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EXPLORATION LICENCE 10370 *BARKLY*

FIRST ANNUAL REPORT
20 March 2001 - 19 March 2002

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

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April 2002

DISTRIBUTION:
BHP Billiton
Central Land Council
Department of Business, Industry and Resource Development
Giants Reef Exploration Pty Ltd
Giants Reef Mining Limited

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

SUMMARY

Exploration Licence 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 Strategic Alliance agreement between BHP Billiton and Giants Reef, BHP Billiton are providing funds for Giants Reef to explore EL 10370 and other selected project areas within the Tennant Creek region. Exploration Licence 10370 is one of two contiguous tenements forming the Barkly Project Area and adjacent Exploration Licence 10371 are being explored concurrently.

The Barkly Project Area is centred over an elongate gravity anomaly trending NNW-ESE through the northern part of EL 10370.

Targets are major base metals/precious metals deposits. Secondary 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 first year included a literature search, reconnaissance, rock chip sampling and geophysical assessment of recent aeromagnetic and gravity information.

Interpretation of the recent NTGS/AGSO gravity data over the target gravity ridge in EL 10370 suggests the ridge is caused by the regional lithology rather than by masses of anomalously dense rock that might provide drill targets. This interpretation has cast doubt on the usefulness of drilling a test hole into the peak residual gravity anomaly.

Two magnetic highs fairly close to the peak residual gravity anomaly on the gravity ridge were assessed. The anomaly at 448200E 7846400N appeared to be the shallower, with a modelled depth to top of around 200m. Drilling a test hole here is under review, as the anomaly may represent a Warramunga Formation-hosted (Tennant Creek type) body which is not the main target of exploration in EL 10370.

Another 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 Tennant Creek type of Au-Cu-Bi occurrence in a locality where little drilling has been done in the past.

It is clear that EL 10370 holds considerable potential for Tennant Creek-type ironstone hosted Au-Cu-Bi orebodies, but its potential for other styles of major base metals/precious metals deposits is under review.

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FIGURES

1. Location of the Licence area
2. Licence area and surrounding tenure
3. Year 1 Licence area
4. Exploration areas on background of residual Bouger gravity contours

APPENDIX

1. Rock sample assay and location data

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.

Exploration in EL 10370 is being carried out by Giants Reef under a Strategic Alliance agreement with BHP Billiton, who are funding the program.

This report records the exploration work done on EL 10370 during the first year of tenure, from 20 March 2001 to 19 March 2002.

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.

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.

Figure 1 shows the location of the Licence area.

3. TENURE

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

On 12th November 1999, Billiton Exploration Australia Pty Ltd (Billiton) entered into an Agreement with Giants Reef whereby Billiton acquired approximately 7% equity in Giants Reef, in return for providing funding for the exploration, by Giants Reef, of four project areas in the Tennant Creek region. Exploration Licence 10370 is included, along with adjacent EL 10371, as part of the Barkly Project Area.

The Licence area totals 262 one-minute blocks, and covers sections of the Barkly (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.

Figure 2 shows the Licence area and surrounding tenure.

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, pp 829-861 provide a good introduction to the Tennant Creek regional geology and styles of gold-copper mineralisation 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 Comstock 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 is a major base metals or base metals/precious metals deposit associated with a trend of moderately elevated gravity readings (gravity ridge) running in a WNW to ESE direction through the wide central part of the EL.

The gravity ridge is more-or-less coincident with a similarly oriented zone of magnetic highs. Apart from some relatively minor areas of Warramunga Formation outcrops, the basement geology of this trend is masked by Cambrian and Recent cover sequences, so that the reason for the gravity and magnetic anomalies is not known.

EL 10370 also 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, as mentioned in Section 4.2. However, Tennant Creek-style orebodies are regarded as secondary targets in EL 10370, as the focus of exploration, under the Strategic Alliance agreement with BHP Billiton, is to find major base metals or base metals/precious metals deposits.

