

2891

GEOCHEMICAL REPORT
ON THE
PINE GROUP OF CLAIMS
KAMLOOPS MINING DIVISION

for

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2891 MAP

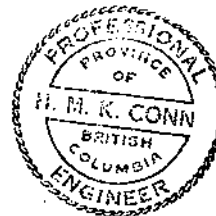
CANADIAN JOHNS-MANVILLE COMPANY, LIMITED
EXPLORATION DEPARTMENT
P.O. BOX 1500 - ASBESTOS, QUEBEC

Covering : Pine Claims No. 1-110
Fir Claims No. 1- 18

Located : 1) $50^{\circ}30'N$ $120^{\circ}29'W$ 92 I / 8W, 9W
2) N.T.S. Map 921, East Half - Nicola
3) Lac Le Jeune lake area, 15 miles south
of Kamloops, Kamloops Mining Division,
British Columbia

Submitted : Chong-Pin Lin, M.A.
by and
H.K. Conn , P.Eng.

Date : February 1971



Expiry Date: Jan. 28, 1972

Chong-Pin Lin

H. M. K. Conn

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INTRODUCTION

GENERAL:

During the period February 3 to June 27, 1970 the Pine group of claims were staked by Canadian Johns-Manville Company, Limited and a total of 796 samples, in terms of soil geochemistry and biogeochemistry, were collected over the claims by the employees of the above-said Company.

This report, dealing with the geochemical surveys of soil and trees, should be treated in conjunction with the geophysical report and the geological report as in an entity of the whole exploration operation in the Pine claim area.

HISTORY:

In the year 1969 a reconnaissance investigation between Kamloops and Merritt brought attention to the molybdenum anomaly (150 ppm) at Station KM 92 which was located by the road 3,000 feet south of Stake Lake. Hence, the detailed program of 1970 was initiated. However, the geochemical soil sampling showed less satisfactory results than expected. It was then assumed that the thick overburden of the glacial moraine has reduced or masked the geochemical character of this area and was responsible for the poor results of soil geochemistry. Therefore, the biogeochemical approach was attempted in order to better understand the bedrock geochemistry.

LOCATION AND ACCESS:

The claim group is located immediately north of Lac Le Jeune Lake in the Kamloops Mining Division, B.C., about 15 miles south of Kamloops. The property can be reached by a secondary road that branches off southward from Highway 97 to Lac Le Jeune Park and then by a road that leads from the entrance to the south end of the claims.

PHYSIOGRAPHY AND VEGETATION:

The claim block is situated on a plateau adjoining the Nicola Plateau to the south, and bordered by Thomson River to the north. The elevation within the property varies between 4,100 and 4,700 feet with a relief of 600 feet. Overburden, chiefly constituted of glacial moraine, is thick. Prominent drumlinoid features are prevalent. Their predominant elongation indicates NW-SE glacial movement.

The vegetation of Lac Le Jeune area is composed of thick shrubs and medium size trees, except over areas of volcanic talus. Lodgepole pine (*Pinus contorta latifolia*) and alpine fir are the dominant species, but cedar, spruce, poplar also occur. In small valleys or swamp environment shrubs, black cottonwoods and poplar prevail.

GEOLOGY:

The claim block is underlain by rocks of three ages. From west to east they are the Nicola Group greenstone of Triassic age, the Coast Intrusion granodiorite of probable Jurassic age and Kamloops Group basalt of Miocene.

The Nicola group consists largely of volcanic greenstone that varies from nearly aphanitic to coarsely porphyritic types. They are predominantly green, but also occur in various shades of purple, red, brown, or grey, and include some with a nearly black groundmass. The rocks are chiefly andesite.

Contacting the Nicola group greenstone is the Nicola batholith, a Coast Intrusion. The plutonic rock is mainly medium to coarse grained granodiorite. Locally it is characterized by high content of biotite and by gneissic texture. The mineralogy is essentially composed of quartz, biotite, plagioclase with minor amounts of hornblende or pyroxene.

GEOLOGY: (Cont'd)

In the eastern portion of the claim block the Nicola batholith is roofed by basalt lava of the Kamloops Group. The lava is chiefly dense, fine-grained, and characterized by aggregate of olivine crystals. Well-developed columnar joints are a distinct feature.

MINERALIZATION:

Evidence of mineralization is limited since the claim area is covered by thick overburden and outcrops are extremely scarce. No showings in place have been observed to date. However, granodiorite boulders have been occasionally found to bear pyrite in aplite dykes and quartz veins. Heavy rust on these boulders suggest that considerable amounts of sulphides have been leached. Rare occurrences of specularite in altered granodiorite boulders have been reported. Pyritized boulders are confined mainly to the area between Stake Lake and Lac Le Jeune south of the Kamloops group basalt.

SOIL GEOCHEMISTRY

During the period February 18 to July 3, 1970 a total of 386 geochemical samples were collected over the Pine claim group. They include 150 soil samples, 26 stream sediment samples, 141 swamp samples, and 69 lake samples. This sampling program was a follow-up of the previous reconnaissance survey which indicated anomalous values in this area.

A. FIELD METHODS:

The samples are generally taken at 200 foot intervals as measured by pacing. Traverses were made along creeks and shorelines of lakes or swamps. Some soil samples were collected along certain grid lines to cover anomalous stations in previous reconnaissance surveys. All sample stations were flagged.

A. FIELD METHODS:

In collecting soil samples, B horizon material was preferred wherever available; in case B horizon was absent, A horizon material was taken. Lake samples were collected from lake floor 10 to 30 feet from shore or along lake edge. Swamp samples were collected from edge of swamps; and stream sediment samples from creeks. Between McConnell Lake and Lac Le Jeune, a test series of samples were collected from creek floors and both banks at each station, and the stations were at 1,000 foot intervals. Qualitative observations concerning texture, color, soil type, depth, slope and distance from shore for lake samples were recorded at each station. Sample groups include SL 01-268; KMS 27-53, 90-110; JB 01-29 and KLS 129, 132, 135, 143.

B. ANALYTICAL TECHNIQUES:

All geochemical samples of soil, stream sediments, swamp and lake were analyzed in the Vancouver laboratories of Bondar-Clegg & Company, Limited. Tests for copper, molybdenum were applied to the total 386 samples, tests for lead, zinc and silver were applied to most samples; tests for tungsten and uranium were applied to 20 samples.

The samples were dried at 40^o to 50^oC in infra-red ovens and sieved to -80 mesh in Tyler sieves. In order to extract the metals, an aliquot of -80 mesh fraction was digested in hot aqua regia, ammonium iodide and potassium carbonate. The metal content of each sample was determined by atomic absorption, colorimetric and fluorimetric means at various detection limits of 2, 1 and 0.2 ppm. A description of the method used is presented below:

B. ANALYTICAL TECHNIQUES: (Cont'd)

<u>Element</u>	<u>Extraction Method</u>	<u>Determination Method</u>	<u>Detection Limit</u>
Cu	Hot Aqua Regia	Atomic Absorption	1 ppm
Pb	"	"	1 ppm
Mo	"	"	1 ppm
Ag	"	"	0.2 ppm
Zn	"	"	1 ppm
U	HNO ₃	Fluorimetric	1 ppm
W	K ₂ CO ₃	Colorimetric	2 ppm

C. CLASSIFICATION OF DATA:

In the statistical analysis of lead, zinc and silver, the geochemical samples were grouped into two populations:

- (a) lake and swamp sediments
- (b) soil from A or B horizons

Such grouping was necessary to warrant meaningful statistical treatment by providing sufficient numbers of samples in each set. The grouping was also appropriate considering the genetical similarity of the samples thusly combined.

The results of copper were analyzed separately in four populations, each being supported by sufficient samples:

- (a) stream sediments
- (b) lake sediments
- (c) swamp sediments
- (d) soil from A or B horizon

A rough arithmetic classification has been attempted for molybdenum results. It appears that their values are low and their distribution is uneven. Further statistical treatment was omitted.

The samples tested for tungsten and uranium were insufficient for statistical analysis.

Geometric, rather than arithmetic method, was chosen in the statistical analysis because the sample results form lognormal distribution instead of normal distribution. For each element the sample data are classified into four categories as follows:

C. CLASSIFICATION OF DATA: (Cont'd)

Negative	$0 - b$
Possibly anomalous	$(b+s) - (b+2s)$
Probably anomalous	$(b+s+1) - (b+2s)$
Anomalous	$(b+2s+1) +$

"b" the background, is the geometric mean; "s" is the standard deviation. "b+2s" is considered as the threshold for anomalous values.

A summary table of the key values in parts per million for statistical classification is presented below:

	<u>b</u>	<u>b+s</u>	<u>b+2s</u>
Copper - stream sediments	37	80	-
- lake sediments	28	43	67
- swamp sediments	25	46	67
- soil	25	56	169
Lead - lake & swamp sediments	8	10	22
- soil	10	13	19
Molybdenum	Insignificantly low values		
Silver - lake & swamp sediments	0.6	0.8	1.0
- soil	0.7	1.0	1.5
Tungsten	Insufficient samples		
Zinc - lake & swamp sediments	39	55	78
- soil	48	63	82
Uranium	Insufficient samples		

D. PRESENTATION OF DATA:

The geochemical results were plotted at each sample station on separate map sheets for each element. Standard symbols for classes of anomaly mark the stations:

Negative	0
Possibly anomalous	⊙
Probably anomalous	⊖
Anomalous	⊕

Cumulative frequency distributions for elements copper, lead, zinc, and silver are presented on logarithmic probability graph paper. Various populations within each element are shown separately along with statistical figures for data classification.

BIOGEOCHEMISTRY

During the period March 9 to June 27, 1970, a grid system was established over the Pine group of claims and a total of 410 biogeochemical samples were then collected from the grid.

A. FIELD METHODS:

A grid was established as the basis of the sampling pattern. An EW baseline, 10,500 feet long, was placed 2,500 feet north of Lac Le Jeune. Stemming from the baseline, the parallel crosslines extend northward for 10,000 feet with spacing of 500 feet to form the grid. The survey was controlled by chaining and compass.

Samples were collected along the grid lines at regular intervals of 500 feet. Each sample station was flagged. Twigs of the second year growth were selected from the lodgepole pine trees (*Pinus contorta latifolia*), the most common and well-distributed tree in the area. Preferences were southerly growing branches at head level, from 20 foot trees. However, these criteria varied in practice. It was sometimes difficult to distinguish the growth modules on pine twigs, thus possibly third year or even fourth year growth were also included in samples. Qualitative observations concerning slope, drainage, height of sample, height of tree, direction of branch growth were recorded for each station. The quantity of each sample, varying from six to nine twigs, was also recorded. The numbers of the samples started from JT-001 to JT-410.

B. ANALYTICAL TECHNIQUES:

The total 410 twig samples were analyzed in the Vancouver laboratories of Bondar-Clegg & Company, Limited. All samples were tested for copper, molybdenum, lead and silver - some 29 samples were tested for uranium.

B. ANALYTICAL TECHNIQUES: (Cont'd)

The samples were dried at low heat on receipt - their needles being removed. Then the portions of the second year growth were selected and ground before being ashed completely in three-step process. The ash was taken up in acid to dryness and afterwards was digested in weak HCl or HNO₃ in the case of uranium. The metal content of each sample was determined by atomic absorption, fluorimetric and colorimetric means at various detection limits of one and 0.2 ppm. A description of the method used is presented below:

<u>Element</u>	<u>Extraction Method</u>	<u>Determination Method</u>	<u>Detection Limit</u>
Cu	HCl	Atomic Absorption	1 ppm
Pb	"	"	1 ppm
Zn	"	"	1 ppm
Ag	"	"	0.2 ppm
Mo	"	Colorimetric	1 ppm
U	HNO ₃	Fluorimetric	1 ppm

C. CLASSIFICATION OF DATA:

In the same fashion as the ^{soil}geochemical data treatment the bio-geochemical data are also classified into four categories for each element as follows:

Negative	o - b
Possibly anomalous	(b+1) - (b+s)
Probably anomalous	(b+s+1) - (b+2s)
Anomalous	(b+2s+1) +

The background "b" is the geometric mean; "s" is the standard deviation. The anomalous values are above the threshold - "b+2s".

A summary table of the key values in parts per million for statistical classification is presented below:

<u>Element</u>	<u>b</u>	<u>b+s</u>	<u>b+2s</u>
Copper	204	253	316
Molybdenum	4	8	15
Lead	180	230	298
Zinc	1660	2140	2760
Silver	7	10	13

D. PRESENTATION OF DATA:

See "Presentation of Data" in "Soil Geochemistry" (Page 6).

DISCUSSION

The objective of this operation is a porphyry type deposit enriched by molybdenum and copper. Lead, characterized by lack of mobility, was used as an indicator of the mineralization source. Silver and zinc, usually associated with molybdenum and copper, signified their presence. Zinc was also used in copper, zinc ratio as a tool to reveal the copper significance.

Surveys of soil geochemistry and biogeochemistry are discussed separately as follows:

A. SOIL GEOCHEMISTRY:

Samples were collected mainly along shorelines, creeks and roadsides in an uneven distribution. The results will be discussed in separate areas. As the molybdenum values are generally too low to show any significance, this element is omitted in the following tabulations:

Area 1: (Samples : SL95 - 116
Location: NW of Pine Claims)

<u>Elements</u>	<u>Total Samples</u>	<u>Possibly Anomalous</u>	<u>Probably Anomalous</u>	<u>Anomalous</u>
Cu	22	14	7	1
Pb	22	2	2	-
Zn	22	7	1	-
Ag	22	14	2	-

This area is underlain by greenstone of Nicola group, approximately 1,500 feet west of the Nicola batholith. The moderate anomaly of copper might be caused by mineralization along the contact, if not by glacial debris from the northwest. Follow-up work has been recommended.

Area 2: (Samples:: SL 137-174; 192-246; 248-268
Location: East of Lac Le Jeune)

A. SOIL GEOCHEMISTRY: (Cont'd)

Area 2: (Cont'd)

<u>Elements</u>	<u>Total Samples</u>	<u>Possibly Anomalous</u>	<u>Probably Anomalous</u>	<u>Anomalous</u>
Cu	114	30	2	1
Pb	114	19	11	1
Zn	114	25	15	2
Ag	114	20	9	2
Mo	114	-	-	-

Superimposed anomalous stations are aggregated around the two southward land protrusions into the NE swamp extension of Lac Le Jeune. Zinc, silver and lead are distinctly anomalous; copper, weakly anomalous. The aggregative pattern of coincidental metal anomalies seems to suggest a single source of multi-element mineralization. These anomalous values could be derived:

- (a) in place from the underlying batholith
- (b) from upslope, or
- (c) from NW by glacial transportation

If one considers the immobility of lead, a source of mineralization in place seems to be more likely. Moreover, these anomalous values occur at the thinnest overburden in the vicinity, where any anomaly underneath in the batholith is more readily revealed on surface than elsewhere. Therefore, surface anomaly here may well be derived in place from the batholith underneath.

Further sampling upslope, from NW and from swamp is recommended.

Area 3: (Samples : SL36-60; 175-191
Location: Road south of Stake Lake)

<u>Elements</u>	<u>Total Samples</u>	<u>Possibly Anomalous</u>	<u>Probably Anomalous</u>	<u>Anomalous</u>
Cu	42	18	10	2
Pb	42	5	5	-
Zn	42	6	3	-
Ag	42	9	2	1

A. SOIL GEOCHEMISTRY:

Area 3: (Contd)

A moderate copper anomaly occurs in association with a weak molybdenum anomaly at the southern part of this area. The traverse is along a valley roughly parallel to the batholith/greenstone contact 500 to 1,500 feet to the west. Possible mineralization may occur along the batholith/greenstone contact or upslope to the east. Local lead and silver values do not suggest any mineralization in place.

Follow-up work in Area 1 as has been recommended should help finding the source of mineralization. Further work upslope to the east is recommended.

Area 4: (Location: McConnell Lake & Stake Lake)
Samples : SL-01-35; 61-94; 117-136; JB(A) 01-29)

<u>Elements</u>	<u>Total Samples</u>	<u>Possibly Anomalous</u>	<u>Probably Anomalous</u>	<u>Anomalous</u>
Cu	118	35	20	2
Pb	68	23	8	3
Zn	68	15	5	1
Ag	68	16	10	1

This area of lakes is underlain by the batholith. Geochemical results are generally low. Weak anomalies of copper, lead and silver overlap along the west margin of McConnell Lake and around the small lake to the southwest of McConnell Lake. The NE end of Stake Lake shows slightly anomalous values of copper.

Area 5: (Location: Creeks between McConnell Lake & Lac Le Jeune)
(Samples : KMS 27-53; 93-110)

<u>Elements</u>	<u>Total Samples</u>	<u>Possibly Anomalous</u>	<u>Probably Anomalous</u>	<u>Anomalous</u>
Cu	45	6	6	-

Samples were collected from creeks and both banks, to be analyzed for copper and molybdenum. Most creek samples showed higher results

A. SOIL GEOCHEMISTRY:

Area 5: (Cont'd)

than those from the banks, probably due to the valley cut that approaches and reveals the batholith under the basalt. Copper values are weakly anomalous; one molybdenum anomaly (95 ppm) was found at Station KMS-30.

B. BIOGEOCHEMISTRY:

The results of biogeochemical survey will be discussed in terms of element distribution and of anomaly zones separately:

(a) Element Distributions:

The distribution of each metal element including Cu/Zn values are reported separately below.

Copper:

The strongest anomalous values occur in Zone B where Stations 133 and 89 show 700 and 500 ppm copper respectively. Other anomalous stations with less intensity spread out in A, C, and D zones.

Molybdenum:

The anomalous stations seem to aggregate in the west of Zone A, or southwest portion of the grid. The values culminate at Station 408 for 48 ppm of molybdenum. Other anomalous values are found around Stake Lake in D zone and south of McConnell Lake in B zones.

Zinc:

High values of zinc are distributed somewhat sporadically, although it seems that a wide anomalous zone occurs at C and A zones, or the southeast portion of the grid.

Lead:

Among all the elements analyzed, lead shows the most significant distribution pattern. A distinct EW trending anomaly occurs across Zone A. The anomalous values here vary (stably) only between

B. BIOGEOCHEMISTRY:

(a) Element Distribution:

Lead: (Cont'd)

305 and 325 ppm lead in a limited range. Away from this trend northward, values descend to almost insignificant lows.

Silver:

A vague trend composed of discontinuous anomalous stations coincide with the trend of lead anomaly that goes EW across Zone A. Other high values occur in B and D zones where all metal anomalies are loosely overlapped.

Copper-Zinc Ratio:

Similar to copper distribution, the highest ratio occurs in Zone B. Station 133 shows 0.378 Cu/Zn ratio. General values are high in Zone D. Zones A and B are relatively weak.

Distinct NW-SE orientation, which coincides with the glacial movement, is shown, by possible and probable anomalous contours. Furthermore, high values seem to occur on north or northwest slope of topographic "barriers". It appears that glacial movement might have affected the general copper distribution.

General:

The distribution of anomalous stations for the metal elements generally form randomly dispersed patterns. In comparison among the elements, zinc shows the widest dispersion range, whereas lead shows the narrowest dispersion range or the most concentrated anomalous pattern. This illustrates the normal secondary dispersion of the relatively mobile zinc and relatively inert lead. Lead, due to its lack of mobility in soil, is used to mark the source of mineralization.

B. BIOGEOCHEMISTRY:

(a) Element Distribution:

General: (Cont'd)

By superimposing lead and silver distribution, one finds a coincidental trend that goes through A zone. This is the most prominent trend shown by the biogeochemical survey. A zone second in prominence consisted of loosely overlapping anomalies of all five elements and is located at Zone B. Other coincidental metal anomalies of lesser significance are located in C and D zones. Further discussion will follow the description of the anomaly zones.

(b) Anomaly Zones:

The grid area is delineated into four zones, based on the superposition of probably anomalous contours.

Zone A:

<u>Element</u>	<u>Sample</u>	<u>Probably Anomalous</u>	<u>Anomalous</u>
Cu	117	25	3
Mo	117	36	6
Pb	117	44	7
Zn	117	22	2
Ag	117	14	3
Cu/Zn	117	13	-

In the east portion of the zone, an east-west line going through stations 305, 295, 388 appears to be the most distinct anomalous trend in the biogeochemical results. This trend is formed by coinciding anomalies of all the metal elements analyzed. Among them lead, being an immobile element, and an indicator of mineralization source, accentuates this trend even more by a strong typical anomalous pattern which consists of continuous high values flanked by well-formed dispersion halos.

This trend, distinct as it appears, shows little correlation to the geological background immediately underneath since it maintains

B. BIOGEOCHEMISTRY:

(b) Anomaly Zones:

Zone A: (Cont'd)

through both the Kamloops basalt and the Nicola batholith. However, apart from the irrelevance to the superficial geology, there remain several possible explanations:

(i) Possible mineralization source might exist in the batholith underneath the Kamloops lava sheet. The mineralization became available for the plants to absorb through three possible ways. First, the mineralized xenolith fragments from the batholith in the basalt lava enrich the groundwater so that the plants can absorb. Secondly, a pre-Kamloops east-west ridge of batholith was covered by thinner sheet of lava than in the vicinity. Mineralization in the batholith thus became more readily absorbed along the buried ridge by the plants growing on the basalt surface. Thirdly, a possible east-west fault allows mineralization in the underlying batholith to be absorbed by the plants on basalt surface. This hypothetical fault is suggested by the local topography and the basalt/batholith contact east of the grid.

(ii) Glacial debris from a mineralization source further north might have been trapped here by the topographic barrier during glacial movement.

(iii) Samples might have been contaminated either in collection or in chemical analysis.

Recommendation for further work here is deferred unless favorable results are indicated by other means of exploration survey such as geophysical investigation.

In the west portion of the zone, a fault roughly along Stations 243 and 331 was found to be in coincidence with anomalies of copper, molybdenum, lead and zinc. This anomalous trend is situated on the boundary

B. BIOGEOCHEMISTRY:

(b) Anomaly Zones:

Zone A: (Cont'd)

of Kamloops basalt and Nicola batholith which outcrops in scattered patches to the west.

It is recommended that prospecting and detailed soil sampling be carried out in the area of batholith outcrops.

Zone B:

<u>Element</u>	<u>Sample No.</u>	<u>Probably Anomalous</u>	<u>Anomalous</u>
Cu	50	9	2
Mo	50	3	1
Pb	50	9	-
Zn	50	8	1
Ag	50	9	1
Cu/Zn	50	8	2

This zone is located southeast of McConnell Lake on the north slope of a basalt mount where previous I.P. survey has shown an anomaly. The essential elements here are copper and silver that culminate at Stations 133 and 92 respectively in halos of supporting values. Values of all elements tend to increase slightly towards the margin of the lake where zinc and molybdenum show anomalous values.

Possibility of mineralization in batholith underneath the basalt is suggested by the biogeochemical anomaly which favors the drilling recommendation in previous I.P. survey.

Zone C:

<u>Element</u>	<u>Sample No.</u>	<u>Probably Anomalous</u>	<u>Anomalous</u>
Cu	32	12	2
Mo	32	8	-
Pb	32	1	-
Zn	32	11	2
Ag	32	7	-
Cu/Zn	32	5	1

B. BIOGEOCHEMISTRY:

(b) Anomaly Zones:

Zone C: (Cont'd)

In general this is a zone of discontinuous stations of moderate to weak anomalies. Anomalous values are represented by copper (Station 175, 213) and zinc (Station 257, 197). The zone is mainly underlain by the basalt extending westward into the moraine fill covering the batholith.

Little of the biogeochemical results can be correlated with geology. Further work should await favorable results of other exploration surveys.

Zone D:

<u>Element</u>	<u>Sample No.</u>	<u>Probably Anomalous</u>	<u>Anomalous</u>
Cu	57	7	1
Mo	57	9	3
Pb	57	4	-
Zn	57	13	1
Ag	57	8	2
Cu/Zn	57	7	4

The zone is located in the vicinity of Stake Lake and is underlain by the batholith. Anomalous values of molybdenum are represented by Stations 54, 65, 121 and 141. Silver, copper and zinc are also anomalous, each showing culminating values in a discontinuous pattern.

The thick glacial debris covering the batholith has to be considered in correlating the anomalous values to the geological background. Anomalous values might have been derived from all surrounding high areas.

No follow-up can be recommended solely on the basis of the biogeochemical survey.

RECOMMENDATIONS

(1) Further detailed geochemical soil sampling in the northwest claim portion is in progress, as has been recommended to follow-up the soil anomaly.

(2) Drilling over the I.P. anomaly in the B zone, as proposed by previous geophysical survey, is supported by the biogeochemical anomaly.

(3) It is recommended that detailed soil sampling and prospecting be carried out in the area of batholith outcrops west of Zone A.

