics indicating multiple lower order cross cutting structures which may tap into the Tallacootra Shear Zone (TSZ).

The soil sampling program has identified low level gold anomalism (maximum of 10.9 ppb Au) mostly coincident with interpreted structures and associated pathfinder elements. This also includes Ba which may indicate K Felspar alteration², which is indicative of wall rock alteration¹.



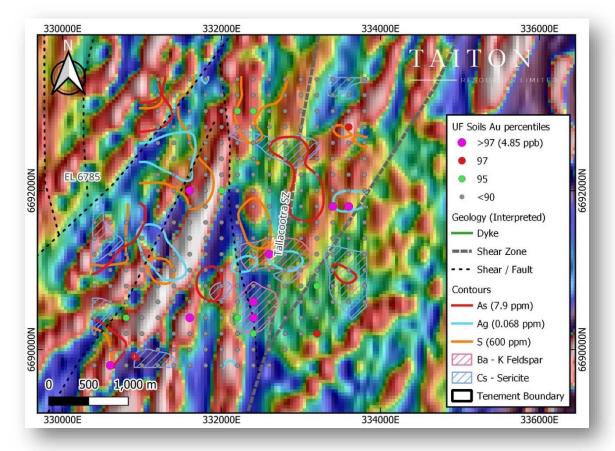


Figure 5. Area 3 UF soil results underlain by RTP 1VD magnetic image.

Short term exploration at Challenger West will include follow up infill sampling of the areas showing multiple element anomalism to advance the prospects to potentially drill stage testing later in the year. Additionally, reconnaissance sampling programs across other prospects will commence.



Tenement Application

Taiton applied for the ground (ELA 2024/00040) based on the position of gravity highs found in the same basement terrane setting as the Challenger deposit (Figure 6). Within this area recent reprocessed aeromagnetic imagery indicated the continuation of north-northeast trending structures as interpreted in Area 1 (Figure 7).

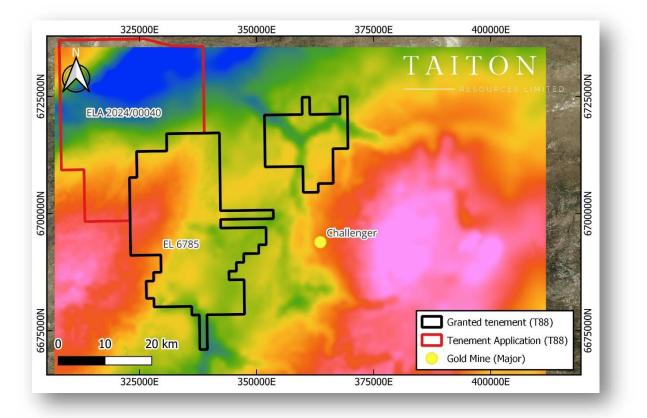


Figure 6. Taiton tenements (granted and application) underlain by gravity image. Note position of Challenger deposit within the shadow (reddish / orange) of a gravity anomaly (magenta) and comparable response within Taiton tenements.

Registered office : Level 13, 200 Queen St, Melbourne, VIC 3000 t : +61 3 8648 6431 f : +61 3 8648 6480



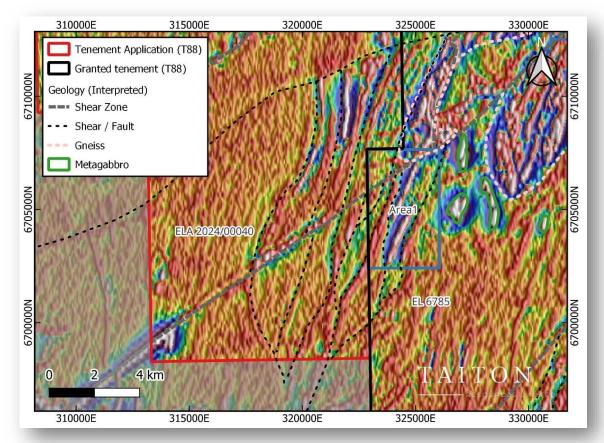


Figure 7. Preliminary structural interpretation within ELA 2024/00040 indicating a broad corridor of structural complexity.

Challenger deposit and elements associated with mineralisation.

Challenger is interpreted as a metamorphosed gold deposit. The distribution and grade of pre-existing gold mineralisation was strongly affected by hightemperature deformation, partial melting, and melt migration during the Palaeoproterozoic granulite facies metamorphism event. This event affected the region.



