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EXPLORATION LICENCE 9408

GUM RIDGE WEST

FIFTH ANNUAL REPORT

4 January 2000 - 3 January 2001

LICENSEE:
GIANTS REEF EXPLORATION PTY LTD
A.C.N. 009 200 346

AUTHOR:
S.C. RUSSELL

January, 2001

DISTRIBUTION:
Department of Mines & Energy ☐
Giants Reef Exploration Pty Ltd ☐
Giants Reef Mining Limited ☐

SE53-14
TENNANT CREEK 1:250 000
5758
TENNANT CREEK 1:100 000

1. INTRODUCTION

EL 9408 *Gum Ridge West* is located east-northeast from Tennant Creek and 3 kilometres west of the abandoned Gigantic gold mine. It is one of a group of contiguous tenements, referred to as the *Eastern Project Area*, being explored by Giants Reef Exploration Pty Ltd. The other tenements are ERL 85, ELs 7636, 7985, 9372, 9645, 9685 and the Blue Moon group of ML C575, MC C377 and Hld C36.

This report records the work completed during the fifth year of the Licence, from 4 January 2000 to 3 January 2001.

2. LOCATION

EL 9408 *Gum Ridge West* is approximately 20 kilometres east-northeast of Tennant Creek. It is located on the Tennant Creek 1:100 000 scale map sheet.

Access is via a four-wheel drive track starting near the Tennant Creek microwave repeater tower and following the "Lone Star" trend of old gold mines to a point about 2 kilometres west of the Gigantic prospect, thence heading north along Giants Reef's cleared grid lines into the southern part of EL 9408.

Alternatively, the central part of the Licence area can be reached by driving east along another system of four-wheel drive tracks starting from the old Tennant Creek telegraph station on the Stuart Highway.

Figure 1 shows the EL and surrounding tenements.

3. TENURE

EL 9408, originally covering 4 blocks totalling approximately 13 square kilometres, was granted to Giants Reef Exploration Pty Ltd (GRE) on 4 January 1996 for a term of 6 years.

The Licence is worked as one project in conjunction with ERL 85, EL's 7636, 7985, 9372, 9645, 9685 and the Blue Moon group of ML C575, MC C377 and Hld C36.

A waiver of reduction required at the end of Year 3 was granted enabling the retention of two blocks for the term of Year 4 to 3rd January 2000.

On January 4th 2000, EL 9408 was halved to a single block (3km^2).

EL 9408 is subject to an Indigenous Land Use Agreement, signed in September 2000 with the Native Title holders of the Tennant Creek region and the Central Land Council.

The Licence is within NT Portion 494, Perpetual Pastoral Lease 1142, Tennant Creek Station.

Figure 2 shows the Licence area held in Year 5.

4. GEOLOGY

4.1 Regional geology

The regional geology of the Tennant Creek field has been detailed in many publications. Papers contained in AusIMM Monograph 4 (Geology of the Mineral Deposits of Australia and Papua New Guinea), Volume 1, pp 829-861 would give the reader a good introduction to the regional geology and styles of gold-copper mineralisation of the area.

In 1998 the Northern Territory Geological Survey released its second edition geological map and explanatory notes on the Tennant Creek 1:250 000 sheet, which includes stratigraphy.

4.2 Local geology

Some low siltstone, sandstone and shale outcrops of the Palaeoproterozoic Warramunga Formation are located in the southwestern area of the Licence. Elsewhere the bedrock is area is covered by Quaternary alluvium and red sand, except for an isolated haematite-quartz ironstone outcrop near the southeastern corner of the Licence, at AMG 434700E 7834500N, the site of the Western Moon prospect and aeromagnetic anomalies.

5. WORK DONE DURING THE YEAR

5.1 Indigenous Land Use Agreement

Exploration Licence 9408 is subject to an Indigenous Land Use Agreement (ILUA), signed in September 2000 with the Native Title holders of the Tennant Creek region and the Central Land Council. A large number of other tenements and EL applications in the region are also subject to the ILUA. These are all on the Tennant Creek and Phillip Creek Pastoral Leases.

The ILUA provides for 25 years of continuity of tenure, and covers any present or future Exploration or Mining Tenement applications and development within the above Pastoral Leases.

5.2 Structural and timing controls on Au-Cu-Bi mineralisation research project

Dr Nicole Adshead-Bell from James Cook University of North Queensland completed a two-month study of the structural and timing controls on Au-Cu-Bi mineralisation within the Tennant Creek mineral field. Her work included several days collecting structural data within the Eastern Project Area including EL 9408 and also rock chip sampling of exposed Warramunga Formation within the Licence.

