Geological, Geochemical and Radiometric Report

on the

Ting Claims, Yukon

Latitude 60° 31' North
Longitude ~~132° 25~~ 125° 53' West

NTS 95C/12

by

J.C. Harrison, B.Sc.

Covering field work completed July 27 - Aug. 20, 1978

090481

June 9, 1979

St. Joseph Explorations Limited
970 Laval Crescent, #5
Kamloops, B.C.
V2C 5P5

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

$ 10,500.00

J. A. Main
A/ Resident Geologist or
Resident Mining Engineer

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

B. R. BAXTER
Supervising Mining Recorder

for Commissioner of Yukon Territory

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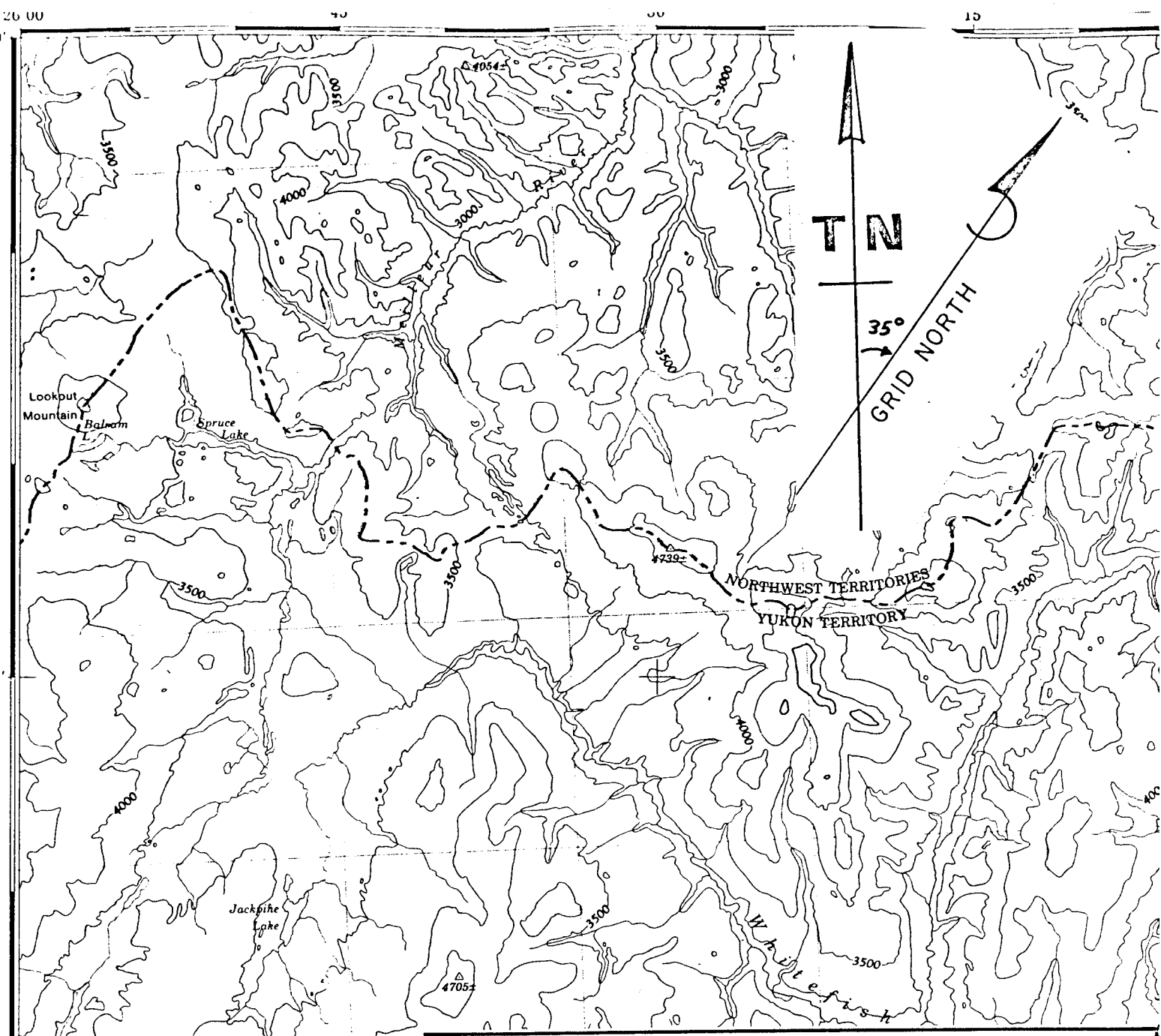
ILLUSTRATIONS



ST. JOSEPH EXPLORATIONS LIMITED

TORONTO, CANADA

TING CLAIMS, YUKON

Location Map.

SCALE: 1:250,000

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG. 60° 32' 00" LATITUDE 125° 53' 00" LONGITUDE	PROJECT NO. 6262-2 REPORT NO.	SHEET NO. ___ OF ___ N.T.S. 95C/12

INTRODUCTION and SUMMARY

Geological and geochemical surveys were conducted on the Ting Claims, 100 miles northeast of Watson Lake, Yukon from July 27 to August 20, 1978. Soil samples were collected at 50 meter stations along lines 400 meters apart. These were then analyzed for Pb, Zn, Mo, U and F. A selected number of rock samples collected were also analyzed for these elements. Geological mapping and prospecting was undertaken along 200 meter lines during the same period as the geochemical survey. Lines established with compass and topofil were tied into a baseline 3.6 km long.

Alkaline intrusive rocks exposed in the area were emplaced into lower Paleozoic shales, carbonates and clastic sediments. Vein-type lead, zinc, and molybdenum mineralization has been found in the vicinity of the intrusive contact within the claim block. Relatively high lead and zinc anomalies were obtained from these areas. Uranium analyses were generally very low.

CONCLUSIONS and RECOMMENDATIONS

Mineralization is thought to be related to hydrothermal veins generated comagmatically. Geophysics and more intensive soil and geological surveys are recommended in order to explain several geochemical anomalies that are not coincident with known mineralization.

Respectfully submitted,

J. Chris Harrison

J.C. Harrison, B. Sc.
June 9, 1979

LOCATION and ACCESS

The Ting Claims are located in the extreme south-east Yukon (lat.60°32' N., long.125°,53' W., NTS Jackpine Lake, 95C/12) sixty kilometers north of the B.C. border and 160 km east-north-east of Watson Lake within Watson Lake Mining Division.

Access is by helicopter from Watson Lake. Several landing sites had to be cut in the vicinity of the claims since the area is densely wooded. The nearest lake, large enough to land fixed wing aircraft, is Jackpine Lake, 13 kilometers to the northeast.

PHYSIOGRAPHY and GLACIATION

The area is toward the southern terminus of the Logan Mountains and is typified by rolling spruce forested hills, deeply incised valleys, and a few bare knobs above the 4000 foot (1200 meter) treeline.

Nearly all the claim ground was burnt over in the last 10 years. Recent burn is still free of undergrowth. However, blowdown slash, dense immature lodgepole, and high brush typifies most of the claim block. Outcrop is common on ridge crests and along incised river valleys.

Proximal boulder till covers northeast slopes while glacial gravel fans rest against the base of southwest slopes. Indicated direction of glacial advance is from the WSW by ice lobes following pre-existing valleys.

CLAIMS and OWNERSHIP

Grant numbers, names and due date for the Ting Claims are summarized in the following table.

TING CLAIM SUMMARY

Grant No.	Name	Due Date
YA 34320-YA 34340	Ting 1-21	July 26, 1979.

Total: 21 Claims

The claims are located in a single block with no internal fractions (see fig.1). The claims are owned by St.Joseph Explorations Limited.

HISTORY and PREVIOUS WORK

Various regional geological mapping surveys by the GSC were carried out in 1945, 1957, and 1972. This work is summarized in the GSC Preliminary 32-195 and the 1:250,000 scale GSC Map 1380A, LaBiche River. No known mineral exploration activity has been undertaken in the vicinity of the Ting Claims, although several stream geochemical surveys have been completed throughout the region within the last five years. This work was presumably aimed at discovering shale-hosted base metal, and carbonate hosted lead-zinc mineralization.

1978 PROGRAMME

Twenty-one (21) Ting Claims were staked on July 25, 1978 and were recorded in Watson Lake the following day. This target area was established from regional stream geochemical anomalies associated with the southern contact area of a small alkalic intrusion. The 3.6 km base line cut in the following days runs the length of the claim block from a point 100^{N}, 100^{E} established at claim post 1 of Ting 18. Nine (9) cross lines, 800 to 1200 meters long were established by chain and topofil at 400 meter spacing. In addition four (4) detail lines of shorter length were surveyed in a similar manner at a 200 meter interval, for a total of 21.6 km of line.

264 soil samples were collected from the B horizon at 50 m intervals along these lines. These were shipped to Bondar-Clegg in Whitehorse and analyzed for Pb, Zn, Mo, U and F.

Geological mapping and prospecting was then undertaken along established and imaginary 200 meter lines.

GEOLOGICAL SETTING

Lower Paleozoic, Selywyn Basin shales are progressively overlain by Devonian platform carbonates and Mattson Formation sandstones and shales. Cretaceous tectonic elements (warps, west and east directed trust faults, gravity block faults) dominate the structural picture.

The alkaline intrusive on and near the Ting Claims, and another syenite in LaBiche Map area were presumably emplaced (into these sedimentary rocks) during the Late Cretaceous or Early Tertiary. Furthermore, both plutons appear to have been emplaced along the same structure: the Beaver River Thrust and its extension north of the Beaver River fault. (R.J.W.Douglas, 1972; GSC Map 1380A; R.A.Price and R.J.W.Douglas, 1972.)

