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EXPLORATION LICENCE 10370

BARKLY

ANNUAL REPORT

20 MARCH 2004 – 19 MARCH 2005

LICENSEE:

GIANTS REEF EXPLORATION PTY LTD

A.C.N. 009 200 346

OPERATOR AND JV PARTNER

METEORIC RESOURCES NL

AUTHORS:

B. DANCE

A. BOYDE

Tennant Creek 1:250 000

SE53-14

Tennant Creek 1:100 000

5758

Flynn 1:100 000

5759

Gosse River 1:100 000

5858

Barkly: 1:100 000

5859

DISTRIBUTION:

Central Land Council ☐

Northern Territory Department of Business

Industry and Resource Development ☐

Giants Reef Exploration Pty Ltd ☐

SUMMARY

Exploration license 10370 Barkly, located approximately 45 kilometres east northeast of Tennant Creek, was granted to Giants Reef Exploration Pty Ltd (Giants Reef) on 20 March 2001 for 6 years.

Under a joint venture agreement between Meteoric Resources and Giants Reef Exploration, Meteoric undertakes to expend \$300,000 over 3 years to earn 51% and is the operator of the project.

In the northern part of the tenement, targets are major base metals/precious metals deposits. In the south, targets are Tennant Creek style gold-copper-bismuth deposits.

EL 10370 is subject to an Indigenous Land Use Agreement (ILUA) between Giants Reef and the Native Titleholders 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.

Clearances to enter were obtained from the Native Titleholders, through the Central Land Council.

Exploration during the 4th year included a literature search, reconnaissance, outcrop mapping, geophysical assessment of recent aeromagnetic and gravity information and ground magnetics and gravity over the Perseverance, Bluebird and Flag prospects in the southern half of the tenement.

A magnetic target was noted in the Explorer 16 and Explorer 66 area in the southern part of EL 10370. This anomaly also offers a chance for the discovery of a typical tenant creek type of Au-Cu-Bi orebodies, but its potential for other styles of major base metals/precious metals deposits is under review.

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1. INTRODUCTION

Exploration Licence 10370 *Barkly* was acquired to search for large base metal deposits associated with an elongate gravity anomaly trending WNW-ESE through the north-central part of the licence.

This report records the exploration work done on EL 10370 during the third year of tenure, from 20 March 2004 to 19 March 2005 under a joint venture agreement between Meteoric Resources NL and Giants Reef Exploration.

2. LOCATION

EL 10370 covers a wide tract of country, with the centre of the licence situated approximately 45 kilometres east northeast of Tennant Creek township and south of the Barkly Highway. Much of the licence area is without tracks, and difficult to reach. (See location diagram)

The northern parts of EL 10370 can be reached from Tennant Creek township by driving along the Barkly highway, and then by following the few existing bush tracks.

Access into the central parts of the licence is possible by driving to the Gigantic mine or to Boundary Bore, along dirt tracks from the Tennant Creek township or from the old Overland Telegraph Station. These routes are not negotiable during or soon after rainy periods.

The southern areas of EL 10370 can be reached from Tennant Creek along the Gosse River road.

3. TENURE

Exploration Licence 10370 was granted to Giants Reef Exploration Pty Ltd on 20 march 2001 for a period of 6 years.

The Licence area totals 262 one-minute blocks, and covers sections of the bakly (5859), gosse River (5858), Tennant Creek (5758) and Flynn (5759) 1:100 000 scale map sheets.

It falls within NT Portion 494, Perpetual Pastoral Lease 1142, Tennant Creek Station.

EL 10370 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, and Giants Reef.

4. **GEOLOGY**

4.1 *Regional geology*

Papers contained in AusIMM Monograph 14 (Geology of the Mineral Deposits of Australia and Papua New Guinea), Volume 1, pp829-861 provide a good introduction to the Tennant Creek regional geology and styles of gold-copper mineralization of the area.

A more recent reference is the 1:250 000 Tennant Creek geology map and Explanatory Notes, published by the Northern Territory Geological Survey in 1999, which includes a revised stratigraphy.

4.2 *Local geology*

Outcrop throughout the Licence is patchy and in most areas non-existent. The majority of EL 10370 is covered with Quaternary alluvium and soils, including the extensive flood-out area of the Gosse River, in the eastern part of the Licence. In the large northern area of the EL, flat-lying sediments of the Cambrian Georgina Basin occur, with some restricted outcrops of the Palaeoproterozoic Warramunga Formation. The underlying geology is for the most part unknown.

In the southern extension of the EL, south of latitude 19°38', some ridges of Warramunga Formation are host to a number of old mines. These include the Perseverance, Golden Mile, New Hope, Plum and Cornstock workings (all held under Mineral Leases, as 'windows' surrounded by EL 10370), and the Bluebird and Desert Hope mines.

5 **WORK DONE DURING THE YEAR**

5.1 *Introduction*

The main target in EL 10370 for this reporting period has been the area surrounding the Perseverance, New Hope and Bluebird mine workings.

EL 10370 contains a number of areas of Warramunga Formation outcrops. The Warramunga Formation is the host rock to virtually all of the well-known Tennant Creek style of ironstone-associated gold-copper-bismuth orebodies. Several such occurrences are found within EL 10370.

5.2 *Literature search and previous work*

Giants Reef and Meteoric Resources examined reports of exploration by previous companies in the EL 10370 area.

The most recent exploration in the area was by Posgold Limited under Substitute Exploration Licence 8687, which was made up from former Exploration Licences 7274, 7690, 7692, 7693, and 8005. Exploration in these earlier Licences and SEL 8687 extended over eight years from 1991 to 1998, and was aimed at finding concealed Tennant Creek-style ironstone-associated Au-Cu-Bi orebodies.

