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GEOCHEMICAL REPORT

on the

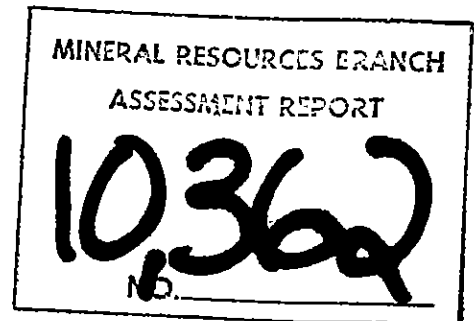
BOB 5, TAGA 3 and TAGA 4 CLAIM GROUP

LIARD and OMINECA MINING DIVISIONS

NTS 94F/13E

Latitude: 57°59'N

Longitude: 125°50'W



by

R.C. Carne and R.J. Cathro

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

for

GETTY CANADIAN METALS, LIMITED (Owner)

and

GATAGA JOINT VENTURE (Operator)

Submitted January 7, 1982

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LIST OF CLAIMS

<u>Claim</u>	<u>Record Number</u>	<u>Number of Units</u>	<u>Record Date</u>	<u>Mining Division</u>
Bob 5	293	14	April 28, 1977	Liard
Taga 3	570	16	April 20, 1977	Omineca
Taga 4	571	16	April 20, 1977	Omineca

GEOCHEMICAL REPORT
on the
BOB 5, TAGA 3 and TAGA 4 CLAIM GROUP

Introduction

The Bob 5, Taga 3 and Taga 4 claims were acquired in 1977 by Gataga Joint Venture in the name of Welcome North Mines Ltd. to cover a possible strike extension of stratiform lead-zinc mineralization on the D, P and Goof claims located at Driftpile Creek, some 10 km to the northwest. Gataga Joint Venture (GJV) is a syndicate composed of Aquitaine Company of Canada Ltd., Chevron Canada Limited, Getty Canadian Metals, Limited, Welcome North Mines Ltd. and Castlemaine Exploration Ltd. The Bob 5, Taga 3 and Taga 4 claims are part of a larger group whose ownership was transferred from Welcome North Mines Ltd. to Getty Canadian Metals, Limited in April 1981. The exploration program was managed by Archer, Cathro & Associates (1981) Limited and was directed in the field for the fifth successive season by R.C. Carne.

About 325 soil and silt samples were taken at roughly 50 m by 100 m intervals on the northeast part of the claim group. Topographic control for the geochemical survey was established with the aid of a contoured 1:5,000 scale orthophoto map produced from aerial photography flown by GJV in 1979. The 1981 work was carried out in the period August 13 to August 19.

Location and Access

The Bob 5, Taga 3 and Taga 4 claim group is located 10 km southeast of Driftpile Creek on NTS map sheet 94F/13E (Figure 1). The centre of the group is located at latitude 57°59'N and longitude 125°50'W.

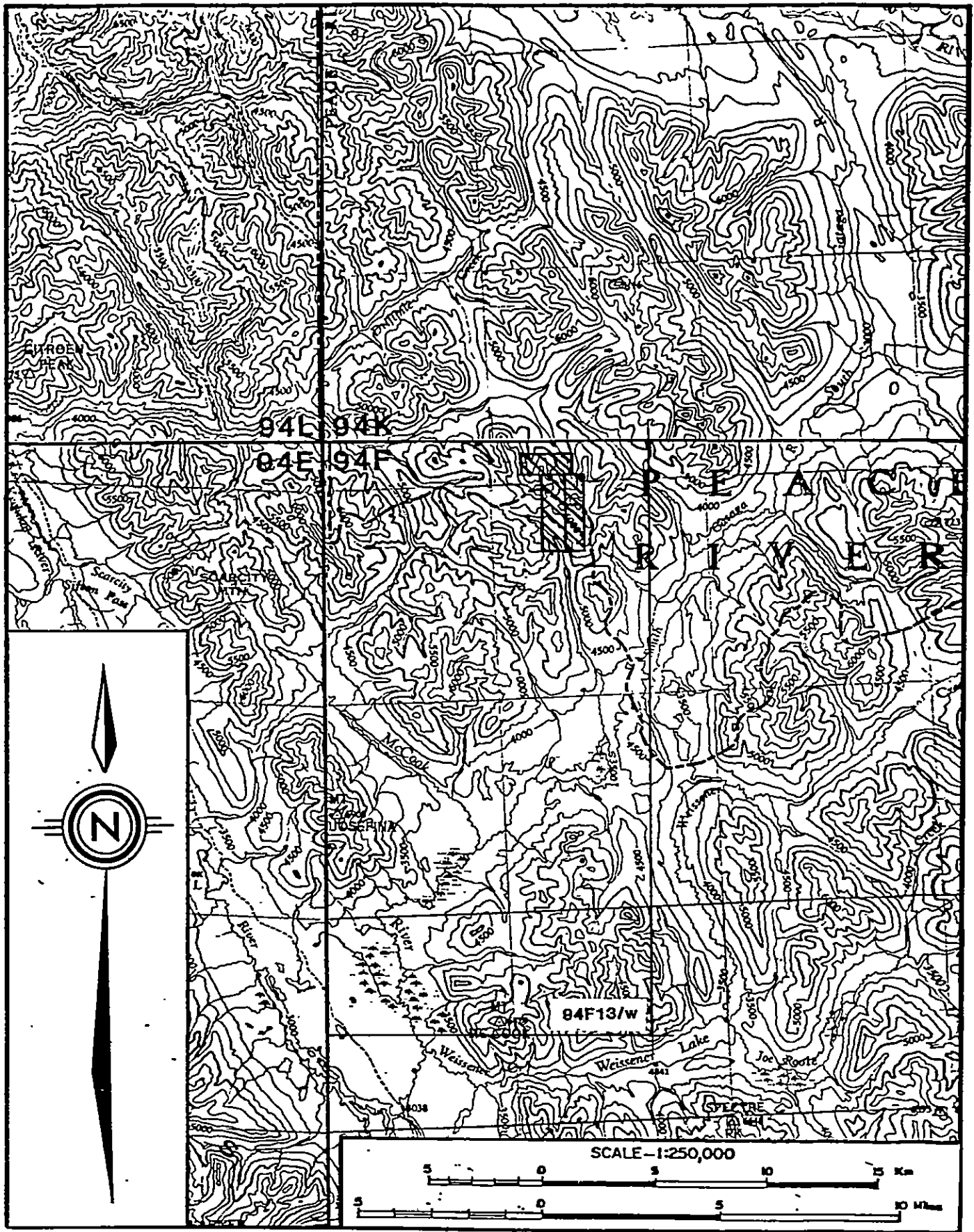


Figure 1: Location of Bob 5, Taga 3 and Taga 4 claim group (94F 13/W).

