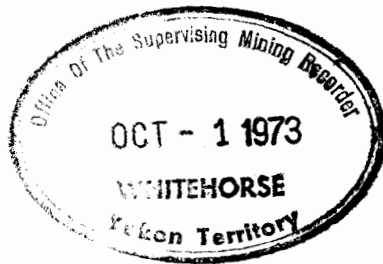


GEOLOGICAL AND GEOPHYSICAL REPORT

ON THE RH GROUP

MINAS DE CERRO DORADO LTD. (NPL)

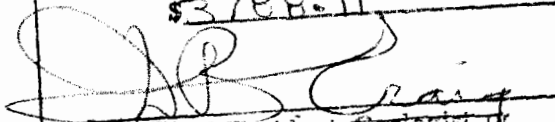
CLINTON CREEK AREA, YUKON TERRITORY.



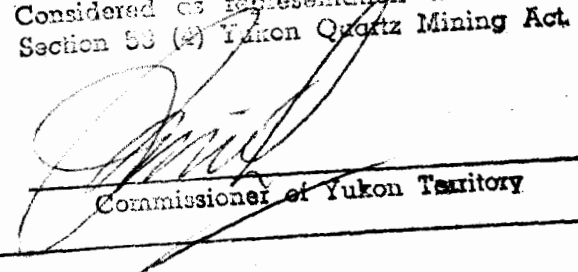
SEPTEMBER, 1973

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

\$3788.11


Resident Geologist or
Resident Mining Engineer

Considered as representation work under
Section 53 (2) Yukon Quartz Mining Act.


Commissioner of Yukon Territory

VANCOUVER, B.C.

TABLE OF CONTENTS

	Page
1-00 INTRODUCTION	1
2-00 PROPERTY	1
3-00 GEOGRAPHY AND PHYSIOGRAPHY	1
3-10 Location	1
3-20 Access	2
3-30 Topography	2
3-40 Vegetation	2
3-50 Climate	2
4-00 HISTORY	3
5-00 GEOLOGY	3
5-10 Regional Geology	3
5-20 Property Geology	4
5-21 Ground Control	4
5-22 Geology	4
6-00 GROUND MAGNETOMETER SURVEY	5
6-10 Purpose	5
6-20 Method	5
6-30 Interpretation	6
7-00 CONCLUSIONS	6
8-00 RECOMMENDATIONS	7

MAPS

Location Map	1" = 20 miles
Geology and Claim Map	1" = 200 feet
Magnetometer Survey	1" = 200 feet

GEOLOGICAL AND GEOPHYSICAL REPORT
ON THE RH GROUP
MINAS DE CERRO DORADO LTD. (NPL)
CLINTON CREEK AREA, YUKON TERRITORY.

1-00 INTRODUCTION:

The RH claim group is situated, in part, over an ultrabasic intrusive to which chrysotile asbestos fibre and serpentization are associated. The Clinton Creek Mine, of Cassiar Asbestos Corporation, is located 6 miles to the east on an asbestos body contained within a similar geological setting to that underlying the RH claims.

During the period from June 25 to July 4, 1973 geological mapping, line cutting and a ground magnetometer survey were completed on the RH claims under the supervision of the author.

2-00 PROPERTY:

The RH Group consists of the following 6 contiguous mineral claims:

<u>Claim Numbers</u>	<u>Record Numbers</u>	<u>Date Recorded</u>
RH 1-6	Y65634 - Y65639	August 23, 1972

The claims were staked by Mr. Garth Hawley and are owned by Minas de Cerro Dorado Ltd. (NPL). They were recorded in Dawson City, Yukon and can be found on claim sheet 116-C-7.

3-00 GEOGRAPHY AND PHYSIOGRAPHY:

3-10 Location:

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 2½ miles east of the Alaska Border.

The property is in the Dawson Mining District and is covered by National Topographic system 116-C. The coordinates of the property are $64^{\circ}29'N$ latitude and $140^{\circ}56'W$ longitude.

3-20 Access:

Cassiar's Clinton Creek asbestos operation is accessible from Dawson by road and an airstrip. The RH Group can be reached by a 6 mile hike through bush and overgrown trail, or by helicopter from the end of the Clinton Creek Mine road.

3-30 Topography:

Topographic relief over the property is gentle except along the western edge where it is cut by a small south flowing stream with consistent 15° to 25° slopes on either side. Elevation of the property is approximately 2,400 feet A.M.S.L. The area is unglaciated.

