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GEOLOGICAL REPORT
on the
GORDON-D. C. NICKEL PROPERTY
New Westminster Mining Division
British Columbia

Dalton Resources Ltd (N. P. L.)

April 17, 1972
Vancouver, B. C.

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T. R. TOUGH & ASSOCIATES LTD.

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GRAPHS

- LOGARITHMIC CUMULATIVE FREQUENCY CURVE
- ARITHMETIC CUMULATIVE FREQUENCY CURVE

SUMMARY

The Gordon-D. C. Nickel group of claims, owned by Dalton Resources Ltd (N. P. L.), consists of 40 contiguous mineral claims and one fraction located approximately 10 miles north of Hope, B. C., and is accessible by paved highway and gravel road. The property is located some three miles north of the producing mine of Giant Mascot Mines Ltd.

The topography is relatively steep but not precipitous with elevations varying from 3,000 feet to 4,200 feet. The average relief in the area is 4,000 feet. Dense stands of fir, cedar, hemlock and spruce occur on the slopes.

Water is available for all phases of exploration, development and domestic use. Hydroelectric power would be available in the area if future requirements warrant it. Diesel electric power will be necessary for initial phases.

Year-round logging and mining operations are carried on in the general area which experiences moderate winters with a fairly heavy snowfall. Summers are pleasant with moderate to heavy rainfall.

Railroad facilities are available in Yale and the Trans Canada Highway provides an excellent trucking route to Vancouver, some 120 miles west, where most supplies are available.

During 1934 to 1940 Western Nickel Corporation Ltd., carried out programmes of trail and road building, geological mapping, limited underground drifting and 973 feet of X-ray diamond drilling.

Diamond drill hole DDH # 4 encountered six feet averaging 0.73% Ni, 0.10% Cu, and 0.35% Cr₂O₃ from 119' to 125'. A 2-foot section from 164-166 feet assayed 0.14% Ni.

A grab sample from the adit ran 0.06% Ni whereas another such sample from a recent trench gave 0.37% Ni.

There are no records of previous production from the property.

Dalton Resources Ltd (N. P. L.) during the 1970 field season, carried out a programme of road building and renovation and trenching.

During the summer of 1971, Dalton Resources Ltd carried out a program of line cutting, soil sampling, magnetometer survey and road building.

The various ultramafic rocks on the property contain varying amounts of disseminated to massive pyrrhotite, pentlandite, chalcopyrite and pyrite. Pyroxenite and hornblende pyroxenite are the most favourable host rocks. Coast Range quartz diorite occurs as small stocks, bosses and apophyses cutting the ultramafic rocks. It is near the contact of such intrusive and ultramafic rocks that the nickel-copper-chrome ore bodies at the Giant Mascot mine occur.

With proper preparation, work could be carried out on a year-round basis.

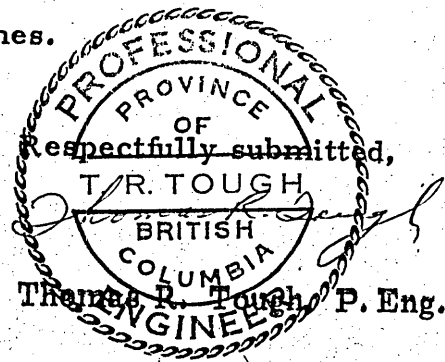
CONCLUSIONS

Although the area covered is small in comparison to the entire group of claims, the results show that the property warrants further investigation. A complete geochemical, geophysical and geological survey should be carried out over the entire claim group with some diamond drilling to test the findings to date.

RECOMMENDATIONS

It is recommended that a geochemical survey, a magnetometer survey and a geological survey be carried out over the entire property in conjunction with diamond drilling to test previous drilling and geochemical and geophysical anomalies.

It is also recommended that Dalton Resources Ltd (N. P. L.) allocate the sum of \$20,000.00 to implement and execute the recommended exploration and development programmes.



April 17, 1972

INTRODUCTION

The following report is compiled from information obtained by the writer during visits to the property during 1971 and from the results of exploration programmes carried out under the direction of the writer.

PROPERTY

The property consists of 40 contiguous mineral claims and one fraction held by location. The claims are staked in accordance with the British Columbia Mineral Act and are as follows:

<u>Claim Name</u>	<u>Record Number</u>	<u>Expiry Date</u>
Gordon # 5 - 22	22413 - 30 incl.	June 16, 1973
Gordon # 23	22431	June 16, 1973
Gordon # 24 - 37	22432 - 45 incl.	June 16, 1973
D. C. Nickel # 1	19741 S	September 26, 1972
D. C. Nickel # 2 - 4	19745 - 47 incl.	September 26, 1972
D. C. Nickel # 5 - 8	20576 - 79 incl.	July 30, 1972.

The claims are three miles north of the producing mine of Giant Mascot Mines Ltd.

OWNERSHIP

The claims are owned outright by Dalton Resources Ltd (N. P. L.)

LOCATION (49° - 121° S. E.)

The claims are situated on Gordon Creek approximately ten miles north-northwest of the town of Hope in the New Westminster Mining Division in southwestern British Columbia.

ACCESS

The property is accessible by means of a gravelled logging road west from the Trans Canada Highway at a point some ten miles north of Hope, British Columbia. The road follows along a north branch of Emory Creek and along the south bank of Gordon Creek and thence to the area of the Audrey Adit on the D. C. Nickel # 3 claim for a total distance of approximately seven miles.

TOPOGRAPHY AND TIMBER

The topography is relatively steep and generally typical of the Coast Range Mountains with an average local relief of 4,000 feet. Peaks in the area attain altitudes of up to 7,000 feet.

Slopes are covered with dense stands of fir, cedar, hemlock and spruce.

WATER AND POWER

Sufficient water for all phases of exploration, development and domestic use, is available from numerous streams which traverse the property and feed into Gordon Creek which drains into the Fraser River near Yale.

Hydroelectric power would be available in the area, but for initial development phases diesel electric power will be necessary.

CLIMATE

Winters are moderate with a fairly heavy snowfall whereas the summer months are warm with moderate to heavy rainfall.

TRANSPORTATION AND SUPPLIES

Rail service is available at Yale which is serviced by the Canadian Pacific Railway. The Trans Canada Highway provides an excellent trucking route to and from Vancouver where most supplies would be obtainable.

HISTORY

During 1934 Western Nickel Corporation Ltd carried out a programme of trail cutting for property access from Yale, and some surface trenching. By 1937 an adit was driven for 67 feet with the aim of crosscutting contact areas between pyroxenite and diorite. The adit was stopped short of its goal. In the latter part of 1939 and early 1940 a total of 973 feet were drilled with an X-ray diamond drill in five holes collared in the portal of the adit.

Some geological mapping of a reconnaissance nature was also carried out over portions of the property.

There is no record of previous production from the property.

