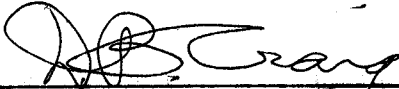




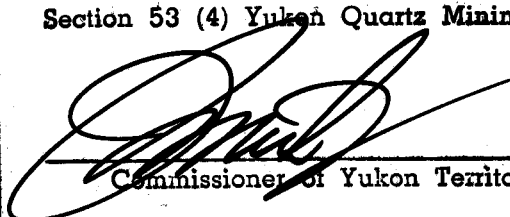
Report on Geological, Geochemical
& Claim Surveys conducted on the
LIZ 1 - 8 & 17 - 24 claims for
CREAM SILVER MINES LTD. (N.P.L.)

August 31, 1974 F. Holcapek, P. Eng.

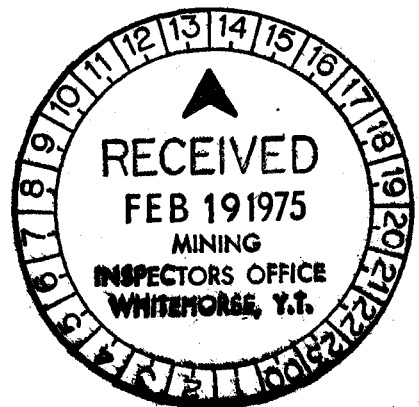
This report has been examined by the
Geological Evaluation Unit and is recom-
mended to the Commissioner to be consider-
ed as representation work in the amount of
\$ 5000.00


Resident Geologist or
Resident Mining Engineer

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


Commissioner of Yukon Territory

\$ 5600



REPORT ON GEOLOGICAL, GEOCHEMICAL
AND CLAIM SURVEY
CONDUCTED ON
THE LIZ 1 - 8 AND 17 - 24 CLAIMS
FOR
CREAM SILVER MINES LTD. (N.P.L.)

Vancouver, B.C.
August 31, 1974.

F. Holcapek, P.Eng.

Cream Silver Mines Ltd.

LIZ 1-8, 17-24.
Claims

Remarks: The property is 5 miles east of
Barrier Reef's Hog Creek property.

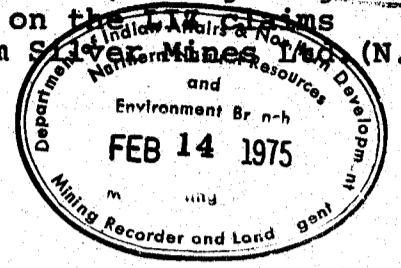
The claims are underlain by shale, siltstone, quartzite, limestone and dolomite of Ordovician to Cambrian age. The rock units are strongly folded and faulted, with fold axes plunging to the east and faults trending north and southeast.

Sphalerite and minor galena and smithsonite occur in ~~the~~ breccia zones in lower Cambrian limestone and dolomite.

Work consisted of geological mapping and a geochemical soil survey. Several coincident zinc-lead soil anomalies appear to be related to fault zones within the carbonate rocks.

DOMINION OF CANADA:
 PROVINCE OF BRITISH COLUMBIA.
 To Wit:

In the Matter of claim surveying, gridding
 geochemical soil sampling
 for Pb and Zn, and geological
 mapping on the FAK claims
 of Cream Silver Mines Ltd. (N.P.L.)



I, **C.H. Stanley**
 of **107 - 325 Howe Street, Vancouver, B.C.**

in the Province of British Columbia, do solemnly declare that the following expenditures were incurred on the LIZ 1-8, 17-24 mineral claims for Cream Silver Mines Ltd. (N.P.L.)

Personnel:		
F. Holcapek, Geologist	\$ 300.00	
J. Deighton, Geologist	\$ 800.00	
F. Zischka, Field assistant	\$ 450.00	
T. Hannon, Field Assistant	\$ 360.00	
L. Hemmingson, Field assistant	\$ 270.00	
J. Toohey, Field assistant	\$ 210.00	
M. Hopkins Field assistant	\$ 210.00	
	<u>\$ 2,600.00</u>	\$ 2,600.00
Disbursements:		
Helicopter,	\$ 1,093.00	
Groceries	\$ 467.01	
Mobilization/ Demobilization	\$ 415.45	
Assays (LAB)	\$ 512.10	
Engineering and camp supplies	\$ 147.20	
Airplane fares	\$ 166.77	
Camp charges	\$ 920.00	
Expediting	\$ 92.30	
	<u>\$ 2,986.13</u>	
Overhead 10%	\$ 298.61	
	<u>\$ 3,284.74</u>	\$ 3,284.74
		<u>\$ 5,884.74</u>

And I make this solemn 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 virtue of the "Canada Evidence Act."

Declared before me at the **City**
 of **Vancouver, B.C.**, in the
 Province of British Columbia, this **11.**
 day of **February, 1975**, A.D.

C.H. Stanley

[Signature]
 A Commissioner for taking Affidavits for British Columbia or
 A Notary Public in and for the Province of British Columbia.

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
TO WIT:

In the Matter of claim surveying, gridding
geochemical soil sampling
for Pb and Zn, and geological
mapping on the LIZ claims
of Cream Silver Mines Ltd. (N.P.L.)

I, C.H. Stanley

of 107 - 325 Howe Street, Vancouver, B.C.

in the Province of British Columbia, do solemnly declare that the following expenditures were incurred on the LIZ 1-8, 17-24 mineral claims for Cream Silver Mines Ltd. (N.P.L.)

Personnel:

F. Holcapek, Geologist	\$ 300.00	
J. Deighton, Geologist	\$ 800.00	
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M. Hopkins Field assistant	\$ 210.00	
	<u>\$ 2,600.00</u>	\$ 2,600.00

Disbursements:

Helicopter,	\$ 1,093.00	
Groceries	\$ 467.01	
Mobilization/ Demobilization	\$ 415.45	
Assays (LAB)	\$ 512.10	
Engineering and camp supplies	\$ 147.20	
Airplane fares	\$ 166.77	
Camp charges	\$ 92.30	
Expediting	\$ 92.30	
	<u>\$ 2,986.13</u>	
Overhead 10%	\$ 298.61	
	<u>\$ 3,284.74</u>	\$ 3,284.74
		<u>\$ 5,884.74</u>

And I make this solemn 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 virtue of the "Canada Evidence Act."

Declared before me at the **City**
of **Vancouver, B.C.**, in the
Province of British Columbia, this **11.**
day of **February, 1975**, A.D.

C.H. Stanley

W. H. R. [Signature]

A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.

