

REPORT ON GEOLOGICAL AND
GEOCHEMICAL SURVEYS ON THE BEA,
DOP AND NOR CLAIM GROUP,
OF MAKAOO DEVELOPMENT CO. LTD. (NPL)
SUMMIT LAKE,
YUKON TERRITORY.

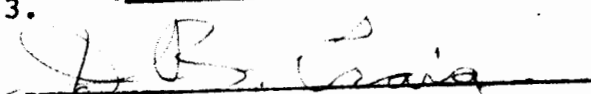


OCTOBER 16, 1973.

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$1800.00

Vancouver, B.C.


Resident Geologist or
Resident Mining Engineer

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

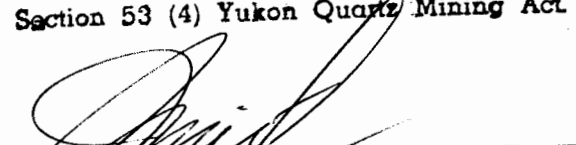

Commissioner of Yukon Territory

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MAPS:

PROPERTY LOCATION MAP	1" = 80 miles
GEOLOGY	1" = 1000 feet
GEOCHEMICAL SURVEY	
ZINC (ppm): Values (1) contours(1)	1" = 1000 feet
LEAD (ppm): Values (1) contours(1)	1" = 1000 feet.

REPORT ON GEOLOGICAL AND GEOCHEMICAL SURVEYS
ON THE BEA, DOP AND NOR CLAIM GROUP,
OF MAKAAO DEVELOPMENT CO. LTD. (NPL)
SUMMIT LAKE, YUKON TERRITORY.

INTRODUCTION

The BEA, DOP, NOR mineral claim group of Makao Development Co. Ltd. (NPL) was staked in the early winter of 1972 in the area of the newly discovered Canex-Placer lead-zinc deposit in Howard Pass near Summit Lake, Yukon Territory. The property was acquired by Makao from the stakers.

In the summer of 1973, a grid was established on the property and geochemical surveying was conducted by personnel of Torwest Resources Ltd. (NPL). Prospecting and some mapping was performed by W. Petrie, Prospector, of Torwest. Geological mapping was done by D. P. Taylor, Geologist, of Agilis Engineering Ltd.

LOCATION AND ACCESS

The property straddles the Yukon - Northwest Territories border 18 miles north-northwest of Summit Lake, Y.T., which is 158 miles north of Watson Lake, Y.T. The property lies about a mile north of Canex-Placer's claims covering a reported showing some 14 miles northwest of their main discovery area in Howard Pass.

The approximate centre of the property is located: - 62° 35' N: 129° 35' W. and lies in both the Watson Lake Mining District of the Yukon Territory and the Nahanni Mining District of the Northwest Territories. Access is by float or ski equipped fixed wing plane to Summit Lake from Ross River or Watson Lake, and by helicopter to the property from Summit Lake.

The NOR claims are staked in the Yukon Territory and the BEA, and DOP claims lie in the Northwest Territories. The claims appear to be staked in accordance with the relevant mineral acts and the Yukon claim tags have been affixed to the appropriate posts.

The property comprises:-

<u>CLAIM</u>	<u>RECORD NUMBER</u>
BEA 1-5	A49801 - A49805
BEA 6-7	A49806 - A49807
BEA 10-13	A49810 - A49813
BEA 14-15	A49814 - A49815
BEA 18-21	A49818 - A49821
BEA 22-23	A49822 - A49823
BEA 26-29	A49826 - A49829
DOP 8-9	A49808 - A49809
DOP 16-17	A49816 - A49817
DOP 24-25	A49824 - A49825
DOP 28-29	A49828 - A49829
NOR 14-19	Y71036 - Y71041
NOR 34-39	Y71056 - Y71061

CLAIM

NOR 51-56

RECORD NUMBER

Y71073 - Y71078

PHYSIOGRAPHY AND CLIMATE

Relief on the property is gentle, small mountains lie on the south end of the claims and the northern area is generally flat and swampy. Elevations average around 4500 feet A.S.L.

