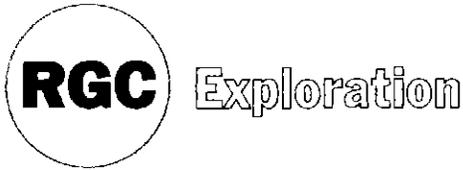


222001

98-4200



ACN 001 426 946

ANNUAL REPORT
May 1997 - May 1998

EL2/94

TASMANIAN BASE METALS PROJECT

EL 2/94

see folio 16

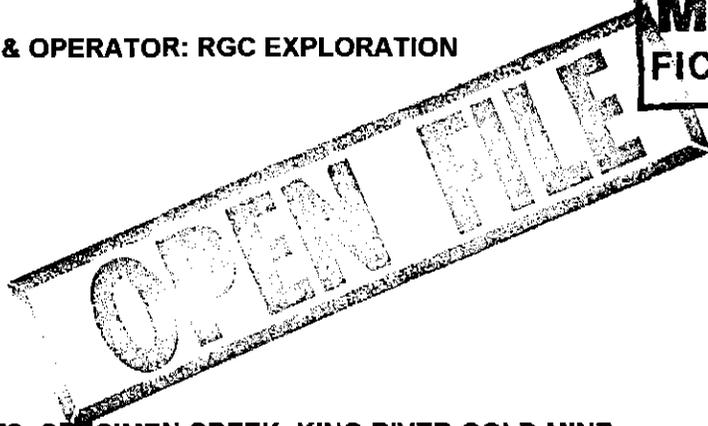
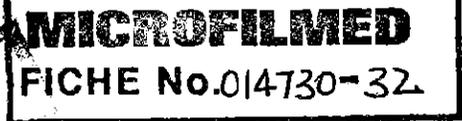
LYNCHFORD

Vol 1 of 1



HELD BY: RGC EXPLORATION

MANAGER & OPERATOR: RGC EXPLORATION



AUTHOR(s):
R.Stockwell

15 January 1998

PROSPECTS: SPECIMEN CREEK, KING RIVER GOLD MINE

MAP SHEETS: 1:25,000: OWEN, STRAHAN 1:100,000: FRANKLIN

GEOGRAPHIC COORDS Min East: 375000 m E Max East: 383000 m E
Min North: 5328000 m N Max North: 5338000 m N

COMMODITY(s): Cu, Au, Zn, Pb, Ag

KEY WORDS: Queen River, Miners Ridge, Yolande River Sequence,

Distribution:

rence: PERTH

98-4200

ANNUAL REPORT - EL 2/94
RGC LYNCHFORD - R STOCKWELL

SUMMARY

EL 2/94 - Queen River is located 5 km south of Queenstown in western Tasmania and was acquired for its potential to host Prince Lyell style Cu - Au, Rosebery style Zn - Pb - Au - Ag mineralisation and Henty style Au mineralisation. In July 1995 EL 17/95 was granted and amalgamated into EL 2/94.

Mapping previously undertaken in the Lynchford (EL 2/94) area has been compiled, checked and up-dated where necessary. Agreement was reached with Paraclete Resources to map Mining Lease 9M/95. No further evidence of exhalative-type deposits were found at the contact between the base of the Tyndall Group and the large Que-Hellyer-type andesite unit (referred to herein as the King River Andesite).

Jasper, previously mapped at the base of the Tyndall Group, was analysed for Rare Earth Elements. The resultant REE pattern is clearly due to precipitation of jasper from sea water, not hydrothermal fluid. Carbonate clasts present at the base of the Tyndall Group were analysed for C and O stable isotopes. The resultant signature was of marine limestone. No further work on this horizon is recommended.

Drilling of the magnetic anomaly, centred at approximately 5334 400 m N, 379 500 m E in the Miners Ridge Grid, encountered minor epigenetic base metals. Significant quantities of magnetic pyrrhotite were intersected (as in hole LF002; 5334 400 m N, 379 700 m E), which accounts for the anomaly. No further work in this area is recommended.

Down-hole EM is yet to be performed on diamond drill holes LF002 - LF005, and is planned for the next period.

CONTENTS

	Page No.
SUMMARY	I
1. INTRODUCTION	1
2. LAND TENURE	1
3. PREVIOUS EXPLORATION	1
3.1 INTRODUCTION	1
3.2 RGC EXPLORATION 1994/96	1
3.3 RGC EXPLORATION 1996/97	2
3.3.1 INTRODUCTION	2
3.3.2 MINERS RIDGE GRID	2
3.3.3 BASAL TYNDALL GROUP	3
3.3.4 RECOMMENDATIONS	3
4. WORK COMPLETED 1997/98	3
4.1 MAPPING	3
4.2 ROCK CHIP GEOCHEMISTRY	4
4.3 DRILLING	4
5. RESULTS	4
5.1 MAPPING	4
5.2 ROCK CHIP GEOCHEMISTRY	5
5.3 DRILLING	5
6. RECOMMENDATIONS	6
7. REFERENCES	8

LIST OF FIGURES

After page:

Figure 1.	EL 2/94 Location plan	1
------------------	-----------------------	---

LIST OF APPENDICES

Appendix 1.	Structural logs and analysis: LF005.
Appendix 2.	Geological note: Wally Herrmann
Appendix 3.	Rare Earth Element analysis: Lynchford jaspers
Appendix 4.	Stable isotope analysis: Lynchford carbonate
Appendix 5.	Technical note: Miners Ridge Grid geophysical anomaly
Appendix 6.	Graphic drill logs: LF003 - LF005
Appendix 7.	Economic-element assay results: LF003 - LF005
Appendix 8.	Neutron Activation assay results: LF005

LIST OF PLANS

Scale

Plan 1.	Mt Read Regional Base Map series, Map 25, Lynchford.	1:5000
Plan 2.	Mt Read Regional Base Map series, Map 26, Lynchford.	1:5000
Plan 3.	Mt Read Regional Base Map series, Map 27, Lynchford.	1:5000
Plan 4.	Geological cross-section 5334400 m N, incl. DDH LF002 and LF005, Miners Ridge Grid.	1:1000

1. INTRODUCTION

E.L. 2/94 - Queen River is held by Renison Ltd and explored by RGC Exploration (RGCE), both wholly owned subsidiaries of RGC Limited. The licence was granted on June 24, 1994 as the result of a successful tender application for ETA's 322 and 346. The tenement is situated about 5 km south of Queenstown in western Tasmania, and in 1994 had an area of 21 km².

EL 17/95 is also held by Renison Limited and explored by RGC Exploration (RGCE), both wholly owned subsidiaries of RGC Limited. The licence was granted on July 10th, 1995 as the result of a successful tender application for ETA 378. The tenement is situated about 5 km south of Queenstown in western Tasmania, and in 1995 had an area of 9 km².

On granting of EL 17/95 the licence was amalgamated into EL 2/94 as the area is a contiguous block. EL 2/94 now has an area of 30 km² (Figure 1). Two mining lease 14M/96 and 25M/95 are excised from the exploration licence.

2. LAND TENURE

The EL comprises: Crown Land, State Forest (Multiple Use Forest Land and Deferred Forest Land), Private Property and Land Vested in the HEC. The area contains parts of the South West Tasmania; Australian Heritage Commission Act; Registered Entry.

3. PREVIOUS EXPLORATION

3.1 INTRODUCTION

The Lynchford EL consists of a sequence of Cambrian basaltic - rhyolitic lavas, intrusions and volcanoclastics of the Mt Read Volcanic Belt. Younger sediments onlap the Cambrian sequence to the west. The Lynchford area has undergone wrenching (Jackson, 1996) during the Devonian Tabberabberan Orogeny, which introduced a minor volume of auriferous fluid into isolated dilational sites, and caused a concentration, in shear zones, of low volume base metals in more mafic rocks. Exploration since 1966 has focussed on these auriferous quartz veins and base metals swarms. The exploration history of EL 2/94, prior to 1994, is summarised by Denver & Gregory (1997).

3.2 RGC EXPLORATION 1994/96.

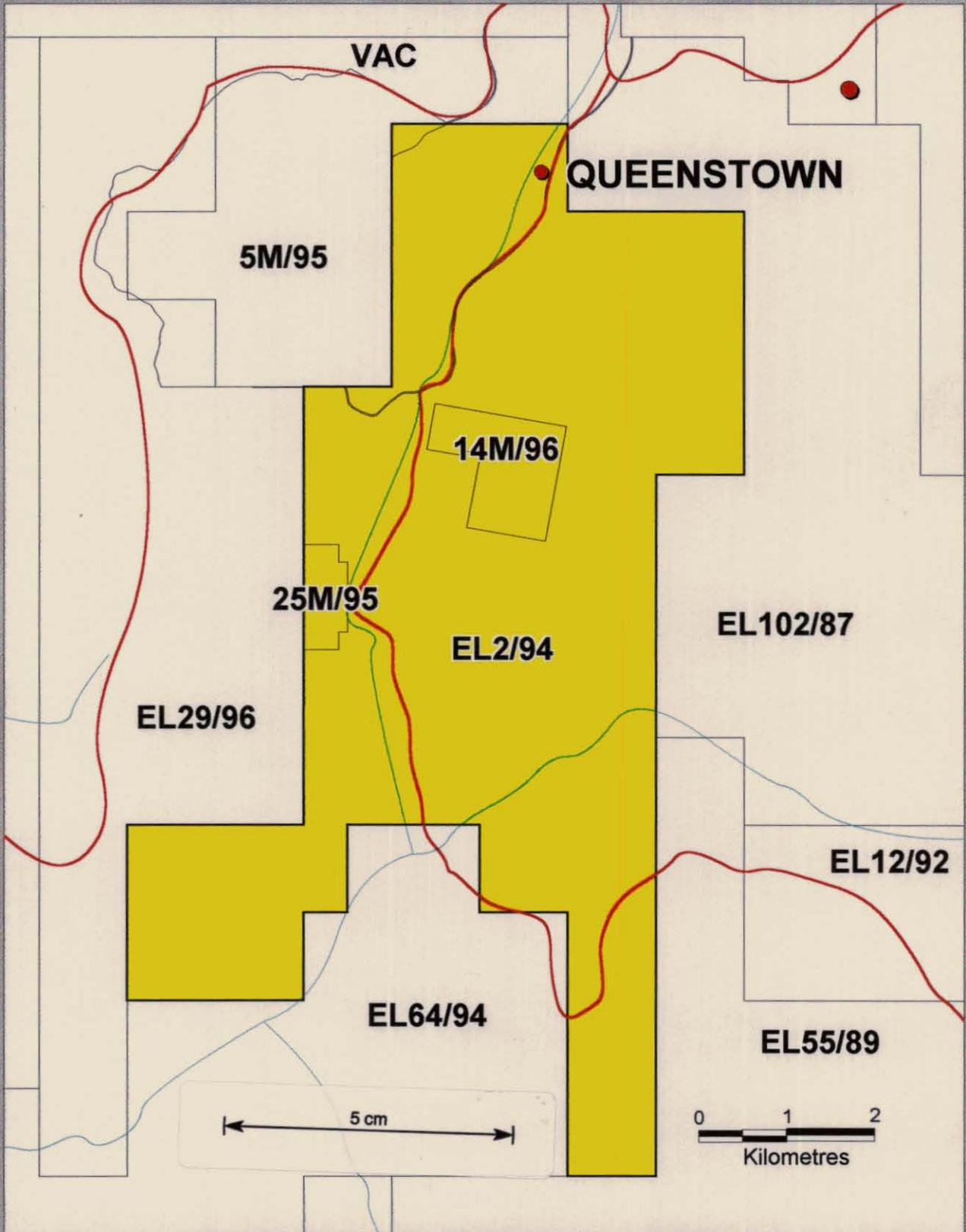
At the Garfield Prospect in EL 102/87 a zone of disseminated and veinlet style chalcopyrite mineralisation has been discovered and occurs within hornblende phytic andesites. The mineralisation has a distinct magnetic signature and is readily discernible on the 1981 Mines Department aeromagnetic survey of western Tasmania (Leaman, 1986).



Exploration

EL 2/94

Tenement Location Plan



By applying knowledge gained from the Garfield Prospect on a regional basis it became apparent that a similar magnetic signature existed in the Queen River area within a similar geological environment. Mines Department mapping in the area (Calver et al, 1987 and Corbett et al, 1993) indicates that the magnetic anomaly is to the west of a line of andesites that trend south from the Lynchford area. The source of the anomaly is not readily apparent as the anomaly is situated over generally non-magnetic Yolande River Sequence.

In the first year of tenure exploration in EL 2/94 consisted in the evaluation of the southernmost magnetic anomaly. A grid was established in the Queen River area and a soil and rock chip sampling program completed. The grid was mapped at 1:5000 scale. No significant anomalies were detected by this programme.

In early 1995 a regional helimagnetics program across all RGC leases in western Tasmania included EL 2/94 (the pre-1995 part). The airborne magnetics survey flown by Aberfoyle has been stitched into the 1995 UTS helimag survey resulting in a full magnetics coverage of the EL.

A base map was produced from digital data obtained from the Lands Department for the 1:25,000 Strahan (3633) and Owen (3833) maps and the basal Tyndall Group was mapped at a scale of 1:5000.

Drill hole LF001, drilled by Aberfoyle, was re-logged.

3.3 RGC EXPLORATION 1996/97.

3.3.1 INTRODUCTION

The focus of exploration in the 1996/97 period can be divided into two prospective areas: the Miners Ridge grid area, which overlies a magnetic bullseye similar in appearance to a low-grade base metals rich andesite intrusive in the Garfield EL; and the base of the Tyndall Group (Lynchford Tuff) - Henty horizon.

3.3.2 MINERS RIDGE GRID.

A grid extension of the Queen River Grid, north over a small circular magnetic anomaly was constructed totalling 5.3 line km. This prospect is referred to as the Miners Ridge grid. The Miners Ridge grid was mapped at a scale of 1:2500 and ninety six soil samples were collected by hand auger, targeting the C horizon where possible. All samples were assayed by Analabs for Al, Ca, Cu, Pb, Zn, V, Sr, P, Ni, Mn, Mg by ICP, Ti by XRF and Au + 28 by NAA by Becquerel. Five hundred and sixty two sample pulps from the Queen River grid were re-assayed for Au + 28 by NAA by Becquerel. Six rock chip samples were collected from the grid and analysed for Cu, Pb, Zn, Ag, As by AAS, and Au by Fire Assay. All samples were processed at Analabs. No significant, economic assay results were returned.

A ground magnetic survey was conducted over the small circular magnetic anomaly. Computer modelling results show the region is dominated by a "bullseye" type magnetic response of approximately 500m radius. The modelled structure is interpreted to represent a shallow intrusive plug within the core of an anticline.

A 367m diamond drill hole LF002 was drilled at -60/280 AMG, situated at 5334425mN 379870mE, with the intention of intersecting the magnetic body at less than 100 metres depth, vertically (Dauth, 1996). Significant magnetic pyrrhotite was intersected (up to 5%), but only minor base metals (2m @ 0.34% Zn - 254-256m, 260-292m). No magnetic, intrusive body was intersected.

3.3.3 BASAL TYNDALL GROUP.

Mapping at Lynchford defined a significant jasper-breccia unit at the base of the Tyndall Group. Drilling of this horizon was recommended, and had commenced at the end of the reporting period.

3.3.4 RECOMMENDATIONS

Follow-up mapping of the basal Tyndall Gp. area, especially within the King River Mine Lease was suggested, to ascertain the possibility of extensions to the possible exhalite deposits (jasper) already defined. Drilling of this horizon was recommended. The inability of drilling results from LF002 to explain the magnetic anomaly in the Miners Ridge Grid area warranted further drilling.

An assessment of the potential of the Lynchford EL to host Henty or Que River - Hellyer-type deposits was conducted by Wally Herrmann (Appendix 2). In addition to the above, it was considered possible that the surface outcrop of the Lynch Creek Basalt may obscure a Que-Hellyer type VHMS deposit at depth (based on the similarity of the footwall sequences), and that only a committed stratigraphic - alteration drilling programme, in conjunction with DHEM surveys, would suffice if this possibility was to be tested.

An IP survey was recommended for the Miners Ridge Grid for targeting possible disseminated sulphides, and a litho-geochemical comparison of andesite breccias from LF002, with those of the Que-Hellyer deposits. If substantiated, a chemical correlation could justify further exploration for stratabound VHMS deposits.

4 WORK COMPLETED 1997/98.

4.1 MAPPING

Agreement was reached with Paraclete Resources to map the King River Mine Lease to complete the regional mapping of EL 2/94, Lynchford. Check-mapping of previous work was undertaken, along with in-fill mapping and correlation of previous work.

