CANADIAN OCCIDENTAL PETROLEUM LTD.

MINERALS DIVISION

GEOLOGY AND GEOCHEMISTRY OF THE RYE CLAIM GROUP

Claim Sheet No. 115-G-16
(N.T.S. 115-G-16)

Long. 138°25'
Lat. 61°50'

Claims Rye 1-54

(Y63018-Y63025
Y63387-Y63432)

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of $ 13,058.25

J.B. Craig

Resident Geologist or
~~Resident Mining Engineer~~

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

Commissioner of Yukon Territory

By:

C.F. Gleeson, Ph.D., P.Eng.
D.M.S. Bhatia, M.Sc.

Duration of Work:
July 29th, 1972 to August 13th, 1972

GEOLOGY AND GEOCHEMISTRY OF THE RYE CLAIM GROUP

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ILLUSTRATIONS

SUMMARY

The claims are underlain to the northeast by northwest trending porphyritic andesite, basalt and rhyolite of probably Triassic age. These are in contact to the southwest with gently dipping (15°SW) Yukon Group quartzite and minor interbedded marble. Two small masses of granodiorite intrude the sedimentary formations in the southeast sector of the property.

Traces of azurite were found as films on fracture surfaces of the quartzite. In addition, a showing of massive pyrrhotite-sphalerite was found near the quartzite-rhyolite contact in the southeast corner of the property. Two grab samples from a small exposure (2' x 2') of this material assayed 15.4 and 24.5% Zn, 0.02% Cu, 0.001% Mo, <0.01% Pb and a trace of Ag.

A strong Cu-Zn-Mo Soil Anomaly occurs over and in the vicinity of the above showing and it is open to the east. In the northwest portion of the claims northwest trending zinc anomalies are related to the fractured quartzites and the porphyritic andesites.

It is recommended that additional claims be staked on the east and south to cover the easterly extension of the mineralized zone and to protect a circular aeromagnetic anomaly that could be caused by an intrusive body (granodiorite) off of the southeast corner of the claims.

Additional prospecting, geology, geochemistry and a magnetometer survey is recommended in the vicinity of the Zn showing and over the newly claimed area. If results warrant it an I.P. survey and diamond drilling should follow.

INTRODUCTION

The Rye (Nos. 1-54) claims were staked as a result of a reconnaissance geochemical program completed during the summer of 1971.

Staking was done under contract by Harman Management Ltd. of Whitehorse during the period September 22-23, 1971.

This report will describe and discuss the geology and geochemistry of the claim area.

The work was done by Canadian Occidental Petroleum Ltd. to determine the cause of stream sediment copper, zinc and molybdenum anomalies detected in the streams draining the claim area.

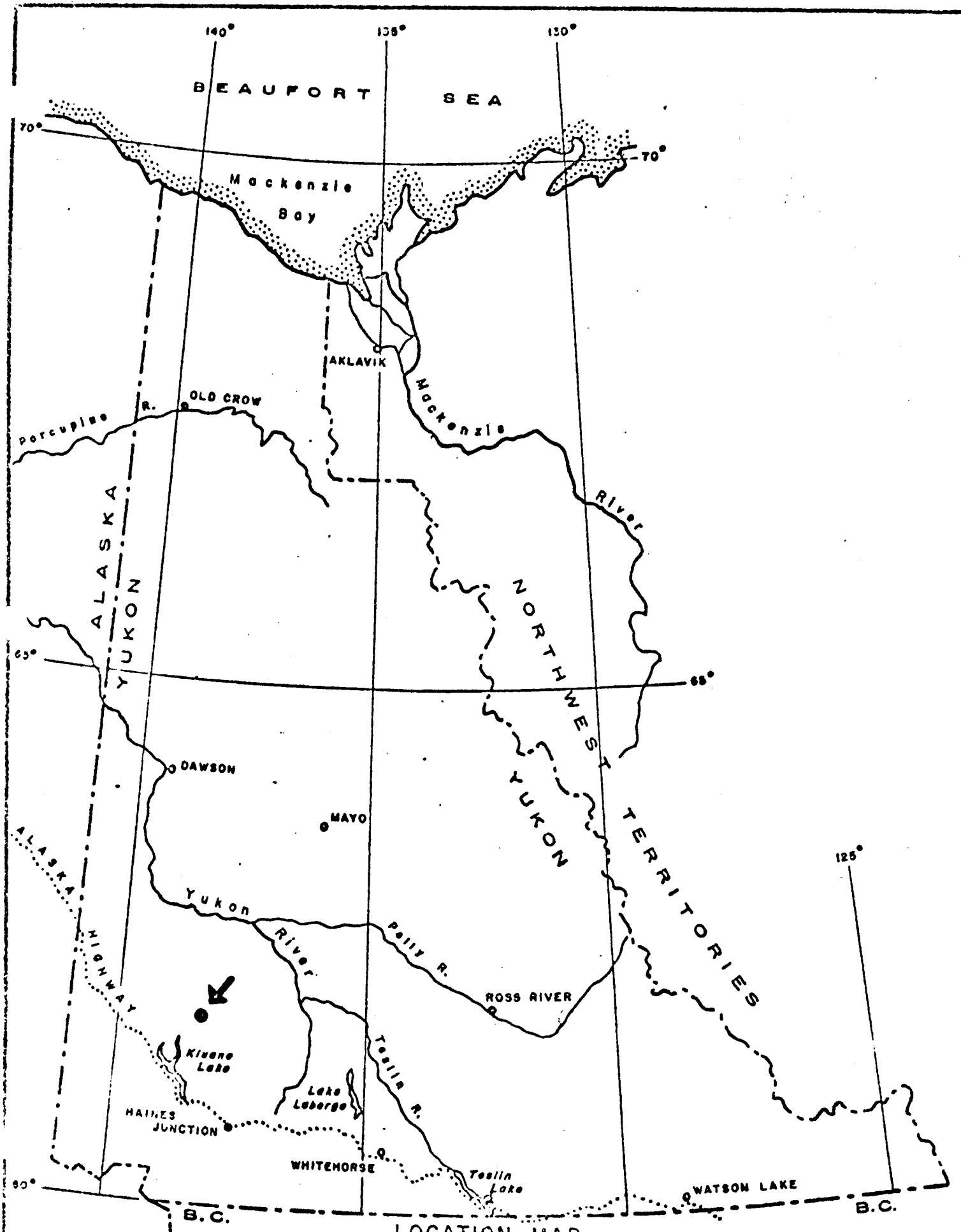
LOCATION AND ACCESS

The claim group is recorded on claim map 115-G-16, in the Whitehorse Mining District.

The property is located about thirty-eight air miles northeast of Burwash Landing which is at mile 1093 on the Alaska Highway (Figure 1).

VEGETATION

The main vegetation in the claim area is moss. It is present on the hills and in the valleys. Spruce and dwarf birch jointly comprising about 10% of the vegetation, are found in the southeast corner of the property. Tree line is at approximately 4000'.



LOCATION MAP

RYE CLAIM GROUP

YUKON TERRITORY

Figure 1

WORK COMPLETED

(a) Line Cutting

Line cutting was done under contract by Harman Management Ltd. of Whitehorse during the period July 24, 1972 to August 5, 1972. The total amount of line cut was 165,700 feet or 31.3 miles, for an average rate of 3,211 of feet of line per man per day.

(b) Geological Mapping

Geological mapping was done on this property between July 30, 1972 and August 13, 1972, by Mr. D.M.S. Bhatia, Geologist, in association with Dr. C.F. Gleeson, Consultant to Canadian Occidental Petroleum Ltd., who visited the property on three separate occasions.

