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Cyprus Gold Australia Corporation

PROJECT A-85-123L  
GEO819

**OPEN FILE**

89-2955

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8 MAY 1989	
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LETTER	
5.5.89	
REFERS.	
Resubmit to	Date

PROGRESS REPORT

TWELVE MONTHS TO APRIL 1989

EXPLORATION LICENCE 38/87

WILMOT

TASMANIA

**RECORDED**

R POLTOCK

APRIL 1989

REPORT 645

**CYPRUS**

01

DISTRIBUTION

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- Sydney
- Department of Mines
- Field
- Spare

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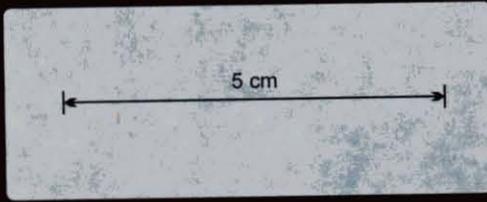
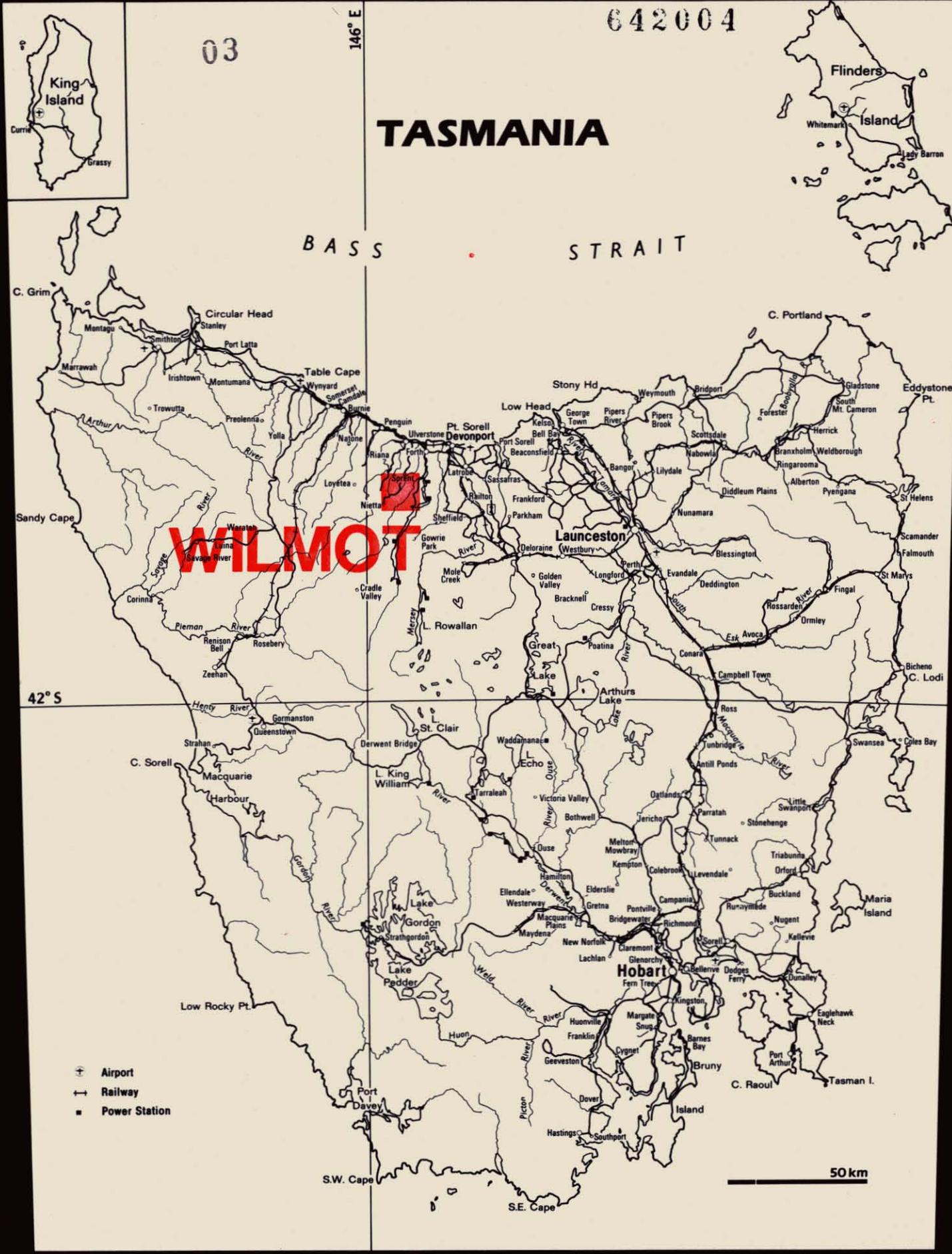
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# Project Location

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#### SUMMARY

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This report details exploration activities in EL 38/87 for the twelve months ending April 1989.

