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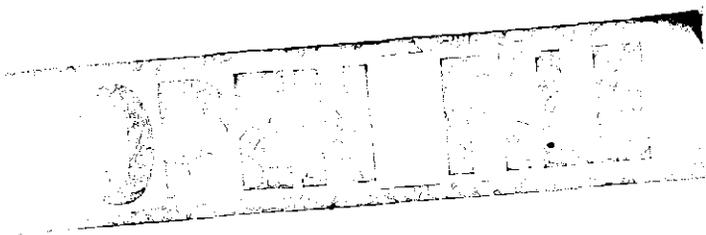
MINES	
File Ref. EL 23/82	
25 MAY 1988	
Doc. Ref.	
Action Officer	Initials
FAXED	
LETTER	
25.5.88	
REFERS	
Resubmit to	Date

ANNUAL AND RELINQUISHMENT REPORT

1987-88

EL 23/82

ALBERTON GOLDFIELDS



R.J.G LEWIS

AMG REFERENCE POINTS ADDED

1/ INTRODUCTION

The Alberton goldfield was discovered in 1883 at the foot of Mt Victoria and was worked until 1925. Numerous auriferous lodes and old workings occur in a narrow NNW trending zone with about 8km strike length along the eastern edge of the Dorset River and the country between the Dorset and New Rivers. Over one hundred reefs were discovered but only five were worked on any scale (New River, Ringarooma United, Mercury, Long Struggle and Mt Victoria mines). It is reasonable to infer that this mineralization is continuous southward until the Doon River goldfield, the intervening area being covered by Permian Sediments. *Doon Rivulet?*

The early work of Hills (1923) and the maps (plans I-V) of Nye and Blake (1934) at a scale of 2½ chains/inch have been the basis of much subsequent exploration.

Other notable relevant work including reports by Mines Department geologists are included in the following chronological summary:

Twelve Trees 1904; Hills 5/1923; Hills 10/1923; Blake 1923; Nye & Blake 1934; Blake 1938; Hughs 6/1952; Hughes 8/1952; ? - McOnie 1983; A bibliograph appears at the end of this report.

McOnie (1983) gives the recorded production of the field as 21,577.5 ounces or 671.125kg of gold.

Much of the field is in State Forest with some on private land. Cover ranges from light forest to thick blackberries along some workings.

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Oceania Tasmania Pty Ltd took up this 8km² exploration license on May 25, 1983 and conducted a program commencing with locality and obtaining access to the old workings followed by an analysis of the structure of the area as it relates to gold mineralization. Electromagnation geophysics proved a very useful and accurate method of locating shears in the Mathinna beds. The traditional prospecting methods using mortar, dolly pot and pan were also used in the program.

2/ REGIONAL GEOLOGY

The lower Devonian Mathinna beds are the major rock type in the area and are part of a 76 km anticlinal structure. This runs from Waterhouse to Mangana defining the line of auriferous reefs, the major lodes being in shear zones associated with the intrusion of the Devonian granite, at Alberton outcropping 5km to the east of the lodes. Mt. Victoria the major geographical feature of the area is to the south of the reefs. It is capped by jurassic dolerite, underlined by lower Permian beds then founded upon the lower Devonian Mathinna beds. Running north from Mt Victoria are the Dorset and New Rivers defining the ridge that contains mineralization and them themselves containing prospects of fine alluvial gold.

*This all
comes directly
from an
earlier
report*

3/ STRUCTURAL SETTING OF MINERALIZATION

At Alberton the anticline is dipping on average at 15° striking at 330° to 345° varying with the undulating pitch of the anticline. The arms of the anticline dip on average at about 60° to the east and west.

Faulting and shearing of the anticline was later followed by mineralization along the parts of least resistance within the Mathinna beds. Apart from a 7 metre wide granite dyke at the Ringarooma United mine there are no igneous rocks near the lodes. There is almost the complete Mathinna sequence represented at Alberton, from the graphitic shales at the bottom to yellow argillaceous sandstones and brown slates, to blue grey slates with interbedded quartzites and sandstones to the top sequence of quartzites sandstones and feldspathic sandstones.

The richest reefs are in the lower sequences of graphitic slates, although good gold contents extend up into the higher members of the sequence in places of extensive shearing and faulting, though no lodes are found in the top feldspathic sandstones of the sequence. The important lodes are all near or on the axis of the anticline and in the case of the Long Struggle mine it is a classic fracture lode as seen in diagram (1) (the axis of the anticline is visible in the entrance of the Caxton adit).

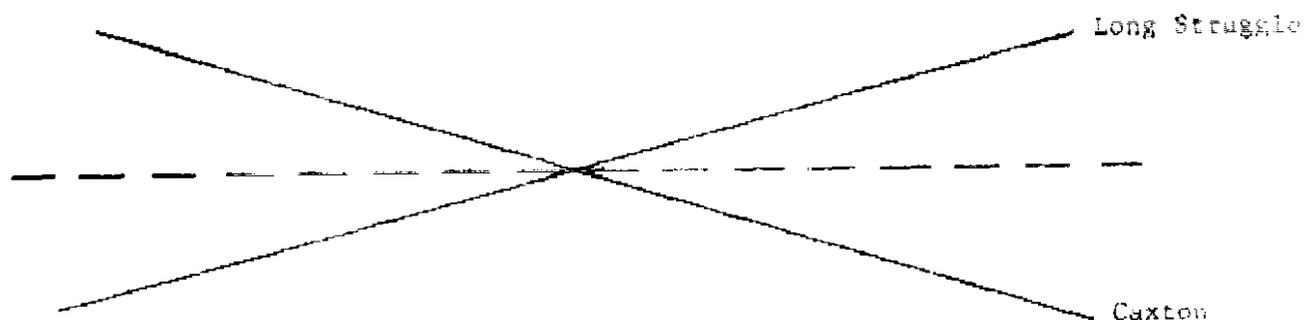


Figure 1 Showing Long Struggle Lodes.

ECONOMIC GEOLOGY

The lodes vary from simple fracture fills and saddles to high pressure implacements witnessed by laminated quartz lodes and embayed country rock similar to that of the Bendigo field in Victoria (e.g. cannon lode). The large lodes are where the pitch and strike of the anticline varies, opening up large fractures with quartz reefs up to three metres in width and charges with sulphides of zinc, lead, copper iron and arsenic as well as free gold (Figure 2).

The major lodes of economic importance are about one metre in width and usually about fifty metres long tapering out into stringers but generally increasing in width at depth.

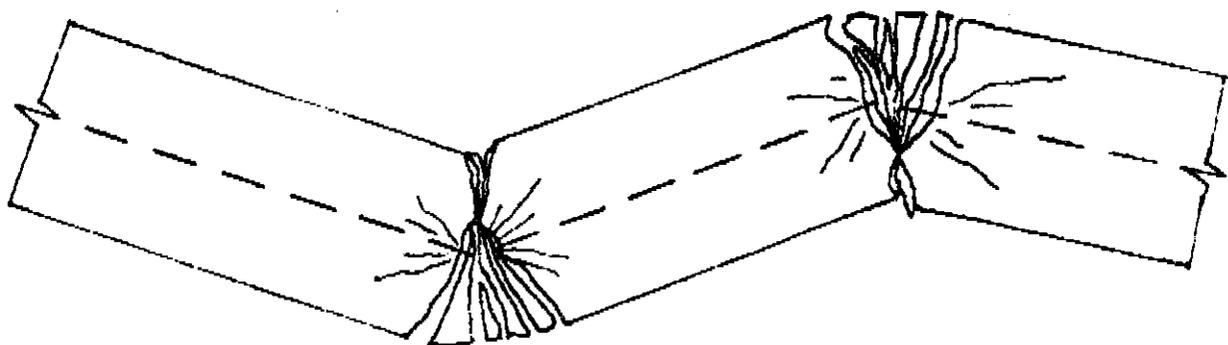


Figure 2. Stylized Fracture Pattern of Anticline

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5/

4/ ECONOMIC CONSIDERATIONS

Historically, no lode in the field was worked if its grade was not of the order of 25g/t and had reasonable width. The current price of gold is such that a grade of 8g/t over a lode width of 1m would probably justify development. In consequence there are well documented lodes which were not much mined in the past which are almost certainly minerable today. Two notable examples are the Long Struggle and Caxton lodes which contain sections 30m along strike 1mm wide which, on the basis of Hills (1923) work might be expected to assay 7-21g/t and 42g/t respectively. Recent work by Goldfields Exploration geologists suggest that until much of the Long Struggle lode has been mined to the surface there is undriven material assaying 25g/t or higher. This work supplied only low values (.1-.43 g/t) from the Caxton No.1 lode.

It is thus apparent that material of interest remains in the Long Struggle area, but the quantity is not well defined. As 25g/t material can be reached underground small scale mining of a section of its lode might provide the best information on average grades and lode extents.

The area also has potential in its alluvial deposits which in both the New and Dorset Rivers are over ten metres deep and two kilometres in length. In the New River gravels, tin is present from the Mt Rex and Star of Peace granite tin deposits as well as alluvial gold from the Alberton lodes. The Dorset River above the old Alberton township holds the best alluvial prospect as a natural rock bar

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782007

holds back a lot of gravel which if one can take the abundance of lodes in the immediate catchments as an indication should prove a rich bit of ground. Initial prospecting of this ground has turned up colours of gold within the fine gravels between the Ringarooma shingle. Further prospecting will have to be carried out with an excavator and will be pursued in the coming summer period.

5/ EXPLORATION

The program of sampling and assaying has continued and extended to include the tailing dumps of the Ringarooma United mine (samples A1-A7) but indicate that there is no prospect of reasonable gold.

Where?
rec'd 28/6

Accumulative summary of assay dates appears at the end of this report.

During the year Gold Fields Exploration Pty Ltd conducted work on the license area on Oceania's behalf as part of a larger regional study. This has afforded detailed studies of numerous sites as outlined in the next section.

No
RGC requested
access to the area
It was not done
"on Oceania's
behalf"

At this stage exploration has progressed to the stage where further work requires the removal of volumes of material from underground. Accordingly applications for mining leases have been lodged over appropriate areas; Exploration of others will continue.

?

007

CENTRAL RINGAROOMA REEF

NOV EL 23/82

This reef was described by Blake (1933) but Blake and Nye (1934) Plan No 1, show a NE trending reef dipping at 75° to NW, developed by two adits and a shaft with some open stopes.

Hills (1923) throws us into confusion by describing a "Central Lode" (under the "Donovan's-Lode Group" which includes the nearby Prendergast, Crest and Pennefather's Lodes) which he reports to strike at 313° (M) and dip SW at 70° and developed by two adits.

However, we managed to locate some workings as depicted by Blake and Nye (1934). The upper adit is inaccessible due to an underhand stope at least 10m deep in the floor of the approach to the portal. The trend of the reef here appears to have been about 50° (AMG) dipping 70° NW with a (Stoped) width of 0.3-0.6m.

Our plan of the lower adit is presented in Figure 10. Unfortunately the adit is caved at 57m, presumably just before the position of the reef.

WATERSTONE FOREST RES.

5 cm

AMG REFERENCE POINTS ADDED

1:100 000

782009

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215188
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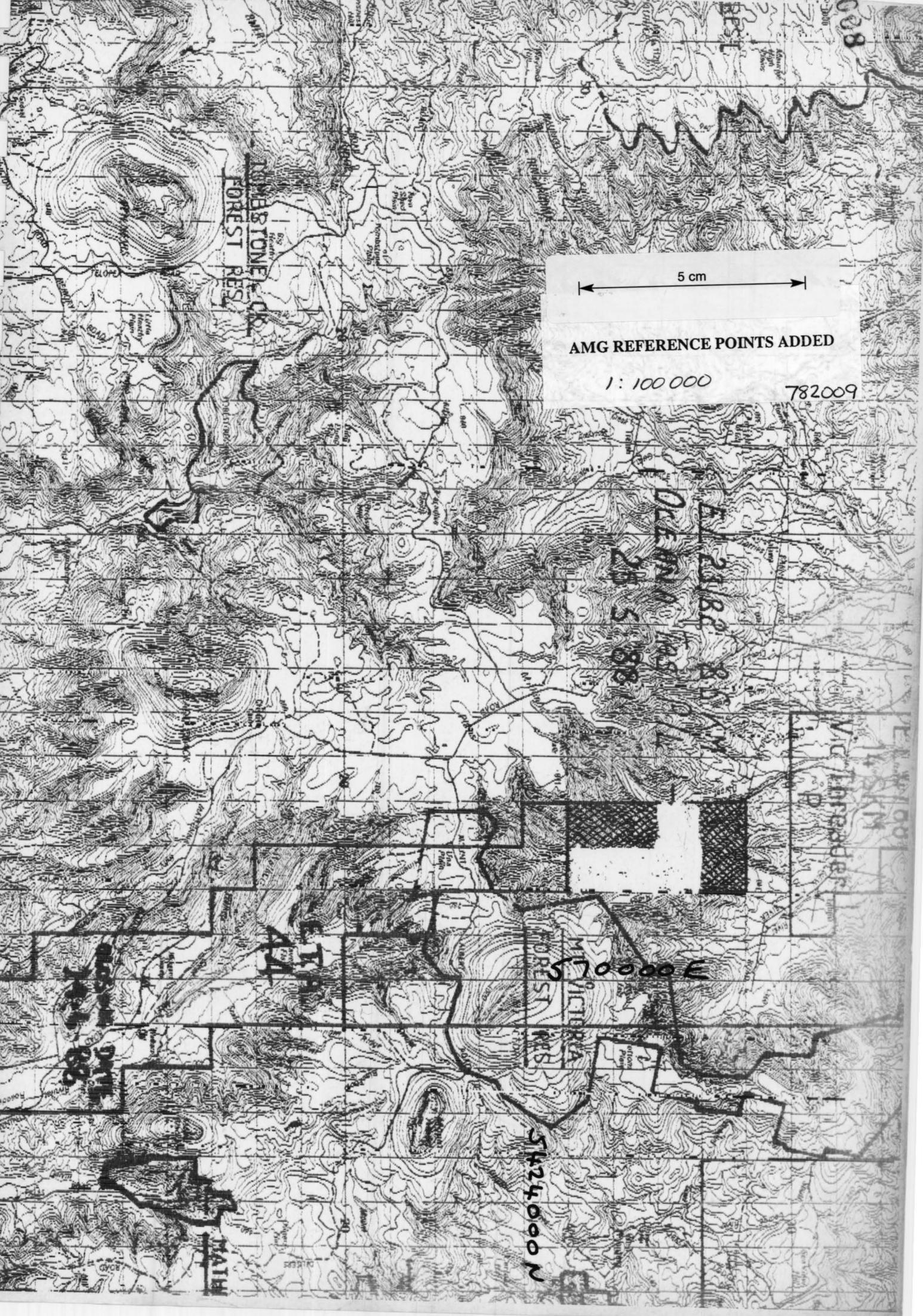
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DATE 1988

MAIR

Vic Timber

MICHAEL FOREST RES.



MINSTOCK MINING GROUP

ASSOCIATED COMPANIES
 SWANSEA MINING CO. PTY. LTD.
 OCEANIA TASMANIA PTY. LTD.
 PORT HARBOUR MINING CO. PTY. LTD.
 WILSON PTY. LTD.

MINES	
File Ref.	E.L. 23/82
22 JUN 1988	
Doc. Ref.	
Action Officer	Initials
Resubmit to	Date

Registered Office:
 84 Wells Parade,
 Blackmans Bay, Tas. 7052.
 Ph. (002) 29.6576. Fax. 292153.

