

GEOLOGICAL AND GEOCHEMICAL REPORT

on the

TOM MINERAL CALIMS

64° ²⁹/~~28~~° N 132° ⁴⁰/~~28~~° W

NTS 106.C/7

for

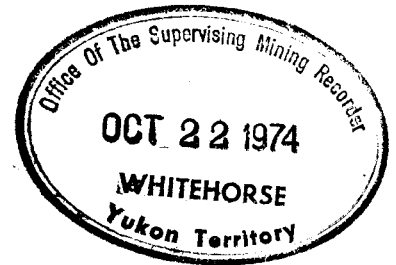
HARMAN MANAGEMENT LTD.

by

Charles K. Ikona P. Eng.

AUG. 29, 1974

6200



This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ 6200.00

J.R. Craig
 Resident Geologist or
 Resident Mining Engineer

Considered as representation work under Section 52 (4) Yukon Quartz Mining Act.

[Signature]
 Commissioner of Mines

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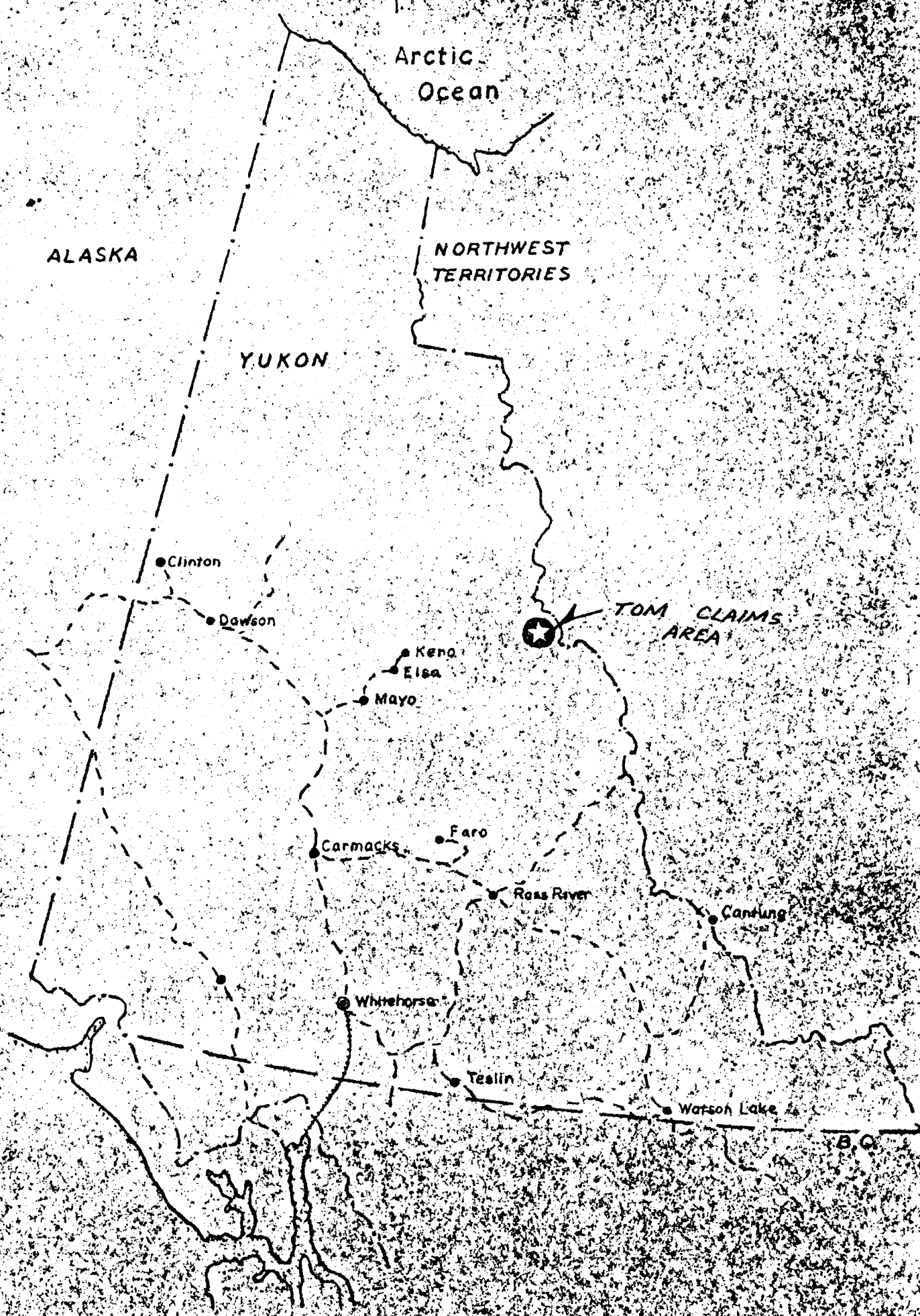
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Volume II