The claim area is generally covered with stunted timber and thick buckbrush with only small areas above tree line (about 4500 feet) and open swamps being clear.

The climate in this area is very cold with moderate snow in the winter and short temperate summers. The snow free working season is generally from mid June to early October.

REGIONAL GEOLOGY

The regional geological map for this area is Geological Survey of Canada Map 8-1967, Nahanni. Three major rock units have been described in the Howard Pass area, only two of which underly the vicinity of the property.

Upper Cambrian and (?) Ordovician limestone, dolomitic silt-stone, and silty dolomite with lesser basal sandy dolomites and quartzites are overlain in this region by Devonian and (?) Mississippian black shales, argillites, chert-pebble conglomerates and minor sandstone, siltstones and banded cherts.

Extensive Cenozoic glacial and alluvial deposits cover most of the open valleys and lower ground.

PROPERTY GEOLOGY

Outcrop exposure on the property is quite limited, particularly toward the north.

The southern part of the property is underlain by east-west striking Upper Cambrian limestones, of wavy-banded and massive gray varieties. These grade northward into calcareous shales in the southern end of the NOR claims. Upper Cambrian or possibly Ordovician siliceous shales, occasionally carrying considerable graphite, underly the northern part of the NOR group.

All strikes were consistently westerly, 280 - 285°, with steep to vertical dips to the south.

Cleavage is generally intense, particularly in the shale sequences and paralalled to sub parallel with the bedding, although cleavage dips tend to be vertical to steeply northerly dipping.

Apart from the graphite noted in some siliceous shales and erratic disseminated pyrite also in the siliceous shales no mineralisation was noted during prospecting or field mapping.

A total of 14 rock samples were taken and sent to Vancouver for assay or to the Agilis basecamp at Summit Lake for XRF analysis. No significant lead-zinc mineralisation was found in any of these samples.

GEOCHEMICAL SURVEY.

Field Procedure

Samples were taken on grid lines established for the purpose. North-south grid lines were established on the BEA, DOP claims

800 feet apart, samples were taken every 200 feet along these lines. On the NOR claims 4 east-west lines were established 1500 or 2000 feet apart. These lines were also sampled at 200 foot intervals.

Samples were taken with mattocks generally from 6-10 inches in depth, attempts were made to locate "B" horizon material in all cases. Samples were placed in numbered kraft paper bags provided by the laboratory.

ANALYSIS

All samples were shipped to the laboratory of Baringer Research in Whitehorse Y.T. for quantitative analysis for lead-zinc content.

The samples were dried and a minus 80 mesh fraction (250 mgm) was taken from each sample. Extraction was performed using hot perchloric acid for 4 hours. Quantitative analysis was conducted using atomic absorption methods. Lead results were corrected for matrix effect interference and are called by the laboratory "background corrected".

RESULTS

Parts per million results have been returned for 545 samples. Zinc values range up to 2850 ppm, with background being established at 80 ppm by cumulative frequency plotting of results on arithmetic probability paper; anomalous samples begin at 230 ppm Zn. The anomalous break on the graph is poorly defined due to the fact

that there is a remarkably large (5.86%) section of the population greater than 400 ppm spread over a very wide value range.

Lead background was found by the same graphic method to be 14 ppm. The anomalous break for lead is 33 ppm and sample values range up to 112 ppm.

INTERPRETATION

Anomalous values tend to be scattered. No single strong anomaly has developed for either lead or zinc.

In the Summit Lake area, due to erratic high background levels in zinc and the high geochemical mobility of that element, normally a relatively coincident lead value is sought to confirm the zinc high validity.

The strongest coincident anomalous area on the grid occurs on the most easterly line, 72E. Three separate samples on this line, at 28S, 34S, and 42S are greater than 1500 ppm Zn. Lead values over most of this area are very low at anomalous values occur at stations 28S, 30S, and 34S. Presence of some mineralisation despite generally low topographic relief in this area, is indicated. The samples do not return the high values of greater than 10,000 ppm Zn found in the Howard Pass deposit area but are considered significant.

