

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,680

PROSPECTING REPORT

on the

CAMBAC 1 and 2 CLAIMS

5067, 5068

NTS 92 P/9W, 16W
Longitude: 120°23'

Kamloops Mining Division
Latitude: 51° 44'

by

A. Heagy
J.C. Stephen

Work Done: June 23 - 29, 1984
Funded by: Falconbridge Nickel Mines Limited
Report Dated: July 12, 1984

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY	1
INTRODUCTION	3
LOCATION, ACCESS AND TOPOGRAPHY	4
CLAIM REGISTER	6
REGIONAL GEOLOGY	8
PROPERTY GEOLOGY	9
LITHOLOGY	10
STRUCTURE	11
MINERALIZATION	12
GEOCHEMISTRY	13
FIELD PROCEDURE	13
GEOCHEMICAL RESULTS	14
DISCUSSION	17
RECOMMENDATIONS	18
REFERENCES	19
STATEMENT OF EXPENDITURES	20

APPENDIX I	SAMPLE DATA SHEETS
APPENDIX II	ANALYTICAL PROCEDURES
APPENDIX III	STATEMENT OF QUALIFICATIONS

LIST OF ILLUSTRATIONS

<u>Figure</u>	<u>Title</u>	<u>Page</u>
1	LOCATION MAP	5
2	CLAIM MAP	7
3	REGIONAL GEOLOGY	follows 8
4	DISTRIBUTION CURVES ZINC VALUES	15
 <u>Maps:</u>		
I	GEOLOGY, GEOCHEMISTRY	In pocket of Report
II	AIR PHOTO ENLARGEMENT	In pocket Report

SUMMARY

The CAMBAC 1 and 2 claims cover the southeast extension of the phyllite member of the Triassic Nicola Group which hosts stratabound gold mineralization on the Fraser gold property.

A total of 10 man days were spent prospecting, mapping and sampling the claims. A total of nineteen rock chip samples were collected and analysed for gold and arsenic. Thirty-six silt samples and eighty-one soil samples were analysed for gold, arsenic, copper and zinc. Samples anomalous for Zn and Cu were run for silver.

The only mineralization observed was limonite-stained quartz \pm calcite veins filling dilatant zones in the cross-folded phyllitic rocks. The contact aureole at the Raft Batholith has metamorphosed the pelitic rocks to spotted phyllites, andalusite schist and biotite and calc-silicate hornfels.

The interbedded phyllite-iron carbonate unit which hosts the Fraser gold mineralization was not found on the CAMBAC claims. Sparse outcrop makes determination of structure difficult. Formations appear to dip to the north east.

The relatively intense silt and soil sampling conducted along the road in the higher northern part of the property failed to indicate significant values for the elements determined.

In the southeast corner of the property several soil samples returned values from 160 to 800 ppm zinc and two samples gave values of 125 and 290 ppm copper. These values appear to occur in the more highly altered rocks above the volcanoclastic grit.

No gold values were obtained and no appreciable silver values were obtained from those samples anomalous in copper and zinc.

Geochemically anomalous values in zinc and copper are restricted to the southeast corner of the property. It is possible more detailed work here would reveal additional outcrop and further soil sampling on a tape and compass grid should be carried out to define the anomalous area. If open ground exists to the east and south further staking may be warranted depending on results of this additional work.

INTRODUCTION

The CMBAC 1 and 2 claims were staked in November 1983 to cover a geologically favourable target for gold mineralization. The claims are at the southeastern end of the Cariboo-Quesnel Gold Belt, currently the focus of considerable gold exploration activity. The stratigraphy covered by the property is the lateral equivalent of the sedimentary sequence which reportedly hosts low grade stratabound gold mineralization on the Frasergold prospect. If this mineralization is of syngenetic origin, then these sedimentary rocks form a favourable exploration target of regional extent. (Saleken and Simpson, 1984).

To assess the validity of this geological model on the CMBAC claims, a program consisting of prospecting, geological mapping and rock, silt and soil sampling was carried out in June 1984.

LOCATION, ACCESS and TOPOGRAPHY

The CMBAC claims are located 25 km northwest of Clearwater B.C. as shown in Figure 1. The claims are in Kamloops Mining Division.

The claims are readily accessible by truck from Clearwater. A campsite on Coldscaur Lake at km 29 of the Mann Creek Forestry Main was used and several branch roads provide direct access to the property.

The topography of the property is a moderate southwesterly facing slope from 3800 to 5400 feet elevation. The southern claim boundary crosses flat-lying swampy ground.

Approximately half of the claim area has been clear cut in the past and is in the early stages of forest regeneration. The uncut blocks are forested with mature lodgepole pine and fir.

Most of the property is blanketed with glacial till and alluvium. Outcrop exposure is very poor despite the numerous road cuts.

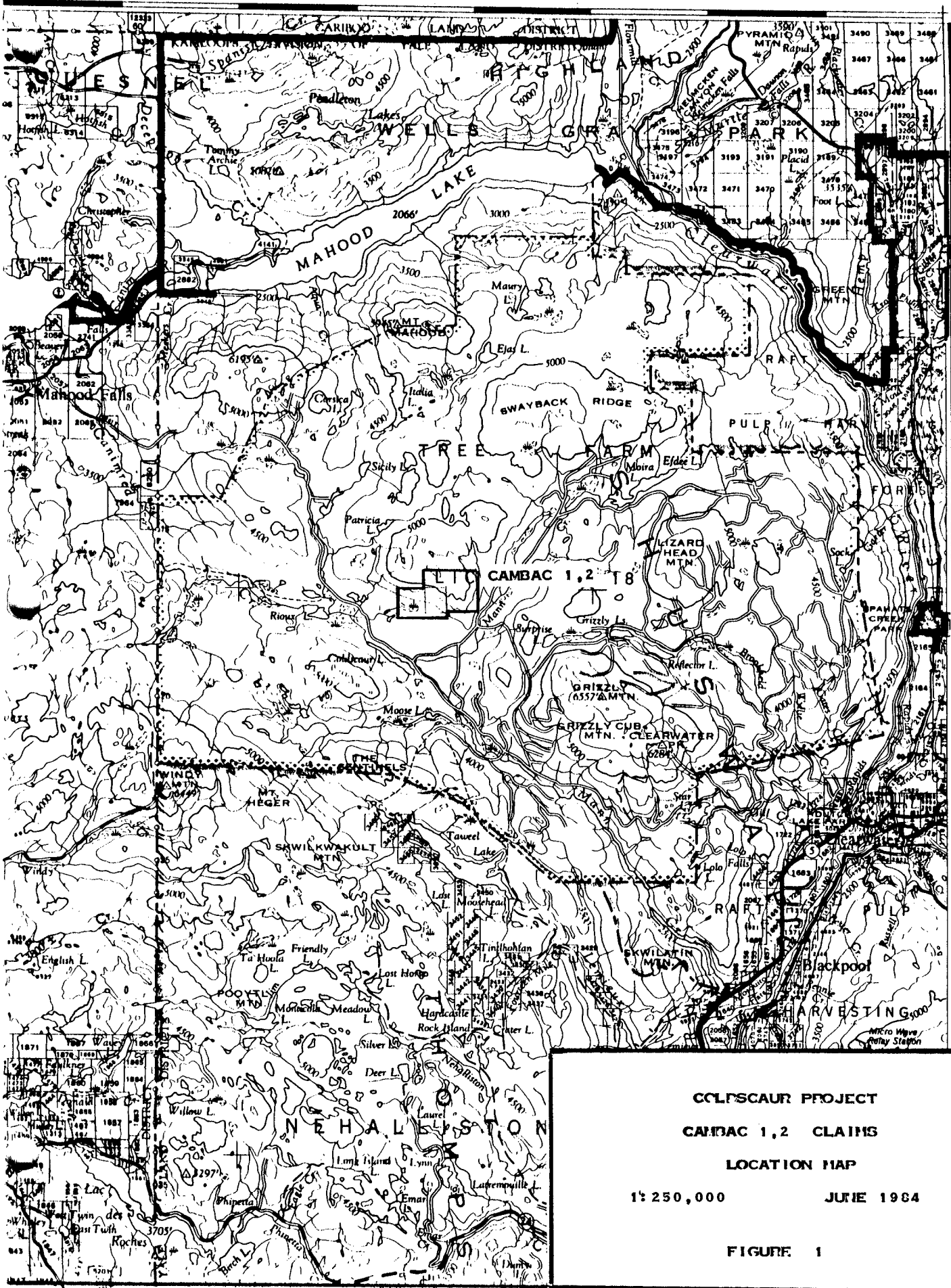
The field work in mid-June was hampered by persistent snow above 5000 feet elevation. Creek levels were high due to meltwater and several areas of the logging roads were flooded.