(c) Geochemical Survey

Geochemical soil sampling was done by Mr. P.D. Tanaskow under the supervision of Mr. D.M.S. Bhatia. Samples of the soil were taken at 200-foot intervals on lines 800 feet apart and every alternate sample was analyzed. A total of 845 soil samples and 19 rock samples were taken and analyzed geochemically for Cu, Zn and Mo.

(d) Names and Addresses of Personnel

Canadian Occidental Petroleum Ltd., Minerals Division

Mr. D.M.S. Bhatia	110 Wellesley Street East Apt. 403, Toronto 5, Ont.	Geologist
Mr. P.D. Tanaskow	627 Dunboyne Crescent London, Ontario.	Soil sampler
Mr. B. LeDoux	General Delivery Whitehorse, Y. T.	Cook (July 29 to August 3, 1972)
Miss Marnie Austin	12319, 131st AVenue Edmonton, Alberta	Cook (August 3, 1972 to August 8, 1972)

Dr. C.F. Gleeson	764 Belfast Road Ottawa, Ontario	Consultant Geologist

Harman Management Ltd., Whitehorse

Mr. N. Glass	172 East Windsor North Vancouver, B. C.	Line Cutter
Mr. V. Guinet	R. R. #1, Cottonwood Island Prince George, B.C.	Line Cutter
Mr. F. Charlie	General Delivery Ross River, Y.T.	Line Cutter
Mr. W. Besner	General Delivery Whitehorse, Y.T.	Line Cutter
Miss Marnie Austin	12319, 131st Avenue Edmonton, Alberta	Cook (July 23, 1972 to August 8, 1972)

PHYSIOGRAPHY

The north and southeast part of the property is made up of a series of northwest trending ridges and valleys while in the southwest portion they trend south and southwest. The ridges reach a maximum elevation of 6000 feet in the northwest sector of the claims and 3 miles to the southeast the valley has a minimum elevation of 3400 feet. Hence the maximum relative relief on the property is 2600 feet (Figure 2).

GEOLOGY

The rocks of the claim area can be divided into two main groups, viz. the Yukon Complex, and the Nisling Range Volcanics. Minor amounts of granodiorite outcrops in the area and probably it is part of the Nisling Range Granodiorite (Figure 2). The following table of formations is suggested.

Jurassic Cretaceous	Nisling Range Granodiorite	Granodiorite
Triassic and Later	Nisling Range Volcanics	Porphyritic Basalt, andesite, Rhyolite
Precambrian and Later	Yukon Complex	Quartzite, Marble

Yukon Complex

The rocks of the Yukon Complex are mainly quartzite with minor intercalated marble.

Quartzite: The quartzite is fine to medium grained, massive and compact, varying in colour from dark grey to ash grey. It consists mainly of sericite and quartz with small amounts of biotite and muscovite. Accessory pyrite and pyrrhotite is common and on weathering it produces brown to black stained oxidized surfaces on the quartzite.

Lineation in the rocks is generally incipient, but strong ordering of minerals (sericite, biotite and quartz) into thin bands (up to 3/4")is seen locally e.g. towards the south-central portion of the property.

The quartzite occurs as float and outcrop in the area. It occupies the southern half of the property. extending from the northwest corner, through the centre to the southeastern corner.

White barren quartz veins cut the quartzite in an east-west direction at line 50E,55S and 17S on L48E.

Marble: This rock is medium to coarse grained, it may be sugary to compact and varies in colour from a dull white to light grey to whitish grey. On weathering, the surface takes on a distinctive "mouse grey" colour; it may become

honeycombed and crumbly. Mineralogically, it is made up predominantly of white crystalline calcite.

The marble occurs interbedded with the quartzite and it is restricted to a small hill with a radius of about 400 feet at station 31S on line 32E.

Nisling Range Volcanics

The Triassic volcanics are made up of porphyritic basalt, andesite and rhyolite. The volcanic rocks are in contact with those of the Yukon Complex (quartzite) and occupy the northern half of the property. The contact between them strikes northwest.

Porphyritic Quartz Basalt*: This is the most Predominant volcanic rock in the area. It occurs as a large dyke-like mass occupying the northern portion of the property and striking northwesterly.

It is hard, fine grained and grey to greenish grey in colour. It contains phenocrysts of plagioclase feldspar, hornblende, biotite, and subordinate quartz (5-10%) in a fine grained matrix. Locally, calcite phenocrysts up to 10% occur in the rock. The rock is generally fresh having a glazed appearance due to the presence of minor amounts of chert.

Porphyritic Andesite occurs locally within the porphyritic basalt e.g. at L104E,5+50N; 87+75E, 2+50S. The rock is greenish grey in colour, fine to medium grained, hard and compact. It contains phenocrysts of plagioclase feldspar, hornblende, biotite and locally some quartz (5-10%) and calcite (up to 10%). It can be differentiated from the basalt in the field by its relatively coarser grain size and subordinate content of mafic minerals.

*Turner, F.J., Verhoogen, J., Igneous and Metamorphic Petrology, 1962, P.147, McGraw-Hill Book Co. Inc., New York

Rhyolite occurs towards the mid-eastern limit of the property and appears to continue northwesterly through to the central portion of the claims. It is sandwiched between the quartzite on the south side and the porphyritic basalt-andesite on the north. In addition, small amounts (up to 20%) of rhyolite are present locally in the basalt.

The fresh, light grey rhyolite weathers to a rusty brown, a light brown or a creamy colour. It is fine grained and occurs mainly as rock debris. Phenocrysts of quartz (up to 1/6" in diameter) are generally present in the rhyolite. The quartz is generally rounded, euhedral and glassy in appearance.

Nisling Range Granodiorite

Two small (10' diameter) outcrops of granodiorite are seen in the claim area at 63+75E, 47+00S, and 61E,45+50S. The rock is whitish grey in colour, coarse grained and comprises mainly quartz and feldspar, accessory biotite (5-10%) and hornblende (5-10%). The rock shows signs of alteration; the mafic minerals appear to be changing to chlorite and the feldspars altering to sericite.

Structure

The quartzites strike southwesterly and dip 15 to 30^{o} southeast (Figure 2). A study of the airphotos suggest the presence of several northwest trending lineaments which cut the quartzites. The quartzites in the vicinity of one of these lineaments (e.g. 8E,27+50S and 30E,36S) are very fractured and contain 1-5% pyrite and pyrrhotite. At both of these localities traces of secondary copper minerals (azurite)

