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**MINERAL CLAIMS**  
**C 226 - C 227, C 230 & C 233 - C 236**  
*MT MARGARET GROUP*  
**FINAL REPORT**  
*29 January 1988 to 28 January 2003*

*TITLE HOLDERS:*  
**NEWMONT WILUNA GOLD PTY LTD**  
*Formally* **NORMANDY WILUNA GOLD PTY LTD**  
A.B.N. 009 751 795

*and*

*OPERATORS:*  
**GIANTS REEF MINING LIMITED.**  
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Giants Reef Mining Limited

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## SUMMARY

Mineral Claims C226 – C227, C230 and C233 – C236 are collectively known as the *Mt Margaret* group, and form part of a Joint Venture between Newmont Wiluna Gold Pty Ltd (Newmont) and Giants Reef Mining Limited (Giants Reef) over numerous tenements in the Tennant Creek goldfield known as the Top End Joint Venture.

The Top End Joint Venture was established by an agreement between Giants Reef Mining NL and Newmont on the 1<sup>st</sup> January 1994 with Giants Reef as operators with the right to earn equity in the tenements by funding exploration. Giants Reef continued to sole fund exploration expenditure and Newmont Wiluna effectively diluted their interest by not contributing. At the conclusion of the Joint Venture in January 2003, Giants Reef had earned 60% interest in the tenements covered by the agreement.

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

This report details the exploration work carried out on Mineral Claims C226 – C227, C230 and C233 – C236, during their fifteen years of tenure, from 29<sup>th</sup> January 1998 to their expiry on the 28<sup>th</sup> January 2003.

Activities over the fifteen year tenure of Mineral Claims C262 - C264 and C275 - C282 included literature reviews, data evaluation, lag sampling, geological mapping and rock chip sampling, gridding, geophysical surveys, analysis and interpretation, RC drilling, project and tenement reviews.

Exploration activities over the Mineral Claims during the fifteen year tenure have produced some interesting geochemical intersections and identified a magnetic anomaly. Giants Reef's assessment of the Mt Margaret claims block concluded that the geochemical and geophysical anomalies warrant further follow up work, however the block still ranked as a low priority exploration target.

Six RC holes were drilled in the Mt Margaret west block, and all returned disappointing assay results. Further rock chip sample analysis over the area produced results in the same low-order range, not warranting further follow up.

Magnetic modelling of the World Geoscience ENMOS magnetic data identified a shallow magnetic target in the Mt Margaret east block. Giants Reef proposed to drill this magnetic anomaly, however due to a pending joint venture decision between Newmont and Giants Reef the drilling was postponed.

In September, 2002 an internal review of the Giants Reef tenement portfolio and a classification of exploration opportunities included a detailed assessment of the Top End Joint Venture tenements. Giants Reef decided to forfeit the Joint Venture tenements based on the lack of productivity of the venture, given its long life span, coupled with the low to moderate exploration potential of the Claims relative to recently defined high-priority exploration targets.

On January 28<sup>th</sup> 2003 the Mineral Claims C226 – C227, C230 and C233 – C236 ended their second term of tenure and were not further renewed.

On expiry the Mineral Claims C226 – C227, C230 and C233 – C236 were subsumed by Giants Reefs Exploration Licence 10113 Ivory. Giants Reef intend to undertake a thorough assessment of the expired Mt Margaret Claims block, and follow up the anomalous geophysical and geochemical zones under the Exploration Licence 10113.

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## 1. INTRODUCTION

Mineral Claims C226 – C227, C230 and C233 – C236 are collectively known as the *Mt Margaret* group, and form part of a Joint Venture between Newmont Wiluna Gold Pty Ltd (Newmont) and Giants Reef Mining Limited (Giants Reef) over numerous tenements in the Tennant Creek goldfield known as the Top End Joint Venture.

The Top End Joint Venture was established by an agreement between Giants Reef Mining NL. and Newmont on the 1<sup>st</sup> January 1994 with Giants Reef as operators with the right to earn equity in the tenements by funding exploration. Giants Reef continued to sole fund exploration expenditure and Newmont Wiluna effectively diluted their interest by not contributing. At the conclusion of the Joint Venture in January 2003, Giants Reef had earned 60% interest in the tenements covered by the agreement.

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

This report details the exploration work carried out on Mineral Claims C226 – C227, C230 and C233 – C236, during their fifteen years of tenure, from 29<sup>th</sup> January 1998 to their expiry on the 28<sup>th</sup> January 2003.

## 2. LOCATION

Mineral Claims C226 – C227, C230 and C233 – C236 *Mt Margaret*, along with Mineral Claims C262 - C264 and C275 - C282 *Mint* and Mineral Claim C223 *Great Bear*, form part of the greater *Mt Margaret Group* of Joint Venture tenements.

The claims form two separate blocks, 2km apart, located approximately 18km east northeast of Tennant Creek, on the Tennant Creek 1:100 000 scale map sheet (5758).

Access is via a dry weather 4x4 drive track originating near the Tennant Creek microwave repeater tower and following the "Lone Star" trend of workings in an easterly direction.

Figure 1 shows the Newmont Wiluna Gold Joint Venture areas and their project groupings.

## 3. TENURE

Mineral Claims C226 – C227, C230 and C233 – C236, totalling 122 hectares, were granted to Asarco Gold Pty Ltd (Asarco) for a five-year term on the 29<sup>th</sup> January 1988 to expire on the 28<sup>th</sup> January 1993. On 6<sup>th</sup> December 1994, pursuant to a Joint Venture Agreement dated 1<sup>st</sup> January 1994, a transfer of 69% to Wiluna Gold (a wholly owned subsidiary of Great Central Mines Pty Ltd) and 31% to Giants Reef Mining Limited was effected. Giants Reef were the operators and sole contributors under the Joint Venture.

In December 1999 Great Central Mines Pty Ltd (GCM) became a fully owned subsidiary of Normandy Mining Limited (Normandy). Subsequently Normandy became a wholly owned subsidiary of Newmont Mining Corporation.

In December 1997 renewal of the Mineral Claims was granted for a further period of ten years to expire on the 28<sup>th</sup> January 2003.

The claims are within NT Portion 494, Perpetual Pastoral Lease 1142, Tennant Creek.

Giants Reef and Newmont signed a Termination Agreement for the Top End Joint Venture in December 2002. This resulted in no further renewal of the Mineral Claims and expiry was effected on the 28<sup>th</sup> January 2003.

Figure 2 shows the Mineral Claims and surrounding tenements.

A tenure summary for the Mineral Claims C226 – C227, C230 and C233 – C236 is presented in the table below:

TITLE	No.	JV REFERENCE	GRANTED	EXPIRY	SIZE	UNIT
MC	C226	Mt Margaret	29 Jan 1988	28 Jan 2003	18.07	Ha
MC	C227	Mt Margaret	29 Jan 1988	28 Jan 2003	16.61	Ha
MC	C230	Mt Margaret	29 Jan 1988	28 Jan 2003	20	Ha
MC	C233	Mt Margaret	29 Jan 1988	28 Jan 2003	19.95	Ha
MC	C234	Mt Margaret	29 Jan 1988	28 Jan 2003	19.95	Ha
MC	C235	Mt Margaret	29 Jan 1988	28 Jan 2003	7.6	Ha
MC	C236	Mt Margaret	29 Jan 1988	28 Jan 2003	19.98	Ha

#### 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 prominent lithology outcropping in within the Mineral Claim area are siltstones, greywackes and ironstones of the Palaeoproterozoic Warramunga Formation, which is host to almost all the gold, copper and bismuth occurrences in the Tennant Creek goldfield.