PRESENT WORK

Dalton Resources Ltd, during 1970, improved 9,000 feet of the existing gravel road which leads to the property and in addition constructed a new road to the Audrey Adit. The new road is some 4,000 feet long. Trenching and blasting was carried out in a number of places and a campsite was cleared near the adit site.

During the summer of 1971 Dalton Resources Ltd. carried out a program of line cutting, soil sampling, magnetometer survey and road building.

GENERAL GEOLOGY

The geology of the area is shown on Map 12-1969 Hope (West Half) of the Geological Survey of Canada. The area is mainly underlain by granodiorite and quartz diorite of the Coast Range intrusives which trend N-S. On the western extremities of the intrusives lie the rocks of the Chilliwack Group of Pennsylvanian and Permian age. The Chilliwack Group consists of basic volcanic rocks, pelites, siltstone, sandstone, conglomerate, and limestone. To the east lie pelitic schists, amphibolite, hornblendite, pyroxenite, peridotite, dunite, and locally associated diorite and gabbro. It is the ultramafic rocks above that contain economic nickel-copper-chrome deposits at the Giant Mascot Mine near the headwaters of Stulkawhits Creek 7 miles northwest of Hope.

The main faults in the region are the Hope Fault, Yale Fault, and Ruby Creek Fault which trend N-S. Faulting in the vicinity of The Old Settler Mountain trends northwesterly. Less than one mile south of the property boundary is the axis of a syncline which plunges northwest.

LOCAL GEOLOGY

The property is underlain by crystalline pelitic schists, pyroxenite, hornblendite, garnetite and quartz diorite. The lack of outcrop in the area makes

rather difficult to map definite contacts. The pyroxenite generally grades into hornblendite and peridotite, and is a grey-green to black rock composed of bronzite, augite, hornblende, olivine and minor biotite. The pyroxenite and hornblendite vary in grain size from coarse to fine.

The quartz diorite is generally medium-grained and occurs as small stocks and apophyses cutting the various phases of ultramafic rocks and schist.

Garnetite occurs as sills in contact with the ultramafic and dioritic rocks.

Generally associated with the pyroxenite and hornblendite are disseminated grains and blebs of pyrrhotite, which contains inclusions of pentlandite, and lesser amounts of chalcopyrite and pyrite.

GEOLOGY OF GIANT MASCOT MINES

The rocks which occur on the Giant Mascot property have been identified as hornblendite, hornblendic pyroxenite, pyroxenite peridotite, diorite norite and dunite. Talcose alteration generally occurs along fractures and faults. The rocks mainly are pyroxenite with cores of peridotite and patches of hornblendic pyroxenite with a periphery of hornblendite. Generally the orebodies developed in the mine occur as disseminations, massive blocks, and vein type. The sulphides present are pyrrhotite, pentlandite and chalcopyrite. Chromite and magnetite also occur. The orebodies have a steep plunge to the northwest at approximately 65° , and occur close to contacts between diorite and pyroxenite, but in the pyroxenite and hornblendic pyroxenite. Massive sulphide zones of limited size occur in hornblendite. Faulting occurs in a northwesterly and northeasterly direction with slight movement in most cases. The dip of the faults varies from about 30° to 70° NW or NE.

The ratio of nickel to copper is approximately 3 : 1.

MINERALIZATION

Sulphide mineralization occurs as disseminations in almost all the ultra-mafic rocks with greater concentrations in hornblende pyroxenite. A massive sulphide zone was encountered in an early diamond drill hole in the portal of the Audrey Adit. The zone assayed 0.73% Ni, 0.10% Cu and 0.35% Cr_2O_3 across 6 feet. Another 2-foot section in the same hole ran 0.14% Ni. A grab sample taken by H. M. Wright from the face of the adit gave 0.06% Ni.

A grab sample selected by H. M. Meixner from a trench approximately 150 feet below the adit assayed 0.37% Ni.

DIAMOND DRILLING

During 1939 and early 1940 a total of 973 feet of X-ray diamond drilling was carried out from the portal of the Audrey Adit. The following information is taken from a report by F. J. Crossland in which he describes the drill core:

D. D. H. # 1

Bearing: S 20° W
 Dip: -82°
 Length: 201 feet

"The core extracted is almost entirely pyroxenite, blending from coarse- to fine-grained, with a few narrow sections at irregular intervals of quartz and quartz diorite.

Metallic sulphides in the form of pyrite appear in blotches of fine crystals intermittently and sparingly throughout the core extracted - which is not of commercial importance."

D. D. H. # 2

Bearing: S 20° W
Dip: 00°
Length: 203 feet

" . . . the core consisting mostly of coarse hornblendite with irregularly spaced ribs of diorite. "

D. D. H. # 3

Bearing: S 65° W
Dip: -20°
Length: 201 feet

" . . . for 119 feet, pyroxenite, the texture being both coarse and fine-grained, then some blending of quartz diorite with garnetite for five feet followed by coarse olivine-green pyroxenite (with heavy crystals of hornblende) for 15 feet, which gradually became mixed or blended with quartz for a few feet -- the balance of the core, about 50 feet being the typical quartz diorite of the locality. "

D. D. H. # 4

Bearing: S 25° E
Dip: -20°
Length: 200'

"The first 5 or 6 feet of core is an altered diorite mixed with hornblende. Then about three inches of quartz appears mineralized with fine crystals of pyrite. For the next 100 feet the core is the typical pyroxenite - showing metallic minerals in places, though not heavy or dense until at 119 feet the core became heavily mineralized with pyrrhotite, pyrite, and highly altered garnetite. At 128 feet, this mineralized section gave place to a calcereous mixture, less mineralized, pointing to the evidence of contact metamorphism,

as it is followed within a few feet by an intrusive rib of hard fine-grained quartz diorite. . . the section being about 5 feet thick. The balance of the drill hole showed pyroxenite -- sparingly mineralized throughout, with one narrow section of the core at 164 feet rather densely mineralized for 24 inches. . . the sulphide, chiefly pyrrhotite. . . being about 50% by volume.

D. D. H. # 5

Bearing: S 20° W
 Dip: -40°
 Length: 168 feet

"An interesting feature of the core extracted was the occurrence of several bands of clear crysocrystalline quartz first appearing at 113 feet, alternating with a mixed diorite to 127 feet. Some of the quartz shows iron stain, the section is badly fractured, (the best core extraction being 3 inches thick), heavily pyritized, which was marked for assay. This is evidently a fault plane. The remainder of the core being in quartz diorite."

Diamond drill hole D. D. H. # 4 was the only hole to encounter significant sulphide mineralization.

LINE CUTTING AND ROAD BUILDING

A total of 16.7 miles of lines were cut over four claims namely, D. C. Nickel # 1, 2, 3 and 4 claims. The grid was established in a north-south direction for the purpose of control for the geochemical and magnetometer surveys. Line spacings were every 200 feet.