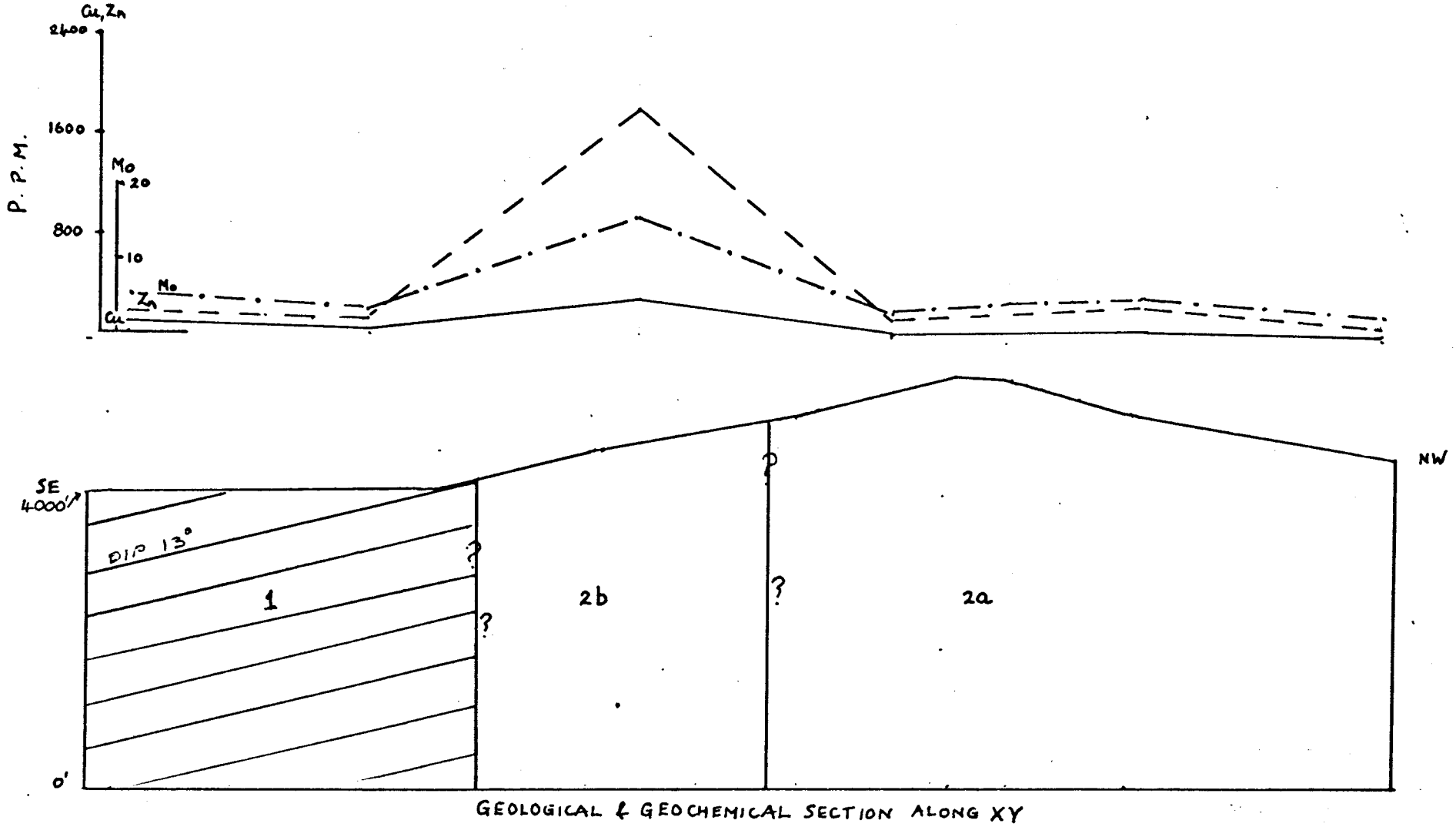


Figure 2

Rye Claims 115-G-16

were seen along the fine fractures in the quartzite. The trends of the zinc anomalies in the soils of this area are also northwest. Hence this lineament would appear to be related to a mineralized northwest fracture zone in the quartzites.

Metamorphism

The rocks of the Yukon Group have undergone regional metamorphism. The lineation in the quartzite is incipient, though locally strong preferred orientation is shown by quartz, sericite and biotite. The limestone has recrystallized to marble. The grade of metamorphism is low and has reached that of the greenschist facies.

ECONOMIC GEOLOGY

Stream sediment anomalies of copper and zinc occur in this claim area; these anomalies are believed to originate in the quartzites of the Yukon Complex and the strong Cu-Zn anomaly on the east side of the claims is related to the rhyolite of the Nisling Volcanics.

Limonite staining in the quartzite is ubiquitous in the area and is caused by the presence of minor quantities of pyrrhotite and pyrite in the fractured quartzites. Trace quantities of azurite are present along fracture surfaces in the quartzites. In addition, a yellow stained fragment of quartzite at 30E,36S contained 39 ppm molybdenum; hence it is possible that the yellow staining is caused by a secondary weathering product of molybdenite (i.e. Molybdate).

A small showing (2' x 2') containing massive sphalerite, pyrrhotite and pyrite was found by P. Tanaskow while digging a hole to get a soil sample. The showing is located on L120E,46+10S. The host rock appears to be rhyolite. This showing is surrounded by dense small bush (dwarf birch) and outcrops are scarce to non-existant. Hence it is difficult to ascertain the extent of sulphide mineralization. The rocks in the sulphide zone weather chocolate brown to yellowish brown.

Although massive sulphides occur in the zone, most of the mineralization appears to be present as disseminated pyrite, pyrrhotite, sphalerite, chalcopyrite and possibly some bornite; however, the latter could also be oxidized pyrrhotite.

The pyrrhotite is magnetic and this causes the sulphide bearing rocks to be slightly to moderately magnetic.

A grab sample of the massive sulphide assayed as follows:

Sample No.	%Cu	%Zn	%Pb	%Mo	Ag
Ry31	0.02	24.5	0.01	0.001	Tr.
Ry32	0.02	15.4	0.01	0.001	Tr.

ROCK GEOCHEMISTRY

In addition to the individual rock specimens that were collected and analyzed (Appendix II), rock chips were collected systematically along the grid lines. The chips from each rock unit were combined and these composite samples were analyzed geochemically for Cu, Zn and Mo. In this way it was felt that a reliable average for the trace metals

in each rock unit would be obtained. The results are tabulated below:

Sample No.	Rock Type	Values in ppm Cu	Zn	Mo
Ry33	Quartzite	39	110	3
Ry34	Porphyritic basalt	17	137	2
Ry35	Rhyolite	14	107	2

The quartzites have a copper background that is more than twice that of the volcanic rocks, while zinc and molybdenum are equally abundant in all rock types.

The pyritiferous and fractured quartzites (Ry #s 11 and 12) at 30E,36S contain anomalous amounts of copper (73 ppm) and molybdenum (8 to 39 ppm). In addition the marble outcrop (Ry#10) 400 feet to the north is higher than average in copper (53 ppm). The quartzite 3000' southeast of Ry #11 has above normal copper (52 ppm). All these samples lie along the postulated northwest trending fracture zone and their above normal metal values are caused by minor copper and molybdenum mineralization in fractures. This mineralization is of no economic significance.

SOIL GEOCHEMISTRY

Some 845 soil samples were collected every two hundred feet on lines 800 feet apart. This sampling was done to help determine the possible presence of Cu-Zn-Mo mineralization. Every alternate sample was analyzed for Cu, Zn and Mo.

The samples were sent to Bondar-Clegg's laboratory in Whitehorse where they were dried and sieved to minus 80

mesh. Samples were analyzed on a Tectron Model AA5 atomic absorption spectrometer after digestion in hot $HCl:HNO_3$. Subsequently the results were plotted and these are shown on the accompanying geochemical map.

Soil Horizons

"A" Horizon: Generally the organic rich "A" horizon is present throughout the claim area. This is especially true in the valleys containing the swamps. In non-swampy areas the "A" horizon is moderately to well decomposed and varies in thickness from 1" to 12". However, in swampy areas it is considerably thicker and in general less decomposed.

"B" Horizon: The "B" horizon is well developed in the claim area. The soil is clayey and varies in colour from grey to greyish brown to brown. Invariably it is overlain by volcanic ash. For the most part the ash layer is 3 to 6 inches thick. However, in places it can be as thick as 11 inches. The ash is white to whitish grey, and granular (sand size).

Profile Soil Sampling

Sample pits were dug in different physiographic settings to determine the relationship between metal content and soil horizons. Descriptions and locations of the pits are given below in Table 1.