The Wilmot tenement covers a portion of the Cambrian Mt Read Volcanics and lies on the northern edge of the Moina granitoid related mineral districts.

The area is considered prospective for volcanogenic gold and base metals and granite related gold mineralization. A large proportion of the prospective lithologies in the licence are covered by Tertiary basalts.

Mineral production in the past was limited to gold from the Bell Mountain alluvial field, an estimated 113.4 kilograms were produced between 1890 and 1892 (Jennings 1979). The field straddles the southern tenement boundary. Located two kilometers

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C  
southwest of the tenement is the Shepherd and Murphy tin-tungsten mine, the largest mine in the Moina district.

The tenement area has been prospected since the 1890's for gold, silver and lead. More recently CRA Exploration Pty Limited and Asarco (Australia) Pty Limited have explored the tin, tungsten, gold, copper, lead and zinc potential under EL 7/73. The only prospect located was the Wilmot copper anomaly in the north of the tenement.

Exploration completed by Cyprus in the first licence year included a literature search, reconnaissance geology and stream and rockchip sampling.

Due to budgetary constraints only the southern section of the licence has been assessed.

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## CONCLUSIONS AND RECOMMENDATIONS

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Stream geochemistry in the vicinity of Bell Mountain failed to locate a hardrock source for the Bell Mountain alluvial gold.

Weak gold anomalies in -80 mesh were located in Lincoln Creek. The gold is interpreted to have been shed from Devonian structures in the Ordovician quartzites.

It is recommended the Lincoln Creek gold stream anomaly be followed-up with more detailed stream and rock geochemistry and the Wilmot copper prospect be evaluated for gold using rock and soil geochemistry and geology.

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LOCATION AND ACCESS

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EL 38/87 comprises 120 square kilometers and was pegged as open ground and granted to Cyprus on 21 April 1988. The property is located in central northern Tasmania between the Forth and Wilmot Rivers. Wilmot is the only town in the area and is the center of the agricultural and forestry district. Access is via the sealed Devonport to Cradle Mountain road and a network of all weather forestry roads.

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#### HISTORY AND PREVIOUS EXPLORATION

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The Wilmot tenement is located on the northern edge of the Moina mineral field. This area has been prospected since the 1890's. One of the earliest discoveries was the Bell Mountain alluvial goldfield which is located on the southern edge of the licence and produced approximately 113.4 kilograms over a life of two years. During this period of prospecting the Washington silver mine was located. The lode has been worked on two adit levels producing 5.1 tonnes of galena (Jennings 1979).

The main mining activity in the district was located two kilometers southwest of the tenement at Moina. Tin and tungsten were sporadically mined from vein systems during the period 1893 to 1957 (Jennings, 1979).

More recently the area was explored as part of EL 7/73 by Asarco (Barker, 1975) and later as a joint venture with CRAE (Clementson, 1983). EL 7/73 was relinquished by CRAE in 1985.

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Asarco concentrated their efforts exploring the Cambrian volcanics for base metals. Exploration was initiated with a regional stream geochemical program, locating the Wilmot and Barrington copper anomalies (Barker, 1975 and 1976), the latter is located less than one kilometer east of EL 38/87.

CRAE entered as a joint venture partner in 1976 following up Asarco's initial work at the Wilmot anomaly with detailed stream geochemistry, grid based mapping, soil and rock geochemistry, magnetics, VLF and EM. Copper mineralization was shown to be associated with brecciated and tourmalinized microgranite? (Clementson, 1983). No further work was carried out and the mineralization was not assessed for gold.

## GEOLOGY AND MINERALIZATION OF THE PROPERTY

Cambrian Mt Read Volcanics and associated sediments are exposed in two east-west trending anticlinoral axes in Ordovician Roland Conglomerate, Moina Sandstone and Gordon Limestone.

The above lithologies are exposed in the Bell Mountain area and the valleys of Forth Falls Creek and the Forth and Wilmot Rivers, the remainder is blanketed by Tertiary basaltic lavas.

Geology has been mapped on a 1:63360 scale by the Geological Survey of Tasmania, Department of Mines Sheffield Sheet. Additionally the Geological Survey has compiled a Metallic Mineral Deposits Map, Cethana 1:50000 scale. This sheet combines mineral occurrences and a revised regional geology.

