
**EL 24906 TENTH ANNUAL REPORT
ADELAIDE RIVER**

**For Period from 19/02/2015/ to18/02/2016
RUM JUNGLE PROJECT NT**

**Pine Creek SD5208 1:250,000
Batchelor 5171 1:100,000**

Titleholder: Australia Mining and Gemstone Co. Pty. Ltd

**Report No. 2016-006
Australia Mining and Gemstone Co. Pty. Ltd
By Mingjin HOU
10th March 2016**

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1. SUMMARY

EL 24906 is SE of Batchelor, and NE of Adelaide River, bordering the Stuart Highway. Territory Uranium Company Pty Ltd is exploring for uranium and Gold within this tenement. Work during Year 1 and 2 of tenure consisted of data compilation, reconnaissance scintolometer surveys and exploration proposals.

Exploration RC and Auger drilling is proposed for Year 3 and will primarily target existing gold prospects.

Previous exploration by TUC consisted of reviewing company reports and historical geochemical data collation and repotting. In year 3 TUC, after reviewing its tenement commitments, has chosen to sell this tenement, as part of a package, to Anhui Geology and Mining Investment Ltd. This sale was established as a direct result of attending the Ministers delegation to China in 2008.

Due to the sale of this tenement to Australia Mining and Gemstone Co. Pty. Ltd Territory Uranium had not taken any exploration on this tenement for year 3 and 4. The transfer had been completed in the 8th of September of 2009.

Work carried out by AMG during Year 5 included:

- a) Search useful structures on the SPOT image
- b) some geological surveying special areas such as H22
- c) some geological section surveying for the special areas

Work carried out by AMG during Year 6 included:

- a) Some geological mapping in special areas such as H22, Area1 and Area2

b) Pick-up rocks samples taken during mapping

Work carried out by AMG during Year 7 included:

- a) All data review and
- b) Some geological survey

There are 9 blocks (Figure 1).

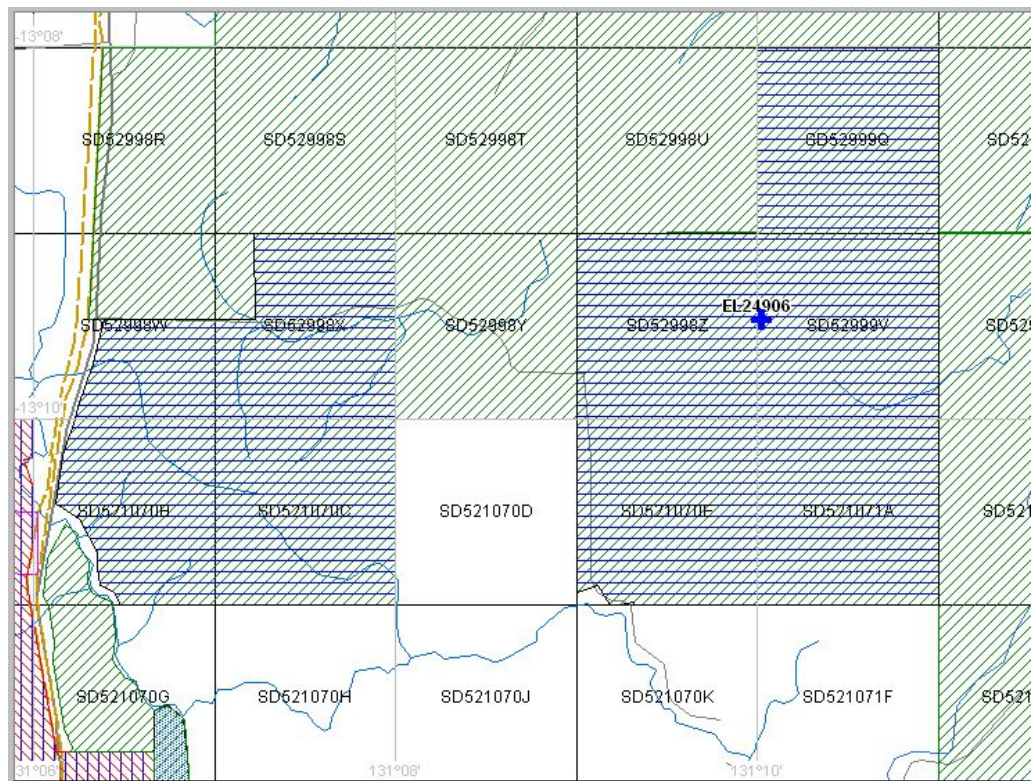


Figure 1 Location Map of EL24906

Work done during Year 8 included:

- a) All data review and
- b) Some geological survey
- c) Some geological sections survey

Work done during Year 9 included:

- a) All data review and
- b) Some geological survey

- c) Some geological sections survey

Work done during Year 10 included:

- a) All data review and
- b) Some geological survey
- c) Some geological sections survey

2. LOCATION AND ACCESS

EL24906 is situated approximately 12km SE of Batchelor, NT, and 8km N of Adelaide River (Figure 2). The western boundary of the Licence runs along the Stuart Highway, while the northern boundary is partly bounded by the Tortilla Flats road. The southern boundary follows Stapleton Creek, and part of the south-eastern border is bounded by the Adelaide River. Tenement boundaries are easily accessed along established roads.

Topography for most of the tenement is low relief, with some floodplains. The western border of the Licence has higher relief around Heaton Hill and south in the area bounded by Stapleton Creek. The tenement has numerous creeks which can flood in heavy rains during the wet season.

