

6429

CANADIAN SUPERIOR EXPLORATION LIMITED

GEOCHEMICAL REPORT

77-#324-#6429

ON THE

GROUSE MOUNTAIN GM CLAIMS

October 10, 1977

NTS 93 L/10 E

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

NO. _____

CANADIAN SUPERIOR EXPLORATION LIMITED

**GEOCHEMICAL REPORT
ON THE
GROUSE MOUNTAIN GM CLAIMS
NTS 93 L/10 E**

LOCATION: Long: 126° 43' Lat: 54° 33'

CLAIM NAME: GM

WORK PERIOD: September 5 - 13 1977

**John Baker, B.Sc.
Smithers, British Columbia
October 10, 1977**

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INTRODUCTION

The GM 12 unit claim is situated on Grouse Mountain 12 miles North of Houston, B.C., and was staked in 1976 by Canadian Superior Exploration Limited. A soil sampling program, described in this report, was undertaken in September 1977 covering the majority of Canadian Superior's claim in the area East of Coppermine Lake.

SUMMARY

Grouse Mountain has a long history of exploration for copper and zinc sulphides localized along Northeasterly trending structures around the shores of and West from Coppermine Lake. Clustering of showings and interpretation of a regional structural intersection indicated a possible focus for mineralization East of the lake in an area of poor rock exposure.

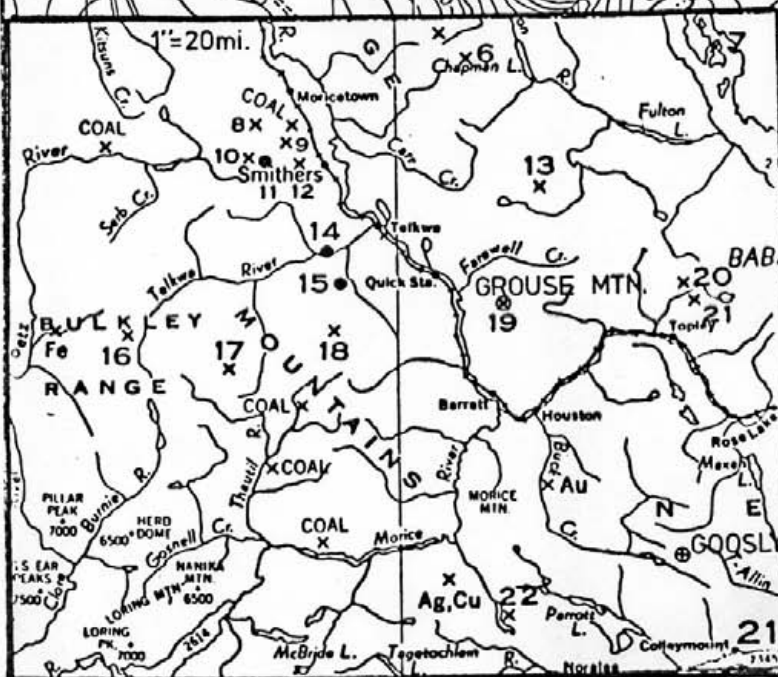
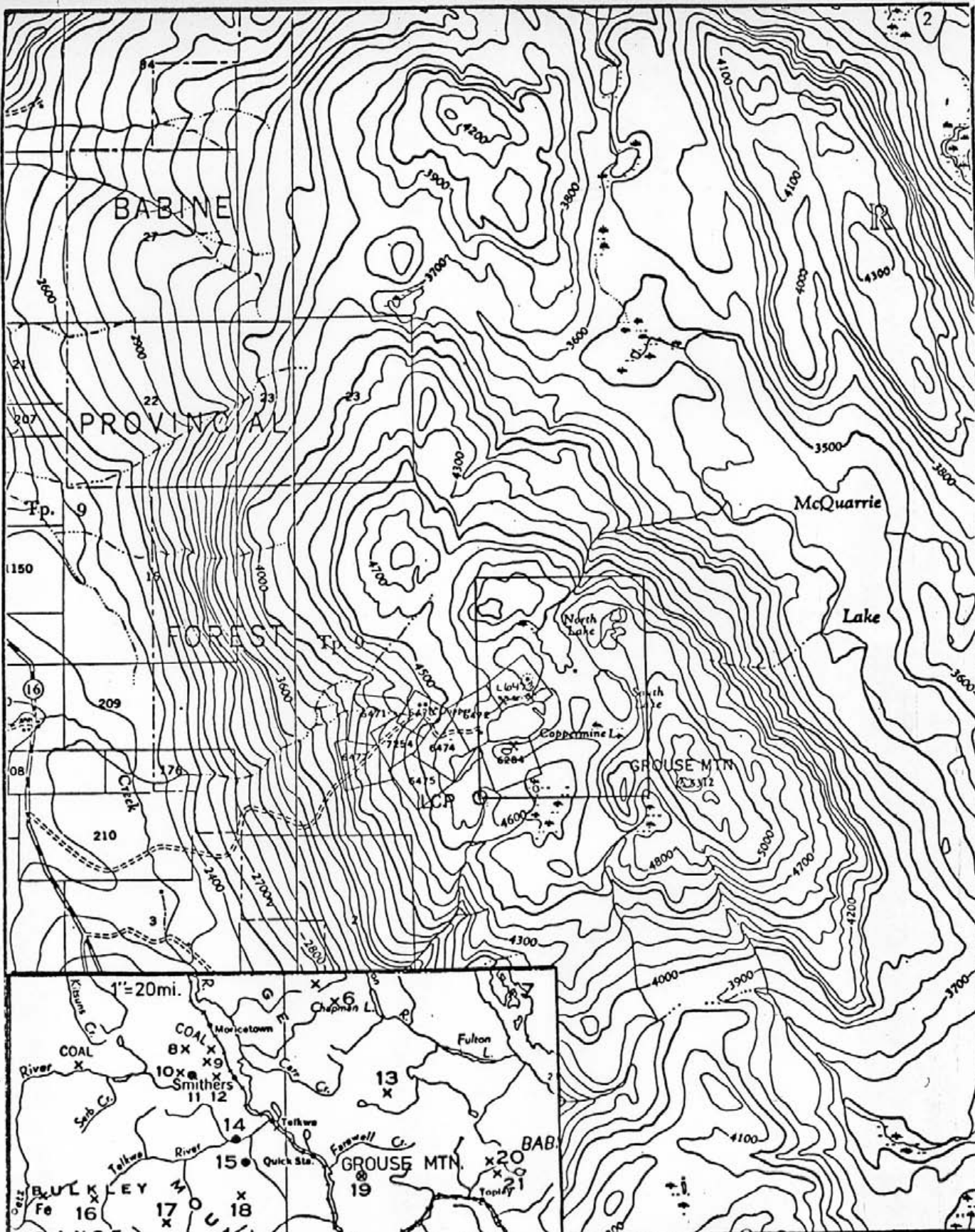
Soil sampling has indicated three strong zinc/minor copper/minor silver anomalies of which two are associated with known showings.