Access is by float-equipped, fixed-wing aircraft from Watson Lake, Yukon Territory, about 320 km to the northwest, to Mayfield Lake located about 15 km northeast of the property. Fuel and camp supplies used for the 1981 program were trucked 300 km from Watson Lake to Muncho Lake (km 747 on the Alaska Highway) and ferried 100 km during mid-April, 1981 by ski-equipped, single Otter aircraft to a winter airstrip located at the headwaters of Driftpile Creek. Field work was conducted with a helicopter supported program based at a permanent camp located on Driftpile Creek, about 10 km to the northwest.

Regional Geology

The Gataga Lakes area lies within Kechika Trough, a southeasterly extension of the much larger Selwyn Basin. Sedimentary rocks range in age from Cambrian to lower Mississippian. Prior to upper Devonian, easterly derived clastic sedimentary assemblages reflect normal sedimentation while the westerly derivation of upper Devonian to Mississippian sedimentary rocks resulted from block faulting and uplift along the continental margin. Regional stratigraphic relationships are summarized on Figure 2.

Structured geology of the area is dominated by northwesterly-trending, easterly-directed thrust faults. Pelitic sedimentary rocks within thrust sheets are complexly deformed into upright to slightly overturned isoclinal folds cut by numerous near-vertical shear zones. A penetrative axial plane foliation is commonly well developed. Structural geology is complicated by deformation initiated prior to deposition of middle Devonian clastic rocks above a pronounced unconformity.

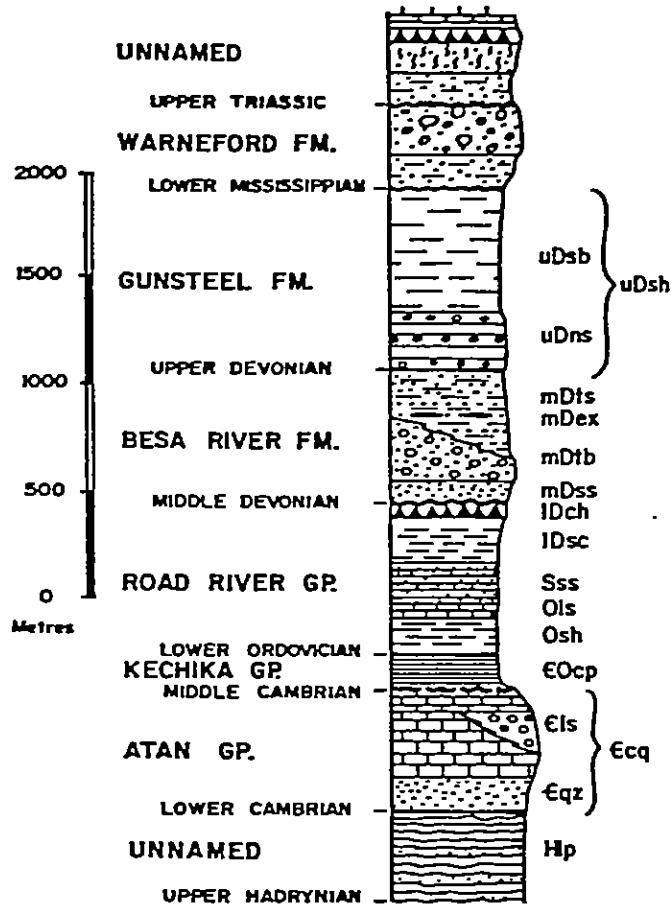


Figure 2: Generalized stratigraphy, Gataga Lakes area.

Upper Devonian siliceous and pyritic black shales are host to numerous stratiform barite and barite-lead-zinc deposits in the area, notably those at Driftpile Creek, some 10 km along strike to the northwest and at the Cyprus Anvil-Hudson Bay Oil and Gas Cirque claims, located about 130 km southeast of the area. A relatively small and low grade massive sulphide deposit is hosted by upper Devonian black shales on the GJV Bear claims, located about 5 km southeast along strike from the Bob and Taga claims. Geology of the Bear and Driftpile showings is summarized in previous reports submitted for assessment credit by GJV.

Geochemical Survey

During the period August 13 to August 19, 1981 approximately 325 soil and silt samples were collected from the Bob 5, Taga 3 and Taga 4 claims. Additional samples collected from adjacent areas during the survey are also reported on here. Soil samples were taken every 50 m along traverse lines spaced at 100 m intervals and running perpendicular to the regional structural grain. Samples, taken from the "B" soil horizon where possible, were located with the aid of a Hip Chain measuring device from base lines established with a nylon chain on a contoured 1:5,000 scale orthophoto map. Sample locations were marked with their prenumbered kraft bag designation on orange survey flagging. All samples were shipped airfreight to Chemex Labs Ltd., North Vancouver, B.C. where they were dried, screened to a minus 80 mesh fraction and analyzed routinely for copper, lead, zinc and silver content using a nitric-perchloric acid extraction and atomic absorption spectrometry. Samples which contained a high barium content required redigestion due to barium interference with lead analysis. A portion of the minus 80 mesh fraction from each sample is stored at the lab.

Background levels for the four metals have previously been statistically established on results of grid soil geochemical surveys carried out by GJV over known mineralization at Driftpile Creek. Results are tabulated below:

	<u>Threshold Value (ppm)</u>	<u>Moderately Anomalous (ppm)</u>	<u>Strongly Anomalous (ppm)</u>
Cu	75	150	300
Pb	175	700	3000
Zn	700	3000	10000
Ag	0.6	2.5	5.0

Copper anomalies are rare in the area, only minor copper values have been recorded from known mineralization. Lead geochemistry has proven to be the most valuable tool for both regional and detailed exploration for shale hosted massive sulphide deposits. Lead distribution in both soil and silt is not as erratic as that for zinc which has a high mobility in locally acid ground waters. Exotic zinc soil geochemical anomalies resulting from dispersion in acid springs can range up to several percent. Silver distribution is very erratic in soils which overlie the Upper Devonian Gunsteel Formation.

