

GEOCHEMICAL SOIL SAMPLING

ON THE

GIN CLAIMS

Pesika Creek Area  
Omineca Mining Division

N.T.S.

94-F-1W, 2E

Latitude:

57° 11' N

Longitude:

124° 30' W

by

W. J. ROBERTS

B. Sc.

J. G. SIMPSON

Ph.D., P. Eng.

CYPRUS ANVIL MINING CORPORATION

August 10, 1980

Field Work done during the period  
July 12th - July 30th, 1980

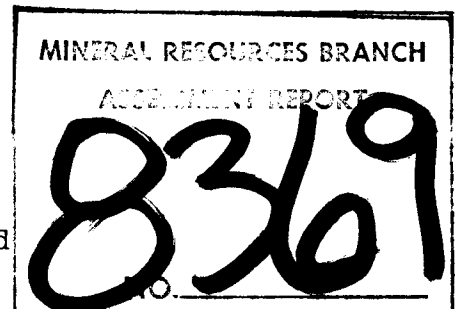


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LIST OF CLAIMS

GIN GROUP

<u>Claim No.</u>	<u>Record No.</u>	<u>No. of Units</u>	<u>Recording Date</u>
1	1928	12	Aug. 1, 1979
2	1929	20	Aug. 1, 1979
3	1930	20	Aug. 1, 1979
4	1931	12	Aug. 1, 1979
5	1932	20	Aug. 1, 1979

Cyprus Anvil Mining Corporation

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GEOCHEMICAL SOIL SAMPLING  
ON THE  
GIN CLAIMS

INTRODUCTION

The GIN GROUP, totalling 84 units, was staked to cover a northwest-striking and southwest-dipping barite horizon discovered on a ridge near the headwaters of Pesika Creek. The barite occurrence lies within the Upper Devonian Gunsteel Formation, host for stratigran lead-zinc-silver-barite mineralization at the nearby Elf and Cirque properties several kilometres to the northwest.