3-40 Vegetation:

The property is situated in an area of an approximately 20 year old burn and is covered on the western side by small spruce and on the eastern side by much willow and marshy areas. The creek along the western side is bordered by thick brush.

3-50 Climate:

Winters are characterized by much snow and temperatures remain well below freezing for the months of October to April. Summers are warm with moderate to sometimes heavy rainfall. Exploration is restricted to the months of June through September.

4-00 HISTORY:

The discovery of asbestos on Clinton Creek by Cassiar Asbestos Corporation in the late 1950's was a result of detailed follow-up work of airborne magnetic anomalies. During the 1960's exploration programs were conducted over the area, including that ground presently within the RH claims.

The RH claim group is over one of several magnetic anomalies in the vicinity of the Clinton Creek Mine. It remains of special interest because of the associated serpentinization and minor asbestos fibre found on surface. Previous geological and geophysical surveys have been conducted by former holders, however, no trace of this work, such as old lines, could be found at the time of the present survey.

5-00 GEOLOGY:

5-10 Regional Geology:

Mapping over the Dawson Map area (NTS 116B-116C, E half) has been completed by L.H. Green and J.A. Roddick of the Geological Survey of Canada. This is published as map 1284 A (1972) at 1" = 400 feet and accompanies GSC memoir 364.

A strong lineament, the Tintina Trench, trends northwesterly through the Yukon, some 10 miles east of the RH claims. Tertiary clastics along the east of the trench are in contact with Nasina "Series" schist, quartzite and gneiss to the west, which underlie most of the area in the vicinity of the property. Several small bodies of ultrabasic rocks are intruded into the metamorphic rocks in the Clinton Creek area. Cross fibre chrysotile asbestos is found in many of the serpentinized bodies, though generally in minute amounts.

To date the only economic occurrence of asbestos is that of the Clinton Creek Mine, 6 miles east of the RH claims. The ore zone is developed within a thick tabular mass of serpentinized ultrabasic rocks and is separated by quartz-carbonate alteration from the intruded slates and phyllites.

5-20 Property Geology:

5-21 Ground Control:

A total of 42,800 feet of line were flagged and cut. A base line was established along the east-west running claim line and cross lines were turned off at 400 foot intervals. Stations were marked every 200 feet on the cross lines.

5-22 Geology:

Except for the channel of a south flowing tributary of Clinton Creek cutting the western edge of the RH claims, topography is flat and bed rock is masked by soil and vegetation. As the area is unglaciated geology over the covered parts of the property could be interpreted from examination of rock chips and boulders in the soil, where they occurred.

Areas of rock chips are rare on the four eastern claims, and where they occur they consist of schist and slate.

Outcroppings along the western edge, and quite abundant rock chips and boulders in that area, enable the approximate outlining of an ultrabasic intrusive, its contact with metamorphic rocks and a zone of serpentinization.

The zone of serpentinization is centred along the base-line on claims RH 1 and 2. Minor amounts of asbestos fibre of 1/8 inch or less occur in the serpentine 100 feet north of base-line 6E.

Ultrabasic intrusive rocks and serpentine are assumed to extend west across the property 4,000 feet to approximately coincide with the magnetic high centred along the base-line.

6-00 GROUND MAGNETOMETER SURVEY:

6-10 Purpose:

Serpentinized ultrabasic bodies, because of their associated magnetite, are excellent targets for magnetic surveys. Airborne geophysical maps released by the GSC in 1966 show high magnetic anomalies which coincide with the position of Cassiar's Clinton Creek ore body as well as with several other ultrabasic intrusives in the area including that underlying the RH claims.

The purpose of the ground magnetometer survey was to detail the extension of outcropping serpentinite and ultrabasic exposed along the western edge of the RH claim group.

6-20 Method:

The geophysical survey was conducted using a Sharpe MF-1 fluxgate magnetometer. This instrument measures the vertical component of the earth's magnetic field.

The established 400 by 200 foot grid was used for ground control. Base station values were established every 400 feet from 0 to 40W by taking two 15 minute loops and

averaging the readings obtained. Cross-line loops of 30 minutes were run and the readings corrected to the corresponding base station. Corrections were made for diurnal magnetic variation assuming all variations to be linear over a short time interval.