A) statement of general expenditures and notes

B) support data



ALASKA

Arctic
Ocean

NORTHWEST
TERRITORIES

YUKON

Clinton

Dawson

Keno

Elsa

Mayo

Carmacks

Faro

Ross River

Canlung

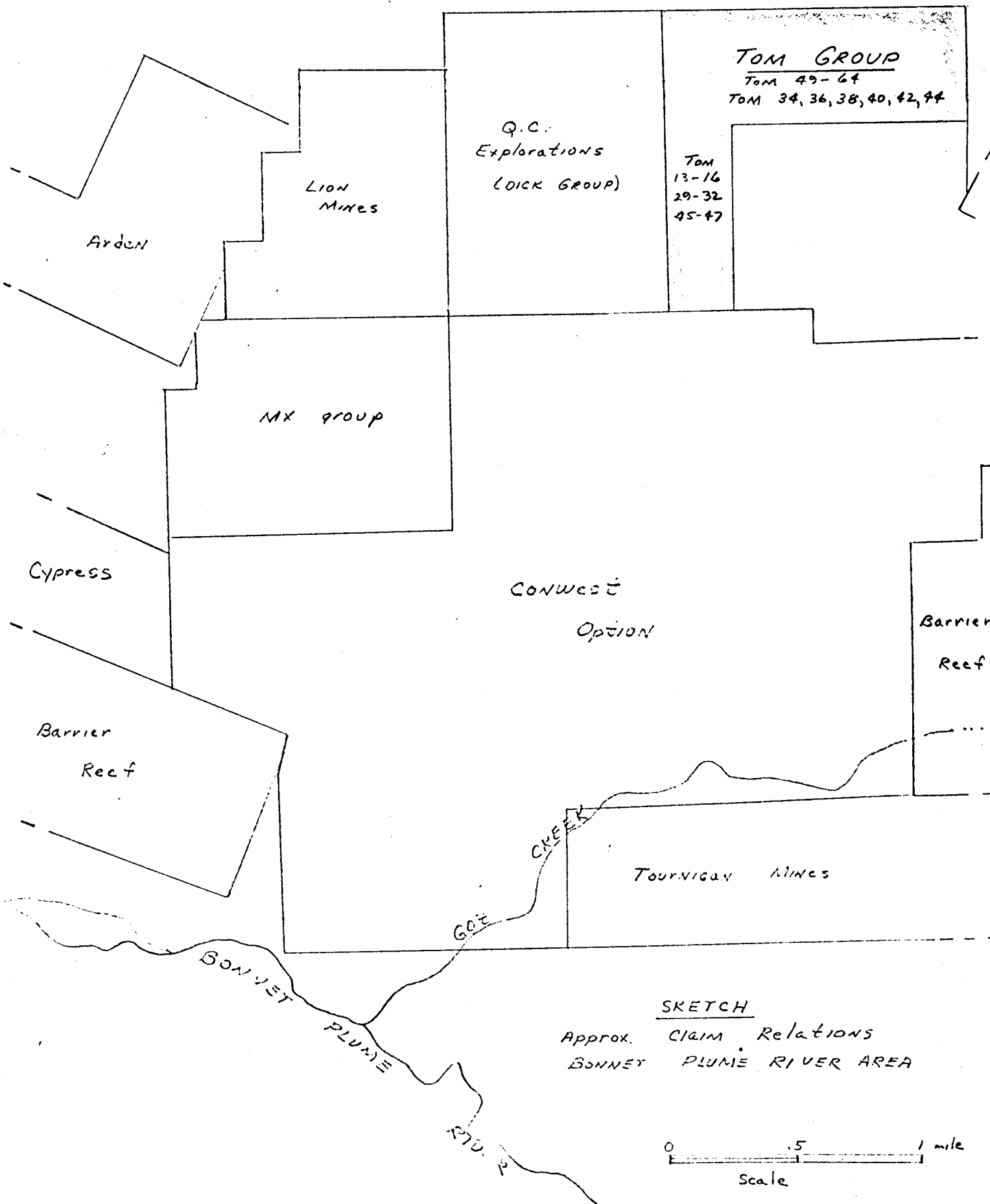
Whitehorse

Tealton

Watson Lake

TOM CLAIMS
AREA

B.C.



TOM GROUP
 Tom 49-64
 Tom 34, 36, 38, 40, 42, 44

Q.C.
 Explorations
 (DICK GROUP)

Tom
 13-16
 29-32
 45-47

LION
 MINES

Arden

MX group

Cypress

CONWEST
 OPTION

Barrier
 Reef

Barrier
 Reef

GOE
 CREEK

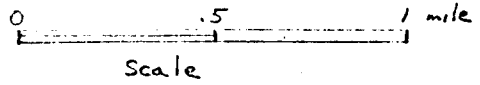
Tournigan Mines

BONNET
 PLUME

RTD. 2

SKETCH

Approx. CLAIM Relations
 BONNET PLUME RIVER AREA



Introduction

A work program consisting of detailed prospecting, geologic mapping and geochem soil sampling was conducted on the Tom mineral claims during the period June 30 to August 14th, 1974. This program was under the supervision of the author, Charles Ikona, P. Eng.

List of Claims

<u>Name:</u>	<u>Tom</u>	<u>Grants</u>	<u>Expirey Date:</u>	NTS 106-C-7
13 - 16		Y85882 - 85885	Oct. 3/74	
29 - 32		Y85898 - 85901		
	34	Y85903		
	36	Y85905		
	38	Y85907		
	40	Y85909		
	42	Y85911		
	44	Y85913		
45 - 64		Y85914 - 85933		

Location and Access

The Tom claims are located west of Harrison Creek in the Mayo Mining District of the Yudon Territory at approximately 64° 28' N and 132° 28' W.

Access to the property is by fixed wing aircraft from Mayo, Y.T. to Goz Lake, a distance of 123 miles. From this point it is 12 miles to the property by helicopter. The group is bounded to the north by the King group, to the west by the Dick group and to the south by the remainder of the Tom group.

Topography

Elevations on the group vary from 4000 to 65000 feet above sea level. Vegetation is confined to scattered aspen and moss.

Topography is rugged with steep ridges and cliffs of dolomite except in circ bottoms. Outcrop and talus cover some 75% of the group with a poorly defined soil profile on the remainder,

Geology

The Northwest corner of the group is underlain by brown to black shales and siltstones of the sheepbed formation. Some thinly interbedded brown quartz sandstones and quartz pebble conglomerates are also contained within this unit. General attitudes are N 50 E dipping 25° - 45° to the southeast with some modifications locally due to warping.