20th June, 1988.

Mr. M.R. Hargreaves,
 Deputy Director of Mines,
 Department of Mines,
 P.O. Box 56,
ROSNY PARK Tas. 7018

Dear Sir,

Renewal of Exploration Licence 23/82.

Further to your letter of the 9th instant regarding the above lease, to enable our application to proceed, we answer your request for further information as follows:-

1381992

(1) With regard to your contention that a poor effort was displayed in exploration, we would point out that we have taken pains to fulfill all requirements under the Act, and taken a forgotten prospect 5 years ago and mainly through our promotion of the District, fostered the interest that the field now enjoys. Further, our excellent exploration efforts have borne fruit as we will be starting production this year. Our exploration effort has been tireless and I personally spent 6 months solid in the Alberton Field prospecting (living in a caravan on site) within the period of tenure, panning and dollying and opening up the old workings for later access (by Renison Goldfields). Those efforts have now been rewarded, as is obvious from Renison's Report, which was only received six months ago.

We are only a small operation (but getting bigger) and do not yet have a large staff to handle the processing of information as quickly or efficiently as both you or I would wish. Rather than producing glossy reports we try to produce results which will benefit the State. We believe that the only true measure of success is a producing Mine.

(2) Copies of all the information you asked for were faxed to you from the Zeehan Medical Union Offices, (this is verified) however, your fax machine was not working properly and great difficulty was experienced in the transmissions, we believe that all the documents were eventually faxed and should be in the possession of your Department.

We do not accept responsibility for the deficiencies of a jamming Fax machine, however we happily and in a spirit of conciliation again supply the required information, which is enclosed.

(3) Renison Goldfields supplied us with the results of their work last December, so they came into this reporting period so far as Oceania Tasmania Pty.Ltd. is concerned.

If we can't claim and report in this period, we can't claim at all, and surely this is a very severe ruling.

Renison's work has never been forwarded before by us and it was done on Oceania's licence. It also surely comes under the provision which states "over expenditure in one year can be carried forward to the following year" and as Renison took so long to report back to us, we would ask that you review your disallowance of this item.

(4) No relinquishment report will be forwarded and as we have done before we wish all existing reports be put on open file. This will assist those interested in the area relinquished to benefit from a proper more regional perspective as we want to see all prospectors find economic Mines as we do.

(5) Clearing of the Mill site was continued along with further prospect examination in the past 12 month period.

(6) In our application for renewal it was clearly stated what we would be doing, however, to satisfy your request I repeat my original proposal with additional cost estimates.

(a) Geometric analysis of vein observations and assay patterns with direct emphasis on Mine feasibility implications. Est. cost consultant \$350 per day, 10 days work, \$3,500.

(b) Surface geophysics under consideration in order to infill observations and define trends. (Method to be determined but may only include self potential and magnetics)

1 Geophysicist, 10 days.	\$3,500
1 Field Assistant, 10 days.	\$1,500
Accommodation & Food etc.	\$1,000
	<hr/>
Total	\$6,000.

Objective: Locate a vein concentration which might permit economic mining.

Drilling will not be considered until orientation and trend confirmation studies have been completed.

Up to 200 metres of Drilling at \$100 per metre.

Total Cost - \$20,000.

Grand Total Estimated Expenditure \$39,500.

This estimated expenditure is 6 times that required under the Act and I suggest that that was quite obvious from the previously submitted proposed exploration programme. Also I would remind you that \$5,000 is the expenditure commitment and you should adjust your expectations accordingly.

Yours faithfully,

M.R. BENDALL
MANAGING DIRECTOR

Oil

ANALABS

782012

Phone (09) 458 7999

A division of MacDonal Hamilton & Co. Pty. Ltd.
52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

ANALYTICAL REPORT No. [REDACTED]

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Hinestock
84 Wells Rd,
Blackman Bay
Tasmania 7052

ORDER No.	PROJECT
DATE RECEIVED	RESULTS REQUIRED
17/05/88	ASAP

No. OF PAGES OF RESULTS

DATE REPORTED

No. OF COPIES

TOTAL No. OF SAMPLES

1	20/05/88	1	7
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STATE OF SAMPLES REFER BELOW	SAMPLE NUMBERS	PRE-TREATMENT							ANALYSIS			
		DRY	CRUSH	SPLIT	PULVERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD	
	917	50	Prep:	005,012,	015,016					Au/329		

RESULTS TO

Hinestock
84 Wells Rd,
Blackman Bay
Tasmania 7052

RESULTS TO

[REDACTED]

REMARKS

STATE OF SAMPLES	ANALYSIS -- PREPARATION	ANALYSIS -- METHOD
whole core WC	perchloric acid A1	atomic absorption CA
split core SC	hydrochloric acid A2	x-ray fluorescence SS
cutting CU	nitric acid A3	spectrophotometry Ma
rock Ro	aqua regia A4	colorimetry AA
soil SO	nitric-perchloric A5	chromatography VO
pulp PU	HF mixture A6	titration IG
water WA	HF under pressure A7	other chemical means PP
issue TI	fusion A8	miscellaneous GF
stream sediment SS		fluorescence
heavy mineral HM		inductively coupled plasma ICP

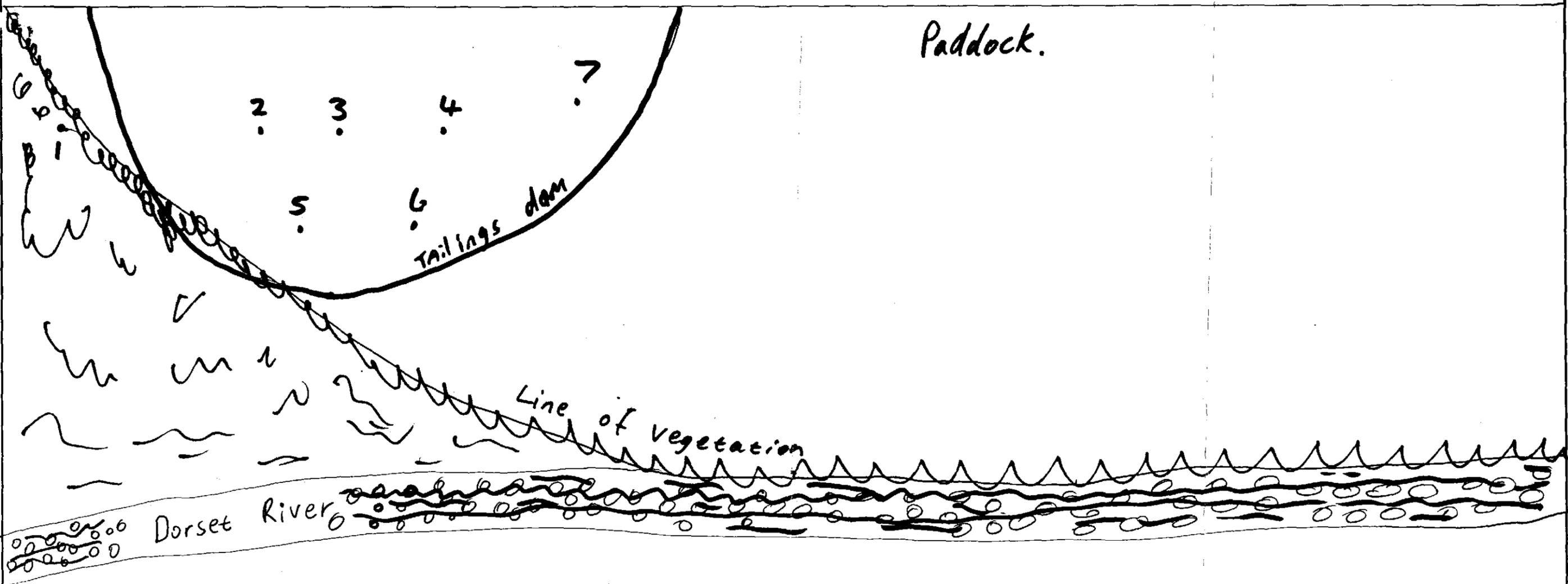
AUTHORISED OFFICER

AREA OF 10
Ringarooma Dam



ALBERTON ROAD →

Paddock.



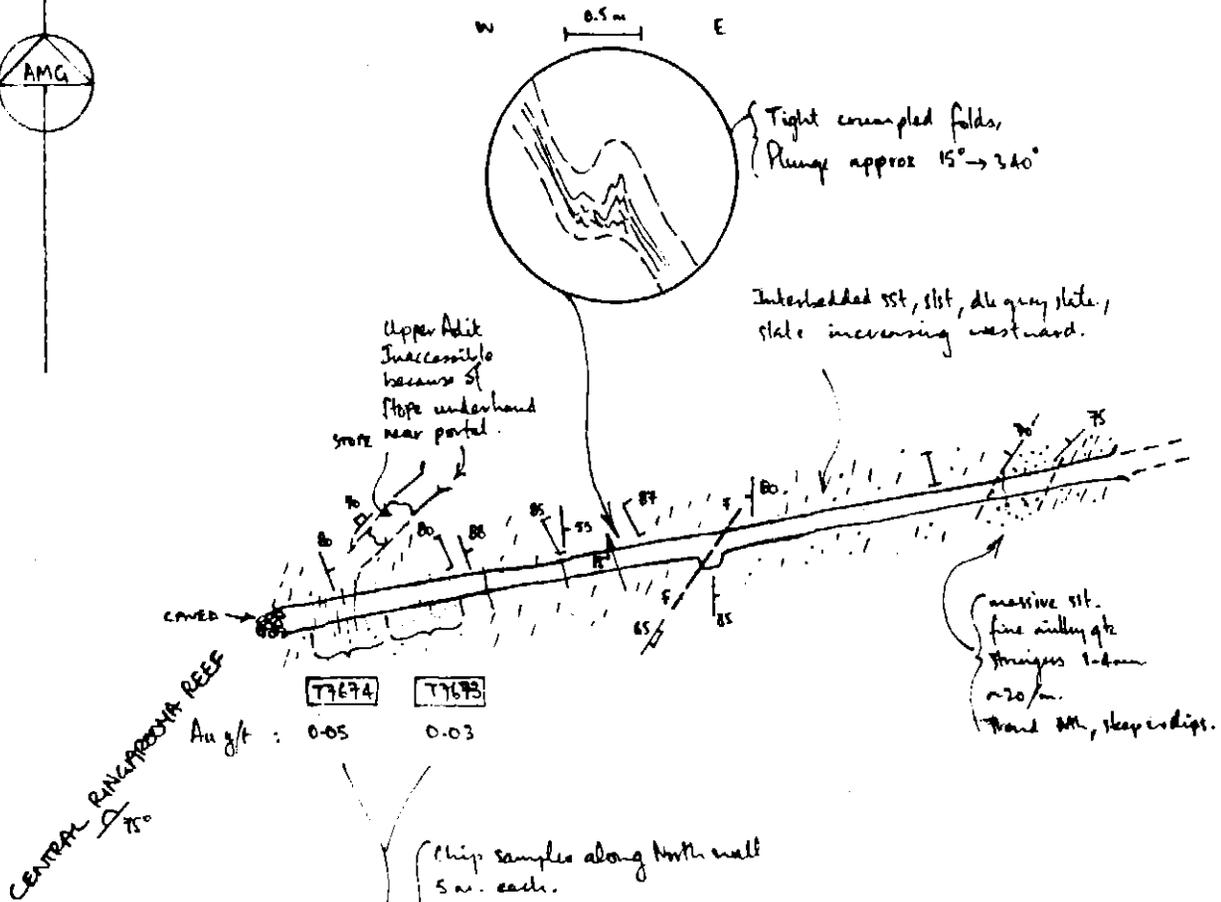
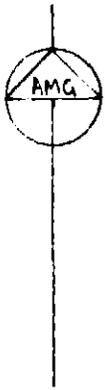
CENTRAL LOCATION - AMG. VICTORIA MAP SHEET 1:25,000.
 APPROX 565 950 ME
 5158 550 MN.

[Signature]

5 cm

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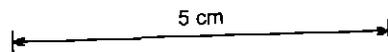
ITEM	DESCRIPTION	REQ'D	MATERIAL	REMARKS
	Ringarooma United Tailings DAM		SCALE	PASSED
	ASSAY Locations		1:100	DATE
	SAMPLES A1-7		DRAWN MRB	DRAWING NUMBER
			TRACED "	
			CHECKED "	



chip samples along North wall
5 m. each.

Discontinuous paddy milky quartz
veins 5-15 mm, average 10/m.
Dominantly N trend & steep
dips to W but also some to E.
(ie: sub // to chg.)
No sulphides.

Similar veining of lower intensity
elsewhere along adit walls.



Not in EL 23/82

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 23/82	
NEW RIVER GOLDFIELD.	
CENTRAL RINGAROOMA REEF	
LOWER ADIT PLAN	
SCALE 1:500	Metres
DRAWN BY: [Signature]	FILE NO
DRAFTSMAN:	FIG. 10
DATE 4-87	
REVISIONS:	

The country rocks are interbedded sandstone-siltstone-slate with steep dips W - NNW and ENE implying a tight synclinal hinge, which however is not evident, about half way along the adit. Tight, crumpled folds just west of this position are asymmetric with short west dipping limbs and shallow NNW plunge. The steeply dipping cleavage is approximately parallel to this direction.

Minor quartz stringer veining dominantly of steep westerly and easterly dip occurs along the adit. The best development near the inner end of the adit was chip sampled over two consecutive 5m intervals (T7673, 7674) but yielded disappointing results of 0.03 and 0.05g/tAu.

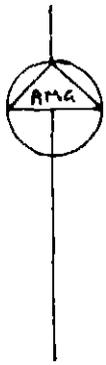
6.1.4. Mullunah Reef (Figure 11) ✓

Figure 11 illustrates the geological details at the Mullunah Adit.

The lode exposed near the bend in the adit is about 0.8m wide consisting of brecciated country rocks with subparallel (to footwall) quartz veins to 50mm and irregular patches of quartz infilling breccia matrix. The full width of the lode may not be exposed, about 20% of the brecciated zone is of quartz but this diminishes rapidly southward along the lode. It is evidently a fault fissure inconsistently mineralized.

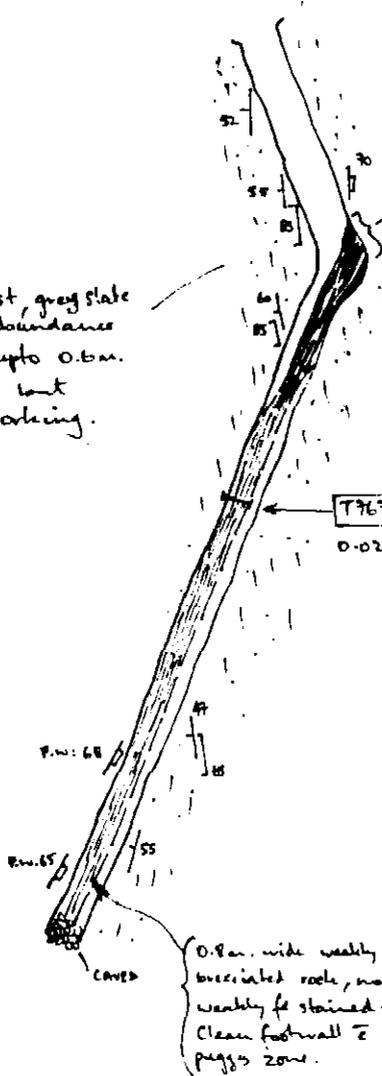
Samples T7675 from the bend and T7676 from about 9m further south tell the story with 1.4 and 0.02g/tAu respectively.

