

## Partial Relinquishment Report

EL28462

For the period ending 14th July 2013

<b>CAPE SCOTT SD5207</b>	<b>1:250,000</b>
<b>Anson 4971</b>	<b>1:100,000</b>
<b>Greenwood 4970</b>	<b>1:100,000</b>

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## 1. ABSTRACT

The prospectivity of the relinquished tenements to host gold and base metals was downgraded following a review of the previous exploration, geology, topography and physiography of the area. The blocks cover swamps and black soil plains, which are subject to seasonal inundation with limited access. The underlying Daly Basin sediments may have some prospectivity for base metals, however the alluvial cover, lack of outcrop and the proximity to the Litchfield Station and Daly River has curtailed the chances of exploration success. These blocks have therefore been relinquished from EL 28462.

## 2. LOCATION AND ACCESS

The relinquished blocks of EL 28462 (Figure 1) are located approximately 130km SSE of Darwin. Litchfield Station is on one of the relinquished blocks. Access from Darwin is via bitumen road (Stuart Highway to Adelaide River township, then along Dorat Road to Daly River Road). The access to Litchfield station comes off Skewes Road and along station tracks.

The relinquished blocks consist of black soil plains and swamps and are quite flat-lying. The southernmost relinquished blocks contain the Daly River and associated drainage swamps. Vegetation consists of tall grasses such as speargrass, with a mid-layer of shrubs including *Acacia*, fan palm, zamia palm and screw palm. Bloodwoods and northern box woodlands also occur widely, mostly on lateritic rises and/or heavier soils.

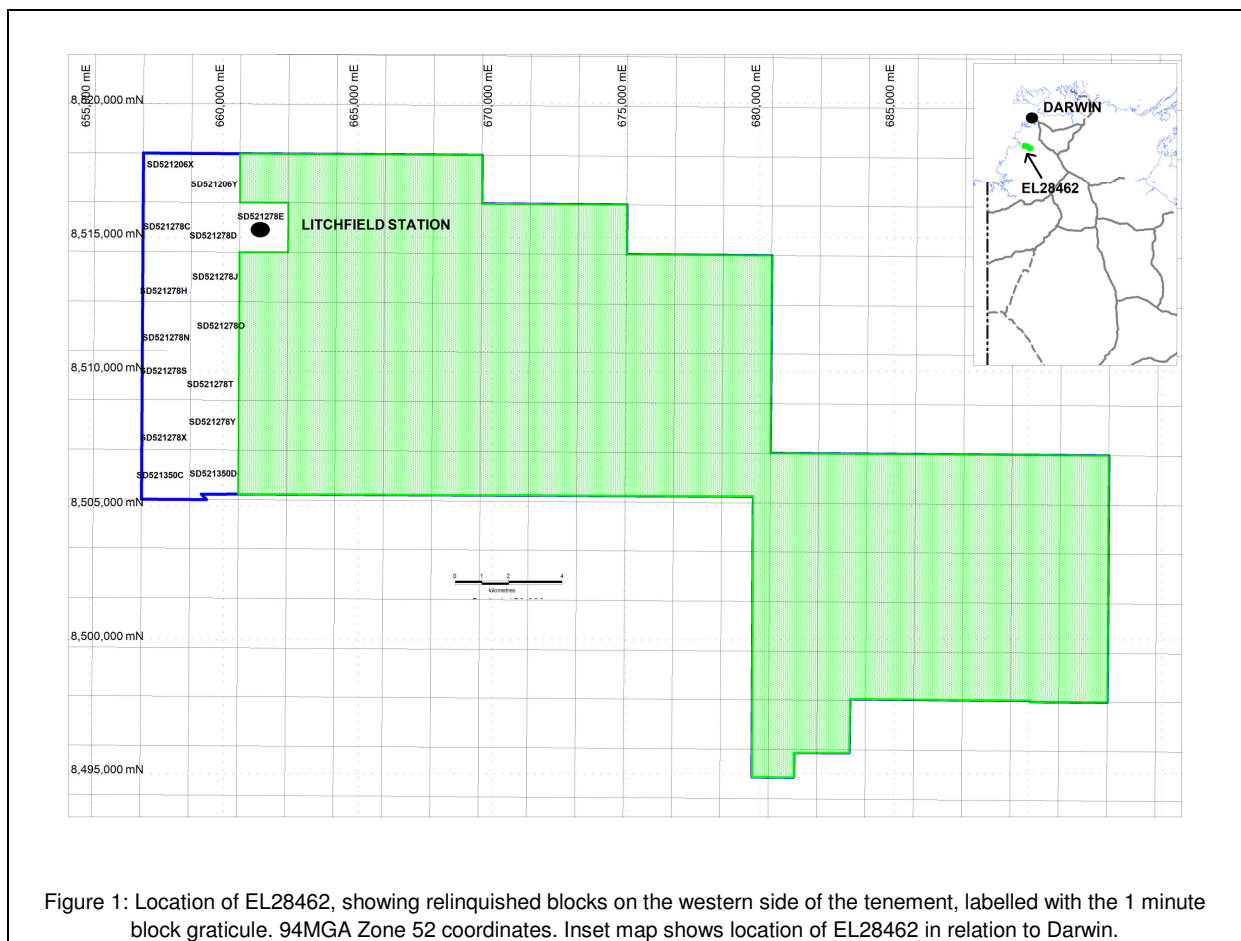


Figure 1: Location of EL28462, showing relinquished blocks on the western side of the tenement, labelled with the 1 minute block graticule. 94MGA Zone 52 coordinates. Inset map shows location of EL28462 in relation to Darwin.

