

YEAR 1 ANNUAL EXPLORATION REPORT

EL 29323

'Mckinlay North'

MCKINLAY NORTH PROJECT

FOR PERIOD ENDING 30TH JULY 2013

**DARWIN SD5204
MARY RIVER 5272**

Titleholder: R. ANICTOMATIS

Commodities: Au, Ag, Base-metals, U, Rare Earth Elements, Fe

Prepared for R. Anictomatis

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1. SUMMARY

The Mckinlay North Project is approximately 95km southeast of Darwin and 4km south of the Mount Bunday Mine and 1km south of Mt Bunday, situated within the the Pine Creek geosyncline in the Mary River area. Access from Darwin is via the Stuart Highway then east on the Arnhem Highway.

EL9323 was granted for a period of six (6) years in 2012 to expire on 30th July 2018. It covers prospective Lower Proterozoic sediments including those of the South Alligator Group occurring at the margins of the Mount Bunday Granite Pluton.

Reconnaissance exploration and rock chip sampling was undertaken during the year. A total of 7 samples (4 rock chip, 1 soil, 2 stream samples) were taken from locations in the south west and south east corners of the tenement. Weakly anomalous copper, lead and arsenic were returned from A3, in the south west of the tenement ~800m along strike from Anomaly 5.

Recommendations include historical data research on surface geochemical sampling and EM surveys that cover the tenement, acquisition and processing of available EM data and further reconnaissance to determine prospective stratigraphy, folding and structures for drill targeting.

2. LOCATION AND ACCESS

The Mckinlay North Project is approximately 95km southeast of Darwin and 4km south of the Mount Bunday Mine and 1km south of Mt Bunday, situated within the the Pine Creek geosyncline in the Mary River area. Access from Darwin is via the Stuart Highway then east on the Arnhem Highway. The northern eastern edge of the tenement borders the south side of the Arnhem Highway. Most of the ground is hilly with rocky outcrop.

3. TENEMENT STATUS AND OWNERSHIP

EL9323 was granted for a period of six (6) years in 2012 to expire on 30th July 2018. The tenement is 31.81 sq km. (10 blocks). There are 8 mining leases or mineral claims shown within the Licence boundaries:

TenementID	Type	Status	Grant Date	Expiry Date	Area Ha	Contact
MCN4952	MCN	renew retained	19950907	20141231	40	HOLCIM (AUSTRALIA) PTY LTD*
MCN4953	MCN	renew retained	19950907	20141231	40	HOLCIM (AUSTRALIA) PTY LTD*
MCN4954	MCN	renew retained	19950907	20141231	40	HOLCIM (AUSTRALIA) PTY LTD*
MCN4955	MCN	renew retained	19950907	20141231	40	HOLCIM (AUSTRALIA) PTY LTD*
EML27133	EML	grant	20100920	20200919	54	CAPRICORN MAPPING & MINING TITLE SERVICES
EML27174	EML	grant	20100923	20200922	30.09	CAPRICORN MAPPING & MINING TITLE SERVICES
EML24309	EML	grant	20070516	20170515	50.61	CAPRICORN MAPPING & MINING TITLE SERVICES
ML29782	ML	grant	20130206	20230205	80	AUSTRALIAN MINING & EXPLORATION TITLE SERVICES PTY LTD

Underlying cadastre (Figure 1) is all perpetual pastoral lease, the bulk of the tenement over Mckinlay River, NT Portion 4938 (owners J. Maley, R. Anictomatis, Ostojic Nominees Pty Ltd) and a small western portion over Old Mount Bunday, NT Portion 4937 (owners F.Coulter).

Block reductions are not yet required as the tenement has just finished year 1.