ANNOUNCEMENT

Formation of a polymetallic melt enabled extensive mobilisation of gold which concentrated into a series of dilation structures which developed within the larger scale fold geometry.

Gold mineralisation occurs within coarse grained quartz veins associated with sulphides that contain a wide range of chalcophile elements and wall-rock alteration consisting of quartz, K-feldspar and biotite haloes to the veins.

Analysis of the deposit by Lintern and Sheard¹ identified two broad groups of elements associated with mineralisation. These are sulphide (Ag, As, Bi, Cd, Cr, Cu, Fe, Mo, S, Se, W and Zn) and alteration (Ba, Cs, K, Rb, Tl) related.

Reference

¹Lintern MJ, Sheard MJ., Regolith Studies Related to the Challenger Gold Deposit, Gawler Craton, South Australia, Geochemistry and Stratigraphy of the Challenger Gold Deposit Volume 1

² Fabris, A.J., Halley, S., van der Wielen, S., Keeping, T., Gordon, G. IOCG-style mineralisation in the central eastern Gawler Craton, SA; characterisation of alteration, geochemical associations, and exploration vectors.

Executive Director Noel Ong commented:

"Today's release has confirmed the company's belief in finding a Challenger Gold Mine style mineralisation. The coincident soil sampling result and interpreted structures have given the company added confidence of making a discovery in the region.



The Taiton strategy is to have a portfolio of projects that could deliver mineral exploration discoveries of a significant economic scale. The systematic steps the exploration team is executing is now starting to bear fruits.

The company is excited to take the next steps in refining our target vectoring with further work in the region imminently. The team has taken time to interpret the UF Soil sampling and they will continue to design the next program of exploration as the current results have been encouraging.

The Challenger West project have not had the resolution of sampling that Taiton have just completed. The only form of exploration in the region has come from regional calcrete sampling which had been completed in the 1990s with sporadic drilling.

No doubt, Taiton will update the market with our next exploration program, and we look forward to uncovering what may be the next Challenger Gold Mine in the region."

This announcement has been approved for release by the Executive Directors.

For further information please contact: Noel Ong Executive Director E: noel.ong@taiton.com.au P: +61 (3) 8648 6431



COMPETENT PERSON STATEMENT

The information in this report that relates to exploration results and geological data for the Highway Project is based on information generated and compiled by Shane Tomlinson, who is a member of the Australian Institute of Geoscientists (AIG).

Shane Tomlinson has sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

FORWARD LOOKING INFORMATION:

This announcement contains forward-looking statements. Wherever possible, words such as "intends", "expects", "scheduled", "estimates", "anticipates", "believes", and similar expressions or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved, have been used to identify these forward-looking statements.

Although the forward-looking statements contained in this announcement reflect management's current beliefs based upon information currently available to management and based upon what management believes to be reasonable assumptions, Taiton cannot be certain that actual results will be consistent with these forward-looking statements. A number of factors could cause events and achievements to differ materially from the results expressed or implied in the forward-looking statements. These factors should be considered carefully and prospective investors should not place undue reliance on the forward-looking statements.

Forward-looking statements necessarily involve significant known and unknown risks, assumptions and uncertainties that may cause actual results, events, prospects and opportunities to differ materially from those expressed or implied by such forward-looking statements. Although Taiton has attempted to identify important risks and factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors and

Registered office :

Level 13, 200 Queen St, Melbourne, VIC 3000



ANNOUNCEMENT

risks that cause actions, events or results not to be anticipated, estimated or intended, including those risk factors discussed in Taiton's public filings.

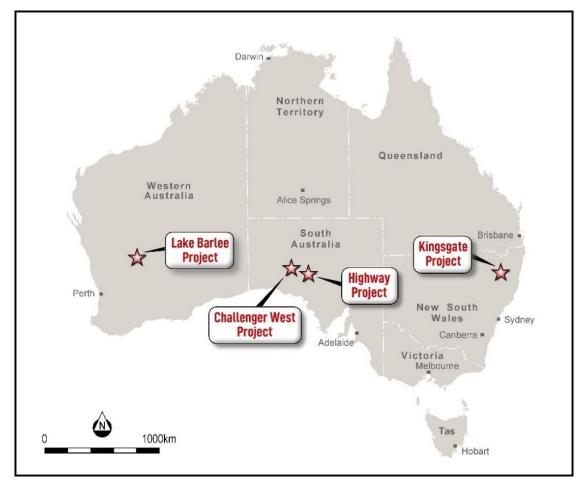
There can be no assurance that the forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, prospective investors should not place undue reliance on forward-looking statements. Any forward-looking statements are made as of the date of this announcement, and Taiton assumes no obligation to update or revise them to reflect new events or circumstances, unless otherwise required by law.

