



# TRAFFORD RESOURCES LIMITED

ASX Announcement

14 March 2012

## Major, 10.5 Km long, IOCG target Defined at Death Adder

- Coincident geochemistry and geophysics identifies Death Adder as a major new Iron Oxide/Copper/Gold (IOCG) target.
  - Large detailed gravity anomaly (10.5km long)
  - Offset magnetic body (6.5Km long)
  - Anomalous copper geochemistry (4km long)
  - Induced Polarity (IP) structural targets
  - Deep Crustal 2d seismic conductivity signature
- Drill testing to begin as soon as possible, subject to rig availability

Trafford Resources Limited (ASX:TRF) is pleased to announce the result of a series of geophysical and geochemical exploration programs over its 100% owned Peterlumbo tenement (EL4421), located in the north of the Eyre Peninsula, South Australia. The results define the **Death Adder Prospect** (figure 1+2) and confirm the potential of the prospect as a new, large Iron Oxide/Copper/Gold (IOCG) mineralisation style target.

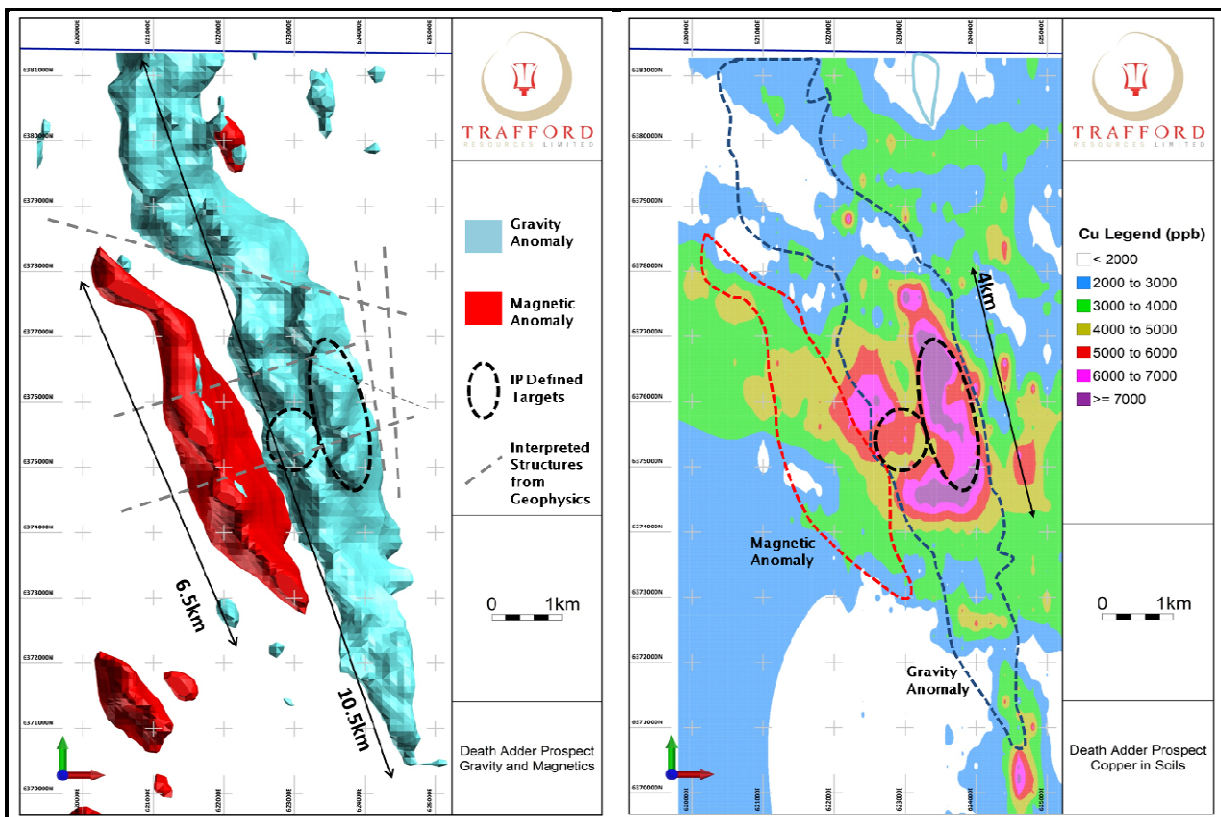


Figure 1: Left - Death Adder prospect showing inverted 3d gravity anomalies and magnetic anomalies with IP defined conductivity targets. Right – Outlines of magnetic, gravity and IP targets relative to contour plot of Copper geochemistry in soils.

