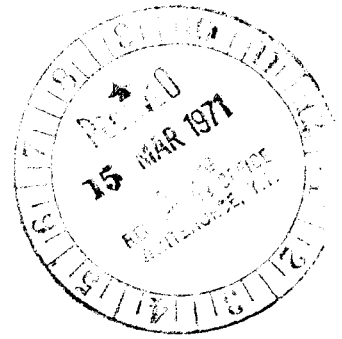


PHELPS DODGE CORPORATION OF CANADA, LIMITED



Geological and Geochemical Report  
on the Talbot Project claims  
'A', 'B' and 'K' Groups  
Claim Sheet 115G8  
Talbot and Rockslide Creek Area  
Yukon Territory

Approximately:  
Longitude: 138°08'W  
Latitude: 61°28'N

N.T.S. 115G8(E)



Work done during  
June 2 - September 22, 1970

By

F. M. Smith

January, 1971

This report has been examined by the Geological Evaluation Division and recommended to the Department of Mines and Technical Surveys as required by Section 53 (1) of the Yukon Mining Act.

43,341.34

*J. R. Craig*  
Inspector

Considered in accordance with work under Section 53 (1) of the Yukon Mining Act.

*[Signature]*  
Commissioner of Yukon Territory



RELIEF DATA INCOMPLETE IN THIS AREA

LOCATION MAP  
PROJECT NO. 98 - TALBOT  
SCALE 1" = 46 MILES APPROX.

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Talbot Molybdenum Cumulative %	Facing Talbot Molybdenum

### MAPS IN ACCOMPANYING POUCH

Talbot Prospect 17 June/70 ± 1":2000'
Talbot Project (Kluane Lake) Map 2, 1":400' Geology
Talbot Project (Kluane Lake) Map 3, 1":400' Geology
Talbot Project (Kluane Lake) Map 2, 1":400' Geochemistry
Talbot Project (Kluane Lake) Map 3, 1":400' Geochemistry

## GEOLOGICAL AND GEOCHEMICAL REPORT

### TALBOT PROJECT 98

#### Introduction:

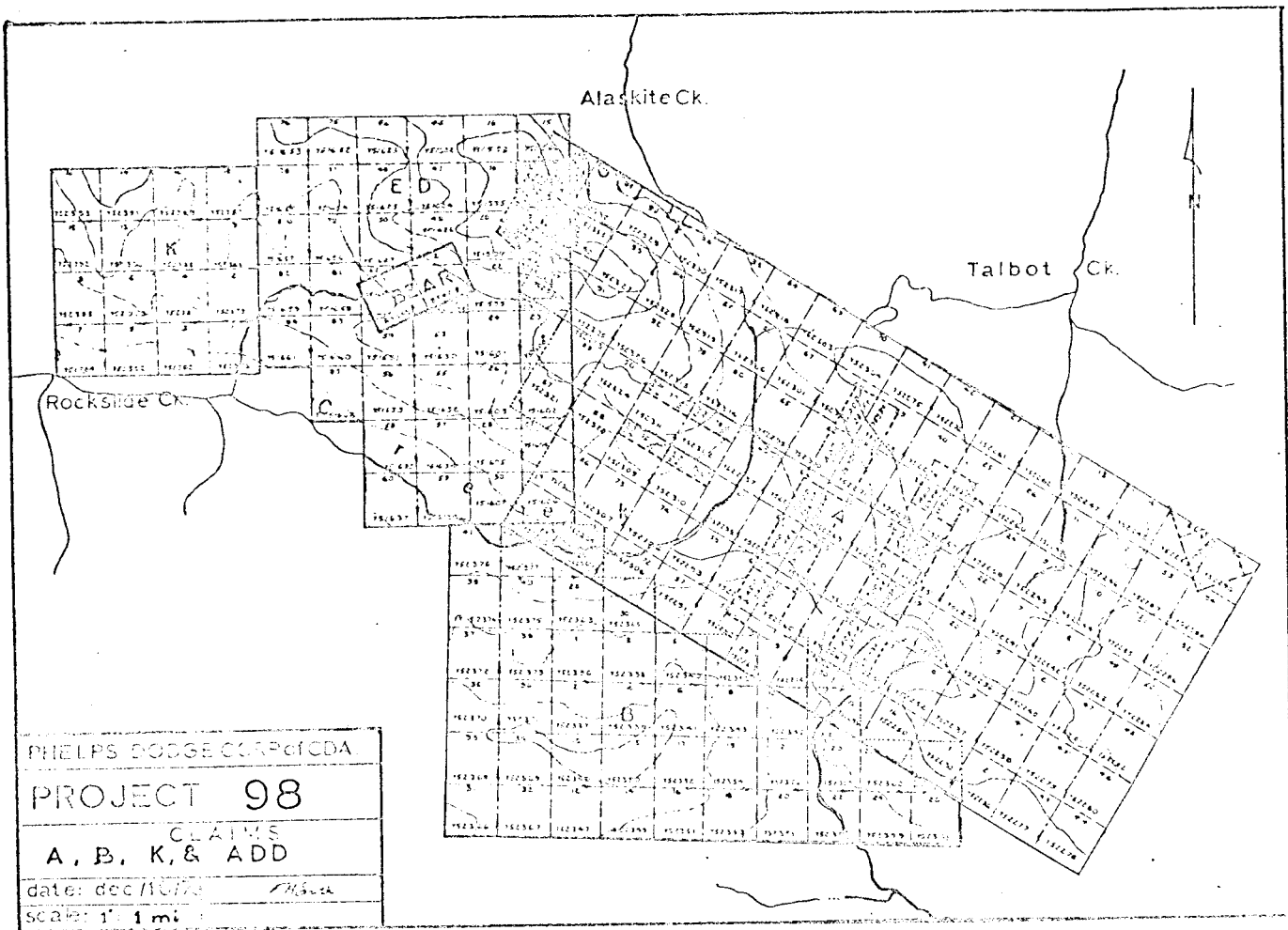
The A, B and K claim groups were staked by the "Charter" syndicate to cover mineral showings and gossans, west, south and east of a previously known (and staked) mineral showing. Following initial staking, reconnaissance geochemical soil and silt samples collected within and near the claims indicated an anomalous copper and molybdenum prospect.

An initial evaluation geology and geochemical survey was carried out on the claims to determine more exact local of the mineralization.

Phelps Dodge Corporation of Canada Limited's main crew was moved in during early August to carry out a more detailed geochemical and geological survey. Based on this work a drill was moved in from the Aishihik road to drill two geological holes. Due to early winter conditions this work was suspended on September 22, 1970.

#### Location and Access:

The A, B and K Groups are located in map-area N.T.S. 11508. The A and B groups are contiguous and cover the headwaters areas of Talbot, Alaskite and Rockslide Ck. The K group lies about 2 miles west of Alaskite Ck. and about 1½ miles north of Rockslide Ck. The center of the region is approximately at 61°28'N, 138°08'W in the east central portion of the Ruby Range.



Access is possible during summer by tracked vehicles from Aishihik airstrip along a 35 mile route. The route uses a pass into Talbot Creek from the north tributary of Albert Ck. The only other presently available access is by helicopter with the closest base (30 miles west) at Burwash Lodge or Airport.

Property:

The A, B and K claims are recorded in the name of Phelps Dodge Corporation of Canada, Limited. They border on a portion of the previously staked 'Ed' Group some of which are wholly owned by Phelps Dodge Corporation of Canada, Limited. Other claims had been previously staked nearby but most had lapsed before the A, B and K Groups were staked.

Physiography and Vegetation:

The area is characterized by sharp mountain peaks and high rounded ridges with steep valley walls and fairly flat even stream valleys. Some of the peaks and ridges have been suggested to be unglaciated (Muller - G.S.C. Memoir 340). Most of the valleys are typical of Valley Glacier activity presumably of the Ruby Glaciation period. Plaster Ridge, central to the 'A' and 'B' group has no erratics on its top flat portion and no sign of glacial alteration.

The extremely sparse vegetation is confined to valley floors and the lowest parts of some non-talus area valley walls. There are no

trees in the area, occasional clumps of willow, alder and buck-brush are the main vegetation. Grass and moss are ubiquitous in non-talus areas.

#### Regional Geology:

The Talbot project area has been mapped by Muller (G.S.C. Memoir 340) as being predominantly 'Alaskite' of Mesozoic and/or Tertiary in age with some portions of the Ruby Range batholith of "Jurassic or? Cretaceous age".

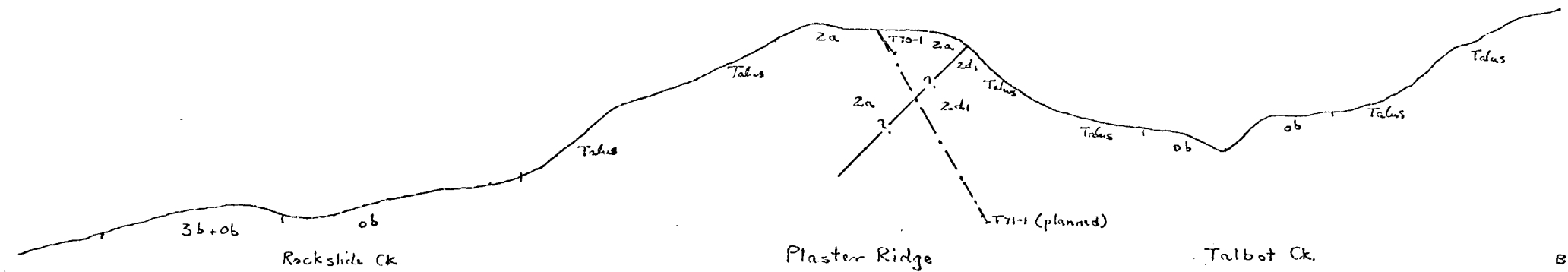
The Project area is a major height of land for the Ruby Range and there is little evidence of the older Yukon Complex, which is intruded by the Ruby batholith. The only sign of this intrusion history are occasional large Xenoliths of crystalline rocks, much richer in biotite and hornblende, within the granodiorite of the Ruby batholith both south and west of the 'B' group.