3. TENEMENT STATUS AND OWNERSHIP

EL 24906 was granted on 20th January 2006 and expires on 19th January 2012. It comprises 52 graticular blocks (133.4 sq km) that are reduced in size to less than the full block along the river and road boundaries. And at the end of 6 year, we reduced 17 blocks and keep 9 blocks (26.75 sq km) (Figure 1). There are no other mining leases or mineral claims shown within the Licence boundaries. The expenditure covenant set for the ninth year was \$32,000.

4. GEOLOGY

EL24906 is situated within the Pine Creek Geosyncline, a tightly folded sequence of Lower Proterozoic rocks. A full description of the geology and stratigraphy of the Pine Creek Geosyncline can be found in several texts, including Ahmad et al., (1993; Ahmad, 1998). The 1:100,000 Batchelor – Hayes Creek Region Geological Special map covers the tenement area (Crick, 1980)(Figure 4).

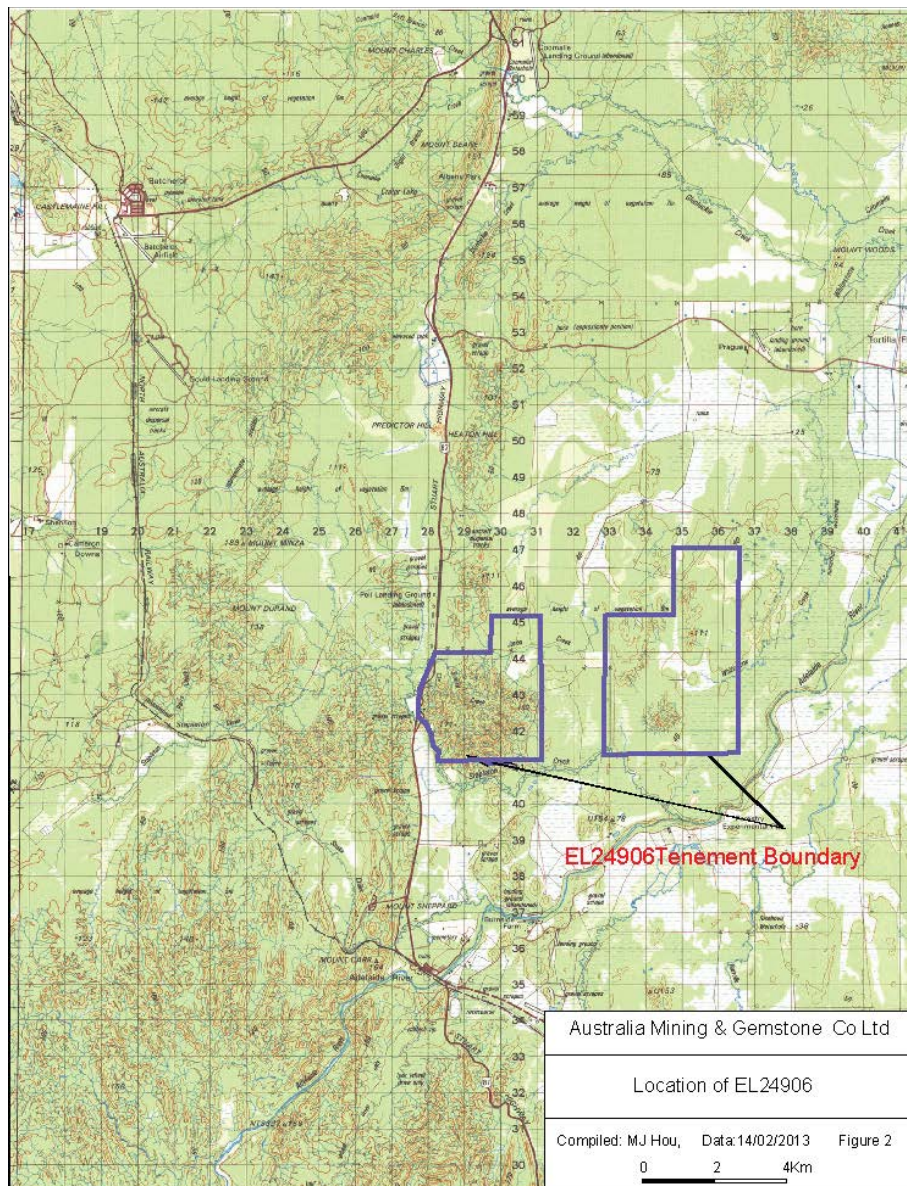


Figure 2 Location of EL24906 in Topography

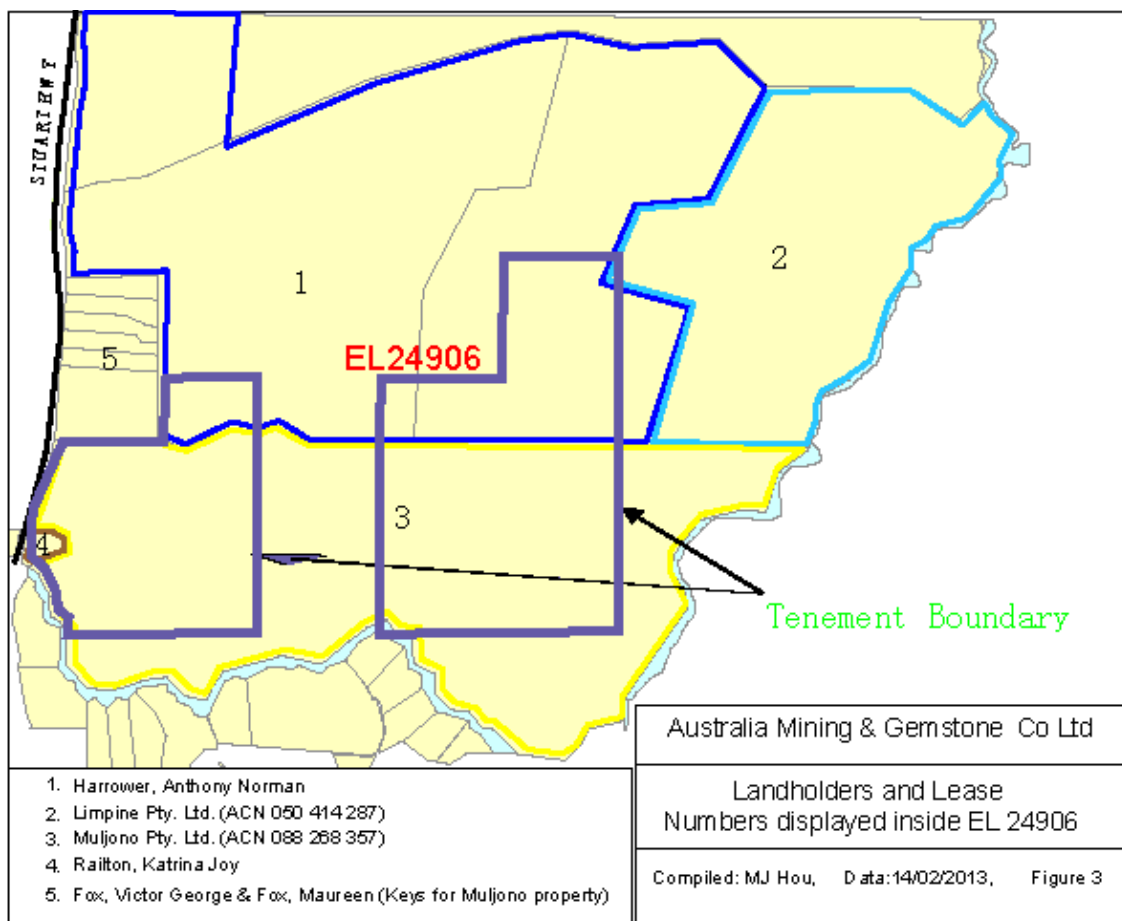


Figure 3 Landholders and Lease Numbers displayed inside EL 24906,
 Tenement boundary red polygon

