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ASSESSMENT REPORT

GEOCHEMICAL REPORT

BASNETT, BOFFO, DAVE'S DELIGHT,  
AND DOG FR. MINERAL CLAIMS

FINLAY RIVER AREA  
OMINECA MINING DIVISION

LATITUDE 57°21' N  
LONGITUDE 126°09' W  
N.T.S. AREA 94E/8E

OWNER AND OPERATOR: SEREM LTD.

WORK COMPLETED BETWEEN JULY 21, 1980 AND AUGUST 4, 1980

AUTHOR: W.J. WILKINSON, B.Sc.

DECEMBER 15, 1980

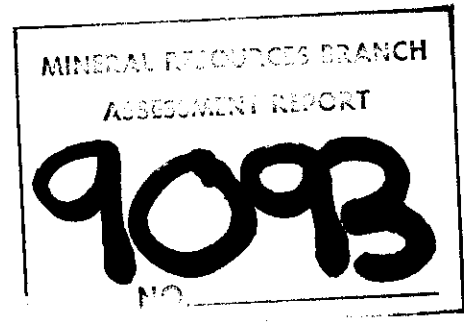


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## INTRODUCTION

In July and August, 1980, Serem Ltd. conducted field-work on the Basnett, Boffo, Dave's Delight and Dog Fr. mineral claims, consisting primarily of line cutting and grid soil sampling.

