3305

GEOCHEMICAL AND GEOLOGICAL REPORT

ON THE

ICE CLAIMS

FORSTER CREEK AREA

GOLDEN MINING DIVISION, BRITISH COLUMBIA

FOR

CANADIAN JOHNS-MANVILLE COMPANY, LIMITED

EXPLORATION DEPARTMENT

P.O. BOX 1500 - ASBESTOS, QUEBEC

COVERING: ICE CLAIMS #1 - #22

LOCATED : 1) 50°40'N - 116°29'W

2) N.T.S. MAP 82K/N.E.

3) On Can Sup Creek, small tributary flowing south to join the upper reaches of Forster Creek, approximately 19 miles west of Radium Hot Springs, B.C.

C.J-M PROJECT: 407

WORK PERIOD : July 16 to 21, 1971

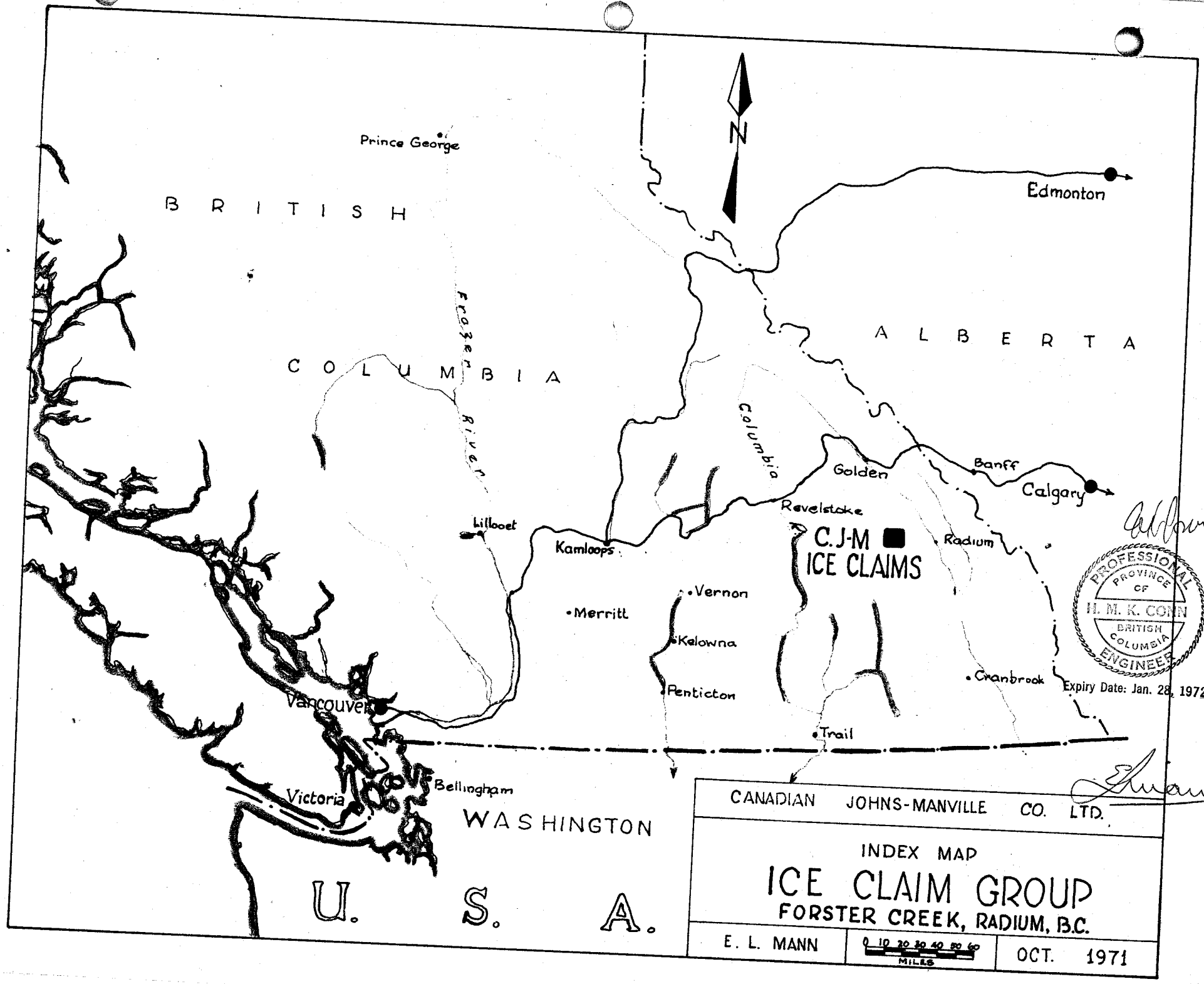
REPORT DATE : October 1971

E.L. MANN

&

H.K. CONN, P. ENG.

Expiry Date: Jan. 28, 1972



CANADIAN JOHNS-MANVILLE CO. LTD.

INDEX MAP

ICE CLAIM GROUP

FORSTER CREEK, RADIUM, B.C.

E. L. MANN | 0 10 20 30 40 50 60 MILES | OCT. 1971

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
H. M. K. CONN

Expiry Date: Jan. 28, 1972

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LIST OF MAPS:

INTRODUCTION:

General:

In October 1970 personnel of Canadian Johns-Manville Company, Limited staked the 22 ICE claims and carried out reconnaissance geochemical stream sediment and limited talus and soil sampling in the vicinity of Can Sup Creek, a small tributary on the north side of Forster Creek, Golden Mining Division, British Columbia.

From July 16 to 20, further geochemical sampling and geological prospecting were conducted over portions of this claim group.

A total of 95 geochemical samples were collected from the vicinity of the contact between the Horsethief Stock and the surrounding sediments; the results of this sampling and geological prospecting completed in July are presented in this report.

Location and Access:

The ICE claims are located on a small water course named Can Sup Creek as the area was formerly covered by claims staked by Canadian Superior Exploration Limited. Can Sup Creek drains southwards into the headwaters of Forster Creek approximately 19 miles west of Radium Hot Springs, at the junction of Routes 93 and 95.

The area is accessible by logging road from Radium. As the terrain is rugged, use of a helicopter greatly facilitates access to the claims along the ridge and that portion of the claim group where most of our current work has been concentrated.

Physiography and Vegetation:

The Ice claim group is situated on the steep valley slopes north of Forster Creek at elevations varying from approximately 5,300 feet on the valley floor to over 8,500 feet along the crest of the ridge which forms the divide to Frances Creek to the north.

Physiography and Vegetation: (Cont'd)

Most of the claim group is characterized by stunted stands of pine, fir and juniper between rocky outcrops along the steep slopes of the valley. Dense alder stands are common along the water courses and below areas of talus screes. The tree line in this area occurs at about 8,000 foot elevation.

