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Western Gawler Craton Project Update

A Recently Completed, Comprehensive Data Review Indicates.....

-  **Extensive, underexplored, highly prospective area (+7000 Km²)**
-  **Strong potential for repeat Challenger style gold deposits**
-  **Potential for Nova and Kambalda style nickel / copper deposits**
-  **Potential for IOCG deposits.**
-  **Multiple other gold and base metal deposit styles likely.**

The Directors of Trafford Resources Limited (ASX : TRF) are pleased to present its findings resulting from an exhaustive review into its Western Gawler Craton Project ("WGCP"). The combined project totals over 7000km² in area and is situated in the highly prospective Gawler Craton in South Australia. The Gawler Craton is home to such deposits as Olympic Dam, Prominent Hill, Carrapateena, Paris, Wilcherry Hill, Cairn Hill, Hillside and Challenger (Figure 1).

The Review incorporated the following:

- Collation and interrogation of all historic data from previous explorers.
- Acquisition and analysis of all publically available technical data.
- Collation of confidential and publically available technical reports.
- Detailed analysis of over 50,000 calcrete samples (Figure 3).
- Analysis of approximately 4,000 RAB / Air Core drill holes.
- Review of a commissioned, independent report on regional geophysical and geological trends.
- Collation and analysis of all known geophysics, geochemistry and geology work undertaken in the area.



Ongoing work includes :

- The distillation of all data down to prospect scale in order to provide prioritised exploration target areas.
- Discussions with Joint venture partners, Kingsgate Consolidated (ASX : KCN) regarding proposed programmes and budgets on J/V ground (Figure 1).
- Integration of small scale geophysical surveys into larger main surveys.

The central position of the Challenger Gold Mine and its associated processing plant and infrastructure provides a focal point for future exploration within the project area. It adds significant value to the existing "Golf Bore" resource (102,600oz Au @ 1.0g/t – see SAU ASX Announcement 24/02/2010) and any nearby discovery as it could create toll treating options or direct sale of ore to Challenger.

During this extensive data review it became evident that there also exists a very large potential for the discovery of both base metals and gold – unrelated to Challenger style gold discoveries.

Challenger - Implications for Further Discoveries:

The Challenger Gold Mine was the successful result of a regional wide scale calcrete, geochemical sampling programme

The mine was discovered in the early 1990's by sampling surficial calcrete on a 1 x 1 mile, staggered grid over the region. It is important to note that the Challenger Mine was almost missed by the original sampling. The geochemical footprint of the Challenger Deposit was small enough such that a slight shift of the grid (~200m) would have resulted in a non-anomalous (<20ppb), sample assay being returned and subsequent exploration follow up not warranted! This has obvious positive implications for ongoing exploration by Trafford.

Adding further encouragement for Trafford is the fact that over 300 of the original geochemical samples were flagged as anomalous (>20ppb Au) but approximately only 50 were followed up. The remainder still warrant further work. Over 250 walk up gold targets, therefore, remain to be explored without the precursor costs associated with further regional sampling programmes.

In Figure 2 it can be seen that the samples in the vicinity of the original 'discovery sample' were very low (5 or 7 ppb Au), which was, historically, considered non-anomalous, Trafford will re assess background geochemical levels in order to provide a better chance of capturing Challenger – like anomalies. Potential gold anomalies are shown in Figure 3.

