

GIANTS REEF MINING LIMITED

A.B.N. 71 058 436 794

1/26 IRVINE STREET TENNANT CREEK NT 0860

PO BOX 1244 TENNANT CREEK NT 0861

Telephone 08 8962 1330 Facsimile 08 8962 2900

Email: email@giantsreef.com.au Website: www.giantsreef.com.au

EXPLORATION LICENCE 10041

GATEWAY

FINAL REPORT

25 February 1999 – 22 January 2003

LICENSEE:

GIANTS REEF EXPLORATION PTY LTD

A.C.N. 009 200 346

AUTHORS:

J L CAHILL

S C RUSSELL

April, 2003

DISTRIBUTION:

Department of Business, Industry and Resource Development ☐
Central Land Council ☐
Giants Reef Exploration Pty Ltd ☐
Giants Reef Mining Limited ☐

SE53-14

TENNANT CREEK 1:250 000

5758

TENNANT CREEK 1:100 000

SUMMARY

Exploration Licence 10041 *Gateway*, was applied for to cover an area of magnetic anomalism and a section of the Mary Lane Shear.

Targets were Tennant Creek style magnetite ironstone associated gold and copper ore bodies.

This report records the exploration work completed on EL 10041 during its four years of tenure from the 25th February 1999 to the 22nd January 2003.

Work completed over the four years of tenure of Exploration Licence 10041 included literature searches, reconnaissance, geophysical modelling and assessment, rock chip sampling, database compilation and reviews.

Four prospect areas were identified by Giants Reef, being the Mary Lane Shear, Pretty Quadroon, Lucky Strike and the Conservation Anomaly. Very little work was undertaken over these prospects as the early tenure years of the EL focussed on exploration over a prospect in the portion of the Licence that was relinquished at the end of the third tenure year.

Rock chip samples taken from the historic Pretty Quadroon and the Lucky Strike workings gave low order geochemical results. A literature search over the Conservation anomaly indicated that Newmont explored the target and found no significant mineralisation. Giants Reef were unable to generate any further target areas over the Mary Lane Shear.

An internal review of the Giants Reefs tenement portfolio and a classification of exploration opportunities in September 2002 ranked the Exploration Licence as an area of limited exploration potential. This assessment was based on assessment of the exploration conducted over EL 10041 over the previous four tenure years, which concluded that the Exploration Licence was at an immature stage of exploration. The four prospect areas were reviewed, but were found not to warrant further follow up exploration.

Based on the recommendations from the internal review in September, Exploration Licence 10041 was surrendered by Giants Reef on the 22nd January 2003.

CONTENTS

PAGE

	SUMMARY	i.
	CONTENTS	ii.
1.	INTRODUCTION	1.
2.	LOCATION	1.
3.	TENURE	1.
4.	GEOLOGY	1.
	4.1 Regional Geology	1.
	4.2 Local Geology	1.
5.	WORK DONE DURING THE YEAR	2.
	5.1 Reporting Area	2.
	5.2 YEAR 1 (1999-2000)	2.
	5.2.1 Literature Search	2.
	5.2.2 Reconnaissance	2.
	5.2.3 Magnetic Modelling of the Mary Lane Shear	2.
	5.3 YEAR 2 (2000-2001)	2.
	5.3.1 Reconnaissance Rock Chip Sampling	2.
	5.3.2 Research Project	3.
	5.4 YEAR 3 (2001-2002)	3.
	5.4.1 Pretty Quadroon Prospect	3.
	5.4.2 Lucky Strike Prospect	4.
	5.4.3 Old Drillholes and Literature Search	4.
	5.4.4 Database Compilation	4.
	5.5 YEAR 4 (2002-January 2003)	4.
	5.5.1 Target Review	4.
	5.5.2 Tenement Review.	5.

6.	REHABILITATION	5.
7.	CONCLUSIONS.....	6.
8.	EXPENDITURE	6.

FIGURES

1. Location and Surrounding Tenements
2. Year 1 Licence Area
3. Year 4 Licence Area
4. Prospects and Sample Locations

1. INTRODUCTION

Exploration Licence 10041 *Gateway*, was applied for to cover an area of magnetic anomalism and a section of the Mary Lane Shear.