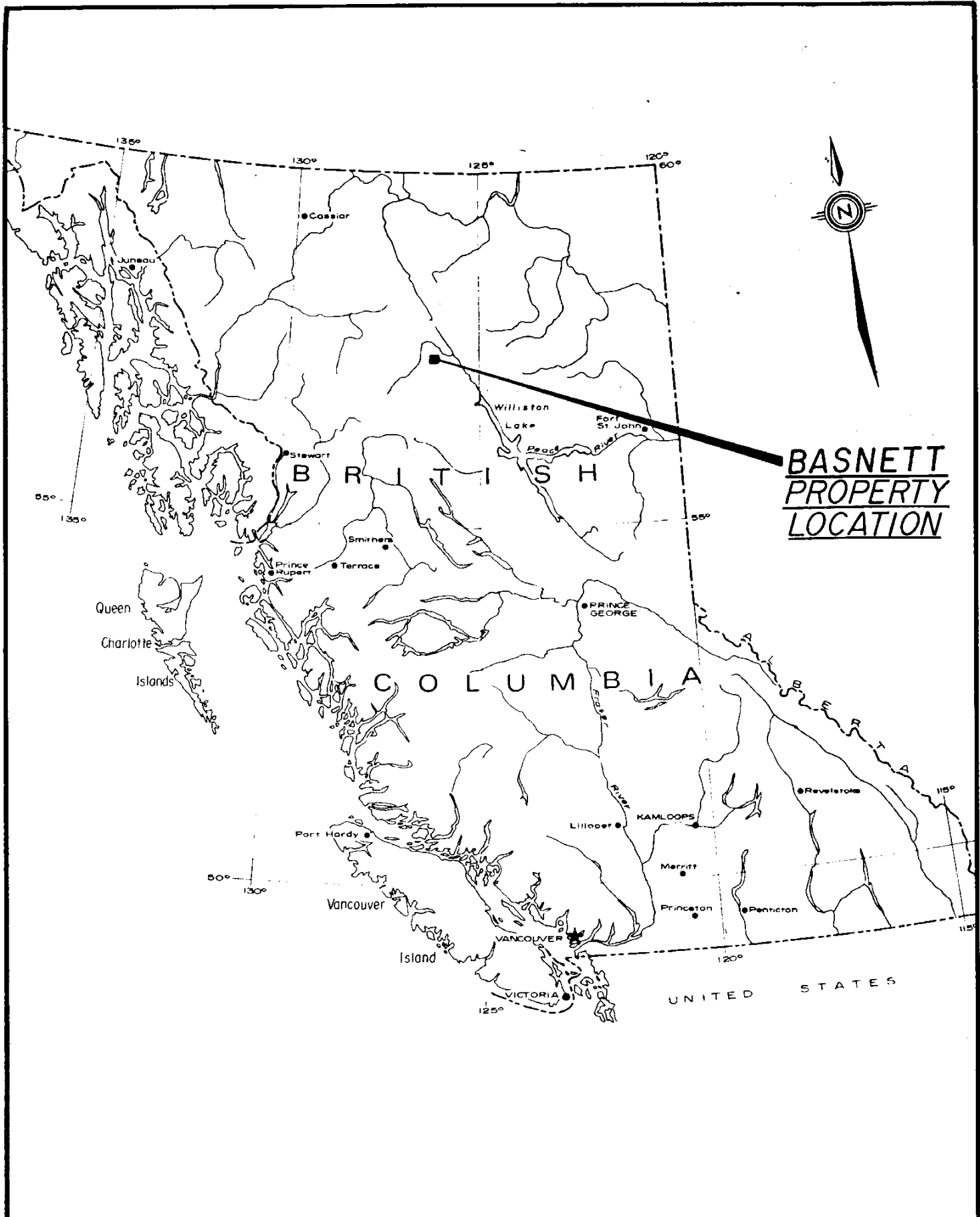
### i. Location and Access

The Basnett prospect is located on the north side of an easterly-flowing tributary of Bower Creek, approximately 32 kilometres west of Ware, at latitude  $57^{\circ}21'$  N, longitude  $126^{\circ}09'$  W, N.T.S. map designation 94E/8E.

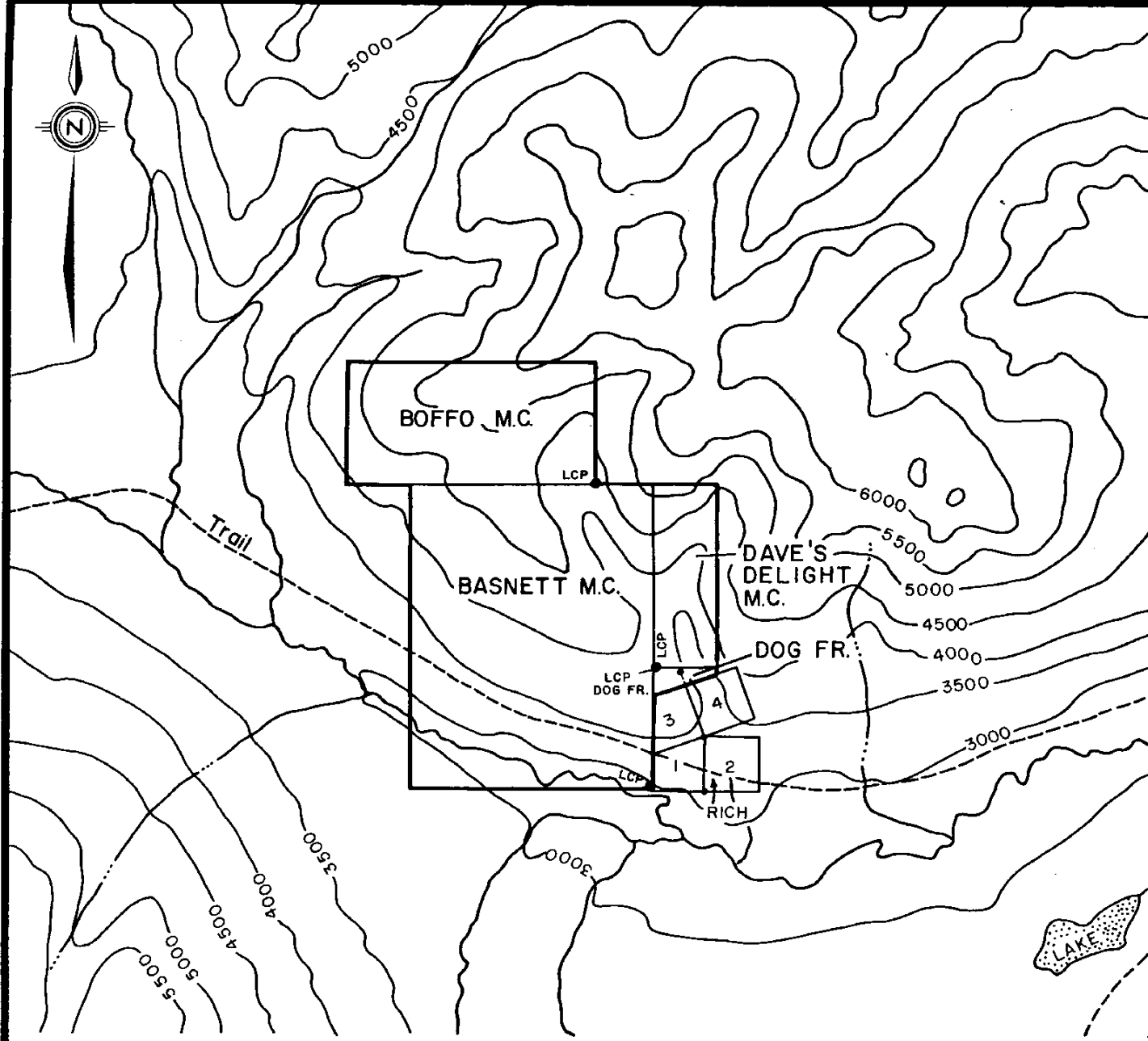
A horse-trail crosses the property, but for practical purposes access is limited to helicopter. Forest access road construction along the west shore of Williston Lake will eventually enter this area. The program was mobilized from Serem's base camp on the Lawyers property, 62 kilometres west of the claims, where a charter helicopter was available, and from where access was possible from Smithers via fixed wing aircraft to the Sturdee River Airstrip, situated just 14 kilometres southeast of the Lawyers base camp.