August 26, 1974.

INVOICE:

Cream Silver Mines Ltd.,
c/o 1575 Rena Crescent,
West Vancouver.

Re: LIZ Mineral Claims
Geology, geochemical, claim survey, lines and
tagging claims, field work and assessment recording

Personnel:

F. Holcapek - P. Eng.	\$300.00	
J. Deighton - geologist	\$800.00	
F. Zischka - field assistant	\$450.00	
T. Hannon - " "	\$360.00	
L. Henningson- " "	\$270.00	
J. Toohey - " "	\$210.00	
M. Hopkins - " "	\$210.00	
	<hr/>	
	\$2,600.00	\$2,600.00

Disbursements:

Helicopter	\$1,093.00	
Groceries	\$467.01	
Mobilization/demobilization	\$415.45	
Assays - (Chemex Labs)	\$512.10	
Engineering & Camp supplies	\$147.20	
Aeroplane fares	\$166.77	
Camp costs	\$92.30	
Expediting	\$92.30	
	<hr/>	
	\$2,986.13	
Plus 10% overhead on disbursements	\$298.61	
	<hr/>	
	\$3,284.74	\$3,284.74

TOTAL \$5,884.74

Please pay from invoice.

Terms: net 30 days from date of invoice.
Interest @ 1.5% per month will be
charged on overdue accounts.

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MAPS AND GRAPHS

GEOCHEM.(Pb)

Frequency Distribution graph

GEOCHEM.(Zn)

Frequency Distribution graph

PROPERTY LOCATION MAP

GEOLOGY AND CLAIM MAP

GEOCHEMICAL SURVEY MAP FOR LEAD & ZINC IN ppm

GEOCHEMICAL CONTOUR MAP FOR LEAD & ZINC IN ppm

REPORT ON GEOLOGICAL, GEOCHEMICAL
AND CLAIM SURVEYS
CONDUCTED ON
THE LIZ 1 - 8 AND 17 - 24 CLAIMS
FOR
CREAM SILVER MINES LTD. (N.P.L.)

INTRODUCTION

The LIZ 1 - 8 and 17 - 24 mineral claims are located approximately 5.5 miles east of a major zinc discovery made by Barrier Reef Resources Ltd. during the summer of 1973, in the Bonnet Plume River area, Yukon Territory.

This report is based on field work conducted by Agilis Engineering Ltd., on behalf of Cream Silver Mines Ltd. (N.P.L.).

Work consisted of a claim survey, geological mapping, gridding - 400 foot lines and 200 foot stations, and soil sampling.

The geological mapping was completed by J. Deighton, Geologist. The program was supervised by the writer.

GEOGRAPHY

Location and Access

The LIZ mineral claims are located approximately 125 miles northeast of Mayo, Yukon Territory on Duo Creek, a tributary of the Bonnet Plume River.

Co-ordinates of the property are $64^{\circ} 26'$ North latitude and $132^{\circ} 28'$ West longitude.

18

The property lies within map sheet 106C of the National Topographic series.

Access to the property from Vancouver is either by motor vehicle to Mayo, Yukon Territory and from there by helicopter to the property, or by Canadian Pacific Airlines to Whitehorse, via North Air to Mayo and hence via helicopter to the property.

A small lake, Porters Puddle, on Duo Creek is accessible by fixed wing planes. Barrier Reef Resources Ltd. is constructing a winter airstrip on Goz Creek and a winter tote road is planned from Mayo.

TOPOGRAPHY

The LIZ 1 - 8 and 17 - 24 mineral claims occupy the south slope of a steep mountain just north of Duo Creek. Topography is rugged and limestone cliffs traverse the property easterly. Outcrop is plentiful, comprising nearly 60% of the area of the northern part of the claims.

The southern portion lies partially within the valley of Duo Creek and hence is mainly overburden covered.

PROPERTY

The LIZ mineral claims were acquired by Cream Silver Mines Ltd. (N.P.L.) from Mr. Andy Harman, prospector and consist of the following contiguous mineral claims:

<u>Name</u>	<u>Record Number</u>	<u>Record Date</u>
LIZ 1 - 8	Y69686 - 69693	August 21, 1973
LIZ 17 - 24	Y69702 - 69709	August 21, 1973

HISTORY

The area was mapped by Dr. J. O. Wheeler, Geological Survey of Canada, in 1952 and the information was published as Preliminary Map 53-7, at a scale of 1" = 4 miles. The area

was remapped in more detail by S. L. Blusson, Geological Survey of Canada.

The first lead-zinc discoveries associated with brecciated dolomites were made in the early 1950's by the K. J. Springer interests. These showings were followed up in recent years by Gordon Dickson, prospector.

Further exploration along the belt of Palaeozoic sedimentary units lead to the discovery of the Tom deposit of Hudson Bay Mining & Smelting at McMillan Pass, and the strati-form lead-zinc deposits of the Vangorda Area, of which Anvil Mines with 60 million tons grading 10% lead-zinc combined is producing at a rate of 7,500 tons per day.

From 1965 to 1972 exploration in the area, because of low metal prices and high exploration costs, was discontinued.

In 1972, the discovery of the Summit Lake deposit by Canex Placer Ltd., along a 25 mile long belt of Ordovician graptolitic shales resulted in renewed exploration.

During 1972 important base metal discoveries were made in the Godlin Lake area in the Northwest Territories, 100 miles north of Summit Lake. The mineralization occurs within a belt of open-folded and faulted Lower Palaeozoic carbonate rocks, the Mackenzie fold belt.

Exploration concentrated along this fold belt resulted in the discovery of the Bonnet Plume showings of Barrier Reef Resources Ltd. and the discoveries by Cypress Resources Ltd., 10 miles to the west of the first.

The LIZ mineral claims lie approximately 5 miles east of the main Barrier Reef discovery and approximately 2 miles east of a zinc discovery along the eastern boundary of Barrier Reef Resources Ltd. property.

GEOLOGY

The LIZ 1 - 8 and 17 - 24 mineral claims are underlain by a sequence of varie-coloured shales, siltstone, grits, quartzites and a minor unit of grey weathering limestone being part of the Backbone Range Formation of Lower Cambrian Age.

This unit is in fault contact with a thick sequence of buff weathering grey limestone and dolomite, also part of the Backbone Range Formation.

The dolomite and limestone is strongly brecciated close to the fault and other fault zones observed. The fragments are cemented by sphalerite, smithsonite, quartz and calcite.

