

180 - 4368 - H

GEOCHEMICAL

REPORT

on the

BOG, FRI, and COM CLAIMS

KAMLOOPS MINING DIVISION, B.C.

NTS: 92P/9W and 92P/10E

on behalf of

COMMONWEALTH MINERALS LIMITED (N.P.L.)

VANCOUVER, BRITISH COLUMBIA

by

G.H. Giroux, P.Eng.

June 10, 1980

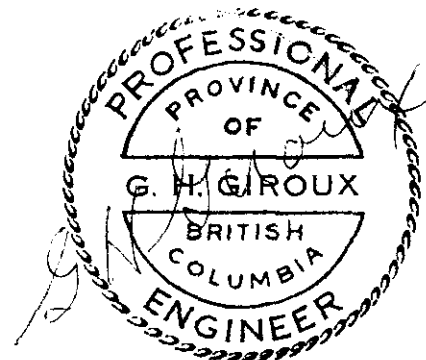
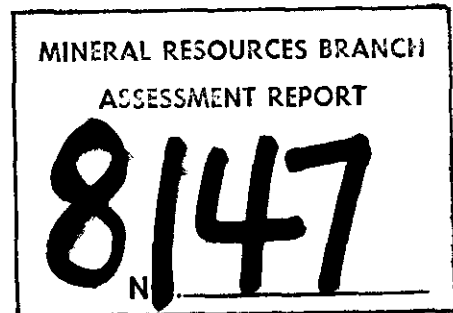


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I. Geochemical Results

1.0 INTRODUCTION

This report describes the work done on the BOG, FRI, and COM claims on behalf of Commonwealth Minerals Limited of Vancouver, British Columbia. The claims are located near Friendly Lake in the Kamloops Mining Division.

During the period May 26 to June 3, 1980 two geochemical surveys were completed on these claims, in order to detail two areas of anomalous lead and copper.

2.0 SUMMARY & CONCLUSIONS

Commonwealth Minerals Limited of Vancouver, British Columbia, holds title to 50 BOG, FRI and COM mineral claims in the Kamloops Mining Division of British Columbia.

A field program consisting of line cutting and soil sampling was completed on the property between the dates May 26 and June 3, 1980.

A total of 271 new samples were taken and analyzed for copper, lead and silver.

When the new data was combined with Cities Services 1974 data, several anomalies for copper, lead and silver were outlined.

3.0 LOCATION AND ACCESS

The BOG, FRI and COM claims are located 30 km. north-west of Little Fort and 6 km. south-east of Windy Mountain in the Kamloops Mining Division of British Columbia. (See Figure 1).

The map coordinates of the claims are:

Latitude: 52° 50' Longitude: 119° 30'
NTS. Map. 92P/9W and 10E

Access to the property is good via Highway 24, some 37 km. north-west from Little Fort and then 24 km. north on logging and mining roads.

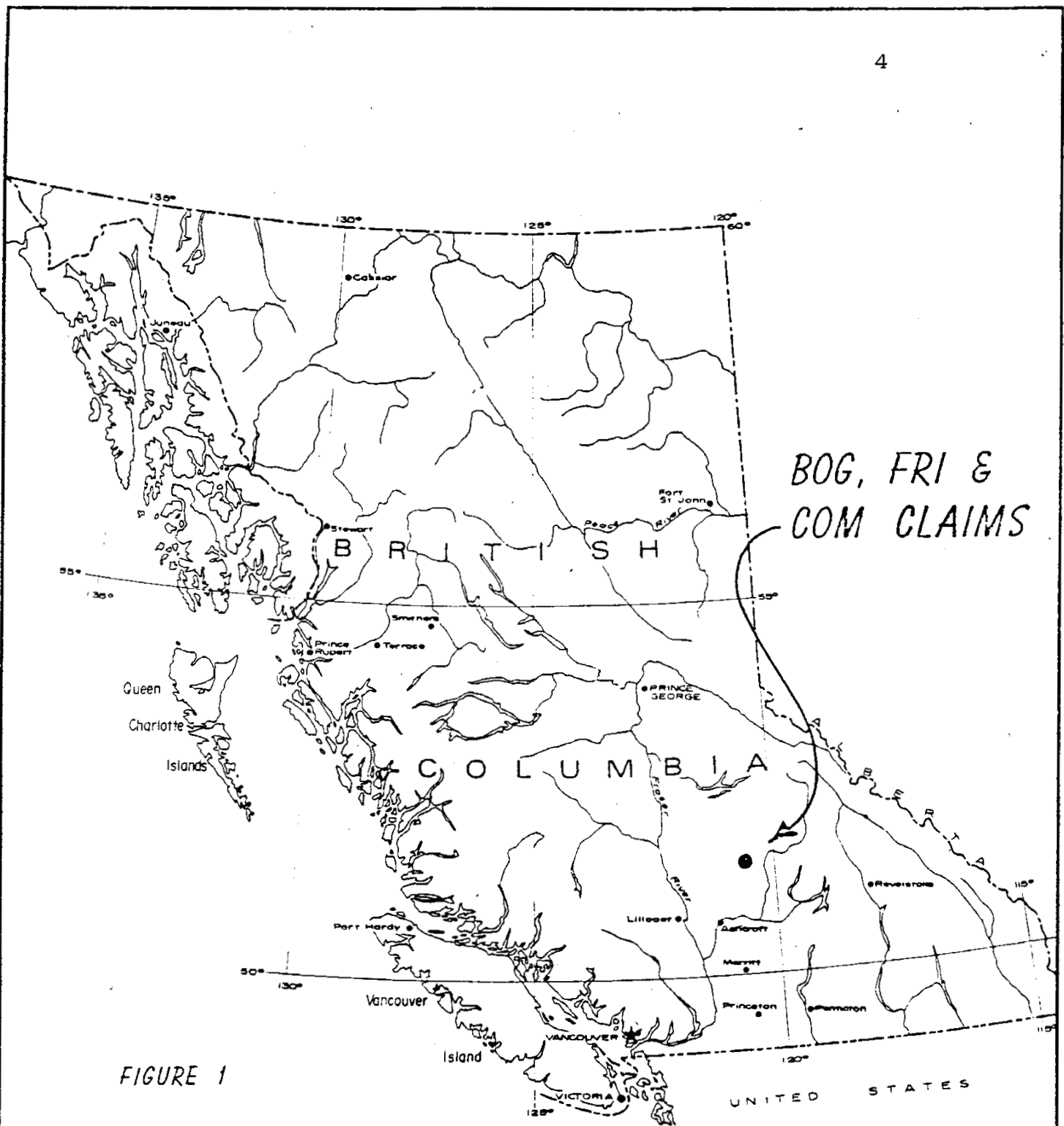


FIGURE 1

LOCATION MAP
 COMMONWEALTH MINERALS LTD.

4.0 CLAIM INFORMATION

The BOG, FRI and COM group of Mineral Claims consist of 48 two post claims and 2 modified grid claims each of 20 units. The claims are held under an option agreement by Commonwealth Minerals Limited. Claim locations are shown on Figure 2. The following Table summarizes pertinent claim information.

CLAIM		RECORD NO.	EXPIRY DATE
BOG 3-4	(2)	98409-98410	July 26, 1982
BOG 5	(1)	98411	July 26, 1982
BOG 6	(1)	98412	July 26, 1982
BOG 7	(1)	98413	July 26, 1982
BOG 8	(1)	98414	July 26, 1982
BOG 9	(1)	98415	July 26, 1982
BOG 11	(1)	98417	July 26, 1982
BOG 12	(1)	98418	July 26, 1981
BOG 13	(1)	98419	July 26, 1982
BOG 14-17	(4)	98420-98423	July 26, 1981
BOG 18	(1)	98424	July 26, 1984
BOG 19-20	(2)	98425-98426	July 26, 1983
BOG 21-24	(4)	99801-99804	Sept. 14, 1980
BOG 34	(1)	99814	Sept. 14, 1980
BOG 35-39	(5)	99815-99819	Sept. 14, 1980
BOG 40	(1)	99820	Sept. 14, 1981
BOG 41	(1)	99821	Sept. 14, 1982
BOG 42	(1)	99822	Sept. 14, 1982
FRI 1-6	(6)	126035-126040	June 25, 1980
FRI 7	(1)	126041	June 25, 1981

CLAIM		RECORD NO.	EXPIRY DATE
FRI 8	(1)	126042	June 25, 1980
FRI 9	(1)	126043	June 25, 1981
FRI 10	(1)	126044	June 25, 1980
FRI 11	(1)	126045	June 25, 1981
FRI 13	(1)	126047	June 25, 1981
FRI 15	(1)	126049	June 25, 1981
FRI 17	(1)	126051	June 25, 1982
COM 1-4	(4)	1317-1320	July 31, 1980
COM 5	(20 units)	2485	March 31, 1981
COM 6	(20 units)	2486	March 31, 1981

