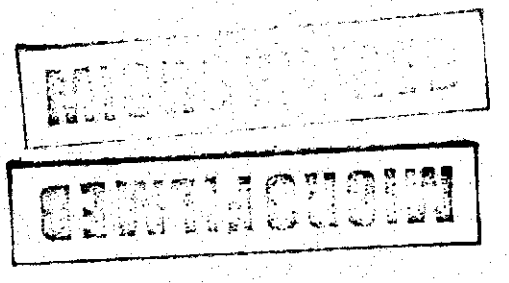
GOLD FIELDS EXPLORATION PTY. LIMITED

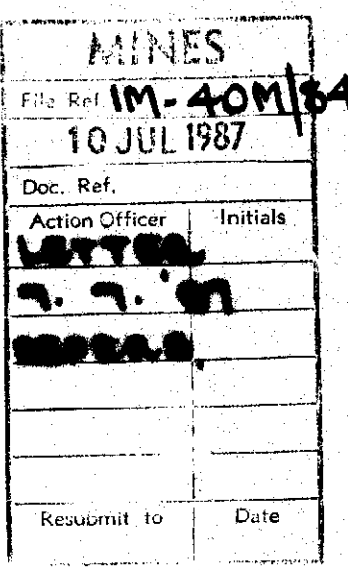
911001



AUTHORITY TO PROSPECT, QUEENSTOWN

RELINQUISHMENT REPORT

FOR 1,956 HECTARES



By: F.G. FitzGerald
Senior Geologist

Circulation: Goldfields Exploration (1)
Mt. Lyell (1)
Mines Department (1)

July, 1987

GFEL Report No. T/87/10

87-2677

1. INTRODUCTION

The Authority to Prospect, Queenstown area, is due to expire on the 5th August, 1987 in conjunction with the adjoining Exploration Licence 9/66. An application to renew the A to P and reduce the area to 1005 hectares has been submitted to the Mines Department in June, 1987. This report summarizes the exploration completed over the remaining 1956 hectares of the A to P which is proposed to be relinquished on the 5th August, 1987 (see Figure 1).

2. LAND TENURE

The A to P was first granted to the Mt. Lyell Mining and Railway Company Limited on 5th January, 1984 to cover forty Mining Lease Applications (1M/84-40M/84) surrounding the current Mt. Lyell Consolidated Mining Lease, 30M/80. This area was previously held by the Mt. Lyell Co. as part of Consolidated Mining Lease 15M/75. When, in 1980, the Mining Lease was reduced to 30M/80 the balance of the area, known as the "Buffer Zone" was incorporated into EL9/66. The "Buffer Zone" was not included in the Joint Venture Agreement signed in 1976 with the Getty Oil Development Co. Ltd. over the rest of EL9/66. The Company sought to have the "Buffer Zone" excluded from the E.L. just prior to the major reduction in area of EL9/66 in 1984. This led to pegging of the Mining Lease Applications.

3. EXPLORATION COMPLETED 1984-87

Gold Fields Exploration Pty. Ltd. has carried out exploration over the A to P since the tenement was first granted to the Mt. Lyell Co. in 1984. Both companies are divisions of Renison Goldfields Consolidated Limited. Exploration over the area to be relinquished during this period has been rather limited and is restricted to the following work, mostly carried out in conjunction with programs on the adjoining Mine Lease and proposed retained parts of the A to P:

1. Geological compilation map covering the A to P area. This was prepared as part of consultant W.A. Brook's study of the mineralization and exploration potential over the general Mine Lease area (Brook, 1984a);

