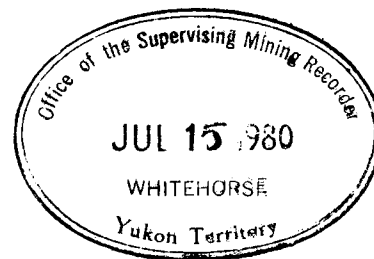


GEOCHEMICAL REPORT



on the

ROMAN CLAIMS

WATSON LAKE MINING DISTRICT

NTS 105A/2

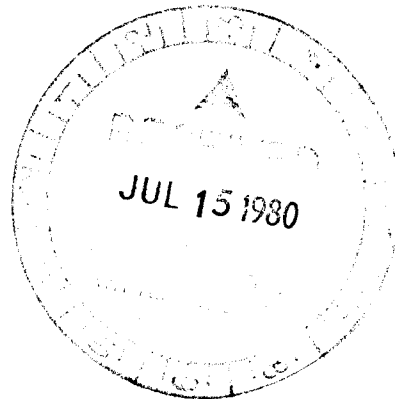


Lat. $60^{\circ}01'$ Long. $128^{\circ}37'$

By: D.C. Miller, P. Eng.
& B. Wilson

Covering field work during May 17 to 23, 1980

090 639



This report has been examined by the Geological Evaluation Unit and is recommended to the Commission to be considered as representing the amount of \$ 4000

[Handwritten Signature]

District Engineer

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

[Handwritten Signature]

B. R. SAXTER
Supervising Mining Recorder

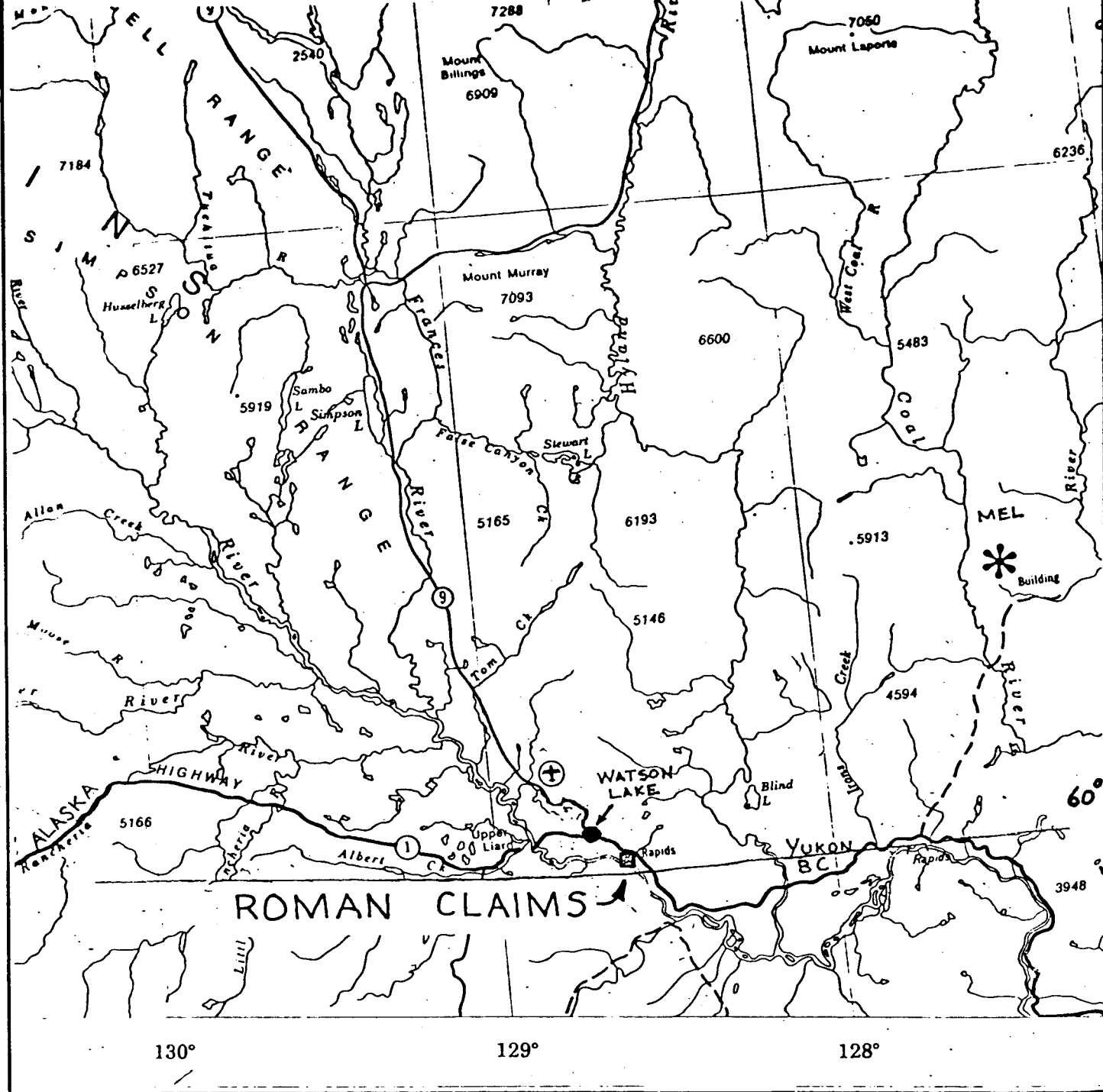
[Handwritten Signature]
Commissioner of Yukon Territory

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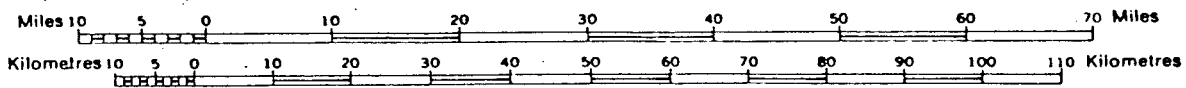
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SCALE 1:1,000,000
1 INCH EQUALS 15.78 MILES



APPROX. LAT. & LONG. OF
LOWER RT. COR. OF DWG.
60° 00' 00" LATITUDE
126° 00' 00" LONGITUDE

PROJECT NO. 6270
FIGURE NO. 1

SHEET NO. _____
OF _____
N.T.S. 105-A-1

ROMAN
CLAIMS

ST. JOSEPH EXPLORATIONS LIMITED

TORONTO, CANADA

fig. 1

Location and Access

The Roman claims lie 6 km southeast of Watson Lake, Yukon, straddling the Liard River at a point $\frac{1}{2}$ km upstream from the B.C.-Yukon border.

Access to the claims is by helicopter, river boat or walking to the north part of the claim block from the Alaska Highway.

Physiography

The claims cover both north and south banks of the Liard River. Bedrock and till cliffs are found along the river banks with highest cliffs on the south side. Base elevation at river level is about 600 m with small hills rising to 650 m.

Vegetation comprises chiefly spruce with various deciduous trees in some areas.

South of the river, soils are well developed from glacial till covering bedrock. To the north, soils are derived from river flooding for up to 100 m back from the river.

Ice movement was eastward and northeastward.

Claims and Ownership

The Roman property includes the following claims in a contiguous block:

<u>Grant No.'s</u>	<u>Name</u>	<u>Anniversary Date</u>
YA 36877-36892	Roman 1-16	June 11

The claims were optioned to St. Joseph Explorations Limited from J. Melnychuk under the terms of an agreement dated December 20, 1979.

History

The showings have been staked intermittently since 1962 as the Jim and Moose Claims, 1962; Barite Claim, 1965; Kirk Claim, 1963; Naza Claim, 1969; and M Claim, 1975.