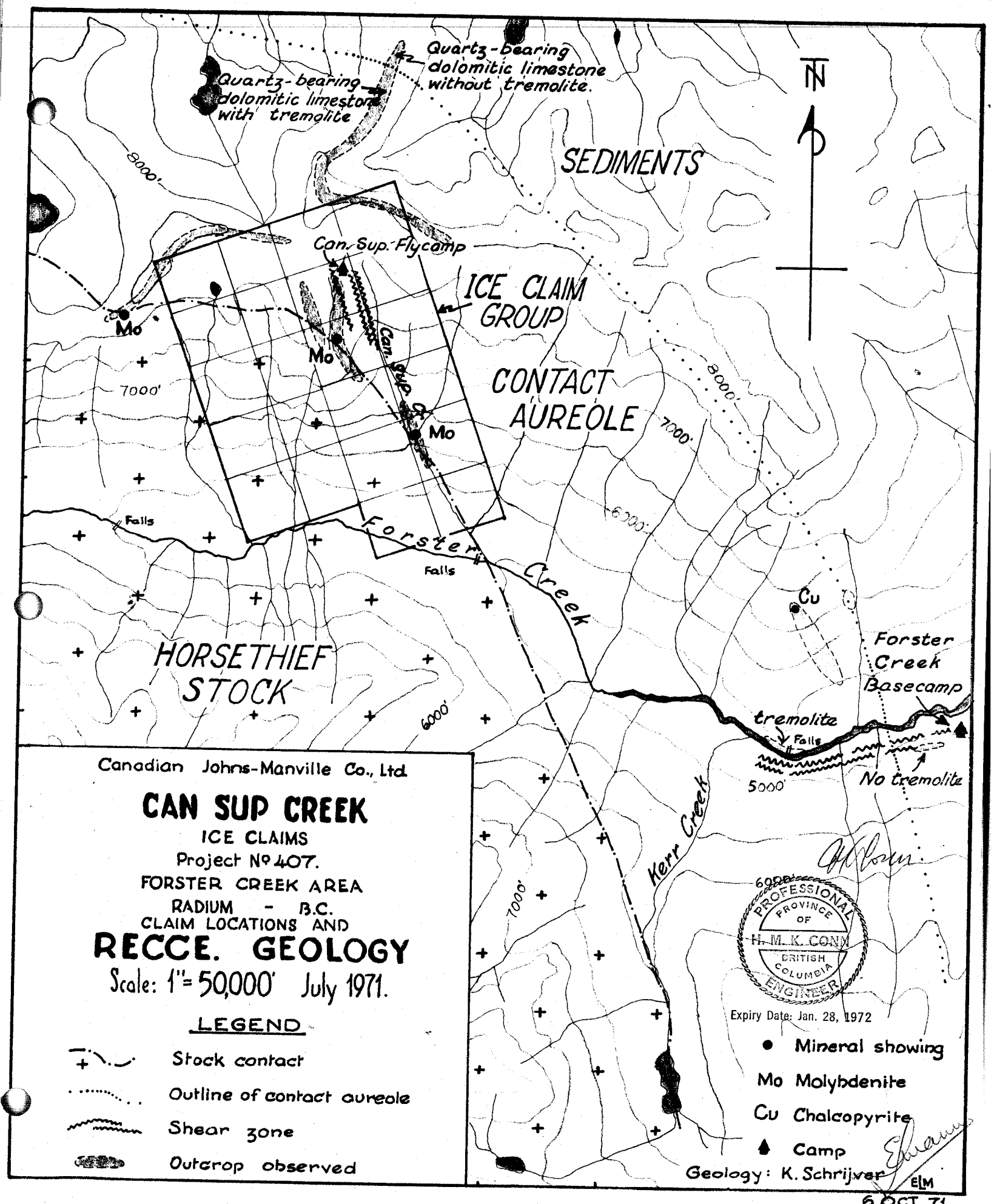
GEOLOGY:

The claim area straddles portions of the northeast margin of the Horsethief stock, a granitic pluton of Cretaceous age which has intruded Precambrian metasediments of the Purcell formation of southern British Columbia.

Exposures within the Horsethief stock in the vicinity of the Ice claim group are typically coarse-grained quartz-biotite-muscovite, while those of the Purcell formations include argillite, quartzite, dolomite and slate. The contact between the intrusive stock and the surrounding sediments is marked by a sharp vertical contact, though minor granitic apophyses and small aplite dykes are not unusual within 100 feet or so of the stock itself.

A definite metamorphic effect can be traced within an aureole approximately one mile wide beyond the contact of the stock. The thermal effects of the intrusive are shown by the presence of high temperature low pressure metamorphic minerals such as muscovite, biotite, andalusite, cordierite, epidote, garnet, diopside forsterite, serpentine and wollastonite.

Superimposed on this is also a marked chemical or "metasomatic" effect indicated by the presence - locally great abundance - of sulphides in a halo up to 1/2 mile from the stock. The sulphides are almost exclusively iron sulphides - pyrite and locally pyrrhotite.


Quartz-bearing dolomitic limestone without tremolite.
Quartz-bearing dolomitic limestone with tremolite
SEDIMENTS
N
8000'
Can. Sup. Flycamp
ICE CLAIM GROUP
Mo
Mo
Mo
Can. Sup. Cr.
CONTACT AUREOLE
7000'
8000'
7000'
6000'
Falls
Forster Creek
Falls
Cu
Forster Creek Basecamp
tremolite
Falls
No tremolite
5000'
HORSETHIEF STOCK
6000'
Kerr Creek
7000'
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
H. M. K. CONN
Expiry Date: Jan. 28, 1972
Canadian Johns-Manville Co., Ltd.
CAN SUP CREEK
ICE CLAIMS
Project No 407.
FORSTER CREEK AREA
RADIUM - B.C.
CLAIM LOCATIONS AND
RECCE. GEOLOGY
Scale: 1"= 50,000' July 1971.
LEGEND
Stock contact
Outline of contact aureole
Shear zone
Outcrop observed
Mineral showing
Mo Molybdenite
Cu Chalcopyrite
Camp
Geology: K. Schrijver
ELM
6 OCT 71.

GEOLOGY: (Cont'd)

These, on oxidizing, give rise to the intense ferriginous gossan staining (rusty-brown, ochre-red, yellow, bluish black) in the sediments. Traces of chalcopyrite and bornite have been noted in a few places but, in the vicinity of the Ice claim group, no copper mineralization has been observed to substantiate the anomalous copper geochemical results.

Traces of molybdenite mineralization, however, have been observed in at least three localities within the claim area. The following observations are excerpted directly from Mr. K. Schrijver's geological report on work done in the Can Sup Creek area.

"A heterogeneous contact zone, up to 200 feet wide, separates the homogeneous coarse-grained quartz-monzonite (or, rather; adamellite) of the Horsethief Stock from spotted, vaguely laminated, hornfelses. The contact zone consists of spotted, clearly laminated, hornfelses cut by a network of aplite dykes and stringers (width ranging from 50 cm to 0.5 cm), as well as by some 30 to 50 cm wide apophyses of coarse-grained, porphyritic adamellite. In both rocks, aplite dikes and adamellite apophyses, traces of molybdenite have been found within 50 feet of the homogeneous, coarse-grained adamellite of the stock. The mineral occurs in flakes, up to 2 mm in diameter, within these rocks and does not seem to be preferentially distributed.along joints or "fractures". The rocks are whitish to light rusty-brown - unlike the pinkish and mauve colors displayed by adamellite and aplite within the stock - and have dark rusty-brown stained joint planes. No other alteration has been noted in close association with the molybdenite mineralization. Quartz veins and stringers in the Contact Zone are not mineralized and have no mineralization associated with them.

"In the molybdenite-bearing exposures, as well as in the homogeneous coarse-grained adamellites of the Horsethief Stock, wherever observed,

GEOLOGY: (Cont'd)

many - but not all - joint planes are coated with light-green mica (muscovite), quartz, and may or may not be covered with small (one to 2 mm) pyrite cubes. Commonly, the mauvish or purplish alkali-feldspar (perthite) megacrysts bordering such joints are slightly or markedly salmon-pink, whereas the whitish plagioclase assumes a light green color and is quite soft (alteration of plagioclase into sericite, kaolinite and/or saussurite?) It is noteworthy that an increase in the abundance of alkali-feldspar along these joints is definitely absent. In fact, in some relatively thick (e.g. 5 cm), pervasively altered (sericitized, silicified, pyritized) zones bordering joints, alkali-feldspar is entirely absent. This is in accordance with the instability of K-feldspar, biotite, and plagioclase in Rose's (1970, Economic Geology 65, pages 921-922) "quartz sericite alteration type". Mineralization other than pyritization has not been observed."

It was clearly established, in the Can Sup area, sets of altered joint planes have the following attitudes from place to place:

110/60 S

125/63 SW

125/45 SW

"Locally, other sets of joint planes show similar, but very slight, alteration, but not as consistently as the sets referred to above.

"The width of the contact-metamorphic aureole around the Horsethief Stock, as indicated by the occurrence of tremolite in quartz-bearing dolomitic limestones, could be determined along the ridge north of Can Sup fly camp (see map). Since the contact of the H.S. with the meta-sediments is approximately vertical here, the horizontal width as measured on the map (1.25 miles) is a good estimate of the true width of the aureole.

