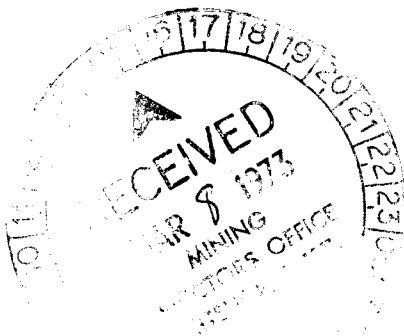


GEOCHEMICAL REPORT  
CONE MOUNTAIN MINES LTD.

Luck mineral claims, mile 706, Alaska Highway  
Watson Lake and Liard Mining Divisions  
Lat. 60°00'N Long. 130°29'W N.T.S. 104 0/16 - 105 B/1

Author: Glen E. White B.Sc. Geophysicist  
P. ENG: D. Parent  
Date of Work: August 15 - 22, 1972  
Date of Report: September 27, 1972



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 \$ 3075.00

D.B. Craig  
Resident Geologist or  
~~Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

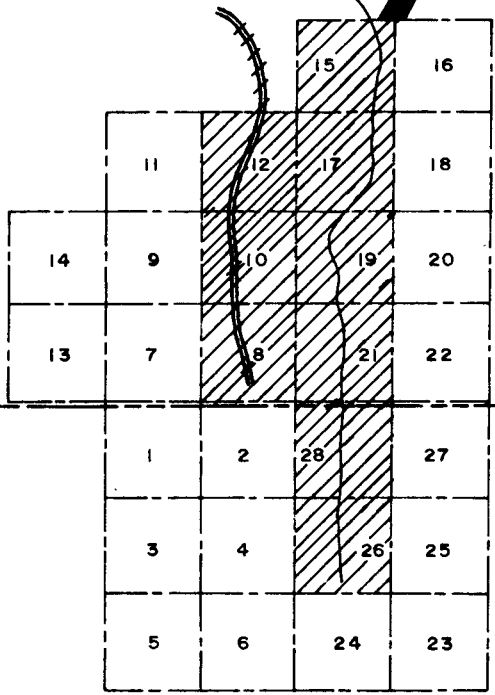
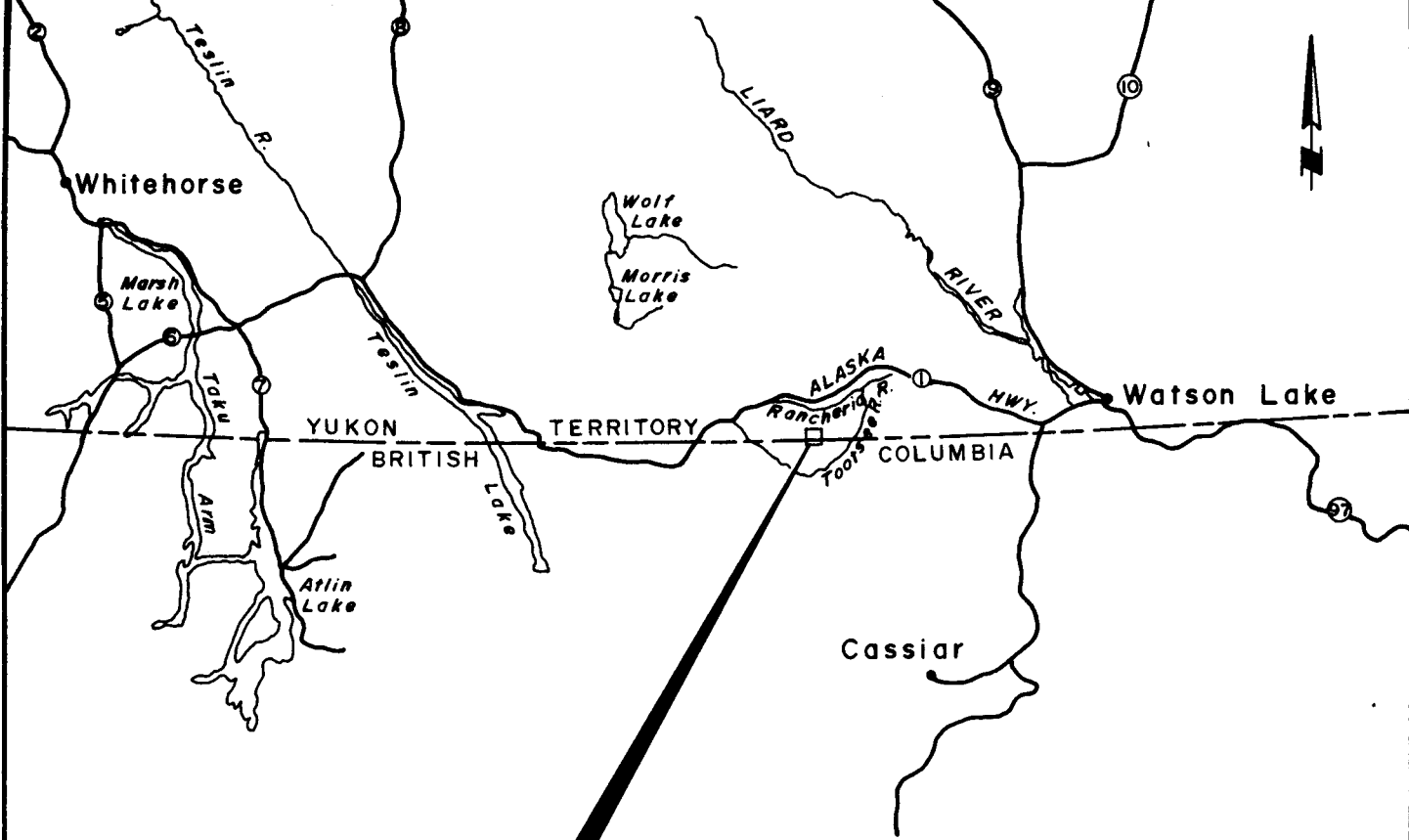
[Signature]  
Commissioner of Yukon Territory

