GOLD FIELDS EXPLORATION PTY. LIMITED

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E.L. 9/76 BLUE TIER AREA

PROGRESS REPORT, DECEMBER 1983

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SUMMARY

Drilling and lithogeochemical programmes over E.L. 9/76 were completed in July-October 1983. The results of the drilling programme were disappointing as all of the Alkali Granite intersections obtained contained very low levels of tin.

The Moon Mine Area's potential for a significant tonneage of moderate grade mineralisation was effectively eliminated by the four holes drilled there this year. At the North Anchor Area, the six holes drilled only encountered more of the tin-poor, greisened Alkali Granite discovered there last year. However, the drilling results have provided useful information on the roof morphology of the Granite. Also, further information was gained from three regional holes drilled between the North Anchor and Moon Mine Areas. In general, the results of the 1983 drilling programme have caused little change to the overall intrusive morphology of the Alkali Granite, as interpreted in the 1982 report. The ridges and cupolas situated on the steep flanks of the main intrusion remain the best drilling targets. A more detailed model of the Alkali Granite roof contact is presented for the southeastern part of E.L. 9/76. Displayed on this are two areas with potential for shallowly buried Alkali Granite cupolas; one at North Anchor, the other in the vicinity of the Liberator Workings.

The lithogeochemical survey over the Anchor Mine mineralised body was successful in defining halo effects for the elements Rb, Ga and Ca. These elements are strongly enriched/depleted close to (0-30m) the mineralised body. Also, a regional, weak, narrow (0-20m) halo of these elements appears to exist around the Alkali Granite in general. Therefore at distances greater than 30m from the Granite, halo effects are likely to be negligible.

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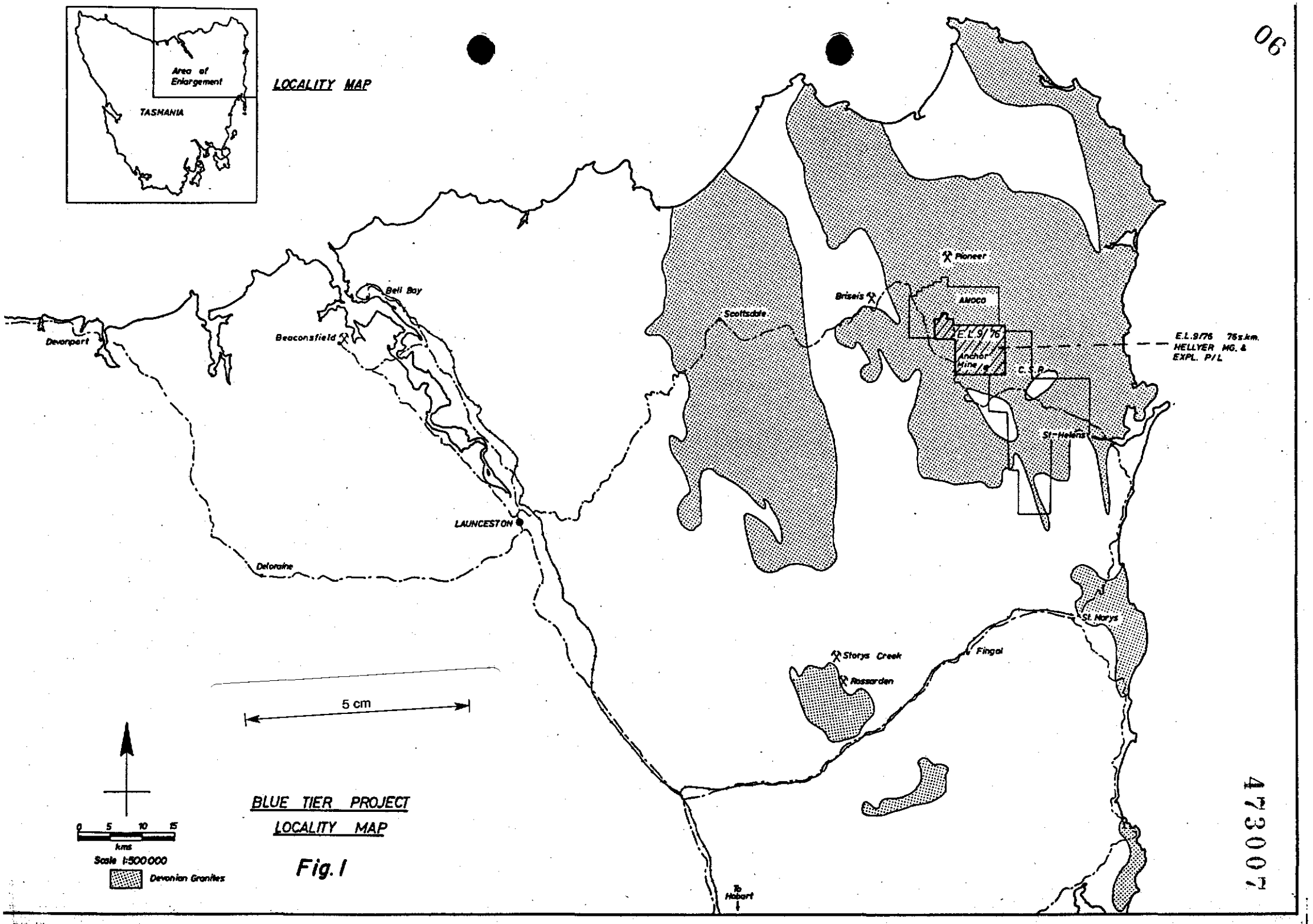
1. INTRODUCTION

E.L. 9/76, the Blue Tier Exploration Licence area, covers 76 square km. of elevated terrain in North Eastern Tasmania. Fig. 1 illustrates how the licence area overlies a portion of a large Devonian granite mass. Historically, the area was known as the Blue Tier Tinfield which produced approximately 4000 tonnes of tin between 1870 and 1930 from a number of mines. The largest mine on the field was the Anchor Mine in the southeastern part of E.L. 9/76. This accounted for some 59% of the total production of the field, the rest being won from the numerous smaller claims.

The topography at Blue Tier is dominated by a large, steep-sided plateau which rises to approximately 700m A.S.L., about 500m above the surrounding country. The lower slopes are covered with extensive eucalyptus, wattle and myrtle forests, while the upper slopes and the plateau are blanketed with a mixture of scrub myrtle, grass and rain forest. The entire region has been extensively logged.

Two major rock types are found in E.L. 9/76; one is the Poimena Adamellite (Dg-p, Dg-fp), which is a convenient name given to a variety of porphyritic, tin-poor granites; the other is the Alkali Granite (Dg-a), which consists of equigranular, tin-bearing leucogranites. The Alkali Granite intrudes the Poimena Adamellite. A variety of stanniferous deposits are present. Vein style mineralisation occurs in both rock types, greisened cupolas occur in the Alkali Granite and erosion of both these styles of mineralisation has produced alluvial tin deposits. In all three cases, cassiterite is the ore mineral.

Exploration on the area by Aberfoyle, in the 1960's, centred on the greisen deposit at the Anchor Mine. When Renison Ltd. commenced exploration in late 1977 as a Joint Venture project with Hellyer Mining and Exploration P/L., the Anchor


Area of Enlargement
TASMANIA
LOCALITY MAP
Pioneer
Bell Bay
Briseis
AMOCO
Scottsdale
E.L.9/76
E.L.9776 76s.km.
HELLYER MG. & EXPL. P/L
Anchor Mine
C. S. R.
Devonport
Beaconsfield
St-Helens
LAUNCESTON
Deloraine
St Marys
Storys Creek
Fingal
Rossarden
5 cm
0 5 10 15
kms
Scale 1:500000
Devonian Granites
To Hobart
BLUE TIER PROJECT
LOCALITY MAP
Fig. 1

remained the focus of attention. By mid -1981, a potential deposit had been assessed and delineated, however it was considered too small to justify the completion of a definitive feasibility study. Since then, the major exploration has been directed towards the rest of the Licence area, in an attempt to define additional tin deposits to supplement the Anchor resource.

This year, as proposed by Cartwright (1982), three areas considered to be prospective for concealed greisen deposits were drilled. Also, a geochemical orientation study of possible halo effects from a stanniferous greisen body was undertaken, using old drill core from the Anchor Mine Area. The results of the geochemical study and the drilling are detailed and discussed in this report.

2. LAND TENURE

E.L. 9/76 is held by Hellyer Mining and Exploration Pty. Ltd., and is explored under a Joint Venture Agreement with Renison Ltd. The Licence operator is Gold Fields Exploration Pty. Ltd. Current project equity is Renison 60%, Hellyer 40%.

A number of Mining Leases are held within the Licence area and these are detailed in Ross(1978) and Roberts (1982). In May, 1983, two small Mining Leases totalling 21 ha. over the Cambria Workings, were pegged and incorporated into E.L. 9/76.

3. EXPENDITURE

A total of $145,980 was spent during 1982-83 and the 1983-84 expenditure to the end of October 1983 is $92,835. A detailed expenditure statement for the year to date is attached (Appendix 1).

The total amount spent by the Joint Venture to the end of October is $1,324,731.

4. PREVIOUS WORK

Exploratory work carried out on E.L. 9/76 prior to 1983 can be divided into two main areas: exploration around the Anchor Mine and exploration over the rest of the Licence.

4.1 Exploration at the Anchor Mine Area

As it accounted for over half the tin produced from the Blue Tier Tinfield, the Anchor Mine has long been the most important exploration target on the E.L. Various Companies investigated the deposit before 1977 (see Ross [1978]), when exploration programmes were commenced by Renison Ltd.

Between 1977 and 1981, the Anchor Mine Area was systematically drilled by Renison Ltd., who completed 99 diamond drill holes including 16 bulk sample holes for metallurgical test work. The early results of the drilling were encouraging enough to initiate an Indicative Feasibility Study (Goodman and Newnham, 1980). However, it was later decided (Ross, 1981) that the Anchor deposit was of an insufficient size for development and future exploration efforts should be directed towards the rest of the Licence, in an effort to locate additional resources to supplement the Anchor.

4.2 Exploration on the rest of E.L. 9/76

Historically, little work has been done on the Licence since the Mt. Lyell Mining and Railway Co.'s trenching and drilling programmes of 1904-05. The limited amount of exploration activity performed between then and 1979 was restricted to minimal drilling, sampling and surveying around some of the old workings, particularly the more productive ones (Ross, 1978).

In 1979, a more regional approach to exploration was adopted, in the form of a photogeological survey (Ross, 1980). Also in 1979, and later in 1980 and 1981, the majority of E.L. 9/76 was systematically ground surveyed over cut grid lines (Roberts, 1982).

A regional drilling programme was undertaken in 1982, based primarily on the geological results obtained from the ground surveys of previous years. This programme was designed (Roberts,1982) to find concealed stanniferous greisen bodies. Although it was unsuccessful in doing this, it did separate areas of potential for this type of deposit from areas of little or no potential (Cartwright,1982).

5. WORK COMPLETED JULY-SEPTEMBER, 1983

5.1 Drilling

Thirteen drill holes, numbered BT 166 to BT 177, totalling 1784.5m were completed between July and September, 1983. The programme was intially based on the proposals outlined by Cartwright (1982), but was amended when the results of the earlier drilled holes were known.

All the holes were triconed through the weathered rock zone, then cored through fresh/altered granite. The hole collars were survey located by G.J. Walkem and Co. (collars are shown on Fig. 2), and the greisened Alkali Granite intersections obtained were assayed for Sn at the Renison Assay Laboratory. Logs are attached as Appendix 3.

5.2 Halo Geochemistry

A multi-element geochemical halo orientation survey over the Anchor Mine mineralised body was undertaken,

using core from previous drilling programmes. Difficulties were encountered in finding unweathered and unaltered Poimena Adamellite core a significant distance away from the mineralised Alkali Granite.

Five holes were found to be suitable for this work and one (BT62) was chosen to determine which elements showed signs of enrichment in the cap rock towards the buried deposit. Once this had been achieved, the other four holes were assayed for these elements.

6. RESULTS

6.1 Drilling

The drilling results can be grouped into three main areas:

- Moon Mine
- North Anchor
- Regional Holes

6.1.1 Moon Mine Area

Four holes, BT 167, BT 168, BT 169 and BT 170 were drilled at the Moon Mine, with the aim of defining a potential 0.5million tonnes of approximately 0.4%Sn mineralisation. The holes were sited according to the recommendations of Cartwright (1982) in order to test all the possible major extensions of the known mineralisation (Fig. 3). Each hole encountered Alkali Granite and although this was quite altered and greisened in some of the holes (notably BT 167 and BT 169), no significant tin was found.

The resultant shape of the Alkali Granite intrusion in the Moon Mine Area was changed very little (see Figs. 4,5 and 6) from the shape shown by Cartwright (1982). The structural contours of the Alkali Granite roof plan (Fig. 6) now indicates an elongate (north-south), almost dyke-like intrusive body. As BT167 encountered the elongate portion of the body, a fifth possible hole in the southeast was not drilled (Cartwright, 1982). Holes BT 168 and BT 169 both drilled through a lower Alkali Granite/Poimena Adamellite contact and ended in the latter. The contact in the east, southeast and south therefore, appears to be either very steep or embayed. The cross-sections (Figs. 4 and 5) show a large tongue of Poimena Adamellite protruding from the steep southeastern contact.

The low assay results and the positions of the intersections have quite severely restricted the room within which a sizeable (0.5 million tonnes) mineralised deposit could exist. It may be possible that minor extensions of the mineralised zone could occur on the axis of the dyke-like intrusion (especially in the southwest near the BT 90 intersection), but this is unlikely to represent a significant increase in the potential size of the zone. At this stage, the tonnage estimate is probably little more than the 110,000 tonnes of 0.4% Sn suggested in the 1982 report.

6.1.2 North Anchor Area

Six holes, BT 171 - BT 176 were drilled in a radial pattern around BT 163 and BT 165. The latter, drilled in 1982, discovered a strong greisen system approximately 80m vertically above the level of the Anchor cupola. The North Anchor

greisen, was however, found to be depleted in tin. Of the six holes completed in the 1983 programme, five intersected altered and greisened Alkali Granite at a similar level while the other, BT 174, encountered altered Alkali Granite at 321 R.L. around 50m below this level. BT 175 contained very weakly altered Alkali Granite and BT 176 contained strongly greisened Alkali Granite very similar to that found in BT 163 and BT 165. All six holes like the 1982 holes in this area intersected tin-depleted Alkali Granite.

Structural contours of the top of the Alkali Granite (Fig. 7) for the North Anchor Area show that BT 174 was drilled on the steep-sided edge of the major Alkali Granite mass. The other five holes occur over a planar feature which is gradually rising to the northwest.

A seventh North Anchor hole was drilled later in the programme after the results from earlier drilling were obtained. This holes is discussed in section 6.1.3 on regional drilling.

The North Anchor Area holes, like the Moon Mine holes, were devoid of tin. However unlike the Moon holes which were closing off a known mineralised zone, the North Anchor holes were an attempt to find such a zone and their failure to do so does not rule out the existence of one.

6.1.3 Regional Areas

Two deep holes, BT 166 and BT 177, and an extension of an existing hole, BT 150 were drilled in the Lottah Tunnels, Ransome River/Poimena Road and North Anchor Areas respectively.

BT 166 was designed to test the possibility of large veins in the Poimena Adamellite representing "leakages" from an underlying mineralised greisen system in the Alkali Granite. The hole intersected the Lottah Tunnels veins, then continued on to approximately 240m below the surface without striking Alkali Granite. From this it was inferred that the steep-sided edge of the main Alkali Granite mass occurred between this hole and the nearest Alkali Granite exposure to the west.

The results of BT 166 meant that a proposed hole to the southeast (in the Ransome River) would be unlikely to encounter Alkali Granite. Therefore a decision was made to abandon this hole and deepen BT 150, a 1982 hole which had failed to reach Alkali Granite. This hole hit unaltered Alkali Granite,and provided useful information on the roof structure of the Alkali Granite (Fig.7).

BT 177 was a late addition to the programme in an attempt to find the Alkali Granite at depth in the south Poimena area. This hole encountered 200m of Poimena Adamellite before it was stopped, implying that the steep-sided edge of the Granite occurs further to the west. The three holes are shown on Fig. 7 which displays their influence on the structural contours of the roof of the Alkali Granite.

6.2 Halo Lithogeochemistry

Lithogeochemical studies using the Anchor greisen deposit were initiated in 1978 when BT 42 and BT 43 were assayed at 1.0m intervals for Rb, Li, Sn, Mn and F. The results obtained were discouraging (Roberts 1982). However, because of the close proximity of

these holes to the mineralised Alkali Granite, a more detailed study over a larger area was considered justified (Cartwright, 1982). Therefore, this year five holes from the Anchor Mine Area, BT 43, BT 42, BT 143, BT 96 and BT 62 were selected for a trace element halo lithogeochemical survey. BT 62 was initially used in an orientation study, to determine which of the chosen elements displayed a significant enough variation to be of use in the survey.

6.2.1 Orientation Study

The result of the orientation study on BT 62 are shown in Table 1 below, where sample 3365 represents mineralised Alkali Granite, 3364 is fine-grained Poimena Adamellite immediately above the Alkali Granite contact and 3363-3361 are Poimena Adamellite samples progressing upwards from the contact. The general criterion for selection was a distinct trend in values (either enrichment or depletion in the Poimena Adamellite samples away from the Granite contact.

TABLE 1. Trace element lithogeochemistry of selected samples from BT 62 (all values in ppm).

Sample Details	Sample No.	3361	3362	3363	3364	3365
	Depth	26.0	42.5	70.0	74.0	87.5
Ca		8400	7700	5400	4100	2500
Li		110	110	80	190	300
F		620	300	420	420	1200
Ba		392	399	379	73	<15
In		<10	<10	<10	<10	<10
Sr		149	153	132	41	11
Rb		589	584	631	1177	1823
Ge		<5	<5	<5	<5	<5
Ga		21	24	23	36	53
Be		1	1	1	1	<1
Nb		<20	<20	<20	40	20
Zn		100	150	80	60	20
B		15	10	6	6	3

(i) In, Ge, Be, Nb, Li and B. All of these elements displayed very little or no variation, especially between the Poimena Adamellite samples. They were therfore not used in the halo lithogeochemical survey.

(ii) Rb and Ga. These two elements show an enrichment trend towards the Alkali Granite contact. It appears that a significant 'leakage' of these two elements from the mineralised Alkali Granite occurs. Both elements are strongly enriched in 3365, the Alkali Granite sample.

(iii) Ca, Ba, Zr and Sr. As both Sr and Ba are known to substitute for Ca in various mineral phases, it is not surprising that all three become depleted towards the Alkali Granite, which contains low concentrations of these elements. Because both Ca and Sr are more readily assayed, they were both chosen over Ba and Zr.

(iv) F. Fluorine shows an erratic relationship with distance from the Alkali Granite contact, being initially depleted then enriched. Despite this, F was chosen for the survey as it was thought that the element may show significant variations at a greater distance from the mineralised Alkali Granite at the Anchor.

The five elements chosen therefore, were Rb, Ga, Sr, Ca and F.

6.2.2 Lithogeochemical Variations

Selected samples, chosen for their lack of weathering and obvious alteration were analysed for the five elements. A full list of the results is given in Appendix 2 and the results for each of the drill holes are shown on Fig. 9. Using the graphical results on Fig. 9, a table of elemental abundance with respect to distance above contact was constructed (Table 2). A plan of the Anchor Mine Area is attached (Fig. 10) showing where the five hole collars are located, together with the appropriate geochemical values for each of the distances above the Alkali Granite contact.

Hole No.	Distance above contact	Rb	F	Sr	Ca	Ga
BT 42	10m	1590	4150	15	3400	43
	20m	1720	4200	20	3200	49
BT 143	10m	1060	3000	140	4500	31
	20m	660	2600	160	5500	25
BT 43	10m	520	2500	100	5100	26
	20m	490	1600	120	5100	20
BT 62	10m	650	4150	70	4800	30
	20m	600	3800	125	5999	26
	50m	580	5100	145	8100	22
BT 96	10m	510	1300	90	4300	29
	20m	540	750	130	4900	19
	50m	510	850	140	4800	24

TABLE 2. Trace element values in various drill holes, calculated from selected samples (Appendix 2). All values are in ppm.

The geochemical results of each element displayed in Table 2 and Fig. 10, all consistently exhibit a zoned pattern around the deposit. It appears that a halo effect is developed in the Poimena Adamellite surrounding mineralised Alkali Granite. However, the distances involved in this study (10-50m vertically and 0-30m horizontally) were small, being restricted by the available drill holes. In an attempt to maximise the distance (horizontal) away from the mineralised Alkali Granite, to examine the halo effect at a greater distance, a Poimena Adamellite sample from BT 72, approximately 120m away from mineralised Alkali Granite and 20m above unaltered Alkali Granite, was analysed for Rb, Sr Ga and Ca. Also tested in this manner were Poimena Adamellite samples from BT 70 and BT 78. Both of these holes were sited a considerable distance from the Anchor Mine mineralised body, testing I.P. anomalies. The results given in Appendix 2 and displayed on Fig. 10, show that the halo effect extends at least to BT 70, but not as far as BT 78 or BT 70, which have relatively normal Poimena Adamellite trace element levels.

Background values for Ca, F, Ga, Sr and Rb in Poimena Adamellite samples were calculated using published results from a number of sources; Higgins et al. (in press), McClenaghan and Williams (1982) and McClenaghan et al. (1982). Average values for unaltered Poimena Adamellite were calculated and are shown in Table 3 below, together with the ranges for unaltered Adamellite. A combination of these results taken with the averaged results shown in Table 2, has enabled a schematic representation of relative elemental abundance against

Element	Average	Minimum Value	Maximum Value
Ca	16,900	12,000	21,000
F	880	580	1,300
Ga	17	13	19
Sr	102	45	136
Rb	348	277	460

TABLE 3. Average maximum and minimum values for unaltered Poimena Adamellite. All values in ppm.

distance above (mineralised) Alkali Granite to be constructed (Fig.11). This diagram clearly shows that Rb, Ga, and Ca are the most suitable elements to use as pathfinders for hidden Alkali Granite bodies. Gallium and Rb are significantly enriched (and Ca depleted) outside the normal Poimena Adamellite range of values as a mineralised Alkali Granite mass is approached. Fluorine and Sr are not as consistent and do not extend outside the background range as far. This schematic representation should hold for horizontal distances up to approximately 100m away from a mineralised Alkali Granite body.

7. CONCLUSIONS

The results from this year's drilling programme at the Moon Mine were disappointing. Although greisened Alkali Granite was intersected in all of the holes, tin levels were very low. As a result the potential size of the mineralised body cannot be significantly larger than the 110,000 tonnes at 0.4% Sn suggested in the 1982 report.

The drilling results obtained at the North Anchor Area were,like those from the Moon Mine, disappointing. No tin bearing Alkali Granite intersections were obtained, despite the fact that strongly greisened Granite was encountered in some holes. The hole drilled at the Lottah Tunnels failed to intersect Alkali Granite. The reason for this appears to be that beneath this region, the Alkali Granite roof contact plunges steeply to the east. This represents the steep edge of the main Alkali Granite intrusion. Therefore the actual source of the veins at Lottah Tunnels is probably either very deep or a large distance to the West (Fig. 7). Despite the failure of this hole, it is still possible that tin mineralised veins overlying known shallow buried Alkali Granite could represent leakage zones from a hidden greisened cupola. This possibility, when combined with the information from the North Anchor Area drilling, and the Mt. Lyell (1904-05) Don Workings drilling, has led to a 'structural high' in the Alkali Granite being postulated under the Gough's Lode Area (see Figs. 7 and 12). It is possible that a buried greisened cupola exists in this area, with the North Anchor Area representing a 'downslope' depleted zone, from which tin has been leached and the Gough's Lode a leakage zone of the concealed mineralisation.

The Alkali Granite structural contour map (Fig. 12) shows regions of possible Alkali Granite doming and the 100m depth contour of the Alkali Granite roof contact. Therefore areas with potential can be distinguished from those of little significance. Two areas where shallow buried Alkali

Granite cupolas may exist are indicated on Fig. 12. One, the Gough's Lode Area, is discussed above; the other is in the North Liberator Area. Little is known about the latter Area, other than the report (Reid and Henderson, 1928) of a few old workings.

The lithogeochemical work appears to have been successful to some extent. Calcium, Rb and Ga all show strong depletion/enrichment trends in Poimena Adamellite close to (0-30m) mineralised Alkali Granite. These trends weaken with increasing distance away from mineralised Alkali Granite, to reach a regional halo effect. This effect is confined to a distance 0-20m away from the Alkali Granite contact. Therefore very little can be determined from samples taken more than 30m away from the contact, whereas strongly enriched/depleted samples probably indicate proximity to mineralised Alkali Granite.

REFERENCES

Cartwright, A.J., 1982: E.L. 9/76 Blue Tier Area, Progress Report, Unpublished Report, GFEL.

Goodman,R.H., and Newnham,L.A., 1980: Proposal to complete a Definitive Feasibility Study on the Anchor Tin Deposit at Blue Tier, Tasmania, Unpublished Report, Renison Ltd.

Higgins, N.C., Solomon,M., and Varne, R., 1982: The genesis of the granitoids of the Blue Tier Batholith, N.E. Tasmania. (in press).

McClenaghan, M.P., and Williams, P.R., 1982: Distribution and characterisation of granitoid intrusions in the Blue Tier Area. Geol. Surv. Paper 4, Tasmanian Dept. of Mines, 32 pp.

