

COMINCO LTD.

EXPLORATION
NTS 92G-9W2/6W

WESTERN DISTRICT
October 31, 1980

GEOCHEMICAL ASSESSMENT REPORT

ON THE

SLO CLAIMS

HARRISON LAKE, B.C., NEW WESTMINSTER MINING DIVISION

49°46'N 122°21'W

WORK PERIOD: June 26 - July 21, 1980

Report by P.J. Wojdak

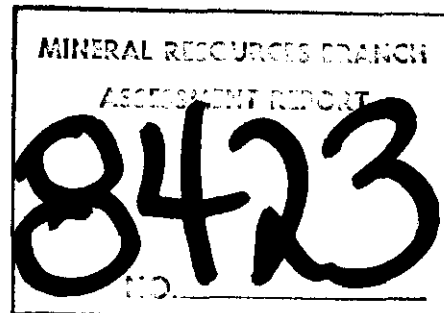


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ATTACHMENTS

Geochemical Statistical Plots

LIST OF PLATES

1. Location Map
2. Copper in Soil (includes Au results).
3. Lead in Soil
4. Zinc in Soil

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT
October 29, 1980

GEOCHEMICAL REPORT

SLO Claims

INTRODUCTION

The SLO claims are located 95 km northeast of Vancouver and 15 km west of the head of Harrison Lake, on the east margin of Garibaldi Provincial Park. The claims are within the rugged Coast Range and access is poor. Although a good gravel logging road extends north from Spring Camp on Harrison Lake, the logging operation is serviced by boat and by air so that road connections south to Agassiz and north to Pemberton are very rough. The claims are reached by following a disused (but driveable) logging road up Sloquet (Spring) Creek and then a foot trail following an overgrown logging road up North Sloquet Creek. A camp site was cleared where the trail crosses the north fork of North Sloquet Creek. This sizeable creek is unnamed on government topographic maps but is referred to locally as Simpson Creek. The SLO claims cover part of the steep valleys of North Sloquet and Simpson Creeks. Mature forest is comprised predominantly of large douglas fir and cedar and the lower slopes of North Sloquet Creek have been logged. Simpson Creek valley is more difficult to traverse as the slopes are steeper and rugged with numerous snow chutes. These, and the main valley bottom are densely overgrown with alder, maple and devils club. Due to the difficult conditions a contour, rather than grid soil survey was carried out by Cominco personnel during July, 1980. A trail was cut from the end of driveable road up Simpson Creek to the west end of the area surveyed. Camp support was provided mainly by B206 helicopter from Agassiz, B.C. The base map was prepared from government 1:50,000 topographic maps enlarged to 1:10,000 scale. A total of 574 soil samples were collected.

OWNERSHIP

The SLO 1 (20 units, record #662) and SLO 2 (20 units, Record #663) are 100% owned by Cominco Ltd. and were recorded Oct. 26, 1979.

REGIONAL SETTING

The SLO claims are underlain by Jurassic-Cretaceous volcanic and sedimentary strata of the Fire Lake Group. The Fire Lake Group is a 10 x 40 km "roof pendant" surrounded by granitic plutons and high grade metamorphic rocks of the Coast Crystalline Complex. The Fire Lake is both intruded by granitic plutons and contains granite cobble conglomerate, presumably eroded from unroofed early Coast Range plutons. Volcano-sedimentary belts within the Coast Crystalline Complex host base and precious metal mineralization such as at Britannia and Northair.

Staking of the SLO claims resulted from silt anomalies in Simpson Creek and several of its short steep northern tributaries, an extensive gossan on the south wall of Simpson Creek, and recognition of a favourable geologic setting.

SOIL GEOCHEMICAL SURVEY

Due to the rugged topography a contour survey was carried out on 500 foot contour lines between 2000 and 4000 ft. Impassible cliffs prevented completion of the 4000 ft. contour on the south side of Simpson Creek and the 2500, 3000 and 3500 contours at the east end of the ridge separating North Sloquet and Simpson Creeks. In several instances the sample line had to be located 50-100 feet above or below the designated contour. Most samples were collected at 50 m. intervals, but some on the 2500 and 3000 ft. contours on the north slope of Simpson Creek were taken at 30 m. intervals. B-horizon soil was collected at most sites, and talus fines at others, and the -80 mesh fraction of dried samples was analysed at Cominco's Exploration Research Laboratory in Vancouver. Cu, Pb and Zn determinations were by atomic absorption following digestion in hot nitric acid. Gold analysis (by aqua regia digestion, solvent extraction followed by A.A.) was conducted on 86 selected samples.

INTERPRETATION

Statistical analysis of the data was carried out and logarithmic histograms and cumulative frequency plots are attached. These plots were used as an aid to contour the data as indicated:

	<u>Cu ppm</u>	<u>Pb ppm</u>	<u>Zn ppm</u>
high background	50	50	150
anomalous	100	90	300
strongly anomalous	200	200	600

Because of significant gaps in the data much of the contouring is poorly defined. Steep slopes and high precipitation are considered likely to produce pronounced downslope geochemical dispersion. This pattern is well borne out where there is sufficient data and has been extended into areas of poor control.

3.

Correlation coefficients among Cu, Pb, and Zn are Cu: Pb = .51, Pb: Zn = .81 and Cu: Zn = .70. Several anomalies were found and these are designated alphabetically and discussed briefly below. Pb and Zn provide best resolution of anomalies, with Cu appearing to be more diffuse.

Anomaly A is very strong in Pb and strong in Zn and Cu. It is incompletely defined but appears to have a sharp upslope cutoff and its source is likely in the cliff gossan.

Anomalies B₁ and B₂ are strong in Cu and Zn but more moderate in Pb.