GEOLOGY: (Cont'd)

The pelitic rocks (shales, argillites), however, at a distance of more than 0.5 miles from the H.S., do not show any recognizable metamorphic minerals or "spots". The only feature of their possible contact-metamorphic nature seems to be an induration and a closely-spaced, blocky fracturing.

The rusty-brown to ochre-red gossan in the upper part of the Can Sup cirque and west and northwest of the cirque, is caused by oxidation/hydration of pyrite. The mineral (pyrite) occurs as fillings of numerous hair-line fractures in argillites, and disseminated throughout an unidentified, fine-grained, light-grey, soft, metasedimentary rock (dolomite? talc-bearing?) in the Can Sup area. In the latter form, it may make up to 1% of the rock. No other sulphides were observed."

Strong east-west shearing has been noted at the falls on Forster Creek and near the main C.J-M base camp further east. Strong shearing has also been observed near the headwaters of Can Sup Creek. This shearing strikes west of north and continues tangentially into the sediments where the contact of the stock swings westwards. Observations of this shearing are based on the irregularly curving, closely-spaced fissility ("shear planes") in the rocks in this area.

GEOCHEMICAL SURVEY:

Field Methods:

Sampling was confined mainly to the 7,000 and 8,000 foot contours, with some additional sampling across the top of the ridge at approximately the 8,350 foot contour. Samples were located by pacing, at 200 foot intervals along contour traverses controlled by altimeter. Actual sample stations were marked on the ground by red flagging.

Samples are coded and identified in the field by the following system:

Field Methods: (Cont'd)

F - symbolizing the Forster Creek area, followed by T, S or L (talus fine, soil or stream sediment sample), and then a number.

Ninety-five samples were collected in the area, commencing with number 3001 and ending with 3095. It should be noted that samples collected previously are denoted by a shaded circle and the results of this sampling have not been used in this report.

Other data recorded at sample sites are as follows:

1. Color
2. Texture
3. Direction of drainage slope
4. Discharge of water in the case of stream sediment samples
5. Soil horizon and depth
6. Remarks concerning rock types, limonitic stain and jointing

The majority of samples taken were talus fines, the others being dubious soils or stream sediment samples. The talus samples were collected between broken rubble, crevices, ledges, etc., and might or might not give a true representation of the particular area. The soil samples had some grass and moss covering and they were usually further down slope or at the bottom of cirques. Particular attention was given to seepages, catchment basins where drainages from more than one area might lodge, contact zones, rusty gossan areas, and the like. Occurrences of any mineralization are indicated on the data sheets.

Analytical Techniques:

The 95 geochemical samples were forwarded to the Vancouver laboratories of Bondar-Clegg & Company and analysis for Mo and Cu. The samples were dried at 40 to 50^{o}C in infra-red ovens and sieved to -80 mesh in Tyler screens.

An aliquot of the -80 mesh fraction was digested in Hot Aqua Regia and tested by the Atomic Absorbtion method for Mo and Cu. Detection limits for these elements are one ppm in both instances.

A SUMMARY OF

THE ANALYTICAL METHOD (USING A COMPUTER TECHNIQUE)

BY: M. Assaad

The general formulas used for estimating the mean and the Standard deviation of sample results were:

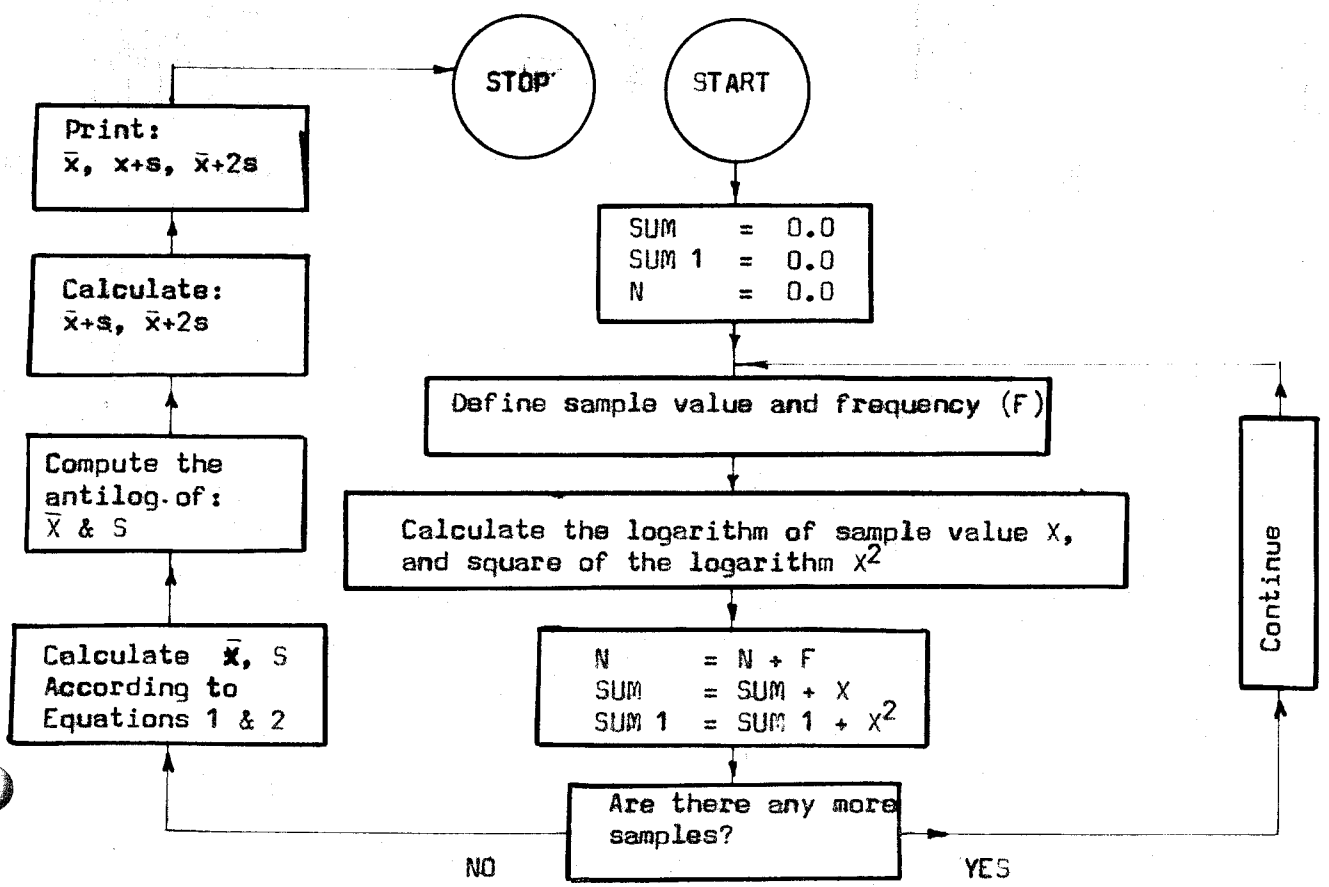
$$\bar{x} = \frac{1}{N} \sum_{i=1}^{N} X_i \quad \ldots\ldots\ldots\ldots\ldots\ldots (1)^*$$

AND

$$S = \sqrt{\frac{\sum_{i=1}^{N} X_i^2 - \frac{(\sum_{i=1}^{N} X_i)^2}{N}}{N-1}} \quad \ldots\ldots\ldots\ldots (2)^*$$

