

84-#369-12268

ARCHER, CATHRO

& ASSOCIATES (1981) LIMITED

CONSULTING GEOLOGICAL ENGINEERS

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GEOLOGICAL AND GEOCHEMICAL REPORT

on the

- RAV 1 GROUP (RAVIOLI 1,2,8,12 and 13 CLAIMS)
- RAV 2 GROUP (RAVIOLI 3,14,15,16 and 19 CLAIMS)
- RAV 3 GROUP (RAVIOLI 4,10,11 and 17 CLAIMS)
- RAV 4 GROUP (RAVIOLI 5,6,7,9 and 18 CLAIMS)

CARIBOO MINING DIVISION

Dates of Work: July 11 to August 10, 1983

NTS: 93A/3W and 93A/6W

Latitude: 52°15'N

Longitude: 120°29'W

GEOLOGICAL BRANCH ASSESSMENT REPORT

MAY, 1984

for

12,268

ROCKRIDGE MINING CORPORATION, OWNER AND OPERATOR

C.A. MAIN

J.F. CARNE

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LIST OF CLAIMS

<u>Group Name</u>	<u>Claim Name</u>	<u>Record #</u>	<u>Numer Units</u>	<u>Record Date</u>
RAV 1	Ravioli 1	4783(4)	20	April 25, 1983
	2	4784(4)	6	"
	8	4835(5)	20	May 17, 1983
	12	4839(5)	20	"
	13	4840(5)	20	"
RAV 2	Ravioli 3	4785(4)	20	April 25, 1983
	14	4841(5)	20	May 17, 1983
	15	4842(5)	14	"
	16	4843(5)	20	"
	19	4999(7)	12	July 25, 1983
RAV 3	Ravioli 4	4786(4)	20	April 25, 1983
	10	4837(5)	9	May 17, 1983
	11	4838(5)	20	"
	17	4844(5)	20	"
RAV 4	Ravioli 5	4832(5)	16	May 17, 1983
	6	4833(5)	16	"
	7	4834(5)	20	"
	9	4836(5)	20	"
	18	4845(5)	20	"

INTRODUCTION

The Ravioli 1-19 claims are located 50 km northeast of the town of Williams Lake and 3 to 14 km south of Horsefly, B.C. (see Figure 1). Numerous all weather roads and secondary four-wheel drive roads provide excellent access to most of the claim block.

Geological mapping, linecutting and grid geochemical sampling were conducted on the Ravioli claims during the period July 11 to August 10, 1983 with a crew of two to six people who were accommodated in a tent camp on the property. Geological mapping at a scale of 1:20,000 covered an area of approximately 35 square kilometres, 2426 soil samples were collected, and 50 km of line were cut and surveyed.

HISTORY AND PREVIOUS WORK

The earliest known work in the area of the Ravioli claims includes geological mapping and an IP survey over the Wood property during 1966 and 1967 by Helicon Explorations Ltd. and Magnum Consolidated Mining Company. Between 1973 and 1977 Exploram Minerals Ltd. carried out exploration for porphyry copper deposits over much of the area now covered by the Ravioli claims. Exploram's work included I.P., magnetic and geochemical surveys and drilling of six diamond drill holes (AR Nos. 5548 and 5731). The area received little attention until 1983 when Placer Development Ltd. drilled on the Megabucks property, which is central to the Ravioli claims.

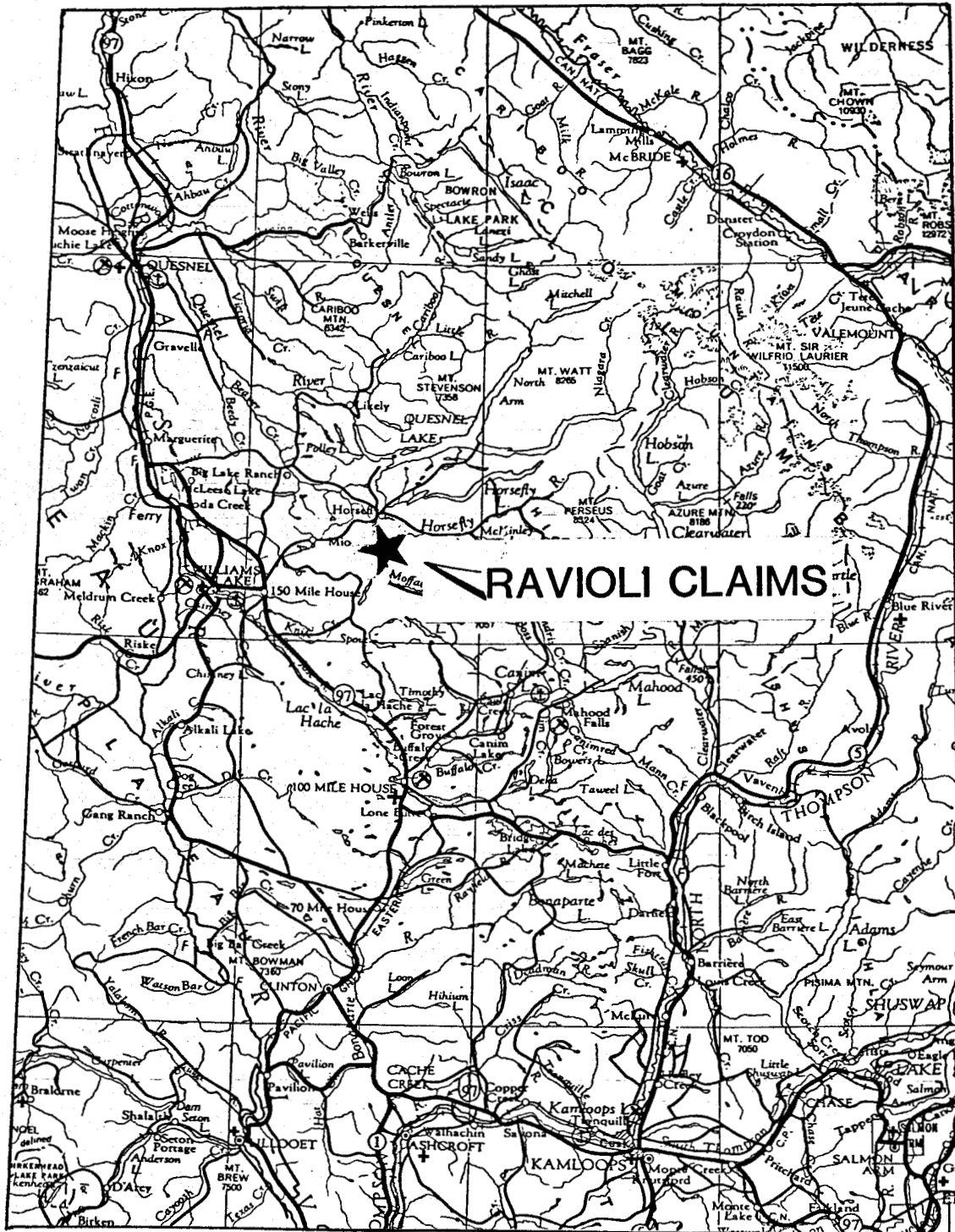


Figure 1. Ravioli Claims location map.