6-30 Interpretation:

General magnetic relief ranges from 0 to 1900 gammas with a single 2750 gamma peak on the western anomaly. Average magnetic intensity over the property is 600 gammas.

An easterly trending magnetic high, approximately coinciding with the base line and dropping sharply to a magnetic low on the western end, coincides approximately with the serpentine exposure on that end. Values decrease evenly to the south along the continuation of the ultrabasic intrusive. The anomaly is several hundred feet wide on the eastern end with no sharp inflections to the north or south indicating a probable continuation of the ultrabasic, accompanied by serpentine, to the eastern boundary of the property. Rock chips indicate schist and slate to the north and south.

7-00 CONCLUSIONS:

Cassiar's fibre zone at Clinton Creek is contained in a serpentanized sill which has intruded slate and schist. On the RH claim group ultrabasics, including serpentinite, are intruding slate, schist and quartzite, however their true extent is masked by overburden.

Asbestos fibre up to 1/8 inch occurs in the serpentinite where it outcrops near the western edge of the property.


Quartz-carbonate alteration, occurring with the Cassiar deposit at Clinton Creek, has not been found on the RH claims although bull quartz has been noted in several localities.

An easterly trending magnetic anomaly of approximately 4,000 feet x 800 feet presumably outlines a serpentinized sill situated centrally under the property.

8-00 RECOMMENDATIONS:


A minimal amount of trenching is recommended to expose the asbestos mineralized serpentinite on claims RH 1 and 2, and the nature of the rocks underlying the eastern continuation of the magnetic anomaly.

Submitted by:



J.C. Needoba, Geologist

Endorsed by:



F. Holcapek, P.Eng. Geologist

September, 1973

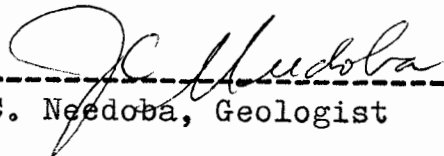
Vancouver, B.C.

CERTIFICATION

I, Jack Charles Needoba of 3 - 876 E. 8th Avenue, Vancouver, British Columbia, do hereby certify that:

1. I am a graduate of the University of British Columbia (1971) and hold a B.Sc. in Geology.
2. I have practised as an exploration geologist in British Columbia, Yukon Territory and Northwest Territories for three years.
3. Information contained in this report is based upon work performed by myself or at my direction.

Submitted by:



J.C. Needoba, Geologist

September, 1973

Vancouver, B.C.

YUKON TERRITORY

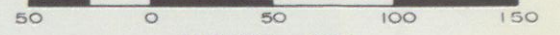
MINAS DE CERRO DORADO LTD. (NPL)

