

81-#517
-9297

1980 EXPLORATION REPORT
ON THE
D . A . # 1, D . A . # 2 AND Des #1
MINERAL CLAIMS

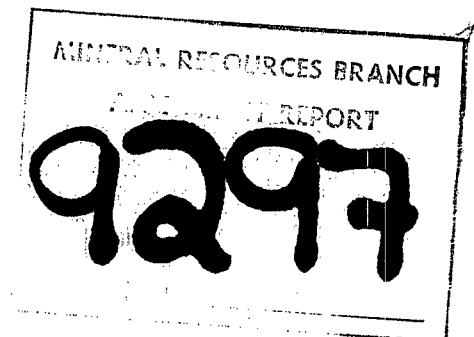
LOCATED:

THIRTEEN KM DUE WEST OF McLEOD LAKE, B. C.
54° 57' 30" N; 123° 12' 30" W
N.T.S. 93J 14E
CARIBOO MINING DIVISION

BY:

MARVIN A. MITCHELL, P.ENG
EXPLORATION MANAGER MINERALS
RANGER OIL LIMITED

MAY 22, 1981



1. SUMMARY AND RECOMMENDATIONS

An option was taken on the D.A. #1 and D.A. #2 mineral claims by Ranger Oil Limited in May 1980. These claims are held by Mr. James H. Randa and are located approximately thirteen km due west of McLeod Lake in the Cariboo Mining Division of B. C.

A small exploration programme consisting of a geochemical soil survey and limited geological reconnaissance was performed by a Ranger Oil Geologist and assistant during June 1980. In addition, a twelve unit mineral claim, the Des #1 claim was staked over the D.A. claims to secure more exploration territory. The claims are underlain by the argillaceous rocks of the Paleozoic Slide Mountain Group, as described by Noel, 1974, in his report on the property. Two gabbroic dikes were encountered with narrow discontinuous zones of silicification and carbonatization adjacent to one of them. Minor pyrohotite was found in these zones and fine pyrite was found as disseminations and fractures in the argillite.

The soil survey completed in 1980 included the same survey area sampled by Noel in 1974 for El Paso Mining and Milling Company. This recent survey failed to confirm the coincident copper-nickel-zinc soil anomalies found by Noel. This may be a consequence of sample spacing, (100m x 100m in 1980 vs 100 x 200ft. in 1974) or that many of the anomalous values from 1974 were spot highs.

Ranger Oil, therefore, has concluded that there are no anomalous areas large enough to warrant further exploration and it is recommended that the option from Mr. Randa be allowed to lapse.

2. INTRODUCTION

The D.A. #1 and D.A. #2 mineral claims (Record No. 1295 and 1296) were staked by Mr. J. H. Randa an independent prospector on October 15, 1979. These claims are, in essence, a relocation of the Bruce #1 and Bruce #4 mineral claims previously held by El Paso Mining and Milling Company.

Cont'd...

2. INTRODUCTION, Cont'd...

Ranger Oil Limited entered into an option agreement on these claims with Mr. Randa in May 1980. In June 1980, a geologist and assistant employed by Ranger Oil carried out a programme of reconnaissance geology and soil sampling on the optioned claims and on the Des #1 claim which was staked in June 1980, to secure more land in the area for exploration.

The results of this exploration on the D. A. and Des mineral claims are the subject of this report.

3. LOCATION AND ACCESS

The claims are located approximately 14 Km. due west of the town McLeod Lake, B. C., approximately 120 Km north of Prince George, B. C. on highway #97. Although a tractor road crosses the property near its southern portion, this access route is in part impassable and the means of access to the property used was helicopter from MacKenzie, B. C. approximately 43 Km to the north. MacKenzie is 200 km. by road north of Prince George.