CONCLUSIONS AND RECOMMENDATIONS

Two of the anomalies, along the Northwest shore of Coppermine Lake, and East of North Lake are related to showings probably too small to be of economic significance. Copper geochemical results support this view however high zinc values are more extensive than the showings would indicate. The third anomaly Southeast of Coppermine Lake is open to the Southwest, has no known associated mineralization, and requires further investigation.

Additional soil sampling, detail prospecting, and geomorphological evaluation of the third anomaly is proposed, to be followed by trial EM and/or I.P. Surveys in the event of favourable results.

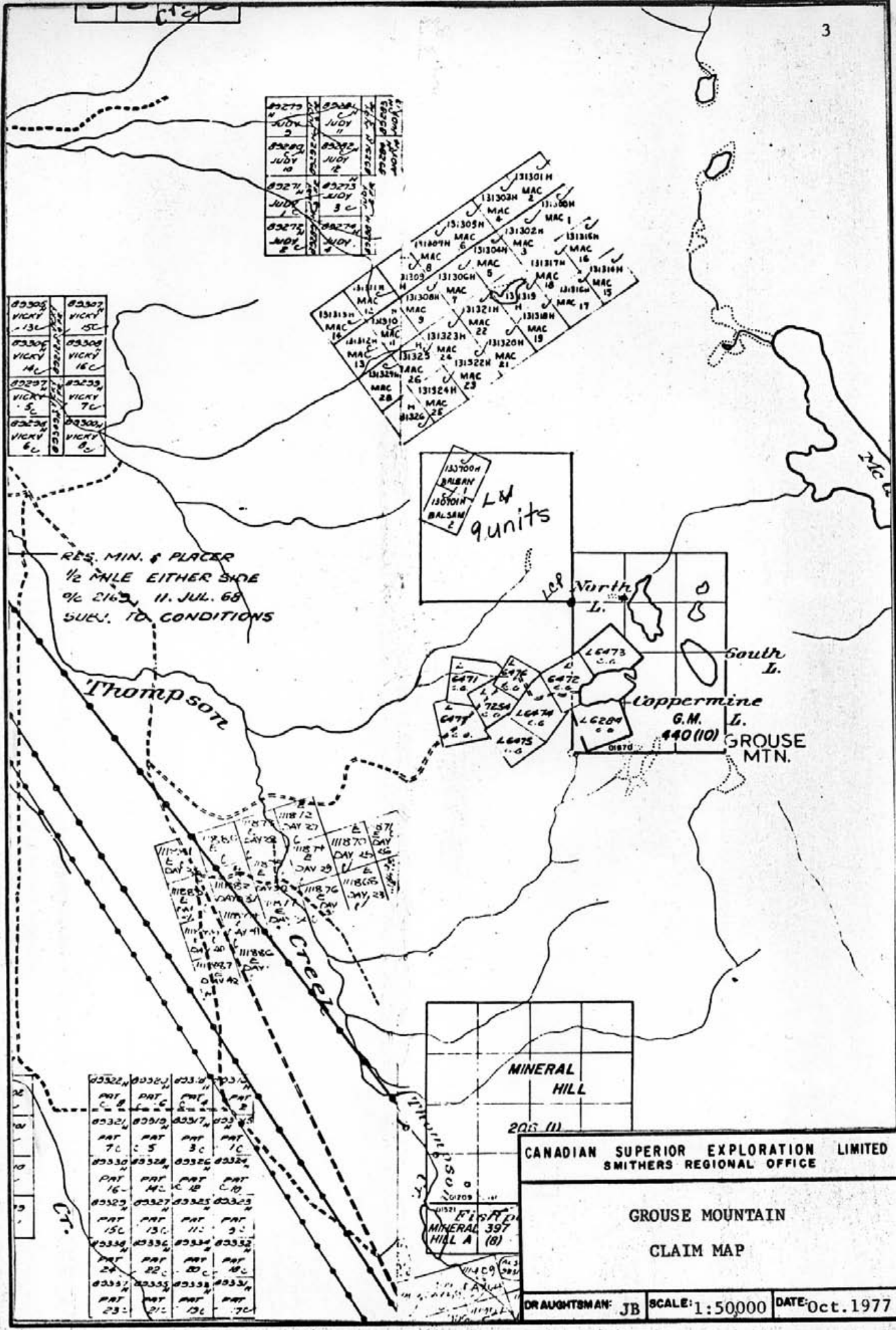
Re-evaluation of the Eureka showings on the North shore of Coppermine Lake will be undertaken in view of the large size of the zinc anomaly.