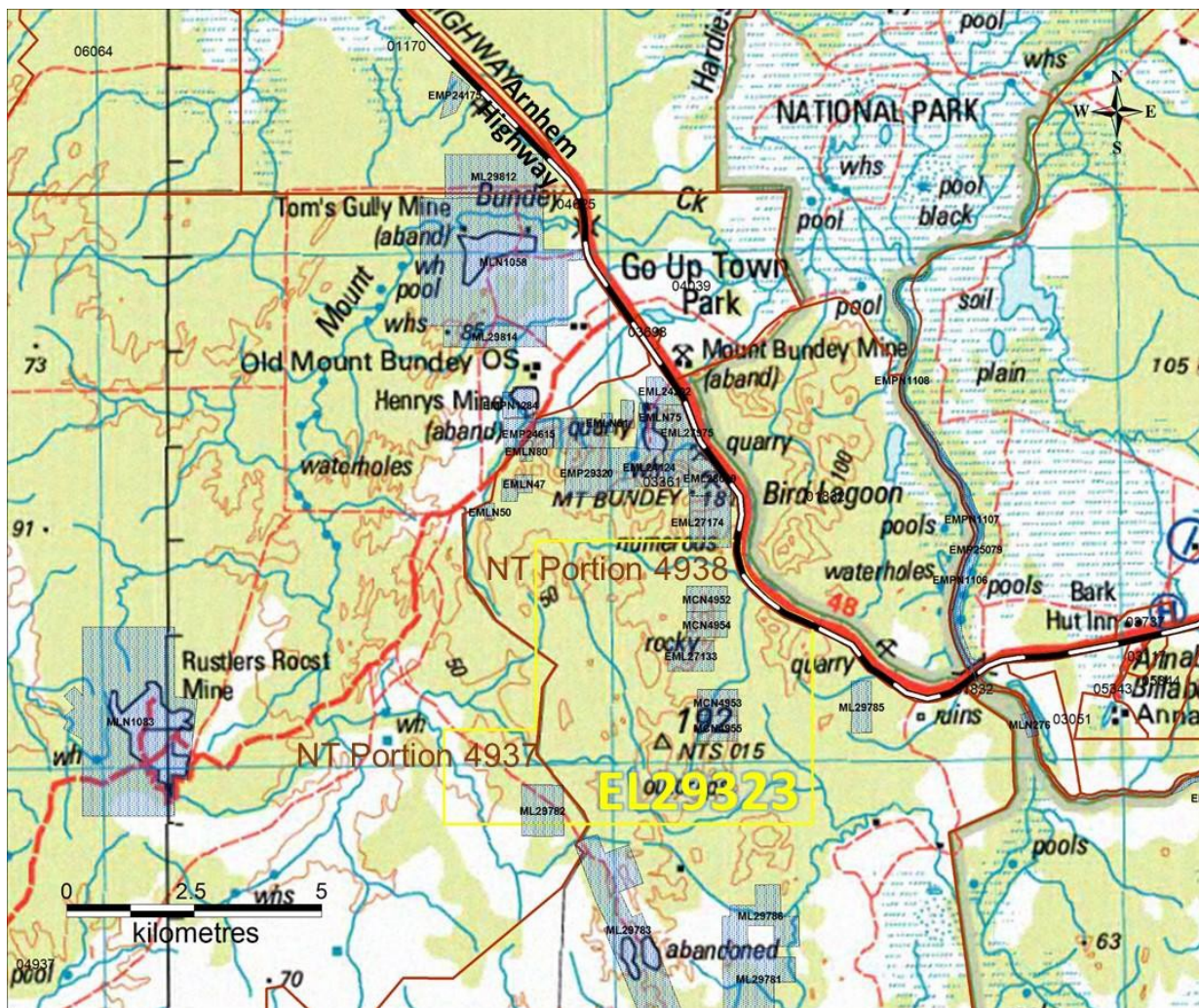


Figure 1 Tenement Location Map

4. GEOLOGY

The tenement is situated within the Pine Creek geosyncline. Early Proterozoic meta-siltstones, tuffs, shales and greywakes rest on an archean basement which outcrops 50km to the south east and has been identified by gravity drilling 40km to the north west at the Woolner Dome. Figure 2 shows a geology map from the Darwin 1:250,000 sheet.