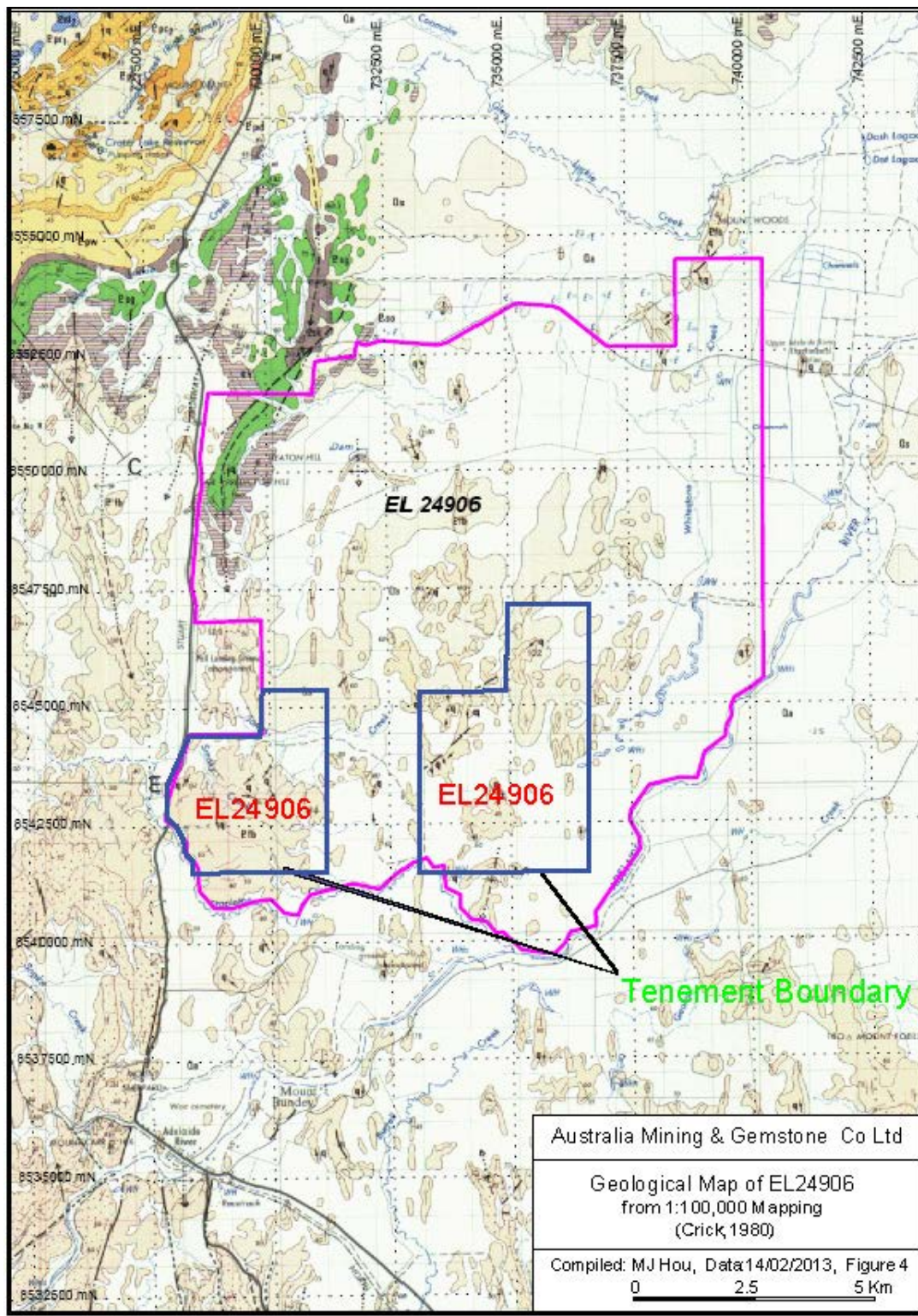


Figure 4 Geological Map of EL 24906 from 1:100000 geologic map of Crick (1980) (the Blue line is the new boundary after year 6)

The tenement area covers the Finniss River Group (Burrell Creek Formation), except for parts of 5 blocks to the northwest, which cover Gerowie Tuff and Mt Bonnie Formation from the Mt Partridge Group (Figure 4). The structure consists of S-SE trending symmetrical folds with gentle southerly plunges in the western part of the tenement.

There is one recorded MODAT occurrence; H22 prospect is located in the SW corner of the Licence. The gold prospect is hosted in vein quartz along a regional southerly plunging anticline. Other quartz veins have been mapped within the Burrell Creek Formation sediments at 1:100,000 scale throughout the Licence (Crick, 1980).

5. PREVIOUS EXPLORATION

A detailed summary of previous tenure and exploration is given in Appendix A and summarized below.

Exploration has been carried out in the area since 1971 by numerous companies. Exploration primarily involved rock chip, soil and stream sampling for gold and some base metal analysis (especially in the North West corner of the tenement). Historical drilling was limited to the H22 gold prospect (5 RC holes) and the Mt Woods gold prospect (6 RC and 1 diamond hole).

6. EXPLORATION DURING YEAR 1

In 2006-2007 Territory Uranium exploration consisted of historic data compilation including tenure, datasets, open file reports and geo-referencing of relevant maps. This enabled an informed review of the tenements prospectively in regards to Gold and Uranium. Also field reconnaissance and a small rock chip program were completed.

7. EXPLORATION YEAR 2

In 2007 all available historical data was compiled into one database (displayed in Figure 5).