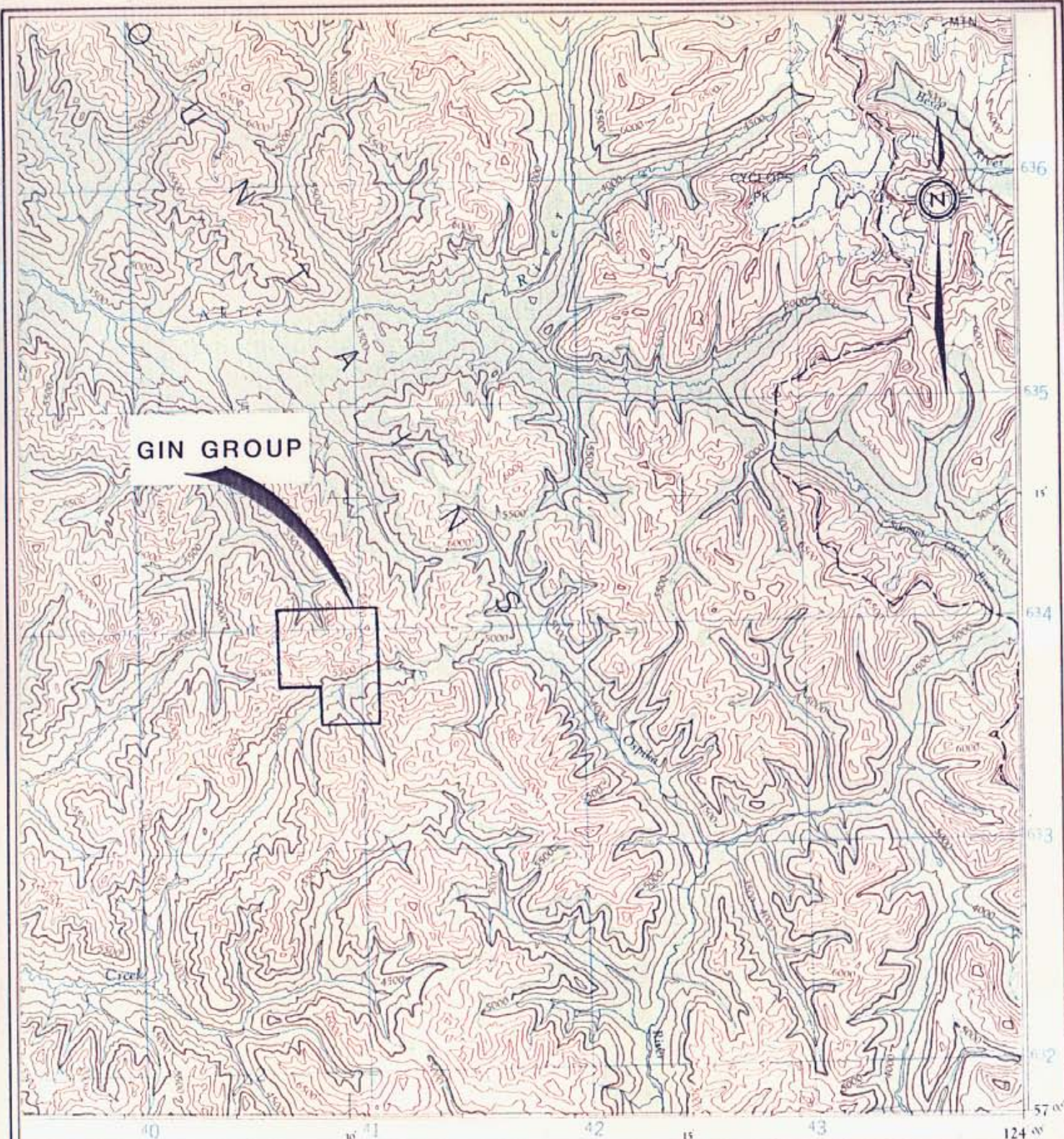
During the period July 12th to July 30th, 1980, Cyprus Anvil evaluated the economic potential of the GIN claims by establishing a grid over much of the property. Roughly 2,850 samples were taken along 100 metre spaced lines over all exposed horizons of host Gunsteel Formation. Total expenditure of the 1980 soil sampling program, which includes 59 man-days of sampling and associated support and transportation costs, is \$30,268.94.

LOCATION AND ACCESS

The GIN GROUP is located in the Ft. Ware area in northern British Columbia. The claims cover a northeast trending ridge and valley floor near the headwaters of Pesika Creek. The centre of the claim group located at latitude 57°11'N. and longitude 124°30'W. is roughly 24 kilometers west-southwest of Sikanni Chief Lake.

