

# PROTO



RESOURCES & INVESTMENTS LTD

## STOCK EXCHANGE ANNOUNCEMENT

6 June 2012

### **Aeromagnetic Surveys Identify Magnetic and Uranium Targets**

#### **Stock Codes ASX: PRW, OTCQX: POOOY**

*Proto Resources & Investments Ltd (“Proto”, “the Company”) is pleased to announce the results of the detailed airborne surveys over its tenements in the southern part of the Yerrida Basin in an under-explored region of Western Australia.*

#### **Executive Summary**

- The Yerrida Basin high resolution airborne magnetic and radiometric survey data has been received.
- A number of magnetic and uranium anomalies have been identified. A strong uranium anomaly associated with calcrete within the Station Bore tenement has been observed. Within the Mt Killara and Casey tenements there is anomalous uranium associated with the Archaean/Proterozoic margin and also with lithological boundaries within the Proterozoic sediments.

#### **Doolgunna Project Geophysics Results**

The Doolgunna Projects are located to the south of Sandfire Resources NL's DeGrussa Deposit (10.67Mt @ 5.6% Cu, 1.9g/t Au and 15g/t Ag) and to the north of Ivernia Inc's Magellan Lead Mine (22.1Mt @ 4.8% Pb). The Doolgunna Project tenements are within the Palaeoproterozoic-aged Yerrida Basin. The Yerrida Basin is considered highly prospective for base metals, copper-gold and uranium mineralisation.

The detailed airborne surveys have defined a complex mixed geological package of Proterozoic/Archaean units within the tenements. A program of geochemical sampling and geological mapping is being planned to target base metals, copper-gold and uranium mineralisation. The Company hopes to prepare drill targets for the second half of this year.

Results returned for each tenement area are illustrated in Figures 2 to 7 below and described briefly in the following details. Note these are only initial assessments based on the preliminary data.

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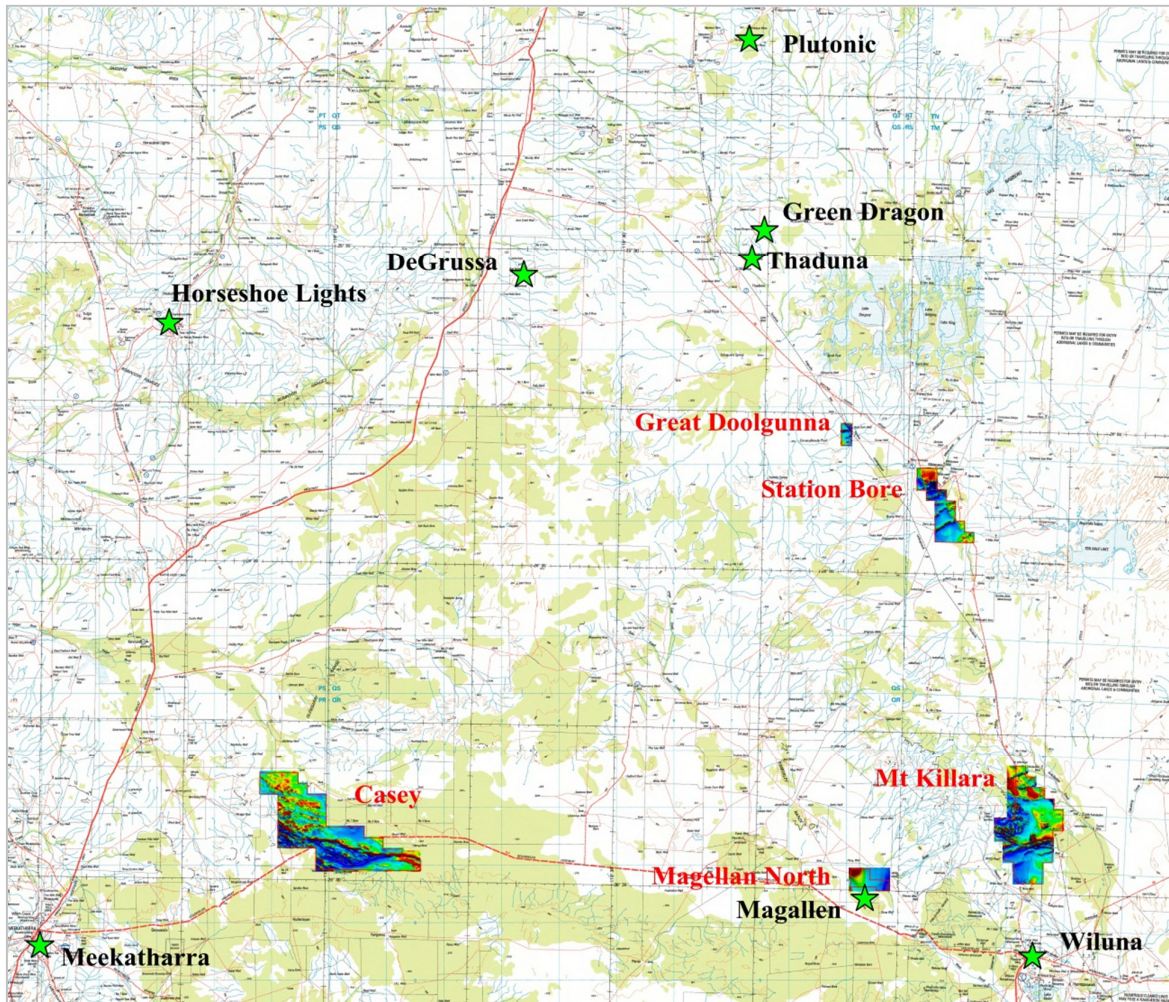
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**Figure 1 – Yerrida Basin Geophysics Survey Coverage**

