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PRELIMINARY REPORT

on

HOMESTEAD PROJECT

Nicola and Similkameen M.D.

92 H 15/E

by

M. R. Wolfhard Feb. 1977

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LIST OF ILLUSTRATIONS

HOMESTEAD PROJECT

SUMMARY:

A large covered area, 3000 m wide by more than 4500 m long, surrounded by outcrops with some evidence of porphyry type mineralization, exists on these claims. The cover should be tested by a wide spaced (600 m) percussion drill grid estimated to cost $45,000.

INTRODUCTION:

PROPERTY: 8 claims, including 84 units, all owned by C. J. Robertson (Quintana) as follows:

MD	Name	#	# of units	Rec. #	Anniversary Date
Nicola	Homestead	1	12	120	24 June
"	"	2	20	123	" "
"	"	3	6	124	" "
"	"	4	8	125	" "
Similkameen	"	5	6	68	23 June
"	"	6	20	69	" "
"	"	7	2	70	" "
Nicola	"	8	12	204	10 Dec.

LOCATION: The Homestead claims lie just east of the Princeton - Merritt highway, about 37 km north of Princeton and about 11 km south of Aspen Grove, in NTS quadrangle 92 H 15/E. Situated in the dry interior plateau, the Homestead area has relief of about 200 m and an average elevation of about 1000 m. Vegetation is either open grassland or open fir and pine forest. Field season is 7 to 8 months, drilling season is 12 months.

ACCESS: Exploration access to the property is by paved road from Vancouver, about 4 hours by auto. A network of secondary and tertiary roads provide ready access within the property. Production access would be by road to Vancouver, or by road to Merritt on a C P R branch line.

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HISTORY: Trenching has been carried out on a copper lead silver occurrence about 1 km south west of the southwest corner of Homestead # 5. A few trenches have also been dug on the ridge just east of Homestead 3 and 4.
More extensive trenching as well as recent percussion drilling by Bethlehem Copper has been done on showings and adjoining covered areas on the next ridge east, about 2 km east of the north east side of Homestead 4. A magnetite chalcopyrite bearing breccia, sometimes known as the Par showing, lies about 1 km west northwest of the northwest corner of Homestead 1. This showing has been extensively explored by drilling, and is said to have been delimited. There is no record of previous exploration of the covered portion of the Homestead claims.

GEOLOGY REGIONAL:

The Homestead property lies within a narrow north trending belt of Upper Triassic to Lower Jurassic, basic to intermediate, volcanics. These Nicola group volcanics are intruded by co-eval plutons associated with porphyry copper mines at Copper Mountain - Ingerbelle, Highland Valley, and Afton - Iron Mask. Other, later Mesozoic intrusives are also related to some copper mineralization.

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A host of other porphyry copper prospects, most of which fall into one of two general classes, are known within this 60 m by 300 m belt stretching from the U. S. border north to Kamloops, and beyond. Locally these Nicola rocks are overlain by Upper Mesozoic through Upper Cenozoic rocks, often in fault bounded basins.

One of the two types of porphyry copper deposits, usually associated with a calc-alkaline intrusive suite, exhibits well developed, megascopically obvious concentric alteration zoning. The Highland Valley deposits are of this type. The second type of deposit, often of good grade, is commonly associated with alkaline intrusive and extrusive rocks. This type shows poorly defined concentric alteration zoning. In particular, an annular zone of strongly sericitized or argillized rock peripheral to and useful as a guide to ore is absent. Exploration for this type of deposit under cover must be guided by the presence of mineralization at the edge of cover. Subjective assessments of the direction to and intensity of the center of mineralization are dangerous.

Within the Nicola belt any covered area large enough to contain a mine size deposit, surrounded on one or more sides by weak fracture controlled copper iron sulphide mineralization , is a compelling target for exploration by grid drilling.