McClenaghan, M.P., Turner, N.J., Baillie, P.W., Brown, A.V., Williams, P.R., and Moore, W.R., 1982: Geology of the Ringarooma -Boobyalla area, Geol. Surv. Bull. 61, Tasmanian Dept. of Mines. 198 pp.

Reid, A.M., and Henderson, Q.J. 1928: Blue Tier Tinfield, Geol. Surv. Bull. 38, Tasmanian Dept. of Mines. 132 pp.

Roberts, P.A., 1982: E.L. 9/76 Blue Tier Area, Progress Report, Unpublished Report, Renison Ltd.

Ross, A.F., 1978: E.L. 9/76 Blue Tier Area Annual Report, 1977-78. Unpublished Report, Renison Ltd.

Ross, A.F., 1980: E.L. 9/76 Blue Tier Area-Eastern Tasmania, 1979 Annual Report. Unpublished Report, Renison Ltd.

Ross A.F., 1981: E.L. 9/76 Geological report on the Anchor Tin Deposit at the completion of infill diamond drilling. Unpublished Report, Renison Ltd.

APPENDIX 1

1983-84 EXPENDITURE

1983-84 EXPENDITURE

(July-October costs)

	$
GEOLOGY	
- Salaries	12,946
- Salary on-costs	783
- Transport	44
- Miscellaneous	1,266
- Travel	1,409
- Stores	533
GEOCHEMISTRY	
- Stores	209
DRILLING	
- Miscellaneous	26
- Outside Contractors	70,813
- Stores	696
SITE PREPARATION	
- Outside Contractors	2,610
INDIRECT MOTOR VEHICLE EXPENSES	1,500
	92,835

APPENDIX 2

Selected element analyses for the Halo Geochemical Survey.

Selected element analyses for the Halo Geochemical Survey

Hole (BT)	Depth	Sample No.	Rb	Sr	Ga	Ca	F
			all ppm				
143	16.0	3350	780	150	20	5300	800
143	27.0	3351	770	140	30	6100	3800
143	35.5	3352	1300	260	20	4400	2700
143	45.0	3353	1510	10	50	2800	2800
143	54.0	3354	1870	10	50	4000	6400
143	84.0	3355	1510	60	50	1900	3600
96	33.0	3356	600	170	30	4400	800
96	45.0	3357	550	120	20	5200	1000
96	61.0	3358	740	120	20	4600	1100
96	83.5	3359	530	140	20	4800	400
96	88.0	3360	1770	10	50	2400	2900
[illegible]	26.0	3361	580	149	21	8400	620
[illegible]	42.5	3362	584	153	24	7700	300
62	70.0	3363	631	132	23	5400	420
62	74.0	3364	1177	41	36	4100	420
62	87.5	3365	1823	11	53	2500	1200
43	38.6	3366	660	160	20	6000	1900
43	56.1	3367	560	110	20	4000	1400
43	73.6	3368	650	130	20	6800	1800
43	87.6	3369	2250	10	60	3000	9600
43	97.6	3370	2300	10	50	1400	7400
42	23.7	3371	1730	20	50	2200	3800
42	34.7	3372	1640	30	50	4700	5200
42	45.7	3373	1500	10	30	2300	2400
42	50.2	3374	1800	10	40	2300	12000
42	73.2	3375	1320	50	40	4400	8000
[illegible]	222.0	10500	530	160	20	8400	-
70	115.0	10501	590	200	20	12500	-
72	22.4	10502	800	70	20	3100	-
146	95.5	7682	670	110	20	4000	-
147	83.5	7683	700	160	20	8400	-
148	102.7	7684	480	180	20	9700	
149	99.0	7685	490	200	20	7600	
151	100.9	7686	550	120	20	7500	
152	98.3	7687	520	150	20	11100	
154	101.2	7688	490	130	20	7400	
155	98.5	7689	510	160	20	9000	
156	89.5	7690	510	160	20	7400	
157	107.0	7691	450	190	20	9800	
158	99.3	7692	470	210	20	10200	
159	98.2	7693	450	120	20	4400	
160	95.7	7694	570	110	20	5300	
161	98.6	7695	530	160	20	7800	
162	93.4	7696	510	170	20	11000	
163	66.6	7697	610	120	20	6500	
	86.6	7698	480	180	10	8800	
164	98.5	7699	640	130	20	8400	

APPENDIX 3

DIAMOND DRILL HOLE LOGS (1983)
BT 166 - BT 177

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

473028

HOLE NO.: BT 166
STATE : TASMANIA

DLV. PRESS

PROJECT	BLUE TIER
DESIGNED BY	A.J. CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	5-7-83
COMPLETED	13-7-83

PURPOSE

To test for unexposed Alkali Granite beneath the Lottah Veins.

LOG SUMMARY / GENERAL COMMENTS

The Lottah Veins were intersected, along with a Dg-Fp granite phase. Apart from intense alteration narrowly developed around the veins, the alteration encountered was weak.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Sn(Wt%)	COMMENTS
53.0	55.0 (2m)	0.17	Lottah veins intersected.

LOCATION

NORTHING	5437832
EASTING	585013
R.L.	639.4
GRID	A.M.G.
LENGTH	240.0

HOLE CONDITION

SIZE Hole Size	SIZE Depth
TRICONE	0-13.0
NQ	13.0-18.0
BQ	18.0-240.0

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

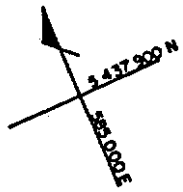
Hole left open, with a black polythene marker.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D.Sin.Dip	R.L.	HORIZONTAL D.Cos.Dip	Prog.Total
0.0	111°	84.5°	0.0	40.6	40.6	40.4	599.0	3.9	3.9
81.2	111°	84.0°	40.6	120.2	79.6	79.2	519.8	8.3	12.2
159.2	111°	84.5°	120.2	198.2	78.0	77.6	442.2	7.5	19.7
237.2	114°	83.5°	198.2	240.0	41.8	41.8	400.4	4.7	24.4

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D.Sin.Dip	R.L.	HORIZONTAL D.Cos.Dip	Prog.Total

473029

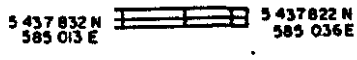


HOLE NO. BT 166

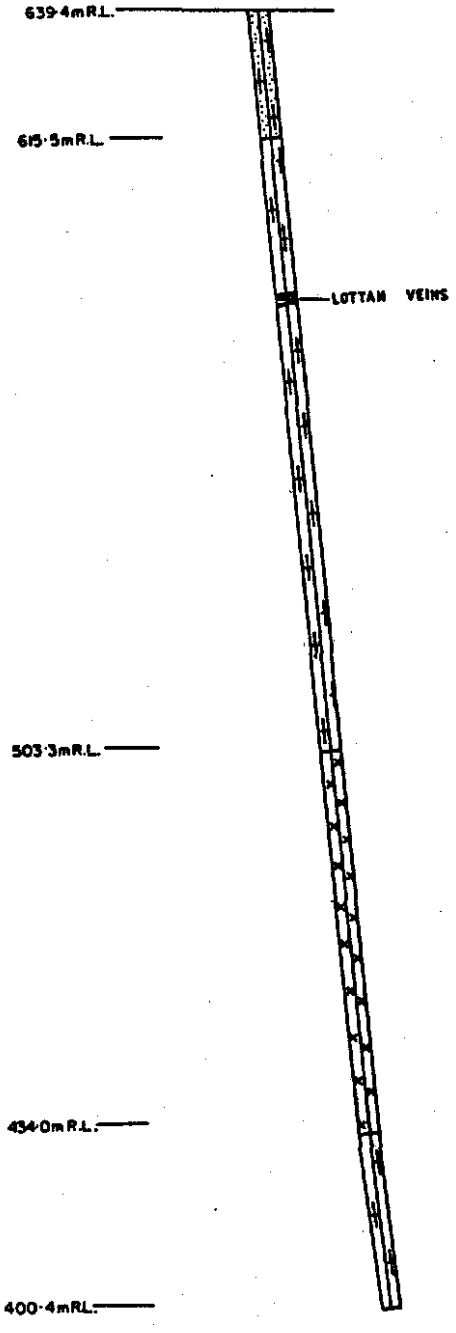
GOLD FIELDS EXPLORATION PTY. LIMITED

DIAMOND DRILL HOLE PLOT

PLAN



DIP PROFILE



SCALE 1:

5 cm

82

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 166 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				SUMMARISED LOG
0.0	23.9	10.9		MODERATELY WEATHERED POIMENA ADAMELLITE, UNALTERED.
23.9	137.3	113.4		COARSE-MEDIUM GRAINED, PORPHYRITIC AND WEAKLY ALTERED POIMENA ADAMELLITE WITH SEVERAL MAJOR QUARTZ VEINS.
137.3	208.0	70.7		FINE GRAINED, NON-PORPHYRITIC POIMENA ADAMELLITE (Dg-fp) WITH A FEW COARSE GRAINED PHASES. WEAKLY ALTERED APART FROM THE DEVELOPMENT OF SEVERAL, NARROW SILICIFIED ZONES.
208.0	240.0	32.0		MEDIUM-COARSE GRAINED, WEAKLY PORPHYRITIC AND WEAKLY ALTERED POIMENA ADAMELLITE.
				DETAILED LOG
				0.0-23.9 MODERATELY WEATHERED POIMENA ADAMELLITE.
0.0	13.0	13.0	0	*Tricone. No core.*
13.0	23.9	10.9	100	Brown weathered granite. Medium grained and strongly porphyritic with large white feldspar phenocrysts up to 4cm wide. Weakly fractured with limonite pervasively developed and intense around the fractured (crumbly zones). Patches of unweathered, unfractured granite. Unaltered.
				23.9-137.3 POIMENA ADAMELLITE WITH MAJOR QUARTZ VEINS.
23.9	52.6	28.7	100	Grey, coarse-medium grained, strongly porphyritic granite. Large white feldspar phenocrysts, smaller pale green sericitised feldspar, quartz and black biotites, are the phases present. Overall unfractured, however a few sericite rich crushed zones (approx. 10cm wide) do occur. Rare sericite (green) coated fractures occur also. Several 2cm thick coarse grained quartz-feldspar pegmatites are developed. Unaltered.

ASSAY DATA Sample No.	From	To	Rec. %

473031

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 166 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	Sample No.	From	To	Rec. %	Sn	As	Sr	Rb	Cu	Ag	Mo
									ASSAY DATA (all ppm)						
				At 52.2, pinkening of feldspar phenocrysts occurs.	4276	52.0	53.0	100	10	<10	120	530	5	<1	<10
					4277	53.0	54.0	100	1120	620	40	1740	120	1	10
52.6	55.0	2.4	100	Strongly altered, argillised granite with abundant sericite,	4278	54.0	55.0	100	2190	550	20	1470	165	1	10
				quartz, hematite and crush zones for 1.3m. Pink-green in											
				colour with all the micas replaced.											
				At 53.9, a 0.9m thick quartz-mica-sericite vein with several											
				small vugs developed. Moderately fractured. This is under-											
				lain by 0.2m strongly sericitised, bright green-pink granite.											
55.0	100.3	45.3	100	Pink granite for 4.0m, then grey, coarse-medium grained											
				porphyritic granite. Unfractured with several thin crush											
				zones, and rare sericite coated fractures. Unaltered with											
				mineral phases the same as before the altered granite/vein											
				above. Several thin (approx. 20cm) mixed aplitic-pegmatitic											
				phases occur. Below 63.8m, pink colour returns to granite.											
				At 64.8, a 2.0m zone of strong altered pink-green granite.											
				Argillised with all biotites replaced. Minor quartz veining.											
				At 91.7, a 30cm vein of white quartz and black biotite with											
				minor sericite. Blocky fractured.	4279	91.5	92.5	100	40	10	80	1200	10	<1	10
				At 100.1, 20cm of very coarse grained granite is overlain											
				by 0.4m of fine grained biotite-rich granite.											
100.3	137.3	37.0	100	Medium grained granite. Porphyritic with feldspars up to 2cm											
				wide. Pink-green in colour with moderate sericite development.											
				More fractured than granite above being fractured into short											
				blocks with several thin (10cm) crush zones also occuring.											
				Feldspars are semi-circular rather than long as they were											
				in the previous granite phase. Also appears to be richer											
				in biotite. Overall weakly sericitised. All feldspars are											
				pinkish.											
				At 126.0, a 0.5m thick aplite of quartz and pale green sericite.											
				At 130.4, the pink colour in the feldspars disappears.											
				Below 133.6, several thin crush zones, silicified zones											
				and patches of extreme variation in grain size occur.											

473032

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 166 Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA (all ppm) Sample No.	From	To	Rec. %	Sn	As	Sr	Rb	Cu	Ag	Mo
				137.3-208.0 FINE GRAINED, NON-PORPHYRITIC POIMENA ADAMELLITE WITH A FEW COARSER GRAINED PHASES.											
					4280	137.0	139.0	100	<10	10	150	550	15	<1	20
137.3	146.0	8.7	100	Fine grained grey granite. Equigranular except for a few rare feldspar phenocrysts elongated up to 2.5cm. Alteration is very weakly developed with unaltered feldspars and biotites. A few narrow zones of sericitisation/silicification exist. Unfractured. At 145.2, a 0.8m thick clay zone. All the granite is altered to a soft clay-pale grey in colour.											
146.0	149.5	3.5	100	Silicified granite with original texture destroyed. Moderately altered. Few relict feldspar phenocrysts exist with minor sericite and pervasive grey quartz. Appears to have been a fine grained granite.	4281	146.0	148.0	100	10	10	160	580	15	<1	<10
149.5	160.9	11.4	100	Medium-coarse grained grey granite. Feldspar phenocrysts up to 2cm wide and long. Unaltered apart from several thin (20cm) silicified zones. Unfractured, with no sericite developed at all. The last 2.0m gets finer grained gradually, grading into the unit below.											
160.9	180.4	19.5	100	Fine grained grey granite, non-porphyritic apart from the occasional large (2cm long) white feldspar. Mafic inclusions commonly occur up to 2-3cm across, consisting predominantly of black biotite. Unaltered and unfractured except for a few rare, thin sericitised fractures. Several aplitic phases (approx. 10cm thick) also exist. At 173.4, an equigranular but coarser grained (0.5cm) grey granite surrounds a thin veinlet of sericite for 1.1m.	4282	161.0	163.0	100	<10	<10	160	500	5	<1	10
180.4	184.5	4.1	100	Medium-coarse grained, porphyritic, grey granite. Unaltered overall, apart from one sericitic and silicified vein. Becomes quite coarse grained in places with large (3-4cm across) white feldspar phenocrysts.	4283	181.0	183.0	100	<10	10	200	460	5	<1	<10

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 166 Page: 4.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA (all ppm) Sample No	From	To	Rec. %	Sn	As	Sr	Rb	Cu	Ag	Mo
184.5	208.0	23.5	100	Fine grained grey granite. Unaltered with mafic clots and rare, small feldspar phenocrysts. Rare sericitised and silicified veins occur randomly throughout. At 189.0, a slight pinkening of the feldspars occur. This becomes slightly stronger with depth. The granite is unfractured and equigranular (around-2mm).	4284	187.0	189.0	100	<10	<10	160	470	5	<1	<10
				At 192.8, a 3cm thick white quartz vein containing minor green sericite is surrounded either side by a 3cm thick sericitised/silicified zone of alteration, of 20° CA. Between 205.1 and 206.1, and increase in veining occurs with several thin sericite filled veinlets causing a light, pale brown alteration in the enclosing granite.											
				208.0-240.0 MEDIUM-COARSE GRAINED, WEAKLY PORPHYRITIC POIMENA ADAMELLITE.											
208.0	210.2	2.2	100	Very pale grey, silicified aplite. Green sericite and pervasive quartz (very fine grained) and feldspar. Becomes pink with depth.	4285	208.0	210.0	100	20	10	10	1970	5	<1	<10
				At 209.0, a 20cm zone at 45° CA, of increased sericitisation-greisen developed. Accessory purple fluorite occurs. The upper and lower contacts of this unit are approx. 15° CA, and are both sharp.											
210.2	225.8	15.6	100	Pink, medium-coarse grained porphyritic granite. Pink feldspars up to 2-3cm across occur commonly. The top 1.0m contains pale green sericite, otherwise the unit is unaltered with rare veins and pegmatites (thin - 10cm).											
				Between 217.1 and 219.4, the pink colour is absent (a grey unaltered, medium grained granite).	4286	217.0	219.0	100	<10	<10	170	490	5	<1	<10
				At 222.5, a 5cm thick white quartz-pale pink feldspar-pale green sericite vein at 45° CA. This is surrounded above and below by a sericitised zone (biotites altered to sericite).											
				At 225.4, a 0.4m thick patch of silicified and sericitised granite.											

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 166 Page: 5.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA (all ppm) Sample No.	From	To	Rec. %	Sn	As	Sr	Rb	Cu	Ag	Mo
225.8	240.0	14.2	100	Medium grained, grey granite. Slightly finer than the phase above. Much less porphyritic, with smaller phenocrysts (up to 2.5cm). Some pink and aplitic zones (20-30cm thick). Minor veinlets surrounded by increased alteration also occur. At 233.0, a 1.0m zone of deep grey, clay rich crushed rock- crumbly and strongly sericitised.	4287	238.0	240.0	100	<10	10	170	530	5	<1	<10
				END OF HOLE. 240.0											

473035

HOLE NO.: B.T. 167
STATE : TASMANIA

GOLD FIELDS EXPLORATION PTY. LIMITED
DRILL CORE RECORD

PROJECT	BLUE TIER
DESIGNED BY	A.J. CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	14-7-83
COMPLETED	20-7-83

PURPOSE

To test for extensions of the mineralisation in the Moon Mine Area.

LOG SUMMARY / GENERAL COMMENTS

The Alkali Granite was encountered at 61.5m., with a 1.1m thick pegmatite overlying the contact. Between 76.0 and 124.0 the granite is topazised, otherwise it is only weakly altered. Significant assays are given below.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Sn (Wt%)												COMMENTS
59.4	124.0	<0.01												

LOCATION

NORTHING	5438940
EASTING	584245
R.L.	732.4
GRID	A.M.G.
LENGTH	144.5

HOLE CONDITION

SIZE Hole Size	Depth
TRICONE	0.0-6.0
NQ	6.0-15.0
BQ	15.0-144.5

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole open with a black plastic tube left as a marker.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D. Sin. Dip	R.L.	HORIZONTAL D. Cos. Dip	Prog. Total	SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D. Sin. Dip	R.L.	HORIZONTAL D. Cos. Dip	Prog. Total
0.0	032	70.0	0.0	21.6	21.6	20.3	712.1	7.4	7.4										
43.2	031	71.0	21.6	67.2	45.6	43.1	669.0	14.9	22.3										
91.2	032	71.0	67.2	115.2	48.0	45.4	623.6	15.6	37.9										
139.2	032	71.0	115.2	144.5	29.3	27.7	595.9	9.5	47.4										

35

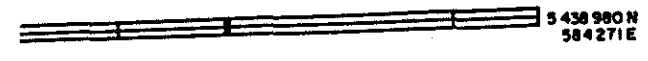
473036

HOLE NO. BT 167

GOLD FIELDS EXPLORATION PTY. LIMITED

DIAMOND DRILL HOLE PLOT

PLAN



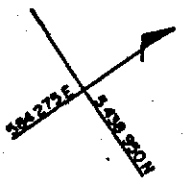
732·4m R.L.

707·7m R.L.

674·9m R.L.

616·3m R.L.

595·9m R.L.



DIP PROFILE

<0·01% Sn

SCALE 1:

5 cm

473037

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 167 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				SUMMARISED LOG
0.0	61.5	61.5		MEDIUM GRAINED, MODERATELY PORPHYRITIC POIMENA ADAMELLITE. WEAKLY WEATHERED AT FIRST, THEN VERY WEAKLY ALTERED. THIS IS UNDERLAIN BY A WELL DEVELOPED PEGMATITE/APLITE.
61.5				CONTACT
61.5	76.0	14.5		WEAKLY GREISENED, EQUIGRANULAR ALKALI GRANITE.
76.0	124.0	48.0		VARIABLY GREISENED, TOPAZISED ALKALI GRANITE.
124.0	144.5	20.5		WEAKLY AND UNALTERED ALKALI GRANITE.
				DETAILED LOG
				0.0-61.5 MEDIUM GRAINED, PORPHYRITIC POIMENA ADAMELLITE. WEAKLY ALTERED WITH A WELL DEVELOPED PEGMATITE ON THE LOWER CONTACT.
0.0	6.0			Tricone-no core recovered.
6.0	27.3	21.3	100	Brown-grey weathered granite. Medium grained and moderately porphyritic with several strong alteration zones-abundant sericite and quartz replacing feldspars and biotites. All the larger feldspar phenocrysts are pink. Strongly weathered zones of limonite crumbly granite also exist. Overall moderately fractured and weakly altered. After 18.0, unweathered and unaltered zones (approx. 50cm long) occur.
27.3	60.4	33.1	100	Pink-grey granite, medium grained and moderately porphyritic with feldspar phenocrysts (some pink, others white) up to 2cm across. Unaltered and unfractured with numerous thin aplites and pegmatites (all aprox 10cm wide) developed at 90° CA. Occasional fractures are filled with green sericitic clays.

ASSAY DATA Sample No.	From	To	Rec. %

473038

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE LOG AND ASSAY DATA

PROJECT: BLUE TIER

HOLE NUMBER: B.T. 167 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	Sample No.	From	To	Rec. %	Sn
				At 53.6, a 0.5m quartz-pink feldspar-silvery muscovite coarse grained pegmatite.					
				The last 0.6m becomes quite sericitised with abundant lime green, soft sericite, pink feldspar and quartz.	4395	59.4	60.4	100	<0.01
					4396	60.4	61.4	100	<0.01
60.4	61.5	1.1	100	Pegmatitic. Large (up to 5cm long) blades of colourless,	4397	61.5	62.0	100	<0.01
				grey and white quartz with pink feldspar are mixed with abundant	4398	62.0	63.0	100	<0.01
				aplitic material, often banded at 20° CA. The aplite occurs	4399	63.0	64.0	100	<0.01
				in the centre with the two coarse grained pegmatite on the	4400	64.0	65.0	100	<0.01
				upper and lower contacts. Accessory micas and purple fluorite	4401	65.0	66.0	100	<0.01
				also exist.	4402	66.0	67.0	100	<0.01
					4403	67.0	68.0	100	<0.01
61.5				CONTACT	4404	68.0	69.0	100	0.01
					4405	69.0	70.0	100	<0.01
				61.5-76.0 WEAKLY GREISENED ALKALI GRANITE.	4406	70.0	71.0	100	<0.01
					4407	71.0	72.0	100	<0.01
61.5	76.0	14.5	100	Pale green alkali granite. Equigranular, medium grained and	4408	72.0	73.0	100	<0.01
				non-porphyritic with a patchily developed weak sericitic alter-	4409	73.0	74.0	100	<0.01
				ation. Unfractured. The unaltered-less altered section consists	4410	74.0	75.0	100	<0.01
				of quartz-feldspar and dark green sericitised micas. The stronger	4411	75.0	76.0	100	<0.01
				altered sections are less abundant and consist of quartz (colour-	4412	76.0	77.0	100	<0.01
				less) and pervasive sericite, as dark green replacing micas	4413	77.0	78.0	100	<0.01
				and pale green in feldspars. Alteration overall is between	4414	78.0	79.0	100	<0.01
				these two extremes. Rare purple fluorite and red hematitic	4415	79.0	80.0	100	<0.01
				veins also occur.	4416	80.0	81.0	100	<0.01
					4417	81.0	82.0	100	<0.01
				76.0-124.0 VARIABLY ALTERED, TOPAZISED ALKALI GRANITE.	4418	82.0	83.0	100	<0.01
					4419	83.0	84.0	100	<0.01
76.0	124.0	48.0	100	Pale greenish grey and off-white alkali granite. Alteration	4420	84.0	85.0	100	<0.01
				is similar to above, however may be more intense as there	4421	85.0	86.0	100	<0.01
				is little trace of the micas. The granite consists of colourless	4422	86.0	87.0	100	<0.01
				quartz and topaz? with white feldspar and pale green sericite.	4423	87.0	88.0	100	0.16
				Unfractured with rare, thin sericite enrichments in a vein -	4424	88.0	89.0	100	<0.01
				like form. Below 87.0 the feldspar becomes pale orange, probably	4425	89.0	90.0	100	<0.01
				due to hematite. This disappears at 94.0.	4426	90.0	91.0	100	<0.01

GOLD FIELDS EXPLORATION PTY. LIMITED

DEV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 167 Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				At 94.0, a thin (2mm) quartz veinlet is surrounded by increased sericite development.
				At 94.7 an inclusion, 4cm across of sericite and quartz (dark green) surrounded a halo of very dark green sericitised mica.
				Below 94.8, the alteration changes slightly with a "blotchy" green sericite alteration occuring randomly on a small scale. This causes the core to appear spotted, off-white and green. Fluorite is a common accessory phase, especially on the few fractures that occur. Rare hematitic veinlets also occur.
				This style of alteration ends at 108.1 and is replaced by a similar but less intense style. The granite is off-white overall, with zones (20-30cm long) of very pale green pervasive sericite-quartz.
				At 116.9, the altered micas return, although they are not as abundant as normal.
				Between 121.9 and 122.7, a network of brown hematitic veinlets is developed, together with increased green sericite.
				124.0-144.5 UNALTERED AND WEAKLY SERICITISED ALKALI GRANITE.
124.0	132.2	8.2	100	Unaltered alkali granite, pale grey, equigranular and medium grained. Colourless quartz and white feldspar together with brown biotite and rare muscovite are the main phases present. Fractures with green sericite infillings also occur but are rare.
132.2	144.5	12.3	100	Green-grey sericitised (weakly) alkali granite. Pale orange feldspars and dark and light green sericitised feldspars and micas occur. Overall very weakly altered, becoming weaker with depth. Unfractured except for a few narrow sericitised crush zones.
				At 140.2, a 1.0m zone of crush clayey sericitised granite is overlain and underlain by a series of hematitic-limonitic veinlets.
				144.5 END OF HOLE

ASSAY DATA (Wt %)

Sample No.	From	To	Rec. %	Sn
4427	91.0	92.0	100	0.01
4428	92.0	93.0	100	0.01
4429	93.0	94.0	100	<0.01
4430	94.0	95.0	100	<0.01
4431	95.0	96.0	100	<0.01
4432	96.0	97.0	100	<0.01
4433	97.0	98.0	100	<0.01
4434	98.0	99.0	100	<0.01
4435	99.0	100.0	100	<0.01
4436	100.0	101.0	100	<0.01
4437	101.0	102.0	100	<0.01
4438	102.0	103.0	100	<0.01
4439	103.0	104.0	100	<0.01
4440	104.0	105.0	100	<0.01
4441	105.0	106.0	100	<0.01
4442	106.0	107.0	100	<0.01
4443	107.0	108.0	100	<0.01
4444	108.0	109.0	100	<0 01
4445	109.0	110.0	100	<0.01
4446	110.0	111.0	100	<0.01
4447	111.0	112.0	100	<0.01
4448	112.0	113.0	100	<0.01
4449	113.0	114.0	100	<0.01
4450	114.0	115.0	100	<0.01
4451	115.0	116.0	100	<0.01
4452	116.0	117.0	100	<0.01
4453	117.0	118.0	100	<0.01
4454	118.0	119.0	100	<0.01
4455	119.0	120.0	100	<0.01
4456	120.0	121.0	100	<0.01
4457	121.0	122.0	100	<0.01
4458	122.0	123.0	100	<0.01
4459	123.0	124.0	100	0.01

473040

GOLD FIELDS EXPLORATION PTY. LIMITED
DRILL CORE RECORD

HOLE NO.	B.T. 168
STATE	TASMANIA

PROJECT	BLUE TIER
DESIGNED BY	A.J. CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	21-7-83
COMPLETED	26-7-83

PURPOSE

To test for extensions of the mineralisation in the Moon Mine Area.