RH CLAIMS
CLINTON CREEK AREA

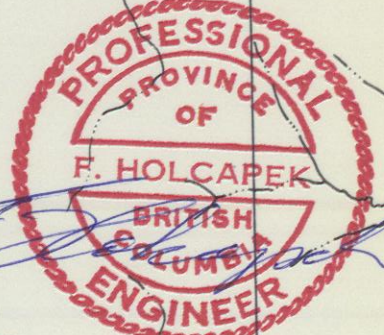
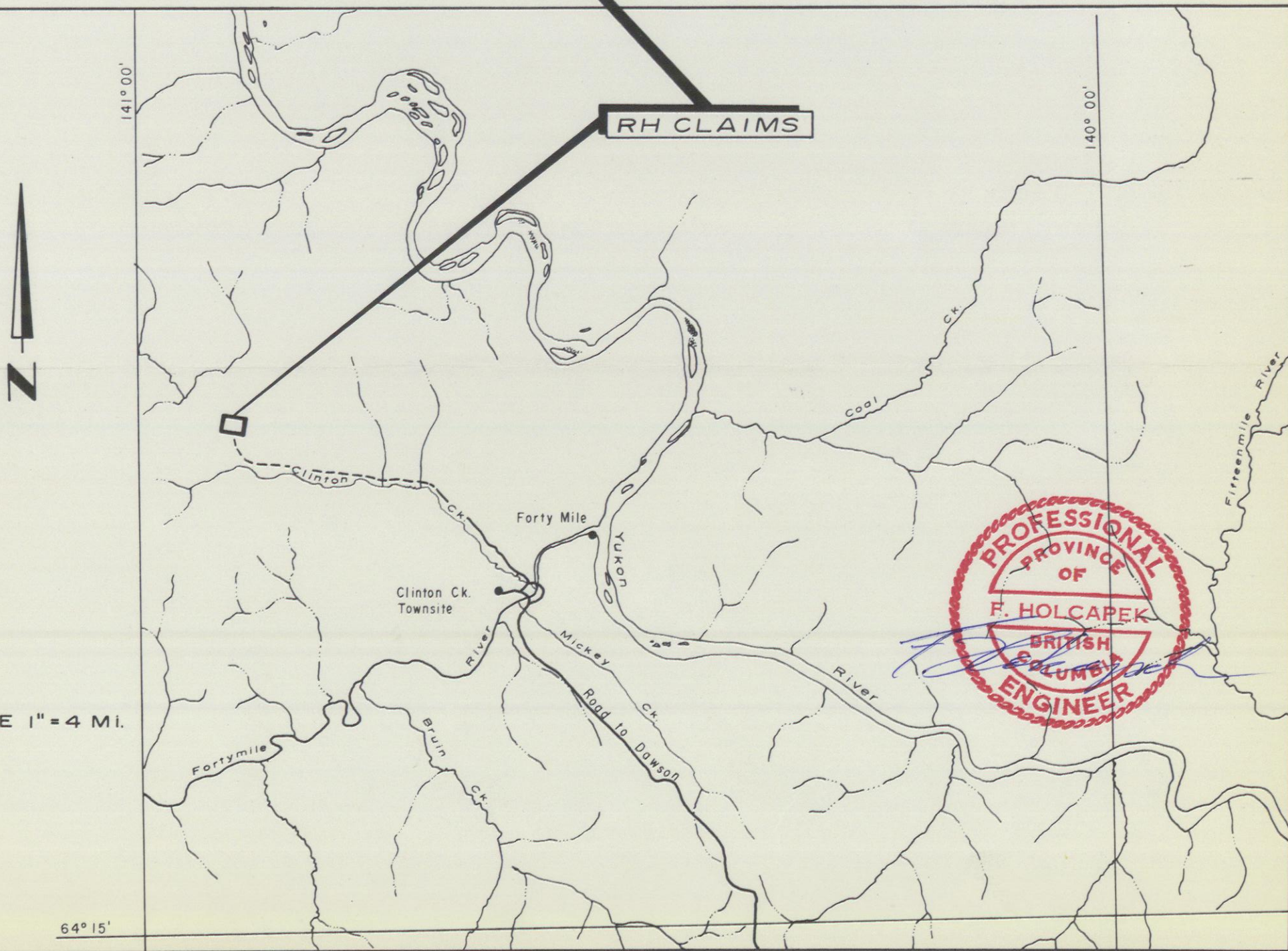
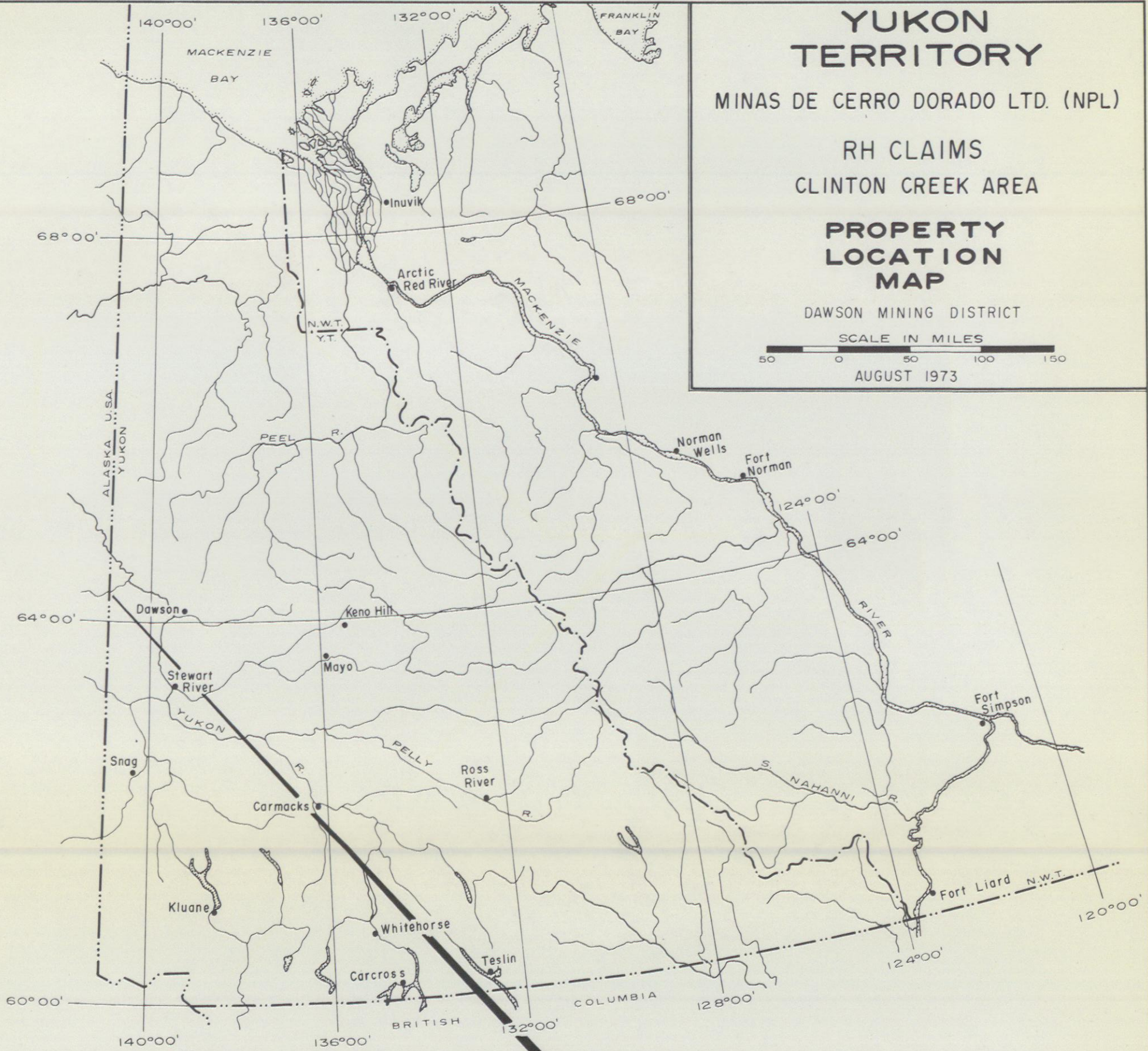
PROPERTY LOCATION MAP