DETAILED GEOLOGY and MINERALIZATION

Detailed geological mapping has revealed two periods of magmatic activity in the vicinity of the Ting Claims. Conjugate block fault structures determined the specific location of an early quartz-bearing syenite. Volcanic breccias and their associated vent feeder pipe have been mapped, and testify to extrusive activity at this time.

After a period of renewed faulting, a nepheline syenite (foyaite) magma reutilized the pre-existing faults and intruded the 'Early Syenite'. Under tectonically quiescent conditions, it fractionated to form a lower agpaitic foyaite, a roof of leucocratic sodalite foyaite, and a core of sphene rich foyaite. Alkali and volatile rich fluids may have been driven from the remaining magma at this stage, to form hybrid silts and dykes.

Several potentially interesting lead, molybdenum and zinc bearing veins found within the contact zone of the intrusion may also have been generated from these late crystallizing fluids. ($L.93^{N}/99.5^{E}$; $L.97.5^{N}/101.5^{E}$; $L.100^{N}/102^{E}$; $L.104^{N}/100.5^{E}$). Host rocks to mineralization include quartzite, carbonates and fractures in the early quartz syenite.

STRUCTURE

The cone shaped Ting intrusive appears to have been emplaced into a small anticlinal structure (with a shallow SW trending fold axis). The western limb of this fold appears to have been faulted into contact with a sequence of platform carbonates. The actual structural relations in this part of the claim block have not yet been adequately worked out due to a paucity of outcrop. The significance of pre-existing faults on the location of this magmatic centre has already been alluded to.

TABLE OF FORMATIONS

Period	GSC Map Unit #	Property Map Unit	Lithology	Thickness
Tertiary or Cretaceous (?)	Tt	9,10,11,12,13, 14,15,16	Nepheline syenite, syenite, foyaite, tinguaite, breccia	
Cretaceous (?)	Ky	5,6,7,8	'Early Syenite' quartz syenite, syenite, porphyritic quartz syenite, vent porphyry, breccia	
Mississippian	Cpm	4	Mattson Formation : grey sandstone, massive bedded grey to brown sandstone, minor shale	
Devono-Mississippian	DM_{BR}	2	Besa River Formation : dark grey shale, siltstone	
Devonian	mDL, mDA	3	Landry, and Arnica Formations. : limestone, dolomite	
Siluro-Ordovician	OSD	1	Road River Formation : shale, limestone	

SOIL GEOCHEMISTRY

264 soil samples were collected in August, 1978. Of these 94% were B horizon samples. The remainder (16 samples) were obtained (at 20 to 30 cm) from the A_1 horizon. In areas of spruce forest, a permafrost layer was often encountered. However, most of the grid is within a 7 to 10 year old burn, and B horizon samples are often within 10 to 20 cm of the surface.

Steep slopes and abundant outcrop ensured a residual soil. Boulders on most south and east facing slopes travelled only a few meters from outcrop or subcrop. On shallow north facing slopes and lower west facing slopes proximal boulder till and distal gravel till are respectively found. Transport of geochemical values occurs generally over short distances, since steep slopes are often short. In the ridge and gully terrain south of $L.100^N$ secondary dispersion is most pronounced in a southwest direction. This is subparallel to bedrock structure. North of $L.100^N$ secondary dispersion is down slope to the east. However, geological structures are parallel to the north to north-east trending intrusive contact.

An attempt has been made to contour results for each element. It has been necessary to bias the contours between grid lines. It is thought that this more closely reflects the bedrock structural trends throughout the map area as well as the secondary dispersion pattern south of $L.100^N$. It should be stressed here that many linear zones are only two or three samples within a contour interval that happen to be on bedrock or dispersion trend with each other.

Arithmetic contour intervals have been chosen for fluorine and molybdenum: geometric intervals for lead, zinc and uranium.

Element	Threshold	Definitely anomalous limit
Pb	360	780
Zn	500	1500
Mo	12	31
U	2	4
F	650	1800

The distinction of a separate anomalous lead population is highly questionable. The cumulative frequency % plot suggests that there is a continuous variation of single source lead from minor igneous disseminations, through minor veinlets to larger unknown vein systems (perhaps). All lead concentrations greater than 200 ppm in soils occur in areas underlain by platform carbonates in the vicinity of the intrusive contact.

Zinc in the possibly anomalous population occurs in linear bands often coexisting with lead or uranium and fluroine. The definitely anomalous population is clustered in one area along line 84 and may occur with molybdenum. This appears to be a break in slope anomaly with some secondary dispersion.

Possibly anomalous molybdenum may reflect locally higher background values over Road River Shales in the western corner of the sampled area. Definitely anomalous values appear to coexist with zinc mineralization.

The possibly anomalous uranium encloses 15% of the data. These values fall generally in the contact and fenitized halo of the intrusive. Definitely anomalous soil samples are related to hybrid sills. Unfortunately all anomalous values are disappointingly low.

Fluorine in soil is widely distributed. It is most notably enriched (possibly anomalous population) over platform carbonate exposures, in fluorine metasomatized sedimentary contact zone units and over fluorite-bearing intrusive rocks. Definitely anomalous fluorine values occur over significant bedrock fluorite concentrations such as in fluoritic skarn or hybrid fluoritic dykes.

Since fluorine is extremely mobile under surface geochemical conditions, fluorine in soils will occur as fluorite. Fluorine in organic complexes is too easily removed by groundwater to be retained in the B horizon. Hence soils near bedrock will show larger fluctuations in fluorine. Where soil and overburden is deep, most residual fluorite will be either removed geochemically or only found at depth. Strong fluorite concentrations in the bedrock will be represented by lower and broader anomalies on surface.

SCINTILLOMETER SURVEY

A McPhar TV-1 scintillometer was carried over the Ting claims. T_1, T_2, and T_3 were recorded at each 50m. soil station. T_1 readings were also taken on a reconnaissance of the remaining unclaimed intrusive. (400m lines, 50m stations). To pinpoint radiometric anomalies, the scintillometer was left on T_1 (total counts) between stations and between lines. Counts due to uranium alone were calculated from T_2 (U+Th) and T_3 (Th) correcting for background. However, spurious results were encountered throughout the survey from these calculations. These uranium counts often worked out negative. All then can be really said, is that where T_2 (U+Th) is high but calculated uranium counts are negative, then U and Th are both present but in unknown proportion. Presumably, where the U count is strongly positive, the U to Th ratio is high. No attempt was made to contour T_2, T_3 or Ctu (uranium counts) for this reason. However, radioactive anomalies were pinpointed by considering the statistical distribution of T_2 values. T_2 >275 counts/min are considered anomalous.

The following types of anomalies were encountered:

1) 'Early Syenite' contacts with foyaite (especially agpaitic foyaite.
2) Tinguaite, and other hybrid dykes.
3) Microshear zones in foyaite; fault structures.
4) Talus and large outcrops.
5) Transported anomalies.
6) Other.

'Other' anomalies include ones found in areas of poor exposure where an explanation has not yet been found. Two of these occur near the intrusive contact.

T_1 (total counts due to U+Th+K) was found useful in defining the intrusive contact in areas of poor exposure. In general, the average counts for outcrop and subcrop are as follows by rock type.

Rock Type	Total Counts Outcrop	Total Counts Subcrop
'Early Syenite'	15,000-30,000 cpm	8,000-10,000 cpm
Foyaite, alkali syenite	8,000-12,000 cpm	3,000- 6,000 cpm
Sedimentary rocks	2,000- 2,500 cpm	1,000- 2,000 cpm

In areas of poor exposure, intrusive-sedimentary contacts can be pinpointed to within a few meters by a near doubling of the total counts. Most rock geochemical sampling for U was done in conjunction with the scintillometer survey. Results suggest that most radioactivity is in the form of Th.

REFERENCES

R.J.W.Douglas, 1972 - "Geology and Economic Minerals of Canada" GSC Economic Geology Report No.1.

