



ACN: 127 411 796

**NT RESOURCES LIMITED**

**QUARTERLY ACTIVITIES REPORT**

**FOR THE PERIOD ENDED 30 SEPTEMBER 2010**

**ASX CODE: NTR**



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## Activities Report

### Background

NT Resources Limited (“NT Resources” or “the Company”) holds six granted Exploration Licences and two Exploration Licence applications (ELA27349 and 27747) in the Pine Creek Geosyncline region (Frazer Project) and nine granted Exploration Licences (EL27568, 27626, and 27714 to 27720), and Substitute Exploration Licence SEL 27526 in the Georgina-Atjararra region (Ooratippra Project) of the Northern Territory (“Tenements”) covering a combined area of approximately 2,800 square kilometres.

The Company has recently acquired two granted Exploration Licences (EL27639 and 27645) and two Exploration Licence applications (ELA28081 and 28190) covering 2,598 square kilometres known as the Plenty River project, located 150km north east of Alice Springs. The Company is completing a review of historical exploration activity on the project and will provide further information on the prospectivity in the coming weeks. The tenements which contain known ultramafic rocks are considered by the Company to be prospective for copper, nickel and the platinum group of metals.

The Frazer project south of Darwin is prospective for uranium, gold and base metals based on historical exploration reports and exploration carried out by the Company.

The Ooratippra project northeast of Alice Springs has geophysical magnetic and gravity anomalies resembling those at Prominent Hill and Olympic Dam and is prospective for uranium, gold, base metals and diamonds.

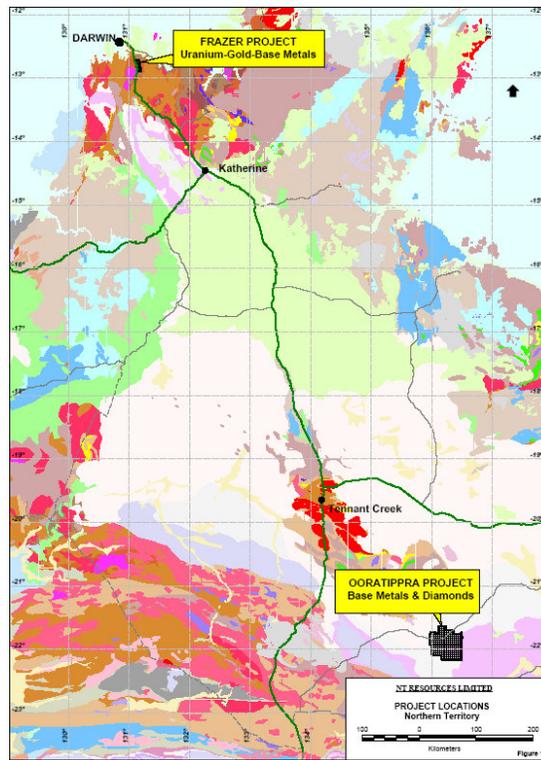


Figure 1: Location of NT Resources Limited project areas in the Northern Territory.



ACN: 127 411 796

## Activities Highlights

- On 6 July 2010 NTR issued a free 1 for 3 loyalty option to shareholders of the company as at 29 June 2010.
- Frazer Prospect Phase 1 drilling programme completed. A zinc/lead anomaly identified will have follow up drilling which has commenced;
- Frazer North Prospect drilling completed with assays pending;
- DeMonchaux Creek gold prospect initial sampling, mapping and drill programme completed with results released once available;
- Completion of fixed wing aerial geophysical survey covering 3,101 line kilometres of the Frazer prospect on 17 July 2010. The company will provide further details upon completion of analysis underway;
- 2,485 station, 1,000 metre grid ground based gravity programme on the Ooratippra Project completed 29 September 2010 with results expected in November 2010.

## Activities

The Company is pleased to advise of the on-going exploration programmes on its Acacia/Frazer project approximately 60 kilometres south of Darwin, and Ooratippra Project northeast of Alice Springs (Figure 1 and Figure 4).

