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EXPLORATION LICENCE 9403

JESS

EXPLORATION LICENCE 10406

MONTANA

SECOND COMBINED ANNUAL REPORT

1 May 2004 - 30 April 2005

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

AUTHOR:
B.J. PARKER

May, 2005

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*
Santexco Pty Ltd	☐	

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 1st May 2004 to the 30th April 2005.

Targets are ironstone-related gold-copper deposits.

Exploration during the year included a detailed ground gravity survey and a RAB drilling program. Whilst the results from the RAB drilling over the anomally 5 target indicate there is little potential for shallow oxide mineralisation there still exists potential to test the magnetic anomaly at depth. Proposed Exploration for year three will most likely include further geophysical remoding of the anomaly 5 magnetic target and geochemical sampling over the remainder of the ELs.

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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 April 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^2) 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 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 9th 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

5. 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 TWO

MMP's covering work planned in Eldorado Project Area (Eldorado Comstock Mineralised Corridor) were submitted to DBIRD in July and approved in August.

Geophysical consultant Resource Potentials Pty Ltd were contracted in July to undertake geophysical data processing and interpretation work. In addition to prospect work, Resource Potentials requested to review the 1998 Kevron Nob-Line airborne magnetic data, and assist with compiling a systematic database of all the available geophysical data in the TC mineral field.

A gravity survey covering some 1.7 km^2 of the Eldorado Project Area including the Anomaly 3, 4 and 5 magnetic anomalies and portions of EL 9403 and EL 10406 was planned in July. The survey also inculded several outcropping ironstones including those at the Mount, Ellen M and Cat's Whiskers prospects. Daishsat Geodetic Surveyors completed approximately 22 line kilometres of gravity using 40 m station centres and 80 m line spacing.

Geophysical modelling and interpretation of the newly acquired gravity data together with previous magnetic survey data was undertaken by Lindeman Geophysics Pty Ltd. The gravity, magnetic and geochemical data was also provided to Resource Potentials for modelling and interpretation. The new gravity data revealed more subsurface information than the magnetic data and resulted in the delination of some 11 gravity high anomalies, which were interpreted as potential ironstones and/or structures. A density of 1.8g/cc rather than 2.2g/cc was applied to the bouguer correction in an effort to remove the effects of terrain and make the data more interpretable. Bouguer corrections use a uniform density over an area and the reality is that hills and gullies that produce topographic anomalies in the gravity data can be caused by rocks and regolith materials that have variable density across the survey area. Therefore, the Bouguer correction will not completely remove all terrain effect. Variable density Bouguer corrections can be undertaken, but this is a subjective process that may produce as many artefacts as it is trying to remove.

RAB drilling commenced over the Eldorado Prospects in September and a total of 75 holes were completed for 1,929 meters. Of these, 7 holes (ELRB 59-65) for a total of 175 meters were sited in EL 10406 (Figure 2.). Drilling was broadly undertaken on a 50m x 50m grid pattern.

The initial drilling program was designed to test the series of 11 gravity anomalies, some of which are coincident with magnetic anomalies (2, 3, 4 and 5) and numerous Au geochemical anomalies which lie along strike to the Eldorado Deposit. Approximately 40% of the initial designed program was precluded by the CLC, including the majority of the more highly ranked gravity/geochemical targets, due to there proximity to areas of topographical relief both within and proximal to a AAPA "Unconfirmed Recored Site". These included gravity-magnetic anomalies associated with several outcropping ironstones (Mount, Ellen M and Cat's Whiskers prospects).

Lithologies encountered in the drilling included moderate to strongly sheared intercalated Warramunga Formation siltstones, shales and sandstones. Apart from three holes approximately 100m east of the Cat's Whiskers prospect (MLC528 & 529), magnetite – hematite – chlorite ironstone bodies were not encountered in any of the holes drillied in EL 10406.

Results from the drilling were mostly disappointing and apart from the drilling in MLC528 & 529 (12m @ 103ppb Au and 853ppm Cu from 12m (ELRB028), and 12m @ 137ppb Au from 30m (ELRB031), no significant assays results were returned for the 7 holes in EL 10406. The weak Au-Cu anomalies encountered in ELRB028 are hosted by a 12m zone strongly hematitic and chloritic sheared siltstone. The Au anomalies encountered in ELRB031 are hosted within a 10m wide zone of strongly hematite-limonitic siltstone-sandstone units.