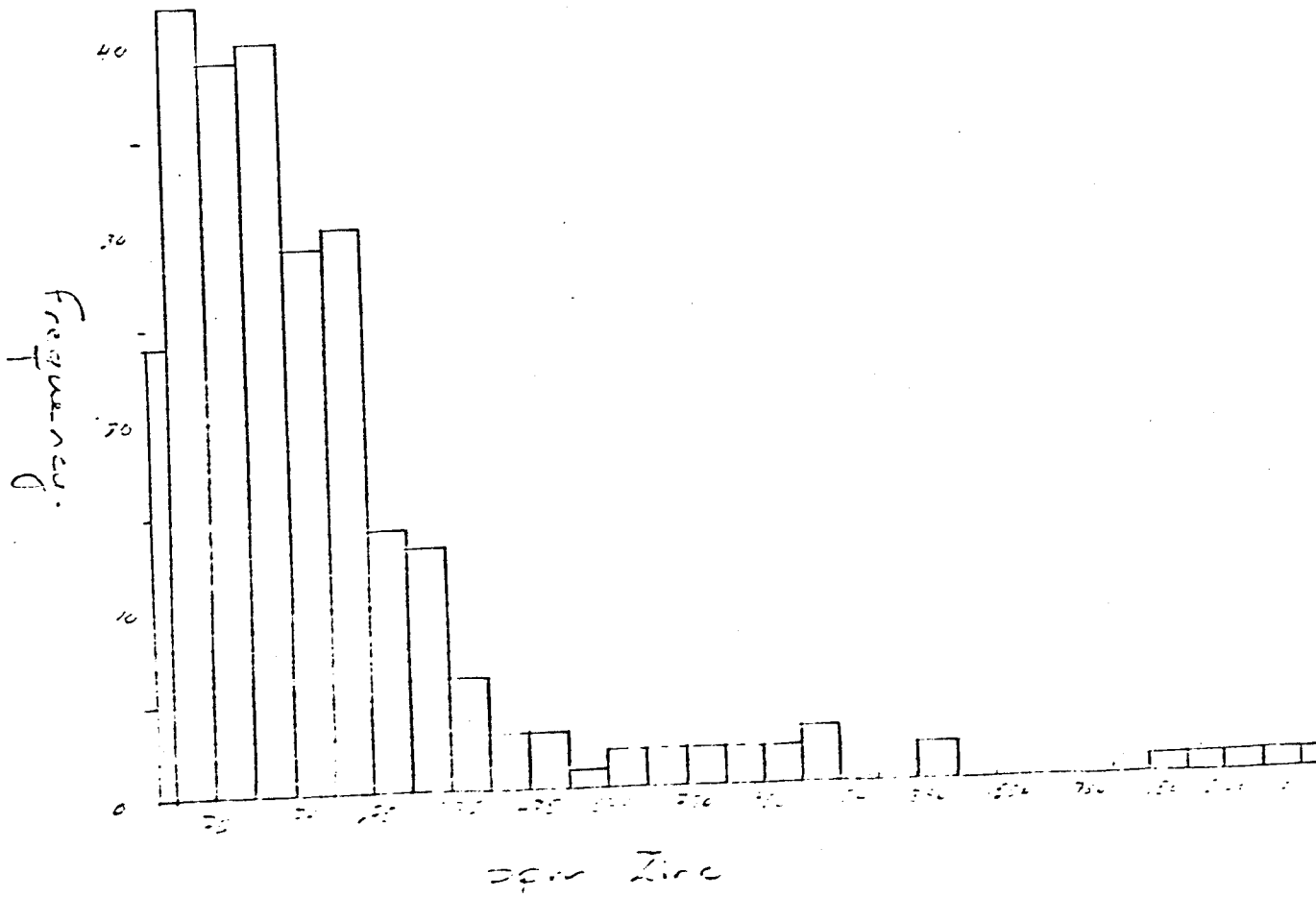
"LaBiche River" - GSC Prelim. 32-1959, GSC Map 1380A, scale 1:250,000, 1972.

Price, R.A. and Douglas, R.J.W., 1972 - "Variation in Tectonic Styles in Canada" GAC Special Publication 11.

Appendix II

Zinc in soils

N = 264

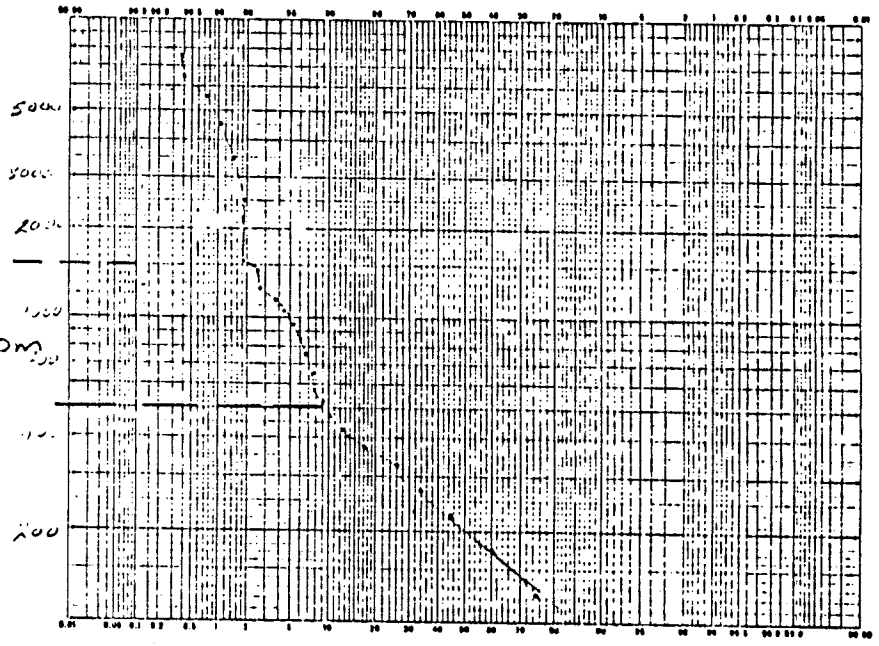


Zinc in soils.

N = 264

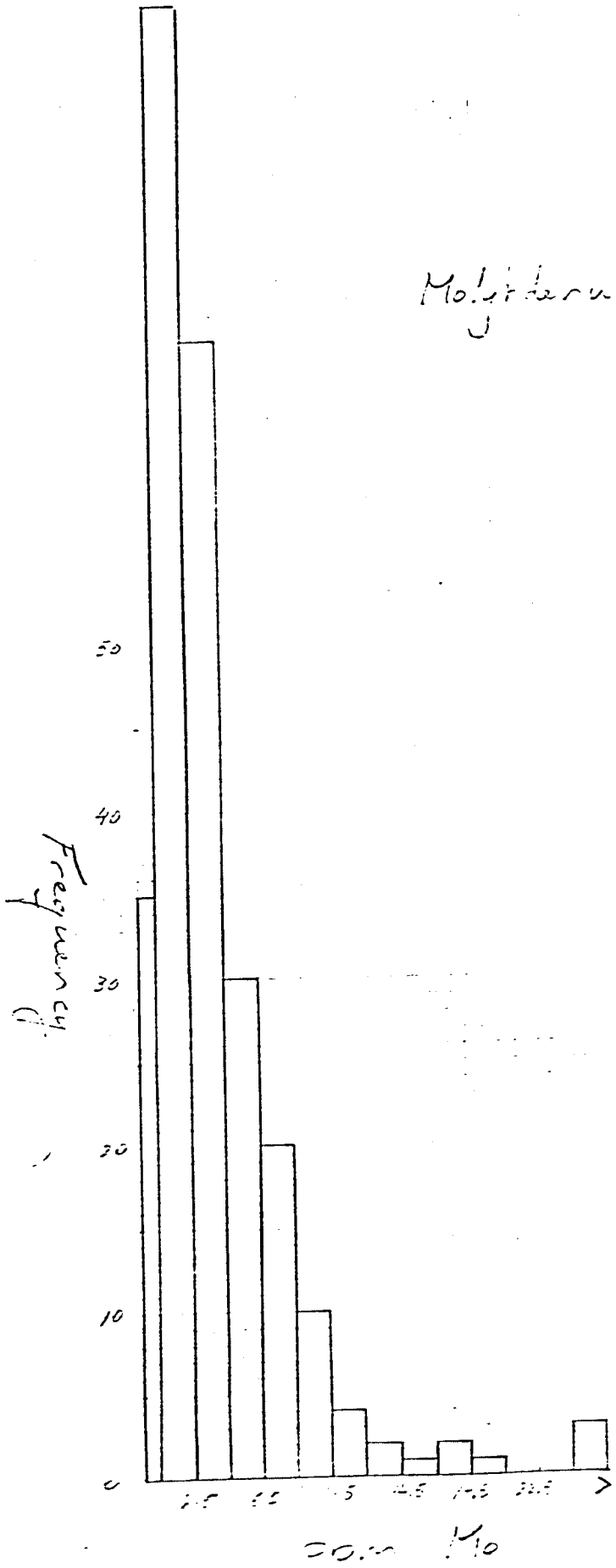
Definitely anomalous >1500ppm

Possibly anomalous 500-1500ppm



Molybdenum in soils

N = 264



Molybdenum in soils.

