

090902

REPORT ON

1981 EXPLORATION PROGRAM

090902

OF PROSPECTING, MAPPING AND DIAMOND DRILLING

PIKE MINERAL CLAIMS

WATSON LAKE MINING DISTRICT

YUKON TERRITORY



LOCATION: Longitude 130° 43' West
Latitude 62° 10' North

BY

INGRID M. VOPEL, BSc.

CIMA RESOURCES LIMITED

August 31, 1981

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MAP

1	Property Geology Map	(in pocket)
2	Zone 1 Geology Map	(in pocket)
3	Zone 1 Geology Trenches	(in pocket)
4	Zone 1 1966 Trench Sample Results	(in pocket)

SUMMARY

The Pike property consists of 48 mineral claims located 84 kilometres West of Ross River, Yukon Territory.

Earlier exploration work resulted in the identification of two zones of potential mineralization; Zone 1 and Zone 2. Trenching in Zone 1 exposed an area of mineralization over 183 metres in length and 14 metres wide, averaging 0.61% Cu and 2.44 oz./tonne Ag. Trenching in Zone 2 exposed areas of intense alteration, but with marginal mineralization.

During 1981, Cima Resources Limited determined the existence of economic mineralization in Zone 1. Indicated reserves are estimated to be 350,000 tonnes, with additional potential based upon the mineralized zone being open towards the East and to depth.

CONCLUSIONS

On the Pike property significant Cu-Ag mineralization has been exposed at the western end of the property (Zone 1). This mineralization occurs in a porphyritic granite dike. Mineralization is associated with the silicified phase of this dike.

Since the limits of the mineralization have not yet been delineated, Zone 1 warrants further investigation of the extension and grade of this deposit.

RECOMMENDATIONS

Based upon a possible extension of the mineralized area in Zone 1 the following exploration program is recommended:-

- 1) Trenching - Across the area East of Zone 1
- 2) Diamond drilling
 - (a) Minimum 3 holes along the mineralized area
 - (b) Minimum 6 holes South of mineralized area
- 3) Surface Sampling - Old trenches to be cleaned and sampled to confirm accuracy of 1966 sampling

The program calls for a crew of approximately 8 people including 4 drillers and the estimated cost is in the order of \$180,000.

INTRODUCTION

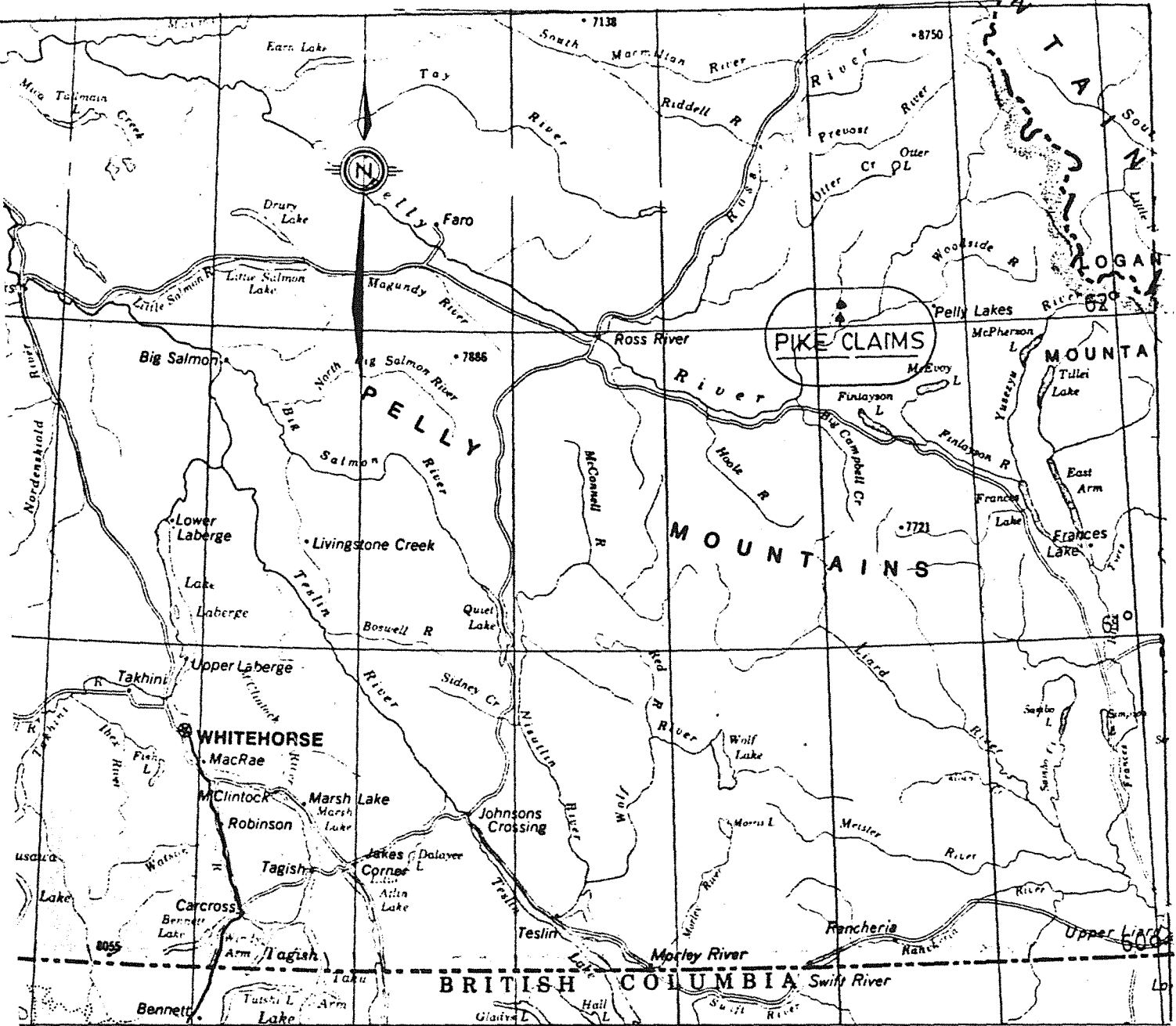
Location and Access

The property is situated partly covering the Pike Lakes, 83 kilometres East of Ross River, Yukon Territory.

Access to the property is by float-equipped aircraft from Ross River to the Pike Lakes. Entrance can also be gained via a winter tote road which leaves the Robert Campbell Highway just north of Finlayson Lake.

Camp Status

A fly camp was built close to the North side of the smallest of the Pike Lakes; water supply can be obtained from this lake.



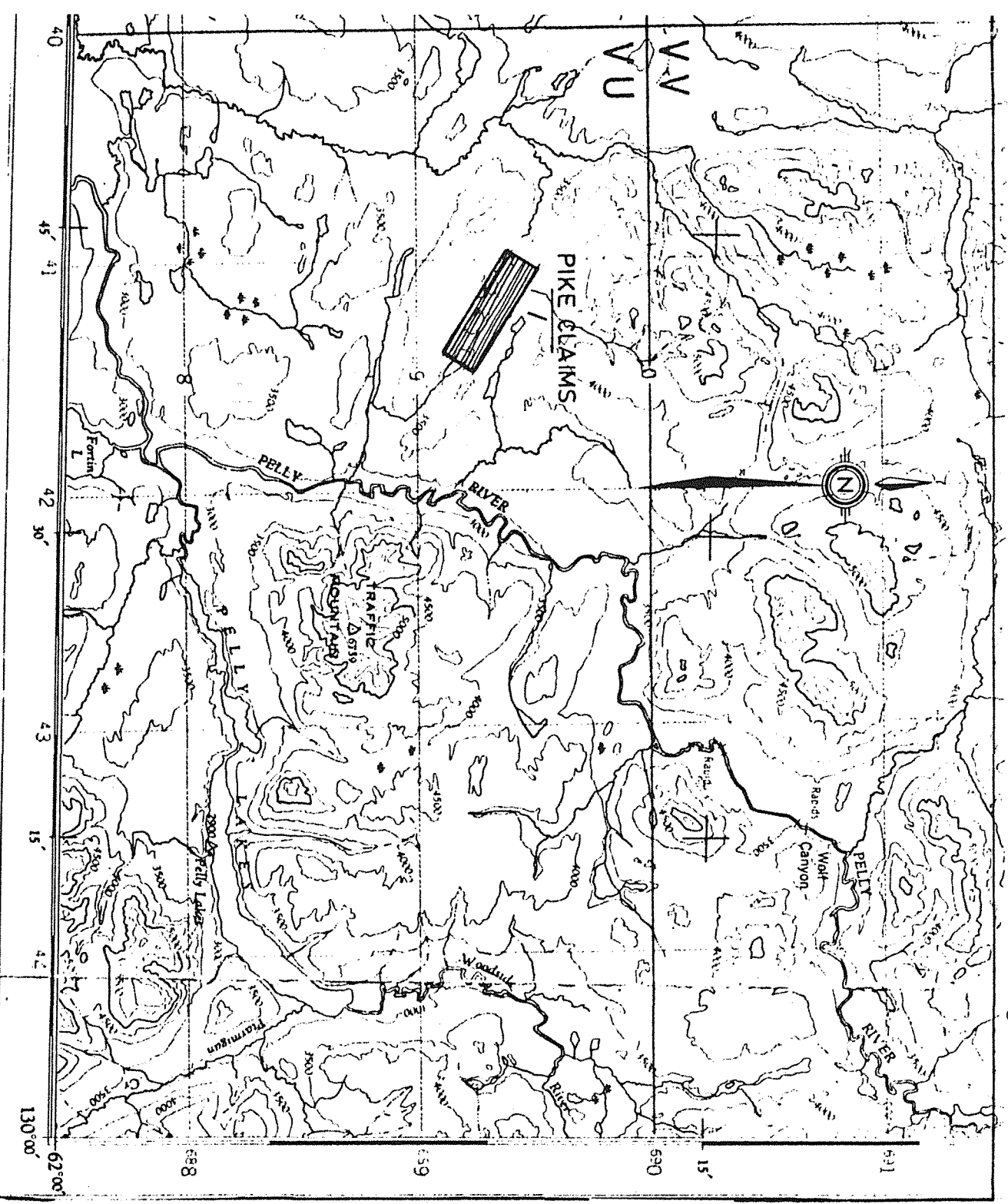
36° 135° 134° 133° 132° 131° 130° 12

CIMA RESOURCES LTD.
 PIKE PROPERTY
 LOCATION MAP

FIGURE 1

N.T.S. 105 J 2

AUGUST, 1981 Scale 1: 2,000,000



CIMA RESOURCES LTD.
PIKE PROPERTY
LOCATION MAP

FIGURE 2
N.T.S. 105 J 2
AUGUST, 1981 Scale 1 : 250,000

Claims

Cima Resources Limited is the sole owner of the following 48

mineral claims:-

<u>Claim No.</u>	<u>Grant No.</u>	<u>No. of Claims</u>	<u>Recording Date</u>	<u>Due Date</u>
7	Y13155	1	July 4, 1966	March 1, 1986
9	Y13157	1	July 4, 1966	March 1, 1986
13-22	Y13161-Y13170	10	July 4, 1966	March 1, 1986
37-40	Y13455-Y13458	4	August 10, 1966	March 1, 1986
1-6	YA45153-YA45158	6	August 9, 1979	August 9, 1986
8	YA45159	1	August 9, 1979	August 9, 1986
10	YA45160	1	August 9, 1979	August 9, 1986
114	YA45173	1	August 9, 1979	August 9, 1986
118	YA45174	1	August 9, 1979	August 9, 1986
120	YA45175	1	August 9, 1979	August 9, 1986
125-126	YA45176-YA45177	2	August 9, 1979	August 9, 1986
129-132	YA45178-YA45181	4	August 9, 1979	August 9, 1986
145	YA45184	1	August 9, 1979	August 9, 1986
81-88	YA45165-YA45172	8	August 9, 1979	August 9, 1986
141	YA45182	1	August 9, 1979	August 9, 1986
143	YA45183	1	August 9, 1979	August 9, 1986
33-36	YA45161-YA45164	4	August 9, 1979	August 9, 1986