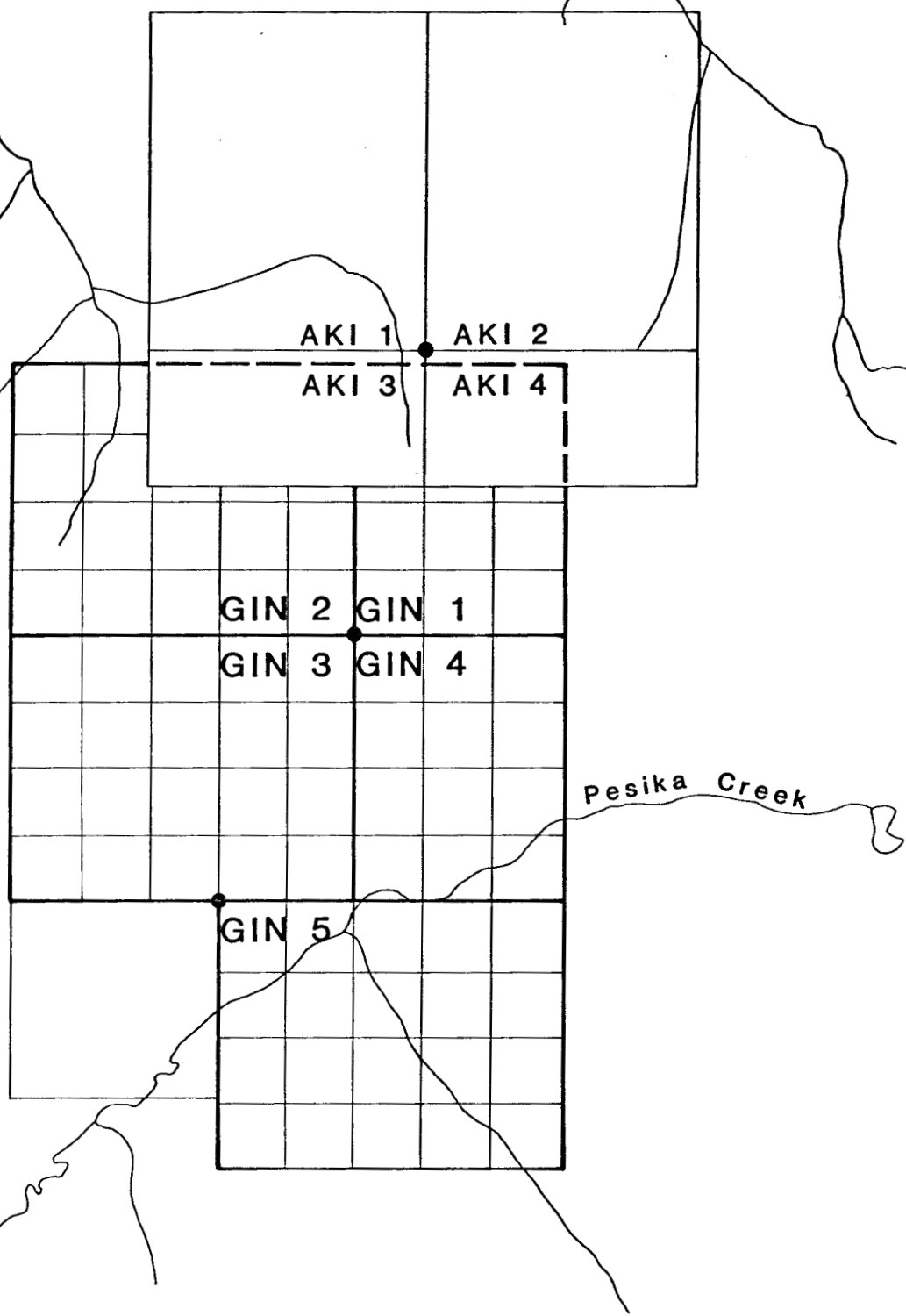
....2

**CYPRUS ANVIL**



**GIN GROUP**

<b>CYPRUS ANVIL MINING CORPORATION</b>	
<b>LOCATION MAP-AKIE DISTRICT</b>	
<b>GIN GROUP</b>	
<b>1:250,000</b>	
NTS: 94F/1,2 SURVEY BY: DRAWN BY: v.f.	DATE: Aug. 19/80 <b>FIG. 1</b>



CYPRUS ANVIL MINING CORPORATION	
LOCATION MAP	
GIN GROUP	
1:50,000	
0 1000 2000 3000m	
NTS 94F/2E SURVEY BY DRAWN BY v.f.	DATE: Aug. 19/80 <b>FIG.2</b>

### REGIONAL GEOLOGY

Lower Devonian to Mississippian rocks are preserved in a series of synformal keels and thrust plates that form four sinuous, semi-continuous, northwest-trending belts. This package lies unconformably on an orange-weathering dolomitic siltstone of Silurian age and is structurally overlain by Cambrian to Silurian lithologies belonging to the Kechika, Road River and Silurian Silstone units. The Devonian to Lower Mississippian sections can be split into four main subdivisions. The Lower to Middle Devonian limestones and shales are characterized by massive, grey, fossiliferous limestone and limestone debris flows that grade into graptolitic shales, cherts and distal turbidites. The Akie Shale, consisting of shales, silty shales and siltstones is a distal turbidite package that unconformably overlies Lower to Middle Devonian units in the southern portion of the district. The Akie Shale may be correlative with the Besa River Formation. The Gunsteel Formation, consisting of silvery grey weathering, black, siliceous carbonaceous shale, porcellanite and chert conformably overlies the Akie Shale and is host for all known barite-sulphide mineralization and most of the known barren stratiform barite deposits in the district. The Wameford Formation, composed of silty shale and interbedded polymictic conglomerate to siltstone, overlies and interfingers with the Gunsteel.