REGIONAL GEOLOGY

Geomorphology and Physiography

The Ravioli claims' area has subdued relief ranging from relatively gentle hills up to elevations of 1200 m down to low swampy areas at 850 m. Numerous lakes, many beaver dammed, dot the property and creeks tend to be of low gradient and do not cut to bedrock. Exposure of bedrock is limited to steeper hillsides, ridgetops and roadcuts. Lower areas are usually covered by extensive glacial till and alluvium. Glacial movement appears to have been toward the northwest.

This part of central British Columbia is an area of relatively low rainfall and the forest is fairly open and free of thick underbrush, except in some of the swamper areas or north slopes. The entire property lies below treeline.

General Geology

The Quesnel Trough subdivision of Central British Columbia is typified by Upper Triassic to Lower Jurassic volcanic, volcanoclastic and sedimentary rocks. These include augite porphyry, basaltic to andesitic flows, breccias and tuffs, and greywacke, siltstone, argillite and lesser limestone. These rocks are currently referred to as the Quesnel River Group by the Geological Survey of Canada. Small, probably synvolcanic, high level plutons of monzonite to diorite to syenite composition occur within the volcanic section and significant gold-copper mineralization has been found peripheral to these intrusions elsewhere in the Quesnel Trough.

The volcano-sedimentary sequence is intruded by the Lower Jurassic Takomkane Batholith, of granodiorite quartz monzonite and quartz diorite composition, and local, small Jurassic to Cretaceous granodiorite to quartz monzonite bodies.

The mesozoic rocks are capped by remnants of Tertiary conglomerate, sandstone and shale and overlying plateau basalts. These rock units are relatively undeformed and unmetamorphosed.

PROPERTY GEOLOGY

Preliminary property mapping at a scale of 1:20,000 has delineated nine map units. Seven of these are subdivisions of the Quesnel River Group while the other two are the Takomkane Batholith and Tertiary rocks. The geology is presented on Figure 2.

Units 1 and 2 of the Quesnel River Group are dark green to maroon porphyritic rocks with 5 to 15 mm blocky augite crystals and 1 to 2 mm feldspar crystals in a finer-grained groundmass. Occasionally coarse pyroclastic to agglomeratic textures are visible on weathered surfaces. Thus, these rocks are at least, in part, extrusive. Elsewhere, more massive textures suggest a high level intrusive origin for the augite porphyry rocks.

Unit 3, welded latite tuff, is generally pale green to pink, and contains lapilli of fine-grained rock and maroon augite porphyry, flattened pumice grains and occasional fragments of vein quartz in a feldspar crystal tuff matrix. Pumice fragments up to 15 cm long have been observed.

Unit 4, epiclastic rocks, includes tuffaceous greywacke to siltstone, sometimes with a carbonate cement. These rocks are typically flaggy weathering and feldspar crystals and lithic grains show evidence of reworking. Very rarely, some indications of bedding can be inferred.

Unit 5, bedded feldspar porphyry, is a very distinctive, blocky weathering rock with 20 to 40%, large (2 cm) plagioclase laths in an aphanitic dark grey groundmass. Scattered ovoid chlorite and epidote patches may be amygdules.

Unit 6, a leucocratic monzonite(?), is similar to some of the augite porphyry volcanic rocks but is sometimes more even grained throughout with little groundmass. Only two small outcrops of this unit have been observed.

Unit 7, Hornfels Zone, consists of fine-grained, blocky weathering, dark green rocks. Occasional small feldspar grains are visible but crystal margins are somewhat obscure. These rocks lie along the western margin of the Takomkane Batholith.

Unit 8, Takomkane Batholith, is composed of leucocratic, granitic-textured granodiorite to quartz diorite. Quartz content varies from 5 to 15% and hornblende content from 10 to 20%.

Unit 9, undivided Tertiary rocks, includes poorly consolidated conglomerate, sandstone, siltstone and shale overlain by vesicular, fine-grained basalt.

GEOCHEMICAL SURVEY

Reconnaissance soil samples were taken at 250 m intervals around the periphery of each claim group and four grid areas were sampled in detail based on anomalies from this preliminary sampling and from geophysical anomalies from previous work. Preparatory to the grid sampling, baseline and ten tielines were cleared of underbrush and smaller trees, surveyed using chain and compass, and marked with pickets upon which grid coordinates were noted. A total of 50 km of lines were laid out in this manner and the locations are shown on Figure 2.

Soil samples were collected with a mattock at 50 m intervals along 100 metre spaced crosslines between the surveyed tielines. Where possible, "B" horizon soil was collected. In swampy areas samplers collected "A" horizon material or bog samples. These different sample types are noted on the maps. Sampling lines were roughly surveyed with compass and hip chain.

Samples were placed in brown paper envelopes, dried and packed for shipment to Chemex Labs Ltd. of North Vancouver, B.C., where all were geochemically analysed for gold using neutron activation. In addition, most were also analysed for copper by atomic absorption. Gold results of the reconnaissance-sampling are presented on Figure 2, while copper and gold results for the four grid areas are illustrated on Figures 3 through 8.

RESULTS AND DISCUSSION

Grid A, shown on Figures 3 and 4, has the best copper and gold results. Values to greater than 10,000 ppm copper lie within a zone of greater than 40 ppm which is 1300 m long, 600 m wide and open to the south. Anomalous gold values, up to 348 ppb, are more scattered, but a weak anomaly, greater than 5 ppb, is nearly coincident with the Cu greater than 40 ppm contour. Poor gold response may be due to its lower dispersion rates through overburden.

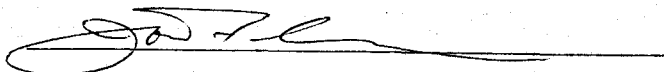
Copper and gold values from grids B and D, plotted on Figures 5 to 8, are relatively low. On Grid B a number of scattered anomalous copper values, up to 390 ppm, occur across the grid. Anomalous gold values, up to 455 ppb, are also scattered and show no clear cut trends or correlation with copper. Overburden and Tertiary cover are more extensive on this grid than on Grid A.

Grid D, testing an area of high response in the reconnaissance sampling, shows scattered, weakly anomalous copper and gold values up to 105 ppm and 250 ppb, respectively. Overburden is of an unknown thickness here.