LOG SUMMARY / GENERAL COMMENTS

A 48.2m intersection of Alkali Granite was encountered at 62.8. This granite is not strongly altered, and is enclosed by Poimena Adamellite above and below. Significant assays are given below.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Sn	(Wt%)											COMMENTS
61.8	110.8	<0.01												

LOCATION

NORTHING	5439024
EASTING	584361
R.L.	729.5
GRID	A.M.G.
LENGTH	126.0

HOLE CONDITION

SIZE Hole Size	Depth
TRICONE	0.0-17.0
BQ	17.0-126.0

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole has been left open, with a black plastic marker.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D. Sin. Dip	R.L.	HORIZONTAL D. Cos. Dip	Prog. Total
0.0	332	60.0	0.0	18.1	18.1	15.7	713.8	9.1	9.1
36.2	333	61.0	18.1	57.2	39.1	34.2	679.6	19.0	28.1
78.2	333	59.0	57.2	99.2	42.0	36.0	643.6	21.6	49.7
120.2	333	59.0	99.2	126.0	26.8	23.0	620.6	13.8	63.5

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D. Sin. Dip	R.L.	HORIZONTAL D. Cos. Dip	Prog. Total

40

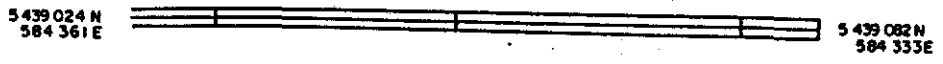
473041

HOLE NO. BT 168

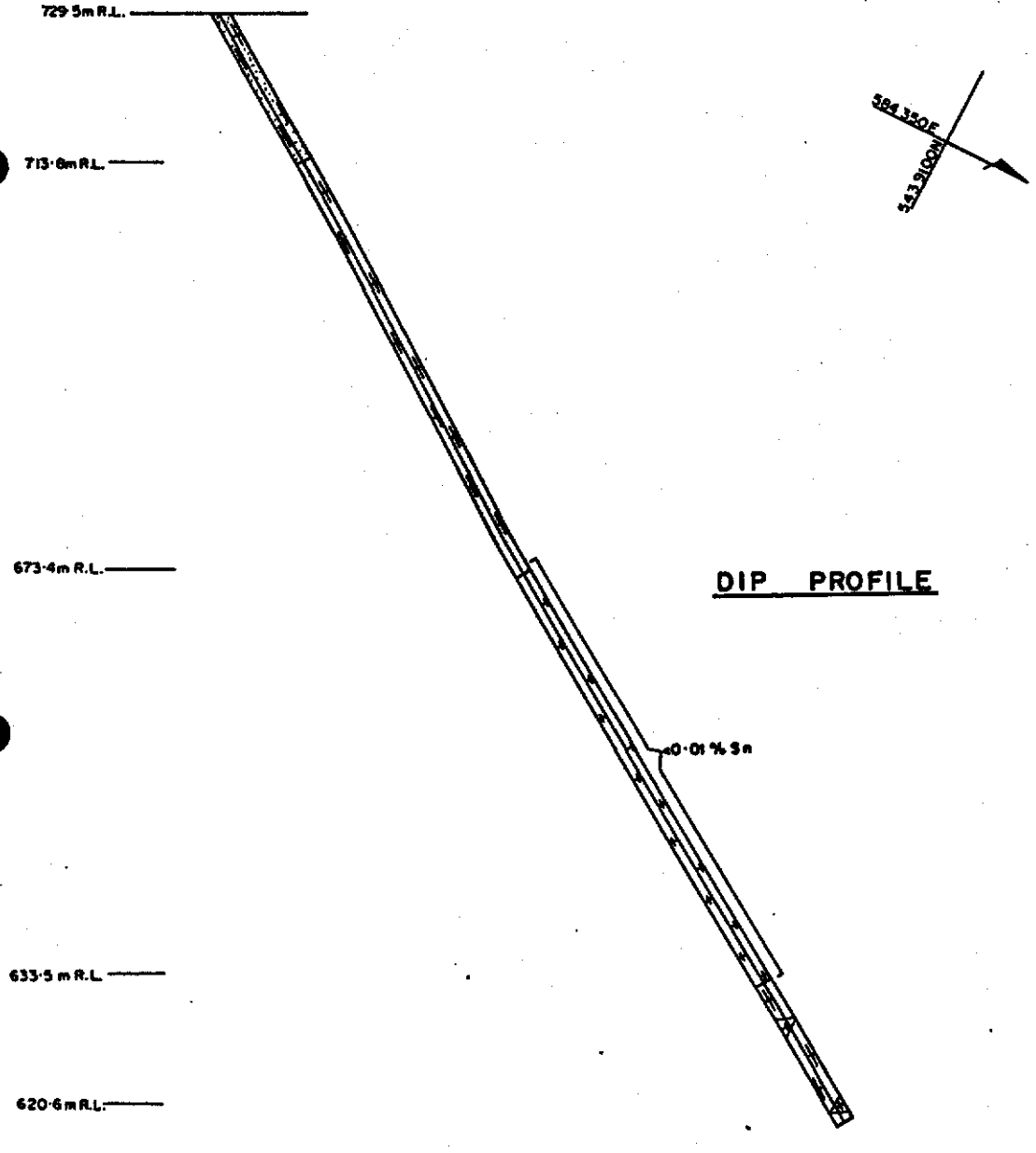
GOLD FIELDS EXPLORATION PTY. LIMITED

DIAMOND DRILL HOLE PLOT

PLAN



DIP PROFILE



SCALE 1:

5 cm

473042

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 168 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No	From	To	Rec. %
				SUMMARISED LOG				
0.0	62.8	62.8		MODERATELY AND OCCASIONALLY STRONGLY ALTERED POIMENA ADAMELLITE. MEDIUM GRAINED AND MODERATELY PORPHYRITIC.				
62.8				CONTACT				
62.8	111.0	48.2		WEAKLY SERICITISED ALKALI GRANITE WITH PATCHES OF GREISEN WEAKLY DEVELOPED. ALSO LARGE SECTIONS OF UNALTERED ALKALI GRANITE.				
111.0				CONTACT				
111.0	126.0	15.0		UNALTERED, MEDIUM-COARSE GRAINED, PORPHYRITIC POIMENA ADAMELLITE WITH MINOR ALKALI GRANITE INTRUSIONS SURROUNDED BY THIN PEGMATITES.				
				DETAILED LOG				
				0.0-62.8 MEDIUM GRAINED, PORPHYRITIC POIMENA ADAMELLITE. MODERATELY ALTERED.				
0.0	17.0			Tricone, no recovery.				
17.0	53.9	36.9	100	Medium grained, porphyritic pinkish-grey granite. Very weakly altered and fractured. Large pink feldspar phenocrysts up to 2.5cm across, occur. Seritisation is rare, being restricted to a few narrow (approx. 10cm) crush zones. Several thin pegmatites also occur. Pink colouration is absent in places, producing a grey granite. At 18.8, a 5cm thick pegmatite of quartz and feldspar is underlain by 20cm of pale green weakly greisened alkali granite. At 39.5, a section of very coarse grained grey granite. Quartz and feldspar crystals are all approx. 1.5cm across.				

473043

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GOLD FIELDS EXPLORATION PTY. LIMITED

DLV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T 168 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn
				This continues for 1.3m, then gradually decreases in grain					
				size over the next 1.5m.					
53.9	57.3	3.4	100	Moderately to strongly altered pale green granite. Medium					
				grained and weakly porphyritic. All feldspars are replaced					
				by pale green sericite and all biotites are sericitised. The					
				rock is very fractured, soft and crumbly with several 20cm					
				thick crushed zones.					
57.3	62.8	5.5	100	Greenish grey, medium grained porphyritic granite. Weakly					
				altered with sericite commonly developed and minor crush					
				and fractured zones occuring. Also zones up to 60cm long,					
				of increased alteration and sericitisation (pale green as					
				above) occur, including one over the last 80cm of this unit.	4541	61.8	62.8	100	<0.01
					4542	62.8	63.8	100	0.02
				62.8 CONTACT	4543	63.8	64.8	100	0.01
					4544	64.8	65.8	100	0.01
				62.8-111.0 WEAKLY AND MODERATELY ALTERED ALKALI GRANITE.	4545	65.8	66.8	100	0.01
					4546	66.8	67.8	100	0.01
62.8	66.0	3.2	100	Green alkali granite. Weakly and moderately greisened, with	4547	67.8	68.8	100	0.01
				some unaltered sections. Alteration varies overall, with darker	4548	68.8	69.8	100	0.01
				and lighter green zones. Micas are replaced but their	4549	69.8	70.8	100	<0.01
				pseudomorphs are still visible. Unfractured.	4550	70.8	71.8	100	<0.01
					4551	71.8	72.8	100	<0.01
66.0	82.7	16.7	100	Very weakly altered alkali granite. Pale brown with sericite	4552	72.8	73.8	100	0.01
				only weakly developed in a few micas, and restricted to fracture	4553	73.8	74.8	100	0.01
				coatings. Moderately to highly fractured-blocky. A pale orange	4554	74.8	75.8	100	0.01
				stain is also developed in the feldspars, probably due to	4555	75.8	76.8	100	<0.01
				hematite.	4556	76.8	77.8	100	<0.01
					4557	77.8	78.8	100	<0.01
82.7	104.3	21.6	100	Weakly altered alkali granite as above, but several zones	4558	78.8	79.8	100	<0.01
				(approx. 1.0m thick) of increased alteration occur. These	4559	79.8	80.8	100	<0.01
				are characterised by a weakly developed pervasive sericitisation.	4560	80.8	81.8	100	0.01
				Biotites and muscovites are still largely unaltered. Weakly	4561	81.8	82.8	100	0.01
				fractured with hematitic (orange-red) zones also developed.	4562	82.8	83.8	100	<0.01

473044

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 168 Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				The granite also appears to be slightly sericitised.
104.3	111.0	6.7	100	Pale green alkali granite. Weakly greisened and unfractured. All the micas are pseudomorphed by pale and dark green sericite. The lower contact of this unit is marked by a 3cm coarse grained quartz pegmatite at 50° CA.
				111.0 CONTACT
				111.0-126.0 MEDIUM-COARSE GRAINED, UNALTERED POIMENA ADAMELLITE WITH NUMEROUS, THIN PEGMATITE AND ALKALI GRANITE PHASES.
111.0	126.0	15.0	100	Pink-grey medium-coarse grained granite, with large (2cm) pink feldspar phenocrysts. Some zones of sericitisation, otherwise unaltered. Unfractured. This granite phase is disrupted by many weakly greisened, pale green alkali granites, varying in thickness from 5cm to 30cm. Narrow pegmatites or coarse grained variations surround these alkali granites.
				END OF HOLE 126.0m.

ASSAY DATA Sample No	From	To	Rec. %	Sn
4563	83.8	84.8	100	<0.01
4564	84.8	85.8	100	<0.01
4565	85.8	86.8	100	<0.01
4566	86.8	87.8	100	<0.01
4567	87.8	88.8	100	<0.01
4568	88.8	89.8	100	<0.01
4569	89.8	90.8	100	<0.01
4570	90.8	91.8	100	<0.01
4571	91.8	92.8	100	<0.01
4572	92.8	93.8	100	0.01
4573	93.8	94.8	100	<0.01
4574	94.8	95.8	100	<0.01
4575	95.8	96.8	100	<0.01
4576	96.8	97.8	100	<0.01
4577	97.8	98.8	100	<0.01
4578	98.8	99.8	100	<0.01
4579	99.8	100.8	100	<0.01
4580	100.8	101.8	100	<0.01
4581	101.8	102.8	100	<0.01
4582	102.8	103.8	100	<0.01
4583	103.8	104.8	100	<0.01
4584	104.8	105.8	100	<0.01
4585	105.8	106.8	100	<0.01
4586	106.8	107.8	100	<0.01
4587	107.8	108.8	100	<0.01
4588	108.8	109.8	100	<0.01
4589	109.8	110.8	100	<0.01

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

473045

HOLE NO.: B.T. 169
STATE : TASMANIA

VLV. PRESS

PROJECT	BLUE TIER
DESIGNED BY	A.J.CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	27-7-83
COMPLETED	2-8-83

PURPOSE

To test for extensions of the mineralisation in the Moon Mine Area.

LOG SUMMARY / GENERAL COMMENTS

Approximately 80 metres of strongly altered, greisened alkali granite was encountered between two Poimena Adamellite phases. Numerous xenoliths and intrusions of each occur. Significant assays are given below.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Sn	wt%											COMMENTS
29.0	110.8	<0.01												

LOCATION

NORTHING	5439129
EASTING	584388
R.L.	734.6
GRID	A.M.G.
LENGTH	146.5

HOLE CONDITION

SIZE Hole Size	SIZE Depth
TRICONE	0.0-12.0
BQ	12.0-146.5

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole left open, with a black polythene marker.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total
0.0		90.0	0.0	35.4	35.4	35.4	699.2	0.0	0.0
70.7		89.5	35.4	106.7	71.3	71.3	627.9	0.6	0.6
142.7		90.0	106.6	146.5	39.8	39.8	588.1	0.0	0.6

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total

45

473046

HOLE NO. BT 169

GOLD FIELDS EXPLORATION PTY. LIMITED

DIAMOND DRILL HOLE PLOT

PLAN

5439129N
584388E

584400E

5439000N

734·6mR.L.

722·9mR.L.

703·0mR.L.

624·5mR.L.

588·1mR.L.

DIP PROFILE

<0·01%Sn

SCALE 1:

METRES

5 cm

GOLD FIELDS EXPLORATION PTY. LIMITED

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DLV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 169 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				SUMMARISED LOG
0.0	31.6	31.6		UNALTERED, MEDIUM GRAINED, PORPHYRITIC POIMENA ADAMELLLITE WITH A WELL DEVELOPED BASAL PEGMATITE/APLITE COMPLEX.
31.6				CONTACT
31.6	110.3	78.7		STRONGLY ALTERED ALKALI GRANITE, GREISENED AND SERICITISED. NUMEROUS POIMENA ADAMELLITE XENOLITHS OCCUR.
110.3				CONTACT
110.3	146.5	36.2		WEAKLY ALTERED, MEDIUM GRAINED, PORPHYRITIC POIMENA ADAMELLITE CONTAINING MINOR ALKALI GRANITE INTRUSIONS.
				DETAILED LOG
				0.0-31.6 UNALTERED, MEDIUM GRAINED,PORPHYRITIC POIMENA ADAMELLITE WITH A PEGMATITIC ZONE DEVELOPED AT THE BASAL CONTACT.
0.0	12.0			Tricone, no core recovered.
12.0	29.0	17.0	100	Grey, medium grained porphyritic granite, consisting of large pinkish feldspar phenocrysts, smaller pale green feldspar and colourless quartz phenocrysts and numerous black biotites. Unfractured and unaltered with a few incipiently weathered zones. Also a few crushed-sericitised zones occur (30-40cm thick).
				At 28.1, a 0.5m zone of pale red hematitic, highly altered silicified granite. Vuggy in places with all the micas replaced. This is underlain by 0.4m of highly altered granite with green sericitised feldspar.

ASSAY DATA Sample No	From	To	Rec. %

GOLD FIELDS EXPLORATION PTY. LIMITED

DEV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 169 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No	From	To	Rec. %	Sn	wt%
29.0	31.6	2.6	100	Pegmatite and medium grained porphyritic granite. The first	4596	29.0	30.0	100	0.01	
				0.8m of this unit is a grey coarse grained pegmatite with	4597	30.6	31.6	100	<0.01	
				minor aplitic phases. The feldspars are pale pink and pale	4598	31.6	32.6	100	0.01	
				green, sericite is common. Accessory purple fluorite also	4599	32.6	33.6	100	0.01	
				occurs.	4600	34.8	35.8	100	<0.01	
				This is underlain by 1.3m of moderately weathered, limonitised	4601	35.8	36.8	100	<0.01	
				medium grained granite. Alteration is strong with numerous	4602	36.8	37.8	100	<0.01	
				quartz veinlets and crush zones.	4603	37.8	38.8	100	<0.01	
				Beneath this is a 0.5m thick pale green quartz pegmatite.	4604	38.8	39.8	100	<0.01	
					4605	39.8	40.8	100	<0.01	
				31.6 CONTACT	4606	40.8	41.8	100	<0.01	
					4607	41.8	42.8	100	<0.01	
				31.6-110.3 VARIABLY BUT STRONGLY ALTERED AND GREISENED ALKALI	4608	42.8	43.8	100	<0.01	
				GRANITE WITH NUMEROUS POIMENA XENOLITHS.	4609	43.8	44.8	100	<0.01	
					4610	44.8	45.8	100	0.02	
31.6	33.2	1.6	100	Pale green, equigranular, medium grained alkali granite. Banded	4611	45.8	46.8	100	<0.01	
				with numerous pegmatites and several thick Poimena inclusions,	4612	46.8	47.8	100	<0.01	
				it is weakly greisened.	4613	47.8	48.8	100	0.01	
					4614	48.8	49.8	100	0.01	
33.2	34.8	2.6	100	A large Poimena inclusion. The granite is strongly altered	4615	49.8	50.8	100	0.01	
				and moderately fractured-softish. Large pink feldspar phenoc-	4616	50.8	51.8	100	0.02	
				rysts and smaller green (sericitised) ones occur. Quartz vein-	4617	51.8	52.8	100	<0.01	
				lets are common.	4618	52.8	53.8	100	0.01	
34.8	45.5	10.7	100	Moderately greisened, in some places stronger than others,						
				alkali granite. Its colour is a variety of greens with some						
				narrow, very dark patches. Moderately fractured with a blockiness						
				developed occasionally. The micas are pseudomorphed and secondary						
				micas are found along with accessory fluorite on joint surfaces.						
				Quartz-sericite veinlets, pegmatites and coarse grained variants						
				are all common features.						
				At 42.8, a 2-3m thick Poimena inclusion. Pink-green and						
				highly altered with numerous brown sericite veinlets.						
45.5	53.3	7.8	100	Topazised? alkali granite. Very pale green, equigranular with						

473049

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 169 Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No	From	To	Rec. %	Sn	wt%
				no trace of micas. A sugary texture. Weakly fractured with limonitic coatings. Similar grainsize variant to above also occur.						
53.3	57.8	4.5	100	A Poimena inclusion. An abrupt upper contact with a coarse-medium grained very pink-green strongly altered granite. Unfractured and not veined. The lower contact is angular at 40° CA.						
57.8	85.0	27.2	100	Weakly greisened alkali granite. Patchy altered, with dark and light green zones. Micas are partially replaced. The top 0.5m is silicified (in contact with above). Fractures are rare, some are covered in bright purple fluorite.	4619	57.8	58.8	100	0.01	
					4620	58.8	59.8	100	<0.01	
					4621	59.8	60.8	100	<0.01	
					4622	60.8	61.8	100	0.02	
				At 74.4 a bleached silicified portion of granite for 0.4m	4623	61.8	62.8	100	0.01	
				then at 75.7 a 0.4m section of dark green-sericite-very	4624	62.8	63.8	100	0.01	
				fine grained.	4625	63.8	64.8	100	0.01	
				Below 76.0, the alteration becomes highly variable on a	4626	64.8	65.8	100	0.01	
				0.5m scale, with zones of:- topazised? granite very dark	4627	65.8	66.8	100	0.01	
				green sericitised granite and pervasively silicified/	4628	66.8	67.8	100	0.01	
				sericitised granite.	4629	67.8	68.8	100	0.01	
					4630	68.8	69.8	100	0.01	
85.0	87.1	2.1	100	Poimena inclusion. Strongly altered, weakly fractured with	4631	69.8	70.8	100	0.01	
				several thin (5cm) pegmatites. Colours include-pink, green	4632	70.8	71.8	100	<0.01	
				and dark grey. Also minor intrusions of alkali granite occur.	4633	71.8	72.8	100	0.01	
					4634	72.8	73.8	100	<0.01	
87.1	110.3	23.2	100	Alkali granite. The top 0.6m is topazised? pale green with	4635	73.8	74.8	100	0.01	
				no mica pseudomorphs. This is underlain by weakly greisened,	4636	74.8	75.8	100	0.01	
				possibly slightly topazised granite. This unit is unusual	4637	75.8	76.8	100	<0.01	
				because all the minerals, quartz, feldspars and micas are	4638	76.8	77.8	100	0.01	
				elongated in a direction 45° CA. Weakly fractured with abundant	4639	77.8	78.8	100	0.01	
				green sericite and purple fluorite coatings.	4640	78.8	79.8	100	0.01	
				At 104.1 a 30cm crumbly crush zone of white clays.	4641	79.8	80.8	100	0.01	
				At 108.4 a 20cm Poimena xenolith-pink green, highly altered	4642	80.8	81.8	100	0.01	
				and surrounded by an alteration halo (narrow) within the	4643	81.8	82.8	100	0.01	
				alkali granite.	4644	82.8	83.8	100	<0.01	
					4645	83.8	84.8	100	<0.01	

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GOLD FIELDS EXPLORATION PTY. LIMITED

DLV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 169 Page: 4.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				110.3 CONTACT
				110.3-146.5 WEAKLY ALTERED, MEDIUM GRAINED, PORPHYRITIC POIMENA
				ADAMELLITE WITH MINOR ALKALI GRANITE INTRUSIONS.
110.3	146.5	36.2	100	Medium grained, porphyritic pink-grey granite. Weakly altered
				with minor sericite developed. Pink pegmatites and aplites
				are common (a 0.8m thick one at 115.0). Weakly fractured.
				Pink feldspar phenocrysts up to 2cm across occur. The top
				3.0m also contains several thin alkali granite intrusions.
				These become ever thicker (approx. 0.5m) and more frequent
				with depth, as do the pegmatites (usually associated with
				the alkali granites).
				Between 127.2 and 131.0, approximately 50% of the core is
				alkali granite. Relatively fresh with altered zones occuring
				on the contacts.
				END OF HOLE 146.5m.

ASSAY DATA Sample No.	From	To	Rec. %	Sn	wt%
4646	84.8	85.8	100	0.01	
4647	85.8	86.8	100	<0.01	
4648	86.8	87.8	100	0.01	
4649	87.8	88.8	100	0.01	
4650	88.8	89.8	100	0.01	
4651	89.8	90.8	100	0.01	
4652	90.8	91.8	100	0.01	
4653	91.8	92.8	100	0.01	
4654	92.8	93.8	100	0.01	
4655	93.8	94.8	100	<0.01	
4656	94.8	95.8	100	0.01	
4657	95.8	96.8	100	0.01	
4658	96.8	97.8	100	<0.01	
4659	97.8	98.8	100	<0.01	
4660	98.8	99.8	100	<0.01	
4661	99.8	100.8	100	0.01	
4662	100.8	101.8	100	<0.01	
4663	101.8	102.8	100	0.01	
4664	102.8	103.8	100	<0.01	
4665	103.8	104.8	100	<0.01	
4666	104.8	105.8	100	<0.01	
4667	105.8	106.8	100	<0.01	
4668	1060.8	107.8	100	<0.01	
4669	107.8	108.8	100	<0.01	
4670	108.8	109.8	100	0.01	
4671	109.8	110.8	100	0.01	

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

473051

HOLE NO.: B.T. 170
STATE : TASMANIA

ULV. PRESS

PROJECT	BLUE TIER
DESIGNED BY	A.J. CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	3/8/83
COMPLETED	5/8/83

PURPOSE

To test for extensions of the mineralisation in the Moon Mine Area.