### Frazer Prospect

The Frazer Prospect hosts a first order airborne uranium anomaly (Figure 2) with nearby anomalous copper, nickel, cobalt gossan and soil anomalies and an airborne electromagnetic (AEM) conductor identified by Geoscience Australia. Drilling to date supports the interpretation that the AEM conductor is associated with the Whites Formation, a graphitic shale, host rock to most of the early Rum Jungle uranium and base metal deposits and mines.

The Frazer orientation drilling programme (Phase 1) is complete. Two east-west lines of vertical RAB holes 550 metres apart, with holes spaced at 50 metre intervals, were drilled across the radiometric anomaly and gossan for a total of 2,194.12 metres in 72 holes (Figure 3). The holes were drilled through the soil cover and weathered zone to identifiable rock. A diamond core sample was taken from the bottom of each hole.

A lead and zinc geochemical anomaly was identified, with a maximum 6 metre interval of 1380ppm Zn and 805ppm Pb. **Significantly, it showed that the main part of the Frazers radiometric uranium anomaly was not tested by the Phase 1 RAB programme** (see Figure 3). Phase 2 RAB programme is currently underway to test this radiometric anomaly and the shale/magnetic unit contact along strike.

### Frazer North uranium, copper, nickel, cobalt, platinum Prospect

A Rotary Air Blast ("RAB") geological orientation drilling programme of 103 holes was planned to test the Frazer North uranium and base metal anomalies within Exploration Licences EL26434 and EL24932 (Figure 5). During the quarter, all holes were completed. Assay results will be released on completion of geochemical analysis.



ACN: 127 411 796

### **DeMonchaux Creek gold Prospect**

During the quarter an orientation rock chip sampling and mapping programme was carried out on the highly prospective DeMonchaux Creek gold prospect (Figure 5) southeast of the Frazer uranium prospect (Figure 5). Compilation of historical databases is underway which will be integrated with the new mapping and sample assay data and reported in the current quarter.

### **Airborne Geophysical Survey**

In early July 2010, the Company flew a fixed wing low level closely spaced aerial geophysical survey of 3,101 line kilometres covering the Acacia tenements, including the Frazer and Frazer North uranium prospects and the DeMonchaux Creek and Acacia North gold prospects (Figure 5).

The results are currently being interpreted and integrated with historical and current databases. This survey is expected to provide detailed high quality magnetic and radiometric data which will assist in identifying exploration and drill targets for future programmes.

### **Ooratippra**

The Ooratippra Project hosts a gravity and co-incident magnetic anomaly which is one of the largest untested gravity anomalies in Australia with dimensions in the order of 35 kilometres by 15 kilometres.

Early gravity surveys over the anomaly used station spacings too wide to enable accurate depth estimations to the top of the causative body to be made.

During the quarter, NTR completed a 2,485 station, 1000 metre spaced helicopter borne ground based gravity survey. This survey will better constrain the regional gravity anomaly, and facilitate the modelling of the depth to basement, enhance basin and basement structures, and outline the residual gravity anomaly for a targeted diamond core drilling programme planned to drill to basement below the Georgina Basin sediments. The target is Iron Oxide Copper Gold (IOCG)-style mineralisation.

Lindeman Geophysics Pty Ltd, an Australian Company with many years experience in gravity survey interpretation both in Australia and overseas, are interpreting the data and are expected to present their report in November 2010.

### **FOR FURTHER INFORMATION:**

Richard Wolanski – Executive Director

Anthony Barton – Non Executive Chairman

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### **Competent Persons Statement**

*The information in this report that relates to exploration results is based on information compiled by Mr KA Rogers (Member of the Australian Institute of Geoscientists), Chief Geologist for NT Resources Limited. Mr Rogers has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Mineral Resources and Ore Reserves. Mr Rogers consents to the inclusion in the report of the matters in the form and context in which it appears.*

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ACN: 127 411 796

### Background

NT Resources Limited (“NTR”) is a mining and exploration company whose prime focus is the definition and development of its uranium, base metal and gold prospects in the Northern Territory (Figure 1).

The Acacia tenements cover a significant portion of the under explored northern part of the Rum Jungle Mineral Field in the Pine Creek Orogen (Figure 5). There are a number of untested uranium, base metal and gold targets and the area is prospective for new discoveries. The Rum Jungle Mineral Field was a significant producer of uranium in unconformity-type and vein-style high grade deposits in the 1950’s and 1960’s (Table 1).

