EL 22729
MAGELLAN

FINAL REPORT

LICENSEE:
GIANTS REEF EXPLORATION PTY LTD
A.B.N.58 009 200 346
(A wholly owned subsidiary of Emmerson Resources Pty Ltd)

29 July 2003 – 28 April 2006

AUTHOR: ADAM WALTERS
AUGUST 2006
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Figure 1. Location Map
1. SUMMARY

This Final Report records exploration work done on EL 22729 between 29 July 2003 and 28 April 2006.

A brief review of all current information, and exploration by NTC over the EL was conducted. The review identified one magnetic target within the reporting area EL 22729, being the Navigator 2 prosuct. A literature review identified a previously explored prospect area called Magellan, held under EL 7151 by Western Mining Corporation.

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 the area covered by EL 22729, and now the newly granted SEL 24979, as a highly ranked target area in terms of its prospectivity potential.

The discovery of the haematite-magnetite Chariot deposit in 1998 has shown the potential for variations on the classic magnetite ironstone hosted gold +/- copper deposits, where lower order magnetic anomalies, plus gravity methods can define new targets. Discoveries by Giants Reef of mineralisation such as at Malbec West, Marathon and Billy Boy further support this.

Automatic cancellation of EL 22729 occurred on 28 April 2006 upon the grant of Substitute Exploration Licence 24979.
2. INTRODUCTION

Exploration Licence 22729 was acquired by Giants Reef Exploration Pty Ltd (Giants Reef) to search for Tennant Creek style iron oxide copper-gold deposits (“IOCG”).

Giants Reef Exploration is a wholly owned subsidiary of Emmerson Resources Pty Ltd (Formerly Centralian Minerals Limited).

This Final Report records exploration work done on EL 22729 between 29 July 2003 and 28 April 2006.

3. LOCATION

Exploration Licence 22729 MAGELLAN, is located approximately 43km north west of the Tennant Creek Township on the Short Range 1:100 000 scale map sheet (5659).

Access to the Licence area is via Warrego Road then south via a series of unsealed tracks and fence line tracks leading from the Warrego Plant, which during and immediately after rain generally become inaccessible.

Figure 1 shows the location of EL 22729 Licence with respect to the Tennant Creek Township.

4. 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, Phillip 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.

Figure 1 shows the location of the Licence area and surrounding tenure.
5. GEOLOGY

5.1 Regional Geology

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

In 1995 the Northern Territory Geological Survey released a geological map and explanatory notes for the Flynn 1:100,000 sheet, which covers the area of the licenses.

The rocks of the Warramunga Formation host most of the orebodies in the region and underlie most of the Exploration Licenses.

5.2 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 ±4Ma. 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.

6. EXPLORATION

6.1 Targets and Concepts

Exploration for large base metal deposits possibly associated with a regional gravity anomaly centred in the southern part of the area covered by the adjoining Licences, with additional targets including Tennant Creek-type ironstone hosted Au-Cu-Bi ore bodies.
Proterozoic Inliers world-wide, and particularly in Australia, are renowned for their iron-rich mineralisation and world class base metal deposits. For many years prominent geologists and researchers in the industry have pointed out the geological similarities that the broader Proterozoic Tennant Creek Inlier shares with the Gawler Craton, host to the Olympic dam deposit, and to the Eastern Succession of the Mt Isa Inlier that hosts the Ernest Henry and Selwyn deposits. These similarities, though recognised, had not been widely acted upon by the industry.

Exploration was aimed at discovering large deposits of base metals along with substantial gold and/or silver, probably accompanied or hosted by large volumes of iron oxide minerals.

Giants Reef’s target model iron oxide-rich lithologies and are therefore likely to be associated with regional or district-scale gravity anomalies, and potentially coincident with a magnetic anomaly.

The discovery of the haematite-magnetite Chariot deposit in 1998 has shown the potential for variations on the classic magnetite ironstone hosted gold +/- copper deposits, where lower order magnetic anomalies, plus gravity methods can define new targets. Discoveries by Giants Reef of mineralisation such as at Malbec West, Marathon and Billy Boy further support this. Giants Reef considers the potential for the discovery of mineralisation in hematite dominant ironstones in the relinquished group is limited.

6.2 Exploration Undertaken – 29 July 2003 to 28 April 2006

Year 1.

Exploration Licence 22729 was originally applied for by Giants Reef in 2003 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 prospect Navigator 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 Navigator 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.

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 within the northern area of the Tennant Creek field.

Year 2.

While no in-ground exploration was carried out on the tenement during the second tenure year, 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.

Year 3.

During the third year of tenure the Licence was included within a package of tenements which were subject to a combined quantitative/qualitative ranking, based on geological, geophysical characteristics and other parameters covering work status, target type, land status and economics. The tenement includes regions of Warramunga Formation with strong magnetic anomalies and within proven corridors of mineralisation.

Work was somewhat restricted during the third tenure year due to two main factors; Giants Reef’s accelerated regional exploration in such high priority areas as the Chariot and Peko
mineralised corridors; and the company restructure under administration with an impending sale of Centralian Minerals.

7. REHABILITATION

Exploration within EL 22729 during the term of tenure was limited to non-invasive reassessment and revaluation of previous exploration work and geophysical surveys, data integration of all previous data into Emmerson Resources Database, and as such, no rehabilitation was required.
8. CONCLUSIONS

A brief review of all current information, and exploration by NTC over the EL was conducted. The review identified one magnetic target within the reporting area EL 22729, being the Navigator 2 prospect. A literature review identified a previously explored prospect area called Magellan, held under EL 7151 by Western Mining Corporation.

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 the area covered by EL 22729, and now the newly granted SEL 24979, as a highly ranked target area in terms of its prospectivity potential.
## 9. EXPENDITURE

Expenditure for the term of the tenure for EL 22729 is as follows:

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