The Claims cover a zone of minor ironstone outcrops on low hills running approximately east-west, some 18km east of the Tennant Creek Township. Bedding in the ironstone shale is well developed, dipping variably at shallow angles to the north and south, with parasitic folds plunging to the east and west at 10° to 30°.

The western half of the claim block is dominated by a prominent ridge composed of talc schist with disseminated magnetite (talc-magnetite alteration) and minor siliceous dolomite. This alteration zone has an outcropping strike length of approximately 40m and maximum thickness of 10m, and the western end is truncated by a fault. The historical Mt Margaret shaft has been sunk into the schist. The area appears to be within a broad shear zone occupying an anticlinal site. Several small ironstones, usually containing specular haematite are also located within this shear that appear to have not been subject to any historic prospecting activity.

In the eastern portion of the claim block is a small anticline plunging at 12° to the west bounded to the north and south by 110° striking shears. The Mauretana (210t @ 32g/t Au) shaft follows a subvertical ironstone-sediment contact. The Mauretana workings are completely enclosed by small Mineral Lease C52, which is fully owned by Santexco (a wholly owned subsidiary of Giants Reef Mining Limited).

#### 5 WORK DONE DURING THE TERM

##### 5.1 YEAR 1 (1988-1989)

During the first 5 years of tenure, the Mt Margaret block was explored as the contiguous tenements MC C226-C236 (Figure 2). In January 1993, MC C228-C229 and C231-C232 were relinquished by Asarco. Details of exploration over the relinquished claims are in the report by Asarco entitled, "Asarco Australia Limited Tennant Creek Project, Final Report on MCC's 228, 229, 231, 232 & 237 Mount Margaret Prospect," author: R.J. Davis (January, 1991).

#### 5.1.1 Data Summary of Tennant Creek Goldfield

A resume of data for the Tennant Creek Goldfield was compiled. The data was pertinent to the current exploration program of Asarco Australia Pty Ltd and included the Mineral Claims C226 – C227, C230 and C233 – C236. The conclusion of the report surmised that the Joint Venture tenements have good potential for the discovery of economic gold deposits of two types:

- near surface low-grade deposits, possibly amenable to heap leaching (low grade, oxidised mineralisation).
- medium to high-grade supergene-enriched deposits (relatively shallow).

The report includes a brief history of exploration and mining activities, geology, geophysical, geochemical and drilling in the Tennant Creek Goldfield. (Report by A. J. Hoskings Pty Ltd, Darwin: Data Summary - Tennant Creek Goldfield, March 1988).

#### 5.1.2 Lag Sampling

Lag sampling over the Mt Margaret block was completed at 200m x 25m spacings, totalling 426 lag samples. This was later followed up by a 100m x 25m soil sampling program that totalled 500 samples.

Results of the lag sampling program were plotted at 1:2 500 scale. Results confirmed Asarco's geological interpretation of two anomalous areas near the eastern and western ends of the Mt Margaret block.

#### 5.1.3 Geological Mapping and Rock Chip Sampling

The Mineral Claims were geologically mapped on a 1:1 000 scale. Locations and results of the lag sampling were also plotted on the map. Scattered ironstones and workings on these claims were rock chip sampled and 40 samples were collected. Most samples were taken from around the alteration shaft at the Mt Margaret mine, with one sample from a shallow trench within siliceous dolomite that returned 75g/t Au. Detailed resampling failed to repeat this assay, the highest result being 1.35g/t Au.

#### 5.1.4 RC Drilling

Four inclined reverse circulation drill holes totalling 276m were completed in March 1988 to test the alteration at the Mt Margaret mine.

Over a strike length of 70m three holes intersected ironstone and/or alteration assemblages over drill widths of up to 15m. The most easterly hole intersected unaltered sediments suggesting that the target zone is plunging steeply to the east. Further RC drilling was recommended.

#### 5.1.5 Geophysical Survey

A detailed aeromagnetic and radiometric survey flown by Aerodata Holdings Limited covered the Mineral Claims and surrounding tenements. The survey had a line spacing of 200m and flight height of 60m. Data was processed and interpreted by Aerodata and a number of priority targets were selected.

A full account of all exploration work conducted over the Mineral Claims C226 – C227, C230 and C233 – C236, during their first year of tenure can be found in the report by Asarco Australia Limited entitled "Tennant Creek Project– 1988 Annual Report to NTDME for the period ended December 31, 1988". Author D. Johnson (January, 1989).

## 5.2 YEAR 2 (1989-1990)

### 5.2.1 Gridding

Infill gridding of 3.5 line kilometres of was completed over the Mineral Claims C226 – C227, C230 and C233 – C236. Lag samples were collected (63) at 25m spacings to provide geochemical coverage of the magnetic anomaly A8 defined by the reprocessing of aerial geophysical data.

### 5.2.2 Ground Magnetic Survey

A ground magnetic survey totalling 7.4 line kilometres was completed at 25m stations on 200m spaced lines during June 1989.

A magnetic high was located 75m northeast of the Mt Margaret mine in an area of gold anomalism. This magnetic high lies 100m north-east from Asarco's 1988 reverse circulation drill site. A further 3.5 line kilometres of ground magnetic surveying was completed during August to locate magnetic anomaly A8 and better define the magnetic high located 75m north-east of the main Mt Margaret shaft area. The ground survey failed to locate either target.

### 5.2.3 RC Drilling

Reverse Circulation holes TRC31 and TRC32 totalling 174m were completed to test a lag anomaly co-incident with workings developed on massive haematite .

Assay results for the RC holes were disappointing and are summarised below.

#### *TRC 31*

Several 0.06ppm gold results had no obvious lithological control. Copper enrichment to 400ppm occurred from surface to 28m, and bismuth enrichment to >200ppm is present from surface to 16m.

#### *TRC 32*

Several 0.06 gold values had no obvious lithological control. Elevated copper values to 55ppm from surface to 14m and bismuth values to 98ppm from surface to 16m are related to the development of massive haematite and stringers of haematite-jasper-quartz between 4m and 16m.

A full account of all exploration work conducted over the Mineral Claims C226 – C227, C230 and C233 – C236, during their second year of tenure can be found in the report by Asarco Australia Limited entitled "Tennant Creek Project Asarco Tenements – Annual Report to NTDME for the period ending December 31, 1989, " Author A. Peterson (January, 1990).

## 5.3 YEAR 3 (1990-1991)

No significant on-ground exploration over Mineral Claims C226 – C227, C230 and C233 – C236 was undertaken in the third year of tenure.

A full account of all exploration work conducted over the Joint Venture tenements including the Mineral Claims C226 – C227, C230 and C233 – C236, during their third year of tenure can be found in the report by Asarco Australia Limited entitled "Tennant Creek Project Top end Joint Venture – Annual Report to NTDME for the period ended December 31, 1990: author R.J. Davies, January 1991.



#### 5.4 YEAR 4 (1991-1992)

No significant on-ground exploration over Mineral Claims C226 – C227, C230 and C233 – C236 was undertaken in the fourth year of tenure.