### **3. TENEMENT STATUS AND OWNERSHIP**

EL 28462 was granted to May Drilling Pty Ltd for 6 years from 14<sup>th</sup> July 2011. In June 2013, a partial waiver of reduction was granted, enabling May Drilling to retain 112 blocks until the end of the next reduction period in July 2015.

The relinquished blocks are on the western side of EL 28462 (Figure 1) and are the subject of this report. These blocks are underlain by the Tipperary Station pastoral lease PPL1006.

### **4. GEOLOGY**

Regional geological mapping by Fahey and Edgoose (1986) shows that the relinquished blocks cover sedimentary rocks of the Cambrian Daly Basin. Daly Basin sediments are dominantly dolomitic siltstone and impure dolomites, and on the Anson 100,000 sheet is around 100m thick. Base metal mineralisation has been located in the Daly Basin sediments but not within the relinquished blocks.

### **5. PREVIOUS EXPLORATION**

As part of the initial stage exploration of EL 28462, a literature review was completed. Appendix 1 shows the results of the literature review. Previous exploration within EL28462 consisted of a laterite sample for bauxite (LOI only reported) and a water sample for phosphate (negative) by the Tipperary Land Corporation on AP 1773 in 1969. AOG Minerals identified a radiometric anomaly ('Natural Clearing') in 1981 but this was downgraded.

### **6. EXPLORATION DURING CURRENT TENURE**

Exploration consisted of a literature review (to assist in identifying exploration targets) and a review of the geology across EL 28462. During this exercise, it became notable that the relinquished blocks were covered in alluvial sediments, subject to seasonal inundation and also contained the Litchfield Station. The Daly River transgresses the southern relinquished blocks.

There were no exploration targets generated within the past 2 years of exploration within the relinquished blocks.

### **7. CONCLUSIONS**

The prospectivity of the relinquished tenements to host gold and base metals was downgraded following a review of the previous exploration, geology, topography and physiography of the area. The blocks cover swamps and black soil plains, which are subject to seasonal inundation with limited access. The underlying Daly Basin sediments may have some prospectivity for base metals, however the alluvial cover, lack of outcrop and the proximity to the Litchfield Station and Daly River has curtailed the chances of exploration success. These blocks have therefore been relinquished from EL 28462.

### **8. REFERENCES**

Fahey, J.E., and Edgoose, C.J. 1986. 1:100,000 Geological Map Series Explanatory Notes, Anson 4971. *Northern Territory Geological Survey, Government Printer, Northern Territory.*

## APPENDIX 1 – LITERATURE REVIEW RESULTS

<b>EL 28462 PREVIOUS TENURE</b>			
<b>TENURE</b>	<b>REPORTS</b>	<b>COMMENTS</b>	<b>Results from within relinquished blocks</b>
AP1773	CR1969-0048	Completion report on AP1773 and AP1873 Daly River, Finnis River, Northern Territory. Examination of cuttings from water bores and a program of augering on the laterite and limestone outcrop failed to give encouraging results for bauxite or phosphate.	One sample (GL10) taken for bauxite with only LOI of 8.7 recorded. Sample LS1 taken from borehole for phosphate (negative)
EL 1408	CR1981-0313	Annual Report Litchfield U J-Venture V1. EL 1407 / EL 1408 / EL 1405 / EL 2407 ; Detailed ground and aerial magnetic surveys detected anomalous radioactivity. No significant radioactive source was located but some base metal anomalies were considered for further attention.	Contained a radiometric anomaly ('Natural Clearing') but not sampled (probably from transported soils)
	CR1983-0090	Diamond investigations. Results negative.	Area surveyed is north of relinquished blocks
EL3188	CR1983-0071	Ashton Mining; Final Report; No anomalies of merit were detected.	Area surveyed is north of relinquished blocks
EL5295	CR1989-0826	Annual and Final Report of Exploration Activity on EL 5295 Litchfield, for period ending 5 September 1989. 9 areas were highlighted after the statistical analyses of results from year one exploration. Follow up during the second year of exploration did not enhance these anomalies. The potential of the area has been downgraded. The area subsequently being relinquished.	Takes in 2 relinquished blocks. No work reported on these blocks.
EL6652	CR1993-0550	<p>Tipperary area, partial relinquishment report for ELs 6649, 6650, 7380, 7381, 7382 and final report for ELs 6647, 6648, 6652, for the period ending 21-06-93. 2 RAB holes for 70m. The first phase of exploration on the relinquished areas essentially involved the collection of 195 heavy mineral stream sediment samples. Geochemical samples were collected at each heavy mineral site. The heavy mineral results were largely disappointing. Although numerous chromites were recovered, only 2 were considered anomalous together with one diamond (0.0027cts). The geochemical results indicated that 5 areas were worthy to follow up as they gave maximum values of 15ppb Au, 158ppm Cu and 47ppm Pb. NTDM magnetic data was also re-interpreted and one anomaly chosen for further work in the relinquished area. This anomaly was followed up with ground magnetics, giving a small discrete dipole feature. The porphyritic granite found outcropping did not explain the anomaly, and it was decided to be followed up in the second year of tenure.</p> <p>The second phase of exploration involved the follow up of the anomalous heavy mineral results with the collection of 117 heavy mineral samples, and the follow up of the geochemically anomalous zones with the collection of 260 geochemical samples (stream, BLEG and rock chip). The geochemical results produced anomalous values only in the Mistake Creek area (130ppm As and 9.89ppb Au), where the gold is believed to have derived from small quartz dykes in the Burrell Creek Formation. The samples collected in the other areas reflected background levels.</p> <p>The magnetic anomaly was followed up by 2 RAB drill holes, which intersected a highly magnetic damp metamorphic pod at 8m.</p> <p>An aerial magnetic survey was flown, which partially covered the reporting area. One anomaly was chosen in the relinquished areas, which was also checked for coincident TM anomalies. As a result one magnetic and 2 TM anomalies were followed up by heavy mineral sampling. The heavy mineral follow up of the diamond, chromites, drill chips and geophysical anomalies produced negative results. No further kimberlitic indicators or diamonds were recovered. The reporting area has little potential to host a primary diamond, gold, or base metal occurrence of economic size.</p>	