The majority of the CRA grid (circa 1986) was mapped to help facilitate the correlation of the Lynchford geology. The Miners Ridge Grid was in-fill mapped.

A hangingwall target proposed by Aberfoyle (Lewis, 1995), proximal to the Specimen Creek Fault at the eastern margin of the King River Andesite, was mapped.

4.2 ROCK CHIP GEOCHEMISTRY

A sample of fresh carbonate was collected for carbon and oxygen stable isotope analysis from a carbonate/jasper-rich, lithic conglomerate, at a down-hole depth of 672 m in LF001.

Rare Earth Element (REE) analysis was performed by Analabs on jasper collected from northern and southern outcrops (Plan 2), at the base of the Tyndall Group, Lynchford. Based on recent research (eg. Duhig et al., 1992), the REE signature of exhalative jasper should reflect an enrichment in the Light REE's, and have a positive europium anomaly. This signature is diagnostic of deposits formed from hydrothermal vent waters; reduced fluids which facilitate the breakdown and transport of Eu^{2+} from Eu-enriched feldspar in the source rock.

4.3 DRILLING

Two diamond drill holes targeted the base of the Tyndall Group: LF003 (5336795 m N, 379173 m E), and LF004 (5337608 m N, 379461 m E) (Appendix 6). Both holes were drilled at 55/110, to a depth of 271 metres and 279 metres, respectively.

A further diamond drill hole (LF005), put into the Miners Ridge Grid area at approximately 5334385 m N, 379290 m E, was drilled to 347 m, and oriented at 60/087 degrees (Appendix 6). Core orientation and structural assessment was carried out (Appendix 1)

LF001 (Aberfoyle) was check-logged for orientation.

5 RESULTS

5.1 MAPPING.

A band of competent dacitic lavas has been identified, striking broadly north-south, in the Miners Ridge Grid area (Plan 2). Flanking this dacitic lava on both sides, and possibly on-lapping it, is a mixed package of dacitic-andesitic breccias, conglomerates and volcanoclastic sandstones and siltstones. The source for the andesitic volcanoclastic component is uncertain. However, a small (<100m X 100m) competent andesite unit was identified in outcrop on the eastern margin of the Miners Ridge Grid between 4800N and 5000N. Fold repetition of the sequence in this area is certain (Plan 4).

No extension to known jasper breccia outcrop was encountered whilst mapping the King River Mine Lease. Andesites in the Specimen Creek hangingwall target area (Aberfoyle) are fresh, unaltered and unstrained.

5.2 ROCK CHIP GEOCHEMISTRY

Analysis of carbonate from LF001, by the University of Tasmania, resulted in a signature typical of a marine limestone (Rollinson 1993) (Appendix 4). The Delta 18O value was slightly depleted, and may indicate interaction with local meteoric water.

A moderate LREE enrichment is present in the Lynchford Jasper (Appendix 3). However, there is no positive europium anomaly, and a distinct negative cerium anomaly exists. Cerium in its 4⁺ oxidation state substitutes efficiently for Mn⁴⁺ in sea-floor manganiferous oxides. This, in conjunction with the absence of a positive europium anomaly, suggests that the jaspers at Lynchford have formed through precipitation from sea water, not hydrothermal fluid.

5.3 DRILLING

Assay results for LF003 and LF004 were discouraging (Appendix 7). However, LF004 intersected strongly silicified and albitised (150.0-166.0m) and sericitised (166.0-177.5m) crystal sandstone at the base of the Lynchford Tuff and within the underlying Yolande River Sequence. The strongly silicified and albitised crystal sandstone appears similar to AS alteration at Henty. LF003 intersected haematitic carbonate at the base of the Lynchford Tuff, hosted within the underlying Yolande River Sequence. A zone of quartz veined, carbonate- and pyrite-altered basalt was intersected from 222.8m to 243.2m.

Assay results for LF005 were disappointing (Appendix 7). Maximum assay values for the 1 metre samples were: 0.04% Pb, 0.015% Zn and 0.0013% Cu. Gold assays were below detection and silver peaked at 1ppm. However, as for LF002, significant quantities of magnetic pyrrhotite were intersected, which may explain the magnetic signature of the area (Appendix 5).

Sulphides in LF005 core are generally confined to fractures and veins, and as in-fill in more porous sandstone layers. In addition, pyrite and pyrrhotite define an S₁ cleavage throughout the core. These styles of mineralisation are clearly epigenetic, and not associated with a Cambrian mineralisation event (Appendix 1). However, fine beds (<2mm) of stratiform pyrite were intersected at 176.9-177.1 metres in LF005 (Appendix 6). The significance of this pre- to syn-Cambrian mineralisation in LF005 is uncertain, but may be related to pyritic clasts mapped in felsic mass flow units in the Miners Ridge Grid area. The source region for this mineralisation is unknown.

Summary log LF003

Depth (m)	Lithology	Code
0-34	Red clay and minor andesitic crystal sst.	CLY
34-42.5	Equigranular feld., amphib., magnetic sst.	VAFM
42.5-62.2	Graded crystal (lithic) sst.	VDFM
62.2-140	Predominantly andesitic crystal (lithic) sst and mass flows + minor qtz, feld., sst.	VAFM/VD>M
140-170	Crystal, lithic dacitic sst and mass flows.	VDF(L)M-C
170-197.5	Graded qtz (lithic) sst + minor haematitic carb.	ERQM
197.5-222.8	Amygdaloidal, lithic poor basalt.	VBFM
222.8-243.2	Qtz-carb-py., altered siltstone, carb + basalt.	
243.2-271.8	Foliated, fine grained mafic + feld., phyrlic sst.	VAFM

Summary log LF004

Depth (m)	Lithology	Code
0-21.6	Feldspar phyrlic mafic conglomerate.	VAFC
21.6-29.8	Fine grained ashy siltstone.	VDF
29.8-59.5	Mafic, feld., phyrlic, magnetic crystal sst.	VAFM-C
59.5-112	Graded, mafic-feld phyrlic magnetic crystal sst.	VAFM-C
112-114	Finely laminated black shale.	SHAL
114-279.4	Qtz phyrlic (lithic) sst and mass flows.	VRQ(L)M

Summary log LF005

Depth (m)	Lithology	Code
0-34.7	Lithic-rich feld phyrlic sst.	VDFM
34.7-39.8	Black to grey sericitic siltstone.	SLT
39.8-47.6	Coarse grained, polymict lithic, intraclastic debris avalanche.	VDLM-C
47.6-298.8	Graded feld phyrlic (lithic) mass flows, turbidite sequences, sst and siltstones.	VDF(L)F-C
298.8-339.7	Interbedded grey siltstone & fine sst.	SLT/VDF
339.7-340	Graphitic carbon layer.	GRAPH
340-347	Polymict mafic-felsic lithic breccia.	VA-RLB

6 RECOMMENDATIONS

Drilling of the southern outcrop of jasper by Aberfoyle (LF001), and the subsequent DHEM and UTEM surveys, failed to define a target worthy of follow-up, either along the jasper-rich contact at the base of the Tyndall Gp., or the Specimen Creek structure.

In light of these results, and the results of the mapping, REE and stable isotope studies carried out by RGC Exploration, the potential of the Lower Tyndall Gp. at Lynchford (especially in the vicinity of the King River Andesite) to host an economic VHMS-style deposit is considered low. No further work in this area is recommended.

A number of DIGHEM anomalies were defined by airborne geophysics during the 1989/90 period by Aberfoyle Resources Ltd (Noonan 1990). Further work on two of these anomalies (21/544 & 22/530) was impractical due to the location of the Lynchford HEC camp. Sphalerite and galena veins were reported from excavations in the Gordon Limestone at the site of 22/530. Both DIGHEM anomalies are contained within an area of strong aeromagnetic response (Plan TASH 2860; Noonan 1990). A small auger sampling (or short-hole RAB or RC) programme is recommended in the area enclosed by the magnetic anomaly to test the possibility of a small Irish-type deposit being located in the Gordon Limestone at the now disused HEC camp site.

Down-Hole EM surveys for drill holes LF002-LF005 are recommended. This is especially applicable for LF004, in which significant alteration was encountered.

A possibility exists for further work mapping paleocurrent directions in the Miners Ridge area to ascertain the source region for pyrite clasts in felsic mass flow units. Textural assessment of clasts within the mass flows would assist in isolating an area of provenance. However this is a long shot, considering the lack of good outcrop at Lynchford and the ubiquitous occurrence of pyrite clasts throughout the Mt. Read Volcanics, and is not considered a priority.

When testing Garfield-type magnetic anomalies, drilling should be designed to intersect the anomaly by the most economic means possible. A cheaper alternative to the 714 metres drilled at the Miners Ridge Grid, would have been a single hole, drilled vertically into the magnetic high. The loss in geological information would be compensated for by the reduction in expense incurred to explain the (purely) magnetic target.

7 REFERENCES

- Calver C.R., Baillie P.W., Everard J.L., Seymour D.B., Williams P.R., Forsyth S.M., Turner N.J., and Williams E. 1987. Lyell - Geological Atlas 1:50 000 Series Sheet 8013N. Dept. of Mines, Tasmania.
- Corbett K.D., Pemberton J., and Vicary M.J. 1993. Map 13. Geology of the Mt. Jukes - Mt. Darwin area. Mount Read Volcanics Project. Dept. of Mines, Tasmania.
- Dauth C., 1996. Technical Note: Miners Ridge geophysical survey. RGC Exploration Internal Report. 4 pp. Unpublished.
- Denwer K., and Gregory D. 1997. Annual Report - Tasmanian Base Metals Project EL 2/94, Lynchford. RGC Exploration Internal Report. 11 pp. Unpublished.
- Duhig N. C., Stolz J., Davidson G. J., and Large R. R., 1992. Cambrian microbial and silica gel textures in silica iron exhalites from the Mount Windsor Volcanic Subprovince, north Queensland, Australia. *Econ. Geol.*, Vol 87. No. 3; pp. 764-784.
- Fowler T. J., and Winsor C. N. 1997. Characteristics and occurrence of bedding-parallel slip surfaces and laminated veins in chevron folds from the Bendigo-Castlemain goldfields: implications for flexural-slip folding. *J. Struct. Geol.*; Vol 19, No. 6; pp. 799-815.
- Jackson M., 1996. The genesis of auriferous quartz veins at Lynch Creek, western Tasmania (Hons thesis). 107 pp. Unpublished.
- Leaman D.E., 1986. Interpretation and Evaluation Report. 1981 west Tasmania aeromagnetic survey. Mt. Read Volcanics Project Geophysical Report 1.
- Lewis R., 1995. Aberfoyle Resources Limited: Relinquishment Report for the Lynchford EL 47/83. 9 pp. Unpublished.
- Noonan D. J., 1990. Aberfoyle Resources Limited: Report on exploration in the area to be relinquished 10th March 1990; Exploration Licence 47/83, Lynchford. 19pp. Unpublished.
- Rollinson H., 1993. Using geochemical data: evaluation, presentation, interpretation. Longman Scientific & Technical, England.

APPENDIX 1

STRUCTURAL LOGS AND ANALYSIS: LF005

STRUCTURAL ANALYSIS - LF005.

Core orientation was performed by ALMAC Drilling on the Lynchford drill hole, LF005. Orientation surveys were taken at 15 - 18 metre intervals, dependant on ground conditions. A modified five-pronged orientation device was used, and resulted in superior accuracy and excellent repeatability of surveys. Core was re-oriented, by down-hole camera surveys, for logging, and structural measurements were taken by a Suunto compass and entered into a modified (by author) Goldfields Exploration structural logging sheet (see overleaf).

Drill hole LF005 (347 m) was collared in feldspar phyric volcanoclastic sandstones and remained in well bedded sandstones, siltstones and mass flows throughout the hole. Bedding was generally acute to the core angle, ranging from 0 - 35 degrees, and facing indicators were apparent. Facing indicators used include flame structures, flute casts, scour structures and graded beds.

The stratigraphic package intersected by LF005 records a number of facing changes and changes in vergence (see Structural Log), suggesting significant folding has occurred in the Miners Ridge Grid area. These folds are evident on a local-scale in outcrop (Plan 4), they trend sub-parallel to Cambrian structures, and are assumed to be contemporaneous with this event. However, the influence of Devonian deformation on folds recorded at Lynchford is unknown. The Devonian S_1 cleavage (Jackson, 1996) runs sub-parallel to inferred fold axes suggesting that folding may be related to this event. It appears most likely that the Devonian deformation caused a parasitic (synthetic?) folding of larger-scale Cambrian folds, and the development of a penetrative cleavage.

Bedding and cleavage data appear random on stereoplots (see overleaf), which may indicate error in core mark-up, or structural measurement. However, the low number of measurements, due to broken core, exacerbates the randomness of the data set and does not allow conclusive estimation of fold character and orientation.

Flexural slip during folding is recorded by bedding-parallel laminated veins (Fowler & Windsor, 1997) and slickensided, or mineral elongation-lineated bedding surfaces. This is especially apparent at contacts between rheologically contrasting rocktypes (eg shale and sandstone).

Generally, phyllosilicates (sericite, chlorite) define a prominent (S_1) cleavage. Pyrrhotite and pyrite are present in the plane of the cleavage, and define a mineral elongation lineation apparent on fault planes and on bedding surfaces. Hence, pyrrhotite and pyrite can be attributed to pre-syn-Devonian deformational mineralisation.

Faults sub-parallel to S_1 (and probably sub-parallel to the F_1 fold axial plane - see above) are numerous, and in conjunction with the attenuation of fold limbs by flexural slip, have complicated the stratigraphy at Miners Ridge.

Cross-cutting all other structures observed in core, is a generation of brecciating, calcite-chlorite-quartz +/- sulphide (pyrite, pyrrhotite, sphalerite, chalcopyrite, galena) veins. This generation of veins has no apparent preferred orientation and is the dominant vein style observed in LF005 core. The late-stage timing of these veins infers a relationship with the Devonian Tabberabberan Orogeny, assumed to correlate with large-scale sinistral wrenching (D_{1DEV}) and a later dextral reactivation (D_{2DEV}) in the Lynchford area (Jackson, 1996). The mineralisation found in these veins is typical of the late-Devonian deformation event, and unfortunately accounts for the majority of mineralisation in LF005 and LF002. The source of this mineralisation at Lynchford is uncertain.

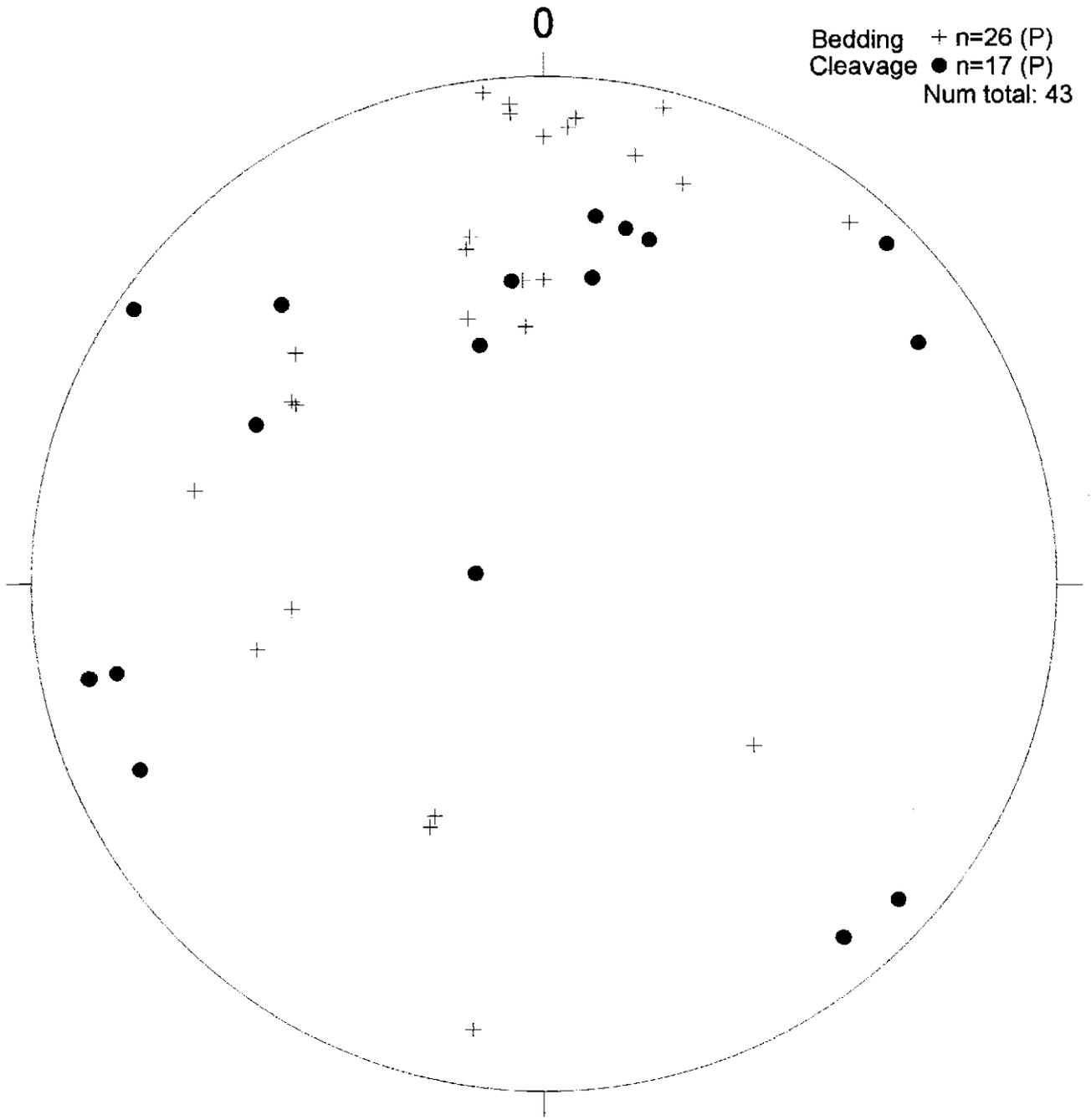
En echelon extension fractures (173.6 m) and conjugate faults (245.8 m) can be analysed to determine strain displacements and paleostress directions. The tails of extension fractures are oriented parallel to the maximum principal compressive stress direction (σ_1) and are infilled with minerals which grow in the minimum principal compressive stress direction (σ_3). Bisecting the acute angle between conjugate faults or shears will give an estimate of σ_1 .