Approximately two miles of road were built to provide access into the claim block. More line cutting and roads will be required during the coming 1972 field season.

GEOCHEMICAL SURVEY

A total of 720 soil samples were collected over the grid area and assayed for copper and nickel. A statistical study was made of the results, and from the study the mean background value for nickel was found to be approximately 20 ppm. with highly anomalous conditions above 60 ppm. The mean background for copper was 30 ppm. with anomalous conditions above 45 ppm.

Several anomalous conditions were found to exist on the claims in both nickel and copper. Coincidence between the nickel and copper anomalies were excellent and in some cases copper and nickel mineralization was picked up during the survey.

MAGNETOMETER SURVEY

The entire grid area of 16.7 line miles was covered with a magnetometer. Some coincidence with the geochemical anomalies were noted which would tend to indicate that the copper-nickel anomalies possibly occur over areas of ultramafic rocks which have been the host to copper-nickel occurrences in the Giant Mascot Mine and in the general area.

EXPLORATION PROGRAMMES

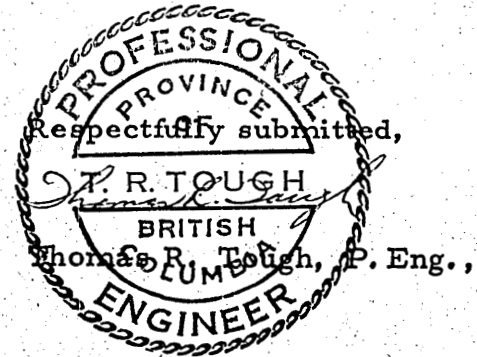
In conjunction with the testing of anomalous zones by diamond drilling,

a complete geochemical, geophysical and geological survey should be carried out over as much of the property as possible.

ESTIMATE OF COSTS OF EXPLORATION AND DEVELOPMENT PROGRAMMES

Diamond Drilling 2,000' x-ray @ \$5.00/ft	\$10,000.00
Geochemical Survey 1000 samples	1,850.00
Assaying 1000 samples at \$1.65/sample	1,650.00
Magnetometer survey 20 line miles @ \$90/line mile	1,800.00
Geological mapping	3,000.00
Contingencies	1,700.00
	<u>\$20,000.00</u>

It is estimated that the above programmes should take approximately four months to complete.



April 17, 1972

CERTIFICATE

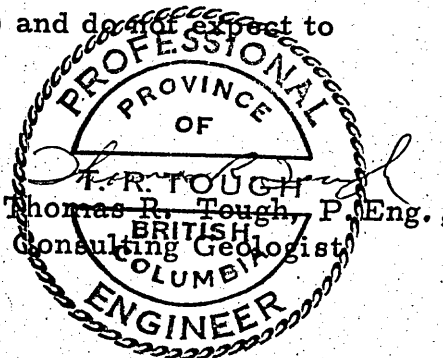
I, Thomas R. Tough, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

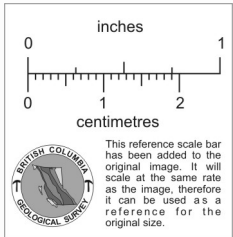
That I am a Consulting Geologist and an associate with T. R. Tough & Associates Ltd., with offices at 519-602 West Hastings Street, Vancouver 2, B. C.

I further certify that:

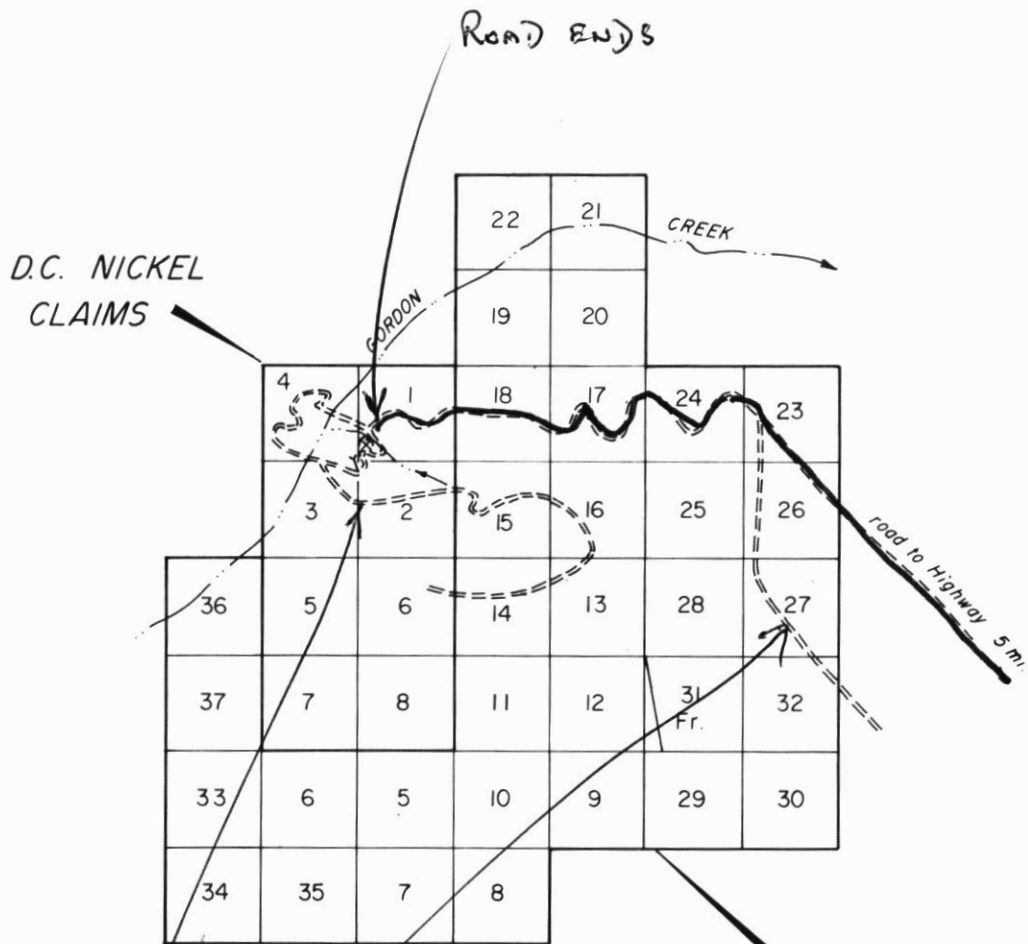
1. I am a graduate of the University of British Columbia (1965) and hold a B. Sc. degree in Geology.
2. I have been practising in my profession for the past six years and have been active in the mining industry for the past thirteen years.
3. I am registered with the Association of Professional Engineers of British Columbia.
4. This report is based on information obtained by the writer during an examination of the property during 1971 and from previous reports by F. J. Crossland, P. Eng., 1934, 1937, 1940; H. M. Wright, P. Eng., 1935; H. C. Horwood, Geological Survey of Canada Paper 36-4, 1936 and Memoir 190, 1936;; A. J. Gaul, P. Eng., 1938 and J. W. H. Monger, Geological Survey of Canada Paper 69-47, 1970.
5. I have no direct or indirect interest whatsoever in the property described herein, nor in the securities of Dalton Resources Ltd. (N. P. L.) and do not expect to receive any interest therein.