About Taiton Resources Limited

Taiton Resources Limited (ASX: T88) is an early-stage mineral exploration and development company with a portfolio of projects across New South Wales, South Australia and Western Australia, comprising the following:

- a) Kingsgate High-Grade Molybdenum Project total tenement land holding of 294.1 sq km, located in New South Wales;
- b) **Highway Project** total tenement land holding of 2,930 sq km, located in South Australia;
- c) **Challenger West Project** total tenement land holding of 997 sq km, located in South Australia; and
- d) Lake Barlee Project total tenement land holding of 668.7 sq km, located in Western Australia.





Taiton Resources Limited (ASX: T88) project locations.

JORC Code, 2012 Edition – Table 1

Challenger West Ultrafine Soil Sampling

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 Taiton Resources The program of Ultrafine soil sampling was completed in April. Samples are to be collected within three areas, Area 1 to 3. Area 1 on an area of 2.5km by 4.5km and on a 100m-by-200m grid opening to 200m by 200m. Area 2 within an area of 5.5km by 4.5km and on a 200m-by-400m grid. Area 3 within an area of 3.5km by 3.5km on a grid of 200m-by-200m grid. All grids were collected in an east-west direction. The grid being employed is reconnaissance in nature and appropriate as a first past assessment tool for gold mineralisation. Soil samples were collected from a nominal depth of 25cm; an area of approximately 1m by 1m was scraped to remove surface crust, lag, and vegetation and then a small pit of approximately 30cm to 40cm was dug in the centre. A scoop was used to collect sample to be sieved using a -2mm mesh plastic sieve to produce a sample of approximately 300g. These were placed in prenumbered paper sample bags. The sampling practice is appropriate to the generally residual soil profile of the area sampled and complies with industry best practice
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	Not applicable.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 	Not applicable.

Criteria	JORC Code explanation	Commentary
	 Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Samples were collected by Taiton contractor and sample material type and terrain were recorded on spreadsheets.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Soil samples were collected in dry conditions and placed in numbered paper bags before being placed in cartons and pellets for transport to Labwest laboratory in Perth, Western Australia by logistic contractors. Sample sizes and material being submitted to Labwest are appropriate in size for the analysis being conducted. QAQC samples were collected in the field as per Taiton's QAQC sample procedure.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Sample analysis using the Ultrafine sample method was completed by Labwest Mineral Analysis Pty Ltd in their Perth laboratory. A sample of approximately 200g is separated to a -2µm sample size and digested in aqua-regia under high pressure and temperature using a microwave apparatus. Analysis and reporting of Au plus 50 elements suite by ICP-MS/OES. The analytical quality control procedures consisted of the inclusion of a Certified Reference Material (CRM) at a rate of 1:20. The CRMs used were OREAS45f with the results showing consistency throughout the sampling program. QAQC data from sample analysis indicate acceptable level of accuracy and precision with the data. The assaying techniques and quality control protocols used are considered appropriate for the data to be used for reporting