Results from the drilling suggest that the gravity highs occur in association with lithology that is either sheared or more resilient to weathering (oxidation). In contrast, gravity lows appear to be associated with units that are more deeply weathered and are best described as clay saprolite.

7. WORK PROPOSAL FOR YEAR THREE

Proposed Exploration for year three will most likely include further geophysical remoding of the anomaly 5 magnetic target and geochemical sampling of the remainder of the ELs.

8. REHABILITATION

All drilling rubbish generated during the Eldorado RAB drill program (including EL 9403 and 10406) was removed and disposed of at the Tennant Creek tip. Green sample bags were collected and removed and both PVC collar pipes were cut 1 metre below ground level, plugged and then back filled to the natural ground surface.

No other work conducted over ELs has required any rehabilitation measures.

9. CONCLUSIONS

Whilst the results from the RAB drilling over the anomally 5 target indicate there is little potential for shallow oxide mineralisation there still exists potential to test magnetic anomaly further and the significant intercept returned from EL5-003B which returned 8.40m @ 11.60 g/t Au, 0.44% Cu from 289m (including 1.20m @ 77.57g/t Au, 0.3% Cu from 294m) which remains open up plunge. Proposed Exploration for year three will most likely include further geophysical remoding of the anomaly 5 magnetic target and geochemical sampling over the remainder of the ELs.

10. EXPENDITURE FOR YEAR TWO

10.1 EL 9403 Expenditure

Under the First Schedule a minium of $7,100 was set as the expenditure requirement for Exploration Licence 9403. Actual expenditure was as follows:

		$
1.	Geology	5,782
2.	Geochemistry	
3.	Geophysics	
4.	Surveying	
5.	Data Integration	3,080
6.	Drilling	
7.	Analytical	2,643
8.	Administration	1,545
9.	Tenement Management	991
10.	Rehabilitation	
	TOTAL	**$14,041**

Total expenditure was $14,041.

10.2 EL 10406 Expenditure

Under the First Schedule a minium of $7,100 was set as the expenditure requirement for Exploration Licence 10406. Actual expenditure was as follows:

		$
1.	Geology	5,855
2.	Geochemistry	
3.	Geophysics	12,693
4.	Surveying	114
5.	Data Integration	
6.	Drilling	20,633
7.	Analytical	6,611
8.	Administration	1,634
9.	Tenement Management	170
10.	Rehabilitation	90
	TOTAL	**$47,800**

Total expenditure was $47,800.

11. PROPOSED PROGRAM AND EXPENDITURE FOR YEAR THREE

11.1 EL 9403

		$
1.	Geology	$2,000
2.	Geochemistry	$2.000
3.	Geophysics	$2,000
4.	Surveying	$0
5.	Data Integration	$500
6.	Drilling	$0
7.	Analytical	$0
8.	Administration	$200
9.	Tenement Management	$400
10.	Rehabilitation	$0
	TOTAL	**$7,100**