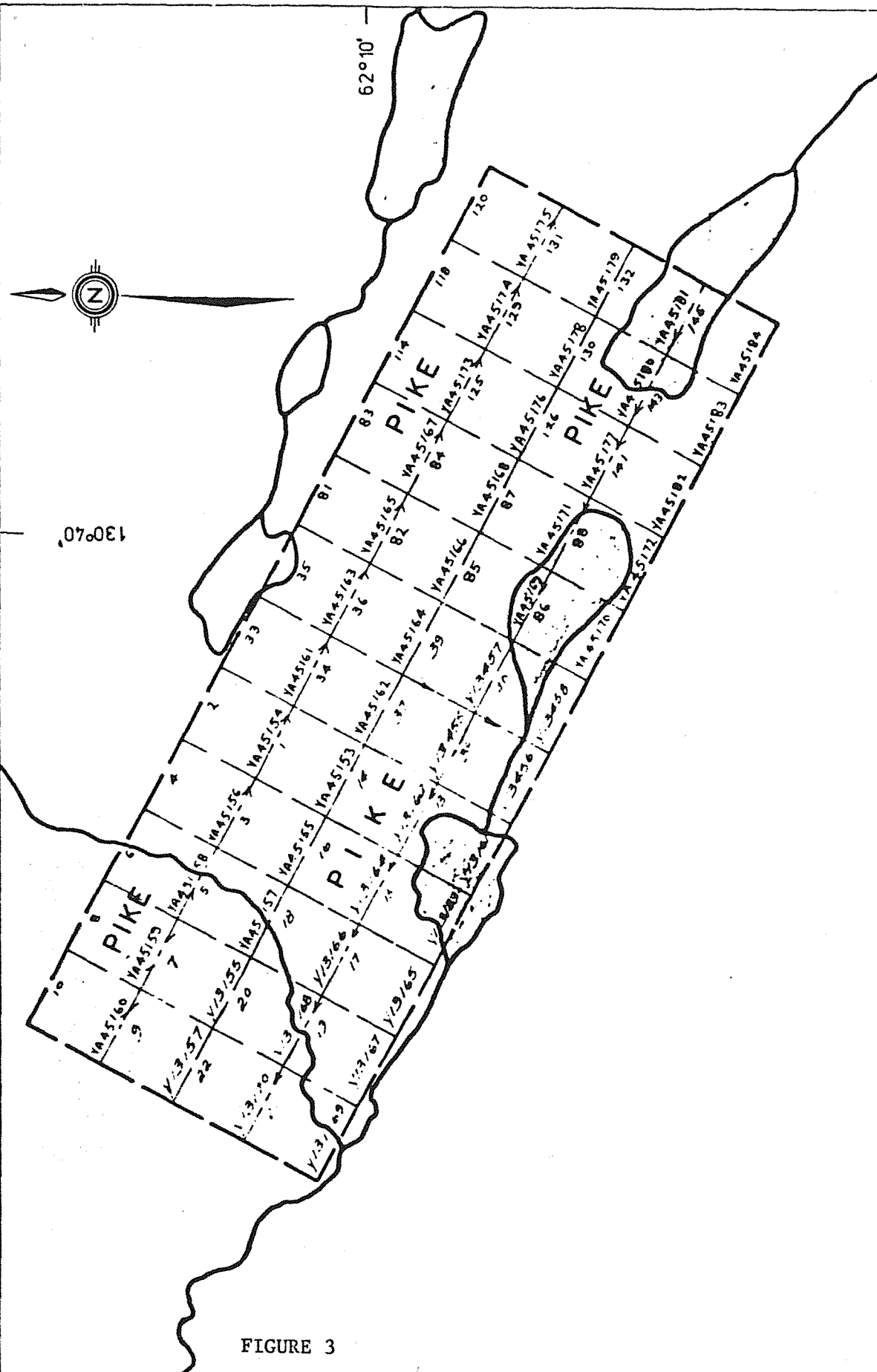


FIGURE 3

CIMA RESOURCES LIMITED

CLAIM MAP
NTS 105-J-2

1 MILE
0 1/2 1 1 1/2 KM

Physiography and Vegetation

The Pike grid area covers a gently rolling terrain overlain by residual soils, thin glacial cover and local swamps. The northern zone of the grid supports a dense vegetation cover including pine, fir and spruce.

History

Atlas Exploration Ltd. became interested in the Pike Lake area during 1966. Interest was prompted by an earlier discovery by Al Kulan of Cu-Ag mineralization in porphyry, running about 200 oz./tonne Ag. That year an airborne magnetic and electromagnetic survey was conducted, being followed by prospecting, trenching and geochemical silt sampling on magnetic anomalous areas.

To cover scattered high geochemical results as well as an area of apparently significant structural geology, a total of 776 claims were staked. This exploration program revealed two zones of mineralization associated with a porphyritic granite dike; sampling and trenching in Zone 1 identified a zone 220 metres long and 14 metres wide of continuous mineralization averaging 0.61% Cu and 2.44 oz/tonne Ag. Due to thick glacial overburden, only two trenches in Zone 2 hit bedrock; sampling of these trenches showed significant Pb, Zn, Ag and Cu values in a limestone unit close to the contact with an porphyritic dike. No further work was done on the property up to 1977 when Cima Resources developed a trenching program with inconclusive results. In 1978 the claims were optioned to Craigmont Mining Ltd. This company carried out a geological program, dropping the option later on.

Work Done

From June 20 to July 31, 1981, line cutting, geological mapping and diamond drilling were carried out on the property.

Diamond drilling was contracted to Drilcor who provided the camp cook, a four man drilling crew and equipment. A portable Winkie drill was utilized to drill 3 holes of B.Q. size for a total of 280.10 metres. The drilling commenced on July 17th and the last hole was completed on July 26th. One drill hole was drilled in Zone 1 and; 2 drilled in Zone 2. The drilling average with moves was 14.0 metres per 12 hour shift.

REGIONAL GEOLOGY (Figure No. 4)

The Pike region is underlain by the following lithologic units (Map 12-1961 C.G.S.); (156) Quarternary unconsolidated glacial and alluvial deposits, which cover the Pike mineral claims; (14) Tertiary volcanic rocks, mainly grey and dark grey andesite, dacite and basalt, commonly massive and porphyritic - these units are located SE and SW of the Pike claims; (5c) possible Devonian-Mississippian black slaty shale - these units underlie the Pike claims and extend south of them; (11) Middle Cretaceous granite rocks - they are commonly biotite granodiorite. The contact with the country rock are normally sharp and dip steeply outward. Silicified rocks, hornfels and minor pyrite are found near the contacts. These units are represented on the Pike claims by a steep dipping granite dike.

ZONE 1

Location and Topography

Zone 1 is located on the North western corner of the Pike property and the mineralized zone outcrop on the South slope of an isolated small hill; a small stream separates Zone 1 from Zone 2.

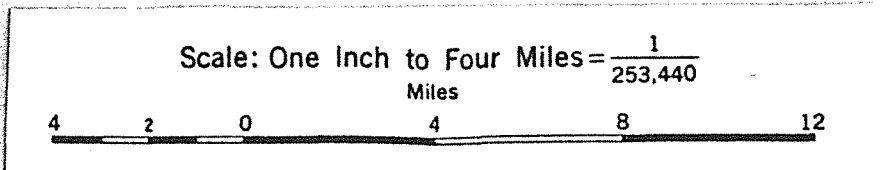
Geology and Structure (Map No. 2 in pocket)

This zone is underlain by a N70°W striking, steeply dipping sequence of black slates, massive bedded cherts and carbonaceous shales with interbedded limestone bands. This sequence is cut by a steeply dipping partially silicified biotite granite dike.



00' 45' 131° 30' PRINTED BY THE SURVEYS AND MAPPING

FIGURE 4



CIMA RESOURCES LTD
PIKE PROPERTY
REGIONAL GEOLOGY MAP
NTS 105 J 2

Map-units A, 2, 6, 7, 8, 9, 10, and 12
appear on Map 13-1961, "Tay River" only

CENOZOIC	QUATERNARY	
	15	15a, modern unconsolidated alluvial deposits; 15b, unconsolidated glacial and alluvial deposits
	TERTIARY	
	14	Grey and dark grey andesite, dacite, and basalt, commonly massive and porphyritic; minor pyroclastic material
MESOZOIC	13	Granodioritic quartz and feldspar porphyry, probably plutonic equivalent of 14
	PALEOCENE	
	12	Brown-weathering, brown, impure sandstone with plant remains, grey and brown conglomerate, and brown shale; 12a, rusty weathering conglomerate; minor sandstone and shale, may be equivalent to 12 but age not established, locally interbedded with part of 14
	CRETACEOUS (?)	
	11	Medium-to coarse-grained quartz monzonite and granodiorite, commonly porphyritic; minor diorite and gneiss
	TRIASSIC	
	10	Interbedded, dark grey to black, friable, micaceous sandstone, and shale; minor conglomerate and concretionary shale
	8	Altered, dark green andesite and basalt flows and tuffs, commonly schistose, rarely porphyritic; minor phyllite, dark argillite, and light grey quartzite
	7	Banded quartzose granulite, green and purplish banded skarn, quartz-sericite schist, hornfels and phyllite; chlorite schist and thin altered andesite (8) common in upper part; minor crystalline limestone
	PALAEOZOIC	MISSISSIPPIAN
6		Dark grey massive limestone
DEVONIAN AND MISSISSIPPIAN		
UPPER DEVONIAN AND LOWER (?) MISSISSIPPIAN		
5		5a, chert-pebble conglomerate; 5b, black and grey chert, shale, quartzite; minor conglomerate and limestone, 5c, black slate, black and brown siliceous shales, sandstone, greywacke, phyllite; minor conglomerate
SILURIAN AND DEVONIAN		
4		Grey and buff-weathering, thick-bedded dolomite, buff to reddish weathering, sandy and silty, dolomite and siltstone; buff, grey, and white quartzites
ORDOVICIAN AND SILURIAN		
3		Black and varicoloured cherts, black, grey, and greenish grey shales; minor chert-pebble conglomerate, quartzite, limestone, and phyllite; 3a, massive chert-pebble conglomerate
CAMBRIAN (?)		
MIDDLE AND UPPER CAMBRIAN (?)		
2	Buff-and grey-weathering, grey, green, and black shales, slates, and phyllites; silty limestone and siltstone	
PROTEROZOIC	1	1a, light grey and whitish quartzite, banded hornfels and granulite, grey quartzite, skarn; minor chert and crystalline limestone; 1b, crystalline limestone; 1c, green and maroon shale, slate, phyllite, quartzite; minor andesite; 1d, gritty massive, quartz-pebble quartzite, medium-grained, grey quartzite, and dark slate

The dike is exposed over widths of a few metres at the East end of Zone 1 (where it is overlain by unconsolidated glacial alluvium) to over 150 metres at the West end of Zone 1. This intrusion is strongly fractured and altered.

