

EXPLORATION LICENCE 10322

GREAT NORTHERN

**ANNUAL REPORT ON
EXPLORATION ACTIVITIES FOR
THE SIXTH YEAR OF TENURE
2007/2008**

Dept. of Regional Development,
Primary Industry,
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1. Introduction

Exploration Licence 10322 occupies two one-minute graticular blocks, an area of 6.7 square kilometres, situated in the Batchelor 1:00,000 sheet area. Excluded from the northern part are Mineral Claims which cover old workings of the Great Northern mine. Figures 1 & 2 show the location and boundaries of the tenement. Title was granted to Gary Anthony Clarke and Brian John Briggs for a three year term commencing 18th November 2002.

The area lies approximately 35 kilometres east of Adelaide River township, and is accessed by various station tracks via Mt Ringwood Station homestead in the north or the old Goodall minesite in the southwest; these tracks may be impassable during monsoonal weather. The topography of the area is subdued, except around the old mining area in the north, consisting of a mixture of isolated low hills and rises interspersed with alleviated areas leading down to McCallum Creek to the east. Vegetation is open savannah woodlands, with a grassy understory, typical of this part of the Top End.

2. GEOLOGY. MINERALISATION AND PAST GOLD PRODUCTION

The general geology of the area is shown on the published 1:100,000 scale geological map Batchelor and Hayes Creek Region (BMR 1985); the relevant portion of this map is reproduced in Figure 3.

The entire Licence area is underlain by sedimentary rocks assigned to the Burrell Creek Formation, of the Finnis River Group, in the upper section of the Early Proterozoic Pine Creek Orogen stratigraphic sequence. The sediments comprise a dominantly greywacke/mudstone sequence of turbidity facies. These rocks have been subjected to green schist facies regional metamorphism, locally with a thermal metamorphic overprint close to granite contacts, and are now represented by slates and metagreywackes showing a variable degree of slaty cleavage depending on original lithology. The meta-sediments are intruded by pre-metamorphic dolerite and lamprophyre dykes.

The structure consists of north to northeast trending, moderately tight symmetrical folds, having gentle northerly plunges. Four major anticlinal trends are recognized in the district and are important in relation to the localisation of gold mineralization; these include the Great Northern and Great Western, the Goodall and the Star of the North trends.

Historical gold workings at Great Northern, Great Western and Star of the North are reported to have produced 112kg of gold between 1896 and 1920, from small pits and shafts. The gold was found in concordant quartz veins and saddle reefs along the hinge lines of the north-plunging anticlines. At Great Northern auriferous saddle reefs, up to 3m thick, occur over a strike length of at least 2000m.

The Goodall open pit of Western Mining. Located some five kilometres west of Great Northern, produced 4,095kg of gold, from ore with an average head grade of 1.99g/t Au, between 1988 and 1993. The deposit consisted of a stock work of thin conformable and cross-cutting quartz veins, and had overall dimensions of 750x50m. The ore zone was located some 60m to the east of a major anticlinal axis (the Howley anticline).

3. PREVIOUS EXPLORATION ACTIVITIES

In recent times serious gold exploration in this part of the Pine Creek field commenced in 1980 when Exploration Licences 2361 and 2362 were explored by W R Grace Australia and Western Mining Corporation under the Mt Ringwood Joint Venture. Initial programs of reconnaissance and rock chip sampling discovered a number of gold anomalies, including the B1 anomaly which eventually became the Goodall gold mine. Exploration continued up to the early 1990's and included regional soil geochemical sampling and geological mapping, together with detailed mineralisation was identified outside the Goodall project area.