BIBLIOGRAPHY

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et al
- G.S.C. Memoir Nicola Map Area, B.C.
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COST ANALYSIS1. GEOCHEMICAL SAMPLING:

Consultant - J. Kerr 3-1/2 days @ \$125 and \$100 per day	\$ 412.50	
Geologist - C. Choi 43 days @ \$26.96 per day	1,159.28	
Survey Fieldman - J. Binnie 13 days @ \$26.96 per day	350.48	
Fieldman - W. Burry 3 days @ \$23.08 per day	69.24	
Bushmen - R. Bell, J. Hughes, C. Robinson 49 days @ \$18.00 per day	<u>882.00</u>	\$ 2,873.50

2. GRID CONTROL:

Geologist - C. Choi 11 days @ \$26.96 per day	296.56	
Survey Fieldman - J. Binnie 1 day @ \$26.96 per day; 10 days @ \$28.53/day	312.26	
Fieldman - W. Burry 5 days @ \$23.08 per day	115.40	
Fieldman - A. Gussan 3 days @ \$20.00 per day	60.00	
Bushmen - R. Bell, T. Whibley, C. Binnie, J. Hughes 17 days @ \$18.00/day; 28 days @ \$20.00/day	<u>866.00</u>	1,650.22

3. GEOLOGICAL CONTROL:

Geologist - C. Choi 6 days @ \$26.96 per day	161.76	
Exploration Manager - H.K. Conn 1 day @ \$75.00 per day	75.00	
Chief Geologist - E.L. Mann 1 day @ \$50.00 per day	<u>50.00</u>	286.76

4. ROOM AND BOARD: (See next page)

COST ANALYSIS
(Continued)

4.	<u>ROOM AND BOARD:</u>		
	189 man days @ \$17.00/day		\$ 3,213.00
5.	<u>ANALYTICAL COSTS:</u>		
	Soil geochemical analysis 386 samples tested for Cu, Mo, Pb, Zn, Ag & some W, U	\$ 1,182.32	
	Biogeochemical analysis 410 samples - Cu, Mo, Pb, Zn, Ag & some U	1,830.40	
	Shipping charges	<u>40.00</u>	3,052.72
6.	<u>TRAVEL COSTS:</u>		
	125 trips of 30 miles (Kamloops to Lac Le Jeune) at 15¢ per mile		562.50
7.	<u>REPORT PREPARATION COSTS:</u>		
	Technician - A. Therrien 25 days @ \$32.30 per day	\$ 807.50	
	Exploration Manager - H.K. Conn 7 days @ \$75.00 per day	525.00	
	Chief Geologist - E.L. Mann 4 days @ \$50.00 per day	200.00	
	Geologist - C.P. Lin 8 days @ \$28.00 per day	224.00	
	Office supplies	<u>50.00</u>	1,806.50
			<hr/>
	TOTAL		<u>13,265.00</u>

STATEMENT OF QUALIFICATIONS

I, Herbert Keith Conn, of the town of Asbestos, do hereby declare that:

1. I am a mining geological engineer employed as Exploration Manager for Canadian Johns-Manville Company, Limited, P.O. Box 1500, Asbestos, Quebec.

2. I have practised in the geological profession for 22 years and specialized in economic geology and exploration procedures for the past 21 years.

3. I am a graduate of the University of Toronto, Toronto, Ontario, with a degree of B.A.Sc. (Mining Geology), 1948.

4. I am a member of the following professional associations:

- (a) Corporation of Engineers of Quebec
- (b) Non-resident member of the Association of Professional Engineers of the Province of British Columbia
- (c) Fellow of the Geological Association of Canada
- (d) Fellow of the Society of Economic Geologists
- (e) Member of the Canadian Institute of Mining and Metallurgy
- (f) Member of the American Institute of Mining Engineers

5. This report is based on published and unpublished information.

February 1971

Expiry Date: Jan. 28, 1972



STATEMENT OF QUALIFICATIONS

I, Chong-Pin Lin, of the city of Asbestos in the Province of Quebec, hereby certify that:

1. I am a mining exploration geologist, with three years of experience.

2. I am a graduate of the following universities:

National Taiwan University B.A. (Geology) 1965
(Republic of China)

Bowling Green State University M.A. (Geology) 1969
(Ohio, U.S.A.)

3. I am employed by Canadian Johns-Manville Company, Limited P.O. Box 1500, Asbestos, Quebec, as a geologist.

4. The costs of the survey discussed in this report and analyzed in Appendix A are, to the best of my knowledge, correct.

5. This report is based on published and unpublished information.



Chong-Pin Lin

February 1971

GEOCHEMICAL SURVEY DATA

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

Stake Lake

COLLECTOR: J Kerr

AREA: Lake Louise

DATE: February 18, 1970

PROJECT: 468

LOCATION REF: Stake Lake

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	LAKE STREAM SIZE FTS DPTH	FLOW STREAM GRADIENT %	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL		
					R	A	L						
Sheet Samples taken from North Shore of Lake floor													
5K01	0100	Flats	2 1/2'	30'				Bl/Grey	Silt/sand	next to road			
02	2100	"	3'	10'				Grey-Green	Sand				
03	4100	"	1 1/2'	20'				Grey/br	Clay/sand	Some organic matter			
04	6100	"	4'	25'				Grey/bl	Silt/sand	"			
05	8100	"	4 1/2'	15'				"	Gravel/sand/silt				
06	10100	"	3'	10'				Grey	Gravel/sand	minor organic			
07	12100	"	3 1/2'	10'				"	"				
08	14100	"	2'	20'				"	Clay/silt	organic material			
09	16100	"	5'	20'				"	"	micro organic			
10	18100	"	4'	15'				Grey/br	Silt/sand	organic (hand sorted)			
11	20100	"	6'	30'				"	"	organic			
12	22100	"	6 1/2'	20'				"	Silt	"			
13	24000	"	1 1/2'	15'				Grey/Green	Sand/Gravel				

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

J. F. Funnell

AREA: Lac La Poudre

DATE: Feb 19/70

PROJECT: 409

LOCATION REF: Stake Lake

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	WATER SAMPLE SIZE (C.P.S.I) depth	DISTANCE TO STREAM GRADIENT (feet) slope	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYSIS
					R	A	L				
SL 16	30+00	Plateau	9'	20'				Grey Black	fine Sand		
SL 17	32+00	"	4'	15'				Grey	Med Sand		
SL 18	34+00	"	4'	20'				Grey Brown	Fine Sand	MINOR organic	
SL 19	36+00	"	4'	30'				Blue Grey	Fine Sand	" "	
SL 20	38+00	"	6'	25'				Blue Grey	Sand + fine Gravel	Small dark masses, organic possible but not	
SL 21	40+00	"	7'	30'				Grey Brown	Silt	" "	
SL 22	42+00	"	7'	15'				Grey Brown	Silt		
SL 23	44+00	"	6'	20'				Blue Grey	Fine Sand	all silt over rocks bottom	
SL 24	46+00	"	2'	30'				Grey Black	Sand + Silt	MINOR organic Gravel bottom	
SL 25	48+00	"	4'	15'				Brown	Silt	" "	
SL 26	50+00	"	3'	20'				Grey Brown	Clay	MINOR organic	
SL 27	52+00	"	1 1/2'	20'				Grey	Clay	" "	
SL 28	54+00	"	1 1/2'	20'				Grey Brown	Clay	MINOR organic	
SL 29	56+00	"	5'	35'				Blue Grey	Clay	" "	
SL 30	58+00	"	4'	20'				Grey	Clay	" "	

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

COLLECTOR: J. BIRDAL

I.P. PINE 19-20
PROJECT: 1/2 way point 5.5 second 31
408

AREA: LAC Le JEANNE

DATE: Feb 10/70

LOCATION REF.: STAKE LAKE
600 FT FROM 610 FT 615 FT

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYSIS
					R	A	L				
SL-36	2700 S	Plateau	0.8	FLAT				BROWN	FINE SAND	MINOR ORGANIC	
SL-37	4000 S	"	"					BROWN	DIRT SAND		
SL-38	5000 S	"	"					BROWN	"		
SL-39	6700 S	"	"					GREY	FINE SAND	MINOR ORGANIC	
SL-40	10000 S	"	"					BROWN	SAND	SPRUCE NEEDLES	
SL-41	12000 S	"	"					GREY	FINE SAND	MINOR ORGANIC	
SL-42	14000 S	"	"					GREY	FINE SAND	"	"
SL-43	16000 S	"	"					GREY	FINE SAND	"	"
SL-44	18000 SW	"	"					BROWN	SAND	"	"
SL-45	20000 SW	"	"					LIGHT	FINE SAND	"	"
SL-46	22000 S	"	"					GREY	"	"	"
SL-47	24000 S	"	"					GREY	GRAVEL	"	"
SL-48	26000 S	"	"					BROWN	SAND	"	"
SL-49	28000 W	"	"					BROWN	DIRT	"	"
SL-50	30000 SW	"	"					BLACK	"	"	"
								LIGHT	"	"	"
								GREY	"	"	"
								DARK	"	"	"
										OUTLET OF SWAMP	

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

COLLECTOR: J BinnieAREA: Lac le JeuneDATE: Feb. 20/70PROJECT: 408LOCATION REF.: Stabe Lake
LOCATION box 10

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTIC
					R	A	L				
SLS-51	28100 W	PLATEAU	Dry	FLAT				GREY BROWN	FINE SAND	WEST SIDE OF SWAMP Flowing NORTH EAST TO STARTING POINT	
SLS-52	26700 W	"	"	"				GREY LIGHT GREY	FINE SAND "	MINOR ORGANIC "	
SLS-53	24700 W	"	"	"				"	"	"	
SLS-54	22700 W	"	"	"				"	"	"	
SLS-55	20700 W NORTH SIDE OF LAL LA Jeune Riv	"	"	"				BROWN GREY	SAND DIAT FINE	ON NO. 2 CHAIN LINE edge of small SWAMP Flowing NORTH SWAMP edge	
SLS-56	2100 N	"	"	"				BROWN	SAND	MINOR ORGANIC	
SLS-57	1400 N	"	"	"				GREY	MED. SAND	SWAMP edge MINOR ORGANIC	
SLS-58	6700 N	"	"	"				GREY BLACK GREY	SAND DIAT FINE	SWAMP edge MINOR ORGANIC SWAMP edge	
SLS-59	8400 N	"	"	"				BROWN	SAND	MINOR ORGANIC	
SLS-60	10700 N	"	"	"				"	"	DRY DRAINAGE TO SWAMP	

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

OR: J Binnie

AREA: Lee Lee Swamp

DATE: Feb 23 1970

PROJECT: 408

LOCATION REF: SWAMP MUD SWAMP

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. P. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL		
					R	A	L						
SLS 61	roadway between Swamps	Plateau	Dry	Flat				Grey Brown	Fine Sand	West edge of swamp bearing N/E of starting point minor organic			
SLS 62	2100 N	"	"	"				Grey	"	edge of swamp			
SLS 63	2400 N	"	"	"				Light Grey	"	"			
SLS 64	6400 N	"	"	"				"	"	"			
SLS 65	8400 N	"	"	"				Brown	Sand + Dirt	East boundary of swamp block sample on EAST edge of swamp some organic			
SLS 66	10400 N	"	"	"				Grey Brown	Fine Sand	"			
SLS 67	12400 N	"	"	"				Grey	Med Sand	"			
SLS 68	14400 N	"	"	"				Grey Black	Sandy Dirt	"			
SLS 69	16400 N	"	"	"				Grey Brown	Fine Sand	"			
SLS 70	18400 N	"	"	"				"	"	"			
SLS 71	east edge of road	"	"	"				Grey	"	South east side of road SW side of swamp minor organic			
SLS 72	2400 SE	"	"	"				Grey Brown	"	"			
SLS 73	4400	"	"	"				Grey Black	"	"			
SLS 74	6400	"	"	"				"	"	"			
SLS 75	8400	"	"	"				"	"	"			

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

COLLECTOR: J Binnise

AREA: Lake Le Jean

DATE: Feb 23/70

PROJECT: 408

LOCATION REF: Swamp

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL		
					R	A	L						
SLS 76	10+00	Platero	Dry	Flat				Grey Black	Fine Sand	edge of swamp minor organic			
		"	"	"				"	"	"			
SLS 77	12+00	"	"	"				Grey, Black	"	SW corner of swamp near turn to the East			
SLS 78	14+00	"	"	"				"	"	minor organic southwest edge of swamp			
SLS 79	16+00	"	"	"				"	"	"			
SLS 80	18+00	"	"	"				"	"	"			
SLS 81	20+00	"	"	"				Grey Light	"	"			
SLS 82	22+00	"	"	"				Grey	"	"			
SLS 83	24+00	"	"	"				Grey	"	S/E corner of swamp likely outlet to lake			
SLS 84	26+00	"	"	"				"	"	"			
SLS 85	28+00	"	"	"				"	"	N/E side of swamp Minor organic			
SLS 86	30+00	"	"	"				"	"	"			
SLS 87	32+00	"	"	"				Grey Black	"	"			
SLS 88	34+00	"	"	"				"	"	"			
SLS 89	36+00	"	"	"				"	"	Minor organic			
SLS 90	38+00	"	"	"				Black	Mucks Sand?	organic Frozen No O. Drill Hole			

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

COLLECTOR: J. B. R. 112

AREA: Laurel, Iowa

DATE: Feb 29/70

PROJECT: 408

LOCATION REF.: R.L. Beach

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL
					R	A	L				
SLS 95	#1 Road	Plateau	Dry	Flat				Brown	Med Sand	minor organic	
SLS 96	From Road	"	"	"				Brown	Med Sand	Major organic load along stream	
SLS 97	A+00SW	"	"	"				Grey	Fine Sand	minor organic	
SLS 98	A+00SW	"	"	"				Grey Brown	Med Sand	" "	
SLS 99	B+00SW	"	"	"				Grey	Fine Sand		
SLS 100	A+00SW	"	"	"				Grey	"	minor organic	
SLS 101	B+00SW	"	"	"				Grey Brown	"	" "	
SLS 102	A+00SW	"	"	"				Brown	"	" "	
SLS 103	B+00SW	"	"	"				"	Sand Dirt	" "	
SLS 104	B+00SW	"	"	"				"	"	" "	
SLS 105	A+00SW	"	"	"				"	"	" "	
SLS 106	B+00SW	"	"	"				"	"	" "	
SLS 107	A+00SW	"	"	"				"	Fine Sand	small lake	
SLS 108	B+00SW	"	"	"				Grey	Fine Sand	" "	
SLS 109	B+00SW	"	"	"				Grey Black	"	" "	

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

COLLECTOR: J. P. Irvine

AREA: Lac Le Jeune

DATE: Feb 29 / 70

PROJECT: 408

LOCATION REF: Rt 1 Ranch KCB

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL		
					R	A	L						
SLS 110	30+000	Plateau	dry	Flat				Brown	Sand	edge of small lake			
	342	"	"	"				Grey	Dirt	end of line to SW			
SLS 111	2400 N	"	"	"				Brown	Sand	N 20° E			
		"	"	"				Grey	Dirt	west side of swamp			
SLS 112	4400 N	"	"	"				Grey	Sandy clay	minor organic			
SLS 113	6400 N	"	"	"				Brown	Dirt	Frozen unable to get good sample			
SLS 114	8400 N	"	"	"				Grey	Med	minor organic			
		"	"	"				Brown	Sand				
SLS 115	10400 N	"	"	"				"	Fine Sand	" "			
SLS 116	12400 N	"	"	"				"	"	" "			
										10. Fine #13-14			

GEOLICAL SINKHOLE SEDIMENT SURVEY DATA

COLLECTOR: J Binnie

LS 117 to 130

AREA: Lao He Teon

DATE: Feb 25/70

PROJECT: 103 Lakesamples

LOCATION REF: Mc Connell Co

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	WATER STREAM GAGE ELEV. FT. 12" P.P.H.	DISTANCE STREAM FROM GRADIENT STAKE	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTIC
					R	A	L				
LS 117	0+00	Plateau	2.5 ft	40 ft.				Brown	Course Sand	Minor organic Gravel bottom	
LS 118	4+00	"	3'	20'				Grey	"	" "	
LS 119	8+00	"	3'	30'				"	Sand & Muck	Minor organic	
LS 120	12+00	"	6'	15'				Grey	"	Inlet drainage from SW	
LS 121	16+00	"	7'	10'				Brown	Med	Gravel Bottom	
LS 122	20+00	"	7'	10'				Grey	Sand	Gravel Bottom	
LS 123	24+00	"	4'	10'				"	"	Minor organic	
LS 124	28+00	"	3'	10'				"	"	" "	
LS 125	32+00	"	5'	10'				"	"	OTM claim boundary	
LS 126	36+00	"	7'	10'				"	"	Gravel bottom	
LS 127	40+00	"	6'	10'				"	"	" "	
LS 128	44+00	"	6'	10'				Grey	Fine Sand	" "	
LS 129	48+00	"	6'	15'				Black	Sand	" "	
LS 130	52+00	"	6'	15'				"	"	" "	
LS 131	56+00	"	6'	10'				Grey	Med Sand	minor organic	
LS 132	60+00	"	6'	10'				Brown	Sand	" "	
LS 133	64+00	"	4'	20'				Grey	Sand	Inlet drainage from south	
LS 134	68+00	"	4'	20'				Black	& Muck	minor organic	
LS 135	72+00	"	4'	10'				"	Med Sand	" "	
LS 136	76+00	"	4'	10'				"	Sand	Gravel Bottom	
LS 137	80+00	"	2'	20'				Grey	Course Sand	" "	
LS 138	84+00	"	2'	20'				Brown	Sand	MINOR organic	

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

COLLECTOR: J. Binnie

AREA: Lac de Tenne

DATE: Feb 25/76

PROJECT: #63

LOCATION REF: Pt. Cahnell, Lac

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	WATER SAMPLE DEPTH	D. STATION	DISTRIBUTION	COLOUR	TEXTURE	REMARKS	ANALYTICAL	
S 132	42100	Plateau	7 ft	20 ft		Grey	Coarse Sand	Gravel bottom		
S 133	44100	"	2'	8'		"	"	minor organic		
S 134	44100	"	4.5'	10'		"	Fine Sand	Gravel bottom		
S 135	48100	"	2'	20'		"	Med Sand	minor organic		
S 136	48100	"	2'	10'		"	Fine Sand	Gravel bottom minor organic		

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

DIRECTOR: J. Ronnie

AREA: Acacia Forest

DATE: Feb 26/70

PROJECT: 408

LOCATION REF: Laraja Swamp north

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL
					R	A	L				
SLS 137	0+00	Plateau	Dry	Flat				Grey	Sand Fine	swamp joins lake west side of swamp minor organic	
SLS 138	2+00 NE	"	"	"				Grey	"	"	
SLS 139	4+00	"	"	"				Brown	"	minor organic	
SLS 140	6+00	"	"	"				Grey	"	"	
SLS 141	8+00	"	"	"				Brown	"	drainage inlet	
SLS 142	10+00	"	"	"				Grey	"	minor organic	
SLS 143	12+00	"	"	"				"	Sand	"	
SLS 144	14+00	"	"	"				"	Clay	"	
SLS 145	16+00	"	"	"				"	Sand	"	
SLS 146	18+00	"	"	"				"	Dirt	"	
SLS 147	20+00	"	"	"				"	Fine	"	
SLS 148	22+00	"	"	"				"	Sand	"	
SLS 149	24+00	"	"	"				Light Grey	Sand	"	
SLS 150	26+00	"	"	"				Grey	Sand	"	
SLS 151	28+00	"	"	"				Black	Med Sand	"	
								"	Fine	"	
								"	Sand	"	
								"	Sand	Humicite lens part	
								Brown	Dirt	minor organic	
								"	Sand	"	
								"	Fine	"	
								"	Fine Sand	"	
								Brown	Sand	Direction change	

Note Feb 10

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

COLLECTOR: J. Binnie

AREA: Lac Le Jeune

DATE: Feb 26 / 70

PROJECT: 408

LOCATION REF: Large swamp south

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL	
					R	A	L					
SLS 152	Southerly 30+00	Plateau	Dry	Flat				Grey Black	Fine Sand	minor organic		
SLS 153	32+00	"	"	"				"	"	" "		
SLS 154	34+00	"	"	"				Brown	Sand Dirt	" "		
SLS 155	36+00	"	"	"				"	"	" "		
SLS 156	38+00	"	"	"				Grey Brown	Clay	" "		
SLS 157	40+00	"	"	"				"	"	" "		
SLS 158	42+00	"	"	"				"	Fine Sand	" "		
SLS 159	44+00	"	"	"				"	"	" "		
SLS 160	Southeast 46+00	"	"	"				Brown	Sand Dirt	" "		
SLS 161	48+00	"	"	"				"	"	" UP Pine 71+72		
SLS 162	50+00	"	"	"				Grey	Sand Clay	minor organic		
SLS 163	52+00	"	"	"				Grey Brown	Sand Dirt	" "		
SLS 164	54+00	"	"	"				"	Sand Clay	" "		
SLS 165	56+00	"	"	"				Brown	Dirt	" "		
SLS 166	Southwestly 58+00	"	"	"				"	Dirt Clay	" "		

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

 COLLECTOR: J. Binnie

 AREA: Lac La Poudre

 DATE: Feb 26/70

 PROJECT: 408

 LOCATION REF.: Large Swamp south

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL		
					R	A	L						
LS 167	66+00	Plateau	Dry	Flat				Brown	Sand Dirt	minor organic			
LS 168	62+00	"	"	"				Grey Brown	"				
LS 169	64+00	"	"	"				"	"				
LS 170	66+00	"	"	"				"	Course Sand Dirt				
LS 171	68+50	"	"	"				Brown	Dirt	South: corner Lake + Swamp large boulders major organic			
LS 172	70+00	"	"	"				Grey Brown	Fine Sand	Lake edge			
LS 173	72+00	"	"	"				"	"	" "			
LS 174	74+00	"	"	"				"	Sand Clay	" "			

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

COLLECTOR: J. Binair

Page 14

AREA: La C. Jeune

DATE: May 2, 1970

PROJECT: 408

LOCATION REF: Swamp and small stream
1000 ft. from La C. Jeune

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL	
					R	A	L					
175	32400W	Plateau	Swamp Small Stream	Flat				Grey Black	Sand Muck	sampled from track examined every tooth of scale ground very wet and frozen very hard samples hard to obtain		
176	34400W	"	"	"				"	"	"		
177	36400W	"	"	"				Brown Black	"	Swamp widens to several hundred ft.		
178	38400W	"	"	"				"	Sand Dirt	"		
179	40400W	"	"	"				"	"	"		
180	42400W	"	"	"				Grey Brown	Med Sand	"		
181	44400W	"	"	"				Black Grey Black	Sand Muck "	"		
182	46400W	"	"	"				"	"	"		
183	48400W	"	"	"				Grey Black	Sand Gravel Muck	sample from road cut various little pieces very deep organic		
184	50400W	"	"	"				Grey Brown	Med Sand	"		
185	52400W	"	"	"				Black	Muck	"		
186	54400W	"	"	"				"	Sand	"		
187	56400W	"	"	"				Brown Grey	Gravel Med	"		
188	58400W	"	"	"				Brown Black	Sand Muck	"		

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

PILOT: J. Binnie

AREA: Loc. Le Jean
Small Lake and spring

DATE: May 23/70

PROJECT: 408

LOCATION REF: South end Loc. Le J.

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL	
					R	A	L					
192-0400		Plateau	Swamp	Flat				Grey	Sand Dirt	minor organic		
192-100E		"	"	"				Brown	"	" "		
192-1400E		"	"	"				"	Sand	" "		
192-1600E		"	"	"				Grey Brown	"	" "		
192-1800E		"	"	"				Grey	"	" "		
192-2000E		"	"	"				Grey Brown	"	" "		
192-12+00 S		"	"	"				Grey	"	" "		
192-14+00 S		"	"	"				Brown	Sand Dirt	minor organic		
200-16+00W		"	"	"				Grey Brown	"	" "		
201-18+00W		"	"	"				Brown	"	" "		
202-20+00W		"	"	"				Light Brown	"	" "		
203-22+00W		"	"	"				"	"	" "		
204-24+00W		"	"	"				"	"	" "		
205-26+00W		"	"	"				Brown	"	" "		
206-28+00W		"	"	"				"	"	" "		

IP Pipe 43178 100' E
SLS - 195

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

INVESTIGATOR: J Binnie

AREA: Lake Teana

DATE: May 4, 1970

PROJECT: 408

LOCATION REF: 2ND. Lake on Survey
south end of Lake Teana

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL		
					R	A	L						
SLS 207	0-400 road	Platow	Swamp & Lake	Flat				Grey Brown Sand		minor organic			
SLS 208	2000N	"	"	"				Grey Sand		" "			
SLS 209	4-100N	"	"	"				" "		" "			
SLS 210	6-100N	"	"	"				Brown		" "			
SLS 211	8-100 NE	"	"	"				Grey Brown		" "			
SLS 212	10-100 NE	"	"	"				" "		" "			
SLS 213	12-100 NE	"	"	"				Brown		" "			
SLS 214	14-100 E	"	"	"				" "		" "			
SLS 215	16-100 NE	"	"	"				Grey Black Sand	Med	minor organic Lake edge			
SLS 216	18-100 NE	"	"	"				" "		" "			
SLS 217	20-100 NE	"	"	"				" "		" "			
SLS 218	22-100 NE	"	"	"				" "		" "			
SLS 219	24-100 NE	"	"	"				Grey Black	Fine Sand	" "			
SLS 220	26-100 NE	"	"	"				Grey Black	Fine	" "			
SLS 221	28-100 NE	"	"	"				Grey Brown	" "	" "			

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

FOR: J. Brian

DATE: May 1/70

PROJECT: 408

AREA: Lawley Farm
2 1/2 Swamp Lake
 LOCATION REF: Swamp Lake

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C.F.S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL
					R	A	L				
LS 222	30+00NE	Platow	Swamp Lake	Flat				Grey	Sand Fine	Swamp NE end of Lake minor organic	
LS 223	32+00NE	"	"	"				Grey Black	Sand & Muck	" "	
LS 224	32+100SE	"	"	"				Grey	Sand	" "	
LS 225	36+00SE	"	"	"				Grey Brown	"	inlet drainage minor organic	
LS 226	36+00SE	"	"	"				"	Sand & Muck	" "	
LS 227	30+00S	"	"	"				"	Med Sand	inlet drainage minor organic	
LS 228	32+00S	"	"	"				Black Brown	"	" "	
LS 229	31+00S	"	"	"				Light Brown	"	" "	
LS 230	46+00S	"	"	"				"	"	" "	
LS 231	43+00S	"	"	"				Grey Brown	"	" "	
LS 232	50+00S	"	"	"				"	Sand & Dirt	inlet drainage minor organic	
LS 233	52+00S	"	"	"				Dark Brown	Sand & Muck	" "	
LS 234	54+00S	"	"	"				"	"	" "	
LS 285	56+00S	"	"	"				Brown	Med Sand	minor organic Lake edge	
LS 236	08+00S	"	"	"				"	"	" "	

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

 COLLECTOR: J. Binnie

 AREA: Laurel, Ontario

 DATE: May 2/70

 PROJECT: 408

 LOCATION REF: 202
Swamp Lake

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL
					R	A	L				
2LS 237	60+00S	Platano	Swamp Lake	Flat				Light Brown	Fine Sand	Some rust	
2LS 238	12+00S	"	"	"				Dark Grey	Coarse Sand	no iron signs	
2LS 239	14+00S	"	"	"				Grey	Med Sand	no iron drainage	
2LS 240	16+00S	"	"	"				Grey	Sand	some rust	
2LS 241	18+00S	"	"	"				Grey	Sand	" "	
2LS 242	20+00S	"	"	"				Brown & Dirt	Coarse	no iron signs	
2LS 243	22+00S	"	"	"				Dark Grey	Sand	no iron signs	
2LS 244	24+00S	"	"	"				"	"	" "	
2LS 245	26+00S	"	"	"				"	"	no iron signs	
2LS 246	28+00S	"	"	"				Brown	"	no iron drainage	
2LS 247	30+00S	"	"	"				"	Sand & Dirt	" "	

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

OR: J. B. Winnie

AREA: Lower ...