C O N T E N T S

	<u>PAGE</u>
Introduction.....	1
Property.....	1
Location and Access.....	1
General Geology.....	2
Survey Specifications	
(1) Survey Grid.....	2
(2) Geochemical Survey.....	2
Data Presentation.....	3
Discussion of Results.....	3 - 4
Conclusions and Recommendations.....	4
Statement of Qualifications: Glen E. White.....	5
Certificate: D. Parent P. ENG.....	6

Illustrations

- Figure 1 - Location and Claims Map
- 2 - Geochemical Map - Silver
- 3 - Geochemical Map - Lead
- 4 - Geochemical Map - Zinc
- 5 - Geochemical Map - Copper



**LEGEND**

- Outline of Claims
- Paved Roads
- Unpaved Roads
- ▨ Area Surveyed

**CONE MOUNTAIN MINES LTD.  
LUCK CLAIMS  
LOCATION AND CLAIMS MAP**

SCALE : LOCATION MAP : 1" = 39 MILES APPROX.

CLAIMS MAP : 1/2" = 1500' APPROX.

*Glen C. White  
geophysical consulting  
&  
services ltd.*

## INTRODUCTION

During the period August 15 - 22, 1972 Glen E. White Geophysical Consulting and Services Ltd. conducted a program of line surveying and geochemical soil sampling on the Luck mineral claims in the Watson Lake area on behalf of Cone Mountain Mines Ltd.

The purpose of the survey was to aid in evaluating the claim group and to see if there were any geochemical trends associated with reported showings and float of high grade argentiferous galena.

## PROPERTY

The property consists of 28 contiguous mining claims as illustrated in Figure 1. The claims are listed as follows:

Luck 1 - 6	No.S. 39692 - 697	Liard M.D., B.C.
23 - 28	No.S. 39698 - 703	" " "
Luck 7 - 22	No.S. Y29466 - 481	Watson M.D., Yukon

## LOCATION AND ACCESS

The mineral claims are situated in the Tootsee Ridge area of the Yukon and British Columbia, some 70 miles west of Watson Lake, Yukon Territory. Latitude 60°00'N  
Longitude 130°29'W N.T.S. 104 O/16 - 105 B/1

Access to the property is by a 4x4 motor vehicle via a branch road at Mile 706 of the Alaska Highway for a distance of some 8 miles. This road and bridge which span the Rancheria River were built to service the C.N.T. microwave tower on the south side of the river. A rough gravel road leading south follows the east bank of Freer Creek East to the northern limit of the Luck claim group. At this point one branch goes up the ridge that lies between Freer Creek and Freer Creek East to service a group of claims known as the Ida Ore property and then continues to the Cone Mountain Mines Ridge showings. The lower branch follows Freer Creek East and ends as a trail leading to the valley showings.