#### Talbot Project Geology:

Mapping of the Talbot area was accomplished at the same time as geochemical samples were collected. Geochemical samples were keyed to topographic features on aerial photos and later transferred to topographic maps. Rock samples were collected and sample points marked on the rock face.

From the field work the exact age relationships of the various rock types is not yet discernible. Few contacts have been defined; no systematic sampling on the few outcrops has been attempted

# TALBOT CROSS-SECTION



Scale:      horizontal      1" : 1000'  
             vertical         1" : 100'

to define phase changes within the various intrusives. The following list is in order of major to minor occurrence of the various rock types. A discussion later will explain some of the known age relationships.

- (1) (map symbol 2a-2b) "Alaskite" (adamellite) to leucogranitic granite
- (2) ( 2di) "Alaskite" porphyry (both feldspar and quartz
- (3) (3 and 2d) Granite and granite porphyry
- (4) (dikes) Acid dikes, shear fillings; composition granodiorite to aplite
- (5) (dikes) Basic dikes (gabbro-diabase to diorite)
- (6) (1) Quartz diorite, intrusive or altered roof pendant

(1) The "Alaskite" (map symbol 2a) occurs on the southern and eastern sides of the areas generally. It is typically of hypidiomorphic coarse granular texture. They are rich in potassic feldspar with quartz, plagioclase and biotite the usual order of major to minor constituents. Hornblende is rare with chlorite, saussurite and sericite the common alteration products of major constituents. No zoning of K-feldspar or sericite-chlorite assemblages has been noted (primarily due to lack of outcroppings).

The Alaskite is a major intrusive and has been tentatively dated by Muller as "Early Tertiary". From thin section work on rocks cored in drill hole 98-70-1 (see later) Dr. Coats (see appendix) states that "miarolitic or drusy cavities and mineralogical make-up suggest crystallization at high levels in the crust". This is in keeping with Muller's analysis of mode of occurrence and age relationship.

# LEGEND

## DIKES

Rhyolitic	Rhy
Andesitic	An
Diabasic	Db
Quartz - Feldspar - Porphyry	QF $\pi$

3

### Fine - to - medium grained Intrusives

- 3a - fine grained porphyritic granite (locally rhyolitic)
- 3b - fine grained granite (locally aplitic)
- 3c - medium grained phase of 3a and 3b










2

### Coarse grained Intrusives

- 2a - Alaskite (low mafic)
- 2b - Leucogranite (transition 2a, 2c)  
identified as Biotite Quartz Monzonite occasionally
- 2c - Granite
- 2d - Porphyry (Granite to Alaskite)
- 2d<sub>1</sub> - as porphyritic alaskite

1

### OLDER Crystalline Rocks Quartz Diorite

	FAULT		MINERAL FLOAT
	JOINTING		TALUS AREA
	SHEARING		ROCK OUTCROP
	MINERAL SHOWING		TALOUS EDGE
			APPROXIMATE CONTACT

(2) Alaskite porphyry (2di)

This unit has been only identified in hand specimens but is reasonably well defined by field evidence. The rock is feldspar and occasionally feldspar and quartz porphyritic. The composition of the feldspars has not been defined as yet. It is usually finer grained than the enclosing rocks and lacks iron staining and intense shearing. The intrusive is elliptical in plan with major axis approximately north south. It has an inferred dip to the west, noted at Talbot cirque (west wall headwaters of Talbot Creek) of approximately  $45^{\circ}$ . The contact relationship to the "alaskite" on Plaster Ridge on the north and west and on the "granite porphyry" to the south is evidence of forceful emplacement of this rock type. All Alaskite near the contact is badly fractured, characterized by intense gossans (hematite brown) and showing small dikes of acid rock and veins rich in quartz, chlorite and occasionally wolframite.

The gossan zones do not extend into the Alaskite porphyry stage, thus a measure of the size of this intrusive can be estimated. The north-south dimension is probably 9000 ft. and east west at the major width about 6000 ft. Most of this area is taken up by the floor of Talbot cirque near the headwaters of the Creek and thus obscured.

The relatively fresh nature to the Alaskite porphyry relative to the rocks near to the assumed contact also points to a later intrusive phase. What have been interpreted as large Xenoliths of "Alaskite" on the west wall of Talbot Cirque also suggest a later phase. The one main Xenolith is shaped such that it has the appearance of a

"stoped roof pendant". The composition is the same as nearby "Alaskite" and the intense gossan and shearing of the Xenolith points to older age.

The major mineralization and thus interest is almost always associated with the "Alaskite porphyry" or within approximately 1000 feet of the contact. This characteristic will be discussed later under Mineralization.

### (3) Granite and granite porphyry

These will be discussed separately. Some of the units (2d) and (2di) are of granitic composition but appear to be minor phase changes within the major rock type.

The granite porphyry (2d) has only been mapped in a small zone on the south side of the map area. It would appear to be a major phase portion of the "Alaskite" intrusive. No idea of size or compositional variations have been determined. It is altered by the "Alaskite porphyry" as noted before.

The Granite (3a, b, c) is an apparently younger than "Alaskite" intrusive in a large NW-SE apparent dike or extremely long thin pluton. The rocks are not well mapped or understood. No idea of age relationship within the "Alaskite porphyry" is possible at this time. The rock is fresh, appears not to be intruded by rhyolitic dikes which appear to originate in Talbot Cirque with the "Alaskite porphyry". One suggestion is that it is a phase of the general later acid intrusive, and the "Alaskite porphyry" is related to it. It is found near the base camp near the major fork in the headwaters of Rockslide Ck. It is at its narrowest here but also the contacts are totally obscured and only a very low percentage of outcrop is available for mapping.

(4) Acid dikes of varied composition are found throughout the property in talus areas. Very few have been found nearby in place and none have been found in areas free of frost action so that attitudes, thicknesses and continuity could be examined. These dikes appear to originate in the "Alaskite porphyry" but this is not properly defined yet. Based on field evidence, they probably have an attitude NNW to N and a steep dip. They vary in composition from Alaskite to quartz eye porphyry (doubly terminated smoky grey quartz crystals), feldspar porphyry (usually showing good carlsbad twins), felsitic to rhyolitic, and occasionally large quartz veins with minor chlorite, feldspar and sulphides. These dikes in some of their varieties do carry disseminated sulfides.

(5) Basic Dikes

Diabasic to dioritic (and one identified as anorthite) dikes appear to be very late in the area. They cut most rock types and are very fresh. They commonly have smears of copper carbonates on their surfaces due probably to their abundance of calcium carbonate relative to the extremely acidic surrounding rocks. Their trend in the areas is more commonly NNE to NE unlike the acid dikes but only a few have been examined and usually they are in intensely frost-riven areas.

(6) The quartz diorite mapped near the southern end of the granite mentioned before is an anomaly. Only a small amount was found and most of the outcrops are poorly exposed. It appears relatively fresh and unaltered by the granite or "Alaskite". No firm evidence of its age relationship and extent could be determined.

Mineralization:

The predominant mineralization in the Talbot Project area is in two localities. The minor area of interest is on the south side of Rockslide Ck. within the 'B' Group especially in steep rock faces in shears and fault gouge within unaltered coarse crystalline "Alaskite" and leucogranite. The predominant jointing coupled with shearing and faulting produces an easily weathered surface. Fairly fresh skree in this locality has occasional mineralized faults and shears. The mineralization is predominantly chalcopyrite with minor molybdenite and bornite. The degree of mineralization is slight. Shears are far apart; the main vein materials are quartz, chlorite and muscovite with sulfides spotty and usually fine grained. Very little mineralization of the type at Talbot Cirque was noted in this area.

The major area of mineralization (further discussed in the appraisal of the geochemical work) lies along the west flank of the headwaters of Talbot Ck. especially between the point due east of Zimmer tarn north along the east wall of Plaster Ridge to the large arete midway along the ridge.

The southern portion is characterized by mineralization of shears, fault gouge, joint planes and disseminated sulfides. The predominant sulfide appears to be pyrrhotite or pyrite with chalcopyrite ubiquitous. There are minor amounts of molybdenite and bornite. The mineralization occurs usually within or near the contact of the "Alaskite porphyry". Quartz flooding of the rock near the mineralization and chlorite and drusy quartz crystals with the sulfides are common. Chip samples of weathered

oxidized surface material in place or nearby has never graded higher than .05% Cu. Hematite and goethite staining and similar alteration are common. Because of the large amount of pyrite or pyrrhotite, leaching of copper has probably occurred.

The northern portion of the mineralization tends to be much richer in molybdenite with copper sulfides about equal to molybdenite in occurrence. Little outcroppings occur in the area and thus the attitude and source of mineralization is uncertain.

Drill hole 98-70-1 was aligned to intersect the center of the southern mineralization from the top, south end of Plaster Ridge. The log etc. of the hole can be found in Appendix A.

#### Geochemistry:

The sampling of the Talbot area was carried out in two ways. Initially, reconnaissance stream and soil geochemistry was used to give a preliminary evaluation of the area. At this time, little of the geology was understood and only the type of mineralization on the adjoining claims to the north was known.

Silt samples were taken from the active portion of moving water coarces especially in eddies or stagnant areas where the silt collected. Soil or grit samples were usually collected in frost boils, open barren fine material on talus and frost active slopes, or sampling below any moss or humus-rich material. The samples were collected in kraft wet strength paper, bags, numbered as to traverse sequence and plotted on either aerial photos or 1":1000' topo maps. The control for

the topo maps and air photos was by small aneroid barometers carried by sampling crews. Checking in at camp at the start and end of the day keyed the height of any one traverse. Most traverses were attempted at crossing favorable geology or following one contour. The data points were then transferred to the final 1":400' topo maps and evaluated.