More detailed prospect scale mapping has been compiled by CRAE at the Wilmot copper prospect (Clementson, 1983).

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Within the tenement Mt Read Volcanics consist of felsic tuffs, minor lavas and tuffaceous greywackes and mudstone. Styles of mineralization occurring within or adjacent to the tenement and which are considered prospective can be subdivided into two genetic groups.

Devonian granitoid related:

- . Vein style gold, silver and lead
- . Skarn style gold.

Volcanogenic:

- . Copper, lead, zinc, massive sulfides with gold/silver credits (Mt Jacob prospect located less than 1 kilometer southwest of EL 38/87)
- . Copper/gold associated with felsic intrusives and tourmalinized breccias (Wilmot and Barrington copper prospects).

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#### WORK CONDUCTED BY CYPRUS

Work conducted during the first year included a literature search, reconnaissance geology and rockchip and stream sampling. Exploration was orientated toward locating gold and base metals.

#### Literature Search

Historical data and previous company reports on the area were reviewed, highlighting two areas warranting further work:

- . Bell Mountain, Mt Read Volcanics and Devonian granite, target - gold and base metals
- . Wilmot copper anomaly, Mt Read Volcanics - target copper and gold associated with tourmalinized and brecciated felsic intrusives.

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Reconnaissance Geology and Rock Geochemistry

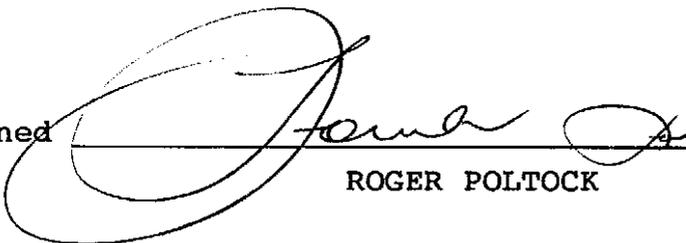
The geology of the Bell Mountain area was briefly assessed. Samples of limonitic sandstone cobbles from the alluvial wash and vein style galena from the Washington prospect were assayed. Gold results returned were less than the 0.005 ppm detection limit (Appendices 1 and 2).

Stream Sediment Sampling

Streams draining volcanics and basal Ordovician quartzite and conglomerate in the Bell Mountain area were sampled with both panned concentrates and -80 mesh samples.

Samples were assayed for copper, lead, zinc, silver, gold, arsenic (Appendices 1 and 2). Anomalous gold with maximum values of 0.06 ppm in -80 mesh samples were located in Lincoln Creek. This stream drains Devonian age structures in Ordovician quartzites. The anomaly should be followed-up with more detailed stream and rock geochemistry. No base metal or gold anomalies were located in streams draining the Cambrian volcanics.

Signed



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ROGER POLTOCK

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**REFERENCES**

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**Barker, R G, 1975**

Progress Report, Lake Barrington Prospect, EL 7/73  
Paradise, Tasmania, Asarco (Australia) Pty Limited

**Clementson, I M, 1983**

EL 7/73 Sheffield, North Tasmania, Report on  
Exploration during 1982. CRAE Report 11883

**Jennings, I B, 1979**

Geological Atlas, 1:63360, Sheet 37, Sheffield.  
Explanatory Report, Department of Mines

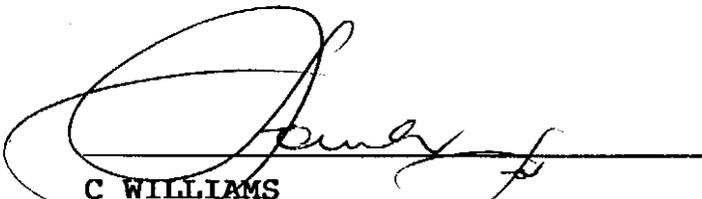
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## CYPRUS GOLD AUSTRALIA CORPORATION

EXPENDITURE FOR THE TWELVE MONTHS ENDED APRIL 21, 1989

WILMOT EXPLORATION LICENCE 38/87

	\$
Salaries and Benefits	2,666.00
Assays	154.00
Field Supplies and Equipment	
Operation/Maintenance	500.00
Administration and Overheads	4,928.00
	-----
<b>TOTAL</b>	<b>\$8,248.00</b>
	=====