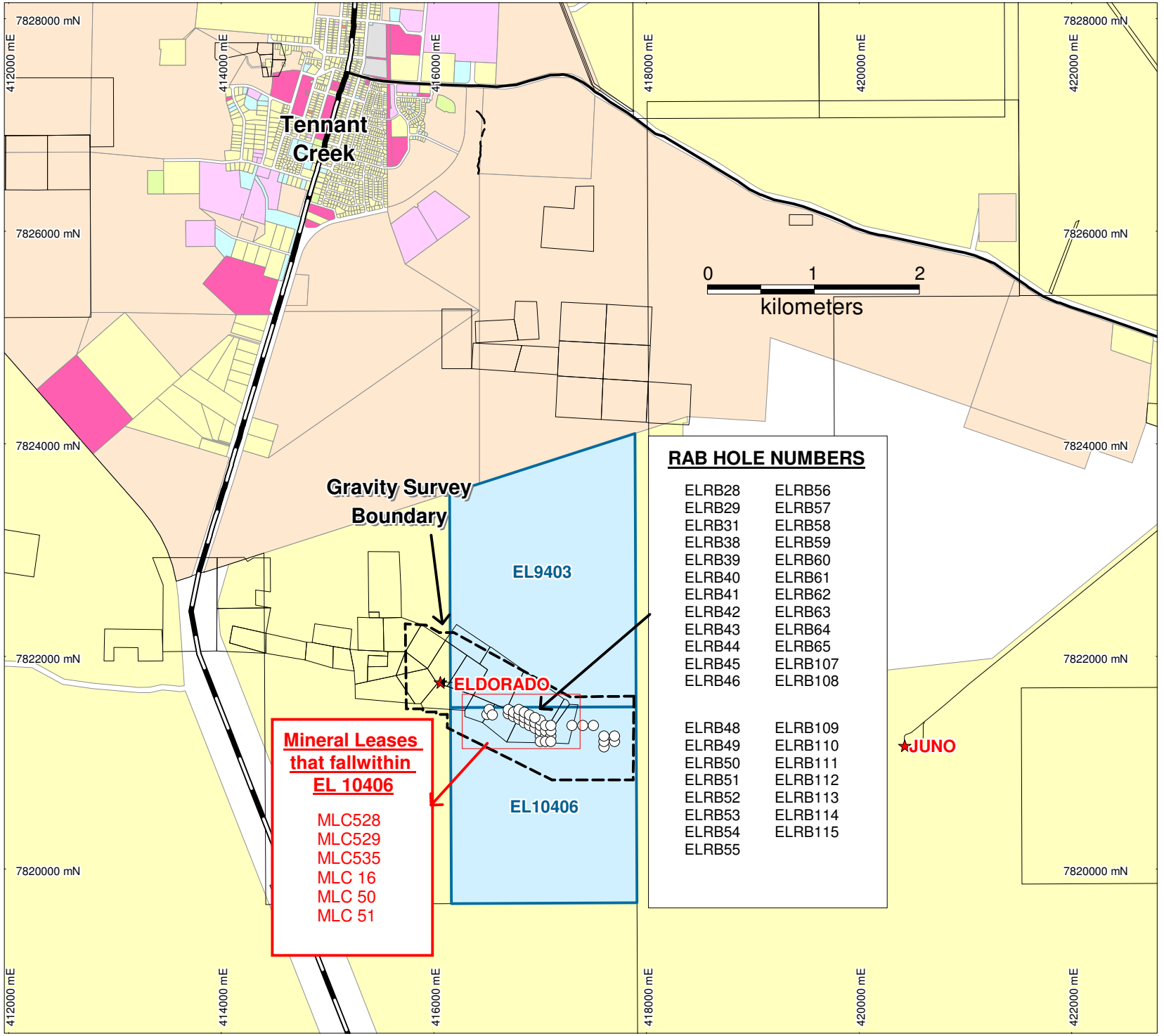
Expenditure for this work is expected to be in the vicinity of $7,100. Exploration programs can be affected by results, and while this is the proposed program and expenditure, specific activities may vary according to the results achieved.

11.2 EL 10406

		$
1.	Geology	$2,000
2.	Geochemistry	$2.000
3.	Geophysics	$2,000
4.	Surveying	$0
5.	Data Integration	$500
6.	Drilling	$0
7.	Analytical	$0
8.	Administration	$200
9.	Tenement Management	$400
10.	Rehabilitation	$0
	TOTAL	**$7,100**

Expenditure for this work is expected to be in the vicinity of $7,100. 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
SUPERVISING GEOLOGIST - REGIONAL



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Location of EL 9403 & EL 10406 and Surrounding Tenure

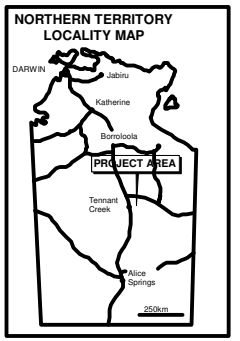
Author: GRM	Date: May 2005
Drawn: DMC	Revised:
Dwg No:	Report No.: Figure 1
Projection: GDA94	Scale: 1:50,000