A principal stress direction of 123° (SE - NW) has formed the en echelon extension fractures logged in LF005. The orientation of σ_1 and the composition of in-fill materials (quartz, carbonate +/- chlorite) are consistent with Devonian dextral wrenching (Jackson, 1996). σ_1 for the conjugate fault set is $21/248^{\circ}$ (SW - NE).

RECOMMENDATIONS

Despite the inconsistent results obtained for LF005 due to broken core, orientation should be performed on all diamond drill core as it provides the fact necessary for interpreting the trend of favourable horizons, either faulted, folded or intact, beneath the surface. Cross-sections should not be attempted, based only on the bedding-core angle from unoriented core (eg LF002). This practice is inaccurate, and misleading, as the apparent dip measured on core can not be corrected either to the plane in which the cross-section is being drawn, or to the coordinates to which the hole is drilled.

Drill-hole cross-sections should only be relied on when oriented core is used, or surface outcrop allows inference. Structural interpretations will be erroneous unless either of the above is true, or sufficient drilling has been done in an area to gain an understanding of the structural character.



LF005 BEDDING AND CLEAVAGE

Equal area projection, lower hemisphere



STRUCTURAL LOGGING CODES-TAS

STRUCTURE TYPE:

C	Crenulation
F	Fault
F _{1-x}	Fold axial plane
S _{1-x}	Foliation
L	Lineation
S ₀	Bedding
T	Extension fracture
V	Vein
Z	Shear

SHAPE:

A	Anastomosing
G	Angular
I	Irregular
L	Linear
P	Planar

WEATHERING:

F	Fresh
S	Slightly-minor colour/lustre change
M	Moderately-minor fabric destruction
H	Highly-iron staining, friable rock fabric, secondary minerals (clays).
E	Extremely-may as well be dirt.

TEXTURE:

B	Breccia-incohesive
C	Cataclasite-cohesive
CS	Crack-Seal
F	Folded
FO	Foliated
M	Massive
S	Soft sediment slump/folded
ST	Stylolitic
SV	Stockwork veined
V	Vuggy

WIDTH: Of structure, normal to orientation

INFILL MATERIALS: Minerals, e.g. Py, Ca, Cl, Qz, and amount (Vol%)

KINEMATICS:

TYPE:

A	Asymmetric grains
C	C-S Fabric
F _A	Fold axis
D	Drag folds
E	Extensional shear bands
L	Lineation
S	Slickensides
W	Wrench array

LINEATION:

1	Bedding - cleavage intersection
2	Crenulation lineation
3	Mineral elongation (stretching)
4	Boudinage (long axis of necks)

SENSE:

N	Normal
R	Reverse
D	Dextral
S	Sinistral

UP SIDE:

F	Footwall
H	Hangingwall.

VERGENCE-bedding to cleavage

A	Anticlockwise
C	Clockwise

SIGMA 1-Maximum compression direction.

SIGMA 3-Maximum extension direction.

APPENDIX 2

GEOLOGICAL NOTE: WALLY HERRMANN

Geological Note: Wally Herrmann

Lynchford EL 2/94

The main interest in this area is in the Lynchford Tuff at the base of the Tyndall Group (syn: Lynchford Member of the Comstock Formation; White and McPhie, 1996) which is a very magnetic feldspar crystal rich volcanoclastic sandstone. Manganiferous-hematitic gossany rocks and jasper exist at surface on this horizon in two locations about 600m apart, immediately north and south of a mining lease covering the King River Gold Mine. The "mineralised" rocks are associated with minor barite, anomalous Cu (400ppm) and some Pb & Zn. They appear to be restricted to the Lynchford Member where it overlies the Lynch Creek Basalt and have not been found to extend further north or south where the Lynchford Member diverges away from the basalt contact. The lease is held by Messers. Rosetti and Butler who have so far resisted offers from RGC to come in and explore the favourable horizon.

Previous work by Aberfoyle culminated in drilling of one hole (LF1) under the southern gossan/jasper occurrence. Drilled eastwards, LF1 apparently stayed in Tyndall Group crystal rich sandstone to the end of hole (697m) which is surprising considering the surface geology from which it would be expected to intersect Lynch Creek Basalt at ~300-400m. However, aeromagnetic data shows a fuzzy slab of magnetic material at depth below the (magnetically quiet) Lynch Creek Basalt in this corner just north of the fault along Specimen Creek and suggests either local overturning of the sequence or some other structural complication. There appears to be no IP and EM coverage (unusual if Aberfoyle have been there before?) or at least it is not available for the area covered by the lease.

Considering the tenure difficulty, RGC's exploration plan is to drill under the gossan/jasper zones at each end (the southern end is already done by LF1) and use DHEM to find off hole conductors on the rationale that if a substantial, conductive VHMS deposit exists in the 600m of strike under the lease then it should be detectable by DHEM and if it's not, then it's probably not big enough.

If the latter conclusion is reached, I believe it is still worth pursuing the Lynchford Member on the basis that it is a regionally recognised favourable horizon which hosts massive sulphide-gold mineralisation at Henty and base metal rich massive sulphide deposits at Comstock.

The following lines of exploration are worth considering:

- What is the significance of the manganiferous-hematitic rocks? - are they distal carbonate-silica exhalites or silicified manganese carbonate alteration phenomena? Either one could be favourable for VHMS exploration, cf. extensive manganese carbonate alteration around the South Hercules deposit. Some whole-rock, immobile element and perhaps Eu geochemistry may help to elucidate this.
- I am a great believer in using systematic IP to identify and map out pyritic footwall alteration zones if they exist close to surface. If the Lynchford area has somehow escaped IP surveys to date, I think it would be worth considering blanket IP coverage of the footwall zone (along and east of the favourable horizon) and following up any broad chargeable zones by stratigraphic-alteration drilling to identify vectors. Apart from systematic pattern drilling this seems to offer the best means of zeroing-in on footwall alteration zones. Presumably the bush is pretty thick down there and alteration is not going to be easy to map in outcrop; the magnetically flat character of the Lynchford Basalt and the enclosing

Yolande River volcano-sedimentary Sequence precludes aeromagnetic interpretation as a means of identifying magnetite destructive quartz-sericite-pyrite footwall alteration zones.

- Depending on the degree of geological exposure, an attempt should be made to establish the significance of northwest trending dextral faults (shown on the Queenstown 1:25000 geological map) which may have been syndepositional with the Tyndall group and influenced hydrothermal circulation.
- The Lynch Creek Basalt (Cbp) is reportedly of MRV Suite III type (Crawford et al., 1992) compositionally analogous to basalts overlying the Que River and Hellyer deposits. Lynch Creek Basalt appears to lie in an anticlinal setting; the Yolande River Sequence rocks (Cys & Cyx) face east on the east side and west on the west side, so that there is a possibility that the equivalent of the Que River-Hellyer favourable horizon lies at moderate depths below it in the core of the anticline.

If the interpretation shown in cross section on the Queenstown 1:25000 geological map is correct, this horizon should be exposed along the east of the strip of Cbp against Cyt south of the Upper Lynch Creek Mine. Cyt reportedly is interbedded vitric and crystal tuff, siltstone, slate and agglomerate. This does not correlate well with the voluminous andesite of the Que-Hellyer footwall sequence in the Mt Charter area but the underlying Miners Ridge Sandstone (Cymr) is lithologically similar to the Animal Creek Greywacke at the base of the Que-Hellyer sequence. This concept of exploring a possible equivalent of the Que-Hellyer horizon under the Lynch creek Basalt would require a commitment to stratigraphic-alteration drilling and DHEM.

Miners Ridge Magnetic Anomaly

This is an isolated bullseye magnetic anomaly about 400m in diameter, located ~2km south of the King River Mine, apparently amongst Yolande River Sequence volcano-sedimentary rocks. There is virtually no outcrop over the anomaly but magnetic modelling indicates a shallow source of <40m depth to top with three lobe like vertical projections corresponding to the main high intensity peaks and apparently little or no tail in the root zone; ie: it has an upright, uneven, laccolith-like form.

Mapping by Dave Gregory indicates the surrounding rocks are felsic mass flow volcanoclastics and shales with minor dacitic hyaloclastic? Breccia and, possibly intrusive, coherent rhyolite. Soil geochem sampling indicates subtle anomalies ~35ppm Cu, 70ppm Cr and 2% Fe coincident with the magnetic zone and faint Pb & Zn anomalies in a halo around its northern margin. These weak soil anomalies are similar to those over RGC's Garfield prospect which were found to be related to 0.1-0.4% Cu mineralisation in an andesitic intrusion?

RGC has attempted to test the magnetic feature, for mineralisation analogous to Garfield, by drilling LF2 into the eastern side. It intersected a folded and overturned but generally east facing sequence of sandstone and shale underlain by polymictic volcanic breccia and minor andesitic hyaloclastite. Minor disseminated pyrrhotite and trace sphalerite veinlets exists mainly in shaly units but the magnetic susceptibility was insufficient to explain the anomaly at surface.

There is a suspicion that the hole has passed under the eastern part of a laccolith shaped magnetic body, even though it should have intersected its rim.

The presence of monomict andesitic resedimented hyaloclastite near the end of the hole, has been interpreted to suggest an eruptive source in near proximity. However, if the andesitic hyaloclastite is not magnetic (as it appears to be) there is no reason to associate it with the magnetic source.

The magnetic source remains highly enigmatic but the best available analogies - Garfield and Penghana - suggest either a Prince Lyell style of disseminated/veiny magnetite-pyrite-chalcopyrite deposit or an andesitic intrusive. Current plans are to drill a more conservative hole (LF4) to test the western peak of the magnetic anomaly. It is noteworthy that the geophysicist, after modelling the anomaly, recommended testing by a vertical drill hole.

I would prefer to see IP used as an additional targeting tool, for disseminated sulphides, but admittedly if there were no IP response the thing would still be tantalising and would require drilling for resolution. The possibility of porphyry style or potassic alteration should not be overlooked but if LF4 fails to find significant alteration zonation or sulphides, and it intersects a magnetic mafic rock, then it will be time to quit.

On a slightly different tack, this location is roughly on line with the predicted position of the Que-Hellyer favourable horizon (see above). LF2 may have intersected it and it would be worth checking the major and immobile element composition of the andesitic hyaloclastic for comparison with Que-Hellyer Volcanics. If substantiated, a chemical correlation could justify further exploration for stratabound VHMS deposits rather than intrusive related deposits.

APPENDIX 3

RARE EARTH ELEMENT ANALYSIS: LYNCHFORD JASPERS

JASPER FROM THE BASE OF THE TYNDALL GP. LYNCHFORD.

SAMPLE	EAST	NORTH	LA_I	CE_I	PR_I	ND_I	SM_I	EU_I	GD_I
45291	379085	5336745	8.25	9.95	1.86	7.8	1.1	0.29	0.9
45292	379280	5336720	1.46	2.22	0.21	0.7	NA	NA	NA
45293	379280	5336730	0.41	0.56	0.06	0.2	NA	NA	NA
45294	378468	5336020	2.85	4.83	0.65	2.7	0.5	0.12	0.4
45295	378474	5336027	2.66	2.79	0.45	1.8	0.3	0.08	0.2
45296	378482	5336034	1.88	2.22	0.33	1.3	0.2	0.06	0.2
45297	378489	5336038	0.52	0.59	0.1	0.4	NA	NA	NA
45298	378497	5336034	3.28	2.86	0.55	2.1	0.3	0.08	0.2
METHOD			M104						
DET.LIMIT			0.05	0.05	0.05	0.1	0.1	0.05	0.1
UNITS			ppm						
ANALABS									

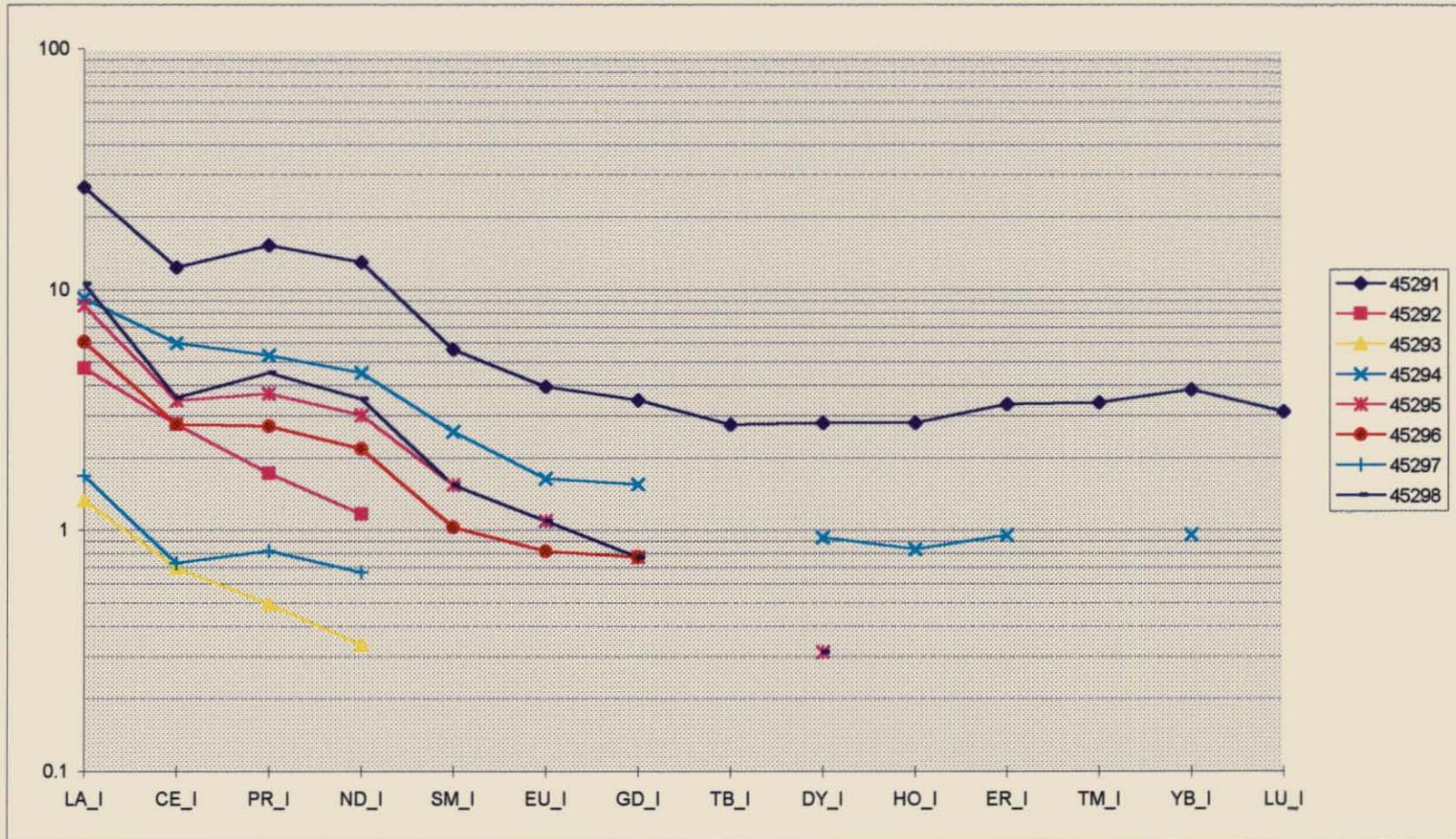
NORMALISED TO C1

SAMPLE	EAST	NORTH	LA_I	CE_I	PR_I	ND_I	SM_I	EU_I	GD_I
45291	379085	5336745	26.6129	12.31436	15.2459	13	5.641026	3.945578	3.474903
45292	379280	5336720	4.709677	2.747525	1.721311	1.166667			
45293	379280	5336730	1.322581	0.693069	0.491803	0.333333			
45294	378468	5336020	9.193548	5.977723	5.327869	4.5	2.564103	1.632653	1.544402
45295	378474	5336027	8.580645	3.45297	3.688525	3	1.538462	1.088435	0.772201
45296	378482	5336034	6.064516	2.747525	2.704918	2.166667	1.025641	0.816327	0.772201
45297	378489	5336038	1.677419	0.730198	0.819672	0.666667			
45298	378497	5336034	10.58065	3.539604	4.508197	3.5	1.538462	1.088435	0.772201