Table 1 Cu, Zn and Mo in Soil Profiles

Sample No.	Location	Horizon	Values in ppm Cu	Zn	Mo	Description
	L40E,27+50S	A_o				0"-2" Moss
8850A	"	A_1	47	25	2	2"-4" thick, black decomposed organic material (70-80%), some roots, 20% silt and clay
8850B	"	Ash	38	36	3	4"-11" thick
8850C	"	B	49	74	5	greyish brown, 90% clay, 10% silt, 11" plus thick
	43+50E,29+10S	A_o				Moss 0"-1" thick
8851A	"	Volcanic Ash	7	6	1	1"-7" thick,whitish grey to brown, it is developing a "B" horizon
8851B	"	B_1	53	66	4	7"-11" thick, soil greyish black in colour, 90% clay, 10% silt, some pebbles.
8851C	"	B_2	45	78	4	11"-17" thick,"B" horizon, brown in colour, 90% clay, 10% silt, some pebbles

It is evident from Table 1 that the maximum concentration of metals occurs in the "B" horizon and that the values in the ash layer are usually much lower. Hence throughout the soil survey "B" horizon soil samples were taken wherever possible.

STATISTICS

Histograms have been drawn for Cu, Zn and Mo in the soils of the claim group and these are shown in Figures 3, 4 and 5.

All curves are multimodal indicating that each metal has two or more distributions. These distributions are probably relative to changes in lithology and mineralization.

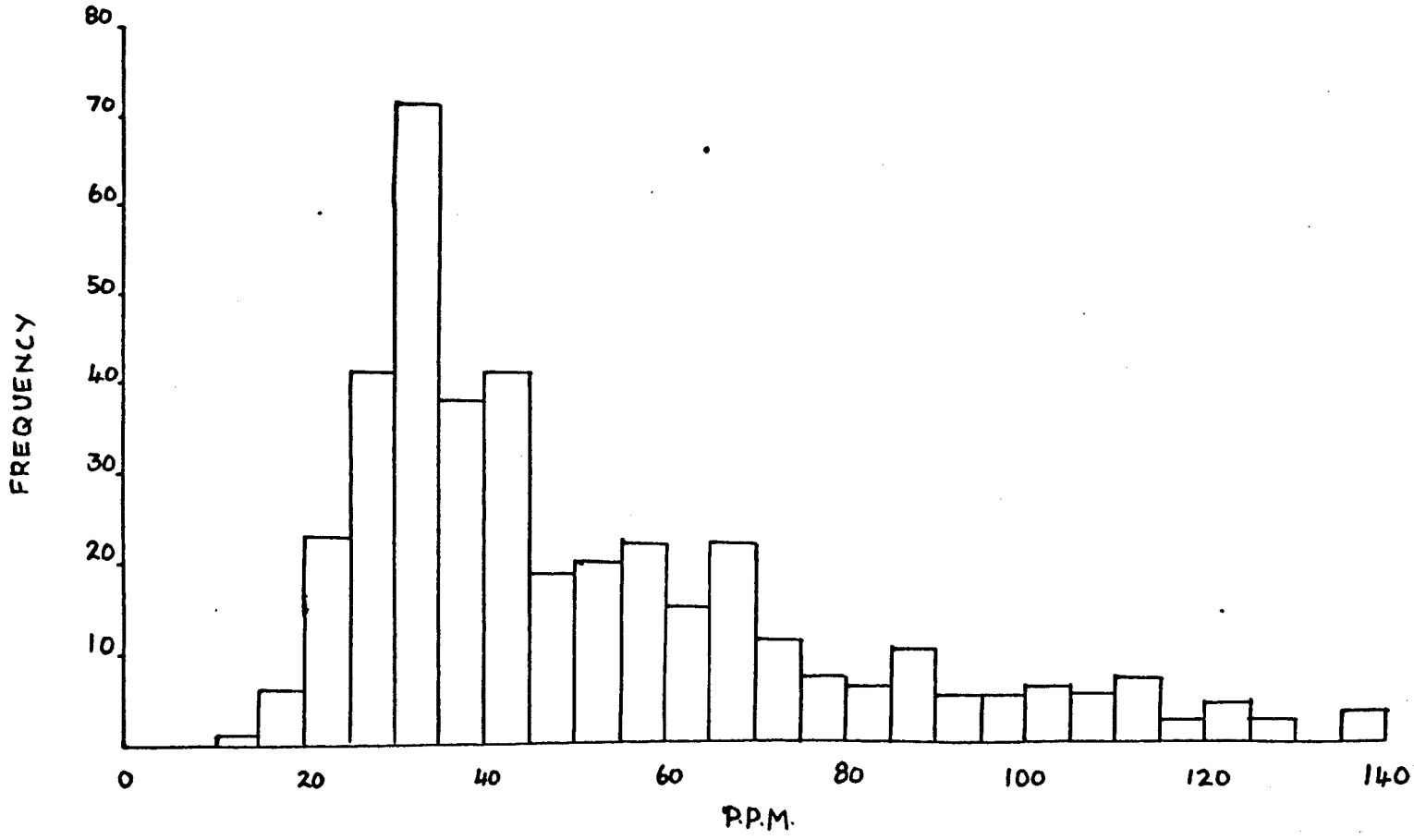
Background (median) values for Cu, Zn and Mo are 36, 90 and 3 ppm respectively. Anomalous values were established at the 97% interval of the non-anomalous population; for Cu, Zn and Mo they are 76, 170 and 6 ppm respectively.

Results

Zinc

Zinc values in the soils range from 8 to 1800 ppm and average about 90 ppm. Two strong northwest trending anomalies occur in the northwest corner of the claim group between lines 0 and 48E.

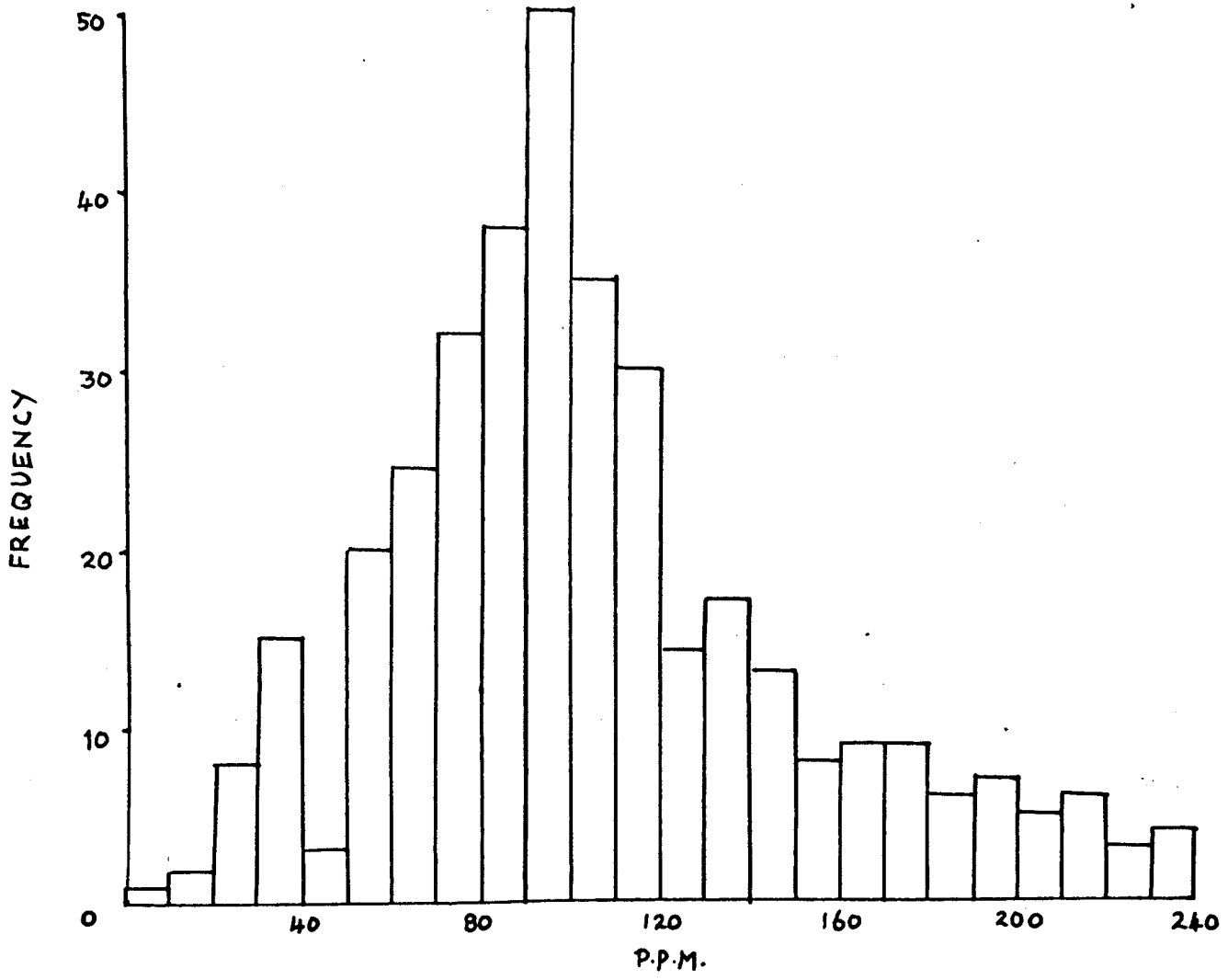
A. The more southerly one continues beyond the claim group and is underlain by a fracture zone of rusty quartzite. Its southeast end is abruptly terminated along a northeast trending depression parallel to the strike of the quartzite. It is possible this lineament could represent a fault. The average dimension of the anomaly on the claim group is 4800' x 800'.



