

REPORT

on

PROPOSED 1981 EXPLORATION PROGRAM

Property

PIKE

Claims PIKE

Location Longitude 130° 43' West  
Latitude 62° 10' North

Mining District Watson Lake

N.T.S. 105 J 2

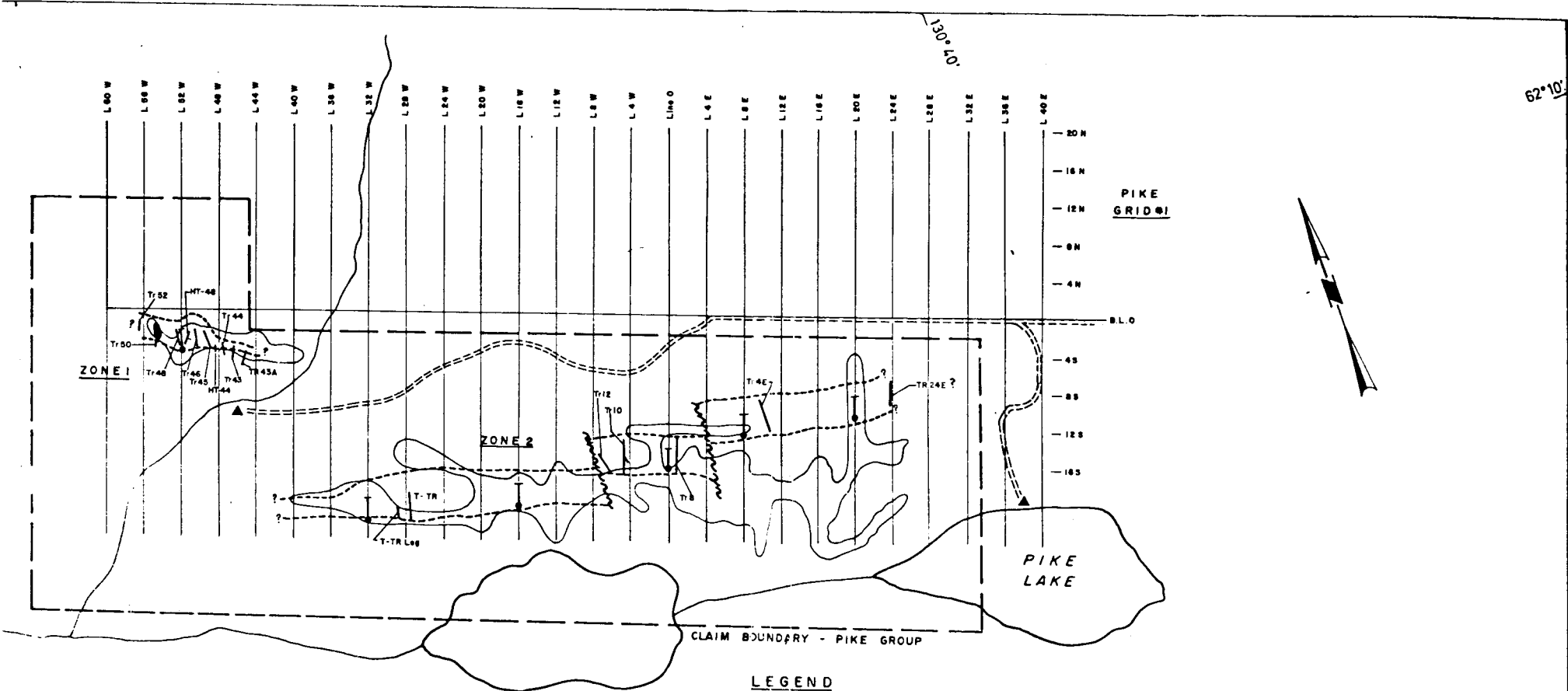
Commodity Cu-Ag-Pb-Zn

Author

R. G. KIDLARK BSc.

Certified by Keith C. Fahrni P. Eng.