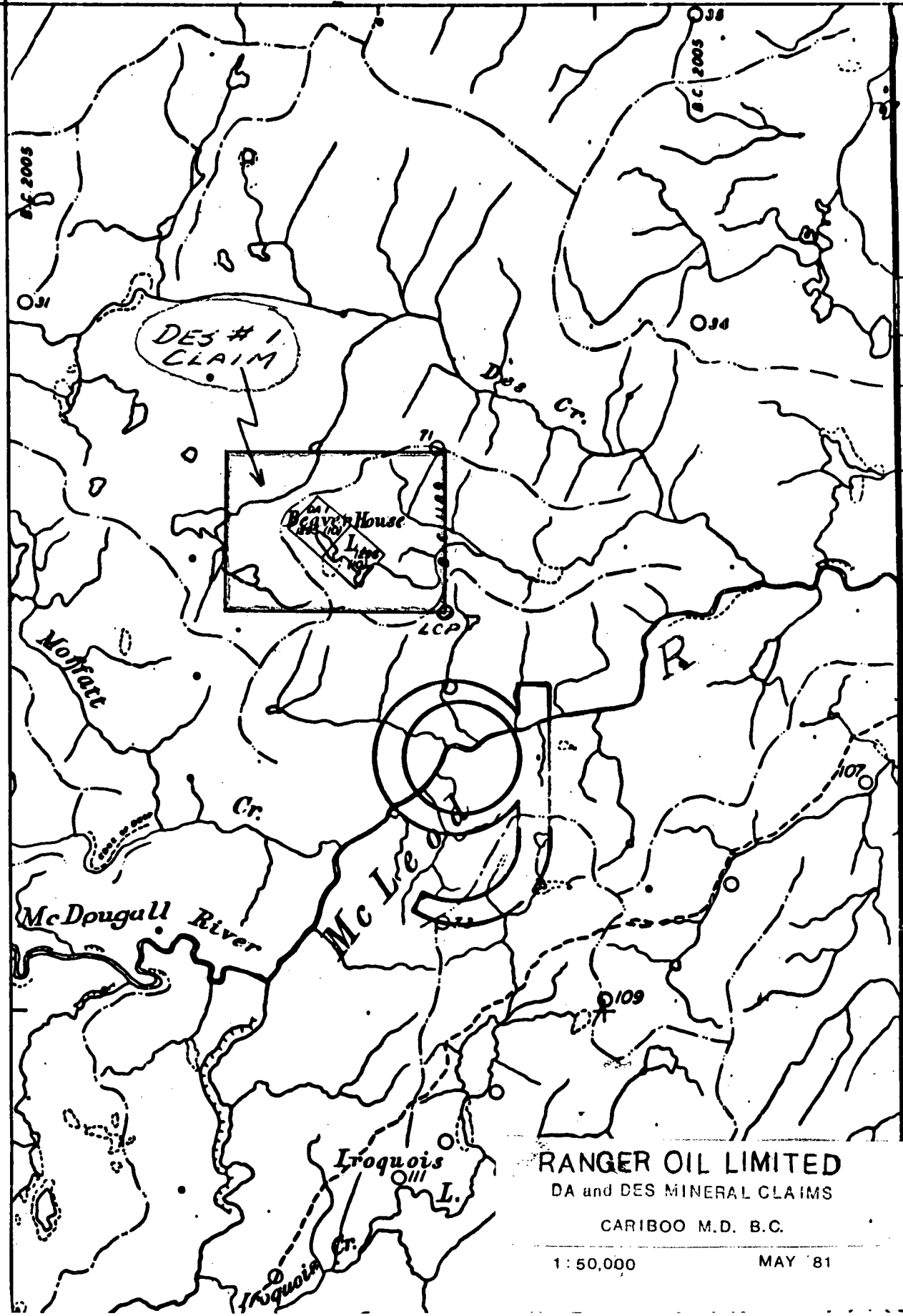
The claims cover gently rolling, well glaciated terrain at an elevation of approximately 900 M above sea level. Vegetation consists of stands of spruce and poplar and thick, almost impenetrable areas of tag alder. The Beaverhouse Lake chain lies near the centre of the claims and many small ponds and marshes are found throughout the area. A notable exception to the gentle terrain is Beaver House Creek which drains the lake chain to the south. The creek has incised itself in a gully perhaps 20 M deep. A recent flood caused by a broken beaver dam has provided excellent rock exposures along the creek bed for perhaps 300 M.

Cont'd...

M 93J/14E

123 15 32

TO NORTH SEE MA



RANGER OIL LIMITED
DA and DES MINERAL CLAIMS

CARIBOO M.D. B.C.