5.2 Literature search and previous work

Giants Reef 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 10.5km east to west by 3.8km 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 was 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 Comstock mines. It was decided that the best opportunities lay within the New Hope, Plum and Comstock leases, and the SEL was surrendered.

5.3 Reconnaissance

A field trip was made to (AGD84) co-ordinates 448200E 7846400N, the site of a proposed drillhole that is currently under consideration. If the drilling proposal goes ahead, a new 6km track will have to be cleared to reach the site from the Barkly Highway.

A field visit was made to the Explorer 16 and Explorer 66 area. These prospects are about 800 metres apart, located in the southern part of the EL, approximately 5km east of the Golden Mile mine.

Approximate AGD84 co-ordinates are:

Explorer 16	450300E	7825500N
Explorer 66	451100E	7825400N

Explorer 16 has no outcrop. A diamond hole by Geopeko in the late 1970's did not encounter any ironstone, and the magnetic anomaly was not conclusively explained at the time. At Explorer 66, the un-drilled siliceous ironstone outcrop could not be located because of very thick bush and difficult access.

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.

The locations of the above reconnaissance areas are marked on Figure 4.

5.4 NTGS/AGSO gravity survey assessment

In mid-2001, the Northern Territory Geological Survey and the Australian Geological Survey Organisation jointly carried out a gravity survey over the Tennant Creek 1:250,000 sheet and parts of some adjacent sheets. In the EL 10370 area, the station spacing was at 4km by 4km centres, and along much of the gravity ridge (refer Section 5.1 and Figure 4) the spacing was at 2km by 2km. The new survey information was a great improvement upon the old 11km by 11km coverage.

Using the new dataset, the peak residual gravity anomaly along the gravity ridge is now located at 448200E 7846400N. This location is north of the Posgold/Normandy vacuum drilling grids (Section 5.2), in an area of Quaternary alluvium or other cover. Giants Reef has been considering the idea of drilling a test hole here to obtain a geological and geochemical sample of the bedrock.

Consulting geophysicist Frank Lindeman, of Lindeman Geophysics Pty Ltd, Melbourne, assessed the new NTGS/AGSO gravity data over EL 10370 for Giants Reef. His report pointed out that the Bouguer gravity and the residual gravity contours in this area do not differ greatly from each other, which suggests that "the responses are of a singular nature and not affected by secondary and deeper responses".

This is in contrast to Giants Reef's "Bluebush" regional gravity anomaly centred 40km southwest of Tennant Creek in EL's 8882 and 8883, where the residual gravity picture differs considerably from the original contoured data, and discrete residual anomalies can be regarded as individual drill targets. The gravity ridge in EL 10370 is most probably a reflection of the regional geology.

This observation downgrades the exploration potential of the EL 10370 gravity ridge target, and the possible drillhole at the residual gravity peak is under review.

5.5 Gravity ridge magnetics

The 1999 AGSO aeromagnetic data over the target gravity ridge was examined by consulting geophysicist Frank Lindeman. It was noted that there are two magnetic highs fairly close to the peak residual gravity anomaly at 448000E 7848600N. Of these two magnetic highs, the one at 448200E 7846400N appeared to be the shallower, with a modelled depth to top of around 200m.

From this work it was suggested that a drillhole at 448200E 7846400N would test both the shallower of the magnetic anomalies while still testing the residual gravity anomaly, although not at its point of maximum amplitude.

This location, however, is in the gap between the two Posgold vacuum/RAB drilling grids (Section 5.2). As much (but not all) of the bedrock found in the Posgold program was interpreted as being Warramunga Formation, it is likely that a hole at 448200E 7846400N would also intersect the same formation. Although the broad conceptual base metals deposit model for EL 10370 is not envisaged as restricted to any one geological unit, the expectation is that it would be more likely to occur in one of the younger units rather than in the Warramunga Formation, which is known only for its Tennant Creek style Au-Cu-Bi deposits. The drilling of this (possible) hole is now therefore under review.

