



Cyprus Gold Australia Corporation

PROJECT 85-123P
GEO705**OPEN FILE**

MINES	
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Action Officer	Initials
Refer to letter	
31.1.89	
Resubmit to	Date

PROGRESS REPORT

TWELVE MONTHS TO DECEMBER 1988

EXPLORATION LICENCE 37/87

DELORAINÉ

TASMANIA

R POLTOCK

DECEMBER 1988

REPORT 621

CYPRUS

DISTRIBUTION

- o Sydney
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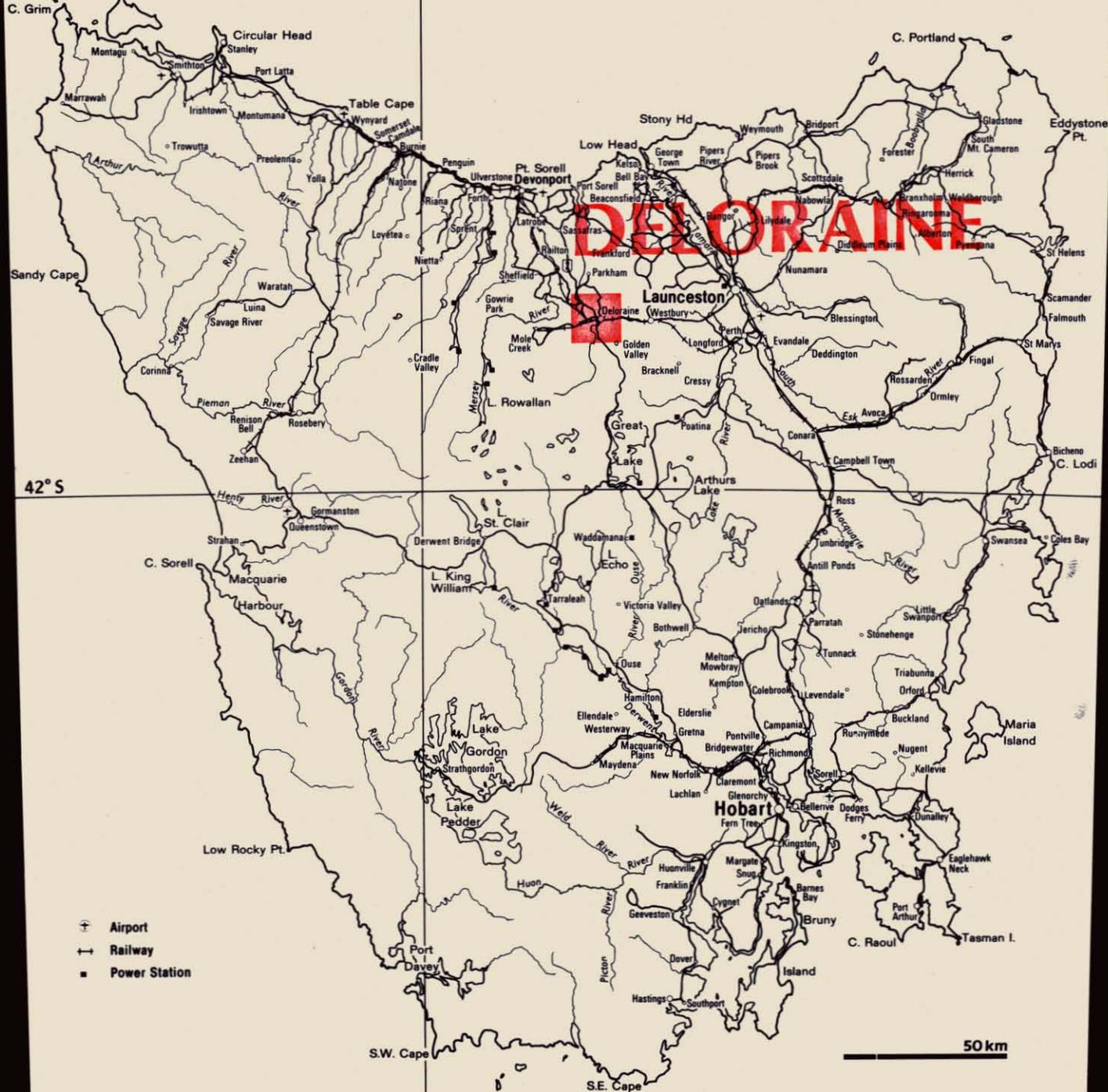
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TASMANIA