LOG SUMMARY / GENERAL COMMENTS

At 30.0m, a weakly altered/mildly greisened sequence of Alkali Granite was intersected. Significant assays are recorded below.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Sn	wt%											COMMENTS
30.0	106.0	<0.01												

LOCATION

NORTHING	5439248
EASTING	584321
R.L.	723.8
GRID	A.M.G.
LENGTH	106.5

HOLE CONDITION

SIZE Hole Size	SIZE Depth
TRICONE	0.0-14.0
BQ	14.0-106.5

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole left open with a black polythene marker.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

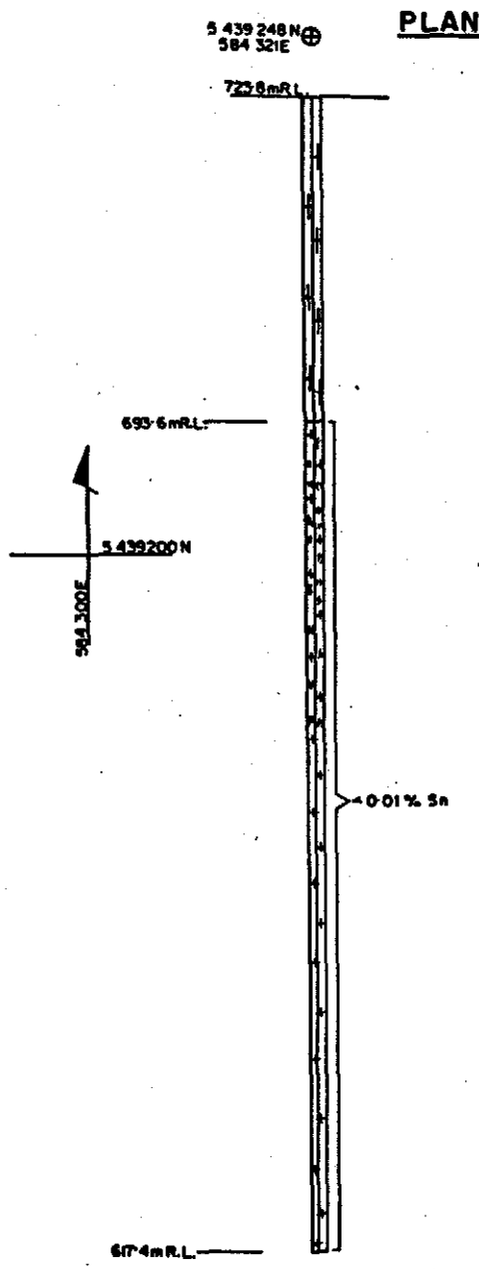
SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total
0.0		90.0	0.0	24.6	24.6	24.6	699.2	0.0	0.0
49.2		89.0	24.6	76.2	51.6	51.5	647.7	0.9	0.9
103.2		90.0	76.2	106.5	30.3	30.3	617.4	0.0	0.9

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total

HOLE NO. BT 170

GOLD FIELDS EXPLORATION PTY. LIMITED
DIAMOND DRILL HOLE PLOT

SCALE 1:



473053

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GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 170 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				SUMMARISED LOG
0.0	30.0	30.0		UNALTERED, MEDIUM GRAINED, PORPHYRITIC POIMENA ADAMELLITE.
30.0				CONTACT.
30.0	106.5	76.5		INCIPIENTLY AND WEAKLY ALTERED, MEDIUM GRAINED, EQUIGRANULAR ALKALI GRANITE.
				DETAILED LOG
				0.0-30.0 UNALTERED, MEDIUM GRAINED POIMENA ADAMELLITE.
0.0	30.0	16.0	100	Medium grained, porphyritic grey granite. Unaltered with pink (hematitic) feldspar phenocrysts up to 2cm across (rarely 3.5cm). Weakly fractured. The granite is mildly weathered with limonite stained fractures down to 26.0m. At 26.81 a 10cm thick very coarse grained vuggy quartz pegmatite overlies 10cm of mildly greisened alkali granite. Below 29.4, 0.3m of pale yellow strongly sericitised, soft granite occurs and this is in contact with 0.3 of silicified but weakly altered granite. Another abrupt contact occurs with the unit below.
				30.0 CONTACT
				30.0-106.5 WEAKLY ALTERED ALKALI GRANITE.
30.0	58.5	28.5	100	Pale green weakly greisened and sericitised alkali granite. A variety of alteration styles occur with green sericitised micas and feldspars showing a range of intensities of replacement. Yellow-brown sericite is also common. Mica pseudomorphs are always present. Unfractured.
				At 47.8, a thin 2mm discontinuous veinlet of dark mica is enveloped by 30cm of bleached silicified altered granite.
				At 54.9, 1.0m of highly silicified colourless granite with

ASSAY DATA Sample No.	From	To	Rec. %	Sn	wt%
4725	30.0	31.0	100	<0.01	
4726	31.0	32.0	100	<0.01	
4727	32.0	33.0	100	<0.01	
4728	33.0	34.0	100	<0.01	
4729	34.0	35.0	100	<0.01	
4730	35.0	36.0	100	<0.01	
4731	36.0	37.0	100	<0.01	
4732	37.0	38.0	100	<0.01	
4733	38.0	39.0	100	<0.01	
4734	39.0	40.0	100	<0.01	
4735	40.0	41.0	100	<0.01	
4736	41.0	42.0	100	<0.01	
4737	42.0	43.0	100	<0.01	
4738	43.0	44.0	100	<0.01	
4739	44.0	45.0	100	<0.01	
4740	45.0	46.0	100	<0.01	
4741	46.0	47.0	100	<0.01	
4742	47.0	48.0	100	<0.01	
4743	48.0	49.0	100	<0.01	
4744	49.0	50.0	100	<0.01	
4745	50.0	51.0	100	<0.01	
4746	51.0	52.0	100	<0.01	
4747	52.0	53.0	100	<0.01	
4748	53.0	54.0	100	<0.01	
4749	54.0	55.0	100	<0.01	
4750	55.0	56.0	100	<0.01	
4801	56.0	57.0	100	<0.01	
4802	57.0	58.0	100	<0.01	
4803	58.0	59.0	100	<0.01	
4804	59.0	60.0	100	<0.01	
4805	60.0	61.0	100	<0.01	
4806	61.0	62.0	100	<0.01	
4807	62.0	63.0	100	<0.01	
4808	63.0	64.0	100	<0.01	
4809	64.0	65.0	100	<0.01	

GOLD FIELDS EXPLORATION PTY. LIMITED

VLV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 170 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				brown micas occurs.
58.5	106.5	48.0	100	Incipiently altered alkali granite. Pale yellow-white in colour with pseudomorphed (by sericite) micas sparsely scattered randomly throughout. A sugary granjtic texture of white and colourless quartz feldspar is developed. Medium grained and unfractured.
				At 61.5, 1.0m of highly silicified colourless granite with brown micas occurs.
				END OF HOLE 106.5m.

ASSAY DATA Sample No.	From	To	Rec. %	Sn	wt%
4810	65.0	66.0	100	<0.01	
4811	66.0	67.0	100	<0.01	
4812	67.0	68.0	100	<0.01	
4813	68.0	69.0	100	<0.01	
4814	69.0	70.0	100	<0.01	
4815	70.0	71.0	100	<0.01	
4816	71.0	72.0	100	<0.01	
4817	72.0	73.0	100	<0.01	
4818	73.0	74.0	100	<0.01	
4819	74.0	75.0	100	<0.01	
4820	75.0	76.0	100	<0.01	
4821	76.0	77.0	100	<0.01	
4822	77.0	78.0	100	<0.01	
4823	78.0	79.0	100	<0.01	
4824	79.0	80.0	100	<0.01	
4825	80.0	81.0	100	<0.01	
4826	81.0	82.0	100	<0.01	
4827	82.0	83.0	100	<0.01	
4828	83.0	84.0	100	<0.01	
4829	84.0	85.0	100	<0.01	
4830	85.0	86.0	100	<0.01	
4831	86.0	87.0	100	<0.01	
4832	87.0	88.0	100	<0.01	
4833	88.0	89.0	100	<0.01	
4834	89.0	90.0	100	<0.01	
4835	90.0	91.0	100	<0.01	
4836	91.0	92.0	100	<0.01	
4837	92.0	93.0	100	<0.01	
4838	93.0	94.0	100	<0.01	
4839	94.0	95.0	100	<0.01	
4840	95.0	96.0	100	<0.01	
4841	96.0	97.0	100	<0.01	
4842	97.0	98.0	100	<0.01	
4843	98.0	99.0	100	<0.01	
4844	99.0	100.0	100	<0.01	

473055

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE LOG AND ASSAY DATA

PROJECT: BLUE TIER

HOLE NUMBER: B.T. 170

Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION

ASSAY DATA Sample No.	From	To	Rec. %	Sn	wt%
4845	100.0	101.0	100	<0.01	
4846	101.0	102.0	100	<0.01	
4847	102.0	103.0	100	<0.01	
4848	103.0	104.0	100	<0.01	
4849	104.0	105.0	100	<0.01	
4850	105.0	106.0	100	<0.01	

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

473056

HOLE NO. : BT 171
STATE : TASMANIA

DLV. PRESS

PROJECT	BLUE TIER
DESIGNED BY	A.J. CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	8-8-83
COMPLETED	11-8-83

PURPOSE

To find concealed stanniferous greisen in the North Anchor Area.

LOG SUMMARY / GENERAL COMMENTS

103.7m of Dg-fp containing veinlets of Cu-bearing minerals was found overlying mildly greisened Alkali Granite. Significant assays for both rock types are given below.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Sn	Cu	(Wt%)	Mo	Ag	(ppm)							COMMENTS
8.0	57.0	<0.01	0.12		<0.01	6								
103.7	140.0	<0.01												

LOCATION

NORTHING	5436214
EASTING	585107
R.L.	464.8
GRID	A.M.G.
LENGTH	140.0

HOLE CONDITION

SIZE Hole Size	SIZE Depth
TRICONE	0.0-8.0
BQ	8.0-140.0

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole left open with a black polythene marker.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total	SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total
0.0	330	79.0	0.0	19.6	19.6	19.2	445.6	3.7	3.7										
39.2	330	79.0	19.6	63.2	43.6	42.8	402.8	8.3	12.0										
87.2	332	79.5	63.2	111.2	48.0	47.2	355.6	8.8	20.8										
135.2	332	79.0	111.2	140.0	28.8	28.3	327.3	5.5	26.3										

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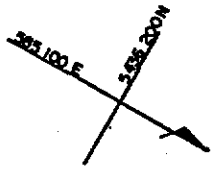
473057

HOLE NO. BT 171

GOLD FIELDS EXPLORATION PTY. LIMITED

DIAMOND DRILL HOLE PLOT



PLAN

5 436 214 N
585 107 E

5436 237 N
585 095 E

DIP PROFILE

464·8 m R.L.

456·9 m R.L.

< 0·01 % Sn
0·12 % Cu
< 0·01 % Mo
8ppm Ag

362·8 m R.L.

< 0·01 % Sn

327·3 m R.L.

SCALE 1:

5 cm

473058

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GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 171 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				SUMMARISED LOG
0.0	103.7	100.7		FINE GRAINED, NON-PORPHYRITIC DG-FP, VARIABLY BUT USUALLY WEAKLY
				ALTERED WITH NUMEROUS VERTICAL VEINLETS OF QUARTZ, SERICITE,
				BORNITE AND CHALCOPYRITE.
103.7				CONTACT
103.7	140.0	36.3		MEDIUM GRAINED, EQUIGRANULAR ALKALI GRANITE. OVERALL MILDLY ALTER-
				ED WITH SOME STRONGLY GREISENED PATCHES DEVELOPED. THE UPPER
				CONTACT IS MARKED BY AN ALTERED ZONE OF MIXED LITHOLOGIES;
				ALKALI GRANITE, PEGMATITE AND APLITE.
				DETAILED LOG
				0.0-103.7 FINE GRAINED, WEAKLY ALTERED DG-FP ADAMELLITE WITH
				NUMEROUS QUARTZ AND QUARTZ-SULPHIDE VEINS.
0.0	8.0			Tricone - no core recovered.
8.0	15.0	7.0	100	Pink-grey, fine grained, very weakly porphyritic granite.
				Moderately altered (yellow sericitised feldspars are common)
				and weathered (abundant limonite staining). Highly fractured.
				Typical granitic texture with a few feldspar phenocrysts up to
				1m across. Minor quartz veining.
				At 13.5, a 0.5m long, 2mm wide, quartz-mica-bornite-veinlet
				at 0° CA.
15.0	103.7	85.7	97	Unweathered, grey, fine-grained, almost non-porphyritic granite.
				Very weakly altered with occasional pink-yellow stronger altered
				patches. These usually enclose quartz-chalcopyrite-bornite veins
(27.2-30.2, 2.0m recovered)				which are abundant. Sericite filled fractures are quite common.
				Hematite (red) and malachite(?) (green) also occur as fracture
				coatings. Thin aplite/pegmatites (<5cm thick) of pink feldspar

Sample No.	From	To	Rec. %	Sn (wt%)	Cu (wt%)		Ag (ppm)	Mo (ppm)				
4791	8.0	9.0	100	0.01	0.01		1	<1				
4792	9.0	10.0	100	<0.01	0.03		<1	<1				
4793	10.0	11.0	100	0.01	0.01		<1	<1				
4794	11.0	12.0	100	0.01	0.03		2	<.01				
4795	12.0	13.0	100	<0.01	0.02		1	<.01				
4796	13.0	14.0	100	0.01	0.08		2	<.01				
4797	14.0	15.0	100	0.01	0.08		3	<.01				
4798	15.0	16.0	100	0.01	0.01		1	<.01				
4799	16.0	17.0	100	0.01	0.08		4	<.01				
4800	17.0	18.0	100	<0.01	0.05		4	<.01				
4851	18.0	19.0	100	0.01	0.07		2	<.01				
4852	19.0	20.0	100	<0.01	0.23		14	<.01				
4853	20.0	21.0	100	0.01	0.31		10	<.01				
4854	21.0	22.0	100	0.01	0.01		2	<.01				
4855	22.0	23.0	100	0.01	0.01		<1	<.01				
4856	23.0	24.0	100	<0.01	<0.01		<1	<.01				
4857	24.0	25.0	100	0.01	0.13		4	<.01				
4858	25.0	26.0	100	0.02	0.16		6	<.01				
4859	26.0	27.0	100	0.01	0.01		1	<.01				
4860	27.0	28.0	100	0.02	0.10		5	<.01				
4861	28.0	29.0	100	0.01	0.10		4	<.01				
4862	29.0	30.0	100	<0.01	0.15		6	<.01				
4863	30.0	31.0	100	0.01	0.06		2	<.01				
4864	31.0	32.0	100	0.01	0.06		3	<.01				
4865	32.0	33.0	100	0.01	0.16		6	<.01				
4866	33.0	34.0	100	<0.01	0.03		1	<.01				
4867	34.0	35.0	100	<0.01	0.04		3	<.01				
4868	35.0	36.0	100	<0.01	0.02		1	<.01				
4869	36.0	37.0	100	<0.01	<0.01		<1	<.01				
4870	37.0	38.0	100	0.01	0.29		17	<.01				
4871	38.0	39.0	100	<0.01	<0.01		1	<.01				
4872	39.0	40.0	100	<0.01	0.05		3	.01				
4873	40.0	41.0	100	0.01	0.12		5	<.01				
4874	41.0	42.0	100	0.01	0.17		7	<.01				
4875	42.0	43.0	100	0.01	0.10		4	<.01				

473059

GOLD FIELDS EXPLORATION PTY. LIMITED

DLV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 171 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				and white quartz are found below 30.0. The sulphide veins are
				all between 0°-20° CA. The granite becomes slightly coarser
				grained and slightly more porphyritic in places.
				Below 57.0, the quartz-sulphide veins are absent, and the core
				is less fractured (unfractured). Also it gradually becomes
				unaltered, apart from 0.5m thick zones of increased fracturing
				and sericite development between 80.0 and 89.0. Beneath this,
(86.0-89.0, 1.0m recovered)				the granite is unaltered again, with minor quartz veining.
				After 100.5, the quartz veining with associated alteration
				haloes increases, along with increased sericite development.
103.70				CONTACT
				103.70-140.0 MILDLY ALTERED, MEDIUM GRAINED ALKALI GRANITE.
				AN APLITIC/PEGMATITIC COMPLEX IS DEVELOPED ON THE UPPER CONTACT.
103.70	104.8	1.1	100	A mixed greisened alkali granite - coarse grained pegmatite -
				layered (80° CA) aplitic complex. Green sericitised alkali gran-
				ite with pseudomporphedmicas has horizons of 10cm thick coarse
				(3 cm) grained feldspar (pink), quartz and biotite pegmatite.
				Aplitic (very fine grained) phases of alkali granite also occur.
				Fractures are rare, with sericite-fluorite coatings.
104.8	140.0	35.2	100	Patchily but overall weakly altered alkali granite. Medium grain-
				ed and non-porphyritic, it is weakly and moderately sericitised.
				Large (several metre) zones of a dark green siliceous greisen
				occur randomly. Narrower (approx. 0.5m) zones of bleached
				granite with no micas or pseudomoprhs developed are less common.
				The core is unfractured and unveined.
				At 125.1, a 0.4m long intergrowth of green sericite and white
				quartz. Sinuous in an irregular vein-like intergrowth.
				At 135.7, another such intergrowth occurs, with purple
				fluorite developed as well.
				The last 20.0m of this unit does not contain any strong alter-
				ation zones and exhibits a uniform weakly altered state.
				END OF HOLE 140.0

ASSAY DATA

Sample No.	From	To	Rec. %	Sn	Cu	(wt%)	Ag	Mo	(ppm)
4876	43.0	44.0	100	0.01	0.23		11	<.01	
4877	44.0	45.0	100	0.01	0.11		5	<.01	
4878	45.0	46.0	100	<0.01	<0.01		<1	<.01	
4879	46.0	47.0	100	<0.01	0.69		36	<.01	
4880	47.0	48.0	100	<0.01	0.25		16	<.01	
4881	48.0	49.0	100	0.01	0.28		13	<.01	
4882	49.0	50.0	100	0.01	0.24		12	<.01	
4883	50.0	51.0	100	<0.01	0.32		17	<.01	
4884	51.0	52.0	100	<0.01	0.08		13	<.01	
4885	52.0	53.0	100	<0.01	0.01		1	<.01	
4886	53.0	54.0	100	0.01	0.21		23	<.01	
4887	54.0	55.0	100	<0.01	0.19		10	<.01	
4888	55.0	56.0	100	0.01	0.18		11	<.01	
4889	56.0	57.0	100	0.01	0.21		11	<.01	
4890	103.7	105.0	100	<0.01					
4891	105.0	106.0	100	0.01					
4892	106.0	107.0	100	<0.01					
4893	107.0	108.0	100	<0.01					
4894	108.0	109.0	100	<0.01					
4895	109.0	110.0	100	<0.01					
4896	110.0	111.0	100	<0.01					
4897	111.0	112.0	100	<0.01					
4898	112.0	113.0	100	<0.01					
4899	113.0	114.0	100	<0.01					
4900	114.0	115.0	100	<0.01					
4901	115.0	116.0	100	<0.01					
4902	116.0	117.0	100	<0.01					
4903	117.0	118.0	100	<0.01					
4904	118.0	119.0	100	<0.01					
4905	119.0	120.0	100	<0.01					
4906	120.0	121.0	100	<0.01					
4907	121.0	122.0	100	<0.01					
4908	122.0	123.0	100	<0.01					
4909	123.0	124.0	100	0.02					
4910	124.0	125.0	100	0.03					

GOLD FIELDS EXPLORATION PTY. LIMITED

473060

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 171 Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION

ASSAY DATA Sample No.	From	To	Rec. %	Sn
4911	125.0	126.0	100	0.03
4912	126.0	127.0	100	0.07
4913	127.0	128.0	100	0.02
4914	128.0	129.0	100	0.01
4915	129.0	130.0	100	0.01
4916	130.0	131.0	100	0.01
4917	131.0	132.0	100	<0.01
4918	132.0	133.0	100	<0.01
4919	133.0	134.0	100	<0.01
4920	134.0	135.0	100	<0.01
4921	135.0	136.0	100	<0.01
4922	136.0	137.0	100	<0.01
4923	137.0	138.0	100	<0.01
4924	138.0	139.0	100	<0.01
4925	139.0	140.0	100	<0.01

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

473061

HOLE NO.: BT 172
STATE : TASMANIA

DLV. PRESS

PROJECT	BLUE TIER
DESIGNED BY	A.J. CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	11-8-83
COMPLETED	16-8-83

PURPOSE

To find concealed stanniferous greisen in the North Anchor Area.

LOG SUMMARY / GENERAL COMMENTS

94m of Poimena Adamellite is underlain by 6.2m of strongly altered Dg-fp containing fluorite and molybdenite. At 100.2, approximately 6m of greisened alkali granite occurs. Assays are given below.

ASSAY SUMMARY

INTERVAL From	INTERVAL To													COMMENTS
94.0	141.0													No significant tin. (i.e. <0.01%Sn)

LOCATION

NORTHING	5436189
EASTING	584942
R.L.	467.5
GRID	A.M.G.
LENGTH	141.0

HOLE CONDITION

SIZE Hole Size	SIZE Depth
TRICONE	0.0-7.0
BQ	7.0-141.0

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole open, with a black polythene marker.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total
0.0	339	70.0.	0.0	45.1	45.1	42.4	425.1	15.4	15.4
90.2	336	70.0	45.1	114.2	69.2	65.0	360.1	23.7	39.1
138.2	339	70.5	114.2	141.0	28.8	27.2	332.9	9.1	48.2

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total

61

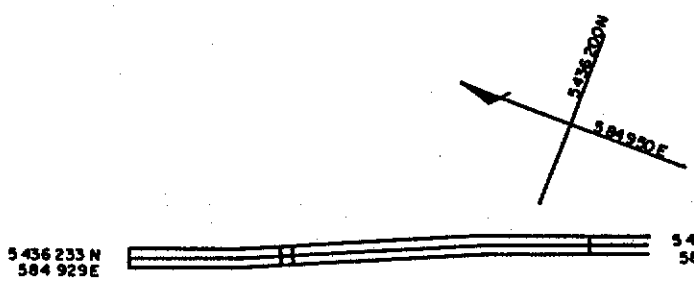
473062

HOLE NO. BT 172

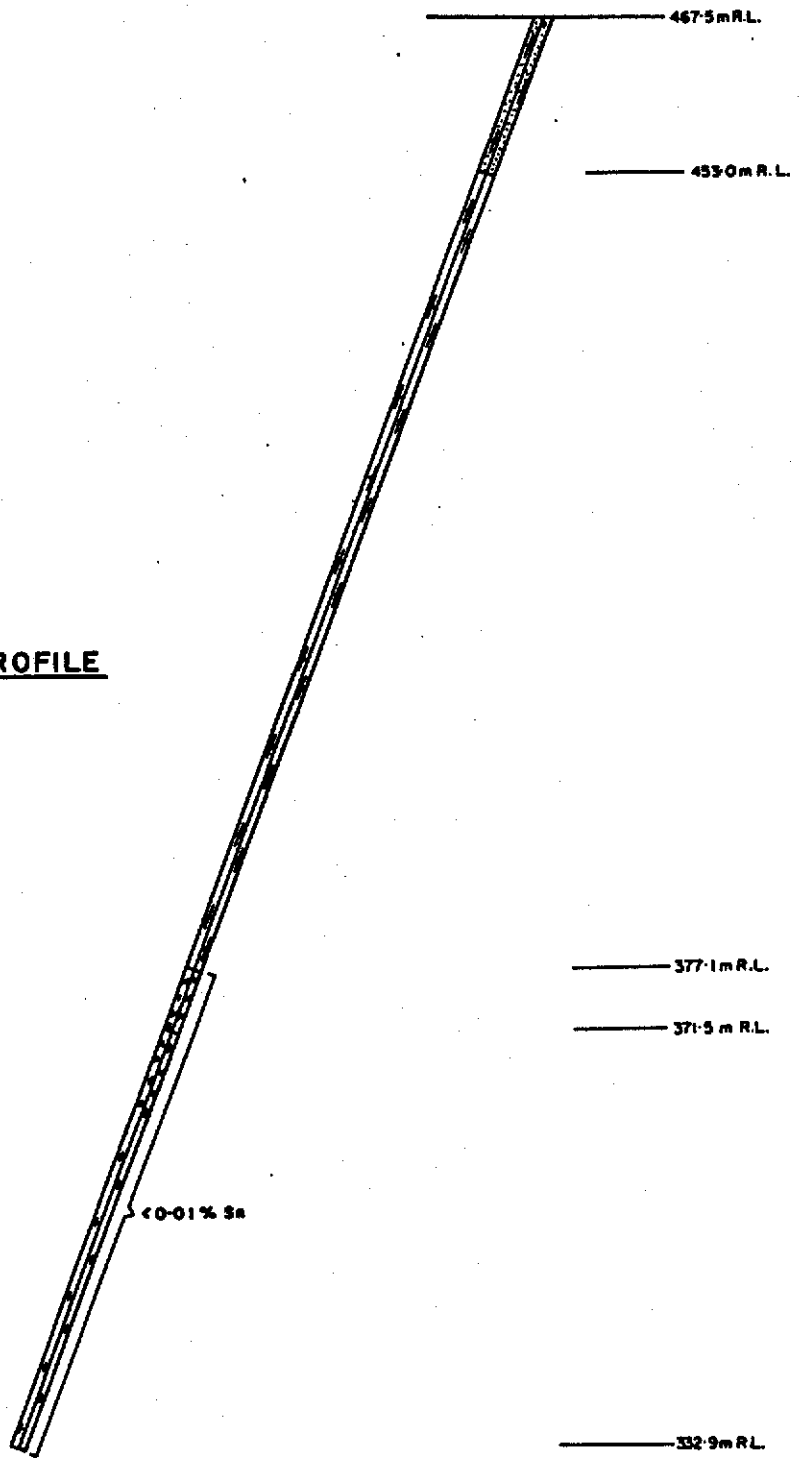
GOLD FIELDS EXPLORATION PTY. LIMITED

DIAMOND DRILL HOLE PLOT

PLAN



DIP PROFILE



SCALE 1:

5 cm

473063

62

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: Blue Tier

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 172 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				SUMMARISED LOG
0.0	94.0	94.0		VARIABLY BUT OVERALL WEAKLY ALTERED, MEDIUM GRAINED POIMENA ADAMELLITE. HEMATITIC ALTERATION INCREASES WITH DEPTH.
94.0				CONTACT
94.0	100.2	6.2		HIGHLY ALTERED DG-FP GRANITE, WITH SILICIFIED ZONES AND ABUNDANT SERICITISATION.
100.2				CONTACT.
100.2	141.0	40.8		MEDIUM GRAINED, EQUIGRANULAR ALKALI GRANITE, INITIALLY MODERATELY GREISENED, THEN ONLY WEAKLY ALTERED.
				DETAILED LOG
				0.0-94.0 INCIPIENTLY ALTERED, MEDIUM GRAINED POIMENA ADAMELLITE
0.0	7.0			Tricone. No core recovered.
7.0	14.8	4.8	62	Moderately weathered, brown, medium grained granite. Porphyritic
(core lost between 10.0-13.0)				with large (up to 1.5cm) feldspar phenocrysts. Moderately and highly fractured with some crumbly zones. Brown limonite and white clays are common. Unaltered.
14.8	61.0	46.2	100	Unaltered, medium grey granite. Medium grained and porphyritic as above. Weakly fractured with a few crushed zones, quartz veinlets and sericite coated fractures. The crushed zones are characterised by a pink colouration in the feldspar phenocrysts (hematite) and the development of pale green sericite causing a softening of the rock. The granite around these zones is pink up to 3-4m away.
				At 31.1 and 31.8, two 0.2m thick, flat lying, weakly greisened alkali granite intrusions occur.