CANADIAN SUPERIOR EXPLORATION LIMITED
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**GROUSE MOUNTAIN
LOCATION MAP**

OR AUGHTSMAN: JB SCALE: 1:50,000 DATE: Oct. 1977



03273	03274	03275	03276
JUDY 2	JUDY 11	JUDY 12	JUDY 13
03277	03278	03279	03280
JUDY 14	JUDY 15	JUDY 16	JUDY 17
03281	03282	03283	03284
JUDY 18	JUDY 19	JUDY 20	JUDY 21

03305	03307
VICKY 13C	VICKY 15C
03306	03308
VICKY 14C	VICKY 16C
03307	03309
VICKY 5C	VICKY 7C
03308	03310
VICKY 6C	VICKY 8C

131700H
131701H
131702H
L & B
9 units

RES. MIN. & PLACER
1/2 MILE EITHER SIDE
OF 2163, 11. JUL. 68
SUBJ. TO CONDITIONS

North L.
South L.
Coppermine G.M. 440 (10)
GROUSE MTN.

111872	111873	111874	111875	111876	111877	111878	111879	111880	111881	111882	111883	111884	111885	111886	111887	111888	111889	111890	111891	111892	111893	111894	111895	111896	111897	111898	111899	111900
DAY 27	DAY 28	DAY 29	DAY 30	DAY 31	DAY 32	DAY 33	DAY 34	DAY 35	DAY 36	DAY 37	DAY 38	DAY 39	DAY 40	DAY 41	DAY 42	DAY 43	DAY 44	DAY 45	DAY 46	DAY 47	DAY 48	DAY 49	DAY 50	DAY 51	DAY 52	DAY 53	DAY 54	DAY 55

MINERAL HILL
205 (11)

03322	03323	03324	03325
PAT 8C	PAT 9C	PAT 10C	PAT 11C
03326	03327	03328	03329
PAT 12C	PAT 13C	PAT 14C	PAT 15C
03330	03331	03332	03333
PAT 16C	PAT 17C	PAT 18C	PAT 19C
03334	03335	03336	03337
PAT 20C	PAT 21C	PAT 22C	PAT 23C
03338	03339	03340	03341
PAT 24C	PAT 25C	PAT 26C	PAT 27C
03342	03343	03344	03345
PAT 28C	PAT 29C	PAT 30C	PAT 31C
03346	03347	03348	03349
PAT 32C	PAT 33C	PAT 34C	PAT 35C
03350	03351	03352	03353
PAT 36C	PAT 37C	PAT 38C	PAT 39C
03354	03355	03356	03357
PAT 40C	PAT 41C	PAT 42C	PAT 43C
03358	03359	03360	03361
PAT 44C	PAT 45C	PAT 46C	PAT 47C
03362	03363	03364	03365
PAT 48C	PAT 49C	PAT 50C	PAT 51C
03366	03367	03368	03369
PAT 52C	PAT 53C	PAT 54C	PAT 55C
03370	03371	03372	03373
PAT 56C	PAT 57C	PAT 58C	PAT 59C
03374	03375	03376	03377
PAT 60C	PAT 61C	PAT 62C	PAT 63C
03378	03379	03380	03381
PAT 64C	PAT 65C	PAT 66C	PAT 67C
03382	03383	03384	03385
PAT 68C	PAT 69C	PAT 70C	PAT 71C
03386	03387	03388	03389
PAT 72C	PAT 73C	PAT 74C	PAT 75C
03390	03391	03392	03393
PAT 76C	PAT 77C	PAT 78C	PAT 79C
03394	03395	03396	03397
PAT 80C	PAT 81C	PAT 82C	PAT 83C
03398	03399	03400	03401
PAT 84C	PAT 85C	PAT 86C	PAT 87C

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GROUSE MOUNTAIN
CLAIM MAP

DRAUGHTSMAN: JB SCALE: 1:50,000 DATE: Oct. 1977

ACCESS AND PHYSICAL FEATURES

Coppermine Lake lies just below timberline on the 4800' plateau, summit of Grouse Mountain, a domical feature along the Eastern margin of the Bulkley Valley.

Within the grid area relief is gentle and patches of dense stunted spruce are relieved by irregular meadows.

Access is via Highway 16 Southeast from Smithers, thence by 3 miles of 4 wheel drive road to Coppermine Lake.