LOCAL: The Homestead claims are largely underlain by glaciofluvial cover. To the northeast, east and west are outcrops of Nicola andesites

(cont'd)

cut by dikes and small stocks of related diorite, monzonite and syenite. These rocks are all weakly to strongly propylitically altered on fractures and pervasively. Locally pyrite, trace chalcopyrite occurs in disseminations or on fractures. To the north, a few exposures of Pleistocene to Recent Valley basalt have been mapped by Preto (1975). South of the claims a large pluton of hornblende granite and quartz monzonite intrudes Nicola rocks. The most northerly exposures of this rock type are altered and pyritized along fractures, and locally contain quartz veinlets. A north tending covered area 3000 m by 4500 m exists surrounded by the above described areas of outcrop. Within this covered area, some potential exists for an alkalic type porphyry copper deposit, for a calc-alkalic type porphyry copper deposit, or for a breccia pipe deposit related to either type. A few weakly anomalous steam silt samples taken near the common corner of Homestead 1, 2, 3 and 4 enhance the exploration potential.

CONCLUSIONS AND RECOMMENDATIONS:

A geologic environment with the potential for a porphyry copper deposit exists under postmineral glaciofluvial and possibly volcanic cover on the Homestead claims.

A ground magnetometer survey should be conducted to search for a breccia similar to but larger than the Par, and to gain whatever insight is possible

(cont'd)

into geology under cover.
This should be followed by drilling a grid of percussion holes to a depth of 10 to 20 m in bedrock on an approximately 600 m triangular grid.

STAGE 1 BUDGET:

1)	Mag survey 70 km @ $25 - $30/km	$2,000
2)	Drilling 30 holes to an average depth of 50 m at a cost of $17/m	25,500
		27,500
	Contingency	500
	Total:	$32,000

REFERENCE:

1) Preto, V.A. (1975): Geology of the Allison Lake - Missezula Lake Area, B. C. Dept. of Mines and Pet. Res., Prelim Map. No. 17.

2) Notes of J. S. Christie, K. W. Livingstone, W. H. Howell.