### ii. Topography

The claims occupy slopes rising at moderate grades from the fairly broad and flat Bower Creek tributary valley. A prominent northwest-oriented ridge runs across the claims. The terrain is fairly even, but steep slopes and rock bluffs are present along several small streams draining the area. Relief is in the order of 750 metres. The valley floor is at about 900 metres above sea level, and the ridges rise toward the north to over 1700 metres above sea level. Overburden cover does not appear to be deep, but exposed rock constitutes less than 5% of the surface.



<b>SEREM LTD.</b>		<b>LOCATION MAP—BASNETT PROP.</b>		<b>FIGURE ONE</b>
FILE NO.				
APR. 6/81-r.w.r.				REPORT NO.
DRAWN: ALTAR, DGD				



<b>S.E.R.E.M. LTD.</b>			
PROJECT: <b>SELWYN REGIONAL</b>			
TITLE: <b>BASNETT, BOFFO, DAVE'S DELIGHT &amp; DOG FR. M.C. CLAIM MAP</b>			
<b>NTS 94E /8E</b>	DATA: W.J.W.	DRAWN - r.w.r	<b>FIGURE 2</b>
	CHECKED -	DATE - APR. 6/1981	
	SCALE 1 : 50,000 		

The area is heavily forested with spruce, balsam and pine. The ridge has been partially burned off, and young evergreens have since grown to heights of 3-5 metres in the burnt areas.

### iii. Property Definition

The Serem claims are located over an old prospect discovered by Emil Bronlund while prospecting for the Consolidated Mining and Smelting Company in 1927; exploration was carried out through 1930. Nithex Exploration and Development Ltd. and David Minerals Ltd. held claims here in 1972, and did some soil sampling, trenching and 45 metres of diamond drilling in one hole. No records of this work are known to the writer.

Serem Ltd. located the 20-unit "Basnett" claim on March 2, 1980. Four 2-post claims (Rich 1-4) were located immediately east of the Basnett claim shortly thereafter, by another party. In July and August of 1980, Serem conducted field work on the property, and located an additional 12 units in 3 claims. Mineral claims currently held by Serem are as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>No. of Units</u>	<u>Date Recorded</u>
Basnett	2660	20	March 26, 1980
Boffo	3170	8	September 3, 1980
Dave's Delight	3172	3	September 3, 1980
Dog Fraction	3171	1	September 3, 1980

### iv. Economic Assessment of Property

No mineralization of economic potential is known. Numerous lead-zinc-copper showings were previously exposed by trenching, and there appears to be significant potential for the existence of massive sulphide lenses on the claims.

v. Work Summary

A 3 kilometre base-line was cut on the Basnett mineral claim, and 15.75 line kilometres were soil sampled (337 samples). The claims and grid were tied in by string-chain and compass.

vi. Claims Worked On

The majority of work was done on the Basnett mineral claim.

vii. Purpose of Project

The 1980 field work was intended to provide an assessment of the potential of this property through grid soil sampling and a brief examination by the writer.

GEOLOGY

Rocks on the claims are divisible into two fundamental groups - phyllite and calcareous shales near the east and northeastern margins of the claims, and soft schists and limestone toward the west. A fault contact may separate the two along the creek which roughly parallels the eastern claim boundary. Exposed along this creek are several outcrops of dolomite with a prominent quartz stockwork, and quartz-calcite breccia.

The schists are generally light grey to green, and range from calcareous to non-calcareous. Two units were readily distinguished in the field: Sericite schist - foliated, buff-orange, extremely soft and non-resistant, highly sericitized schist with or without quartz; and "Greenschist" - foliated, grass green, moderately soft (but comparatively resistant), highly chloritized quartz schist. Massive grey limestone beds or lenses are associated with the schists.

These schists are relatively well exposed along the top of the central ridge, and locally along the west bank of the aforementioned creek. They are the main object of interest inasmuch as they are host to all of the sulphide mineralization observed. The schists appear to represent several discrete units, but interrelationships are obscured by lack of outcrop and strong structural deformation.

The schists have undergone very tight folding, with most schistosity (and probably bedding) striking N 60° W and dipping very steeply.