WHERE X = Logarithm of sample result in ppm
AND N = Total number of samples

FLOW CHART OF THE COMPUTER PROGRAM

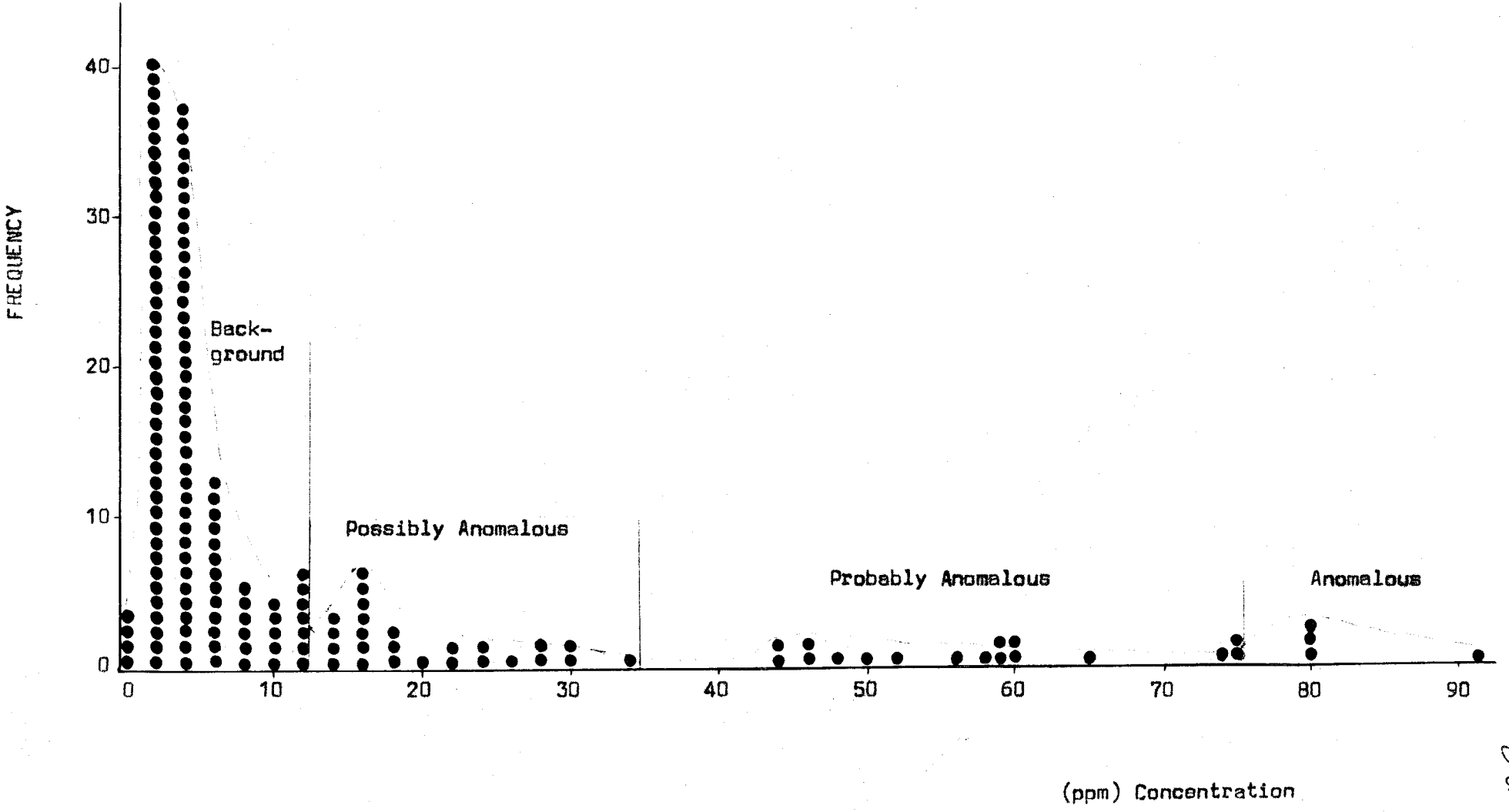


* (Basic Statistical methods - A.M. Neville & J.B. Kennedy - International Textbook Company)