**Casey E51/1457**

The Casey Project lies 55km northeast of Meekatharra and covers a portion of the southwest margin of the Yerrida Basin. The magnetics indicate a complex mixed geological package of Proterozoic/Archaean units (Figure 2). The Proterozoic sequence strikes ESE-WNW and abuts Archaean granites to the west. The Archaean/Proterozoic unconformity is most likely a shear zone. There is an anomalous uranium response associated with this unconformity.

**Magellan North E53/1581**

This project area lies immediately to the north of the Magellan Lead Mine and is considered prospective for further base metal discoveries. There is no mapped outcrop in the tenement and it is covered with abundant transported cover and most likely deep intense weathering. The magnetics show deep seated magnetic

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anomalies in basement Archaean sequence, situated immediately north of the Magellan Pb deposits (Figure 3). The radiometric data show a potential ~NE-SW trending corridor/structure that contains most of the known base metal mineralisation.

## ***Mt Killara E53/1580***

This project area is 10km north of the township of Wiluna Gold deposits and contains mapped volcanics of the Killara Formation. The magnetics indicate a complex mixed geological package of Proterozoic/Archaean units. Interpreted Proterozoic dykes are clearly evident striking ENE-WSW (Figure 4). The radiometric data show anomalous uranium in the vicinity of the Archaean/Proterozoic unconformity

## ***Station Bore E69/2872***

The Station Bore Project lies 13km southeast of the Great Doolgunna Project area. The tenement covers the part of the Mibbeyean drainage system. The magnetics show Proterozoic dykes units striking ~NE-SW. There is NNW-SSE striking feature on the eastern margin of the tenement which could represent a potential unconformity / structural boundary. There is a strong magnetic anomaly in the north (Figure 5). There is no mapped outcrop in the tenement and it is covered with abundant transported cover and most likely deep intense weathering.

The radiometric data show strong anomalous uranium response associated with the drainage, particularly anomalies A and B. Anomaly A is associated with mapped calcrete and appears to be a paleo-channel. Anomaly A extends off tenement further south (Figure 6).

## ***Great Doolgunna E51/145***

The tenement lies 60km southeast of Sandfire's DeGrussa Cu-Au Deposit and adjoins Great Western Exploration Limited's Doolgunna Project. Previous work, undertaken by the Geological Survey of Western Australia and Great Western Exploration, has defined a broad polymetallic geochemical soil anomaly to the immediate east of the tenement. Great Western Exploration also identified several VTEM conductors.

The magnetics show magnetic lineaments apparent striking ~NE-SW. A major ~NNW-SSE structure running along the north-eastern margin of the tenement which appears to control present day drainage (Figure 7). The radiometric data show slightly anomalous uranium response associated with the drainage in the NE section of the tenement.