DATE: May 5/70

PROJECT: 405

LOCATION REF: 2001 ...

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL
					R	A	L				
SLS 248	2200 NE fence S15	Platena Swamp		Flat				Grey & Dirt	minor organic		
SLS 249	A100 NE	"	"	"				Grey Brown	"		
SLS 250	1100	"	"	"				"	"		
SLS 251	8200	"	"	"				"	"		
SLS 252	10400	"	"	"				"	"		
SLS 253	12500	"	"	"				"	"		
SLS 254	14100	"	"	"				"	drainage		
SLS 255	11400E	"	"	"				"	"		
SLS 256	18100	"	"	"				"	"		
SLS 257	20100	"	"	"				"	"		
SLS 258	22400	"	"	"				Grey Fine Sand	minor organic		
SLS 259	24100	"	"	"				Grey Brown Dirt	"		
SLS 260	26100	"	"	"				"	"		
SLS 261	28100	"	"	"				"	inlet drainage		
SLS 262	30100	"	"	"				" Fine Sand	minor organic		

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

COLLECTOR:

J. Bunnie

AREA:

Lake George

DATE:

May 5, 1960

PROJECT:

408

LOCATION REF:

east from

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYST
					R	A	L				
SLS 263	32+00	Plateau Swamp		Flat				Brown Sand			
SLS 264	34+00	"	"	"				Grey Silt		minor organic	
SLS 265	36+00	"	"	"				Grey	"	"	
SLS 266	38+00	"	"	"				Black	"	"	
SLS 267	40+00	"	"	"				light	"	"	
SLS 268	42+00	"	"	"				Grey	"	direction change	
SLS 269	44+00	"	"	"				"	"	"	
SLS 270	46+00	"	"	"				"	"	"	
SLS 271	48+00	"	"	"				"	"	"	
SLS 272	50+00	"	"	"				"	"	"	
This area from SLS 264 forward, being unable to obtain samples from stream, only some obtained along edge of ridge T.B.											
sample's 1000 ft short of joining with 36+00											

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

COLLECTOR: C. Chin

Surface water Not analyzed Subsurface

AREA: Kamloops - Merritt Area

DATE: April 25th 1970

PROJECT: 408

LOCATION REF.

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL		
					R	A	L						
1	5.8 miles from Merritt	Mountain valley	0.2 cfs/sec					Brown	Coarse & medium sand	KMS-1			
2	"	"	0					Yellowish Grey	silt & silt	Left bank of KMS 1			
3	"	"	0					"	silt	Right bank			
4	1.5 mi from Merritt	"	0					Brownish black	Clay & silt	Organic materials			
5	"	"	0					Brownish Grey	silt & fine sand	Left bank of KMS 4 minor organic			
6	"	"	0					Grey	fine sand & silt	Right bank of KMS 4			
7	1.5 miles from KMS 4	Plateau	0					Grey	fine & medium sand				
8	1.5 miles from KMS 5	Mountain valley	0					Brownish black	silt & clay	End of Creek minor organic			
9	8 miles from Merritt (3.3 miles from top of valley)	mountainous	0.2 cfs/sec					Brown	Coarse sand & silt				
10	"	"	0					Greyish Yellow	silt	Right bank of KMS-9			
11	"	"	0					Brownish black	Coarse sand & clay	Left bank of KMS-9			
12	1.5 mi from KMS-9	plateau	6 cfs/sec					Greyish brown	Coarse & medium sand				
13	"	"	0					Reddish Yellow	silt & clay	Left bank of KMS-12			
14	"	"	0					Brownish Grey	"	Right bank of KMS-12			
15	1.5 mi from KMS-12	"	6 cfs/sec					Brownish black	fine & medium sand				

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

DATE: Apr 1 29th 1970

PROJECT: 408

AREA: Kanloops - Meard Area

LOCATION REF.:

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL		
					R	A	L						
16	1000 ft from K115-12	Plateaus	0				Brown	silt & clay	Left bank of K115-15				
17	"	"	0				Yellowish Grey	"	Right bank of K115-15				
18	1000 ft up from K115-15	"	2 cut by / sec				Brownish black	silt & clay	Organic material				
19	"	"	0				"	"	Right bank of K115-18				
20	"	"	0				"	"	Left bank of K115-18				
21	1500 ft up from K115-17	Plateaus	0				Brownish black	silt & fine sand	Organic material	} Lost S			
22	"	"	0				"	clay & silt	Right bank of K115-21				
23	"	"	0				Dark Yellow	"	Left bank of K115-21				
24	1000 ft up from K115-21	"	0				Brownish black	silt & fine sand					
25	"	"	0				Black & Grey	silt & organic	Right bank of K115-24				
26	"	"	0				Dark Yellow	"	Left bank of K115-24				

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

198

DATE: May 29, 70

PROJECT: 408

AREA: Kamloops - Merritt Area

LOCATION REF: KM # 104 Area

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL		
					R	A	L						
27	1.500 up for KM# 27	plains	6 cfs/sec					Brownish black	silt & clay	some organic material by hand			
28	"	"	0					"	"	Right bank of KM# 27			
29	"	"	0					Dark Yellow	silt & sand	Left bank of KM# 27			
30	1.500 up for KM# 27	"	4 cfs/sec					black	silt & organic	local near base line			
31	"	"	0					Grayish yellow	clay & sand	Right bank of KM# 30			
32	"	"	0					Brownish yellow	"	Left bank of KM# 30			
33	1.500 up for KM# 33	"	2 cfs/sec					Brownish black	silt & organic				
34	"	"	0					Brownish yellow	soil & sand	Right bank of KM# 33			
35	"	"	0					"	silt & organic	Left bank of KM# 33			
36	1.500 up for KM# 36	"	2 cfs/sec					Brownish black	silt & organic				
37	"	"	0					Brown	soil & roots	Right bank of KM# 36			
38	"	"	0					Brownish black	"	Left bank of KM# 36			
39	1.500 up for KM# 39	"	0					Brownish black	silt & clay				
40	"	"	0					Brownish yellow	silt	Left bank of KM# 39			
41	"	"	0					Brownish black	"	Right bank of KM# 39			

GEOCHEMICAL STREAM SEDIMENT SURVEY DATA

SECTOR: C. Ch...

AREA: Kualap - Harrit

DATE: May 30, 1970

PROJECT: 408

LOCATION REF: _____

SAMPLE NO.	LOCATION	PHYSIOGRAPHY	STREAM SIZE C. F. S.	STREAM GRADIENT	DISTRIBUTION SAMPLE			COLOUR	TEXTURE	REMARKS	ANALYTICAL P		
					R	A	E						
42	1000' up from KMS-29	plateau	2 cft/ sec					brownish black	silt & clay	Swamp Organic material			
43	"	"	0					brownish yellow	silt & some sand	Left bank of KMS-02			
44	"	"	0					"	"	Right bank of KMS-02			
45	500' up from KMS-02	"	0					pink brown	silt & some sand	near top of drainage			
46	"	"	0					Brown	"	Right bank of KMS-05			
47	"	"	0					brown	"	Left bank of KMS-05			
48	1000' down from KMS-05	"	0					brownish black	silt & medium sand	end of Creek			
49	"	"	0					brown	silt & rocks	Right bank of KMS-05 (left side deep Swamp)			
50	500' down from KMS-07	"	0					brownish black	silt & some sand	near location line 300' back up			
51	"	"	0					pink brown	silt & frags	Left bank of KMS-51			
52	"	"	0					yellowish brown	silt & rocks	Right bank of KMS-51			
53	2.3 miles past in forest access road	"	6 cft/ sec					brownish black	silt & medium sand	minor organic			

GEOCHEMICAL SOIL SURVEY DATA

COLLECTOR: C. Choi

AREA: Par. Clear Camp

DATE: July 3, 1970

PROJECT: 408

LOCATION REF: 670-1004

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL NO.	
120	2700	←	mountain valley	Bt	12"	Grey	silt fine sand			
121	2700	←	plains	A	8"	Greyish brown	silt sand, some siltstone			
122	2700	←		B	10"	Grey	silt fine sand			
123	2700	←	mountain valley	A	6"	Reddish brown	silt fine sand	in tubes		
124	2700	←		A	12"	"	silt, fine sand & mica coats	in tubes		
125	2700	←	plains	A	12"	Brown	silt fine sand			
126	2700	←	"	A	11"	Brown	silt fine sand			
127	2700	→	"	A	12"	Brown brown	silt fine sand			
128	2700	↔	"	A	14"	Black brown	silt, fine sand minor mica coats			
129	2700	↔	"	B	16"	Grey	silt clay fine sand	edge of Swamp (W)		
130	2700	↔	"	A	18"	Grey	silt fine sand	50m E in swamp station 150' NE to 50m E		
131	2700	↔	"	A	15"	Grey	silt clay minor mica coats	silt of Swamp (W)		
132	2700	↔	"	B	19"	Brownish Black	silt clay minor sand	Swamp		
133	2700	←	"	A	15"	Grey	fine sand & silt			
134	2700	←	"	A	6"	Dark	fine sand & silt			

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. C. [unclear]

 AREA: P. A. [unclear]

 DATE: July 1, 1971

 PROJECT: 208

 LOCATION REF.: 6.7 - 6.8

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL DATA		
135	[unclear]	→	[unclear]	A	18"	Greyish brown	silt fine sand				
136	[unclear]	←	[unclear]	A	14"	Ruddish brown	"				
137	[unclear]	→	[unclear]	A	10"	Dark brown	silt, fine sand some coarse sand				
138	[unclear]	←	[unclear]	A	5"	Ruddish brown	fine sand, silt some silt	high magnetic permeability			
139	[unclear]	→	[unclear]	A	12"	Dark brown	silt fine sand				
140	[unclear]	→	[unclear]	A	5"	Ruddish brown	silt, fine sand some silt				
141	[unclear]	→	[unclear]	A	12"	Ruddish brown	silt fine sand				
142	[unclear]	→	[unclear]	A	6"	Grey	"				
143	[unclear]	←	[unclear]	B	20"	Greyish black	silt, clay some sand	Ext. (dry)			
144	[unclear]	←	[unclear]	A	16"	Grey	silt & sand				
145	[unclear]	←	[unclear]	B	10"	Grey	silt, clay & coarse sand				

GEOCHEMICAL SOIL SURVEY DATA

COLLECTOR: P. Chai

PROJECT: 409

AREA: Pan. China Green

DATE: June 29, 2010

LOCATION REF.: L 75+00 N
270+00 E

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of horizons	HORIZON & DEPTH Ht. of tree	COLOUR Side of tree	TEXTURE Ht. of sample	REMARKS	ANALYTICAL RES.		
97	L 75 N 55+00E	↔	Plateau	6	32'	W & SW	12'-16'	100' W of 5 from 53+00E			
98	L 75 N 60+00E	→	"	7	24'	SE & SW	4'-8'	20' S from 60+00E			
99	L 75 N 55+00E	←	"	8	25'	E & S	4'-9'	20' N from 63+00E 62+00E same location			
100	L 75 N 70+00E	↔	"	7	25'	W & SE	4'-11'				
101	L 75 N 75+00E	↔	"	8	20'	SW & S	1'-10'	30' S from 75+00E			
102	L 75 N 80+00E	→	mountain side	7	28'	SW & SE	16'-21'	30' SE from 85+00E			
103	L 75 N 85+00E	↔	"	6	25'	E & SW	4'-12'	thick soil			
104	L 75 N 88+00E	↔	"	6	25'	SE & SW	4'-10'	15' S from 85+00E			
105	L 70 N 0+30	↔	Plateau	7	35'	S & SE	22'-29'	W edge of plateau			
106	L 70 N 9+00E	↔	"	7	26'	SW & S	15'-19'	E edge of plateau			
107	L 70 N 12+00E	↔	"	9	30'	SW & SE	20'-26'				
108	L 70 N 15+00E	↔	"	7	28'	W & S	18'-22'	15' E from 15+00E			
109	L 70 N 20+00E	→	"	8	25'	W & E	1'-12'	20' SW from 20+00E			
110	L 70 N 25+00E	↔	"	8	25'	SE & SE	6'-10'	15' SW from 25+00E			

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY--DATA

 COLLECTOR: S. Shee

 AREA: 1000

 DATE: July 2 1920

 PROJECT: 40

 LOCATION REF.: 470

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESI
107	27-100	←	plateau	7	20'	E 5 SE	10-15"		
108	30-100	←	"	8	22'	SE 5 SE	11-15"		
109	35-100	←	"	7	22'	E 5 SE	18"-20"		
110	40-100	←	"	7	25'	E 5 SE	3"-6"		
111	45-100	←	"	7	20'	SE 5 S	21-6"		
112	50-100	←	"	6	24'	SE 5 S	10-15"		
113	55-100	←	"	8	20'	E 5 SE	10-15"		
114	60-100	←	"	7	25'	E 5 SE	21-6"		
115	65-100	←	"	7	22'	S 6 SE	11-15"		
116	70-100	←	"	6	25'	SW 5 S	5"-10"		
117	75-100	←	"	7	23'	W 5 S	11-15"		
118	80-100	←	"	6	22'	SE 5 SE	4"-10"		
119	85-100	←	"	8	25'	SE 5 S	11-15"		
120	90-100	←	"	7	22'	E 5 SE	11-15"		

GEOCHEMICAL SOIL SURVEY DATA

COLLECTOR: C. J. [unclear]

AREA: La. [unclear]

DATE: July 6 - 7, 1970

PROJECT: 411

LOCATION REF: 289 [unclear]

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL-TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RES.		
120	285+00W 2000	←	plateau	7	25'	S	5-7'				
121	45+00E	→	"	8	28'	SW	18'-26'	20' top of [unclear]			
122	17+00E	←	"	7	22'	SW & S	3'-14'	20' top of [unclear]			
123	20+00E	←	"	8	25'	SW & SE	10'-18'				
124	25+00E	→	"	7	20'	SE & W	4'-12'				
125	30+00E	→	"	6	25'	E & SW	4'-10'	20' top of [unclear]			
126	35+00E	→	"	8	28'	NW & S	17'-21'	20' top of [unclear]			
127	37+00E	←	"	6	22'	S & SE	11'-17'	20' top of [unclear]			
128	40+00E	←	plateau	6	25'	W & SE	4'-10'	20' top of [unclear]			
129	50+00E	→	"	8	20'	SE & SW	5'-12'				
130	55+00E	→	"	6	35'	S	25'-30'	20' S from [unclear] 2' SE of SE from [unclear] - 66'			
131	60+00E	←	"	7	20'	W & S	2'-10'	10' S from [unclear]			
132	65+00E	←	"	6	23'	S & E	5'-11'				
133	70+00E	→	"	7	30'	SE & SW	18'-25'	50' SE from [unclear]			

GEOCHEMICAL SOIL SURVEY DATA

SR: P. Chen

AREA: San Joaquin

July 7, 1970

PROJECT: 100

LOCATION REF: 200-100

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RES.	
134	1.50 N 75°00 E	←	plateau	7	26'	2.5 S	5'-25'	at top of 25' soil		
135	8°00 E	→	"	6	25'	5.0 SE	1'-8'			
136	25°00 E	←	"	8	30'	4.0 SE	18'-20'	at top of 30' soil		
137	10°00 E	←	"	7	22'	S	2'-12'	at top of 22' soil		
138	260°00 W 0°00	↔	plateau	8	30'	5.0 SE	18'-25'	at top of 30' soil		
139	5°00 E	←	"	8	28'	10.0 SE	20'-26'			
140	9°00 E	→	"	8	25'	6.0 SE	10'-20'	at top of 25' soil		
141	12°00 E	→	"	7	25'	W. S	15'-20'	at top of 25' soil		
142	17°00 E 27°00 E	←	"	9	24'	10.0 SE	12'-18'	E edge of 24' soil		
143	22°00 E	←	"	7	30'	10.0 SE	18'-25'			
144	27°00 E	→	"	6	25'	8.0 SE	1'-9'			
145	32°00 E	↔	"	7	25'	5.0 SE	12'-20'	30'-6.5' cross section line		
146	37°00 E	←	"	6	22'	5.0 SE	4'-8'			
147	42°00 E	→	"	7	25'	5.0 SE	20'-26'			

GEOCHEMICAL SOIL SURVEY DATA

FOR: C. Ch...

AREA: ...

DATE: July 9, 10/1970

PROJECT: A...

LOCATION REF: ...

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE <small>No. of layers</small>	HORIZON & DEPTH <small>1st of 1st</small>	COLOUR <small>5/10 of 10</small>	TEXTURE <small>1/10 of 10</small>	REMARKS	ANALYTICAL RESU			
148	6600N 4700E	←	Mountain	7	35'	SWSE	10-20'	120 g for 148				
149	5200E	←	"	7	20'	SESE	12-11'	60 g for 149				
150	5700E	↔	Altoan	7	27'	WSE	10-20'	10 g for 150				
151	6200E	↔	"	8	26'	NWSE	12-10'	60-100 g for 151				
152	6900E	↔	"	8	22'	ESE	5-10'					
153	7200E	←	"	7	25'	SWSE	11-18'					
154	7700E	↔	"	7	25'	SESE	11-20'					
155	8200E	←	"	7	25'	SESE	11-18'					
156	8700E	→	Mountain	7	23'	NWSE	12-18'	100 g for 156				
157	9000E	↔	"	6	22'	WSE	6-10'	40 g for 157				
158	25500N 8400E	←	Altoan	7	26'	NWSE	18-20'					
159	5100E	↔	"	7	28'	SESE	15-20'	40 g for 159				
160	10400E	↔	"	8	28'	SWSE	16-20'	15 g for 160				
161	15400E	←	"	7	30'	SESE	20-27'	20 g for 161				

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Chi

 AREA: Pan China Group

 DATE: July 13, 14, 1970

 PROJECT: 440

 LOCATION REF.: L 55 - 4001

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESULTS			
117	25000E	→	plateau	7	22'	5Y 5/2	10-16					
118	28000E	←	"	8	26'	5Y 5/10	17-17'					
119	30000E	←	"	7	25'	5Y 5/8	8'-10'					
120	35000E	↔	"	7	20'	5Y 5/10	10'-17'					
121	40000E	↔	"	7	25'	5Y 5/3	7'-16'					
122	45000E	↔	"	8	27'	5Y 5/2	10'-17'	15' W from 40000E				
123	50000E	↔	"	8	22'	5Y 5/10	7'-15'					
124	55000E	↔	"	7	20'	10Y 5/3	10'-15'	20' W from 50000E				
125	60000E	←	mountain	8	25'	5Y 5/3	4'-8'	50' W from 60000E				
126	65000E	→	"	7	30'	10Y 5/8	20'-25'	70' W from 60000E 100' W from 60000E				
127	70000E	←	plateau	7	27'	10Y 5/8	20'-25'	25' W from 70000E				
128	75000E	←	mountain	7	25'	5Y 5/3	3'-7'	30' W from 70000E				
129	80000E	↔	"	7	27'	5Y 5/1	20'-25'	15' W from 80000E				
130	85000E	→	"	7	28'	5Y	18'-20'					
131	90000E	←	plateau	7	22'	5Y 5/8	8'-10'	30' W from 90000E 90' W from 90000E				

CANADIAN JOHNS-CANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Choi

 AREA: Line Chin Group

 DATE: July 25, 1962

 PROJECT: 419

 LOCATION REF.: 150000'

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESULTS					
180	250000	←	plateau	8	25'	5.2 5.0	17'-20'							
181	30000E	←	"	7	20'	7.0 5.5	20'-25'							
182	10000E	→	"	7	22'	5.2 5.5	5'-11'							
183	15000E	←	"	7	20'	5.8 5.0	5'-10'	55' SE from 15000E						
184	20000E	←	"	7	22'	5.2 5.8	9'-14'	50' SE from 20000E						
185	25000E	↔	"	7	23'	5.0 5.5	8'-12'	10' E from 25000E 27-50' E. East. location at 150000'						
186	30000E	↔	"	7	22'	5.2 5.5	10'-15'							
187	35000E	↔	"	7	20'	5.0 5.5	7'-11'							
188	40000E	←	"	7	24'	5.0 5.5	8'-16'							
189	45000E	←	"	7	26'	5.0 5.5	15'-18'	100' W from 45000E						
190	50000E	←	"	7	23'	6.0 5.0	8'-16'	60' E from 50000E						
191	55000E	←	"	7	25'	5.0 5.0	17'-20'	50' E from 55000E						
192	60000E	←	"	7	25'	5.0 5.5	20'-5'	150' E from 60000E						
193	65000E	←	"	7	25'	5.0 5.5	5'-7'	180' W from 65000E						
194	70000E	←	mountain	7	24'	5.0	5'-7'	200' W from 70000E 50' SE from location at 45000E						

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Chab

 AREA: Pine Chain Group

 DATE: July 16 1970

 PROJECT: 212

 LOCATION REF: L 48 100W T 1 90N 00W

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESULTS			
195	2004 2000E	←	Plateaus	7	20"	5Y 5/2	8-10"	20" from 2000E				
196	2004E	→	"	7	20"	5Y 5/2	5-10"	20" from 2000E				
197	2004E	→	"	8	25"	4.5Y 5/2	10-20"	20" from 2000E				
198	2004E	←	Plateaus	7	25"	5Y 5/2	8-10"					
199	245-2004 2010	↔	Plateaus	7	20"	5Y 5/2	6-17"	20" from 2000E				
200	5100E	←	"	6	17"	5Y 5/2	5-7"	20" from 5100E				
201	1000E	←	"	7	20"	5Y 5/2	20-25"					
202	1500E	↔	"	7	26"	5Y 5/2	5-11"	20" from 1500E				
203	2000E	→	"	7	25"	5Y 5/2	12-17"					
204	2500E	↔	"	7	22"	5Y 5/2	7-10"					
205	3000E	↔	"	7	25"	5Y 5/2	8-10"	20-25" from 3000E				
206	3500E	↔	"	7	20"	5Y 5/2	4-13"					
207	4000E	←	"	7	20"	5Y 5/2	20-25"					

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. J. ...