Numerous showings are present in old trenches scattered across the property. These generally consist of lensoid quartz-calcite bodies, bounded by narrow, discrete bands of galena, chalcopyrite and sphalerite, occurring within the "greenschist" and sericite schist.

#### LINE CUTTING

Contract line-cutters were employed to cut a base-line for 3,000 metres along the northwest ridge crossing the claims. This base line is oriented at N 35° W, and was chained and picketed at 50 metre intervals.

#### GEOCHEMISTRY

##### i. Sampling Methods

Sampling lines were run perpendicular to the base line and were run using compass and string-chain for control. Line spacing was 250 metres except for the interval 10+00S to 20+00S, where line spacing was reduced to 200 metres. The lines were flagged and stations were labelled with grid co-ordinates. Samples were taken at 50 metre



intervals along the lines. The lines were run out to the east as far as the creek (approximately 4+00E), and to 5+00W. Lines 0+00S and 10+00S were extended to 15+00W as a reconnaissance probe. Lines 20+00S through 30+00S were extended as far west as the valley floor.

Samples were collected from the "B" soil horizon at a depth of 10-20 centimetres, using an iron mattock or shovel to first dig a hole, then placing a sample in a high wet-strength Kraft paper sample bag.

ii. Analytical Procedures

Samples were submitted to Min-En Laboratories Ltd., 705 West 15th Street, North Vancouver, B.C., for analysis for lead, zinc, copper and silver.

The samples were dried at 95<sup>o</sup> Celsius and sieved, retaining the -80 mesh fraction. A 1.0 gram portion was digested (6 hours) with a HNO<sub>3</sub>-HClO<sub>4</sub> mixture. This was then cooled, diluted to a standard volume, and analysed by Atomic Absorption Spectrophotometer. The results reported are not background-corrected.

iii. Interpretation of Results

Results of the sampling program are plotted on the accompanying plans (in pocket). Geochemical response was generally weak; many mineralized showings were not reflected in the data.

(a) Copper

Copper values ranged from 5 ppm to 245 ppm. Background value is very low, 5-40 ppm, with only six strongly anomalous values (greater than 100 ppm). Anomalous response from 10+00S to 14+00S may be related to anomalous zinc extending toward the northwest.

(b) Zinc

Zinc values ranged from 10 ppm to 1,450 ppm, with the greatest portion in the background range from 10-60 ppm. Anomalous values were contoured at 100 ppm and 200 ppm.

One strong anomaly is defined, immediately west of the base line between 0+00S and 7+50S, which is up to 200 metres in width. Steep westerly slopes prevail, so the anomaly probably has a strong downslope component. The area is at least partially underlain by calcareous schists and quartz-chlorite schist. Sulphide float was noted on strike with the anomaly, 100 metres north of the 0+00S line. Anomalous lead coincides with the centre of the zinc anomaly.

A weaker zinc anomaly occurs along the creek bounding the grid to the east, from 16+00S to 20+00S. Several isolated high values occur along the west side of the grid which may warrant further geochemical investigation.

(c) Lead

Lead values ranged from 2 to 228 ppm, with background values in the range from 2-60 ppm. Anomalies were contoured at 100 ppm. Four isolated sample sites yielded values over 100 ppm. Anomalous values on 3 lines, 2+50S, 5+00S, 7+50S, coincide with the zinc anomaly.

(d) Silver

Silver values range from 0.3 to 2.2 ppm, but there are no anomalous zones clearly evident in the data. Three samples of 2.0 ppm and better are isolated across the grid.

iv. Discussion of Results

Geochemical response seems quite low in view of the numerous mineral occurrences scattered across the area sampled. Some mineralization (e.g. Dog Fr. area) yielded no response whatever. Copper response at 10+00S, 50+00W, is probably related to a small, trenched exposure of chalcopyrite in rusty sericite schist just uphill.

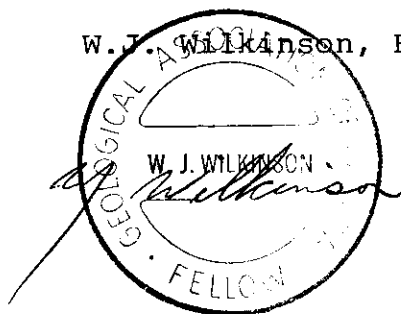
It seems probable that anomalous areas are related to underlying sulphides, and more detailed investigation (soil sampling, prospecting and electromagnetic surveys) is justified across these areas.

CONCLUSIONS

This property has considerable potential for the eventual discovery of massive sulphides of economic dimensions. Soil sampling has indicated several areas of considerable promise, but seems fallible in that several substantial sulphide occurrences were not detected geochemically.