A second coincident anomaly occurs at stations 44S and 46S on line 56E. This anomaly is also on the boundary of the grid; it is weaker in intensity than the eastern anomaly.

Three other small, lower grade, coincident anomalies are

located at stations 32E, 34S; 8E, 22S; and 8W, 34S.

The anomalies are all in areas devoid of outcrop and within projected areas of limestone with possible calc-shale geology in the BEA and DOP claim area. No significant anomalies are located on the NOR claims.

CONCLUSIONS

The BEA, DOP, NOR claim group is underlain by limestones, calc-shales, and siliceous shales of Cambrian and (?) Ordovician and of Devonian ages.

The Howard Pass deposit of Canex-Placer is in horizons stratigraphically correlatable to the calc-shale sequence found on this property.

Significant lead-zinc geochemical anomalies have been located on the grid and claim boundaries; on the eastern boundary around station 72E, 34S and on the southern boundary at stations 44S and 46S on line 56E.

Line spacing on the grid, of 800 feet, is not sufficient coverage to satisfactorily delineate the reconnaissance anomalies located.

RECOMMENDATIONS

A boundary survey should be conducted on the BEA, DOP claims to establish the validity of the area underlain by the eastern two anomalies.

The anomalies located, particularly the two furthest east,

should be geochemically sampled on detailed grids of not more than 100 x 100 feet sample spacing.

If necessary, upon confirmation of the anomalies, some attempt should be made to cover any unclaimed ground on the southern and eastern boundaries of the BEA and DOP claims. It is known that the area east of the claims is owned by S. Aiken, but the possibilities of open ground in this area is indicated on the government claim maps. Open ground also lies south of the east end of the claim group, according to the government claim map, between the BEA claims and Dynasty's GULL group and Canex-Placer's R group.

There is a possibility of an access road to Howard Pass being built to pass in the vicinity of the property which would greatly expedite and lessen the cost of future investigations, and also make trenching of the anomalies feasible.

Respectfully submitted,



D.P. Taylor, M. Sc.,

Geologist.

Endorsed by,



F. Holcapek,

P. Eng.

Vancouver, B.C.

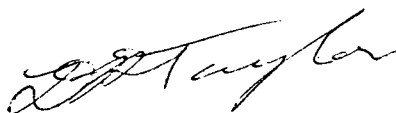
October 16, 1973.

CERTIFICATION

I, David Pelham Taylor of Vancouver, B.C.

do hereby certify that:

1. I am an Exploration geologist residing at 2097 West 6th Avenue, Vancouver, B.C.
2. I am a graduate of the Royal School of Mines, London.
3. I have practiced as an exploration geologist in B.C. for five years.
4. Information contained in this report is based upon work performed by myself or by personnel under my consultative direction.



D. P. Taylor, M.Sc.

October 16, 1973.

Vancouver, B.C.