 AREA: LAC Le JARDIN

 DATE: July 26, 21, 1974

 PROJECT: 410

 LOCATION REF: L. 45, 500 N & L 40, 000 W

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE <small>HL. of top</small>	HORIZON & DEPTH <small>HL. of top</small>	COLOUR <small>5 cm. of top</small>	TEXTURE <small>HL. of top</small>	REMARKS	ANALYTICAL RESULTS				
ST 204			plains	7	25'	WSE	11'-18'						
ST 207			"	7	28'	NE, NW E, N	16'-22'	120' S from 5800E					
ST 208			"	7	20'	E & SE	22'-26'	50' ESE cross heading line of 6000W 130' N from 5800E					
ST 209			"	6	28'	SE & S	20'-25'	40' S from 6000E					
ST 210			"	8	20'	SE & S	6'-16'	40' N from 6500E 60' SESE slope, logging road					
ST 213			"	7	22'	NE & SE	5'-11'	25' NE from 7500E					
ST 214			"	7	22'	WSE	5'-14'	40' NE from 7500E					
ST 215			"	"	23'	SE & S	13'-20'	20' S from 8000E					
ST 216			"	5	14'	WSE	10'-15'	50' - 100' cross heading line at chain post					
ST 217			"	8	23'	SE & SE	5'-13'						
ST 218	L. 20000 2400W		plains	6	23'	SE & SE	4'-9'	20' E from 3000E					
ST 219	6000E		"	8	30'	W	22'-28'	at W edge of swamp					
ST 220	0100E		"	6	18'	SE & SE	4'-6'	60' SE from 0400E					
ST 221	5100E		"	7	28'	SE & S	19'-25'	15' NW from 5100E					

CANADIAN JAMES-MONVILLE Co. Ltd.
GEOCHEMICAL SOIL SURVEY DATA

COLLECTOR: C. Cho

AREA: _____

DATE: July 21 22 1970

PROJECT: 410

LOCATION REF: 2-1-1

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of layers	HORIZON & DEPTH HT. of 1st ft.	COLOUR Side of 1st ft.	TEXTURE No. of layers	REMARKS	ANALYTICAL RESULTS				
222	20+00N 10+00E	←	plateau	9	26'	NR LNE	17-25						
223	15+00E	↔	"	7	24'	S & S	21-11	10' 30" from surface					
224	20+00E	↔	"	8	25'	S & S	4-12	10' 30" from surface					
225	25+00E	←	"	6	24'	S & S	1-10	10' 30" from surface					
226	30+00E	←	"	7	30'	E & S	23-28	25' 30" from surface					
227	35+00E	→	"	8	30'	S & S	17-20	20' 30" from surface					
228	40+00E	↑	"	7	24'	S & S	9-10	20' 30" from surface					
229	45+00E	←	"	7	22'	N & S	20-22						
230	50+00E	↔	"	7	24'	NR LNE	21-25	20' 30" from surface					
231	55+00E	←	"	6	22'	N & S	20-21	20' 30" from surface					
232	60+00E	←	"	9	25'	S & S LNE	10-22	10' 30" from surface					

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Chai

 AREA: 1000000

 DATE: July 23, 20, 1970

 PROJECT: 410

 LOCATION REF.: 1000000

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESULTS			
JT 233	L 50+00 15+00E	→	plateau	8	25'	5E & SE	22-27	20' NE from 15+00E				
JT 234	70+00E	↔	"	7	20'	E & S	10'-12'					
JT 235	75+00E	←	"	8	26'	E & SE	15'-22'					
JT 236	80+00E	↔	"	7	24'	S & E	9'-12'					
JT 237	85+00E	↔	"	7	25'	NE & N	12'-22'	50' NE from 15+00E				
JT 238	90+00E	→	"	7	20'	SE & S	7-9'	60' E from 15+00E				
JT 239	L 35+00W 21+00W	←	mountain	8	27'	W & SW	8'-15'	30' NE from 15+00E				
JT 240	6+00E	↓	"	7	30'	NE & SE	25'-27'	100' E from 15+00E				
JT 241	9+00W	←	"	9	27'	W & SE	24'-26'	at 10+00E from 15+00E				
JT 242	L 35+00W 0+00	↔	plateau	7	26'	W & S	9'-14'					
JT 243	5+00E	←	mountain hill	8	26'	SE & S	20'-24'	15' NE from 15+00E				
JT 244	10+00E	←	plateau	7	22'	NE, W & S	11'-16'	20' S from 10+00E				
JT 245	15+00E	→	"	7	24'	S & SE	11'-15'	50' NE from 15+00E				
JT 246	20+00E	↔	"	7	27'	W, SE & SE	13'-22'					

CANADIAN JOHNSONVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Choi

 AREA: Loc Le Jaune Lake

 DATE: July 27-28, 1970

 PROJECT: 410

 LOCATION REF.: L 35+00N 5, L 30+00W

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of twists	HORIZON & DEPTH H. of 1/2 in.	COLOUR Side of 1/2 in.	TEXTURE H. of 1/2 in.	REMARKS	ANALYTICAL RESULTS		
IT-251	L 35+00N 45+00E	↔	plateau	8	28'	W & SW	18'-22'				
252	50+00E	↔	"	7	26'	SW & NW	16'-22'				
253	55+00E	←	"	7	32'	SE & S	22'-27'	55+00E cross location line of 32+00N 100' N from 50+00E			
254	60+00E	←	"	7	20'	S & E	14'-17'				
255	65+00E	←	"	7	25'	SE, SW	15'-21'				
256	70+00E	→	"	7	26'	SW, S	16'-19'	25' SE from 70+00E			
257	75+00E	↔	"	7	22'	SE & S	12'-18'	25' N from 75+00E			
258	80+00E	↔	"	7	26'	SE	17'-22'	40' N from 80+00E Cross location line			
259	85+00E	↔	"	7	20'	SE, SE	11'-18'	20' N from 85+00E			
260	90+00E	↔	"	8	28'	S	14'-20'	85+00E cross location line 15' N from 90+00E			
IT-261											
IT-261	L 30+00N 3+00W	←	plateau	7	27'	E & SE	22'-25'	20' NE from 30+00W			
262	6+00W	↑	"	7	28'	E & NE	24'-27'				
263	10+00W	↔	"	7	28'	N, E & SW	22'-25'	10' S from 10+00W E edge of swamp			
264	L 30+00N 0+00	↔	"	6	28'	NE & NW	23'-26'				

CANADIAN JOHNNY MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Choi

 AREA: Lot 22 Jones Lake

 DATE: July 28, 29, 1970

 PROJECT: 411

 LOCATION REF.: L30+00N

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOR	TEXTURE	REMARKS	ANALYTICAL RESULTS		
				No. of trays	ft. of soil	Shade of tray	ft. of trays				
✓ JT -265	L30+00N 5+00E	←	Plateau	7	26'	N E S	19'-25'	70' SE from 5+00E			
266	10+00E	↔	"	7	22'	E E SW	9'-14'	20' E from 10+00E			
267	15+00E	↔	"	7	25'	SE E NE	15'-20'	10' NW from 15+00E			
268	20+00E	→	"	7	24'	W E SW	7'-14'	15' SE from 20+00E			
269	25+00E	↔	"	7	26'	NW E SE	11'-18'	20' E from 25+00E			
270	30+00E	↔	"	7	26'	NW E SW	22'-24'	29+00E (see below)			
271	35+00E	→	"	8	30'	NE E SW	18'-24'	60' S from 35+00E			
272	40+00E	←	"	8	26'	SW E S	20'-24'				
273	45+00E	↔	"	7	25'	SW E S	18'-23'				
274	50+00E	←	"	7	24'	SW E SE	15'-19'	20' E from 50+00E			

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

COLLECTOR: C. J. [unclear]AREA: LAC LA GARDIE LAKEDATE: Aug 31, Sept 1, 1970PROJECT: 410LOCATION REF: A 25 400 N

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of frags	HORIZON & DEPTH Ht. of tree	COLOUR Side of tree	TEXTURE Ht. of frags	REMARKS	ANALYTICAL RESULTS					
-291	25 400 E	←	plateau	7	22'	SW, SE & NE	12'-15'							
-292	25 400 E	←	"	7	27'	NE & SE	24'-25'	35' E from 25 400 E						
-293	30 400 E	←	"	7	22'	SE & NW	8'-12'	30 400 E cross location line at 20' S from 30 400 E 22 400 N						
-294	35 400 E	←	"	7	25'	SE & S	14'-18'							
-295	40 400 E	←	"	8	30'	NW & SW	27'-29'	45' SE from 40 400 E						
-296	45 400 E	←	"	7	25'	SW	19'-23'	25' SE from 45 400 E						
-297	50 400 E	←	"	7	23'	E & W	9'-16'	25' E from 50 400 E						
-298	55 400 E	←	"	8	24'	N & SW	12'-16'	52 400 E cross location line at 21 450 N 80' W from 55 400 E						
1T -299	60 400 E	←	plateau	8	27'	SE & SW	18'-22'							
-300	65 400 E	←	"	7	23'	SE & SW	10'-16'	20' NE from 65 400 E						
-301	70 400 E	←	"	8	26'	SE & NE	20'-24'	30' NW from 70 400 E						
-302	75 400 E	→	"	6	22'	SE & SW	10'-15'	35' N from 75 400 E						
-303	80 400 E	→	"	7	25'	SE & SW	9'-16'	45' NW from 80 400 E						
-304	85 400 E	→	"	7	28'	SW & S	24'-26'	30' N from 85 400 E 85 450 E cross location line						

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: E. Chai

 AREA: LAC LA JEUNE LAKE

 DATE: Sept 2 & 3 / 1970

 PROJECT: A10

 LOCATION REF.: L-20 to IV

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of pages	HORIZON & DEPTH Ht. of tree	COLOUR Side of tree	TEXTURE Ht. of logs	REMARKS	ANALYTICAL RESULTS				
T-305	23000W 9000E	↔	plateau	7	23'	SW & S	8'-15'						
T-306	22000W 3000E	↔	mountainous hill	8	28'	E & SW	20'-22'	15' S from 22000W					
-307	6000W	↔	plateau	7	30'	S	17'-21'	25' W from 6000W					
-308	9000W	↔	"	8	30'	SE & S	20'-24'						
-309	12000W	←	"	7	28'	SW & NE	25'-27'	15' N from 12000W					
-310	15000W	↔	"	8	30'	SW SE & NE	24'-27'	15' S from 15000W					
-311	18000W	↔	"	8	27'	SW & SE	21'-23'	E edge of swamp 25' S from 18000W					
-312	20000W 6000E	←	mountainous hill	7	23'	W & SE	4'-9'	25' SW from 0000E					
-313	5000E	→	plateau	8	27'	SW & E	22'-25'	35' NW from 5000E					
-314	10000E	→	"	7	22'	E, W & S	11'-16'						
-315	15000E	↔	"	7	22'	N & NW	14'-18'	25' S from 15000E					
-316	20000E	→	"	8	24'	SE & SW	13'-16'						
-317	25000E	→	"	7	23'	"	9'-14'						
-318	30000E	→	"	8	26'	SE & E	17'-21'	25' NW from 30000E					

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

COLLECTOR: C. ChoiAREA: LAC LE JEUNEDATE: Sept. 3 & 4 / 1970PROJECT: 410LOCATION REF: L 20+00 N

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of layers	HORIZON & DEPTH Ht. of top	COLOUR S. do. of top	TEXTURE Ht. of top	REMARKS	ANALYTICAL RESULTS			
-319	220+00 E	→	plateau	27'	9	NE S SW	19'-21'	2800E cross location line at 16+700 80' NW from 2000E				
-320	140+00 E	←	"	24'	9	E S S	12'-16'					
-321	25+00 E	←	"	26'	9	S	16'-22'					
-322	50+00 E	←	plateau	27'	8	S S SW	20'-23'					
-323	50+00 E	←	"	30'	8	S	25'-27'	50+50E cross location line at 16+800 15' N from 5000E				
-324	60+00 E	←	"	25'	7	S E S E	19'-20'	45' N from 4000E				
-325	65+00 E	→	"	26'	8	S E S	12'-20'					
-326	70+00 E	→	"	24'	8	S S SW	14'-18'					
-327	75+00 E	→	"	21'	7	S E S SW	8'-14'	20' SE from 7500E				
-328	80+00 E	←	"	25'	6	SW S NE	18'-23'	100' SE from 8000E				
-329	85+00 E	←	"	30'	6'	W S SW	26'-29'	85+50E cross location line 170' N from 80+00E				
-330	90+00 E	←	"	23'	7'	NW S SW	12'-18'	15' SE from 9000E				

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Chou

 AREA: LAC LE JEUNE

 DATE: Sept. 8 / 70

 PROJECT: 410

 LOCATION REF.: L 15400 N

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of frags	HORIZON & DEPTH Ht. of top	COLOUR S. of 1 ft	TEXTURE Ht. of frags	REMARKS	ANALYTICAL RESULTS			
331	L15400N 3+00W	↔	Mountainous Ridge	8 25'	24' 8	S E SW	16'-20'	40' W from 3+00W				
332	7+00W	↔	Mountainous Valley	9 26'	26' 9	S 9 SE	19'-23'	50' N from 7+00W				
333	9+00W	↔	plateau	7	25'	S E SW	20'-23'					
334	12+00W	←	"	8	29'	S E SE	19'-24'	15' E from 12+00W				
335	15+00W	←	"	7	24'	S E SW	18'-23'					
336	18+00W	←	"	7	27'	SE	22'-25'					
337	19+50W	←	"	8	26'	E E W	21'-25'	E edge of Swamp				
338	L 15400N 1+00E	←	plateau	8	18'	SE 4 SW	9'-14'	20' N from 1+00E				
339	6+00E	→	"	8	18'	S E NW	7'-12'	20' E from 6+00E				
340	10+00E	↔	"	8	24'	S E SW	16'-20'					
341	15+00E	↔	"	7	26'	W 4 SW	16'-20'					
342	20+00E	→	"	7	24'	SE 4 SW	10'-16'	15' N from 20+00E				

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 AREA: LAC LE JEUNE

 LOCATION REF.: L0400

 DATE: Sept. 9 / 1970

 PROJECT: 410

 BY: C. Choi

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of $\frac{1}{2}$ in. $\frac{1}{2}$ in.	HORIZON & DEPTH Ht. of Top Ht. of Bottom	COLOUR Side of Face	TEXTURE Ht. of Top	REMARKS	ANALYTICAL RESULTS			
343	L0400 3400W	↔	Plateau	7	25'	NH	15'-22'	15'E from 3400W				
344	6400W	↔	"	7	18'	N & S	10'-14'					
345	9400W	↔	"	7	28'	S.E. & W	24'-26'					
346	12400W	↔	"	7	26'	E	20'-23'	25' W from 12400W				
347	15400W	↔	"	7	25'	N & NW	18'-23'					
348	18400W	↔	"	7	28'	E & SE	22'-25'	at the Creek 50' N from 18400W				
349	21400W	↔	"	8	28'	S	24'-26'					
350	23400W	↔	"	8	26'	SW & SE	24'-25'	10' S from 21400W E edge of 21400W				

CANADIAN JOHNS-McNIVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Choi

 AREA: LAC LE JEUNE

 DATE: Sept. 10 1970

 PROJECT: 440

 LOCATION REF: LQ+00

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of trays	HORIZON & DEPTH Ht. of tray	COLOUR Side of tray	TEXTURE Ht. of tray	REMARKS	ANALYTICAL RESULTS				
15 -351	LQ+00	←	plateau	8	26'	SW & S	17'-20'						
-352	5+00E	←→	"	8	25'	S	22'-25'						
-353	10+00E	→	"	7	28'	SW & N	18'-22'	20' N from 10+00E					
354	15+00E	→	"	7	25'	NW & W	20'-24'	15' SE from 15+00E					
355	20+00E	←→	"	8	22'	NW & SW	15'-20'						
356	25+00E	→	"	7	20'	SE & SW	6'-14'	30' SW from 25+00E					
357	30+00E	←	mountainous hill	8	20'	S & SE	15'-18'	45' SE from 30+00E					
358	35+00E	←	plateau	9	27'	E & NE	20'-25'	15' E from 35+00E					
359	40+00E	←	mountainous hill	6	24'	SE & W	12'-18'	cross the road at 39+00E 25' SW from 40+00E					
360	45+00E	←	"	8	18'	NE & NW	11'-15'	100' N from 45+00E					

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Choi

 AREA: L. 60 E. 25 NE

 DATE: Sept. 11, 1970

 PROJECT: 410

 LOCATION REF.: L. 0-00

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of horizons	HORIZON & DEPTH Hk. of face	COLOUR Side of face	TEXTURE Hk. of face	REMARKS	ANALYTICAL RESULTS			
1T -361	20+00 55+00E	←	plateau	7	20'	S & SE	10'-14'	No pine tree between 45 and 55 70' NE from 55+00 NE				
-362	60+00E	→	"	7	20'	SW & W	17'-20'	30' NE from 60+00E				
-363	65+00E	→	"	7	25'	S & SW	12'-18'	60' E from 65+00E				
-364	70+00E	→	"	7	28'	S & SW	24'-26'	25' S from 70+00E				
-365	75+00E	→	"	7	27'	SE & S	17'-22'	18' SE from 75+00E				
-366	80+00E	→	"	7	27'	N & NE	25'-26'					
-367	86+00E	←	"	7	26'	SE & SW	20'-23'					
-368	88+00E	←	"	7	20'	N & NW	16'-20'					

DATA STATISTICS
CUMULATIVE FREQUENCY DISTRIBUTION

CANADIAN JOHNS-MONVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Choi

 AREA: LAC LE JEUNE

 DATE: Sept. 14, 15, 1970

 PROJECT: 410

 LOCATION REF.: 1 15 +00 N

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL CLASS No. of <i>twigs</i>	HORIZON & DEPTH Hts. of <i>twigs</i>	COLOUR Side of <i>twigs</i>	TEXTURE Hts. of <i>twigs</i>	REMARKS	ANALYTICAL RESULTS				
									Ca	Mg			
-369	L15N 25+00E	→	plateau	7	18'	S & SW	10'-15'	15' W from 25+00E		11			
-370	30+00E	→	"	8	27'	NW & SW	19'-24'	30+50E cross location line 20' SW from 30+00E		4			
-371	35+00E	←	"	8	27'	W & SE	18'-22'	15' W from 35+00E		16			
-372	40+00E	←	"	9	26'	SE & SW	20'-24'			14			
-373	46+00E	←	mountainous hill	8	28'	W & SE	24'-26'	70' E from 46+00E		2			
-374	50+00E	←	plateau	9	25'	S	20'-24'	20' N from 50+00E 50+35E cross location line at 12+70W		2			
-375	55+00E	←	mountainous hill	7	22'	E	16'-20'			6			
-376	60+00E	↔	plateau	7	22'	S & E	16'-19'			2			
-377	65+00E	→	"	7	24'	W & SE	18'-22'	25' S from 65+00E		8			
-378	70+00E	→	mountain ridge	8	23'	S & NW	15'-19'	25' S from 70+00E		1			
-379	75+00E	→	plateau	7	25'	NW & SW	17'-21'			3			
-380	81+00E	↔	"	10	28'	W & SW	20'-26'	35' SW from 81+00E		3			
-381	85+00E	↔	"	8	26'	S & W	18'-23'	83+50E cross location line		5			
-382	90+00E	↔	"	7	28'	SW	25'-27'	20' SE from 90+00E		9			

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Choi

 AREA: LAC LE JEUNE

 DATE: Sept. 15-16, 1970

 PROJECT: 410

 LOCATION REF.: L 10 100 N

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of rings	HORIZON & DEPTH Hts. of top	COLOUR Side of top	TEXTURE Ht. of top	REMARKS	ANALYTICAL RESULTS			
JT -383	L101N	←	Plateau	7	25'	SE E S	18'-22'		1			
-384	4000E	→	Mountain top	8	24'	NE, W E, NW	9'-14'	35' W from 4000E	4			
-385	10000E	←	Plateau	8	23'	S & W	14'-18'	15 SE from 10000E	3			
-386	15000E	→	"	8	27'	NE & SW	20'-24'	D7 opening	0			
-387	22000E	→	"	9	25'	E & SE	18'-23'	"	1			
-388	25000E	→	"	9	27'	SE & SW	19'-23'	"	5			
JT -389	L10100N	→	Plateau	8	25'	S & W	10'-25'	3000E cross transect line at 10115N	7			
-390	37000E	←	"	9	24'	E	16'-22'	50' NW from 37000E W edge of swamp	7			
-391	40000E	←	"	7	18'	S & SW	17'-18'	35'E from 40000E 40000E cross transect (log)	4			
-392	45000E	←	Mountains	8	26'	SW	21'-25'	45' S from 45000E	12			
-393	50000E	←	"	8	26'	S & SW	18'-24'	49000E cross transect line at 9000N	2			
-394	55000E	←	Plateau Top of ridge	7	26'	S & W	19'-23'	30' NE from 50000E	4			
-395	60000E	←	Plateau	7	22'	SW & S	8'-14'	45' SE from 55000E 35' W from 60000E	4			

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

 COLLECTOR: C. Choi

 AREA: LAC LE JEUNE

 DATE: Sept. 17, 19

 PROJECT: 410

 LOCATION REF: L10+00N & 45+00N

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE No. of Tuigs	HORIZON & DEPTH Ht. of Tuig	COLOUR Side of Tuig	TEXTURE Ht. of Tuig	REMARKS	ANALYTICAL RESULTS			
ST -396	L10+00N 65+00E	→	plateau	6	26'	E & SE	18'-23'		4			
-397	70+00E	↗	"	7	26'	SW & W	12'-18'		8			
-398	75+00E	→	"	9	20'	SE	8'-14'	30' N from 75+00E	5			
-399	80+00E	↔	"	8	27'	NE & E	21'-25'	25' SW from 80+00E	7			
-400	86+00E	↔	"	8	24'	SE & E	17'-21'	83+50E cross location line 30E from 86+00E	5			
-401	90+00E	↔	"	7	22'	SE & SW	8'-16'	50' NW from 90+00E	12			
ST -402	L5+00N 0+00	↔	plateau	7	23'	SE & W	11'-16'	45' N from L5+00N	4			
-403	5+00E	↔	"	8	22'	S & SE	12'-15'	65' S from 5+00E	9			
-404	10+00E	↑	"	7	22'	SE & S	14'-18'		9			
-405	15+00E	↑	"	7	23'	NW & SW	4'-11'	15' S from 15+00E	9			
-406	20+00E	→	"	8	20'	S & SW	11'-16'	40' NW from 20+00E creeping	5			
-407	25+00E	↑	small ridge	8	25'	SE & NE	11'-16'		2			
-408	30+00E	←	small ridge	7	25'	W & NW	16'-19'	29+80E cross location line at 5+00N	48			
-409	35+00E	←	plateau	8	26'	S & SW	12'-18'	20' NE from 35+00E	13			

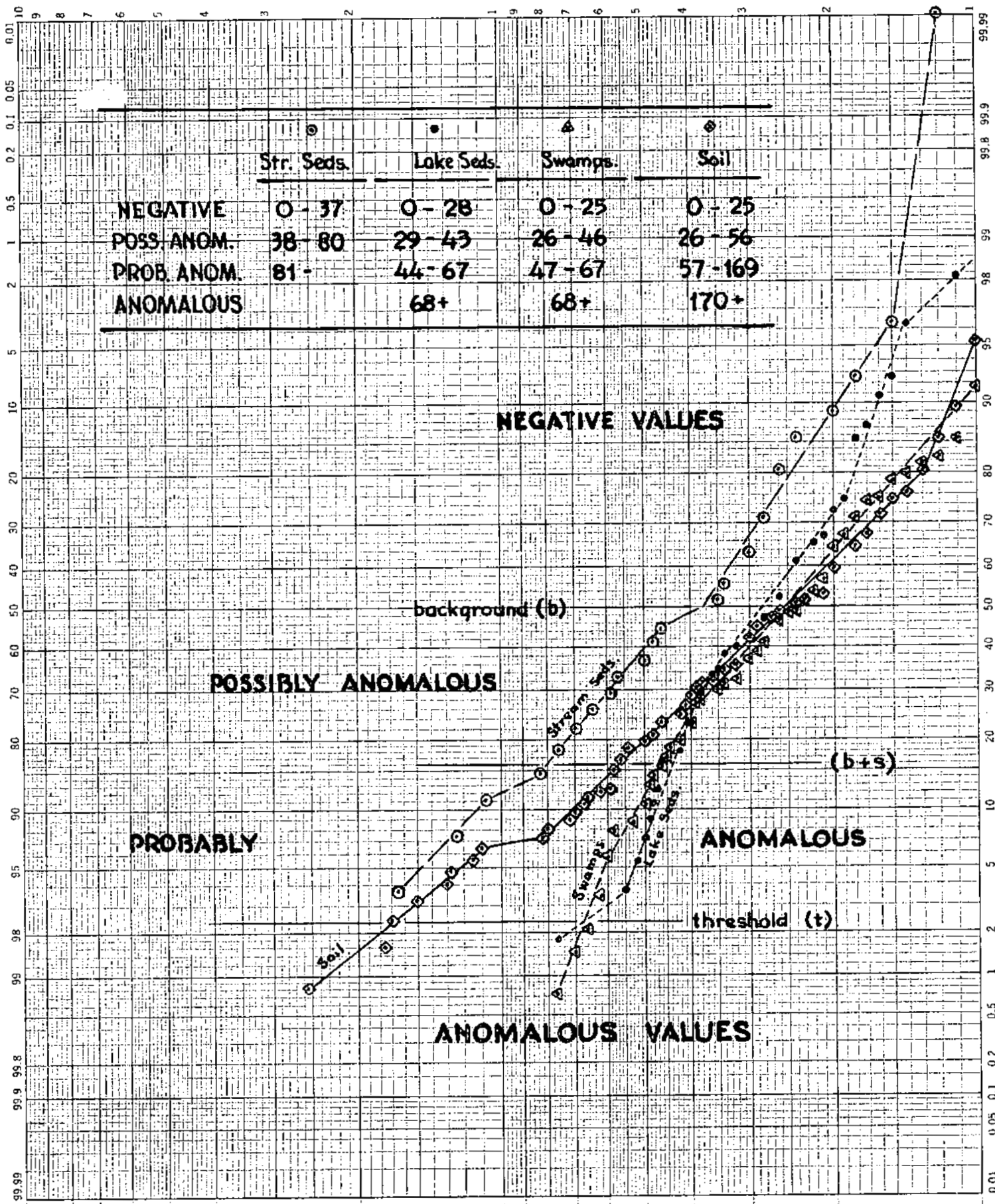
Cumulative Frequency Distribution (Lognormal Population)

by A. Therrien - Dec. 1970.

(320 samples)

Soils & Lake Seds. (27) Stream Seds.

COPPER



	Str. Seds.	Lake Seds.	Swamps.	Soil
NEGATIVE	0 - 37	0 - 28	0 - 25	0 - 25
POSS. ANOM.	38 - 80	29 - 43	26 - 46	26 - 56
PROB. ANOM.	81 -	44 - 67	47 - 67	57 - 169
ANOMALOUS		68+	68+	170+

45 8043
 PROBABILITY
 X 2 LOG CYCLES
 KENFEL & ESSER CO.

Lab. Reports: LAKE SEDS: 20-43, 62. SWAMPS: 20-43, 806.
 STREAM SEDS: 20-43, 111, 146. SOIL: 20-43, 111, 296, 806.