A full account of all exploration work conducted over the Joint Venture tenements including the Mineral Claims C262 - C264 and C275 - C282, during the fourth year of tenure can be found in the report by Asarco Australia Limited entitled "Tennant Creek Project Top End Joint Venture – Annual Report to NTDME for the period ended December 31, 1991: author C. Paterson, February 1992.

#### 5.5 YEAR 5 (1992-1993)

##### 5.5.1 Prospect Assessment

A thorough review and appraisal was carried out by Asarco of all their Tennant Creek tenements including the *Mt Margaret* Claims block.

Mineral Claims C228-C229 and C231-C232 were relinquished at the end of their fifth year of tenure. This left 2 *Mt Margaret* claims blocks: MC C226-C227 and C230 *Mt Margaret west*, and MC C233-C236 *Mt Margaret east*.

A full account of all exploration work conducted over the Joint Venture tenements including the Mineral Claims C226 – C227, C230 and C233 – C236 during their fifth year of tenure can be found in the report by Asarco Australia Limited entitled "Tennant Creek Project– Annual Report to NTDME for the period ended December 31, 1993": Author C. England (February, 1994).

#### 5.6 YEAR 6 (1993-1994)

##### 5.6.1 Review by Asarco

The review and reappraisal of Asarco's tenements in the Tennant Creek field, including C226 – C227, C230 and C233 – C236 continued. It was decided to seek a Joint Venture partner.

Field and data assessments were conducted over the Joint Venture tenements in September. The work ranked the prospectively of the claim blocks based on the presence of haematite-magnetite ironstone pods and associated gold mineralisation.

The report concluded that the *Mt Margaret* Claim group is under-explored and their prospectivity appears low and limited to repetitions of the Mauretana mineralisation which are obviously of the low tonnage, gold-haematite plug style. On this basis the Mineral Claims were ranked as a low priority target. (Report on an evaluation of mining tenements at Tennant Creek Northern Territory for Asarco Australia Ltd. W. Gifford, October 1993).

##### 5.6.2 Change of Structure of the Joint Venture

Giants Reef entered the Joint Venture and took over as manager/operator, after having purchased the 31% interest previously held by Top End Resources. (Report by C. England dated February 1994, entitled "Asarco Australia Ltd. Tennant Creek Project MC C's 219-223, 226-227, 230, 233-236, 242, 262-264, 275-282, 346, 763-780, 866-879, 992-994 and 1026-1031: Annual report to the NT Department of Mines and Energy for the period ended December 31, 1993").

## 5.7 YEAR 7 (1994-1995)

### 5.7.1 Gridding

Grid pegs in the area around the RC drillholes were replaced or relabelled.

### 5.7.2 Rock Chip Sampling

In August 1994 the *Mt Margaret west* claims were visited. A significant amount of ironstone outcrop was noted within the vicinity of the Mt Margaret diggings. Rock chip samples were taken (114925 – 114967) totalling 42 samples. The locations of the samples were noted on the 1988 Asarco geological 1:10 000 scale map.

Assay results are tabulated below:

SAMPLE	Au (ppb)	Bi (ppm)	Cu (ppm)
114925	7030	163	797
114926	38	4	10
114927	3	3	15
114928	2	1	6
114929	4	3	10
114930	8	2	18
114931	420	209	482
114932	420	299	1080
114933	9	18	25
114934	10	54	100
114935	9	17	36
114936	6	10	20
114937	52	7	52
114938	10	15	77
114939	4	2	53
114940	4	6	24
114941	10	12	97
114942	4	1	16
114943	56	8	34
114944	9	2	36
114945	7	32	111
114946	2	5	19
114947	3	5	15
114948	4	<	24
114949	5	1	25
114950	3	1	16
114951	7	7	31
114952	16	29	105
114953	5	4	120
114954	1	11	8
114955	3	11	10
114956	1	3	10
114957	2	2	10
114958	7	18	42
114959	1	1	15
114960	2	1	31

SAMPLE	Au (ppb)	Bi (ppm)	Cu (ppm)
114961	3	1	9
114962	2	4	9
114963	14	39	104
114964	6	16	134
114965	19	93	85
114966	1	3	14
114967	1	1	8

Eleven samples returned Au values greater than 0.01g/t. These samples all displayed anomalous co-incident Cu and Bi.

Assay results were plotted on the Asarco geological map along with the results of the 1988 Asarco rock chip sampling. A distinct geochemical anomaly is evident on the north western margin of the ironstone with anomalous gold values reported by Asarco at 75g/t in the same vicinity as 7g/t reported in sample 114925.

Figure 3 shows the rock chip sample locations with anomalous Au results.

Rock Chip assay results are presented as Appendix 1.

### 5.7.3 Rock Chip Resampling

On compilation of the 1988 Asarco geological 1:10 000 scale map the Asarco 1988 rock chip sampling, and the results of the Giant Reef rock chip sampling were merged. A geochemically anomalous area was noted.

The most significant sample by Giants Reef returned 7.04g/t Au 163ppm Bi and 797ppm Cu. Giants Reef reassayed the same rock chip sample in an attempt to replicate or better the gold assay. (Samples 112953-112954). Results were disappointing, the highest sample being 0.57ppm Au, 1250ppm Cu and 484ppm Bi.

Rock Chip assay results are presented as Appendix 1.

### 5.7.4 Project Review

In November 1994 a review of all the Joint Venture tenements including C226 – C227, C230 and C233 – C236 was conducted by Giants Reef's Senior Geologist, John Fabray.

## 5.8 YEAR 8 (1995-1996)

### 5.8.1 Project Review

In July 1995 a review of all the Joint Venture tenements was again conducted by Giants Reef.

## 5.9 YEAR 9 (1996-1997)

### 5.9.1 Project Review

In November 1996 a further review of all the Joint Venture tenements was completed.

## 5.10 YEAR 10 (1997-1998)

### 5.10.1 Magnetic Assessment

In December 1997 World Geoscience ENMOS magnetic data was assessed by Giants Reef. A magnetic anomaly over a area slightly west of the Mauretana Mineral Claim C52 in MC C226 - C227 was noted. A magnetic traverse over the area to gauge its depth and a follow up gravity survey was recommended.

### 5.10.2 Boundary Maintenance

The claim boundaries were cleared and re-marked, and the corner posts and lockspits repaired as necessary.

### 5.10.3 Field Assessment and Project Review

In May 1997 a review of all the Joint Venture tenements was conducted.

Senior geological personnel from both Joint Venture companies assessed the claims in the field to help formulate new work programs.

## 5.11 YEAR 11 (1998-1999)

No significant work was done over the Mineral Claims during the eleventh tenure year.

## 5.12 YEAR 12 (1999-2000)

### 15.12.1 Blazing Hill Prospect Review

A review was made of all the Asarco drilling, geological and rock chip assay results over the Blazing Hill prospect in Mineral Claim C235 at AMG 428100E 783700N within the *Mt Margaret* west claim block. It was noted that Asarco drilled two RC holes at the prospect in 1988 (TRC 31 & TRC 32), both returning 0.06ppm anomalous gold values with elevated copper and bismuth. The 1988 Asarco rock chip assay results in the area were also geochemically anomalous, and considered encouraging.

Figure 4 shows the location of the drill holes and rock chip assay results.