## GENERAL GEOLOGY

The area of the claim group is underlain by massive grey biotite quartz monzonite known as the Cassiar Batholith of Jurassic and or Cretaceous age. It is highly jointed with prominent horizontal and east-west fracture patterns. In the area of the claim group the quartz-monzonite has been intruded by northerly trending lamprophyre dykes which vary in width from a few inches to 10 - 20 feet and which appear to have extensive north-south dimensions. Mineralization occurs as argentiferous galena, sphalerite and chalcopryrite which are found in quartz veins and as massive lenses of sulphides which favour steeply dipping east-west striking fractures. Examination of the area by D. Parent, P. ENG. indicated that the mineralization may have a genetic relationship to the lamprophyre dykes.

## SURVEY SPECIFICATIONS

### Survey Grid

The survey grid consisted of two north-south control lines, one along a north-south ridge and the other in the valley along East Freer Creek which also trends north-south. Cross lines were turned off at intervals of 800 to 1000 feet to try and locate any mineralized zones. The base and traverse lines were chained and flagged at 100 foot intervals.

### Geochemical Survey

Geochemical soil samples of the B horizon were obtained with soil augers at 100 foot and 200 foot intervals along the traverse and base lines and placed in soil envelopes provided by Chemex Labs Ltd. of North Vancouver. The soil samples were then delivered to Chemex Labs Ltd. where -80 mesh sieving, digestion by perchloric acid and analysis by atomic absorption was carried out under the supervision of professional geochemists. Some 211 soil samples were obtained and analysed for lead, zinc, silver and copper. Three rock samples were obtained and assayed for lead, zinc and silver.

## DATA PRESENTATION

The survey data accompanying this report is at a scale of 1" = 400' as follows:

Figure 2	-	Geochemical Map	-	Silver
3	-	"	"	Lead
4	-	"	"	Zinc
5	-	"	"	Copper

## DISCUSSION OF RESULTS

Figure Nos. 3 and 4, Geochemical Maps for Lead and Zinc respectively show good correlation and indicate several zones of strong geochemical responses. Most of the interesting geochemical values were found in the valley associated with Freer Creek East. Mr. D. Parent in his geological appraisal of the area considered that possibly this depression was partly associated with a rapidly decomposing lamprophyre dyke which may be genetic associated with the mineralization.

Figure 3 shows particularly strong p.p.m. lead values along 16S East and at the western end of 8S. A number of interesting values also occur along the various lines in a northerly direction down the valley in areas of deeper overburden. Several single point high values were located along the ridge and would appear to be associated with interesting mineralized float.

Figure 4, the zinc geochemical map, shows several interesting zinc values along the ridge, but like the lead map shows much more geochemical activity in the valley.

Figure 2 illustrates the p.p.m. values of silver mineralization and shows a particularly strong anomaly on line 16S - 4E to 6E. This anomaly shows excellent correlation with the high lead values in this area. A number of interesting but weaker anomalies such as on line 8S, 10N and 30N were located along the valley. The soil samples along the ridge showed no geochemical values in silver.

The copper geochemical map, Figure 5, shows weak copper values along line 16S.

Correlation of the above geochemical data indicates that the zone around line 16S is of considerable interest as all four elements show a response in this area and the silver value at 16S - 5E is just over 1 ounce of silver/ton in the soil.

#### CONCLUSION AND RECOMMENDATIONS

During the latter part of August 1972, a program of linecutting and geochemical soil sampling was conducted over a portion of the Luck claim group, Watson Lake area, Yukon Territory.

The survey located an area of interesting lead, zinc and silver geochemical values on line 16S where the p.p.m. value of silver indicated a little over 1 ounce of silver/ton in the soil. This zone is at the head of a valley drained by Freer Creek East. Several smaller anomalous zones were located down this valley and it is thought that the valley may be underlain by a lamprophyre dyke which may possibly be genetically associated with the mineralization.