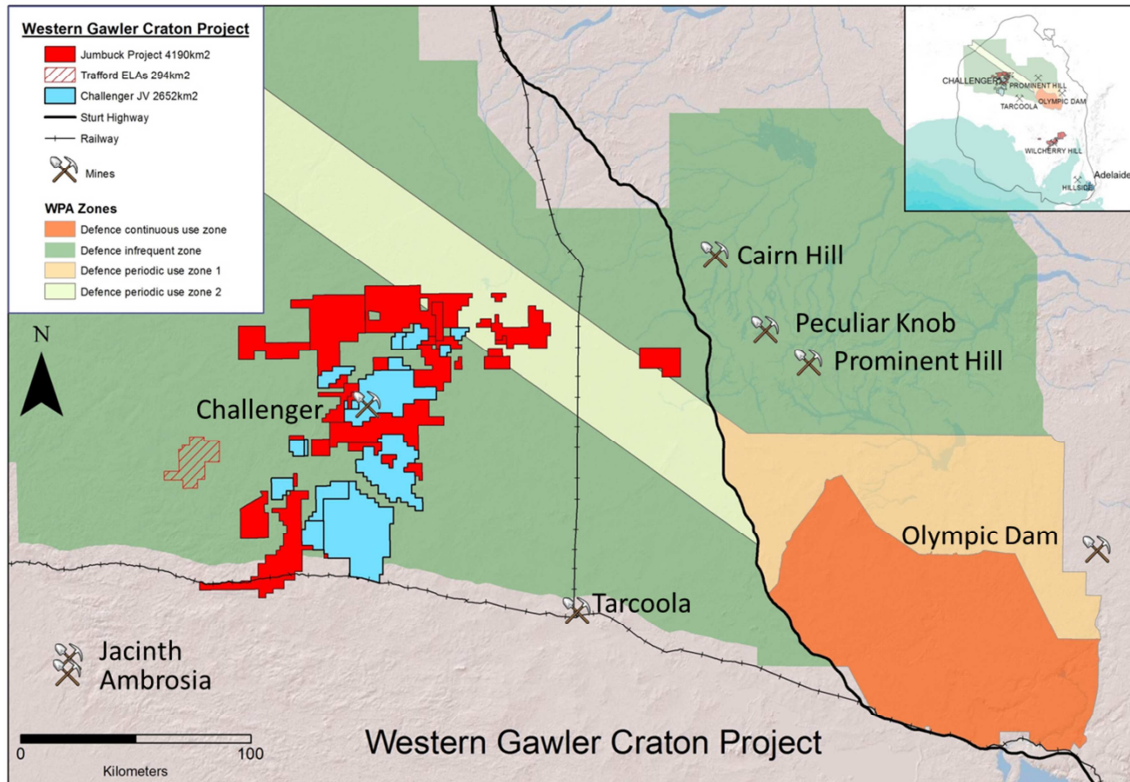


Figure 1: The WGCP Showing surrounding infrastructure and mines

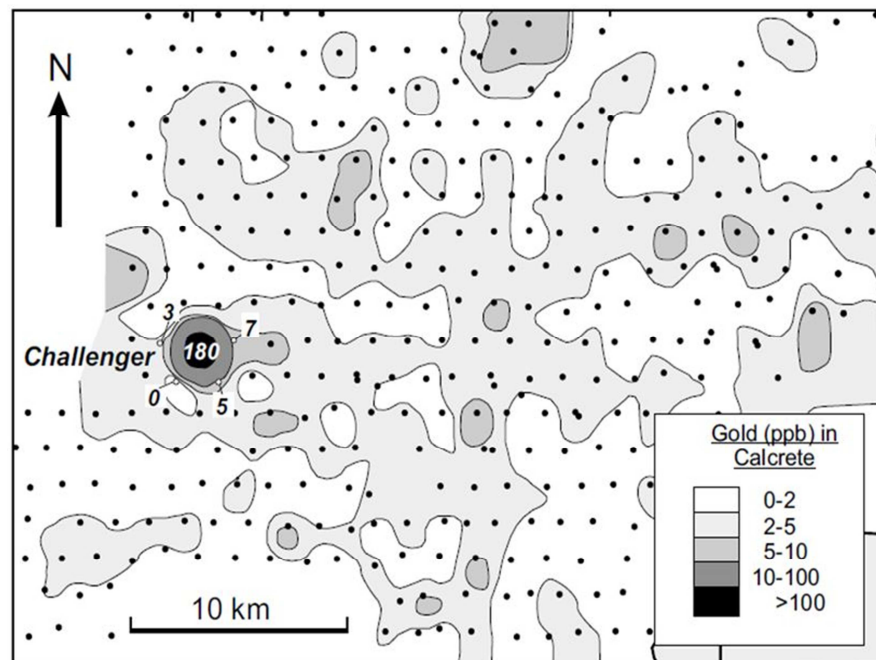


Figure 2: Original calcrete sampling discovery point - demonstrating how Challenger was almost missed. Note the low order of neighbouring sample values