HISTORY

In 1914 prospectors discovered the Copper Crown, Ruby, Lakeview, Schorn and Eureka copper and zinc sulphide showings near Coppermine Lake. In 1915 Cassiar Crown Company sank a shaft 56' deep on the Copper Crown and advanced a crosscut 1000' without encountering appreciable mineralization. Activity was then directed to the Ruby showing where a lens of mixed sulphide was traced several hundred feet from a short adit crosscut on the 4540' level. No mineralization comparable to that on surface was found. In 1926 further underground work linked the Ruby and Copper Crown, and short adits were driven on several other showings in the vicinity.

The area lay dormant until 1951 when Copper Ridge Mines dewatered and sampled the underground workings and carried out 5000' of Ax diamond drilling on the Copper Crown/Ruby zone before suspending the program.

More recently in 1973 N. Church of the B.C. Department of Mines mapped the local geology as described in GEM 1973.

GEOLOGY

The Coppermine Lake area as mapped by Church (GEM 1973) is underlain by Hazelton (Jurassic) greywacke, minor interbedded shale and thin bands of andesitic tuff, with a gentle dip to the South. This sedimentary unit is overlain by andesitic tuff and appears to pass laterally into andesite tuff breccia.

Two structural trends are prominent; a Northerly direction invaded by bladed feldspar porphyry dikes and an Easterly trend controlling the mineralization.

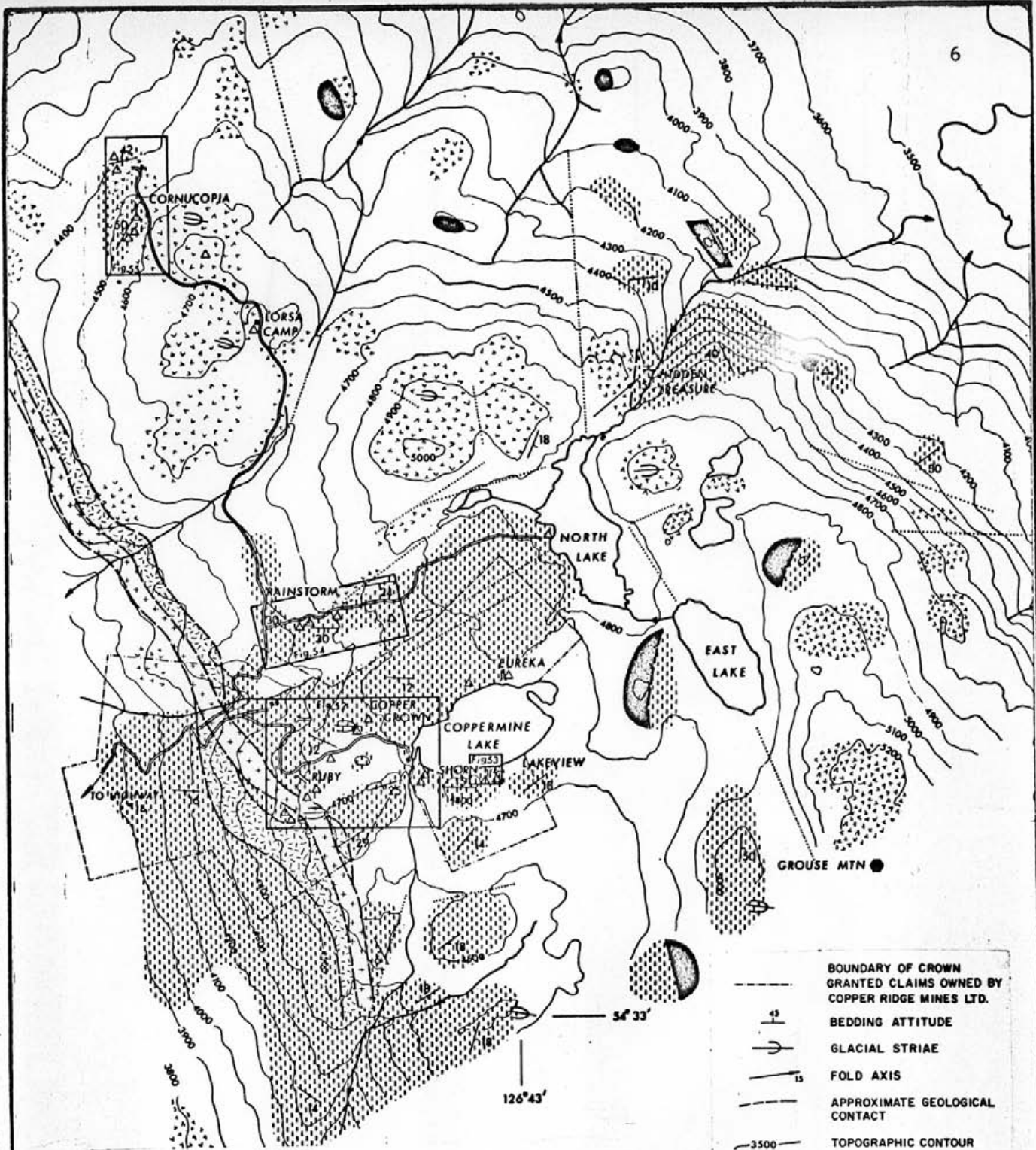
Mineralization on the Ruby and Copper Crown, and Schorn and Lakeview area consists largely of massive sphalerite and/or chalcopyrite in lenticular and stringer like bodies distributed over an aggregate width of less than 50 feet controlled by tension fracture zones. The Eureka and Rainstorm zones consist of pyrite/chalcopyrite/sphalerite mineralization with quartz gangue in brecciated fault zones.