Date: January 8th, 1981



TRENCH SAMPLING RESULTS

TRENCH No.	INTEVAL	LENGTH	AVERAGE % Cu	AVERAGE Ag (03/T)
24E	170' - 205'	35'	Tr	4.33
43	45' - 90'	45'	0.57	1.44
43A	20' - 58'	38'	0.69	1.50
HT 44	5' - 55'	50'	0.40	0.93
46	25' - 45'	20'	0.45	1.20
48	0' - 135' or 10' - 80'	135' 70'	0.36 0.44	2.58 3.85
50	0' - 120' or 25' - 60'	120' 35'	0.29 0.61	1.59 2.48
T-TR Leg	0' - 25'	25'	1.48	2.91
T-TR	25' - 88'	63	1.21	2.20



**CIMA RESOURCES LTD.**

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**PIKE GROUP**

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**COMPILATION MAP**

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(revised)  
DATE JANUARY 1981

NTS-105-J-2

# CANADIAN GEOSCIENCE CORPORATION

809 - 626 WEST PENDER STREET, VANCOUVER, BRITISH COLUMBIA, CANADA V6B 1V9

For personal contact, please dial ..... (604) 687-1022

reference:.....

February 3, 1981

## LETTER OF CERTIFICATION

### TO WHOM IT MAY CONCERN

I have reviewed the reports upon which this proposal for work on the Pike Property is based and which are listed in the bibliography. This proposal constitutes a just and fair assessment of the findings to date. The conclusions and recommendations outlined in the report follow logically from the work which has been done as described in the reports.

I have not visited the property personally, but I know the companies which have made the key reports referred to above to be of good repute.

I have had occasion to work with Mr. Kidlark and found him to be a capable geologist. I am pleased to assist him with this review of the proposals as a professional engineer.

I do not now, nor do I expect to hold any interest in either Cima Resources Ltd or the Pike mineral claims.

This report, in its full form or in the form of the abbreviated introductory letter, may be used by Cima Resources Ltd. for the information of the public in promotional releases to assist the financing of further work on the property.

I am a Professional Engineer, registered in British Columbia (#1885) and Alberta (#05773), who has practised mining and geological engineering in western Canada continuously since graduating from U.B.C. with the B.A.Sc. degree in 1936. I am familiar with operating conditions for mining development in Yukon Territory.

Yours truly,

CANADIAN GEOSCIENCE CORPORATION



Keith C. Fahrni, P.Eng.  
Vice President, Geology and Mines.

KCF/wf

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For personal contact, please dial (604) 687-1022

reference:.....

February 3, 1981

Cima Resources Ltd  
905-355 Burrard Street  
Vancouver, B.C.  
V6E 2G8

Dear Sirs:

Re: PIKE PROPERTY PROPOSALS  
WATSON LAKE DISTRICT, YUKON TERRITORY

## INTRODUCTION

The Pike Property is located 52 miles north-east from the town of Ross River in the Yukon Territory. Access is by air to Pike Lake, centrally located on the claim group. The property is held by Cima Resources Ltd. The Cima directors desire to carry out development on the property and this report proposes a work program for the 1981 summer season and estimates its cost.

## SUMMARY

The Pike property consists of 48 mineral claims which are held by right of location. Since the staking of the original claims in 1966, several companies have tried to develop ore on the property without much success. A coincident geophysical and geochemical (copper, lead) anomaly has been outlined over a length of about two miles. Two zones of mineralization by copper, silver, lead and zinc have been defined by bulldozer trenching, but the difficulty of trenching in permafrost and the decomposed nature of the bedrock under the overburden have prevented adequate sampling. Local outcrop is scarce. The property lies within the Selwyn Basin, the rocks of which form the hosts to most of the silver, lead and zinc deposits of the Yukon. A granitic dyke up to 400 feet in width appears to carry the interesting mineralization. There is a potential for a large tonnage deposit.

RECOMMENDATIONS

Further work on the Pike property is justified to get better definition of the extent and grade of mineralization within the anomalous zone.

A development program for 1981 season is recommended which has the following components:

Development Program

- a. Geological mapping,
- b. Geochemical sampling - to further define drill targets,
- c. Linecutting - to locate drill sites,
- d. Staking of additional claims - to protect possible extensions of the mineralization beyond the present claim boundaries,
- e. Diamond drilling - to test the character of the deposit at depth.

More details on the recommended program are provided in the report following. A tent camp will be established at Pike Lake which will be serviced from Ross River by float plane. A helicopter will be used to move the drill outfit between drill sites. A minimum field crew will be required.

The estimated cost of the program will be \$150,000 as scheduled item by item in the report.

Yours truly,

CANADIAN GEOSCIENCE CORPORATION



Keith C. Fahrni, P.Eng.  
Vice President, Geology and Mines.