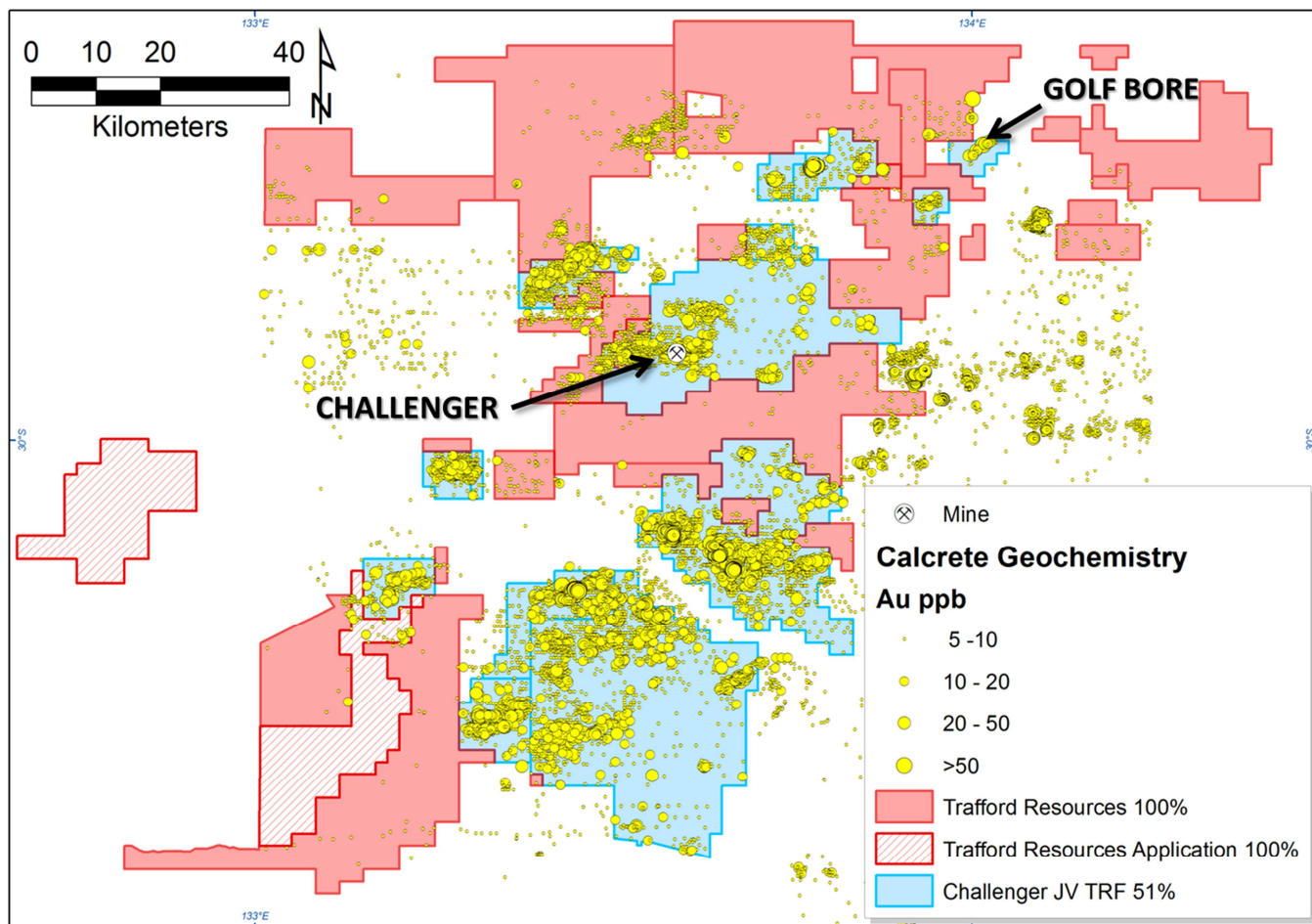







Figure 3: All gold (Au) in calcrete samples of interest in the project area.

Non-Challenger Gold Styles

As a part of Trafford's study of the region and the project area, it is clear that a number of different structural and host rock types of mineralisation, as well as different ages of mineralisation, could be present in the Christie Geological Domain, which hosts the Challenger Mine. The same is also true of the surrounding Domains, such as the Harris Greenstone Domain.