30'

15'

120°00'

52°00'



45'

To Birch Island - 6 Miles

COLUSA PROJECT
CAMBAC 1,2 CLAIMS
LOCATION MAP

1:250,000

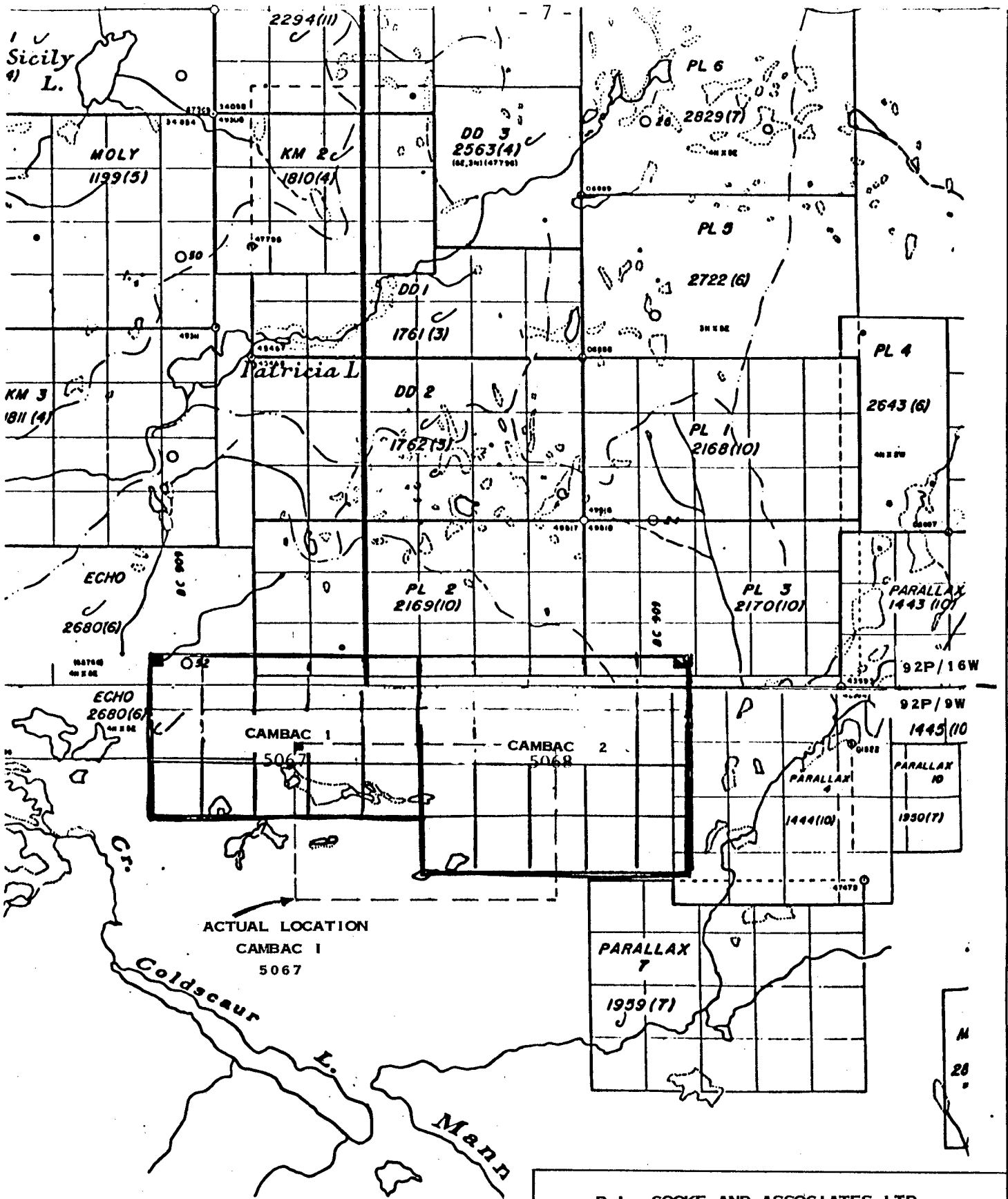
JULIE 1964

FIGURE 1

CLAIM REGISTER

<u>Name</u>	<u>Size</u>	<u>Record Number</u>	<u>Record Date</u>
CAMBAC 1	15 units	5067	November 23, 1983
CAMBAC 2	20 units	5068	November 23, 1983

These claims were staked as agent for J.C. Stephen and were transferred in trust to Falconbridge Nickel Mines Limited under an agreement dated December 9, 1983.



D.L. COOKE AND ASSOCIATES LTD.

CLAIM MAP

CAMBAC 1, 2

KAMLOOPS M.D.

NOV. 1983

FIGURE 2

REGIONAL GEOLOGY

The regional geologic setting of the CMBAC claims is shown in Figure 3 taken from GSC Map 1278A (Campbell and Tipper, 1971)

The southern margin of the Cretaceous Raft Batholith (20) lies near the northern claim boundary. The flat-lying ground in the southern claim area consists of valley-filling flood basalts (25) of Tertiary age. The sedimentary rocks exposed in the claim area had been tentatively mapped as volcanoclastic rocks of Jurassic age (15?). The present work indicates the lithology is much more similar to the black shales and phyllites of the Triassic Nicola group. (10). The belt of Nicola rock mapped south of the CMBAC claims appears to be continuous with the Nicola rocks to the north, near Mahood Lake. This belt of sedimentary rocks continues northwest and has been deformed by the Crooked Lake synclinal structure in the vicinity of the Frasergold property.

TABLE I

LITHOLOGY

UNIT

- Vb Tertiary valley basalt. Tan-weathering, dark grey vesicular basalt, basaltic andesite. Fine feldspar phenocrysts. Does not outcrop but abundant float in flat-lying valley floor.
- Ig Intrusive rocks. On CAMBAC claims represented only by one small dyke of porphyritic quartz monzonite. Abundant glacial float of biotite ± hornblende quartz monzonite, granodiorite, muscovite granite, aplite and pegmatite from Raft Batholith to the north.
- P Metasedimentary rocks. Pelitic to argillaceous sedimentary rocks with minor graphitic and calcareous interbeds. Variably developed hornfels mineralogy. Pp - dark gray phyllite. Pg - graphitic bed. Pc - calcareous bed. Ps - "spotted" phyllite (andalusite porphyroblasts). Pb - dark purple grey fine-crystalline biotite hornfels with disseminated pyrrhotite. Pa - finely banded andalusite-quartz biotite schist. Pcs (one outcrop of) purple and green calc-silicate hornfels.
- Sv Volcaniclastic sandstone. Grey to purple (Hornfelsed) coarse volcaniclastic grit

The only intrusive rock observed, was in a 1 meter wide dyke of porphyritic quartz monzonite in an outcrop of biotite hornfels and graphitic slate near the LCP of the CAMBAC 2 claim block. The absence of metasedimentary float in with the intrusive till boulders near the northern claim line indicates the claim boundary lies at or near the intrusive contact.