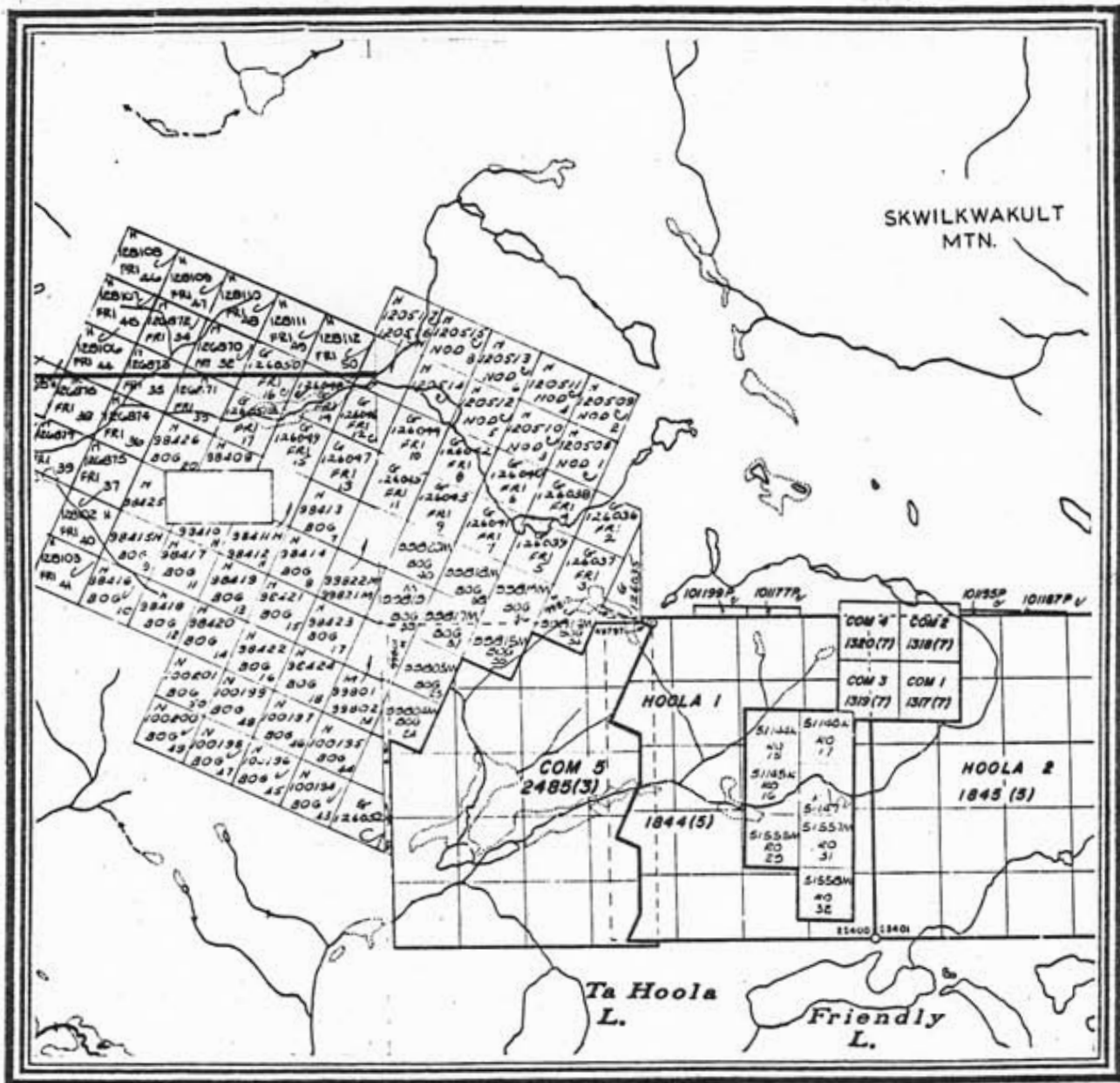


FIGURE 2

CLAIM LOCATION MAP

0 500 1000 2000 3000 4000 METRES

COMMONWEALTH MINERALS LIMITED

MONTGOMERY CONSULTANTS LIMITED

JUNE 1980

5.0 HISTORY

The earliest recorded work on the BOG-FRI claims was done by Anaconda American Brass Limited from 1965 to 1970. Regional geochemistry, geologic mapping and induced polarization surveys were carried out with the hope of finding a "porphyry copper" type deposit.

Trenching and drilling of some of the more favourable anomalies found failed to detect a large low-grade deposit.

In 1971, G.H. Rayner staked a large part of this area and in 1972 optioned these claims to Prism Resources Limited. The area was mapped by Orr and Sinclair but no follow-up work was done.

From 1973 to 1975, Cities Services Mineral Corporation worked on the claims under an option agreement. Additional geochemical sampling, an induced polarization survey, a magnetic survey, trenching and a drilling program also failed to find a "porphyry type" deposit.

Recent work by Commonwealth Minerals, consisting of detailed soil sampling over old anomalies has been carried out in hope of locating a small tonnage, high grade copper, silver, lead ore body.

6.0 GEOLOGY AND MINERALIZATION

The regional geology of this area has been mapped by R.B. Campbell and H.W. Tipper in the Geological Survey of Canada Memoir 363. (See Figure 3).

The general area covered by the claims is described as Upper Triassic Nicola Group andesitic flows and breccias, tuff, argillite, graywacke and limestone. Triassic or Jurassic intrusions (syenite and monzonite) have also been mapped. The major structural features are a series of northwest or northeast-trending faults.

V. Preto mapped the area between Eakin Creek and Windy Mountain in more detail for the B.C. Department of Mines in 1970. The portion of his map that pertains to this property has been included. (See Figure 4). He describes the area as "characterized by a mosaic of fault blocks of sedimentary and volcanic rocks that range in age from Permian to Lower Jurassic. To the south, these rocks are truncated by the northern part of the Thuya Batholith and in the area between Friendly Lake and Windy Mountain they are intruded by stocks of fine grained leucogranite to leucosyenite porphyry that may be satellites of Thuya Batholiths".



FIGURE 3

REGIONAL GEOLOGY

WINDY MOUNTAIN COPPER PROSPECT

(AFTER R. CAMPBELL & H. TIPPER - 1971)

LEGEND

11 - NICOLA GP.

13 - SYENITE, MONZONITE

14 - THUYA BATHOLITH

JUNE 1980

MONTGOMERY CONSULTANTS LIMITED

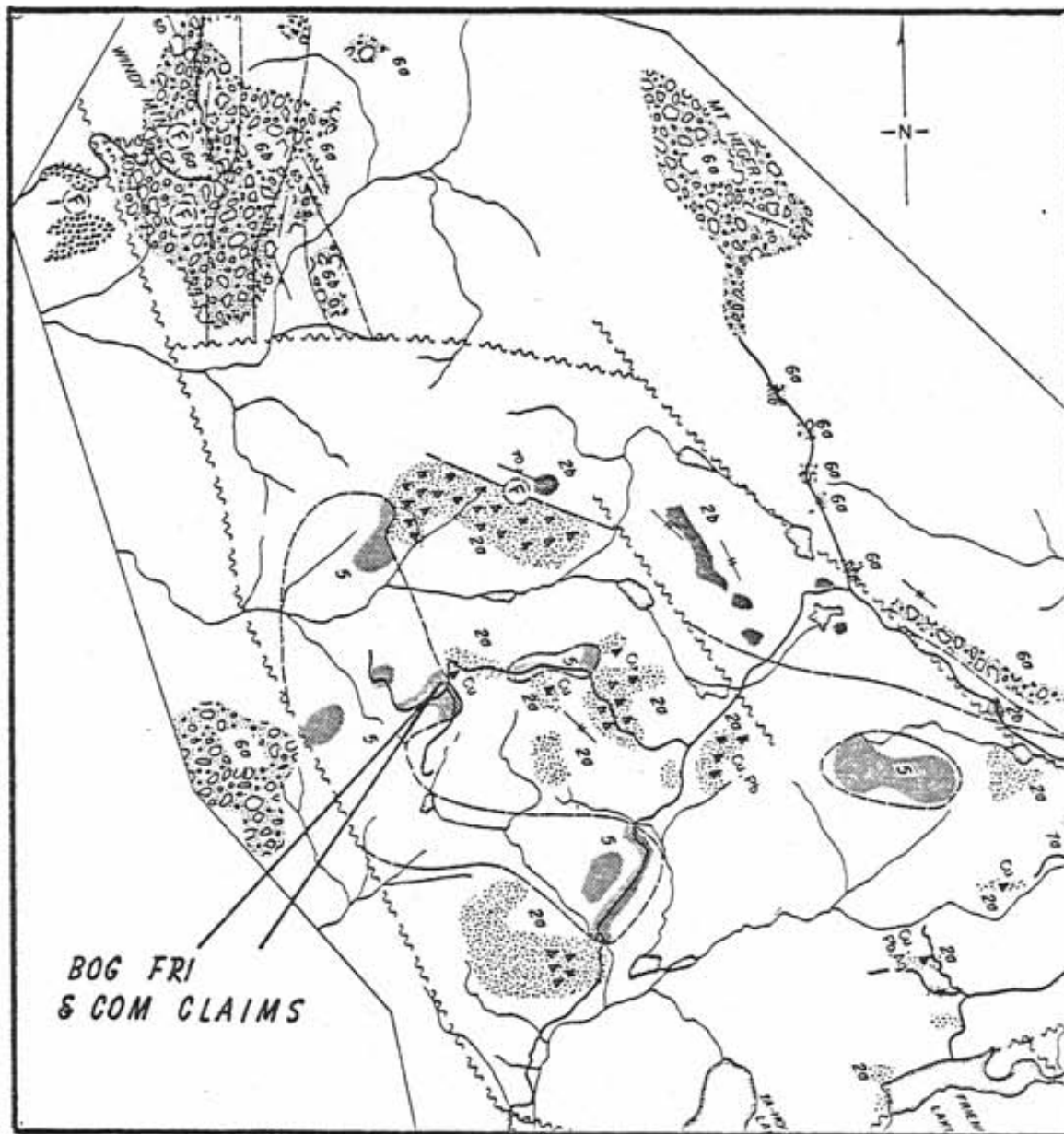


FIGURE 4
 GEOLOGY - WINDY MOUNTAIN AREA
 (AFTER V. PRETO - 1970)

- 2a Massive Andesitic
 Flows and Volcanic
 Breccia
- 5 Leucogranite to
 Leucosyenite Porphyry

0 1/2 1 mile

He divides the Nicola into four sub-groups:

- 2a - Massive andesite, pyroxene andesite, and breccia.
- 2b - Thin-bedded, light-green tuff with some interbeds of coarser lapilli tuff and tuff breccia.
- 2c - Interbedded calcareous siltstone, argillite, shale and sandstone.
- 2d - Grey, fine-grained, well-bedded limestone, locally altered to skarn.

Preto has mapped the area of present interest as being underlain by Unit 2a adjacent to a leucogranite to leucosyenite porphyry intrusion to the south.

More detailed mapping of the claim area has been done by John Orr (1971), A. Sinclair (1972), and N. Jorgensen (1975).

Mineralization consists of chalcopyrite, bornite, tetrahedrite, galena and pyrite in fractures and disseminated throughout the monzonite and volcanic rocks and their altered equivalents.

7.0 GEOCHEMICAL SURVEY

The purpose of this geochemical survey was to study, in detail, two areas of anomalous lead and copper values located in 1974 by Cities Services Mineral Corporation. Using 1974 lines as base lines, two grids were cut on the property with lines flagged and chained 100 meters apart. (See Figure 5 for grid locations). Samples were taken every 50 meters along these lines. The B horizon was sampled and the soil placed in kraft paper bags and numbered with the grid location. These samples were then shipped to MIN-EN Laboratories Ltd. in North Vancouver where they were analyzed by nitric perchloric digestion and Atomic Absorption analysis for copper, lead and silver.