Mary River has seen significant metal production (from gold and silver to copper and iron) with numerous prospects for base-metals, gold, silver and uranium as well as those for extractive commodities.

A summary of the geology for the region is as follows:

- Early Proterozoic folded (NW trending axial plane - doubly plunging) Mt Partridge Group, South Alligator Group (iron and carbonate rich siltstones, shales, tuffs and greywakes) and then Burrell Creek Formation (Finniss River Group sediments) have been intruded by a later, Early Proterozoic granitoid suite and Zamu Dolerite. These are again unconformably overlain by the Koombolgie Sandstones.
- These rocks are unconformably overlain by Mid Proterozoic sandstones and basalts of the Katherine River Group.
- These rocks are discordantly overlain by Mesozoic sandstones and recent Cainozoic sediments.

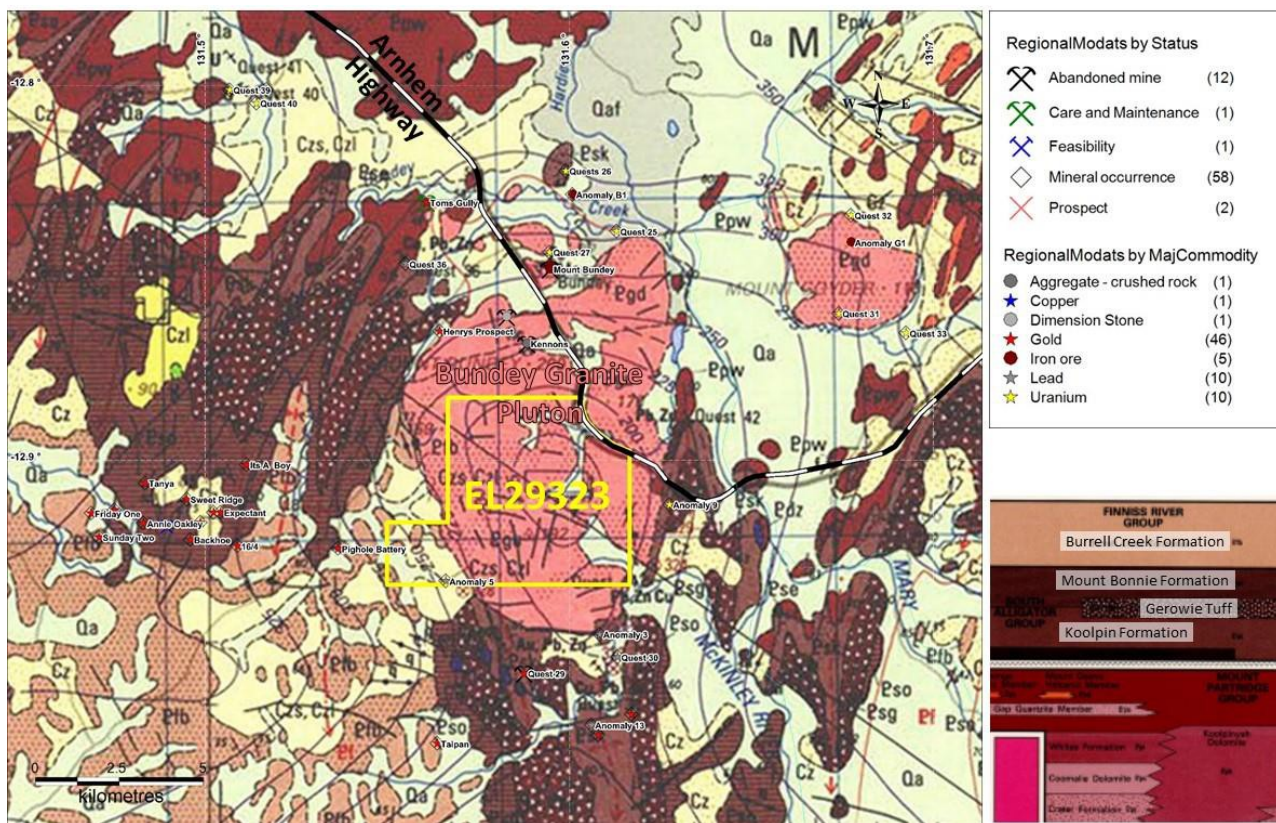


Figure 2 Tenement Geology (1:250K)