PROJECT 407 - CAN. SUP. CREEK, ICE CLAIMS GROUP
BONCO REPORT - 21-439 - July 1971
165 samples

HISTOGRAM OF MOLYBDENUM DISTRIBUTION

By: M. Assaad - Oct. 1971

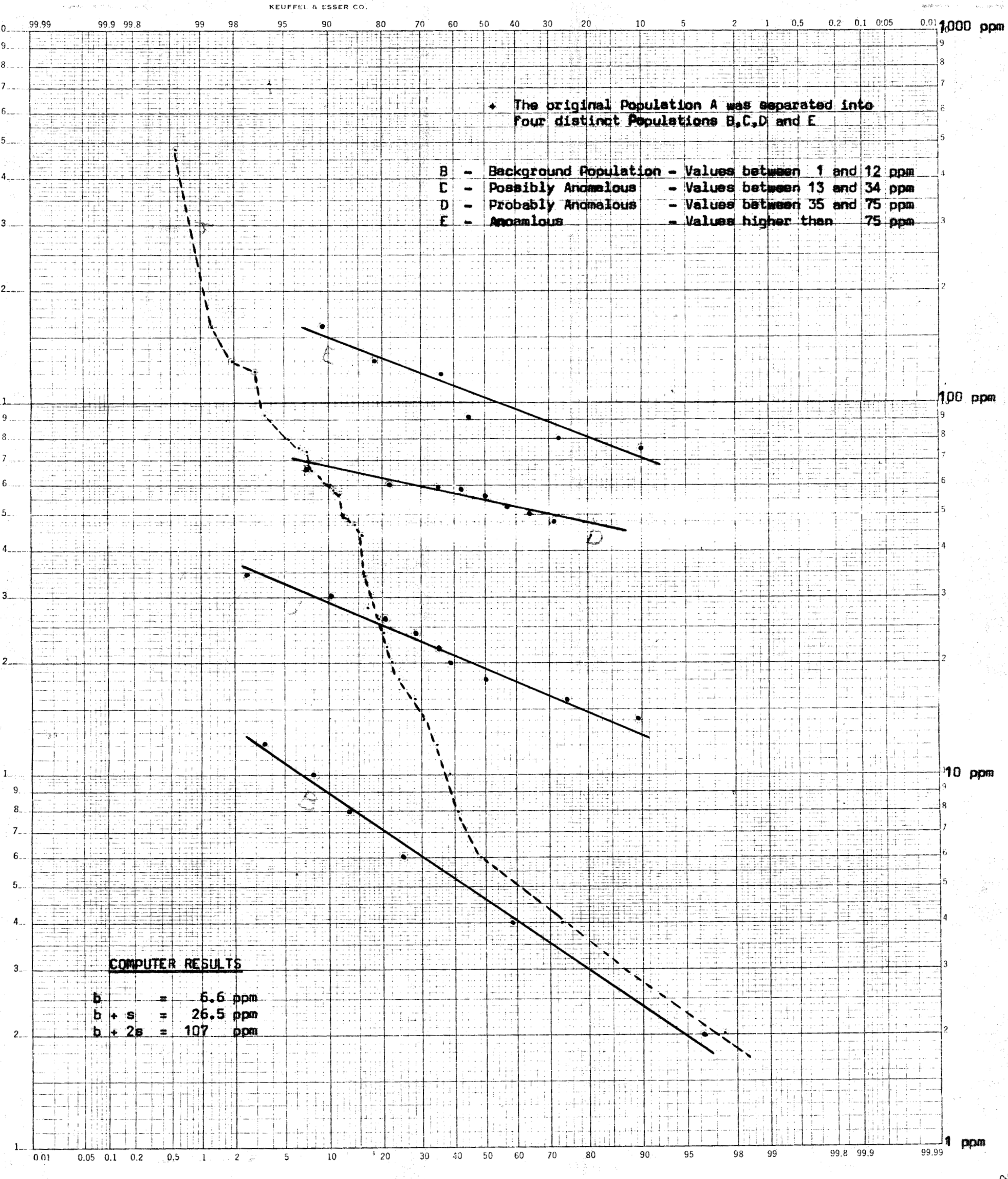


Cumulative Frequency Distribution of Molybdenum
by M. Assaad - October 1971

CAN. SUP. CREEK, ICE CLAIMS GROUP - PROJECT 407

BONCO REPORT: 21-439 - JULY 1971

165 samples

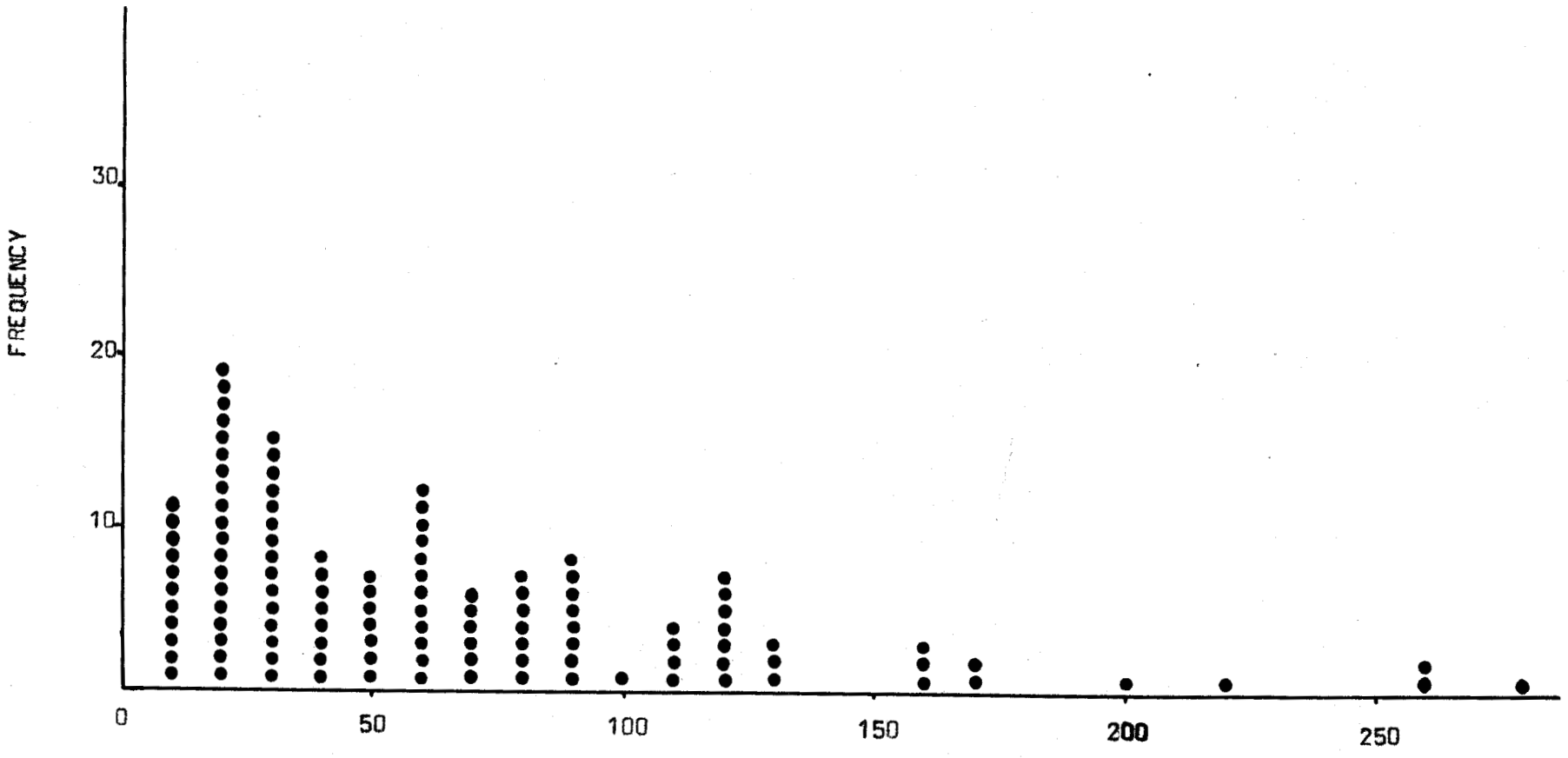


96

PROJECT 407 - CAN. SUP. CREEK, ICE CLAIMS GROUP
BONCO REPORT - 21-439 - July 1971
117 samples

HISTOGRAM OF COPPER DISTRIBUTION

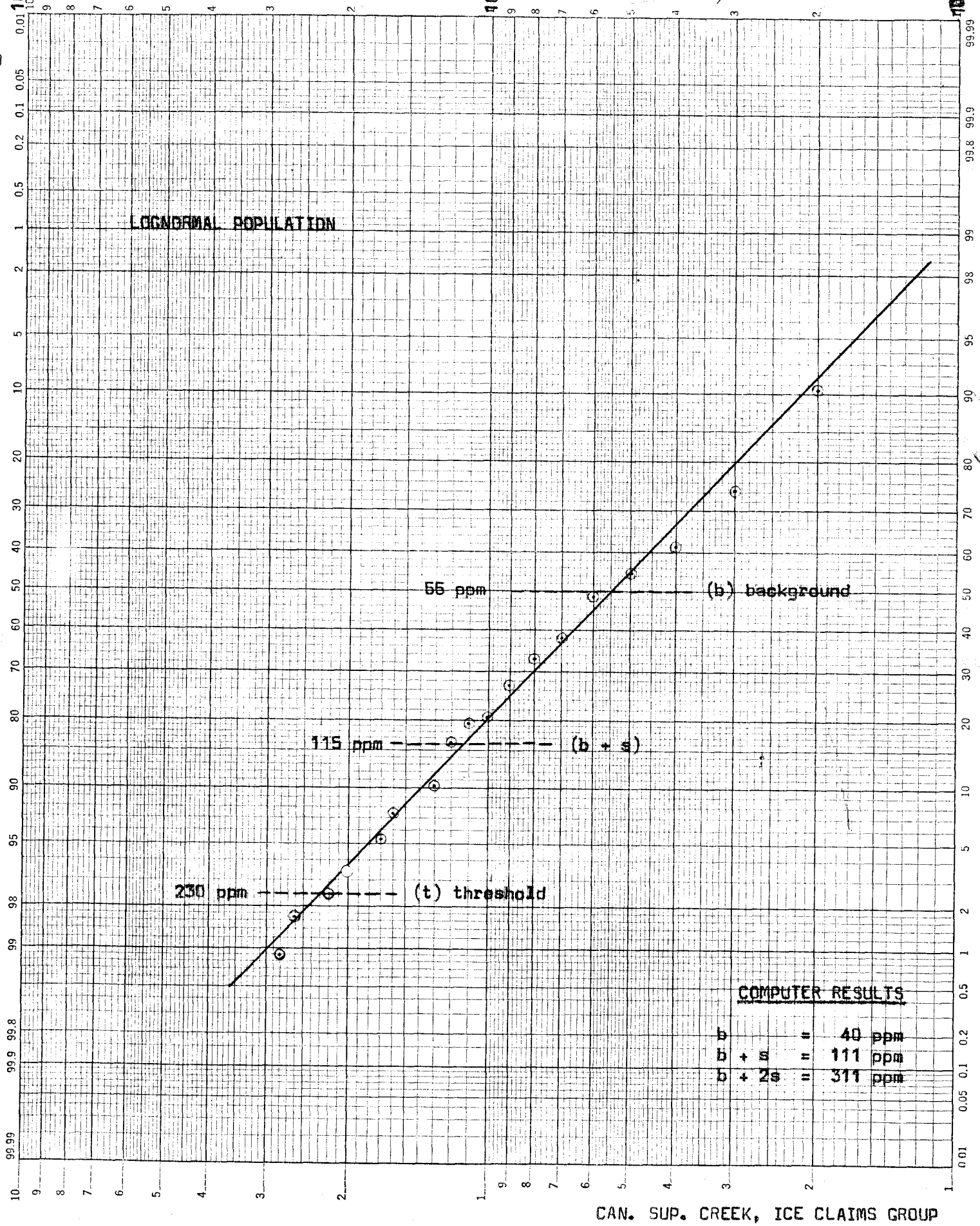
By: M. Assaad - Oct. 1971



Cumulative Frequency Distribution of COPPER

By: M. Assaad - October 1971

BONCO REPORT: 21-439
(July 1971)
117 samples



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

CAN. SUP. CREEK, ICE CLAIMS GROUP
PROJECT 407

Statistical Analysis of Results:

The analytical results were computed statistically according to the enclosed computer technique described by Mr. M. Assaad.