EL7086	CR1992-0558	Ashton Mining:Results of loam and gravel sampling were negative for diamonds and kimberlitic indicator minerals.	Ground mag survey carried out much further south of relinquished blocks
EL24207	CR2005-0607	Annual and final report for EL 24207, year ending 17 November 2005. Benger, J / Imperial Granite and Minerals / Cleaver, RB. conducted., except three field trips. They helped to determine the soil nickel anomaly found by Kewanee was not within the EL boundaries, but was actually located within the Litchfield Park. This led to surrendering the EL.	No work done on relinquished blocks
EL25176	CR2007-0643	Annual exploration report on EL 25176 Hermit Creek for period ending 8 November 2007 Litchfield Project. Territory Uranium Company Pty Ltd is exploring for multiple commodities and applied for EL 25176 to explore for unconformity-hosted U mineralisation, plus review potential for base metals and gold. Work during Year 1 of tenure consisted of a review of both NTGS data, and compilation of significant results from Industry reports, plus a geophysical review of available data. At the time of reporting this work was still in progress. A planned geophysical survey encompassing part of EL 25176 plus other TUC tenements did not proceed. The geophysical contractor was carrying out a survey on neighbouring tenements but the work was not carried out until late November, so TUC will be seeking to conduct an airborne geophysical survey during the dry season of Year 2.	Large tenement, which covered just the southern relinquished blocks, which also contain the Daly River. No work done.
	CR2008-0931	Year 2 reduction report for EL 25176 Hermit Creek, for period ending 8 November 2008. EL 25176 is situated approximately 240km SSE of Darwin, NT, and 14km west of Daly River townsite. Territory Uranium Company Pty Ltd is exploring for multiple commodities and applied for EL 25176 to explore for unconformity-hosted U mineralisation, plus review potential for base metals and gold. Work during Year 1 of tenure consisted of a review of both NTGS data, and compilation of significant results from Industry reports, plus a geophysical review of available data. Exploration on EL 25176 during the period was restricted with efforts focused on EL 24984. Historical data compilation continued and a review of uranium targets commenced with helicopter and geochemical reconnaissance planned at priority targets in the 2009 field season. At the end of year two EL 25176 was reduced by 50%, targets identified in this review were retained hence no field work was undertaken within the relinquished ground. This report details the work done on the blocks of EL 25176 relinquished in the second year.	
EL25195	CR2010-0998	Final reduction report for EL 25195 Elliot Creek for period ending 8 November 2010. Work during Year 1 of tenure consisted of a review of NTGS data and Industry reports. The COREDAT database showed several drillholes within EL 25195 held in the Darwin Library. A total of 19 quarter core samples from 5 drillholes were collected and assayed for a suite of elements including uranium. The samples taken were collected at areas of change of lithology and/or alteration. The best result was 13.8ppm U (with 2ppb Au) taken from Hole 82/42. Exploration on EL 25195 during year 2 and 3 was restricted with efforts focused on EL 24984. Historical data compilation continued and a review of uranium targets (EL 25176 and EL 25195) and tin targets (EL 25297) commenced with helicopter and geochemical reconnaissance undertaken at priority targets in the 2009 field season. Four soil and 1 rock chip sample were taken from the relinquished ground. No significant results were returned. Territory Uranium intended to complete a radiometric survey over this tenement in year 4 but due to budgeting restraints was unable to complete the survey. The tenement was subsequently relinquished due to Territory Uranium being unlikely to meet expenditure commitments in year 5 and 6.	Work carried out was further west and outside the relinquished blocks.