In the eastern portion of the claims a faulted sequence of slates, argillites and minor dolomite lies between the above units. This rock strikes northerly and dips gently to the east. This unit is probably part of the Cambrian-Hadrynian Sheepbed Formation, but the possibility of being a phase of the Backbone Range Formation cannot be ruled out.

The rock units are highly folded along an easterly trend with the axis plunging to the east.

The northern part of the property appears to be underlain by an overturned anticline with the crestal region following the top of the hill.

Along the base line a synclinal axis, trending and plunging easterly, is indicated.

Faulting is abundant and consists of a 120° - 140° trending set and a N-S trend.

Strong brecciation is nearly always associated with faulting.

ECONOMIC GEOLOGY

The buff weathering grey limestone and dolomite of Lower Cambrian Age appears to be the economically significant rock unit in the Bonnet Plume area. Sphalerite and galena mineralization explored by Barrier Reef on the property to the northwest is associated with this rock type.

On the LIZ claims, sphalerite, minor galena and smithsonite have been found associated with breccia zones in the limestone and dolomite. The breccia is cemented by quartz, and calcite; sphalerite and smithsonite were found in place.

Several areas of float material have been found but the source has not been located. Samples from in place and float were submitted for assay:

<u>Sample #</u>	<u>Zinc %</u>	<u>Description</u>
22542	3.33	Grab from brecciated limestone
22543	2.39	Float material from hillside
22545	1.00	Poorly brecciated limestone, silicious

None of the samples submitted for assay were high grade material but since the major portion of the breccia zone is overburden covered, the possibility of locating areas of better grade exists.

Faulting is abundant on the property and nearly every fault appears to be associated with brecciation where it cuts the limestone or dolomites.

GEOCHEMISTRY

Field Method

The LIZ mineral claims were soil sampled on a grid system. The grid consisted of North-South compass lines, 400 feet apart with sample stations every 200 feet along the lines marked by

flagging. East-West tie lines were established for control.

Samples were collected by auger from the "B" horizon wherever possible. Soils were packed in kraft paper envelopes and shipped to Chemex Labs. Ltd., 212 Brooksbank Avenue, North Vancouver, B.C. for preparation and analysis for total lead and zinc.

Lab. Technique

All samples were analysed by Chemex Labs. Ltd.

A minus 80 mesh fraction was taken from each sample, digested for 2- $\frac{1}{2}$ hours in hot nitric acid. A second minus 80 mesh fraction was digested for 4 hours in hot perchloric-nitric acid.

Quantitative analysis for lead and zinc content was performed by atomic absorption methods.

RESULTS

Results were obtained for a total of 411 samples.

Statistical analysis is based on a total of 984 samples collected on the LIZ claim group and surrounding areas.

The results were grouped, frequency and accumulated percent calculated and results plotted on arithmetic probability paper.

<u>Range ppm</u>	<u>No. of samples</u>	<u>Background ppm</u>	<u>%</u>	<u>Anomalous ppm</u>	<u>%</u>
Zinc 10 - 4000	984	140	73.99	280	9.23
Lead 10 - 700	984	40	70.81	140	3.56

6.

INTERPRETATION

(a) Zinc:

The geochemical results for zinc show a close relationship with faulting, i.e. breccia zones and Cambrian - Sheepbed Formation grey limestone.

Along line 84E a northerly trending fault appears to form the contact between the Sheepbed and Backbone Range Formations. Several low zinc anomalies follow the fault trace.

West of line 84E, from 28N to 48N a strong zinc anomaly with peak value in excess of 4,000 ppm is outlined. Rock samples collected from this area assayed up to 2.20% zinc. Primary zinc sulphides have been recognized in rock specimens.

The anomaly has a maximum extent of approximately 2,000 feet and consists of two peak areas separated by a narrow intervening low.

A second anomaly is indicated by a spot high of 660 ppm at 108E, 52N, along the northern limits of the property. The area is underlain by Sheepbed limestone.

A third low anomalous area is centred on 124E, 8N, along the eastern property limits. Rocks outcropping in this location are believed to be Backbone Range Limestones.

(b) Lead:

Three spot highs of lead coinciding with high zinc have been located, the first at 84E, 38N and the second at 124E, 8N and the third at 120E, 28N. At the latter station, zinc is anomalous.

CONCLUSIONS

Geological mapping of the claim group shows that the area is underlain by the Backbone Range and Sheepbed Formation of

Lower Cambrian and/or Hadryian Age.


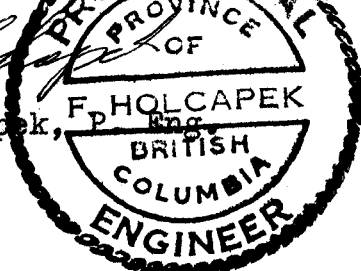
The structural setting is complex as expressed by extensive faulting and folding mapped along the southern and central part of the grid.

Geochemical anomalies located can be correlated with limestones of both units and areas of brecciation and faulting.

The zinc anomaly centred west of 84E, 38N should be investigated in detail to outline the lateral extent and possible grade of mineralization found in place.

Follow-up work should consist of detailed mapping, trenching and sampling.

Respectfully submitted,


F. Holcapek, P. Eng.


Vancouver, B.C.
August 31, 1974

CERTIFICATION

I, Ferdinand Holcapek of 92 - 10842 152nd Street, Surrey, B.C. do hereby certify that:

1. I am a graduate of the University of British Columbia, with a Bachelor of Science Degree in Geology, 1969.
2. Since graduation I have been engaged in mining exploration in British Columbia, Yukon Territory, Northwest Territories, Quebec, Nevada, Arizona and Australia.
3. I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia.
4. I am a consulting geologist.

A circular seal for the Association of Professional Engineers of British Columbia. The outer ring contains the text 'ASSOCIATION OF PROFESSIONAL ENGINEERS OF BRITISH COLUMBIA'. The inner circle contains the name 'F. HOLCAPEK' and the title 'CONSULTING GEOLOGIST'. There is a handwritten signature over the seal.
F. Holcapek, P. Eng.,
Consulting Geologist.

Vancouver, B.C.
August 31, 1974.