The quartz reef evidently makes again further south as Twelvetrees (1904) reports two shafts (presumably at about the "fallen stopes" depicted by Blake & Nye, 1934) one of which produced 15 or 20 tons at 1½oz/ton.



Country Rock:

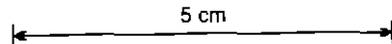
Interbedded sst, slst, grey slate of approx. equal abundance
Sandstone beds upto 0.6m.
Thick near portal but
no qtz vein stock working.



Chip sample across 0.8m.
late formation of moderately
intensely brecciated country rock
with quartz veining to 50mm
and patchy quartz breccia infill.
Overall estimate 20% vol. in qtz.
Milky and clear quartz, very
rare coarse blebs Aspy.
Qtz. content diminishing rapidly
southwards.

Chip sample across 0.6m.
zone weakly brecciated, fe stained
rock. No quartz.

0.8m. wide weakly sheared
brecciated rock, no quartz,
weakly fe stained.
Clear footwall \pm 30mm
peggy zone.

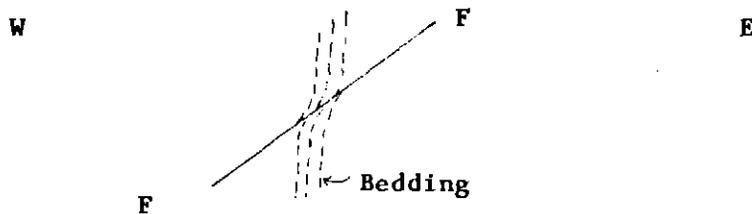


GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 23/82 ✓	DRAWN BY: <i>A.R.</i>
ALBERTON GOLDFIELD.	DRAFTSMAN:
MULLUNAH ADIT PLAN	DATE 4:89
	REVISIONS:
	FILE NO
SCALE 1:250	 Metres
	FIG. 11

6.1.5 Alberton, Forest King and Queen Reefs ✓

Most of the workings in this group are now inaccessible and did not provide much geological information.

However an inspection of the Lower Adit on Alberton No 2 Reef indicated that the lode at this point occupied a somewhat undulose fault fracture zone 50-200mm wide, striking 50° and dipping at 80° SE. The wall rocks are interbedded sandstone-siltstone-dark slate orientated at $00^{\circ}/70^{\circ}$ W in the footwall and $010^{\circ}/75^{\circ}$ W in the hanging wall. Slight bending of the bedding planes within 0.5m of the fault plane (especially in the hanging wall) suggests an east side southward and downward movement.



The lode consists of fractured milky quartz, clayey pug and some discontinuous pods or massive veins of smoky quartz with upto 2% arsenopyrite, most notably against the footwall in "swells" in the lode course.

Sample T7644 with 0.2g/tAu and 0.39%As is representative of the full width of lode at the only point where we could reach the stoped out back of the working.

Into the footwall of the lode are occasional quartz veins of two types:

- 1) sigmoidal tension veins, milky quartz, E-W strike, flattish 20° dip to north, upto 600mm long x 70mm thick, often confined to sandstone beds.
- 2) subordinate thin milky quartz veins (< 20 mm) sub parallel to bedding, mostly within or adjacent to slaty units.

A grab sample of the quartz from these vein types assayed 0.31g/tAu. This does not offer much prospectivity for these low intensity stringer and tension vein systems but does again indicate (as in Prendergast upper adit) that this style of veining is weakly auriferous, in contrast to many of the Forester and Warrentinna stringer veins which were quite barren.

The Alberton No 1 and No 2 lodes are possible north and south parts of a single lode. The presence of the sub parallel Forest King and Queen Reefs within 80-90m to the south east indicates an unusual concentration of lodes, with the possibility of more in between. Although the early prospectors have carried out some cross trenching, no cross cut drives are shown by Blake and Nye (1934). Hills (1923) reports average gold grades for the three known lodes in the range 5-20dwts/ton (7.65-30.6g/t) and widths upto 1.1m so the area may bear consideration for the "bulk mining of several reefs together" type target.

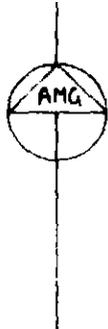
6.1.6. Crown Prince Mine (Figure 12) ✓

The Crown Prince Mine is located on the eastern fringe of the goldfield near the Mt Victoria Road.

McOnie (1983) summarizing Twelvetrees (1900) mentions a shaft to 27m on 27.5g/tAu rock, but at a depth of 30m the vein widened to 1.8m and was reported to be of poor quality.

The results of our investigation of the adit are presented in Figure 12. The adit is driven SSW through shallow NW dipping interbedded siltstone-sandstone and massive sandstone for 118m before intersecting the NE striking, SE dipping lode formation. The lode is in a fault fissure, consisting of 0.8-1.8m wide zone of intensely brecciated and quartz veined sandstone with upto 5% disseminated arsenopyrite, contained within fairly clean puggy walls. Our channel sample (T7648) across 1.8m width of lode assayed 0.49g/tAu and 1.2%As.

639



Interbedded pale grey fg. sst. and grey slaty siltstone, sst. gradually increasing down sequence (10-11)

Thick bedded massive fg. sst. very minor slaty interbeds.

0.2 m. w. angularoidal mafic Dyke.

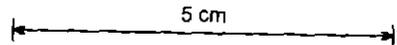
End face: 0.8m. zone brk sst. & abundant irregular milky qtz veining. Clean puggy walls.

Lode 1.2m. brk zone clean walls, ochreous milky qtz veins, some smoky qtz & upto 5% As₂S₃.

T7646 H.C. Sample of veins only. Milky quartz veins, < 20 mm average 2/m. trending steep ENE

T7647 H.C. sample of 50-100 mm. smoky quartz vein & 2% As₂S₃ on Footwall of "lode". Sometimes milky barren quartz in medial zone in areas of swells.

T7648 chip channel sample across back over 1.8m. in "lode" consisting of brecciated intensely qtz veined sst. Qtz mostly milky, some smoky & As₂S₃. Persistent 50mm smoky qtz vein & As₂S₃ on F-wall. H-wall side locally very puggy & upto 5% disseminated As₂S₃.



T7647 0.18 g/t
Rubble pile

T7648 0.49 g/t Au
1.20% As

WATER

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 23/82 ✓	
ALBERTON GOLDFIELD	
CROWN PRINCE ADIT	
PLAN	
SCALE 1:500	FILE NO
DRAWN BY: <i>AD</i>	
DRAFTSMAN:	
DATE 4/87	
REVISIONS:	
FIG. 12	

620

A 0.2m wide weathered basaltic dyke is intersected in the adit at about 90m from the portal. This is oriented $70^{\circ}/70^{\circ}\text{SE}$ essentially parallel to the lode of which the footwall trends $60^{\circ}/65^{\circ}\text{SE}$. Blake and Nye (1934) Plan No II, show another (similar?) dyke of similar trend on the Mt Victoria Road about 300m to the NW.

Within the first half of the adit there are many spaced, narrow, planar milky quartz veins (mostly $< 20\text{mm}$, usually 1-2 per metre) of remarkably regular steep dip to the ENE and apparently spatially related to the contact between interbedded sandstones-siltstones and the underlying more massive sandstones. A high graded sample of material from some of these veins assayed at $< 0.008\text{g/tAu}$.

The gold potential of the observed "stringer" veins at Crown Prince seems to be negligible.

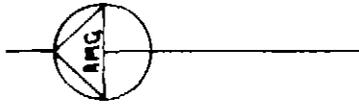
The local prevalence of SE dipping dykes and mineralized fault fissures suggests that this has been a popular orientation for brittle yielding of the rocks in the Crown Prince-Alberton Reef area and that additional lodes may occur between and beyond these two prospects.

6.1.7 Rosalind, Premier, Hannah and Strahan Adits ✓
(Figures 13, 14 and 15)

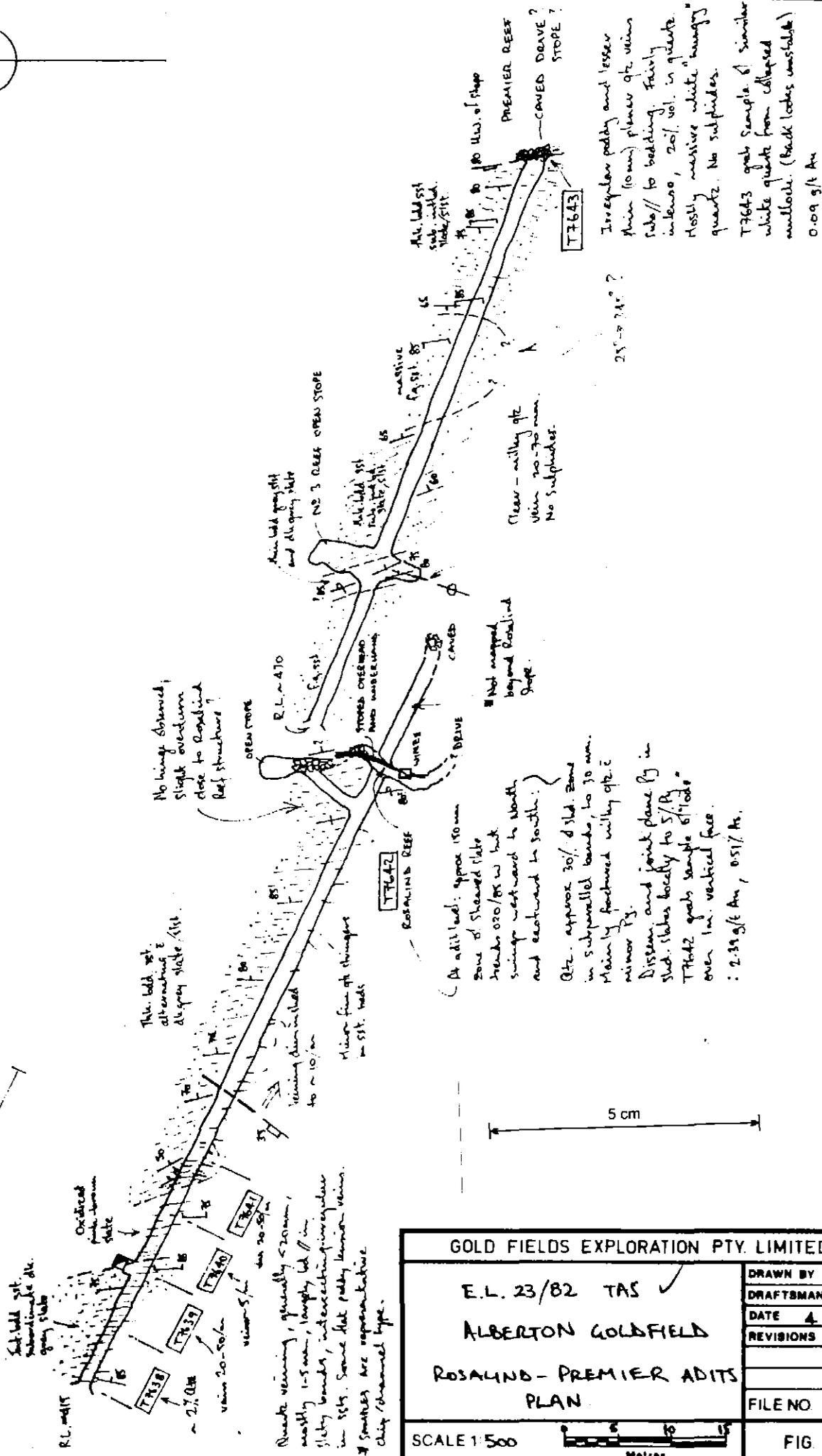
These five adits all occur over a WNW trending zone a few hundred metres long and were apparently all developed by the Ringarooma United Gold Mining Company which according to McOnie (1983) produced at least 4282oz and possibly as much as 8974oz from this vicinity.

Figures 13, 14 and 15

Illustrate the geological details observed in the adits.



24m @ 0.22 g/t Au



Irregular paddy and lesser thin (10mm) planar qtz veins sub// to bedding. Fairly intense, 20% vol. in quartz. Mostly massive white 'bungy' quartz. No sulphides.

T7643 grab sample of similar white quartz from collapsed mullhole. (Block looks unstable)

0.09 g/t Au

At all levels: approx 150mm zone of sheared slate trends 050/080 but swings westward to north and eastward to south.

Qtz: approx 30% of slab zone in subparallel bands, to 30mm. Mainly fractured milky qtz. minor P3.

Discon. and joint plane P3 in slab. Slab locally to 5/P3.

T7642 grab sample 61'000 over 1m vertical face.

: 2.39 g/t Au, 0.517 Au.

No things observed, slight overturn close to Rosalind Reef structure

Not mapped beyond Rosalind adit

Clear - milky qtz vein 20-70mm. No sulphides.

25°-30°?

All level st sub milled. No st

PREMIER REEF
- CAVED DRIVE?

massive qtz st. 85

NO 3 REEF OPEN STONE

oxidized grey st and all grey slate

All level st sub milled. No st

R.L. M-470

STONES OVERSEEN AND UNRECORDED

WIRES

DRIVE

T7642

ROSAIND REEF

This level st alternating grey slate st.

veining thin to thick to ~10mm

Minor fine qtz stringers in st. beds

Slat. bed st. sub milled. grey slate

Oxidized pinkish-grey slate

Quartz veining, generally $5-20\text{mm}$, mostly 1-5mm, largely lat. in slab bands, intersecting irregular in st. Some flat paddy laminar veins. If smelted are representative chip/channel type.