Westerns Mining's work stimulated intensive gold exploration in the surrounding district by many other companies through to 2000. Most work concentrated on exploring poorly exposed or alluvial areas, which had not been exhaustively tested by Western Mining, utilising mainly reconnaissance RAB drilling, soil and drainage geochemical sampling and a variety of remote sensing techniques. Some of this work overlapped the area EL.24560, but no anomalies of significance were discovered. Post 1980 company exploration is summarised in Table 1

During the first five years of the current Exploration Licence three good prospects have been discovered to the south of the main Great Northern workings. These areas are known as Backhoe Hill, Carl's Hill and Golden Nob. All were discovered by metal detector and followed up with soil sampling and rock chip sampling.

4. EXPLORATION WORK CARRIED OUT IN YEAR SIX OF THE LICENCE

During Year Six a backhoe trench was dug on a flat amongst some old Chinese diggings 13° 12'50.5 S, 131° 25'22.1E. Gravel samples were taken from along the trench and sent for assay. Gravels from the trench were also panned on site with slight traces of gold obtained in several samples. Samples sent for assay were lost due to the closure of the assay lab. Work will have to be repeated next year as backhoe trench was backfilled.

5. YEAR SIX EXPENDITURE

Backhoe Hire and Transport	\$ 3200.00
Labour 14 days @ 200	\$ 2800.00
Vehicle (UTE) 14 days @ 150	\$ 1400.00
Camp Supplies	\$ 400.00
Fuel	<u>\$ 450.00</u>
Total	\$ 8250.00

6. PROPOSAL FOR EXPLORATION DURING YEAR THREE OF THE LICENCE.

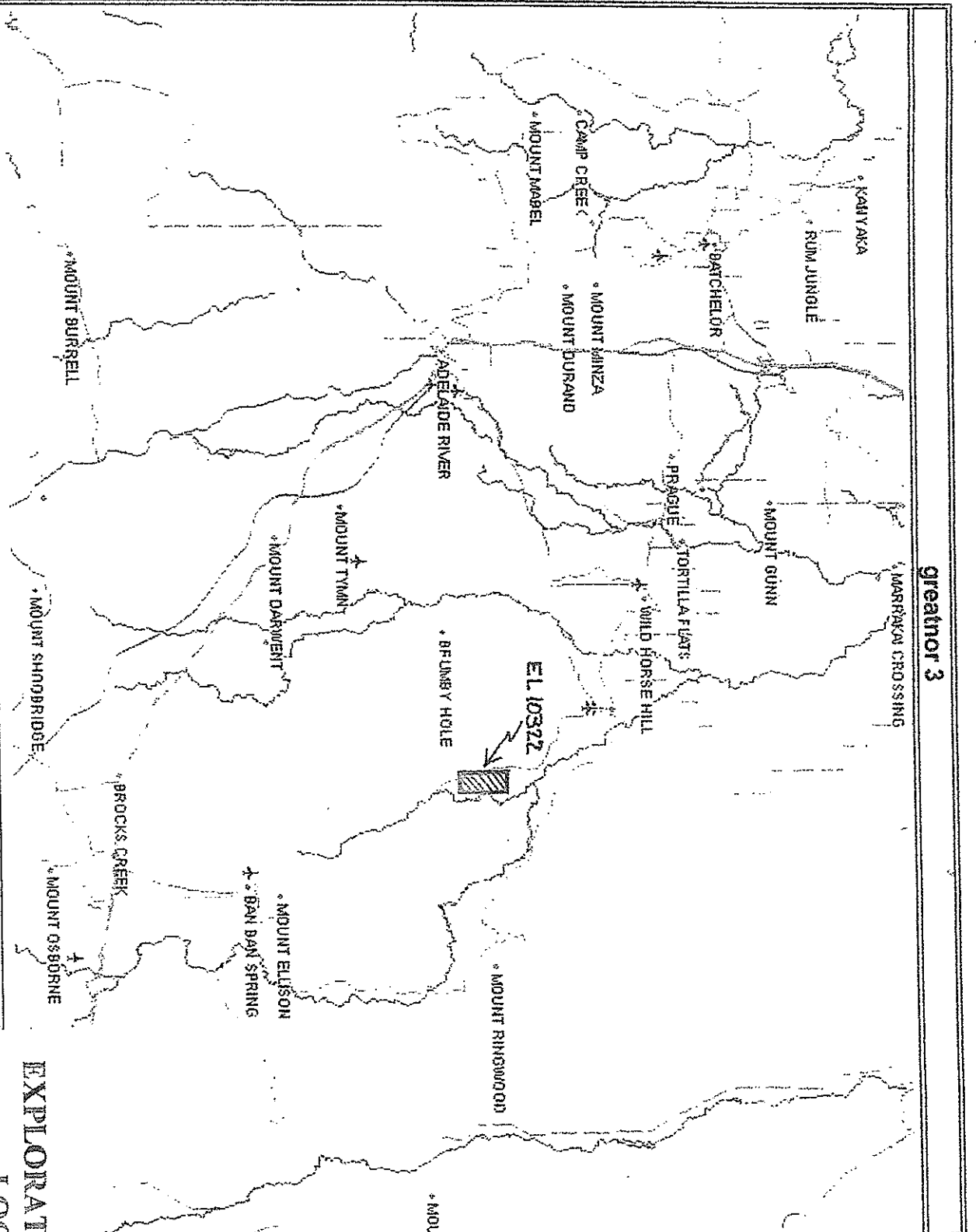
Year seven will be spent doing follow up samples on Alluvials sampled during Year Six. Expenditure for Year Seven will be approximately \$10000.00.