### 15.12.2 Rock Chip Sampling

In March 1999 a field trip to the Blazing Hill prospect was made. The outcrop was mapped and the Asarco RC hole collars were located. Six rock chip samples were taken around the outcrop (422143-422148). Samples were sent to Australian Laboratory Services, Alice Springs and tested for Au, Cu, Bi and Fe.

Assay results are tabulated below:

SAMPLE	Au (ppm)	Cu (ppm)	Bi (ppm)	Fe (ppm)
422143	0.35	30	56	34.92
422144	0.19	35	72	32.98
422145	0.21	203	71	30.07
422146	0.08	28	74	56.26
422147	0.07	20	85	50.44
422148	0.05	87	59	32.98

Assay results for the Blazing Hill prospect although low, suggest a geochemical anomaly within the ironstone and conclusions were made to follow up the anomaly with magnetic interpretation with the view to possible drill testing.

Assay results are presented as Appendix 1.

#### 5.12.3 Magnetic Interpretation

In December 1999 Consultant Geophysicist Mr Frank Lindeman of Lindeman Geophysics, Melbourne was asked to geophysically model and assess the magnetic anomaly slightly west of the Mauretana Mineral Claim C52 in MC C226 - C227 *Mt Margaret* east block. This magnetic anomaly was identified in 1997 from the World Geoscience ENMOS magnetic data.

Mr Lindeman modelled the magnetic source along traverse section 430305E and 430890N. The modelling located the top of the causative body to be at approximately 150m depth (Figure 5).

#### 15.12.4 Tenement Review

A review of the Joint Venture was carried out by Giants Reef during December 1999 and January 2000. This review included all of the data held by Giants Reef in Tennant Creek. Following this assessment, GCM verbally indicated their intention not to contribute to the Joint Venture and to exercise their right to dilute their equity. However, before this was formally documented, GCM became a wholly owned subsidiary of Normandy Mining Limited. Consequently, discussions were held with Normandy concerning their intention regarding the proposed Joint Venture dilution.

Work on Mineral Claims C226 – C227, C230 and C233 – C236 in their twelfth year of tenure consisted of research and geological assessment of the Mineral Claims.

### 5.13 YEAR 13 to YEAR 14 (2000-2002)

#### 5.13.1 Proposed Drill Program

A single hole reverse circulation drill program was proposed within the *Mt Margaret East* claims block to follow up the magnetic anomaly modelled by Mr Frank Lindeman the previous tenure year. The RC hole was planned to be collared at approximate AMG co-ordinates 430600E 7832800N, to a depth of 240m, at –60° to AMG north.

Figure 6 shows the proposed drill site in MC C230 targeting the magnetic anomaly.

An application for approval of Substantial Disturbance for the one hole drill program was submitted to the Department of Mines and Energy in July 2000, and subsequently approved.

#### 5.13.2 Postponement of Drilling

The planned drilling in Mineral Claim C230 was deferred pending a decision regarding the status of the Joint Venture tenements between Newmont and Giants Reef.

### 5.14 YEAR 15 - 2002

In September, 2002 an internal review of the Giants Reef tenement portfolio and a classification of exploration opportunities included a detailed assessment of the Top End Joint Venture tenements. Giants Reef decided to forfeit the Joint Venture tenements based on the lack of productivity of the venture, given its long life span, coupled with their low to moderate exploration potential of the Claims relative to defined high-priority exploration targets.

Newmont was subsequently informed that Giants Reef wished to terminate the Joint Venture and was offering them all titles and applications. Newmont was informed that if they did not want to take over 100% ownership and management of these tenements, Giants Reef would withdraw all applications and not renew MC's and EL's and that many of the titles, when surrendered, would fall into Giants Reefs wholly-owned tenements.

In June 2002 Newmont informed Giants Reef that they wished to withdraw from the Joint Venture and that all the tenements covered by the agreement could be withdrawn. A Termination Agreement for the Top End Joint Venture was signed by Giants Reef and Newmont in December 2002.

On expiry the Mineral Claims C226 – C227, C230 and C233 – C236 were subsumed by Giants Reef's Exploration Licence 10113 *Ivory*, and will be explored under that Licence.

## 6. REHABILITATION

Shortly after Asarco completed drilling, all drilling associated debris was removed from the sites and the holes were back-filled by pouring the samples down them. Collar positions of the old holes, were marked with star pickets with wired-on, punched metal tags showing the number of each hole.

The lightly scraped drill pads were left to re-vegetate naturally, and on recent inspection have revegetated successfully.

## 7. CONCLUSIONS

Activities over the fifteen year tenure of Mineral Claims C262 - C264 and C275 - C282 included literature reviews, data evaluation, lag sampling, geological mapping and rock chip sampling, gridding, geophysical surveys, analysis and interpretation, RC drilling, project and tenement reviews.

Exploration activities over the Mineral Claims during the fifteen year tenure have produced some interesting geochemical intersections and identified a magnetic anomaly. Giants Reef's assessment of the *Mt Margaret* claims block concluded that the geochemical and geophysical anomalies warrant further follow up work, however the block still ranked as a low priority exploration target.

Six RC holes were drilled in the Mt Margaret west block, and all returned disappointing assay results. Further rock chip sample analysis over the area produced results in the same low-order range, not warranting further follow up.

Magnetic modelling of the World Geoscience ENMOS magnetic data identified a shallow magnetic target in the Mt Margaret east block. Giants Reef proposed to drill this magnetic anomaly, however due to a pending joint venture decision between Newmont and Giants Reef the drilling was postponed.

