RECEIVED
OCT 29 1969
MINING RECORDS OFFICE
WHITEHORSE, Y.T.

Cominco

GEOCHEMICAL REPORT
ON THE WON "A" GROUP OF MINERAL CLAIMS
SITUATE AT 64° 12' N, 134°34'W
IN THE MAYO MINING DISTRICT OF THE
YUKON TERRITORY

WORK DONE JUNE 12-18, 1969

REPORT BY

A. A. JOHNSON, B.Sc.

UNDER SUPERVISION OF

J. RICHARDSON, P.Eng.

FOR COMINCO LTD.

RECEIVED
SEP 8 1969
MINING
INSPECTORS OFFICE
WHITEHORSE, Y.T.

This report has been examined by the Geological Evaluation Co.
Approved as to technical worth by:

RESIDENT GEOLOGIST

Approved as to cost in the amount of: $ 1600.00

RESIDENT MINING ENGINEER

Accepted as representation work under Section 53(4) Yukon Quartz Mining Act.

COMMISSIONER OF YUKON

C O M I N C O L T D.

EXPLORATION | WESTERN DISTRICT

GEOCHEMICAL REPORT
ON THE WON "A" GROUP OF MINERAL CLAIMS
SITUATE AT 64°12' N, 134°34' W
IN THE MAYO MINING DISTRICT OF THE
YUKON TERRITORY

Located claims on which assessment credit is requested:-

WON "A" GROUP

Claim Name	Record No.	Date Recorded	Assessment Credits	Amount
WON 121	Y26871	August 15, 1968	2 yrs.	$ 200
WON 122	Y26872	August 15, 1968	2 yrs.	200
WON 123	Y26873	August 15, 1968	2 yrs.	200
WON 124	Y26874	August 15, 1968	2 yrs.	200
WON 125	Y26875	August 15, 1968	2 yrs.	200
WON 126	Y26876	August 15, 1968	2 yrs.	200
WON 127	Y26877	August 15, 1968	2 yrs.	200
WON 128	Y26878	August 15, 1968	2 yrs.	200
		TOTAL	16 yrs.	$1,600

Work was done on these claims from June 12, 1969 through June 18, 1969 incl.

REPORT BY

A. A. JOHNSON, B.Sc.

UNDER SUPERVISION OF

J. RICHARDSON, P.ENG.

C O M I N C O L T D.

EXPLORATION **WESTERN DISTRICT**

GEOCHEMICAL REPORT
ON THE
WON "A" GROUP OF MINERAL CLAIMS

TABLE OF CONTENTS

	Page
INTRODUCTION	1
SUMMARY	1
SURVEY SPECIFICATIONS	1
GEOLOGICAL NOTES	1
MINERALIZATION	2
GEOCHEMICAL RESULTS	
General	2
Copper	2
Lead	2
Zinc	2
CONCLUSIONS	3

ATTACHMENTS
1. Exhibit "A" - Statement of Expenditures
2. Statutory Declaration Relating to Expenditures
3. Statement of Qualifications
4. Location Map 1" = ½ mile and 1" = 10 miles
5. Geochemistry - Copper 1" = 500'
6. Geochemistry - Lead 1" = 500'
7. Geochemistry - Zinc 1" = 500'

REFERENCES
1. GSC Map 62-7 Nash Creek 1" = 4 mile 106 D
2. GSC Map 58-4 Scougale Creek 1" = 1 mile 106 D/2
3. GSC Geochemical Series (Circ 1965) for Keno Area

August 14, 1969
Vancouver, B.C.

C O M I N C O L T D.

EXPLORATION | WESTERN DISTRICT

GEOCHEMICAL REPORT
ON THE
WON "A" GROUP OF MINERAL CLAIMS

August 14, 1969

INTRODUCTION

The WON claims were staked by Cominco Ltd. under a joint agreement with L. Elliott of Calgary during the 1968 field season and, on the basis of their work in the area Cominco has optioned to maintain eight of these claims (WON 121-128 incl.) under this agreement for the time being. Consequently a geochemical survey was undertaken on these eight claims to further determine their potential for the location of significant mineral deposits.

SUMMARY

The geochemical survey indicates that a large zinc anomaly exists on the WON "A" group but it is not supported by copper and lead anomalies. Since the few outcrops which were observed on the group and most of the talus occurrences are argillite, this would suggest that the source of the anomaly is an argillite horizon containing not abnormal, but higher than average, amounts of zinc.

SURVEY SPECIFICATIONS

The following personnel were employed during the survey:

Mr. A. A. Johnson, B.Sc. (Geologist),
1199 West Pender Street,
Vancouver 1, B. C.

Mr. G. P. Gormley (Assistant)
1199 West Pender Street,
Vancouver 1, B.C.

The survey was conducted from June 12, 1969 through June 18, 1969 incl.

Geological notes were taken concurrently with the geochemical sampling using the claim location line as a guide and running sample lines roughly parallel to it at 500 ft. intervals. The lines were chained, compassed and flagged every 200 feet. G.P. Gormley took the soil samples while A.A. Johnson made geological and geochemical notes.

Soil samples were taken for geochemical analysis at 200 ft. intervals along the survey lines and they were immediately placed in Kraft envelopes. The samples were dried in the field before being shipped to Cominco's laboratory in Vancouver. In all cases an attempt was made to sample the "B" soil horizon although this was usually impossible below the 2500 ft. contour level. In these cases earthy black soil was taken for the sample. These may have produced spurious anomalies where organic material tends to concentrate zinc ions.