5.6 Other 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 centred approximately over the old Perseverance and Golden Mile mines. This remanently magnetised 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 mineralisation. 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.

5.7 Rock sampling

Two samples of ferruginised Warramunga Formation sediments (423466 and 423467) were collected from the general vicinity of Explorer 16 and Explorer 66, but did not show anomalous assay results.

Eight rock samples (423468 to 423475) were taken from around the old Bluebird mine workings. Several of these samples returned assay results with anomalous gold levels, including a fine-grained dark red and black ferruginised sedimentary rock from a small mine dump (423471) which assayed 4.63 g/t Au.

The AMG (AGD84) locations and assay results for gold, copper, bismuth and iron are attached to this report as Appendix 1.

5.8 Access clearance from the Central Land Council

The Central Land Council conducted a land access clearance of the work proposed by Giants Reef in a program submitted (under the Indigenous Land Use Agreement) in March 2001. The CLC pointed out in a letter dated 5 December 2001 that the clearance work was made difficult by the fact that Giants Reef did not have firm locations for any possible drilling at the time.

A number of exclusion zones were marked on the map accompanying the clearance letter. As well, the extensive flood-out area of the Gosse River is a culturally sensitive area. The CLC requested to be advised when drilling sites or other areas likely to be disturbed by exploration activities are decided.

6. REHABILITATION

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

7. CONCLUSIONS

Interpretation of the recent NTGS/AGSO gravity data over the target gravity ridge in EL 10370 raises the likelihood that the gravity ridge is caused by the regional lithology rather than by localised masses of anomalously dense rock that might provide drill targets. This interpretation has cast doubt on the usefulness of drilling a test hole into the peak residual gravity anomaly.

Two magnetic highs fairly close to the peak residual gravity anomaly on the gravity ridge were assessed. The anomaly at 448200E 7846400N appeared to be the shallower, with a modelled depth to top of around 200m. Drilling a test hole here is under review, as the anomaly may represent a Warramunga Formation-hosted (Tennant Creek type) body which is not the main target of exploration in EL 10370.

Another 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 Tennant Creek type of Au-Cu-Bi occurrence in a locality where little drilling has been done in the past.

It is clear that EL 10370 holds considerable potential for Tennant Creek-type ironstone hosted Au-Cu-Bi orebodies, but its potential for other styles of major base metals/precious metals deposits is under review.

8. EXPENDITURE

The proposed expenditure for the first year of tenure was \$38,600. Actual expenditure was as follows:

	\$
1. Geology.....	2,756
2. Geophysics	3,378
3. Geochemistry.....	282
4. Surveying	0
5. Data integration	261
6. Analytical.....	185
7. Drilling	0
8. Tenure maintenance.....	361
9. Administration and Overheads	2,944
10. Land owner negotiations.....	6,715
TOTAL	16,882

Total expenditure amounted to \$16,882. As the expenditure covenant was not met, an application for variation of the minimum expenditure accompanies this report.