Further work is justified, including prospecting and geological mapping, linecutting, soil sampling, and an electromagnetic survey (VLF-EM).

W. J. Wilkinson, B.Sc.



APPENDIX I  
ITEMIZED COST STATEMENT

Wages:

Employee	Position	Wages Day Rate	Days Worked	Field Days	Total Paid
D. Price	Sampler	\$100	July 30-Aug. 4	6	\$ 600.00
D. Dolsen	Technician/ Sampler	\$ 80	July 30-Aug. 3	5	400.00
G. Miles	Sampler	\$ 50	July 30-Aug. 4	6	300.00
W. Wilkinson	Supervisor/ Geologist	\$185	July 30-Aug. 3	5	925.00
"	(Office com- pilation)	\$185	Aug. 18-20		555.00
Totals				22	\$2,780.00

Allocated Camp Costs:

		<u>Per Man Day</u>	
	Food	\$10.80	
	Expediting	3.00	
	Fixed Wing Support	<u>13.20</u>	
		\$27.00	
Serem Crew:	22 Man days (see above)	@ \$27.00	\$ 594.00
Line cutters:	8 Man days (July 21-24)	@ \$27.00	\$ 216.00

Helicopter Charters:

Viking Helicopters (Hughes 500 D, C-GRV):

July 30	2:00 hours	
August 1	0:45 "	
August 3	0:50 "	
August 4	0:45 "	
July 21	0:40 "	
July 22	1:05 "	
July 23	0:30 "	
July 24	<u>1:50</u> "	
Total	8:30 hours @ \$310 + \$102 fuel	\$3,502.00

Contract Line Cutting:

McCrorry Holdings (Yukon) Ltd. Invoice, July 27/80	
for 2 line cutters, period July 21-24, 1980	\$2,173.90

Continued ...

ITEMIZED COST STATEMENT (Continued)

Assays:

337 analyses for Pb, Zn, Cu, Ag @ \$4.00	\$1,348.00	
337 sample preparations @ \$ .60	<u>202.20</u>	
(Min-En Invoices 6873, 6943, 6944 in part or whole)		\$1,550.20
Shipping cost, via Greyhound, Smithers to Vancouver @ \$0.30/sample		\$ 101.10

Report Preparation

\$1,400.00

Total Cost

\$12,317.20

## APPENDIX II

### AUTHOR'S QUALIFICATIONS

The author holds a B.Sc. degree in geology from the University of British Columbia, is a Fellow of the Geological Association of Canada, and has been practising his profession continuously for thirteen years. He was employed by Zapata Granby Corporation for 10 years, initially as District Geologist (Smithers), then from 1977-1979 as Senior Exploration Geologist (Vancouver). From June through November, 1979 he was Manager, Metals Exploration, for Granby. He is presently employed by Serem Ltd. as a Senior Geologist. He was responsible for planning and supervision of this programme, and directed field work on the property.

## APPENDIX III

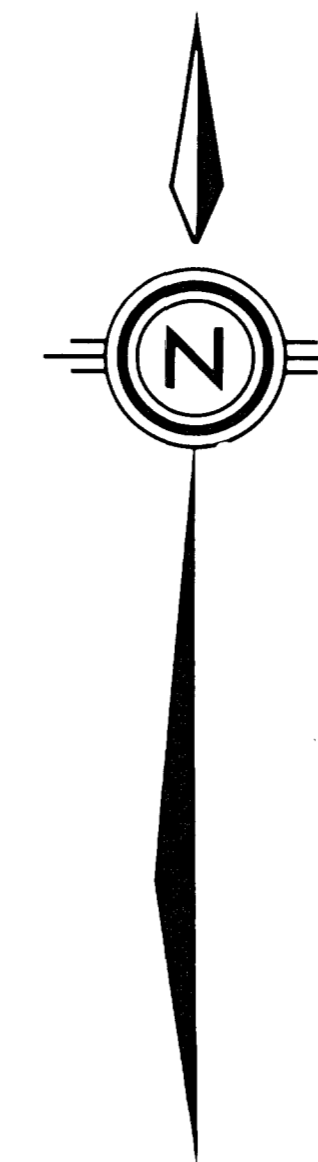
### BIBLIOGRAPHY

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MD Claims, page 485, B.C. Ministry of Energy, Mines  
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BOFFO M.C.



DAVE'S  
DELIGHT  
M.C.

BASNETT M.C.

LEGEND

STREAM

SAMPLING GRID

SOIL SAMPLE LOCATION; Zn (ppm)  
Cu (ppm)

100 PPM COPPER CONTOUR

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**9093**  
FIG.