Mineralisation/Deposits

Exploration models suggest mineralising fluids (uranium, base metal and iron-bearing fluids) associated with the Mount Bunday Suite migrated into surrounding country rocks reacting with prospective Proterozoic sediments producing deposits such as Tom's Gully Gold Mine, the Quest gold and other base-metal deposits as well as the Mount Bunday Iron Ore mine. Skarn mineralisation has been mapped up to 300m around the pluton and is characterised by magnetite, pyrrhotite, chalcopyrite and allanite in thin lenses dipping away from the syenite contact.

Relevant significant nearby mineralisation includes:

- ☐ The Toms Gully gold mine, only 5kms to the north; a persistent vein in the South Alligator Group.
- ☐ Mt Bunday Iron mine 3.8km north (Skarn mineralisation).
- ☐ Quest 29 mine (13m @ 1.84g/t Au), 2.5km to the south (3.5km along strike).
- ☐ Rustlers Roost Mine, 6.5km to the west, gold mineralised sheeted quartz sulphide veins.

Numerous other prospects and occurrences surround the Mount Bunday Pluton within the South Alligator Group. The Bunday granite is also quarried for extractive stones/crushed rock.

Tenement Geology

The tenement covers the 1830Ma Mount Bunday calc-alkaline granite pluton (partially cut by Mt Goyder Syenite and K-rich shoshonitic lamprophyric dykes and felsic dykes) with skirting Lower Proterozoic sediments of the South Alligator Group in the south east and south western corners of the tenement. South Alligator Group sediments are prospective for precious and base-metal mineralisation. Also in other areas of the Pine Creek Geosyncline, this stratigraphy has recently been found to host significant high grade uranium mineralisation (Thundelarra's Thunderball deposit – Gerowie Tuff) and REE mineralisation (TUC Resources Quantum deposit) giving new exciting exploration models that have yet to be tested on this tenement. Thin alluvial cover partially masks the South Alligator Group sediments in the south west corner of the tenement.

Mineralisation within the tenement includes Anomaly 5 in the southwest where 11% Pb and 1185ppm Ag have been reported from polymetallic Cu-Pb-Zn-Ag veins. Stone quarries are also present within the tenement.

Geophysics

The Mount Bundey Pluton is clearly identified by a bouguer low in gravity data. A major crustal structure is shown by regional magnetics, cutting the north east end of the tenement, with a slight deflection as it crosses the pluton. Magnetic highs around the edges of the pluton within the tenement may indicate the presence of slivers of prospective Proterozoic sediments. Radiometrics show strong uranium anomalism within the Mount Bundey Granite; selectively within the granite, higher zones may present uranium targets.