Mineralization

Medium grained and disseminated arsenopyrite, with minor chalcopyrite, galena and sphalerite occur in a porphyry granite dike close to the contact with metamorphosed limestone. Higher silver/copper values appear to be related to silicification. The granite contains irregular altered zones which roughly parallel dike contacts. Alteration minerals consist of silica, chlorite, clay-sericite and biotite. Mineralization is predominantly of the porphyry type, occurring as disseminations and veinlets in a zonal-altered intrusion.

The mineralized zone has an elongated (EW) form 6 to 22 metres wide. It is bounded towards the West by barren porphyry granite and towards the East is open, since it is covered by glacial alluvium. DDH PZ-1 indicated that mineralization plunges south following the granite upper contact with a calc-silica hornfel unit.

ZONE 2

Location and Topography

Zone 2 is situated on the north side of the Pike Lakes along the southern slope of an east-west trending ridge. Slopes are moderate to gentle and elevations range from 1050 to 1100 metres.

Geology and Structure (map in pocket)

Zone 2 is underlain by steeply dipping early Paleozoic cherts, black slates and carbonaceous shales with interbedded limestone bands. The sediments are cut by a biotite granite dike trending N70°W. The dike is exposed over widths of a few metres to more than 100 metres over a length of about 3 kilometres. The intrusion is relatively resistant to erosion and forms a low lying ridge. Position of the dike may have been controlled by a fault since the intrusion trends parallel to the Traffic Mountain fracture system.

Mineralization

In contrast with Zone 1, mineralization occurs in granite-limestone contact and in the adjacent limestone unit as narrow ladder veins occurring perpendicular to dike contact. On the intrusion mineralization is disseminated and fills small veins and fractures; the most common sulfides are arsenopyrite, pyrite with minor chalcopyrite, sphalerite and galena. Mineralization in the limestone unit consists of galena, sphalerite, arsenopyrite, pyrite with minor chalcopyrite and tetrahedrite. Diamond drill holes collared in trenches 10W and 22E did not intersect economic mineralization.

MINERAL RESERVESZone 1

Based on drill and 1966 trenches assay results potential reserves can be stated as follows:-

<u>Block</u>	<u>m²</u>	<u>Oz./T Ag</u>	<u>% Cu</u>
A	417	2.48	.61
B	721	3.86	.44
C	290	2.20	1.21
D	116	1.20	.45
E	165	.93	.40
F	265	1.44	.57
G	214	1.50	.69
TOTAL	<u>2188</u>		
AVERAGE		<u>2.49</u>	<u>.61</u>

Assuming that the mineralized area is 60 metres deep (along the lower contact), potential reserves can be estimated at 350,000 tonnes. This mineralized area is open towards the East and to depth. Drill results are in Appendix A, trench results in Plan No. 3 (in pocket).

TRENCH MAPPING

The 16 trenches on the property all run roughly north-south (200°) with the exception of the trench at 14W and 12W. They are in poor condition, caved in with glacial till, covered with float and boulders and locally overgrown with bushes. Exposure of outcrop is limited. The trenches are cut across the main granitic dike and expose a general pattern. Discontinuous bands of impure banded limestone bordering the granite at the north end, locally accompanied by minor quartz-sandstone, the silicified sulfide disseminated porphyritic phase of granite follows which grades into typical granite. The south contact borders on to a sequence of black-grey slaty shale followed by splintery grey shale. Trenches 22E, 18E, 6W and 4E show narrow impure limestone bands at the south contact and then followed by shales. At Trenches 22E, 4E and 10W a displacement of the granite along strike ranging from a few metres up to 10 metres was noted. Trenches 22E, 6W and 10W exposed small (1-3 metres wide) pockets of galena, sphalerite, pyrite and chalcopyrite. Samples from a pocket at 22E assayed 12 oz./tonne silver.

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STATEMENT OF QUALIFICATIONS

Name: Ingrid Vopel

Place and Year of Birth: Winsen (Luhe), West Germany, 1951

Education: University of Ottawa, Awarded BSc. 1979

Experience:

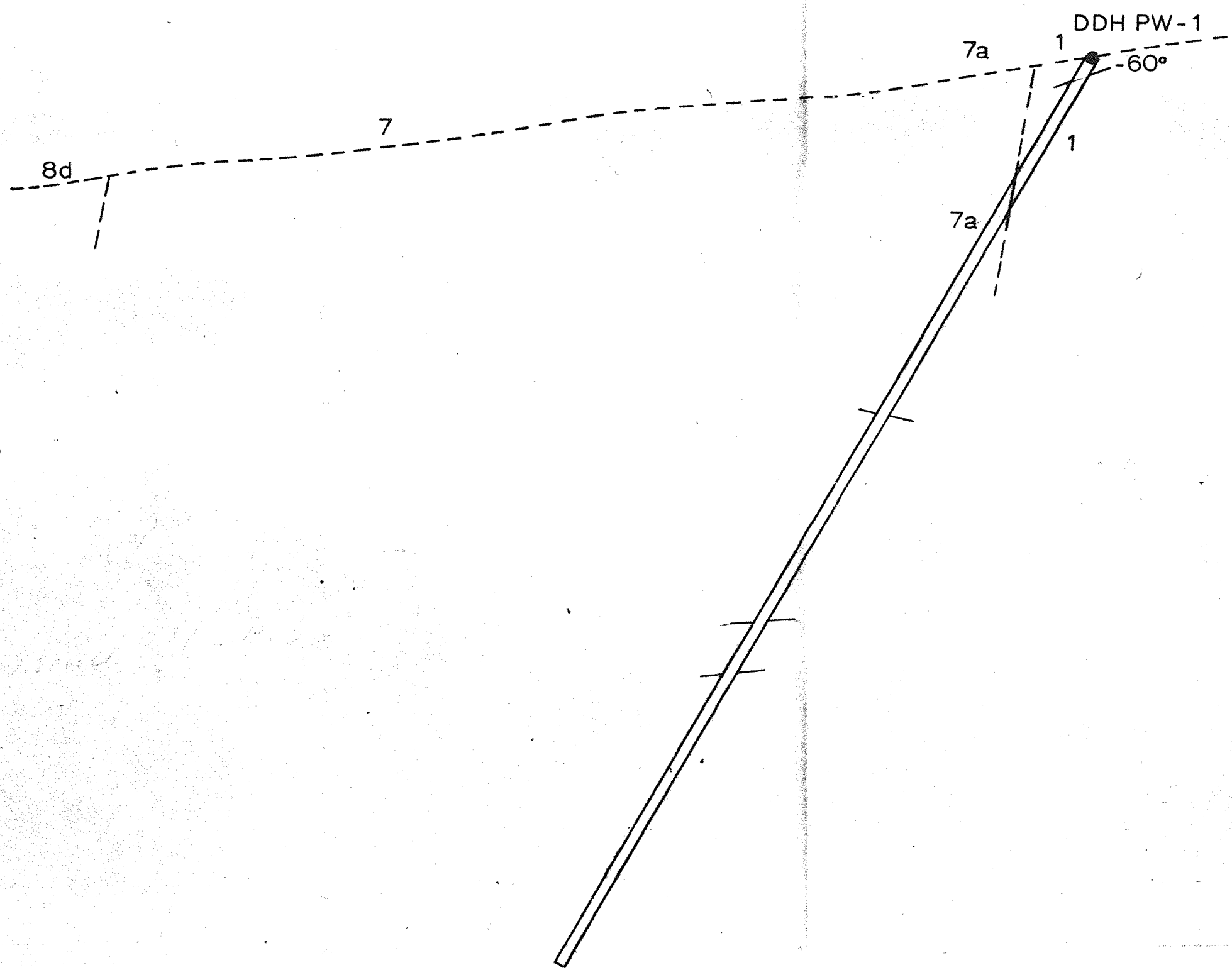
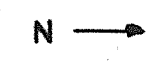
June to September 1981 - Project Geologist, Cima Resources Limited

April to December 1980 - Assistant Geologist, Placer Development Ltd.

May to August 1979 - Project Geologist, Giant Yellowknife Mines Ltd.

May to August 1977 - Geological Field Assistant, Shell Canada Ltd.

-1080 m
-1060 m
-1040 m
-1020 m



LEGEND

- 8 Glacial Till, boulders of Granite 8a, Lst 8b, Qz-Sst 8c, Shale 8d.
- 7,7a Granite, Silicified
- 6 Calc-silicate Hornfels
- 5 Splintery, Grey Shale
- 4 Dark grey Slaty Shale
- 3 Blue to grey Qz-Siltstone
- 2 Grey Qz-Sandstone
- 1 Impure banded Limestone
- Contact observed, assumed

-16+00 S

-15+00 S

-14+00 S

-13+00 S

Horizontal scale in feet

CIMA RESOURCES LTD.	
PIKE PROPERTY	
CROSS SECTION TRENCH 10W	
N.T.S. 105-J-2	
AUGUST, 1981	Scale 1:400

-1080m

5 4

LEGEND

-1040m

cial Till, boulders of Granite 8a
8b, Qz-Sst 8c, Shale 8d.

nite, Silicified

c-silicate Hornfels

ntery, Grey Shale

-1000m

k grey Slaty Shale

e to grey Qz-Siltstone

y Qz-Sandstone

ure banded Limestone

tact observed, assumed

-960m

CIMA RESOURCES LTD.