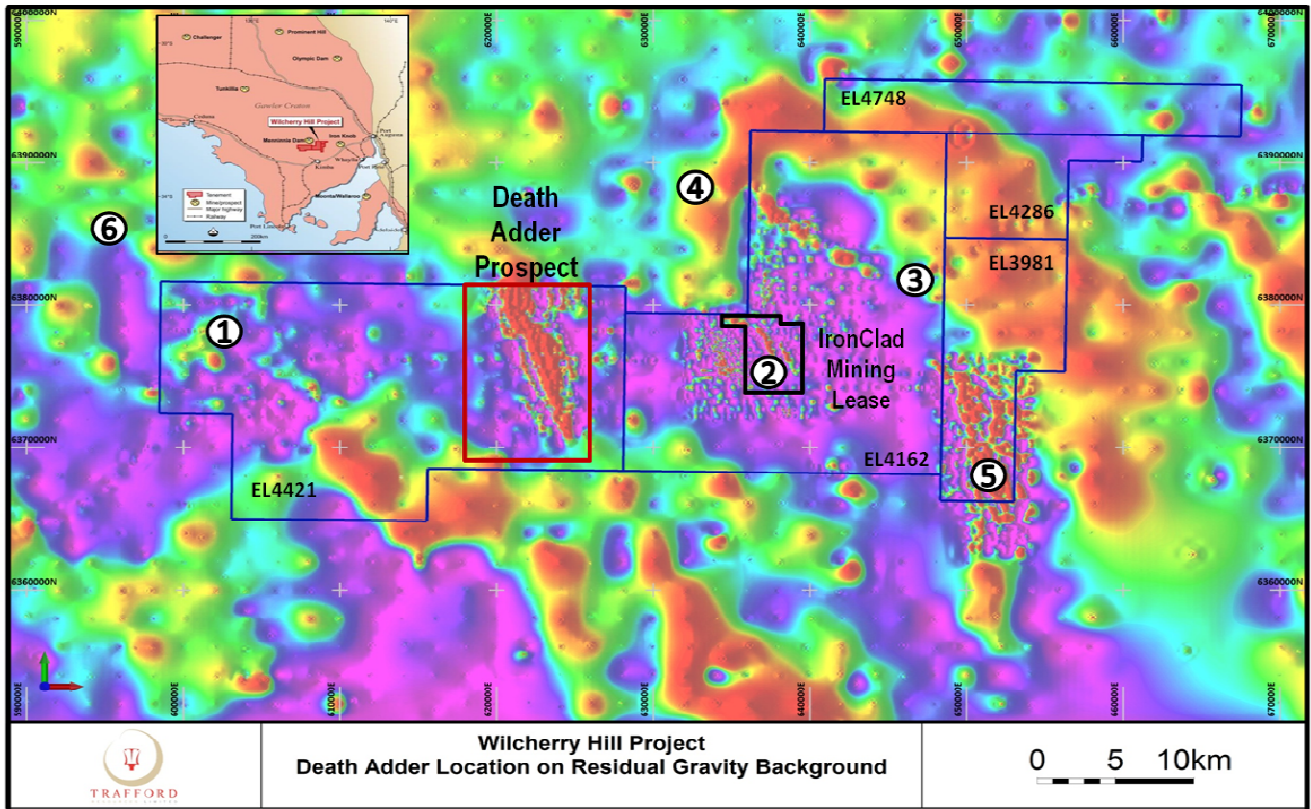


Figure 2: Mosaic image of detailed and regional gravity of the Wilcherry Hill Project and location of the Death Adder Prospect within Peterlumbo EL4421. Key to other known deposits and prospects 1- Black Hill Au-Ag-Cu (TRF) 2- Weednanna Au (TRF) 3- Telephone Dam Pb-Zn-Ag (TRF) 4 Meninnie Dam Pb-Zn-Ag (TZN) 5- Paris Ag (IVR)

**Latest Generation Geochemistry, Gravity, Magnetics, Geophysical Interpretation and Induced Polarity (IP) traverses (figure 1)** outline a large scale geological structure similar to known IOCG deposits. In addition to these features a deep crustal 2d seismic conductivity signature (figure 3) can be seen to underlie these anomalies. Regional scale features of this nature are found at such deposits as Olympic Dam and Prominent Hill and are considered a vital factor in the genesis of world class deposits.

The Death Adder prospect was identified as a potential IOCG target early in 2011 as a result of a review of the historical database. Discrete geochemical anomalies were discovered, including elevated Copper in calcrete from an earlier regional survey as well as an historical surface grab sample from a prospectors pit grading **1.44g/t Gold**. The Company then completed all the above geophysical and geochemical exploration work in the 2<sup>nd</sup> half of 2011 in order to better define the Death Adder prospect. Details of all methodologies are provided in the appendix to this announcement.

