

SUMMARY REPORT ON EXPLORATION
CONDUCTED ON THE
ROSS MINERAL CLAIMS
FOR
CREAM SILVER MINES LTD. (NPL).

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

\$ 6049.75

D.B. Craig

Regional Geologist or
Professional Mining Engineer

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

[Signature]

Commissioner of Yukon Territory

VANCOUVER, B.C.
October 10, 1974.

F. HOLCAPEK, P. ENG.

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SUMMARY REPORT ON EXPLORATION
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FOR
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1-00 INTRODUCTION

During the period July 11 to July 30, 1974 a program consisting of detailed geological mapping, prospecting and diamond drilling, using a Winkie drill, was completed on the Ross claim, detailed grid CA.

The purpose of the drill program was to obtain more detailed subsurface geological information and possibly explain the high zinc and lead geochemical anomaly.

The program was under the supervision of Mr. G. House, Geologist and the writer. This report is based on results from the 1973 and 1974 programs. New information obtained from the detailed geological mapping clarified the geological setting of the area.

2-00 GEOGRAPHY

2-10 Location and Access

The Ross mineral claim group is located in the Yukon Territory, 168 miles north of Watson Lake, Y.T. and 10 miles north of Summit Lake. Float and Ski equipped fixed-wing aircraft operate from Watson Lake or from Ross River to Summit Lake. Access from the lake to the property is by helicopter at the present time.

The centre of the property is located:

62° 29' N - 129° 17' W.

2-20 Physiography and Climate

Elevations on the property vary from 4200 feet to about 6300 feet above sea level. There are precipitous areas around the southern and northern parts of the property while the centre is relatively level with steep creek valleys cutting to the northwest and northeast. Extensive areas of talus are found below the precipitous areas.

3-00 PROPERTY

Forty-five claims were bought by Cream Silver Mines Ltd. (NPL) from A. Harman. Ross 1-45 were staked November 25, 1972. During the summer of 1973 open ground on the perimeter of the claim group in geologically favourable areas was staked, 4 claims and 2 fractions, by personnel of Agilis Engineering Ltd. All claims were recorded in the Watson Lake Mining District of the Yukon Territory.

<u>Claim Name</u>	<u>Record Number</u>
Ross 1-45	Y71079 - Y71123
Ross 46	Y73930
Ross 47	Y73929
Ross 48	Y73931
Ross 49	Y74223
Ross 1 Fr.	Y73932
Ross 2 Fr.	Y74222

4-00 PROGRAM COMPLETED 1973.

During the 1973 field season a program consisting of gridding, (400 feet lines, 200 feet stations) geological mapping at a scale of 1" = 400' and soil or rock geochemistry was conducted over the property. The purpose of this program was to locate areas underlain by potentially mineralized Silurian black shales and cherts.

The results of the geochemical survey outlined four areas warranting further investigation. The areas were detailed sampled and on the basis of the results of the program. Anomaly CA was selected for further investigation in 1974.

5-00 GEOLOGY

5-10 Regional Geology

Regional geological mapping has been conducted in this area and is covered by G.S.C. Map 8-1967 Nahanni by Green, Roddick and Blussom.

Three major rock units have been described in the Howard Pass area.

Cambrian slates and phyllites, generally brown to red brown, green or purple underly the area.

This sequence is overlain by Upper Cambrian and Ordovician limestone, dolomitic siltstone, silty dolomite, sandy dolomite and quartzite.

Uppermost in the general stratigraphy is Devonian and (?) Mississippian black shale and argillite, minor sandstone and siltstone, banded chert and massive chert pebble conglomerate.

Some areas on a reported unconformity between the Upper Cambrian and Ordovician calc rocks and the Devonian siliceous shales are underlain by Upper Ordovician and Silurean black graptolitic shale and argillaceous limestone with minor black chert, cherty argillite and dolomite.

5-20 Property Geology

During the course of the mapping done in 1974, the stratigraphic column and nomenclature, as used by Canex-Placer, 1973, by House and Morganti, were used in an attempt to standardize the geology.

5-21 Stratigraphy

Canex-Placer, 1973:

Devonian: Yarra Peak Formation
Chert Pebble Conglomerate,
Conglomerate, Sandstone

D. Taylor, 1973:

Devonian: Mississippian:
Chert Pebble Conglomerate, Sandstone, Black Shale,
Sandy Shales,
Argillites Dark grey pebble siltstone.

<p>Ordovician: Road River Formation Upper Siliceous shale unit, Clay Flake Mudstone unit, Lower siliceous shale unit, Chert unit limey horizons with galena, sphalerite pyrite. Lower shale unit.</p>	<p>Cambrian and (?) Ordovician; Dark grey limestone Calcareous and non-calcareous shales, and argillites Black folded and fractured Mudstone.</p>
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Transition Zone: Limestone

Cambrian: Wavy banded Limestone.

A comparison between the two stratigraphic columns, shows that Mr. Taylor's subdivision is more general and that the age relationship between the subdivisions of the Cambrian rock units are not quite accurate.

The dark grey limestone is effectively the equivalent of the wavy banded limestone of Canex, and hence the basal unit.

The shale and argillite unit is the equivalent of the Ordovician shales and chert.

The Black folded mudstone is the equivalent of the Clay Flake Mudstone unit of Canex.

5-22 Structural Setting

Geological (float and outcrop) mapping of the detailed grid CA shows that the zinc-lead anomaly is coincident with the Chert Unit - Lower Siliceous Shale Unit of the Howard Pass shale sequence of the Ordovician Road River Formation.

Float and outcrop of the Clay Flake Mudstone Unit occurs in a north - northeast trending arc to the north and west of the anomalous area. This, combined with the outcrop of the Wavy Banded Limestone of Cambrian age to the south and east, would indicate that the structural setting is an easterly trending anticline, possibly slightly overturned. The anomalous area would overlie the northern limb of the fold.

The northern extension of the Clay Flake Mudstone and the underlying shale sequence is unconformably overlain by the Devonian Yarra Peak Sediments.

Chert pebble conglomerate, sandstone and siltstone were mapped both north and south of the anomalous area.

The southern limb of the anticline is not readily evident from outcrop attitudes. An east-west fault structure apparently truncates the fold structure. This fault is expressed as a windgap topographic low on the ground.

The other 3 anomalies located during the 1973 field season and detailed at that time, appear to be underlain by black mudstone as mapped by Mr. Taylor. From the comparison of the two stratigraphic columns it is suggested that the anomalies are also underlain by the favourable shale sequence. Detailed geological mapping will be necessary to clarify the setting.

The main anticlinal axis, as indicated by detailed mapping, trends approximately N 60 to 70 E with a plunge of 12° NE. A secondary anticlinal fold is indicated just west of the claim post of Ross 20 and 21. The indicated trend of the axis is N 45 W plunging at about 2° in the same direction.

In the vicinity of the other three anomalies, the Cambrian limestone outcrops topographically higher than the surrounding younger (?) shale units. The distribution of the shales is arc-like with the closure in the creek on line 24 SE. The arc has an easterly trending axis. The outcrop pattern suggests a similar secondary anticlinal fold, similar to the one mapped west of the claim post of Ross 20 and 21.

Taking these structural features into consideration, the outcropping of the wavy banded limestone in the vicinity of grid CA is most likely due to a combination of doming and possible fault movement.

5-23 Economic Potential

The exposure of the favourable chert unit, underlying the large zinc-lead anomaly on grid CA, is actually an erosional window and hence the assumption that the favourable mineralized chert horizon underlies the property is valid.

Float of good zinc mineralization was found on the property during the 1973 field program. The source has not been located. The absence of glacial erratics on the detailed grid, suggests that the mineralization has been derived from the property.

The stratigraphic sequence underlying the Ross mineral claims is identical to the Canex-Placer zinc deposit to the northeast. In both areas the mineralization is stratigraphically controlled, i.e. stratabound with possible remobilization caused by folding.

The property needs more detailed geological mapping and diamond drilling to test the economic potential.

6-00 DRILLING

A diamond drill program using a Winkie drill was started in July, 1974. Three holes were completed from 45 to 65 feet deep. The presence of permafrost, deep talus and poor core recovery, combined with mechanical breakdowns, rendered the drilling program inconclusive. The location of the drill holes has been plotted on the accompanying geological plan.

Geological mapping during the same period clarified the geological setting and from this it became apparent that the best location for further drill investigation is from the northern limit of the zinc anomaly. Holes should be inclined to the southeast at 45° and have a minimum depth of about 500 feet.

Hole #4 attempted to accomplish the above, but failed because of shortage of gasoline, breakdown of pumps and bad weather conditions. The drill program was terminated after this attempt.

7-00 CONCLUSIONS

The exploration program completed on the Ross claim group, on detailed grid CA, consisted of detailed geological mapping and diamond drilling with a Winkie Drill.

The mapping showed that the zinc-lead anomaly is underlain by the favourable chert shale sequence of the Road River Formation, Ordovician in age, which carried the zinc mineralization on the Canex-Placer property to the northeast.

The property is underlain by an easterly trending and plunging anticlinal fold. Northwesterly trending secondary folding is indicated, suggesting doming in the area of detailed grid CA.

Easterly trending faults truncate the south limb of the fold structure. The favourable chert and shale sequence is unconformably overlain by the Yarra Peak Formation, Devonian in age.

The exposure of the chert-shale sequence occurs within an erosional window and coincide with the geochemical anomalies, hence the assumption that the property is underlain by the favourable stratigraphic horizon is valid.

The drill program completed, consisting of 3 short diamond drill holes, was inconclusive because of difficulties encountered due to permafrost, poor core recovery and mechanical breakdowns.

Further drilling is warranted to test the economic potential of the Ross Group.

8-00 RECOMMENDATIONS

Detailed geological mapping showed that the favourable stratigraphic horizon outcrops on the detailed grid CA, and is coincident with the geochemical zinc and lead anomaly.

It is recommended that a program of detailed mapping be completed over all areas of interest and be followed up by diamond drilling, using at least a BBS-1 diamond drill.

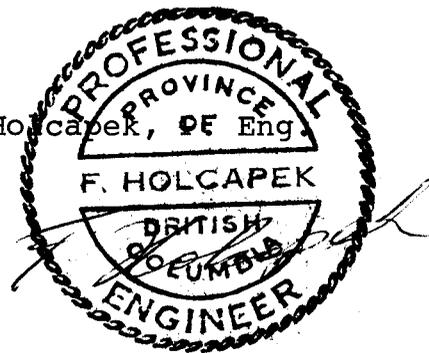
On detailed grid CA, at least one drill hole, located along the northwestern limits of the zinc anomaly, should be drilled. The bearing of the drill hole should be to the southeast at -45° and have a minimum depth of about 500 feet or until the wavy banded limestone is intersected.

Further drill locations will depend on the results of the first hole.

Respectfully submitted,

F. Holcapek, PE Eng.

Vancouver, B.C.
October 10, 1974.



CERTIFICATION

I, FERDINAND HOLCAPEK of 92 - 10842 152nd Street, Surrey, British Columbia, do hereby certify that:

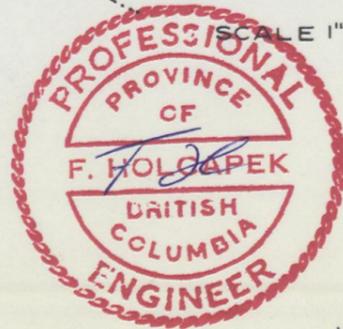
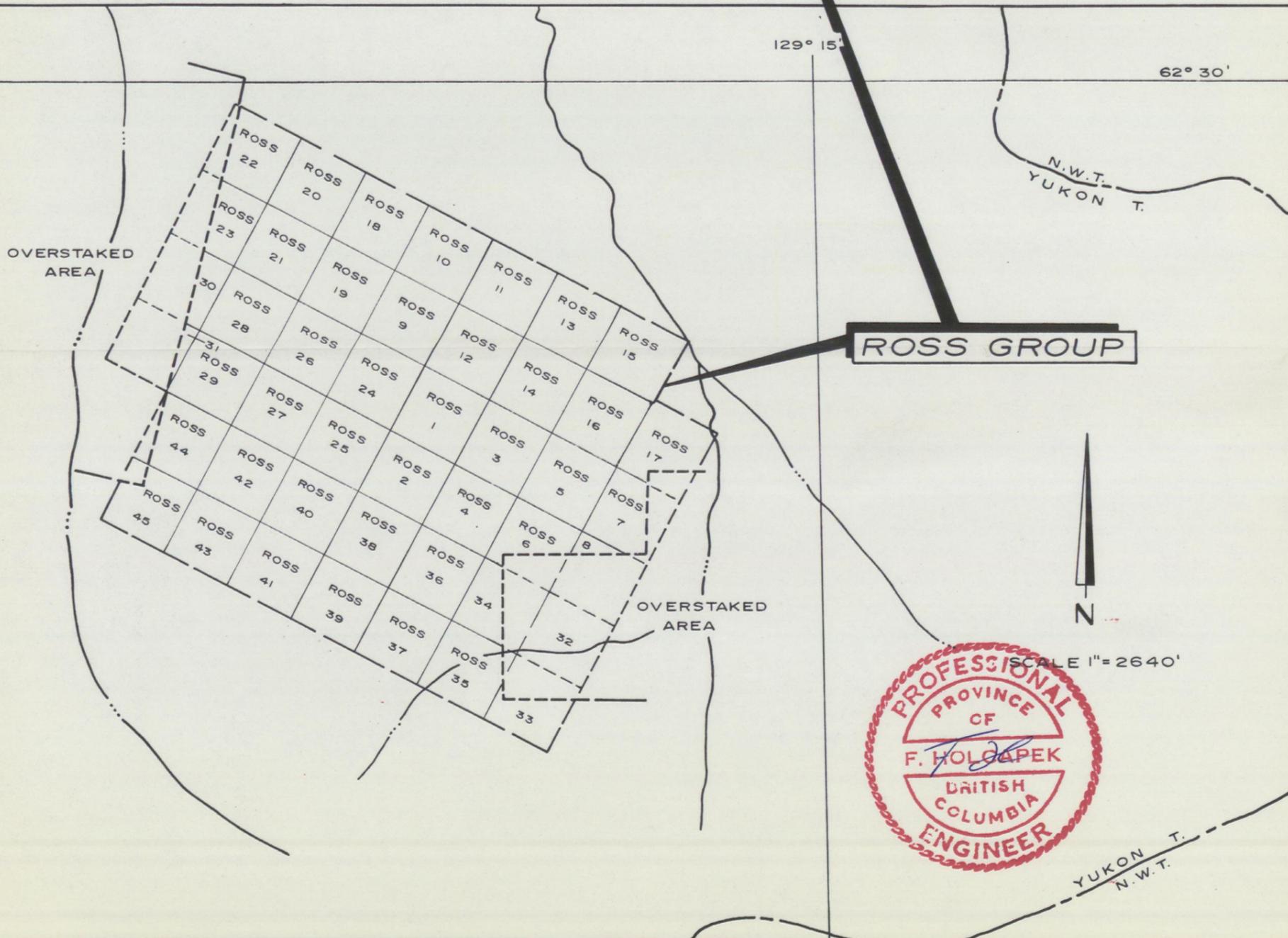
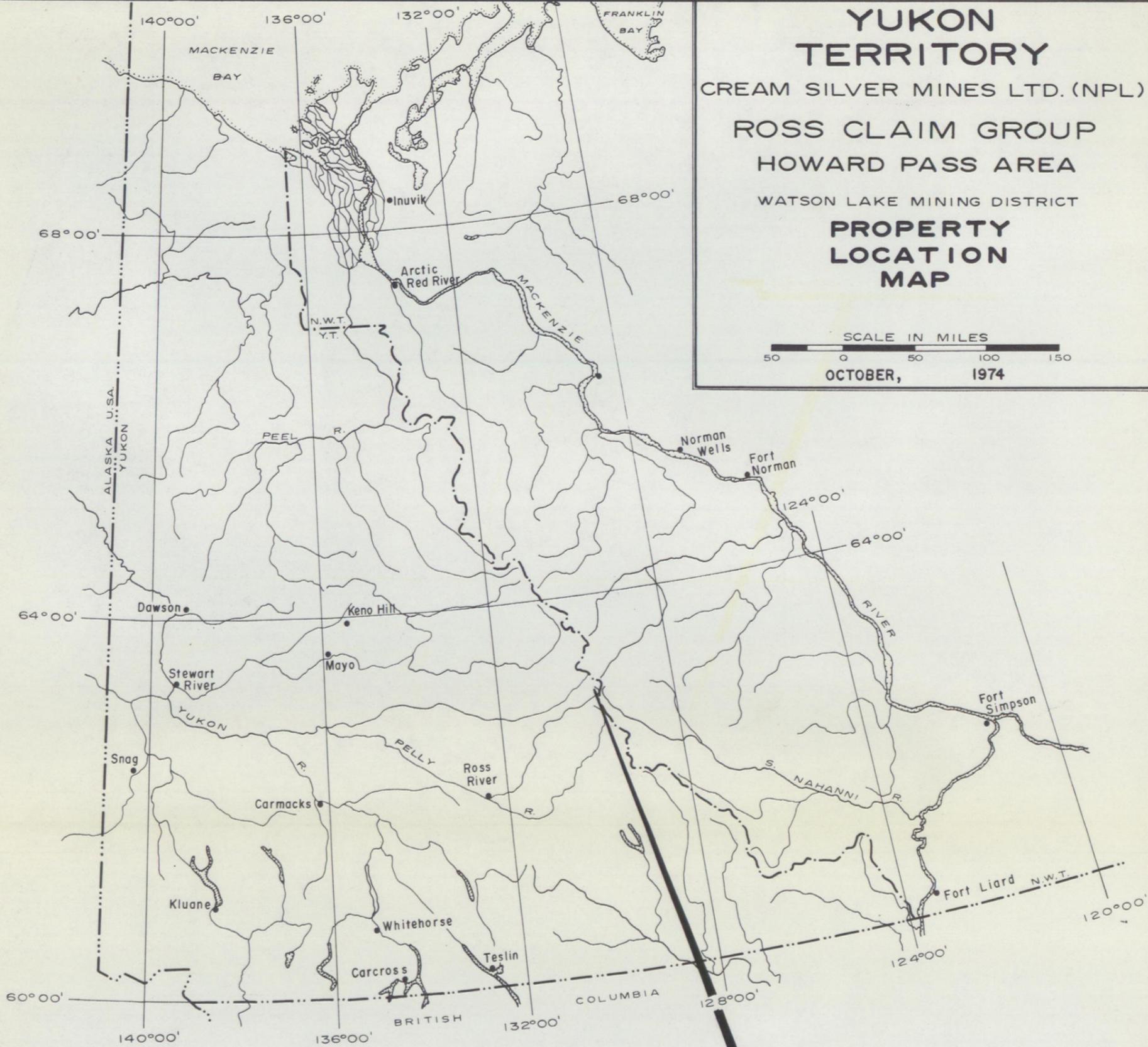
1. I am a graduate of the University of British Columbia, with a Bachelor of Science Degree in Geology, 1969.
2. Since graduation I have been engaged in mining exploration in British Columbia, Yukon Territory, Northwest Territories, Quebec, Nevada, Arizona, Mexico and Australia.
3. I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia, the Geological Association of Canada and the Society of Exploration Geophysists.
4. I am a consulting geologist.
5. This report is based on field work conducted under my supervision, during the period of July 11 to July 30, 1974.
6. That the cost statement attached outlines expenditures incurred to complete the work program.

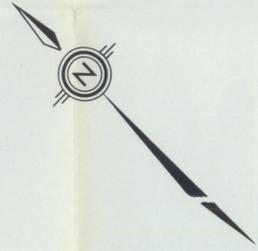
Vancouver, B.C.
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YUKON TERRITORY
CREAM SILVER MINES LTD. (NPL)
ROSS CLAIM GROUP
HOWARD PASS AREA
 WATSON LAKE MINING DISTRICT
PROPERTY LOCATION MAP

SCALE IN MILES
 50 0 50 100 150
 OCTOBER, 1974



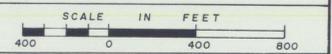


MAP REF. 105-1-6

CREAM SILVER MINES LTD (NPL)
ROSS CLAIMS - HOWARD PASS AREA
WATSON LAKE MINING DISTRICT, Y.T.

CLAIM MAP

SHOWING RELATIONSHIP OF THE
ROSS AND NESS CLAIMS



AGILIS ENGINEERING LTD. FEBRUARY, '73.

48 NW 44 NW 40 NW 36 NW 32 NW 28 NW 24 NW 20 NW 16 NW 12 NW 8 NW 4 NW 0 Baseline 4 SE 8 SE 12 SE 16 SE 20 SE 24 SE 28 SE 32 SE 36 SE 40 SE 44 SE 48 SE 52 SE 56 SE

64 NE
60 NE
56 NE
52 NE
48 NE
44 NE
40 NE
36 NE
32 NE
28 NE
24 NE
20 NE
16 NE
12 NE
8 NE
4 NE
0
4 SW
8 SW
12 SW
16 SW
20 SW
24 SW
28 SW
32 SW
36 SW
40 SW
44 SW



- Located claim post.
- Unlocated claim post



CREAM SILVER MINES LTD. (NPL)
ROSS CLAIMS - HOWARD PASS AREA
WATSON LAKE MINING DISTRICT, Y.T.

CLAIM MAP AND AREA OF DETAILED GRID C-A