The geological review has enabled Trafford to be in the position to assess the Project for the following styles of mineralisation:

-  **Saddle Reef:** migration of gold mineralisation into low pressure zones in the apexes of syn- and anti-formal fold structures. (The Challenger deposit probably is of this style but extremely attenuated with the fold limbs sheared out).
-  **Shear Zones:** Linear mineralised shears with plunging "ore shoot" development depending on the orientation of the pressure fields.
-  **En-echelon Tension Gash Arrays:** mineralisation at an angular disposition and plunge relative to parallel shear/fault couples.
-  **Sigmoid Loop (or "Jog Zones"):** 'Pull-apart' structures creating low pressure zones related to shear/fault couples.
-  **Replacement BIF hosted:** replacement of magnetite in BIF's by gold mineralising fluids and consequential de-



magnetisation of the BIF horizon.

- ☛ **Skarn: Calc-silicate:** host to gold mineralisation related to intrusives (Hiltaba or older).
- ☛ **Alteration Halo Shear/fracture Control (TAG Model):** Gold mineralisation in structural traps related to fracturing due to pluton (granitoid) intrusion within the thermal alteration zone to the roof or margins.
- ☛ **IOCG: Iron Ore Copper Gold:** breccia deposits such as “Olympic Dam” related to younger (Hiltaba) granite intrusives.
- ☛ **Cupola Zone:** gold mineralisation related to stock-works and greisenization in the cupola zone of high level granitoid intrusions.

Nickel Copper and Other Base Metal Potential.

Although regional sampling covers a vast area of the project, base metals were often not tested for. This was, to some degree, rectified by the South Australian Government Calcrete Re-analysis Program completed in 2011. Numerous base metal anomalies exist, of particular interest are the coincident Ni-Cu anomalies (Figure 4) highlighting prospectivity and revealing trends of potential mineralisation. It should be noted that Trafford retains the rights to base metals, only on its 100% owned tenements (red below).