The only known work has been sampling and assaying of mineralized exposures at river level and minor soil and silt sampling.

General Geology

The claims are underlain by shale, chert and phyllite of Cambrian to Ordovician age (Gabrielse 1966).

Details of these various rocks were described in a previous assessment report (Hendry 1979). Shales are black, carbonaceous, non-calcareous, rusty and contain pyrite bands up to 10 cm thick, macasite nodules and minor barite veins. Cherts are creamy to grey, pyritic, and strongly jointed. Phyllites are buff to rusty weathered and grey on fresh surfaces. White and rusty calcite veining is common.

Mineralization

Lead-zinc-barite veins within black shale host rocks are exposed on the south bank of the river. The main

vein is 4 m thick, strikes northwest and dips vertically. Chip samples of this vein, taken in 1979, assayed 19.7% Ba, 0.88% Pb, 0.25% Zn and 0.09 oz./ton Ag over 4 m.

On the north bank of the river, small quartz veins, containing barite, lead, zinc, copper and silver mineralization, are poorly exposed within shale host rocks. Samples of this material averaged 0.4% Ba, 0.17% Pb, 14.4% Zn, 0.34% Cu and 0.29 oz./ton Ag over a width of 0.3 m.

Between these two showings, on the river bottom, a number of white veins with an average strike of about N10°E are exposed under fairly deep water. From shore to shore the total distance of strike length partially exposed is 700 m.

Geochemical Survey, 1980

As recommended by D. Hendry in his report of August 1979, a geochemical survey was conducted to cover the presumed extension of mineralization southward.

During May 18-23, 1980, 3-4 men were employed in this work. During this period, they were based at the Belvedere Hotel, in Watson Lake, and transported to the claims daily by a helicopter based at Watson Lake, or by vehicle to the north part of the claims. Field supervision of the crew was provided by Brad Wilson.

A geochemical soil grid was designed to cover possibilities of either a southeast or southwest strike of mineralization. A total of 5.3 km of line was chained, ribboned,

and blazed with minimal cutting. Silva compasses were used for direction control. Ten cross lines, at 100 m spacings, were tied into a central base line. Soil samples were collected at 25 m stations along the cross lines.

Soils were collected from the B horizon at an average depth of 25 cm from sandy brown soils. These soils were placed in kraft bags and shipped to Kamloops for analysis for lead, zinc and barium at the Kamloops Research and Assay Laboratory. Here they were dried, screened and part of the -80 mesh fraction was used for analyses. For lead and zinc analyses, the refined samples were digested in hot nitric and hydrochloric acid and analyzed for lead and zinc by atomic absorption. For barium analyses, the refined samples were analyzed by the X-Ray method.

A total of 193 soil samples were analyzed and results are plotted on Maps 1, 2 & 3, in the pocket.

To estimate thresholds and anomalous values, cumulative frequency curves were plotted for soil analyses for lead, zinc and barium (figures 2, 3 & 4). Based on these curves, threshold values and anomalous values are summarized as follows:

	No. of Samples	PPM Mean	PPM Threshold	PPM Possibly Anomalous	PPM Definitely Anomalous
LEAD	193	11.3	15	15 - 17	greater than 17
ZINC	193	33	58	58 - 84	greater than 84
BARITE	193	780	950	950 - 1120	greater than 1120

On accompanying maps 1, 2 & 3, anomalous values for lead, zinc and barium are indicated by shaded areas.

In addition to soils, geochemical analyses for lead, zinc, and barium were done for 3 silt samples and 11 bedrock samples. These results are also plotted on maps 1, 2 & 3. There were too few of these samples to estimate anomalous populations and values are presented only for comparison purposes with soil sample values.

Conclusions and Recommendations

It is concluded the soil survey shows that the mineralized zone continues southward under soil cover to line 100S. Weakly anomalous values in zinc only are also found along trend on lines 200 and 300 south.

Because of relatively low barite content, a gravity survey probably would not be effective in tracing the zone under soil cover. Also, because of the high sulphide content in country rocks and the presence of graphitic horizons, the use of other geophysical methods to trace the zone may not be effective.

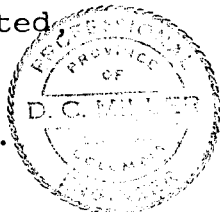
Diamond drilling or trenching in the vicinity of line OS is recommended to obtain a clean exposure of mineralization indicated by soil samples.

Respectfully submitted,

D. C. Miller

D.C. Miller, P. Eng.