GEOCHEMICAL SURVEY

Soil samples were taken by means of an auger at 200' intervals along flagged compass lines 400' apart and analysed for total copper, zinc and silver by Acme Analytical Laboratories in Burnaby. Standard analytical procedures involving atomic absorption techniques were employed.

The area sampled is covered by a relatively thin (< 20') mantle of glacial till with a well developed B horizon generally less than 1' below surface. Background values for zinc, copper, and silver are 175 ppm, 20 ppm, and 0.4 ppm with anomalous conditions established at 300 ppm, 50 ppm, and 1 ppm respectively.

Zinc is obviously the dominant metal although coincident copper and very weak silver signatures are present with each Zinc anomaly.



LEGEND

BEDDED ROCKS

SEDIMENTARY ROCKS, MAINLY GREYWACKE WITH SOME INTERCALATED TUFF AND BRECCIA

VOLCANIC ROCKS, MAINLY TUFF AND TUFF BRECCIA WITH SOME LAVA

IGNEOUS INTRUSIONS

TABLET FELDSPAR PORPHYRY (CONTACTS ARE PARTLY INTERPOLATED)

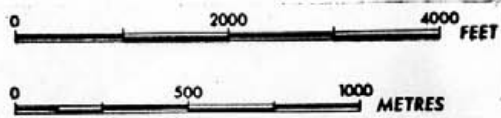
BLADED FELDSPAR PORPHYRY (CONTACTS ARE PARTLY INTERPOLATED)

BIOTITE FELDSPAR PORPHYRY

SYMBOLS

BUILDING

MINERALIZATION



BOUNDARY OF CROWN GRANTED CLAIMS OWNED BY COPPER RIDGE MINES LTD.

BEDDING ATTITUDE

GLACIAL STRIAE

FOLD AXIS

APPROXIMATE GEOLOGICAL CONTACT

TOPOGRAPHIC CONTOUR

TOPOGRAPHIC LINEAMENT AND FAULT

STREAM

PORTAL

CANADIAN SUPERIOR EXPLORATION LIMITED
SMITHERS REGIONAL OFFICE

**GEOLOGY OF THE
GROUSE MOUNTAIN AREA**
(by B. N. Church)

DR AUGHTSMAN: SCALE: DATE: Oct. 1977

GEOCHEMICAL SURVEY - Continued

Essentially three main anomalous areas have emerged. Anomaly A along the Northeastern shore of Coppermine Lake defined by the 300 ppm zinc contour exhibits three Northeast trending peaks up to 5500 ppm zinc also reflected in a more restricted 1400 ppm copper anomaly.

The Eureka showings which consist of two short adits driven by early prospectors on narrow chalcopyrite/sphalerite quartz fracture zones correlate with anomaly peaks and probably cause the geochemical response.

Anomaly B South of Coppermine Lake consists of two Northwesterly elongate features with peak values > 1000 ppm zinc, coincident 145 ppm copper and 5.2 ppm silver in an area generally devoid of outcrop. Detail prospecting is required to determine the probable cause of this anomaly, on addition to further soil sampling to delimit high zinc values.

Anomaly C on the Eastern shore of North Lake with zinc values in excess of 100 ppm and very weak coincident copper and silver response may, in view of Easterly glacial transport, reflect a source beneath North Lake however a small chalcopyrite/sphalerite vein within the anomaly suggests this type of mineralization as the probable cause.

Several other small anomalies have emerged however their size indicates lower priority and no immediate followup is planned.


John Baker B.Sc.

COST STATEMENT

In support of an Affidavit on Application to Record Work on the GM
Claim, Omineca Mining Division.

Costs incurred in soil geochemical survey September 5 - 13, 1977.

	Costs
Geochemical Analyses: 256 samples @ 2.25/sample	\$576.00
Field Supplies (flagging, sample bags etc.)	\$ 25.00
Transportation	\$ 50.00
Salaries: F.J.Hemelspeck, 7 days @ \$60/day	\$455.00
(Sampler) B. Tompson, 6 days @ \$50/day	\$300.00
G. Stock, geologist 1 day @ \$60	\$ 60.00
J. Baker, geologist 1 day @ \$60	<u>\$ 60.00</u>
Total	\$1526.00