### GEOCHEMICAL SOIL SAMPLING SURVEY

During the 1980 field season, roughly 2,850 soil samples were taken on the GIN GROUP as a preliminary survey for potential areas of near-surface stratiform barite-sulphide mineralization. Samples were taken from either the "B" or "C" horizon at 50 metre intervals along 100 metre spaced lines that are orientated perpendicular to the structural and stratigraphic grain of the host Gunsteel Formation.

All samples were packaged in kraft sample bags and sent to the Acme Analytical Laboratory at 852 E. Hastings Street, Vancouver, B.C. The samples were then dried, sieved to -80 mesh, weighed to half a gram,

digested in perchloric acid and analysed by atomic absorption for lead and zinc. Half a gram of sample was also digested in E.D.T.A. and analysed by atomic absorption for barium. All sample pulps from the GIN GROUP are stored at the Acme Analytical Laboratory in Vancouver. Sample results from the geochemical program are plotted on the accompanying 1:10,000 scale Geochemical Values and Contour Maps in parts per million (ppm).

Thresholds for lead, zinc and barium were calculated from cumulative frequency plots to distinguish response of possible mineralization or host Pregnant Shale from background values. Lead response appears to be the best indicator of stratiform barite-sulphide mineralization in the district.

Lead response on the GIN claims is very low. Two small isolated anomalies, centred at stations 505+50E and 508E on lines 896N and 886N respectively, are coincident with weak barium response and may outline weak stratiform mineralization. Both anomalies will be prospected. The large weak lead anomaly between lines 907 and 915N is probably related to the high lead content of the host Gunsteel Formation.

High zinc response appears to be unrelated to any of the lead anomalies and is, therefore, not considered to be related to potentially economic stratiform mineralization. The only anomaly worthy of follow-up prospecting occurs in a stream valley in the northeast corner of GIN number 4. Lack of intensity of the zinc anomalies suggests presence of high zinc background Road River age black shales.

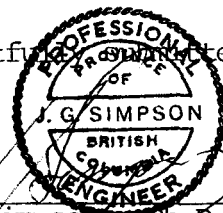
The three major barium anomalies within GIN claims 1 and 2 appears to outline a northwest-trending southwest-dipping barite horizon passing through the northern portion of the property. Lack of associated coincident lead or zinc mineralization would suggest the horizon is barren of potentially economic sulphides. The coincident barium-lead response at station 479E on line 870N may outline the stratigraphic horizon hosting stratiform barite sulphides and should be prospected.



CONCLUSIONS AND RECOMMENDATIONS

Soil sampling on the property has outlined a northwest-trending barite horizon in the northern portion of the property that may have associated sulphide mineralization along strike to the southeast as indicated by two coincident barium-lead anomalies. Detailed geological mapping and prospecting will be undertaken later in the field season.

Respectfully submitted,



J. G. Simpson, Ph.D. P. Eng.  
W. J. Roberts, B.Sc.

STATEMENT OF QUALIFICATIONS

I, JOHN GLENN SIMPSON, Geologist, with business address in Vancouver, British Columbia, and residential address in West Vancouver, British Columbia, hereby certify that:

- (1) I graduated from the University of London in 1958 with a B.Sc. majoring in Geology and a Ph.D. (Faculty of Science) obtained in 1968.
- (2) From 1958 to the present I have been actively engaged as a geologist in mineral exploration in Africa and North America.
- (3) I am a Fellow of the Geological Association of Canada and a Professional Engineer (Geol.) of the Province of British Columbia (1969).
- (4) I am personally responsible for the supervision of all work on the GIN CLAIM GROUP and have actively participated in the field work on these claims.