Targets were Tennant Creek style magnetite ironstone associated gold and copper ore bodies.

This report records the exploration work completed on EL 10041 during its four years of tenure from the 25th February 1999 to the 22nd January 2003.

All AMG co-ordinates in this report are in AGD 84 grid system.

2. LOCATION

EL 10041 is centred 6km north of Tennant Creek. It is located on the Tennant Creek 1:100 000 scale map sheet (5758).

Access is via the Stuart Highway, which runs along the western boundary of the EL, and the sealed road into the Mary Ann Dam, which turns east off the Stuart Highway 4.5km north of Tennant Creek. There are a number of dirt tracks through the Licence and most of it can be traversed in 4x4 drive vehicles during dry weather.

Figure 1 shows EL 10041 and surrounding tenements.

3. TENURE

Exploration Licence 10041, originally covering 1 full block and 4 part blocks with a total area of 11 square kilometres, was granted to Giants Reef Exploration Pty Ltd on the 25th February 1999 for a period of 6 years.

The Licence is within NT Freehold Portion 4073, owned by the Partta Land Aboriginal Corporation. Exploration was governed by the terms and conditions of Giants Reef's Indigenous Land Use Agreement (ILUA).

At the end of the third tenure year 2 part blocks (22/46 and 22/47) were relinquished.

Exploration Licence 10041 was surrendered on the 22nd January 2003.

Figure 2 shows the year 1 Licence Area.

Figure 3 shows the year 4 Licence Area.

4. GEOLOGY

4.1 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.

4.2 Local Geology

The area is mostly covered by thin soils and a surface layer of scattered quartz. Bedrock exposures in a few low hills and in gullies of the Goodairs Creek drainage system show that the EL is underlain by the Palaeoproterozoic Warramunga Formation.

A major structural feature, the Mary Lane Shear, runs through the EL, striking west north-west to east south-east.

5. WORK DONE DURING THE TERM

5.1 Reporting Area

At the end of the third tenure year 2 part-blocks were relinquished, accompanied by a relinquishment report. The Final Report for EL 10041 records all the exploration work undertaken on the Licence area held in the fourth year (Figure 3).

Full details of work completed over the relinquished portion of EL 10041 can be found in the report by Giants Reef entitled, "Exploration Licence 10041, Gateway: Third Year Relinquishment Report, 25 February 1999 to 24 February 2002." Authors J L Cahill & S C Russell, (2002). Report to DBIRD.

5.2 YEAR 1 (1999-2000)

5.2.1 Literature Search

Two historic workings are identified on NTDME 1:25,000 scale tenement map 52/5.IV.NE. These are the "Lucky Strike" (AMG 418250 7832900N) and the "Pretty Quadroon" (417300E 7832650N). No mentions were found of these in Ivanac (BMR Bulletin 22 Geology and Mineral deposits of the Tennant Creek Goldfield, NT; 1954) or Ferenczi (NTGS Mineral Deposit Series, Tennant Creek SE 53-14; 1996).

5.2.2 Reconnaissance

Attempts were made to locate the 'Lucky Strike' and 'Pretty Quadroon' diggings on the ground, using the positions shown on the NTDME map 52/5.IV.NE. No clear evidence of old workings were found at either location.

5.2.3 Magnetic Modelling of the Mary Lane Shear

Consulting geophysicist Dr Doug Barrett, of Barrett Geophysical Exploration Consultants Pty Ltd of Perth, WA, was engaged to produce magnetic images of EL 10041 and the adjoining EL 9793 (Giants Reef) to show the demagnetised Mary Lane Shear. A number of geological references interpret the Mary Lane Shear as an ancient structure contemporaneous with mineralising episodes in the Tennant Creek goldfield. This shear zone is host to a number of small mines such as the True Blue, Mary Ann, Hidden Mystery, Eyes of Youth, Mary Lane and Mascot.