Further work should concentrate on extending Grid A to the south and east.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



J.C. Carne



C.A. Main

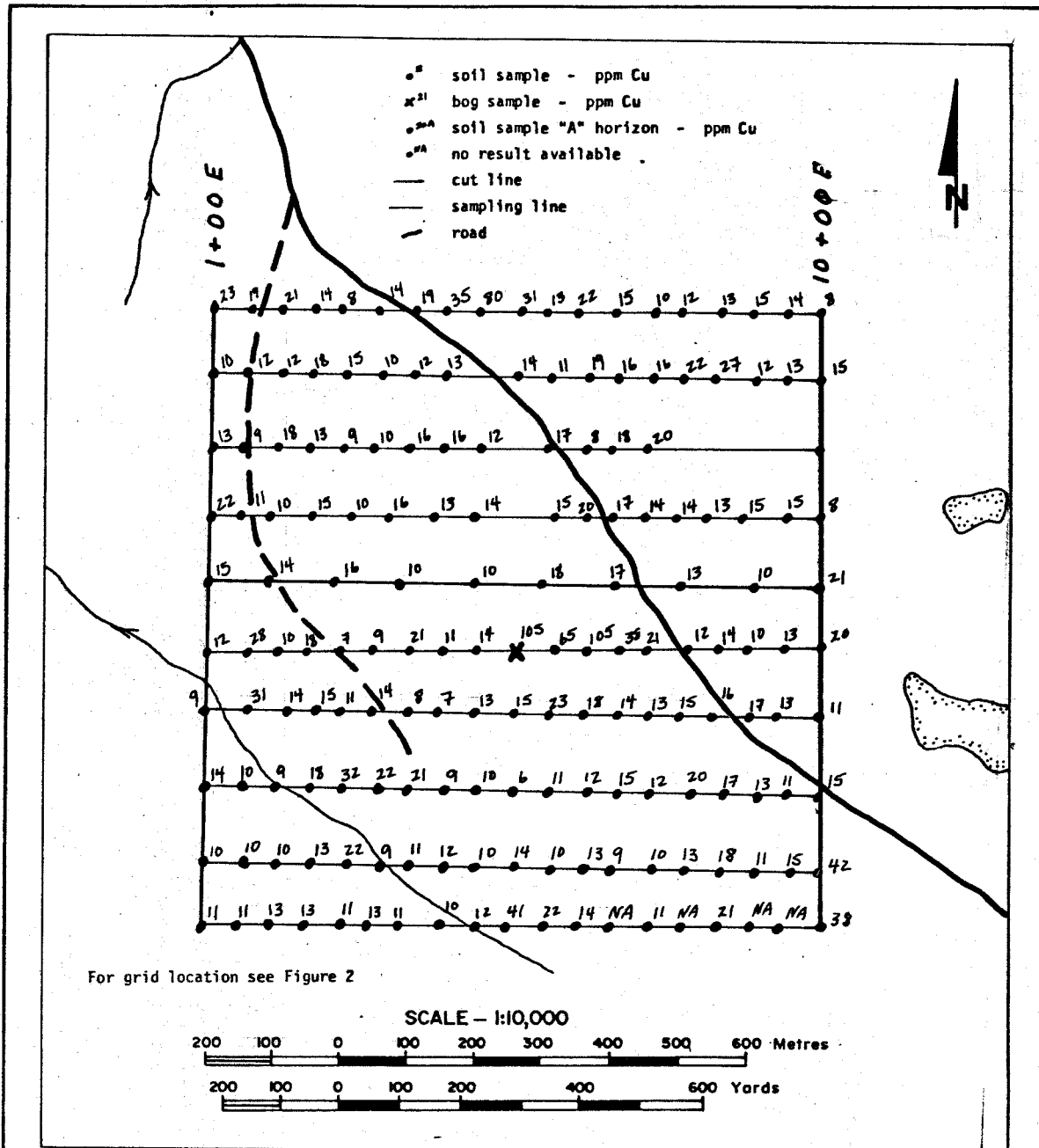


Figure 7

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COPPER GEOCHEMISTRY

GRID D

RAVIOLI CLAIMS

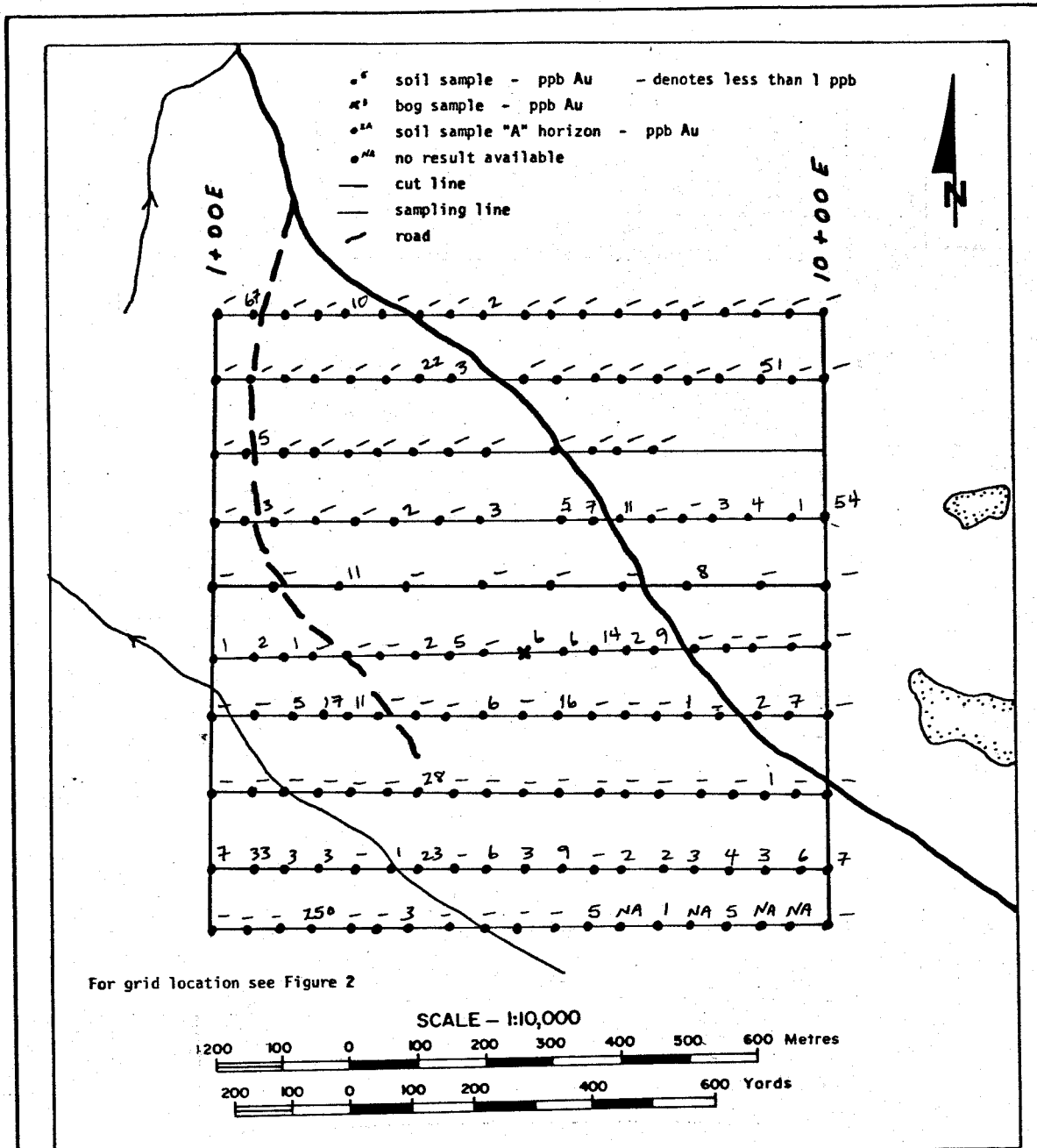


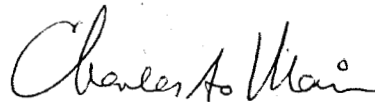
Figure 8
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
GOLD GEOCHEMISTRY
GRID D
RAVIOLI CLAIMS