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 23/82 TAS ✓	
ALBERTON GOLDFIELD	
ROSAIND - PREMIER ADITS PLAN	
SCALE 1:500	FIG 13
DRAWN BY: [Signature]	FILE NO
DRAFTSMAN:	
DATE 4:87	
REVISIONS:	

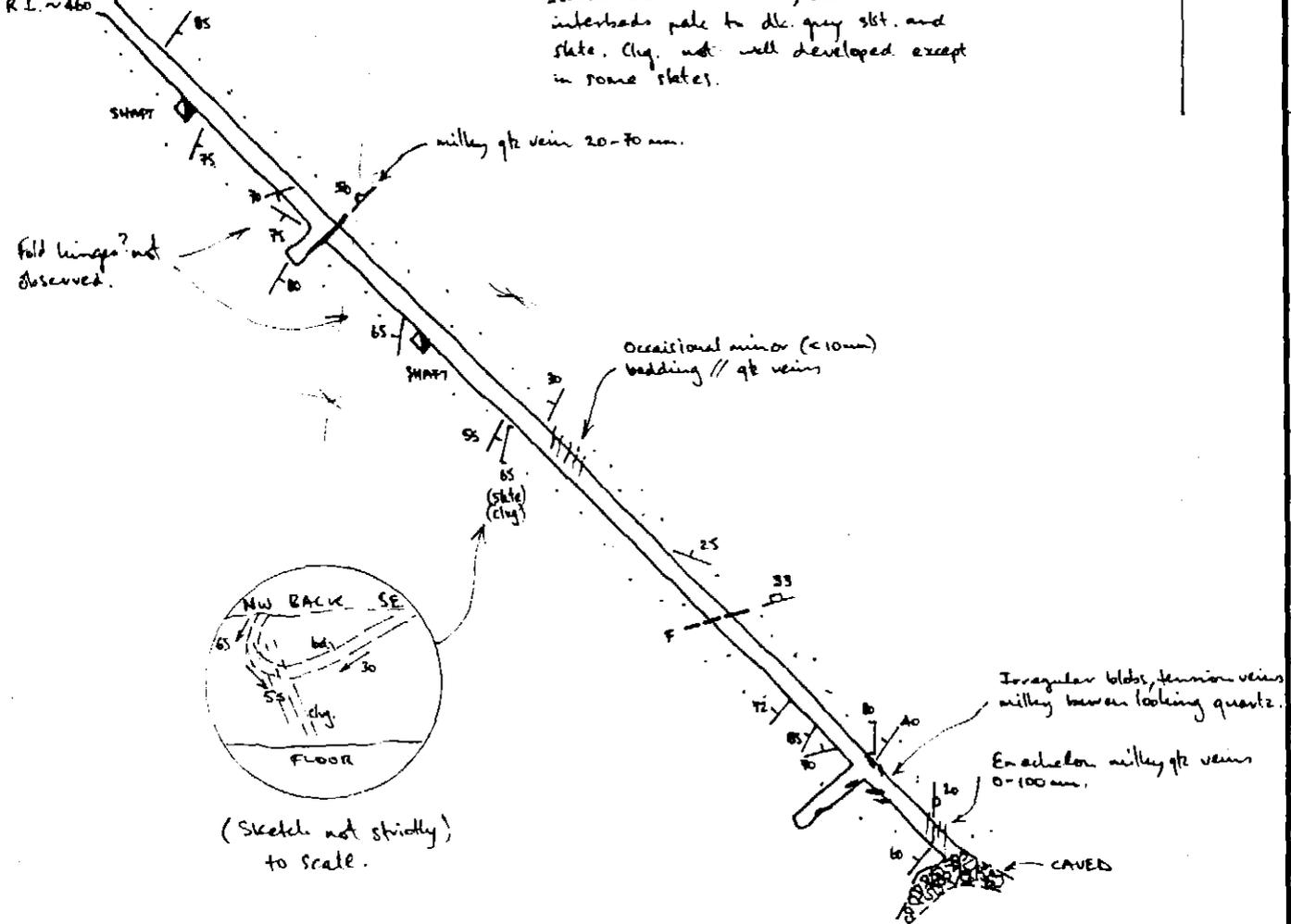


SE CORNER OF FIG: 13

COUNTRY ROCK LITHOLOGY:

dominantly pale grey - buff thick bedded
somewhat massive sst, subordinate
interbeds pale to dk. grey slt. and
slate. Clg. not well developed except
in some slates.

R.L. ~ 460

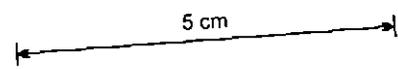


Fold hinges? not observed.



(Sketch not strictly to scale.)

WESTE
EDGE
FIG:
8 cm
SAME



GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 23/82 TNS. ✓	DRAWN BY <i>[Signature]</i>
ALBERTON GOLDFIELD	DRAFTSMAN
HANNAH ADIT PLAN	DATE 4/87
	REVISIONS :
	FILE NO
SCALE 1:500	FIG 14

NEW STRAHAN ADIT

EASTERN EDGE OF FG: 14
8m/140m
SAME LAT.

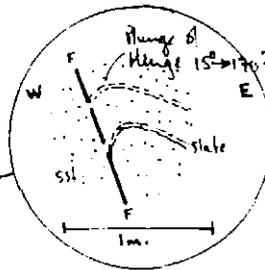
H.C. sample poddy 5-120mm
milky quartz vein. T7655
Ar < 0.008 g/t.

Poorly defined zone of brecciation
& irregular discontinuous milky qtz
veining ~ 40% vol. T7654

OLD STRAHAN ADIT
R.L. ~ 520

COUNTRY ROCK LITHOLOGY:
Moderately thick bedded (~200mm)
fg. sst and gray slt with
subordinate dk gray slt.
Silt beds ~ 40mm usually
fine // bedding.

T7656, T7657 : Samples representative of zone
of poddy irregular milky qtz veins,
mostly < 50mm, some up to 100mm,
partly bedding //, some flat arcuate
tension veins. Est. 5% vol. is qtz.
* * Both Samples H.C. of qtz veins only.



Structural trace of Mammoth Fault at R.L. 460



(Lower level)
Milky quartz filled tension veins
and tabular veins to 30 max, 5/m.
Orient: variable, irregular, some flat

Prominent jointing / clay
resembles fault shear.

COLLAPSED AT LOWER ADIT LEVEL

Mammoth fault
R.L. 475 m

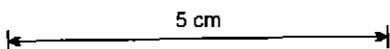
Irregular poddy veins milky qtz trend. 350'

CAVED STOPE

WINEE; WATER at 4 m.

COLLAPSED

milky qtz veins
to 50 mm.



Mammoth Fault trace at R.L. 520

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 23/82 TRS ✓	DRAWN BY: [Signature]
ALBERTON GOLDFIELD	DRAFTSMAN:
STRAHAN ADITS PLAN	DATE 4.87
	REVISIONS:
	FILE NO
SCALE 1:500	FIG 15



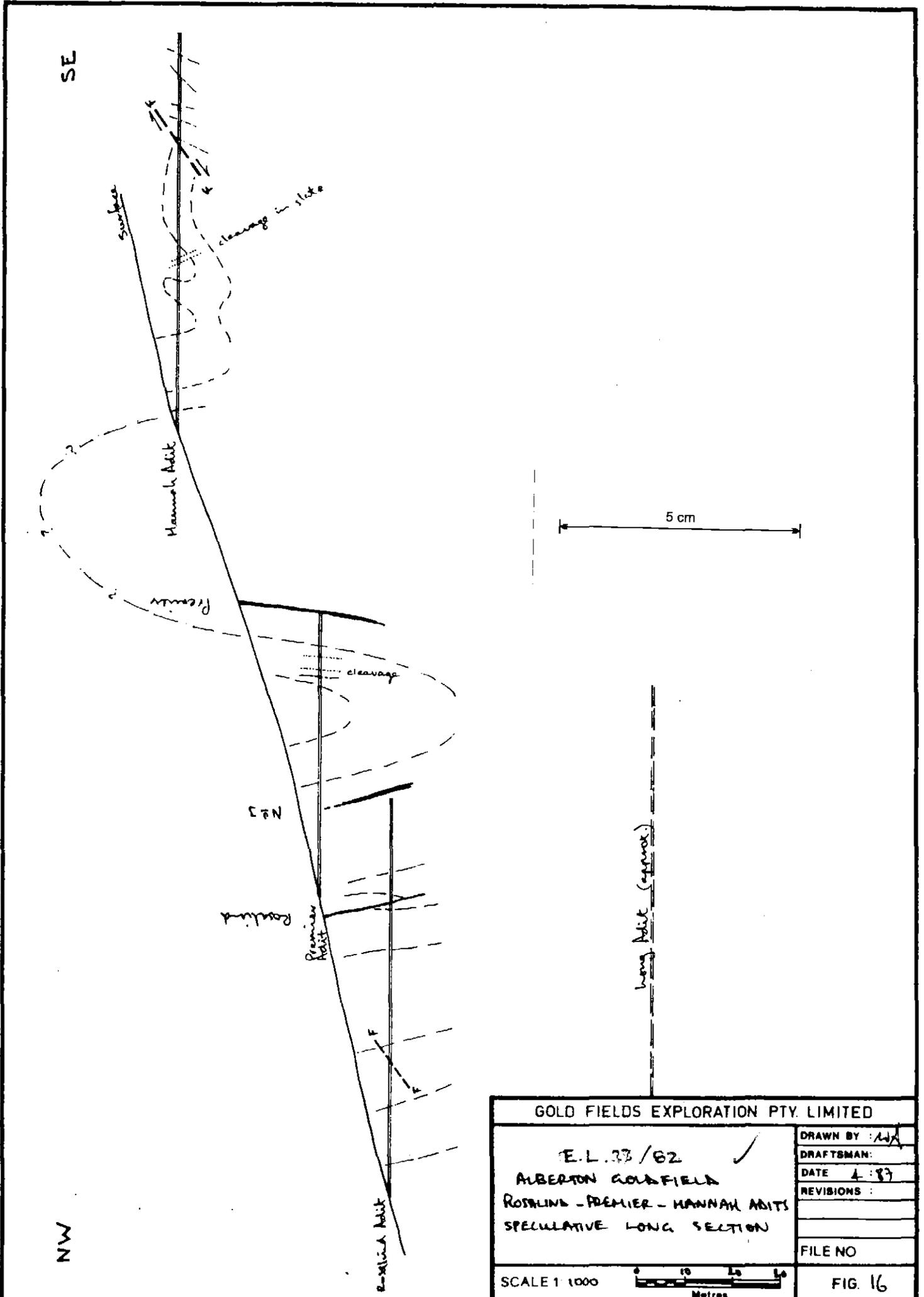
Bedding in the Rosalind Adits and the first part of the Premier Adit dips steeply to ENE but in the latter part of Premier Adit the dips are to the west inferring a synclinal axis plunging at about 25° to 345° although this was not observable due to the massive nature of the sandstone at the critical interval.

The Premier Reef (not observed due to cave-in) appears to be pretty well bedding parallel and perhaps also the Rosalind Reef which however appears to have some north easterly offsets. (Blake & Nye, 1934, Plan III). The No 3 Reef is not well exposed at the Premier Adit level but according to Hills (1923) has a strike of 320° (magnetic) and definite easterly dip in the lower levels which would also accord with the bedding orientation.

The No 3 and Premier lodes are about equidistant from the inferred synclinal axis and I see a possibility that these two are opposite limbs of an inverted saddle reef. Indeed Hills (1923) stated that the No 3 Reef "junctions with the Premier lode at its southern end" although he considered it to be a fault fissure lode.

In the first part of the Hannah Adit, bedding dips are again easterly, implying an anticlinal hinge somewhere between Premier Reef and the Hannah portal. Further in dips are mainly north westerly, both shallow and steep and at least one, semi recumbent, synclinal fold is apparent (Fig 14). This overturned fold may be related to possible reverse movement on a shallow NW dipping fault observed in the Hannah Adit. A similarly oriented fault was mapped in the Rosalind Adit 30m in from the portal. The geological cross section might resemble Figure 16.

In the Strahan Adits, nearby to the east, structure is also quite complicated with bedding in both tight and open folds mostly plunging very steeply to SSE in contrast to the relatively shallow northerly plunges inferred in the other adits.



GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 33/62 ✓	
ALBERTON GOLDFIELD	
ROSLIND - PREMIER - HANNAH ADITS	
SPECULATIVE LONG SECTION	
DRAWN BY: <i>Adx</i>	DRAFTSMAN:
DATE: 4/83	REVISIONS:
FILE NO	FIG. 16
SCALE 1:1000	Metres

Some small scale "drag" folding is associated with a steep NE dipping fault at about 45m in from the portal of the (lower) New Strahan Adit. The "drag" fold axis plunges at 15° to 170° and the deflection of the bedding suggests a reverse (east side up) sense of displacement on the fault. This fault may be connected with the Strahan Reef which has a similar orientation and (again) seems to be at least partly parallel to bedding.

No doubt, some of the structural complexities could be elucidated if the workings were in a better condition. The (lowest) Long Adit which is now inaccessible would be particularly useful.

Blake and Nye (1934) Plan III, show at least four bedding dip reversals in the Long Adit between the portal and the Rosalind Reef (approx. 300m) which together with the folds observed or inferred in the other adits, identifies this as an area of unusually close folding.

Our sampling of major reefs and quartz veins in the Rosalind, Premier and Strahan Adits (as well as sampling by Roberts (1986) in the Hannah Adit) revealed nothing of particular interest mainly due to the fact that not much of the original producing reefs remains or is accessible today. Figures reported by Hills (1923) and McOnie (1983) indicate average grades upto and better than 1oz/ton.

This area seems to have some potential for the bulk mining of the multiple reef gold type target. There is/was reasonable concentration of large lodes carrying good grades of gold. Many of these appear to be bedding parallel and some may be saddles. Hills (1923) mentions the Soft Spur Lodes just north of Rosalind as being six lodes in close proximity, upto 0.3m in width, 8m in length and with yields upto 5oz/ton.

Also the Bank Lodes southeast of Premier, were a group of four lodes of "indefinite developments of quartz..... constituting partial saddles" with average gold grades of several ounces/ton.

About 100m ENE of Premier Reef are/were the Cake and Plum Pudding lodes which Hills described as being close together, "fillings of joint or bedding planes" and averaging 1oz/ton gold.

Hills and the geologists of those days regarded the bedding parallel reefs as being of subordinate interest to the fault fissure lodes which could be expected to have greater strike and depth persistence. The lack of persistence would be less of a problem for bulk mining methods if intensity of veining and grade were good enough.

The presently available structural information is insufficient to predict where the greatest concentrations of bedding veins/saddles might be located. However, the local prevalence of bedding parallel lodes in a zone of apparently close folding suggests a connection.

A possible "sweetener" in the bulk mining target is the local presence of quartz vein stringer systems carrying anomalous gold.

The best development occurs over the first 24m of the Rosalind Adit where quartz stringers mostly in the range 1-5mm but upto 20mm thick, occur in intensity upto 50/metre. They are largely bedding parallel in the slaty beds and irregular-intersecting in sandstone units. Our chip samples T7638,39,40,41 over 6m intervals each, progressing inwards from the portal, assayed 0.02, 0.21, 0.53 and 0.10 g/t gold respectively, giving an average of 0.22g/t over 24m which includes a zone of 12m @ 0.37g/t.

Similar partly bedding parallel, stringer/tension veining was observed in the Old Strahan Adit. A (high graded) sample of quartz veins only over an 8m width in T7656 assayed 2.19g/tAu. As the veins constitute an estimated 5% of the interval the bulk grade would come down to around 0.11g/t. Curiously, T7657 a high graded sample of the veins presumably in the same zone, a few metres south east of T7656, assayed < 0.008g/tAu.

028

6.1.8 Mercury Mine - Point Workings Area (Figures, 17, 18)

Our reconnaissance of the Mercury area found that the No 2 Adit was partly flooded and the timber sets in decayed condition. We made an attempt to drain the water intending to return later for an inspection. However time on the day did not allow this and a second opportunity did not arise.

We could not locate the lower No 3 Adit.

Our inspection of No 1 Adit revealed the geological information shown in Figure 17.