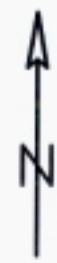
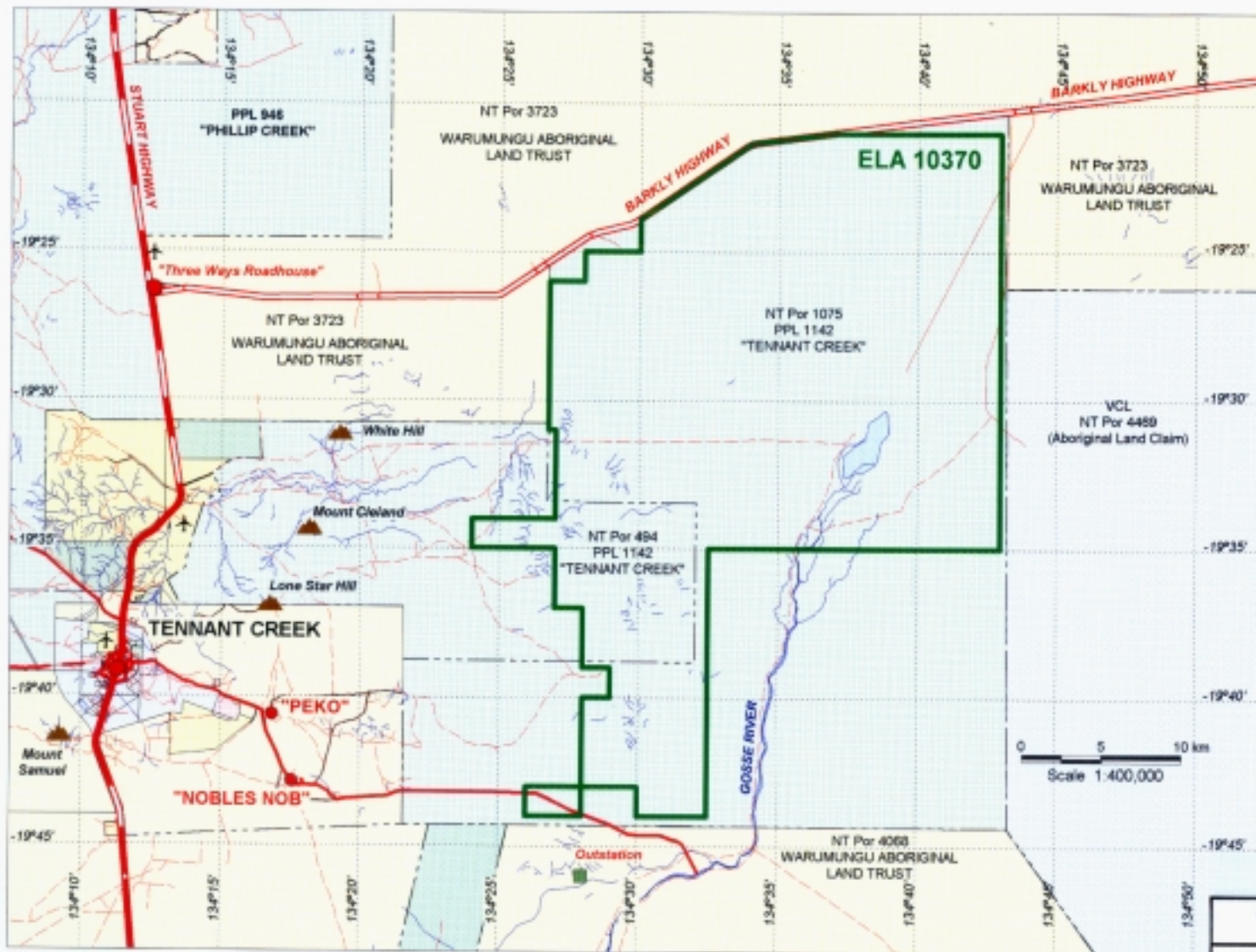
9. PROPOSED PROGRAMME AND EXPENDITURE FOR NEXT YEAR

	\$
Geology.....	1,500
<i>planning and supervision</i>	
Geophysics.....	3,500
<i>assessment of geophysical data</i>	
Analytical.....	1,000
<i>assaying</i>	
Drilling.....	6,000
<i>RC or open hole percussion</i>	
Rehabilitation.....	1,000
Tenure Maintenance	4,000
<i>(incl. CLC fees)</i>	
Administration and Overheads.....	3,000
	TOTAL 20,000

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.