April 17, 1972



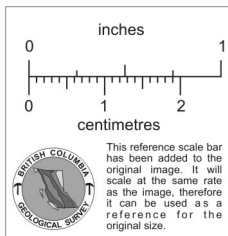


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 DALTON RESOURCES LTD. (N.P.L.)
LOCATION MAP
 D. C. NICKEL, GORDON CLAIMS
 YALE AREA
 NEW WESTMINSTER M.D., B.C.
 SCALE
 1" = 137 MILES



ROADS STILL TO BE COMPLETED

GORDON CLAIMS



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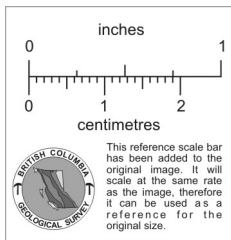
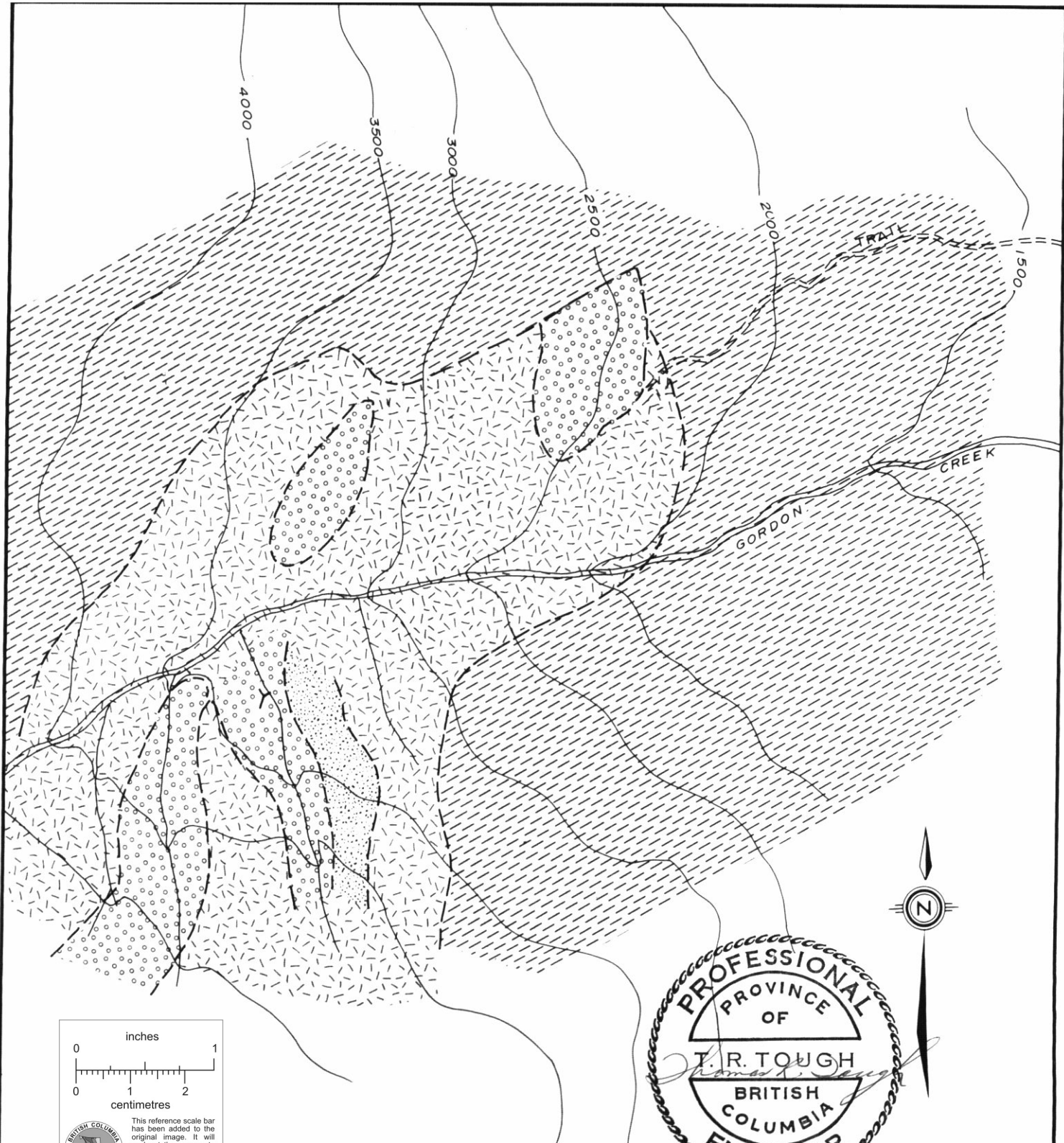
CLAIMS MAP

D.C. NICKEL, GORDON CLAIMS
YALE AREA





NEW WESTMINSTER M.D., B.C.



APRIL, 1971



LEGEND

-  CRYSTALLINE SCHISTS
-  PYROXENITE & HORNBLende
-  GARNETITE
-  DIORITE

AFTER F.J.C.