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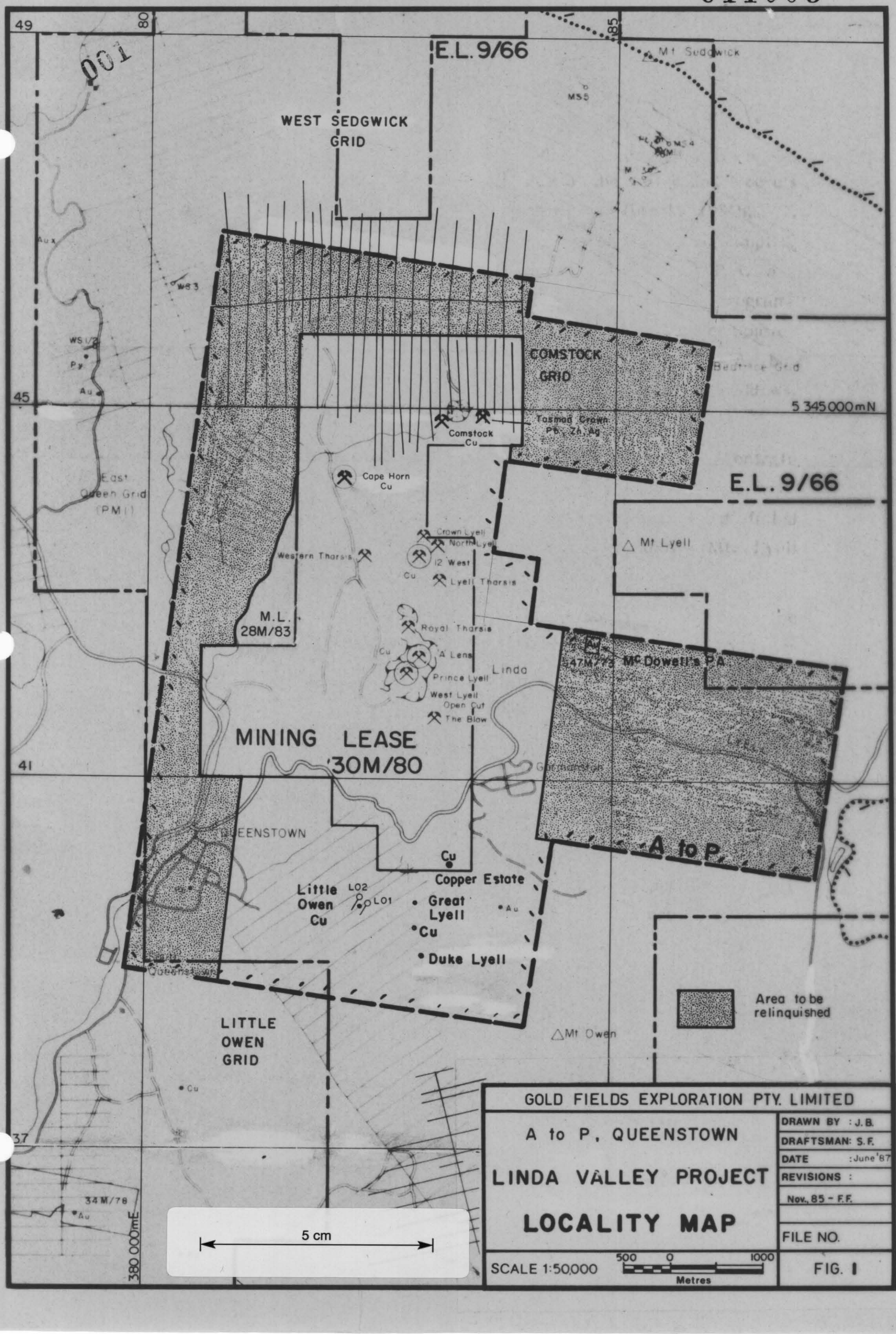
49
80
85
E.L. 9/66
Mt Sedgwick
MS5
MS4
WEST SEDGWICK GRID
WS3
WS1/2
Py
Au
Aux
45
COMSTOCK GRID
5 345 000mN
Tasmad Crown Pb, Zn, Ag
Comstock Cu
Cape Horn Cu
East Queen Grid (PM1)
E.L. 9/66
Crown Lyell
North Lyell
Western Tharsis
12 West
Cu
Lyell Tharsis
Mt Lyell
M.L. 28M/83
Royal Tharsis
Cu
A Lens
Linda
Au
47M/73
Mc Dowell's P.A
Prince Lyell
West Lyell Open Cut
The Blow
MINING LEASE '30M/80
41
QUEENSTOWN
Cu
Copper Estate
Little Owen Cu
LO2
LO1
Great Lyell
Au
Cu
Duke Lyell
A to P
Area to be relinquished
LITTLE OWEN GRID
Mt Owen
Cu
37
34M/78
Au
380 000mE
5 cm
GOLD FIELDS EXPLORATION PTY. LIMITED
A to P, QUEENSTOWN
LINDA VALLEY PROJECT
LOCALITY MAP
DRAWN BY : J.B.
DRAFTSMAN: S.F.
DATE : June '87
REVISIONS :
Nov., 85 - F.F.
FILE NO.
SCALE 1:50,000
500 0 1000
Metres
FIG. 1

2. Investigation of the gold potential of the Linda Valley. This work comprised very limited rock sampling around the old gold prospects including McDowell's P.A. on the north side of the valley and Moore's Gold Mine on the northern flanks of Mt. Owen (Brook, 1984b, and Jones, 1985 see Appendix 1). In addition restricted moss sampling for gold was carried out in creeks draining McDowell's P.A. and Cemetry Creek (Beddows, 1985). Results from these programs were disappointing. One diamond drill hole, G14A, was completed for 421m to test for gold mineralization at McDowell's P.A. but unfortunately was drilled entirely within glacial deposits (Beddows, 1985);

3. Stream sediment geochemistry, including -80#, panned concentrate and limited moss sampling in the East Queen drainage. This work was carried out by geological contractor R.A. Poltock but failed to identify significant anomalies away from the known Mt. Lyell mineralization (FitzGerald and Pease, 1985);

4. Geological mapping and sampling along the southern slopes of the West Sedgwick area. This work was completed by geological contractor P. Komyshan as part of a detailed mapping program over the adjacent Comstock area (Komyshan, 1985).

4. CONCLUSIONS

The negative results from these investigations, as well as data from previous exploration and early prospecting, have indicated that no significant potential for economic mineralization exists in the main portions of both the Linda and Comstock Valleys. Similarly the area west of the East Queen River and south of West Sedgwick is considered to be unprospective. Consequently, it is proposed that these areas be relinquished on the 5th August, 1987.