Anomaly C is a linear feature adjacent a tributary creek, suggesting the source is in a creek cut. It is of moderate strength in Cu, Pb and Zn. Anomalies B and C may be related, and have a moderately sharp upslope cut off.

Anomaly D is at the margin of the grid and consequently is poorly defined. It is mainly a feature of the Cu and Pb maps. It may represent an extension of anomaly A on the south side of the North Sloquet/Simpson ridge.

Anomaly E is a linear weak Cu, Zn anomaly adjacent a tributary creek.

Anomaly F is essentially a single sample anomaly. It is noteworthy only because it produced the only interesting gold anomaly of all Cu, Pb, Zn anomalies checked for Au.

CONCLUSIONS

A contour soil survey on the steep sidewalls of Simpson and North Sloquet Creek of the SLO claims has indentified specific areas for further exploration.

Anomalies A and B appear most significant and should be followed up with closer spaced soil sampling to provide better definition of the anomaly, prospecting and geological mapping. Anomaly C warrants prospecting of float and outcrop in the steep tributary creek. Anomalies D and F are secondary targets for further soil sampling and prospecting. Anomaly E is not considered worthy of further work.

Report by: P. J. Wojdak

P. J. Wojdak
Geologist

Endorsed for
release by: G. Harden

G. Harden
Manager

Western District, Exploration

APPENDIX I

IN THE MATTER OF THE B.C. MINERAL ACT AND
IN THE MATTER OF A GEOCHEMICAL
PROGRAM CARRIED OUT ON THE
SLO 1 AND SLO 2 MINERAL CLAIMS
LOCATED IN THE NEW WESTMINSTER MINING DIVISION
OF THE PROVINCE OF BRITISH COLUMBIA
MORE PARTICULARLY N.T.S. 92 G/16

A F F I D A V I T

I, PAUL J. WOJDAK OF THE MUNICIPALITY OF DELTA IN THE PROVINCE OF
BRITISH COLUMBIA, MAKE OATH AND SAY;

1. THAT I am employed as a geologist by Cominco Ltd., and as such
have a personal knowledge of the facts to which I hereinafter
depose;
2. THAT annexed hereto and marked as Appendix II to this my affidavit
is a true copy of expenditures on a geochemical program carried
out on the SLO Mineral Claims;
3. THAT the said expenditures were incurred between the twenty-sixth
day of June and twenty-first day of July, 1980 for the purpose
of mineral exploration on the above noted claims.




P.J. Wojdak, Geologist

APPENDIX II

STATEMENT OF EXPENDITURES ON SLO CLAIMS.

Salaries:	P.J. Wojdak; initiating project, June 30, July 2 - 4; 4 days @ \$150/day	\$ 600.00
	Bob Grant; Soil sampling, July 2 - 21 ; 20 days @ \$68/day	1,360.00
	Stewart Fyles; soil sampling, July 2 - 21; 20 days @ \$60/day	1,200.00
	Cutting trail and clearing campsite, contracted to Don Martinson. (June 26 - 28)	525.00
	Charter of Highland Helicopter B206 from Agassiz (camp mob/demob, camp service)	2,192.58
	Camp equipment and field supplies	711.52
	Groceries, travel costs	704.54
	Truck rental and fuel	961.77
	Analytic costs: 574 soils for Cu, Pb, Zn @ \$3.25	1,865.50
	86 soils for Au @ \$3.75	322.50
	Drafting	250.00
	Report preparation	250.00
	TOTAL	\$ 10,943.41



P.J. Wojdak
Geologist.

APPENDIX III

STATEMENT OF QUALIFICATIONS

I, PAUL J. WOJDAK, OF THE MUNICIPALITY OF DELTA, PROVINCE OF BRITISH COLUMBIA, HEREBY CERTIFY:

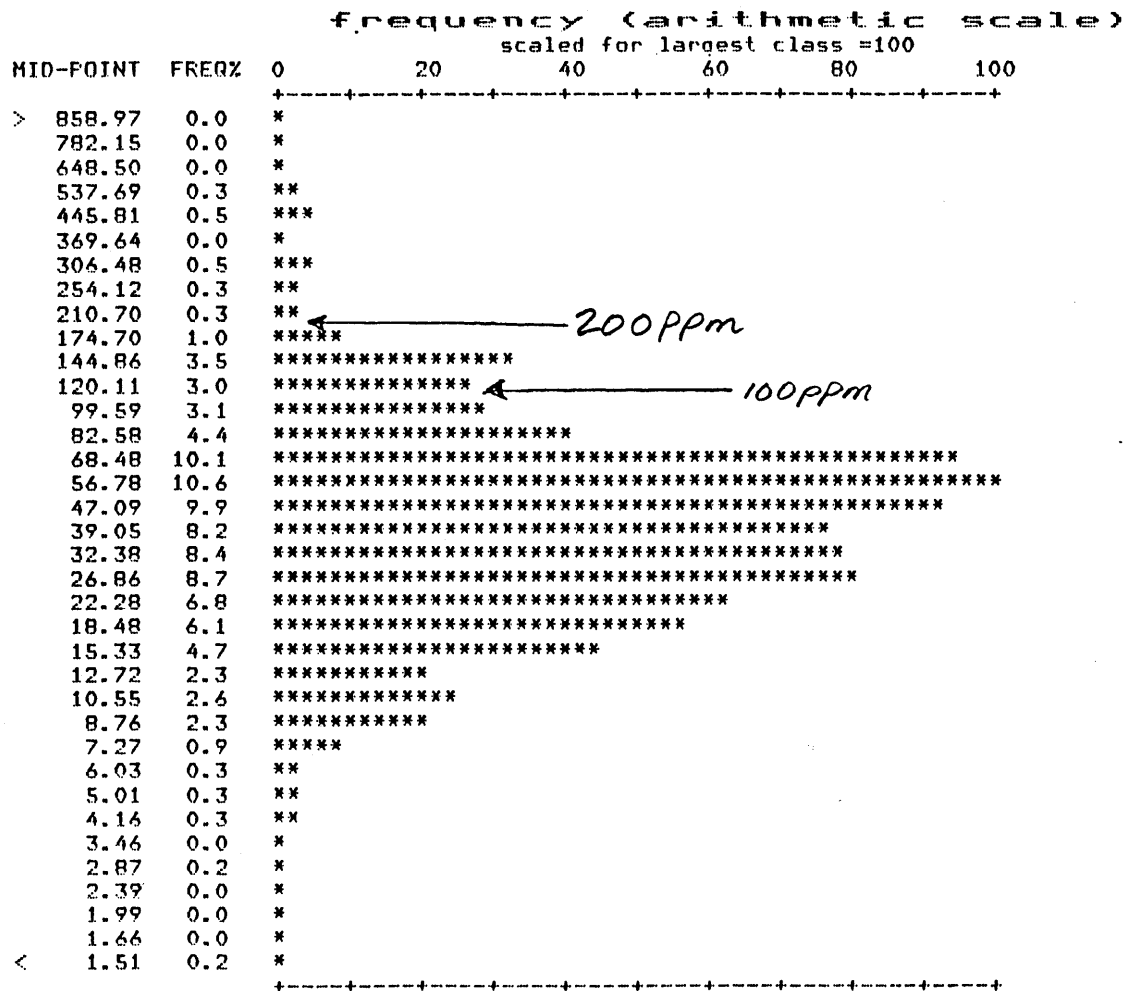
1. THAT I am a Geologist residing at 11405-85th Avenue, Delta, British Columbia with a business address at 2200-200 Granville Street, Vancouver, British Columbia;
2. THAT I graduated with a B.Sc. in Geology and Chemistry from McMaster University, Hamilton, Ontario in 1971 and with a M. Sc. in Geology from the University of British Columbia in 1974;
3. THAT I have practised geology with Cominco Ltd. from 1974 to 1980.

DATED THIS 31 DAY OF OCTOBER 1980 AT VANCOUVER, BRITISH COLUMBIA.

Signed: *P. J. Wojdak*
P.J. WOJDAK, M.Sc.

SLO

LOG TRANSFORM HISTOGRAM FOR COPPER



↑
ppm

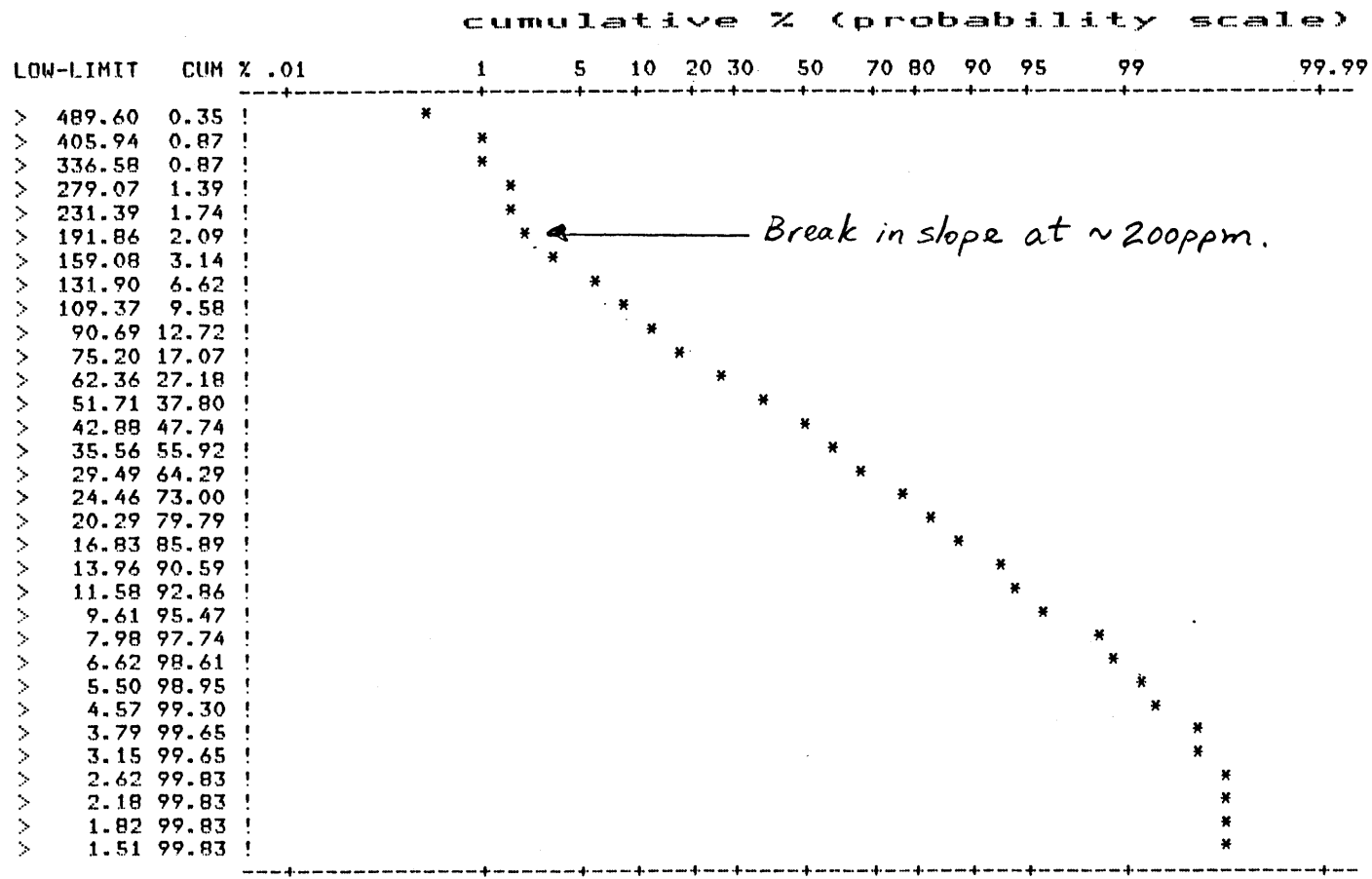
NOTE : CONC SCALE IS LOGARITHMIC (INTERVAL=.081). VALUES ARE MID-POINTS OF CLASSES