Because of the limited number of samples and the dubious classification of some of the soils and seep samples, all samples were treated as representing one population.

The statistical analysis was used to classify the samples into negative, possibly anomalous, probably anomalous, and anomalous groups.

Presentation of Data:

Sample stations with numbers are shown on the enclosed Sample Location Map which also delineates the contact between the Horsethief Stock and the surrounding metamorphic aureole. Key geological exposures are also indicated on this map.

The geochemical results have been plotted at each sample station on separate maps for both Mo and Cu, and all anomalous results are indicated by standard symbols.

A Legend showing the anomalous classes is shown on each map. To illustrate the similarity in the distribution and shape of the anomalies, the map "Geochemical Anomalies" is presented.

DISCUSSION:

The main objective of this geochemical survey was to try to extend the reconnaissance geochemical survey, which led to earlier discoveries of traces of molybdenite mineralization on Can Sup Creek.

A glance at the present survey results indicates a marked concentration of anomalous Mo and Cu values along the immediate contact zone and in the adjacent sediments. The Mo anomalies are coincident with actual molybdenite showing located in outcrop.

DISCUSSION: (Cont'd)

In the case of Cu, no trace of copper mineralization has been found to corroborate the geochemical anomalies.

In a few places the anomalies are seen to extend away from the immediate contact zone, e.g. at the headwaters of Can Sup Creek, but this divergence can probably be attributed to the tangential shearing observed in this area.

The anomalies also explain the high values obtained along the previously surveyed 6,000 foot contour line as these anomalous samples are definitely located on or adjacent to drainage channels which originate close to the contact.

Mo:

Examination of the histogram of Molybdenum distribution shows a typical assymetric logarithmic distribution with a scattering of values in the higher ranges. A plot of the Cumulative Frequency Distribution of this element does not produce the normal straight line distribution but shows three or possibly four separate populations. Replotting these four separate populations gives straight line distributions for each of these and the degree of anomalousness is taken at the cut-off of each group.

i.e.	1 - 12 ppm	Background population
	13 - 34 ppm	Possibly anomalous
	35 - 75 ppm	Probably anomalous
	+75	Anomalous

Classification of the results by the Standard Deviation method gave values which differ somewhat from the above:

b	=	6.6 ppm
b+s	=	26.5 ppm
b+2s	=	107 ppm

Where b is the geometric mean, and s is the standard deviation

Mo: (Cont'd)

Owing to the fact that the samples were collected from a relatively small area, and that much of this area was actually anomalous, it was decided to modify these values and the following cut-offs were used.

Background	0 - 5
Possibly anomalous	6 - 19
Probably anomalous	20 - 39
Anomalous	40 - 99
Highly anomalous	100+

The resulting contoured plot has a tendency to amplify the area of the anomaly slightly but, when compared with values from the surrounding areas, these results do not appear to distort the importance of these anomalies.

The key anomalies are definitely associated with the contact zone of the Horsethief Stock and the surrounding sediments along much of its length. The larger anomaly runs directly up the slope along the granite contact.

Near the area where the contact turns sharply west, the anomaly widens and diverges away from the contact onto the sedimentary rocks. This is attributed to the strong tangential shearing in this vicinity which has allowed the penetration of the mineralizing solutions.

The second molybdenum anomaly is smaller in size, but of similar intensity to the one already described. This anomaly is again associated with the contact zone of the Horsethief Stock being located near the limit of the sampling in the northwest corner of the claim block.

Traces of molybdenite have been noted from at least three localities along the contact.

Cu:

The histogram for Cu shows a fairly erratic and skewed distribution of values.

Cu: (Cont'd)

Presentation of the same data on a Cumulative Frequency diagram plots as a straight line, representing a single population. Because of this straight line distribution, the classification of the results is best accomplished using standard deviation as follows:

(b)	background =	geometric mean	50 % =	55 ppm
		b+s	84 % =	115 ppm
(t)	threshold	b+2s	97.5% =	230 ppm

Calculation by computer for these same points gave b = 40 ppm, b+s = 111 ppm, and b+2s = 311 ppm.

For the purposes of this study, these values have been simplified slightly as follows:

background	0 - 49
possibly anomalous	50 - 124
probably anomalous	125 - 199
anomalous	200+

Contouring of the Cu anomalies shows a marked resemblance to those of molybdenum with a large anomaly parallelling the contact immediately to the west of the headwaters of Can Sup Creek and a second smaller anomaly near the northwest corner of the claim block.

This is especially true for the highly anomalous areas, whereas in areas of lower values, the dispersion haloes tend to differ somewhat.

As stated previously, no trace of copper mineralization has been recognized in the area. However, the contact zone displays prominent gossan coloring which is derived primarily from the pyrite mineralization common throughout most of the contact metamorphic aureole - and it could be that the occurrence of any copper minerals has been masked by the general rusty coloration.

The anomalies in detail follow the contact of the Horsethief stock and the sediments closely.

Cu: (Cont'd)

But, as in the case of Mo, there is a definite extension of the zone in the area of tangential shearing near where the contact changes direction from northwest to west.

CONCLUSIONS & RECOMMENDATIONS:

The distribution of Cu and Mo anomalies definitely indicates the contact zone of the Horsethief Stock and the adjacent Purcell Formation metasediments to be the source of mineralization.

Furthermore, the negative results of the rocks away from the contact suggest a definite enrichment of both Mo and Cu along this contact zone.

In view of the indications of molybdenite mineralization associated with this contact zone of the Horsethief stock and the intensities of both the Mo and Cu, it is recommended that the Ice claims #2, 4, 6, 19, 20, 21, and 22 be kept in good standing until the best molybdenite showings associated with the contact of the Horsethief stock are evaluated and proved economic or otherwise.

COST ANALYSIS - ICE CLAIMS

A.	**Geochemical Survey:**		
	1. Labor Cost: July 16-20, 1971		
	W. Burry, Sampler 5 days @ $25 per day	$ 125.00	
	B. Dykeman, Sampler 5 days @ $20 per day	100.00	
			$ 225.00
	2. Camp Cost: July 16-20, 1971		
	10 man days @ $7 per man day		70.00
	3. Helicopter Cost: (Transportation for Fly Camp)		
	Biggs Helicopter Service: July 16 - 1.0 hours @ $150 per hour July 20 - 1.3 hours @ $150 per hour		345.00
	4. Analytical Cost:		
	95 samples analyzed at Bondar-Clegg & Co., Vancouver, B.C., for Cu and Mo @ $1.60		152.00
	5. Drafting and Plotting:		
	A. Therrien - 1/2 day @ $32.30	$ 16.15	
	D. Williamson - 1 day @ 14.62	14.62	
			30.77
	6. Interpretation		50.00
			$ 872.77
B.	**Geological Survey:**		
	1. Labor Cost: July 16-21, 1971:		
	K. Schrijver, Geologist 6 days @ $46.15	$ 276.90	
	D. Gardner, Geologist 6 days @ $25.00	150.00	
			426.90
	2. Camp Cost: July 16-21, 1971		
	12 man days @ $7 per day		84.00
	3. Preparation of Report		50.00
			$ 560.90
T O T A L			$ 1,433.67

STATEMENT OF QUALIFICATIONS

I, Ernest Leigh Mann, of the town of Asbestos, do hereby declare that:

1. I am a geologist employed as Chief Geologist for Canadian Johns-Manville Company, Limited, P.O. Box 1500, Asbestos, Quebec.

2. I have practiced in the geological profession for about twenty years, most of which have been in the field of exploration and economic geology.