FREQUENCY DISTRIBUTION
FOR
COPPER IN SOIL

Figure 3

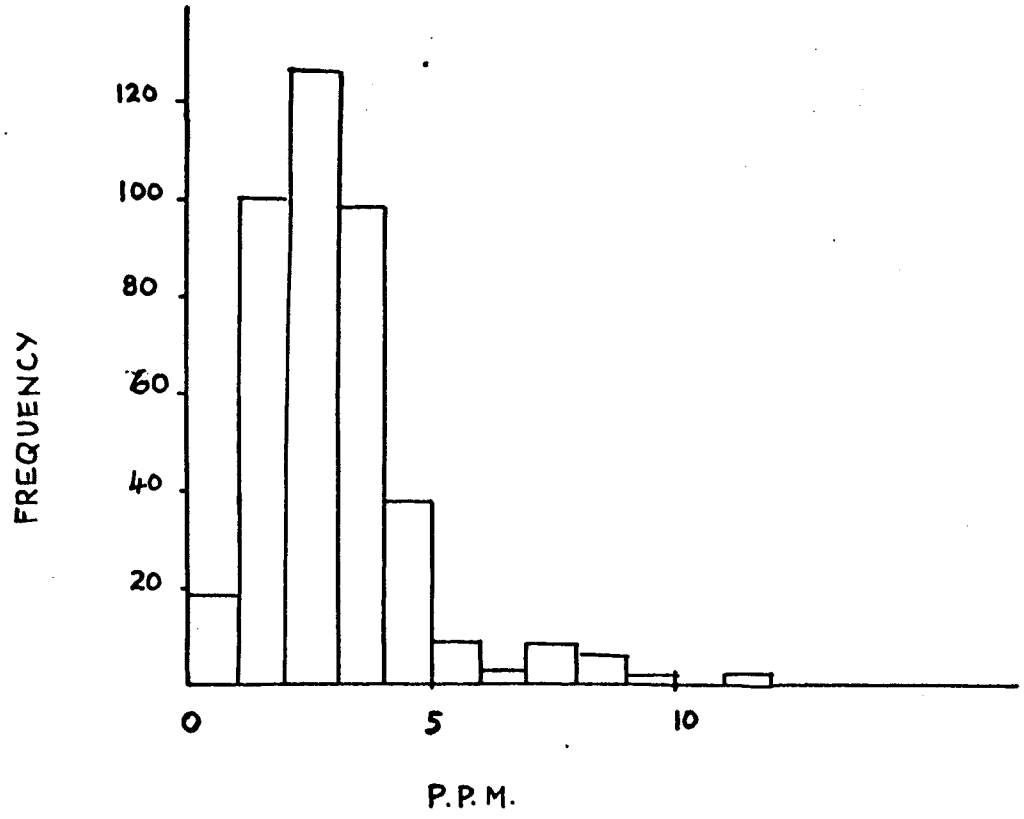
Rye Claims 115-G-16



FREQUENCY DISTRIBUTION FOR ZINC IN SOIL

Figure 4

Rye Claims 115-G-16



FREQUENCY DISTRIBUTION
FOR
MOLYBDENUM IN SOIL

Figure 5

Rye Claims 115-G-16

B. The north one (2000' x 800') also continues to the northwest beyond the claim group and it is underlain by basic to intermediate porphyritic volcanic rocks. At the north end of L24E the zinc highs are accompanied by a high (112 ppm) copper value.

C. Centered around L56E,18S is an east-west striking zinc anomaly (2800' x 600') which straddles a rhyolite-quartzite contact. It is possible that this anomaly could represent a faulted portion of the more southerly northwest trending zinc anomaly.

D. A large (3600' x 2000') zinc anomaly starts on L88E,34S and continues in a sotuheasterly direction off of the claim group. A zinc showing containing up to 24.5% zinc was found in this zone on L120E,46S.

Most of the anomaly is underlain by rhyolite (Figure 2). The presence of several northeast trending lobes along the anomaly suggests that it could be controlled, in part, by a northeasterly fracture system.

E. Another zinc anomaly at the south ends of lines 72E and 80E is underlain by quartzite and it could mark the southwesterly extension of one of the above lobes.

F. Zinc is present in anomalous quantities between L56E,50S and L72E,48S. This area is underlain by quartzite which has been intruded by a dyke or small mass of granodiorite.

G. Several other isolated zinc anomalies which,

in part, parallel the strike of the quartzite, are present in the southwestern part of the claims. An isolated east trending one occurs also over the volcanics on L112E,6S.

Copper

Copper ranges from 18 to 320 ppm and averages 36 ppm.

A. South of base line #1 and between lines 8E and 80E there are several areas containing in excess of 100 ppm copper. The largest one is centered on L40E between stations 20 and 36S. It trends northeast and measures 2200' x 800'. The rock type here is a fractured pyritiferous quartzite in which a minor amount of azurite was found along the fracture planes.

B. The highest copper value (320 ppm) on the property is a single station anomaly at the south end of L24E and it is present in a similar geological environment as the previous anomaly.

C. In the vicinity of B.L. #2 (5500' S of B.L. #1) between 40E and 80E several discontinuous, narrow, east and northeast trending anomalies occur. These anomalies are associated with quartzite that has been intruded by a dyke of granodiorite.

D. The largest copper anomaly is present in the southeast corner of the property between lines 96E and 120E. The 100 ppm contour for copper outlines an area measuring approximately 3600 feet by 1600 feet. The anomaly has a northeasterly orientation and it is open on the east. This zone coincides with an area that is also high in zinc and

molybdenum. On L120E,46S this anomaly is underlain by a showing containing massive sphalerite and pyrrhotite with minor amounts of chalcopyrite and bornite (?). The anomaly occurs in an area underlain by quartzite and rhyolite.