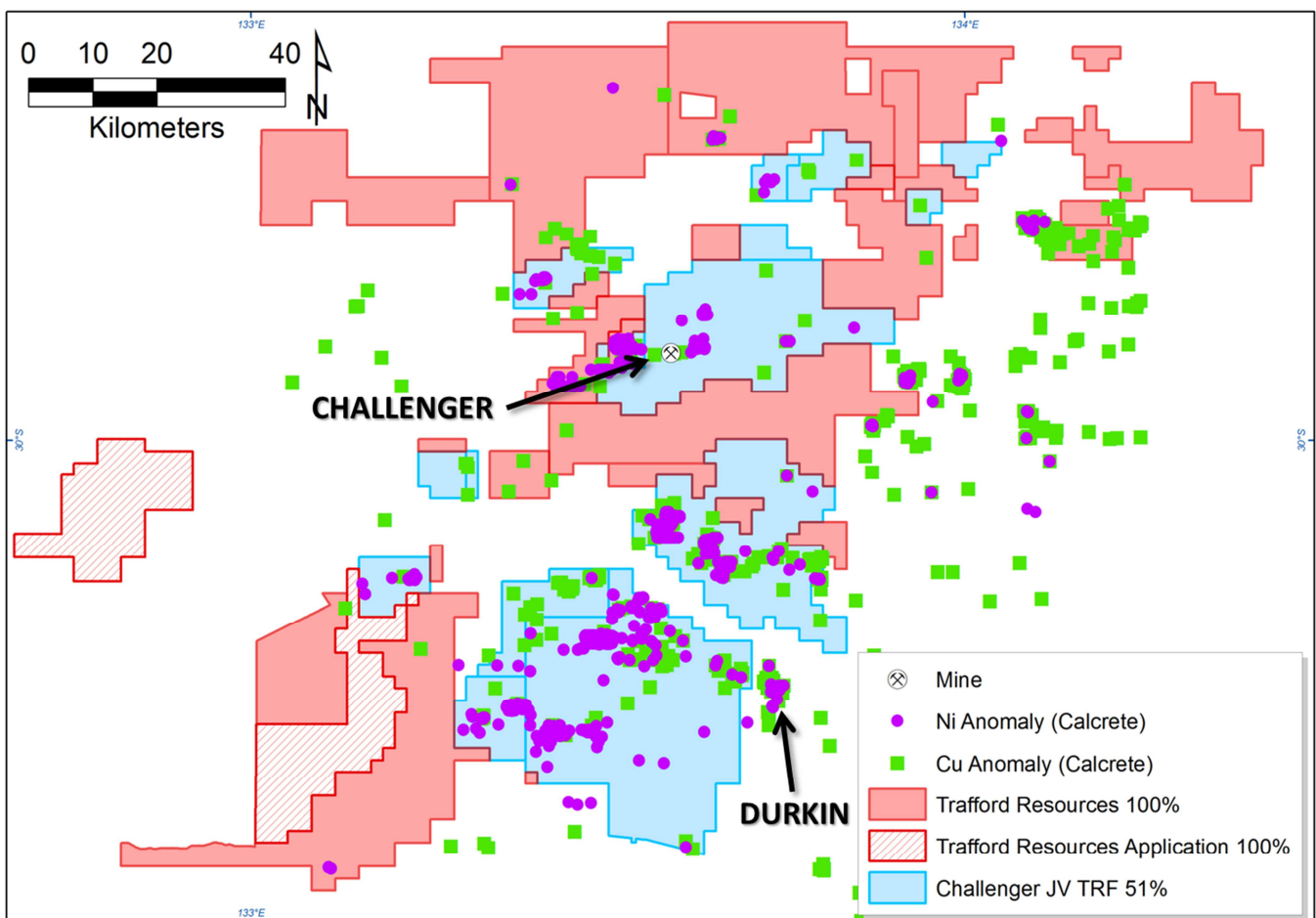


Figure 4: Nickel and Copper in calcrete anomalies in the Project area



The Archaean Harris Greenstones Domain is a newly recognised belt containing komatiite, basalt and lesser metasediments extending over a strike length of up to 300 km and at least 300 m thick. Such rock types are often host to base metal mineralisation – in particular Nickel and Copper. This belt is virtually unexplored and is, therefore, considered to have significant potential for nickel/copper discoveries, similar to those at Kambalda or Nova-Bollinger. The recent discovery of a previously undetected Nickel-Copper rich outcrop by Marmota Energy limited (ASX : MEU) has confirmed this potential. Harris Greenstone is projected to occur within the Trafford Project area.

IOCG Potential

The Gawler Craton contains one of the largest Iron Oxide Copper Gold (IOCG) provinces in the world, hosting the Prominent Hill deposit, the Olympic Dam deposit, the Carrapateena deposit and the Moonta – Wallaroo district in the South. The geological trend that hosts these deposits stretches North from the Yorke Peninsula through Port Augusta to Carrapateena, Olympic Dam and Prominent Hill where the trend swings sharply to the West, towards the WGCP, following the outline of the Craton. The recent findings by Apollo Minerals (ASX : AON) again provides confirmation that the interpreted potential for IOCG mineralisation is correct.

Vital to the formation of IOCG deposits are deep, crustal scale faults, which provide a conduit for mantle fluids to move and react with the surrounding country rock. Such fundamental faults have been interpreted to occur in the WGCP and were confirmed by a government funded Magneto-tulleric (MT) survey in 2008 conducted by Geoscience Australia and Adelaide University.

Several ring-like and semi-circular magnetic anomalies, related to this faulting, have been identified in the area and could represent IOCG intrusive centres.

Ian Finch
Managing Director

Trafford Resources Limited

Competent person statement:

The information in this announcement that relates to Exploration Results is based on information compiled by Ian D. Finch, who is a Member of The Australasian Institute of Mining and Metallurgy and who has more than five years' experience in the field of activity being reported on. Mr. Finch is the Managing Director of the company.

Mr. Finch has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Finch consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