July 3, 1980



Brad Wilson

Brad Wilson

50
17
14.1
10
PPM Pb

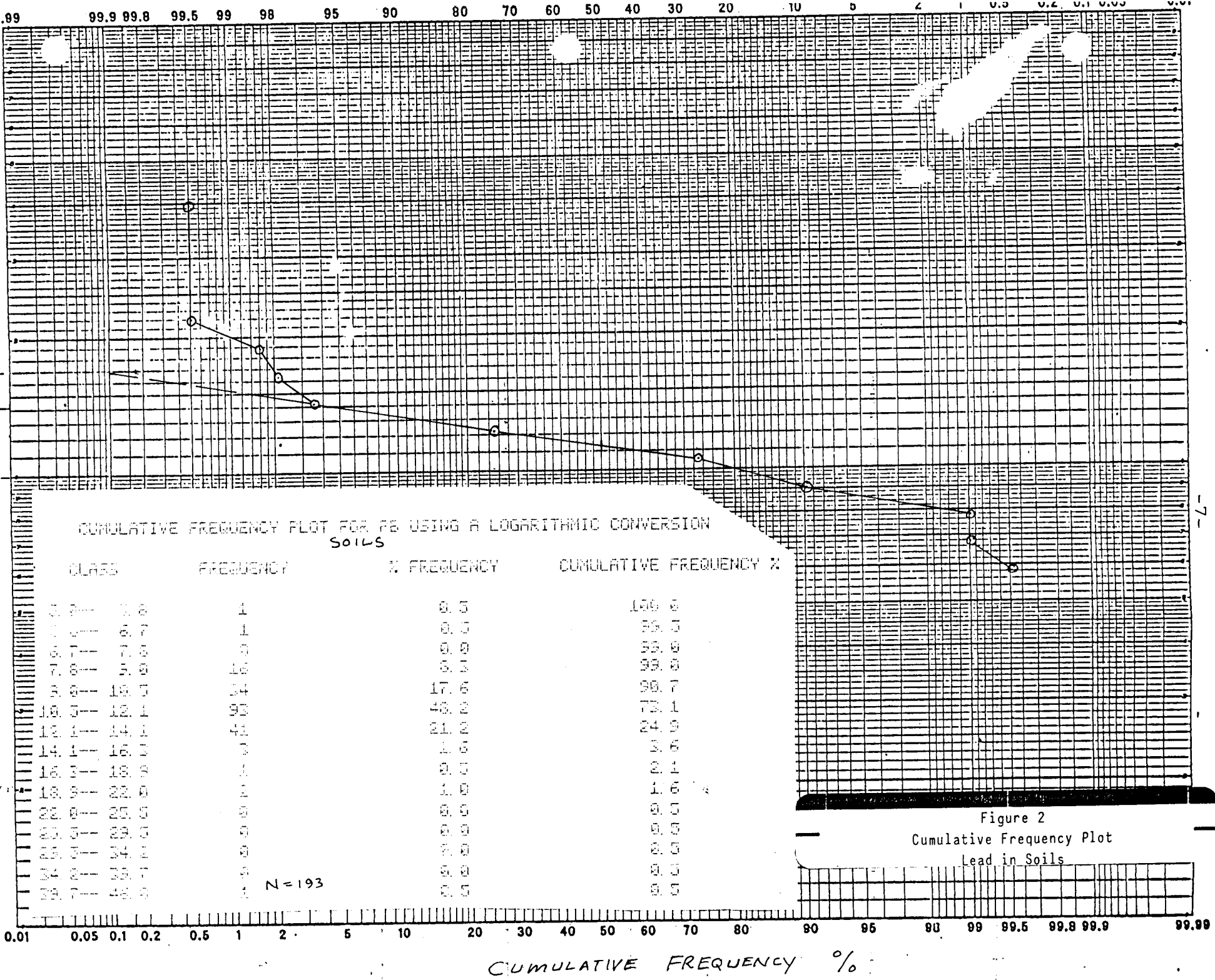
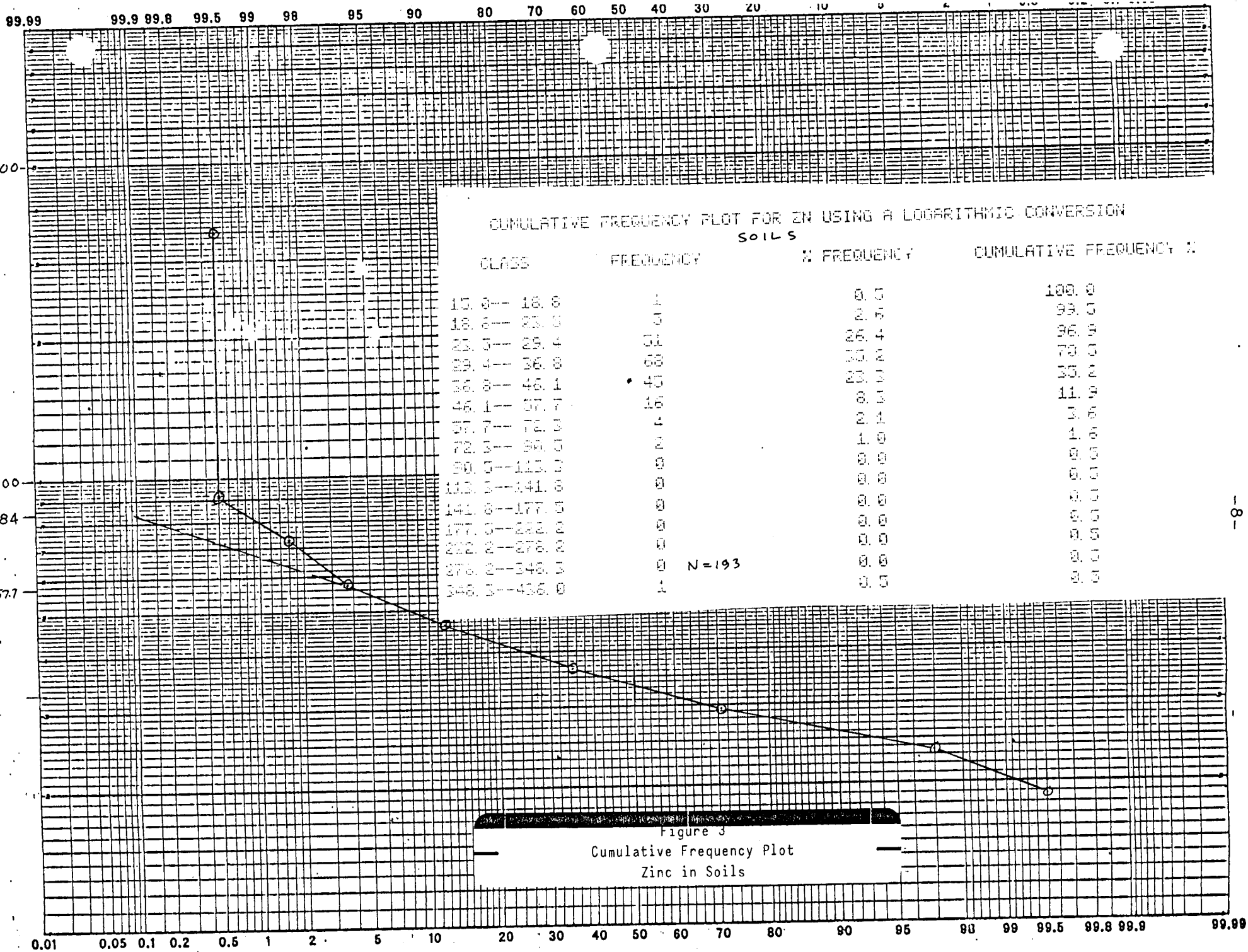


Figure 2
Cumulative Frequency Plot
Lead in Soils

CUMULATIVE FREQUENCY %



PPM Zn

CUMULATIVE FREQUENCY %

Figure 3
Cumulative Frequency Plot
Zinc in Soils

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

CUMULATIVE FREQUENCY PLOT FOR BA USING A LOGARITHMIC CONVERSION
SOILS

CLASS	FREQUENCY	% FREQUENCY	CUMULATIVE FREQUENCY
333.3--368.3	1	0.5	100.0
368.3--400.4	0	0.0	99.5
400.4--445.3	1	0.5	99.0
445.3--490.3	0	0.0	99.0
490.3--533.6	0	0.0	99.0
533.6--583.6	1	0.5	99.0
583.6--633.3	4	2.1	98.4
633.3--718.3	37	19.2	96.4
718.3--799.1	37	29.5	77.2
799.1--869.2	58	30.1	47.7
869.2--956.1	25	13.0	17.6
956.1--21031.7	3	1.6	4.7
21031.7--21157.0	5	2.6	3.1
21157.0--21272.7	0	0.0	0.5
21272.7--21408.0	1	0.5	0.5

N=193

PPM Ba

2000
1120
950

200

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

Figure 4
Cumulative Frequency Plot
Barium In Soils

CUMULATIVE FREQUENCY %

Cost Statement/Personnel & Addresses

The following costs were incurred by St. Joseph Explorations Limited during May 16 - June 11, 1980:

(1) <u>Wages, Salaries, Days Employed</u>	
1. D. Miller - May 16, June 2	
2. B. Wilson - May 17-23	
3. R. Shearing - May 17-23	
4. L. Groat - May 17-23	
5. H. Cameron - May 20-23	
Total Wages & Salaries:	\$ 1,628.49
(2) <u>Food & Accomodation</u>	
25 Man-days @ \$38/Man-day	950.00
(3) <u>Vehicle</u>	
7 Days @ \$35/Day	245.00
(4) <u>Helicopter</u>	
1 Hour @ \$390/Hour	390.00
(5) <u>Material Consumed, Flagging, Sample Bags</u>	50.00
(6) <u>Analyses</u>	
193 Soil, 3 Silt and 11 Rock Samples for lead, zinc, and barium	1,223.88
Subtotal:	\$ 4,487.37
<u>Costs Incurred During June 26 - July 3, 1980</u>	
Plotting of analyses, interpretation, report writing, typing & reproduction	600.00
TOTAL COSTS	\$ 5,087.37

The address of all persons employed is: St. Joseph Explorations Limited, #5, 970 Laval Crescent, Kamloops, B.C., V2C 5P5 (C/O).

References

Archer, A., Cathro, R.J.

1972: Northern Cordillera Mineral Inventory

Bostock, H.S.

1948: Physiography of the Canadian Cordillera with special reference to the area north of the fifty-fifth parallel; Geol. Surv. Can., Mem. 247

Gabrielse, H.