7.1 Lead Grid

On the 1980 sampling grid, 124 samples were taken on six lines, 100 meters apart. These results were combined with 107 samples taken in 1974 by Cities Services. The total of 231 samples had an arithmetic mean for lead of 101 ppm with a standard deviation of 107.3. The combined copper values had an arithmetic mean of 99 ppm with a standard deviation of 94.8. Silver was not analyzed for in the 1974 survey but 124 samples from 1980's survey had an arithmetic mean of 1.8 ppm with a standard deviation

ARITHMETIC HISTOGRAM FOR LEAD

LEAD GRID

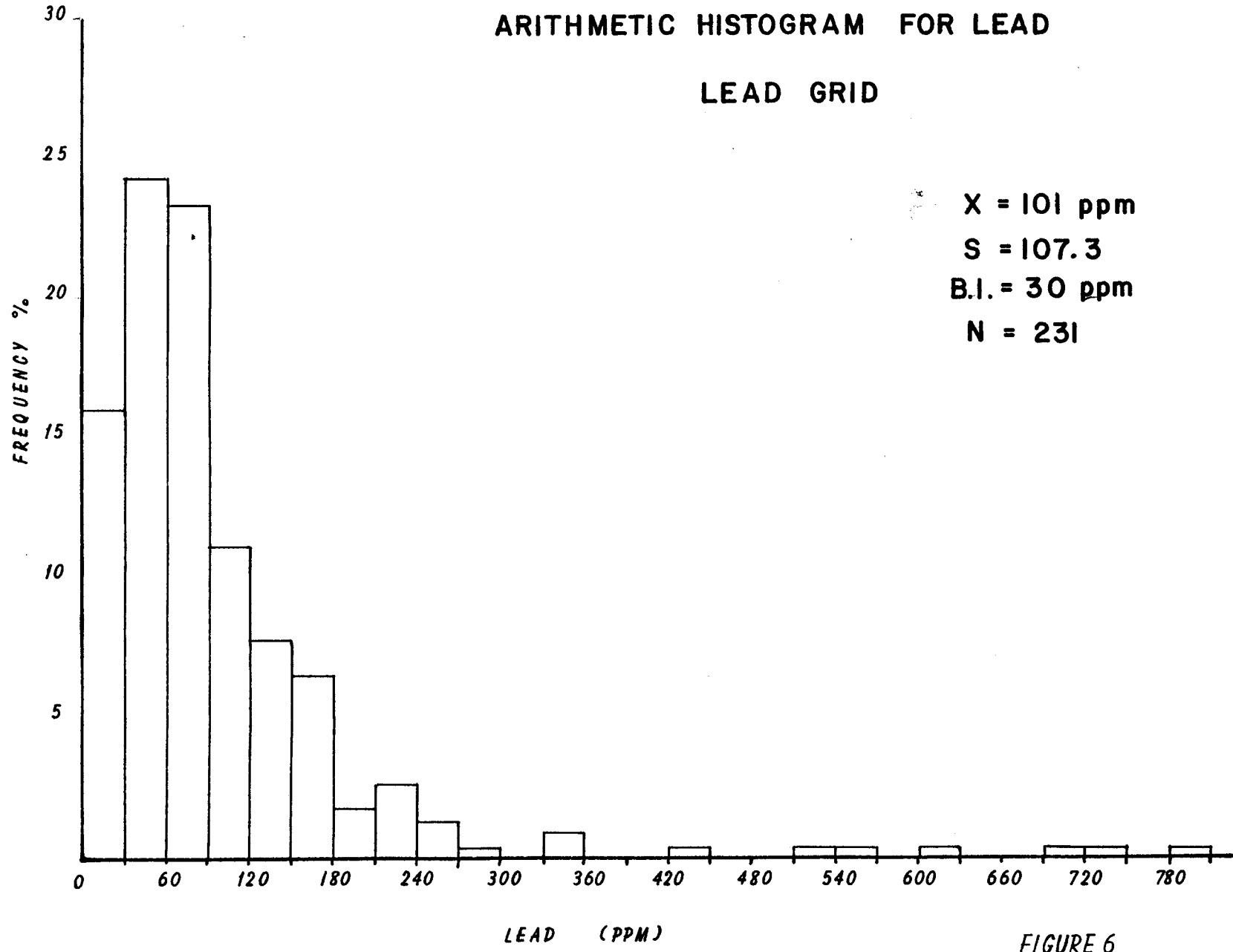


FIGURE 6

FREQUENCY %

ARITHMETIC HISTOGRAM FOR COPPER

LEAD GRID

\bar{X} = 99 ppm

S = 94.8

BI = 25 ppm

N = 231

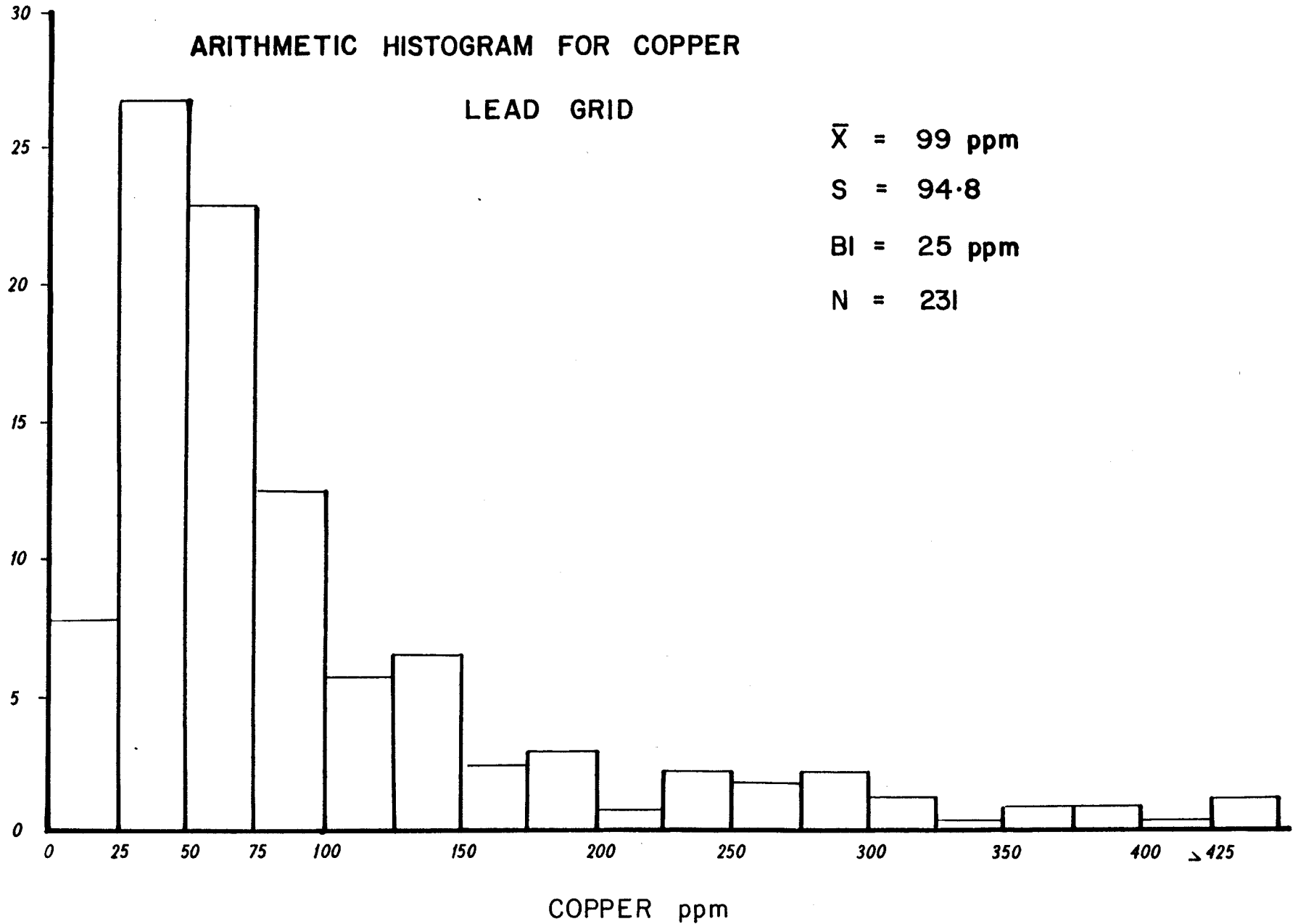


FIGURE 7

of 1.3. Histograms for copper and lead are shown in Figures 6 and 7. Contour maps showing sample locations and values are shown in Figures 10, 11 and 12.

On the lead grid, two coincident lead-silver anomalies were outlined. One was centered on Cities Services' line 520 while a second was centered between lines 506 and 504.

7.2 Copper Grid

The copper grid was started from Cities Services' line 500 with new lines cut south at 100 meter intervals. 147 new samples were taken and combined with 112 sample results taken in 1974.

A total of 259 samples, analyzed for lead, had a mean of 74 ppm and a standard deviation of 33.2. Samples tested for copper had a mean of 138 ppm with a standard deviation of 208.6. 147 samples taken in 1980 and analyzed for silver had a mean of 2.0 ppm with a standard deviation of .79. Sample locations and values are shown in Figures 13, 14 and 15.

A large copper anomaly was detected in both the 1974 and 1980 surveys. Values as high as 1450 ppm copper were found. A coincident silver-lead anomaly, centered on line 488, was also found.