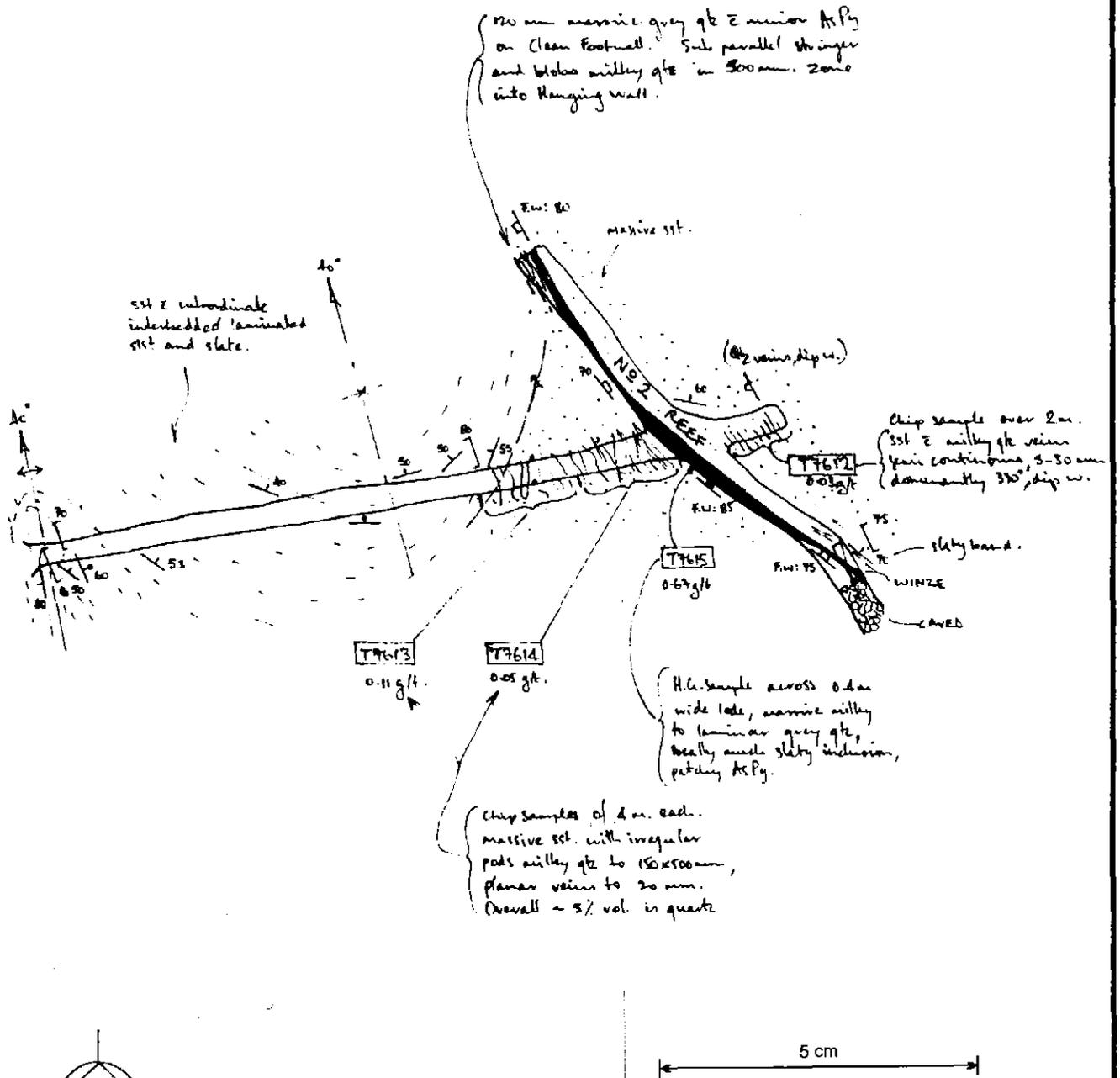
The No 2 reef as exposed north of the winze trends NW with a steep NE dip and is thin semi conformable with bedding on the east side of the lode. Immediately west of the lode the country rock is massive sandstone in which I could find no confident bedding observations but further westward interbedded sandstone-siltstone-slate are folded about moderately NNW plunging axes.

The folds are upright and open to very tight.

Locally developed slaty cleavage seems to be more or less parallel to the axial plane of the tight folds near the portal.

Variable dip orientations in the No 2 Adit (Shown by Blake and Nye 1934, Plan IV), a 48° NNE dip in Mercury Creek below the mine (Plan 3, this report) and variable dips in the Point Adits (Fig 18) indicate fairly close folding in this area as at Rosalind etc.

One chip sample taken across the No 2 lode of 0.4m (T7615) assayed at 0.67g/tAu but Hills (1923) quoted values of upto 3-5oz/ton with an average of 1oz/ton.



GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 13/82 ✓	
ALBERTON GOLDFIELD.	
MERCURY NO 1 ADIT PLAN	
DRAWN BY : <i>[Signature]</i>	DRAFTSMAN :
DATE 4/82	REVISIONS :
SCALE 1 250	
	FILE NO
	FIG. 17

A fairly strong quartz stringer system with planar veins to 20mm and poddy discontinuous veins upto 150mm, containing upto 5% quartz overall, occurs in the sandstone adjacent to both walls of the lode.

Our chip samples T7612 over 2m eastward from the lode and T7614, T7613 over 4m each consecutively westward from the lode, assayed 0.03, 0.05 and 0.11g/tAu respectively. Sampling by Roberts (1986) showed that the interval 8-14m westward from the lode contained less than the detection limit of gold. This weakly auriferous stringer mineralization is spatially related to the main lode and confined within massive sandstones.

Figure 18 depicts the geology observed in the Point Adits about 300m SW of the Mercury Mine.

In the northern (lower) adit the country rocks are indicate an open NNW Plunging synclinal fold with the NW-NNW trending lode cutting across or subparallel to its eastern limb in an arrangement analogous to the Mercury No 2 lode.

In the Southern Point Adit the bedding dips steeply ENE and although the lode is not now exposed Hill's (1923) strike 322° (magnetic) and dip 75° E suggests it is parallel to the bedding here.

One (high graded) sample (T7609) of the 20-70mm wide Point Reef over the northern adit assayed 23.31g/t and a chip sample (T7610) across the 0.7m weakly sheared zone parallel to and hosting the reef gave 0.25g/tAu. Hills (1923) refers to very rich values near the surface in the shafts ("17oz of gold from one bucketful of ore"). Weak stringer quartz veining in the northern adit, chip-channel sampled over 5m interval eastward of the lode (T7608) and 2m westward of the lode (T7611) returned < 0.008 and 0.03g/tAu respectively.

The stringer type mineralization in the Mercury-Point area does not offer much prospectivity on it's own, being of restricted (?) extent and low grade.

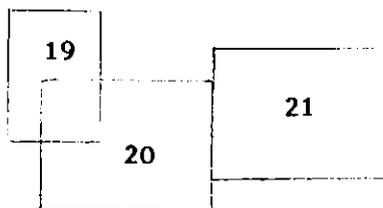
However the apparent close folding and probably partly bedding parallel lodes (Hills, 1923 considered that most of the other lodes in this vicinity (Frog, Reform and Boundary) were not of the fault fissure type) suggests that the structural control of mineralization and prospectivity may be similar to that of the Rosalind etc. area. (Section 6.1.7)

683

6.1.9 Long Struggle Area (Figures 19, 20, 21, 22)

The workings we visited in this area include Ragged Youth, Cross Reef, Long Struggle and Caxton No 1 and No 2 Reefs.

The information gained is shown on Figures 19, 20, 21 which adjoin as follows:



In the Ragged Youth adit the country rocks, dominated by fine siltstone and slate have a shallow westerly dip west of the lode and shallow easterly dip east of the lode which trends NNE with a steep easterly dip and is therefore clearly cross cutting.

The lode formation here consists of a 70-300mm wide zone of sheared slate with upto 50% of quartz as broken irregular pods and narrow laminar veins parallel to the walls. We obtained values in the range 1.86 to 55.17g/tAu (T7596-99) consistent with the grades previously reported by Twelvetrees (1904) of 34dwts/ton diminishing to 17-18 dwts/ton and Hills (1923) of 12oz gold from 14 tons of quartz.

Twelvetrees (1904) mentioned a total yield of 250-300 ounces of gold from this lode.

Significantly, the exclusively fine grained slaty rocks in the adit contain only very occasional quartz stringer veins.

In the adjacent Cross Reef Lower Adit the country rock is dominantly thick bedded sandstone with minor thin interbedded siltstone and dark grey slate. The bedding has a moderate to shallow dip consistently northwestwards over the 142m length of the adit.

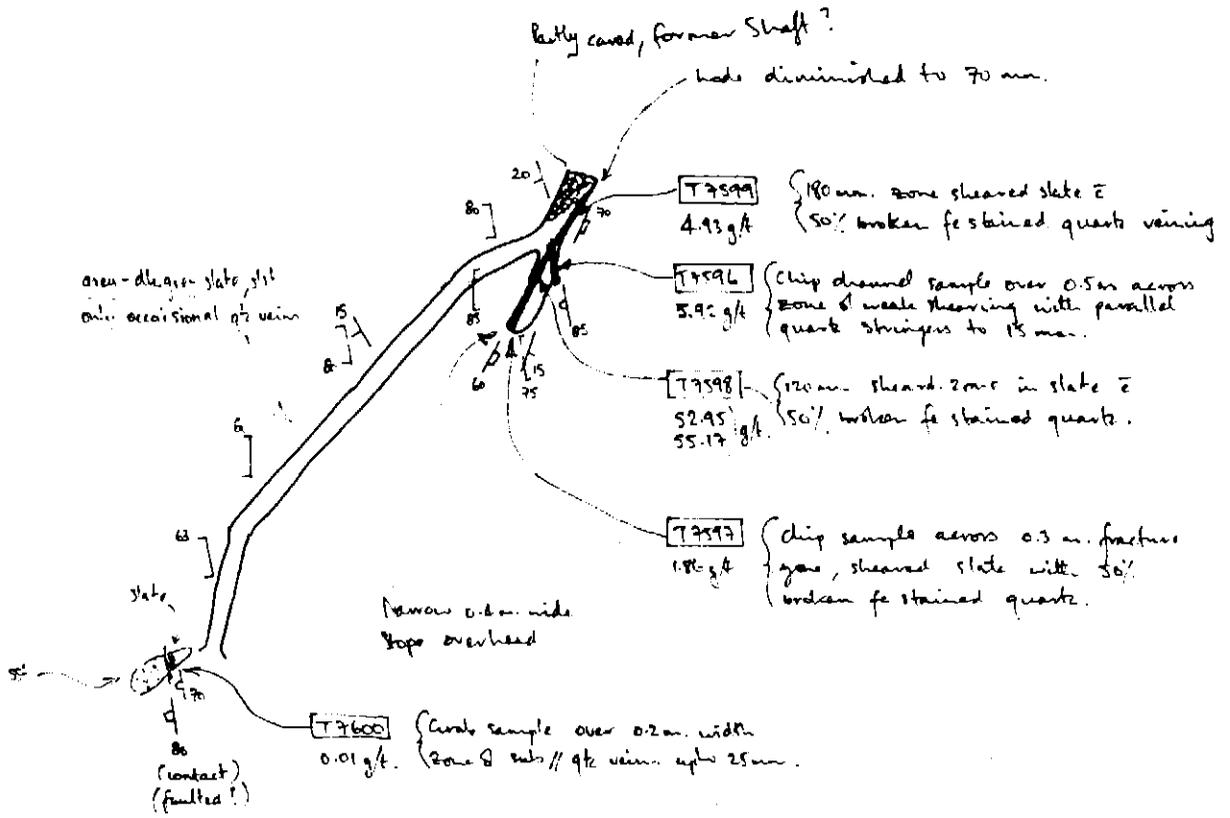
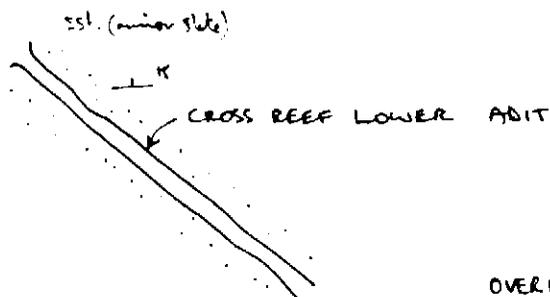


FIG: 20, N.W. CORNER

5 cm



OVERLAPS FIG:

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 23/B2 ✓	DRAWN BY: <i>AM</i>
ALBERTON GOLDFIELD	DRAFTSMAN:
RAGGED YOUTH ADIT	DATE: 4: 87
PLAN	REVISIONS:
	FILE NO:
SCALE 1:500	FIG. 19



025

The Cross Reef bears NE sub parallel to the strike of the bedding but with a steep SE dip and is clearly cross cutting. The "reef" consists of a zone of intense brecciation and shearing upto 2m wide containing upto 30% quartz and I am in accord with Hill's (1923) interpretation of it as a fault fissure lode. A small anticlinal drag (?) fold in the footwall of the lode on the upper adit level suggests an eastside down and southwestward sense of displacement along the lode-fault.

Our chip channel samples across the lode at the upper adit level (T7576, 7577) assayed only 0.27 and 0.03g/tAu. In the lower adit, the lode had been stoped out overhead and was inaccessible whilst at the short ENE crosscut the back in lode looked so unstable I was afraid to touch it with a hammer. Hills (1923) gave an average grade of about 27dwts/ton (41.3g/t)Au.

A sample (T7606) representative of an 0.6m wide NNE trending lode (brecciated/sheared country rock with upto 50% quartz as veins and irregular blobs) at 83m in from the lower adit portal assayed at 25.08g/t with re assay at 33.8g/tAu. This lode was not driven on and seems to have been overlooked by the earlier prospectors.

Interestingly, a 2m wide zone of fairly strong stringer veining immediately east of this lode, sampled in T7605 assayed at < 0.008 g/tAu. Furthermore, chip sample T7604 across a 1.2m wide fault fissure type lode with 15% quartz trending $335^{\circ}/85^{\circ}W$ at 93m from the portal also assayed at < 0.008 g/tAu, high-lighting the unpredictability of gold distribution.

Several other zones of quartz stringer veining we sampled in both upper and lower levels returned low values in the range $< 0.008-0.05$ g/tAu leading me to the conclusion that the stringer mineralization in this vicinity offers no prospectivity.

009

The Long Struggle Reef has been stoped to surface over most of its known length (100m). The stopes indicate a dip of about 60° to the NE which as recognized by Hills (1923) is parallel to the bedding here.

In the first part of the No 2 Level Adit (Figure 21) the bedding dips to the NW, somewhat steeper but more or less consistent with the orientation close to the Cross Reef. Further in, however, the bedding dips consistently NE at $55-65^{\circ}$ inferring a moderately north plunging anticlinal fold with its axis around about 28m from the portal. The rock here is massive sandstone and I could find no trace of a fold hinge which, however, must surely exist (unless the west dipping fault observed just west of the postulated fold axis has been the means of juxtaposing opposite dips?)

Twelvetrees (1904) stated that this level had been driven easterly for 200ft (61m) and then 88 ft (27m) southeasterly on the lode line and he was disappointed that the easterly cross cut had not been extended further because the southeast drive had "only picked up the reef-quartz in approaching the end".

This southeast drive is now only about 10m in length being blocked by caving from above, possibly at the position of a rise, so we were not able to observe the lode.

Hills (1923) reported it to be of varying thickness, averaging 0.3-0.4m and about 30dwts/ton (46g/t)Au.

Patchy quartz stringer veining (partly parallel to bedding) and tension veining (mostly NE strike, sub vertical) of low to moderate intensity occurs along the eastern cross cut. We chip sampled the interval 18-53m from the portal in seven 5m sections (T7578-84) which returned assays in the range < 0.008 to 0.10g/tAu (which, incidentally, have little correlation to the estimated intensity of veining).

0-10

Blake (1938) briefly presented the results of a three hole drilling program carried out by the Tas. Dept. of Mines at Long Struggle in 1937. The location of the holes is in some doubt.

Of the No 1 Borehole, Blake's report states:

"This hole was horizontal and located in end of north-easterly cross cut at 456 feet from main (lower) adit cross cut.

It was directed in a southeasterly direction to intersect the northern extension of Long Struggle Reef".