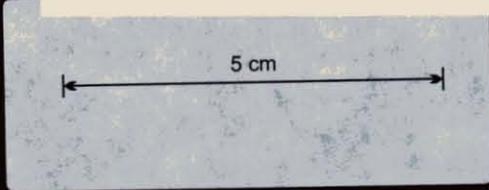


BASS STRAIT



- ✈ Airport
- 🚂 Railway
- ⬛ Power Station

50 km



Project Location

SUMMARY

The Deloraine licence area covers the eastern-most exposure of the Cambrian Mt Read Volcanics. The area is considered prospective for volcanogenic and replacement style gold mineralization.

No mineral production has been recorded from the licence area but copper was prospected in the early 1900's at Kentish Hill and gold at the Star of the West, 3 kilometers west of the licence.

Exploration by several companies since 1970 has located anomalous levels of copper, tin, tungsten, molybdenum and gold.

Cyprus' exploration was initiated with a literature search which outlined four areas warranting further work:

- . Lobster Rivulet/PK Pit, anomalous tin, tungsten, molybdenum and copper in magnetite skarns associated with basic volcanics
- . Gregory Road, anomalous gold associated with tonalite intrusives and quartz tourmaline breccias
- . Kentish Hill, copper prospects in basic volcanics and gossanous float with anomalous gold
- . Beefeater Hill, anomalous copper, cobalt and silver associated with quartz limonite veins in tuffaceous greywackes.

Due to budgetary constraints during the year only the Beefeater Hill and Kentish Hill areas were assessed. No significant values were returned from rockchip sampling in either area.

CONCLUSIONS AND RECOMMENDATIONS

The property is still considered prospective for replacement and volcanogenic gold mineralization.

The remaining prospective areas outlined by the literature search should be assessed as early as possible in the new licence year.

INTRODUCTION

This report details exploration activities on EL 37/87 for the twelve months ending December 1988.

EL 37/87 comprises 173 square kilometers and was pegged as open ground and granted to Cyprus on 12 January 1988.

The licence is located in central northern Tasmania immediately south of Deloraine and covers the eastern-most exposure of the Mt Read Volcanics.

The property is readily accessed by a network of sealed and all weather gravel roads which service agricultural and forestry industries in the area.

Work during the year consisted of a literature search and the partial geochemical assessment of the Beefeater and Kentish Hill Areas for gold.

HISTORY AND PREVIOUS EXPLORATION

The area has been prospected sporadically since the 1880's when gold was first discovered at the Minnow River a few kilometers northwest of EL 37/87. Minor production occurred from alluvials and quartz veins associated with feldspar hornblende porphyry dikes in slate (P B Nye, 1941).

In 1921 copper was discovered in the Kentish Hill/Quamby Brook area in the southeast of the licence, mineralization occurring on the contact between basic volcanics and slates. Minor underground prospecting was carried out but no economically significant mineralization was located (A Reid McIntosh, 1923).

This section of Mt Read ^{Volcanics} has been prospected using modern exploration methods since 1970 by several companies, including T W Davies Syndicate, Union Oil Development, Asarco, Cygnatrex, Comalco and Amax. A thorough review of previous prospecting and

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exploration can be found in a report by G Weste and P Komyshan, 1978.

T W Davies Syndicate EL 25/70, R L Wildy, 1971

Electromagnetics and follow-up diamond drilling of six holes in the Kentish Copper Mine area. The holes were apparently drilled down-dip. The best intersection was 46.5 meters of 0.18% copper.

Asarco (Australia) Pty Limited EL 7/73

Regional stream sediment geochemistry targeting volcanogenic base metals in Cambrian lithologies. The survey defined the Gog Range and East Gog lead, zinc anomalies. The Gog Range anomaly is located immediately west of EL 37/87.

Cygnatrex Pty Limited EL 13/74

Target Carlin type gold mineralization in Gordon Limestone, most of the licence was located southwest of EL 37/87 in the Mole Creek area. No significant gold anomalies were located.