J. G. Simpson, Ph.D. P. Eng.

SUMMARY OF COSTSGIN CLAIMS

Field Work done during the period  
July 12th - July 30th, 1980

Salaries and Wages

K. Borthwick	July 17-23, 28, 29	9 days @ \$43.55	\$391.95	
M. Biedler	July 18-22	5 days @ \$44.19	220.95	
M. Kilby	July 17-23, 28, 29	9 days @ \$51.61	464.85	
J. Hobart	July 17-23, 28, 29,	9 days @ \$48.55	436.95	
L. Ramsay	July 17-23, 28, 29	9 days @ \$40.45	364.05	
D. Tupper	July 15-23	9 days @ \$47.10	423.90	
N. Laube	July 17-23	7 days @ \$40.45	283.15	
B. Youngman	July 15, 16,	2 days @ \$53.32	106.64	\$ 2,692.44

Geochemical Analysis

2,850 samples @ \$3.10/sample	8,835.00
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Camp Maintenance

59 man-days @ \$18.50/man/day	1,091.50
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Field Equipment and Supplies

	850.00
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Fuel

37.5 hrs. x 26 gal/hr. x \$2.80/gal.	2,730.00
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Rotary Wing

37.5 hrs. @ \$295.00/hr.	11,062.50
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Fixed Wing

3 Beech - 18 trips from Mackenzie to Fin-Bow and return - 990 mi. @ \$1.85/mi.	1,831.50
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Miscellaneous Transportation

	150.00
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District Expense - Expediting, etc.

	110.00
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Report Writing and Map Contouring

W. Roberts - 2 days @ \$150.00/day	300.00
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Drafting

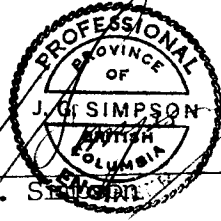
B. Cory - Base Map - 8 hrs. @ \$14.00/hr.	\$112.00	
- Geochemical Values & Contours - 36 hrs. @ \$14.00/hr.	504.00	616.00