The Tertiary valley basalt unit does not outcrop but is abundant in float in the flat lying area at the southern edge of the property. The northern contact of the basalt appears to be roughly coincident with the lower most east-west logging road.

STRUCTURE

The metasedimentary rocks are highly deformed. Bedding is rarely apparent in outcrop and has been affected by at least two deformations.

A prominent cleavage is developed in the phyllites and is fairly consistent in strike, varying from 100 to 130° and dipping 60 to 80° N. Near the north east corner of CAMBAC 2 the cleavage is dipping steeply to the south. Foliation in the schists parallels this cleavage. In some exposures a later cleavage is seen striking 025 to 060 and dipping 70° to the west. This cleavage crenulates the earlier cleavages and often shows small reverse offsets.

The style of the small scale folds are characteristic-ally open symmetric upright folds about the axial plane cleavage. The later cross-folding has disrupted thin competent beds within the phyllites. Where observed bedding was dipping 40° to 60° to the north but it is quite possible that one or more east-west trending folds strike across the property.

MINERALIZATION

Within the metasedimentary rocks quartz \pm calcite sweats are present filling dilatant zones developed between beds of varying competency. The sweats are not abundant and range from 1 to 30 cm thickness and are generally only at most a few metres in strike length. Minor limonite after pyrite and traces of fresh pyrite are the only mineralization observed in the sweats.

The biotite hornfels unit is very rusty weathering due to oxidation of the disseminated pyrrhotite. Ferricrete-cemented overburden was observed in the vicinity of several of the biotite hornfels outcrops. The only mineralization observed in float was a boulder of coarse crystalline quartz monzonite with molybdenite rosettes on a dry fracture. Minor calc-silicate hornfels and rare poorly developed biotite-diopside skarn boulders were also seen but appear to be barren.

GEOCHEMISTRY

FIELD PROCEDURE

Nineteen rock chip samples were collected for analysis for gold and arsenic. Outcrops sampled included the various rock types and several samples were collected from the limonite stained quartz \pm calcite veins.

Thirty-six silt samples were collected from the fast flowing streams which were at high levels due to meltwater.

Two lines of soil samples, totalling seventy-four samples were collected. One line follows the eastern most claim line which is approximately perpendicular to the strike of the prominent cleavage. Samples were collected at 100 metre intervals from the B horizon. A second line of soil follows the upper logging road and is a contour soil line. Samples were collected at 50 metre intervals from the B horizon where exposed at the top of the road cut. Seven additional soil samples were collected from rusty zones on two small graphitic shears.

Sample Data sheets and analytical procedures are included in Appendix I and II.

GEOCHEMICAL RESULTS

(1) Rock Geochemistry

Rocks were analysed only for arsenic and gold. No gold values were obtained. Arsenic values range from 1 to 23 ppm and cannot be considered anomalous.

(2) Silt Geochemistry

Silt values range from 5 to 53 ppm copper which cannot be considered anomalous. Values for zinc range from 24 to 253 ppm. The distribution curves, Figure 4, suggest a very small (2 sample) anomalous population with values of 225 to 253 ppm. These values occur in the east central portion of CAMBAC 2.

Arsenic values range from 2 to 15 ppm and, except that the 15 ppm value coincides with the single 20 ppb gold value, cannot be considered anomalous.

A single value of 20 ppb gold was obtained in silts.

It may be significant that the few relatively high zinc values obtained occur in the east portion of the property. Zinc, being the most soluble of the elements analysed, may indicate mineralization otherwise masked by the extensive glacial cover.

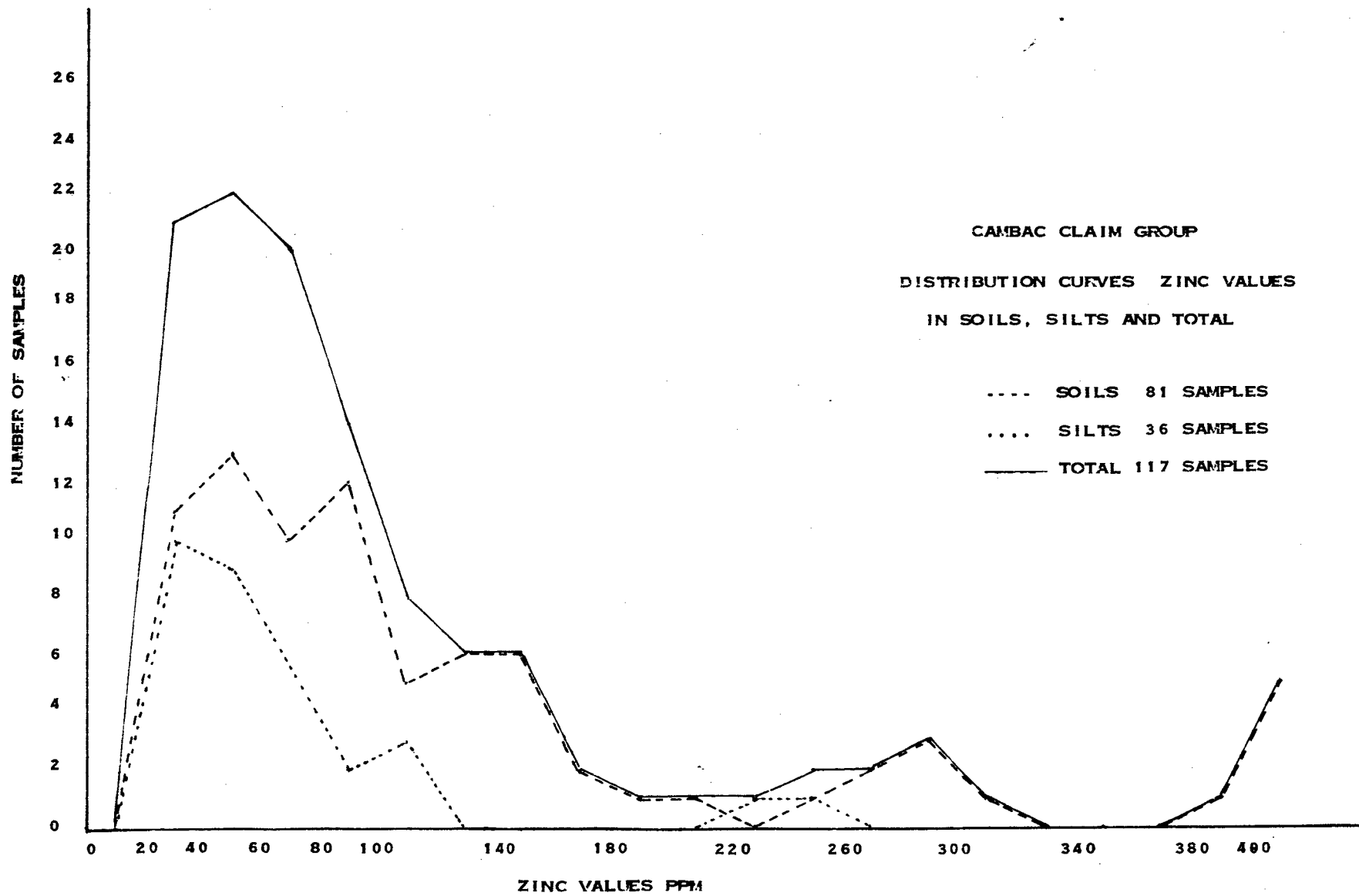


FIGURE 4

(3) Soil Geochemistry

Soil values range from 4 to 290 ppm copper. The two highest values, 125 and 290 ppm, as well as four values ranging from 40 to 72 ppm occur in the eastern portion of the property.