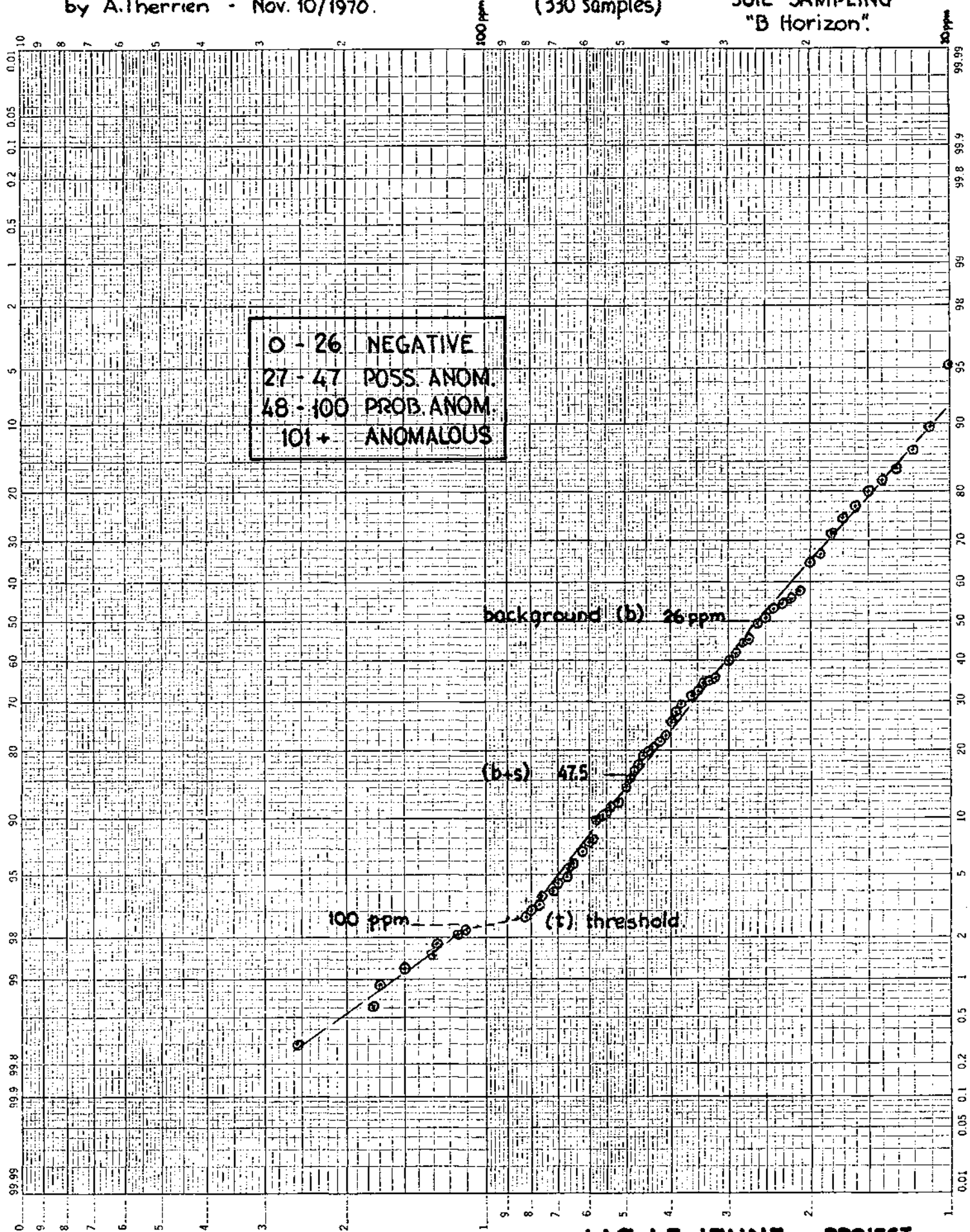
LAC LE JEUNE PROJECT 410
KAMLOOPS AREA - B.C.

Cumulative Frequency Distribution (lognormal population)

by A. Therrien - Nov. 10/1970.

(330 samples)

COPPER
SOIL SAMPLING
"B Horizon".



0 - 26	NEGATIVE
27 - 47	POSS. ANOM.
48 - 100	PROB. ANOM.
101 +	ANOMALOUS

PROBABILITY
X 2 LOG CYCLES
KEUFFEL & ESSER CO.
46 8043
MADE IN U.S.A.

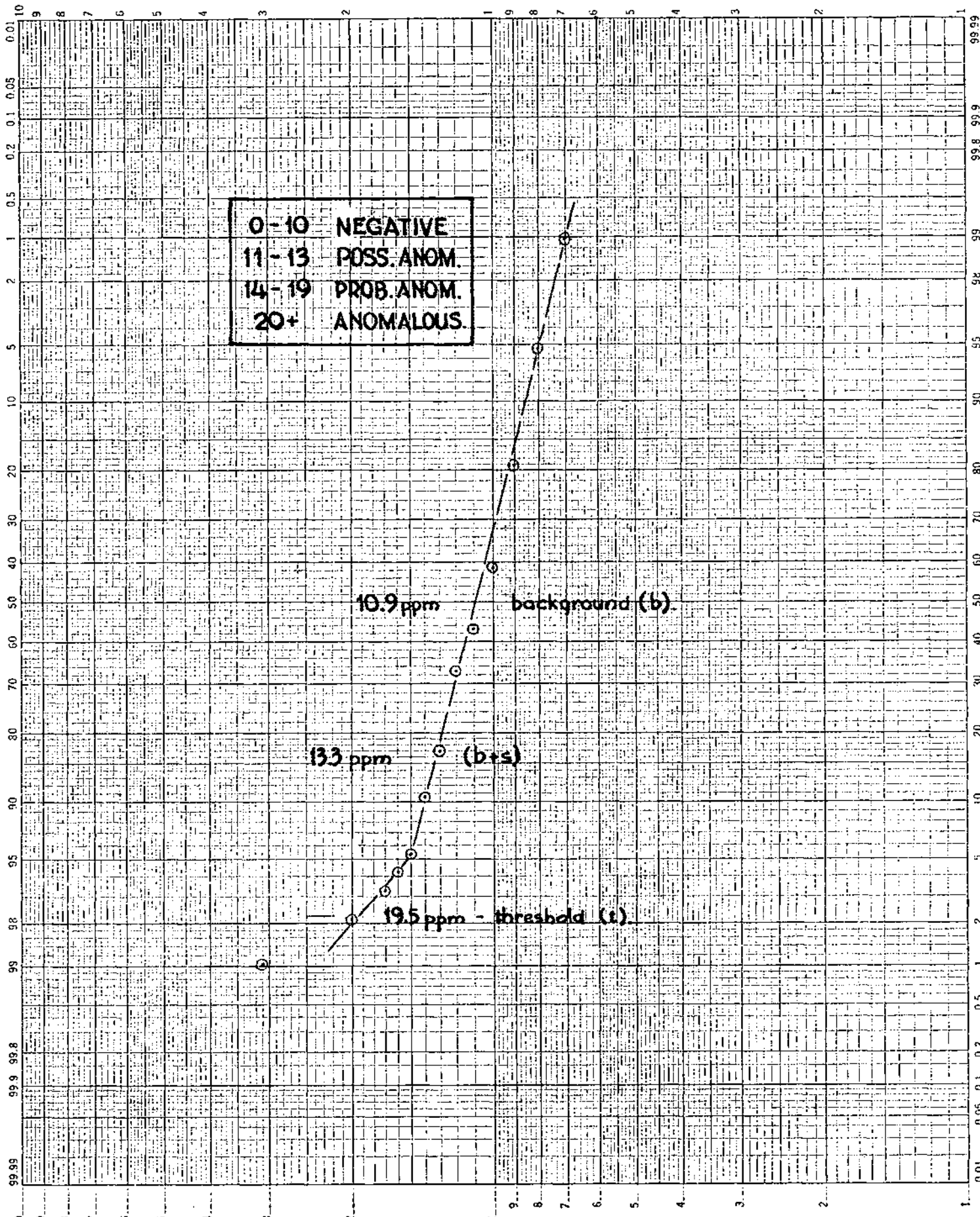
Lab. Reports #20-43, -62, -111, -138, -146, -806.

LAC LE JEUNE PROJECT
410
KAMLOOPS AREA - B.C.

Cumulative Frequency Distribution (Lognormal Population)
 by A. Therrien - Jan. 1971. (94 samples)

LEAD
 Soil Samples (A & B Hor.)

PROBABILITY
 X 2 LOG CYCLES
 KEUFFEL & ESSER CO.



LAC LE JEUNE (PROJECT), Kamloops Area, B.C.

Cumulative Frequency Distribution (Lognormal Population)

by A. Therrien - Jan. 1971.

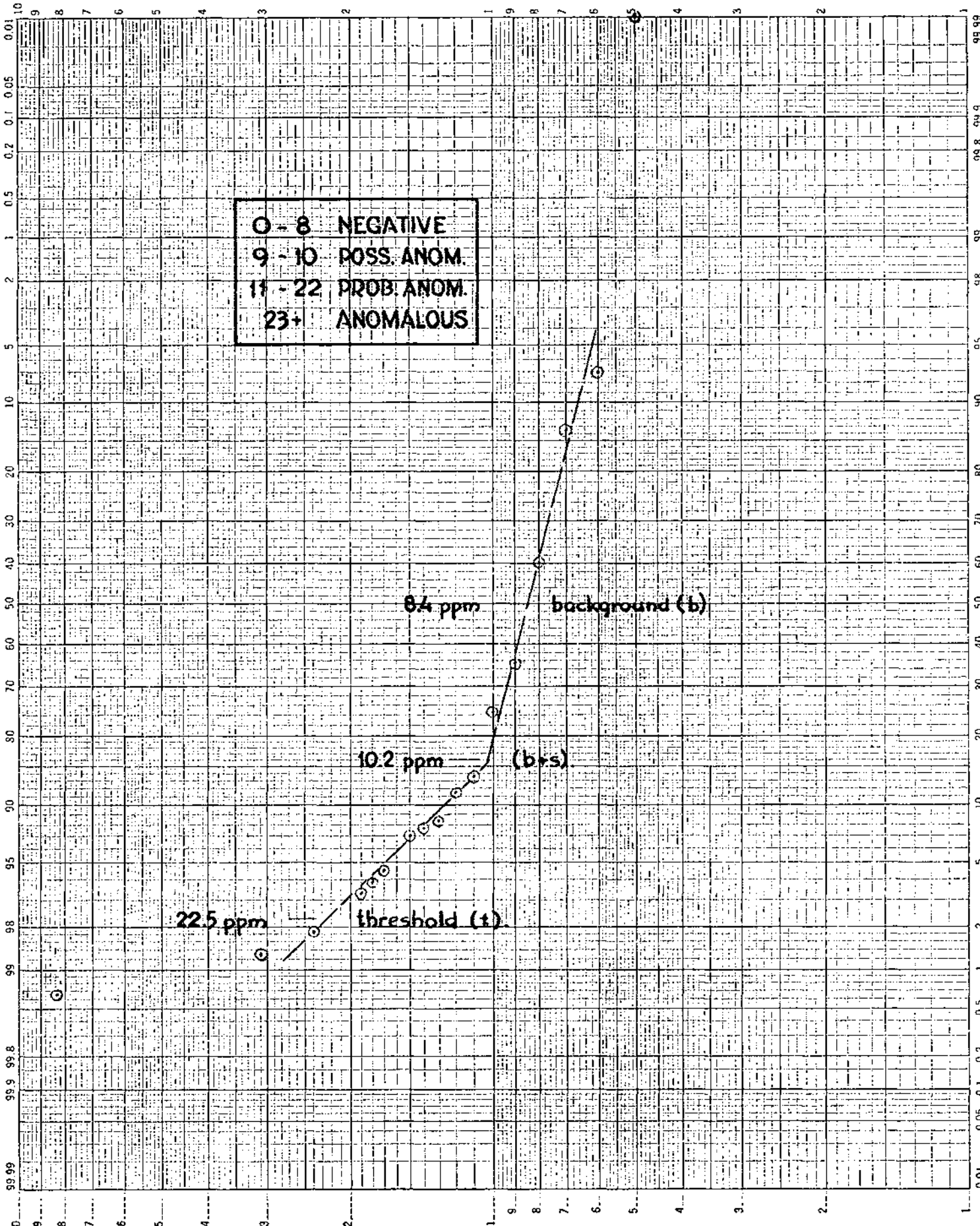
(155 samples)

LEAD

Soil Survey (lake & Swamp)

0 - 8	NEGATIVE
9 - 10	POSS. ANOM.
11 - 22	PROB. ANOM.
23 +	ANOMALOUS

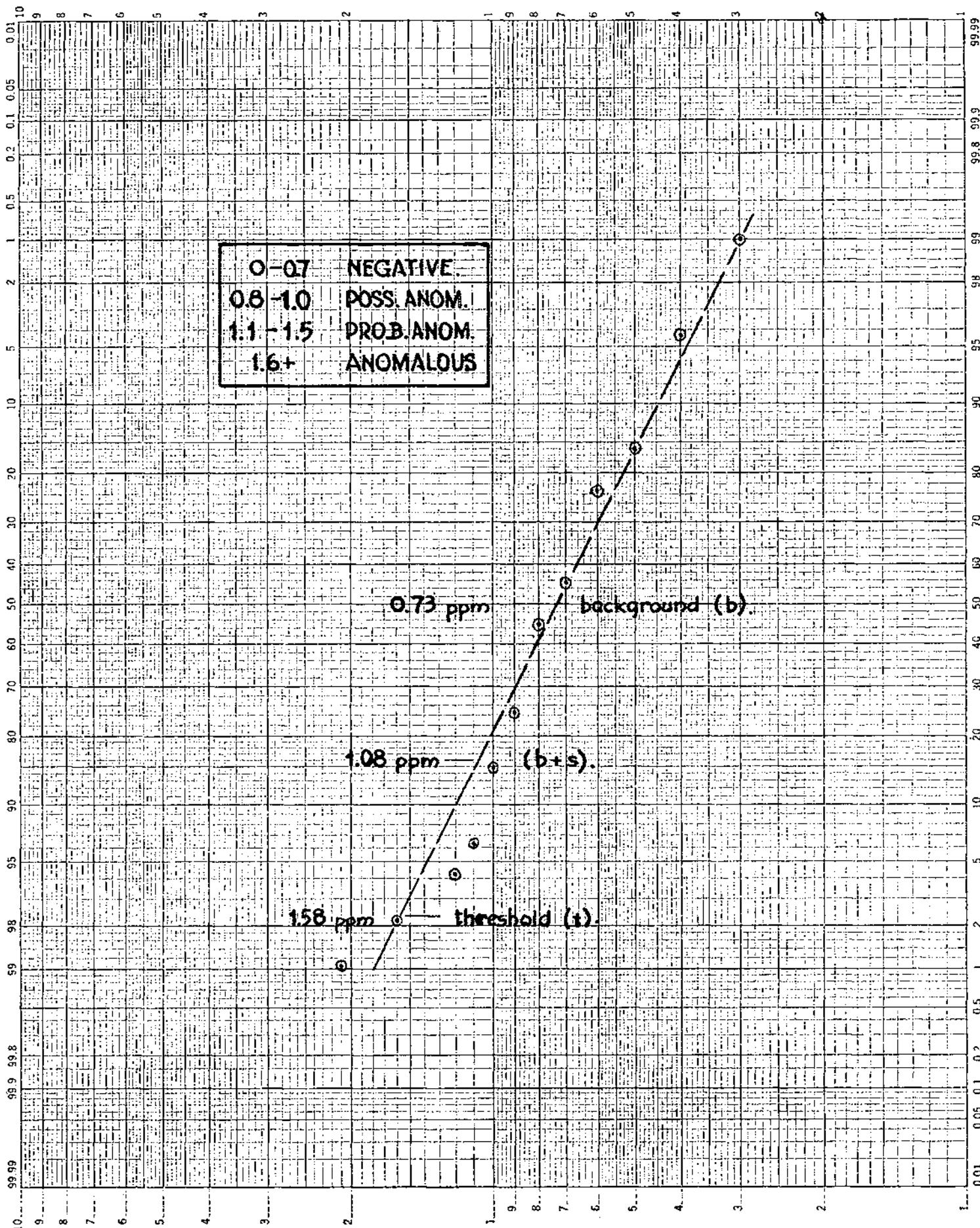
KE PROBABILITY
 X 2 LOG CYCLES
 MADE IN U.S.A.
 KEUFFEL & ESSER CO.



LAC LE JEUNE (PROJECT 410), Kamloops Area, B.C.

Cumulative Frequency Distribution (Lognormal Population)
 by A. Therrien - Jan. 1971. (94 samples).

SILVER
 Soil Samples (A&B Horizons).



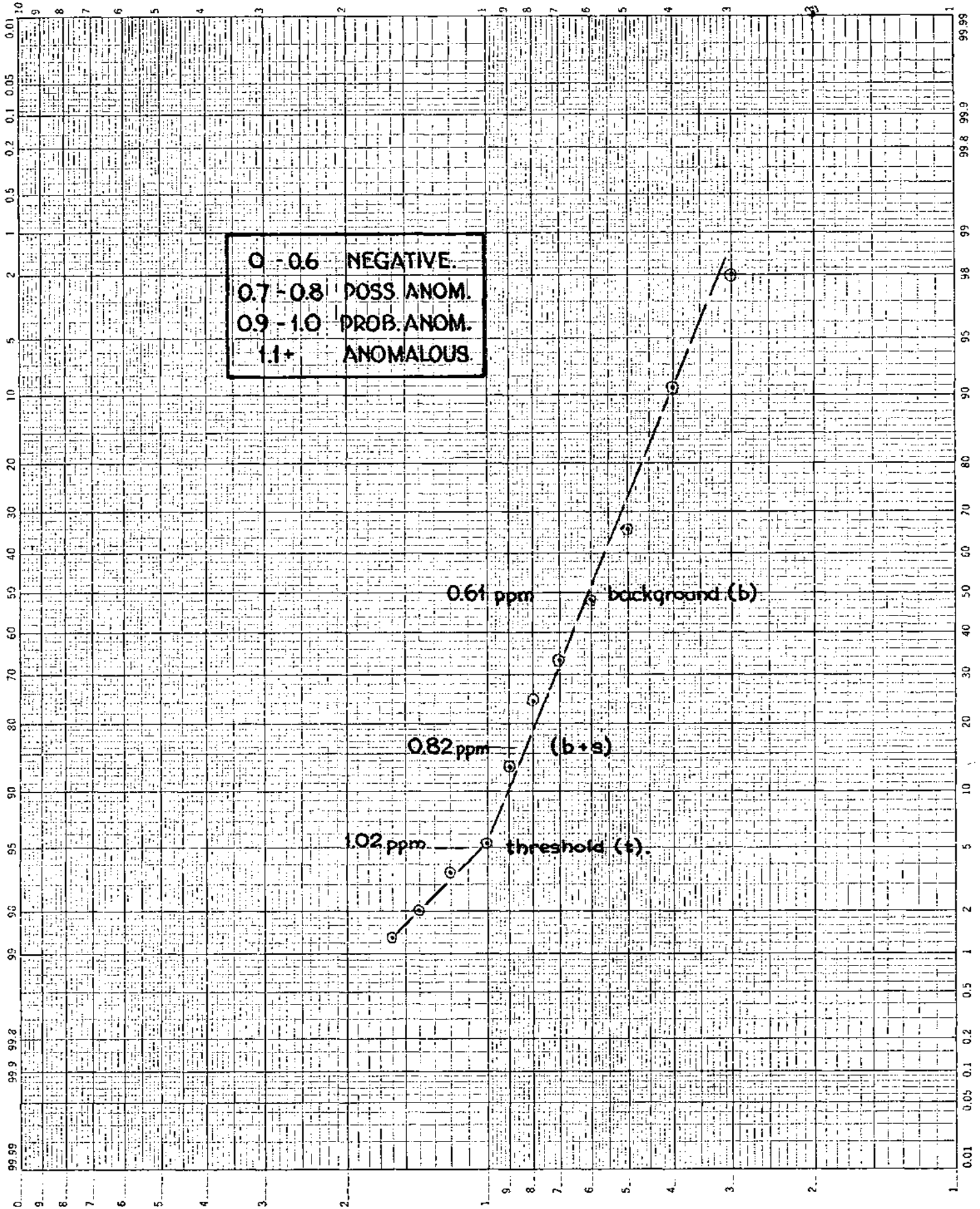
LAC LE JEUNE (PROJECT 210), Kamloops Area, B.C.

PROBABILITY
 X 2 LOG CYCLES
 NEUFTEL & ESSER CO.
 45 8043
 MADE IN U.S.A.

Cumulative Frequency Distribution (Lognormal Population)
 by A. Therrien - Jan. 1971.
 (153 samples)

SILVER
 Soil Survey (Lake & Swamp)

PROBABILITY 46 8043
 X 2 LOG CYCLES
 KEUFFEL & ESSER CO.



LAC LE JEUNE (PROJECT 410), Kamloops Area, B.C.

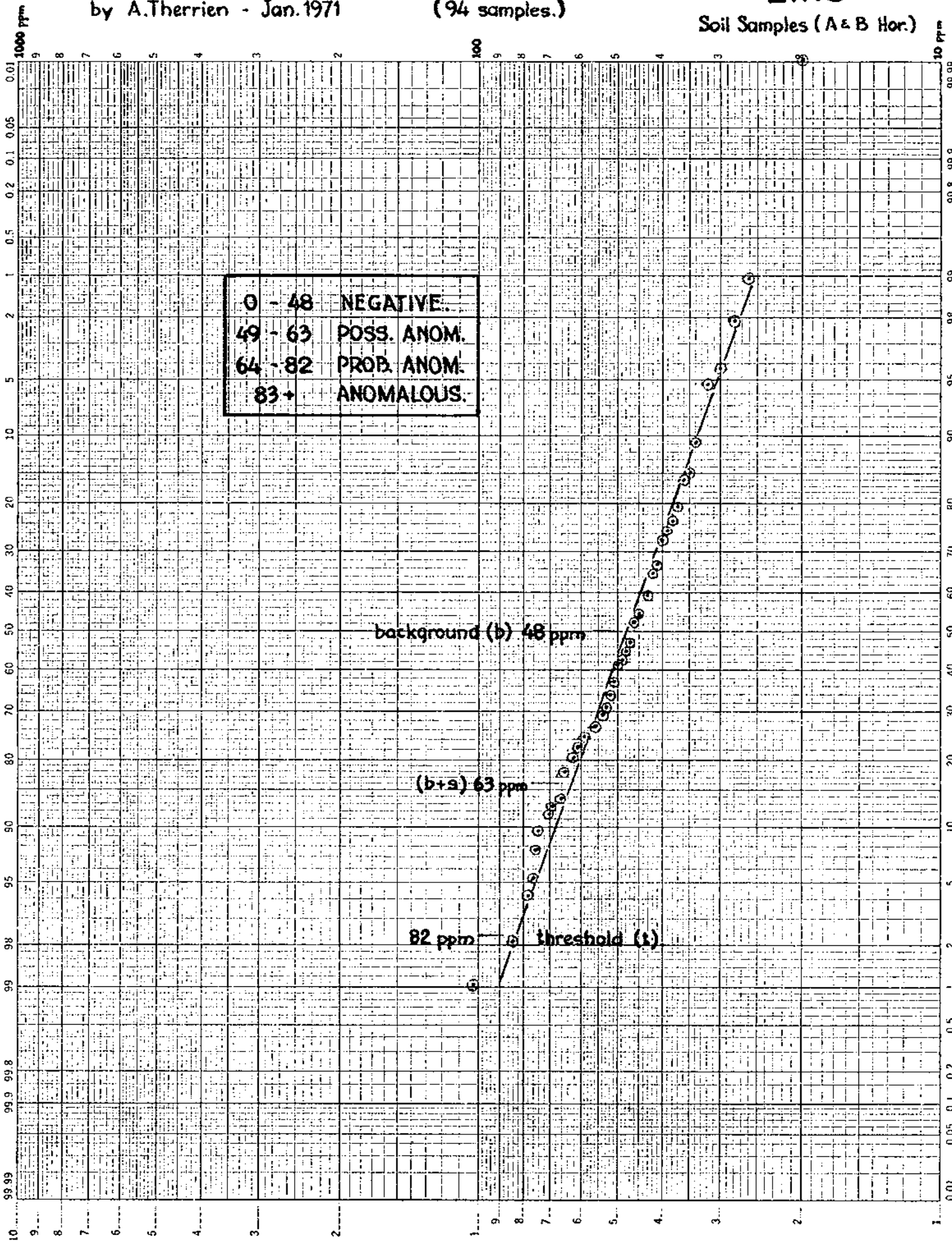
Cumulative Frequency Distribution (Lognormal Distribution)

by A. Therrien - Jan. 1971 (94 samples.)

ZINC

Soil Samples (A & B Hor.)

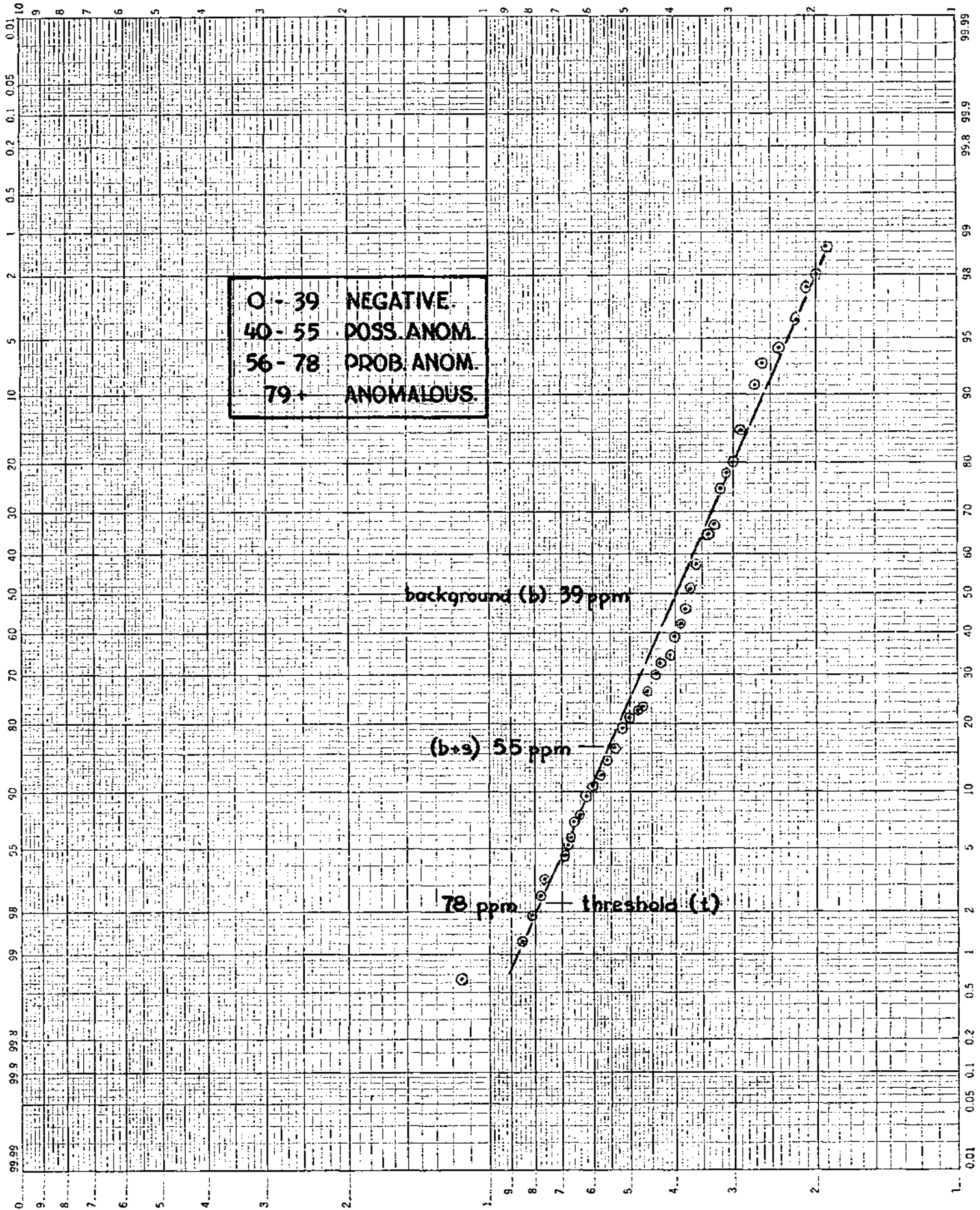
KE PROBABILITY 46 8043
 X 2 LOG CYCLES
 KEUFFEL & ESSER CO.