C WILLIAMS  
MANAGER - ACCOUNTING

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APPENDIX 1 \_\_\_\_\_

SAMPLE RECORD AND ANALYTICAL DATA SHEETS







APPENDIX 2

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ANALYTICAL REPORTS

# ANALABS

7.5.08.05855

R. Poltock  
Cyprus Gold Aust. Co.,  
C/- Post Office  
Wilmot  
Tasmania 7310

03494

DN 3484

22/11/88

ASAP

1

28/11/88

1

10

Various

SS Prep: 005,007

Cu, Pb, Zn/101, As/114

Various

SS

Au, AuChk/309

217775

RO Prep: 005,009,011,013,016

As/114

217775

RO

Au, AuChk/309

## REMARKS

B. Roxburgh  
Cyprus Gold Aust. Co.,  
P.O. Box 493  
North Sydney  
N.S.W. 2060

RESULTS

RESULTS

### STATE OF SAMPLE

### ANALYSIS - PREPARATION

IC  
SC  
OI  
RO  
PI  
NA  
TI  
SS  
HM

hydrofluoric acid  
hydrochloric acid  
nitric acid  
hydrogen peroxide  
Cyanide Potassium  
HF mixture  
in under pressure  
fusion

A1  
A2  
A3  
A4  
A5  
A6  
A7  
A8

oxalic acid  
specific sulphide  
cyanide solution  
cyanide solution  
cyanide solution  
cyanide solution  
pressed powder (XRF)  
glass fusion (XRF)

GA  
GS  
GC  
GC  
GC  
GC  
GF

Method used  
Reference  
Institution/Company



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# ANALABS

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

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.05855

28/11/88

03494

1 OF 1

TUBE No.	SAMPLE No.	Cu	Pb	Zn	As	Au	AuChk			
1	217751	40	5	165	5	<0.01	-			
2	217754	40	10	175	5	<0.01	<0.01			
3	217756	45	<5	165	4	<0.01	-			
4	217758	5	20	35	13	<0.01	-			
5	217761	20	20	35	12	0.01	-			
6	217763	<5	20	45	13	0.03	-			
7	217766	10	10	140	10	0.06	-			
8	217769	<5	10	15	3	0.02	-			
9	217772	<5	<5	30	5	<0.01	-			
10	217775	-	-	-	6	<0.01	-			
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	1	0.01	0.01			
24	UNITS	PPM	PPM	PPM	PPM	PPM	PPM			
25	METHOD	101	101	101	104	307	309			

Results in ppm unless otherwise specified  
 T = element present; but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER



# ANALABS

A division of MacDonal Hamilton & Co. Pty. Ltd.

Phone (09) 458 7999

52 Murray Road, Welshpool, W.A. 6106

Telex AA92560

ANALYTICAL REPORT No. 1508.04482

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
1458	
DATE RECEIVED	RESULTS REQUIRED
17/08/87	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
2	14/09/87	1	21

STATE OF SAMPLES	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS			
		DRY	CRUSH	SPLIT	PULVERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD
	16651/71	RD	Prep: 006	010,01	012,08	3,016			Cu, Pb, Zn, Bi, Ag, Mo/101, As/114		
	16651/71	RD							W/101, Au, AuCN/1313		
	16651/71	RD	Prep: 006	010,01	012,08	3,016			Pb, Ag/104		

RESULTS

TO

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

RESULTS

TO

R. Fullerton  
Cyprus Minerals  
P.O. Box 493  
North Sydney  
N.S.W. 2060

REMARKS

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

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642025

# ANALABS

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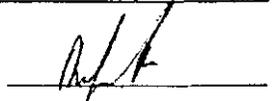
## ANALYTICAL DATA

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	216654	25	35	-	20	<10	<0.5	-	<10	23	
5	216655	10	-	2300	750	<10	-	11	<10	30	
6	216656	30	-	4300	325	<10	-	37	<10	56	
7	216657	10	380	-	430	<10	<0.5	-	<10	10	
8	216658	15	-	1600	200	<10	-	4	<10	14	
9	216659	20	-	50500	570	<10	-	185	<10	90	
10	216660	10	680	-	1350	<10	<0.5	-	<10	13	
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	120	<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  
 T = element present; but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