3. I am a graduate of the University of Natal, South Africa, with a B.Sc. (1949), B.Sc. (Hons) 1951, and M.Sc., (1955). I also graduated from McGill University with a Ph.D. in 1959.

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

   (a) Fellow of the Geological Society of South Africa

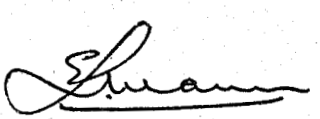
   (b) Fellow of the Geological Association of Canada

   (c) Member of the Canadian Institute of Mining and Metallurgy

   (d) Member of the Association of Exploration Geochemists

   (e) Member of the Quebec Professional Geologists' Society

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



October 1971

E.L. Mann, Ph.D., Chief Geologist
Canadian Johns-Manville Co., Limited

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 twenty-two years and specialized in economic geology and exploration procedures for the past twenty-one 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.

October 1971

H.K. Conn, P. Eng., Exploration Manager
Canadian Johns-Manville Co., Limited

GEOCHEMICAL SURVEY DATA

CANADIAN JOHNS-MANVILLE Co. Ltd.

Recopied by #1 Bruce Patterson

GEOCHEMICAL SOIL SURVEY DATA

BONCO 21-439

COLLECTOR: W J Bunny — 8,000' contour

AREA: Forester Creek (Can Sup)

DATE: July 17

PROJECT: LOT

LOCATION REF.: Radium

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESULTS
S-001		↙	Talus Golden little beg.	S/C	3-5"	G/B	fine	Taken from small Pocket of soil amongst talus	Rocks massive quartzite with heavy limonite staining (Elevation 8,100)
S-002	200'	↙		S/C	2-4"	B	fine	taken amongst talus boulders. little moss covering	covering in pond areas
S-003	400' ~~300~~	↙	Same Snow slide area	C	2"	B	fine	Soil taken on edge of Snow slide area could have come from top	Rocks here are very heavily stained. Are of type quartzite
S-004	600'	↙	"	C	2"	B	fine	Same as above	
S-005	800'	↙	boulders/soil	C	2"	B	fine	Rocks contain flecks of Pyrite. Very heavily limonite stained. Outcrop slope. Soil mainly transported from	
S-006	1000'	↙	" /snow	C	2"	B	fine	other areas. Rocks are heavily stained	
S-007	1200'	↙	O/C	C	2"	B	fine	Taken from pocket of soil at base of O/C approx. 200' east of granite Rock appears to be fracture, very fine grained	
FS-008	1400'	↙↙	O/C granite outcrop	ST/S	3-4"	G/B	fine	Taken from pocket of soil on top of granite near edge of contact N/D approx. Mineralization	
FS-009	1600'	↙↙	"	"	3-4"	G/B	fine	Same as above, little more moss covering & less trees	
FS-010	1800'	↙↙	O/C granite Bluff	S/ST	4"	B	fine	Taken on side of granite bluff. Some moss & grass covering.	
FS-011	2000'	↙↙	"	"	4"	B	fine	Same	
FT-012	2200'	↙↙	" " "	"	4"	B	fine	Sample taken among granite talus very rough going	
FT-013	2400'	↙↙	"	"	4"	B	fine	Sample taken 200' East of contour	
FT-014	2600'	↙↙	granite Bluff	S/C	2"	G/B	med	Taken from area of granite boulders Rugged.	
FT-015	2800'	↙	"	ST/S	2"	G/B	med	same	7,800'

CANADIAN JOHNS-MONVILLE Co. Ltd. #2

GEOCHEMICAL SOIL SURVEY DATA

$500'

COLLECTOR: W J Burry

AREA: Forster Creek (canlup)

DATE: July 17 1971

PROJECT: 407

LOCATION REF.: Radium

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESULTS
016	3000'	←	Gauge granite boulders few trees	S/g	# 3"	grey	med	Sample taken from small pocket of soil on top of granite boulders	
017	3200'	↙	"	"	"	"	"	Same 7900	
018	3400'	↙	"	"	"	B	fine	little soil covering on top of granite boulders.	
T 019	3600'	↙	"	"	"	"	"	Same	
T 020	3800'	↙↙	"	S/g	"	g/B	med.	" 7,950	
T 021	4000'	↙↙ cc	boulders granite	S/g	2"	g/B	fine	" 8000	
T 022	4200'	↙↙	"	"	"	"	"	" "	
T 023	4400'	↙↙	contact zone subcrop small	g	3"	B	fine	Heavily oxidization, some pyrite quartzite, Hornfels	
T 024	4600'	↙↙	quartzite subcrop Highly oxidized	g	2"	B	"	Same as above	
FT 025	4800'	↙↙	"	"	"	"	"	"	
T 026	5000'	↙↙	"	"	"	"	"	gossan zone Hornfel rubble	Quartzite pyrite
FT 027	5200'		"	"	"	"	"	Same	
FT 028	5400'	↙↙	gossan area	g	2"	B	"	"	
FT 029	5600'	↙↙	" "	"	"	"	"	Same	
FT 030	5800'	↙↙	"	"	"	"	"	Very heavy limo stained some pyrite.	

ACP 5343

9/c - [illegible]

3 #

CANADIAN JOHNS-MONVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

8000 contour

COLLECTOR: W Burry

AREA: Forester Creek (Can Sup)

DATE: July 17 / 71

PROJECT: # 407

LOCATION REF.: Radium

MPLE O.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESULTS				
	6000	NO	Sample	Camp rubble area									
T 31	6200	↙	SNOW Rock / some soil	ST/s	2"	B	med	Rock heavily stained (lim) mostly quartzite (8100 elevation)					
			July 18 / 71 (Sunday)										
L 32	-100	↙	sample taken from small stream approx 2'-3' wide	Silty sand		B	fine	Stream flowing out of small cirque (→ cirque) near camp					
S 033	-200	→	Some moss covering / few trees o/c	ST/s	2"	B	fine	Heavy lime staining on surface of o/c					
034	-400	→	o/c	ST/s	2"	B	fine	taken from pocket of soil at base of o/c / o/c heavily stained.					
T 035	-600	→	Side talus cirque slide	S/G	3"	B	"	taken among rubble on slide of cirque. rock type quartzite limestone slots. the texture.					
T 036	-800	→	taken base of limestone bluff	ST/s	2"	B	"						
AT 037	-1000	→	quartzite rubble limestone	C	2"	B	"	Same as above					
AT 038	-1200	→	"	ST/C	2'	B	"	" " "					
T 3039	-1400	→	Broken rock face / quartzite	ST/C	3"	B	fine	side of cirque broken rubble no mineralization					
AT 040	-1600	→	"	ST/s	3"	B	"	Broken rubble / argillite					
DS 041	1800	→	Some moss covering	ST/C	3"	Grey	"	Different rock structure (Grey Slaty Surface)					
PS 042	-2000	→	" "	"	3"	"	fine	same					
S 3043	-2200	→	" Juniper trees	ST/C	4"	"	"	"					

ACP 5343

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

#4

8000' contour

COLLECTOR: W J Bunny

AREA: Joister Creek can Sup.

DATE: July 18 /71

PROJECT: 207

LOCATION REF.: Radium

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESULTS
44	-2400	→	few trees/moss covered	ST/C	3"	grey	fine	side of slope moss covered few trees no apparent mineralization	
45	-2600	→	" "	ST/C	3"	grey	"	"	
46	-2800	→	" " "	ST/C	2"	grey	"	"	
47	-3000	→	boulders grass moss	ST/C	2-4"	grey	"	taken amongst C/C Some moss covering	No limonite staining or mineralization
48	-3200	→	" " area passes	C	2"	B	"	Rock heavily stained oxidation Rock grey/white - some pyrite	
49	-3400	→	" " rock broken shale	C	2"	B	fine	rock the same as above less oxidation	
50	-3600	→	" "	C	2"	B	"	Oxidation	
51	-3500	→	" "	C	2"	B	"	" "	
52	-4000	→	" "	C	2"	B	fine "	end of 8000 contour	Very heavy oxidation
			7500		contour				
3053	0'	↙	small stream	ST	-	grey	fine	Steam 6'-7' wide	
54	200'	↙	grass/trees	ST/C	3"	B	"	Lim. Stain	
55	400'	↙	Broken rock and Grass/talus	ST/C	2"	C/B	"	Some pyrite	
56	600'	↙	"	ST/S	2"	B	"	rusty rocks on outcrop grey in side).	
57	800'	↙	shale related shaley rock	ST/C	2"	B	fine	"	

CANADIAN JOHNS-MANVILLE Co. Ltd.