Molybdenum

Molybdenum values in the soils range from 1 to 32 ppm and average 3 ppm. Molybdenum anomalies as outlined by the 10 ppm contour tend to occur as isolated highs. Two of these highs (i.e. L56E, 50S and L72E,58S) are in part coincident with copper anomalies and they are thought to be related to a granodiorite which intrudes the quartzites in this area.

A. The highest Mo result (32 ppm) found in the soils on the property is a single station value on L72E ,30S. It occurs at the east end of an east trending molybdenum zone that extends westward for 1600 feet and which is outlined by the 5 ppm Mo contour. The soil at this station was organic and because of this probably there has been an enrichment of available molybdenum. The source of the anomaly appears to be the quartzites.

B. Two isolated Mo highs are present on L96E,36S (15 ppm) and on l12E,42S (24 ppm), they occur within a northwest trending zone outlined by the 5 ppm Mo contour. The zone is about 400 feet wide, it is open to the east and extends northwest for 2600 feet from L120E. The anomalies are coincident with previously described Cu-Zn ones and they are underlain by rhyolite.

DISCUSSION

Linear northwest trending zinc anomalies in the northwest corner of the claims appear to be related to lithology (intermediate to mafic porphyritic volcanics) and to a northwest lineament in the quartzites and on the quartzite-volcanic contact. The abrupt termination of the more southerly zinc anomaly suggests a possible offset of the zone by a northeast fault. Generally the zinc anomalies in the northwest part of the claim are not coincident with other anomalous metal zones. These anomalies are not thought to be caused by economically significant mineralization.

Several circular and northeast trending copper anomalies are present over the quartzites in the southwest sector of the claims.

In several localities rusty quartzites containing 1-5% pyrite-pyrrhotite have been found to have minor amounts of azurite along thin fracture surfaces. Most of the copper anomalies in the southwest sector of the claims are probably related to such a source.

One exception may be the coincident Cu-Mo anomalies on L56E,50S and L72E,56S; the quartzite in this vicinity has been intruded by a granodiorite and mineralization related to this intrusion could be the cause of these anomalies.

The most intense and extensive coincident Cu, Zn and Mo anomalies occur in the southeast portion of the property. The general zone strikes to the southeast from L88E,34S and continues off of the claim group. A showing

containing massive sphalerite pyrrhotite as well as disseminated pyrrhotite, chaocopyrite, bornite (?) and sphalerite was found in the rhyolite within the anomalous zone on L120E,46S. Two samples of massive sulphides assayed: 15.4 and 24.5% Zn, 0.02% Cu, 0.001% Mo, 0.01% Pb and a trace of Ag.

The lobate character of the anomaly suggests that in addition to the northwest geological control there is also a northeast one. A geological feature that could result in such a configuration would be the intersection of two fracture systems.

Whether the above anomaly is related to an economic source of metallic mineralization can be determined by additional work. The presence of a larger intrusion than the granodiorite one found on L64E is suggested by a circular aeromagnetic anomaly just off of the southeast corner of the claims.

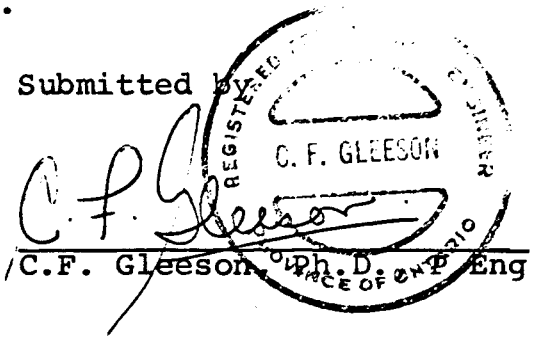
A stream sediment sample taken in 1971 and located 1 mile east of the magnetic anomaly and south of the claim group contained anomalous copper (126 ppm).

Recommendations

Prior to further work additional claims should be added to the east and south boundaries of the claim group. This additional staking will cover the eastern extension of the zinc showing and the Cu, Zn and Mo anomaly, the circular aeromagnetic anomaly and a stream sediment copper anomaly south of the central portion of the present claim block.

The old and new claims should be covered by a magnetometer survey and additional geology and prospecting should be done around the showing on L120E. The new claims should be mapped geologically and soil sampled prior to deciding where and what future work (e.g. I.P., trenching, drilling) should be carried out.

Submitted by,



C.F. Gleeson, Ph.D., P.Eng.

Toronto, Ontario
September 14, 1972

D.M.S. Bhatia, M.Sc.

APPENDIX I

CLAIM DATA

Claim	Post No.	Tag No.	Location	Staker	Date Staked
Rye 1	1	Y63018	OE, ON	J.Johnson	Sept. 22, 1971
" 2	1	Y63019			
" 1	2	Y63018	14+00E,0+15N	"	"
" 2	2	Y63019			
" 3	1	Y63020			
" 4	1	Y63021			
" 3	2	Y63020	27+50E,0+50N	"	"
" 4	2	Y63021			
" 5	1	Y63022			
" 6	1	Y63023			
" 5	2	Y63022	40+00E,0+70N	"	"
" 6	2	Y63023			
" 7	1	Y63024			
" 8	1	Y63025			
" 7	2	Y63024	53+70E,1+50N	(Jessie Joe	"
" 8	2	Y63025		(J.Johnson	
" 9	1	Y63387			
" 10	1	Y63388			
" 9	2	Y63387	67+00E,2+00N	"	"
" 10	2	Y63388			
" 11	1	Y63389			
" 12	1	Y63390			
" 11	2	Y63389	79+50E,2+90N	"	"
" 12	2	Y63390			
" 13	1	Y63391			
" 14	1	Y63392			
" 13	2	Y63391	93+20E,4+20N	Jessie Joe	"
" 14	2	Y63392			
" 15	1	Y63393			
" 16	1	Y63394			
" 15	2	Y63393	105+50E,5+80N	L.J.Jacquot	"
" 16	2	Y63394		Jessie Joe	
" 17	1	Y63395			
" 18	1	Y63396			
" 17	2	Y63395	119+00E,6+50N	L.J.Jacquot	"
" 18	2	Y63396			
" 19	1	Y63397	1+00W,27+50S	"	"
" 20	1	Y63398			
" 19	2	Y63397	12+25E,27+00S	"	"
" 20	2	Y63398			
" 21	1	Y63399			
" 22	1	Y63400			
" 21	2	Y63399	23+00E,24+50S	"	"
" 22	2	Y63400			
" 23	1	Y63401			
" 24	1	Y63402			