PIKE PROPERTY

CROSS SECTION

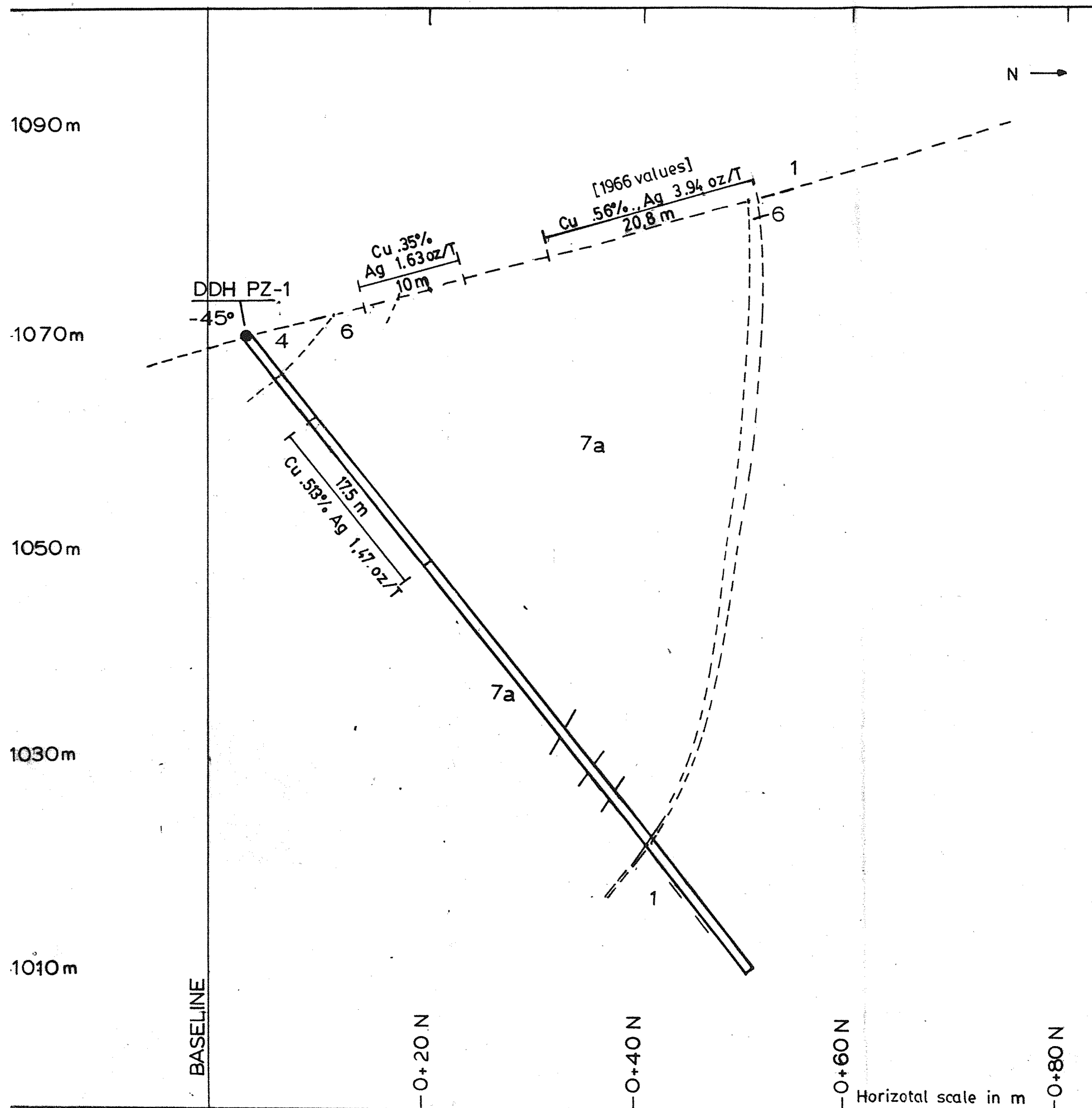
TRENCH 22E

N.T.S. 105-J-2

AUGUST, 1981

Scale 1:800

-14+00 S



LEGEND

- 8 Glacial Till, boulders of Granite 8a
Lst 8b, Qz-Sst 8c, Shale 8d.
- 7,7a Granite, Silicified
- 6 Calc-silicate Hornfels
- 5 Splintery, Grey Shale
- 4 Dark grey Slaty Shale
- 3 Blue to grey Qz-Siltstone
- 2 Grey Qz-Sandstone
- 1 Impure banded Limestone
- Contact observed, assumed

CIMA RESOURCES LTD.	
PIKE PROPERTY	
CROSS SECTION TRENCH 48 (ZONE No.1)	
N.T.S. 105-J-2	
AUGUST, 1981	Scale 1:400

-1080m

-1040m

-1000m

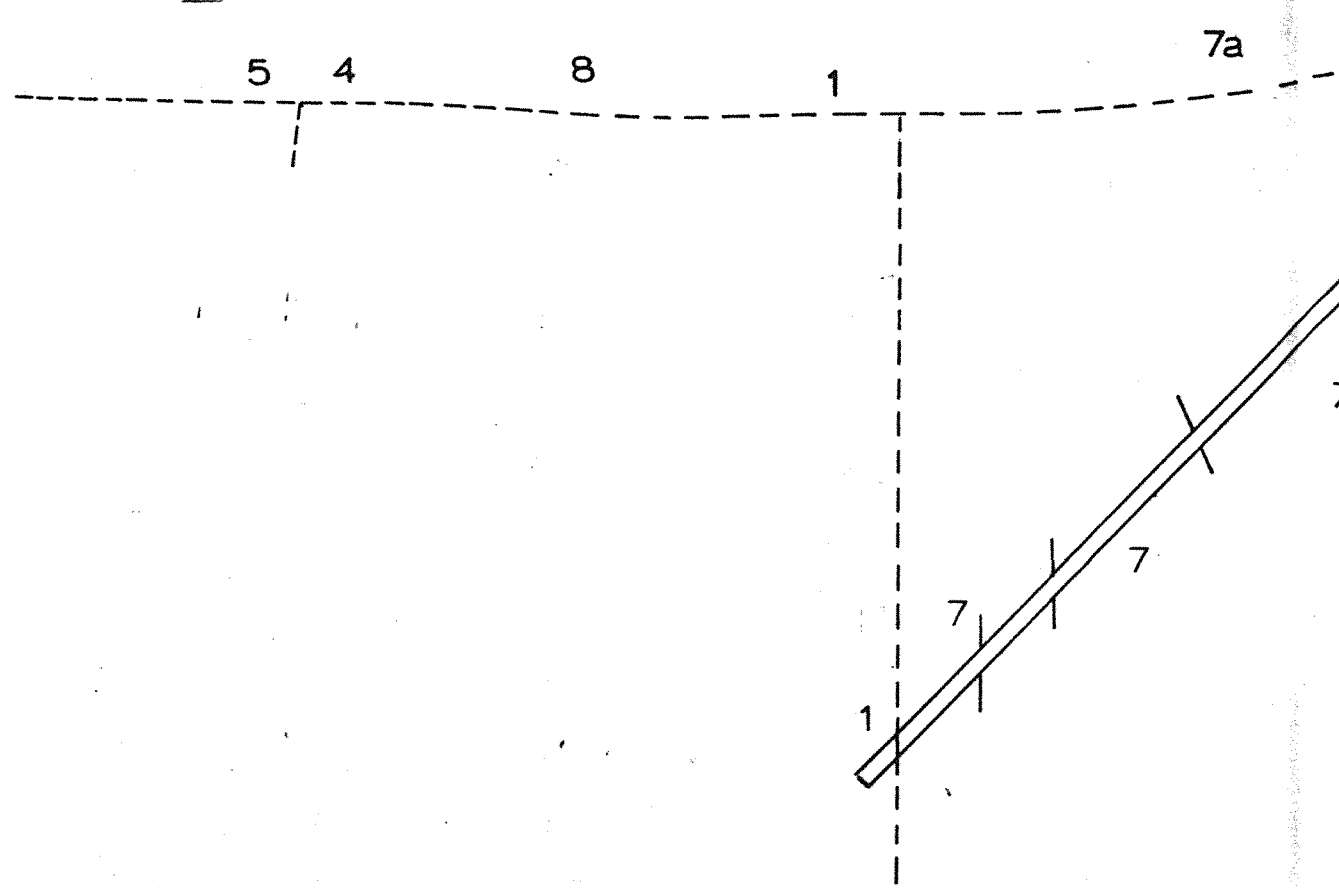
-960m

-14+00 S

-12+00 S

-10+00 S

Horizon



WINKIE DRILLHOLEPW-1

<u>SAMPLE NO.</u>	<u>SAMPLE LENGTH (metres)</u>	<u>Cu %</u>	<u>Pb %</u>	<u>Zn %</u>	<u>Ag oz/ton</u>	<u>Au oz/ton</u>
4378	9-9.5	.01	.02	.40	.04	.001
4379	13.6-15	.01	.02	.06	.06	.001
4380	15-16.5	.01	.12	.24	.18	.001
4381	16.5-18.3	.01	.02	.06	.06	.001
4382	18.3-20	.04	.02	.04	.10	.001
4383	20-25	.13	.02	.12	.28	.001
4384	25-30	.06	.02	.08	.16	.001
4385	30-35	.12	.02	.10	.20	.001
4386	35-40	.08	.02	.22	.20	.001
4387	41.5-42.5	.02	.02	.02	.04	.004
4388	49-50	.01	.02	.02	.02	.006
4389	54-55	.03	.02	.02	.06	.007
4390	58-59	.02	.20	.26	.12	.005
4391	62-63	.01	.42	.36	.24	.005
4392	68-69	.02	.66	.60	.38	.005
4393	72-73	.02	.02	.10	.04	.004
4394	77-78	.04	.02	.06	.10	.006
4395	84-85	.03	.02	.02	.16	.006
4396	87-88	.04	.02	.14	.10	.006

WINKIE DRILLHOLE

PE-1

<u>SAMPLE NO.</u>	<u>SAMPLE LENGTH (metres)</u>	<u>Cu %</u>	<u>Pb %</u>	<u>Zn %</u>	<u>Ag oz/ton</u>	<u>Au oz/ton</u>
24757	11-12	.01	.02	.04	.04	.006
24760	22-23	.01	.02	.06	.04	.003
24753	32-33	.01	.02	.02	.04	.010
24755	41-42	.02	.24	1.02	.38	.003
24758	52-53	.01	.02	.04	.02	.007
24752	65-66	.01	.02	.02	.02	.006
24756	74-75	.01	.02	.04	.02	.006
24751	84-85	.01	.02	.04	.04	.006
24759	94-95	.01	.02	.02	.02	.004
24754	110-111	.01	.02	.02	.02	.004

WINKIE DRILLHOLEPZ-1

<u>SAMPLE NO.</u>	<u>SAMPLE LENGTH (metres)</u>	<u>Cu %</u>	<u>Pb %</u>	<u>Zn %</u>	<u>Ag oz/ton</u>	<u>Au oz/ton</u>
24776	3-4	.01	.02	.04	.02	.005
24764	7-8	.05	.18	.32	.48	.005
24773	12-13	.36	.22	.38	1.06	.010
24771	17-18	.08	.02	.08	.24	.002
24768	21-22	1.06	.34	.80	3.30	.010
24777	24-25	.80	.08	.12	1.50	.010
24772	29-30	.03	.02	.02	.12	.003
24765	35-36	.04	.02	.06	.02	.005
24767	39-40	.02	.14	.02	.36	.006
24770	43-44	.06	.02	.08	.26	.006
24774	46-47	.12	.22	.08	1.30	.005
24761	52-53	.05	.06	.12	.16	.006
24762	59-60	.04	.02	.02	.12	.006
24766	64-65	.01	.02	.02	.04	.005
24763	68-69	.01	.02	.02	.02	.005
24769	72-73	.01	.02	.02	.02	.005

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 81201

TO: CIMA RESOURCES LTD.
905 - 355 BURRARD ST.
VANCOUVER, B.C. V6C 2G8

INVOICE NO. 1327 - A

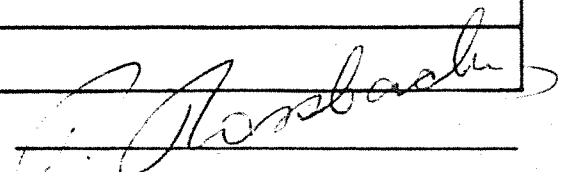
DATE RECEIVED

ATTN: R. KIDLARK

DATE ANALYSED July 15, 1981.