Posgold's work included grid vacuum drilling over the highest amplitude section of the regional gravity ridge referred to in section 5.1. The vacuum drilling (297 holes) was

conducted over two grid areas separated by a 2km gap, contained within a rectangle measuring 10.5 km east to west by 3.8 km north to south (443100E to 453600E, and 7846800N to 7843000N).

The bedrock sample assays provided some geochemical anomalism but two follow-up RC holes, and some later RAB holes in the eastern grid area where the vacuum drilling apparently did not reach bedrock, did not find any ironstone bodies.

An extensive gravity survey was carried out in an area measuring roughly 6km east to west by 4km 6km north-south, located over a regional gravity high in the general area of the Perseverance and Golden Mile mines. Gridding and ground magnetics were conducted over at least four magnetic anomalies in other parts of SEL 8687.

By 1998, SEL 8687 had been reduced to two blocks in the southern end of what is now EL 10370, in the vicinity of the New Hope, Plum and Cornstock mines. It was decided that the best opportunities lay within the New Hope, Plum and Cornstock leases, and the SEL was surrendered.

5.3 *Reconnaissance*

A brief visit was made to the small Desert Hope mine, beside the Gosse River road in the southern part of the Licence area. No samples were taken. The workings, in outcrops of haematite ironstone and dark red to blackish fine sediments, extend over about 50m in an east-west strike direction. It was noted that no drilling appears to have been done at this prospect.

5.4 *Geophysical targets*

The consulting geophysicist drew attention to two discrete magnetic anomalies in the Warramunga Formation area in the southern 'leg' of EL 10370.

The western discrete anomaly corresponds with the Perseverance mine and its nearby ironstone ridges.

The other is in the same general area, in the SE part of Posgold's gravity grid over the regional gravity high centered approximately over the old Perseverance and Golden Mile mines. This remanently magnetized body at AGD84 449894E 7825932N is described as having "an excellent analytic signal response". It is in the general area of Explorer 16 and Explorer 66 (section 5.2), and offers potential for the discovery of typical Tennant Creek type of Au-Cu-Bi mineralization. Literature search showed that little drilling has been done at this locality in the past, and the 200m line spaced AGSO aeromagnetic data was not available to previous explorers.

6. **REHABILITATION**

None of the work done on EL 10370 so far has required any rehabilitation measures.

7. **GEOPHYSICAL ACTIVITIES**

Ground magnetics and gravity surveys were carried out over areas in the southern portion of the tenement targeted from interpretation of aeromagnetics and gravity in the Perseverance,

Bluebird and Flag areas. Reporting, specifications and geophysical data are included in the appendix.

8. EXPENDITURE

The proposed expenditure for the fourth year of tenure was \$8,000. Actual expenditure was as follows:

1.	Field supplies	\$1,323
2.	Direct wages	\$1,500
3.	Geophysics	\$5,400
4.	Geochemistry	\$282
5.	Gravity survey	\$22,030
6.	Data integration	\$560
7.	Analytical	\$3,060
8.	Tenure maintenance	\$800
9.	Administration and overheads	\$2,944
10.	Land owner negotiations	\$1,500

Total expenditure amounted to \$39,399

9. PROPOSED PROGRAMME AND EXPENDITURE FOR NEXT YEAR

Geology	\$3,000
<i>Planning and supervision</i>	
Geophysics	\$4,500
<i>Ground magnetics</i>	
Analytical	\$10,000
<i>Assaying</i>	
Drilling	\$60,000
<i>RC or open hole percussion</i>	
Rehabilitation and access	\$4,000
Tenure Maintenance	\$4,000
<i>(incl. CLC fees)</i>	
Administration and Overheads	\$8,000

TOTAL \$84,643

Exploration programs can be affected by results, and while this is the proposed program and expenditure for the year, specific activities may vary according to the results achieved. Adverse results from work conducted during the course of the year may downgrade considerably, the above proposed expenditure by as much as \$40,000.

Barrie Dance
Technical Officer

REPORT NAME:	EL 10370 <i>Barkly</i> THIRD ANNUAL REPORT 20 th MARCH 2004 – 19 th MARCH 2005
PROSPECT NAME(s):	BARKLY
TENEMENT NUMBER(s):	EL 10370
ANNIVERSARY DATE:	19 MARCH 2005
OWNER/JV PARTNERS:	GIANTS REEF EXPLORATION PTY LTD (Owners) METEORIC RESOURCES NL
AUTHOR(s):	A.BOYDE B.DANCE
COMMODITIES:	GOLD, COPPER, LEAD, ZINC, SILVER, BISMUTH
MAPS 1:125 000:	TENNANT CREEK SE53-14
MAPS 1:100 000:	TENNANT CREEK 5758, FLYNN 5759, GOSSE RIVER 5858, BARKLY 5859
TECTONIC UNITS(s):	TENNANT CREEK INLIER
STRATIGRAPHIC NAME(s):	WARRAMUNGA FORMATION CAMBRIAN GEORGINA BASIN
AMF GENERAL TERMS:	LITERATURE SEARCH, RECONNAISSANCE
AMF TARGET MINERALS:	GOLD, COPPER, BISMUTH, LEAD, ZINC
AMF GEOPHYSICAL:	GEOPHYSICAL INTERPRETATION, NTGS & AGSO GRAVITY SURVEY, MAGNETIC SURVEY
HISTORIC MINES:	DESERT HOPE, BLUEBIRD, NEW HOPE, PLUM, CORNSTOCK, PERSEVERANCE, GOLDEN MILE