Claim	Post No.	Tag No.	Location	Staker	Date Staked
Rye 23	2	Y63401	37+00E,25+-0S	(L.J.Jacquot	Sept.23,1971
" 24	2	Y63402		(E.Kohler	
" 25	1	Y63403			
" 26	1	Y63404			
" 25	2	Y63403	50+00E,24+00S	E.Kohler	"
" 26	2	Y63404			
" 27	1	Y63405			
" 28	1	Y63406			
" 27	2	Y63405	62+50E,24+50S	E.Kohler	"
" 28	2	Y63406			
" 29	1	Y63407			
" 30	1	Y63408			
" 29	2	Y63407	76+00E,24+00S	(E.Kohler	"
" 30	2	Y63408		(Jimmy Joe	
" 31	1	Y63409			
" 32	1	Y63410			
" 31	2	Y63409	90+00E,24+00S	Jimmy Joe	"
" 32	2	Y63410			
" 33	1	Y63411			
" 34	1	Y63412			
" 33	2	Y63411	101+00E,24+00S	"	"
" 34	2	Y63412			
" 35	1	Y63413			
" 36	1	Y63414			
" 35	2	Y63413	114+00E,24+00S	"	"
" 36	2	Y63414			
" 37	1	Y63415	2+00W,53+50S	"	"
" 38	1	Y63416			
" 37	2	Y63415	11+50E,54+50S	"	"
" 38	2	Y63416			
" 39	1	Y63417			
" 40	1	Y63418			
" 39	2	Y63417	26+15E,54+70S	(Jimmy Joe	"
" 40	2	Y63418			
" 41	1	Y63419			
" 42	1	Y63420			
" 41	2	Y63419	39+40E,54+60S	G.Johnson	"
" 42	2	Y63420			
" 43	1	Y63421			
" 44	1	Y63422			
" 43	2	Y63421	53+30E,54+80S	"	"
" 44	2	Y63422			
" 45	1	Y63423			
" 46	1	Y63424			
" 45	2	Y63423	66+50E,54+50S	"	"
" 46	2	Y63424			
" 47	1	Y63425			
" 48	1	Y63426			"
" 47	2	Y63425	81+50E,54+50S	(G.Johnson	"
" 48	2	Y63426		(Leon M.	
" 49	1	Y63427			
" 50	1	Y63428			

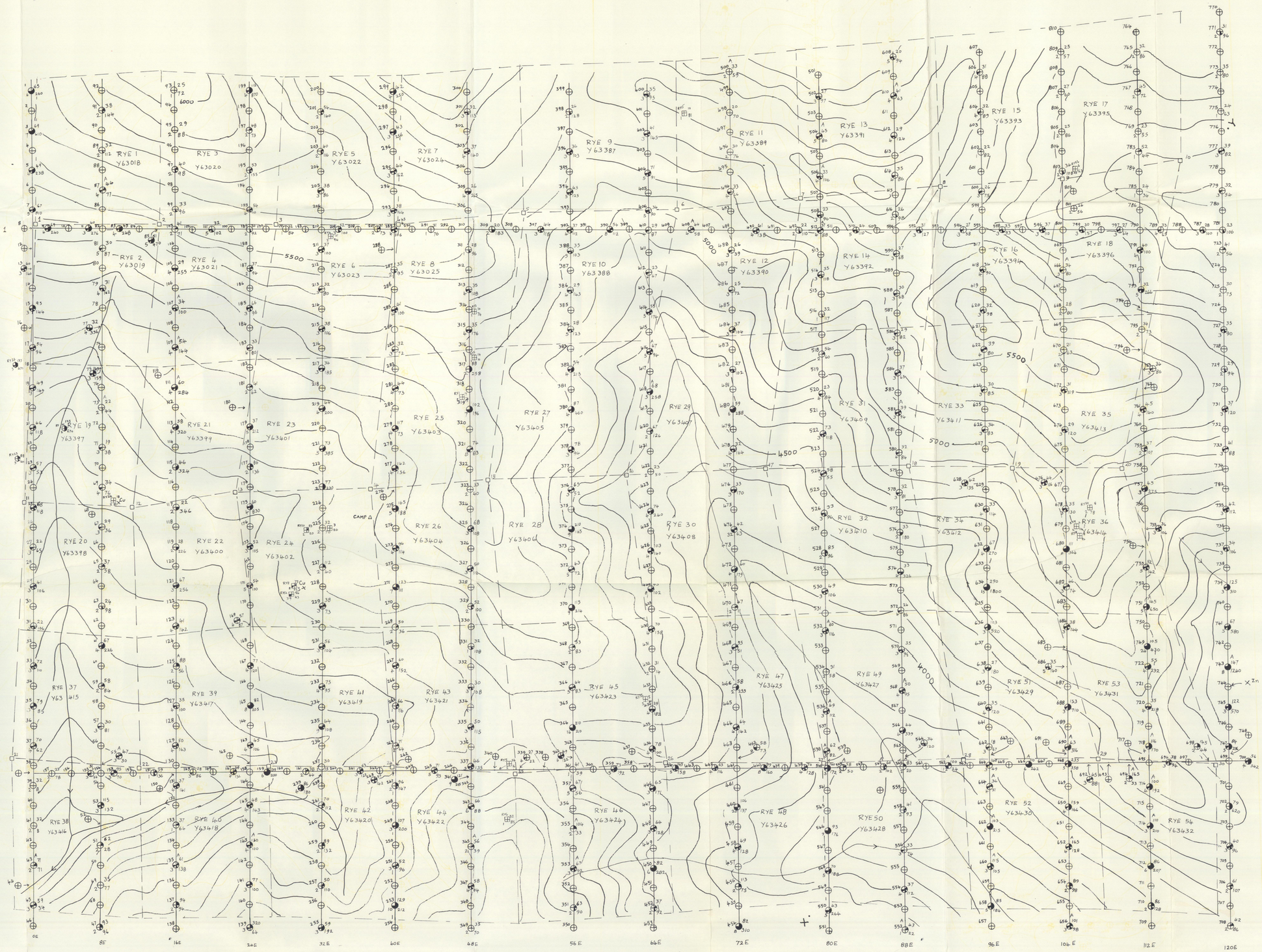
Claim	Post No.	Tag No.	Location	Staker	Date Staked
Rye 49	2	Y63427	95+70E,54+60S	Leon M.	Sept.22, 1971
" 50	2	Y63428			
" 51	1	Y63429			
" 52	1	Y63430			
" 51	2	Y63429	109+50E,54+60S	Leon M.	"
" 52	2	Y63430			
" 53	1	Y63431			
" 54	1	Y63432			
" 53	2	Y63431	123+05E,55+20S		
" 56	2	Y63432			

APPENDIX II

Location and Description of Rock Samples

Sample No.	Location	Rock Type	Values in ppm Cu	Zn	Mo
RY 1	L48E,17S	Quartz vein, pink coloured quartz	7	15	2
RY 2	L48E,13S	Light brown rhyolite	14	10	1
RY 3	L48E,8S	Porphyritic Andesite	10	74	1
RY 4	BL #1 - 29+75E	Porphyritic Andesite	15	94	2
RY 5	BL #2,50E	Quartz vein with minor pyrite	24	16	2
RY 6	51+50E,60S	Quartzite with limonite staining	52	85	1
RY 7	63S,48E	Quartz float	2	2	2
RY 10	31E,30S	Marble, with specks of pyrrhotite	53	20	2
RY 11	30E,36S	Quartzite probably containing azurite, limonite staining	73	117	8
RY 12	30E,36S	Quartzite, limonite staining; may contain azurite	26	43	39
RY 13	48+50E,28+50S	Quartzite	not analysed		
RY 14	63E,12N	Latite	not analyzed		
RY 15	67+50E,12N	Porphyritic basalt, with minor specks of pyrite	10	81	1
RY 16	104E,5+50N	Porphyritic basalt	6	63	ND
RY 17	71+50E,64S	Granodiorite, slightly altered, not mineralized	4	64	2
RY 18	106+50E, 31+50S	Porphyritic andesite, Minor pyrite	18	92	1
RY 19	106+51E,30S	Rhyolite	8	78	2
RY 20	106+50E, 28+25S	Basalt	2	114	2

Sample No.	Location	Rock Type	Values in ppm Cu	Zn	Mo
RY 24	9+25E, 26+50S	Quartzite containing minor azurite	18	27	2
RY 25	32+50E,30S	Dolomite	3	20	1
RY 26	63+75E,47S	Granodiorite, rock slightly altered	5	40	3
RY 31	120E,46+10S	Massive sulphides	Assay - 24.5% Zn		
RY 32	120E,46+10S	Massive sulphides (Sphalerite, Chalcopyrite, pyrite, pyrrhotite)	Assay - 15.4% Zn		



SAMPLE Cu Mo Zn
ANAMOLOUS SAMPLE
PROBABLY ANAMOLOUS
SAMPLE NUMBERS START AT B001
Cu Mo 12n Rock Samples
Cu Mo 12n STREAM SEDIMENT SAMPLES

6 CLAIM (POST, LINE)
STREAM
SWAMP
4500 CONTOURS
x Cu SHOWING
A ORGANIC SAMPLES

T.N. M.N. 30°38'

CANADIAN OCCIDENTAL PETROLEUM LTD.