Giants Reef regards the Mary Lane shear as a target in its own right for non-magnetic, structurally controlled orebodies, although the idea has not been pursued in the field to any length by Giants Reef.

Full details of work completed on EL 10041 during the first year of tenure can be found in the report by Giants Reef entitled, "Exploration Licence 10041, Gateway: First Annual Report, 25 February 1999 to 24 February 2000," author P.G.Simpson, (2000). Report to NT DME.

5.3 YEAR 2 (2000-2001)

5.3.1 Reconnaissance Rock Chip Sampling

Previous attempts to locate the "Lucky Strike" and "Pretty Quadroon" diggings in the first year of tenure were unsuccessful. Another reconnaissance trip to the EL was made in the hope that recent bushfires and heavy rains may have exposed evidence of these two diggings.

One prospecting pit was located during the reconnaissance trip and is thought to be the “Pretty Quadroon” occurrence identified on the NTDME 1:25,000 scale tenement map 52/5.IV.NE. The location for Pretty Quadroon scaled off the Tenure maps is 417300E 7832900N. The prospecting pit location collected in the field is 417215E 7832595N. It is quite reasonable to believe that the pit identified is the occurrence known as the “Pretty Quadroon”.

The occurrence consisted of one shallow (30-40cm) prospecting pit that had exposed a narrow specular-haematite ironstone vein enclosed within blocky limonite-stained quartz. The ironstone strikes approximately east-west and can be traced for at least 350m.

Twelve rock chip samples (74551 to 74562) were collected along strike from the exposed ironstone. A summary is tabulated below:

Sample No	Easting (AMG)	Northing (AMG)	Rock Type
74551	417157	7832458	Quartz-haematite vein subcrop
74552	417205	7832688	Quartz-haematite outcrop
74553	417098	7832557	Ironstone plus quartz-haematite veins
74554	417102	7832560	Ferruginous jasper ironstone
74555	417115	7832563	Quartz-Haematite outcrop
74556	417215	7832595	Prospecting pit specular-haematite rubble
74557	417400	7832665	Decayed ironstone
74558	417394	7832668	As above
74559	417495	7832663	Ferruginous sandstone
74560	417485	7832553	Quartz-haematite outcrop
74561	417516	7832530	Quartz-haematite outcrop
74562	417565	7832615	Rubbly ironstone

Due to wet ground conditions it was decided not to continue on with the search for the “Lucky Strike” occurrence.

5.3.2 Research Project

Dr Nicole Adshead-Bell from James Cook University of North Queensland completed a two-month study of the structural and timing controls on Au-Cu-Bi mineralisation within the Tennant Creek mineral field. Her work included several days collecting structural data within the Mary Lane Shear Zone, which runs through the southern end of the Licence. Although no rock chip samples were collected from within the Licence area or the relinquished blocks, the data set collected over the 2-month research period was thought to assist in targeting future drilling within EL 10041.

Full details of work completed on EL 10041 during the second year of tenure can be found in the report by Giants Reef entitled, “Exploration Licence 10041, Gateway: Second Annual Report, 25 February 2000 to 24 February 2001.” Authors P.G.Simpson & S.C.Russell, (2001). Report to DBIRD.

5.4 YEAR 3 (2001-2002)

5.4.1 Pretty Quadroon Prospect

The “Pretty Quadroon” prospect is plotted on NTDME 1:25,000 scale tenement map 52/5.IV.NE, at 417300E 7832900N. In the third tenure year, this locality was searched and some low ironstone outcrops and a shallow prospector’s pit were located, which almost certainly mark the Pretty Quadroon prospect, at 417215E 7832595N. The ironstone outcrops trend approximately east-west and can be followed for at least 350m.

The results for the twelve rock chip samples (74551 to 74562) were received in the third tenure year. Gold assays were low (maximum 0.07 g/t Au); copper levels were all below the detection level apart from sample 74559 at 200 ppm Cu, and bismuth levels ranged up to 75 ppm Bi.