One rock chip sample (423009) was collected from the Licence area and sent to Australian Laboratory Services (ALS), Alice Springs for gold, copper, bismuth and iron analysis. The sample collected was mapped as a foliated porphyry and forms part of a regional data set collected over the 2-month research period. Analytical data for the sample are tabulated below. Raw analytical and structural data for this sample are presented as Appendix 1.

Sample Number	Easting (AMG)	Northing (AMG)	Au (ppm)	Cu (ppm)	Bi (ppm)	Fe (%)	Sample Description
423009	432590	7834982	<0.01	6	<5	2.66	Foliated porphyry

5.3 Magnetic target modelling

Further magnetic interpretation and modelling was carried out during the fifth year of tenure for EL 9408 by Frank Lindeman of Lindeman Geophysics Pty Ltd, Victoria. Geophysical assessment focussed on the Western Moon prospect and investigating four previously identified geophysical anomalies (EL 9408 *Gum Ridge West* Fourth Annual Report 4 January 1999 – 3 January 2000).

5.3.1 South-east anomaly

This SE-NW trending magnetic response was satisfactorily modelled with a single ellipsoidal body using Potent© geophysical software. The modelled body has an interpreted depth to surface of just under 200 metres and a magnetic susceptibility of 0.02 SI units.

5.3.2 North-east anomaly

Initially this body was identified in analytic signal processing however on re-examination of the data, this anomaly was downgraded and is not considered of high priority.

Modelling has confirmed this opinion, with the causative body having a depth to surface in excess of 200 metres.

5.3.3 South-west anomaly

This body is interpreted as "remanent" and was modelled using Potent© geophysical software. This "remanent" anomaly is not considered of high priority as the main contributor to the magnetic response is a negatively polarised body characterised by –0.04 SI units.

5.3.4 North-west anomaly

This anomaly is located close to the edge of a detailed Western Mining Corporation (WMC) aeromagnetic survey as described in report EL 9408 *Gum Ridge West* Fourth Annual Report 4 January 1999 – 3 January 2000. A single ellipsoidal body gave a satisfactory model result using Potent© geophysical software.

A comparison of the source position relative to the WMC data suggests that much of the body lies outside of the coverage. This combined with the interpreted depth to surface being approximately 110 metres makes this body of some interest.

6. REHABILITATION

No work requiring rehabilitation measures was carried out over the Licence area during the fifth year.

7. CONCLUSIONS

Geophysical assessment of the Western Moon prospect confirmed and enlarged on earlier geophysical work. The modelling of four discrete magnetic anomalies has provided a reasonable indication of the causative body's size, susceptibilities and depth to surface.

Further detailed geophysical assessment is required over the Western Moon anomalies and additional data collection is warranted.

Valuable information has been produced from Dr Nicole Adshead-Bell's research study. This has greatly increased our understanding of the structural and timing controls on Au-Cu-Bi mineralisation within the Eastern Project Area. This regional information will be applied at the prospect level.

Reverse circulation drilling of the Western Moon magnetic targets is envisaged during the next term of tenure.

EL 9408 is regarded as a very prospective block by virtue of its geology, magnetic anomalies, and its proximity to a number of old mines and mineralised occurrences.

8. EXPENDITURE

The proposed expenditure for the fifth year was $20,000. Changes to the planned programme for the fifth year, notably the postponement of drilling at the Western Moon prospect, meant that the expenditure covenant for Year 5 was not fully met. Actual expenditure was as follows:

		$
1.	Geology	8,715
2.	Geophysics	2,266
3.	Geochemical	128
4.	Surveying	0
5.	Data integration	1,321
7.	Drilling (access and site preparation)	0
8.	Tenure maintenance	2,885
9.	Administration and Overheads	3,082
10.	Rehabilitation	0
	TOTAL	18,397

Expenditure on the Licence area is high and reflects the regional research efforts GRE has adopted this year within the Eastern Project Area. Exploration Licence 9408 is one of a group of contiguous tenements, referred to as the Eastern Project Area, being explored by GRE. In an initiative to further understand the complex nature of mineralisation within this area Dr Nicole Adshead-Bell (refer to section 5.2) of James Cook University completed a two-month study of the structural and timing controls on Au-Cu-Bi mineralisation within the Tennant Creek mineral field and focussed her efforts on the Eastern Project area. Her time was charged to the Eastern Project Area at times and was not always tenement specific. The result of these field and office costs has been to increase the geological and administration costs normally associated with this one-block Licence.