KCF/wf

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## HISTORY

During the 1966 field season Atlas Exploration Limited carried out a regional prospecting, geochemical and geophysical program over the Traffic Mountain area. Lockwood Survey Corporation carried out the airborne magnetic and electromagnetic survey. The follow up program of prospecting, hand trenching and geochemical sampling turned up a Cu-Ag showing which resulted in the staking of the Pike Claims.

During 1970 Atlas Exploration carried out line cutting, geochemistry, ground magnetic, ground electromagnetic and bulldozer trenching over the claim block. The program turned up a coincident geochemical, magnetic and electromagnetic anomaly that had a linear extent of over 2 miles. The subsequent trenching revealed two zones of mineralization associated with a high level silicic dyke. Zone 1 which returned values of 0.61% Cu and 2.44 oz/T Ag has been exposed over an area 600 feet long and 45 feet wide. Drilling was unsuccessfully attempted in Zone 1 using a Winkie drill.

Due to thick overburden and permafrost, trenching in Zone 2 was relatively unsuccessful.

In 1977 hand trenching was carried out in Zone 1 by Cima Resources and in 1978 the property was optioned to Craigmont Mines Limited which subsequently carried out a modest geological mapping program on Zone 1. At that time Craigmont concluded that Zone 1 had little economic potential. The option was terminated in the latter part of 1978 and the property reverted back to Cima Resources. In 1980 Cima re-cut and extended the grid over Zone 2.

## LOCATION, ACCESS and GENERAL CONDITIONS

The Pike property consists of 48 contiguous claims and is situated North of Pike Lakes along the southern slope of an east-west trending ridge.

Slopes are moderate to gentle and elevations range from 1050 to 1100m. The property is accessed by float equipped aircraft or helicopter from Ross River which lies 52 miles to the south. Entrance can also be gained via a tote road which leaves the Robert Campbell Highway just North of Finlayson Lake.

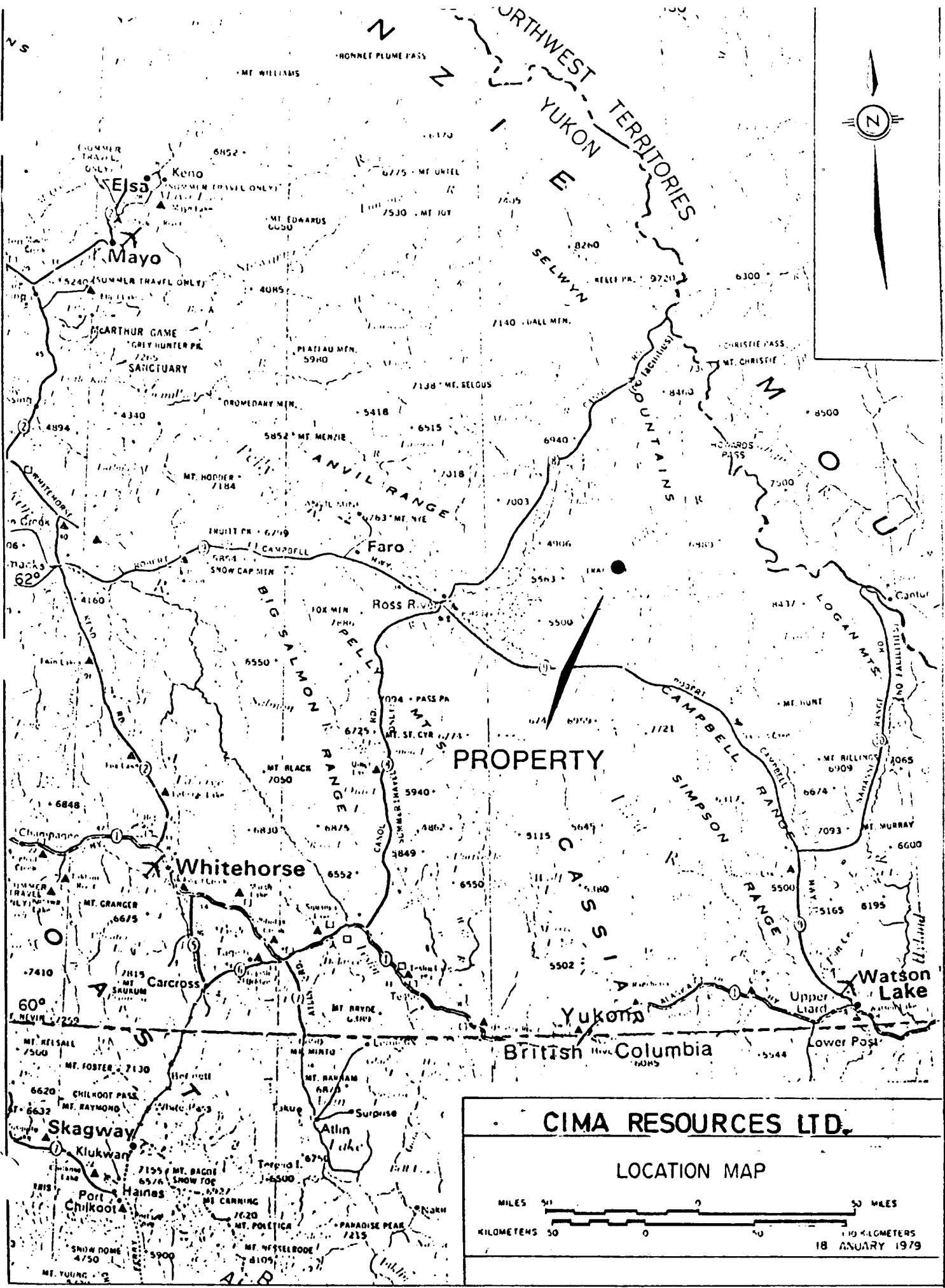
Ross River is a small village which is connected to the town of Whitehorse by 300 miles of allweather gravel highway. Facilities are limited and the airport can only accommodate light aircraft. Daily scheduled flights leave for Faro and Whitehorse.