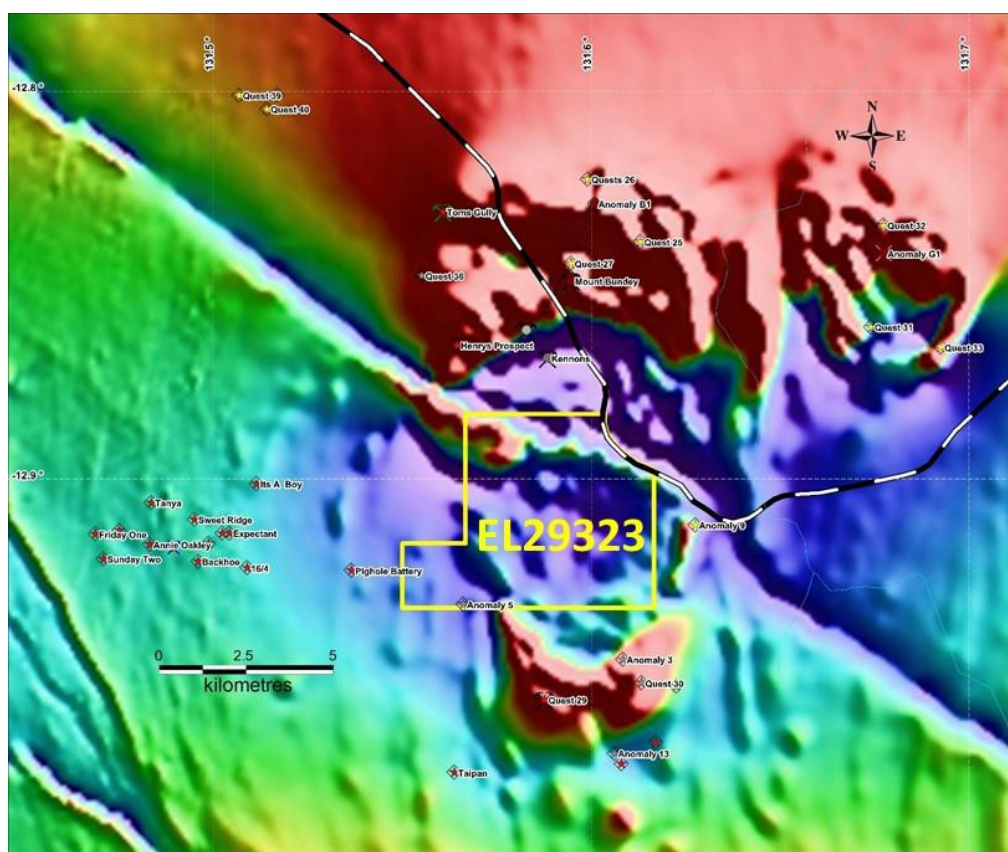
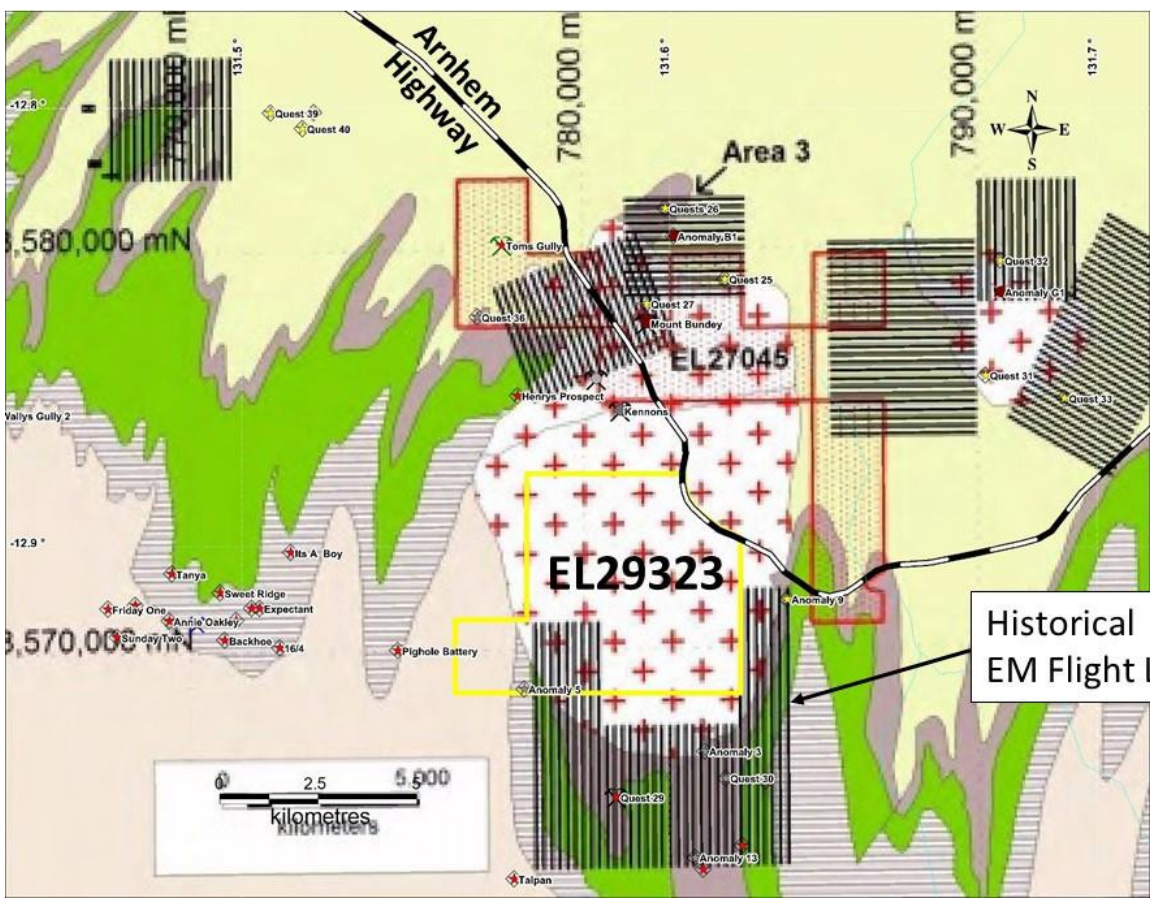