FREQUENCY %

ARITHMETIC HISTOGRAM FOR LEAD

COPPER GRID

$\bar{X} = 74$ ppm

S = 33.2

BI = 10 ppm

N = 259

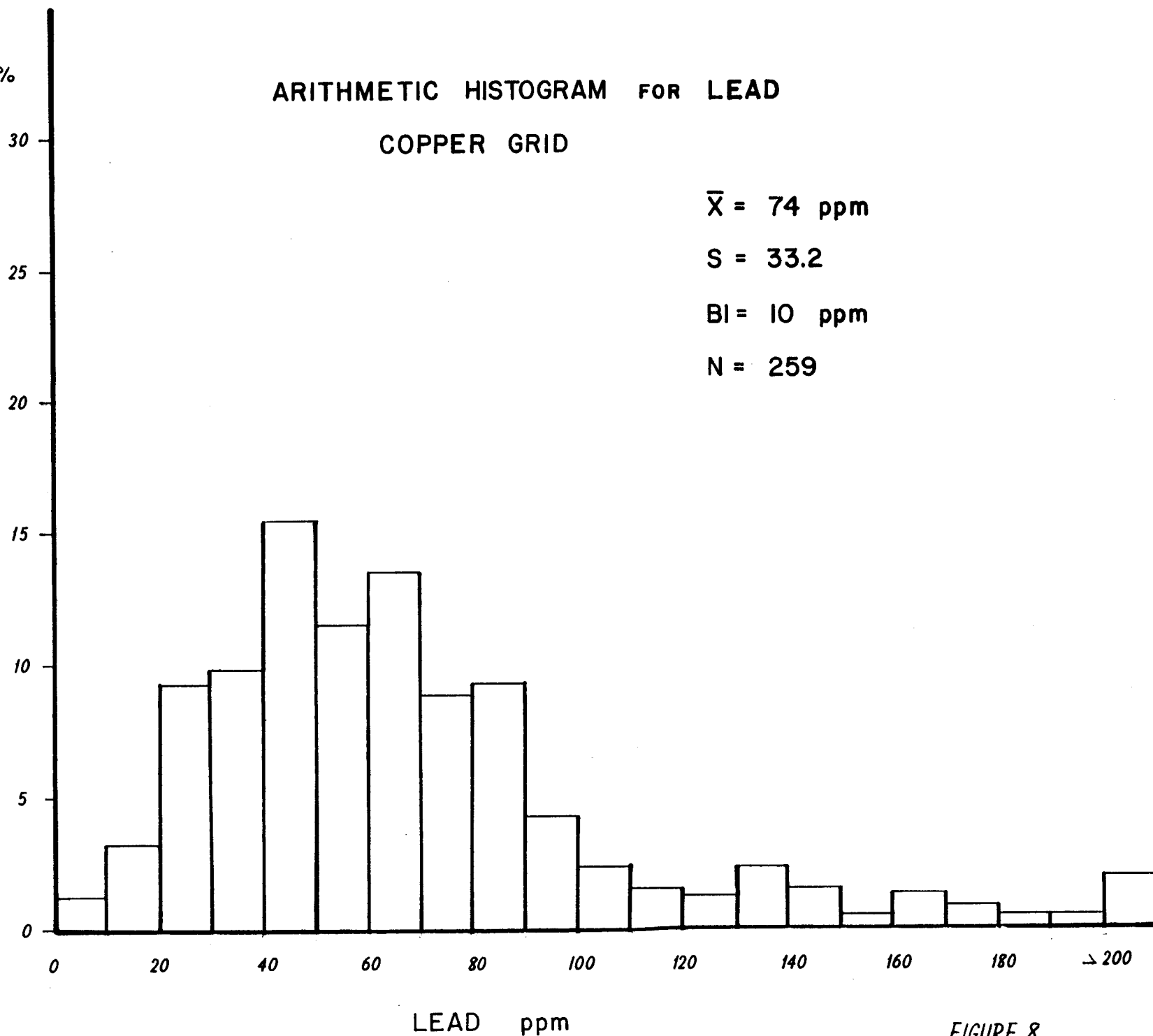


FIGURE 8

FREQUENCY %

ARITHMETIC HISTOGRAM FOR COPPER

COPPER GRID

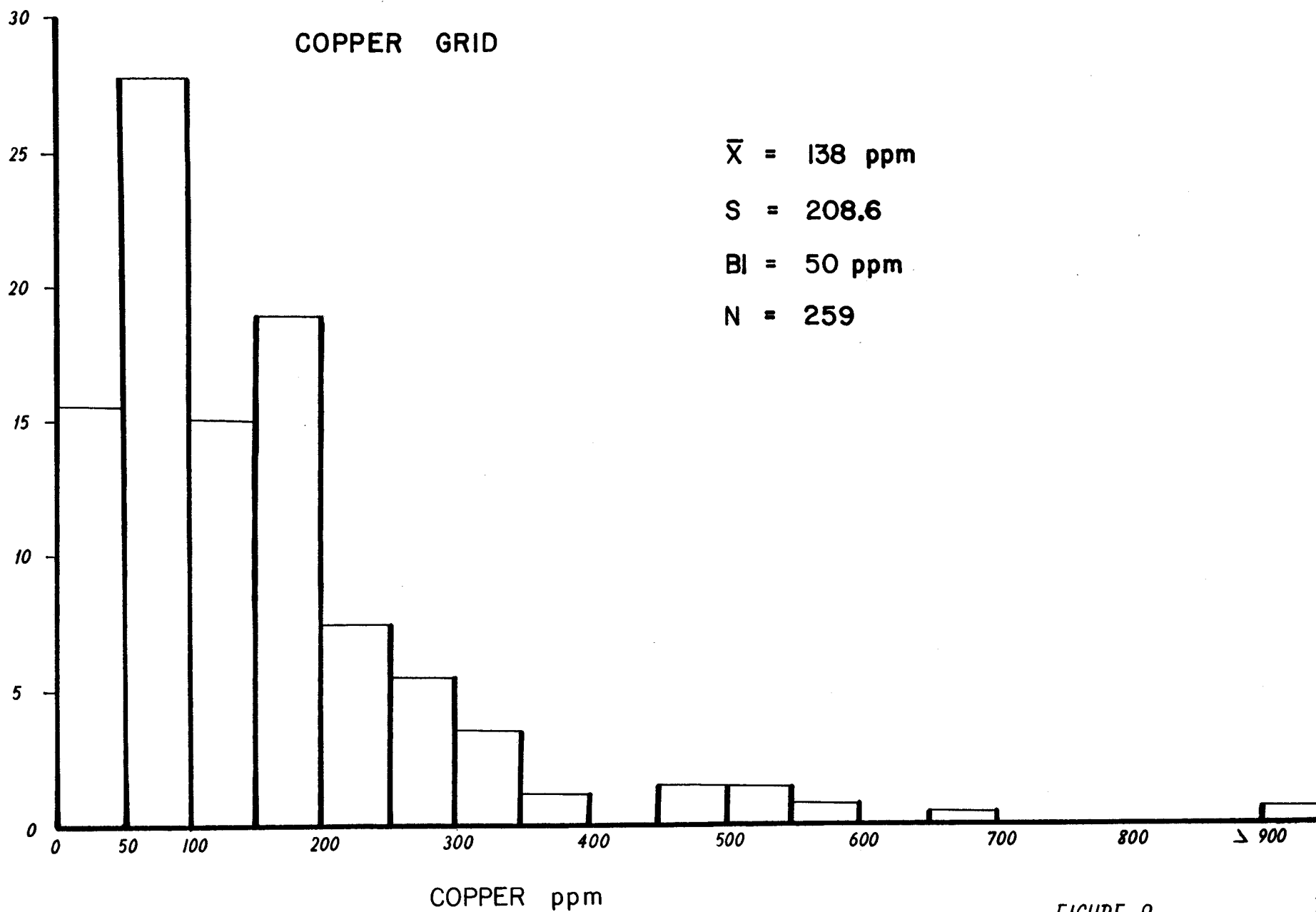


FIGURE 9

8.0 COST STATEMENT

PERSONNEL

C. Karchewski	8½ days @ \$75.00/day	\$637.50
M. Hayes	8½ days @ \$75.00/day	637.50

PROFESSIONAL FEES

J.H. Montgomery	½ day @ \$250.00/day	125.00
G.H. Giroux	13½ days @ \$200.00/day	2,700.00

FOOD & ACCOMODATION

May 26 to June 3, 1980		462.99
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TRANSPORTATION

Truck Rental	9 days @ \$38.85/day	349.72
Gas & Oil		127.82

SUPPLIES, MATERIALS & CAMP RENTAL		295.36
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TELEPHONE		10.78
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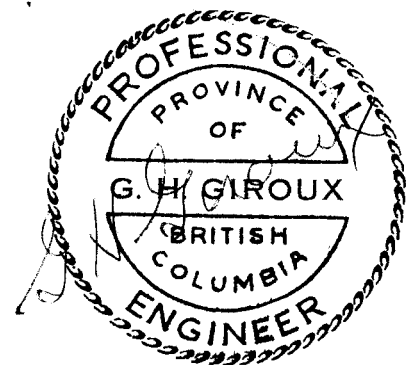
GEOCHEMICAL ANALYSIS

271 Soils @ \$4.29		1,163.64
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REPORT PREPARATION

Typing, Drafting & Reproduction		<u>500.00</u>
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<u>TOTAL:</u>		\$7,010.31
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9.0 CERTIFICATE

I, G.H. GIROUX, of 982 Broadview Drive, North Vancouver, British Columbia, do hereby certify that:


1. I am a consulting geological engineer with an office at No. 605 - 850 West Hastings Street, Vancouver, British Columbia.

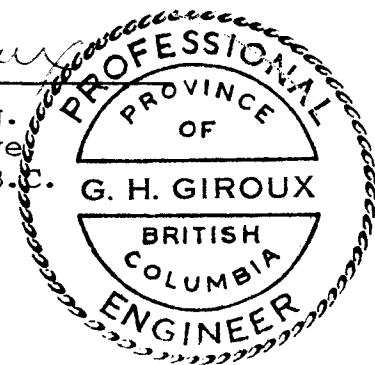
2. I am a graduate of the University of British Columbia (1970) with a degree in Geological Engineering (B.A.Sc.).

3. I have practiced my profession continuously since graduation.

4. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.

5. I have no interest, either direct or indirect, in the properties or securities of Commonwealth Minerals Ltd., nor do I expect to receive any such interest.


G.H. GIROUX, P.Eng.
982 Broadview Drive
North Vancouver, B.C.
June 10, 1980



10.0 BIBLIOGRAPHY

1. Orr, J.F. (1971) - "Report on BOG Property for Prism Resources, Ltd."
2. Campbell, R.B. & Tipper, H.W. (1971) - "Geology of Bonaparte Lake Map-Area, British Columbia". G.S.C. Memoir 363.
3. Preto, V.A.G. (1970) - "Geology of the Area Between Cabin Creek and Windy Mountain". Geology, Exploration and Mining, British Columbia, 1970); B.C. Department of Mines.
4. Jorgensen, N. (1975) - "BOG Property Final Report - September 1975". Engineer's Report for Cities Services Minerals Corp.
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7. Sinclair, A.J. (1972) - "BOG Project, Geological Map, August, 1972".
8. Seraphim, R.H. (1973) - "BOG claims, Friendly Lake"; Engineer's Report for Cities Services Corp.
9. Montgomery, J.H. (1978) - "Report on the Windy Mountain Copper Prospect". Engineer's Report for Commonwealth Minerals Ltd.
10. Giroux, G.H. (1979) - "Geochemical and Geophysical Report on the BOG, FRI and COM claims". Engineer's Report for Commonwealth Minerals Ltd.

MIN-EN Laboratories Ltd.

705 WEST 15th STREET,
NORTH VANCOUVER, B.C., CANADA V7M 1T2
TELEPHONE (604) 980-5814

ANALYTICAL REPORT

Project 80CM1 Date of report June 6/80.

File No. 0-245 Date samples received June 3/80.

Samples submitted by:

Company: Montgomery Consultants

Report on: 271 soils Geochem samples

1 Assay samples

Copies sent to:

1. Montgomery Consultants, Vancouver, B.C.

2.

3.

Samples: Sieved to mesh -80 soils Ground to mesh

Prepared samples stored discarded

rejects stored discarded geochem

Methods of analysis: Geochem-nitric, perchloric digestion.A.A.

Analysis. Assays-Acid digestion-chemical analysis.

Remarks:

SPECIALISTS IN MINERAL ENVIRONMENTS

COMPA

Montgomery Consultants

GEOCHEMICAL ANALYSIS DATA SHEET

File No. 0-245

PROJECT No.: 80CM1

MIN - EN Laboratories Ltd.

DATE: June 6,

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1980.