Union Oil Development EL 15/75

Soil geochemical survey over the Kentish Hill copper prospect, locating anomalous copper, zinc and nickel. No further work was carried out.

Comalco Limited EL 17/76

Target tin W F skarns and volcanogenic base metal sulfides. The licence was covered with detailed stream geochemistry and geological mapping. Grid soil/rock geochemistry and geophysics was completed in the Kentish Hill and PK Pit areas. No significant mineralization was located and the licence was surrendered in 1979.

Austamax Operations Pty Limited EL 49/82

Licence included the northwest section of EL 37/87, extending north into the Beulah district. The main thrust of exploration was the Digem anomaly followed-up with mapping, stream and rock geochemistry.

GEOLOGY AND MINERALIZATION OF THE PROPERTY _____

Cambrian sediments and basic to felsic volcanics have been exposed in the core of the northwest trending anticline of Cambro-Ordovician quartzose sandstone and conglomerates.

This Cambrian sequence is the eastern-most exposure of the Mt Read Volcanics which hosts the major base and precious metal mines of western Tasmania. East of the Deloraine licence the volcanics are covered by flat lying Permo-Triassic sediments and Jurassic dolerites.

The area has been mapped on a regional scale by the Tasmanian Department of Mines, Quamby 1:63,360. Regional and prospect scale mapping has also been completed by Komysan, 1978 and Poltock, 1984.

In the east of the licence Cambrian lithologies are dominated by interlayered slate, greywacke, sandstone and rhyolitic to basic

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volcanics. These lithologies are interpreted to have been laid down in a distal depositional environment.

Lithologies in the western sector are more typical of a proximal environment, consisting of rhyolitic domes and a cluster of plug like intrusives ranging in composition from gabbro-tonalite-granite.

Three styles of mineralization have been located to date:

- . Copper associated with contacts between basic volcanics and shales, Kentish Hill (Weste, 1978)
- . Magnetite skarns anomalous in tin, tungsten and copper associated with basic volcanics in the PK Pit/Punches Terror area (Komyshan, 1978)
- . Quartz tourmaline stockworks associated with tonalite and gabbroic intrusives in the Gregory Road area (Poltock, 1984).

All three styles are considered to have potential for gold mineralization.

WORK CONDUCTED BY CYPRUS

Work conducted by Cyprus during 1988 included a literature search of historical data and previous company reports. The search outlined several areas warranting further assessment for gold. Only two of these areas, Kentish and Beefeater Hills were assessed with any detail, using rock geochemistry and geology.

Literature Search

Historical data and previous company reports were reviewed to assess the licence's gold potential.

The review outlined several areas warranting more detailed exploration.

Lobster Rivulet/PK Pit

Magnetite skarns associated with basic volcanics with anomalous levels of tin, tungsten, molybdenum and copper were located by

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Comalco. The interpreted skarns were not exhaustively tested for gold.

Gregory Road (Western section of EL 37/87)

Gabbroic to tonalite intrusives associated with quartz tourmaline breccia veins and anomalous gold, located by Austamax. The intrusives and associated breccias were not fully assessed for their gold potential.

Kentish Hill/Quamby Brook

Basic volcanics and copper prospects. The area is considered to have potential for gold mineralization. Comalco locating gossanous float anomalous in gold in Quamby Brook.

Beefeater Hill

Extensive quartz limonite veining in tuffaceous greywackes with anomalous levels of copper, cobalt and silver, located by Comalco.

Geological and Geochemical Reconnaissance

Rockchip sampling was only completed at Kentish Hill and Beefeater Hill. Samples were assayed for copper, lead, zinc, bismuth, silver, gold, molybdenum, tungsten and arsenic. No significant results were returned.

Kentish Hill

Epidotized and quartz epidote veined basalt was chip sampled in the vicinity of the old workings at 5393700N:475000E. Four samples (216668 to 216671) were assayed. Copper reaching a maximum of 70 ppm and gold <0.005 ppm. A sample of pyritic Precambrian metasediment from just west of Kentish Hill at 5393300N:473600E (216667) was assayed without significant results (Appendices 1 and 2).