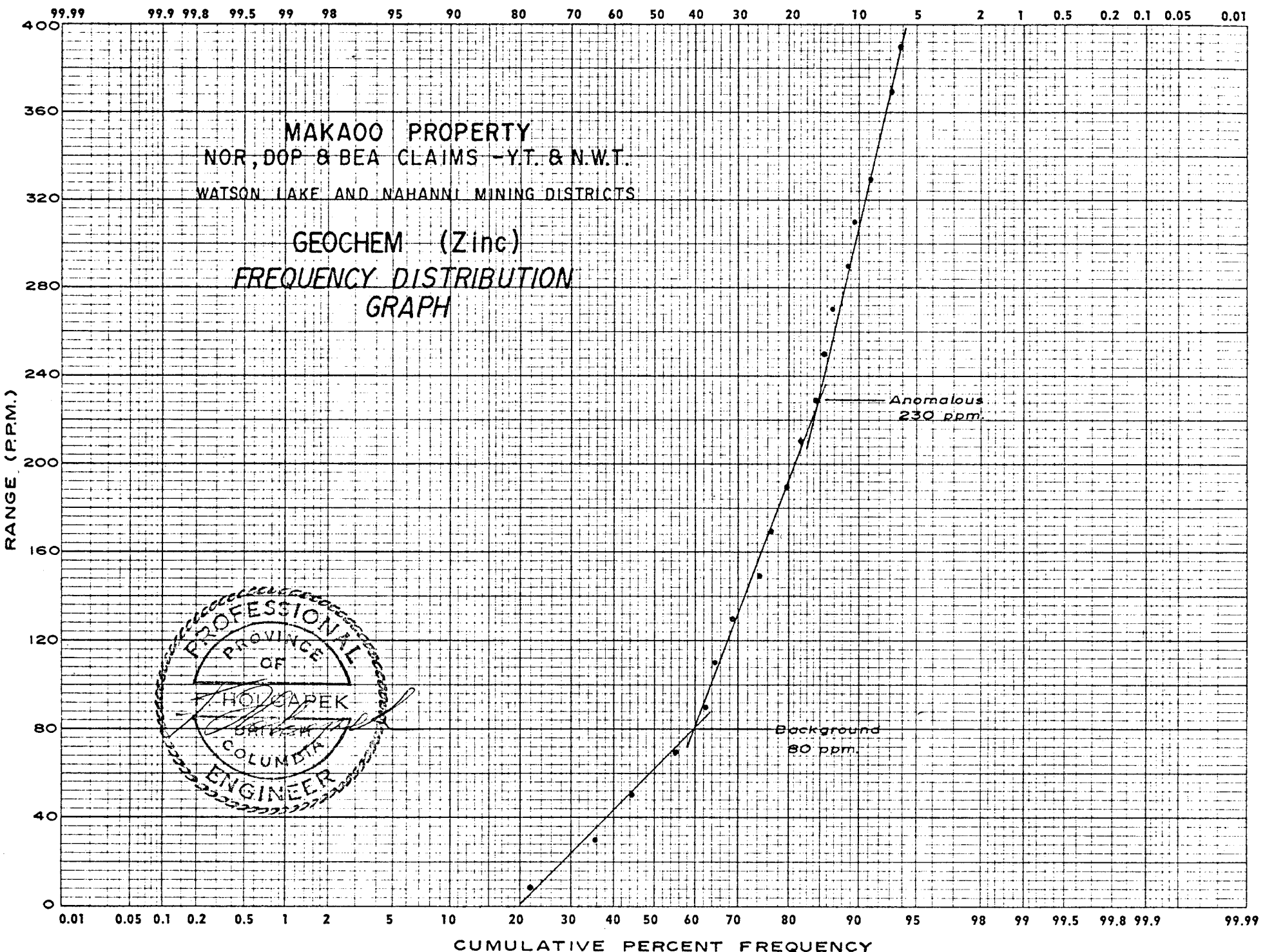
STATEMENT OF EXPLORATION EXPENDITURES
ON THE BEA, DOP, AND NOR MINERAL CLAIMS
OF MAKAOO DEVELOPMENT CO. LIMITED,
SUMMIT LAKE AREA, YUKON AND N.W.T.

Consultants Fee	\$ 2,157.34
Field Supervision	1,291.12
Ground Transportation	819.86
Mapping & Prospecting	1,672.00
Geological Survey	1,558.00
Geochemical Survey	5,186.66
Sampling & Assays	793.86
Camp & Supplies	906.80
Air Transportation	2,485.44
Administration	<u>923.44</u>
Total	\$17,794.52

Names and addresses of persons employed in performing this work.

H.H. Waller	-	Richmond, B.C.
W.F. Petrie	-	Merritt, B.C.
H. Hatchard	-	Merritt, B.C.
R. Grabowski	-	Merritt, B.C.
K. Folstrom	-	Vancouver, B.C.
F. Holcapek	-	Vancouver, B.C.
D. Taylor	-	Vancouver, B.C.
B. Talbot	-	Vancouver, B.C.