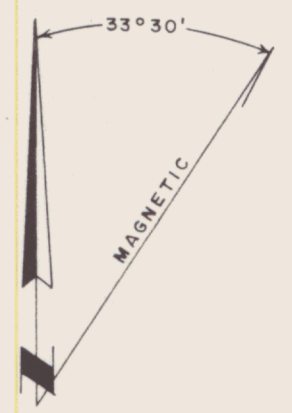
It is recommended that since this soil sampling survey was done on a wide line spacing, that further soil sampling, geological mapping, electromagnetometer and possibly magnetometer surveying be conducted to further delineate the anomalous geochemical targets detected by this survey.

Respectfully submitted,  
GLEN E. WHITE GEOPHYSICAL  
CONSULTING AND SERVICES LTD.



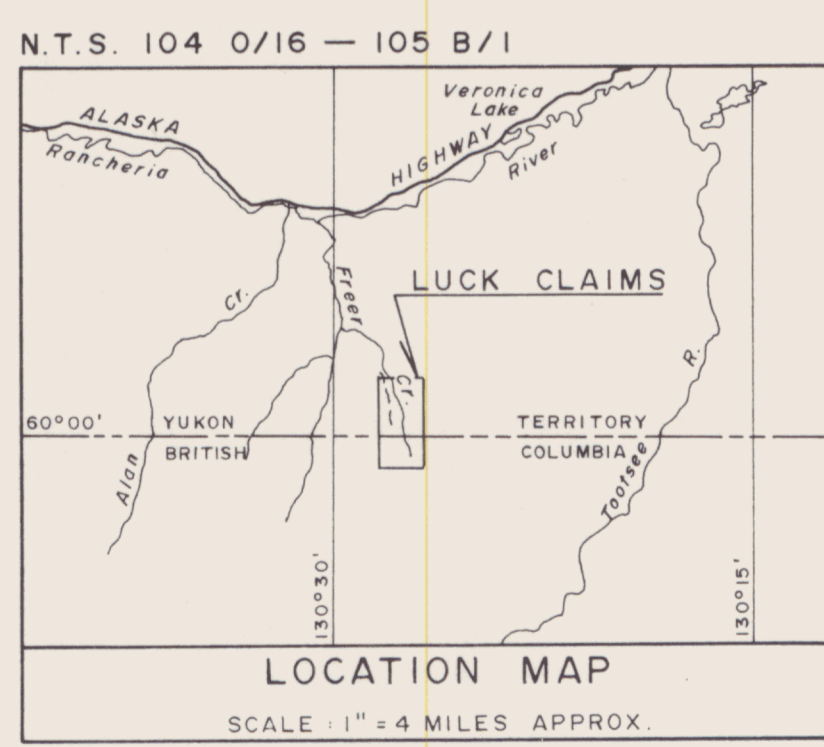
Glen E. White B.Sc.  
Geophysicist

130°29' 5+00 W 0+00 5+00 E



LEGEND  
 --- Contour Line, Contour Interval 1.5, 3.0, 4.5 P.P.M.  
 o Stations  
 --- Outline of Claims  
 ■ Claim Posts  
 == Unpaved Roads  
 --- Cliffs

50+00 N  
 40+00 N  
 30+00 N  
 20+00 N  
 10+00 N  
 0+00  
 8+00 S  
 16+00 S  
 22+00 S

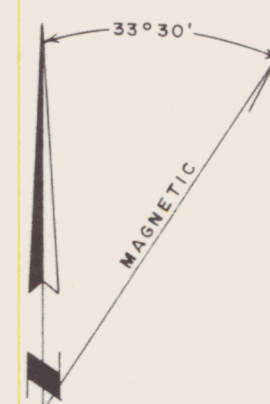


CONE MOUNTAIN MINES LTD.  
 LUCK CLAIMS  
 WATSON & LIARD MINING DIVISIONS  
 YUKON TERRITORY & BRITISH COLUMBIA  
 GEOCHEMICAL MAP  
 SILVER - P.P.M.  
 Drawn by: GLEN E. WHITE  
 geophysical consulting services Ltd.  
 INTERPRETED BY: G.E.W.  
 CHECKED BY: [Signature]  
 DATE: SEPT. 20, 1972  
 FIG. No. 2

To accompany Geochemical Report on THE LUCK CLAIM GROUP Date: September 22, 1972 By: GLEN E. WHITE - G.S. [Signature]

130°29'

5+00 W 00+00 5+00 E



LEGEND

- Contour Line Contour Interval 80, 160, 240 P.P.M.
- Stations
- Outline of Claims
- Claim Posts
- Unpaved Roads
- Cliffs