5. REFERENCES

BEDDOWS, J.W., 1985: Report on work completed, July 1984 to January 1985 on Authority to Prospect, Linda Valley Area. Unpublished Gold Fields Exploration Report.

85-2475
include drill details
G14A

BROOK, W.A. 1984a: Mineralization at Mount Lyell and exploration of the buffer zone, mine lease and EL9/66. Unpublished report to Gold Fields Exploration Pty. Limited. ~~85-2471~~ 85-2473

BROOK, W.A. 1984b: Exploration for gold deposits at Mt. Lyell within the mine lease and buffer zone: regional and general aspects. Unpublished report to Gold Fields Exploration Pty. Limited. 85-2471

FITZGERALD, F.G. and PEASE, C.F.D., 1985: E.L.9/66 Tyndall Area Annual Report 1984/85. Unpublished Gold Fields Exploration Pty. Ltd. Report.

JONES, M.T., 1985: Mt. Lyell gold results. Extract of unpublished Gold Fields Exploration Pty. Limited internal memo, 11th September, 1985. ~~2-85-2002~~ This report

KOMYSHAN, P., 1985: Geological investigations in the Cape Horn-Lyell Comstock-West Sedgwick area. Unpublished report for Gold Fields Exploration Pty. Limited.

APPENDIX 1

EXTRACT FROM MEMO BY M.T. JONES, SEPT. 1985

005

GOLD FIELDS EXPLORATION PTY. LIMITED

911007

MJ/srd

MEMORANDUM

DATE: 13 SEP 1985
FILE No.: 9516/3
INITIALS:

To F. Fitzgerald
From M. Jones
Subject MT. LYELL Au RESULTS
Date 11th September, 1985.

The gold sampling programme covered a number of "prospects" in the lease area; the reasons behind the selection (see my memo to L.A.N. dated 8 October, 1984) and the results obtained are summarised below as a prelude to a more formal report. All results are listed on the attached tables or, in the case of culvert samples from the Queenstown - Gormanston road, plotted on the enclosed plan.

Sample types and analytical method:

Samples were of one of three types

(i) assay pulps that had not previously been analysed for gold - drillcore and Comstock grid rock chip samples.

(ii) drill-core samples - a small length of split core at approx. one metre intervals was taken, the material from one core tray constituting a single sample; in effect about 10% of the core in a given interval was sampled.

(iii) rock chip samples - outcrop or (rarely) underground exposure; ca. 2kg.

All samples were prepared at G.F.E.L. Canberra and, with standards included, submitted to Analabs (W.A.) for Au analysis by their method 309 - fire assay with A.A.S. determination on a 30gm. sample with a lower limit of detection of .008ppm.

VIII MT. OWEN

Chip samples of dump material and wall rocks from two small gold shows on the north flank of Mt. Owen and a copper occurrence associated with chloritic alteration about 600m. west of the summit did not return gold values of interest.

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

006

PROJECT: | PROSPECT: | SAMPLE STORAGE REQ'D: | LABORATORY: ANALABS (W.A.) | COLLECTED: | DATE DISPATCHED:

1:250.000 SHEET: | TYPE OF SAMPLE: | SAMPLE PREP. REQ'D: | ANALYSIS REQ'D: Au - 309 | DATE RECEIVED:

SAMPLE NUMBER	LOCATION	DESCRIPTION	ANALYSES						
			Au	Cu	Ag				
52221	W. Thorns - adit (m -220)	pyrite - quartz - pyrophyllite rock	.100	165	<0.5				
52222	— " —	oxidised pyritic siliceous breccia.	.133	160	<0.5				
52259	Mt. Owen: "Moore's Au mine	silicified Pioneer? Beds	.025						
52260	" "	green micaceous alteration of Pioneer? Beds	.040						
52261	" "	goethitic fine-grained mudstone	.025						
52262	Mt. Owen - above Cormanston. X	phyllite - gossan interbeds - relic pyrite	.040						
52263	" "	quartz gossan, brecciated, limonitic (after CO_3)	.032						
52264	Telecom road - cutting below rd 62/63	shale	.017						
52242	Mt. Owen - nth slopes	pyritic Pioneer? Beds (m. R.d).	.032						
59145	W. Thorns - above C.H. road	pyrite - quartz - topaz? rock	.017						
59146	" "	pyrophyllite - pyrite altered rock	x						
59147	" "	pyrophyllite? altered rock.	x						
59148	Cormanston - drainage culvert	breccia (? gossan)	x						
59149	Zeplin gossan	siderite gossan	x						
59150	Comstock - silica knob	silica with hematite (and baryte?) veining	.100	185	22.5				
59151	Comstock - S end of opencut.	Fe/qtz altered rock.	.133	315	9.5				
59152	nth. end of Razorback Ridge	mylonite	.050						
59153	top of Philosopher's Ridge	Ba in weathered chloritic rock.	.075						
59154	Tasman dumps	sericitic schist	.017						
59155	W. Lyell 1410 bench	pyritic replacement of sediment	.075						
59156	N. Lyell - above 1010 stope	hydrothermal? breccia in altered Gordon?	.040						

911008