*Table 1: Uranium Deposits in the Rum Jungle Mineral Field*

Deposit Name	Ore tonnes	Grade U <sub>3</sub> O <sub>8</sub> %	U <sub>3</sub> O <sub>8</sub> tonnes
Whites	396,000	0.27	1,069.2
Dysons	157,000	0.34	533.8
Rum Jungle Creek South	663,500	0.43	2,853.0

Source: Independent Geological Report, Table 2, NT Resources Limited Prospectus 2009

The Ooratippra tenements cover a very large coincident gravity and magnetic anomaly (Figure 3) that has never been drilled for Olympic Dam style copper-gold-uranium mineralisation in the Proterozoic basement below a cover sequence of sediments within the Georgina Basin. These sediments have recorded lead, zinc and silver mineralisation at surface within the tenements, suggestive of MVT (“Mississippi Valley Type”) base metal mineralisation, and are also prospective for phosphates and kimberlitic indicator minerals.

At Acacia, NT Resources Limited has a 100% interest in six granted Exploration Licences (EL24932, 25027, 26434, 27282, 27746 and 26777) and two Exploration Licence applications (ELA27349 and 27747) covering 490 km<sup>2</sup> located about 60 km south of Darwin. The Ooratippra tenements are located 300km south east of Tennant Creek, and consist of nine granted Exploration Licences (EL27568, 27626, and 27714 to 27720), and a Substitute Exploration Licence (SEL27526), together totalling 2,400km<sup>2</sup>.

The Company has recently acquired two granted Exploration Licences (EL27639 and 27645) and two Exploration Licence applications (ELA28081 and 28190) covering 2,598km<sup>2</sup> known as the Plenty River prospect, located 150km northeast of Alice Springs. The Company is completing a review of historical exploration activity on the prospect and will provide further information on this prospect in the coming weeks.