SAMPLE NO.:	% Pb	% Zn	oz/t Ag	% Cu	oz/t Au	% WO ₃
4301	1.14	0.34	2.26	0.06	0.001	0.01
4302	0.26	0.06	2.34	0.08	0.007	0.02
4303	0.16	0.02	1.22	0.20	0.001	0.01
4304	0.02	0.02	0.08	0.01	0.001	0.01
4305	0.08	0.08	1.34	0.62	0.004	0.01
4306	0.58	0.98	9.10	0.56	0.056	0.01
4307	5.56	2.66	2.50	0.14	0.001	0.01
4308	0.06	0.04	0.42	0.10	0.007	0.01
4309	0.06	0.08	0.06	0.01	0.001	0.01
4310	0.10	0.04	0.84	0.16	0.001	0.01
4311	0.12	0.04	1.22	0.03	0.001	0.01
4312	0.08	0.03	0.62	0.01	0.003	0.01
4313	0.64	0.58	0.54	0.02	0.001	0.01
4314	1.78	0.12	0.90	0.20	0.001	0.01
4315	0.10	0.04	0.86	0.01	0.007	0.02
4316	0.26	0.04	0.42	0.20	0.001	0.01
4317	0.04	0.04	0.42	0.24	0.001	0.01
4318	0.02	0.04	0.02	0.01	0.001	0.01
4319	0.16	0.12	1.30	0.13	0.004	0.01
4320	0.02	0.06	0.88	0.76	0.001	0.01
4321	8.60	5.20	7.40	0.74	0.001	0.02
4322	0.01	0.02	0.06	0.02	0.001	0.01
4323	0.12	0.05	1.04	0.20	0.002	0.01
4324	0.08	0.01	0.42	0.01	0.002	0.01
4325	0.02	0.02	0.70	0.27	0.023	0.01

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Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 81201-3

TO: CIMA RESOURCES LTD.
905-355 Burrard St.
Vancouver, B.C.

INVOICE NO. 1327-A

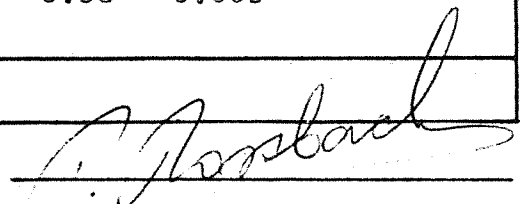
DATE RECEIVED

ATTN:

DATE ANALYSED Aug 15, 1981

SAMPLE NO.:	% Pb	% Zn	oz/T Ag	% Cu	oz/T Au
4387	0.02	0.04	0.04	0.02	0.004
4388	0.02	0.02	0.02	0.01	0.006
4389	0.02	0.02	0.06	0.03	0.007
4390	0.20	0.26	0.12	0.02	0.005
4391	0.42	0.36	0.24	0.01	0.005
4392	0.66	0.60	0.38	0.02	0.005
4393	0.02	0.10	0.04	0.02	0.004
4394	0.02	0.06	0.10	0.04	0.006
4395	0.02	0.02	0.16	0.03	0.145
4396	0.02	0.14	0.10	0.04	0.006
24751	0.02	0.04	0.04	0.01	0.006
24752	0.02	0.02	0.02	0.01	0.006
24753	0.02	0.02	0.02	0.01	0.010
24754	0.02	0.02	0.02	0.01	0.004
24755	0.24	1.02	0.38	0.02	0.003
24756	0.02	0.04	0.02	0.01	0.006
24757	0.02	0.04	0.04	0.01	0.006
24758	0.02	0.04	0.02	0.01	0.007
24759	0.02	0.02	0.02	0.01	0.004
24760	0.02	0.06	0.04	0.01	0.003
24761	0.06	0.12	0.16	0.05	0.006
24762	0.02	0.02	0.12	0.04	0.006
24763	0.02	0.02	0.02	0.01	0.005
24764	0.18	0.32	0.48	0.05	0.005
24765	0.02	0.02	0.02	0.04	0.005
24766	0.02	0.02	0.04	0.01	0.005
24767	0.14	0.06	0.36	0.02	0.006
24768	0.34	0.80	3.30	1.06	0.010
24769	0.02	0.02	0.02	0.01	0.005
24770	0.02	0.08	0.26	0.06	0.006
24771	0.02	0.08	0.24	0.08	0.002
24772	0.02	0.02	0.12	0.03	0.003
24773	0.22	0.38	1.06	0.36	0.010
24774	0.22	0.08	1.30	0.12	0.005
24776	0.02	0.04	0.02	0.01	0.005
24777	0.08	0.12	1.50	0.80	0.010
24778	8.80	3.38	13.4	0.53	0.005

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GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

APPENDIX C
Page 1

CERTIFICATE OF ANALYSIS

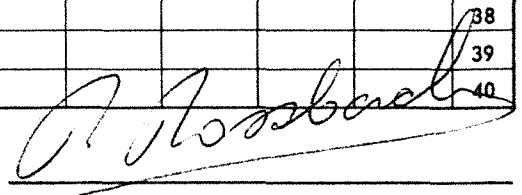
TO: **CIMA RESOURCES LTD.**
905 - 355 BURNARD ST.
VANCOUVER, B.C. V6C 2G2

CERTIFICATE NO. 81201-4
INVOICE NO. 1327A
DATE ANALYSED AUG, 1981
PROJECT

No.	Sample	pH	Mo	Cu	PPM Sn	PPM As					No.
01	4301				570						01
02	4302				22						02
03	4303				40						03
04	4304				4						04
05	4305				64						05
06	4306				50						06
07	4307				10						07
08	4308				2						08
09	4309				1						09
10	4310				20						10
11	4311				1						11
12	4312				1						12
13	4313				4						13
14	4314				34						14
15	4315				6						15
16	4316				16						16
17	4317				18						17
18	4318				18						18
19	4319				26						19
20	4320				38						20
21	4321				4000						21
22	4322				10						22
23	4323				36						23
24	4324				6						24
25	4325				4						25
26	4378				2	25					26
27	4379				24	10					27
28	4380				5	16					28
29	4381				4	12					29
30	4382				4	730					30
31	4383				10	17,500					31
32	4384				8	1,000					32
33	4385				12	750					33
34	4386				9	2,200					34
35	4387				6	2					35
36	4388				4	2					36
37	4389				2	2					37
38	4390				2	2					38
39	4391				3	2					39
40	4392				4	2					40

VALUES IN PPM, UNLESS NOTED OTHERWISE.

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GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

APPENDIX C
Page 2

CERTIFICATE OF ANALYSIS

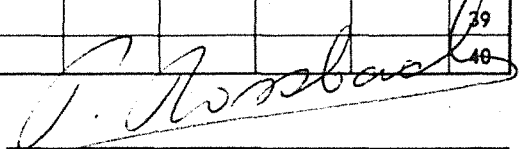
CERTIFICATE NO. 81201-5
INVOICE NO. 1327A
DATE ANALYSED AUG, 1981
PROJECT

TO: CIMA RESOURCES LTD.
905 - 355 BURNARD ST.
VANCOUVER, B.C. V6C 2C2

No.	Sample	pH	Mo	Cu	PPM Sn	PPM As				No.
01	4393				1	6				01
02	4394				2	1400				02
03	4395				1	560				03
04	4396				4	760				04
05	24751				1	6				05
06	24752				2	10				06
07	24753				1	4				07
08	24754				1	3				08
09	24755				8	400				09
10	24756				2	140				10
11	24757				9	40				11
12	24758				1	22				12
13	24759				1	2				13
14	24760				2	2				14
15	24761				9	840				15
16	24762				2	28000				16
17	24763				1	72				17
18	24764				5	8				18
19	24765				3	32				19
20	24766				1	42				20
21	24767				3	5280				21
22	24768				80	38,000				22
23	24769				1	116				23
24	24770				8	4,400				24
25	24771				9	16				25
26	24772				7	40				26
27	24773				25	2000				27
28	24774				11	28,000				28
29	24776				1	50				29
30	24777				70	38,000				30
31	24778				1700	1680				31
32										32
33										33
34										34
35										35
36										36
37										37
38										38
39										39
40										40

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GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

APPENDIX C
Page 3

CERTIFICATE OF ANALYSIS

CIMA RESOURCES LTD.

TO: 905 - 355 BURNARD ST.
VANCOUVER, B.C. V6C 2G8

CERTIFICATE NO. 81200-1A

INVOICE NO. 1327

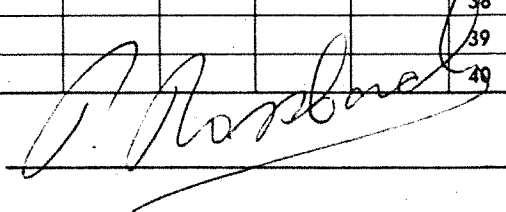
DATE ANALYSED JULY 16/81

PROJECT

No.	Sample	pH	Mo	Cu	Pb	Zn	Ag	PPB Au	Sm					No.
01	81PVT 04			16	18	56	0.2	10	1					01
02	09			18	6	114	0.2	10	1					02
03	11			205	4800	4900	12.4	10	3					03
04	19			26	16	58	0.2	10	1					04
05	32			72	20	102	0.2	10	1					05
06	38			12	20	62	0.2	10	1					06
07	40			8	28	32	0.2	10	1					07
08	41			12	14	78	0.2	10	1					08
09	42			126	16	620	0.2	10	1					09
10	81PVT 43			10	12	62	0.2	10	1					10
11	44			140	8	312	0.8	10	1					11
12	46			18	12	36	0.2	10	1					12
13	48			96	2200	640	15.4	10	40					13
14	50			26	18	308	0.2	10	1					14
15	52			8	16	56	0.2	10	1					15
16	53			10	12	58	0.2	10	1					16
17	54			10	34	52	0.2	10	1					17
18	58			28	24	92	0.2	10	1					18
19	63			520	4800	6000	6.8	10	8					19
20	81PVT 69			24	48	106	0.2	10	1					20
21	70			116	760	12	6.8	580	1					21
22	72			160	30	154	0.8	10	7					22
23	81PVT 88			50	10	66	0.2	10	1					23
24														24
25														25
26														26
27														27
28														28
29														29
30														30
31														31
32														32
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36														36
37														37
38														38
39														39
40														40

VALUES IN PPM, UNLESS NOTED OTHERWISE.