ERL JOB V80-669S. S80-24360-24933

ELEMENT	NO OF ANALYSES	RANGE	ARITH MEAN (N+2STD DEV)	GEO MEAN (N+2STD DEV)
COPPER	574	1 TO	539 ppm (172)	39.0 (201)

SLO

CUMULATIVE PROBABILITY PLOT FOR COPPER



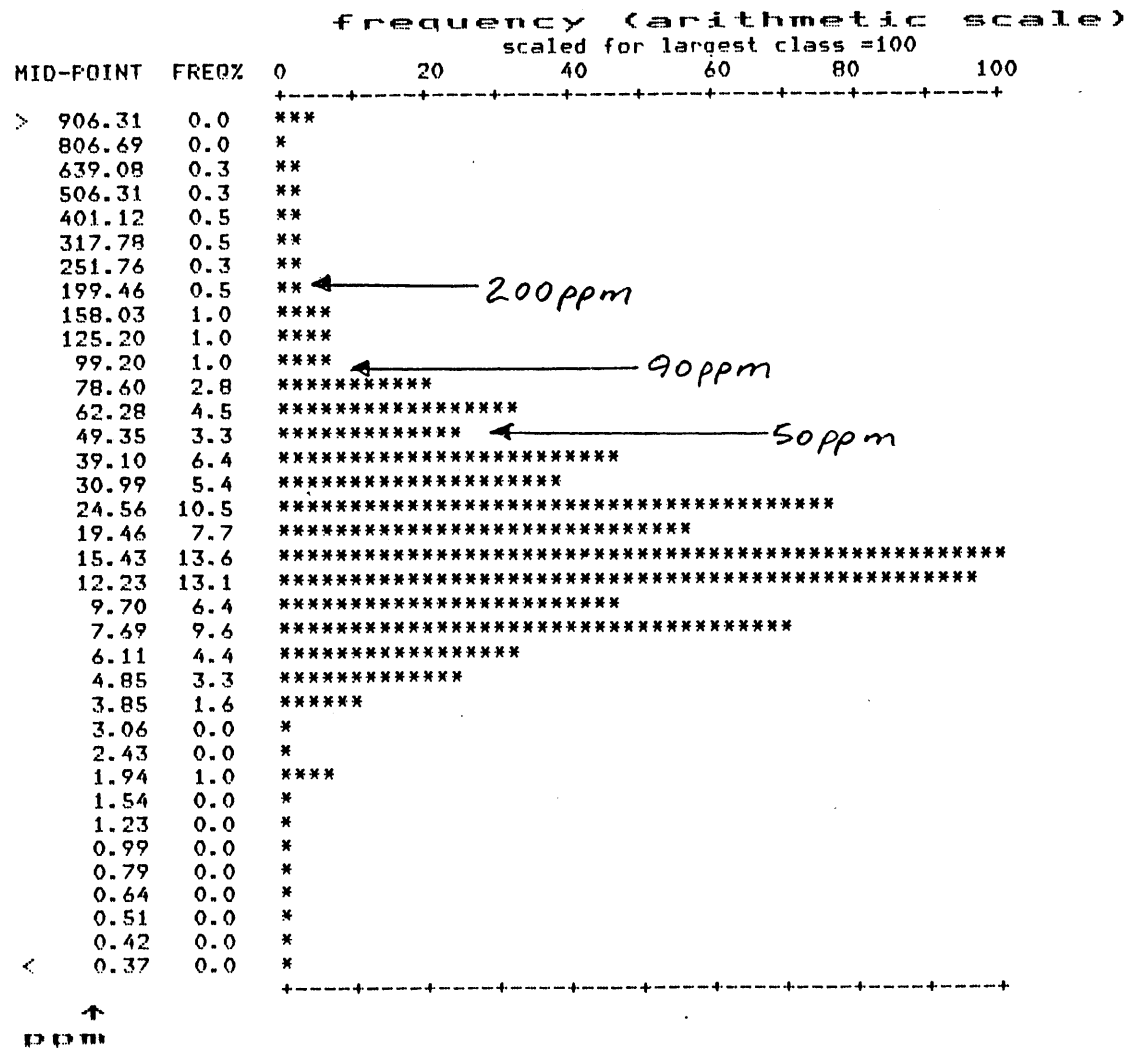
NOTE: CONCENTRATION SCALE IS LOGARITHMIC (INTERVAL=.081). VALUES ARE CLASS LOWER LIMITS

ERL JOB V80-669S. S80-24360-24933

ELEMENT	NO OF ANALYSES	RANGE	ARITH MEAN (M+2STD DEV)	GEO MEAN (M+2STD DEV)
COPPER	574	1 TO	539 ppm (172)	39.0 (201)