Appendix A

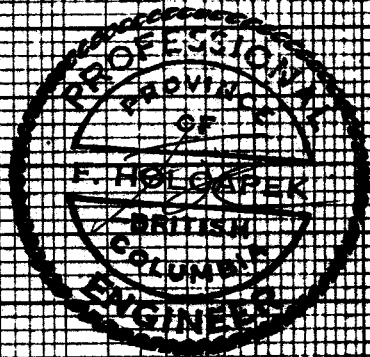
LEAD - ppm

<u>Interval</u>	<u>No. of samples</u>	<u>%</u>	<u>Accumulative %</u>
0-10	21	2.13	2.13
11-20	131	13.31	15.44
21-30	330	33.54	48.97
31-40	215	21.84	70.81
41-50	80	8.13	78.94
51-60	85	8.63	86.57
61-70	35	3.55	90.12
71-80	29	2.94	93.06
81-90	9	.91	93.97
91-100	10	1.01	94.98
101-110	6	.6	95.59
111-120	5	.5	95.64
121-130	2	.2	95.84
131-140	6	.6	96.44
141-150	4	.4	96.84
151-160	0		
161-170	1	.1	96.94
171-180	4	.4	97.34
181-190	0		
191-200	2	.2	97.54
200+	9	.9	98.44