Whitehorse has a population of approximately 14,000 and provides access to the major port of Skagway. Most of the services necessary to support an exploration program such as that which is planned for the Pike property are available at Whitehorse. Camp supplies are available from Ross River.

Weather conditions at the property are typical of the Central Yukon. Late break up and early freeze up limits exploration to the summer months when float equipped aircraft can provide transportation and while water lines for drills can be kept in operation.

There are no buildings on the property at present. A temporary camp is planned at a site which has been previously found suitable on the north shore of the largest of the lakes.





PROPERTY

CIMA RESOURCES LTD.

LOCATION MAP

MILES 0 50  
KILOMETERS 0 50 100  
18 JANUARY 1979

CLAIMS

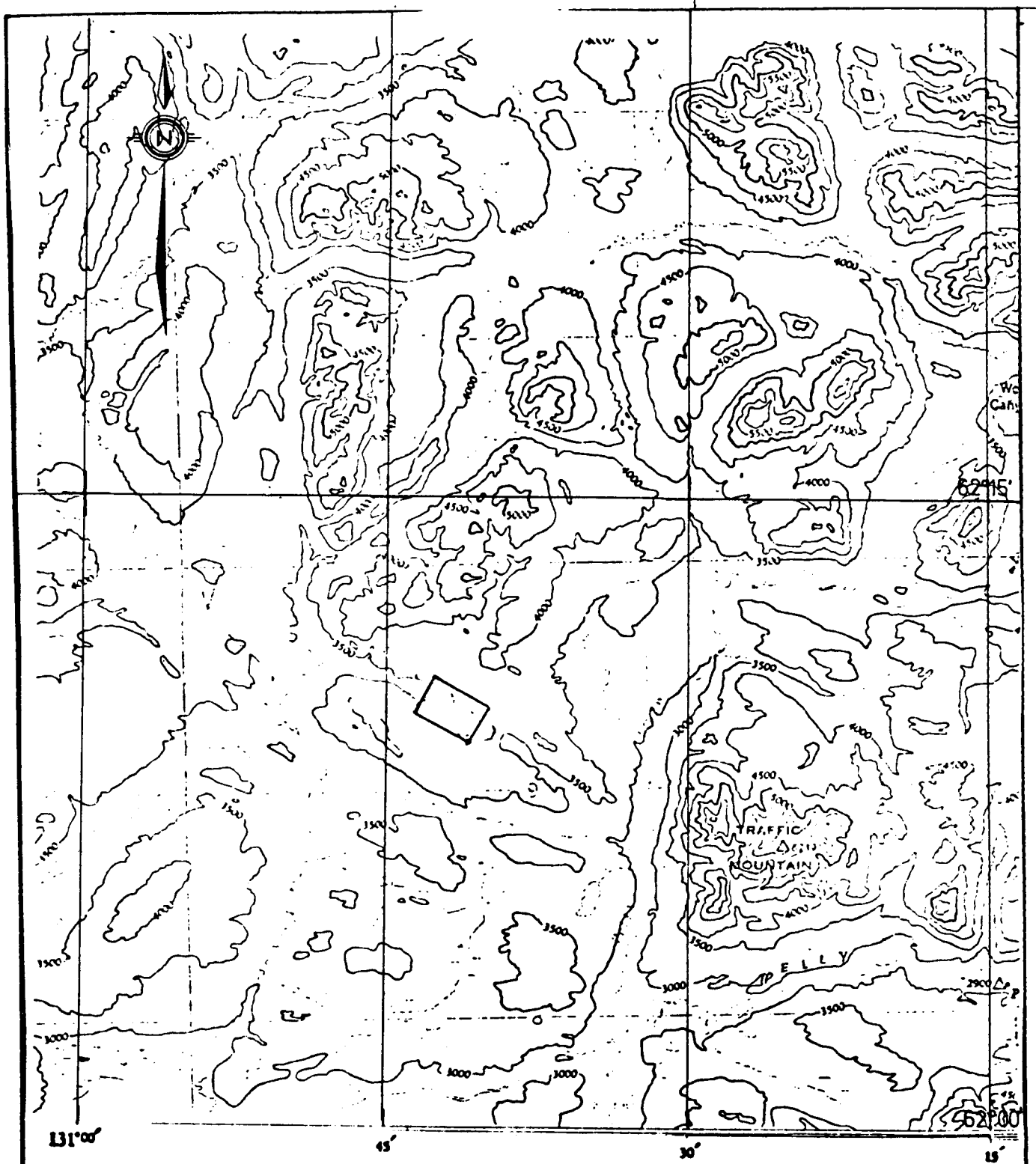
Cima Resources Limited hold the following 48 mineral claims:

<u>Claim</u> <u>No.</u>	<u>Grant</u> <u>No.</u>	<u>No. of</u> <u>Claims</u>	<u>Recording</u> <u>Date</u>	<u>Due</u> <u>Date</u>
7	Y13155	1	4 July 1966	March 1, 1982
9	Y13157	1	"	"
13-16	Y13161-Y13164	4	"	"
17-22	Y13165-Y13170	6	"	"
37-40	Y13155-Y13458	4	10 Aug. 1966	"
1-6	YA45153-YA45158	6	9 Aug. 1979	Aug. 9, 1981
8	YA45159	1	"	"
10	YA45160	1	"	"
114	YA45173	1	"	"
118	YA45174	1	"	"
120	YA45175	1	"	"
125	YA45176	1	"	"
129	YA45178	1	"	"
131-132	YA45180-YA45181	2	"	"
145	YA45184	1	"	"
85-88	YA45169-YA45172	4	"	"
126	YA45177	1	"	"
130	YA45179	1	"	"
141	YA45182	1	"	"
143	YA45183	1	"	"
33-36	YA45161-YA45164	4	"	"
81-84	YA45165-YA45168	4	"	"

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On January 7, 1981 the certificates of work were examined and the preceeding claim data was verified.



CIMA RESOURCES LTD.	
PIKE MINERAL CLAIMS	
SCALE 1 : 250,000	
JANUARY 1981	N.T.S. 105-J-2

## GEOLOGY

Outcrop is sparse on the property and the lithologic units are ambiguous. Atlas investigators observed that the claim block was underlain by a Paleozoic sequence of interbedded cherts, shales and limestone which have been intruded by an east-west striking cretaceous granite dyke. The dyke dips steeply and is the host for the Cu - Ag mineralization.

Craigmont geologists concluded that the claims are underlain by a volcanic sequence consisting of andesite, rhyolite, tuffite and dacite and that the Cu - Ag mineralization is associated with a rhyolite flow or dyke.

## MINERALIZATION

Pyrrhotite, arsenopyrite, pyrite, chalcopyrite and tetrahedrite with minor enstatite, bornite, sphalerite and galena occur as disseminations and in veinlets in an altered silicic dyke. Alteration mineral consists of quartz, chlorite, clay - sericite and biotite.