Copper, lead, zinc and silver geochemistry of the Bob 5, Taga 3 and Taga 4 claims and surrounding area is shown on Figures 4, 5, 6 and 7, respectively. Location of the 1981 survey with respect to claim boundaries is shown on Figure 3 at 1:20,000 scale. Location of internal claim boundaries within the larger contiguous GJV claim holdings is shown at 1:5,000 scale on Figure 7 only.

Copper values are generally below the 75 ppm threshold value. Scattered moderate to strong single sample response probably corresponds to the upper limit of the background population. A weak to moderate strength, discontinuous

lead soil geochemical anomaly occurs across the length of the property. The area immediately southeast of the northeast corner of the Taga 4 claim exhibits strongly anomalous lead response over a strike length of several hundred metres. Zinc values are generally low with scattered, irregular areas of moderately anomalous response. Silver soil assay values are erratic with irregularly distributed areas of weak to moderately anomalous response.

The area of best lead response, outside the claim block, contains generally coincident high silver response while zinc and copper values are uniformly low.

Conclusions and Recommendations


Soil sampling at 50 m by 100 m grid spacing was carried out over parts of the Bob 5, Taga 3 and Taga 4 mineral claims during the period August 13 to August 19, 1981. The samples were analyzed for copper, lead, zinc and silver to determine if stratiform zinc-lead-silver mineralization was present in underlying upper Devonian black shales. Results of the geochemical survey are generally negative. A subdued, discontinuous lead soil anomaly parallels structural strike of the underlying shales across the northeastern end of the claim block, increasing in tenor outside the claims to the southeast. Best silver values accompany lead in the latter area. Zinc values are generally low throughout the area surveyed.

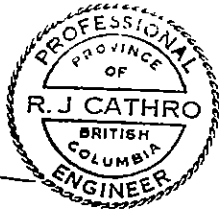
Discontinuous and weakly developed nature of the geochemical response suggests that a metalliferous shale unit may underlie the central part of the area sampled. Although the potential for significant massive sulphide mineralization within this unit appears to be low on surface, the area should receive careful geologic

mapping to determine if unexposed mineralization may be present down-dip to the southwest.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED,


R.J. Cathro





R.C. Carne

/jm

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Robert C. Carne, geologist, with business and residential addresses in Vancouver, British Columbia, hereby certify that:

1) I graduated from the University of British Columbia in 1974 with a B.Sc. and in 1979 with an M.Sc. majoring in Geological Sciences.

2) I am a member of the Geological Association of Canada.

3) From 1974 to the present, I have been actively engaged as a geologist in mineral exploration in 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.



Robert C. Carne

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Robert J. Cathro, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia, and residential address in West Vancouver, British Columbia, do hereby declare:

1. I am a 1959 graduate of the University of British Columbia in geological engineering.
2. I have been engaged in geological engineering for over twenty years, the past fifteen of which have been as a consultant.
3. I am a registered professional engineer in British Columbia and in Yukon Territory.
4. I have supervised the work described in this report.



Robert J. Cathro

APPENDIX II

SUMMARY OF COSTS

on work performed on the
BOB 5, TAGA 3 and TAGA 4 CLAIMS
between August 13 and August 19, 1981

Salaries and Wages

R.C. Carne (Geologist)	August 13,14	2 days @ \$230/day	\$ 460.00
D. Charters (Jr. Ass't.)	August 14,16-19	5 days @ \$86/day	430.00
M. Jovanovic (Jr. Ass't.)	August 13,14,17-19	5 days @ \$86/day	430.00
B. Riehl (Jr. Ass't.)	August 13,14,16	3 days @ \$86/day	258.00
F. Schuerheck (Jr. Ass't.)	August 14,17-19	4 days @ \$86/day	344.00
			<u>1,922.00</u>

Geochemical Analyses

Analysis of 325 soil samples for Cu, Pb, Zn and Ag	1,300.00
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Camp Maintenance (includes fixed-wing and helicopter costs)