ATTENTION:

Sample Number	As (ppm)	Pb (ppm)	Cu (ppm)	Ni (ppm)	Co (ppm)	Ag (ppm)	Fe (ppm)	Hg (ppb)	As (ppm)	Mn (ppm)	Au (ppb)	70	75	80
LG500E	1000N	220	87			34								
	1050N	85	32			16								
	1100N	no sample				.								
	1150N	105	52			21								
	1200N	134	170			63								
	1250N	129	180			30								
	1300N	92	99			11								
	1350N	79	74			26								
	1400N	78	110			11								
	1450N	97	102			17								
	1500N	40	56			10								
	1550N	66	110			15								
	1600N	67	112			12								
	1650N	60	60			12								
	1700N	30	46			14								
	1750N	59	56			16								
	1800N	18	68			16								
	1850N	12	40			12								
	1900N	62	40			14								
	1950N	7	19			11								
LG500E	2000N	10	74			12								
LG550E	1000N	no sample				.								
LG550E	2000N	14	47			11								
LG600E	1000N	no sample				.								
	1050N	no sample				.								
	1100N	no sample				.								
	1150N	168	150			28								
	1200N	142	52			17								
	1250N	20	20			12								
LG600E	1300N	93	36			10								

CERTIFIED BY

COMP,

Montgomery Consultants

GEOCHEMICAL ANALYSIS DATA SHEET

File No. 0-245

PROJECT No.: 80CM1

MIN - EN Laboratories Ltd.

DATE: June 6,

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1980.

ATTENTION:

Sample. Number	6 % ppm	10 % ppm	15 % ppm	20 Pb ppm	25 % ppm Cu	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70	75	80
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
LG600E	1.35	N		33	27			10								
	1.40	N		101	83			11								
	1.45	N		43	88			11								
	1.50	N		145	126			13								
	1.55	N		20	73			14								
	1.60	N		140	134			16								
	1.65	N		18	35			11								
	1.70	N		32	54			13								
	1.75	N		48	64			11								
	1.80	N		18	27			18								
	1.85	N		17	61			13								
	1.90	N		10	56			11								
	1.95	N		22	55			13								
LG600E	2.00	N		15	27			15								
LG650E	2.00	N		10	43			12								
LG700E	1.15	N		113	397			68								
	1.20	N		194	305			40								
	1.25	N		90	37			10								
	1.30	N		335	130			10								
	1.35	N		55	31			12								
	1.40	N		240	65			22								
	1.45	N		158	67			12								
	1.50	N		115	46			11								
	1.55	N		119	27			09								
	1.60	N		63	35			10								
	1.65	N		735	247			68								
	1.70	N		30	55			13								
	1.75	N		16	27			11								
	1.80	N		15	25			08								
LG700E	1.85	N		44	460			10								

CERTIFIED BY

PROJECT No.: 80CM1

MIN - EN Laboratories Ltd.

DATE: June 6,

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1980.

ATTENTION:

Sample Number	6 As ppm	10 Pb ppm	15 Cu ppm	20 Pb ppm	25 Cu ppm	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70	75	80
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
LG700E	19.00N			1.0	2.7			0.9								
	19.50N			4.9	6.9			1.3								
LG700E	20.00N			1.5	4.6			1.0								
LG750E	11.00N			1.27	7.5			5.4								
LG750E	20.00N			1.2	1.8			0.9								
LG800E	11.00N			no sample				.								
	11.50N			4.28	7.2			5.4								
	12.00N			2.42	7.8			3.2								
	12.50N			1.27	5.3			1.6								
	13.00N			1.15	3.4			1.0								
	13.50N			8.9	6.7			1.7								
	14.00N			1.00	3.7			1.7								
	14.50N			6.7	3.1			1.4								
	15.00N			6.6	2.4			1.2								
	15.50N			6.2	6.7			1.2								
	16.00N			5.34	6.3			3.1								
	16.50N			1.22	9.2			2.0								
	17.00N			2.96	36.7			2.8								
	17.50N			1.12	9.3			2.5								
	18.00N			7.3	3.9			2.0								
	18.50N			5.3	3.4			1.2								
	19.00N			9.2	8.6			1.2								
	19.50N			6.6	3.6			2.2								
LG800E	20.00N			3.0	4.0			1.9								
LG850E	20.00N			1.78	3.0			1.8								
LG900E	10.00N			6.5	10.2			2.5								
	10.50N			5.7	7.8			1.1								
	11.00N			4.0	25.3			2.5								
	11.50N			2.7	19.6			2.1								
LG900E	12.00N			7.7	13.9			1.0								

CERTIFIED BY:

COMPACT

Montgomery Consultants

GEOCHEMICAL ANALYSIS DATA SHEET

File No. 0-245

PROJECT No.: 80CM1

MIN - EN Laboratories Ltd.

DATE: June 6,

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1980.

ATTENTION:

Sample. Number	6 As ppm	10 Pb ppm	15 Cu ppm	20 Pb ppm	25 Cu ppm	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70	75	80
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
LG900E	1.25	N		8.0	10.6			1.2								
	1.30	N		7.4	18.6			2.5								
	1.35	N		7.2	1.75			1.8								
	1.40	N		3.4	3.9			1.1								
	1.45	N		4.4	5.7			1.4								
	1.50	N		6.0	32.9			0.9								
	1.55	N		1.55	14.0			2.8								
	1.60	N		1.90	6.8			2.0								
	1.65	N		6.9	2.5			1.2								
	1.70	N		6.5	2.2			1.4								
	1.75	N		5.2	5.4			0.8								
	1.80	N		7.6	3.3			1.2								
	1.85	N		8.5	2.4			1.2								
	1.90	N		5.0	4.5			0.9								
	1.95	N		5.1	2.0			1.2								
LG900E	2.00	N		1.79	7.8			1.5								
LG950E	1.00	N		7.5	36.6			4.3								
LG950E	2.00	N		5.0	8.5			0.9								
LG1000E	1.00	N		7.0	17.3			1.3								
	1.05	N		6.7	30.9			4.1								
	1.10	N		6.9	1.90			2.5								
	1.15	N		8.6	28.8			2.7								
	1.20	N		4.4	8.3			1.0								
	1.25	N		4.7	31.0			2.6								
	1.30	N		5.2	7.3			1.2								
	1.35	N		5.6	5.3			1.4								
	1.40	N		5.0	12.3			1.1								
	1.45	N		4.3	8.2			1.3								
	1.50	N		5.7	5.8			1.8								
LG1000E	1.55	N		1.00	12.6			1.9								

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GEOCHEMICAL ANALYSIS DATA SHEET

File No. 0-245

PROJECT No.: 80CM1

MIN - EN Laboratories Ltd.

DATE: June 6, 1980.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

ATTENTION:

Sample. Number	6 10 86 90	15 95	20 100	25 105 Cu	30 110	35 115	40 120	45 125	50 130	55 135	60 140	65 145	70 150	75 155	80 160
	Mo ppm	Pb ppm			Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb			
CG100E	1200N		142	177			42								
	1250N		67	163			19								
	1300N		84	160			11								
	1350N		39	50			20								
	1400N		25	26			12								
	1450N		21	31			10								
	1500N		20	27			09								
	1550N		43	230			48								
	1600N		112	126			19								
	1650N		90	64			24								
	1700N		78	74			20								
	1750N		38	58			11								
	1800N		47	107			19								
	1850N		83	35			16								
	1900N		91	78			18								
	1950N		26	14			10								
CG100E	2000N		86	49			11								
CG200E	1200N		28	120			16								
	1250N		55	170			18								
	1300N		42	177			23								
	1350N		65	187			31								
	1400N		70	171			21								
	1450N		9	96			14								
	1500N		68	126			23								
	1550N		62	74			21								
	1600N		36	40			13								
	1650N		50	176			25								
	1700N		75	336			53								
	1750N		89	337			28								
CG200E	1800N		56	40			15								

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GEOCHEMICAL ANALYSIS DATA SHEET

File No. 0-245

PROJECT No.: 80CM1

MIN - EN Laboratories Ltd.

DATE: June 6,

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1980.

ATTENTION:

Sample. 6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
Number	ppm	ppm	Pb ppm	Cu ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb				
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
CG200E	1850N		41	33				11								
	1900N		50	37				16								
CG200E	1950N		32	48				13								
CG250E	1200N		44	150				21								
CG300E	1200N		36	76				13								
	1250N		58	203				26								
	1300N		36	72				14								
	1350N		55	116				17								
	1400N		42	70				23								
	1450N		92	260				32								
	1500N		50	133				28								
	1550N		94	300				30								
	1600N		143	222				37								
	1650N		102	465				24								
	1700N		120	102				16								
	1750N		165	280				36								
	1800N		144	280				24								
	1850N		147	195				20								
	1900N		94	71				14								
CG300E	1950N		75	73				13								
CG400E	1200N		26	67				12								
	1250N		14	46				08								
	1300N		26	75				13								
	1350N		66	157				29								
	1400N		60	235				27								
	1450N		56	130				14								
	1500N		86	278				21								
	1550N		63	356				26								
	1600N		42	304				24								
CG400E	1650N		122	660				47								

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File No. 0-245

PROJECT No.: 80CM1

MIN - EN Laboratories Ltd.

DATE: June 6,

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1980.

ATTENTION:

Sample Number	6 10 ppm	15 Cu ppm	20 Pb ppm	25 Cu ppm	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70	75	80	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
CG400E	17.00	N	84	209			12									
	17.50	N	56	85			09									
	18.00	N	60	76			13									
	18.50	N	46	26			10									
	19.00	N	30	33			09									
CG400E	19.50	N	48	86			12									
CG450E	12.00	N	20	61			13									
CG500E	12.00	N	22	59			12									
	12.50	N	20	44			10									
	13.00	N	27	67			10									
	13.50	N	120	58			14									
	14.00	N	48	190			24									
	14.50	N	19	34			12									
	15.00	N	79	227			31									
	15.50	N	46	190			18									
	16.00	N	72	204			22									
	16.50	N	76	326			51									
	17.00	N	82	277			39									
	17.50	N	88	180			21									
	18.00	N	35	38			17									
	18.50	N	30	11			13									
	19.00	N	36	36			12									
CG500E	19.50	N	66	92			19									
CG600E	12.00	N	28	56			09									
	12.50	N	47	171			22									
	13.00	N	48	155			26									
	13.50	N	30	57			12									
	14.00	N	45	126			18									
	14.50	N	8	34			1.1									
CG600E	15.00	N	9	52			0.8									

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GEOCHEMICAL ANALYSIS DATA SHEET

File No. 0-245

PROJECT No.: 80CM1

MIN - EN Laboratories Ltd.

DATE: June 6,

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1980.