APPENDIX I
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Charles A. Main, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Vancouver, British Columbia, hereby certify that:

1. I graduated from the University of British Columbia in 1971 with a B.Sc. majoring in Geological Sciences and Chemistry.
2. I have been actively engaged as a geologist in mineral exploration since 1971 and as a partner of Archer, Cathro & Associates (1981) Limited since June 1, 1981.
3. I have personally participated in or supervised the field work reported herein.

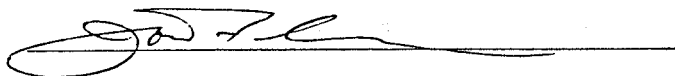


Charles A. Main, B.Sc.

STATEMENT OF QUALIFICATIONS

I, Joan F. Carne, geologist, with business address in Vancouver, British Columbia and residential address in Burnaby, British Columbia, hereby certify that:

1. I graduated from Middlebury College, Vermont in 1974 with a B.A. and from the University of British Columbia in 1979 with an M.Sc. majoring in Geological Sciences.
2. I am a member of the Geological Association of Canada.
3. From 1977 to the present, I have been actively engaged as a geologist in mineral exploration in Alaska, Washington, British Columbia and Yukon Territory.
4. I have personally participated in or supervised the field work reported herein and have interpreted all data resulting from this work.



Joan F. Carne, B.A., M.Sc.

APPENDIX II
STATEMENT OF COSTS

STATEMENT OF COSTS

Wages

C.A. Main (party chief) 24 days @ \$300/day	\$7,200.00	
July 11-19: Linecutting and supervision		
July 20, 26-29, Aug.1-3, 5-10: Mapping and supervision		
P. Newman (assistant) 25 days @ \$113/day	2,825.00	
July 14-22, 25-27: Linecutting		
July 24,28-31, Aug.1-3,5-7,9-10: Geochemical sampling and prospecting		
A. Starr (assistant) 27 days @ \$73/day	1,971.00	
July 14-22: Linecutting		
July 23-31, Aug.1-3,5-10: Geochemical sampling		
M. Knight (jr. assistant) 27 days @ \$57/day	1,539.00	
July 14-22,25-27: Linecutting		
July 23-24,28-31, Aug.1-3,5-10, Geochemical sampling		
M. Wilson (jr. assistant) 29 days @ \$57/day	1,653.00	
July 11-22: Linecutting		
July 23-31, Aug.1-3,5-10: Geochemical sampling		
J. Carne (geologist) 8 days @ \$270/day	<u>2,160.00</u>	
July 26-29,31, Aug.1-2,5: Mapping		
		\$17,348.00

Room and Board

140 mandays @ \$55/day	7,700.00
includes food, camp equipment, support expenses	

Transportation

140 mandays @ \$35/day	4,900.00
includes truck and motorcycle rental, fares Vancouver to Williams Lake	

Analyses

365 soils for Au (NAA) @ \$5.80	\$ 2,117.00	
71 soil samples for Au (NAA),Ag,Cu @ \$8.04	570.84	
1990 soils analyzed for Au (NAA) and Cu @ \$7.40	<u>14,726.00</u>	
		<u>17,413.84</u>