Figure 4 shows the location of the Pretty Quadroon prospect within EL 10041.

5.4.2 Lucky Strike Prospect

Another historic working called the 'Lucky Strike' is marked on NTDME 1:25,000 scale tenement map 52/5.IV.NE, at approximately 418200E 7832900N. Previous reconnaissance work by Giants Reef had failed to find any evidence of prospecting or mining in this locality.

A new search was made which located some ironstone outcrops and old diggings centred on 417960E 7833000N, which is in the general area shown on the Government map, and is presumably the Lucky Strike. Like the Pretty Quadroon, this prospect is on the northern edge of the Mary Lane Shear.

A total of 28 rock chip samples (numbers 74583-74584, 74591-74600, and 423278-423293) were collected from this prospect and from various poorly exposed outcrops up to several hundred metres away. Assay results were encouraging, although there were also many low values. The highest three gold assays were 0.21, 0.15 and 0.14 g/t Au, with maximum copper at 155, 140 and 120 ppm Cu and maximum bismuth at 280, 210 and 100 ppm Bi.

Figure 4 shows the location of the Lucky Strike prospect within EL 10041.

5.4.3 Old Drillholes and Literature Search.

The collars of three RC percussion holes, drilled by Newmont Australia Limited in 1989, under EL 5723, were located in the field, and their locations recorded using a GPS. An earlier hole, probably drilled by Asarco Australia Ltd, was found in the same area. All four of these drill collars are within a 50m radius of 416870E 7832850N. This is at a cluster of magnetic anomalies referred to collectively as the "Conservation Anomaly", located on the northern margin of the Mary Lane Shear. The "Bullseye Anomaly" is one of its component magnetic anomalies, and was tested by Newmont drillholes CZRC-1, CZRC-2 and CZRC-3. Downhole magnetic probing was carried out on CZRC-2 to help locate the magnetic source, and CZRC-3 was then drilled, intersecting ironstone with associated chlorite and talc alteration. However, assay results were disappointing, and Newmont abandoned the prospect.

Newmont's first and second annual reports on EL 5723 (NTDME Open File Reports CR90/115 and CR91/050 respectively) describe the work done.

Figure 4 shows the location of the Conservation Anomaly magnetic complex within EL 10041.

5.4.4 Database Compilation

A geological Micromine database for EL 10041 was created.

Full details of work completed on EL 10041 during the third year of tenure can be found in the report by Giants Reef entitled, "Exploration Licence 10041, Gateway: Third Annual Report, 25 February 2001 to 24 February 2002." Authors P.G.Simpson & S.C.Russell, (2002). Report to DBIRD.

5.5 YEAR 4 (2002-January 2003)

5.5.1 Target Review

The targets located from previous companies work and the targets generated by Giants Reef during the four years of tenure of EL 10041 were summarised.

Mary Lane Shear:

This shear zone is host to a number of small mines such as the True Blue, Mary Ann, Hidden Mystery, Eyes of Youth, Mary Lane and Mascot. Giants Reef regards the Mary Lane shear as a target in its own right for non-magnetic, structurally controlled orebodies, although the idea has not been pursued in the field, and no specific targets in EL 10041 along the shear have been generated by Giants Reef.

Conservation Anomaly:

This is a cluster of magnetic anomalies referred to collectively as the "Conservation Anomaly", located on the northern margin of the Mary Lane Shear. The "Bullseye Anomaly" is one of its component magnetic anomalies, and was drill tested by Newmont. Assay results were disappointing, and Newmont abandoned the prospect.

Lucky Strike:

A historic working called the 'Lucky Strike' was located at AMG 417960E 7833000N, which has some ironstone outcrops and old diggings. Rock chip samples taken from this location was slightly anomalous with the highest gold assay at 0.21, g/t Au.

Pretty Quadroon Prospect:

A historic working called the "Pretty Quadroon" was located at 417215E 783259S which has some small ironstone outcrops and a shallow prospector's pit. Rock chip samples taken from this location were disappointing and do not warrant follow up exploration.