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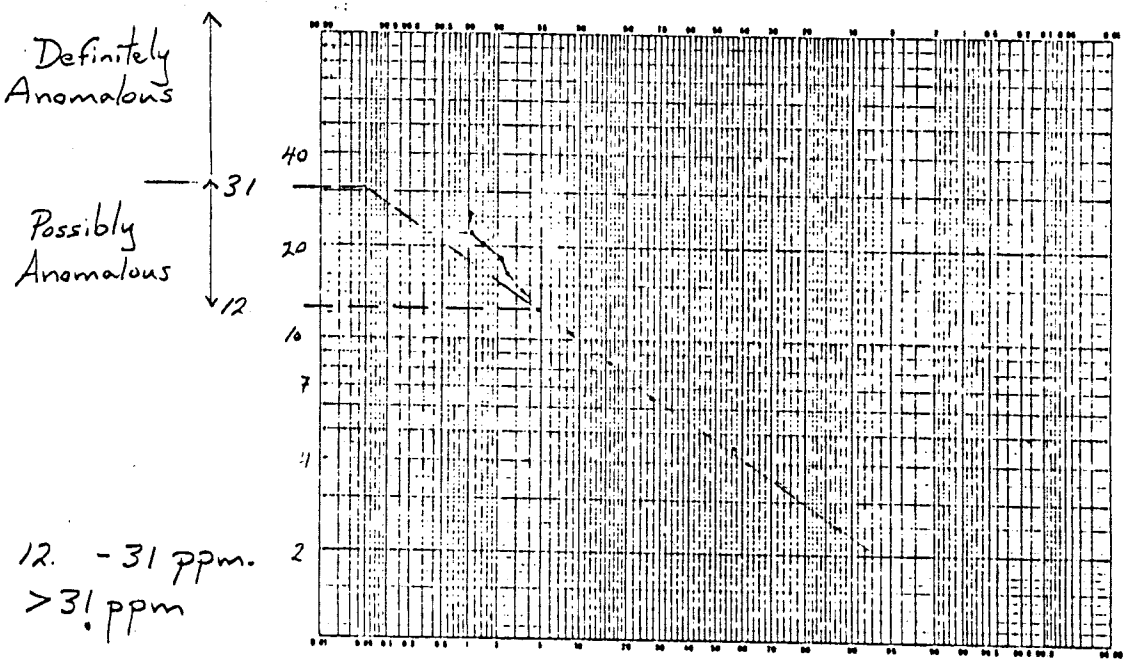
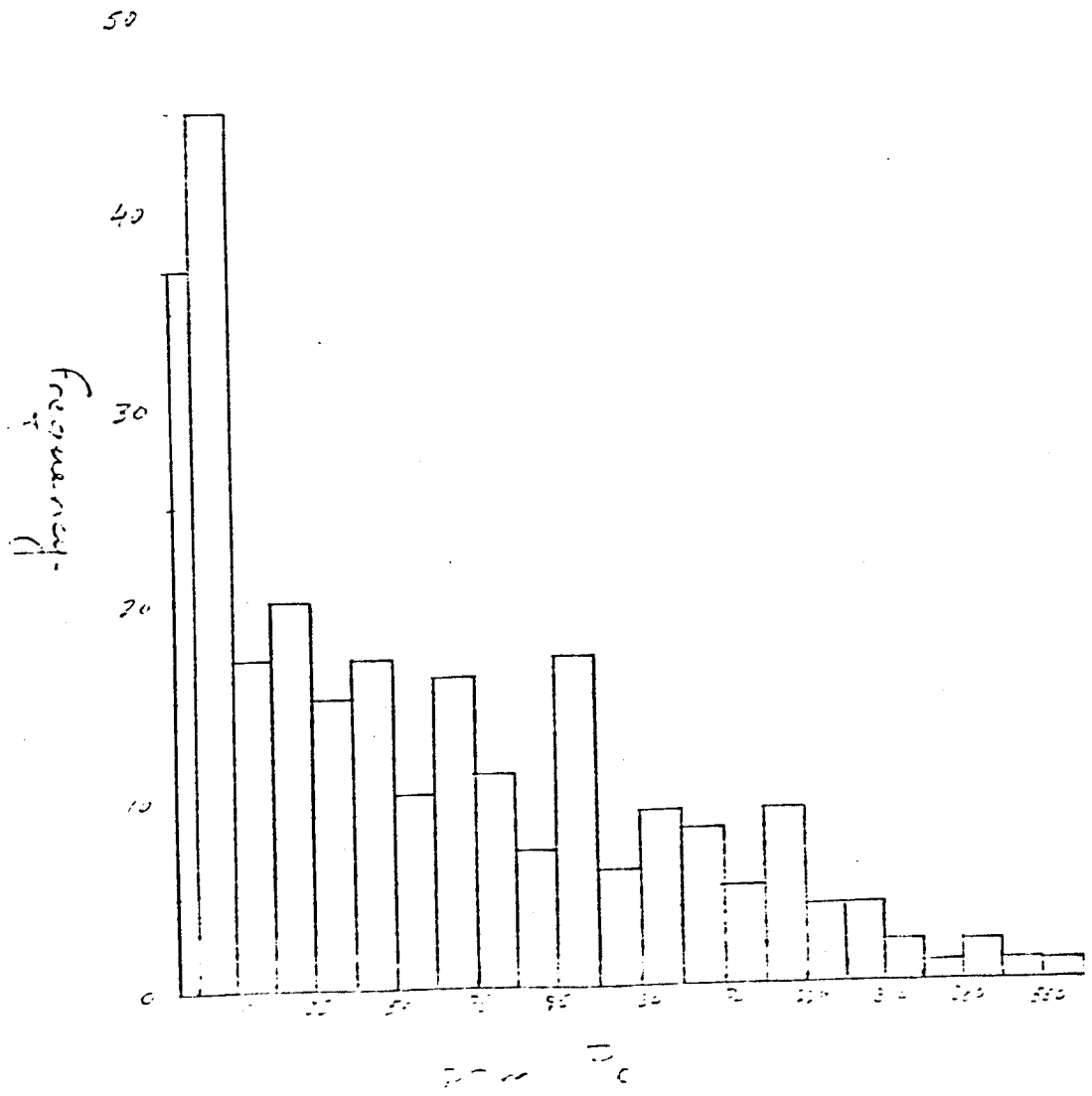


Possibly anomalous 12 - 31 ppm.
Definitely anomalous >31 ppm

Lead in soils



N = 264

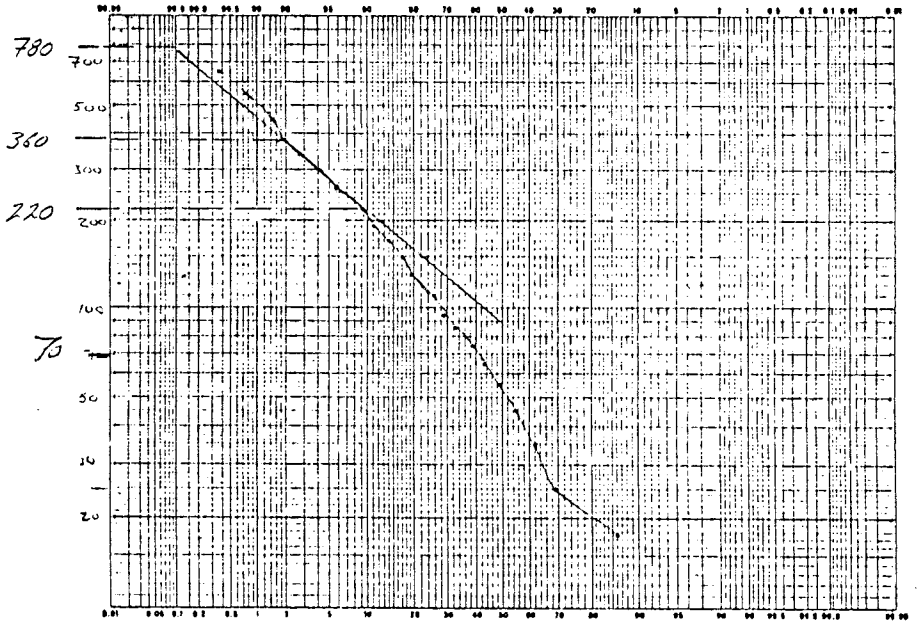
Pb in soils

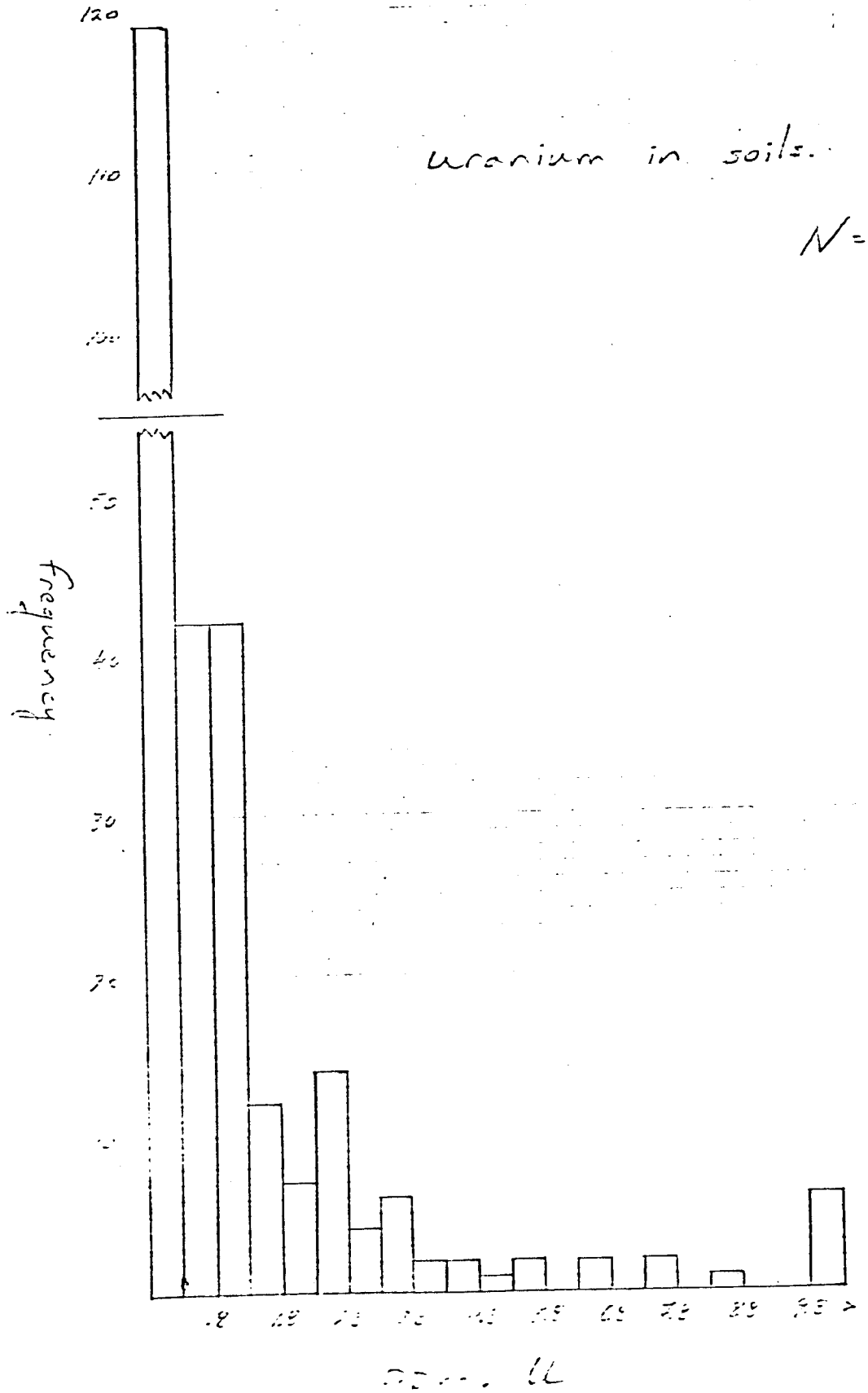
Three Populations

(1) Low background < 220 ppm.
(2) High background < 780 ppm.
(3) Anomalous data > 360 ppm.