ACN: 127 411 796

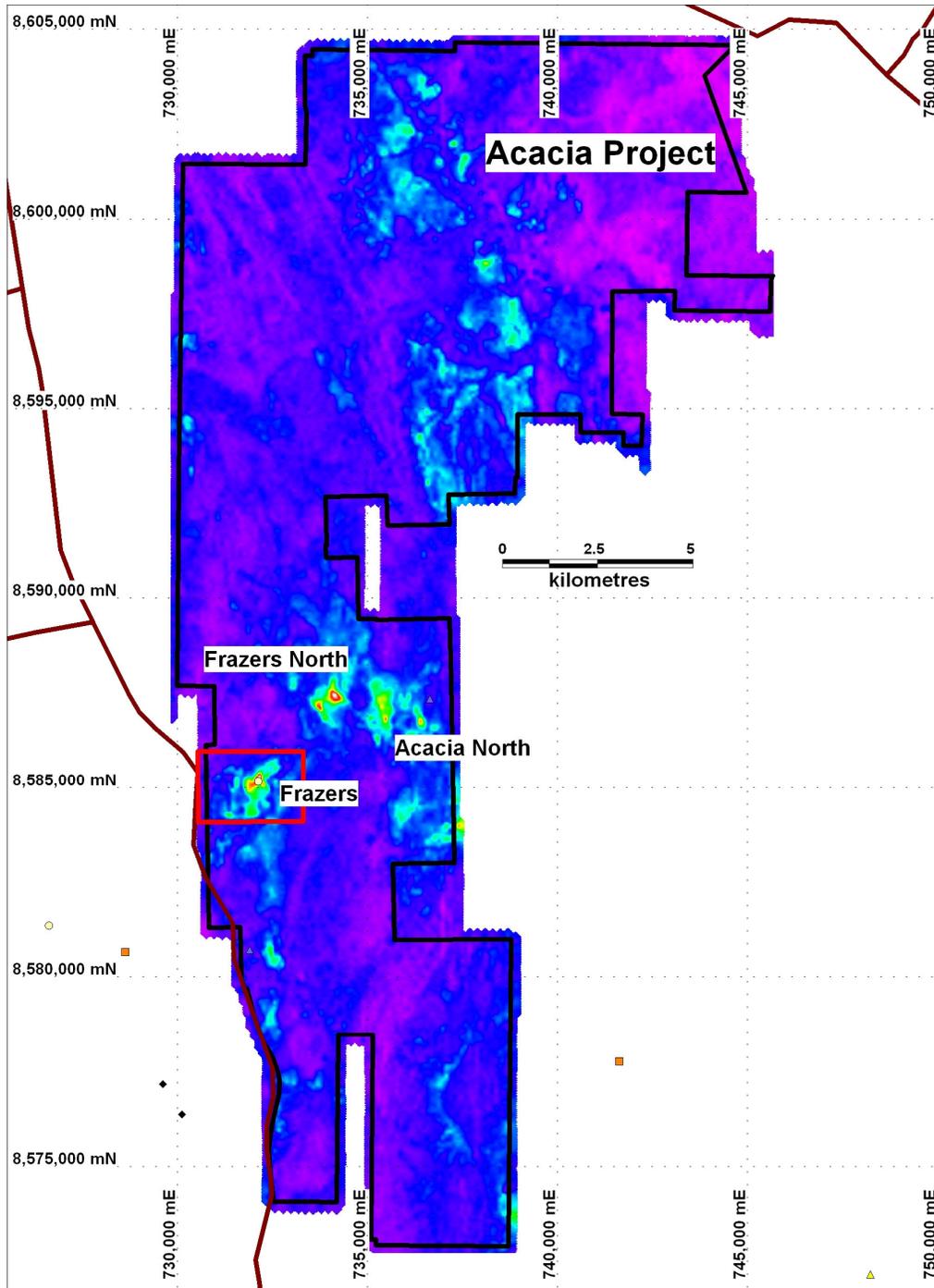


Figure 2: Location of the Frazers prospect with outline (red box) of area of Figures 3 and 4, showing the three main radiometric anomalies to be drill tested (Frazers, Frazers North and Acacia North) on a linear enhanced uranium radiometric anomaly image.