Figure 3 NT TMI Magnetics

5. PREVIOUS EXPLORATION

A brief review of available historic reports has shown:

- ☐ Exploration is recorded from 1973 (including Geopeko for gold, uranium and base-metals) to 2006 (Explormin on EL9594).
- ☐ Previous holders of tenements that covered/partially covered EL29323 includes Carpentaria Gold, Jimberlana Minerals, Aquitaine Australia, Normandy, Newmont and Dominion Gold.
- ☐ Commodities explored for include diamond, gold, base-metals and uranium.



6. EXPLORATION DURING YEAR 1

Reconnaissance exploration and rock chip sampling was undertaken during the year. A total of 7 samples (4 rock chip, 1 soil, 2 stream samples) were taken from locations in the south west and south east corners of the tenement. Weakly anomalous copper, lead and arsenic were returned from A3, in the south west of the tenement ~800m along strike from Anomaly 5, possibly indicating alteration associated with mineralisation at depth where more prospective stratigraphy follows the northerly plunge of the anticline beneath the alluvial cover and Burrell Creek Formation. Location of samples are shown in the figure below and results are attached in Appendix A.

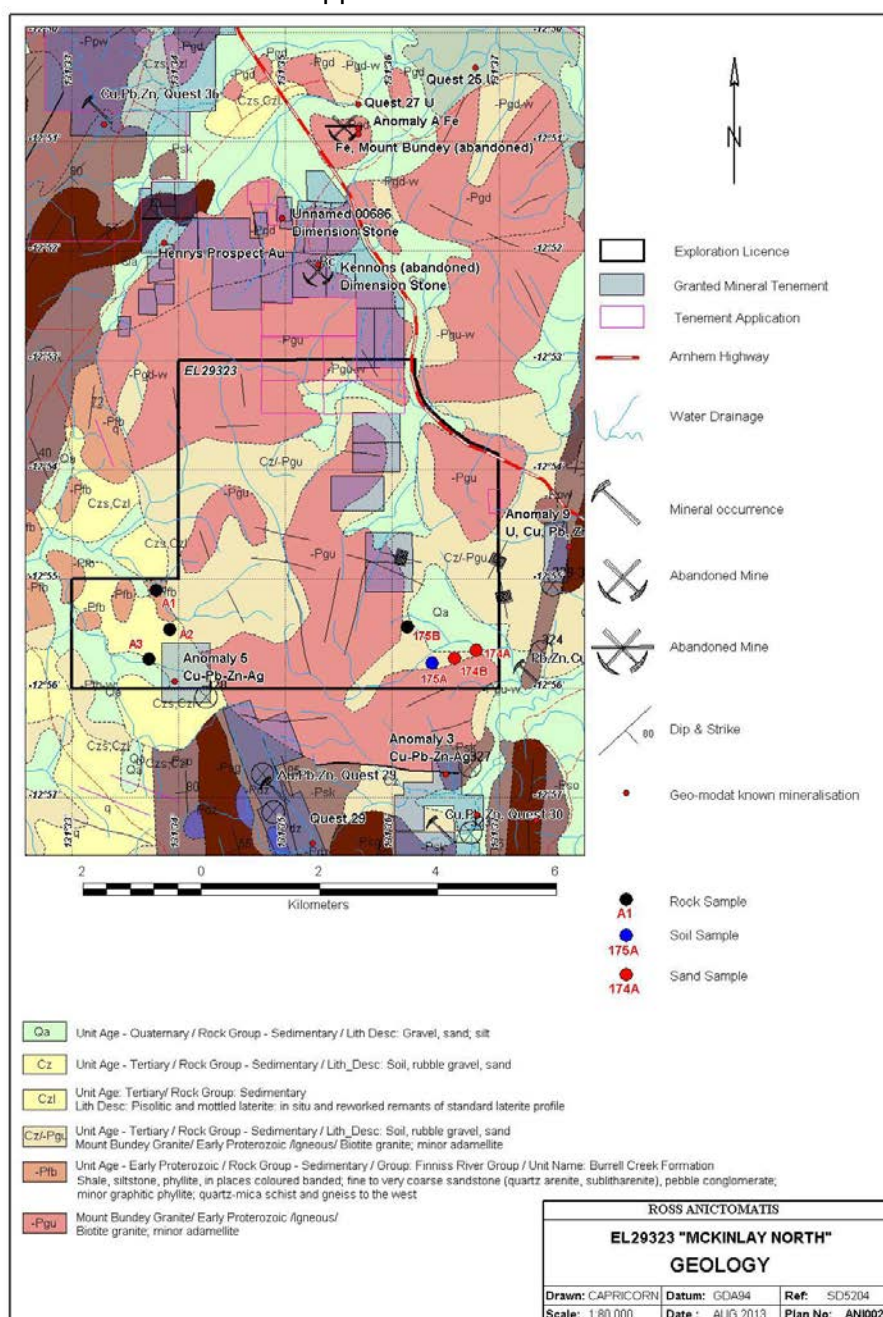


Figure 5 Sample Locations Year 1, 2013

7. CONCLUSIONS/RECOMMENDATIONS

The tenement covers prospective stratigraphy on the margins of a mineralising granite pluton. Further exploration is recommended with detailed historical data review specifically to determine historical surface geochemical work and EM surveys that cover the tenement. Any EM survey data within the tenement will be acquired and processed by a consultant geophysicist. Surface