1966: Geology: Watson Lake, Yukon, Geol. Surv. Can., Map 19-1966

Hendry, D.A.R.

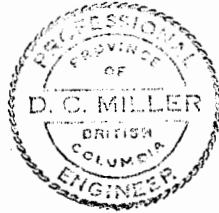
1979: Geological and Geochemical Report on the Roman Claims

Statement of Qualifications

I, DAVID C. MILLER, of 970 Laval Crescent, #5, 970 Laval Crescent, Kamloops, B.C., do hereby certify that:-

- (1) I am a graduate of the University of British Columbia and obtained a B.A.Sc. degree in Geological Engineering in 1959.
- (2) I have had 21 years experience in mining geology and mineral exploration.
- (3) I am a registered Professional Engineer in the Province of British Columbia.
- (4) I have no interest, directly or indirectly, in the property.

D.C. Miller



D.C. Miller, P. Eng.

July 3, 1980

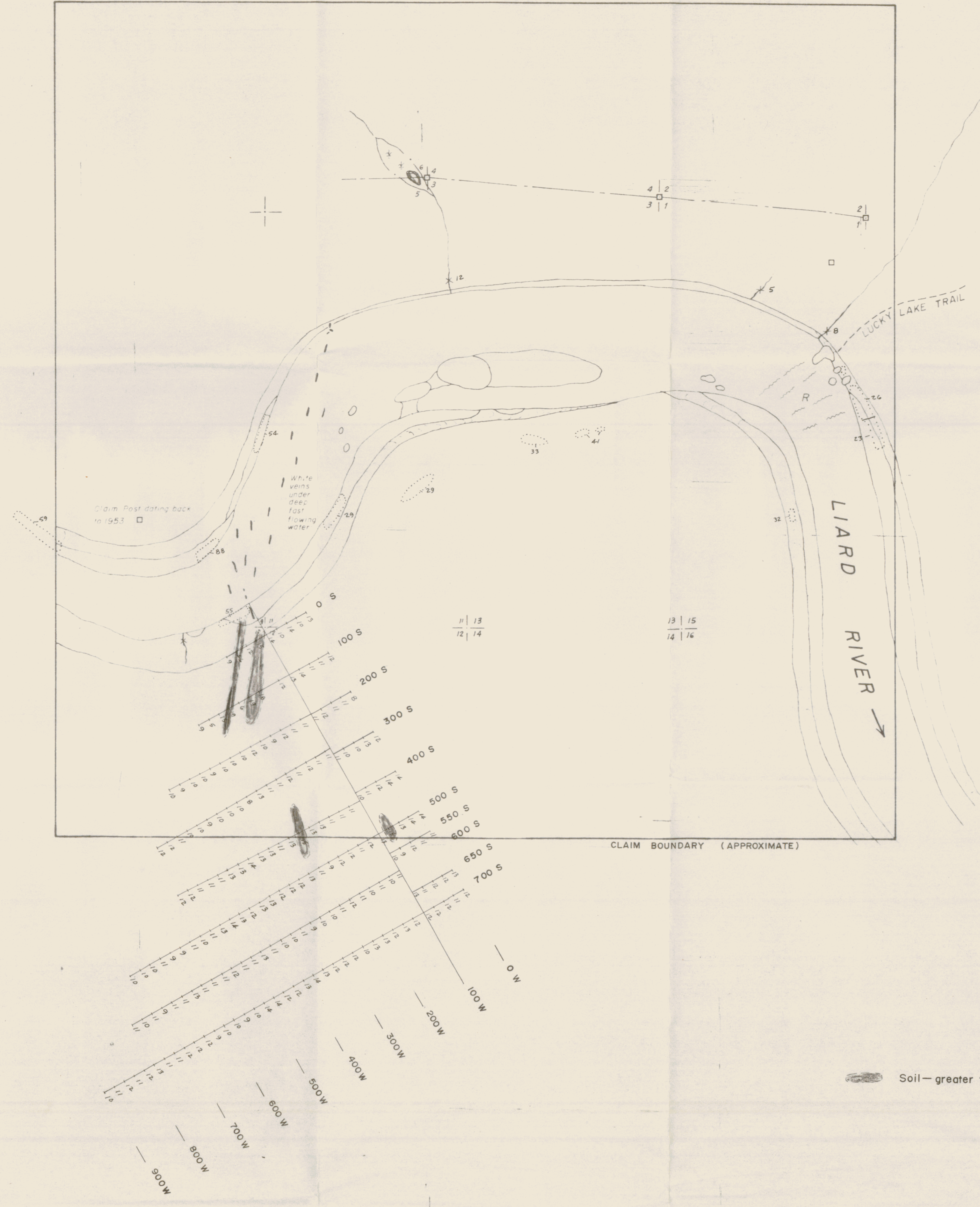
Statement of Qualifications

I, BRAD WILSON, c/o #5, 970 Laval Crescent, Kamloops, B.C.,
do hereby certify that:-

- (1) I am a 4th year student at Queens University, studying geological sciences.
- (2) I am fully experienced in supervising line cutting, soil sampling, silt sampling, and bedrock sampling and was employed during the summers of 1978 and 1979 in geological exploration work in the Yukon and northern B.C.

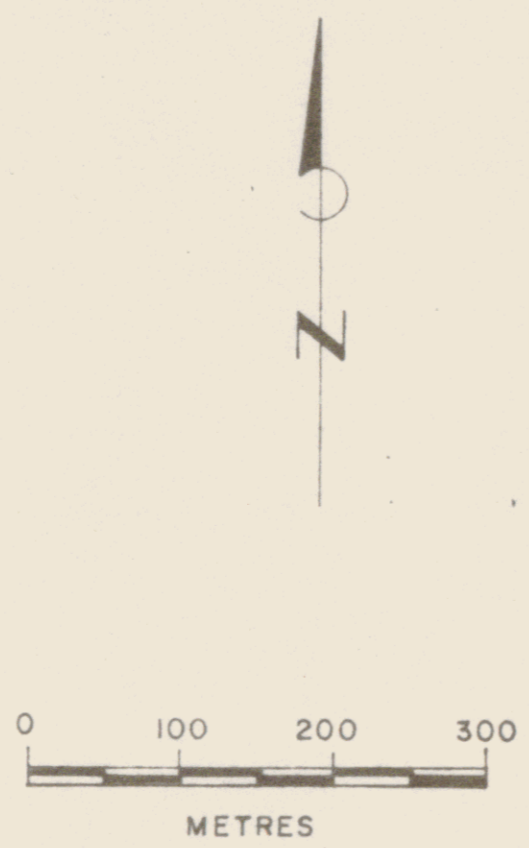
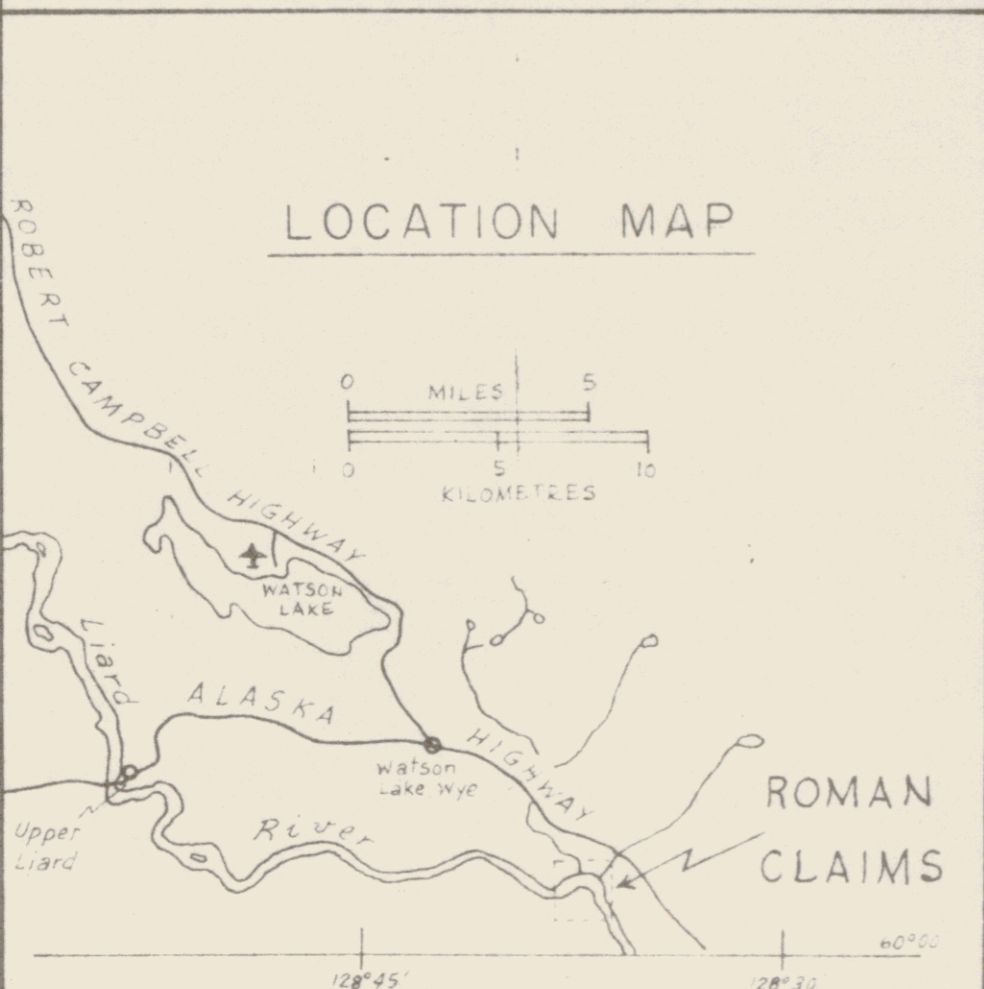
Brad Wilson
Brad Wilson