The samples were analysed at the Barringer Research Limited's Whitehorse lab for copper and molybdenum. Approximately 580 samples were collected and analysed. The copper was evaluated using hot acid (nitric-perchlorate) extraction and run on a Techtron AA4 unit. The molybdenum was evaluated using the carbonate-salt fusion, acid digestion and run on the AA4 using the "Loring" procedure. The accuracy of the copper run at the mode (30 ppm) would be less than  $\pm 1.5$  ppm Cu. and molybdenum at the mode (2 ppm) would be less than  $\pm .5$  ppm Mo.

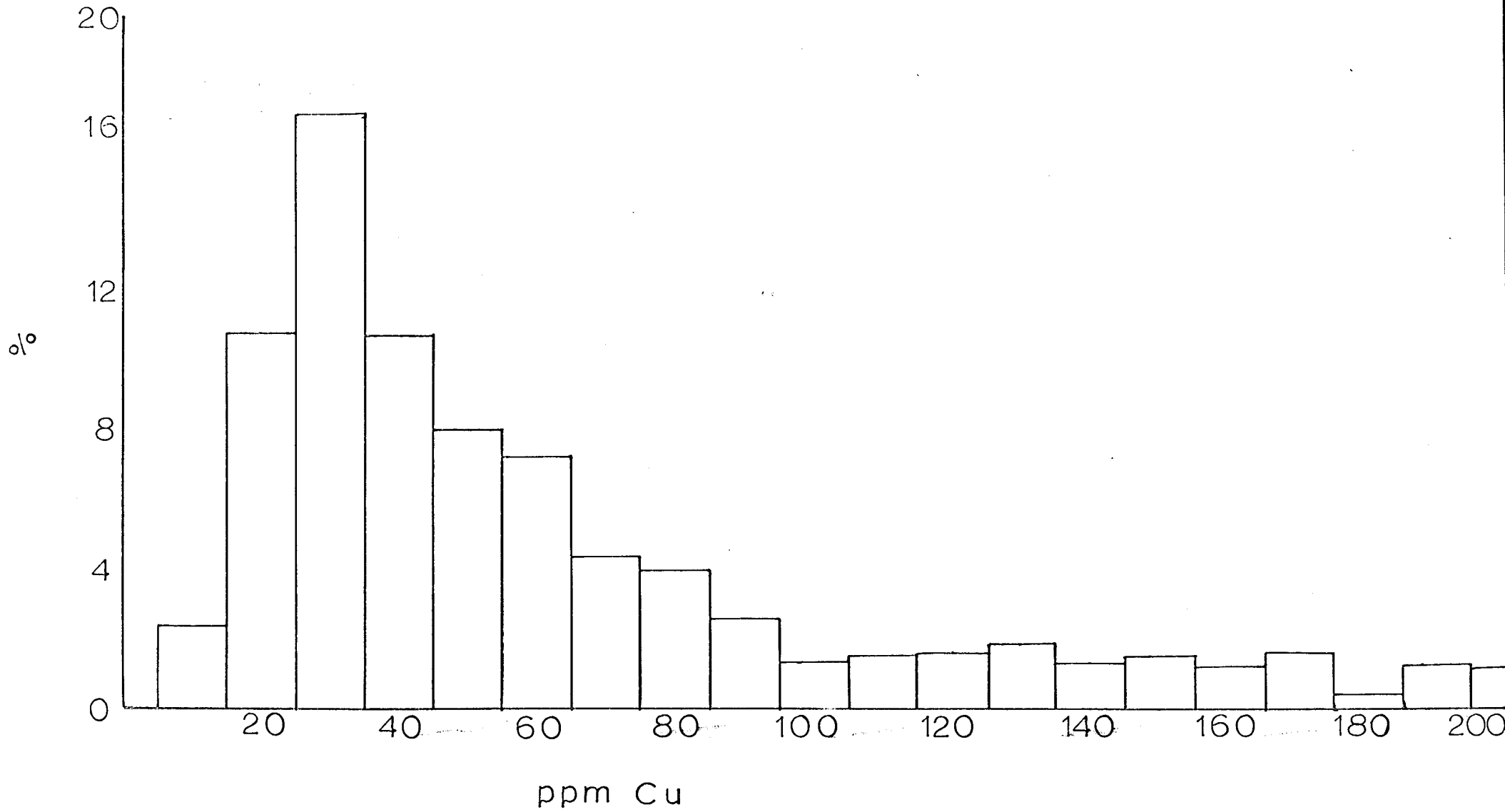
Also collected were 40 rock chip samples from frost-riven material and virtually in place rock. These were assayed by G. Spaulding at the Whitehorse Assay office. They were run for copper and molybdenum. Several grab samples were assayed for tungsten.

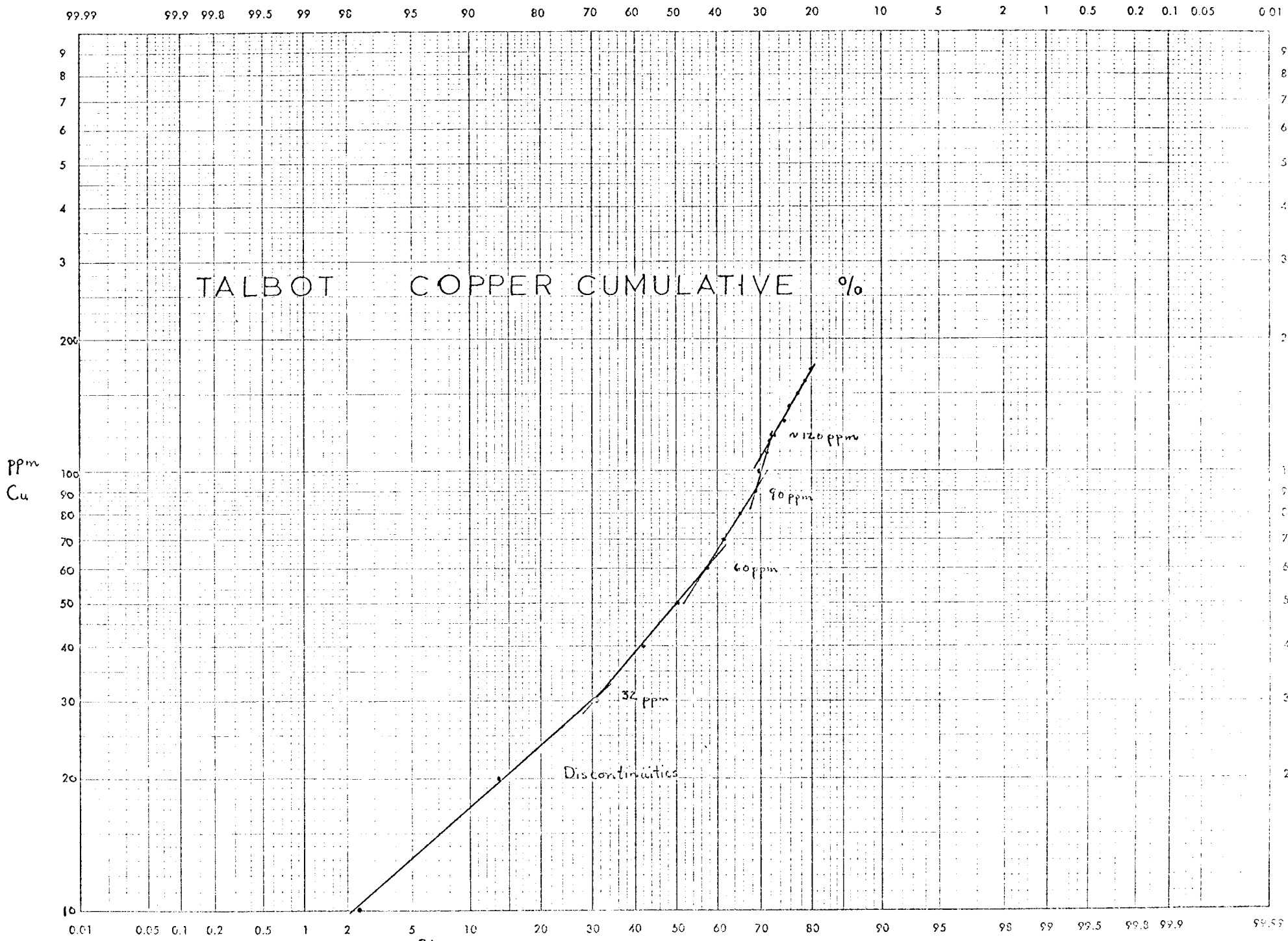
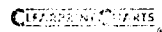
Approximately 30 of the Barringer samples were sent to their Toronto or Vancouver labs for geochemical determination of tungsten and tin.

#### Stream and Reconnaissance Survey:

The results of this survey are plotted on the 1" to 2000' map within this report. The geology interpretation has been changed from this initial evaluation and refinements about the exact areas of interest have changed with more detailed information.

# TALBOT COPPER





From the sample values, three basic anomalous areas are evident. These are the near headwaters of Talbot Ck., the south side and near headwaters of Rockslide and the west side of the headwaters of Alaskite Ck.

The main problem in evaluation of the geochemical conditions of the area is the influence of leaching of copper mineralization and the mode and degree of transportation of the copper ions.