P G SIMPSON
EXPLORATION MANAGER

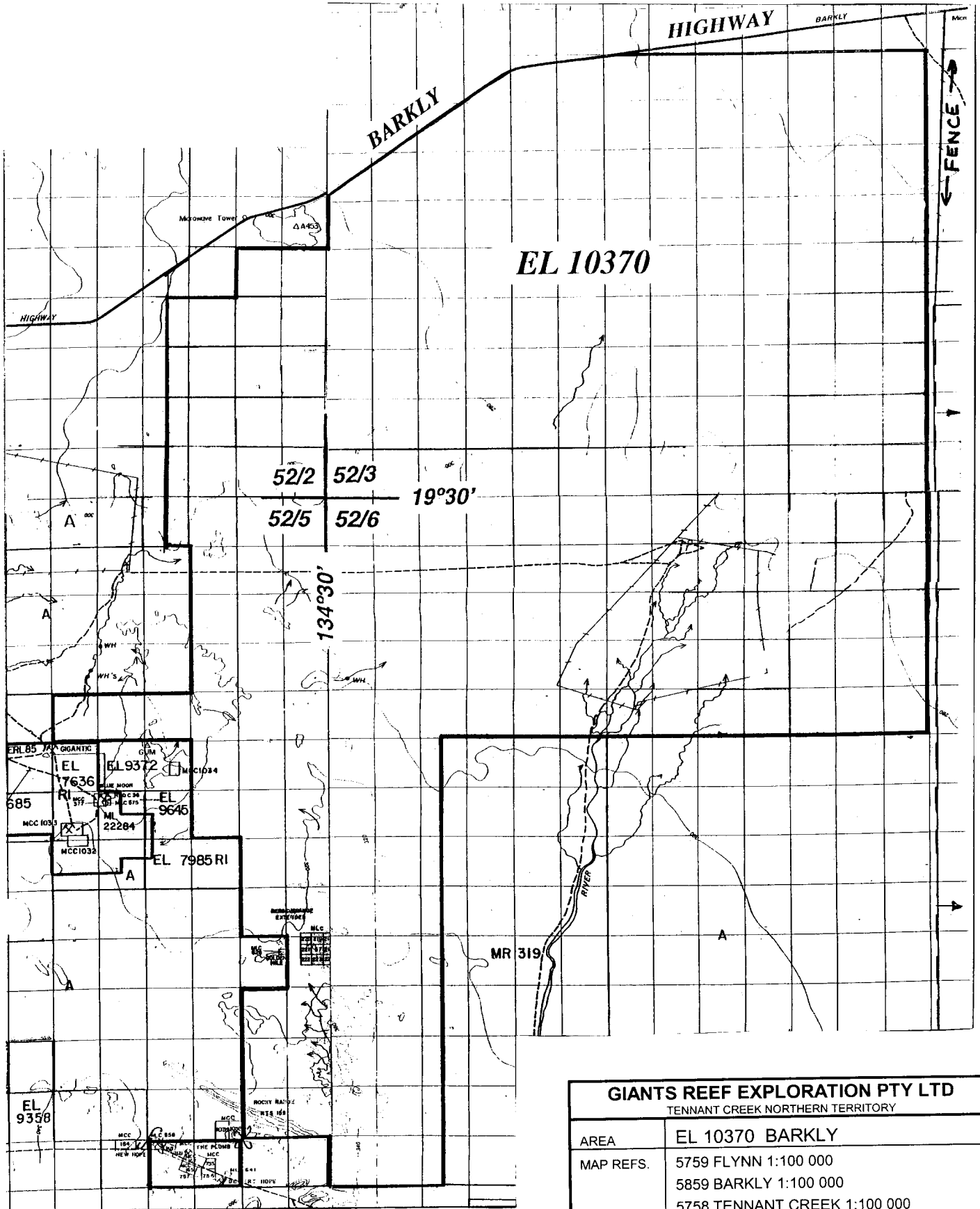
S C RUSSELL
EXPLORATION GEOLOGIST



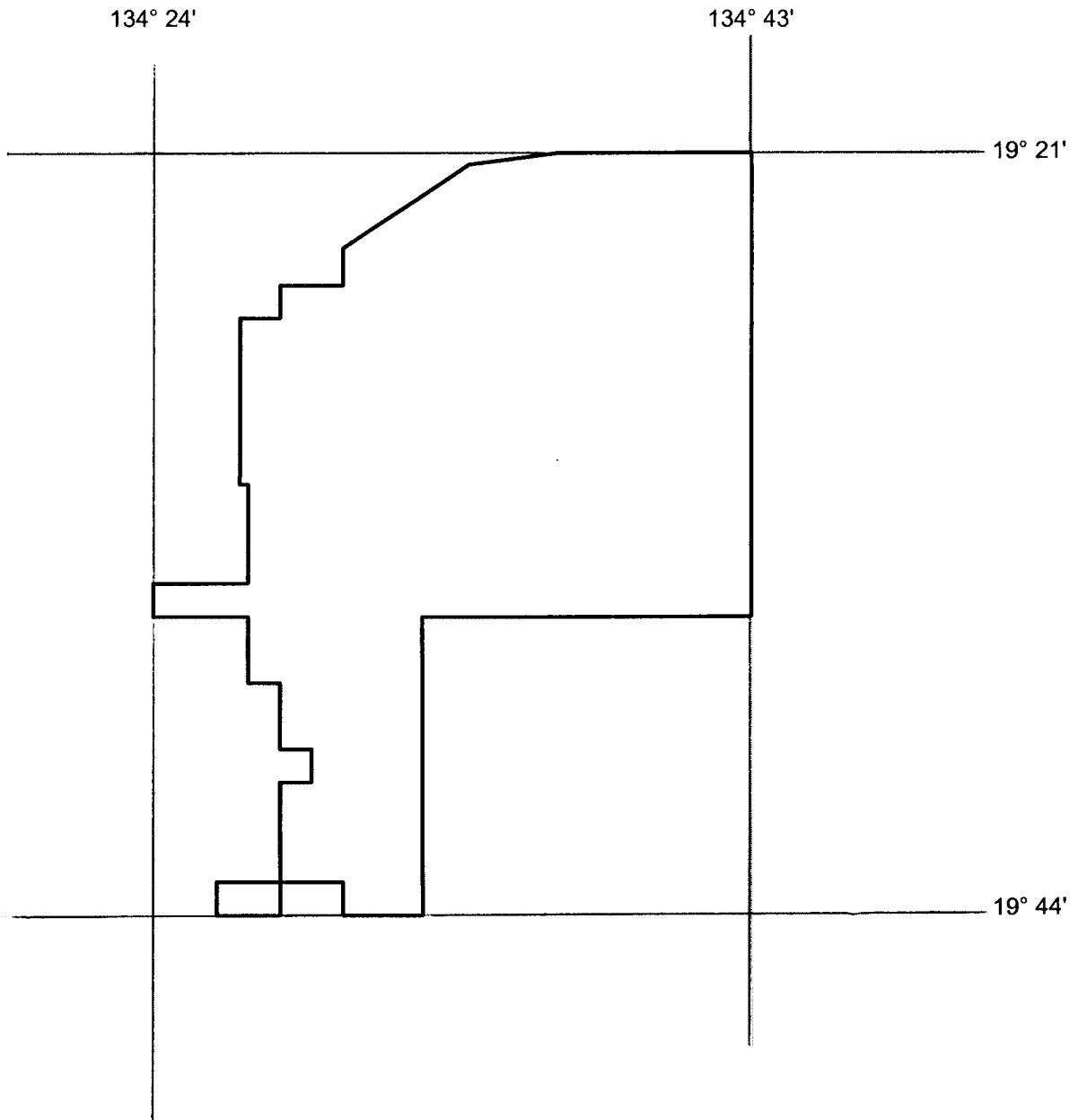
- ELA BOUNDARY
- VACANT CROWN LAND
- PERPETUAL PASTORAL LEASE
- ABORIGINAL FREEHOLD LAND

- LEGEND**
- Creek
 - Highway
 - Road
 - Land Tenure Boundary
 - Town / Mine etc.