TABLE 1 - SUMMARY OF POST-1980 EXPLORATION.

<u>TENEMENT</u>	<u>TITLEHOLDER</u>	<u>LOCATION</u>	<u>EXPLORATION ACTIVITIES</u>	<u>RESULTS OBTAINED</u>
EL2362 1983/89	Western Mining	Area covers Star of the North, Great Northern, Great Western.	Regional helicopter reconnaissance and rock chip sampling (1980/81); detailed grid survey, mapping and surface sampling of anomalies (1982/84), soil geochemistry and costeaning (1985).	Auriferous quartz reefs and stockworks at Johns Hill, and C3, C4 and C5 anomalies in overlap with EL23516.
EL4217 1983/89	Douglas, Zapopan, Nobelex.	North of Goodall	Landsat and air photo studies, field reconnaissance and rock-chip sampling; 100 RAB drillholes, 67 reaching bedrock.	Two holes struck anomalous gold on inferred projection of Goodall anticlinal axis.
EL5011 1988/89	White Mining, Zapopan.	Margaret River flats E of Great Western.	Reconnaissance soil sampling of outcrop areas, and one traverse of RAB drilling of alluvial area.	No anomalies detected.
EL's 4218 & 4220B 1983/89	White Mining, Zapopan & Nobelex.	South of Great Western.	Reconnaissance geology and rock chip sampling, and stream sediment sampling.	No encouraging results.
EL5318 A 1987/91	Western Mining.	John's Hill area.	At C3 anomaly three diamond drill holes tested north-dipping quartz veins in a 50m wide meta-dolerite N-S dyke.	Veins too narrow and wide-spaced (20m) for economic mineralisation; grades up to 3.38g/t Au, widths to 0.8m.
			At C4 anomaly five 60m RC holes tested saddle reefs and stockworks mainly on east anticlinal limb.	Several narrow gold int'cepts best 5.2g/t Au over 2.0m.
EL5313 1988/91	Oceania, Golden Plateau Pegasus	S & SE of Goodall	Aeromagnetics, geological mapping, rock chip and drainage geochem. sampling, with follow up detailed geology, sampling, trenching and RC drilling of prospects.	Follow up of magnetic and rock chip anomalies at Three Rest Hill, Copper Pits and Hallelujah prospects did not indicate economic mineral'n

TABLE 1 CONTINUED.