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## ***Competent Persons Statement***

*The information in this release that relates to Exploration is based on information compiled by Bill Robertson, who is a Member of the Australian Institute of Geoscientists (MAIG). Mr Robertson is a director of Value Adding Resources Pty Ltd and has sufficient experience relevant 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 Robertson consents to the inclusion in the release of the matters based on his information in the form and context in which it appears.*



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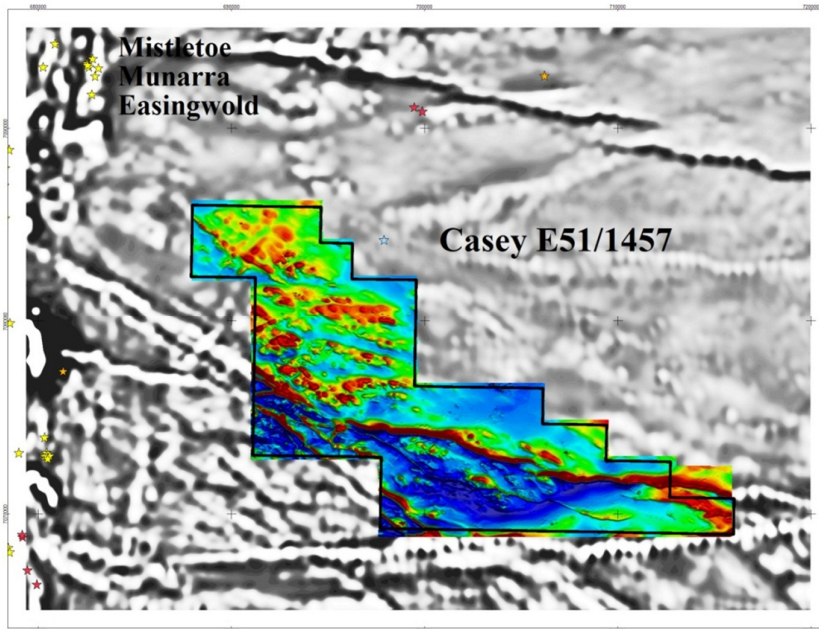


Figure 2 – Casey (E51/1457) Aeromagnetic TMI Image over Regional VD1 Image

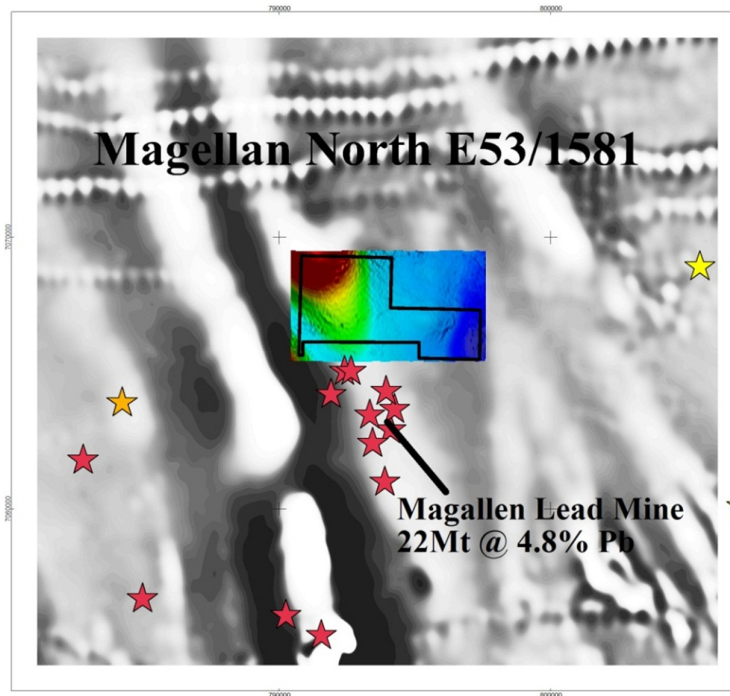


Figure 3 – Magellan North (E53/1581) Aeromagnetic TMI Image over Regional Magnetic VD1 Image