SAMPLE	EAST	NORTH	TB_I	DY_I	HO_I	ER_I	TM_I	YB_I	LU_I
45291	379085	5336745	0.13	0.9	0.2	0.7	0.11	0.8	0.1
45292	379280	5336720	NA						
45293	379280	5336730	NA						
45294	378468	5336020	O.O5	0.3	0.06	0.2	NA	0.2	NA
45295	378474	5336027	NA	0.1	NA	NA	NA	NA	NA
45296	378482	5336034	NA						
45297	378489	5336038	NA						
45298	378497	5336034	NA	0.1	NA	NA	NA	NA	NA
METHOD			M104						
DET.LIMIT			0.05	0.1	0.05	0.1	0.05	0.1	0.1
UNITS			ppm						
ANALABS									

NORMALISED TO C1

SAMPLE	EAST	NORTH	TB_I	DY_I	HO_I	ER_I	TM_I	YB_I	LU_I
45291	379085	5336745	2.742616	2.795031	2.785515	3.333333	3.395062	3.827751	3.10559
45292	379280	5336720							
45293	379280	5336730							
45294	378468	5336020		0.931677	0.835655	0.952381		0.956938	
45295	378474	5336027		0.310559					
45296	378482	5336034							
45297	378489	5336038							
45298	378497	5336034		0.310559					



APPENDIX 4

STABLE ISOTOPE ANALYSIS: LYNCHFORD CARBONATE

Stable isotopes for Lynchford carbonate (from LF001 672m-Aberfoyle)

sample	Delta45	Delta46	Delta 18O PDB	Delta 13 ⁰ PDB	Delta 18O SMOW
45299	6.739	-4.454	-15.7	1.109	14.68

Detection limits for the OIC Stable Isotope Mass Spectrometry method used, are:

D13C- 0.007

D18O- 0.011

APPENDIX 5

TECHNICAL NOTE:MINERS RIDGE GRID MAGNETIC ANOMALY



RGC EXPLORATION PTY LTD ACN 001 426 946
A Member of the RGC Group

Perth Head Office
89 Burswood Rd
Post Office Box 322
VICTORIA PARK WA 6100
Australia
Telephone (09) 442 8100
Facsimile (09) 442 8181

rgctecp.dot

TECHNICAL NOTE

To : Richard Stockwell

CC. : RGC Exploration Information Centre Reference: Lynchford 23-14

From : Chris Dauth

Date : 15 January, 1998

Subject : Miners Ridge magnetic susceptibility measurements

INTRODUCTION

The Lynchford Project is currently being explored by RGC Exploration Pty Ltd for base-metal and gold mineralisation. This TECHNICAL NOTE discusses results of magnetic susceptibility measurements made on diamond drill core from two holes drilled in 1997. The diamond drill-holes were designed to test a ground magnetic anomaly. As part of the initial stages of exploration, an east-west grid was established, and field mapping and acquisition of ground magnetic data conducted. A previous Technical Note was written on computer modeling results on an anomaly delineated by the ground magnetic survey. Subsequently, two diamond holes were drilled to test this anomaly, LF002 and LF005. The aim of assessing the magnetic susceptibility readings is to determine whether the holes can adequately explain the observed magnetic anomaly.

GEOLOGY

Both LF002 and LF005 intersected a thick sequence of predominantly black siltstones. Minor pyrite and pyrrhotite were identified within the black siltstones. LF002 was drilled to the west below the main modelled magnetic body, and LF005 to the east into the centre of the main magnetic body.

GROUND MAGNETIC DATA AND COMPUTER MODELLING RESULTS

The data show a dynamic range of 616 nT (62183-62799 nT) and are dominated by a "bullseye" type magnetic anomaly of approximately 500m radius. The anomaly has a main positive high (62799 nT) located at local grid co-ordinates 9725mE, 4400mN, and a negative dipole centred at 9700mE, 4000mN. In addition to the main high, the anomaly has two further local peaks in magnetic amplitude. These are located at 9475mE, 4400mN; and 9585mE, 4800mN. It is most likely that these local high amplitude centres represent regions where the magnetic source is closer to the surface.

Computer modelling results show a number of polygonal slab bodies stacked to form a three-dimensional model. It was considered most likely that this modelled structure represented an intrusive igneous plug into a sediment (and volcanic?) rock pile. The drilling results strongly suggest

that it is the folded sediment rock pile that actually forms the magnetic anomaly, as the proposed intrusive igneous plug was not intersected.

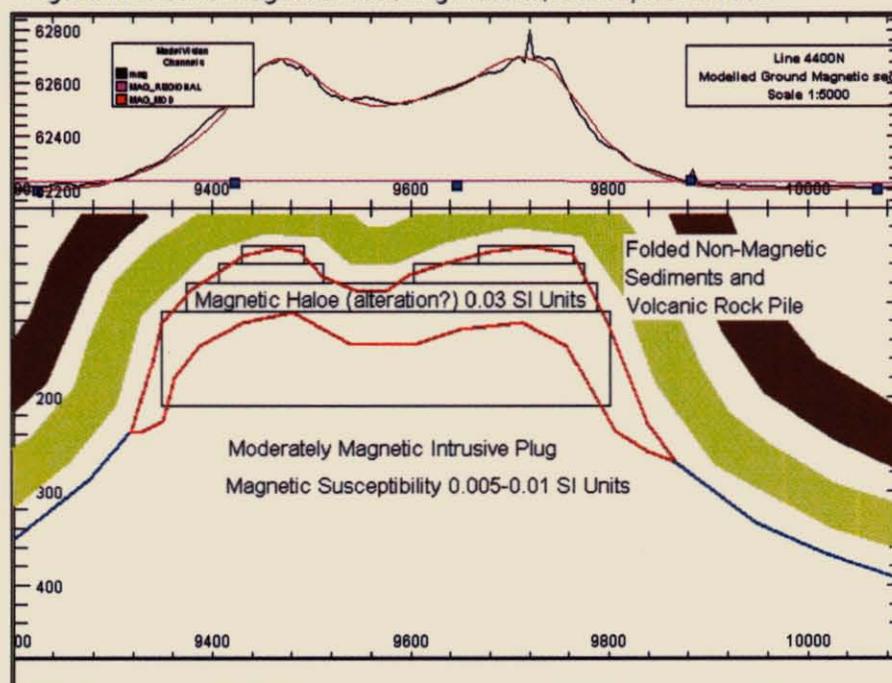
The magnetic susceptibility of the modelled body was set at 0.03 SI units. Assuming the magnetic response is purely due to magnetite, and that the magnetite is of average magnetic susceptibility, this would relate to a magnetite content by volume of 0.5%. The magnetic susceptibility is within the range that would be expected of an andesitic intrusive or a highly magnetic granite. Assuming the response was due to pyrrhotite, then a pyrrhotite content by volume would be approximately 0.1%.

Each of the local high amplitude anomalies within the main anomalous zone have been modelled as having the magnetic source closer to the surface. These are interpreted as local variations in the geometry of the main magnetic body. It is quite possible that these local elevations in the surface level of the magnetic body could be related and causative of folding in the overlying sedimentary (volcanic?) pile. The magnetic body as a whole would correspond to a regional anticlinal structure. The depth to the top of the modelled body is as shallow as 40m below ground level at 9700mE, 4400mN, and at 9460mE, 4400mN. An additional elevated surface of the magnetic source has been modelled over the local high amplitude response centred at 9585mE, 4800mN. This local high is modelled at a depth of 60m below the surface. The centre of this body is located slightly to the south of line 4800N at 9580mE. Closer line spaced data would be required to better resolve the surface topographical nature of the magnetic source.

The modelling results suggest a N-S elongation of the magnetic source. It is quite possible that this elongation is a regional structural orientation. This is yet to be established.

The geological nature of the modelled structure could be explained in a number of ways. Two possible scenarios were proposed. Firstly, a uniform intrusive plug intruding and folding the overlying stratigraphy. The lack of a broad regional anomaly suggests that the tail of the intrusive plug would have to be either narrower than the surface of the plug; or become less magnetic at depth. An alternative considered was a large, poorly to moderately magnetic intrusive mass with a magnetic carapace near the surface. It would be the magnetic carapace (possibly an alteration product) that is causing the magnetic anomaly (see Figure 1 below).

Figure 1. Ground Magnetic Modelling Results, Conceptual Model.



Taking the drilling results into account, it is most likely that the "carapace" does exist, and that it is in fact a layer of pyrrhotite rich sediments that form a folded surface giving the observed magnetic response. Therefore, the "carapace" indicated in Figure 1 would most likely represent a lower unit of the sediments in which pyrrhotite was associated with the black siltstones.

SURVEY PARAMETERS

Hand held magnetic susceptibility readings were taken using the GEOMETRICS GMS-2 Magnetic Susceptibility Meter. Measurements were taken at 1m intervals for the entire length of each drill-hole. Measurements were made in SI units. Corrections have been applied on readings to allow for the curvature of each core sample. Results were transferred to an EXCEL spreadsheet.

RESULTS

Plots of the magnetic susceptibility readings for LF002 and LF005 are presented in Plan 1. The results show that the two holes may be well correlated in terms of magnetic susceptibility. An interval of magnetic susceptibility 0.0001-0.0002 SI units can be correlated at 68-93m and 58-113m in LF002 and LF005 respectively. Also, an interval of 0.001-0.01 SI units is of similar character from 239-279m and 236-276m in LF002 and LF005 respectively. It is not known whether these units have been geologically correlated, however, the magnetic susceptibility readings do provide evidence for some form of stratigraphic correlation.

The magnetic susceptibility values are a factor of 3-10 lower than would be expected from the magnetic modelling results. Modelling with such lower magnetic susceptibilities does significantly reduce the amplitude of the modelled response that it no longer adequately matches the observed data. It remains to be explained why the magnetic susceptibility readings indicate a lower value than the computer modelling.

CONCLUSIONS

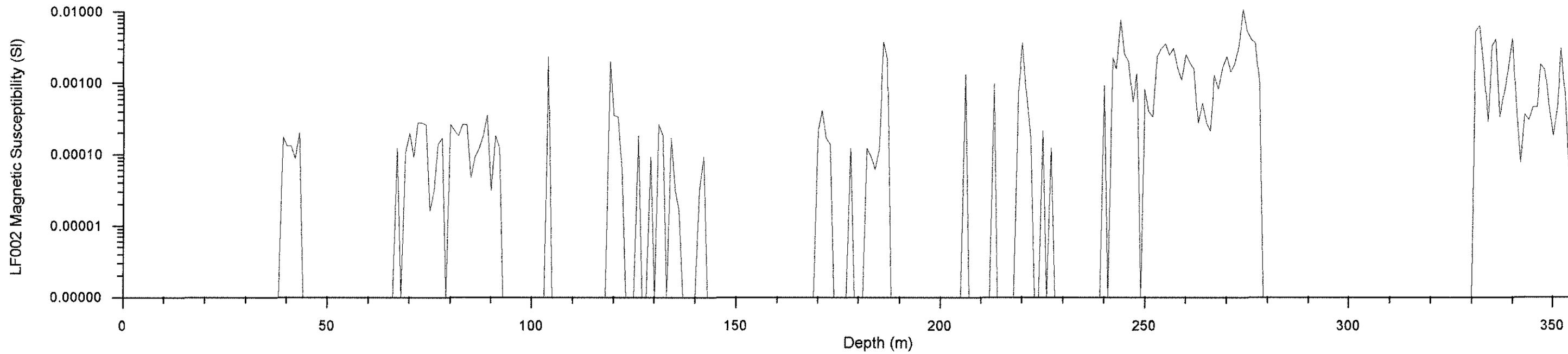
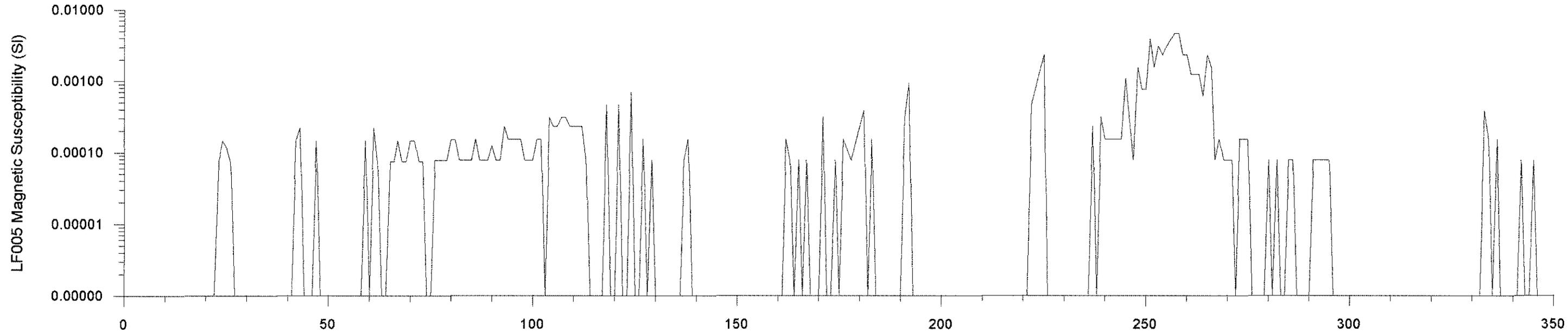
Several conclusions may be drawn:

1. The drill holes have not reached the main magnetic source.
2. The drill holes have intersected less magnetic portions of the black siltstone, and more pyrrhotite rich regions do exist.
3. The pyrrhotite is remanently magnetised with a higher intensity total field thus giving a higher amplitude magnetic response.
4. The magnetic susceptibility readings were in error (either instrument, or CGS units were taken rather than SI units).

Conclusions 1 and 4 can be discounted. LF005 was positioned directly above the modelled source and drilled to well below the depth of the modelled body. We must assume that our readings are correct given well maintained field practices and trained field staff.

It is most likely that the reason for the lower measured magnetic susceptibilities than modelled, is a combination of more pyrrhotite rich parts of the black siltstone existing, and possibly that the pyrrhotite is remanently magnetised. It is most probable that the drill-holes have tested the magnetic anomaly.