GIANTS REEF EXPLORATION PTY LTD			
TENNANT CREEK NORTHERN TERRITORY			
AREA	EL 10370 BARKLEY		
MAP REFS.	5759 FLYNN 1:100 000 5859 BARKLY 1:100 000 5758 TENNANT CREEK 1:100 000 5858 GOSSE RIVER 1:100 000		
SUBJECT	EL 10370 Location Plan		
DATE	AUTHOR	SCALE	
APR 1999	CAP	1:400 000	FIGURE 1

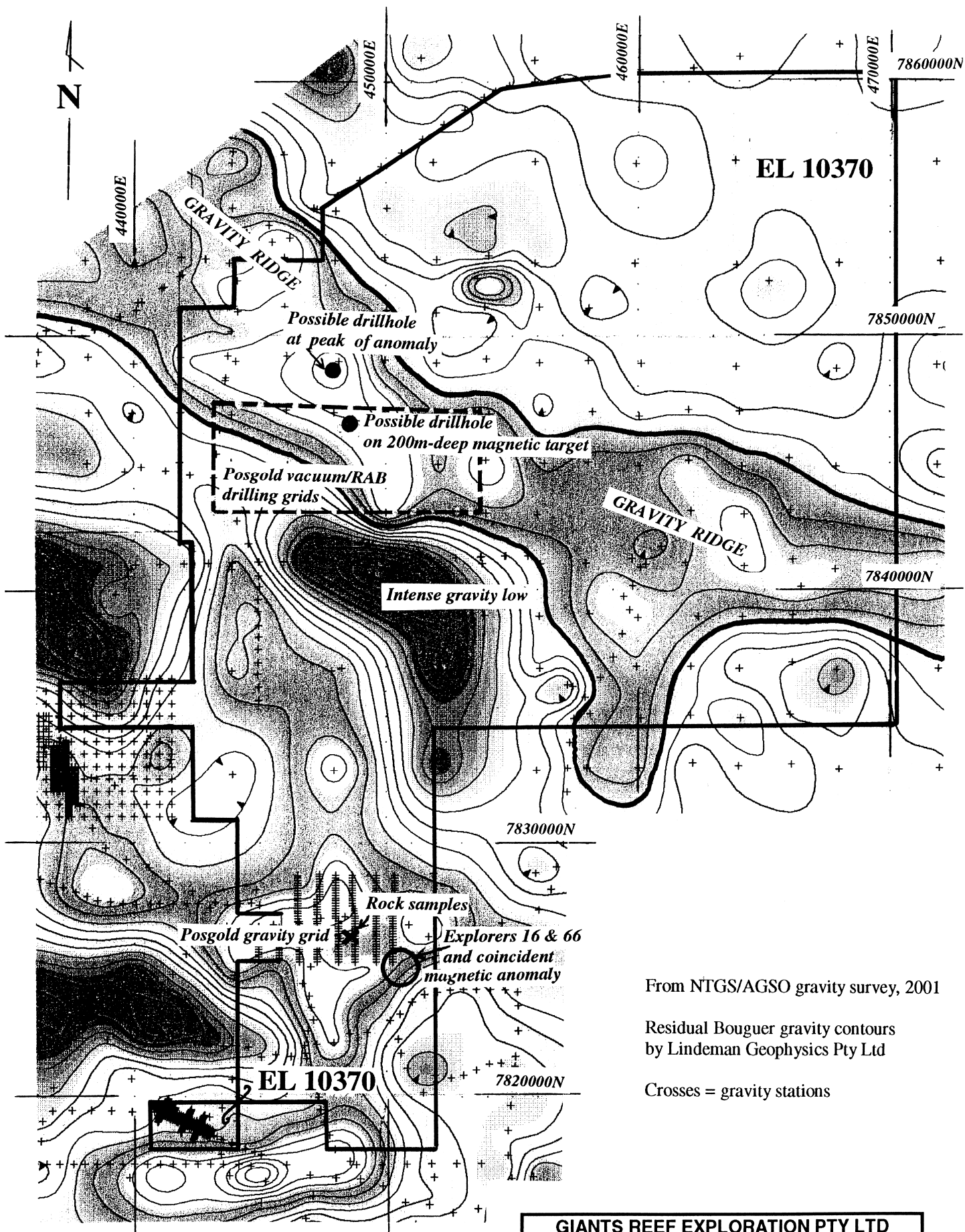


GIANTS REEF EXPLORATION PTY LTD			
TENNANT CREEK NORTHERN TERRITORY			
AREA	EL 10370 BARKLY		
MAP REFS.	5759 FLYNN 1:100 000 5859 BARKLY 1:100 000 5758 TENNANT CREEK 1:100 000 5858 GOSSE RIVER 1:100 000		
SUBJECT	Location and Surrounding Tenements Extract DME MINING TENURE 52/2, 52/3, 52/5 & 52/6		
DATE	AUTHOR	SCALE	
DEC 2000		1:200 000	FIGURE 2



EL10370
262 BLOCKS
809 sq kms

GIANTS REEF EXPLORATION PTY LTD			
TENNANT CREEK NORTHERN TERRITORY			
AREA	EL 10370 BARKLY		
MAP REFS.	5759 FLYNN 1:100 000 5859 BARKLY 1:100 000 5758 TENNANT CREEK 1:100 000 5858 GOSSE RIVER 1:100 000		
SUBJECT	EL 10370 Year 1 Licence Area <i>Extract DME SECOND SCHEDULE</i>		
DATE	AUTHOR	SCALE	
MAR 2001			FIGURE 3



From NTGS/AGSO gravity survey, 2001

Residual Bouguer gravity contours
by Lindeman Geophysics Pty Ltd

Crosses = gravity stations

GIANTS REEF EXPLORATION PTY LTD			
TENNANT CREEK NORTHERN TERRITORY			
AREA	EL 10370 BARKLY		
MAP REFS	Barkly, Gosse River, Tennant Creek and Flynn 1:100 000 maps		