Beefeater Hill

Quartz limonite veins with anomalous copper, silver and cobalt were located by Comalco (Weste, 1979). Although follow-up sampling by Comalco failed to repeat the anomalous levels

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initially returned, it was considered that the area may be still prospective for gold.

Six samples of limonitic quartz vein float were collected at 5400250N:467000E (216661 to 216666). All gold assays were <0.005 ppm (Appendices 1 and 2). No further work is warranted in this area.

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CYPRUS GOLD AUSTRALIA CORPORATION

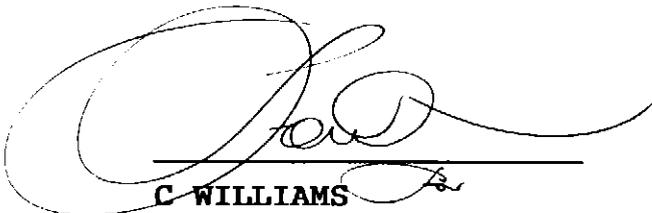
EXPENDITURE FOR THE THREE MONTHS ENDED 31 DECEMBER 1988

DELORAINÉ EXPLORATION LICENCE 37/87

	\$
Salaries and Wages	-
Benefits	-
Drafting	-
Field Supplies - General	-
Communication	-
Travel	-
Other Contractors	580,00
Assays	-
Consulting Fees	-
Property Payments	1,930.00

	\$2,510,00
Overhead @ 10%	251,00

TOTAL	\$2,761.00
	=====



C WILLIAMS

MANAGER - ACCOUNTING

REFERENCES

McIntosh Reid, A; 1923

Quamby Brook Copper Mine, Unpublished Report,
Department of Mines, Tasmania

Nye, PB; 1941

Report on the Minnow Goldfield Geological Survey
Typed Reports

EL 49/82

Poltock, R; 1984

EL 9/84 Beulah, Gog Range Area, Tasmania.
Geological mapping and rockchip geochemistry,
Austamax Operations Pty Limited

Weste, G & Komysan, P; 1978

EL 17/76 Quamby, Tasmania. Report on all
Investigations to October 1978

Weste, G; 1979

EL 17/76 Quamby, Tasmania. Final Report

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APPENDIX 1

SAMPLE RECORD & ANALYTICAL DATA SHEETS

ROGER POLTOCK GEOLOGICAL PTY. LTD.

CLIENT CYPRUS MINERALS
 PROJECT KH 37/87 DELORAINÉ
 PROSPECT

SAMPLE RECORD AND ANALYTICAL DATA SHEET
 LABORATORY ANALABS
 SAMPLE TYPE ROCK 16-8-87.

COLLECTED BY: CT. RP
 DATE DISPATCHED:
 DATE RECEIVED:

A 2830

SAMPLE NUMBER	LOCATION	DESCRIPTION	ANALYSES									
			Ca	Pb	Zn	Bi	Ag	Au	As	Mn	W	
216661	BEEFATER HILL 467 000E 5400, 2500N	Qtz veins with limonite and or MnO (pyroclastic) on fractures	260	180	85	<10	0.5	<0.005	3	10	<10	
216662	"	"	10	15	5	<10	<0.5	<0.005	1	<10	<10	
216663	"	"	15	10	5	10	<0.5	<0.005	1	<10	<10	
216664	"	"	25	5	10	10	<0.5	<0.005	1	<10	<10	
216665	"	"	10	<5	5	10	<0.5	<0.005	2	10	<10	
216666	"	"	15	<5	5	<10	<0.5	<0.005	1	<10	<10	
216667	LAME HILL - KENTISH HILL PROSPECT 473 600E 5393 300N	Flocc PE gbk - schist with smears of py	45	5	5	20	<0.5	<0.005	5	10	<10	
216668	KENTISH HILL PROSPECT 475 000E 5393 700N	Qtz epid veins in highly epidotized basalt	70	10	15	<10	<0.5	<0.005	2	<10	<10	
216669	"	Epidotized basalt with fine Qtz stripes	40	10	20	<10	<0.5	<0.005	6	<10	<10	
216670	"	Qtz epid veins	30	5	10	<10	<0.5	<0.005	1	<10	<10	
216671	"	Epid Qtz hem veins in basalt	15	5	20	<10	<0.5	<0.005	3	<10	<10	