Conformably overlying this unit are thickbedded units of lower cambrian dolomites, quartzites and recessive shales. Typically a section through these unit may vary from poorly bedded, light grey fine grained vuggy dolomite to a poorly bedded grey crystalline dolomite interspersed with minor beds of quartzite and recessive shales. At the top of this sequence and defined by a 15 to 20 bed of black siltstone the dolomites become much better bedded and consist mainly of a fine grained dolomites weathering to a very porous texture.

The lower massive dolomites in this sequence exhibit fairly extensive quartz fracture healing and vug filling. In some cases this quartz healing may be accompanied by minor lead and / or zinc mineralization.

Two areas of interest are apparent on the group.

A. On the Tom # 15

A showing has been located on the adjoining Dick #1 claim. Here a grey green vuggy dolomite has been shattered and partially healed by quartz with accompanying sphalerite. This showing appears to conform to bedding and if so a strike extension may be located in the floor of the circ on the Tom # 15 although it would not outcrop.

B. In the ridge on the north east and of the property a showing has been located on the Tom # 35 adjacent to the claim group. On this showing a grey, vuggy dolomite has had extensive quartz fracture filling. A red colored sphalerite accompanies this quartz weakly over some 200 feet in vertical section. Over an approximate 20 feet in section the sphalerite appears fairly massively in some fractures. These units strike onto the Tom #38 and 40 claims where sphalerite accompanying quartz healing is also weakly seen. Unfortunately the higher grade section has not been located on the Tom 38 and 40.

Geochemistry

The high percentage of the property with either outcrop or talus limits the scope at a geochemical program.

Where possible geochem samples were collected and placed in kraft bags to be air dried in camp prior to analysis.

Method of Analysis

The samples were delivered to Chemex labs Ltd. 212 Brooksbank Ave., North Vancouver, B.C. for lead and zinc determination. A hot acids digestion method was employed and analysis made on an atomic absorption unit.

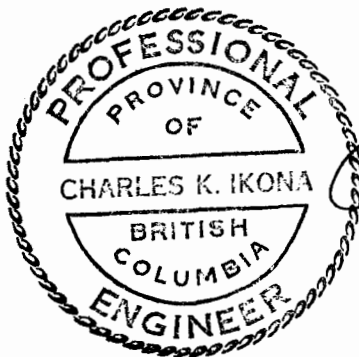
Discussion of Results & Conclusions

Geochemical results are plotted on the 100"-1000" map accompanying this report.

Some erratic highs are to be expected when sampling this unit due to the extensiveness of Quartz open space filling which occasionally is accompanied by minor lead and/or zinc.

The ridge on the North east end of the claim group has returned a large number of geochem high valves and must however, be considered anomalous.

Given the size of the geochem anomaly of several thousand feet and the mineralization located here the ridge must be considered a good target for a detailed prospecting and geochemical sampling program.



Respectfully submitted,

A handwritten signature in cursive script that reads "Charles K. Ikona".

Charles K. Ikona

P. Eng.

List of personnel for the TOM Group:

Kevin Milledge	5794 Atlantic Ave., Halifax, N.S.	field hand	July 28 to Aug. 2
Mike Toporowske	812 Seafair Place Richmond, B.C.	ass. prospector	July 28 to Aug. 2
Duck Johnny	General Delivery Ross River, Y.T.	ass. prospector	July 28 to Aug. 2
Chuck Ikona	2416 St. John's Port Moody, B.C.	P. Eng.	June 18, Aug. 14, Aug.30

TOM MINERAL CLAIM GROUP
Statement of Expenditures to date
August 24, 1974.