William F. Petrie



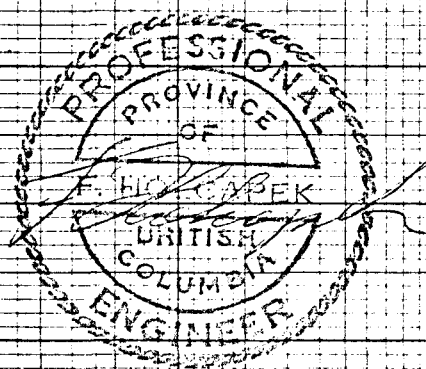
99.99 99.9 99.8 99.5 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01

MAKAOO PROPERTY
 NOR, DOP & BEA CLAIMS - Y.T. & N.W.T.
 WATSON LAKE AND NAHANNI MINING DISTRICTS

GEOCHEM (Lead)
 FREQUENCY DISTRIBUTION
 GRAPH

RANGE (P.P.M.)

80
70
60
50
40
30
20
10

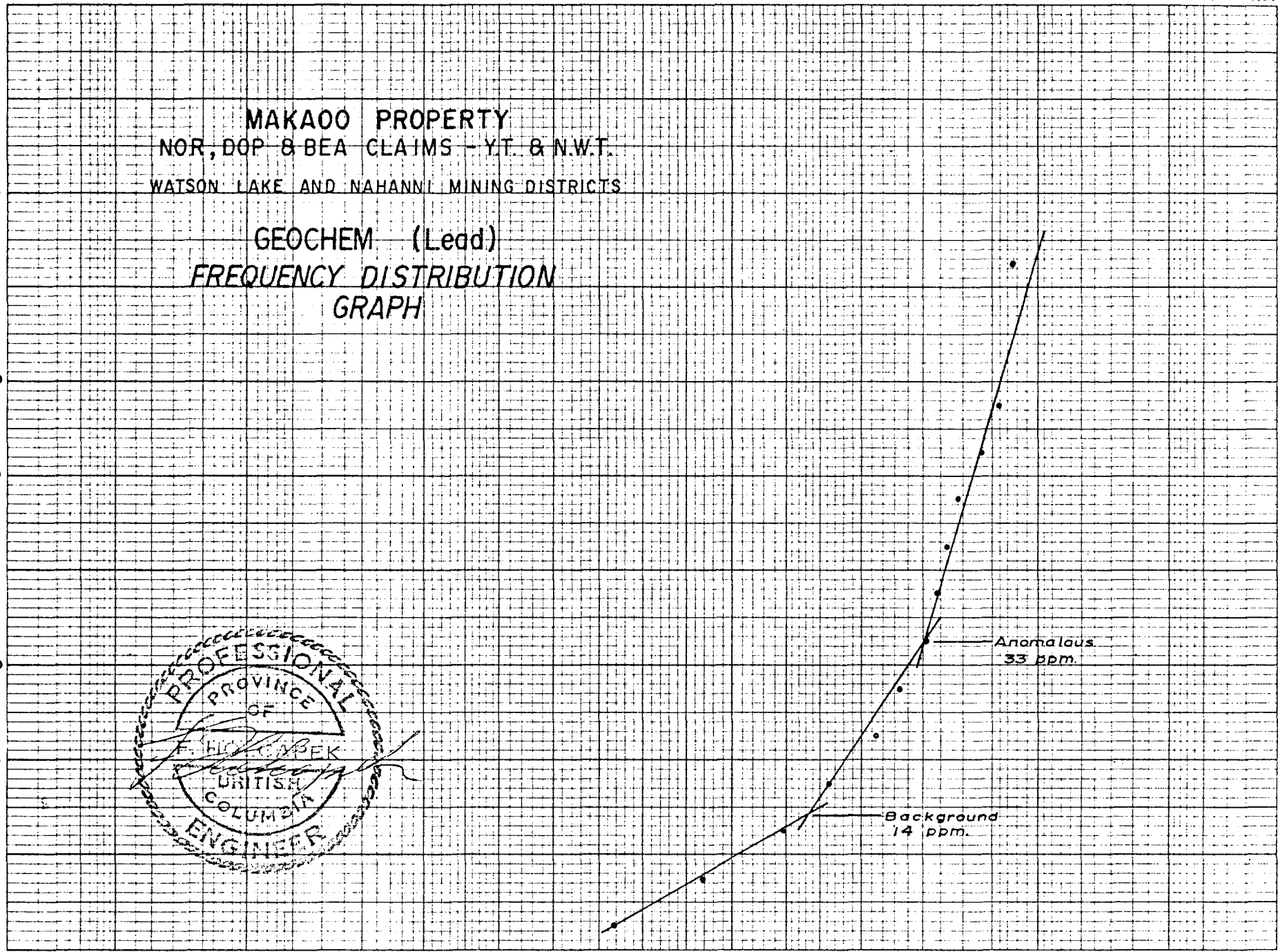