Values for zinc range from 20 to 800 ppm. The distribution curve, Figure 4, suggests two families of anomalous values in the ranges 220 to 320 ppm and >400 ppm. These higher values all occur in the eastern portion of the property.

Arsenic values in soil samples range from 1 to 48 ppm. Although none of these are definitely anomalous it may be significant that all but one of those values of 10 ppm or greater (15 out of 81 samples) occur in the eastern portion of the property.

Twelve soil samples returned 10 ppb gold and one returned 20 ppb gold. These cannot be termed anomalous and there is no apparent concentration of these values in any one portion of the property.

Silver was analysed in 41 samples which were anomalous for zinc and copper. Silver values range from 0.1 to 1.9 ppm and cannot be considered anomalous.

DISCUSSION

Although the CAMBAC property is a technical success in that it does cover the favourable phyllite member of the Nicola Group it does not appear to host any significant gold mineralization. No iron carbonate bearing phyllites or sweats were found in outcrop or float. The quartz-calcite sweats appear to be barren and of little consequence.

DISCUSSION

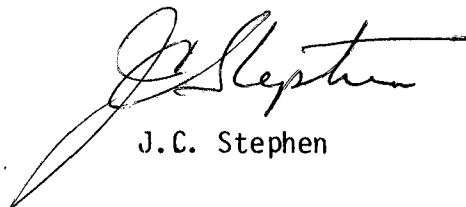
Widespread glacial overburden makes exploration difficult but concentration of moderate zinc, low to moderate copper and minor arsenic geochemical values in the eastern portion of the property suggests possible mineralization above the volcanogenic grit horizon. It is not clear whether these values are associated with thermal alteration from the Raft batholith since the highest values are in the southeast part of the property apparently some distance from the batholith. No evidence of Tertiary epithermal type alteration has been detected but these highest values are in the area close to Tertiary basalts.

RECOMMENDATIONS

No precious metals values have been obtained on the CAMBAC claims and no exploration program is immediately recommended.

Geochemical values for zinc with indications of copper and low to moderate arsenic values occur in the east portion of the property. This area would warrant some further investigation in an effort to find the source of these values. Some detailed prospecting with additional soil sampling should be carried out at a convenient time.

Respectfully submitted,
J.C. Stephen Explorations Ltd.



J.C. Stephen

JCS/ms

REFERENCES

Campbell, R.B. and H.W. Tipper, 1971. Geology of Bomaparte Lake Map Area, B.C. GSC Memoir 363.

Saleken, L.W. and R.G. Simpson, 1984. Cariboo-Quesnel Gold Belt: a geological overview. Western Miner April 1984, P. 15 to 20.

COLDSCAUR PROJECT

CAMBAC 1, 2

STATEMENT OF EXPENDITURES

PERSONNEL

Audrey Heagy	Geologist	June 23-29	7 days @ \$150.	= 1050.	
C. Lormand	Geol.Asst	June 23-27,29	6 days @ 120.		720.
D. Cone	Labour	June 23-29	7 days @ 120.		840.
G. Marlow	Labour	June 24	1 day @ 120.		120.
G. Mowatt	Labour	June 24	1 day @ 120.		<u>120.</u>
					\$2,850.00

TRANSPORTATION

GMC Van	7 days @ \$25.		175.	
Gas etc.			<u>141.50</u>	
				\$316.50

CAMP SUPPLIES

Groceries			238.	
Camp supplies, naptha etc.			<u>105.39</u>	
				\$343.39

GEOCHEMICAL

Chemex Invoice	8412641		183.83	
Chemex Invoice	8412642		1,267.69	
Chemex Invoice	8413184		<u>73.80</u>	
				<u>\$1,525.32</u>
		TOTAL FIELD COSTS		\$5,035.21

A P P E N D I X I

SAMPLE DATA SHEETS

SAMPLER CONE
DATE June 15/89

PROJECT COLDSCAR
EAST CLAIM LINE NORTH TO SOUTH 100m

NTS 92 P 9 W
LINE CAMBAC 21
AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth CM	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS			
				Colour	Part Size	% ORG.	Ph				Au	As	Cu	Zn
LCP 2	CAMBAC 2	15	B	RED ORANGE	LOAM	0		GENTLE	TREES	TOP OF ROAD CUT	<10	11	12	95
E 100S	East claim	20	B	RED ORANGE	LOAM	0		GENTLE	"	"	<10	4	4	76
E 200S	line	15	B	"	"	"		"	"	"	<10	9	7	53
E 300S		20	B	BROWN	LOAM	0		"	"	"	10	14	72	162
E 400S		40	B	BROWN	LOAM	0		MOD STEEP	"	"	<10	10	28	110
E 500S	15	30	B	RED BROWN	LOAM	0		MOD STEEP	"	"	10	10	21	120
E 600S		50	B	"	"	0		"	"	"	<10	7	12	39
E 700S		40	B	"	"	11		"	"	"	<10	9	10	93
E 800S		10	B	"	"	11		GENTLE	"	"	<10	10	10	155
E 900S		30	B	"	"	0		GENTLE	"	SMALL TREES QUITE A BIT OF WINDFALL SLOPES TOWARDS STREAM	10	11	13	440
E 1000S	25	10	B	RED BROWN	LOAM	0		MOD STEEP	"		<10	11	21	160
E 1100S		5	B	"	"	0		GENTLE	TREES	CLEARING	10	10	23	265
E 1200S		20	B	"	LOAM	0		"	TREES		<10	6	8	295
E 1300S		40	B	BROWN	FRACK	0		GENTLE	"		<10	12	34	270
E 1400S		10	B	RED BROWN	LOAM	0		GENTLE	"		<10	10	38	510
E 1500S	35	25	B	"	"	"		"	"		10	6	18	730
E 1600S		5	B	"	"	"		"	"		<10	7	33	525
E 1700S		5	B	"	"	0		MOD STEEP	"	TOP OF ROAD CUT	<10	11	39	800
E 1800S		5	B	"	"	0		GENTLE	"	"	<10	9	40	400
E 1900S	15	2	B	"	"	0		"	"	TOP OF ROAD CUT CLEARING	<10	11	51	320

