



GIANTS REEF EXPLORATION

A.B.N. 58 009 200 346

58 PEKO ROAD TENNANT CREEK NT 0860
PO BOX 1244 TENNANT CREEK NT 0861

Telephone 08 8962 1330 Facsimile 08 8962 2900

Email: email@giantsreef.com.au Website: www.giantsreef.com.au

EXPLORATION LICENCE 22729 MAGELLAN

SECOND ANNUAL REPORT 29 July 2004 – 28 July 2005

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

AUTHOR:
B. J. PARKER

August 2005

DISTRIBUTION:

Department of Business Industry & Resource Development
Central Land Council
Giants Reef Exploration Pty Ltd
Giants Reef Mining Limited

☐
☐
☐
☐

SE53-14
TENNANT CREEK 1:250 000
5659
SHORT RANGE 1:100 000

SUMMARY

Exploration Licence 22729 *Magellan*, is located between the Warrego and White Devil mines, in the Navigator Fault area.

This report records the exploration work completed on EL 22729 during its second year of tenure, from the 29th July 2004 to the 28th July 2005.

Targets are Tennant Creek-style magnetite ironstone associated gold and copper ore bodies, and also shallow haematite-ironstone related gold deposits.

Exploration Licence 22729 was originally applied for by Giants Reef in 2000 to cover a group of Mineral Claim Applications (MC C1427-C1432) which were being withdrawn as a consequence of the termination of the Western Mining Joint Venture. The tenement includes the Navigator 2 magnetic anomaly.

The presence of Warramunga Formation units, a major splay fault off the Navigator Fault, and a series of moderate magnetic anomalies and proximity to the Warrego deposit places EL 22729 as a highly ranked target area in terms of its prospectivity potential.

CONTENTS

	PAGE
SUMMARY	i.
CONTENTS.....	ii.
1. INTRODUCTION.....	1.
2. LOCATION	1.
3. TENURE.....	1.
4. GEOLOGY	1.
4.1 Regional Geology.....	1.
4.2 Local Geology	1.
5. PRVIOUS WORK.....	2.
6. EXPLORATION DURING YEAR TWO	3.
7. PROPOSED WORK FOR YEAR THREE	3.
8. REHABILITATION.....	3.
9. CONCLUSIONS	3.
10. EXPENDITURE	4.
11. PROPOSED PROGRAM AND EXPENDITURE FOR YEAR THREE	4.

FIGURES

1. Location of EL 22729 and Surrounding Tenure

1. INTRODUCTION

Exploration Licence 22729 *Magellan*, is located between the Warrego and White Devil mines, in the Navigator Fault area.

This report records the exploration work completed on EL 22729 during its second year of tenure, from the 29th July 2004 to the 28th July 2005.

Targets are Tennant Creek-style magnetite ironstone associated gold and copper ore bodies, and also shallow haematite-ironstone related gold deposits.

2. LOCATION

Exploration Licence 22729 is located approximately 40km northwest of the Tennant Creek town and 2.5km south of the Warrego Ore Treatment Plant on the Short Range 1:100,000 mapsheet (5659).

The Licence is located south off the sealed Warrego Road., and access can be gained by station tracks leading off Warrego Road, or directly south from the Warrego Ore Treatment plant.

The climate of the Tennant Creek district is mild and dry through most of the autumn to spring months. The summer period is hot with seasonal heavy rainfall between January and March making access very difficult during these periods.

Figure 1 shows the Licence area and surrounding tenure.

3. TENURE

Exploration Licence 22729 *Magellan*, covering 1 block (3.24km²) was granted to Giants Reef Exploration Pty Ltd (Giants Reef) on 29th July 2003 for a period of six years.

EL 22729 is on NT Portion 408, within Perpetual Pastoral Lease 946, Phililp Creek Station.

EL 22729 is subject to an Indigenous Land Use Agreement (ILUA) signed in September 2000 between the Native Title holders of the Tennant Creek region, represented by the Central Land Council (CLC), and Giants Reef Exploration Pty Ltd.