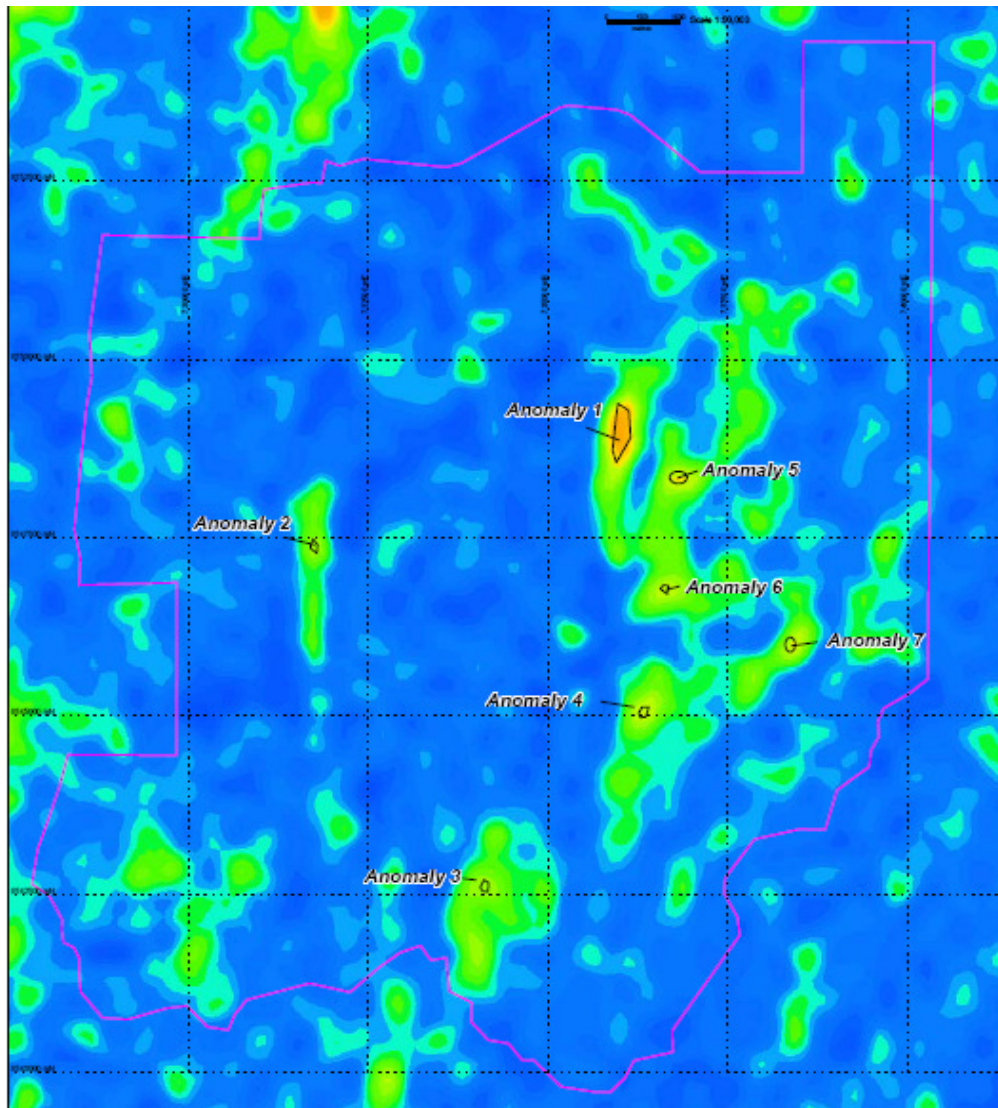


Figure 5 Location of Radiometric Anomalies, tenement boundary –pink

A total of 490 scintillometer readings were taken over the main anomalies identified from radiometric survey data (Figure 5) with readings confirming the anomalies. The highest readings (>500 mSv) were from H22 and Anomaly 1 (Figure 6). Also 31 rock chip samples were taken in conjunction with the

traverses but only 8 were assayed with no significant results returned.

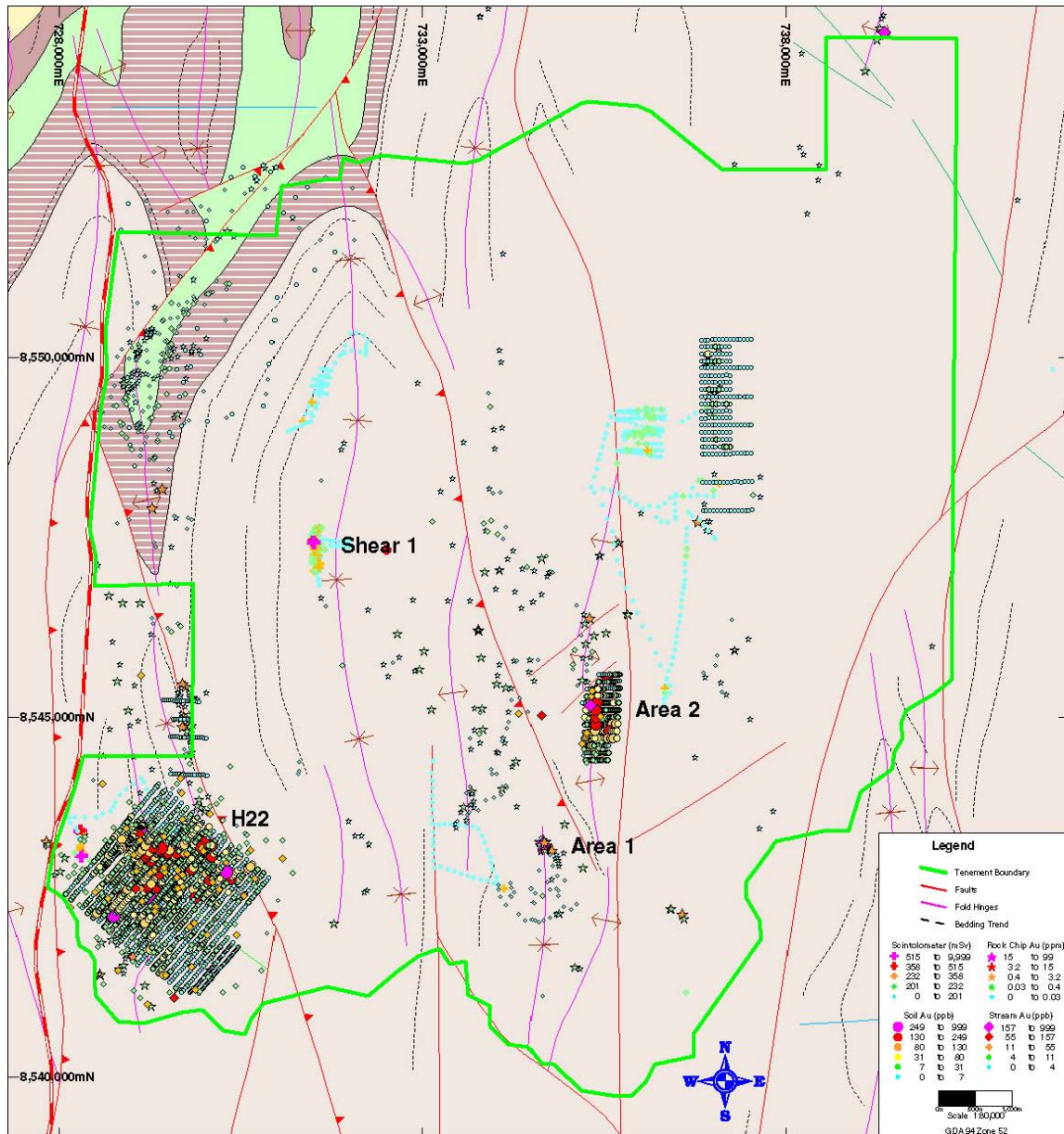


Figure 6 Compilation of all historical data for EL24906, overlain by TUC 2007-2008 rock chip and scintolometer readings

8. EXPLORATION FOR YEAR 3 and YEAR 4

Because the EL transfers between TUC and AMG from the early of year of 2009 until 18th September of 2009, TUC or AMG have not done the exploration

according to the plan during the year 3. But we did some work, such as ground survey by helicopter, review the assayed results of all taken by TUC and previous, and review a lot of data and references concerning this areas and regional geological and geophysical data.