EL8139 1993/95	Territory Goldfields.	W & SW of Great Northern.	Aeromagnetic interpretation, LAG geochemical sampling, and 23 RAB drillholes for 97m.	No results for follow up.
EL9167 1995/97	Northern Gold Camelot.	Between Star of the North and Great W'n.	Regional soil sampling on 400m by 100m grid, on 19 lines over mainly alluvial areas, for total of 431 samples.	No follow up reported.
EL8504 1995/97	Northern Gold Dominion	West of Great North'n.	Area is 80% black soil plain; RAB drilled on 1600mX200m grid for 117m in 18 holes with analyses for Au, Ag and base metals.	No significant anomalies.
EL7090 1998	NT Gold P/L.	Great Northern.	Survey with metal detectors in the vicinity of the historical workings.	Several small quartz veins with coarse to nuggety gold were found and pegged under Mineral Claims.
EL9306 1995/99	Markaranka, Agricola Gold.	W and SW of Great Northern.	Limited rock chip sampling.	Anomalies too small to warrant further work.
EL9667 1996/2000	Markaranka,	S of Great North'n.	No field exploration done.	
EL9122 1995/2001	Northern Gold, Dominion.	Margaret River flats E of McCallum Creek.	Regional soil sampling on 100mX400m grid, comprising 12 traverse and 241 samples analysed for Au, Ag, As and base metals. Several phases of infill and follow up soil sampling were done.	All anomalies were very low order, not warranting further Work.



 Northern Territory Government
Department of Resources, Industry & Environment

Legend

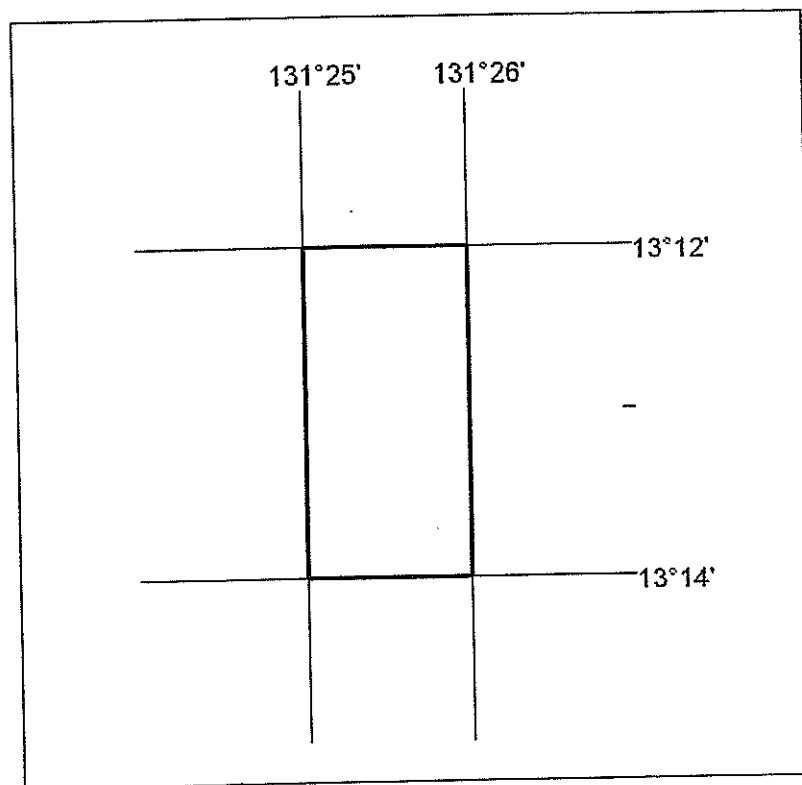
- Other
- Offshore Minerals
- Reserves

**EXPLORATION LICENCE 10322
LOCALITY MAP**

Figure 1

Printed for : orid on : 06-Dec-2004
NOTE TO MAP USERS : Mining and Exploration Tenure depicted here are plotted from descriptions supplied by the holders and the Northern Territory

Datum : Lat



EL10322
2 Blocks
6.69 sq kms