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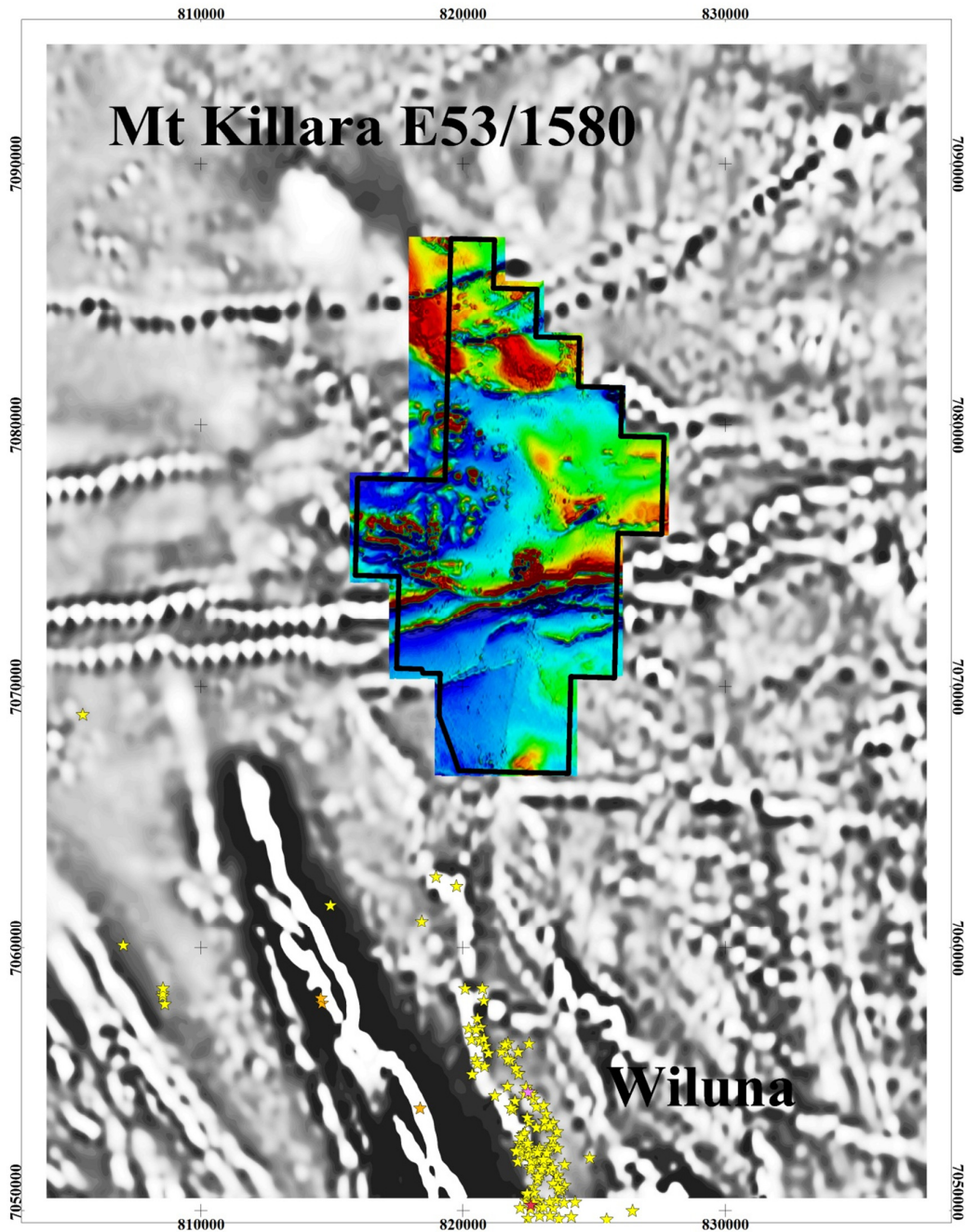
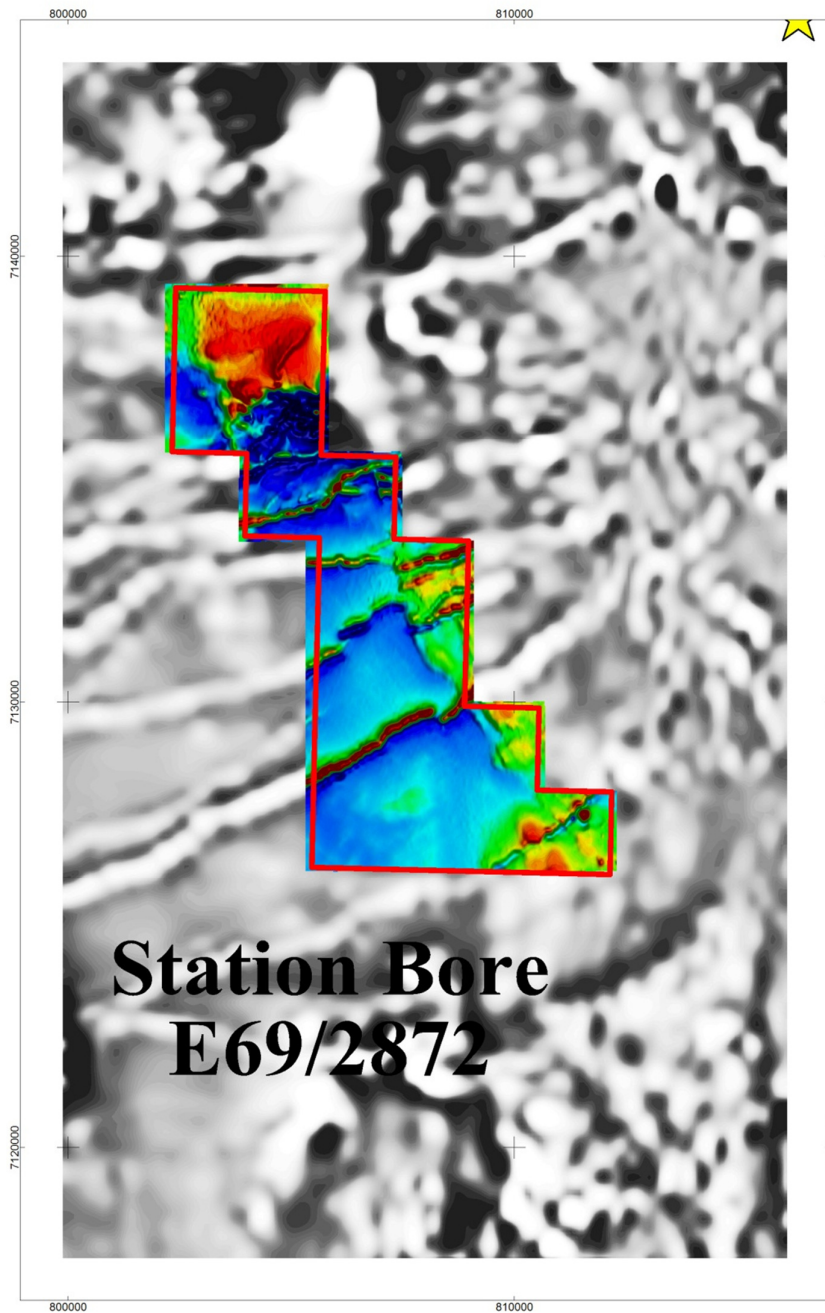