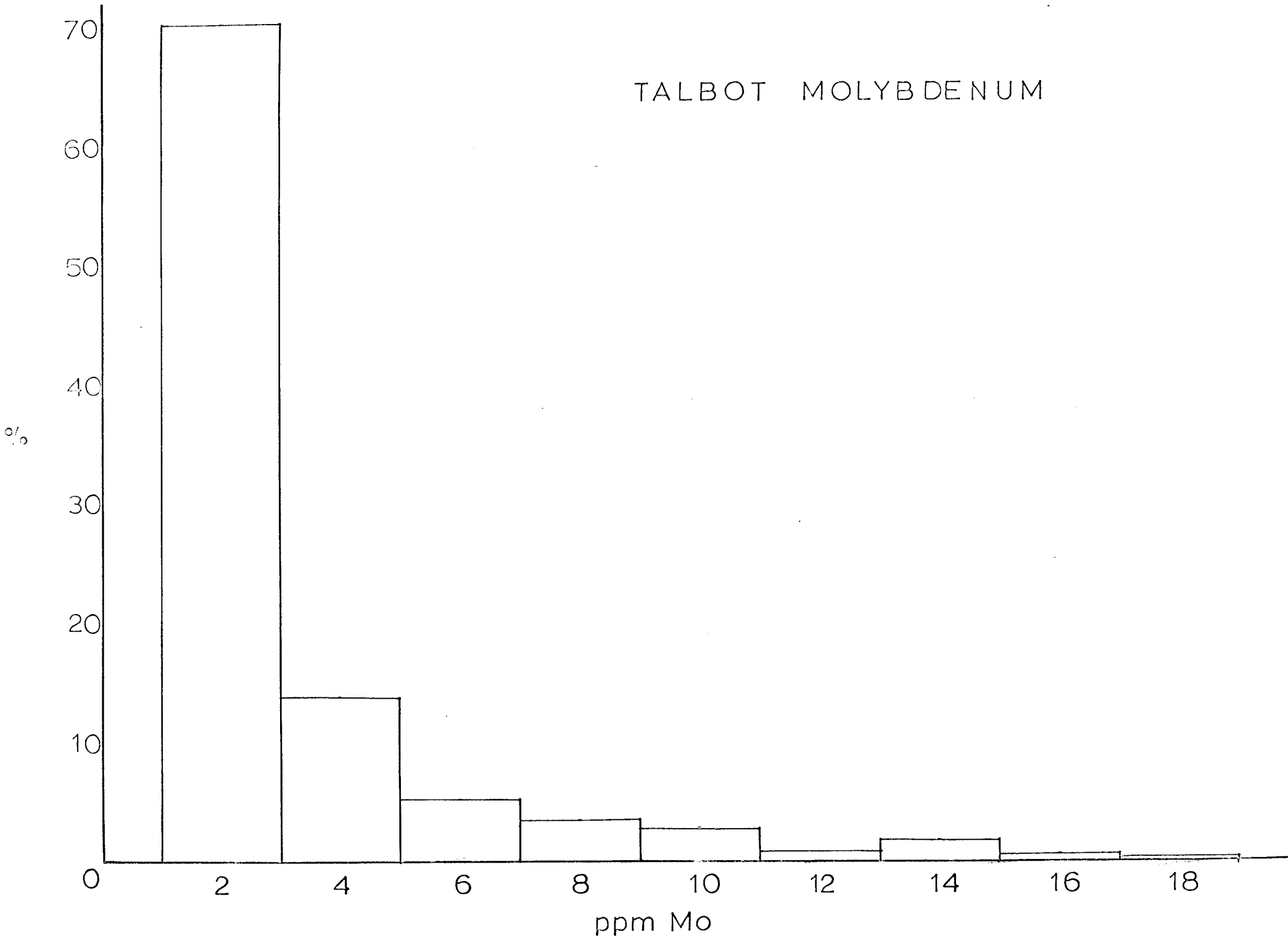
Mr. J. Barakso (Anaconda American Brass) took readings about June 7/70 of the pH and the Eh of the streams in the area while evaluating their reconnaissance geochemistry survey. The electrical apparatus he used noted an Eh of 8.0 and pH of 2.5. This indicates an extremely acidic environment rich in oxidizing material. From his readings it is evident that copper mineralization is being oxidized and leached rapidly from surface rocks and being transported readily in stream water and silts. Thus high soil and silt values in valleys may be "enhanced" from mineralization in steep valley walls. (This has been suggested to be the cause of high values in the area south of the headwaters of Rockslide Ck.).

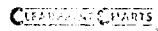
#### Soil Survey:

##### Analysis of values

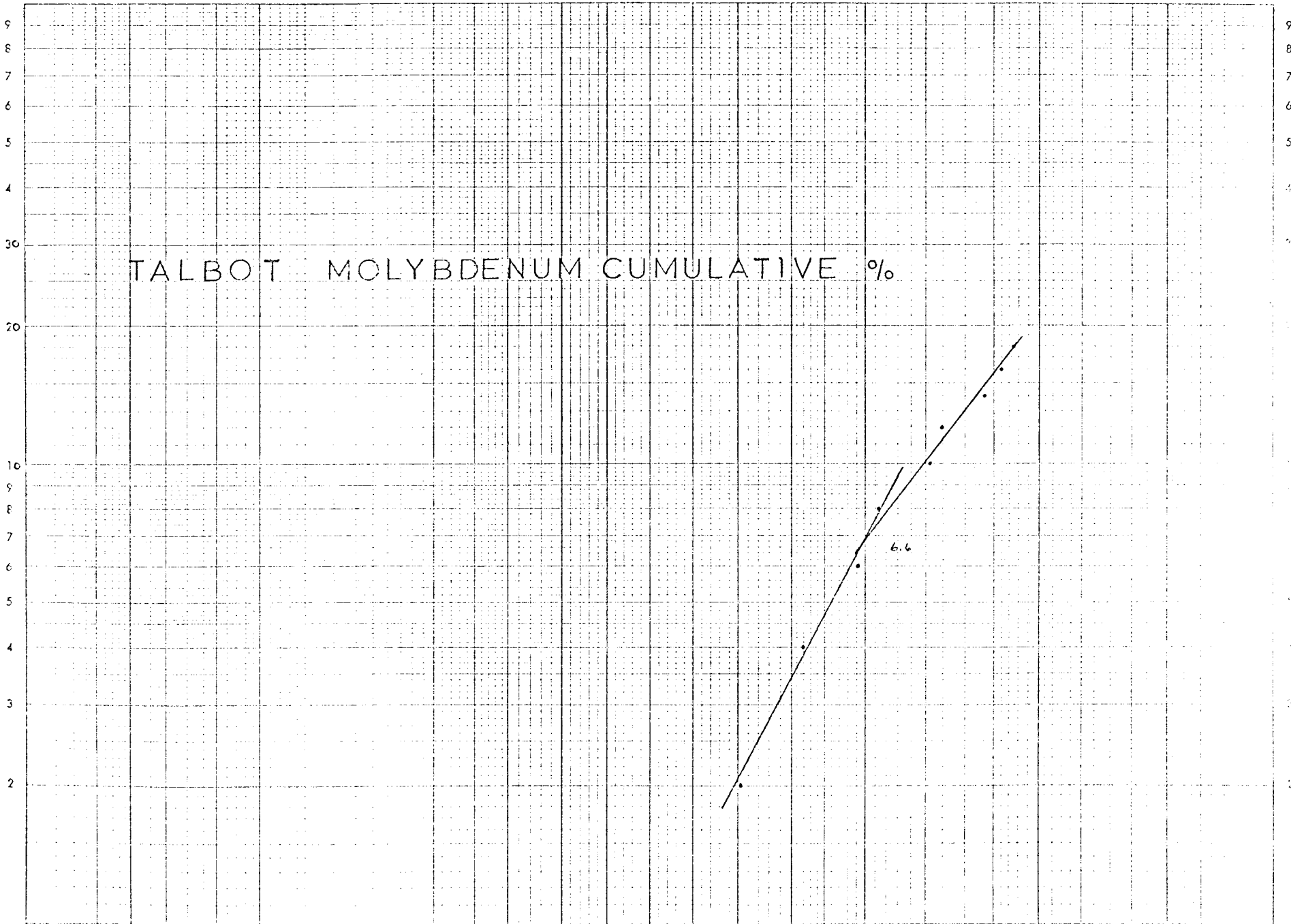
An evaluation of the values determined through determination of the mode, average value, character and shape of the histogram of occurrence and the cumulative % graph is necessary to explain the geochemical pattern in the area.

TALBOT M OLYB D E N U M





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



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

The mode or most common value for copper is 30 ppm Cu. and the average value is 166 ppm Cu. This shows the distribution is positively skewed and a "log-normal" type of distribution. Examining the histogram and cumulative % distribution shows the distribution to be made up of several (probably log-normal) distributions with the largest number of values associated with the lower distribution (with mode 30 ppm Cu.). Thus the usual method of determining anomalous conditions on the basis of the standard deviation of the values cannot be used as this value is relevant to normal distributions of one "mode".

The values for determining the relevant divisions amongst the values can be obtained from the cumulative % graph. Thus the following values apply for copper ppm's.

or mean	32 ppm Cu
threshold	60 ppm Cu - 90 ppm Cu
anomalous background	90 ppm Cu - 120 ppm Cu
anomalous condition	120 ppm Cu

The molybdenum values show quite a different distribution from the copper. The mode for moly is 2.0 ppm and the mean 3.9 ppm. Thus the values are as a skewed distribution but not as skewed as the copper. The cumulative % distribution and the histogram suggest only two distributions are noticable in the area.

Interpretation:

The main problem of interpretation of the geochemical survey has been noted previously as being "transportability". The copper minerali-

zation in the area is being rapidly leached from surface rocks. The degree of leaching is evident in co-incident rock chip and rock grit (or "soil") samples high on the ridge west of Talbot Ck. The rock chips graded .03% Cu.; .002% Mo. usually but coincident "soils" had up to 930 ppm Cu (or .093% Cu) and 640 ppm Mo (or .064% Mo). Thus copper is being readily leached.

The degree of fit of steep wall and mountain top sampling to actual rock values has been obtained in the drill hole T70-1. The "soils" in the area of the drill hole ranged from 145 to 300 PPM Cu and the drill hole results indicate unoxidized material with 110-360 ppm Cu. Molybdenum ranged from 8-16 ppm and all assays were 'Trace' in the core. Thus unoxidized rock chips could grade in the range .05 to .19% Cu in the main area of interest.

The degree of fit of anomalous copper values to the interpolated contact between  $Zd_1$  and  $Za$  on the west side of Talbot Ck. and into the area of Zimmer Tarn is very good. There is quite a sharp line of demarkation with +200 ppm Cu. being at or near the contact in the  $2a$  and extending into the +1000 ppm Cu within the  $2d_1$  material. Thus the main areas of interest in less explored areas in the headwaters of Talbot Ck. should be at or near contacts of  $2d_1$  with any other rock type.