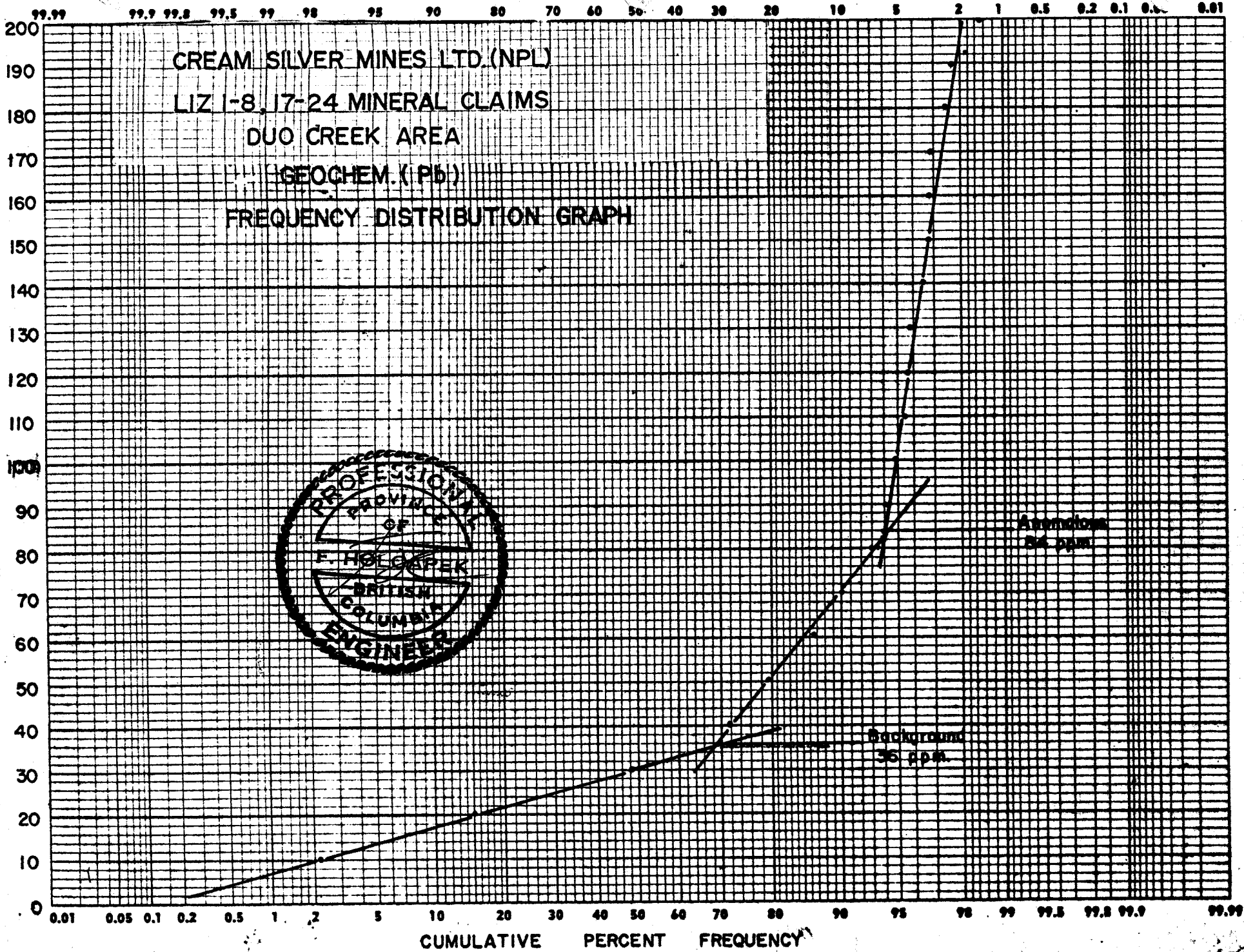
ZINC - ppm

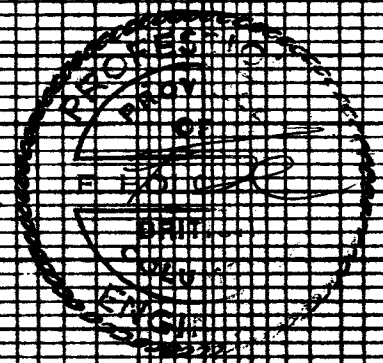
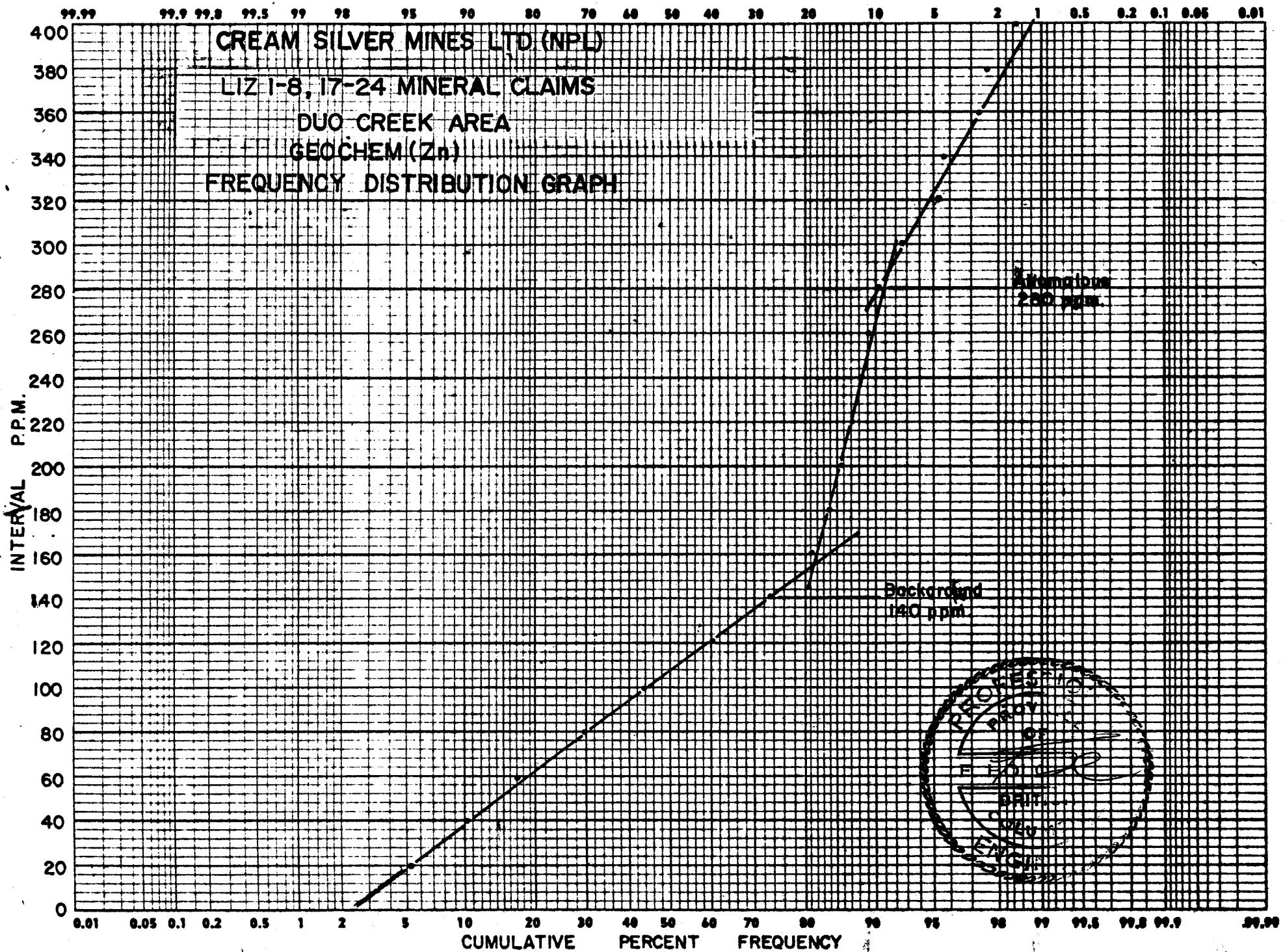
<u>Interval</u>	<u>No. of samples</u>	<u>%</u>	<u>Accumulative %</u>
0-20	51	5.18	5.18
21-40	49	4.98	10.16
41-60	68	6.91	17.07
61-80	134	13.62	30.69
81-100	134	13.62	44.31
101-120	176	17.89	62.20
121-140	116	11.79	73.99
160	69	6.01	80.00
180	31	3.15	83.15
200	24	2.44	85.59
220	13	1.32	86.91
240	12	1.22	88.13
260	12	1.22	89.35
280	14	1.42	90.77
300	20	2.03	92.80
320	22	2.23	95.03
340	6	.60	95.63
360	15	1.59	96.92
380	3	.30	97.22
400	9	.91	98.13
420	3	.30	98.43
440	0		
460	1	.11	98.54
480	1	.11	98.55
500+	11	1.12	99.67

CREAM SILVER MINES LTD. (NPL)
LIZ 1-8, 17-24 MINERAL CLAIMS
DUO CREEK AREA
GEOCHEM. (Pb)
FREQUENCY DISTRIBUTION GRAPH



INTERVAL P.P.M.





YUKON TERRITORY

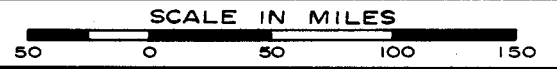
CREAM SILVER MINES LTD.(NPL)

DUO CREEK AREA

Liz 1-8, 17-24 Claims

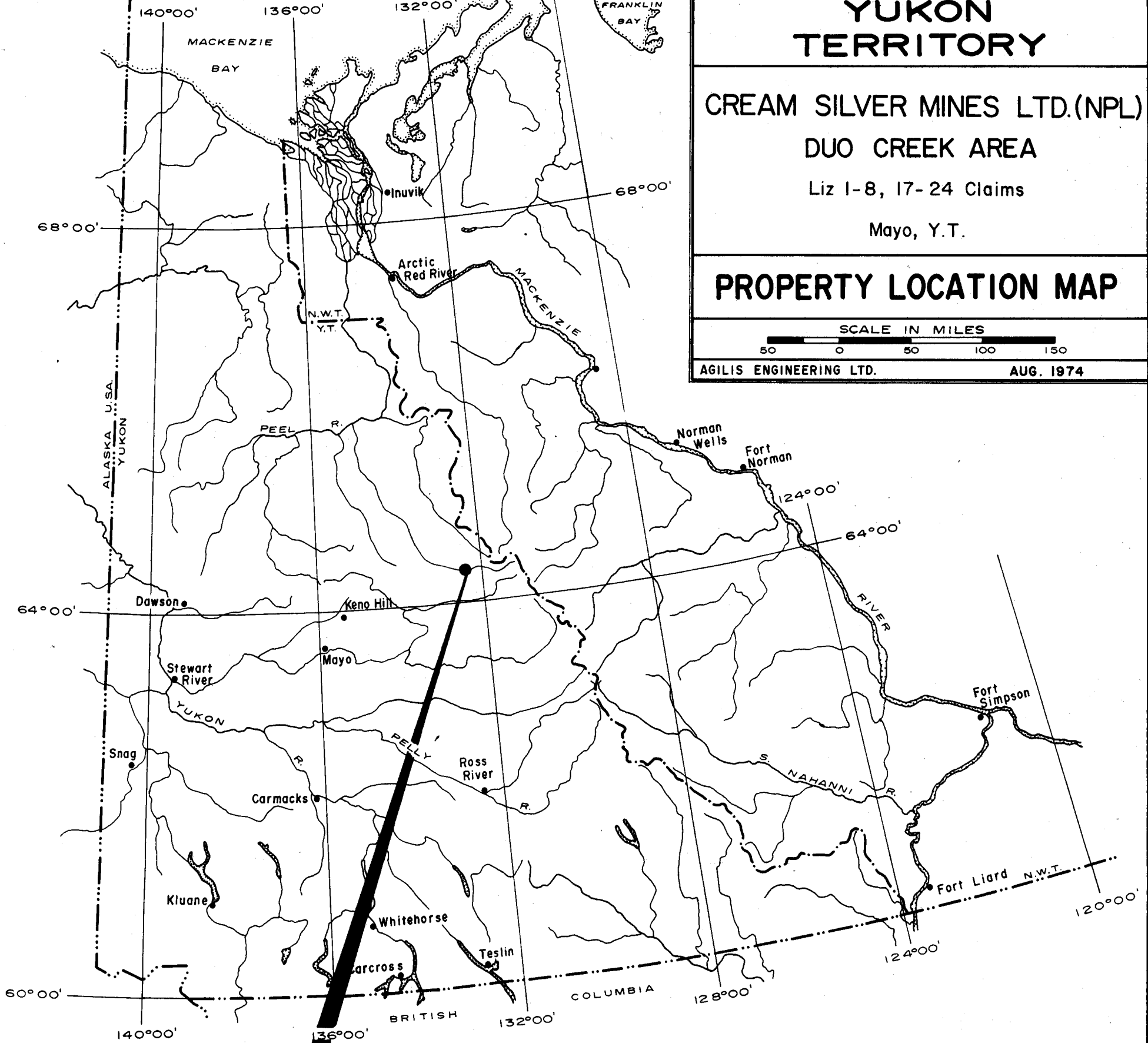
Mayo, Y.T.

