

RELINQUISHMENT REPORT
PART EL 30090 Northern Territory
SOUTHERN CROSS BORE PROJECT (SXB)

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ABSTRACT

EL 30090, Southern Cross Bore Project, located about 75kms northeast of Alice Springs is bisected by a north trending zone of intense tectonism called the Pinnacles Shear Zone. In adjoining EL28045 to the east of the shear are the Pinnacles quartz – copper veins and to the west of the shear the Johnnies Reward prospect. Local geology is dominated by protolithic carbonate in the east which transitions abruptly to a pelite-psammite-acid volcanic sequence in the west assigned to the 1810 – 1800Ma Cadney metamorphics, Aileron Province, Strangways Metamorphic Complex, southeast Arunta Inlier.

In 2017 Davenport undertook a close spaced low level Aeromag survey over the combined area of EL30090 and EL28045. The quality of the data was very good over what is a magnetically complex terrane. Southern Geoscience Consultants completed a regional interpretation and highlighted a number of anomalies and priority areas for field checking. A reconnaissance field visit in September 2017 to check the highest priority anomalies and others that were reasonably accessible resulted in a general downgrading of the area.

As there were no areas considered to be of interest within the area of EL30090 relinquished, in accordance with regulatory requirements Davenport has relinquished 83 blocks from EL30090.

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1.0 INTRODUCTION

1.1 Location and Access

The Southern Cross Bore Project of which EL30090 is a part is located about 75kms north east of Alice Springs and south of the Plenty Highway. Access to the project is via the Stuart Highway north of Alice Springs for 49kms, then east along the The Garden (Arltunga Tourist) Road for 48kms to the Pinnacle Road turnoff. From here various station tracks broadly follow the north west trending valleys giving reasonable access to the licence.