CERTIFICATE

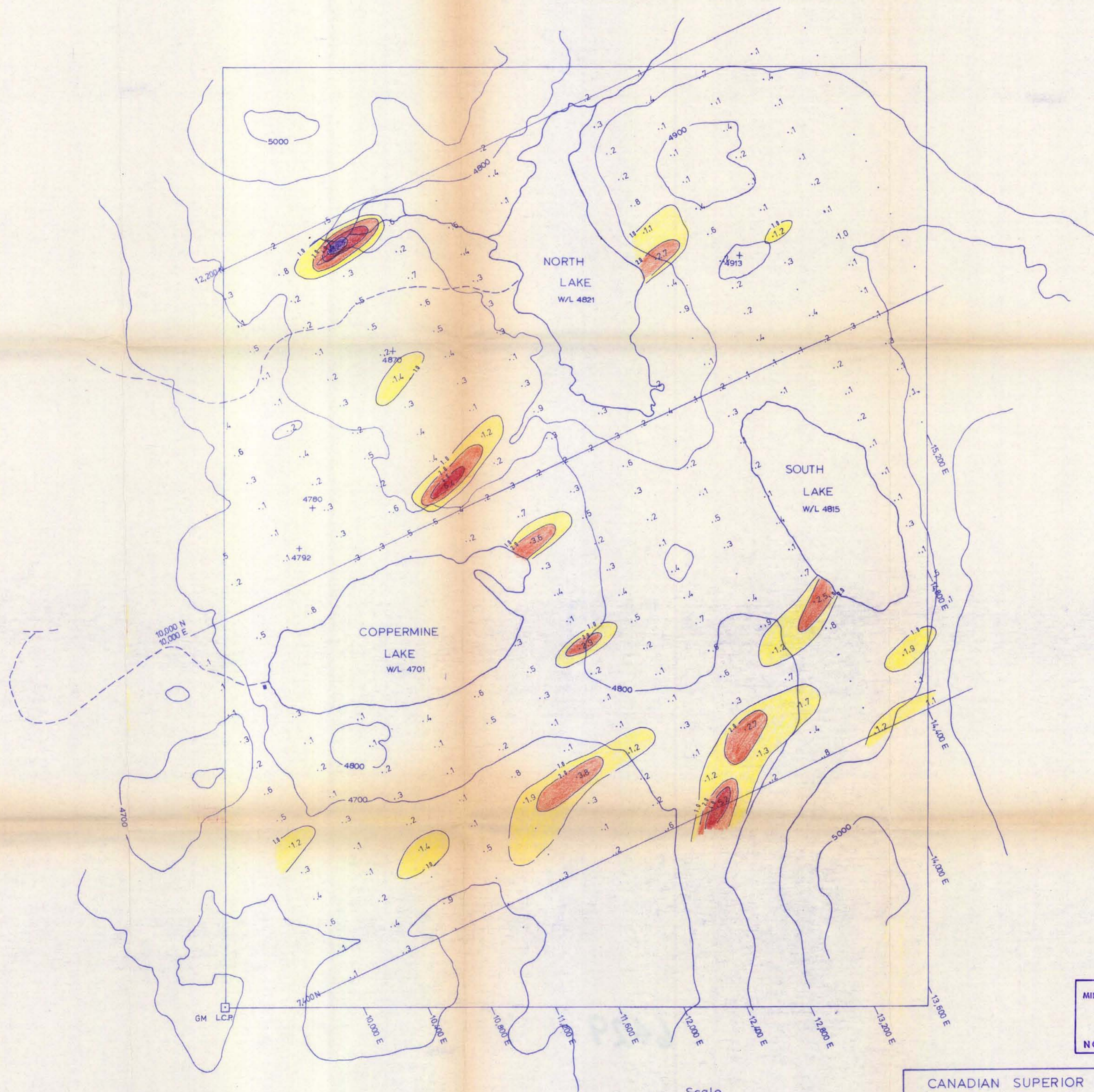
I, John F. Baker, of the Town of Smithers do hereby certify that:

- 1. I am a geologist resident at Seymour Lake Road, Smithers.**
- 2. I hold a B.Sc. degree in geology from the University of B.C. (1971).**
- 3. I have been employed in the mining industry since 1965 and currently hold the position of Northern BC Exploration Manager for Canadian Superior Exploration Limited.**
- 4. I personally supervised all work programs on the Grouse Mountain property during 1977.**