PROPERTY LOCATION MAP



AGILIS ENGINEERING LTD.

AUG. 1974



SCALE: 1" = 5000'

SCALE: 1" = 2640'

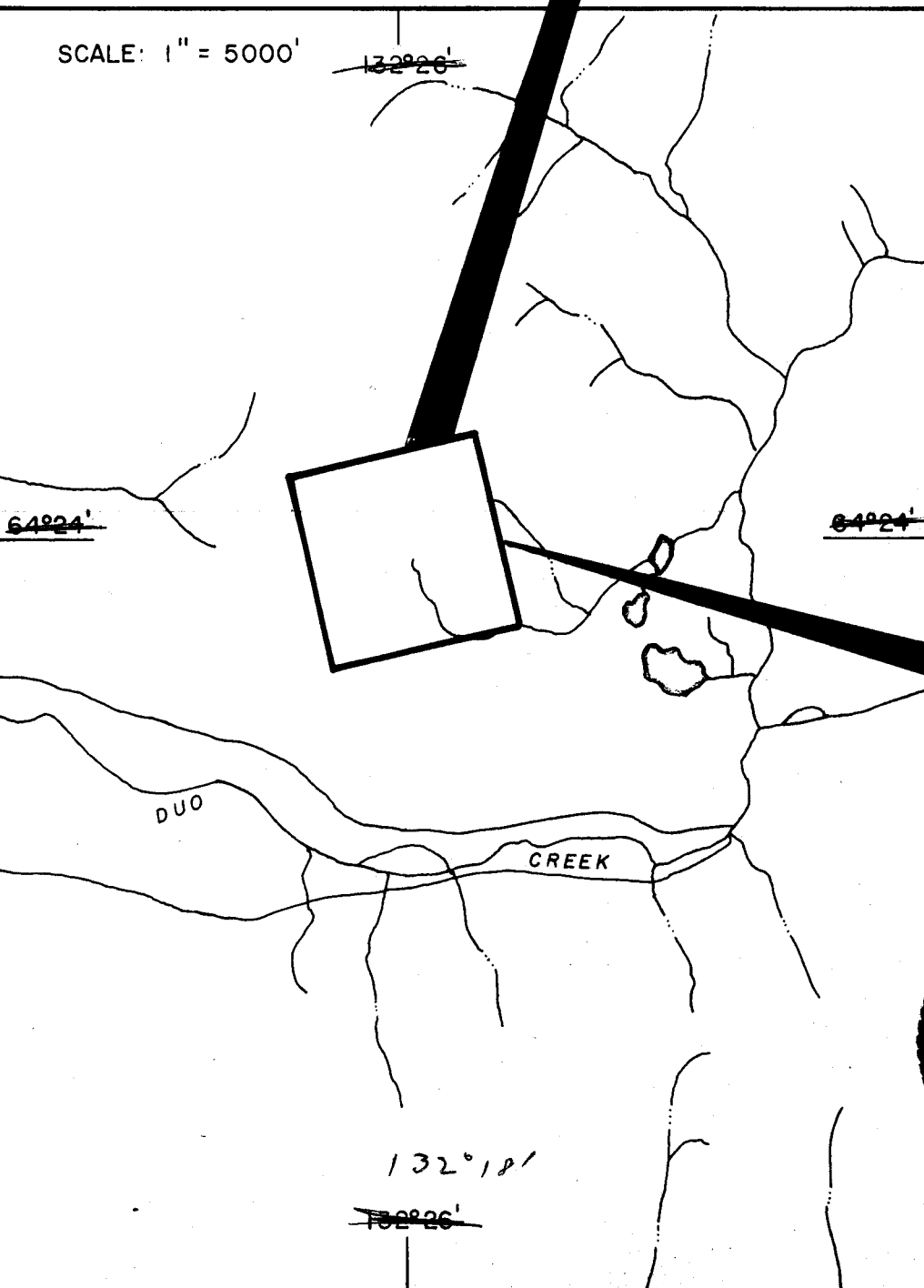


64°26'

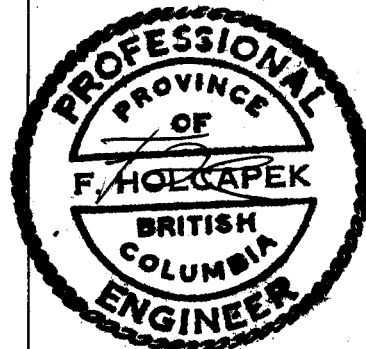
64°24'

64°24'

64°24'