5.5.2 Tenement Review

An internal review of the Giants Reefs tenement portfolio and a classification of exploration opportunities in September 2002 ranked the Exploration Licence as an area of limited exploration potential. This assessment was based on assessment of the exploration conducted over EL 10041 over the previous four tenure years, which concluded that the Exploration Licence was at an immature stage of exploration. The four prospect areas were reviewed, but were found not to warrant further follow up exploration.

For these reasons, combined with Giants Reefs initiative to reduce the amount of Exploration Licences held by the company, Giants Reef made a recommendation for the Licence area to be surrendered.

5.6 Licence Surrender

Based on the recommendations from the internal review in September, Exploration Licence 10041 was surrendered by Giants Reef on the on 22nd January 2003.

6. REHABILITATION

None of the field work carried out on EL 10041 required any rehabilitation measures.

7. CONCLUSIONS

Work completed over the four years of tenure of Exploration Licence 10041 included literature searches, reconnaissance, geophysical modelling and assessment, rock chip sampling, database compilation and reviews.

Four prospect areas were identified by Giants Reef, being the Mary Lane Shear, Pretty Quadroon, Lucky Strike and the Conservation Anomaly. Very little work was undertaken over these prospects as the early tenure years of the EL focussed on exploration over a prospect in the portion of the Licence that was relinquished at the end of the third tenure year.

Rock chip samples taken from the historic Pretty Quadroon and the Lucky Strike workings gave low order geochemical results. A literature search over the Conservation anomaly indicated that Newmont explored the target and found no significant mineralisation. Giants Reef were unable to generate any further target areas over the Mary Lane Shear.

An internal review of the Giants Reefs tenement portfolio and a classification of exploration opportunities in September 2002 ranked the Exploration Licence as an area of limited exploration potential. This assessment was based on assessment of the exploration conducted over EL 10041 over the previous four tenure years, which concluded that the Exploration Licence was at an immature stage of exploration. The four prospect areas were reviewed, but were found not to warrant further follow up exploration.

Based on the recommendations from the internal review in September, Exploration Licence 10041 was surrendered by Giants Reef on the 22nd January 2003.

8. EXPENDITURE

The total expenditure for EL 10041 for the four years of tenure from the 25th February 1999 to the 22nd January 2003 is tabulated below:

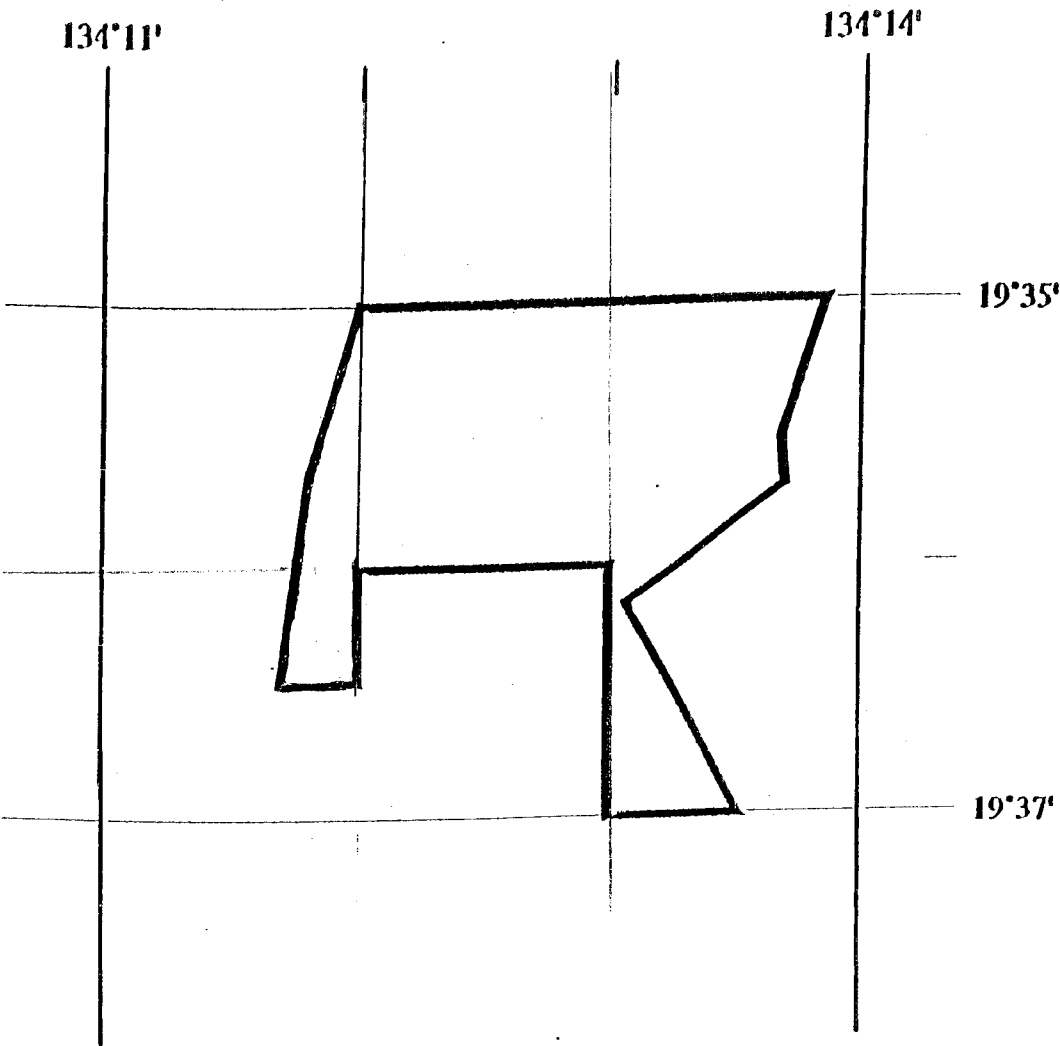
	\$YEAR 1	\$YEAR 2	\$YEAR 3	\$YEAR 4
Geology	2,235	3,753	4,017	1,276
Geophysics	3,053	655	130	0
Analytical	959	0	2,520	0
Survey	0	0	126	0
Drilling	12,763	0	0	0
Data Integration	772	1,572	1,015	0
Tenure Maintenance	308	1,043	1,460	1,245
Administration and Overheads	1,534	2,385	1,727	74
Rehabilitation	0	238	0	0
TOTAL	21,624	9,646	10,995	2,595

Expenditure over EL 10041 for the 4 years of tenure amounted to \$44,860.