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APPENDIX 2

ANALYTICAL REPORTS

ANALABS

686021

020
Phone (09) 458 7999

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

Telex AA92560

ANALYTICAL REPORT No. 7500 14603

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

B. Roxburgh
Cyprus Minerals
P.O. Box 493
North Sydney
N.S.W. 2060

ORDER No.	PROJECT
DATE RECEIVED	RESULTS REQUIRED

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
2	14/07/87	1	2

DATE OF SAMPLES	SAMPLE NUMBERS	PRE-TREATMENT							ANALYSIS			
		DRY	CRUSH	SPLIT	PUL-VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD	
	18651/71	RO	Prep: 006	010,011,012,013,016						Cu,Pb,Zn,Bi,Ag,Mo/101,As/114		
	18651/71	RO								W/401,As,AuChn/313		
	18651/71	RO	Prep: 006	010,011,012,013,016						RO,Ag/104		

RESULTS TO

B. Roxburgh
Cyprus Minerals
P.O. Box 493
North Sydney
N.S.W. 2060

RESULTS TO

R. Pollock
Cyprus Minerals
C/- Post Office
Wilmot
Tasmania 7310

REMARKS

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core	perchloric acid A1	atomic absorption AAS
split core	hydrochloric acid A2	x-ray fluorescence XRF
cutting	nitric acid A3	spectrophotometry SPEC
rock	aqua regia A4	colorimetry COL
soil	nitric-perchloric A5	chromatography CHR
pulp	HF mixture A6	titration ITN
water	HF under pressure A7	other chemical means CHEM
sludge	fusion A8	miscellaneous MISC
stream sediment		fluorescence FLUOR
heavy mineral		inductively coupled plasma ICP

AUTHORISED OFFICER

ANALABS

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021

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No

PAGE

7.5.08.04682

14/09/87

3458

1 OF 2

TUBE No.	SAMPLE No.	Cu	Pb	Pb	Zn	Bi	Ag	Ag	Mo	As
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11	216661	260	180	-	85	<10	0.5	-	10	3
12	216662	10	15	-	5	<10	<0.5	-	<10	1
13	216663	15	10	-	5	10	<0.5	-	<10	1
14	216664	25	5	-	10	10	<0.5	-	<10	1
15	216665	10	<5	-	5	10	<0.5	-	10	2
16	216666	15	<5	-	5	<10	<0.5	-	<10	1
17	216667	45	5	-	5	<10	<0.5	-	<10	5
18	216668	70	10	-	15	<10	<0.5	-	<10	2
19	216669	40	10	-	20	<10	<0.5	-	<10	6
20	216670	30	5	-	10	<10	<0.5	-	<10	1
21	216671	15	5	-	20	<10	<0.5	-	<10	3
22										
23	DETECTION	5	5	25	5	10	0.5	2	10	1
24	UNITS	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
25	METHOD	101	101	104	101	101	101	104	101	114

Results in ppm (unless otherwise specified)
 - element present, but concentration too low to measure
 - element concentration below detection limit
 - element not determined

AUTHORISED
OFFICER

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

680023

022

ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.04682

14/09/87

3458

2 OF 2

TUBE No.	SAMPLE No.	Au	AuChk	W						
1	216651									
2	216652									
3	216653									
4	216654									
5	216655									
6	216656									
7	216657									
8	216658									
9	216659									
10	216660									
11	216661	<0.005	-	<10						
12	216662	<0.005	-	<10						
13	216663	<0.005	-	<10						
14	216664	<0.005	-	<10						
15	216665	<0.005	-	<10						
16	216666	<0.005	-	<10						
17	216667	<0.005	0.005	<10						
18	216668	<0.005	-	<10						
19	216669	<0.005	-	<10						
20	216670	<0.005	-	<10						
21	216671	<0.005	-	<10						
22										
23	DETECTION	0.005	0.005	10						
24	UNITS	PPM	PPM	PPM						
25	METHOD	313	313	401						

Results in ppm unless otherwise specified.
* element present, but concentration too low to measure
* element concentration is below detection limit
* element not determined

AUTHORISED OFFICER