50+00 N

40+00 N

30+00 N

20+00 N

10+00 N

0+00

8+00 S

16+00 S

22+00 S

LEAD KEY



60°00' YUKON TERRITORY BRITISH COLUMBIA

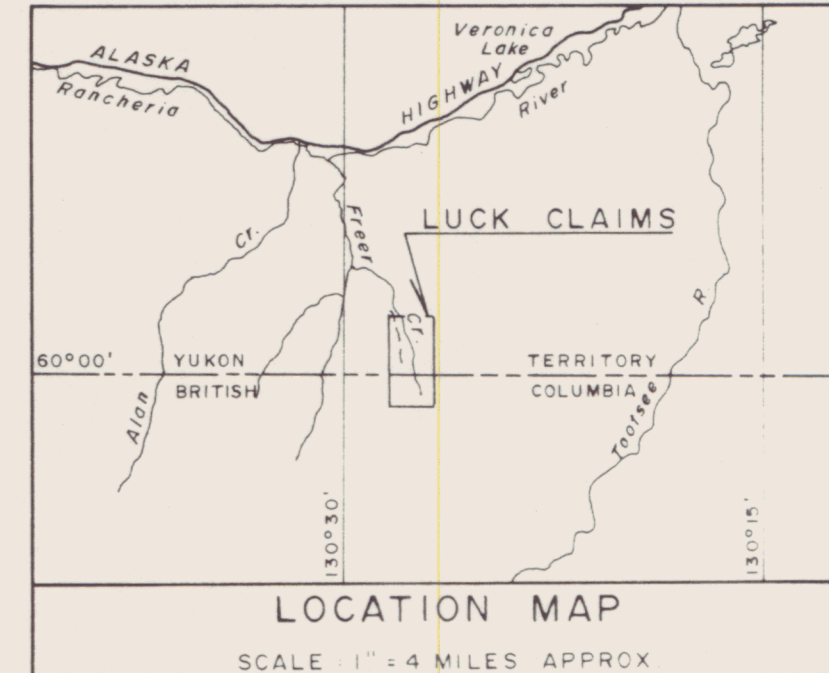
60°00'

Representative Float  
Pb = 8.4 %  
Zn = 0.31 %  
Ag = 1.31 oz/ton

Float  
Pb = 12.5 %  
Zn = 0.31 %  
Ag = 0.61 oz/ton

Grab Samples Float  
Pb = 0.29 %  
Zn = 0.02 %  
Ag = 0.15 oz/ton  
Trenches do not reach Bedrock

N.T.S. 104 0/16 - 105 B/1



500 250 0 500 1000 2000  
1" = 500'

CONE MOUNTAIN MINES LTD.

LUCK CLAIMS  
WATSON & LIAO MINING DIVISIONS  
YUKON TERRITORY & BRITISH COLUMBIA

GEOCHEMICAL MAP  
LEAD - P.P.M.

Glen E. White  
geophysical consulting  
sources Ltd.

INTERPRETED BY: G.E.W.  
DRAWN BY:  
CHECKED BY:  
DATE: SEPT. 20, 1972  
FIG. NO.: 3

To Accompany Geochemical Report on  
THE LUCK CLAIM GROUP  
Date: September 27, 1972  
By: GLEN E. WHITE - G.S. Alan R. White

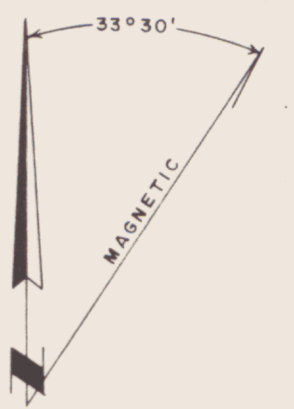
130°29'

130°29'

5+00 W

0+00

5+00 E



LEGEND

- Contour Line Contour Interval 100, 200, 300 P.P.M.
- Stations
- Outline of Claims
- Claim Posts
- Unpaved Roads
- Cliffs