TOTAL COST

\$30,268.94

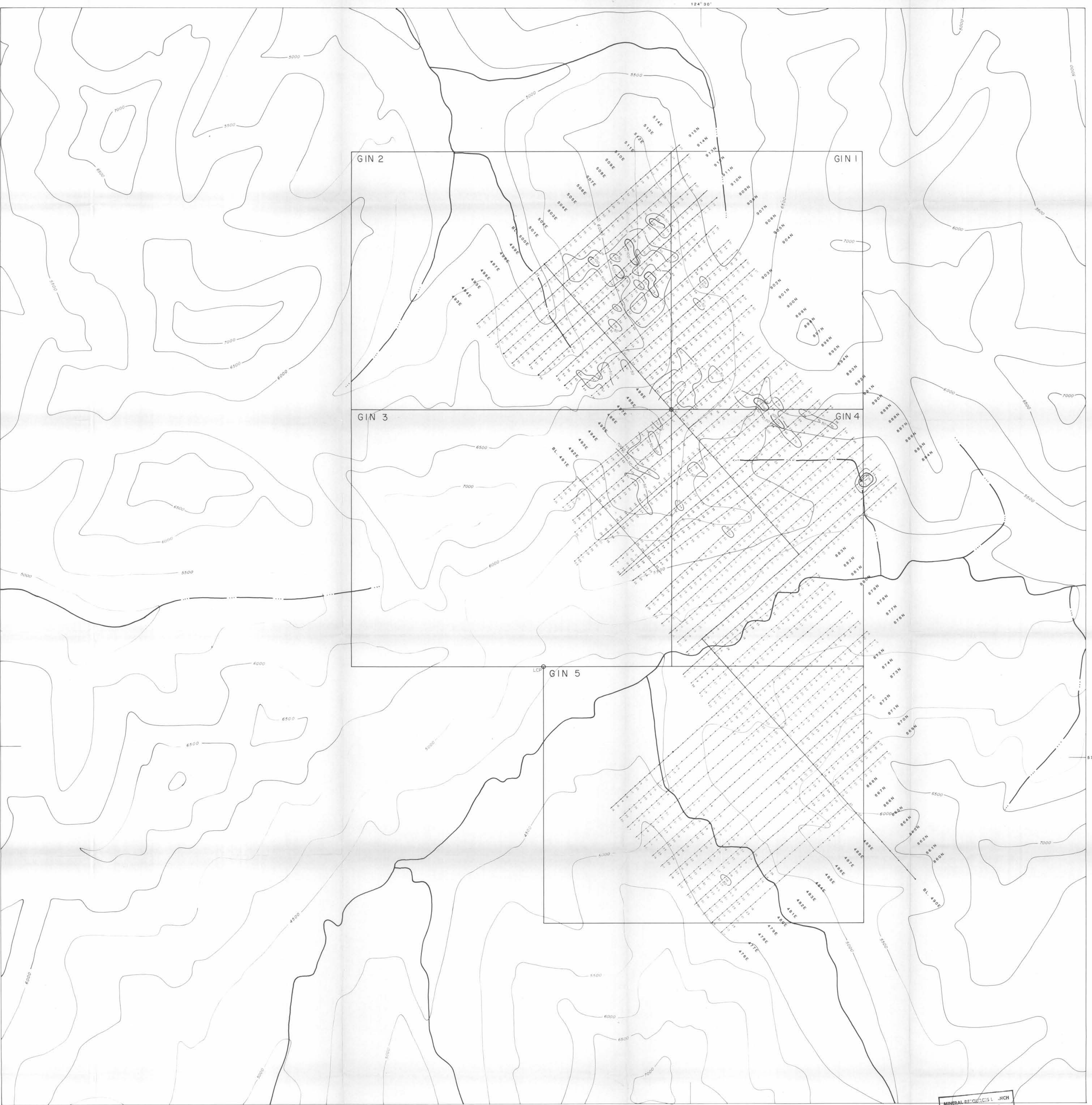
AFFIDAVIT SUPPORTING SUMMARY OF COSTS

I, J. G. SIMPSON, Vice President Exploration, Cyprus Anvil Mining Corporation, of Vancouver, British Columbia, do hereby state that, to the best of my knowledge and belief, the Statement of Costs in this report (GEOCHEMICAL SOIL SAMPLING ON THE GIN CLAIMS) is a true account of expenditures incurred from exploration on the GIN property.

  
A circular professional seal for J. G. Simpson, a professional in the Province of British Columbia. The seal contains the text "PROFESSIONAL OF J. G. SIMPSON BRITISH COLUMBIA". The seal is stamped over a horizontal line that also contains the text "J. G. SIMPSON".

J. G. SIMPSON

29 Aug 80.  
Date



MINERAL RESOURCES L. INC.  
ASSESSMENT REPORT  
**8369**



**LEAD CONTOURS**  
— 50 ppm  
— 100 ppm  
— 200 ppm

CYPRUS ANVIL MINING CORPORATION	
GIN GROUP	
OMINECA MINING DIVISION - B.C.	
<b>LEAD VALUES AND CONTOURS</b>	
1:10,000	
0 100 200 300 400 500 600 700 800 900 1000	
METRES	
NTS 94-F-2 SURVEY BY W.R. DRAWN BY C.L.C.	DATE JULY 1980 MAP 10-2