SUBJECT	Exploration areas on background of residual Bouguer gravity contours		
DATE	AUTHOR	SCALE	
APRIL 2002	PGS	1:200,000	FIGURE 4



GIANTS REEF MINING LIMITED

HARD COPY REPORT META DATA FORM

REPORT NAME: EL 10370 *Barkly* FIRST ANNUAL REPORT 20TH
MARCH 2001-19TH MARCH 2002

PROSPECT NAME(S): BARKLY

GROUP PROSPECT NAME: BARKLY

TENEMENT NUMBERS(S): EL 10370

ANNIVERSARY DATE: 19 MARCH 2002

OWNER/JV PARTNERS: GIANTS REEF EXPLORATION PTY LTD (Owners)
BHP BILLITON (Alliance).

AUTHOR(S): P.G.SIMPSON
S.C.RUSSELL

COMMODITIES: GOLD, COPPER, LEAD, ZINC, SILVER, BISMUTH

MAPS 1:250 000: TENNANT CREEK SE53-14

MAPS 1:100 000: TENNANT CREEK 5758, FLYNN 5759
GOSSE RIVER 5858, BARKLY 5859

MAPS 1:25 000:

TECTONIC UNIT(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 MODELLING

AMF GEOCHEMICAL: SURFACE ROCK CHIP SAMPLING
10 SAMPLES COLLECTED

AMF DRILL SAMPLING:

HISTORIC MINES: DESERT HOPE, BLUEBIRD, NEW HOPE, PLUM,
COMSTOCK, PERSEVERANCE, GOLDEN MILE

DEPOSITS:

PROSPECTS: EXPLORER 16, EXPLORER 66.

KEYWORDS: BARKLY PROJECT, EL 10370,
EXPLORATION LICENCES 7274, 7690, 7692, 7693,
8005 AND SEL8667.

APPENDIX 1

EL 10370 BARKLY

*Rock Chip Assays and Locations
(Micromine Database)*

Sample	Number	Lab	Number of Samples	Batch	File Name
423468	423475	AMDEL	10	1DN0144	BAR_SAMP.dat