GEOCHEMICAL SOIL SURVEY DATA

COLLECTOR: W J Berry

DATE: July 18 1971

PROJECT: 407

AREA: 5th Forester Creek (Con Inp)

LOCATION REF.: Radium

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESULTS				
T 58	1000'	↙	argillite Broken rock	S/C	2"	B	Fine	broken rock rusty gossan area					
T 59	1200'	↙	same	S/C	"	"	"	same					
3060	1400'	↙	Different Rock	C	2"	grey	"	very little lim. stain					
S 061	1600'	↙	—	—	—	—	—	Some moss – Schrub covering					
S 062	1500'	↙	soil moss moss	St/C	2"	grey	fine	no mineralization. Very little lim. staining					
T 063	2000'	↙	Talus Slide	St/G	2"	"	"						
FT 064	2200'	↙	"	C	2"	R/B	"	bottom of gossan in large slide Heavy limonite staining					
FT 065	2400'	↙	"	C	2"	R/B	"	gossan area					
FT 066	2600'	↙	talus slide Same	C	—	—	—	"					
FT 067	2800'	↙	" "	"	"	"	fine	—					
FT 068	3000'	↙	Same	"	"	"	"	tallus shale Very rusty oxidized surface					
FS 069	3200'	↙	granite some overburden small trees	St/C	2"	grey	"	top of granite.					

CANADIAN JOHNS-MANVILLE Co. Ltd. 67

GEOCHEMICAL SOIL SURVEY DATA

6,350 Contour Top of ridge

COLLECTOR: W Burry
AREA: Forester Creek (Can Sup)

DATE: July 19
PROJECT: 407
LOCATION REF.: Radium

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESULTS				
S 070	south east 0'	↔	Top of ridge	S/G	2"	green B	fine	Rocks heavily lim stained Rusty area					
FT 071	200'	↔	Broken rubble	–	—	B	11	———					
FT 072	400'	↔	11	S/G	2"	11	fine	Different rock type grey surface some lim. staining					
FT 073	600'	→	11	G	—	Light B	fine	some limonite staining on surface					
FT 074	800'	→	11	G	—	R/B	11	very scaly ~~[illegible]~~ rock					
FT 075	1000'	↙	11	G	2"	11 11	11						
FT 076	1200'	↙↘	11	ST/G	2"	Grey	11	some moss, Broken rubble. some lime staining					
FT 077	1400'		11	G	4"	red ocre	fine	soil really red ocre colour					
FT 078	1600'	↙↘	11	G	4"	B.	11	Same as above near contact.					
FT 079	1800'	↙↘	11	G	4"	B	11	take on edge of contact					
	westerly ↓							→ Rock surface has yellow/reddish surface!					
FT 3080	600'	↗	11	G	2"	yellow/B	fine	yellowish red surface very Oxidized					
FT 3081A	700'	↔	11	Gravel	4"	R/ocre	11	ocre colour on tops and get					
FT 3081B	700'	↔	11	=	10"	yellow	11	yellow as you get deeper					
FT 3082	800'	↔	11	=	3"	Brown	fine	Reddish brown area					

ACP 5343

CANADIAN JOHNS-MANVILLE Co. Ltd. #7

GEOCHEMICAL SOIL SURVEY DATA

COLLECTOR: W.J Berry AREA: Forester (Can Sup)

DATE: July 19/71 PROJECT: 407 LOCATION REF.: Rackham

SAMPLE NO.	LOCATION	DRAINAGE SLOPE	PHYSIOGRAPHY	SOIL TYPE	HORIZON & DEPTH	COLOUR	TEXTURE	REMARKS	ANALYTICAL RESULTS
AT 30883	1000'	↔	Top of ridge Broken rubble.	C	4"	ocre	fine	again the soil is very red, there is pyrite in the rubble, very rusty zone	
AT 30884	1200'	←	—	—	—	—	—	same	
AT 30885	1400'	←	—	C	6"	ocre/red	fine	same	
AT 30886	1600'	←	—	C	6"	—	—	End	
			8000		contour.			Taken at bottom of cirque	
AT 30887	6600'		Broken hardpan	C	2"	B	fine	Same with lime. some Pyrite	
30888	6800'		—	—	—	—	—	talus very heavily stained	
30889	7000'	→	—	S/St	3"	B St/	fine	1	
T 30890	7200'	→	rock ridge talus	St/C	2"	B1	fine	taken on top of weathered granite	
30891	7400'	←	" " "	C	2"	Br	fine	talus stained	
30892	7600'	←	" " "	C	2"	Br	"	talus burnt up Pyrite present	
30893	7800'	←	Broken granite rock face	C	2"	Br	"	T contact zone gossan area	
30894	8000'	←	—	St/c	2"	Br	"	T granite / some lim?	
30895	8200'	←	—	—	—	-	fine	T	

Canadian Johns-Manville Co., Ltd.

CAN SUP CREEK

ICE CLAIMS

Project Nº 407.

FORSTER CREEK AREA

RADIUM - B.C.

Scale: 1"=1000'. Sept. 1971.

HORSETHIEF STOCK

METAMORPHIC AUREOLE

CAN SUP CREEK

FORSTER CREEK

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3305 MAP #3

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
H. M. K. CONN
Expiry Date: Jan. 28, 1972

SAMPLE LOCATION

Canadian Johns-Manville Co., Ltd.

CAN SUP CREEK

ICE CLAIMS

Project Nº 407.

FORSTER CREEK AREA

RADIUM - B.C.

Scale: 1"=1000'. Sept. 1971.

HORSETHIEF STOCK

METAMORPHIC AUREOLE

CAN SUP CREEK

FORSTER CREEK

Cu p.p.m. 200 100 50

Mo p.p.m. 40 16

H. M. K. CONN
BRITISH COLUMBIA
PROFESSIONAL ENGINEER
PROVINCE OF

Expiry Date: Jan. 28, 1972

GEOCHEMICAL ANOMALIES

Canadian Johns-Manville Co., Ltd.

CAN SUP CREEK

ICE CLAIMS

Project Nº 407.

FORSTER CREEK AREA

RADIUM - B.C.

Scale: 1"=1000'. Sept. 1971.

HORSETHIEF STOCK

METAMORPHIC AUREOLE

CAN SUP CREEK

FORSTER CREEK

Data Interpretation

○	0-5	NEGATIVE ANOMALOUS
⊕	6-19	POSSIBLY ANOMALOUS
⊖	20-39	PROBABLE ANOMALOUS
●	40-99	ANOMALOUS
●	>99	HIGHLY ANOMALOUS

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
H. M. K. CONN

Expiry Date: Jan. 28, 1972

Mo (ppm) DISTRIBUTION

Canadian Johns-Manville Co., Ltd.

CAN SUP CREEK

ICE CLAIMS

Project Nº 407.

FORSTER CREEK AREA

RADIUM - B.C.

Scale: 1"=1000' Sept. 1971.

HORSETHIEF STOCK

METAMORPHIC AUREOLE

CAN SUP CREEK

FORSTER CREEK

Data	Interpertation
0-49	NEGATIVE ANOMALOUS
50-124	POSSIBLY ANOMALOUS
125-199	PROBABLY ANOMALOUS
>199	ANOMALOUS

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
H. M. K. COHN
Expiry Date: Jan. 28, 1972

Cu (ppm) DISTRIBUTION