John F. Baker

October 10, 1977

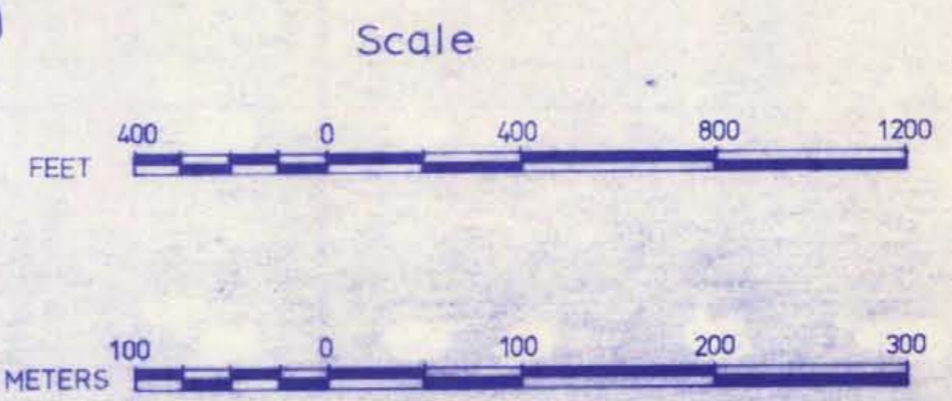


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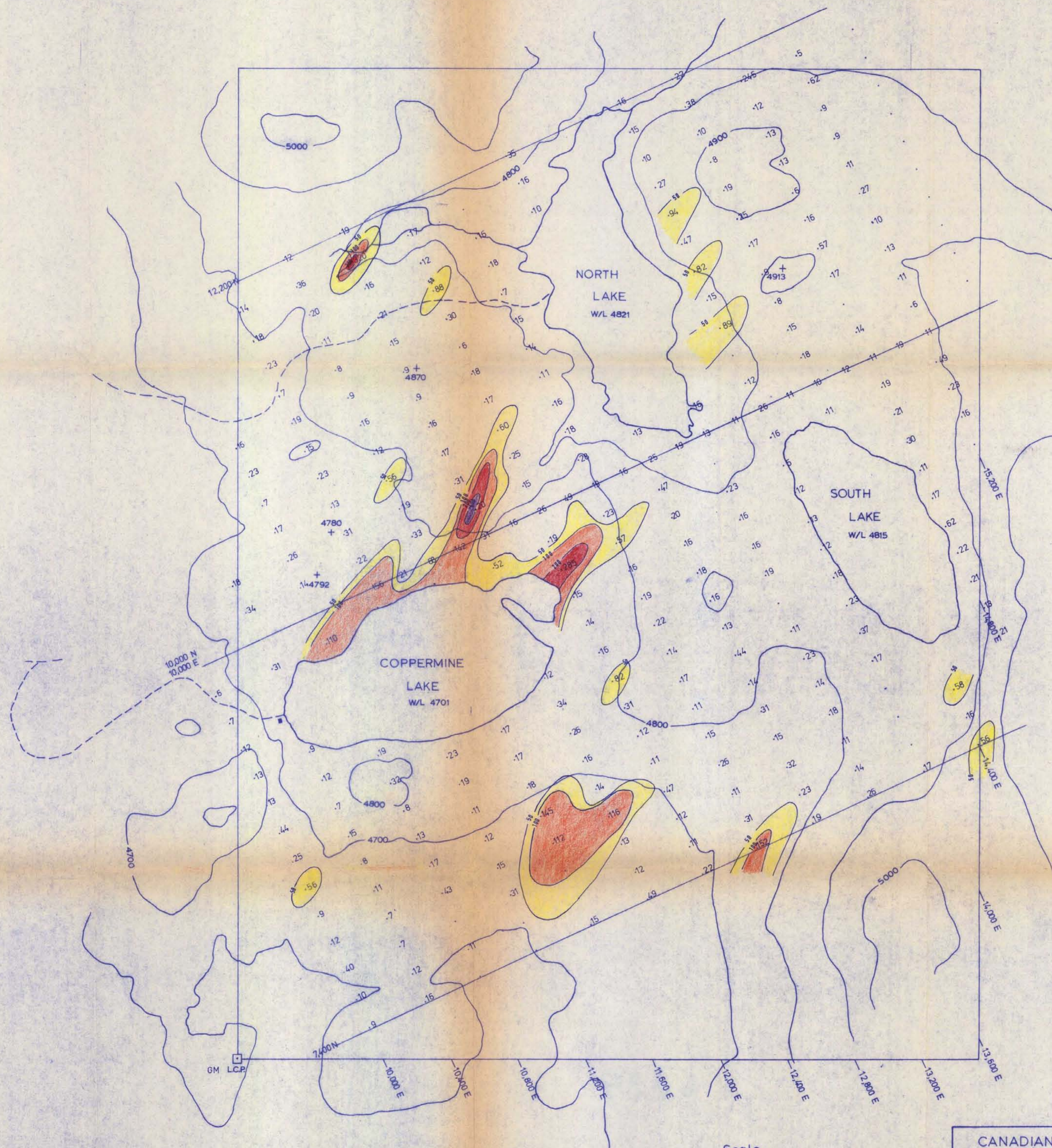
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 SMITHERS REGIONAL OFFICE

GROUSE MOUNTAIN PROJECT
 SOIL GEOCHEMISTRY
 SILVER (PPM)

NTS: 93 L/10 E SCALE: 1 inch = 400 feet DATE: October 1977



To Accompany Geochemical Report on the GM claims, Omineca Mining District
 by J. Baker B.Sc. October 10, 1977