Surrounding this contact area within the  $2a$  material there are scattered anomalous values and a general high region. This area (+60 ppm Cu) is especially anomalous in areas of intense gossans. The mineralogy and source of these gossans is not well understood. They appear to be related to the contact (i.e. intrusion) of the  $2d_1$  material. But proof of this must wait for the results of the geological drill hole T71-1.

The only other anomalous area lies on the south side of Rockslide Ck. This area is not as important geochemically as the Talbot Ck. area. The geochemistry is spotty, not as anomalous, is not verified by sampling on the ridge top and lacks and size or discernible shape. The important point is the lack of fit of involved geology to the geochemistry. It is suggested that the type of mineralization is similar to the "splashey" shear type noted at Talbot Ck. but not as extensive or intensive.

Recommendations and Conclusions:

An extremely anomalous area showing good fit of geology and geochemistry lies in and about the headwaters of Talbot Ck. The west wall of the creek especially along the central and northern end of the east side of Plaster Ridge is a main target area for further work. This is the only area presently known within the Talbot Project which could have economic mineralization.

The area must be drilled to evaluate the unoxidized rock near and within the 2di intrusive. The hole T71-1 should be drilled at  $-60^{\circ}$  on a bearing of  $135^{\circ}$  Az. from the same collar as hole T70-1.

Respectfully submitted,



F. M. Smith

FMS:vh

Certification

I, F. Marshall Smith of #31 Teslin Road, Riverdale in the city of Whitehorse, in the Yukon Territory, DO HEREBY CERTIFY:

1. That I am a Geologist, acting as Area Geologist for Phelps Dodge Corporation of Canada, Limited, P.O. Box 1043, 106 Main St., Whitehorse, Yukon Territory.
2. That I am a graduate of the University of Toronto where I obtained a Bachelor of Science degree in Honours Geology in 1967.
3. That I am an Associate Member of the Association of Exploration Geochemists, and have practiced my profession as a geologist for the last three (3) years.
4. That I have personally worked on the Talbot project area, A, B, K and Add claims, from June 1, 1970 to September 22, 1970, and wrote the summary report during January and February 1971.
5. Work conducted on the property, in addition to my own, is hereby acknowledged to Mr. J. S. De Latre, Mr. R. H. Beaton, Mr. B. J. Vanderkamp, Mr. G. S. Zimmer, Mr. G. G. Carlson, geologists and the summer crew of Phelps Dodge Corporation of Canada, Limited.
6. That I have no direct or indirect interests in any of the securities held by Phelps Dodge Corporation of Canada, Limited, nor do I expect to receive any.

Dated the 2nd day of March, 1971.



LIST OF PERSONNEL - TALBOT

F. M. Smith (Geologist)  
Box 548,  
Whitehorse, Y.T.

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1215 Bidwell Street,  
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Vancouver, B.C.

B. D. Jolliffe (Student)  
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Vancouver 8, B.C.

E. A. Williams (Student)  
574 St. Giles Road,  
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Box 548,  
Whitehorse, Y.T.

G. S. Zimmer (Geologist)  
Box 1293,  
Whitehorse, Y.T.

G. R. McMurray (2nd yr. Geology, Univ. of Sask.)  
c/o Box 1566,  
Whitehorse, Y.T.

I. R. Thomas (1st yr. Geology Technician, NAIT)  
c/o Box 1566,  
Whitehorse, Y.T.

APPENDIX I

Drill Hole T70-1:

The following drill log is for hole T70-1. The description of rocks, etc. are microscopic examination. The accompanying descriptions of thin sections are for pieces of drill core with the number referring to depth in hole.

All core was split in approximately 10 ft. lengths, bagged and sent for assaying at our Smithers lab. The samples were assayed for copper and molybdenum and reported on the drill log.

Alteration of Rocks in T70-1:

The thin section descriptions of selected pieces of hole T-1 was compared against the original core nearby the selected pieces and the visual estimation of alteration noted. A virtual 1:1 association of "alteration" (other than simple near surface oxidation) was noted with the naming of the rock a Biotite Quartz Monzonite (as per report on thin sections). The only exceptions are samples 113 and 135. These are very highly altered and deciding a class (i.e. monzonite or granite) is academic. Due to the less intense alteration of the same sort in samples 183, 218 and 162 these should be (113, 135) classed as altered or Biotite Quartz Monzonites (BQM). The BQM's are associated with some degree of visible silicification. Microscopically this alteration is dark blue grey to black in color with a tendency to greenish coloured feldspars. The leucocratic phases (Biotite Granite = BG) have much whiter feldspars and little or no mineralized shears. Pyrite is not a common accessory with the leucocratics

whereas it is more common as smears on crystals in the BQM's. Also the BQM's tend to visible pyrrhotite, wolframite and the higher copper assays. Sample 135 is unusual in this respect but it also is extremely silicified and apparently albitized rather than K-feldspar enriched.

CLAIM NO. A17

## DIAMOND DRILL RECORD

PROPERTY Project 98 - Talbot

H

-1

LATITUDE

ELEVATION APPROX. 6700 ASL BEARING 110°

DEPTH 219'

STARTED Sept. 12/70

COMPLETED Sept. 18/70

DEPARTURE

SECTION HQ size DIP - 50°

DRILLED BY E. Caron Diamond Drilling Logged by P.M. Smith

DEPTH FEET	FORMATION	SAMPLE NO.	FROM	TO	WIDTH	ASSAYS	
						Cu	Mo
0-10	Overburden - felsensmeer.						
10-219	Leucocratic Granite - altered by oxidation and surface hydro thermal for first 132' - alteration of this type becoming less with depth but continues to 175' on joint faces and few inches out from joints and breaks. - permafrost encountered in hole at 70'. Second type of alteration associated with silicified well healed shears and breaks. Alteration extends sometimes only few inches from break but usually more than one foot of alteration associated with mineralized break. - Leucocratic granite altered to a dark grey to black granitic looking rock (identified as Biotite Quartz Monzonite). Biotite not more common than in Leucocratics. Appear as hydro thermally altered Leucocratic rock. - There are thus three types of breaks - old mineralized shears and silicious zones - recent faulting and jointing (which appear to be fault controlled). - pyrrhotite is associated with both jointing and silicious zones - appears as paintings on feldspar crystals - moly noted at 189 on joint face - shear with pyrite minor visible chalcoc. The following is a more detailed breakdown of appearance.	40851	10	20	10'	0.004	Tr.
		40852	20	30	10	0.006	Tr.
0-34	no mineralized shears, predominant oxidation	40853	30	40	10	0.012	Tr.
34-37	mineralized shear	54	40	50	10	0.003	Tr.
40-43	Fault (young) gouge.	55	50	60	10	0.032	Tr.
55-60	Fault zone (much mylonite - rounded soft core)	56	60	70	10	0.011	Tr.
79'	minor fault	57	70	80	10	0.031	Tr.
84	minor faulting	58	80	90	10	0.037	Tr.
87	minor faulting (oxidation not complete beyond about 85')	59	90	100	10	0.045	Tr.
95-98	minor faulting (oxidation not complete beyond about 85')	40860	100	110	10	0.028	Tr.
98-102	mineralized minor shears	61	110	120	10	0.070	Tr.
109-121	Fault zone						
	heavily silicified + altered zone - mineralized pyrrhotite and wolframite	62	120	130	10	0.022	Tr.
124-127	Fault zone						
130	minor mineralized shear, 132-135 mineralized shear (qtz. rich)						
138-139.5	mineralized shear - predominately pyrite.	63	130	140	10	0.013	Tr.



HANDSPECIMEN

The specimen is of a veined, coarse <sup>grained</sup> granitic rock. It is made up almost entirely of quartz and plagioclase with minor K-feldspar and biotite.

THIN SECTION

In thin section it is difficult to distinguish between the vein and the rock and the mode is therefore given together.

Mode

Quartz	48%
Plagioclase	36%
K-feldspar	10%
Biotite	4%
Hornblende	2%
Fluorite	Tr.

Texture

The thin section shows wholesale silicification and veining of the rock and little can be said about the original nature of the specimen except that it was probably a coarse grained granite somewhat like others of this suite. Healed quartz filled fractures with quartz growing into the rock and replacing the feldspar preferentially dominate the picture. The quartz is of two grain sizes; grains about 1 or 2 mm across (unstrained) are volumetrically the most important, but most prominent, and interstitial to these larger grains are areas of tiny grains about 0.05 mm across. These aggregates of tiny quartz grains carry intergrown brown biotite, grass green hornblende and minor fluorite, all grains are anhedral. The small grains may represent healed brecciated material although all quartz is unstrained judging by its uniform extinction. Plagioclase is partly replaced by quartz but is otherwise relatively fresh. Only a few large relict grains of microperthite are seen in the section.

NAME: Silicified granite'

ALTERATION: The rock is strongly silicified by late hydrothermal introduced quartz.

## HANDSPECIMEN:-

This coarse grained granite is cut by a system of straight, narrow veins which have partially silicified and sericitized the rock.

## THINSECTION:-

## Mode

Quartz	33%
Plagioclase	25%
K feldspar	30%
Biotite	7%
Muscovite	5%
Apatite	Tr
Opaques	Tr

## Texture

Rock texture is hypidiomorphic granular. The K feldspar is microperthite with 15% exsolved albite. Quartz replaces the Kfeldspar to some extent and forms equant blebs in that mineral. The plagioclase is probably low oligoclase but its composition is masked by sericite and could not be closely determined. Grain sizes are as in other rocks of the suite. Muscovite flakes no more than 0.8 mm long are evenly dusted through most of the potash feldspar and some of the plagioclase grains in the specimen. The veinlets are narrow and made up of finely granular quartz and disseminated brown biotite. The feldspars are silicified outward from the veinlets whose margins are poorly defined.

NAME:- Coarse grained biotite quartz monzonite.