At the laboratory, the samples were completely dried and screened at 80 mesh before the -80 mesh fraction was analyzed by standard atomic absorption methods for copper, lead, and zinc.

GEOLOGICAL NOTES

The main creek which transects the east side of the WON "A" group provides the best indication of the type of rock which underlies the claim group. The only rock which outcrops in this creek is fine-grained black argillite. That the group is underlain virtually entirely by argillite is also supported by the fact that almost all the rock chips seen in the soils were argillite, with the exception of a few light green phyllite chips which were observed in the southwest corner of the property. The phyllite chips may indicate a facies change to quartzite since quartzite is known to overlie the argillite west of the WON "A" group.

MINERALIZATION

No mineralization was observed on the property but a few small specs of tetrahedrite were observed in quartz veins beside the helicopter pad which was built just north of the N.. corner of the property.

GEOCHEMICAL RESULTS

General

The results of the geochemical survey were quite discouraging as the only significant anomaly which was delineated consisted of high zinc readings which were virtually unsupported by copper and lead values. Extremely high zinc readings have no counterpart in copper and correspond to a few lead values which are barely above threshold.

Copper

A statistical analysis of the copper analyses on the WON "A" group indicates the following:

2 sigma	= 34.6	ppm.
Median	= 45	"
Mean	= 45	"
Threshold	= 80	"

The few readings which were found to be above threshold are circled on the accompanying map. It can be readily seen that these values form no pattern and are too sporadic to be considered a reliable guide to economic quantities of mineralization.

Lead

Statistical analysis of the lead results on the WON "A" group gives the following results:

2 sigma	= 33.2	ppm.
Median	= 25	"
Mean	= 30	"
Threshold	= 58	"

There are a small number of lead analyses which are barely above threshold which cluster in the southwest corner of the group. These values coincide with a very strong zinc anomaly. As they are at the base of a long slope they may just as likely be modest accumulation anomalies as indications of the zinc trend. The other main zinc anomaly just southeast of the centre of the property does not coincide with a similar trend.

Zinc

Since there are so many highly anomalous zinc values in the geochemical analyses from the WON "A" group, a statistical analysis is very difficult. However, if only the values below 1000 ppm are considered, the following results are obtained:

2 sigma	= 420	ppm.
Median	= 275	"
Mean	= 296	"
Threshold	= 700	"

The zinc analyses above 700 ppm are found south of a line which runs approximately east-west through the lower part of the group. This trend is roughly parallel to the trend of formations in the area and it is probably a good indication that the zinc anomalies are related to a layer of argillite which contains a large amount of zinc. The southwestern anomaly is the highest (10,000 ppm) and it may be due, in part, to accumulation as it corresponds to the very weak lead anomaly previously described. The anomaly that lies just southeast of the centre of the property (5800 ppm) is probably closer to source as it peaks rapidly and tapers off slightly down-slope.

CONCLUSION:

No recommendation for further work on the WON "A" group can be made at this time as the geochemical anomalies located by this survey do not appear to be related to significant mineral deposits.

Report By _____
A. A. Johnson, B.Sc.

Endorsed By _____
J. Richardson, P.Eng.

AAJ:mk

Encls.

AAJ:mk

Distribution:

Mining Recorder	3
Vancouver Files	1
Author	1

E X H I B I T "A"

GEOCHEMICAL REPORT
ON THE
MON "A" GROUP OF MINERAL CLAIMS

STATEMENT OF EXPENDITURES

The following is a true account of expenditures incurred by Cominco Ltd. in conducting a geochemical survey on the MON "A" group of mineral claims (NTS: 106 D/2) in the Beaver River area of the Mayo Mining District of the Yukon Territory.

Helicopter Charges	$ 867.00
Geochemical Analyses	260.00
Camp Supplies	221.00
Wages - A.A. Johnson, G.P. Gormley	275.00
	$ 1,623.00

Signed J. Richardson
J. Richardson, P.Eng.

This is Exhibit "A" to the Statutory Declaration of JAMES RICHARDSON declared before me the 18 day of AUGUST, 1969., A.D.

A Commissioner for taking Affidavits for British Columbia

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

TO WIT:

In the Matter of

STATUTORY DECLARATION RELATING TO EXPENDITURES ON A GEOCHEMICAL SURVEY ON THE WON "A" GROUP OF MINERAL CLAIMS, PROPERTY OF COMINCO LTD., MAYO MINING DIVISION, YUKON TERRITORY.

I, J. ALL RICHARDSON, Professional Engineer

of the city of Vancouver

in the Province of British Columbia, do solemnly declare that

1. I did personally supervise A.A. Johnson who prepared the accompanying geochemical report as a result of a survey carried out on certain mineral claims situated in the Mayo Mining Division, Yukon Territory, and owned by Cominco Ltd.

2. Copies of the said report are being filed with the Mining Recorder at Mayo.

3. Attached hereto and marked with the letter "A" upon which I have signed my name at the time of declaring hereof, is a statement of expenditures incurred in connection with the geochemical survey of the said claims showing in addition the dates during which those making the said survey performed their work.

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City of Vancouver, in the Province of British Columbia, this 18th day of August, 1969, A.D.

