FINAL REPORT TO COVER EXPLORATION ACTIVITIES OVER MCC 52
01 JANUARY 1999 – 30 OCTOBER 2007

MCC 52
Mauretania

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

AUTHOR:
ADAM WALTERS

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Department of Primary Industry, Fisheries & Mining
Central Land Council
Emmerson Resources Pty Ltd

MAP SHEETS:
TENNANT CREEK SE53-14
TENNANT CREEK 5758
TENNANT CREEK 1:100 000
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Figure 1. Location Map of the Mauretania Tenure Area
1. SUMMARY

Mineral Claim 52, Mauretania, was acquired by Giants Reef Exploration Pty Ltd (Giants Reef) to search for Tennant Creek style iron oxide copper-gold deposits.

This bridging report records the exploration work done on this tenure during the term 01 January 1999 to 30 October 2007.

Giants Reef conducted geophysical modelling of magnetic features in the immediate area surrounding Mauretania. This modelling of magnetic features in neighbouring mineral claims suggest that the Mauretania Mine outcrops may represent the upwards continuity of a deeper magnetic body located to the south of the current claim.
2. INTRODUCTION

Mineral Claim 52, Mauretania, was acquired by Giants Reef Exploration Pty Ltd (Giants Reef) to search for Tennant Creek style iron oxide copper-gold deposits.

This bridging report records the exploration work done on this tenure during the term 01 January 1999 to 30 October 2007.

3. LOCATION

Mineral Claim 52 is located within Exploration Licence 8879, approximately 15km east of the Stuart Highway and 16.5km north east of the Tennant Creek Township.

Access to MCC 52 is gained north via the Stuart Highway then east via a series of 4WD tracks leading to the historical Mauretania gold mine workings.

Figure 1 shows the location of the Mauretania tenure with respect to the town of Tennant Creek.
4. TENURE

Tenure details for the Mauretania tenure is as follows:

<table>
<thead>
<tr>
<th>Tenure ID</th>
<th>Name</th>
<th>Company</th>
<th>Grant Date</th>
<th>Expiry Date</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCC52</td>
<td>Mauretania</td>
<td>GRE</td>
<td>29/08/1983</td>
<td>31/12/2007</td>
<td>3</td>
</tr>
</tbody>
</table>

The tenure lies within NT Portion 00494, Perpetual Pastoral Lease 1142, Tennant Creek Station.

MCC 52 was initially purchased by Giants Reef Exploration Pty Ltd on 15 October 1999 from Mr. Peter Eaton and Mr. Paul Holewa, both Tennant Creek residents at the time of Giants Reef’s purchase. An application for the renewal of all this lease was lodged by Giants Reef in 2001, and renewed for a term expiring 31 December 2007.

Figure 1 shows the tenure area as it was during the reporting term.
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 an 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 Tennant Creek 1:100,000 sheet, which covers the area of the license.

The rocks of the Warramunga Formation host most of the ore bodies in the region and underlie the Exploration License.

5.2 Local Geology

MCC 52 covers an area consisting of Proterozoic Warramunga Group sediments. The sediments are highly cleaved in an east-west direction, and consist of interbedded mudstone, shales and sandstone. Dips are generally steep, between 50 and 70 degrees. The sandstones are predominately fine grained, ferruginous and tuffaceous; outcrops are well weathered and crumbly. The mudstones and shales are ferruginous, with occasional bands of hematite shale.

In 1995 the Northern Territory Geological Survey released geological maps and explanatory notes for the Tennant Creek 1:250,000 sheet, and the Tennant Creek (5758) 1:100 000 sheet, which covers the area of the tenure.
6. PREVIOUS EXPLORATION

MCC 52

Mauretania 430 834E 7 833 140N (actually located 30m north of the tenement)

During 1937, the A.G.G.S.N.A. made three ground magnetometer traverses across the lease area and partly outlined a small 200 gamma anomaly.

Production from the Mauretania Gold Mine yielded 210 fine ounces of gold, at an average recovery of 86.5 dwts/ton (134.5g/t). This is one of the richest ore-grades worked on the goldfields. The mine has not been worked since 1942.

The gold at the Mauretania mine occurs in a quartz-hematite lode, located in a major east-west trending brecciated crush zone in the crestal region of an easterly plunging anticline.

The gold-bearing quartz-hematite lode is localised within a major brecciated crush zone. The hematite lode is hard, compact, massive and slightly jaspery, while the breccia zone is characterised by kaolinised and sericitic sediments, with small hematite pebbles and ramifying limonite stringers. Bismuth carbonate is locally associated with the ironstone fragments. Surface assays of the ironstone lode revealed only low gold values, up to 0.7 dwts/ton (1.09g/t), whereas samples taken from adjacent crush breccia assayed slightly higher, up to 2.7 dwts/ton (4.2g/t).

The previous owners (Mr. Paul Holewa & Mr. Paul Eaton) conducted underground drilling and rock sampling. Emmerson does not have details of this work.

7. WORK DONE DURING THE REPORT PERIOD

MCC 52

Mauretania 430 834E 7 833 140N (actually located 30m north of the tenement)

During Giants Reef's ownership, numerous visits have been made to the area to assess the geology. The boundary was cleared and resurveyed, because of uncertainty over the actual area of the claim. Giants Reef also conducted geophysical modelling of magnetic features in the immediate area surrounding Mauretania. This modelling of magnetic features in neighbouring mineral claims suggest that the Mauretania Mine outcrops may represent the upwards continuity of a deeper magnetic body located to the south of the current claim.
8. REHABILITATION

As the work conducted by Giants Reef was restricted to desktop geophysical modelling and non-invasive site visits, no rehabilitation work was required.

9. REFERENCES