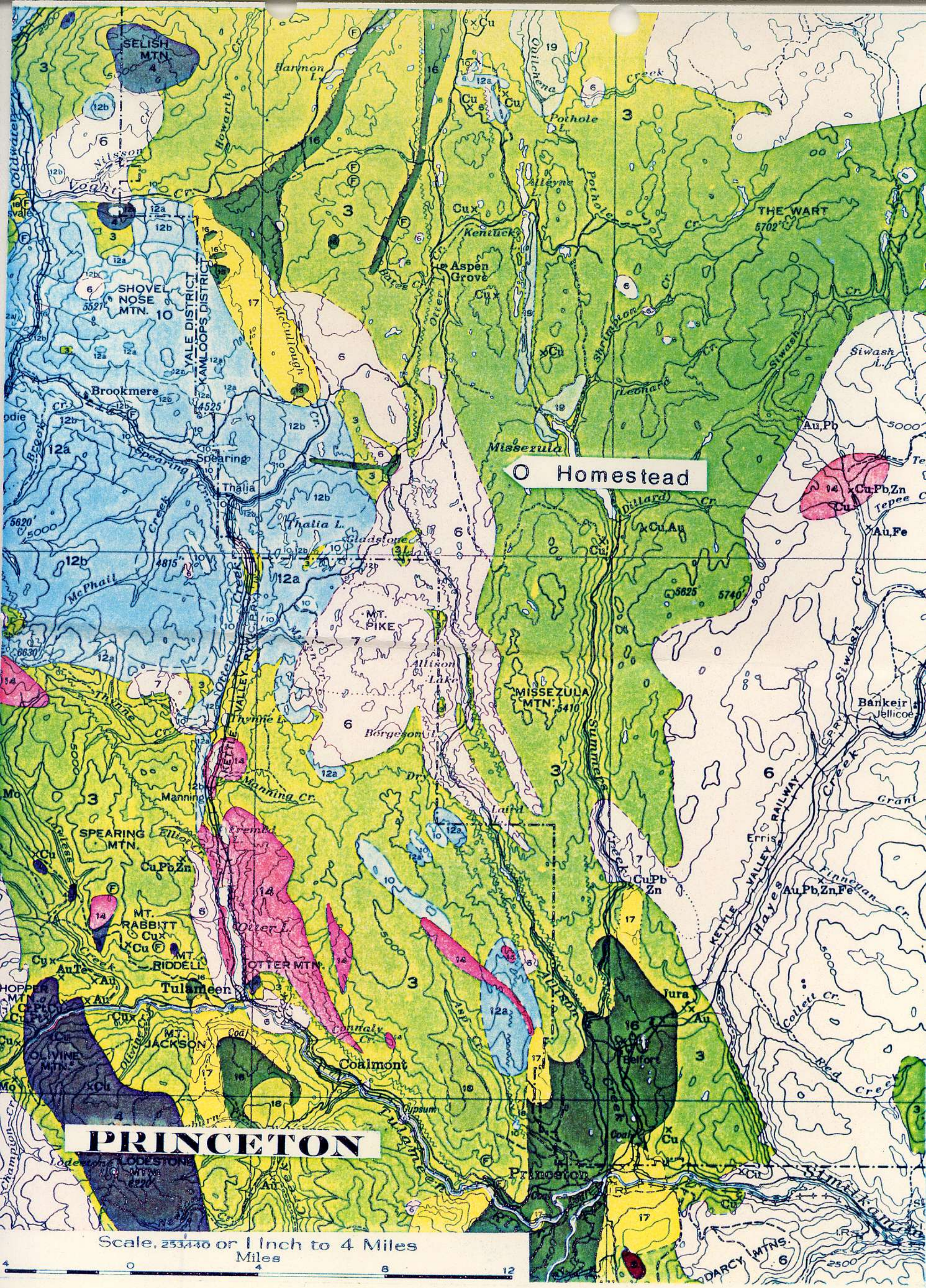
PRINCETON
O Homestead
SELISH MTN.
SHOVEL NOSE MTN.
YALE DISTRICT
KAMLOOPS DISTRICT
Brookmere
Spearing
Thalia
Thalia L.
Gladstone
MT. PIKE
Allison Lake
Borgeson L.
MISSEZULA MTN.
Missezula L.
Aspen Grove
Kentuck
Alleyne
Pothole L.
Quilchena
Shrimpton Cr.
Siwash Cr.
THE WART
Bankeir
Jellicoe
Erris
KETTLE VALLEY RAILWAY
Hayes Creek
Summers Creek
Dillard Cr.
Leonard
Harmon L.
Howarth Cr.
McCullough
Voght Cr.
Nilsson Cr.
Coldwater R.
McPhail
Spearing Creek
Thynne L.
Manning Cr.
Manning
SPEARING MTN.
MT. RABBITT
MT. RIDDELL
Tulameen
OTTER MTN.
Otter L.
Fremd L.
Coalmont
Gypsum
Tulameen R.
MT. JACKSON
OLIVINE MTN.
HOPPER MTN.
LODESTONE MTN.
Lodestone
Princeton
Jura
Belfort
Allison Cr.
Collett Cr.
Red Creek
Finnegan Cr.
DARCY MTNS.
Similkameen R.
Scale 253440 or 1 Inch to 4 Miles
Miles
4 0 4 8 12

FIG Hom-3

LEGEND

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CENOZOIC

TERTIARY

MIOCENE OR LATER

19 — *Valley basalt: vesicular, varicoloured basalt*

18 — *Plateau basalt: amygdaloidal, brown basalt*

MIOCENE OR EARLIER

PRINCETON GROUP

16 | 17

16, *Mainly shale, sandstone, and conglomerate; coal*
17, *Varicoloured andesite and basalt*

CRETACEOUS OR TERTIARY

UPPER CRETACEOUS OR LATER

14,15 — 14, *OTTER INTRUSIONS: pink and grey granite and granodiorite*
15, *LIGHTNING CREEK INTRUSIONS: grey quartz diorite*

MESOZOIC

CRETACEOUS

LOWER CRETACEOUS

KINGSVALE GROUP

12a-b,13 — 12a, *mainly volcanic breccia;* 12b, *mainly andesite and basalt porphyry*
13, *Andesite and basalt porphyry and volcanic breccia*