ATTENTION:

Sample Number	6 Co ppm	10 Zn ppm	15 Sr ppm	20 Pb ppm	25 Zn ppm Cu	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70	75	80
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
CG600E	15.50	N		5.8	22.5			2.9								
	16.00	N		4.4	25.5			2.6								
	16.50	N		7.6	17.9			1.5								
	17.00	N		2.2	14.6			1.3								
	17.50	N		3.7	6.6			1.6								
	18.00	N		7.9	24.5			3.0								
	18.50	N		5.3	4.3			1.4								
	19.00	N		6.2	8.2			1.4								
CG600E	19.50	N		8.9	15.4			2.6								
CG650E	12.00	N		3.2	7.4			1.3								
CG50E	12.00	N		3.8	18.3			3.8								
CG50E	20.00	N		1.40	13.5			1.9								
CG0E	12.00	N		5.3	16.8			2.2								
	12.50	N		2.8	4.1			1.1								
	13.00	N		2.1	2.6			0.9								
	13.50	N		4.6	16.4			2.4								
	14.00	N		4.6	10.0			3.2								
	14.50	N		7.8	4.95			7.2								
	15.00	N		1.38	17.4			3.1								
	15.50	N		8.4	17.5			1.6								
	16.00	N		7.2	16.0			2.2								
	16.50	N		7.2	9.6			1.4								
	17.00	N		7.7	7.4			1.5								
	17.50	N		4.9	2.9			0.9								
	18.00	N		1.96	11.5			1.2								
	18.50	N		4.1	2.0			0.9								
	19.00	N		8.7	9.2			1.5								
	19.50	N		5.4	5.4			1.7								
CG0E	20.00	N		5.5	5.7			1.3								
CG2000	N1.50	E		9.7	7.2			1.3								

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ATTENTION:

Sample Number	6	10	15	Pb	Zn	Ni	Co	Ag	Fe	Hg	As	Mn	Au	70	75	80	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb				
	81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
CG2000	N200E			62	51				16								
	250E			45	77				15								
	300E			34	42				09								
	350E			42	33				12								
	400E			80	57				14								
	450E			68	59				14								
	500E			38	30				16								
	550E			68	129				16								
	600E			58	63				15								
	650E			44	32				12								
CG2000	N700E			22	34				10								
CG700E	1200N			41	68				10								
	1250N			28	59				14								
	1300N			25	54				13								
	1350N			61	143				21								
	1400N			42	66				19								
	1450N			40	75				20								
	1500N			39	96				15								
	1550N			28	120				16								
	1600N			44	175				36								
	1650N			52	500				31								
	1700N			41	104				13								
	1750N			43	46				13								
	1800N			50	49				12								
	1850N			30	57				10								
	1900N			26	41				12								
CG700E	1950N			34	79				13								

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COMMONWEALTH MINERALS LIMITED
BOG PROJECT

GEOLOGY MAP -
AFTER A. J. SINCLAIR, 1972

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8147

SCALE IN FEET
0 100 200 300 400 500 600 700 800 900 1000

MONTGOMERY CONSULTANTS LIMITED JUNE 1980



GEOLOGY

NIOBA (MAINLY PYROCLASTICS)	
N10	Fine Grained to Aphritic Tuffs (sometimes basaltic), (T)
N11	Niob. Breccia to Agglomerate, i.e. fragmental
N12	Augite Porphyry
N13	Augite / Plagioclase Porphyry
N14	Plagioclase Porphyry
N15	Undifferentiated Niobite
STOCKWORK DYKES	
S24	Syenite (s.g. pink) - out to barren dyk. / hornblende seam, (C.S.)
S25	Melanophite - grayish silt. containing K-spar crystals, (M)
S26	Syenite, (D)

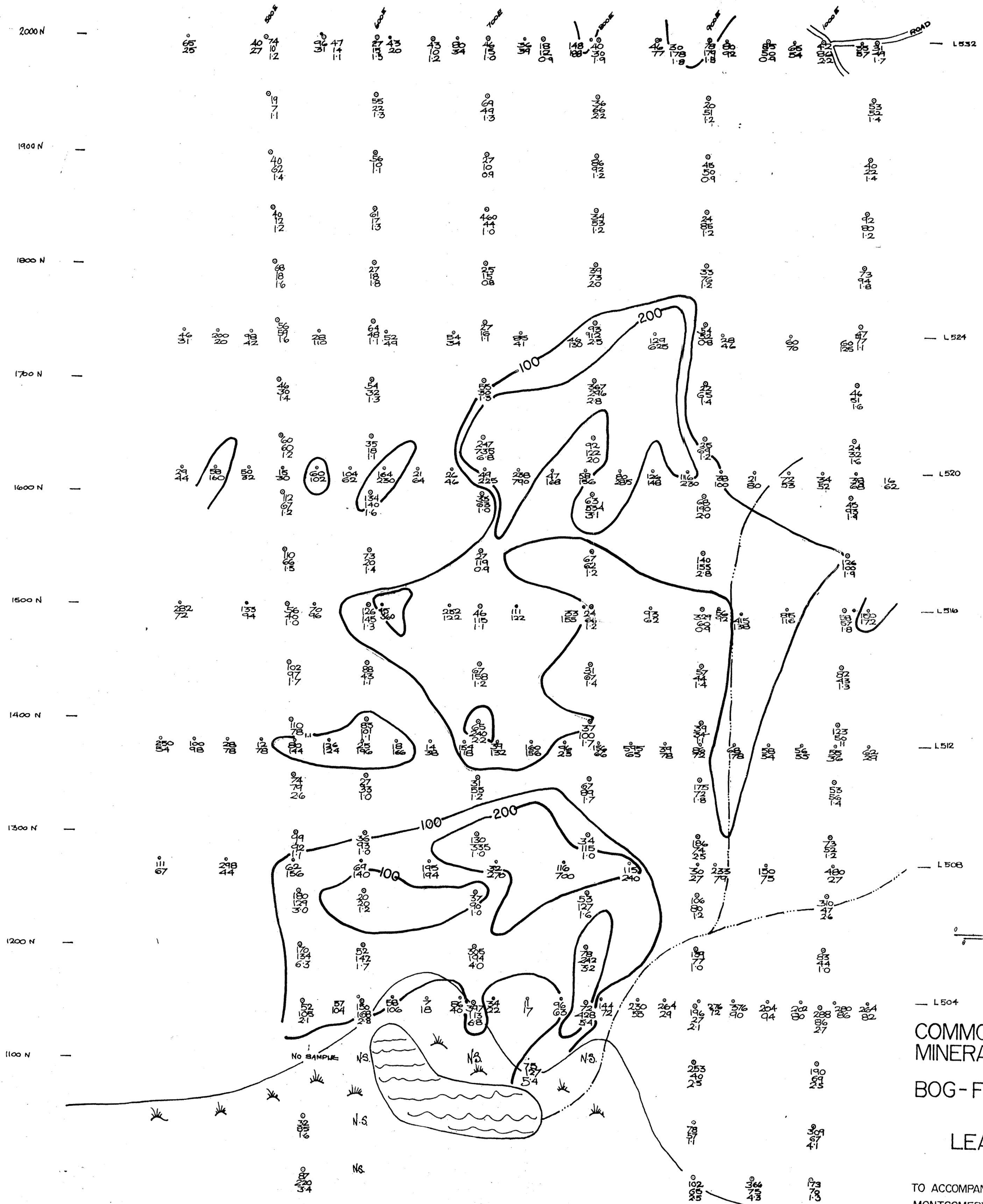
SHOWINGS

Cp	Chrysophyllite	B	Biotite (P) silt. / rest of Tuffa
Pv	Pyrite	A	Aphanite or Calcite / Pyrite, rusty weathering
Gn	Gaioisite	F	Blue seleniferous Amphibole (Fusuristasterite)
Mq	Magnetite	S	Chalcocopyrite
Cc	Chalcocite	Q	Chert
Mw	Muscovite	C	Carbonate in Matrix
As	Asurite	R	Rusty envelopes around ore veins
Pc	Pyrox / Calcite	SPC	Sphenoidal Hematite
PC	Pyrox / Calcite	P	Pyrite seams
K	K-spar in matrix	H	Hornblende

SYMBOLS

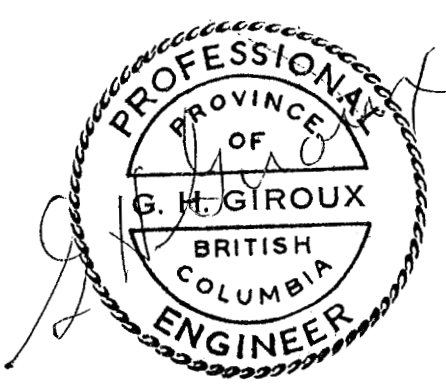
THIN TRENCH	
N/O	NO OUTCROP
○	OUTCROP
○	NEAR O/C OR HURBLE
○	ANGULAR FLOT
○	ERRATICS (loss; uncertain)

L 420 N



45 Cu
 39 Pb
 45 Cu
 39 Pb
 2.4 Ag
 ppm
 CITIES SERVICES LTD. 1974
 COMMONWEALTH MINERALS LTD. 1980

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
8147
 NO.

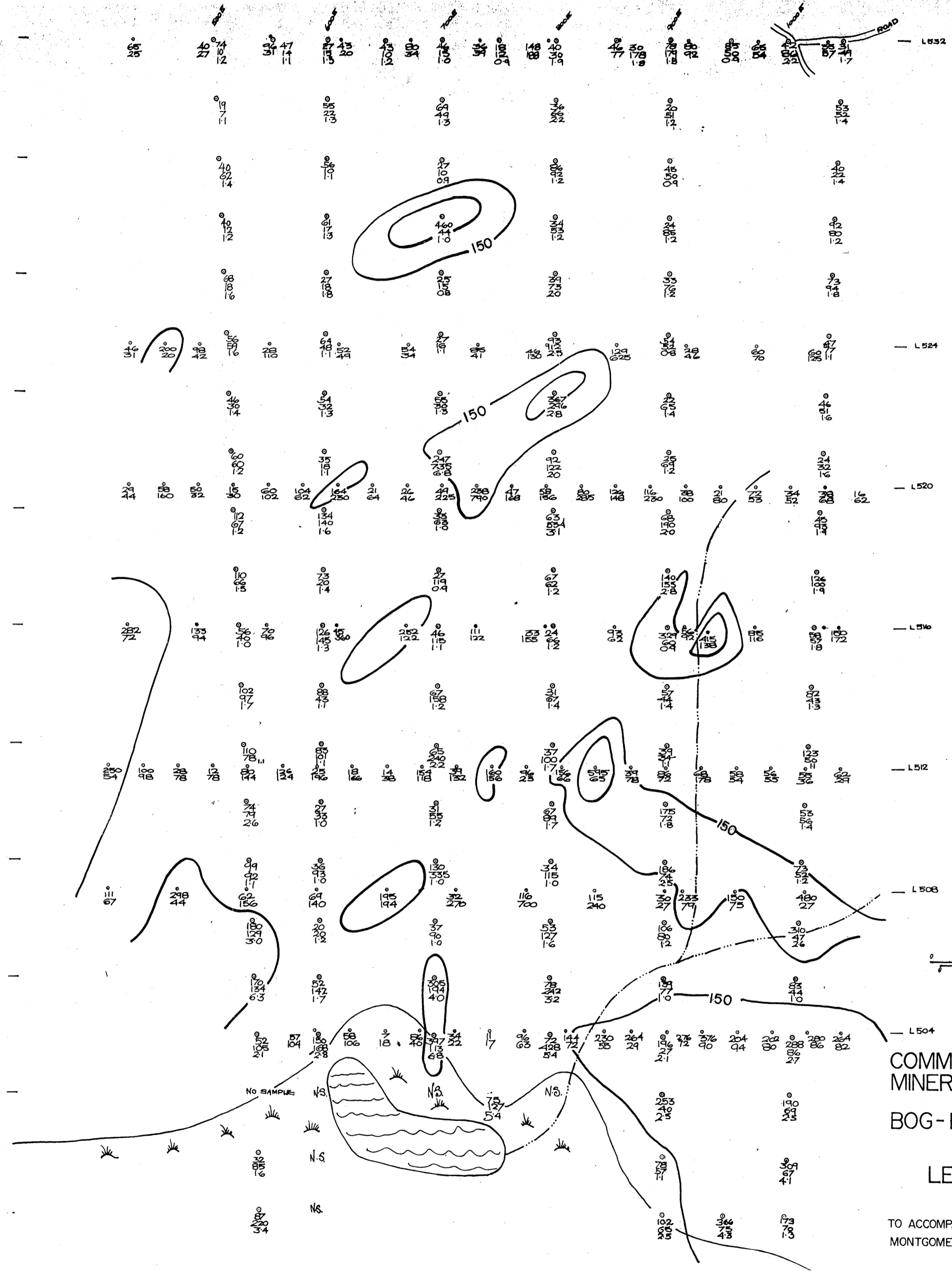


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 MINERALS LIMITED
 BOG-FRI CLAIMS
 LEAD GRID