Threshold = 360 ppm.

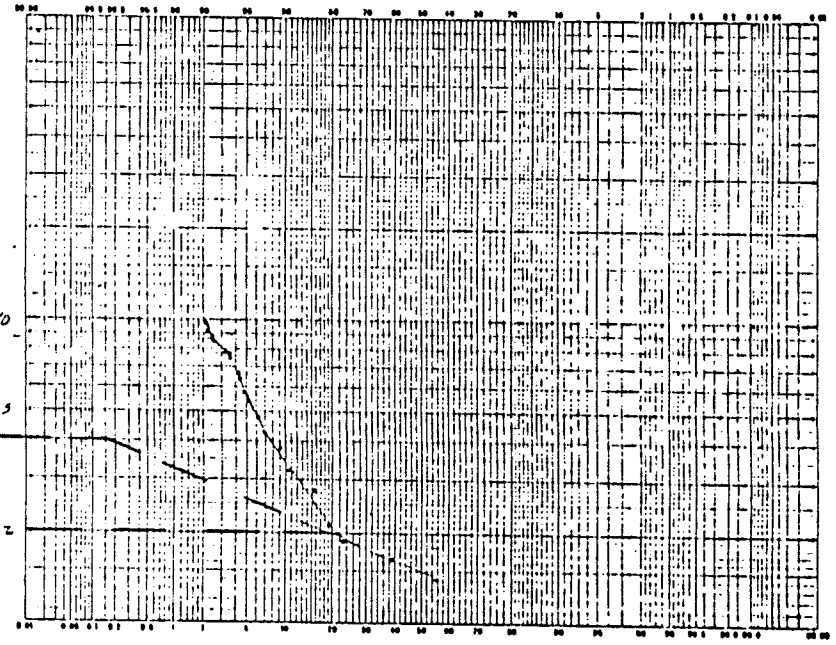
Possibly anomalous : 360 - 780 ppm
Definitely anomalous : > 780 ppm.




uranium in soils.
N = 264
120
110
frequency

N = 264

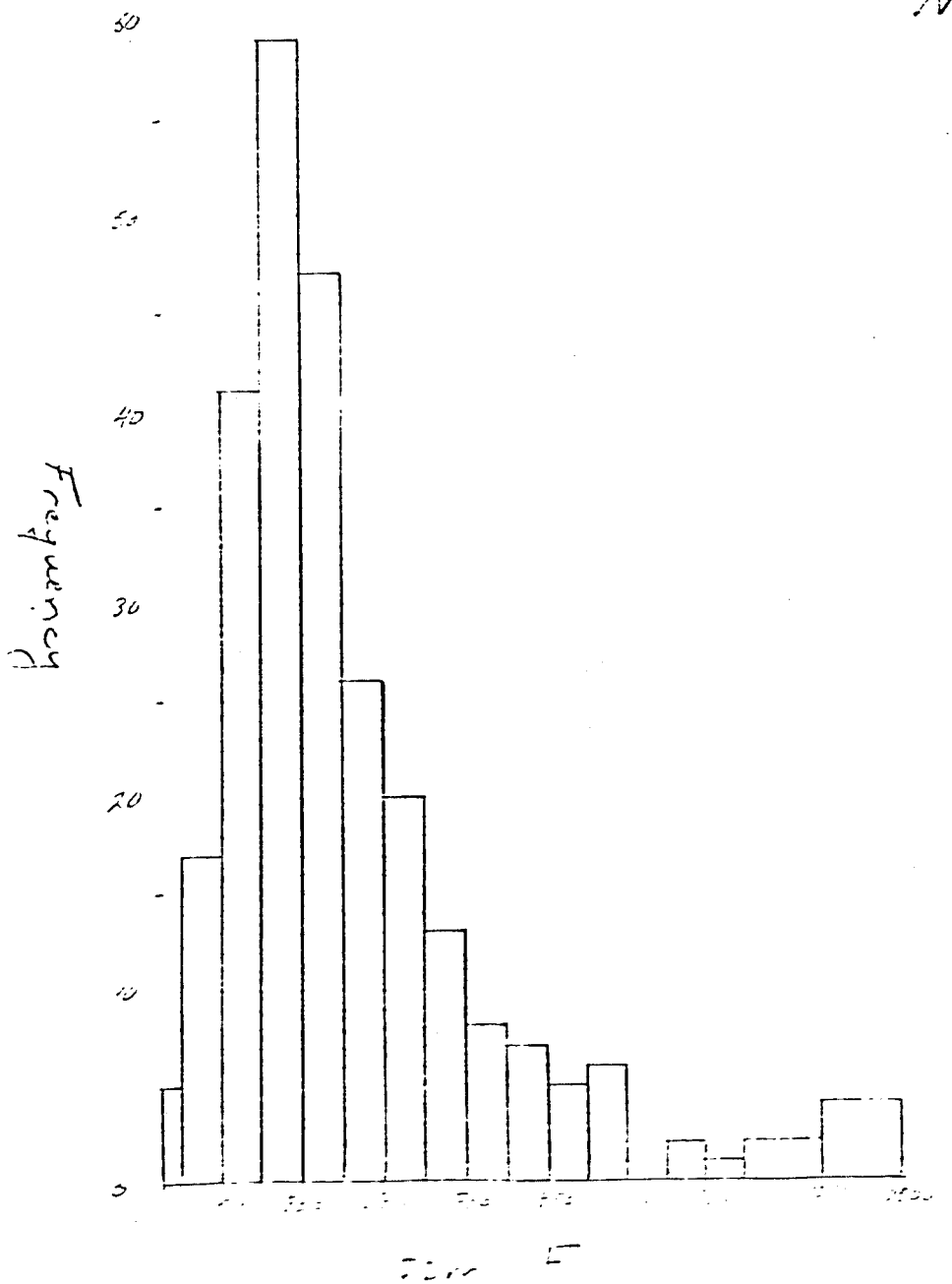
Uranium in soils.



Possibly anomalous 2 - 4.0 ppm
Definitely anomalous >4 ppm.

Fluorine in soils

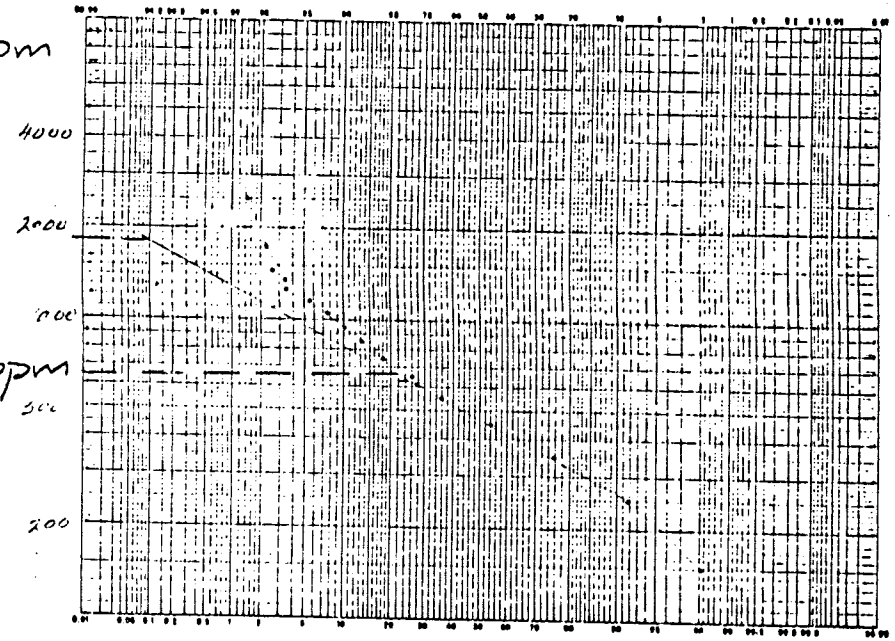
N = 254



Fluorine in soils

N = 264

Possibly anomalous 650 - 1800 ppm
Definitely anomalous > 1800 ppm.