11 — PASAYTEN GROUP
Mainly grit and shale;
11a, *mainly purple lava, tuff, and breccia*

SPENCE BRIDGE GROUP

10 — *Hard, reddisn andesite and basalt*

JURASSIC (?) AND CRETACEOUS

UPPER JURASSIC (?) AND LOWER CRETACEOUS

DEWDNEY CREEK GROUP

9 — *Tuff, volcanic breccia, grit, argillite;* 9a, *mainly conglomerate*

JURASSIC OR LATER

8 — *COPPER MOUNTAIN INTRUSIONS: syenogabbro, augite diorite, pegmatite*

5,6,7 — *COAST INTRUSIONS:* 5, *grey, slightly gneissic granodiorite;* 6, *mainly reddish, coarse-grained, siliceous granite and granodiorite;* 7, *light coloured granodiorite, quartz diorite, and gabbro*

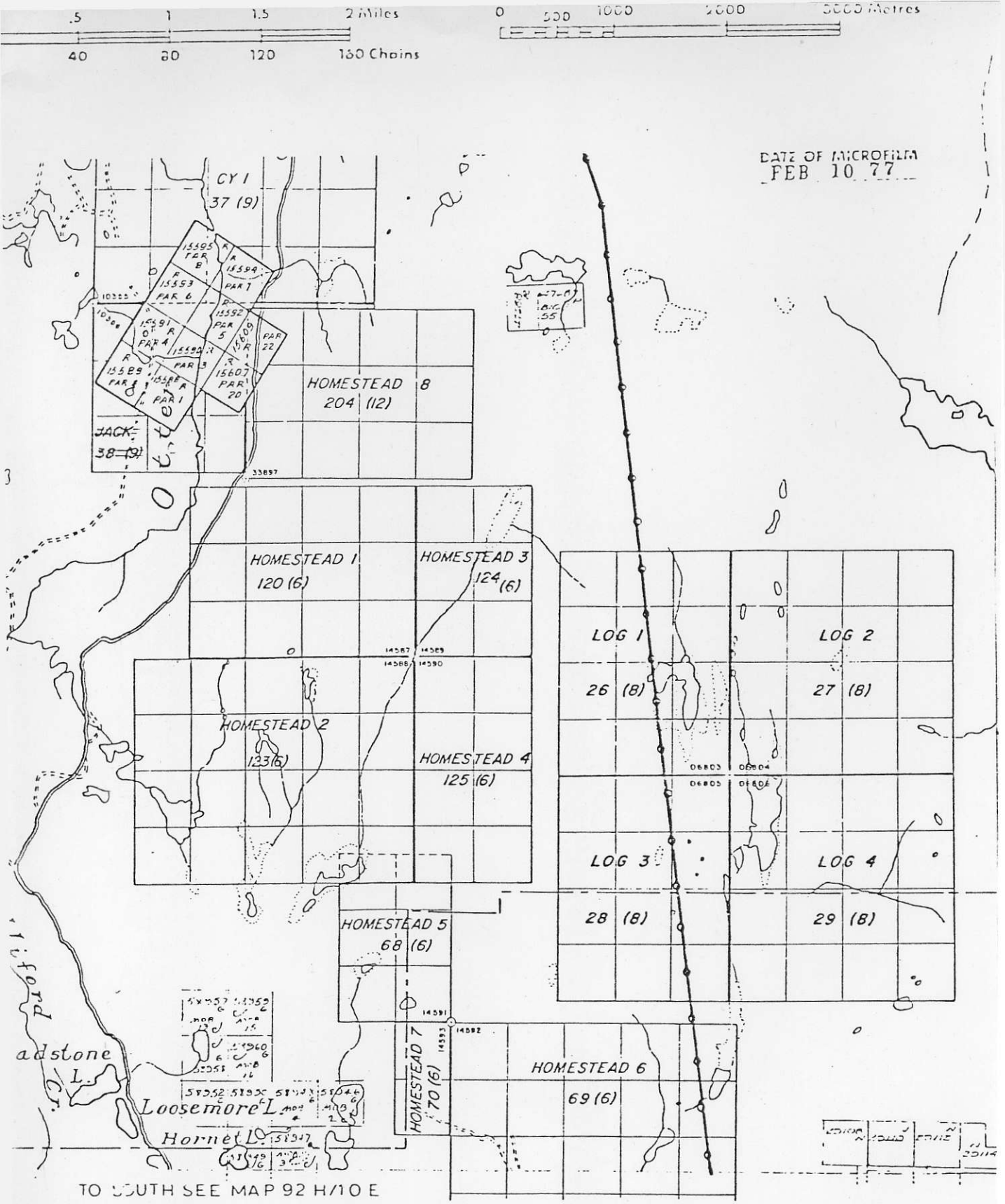
4 — *Peridotite, pyroxenite, gabbro*

TRIASSIC

UPPER TRIASSIC

NICOLA GROUP

3 — *Varicoloured lava; argillite, tuff, limestone; chlorite and sericite schist*



NT OF MINES AND PETROLEUM RESOURCES
VICTORIA, B.C.

MINERAL MAP 92 H/15E

#4598

QUINTANA MINERALS CORPORATION

#4598

HOMESTEAD

GEOLOGY, GEOCHEMISTRY & CLAIMS

SCALE

FEET 0 1000 2000 3000 4000 5000 FEET

METRES 0 300 600 900 1200 1500 METRES

inches 0 1 0 1 2 centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the original drawing & can be used as a reference for the original size.

Prepared by: J.S.C., M.R.W.	Date: Dec. 21, 1976	NTS MAP AREA	DRAWING No. HOM-2
Drawn by: ATK, Altair	Revised: Feb 15, 1977	92 - H - 15 / E	

LEGEND

Pleistocene Recent	4	Valley basalts	• , x Geochem. sample ; rock, soil or silt