FIG. 10
 LEAD
 < 100 ppm
 > 200 ppm

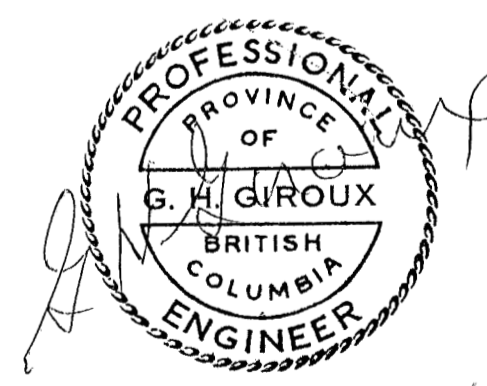
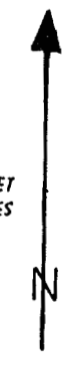
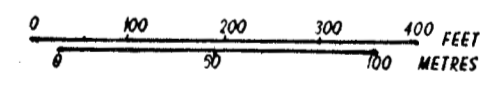
TO ACCOMPANY REPORT BY G.H. GIROUX
 MONTGOMERY CONSULTANTS LIMITED
 JUNE 1980

2000 N
1900 N
1800 N
1700 N
1600 N
1500 N
1400 N
1300 N
1200 N
1100 N



45 Cu
39 Pb
2.4 Ag ppm
CITIES SERVICES LTD. 1974
COMMONWEALTH MINERALS LTD. 1980

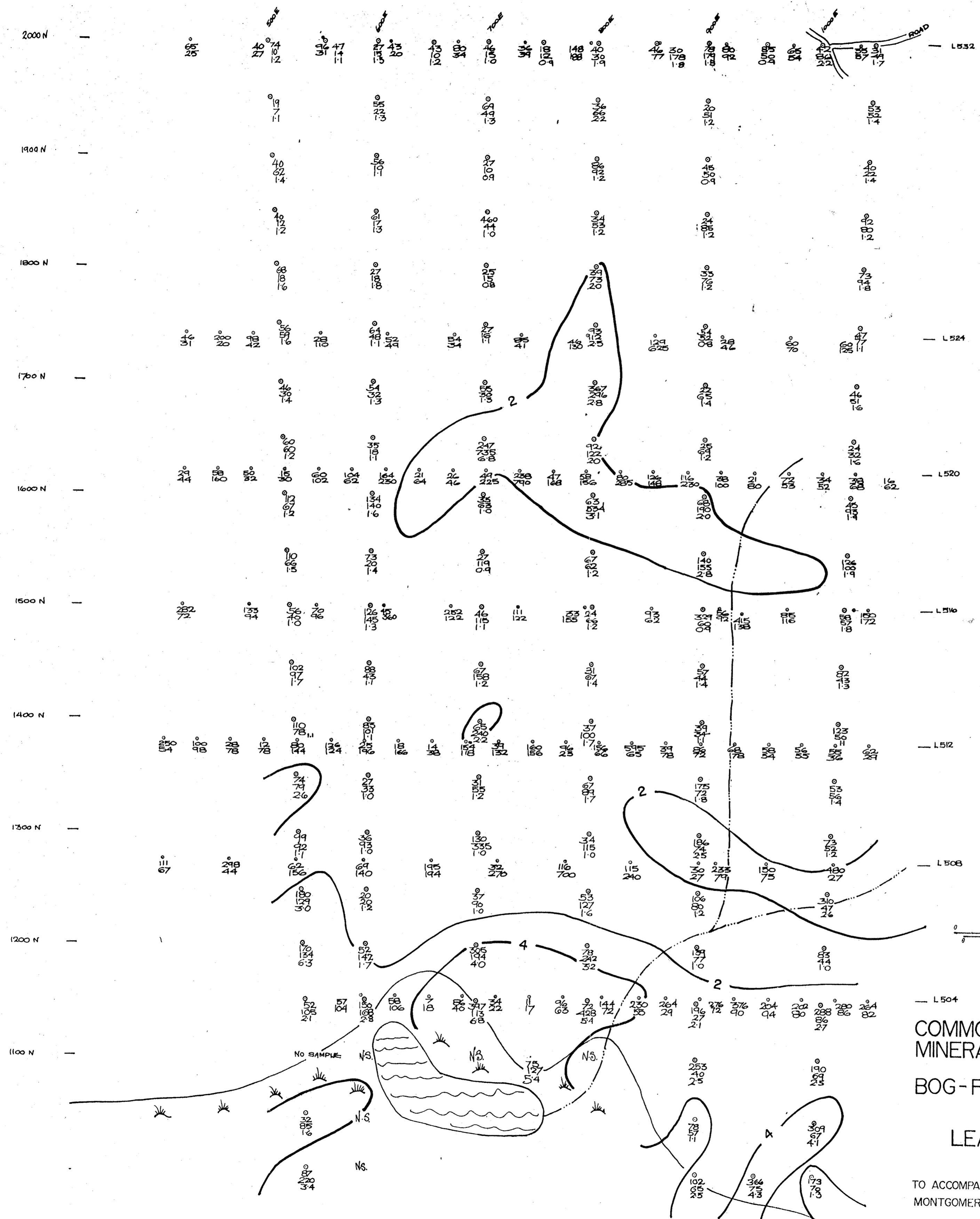
MINERAL RESOURCES BRANCH
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NO.



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FIG. II
COPPER
∠ 150 ppm
∇ 350 ppm

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45 Cu
 39 Pb
 2.4 Ag
 ppm
 COMMONWEALTH MINERALS LTD. 1980

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
8147
 NO. _____

COMMONWEALTH
 MINERALS LIMITED
 BOG-FRI CLAIMS
 LEAD GRID

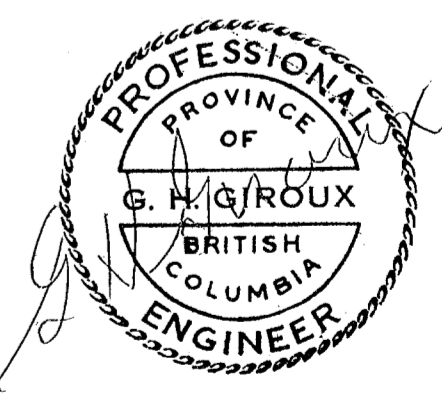
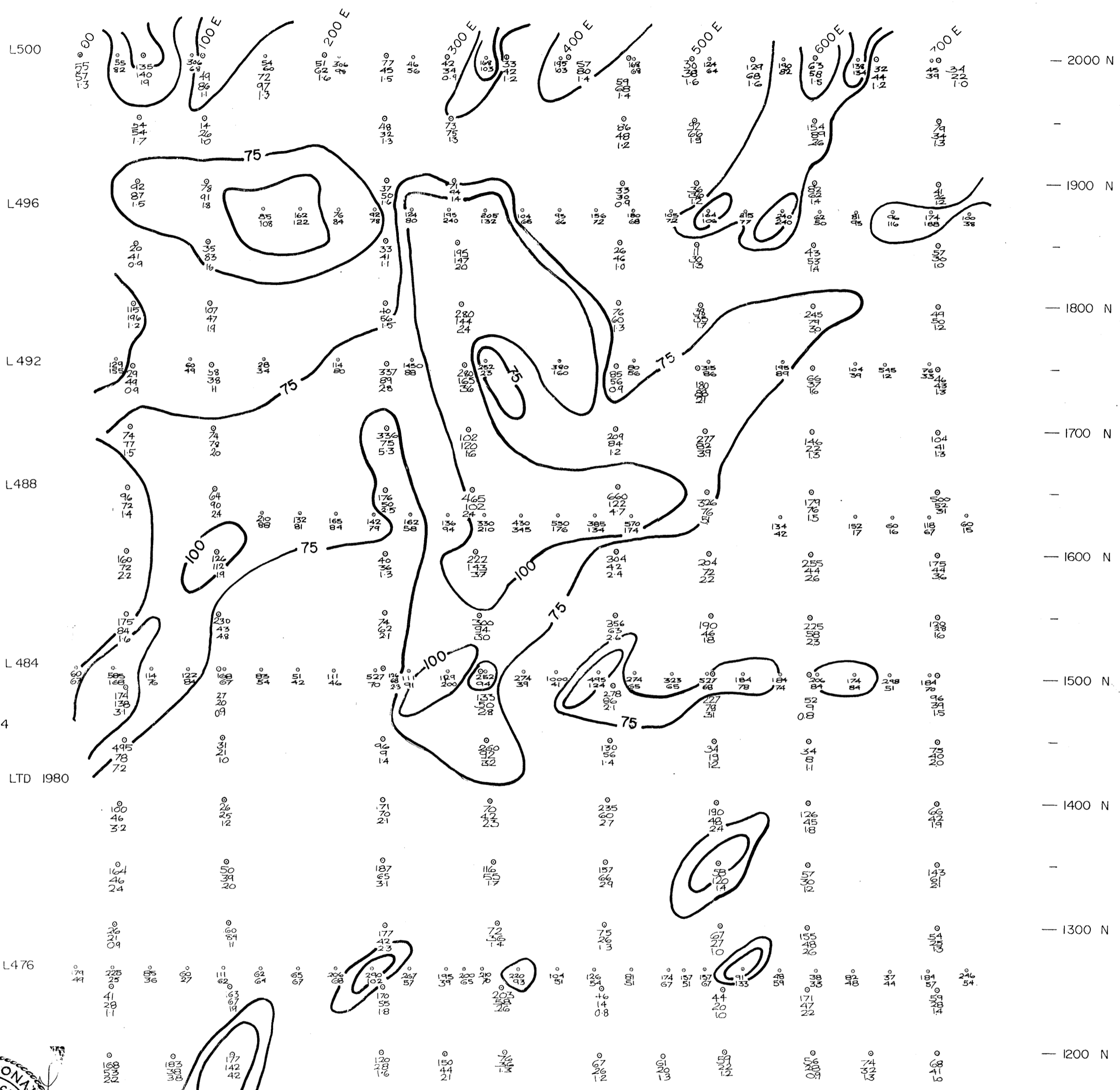


