

## **GIANTS REEF EXPLORATION**

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# EXPLORATION LICENCE 9403 JESS

# EXPLORATION LICENCE 10406 MONTANA

FIRST COMBINED ANNUAL REPORT

1 May 2003 - 30 April 2004

LICENSEE:
GIANTS REEF EXPLORATION PTY LTD
A.B.N. 58 009 200 346
SANTEXCO PTY LTD
A.B.N. 002 910 296

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June, 2004

DISTRIBUTION:		
Department of Business Industry & Resource Development		SE53-14
Central Land Council		TENNANT CREEK 1:250 000
Giants Reef Exploration Pty Ltd		5758
Giants Reef Mining Limited		Tennant Creek 1:100 000
Santeyco Pty Ltd	П	

#### **SUMMARY**

This combined report details exploration undertaken by Giants Reef Exploration Pty Lted and Santexco Pty Ltd a wholly owned subsidiary of Giants Reef Mining Limited (Giants Reef) on Exploration Licences 9403 *Jess* and 10406 *Montana*, for the period from the 1<sup>st</sup> May 2003 to the 30<sup>th</sup> April 2004.

Targets are ironstone-related gold-copper deposits.

As part of the Giants Reef evaluation and ranking study in Year One, exploration data within ELs 9403 and 10406 underwent validation and integration into the companies new exploration geological information system. This, together with a re-examination and interpretation of high quality magnetic data, has enabled Giants Reef to compare targets within the EL with targets elsewhere in the Tenant Creek Goldfield and aid in planning the next phase of regional exploration. However, follow-up exploration was postponed due to higher priority definition drilling at the Chariot gold deposit and the devlopement of exploration models for haematite dominant ironstone orebodies.

Giants Reef has announced in its Half Yearly Report to the ASX that, as part of an accelerated exploration program, exploration in the eastern region of the Tennant Creek Goldfield, that incorporates ELs 9403 and 10406, will be one of its highest ranked priorities for the 2004 calendar.

Giants Reef intends to commence exploration activities in the region encompassing ELs 9403 and 10406 by conducting a detailed gravity survey over the tenements. Encouragement from these programs will determine the next phase of exploration.

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#### 1. INTRODUCTION

This report records exploration undertaken by Santexco Pty Ltd (Santexco) a wholly owned subsidiary of Giants Reef Mining Limited (Giants Reef) on Exploration Licences 9403 *Jess* and 10406 *Montana* for the period from the 1st May 2003 to the 30th June 2004.

On 13 June 2001, Giants Reef Exploration Pty Ltd, a wholly owned subsidiary of Giants Reef, purchased all of the shares in Normandy Tennant Creek (NTC) from Normandy Consolidated Gold Holdings Pty Ltd, a subsidiary of Normandy Mining Limited. The name has NTC since been changed to Santexco (Santexco), which is a wholly owned subsidiary of Giants Reef.

Giants Reef Exploration's Exploration targets are ironstone-related gold-copper deposits.

#### 2. LOCATION & ACCESS

Exploration Licences 9403 *Jess* and 10406 *Montana*, are located approximately 3.5 km southeast of the township of Tennant Creek on the 1:100 000 scale Tennant Creek map sheet (5758).

Access to EL 9403 and EL 10406 from Tennant Creek town is via the sealed Eldorado mine roads. A series of un-sealed minor tracks provides access to the remainder of the tenements. During and immediately after rain the Licence areas are generally inaccessible.

#### 3. TENURE

Exploration Licence 9403 comprises two graticular block (4.02 km<sup>2</sup>) and was granted to Giants Reef Exploration Pty Ltdy on the 1st May 2003 for a period of six years.

Exploration Licence 10406 comprises of one graticular block  $(3.23 \text{ km}^2)$  and was granted to Santexco Pty Ltdy on the 1st May 2003 for a period of six years.

The two ELs fall within Inalienable Aboriginal Freehold land held by the Warrumungu Land Trust. An Agreement referred to as the Areas of Interest Deed for Exploration was signed by the Central Land Council (CLC), Traditional Landowners and NTC on the 9<sup>th</sup> December 1998. This agreement established land access for mineral exploration upon Warrumungu Land Trust areas, including EL 9403 and EL 10406.

Figure 1 shows the Licence areas and surrounding tenements.

#### 4. GEOLOGY

#### 4.1 Regional Geology

The oldest exposed rocks in the Tennant Inlier are metasedimentary turbidites and siltstones of the Warramunga Formation, which are host to the ironstone Au-Cu-Bi mineralisation of the Tennant Creek Goldfield. These Palaeoproterozoic metasediments have an age of deposition of approximately 1860 Ma. Deformation and intrusion of the Warramunga Formation by voluminous porphyries and granitoids occurred during the Barramundi Orogeny (1858 Ma to 1845 Ma).