July 3, 1980



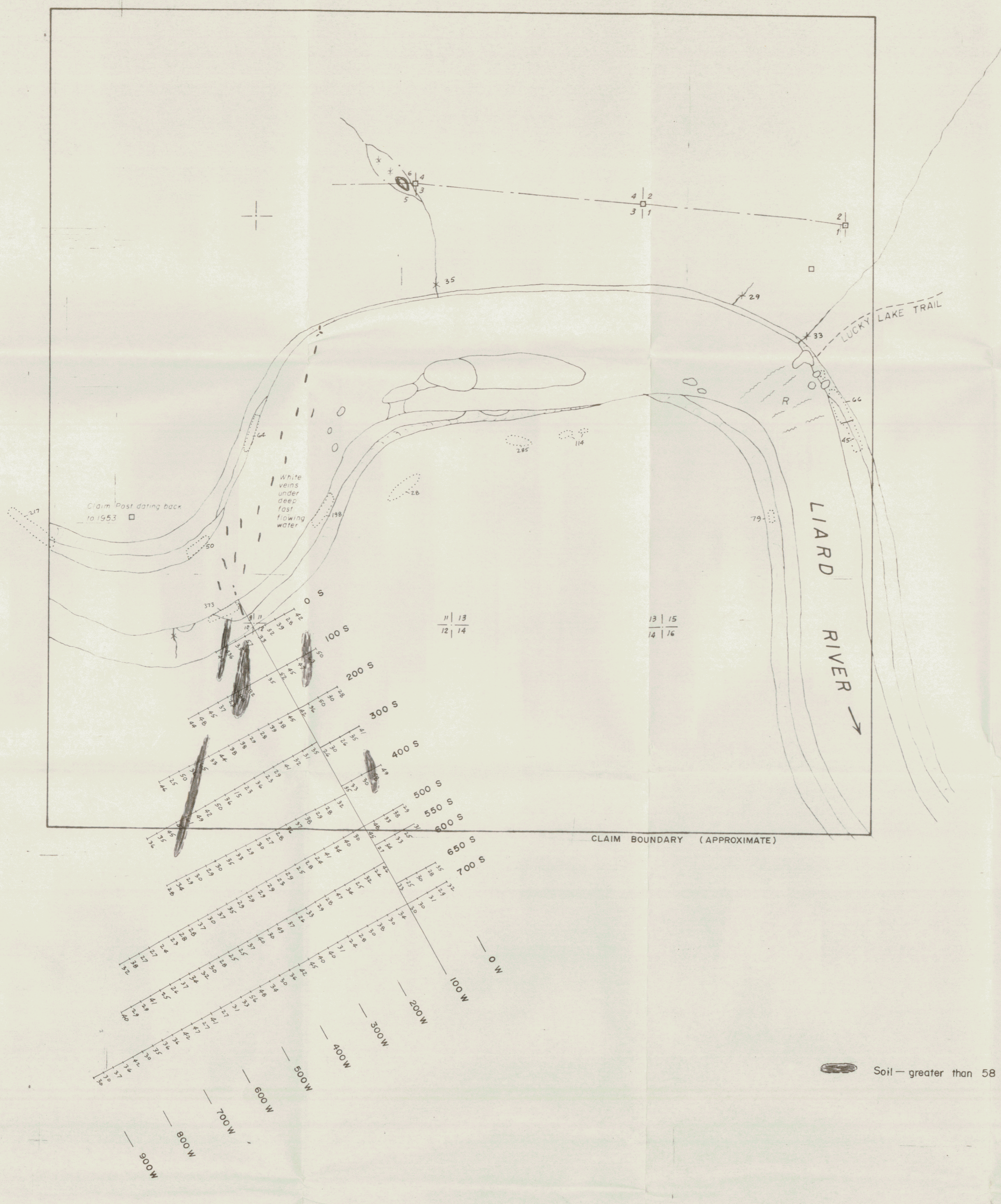
Soil—greater than 15 PPM lead

- Bedrock sample
- Soil sample grid
- Silt sample
- Claim post (claim line), located
- Claim post drawn from claim map
- Vein
- Outcrop
- Till cliffs
- Outcrop cliffs
- Swamp (pond)
- River (creek)
- Rapids