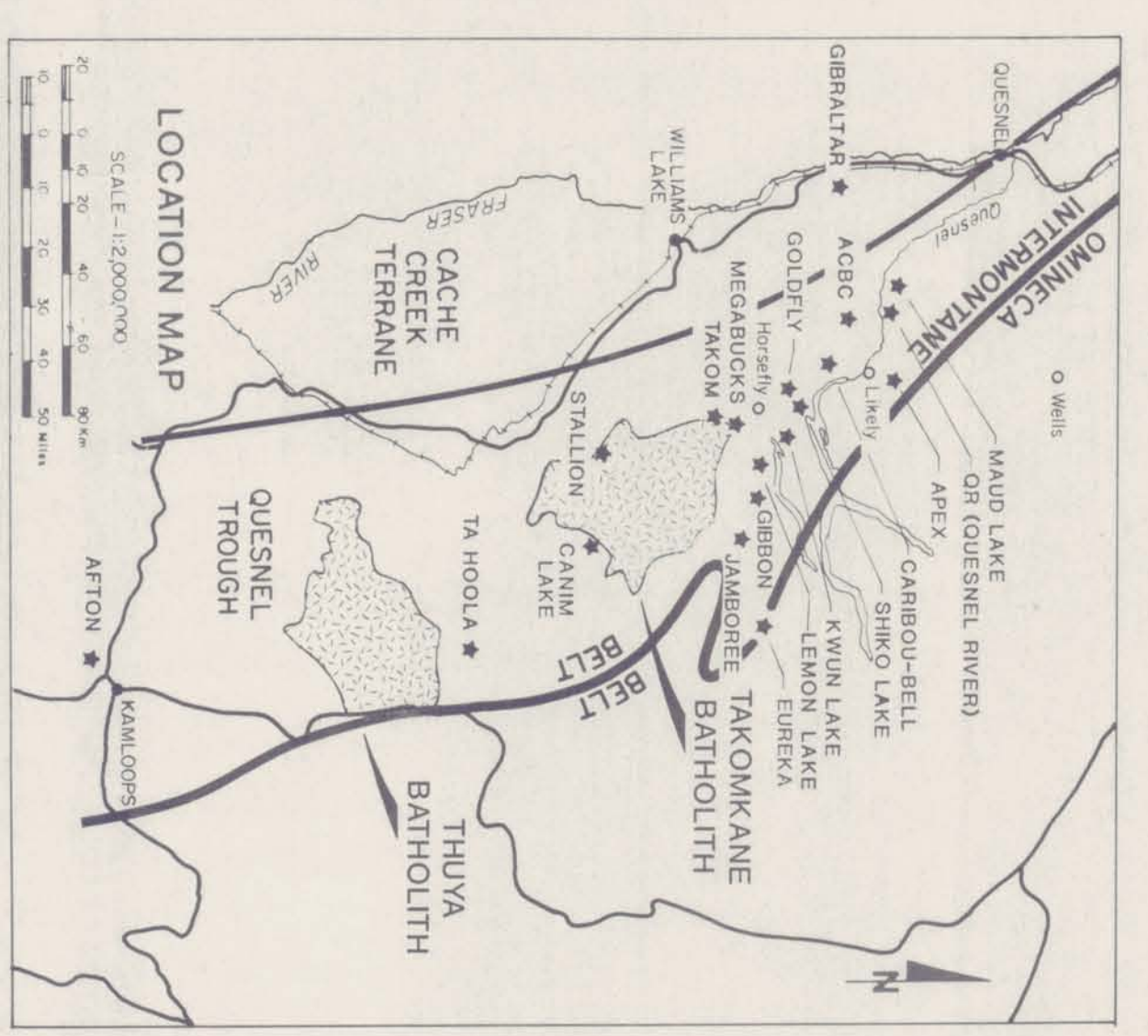
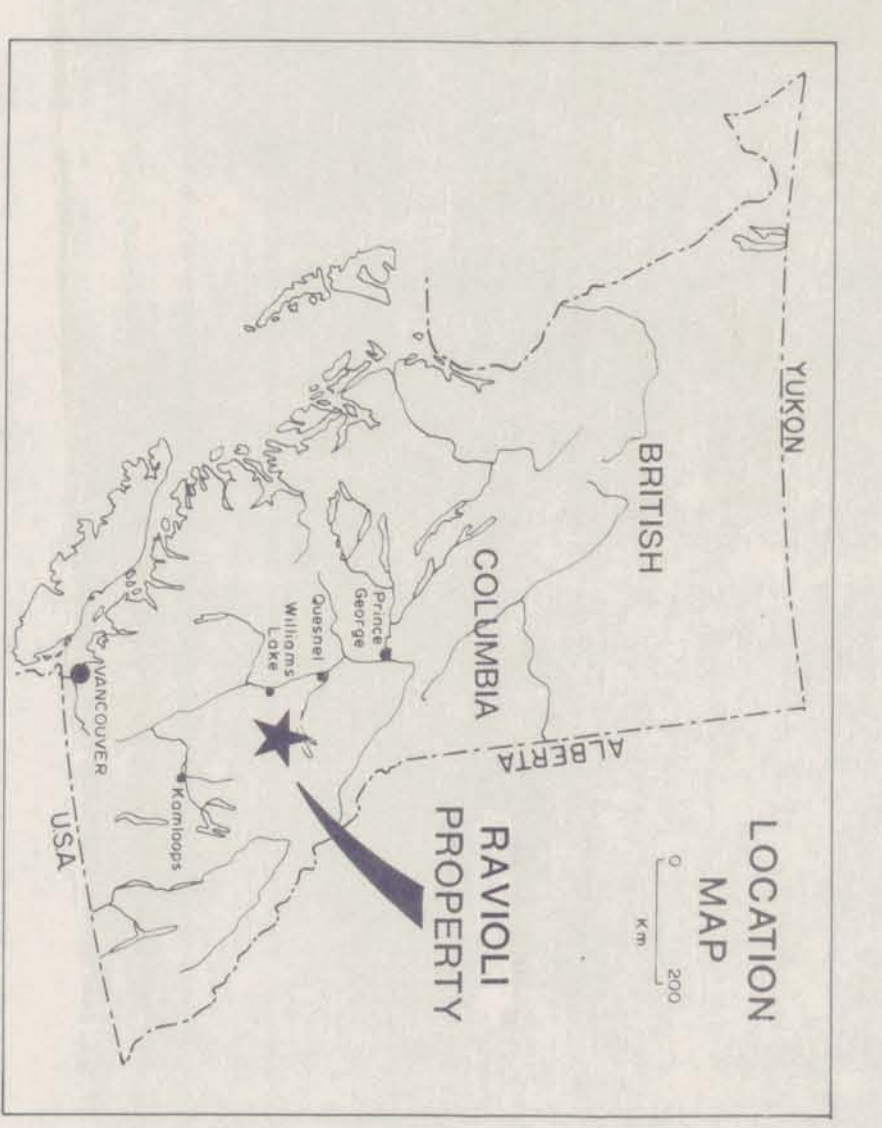
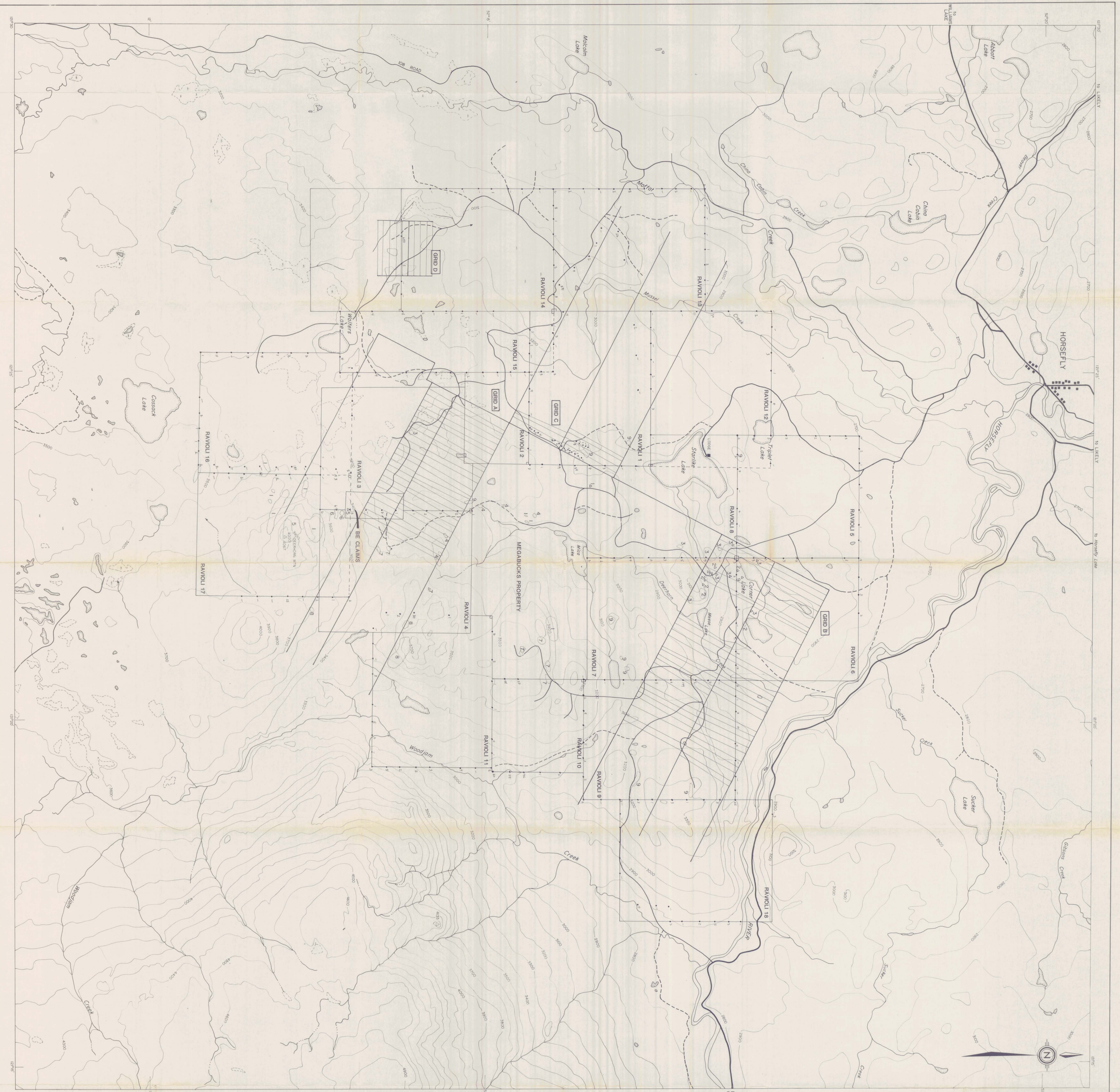
TOTAL FIELD EXPENDITURES - \$47,361.84