In addition to the geological work done by Trafford, a recent interpretation of seismic data collected for PIRSA and Geoscience Australia in 2008-2009 (line 08GA-01) has shown there to be a regional conductive body underlying the Death Adder target as well as crustal scale faults which reach significant depths (figure 3).

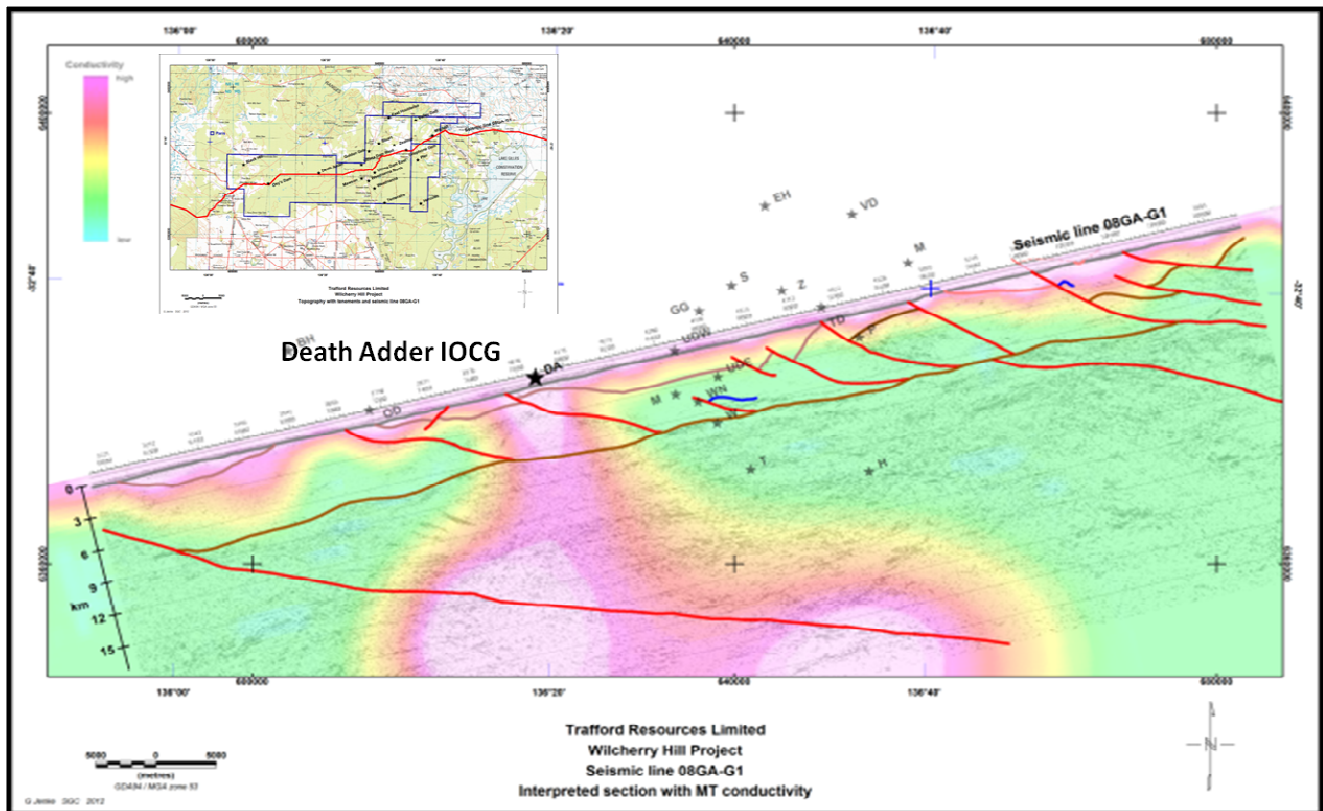


Figure 1 : Cross section of data interpretation from seismic line 08GA-01 showing crustal scale conductive body directly underlying the Death Adder prospect (DA)

In summary, it has been shown, via the seismic data, that a major crustal dislocation occurs directly beneath the Death Adder prospect. Immediately above this crustal feature exists a strong, 10.5 km long gravity anomaly with a parallel- but not coincident- magnetic body. Electrical geophysics (Induced Polarity) demonstrates that the near surface portion of the main body is conductive and that these conductive areas are directly overlain by strong copper in soil anomalism. This represents a first class Iron Oxide / Copper / Gold (IOCG) target of significant proportions.