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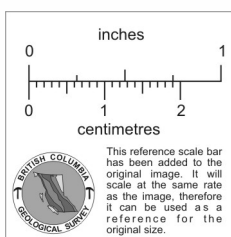
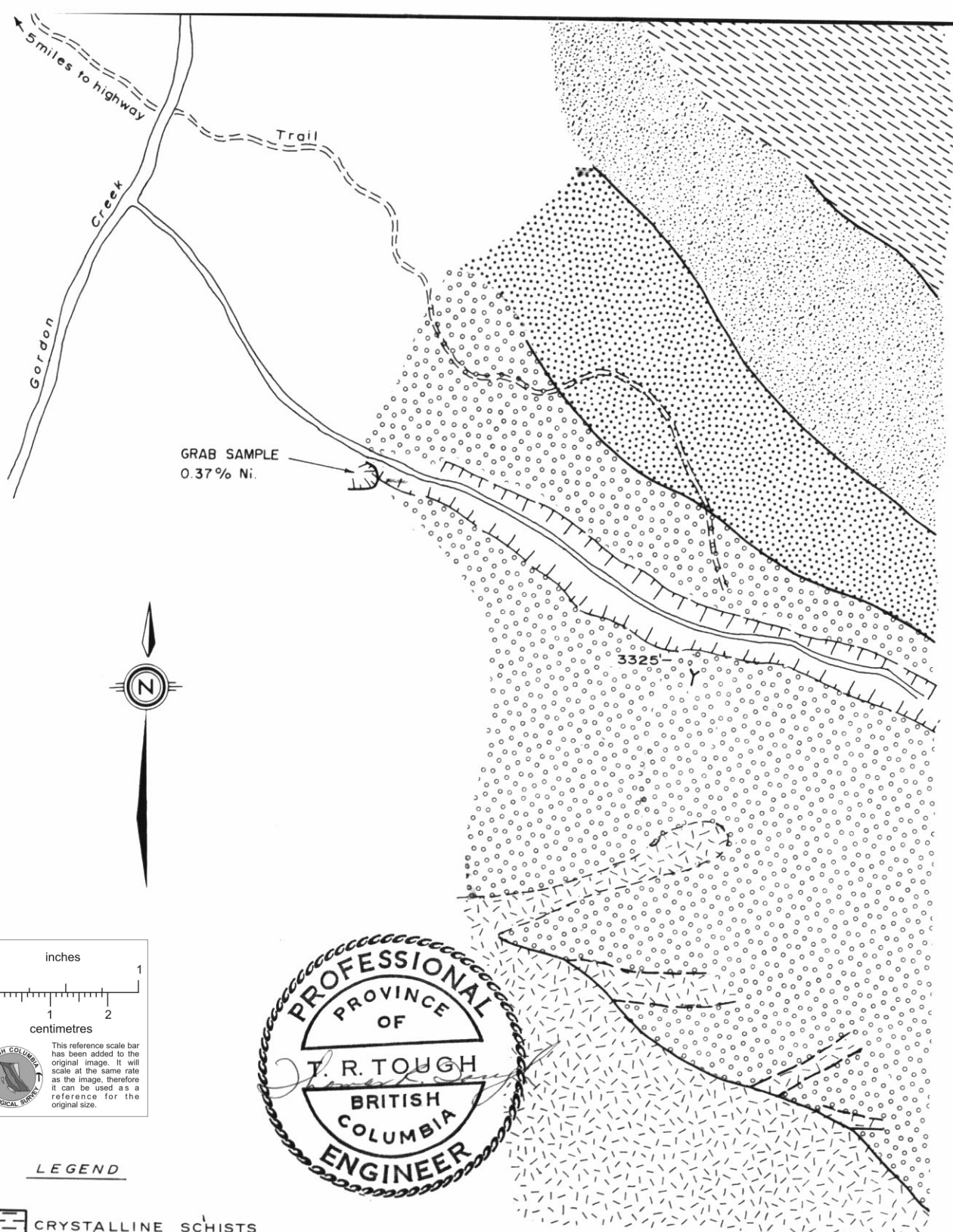
GEOLOGY

D.C. NICKEL, GORDON CLAIMS
YALE AREA

NEW WESTMINSTER M.D., B.C.

SCALE: 1" = 1500'

APRIL, 1971



LEGEND

- CRYSTALLINE SCHISTS
- GRANODIORITE
- GARNETITE
- HORNBLENDE PYROXENITE
- DIORITE

AFTER F.J.C.



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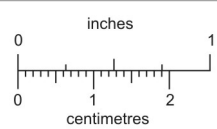
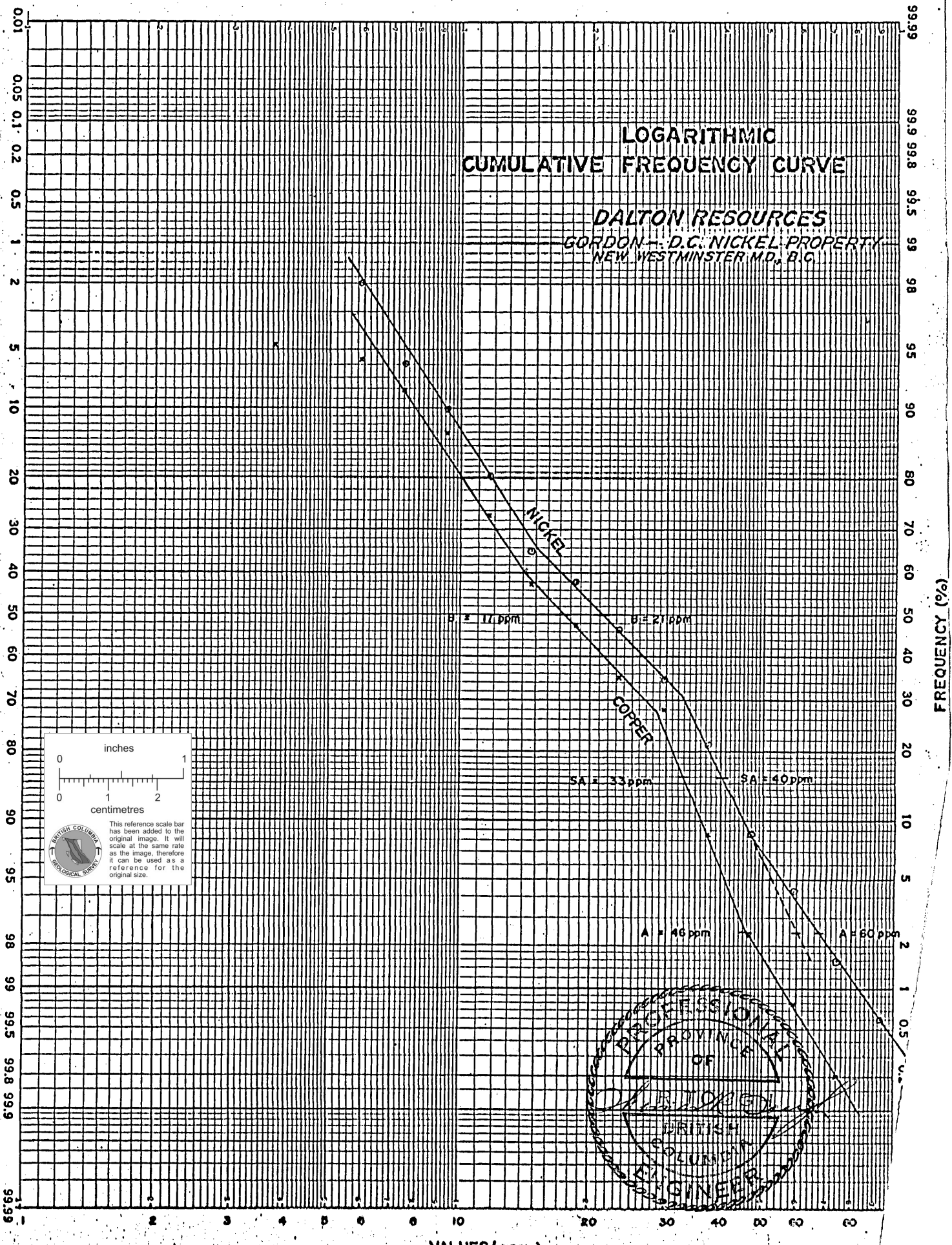
GEOLOGY

D.C. NICKEL, GORDON CLAIMS
YALE AREA
NEW WESTMINSTER MD., B.C.