Following deformation and uplift the volcanics and volcaniclastics of the Flynn Sub-Group were erupted (1845 Ma to 1827 Ma), with intrusion of porphyries and minor granitoids into the Warramunga Formation. An additional deformation event preceded the deposition of the Hatches Creek Group/Tomkinson Creek Sub-Group (1820 Ma to 1785 Ma) and the intrusion of late-stage granitoids and porphyries into both the Warramunga Formation and Flynn Sub-Group at 1650-1712 Ma. Papers contained in AusIMM Monograph 14 (Geology of the Mineral Deposits of Australia and Papua New Guinea, Volume 1, pp 829-861) give a good introduction to the regional geology and styles of gold-copper mineralisation of the area.

More recently, the regional geology of the Tennant Inlier has been described in the 1:250,000 Tennant Creek geological map and its explanatory notes, published by the Northern Territory Geological Survey in 1999.

#### 4.2 Local Geology

The geology in EL 9403 and EL 10406 consists of minor outcrops of weathered lithic arenite subordinate or sebequal to siltstone and shale. 'Heamatite shale'.

The east and north eastern regions of ELs include dissected colluvial fan deposits.

Figure 2 shows the regional geology

#### PREVIOUS EXPLORATION

The ELs have been explored by various companies including Peko, Australian Development and Normandy. Exploration work includes ground and airborne magnetics, photogeological mapping, and vacuum drilling. NTC (Normandy completed various surveys over the area including the the Nobline airborne geophysical survey in 1998). This showed that the major structure hosting the Eldorado and Juno deposits extended into the EL 9403 and EL 10406 tenements.

In 2003/4 Giants Reef assessed Normandy's 1998 detailed aeromagnetic data and generated a number of low order magnetic anomalies within EL 10406. Giants Reef view the Licences as prospective for ironstone-related gold-copper deposits due to presence of favourable structures, subtle magnetic features, and because of their position between the high-grade Juno and Eldordo mines. An internal review of the Giants Reef tenement portfolio and a classification of exploration opportunities in September 2002 assessed the future exploration potential of EL 9403 and EL 10406. The Licence areas were individually assessed based on their prospectivity, targets and overall geological and geophysical potential.

#### 6. WORK CARRIED OUT IN YEAR ONE

As part of the Giants Reef evaluation and ranking study in Year 1, exploration data within ELs 9403 and 10406 underwent validation and integration into the companies new exploration geological information system. This, together with a re-examination and interpretation of high quality magnetic data, has enabled Giants Reef to compare targets within the ELs with targets elsewhere in the Tenant Creek Goldfield and aid in planning the next phase of regional exploration.

In 2003/4 Giants Reef assessed Normandy's 1998 detailed aeromagnetic data and generated a low order magnetic anomaly within EL 10406. Giants Reef view the Licences as prospective for ironstone-related gold-copper deposits due to presence of favourable structures, subtle magnetic features, and because of their position between the high-grade Juno and Eldordo mines. An internal review of the Giants Reef tenement portfolio and a classification of exploration opportunities in 2003 assessed the future exploration potential of EL 9403 and EL 10406. The Licence areas were individually assessed based on their prospectivity, targets and overall geological and geophysical potential.

Exploration, however was postponed due to higher priority definition drilling at the newly discovered Malbec West gold deposit.

Giants Reef has recently announced in its Half Yearly Report to the ASX that, as part of an accelerated exploration program, exploration within a second mineralised corridor, including ELs 9403 and 10406, will be one of its highest ranked priorities for the 2004 calendar.

Figure 3 shows the aeromagnetics (1VD RTP) of the region

#### 7. WORK PROPOSAL FOR YEAR TWO

Giants Reef has announced in its Half Yearly Report to the ASX that, as part of an accelerated exploration program, exploration in the eastern region of the Tennant Creek Goldfield, that incorporates ELs 9403 and 10406, will be one of its highest ranked priorities for the 2004 calendar.

Giants Reef intends to commence exploration activities in the region encompassing ELs 9403 and 10406 by conducting detailed gravity survey and pending favourable results follow up with regolith drilling. Encouragement from these programs will determine the next phase of exploration.

#### 8. REHABILITATION

As no on-ground work that could cause substantial disturbances was conducted on EL 9403 and EL 10406, no environmental rehabilitation work was carried out during the reporting period.

#### 9. CONCLUSIONS

Giants Reef consider EL 9403 and EL 10406 to be in a prospective location to host ironstone-related gold-copper deposits, given the presence of a number of magnetic targets, structural geometry, their proximity to the Eldorado and Cats Whiskers deposits and their position along the Eldorado-Juno-Nobles Nob trend.

As part of the Giants Reef evaluation and ranking study exploration data within ELs 9403 and 10406 underwent validation and integration into the companies new exploration geological information system. This together with a re-examination and interpretation of high quality magnetic data has enabled Giants Reef to compare targets within these ELs with targets elsewhere in the Tenant Creek Goldfield and aid in planning the next phase of regional exploration.