STATEMENT OF COSTS (Cont'd)

	TOTAL FIELD EXPENDITURES -	\$47,361.84
Report Preparation - 15% of field expenditures		<u>7,104.28</u>
	TOTAL EXPENDITURES -	<u>\$54,466.12</u>

These costs are apportioned to the four groups on the basis of percentage of work on each group as follows:

RAV 1 Group - 21% of total -	\$11,437.88
RAV 2 Group - 25.5% of total -	13,888.86
RAV 3 Group - 13% of total -	7,080.60
RAV 4 Group - 40.5% of total -	22,058.78



LEGEND

- Creaceous to Tertiary
 - 9 Olivine basalts, conglomerate, sandstone and shale
- Lower Jurassic
 - 8 Takomkane Batholith
- Upper Triassic to Lower Jurassic - Quesnel River Group
 - 7 Hornfels zone
 - 6 Subvolcanic monzonite?
 - 5 Banded felsic porphyry
 - 4 Epilastic rocks - triffaceous siltstone to greywacke
 - 3 Welded latite tuffs
 - 2 Maroon augite porphyry
 - 1 Dark green augite porphyry, locally pyroclastic

Limit of outcrop
7.0 Boulder

Soil geochem lines
/ Cut lines

Claim boundaries - LCP's located by topographic maps

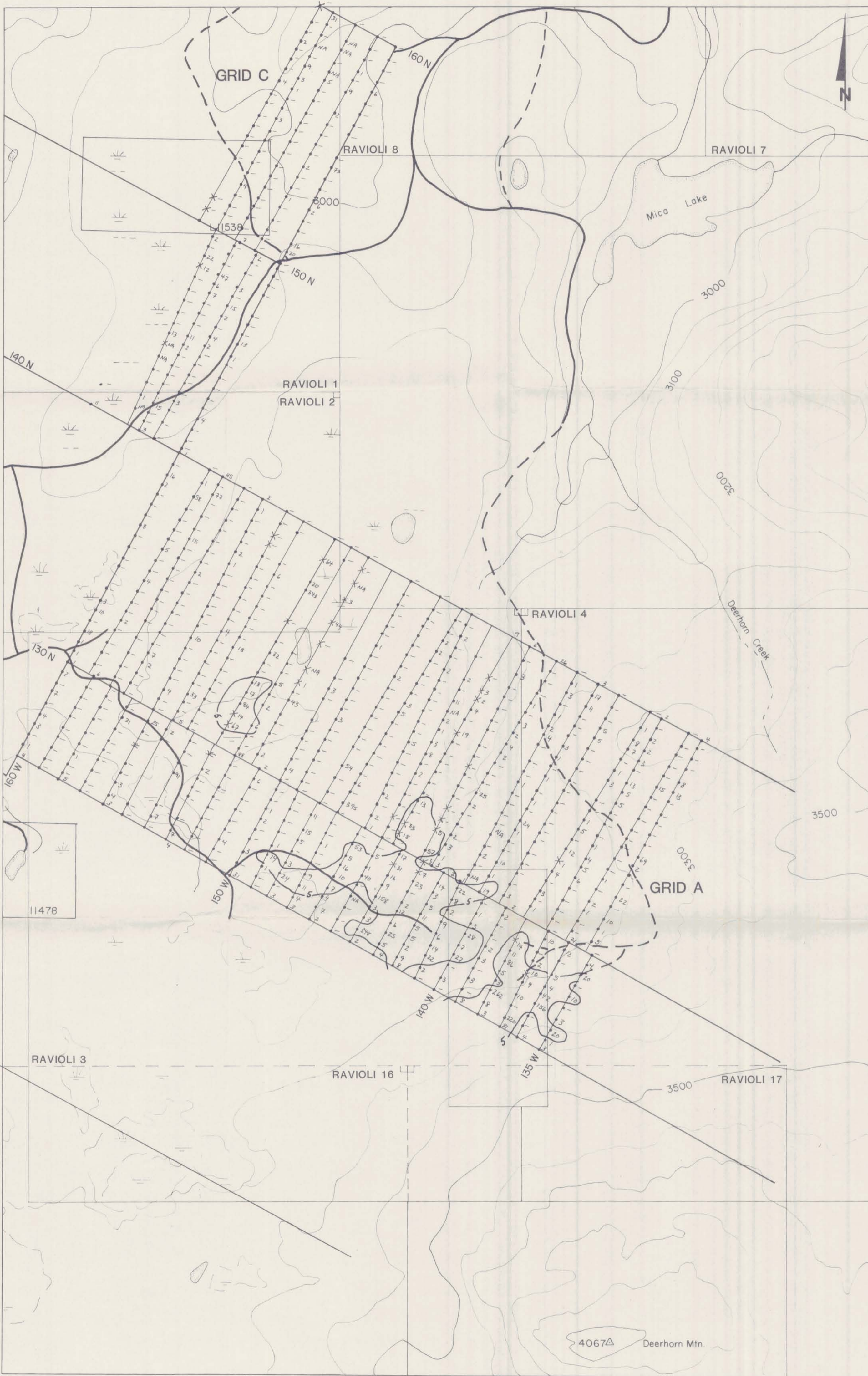
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GEOLOGICAL RESEARCH ASSESSMENT REPORT

•• soil sample - ppb Au (- denotes values less than one)
•• stls sample - ppb Au

Figure 2
GEOLOGY, CLAIMS LOCATION, GRID LOCATION AND REGIONAL GOLD GEOCHEMISTRY RAVIOLI CLAIMS





LEGEND

- ⁵ soil sample - ppb Au - denotes less than 1 ppb
- ³ bog sample - ppb Au
- ^{2A} soil sample "A" horizon - ppb Au
- ^{NA} no result available
- cut line
- sampling line
- road