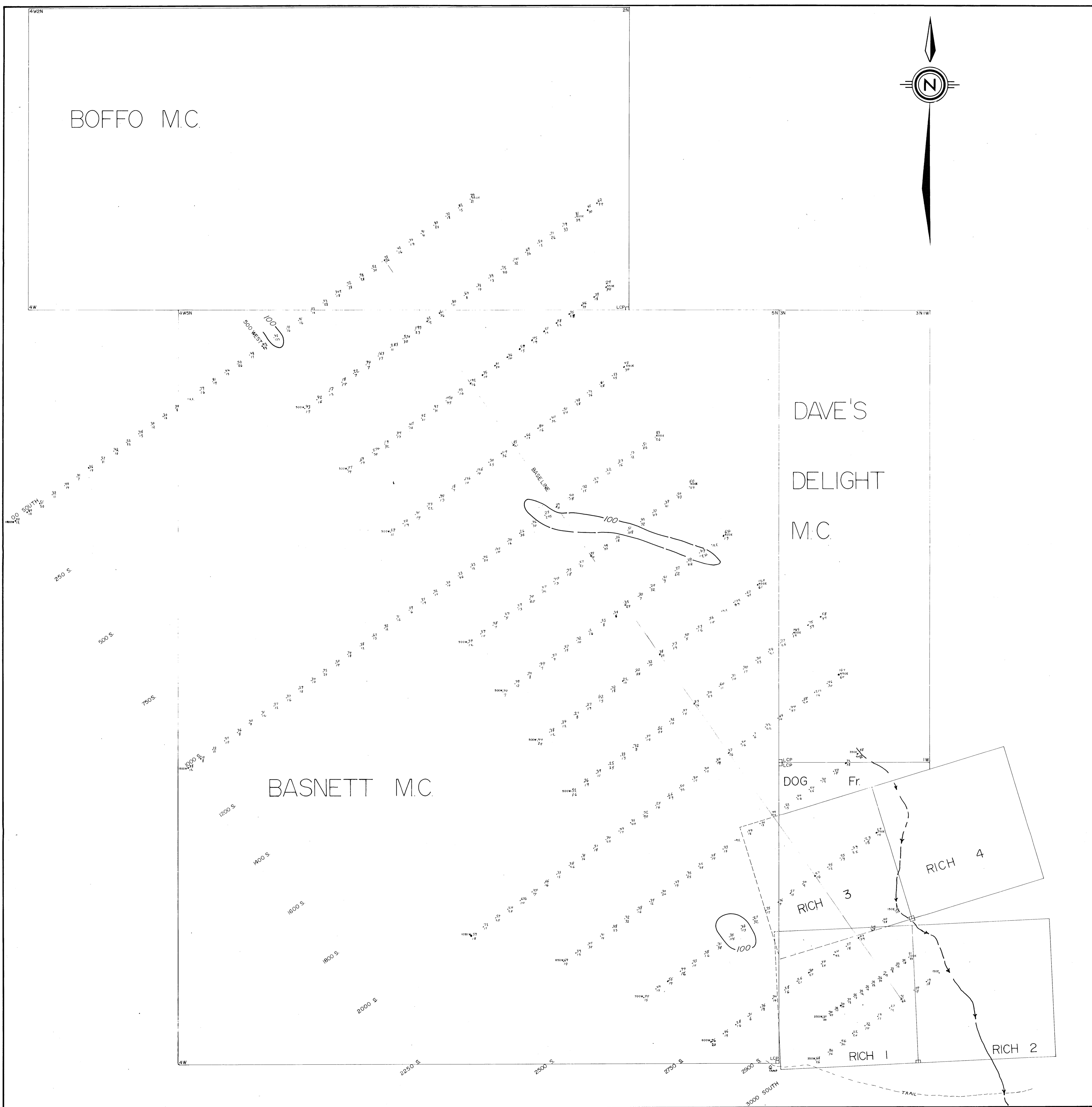
S.E.R.E.M. LTD.

PROJECT SELWYN REGIONAL

TITLE BASNETT M.C., BOFFO, DAVE'S DELIGHT  
& DOG Fr.