Tenure maintenance costs include the preparation of two relinquishment reports for the one relinquished block. One report was written for open file and the other to remain as closed file while GRM awaits the grant of MLA 22284 covering this part block. This data gathering and report writing proved unusually time consuming and is reflected in the tenure maintenance expenditure during the fifth year of the Licence.

9. PROPOSED PROGRAMME AND EXPENDITURE FOR NEXT YEAR

		$
1.	Geology Assessment, drill planning and supervision	1,000
2.	Geophysics Further assessment of magnetics data	1,000
3.	Geochemistry Soil sampling	1,000
4.	Analytical Soil and drill samples	1,500
5.	Drilling RC drilling at Western Moon	4,500
6.	Tenure maintenance	500
7.	Administration and Overheads	1000
8.	Rehabilitation	500
	TOTAL	11,000

Proposed expenditure for next year may appear high for a one-block Licence however EL 9408 is regarded as a very prospective block by virtue of its geology, magnetic anomalies, and its proximity to a number of mineralised occurrences including, the Billy Boy Au-Cu deposit. Further exploration within the EL 9408 is sure to enhance the prospectivity of this area.

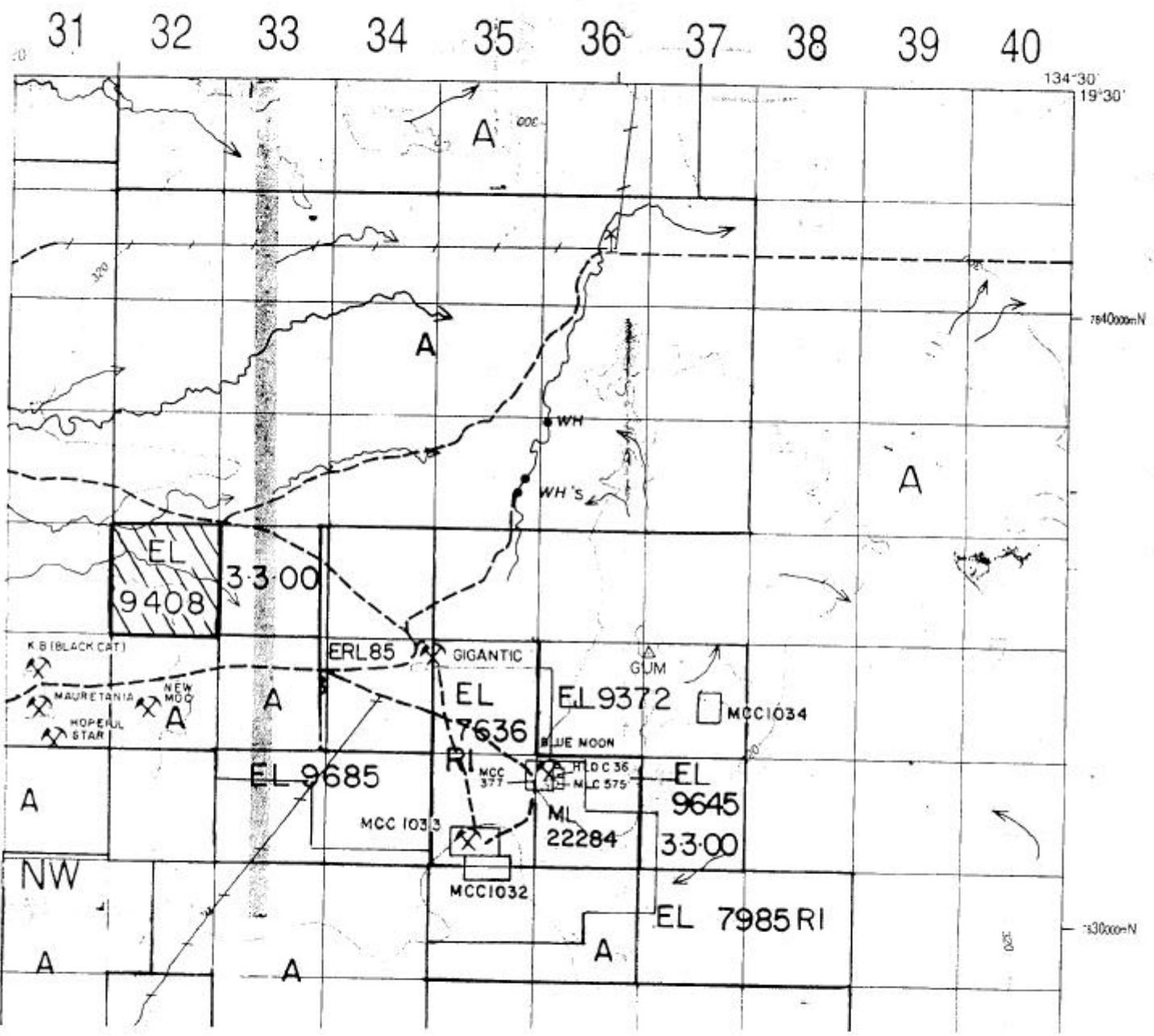
Exploration programmes can be affected by results, and while this is the proposed programme and expenditure, specific activities may vary according to the results achieved.