50+00 N

40+00 N

30+00 N

20+00 N

10+00 N

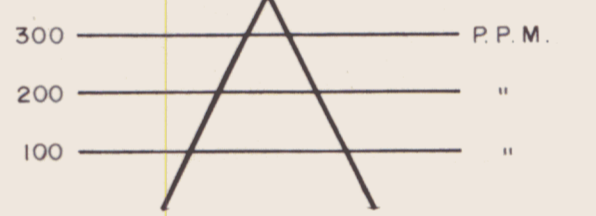
0+00

8+00 S

16+00 S

22+00 S

ZINC KEY



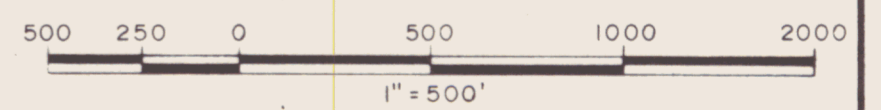
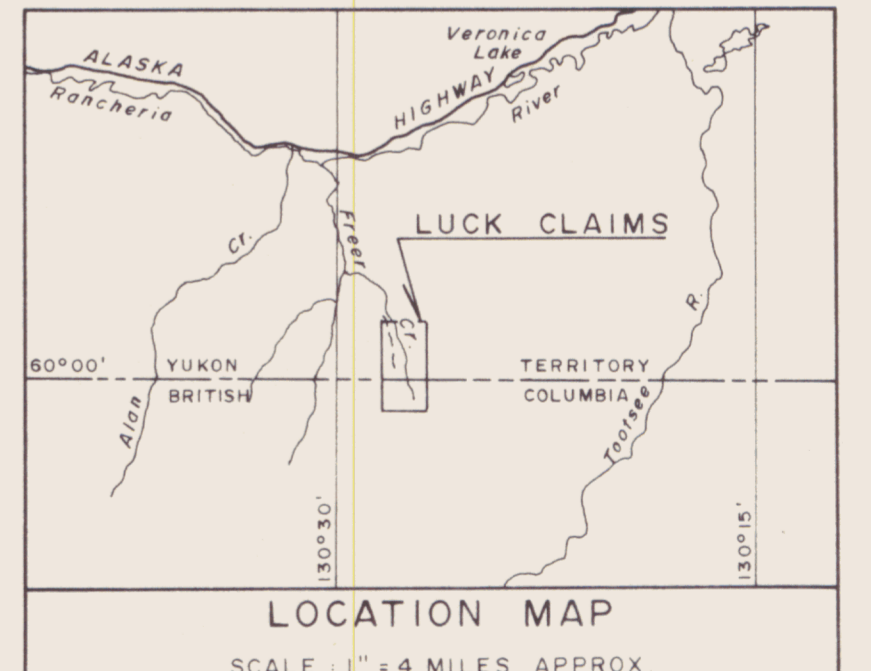
Representative Float  
 Pb = 8.4 %  
 Zn = 0.31 %  
 Ag = 1.31 oz/ton

Float  
 Pb = 12.5 %  
 Zn = 0.31 %  
 Ag = 0.61 oz/ton

Grab Samples Float  
 Pb = 0.29 %  
 Zn = 0.02 %  
 Ag = 0.15 oz/ton  
 Trenches do not reach Bedrock  
 25

YUKON TERRITORY  
BRITISH COLUMBIA

N.T.S. 104 0/16 - 105 B/1



CONE MOUNTAIN MINES LTD.

LUCK CLAIMS  
WATSON & LIARD MINING DIVISIONS  
YUKON TERRITORY & BRITISH COLUMBIA

GEOCHEMICAL MAP  
ZINC - P.P.M.

To accompany Geochemical Report on  
 THE LUCK CLAIM GROUP  
 Date September 27, 1972  
 By GLEN E. WHITE - G.S.C. *Glen White*

*Glen E. White*  
 geophysical consulting  
 &  
 services Ltd.

INTERPRETED BY: G.E.W.  
 DRAWN BY:  
 CHECKED BY:  
 DATE: SEPT. 20, 1972  
 FIG No: 4

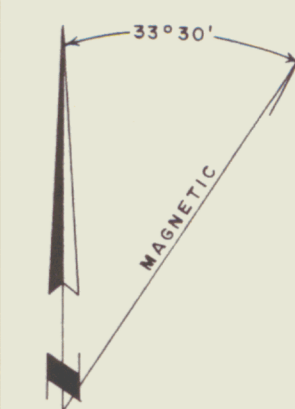
130°29'

130°29'