The "southeasterly direction" must surely be a typographical error since the reef has a south easterly strike. I'm uncertain whether the "main (lower) adit cross cut" refers to the No 2 level adit at Long Struggle (R.L.~450m, Figure 21) or the lower adit to the Cross Reef (R.L.~390m Fig 20) but I suspect it means the latter. The latter does have a north east drive at the end (can we trust Blake's typist?) though you would hardly call it a cross cut since it runs sub parallel to the bedding and the Cross Reef. We did not investigate this drive for three reasons:

- 1) dangerously unstable looking back where the drive crosses the Cross Reef.
- 2) 0.6m deep water clouded with a heavy colloidal suspension obscuring the floor.
- 3) it was not charted by Blake and Nye (1934) Plan IV and might contain hidden pitfalls.

A distance of 456 feet NE of the end of the main adit (R.L.~390m) would give a position about 20m NE of and 60m below the portal of the No 2 level Adit at Long Struggle which seems like a pretty fair place to site a horizontal, northeasterly bearing hole designed to test the northern extension of Long Struggle Reef (Fig 22). However, I'm again thrown into confusion by the location of Borehole 2 stated to have "commenced from the same position as No 1 and, with the object of cutting Long Struggle Reef at a greater depth. It was depressed at an angle of 55° ". No bearing was given but presumably it would also be northeast. At an angle of 55° it would be drilling almost parallel to the dip of the reef.

If my speculative geological section (Figure 22) has the boreholes in the correct positions, then the high grade intersections in Borehole 1 are spot on target and Borehole 2 never had a chance of success.

McOnie (1983) calculated the weighted average of the gold values given for Borehole 1 in the interval 81-266 feet to be 1.26g/t over 56m. Unfortunately McOnie fell foul of another of the ambiguities in Blake's (1938) report and his weighted average value is incorrect. The assay results table for Borehole 1 reads in part as follows:

	<u>Gold</u>			<u>Silver</u>		
	oz.	dwt.	grs.	oz.	dwt.	grs
First half 136' to 138'	0	0	19	0	0	15
Latter half 136' to 138'	3	4	12	0	3	18

with a note at the bottom explaining:

"A specimen from midway between 136 feet and 138 feet showing coarse free gold was excluded from the sample and not assayed".

McOnie (1983) has, quite reasonably, not noticed this trick of quoting two values for the interval 136-138' and has put into his calculation 2' at 19grs and 2' at 3oz 4dwts 12grs.

Taking the assay table strictly literally (does one dare?) and calculating for one foot each at those grades, the weighted average gold value for the interval 81-266 feet (56.4m) falls to 0.72 g/t.

In the entire (assayed intervals of the) hole there are only four lode formations carrying greater than 1g/tAu. Three of these are within one 8' (2.44m) section which runs at weighted average 15.26g/tAu situated exactly at the expected position of the Long Struggle Reef and the other is a 2'1" (0.63m) lode carrying 3.57g/t Au located 33m east of the above.

My interpretation is that at this northern extension the Long Struggle Reef has split up into three tracks (not all that surprising as it is known to parallel the bedding) still carrying good gold over an (apparent) overall width of 2.44m (cf: Cross Reef at 2m; Premier Lode upto 1.83m (Mills, 1923); Crown Prince upto 1.8m.). The 0.63m lode with 3.57g/tAu is a separate formation. The weighted average value is really carried by the "Long Struggle - north extension lodes"; if the 0.63m at 3.57g/t is left out of the calculation the weighted average drops only slightly to 0.68g/tAu.

McOnie's (1983) statement that Borehole 1 "intersected at least 12 veins ranging in width from 0.15m to 1.5m and ranging in gold content from 0.8g/t to 98.7g/t" implies that all of the 12 veins carry gold which would significantly boost the bulk grade. The hole did intersect 12 lodes; 13 if one counts the "slate and quartz" in the interval 110'6" - 111'1". Twelve intervals (more or less corresponding to the lodes) were assayed. Of these twelve assayed intervals, two carried "nil" gold, five had a "trace" and five carried gold ranging from 0.77g/t to 49.97g/t. Of the latter five, only two carried greater than 5g/tAu.

The Caxton No 1 Reef lies near parallel to and about 30m north eastward of the Long Struggle Reef. Only the lower level adit is now accessible, the two upper levels (Twelvetrees, 1904) having been converted to open stopes.

In the inner part of the lower adit (Fig 21) the lode (variable in width from 1.2m down to 0.17m) parallels the strike of the bedding in the enclosing sandstone and very nearly the dip also but is perhaps a few degrees steeper, to the NE. At the inner end, the narrowed lode swings away slightly westward of bedding strike. At the bend in the adit at about 43m from the portal the lode takes a pronounced turn westward with a 70° dip northwards and disappears into the westwall of the drive. Unfortunately the country rock here is extremely massive and I was unable to determine whether this bend in the lode follows the bedding and represents a saddle reef.

043

The bend is rather too far east to correlate with the anticlinal axis inferred in the Long Struggle No 2 Level Adit but could conceivably represent a minor flexure on the limb of this fold. If the Caxton No 1 lode straightens out and swings back to north westerly strike to the north west of the observed bend then it could very well represent the 0.63m lode carrying 3.57g/tAu intersected near the end of the Long Struggle Borehole No 1.

Our several chip samples across the Caxton lode in the adit (T7586-89) carried gold in the range 0.1 to 0.43g/t which probably explains why stoping has not been carried out this far north. Twelvetrees (1904) reported average grades of 10 to 17dwts/ton from the upper level stopes. A fairly strong network of quartz stringer veins (15-50 per metre) occurs in massive sandstone over the interval 10-30m in from the portal but I was not game to sample it for fear of disturbing the unstable looking back.

At the upper (SE) end of the No 2 Caxton Reef about 70m northeast of No 1 the former is exposed in a short adit driven on the lode. (Fig 21) The enclosing country rocks dip at moderate angles to the north east. The rather poddy and discontinuous lode has a subparallel NNW strike but much steeper dip mostly to the NE and must cut across the bedding.

A sample from the lode in the back (T7590) gave us 0.4g/tAu whilst another grab sample of reef quartz in a number (perhaps 15?) of partly decomposed sacks stacked along one wall of the adit returned values (in three re assays) in the range 7.28 to 8.81g/t Au.

The north easterly dip of bedding here invites one to believe that there has been no change of dip direction in the 120m or so between here and the inferred anticlinal axis in the Long Struggle No 2 Level Adit implying that folding hereabouts is relatively broad and open.

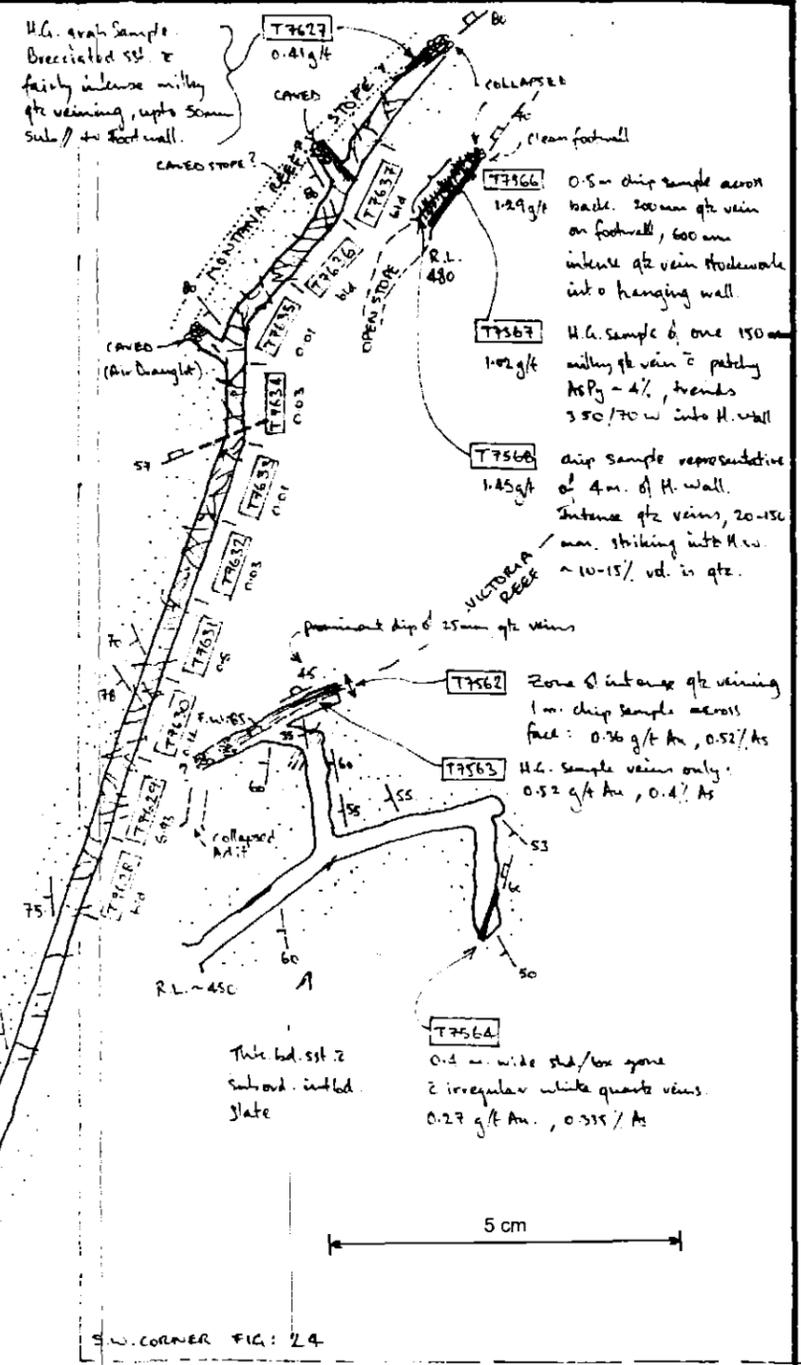
However, the normally reliable Blake & Nye (1934, Plan IV) show westerly dips in the gully about 10 and 40m downstream and also about 50m upstream from the No 2 Caxton Reef. If these are correct then north trending anticlinal axes occur at intervals of 100m or so.

The Long Struggle area compares with the Rosalind-Premier etc area in containing a fairly high frequency of (known) gold rich reefs and may therefore be prospective for a bulk mineable resource. As in the Rosalind area, a number of the reefs are parallel to bedding in the enclosing country rocks, suggesting that greater intensity of reef development occurred where the deformation stress conditions caused dilation or shearing along bedding planes. This would be of obvious exploration significance but unfortunately the particular structural setting is not yet clear. Furthermore, it is clear (for instance in the Long Struggle Bore Holes 1 and 2) that a high frequency of lode formations does not necessarily indicate a high frequency of gold rich lodes for which the controlling factors are even more obscure. Our investigations in this area have not indicated significant potential for quartz stringer-stockwork type mineralization.

6.1.10 Mt Victoria Mine (Figures 23,24) ✓

This mine was one of the major producers of the Alberton Goldfield with a recorded production of 5128 ounces of gold apparently from ore of about 26.7g/t average grade. (McOnie, 1983, Table 10.1)

There are two major parallel lodes (Montana and Victoria, see Figures 23,24) striking NE, dipping 70° - 80° to the NW and separated by an across strike distance of about 25m.



NR 2 ADIT
(partly collapsed at Portal)

No hinges obs.
Slight local
overturn to E?

Thin bed. sst &
subord. int. bed.
slate

T7564
0.3 - wide sst/low zone
& irregular white quartz veins.
0.27 g/t Au., 0.51% As

5 cm

S.W. CORNER FIG: 24

Fissile, fresh grey to
buff coloured slate.
Clug // Ba. ?

Thick bed. sst &
thin interbeds of
dark grey slate
Sst/slate > 10
Slatess fissile // bedding

Oxidized pinkish
brown mudstone
ex: slate/sst.
Fissile but
not well bed.

Milky qtz kernian vein
10-40mm, 5-10/m

Milky qtz kernian
vein, 120mm.

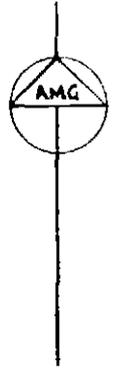
Paddy milky qtz kernian veins
mainly flat to moderate w. dips

Unconsol. bouldery
conglomerate

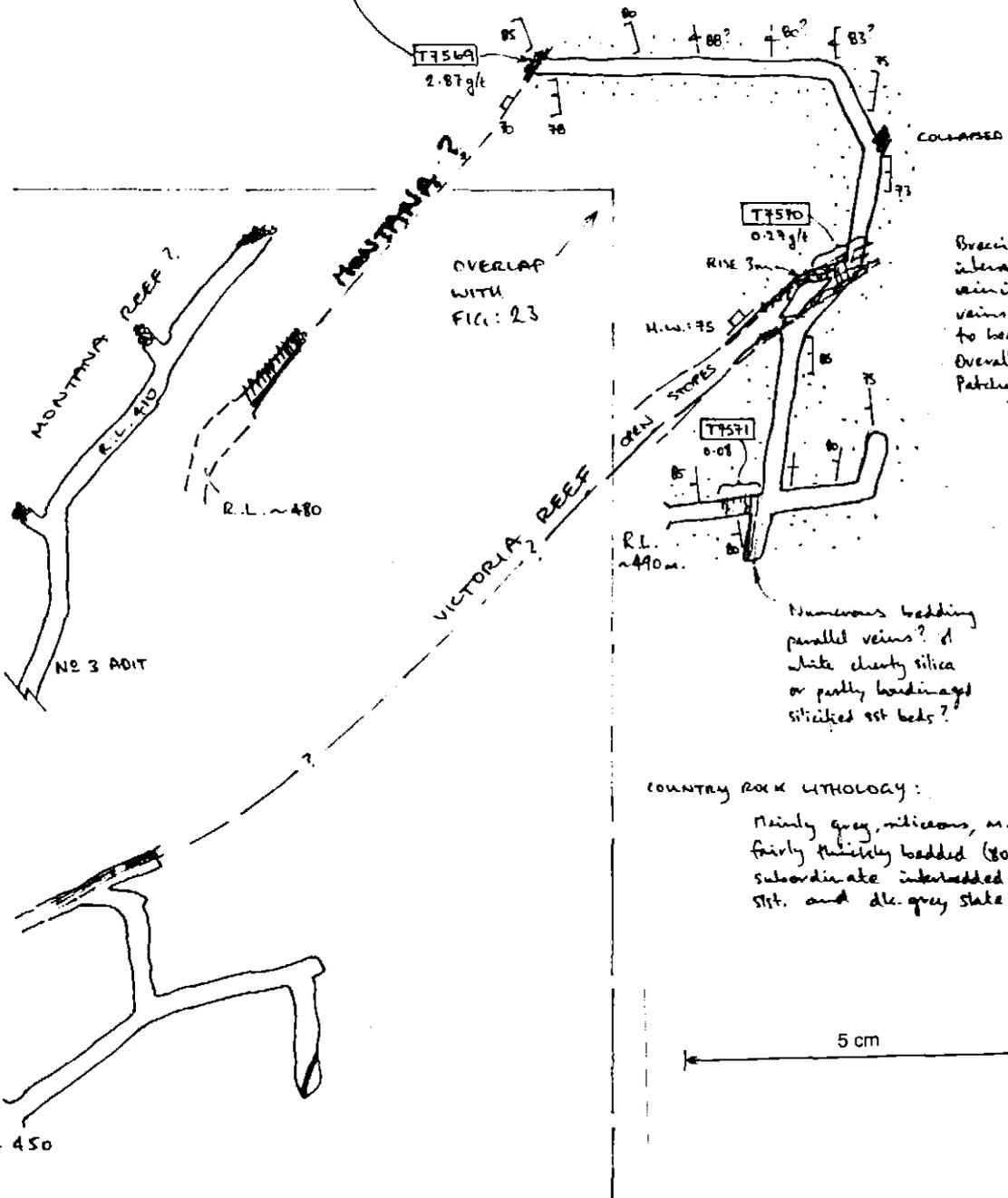
88-2809

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 23/B2 TRS ✓	DRAWN BY: <i>L.J.</i>
ALBERTON GOLDFIELD	DRAFTSMAN:
MT. VICTORIA MINE	DATE: 4:87
PLAN	REVISIONS:
SCALE 1:500	FILE NO.
0 5 10 15 Metres	FIG 23

025



Intensely veined breccia zone.
 Some veins to 50 mm
 Sub// to E-W. Abundant
 finer qtz veins trend
 into N. wall sub// to
 fracture dvg. and bedding.
 Also mainly silty, low
 sulphide content.
 Approx 10% of vol. is qtz.