MINERS RIDGE LF002 and LF005 Magnetic Susceptibility Log



Depth (m)

Scale 1:1000

RGC EXPLORATION PTY LTD

Tasmania Base Metals
Miners Ridge Project
Magnetic Susceptibility Log
Jan 1998

RGC Zeehan
Plan No. 1

222037

APPENDIX 6

GRAPHICAL DRILL LOGS: LF003 - LF005

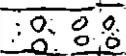
55401
RGC EXPLORATION PTY LTD

DRILL HOLE No LF003 ²²²⁰³⁸

SHEET 1 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ⊠ Broken core
- ⋯ Disseminated
- Massive
- ▨ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	Lynchford
PROSPECT :	
DATE :	28/5/97
LOGGED BY :	KPD

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL	SER	PY		ROCK	ALTERATION
0				<div style="display: flex; justify-content: space-around; font-size: small;"> 1/16 1/4 1 4 16 32 </div> <p style="text-align: center;">RED CLAY</p>				<p>0-34.0m. deeply weathered brown red clay with minor preserved kernels of VAL(F)M-C.</p>		
5								<p>4.0-8.5m. Crystal sst/conglomerate. <i>Arctolithis</i> clasts to 10mm (typically 3mm) in a crystal rich matrix.</p>		VAFC
10				<p style="text-align: center;">RED CLAY</p>						
15				 <p style="text-align: center;">RED CLAY</p>				<p>13.0-13.5m as at 4.0-8.5m</p>		
20	REMARKS									

RGC EXPLORATION PTY LTD

DRILL HOLE No LFO03

SHEET 2 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- △△△ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	Lynchford
PROSPECT :	
DATE :	28/5/97
LOGGED BY :	KPD

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG							ALTERATION	GEOLOGY NOTES	SUMMARY				
				1/16	1/4	1	4	16	32	SIL			SER.	PY.	ROCK	ALTERATION	
20																	
25																	VAFM
30																	
35																	

RED CLAY

- TOX
340 - 425 m
epidote, chlorite, amphibole,
magnetite sandstone
VAFM

REMARKS

RGC EXPLORATION PTY LTD

DRILL HOLE No LFO03
 SHEET 3 OF 14

-  Bedding
-  Cleavage
-  Foliation
-  Fault, Shear
-  Breccia
-  Broken core
-  Disseminated
-  Massive
-  Pervasive
-  Narrow vein
-  * Visible gold

PROJECT :
PROSPECT :
DATE :
LOGGED BY :

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY
				1 1 4 16 32 SIL. SER. PY. Ch. 6			ROCK ALTERATION
40							V D F M
45						42.5 - 49.5m. graded bedded crystal-lithic sandstone. Feldspar, amphibole and quartz clasts plus basalt minor lithic (phyritic) clasts to 1cm, well sorted. mag susc:- 110	C L D D C M F V
50					FOX	49.5 - 55.8m. graded well sorted crystal sandstone. Feldspar amphibole and minor quartz phytolite (30-75%) in a fine grained matrix	V D F M
55						55.8 - 60.1m as above but includes blebs/zones of chlorite alteration - 10cm x 4cm slab of fine grained sediment.	V D F M

55
 mag sus
 clay

REMARKS

222040

RGC EXPLORATION PTY LTD

DRILL HOLE No LF003

SHEET 4 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚠ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	
PROSPECT :	
DATE :	<u>29/05/97</u>
LOGGED BY :	<u>KPD</u>

HOLE DEPTH	SAMPLE NO PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION				GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.	Chlorit		ROCK	ALTERATION
60									<p>60.1 - 62.2m interbedded siltstone and VDFM with siltstone rip up clast probable that the 10-50cm patches of siltstone are also rip up clasts</p> <p>- 62.2 - 67.6m well sorted feldspar-amphibole - minor lithic and quartz sst.</p>		V A F M
65									<p>- 67.6 - 68.9m finely laminated red-brown siltstone</p>		
70									<p>68.9 - 99.5m weakly chlorite altered cryptic sst, feldspar & quartz crystals to 80% in a fine matrix</p> <p>sediment clast.</p> <p>sediment clast.</p>		V D M
75											
80											

may
character
change

REMARKS

222041

RGC EXPLORATION PTY LTD

DRILL HOLE No LF003

SHEET 5 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ⋯ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :
PROSPECT :
DATE :
LOGGED BY :

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION				GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.	Other		ROCK	ALTERATION
85				<div style="display: flex; justify-content: space-around; font-size: 8px;"> 1/16 1/4 1 4 16 32 </div>				<i>silstone</i> 10cm clast of silstone?	U A F M		
90											
95								← There is a major change in magnetic character at 95m, however there is no obvious geological change.			
100											

REMARKS

RGC EXPLORATION PTY LTD

DRILL HOLE No LF003.

SHEET 6 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ⊞ Broken core
- ⋯ Disseminated
- Massive
- ▨ Pervasive
- ⚡ Narrow vein
- * Visible gold

PROJECT :	
PROSPECT :	
DATE :	
LOGGED BY :	

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL	SER	PY		ROCK	ALTERATION
105								<p>99.5-105-1m crystal sodalite. Feldspar and quartz (abundant) crystals in a fine grained green matrix.</p>	V D V M	
110								<p>105-1 - Graded near flow unit Abundant lithic clasts at base (predominantly rhyolitic breccia 5-10mm) with lithic clast # and size decreasing up hole. The matrix is feldspar amphibole- rich quartz crystal sodalite</p>	V A F C	
115								<p>95 vein</p>		

REMARKS	222043
---------	--------

RGC EXPLORATION PTY LTD

DRILL HOLE No LF003

SHEET 7 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ⊠ Broken core
- ⋯ Disseminated
- Massive
- ▨ Pervasive
- ⚡ Narrow vein
- * Visible gold

PROJECT :	
PROSPECT :	
DATE :	
LOGGED BY :	

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
120								<p style="text-align: center;">↓</p> <p style="text-align: center;">missing core</p> <p style="text-align: center;">↑</p>		
125										
130										
135										
140										

REMARKS 222044

RGC EXPLORATION PTY LTD

DRILL HOLE No LF003

SHEET 8 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ⋯ Disseminated
- Massive
- ▩ Pervasive
- ↖ Narrow vein
- * Visible gold

PROJECT :	
PROSPECT :	
DATE :	
LOGGED BY :	

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY		
					SIL.	SER.	PY.		ROCK	ALTERATION	
140								<p>- 152.5m x'ed sandstone with abundant lithic clasts of variable size and composition.</p> <p>numerous slab-like (100mm x 10mm) limestone clasts & rhyolite clasts</p> <p>10 cm rhyolite clast.</p> <p>2x 30cm rhyolite clast in 1-2mm crystal matrix</p> <p>30mm clast,</p>			V D F/L M/E
145											
150											
155								<p>152.5-155.2m fine grained ashy siltstone.</p>			Silt
160								<p>155.2-160.8m crystal sandstone, feldspar - quartz - qtz crystals to 2mm and minor rhyolite (with in a fine green matrix. Variable and patchy silicification gives the unit a coarse clastic appearance.</p>			V D F M
REMARKS											
222045											

RGC EXPLORATION PTY LTD

DRILL HOLE No LF003.

SHEET 9 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	
PROSPECT :	
DATE :	29/5/97
LOGGED BY :	KPD

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY		
					SIL.	SER.	PY.		ROCK	ALTERATION	
160								<p>- 160.0m - 170.0m graded mass flow unit. A crystal sandstone with lithic clasts (predominantly rhyolite - minor limestone) grading from 10-15mm at base to 3-4mm at top.</p> <p>rhyolite clasts large limestone clast.</p> <p>170.0 - 171.2m lithic clasts and qtz crystals in a light green sericite matrix.</p> <p>171.2 - 173.4m quartz veined peg fault</p> <p>- 173.4 - 178.5m variably silicified and carbonate veined qtz sandstone yellow coloration (sericite?)</p> <p>- 178.5 - 179.0m fault</p> <p>179.0 - 182.8m series of small graded siltstone mass flows.</p>	<p>V D F C</p> <p>M R K</p> <p>E R Q M</p>		

REMARKS

222046

RGC EXPLORATION PTY LTD

DRILL HOLE No LF003

SHEET 11 OF

-  Bedding
-  Cleavage
-  Foliation
-  Fault, Shear
-  Breccia
-  Broken core
-  Disseminated
-  Massive
-  Pervasive
-  Narrow vein
-  * Visible gold

PROJECT :	
PROSPECT :	
DATE :	<u>29/5/97</u>
LOGGED BY :	<u>KPD</u>

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION					GEOLOGY NOTES	SUMMARY						
					SIL	SER	PY	CU	CL		ROCK	ALTERATION					
200				1 16	1 4	1 1	4 4	16 16	32 32	SIL	SER	PY	CU	CL	<p>The entire unit is carbonate altered.</p> <p>2nd clast</p> <p>30cm sediment clast?</p> <p>carbonate veining</p> <p>porphyritic clasts, and amygdaloidal clast.</p> <p>— 15cm amygdaloidal clast.</p>		
205																	
210																	
215																	

220 REMARKS 222048

271.5m.

RGC EXPLORATION PTY LTD

DRILL HOLE No LF003

SHEET 12 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	
PROSPECT :	
DATE :	29/5/97
LOGGED BY :	KPD

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
220				16 4 4 16 32						
225	542			▨				222.8 - 243.2m Intensely weath. qtz and carbonate veined, veinlets fine grained py altered, siliceous/carbonate and basaltic material.		
	543			▨						
	544			▨				227.4 - 231.0 - Intensely qtz stockwork, weath. pyrite altered b. calciferous shale		
	545			▨						
	546			▨						
230	547			▨						
	548			▨						
	549			▨						
	550			▨				233.0 - 235.1m stockwork carbonate and carbonate chert		
	551			▨						
235	552			▨				- shug of Cpy within vein, 235.1 - 241.3m qtz carbonate veined pyrite basaltic breccia		
	553			▨						
	554			▨						
	555			▨						
	556			▨						

REMARKS 222049

240

RGC EXPLORATION PTY LTD

DRILL HOLE No LE003

SHEET 13 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚠ Breccia
- ▨ Broken core
- ⋯ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :
PROSPECT :
DATE :
LOGGED BY :

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
240	557 558 559							<p>- 241.3 - 243.2 m, vein with abundant angular basalt fragments</p> <p>- 243.2 - 255.5 m foliated fine grained mafic with feldspar phenocrysts, contains abundant 3-4mm chlorite wisps (after a mafic mass?)</p>	U A F M	
245										
250										
255								<p>255.5 - 274.8 m as above but large chlorite wisps and some large porphyritic clasts</p>		
260										

REMARKS

222030

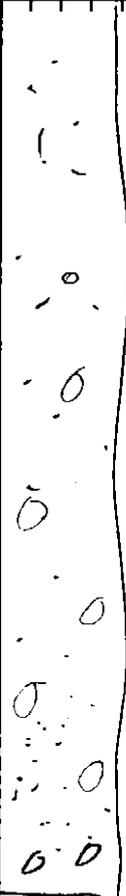
RGC EXPLORATION PTY LTD

DRILL HOLE No LP 003
 SHEET 14 OF 14

-  Bedding
-  Cleavage
-  Foliation
-  Fault, Shear
-  Breccia
-  Broken core
-  Disseminated
-  Massive
-  Pervasive
-  Narrow vein
-  * Visible gold

PROJECT :	
PROSPECT :	
DATE :	
LOGGED BY :	

255401

HOLE DEPTH	SAMPLE NO PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG							ALTERATION			GEOLOGY NOTES	SUMMARY		
				1/8	1/4	1	4	16	32	SIL.	SER.	PY.	ROCK		ALTERATION		
260																	
265																	
270																	
271.8m																	

REMARKS 222051

RGC EXPLORATION PTY LTD

DRILL HOLE No LF004

SHEET 2 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	
PROSPECT :	
DATE :	26-6-97
LOGGED BY :	KPD

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
20										
25			55° qtz 35° chl qtz qtz					I - 21.6-29.8m. fine grained ashly sediment VDF?F, minor clots of pyrite, - Box low magnetic susceptibility. ← chloite-qtz vein. - 29.8-30.4m. qtz vein + cavity/fault? - 30.4-59.5m. graded VAFM-VAFC feldspar-magnetite crystal sandstone. Fine ashly top with only minor obvious phenocrysts. ← 32.5m. 4x 2.5mm magnetite bands. abundant qtz-chloite vein particularly from 32-40m with VCA ~ 80°. - POX		
30			qtz 59° qtz chl qtz-chl							
35										
40										

REMARKS

222053

RGC EXPLORATION PTY LTD

DRILL HOLE No LF004
 SHEET 3 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	
PROSPECT :	
DATE :	26-6-97
LOGGED BY :	KPD

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
40								crystal size and content increases gradually downhole.		
45										
50								} abundant pink subrounded rhyolite clasts at base of mass flow		
55										
60										

REMARKS

222054

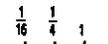
RGC EXPLORATION PTY LTD

DRILL HOLE No LF004

SHEET 4 OF 14

-  Bedding
-  Cleavage
-  Foliation
-  Fault, Shear
-  Breccia
-  Broken core
-  Disseminated
-  Massive
-  Pervasive
-  Narrow vein
-  * Visible gold

PROJECT :	
PROSPECT :	
DATE :	<u>26-6-97</u>
LOGGED BY :	<u>KPD</u>

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
60								<p><u>59.5-112.0m</u> graded VAFM → VIFM → VDLG as at 30.4- 59.5m. fine grained $\frac{1}{2}$mm clasts in upper part of unit, 59.5-75.0m. crystal became bigger and more white fragments from 75.0-89.0m. from 89.0-112.0m abundant rhyolite clasts to 15cm and minor limestone clasts.</p>		
65			<u>ats.</u> 							
70										
75			<u>97.4</u> 				<p><u>74-75m</u> 97-chlorite-purple mineral? vein,</p>			
80										

REMARKS

222055

RGC EXPLORATION PTY LTD

DRILL HOLE No LF004

SHEET 6 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	<i>M⁺ Road</i>
PROSPECT :	<i>Lynchford</i>
DATE :	<i>26-6-97</i>
LOGGED BY :	<i>KPD</i>

HOLE DEPTH	SAMPLE NO	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
100	PREFLY 255							<p><i>Very high proportion of rhyolite clasts with minor limestone clasts to 107m then proportion of clasts diminishes.</i></p>		
105										
110m	562							<p><i>~ 60° contact.</i></p> <p><i>112.0 - 114.0 finely laminated black shale - slightly coarser ashly shale. SHAL</i></p>		
115m	563									
120m								<p><i>114.0 - 117.0m VR=M.</i></p> <p><i>graded mass flow - fine grained top, coarse crystal and rhyolite clasts rich base.</i></p> <p><i>117.0 - 120.5m VR=M.</i></p> <p><i>graded mass flow - finely laminated top, medium - coarse grained crystal mass lithic rich base.</i></p>		
REMARKS									222057	

RGC EXPLORATION PTY LTD

DRILL HOLE No LF004

SHEET 7 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚠ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	MT Rand
PROSPECT :	Lynchford
DATE :	26-6-97
LOGGED BY :	KPD

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PT.		ROCK	ALTERATION
120								<p>120.5 - 127.8m.</p> <p>variably graded crystal sandstones/ siltstones ERQF-M.</p>		
125							<p>124.0 - 125.0</p> <p>broken core + 9K veining = fault.</p>			
130								<p>127.8 - 134.8m.</p> <p>graded mass flow: ERQ/LM</p> <p>abundant white chlorite clasts at base of unit ~ 10-15mm rapidly fines upward to a 9/3-like sst.</p>		
135								<p>134.8 - 139.8m VRLM</p> <p>Pink albite rich mass flow only minor grading through this unit.</p>		
140										
REMARKS									222058	

RGC EXPLORATION PTY LTD

DRILL HOLE No LF004

SHEET 8 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚠ Breccia
- ⊞ Broken core
- ⊞ Disseminated
- Massive
- ▨ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	M ⁺ Read
PROSPECT :	Lynchford
DATE :	26-6-97
LOGGED BY :	KPD

HOLE DEPTH	SAMPLE No	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
140	PREFIX 753		6°					139.8 - 145.0m. ERLM. finely bedded top abundant strophite clasts in a black shale matrix deeper in the unit <u>Intrabasinal mass flow?</u>		
145			75°					- 145.0 - 149.0m ERQM		
150	569							149.0 - 128.0m well sorted VRGM qtz lathwork crystal sandstone strongly silicified (and albified?) from 150.0 - 166.0 and somewhat altered from 149.0 - 150.0 and 166.0 - 177.5m. strongly qtz cement in silicified partes		
	570									
	571									
	572									
	574									
	575									
155										
160										
REMARKS										
222059										

RGC EXPLORATION PTY LTD

DRILL HOLE No LF004

SHEET 9 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚠ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	<i>Mt Read</i>
PROSPECT :	<i>Lynchford</i>
DATE :	<i>26-6-97</i>
LOGGED BY :	<i>KPD</i>

HOLE DEPTH	SAMPLE No	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
160	PREFIX 355									
165	564									
	565									
	566									
	567									
170	568									
175										
180										
REMARKS										
222060										