ACN: 127 411 796

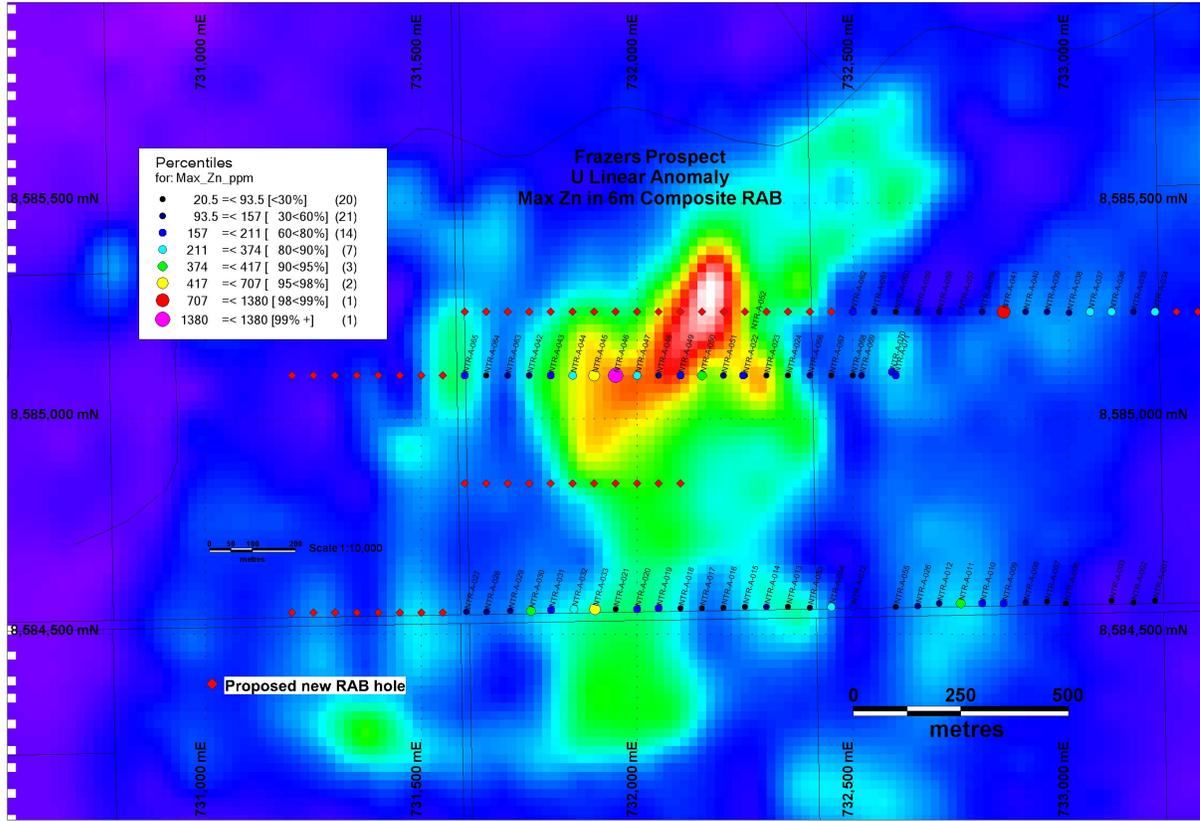


Figure 3: Maximum zinc values in Phase 1 RAB drill holes at Frazers prospect on a linear uranium image (red colours high, blue low).