5+00 W

0+00

5+00 E



LEGEND

- Contour Line, Contour Interval 10, 20, 30 P.P.M.
- o Stations
- - - Outline of Claims
- Claim Posts
- == Unpaved Roads
- Cliffs

50+00 N

40+00 N

30+00 N

20+00 N

10+00 N

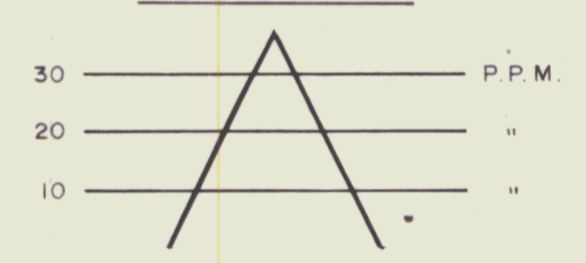
0+00

8+00 S

16+00 S

22+00 S

COPPER KEY



60°00' YUKON TERRITORY BRITISH COLUMBIA

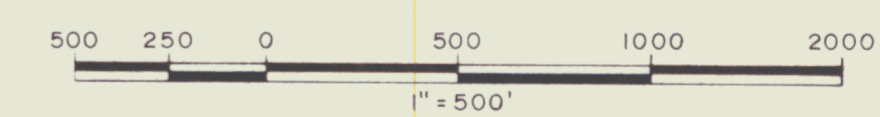
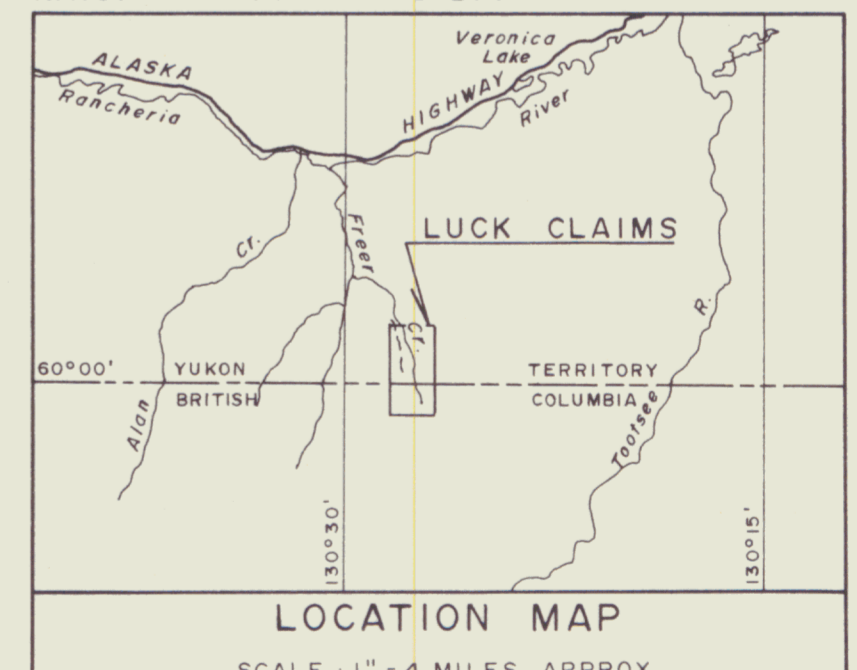
60°00'

Representative Float  
Pb = 8.4 %  
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Ag = 1.31 oz/ton

Float  
Pb = 12.5 %  
Zn = 0.31 %  
Ag = 0.61 oz/ton

Grab Samples Float  
Pb = 0.29 %  
Zn = 0.02 %  
Ag = 0.15 oz/ton  
Trenches do not reach Bedrock  
25

N.T.S. 104 0/16 — 105 B/1



**CONE MOUNTAIN MINES LTD.**  
LUCK CLAIMS  
WATSON & LIARD MINING DIVISIONS  
YUKON TERRITORY & BRITISH COLUMBIA

**GEOCHEMICAL MAP**  
COPPER — P.P.M.

*Glen E. White*  
geophysical consulting  
services Ltd.

INTERPRETED BY: G.E.W.  
DRAWN BY:  
CHECKED BY: *[Signature]*  
DATE: SEPT. 20, 1972  
FIG No: 5

130°29'

To Accompany Geochemical Report on  
THE LUCK CLAIM GROUP  
Date: *Sept. 20, 1972*  
By: GLEN E. WHITE & *[Signature]*