Figure 4 – Mt Killara (E53/1580) Aeromagnetic TMI Image over Regional Magnetic VD1 Image



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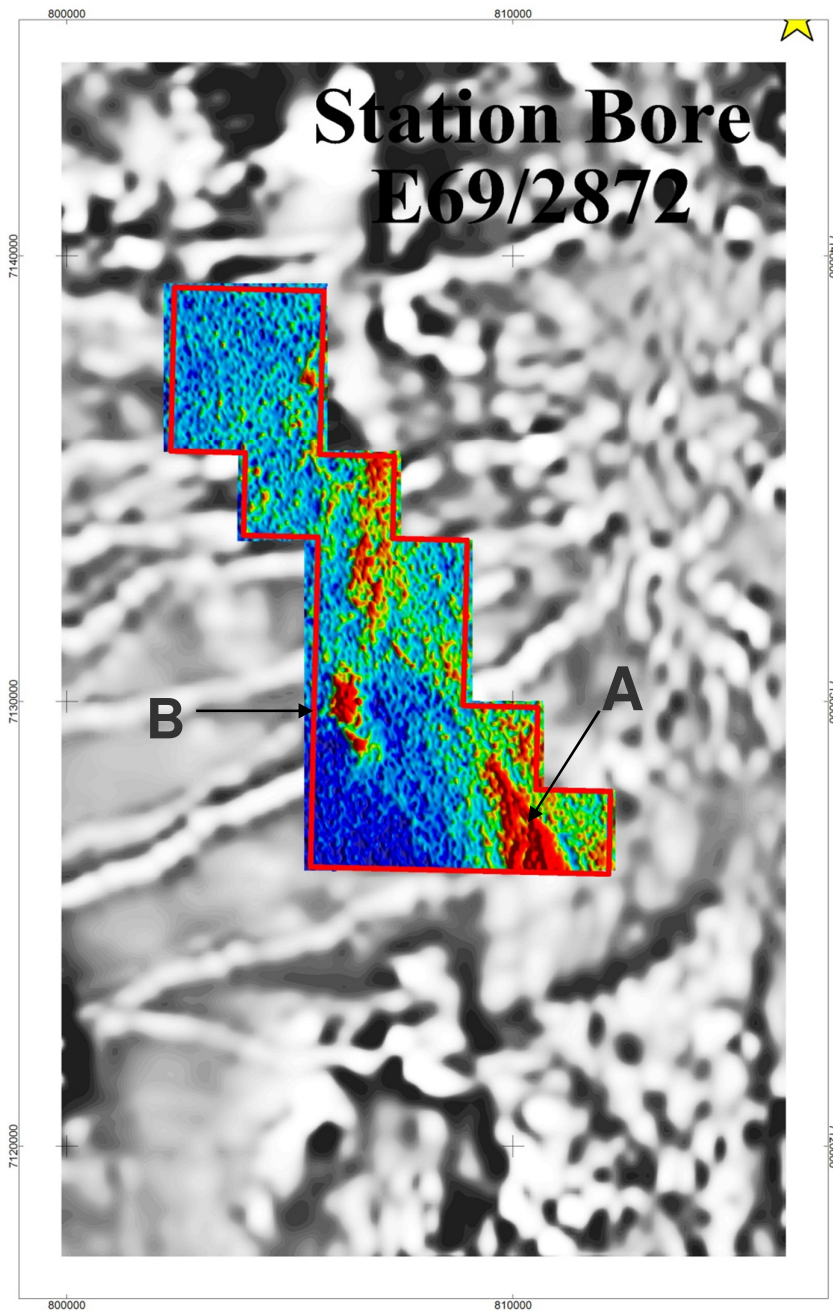
*Figure 5 – Station Bore (E69/2872) Aeromagnetic TMI Image over Regional Magnetic VD1 Image*