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 14 (Geology of the Mineral Deposits of Australia and Papua New Guinea), Volume 1, pp. 829-861 provide a good introduction to the regional geology and styles of gold-copper mineralisation of the area.

A more recent reference is the 1998 Northern Territory Geological Survey second edition geological map and explanatory notes on the Tennant Creek 1:250,000 sheet, which includes a revised stratigraphy.

4.2 Local Geology

The Licence area is blanketed by a layer of colluvium and aeolian sand up to 7m thick, with little outcrop.

The Licence area is underlain by sandstones, siltstones and other sediments of the Palaeoproterozoic Warramunga Formation. This formation is host to all the magnetite-haematite (ironstone-hosted) gold-copper-bismuth mineralisation and ore bodies in the Tennant Creek goldfield. The Chariot gold

deposit is hosted by haematite dominated ironstone which is quite unique to the Tennant Creek goldfield.

Within the Licence area, sediments of the Early Proterozoic Warramunga Formation have been intruded by numerous quartz-feldspar porphyry dykes. At the nearby White Devil mine this porphyry has been dated using Rb/Sr at $1856 \pm 4\text{Ma}$. It has also been suggested that a much later set of porphyries may be present in the tenement area (Ward, 1997).

The north-west trending Navigator Fault which is spatially associated with mineralisation at the Warrego and White Devil deposits is located approximately 1km north of the EL

5. PREVIOUS WORK – YEAR ONE

Exploration Licence 22729 was originally applied for by Giants Reef in 2000 to cover a group of Mineral Claim Applications (MC C1427-C1432) which were being withdrawn as a consequence of the termination of the Western Mining Joint Venture.

No literature was located explaining the justification of the application for MC C1427-C1432, however it is expected that the Claims, and then the EL was applied for to cover a north west striking magnetic high that runs through the upper half of the Exploration Licence.

The prospect Nav 2, located over the magnetic high was identified from Giants Reef's GIS database, within EL 22729.

In the first year of a tenure a brief review of all current information, and exploration by previous Companies over the EL was conducted. The review identified the magnetic target within the reporting area EL 22729, being the Nav 2 prospect.

The Licence appears to be located within an area of magnetic complexity within Warramunga Formation sediment and located south of the Warrego granite.

A brief assessment of the prospectivity of the EL was conducted. No historical drilling or geochemical surface sampling over the EL was identified.

Review of historical Exploration Licences over the EL identified the Magellan EL held under EL 7151, by Western Mining Corporation. Western Mining conducted detailed geophysical reviews of the prospect area and modelled a number of geophysical bodies. Information located suggests that a RC hole was drilled at the prospect, however Giants Reef was unable to source data on this work. The brief assessment highlighted the fact that previous exploration over the tenure had focussed on the targeting of magnetic anomalies to identify magnetic ironstone bodies. Giants Reef noted that limited gravity data exists over the tenure and concluded that the potential for new discoveries in EL 22729 are highly likely.

The location of the Warrego mine and the White Devil gold mines to EL 22729 along the Navigator Fault line ranked EL 22729 as a moderately prospective exploration area due to its structural significance. Additionally, the EL's location to existing mine infrastructure at Warrego ranked this Licence area favourably.

Work completed over EL 22729 in the first tenure year involved no on-ground exploration. Giants Reef's commitments in establishing mining operations at Chariot, Edna Beryl, Cats Whiskers and Malbec West prevented any on-ground exploration over EL 22729. During the year Giants Reef recruited an additional 4 senior project geologists in an effort to expedite regional exploration in areas such as EL 22729.

In August 2004 Giants Reef Exploration submitted a Mining Management Plan (MMP) for Exploration within the Northern Project area, which spans from White Devil in the west to the Whippet prospect in

the east. Approval of the MMP is pending, and will initiate a new phase of exploration by Giants Reef within the northern area of the Tennant Creek field.