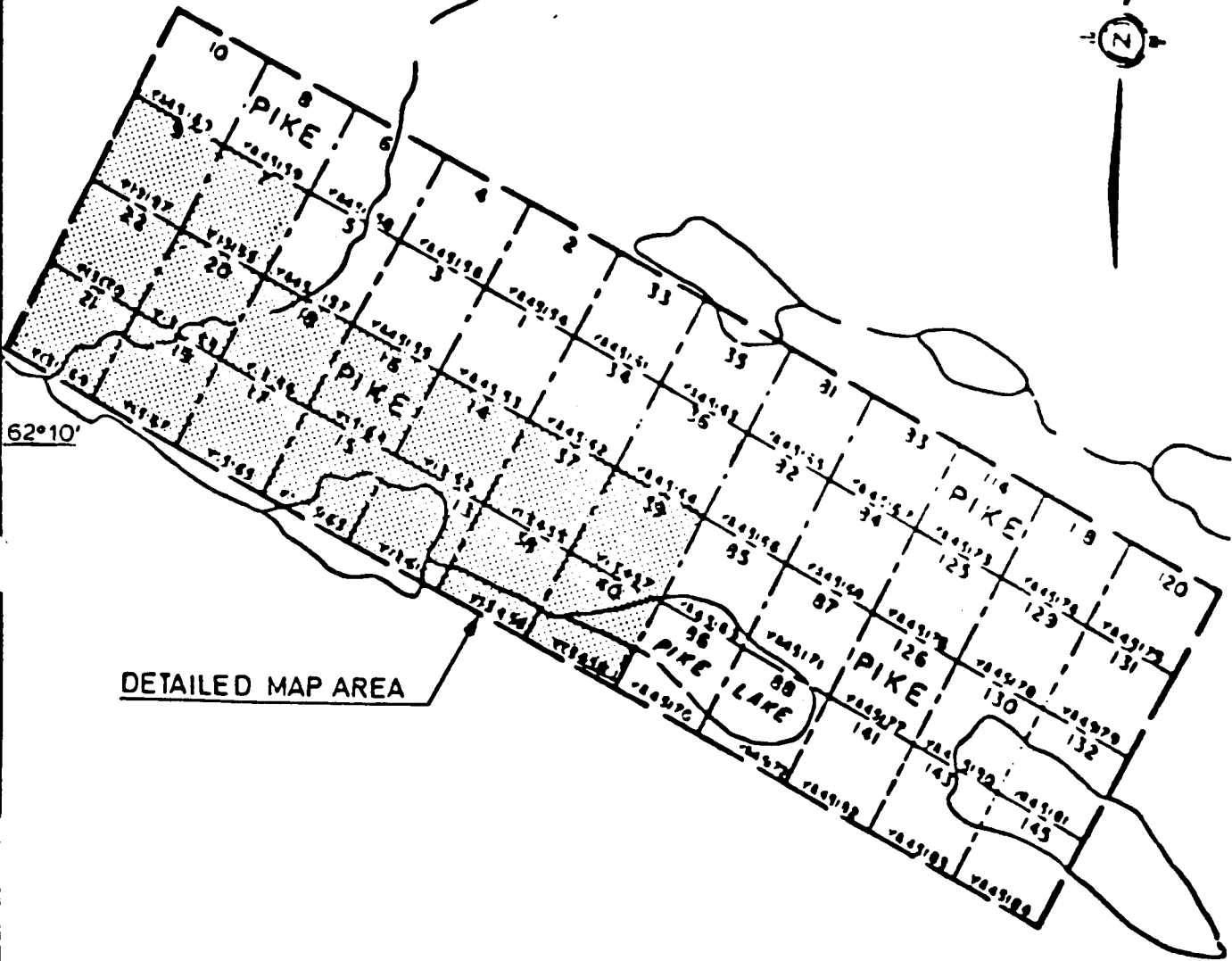
F.A. Campbell did a brief study of polished sections of type specimens from the Pike claims in 1967. The study indicated the following paragenetic sequence: sphalerite (early), arsenopyrite, chalcopyrite, tetrahedrite, arsenopyrite (late). The Cu - Ag values appeared to be carried by the chalcopyrite - tetrahedrite mineralization.

## CONCLUSIONS

There is not enough information to indicate whether the sulphide mineralization is related to a porphyry or massive sulphide system, but the following conclusions can be made:

- a) Coincident geophysical and soil geochemical anomalies occur over a 2 mile length.
- b) Where the anomalous zone has been tested to bedrock sulphide mineralization occurs in association with a silicic dyke which may be 400 feet in width and of undefined vertical extent.