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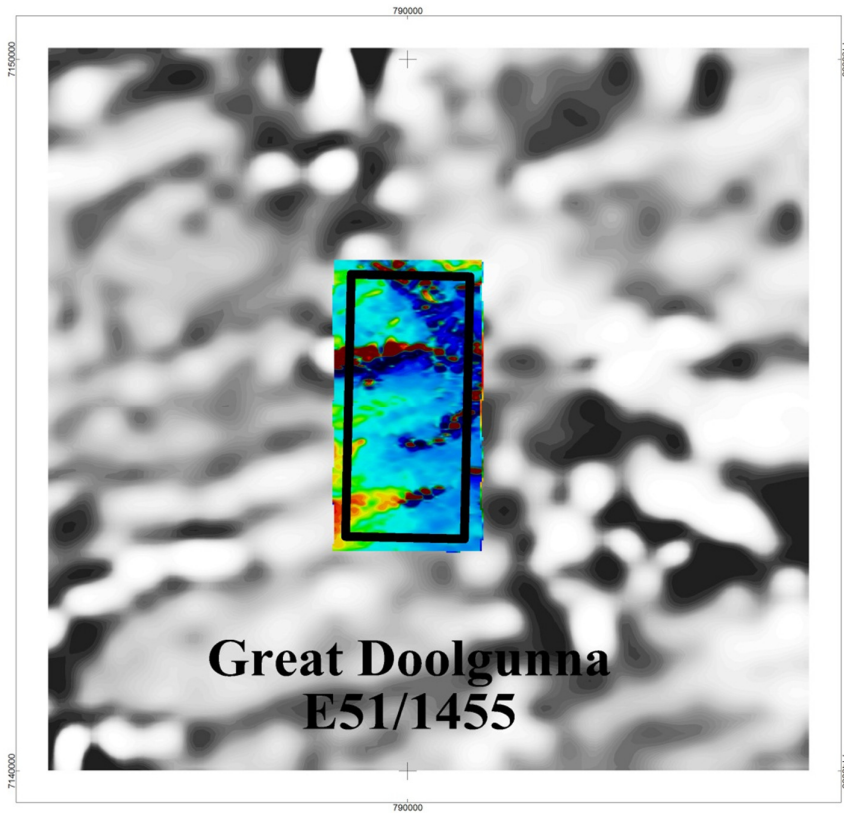
*Figure 6 – Station Bore (E69/2872) Aeromagnetic Uranium Image over Regional Magnetic VD1 Image*

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*Figure 7 – Great Doolgunna (E51/1455) Aeromagnetic TMI Image over with Regional Magnetic VD1 Image*

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