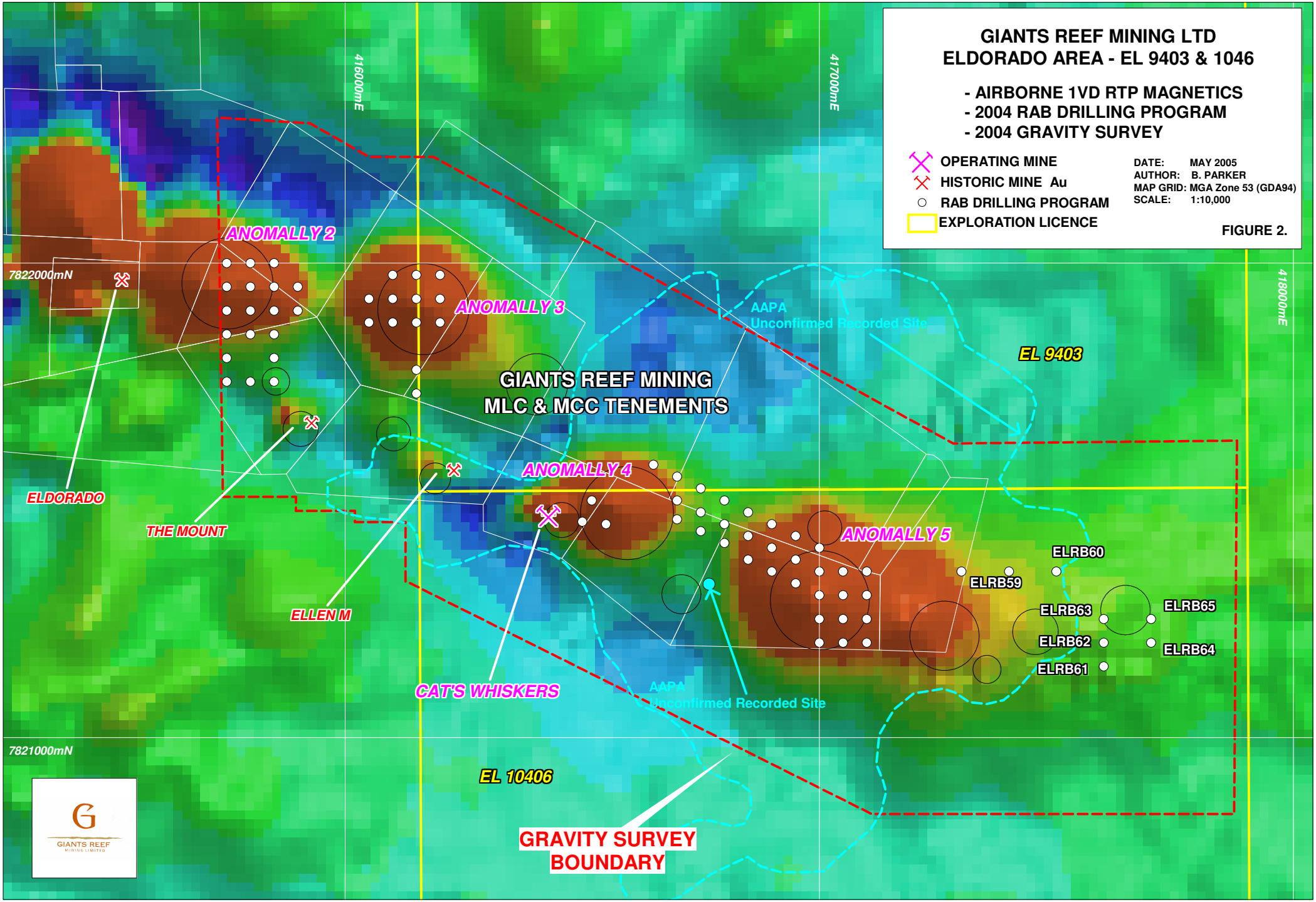
Perpetual Pastrol Lease

Aboriginal Freehold Land

Special Purpose Lease

Crown Land Perpetual





MAP CENTRE: 416,660 E; 7,821,600 N

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HARD COPY REPORT META DATA FORM

REPORT NAME:	EL 9403 *Jess*, EL 10406 *Montana*, SECOND COMBINED ANNUAL REPORT 1TH MAY 2004 - 30TH JUNE 2005
PROSPECT NAMES(s):	JESS, MONTANA
GROUP PROSPECT NAME:	
TENEMENT NUMBERS(s):	EL 9403, EL 10406
ANNIVERSARY DATE:	1 MAY 2005
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