## ALTERATION :-

Replacement of the feldspars by quartz and sericite (muscovite) is fairly extensive. It is probably related to a late hydrothermal event.

HAND SPECIMEN

This is a coarse grained biotite granite. The quartz occurs as intergrowths of clear grains with white potash feldspar and plagioclase and biotite grows interstitially.

THIN SECTIONMode

Quartz	27%
Plagioclase	20%
Microperthite	45%
Biotite	8%
Apatite	Tr.

Texture

In thin section the rock exhibits a hypidiomorphic granular texture. Quartz occurs as anhedral, equant grains to 3 mm across and shows uniform extinction. For the most part it grows interstitially to the feldspars. Plagioclase grains are subhedral and thick tabular, they show good Carlsbad-Abite twinning, are <sup>unzoned</sup> unfounded, and grow as large as 4 mm; its composition is An<sub>15</sub>. K feldspar forms anhedral, equant and irregular shaped grains somewhat larger than the other minerals; i.e. up to 6 mm across. The potash feldspar shows microperthitic intergrowths of <sup>g.</sup>plagioclase which accounts for perhaps 10% of its volume. Biotite occurs as clusters of tiny grains no more than 1 mm across; the mineral is pleochroic in browns.

NAME: Equigranular coarse grained biotite granite.

ALTERATION: Alteration in this rock is extremely slight. The potash feldspar is slightly kaolinized, but the other minerals are quite fresh. *Slight silicification of feldspar is noted.*

## HANDSPECIMEN:-

This is a coarse grained granite made up of white feldspar and clear quartz with minor black biotite. It is cut by a narrow vein of quartz.

## THINSECTION:-

## Mode

Quartz	37%
Plagioclase	20%
K feldspar	32%
Biotite	8%
Muscovite	Tr
Fluorite	Tr
Opaque minerals	1%
Chlorite	2%

## Texture

Microperthite dominates the section along with quartz, both minerals are anhedral, but the potash feldspar forms the larger grains. Grain sizes are about the same as in other specimens of the suite. The K-feldspar is evenly kaolinized, but the plagioclase grains are relatively fresh. Biotite (brown pleochroism) occurs in clusters and is most commonly associated with quartz. Some biotite is chloritized along the basal cleavage. A narrow, straight quartz vein filled with finely granular quartz and disseminated biotite cuts the rock. Fluorite is associated with this veinlet.

NAME:- Coarse grained equigranular biotite quartz monzonite or adamellite.

## ALTERATION:-

Silicification around margins of the tiny vein is not as extensive as seen <sup>in</sup> other specimens.

## HANDSPECIMEN:-

This is a light coloured, medium grained equigranular granite, made up of clear quartz and white feldspar; it also contains black biotite.

## THINSECTION:-

## Mode

Quartz	23%
Plagioclase	10%
K feldspar	60%
Biotite	7%
Muscovite	Tr
Zircon	Tr

## Texture

The rock is dominated texturally by large, anhedral grains of microperthite with about 15% exolved blebs, rods and patches of an albitic phase that seems to be controlled largely by the (001) basal crystallographic plane in the K feldspar host. Potash feldspar grains are as much as 9 mm across. Quartz occurs interstitially to the potash feldspar as smaller grains of equant shape and about 2 or 3 mm across. Plagioclase, moderately sericitized in most instances, but recognizably of oligoclase composition and generally showing albite twinning, forms subhedral grains several millimetres long. Brown pleochroic biotite is "dusted" through the section as tiny grains and a few small flakes of muscovite were noted. A straight narrow veinlet filled with biotite, mostly pleochroic in brown, but locally showing a green pleochroic scheme, cuts the rock.

NAME:- Coarse grained biotite granite.

## ALTERATION:-

Most of the plagioclase is sericitized pervasively but not strongly and the K feldspar is evenly, but weakly kaolinized. This alteration is probably deuteric.

## HANDSPECIMEN:-

This coarse grained granitic rock contains buff yellow and white feldspar and clear quartz. The rock contains a considerable proportion of pyrite.

## THINSECTION:-

## Mode

Quartz	27%
Plagioclase	22%
Microperthite	43%
Biotite	87%
Chlorite	1%
Opaque minerals (pyrite)	Tr

## Texture

In thinsection the rock shows the characteristic weak crystal boundary control over texture seen in many rocks of this suite. Only the plagioclase grains have subhedral outline; this mineral occurs as thick tabular crystals with good albite twinning. Plagioclase composition (An<sub>15</sub> for one grain measured) is in the low oligoclase range; the mineral is unzoned but cores of about a third of the grains are strongly sericitized suggesting that some grains may have been zoned. The K spar is a microperthite with about 15% exsolved, optically continuous plagioclase strung out in rods and blebs along (001) planes in the K spar phase. Quartz is interstitial and forms equant, anhedral grains. Grain sizes are as follows: K feldspar 6 mm, Plagioclase 5 mm, Quartz 2 mm. Biotite grains cluster together and are generally no more than a millimetre across, they are subhedral and form thin books. The biotite is pleochroic in deep brown. Chlorite replaces some biotite grains along the cleavage.

NAME:- Coarse grained equigranular biotite quartz monzonite or adamellite.

## ALTERATION:-

Both the K feldspar and plagioclase are partially altered in this specimen, but this alteration is not strong and is probably deuteric and not related to hydrothermal activity.

HANDSPECIMEN

This is a very light coloured, coarse grained granite rock. The stained surface shows that most of the feldspar is K-spar.

THINSECTIONMode

Quartz	28%
Plagioclase	16%
K-feldspar	43%
Biotite	8%
Muscovite	3%
Calcite	Tr.
Chlorite	1%
Fluorite	1%

Texture

This specimen shows the granitic (hypidiomorphic granular) texture of others in this suite. Grain sizes, habit and crystal outlines are similar to those described from other thin sections. The K-feldspar is microperthite and the plagioclase is an oligoclase with composition  $An_{12}$ . Fluorite forms drusy cavity fillings and also lines <sup>some</sup> narrow irregular fractures. One such drusy cavity is as much as 1.4 mm across. Muscovite occurs as tiny flakes about 0.07 mm long scattered through some feldspar grains in the rock apparently as an alteration of such grains. Muscovite also lines a fracture about 0.1 mm wide. Chlorite, evidently replacing preexisting brown biotite in the rock, occurs as clusters of tiny grains. Calcite is an alterative<sup>on</sup> product of one plagioclase grain.

NAME: Medium to coarse grained biotite granite.

ALTERATION: The alteration of this specimen is stronger than that noted in some others of this suite. Kaolinization of potash feldspar and its partial replacement by muscovite are evidence of this alteration. Chloritization of some of the biotite is further evidence. This alteration may be related to late hydrothermal action although a diagenetic origin for it could equally well be postulated.

HANDSPECIMEN

This light coloured coarse grained granitic rock, made up largely of white feldspar and clear quartz carries some biotite and traces of pyrite.

THIN SECTIONMode

Quartz	28%
Plagioclase	24%
K-feldspar	35%
Biotite	8%
Hornblende	45%
Zircon	Tr.
Chlorite	Tr.
Apatite	Tr.
Opaques	Tr.

Texture

This granitic (hypidiomorphic granular) textured rock has microperthite as its dominant mineral. The microperthite has about 10-15% of an exsolved albitic phase strung out in rods, blebs and patches along crystallographic directions of the K-spar host. Grain size of the microperthite is remarkably uniform (about 6 mm). Its habit is distinctly anhedral. Plagioclase grains are subhedral to euhedral and beautifully twinned according to both the Carlsbad and Albite laws. Grains are thick tabular and generally somewhat less than 4 mm in largest dimension. Plagioclase composition is  $An_{16}$ . Quartz is interstitial and forms smaller grains than the feldspar. Two mafic minerals are present; Pleochroic euhedral, fine grained brown biotite is commonest and is intergrown with anhedral hornblende that is pleochroic in green colours. Traces of zircon and apatite were noted.

NAME: Coarse grained equigranular hornblende biotite quartz monzonite or adamellite.

ALTERATION: The cores of most plagioclase grains are replaced by fine sericite and calcite mixtures and the potash feldspar is weakly kaolinized. Some biotite is replaced along the cleavage by biotite. The alteration is probably deuteric.

APPENDIX II

Thin Section Report

SUMMARY OF THIS SUITE OF GRANITES

Modes	40	183	17	85	218	28	195	162	175	147	140	135	113
Quartz	35	27	26	39	28	23	28	37	23	27	33	48	43
Plagioclase	15	22	16	19	24	17	16	20	10	20	25	36	14
K feldspar	42	43	45	33	35	52	43	32	60	45	30	10	33
Biotite	8		11	9	8	8	8	8	7	8	7	4	7
Hornblende	1				5	X						2	
Apatite					X	X				X	X		
Zircon	X			X	X				X				X
Fluorite			2				1	X				X	
Chlorite			X		X		1	2					
Muscovite							3		X		5		

Rocks of this suite all belong to the granite, adamellite clan. They are characterized by their hypidiomorphic granular texture and their coarse grain size. The potash feldspar in all specimens is a microperthite with about 15% exsolved albite, commonly in optically continuous patches. Plagioclase is all low calcium oligoclase. The rocks are all super-saturated with respect to quartz. Grain size of the K feldspar is generally larger than that of the other minerals being commonly 6 mm or more. Plagioclase grains are generally about 4 mm across and constitutes the only mineral in these rocks with euhedral or subhedral outline. Quartz is interstitial to the feldspars and forms smaller equant grains generally 3 mm across. The biotite is pleochroic in brown and occurs as clusters of small grains.

The alteration is generally weak and restricted to kaolinization of K feldspar. In some specimens the plagioclase is sericitized. These types of alteration are probably deuteric and related to the cooling history of the rock. Silicification is prominent in 113, 135 and 140 and to some extent in 147. It is intense and has resulted in large scale replacements of feldspar by quartz. This alteration may be of hydrothermal origin.