Trafford intends, subject to the availability of a suitable drilling rig, to conduct a substantial drill (>500m per hole) diamond drilling program.

For further information, please visit [www.traffordresources.com](http://www.traffordresources.com) or contact

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**Disclosure statement**

*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 2004 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.*

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## **Appendix A**

### 1) Close spaced aeromagnetic coverage

A closer spaced aeromagnetic survey of Peterlumbo was flown in 2011 and has significantly improved the magnetic understanding of the region. Previous coarse state collected data was refined to 80m lines at a 40m height. This was partly funded by PIRSA as part of their PACE exploration initiative for which Trafford were successful applicants.

### 2) Detailed ground based gravity

Previously available airborne gravity data of 2000m x 2000m was improved via a ground based gravity survey was completed in the 3<sup>rd</sup> quarter 2011 which improved the data down to 400m x 200m spacing. This has enabled for much improved definition of the gravity targets and also used in the 3-dimensional inversion.

### 3) 3-Dimensional Induced Polarisation (IP) traverses

An Induced Polarisation (IP) survey was then completed towards the end of 2011 which emphasised a number of structural targets within the massive gravity anomaly. A grid of six 3000m lines with a 400m spacing was used across the central region of the gravity anomaly where previous Copper in calcrete anomalism had also been recorded.

### 4) 3-Dimensional inversion and structural interpretation of all geophysical data

Methodology - All of the available geophysical data for the Death Adder area was compiled and converted to create 3d inversion "wireframes" which not only take in to account the position of data from a 2d perspective (X, Y) but also takes the depth of a data point in to account (Z). It is then available for use in 3d visual programmes for comparison to other data, eg. drill hole positions, drill assays, soil geochemistry. The implications are that estimated depths to targets can be defined and the inter-relationships between features can be observed

Application - This method was first applied on a regional basis early in 2011 with all available data being used to create a regional 3d model of the gravity and magnetic data. As a result the Death Adder prospect was ranked as a high priority due to the size of the associated gravity and magnetic anomalies and it was decided that new closer spaced data was required which was then converted to 3d "wireframes". IP data was subsequently collected over the main area of interest and also converted to 3d.

Death Adder Result - The 3d inversion model of the geophysical data has highlighted a number of coincident features which will enable Trafford to accurately identify drill targets as the next stage of exploration at the Death Adder prospect. A 10.5km long gravity anomaly with an offset 6.5km long parallel aeromagnetic anomaly along its western edge (figure 1) is a potentially crucial feature as it enhances the possibility of Iron-oxide mineralisation as Magnetite or Hematite - a decisive factor in an IOCG system. The results of the 3d IP have highlighted a number of chargeability anomalies which are coincident with the peak of the gravity high as well as the results of the new geochemistry which have been interpreted as shear structures defined by chargeability highs which could possibly be hosting previously untested sulphide mineralisation.

The 3d inversion gravity and magnetic database that Trafford now owns for the entire Wilcherry Hill area has given Trafford a unique and new understanding of the interaction of high magnetic and gravity features found in this area of the Gawler Craton.

### 5) Regional partial leach soil survey

Methodology - The partial leach analytical (Genalysis' TL8) method is designed to detect the "mobile ion" component from underlying bedrock which has, over time, been transported vertically in to overlying soils. "Mobile ions" are particles which can weakly attach to the surface of soils having migrated through the weathering profile and can indicate the position of mineralisation buried directly below. The sample is collected from an optimal depth (usually within top 20cm) and is analysed using Genalysis' Terraleach Partial Digest technique. This modern procedure is able to detect analytes such as Gold and Silver at much lower detection limits than other standard geochemical techniques as well as being able to detect elements which would not normally be measurable. Combined with the methods ability to detect mineralisation directly underlying the soils, this allows for the definition of much more specific targeting of anomalies for the next stage of exploration.

Application - Due to the successful application of the partial leach soil surveying method both at Investigator Resources' Paris prospect and Trafford's recently reported potential epithermal targets at Black Hill prospect (ASX release 5 March 2012), it was decided to employ the same method at the Death Adder prospect to try to improve the definition of the discrete Copper anomalism previously detected. A 200m x 200m grid was applied over the entire gravity anomaly.

Death Adder result - The results of the survey defines a 4 Km long Copper anomaly, which are directly overlying a prominent gravity anomaly (figure 1). These are a significant improvement on the previous available data and have defined a number of North-South trending Copper anomalies over a width of 3km with the main anomaly being almost 4km in length (see figure 1). These trends are directly coincident to where the modelling of the gravity has interpreted the source as coming closest to the surface as well as being strongly coincident with recently defined, IP detected chargeability highs.