84E 86E 88E 90E 92E 94E 98E 100E 102E 104E 106E 108E 100E

L 116 N
L 114 N
L 112 N
L 110 N
L 108 N
L 106 N
L 104 N
L 102 N
L 100 N
L 98 N
L 96 N
L 94 N
L 92 N
L 90 N
L 88 N
L 86 N
L 84 N

TING 1
YA 34320

TING 2
YA 34321

TING 3
YA 34322

TING 4
YA 34323

TING 5
YA 34324

TING 6
YA 34325

TING 7
YA 34326

TING 8
YA 34327

TING 9
YA 34328

TING 10
YA 34329

TING 11
YA 34330

TING 12
YA 34331

TING 13
YA 34332

TING 14
YA 34333

TING 15
YA 34334

TING 16
YA 34335

TING 17
YA 34336

TING 18
YA 34337

TING 19
YA 34338

TING 20
YA 34339

TING 21
YA 34340

North Ting Creek

South Ting Creek

Down

Up

7B, 14B (stream float)

gahnite syenite dykes

LEGEND

Alkaline suite

- 16 Hybrid rocks — A soda pyroxene – albite – fluorite rocks; B nepheline leucogabbro; C phosphorescent carbonate veins
- 15 Alkali quartz syenite
- 14 Alkali syenite — A alkali syenite; B trachytoid dykes; C sulphide syenite dykes
- 13 Tinguaite — A agpaitic tinguaite; B miaskitic tinguaite
- 12 Sodalite foyaite
- 11 Miaskitic foyaite
- 10 Agpaitic foyaite
- 9 Chill margin

Intrusive contact

Aluminous suite

- 8 Vent porphyry

Intrusive contact

- 7 Volcanic breccia — A trachyte agglomerate; B xenolith-rich volcanic breccia; C syenitized volcanic breccia
- 6 Fault breccia — A shale – 'Early Syenite' – breccia; B syenitized fault breccia, hematitie syenite

hiatus

- 5 'Early Syenite' — A syenite; B quartz syenite; C green porphyry

Intrusive contact

Sedimentary Rocks

- 4 Mattson Formation — sandstone, argillite, lithic orthoquartzite

Unconformity

- 3 Devonian carbonates — A buff dolomite, marble; B brown limy dolomite; C grey limestone: fossil, ferous, laminated, brecciated, marble
- 2 Besa River clastic and carbonates — A orthoquartzite, quartzite; B conglomerate; C siltstone; D calcsilicate, limy shale; E limestone, marble
- 1 Road River, and Besa River Fms. — A shale; B argillite, hornfelsed shale; C dark grey micritic limestone; D calcsilicate, limy shale

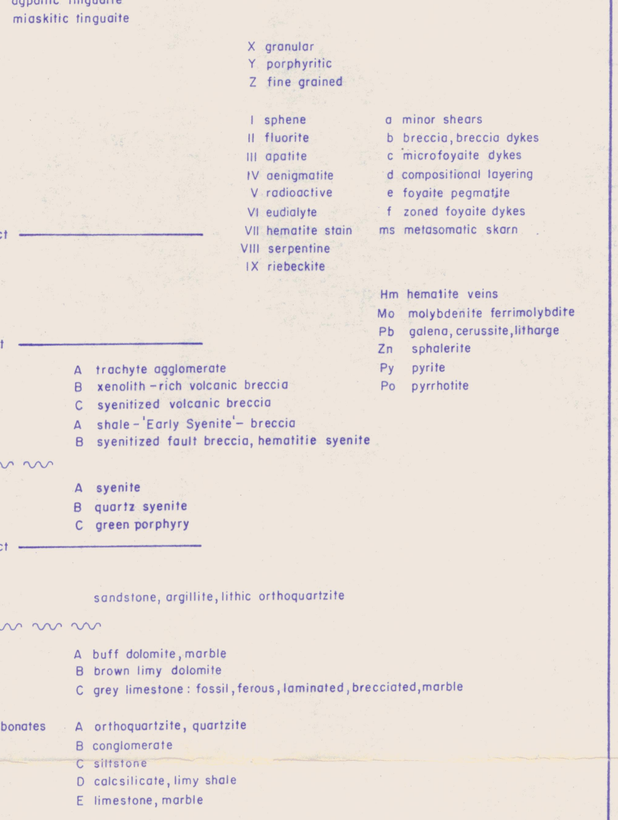
X granular
Y porphyritic
Z fine grained

I sphene
II fluorite
III apatite
IV aenigmatite
V radioactive
VI eudialyte
VII hematite stain
VIII serpentine
IX riebeckite

a minor shears
b breccia, breccia dykes
c microfoyaite dykes
d compositional layering
e foyaite pegmatite
f zoned foyaite dykes
ms metasomatic skarn

Hm hematite veins
Mo molybdenite ferrimolybdite
Pb galena, cerussite, litharge
Zn sphalerite
Py pyrite
Po pyrrhotite

Trickle, stream
Fault zone, approximate
Contact; approximate, defined
Outcrop, felsenmeer float
Claim post, claim line



TING CLAIMS – LOCATION MAP
Scale 1:1,000,000

SCALE
0 100 200 300 400 500 Metres

GRID NORTH

GEOLOGY BY:- C. HARRISON

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

TING CLAIMS, YUKON

GEOLOGY

SCALE: 1:5,000

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG.
60° 32' " LATITUDE
~~132° 25'~~ 125°53' " LONGITUDE

PROJECT NO. 6262-2
REPORT NO. Map 1

SHEET NO. ___ OF ___
N.T.S. 95C/12

86E 88E 90E 92E 94E 98E 100E 102E 104E 106E 108E 100E

North Ting Creek

TING 1
YA 34320

TING 2
YA 34321

TING 3
YA 34322

TING 4
YA 34323

TING 5
YA 34324

TING 6
YA 34325

TING 17
YA 34336

TING 7
YA 34326

TING 8
YA 34327

TING 18
YA 34337

TING 9
YA 34328

TING 10
YA 34329

TING 19
YA 34338

TING 11
YA 34330

TING 12
YA 34331

TING 20
YA 34339

TING 13
YA 34332

TING 14
YA 34333

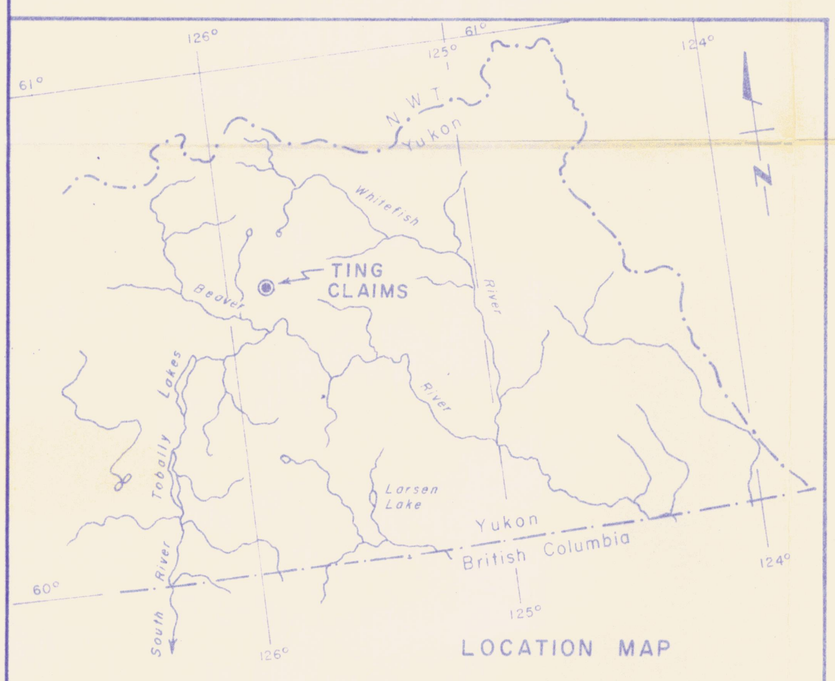
TING 21
YA 34340

TING 15
YA 34334

TING 16
YA 34335

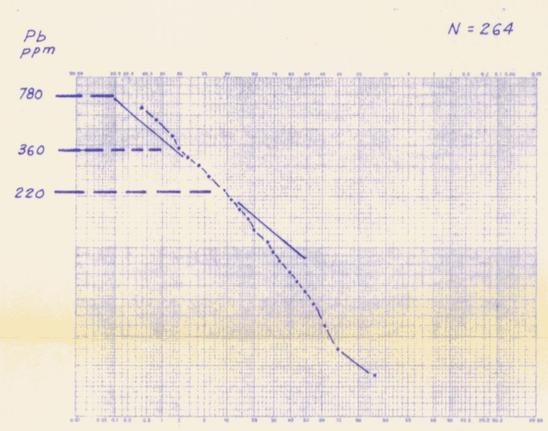
South Ting Creek

L 116 N
L 114 N
L 112 N
L 110 N
L 108 N
L 106 N
L 104 N
L 102 N
L 100 N
L 98 N
L 96 N
L 94 N
L 92 N
L 90 N
L 88 N
L 86 N
L 84 N
L 82 N



LOCATION MAP

Scale 1:1,000,000



Pb in soils
Three populations
1. *Low background* < 220 ppm
2. *High background* < 780 ppm
3. *Anomalous data* > 360 ppm

Threshold = 360 ppm
Possibly anomalous: 360 - 780 ppm
Definitely anomalous: > 780 ppm

Soil Survey

Sample medium : B horizon
A horizon samples marked (A)
Sediment depth : 10 - 30 cms.
Sample density : 200 and 400 m. lines, 50m. interval
Size fraction : - 80 mesh
Digestion : HCl, HNO_3
Leach : AA Fluorometric
Analysis : Pb, Zn, Mo, U
Field work by : B. Petch; C. Sharpe
Labratory : Bondar - Clegg, Whitehorse
Interpretation : C. Harrison

Contours at 200, 400, & 800 ppm

0 100 200 300 400 metres

T 2

GRID NORTH

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

TING CLAIMS, YUKON
GEOCHEMISTRY
LEAD (ppm)

SCALE 1:5,000

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG.
60° 32' ___" LATITUDE
~~132° 25'~~ 125° 53' ___" LONGITUDE

PROJECT NO. 6262-2
REPORT NO. Map 2

SHEET NO. ___ OF ___
N.T.S. 95 C/12

86E 88E 90E 92E 94E 98E 100E 102E 104E 106E 108E 100E

L 116 N
L 114 N
L 112 N
L 110 N
L 108 N
L 106N
L 104 N
L 102 N
L 100N
L 98N
L 96N
L 94N
L 92N
L 90N
L 88N
L 86N
L 84 N
L 82N

North Ting Creek

TING 1
YA 34320
25 138 100 78 10 56 140 85 12 (A A)

TING 2
YA 34321
130 105 70 265 250 140 68 140 93 105 (A)

300 235 200 240 305 240 35 140 15 (A A)
135 80 860 630 840 24 285 170 570

TING 3
YA 34322
90 100 8 140 90 50 95 90 65

TING 4
YA 34323
48 130 680 300 235 80 350 240 240 465

TING 5
YA 34324
34 4 23 74 58 150 45 165 140 85 73 415 33 205 220 200 185 (A A)