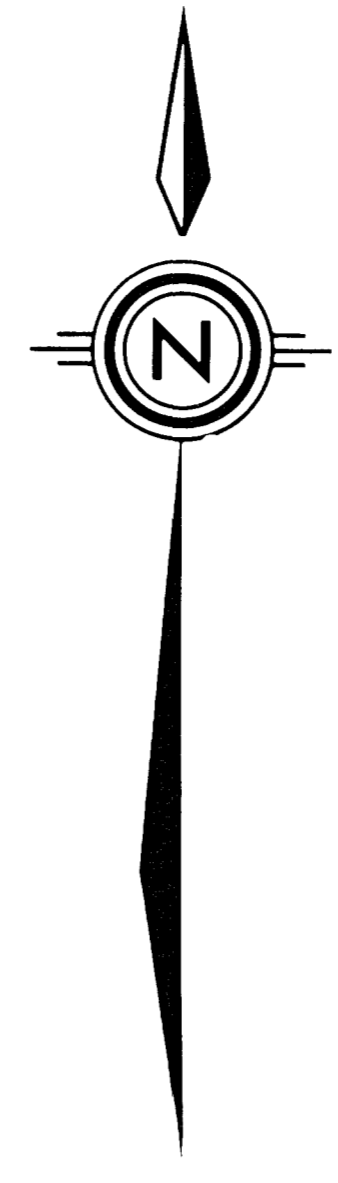
SOIL GEOCHEMISTRY— COPPER

NTS 94E /8E	DATA— W.J. WILKINSON	DRAWN— W.J.W., D.G.D.	FIGURE <b>3</b>
	CHECKED—	DATE— SEPT. 1980 / APR. 1981	
500m		SCALE 1:5 000	10km



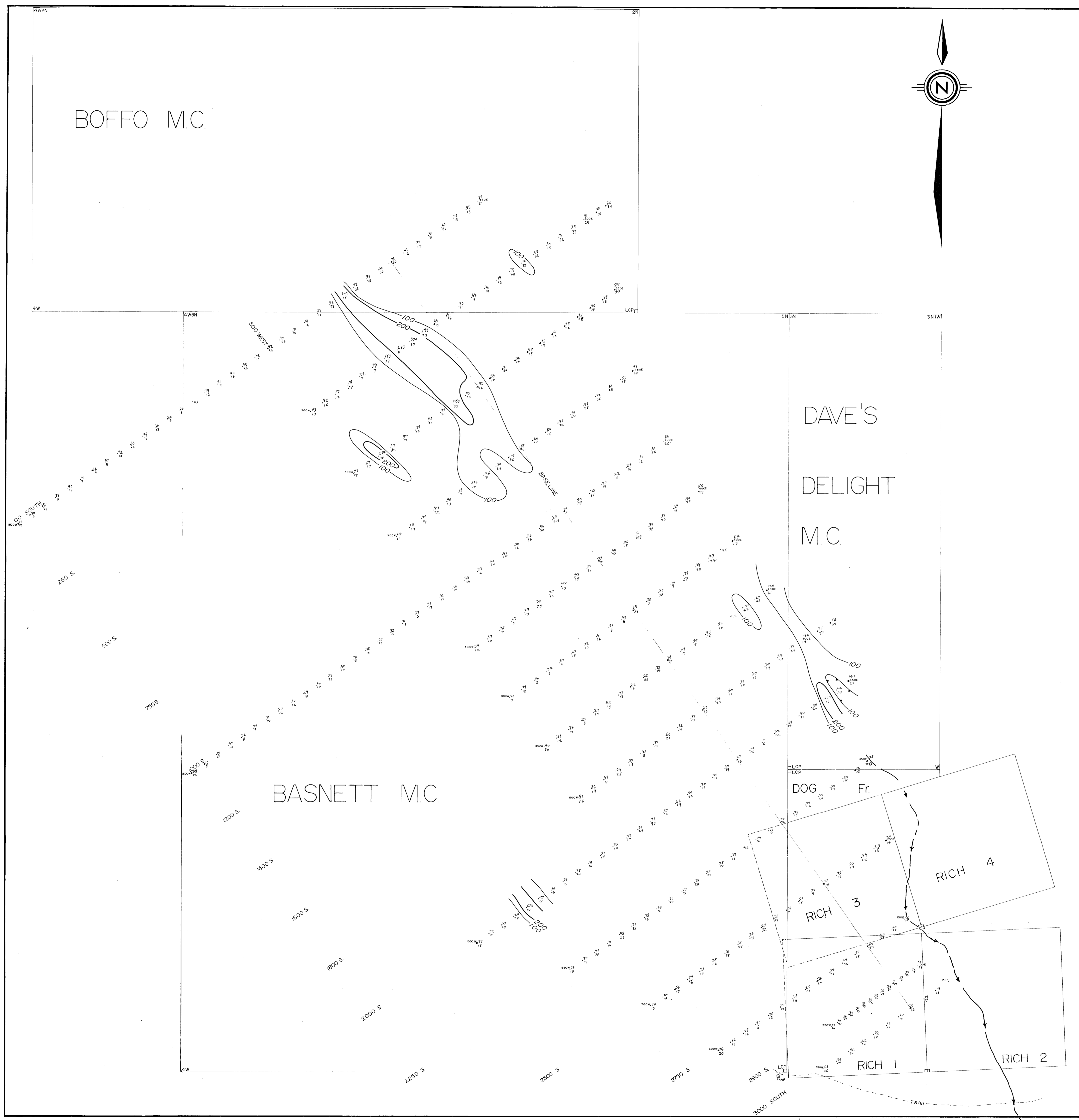


BOFFO M.C.