SCALE: 1"=50'

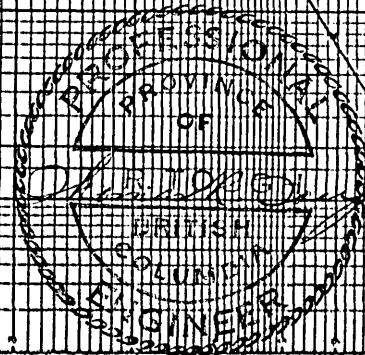
LOGARITHMIC CUMULATIVE FREQUENCY CURVE

DALTON RESOURCES
GORDON - D.C. NICKEL PROPERTY
NEW WESTMINSTER MD., D.C.

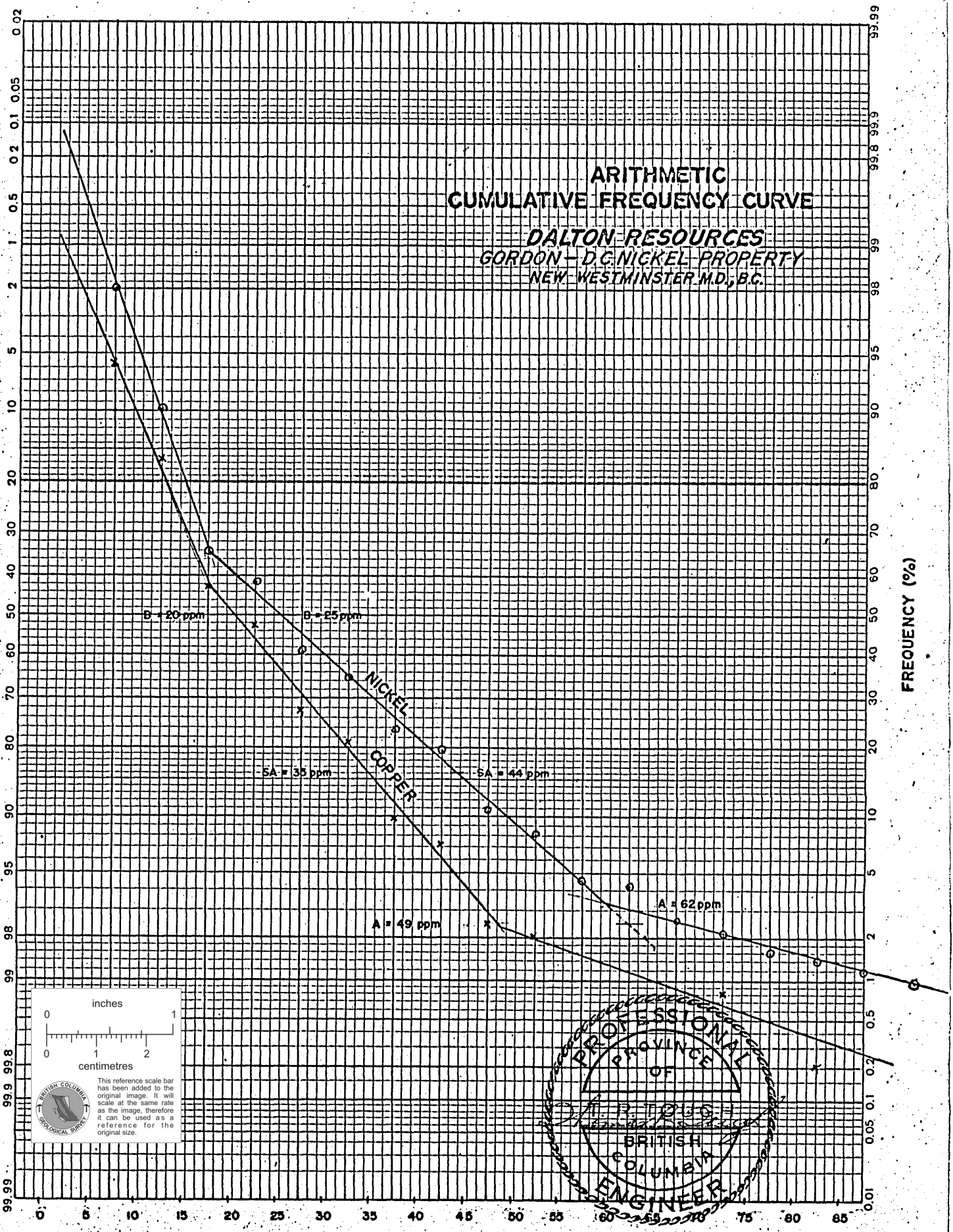


BRITISH COLONY
GEOLOGICAL SURVEY

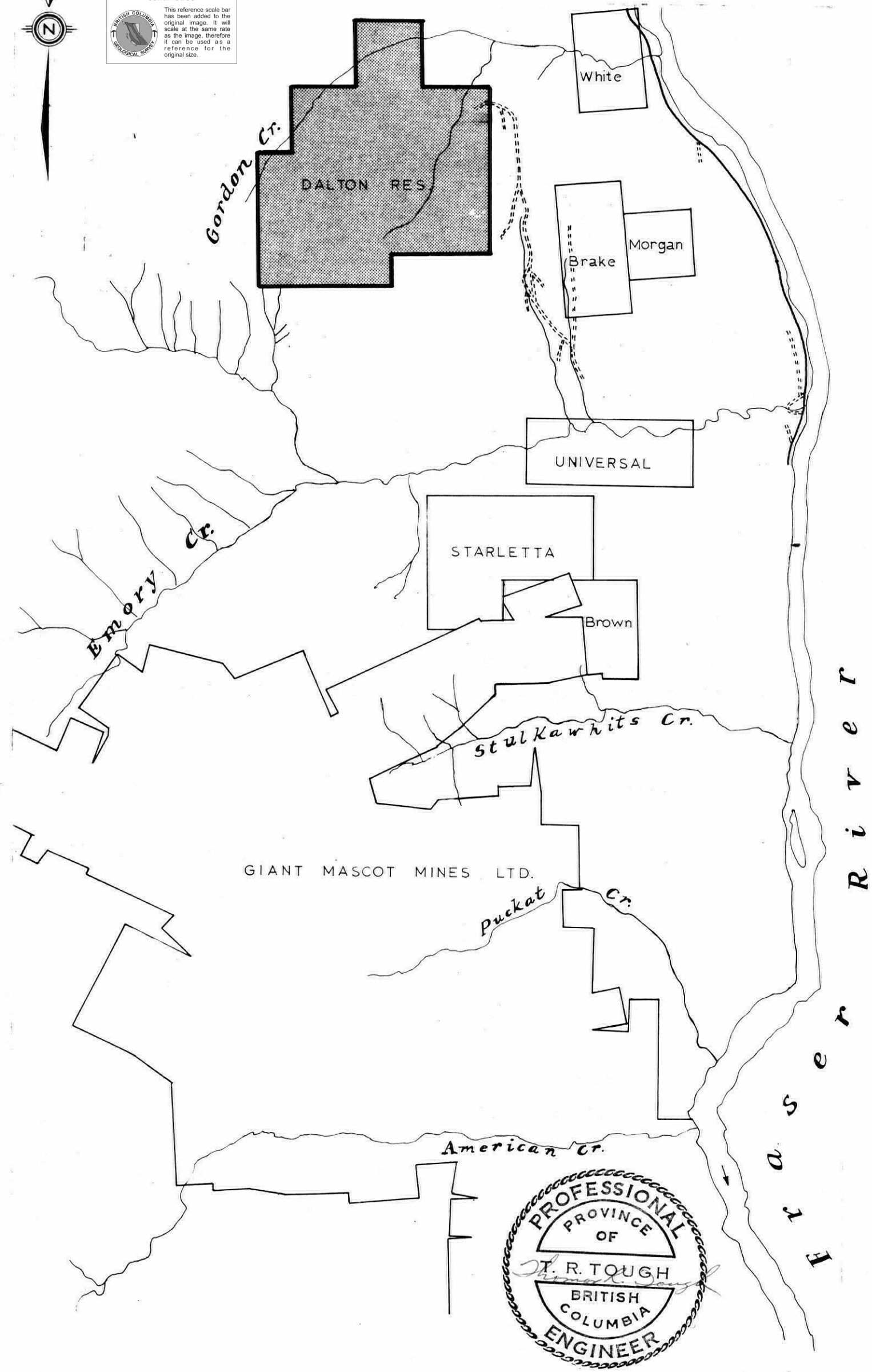
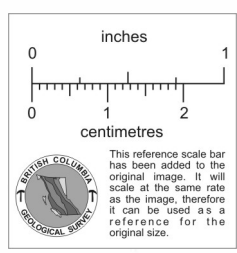
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GB-23
PROBABILITY