TING 6
YA 34325
190 125 765 1050 40 80 12 90 1000 260

TING 17
YA 34336
200 180 30 120 58 57 45 80 150

TING 7
YA 34326
750 360 285 280 75 275 140 110

TING 8
YA 34327
170 205 340 167 320 1460 195 240 163 125
200 90 275 4 275 385 280 370 400 240

TING 18
YA 34337
315 61 125 40 148 200 115 155 350

TING 9
YA 34328
370 175 250 110 160 230 265 500
250 250 400 1140 410

TING 10
YA 34329
280 250 1200 430 150 430 530 130 87 400

TING 19
YA 34338
120 1100 1170 185 209 32 255 110 180 415 380 525

TING 11
YA 34330
130 135 90 50 35 160 170 190 225 335 170 285 175 195 170 510 365

TING 12
YA 34331
160 150 87 90 200 310 275 210 425

260 360 230 260 220 140 180 1450 230 260 270

YA 34339
TING 20
75 115 20 10 10 180 110

YA 34332
TING 13
485 280 115 275 265 120 55 56 300 220

YA 34333
TING 14
250 245 155 15 225 165 53 50 330

105 115 155 160 60 60 310 220 235 240

YA 34334
TING 21
70 165 165 40 90 365 370 400 2100 3800 4300 7100 6000

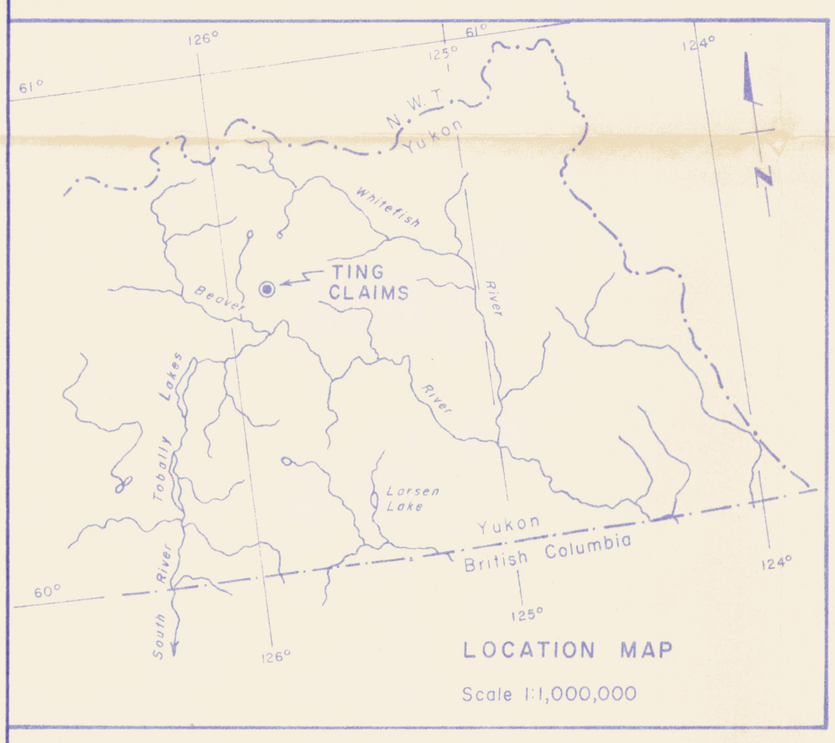
TING 15
675 190 1000 165

YA 34335
TING 16
220 290 320 300 280 310 275 180 205 340

YA 34340

South Ting Creek

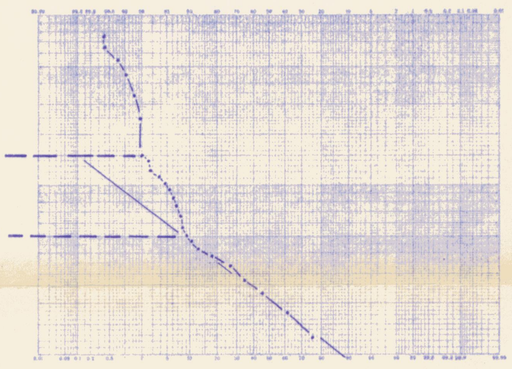
LOCATION MAP



Scale 1:1,000,000

Zn ppm

N = 264



CUMULATIVE FREQUENCY %

Definitely anomalous > 1500 ppm
Possibly anomalous 500 - 1500 ppm

Soil Survey

Sample medium	B horizon A horizon samples marked (A)
Sediment depth	10 - 30 cms.
Sample density	200 and 400 m. lines, 50m. interval
Size fraction	- 80 mesh
Digestion	HCl, HNO_3
Leach	AA Fluorometric
Analysis	Pb, Zn, Mo, U
Field work by	B. Petch; C. Sharpe
Labratory	Bondar - Clegg, Whitehorse
Interpretation	C. Harrison

Zn in soils - contours at
500, 1000, 2000, 4000 ppm.

0 100 200 300 400 metres

TN
GRID NORTH

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

TING CLAIMS, YUKON
GEOCHEMISTRY
ZINC (ppm)

SCALE: 1:5,000

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG.
60° 32' ___" LATITUDE
~~132° 25'~~ 125°53' ___" LONGITUDE

PROJECT NO. 6262-2
REPORT NO. Map 3
SHEET NO. ___ OF ___
N.T.S. 95C/12

86E 88E 90E 92E 94E 98E 100E 102E 104E 106E 108E 100E

L 116 N
L 114 N
L 112 N
L 110 N
L 108 N
L 106 N
L 104 N
L 102 N
L 100 N
L 98 N
L 96 N
L 94 N
L 92 N
L 90 N
L 88 N
L 86 N
L 84 N
L 82 N

North Ting Creek

South Ting Creek

TING 1
YA 34320

TING 2
YA 34321

TING 3
YA 34322

TING 4
YA 34323

TING 5
YA 34324

TING 6
YA 34325

TING 7
YA 34326

TING 8
YA 34327

TING 9
YA 34328

TING 10
YA 34329

TING 11
YA 34330

TING 12
YA 34331

TING 13
YA 34332

TING 14
YA 34333

TING 15
YA 34334

TING 16
YA 34335

TING 17
YA 34336

TING 18
YA 34337

TING 19
YA 34338

TING 20
YA 34339

TING 21
YA 34340

LOCATION MAP

Scale 1:1,000,000

N.W.T.
Yukon
Whitefish
Beaver
TING CLAIMS
River
Tobally Lakes
Larsen Lake
South River
Yukon
British Columbia
61°
60°
126°
125°
124°

N = 264

Mo ppm

31
12

CUMULATIVE FREQUENCY %

Possibly anomalous 12 - 31 ppm
Definitely anomalous > 31 ppm

Soil Survey

Sample medium	:	B horizon
	:	A horizon samples marked (A)
Sediment depth	:	10 – 30 cms.
Sample density	:	200 and 400 m. lines, 50 m. interval
Size fraction	:	– 80 mesh
Digestion	:	HCl, HNO_3
Leach	:	AA Fluorometric
Analysis	:	Pb, Zn, Mo, U
Field work by	:	B. Petch; C. Sharpe
Labratory	:	Bondar – Clegg, Whitehorse
Interpretation	:	C. Harrison

Mo in soils - contours at 6, 10, 14, 18 ppm

0 100 200 300 400 metres

TN
GRID NORTH

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

TING CLAIMS, YUKON
GEOCHEMISTRY
MOLYBDENUM (ppm)

SCALE: 1:5,000

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG.	PROJECT NO. 6262-2	SHEET NO. ___ OF ___
60° 32' ___" LATITUDE	Map REPORT NO. 4	NTS 95C/12
~~132° 35'~~ ___" LONGITUDE		

125°33'

86E 88E 90E 92E 94E 98E 100E 102E 104E 106E 108E 100E

L 116 N
L 114 N
L 112 N
L 110 N
L 108 N
L 106 N
L 104 N
L 102 N
L 100 N
L 98 N
L 96 N
L 94 N
L 92 N
L 90 N
L 88 N
L 86 N
L 84 N
L 82 N