Direct Costs:

wages	15 man-days	750.00	
tagging posts	34 claims	272.00	
geologic fees	C Ikona	330.00	
helicopter support	(\$199/hour)	975.10	
geochem samples	45 at \$ 2.00	90.00	
field equip expense	\$ 6.00/man/day	108.00	
camp cost expense	10.00/man/day	<u>150.00</u>	\$ 2675.10

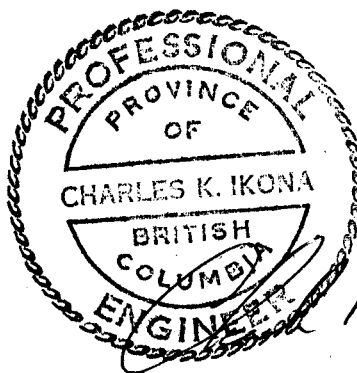
Indirect Costs: (.063)

equipment supply depreciation	204.72	
contracts and rentals	20.02	
wages(mob & demob)	532.35	
food	per diem	
fuels	per hour	
helicopter (general)	605.17	
fixed wing general)	530.09	
travel & accommodations	41.19	
sundry & administration	365.99	
geochem supplies	23.35	
expediting services	188.52	
air travel & air freight	<u>82.27</u>	\$ <u>2,593.67</u>

sub total 5,268.77

Harman Management Ltd fee 931.23

Total Expenditures to date \$ 6,200.00



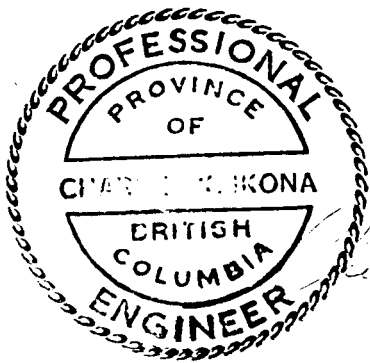
A handwritten signature in black ink, appearing to read 'K. Ikona', written over the bottom right portion of the professional seal.

ENGINEERS CERTIFICATE

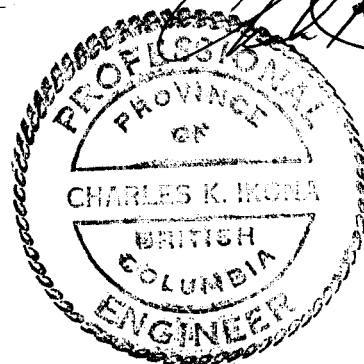
I, CHARLES K. IKONA of 2614 St. John's St., Port Moody, in the Province of British Columbia do hereby certify that:

1. I am a consulting mining engineer with offices at 609-850 W. Hastings St., Vancouver, B.C.
2. I am a graduate at the University of British Columbia with a degree in Mining Engineering.
3. I am a member in good standing at the Association of Professional Engineers of the Province of British Columbia.
4. The work described in the accompanying report on the Claim Group was performed under my personal supervision.

Dated this 30th day of August 1974 at Vancouver, B.C.



Charles K. Ikona, P. Eng.



Direct Cost Invoices

Helicopter and geochemical support data



127

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
AREA CODE: 604

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO: Harman Explorations
821 - 602 W. Hastings
Vancouver, B.C.

CERTIFICATE NO. 27983
INVOICE NO. 12149
RECEIVED Aug. 12/74
ANALYSED Aug. 15/74

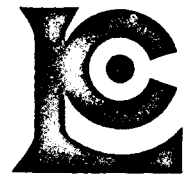
ATTN:

SAMPLE NO. :	PPM Lead	PPM Zinc
MX G 7	44	102
8	42	83
9	40	112
10	33	67
11	38	92
12	32	72
13	42	80
MX G 14	44	123
RAF H 1	50	108
2	46	400
3	38	275
4	40	45
RAF H 5	46	98
TOM A 0	52	275
1	60	375
2	54	640
3	77	700
4	56	375
5	62	640
6	100	1588
7	72	950
8	52	450
9	42	240
10	46	194
11	62	700
12	52	233
13	40	400
14	42	275
15	70	1080
16	46	900
17	56	2440
18	48	466
19	50	450
TOM A 20	46	1044
TOM 1 B	34	680
2	56	660
3	56	733
4	68	3544
5	32	600
TOM 6 B	54	420
Std.	62	50



MEMBER
CANADIAN TESTING
ASSOCIATION

CERTIFIED BY: *H. P. [Signature]*



CHEMEX LABS LTD.