SLO

LOG TRANSFORM HISTOGRAM FOR LEAD



NOTE : CONC SCALE IS LOGARITHMIC (INTERVAL=.101). VALUES ARE MID-POINTS OF CLASSES

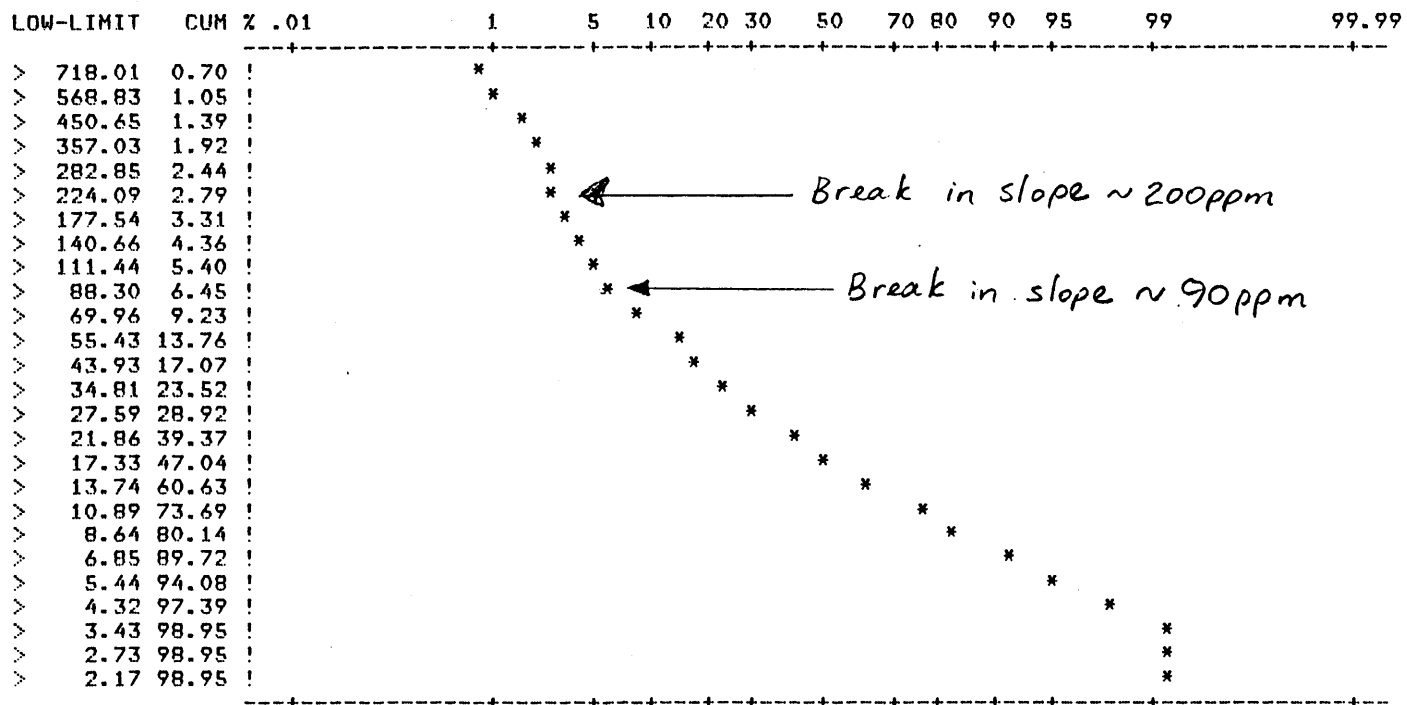
ERL JOB V80-669S. S80-24360-24933

ELEMENT	NO OF ANALYSES	RANGE	ARITH MEAN (M+2STD DEV)	GEO MEAN (M+2STD DEV)
LEAD	574	<4 TO 3600 ppm	47.4 (433)	19.4 (149)

SLO

CUMULATIVE PROBABILITY PLOT FOR LEAD

cumulative % (probability scale)