19 mandays @ \$50/day	950.00
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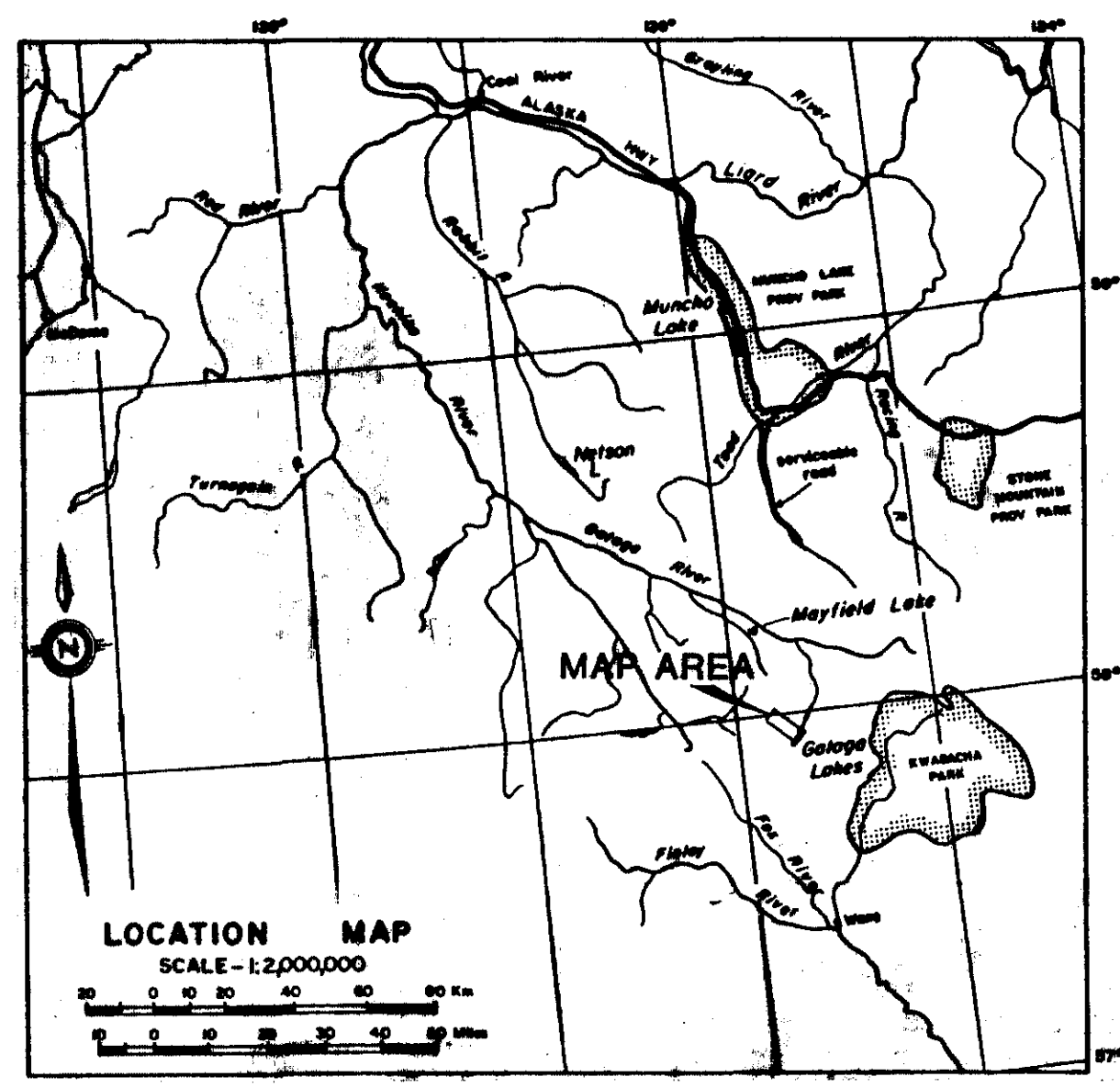
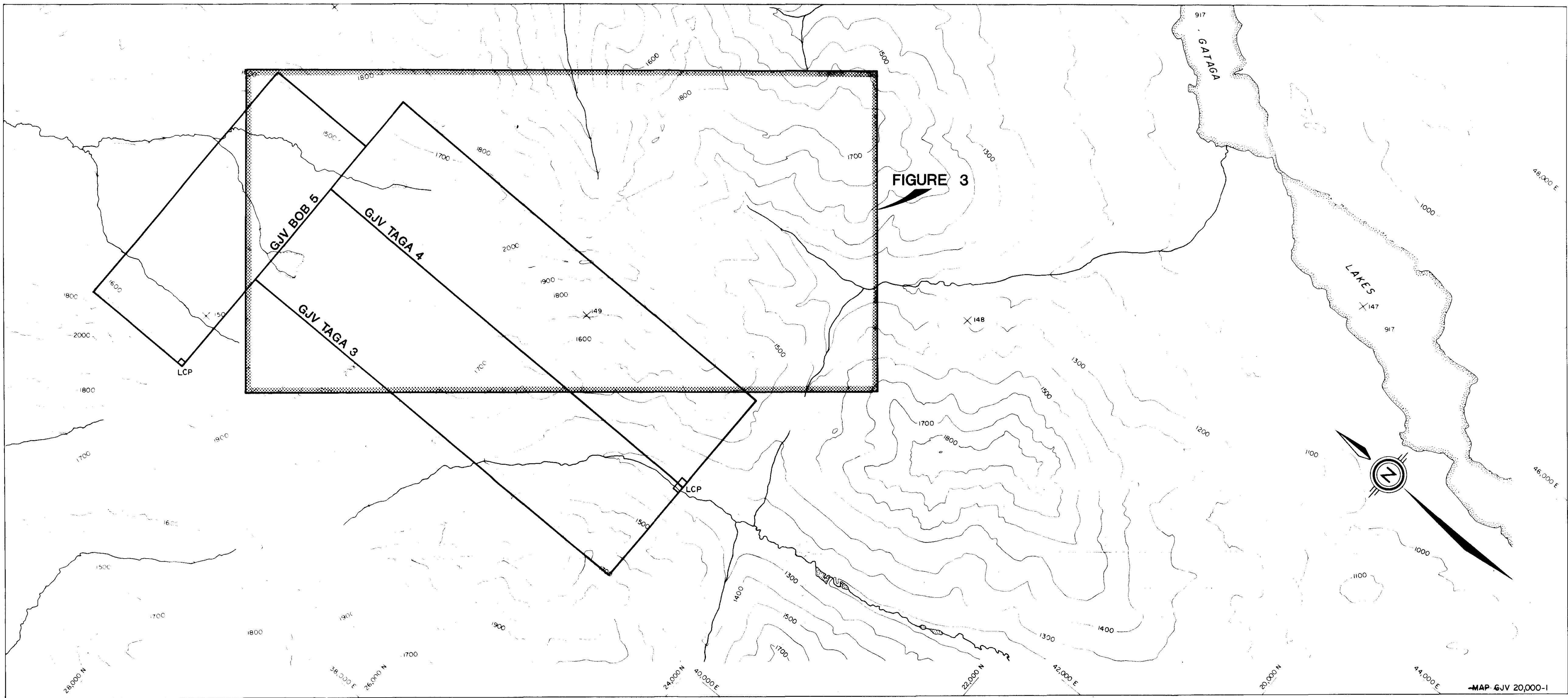
Helicopter (includes fuel costs on site)

Northern Mountain Helicopters Ltd. Bell Jet Ranger 206B @ \$450/hr x	2,250.00
	<u>6,422.00</u>

Report Preparation and Administration

	<u>660.00</u>
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TOTAL EXPENDITURES	<u>\$7,082.00</u>
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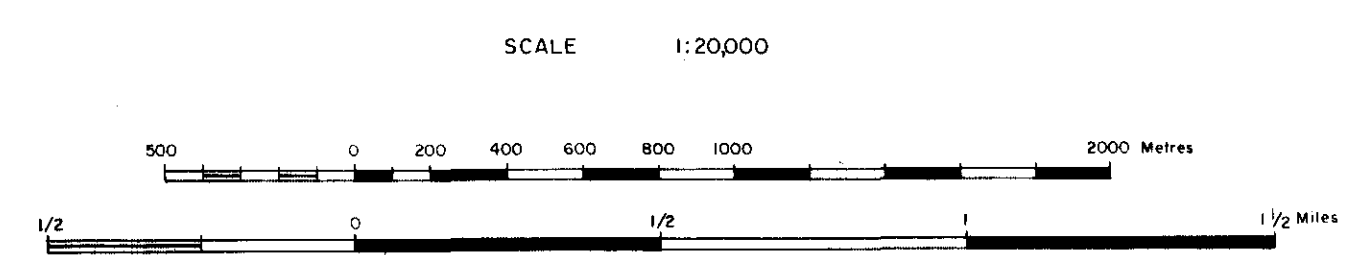


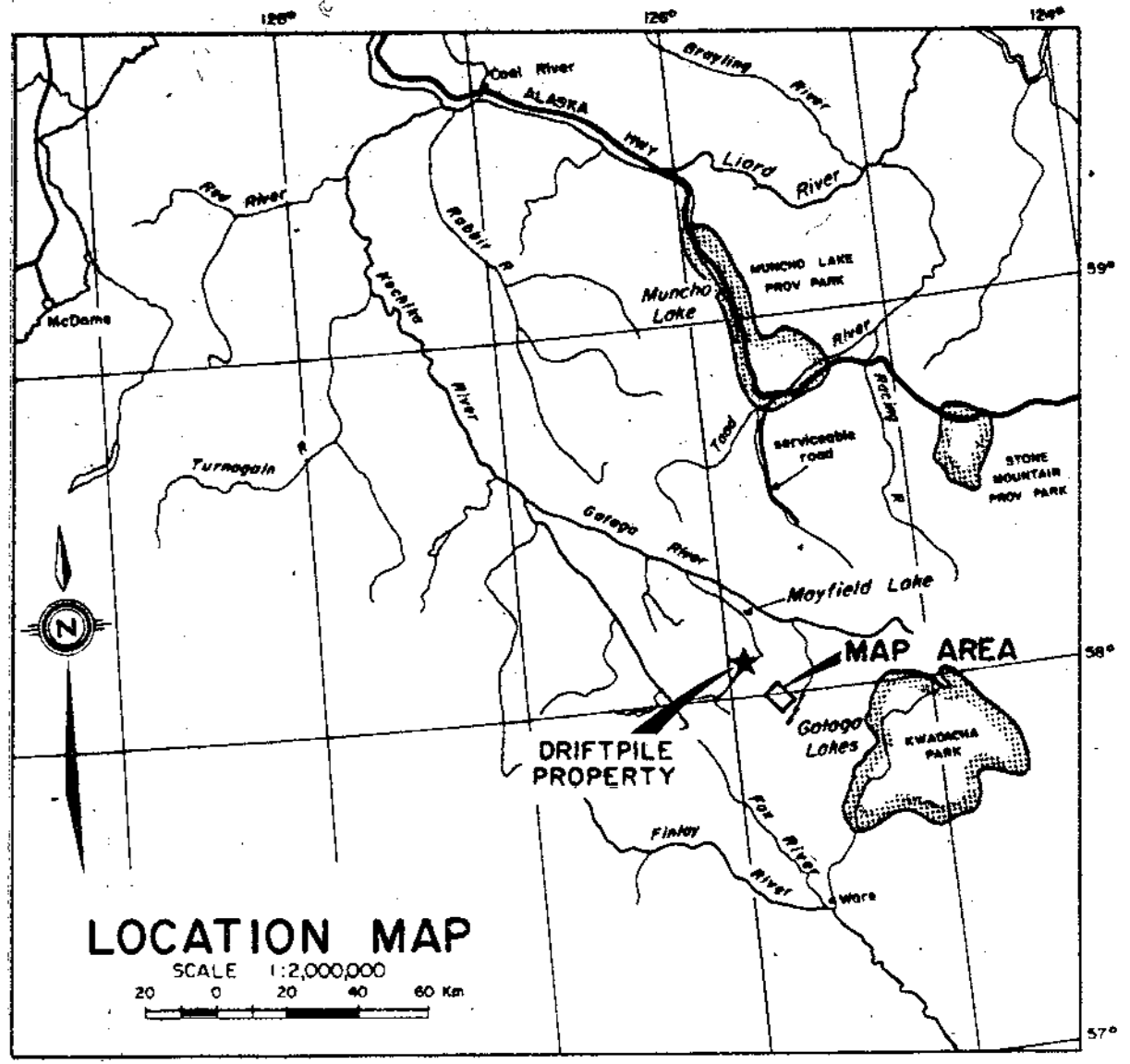
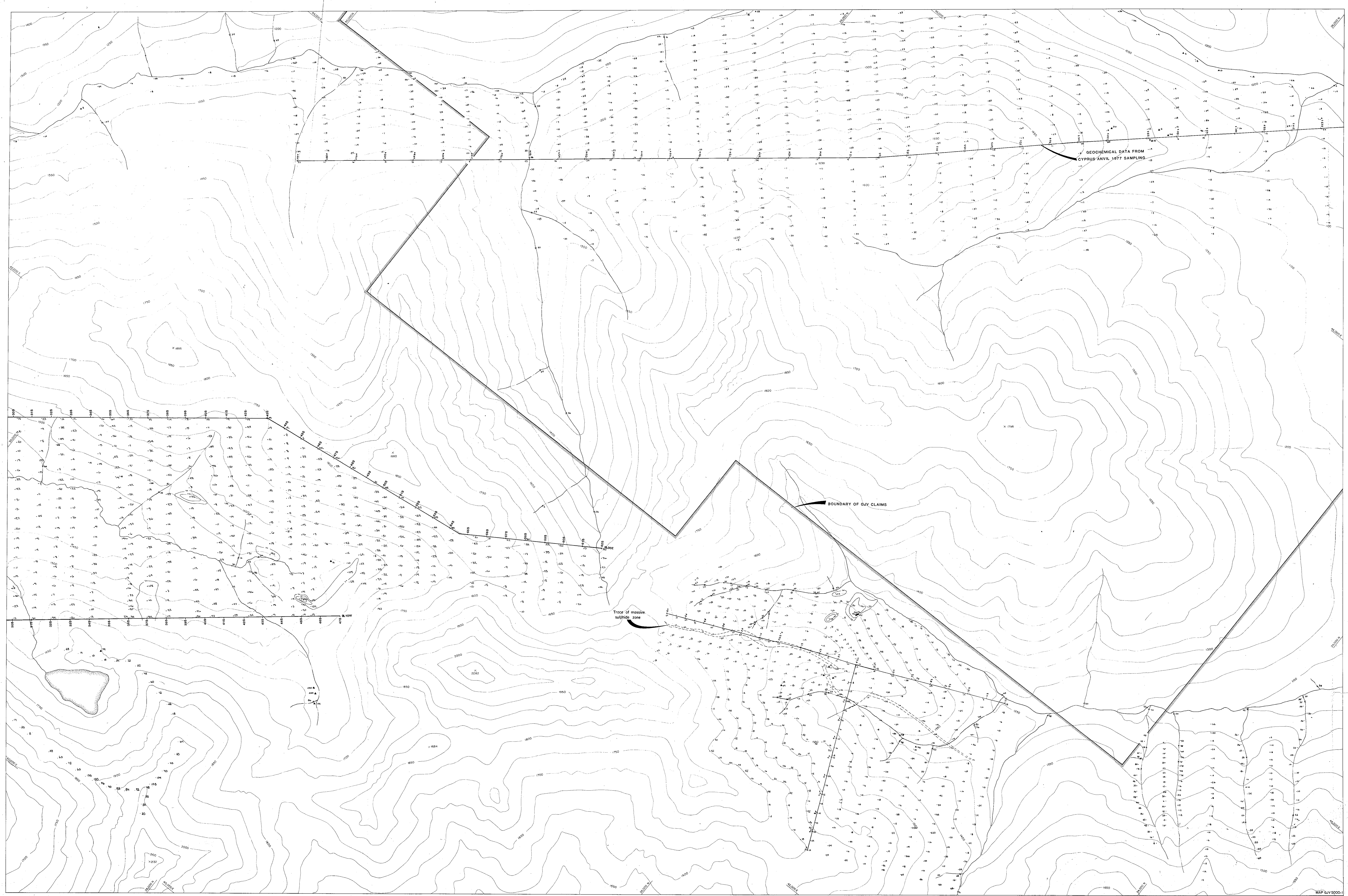
COMPILED FROM AERIAL PHOTOGRAPHY
 TAKEN AUGUST 15, 1979 AT A SCALE OF 1:24,000