mapping will be undertaken to clearly map areas of alluvial cover and outcropping prospective South Alligator Group stratigraphy in the south east and south west of the tenement. Mapping in the south west may determine the orientation and plunge of the north dipping anticline that hosts anomaly A. Magnetic anomalies around the edges of the pluton will be investigated to determine if they indicate slivers of Proterozoic sediments or mineralised granite. It is also recommended that radiometric highs are visited and tested with a spectrometer.

Based on the outcome of the proposed year 2 exploration any historical EM data can then be analysed and interpreted to identify the depth and location of the South Alligator Group stratigraphy (Koolpin Formation conductor) beneath the Burrell creek formation and alluvial cover, as well as analyse any slivers of sediment found within the granite. The EM data will also give an indication of structures and provide target sites such as faults and fold hinges. An EM survey could be completed to compliment any historical data acquired if it does not cover areas identified in year 2. EM data combined with mapping in year 2 should provide targets for RC drilling along the northerly plunge of the Anomaly 5 anticline beneath the alluvial cover and Burrell Creek Formation.

8. REFERENCES

Stuart-Smith, P.G. et al. 1984. 1:100,000 Geological Commentary Mary River-Point Stuart Region Northern Territory. *1:100,000 Geological Map Series; Bureau of Mineral Resources, Geology and Geophysics.*

Dunster J. 2011. Second annual and final report for EL 27045, Mount Bunday Project, NT Rum Jungle Resources Limited.