FIG. 12
 SILVER
 < 2 ppm
 > 4 ppm

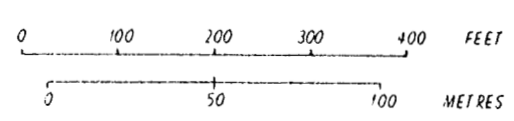
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 JUNE 1980



45 Cu ppm
 72 Pb ppm
 CITIES SERVICES LTD. 1974
 45 Cu ppm
 78 Pb ppm
 11 Ag ppm
 COMMONWEALTH MINERALS LTD 1980

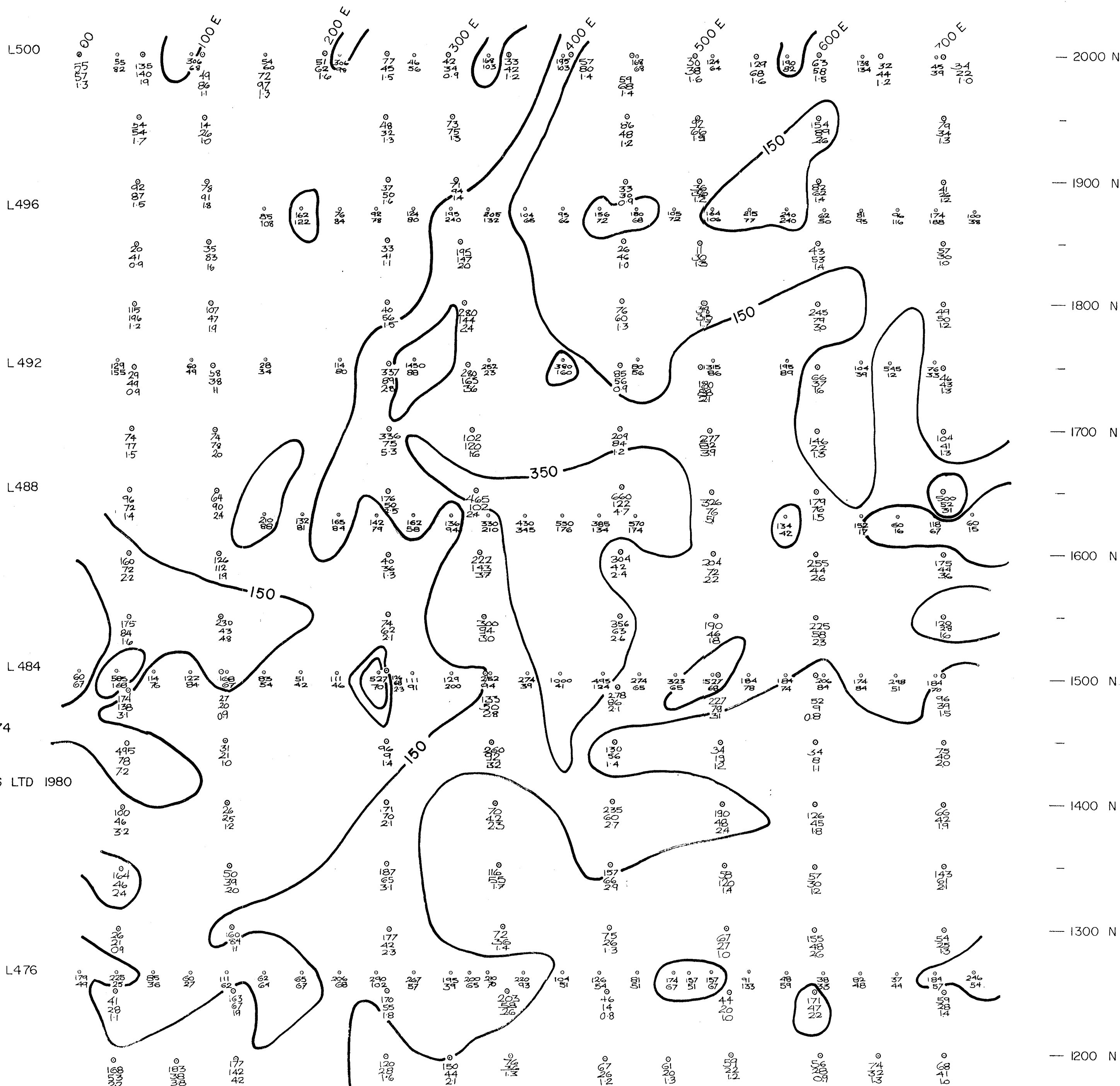
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FIG. 13
 LEAD
 Δ 75 ppm
 Δ 100 ppm



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 BOG-FRI CLAIMS
 COPPER GRID
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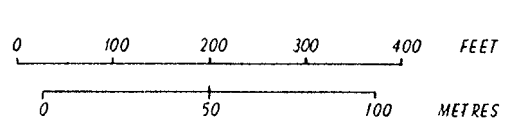
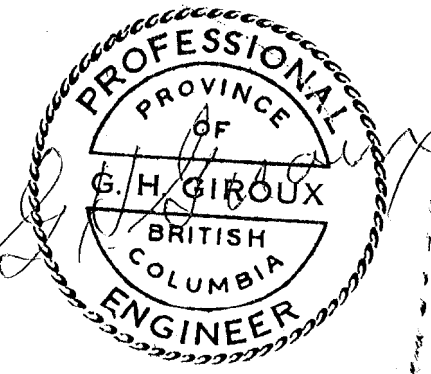
JUNE 1980



45 Cu ppm
 72 Pb ppm
 CITIES SERVICES LTD. 1974
 45 Cu ppm
 78 Pb ppm
 1.1 Ag ppm
 COMMONWEALTH MINERALS LTD 1980

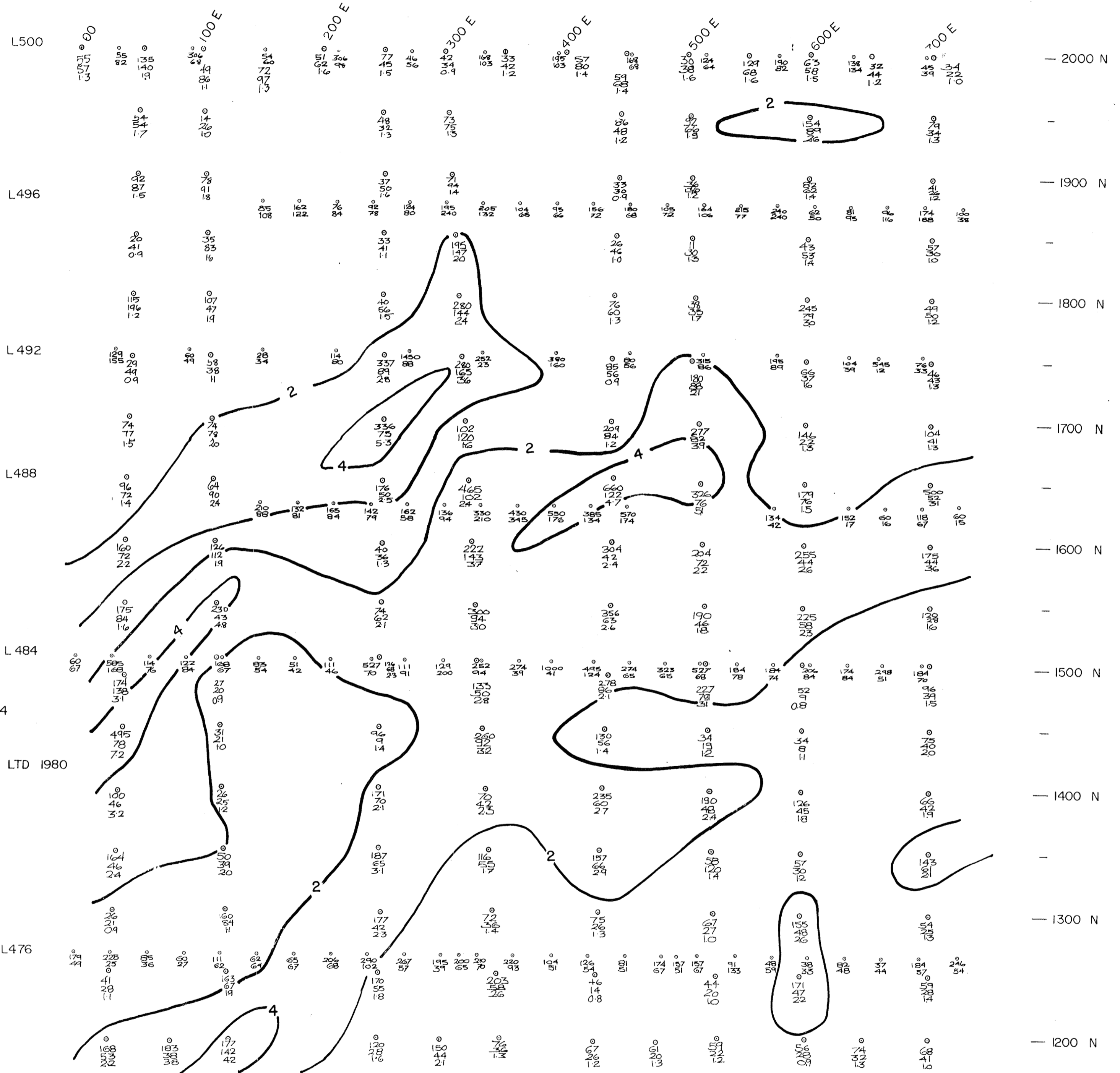
MINERAL RESOURCES BRANCH
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 NO.

FIG. 14
 COPPER
 \triangle 150 ppm
 ∇ 350 ppm



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 BOG-FRI CLAIMS
 COPPER GRID

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 MONTGOMERY CONSULTANTS LTD.

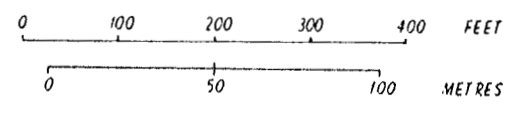


45 Cu ppm
72 Pb ppm
CITIES SERVICES LTD. 1974

78 Cu ppm
111 Pb ppm
COMMONWEALTH MINERALS LTD 1980

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8147
NO. _____

FIG. 15
SILVER
△ 2 ppm
▽ 4 ppm



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COPPER GRID

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