N.B - Legal Corner Posts were located in the field
 with the aid of a 1:5,000 scale orthophoto

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FIGURE 3
 ARCHER, CATHRO & ASSOCIATES (1981) LTD.
LOCATION PLAN
 TAGA 3, TAGA 4 AND BOB 5 CLAIMS
 GATAGA JOINT VENTURE



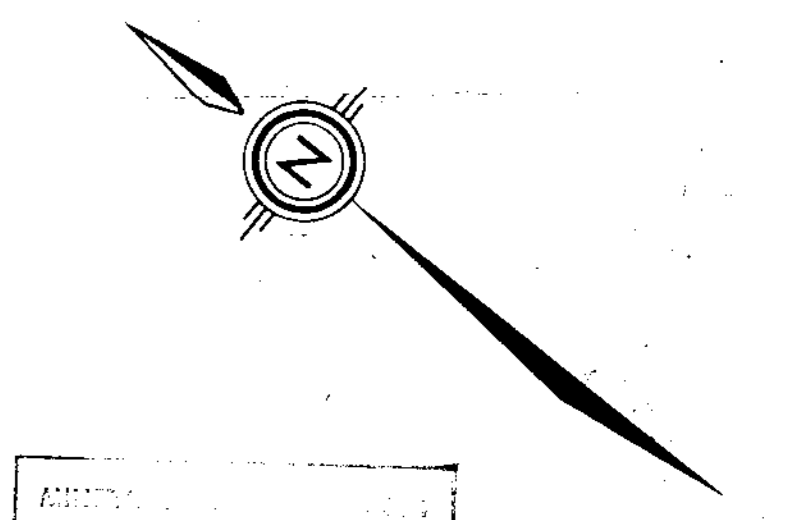


LEGEND

- x 6# soil sample (ppm Cu)
- 6# rock sample (ppm Cu)
- ▲ 6# stream sample (ppm Cu)
- claim boundary