For grid location see Figure 2

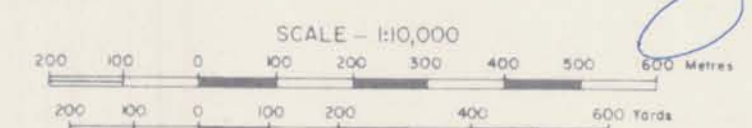
GEOLOGICAL BRANCH
ASSESSMENT REPORT

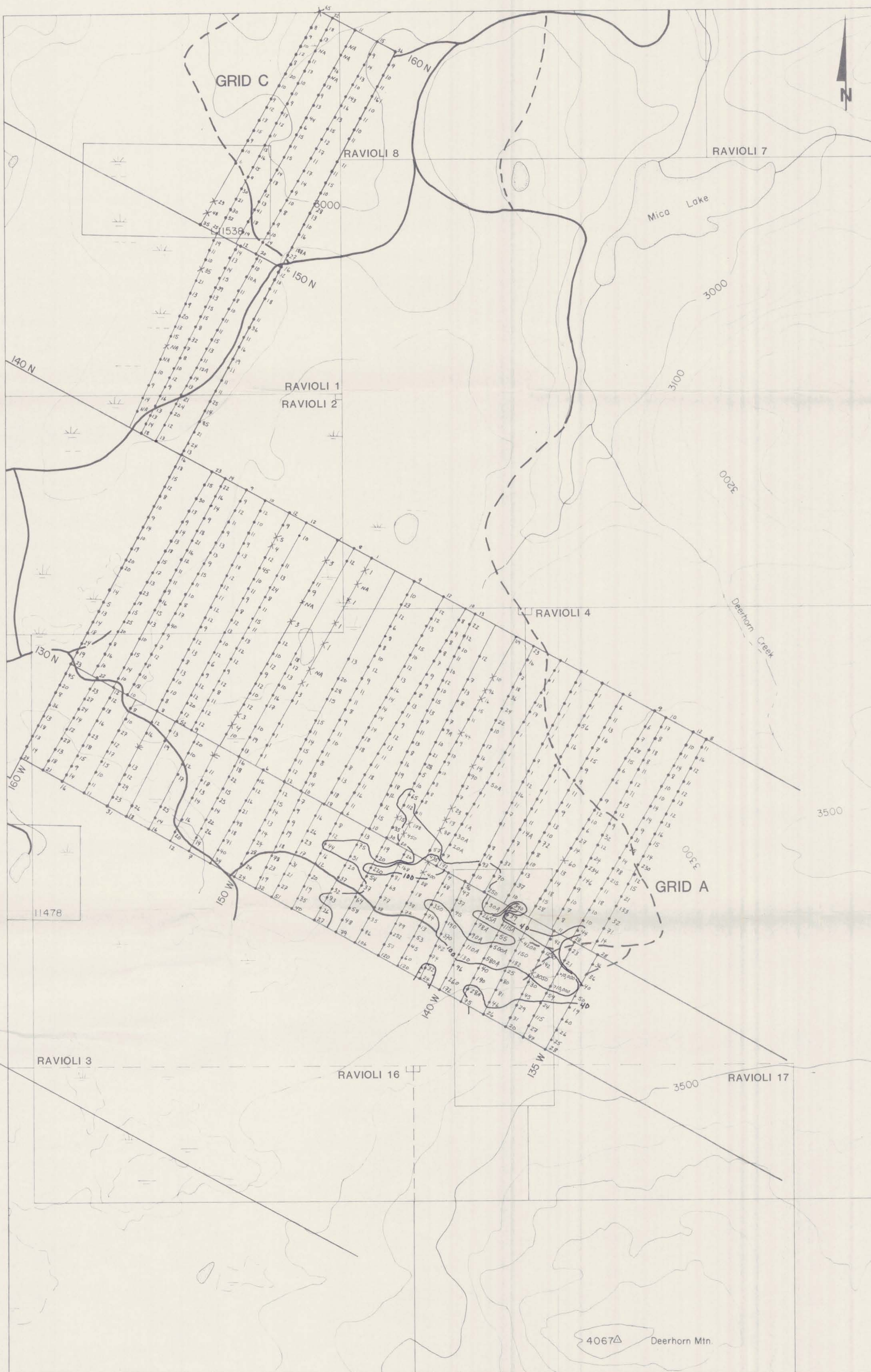
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Figure 4

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GOLD GEOCHEMISTRY
GRIDS A AND C
RAVIOLI CLAIMS





LEGEND

- ¹⁵ soil sample - ppm Cu
- x²¹ bog sample - ppm Cu
- ^{50A} soil sample "A" horizon - ppm Cu
- ^{NA} no result available
- cut line
- sampling line
- road

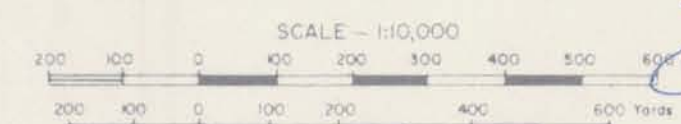
For grid location see Figure 2

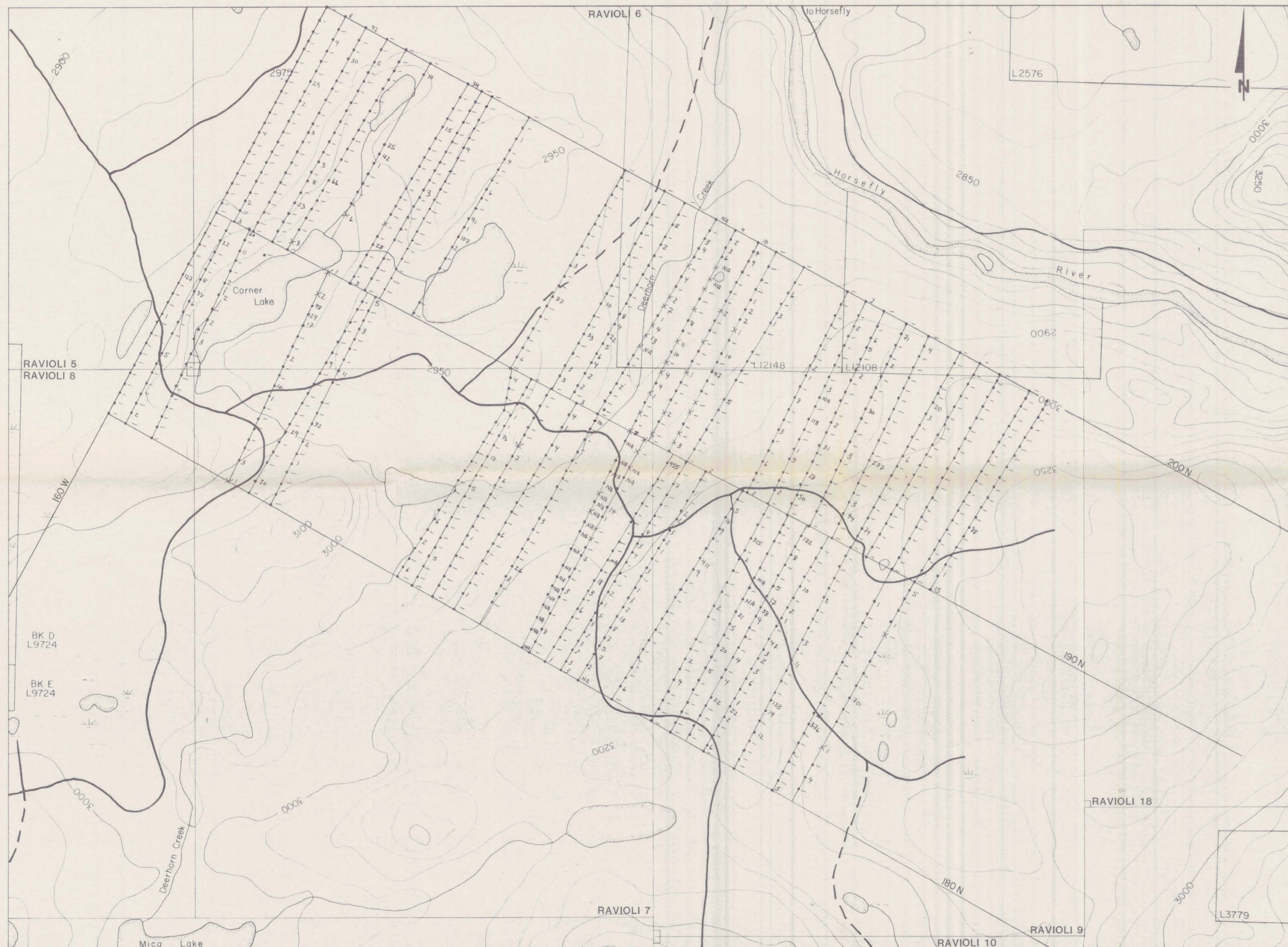
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Figure 3
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