0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.5 99.8 99.9 99.99

CUMULATIVE PERCENT FREQUENCY

Anomalous
33 ppm.

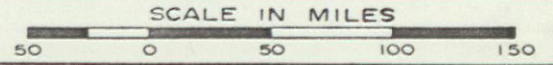
Background
14 ppm.



YUKON TERRITORY
AND PART OF THE
NORTHWEST TERRITORIES

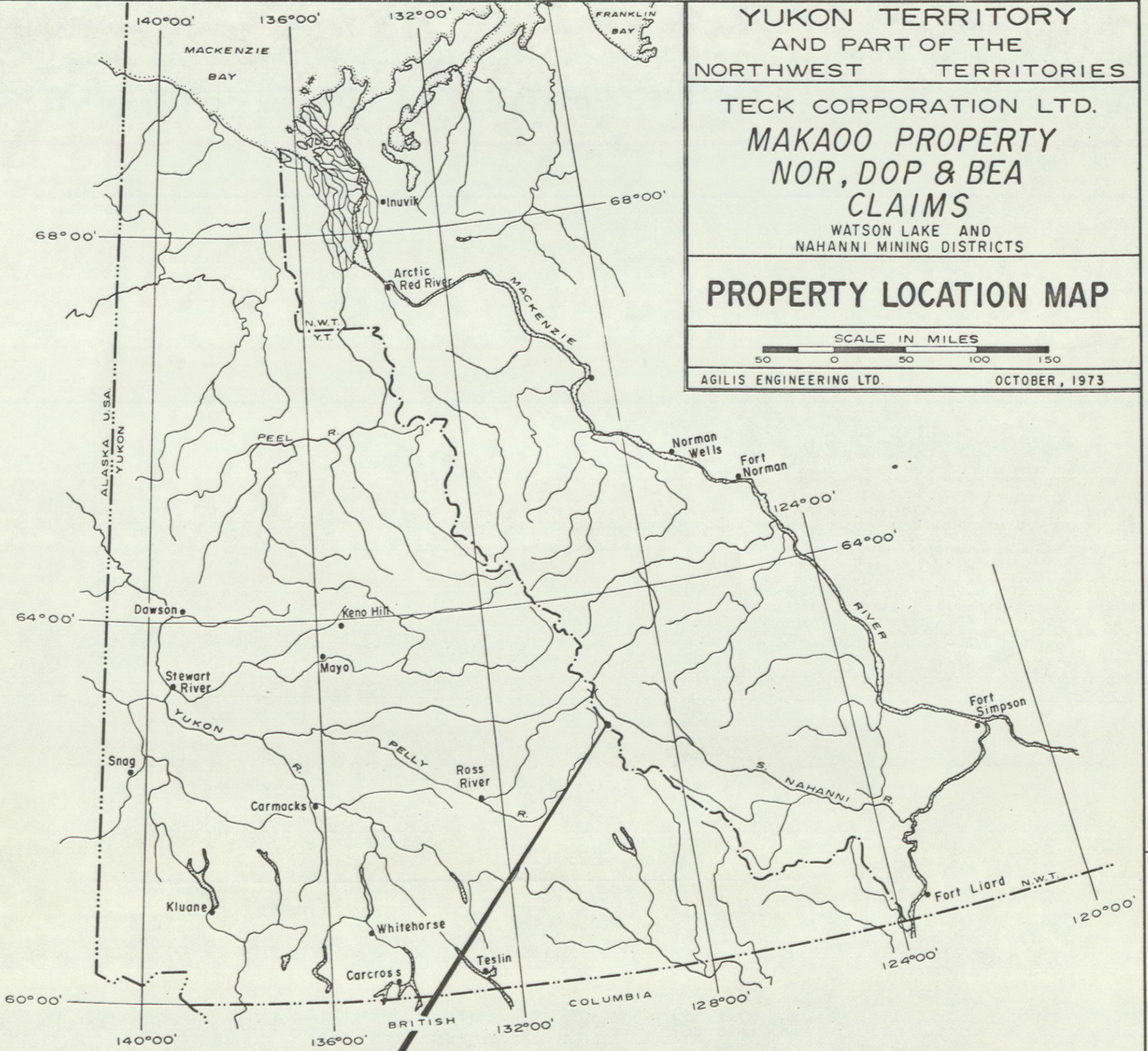
TECK CORPORATION LTD.
MAKAOO PROPERTY
NOR, DOP & BEA
CLAIMS
WATSON LAKE AND
NAHANNI MINING DISTRICTS