Breccia zone, locally
 intense quartz stockwork
 veining. Some larger
 veins to 50mm sub//
 to bedding?
 Overall: est. 5% dks.
 Patchy As Py

Numerous bedding
 parallel veins? of
 white cherty silica
 or partly hardenaged
 silicified est beds?

COUNTRY ROCK LITHOLOGY:
 Mainly grey, siliceous, m.g. est,
 fairly thinly bedded (80-300 mm)
 subordinate interbedded grey
 sst. and dk. grey slate.

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 23/82 TAS. ✓	
ALBERTON GOLDFIELD	
MT. VICTORIA MINE PLAN	
NORTH EASTERN WORKINGS	
SCALE 1:500	FILE NO
	FIG. 24
DRAWN BY <i>[Signature]</i>	REVISIONS:
DRAFTSMAN	
DATE 4-87	

Blake and Nye (1934, Plan IV) show a "Central Reef" subparallel and between the above two reefs. I do not think we encountered the Central Reef in our underground inspections and was unable to obtain a copy of Twelvetree's (1900) report which would no doubt throw some light on the matter.

The Montana Reef as exposed in the upper adit (R.L. ~480m) trends 040° /dips 70° NW and is at least 0.8m wide consisting of an 0.2m thick vein of fractured milky quartz on the foot wall and 0.6m of intensely brecciated country rock with intense network of quartz veins mostly striking at $340^{\circ}/70^{\circ}$ W into the hanging wall for an unknown distance. Our chip sample (T7568) over 4m of this hanging wall assayed 1.45 (check 1.07)g/tAu which is interesting but not surprising in that this material appears to form part of a fault fissure type lode channel. It is a pity that no cross cut exists in which we might have observed the extent of this heavy veining into the hanging wall (and the foot wall?)

On the No 3 Adit Level, approximately 70m below the upper adit, two crosscuts and the end of the adit all presumably leading into a drive or stope on Montana Reef are now collapsed and we could not get a look at the reef.

From the upper north eastern adit (R.L. ~490m, Figure 24) the northerly drive which crosses the Victoria Reef and then swings westerly, ends in a lode formation trending $35^{\circ}/70^{\circ}$ NW and of similar character to that described above from the Montana upper adit.

This lode is probably the northward extension of the Montana. Our sample of the face (T7569) gave a grade of 2.57 (check 2.87)g/tAu which was evidently insufficient to entice the earlier prospectors to carry the drive on through the lode. The foot wall is fairly sharp with a few quartz stringers within about 0.5m of the foot wall but none further back.

048

This same level crosses the Victoria Reef just northeast of the main open stopes. In the drive the reef is represented by a zone of strong shearing and brecciation some 2-3m in thickness with discontinuous quartz veins to 50mm carrying some arsenopyrite and strong network of fine intersecting quartz stringers. About 5% of the volume would be quartz. Our sample T7570 assayed only 0.27g/tAu. The same type of formation is exposed in the partly caved drive along the lode at the R.L. 450m level (Figure 23) where our representative chip sample (T7562) over 1m width assayed 0.36g/tAu.

So it seems that the formerly productive part of the Victoria Reef was confined at these levels between the two exposures just described, a plan distance of 60m. Hills (1923) stated that the length of the lode varied from 30m to 90m according to the depth and that the width varied from a "few inches to 5 feet". The average grade seems to have been around 24g/tAu.

The results of our systematic chip sampling along the No 3 Adit (T7629) suggest that the Victoria Reef "makes" again at this level although I did not notice it and the old timers did not develop it there.

In the upper adits mineralization is virtually confined to the lode courses and stringer veining in the country rocks is very minor. In the No 3 adit, however, the entire length of the tunnel beyond about 112m from the portal carries a moderate to high intensity of quartz stringer veining in sandstone country rocks. The subordinate interbedded dark grey slate bands usually do not have quartz stringers. The stringer veins are mostly in the range 1-5mm thick but not uncommonly upto 15mm composed of clear to milky quartz often with minor arsenopyrite and pyrite. Lesser pyrite also occurs as fine disseminated euhedra in the sandstone country rock.

My estimate is for bulk sulphide content to be around 0.1% of volume. Orientation of the stringers is highly variable and in the more intensely veined areas they are randomly intersecting. Some of the larger (>10mm) veins seem to have preference for flattish or east-west striking/semi vertical orientations.

The walls are rather mucky and its difficult to get a good estimate of vein intensity which is locally rather variable; my guess is that intensity is in the range 20-60 veinlets/m from 160m to the end of the adit. Intensity seems to be somewhat lower in the interval 112-160m from the portal but this is really rather subjective.

Our samples (T7628-T7637) of this stringer veining were taken in consecutive 6m lengths in the interval 160-220m from the portal. Due to the very hard sandstone country rock it was difficult to get a good channel sample and so the samples actually consist of numerous chips which are hopefully representative of the intervals. Assays from the 60m interval thus sampled ranged (from < 0.008 to 6.93g/tAu (Figure 23) with only three intervals above 0.1g/t. The 6.93g/t value is from a section pretty well on strike with the Victoria Reef and although I didn't recognize it in mapping the No3 adit I am convinced that this high value is related to a south west continuation of the reef. The two 6m sections immediately north of this went 0.14 and 0.50g/tAu but further north the values are negligible.

The 18m interval from 166-184m from the portal averages 2.52g/tAu which is the best result we have encountered in our sampling of quartz vein stringer systems.

Judging by some of the material on the mullock dump the lower No 4 adit also contains some similar stringer mineralization. (T7572 and T7573 are grab samples of stringer veined sandstone from No 3 and No 4 adit mullock dumps containing 2.98 and 2.08g/tAu respectively.) Unfortunately, we could not locate the No 4 adit entrance.

This strong stringer mineralization in the lower adits is in marked, but not obviously explicable, contrast to the situation in the upper adits where stringer veining is virtually absent in identical country rocks.

The Montana and Victoria Reefs appear to be of the fault fissure type cutting across the bedding of the country rocks. Bedding in the area is generally steep to the west and south west. There are occasional steep easterly dips in the No 3 adit and the upper (north eastern) adit but in no case could any trace of fold hinges be discerned and I am of the suspicion that these represent local slight easterly overturnings.

There is slight flattening of the westerly dip to 50° in the R.L.~450m adit but whether this indicates a dip reversal (fold) in the area of no exposure between here and the upper adit or merely an inflection on the general westerly dip, is uncertain.

Although it is imperfectly understood the structure of the country rocks at Mt Victoria Mine does not seem to very well match the apparent pattern of open north plunging folds inferred or observed in the Long Struggle-Mercury area.

The occurrence of three known reefs within a 25m width at Mt Victoria Mine makes it a contender for the bulk mining of reef gold type target with the possibility of localized quartz stringer mineralization to boost the bulk grade. A fourth lode was cut in the eastern arm of the R.L.~450m level and there could be several more to the NW or SE of the developed lodes.

001

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HERRMANN
R. WALKER

PROJECT EL 17/86 PROSPECT:

SAMPLE STORAGE REQ'D:

LABORATORY: ANALABS

DATE DISPATCHED:

1250.000 SHEET LAUNCESTON TYPE OF SAMPLE: ROCK CHIP

SAMPLE PREP. REQ'D:

ANALYSIS REQ'D: 95.1.08.04293

DATE RECEIVED:

A199*

SAMPLE NUMBER	LOCATION	DESCRIPTION	ANALYSES									
			Cu	Pb	Zn	Ag	Bi	As	Au	AuChk	Mo	PPM

T7562	LAUNCESTON	MT. VICTORIA.	Chip/channel sample across 1m. wide face.	30	60	30	<0.5	<10	5200	0.360		
		No. 2 FOOT ADIT.	Zone of intense Qtz vein stockwork.									
T7563	"	"	High grade sample of veins to 20mm. from above zone of vein stockwork.	30	30	70	<0.5	<10	4000	0.520		<2

$\frac{No}{T7562}$ $\frac{Sn}{<5}$ $\frac{M}{<5}$

782052

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HERRMANN
R. WALKER

PROJECT EL17/86 PROSPECT
1250.000 SHEET LAUNCESTON TYPE OF SAMPLE ROCK CHIP

SAMPLE STORAGE REQ'D:
SAMPLE PREP. REQ'D:

LABORATORY: ANALABS
ANALYSIS REQ'D: 95-1-08-04293 DATE RECEIVED:

A19

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							PPM	
				Cu	Pb	Zn	Ag	Bi	As	AV	AVchk	Mo
T7564	ALBERTON	MT. VICTORIA	High Graded (selective) sample across 0.4 m. No 2 EAST ADIT. breccia zone ± irregular milky Qtz veining.	40	60	245	<0.5	<10	3350	0.270		
T7566	ALBERTON	MT. VICTORIA.	Chip sample 800 mm. across bench, 5 m from portal 200 mm. massive qtz, 600 mm intense stibite, 50% qtz.	15	75	5	<0.5	<10	350	1.290		
T7567	"	"	High graded sample of 150 mm. milky qtz vein ± patching ~4% AsPy. 4 m. from portal.	15	50	5	<0.5	<10	7500	1.020		
T7568			Chip channel sample 4 m. NW wall of adit. Numerous Qtz veins 20-150 mm, 10/-15% of vol.	20	60	15	<0.5	<10	2700	1.070	1.450	
T7569	ALBERTON MT. VICTORIA.	ADIT F VICTORIA REEF	Chip channel across and face in CENTRAL REEF! Brecciated sst/slate Qtz stringers 1-20 mm, 5-10% vol.	35	50	10	<0.5	<10	2700	2.570	2.870	
T7570	"	"	Representative High-graded sample of 3 m. along VICTORIA REEF.	45	75	75	<0.5	<10	3550	0.270		
T7571	"	ADIT E	Chip/channel over 3 m. NW wall adit. caddy. Numerous "cherty" bed// veins or silicified sst beds?	50	20	50	<0.5	<10	330	0.080		
T7572	ALBERTON	MT. VICTORIA. No 2 ADIT	Grabs Sample Mullerke Dump. (Representative) Sst ± milky qtz veins <10 mm, 50/m, AsPy	10	560	30	3.0	<10	18000	2.980	3.080	2
T7573	"	MT. VICTORIA No 4 ADIT.	Grabs Sample representative of Mullerke Dump. Sst ± Qtz veining est. 30/m. AsPy, Gal, Py.	15	300	20	<0.5	10	8450	2.080		
T7574	ALBERTON	CROSS REEF	Chip channel, west wall 15-14 m from portal. SOUTHERN ADIT. Qtz stringers 5-5 mm, 5/m	15	5	25	<0.5	<10	390	0.050		

No.	Sn	W
T7565	<3	<10
2070	1	1

782053

033

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HERRMANN
R. WALKERPROJECT EL17/86 PROSPECT
1250.000 SHEET LAUNCESTON TYPE OF SAMPLE ROCK CHIPSAMPLE STORAGE REQ'D:
SAMPLE PREP. REQ'D:LABORATORY: ANALABS
ANALYSIS REQ'D: 95-1-08-04293 DATE RECEIVED:

A19962

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES PPM										
				Cu	Pb	Zn	Ag	Bi	As	Ar	Sn	W	Mo	
T7575	ALBERTON	CROSS REEF	West wall, chip/channel ^{A-23} 18-23 m. from portal Qtz stringers 5-15 mm, ~ 5/m.	50	20	40	<0.5	<10	690	0.040				
T7576	ALBERTON	"	Sample across back, about 2m. NNE of wing. 800 mm wide shear zone ~ 15% Qtz veining.	20	<5	45	<0.5	<10	1200	0.270	3	<10	2	
T7577	"	"	Chip sample across back, 1m width fractured sandstone/slate ± 15-20% vol Qtz veining	10	<5	20	<0.5	<10	740	0.030				
T7578	ALBERTON	LONG STRUGGLE	Chip sample 18-23 m from portal	30	30	55	<0.5	<10	290	0.100				
T7579	"	"	Sub. minor slates, "occasional" Qtz veins to 20mm Chip sample 23-28m from portal Massive slt. Occasional Qtz veins.	40	25	55	<0.5	10	205	0.020				
T7580	"	"	Chip sample 28-33 m. Qtz veins < 5 mm, < 5/m.	25	30	60	<0.5	20	310	0.070				
T7581	"	"	Chip sample 33-38 m. Qtz veins < 10 mm, ~ 5/m. 1 of 70 mm	30	25	60	<0.5	<10	110	0.010				
T7582	"	"	Chip sample 38-43 m. Milky Qtz (ferruginous) veins to 30 mm, 5-10/m.	30	20	65	<0.5	<10	120	0.020				
T7583			Chip sample 43-48 m. Milky Qtz (ferruginous) veins to 50 mm, up to 15/m	30	15	75	<0.5	10	140	0.030				
T7584			Chip sample 48-53 m. Only occasional Qtz stringers, ferruginous veins.	30	20	80	<0.5	<10	260	<0.008				

782054

634

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HERRMANN
R. WALKER

PROJECT EL17/86 PROSPECT:

SAMPLE STORAGE REQ'D:

LABORATORY: ANALABS

DATE DISPATCHED:

250,000 SHEET LAUNCESTON TYPE OF SAMPLE ROCK CHIP

SAMPLE PREP. REQ'D:

ANALYSIS REQ'D: 95.1.08.04293

DATE RECEIVED:

A19962

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES						PPM		
				Cu	Pb	Zn	Ag	Bi	As	Pb	Au(1)	
T7585	ALBERTON	LONG STACQUE LOW ADIT.	Chip Sample 0.8 m. wide, back of caddy. Qtz. veins to 30 mm, 30-40/m ~ 5% vol.	15	<5	20	<0.5	<10	280	0.050		
T7586	"	CANTON NO 1 lower Adit	Chip sample across 1.2 m. hole. Fractured sst. numerous veins to 150 mm. ~ 70% Qtz.	15	<5	15	<0.5	<10	6300	0.430		
T7587	"	"	H.G. sample across 170 mm wide Qtz Reef. White - smoky grey Qtz, minor fine sulph.	10	25	25	<0.5	10	1350	0.100		
T7588	"	"	Chip sample 200 mm wide Qtz stringers Trending 035° Anastomosing veins to 30 mm ~ 10% of zone	15	15	25	<0.5	10	1200	0.110		(Mo)
T7589	"	"	Chip sample 650 mm. wide Qtz reef. white + grey quartz. massive	10	50	15	<0.5	<10	7900	0.340	0.330	4
T7590	ALBERTON	CANTON NO 2 ADIT	Chip sample along poddy Qtz vein over 2m. of strike. Vein variable 10-100 mm. Minor Py, Arpy, Galena	15	30	25	<0.5	<10	3650	0.400		
T7591	"	"	Coal sample of bagged ore indit. Vein Qtz & dissems Py, Arpy, Galena.	30	1350	615	2.0	20	7700	8.030	7.280	8.810