ASSAY DATA Sample No.	From	To	Rec. %

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: Blue Tier

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 172 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	Sample No.	From	To	Rec. %	ASSAY DATA (ppm) Sn
61.0	94.0	33.0	100	A thick (2.0m) zone of strongly altered, pale pink-grey granite occurs. Pale grey sericite is common, pervasively with quartz. All trace of micas is gone. Patches of silicified (medium grey) granite are developed. Fractures are abundant with clay coatings. Below this altered zone, the medium grained, porphyritic granite is pink with no grey granite patches. Fractured and crushed zones are still common. Weakly altered overall, apart from a few minor sericitised zones (thin, 20-30cm) similar to the one described above. In places the granite is quite red with hematitic alteration well developed. Rare, thin (5cm) pegmatites and aplites occur. At 75.4, a 5cm thick pink-red pegmatite is underlain by 0.5m of dark grey silicified, sericitised aplitic granite. A moderately gradational contact with the unit below occurs.					
94.0				CONTACT	5451	94.0	95.0	100	60
					5452	95.0	96.0	100	30
				94.0-100.2 HIGHLY ALTERED DG-FP	5453	96.0	97.0	100	30
					5454	97.0	98.0	100	20
94.0	100.2	6.2	100	Highly altered, sericitised fine grained, non-porphyritic granite.	5455	98.0	99.0	100	20
				Much of the original texture has been replaced with a pervasive	5456	99.0	100.0	100	20
				silicification and sericitisation. Pale green and grey, moderately	5457	100.0	101.0	100	30
				fractured, in places crumbly and soft with sericite and rare	5458	101.0	102.0	100	30
				fluorite coating and infilling fractures. Molybdenite is also	5459	102.0	103.0	100	60
				present. Dark grey silicified zones and a few weakly altered	5460	103.0	104.0	100	40
				granite zones occur. Rare feldspar phenocrysts (2cm long) are	5461	104.0	105.0	100	30
				also discernable. Could be medium grained Poimena Adamellite	5462	105.0	106.0	100	50
				in places. No pegmatite on lower contact.	5463	106.0	107.0	100	20
					5464	107.0	108.0	100	20
00.2				CONTACT.	5465	108.0	109.0	100	20
					5466	109.0	110.0	100	10
				100.2-141.0 MODERATELY ALTERED, WEAKLY GREISENED ALKALI GRANITE.	5467	110.0	111.0	100	10
					5468	111.0	112.0	100	20
00.2	106.0	5.8	100	Moderately altered, greisened alkali granite. Medium grained,	5469	112.0	113.0	100	10

473065

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GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: Blue Tier

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 172

INTERVAL		RECOVERY		DESCRIPTION
From	To	m	%	
				equigranular and unfractured. Alteration is variable ranging from
				weakly sericitised to moderately greisened, in a patchy random
				fashion. Veins of quartz sericite and fluorite occur. The colours
				of the granite are pale green-cream to very dark green-grey.
106.0	141.0	35.0	100	Pale green-orange grey alkali granite. Very weakly altered
				(abrupt contact with the more altered phase above) and unfractured.
				Slightly more altered in some places (e.g. 121.2-122.5) it
				also contains a few rare quartz-fluorite veinlets. Some fractures
				(also rare) have fluorite coatings.
				END OF HOLE 141.0m

ASSAY DATA (ppm)

Sample No.	From	To	Rec. %	Sn
5470	113.0	114.0	100	20
5471	114.0	115.0	100	20
5472	115.0	116.0	100	20
5473	116.0	117.0	100	20
5474	117.0	118.0	100	10
5475	118.0	119.0	100	10
5476	119.0	120.0	100	20
5477	120.0	121.0	100	10
5478	121.0	122.0	100	70
5479	122.0	123.0	100	140
5480	123.0	124.0	100	20
5481	124.0	125.0	100	20
5482	125.0	126.0	100	20
5483	126.0	127.0	100	20
5484	127.0	128.0	100	10
5485	128.0	129.0	100	20
5486	129.0	130.0	100	20
5487	130.0	131.0	100	20
5488	131.0	132.0	100	20
5489	132.0	133.0	100	20
5490	133.0	134.0	100	30
5491	134.0	135.0	100	20
5492	135.0	136.0	100	20
5493	136.0	137.0	100	20
5494	137.0	138.0	100	20
5495	138.0	139.0	100	20
5496	139.0	140.0	100	20
5497	140.0	141.0	100	10

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

473066

HOLE NO: B.T. 173
STATE : TASMANIA

PROJECT	BLUE TIER
DESIGNED BY	A.J. CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	17-8-83
COMPLETED	19-8-83

PURPOSE

To find stanniferous greisen in the North Anchor Area.

LOG SUMMARY

Weakly altered Poimena Adamellite is underlain (at 88.0m) but weakly altered Alkali Granite.

GENERAL COMMENTS

ASSAY SUMMARY

INTERVAL From	INTERVAL To	COMMENTS
88.0	139.5	No significant tin. (i.e. <0.01%Sn)

LOCATION

NORTHING	5436112
EASTING	584928
R.L.	447.9
GRID	A.M.G.
LENGTH	139.5

HOLE CONDITION

SIZE Hole Size	SIZE Depth
TRICONE	0.0-28.0
BQ	28.0-139.5

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole open, with a black polythene marker.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D.Sin.Dip	R.L.	HORIZONTAL D.Cos.Dip	Prog.Total
0.0	276	55.0	0.0	22.6	22.6	18.5	429.4	13.0	13.0
45.2	277	57.0	22.6	66.2	43.6	36.6	392.8	23.8	36.8
87.2	278	57.0	66.2	111.2	45.0	37.7	355.1	24.5	61.3
135.2	278	57.0	111.2	139.5	28.3	23.7	331.4	15.4	76.7

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D.Sin.Dip	R.L.	HORIZONTAL D.Cos.Dip	Prog.Total

66

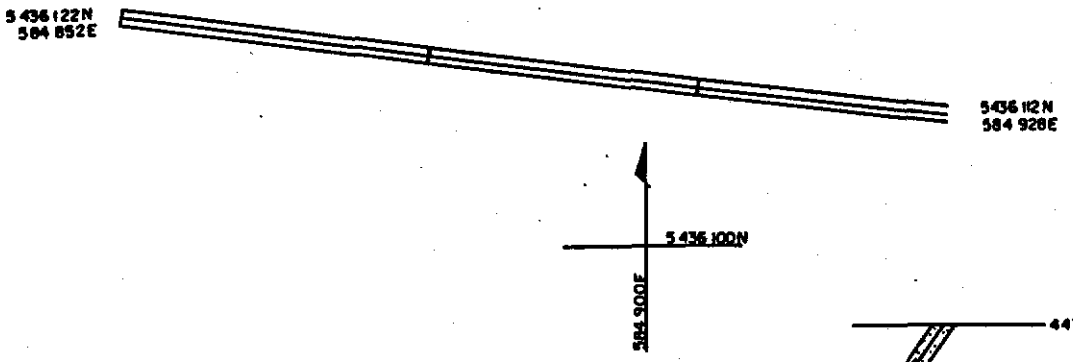
473067

HOLE NO. BT 173

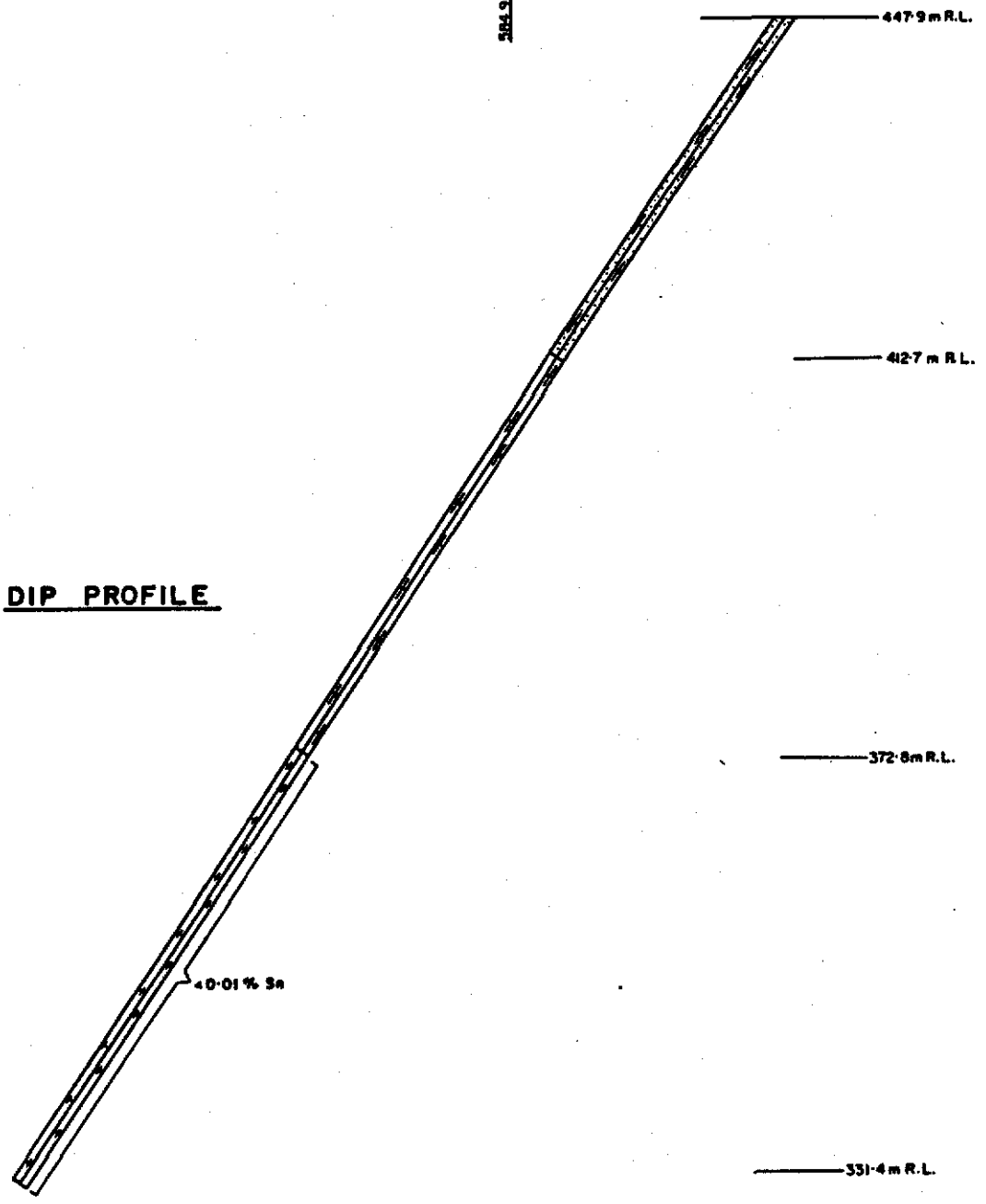
GOLD FIELDS EXPLORATION PTY. LIMITED

DIAMOND DRILL HOLE PLOT

PLAN



DIP PROFILE



SCALE 1:

5 cm

473068

GOLD FIELDS EXPLORATION PTY. LIMITED

V. PRESS

PROJECT: Blue Tier

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 173 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				SUMMARISED LOG
0.0	88.0	88.0		MEDIUM GRAINED, WEAKLY PORPHYRITIC POIMENA ADAMELLITE OVERALL UNALTERED WITH ZONES OF INCREASED ALTERATION AND FRACTURING.
88.0				CONTACT
88.0	139.5	51.5		MEDIUM GRAINED, EQUIGRANULAR ALKALI GRANITE. MODERATELY GREISENED AT FIRST, THEN WEAKLY ALTERED.
				DETAILED LOG
				0.0-88.0 WEAKLY ALTERED MEDIUM GRAINED POIMENA ADAMELLITE.
0.0	29.0			Tricone, no core recovered.
29.0	41.2	12.2	100	Medium grained, weakly porphyritic granite with rare feldspars up to 1.5cm across. Pinkish grey, unaltered and weakly fractured, the top 1.4m is weakly weathered with limonite stained joints. Becomes slightly more altered with depth.
41.2	44.7	3.5	100	Pale pink, moderately altered aplitic granite. Fine grained and non-porphyritic with hematitic-sericitised feldspars, quartz and a few unaltered biotites. Several quartz-sericite veinlets are surrounded by a 10-20cm thick zone of dark grey silicification (All at 30° CA).
				Between 44.0 and 44.7, a mildly brecciated sequence of quartz and pale brown sericite, mainly as veins, with a patch of soft, sericitised granite (medium grained).
44.7	65.5	20.3	98	Red-pink, medium grained, very weakly porphyritic granite. Highly altered in places with pervasive sericite producing a very soft-clay rock. The sericite in these patches (approx. 1.0m long) is pale green. Overall, moderately altered granite.
				20-30cm thick zones of dark grey silicification surround

ASSAY DATA Sample No.	From	To	Rec. %

GOLD FIELDS EXPLORATION PTY. LIMITED

DLV. PRESS PROJECT: Blue Tier

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 173 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA (ppm) Sample No	From	To	Rec. %	Sn
				quartz-muscovite veins at approx. 30° CA. Altered zones are					
				crumbly, otherwise fracturing is moderate.					
				At 45.8, 0.9m of green sericitised granite.					
53.7	57.2	(3.0m core recovered)		At 51.5, a 30cm thick pale pink aplite. Very fine grained.					
				At 57.2, a 70cm thick intrusion of dark green, fractured greisened alkali granite. A 20cm, intrusion also occurs at 59.1.					
				Small pegmatitic/aplitic complexes are developed on the contacts and the larger intrusion containing abundant sericite and accessory fluorite.					
				The degree of alteration and redness decreases below this to grade into the unit below.					
65.5	87.5	22.0	100	Grey, medium grained, weakly porphyritic granite. Several thin	5498	88.0	89.0	100	10
				(5cm) pegmatites and aplites occur, as do thin (10cm) crumbly,	5499	89.0	90.0	100	10
				sericitised zones and thin (10-20cm) silicified (dark grey)	5500	90.0	91.0	100	10
				zones surrounding quartz veinlets. In places, the granite becomes	5524	91.0	92.0	100	20
				fine grained (Dg-fp)but this is an irregular relationship.	5525	92.0	93.0	100	10
				Overall unaltered and incipiently fractured.	5526	93.0	94.0	100	20
				At 82.0, the pink (hematitic) colouration returns.	5527	94.0	95.0	100	30
					5528	95.0	96.0	100	40
87.5	88.0	0.5	100	A coarse grained pegmatite, consisting of pale pink feldspar,	5529	96.0	97.0	100	60
				colourless quartz and dark green sericitised micas, all very	5530	97.0	98.0	100	30
				coarse grained.	5531	98.0	99.0	100	30
					5532	99.0	100.0	100	20
88.0				CONTACT	5533	100.0	101.0	100	20
					5534	101.0	102.0	100	30
				88.0-139.5 VARIABLY BUT WEAKLY ALTERED AND GREISENED ALKALI	5535	102.0	103.0	100	30
				GRANITE.	5536	103.0	104.0	100	30
					5537	104.0	105.0	100	30
88.0	88.8	0.8	100	Medium grained, equigranular, weakly altered alkali granite	5538	105.0	106.0	100	20
				with a finer grained, more altered, banded (at 50° CA) sequence.	5539	106.0	107.0	100	20
				Unfractured.	5540	107.0	108.0	100	20
					5541	108.0	109.0	100	20
88.8	106.0	18.2	100	Variably but overall weakly altered alkali granite. Predominantly,	5542	109.0	110.0	100	20
				pale green-cream in colour and only slightly altered, with	5543	110.0	111.0	100	20

473070

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: Blue Tier

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 173 Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				patches up to 1.5m long of dark green greisened granite. Unfractured.
106.0	139.5	33.0	99	Very weakly altered, pale cream alkali granite with green (dark) sericitised micas. Unfractured.
(118.8	122.3,	3.0m recovered)		At 112.0, 10.3m of fractured granite. Sericite (pale green-white) occurs as fracture infillings. No increase in alteration occurs.
				Below this fractured zone, the granite becomes slightly more green, with slightly more sericite replacing micas.
				Between 133.0 and 139.5, the sericite filled fractures return, producing a more incompetent rock.
				END OF HOLE 139.5m.

ASSAY DATA (ppm)

Sample No	From	To	Rec. %	Sn
5544	111.0	112.0	100	10
5545	112.0	113.0	100	20
5546	113.0	114.0	100	20
5547	114.0	115.0	100	10
5548	115.0	116.0	100	10
5549	116.0	117.0	100	10
5550	117.0	118.0	100	20
6001	118.0	119.0	100	20
6002	119.0	120.0	100	20
6003	120.0	121.0	100	20
6004	121.0	122.0	100	20
6005	122.0	123.0	100	20
6006	123.0	124.0	100	10
6007	124.0	125.0	100	20
6008	125.0	126.0	100	10
6009	126.0	127.0	100	20
6010	127.0	128.0	100	10
6011	128.0	129.0	100	20
6012	129.0	130.0	100	20
6013	130.0	131.0	100	20
6014	131.0	132.0	100	20
6015	132.0	133.0	100	20
6016	133.0	134.0	100	20
6017	134.0	135.0	100	20
6018	135.0	136.0	100	<10
6019	136.0	137.0	100	<10
6020	137.0	138.0	100	<10
6021	139.0	139.5	100	<10

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

473071

HOLE NO.: BT 174
STATE : TASMANIA

PROJECT	BLUE TIER
DESIGNED BY	A.J.CARTWRIGHT
LOGGED BY	A.J.CARTWRIGHT
COMMENCED	22-8-83
COMPLETED	24-8-83

PURPOSE

To find stanniferous greisen in the North Anchor Area.

LOG SUMMARY

114.0m of Poimena Adamellite was drilled before a contact with weakly altered Alkali Granite was obtained.

GENERAL COMMENTS

ASSAY SUMMARY

INTERVAL From	INTERVAL To													COMMENTS
114.0	140.0	No significant tin (i.e. <0.01% Sn)												

LOCATION

NORTHING	5436107
EASTING	585149
R.L.	440.6
GRID	A.M.G.
LENGTH	140.0

HOLE CONDITION

SIZE Hole Size	SIZE Depth
TRICONE	0.0-18.0
BQ	18.0-140.0

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole open, with a black polythene marker.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D.Sin.Dip	R.L.	HORIZONTAL D.Cos.Dip	Prog.Total
0.0		90.0	0.0	33.1	33.1	33.1	407.5	0.0	0.0
66.2	316	87.0	33.1	102.0	68.9	68.8	338.7	3.6	3.6
138.2	279	87.5	102.0	140.0	38.0	38.0	300.7	1.7	5.3

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D.Sin.Dip	R.L.	HORIZONTAL D.Cos.Dip	Prog.Total

71

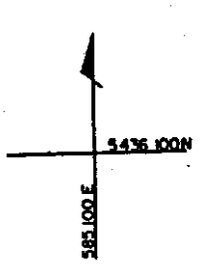
473072

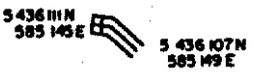
HOLE NO. BT 174

GOLD FIELDS EXPLORATION PTY. LIMITED

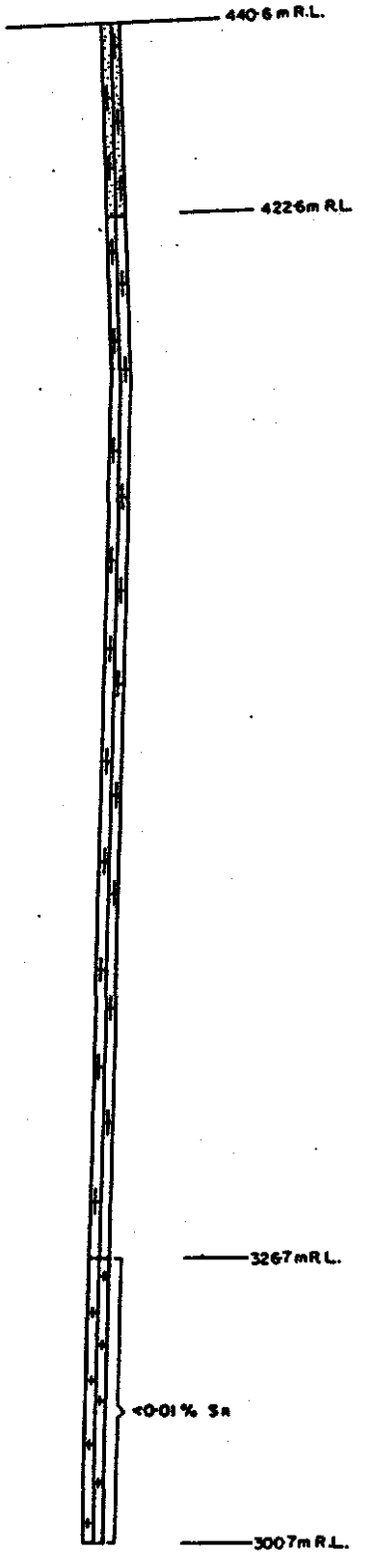
DIAMOND DRILL HOLE PLOT

PLAN





DIP PROFILE



SCALE 1

5 cm

GOLD FIELDS EXPLORATION PTY. LIMITED

473073

VLV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 174 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				SUMMARISED LOG
0.0	114.0	114.0		MEDIUM GRAINED, PORPHYRITIC POIMENA ADAMELLITE WITH NUMEROUS APLITES AND PEGMATITES. BECOMES HEMATITIC AND SERICITIC WITH DEPTH.
114.0	140.0	26.0		WEAKLY ALTERED, MEDIUM GRAINED, EQUIGRANULAR ALKALI GRANITE. BECOMES SERICITISED WITH DEPTH.
				DETAILED LOG.
				0.0-114.0 MEDIUM GRAINED, PORPHYRITIC POIMENA ADAMELLITE WITH NUMEROUS APLITES AND PEGMATITES.
0.0	18.0			Tricone, no core recovered.
18.0	83.5	65.5	100	Grey, medium grained, porphyritic granite. Unaltered, unweathered and incipiently fractured-slightly blocky in places. White feldspar phenocrysts up to 2cm across rarely occur. More common are elongate phenocrysts 1.0cm long. Smaller feldspars have a pale green hue. Patches with pink hematitic feldspars also occur. This granite contains several thin (>10cm) fine grained aplites, rare quartz-sericite veinlets and their narrow alteration halos, together with fractured zones (weakly developed) and associated sericitisation. At 20.5, a 1.5m section of pale orange altered granite with green sericitised micas and orange feldspars. This is underlain by a 0.5m pegmatite of similar but very coarse grained phases. Between 57.4 and 58.7, between 62.0 and 64.0, highly fractured zones of crumbly, soft rock occur. Sericite is common. A strongly developed sericitised zone surrounds the lower crush zones, approximately 4.0m either side. Another altered zone (sericitised) exists between 70.0 and 74.0. Between 78.5 and 82.5, another altered zone surrounding a central crush zone occurs.