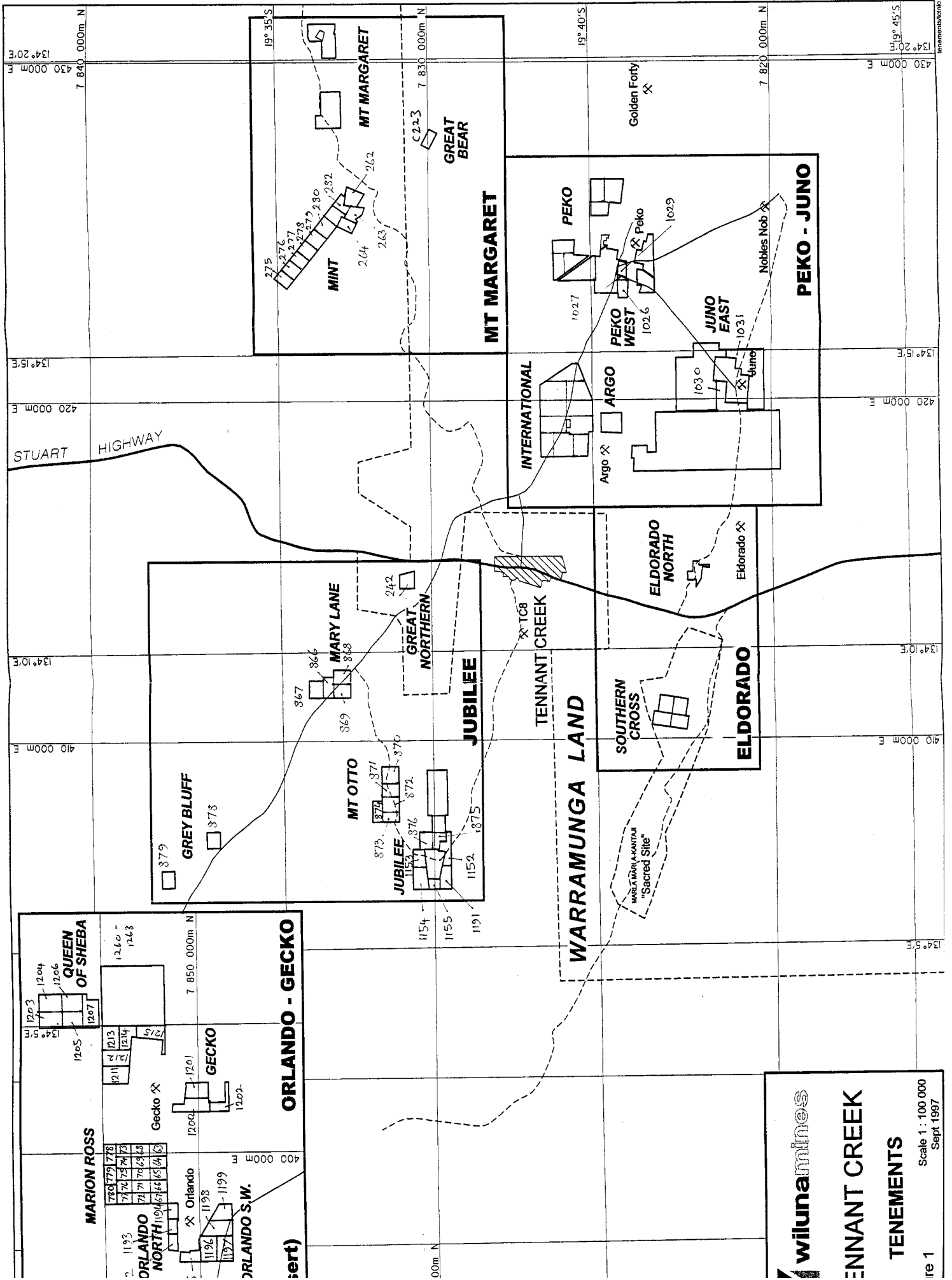
In September, 2002 an internal review of the Giants Reef tenement portfolio and a classification of exploration opportunities included a detailed assessment of the Top End Joint Venture tenements. Giants Reef decided to forfeit the Joint Venture tenements based on the lack of productivity of the venture, given its long life span, coupled with the low to moderate exploration potential of the Claims relative to recently defined high-priority exploration targets.

On January 28<sup>th</sup> 2003 the Mineral Claims C226 – C227, C230 and C233 – C236 ended their second term of tenure and were not further renewed.

On expiry the Mineral Claims C226 – C227, C230 and C233 – C236 were subsumed by Giants Reefs wholly-owned Exploration Licence 10113 *Ivory*. Giants Reef intend to undertake a thorough assessment of the expired Mt Margaret Claims block, and follow up the anomalous geophysical and geochemical zones under the Exploration Licence 10113.