To accompany report by D. Miller dated July 3, 1980

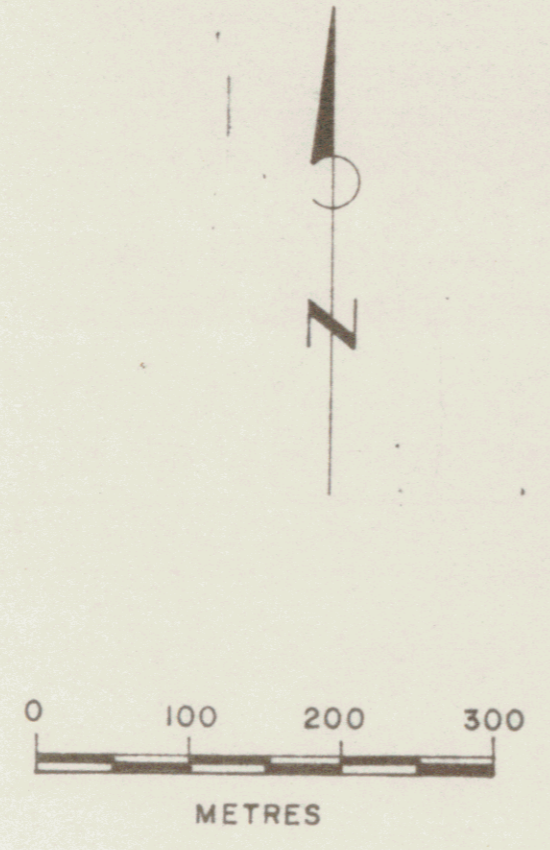
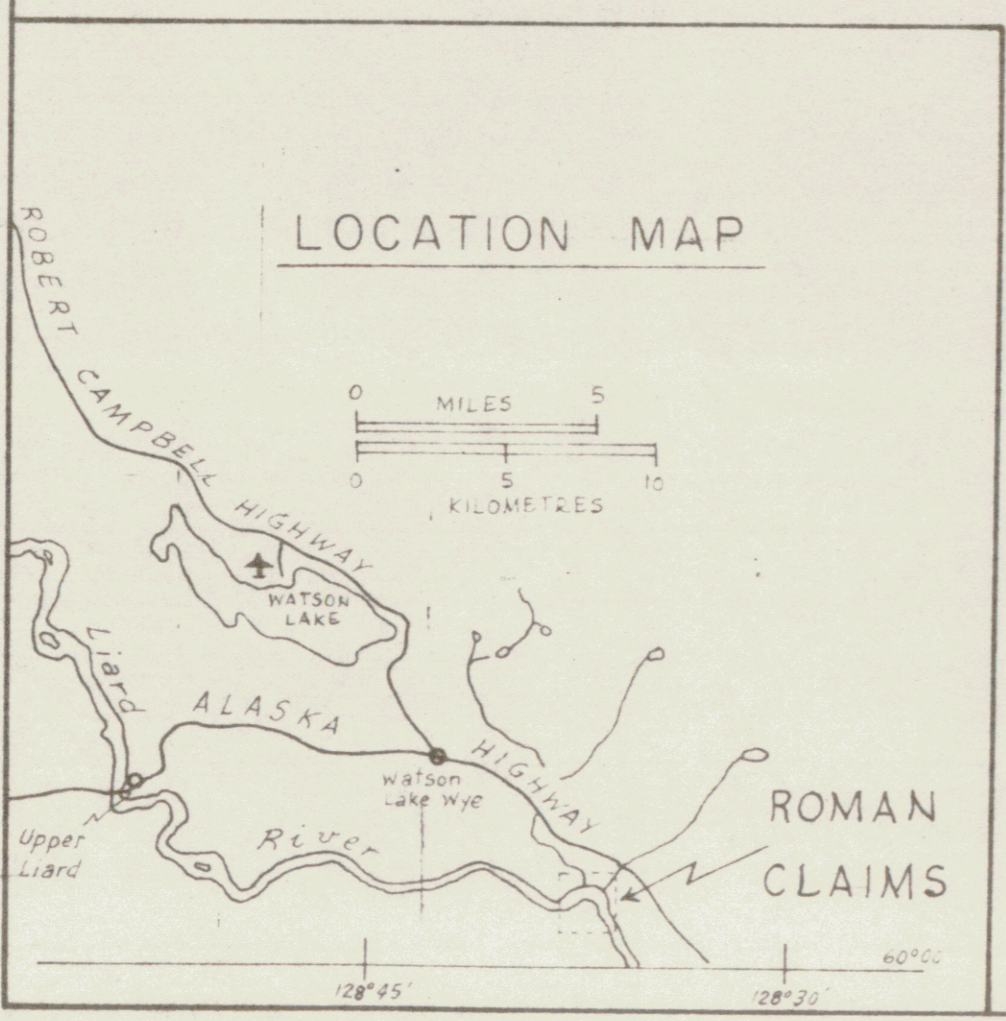
ST. JOSEPH EXPLORATIONS LIMITED TORONTO, CANADA		
ROMAN CLAIMS WATSON LAKE, Y.T. PPM LEAD IN SOIL SILT & BEDROCK		
SCALE 1:5000		
APPROX. LAT & LONG. OF LOWER RT. COR. OF DWG. 60° 00' 00" LATITUDE 128° 36' 00" LONGITUDE	PROJECT NO. 6270 REPORT NO. 2	MAP 1 105-A-2 NTS



CLAIM BOUNDARY (APPROXIMATE)

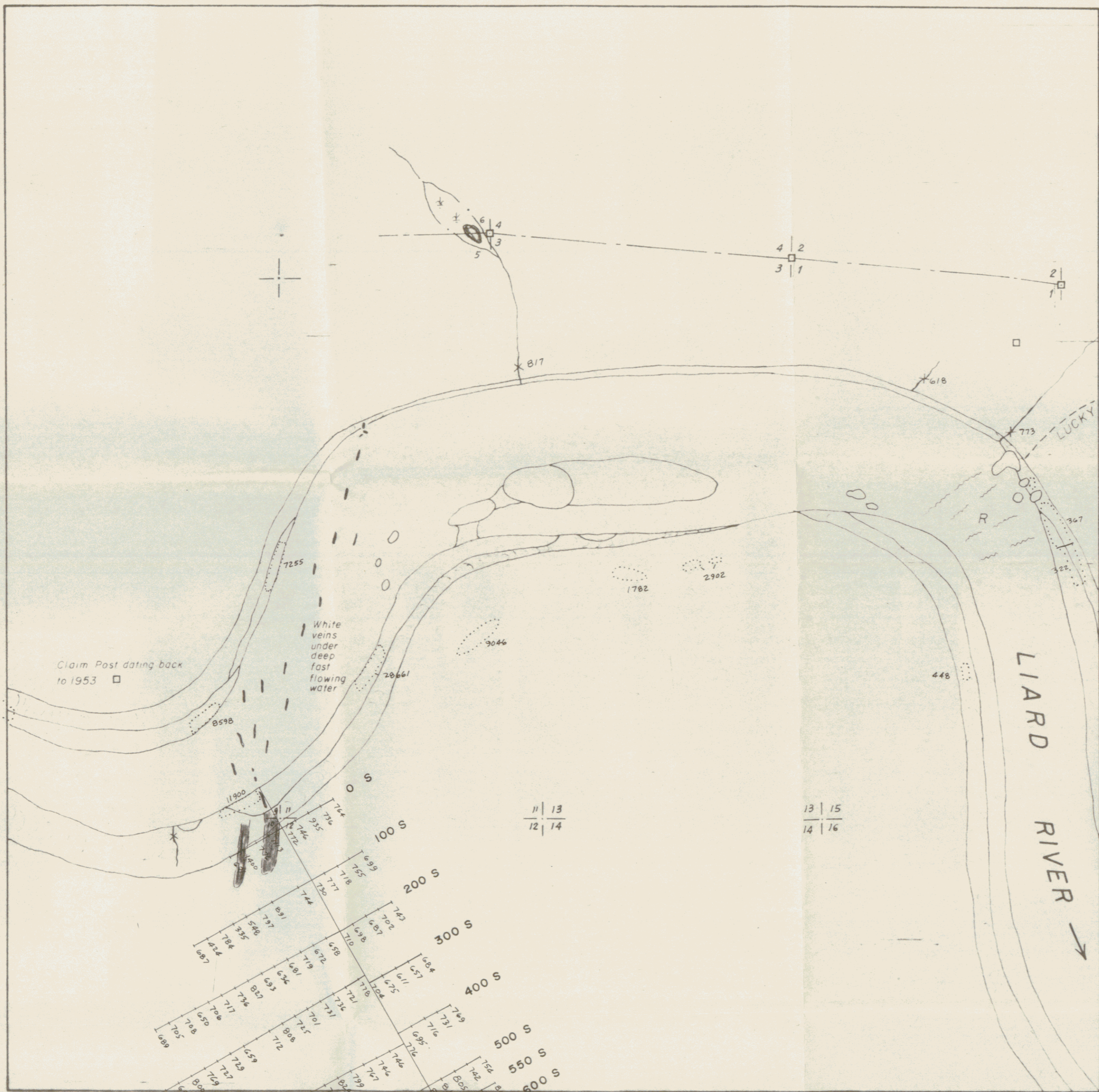
Soil - greater than 58 PPM zinc

- Bedrock sample
- Soil sample grid
- Silt sample
- Claim post (claim line), located
- Claim post drawn from claim map
- Vein
- Outcrop
- Till cliffs
- Outcrop cliffs
- Swamp (pond)
- River (creek)
- Rapids