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# ANALABS

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

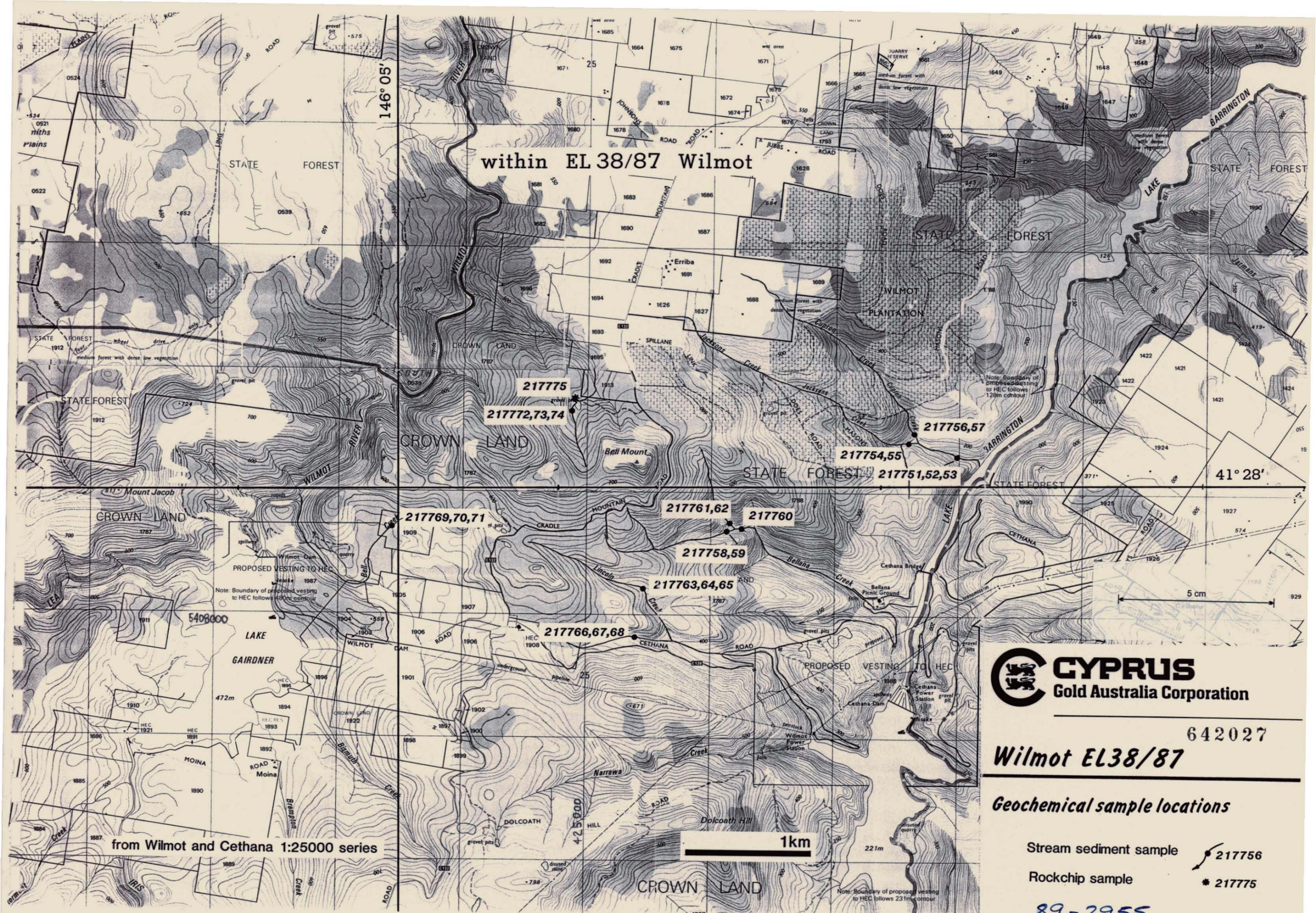
## ANALYTICAL DATA

SAMPLE PREFIX
REPORT NUMBER
REPORT DATE
CLIENT ORDER No.
PAGE

TUBE No.	SAMPLE No.	Au	AuChk	W					
		7.5.08.04682			14/09/87		3458		2 OF 2
1									
2									
3									
4	216654	<0.005	-	<10					
5	216655	<0.005	-	<10					
6	216656	<0.005	-	<10					
7	216657	<0.005	<0.005	<10					
8	216658	<0.005	-	<10					
9	216659	0.010	-	<10					
10	216660	<0.005	-	<10					
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	PRECISION	1%	1%	4%					

Results in ppm unless otherwise specified  
 T = element present; but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER



within EL 38/87 Wilmot

PROPOSED VESTING TO HEC  
 Note: Boundary of proposed vesting to HEC follows 480m contour

PROPOSED VESTING TO HEC

Note: Boundary of proposed vesting to HEC follows 231m contour



642027

Wilmot EL38/87

Geochemical sample locations

- Stream sediment sample 217756
- Rockchip sample 217775

89-2955

from Wilmot and Cethana 1:25000 series

1km

5 cm