J. Richardson.

A Commissioner for taking Affidavits within British Columbia or
~~A Notary Public in and for the Province of British Columbia.~~

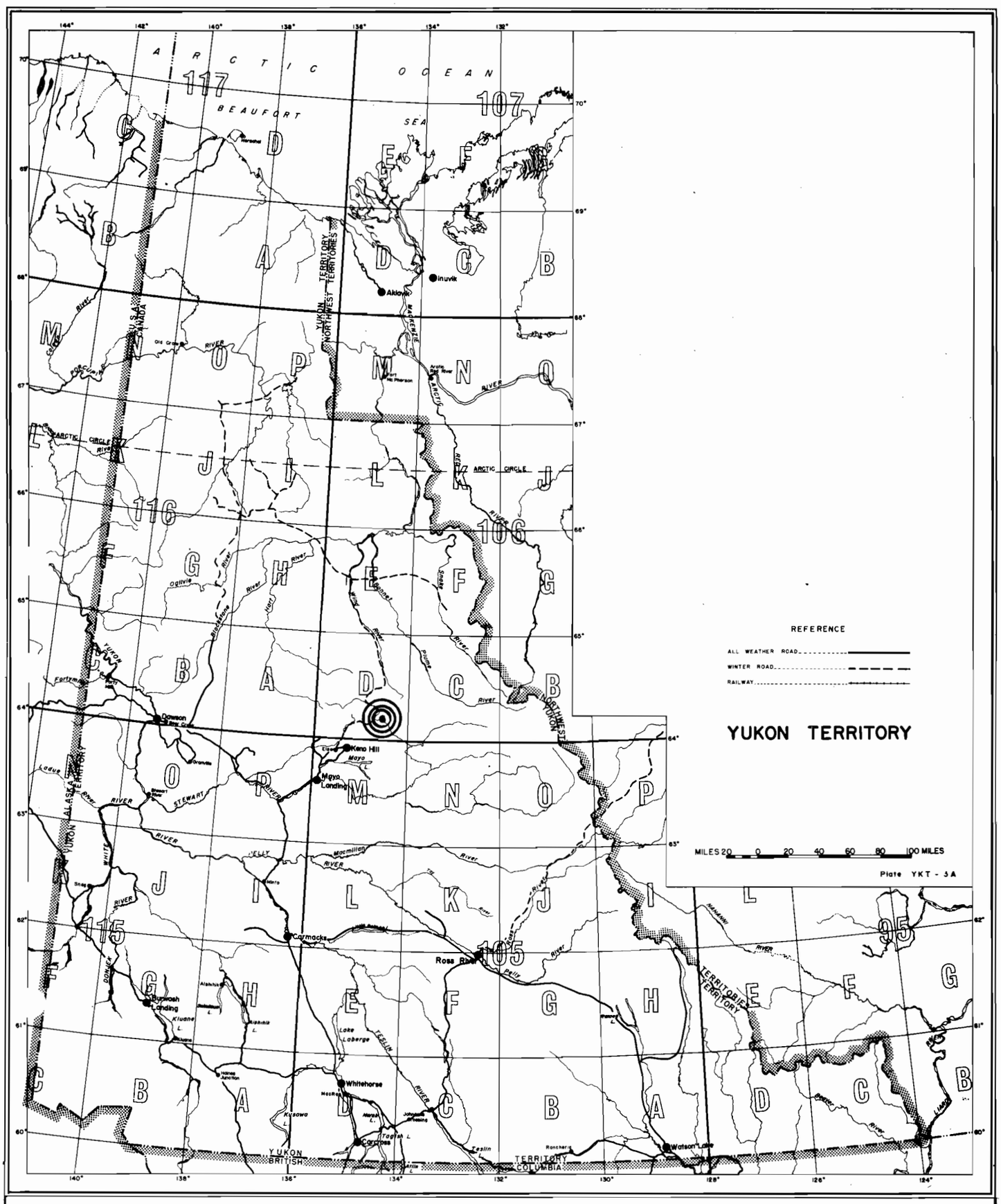
C O M I N C O L T D.

EXPLORATION WESTERN DISTRICT

STATEMENT OF QUALIFICATIONS

A. A. Johnson was responsible for conducting the geochemical survey described herein. Mr. Johnson is a graduate geologist from Mount Allison University, Nova Scotia B.Sc. 1963. He has worked on various field projects as an Exploration Geologist for Cominco since early 1967 and I consider him a competent and experienced geologist.

Signed J. Richardson
J. Richardson, P.Eng.



Drawn by:		Traced by:	
Revised by:	Date:	Revised by:	Date:

WON 'A' GROUP LOCATION MAP

Scale:

Date: AUG. 10, 1969

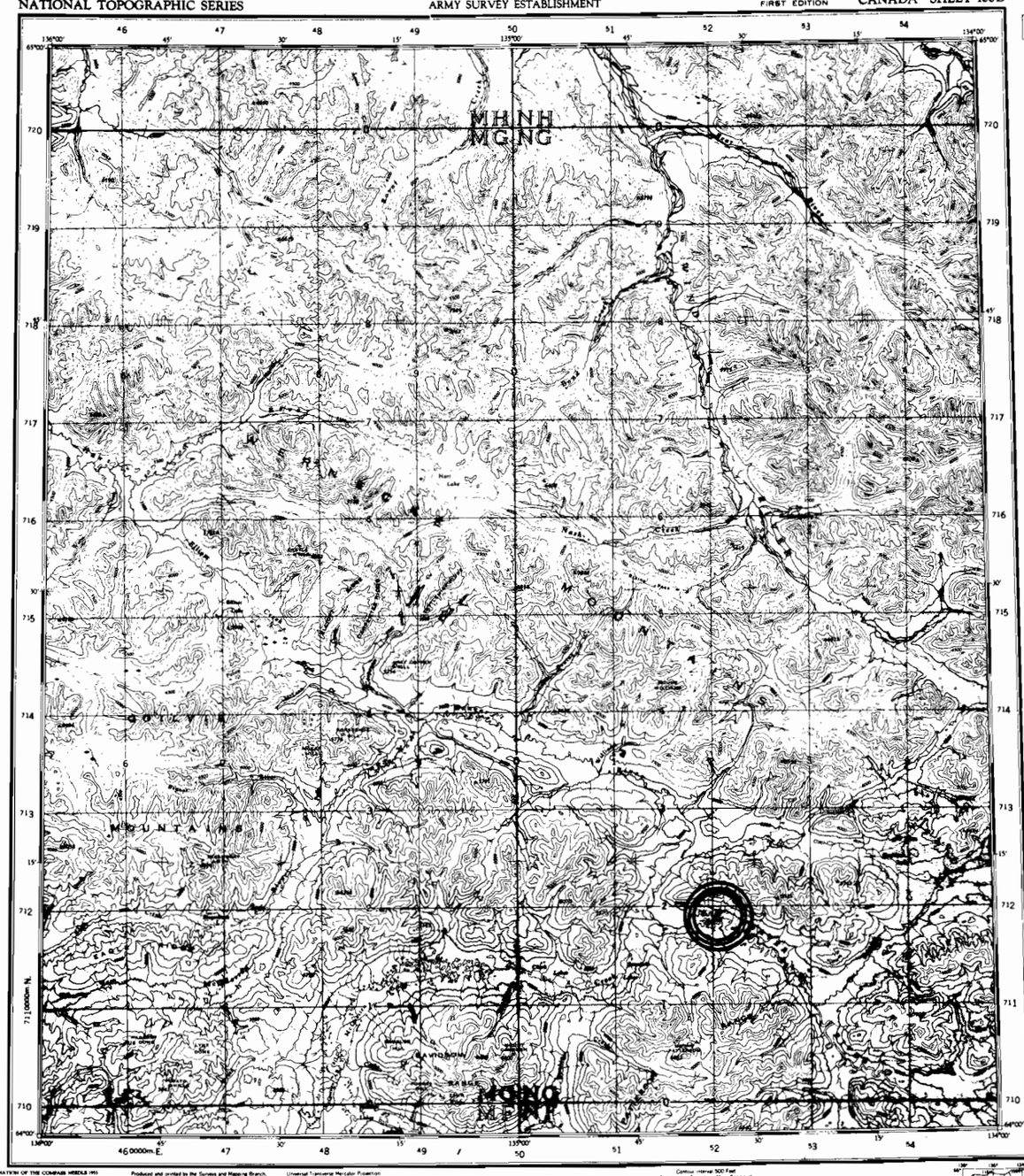
Plate:

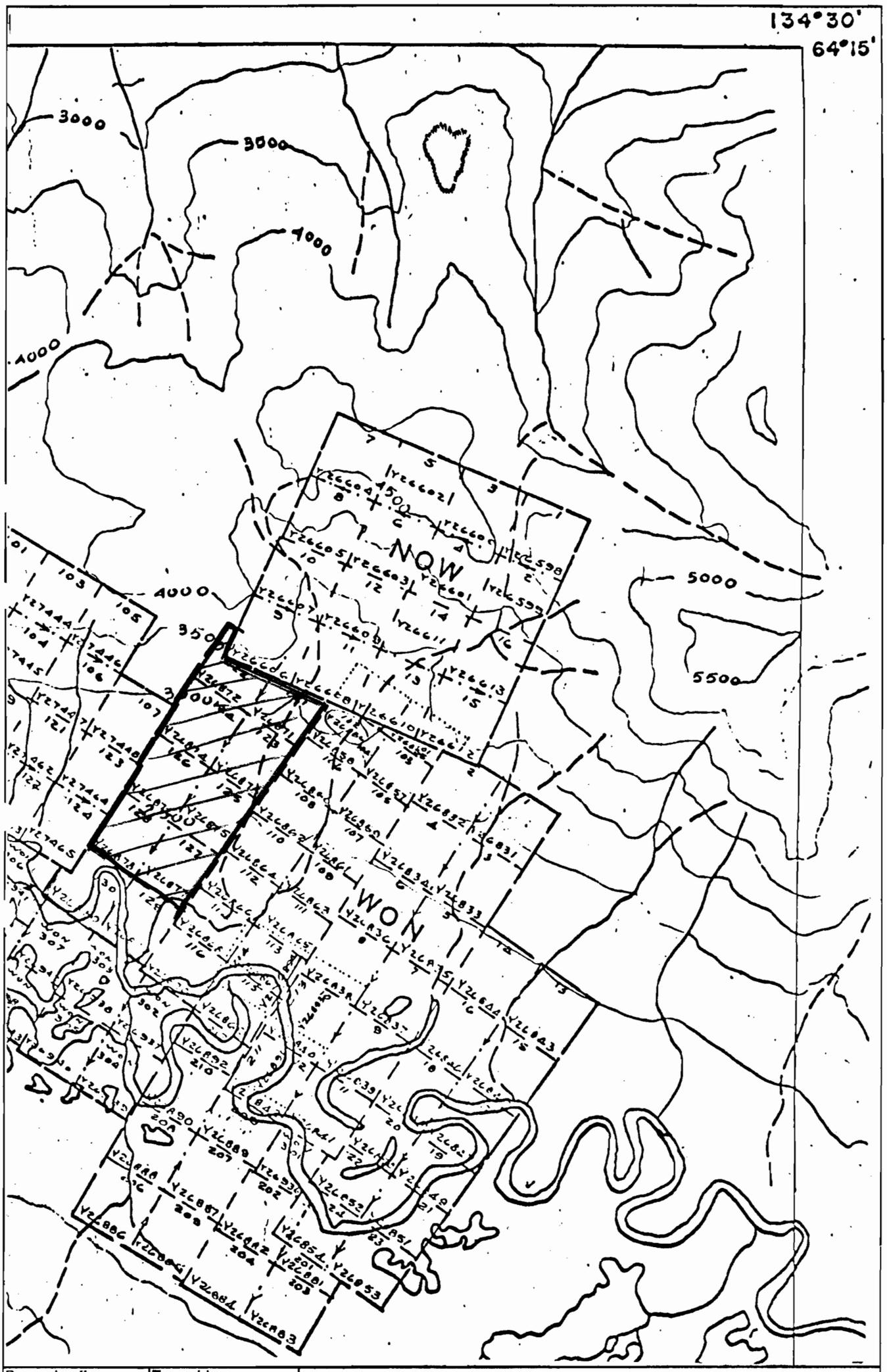
NATIONAL TOPOGRAPHIC SERIES

DEPARTMENT OF NATIONAL DEFENCE
ARMY SURVEY ESTABLISHMENT

FIRST EDITION

CANADA SHEET 106D


MHNH
MGNG
MOUNTAINS
MONO
MTN
Nash Lake
Nash Creek
Nash Mtn
Nash Mtn
Nash Mtn



Drawn by: A.A.J.		Traced by: G.K.T.	
Revised by	Date	Revised by	Date

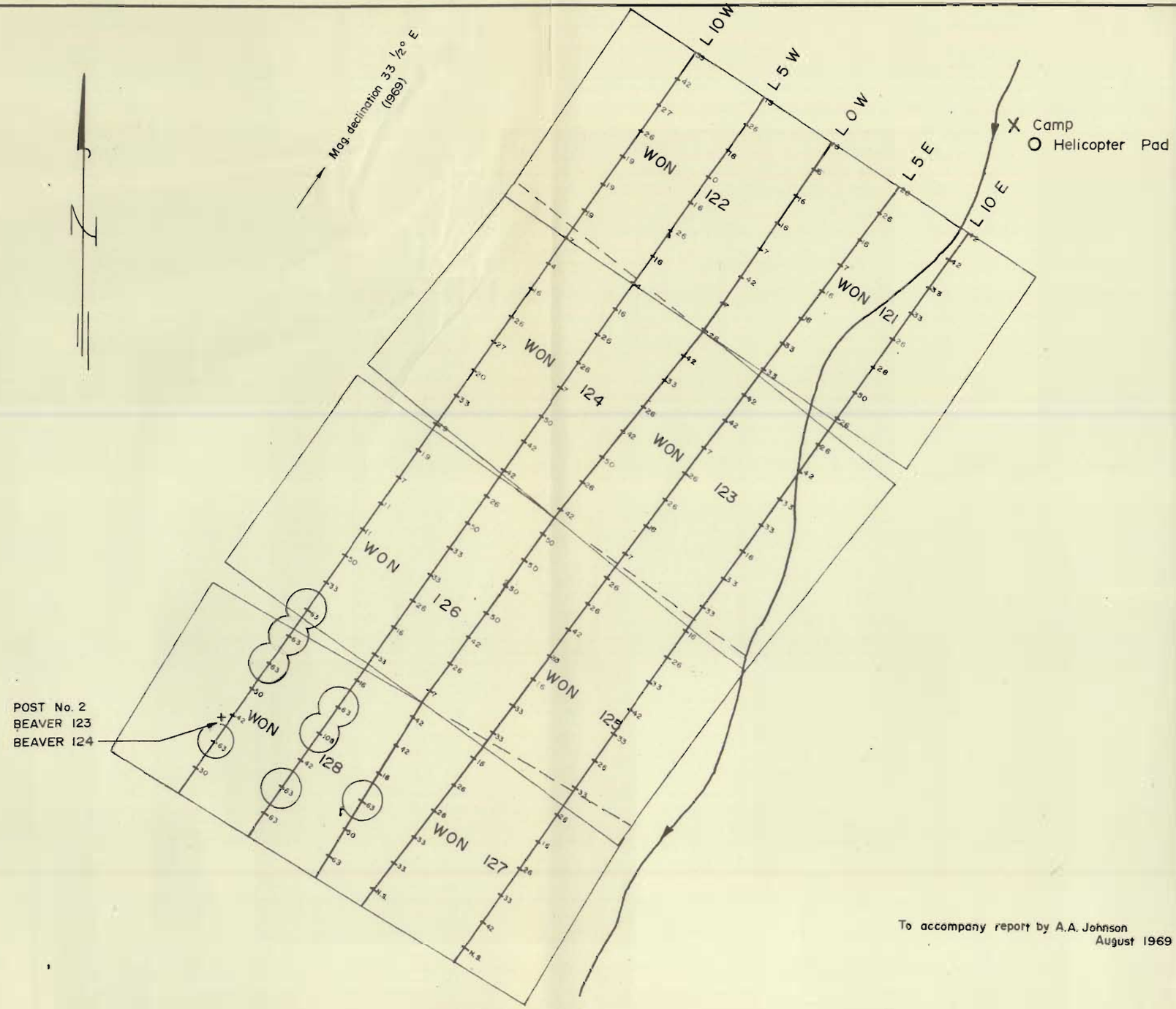
WON 'A' GROUP
CLAIM LOCATION MAP