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GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

APPENDIX C
Page 4

CERTIFICATE OF ANALYSIS

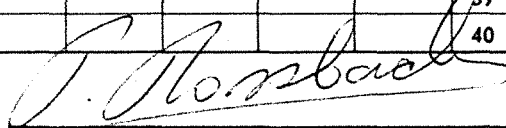
TO: **CIMA RESOURCES LTD.**
905 - 355 BURNARD ST.
VANCOUVER, B.C. V6C 2G8

CERTIFICATE NO. **81200-1B**
INVOICE NO. **1327**
DATE ANALYSED **JULY 24/81**
PROJECT **WATSON LAKE**

No.	Sample	pH	Mo	So	W							No.
01	81PVT 04				1							01
02	09				1							02
03	11				1							03
04	19				1							04
05	32				1							05
06	38				1							06
07	40				1							07
08	41				1							08
09	42				1							09
10	43				1							10
11	44				1							11
12	81PVT 46				1							12
13	48				1							13
14	50				1							14
15	52				1							15
16	53				1							16
17	54				1							17
18	58				1							18
19	63				1							19
20	69				1							20
21	70				1							21
22	72				10							22
23	81PVT 88				1							23
24												24
25												25
26												26
27												27
28												28
29												29
30												30
31												31
32												32
33												33
34												34
35												35
36												36
37												37
38												38
39												39
40												40

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Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

APPENDIX C
Page 5

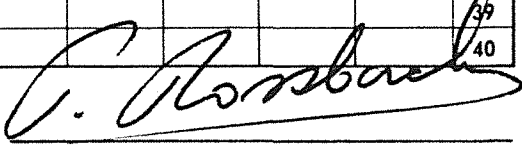
CERTIFICATE OF ANALYSIS

TO: **CIMA RESOURCES LTD.**
905 - 355 BURNARD ST.
VANCOUVER, B.C. V6C 2G8

CERTIFICATE NO. **81209-1A**
INVOICE NO. **1327**
DATE ANALYSED **JULY 23/81**
PROJECT

No.	Sample	pH	Mg	Cu	Pb	Zn	Ag					No.
01	4351			20	4	72	0.2					01
02	4352			4	10	44	0.4					02
03	4353			6	4	24	0.2					03
04	4354			6	10	70	0.2					04
05	4355			4	6	90	0.2					05
06	4356			2	12	61	0.4					06
07	4357			72	800	1520	40					07
08	4358			4	16	26	0.2					08
09	4359			4	12	38	0.2					09
10	4360			48	350	500	1.6					10
11	4361			8	16	54	0.2					11
12	4362			30	26	158	0.4					12
13	4363			50	14	36	0.4					13
14	4366			344	1010	22200	20.0					14
15	4368			18	12	180	0.2					15
16	4371			8	22	50	0.2					16
17												17
18												18
19												19
20												20
21												21
22												22
23												23
24												24
25												25
26												26
27												27
28												28
29												29
30												30
31												31
32												32
33												33
34												34
35												35
36												36
37												37
38												38
39												39
40												40

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GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

APPENDIX C
Page 6

CERTIFICATE OF ANALYSIS

CIMA RESOURCES LTD.

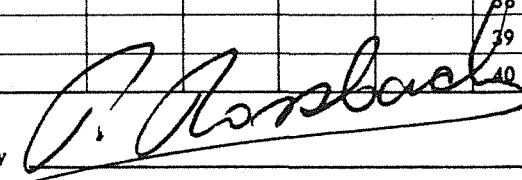
TO: 905 - 355 BURNARD ST.
VANCOUVER, B.C. V6C 2G8

CERTIFICATE NO. **81209-2A**
INVOICE NO. **1327**
DATE ANALYSED **JULY 23/81**
PROJECT

No.	Sample	pH	✓ Mg	Cu	Pb	Zn	Ag					No.
01	81PKT 01		1	12	6	60	0.2					01
02	02		1	6	10	62	0.4					02
03	03		1	6	14	68	0.2					03
04	04		1	34	20	34	0.4					04
05	05		1	46	110	36	1.8					05
06	06		1	38	238	40	2.4					06
07	07		1	20	10	82	0.2					07
08	08		1	6	16	60	0.2					08
09	09		1	10	12	54	0.2					09
10	81PKT 10		1	8	8	70	0.2					10
11	11		1	12	10	80	0.2					11
12	12		1	6	2	44	0.2					12
13	13		1	6	2	52	0.2					13
14	14		1	8	720	710	4.0					14
15	17		1	10	20	76	0.2					15
16	18		1	8	16	102	0.2					16
17	19		1	10	14	142	0.2					17
18	20		1	12	10	88	0.2					18
19	21		1	10	14	78	0.2					19
20	81PKT 23		1	8	10	72	0.2					20
21	STD G9		15	230	344	440	0.4					21
22												22
23												23
24												24
25												25
26												26
27												27
28												28
29												29
30												30
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33												33
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35												35
36												36
37												37
38												38
39												39
40												40

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Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.
CANADA
TELEPHONE: 299-6910

APPENDIX C
Page 7

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. **81209-3A**
INVOICE NO. **1327**
DATE ANALYSED **JULY 23/81**
PROJECT

TO: **CIMA RESOURCES LTD.**
905 - 355 BURRARD ST.
VANCOUVER, B.C. V6C 2G8

No.	Sample	pH	Mo	Cu	Pb	Zn	Ag					No.
01	81PVT 90			26	340	810	1.4					01
02	91			22	700	1750	4.4					02
03	100			28	6	80	0.2					03
04	101			36	64	160	0.4					04
05	102			10	14	60	0.2					05
06	103			4	10	42	0.2					06
07	104			24	2	92	0.2					07
08	105			10	2	22	0.2					08
09	106			100	6	74	0.2					09
10	81PVT 108			10	42	50	0.2					10
11	109			18	64	82	0.2					11
12	110			8	4	92	0.2					12
13	111			122	10	70	0.2					13
14	112			6	6	92	0.2					14
15	114			10	6	44	0.2					15
16	118			26	2	160	0.2					16
17	119			172	12	72	0.6					17
18	126			30	6	190	0.2					18
19	127			8	2	52	0.2					19
20	128			30	530	206	4.8					20
21	129			8	8	98	0.2					21
22	81PVT 130			8	12	70	0.2					22
23	STD 69			232	324	440	0.4					23
24												24
25												25
26												26
27												27
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30												30
31												31
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40												40

P. Rossbacher

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Certified by

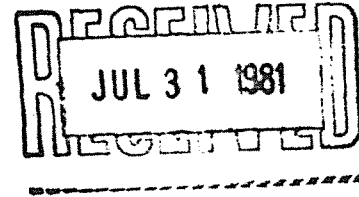


18-12871 Bathgate Way
Richmond, B.C. V6V 1Y5
Telephone (604) 273 1878
Telex 04357519

July 31, 1981.

Cima Resources,
905 - 355 Burrard Street,
Vancouver, B.C.

Attn: Mr. Selwyn Jones



Dear Sir:

re: Invoice # 8114/3

Enclosed, is our interim invoice covering drill footage and labor for the period July 15 - 31, 1981. There will be a further invoice to clear up demobilization and other indirect costs.

In the meantime, perhaps we can discuss a settlement on the contract shortfall.

Yours truly,
DRILCOR INDUSTRIES LTD.

A handwritten signature in cursive script, appearing to read "Thomas Hasek".

Thomas Hasek, P. Eng.
Vice President.

TH/jf



18-12871 Bathgate Way
Richmond, B.C. V6V 1Y5
Telephone (604) 273 1878
Telex 04357519

July 30, 1981.

Cima Resources,
905 - 355 Burrard Street,
Vancouver, B.C.

INVOICE: 8114/3

re: diamond drilling Pike Property. July 15 - 31, 1981.

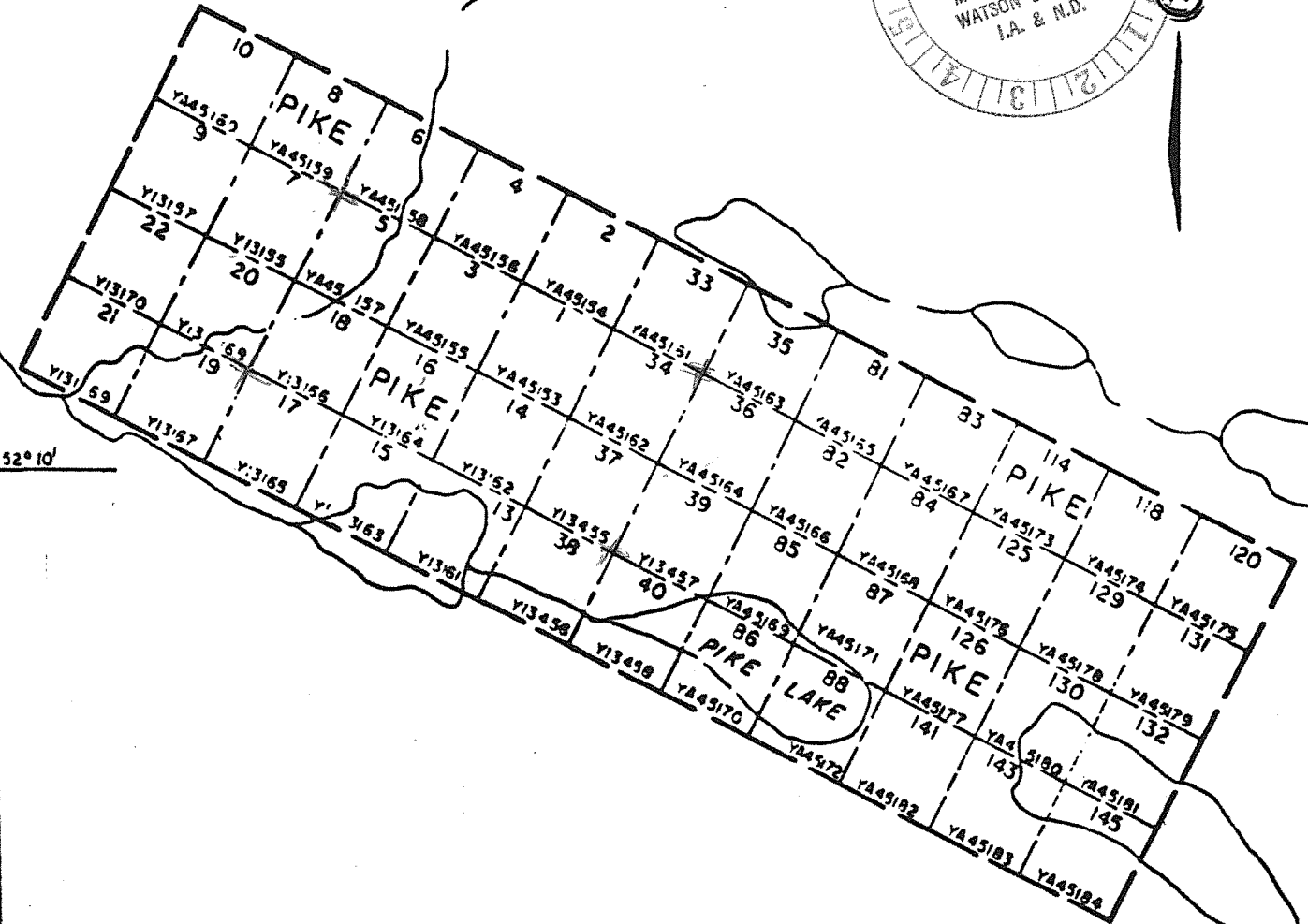
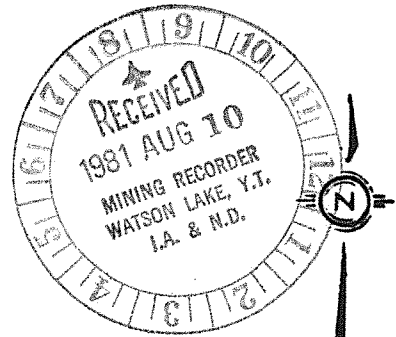
<u>Hole #</u>	<u>Interval</u>	<u>BW Casing</u>	<u>BQ Coring</u>
1	0-2	2	
	2-290		288
2	0-4	4	
	4-378		374
3	0-9	9	
	9-250		241
		<u>15'</u>	<u>903'</u>