6. EXPLORATION DURING YEAR TWO

While no in-ground exploration was carried out on the tenement during the report period, work did however include a review and interpretation of all geological and geophysical data. This was followed up by a number of field visits to investigate areas of interest such as those corresponding with the magnetic anomalies. Reconnaissance work over the EL failed to delineate areas of outcropping Warramunga Formation, or magnetite-hematite ironstones, however did confirm the presence of recent colluvium cover, which could be suitably tested by geochemistry. The high magnetic responses over the EL supports the presence of prospective Warramunga Formation basement beneath the shallow colluvium profile and a review of detailed airborne magnetics highlighted a prospective group of 4 magnetic anomalies, including the Navigator 2 anomaly which are proximal to a major north south splay fault off the Navigator Fault. Apart from the one reported RC hole which tested the Navigator 2 anomaly, the tenement remains largely unexplored. Of particular interest is the absence of any vacuum drilling geochemistry or regolith drilling in the area.

7. PROPOSED WORK FOR YEAR THREE

Work proposed for year three will include detailed geophysical modeling of the 4 magnetic anomalies with the aim of determining their size, depth and most appropriate next phase of exploration.

8. REHABILITATION

No rehabilitation work was required as no ground disturbing work was carried out during the year.

9. CONCLUSIONS

The presence of Warramunga Formation units, a major splay fault off the Navigator Fault, and a series of moderate magnetic anomalies and proximity to the Warrego deposit places EL 22729 as a highly ranked target area in terms of its prospectivity potential.

10. EXPENDITURE

The proposed expenditure for the second year of tenure was \$3,000. Actual expenditure was as follows:

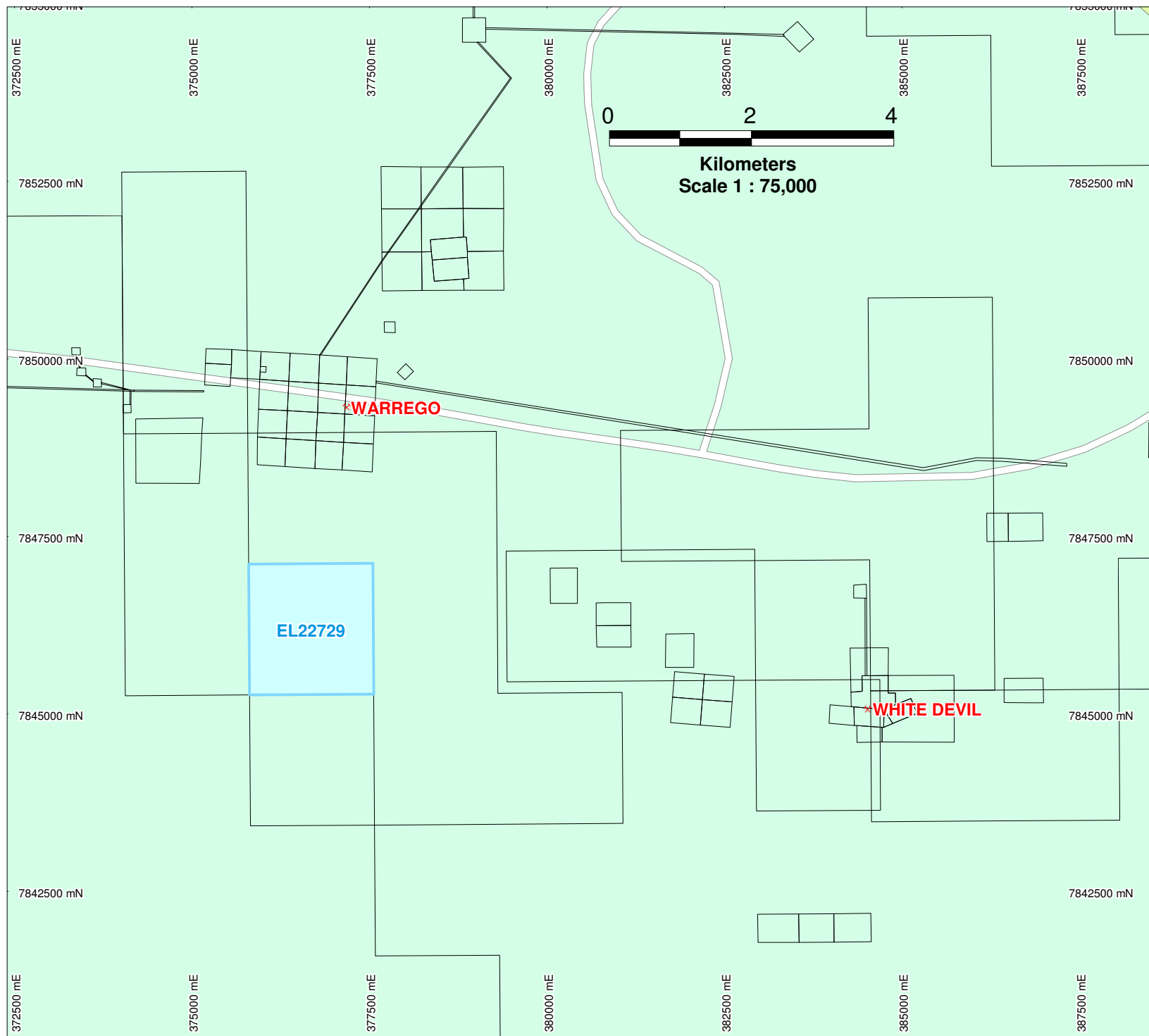
	\$
1. Geology	1750
2. Geophysics	255
3. Geochemistry	0
4. Surveying	0
5. Data integration	475
6. Analytical	0
7. Drilling	0
8. Tenure maintenance	326
9. Administration and overheads	254
10. Rehabilitation	0
TOTAL	\$3,060