North Ting Creek

South Ting Creek

TING 1
YA 34320

TING 2
YA 34321

TING 3
YA 34322

TING 4
YA 34323

TING 5
YA 34324

TING 6
YA 34325

TING 7
YA 34326

TING 8
YA 34327

TING 9
YA 34328

TING 10
YA 34329

TING 11
YA 34330

TING 12
YA 34331

TING 13
YA 34332

TING 14
YA 34333

TING 15
YA 34334

TING 16
YA 34335

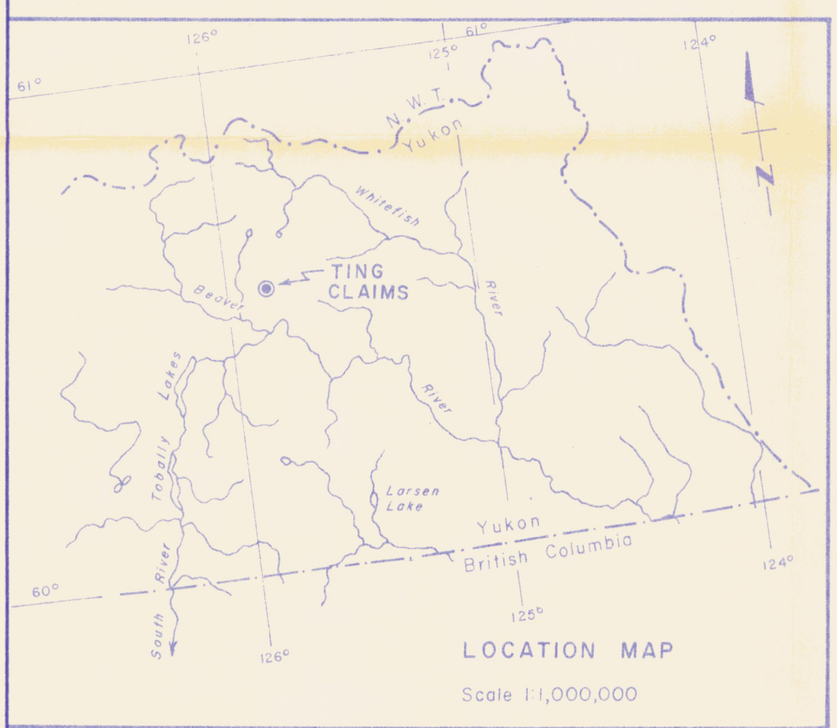
TING 17
YA 34336

TING 18
YA 34337

TING 19
YA 34338

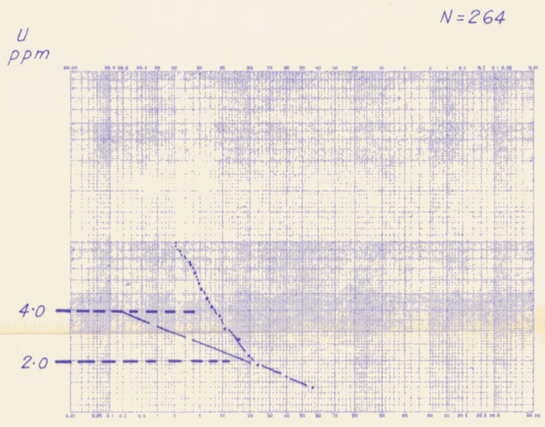
TING 20
YA 34339

TING 21
YA 34340



LOCATION MAP

Scale 1:1,000,000



Possibly anomalous 2·0 — 4·0 ppm
Definitely anomalous > 4·0 ppm

Soil Survey

Sample medium	:	B horizon A horizon samples marked (A)
Sediment depth	:	10 – 30 cms.
Sample density	:	200 and 400 m. lines, 50m. interval
Size fraction	:	– 80 mesh
Digestion	:	HCl, HNO_3
Leach	:	A.A. Fluorometric
Analysis	:	Pb, Zn, Mo, U
Field work by	:	B. Petch; C. Sharpe
Labratory	:	Bondar – Clegg, Whitehorse
Interpretation	:	C. Harrison

U in soils – Contours at 1, 2, 4, 8, 16 ppm

0 100 200 300 400 metres

TN

GRID NORTH

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

TING CLAIMS, YUKON
GEOCHEMISTRY
URANIUM (ppm)

SCALE: 1:5,000

APPROX LAT. & LONG. OF LOWER RT. COR. OF DWG.
60 ° 32 ' " LATITUDE
~~132 ° 25 ' "~~ 125°53' LONGITUDE

PROJECT NO. 6262·2

Map REPORT NO. 5

SHEET NO. ___ OF ___

NTS 95C/12

86E 88E 90E 92E 94E 98E 100E 102E 104E 106E 108E 100E

North Ting Creek

South Ting Creek

L 116 N
L 114 N
L 112 N
L 110 N
L 108 N
L 106 N
L 104 N
L 102 N
L 100 N
L 98 N
L 96 N
L 94 N
L 92 N
L 90 N
L 88 N
L 86 N
L 84 N
L 82 N

TING 1
YA 34320
330 630 340 180 310 62 1200 500 270

TING 2
YA 34321
630 210 270 620 640 390 360 200 300 400

TING 3
YA 34322
920 850 880 200 750 690 160

TING 4
YA 34323
610 340 690 440 1600 1150 1500 500 540 330 320 160

TING 5
YA 34324
590 850 270 570 540 320 390 440 440

TING 6
YA 34325
370 540 1400 750 540 460 1200 810 400 500

TING 17
YA 34336
440 210 370 300 400 290 420 850 780

TING 7
YA 34326
460 280 390 280 610 500 440 330

TING 8
YA 34327
420 480 710 1050 320 690 1200 460 960 590

TING 18
YA 34337
670 440 110 560 180 200 490 460 2700

TING 9
YA 34328
2400 1200 1100 660 720 200 460 270

TING 10
YA 34329
370 330 660 320 620 740 920 780 840 560

TING 19
YA 34338
1200 120 810 1750 1400 660 390 440 620

TING 11
YA 34330
610 500 460 880 300 460 400 570

TING 12
YA 34331
390 510 1100 510 370 470 480 530 530 740

TING 20
YA 34339
300 2500 320 340 360 290 320 260 300 460 390 490

TING 13
YA 34332
480 330 330 260 250 260 320 480 420 560 460 440 390 440 400 610 320

TING 14
YA 34333
330 420 290 380 400 530 480 740 680

TING 21
YA 34340
100 140 70 350 100 300 310 260 370 2700 62

TING 15
YA 34334
300 260 200 190 200 260 290 460 160 300 480 440 370 270 260 270 260

TING 16
YA 34335
260 280 280 200 480 320 420 370 560

370 370 190 400 950 520 560 130 290 280 250 380 270 320 540 420 460 380

460 440 400 1100 1100 96 780 600 580

CLAIM BOUNDARY

TING CLAIMS

LOCATION MAP
Scale 1:1,000,000

N.W.T.
Yukon
Whitefish River
Beaver River
Toodoggone Lakes
Larsen Lake
Yukon
British Columbia
South River
61°
60°
126°
125°
124°

N = 264

Fluorine ppm

1800
650

CUMULATIVE FREQUENCY %

Possibly anomalous 650 - 1800 ppm
Definitely anomalous > 1800 ppm

Soil Survey

Sample medium	B horizon A horizon samples marked (A)
Sediment depth	10 - 30 cms.
Sample density	200 and 400 m. lines, 50 m. interval
Size fraction	- 80 mesh
Digestion	HCl, HNO_3
Leach	Electrometric
Analysis	Fluorine
Field work by	B. Petch, C. Sharpe
Labratory	Bondar - Clegg, Whitehorse
Interpretation	C. Harrison

Flourine in soils - contours at
500, 1000, 1500, 2000, 2500 ppm

0 100 200 300 400 metres

TN
GRID NORTH

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

TING CLAIMS, YUKON
GEOCHEMISTRY
FLUORINE (ppm)

SCALE: 1:5,000

APPROX. LAT & LONG. OF LOWER RT COR. OF DWG.
60 ° 32 ' " LATITUDE
~~132 ° 25~~ 125°53' ' " LONGITUDE

PROJECT NO 6262-2
Map REPORT NO 6
SHEET NO ___ OF ___
NTS 95C/12

84E 86E 88E 90E 92E 94E 98E 100E 102E 104E 106E 108E 100E

L 116 N
L 114 N
L 112 N
L 110 N
L 108 N
L 106 N
L 104 N
L 102 N
L 100 N
L 98 N
L 96 N
L 94 N
L 92 N
L 90 N
L 88 N
L 86 N
L 84 N
L 82 N

TING 1
TING 2
TING 3
TING 4
TING 5
TING 6
TING 7
TING 8
TING 9
TING 10
TING 11
TING 12
TING 13
TING 14
TING 15
TING 16
TING 17
TING 18
TING 19
TING 20
TING 21

North Ting Creek

South Ting Creek

Contours at 3,000 cpm
6,000 cpm
12,000 cpm
24,000 cpm

T_1 = Total counts due to K, U, Th before background correction

TN

GRID NORTH

Instrument: McPhar TV-1

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

TING CLAIMS, YUKON
RADIOMETRIC MAP
SCINTILLOMETER SURVEY
TOTAL COUNTS

SCALE: 1:5,000

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG.
60° 32' N LATITUDE
~~132° 25'~~ 125° 53' W LONGITUDE

PROJECT NO. 6262-2

Map REPORT NO. 7

SHEET NO. ___ OF ___

N.T.S. 95/C/12

84E 86E 88E 90E 92E 94E 98E 100E 102E 104E 106E 108E 100E

L 116 N
L 114 N
L 112 N
L 110 N
L 108 N
L 106 N
L 104 N
L 102 N
L 100 N
L 98 N
L 96 N
L 94 N
L 92 N
L 90 N
L 88 N
L 86 N
L 84 N
L 82 N

North Ting Creek

South Ting Creek

TING 1
YA 34320

TING 2
YA 34321

TING 3
YA 34322

TING 4
YA 34323

YA 34324
TING 5

YA 34325
TING 6

TING 17
YA 34336

TING 7
YA 34326

TING 8
YA 34327

TING 18
YA 34337

TING 9
YA 34328

TING 10
YA 34329

TING 19
YA 34338

TING 11
YA 34330

TING 12
YA 34331

TING 20
YA 34339

YA 34332
TING 13

TING 14
YA 34333

TING 21
YA 34340

YA 34334
TING 15

TING 16
YA 34335

T_2 = Counts due to U and Th before background corrections. (cpm)

T_3 = Counts due to Th (cpm)

C_{Tu} = Counts attributed to uranium after subtraction of Thorium and background. (cpm)

Threshold value for T_2 is 275 cpm
Values above 275 cpm are circled

TN
GRID NORTH

Instrument: McPhar TV-I

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

TING CLAIMS, YUKON
RADIOMETRIC MAP
SCINTILLOMETER SURVEY
T_2, T_3, C_{Tu}

SCALE: 1:5,000

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG.	PROJECT NO. 6262-2	SHEET NO. ___ OF ___
60° 32' ″ LATITUDE ~~132° 25'~~ 125°53' ___ LONGITUDE	REPORT NO. Map 8	N.T.S. 95 C/12