J L CAHILL  
EXPLORATION GEOLOGIST

S C RUSSEL  
SENIOR EXPLORATION GEOLOGIST



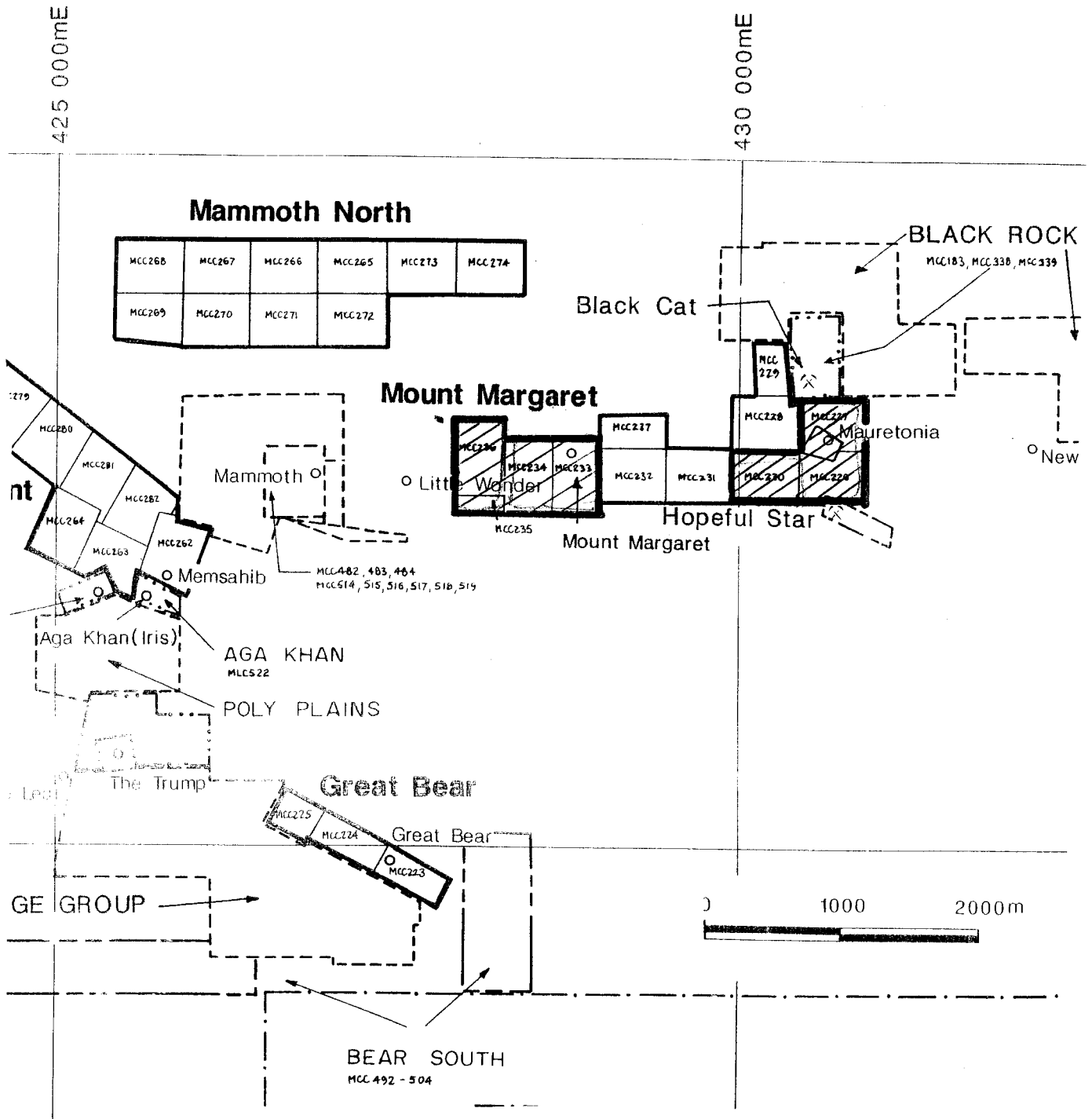
**wilunamines**

**TENNANT CREEK  
TENEMENTS**

ire 1

Scale 1 : 100 000  
Sept 1997



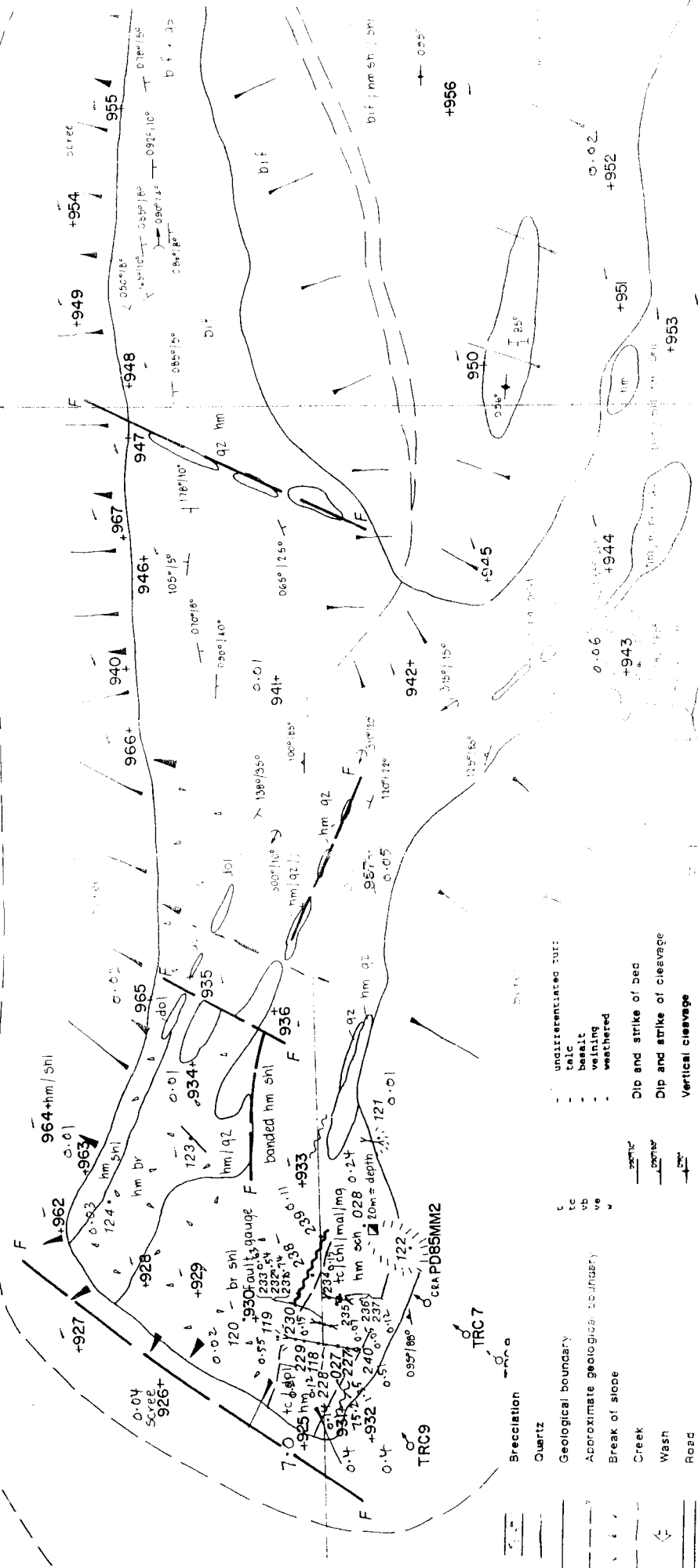


GIANTS REEF MINING LIMITED			
TENNANT CREEK NORTHERN TERRITORY			
AREA	MC C226 – C227, C230 & C223 – C236 Mt Margaret		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	Mineral Claim Area		
DATE	AUTHOR	SCALE	
MAR 2003	JLC		<b>FIGURE 2</b>

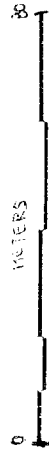
CRA PD85MM3  
 0 115°/60°

MCC 234

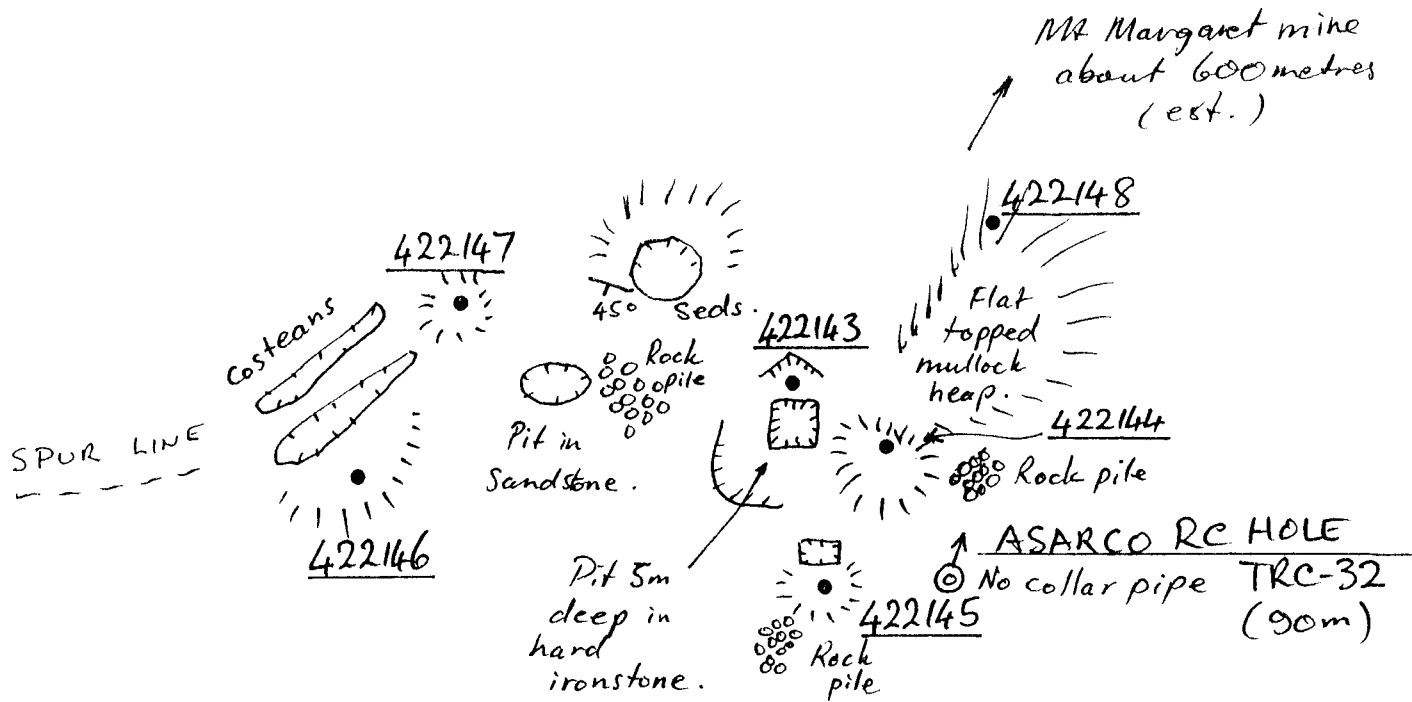
MCC 233



GIANTS REEF MINING LIMITED	
TENNANT CREEK NORTHERN TERRITORY	
AREA	MC C226 - C227, C230 & C233 - C236 Mt Margaret
MAP REF.	5758 TENNANT CREEK 1:100 000
SUBJECT	Mt Margaret West Claims Rock Chip Sample Locations
DATE	AUTHOR
MAR 2003	JLC
SCALE	
FIGURE 3	

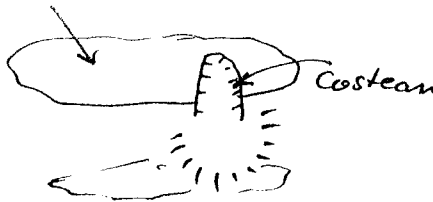


- Brecciation
- Quartz
- Geological boundary
- Approximate geological boundary
- Break of slope
- Creek
- Wash
- Road
- Track
- Fence
- Pit, shaft
- Trench
- Dump, mullock heap
- Sample location and number prefixed by 420
- RC drill hole
- Sample location grid number prefixed by 645
- undifferentiated tuff
- talc
- basalt
- veining
- weathered
- Dip and strike of bed
- Dip and strike of cleavage
- Vertical cleavage
- Plunge and sense of parasitic fold
- Plunge of m fold
- Joint
- Syncline major
- Syncline minor
- Anticline major
- Anticline minor
- Fault
- Shear
- Minor shear



Drill chips  
 lying around

Outcrop of spec. haem, jasp + qtz.