RGC EXPLORATION PTY LTD

DRILL HOLE No LF004

SHEET 10 OF 14

-  Bedding
-  Cleavage
-  Foliation
-  Fault, Shear
-  Breccia
-  Broken core
-  Disseminated
-  Massive
-  Pervasive
-  Narrow vein
-  * Visible gold

PROJECT :
PROSPECT :
DATE :
LOGGED BY :

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PK.		ROCK	ALTERATION
180								<p>185-0 - 217.5m. VRQM Single graded quartz-mica lithic permicaceous mass flow.</p>		
185										
190										
195										
200										
REMARKS										
222061										

RGC EXPLORATION PTY LTD

DRILL HOLE No LF004
 SHEET 12 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :
PROSPECT :
DATE :
LOGGED BY :

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG							ALTERATION	GEOLOGY NOTES	SUMMARY			
				16	4	1	4	16	32	SIL.			SER.	PT.	ROCK	ALTERATION
220																
225																
230																
235																
240																
REMARKS												222063				

RGC EXPLORATION PTY LTD

DRILL HOLE No LF004
 SHEET 13 OF 14

- Bedding
- ┌ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :
PROSPECT :
DATE :
LOGGED BY :

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG						ALTERATION	GEOLOGY NOTES	SUMMARY				
				1 16	1 4	1 4	15 32	SIL.	SER.			PY.	ROCK	ALTERATION		
240											<p>256.5 - 259.6m. intermixed gts crystal sst and coarse calciferous in a black shale matrix</p>					
245																
250																
255																
260	REMARKS											222064				

RGC EXPLORATION PTY LTD

DRILL HOLE No LF004
 SHEET 14 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- △ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ⚡ Narrow vein
- * Visible gold

PROJECT :	
PROSPECT :	
DATE :	26-6-97
LOGGED BY :	KPD

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
260										
265										
270								- qtz sat		
275										
279.6m										

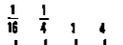
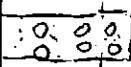
REMARKS 222065

RGC EXPLORATION PTY LTD

DRILL HOLE No LF003
 SHEET 1 OF 14

-  Bedding
-  Cleavage
-  Foliation
-  Fault, Shear
-  Breccia
-  Broken core
-  Disseminated
-  Massive
-  Pervasive
-  Narrow vein
-  * Visible gold

PROJECT :	<u>Lynchford</u>
PROSPECT :	
DATE :	<u>28/5/97</u>
LOGGED BY :	<u>KPD</u>

HOLE DEPTH	SAMPLE NO PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
0								<p><u>0-34.0m.</u> deeply weathered brown red clay with minor preserved kernels of VAL(F)M-C.</p>	VAF	
5								<p><u>4.0-8.5m.</u> crystal sst/components. (ortholiths) clasts to 10mm (typically 3mm) in a crystal rich matrix.</p>	VAF-C	
10				<p>RED CLAY</p>						
15								<p><u>13.0-13.5m</u> at 4.0-8.5m.</p>		
20				<p>RED CLAY</p>						
REMARKS								222066		

RGC EXPLORATION PTY LTD

DRILL HOLE No LF003

SHEET 2 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▣ Broken core
- ▤ Disseminated
- Massive
- ▨ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	<i>Lynchford</i>
PROSPECT :	
DATE :	<i>28/5/97</i>
LOGGED BY :	<i>KPD</i>

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG						ALTERATION			GEOLOGY NOTES	SUMMARY		
				1/16	1/4	1	4	16	32	SIL.	SER.	PY.		ROCK	ALTERATION	
20																
25				RED CLAY											VAFM	
30																
35													- TOX 30 - 42.5m. oolitic feldspar, amphibole, magnetite sandstone VAFM			
40																
REMARKS															222067	

RGC EXPLORATION PTY LTD

DRILL HOLE No LFO03
 SHEET 3 OF 14

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	
PROSPECT :	
DATE :	
LOGGED BY :	

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY
				16 4 4 16 32 SIL. SER. PY. Chlorite			ROCK ALTERATION
40				▨			V
45				▨		<p>42.5 - 49.5m. graded bedded crystal-litic sandstone. Feldspar, amphibole and quartz clasts plus basical minor lithic (chlorite) clasts to 7mm, well sorted. mag succ: - 110</p>	V D F M D D L C
50				▨	FOX	<p>49.5 - 55.8m. graded well sorted crystal sandstone Feldspar amphibole and minor quartz crystals (30-75%) in a fine grained matrix</p>	V D F M
55				▨		<p>55.8 - 60.1m As above but includes blebs/zones of chlorite alteration - 10cm x 4cm slab of fine grained sediment.</p>	V D F M

may see clay

REMARKS

222068

RGC EXPLORATION PTY LTD

DRILL HOLE No LF005

SHEET 1 OF 18

-  Bedding
-  Cleavage
-  Foliation
-  Fault, Shear
-  Breccia
-  Broken core
-  Disseminated
-  Massive
-  Pervasive
-  Narrow vein
-  * Visible gold

PROJECT : <u>LYNCHFORD</u>
PROSPECT :
DATE : <u>27/11/97</u>
LOGGED BY : <u>RGS</u>

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		ROCK	ALTERATION
0 5 10 15 20								<p>0-34.7 VDFM - Cleaved, variably Ser-py-altered ± chl</p> <p><u>BOX</u></p> <p>Serp/talc replacing chl in more oxidised zones.</p> <p>shale clast - Black</p> <p>unconsolidated - eroded clasts</p> <p>Rounded shale clast</p> <p>Minor py.</p> <p>10.5 Banded py clast</p> <p>Base of fracture ex.</p> <p>A2. Black shale clast</p>	<p>Py</p> <p>Ser</p> <p>chl</p> <p>VDFM</p>	
REMARKS								222069		
VDFM - VOLCANICLASTIC RESEDIMENTED MASS FLOW/DEBRIS FLOW.										
- LITHIC stem lithic clasts in a fold-deformed re-sed. volcanic.										

RGC EXPLORATION PTY LTD

DRILL HOLE No LF005

SHEET 2 OF 18

-  Bedding
-  Cleavage
-  Foliation
-  Fault, Shear
-  Breccia
-  Broken core
-  Disseminated
-  Massive
-  Pervasive
-  Narrow vein
-  * Visible gold

PROJECT :	LYNCH FURT
PROSPECT :	
DATE :	27/11/97
LOGGED BY :	RG5

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY	
							ROCK	ALTERATION
20				16 4 1 16 32 SIL. SER. PY. CH		Large pale clasts 6cm very weathered, may be mafic.		
25			35°			24.4 - Rhyolitic lithic clast 24.5 - Black shale → Py clast.		SOF ± CH1, 5 th
30			35°			26 Block shale clast (thin) 26.3 Large (8x5cm) differentially weathered pale clast. 27.5 Broken core - weathered around. 27.95-29 LOST CORE		VDFM
35			45°			29-34.7 Broken + weathered core 30.0 Block shale clast.		
37.9			45°			37.9 VUG FAULT - Qtz fill	↔	VDFM
32.7			45°			32.7-34.7 Felsic mass flows + Py sharp contacts	↔	GCS
34.7			60°			34.7-35.7 Black shale	↔	SLT
35.7			35°			35.7 - 38.2 - Green Ser Ashy silt/sal 36.05 Qtz vein/elt 36.4 Qtz filled fault.	↔	SOF ± CH1
38.2			35°			38.2 plane structures + soft sed folds 38.2-38.8 Black/green veined silt 38.8-47.6 intraclast polymict resedimented mass flow	↔	
REMARKS								
							222070	

RGC EXPLORATION PTY LTD

DRILL HOLE No LFO05

SHEET 3 OF 18

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⊞ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	LYNCHFORD
PROSPECT :	
DATE :	3/12/97
LOGGED BY :	RGS.

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION			GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.		FACTOR	ROCK
40								<p>39.8-47.6 - Polymict debris Flow / Avalanche.</p> <p>MATRIX - Block, silicified</p> <p>CLASTS - <1m - 710cm in size</p> <p>- Feldspar grains, shale clasts, Qtzphyric volcaniclastic clasts, VDF clasts, pyrite clasts</p> <p>MINERALISATION</p> <p>Pyrite in matrix</p> <p>Cpy, Py, Bo crystals & grains in Qtzphyric volcaniclastic <1%</p>	VDLM-L	Ser ± Py
45								<p>47.6-53 - well to indistinctly bedded VDF</p> <p>50.2 - sericitic shear</p>	VDF	Ser
50			QV					<p>QZ-chl Fabric destructive vein - Vugs</p> <p>53.6-54.4 VDF</p>	QV	Ser, Py, Py
55								<p>54.4-55 Interbedded block shale & VDF</p> <p>55-81.4 Polymict volcaniclastic mass flow. Large (<10cm) block shale, grey shale, Qtz, sericitised Relat, par, feldspar & pyrite clasts.</p>	VDFM	Ser, Py
60										
REMARKS								222071		

RGC EXPLORATION PTY LTD

DRILL HOLE No LF005

SHEET 5 OF 18

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▣ Broken core
- ▤ Disseminated
- Massive
- ▨ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	LYNCHFORD
PROSPECT :	
DATE :	3/12/97
LOGGED BY :	RGS

HOLE DEPTH	SAMPLE NO PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION							GEOLOGY NOTES	SUMMARY		
					SIL.	SER.	PY.	PO	CPY	SO	CAI		FACING	ROCK	ALTERATION
80													BASE OF MASS FLOW UNIT.		
													81.4-83.8 Interbedded block shale & pale VDFE. MINERALISATION: PY, PO, CPY stratobound & in fractures stratobound sulphides confined to POOOS beds & probably remobilised	VDLFM	Ser, Py
														SLT	Py, Po
85													83.8-84.8 Febic mass flow. Clash of VDFE. block shale, pyrite clast, feldspar, bornite/ cpy crystals	VDLE	Ser, Alt
													84.8-88.4 Mass flow, shale clast in a febic groundmass	VDLFM	Py + Ser
													WEIRD CONTACT. BEDDING CONTINUES THROUGH FROM VDFE - BLOCKSLT, BUT SHARP CONTACT BETWEEN THEM		
90													88.4-98.6 Interbedded block shale & pale VDFE MINERALISATION: py, CPY stratobound. in fractures - remob		
														SLT/VDFE	Py + CPY
95															
100													98.6-100 Black shale	SLT	Py + CPY
REMARKS															
													222073		

RGC EXPLORATION PTY LTD

DRILL HOLE No LFOOS

SHEET 6 OF 18

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ⊠ Broken core
- ▤ Disseminated
- Massive
- ▨ Pervasive
- ⚡ Narrow vein
- * Visible gold

PROJECT :	LYNCHFORD
PROSPECT :	
DATE :	3/12/97
LOGGED BY :	RGS

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION					GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.	SPX	CHL		ROCK	ALTERATION
100										100-103 - Mass flow felsic with black shale interclasts at base	VDLFM-C	Ser
105										103-105 - Interbedded VDF & Black silt. MINERALISATION STREATABOUND & fracture filled, remobilised py, cpy	VDF/SILT	P ₂
110										105-108 Felsic volcanoclastic mass flow shale clast. Feldspar, sericitised feldspar, pyrite - clasts.	VDLM-C	Ser, CHL, P ₁
115										108-109 - Black shale bed/clast. Irregular contacts, some rock type either side		
120										SILICIFIED CLASTS + SPHALERITE TOWARDS BASE + P. PY.		
										118.7-121.8 Interbedded siliceous block shale & highly silicified ash? VERY FRACTURED & INFILLED BY CC	SILT	S, R
REMARKS												
222074												

RGC EXPLORATION PTY LTD

DRILL HOLE No LFO05
 SHEET 8 OF 18

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	LINCHFORD
PROSPECT :	
DATE :	5/12/97
LOGGED BY :	RGS.

HOLE DEPTH	SAMPLE NO PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION				GEOLOGY NOTES	SUMMARY	
					SIL.	SER.	PY.	CAI		CC	FACING
140			50/5						140.4-143.5 - Block shale clasts in felsic sst.		Chl, C, Py VDLM-C
			5/5						143.5-144.7 - Block shale 144.7-147.5 - Fine, chloritic felsic sst.		SLT VDLF
145			5/28						147.5-147.7 - Block shale 147.7-149 - Mass flow		SLT VDLF
			5/14						149-150.5 - Fine chloritic felsic sst.	↘	SLT VDLF
150			5/5						150.5-152.5 - Felsic Mass flow	↘	SLT VDLF-M
			50/30						152.5-154.9 - Block shale - Cc veins 153.2 pink nodules (64cm)		SLT Py, Cc
155									154.9-164 mass/debris flow block shale, grey shale clasts & VDFM.		VDLC Chl, C, Py
160	REMARKS										
222076											

RGC EXPLORATION PTY LTD

DRILL HOLE No LFO05

SHEET 9 OF 18

- Bedding
- Cleavage
- Foliation
- Fault, Shear
- Breccia
- Broken core
- Disseminated
- Massive
- Pervasive
- Narrow vein
- * Visible gold

PROJECT :	LYNCHFORD
PROSPECT :	
DATE :	5/12/97
LOGGED BY :	RGS

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS (ppm)			STRUCT.	GRAPHIC LOG	ALTERATION						GEOLOGY NOTES	SUMMARY		
		Cu	Pb	Zn			SIL.	SER.	PY.	Sph.	Chl	Cc		PO	FACING	ROCK
160																CHL ± Cc, Py
165													164-172.3 mass flow - block shale clasts in a fine grained sst. grading into a silt. numerous Cc, ± Py filled fractures.			CHL ± Cc, Py
170																CHL ± Cc, Py
175													172.5-176.9 mass flow - block grey shale clasts.			CHL ± Cc, Py
1020	401			143												CHL Cc
	402		99	501									176.9-177.4 0.12 phytic crystals sst grading into a block shale with distinct stratiform pyrite			CHL Cc
	403	94	138	1566									177.1-179. Dacitic - Rhyolitic x'tal rch breccia in dark matrix.			CHL Cc
	404	96	704	474									179-202.7 - SLT.			SLT

REMARKS

222077

RGC EXPLORATION PTY LTD

DRILL HOLE No LF005

SHEET 10 OF 18

-  Bedding
-  Cleavage
-  Foliation
-  Fault, Shear
-  Breccia
-  Broken core
-  Disseminated
-  Massive
-  Pervasive
-  Narrow vein
-  * Visible gold

PROJECT :	LYNCHFORD
PROSPECT :	
DATE :	12/12/97
LOGGED BY :	RGS

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS (ppm)			STRUCT.	GRAPHIC LOG	ALTERATION								GEOLOGY NOTES	SUMMARY	
		Cu	Pb	Zn			SIL	SER	PT	SP	SO	U	RO	ROCK		ALTERATION	
180	405			3980													
	406			355													
	407			764													
	408			680													
	409			1066	18												
185	410			625	85												
	411			379	3												
	412			109	15												
	413																
	414	132	221														
190	415	40	303	1317	25												
	416	72	112	257	59												
	417				10												
	418																
195	419																
	420																
	421				59												
	422				25												
	423			106													
	424			135	10												
200	REMARKS																
Hydrantite brecciated SLT with white calc. infill																	
															222078		

Galena vein.

calc vein + minor galena

crack-seal vein.