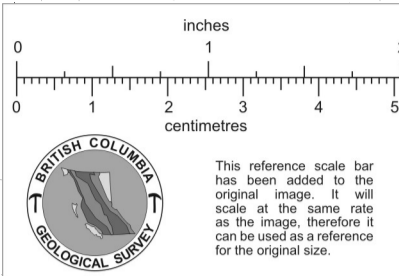
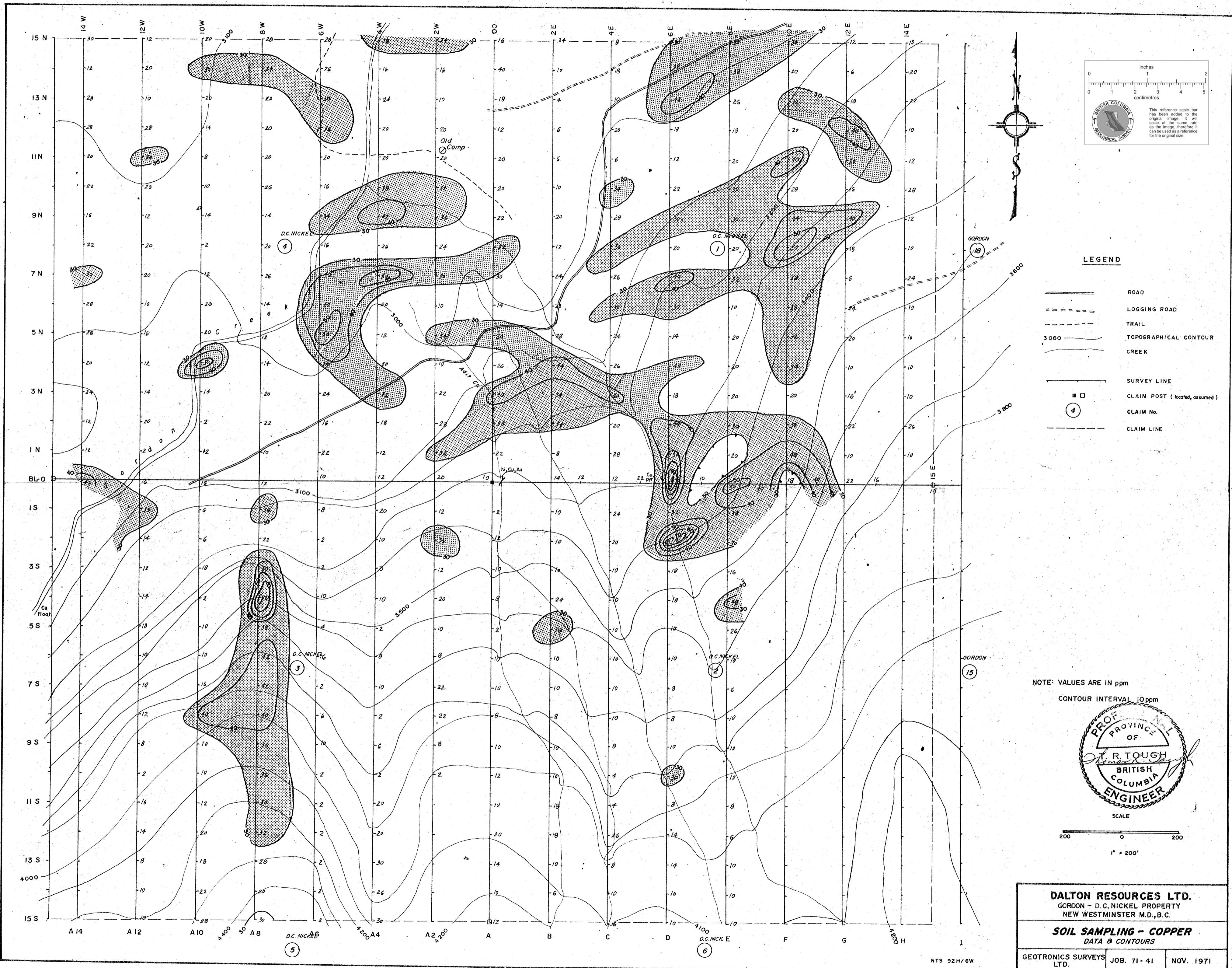


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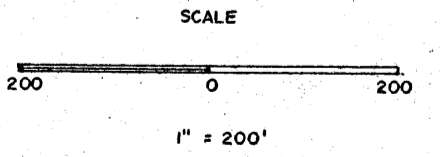
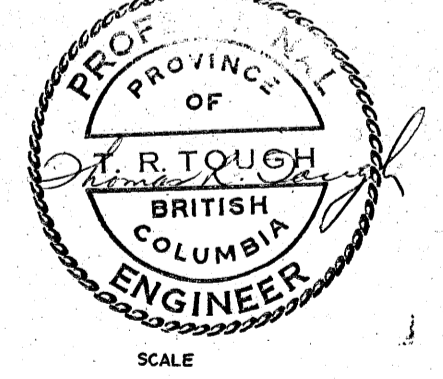
T. R. TOUGH & ASSOCIATES LTD.
DALTON RESOURCES LTD. (N.P.L.)
PROPERTY MAP
D.C. NICKEL, GORDON CLAIMS
YALE AREA
NEW WESTMINSTER M.D., B.C.