LAC LE JEUNE (PROJECT), Kamloops Area, B.C.

Cumulative Frequency Distribution (Lognormal Population)
 by A. Therrien - Jan. 1971. (156 samples)

ZINC
 Soil Survey (Lake & Swamp).



0 - 39	NEGATIVE.
40 - 55	POSS. ANOM.
56 - 78	PROB. ANOM.
79 +	ANOMALOUS.

background (b) 39 ppm

(b+s) 55 ppm

78 ppm — threshold (t)

LAC LE JEUNE (PROJECT 218), Kamloops Area, B.C.

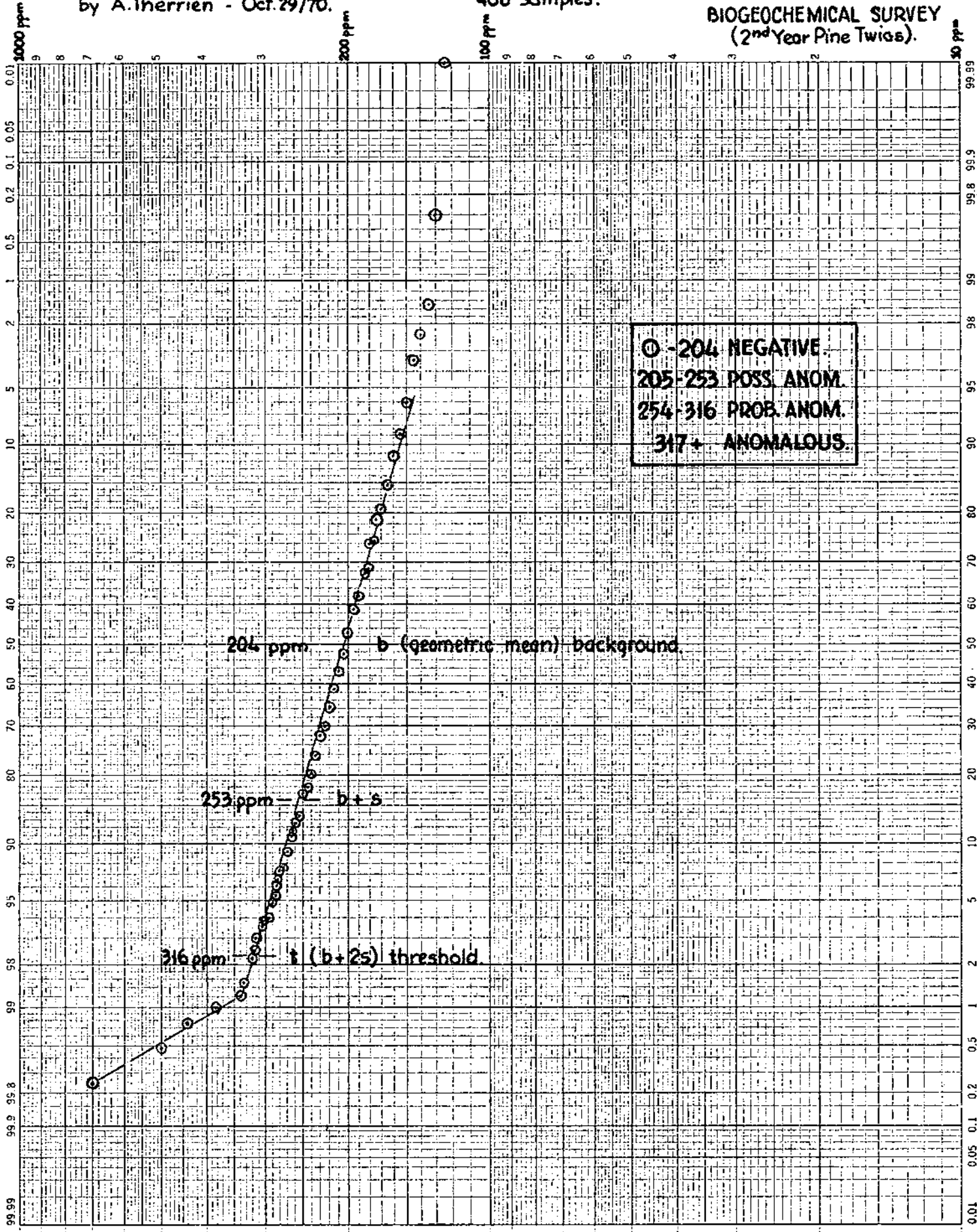
PROBABILITY 46 8043
 X 2 LOG CYCLES
 NEUFEL & ESSER CO.

Cumulative Frequency Distribution (lognormal population)

by A. Therrien - Oct. 29/70.

406 samples.

COPPER
BIOGEOCHEMICAL SURVEY
(2nd Year Pine Twigs).



○ - 204 NEGATIVE.
205-253 POSS. ANOM.
254-316 PROB. ANOM.
317+ ANOMALOUS.

204 ppm — b (geometric mean) background.

253 ppm — b + s

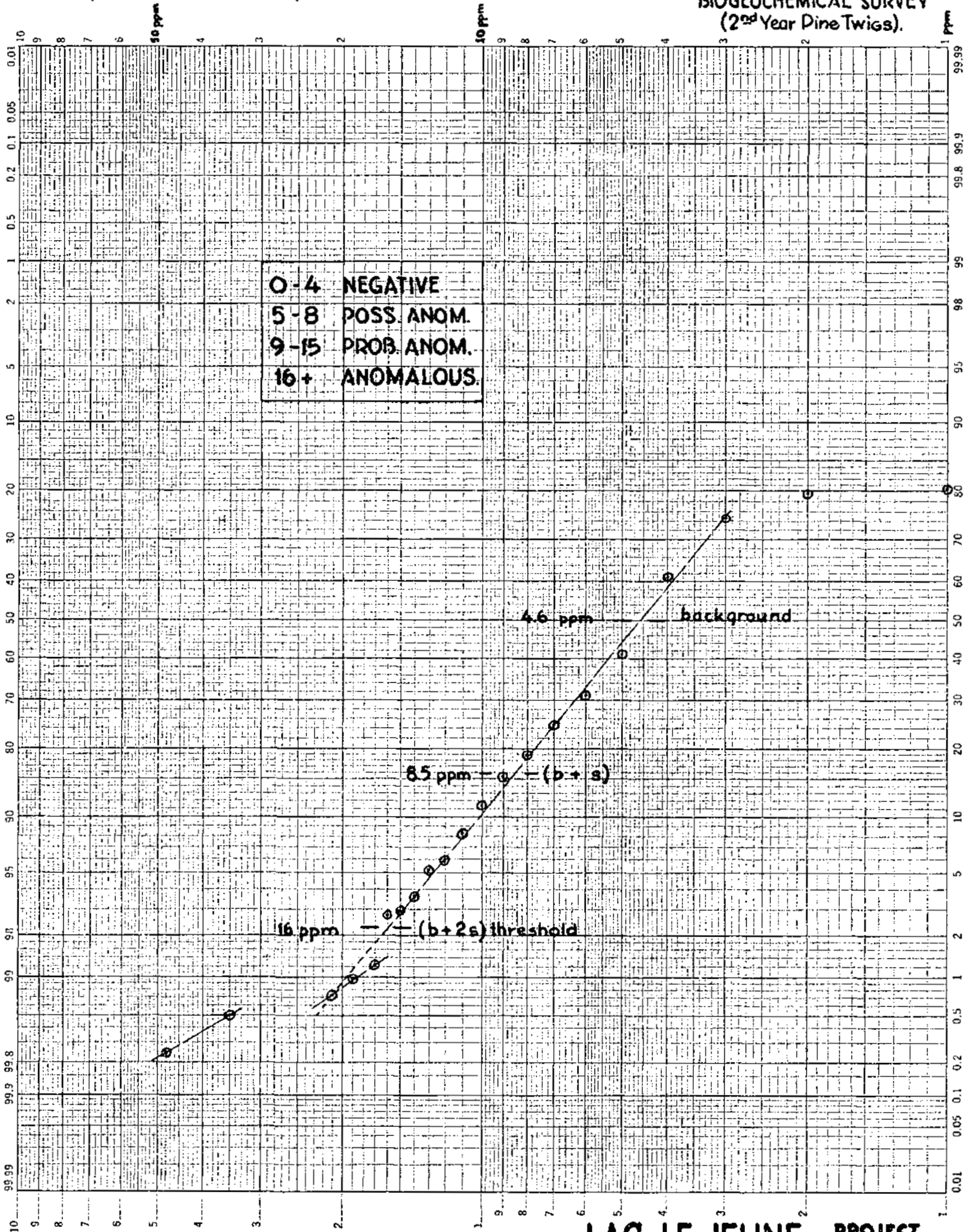
316 ppm — 1 (b + 2s) threshold.

K+W PROBABILITY 46 8043
X 2 LOG CYCLES
MADE IN U.S.A.
KEUFFEL & ESSER CO.

Cumulative Frequency Distribution (lognormal population)
by A. Therrien - Oct. 30/70. 406 samples.

MOLYBDENUM
BIOGEOCHEMICAL SURVEY
(2nd Year Pine Twigs).

PROBABILITY
X 2 LOG CYCLES
NEUFTEL & ESSER CO.
46 8043
MADE IN U.S.A.



Lab. Report #B 20-4, -9, -11, -12, -16, -18,
-20, -35, -36, -39.

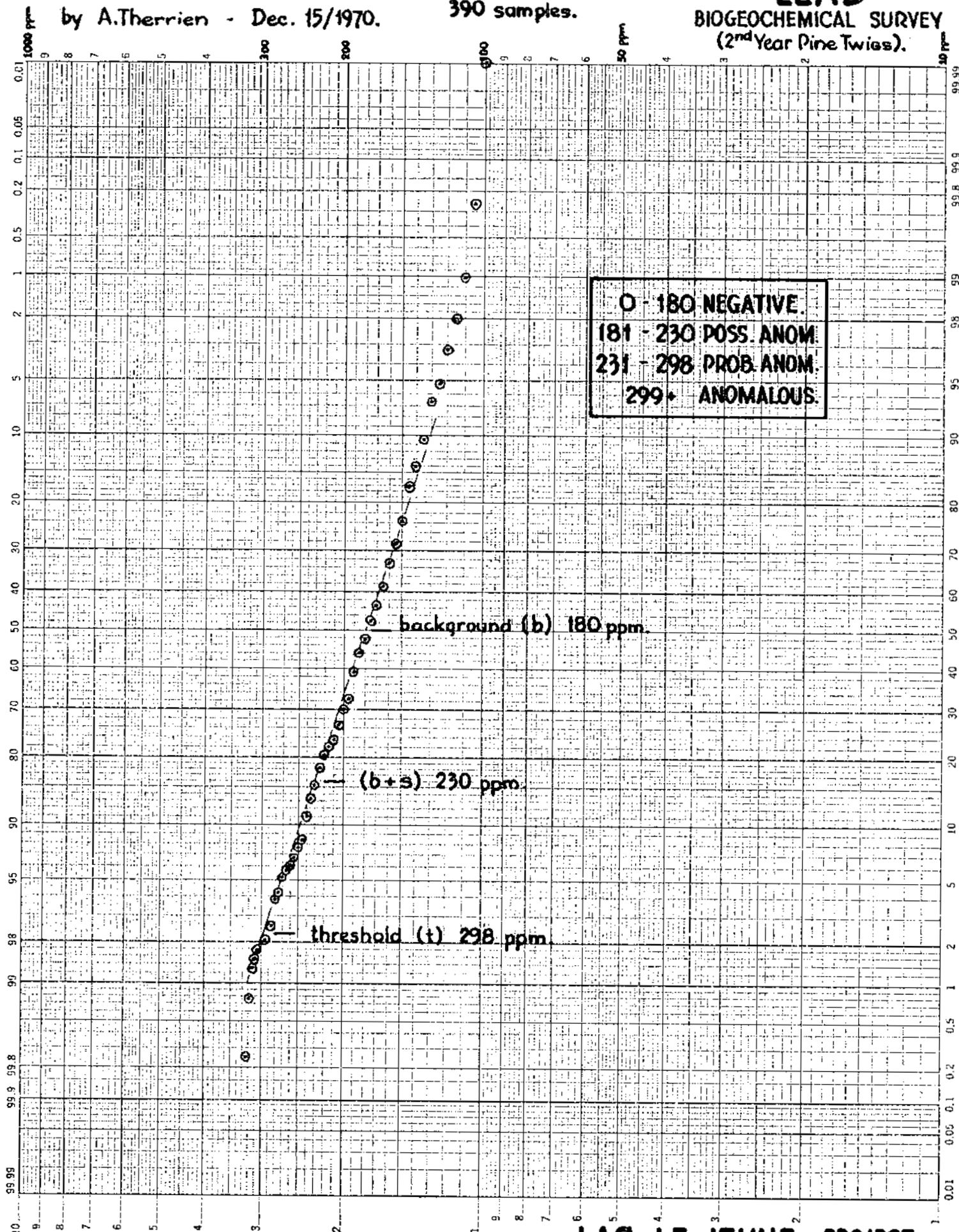
LAC LE JEUNE PROJECT
410
KAMLOOPS AREA - B.C.

Cumulative Frequency Distribution (Lognormal Population)

by A. Therrien - Dec. 15/1970.

390 samples.

LEAD
 BIOGEOCHEMICAL SURVEY
 (2nd Year Pine Twigs).



O - 180 NEGATIVE.
 181 - 230 POSS. ANOM.
 231 - 298 PROB. ANOM.
 299+ ANOMALOUS.

background (b) 180 ppm

(b+s) 230 ppm

threshold (t) 298 ppm

PROBABILITY
 X 2 LOG CYCLES
 MADE IN U.S.A.
 NEUFREL & ESSER CO.

46 8043

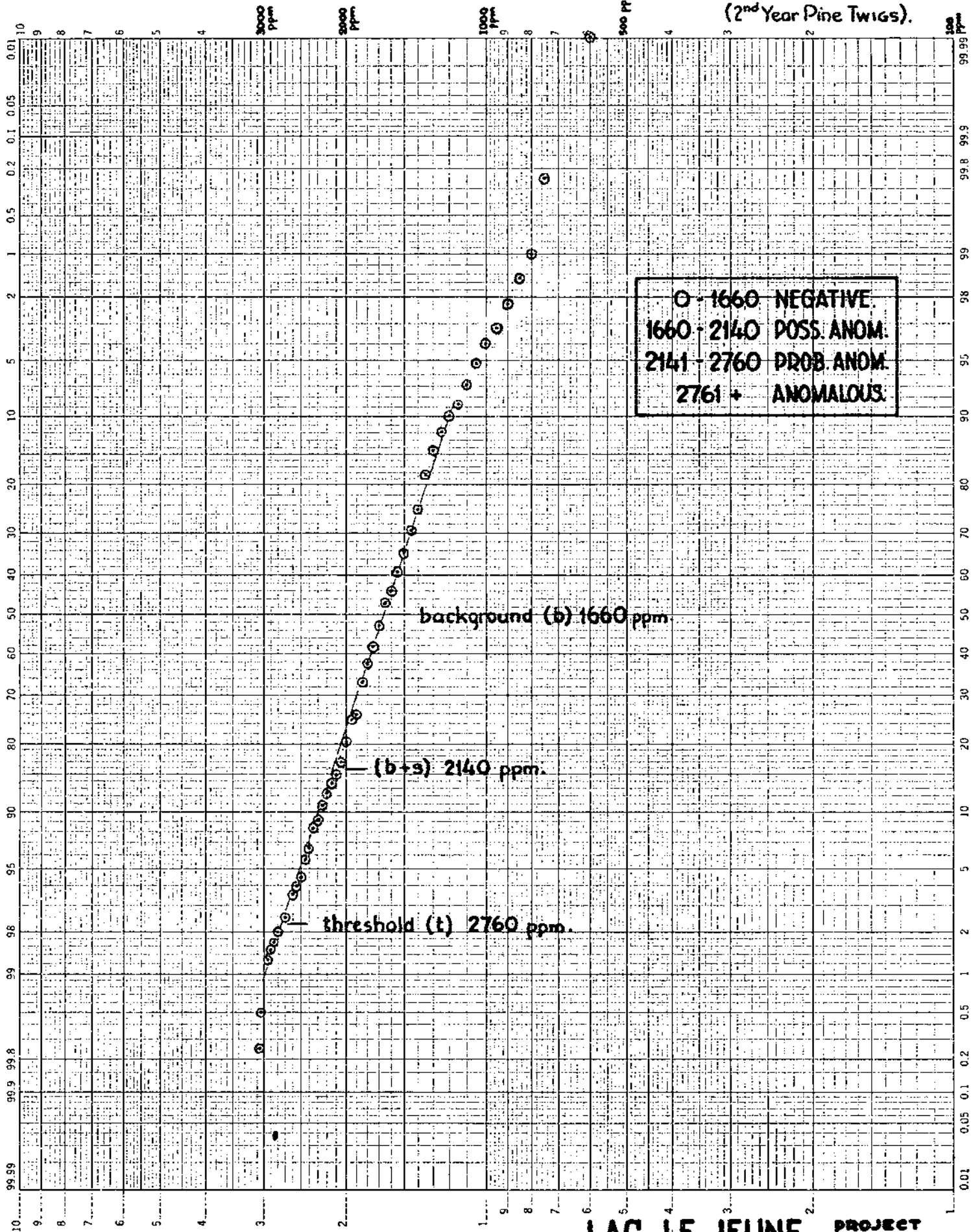
Lab. Reports B20-7, -47, -47A.

LAC LE JEUNE PROJECT
 410
 KAMLOOPS AREA - B.C.

Cumulative Frequency Distribution (Lognormal Population)
by A. Therrien - Dec. 16/70.

406 samples.

ZINC
BIOGEOCHEMICAL SURVEY
(2nd Year Pine Twigs).



K&E PROBABILITY
 X 2 LOG CYCLES
 KEUFFEL & ESSER CO.
 46 8043
 MADE IN U.S.A.

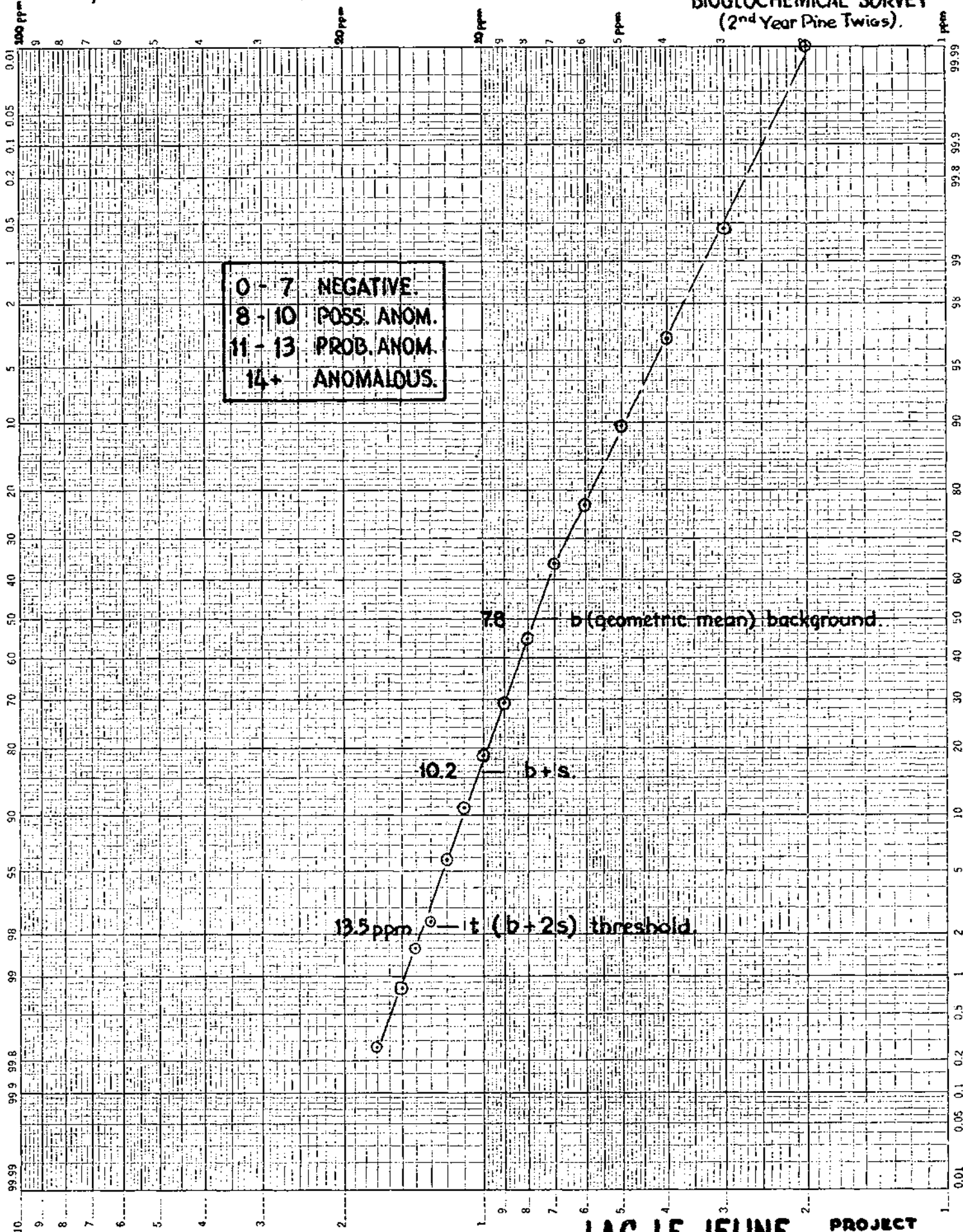
Lab. Reports: B20-7, -47, -47A.

LAC LE JEUNE PROJECT
410
KAMLOOPS AREA - B.C.

Cumulative Frequency Distribution (Lognormal population)
by A. Therrien - Dec. 21/70

377 samples.

SILVER
BIOGEOCHEMICAL SURVEY
(2nd Year Pine Twigs).

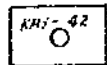


46 8043
PROBABILITY
X 2 LOG CYCLES
KEUFFEL & ESSER CO.

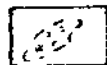
SYMBOLS



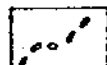
Claim Post



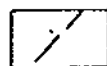
Sediment & soil sample station and number



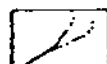
Swamp



Trail



Location Line



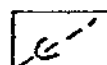
Creek and Dry Creek



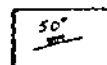
Outcrop surface



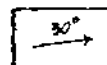
Shallow Overburden with Drumline and Moraine Exposures



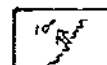
Glacial Striae (Indicated Direction of Drumlins Movement)



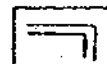
Strike and Dip of Joints



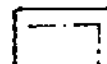
Slope of Topography



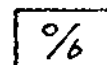
Strike and Dip of Basalt Flow Bedding



C. J. M. Claim Boundary



Other's claim Boundary



Overburden

LEGEND

PLEISTOCENE AND RECENT

A

Mainly consist of Grano-diorite

B

Consist of Grano-diorite & Basalt

} Glacial Drumlins
& Moraine

C

Mainly consist of Basalt

MIOCENE OR EARLIER

2

Mainly Olivine Basalt — KAMLOOPS GROUP

Well developed columnar joints. Olivine crystals form masses.
Containing quartz, oligoclase, phenocryst of sanidine and minor biotite
in fine grained groundmass.