Criteria	JORC Code explanation	Commentary
		exploration soil geochemistry results.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 No independent verification of results has been conducted. All sampling and assay data were stored in a secure database with restricted access. Digital sample submission forms provided the sample identification numbers accompanying each submission to the laboratory. All sample results reported in this announcement are compiled in the Annexures.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Samples were located using a Garmin handheld portable GPS with an accuracy of ± 3m. The grid system used is GDA94/MGA94 Zone 53. RL data was assigned using publicly available SRTM elevation data.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Area 1 samples were collected on an east-west grid of 100m by 200m through the central zone expanding to 200m-by-200m grid on the flanks. Area 2 samples were collected on an east-west grid of 200m by 400m. Area 3 samples were collected on an east-west grid of 200m by 200m. Data density is appropriately indicated in the presentation with all sample positions shown in the plans provided. No Resources or Ore Reserve estimations are presented
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 Sample spacing is broad to identify potential gold and / or pathfinder elements that may indicate potentially underlying structurally controlled gold mineralisation. Based on the broad sample pattern and the style for mineralisation being targeted no sampling bias from the grids being used is believed to exist.
Sample security	The measures taken to ensure sample security.	• All samples were collected by Taiton's geological contractor with individual samples collected in paper bags and placed in small cartons which were then sealed. The cartons were then placed on pellets and plastic wrapped before transport to Perth by freight contractors via road.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 No audits or reviews have been completed to date.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Challenger West project consists of granted tenement EL6785, and tenement application ELA 2024/00040 which is 100% owned by Taiton Resources Limited. The Challenger West project overlaps the Native Title Determination area for the Antakirinja Matu-Yankunytjatjara People and the Department of Defence Woomera Prohibited Area. The Company also holds an Exploration Permit (Number: REX 058-22) to access the Woomera Permit Area. A Part 9B Native Title agreement has been signed with the Antakirinja Matu-Yankunytjatjara People. Within the Challenger West project is the Lake Anthony and Half Moon Lake registered heritage site.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Between 1968 and 1971 Kennecott explored for nickel associated with ultramafic intrusions within the Christie Gneiss without success. Through the 1970's and early 1980's PNC, BP and Afmeco explored for uranium, primarily targeting sedimentary uranium associated with Tertiary paleochannels, also without success. In the 1980's BP and CRA (Rio Tinto) explored for base metals, targeting magnetic and gravity features and Stockdale (1982- 1985) carried out regional exploration for diamonds. The most extensive exploration was carried out by Stockdale Prospecting Limited over the period from 1981 to 1988. Stockdale's work included ground magnetics, helicopter-borne magnetics, resistivity, Sirotem and minor gravity and VLF-EM surveys were carried out and generally followed by a drilling program. No kimberlite or potentially diamondiferous rock was intersected in the drilling. In 1996 CRA (Rio Tinto) formed a joint venture with Goldstream (as operator). Goldstream carried out regional calcrete sampling initially

Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	 Commentary on an 800m x 800m grid with follow up infill sampling over anomalous areas, identifying a peak value of 25ppb Au. Follow up RAB drilling was carried out at selected targets where drilling identified weak Au-As anomalism. Goldstream withdrew from the JV in 1999. Rio Tinto relinquished the ground in 2000. Between 1997-2006 - A group of eight tenements which partially covered the project area, were held by a consortium comprising Aurelius, Havilah, Allender, and Pima Mining and targeted Challenger-style gold mineralisation. Initial regional and follow up infill calcrete sampled identified a maximum gold in calcrete anomaly of 47 ppb Au located at the north-eastern end of a >2km N- E trending shear. RAB/Aircore and RC holes were drilled at selected targets with elevated gold and copper assays returned. Southern Gold farmed into the Dominion regional exploration tenements in the mid-2000s, targeting gold. They explored the Western Gawler tenements from 2004 and acquired the central tenements that included the area of current project area in 2006. Southern Gold focused largely on the more advanced prospects with the aim of proving potential resources. Deep Yellow formed a joint venture with Dominion Gold Operations in 2006 to explore for sediment hosted uranium mineralisation associated with lignite deposits within Eccene Pidinga Formation and sand or sandstone hosted roll-front uranium at greater depths where marginal or terminal oxidation fronts extend down the drainage axis. Exploration in the Lake Anthony area has predominantly been within the paleochannel systems seeking roll front deposits of uranium. Companies exploring for this style of mineralisation include Deep Yellow, Mega Hindmarsh and Southern Uranium limited. Gold and base metals have also been sought in this area using a variety of techniques including calcrete, soil, and biogeochemical sampling. Several anomalies have been followed up with infill
		sampling and in some cases shallow drillholes.

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	• Gold mineralisation is being targeted based on a Challenger deposit and BIF hosted orogenic gold. Gold mineralisation at Challenger occurs in deformed quartz veins within narrow plunging lodes hosted by metapelites of the Christie Gneiss. Challenger has been recognised as an early orogenic gold deposit that has been subject to later deformation and metamorphism that resulted in the remobilisation of gold before concentrating into a series of dilatational structures. Subsequent lower temperature overprinting is interpreted to have occurred.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	Not applicable.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	Not applicable.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	Not applicable.

Criteria	JORC Code explanation	Commentary
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	 Refer to figures in body for spatial context of surface sampling.
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 All relevant data and targets discussed are included on plan view maps.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 No other material is considered material for this presentation.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Compiling and reinterpretation of geological and geophysical datasets. Potential infill soil sampling. Reconnaissance drilling.