ASSAY DATA Sample No.	From	To	Rec. %

473074

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 174 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
83.5	114.0	30.5	100	Red-grey medium grained, weakly altered, porphyritic granite.
				Same as above, with all the feldspars hematitic. More fractured
				and sericite is more abundant. Medium-coarse grained pegmatites
				and stronger altered granite sections occur, as do patches of
				biotite accumulations. The red-pink decreases with depth to pro-
				duce a grey but altered granite.
				At 113.7, a 30cm thick complex zone of aplite and pegmatite.
				Dark green sericite, black biotite, colourless quartz and pale
				orange feldspars occur as both coarse and fine grained phases.
				Accessory purple fluorite also occurs.
114.0				CONTACT.
				114.0-140.0 WEAKLY ALTERED, MEDIUM GRAINED ALKALI GRANITE.
114.0	118.7	4.7	100	Pale orange-grey, incipiently altered, medium grained equigranul-
				ar alkali granite. Most micas are unaltered, and the feldspars
				are pale orange. Unfractured with a few rare fractures having
				fluorite coatings.
118.7	140.0	21.3	100	White-green, alkali granite. Medium-fine grained, equigranular.
				This granite is weakly altered, being quite strongly sericitised.
				White, clayey sericite occurs pervasively and as veins, producing
				a soft rock, moderately fractured with several crushed zones.
				Pale green sericite replaces micas. Pale brown sericite-white
				quartz veins are also common.
				END OF HOLE 140.0

ASSAY DATA (ppm)

Sample No.	From	To	Rec. %	Sn
6022	114	115	100	10
6023	115	116	100	10
6024	116	117	100	20
6025	117	118	100	20
6026	118	119	100	20
6027	119	120	100	10
6028	120	121	100	20
6029	121	122	100	30
6030	122	123	100	30
6031	123	124	100	30
6032	124	125	100	20
6033	125	126	100	30
6034	126	127	100	20
6035	127	128	100	20
6036	128	129	100	30
6037	129	130	100	20
6038	130	131	100	20
6039	131	132	100	20
6040	132	133	100	20
6041	133	134	100	70
6042	134	135	100	230
6043	135	136	100	50
6044	136	137	100	30
6045	137	138	100	20
6046	138	139	100	30
6047	139	140	100	20

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

473075

HOLE NO.: B.T. 175
STATE : TASMANIA

ULV. PRESS

PROJECT	BLUE TIER
DESIGNED BY	A.J. CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	25-8-83
COMPLETED	30-8-83

PURPOSE

To find stanniferous greisen in the North Anchor Area.

LOG SUMMARY / GENERAL COMMENTS

Quite strongly altered and greisened Alkali Granite was encountered at 30.3 under a well developed pegmatite. Molybdenite and fluorite were observed. The degree of alteration lessened with depth. Significant assays are recorded below.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	COMMENTS
28.0	95.0	No significant Sn, Cu, Ag or Mo.

LOCATION

NORTHING	5435976
EASTING	585139
R.L.	392.0
GRID	A.M.G.
LENGTH	101.0

HOLE CONDITION

SIZE Hole Size	SIZE Depth
TRICONE	0.0-27.0
BQ	27.0-101.0

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole open, with a black polythene marker.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D. Sin. Dip	VERTICAL R.L.	HORIZONTAL D. Cos. Dip	HORIZONTAL Prog. Total
0.0		90.0	0.0	24.1	24.1	24.1	367.9	0.0	0.0
48.2	124	87.5	24.1	101.0	76.9	76.8	291.1	3.4	3.4

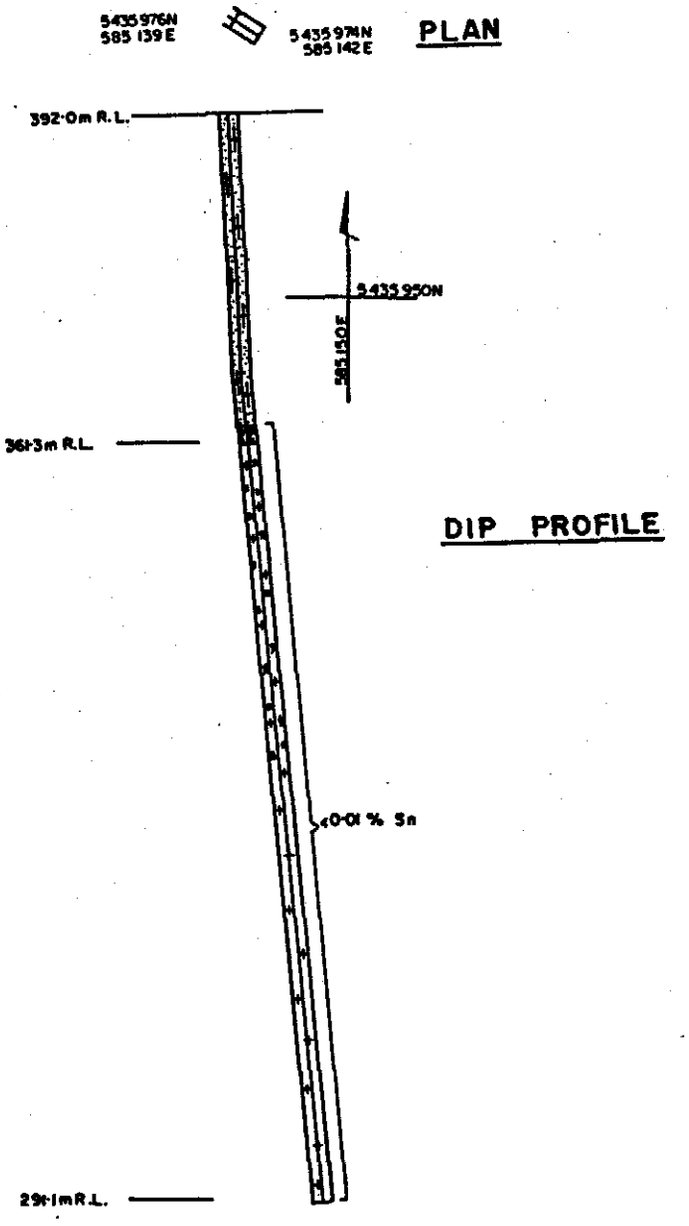
SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D. Sin. Dip	VERTICAL R.L.	HORIZONTAL D. Cos. Dip	HORIZONTAL Prog. Total

HOLE NO. BT 175

GOLD FIELDS EXPLORATION PTY. LIMITED
DIAMOND DRILL HOLE PLOT

SCALE 1: 10 5 0 10 20 METRES

5 cm



473077

GOLD FIELDS EXPLORATION PTY. LIMITED

DEV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 175 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				SUMMARISED LOG
0.0	30.3	29.7		WEAKLY WEATHERED AND ALTERED, MEDIUM GRAINED POIMENA ADAMELLITE. A THICK PEGMATITE UNDERLIES THIS GRANITE.
30.3				CONTACT.
30.3	101.0	70.7		PATCHILY BUT OVERALL MODERATE TO STRONGLY ALTERED ALKALI GRANITE, WHICH BECOME LESS ALTERED WITH DEPTH.
				DETAILED LOG
				0.0-30.3 WEAKLY WEATHERED AND ALTERED, MEDIUM GRAINED POIMENA ADAMELLITE WITH A LARGE BASAL PEGMATITE.
0.0	27.0	27.0		Tricone, no core recovered. Probably weathered adamellite.
27.0	28.8	1.2	67	Brown, weathered medium grained, weakly porphyritic granite.
(27.0-28.0, 0.4m recovered)				Highly fractured and weakly altered. Crumbly zones of rock fragments occur.
				After 28.0, the rock is unweathered with several thin (approx. 10cm thick) aplitic and alkali granite intrusions. The granite is moderately altered and unfractured and pale grey in colour.
28.8	30.3	1.5	100	A 0.7m thick, very coarse grained (several cm) white pegmatite of feldspar occurs. Accessory phases are fine grained colourless quartz and green sericite bands.
				This is underlain by 0.4m of dark grey-green silicified granite with abundant green sericitised feldspars and micas. This is underlain by 15cm of quartz, which is underlain by 15cm of coarse-medium grained granite (pegmatitic)-weakly sericitised. A 10cm thick pale yellow aplite occurs beneath this.
30.3				CONTACT.

ASSAY DATA Sample No	From	To	Rec. %

473078

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 175 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				30.3-101.0 MODERATELY TO STRONGLY ALTERED ALKALI GRANITE.
				ALTERATION RANK DECREASES WITH DEPTH.
30.3	33.1	2.8	100	Moderately altered and greisened alkali granite. Green-grey in colour and unfractured. All mica phases are replaced with green sericite.
				At 32.2, a 10cm thick aplite-pegmatite complex occurs.
33.1	38.2	5.1	100	Pale yellow,weakly altered, sericitised alkali granite. Medium grained and equigranular, with several yellow-sericite filled fractures. Micas are still all replaced.
38.2	39.5	1.3	100	From above, the granite gradually becomes darker green and overal strongly altered. Pale brown and dark green sericite are common, and disseminated molybdenite and fluorite occur. Both feldspars and micas are replaced.
39.5	45.3	5.8	100	Weakly altered, paler green-grey alkali granite. Only the micas have been sericitised. Unfractured.
45.3	51.3	6.0	100	Variably altered alkali granite. Predominantly dark green and moderately strongly altered and silicified, with patches of weaker altered granite and patches of pale yellow-cream bleached granite. In places, strongly fractured, with a blocky fracture developed. The darker, more intense alteration zones surround poorly developed quartz veins.
51.3	59.7	8.4	100	Moderately and uniformly altered, greisened alkali granite. Green-grey and rarely fractured, some with sericite infillings. All micas and some feldspars are altered and replaced. This alteration state grades into the one below.
59.7	95.7	36.0	100	Weakly altered alkali granite. Pale green-cream in colour and rarely fractured. Some sericite infilled fractures occur. The micas have been partially replaced with dark green sericite. This

ASSAY DATA (ppm)

Sample No	From	To	Rec. %	Sn	Ag	Cu	Mo
6058	28.0	29.0	100	40	<1	5	30
6059	29.0	30.0	100	20	<1	5	<10
6060	30.0	31.0	100	30	<1	5	<10
6061	31.0	32.0	100	30	<1	5	90
6062	32.0	33.0	100	20	<1	5	10
6063	33.0	34.0	100	20	<1	10	<10
6064	34.0	35.0	100	30	<1	15	<10
6065	35.0	36.0	100	20	<1	10	10
6066	36.0	37.0	100	30	<1	5	<10
6067	37.0	38.0	100	20	<1	15	<10
6068	38.0	39.0	100	40	<1	5	130
6069	39.0	40.0	100	40	<1	5	240
6070	40.0	41.0	100	40	<1	5	120
6071	41.0	42.0	100	50	1	5	60
6072	42.0	43.0	100	50	<1	5	140
6073	43.0	44.0	100	50	<1	10	110
6075	45.0	46.0	100	30	2	10	10
6076	46.0	47.0	100	40	3	10	10
6077	47.0	48.0	100	30	2	20	<10
6078	48.0	49.0	100	70	<1	5	10
6079	49.0	50.0	100	50	1	5	10
6080	50.0	51.0	100	50	1	5	20
6081	51.0	52.0	100	50	1	5	10
6082	52.0	53.0	100	30	<1	5	10
6083	53.0	54.0	100	30	<1	5	<10
6084	54.0	55.0	100	40	<1	5	10
6085	55.0	56.0	100	30	<1	5	<10
6086	56.0	57.0	100	40	<1	5	20
6087	57.0	58.0	100	30	<1	<5	10
6088	58.0	59.0	100	50	<1	<5	10
6089	59.0	60.0	100	50	<1	5	10
6090	60.0	61.0	100	30	<1	<5	30
6091	61.0	62.0	100	40	<1	5	<10
6092	62.0	63.0	100	40	<1	5	10

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 175 Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				alteration style is slightly more variable than above, with
				patches of darker, slightly more altered granite, and pale cream
				unaltered zones.
				At 82.4, 86.1, 87.0, fractures with sericite-fluorite infillings
				occur.
				Overall, the green colour and degree of alteration decrease with
				depth.
95.7	101.0	5.3	100	Unaltered, cream-grey alkali granite. Equigranular, medium grained
				and unfractured. A gradational contact with the above unit occurs.
				END OF HOLE 101.0

Sample No	From	To	Rec. %	ASSAY DATA (ppm) Sn	Ag	Cu	Mo
6093	63.0	64.0	100	50	<1	<5	10
6094	64.0	65.0	100	40	<1	<5	30
6095	65.0	66.0	100	40	<1	5	20
6096	66.0	67.0	100	40	<1	5	20
6097	67.0	68.0	100	40	<1	<5	10
6098	68.0	69.0	100	40	<1	<5	50
6099	69.0	70.0	100	40	<1	<5	<10
6100	70.0	71.0	100	40	<1	<5	10
6101	71.0	72.0	100	30	<1	<5	10
6102	72.0	73.0	100	40	<1	5	10
6103	73.0	74.0	100	30	<1	<5	<10
6104	74.0	75.0	100	40	<1	<5	<10
6105	75.0	76.0	100	40	<1	<5	50
6106	76.0	77.0	100	40	<1	<5	<10
6107	77.0	78.0	100	30	<1	<5	110
6108	78.0	79.0	100	40	<1	<5	120
6109	79.0	80.0	100	30	<1	<5	20
6110	80.0	81.0	100	40	<1	<5	10
6111	81.0	82.0	100	40	<1	<5	90
6112	82.0	83.0	100	40	<1	<5	40
6113	83.0	84.0	100	30	<1	<5	20
6114	84.0	85.0	100	40	<1	<5	30
6115	85.0	86.0	100	30	<1	<5	30
6116	86.0	87.0	100	30	<1	<5	40
6117	87.0	88.0	100	30	<1	<5	20
6118	88.0	89.0	100	40	<1	<5	10
6119	89.0	90.0	100	40	<1	<5	10
6120	90.0	91.0	100	30	<1	<5	10
6121	91.0	92.0	100	30	<1	<5	<10
6122	92.0	93.0	100	40	<1	5	<10
6123	93.0	94.0	100	30	<1	<5	<10
6124	94.0	95.0	100	30	<1	<5	<10

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

473080

HOLE NO.: B.T. 176
STATE : TASMANIA

ULV. PRESS

PROJECT	BLUE TIER
DESIGNED BY	A.J. CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	30-8-83
COMPLETED	1-9-83

PURPOSE

To find stanniferous greisen in the North Anchor Area.

LOG SUMMARY / GENERAL COMMENTS

Moderately altered Poimena Adamellite overlies (at 21.5m) incipiently altered Alkali Granite.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	COMMENTS
21.5	53.5	No significant tin. (i.e. <0.01%Sn)

OCATION

NORTHING	5435924
EASTING	584884
R.L.	396.1
GRID	A.M.G.
LENGTH	80.2

HOLE CONDITION

SIZE Hole Size	SIZE Depth
TRICONE	0.0-9.0
BQ	9.0-80.0

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost
9.0	20.0	68

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole open, with a black polythene marker.

URVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D. Sin. Dip	R.L.	HORIZONTAL D. Cos. Dip	Prog. Total
0.0		90.0	0.0	20.1	20.1	20.1	376.0	0.0	0.0
40.2		89.5	20.1	58.2	38.1	38.1	337.9	0.3	0.3
76.2		90.0	58.1	80.0	21.9	21.9	316.0	0.0	0.3

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D. Sin. Dip	R.L.	HORIZONTAL D. Cos. Dip	Prog. Total

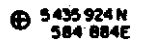
HOLE NO. BT 176

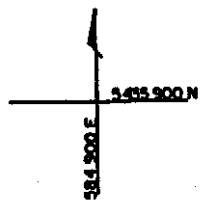
GOLD FIELDS EXPLORATION PTY. LIMITED
DIAMOND DRILL HOLE PLOT

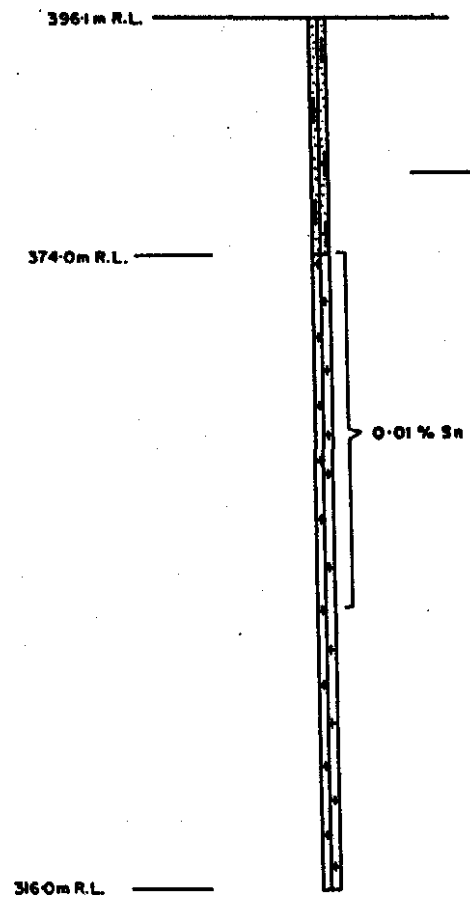
SCALE 1:

5 cm

PLAN







DIP PROFILE

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PAPER

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 176 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA (ppm) Sample No.	From	To	Rec. %	Sn
				SUMMARISED LOG					
0.0	21.5	14.0		MODERATELY ALTERED, MEDIUM GRAINED, PORPHYRITIC POIMENA ADAMELLITE.					
21.5				CONTACT.					
21.5	80.0	58.5		WEAKLY ALTERED TO UNALTERED ALKALI GRANITE. MEDIUM GRAINED AND					
				EQUIGRANULAR.					
				DETAILED LOG					
				0.0-21.5 MODERATELY ALTERED, MEDIUM GRAINED POIMENA ADAMELLITE.					
0.0	9.0	9.0		Tricone, no core recovered.					
9.0	19.5	3.0	30	Moderately weathered and altered, brown-grey-pink granite.					
(9.0-20.0, 3.5m recovered)				Medium grained and weakly porphyritic with patches of hematitic					
				feldspar developed. Limonite is common at the top of the unit.					
				Moderately to highly fractured in places with some crushed zones.					
19.5	21.5	2.0	100	Pale pink-grey aplite. Very fine grained and weakly altered.					
				Weakly fractured, with sericite (yellow) infillings. Slightly					
				hematitic in places. Unusual, subhorizontal quartz lamellae					
				approx. 2mm thick are developed throughout.	6201	21.5	22.5	100	20
				At 21.2, a 30cm pegmatite-aplite occurs. It consists of quartz,	6202	22.5	23.5	100	50
				feldspar and unaltered biotite.	6203	23.5	24.5	100	40
					6204	24.5	25.5	100	20
21.5				CONTACT	6205	25.5	26.5	100	20
					6206	26.5	27.5	100	20
				21.5-80.0 WEAKLY ALTERED TO UNALTERED ALKALI GRANITE.	6207	27.5	28.5	100	20
					6208	28.5	29.5	100	30
21.5	80.0	58.5	100	Weakly altered alkali granite. Medium grained and equigranular.	6209	29.5	30.5	100	30
				A few patches (up to 0.5m thick) of stronger, moderately altered	6210	30.5	31.5	100	30
				granite occur. These are dark green, otherwise the rock is very	6211	31.5	32.5	100	20

473083 82

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 176 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				pale green-cream in colour. Weakly fractured, with the occasional sericite filled fracture.
				Below 53.0, the 'greeness' and degree of alteration decreased to give pale cream unaltered alkali granite. This is a uniform alteration state.
				END OF HOLE 80.0

Sample No	From	To	Rec. %	ASSAY DATA (ppm) Sn
6212	32.5	33.5	100	30
6213	33.5	34.5	100	40
6214	34.5	35.5	100	40
6215	35.5	36.5	100	30
6216	36.5	37.5	100	40
6217	37.5	38.5	100	40
6218	38.5	39.5	100	40
6219	39.5	40.5	100	40
6220	40.5	41.5	100	40
6221	41.5	42.5	100	30
6222	42.5	43.5	100	20
6223	43.5	44.5	100	20
6224	44.5	45.5	100	10
6225	45.5	46.5	100	30
6226	46.5	47.5	100	20
6227	47.5	48.5	100	10
6228	48.5	49.5	100	20
6229	49.5	50.5	100	20
6230	50.5	51.5	100	10
6231	51.5	52.5	100	20
6232	52.5	53.5	100	10

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

473084

HOLE NO.: B.T. 150
STATE : TASMANIA

ULV. PRESS

PROJECT	BLUE TIER
DESIGNED BY	P.A. ROBERTS
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	17/6/82
COMPLETED	22/6/82

PURPOSE

To test the possible existence of unexposed Alkali Granite.
Hole deepened; 2-9-83 to 6-9-83

LOG SUMMARY

0 - 39.0	Weathered Poimena Adamellite.
39.0 -171.0	Variably altered Poimena Adamellite.
171.0 -191.0	Unaltered Alkali Granite.

GENERAL COMMENTS

ASSAY SUMMARY

INTERVAL From	INTERVAL To													COMMENTS

OCATION

NORTHING	6994.3
EASTING	5003.9
R.L.	499.6
GRID	A.M.G.
LENGTH	111.50

Deepened to 191.0

HOLE CONDITION

SIZE Hole Size	SIZE Depth
HAMMER	0-72.7
BY	72.7-111.5
BQ	111.5-191.0

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole now open with a black polythene marker.

URVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D. Sin. Dip	VERTICAL R.L.	HORIZONTAL D. Cos. Dip	HORIZONTAL Prog. Total
0	-	-90.0	0	55.5	55.5	55.5	444.1		
111	-	-89.0	55.5	111.5	56.0	56.0	388.1		
141.2	-	-88.5	111.5	162.2	50.7	50.7	337.4		
183.2	-	-88.5	162.2	191.0	28.8	28.8	308.6		

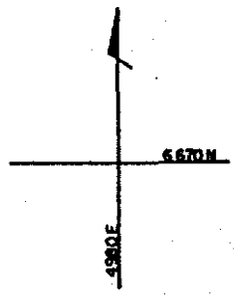
SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D. Sin. Dip	VERTICAL R.L.	HORIZONTAL D. Cos. Dip	HORIZONTAL Prog. Total

66943 N
5003·9 E

PLAN

499·6 m R.L.

473085



4602 m R.L.

HOLE NO. BT 150

GOLD FIELDS EXPLORATION PTY. LIMITED

DIAMOND DRILL HOLE PLOT

DIP PROFILE

SCALE 1:

328·6 m R.L.

5 cm

308·6 m R.L.

84

GOLD FIELDS EXPLORATION PTY. LIMITED

DLV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 150 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				0-39 WEATHERED AND SLIGHTLY WEATHERED POIMENA ADAMELLITE.				
0	22	22		Orange-brown weathered granite. Large white feldspar phenocrysts, some weathered to white clays, black biotites and Fe-oxide stained quartz are the main minerals.				
22	26	4		Grey-orange slightly weathered granite. A decrease in the amount of Fe-oxide corresponds to an increase in green sericite.				
26	39	13		Grey granite with slight orange colour. Fe-oxide staining is still common as are weathered feldspar phenocrysts.				
				39-111.50 VARIABLY BUT GENERALLY WEAKLY ALTERED POIMENA ADAMELLITE.				
39	72.70	33.70		Grey porphyritic granite. Feldspar phenocrysts are fresh and white. Sericite is rare, as is Fe-oxide staining. Biotite is present as small aggregates and clusters.				
72.70	84.50	11.80	100	Greenish-grey granite. Moderately porphyritic and medium grained with a few very large (3-4cm) phenocrysts of feldspar, smaller feldspar phenocrysts and small quartz phenocrysts. Mafic dots of fine grained quartz and feldspar with coarse grained biotite occur as small (5-6cm) rounded bodies. Moderately to poorly fractured with sericite in the fractures and increased modally in the rock surrounding them. Minor quartz veinlets also occur randomly throughout. Between 82.20 and 82.95, a 75cm pegmatite of medium grained, equigranular feldspar and quartz occurs. Moderately fractured with light green sericite and traces of fluorite on joint surfaces.				
84.50	88.10	3.60	100	Pale grey granite with only very minor sericite development. Fractures are moderate with minor sericite coatings.				
88.10	94.80	6.70	100	Pale grey-green granite. Weakly porphyritic and medium to				

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 150 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				fine grain size. Still moderately fractured with sericite, quartz and fluorite as infilling minerals. Sericite is moderately developed in the rock.				
94.80	100.20	5.40	100	Grey granite. Fresh, with sericite found only in the vicinity of fractures filled with clays. Poorly fractured and strongly porphyritic with a few minor quartz veinlets.				
100.20	111.50	11.30	100	Greenish-grey granite. Moderately jointed and sericitised except in a few places where increased alteration produces a crumbly, highly fractured, clay-sericite rich rock. Moderate to weakly porphyritic with patches of biotite accumulation. Becomes relatively coarse grained at depth.				
				END OF HOLE 111.50				
				B.T. 150 DEEPENED 2-9-83 to 6-9-83				
111.50	159.0	47.5	100	Grey, medium grained, porphyritic granite. Unaltered apart from a few sericitised fractures. Also, zones of pink hematitic granite occur. Overall, incipiently fractured. A few large (3cm feldspar phenocrysts occur otherwise they are around 2cm long. Smaller (0.5-1cm) phenocrysts of feldspar and quartz are present together with "book biotites" - dark coloured clots of the mica. A few finer-grained phases also exist. Between 120.0 and 123.0, a zone of highly fractured and moderately sericitised granite occurs. At 126.5, a 30cm fine-medium grained, grey, unaltered aplite. At 152.4, a major vein of white feldspar, colorless quartz and green + brown sericite runs at 0° CA for 1.9m. Accessory purple fluorite occurs and the vein has a narrow, weakly developed silicified halo.				
159.0	171.0	12.0	100	Pale pink-green, grey granite. Medium grained and porphyritic				

GOLD FIELDS EXPLORATION PTY. LIMITED

473088

ULV. PRESS

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 150 Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				with the larger feldspars coloured pale pink and the smaller ones pale green. The biotites become rare, being replaced by pale brown-grey clays. Still incipiently fractured with sericite fillings. Overall slightly to weakly altered.
				At 170.2, a 0.4m thick, pale pink, medium grained quartz-feldspar aplite.
				At 170.95, a 0.5m thick, weakly sericitised medium grained pegmatite of quartz, feldspar and biotite.
171.0				CONTACT
				171.0-191.0 UNALTERED, MEDIUM GRAINED, EQUIGRANULAR ALKALI GRANITE.
171.0	191.0	20.0	100	Pale green-grey, medium grained, equigranular alkali granite. Unaltered apart from fractures filled with green sericite and zones of incipiently developed pale green sericite replacing micas. Fracturing is rare.
				At 173.2, a 10cm thick, pale grey, unaltered aplite.
				Below 175.0, the granite is pale grey and completely unaltered.
				Below 186.0, several fractures with pale green sericite infillings (2mm wider) occur. Pyrite also occurs as an accessory phase with the sericite.
				END OF HOLE 191.0

ASSAY DATA Sample No.	From	To	Rec. %

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

473089

HOLE NO.: B.T. 177
STATE : TASMANIA

ULV. PRESS

PROJECT	BLUE TIER
DESIGNED BY	A.J. CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	7-9-83
COMPLETED	15-9-83

PURPOSE

To test for unexposed Alkali Granite in the Ransome River Area.