↑
PPM

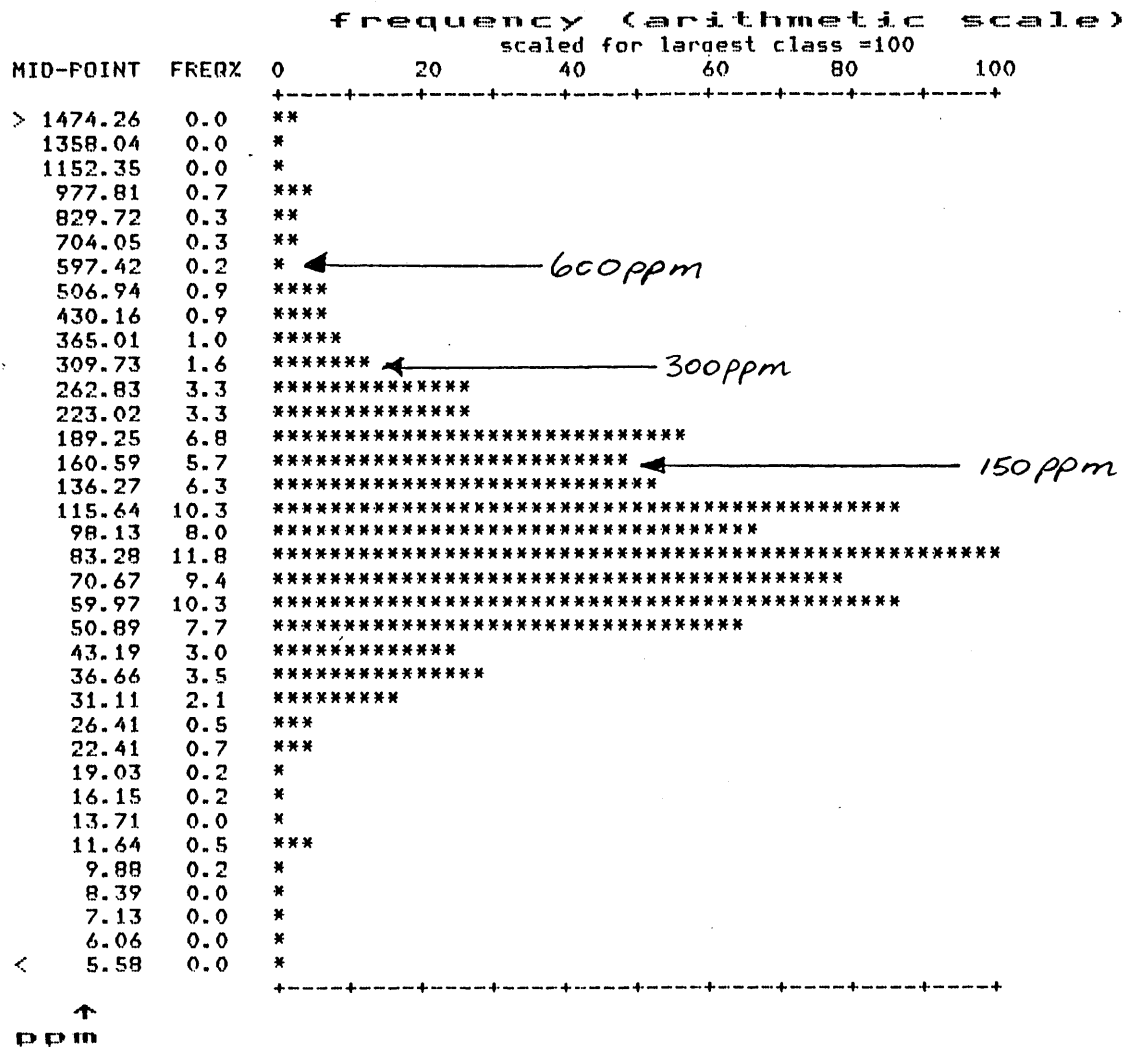
NOTE: CONCENTRATION SCALE IS LOGARITHMIC (INTERVAL=.101). VALUES ARE CLASS LOWER LIMITS

ERL JOB V80-669S. S80-24360-24933

ELEMENT	NO OF ANALYSES	RANGE	ARITH MEAN (M+2STD DEV)	GEO MEAN (M+2STD DEV)
LEAD	574	<4 TO 3600 ppm	47.4 (433)	19.4 (149)

SLO

LOG TRANSFORM HISTOGRAM FOR ZINC



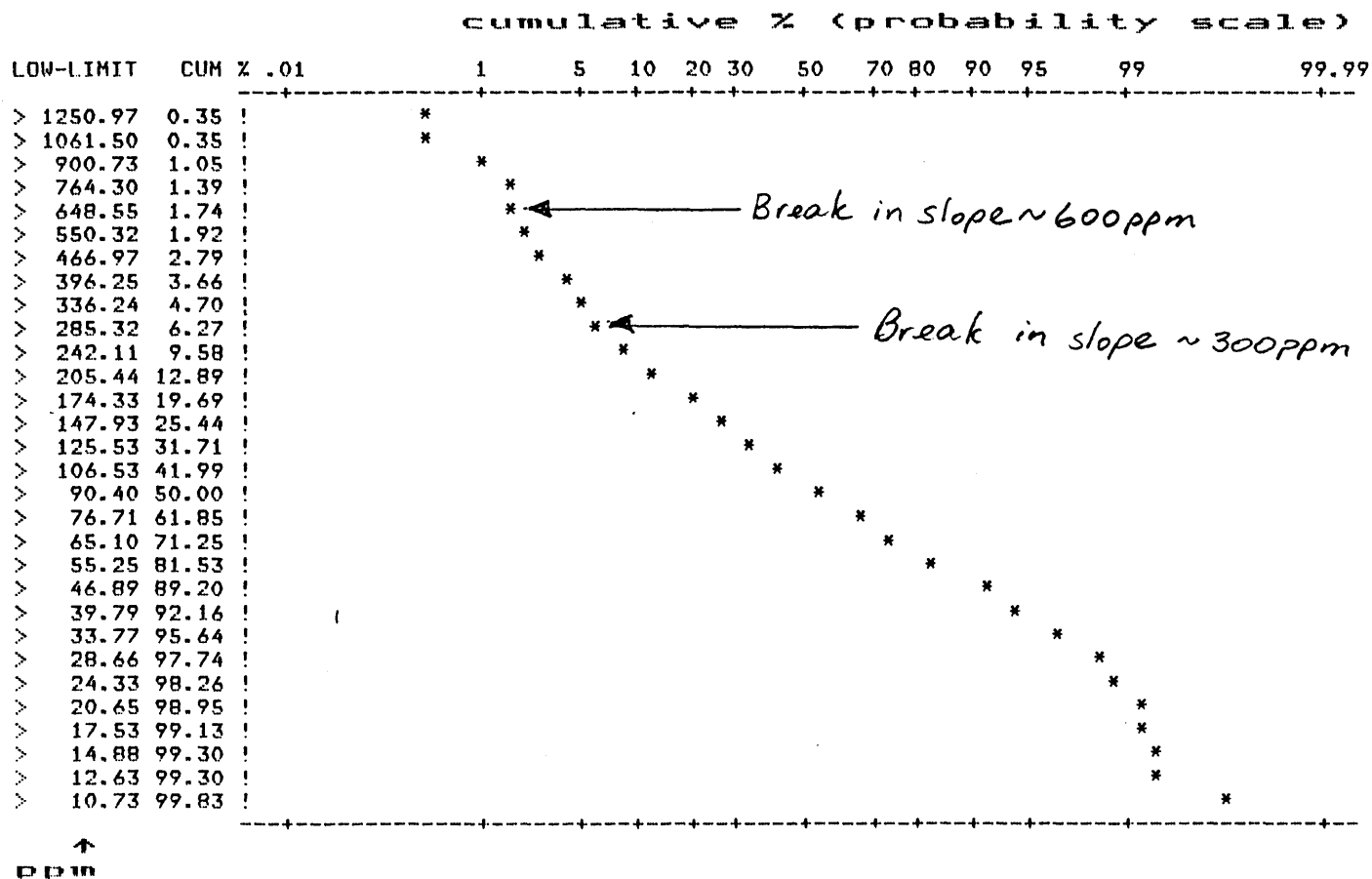
NOTE : CONC SCALE IS LOGARITHMIC (INTERVAL=.071). VALUES ARE MID-POINTS OF CLASSES