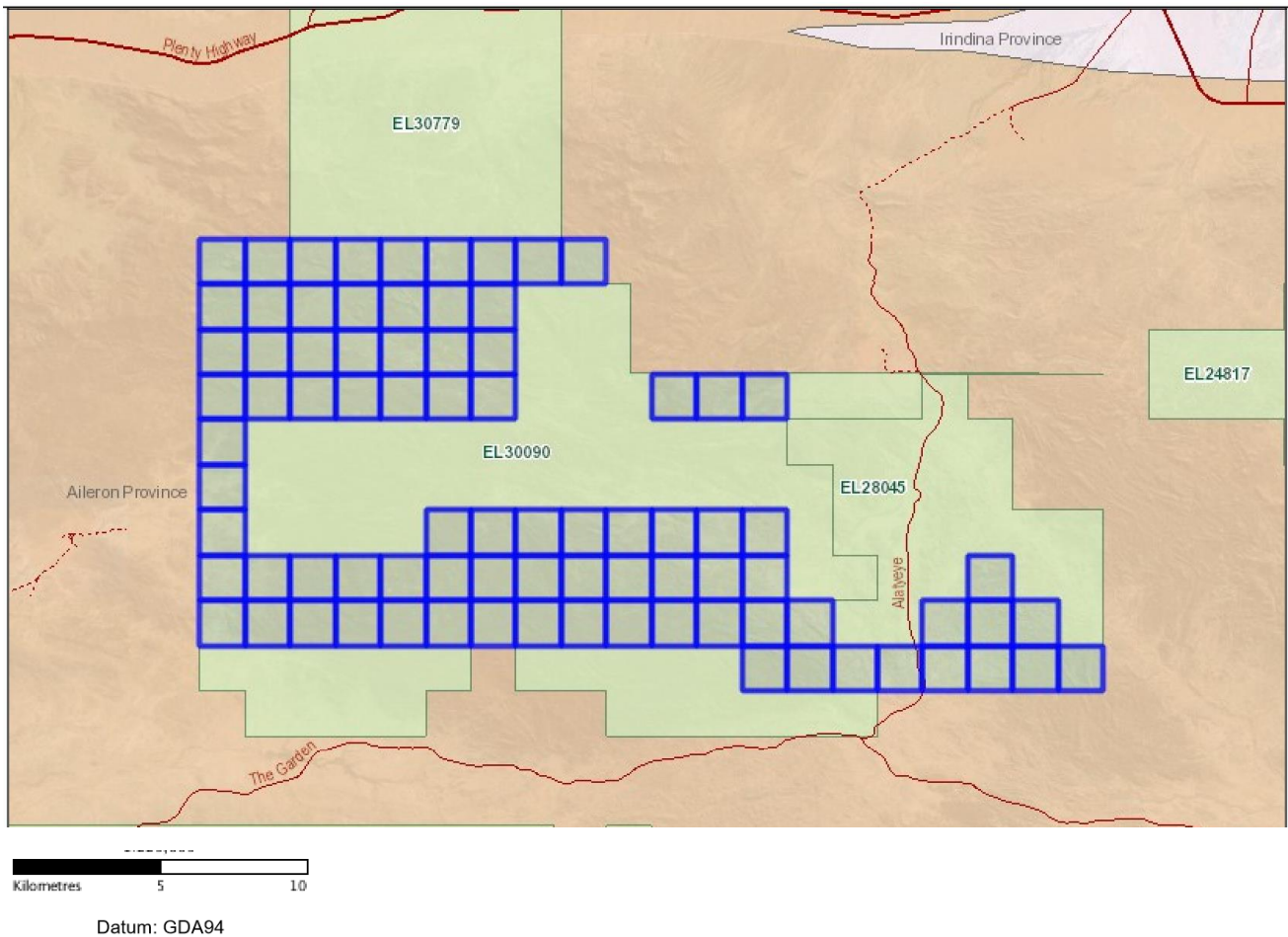


Figure 1 Location Map EL 30090 showing graticules relinquished

(Note: the areas of tenure shown south of the relinquished blocks, adjoining The Garden road are not part of EL30090).

1.2 Tenure

EL 30090 was granted to Davenport on 28 January 2015 for a period of 6 years. EL 30090 spreads across the boundaries of four pastoral leases, The Garden Pastoral Lease in the east, Yamba Pastoral Lease for the bulk of the western area and Bushy Park Pastoral Lease in a strip across the north. It is not the subject of a land claim under the NT Land Rights Act (1976). Davenport is relinquishing 83 graticule blocks from the licence area as shown on Figure 1 above.

1.3 Regional Geology

The Southern Cross Bore Project is located within the high grade metamorphic rocks of the Central Block of the Arunta Province a Palaeo to Mesoproterozoic mobile belt. Within the project area the Arunta Province is represented by the Strangways Range Metamorphic Complex, originally a sequence of sedimentary and volcanic

rocks of early Proterozoic age that was deformed and metamorphosed 1700 to 1800 million years ago by regional metamorphism associated with igneous intrusion.

1.4 Project Geology

The licence area is generally flat with some higher terrain and ridges of strongly magnetic bedrock formations in the north-western part of the tenement and across the south including in much of the southern area relinquished. Broad alluvial plains associated with the lower creeks running from the North West to South East are a feature of the eastern half of the licence area. Local geology is dominated by a pelite-psammite-acid volcanic sequence assigned to the 1810 – 1800Ma Cadney metamorphics, Aileron Province, Strangways Metamorphic Complex, southeast Arunta Inlier. Large fault structures are interpreted to strike generally north-west across the licence and appear to be splays sub parallel to the Wollanga lineament. It is this linement in the adjoining licence EL28045 that is related to known copper-gold mineralisation, including the Johnnies Reward prospect. Creek valleys appear to be influenced, at least in part, by the major structures.

2.0 Previous Exploration

Previous Exploration by others generally consists of stream and selected soil sampling. A review of previous exploration reports for licences covering the relinquished blocks of EL30090 suggests that there has been a series of stream sediment sampling programs undertaken across the region by previous explorers including Stockdale Prospecting in 1992 and Pasminco in 1995-1997.

EL22443 was granted to Flinders Diamonds in December 2001 as part of a group of 4 licences for diamond exploration. In 2002 an Alliance of BHP and TeckCominco joint ventured into the tenements and undertook a program to explore for base metals across the region with a focus on the portion encompassing both Davenport's EL30090 and EL2804

In January 2006 the group of licences were surrendered in exchange for 2 SELs including SEL25055 that was granted to Flinders Diamonds Ltd on 13th June 2006 for a period of four years. Flinders Diamonds Ltd then joint ventured the non-diamond rights for the two licenses to Maximus Resources Ltd, (MXR). In January 2008 NuPower Resources Ltd entered into an agreement with Maximus Resources to explore the licenses for energy minerals; uranium, thorium and coal. In 2013 NuPower (then Central Australian Phosphate) and Maximus Resources Ltd withdrew from the joint venture. In 2013 EL 25055 was subdivided following a change in the Mining Act that restricted the size of a licence to 250 blocks. The new licence EL 29904, comprised the southern portion over much of what is now EL30090, however, no further work was done and the licence was surrendered in July 2013. After that period from the early 1990s to Davenport's tenure no reported exploration results have been sighted from the blocks being relinquished.

The only past results found in the area now being relinquished by Davenport was stream sampling by Saturn Resources (EL6899) between 1990-1992 and there were no results at that time considered worth detailed follow up. There is no known drilling on EL30090.

2.1 Mining History

There are no records of previous mining at any scale on the tenement

2.2 Exploration during Davenport tenure

No exploration fieldwork was undertaken by Davenport resources between 28 January 2015 and 27 January 2017, the first two years of tenure of EL30090.