S.C.RUSSELL
EXPLORATION GEOLOGIST

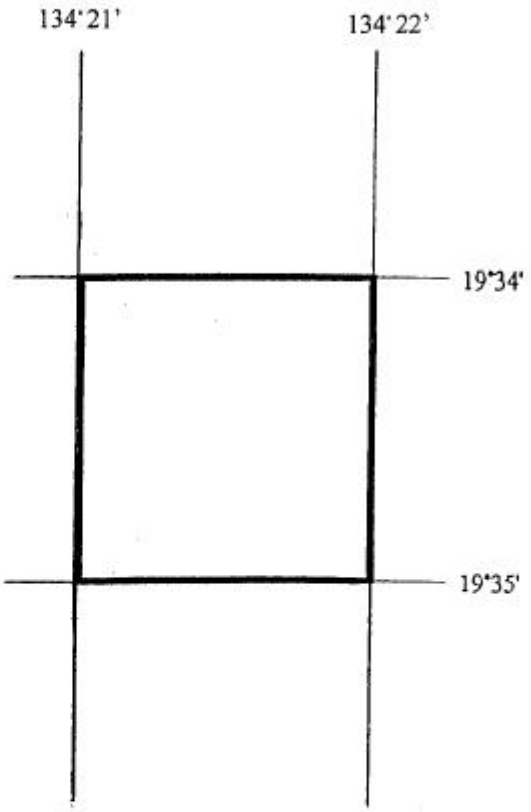
GIANTS REEF MINING LIMITED

HARD COPY REPORT META DATA FORM

REPORT NAME:	EL 9408 Gum Ridge West FIFTH ANNUAL REPORT 4 January 2000 - 3 January 2001
PROSPECT NAMES(s):	GUM RIDGE WEST WESTERN MOON
GROUP PROSPECT NAME:	EASTERN PROJECT AREA
TENEMENT NUMBERS(s):	EL 9408
ANNIVERSARY DATE:	3rd JANUARY 2001
OWNER/JV PARTNERS:	GIANTS REEF EXPLORATION PTY LTD
AUTHOR(s):	SC RUSSELL
COMMODITIES:	GOLD, COPPER
MAPS 1:250 000:	TENNANT CREEK SE53-14
MAPS 1:100 000:	TENNANT CREEK 5758
TECTONIC UNIT(s):	TENNANT CREEK INLIER
STRATIGRAPHIC NAME(s)	WARRAMUNGA FORMATION
AMF GENERAL TERMS:	FOLIATED PORPHYRY, STRUCTURAL OUTCROP MAPPING
AMF TARGET MINERALS:	GOLD, COPPER, BISMUTH, IRON
AMF GEOPHYSICAL:	POTENT GEOPHYSICAL SOFTWARE MAGNETIC ANOMALY
AMF GEOCHEMICAL:	ROCK SHIP SAMPLING
AMF DRILL SAMPLING:	
MINES:	GIGANTIC MINE (HISTORICAL)
DEPOSITS:	
PROSPECTS:	GUM RIDGE WEST WESTERN MOON, BLUE MOON
KEYWORDS:	GUM RIDGE WEST WESTERN MOON



GIANTS REEF EXPLORATION PTY LTD TENNANT CREEK NORTHERN TERRITORY			
AREA	**EL 9408 - *GUM RIDGE WEST***		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	Location and Surrounding Tenements *Extract DME MINING TENURE 52/5*		
DATE	AUTHOR	SCALE	
OCT 2000			**FIGURE 1**



EL 9408
1 BLOCK
3 sq kms

GIANTS REEF EXPLORATION PTY LTD TENNANT CREEK NORTHERN TERRITORY			
AREA	**EL 9408 - *GUM RIDGE WEST***		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	Year 5 Licence Area *Extract DME SCHEDULE*		
DATE	AUTHOR	SCALE	
JAN 2000			**FIGURE 2**

APPENDIX 1

SAMPLE 423009
ANANLYTICAL AND STRUCTURAL DATA

Appendix 1.xls