JURASSIC AND LATER

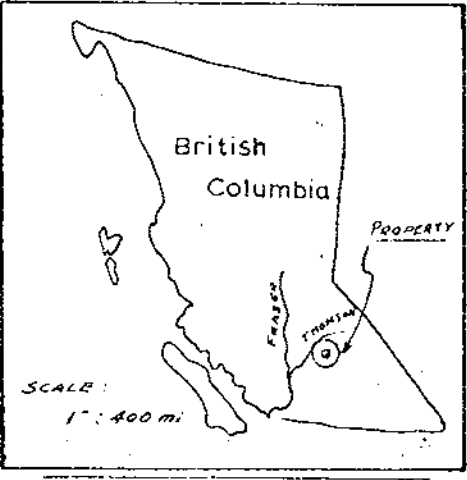
1

Intrusion

Grano-diorite (Biotite Rich) — NICOLA BATHOLITH

Gneissic structure. injected with granitic material.
Containing Quartz, Biotite, Plagioclase and minor amounts
of Hornblende or Pyroxene.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2891 MAP #1



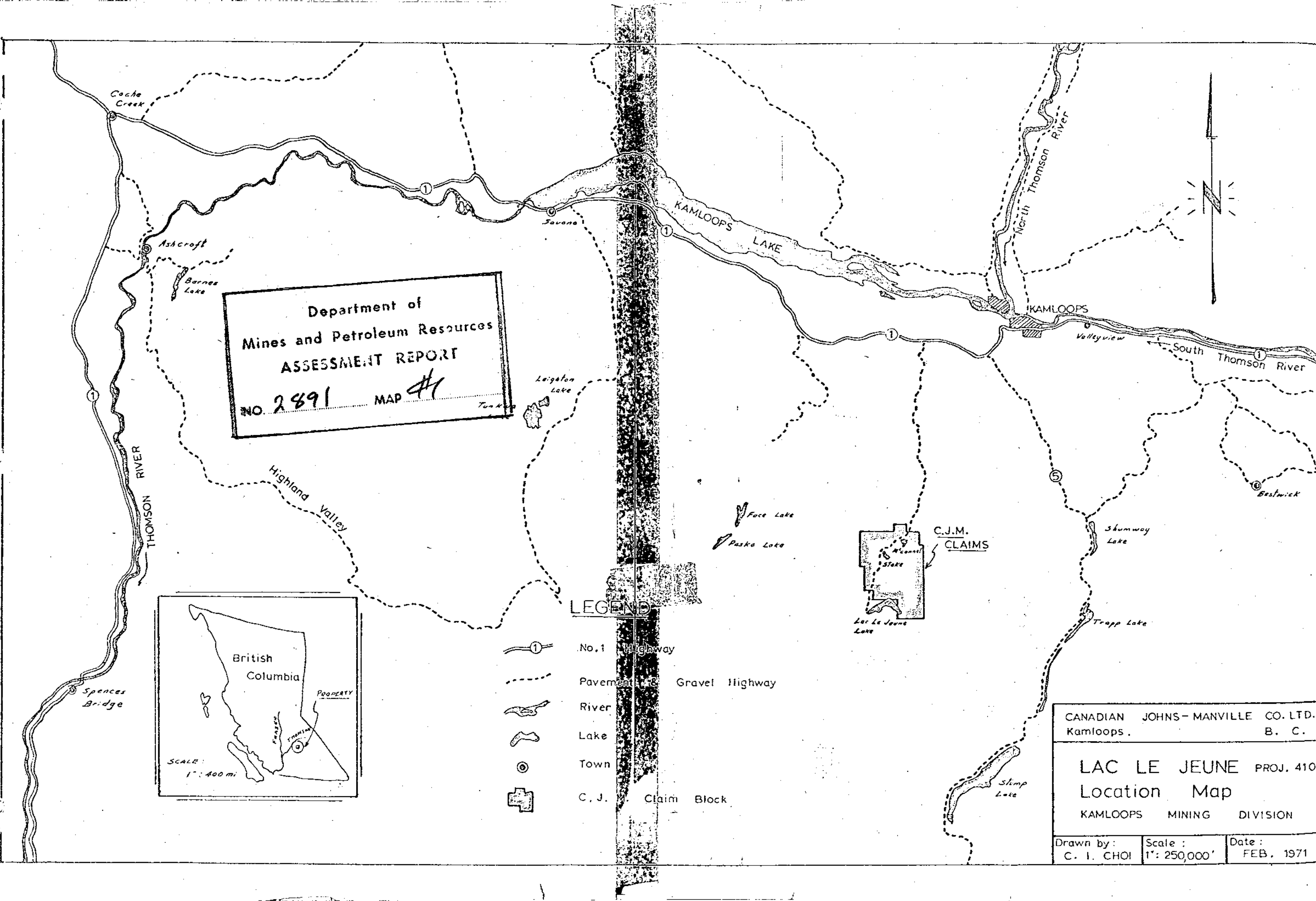
LEGEND

- No. 1 Highway
- Pavement & Gravel Highway
- River
- Lake
- Town
- C. J. Claim Block

CANADIAN JOHNS-MANVILLE CO. LTD.
Kamloops. B. C.

LAC LE JEUNE PROJ. 410
Location Map
KAMLOOPS MINING DIVISION

Drawn by: C. I. CHOI	Scale: 1" = 250,000'	Date: FEB. 1971
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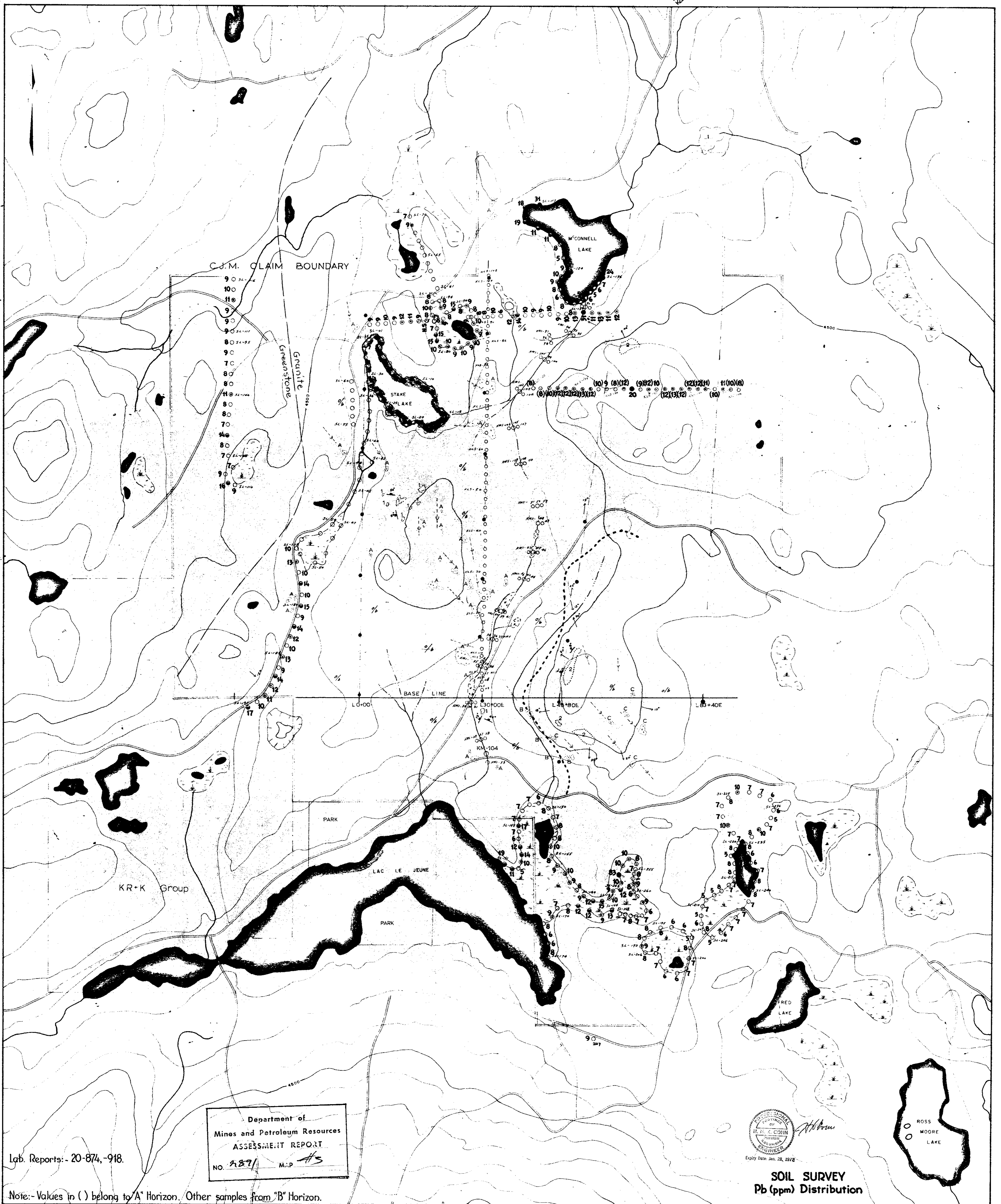


Exp. Date: Jan. 28, 1972

Cu/Zn RATIO
LOCATION MAP of TWIG SAMPLE
(BIOGEOCHEMICAL SURVEY)



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 7591 M.P. #15



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4871 M.P. HS

Professional Engineer
H. C. COHN
Geotechnical Engineering
Expiry Date: Jan. 28, 1972

SOIL SURVEY
Pb (ppm) Distribution

Lab. Reports: - 20-874, -918.

Note: - Values in () belong to "A" Horizon. Other samples from "B" Horizon.

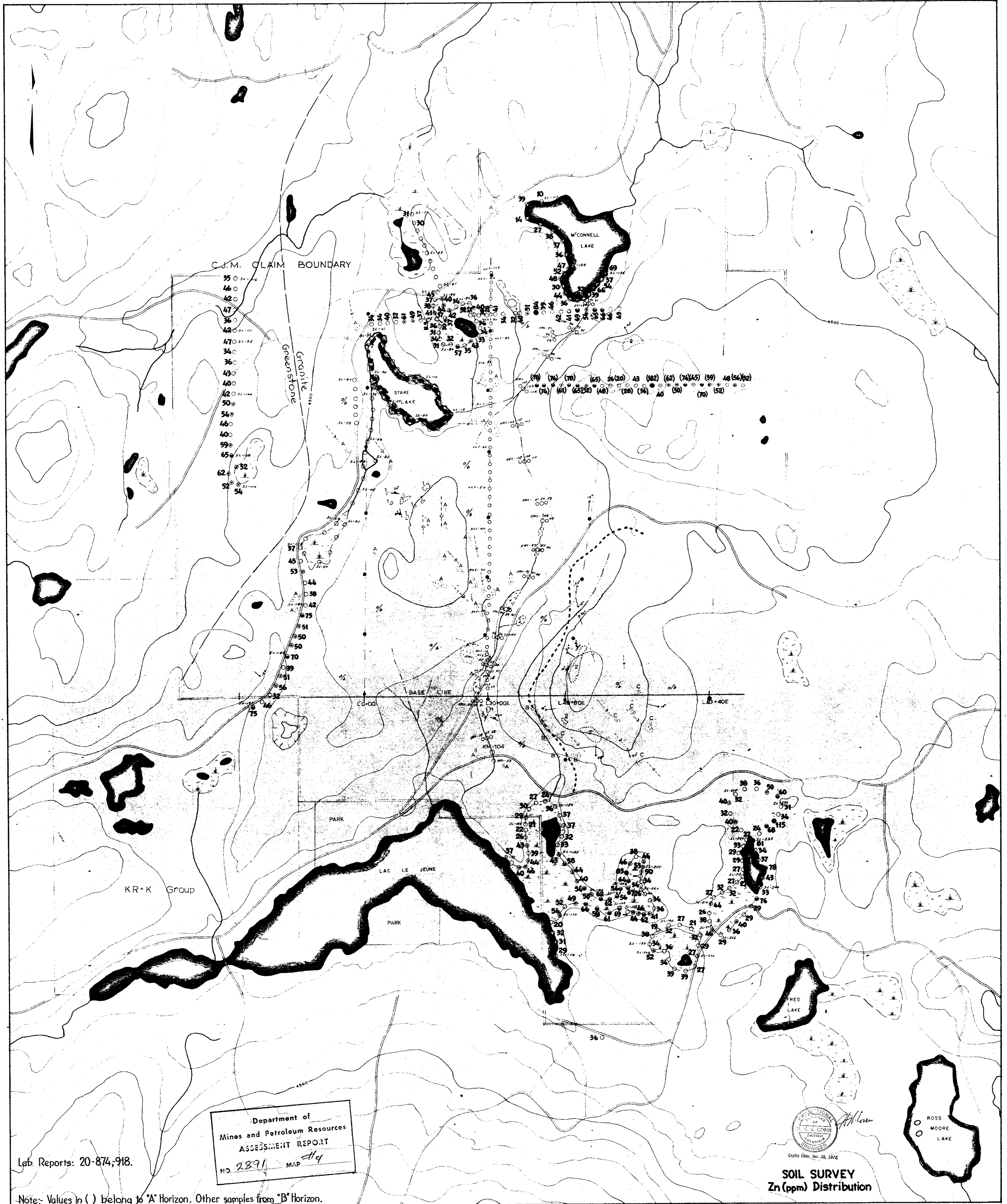
Canadian Johns-Marville Co., Ltd.
Exploration Dept., Asbestos, Que.

LAC LE JEUNE - *410.
Kamloops Area, B.C.

SCALE: 1 inch = 1000 feet

WESTERN MAPPING LTD
105 SEYMOUR ST. - KAMLOOPS, B.C.

15 mi.
Kamloops



C.M. CLAIM BOUNDARY

- 35 ○ 31-36
- 46 ○
- 47 ○
- 36 ○
- 42 ○ 31-33
- 47 ○ 31-35
- 34 ○
- 36 ○
- 43 ○
- 40 ○
- 42 ○ 31-33
- 50 ○
- 54 ○
- 46 ○
- 40 ○
- 59 ○
- 65 ○ 31-33
- 62 ○ 52
- 52 ○ 54

Greenstone

M'CONNELL LAKE

STAKE LAKE

LAC LE JEUNE

RED LAKE

ROSS MOORE LAKE

KR+K Group

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2891 MAP 114



SOIL SURVEY
Zn (ppm) Distribution

Lab. Reports: 20-874;918.

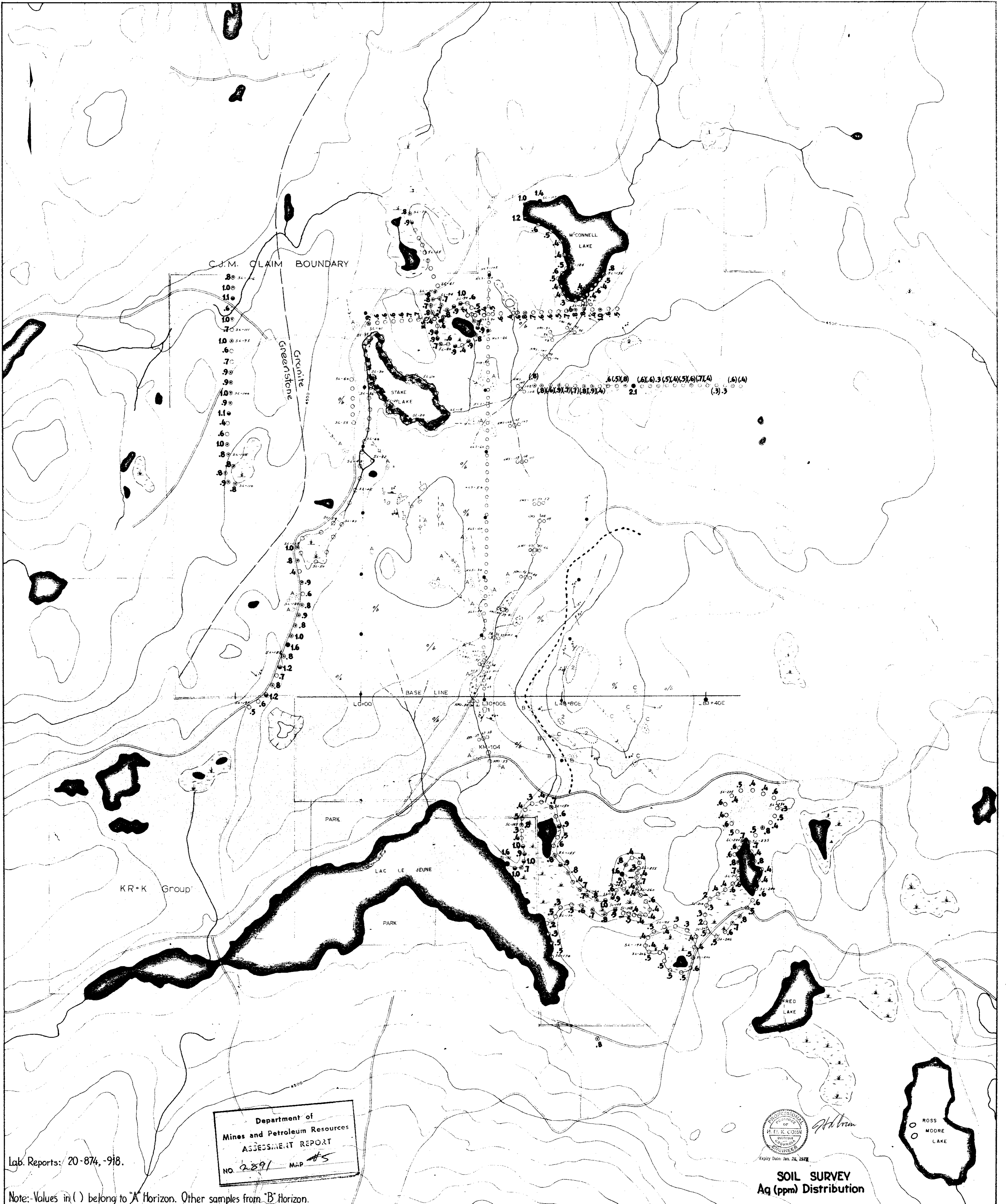
Note: Values in () belong to 'A' Horizon. Other samples from 'B' Horizon.

Canadian Johns-Manville Co. Ltd.
Exploration Dept., Asbestos, Que.

LAC LE JEUNE - #410.
Kamloops Area., B.C.

SCALE: 1 inch = 1000 feet

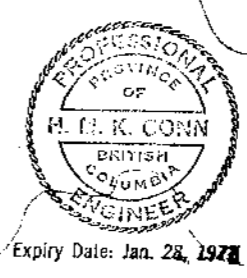
WESTERN MAPPING LTD
103 SEYMOUR ST., KAMLOOPS, B.C.



C.J.M. CLAIM BOUNDARY

- 8.0
- 10.0
- 11.0
- 6.0
- 7.0
- 10.0
- 6.0
- 7.0
- 9.0
- 9.0
- 10.0
- 9.0
- 1.1
- 4.0
- 6.0
- 10.0
- 8.0
- 8.0
- 9.0
- 8.0

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2891 MAP #5

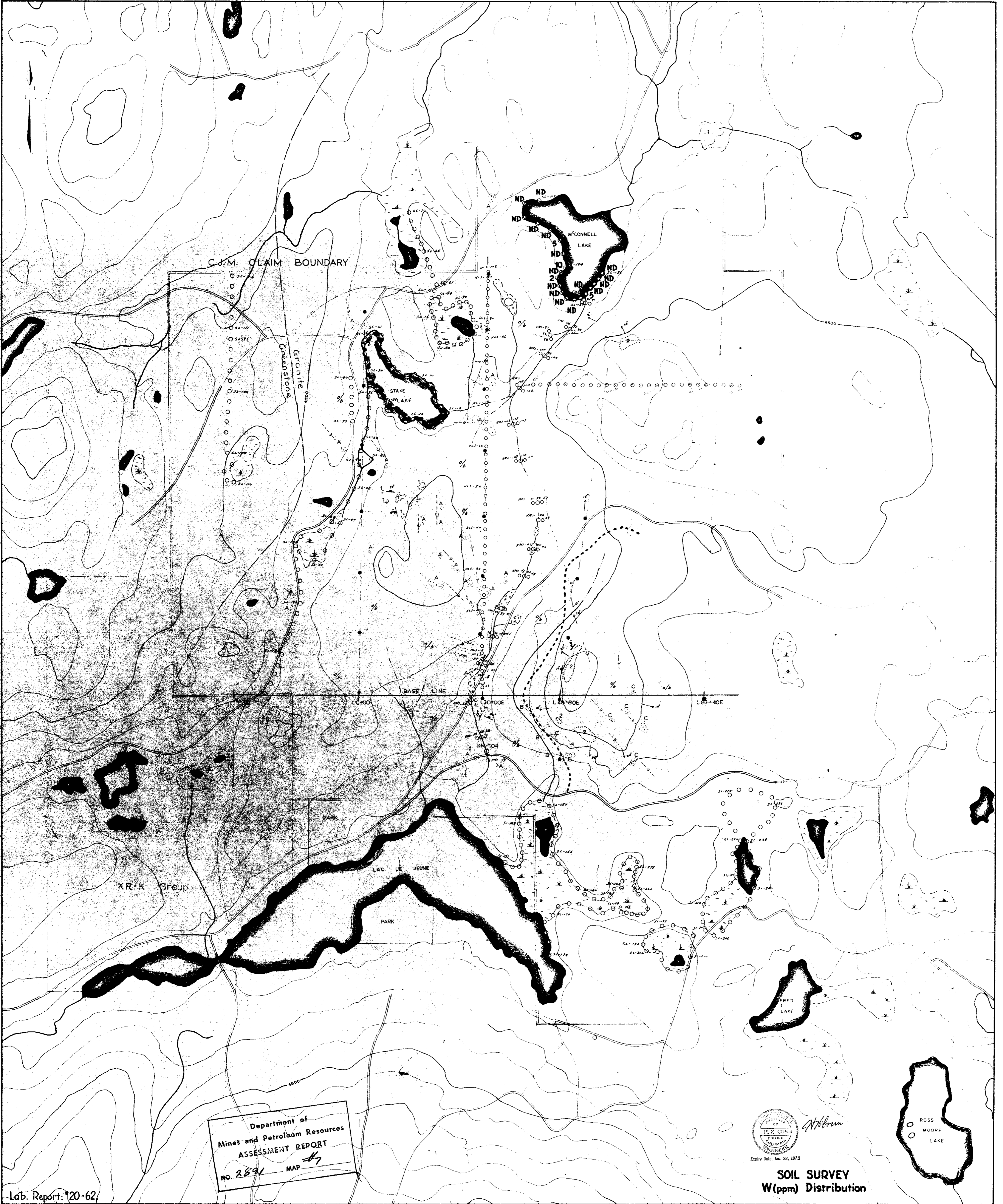


SOIL SURVEY
Aq (ppm) Distribution

Lab. Reports: 20-874, -918.

Note: Values in () belong to "A" Horizon. Other samples from "B" Horizon.

15 mi.
Kamloops



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2891 MAP #7

Atkinson
H. K. CONNOR
REGISTERED
ENGINEER
EXPIRY DATE: JAN. 28, 1978

SOIL SURVEY
W(ppm) Distribution

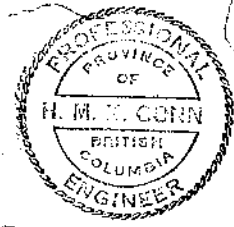
Lab. Report: #20-62

Canadian Johns-Manville Co. Ltd.
Exploration Dept., Asbestos, Que.

LAC LE JEUNE - #410.
Kamloops Area, B.C.

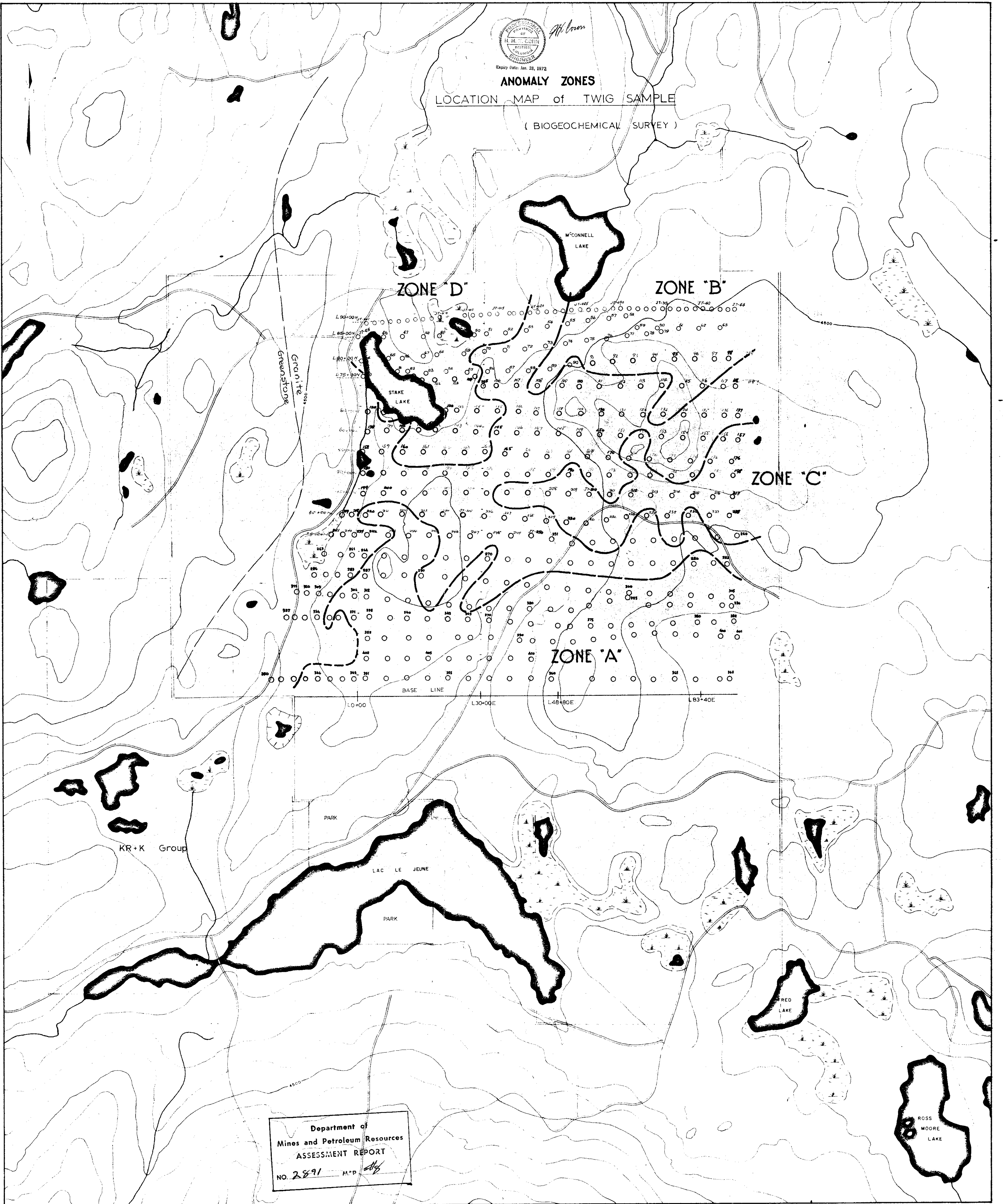
SCALE: 1 inch = 1000 feet

WESTERN MAPPING LTD
105 SEYMOUR ST. - KAMLOOPS, B.C.