Breccia at vein margin

S, C, Ch, P, Pb + Sp, Gr
SLT / VDFE

RGC EXPLORATION PTY LTD

DRILL HOLE No LF005

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↖ Narrow vein
- * Visible gold

SHEET 11 OF 18

PROJECT :	LTACHFORD
PROSPECT :	
DATE :	12/12/97
LOGGED BY :	RGS

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS (ppm)	STRUCT.	GRAPHIC LOG	ALTERATION							GEOLOGY NOTES	SUMMARY			
					SIL.	SER.	PY.	Sph	Chl	Cc	Pb		FACING	ROCK	ALTERATION	
200	425	Zn 294												SIL, Cc, Chl, Pb	SLT/VDF	
	426															
	427	104											Mass flows - black shale clasts to 3cm. 202.7 - 214		VDFM-VDF	VDF-F-M
205																
210																
													214-216-B. Mass flow, small black shale clasts (~1cm) grading into a black substratified shale. 215.7-216.4 - vein - 1cm		VDFM/SLT	Chl, Pb, Sph, Cc
215													216.6-218 Mass flow.		VDFM	Chl
													218-221.7 - Capable white rich sst		VDFM	Chl
220																

REMARKS

222079

RGC EXPLORATION PTY LTD

DRILL HOLE No LF005

SHEET 12 OF 18

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ⊞ Broken core
- ⊞ Disseminated
- Massive
- ▨ Pervasive
- ↖ Narrow vein
- * Visible gold

PROJECT :	LYNCHFORD
PROSPECT :	
DATE :	12/12/97
LOGGED BY :	RGS

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION							GEOLOGY NOTES	SUMMARY			
					SIL.	SER.	PY.	CH.	CC	PO	FACING		ROCK	ALTERATION		
220																
												221-7-225 - Black to grey silt. Faulted contacts.	←	SLT	P ₁ P ₀ = CL1 SPAL	
225												225-225.2 - Lithic red (dark) moss flow, shale clasts & lumpy		VDL	CL1	
												225.2-245.2 - Interbedded silt & fine sands numerous fine CC/OTC veins				
230																
235																
240																
REMARKS													222080			

RGC EXPLORATION PTY LTD

DRILL HOLE No LFO05

SHEET 13 OF 98

-  Bedding
-  Cleavage
-  Foliation
-  Fault, Shear
-  Breccia
-  Broken core
-  Disseminated
-  Massive
-  Pervasive
-  Narrow vein
-  * Visible gold

PROJECT :	LYNCHFORD
PROSPECT :	
DATE :	12/12/97
LOGGED BY :	RGS

HOLE DEPTH	SAMPLE NO PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION							GEOLOGY NOTES	SUMMARY			
					SIL	SER.	PX	Spk	CAI	CC	Pb		FACING	ROCK	ALTERATION	
240													Indistinct bedding			CL1
245													245.2-245.4 /DFM 245.4-248 graded mass flows.	0	VDLF-M	CL1 CL1, P, Pb
													248-249 bedded grey & black silt	0	SLS	
													249-249.5 - mass flow black slab clasts	0	VDLF-C	
250													249.5-255.5 - Turbidite sequence of increasing intensity down hole	0	VDLF-M	CL1 P, Pb
255													255.5-260 - mass flows, lower energy/intensity, more fins.	0	VDLF-M	CL1 P, Pb
260														0		

REMARKS

222081

RGC EXPLORATION PTY LTD

DRILL HOLE No LFO05

SHEET 14 OF 18

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↖ Narrow vein
- * Visible gold

PROJECT :	LYNCHFORD
PROSPECT :	
DATE :	12/12/97
LOGGED BY :	RGS

HOLE DEPTH	SAMPLE NO PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION							GEOLOGY NOTES	SUMMARY			
					SIL.	SER.	PY.	Sph	Chl	Cc	PO		FACING	ROCK	ALTERATION	
260													260-263.6 - Massive VDFM. 261.1 - crack-seal vein		Chl	
265			8/10										263.6-265.5 turbidite sequence.	↑	Chl, Py, B	VDFM
270			8/12										265.5-270.9 - interbedded grey/black silt. 268.3 - Hydraulic Bx - Cc, Py, Po fill		Chl + Py	SLT
275			35										269.5 - Hydraulic Bx - Cc / Qtz fill		Chl	
			35										270.9-271.5 - mass flow - block chert 271.5 - vein + breccia. 271.5-278.6 Turbidite sequence	↑	Chl, Py	VDFM
280			8/8										278.6-286.2 - Turbidite seq		SLT	Chl, Py, B

REMARKS

222082

RGC EXPLORATION PTY LTD

DRILL HOLE No LF005
 SHEET 15 OF 18

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	LYNCHFORD
PROSPECT :	
DATE :	12/12/97
LOGGED BY :	RGS.

HOLE DEPTH	SAMPLE NO PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION							GEOLOGY NOTES	SUMMARY			
					SIL.	SER.	PY.	Sch	Cl	CC	PO		FACING	ROCK	ALTERATION	
280													Turbidites - black shale tops grading into fine-med sst.			
285													2874-289.3 - Black shale, numerous fine veins.			
290													2893-290.3 - felsic mass flow			
295													290.3-295.9 - Interbedded grey sst & fine grey sst.			
													295.9-297.2 - felsic mass flow			
													297.2-298.8 Black sst S ₁ defined by alignment of py			
													298.8-339.7 interbedded grey sst & fine grey sst			

REMARKS

Ant Jockwise
Vergence

222033

RGC EXPLORATION PTY LTD

DRILL HOLE No LFO05

SHEET 16 OF 18

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚡ Breccia
- ▨ Broken core
- ▤ Disseminated
- Massive
- ▩ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	LYNCHFORD
PROSPECT :	
DATE :	15/12/97
LOGGED BY :	RGS

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION							GEOLOGY NOTES	SUMMARY		
					SIL.	SER.	PHY.	Sph	CAI	Cc	PO		FACING	ROCK	ALTERATION
300			85 112		1 16 4 16 32	SIL.	SER.	PHY.	Sph	CAI	Cc	PO		↕	CH1 ± Ser, Cc, S, Sph
305			112											↕	
310			447 15										309.7 Sph, Cc, PO ± Qtz vein	↕	SLT / VDFE
315			11												
320			12												
REMARKS															
222084															

RGC EXPLORATION PTY LTD

DRILL HOLE No LF005

SHEET 18 OF 18

- Bedding
- └ Cleavage
- ▲ Foliation
- ~ Fault, Shear
- ⚠ Breccia
- ⊠ Broken core
- ⊞ Disseminated
- Massive
- ▨ Pervasive
- ↘ Narrow vein
- * Visible gold

PROJECT :	LYNCHFORD
PROSPECT :	
DATE :	15/12/97
LOGGED BY :	RGS

HOLE DEPTH	SAMPLE NO PREFIX	ASSAY RESULTS (ppm)	STRUCT.	GRAPHIC LOG	ALTERATION						GEOLOGY NOTES	SUMMARY					
					SIL	SER	PH	SP	CH	CL		LEUCOXENE	FACING	ROCK	ALTERATION		
340	431	Zn															
	432	395															
	433	281															
	434	429															
345	435	152															
	436	265															
	437																
347	401																

340-347 - Perovskite leucotene, from ilmenite rich mafic?
 340-347 - polymict breccia
 MATRIX - silicified (especially at base), dark → black shale?
 CLASTS - small (<1.5cm) black shale, at. phytic, rhyolite (5.5cm); feldspar crystals, sericite-Leucotene altered (mafic?) clasts (<10cm)

VAR-LR
 S, Ser, Leuc, = CH, SP, PH

REMARKS

222086

APPENDIX 7

ECONOMIC-ELEMENT ASSAY RESULTS: LF003 - LF005

SAMPLE	Au (ppm)	Au(R)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Bi (ppm)	As (ppm)
W255533	X	-	22	97	38	X	X	X
W255534	X	-	30	592	21	X	X	X
W255535	X	-	14	20	20	X	X	X
W255536	X	-	24	10	64	X	X	X
W255537	X	-	7	X	32	X	X	X
W255538	X	-	82	X	19	X	X	X
W255539	X	-	X	6	49	X	X	X
W255540	0.48	0.49	>10000	62	1503	X	X	X
W255541	X	X	29	34	39	X	X	X
W255542	X	-	5	42	62	X	X	X
W255543	X	-	16	85	34	X	X	X
W255544	X	-	12	683	84	X	X	X
W255545	X	-	8	359	72	X	X	X
W255546	X	-	23	91	42	X	X	X
W255547	X	-	16	40	128	X	X	X
W255548	X	-	17	40	132	X	X	X
W255549	X	-	18	197	66	X	X	X
W255550	X	X	10	29	108	X	X	X
W255551	X	-	11	54	77	X	X	X
W255552	X	X	7642	52	45	X	X	X
W255553	X	-	29	45	82	X	X	X
W255554	X	-	42	47	84	X	X	X
W255555	X	-	55	30	89	X	X	X
W255556	X	-	19	52	86	X	X	X
W255557	X	X	28	75	106	X	X	X
W255558	X	-	26	112	58	X	X	X
W255559	X	-	26	2580	34	X	X	X
W255560	0.48	0.44	>10000	47	1604	4	X	X
W255561	X	-	24	222	223	X	X	X
METHOD	F630	F630	A101	A101	A101	A101	A101	A101
DET.LIMIT	0.01	0.01	2	3	2	1	10	50
ANALABS								

Sample No.	Mn (ppm)	Ba (ppm)	Cu (%)
W255533	635	564	-
W255534	436	648	-
W255535	523	493	-
W255536	1346	362	-
W255537	315	645	-
W255538	1337	106	-
W255539	651	1102	-
W255540	1180	5992	3.5
W255541	553	1359	-
W255542	1918	397	-
W255543	902	991	-
W255544	2104	273	-
W255545	2591	349	-
W255546	2340	620	-
W255547	2311	396	-
W255548	1894	435	-
W255549	2414	221	-
W255550	1942	454	-
W255551	2373	409	-
W255552	3103	353	-
W255553	1876	595	-
W255554	1582	1011	-
W255555	2132	380	-
W255556	1959	256	-
W255557	2346	310	-
W255558	2767	241	-
W255559	1408	357	-
W255560	752	5940	3.4
W255561	464	753	-

METHOD	A101	X401	A103
DET.LIMIT	3	10	0.01
ANALABS			

SAMPLE	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Ba (ppm)
255562	85	404	59	X	40	X	52	942
255563	9	23	55	X	10	X	17	978
255564	4	X	4	X	10	X	22	1170
255565	X	X	21	X	10	X	3	1620
255566	X	X	8	X	30	X	2	751
255567	X	X	12	X	X	X	3	466
255568	X	X	11	X	X	X	2	456
255569	11	X	34	X	X	X	11	1310
255570	22	X	14	X	X	X	17	1130
255571	22	X	14	X	X	X	11	333
255572	3	X	8	X	X	X	6	313
255573	8	3	44	X	250	X	4	637
255574	X	X	5	X	X	X	94	202
255575	2	X	5	X	90	X	602	161
255576	99	36	93	X	X	X	157	X
255577	39	27	43	X	X	X	26	X
METHOD	A101	A101	A101	A101	N701	N701	N701	N701
DETECTION	2	3	2	1	5	5	1	100
ANALABS								

SAMPLE	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppm)	Au(R)	Au (ppb)	
1020401	75	86	143	1	X	-	-	
1020402	60	99	501	1	X	-	-	
1020403	94	138	1566	1	X	-	-	
1020404	96	704	474	1	X	-	-	
1020405	68	3980	44	1	X	-	-	
1020406	67	355	50	1	X	X	-	
1020407	46	764	48	X	X	-	-	
1020408	64	680	46	X	X	-	-	
1020409	67	1066	44	1	X	X	-	
1020410	45	625	51	1	X	-	-	
1020411	47	379	42	1	X	-	-	
1020412	46	109	25	1	X	-	-	
1020413	96	19	27	1	X	X	-	
1020414	132	221	82	1	X	-	-	
1020415	40	303	1317	1	X	-	-	
1020416	72	112	257	1	X	-	-	
1020417	70	X	50	X	X	-	-	
1020418	44	28	87	1	X	X	-	
1020419	37	X	36	X	X	-	-	
1020420	59	X	82	1	X	-	-	
1020421	26	X	51	1	X	X	-	
1020422	26	6	45	X	X	-	-	
1020423	61	26	106	1	X	-	-	
1020424	47	52	135	1	X	-	-	
1020425	49	4	294	1	X	-	-	
1020426	46	X	45	1	X	-	-	
1020427	66	X	104	1	X	-	-	
1020428	42	X	85	1	0.45	0.41	-	STD
1020429	20	130	390	1	-	-	X	
1020430	43	97	275	1	-	-	X	
1020431	36	24	83	1	-	-	X	
1020432	34	62	395	1	-	-	X	
1020433	28	95	281	1	-	-	X	
1020434	37	76	429	1	-	-	X	
1020435	62	49	152	1	-	-	X	
1020436	49	43	265	1	-	-	X	
1020437	79	4	96	1	-	-	X	
1020438	6	X	53	2	-	-	60	STD
DET.LIMIT	2	3	2	1	0.01	0.01	5	
METHOD	A101	A101	A101	A101	F650	F650	N701	

APPENDIX 8

NEUTRON ACTIVATION ASSAY RESULTS: LF005

Sheet1

SAMPLE	Ti (ppm)	Zr (ppm)	V (ppm)	P (ppm)	Ag (ppm)	As (ppm)	Ba (ppm)	Br (ppm)
1020429	1779	148	118	1211	X	17	432	1
1020430	2386	169	131	1310	X	23	1110	X
1020431	2328	174	64	768	X	11	832	X
1020432	2193	141	138	822	X	13	1370	X
1020433	1447	82	116	757	X	14	668	2
1020434	2715	156	197	1148	X	20	1150	X
1020435	2631	148	175	1011	X	13	960	X
1020436	2707	154	201	1052	X	19	1590	X
1020437	2395	161	157	1373	X	4	894	X
1020438	I/S	I/S	I/S	I/S	X	3	382	X
METHOD	X401	X401	X401	X401	N701	N701	N701	N701
DET.LIMIT	100	5	5	30	5	1	100	1
ANALABS								

SAMPLE	Ca (%)	Ce (ppm)	Co (ppm)	Cr (ppm)	Cs (ppm)	Eu (ppm)	Fe (%)	Hf (ppm)
1020429	2.1	156	15	15	X	1.4	4.66	3.8
1020430	3.1	169	19	114	4	2	3.72	4.1
1020431	3.4	73	13	20	4	2.1	3.86	4.7
1020432	2.3	131	18	176	6	1.7	5.23	4.1
1020433	3.5	139	14	51	6	1.8	5.14	2.6
1020434	1.2	137	20	124	6	2	5.01	4
1020435	1.8	164	20	56	5	2.1	5.13	4.3
1020436	1.9	185	27	78	5	2.1	6.02	4.1
1020437	1.7	173	19	33	X	2	4.12	4.5
1020438	X	77	21	427	17	0.8	4.11	8.4
METHOD	N701	N701	N701	N701	N701	N701	N701	N701
DET.LIMIT	1	2	1	5	1	0.5	0.02	0.5
ANALABS								

SAMPLE	Ir (ppm)	K (%)	La (ppm)	Lu (ppm)	Mo (ppm)	Na (%)	Rb (ppm)	Sb (ppm)
1020429	X	0.7	77	0.3	X	4.12	25	1.2
1020430	X	1.4	89	0.3	X	4.03	40	2.5
1020431	X	0.5	34.6	0.4	X	4.48	35	1.7
1020432	X	1.4	66.4	0.3	X	3.09	45	0.7
1020433	X	X	74.7	0.2	X	2.49	X	X
1020434	X	0.8	70.6	0.3	X	3.99	60	0.5
1020435	X	0.6	85.3	0.3	X	4.39	25	0.7
1020436	X	1.3	95.3	0.4	X	3.89	50	0.6
1020437	X	X	91.6	0.3	X	5.1	X	0.4
1020438	X	2	35.3	0.3	X	1.55	190	X
METHOD	N701	N701	N701	N701	N701	N701	N701	N701
DET.LIMIT	20	0.2	0.5	0.2	5	0.01	20	0.2
ANALABS								

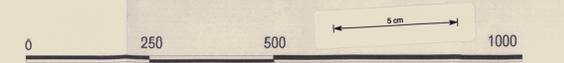
SAMPLE	Sc (ppm)	Se (ppm)	Sm (ppm)	Ta (ppm)	Te (ppm)	Th (ppm)	U (ppm)	W (ppm)
1020429	14.6	X	9.5	X	X	30.4	8	X
1020430	19	X	10.3	2	X	26.3	5	X
1020431	12.5	X	6.7	X	X	16.2	4	X
1020432	19.4	X	8.7	1	X	22.2	4	X
1020433	16.4	X	7.3	X	X	16.1	4	X
1020434	24.1	X	8.2	X	X	25.5	5	X
1020435	22.5	X	10.5	2	X	24.5	6	X
1020436	25.5	X	11.4	X	X	28	6	X
1020437	20.2	X	10.2	4	X	29.7	5	X
1020438	11.2	X	6.8	4	X	13.4	5	5
METHOD	N701	N701	N701	N701	N701	N701	N701	N701
DET.LIMIT	0.1	5	0.2	1	5	0.5	2	2
ANALABS								

SAMPLE	Yb (ppm)	Zn (ppm)	Zr (ppm)
1020429	1.9	433	X
1020430	2.2	342	X
1020431	2.9	122	X
1020432	2.3	469	X
1020433	1.5	411	X
1020434	2.3	X	X
1020435	2.1	269	X
1020436	2.5	393	X
1020437	1.9	187	X
1020438	2.4	X	X
METHOD	N701	N701	N701
DET.LIMIT	0.5	100	500
ANALABS			