LOG SUMMARY / GENERAL COMMENTS

Unaltered Poimena Adamellite was encountered over the entire length of this hole.

ASSAY SUMMARY

INTERVAL From	INTERVAL To													COMMENTS

LOCATION

NORTHING	5437796
EASTING	584398
R.L.	687.7
GRID	A.M.G.
LENGTH	200.0

HOLE CONDITION

SIZE Hole Size	SIZE Depth
TRICONE	0.0-3.0
BQ	3.0-200.0

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole left open with a black polythene marker.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D. Sin. Dip	VERTICAL R.L.	HORIZONTAL D. Cos. Dip	HORIZONTAL Prog. Total	SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D. Sin. Dip	VERTICAL R.L.	HORIZONTAL D. Cos. Dip	HORIZONTAL Prog. Total
0.0	-	90.0	0.0	51.0	51.0	51.0	636.7												
102.0	-	89.0	51.0	150.0	99.0	99.0	537.7												
198.2	-	88.5	150.0	200.0	50.0	50.0	487.7												

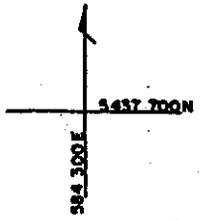
HOLE NO. BT 177

GOLD FIELDS EXPLORATION PTY. LIMITED
DIAMOND DRILL HOLE PLOT

SCALE : 20 10 0 20 40 METRES

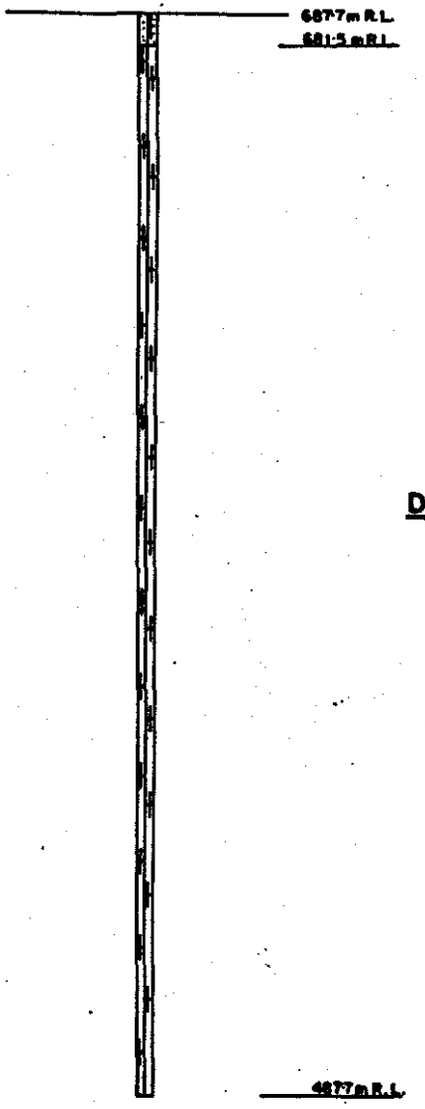
5 cm

PLAN



5437 796 N
384 398 E

DIP PROFILE



473091

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 177 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				SUMMARISED LOG
0.0	200.0	200.0		FRESH TO WEAKLY ALTERED POIMENA ADAMELLITE. PREDOMINANTLY MEDIUM GRAINED AND PORPHYRITIC.
				DETAILED LOG
				0.0-200.0 INCIPIENTLY ALTERED POIMENA ADAMELLITE.
0.0	3.0			Tricone, no core recovered.
3.0	6.2	1.2	38	Weakly weathered, pale brown-grey granite. Medium-coarse grained and porphyritic. Brown limonite is developed on fracture surfaces (weakly fractured). Yellow-brown sericitised feldspars occur. Overall, very weakly altered.
(3.0-6.0, 1.0m recovered)				
6.2	21.6	15.4	100	Fresh, weakly altered, pink-green-grey granite. Pale pink feldspar phenocrysts up to 2cm occur with smaller olive green sericitised feldspar phenocrysts. Quartz also occurs as phenocrysts producing a medium-coarse grained moderately porphyritic rock. Black "book" biotites are unaltered. In places, the rock becomes so coarse grained as to become semi-pegmatitic. The rock is unfractured, apart from narrow (10-20 cm) zones of intense sericitisation and clay development which produce patches of incompetent, crumbly rock. At 9.2, a 1.2m thick zone of aplite-pegmatite with a wide variety of grain sizes. Feldspars and quartz form graphic intergrowths with a few very large (1cm) biotite flakes.
21.6	53.9	32.3	100	Medium-fine grained, weakly porphyritic granite. Similar to above, except finer grained and less porphyritic. Hematitic in places, it is also pinker than granite above. A few very large (3 cm across) feldspar phenocrysts occur. Fracturing

ASSAY DATA Sample No.	From	To	Rec. %

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE LOG AND ASSAY DATA

PROJECT: BLUE TIER HOLE NUMBER: B.T. 177 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				and alteration are the same as for the granite above. Thin (5cm) aplites are common, veinlets with narrow (2-3 cm) alteration halos occur and patches of pale green intensely sericitised granite exist. At 50.9, a 3.0m zone of leucogranite occurs. Medium grained non porphyritic intergrowths of pale pink feldspar, white feldspar and quartz. In patches, incipient sericitisation and a vugginess are developed. No dark minerals are present.				
53.9	107.5	53.6	100	Dark grey medium grained, moderately porphyritic granite. Unaltered and unfractured, the granite has a high biotite content, causing the darker colour. The pink tinge common in feldspar phenocrysts is absent, apart from a weakly sericitised zone between 69.4 and 75.4m. At 92.5, a strongly fractured and sericitised zone of pink granite surrounding a quartz vein, occurs over 1.6m. The pink hue remains in feldspar phenocrysts approximately 6.0m beneath this zone.				
107.5	135.5	28.0	100	Pale pink-grey weakly altered granite. Medium grained and moderately porphyritic, with widespread sericitisation developed. Unfractured apart from fracture zones rich in pale green sericite. Biotite is abundant in this phase. Small pegmatite-aplite seams and quartz veinlets occur. Between 110.7 and 113.5 a moderately altered zone rich in pale green sericite (pervasive) exists. Below 125.0, the granite becomes unalterd. Also the pink colour decreases gradually with depth.				
35.5	200.0	64.5	100	Grey granite, medium grained, porphyritic and unaltered, except for the crush zones (10-20cm wide) which are sericitic. In places the granite is coarser grained; semi-pegmatitic. At 142.5, a large 1.2m crush zone of sericitic clays and sericitised rock fragments occurs. At 160.0, a 20cm zone of fine grained black biotite and				

GOLD FIELDS EXPLORATION PTY. LIMITED

DEV. PR.

PROJECT: BLUE TIER

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: B.T. 177 Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				white feldspar exists. The zone is biotite rich.				
				At 167.0 a weakly developed altered fracture system occurs over 1.0m.				
				After 169.0, the granite is completely unaltered with no altered fractures occuring.				
				At 189.5, a 2.0m zone with brown clay filled (3mm wide) exists.				
				END OF HOLE 200.0m.				

Launceston

MOORINA

WELDBOROUGH

POIMENA

LOTTAH

Lake Frome

E.L.9/76

E.L.9/76

E.L.9/76

Goulds Country

Mt Littlechild

Mt Michael

St. Helens

Spinks Workings

Hibernus Creek Workings

F.B. Lode

Kent Workings

Chintock Workings

Doyles Workings

Cambria Workings

Wellington Workings

Southern Cross / Holway Workings

Mosher Workings

Perennial Workings

Michael Workings

Moore Workings

Moon Workings

Australian Dome

Summit Workings

Ethel Workings

Purple or Aluminium Workings

Latrah Tunnels

Ronson Workings

Goughs Lodes

Iron Workings

Duco Workings

Liberator Workings

Crystal Hill Dome

Victory Workings

Anchor Workings

West Anchor

Winfield Dome

Mineral Dome

CRYSTAL CREEK LINEAMENT

Drill Holes

BT o Renison / Goldfields Drilling

Area of Detailed Drilling at the Anchor Mine

LEGEND

Quaternary — Qa Alluvium, colluvium

Tertiary — Ts Gravel, sand, clay; Tb Basalt; Ta Agglomerate and tuff

Siluro-Devonian — Matthinna Beds

BLUE TIER COMPOSITE BATHOLITH

Devonian — Dg-a Alkali Granite - similar to granite in Anchor Mine, medium grained; Dg-fp Fine to medium grained, includes all other leucocratic types e.g. quartz-feldspar porphyry, aplite etc. (Leucocratic Granite Types); Dg-p Poimena Adamellite - mesocratic porphyritic biotite granite/adamellite; Dg-g Granodiorite

Apparent Domal feature in roof of alkali granite

Dip of granite contact

Interpreted geological contact

Photo-lineament

Old Workings

75N Cut Grid Line

Vehicle Track

Sealed Road

Licence Boundary

473094

5 cm

ATTRIBUTION DIAGRAM

MAPPING BY

RP R. Pollock (contract geologist)

AR A. Ross

MD Mines Department (1:50000 mapping)

AC A. CARTWRIGHT

RENISON LIMITED

84-2081

BLUE TIER AREA

INTERPRETATIVE GEOLOGY & DRILL HOLE LOCATION PLAN

GEOLOGIST	: P.A.R.	SCALE 1:20,000 METRES	
DRAUGHTSMAN	: T.G.D.S.	400 0 400 800	
DATE	: APRIL 1982		
REVISIONS	: A.J.C.: Nov. 83	DRAWING No. 2	


Dg-p
Dg-a
BT 170
BT 169
BT 168
BT 167
BT 114
BT 113
BT 112
BT 95
BT 90
E
E'
D
D'
C
C'
B
B'
A
A'
X
9200N
9100N
9000N
8900N
4200E
4300E
4400E
750
740
730
Sn
ASSAY DATA AT 0·1% Sn CUT OFF
BT 110
RENISON DRILL HOLES
Drill Holes
Trench
MT. LYELL (1906-07)
ROAD
TOPOGRAPHIC CONTOUR (10m. interval)
CONTACT
- Surface
- Drill Hole
NOTE: OPEN CUTS WITHIN MOON MINE WORKINGS NOT SHOWN.
G.N.
M.N.
14.2°
MOON MINE AREA
1:5000 Series
473095
5 cm
GOLD FIELDS EXPLORATION PTY. LIMITED
84-2081
MOON MINE AREA
INTERPRETATIVE GEOLOGY
AND DRILL HOLES
DRAWN BY : A.J.C.
DRAFTSMAN : S.J.F.
DATE : Nov., 82
REVISIONS : Dec., 83 (A.J.C.)
FILE NO.
SCALE 1:500
METRES
FIG. 3

A
WEST

A'
EAST

LINE X

BT 95
Projected 4m. Nth.

Lottah Road

Moon Creek

700 m.R.L.

650 m.R.L.

600 m.R.L.

550 m.R.L.

Dg-p

Dg-a

Projected 6m.
North

C
WEST

C'
EAST

BT 113
Projected 5m. South

Lottah Road

29

Projected 14m.
North

Road

Projected
4m. South

13

Projected 4m. South

25

LINE X

BT 169
Projected 2m
North

6m x 0·18

10m x 0·17

15m x 0·37

Projected 5m.
North

Projected 4m. North

2m x 0·38

10m x 0·17

Projected 4m.
South

2m x 0·12

Projected 9m. North

2m x 0·72

700m.R.L.

650m.R.L.

600m.R.L.

550m.R.L.

Dg-p

Dg-a

Dg-p

Projected 3m. South

Projected 2m North

Projected 5m. North

B
WEST

B'
EAST

BT 114
Projected 8m. South

BT 167
Projected 43m North

BT 90
Projected 6m. North

Lottah Road

Road

Projected 8m
South

16

LINE X

18

19

Projected 12m. South

7m x 0·33

10m x 0·31

Projected 13m.
South

Projected 8m.
South

Projected 10m.
South

3m x 0·23

16m x 0·60

2m x 0·48

Projected 23m
North

Projected 15m. North

Projected 9m. North

750m.R.L.

700m.R.L.

650 m.R.L.

600 m.R.L.

550m.R.L.

Dg-p

Dg-a

Dg-p

D
WEST

D'
EAST

Lottah Road

Road

14

Projected 4m.
North

Road

LINE X

22

23

Projected 3m. North

Dg-p

11m x 0·20

3m x 0·11

Projected 4m. North

Projected 3m. North

Projected 3m.
North

Dg-a

Dg-p

700m.R.L.

650m.R.L.

600m.R.L.

E
WEST

E'
EAST

BT 112
Projected 2m. South

Lottah Road

Road

LINE X

Dg-p

Dg-a

Projected 3m. South

Dg-p

700m.R.L.

650m.R.L.

600m.R.L.

473086

GOLD FIELDS EXPLORATION PTY. LIMITED

82-2081

MOON MINE AREA

CROSS SECTIONS

5 cm

DRAWN BY : A.J.C.

DRAFTSMAN : S.J.F.

DATE : Dec.,82

REVISIONS : Dec.,83 (A.J.C.)

FILE NO.

SCALE 1:500

10 5 0 5 10 15 20
METRES

FIG. 4

X
SOUTH

X'
NORTH

LINE A

BT 168
Projected 35m
West

LINE B

LINE C

LINE D

LINE E

BT 170
Projected 11m East

20x0·30

6m x 0·27

3m x 0·11

2m x 0·12

Dg-p

Dg-a

Dg-p

Projected 2m
West

Dg-p

Projected 11m
East

700 m.R.L.

650 m.R.L.

600 m.R.L.

550 m.R.L.

700 m R.L.

650 m R.L.

600 m R.L.

550 m R.L.

473097

GOLD FIELDS EXPLORATION PTY. LIMITED

84-2087.

MOON MINE AREA

LONGITUDINAL SECTION

5 cm

SCALE 1:500

10 5 0 5 10 15 20
METRES

DRAWN BY : A.J.C.

DRAFTSMAN: S.J.F

DATE : Dec.,82

REVISIONS : Dec.,83
(A.J.C.)

FILE NO.

FIG. 5

5 439 300 N
584 100 E
4200E
4300E
4400E
5 439 300 N
584 500 E
9200N
9100N
9000N
8900N
5 438 800 N
584 100 E
4200E
4300E
4400E
5 438 000 N
584 500 E

BT 170 -90°
694 R.L.
Dg-p → Dg-a

Dg-p
Dg-a

BT 112 -50°
683 R.L. Dg-a
E
E'

750
740
620
640
660
730
680
700
720
600

BT 169 -90°
703 R.L. Dg-p → Dg-a
623 R.L. Dg-a → Dg-p

D
D'
C
C'
B
B'
A
A'
X

726 R.L. Dg-a
724 R.L. Dg-a
8×0·12
708-705×0·11
706-697×0·20
-60° (14)
725-719×0·18
706-704×0·12
642 R.L. Dg-a→Dg-p (25)
580 R.L. Dg-p→Dg-a
700-698×0·38 (13)
8×0·29
15×0·37
15×0·48
9×0·17
705 R.L. Dg-p
719-711×0·31
-45° (19)
724 R.L. Dg-a
725 R.L.
724-718×0·33 (18) -60°
Dg-a
636 R.L. Dg-p
634 R.L. Dg-p
Dg-a
688-686×0·78
695 R.L. Dg-a
704-697×0·17
-45° (29)
720 R.L. Dg-a
-60° (16)
673 R.L.
BT 113 -50°
BT 168 -60°
693-682×0·66
701-699×0·23
703 R.L. Dg-a
664-663×0·48
685 R.L. Dg-a
BT 90 -45°
BT 114 -52°
675 R.L. Dg-a
Dg-p
BT 167 -70°
603 R.L. Dg-a
BT 95 -50°

473098

5 cm

Sn
ASSAY DATA AT 0·1% Sn CUT OFF

BT 110 -50° 700-694×0·17 — RENISON DRILL HOLES

Drill Holes (22) -60° 702-701×0·3
Trench 8×0·25
— MT. LYELL (1906-07)

ROAD

740 — TOPOGRAPHIC CONTOUR (10m. interval)

Dg-p / Dg-a 700 R.L. — CONTACT – Surface – Drill Hole

NOTE: OPEN CUTS WITHIN MOON MINE WORKINGS NOT SHOWN.

660 — *STRUCTURAL CONTOUR (20m. Interval)*

G.N. M.N. 14·2°

1 | 2 MOON MINE AREA | 3 | 4

1:5000 Series

GOLD FIELDS EXPLORATION PTY LIMITED 84-2081

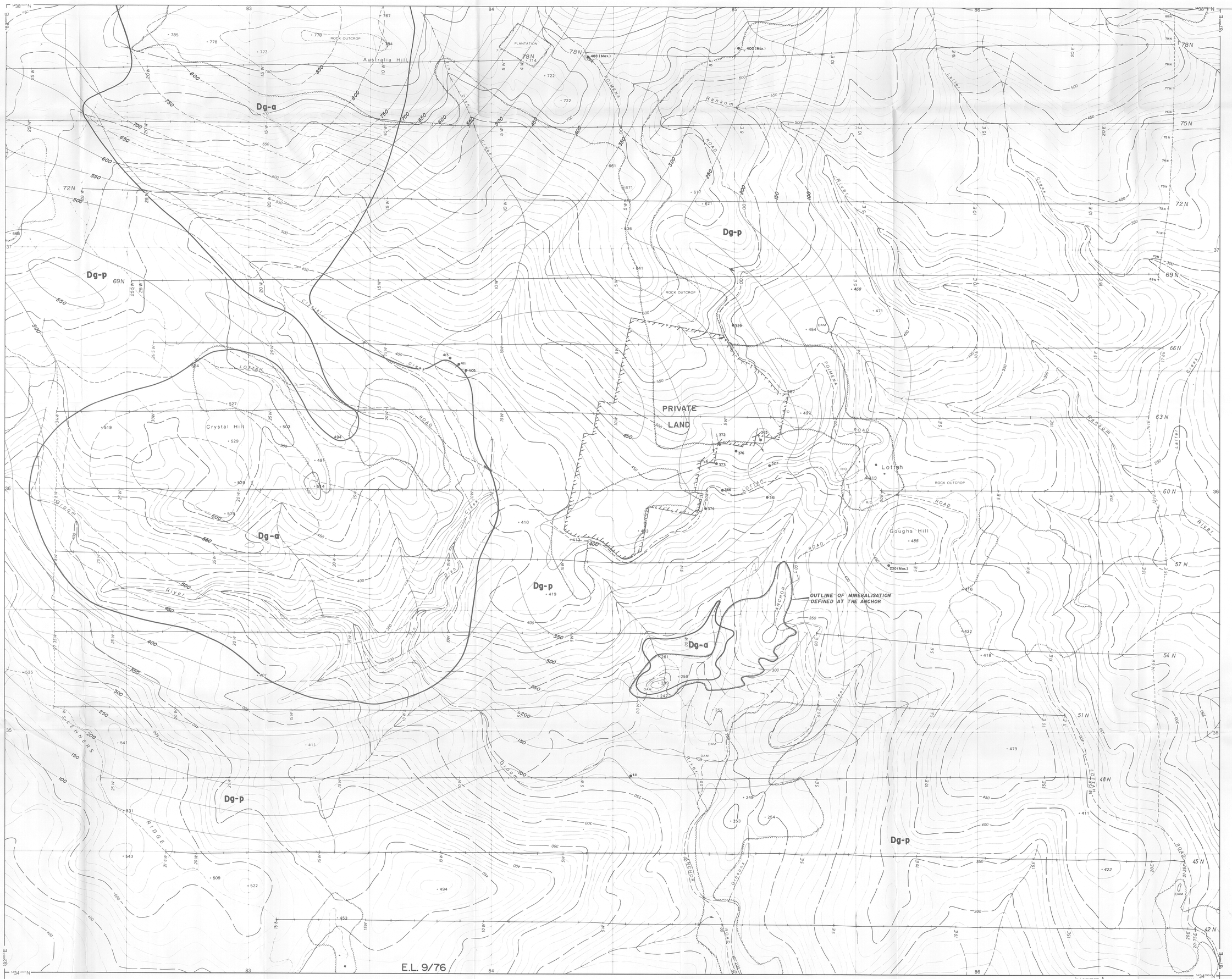
MOON MINE AREA

STRUCTURAL CONTOURS AT THE TOP OF THE ALKALI GRANITE

SCALE 1 500 — 10 5 0 5 10 15 20 METRES

DRAWN BY	A.J.C.
DRAFTSMAN	S.J.F
DATE	Nov.82
REVISIONS	Dec.83 (A.J.C.)
FILE NO.	

FIG 6



GEOLOGICAL CONTACT

600 STRUCTURAL CONTOURS AT THE TOP OF THE ALKALI GRANITE

Dg-a ALKALI GRANITE

Dg-p POIMENA ADAMELLITE

473099

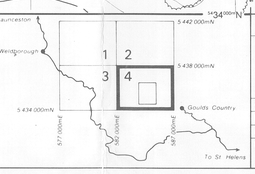
5 cm

LEGEND

CONTOUR INTERVAL 10 METRES

Sealed Road — Unsealed Road — Contour
Major Track — Minor Track — Form Line
Watercourse — Bridge — + 494 Spot Elevation
Building — Fence — + 826 Approx. Spot Elevation
Power Line — N.B. Form lines and italic spot elevations indicate lower reliability due to dense vegetation cover
Timber Boundary — Datum: Horizontal – Australian Map Grid; Vertical – Australian Height Datum
(P.D.) Position Doubtful
(I.D.) Interpretation Doubtful — Grid Interval: 500 metres

Mapping photogrammetrically compiled by Associated Aerial Surveys Pty. Ltd.
Compilation date: November 1978, from aerial photographs dated 12.12.1977.