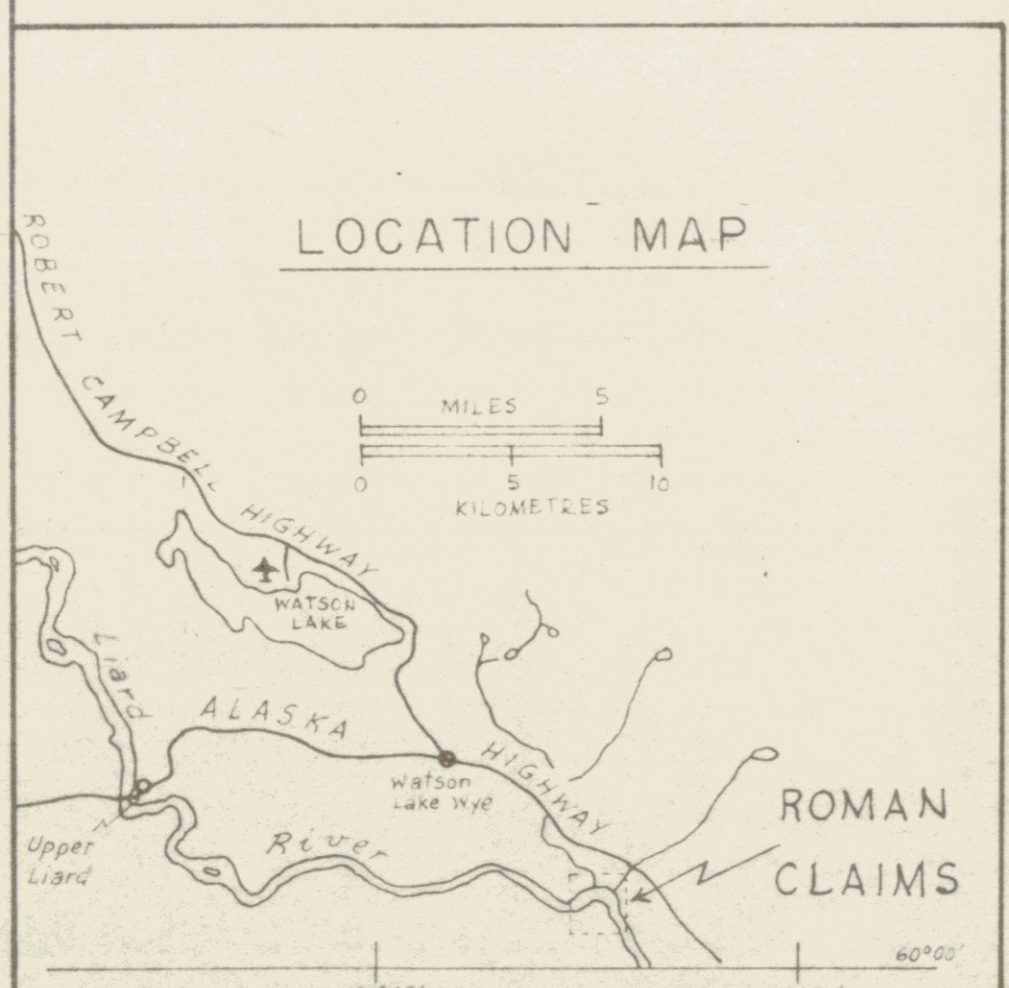
To accompany report by D. Miller dated July 3, 1980

ST. JOSEPH EXPLORATIONS LIMITED TORONTO, CANADA		
ROMAN CLAIMS WATSON LAKE, Y.T.		
PPM ZINC IN SOIL SILT & BEDROCK		
SCALE 1:5000		
APPROX LAT & LONG OF LOWER RT COR OF DWG	PROJECT NO. 6270	MAP 2
60° 00' 00" LATITUDE	REPORT NO. 2	105-A-2
128° 36' 00" LONGITUDE		NTS