JORC Code, 2012 Edition - "Table 1"
Sampling Techniques and data

Criteria	Comment
Sampling Techniques	<p>The calcrete was sampled to identify areas of potential mineralisation.</p> <p>The results published are from historic calcrete sampling carried out by previous explorers on multiple occasions. The sampling has been carried on various grid sizes and various orientations for various targeting purposes. The samples were acquired by digging or auguring small pits to access the calcrete.</p> <p>Trafford assumes appropriate measures were taken by the previous explorers to ensure: an appropriate, correct and representative sample was taken, appropriate positioning of sample site was acquired, appropriate QAQC measures adopted and carried out, appropriate assay method used and appropriate laboratory QAQC carried out.</p>
Drilling techniques	Calcrete sampling does not involve drilling.
Drill sample recovery	As no drilling is involved, drill sample recovery is not relevant
Logging	As no drilling is involved, logging is not relevant
Sub-sampling techniques and sample preparation	<p>The results published are from historic calcrete sampling carried out by previous explorers on multiple occasions. The sampling has been carried on various grid sizes and various orientations for various targeting purposes. The samples were acquired by digging or auguring small pits to access the calcrete.</p> <p>Trafford assumes appropriate measures were taken by the previous explorers to ensure: an appropriate, correct and representative sample was taken, appropriate positioning of sample site was acquired, appropriate QAQC measures adopted and carried out, appropriate assay method used and appropriate laboratory QAQC carried out.</p>
Quality of assay data and laboratory tests	<p>Trafford assumes appropriate measures were taken by the previous explorers to ensure: an appropriate, correct and representative sample was taken, appropriate positioning of sample site was acquired, appropriate QAQC measures adopted and carried out, appropriate assay method used and appropriate laboratory QAQC carried out.</p> <p>The assaying of elements ranged from gold only up to 32 different elements, depending on the explorer. The 32 elements are Au, Cu, Ni, U, V, As, Ag, Bi, Ca, Cd, Co, Cr, Fe, Ga, Mg, Mn, P, Pb, Pt, Sb, Se, Te, Th, Tl, W, Zn, Ca, La, Rb, K & Al.</p>
Verification of sampling and assaying	The current Project database is a combination of previous explorers' databases and publically available data. Trafford assumes data adjustment, if any, was made as a result of QAQC analysis, and therefore appropriate.
Location of data points	<p>The geographic coordinate system that all sample sites are currently stored as, is MGA94, zone 53. Some sample site coordinates have been converted by previous explorers to MGA94 Zone 53 from other geographic coordinate systems and local grids. Trafford assumes that the conversions are accurate.</p> <p>Trafford assumes appropriate measures were taken by the previous explorers to ensure appropriate positioning of sample site was acquired.</p>
Data spacing and distribution	Sample Grid spacing varied from explorer to explorer and varied as to the purpose of the sampling. Sample Grid spacing ranges from 1.6 x 1.6km as a regional tool, down to 50 x 50m as a drill targeting tool.
Orientation of data in relation to geological structure	<p>Calcrete sampling was used as a regional tool – used to test a broad zone of geological interest.</p> <p>Calcrete sampling is also used as a targeting tool at prospect scale – used to aid drill targeting and / or increase the geochemical 'resolution' over a target.</p>



Sample security	As the sampling is historic, Trafford assumes that the previous explorers took the necessary measure to assure the integrity of the samples.
Audits or reviews	No audit or reviews have been undertaken.