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 NORTH VANCOUVER, B.C.
 CANADA V7J 2C1
 TELEPHONE: 985-0648
 AREA CODE: 604

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

TO: Harman Explorations
 821 - 602 W. Hastings,
 Vancouver, B. C.

CERTIFICATE NO. 27984

INVOICE NO. 12149

RECEIVED Aug. 12/74

ANALYSED Aug. 15/74

ATTN:

SAMPLE NO.	PPM Lead	PPM Zinc
TOM 7B	58	206
8	58	1148
9	58	1000
10	52	766
11	46	766
12	70	733
TOM 13B	58	550
TOM C 1	79	1388
2	52	45
TOM C 3	44	28
TOM 1 D	40	392
2	40	392
3	50	375
4	56	295
5	68	317
6	50	620
TOM 7 D	74	434
Dick A 1	48	360
2	50	400
3	52	525
4	46	406
5	52	406
6	46	466
7	26	72
8	56	98
9	38	80
10	42	164
11	88	285
12	36	120
13	48	155
14	38	131
15	36	108
16	74	400
17	42	135
18	132	140
19	86	135
20	180	120
21	48	105
22	34	120
Dick A 23	30	92
Std.	60	52



MEMBER
 CANADIAN TESTING
 ASSOCIATION

CERTIFIED BY: *[Signature]*

CANADA) In the matter of a geological and geochemical survey
) and report on the Tom mineral claims as noted on page 3
) on behalf of Harman Management Ltd
 TO WIT:)

I, Charles K Ikona for Pamicon Development Ltd of 609-850 West Hastings street, Vancouver, B.C. do solemnly declare that geologic mapping and a geochemical survey were conducted on the Tom mineral claims as outlined in this report during the period June 18, July 28 to Aug 2, and August 14, 1974.

The following expenses were incurred during the course of this work and in the compilation and reporting of the results:

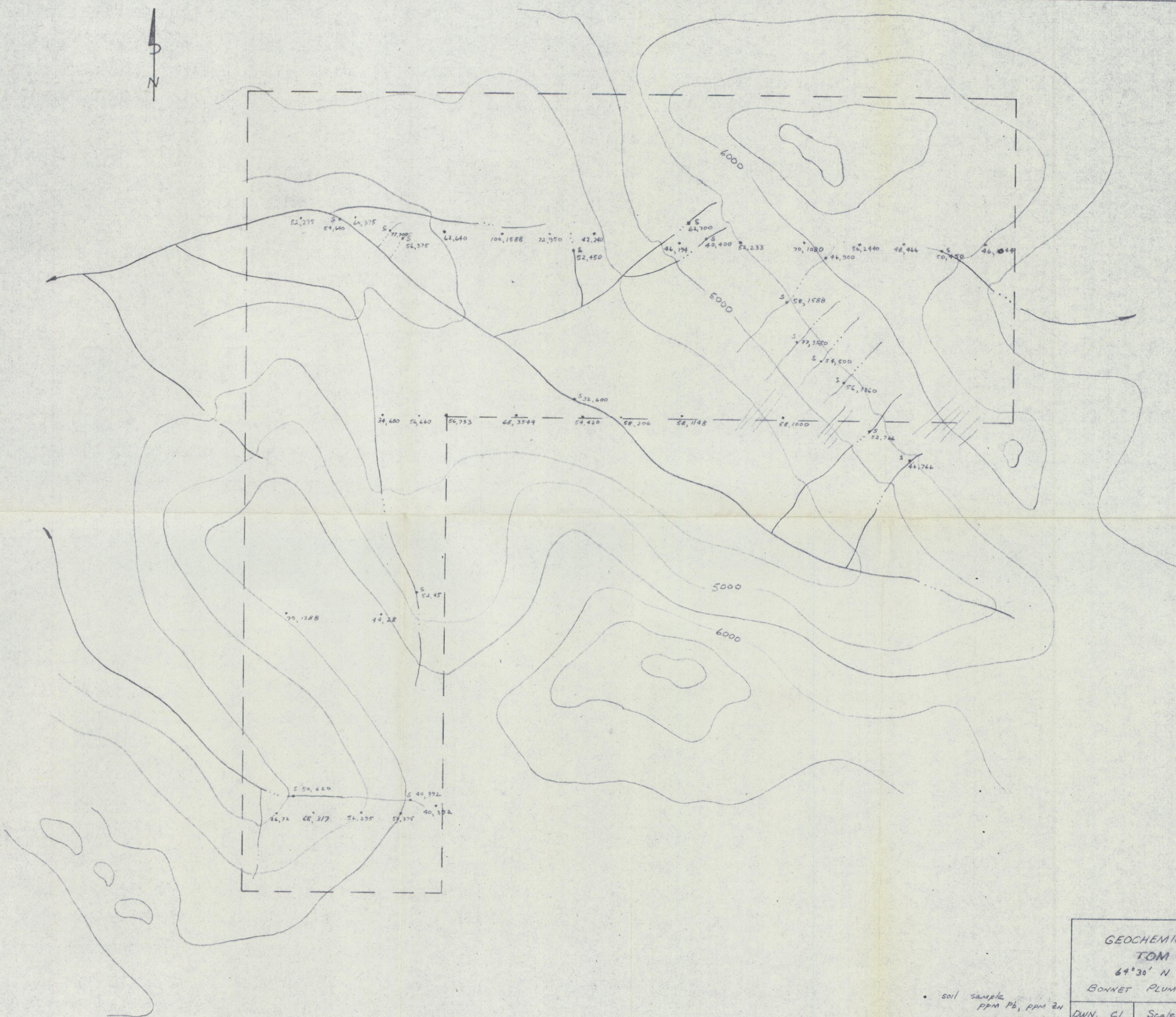
wages	
tagging posts	\$ 750.00
geologic fees	272.00
helicopter support	330.00
geochemical samples	975.10
field equipment expense	90.00
camp cost expense	108.00
	150.00
equipment supply expense	204.72
contracts and rentals	20.02
wages (mob & demob)	532.35
helicopter	605.17
fixed wing	530.09
travel and accommodation	41.49
sundry and administration	365.99
geochemical supplies	23.35
expediting services	188.52
air travel and air freight	82.27
Harman Management Ltd fee	<u>931.23</u>
Total	\$ <u>6,200.00</u>

And I make this solem declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virture of the Canada Evidence Act.

Declared before me at Vancouver)
 in the Province of British)
 Columbia this 30th day of)
JANUARY, 1975.)