ERL JOB V80-669S. S80-24360-24933

ELEMENT	NO OF ANALYSES	RANGE	ARITH MEAN (M+2STD DEV)	GEO MEAN (M+2STD DEV)
ZINC	574	10 TO 3300 ppm	135.0 (516)	98.0 (412)

SLO

CUMULATIVE PROBABILITY PLOT FOR ZINC

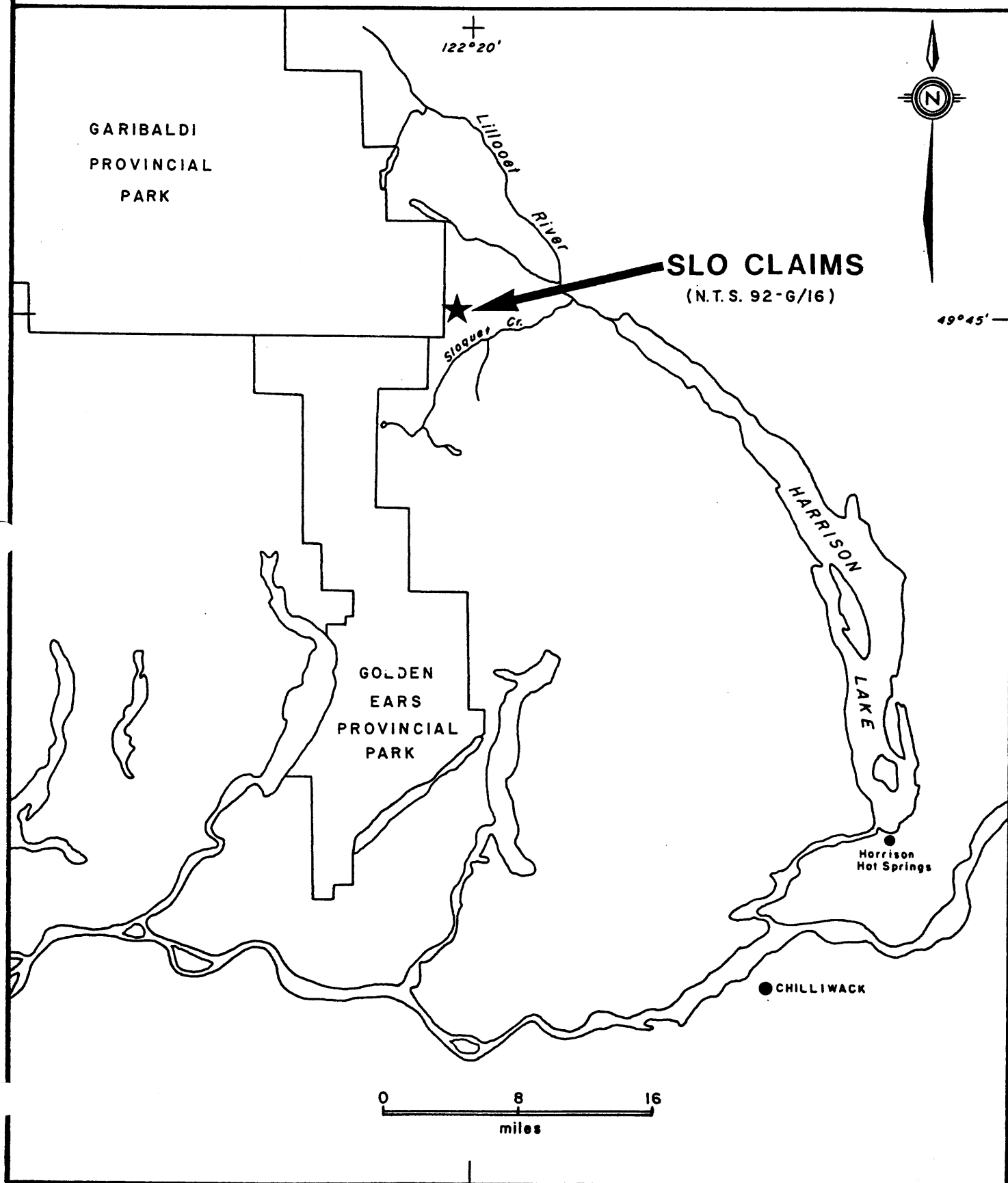


NOTE: CONCENTRATION SCALE IS LOGARITHMIC (INTERVAL=.071). VALUES ARE CLASS LOWER LIMITS

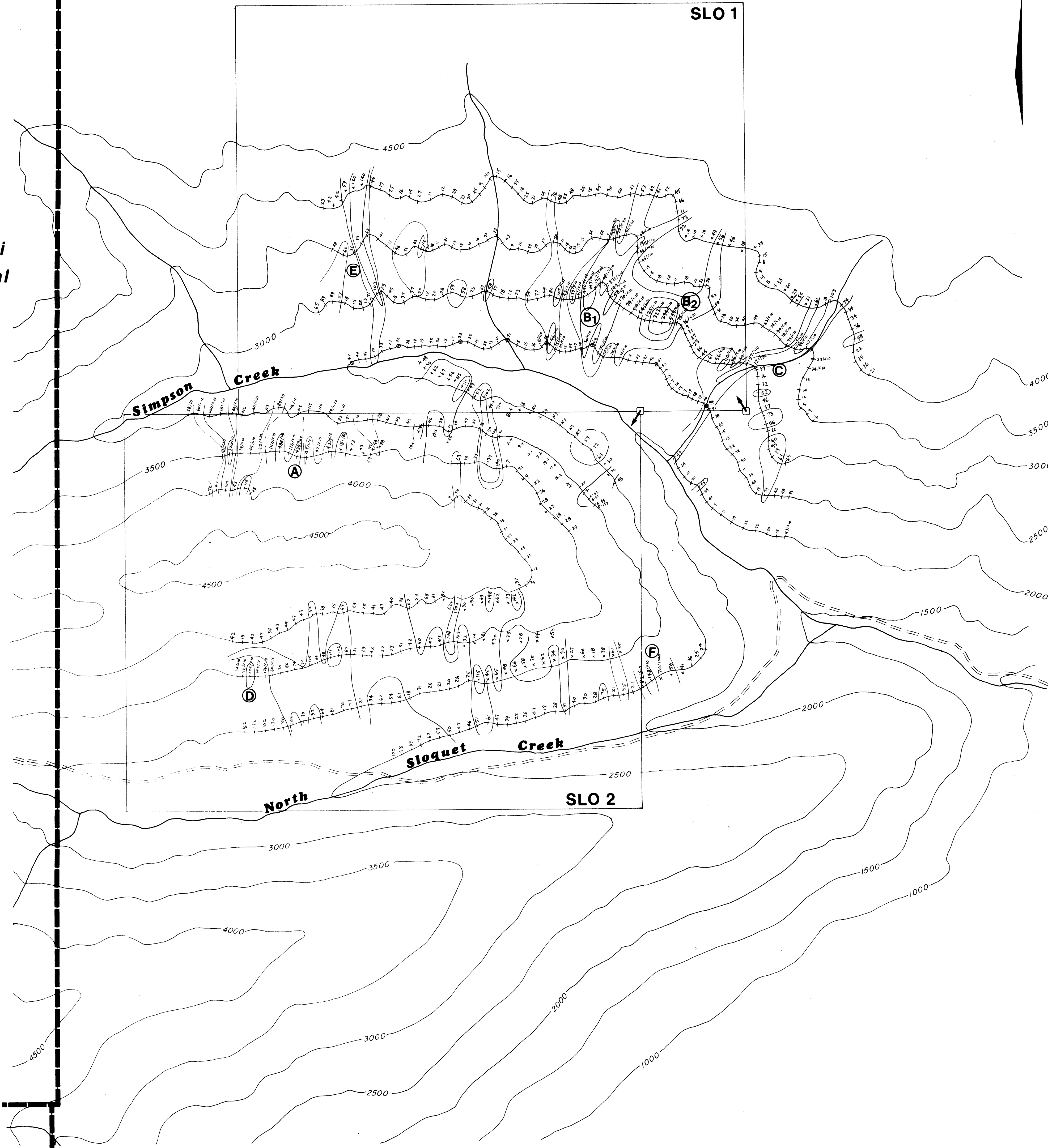
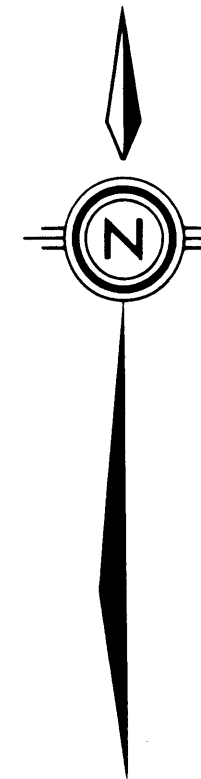
ERL JOB V80-669S. S80-24360-24933

ELEMENT	NO OF ANALYSES	RANGE	ARITH MEAN (M+2STD DEV)	GEO MEAN (M+2STD DEV)
ZINC	574	10 TO 3300 ppm	135.0 (516)	98.0 (412)

Location Map Slo Claims

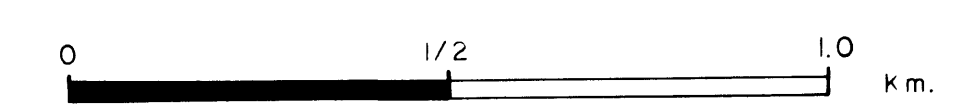


Garibaldi
Provincial
Park



LEGEND

- Soil survey by elevation contour
- Data contoured at 50 ppm Cu
100
200 ppm Cu
- x 148/110 Cu-ppm / Au-ppb
- o Silt sample
- ==== Disused logging road



MINERAL SERVICES BRANCH
ASSOCIATION OF QUEBEC
8423
No.

92 G/16 W

SLO PROPERTY			
Drawn by:	Traced by:		
Revised by:	Date:	Revised by:	Date:
		COPPER IN SOIL	
Scale: 1:10,000		Date: 10-9-1980	Plate:

