# ADDENDUM TO
# GEOLOGICAL AND GEOPHYSICAL
# REPORT
# ON THE
# RH MINERAL CLAIMS
# CLINTON CREEK AREA
# YUKON TERRITORY

64° 29' North Latitude (116-C-7)

140° 56' West Longitude

for

MINAS DE CERRO DORADO LTD. (N P L)

March 16, 1973.

Received March 11/74

W. G. STEVENSON & ASSOCIATES LIMITED
CONSULTING GEOLOGISTS

# GEOLOGICAL AND GEOPHYSICAL

# REPORT

# ON THE

# RH MINERAL CLAIMS

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64° 29' North Latitude

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MINAS DE CERRO DORADO LTD. ( N P L )

W.G. STEVENSON & ASSOCIATES LIMITED
VANCOUVER, B. C.

September 4, 1972.

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## A P P E N D I X

## INTRODUCTION

During 1962 to 1964 I conducted an exploration program which was designed to search for asbestos deposits northwest of Dawson in the Yukon Territory. During this time a number of mineral claims were staked in the vicinity of Cassiar's Clinton Creek ore body. These claims were prospected, geologically mapped and geophysically surveyed. Most of the claims were allowed to lapse at their expiry dates.

During August 1972 one of these claim blocks was restaked for Minas De Cerro Dorado Ltd. (NPL).

The accompanying report is based on examinations I made during 1962 and 1964, from a review of the available literature and published maps, from discussions with engineers, geologists and prospectors who have worked in this area and from experience I have gained while working in the ultra-basic belt in eastern Canada.

## PROPERTY AND TITLE

On August 18, 1972, Mr. Garth Hawley, prospector from Vancouver, staked a block of mineral claims west of Cassiar's Clinton deposit. These were the RH 1 - 6 mineral claims. These claims were recorded in the Yukon Territorial Government Mining Office in Dawson August 23, 1972. They will be shown on map sheet 116-C-7 of the Department of Northern Affairs and National Resources when the records have been processed.

## LOCATION AND ACCESS

The RH Claim Group is located 58 miles northwest of Dawson, 13 miles westerly from the confluence of the Forty Mile River with the Yukon River and $2\frac{1}{2}$ miles east of the Alaska Border. More precisely, the claims are positioned at 64° 29' North Latitude and 140° 56' West Longitude.

Cassiar's Clinton Creek Asbestos operation is accessible from Dawson by road and airstrip. A foot trail extends 7 miles westerly from Cassiar to the RH Claim Group.

## HISTORY

The discovery of Placer gold in the Dawson area in 1898 sparked a prospecting campaign that reached its peak during the Klondike gold rush at the turn of the century. Prospectors covered a wide area searching the creeks and rivers tributary to the Yukon River for Placer gold. They were active in the drainage basin of the Forty Mile River, 50 miles northwest of Dawson and there is a record of gold production from that area.

The discovery of asbestos in an ultrabasic body at Cassiar in northern British Columbia in 1952 promoted interest in Asbestos, and programs were initiated to explore the ultrabasic bodies in British Columbia, the Yukon Territory and Alaska.

In 1954 Asbestos Corporation Ltd. conducted an airborne magnetic survey over the Dawson ultrabasic belt and initiated a program of prospecting, test pitting, geological mapping and claim staking. In 1955 a prospector staked mineral claims on Clinton Creek, optioned them to Cassiar Asbestos Corporation.

HISTORY, cont'd

Cassiar developed substantial tonnage of ore grade asbestos, and in 1967 production commenced at a rate of 5000 tons per day.

During 1962 and 1966 exploration programs were conducted over the ground that is now within the RH claim group.

In 1966 the geological survey of Canada released a series of geophysical maps covering this part of the Yukon territory.

GEOLOGY

A pronounced lineament named the Tintina Fault trends northwesterly through the Yukon Territory and into Alaska. Northwest of Dawson the Tintina Fault forms the contact between unmetamorphosed sediments on the north and strongly metamorphosed rocks on the south. The metamorphic rocks are primarily quartzites, gneiss, schists and slates.

Approximately 10 miles southwesterly from the Tintina Fault and parallel with it, the Dawson ultra-

basic bodies have intruded the metamorphosed rocks. Most of these ultrabasic bodies are small serpentinized sills concordant with the enclosing rocks. Cross fibre chrysotile asbestos is found in many of the serpentine bodies though generally, in only minute amounts. Quartz carbonate alteration is associated with Cassiar's deposit at Clinton Creek, and some of the other serpentine bodies.

A south-flowing tributary of Clinton Creek cuts the western edge of the RH claim block and exposes serpentine. This serpentine exposure extends 300 feet along the channel of the creek. The ultrabasic is bounded on the south and southeast by Diorite and Gabbro.

Except for the channel of the stream the topography over most the property is relatively flat and bed rock exposures are masked by soil and vegetation. The geology over the covered parts of the property was interpretated by studying rock chips and boulders in the soil and by assessing the geophysical data. A magnetic high can be correlated with the ultrabasic body where it is exposed in the creek. This high is 1000 feet

GEOLOGY, cont'd

wide and extends 3800 feet easterly, across the claim block.

The attached map marked Appendix B, drawn to a scale of 1" = 7200 feet will show the position of the RH mineral claims, their relation to Cassiar's Asbestos deposit, and the position of the high magnetic responses. The attached map marked Appendix C, drawn to a scale of 1" = 400 feet will show the geological interpretation, the geophysical responses and the claim outline.

GEOPHYSICAL APPRAISAL

The position of the ultrabasic serpentine bodies are reflected on the airborne geophysical maps that were released by the G.S.C. during 1966. These maps show high magnetic anomalies which coincide with the position of the claims over Cassiar's Clinton Creek ore body, over the position of the RH Claim Block, and in other areas.

The results of a preliminary ground geophysical survey over the RH claim block with a sharpe D-2 dip needle showed high magnetic responses coin-

GEOPHYSICAL APPRAISAL, cont'd

ciding with part of the ultrabasic body exposed in the creek at the western edge of the RH claim group. The magnetic responses are somewhat higher toward the east where bed rock is masked by soil and vegetation.

MINERALIZATION

Cassiar's ore deposit 7 miles east of the RH claims occurs within a gently dipping ultrabasic sill 800 feet wide, 2500 feet long which has been developed to a depth of 900 feet. This ultrabasic sill is intrusive into and conformable with a slate Horizon. A pronounced halo of quartz carbonate rock surrounds the northern extremity of the deposit. Two ore bodies have been developed which contain 26 million tons of ore, with a recoverable fibre content of 7 1/2% of high quality cement grade.

Near the western edge of the RH claim group, serpentinized ultrabasic rock is exposed over an area 300 feet by 500 feet. This serpentine contains minor amounts of chrysotile asbestos fibre with lengths up to 3/16".

## CONCLUSIONS

1. The structural pattern and lithologic relationships of the ultrabasic bodies at Clinton Creek area are complex.

2. Cassiar's fibre zone at Clinton Creek is contained in a serpentinized sill which has intruded slate.

3. Geological mapping and geophysical surveying over the RH claim block has outlined an area 3800' x 1000' which is presumably underlain by a serpentine sill which has intruded slate.

4. The RH prospect has not been tested and warrants exploration.

## RECOMMENDATIONS

1. Set up camp on the property.

2. Construct an access road from Clinton Creek to the RH Claims.

3. Establish a base line with picket lines at 400 foot intervals over the claim block.

4. Prospect the claims and map the geology in detail.

RECOMMENDATIONS, cont'd

5. Conduct a ground geophysical survey using a magnetometer with an accuracy of 2 gammas.

6. Diamond drill or trench areas that hold promise.

# YUKON TERRITORY

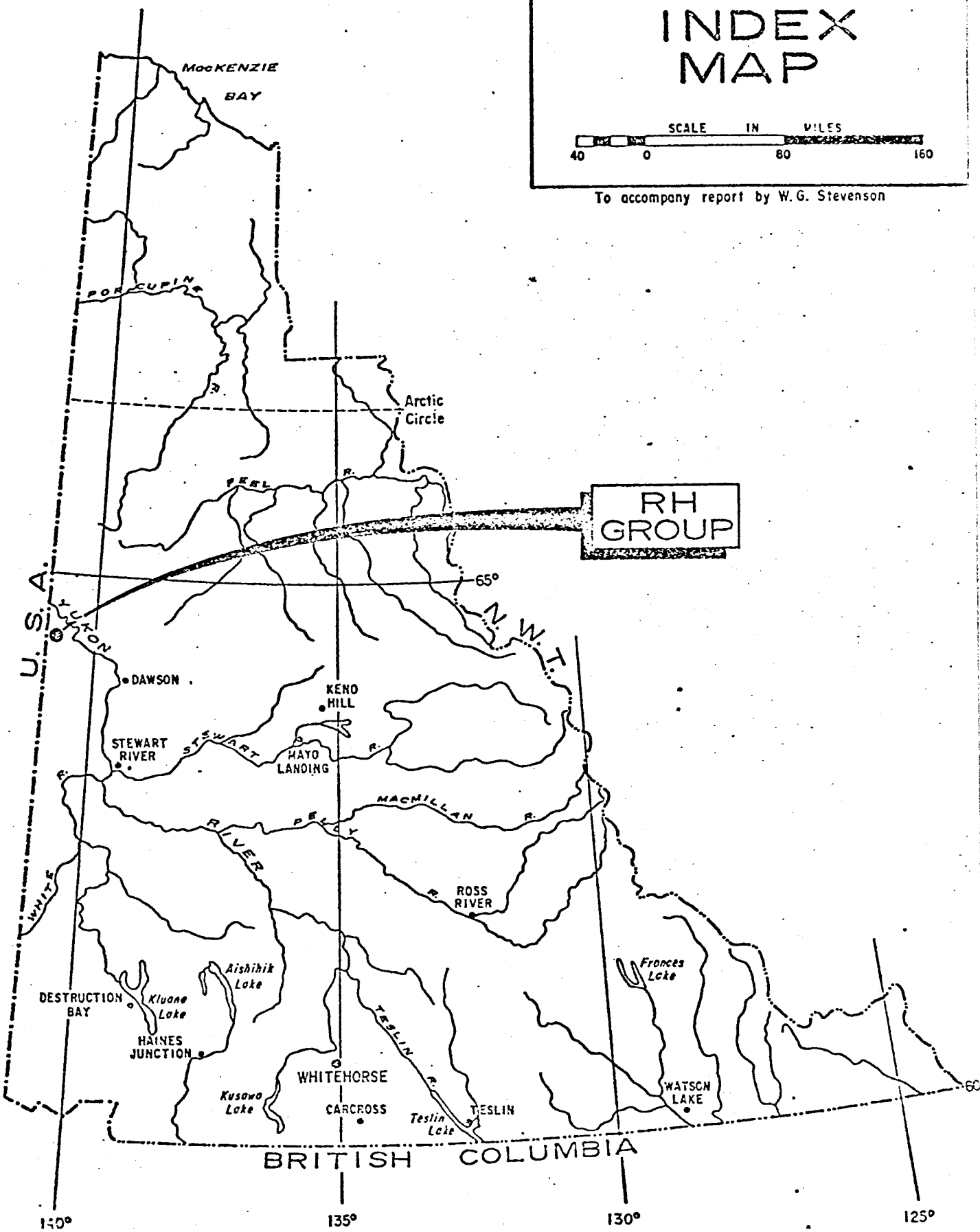
MINAS DE CERRO DORADO LTD.(NPL)
RH CLAIMS · CLINTON CREEK AREA

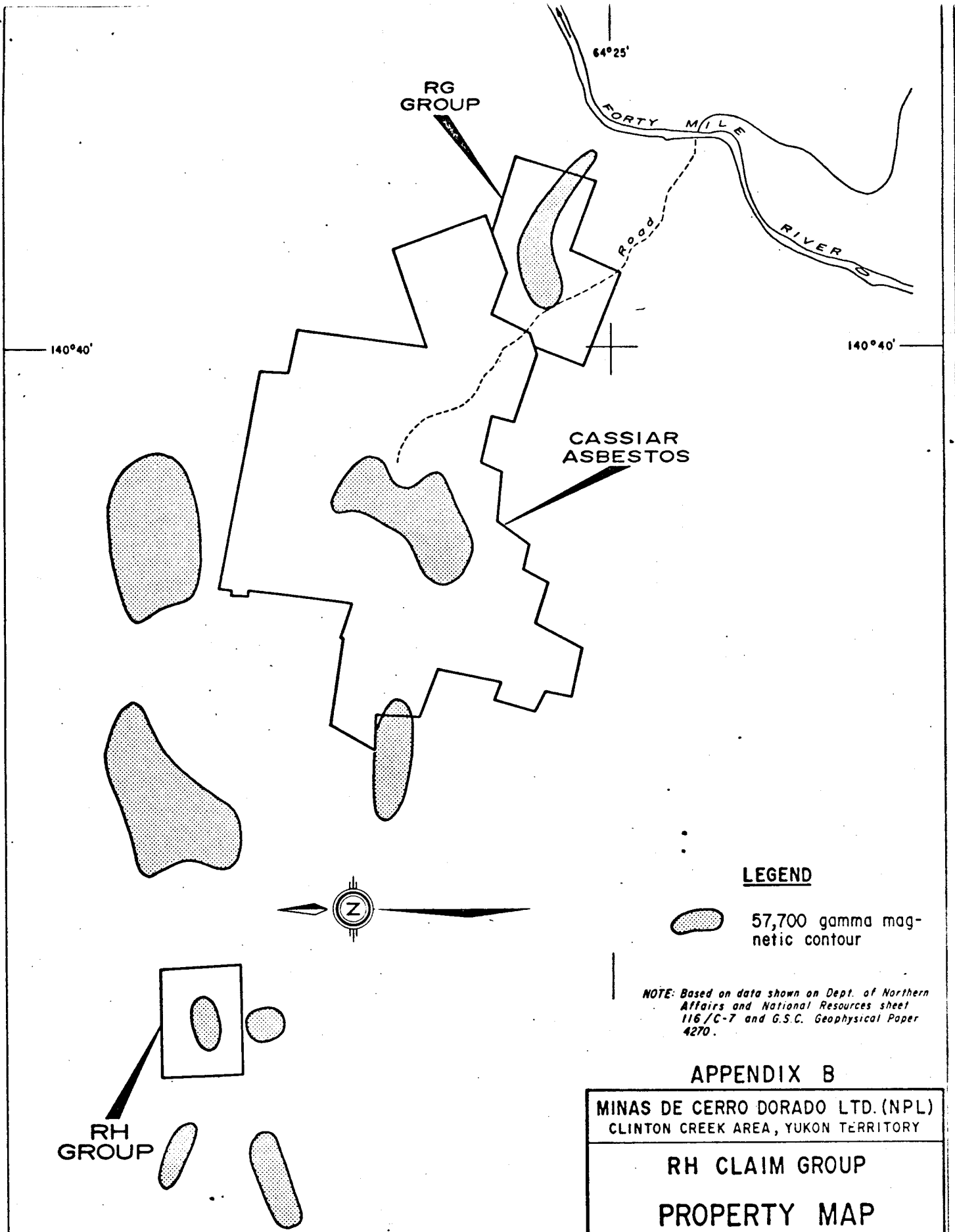
APPENDIX A

# INDEX MAP

SCALE IN MILES
40 0 80 160

To accompany report by W.G. Stevenson






**LEGEND**

57,700 gamma magnetic contour

*NOTE: Based on data shown on Dept. of Northern Affairs and National Resources sheet 116/C-7 and G.S.C. Geophysical Paper 4270.*

APPENDIX B

MINAS DE CERRO DORADO LTD. (NPL)
CLINTON CREEK AREA, YUKON TERRITORY

# RH CLAIM GROUP

# PROPERTY MAP

SCALE IN MILES
1 0 1 2

W. G. STEVENSON & ASSOCIATES LTD.
SEPTEMBER 1972