PROPERTY LOCATION MAP



AGILIS ENGINEERING LTD.

OCTOBER, 1973



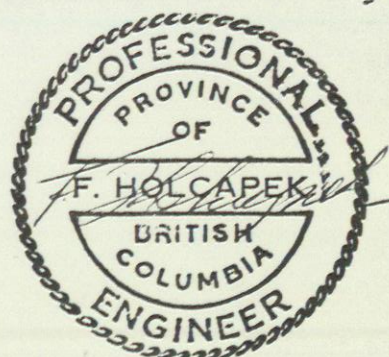
**MAKAOO
PROPERTY**

NOR 15	NOR 17	NOR 19
NOR 14	NOR 16	NOR 18
NOR 35	NOR 37	NOR 39
NOR 34	NOR 36	NOR 38
NOR 51	NOR 53	NOR 55
NOR 52	NOR 54	NOR 56

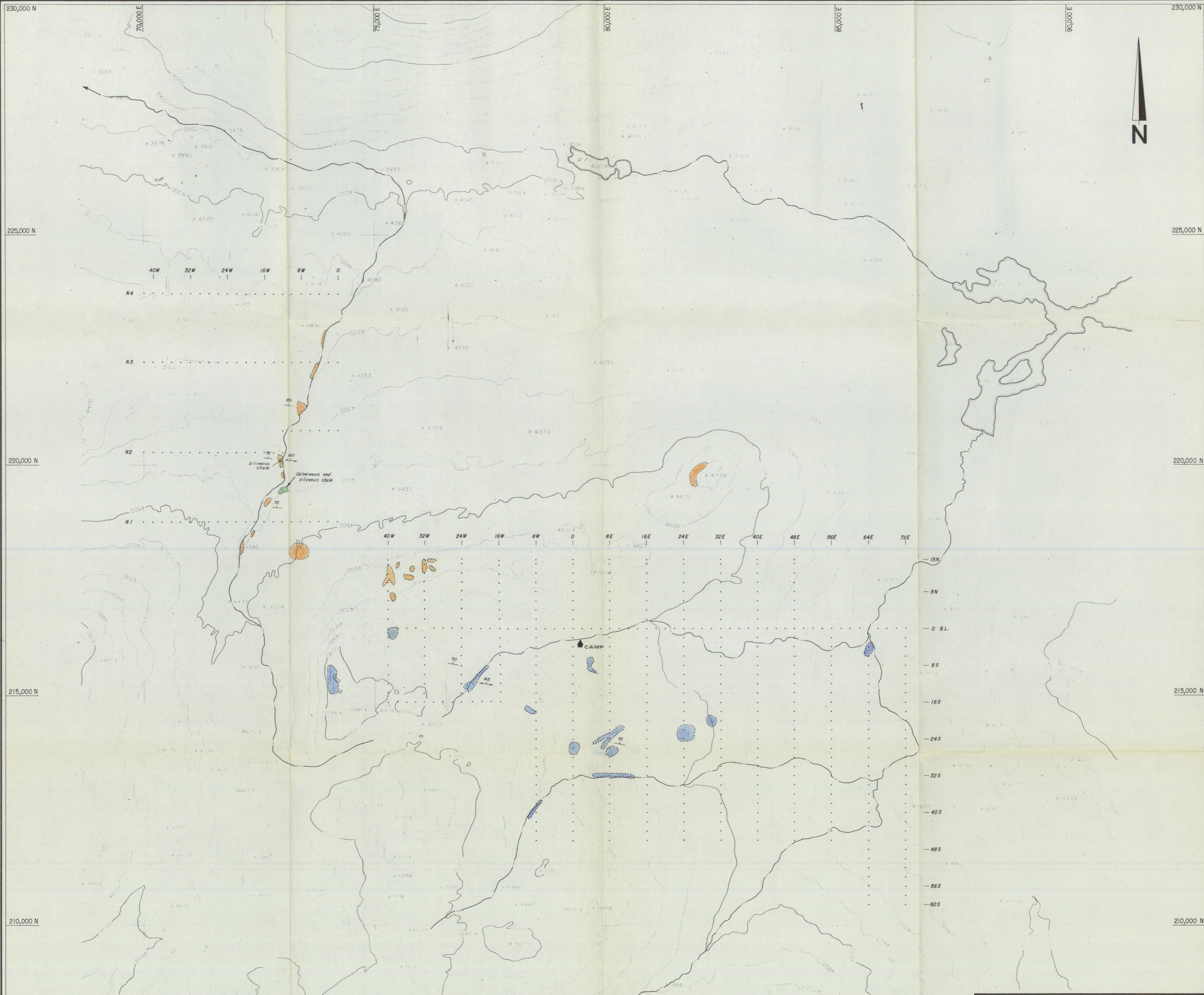
BEA 27	BEA 26	BEA 23	BEA 22	BEA 15	BEA 14	BEA 7	BEA 6
DOP 29	DOP 28	DOP 25	DOP 24	DOP 17	DOP 16	DOP 9	DOP 8
BEA 21	BEA 20	BEA 13	BEA 12	BEA 5	BEA 4		
BEA 19	BEA 18	BEA 11	BEA 10	BEA 3	BEA 2		
							BEA 1




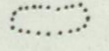



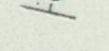
SCALE 1" = 4000 FT.



SCALE: 1" = 4 MI.



LEGEND:

- | | | | |
|---|------------------|---|----------------|
|  | Limestone |  | Outcrop |
|  | Siliceous shale |  | Foliation |
|  | Calcareous shale |  | Strike and dip |