- Q Undifferentiated Quaternary deposits
- Qa Alluvium
- Qg Glacial and fluvioglacial deposits
- Qt Talus and slope deposits
- Df Fine grained quartz sandstone with minor siltstone & mudstone - correlate of Florence Sandstone
- Sca Undifferentiated mudstone-sandstone-rare limestone sequence - correlates of Crotty & Amber Formation
- Scc Fine to coarse grained quartz - rich sandstone, calcareous sandstone & minor mudstone - correlate of Crotty Formation
- Ogl Mainly limestone commonly decomposed to black clay "pug"
- Oop Grey to pink quartz sandstone with basal pebble - granule conglomerate, trace fossils & chromite rich bands in upper part - Pioneer Beds.
- Cts Bedded sandstone - siltstone units
- Cti Crystal - rich volcanic sandstone (feldspar-pyroxene phytic), lithic-rich bases with minor ash, sandstone & limestone. Lynchford Tuff & correlates.
- Ca Andesitic to basaltic intrusive bodies with lavas & clastic units. Includes feldspar-hornblende-pyroxene-phyric & feldspar-pyroxene phytic types & small chlorite altered dykes.
- Cb Basalt. Henty Dyke Swarm
- Ccl Mainly felsic feldspar phytic lava and intrusives; massive to flow banded or auto-brecciated, with rare columnar jointing
- Ccs Units of bedded siltstone, sandstone, tuff & agglomerate
- Cyl(b) Felsic porphyry bodies, intrusive & partly extrusive, including quartz-feldspar (+ biotite)(b) porphyry.
- Cyl(d) Felsic porphyry bodies, intrusive & partly extrusive. Feldspar-quartz-pyroxene(p) porphyry.
- Cys Units of bedded siltstone, sandstone
- CysS Black siltstone
- Cyl Interbedded vitric tuff, crystal tuff, siltstone, slate, sandstone & agglomerate.
- Cyx Crystal rich volcanoclastic sandstone
- Cp(b) Quartz feldspar biotite porphyry
- Cmrs Well bedded micaceous quartzwacke sandstone & minor mudstone - Miners Ridge Sandstone
- CmrsH Shale and mudstone
- Cmrb Ophiolite-textured tholeiitic basalt lava, breccia & tuff with associated intrusives. Miners Ridge Basalt

- Geological boundary, accurate
- Geological boundary, inferred
- Fold feature
- Fault, position accurate
- Inferred fault
- Concealed fault
- Underground mine
- Open cut mine
- Mineral deposit
- Mineral occurrence
- Prospect, explored
- Abandoned mine
- Built up populated area
- Homestead (flattened)
- Building
- Railway station
- Beacon, lighthouse
- Airport or aerodrome
- Bridge
- Road tunnel
- Monument, statue, cross
- Landmark object
- Named relief feature
- Mountain or mountain range
- Pass
- CR, Escarpment, Breakaway
- Sand ridge or sand dunes
- Spur, spur line
- Rock
- Plateau
- Valley
- Gully, gip
- Cave, cavern
- Island
- Pier
- Reef, pond, waterhole, rockhole
- Swamp
- Waterfall
- Dam
- Spring
- Ford
- Mark, mooring post, post
- Highway
- Secondary road
- Minor road
- Wharf track
- Runway
- Landing ground
- Powerline
- Contour line
- Watercourse
- Perennial lake



Scale 1 : 5 000
 Distances in Metres
 Major Contour Interval 50m
 Minor Contour Interval 10m
 AMG Zone 55

98-4200
 ANNUAL REPORT - EL 294
 RGC LYNCHFORD - R STOCKWELL

1 : 5 000 Sheet Index

48	Queensdown 27	Gormanston 6
West Lynchford 47	Lynchford 26	Mount Owen South 5
North Waterfall 46	Crown Spur 25	Mount Jukes 4
Waterfall Gully 45	Newell Spur 24	South Jukes 3
Mount Strahan 44	23	Conglomerate Peak 2

RGC Exploration

**Mt Read Volcanics Belt
Tasmania**

**SHEET 25
Crown Spur**

222095

GEOLOGICAL INTERPRETATION

Workspace Path: i:\draft\1 mapinfo\1 basemel\1bm_tas\1230115\1 SHEET25 1 SH05_GEOLOG.WOR
 Page Setup: A0 and landscape
 Date: August 1997



- Q Undifferentiated Quaternary deposits
- Qa Alluvium
- Qg Glacial and fluvio-glacial deposits
- Qt Talus and slope deposits
- Df Fine grained quartz sandstone with minor siltstone & mudstone - correlate of Florence Sandstone
- Sca Undifferentiated mudstone-sandstone-rare limestone sequence - correlates of Crotty & Amber Formation
- Scc Fine to coarse grained quartz - rich sandstone, calcareous sandstone & minor mudstone - correlate of Crotty Formation
- Ogl Mainly limestone commonly decomposed to black clay "pug"
- Oop Grey to pink quartz sandstone with basal pebble - granule conglomerate, trace fossils & chromite rich bands in upper part - Pioneer Beds
- Cts Bedded sandstone - siltstone units
- Ctl Crystal - rich volcanic sandstone (feldspar-pyroxene phytic), lithic-rich bases with minor ash, sandstone & limestone. Lynchford Tuff & correlates.
- Ca Andesitic to basaltic intrusive bodies with lavas & clastic units. Includes feldspar-hornblende-pyroxene-phyric & feldspar-pyroxene phytic types & small chlorite altered dykes.
- Cb Basalt. Henly Dyke Swarm
- Ccl Mainly felsic feldspar phytic lava and intrusives; massive to flow banded or auto-brecciated, with rare columnar jointing
- Ccs Units of bedded siltstone, sandstone, tuff & agglomerate
- Cyl (b) Felsic porphyry bodies, intrusive & partly extrusive, including quartz-feldspar (+ biotite)(b) porphyry.
- Cyl (p) Felsic porphyry bodies, intrusive & partly extrusive. Feldspar-quartz-pyroxene(p) porphyry.
- Cys Units of bedded siltstone, sandstone
- Cyss Black siltstone
- Cyt Interbedded vitric tuff, crystal tuff, siltstone, slate, sandstone & agglomerate.
- Cyx Crystal rich volcanoclastics sandstone
- Cp (b) Quartz feldspar biotite porphyry
- Cmrs Well bedded micaceous quartzwacke sandstone & minor mudstone - Miners Ridge Sandstone
- Cmsh Shale and mudstone
- Cmrb Ophiolite-textured tholeiitic basalt lava, breccia & tuff with associated intrusives. Miners Ridge Basalt

- Geological boundary, accurate
- Geological boundary, inferred
- Fault feature
- Fault, position accurate
- Inferred Fault
- Concealed Fault
- Underground Mine
- Open Cut Mine
- Mineral Deposit
- Mineral occurrence
- Prospect, explored
- Abandoned Mine
- Built up populated area
- Homestead (Flattop)
- Building
- Railway Station
- Beacon, Lighthouse
- Airport or Aerodrome
- Bridge
- Road tunnel
- Monument, Statue, Cross
- Landmark Object
- Mountain or mountain range
- Peak
- Cliff, Escarpment, Breakaway
- Sand Ridge or Sand Downs
- Spur, Spur line
- Dam
- Railway
- Valley
- Gully, Gap
- Cave, Cavern
- Island
- Point
- Flood Plain, Waterhole, Rockhole
- Swamp
- Waterfall
- Dam
- Spring
- Flood
- Marina, Mooring Pier, Port
- Highway
- Secondary Road
- Minor Road
- Vehicle Track
- Runway
- Landing Ground
- Pipeline
- Contour line
- Watercourse
- Perennial Lake



0 250 500 1000

Scale 1 : 5 000
 Distances in Metres
 Major Contour Interval 50m
 Minor Contour Interval 10m
 AMG Zone 55

1 : 5 000 Sheet Index

East Sister 49	Dawies Hill 28	Cape Horn Spur 7
48	Quasquetown 27	Gormanston 6
West Lynchford 47	Lynchford 26	Mount Owen South 5
North Waterfall 46	Crown Spur 25	Mount Jukes 4
Waterfall Gully 45	Newell Spur 24	South Jukes 3

RGC Exploration

**Mt Read Volcanics Belt
Tasmania**

222096

SHEET 26 98-4200

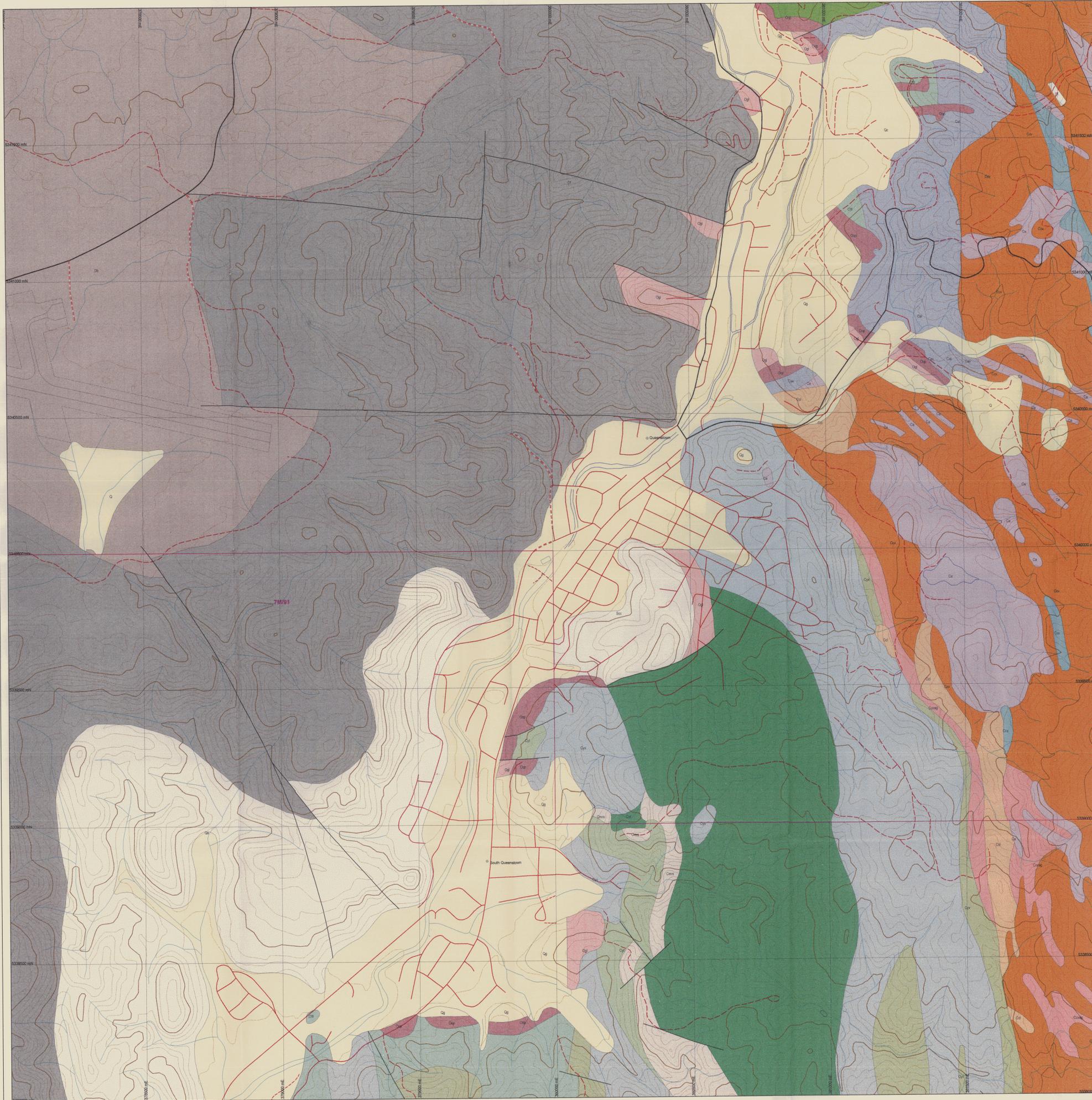
ANNUAL REPORT - EL 2/94
RGC LYNCHFORD - R STOCKWELL

GEOLOGICAL INTERPRETATION

Workspace Path: i:\draft\mapinfo\basemap\1 km, 1:5000\1:5000\SHEET26\SH26_GEOL5K.WOR

Page Setup: A0 and landscape

Date: August 1997



- Q Undifferentiated Quaternary deposits
- Qa Alluvium
- Qg Glacial and fluvioglacial deposits
- Qt Talus and slope deposits
- Df Fine grained quartz sandstone with minor siltstone & mudstone - correlate of Florence Sandstone
- Sca Undifferentiated mudstone-sandstone-rare limestone sequence - correlates of Crotty & Amber Formation
- Scs Fine to coarse grained quartz - rich sandstone, calcareous sandstone & minor mudstone - correlate of Crotty Formation
- Ogl Mainly limestone commonly decomposed to black clay "pug"
- Oop Grey to pink quartz sandstone with basal pebble - granule conglomerate, trace fossils & chromite rich bands in upper part - Pioneer Beds.
- Cts Bedded sandstone - siltstone units
- Ctl Crystal - rich volcanic sandstone (feldspar-pyroxene phytic), lithic-rich bases with minor ash, sandstone & limestone. Lynchford Tuff & correlates.
- Ca Andesitic to basaltic intrusive bodies with lavas & clastic units. Includes feldspar-hornblende-pyroxene-phyric & feldspar-pyroxene phytic types & small chlorite altered dykes.
- Cb Basalt. Henty Dyke Swarm
- Oci Mainly felsic feldspar phytic lava and intrusives; massive to flow banded or autobrecciated, with rare column jointing
- Ccs Units of bedded siltstone, sandstone, tuff & agglomerate
- Cyl (b) Felsic porphyry bodies, intrusive & partly extrusive, including quartz-feldspar (+ biotite)(b) porphyry.
- Cyl (p) Felsic porphyry bodies, intrusive & partly extrusive. Feldspar-quartz-pyroxene(p) porphyry.
- Cys Units of bedded siltstone, sandstone
- Cyss Black siltstone
- Cyt Interbedded vitric tuff, crystal tuff, siltstone, slate, sandstone & agglomerate.
- Cyx Crystal rich volcanoclastic sandstone
- Cp (b) Quartz feldspar biotite porphyry
- Cmrs Well bedded micaceous quartzwacke sandstone & minor mudstone - Miners Ridge Sandstone
- Cmrsh Shale and mudstone
- Cmrb Ophitic-textured tholeiitic basalt lava, breccia & tuff with associated intrusives. Miners Ridge Basalt

- Geological boundary, accurate
- Geological boundary, inferred
- Fault feature
- Fault, position accurate
- Inferred Fault
- Concealed Fault
- Underground Mine
- Open Cut Mine
- Mineral Deposit
- Mineral occurrence
- Prospect, explored
- Abandoned Mine
- Build up proposed area
- Homestead (Pastoral)
- Building
- Railway Station
- Beacon, Lighthouse
- Airport or Aerodrome
- Bridge
- Road tunnel
- Monument, Statue, Cross
- Landmark Object
- Named Relief Feature
- Mountain or mountain range
- Pass
- Cliff, Escarpment, Breakaway
- Sand Ridge or Sand Dunes
- Spor. Spur line
- Rock
- Platiau
- Valley
- Gully, Gap
- Cave, Cavern
- Island
- Fork
- Flood, Flood Waterhole, Rockhole
- Swamp
- Waterfall
- Dam
- Spillway
- Canal line
- Watercourse
- Perennial Lake
- Highway
- Secondary Road
- Minor Road
- Vehicle Track
- Runway
- Landing Ground
- Paved/line
- Carton line
- Watercourse
- Perennial Lake



Scale 1 : 5 000
 Distances in Metres
 Major Contour Interval 50m
 Minor Contour Interval 10m
 AMG Zone 55

1 : 5 000 Sheet Index

50	Crown Hill 29	Mount Cyll 8
East Sister 49	Davies Hill 28	Cape Horn Spur 7
48	Queenstown 27	Gormansdon 6
West Lynchford 47	Lynchford 26	Mount Owen South 5
North Waterfall 46	Crown Spur 25	Mount Jukes 4



222037

**Mt Read Volcanics Belt
 Tasmania 98-4200**
 ANNUAL REPORT - EL 294
 RGC LYNCHFORD - R STOCKWELL

**SHEET 27
 Queenstown**

GEOLOGICAL INTERPRETATION

Workspace Path: i:\draft\mapinfo\basemap\1bm_tas\120115\1SHEET27\SH27_GEOLOG.WOR
 Page Setup: A0 and landscape
 Date: August 1997