9. EXPLORATION FOR YEAR 5

Work done during Year 5 of tenure consisted of field reconnaissance on all blocks.

According to the structural analyzing on the SPOT Image of the tenement and its adjacent area, we want to find some useful structures which filled with quartz vein bearing gold or silver. And then take some geological surveying special areas such as H22 and also some geological section surveying for the special areas.

10. EXPLORATION FOR YEAR 6

Work done during Year 6 included:

- a) Some geological mapping in special areas such as H22,Area1 and Area2 about 25 sq km
- b) Pick-up rocks samples taken during mapping about 9 samples, the analysis results see the attachment files.

11. EXPLORATION FOR YEAR 7

Work done during Year 7 included:

- a) All data review
- b) some geological sections surveying in special areas

12. EXPLORATION FOR YEAR 8

Work done during Year 8 included:

- a) All data review and
- b) Some geological survey
- c) Some geological sections survey

13. EXPLORATION FOR YEAR 9

Work done during Year 9 included:

- a) All data review and
- b) Some geological survey
- c) Some geological sections survey

14. EXPLORATION FOR YEAR 10

Work done during Year 10 included:

- a) All data review
- b) All drilling cores review
- c) Geological data review and maps review
- d) Geophysical data review

15. PREPARING EXPLORATION FOR NEXT YEAR

Working program for Year 10 included:

- a) some geological sections surveying in special areas
- b) IP section survey in special areas
- c) Diamond drilling on the anomalies detected by the IP survey if the anomalies are good.

Expenditure is expected to be at least \$40,000.

16. EXPENDITURE

Expenditure (as supplied by Australia Mining and Gemstone) consisted of:

Table 1 Expenditure on EL24906

Ground Geological survey	\$6,000.00
Office studys	\$24,000.00
Overheads	\$2,000.00
TOTAL	\$32,000.00

17. CONCLUSION AND RECOMMENDATIONS

The exploration target is Gold, or Base metal and Uranium. Throughout analysis history exploration date, and all fieldworks taken, we found some Quartz Veins and ductile shearing zone developed in the H22 and area1 and2, there are gold mineralization developed in those veins and shearing zone. After analyses some rocks chips samples, no more stronger gold mineralization in surface, so, we prepare to take IP section survey cross the shearing zone or quartz veins, in order to see how about the underground.

18. REFERENCES

Wood, S., 2008. March 2008 Drill Proposal for Rum Jungle NT 'Adelaide River' EL 24906. Territory Uranium Co Ltd.

Smith, B., 2007. Annual Exploration Report EL 24906. Territory Uranium Co Ltd, Report No. 2007-02

Ahmad, M., 1998. Geology and mineral deposits of the Pine Creek Inlier and McArthur Basin, Northern Territory. AGSO Journal of Australian Geology and Geophysics, 17(3), pp1-17.

Ahmad, M., Wygralak, A.S., Ferenczi, P.A., and Bajwah, Z.U. 1993. Explanatory Notes and Mineral Deposit Data Sheets. 1:250,000 Metallogenic Map Series,

Department of Mines and Energy, Northern Territory Geological Survey

Crick, I., 1980. Geology of the Batchelor-Hayes Creek Region. BMR 1:100,000 Geological Special.

Rade, J., 1956. Shearing along anticlines as an important structural feature in uranium mineralisation in the northern part of the Northern Territory of Australia. Journal of Economic Geology.

19. APPENDIX A, Tenement History

Karangie Minerals Australia held **AP 2427** to explore for base metals. A 'lower priority area' ('Area 5') was outlined within EL 24906 west of Heaton Hill from geochemical sampling. No further work was done after traversing did not show areas of favourable mineralisation.

CRA Exploration explored a lot of the area around Batchelor – Adelaide River, firstly on **AP 2483** then under EL 610. On AP 2483, reconnaissance drainage sampling at an average density of 3.6 samples per square mile delineated 2 areas with base metals anomalism (outside EL 24906), and U values were typically 3-5ppm. Assay methods and detection limits are unknown, and no obvious areas of U anomalism were shown, even around known U occurrences. A helicopter-borne scintillometer survey detected one order radiometric anomaly (1.4x background) within EL 24906 (Anomaly 18-11; Figure 5). Anomaly 18-11 is 'caused by an area of red siltstone yielding up to 95cps bounded to the east by an impure ferruginous quartzite and to the west by a black soil plain yielding 45cps'. Areas which showed roughly 2x background readings are shown on Figure 5; these are the raw data figures, whereas the radiometric anomalies (such as anomaly 18-11) were determined by statistical treatment of radiometric data.

CRA Exploration was then granted **EL 610** in 1973 to explore for uranium. EL 610 was mainly to the west of EL 24906, with only part of 2 blocks on the northern boundary being within EL 610. No samples appear to have been collected within EL 24906, and there were no U values reported as assayed.

Magnum Exploration held **EL 995** along with other contiguous EL's, and explored for U mineralisation in 1978 for a year. The area was covered by aerial radiometric and magnetometer surveys by Geosearch in 1977, but other work (soil geochemistry, track etch surveys, ground geophysics) were carried out further north. Forty-one anomalous zones over the 2 EL's were outlined, but there are no maps showing anomaly locations. The report discusses an anomaly that appears to be much further north, and outside EL24906.