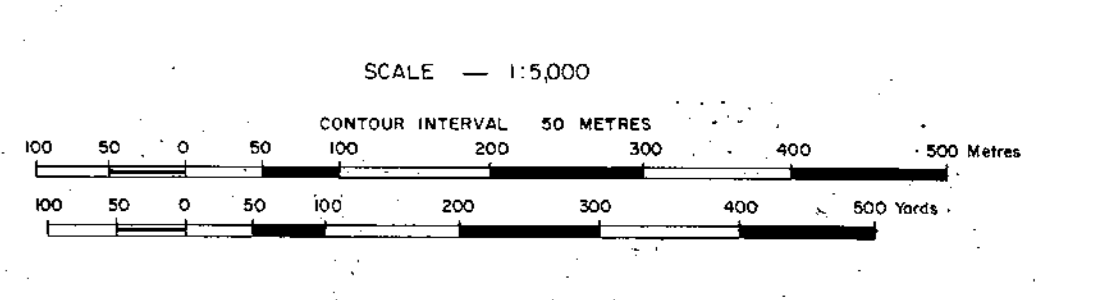
CONTOUR INTERVALS

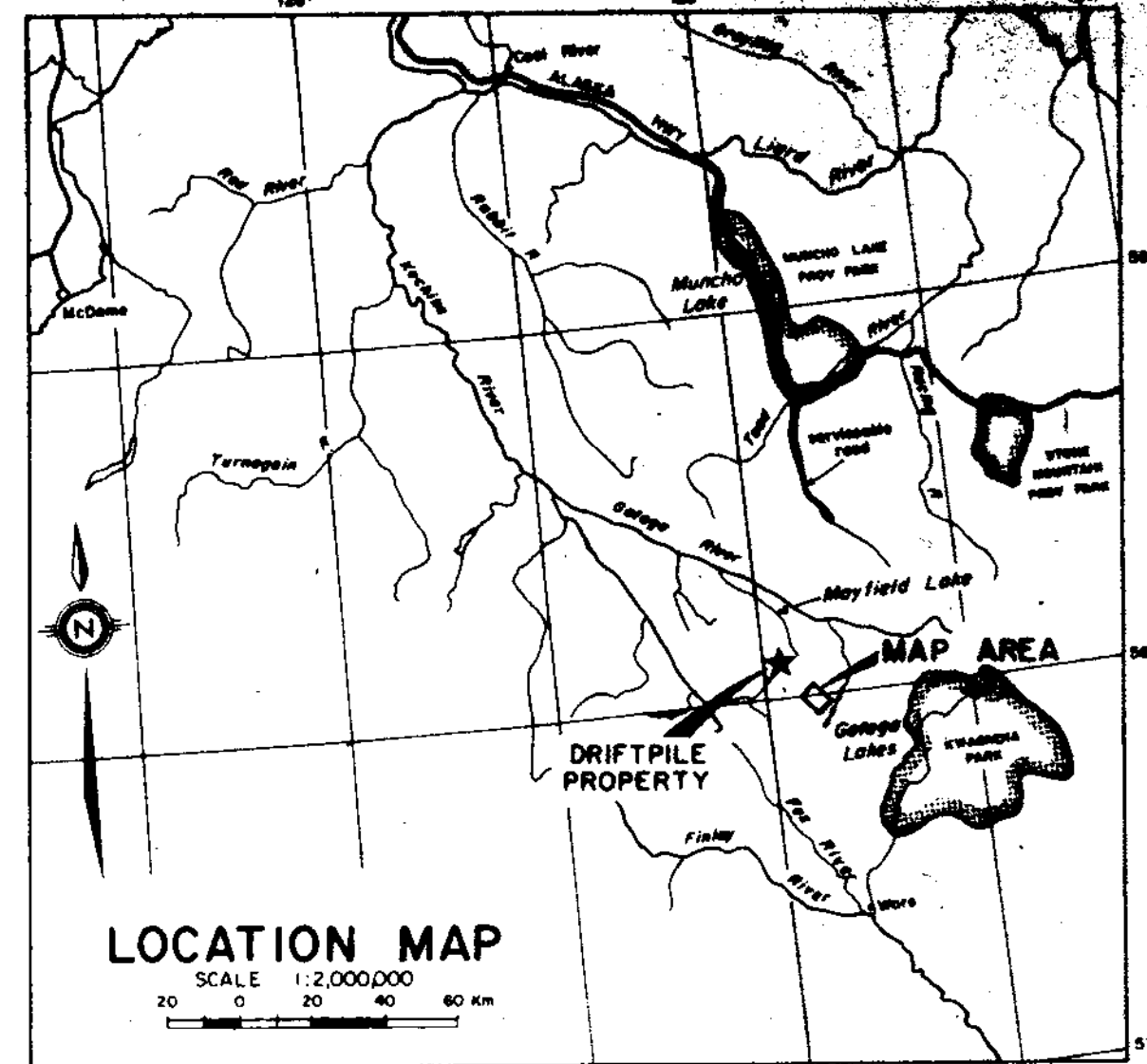
- 475 ppm Cu
- 75-100 ppm Cu
- 150-200 ppm Cu
- 300 ppm Cu



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Fig 4
 ARCHER, CATMO & ASSOCIATES (1981) LTD.
COPPER GEOCHEMISTRY
 BOB 5, TAGA 3 AND TAGA 4 CLAIMS
 GATAGA JOINT VENTURE





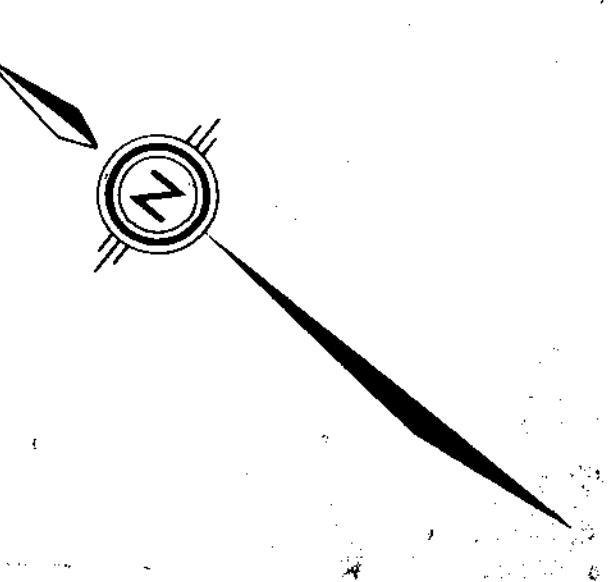
GEOCHEMICAL DATA FROM
CYPRUS ANVIL 1977 SAMPLING

BOUNDARY OF GJV CLAIMS

Trace of massive sulphide zone

- LEGEND**
- x 176 all sample (ppm Zn)
 - 176 rock sample (ppm Zn)
 - 176 rock sample (ppm Zn)
 - 176 green sample (ppm Zn)
 - claim boundary

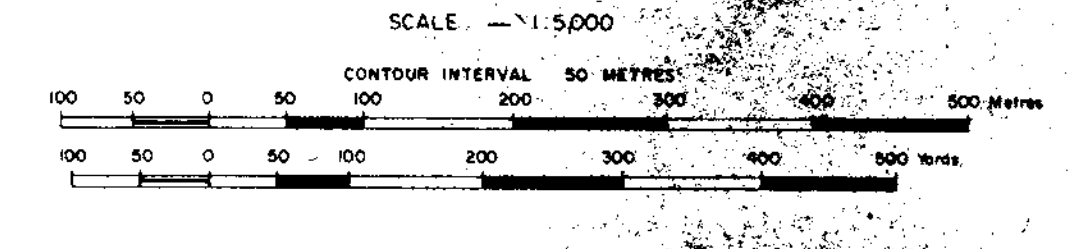
- CONTOUR INTERVALS**
- 200 ppm Zn
 - 700 - 800 ppm Zn
 - 900 - 1000 ppm Zn
 - 1000 - 1500 ppm Zn
 - 1500 - 2000 ppm Zn