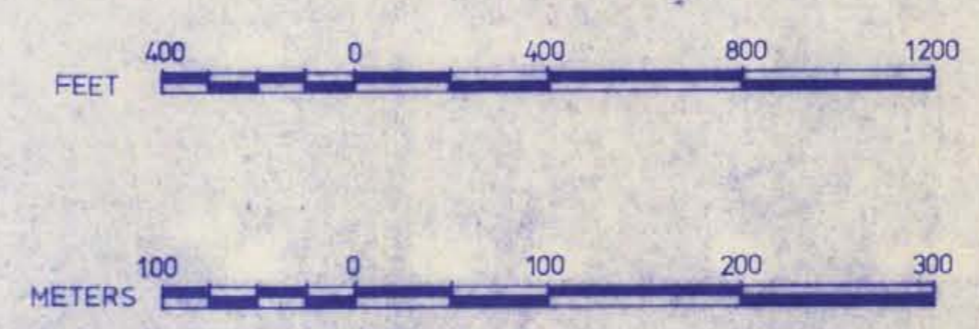
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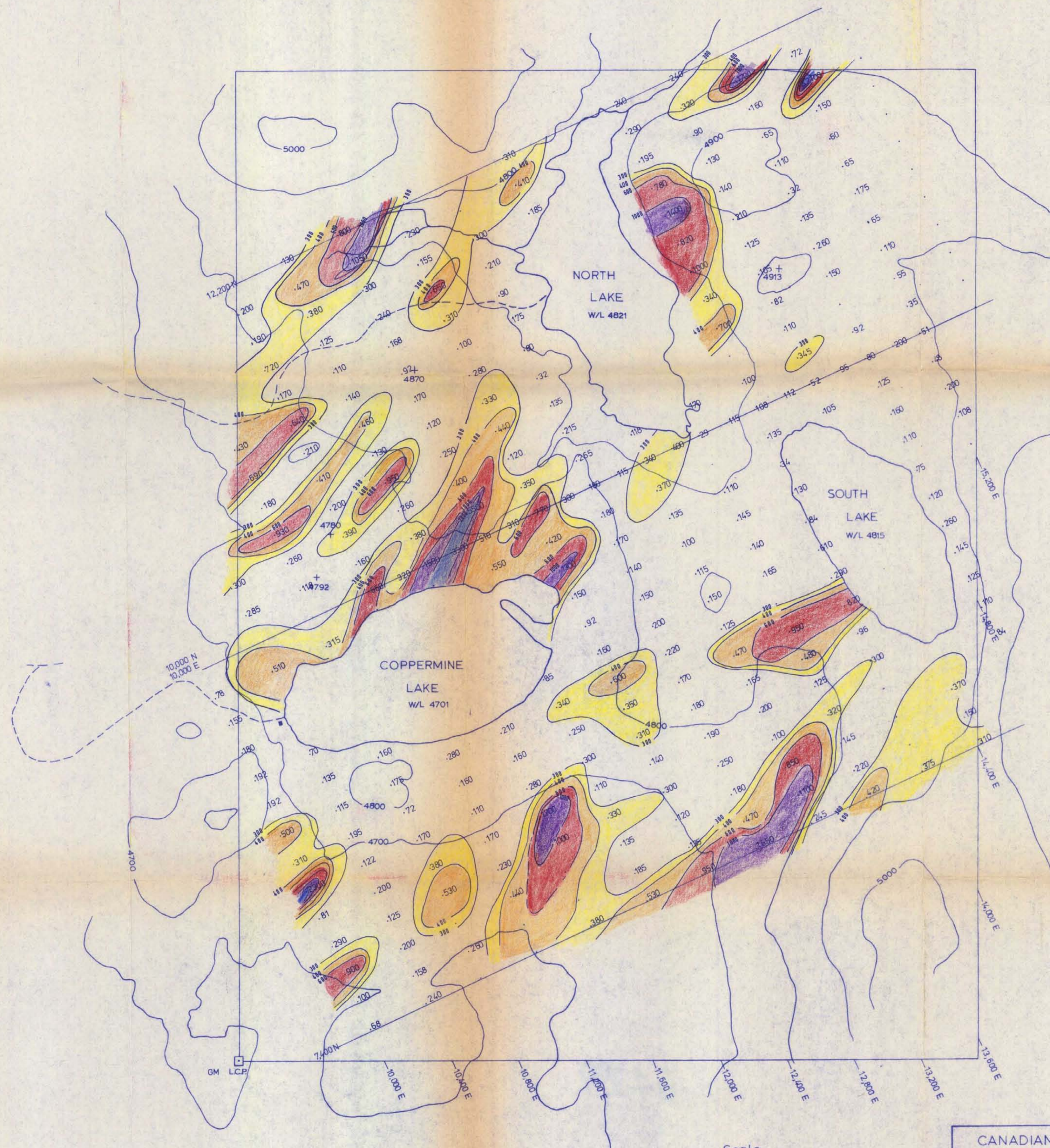
GROUSE MOUNTAIN PROJECT
SOIL GEOCHEMISTRY
COPPER (PPM)

NTS: 93 L/10 E SCALE: 1 inch = 400 feet DATE: October 1977

Scale



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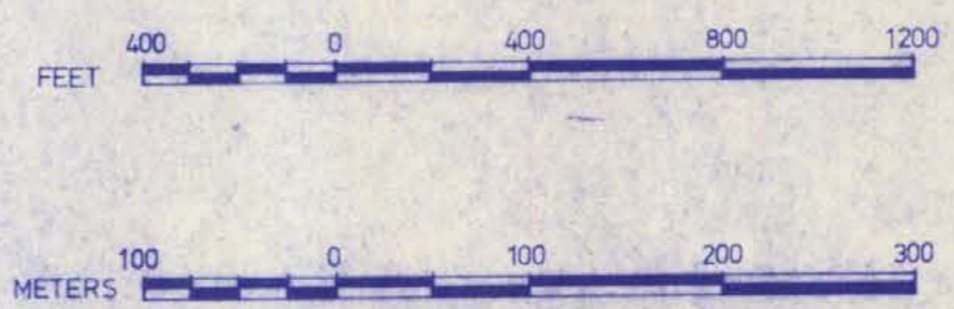
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 SMITHERS REGIONAL OFFICE

GROUSE MOUNTAIN PROJECT
 SOIL GEOCHEMISTRY
 ZINC (PPM)

NTS: 93 L/10 E	SCALE: 1 inch = 400 feet	DATE: October 1977
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Scale



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