115 - G - 16

Dwarf Birch Ck. Y. T.

RYE CLAIMS 1 - 54
GEOCHEMISTRY

200 0 400 800 FEET

Data by: D. M. S. Bhatia & C. F. Gleeson

Date: August 13, 1972

RYE 1 Y63018
RYE 2 Y63019
RYE 3 Y63020
RYE 4 Y63021
RYE 5 Y63022
RYE 6 Y63023
RYE 7 Y63024
RYE 8 Y63025
RYE 9 Y63387
RYE 10 Y63388
RYE 11 Y63389
RYE 12 Y63390
RYE 13 Y63391
RYE 14 Y63392
RYE 15 Y63393
RYE 16 Y63394
RYE 17 Y63395
RYE 18 Y63396
RYE 19 Y63397
RYE 20 Y63398
RYE 21 Y63399
RYE 22 Y63400
RYE 23 Y63401
RYE 24 Y63402
RYE 25 Y63403
RYE 26 Y63404
RYE 27 Y63405
RYE 28 Y63406
RYE 29 Y63407
RYE 30 Y63408
RYE 31 Y63409
RYE 32 Y63410
RYE 33 Y63411
RYE 34 Y63412
RYE 35 Y63413
RYE 36 Y63414
RYE 37 Y63415
RYE 38 Y63416
RYE 39 Y63417
RYE 40 Y63418
RYE 41 Y63419
RYE 42 Y63420
RYE 43 Y63421
RYE 44 Y63422
RYE 45 Y63423
RYE 46 Y63424
RYE 47 Y63425
RYE 48 Y63426
RYE 49 Y63427
RYE 50 Y63428
RYE 51 Y63429
RYE 52 Y63430
RYE 53 Y63431
RYE 54 Y63432

CAMP

BL # 1

BL # 2

Claim (post, line)
Stream
Contour
Swamp
Dip (inclined)
Contact (assumed)
Float, area of float
Outcrop
Showing
Rock samples

T.N.
M.N.
30°38'

Nisling Range Granodiorite

Volcanics: 2a, porphyritic basalt, andesite; 2b, rhyolite

Yukon Complex: 1a, marble; 1b, quartzite

CANADIAN OCCIDENTAL PETROLEUM LTD.

115 - G - 16

Dwarf Birch Ck. Y.T.

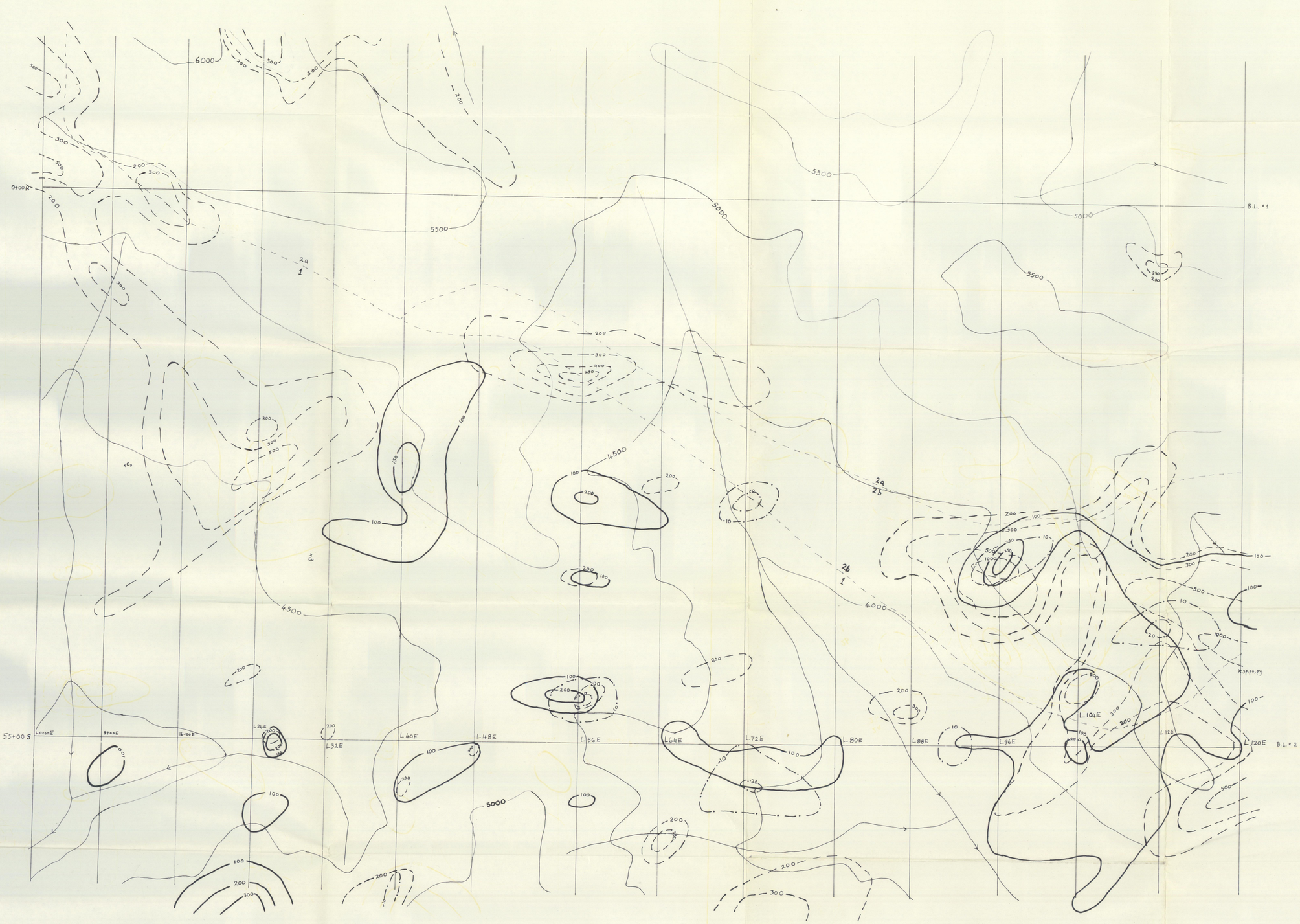
RYE CLAIMS 1 - 54

GEOLOGY

Data by: D.M.S. Bhatia & C.F. Gleeson

400 0 400 800 FEET

Date: August 13, 1972



[2] TRIASSIC VOLCANICS: 2a; porphyritic andesite, basalt, minor rhyolite, 2b; rhyolite

[1] YUKON GROUP: quartzite; marble

Geological contact (assumed)
Stream
Contours
- elevation
- copper > 100 p.p.m.
- zinc > 200 p.p.m.
- molybdenum > 10 p.p.m.

CANADIAN OCCIDENTAL PETROLEUM LTD.

115 - G - 16

Dwarf Birch Ck. Y. T.

RYE CLAIMS 1 - 54

GEOLOGY & GEOCHEMISTRY

(COMPILATION)

Data by: D.M.S. Bhatia & C.F. Gleeson

Date: August 13, 1972