CRA Exploration explored for base metal mineralisation on **EL 1471** in 1978. Soil sampling and ironstone sampling were carried out to the north of EL 24906 with no notable results.

Pan D'or Mining NL held **EL 1656** from 1981. The H22 gold prospects was located during helicopter reconnaissance sampling. H22 was described as "*a large massif fo folded sediments yielding a number of samples anomalous in As, Au and Pb. Further samples were taken over this anomaly in 1983.*" Sample H.7164 (takend at H22) assayed 1.00g/t Au, 3800ppm As and 1400ppm Pb. These samples have been captured in MapInfo (Figure 6) and ascii (CR19830267_rockchips.txt; Appendix 2). It appears that the samples are rock chip samples, but this is not specified in the text. A photogeological report notes that '*there are plenty of quartz veins that should be sampled, particularly those along the large faults.*' These quartz veins were not sampled for vein-style U mineralisation. The area identified as most prospective for gold mineralisation is south from Ricebowl Waterhole (outside EL 24906). Under the Ringwood JV with WMC, 142 stream sediment samples were collected, with a '*marked concentration of higher Au and As values in the central part of the area around*

the headwaters of a large north-west flowing creek. Maximum values of 0.155ppm Au (0.005ppm Au detection limit) and 550ppm As (50ppm detection limit for As) were recorded, and the data was captured in MapInfo (Figure 6) and as text file (CR19850213_stream_sed_sample_sites.txt; Appendix 2). Follow-up work included soil sample traverses, and rock chip samples, with over half of the 34 soil samples returning +10ppb Au, and a max value of 5.4g/t Au from the rock chip sample. 1:10,000 geological mapping of H22 prospect identified the 'geometry and location of 3 positions of intense quartz-gossan veining, quartz, and quartz-gossan stockwork and sulphide impregnation of host wacke sequences'. Further rock chip sampling 'conformed to the character of previous rock chip data in recording anomalous but not generally interesting gold tenor'. Soil sample results were contoured and related to the mapped distribution of stockwork mineralisation.

The Ringwood JV continued work over the H22 prospect under the new tenure of **EL 5321**. A more systematic approach included bulldozing the top of the ridge to allow vehicle access in the rugged terrain, plus gridding and infill soil sampling at 20m spacings. The soil sampling outlined peak As results are east of the peak Au results but on the same stockwork ridge. The best soil gold anomalous zone is in the mid-north of the prospect (approx MGA52 729200E / 8543150N). Detailed geological mapping (1:2500 scale) over the gossanous quartz vein system was carried out. The quartz stockwork zone has >1% limonite after pyrite. There are 2 main types of quartz veining; massive bucky conformable veins (pre-F2 folding) and the dominant stockwork veins are axial planar (N-S strike, subvertical), with less developed NW-SE veins with moderate dip to NE, and a third set of flatly oriented veins (rare). Rock chip assays of 0.01g/t to 0.6g/t with a max value of 4.39g/t Au may reflect '*a strongly leached caprock with better grades at depth.*' Results from 5 drillholes scattered to test gold soil anomalies, an As anomaly, plus to intersect the trend of the stockwork zone gave patchy results all <1g/t Au (Figure 6; Appendix 3). Best results came from RARD11 (approx MGA 729260E / 8543100N) which tested the main soil gold anomaly

and designed to intersect the axial planar set of quartz veins. Anomalous (>0.1g/t Au) gold was found from 15.4m – 38.2m, with max values of 0.8m @ 0.98g/t Au from 61.6m, and 0.7m @ 0.92g/t Au from 20.7m. Results were not discussed, but it seems that RARD11 was the only hole that tested the zone that had gold in soil anomaly from 2 separate soil sampling programmes, plus the axial planar zone from 1:2500 mapping. The results were never fully discussed by WMC. WMC applied for an ERL but the application did not comply with ERL criteria, and the tenement was allowed to lapse.

Uranerz held **EL 2161** for a year in 1980. EL 2161 covers the northern blocks only of EL 24906, and most of this area is alluvium. Uranerz used results from the BMR airborne geophysics, and concluded that radiometric anomalies in the area came from rock outcrop-alluvium contrast, and highs over a laterite unit (location not specified). Samples were taken outside of EL24906.

Kennecott explored **EL 4943** for gold mineralisation from 1987, with 4 stream sediment samples taken within EL 24906, but these are marked 'not assayed' for gold, and were very low for base metals. Rock chip samples just outside EL 24906 assayed 197ppm U; possibly at the contact of Koolpin Fm and Gerowie Tuff sediments, and along a fault (Figure 5). Further work continued outside EL24906 on gold exploration.

EL 5105 was explored for gold mineralisation by the Woodcutters JV in 1987, covering most of EL 24906, plus areas north and east. Geochemical sampling outlined 2 anomalous areas within EL 24906 (Fig 6) with results of 245.5ppm Au from float samples, and both areas are associated with quartz veining in Burrell Creek Fm sediments. Results from Year 2 geochemical sampling were 'disappointing' with costeaning 'effectively precluded the presence of any economic sources of mineralisation' and no other work was done on these areas. Mapping indicated discontinuous pods and veins of vuggy white quartz which is locally iron-rich, gossanous and sometimes sericitic along the NNW ridge of

Burrell Ck Fm sediments.