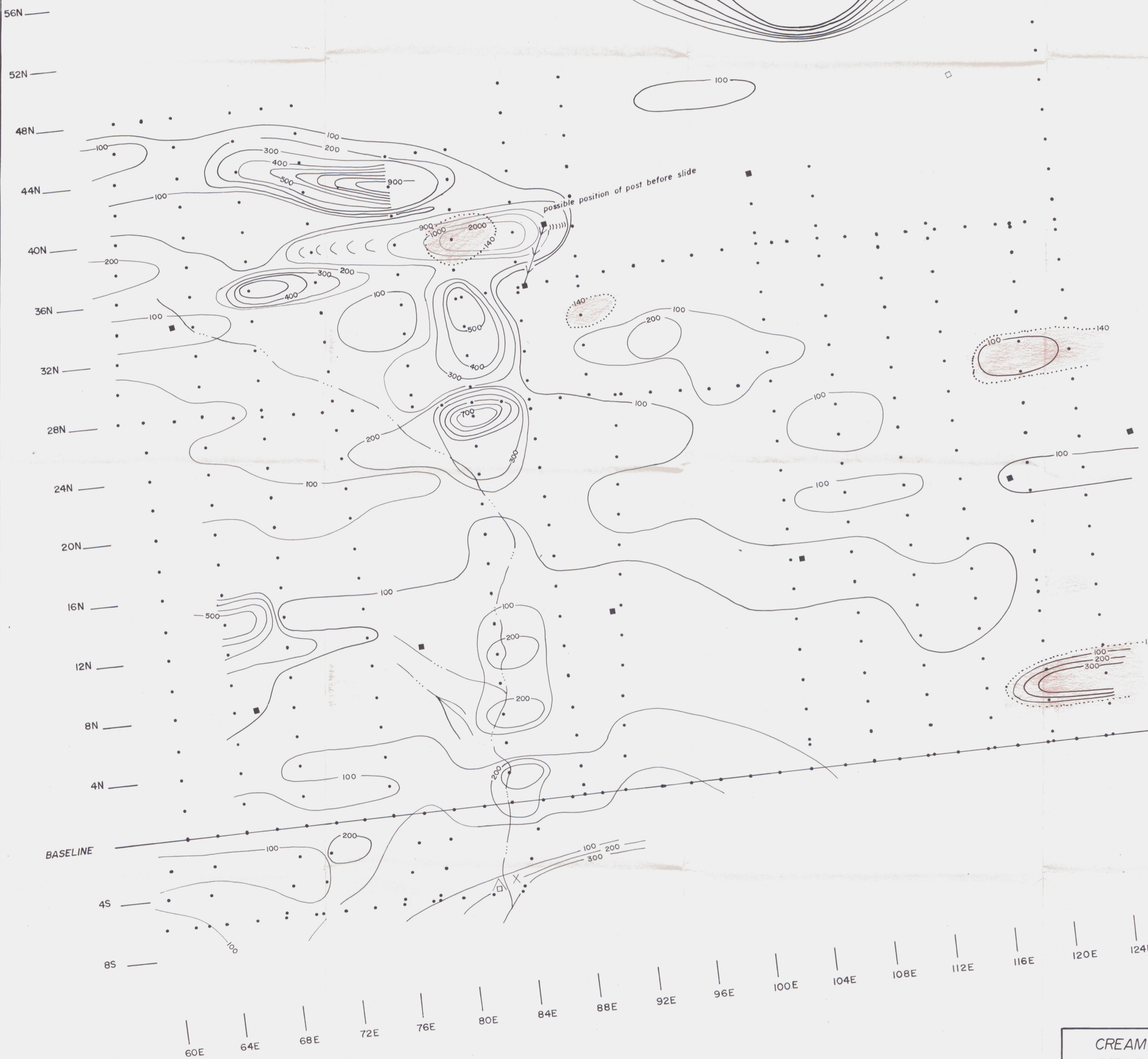
Liz 1	Liz 3	Liz 5	Liz 7
Liz 2	Liz 4	Liz 6	Liz 8
Liz 17	Liz 19	Liz 21	Liz 23
Liz 18	Liz 20	Liz 22	Liz 24



132°18'

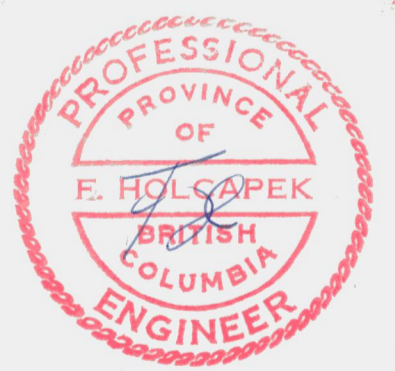
132°26'

132°26'



LEGEND

- Claim post
- — position uncertain
- Geochemical survey station
- Creek
- X Helicopter pad
- △ Camp
- 600— Geochemical contour line for zinc in p.p.m.
- 140 --- Geochemical contour line for anomalous lead in p.p.m.
- Anomalous lead - above 140 p.p.m.

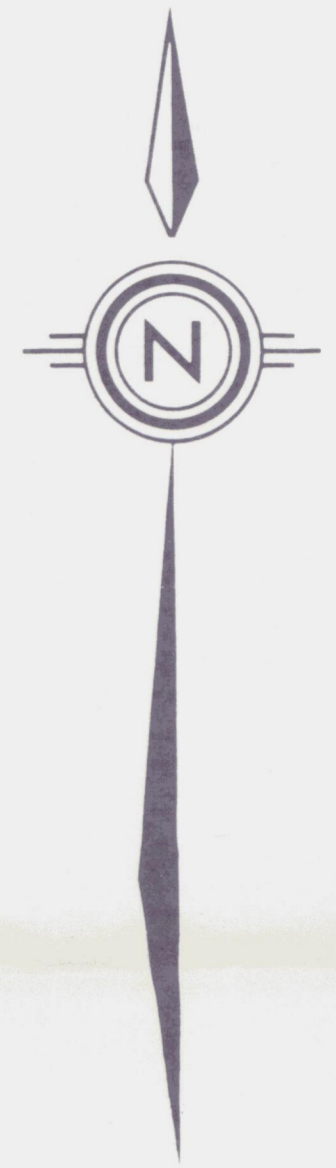


CREAM SILVER MINES LTD.(NPL)
LIZ 1-8, 17-24 MINERAL CLAIMS
MAYO, Y.T.

GEOCHEMICAL CONTOUR MAP FOR
LEAD AND ZINC IN P.P.M.

SCALE IN FEET
400 0 400 800 1200

AGILIS ENGINEERING LTD. AUGUST, 1974.