ACN: 127 411 796

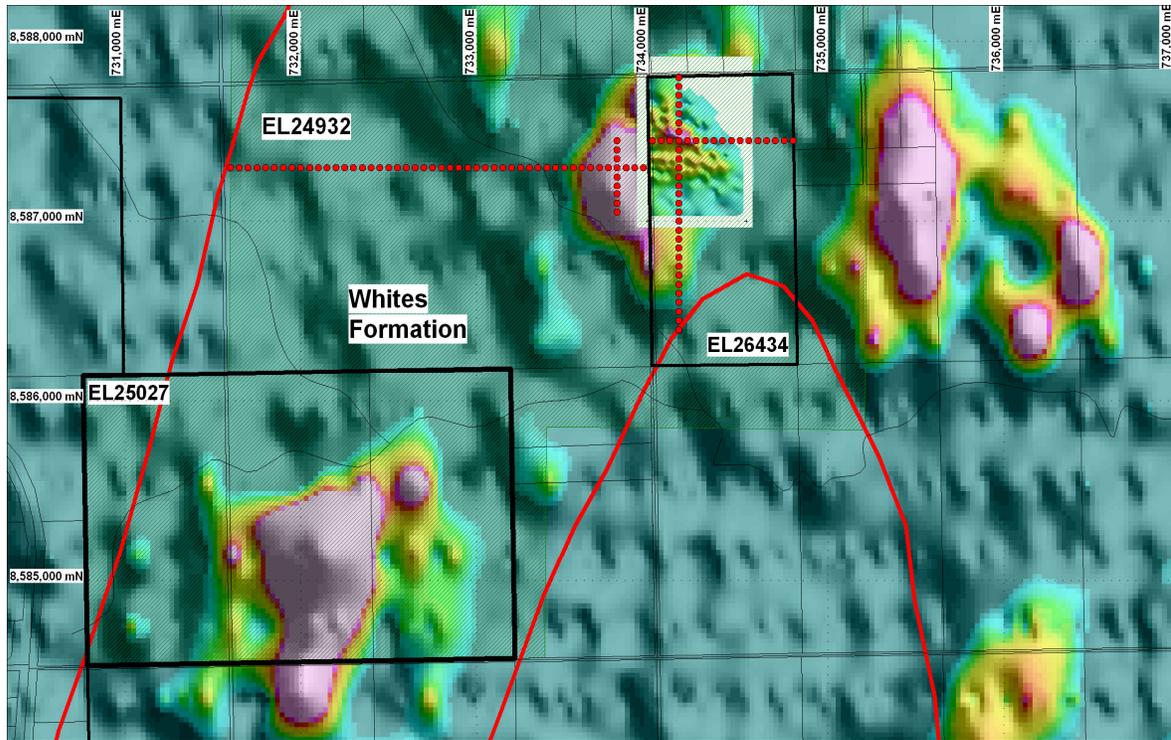


Figure 4: Frazers North Drill Hole Locations

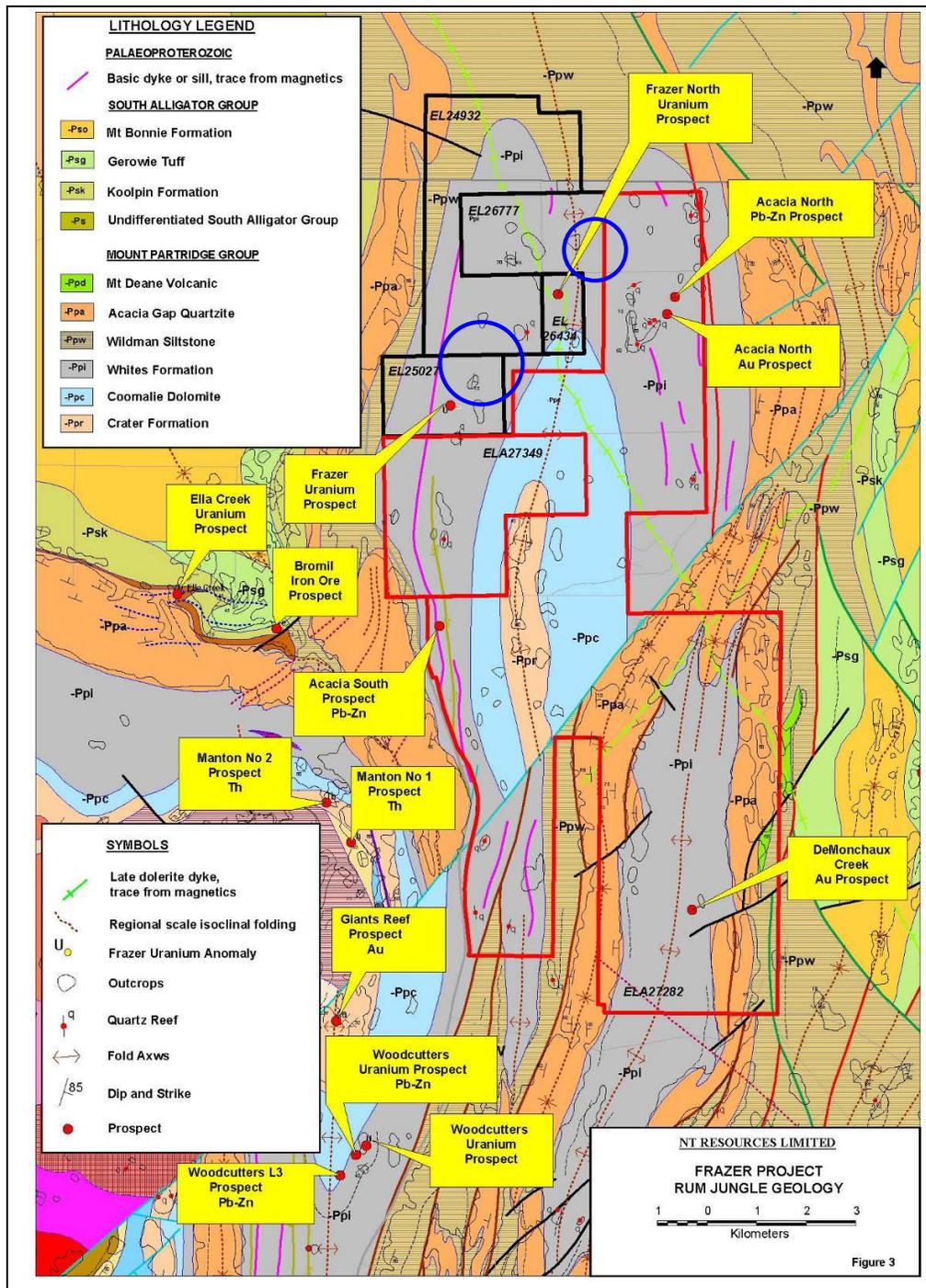


Figure 5: Frazer's Project geology with uranium and base metal prospects and those immediately targeted (blue circles) for drilling on the granted EL's (black outlines). ELA's in red outline have been granted since production of this map.