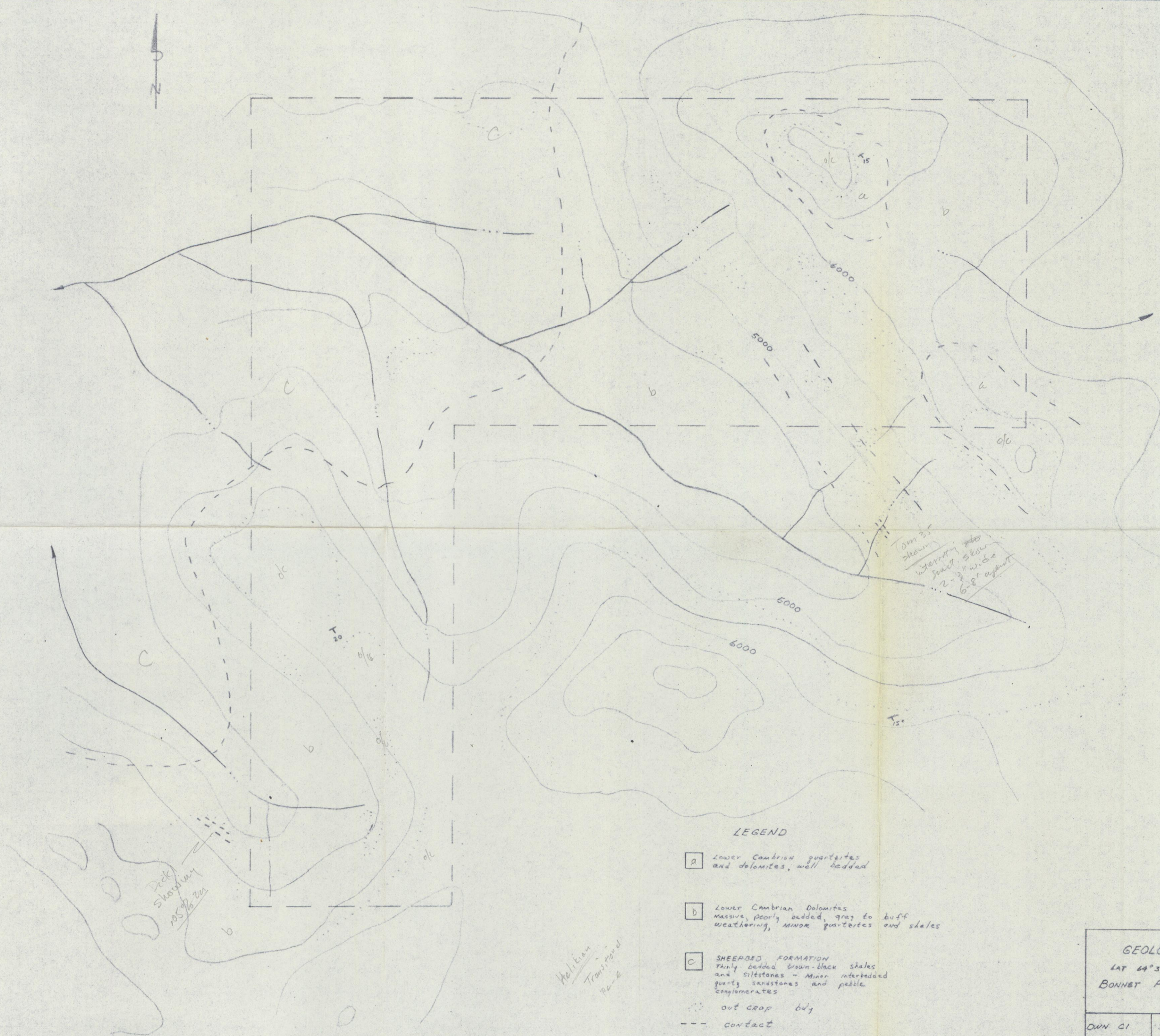
H.S.A.L.
 A Commissioner for Oaths for
 or Notary Public
 for the Yukon Territory.



GEOCHEMICAL RESULTS
 TOM CLAIMS
 64°30' N 132°43' W
 BONNET PLUME RIVER AREA Y.T.

• soil sample
 ppm Pb, ppm Zn
 S. silt sample
 ppm Pb, ppm Zn

DWN. C1	Scale 1" = 1000'	AUG 1974
HARMAN Mgmt Ltd.		



See 3.5
shallow
interior to
face slope
2-3' wide
6-8' apart

Deck
Shedding
105 to 20

Melville
Transition
Zone

LEGEND

- a Lower Cambrian quartzites and dolomites, well bedded
- b Lower Cambrian Dolomites massive, poorly bedded, grey to buff weathering, MINOR quartzites and shales
- c SHEPHERD FORMATION Thinly bedded brown-black shales and siltstones - Minor interbedded quartz sandstones and pebble conglomerates
- out crop only
- - - contact
- T attitudes

GEOLOGY TOM CLAIMS		
LAT 64° 30' N		LONG 132° 43' W
BONNET PLUME RIVER AREA Y.T.		
OWN CI	Scale 1" = 1000'	AUG 1974
HARMAN Mgmt. Ltd.		