J.L.CAHILL
EXPLORATION GEOLOGIST

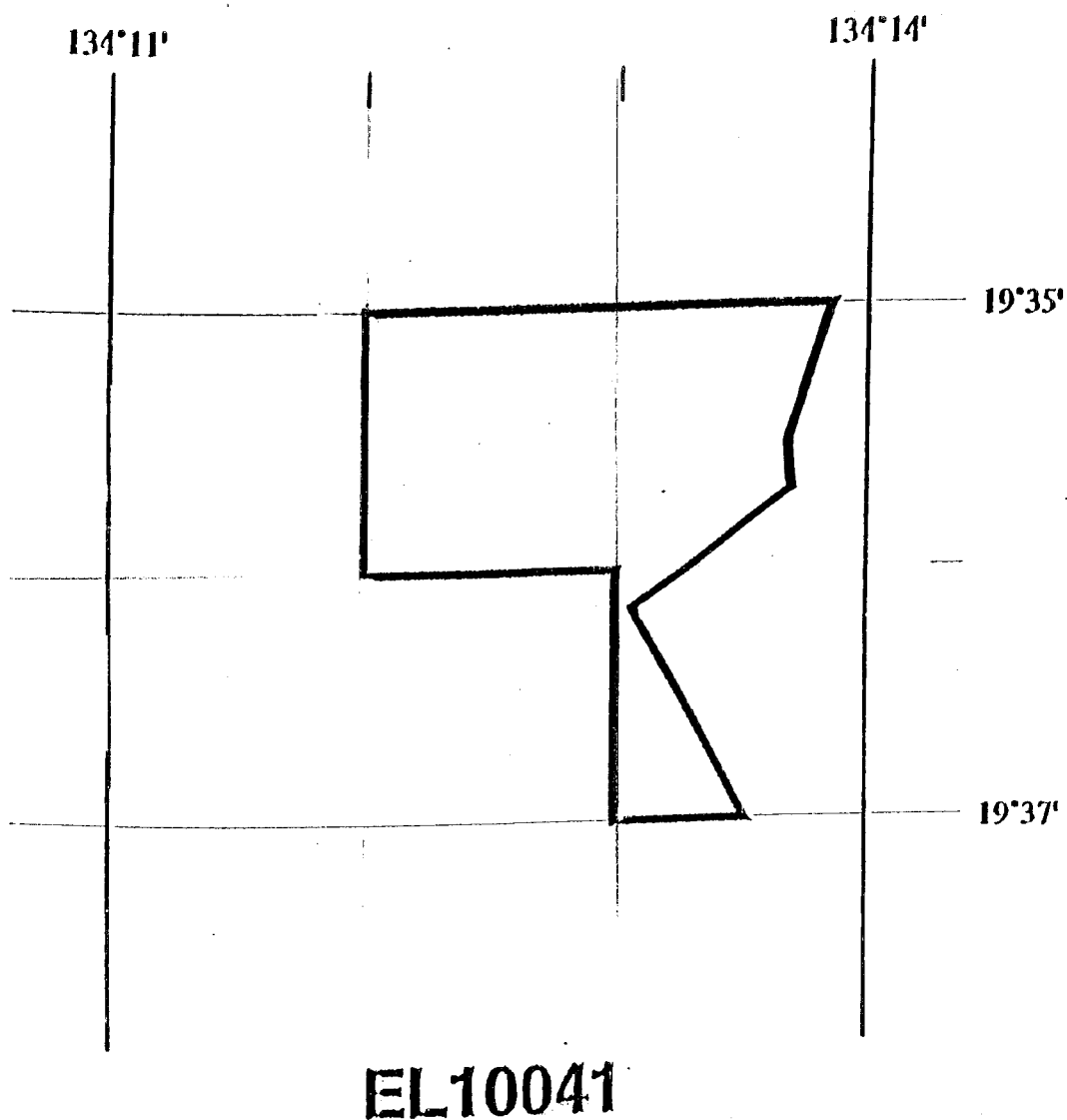
S.C.RUSSELL
SENIOR EXPLORATION GEOLOGIST

GIANTS REEF MINING LIMITED TENNANT CREEK NORTHERN TERRITORY			
AREA	EL 10041 - GATEWAY		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	Location and Surrounding Tenements <i>Extract DME MINING TENURE 52/5</i>		
DATE	AUTHOR	SCALE	FIGURE 1
FEB 2000		1:100 000	