H.M. Cohen

ANOMALY ZONES
LOCATION MAP of TWIG SAMPLE
(BIOGEOCHEMICAL SURVEY)

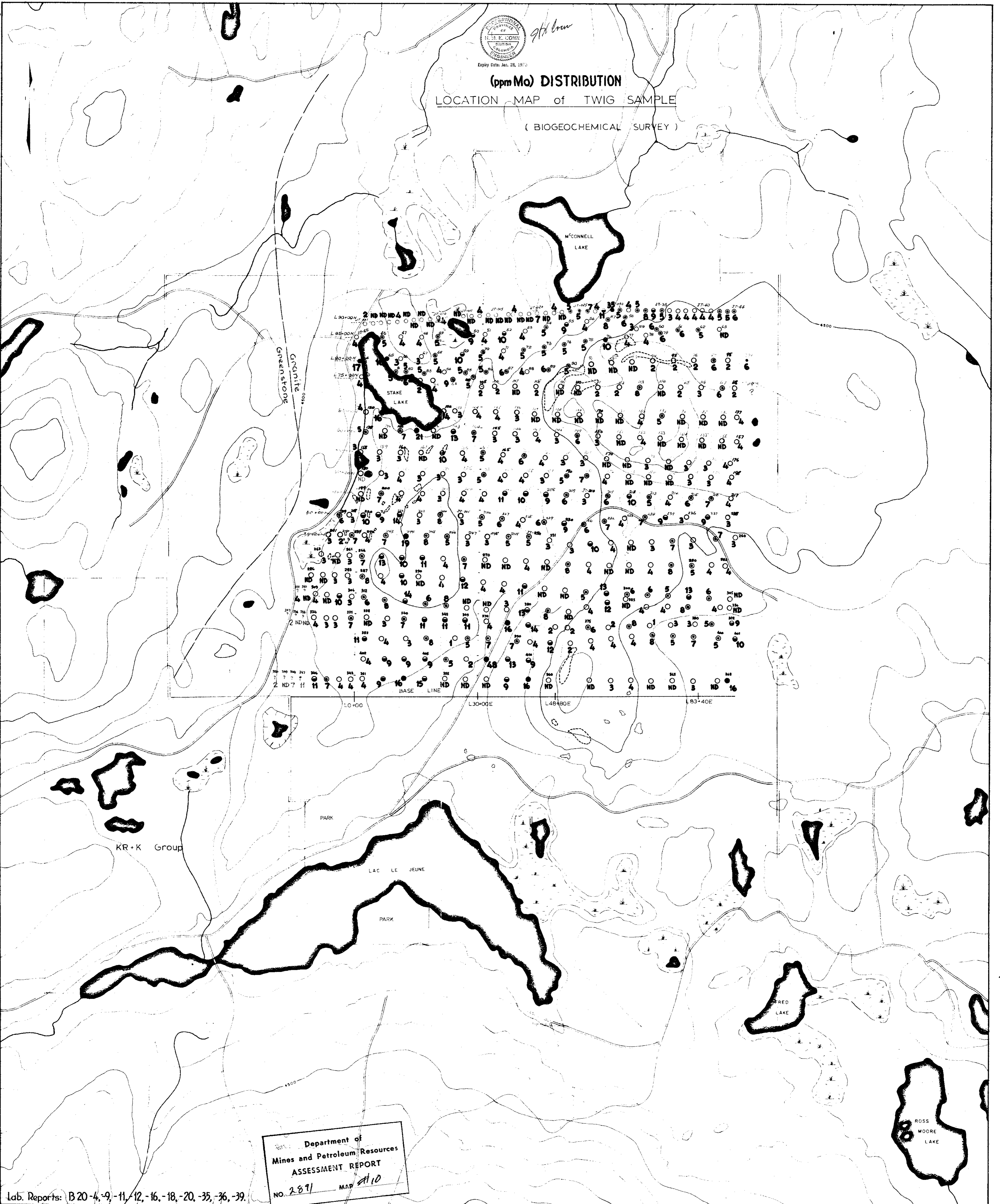


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Mines and Petroleum Resources
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NO. 2891 M.P. *ALB*

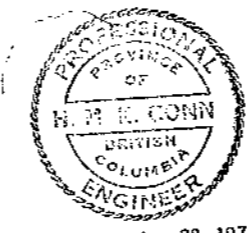


(ppm Mo) DISTRIBUTION
 LOCATION MAP of TWIG SAMPLE
 (BIOGEOCHEMICAL SURVEY)

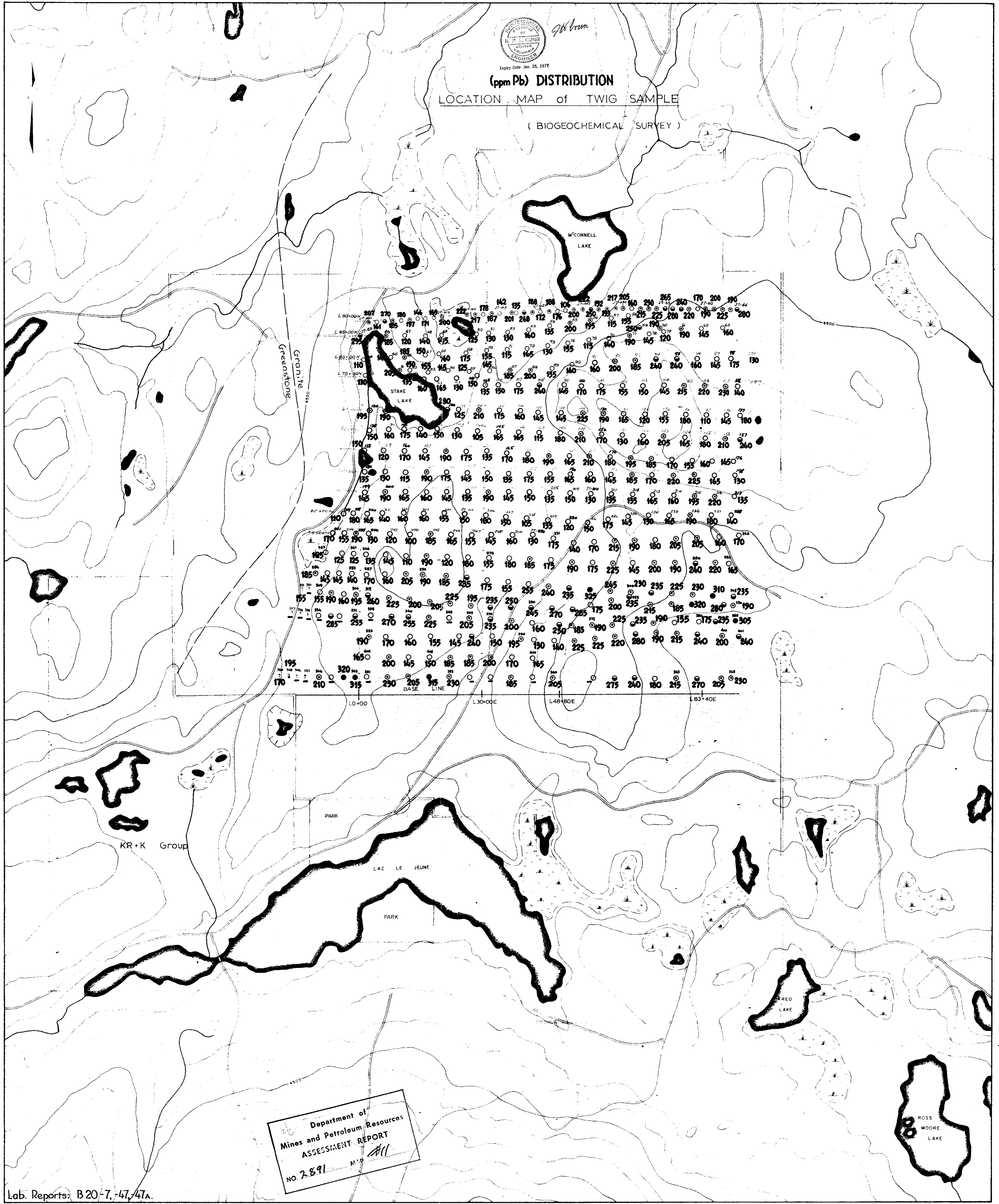


Department of
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 ASSESSMENT REPORT
 NO. 2871 MAP A10

Lab. Reports: B20-4, -9, -11, -12, -16, -18, -20, -35, -36, -39.

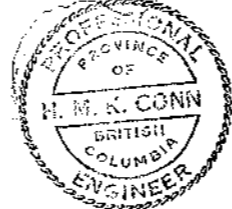


(ppm Pb) DISTRIBUTION
LOCATION MAP of TWIG SAMPLE
 (BIOGEOCHEMICAL SURVEY)



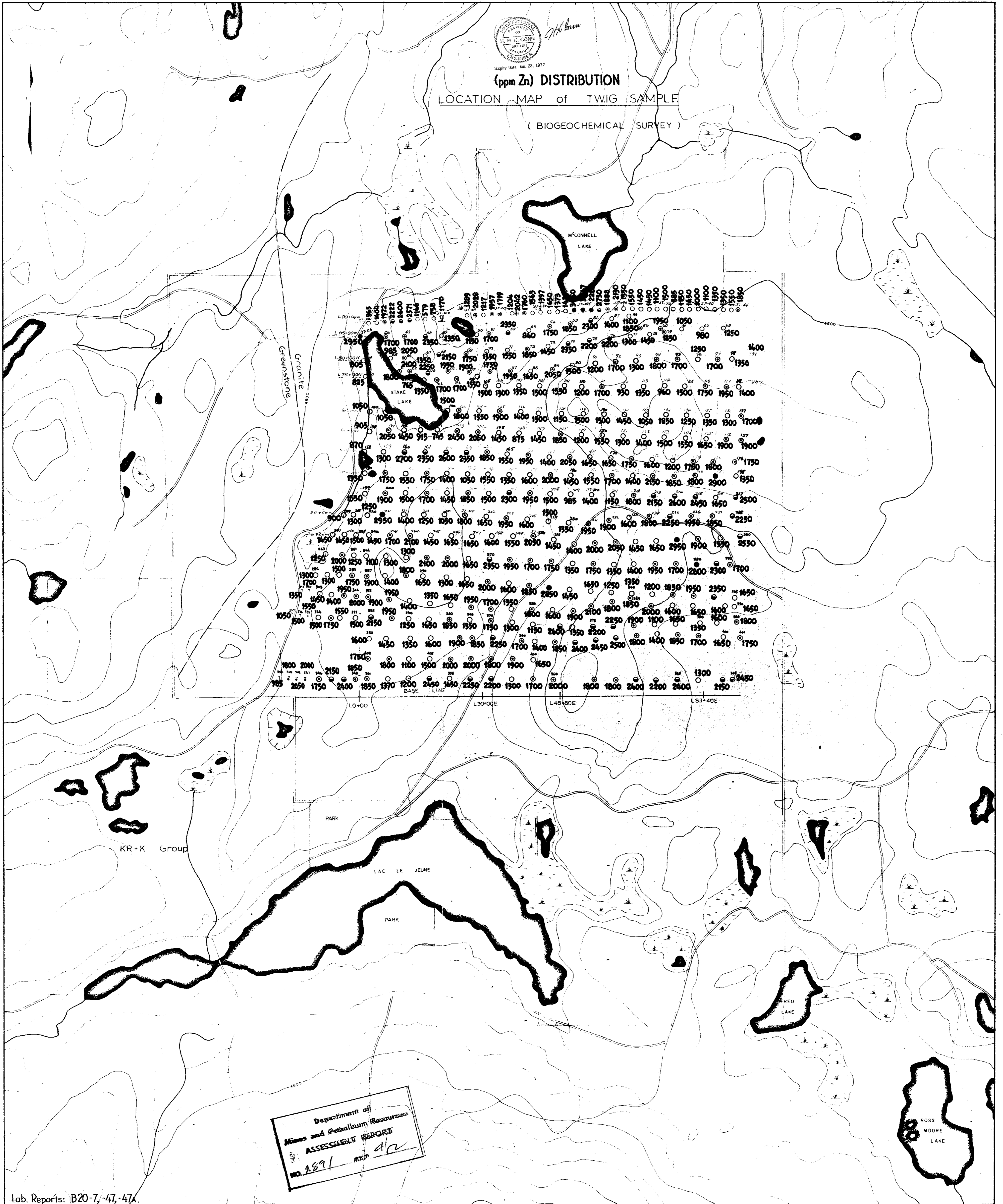
Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 No. 2891
 M.P.

Lab. Reports: B20-7, 47, 47A.



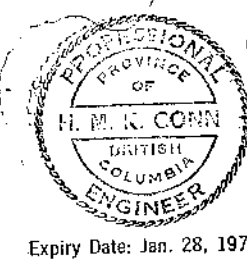
Expiry Date: Jan. 28, 1972

(ppm Zn) DISTRIBUTION
LOCATION MAP of TWIG SAMPLE
(BIOGEOCHEMICAL SURVEY)

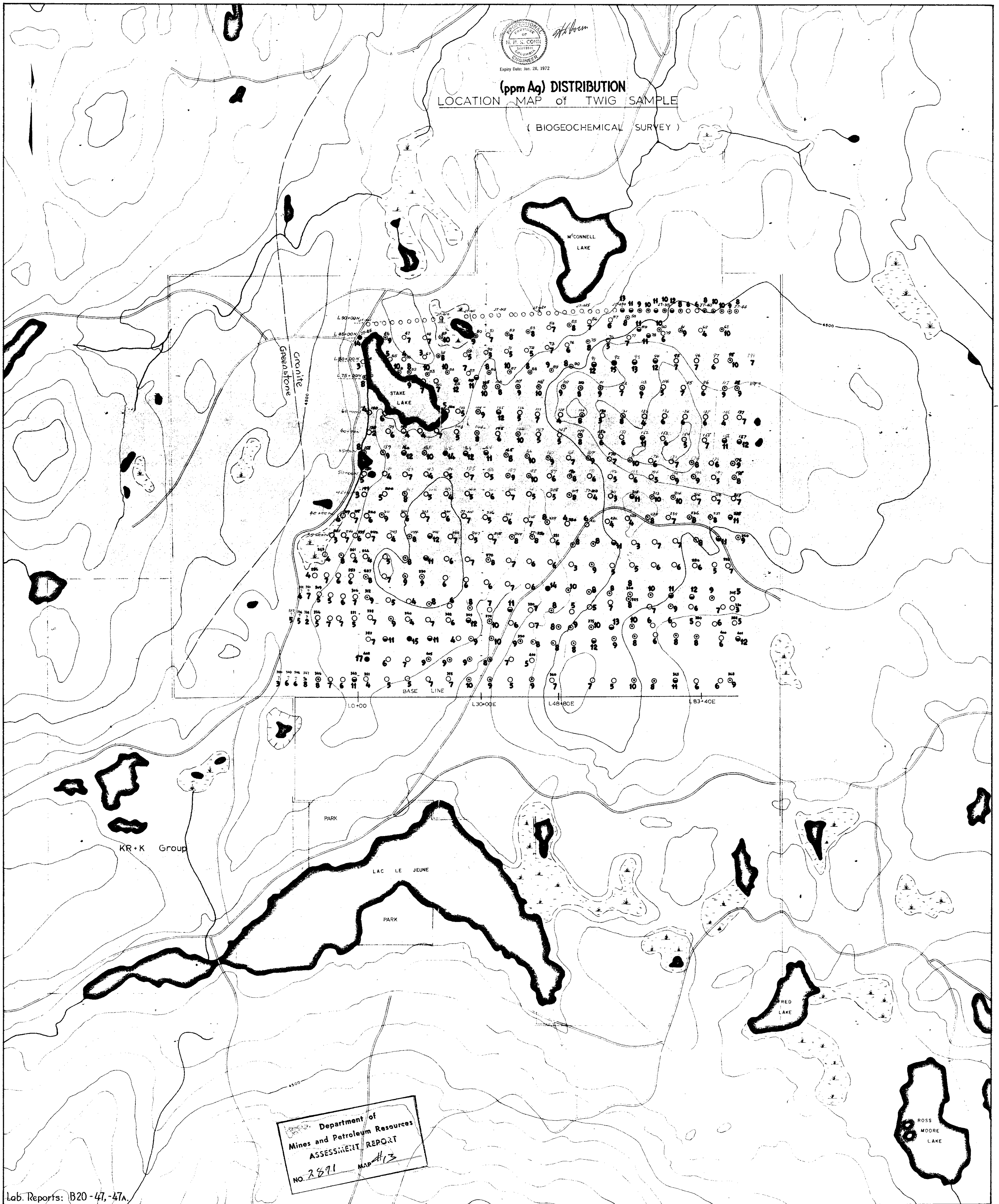


Department of
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MKP dr

Lab. Reports: B20-7,-47,-47A.



(ppm Ag) DISTRIBUTION
LOCATION MAP of TWIG SAMPLE
(BIOGEOCHEMICAL SURVEY)



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2891 MAP #13

Lab. Reports: B20-47, -47A.

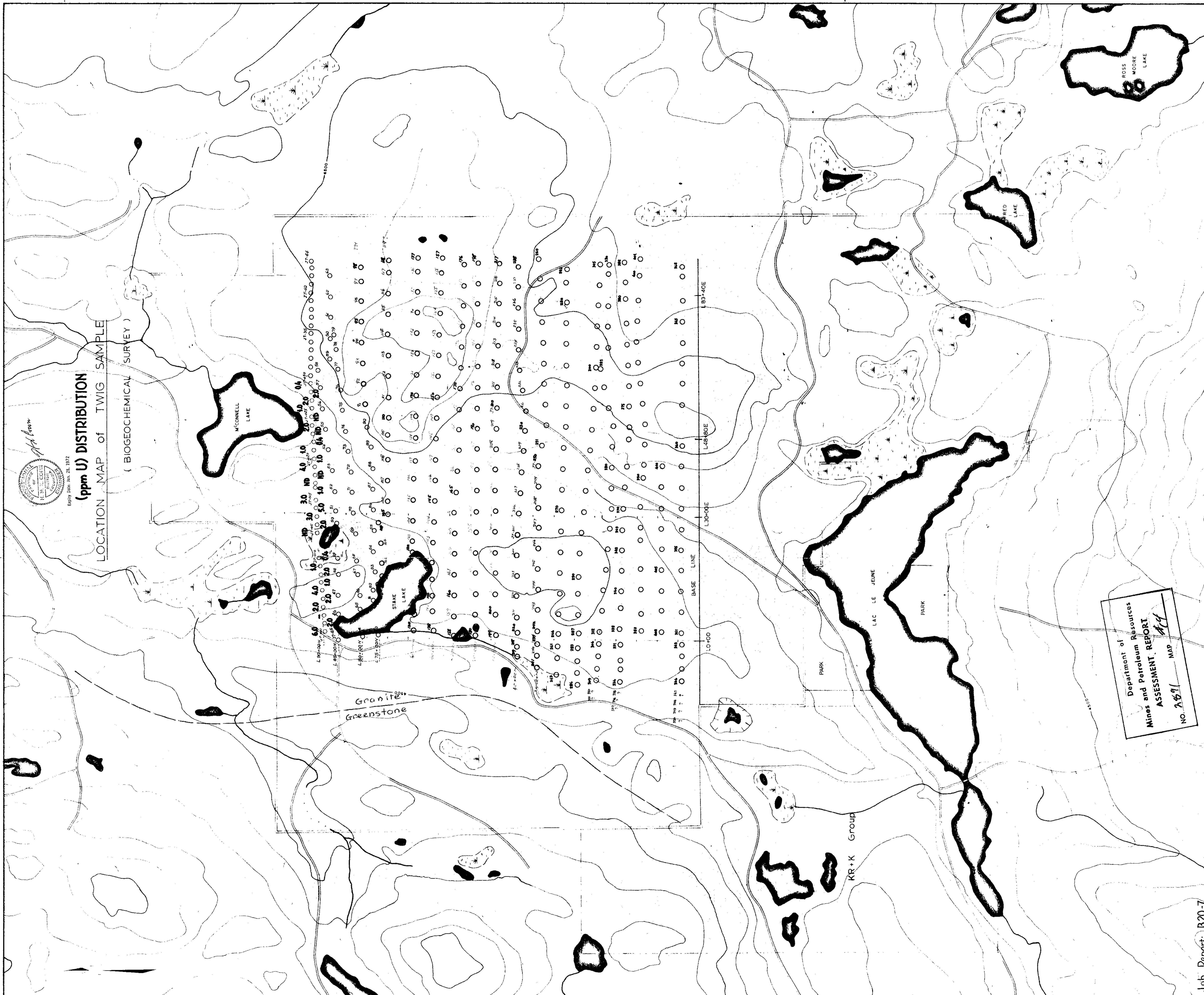


ESQ 200 JUN 28 1972

(ppm U) DISTRIBUTION

LOCATION MAP of TWIG SAMPLE

(BIOGEOCHEMICAL SURVEY)

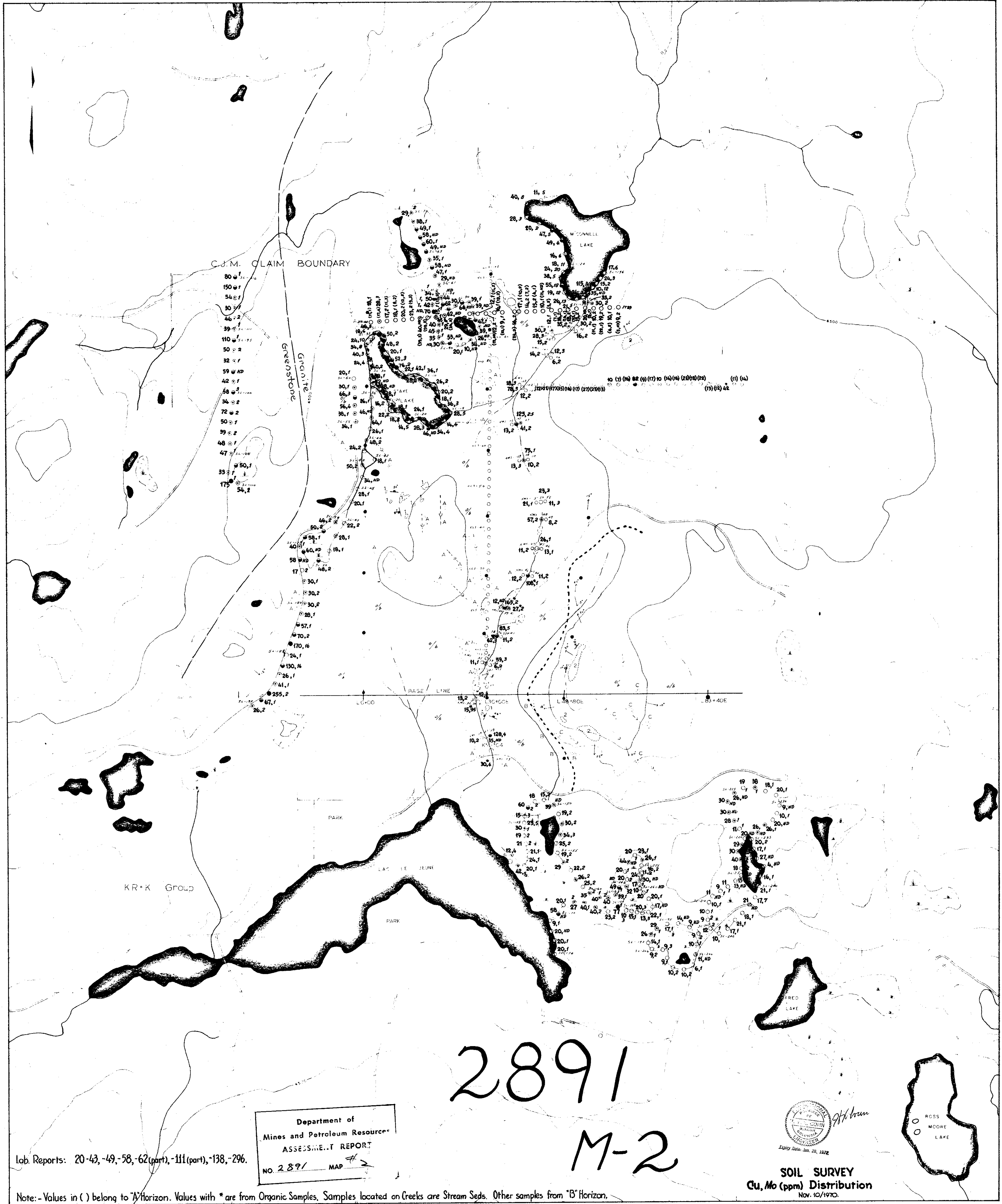


Granite
Greenstone

KR+K Group

LAC LE JEUNE

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
MAP
NO. 2691



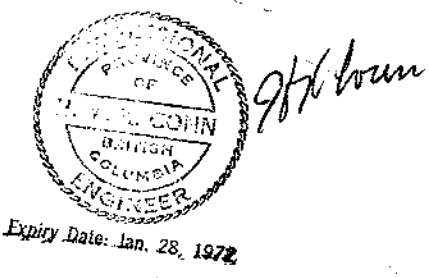
C.J.M. CLAIM BOUNDARY

Greenstone

- 80 @ 1
- 150 @ 1
- 54 @ 1
- 30 @ 1
- 46 @ 2
- 39 @ 1
- 110 @ 1
- 50 @ 2
- 32 @ 1
- 59 @ ND
- 42 @ 1
- 58 @ 3
- 34 @ 2
- 72 @ 2
- 50 @ 1
- 39 @ 2
- 48 @ 1
- 47 @ ND
- 33 @ 1
- 17 @ 1
- 54 @ 2

2891
M-2

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2891 MAP # 2



SOIL SURVEY
Cu, Mo (ppm) Distribution
Nov. 10/1970.

Lab. Reports: 20-43, -49, -58, -62(part), -111(part), -138, -296.

Note: - Values in () belong to "A" horizon. Values with * are from Organic Samples. Samples located on Creeks are Stream Seds. Other samples from "B" horizon.

Canadian Johns-Manville Co. Ltd.
Exploration Dept., Asbestos, Que.

LAC LE JEUNE - #410.
Kamloops Area, B.C.

SCALE 1" = 1000 FEET

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