This suite of granitic rocks apparently comes from a high level pluton. Its microlitic or drusy cavities and mineralogical makeup suggest crystallization at high levels in the crust.

HANDSPECIMEN

A coarse grained granitic rock with buff yellowish K feldspar and clear quartz as well as a black mafic mineral.

THIN SECTIONMode

Quartz	26%
Plagioclase	16%
K-feldspar	45%
Biotite	11%
Fluorite	2%
Chlorite	Tr.

Texture

The thin section shows up the granitic texture of this rock; it has large anhedral perthite grains, anhedral quartz grains and subhedral, somewhat smaller plagioclase crystals. The K-feldspar is a microperthite with 10-15% exsolved albite that forms irregular shaped intergrowths within and around K-spar crystals. The K-spar forms irregularly shaped Carlsbad twinned grains fully 5 mm across. Plagioclase occurs as thick tabular grains and is of Oligoclase composition - its grain size is about 3 mm or 4 mm across. Quartz grains are anhedral, equant and about 3 mm across; their shape is largely controlled by feldspar crystals bounding them and they occur interstitial to the feldspars. Biotite, pleochroic in green, khaki green and brown constitutes as the only mafic mineral; it occurs in clusters of anhedral tiny grains about 0.5 mm across. Fluorite occurs as small grains less than 1 mm across grown in small cavities and fractures.

NAME: Medium to coarse grained equigranular biotite granite.

ALTERATION: This rock is essentially unaltered. Only the K-spar shows slight kaolinization. The fluorite cavity fillings are druses or miarolitic cavities.

## HANDSPECIMEN: -

This coarse grained granite is made up of white feldspar, clear quartz and black biotite .

## THINSECTION:-

## Mode

Quartz	23%
Plagioclase	17%
K feldspar	52%
Biotite	8%
Apatite	Tr
Hornblende	Tr

## Texture

The specimen shows the hypidiomorphic granular texture and its <sup>major</sup> dominant mineral, microperthite, dominates the section. Microperthite forms large, anhedral, Carlsbad twinned grains generally more than 5 mm across. It contains about 10% exsolved albite which is commonly optically continuous. Plagioclase grains (oligoclase) are thick tabular and subhedral commonly reaching 5 mm in longest dimension. Quartz forms anhedral, equant grains that show uniform extinction. Biotite, with a brown pleochroic scheme, occurs in clusters of tiny grains; the hornblende is intergrown with it.

NAME:- Coarse grained equigranular biotite granite.

ALTERATION:- Potash feldspar in this rock is weakly kaolinized and many of the plagioclase crystals are sericitized in their cores.

HANDSPECIMEN

This coarse grained plutonic rock contains aggregates of <sup>an</sup>anhedral, yellowish brown K feldspar grains intergrown with clear quartz. It is studded with small, black grain aggregates of biotite.

THIN SECTIONMode

Quartz	35%
Plagioclase	15%
Microperthite	42%
Biotite	8%
Zircon	Tr.

Texture

The rock has the typical hypidiomorphic granular texture found in many medium grained plutonic rocks. It contains intergrown anhedral potash feldspar grains and anhedral quartz as well as subhedral plagioclase and biotite. The potash feldspar is microperthite with about 10% exsolved plagioclase rods, laths and drops. Potash feldspar grains commonly show Carlsbad-Albite twinning and are generally less than 5 mm across. The plagioclase is fairly sodic; two grains measured by the Carlsbad-Albite method gave  $An_{16}$  and  $An_{14}$  (Oligoclase). Plagioclase grains are thick tabular, about 3 mm long and show excellent Carlsbad and Albite twinning. Biotite occurs in clusters of small, <sup>an</sup>anhedral to subhedral grains, no more than 1 mm across and having a pleochroic scheme in browns; the mineral occurs interstitial to quartz and feldspar. Quartz forms anhedral equant grains that show uniform extinction and which are about 2 mm across. One or two anhedral grains of zircon were noted in the section.

NAME: Equigranular coarse grained biotite granite

ALTERATION: The minerals are all pretty fresh and even the K feldspar shows only slight effects of kaolinization.

HANDSPECIMEN

This is a coarse grained biotite granite containing roughly equal proportions of quartz, plagioclase and K-feldspar as well as minor black biotite.

THIN SECTIONMode

Quartz	39%
Plagioclase	19%
Microperthite	33%
Biotite	9%
Zircon	Tr.

Texture

This specimen has the granitic or hypidromorphic granular texture exhibited by most of the other specimens. The K-feldspar is a microperthite with 10 to 15% exsolved plagioclase. Exsolution is controlled by the (001) basal plane and forms rods, patches and drops that are in crystallographic continuity with each other. Exsolution of the albitic phase around grain boundaries is also common. Grain size of microcline is generally 5 or 6 mm and the mineral shows anhedral outlines and forms grains of various shapes. Carlsbad twins are common. The plagioclase is oligoclase with composition about  $An_{16}$ . Plagioclase grains are subhedral, have a thick tabular habit and a maximum grain size of 4 mm; the grains are unzoned and show excellent albite twinning. Quartz grains are equant and anhedral; they show uniform extinction, occur interstitially to the feldspars and are generally 2 or 3 mm across. Biotite is pleochroic in browns and occurs in clusters of tiny euhedral grains about 1 mm long. A narrow healed fracture filled in one or two places with very fine fibrous amphibole, pleochroic <sup>cc</sup> in ~~grown~~ cuts diagonally across the lower right corner of the section.

NAME: Medium to coarse grained equigranular biotite quartz monzonite or adamellite.

ALTERATION: The rock is pretty fresh and unaltered, the K-feldspar is very lightly kaolizined.

HANDSPECIMEN

This medium grained specimen, made up of white feldspar, clear quartz and black biotite is cut by a irregular dark quartz vein with hazy boundaries.

THIN SECTIONMode of rock

Quartz	43%
Plagioclase	14%
K-feldspar	33%
Biotite	7%
Zircon	Tr.

Mode of vein

Quartz	55%
Biotite	15%
K-feldspar	20%
Opaque mineral	10%

Texture

The rock is a hypidiomorphic granular granitic one with irregular shaped K-feldspars. The K-spar is a microperthite with up to 20% exsolved albite; grain size is up to 5 mm. Plagioclase is of low oligoclase composition and shows good crystal outlines occurring as thick tabular, albite twinned grains that are moderately sericitized. Biotite has a brown pleochroic scheme and occurs as clusters of small (1 mm), fresh grains. Zircon is associated with the biotite. The vein that cuts the rock has margins of clear unstrained quartz grains about 2 mm across. Central parts of the vein are made up of intergrown fine grained quartz and biotite with an opaque mineral whose nature could not be determined (grain size here is about 0.07 mm or less). Boundaries of the vein are very indistinct and quartz from it appears to have replaced parts of the host rock as it grows out into the feldspars.

APPENDIX III

Certificate of Expenditure

PHELPS DODGE CORPORATION OF CANADA, LIMITED

904-55 YONGE STREET

TORONTO 215, ONTARIO

January 19th, 1971.

NEW YORK OFFICE  
300 PARK AVENUE  
NEW YORK, N.Y. 10022

VANCOUVER OFFICE  
1112 WEST PENDER STREET  
VANCOUVER, BRITISH COLUMBIA

Certificate of Expenditure  
for Assessment Purposes  
for the period July 1st, 1970 to December 31st, 1970

on  
Project 98 - Talbot  
Whitehorse Mining District  
Yukon Territory

Under Joint Venture Agreement  
dated July 1st, 1970

Company Labour

Geology & Engineering (Field Crews)

Vanderkamp, B. J. (July 22-31)	\$ 193.75	
Jolliffe, B. D. (July 25-31)	98.33	
Williams, E. A. (Aug. 16-25)	<u>455.00</u>	
		\$ 747.08

Supplies

Core Boxes for Diamond Drilling (Winzer)	210.00	210.00
--	--------	--------

Contract

Diamond Drill Mobilization - E. Caron Diamond Drilling Ltd.	1,782.06	
Diamond Drilling - "	<u>6,553.80</u>	8,335.86
Surface Work - Bulldozing - "	2,326.00 <sup>A</sup>	2,326.00

Sampling & Assaying

Gordon Coots Petrographic Service	182.00	
Whitehorse Assay Office	533.45	
Barringer Research Limited	<u>2,093.25</u>	
		2,808.70

Transportation

Helicopter - Trans North Turbo Air Ltd.	26,145.34	
- Klondike Helicopters	1,110.22 <sup>v</sup>	
- Fuel - Whitepass Petroleum Services	<u>1,658.14</u> <sup>s</sup>	
		<u>28,913.70</u>

\$43,341.34

.....2

APPENDIX IV

List of Claims

## PROJECT 98 - TALBOT

## Additional Claims

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date</u>
A 1	Y52235	June 15/71
A 2	Y52236	"
A 3	Y52237	"
A 4	Y52238	"
A 5	Y52239	"
A 6	Y52240	"
A 7	Y52241	"
A 8	Y52242	"
A 9	Y52243	"
A 10	Y52244	"
A 11	Y52245	"
A 12	Y52246	"
A 13	Y52247	"
A 14	Y52248	"
A 15	Y52249	"
A 16	Y52250	"
A 17	Y52251	"
A 18	Y52252	"
A 19	Y52253	"
A 20	Y52254	"
A 21	Y52255	"
A 22	Y52256	"
A 23	Y52257	"
A 24	Y52258	"
A 25	Y52259	"
A 26	Y52260	"
A 27	Y52261	"
A 28	Y52262	"
A 29	Y52263	"
A 30	Y52264	"
A 31	Y52265	"
A 32	Y52266	"
A 33	Y52267	"
A 34	Y52268	"
A 35	Y52269	"
A 36	Y52270	"
A 37	Y52271	"
A 38	Y52272	"
A 39	Y52273	"
A 40	Y52274	"
A 41	Y52275	"
A 42	Y52276	"
A 43	Y52277	"
A 44	Y52278	"
A 45	Y52279	"
A 46	Y52280	"