SAMPLER Cone
DATE June 16/84

PROJECT COLDSCAUR
B4-CDS-

NTS 9P P 9W

LINE Upper Road - West to East

AIR PHOTO NO. 50m spacing

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS			
				Colour	Part Size	% ORG.	Ph				Au	As	Cu	Zn
1	0+00 E	65	B	RED BROWN	SAND	0		MOD STEEP	TREES	TOP OF ROAD CUT	20	4	16	49
2	0+50 E	20	B	"	"	0		"	"	" " " "	<10	3	8	47
3	1+00 E	10	B	"	"	"		"	"	" " " "	<10	4	18	38
4	1+50 E	15	B	"	"	"		"	"	" " " "	10	3	14	68
5	2+00 E	5	B	"	"	"		GENTLE	"	" " " "	<10	5	16	62
6	2+50 E	10	B	"	"	0		MOD STEEP	"	" " " "	<10	2	10	42
7	3+00 E	30	B	"	"	"		"	"	" " " "	<10	3	10	43
8	3+50 E	15	B	"	"	"		"	"	" " " "	10	2	11	20
9	4+00 E	10	B	"	"	"		GENTLE	"	" " " "	<10	2	7	22
10	4+50 E	15	B	"	"	"		MOD STEEP	"	TOP OF ROAD CUT & U/G STREAMS COMING FROM BANK	<10	3	7	39
11	5+00 E	60	B	"	CLAY	0		GENTLE	"	T O R C	<10	5	29	75
12	5+50 E	45	B	"	SAND	0		"	"	" " " "	<10	3	9	55
13	6+00 E	55	B	"	"	0		MOD STEEP	"	T O R C	<10	3	11	33
14	6+50 E	35	B	"	"	0		GENTLE	"	" " " "	10	4	7	96
15	7+00 E	25	B	"	CLAY	0		MOD STEEP	"	" " " "	<10	3	8	35
16	7+50 E	45	B	"	SAND	0		"	"	" " " "	<10	4	11	70
17	8+00 E	30	B	"	CLAY	0		"	"	TO RC & VERY WET MANY U/G STREAMS IN AREA	<10	4	16	90
18	8+50 E	40	B	"	SAND	0		"	"	T O R C	<10	6	20	44
19	9+00 E	25	B	"	CLAY	0		"	"	TO RC & U/G STREAMS	<10	4	11	38
20	9+50 E	40	B	"	CLAY	0		GENTLE	"	T O R C	<10	4	11	40

SAMPLER COWIC
DATE JUNE 14/89

PROJECT COLDSCAR
8A - CDS -

NTS _____
LINE _____
AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS			
				Colour	Part Size	% ORG.	Ph				Au	As	Cu	Zn
21	10+00E	50	B	RED BROWN	SAND	0		GENTLE	TREES	TORC	<10	4	15	70
22	10+50E	20	B	"	"	"		MOD STEEP	"	"	<10	5	18	95
23	11+00E	40	B	"	"	"		"	"	TORC ABOVE OUTCROP APPROX 3.5m	<10	4	23	98
24	11+50E	10	B	"	"	"		"	"	TORC (BURNED AREA)	<10	4	14	40
25	12+00E	10	B	"	"	"		GENTLE	"	"	10	4	13	58
26	12+50E	15	B	"	"	"		MOD STEEP	"	TORC (NEW VEG.)	<10	3	9	46
27	13+00E	25	B	"	"	"		"	"	TORC & U/G STREAM	<10	7	11	35
28	13+50E	5	B	"	"	"		"	"	TORC & BURNED AREA	<10	6	21	100
29	14+00E	5	B	"	"	5		"	"	"	<10	4	10	95
30	14+50E	10	B	"	"	0		GENTLE	"	TORC OK APPROX 7.5m	<10	3	11	135
31	15+00E	20	B	"	"	0		MOD STEEP	"	TORC U/G APPROX 4.0m	<10	6	23	82
32	15+50E	20	B	"	"	"		"	"	TORC & BURNED AREA	<10	3	12	62
33	16+00E	40	B	"	"	0		FLAT	"	TORC	<10	4	14	30
34	16+50E	15	B	"	"	0		GENTLE	"	"	<10	7	31	90
35	17+00E	20	B	"	CLAY	0		"	"	"	<10	5	18	130
36	17+50E	5	B	"	SAND	0		MOD STEEP	"	TORC & BURNED AREA	<10	6	14	120
37	18+00E	5	B	"	"	10		"	"	TORC & "	<10	6	14	41
38	18+50E	20	B	"	"	0		GENTLE	"	TORC	<10	5	13	58
39	19+00E	20	B	"	"	5		"	"	"	<10	3	12	86
40	19+50E	40	B	"	"	0		"	"	TORC & U/G STREAM	40	5	18	58

SAMPLER CONE
DATE JUNE 16/84

PROJECT COLDSCAR
BA-CDS-

NTS _____

LINE _____

AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS			
				Colour	Part Size	% ORG.	Ph				Au	As	Cu	Zn
41	20+00E	10	B	RED BROWN SAND	10			GENTLE	TORC	10	6	19	130	
42	20+50E	2	B	"	"	0		"	"	40	9	32	150	
43	21+00E	10	B	"	"	0		"	TORC & BURNED AREA	40	6	23	180	
44	21+50E	20	B	"	"	4		MOD STEEP	" " "	40	5	16	203	
45	22+00E	5	B	"	"	"		"	" " "	40	5	13	62	
46	22+50E	5	B	"	"	0		"	" " "	40	5	15	98	
47	23+00E	5	B	"	"	30		GENTLE	TORC	40	4	11	32	
48	23+50E	5	B	"	"	0		"	TORC & CLEAR CUT	40	1	16	65	
49	24+00E	15	B	"	"	10		"	" " "	10	11	42	135	
50	24+50E	20	B	"	"	30		"	" " "	40	5	13	290	
51	25+00E	10	B	"	"	30		"	" " "	40	4	9	250	
52	25+50E	20	B	"	"	10		"	" " "	40	5	13	158	
53	26+00E	10	B	"	"	0		"	" " "	40	3	17	102	
54	26+50E	20	B	"	"	0		MOD STEEP	EDGE OF CLEAR. CUT SLOPES TOWARDS CREEK	40	6	34	110	

SAMPLER CONE

PROJECT COLDSPA

NTS 92 P 9W

DATE JUNE 16/57

84-CDQ-

CREEK upper road traverse

AIR PHOTO NO. west to east
from end of road

SAMPLE NO.	VOLUME		VELOCITY	Ph	TYPE OF SAMPLE	COLOUR	TEXTURE	% ORGANIC MATERIAL	PETROLOGY OF BEDROCK AND/OR FLOAT	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS			
	Width	Depth									Au	As	Cu	Zn
CDQ-1	100	15	V.F.		GRAVEL		GRAVEL	10		LOCATION 2+20 E	<10	4	19	53
2	50	20	V.F.		GRAVEL		SAME	0		LOCATION 4+91 E	<10	3	10	29
3	40	15	F		GRAVEL		GRAVEL	0		LOCATION 5+75 E	<10	3	8	27
4	150	40	V.F.		"		"	"		LOCATION 3+4 MAY 30 SAME STREAM	<10	3	11	37
5	30	10	S		SILT		SILT	0		6+13 E	<10	4	12	33
6	15	10	S		GRAVEL		G	20		7+75 E	<10	5	11	27
7	20	20	F		CLAY		L	40		8+18 E	<10	4	28	70
8	95	25	F		SILT		S	0		9+23 E	<10	5	23	62
9	40	25	F		GRAVEL		G	0		9+87 E ✓	<10	5	17	55
10	60	35	F		GRAVEL		G	20		11+63 E ✓	<10	5	25	76
11	50	10	F		SAND		S	15		12+52 E APPROX 100' U.L. DEPTH ✓	<10	3	10	53
12	65	25	F		G		G	0		12-760' U.L. DEPTH ✓	<10	2	8	29
13	75	15	F		G		G	10		13+56 E (LOW R. A.) ✓	<10	6	18	50
14	50	10	S		G		G	0		15+52 E ✓	<10	3	13	38
15	20	10	F		G		G	0		16+03 E ✓	<10	7	15	51
16	25	15	F		G		G	10		16+33 E ✓	<10	5	13	48
17	50	20	F		G		G	0		16+67 E ✓	<10	5	17	45
18	150	40	V.F.		G		G	0		22+52 E ✓	<10	5	11	70

A P P E N D I X II

ANALYTICAL PROCEDURES

GEOCHEMICAL PREPARATION
AND
ANALYTICAL PROCEDURES

1. Geochemical samples (soils, silts) are dried at 50°C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh.
2. A 1.00 gram portion of the sample is weighed into a calibrated test tube. The sample is digested using hot 70% HClO₄ and concentrated HNO₃. Digestion time = 2 hours.
3. Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analyzed by atomic absorption procedures.
4. Detection limits using Techtron A.A.5 atomic absorption unit.