COPPER GEOCHEMISTRY
GRIDS A AND C
RAVIOLI CLAIMS





LEGEND

- ^e soil sample - ppb Au - denotes less than 1 ppb
- ^b bog sample - ppb Au
- ^{1A} soil sample "A" horizon - ppb Au
- ^{NA} no result available
- cut line
- sampling line
- road

For grid location see Figure 2

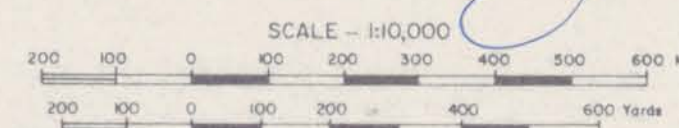
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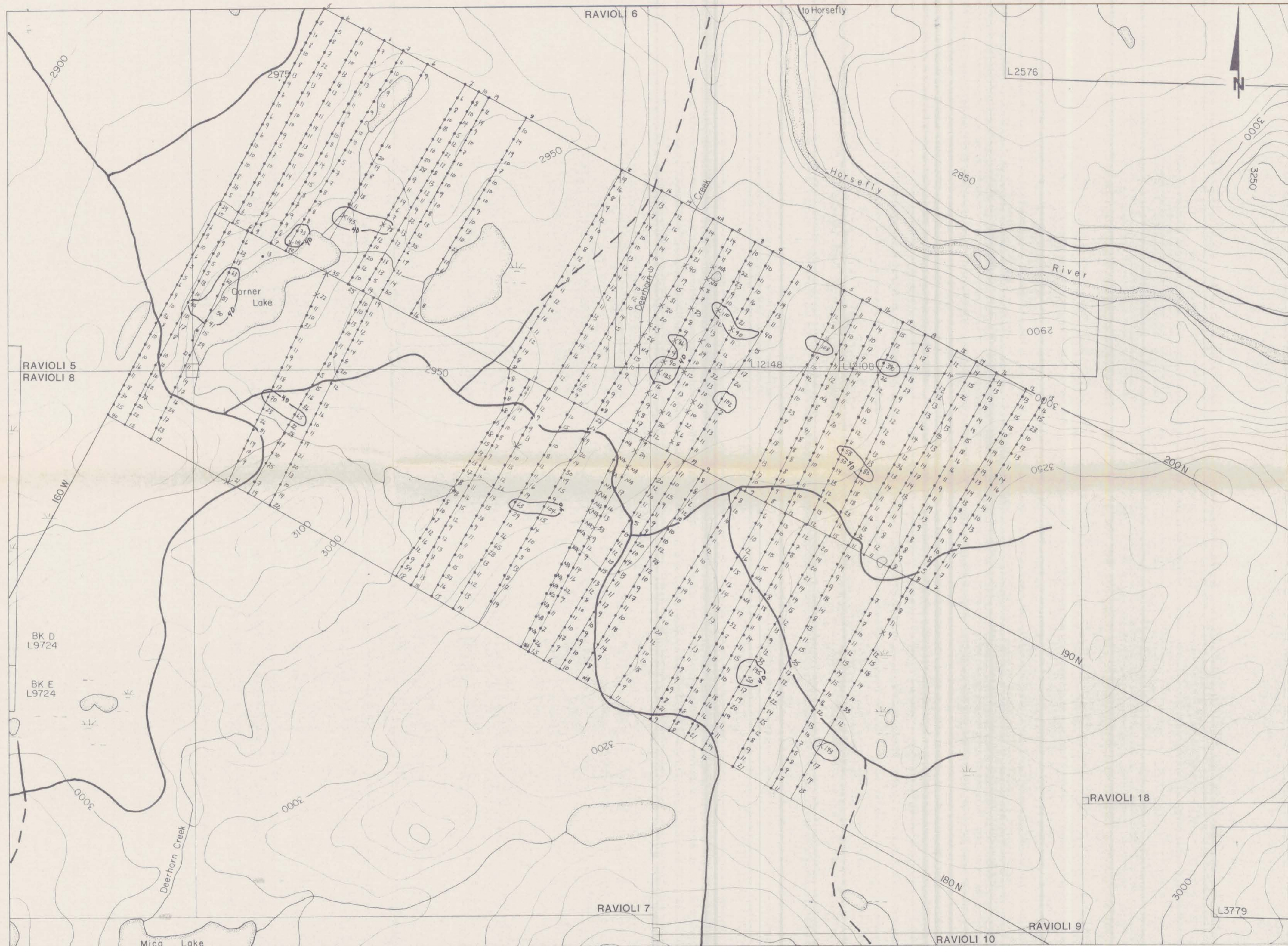
Figure 6

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**GOLD GEOCHEMISTRY
GRID B
RAVIOLI CLAIMS**



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LEGEND

- soil sample - ppm Cu
- ✕ bog sample - ppm Cu
- ^{soA} soil sample "A" horizon - ppm Cu
- ^{NA} no result available
- cut line
- sampling line
- road

For grid location see Figure 2

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Figure 5

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

COPPER GEOCHEMISTRY

**GRID B
RAVIOLI CLAIMS**