N.T.S. 106 D 2

Scale: 1" = 1/2 mi. | Date: AUG. 10, 1969 | Plate: WN-69-4

BCIL 2187C

210-0610



NOTE:

Median 25 p.p.m.
Average 30 p.p.m.
Threshold 58 p.p.m.

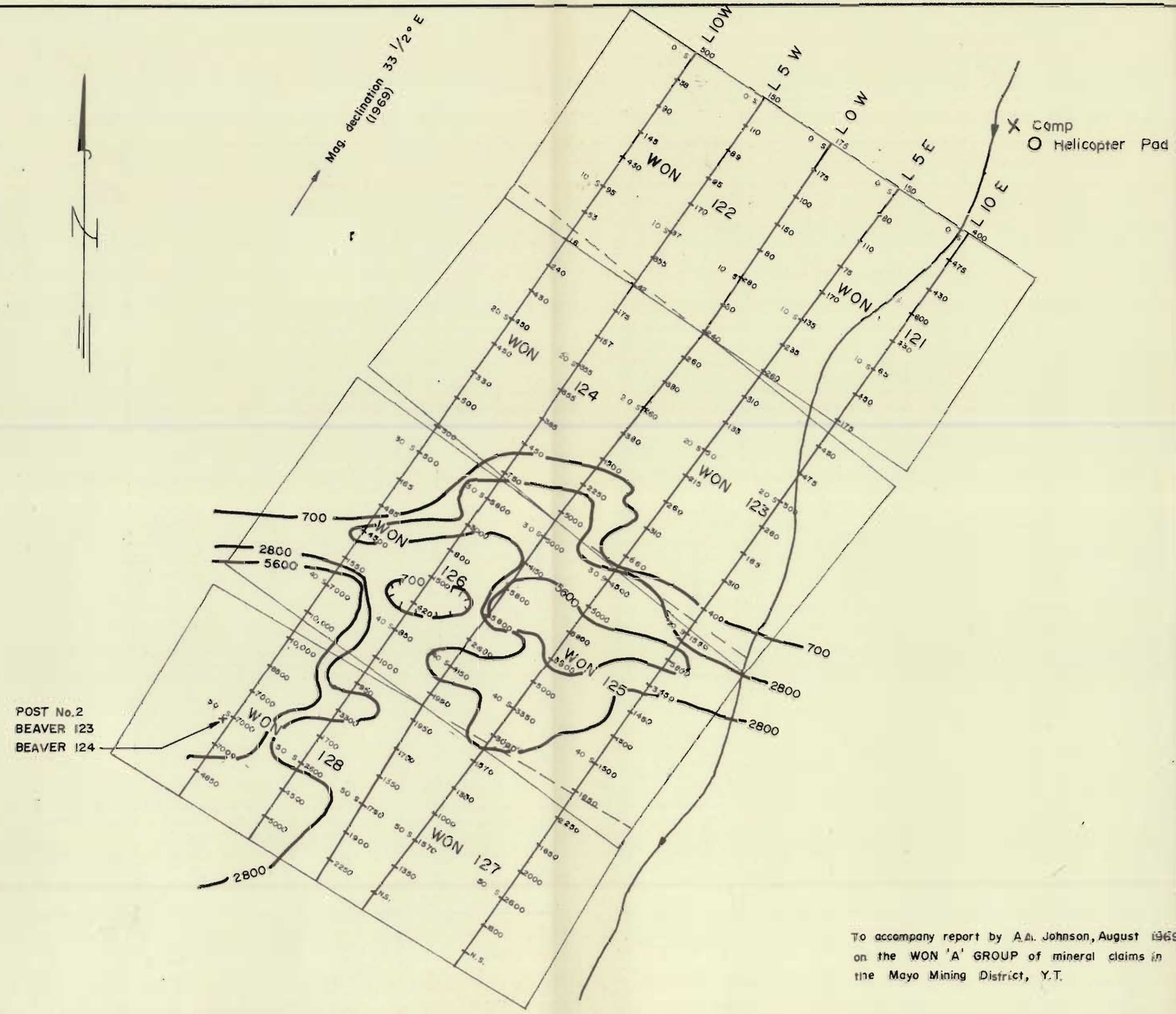
Values above threshold have been circled rather than contoured as it appears that they represent an accumulation anomaly which cannot be interpreted with confidence.