Copper - 1 ppm
Molybdenum - 1 ppm
Zinc - 1 ppm
*Silver - 0.2 ppm
*Lead - 1 ppm
*Nickel - 1 ppm
Chromium - 5 ppm

*Ag, Pb & Ni are corrected for background absorption.

5. Elements present in concentrations below the detection limits are reported as one half the detection limit, ie. Ag - 0.1 ppm

GEOCHEM PROCEDURES

PPM Antimony: a 1.0 gm sample digested with conc. HCl in hot water bath. The iron is reduced to Fe⁺² state and the Sb complexed with I⁻. The complex is extracted with TOPO-MIBK and analyzed via A.A. Correcting for background absorption 0.2 ppm ± 0.2 Detection limit.

PPM Arsenic: a 1.0 gram sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with NaBH₄ and the arsenic content determined using flameless atomic absorption. Detection limit - 1 PPM

PPB Gold: 5 gm samples ashed @800°C for one hour, digested with aqua regia - twice to dryness - taken up in 25% HCl⁻, the gold then extracted as the bromide complex into MIBK and analyzed via A.A. Detection limit - 10 PPB

ASSAY PROCEDURES

Gold: - Fire Assay Method.

0.5 assay ton sub samples are fused in litharge, carbonate and silicious fluxes. The lead button containing the precious metals is cupelled in a muffle furnace. The combined Ag & Au is weighed on a microbalance, parted, annealed and again weighed as Au. The difference in the two weighing is Ag.



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : STEPHEN, J.C. EXPLORATION LIMITED

1458 RUPERT STREET
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8412642-001-A
INVOICE # : I8412642
DATE : 26-JUN-84
P.O. # : NONE
COLDSCAUR

Sample description	Prep code	AS ppm	AU-AA ppb				
7501 E	205	22	<10	--	--	--	--
7502 E	205	5	<10	--	--	--	--
7503 E	205	6	<10	--	--	--	--
7504 E	205	1	<10	--	--	--	--
7505 E	205	2	<10	--	--	--	--
7506 E	205	1	<10	--	--	--	--
7507 E	205	23	<10	--	--	--	--
7508 E	205	14	<10	--	--	--	--
7509 E	205	2	<10	--	--	--	--
7551 E	205	10	<10	--	--	--	--
7552 E	205	9	<10	--	--	--	--
7553 E	205	6	<10	--	--	--	--
7554 E	205	1	<10	--	--	--	--
7555 E	205	5	<10	--	--	--	--
7556 E	205	1	<10	--	--	--	--
7557 E	205	4	<10	--	--	--	--
7558 E	205	2	<10	--	--	--	--
7559 E	205	9	<10	--	--	--	--
7560 E	205	1	<10	--	--	--	--



MEMBER
CANADIAN TESTING
ASSOCIATION

Certified by Hart Bichler



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : STEPHEN, J.C. EXPLORATION LIMITED

1458 RUPERT STREET
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8412641-001-A
INVOICE # : I8412641
DATE : 27-JUN-84
P.O. # : NONE
COLDSCAUR

Sample description	Prep code	Cu ppm	Zn ppm	AS ppm	AU-AA ppb		
84-CAQ-01	201	48	103	11	<10	--	--
84-CAQ-02	201	21	70	9	<10	--	--
84-CAQ-03	201	30	108	9	<10	--	--
84-CAQ-04	201	40	90	7	<10	--	--
84-CAQ-05	201	53	78	10	<10	--	--
84-CAQ-06	201	25	62	7	<10	--	--
84-CAQ-07	201	17	50	5	<10	--	--
84-CAQ-08	203	9	64	6	<10	--	--
84-CAQ-09	201	37	98	15	20	--	--
84-CAQ-10	201	23	46	5	<10	--	--
84-CAQ-11	201	26	80	9	<10	--	--
84-CAQ-12	201	8	30	4	<10	--	--
84-CAQ-13	203	11	35	5	<10	--	--
84-CAS-01	201	32	133	48	<10	--	--
84-CAS-02	203	35	67	16	<10	--	--
84-CCQ-01	201	35	253	9	<10	--	--
84-CCQ-02	203	33	225	9	<10	--	--
84-CCQ-03	201	52	114	5	<10	--	--
84-CCS-01	201	290	106	22	<10	--	--
84-CCS-02	201	125	148	9	<10	--	--
84-CCS-03	201	21	153	3	<10	--	--
84-CCS-04	201	20	188	4	<10	--	--
84-CCS-05	201	27	295	4	<10	--	--
84-CDQ-01	201	19	53	4	<10	--	--
84-CDQ-02	203	10	29	3	<10	--	--
84-CDQ-03	203	8	27	3	<10	--	--
84-CDQ-04	203	11	37	3	<10	--	--
84-CDQ-05	203	12	33	4	<10	--	--
84-CDQ-06	203	11	27	5	<10	--	--
84-CDQ-07	203	28	70	4	<10	--	--
84-CDQ-08	201	23	62	5	<10	--	--
84-CDQ-09	201	17	55	5	<10	--	--
84-CDQ-10	201	25	76	5	<10	--	--
84-CDQ-11	201	10	53	3	<10	--	--
84-CDQ-12	203	8	29	2	<10	--	--
84-CDQ-13	203	18	50	6	<10	--	--
84-CDQ-14	203	13	38	3	<10	--	--
84-CDQ-15	201	15	51	7	<10	--	--
84-CDQ-16	203	13	48	5	<10	--	--
84-CDQ-17	203	17	45	5	<10	--	--

Certified by *Hart Bichler*



MEMBER
CANADIAN TESTING
ASSOCIATION



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : STEPHEN, J.C. EXPLORATION LIMITED

1458 RUPERT STREET
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8412641-002-A
INVOICE # : I8412641
DATE : 27-JUN-84
P.O. # : NONE
COLDS CAUR