56N

52N

48N

44N

40N

36N

32N

28N

24N

20N

16N

12N

8N

4N

BASELINE

4S

8S

60E

64E

68E

72E

76E

80E

84E

88E

92E

96E

100E

104E

108E

112E

116E

120E

124E

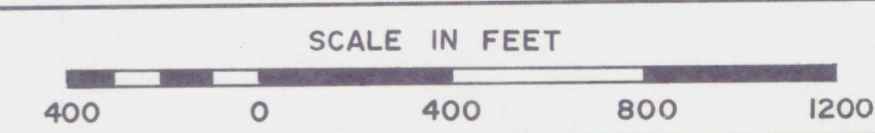
LEGEND

- Claim post
- position uncertain
- Geochemical survey station
VALUE OF ZINC IN P.P.M.
VALUE OF LEAD IN P.P.M.
- Creek
- X Helicopter pad
- △ Camp

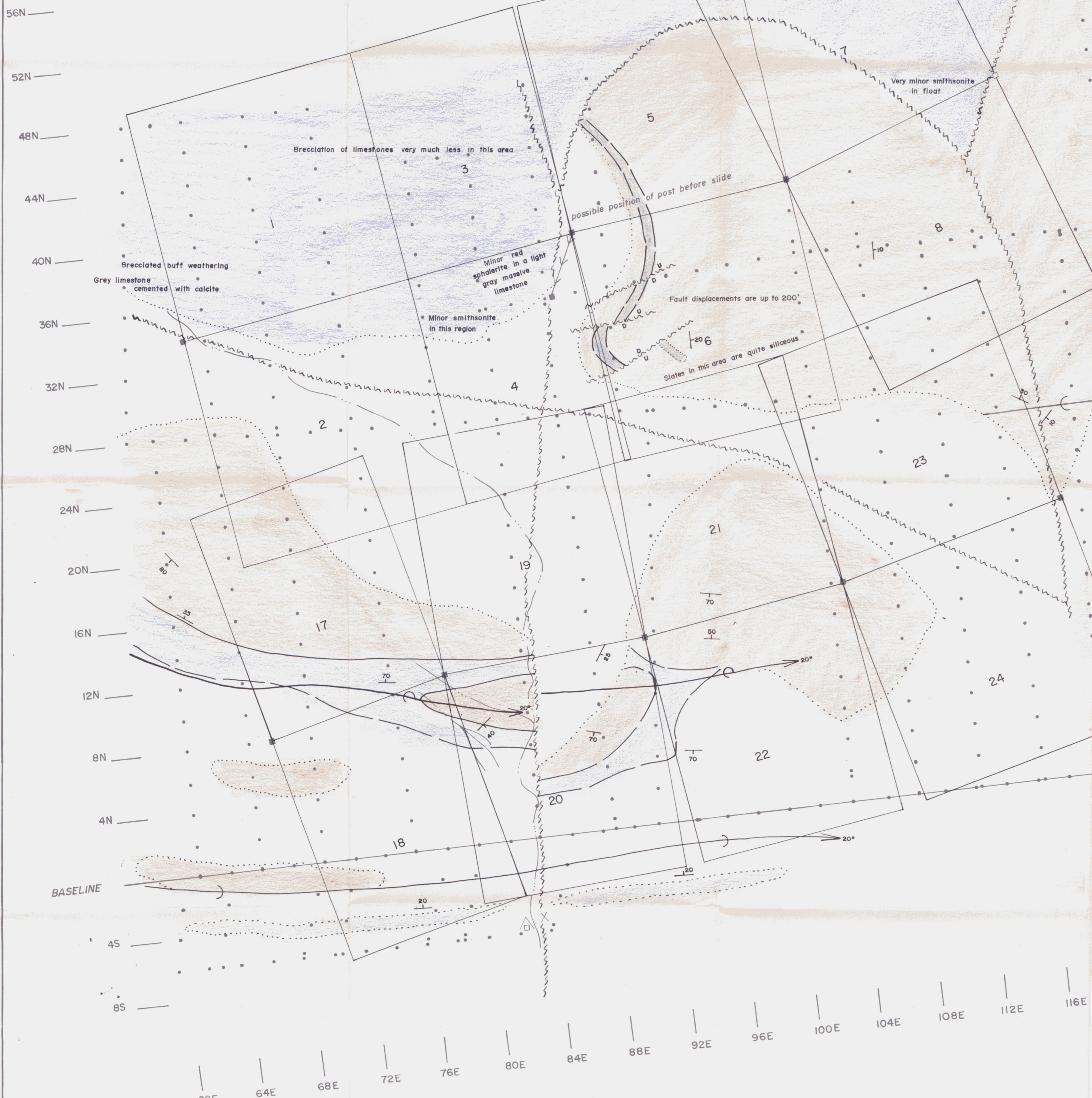
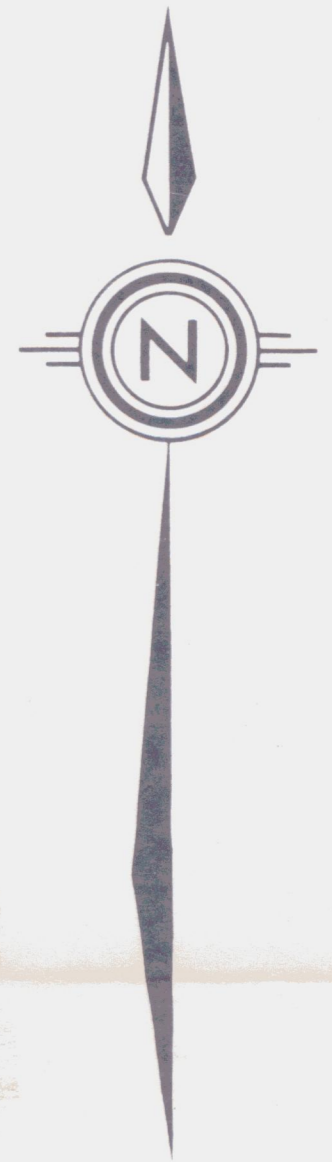


CREAM SILVER MINES LTD.(NPL)
LIZ 1-8,17-24 MINERAL CLAIMS
MAYO, Y.T.

GEOCHEMICAL SURVEY MAP FOR
LEAD AND ZINC IN P.P.M.



AGILIS ENGINEERING LTD. AUGUST, 1974.



LEGEND

- +— Claim post and line
- position uncertain
- Geochemical survey station
- Creek
- X Helicopter pad
- △ Camp
- ~~~~ Fault
- Rock Outcrop
- 20° Plunging Fold Axis
- ↺ Overturned fold
- Geologic Contact
- ↘ 35 Strike and dip

LOWER CAMBRIAN

- Backbone Ranges Formation
- 945 Varied coloured quartzites (minor siltstone and shale)
- 905 Gray massive limestone 20'-60' thick
- 902 Pale buff weathering poorly bedded and in part pistolithic dolomite and limestone

CAMBRIAN ? AND HADYNIAN

- Sheepbed Formation
- 946 Dark slate and argillite, minor fine-grained quartzites, some slateness (may be part of unit 945)
- 903 Gray weathering limestone 20'-30' thick (may be unit 905)



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**GEOLOGY &
CLAIM MAP**

SCALE IN FEET
400 0 400 800 1200

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