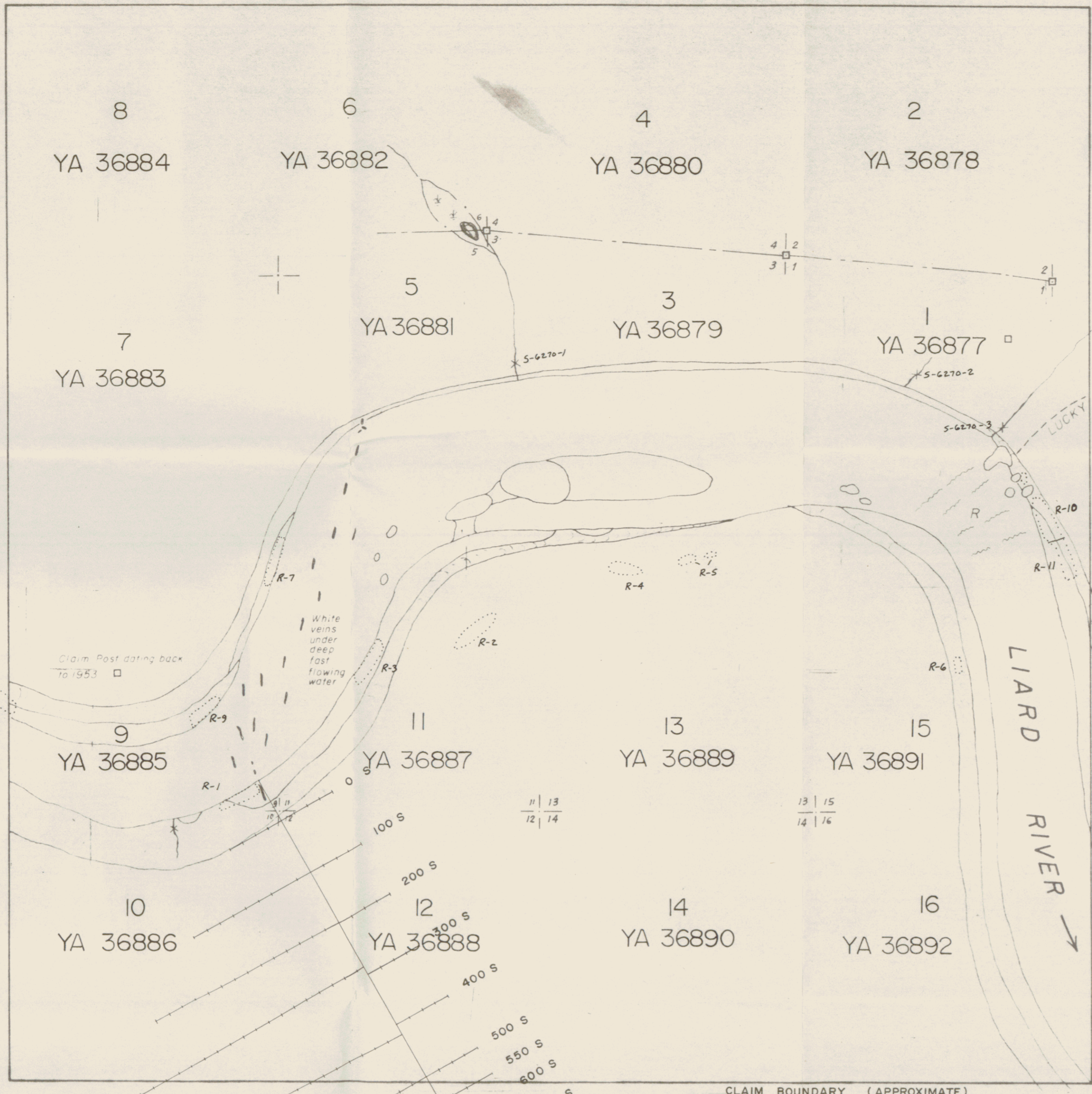
Soil—greater than 950 PPM barium

- Bedrock sample
- Soil sample grid
- * Silt sample
- Claim post (claim line), located
- Claim post drawn from claim map
- Vein
- Outcrop
- Till cliffs
- Outcrop cliffs
- Swamp (pond)
- River (creek)
- Rapids

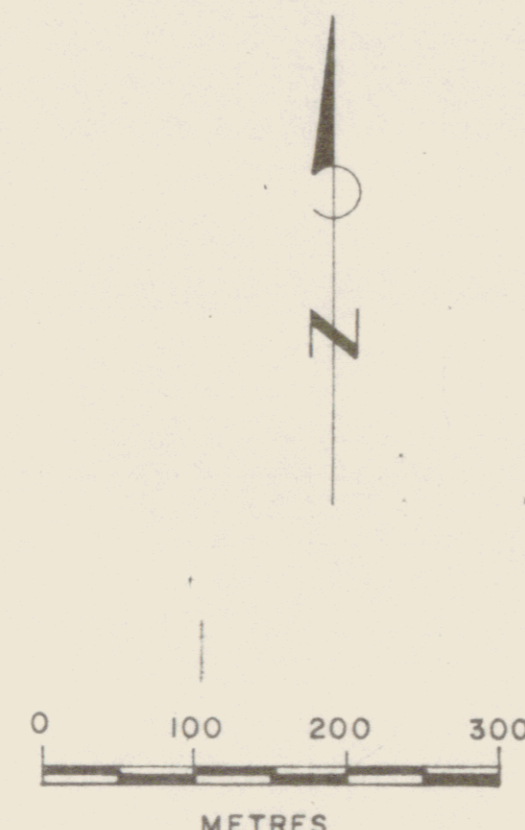
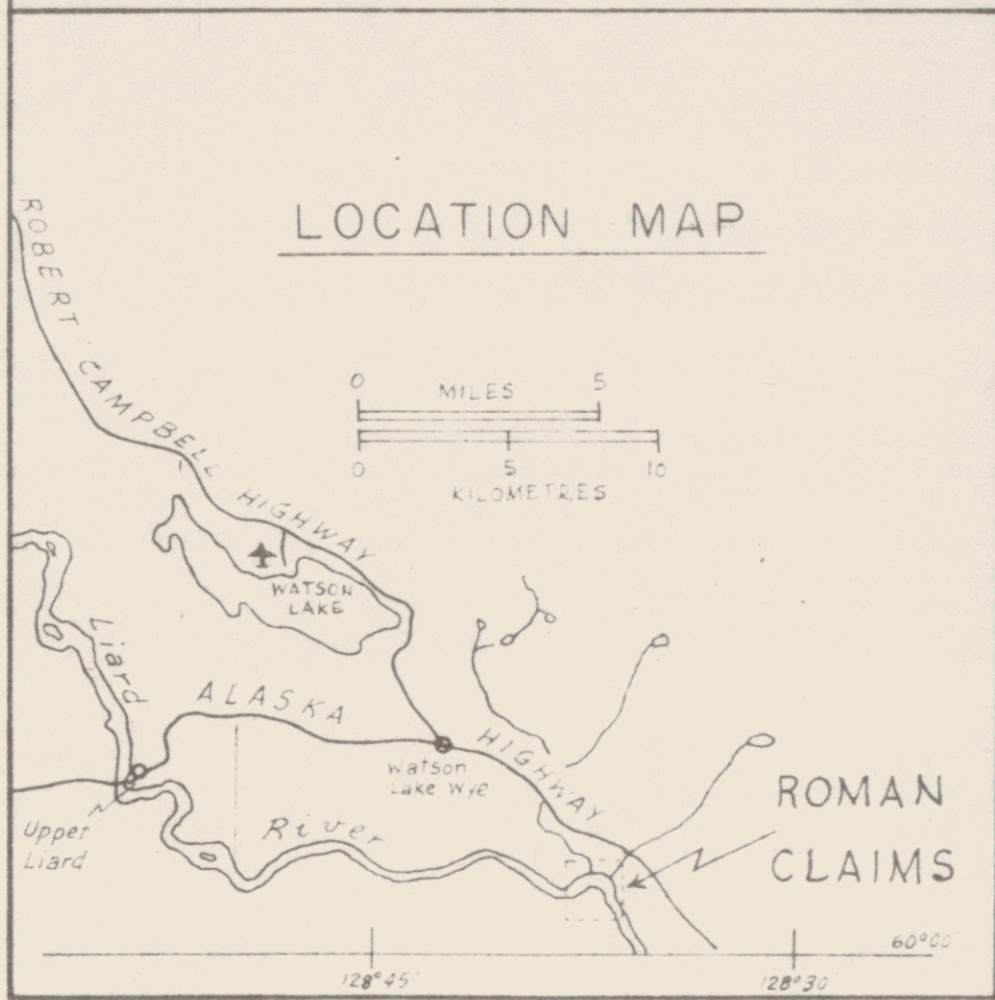


To accompany report by D. Miller dated July 3, 1980

ST. JOSEPH EXPLORATIONS LIMITED TORONTO, CANADA		
ROMAN CLAIMS WATSON LAKE, Y.T. PPM BARIUM IN SOIL SILT & BEDROCK		
SCALE 1:5000		
APPROX. LAT & LONG OF LOWER RT. COR. OF DWG. 60° 00' 00" LATITUDE 128° 36' 00" LONGITUDE	PROJECT NO. 6270 REPORT NO. 2	MAP 3 105-A-2 N.T.S.



CLAIM BOUNDARY (APPROXIMATE)



- R-7 Bedrock sample
- Soil sample grid
- S-6270-2 Silt sample
- Claim post (claim line), located
- Claim post drawn from claim map
- Vein
- Outcrop
- Till cliffs
- Outcrop cliffs
- Swamp (pond)
- River (creek)
- Rapids

To accompany report by D. Miller dated July 3, 1980

ST. JOSEPH EXPLORATIONS LIMITED TORONTO, CANADA		
ROMAN CLAIMS WATSON LAKE, Y.T. CLAIMS & SAMPLE LOCATION		
SCALE 1:5000	PROJECT NO. 6270	MAP 4
APPROX. LAT & LONG. OF LOWER RT. COR. OF DWG. 60° 00' 00" LATITUDE 128° 36' 00" LONGITUDE	REPORT NO. 2	105-A-2 NTS