EL 5310 was held by Golden Plateau NL as part of the Mt Bunday JV for gold exploration. Work included a regional aeromagnetic and radiometric survey, mapping and rock chip sampling in the first year. Golden Plateau were interpreting the results of the geophysical survey at the time of writing the first year report, so results weren't presented. By Year 2 Golden Plateau had withdrawn from the JV so the geophysical results weren't supplied. Soil sampling returned a max value of 7.3ppb Au from BLEG sampling and a max value of 0.53ppm Au and 4200ppm As for rock chip sampling. Stream sediment samples returned a maximum value of 4.4ppb Au and 160ppm As, with the best results draining from the rugged ridges where H22 prospect is located.

EL 5316 (one block on SW part of EL 24906) was held for a year in a JV between Oceania Exploration and Mining, and Golden Plateau NL. 1:25,000 geological mapping seemed based on airphoto interpretation, and showed the western fold limb of H22 prospect anticline. Magnetic contours at 1:25,000 were not interpreted, and came from a regional aeromagnetic survey carried out by Golden Plateau. The best value of 0.6ppm Au plots close to the mapped anticline from work done on EL 1656.

EL 6422 covered the area of EL24906 which overlies the Gerowie Tuff/Mt Bonnie Fm sediments (NW corner of Licence). The Woodcutters JV explored for gold and base metal mineralisation from 1989 and identified 2 base metal anomalous areas; Heaton Hill and Predictor Hill (Figure 6) which were more poorly defined anomalies than other areas outside of EL24906. There were no Au anomalies from stream seds or rock chips. Follow-up rock chip sampling returned max values of 411ppm Pb and 130ppm Zn in silicified and quartz-veined ferruginous siltstones and cherts.

EL 7163 was held for a year by N. Manhire and D. Langley, who were looking for

'small rich shoots' of mineralisation. Reconnaissance and panning of samples, plus assaying of concentrates was carried out. *'Several reefs showed Uranium (and Gold) mineralisation. One reef was assayed for Uranium and gave a result of 8g/t. (Metal). One of these reefs has an old test pit and pieces of diamond core scattered about.'* The location of this area is shown in Figure 5.

The most notable work on **EL 8547** (held by John Earthrowl and explored by Savanna Resources from 1995 to 2000) is the geophysical interpretation of multicient data. A low level TC radiometric anomaly is shown within EL 24906 at approximately MGA52 739000E/ 8545200N. This is in a floodplain area, so it may relate to surface blacksoils, and the ternary radiometric image indicates this may be a K anomaly. Other work occurred outside of EL24906.

MIM explored **EL 8660** for gold, mainly around the Heaton Hill area, using rock chip and stream sediment sampling. 47 stream sediment samples were taken within EL24906, and 13 rock chip samples. Anomalous Au samples (as statistically derived) came from samples >1ppb Au for BLEG stream sediment samples, and 0.5g/t Au for rock chip samples. 8 stream sediment samples were anomalous (Fig 6; Appendix 2) and 1 rock chip sample (in brecciated, pyritic Koolpin Fm chert and siltstone). The area of anomalism (approx MGA 729750E / 8547800N) is marked as 'aircraft dispersal tracks' on the 1:100,000 topographic map, so the anomaly may be from ground disturbance and not 'real'. MIM relinquished the ground, but this may be partly from their withdrawal from NT exploration and moving their office interstate, rather than perceived prospectivity of the tenement.

EL 8875 was prospected by Jan Hills following reports of gold exploration in the Adelaide River area amongst ex Army/RAAF camps. Prospecting using the metal detector was unsuccessful due to the amount of metal from the old WW2 campsites. A best result of 0.21g/t Au was obtained from a rock chip sample during Year 2 of tenure. Sampling in the southern hills area along the southern

boundary of EL 8875 was limited, and further sampling of this area (approx MGA 729200E – 730000E; 8543800N) was recommended, but not carried out before Licence expiry.

EL 9005 was held by SBA Distributors, J.Earthrowl and P. Melville; and exploration targetted gold mineralisation. In the first year 110 rock chip samples were collected, with best result of 1.84ppm Au at MGA52 736800E / 8547700N (Appendix 3 has the rock chip results in MapInfo format). Values over 0.1ppm Au were associated with 'altered, gossanous quartz veins'. Further rock chip sampling in Year 2 gave a best result of 0.27ppm Au. Soil sampling along 7 lines spaced 400m apart (with infill soil sampling to 100m x 50m) showed a weak gold in soil anomaly close to the best rock chip result of 1.84ppm Au. The gold anomaly was N-S oriented, and around 200m x 100m extent, which follows a poorly outcropping, N-S quartz vein. The mineralisation was considered uneconomic and the Licence relinquished.

Quartz-hosted gold mineralisation in Burrell Creek Formation was the target for EL 9256. Only one rock chip sample (641632 at approx MGA52 735400E / 8553400N) was within EL24906, and this gave below level of detection for Au and As. EL 9256 was surrendered on its first anniversary following poor results from initial exploration.

EL 9456 covered a similar area to EL 8660, which is the NW corner of EL 24906. Work during Year 1 consisted of a regional airborne geophysical survey, soil sampling and rock chip sampling in the northern area of the Licence (outside of EL 24906), with follow-up geochemical sampling in Years 2 and 3 (all outside of EL24906). Results were low level Au anomalism only.

EL 9918 only covered 2 part blocks on the northern boundary of EL 24906. A data compilation exercise indicated the southern portion of EL 9918 was the most prospective for gold mineralisation, particularly on the strike extensions of

anticlines. No further work was carried out due to low gold prices.

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