Cretac.	3	Kingsvale andesite	• 76C450 / 34 Sample number; Cu in p.p.m.
L. Jur.	2b	Granite, quartz monzonite	Outcrop, area of scattered outcrop
U. Tr.	2,2a	Diorite; monzonite, syenite	Geological contact
U. Tr.	1	Nicola volcanics	Quintana claim boundary

Loc. approx. reported alt. 2b, qvs, py, old drill site

L.C.P. 8

HIGHWAY 5

76C434 f.chl., epi, minor sulph. 36

76C433 chl., epi 33

76C432 62 f. chl., epi d. py, tr cpy

76C431 f. chl., epi 16

76C429 f. chl., epi, tr. cpy 35

76C430 21

76C428 2.+ l.

76C427 f. py

76C456 22

76C455 3

76C454 106

Float 76C452 24

Float 76C451 11

76C450 34

76C453 34

76C449 20

WH76-144 X 43 □ LCP

WH76-145 X 32

WH76-146 X 108

WH76-147 X 104

WH76-148 X 178

WH76-149 (BELOW ESKER) X 302

WH76-150 X 14

WH76-151 X 13

WH76-152 X 20

WH76-153 X 27

WH76-154 X 30

WH76-155 X 19

WH76-156 X 21

WH76-157 X 28

WH76-158 X 36

Sample locations ± 200 m.

Sample locations ± 100 m.

WH76-140 X 47

WH76-141 X 34

WH76-142 X 27

WH76-143 X 28

76C448 py 240

76C447 tr py 116

76C446 81

76C445 48

76C444 32

76C443 74

76C442 4

76C441 84

76C440 62

76C439 strong f. epi, d. chl 43, minor py

76C438 f epi 41

76C437 strong f. epi., d. chl. tr. py. 77

76C436 leached, mal py ? 8

76C435 f. epi, d. chl., d.py 99

LCP 5,6,7

X Cu, Pb 2b

GULLFORD CR.

GLADSTONE

LOOSEMORE L.

HORNET L.

GULLIFORD L.

KETCHAN CK.

BETHLEHEM COPPER

cp, mal

3500

4000

4500