Giants Reef has announced that as part of an accelerated exploration program, exploration in eastern region of the Tennant Creek Goldfield, that incorporates ELs 9403 and 10406, will be one of the highest ranked priorities for the 2004 calendar.

Giants Reef intends to commence exploration activities in the region encompassing EL 8991 by conducting a detailed gravity survey and pending favourable results follow this work up with regolith drilling. Encouragement from these programs will determine the next phase of exploration.

#### 10. EXPENDITURE FOR YEAR FIVE

#### 10.1 EL 9403 Expenditure

Under the First Schedule a minium of \$7,600 was set as the expenditure requirement for Exploration Licence 9403. Actual expenditure was as follows:

		\$
1.	Geology	\$5,363.37
2.	Geochemistry	\$0.00
3.	Geophysics	\$0.00
4.	Surveying	\$0.00
5.	Data Integration	\$0.00
6.	Drilling	\$247.20
7.	Analytical	\$247.20
8.	Administration	\$60.00
9.	Tenement Management	\$90.00
10.	Rehabilitation	\$0.00
	TOTAL	\$6,007.77

Total expenditure was \$6,007.77. As the expenditure covenant was not met, an application for variation of the minimum expenditure accompanies this report.

#### 10.2 EL 10406 Expenditure

Under the First Schedule a minium of \$22,200 was set as the expenditure requirement for Exploration Licence 10406. Actual expenditure was as follows:

		\$
1.	Geology	\$5,372.48
2.	Geochemistry	\$0.00
3.	Geophysics	
4.	Surveying	
5.	Data Integration	
6.	Drilling	\$455.00
	Analytical	
	Administration	\$1,635.10
9.	Tenement Management	\$297.14
10.	Rehabilitation	
	TOTAL	\$7,759.72

Total expenditure was \$7,759.72. As the expenditure covenant was not met, an application for variation of the minimum expenditure accompanies this report.

#### 11. PROPOSED PROGRAM AND EXPENDITURE FOR YEAR TWO

#### 11.1 EL 9403

		\$
1.	Geology	\$5,000
2.	Geochemistry	\$0
3.	Geophysics	
4.	Surveying	\$0
5.	Data Integration	\$500
	Drilling	
	Analytical	
8.	Administration	\$200
9.	Tenement Management	\$400
10.	Rehabilitation	\$0
	TOTAL	\$7,100.00

Expenditure for this work is expected to be in the vicinity of \$7,000. Exploration programs can be affected by results, and while this is the proposed program and expenditure, specific activities may vary according to the results achieved.

#### 11.2 EL 10406

		\$
1.	Geology	\$5,000
2.	Geochemistry	\$0
3.	Geophysics	
4.	Surveying	
5.	Data Integration	\$500
	Drilling	
7.	Analytical	\$0
8.	Administration	\$200
	Tenement Management	
10.	Rehabilitation	\$0
	TOTAL	\$7,100.00

Expenditure for this work is expected to be in the vicinity of \$7,000. Exploration programs can be affected by results, and while this is the proposed program and expenditure, specific activities may vary according to the results achieved.

B.J. PARKER SENIOR PROJECT GEOLOGIST



REPORT NAME:

# **GIANTS REEF MINING LIMITED**

### HARD COPY REPORT META DATA FORM

EL 9403 Jess, EL 10406 Montana,

REPORT NAME:  PROSPECT NAMES(s):	FIRST COMBINED ANNUAL REPORT 1 <sup>TH</sup> MAY 2003 - 30 <sup>TH</sup> JUNE 2004 JESS, MONTANA
GROUP PROSPECT NAME:	
TENEMENT NUMBERS(s):	EL 9403, EL 10406
ANNIVERSARY DATE:	1 MAY 2004
OWNER/JV PARTNERS:	GIANTS REEF EXPLORATION PTY LTYD SANTEXCO PTY LTD
AUTHOR(s):	B.J.PARKER
COMMODITIES:	GOLD, COPPER, BISMUTH
MAPS 1:250 000:	TENNANT CREEK SE53-14
MAPS 1:100 000:	TENNANT CREEK 5758
MAPS 1:25 000	
TECTONIC UNIT(s):	TENNANT CREEK INLIER
STRATIGRAPHIC NAME(s)	WARRAMUNGA FORMATION
AMF GENERAL TERMS:	
AMF TARGET MINERALS:	GOLD, COPPER
AMF GEOPHYSICAL:	
AMF GEOCHEMICAL:	
AMF DRILL SAMPLING:	
HISTORIC MINES:	ELLEN M, CATS WHISKERS
DEPOSITS:	CATS WHISKRS
PROSPECTS:	
KEYWORDS:	EL 9403, EL 10406, JESS, MONTANA