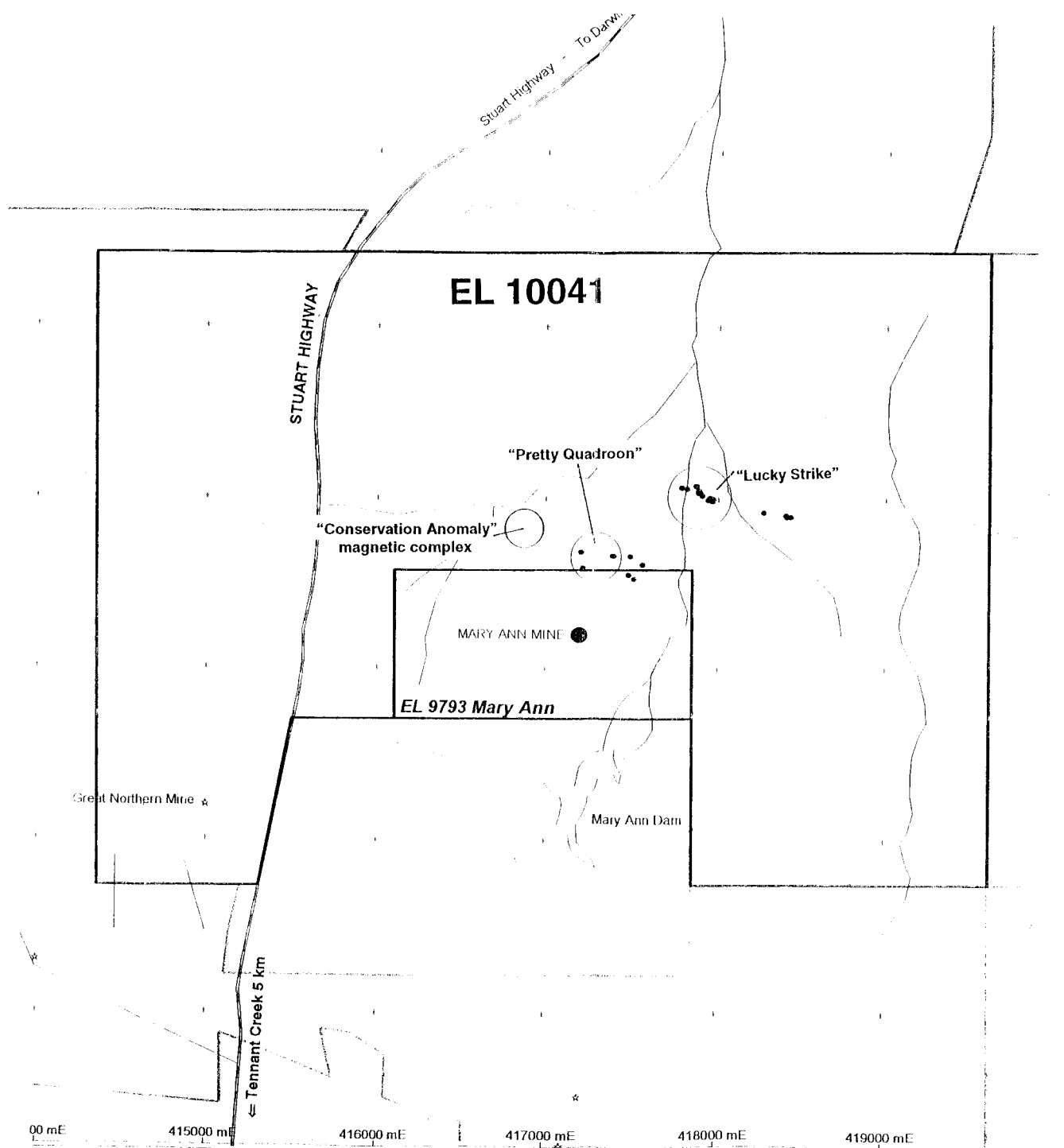


EL10041
5 BLOCKS
11 sq kms

GIANTS REEF EXPLORATION PTY LTD			
TENNANT CREEK NORTHERN TERRITORY			
AREA	EL 10041 GATEWAY		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	Year 1 Licence Area Extract DME FIRST SCHEDULE		
DATE	AUTHOR	SCALE	FIGURE 2
FEB 1999			



GIANTS REEF EXPLORATION PTY LTD			
TENNANT CREEK NORTHERN TERRITORY			
AREA	EL 10041 GATEWAY		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	Year 4 Licence Area <i>Extract DME FIRST SCHEDULE</i>		
DATE	AUTHOR	SCALE	
FEB 1999	DBIRD		FIGURE 3



SCALE 1:25 000
 1 0 1 Kilometers



Co-ordinates are AGD84

● = rock chip sample locations

GIANTS REEF EXPLORATION PTY LTD			
TENNANT CREEK NORTHERN TERRITORY			
AREA	EL 10041 GATEWAY		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	PROSPECTS AND SAMPLE LOCATIONS		
DATE	AUTHOR	SCALE	
FEB 2002	SCR/PG	1:25,000	FIGURE 4