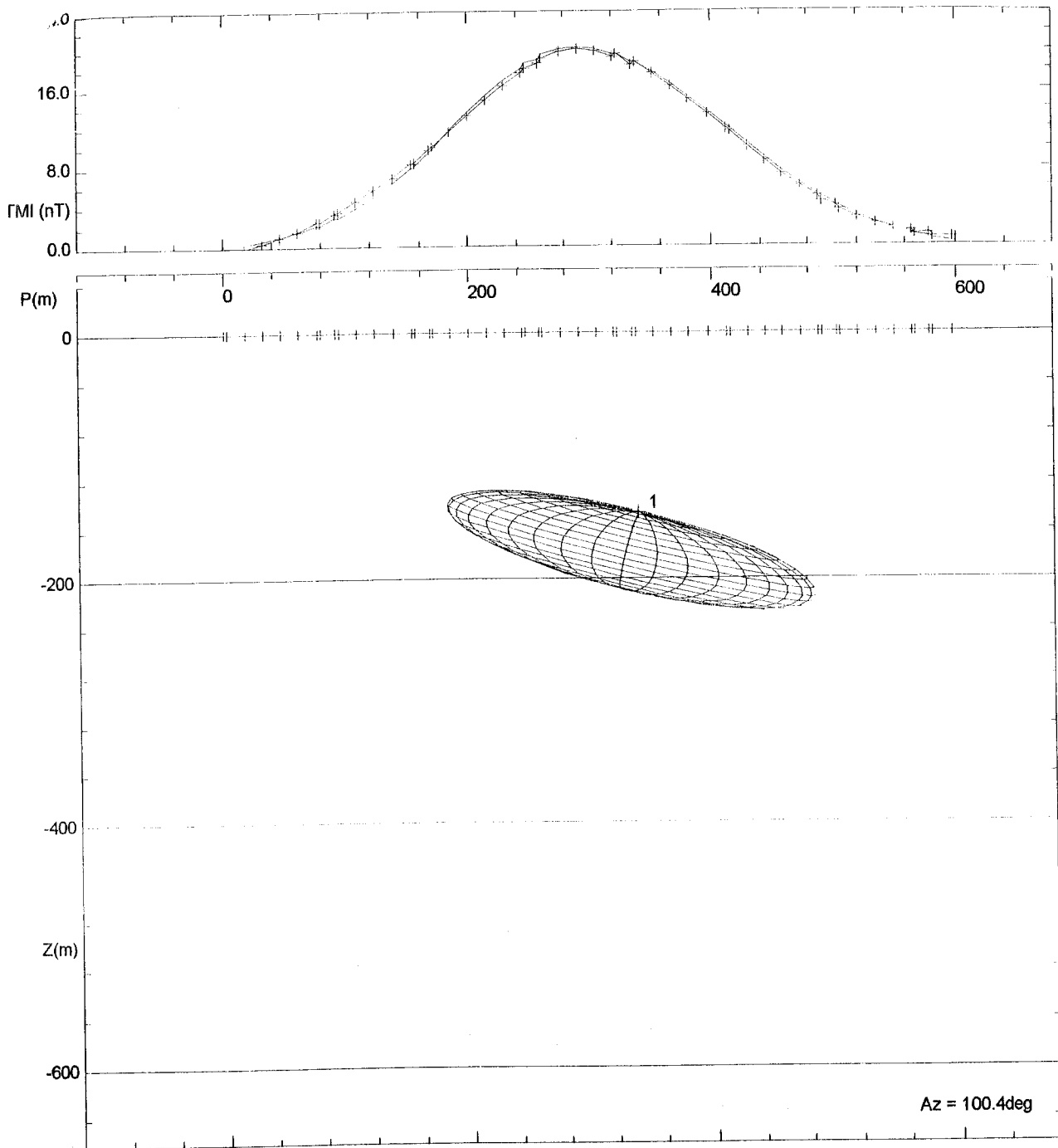


About 5m  
 (Not to Scale)

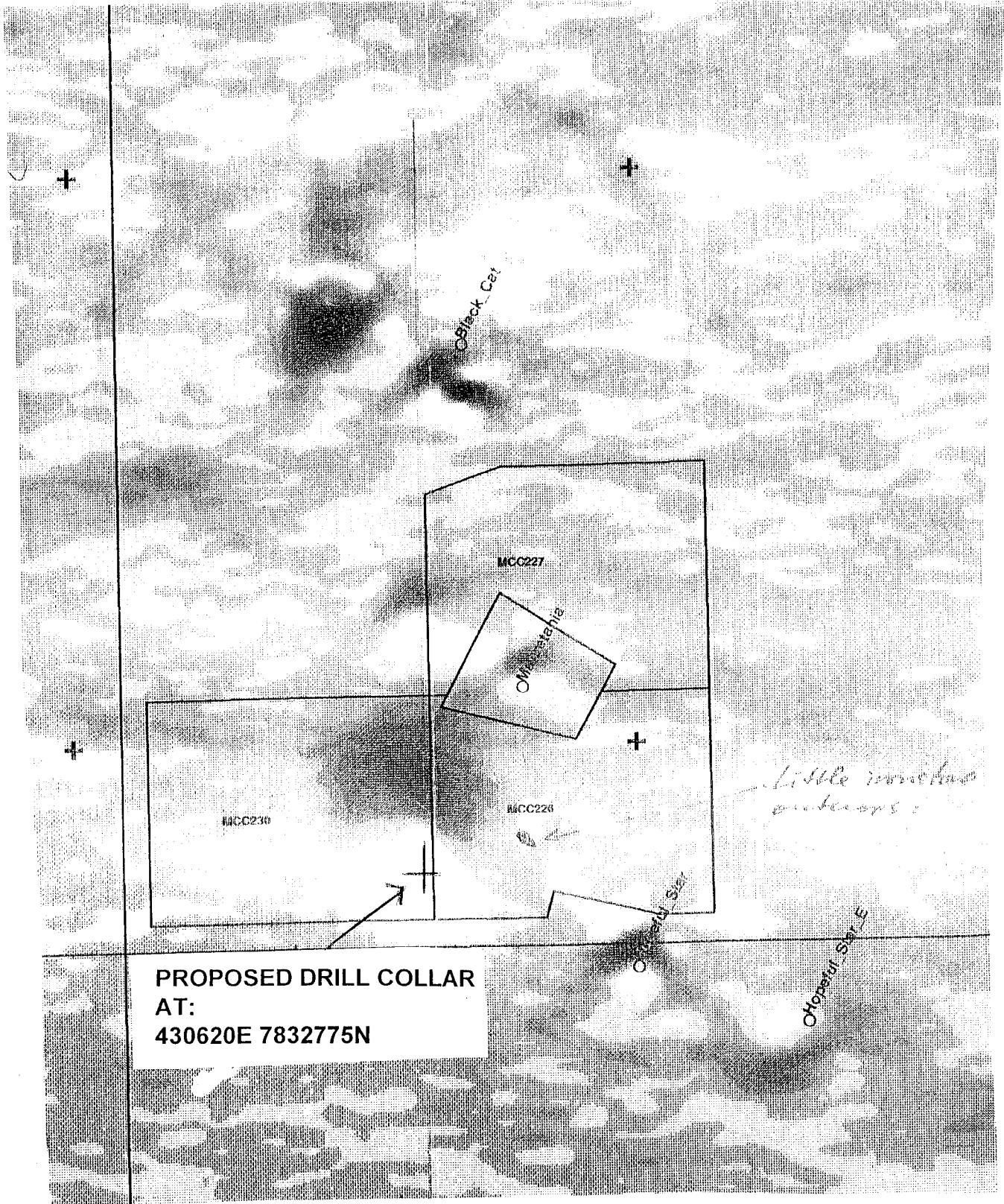
ASARCO RC HOLE TRC-31  
 (90m)  
 RC hole with projecting collar pipe.