- LEGEND**
- ROAD
 - LOGGING ROAD
 - TRAIL
 - TOPOGRAPHICAL CONTOUR
 - CREEK
 - SURVEY LINE
 - CLAIM POST (located, assumed)
 - CLAIM No.
 - CLAIM LINE

NOTE: VALUES ARE IN ppm
 CONTOUR INTERVAL 10 ppm

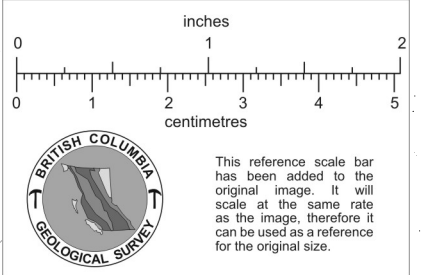
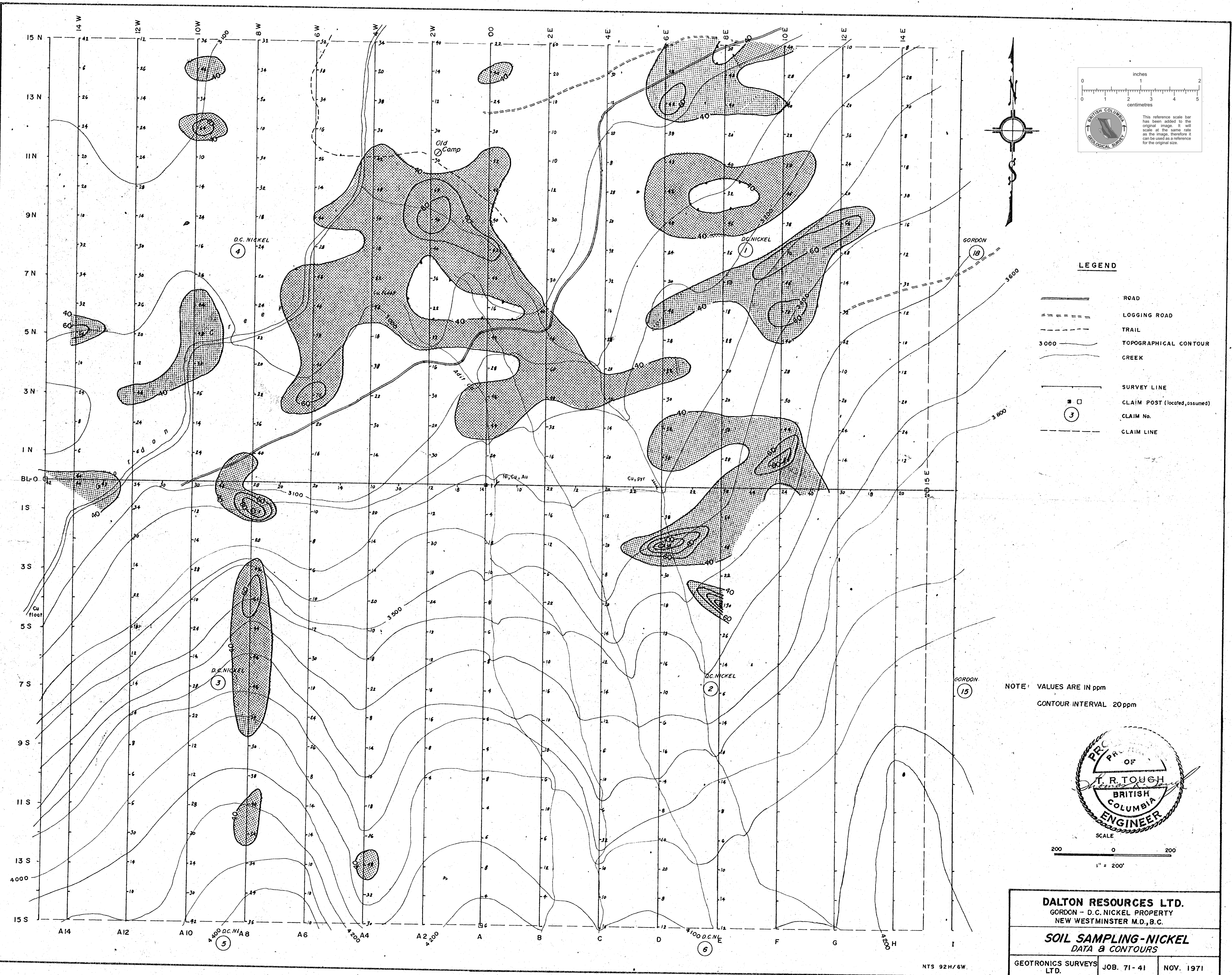


DALTON RESOURCES LTD.
 GORDON - D.C. NICKEL PROPERTY
 NEW WESTMINSTER M.D., B.C.

SOIL SAMPLING - COPPER
 DATA & CONTOURS

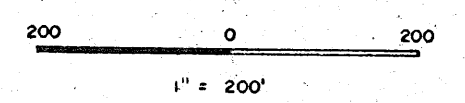
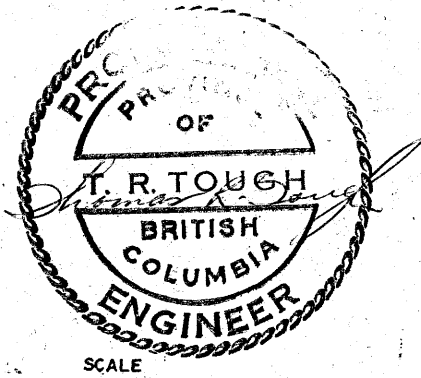
GEOTRONICS SURVEYS LTD. JOB. 71-41 NOV. 1971

NTS 92H/6W



- LEGEND**
- ROAD
 - - - LOGGING ROAD
 - - - TRAIL
 - 3000 TOPOGRAPHICAL CONTOUR
 - CREEK
 - SURVEY LINE
 - □ CLAIM POST (located, assumed)
 - (3) CLAIM No.
 - - - CLAIM LINE

NOTE: VALUES ARE IN ppm
CONTOUR INTERVAL 20 ppm



DALTON RESOURCES LTD.
GORDON - D.C. NICKEL PROPERTY
NEW WESTMINSTER M.D., B.C.

SOIL SAMPLING-NICKEL
DATA & CONTOURS

GEOTRONICS SURVEYS LTD. JOB. 71-41 NOV. 1971