DAWSON MINING DISTRICT

SCALE IN MILES



AUGUST 1973


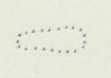



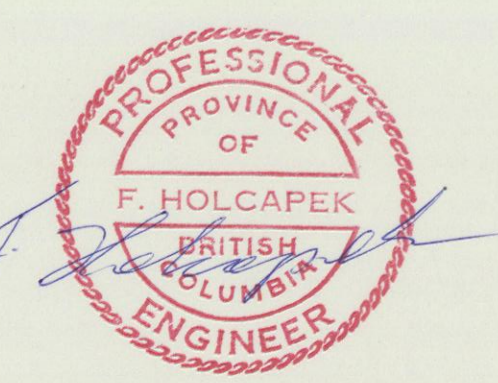
SCALE 1" = 4 Mi.

64° 15'



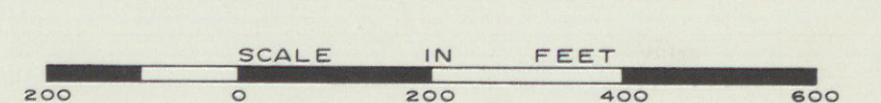
LEGEND

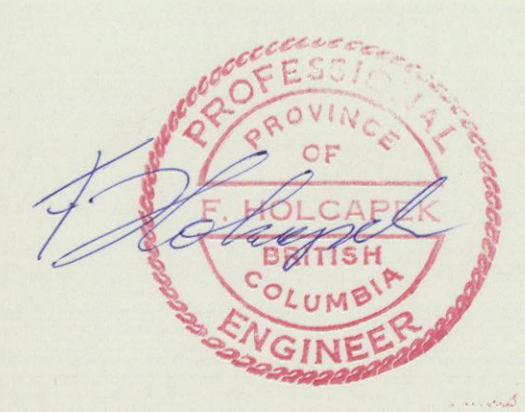
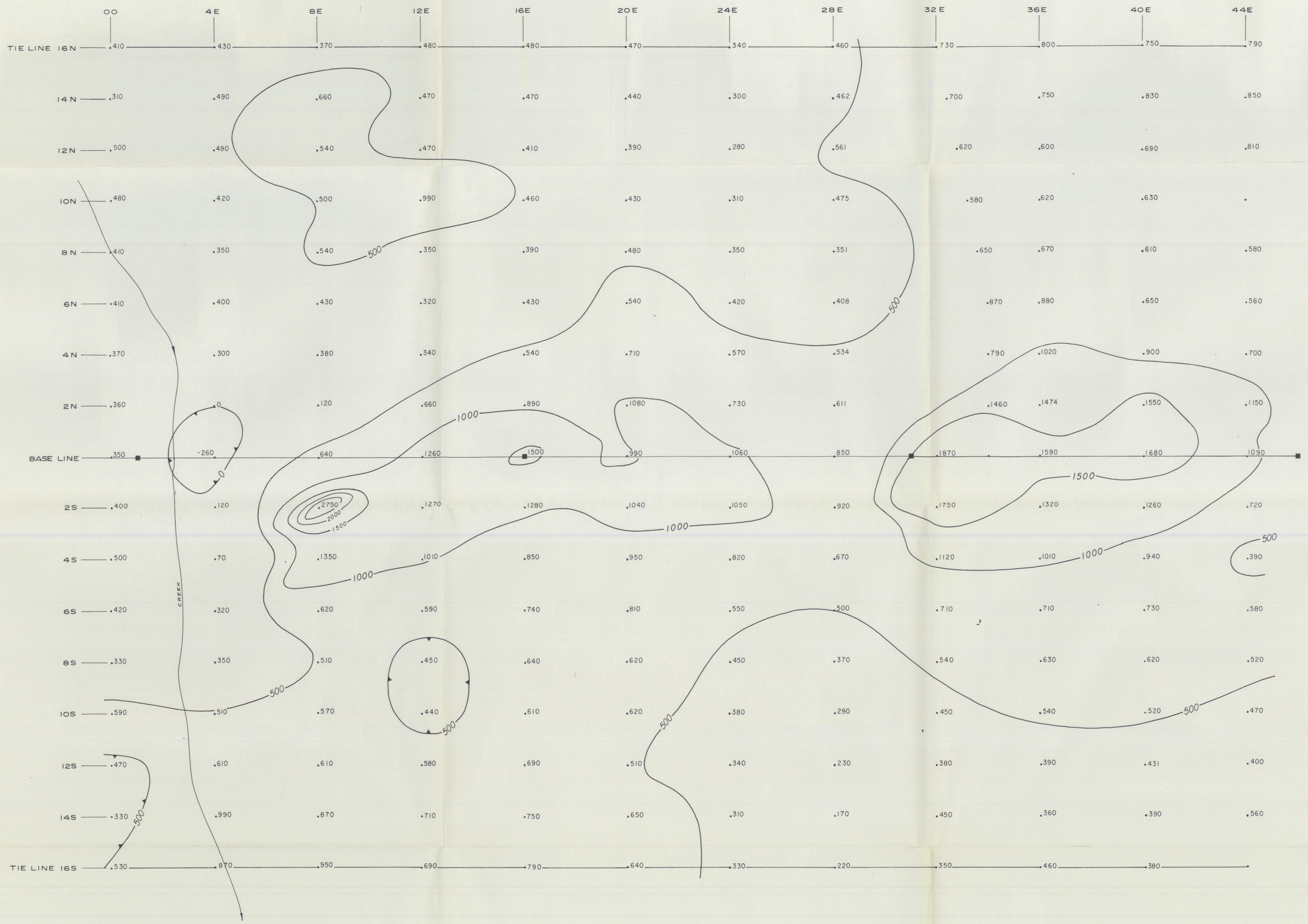
-  Area of rock chips or boulders
-  Outcrop
-  Assumed geological contact



MINAS DE CERRO DORODO LTD. (NPL)
 RH CLAIMS-CLINTON CK. AREA
 DAWSON MINING DIVISION

GEOLOGY and CLAIM MAP





MINAS DE CERRO DORODO
LTD. (NPL)
RH CLAIMS-CLINTON CK. AREA
DAWSON MINING DIVISION

**MAGNETOMETER
SURVEY**

VALUES IN GAMMAS
CONTOUR INTERVAL: 500 GAMMAS

SCALE IN FEET
200 0 200 400 600

AGILIS ENGINEERING LTD. AUG 1973