130°43'

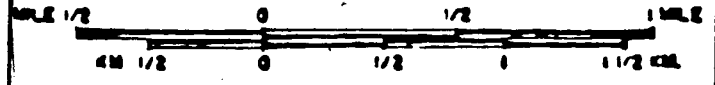


62°10'

DETAILED MAP AREA

CIMA RESOURCES LTD.

CLAIM MAP  
NTS 105-J-2



NOV. 1980

- c) Grades of up to 1.48% copper and 4.33 ounces per ton in silver are reported from previous trench sample assays.
- d) The property has the potential for a large tonnage deposit and further exploration is justified.

### RECOMMENDATIONS

A program of exploration is recommended for the 1981 season. The contemplated program calls for a Cima crew of 3 for a period of 2 months who will be engaged in the following activities:

- a) Geological Mapping.
- b) Geochemical Sampling - to further define drill targets.
- c) Linecutting - to locate drill sites and provide geological control.
- d) Staking - to protect the possible extension of mineralization outside of the present claim boundaries.
- e) Supervising drilling, logging and sampling core.

Diamond drilling will be carried out by contractors using a light drill outfit which will be moved by helicopters. An estimated total of 2000 feet (610 m) in six holes at BQ size is planned to be drilled in the later part of the season when drill sites have been established according to the grid system which has been set up on the property and shown on the compilation map. Proposed drill holes are listed in the following table:

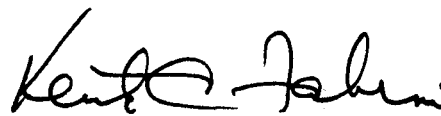
Proposed Drill Hole	Location	Length		Dip	Direction
		ft.	m.		
1	L20E, 10+00S	333	100	-50°	N 20° E
2	L8E, 12+00S	333	100	-50°	N 20° E
3	L0, 16+00S	333	100	-50°	N 20° E
4	L16W, 22+00S	333	100	-50°	N 20° E
5	L32W, 24+00S	333	100	-50°	N 20° E
6	L52W, 4+00S	333	100	-50°	N 20° E
Total (Rounded)		2000 (610m)			

ESTIMATE OF COST

## Cima Personnel

Project Geologist	\$ 2,500/mo	X 2	\$ 5,000
Assistant (Core splitter, soil samples)	\$ 1,200/mo	X 2	\$ 2,400
Cook	\$ 1,600	X 1	\$ 1,600
Truck Rental	\$ 1,200/mo	X 2	\$ 2,400
Mobilization and Demobilization			\$ 1,500
Room and Board: Cima Personnel	\$ 30/day	X 3 X 60	\$ 5,400
Drillers	\$ 30/day	X 4 X 30	\$ 3,600
Transportation: Camp moves and supply flights			
Fixed wing 12 trips x \$ 200/trip			\$ 2,400
Helicopter 20hr (?) @ \$400/hr			\$ 8,000
Linecutting and staking			\$ 8,000
Field Supplies and Rentals			\$ 10,000
Assaying and Geochem			\$ 1,000
Expediting			\$ 1,000
Map + Reports			\$ 7,000
Diamond Drilling	2000ft (610m)	X \$ 120/m	\$ 73,200
			<hr/>
			\$132,500
Contingencies 10%			\$ 13,250
			<hr/>
TOTAL			\$145,750
ROUNDED			\$150,000
			=====

  
 R. G. KIDLARK BSc.

  
 Certified by:  
 Keith C. Fahrni P. Eng.

BIBLIOGRAPHY

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- 1967: Report Geophysical Surveys.  
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STATEMENT OF QUALIFICATIONS

Name: Roger Graham Kidlark

Place and year of birth: Bracebridge, Ontario, 1948

Education: University of Toronto;  
Awarded BSc. 1974

Experience:

- April 1980 to present - Geologist, Cima Resources Limited
- May 1978 to March 1980 - Geologist, Amax of Canada Limited
- January 1978 to April 1978 - Sr. Assistant, Geological Survey of Canada
- May 1977 to August 1977 - Geologist, Chevron Standard Limited
- August 1974 to May 1976 - Geologist, Brascan Resources Limited
- April 1974 to July 1974 - Geologist, Silvermaque Mining Limited