Reporting of Exploration Results

Criteria	Comment
Mineral tenement and land tenure status	<p>Trafford Resources is currently in Joint Venture with Kingsgate Consolidated (ASX : KCN) whereby Trafford has rights to 51% of gold on the following Exploration Licenses: EL5183, 5298, 4577, 4468, 4532, 4644 and 4951.</p> <p>Trafford currently holds eleven Exploration Licenses and two Exploration License Applications, and retains rights to 100% of all minerals on these licenses. Exploration Licenses: EL4942, 4943, 4944, 5098, 5018, 5168, 5282, 5283, 5284, 5285 and 4465. Exploration Licence Applications: ELA291/12 and 53/14.</p> <p>All of the tenements listed fall, in part or whole, within the Woomera Prohibited Area (WPA). Access to the WPA for exploration purposes is allowed, however there are certain publically documented time periods where access is forbidden due to use by The Defence Department.</p> <p>Native Title: Antakiringa Area Mineral Exploration ILUA. Land Use: Pastoral Conservation Park: The Tallarniga CP covers Northern portions of EL4943 and EL4944 (up to approximately 25% of the tenement area). Exploration access is allowed, however approvals and access may carry certain relevant conditions to protect the CP.</p>
Exploration done by other parties	<p>The area has been a target for mineral exploration sporadically since the 1900's, but more regularly since the 1980's by multiple companies including BP Mining Development, Stockdale, CRA, BHP, Dominion (now owned by Kingsgate), Resolute and Southern Gold. All of the known work is currently being appraised by Trafford Resources.</p>
Geology	<p>The Projects area is predominantly located in the Christie Domain of the northwestern Gawler Craton, South Australia. The Christie Domain is defined by generally low amplitude, bland magnetic signature (Teasdale 1997) and is primarily comprised of poorly exposed of Archaean gneissic rocks, southwest of Coober Pedy. This late Archaean Mulgathing Complex outcrop is sparse occurring predominantly in the Mt Christie – West Well - Durkin areas and, to a lesser extent, in the vicinity of Indoeroopilly Outstation.</p> <p>Palaeoproterozoic rocks occur as intrusive igneous bodies and are part of the Ifould Suite and Tunkillia Suite equivalents (Direen et al 2005). Rare Mesoproterozoic granitoids of the Hiltaba Suite occur in the furthest southern part of the domain. Neoproterozoic Gairdner dykes occur and are evident on magnetic imagery as thin, linear north west orientated trends.</p> <p>The Mulgathing Complex within the Christie Domain is dominated by the Christie Gneiss. This layered weakly foliated, migmatitic paragneiss is interlayered with felsic orthogneiss; semi-pelitic garnet-biotite gneiss; calc-silicate rock; mafic orthogneiss and metamorphosed banded iron formation (BIF) (Direen et al 2005). The principal orogenic episode to have affected these Late Archaean lithologies is the 2480 - 2420 Ma Sleafordian Orogeny (Daly and Fanning, 1993). The Sleafordian Orogeny is typically manifest as gneissic foliations and tight to isoclinal folding within a range of lithologies. The 1730–1710 Ma Kimban Orogeny is evident as variable, lower greenschist to amphibolite facies reworking of parts of the western Gawler Craton (Tomkins et al 2004). This is manifest as weak to intense overprinting of the Mulgathing Complex by retrograde foliations, especially within presently northeast-trending shear zones (Teasdale, 1997).</p> <p>Cover sedimentary packages are relatively extensive but variable in thickness and</p>



	<p>distribution. Late Palaeozoic and Mesozoic sedimentary sequences are present. These include the Permian glaciogene sediments, Jurassic Algebuckina Sandstone and Cretaceous Bulldog Shale predominantly within structural troughs such as the Mulgathing Trough. Extensive periods of weathering and erosion interspersed and followed these depositional periods and resulted in deep weathering profiles (Rogers and Zang 2006).</p> <p>Multiple westward flowing palaeodrainage channels of the Tertiary Eucla Basin exist within the project area. These consist of fluvial sand dominated fills in the upper reaches of the palaeochannels giving way to marginal marine sand, silts and lignites in the lower reaches where swamps developed behind extensive beach barrier dunes of the Ooldea and Barton Ranges (Rogers and Zang 2006). Higher sea levels in the Miocene–Pliocene resulted in deposition of marine sediments further up the palaeochannels, and lacustrine Garford Formation clay and dolomite in the upper reaches.</p> <p>The south western area of the Domain is covered extensively by Quaternary sand dunes of the Great Victoria Desert (Pell et al 1999). Extensive and ubiquitous aeolian sand plains dominate the majority of the project area with playa lake deposits following the pattern of Tertiary palaeodrainage. Lesser erosional areas occur mainly draining off remnant basement highs.</p>
Drill hole Information	NA
Data aggregation methods	Assay results deemed ‘anomalous’ vary from element to element. Various levels have been deemed anomalous by previous explorers for each element. Trafford believes gold values over 5ppb warrant investigation and therefore are deemed ‘anomalous’. Copper and nickel were deemed to be anomalous once over 38ppm and 30ppm respectively. This is representative of the data, however it has not been normalised against effects like geology or regolith, therefore they are approximate numbers.
Relationship between mineralisation widths and intercept lengths	The calcrete data does not provide information on this matter, hence it is not applicable.
Diagrams	Refer to figures in main body of text.
Balanced reporting	Results reported in the body of text represent anomalous values in historic calcrete sampling.
Other substantive exploration data	No new technical information has been acquired by Trafford. Trafford assumes previous explorers have released all relevant Material information to the market.
Further Work	Future work at this stage will be detailed analysis of previous exploration aiming to result in prioritisation of current prospects and new prospect generation followed by appropriate exploration work on priority prospects.