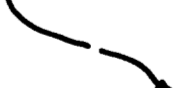
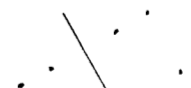
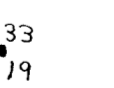




DAVE'S  
DELIGHT  
M.C.

BASNETT M.C.




LEGEND

-  STREAM
  -  SAMPLING GRID
  -  SOIL SAMPLE LOCATION;
  -  100 PPM ZINC CONTOUR
  -  200 " " "
- Zn (ppm)  
 Cu (ppm)

MINERAL RESOURCES BOARD  
ASSESSMENT REPORT

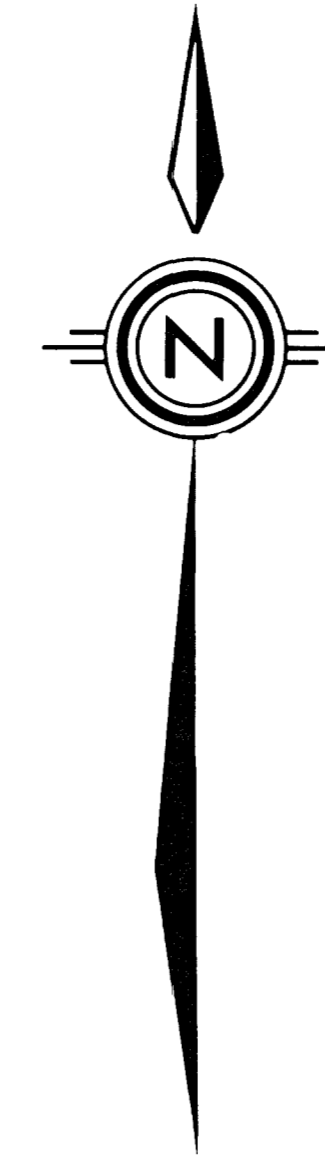
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S.E.R.E.M. LTD.		FIGURE <b>4</b>
PROJECT <b>SELWYN REGIONAL</b>		
TITLE <b>BASNETT M.C. , BOFFO, DAVE'S DELIGHT &amp; DOG Fr. :</b>		
SOIL GEOCHEMISTRY—ZINC		
NTS 94E /8E	DATA— W.J. WILKINSON CHECKED— SCALE 1:5 000 	DRAWN— W.J.W., D.G.D. DATE— SEPT. 1980 / APR. 1981



BOFFO M.C.



DAVE'S  
DELIGHT  
M.C.

BASNETT M.C.

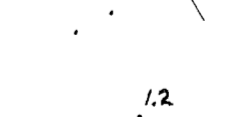
LEGEND



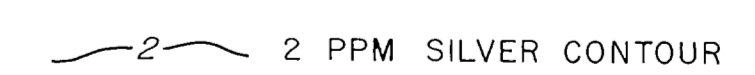
STREAM



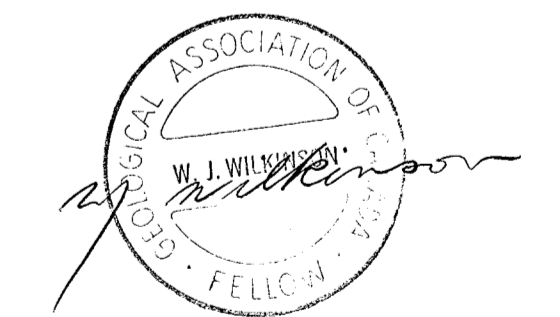
SAMPLING GRID



SOIL SAMPLE LOCATION; Ag (ppm)  
Pb (ppm)



2 PPM SILVER CONTOUR



MINERAL RESOURCES EXPL.  
ASSESSMENT REPORT  
**9093**  
NO.

S.E.R.E.M. LTD.

PROJECT SELWYN REGIONAL

TITLE BASNETT M.C., BOFFO, DAVE'S DELIGHT  
& DOG Fr. :  
SOIL GEOCHEMISTRY—SILVER

NTS  
94E  
/8E

DATA— W.J. WILKINSON DRAWN— W.J.W., D.G.D.  
CHECKED— DATE— SEPT. 1980 / APR 1981

SCALE 1:5 000  
500m 0 0.5 1.0km

FIGURE  
6