782055

005

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HERDMAN
R. WALKER

PROJECT EL 17/86 PROSPECT:

SAMPLE STORAGE REQ'D:

LABORATORY: ANALABS

DATE DISPATCHED:

250.000 SHEET LANCASTON TYPE OF SAMPLE ROCK CHIP

SAMPLE PREP. REQ'D:

ANALYSIS REQ'D: 95.1.08.04309

DATE RECEIVED:

A19962

SAMPLE NUMBER	LOCATION	DESCRIPTION	ANALYSES							Au	Ag	Mo
			Cu	Pb	Zn	Bi	As	Ppm				
T7596	ALBERTON	Ragged Youth Adit	Chip channel sample 500 mm width, weak shearing \bar{E} // Qty stringers to 15mm	40	"	30	"	"	18500	5.49	5.92	
T7597	"	"	Chip channel sample 300 mm width brecciated slate approx 50% Qty veins.	20	350	30	3.0	"	15000	1.86	2	
T7598	"	"	120 mm. fault fracture zone, sheared slate \bar{E} approx 50% broken festained qtz.	40	125	30	11.0	"	24500	52.95	55.17	
T7599	"	"	180 mm. sheared slate fracture zone, broken grey festained qtz ~ 50%	15	155	25	<0.5	"	14500	4.93		
T7600	"	"	Chip sample across 200 mm stringer zone in o/c just sw. of portal.	30	<5	55	"	"	400	0.01		
T7601	ALBERTON	CROSS REEF lower Adit	Core sample laminated Qty vein 40 mm wide. Parallel to bedding. 127 m. from Portal.	100	60	55	"	"	650	1.79		
T7602	"	" (126 m.)	Chip channel sample over 1 m. width across Qty vein to 80 mm, several sub// adjacent stringers ^{to 15mm}	10	<5	95	"	"	390	0.07		
T7603	"	"	High grade gneiss sample of 20-50 mm wide laminated milky qtz. 119 m from portal	5	<5	35	"	"	100	0.10		

782056

036

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HERRMANN
R. WANKER

PROJECT EL 17/86

PROSPECT

SAMPLE STORAGE REQ'D:

LABORATORY: ANALABS

DATE DISPATCHED:

250.000 SHEET LAUNCESTON

TYPE OF SAMPLE: ROCK CHIP

SAMPLE PREP. REQ'D:

ANALYSIS REQ'D: 95.1.08.04309

DATE RECEIVED:

A19962

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							Au CHK
				Cu	Pb	Zn	Ag	Bi	As	Au	
7604	ALBERTON	CROSS REEF	Chip channel sample over 1.2 m. (true thickness)	15	<5	60	<0.5	<10	38	<0.008	
		lower Adit	95-97 m from portal. Fault fracture zone, minor veins								
7605	"	"	Chip channel sample 83-85 m from portal	<5	<5	25	"	"	27	<0.008	0.01
			across stringer zone in footwall of fault								
			fine lode at 83 m. Qty stringers 5-10 mm								
			20-30/m.								
606	"	"	High grade representative sample of 0.6m	10	125	80	"	"	3400	25.08	33.80
			wide fault fissure reef at 83 m. from portal								
07	"	"	Chip sample 11-19 m. from portal	15	<5	30	"	"	90	<0.008	
			Milky qb veins to 25 mm (mostly < 10 mm)								
			5-15/m. in massive sandstones								
508	ALBERTON	POINT	Chip channel sample over 5 m. from	25	<5	30	"	"	80	<0.008	
		lower Adit	cross cut to end of Adit. Massive mudst/silt								
			stringer veinlets, fr stained < 4 mm, 20/m								
			and 10-30 mm about 5/m.								
7609	"	"	High graded sample of main Qty reef:	20	320	20	4.0	"	31500	23.31	18.43
			20-70 mm in beds of main drive								
			Milky to grey massive Qty. 5-10% AnPy								
7610	"	"	Representative chip channel sample over 700 mm	20	<5	90	<0.5	"	1350	0.25	
			width of lode course over main adit.								

782057

657

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HEPPMANN
R. WALKER

PROJECT EL 17/86 PROSPECT:

SAMPLE STORAGE REQ'D:

LABORATORY: ANALABS

DATE DISPATCHED:

250.000 SHEET LAUNCESTON

TYPE OF SAMPLE: ROCK CHIP

SAMPLE PREP. REQ'D:

ANALYSIS REQ'D: 95.1.08.02309

DATE RECEIVED:

A19962

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							Mo
				Cu	Pb	Zn	Ag	Bi	As	Au	
7611	ALBERTON	POINT, L ADIT	Chip channel sample, south wall 29.5-31.5m from portal. Sst/sst/minor dk grey slate, milky Qtz veins 10-20mm, 5-10/m.	15	<5	20	<0.5	<10	260	0.03	
7612	ALBERTON	MCCAWBY No 1 ADIT.	2m. chip/channel sample from corner of crosscut drive (on lode) to end of main adit. Occasional Qtz stringers 5-50mm in Sst.	25	<5	75	"	"	430	0.03	
7613	"	"	Chip sample Sth wall adit 17.2-21.2m from portal. Massive sst with irregular pods allg. to 150x500mm, planar veins to 20mm. Overall estimate ~5% quartz / vol.	20	<5	65	"	"	630	0.11	
7614	"	"	Chip sample Sth wall 21.2-25.2m. Lithologies as above.	10	<5	45	"	"	640	0.05	
7615	"	"	High grade representative sample across 400mm wide milky quartz reef, patchy Arsenopyrite. In drive on lode just south of main adit.	<5	<5	15	"	"	3050	0.67	21

782058

038

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HERRMANN
R. WALKER

PROJECT EL 17/86

PROSPECT:

SAMPLE STORAGE REQ'D:

LABORATORY: ANALABS

DATE DISPATCHED:

250.000 SHEET LAUNCESTON TYPE OF SAMPLE: ROCK CHIP

SAMPLE PREP. REQ'D:

ANALYSIS REQ'D: 95.1.08.04383 DATE RECEIVED:

A19962

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES						PPM		
				Cu	Pb	Zn	Ag	Bi	As	Au		
T7625	ALBERTON	MT. VICTORIA NO 3 ADIT.	H.G. Sample of milky quartz veins in interval 37-40 m. from portal.	25	<5	40	<0.5	<10	260	<0.008		
T7626	"	"	Chip sample 44-48 m. representative of zone of qtz veins 10-40 mm, 5-10/m.	35	"	60	"	"	400	"		
T7627	"	"	Crude sample (H.G.) brecciated sst. \bar{E} fairly intense milky qtz veining, veins upto 50 mm. sub // to main reef.	15	80	35	"	"	1100	0.41		
T7628	"	"	Chip sample 160-166 m from portal. Sst. \bar{E} stockwork qtz veinlets	15	<5	40	"	"	370	<0.008		
T7629	"	"	Chip sample 166-172 m. Sst \bar{E} stockwork qtz veinlets	20	15	50	"	"	5300	6.93		
T7630			Chip sample 172-178 m Sst \bar{E} Qty stockwork	10	<5	25	"	"	5800	0.14		
T7631			Chip sample 178-184 m "	20	5	45	"	"	3300	0.50		
T7632			Chip sample 184-190 m "	15	<5	45	"	"	1200	0.03		

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GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HERMANN
R. WANCER

PROJECT EL. 17/86 PROSPECT:
250.000 SHEET LANKESTON TYPE OF SAMPLE: Rock Chips

SAMPLE STORAGE REQ'D:
SAMPLE PREP. REQ'D:

LABORATORY: ANPAABS
ANALYSIS REQ'D: 95.1.08.04383

DATE DISPATCHED:
DATE RECEIVED:

A19962

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							
				Cu	Pb	Zn	Ag	Bi	As	Au	Au Clk
17633	ALBERTON	MT. VICTORIA	Chip Sample 190-196 m.	20	<5	70	<0.5	<10	510	0.01	
		NO 3 ADIT.	Sst ± qtz vein Rockwork								
17634	"	"	" 196-202 m	30	"	60	"	"	350	0.03	
17635	"	"	" 202-208 m	25	"	95	"	"	270	<0.008	0.01
17636	"	"	" 208-214 m	15	"	30	"	"	240	<0.008	
17637	"	"	" 214-220 m	20	"	50	"	"	370	<0.008	
17638	"	ROSALINA ADIT	Chip Sample 0-6 m. Sst/slate ± 2% Qtz veins	20	<5	50	"	"	180	0.02	
17639	"	"	" 6-12 m. Abundant bd // veinlets <5mm, 20-50/m	20	<5	40	"	"	510	0.21	
17640	"	"	" 12-18 m. Qtz veinlets // chng // bd. <15mm, ~ 5/m.	25	<5	55	"	"	640	0.53	
17641	"	"	" 18-24 m. Qtz veinlets, irregular, 1-5 mm, 20-50/m	25	<5	50	"	"	300	0.10	
17642	"	"	Core Sample of Rosalind Reef: 150 mm wide zone of sheared slate with fractured silty quartz ~ 30% and minor Pyrite.	20	<5	45	"	"	5100	2.39	

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GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HERDMANN
R. WALKER

PROJECT EL 17/86

PROSPECT:

SAMPLE STORAGE REQ'D:

LABORATORY: ANALAB

DATE DISPATCHED:

250,000 SHEET LAUNCESTON

TYPE OF SAMPLE Rock chip

SAMPLE PREP. REQ'D:

ANALYSIS REQ'D: 95.1.08.04383

DATE RECEIVED:

A19962

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							PPM		
				Cu	Pb	Zn	Ag	Bi	As	Au	AuClk	Mo	
T7643	ALBERTON	PREMIER ADIT	Crust sample from rubble in caved (stope?) at end of adit. (H.G.) Massive white qtz.	10	60	3	<0.5	<10	270	0.09			
T7644	ALBERTON	ALBERTON No 2 REEF. Southern Stope	H.G. Sample representative of 50-200 mm wide clayey friable with fractured milky and smoky quartz, 2% AsPy	20	<5	10	"	"	3900	0.20	0.19		
T7645	"	"	H.G. Sample of milky tension veins (to 70 mm) and thin bd. // planar qtz veins.	20	<5	15	"	"	520	0.31			
T7646	"	CROWN PRINCE ADIT.	H.G. Sample of milky qtz veins <20 mm, average 2/m. trending NNW, steep ENE dip. In interval 34-42 m. from portal.	20	<5	15	"	"	36	<0.008			
T7647	"	"	H.G. Sample of 50-100 mm smoky quartz vein ± 2% AsPy, on footwall of main lode.	25	"	5	"	"	4700	0.18			
T7648	"	"	Chip channel sample over 18 m. across back of drive in "lode" consisting of brecciated intensely quartz veined sst. Qtz mostly milky, minor smoky ± AsPy. Up to 5% <u>disseminated</u> AsPy in sst.	15	<5	50	"	"	12000	0.44	3	<10	<2

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GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HERRMANN
R. WALKER

PROJECT EL 17/86 PROSPECT

SAMPLE STORAGE REQ'D:

LABORATORY: ANALABS.

DATE DISPATCHED:

250,000 SHEET LAUNCESTON TYPE OF SAMPLE: Rock Chip

SAMPLE PREP. REQ'D:

ANALYSIS REQ'D: 95.1.08.04383

DATE RECEIVED:

A19962

SAMPLE NUMBER	LOCATION	DESCRIPTION	ANALYSES							PPM	
			Cu	Pb	Zn	Ag	Bi	As	Am	AuClk	

7765d	ALBERTON	NEW STRAHAN ADIT.	Poorly defined zone of brecciation 1 m. wide upto 40% irregular quartz veining.	15	30	40	"	"	1100	0.24	0.21

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GOLD FIELDS EXPLORATION PTY. LTD.

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SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HEEDMAN
R. WALKER

PROJECT: EL 17/86

PROSPECT:

SAMPLE STORAGE REQ'D:

LABORATORY: ANALABS.

DATE DISPATCHED:

1:250,000 SHEET LANKESTON

TYPE OF SAMPLE: Rock chip

SAMPLE PREP. REQ'D:

ANALYSIS REQ'D: 95.1.08.04383

DATE RECEIVED:

A19962

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							Mo
				Cu	Pb	Zn	Ag	Bi	As	Au	
T7655	AUBERTON	NEW STRAWMAN ADIT	H.G. Sample of paddy 5-120 mm Qtz vein	10	<5	10	<0.5	<10	24	<0.008	
T7656	"	OLD STRAWMAN ADIT	H.G. samples of Qtz veins over 8m interval. Paddy irregular quartz veins mostly <50 mm parallel to bedding or faultish.	20	"	30	"	"	280	2.19	
T7657	"	"	As above, H.G. sample veins only, 5m interval	15	<5	10	"	"	29	<0.008	

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GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: W. HEARMAN
R. LAUER

PROJECT EL 1786

PROSPECT:

SAMPLE STORAGE REQ'D:

LABORATORY: ANALABS

DATE DISPATCHED:

250.000 SHEET LAUNKESTON TYPE OF SAMPLE: ROCK CHIP

SAMPLE PREP. REQ'D:

ANALYSIS REQ'D: 95.1.08.04383 DATE RECEIVED:

A19962

SAMPLE NUMBER	LOCATION	DESCRIPTION	ANALYSES PPM								
			Cu	Pb	Zn	Ag	Bi	As	Au	Au chkr	Mo
T7673	ALDERSON	CENTRAL RING- AROOMA. LOWER ADIT	Chip channel sample over 5m. Poddy milky qtz veins 5-15 mm, 10/m.	<5	10	55	"	<10	170	0.03	
T7674	"	"	Chip channel sample over 5m. adj 9673 Lithologies as above.	30	25	45	"	"	350	0.05	
T7675	"	MULLUMAH ADIT	Chip sample across 0.8m. lode formation. Brecciated sst, slate with quartz veining and qtz infill to about 20%. Rare Aspy.	5	<5	35	"	"	1300	1.40	
T7676	"	"	Chip sample across 0.6m. weakly brecciated sst, silt, slate; no quartz. Along strike of lode.	20	50	40	"	"	240	0.02	

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REPORTSMt. Victoria Goldfield, G. Thureau, 1882.Mt. Victoria Goldfield, G. Thureau, 1883.North Mt. Victoria Goldfield, W.H. Twelvetrees, 1900.Mt. Victoria Goldfield, W.H. Twelvetrees, 1904.Mt. Victoria Goldfield, Dr. Loftus Hills, 1923.Preliminary Report on Forest King and Alberton Mines, A. McIntosh Reid, 1922.Wardlaw Prospect (Alberton), A. McIntosh Reid, 1923.The Properties of the Ringarooma Gold Mining Company, Alberton, Tasmania,
A. McIntosh Reid, 1925.Notes on the Boring Campaign at the Northern End of the Alberton Field
(New River), J.B. Scott, 1933.Boring at Long Struggle Mine, F. Blake, 1938.Heathorns Gold Prospect, New River, H.G.W. Reid, 1951.The Alberton Goldfield, T.D. Hughes, 1952.Proposed Boring, Long Struggle Area, Alberton, T.D. Hughes, 1952.Alberton, Stannon Engineering, 1976.

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