To accompany report by A.A. Johnson
August 1969

WON 'A' GROUP

Drawn by: A.A.J.	Traced by: G.K.T.	GEOCHEMICAL SURVEY
Revised by / Date	Revised by / Date	LEAD
		N.T.S. 106 D 2
		Scale: 1" = 500' Date: AUG. 10, 1969 Plate: WN-69-2

#210-0640



NOTE :

Median	275 p.p.m.
Mean	296 p.p.m.
Threshold	700 p.p.m.
Contours	700 p.p.m.
	2800 p.p.m.
	5600 p.p.m.

To accompany report by A.A. Johnson, August 1969 on the WON 'A' GROUP of mineral claims in the Mayo Mining District, Y.T.

WON 'A' GROUP

Comaco

Drawn by: A.A.J.	Traced by: G.K.T.
Revised by / Date	Revised by / Date

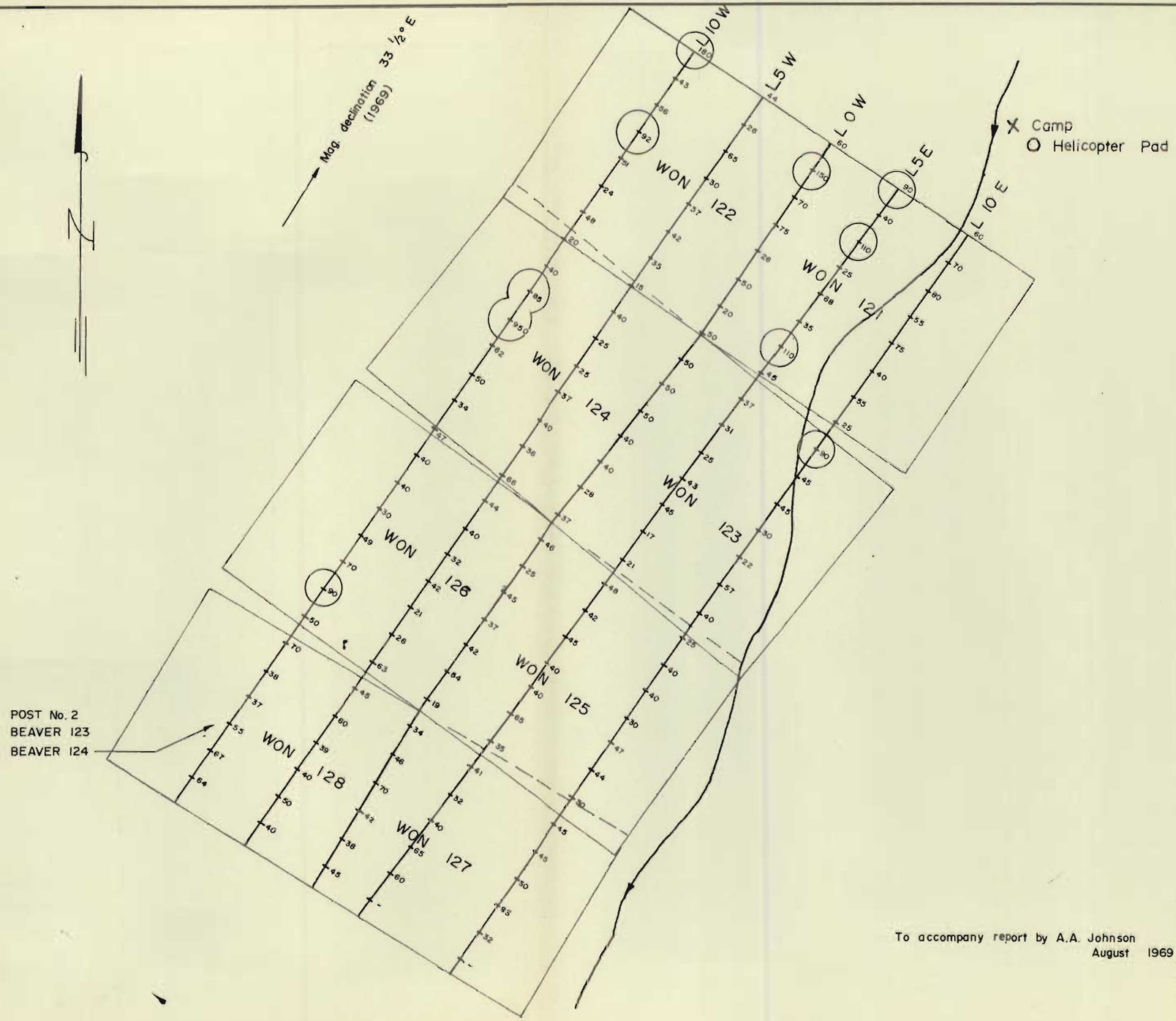
GEOCHEMICAL SURVEY

ZINC

N.T.S. 106 D 2

Scale: 1" = 500' | Date: AUG. 10, 1969 | Plate: WN-69-1

#210-0640



NOTE : Median 45 p.p.m.
Average 45 p.p.m.
Theshold 80 p.p.m.

Values above threshold have been circled rather than contoured as they are too sporadic to be interpreted with confidence.