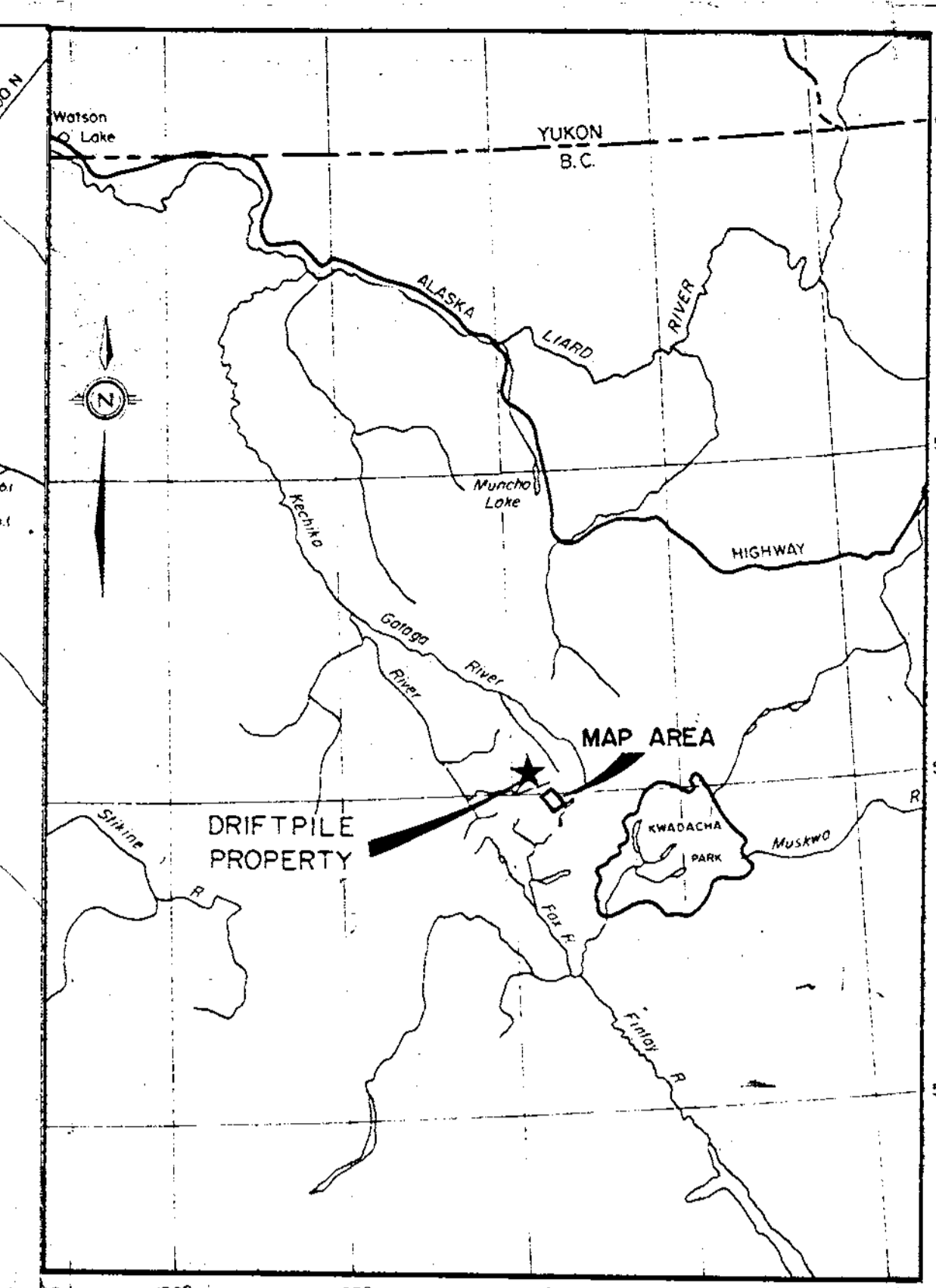
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Fig. 6
ANCHER, CATIRO & ASSOCIATES LTD
ZINC GEOCHEMISTRY
BOB 5, TAGA 3 AND TAGA 4 CLAIMS

GATAGA JOINT VENTURE



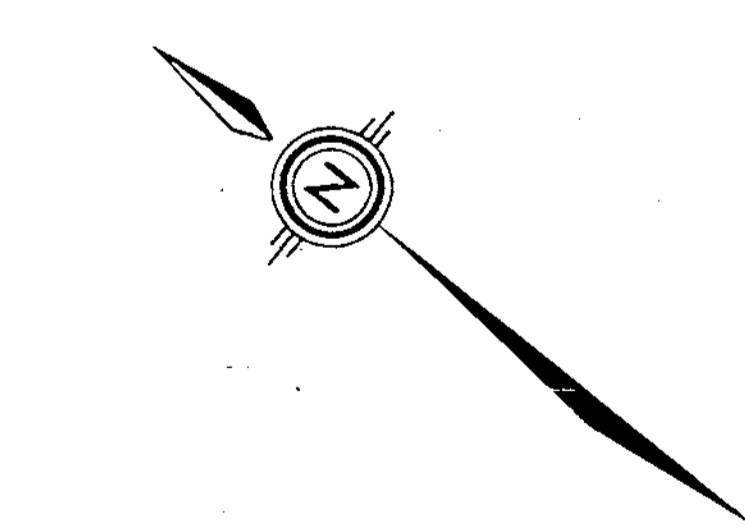
COMPILED FROM AERIAL PHOTOGRAPHY
TAKEN AUGUST 6, 1976 AT A SCALE OF 1:4000
MAP GJV-5000



LOCATION MAP
SCALE 1:2,000,000

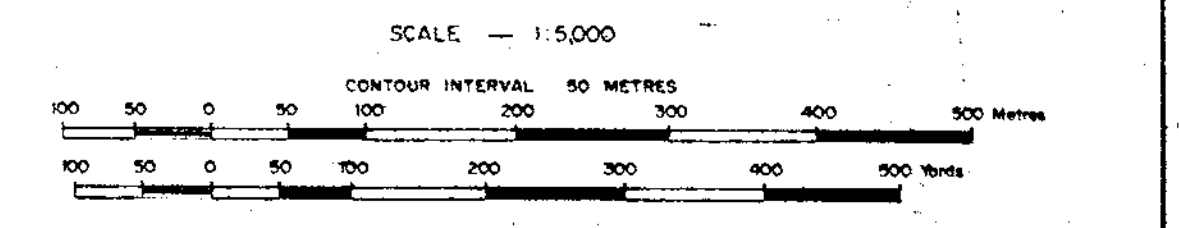
- LEGEND**
- X 0.4 x11 sample 1 ppm Ag
 - 0.2 x01 sample 1 ppm Ag
 - 0.1 x04 sample 1 ppm Ag
 - ▲ 0.1 x04 sample 1 ppm Ag
 - claim boundary

- CONTOUR INTERVALS**
- 0.5 ppm Ag
 - 0.5-1.0 ppm Ag
 - 1.0-2.0 ppm Ag
 - 2.5-4.9 ppm Ag
 - 5.0-9.9 ppm Ag
 - 10.0 ppm Ag



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Fig. 7
ARCHER, CATIBO & ASSOCIATES (1983) LTD.
**SILVER GEOCHEMISTRY
AND CLAIM LOCATIONS**
BOB 5, TAGA 3 AND TAGA 4 CLAIMS
GATAGA JOINT VENTURE



COMPILED FROM AERIAL PHOTOGRAPH
MAY 1979 AT A SCALE OF 1:25,000