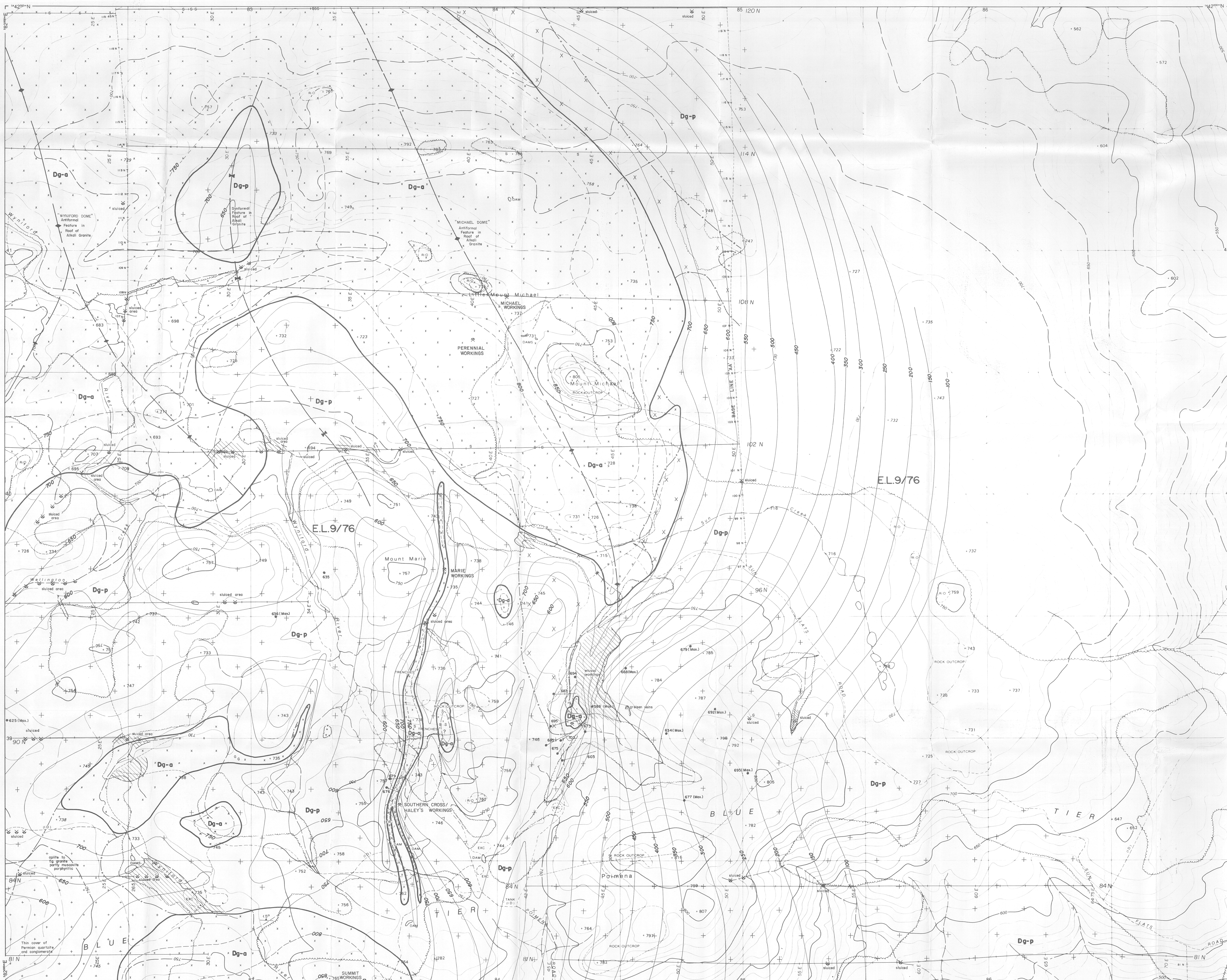


RENISON LIMITED 84-2681

BLUE TIER AREA

STRUCTURAL CONTOURS AT THE TOP OF THE ALKALI GRANITE AND DRILLING RESULTS

GEOLOGIST	A.J.C.	SCALE 1:5,000 METRES
DRAUGHTSMAN	S.J.F.	100 50 0 100 200
DATE	Dec., 83	
REVISIONS		DRAWING No. 7



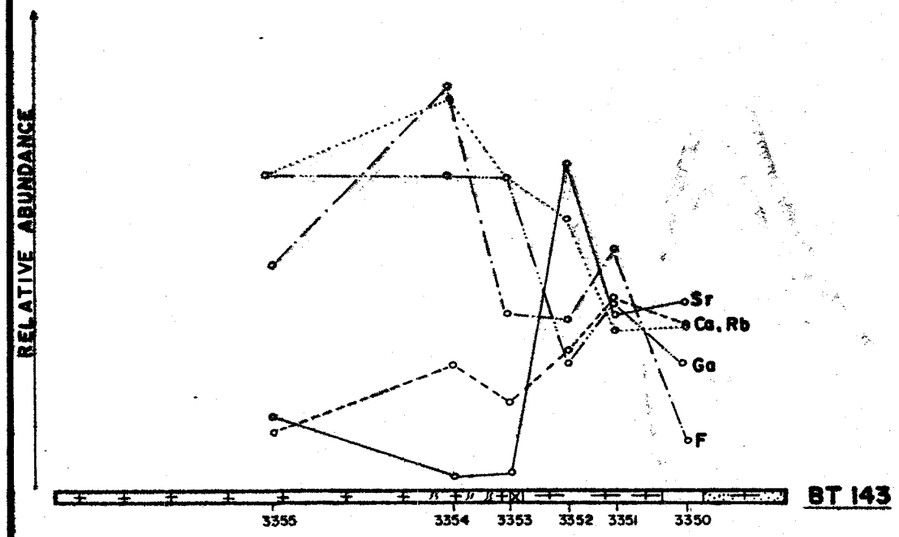
473100

RENISON LIMITED

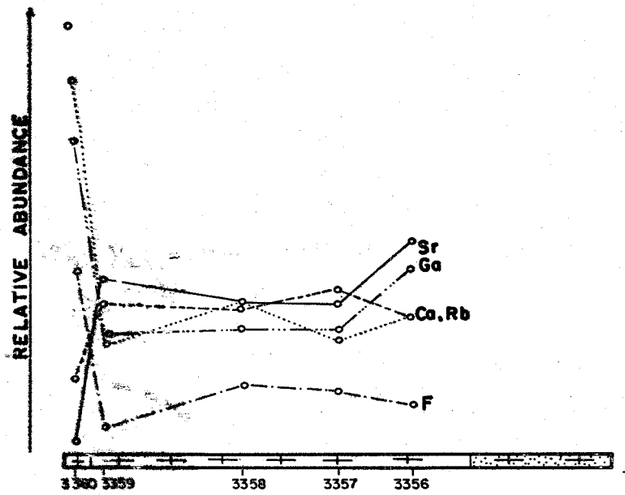
84-2081

BLUE TIER AREA
STRUCTURAL CONTOURS AT THE TOP OF THE ALKALI GRANITE AND DRILLING RESULTS

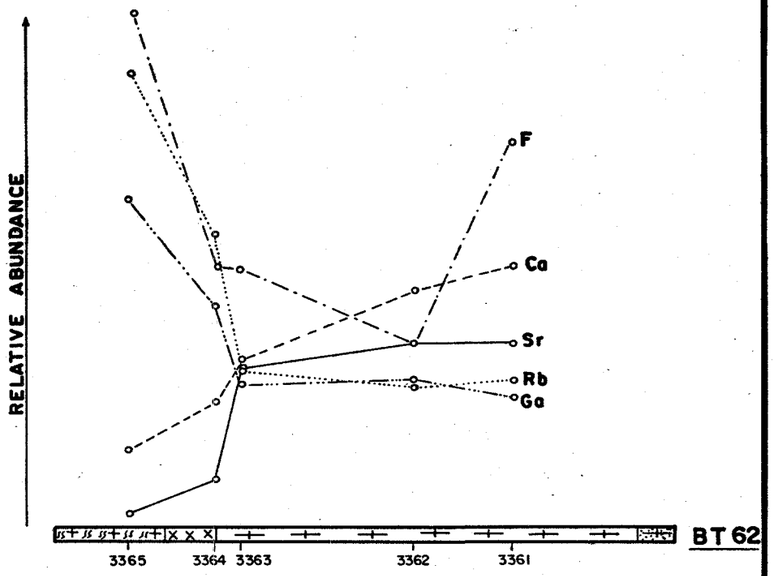
GEOLOGIST	: R. POLTOCK	SCALE 1:5,000 METRES
DRAUGHTSMAN	: T.G.D.S.	
DATE	: APRIL 1982	
REVISIONS	: A.J.C. Dec., 83	DRAWING No. 8



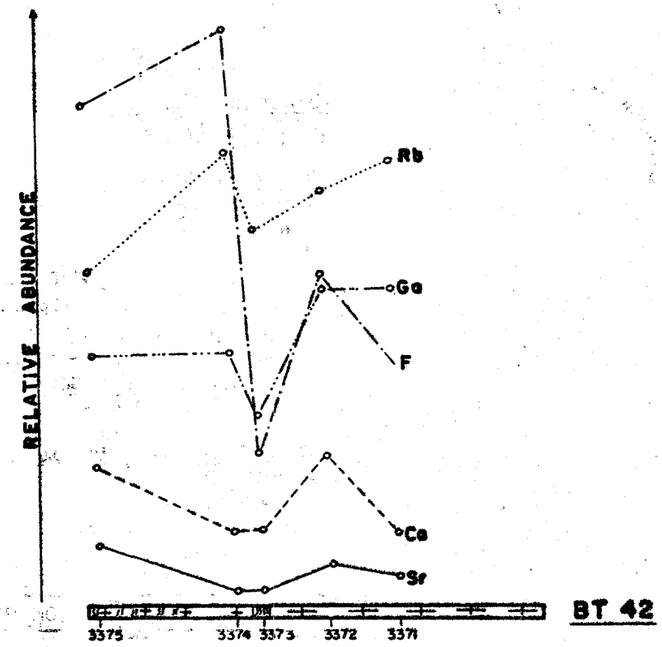
BT 143



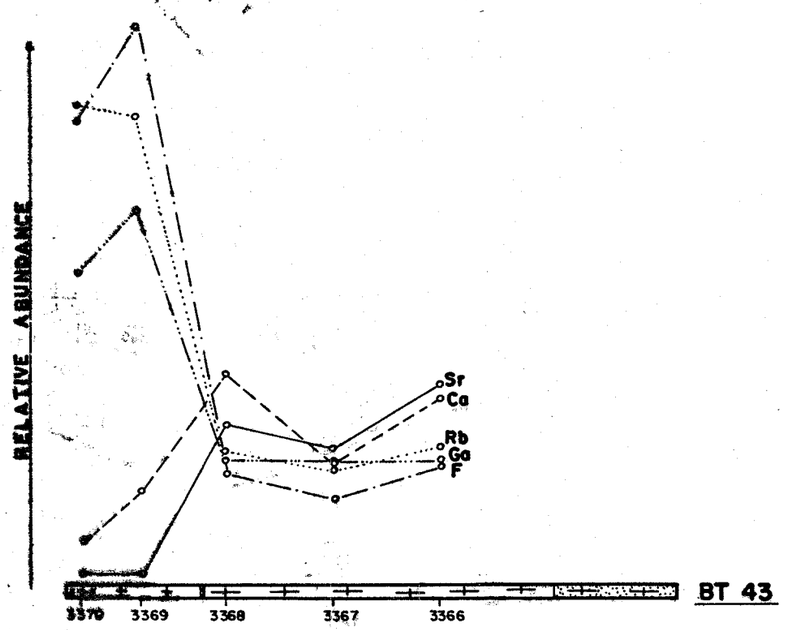
BT 96



BT 62



BT 42



BT 43

LEGEND

- POIMENA ADAMELLITE
- POIMENA ADAMELLITE - WEATHERED
- FINE GRAINED POIMENA ADAMELLITE
- PEGMATITE
- ALKALI GRANITE
- ALKALI GRANITE - ALTERED

473101

5 cm

GOLD FIELDS EXPLORATION PTY. LIMITED

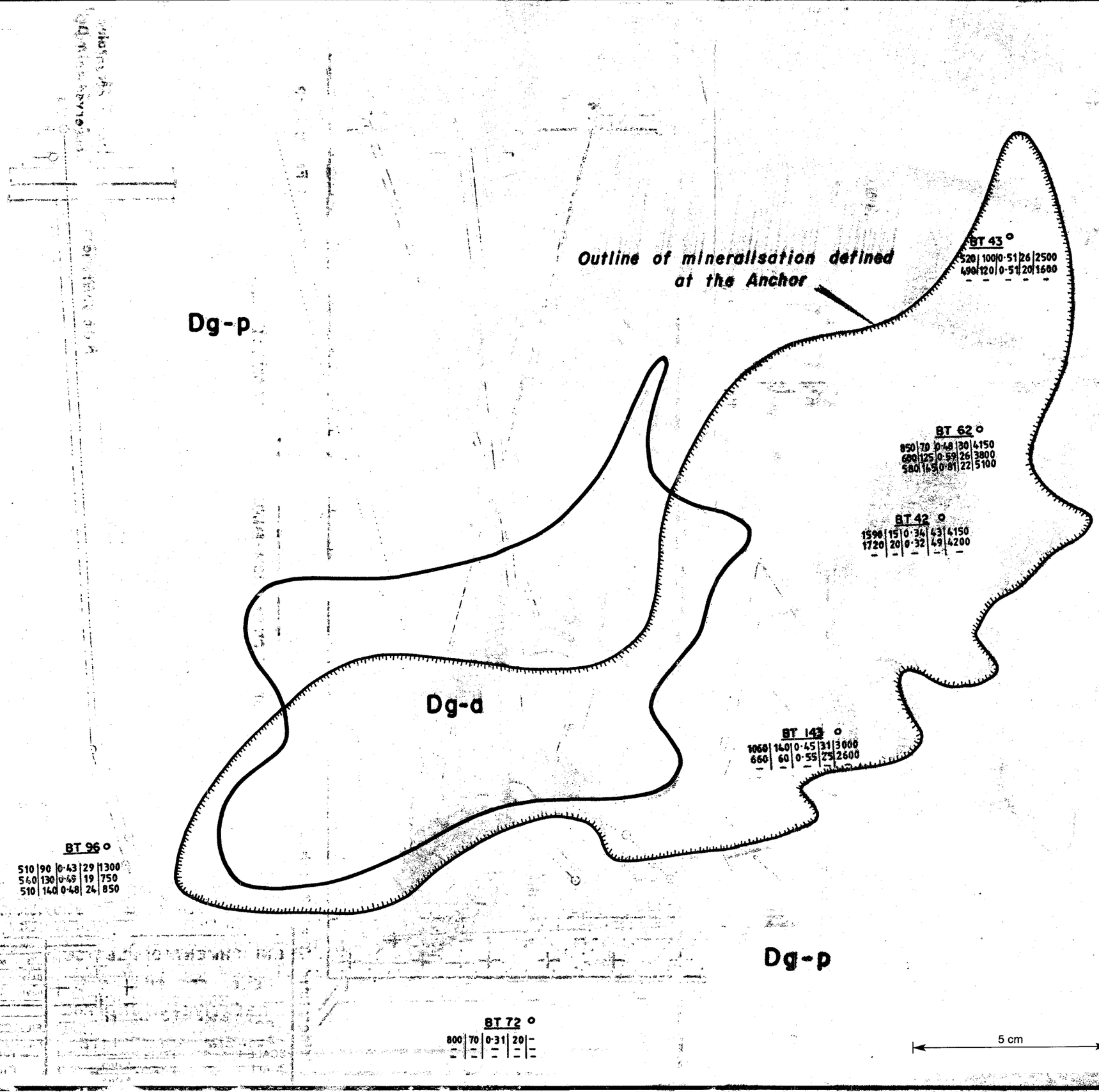
SELECTED ELEMENT HALO GEOCHEMISTRY OF ANCHOR MINE AREA DRILL CORE

84-2081

DRAWN BY	A.J.C.
DRAFTSMAN	S.J.F.
DATE	Dec.,83
REVISIONS	
FILE NO.	

SCALE 1:1000 (10 0 20 Metres)

FIG. 9



LEGEND

Order of Values
Rb | Sr | Ca | Ga | F

10m above contact
20m above contact
50m above contact

Rb average for Dg-p = 348 p.p.m.
Sr average for Dg-p = 102 p.p.m.
Ca average for Dg-p = 1·69 %
Ga average for Dg-p = 17 p.p.m.
F average for Dg-p = 880 p.p.m.

Rb, Sr, Ga & F values in p.p.m.
Ca values in %
– no assay taken

473102

GOLD FIELDS EXPLORATION PTY. LIMITED

SELECTED ELEMENT HALO GEOCHEMISTRY OF ANCHOR MINE AREA DRILL HOLE PLAN

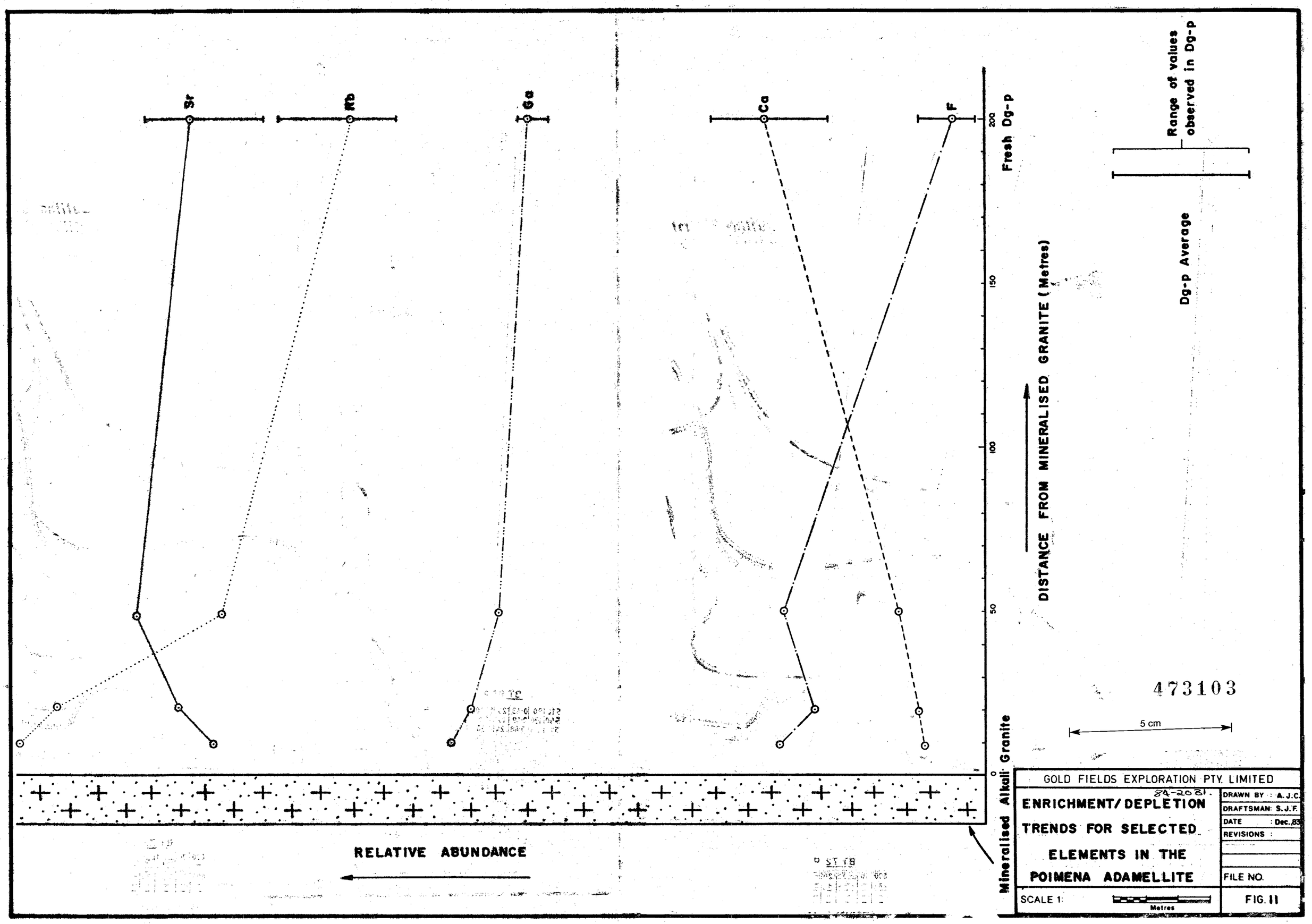
(84-2081)

DRAWN BY : A.J.C.
DRAFTSMAN: S.J.F.
DATE Dec.83
REVISIONS :

FILE NO.

SCALE 1 Metres

FIG. 10

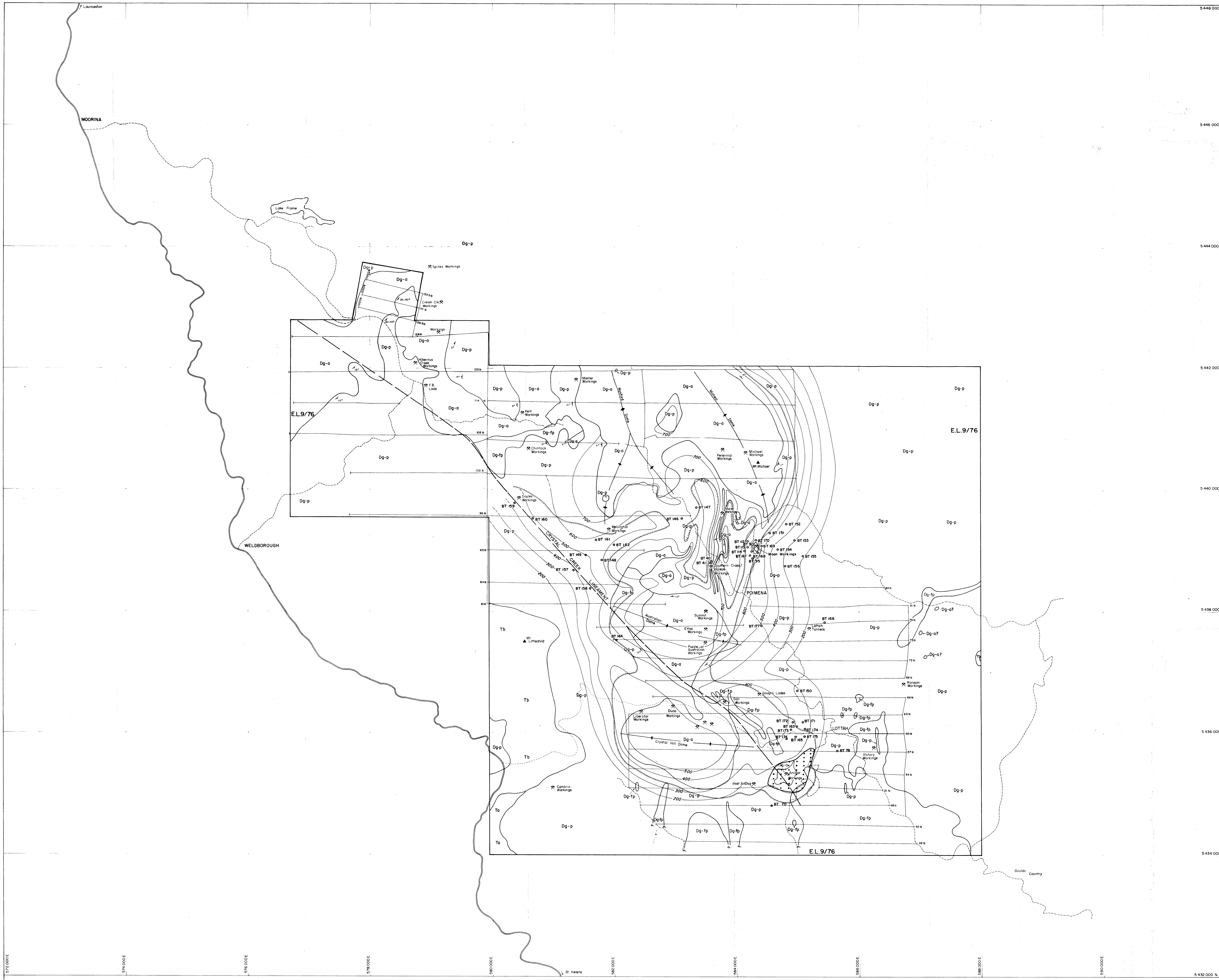


GOLD FIELDS EXPLORATION PTY. LIMITED

84-2081.

ENRICHMENT/DEPLETION TRENDS FOR SELECTED ELEMENTS IN THE POIMENA ADAMELLITE

DRAWN BY : A.J.C.
DRAFTSMAN: S.J.F.
DATE : Dec.83
REVISIONS :
FILE NO.
SCALE 1: Metres
FIG. 11



Drill Holes

BT o Renison/Goldfields Drilling

Area of Detailed Drilling at the Anchor Mine

Structural Contours at the top of the Alkali Granite

Top of Alkali Granite Contact - 100m below surface

LEGEND

Quaternary	Qa	Alluvium, colluvium
Tertiary	Ts	Gravel, sand, clay
	Tb	Basalt
	Ta	Agglomerate and tuff
Siluro-Devonian		Mathinna Beds

BLUE TIER COMPOSITE BATHOLITH

Devonian	Dg-a	Alkali Granite - similar to granite in Anchor Mine, medium grained	Leucocratic Granite Types
	Dg-fp	Fine to medium grained, includes all other leucocratic types e.g. quartz-feldspar porphyry, aplite etc.	
	Dg-p	Poimena Adamellite - mesocratic porphyritic biotite granite/adamellite	
	Dg-g	Granodiorite	

Apparent Domal feature in roof of alkali granite

Dip of granite contact

Interpreted geological contact

Photo-lineament

Old Workings

75N Cut Grid Line

Vehicle Track

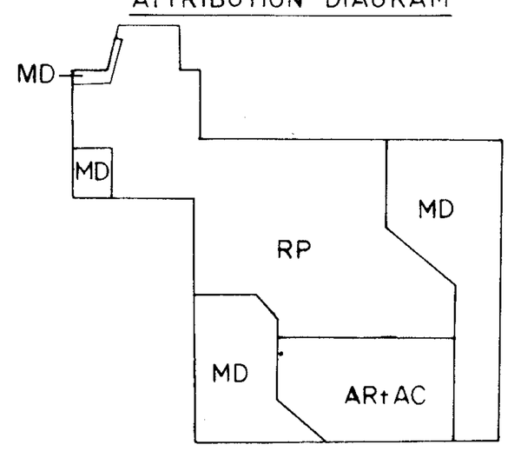
Sealed Road

Licence Boundary

473104

5 cm

ATTRIBUTION DIAGRAM



MAPPING BY

RP R Poltock (contract geologist)
AR A. Ross
MD Mines Department (1:50000 mapping)
AC A. CARTWRIGHT

RENISON LIMITED

84-2081.

BLUE TIER AREA
STRUCTURAL CONTOURS AT THE TOP OF THE ALKALI GRANITE

GEOLOGIST	P.A.R./A.J.C.	SCALE 1:20,000 METRES	
DRAUGHTSMAN	T.G.D.S./S.J.F.	400 0 400 800	
DATE	APRIL 1982		
REVISIONS	A.J.C.: Nov, 83	DRAWING No.	12