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8369**



**ZINC CONTOURS**

- 250 ppm
- 500 ppm
- 1000 ppm
- 2000 ppm

CYPRUS ANVIL MINING CORPORATION

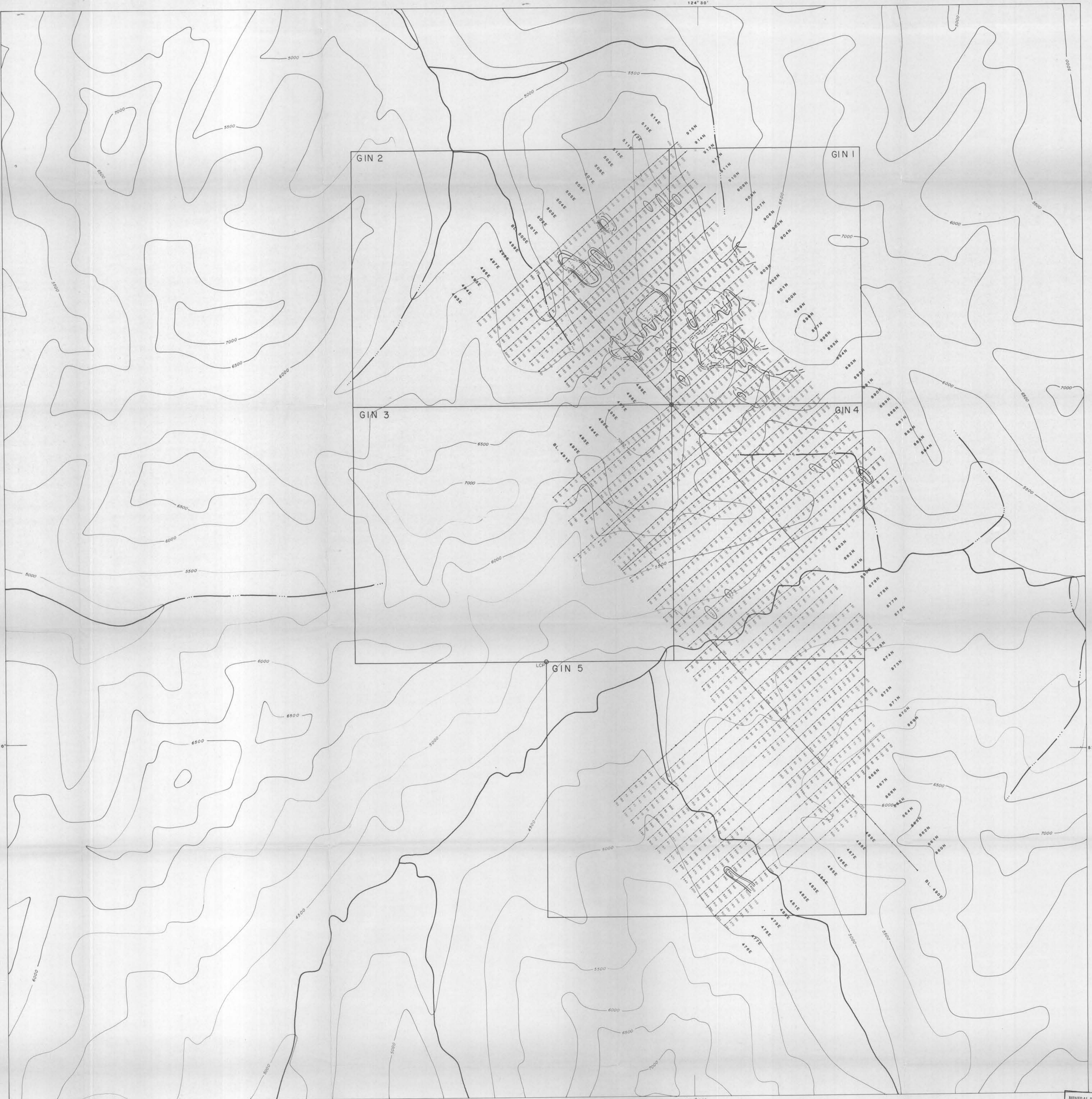
**GIN GROUP**

OMEGA MINING DIVISION - B.C.

**ZINC VALUES AND CONTOURS**



N.T.S. 24-F-2 SURVEY BY W.R. DRAWN BY C.L.C. DATE: JULY 1980 MAP No. 3



**BARIUM CONTOURS**

- 1000 ppm
- 2000 ppm
- 4000 ppm

MINERAL RESOURCES BRANCH  
REGULATORY DIVISION  
**8369**  
10

CYPRUS ANVIL MINING CORPORATION  
**GIN GROUP**  
OMEGA MINING DIVISION - B.C.

**BARIUM VALUES & CONTOURS**

1:10,000  
0 100 200 300 400 500 600 700 800 900 1000  
METRES

N.T.S. 34-F-2  
SURVEY BY W.P.R.  
DRAWN BY C.L.C.

DATE JULY 1980  
MAP No. 4