To accompany report by A.A. Johnson
August 1969

WON 'A' GROUP

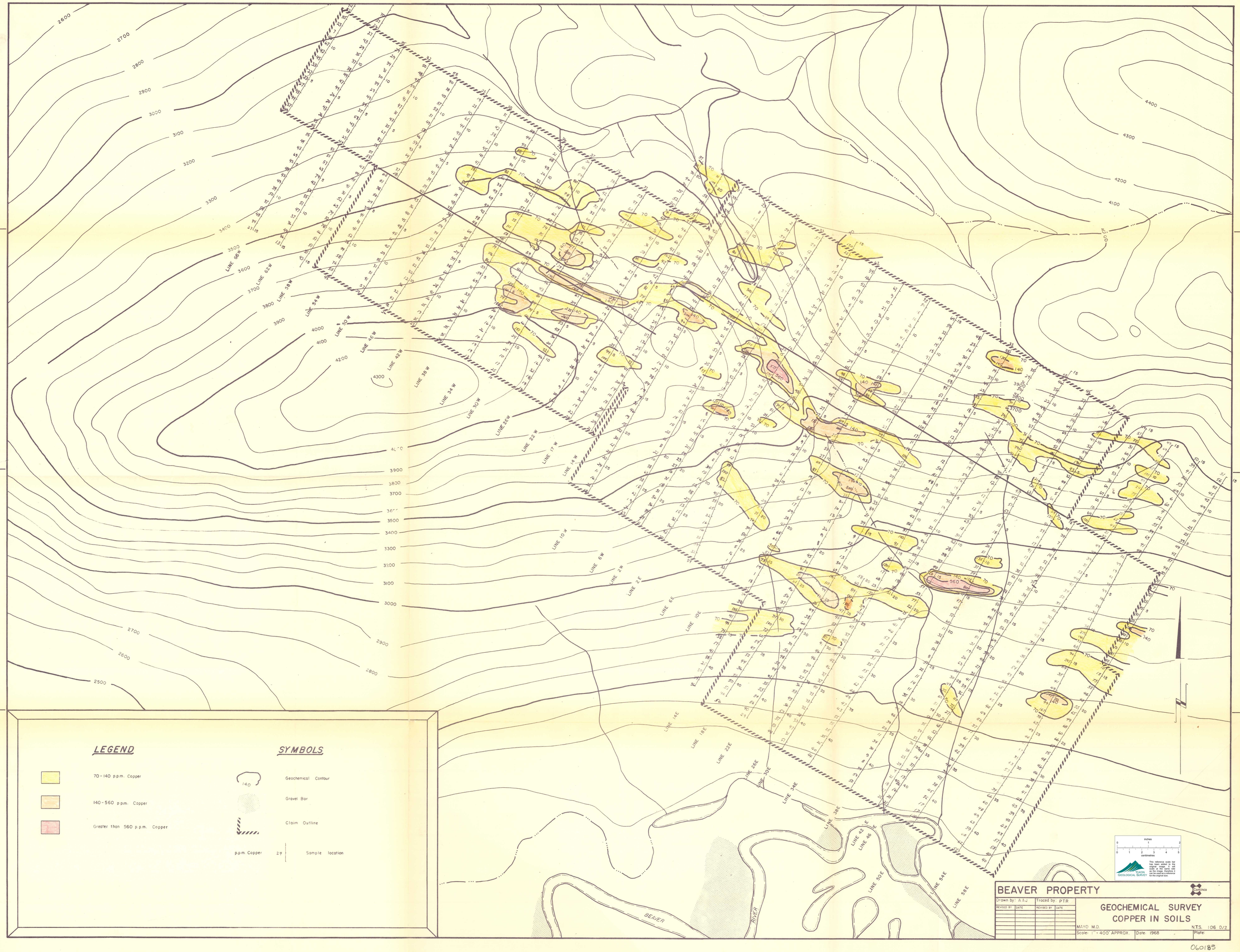
Drawn by: A.A.J. | Traced by: G.K.T.
Revised by | Date | Revised by | Date

GEOCHEMICAL SURVEY
COPPER

N.T.S. 106 D 2

Scale: 1" = 500' | Date: AUG. 10, 1969 | Plate: W-69-3

#210-0640


LEGEND
70 - 140 p.p.m. Copper
140 - 560 p.p.m. Copper
Greater than 560 p.p.m. Copper
SYMBOLS
140
Geochemical Contour
Gravel Bar
Claim Outline
p.p.m. Copper 24
Sample location
BEAVER RIVER
LINE 56W
LINE 52W
LINE 58W
LINE 54W
LINE 50W
LINE 46W
LINE 42W
LINE 38W
LINE 34W
LINE 30W
LINE 26W
LINE 22W
LINE 17W
LINE 14W
LINE 10W
LINE 6W
LINE 2W
LINE 2E
LINE 6E
LINE 10E
LINE 14E
LINE 18E
LINE 22E
LINE 26E
LINE 30E
LINE 34E
LINE 38E
LINE 42E
LINE 46E
LINE 50E
LINE 54E
LINE 58E
inches
centimetres
YUKON GEOLOGICAL SURVEY
This reference scale bar has been added to the original image. It will scale at the same rate as the original image, and can be used as a reference for the original size.
BEAVER PROPERTY
Cominco
Drawn by: A.A.J.
Traced by: P.T.R.
REVISED BY
DATE
GEOCHEMICAL SURVEY
COPPER IN SOILS
MAYO M.D.
N.T.S. 106 D/2
Scale: 1" = 400' APPROX.
Date: 1968
Plate:

060183