In 2013 an aeromagnetic survey was undertaken over Davenport EL28045, which is surrounded by EL30090. The comparison of the 150m line data survey magnetics from the VTEM survey with the 400m government survey over the Jonnies reward prospect shows the reduced detail in the 400m data. (Figure 3)

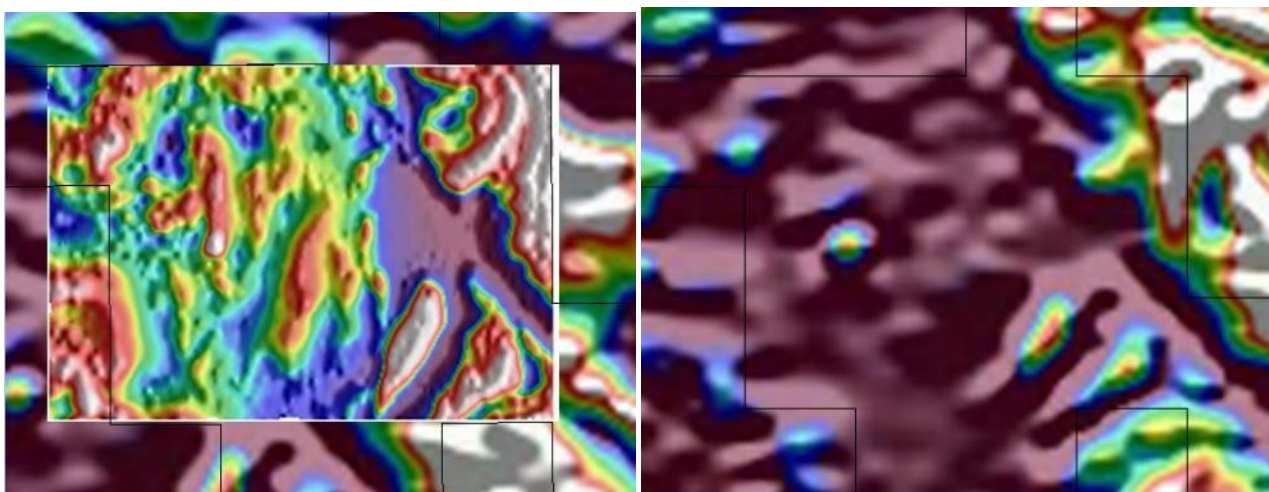


Figure 2 Comparative aeromag data

Left Jonnies Reward 150m lines spacing magnetics, **Right**: State wide TMI magnetics image.

Given the quality of the data from that survey it was decided to fly an aeromag survey over EL30090, for continuity the survey also covered all of EL28035 including the area covered by the previous 2013 survey. MAGSPEC Airborne Surveys Pty Ltd flew the survey with a Cessna 210 aircraft in August 2017 with EL30090 comprising approximately 88% of the total area covered. The survey of 7,290 line km was flown at a height of 50 metres with east-west traverse lines 100 metres apart with north-south tie lines every 1,000 metres.

Data Acquisition System:

- Sample rates up to 20 Hz
- Integrated Novatel OEM GPS receiver providing positional information that is used to tag incoming data streams in addition to providing pilot navigation guidance
- Current monitoring
- Visual real time on-screen system monitoring / error messages to limit re-flights due to equipment failure

Magnetometers

- Single sensor mounted in a tail “stinger” assembly
- Caesium vapour magnetometers
- 3-axis fluxgate magnetometer

Gamma-Ray Spectrometers

- Total Crystal Volume Down - 32 L
- Channels - 1024

- Sample Rate - 1 Hz
- Multi-peak automatic gain stabilisation

Altimeters

- Bendix/King KRA 405 radar altimeter
- Barometric pressure sensor

Base Station Magnetometers

- One Geometrics G-856 and one Scintrex ENVI MAG proton procession base station magnetometer
- Sample Rate - 0.5 Hz and 0.2 Hz

Global Positioning System

- Novatel OEM616 GPS Receiver
- 120-channel
- L1/L2

The full data set from the survey is submitted as a Data file appended to this Report as Appendix 1 & 2

2.2.1 SGC interpretation of Aeromag survey results

The detailed magnetic and radiometric survey delivered good quality data and enhanced the understanding of the area that is extraordinarily complex due to high grade metamorphism and multiple complex deformation events. A new structural and lithological interpretation delivered a range of exploration targets across EL30090. There were no targets identified on the relinquished blocks.

3.0 Conclusion and Recommendations

The results from the aero magnetic survey over the combined EL30090 and EL28045 provided high quality data in what is a complex area. Whilst there were new additional priority targets defined from that survey, no significant targets were identified within the 83 blocks relinquished.

REFERENCES

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