GIANTS REEF MINING LIMITED			
TENNANT CREEK NORTHERN TERRITORY			
AREA	MC C226 - C227, C230 & C223 - C236 Mt Margaret		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	Blazing Stump Rock Chip Sample Locations		
DATE	AUTHOR	SCALE	
MAR 1999	PGS		FIGURE 4



GIANTS REEF MINING LIMITED			
TENNANT CREEK NORTHERN TERRITORY			
AREA	MC C226 - C227, C230 & C223 - C236 Mt Margaret		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	Mineral Claims C226 - C227, C230 Modelled Magnetic Source: Transverse Section 430305E to 430890E		
DATE	AUTHOR	SCALE	
DEC 1999	FWL	1:5000	FIGURE 5



**PROPOSED DRILL COLLAR  
 AT:  
 430620E 7832775N**

GIANTS REEF MINING LIMITED TENNANT CREEK NORTHERN TERRITORY			
AREA	MC C226 - C227, C230 & C223 - C236 Mt Margaret		
MAP REF.	5758 TENNANT CREEK 1:100 000		
SUBJECT	Mineral Claim C230 Proposed Drill Site		
DATE	AUTHOR	SCALE	
NOV 2000	PGS	1:10 000	<b>FIGURE 6</b>

## **APPENDIX 1**

### **MC C226 - C227, C230 & C233 - C236** ***Mt Margaret*** **ROCK CHIP SAMPLE ASSAYS**

- i. Mt Margaret West 1994: Assaycorp
- ii. Mt Margaret West 1994: Assaycorp Resample
- iii. Blazing Stump 1999: ALS

# ASSAYCORP PTY LTD

A.C.N. 012 002 911

171 Ward Street, Pine Creek, N.T. 0847

P.O. Box 41 Pine Creek, N.T. 0847

Telephone (089) 76 1262

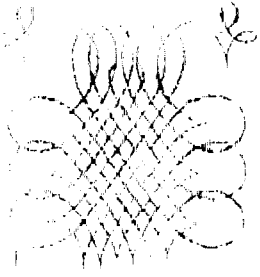
Facsimile (089) 76 1310

ASSAY CODE: AC 16208

Page 1 of 2

Sample	Au (ppb)	Au(R) (ppb)	Cu (ppm)	Bi (ppm)	Fe (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)
114925	7030							
114926	38							
114927	3	3						
114928	2							
114929	4							
114930	8							
114931	420	430						
114932	420	450						
114932	9							
114934	10							
114935	9							
114936	6							
114937	52							
114938	10							
114939	4							
114940	4							
114941	10	10						
114942	4							
114943	56	59						
114944	9	11						
114945	7							
114946	2	4						
114947	3							
114948	4							
114949	5							

*Mt. Margaret  
Rocks.*



# ASSAYCORP PTY LTD

A.C.N. 002 982 911

174 Ward Street, Pine Creek, N.T. 0847

P.O. Box 41, Pine Creek, N.T. 0847

Telephone (089) 76 1262

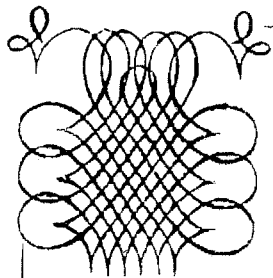
Facsimile (089) 76 1310

ASSAY CODE: AC 16208

Page 2 of 2

Sample	Au (ppb)	Au(R) (ppb)	Cu (ppm)	Bi (ppm)	Po (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)
114950	3							
114951	7	9						
114952	16	16						
114953	5							
114954	1							
114955	3	4						
114956	1							
114957	2	2						
114958	7	7						
114959	1							
114960	2							
114961	3							
114962	2							
114963	14	13						
114964	6	7						
114965	19	20						
114966	1							
114967	1	2						





# ASSAYCORP PTY LTD

A.C.N. 052 983 911

174 Ward Street, Pine Creek, N.T. 0847

P.O. Box 41, Pine Creek, N.T. 0847

Telephone (089) 76 1262

Facsimile (089) 76 1310

ASSAY CODE: AC 16405

Page 1 of 1

Sample	Au (ppm)	Au(R) (ppm)	Cu (ppm)	Bi (ppm)	As (ppm)	
112953	0.04	0.04	257	36	13	100605 repeat
112954	0.57	0.50	1250	484	29	MT Margaret.

Repeat of 7 g/t

Assay in  
original batch  
of rock chips assays.



**AUSTRALIAN LABORATORY SERVICES P/L**  
A.C.N. 009 936 029

28 APR 1999



# ANALYTICAL REPORT

PAGE 1 of 1

CONTACT: MR P SIMPSON  
CLIENT: GIANTS REEF MINING NL  
ADDRESS: P O BOX 1244  
TENNANT CREEK NT 0861

LABORATORY: ALICE SPRINGS  
BATCH NUMBER: AS2781  
SUB BATCH: 0  
No. OF SAMPLES: 6  
DATE RECEIVED: 06/04/99  
DATE COMPLETED: 09/04/99

ORDER No.: 064239 SAMPLE TYPE: RC DRILL CHIP PROJECT:

SAMPLE NUMBER	ELEMENT UNIT METHOD L.O.R.	Au ppm PM209 0.01	Au PM209 ppm CHECKS 0.01	Cu ppm G001 2	Bi ppm G001 1	Fe % G001 0.01
	422143	0.35	0.27	30	56	34.92
	422144	0.19		35	72	32.98
	422145	0.21	0.16	203	71	30.07
	422146	0.08		28	74	56.26
	422147	0.07		40	85	50.44
	422148	0.05		87	59	32.98

COMMENTS:

NO. 235 BLAZING STAMP  
ROCK CHIP SAMPLES

• This is the Final Report which supersedes any preliminary reports with this batch number. • Results apply to sample(s) as submitted by c