TECK CORPORATION LTD.
 MAKAOO PROPERTY - SUMMIT LAKE AREA
 NOR, BEA and DOP CLAIMS, Y.T. and N.W.T.
 WATSON LAKE and NAHANNI MINING DISTRICTS

GEOLOGY MAP

SCALE IN FEET
 1000 0 1000 2000 3000

AGILIS ENGINEERING LTD. SEPTEMBER, 1973



TECK CORPORATION LTD.
 MAKAOO PROPERTY - SUMMIT LAKE AREA
 NOR, BEA and DOP CLAIMS, Y.T. and N.W.T.
 WATSON LAKE and NAHANNI MINING DISTRICTS

GEOCHEMICAL SURVEY
 ZINC (P.P.M.)

Contours at: 80, 160, 230, 400, 800 & 1200 ppm

SCALE IN FEET
 1000 0 1000 2000 3000

AGILIS ENGINEERING LTD. SEPTEMBER, 1973



TECK CORPORATION LTD.
 MAKAOO PROPERTY - SUMMIT LAKE AREA
 NOR, BEA and DOP CLAIMS, Y.T. and N.W.T.
 WATSON LAKE and NAHANNI MINING DISTRICTS

GEOCHEMICAL SURVEY
 LEAD (P.P.M.)

Contours at: 14, 25, 33 & 55 ppm

SCALE IN FEET
 0 1000 2000 3000

AGILIS ENGINEERING LTD. SEPTEMBER, 1973