15' converts to 4.57M @ 99.50/M	454.72
903' " " 275.23M @ 85.30/M	23,477.12

Labor Hours

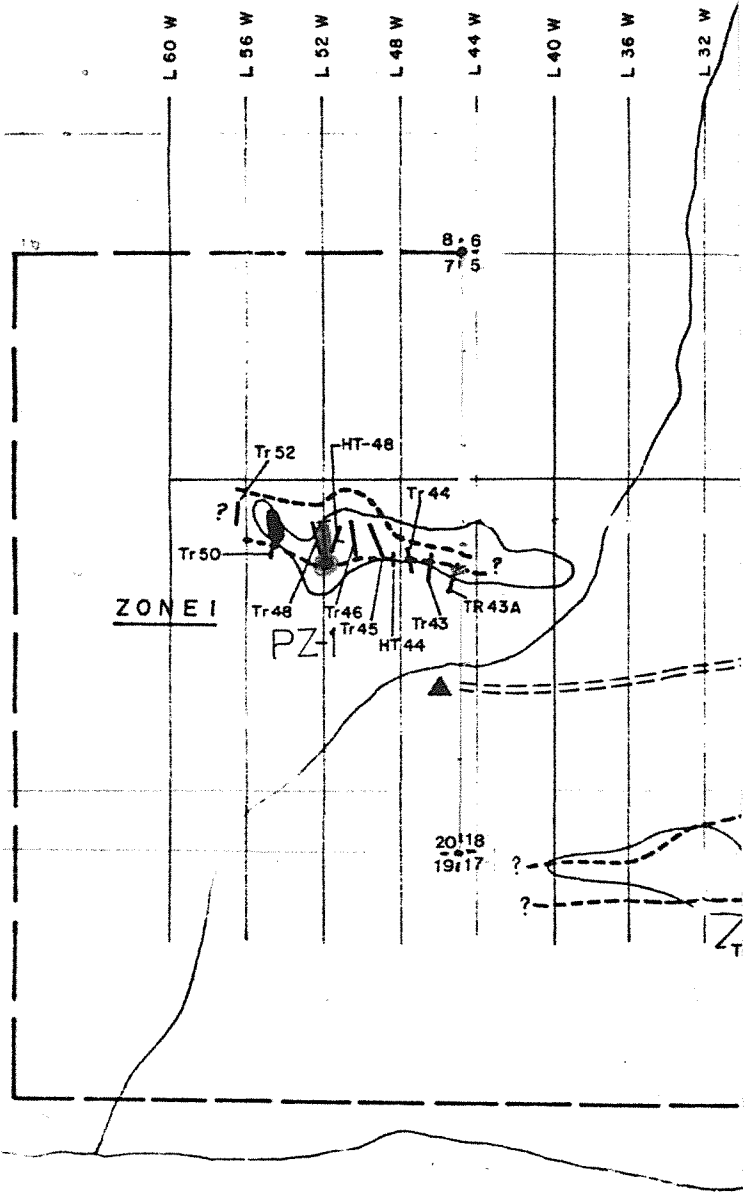
July 15	22.5	
16	58	
17	22	
19	10	
22	26	
23	7	
25	19	
26	8	
27	42	
28	65	
	<u>279.5 hrs. @ 24.00/hr.</u>	<u>6,708.00</u>
		<u>\$30,639.84</u>

130°43'



52° 10'

CIMA RESOURCES LIMITED				
CLAIM MAP NTS 105-J-2				
MILE 1/2	0	1/2	1 MILE	
KM 1/2	0	1/2	1	1 1/2 KM
NOV. 1980				



TRENCH SAMPLING RESULTS

TRENCH No.	INTEVAL	LENGTH	AVERAGE % C
24E	170' - 205'	35'	Tr
43	45' - 90'	45'	0.57
43A	20' - 58'	38'	0.69
HT 44	5' - 55'	50'	0.40
46	25' - 45'	20'	0.45
48	0' - 135' or 10' - 80'	135' 70'	0.36 0.44
50	0' - 120' or 25' - 60'	120' 35'	0.29 0.61
T-TR Leg	0' - 25'	25'	1.48
T-TR	25' - 88'	63	1.21

CIMA RESOURCES LIMITED

PIKE GROUP



P. O. Box 269
Watson Lake, Yukon
Y0A 1C0

24 November, 1981



REGIONAL DIRECTOR RESOURCES

Your file Votre référence

Attention: Supervising Mining
Recorder

Our file Notre référence

RESTRICTED

Enclosed are diamond drill logs submitted by Cima Resources Limited for assessment on the PIKE mineral claims located on Map 105-J-2.

Drill holes were as follows:

WDH #2 - 115.3 m.
WDH #1 - 88.5 m.
WDH #3 - 76.3 m.

Total assessment credit requested is \$22,400.00. Drill core is being stored partially at their storage site on the claims and partially at their storage facility in Vancouver.

Yours truly,

Patti L. McLeod
Mining Recorder
Watson Lake Mining District

PLM/pj
encl.
cc: Regional Geologist

090902

AND SAMPLE RECORD

LOCATION: _____ (N) (S)

 LOCATION: 10W (E) (W)

 DIP AT COLLAR: 60°

 BEARING ASTR: 160° or S20°E

 ELEVATION AT COLLAR: 1070 m

 FILE CODE: 2171

 D.D.H. NO.: FW-1

 PAGE: 2/16

 PROPERTY NAME: PIKE

 STARTED: JULY 17, 1981

 DEPTH DRILLED: 290' or 88.5m

 FINISHED: JULY 22, 1981

 PROVINCE: Y.T.

 LOGGED BY: E. VOPEL

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS					
										%Cu	%Pb	%Zn	oz. Ag	oz Au	%Mo
3.05	5	Impure Limestone	Stongly broken up, locally intensely microfractured indicating 3 stages of fracturing (cross-cut 2 times) seem to be with random orientation microfractures show Py and Fe-staining local fault-breccia-like breakup of chert clast within fracturing, minor Py.		65%										
5	10	Limestone	5-5.75 Core badly broken unit heavily fractured brecciated with slate clast. 5.75-10.2 set of fractures; one parallel to bedding, the other 60° to bedding fractures are filled with calcite minor Py diss. and into fractures also siderite, fracturing is less intense than above. Interbedded dark shale is dense and locally concentrated at 9 red mineral (Mn O ₂)	Tr		4378	9	9.5	.5						

AND
SAMPLE RECORD

LOCATION: _____ (N) (S)

LOCATION: 10W (E) (W)

DIP AT COLLAR: 60°

BEARING ASTR: 160° or S20°E

ELEVATION AT COLLAR: 1070 m

FILE CODE: 2171

D.D.H. NO.: PW-1

PAGE: 3/16

PROPERTY NAME: PIKE

STARTED: JULY 17, 1981

DEPTH DRILLED: 290' or 88.5m

FINISHED: JULY 22, 1981

PROVINCE: Y.T.

LOGGED BY: T. ROPEL

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS						
										%Cu	%Pb	%Zn	oz. Ag	oz Au	%Mo	
10	13.6	Impure Limestone	10-11.3m light-grey, weakly fractured shale interbedded limestone, shaly layers thin-hairline again, minor chert interbedded 11-13.6 folding and fracturing increases, dominant fracture-set at 30° to C.A. Mass. Py in fractures and local diss.		96%											
13.6	15	Porph. Granite	Greenish - grey porphyritic silicified granite. Fe-stained fractures, major chlorite alteration Py and Aspy diss. in fractures.	1%	96%	4379	13.6	15	1.4							
15	20	Granite	At 16.5-17.8 core badly broken mineralization mostly Aspy Py altered CONTACT PHASE OF and disseminated. 17.40-20 disseminated Py Aspy in small crystals, and speks At 18 fractures parallel to	3%		4380	15	16.5								
		porphyritic		5%		4381	16.5	18.3								
				6%		4382	18.3	20								

C.A.

DIAMOND DRILL LOG
AND
SAMPLE RECORD

LOCATION: _____ (N) (S)

LOCATION: 10W (E) (W)

DIP AT COLLAR: 60°

BEARING ASTR: 160° or S 20°E

ELEVATION AT COLLAR: 1070 m

FILE CODE: 2171

D.D.H. NO.: PW-1

PAGE: 6/16

PROPERTY NAME: PIKE

STARTED: JULY 17, 1981

DEPTH DRILLED: 290' or 88.5m

FINISHED: JULY 22, 1981

PROVINCE: Y.T.

LOGGED BY: I. KOPEL

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS						
										%Cu	%Pb	%Zn	oz. Ag	oz. Au	%Mo	
			drastically core is thoroughly micro-fractured.													
25	30	Porphyritic Phase of Granite	Appearance: dark-green massive mottled Texture & Gr. Size: Phenocrysts of Fsp. & Qz crowd in an aphanitic chloritic silicious Matrix. Phenos .5-1cm large Structure: Cross cutting fracture set 2-5cm wide throughout $\approx 70^\circ$ to core axes. Mineralization: intense Aspy mainly cryst. in fractures along with diss. mass Py & Cp. Alteration: Mainly of Fsp (Plagioclase) glassy, soft green chlorite & Clay minerals biotite segregates along with phenocrysts locally. Few Qz veins (.1-5cm) cross cut Py filled fractures came later	6%	97				1c .5-1cm							

LOCATION: _____ (N) (S)
 LOCATION: 10 W (E) (W)
 DIP AT COLLAR: 60°
 BEARING ASTR: 160° or S'20°E

AND SAMPLE RECORD

ELEVATION AT COLLAR: 1070 m

FILE CODE: 2171 D.D.H. NO.: PN-1 PAGE: 10/16
 PROPERTY NAME: PIKE STARTED: JULY 17, 1981
 DEPTH DRILLED: 290.1' or 88.5m FINISHED: JULY 22, 1981
 PROVINCE: Y. T. LOGGED BY: J. KOPEL

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS						
										%Cu	%Pb	%Zn	oz. Ag	oz. Au	%MO	
			observed mainly Py and Aspy crystalline and diss..													
			Alteration: locally intense in general seems decreasing.													
			As above minor Manganese stain along fracture faces.		96				1m							
45	50	Weakly altered Granite with small (30cm) porphyritic phases	Colour: light grey bluish-green Texture: granitic and porphyritic f. grained matrix disappears locally leaving phenocrysts slightly stained to form a granitic intergrowth Bi crystals are larger and show interstitial and as separate crystals	1		4388	49	50								
45	50	Granite with small porphyritic phases	grainsize varies locally from fine grained to medium. Qz and Fsp. phenocrysts 3mm - 8mm subhedral													
			STRUCTURE: Micro fracturing is drastically decreased one 2mm													

Py filled fracture shows a Fsp.