Sample description	Prep code	Cu ppm	Zn ppm	AS ppm	AU-AA ppb		
84-CDQ-18	203	11	70	5	<10	--	--
84-CDQ-19	203	5	24	2	<10	--	--
84-CDQ-20	201	11	68	4	<10	--	--
84-CDS-01	201	16	49	4	20	--	--
84-CDS-02	201	8	47	3	<10	--	--
84-CDS-03	201	18	38	4	<10	--	--
84-CDS-04	201	14	68	3	10	--	--
84-CDS-05	201	16	62	5	<10	--	--
84-CDS-06	201	10	42	2	<10	--	--
84-CDS-07	201	10	43	3	<10	--	--
84-CDS-08	201	11	20	2	10	--	--
84-CDS-09	201	7	22	2	<10	--	--
84-CDS-10	201	7	39	3	<10	--	--
84-CDS-11	201	29	75	5	<10	--	--
84-CDS-12	201	9	55	3	<10	--	--
84-CDS-13	201	11	33	3	<10	--	--
84-CDS-14	201	7	96	4	10	--	--
84-CDS-15	201	8	35	3	<10	--	--
84-CDS-16	201	11	70	4	<10	--	--
84-CDS-17	201	16	90	4	<10	--	--
84-CDS-18	201	20	44	6	<10	--	--
84-CDS-19	201	11	38	4	<10	--	--
84-CDS-20	201	11	40	4	<10	--	--
84-CDS-21	201	15	70	4	<10	--	--
84-CDS-22	201	18	95	5	<10	--	--
84-CDS-23	201	23	98	4	<10	--	--
84-CDS-24	201	14	40	4	<10	--	--
84-CDS-25	201	13	58	4	10	--	--
84-CDS-26	201	9	46	3	<10	--	--
84-CDS-27	201	11	55	7	<10	--	--
84-CDS-28	201	21	100	6	<10	--	--
84-CDS-29	201	10	95	4	<10	--	--
84-CDS-30	201	11	135	3	<10	--	--
84-CDS-31	201	23	83	6	<10	--	--
84-CDS-32	201	12	62	3	<10	--	--
84-CDS-33	201	14	30	4	<10	--	--
84-CDS-34	201	31	90	7	<10	--	--
84-CDS-35	201	18	130	5	<10	--	--
84-CDS-36	201	14	120	6	<10	--	--
84-CDS-37	201	14	41	6	<10	--	--

Certified by *Hart Bichler*





CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : STEPHEN, J.C. EXPLORATION LIMITED

1458 RUPERT STREET
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8412641-003-A
INVOICE # : I8412641
DATE : 27-JUN-84
P.O. # : NONE
COLDSCAUR

Sample description	Prep code	Cu ppm	Zn ppm	AS ppm	AU-AA ppb		
84-CDS-38	201	13	58	5	<10	--	--
84-CDS-39	201	12	86	3	10	--	--
84-CDS-40	201	18	58	5	<10	--	--
84-CDS-41	201	19	130	6	10	--	--
84-CDS-42	201	32	150	9	<10	--	--
84-CDS-43	201	23	180	6	<10	--	--
84-CDS-44	201	16	203	5	<10	--	--
84-CDS-45	201	13	62	5	<10	--	--
84-CDS-46	201	15	98	5	<10	--	--
84-CDS-47	201	11	32	4	<10	--	--
84-CDS-48	201	16	65	1	<10	--	--
84-CDS-49	201	42	135	11	10	--	--
84-CDS-50	201	13	290	5	<10	--	--
84-CDS-51	201	9	250	4	<10	--	--
84-CDS-52	201	13	158	5	<10	--	--
84-CDS-53	201	17	107	3	<10	--	--
84-CDS-54	201	34	110	6	<10	--	--
01+00S	201	4	76	4	<10	--	--
02+00S	201	7	53	9	<10	--	--
03+00S	201	72	162	14	10	--	--
04+00S	201	28	110	10	<10	--	--
05+00S	201	21	120	10	10	--	--
06+00S	201	12	39	7	<10	--	--
07+00S	201	10	93	9	<10	--	--
08+00S	201	10	155	10	<10	--	--
09+00S	201	13	440	11	10	--	--
10+00S	201	21	160	11	<10	--	--
11+00S	201	23	265	10	10	--	--
12+00S	201	8	295	6	<10	--	--
13+00S	201	34	270	12	<10	--	--
14+00S	201	38	510	10	<10	--	--
15+00S	201	18	730	6	10	--	--
16+00S	201	33	535	7	<10	--	--
17+00S	201	39	800	11	<10	--	--
18+00S	201	40	400	9	<10	--	--
19+00S	201	51	320	11	<10	--	--
LCP2	201	12	95	11	<10	--	--



MEMBER
CANADIAN TESTING
ASSOCIATION

Certified by *Hart Bichler*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : STEPHEN, J.C. EXPLORATION LIMITED

1458 RUPERT STREET
NORTH VANCOUVER, B.C.
V7J 1E9

CERT. # : A8413184-001-A
INVOICE # : I8413184
DATE : 9-JUL-84
P.C. # : NCNE
COLDSKAUR

Sample description	Prep code	Ag ppr Aqua R						
84-CAQ-01	214	0.3	--	--	--	--	--	--
84-CAQ-02	214	0.1	--	--	--	--	--	--
84-CAQ-03	214	0.3	--	--	--	--	--	--
84-CAS-01	214	0.1	--	--	--	--	--	--
84-CCQ-01	214	0.3	--	--	--	--	--	--
84-CCQ-02	214	0.3	--	--	--	--	--	--
84-CCQ-03	214	0.4	--	--	--	--	--	--
84-CCS-01	214	1.9	--	--	--	--	--	--
84-CCS-02	214	0.5	--	--	--	--	--	--
84-CCS-03	214	0.3	--	--	--	--	--	--
84-CCS-04	214	0.4	--	--	--	--	--	--
84-CCS-05	214	0.4	--	--	--	--	--	--
84-CDS-28	214	0.3	--	--	--	--	--	--
84-CDS-30	214	0.1	--	--	--	--	--	--
84-CDS-35	214	0.4	--	--	--	--	--	--
84-CDS-36	214	0.3	--	--	--	--	--	--
84-CDS-41	214	0.4	--	--	--	--	--	--
84-CDS-42	214	0.2	--	--	--	--	--	--
84-CDS-43	214	0.2	--	--	--	--	--	--
84-CDS-44	214	0.3	--	--	--	--	--	--
84-CDS-49	214	0.3	--	--	--	--	--	--
84-CDS-50	214	0.3	--	--	--	--	--	--
84-CDS-51	214	0.1	--	--	--	--	--	--
84-CDS-52	214	0.1	--	--	--	--	--	--
84-CDS-53	214	0.3	--	--	--	--	--	--
84-CDS-54	214	0.1	--	--	--	--	--	--
03+00S	214	0.4	--	--	--	--	--	--
04+00S	214	0.2	--	--	--	--	--	--
05+00S	214	0.3	--	--	--	--	--	--
08+00S	214	0.1	--	--	--	--	--	--
09+00S	214	0.4	--	--	--	--	--	--
10+00S	214	0.3	--	--	--	--	--	--
11+00S	214	0.2	--	--	--	--	--	--
12+00S	214	0.1	--	--	--	--	--	--
13+00S	214	0.3	--	--	--	--	--	--
14+00S	214	0.4	--	--	--	--	--	--
15+00S	214	0.4	--	--	--	--	--	--
16+00S	214	0.2	--	--	--	--	--	--
17+00S	214	0.4	--	--	--	--	--	--
18+00S	214	0.4	--	--	--	--	--	--



MEMBER
CANADIAN TESTING
ASSOCIATION

Certified by *Hart Bichler*



CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1

TELEPHONE: (604) 984-0221
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO : STEPHEN, J.C. EXPLORATION LIMITED

1458 RUPERT STREET
NORTH VANCCOVER, B.C.
V7J 1E9

CERT. # : A8413184-002-A
INVICICE # : 18413184
DATE : 9-JUL-84
P.C. # : NONE
COLDCALR

Sample description	Prep code	Ag ppr Aqua R						
19+00S	214	0.2	--	--	--	--	--	--



MEMBER
CANADIAN TESTING
ASSOCIATION

Certified by *Hart Bichler*

A P P E N D I X I I I

S T A T E M E N T S O F Q U A L I F I C A T I O N S

STATEMENT OF QUALIFICATIONS

AUDREY E. HEAGY

ACADEMIC

1981 Graduated from Queen's University at Kingston Ontario.
 B.Sc. Honors Geology, First Class
 Medalist in Geological Sciences

EXPERIENCE

1979 Assistant geologist on traverse, drafting, cooking
 Ontario Geological Survey

1980 Detailed geological mapping, reconnaissance, prospecting
 and sampling on Queen Charlotte Islands, Vancouver Island
 J.C. Stephen Explorations Ltd.