11. PROPOSED PROGRAM AND EXPENDITURE FOR YEAR THREE

	\$
1. Geology	2000
2. Geophysics	600
3. Geochemistry	0
4. Surveying	0
5. Data integration	200
6. Analytical	0
7. Drilling	0
8. Tenure maintenance	100
9. Administration and overheads	100
10. Rehabilitation	0
TOTAL	\$3,000

Exploration programs are affected by the results achieved as the work progresses, and while this is the proposed program and expenditure for the coming year, some changes may become necessary.

B J PARKER
SUPERVISING GEOLOGIST - REGIONAL



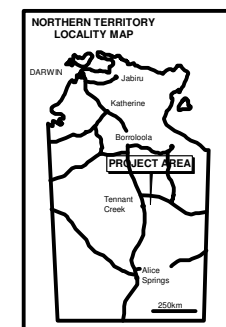


GIANTS REEF MINING LIMITED

Location of EL 22729 and Surrounding Tenure

Author: GRM	Date: August 2005
Drawn: DMC	Revised:
Dwg No:	Report No.: Figure 1
Projection: GDA94	Scale: 1:75,000

- Perpetual Pastoral Lease
- Aboriginal Freehold Land
- Special Purpose Lease
- Crown Land Perpetual





GIANTS REEF MINING LIMITED

HARD COPY REPORT META DATA FORM

REPORT NAME:	EL 22729 <i>Magellan</i> , SECOND ANNUAL REPORT 29 TH JULY 2004 – 28 TH JULY 2005
PROSPECT NAMES(s):	MAGELLAN
GROUP PROSPECT NAME:	NORTHERN PROJECT AREA
TENEMENT NUMBERS(s):	EL 22729
ANNIVERSARY DATE:	29 TH JULY 2005
OWNER/JV PARTNERS:	GIANTS REEF EXPLORATION PTY LTD
AUTHOR(s):	B. J. PARKER
COMMODITIES:	GOLD, COPPER
MAPS 1:250 000:	TENNANT CREEK SE53-14
MAPS 1:100 000:	SHORT RANGE 5657
MAPS 1:25 000	
TECTONIC UNIT(s):	TENNANT CREEK INLIER
STRATIGRAPHIC NAME(s)	WARRAMUNGA FORMATION
AMF GENERAL TERMS:	
AMF TARGET MINERALS:	GOLD, BISUMITH
AMF GEOPHYSICAL:	
AMF GEOCHEMICAL:	
AMF DRILL SAMPLING:	
HISTORIC MINES:	
DEPOSITS:	
PROSPECTS:	BERUIT
KEYWORDS:	EL 22729, MAGELLAN, NAVAGATOR FAULT, NAV 2, WARREGO