LOCATION: _____ (N) (S)

LOCATION: 10W (E) (W)DIP AT COLLAR: 60°BEARING ASTR: 160° or S 20°E

AND SAMPLE RECORD

ELEVATION AT COLLAR: 1070 mFILE CODE: 2171D.D.H. NO.: PW-1PAGE: 14/16PROPERTY NAME: PIKESTARTED: JULY 17, 1981DEPTH DRILLED: 290.1' or 88.5mFINISHED: JULY 22, 1981PROVINCE: Y.T.LOGGED BY: I. VOPEL

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS					
										%Cu	%Pb	%Zn	oz. Ag	oz. Au	%Mo
70	75	Porphyritic Altered Granite	Colour: pale grey green as above C _a veins locally concentrating getting larger at steep angle to core axes 3-4cm wide they cut the Py filled microfractures until 73m alteration and sulfide mineralization intense then porphyritic phase changes to fresher granitic phase which alternate Py, Aspy, minor Sp and Cp and tiny specks of Ga are visible in microfractures crystalline and disseminated minor manganese stain.	4	95	4393	72	73	1m						
75	80	Porphyritic Altered Granite	Colour: grey green Texture: mainly porphyritic mottled crowded Qz-Fsp Pheno- crysts ≈ (.5cm) subhedral float in a f.gr. matrix of Qz-Fsp. Structure: micro veins and	1	96	4394	77	78	1m						

DIAMOND DRILL LOG

AND

SAMPLE RECORD

 LOCATION: BL 1000+22E

 ASS. MAG. DECL'N 33°

 DIP AT COLLAR: 45°

 BEARING ASTR: 210°

 ACID TESTS: at 378' DIP ANGLE 38°

 ELEVATION AT COLLAR: 1072.5 m.

 FILE CODE: 2171

 PROPERTY NAME: PIKE

 DEPTH DRILLED: 378 ft. or 115.3 m.

 PROVINCE: Y.T.

WDH #2

PE-1

D.D.H. NO.: _____

 PAGE: 6/15

 STARTED: July 23, 1981

 FINISHED: July 25, 1981

 LOGGED BY: I. Vopel

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS					
										%Cu	%Pb	%Zn	oz. Ag	% Mo	oz. Au
			Alteration: Zones of strong alteration show silice enrichment in the matrix strong sericite - clay alteration of Fsp, Bio disappear in dark greenish groundmass - chloritized and a concentration of micro fractures calcite came later, at 28.5 m. a 2 cm wide calcite vein at steep angle to C.A. cuts all other fractures crystalline calcite in the centre.												
30	35	Porphyritic Granite	Light grey black mottled weakly altered porphyritic granite texture alternates between a crowded porphyry with subhedral QZ and Fsp crystals in a blurred silicified finer matrix and a more granitic texture with prominent 2 - 4 mm. large Bio crystals and a more random distribution.		97	24753	32	33	1	.01	.02	.02	.04		.010

DIAMOND DRILL LOG AND

SAMPLE RECORD

LOCATION: BL 1000+22E
 ASS. MAG. DECL'N 33°
 DIP AT COLLAR: 45°
 BEARING ASTR: 210°

ACID TESTS: at 378' DIP ANGLE 38°
 ELEVATION AT COLLAR: 1072.5 m.

FILE CODE: 2171 D.D.H. NO.: PE-1
 PROPERTY NAME: PIKE
 DEPTH DRILLED: 378 ft. or 115.3 m.
 PROVINCE: Y.T.

WDH #2
 PE-1
 PAGE: 12/15
 STARTED: July 23, 1981
 FINISHED: July 25, 1981
 LOGGED BY: I. Vopel

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS					
										%Cu	%Pb	%Zn	oz.Ag	%Mo	oz.Au
			poor diss. Py, Cp and Sp in veins												
			crystalline Ca and tremolite in veins.												
75	80	As Above	Ca-veins wider at low angle to C.A. at 77.5 m. a 70 cm. wide tremolite vein 30° to C.A. Local intense chlorite alteration at 77 m. small 30 cm. fault breccia followed by 1 m. shear zone then the tremolite vein local silicification economic mineralization poor. Crystalline Py and massive diss.		95										
80	85	Porphyritic Mafic Phase of Granite	Texture is turning back to a crowded porphyry with large phenocrysts of Fsp and fine grained mafic matrix. Calcite veins decrease alteration decreases local zones of intense chloritization diss. Py and Aspy economic mineralization extremely		96	24751	84	85	1	.01	.02	.04	.04		.006

poor.

DIAMOND DRILL LOG

AND

SAMPLE RECORD

LOCATION: BL 1000+22E
 ASS. MAG. DECL'N 33°
 DIP AT COLLAR: 45°
 BEARING ASTR: 210°

ACID TESTS: at 378' DIP ANGLE 38°
 ELEVATION AT COLLAR: 1072.5 m.

FILE CODE: 2171
 PROPERTY NAME: PIKE
 DEPTH DRILLED: 378 ft. or 115.3 m.
 PROVINCE: Y.T.

WDH #2
 PE-1
 PAGE: 14/15
 STARTED: July 23, 1981
 FINISHED: July 25, 1981
 LOGGED BY: I. Vopel

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS					
										%Cu	%Pb	%Zn	oz. Ag	% Mo	oz. Au
100	105.7	As Above	As above.		96										
			Strongly broken up 1 cm. wide crystalline calcite vein parallel to C.A. small 10 cm. wide shear zones strongly chloritized approaching contact strongly micro-veined filled with manganese stained chloritized and Py disseminated then 5 cm. zone of strong shear at 10° to C.A.												
105.7	110	Impure Banded Limestone	Color: Blackish-grey white striated. Texture: homogeneous aphanitic bedding runs 60° to 30° to C.A. It's locally changing angle seems to become shallower with depth, thin hairline microveins of calcite internally weakly crenulated local black shale interbedded local zones of strong calcification networks of C.A. Mineralization very poor minor Py		97										

on fracture faces.

DIAMOND DRILL LOG

090902

AND

SAMPLE RECORD

LOCATION: S. End of Trench 48

ASS. MAG. DECL'N

DIP AT COLLAR: 45°

BEARING ASTR: 15°N

ACID TESTS: at DIP ANGLE °

ELEVATION AT COLLAR: 1078 m.

FILE CODE: 2171

PROPERTY NAME: PIKE

DEPTH DRILLED: 250 ft. or 76.3 m.

PROVINCE: Y.T.

WDH #3

D.D.H. NO.: PZ-1

PAGE: 1/8

STARTED: July 25, 1981

FINISHED: July 26, 1981

LOGGED BY: I. Vopel

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS					
										%Cu	%Pb	%Zn	oz.Ag	%Mo	oz.Au
0	5	Shale	Color: Blackish-grey Texture: Aphanitic shale inter-bedded. Structure: Severely broken up calcite-veined micro-fractured pretty random orientation locally crystalline calcite. Mineralization: Minor massive Py in veins alteration. Fe-stained fracture faces, secondary calcite.		60	24776	3	4	1	.01	.02	.04	.02		.005
5	10	As Above	As Above Calcite veins increase slightly local intense alteration. A calcite vein shows fragments of broken-up shale - small breccia sulfide mineralization increases Py, Cp and Sp noticed in fractures, local chloritization		82	24764	7	8	1	.05	.18	.32	.48		.005

DIAMOND DRILL LOG

AND

SAMPLE RECORD

LOCATION: S. End of Trench 48

ASS. MAG. DECL'N _____

DIP AT COLLAR: 45°

BEARING ASTR: 15°N

ACID TESTS: at _____ DIP ANGLE _____ °

ELEVATION AT COLLAR: 1078 m.

FILE CODE: 2171

PROPERTY NAME: PIKE

DEPTH DRILLED: 250 ft. or 76.3 m.

PROVINCE: Y.T.

WDH #3

D.D.H. NO.: PZ-1

PAGE: 5/8

STARTED: July 25, 1981

FINISHED: July 26, 1981

LOGGED BY: I. Vopel

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS					
										%Cu	%Pb	%Zn	oz.Ag	%Mo	oz.Au
35	40	As Above	As Above. Alteration increases a network of micro-fractures filled with Py and Cp.		98	24765	35	36	1	.04	.02	.06	.02		.005
35	40	As Above	Stretching parallel to C.A. a waxy olive-green vein very soft alteration of Fsp. Locally strong diss. of Py and Aspy also crystalline.		98	24767	39	40	1	.02	.14	.06	.36		.006
40	45	As Above	Color: Pale grey-green Texture: Crowded porphyry interrupted by 30-60 cm wide zones of total silicification 3-10 mm wide networks of dark grey QZ-veins stretch 75° to C.A. all or partly filled with Aspy. Mineralization: Strong sulfide diss. mainly Aspy, locally specks of Ga. Strong Aspy diss. seems		98	24770	43	44	1	.06	.02	.08	.26		.006

DIAMOND DRILL LOG

AND

SAMPLE RECORD

 LOCATION: S. End of Trench 48

ASS. MAG. DECL'N _____

 DIP AT COLLAR: 45°

 BEARING ASTR: 15°N

ACID TESTS: at _____ DIP ANGLE _____ °

 ELEVATION AT COLLAR: 1078 m.

 FILE CODE: 2171

 D.D.H. NO.: PZ-1

 PAGE: 6/8

 PROPERTY NAME: PIKE

 STARTED: July 25, 1981

 DEPTH DRILLED: 250 ft. or 76.3 m.

 FINISHED: July 26, 1981

 PROVINCE: Y.T.

 LOGGED BY: I. Vopel

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS					
										%Cu	%Pb	%Zn	oz.Ag	%Mo	oz.Au
			always associated with zones of intense silicification.												
			Alteration: Sericite, chlorite, QZ, calcite at 44.5 m. cryst. associated with mass. Sp, Ga, Aspy and tetrahedrite.												
45	50	As Above	Silicified zone at 44.5 m. runs for 25 m. weakly mineralized tecture and grain-size fluctuate a crowded porphyry with subhedral QZ and Fsp. Phenos dominant, local granitic texture is adopted. Bio shows up again. Mineralization decreases.			24774	46	47	1	.12	.22	.08	1.30		.005
50	55	As Above	Densely crowded porphyry crystals are almost round. Weak sulfide diss. Cp, Py, Sp and minor Ga. Strong sericite chloritization alteration.		98	24761	52	53	1	.05	.06	.12	.16		.006

DIAMOND DRILL LOG

AND

SAMPLE RECORD

LOCATION: S. End of Trench 48

ASS. MAG. DECL'N _____

DIP AT COLLAR: 45°

BEARING ASTR: 15°N

ACID TESTS: at _____ DIP ANGLE _____ °

ELEVATION AT COLLAR: 1078 m.

FILE CODE: 2171

PROPERTY NAME: PIKE

DEPTH DRILLED: 250 ft. or 76.3 m.

PROVINCE: Y.T.

WDH #3

D.D.H. NO.: PZ-1

PAGE: 7/8

STARTED: July 25, 1981

FINISHED: July 26, 1981

LOGGED BY: I. Vopel

METRES FROM	METRES TO	FORMATION	DESCRIPTION DETAILS	EST. SULP %	REC. %	SAMPLE NUMBER	FROM	TO	WIDTH	ASSAYS					
										%Cu	%Pb	%Zn	oz.Ag	%Mo	oz.Au
55	60	As Above	Matrix silicification starts and gets stronger, micro-veins and fractures increase, sulfide mineralization weak.		98	24762	59	60	1	.04	.02	.02	.12		.006
60	61	As Above	Contact at 78° to C.A. to pale green aphanitic hornfels strongly micro-veined. Hornfels change gradually to chert inter-bedded with partly dolomitized impure limestone.												
61	65	Impure Dolomitized Limestone	Gradation in color from pale green to mocha-brown then finally greyish-white. Bedding 10-15° to C.A. strongly folded at thin 1-2 mm. shaly layers and calcitic layers interbedded with wide grey cherty layers. One major folding system and one superimposed causing weak crenulations locally Ca-veining extensive.		95	24766	64	65	1	.01	.02	.02	.04		.005
											Economic mineralization: very poor local diss.Py.				