<u>Claim</u> <u>Name</u>	<u>Grant</u> <u>Number</u>	<u>Expiry</u> <u>Date</u>
A 47	Y52281	June 15/71
A 48	Y52282	"
A 49	Y52283	"
A 50	Y52284	"
A 51	Y52285	"
A 52	Y52286	"
A 53	Y52287	"
A 54	Y52288	"
A 55	Y52289	"
A 56	Y52290	"
A 57	Y52291	"
A 58	Y52292	"
A 59	Y52293	"
A 60	Y52294	"
A 61	Y52295	"
A 62	Y52296	"
A 63	Y52297	"
A 64	Y52298	"
A 65	Y52299	"
A 66	Y52300	"
A 67	Y52301	"
A 68	Y52302	"
A 69	Y52303	"
A 70	Y52304	"
A 71	Y52305	"
A 72	Y52306	"
A 73	Y52307	"
A 74	Y52308	"
A 75	Y52309	"
A 76	Y52310	"
A 77	Y52311	"
A 78	Y52312	"
A 79	Y52313	"
A 80	Y52314	"
A 81	Y52315	"
A 82	Y52316	"
A 83	Y52317	"
A 84	Y52318	"
A 85	Y52319	"
A 86	Y52320	"
A 87	Y52321	"
A 88	Y52322	"
A 89	Y52323	"
A 90	Y52324	"
A 91	Y52325	"
A 92	Y52326	"
A 93	Y52327	"
A 94	Y52328	"

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry date</u>
A 95	Y52329	June 15/71
A 96	Y52330	"
A 97	Y52331	"
A 98	Y52332	"
A 99	Y52333	"
A 100	Y52334	"
A 101	Y52335	"
B 1	Y52336	June 15/71
B 2	Y52337	"
B 3	Y52338	"
B 4	Y52339	"
B 5	Y52340	"
B 6	Y52341	"
B 7	Y52342	"
B 8	Y52343	"
B 9	Y52344	"
B 10	Y52345	"
B 11	Y52346	"
B 12	Y52347	"
B 13	Y52348	"
B 14	Y52349	"
B 15	Y52350	"
B 16	Y52351	"
B 17	Y52352	"
B 18	Y52353	"
B 19	Y52354	"
B 20	Y52355	"
B 21	Y52356	"
B 22	Y52357	"
B 23	Y52358	"
B 24	Y52359	"
B 25	Y52360	"
B 26	Y52361	"
B 27	Y52362	"
B 28	Y52363	"
B 29	Y52364	"
B 30	Y52365	"
B 31	Y52366	"
B 32	Y52367	"
B 33	Y52368	"
B 34	Y52369	"
B 35	Y52370	"
B 36	Y52371	"
B 37	Y52372	"

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date</u>
B 38	Y52373	June 15/71
B 39	Y52374	"
B 40	Y52375	"
B 41	Y52376	"
B 42	Y52377	"
K 1	Y52378	June 15/71
K 2	Y52379	"
K 3	Y52380	"
K 4	Y52381	"
K 5	Y52382	"
K 6	Y52383	"
K 7	Y52384	"
K 8	Y52385	"
K 9	Y52386	"
K 10	Y52387	"
K 11	Y52388	"
K 12	Y52389	"
K 13	Y52390	"
K 14	Y52391	"
K 15	Y52392	"
K 16	Y52393	"

Typed Aug.27/70-vh

PROJECT 98 - TALBOT

Additional Claims

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date</u>
Add 6 Fr.	Y59298	Oct. 14/71
Add 7 Fr.	Y59299	"
Add 8 Fr.	Y59300	"
Add 9 Fr.	Y59301	"
Add 20 Fr.	Y59302	"
Add 21 Fr.	Y59303	"
Add 22 Fr.	Y59304	"
Add 23 Fr.	Y59305	"
Add 24 Fr.	Y59306	"
Add 25 Fr.	Y59307	"
Add 26 Fr.	Y59308	"
Add 27 Fr.	Y59309	"
Add 28 Fr.	Y59310	"

Typed Nov. 3/70-va

**TALBOT PROJECT**  
**GEOLOGY**  
**A, B, K and ADD CLAIMS**

**LEGEND**

**DIKES**

Rhyolitic Rhy  
 Andesitic An  
 Diabasic Db  
 Quartz - Feldspar - Porphyry QFπ

**3** Fine to medium grained Intrusives

3a - fine grained porphyritic granite (locally rhyolite)  
 3b - fine grained granite (locally aplitic)  
 3c - medium grained phase of 3a and 3b

**2** Coarse grained Intrusives

2a - Alaskite (low mafic)  
 2b - Leucogranite (transition 2a, 2c)  
 identified as Biotite Quartz Monzonite occasionally  
 2c - Granite  
 2d - Porphyry (Granite to Alaskite)  
 2d1 - as porphyritic alaskite

**1** OLDER Crystalline Rocks

Quartz Diorite

**FAULT**

MINERAL FLOT  
 TALUS AREA  
 ROCK OUTCROP  
 TALOUS EDGE  
 APPROXIMATE CONTACT

MINERAL FLOT  
 TALUS AREA  
 ROCK OUTCROP  
 TALOUS EDGE  
 APPROXIMATE CONTACT

CONTACT



ALASKA  
 PRELIMINARY GEOLOGICAL MAP  
 TALENAKE  
 ENGINEERING LTD.  
 1958



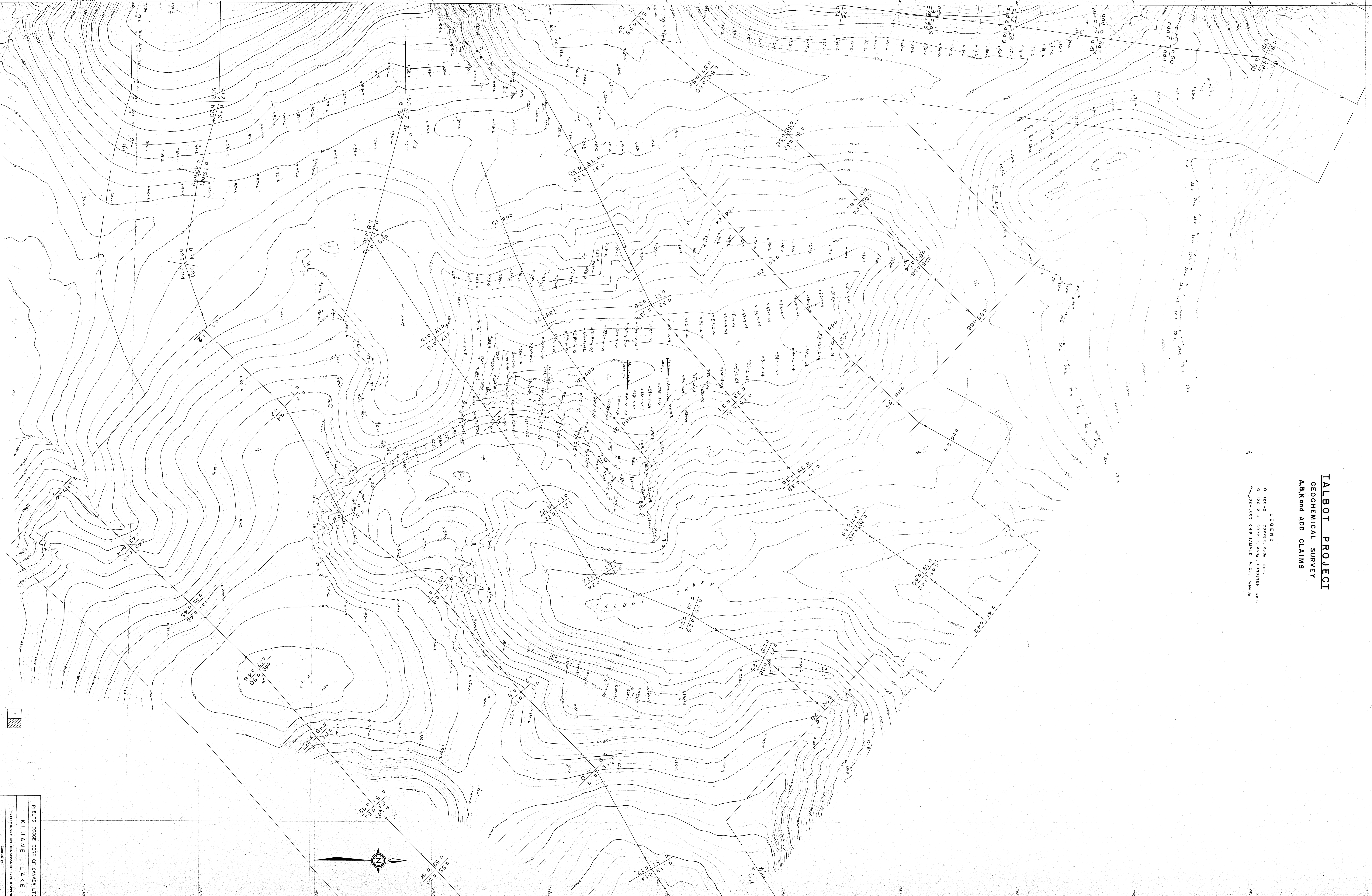
**TALBOT PROJECT**  
**GEOCHEMICAL SURVEY**  
**A, B, K and ADD CLAIMS**

- LEGEND**
- 120-2 COPPER,  $MnS_2$  ppm.
  - 120-2-4 COPPER,  $MnS_2$ , TUNGSTEN ppm
  - 02-.003 CHIP SAMPLE % Cu, %  $MnS_2$



**TALBOT PROJECT**  
**GEOCHEMICAL SURVEY**  
**AR&M ADD CLAIMS**

**LEGEND**  
 ○ 120-2 COPPER, MASS. ppm.  
 ○ 120-2-4 COPPER, MASS. TUNGSTEN. ppm.  
 ○ 03-003 CHIP SAMPLE. % Cu, %MoS<sub>2</sub>



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 1985-0001  
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