1981 Reconnaissance exploration, primarily for tungsten, also
1982 molybdenum and base metals, northern B.C. and Yukon
 Amax Mineral Exploration Ltd.

1983 Petrographic descriptions, data compilation and minor research
 related to tungsten, tin and molybdenum deposits in Canada
 Geological Survey of Canada

May
1983 to Present - Reconnaissance exploration for precious metals in
 the Cassiar district, B.C.
 J.C. Stephen Explorations Ltd.

STATEMENT OF QUALIFICATIONS

J.C. STEPHEN

Academic

1950 Associate Member British Institute Engineering Technology
1950-1951 One year Geology University of Alberta

Experience Summary

1947-1955 Development and production experience in engineering and geology at Central Patricia Gold Mines, Eldorado Mining and Refining, Madsen Gold Mines, Hasaga Gold Mines, Pickle Crow Gold Mines as Surveyor, Assistant to the Engineer, Geologist.

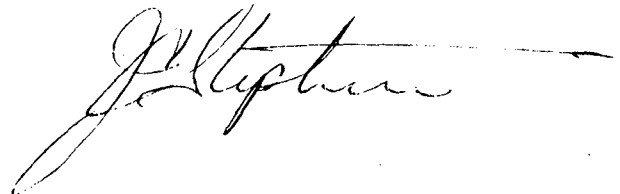
1955-1959 Regional exploration experience with Pickle Crow Gold Mines, Combined Developments Ltd., R.G. Crosby and Associates, Jay-Kay Syndicate as Field Geologist.

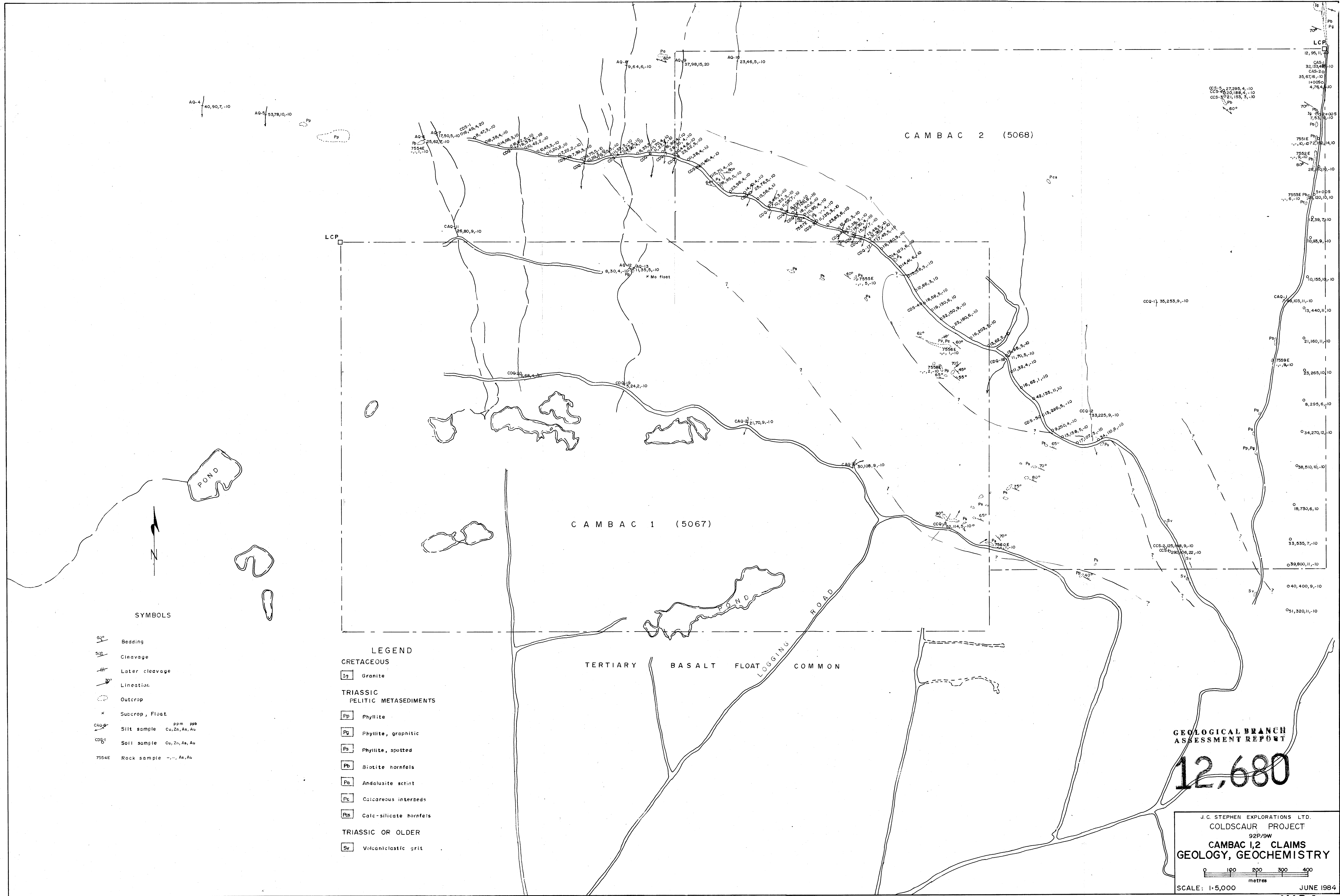
1959-1961 Municipal construction including monolithic concrete tunnels as Senior Inspector.

1962-1968 Regional exploration with Mastodon Highland Bell Mines as field geologist.

1968-1976 Regional exploration with Bacon and Crowhurst Ltd., as supervisor of exploration syndicates.

1977-Present President J.C. Stephen Explorations Ltd.
Management of various exploration syndicates. B.C. and Yukon





SYMBOLS

- Bedding
- Cleavage
- Later cleavage
- Lineation
- Outcrop
- Succrop, Float
- Silt sample ppm ppb
Cu, Zn, As, Au
- Soil sample Cu, Zn, As, Au
- Rock sample ---, As, Au

LEGEND

- CRETACEOUS**
- Granite
- TRIASSIC PELITIC METASEDIMENTS**
- Phyllite
- Phyllite, graphitic
- Phyllite, spotted
- Biotite hornfels
- Andalusite schist
- Calcareous interbeds
- Calc-silicate hornfels
- TRIASSIC OR OLDER**
- Volcaniclastic grit

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,680

J.C. STEPHEN EXPLORATIONS LTD.
COLDSCAUR PROJECT
92P/SW
CAMBAC 1,2 CLAIMS
GEOLOGY, GEOCHEMISTRY

0 100 200 300 400
metres
SCALE: 1:5,000
JUNE 1984

12 680

30BC 83051 N^o 001



J. C. STEPHEN EXPLORATIONS LTD
COLDSCAUR PROJECT
CAMBAC CLAIMS
92 P 9, 16 W KAMLOOPS M.D.

AIR PHOTO ENLARGEMENT
DATE: JUNE 1984
WORK BY:
SCALE 1:5000