1:50,000

MAY '81

4. FIELDWORK

A grid was laid out using the final post of the D.A. claims as a reference point (L18N). The grid origin was located 1,800 M at 135° from this point. A baseline was run through the reference point from L5N (The Legal Corner post of the Des #1 claim) to L26N, 800 M at 315° from the D.A. claim reference point. Cross lines were extended at right angles from the base line to the North east and south west. All surveying was done with a Brunton Compass and a Topofil chain. All grid points were marked with felt tipped marker on fluorescent orange flagging. A total of 288 soil samples were taken from the grid locations by means of a mattock from the B. soil horizon wherever possible at a depth of from 0.1 - 0.2M. The sample material was generally a light tan to brown and occasionally grey clay with small pebbles. Each sample was bagged in a kraft paper envelope, marked with the grid location and any soil abnormality. Samples from swampy or deep humus locations were omitted.

All samples were analyzed for copper, nickel and zinc by General Testing Laboratories, 1001 East Pender St., Vancouver, B. C., using the atomic absorption spectrographic method and reported in parts per million for each element.

Four selected rock samples from Beaverhouse Creek containing sulphide material were also analysed for copper, nickel and zinc by the above laboratory. Results were reported in ppm for each element to gain a general idea of what values might be obtainable from mineralized material.

Finally, a thirty element spectrographic analysis was run on a selected specimen of sulphide bearing material to ensure that mineral potential for other elements, was not overlooked.

All results for the soil geochemical survey were plotted on a separate map for each element at a scale of 1:2,500.

Cont'd...

5. GEOLOGY

The general area is underlain by interbedded volcanic and sedimentary rocks of the Paleozoic Slide Mountain Group including andesite, basalt, limestone, chert and argillite. Regionally these rocks appear to strike northwesterly and dip to the south west. Generally, in the claims area, the rocks follow these trends although exposures of argillite near the D.A. reference point strike northerly and dip steeply to the east indicating that folding and/or faulting has taken place.

A Federal Government aeromagnetic survey indicates that there is a small lenticular anomaly (4,500 gammas) directly east of Beaverhouse Lake, oriented in a northwest - southeast direction.

The only rocks exposed in the claim area are argillite and cherty argillite with minor hornfelsed material near what appear to be gabbro dikes along the north east shore of Beaverhouse Lake and in Beaverhouse Creek near the upper end of the canyon.

Pyrite and pyrrholite occur as disseminations in irregular patches of hornfelsed and silicified argillite near the margin of a gabbro dike at the upper end of the Beaverhouse Creek Canyon. These altered areas range from 1 to 2 M. in diameter. Small discontinuous calcite stringers occur for a few tens of meters to the southeast on the floor of the canyon but appear to be devoid of any sulphide mineralization.

Pyrite was noted as fine disseminations and fracture coatings locally in the argillite giving a yellowish limonitic cast to weathered surfaces.

Cont'd....

6. GEOCHEMICAL RESULTS(a) Copper

The arithmetic mean of all copper analysis is 33.8 ppm. The values are shown on a frequency histogram and a cumulative percent frequency plot on log probability paper. On the latter curve, the background value at the 50 percentile is 28 ppm. A significant break in the curve occurs at 60 ppm and this is assumed to be the threshold value. The following ranges of anomalous copper values have been selected from a consideration of the threshold value and of the frequency histogram.

60 - 90 ppm possible anomalous
90 - 120 ppm probably anomalous
over 120 ppm definitely anomalous

It should be noted that only 4% of the sample population falls in the probably anomalous or definitely anomalous range, and that these results, are scattered over the claim area. Therefore, the values were not contoured on the 1:2,500 map sheet.

(b) Nickel

The arithmetic mean of all nickel analysis is 26.8 ppm. These analysis are shown on a frequency histogram and on a percent frequency plot on log probability paper. On this curve the background value at the 50 percentile is 23 ppm. A break in the slope of the curve occurs at 50 ppm which could be considered the threshold value. The following anomalous limits for nickel were selected from a consideration of the threshold value and the frequency histogram.

50 - 75 ppm possibly anomalous
75 - 125 ppm probably anomalous
over 125 ppm definitely anomalous

6% of the sample population lies above the 50 ppm or threshold limit but again these values are scattered and have not been contoured on the 1:2,500 scale map.

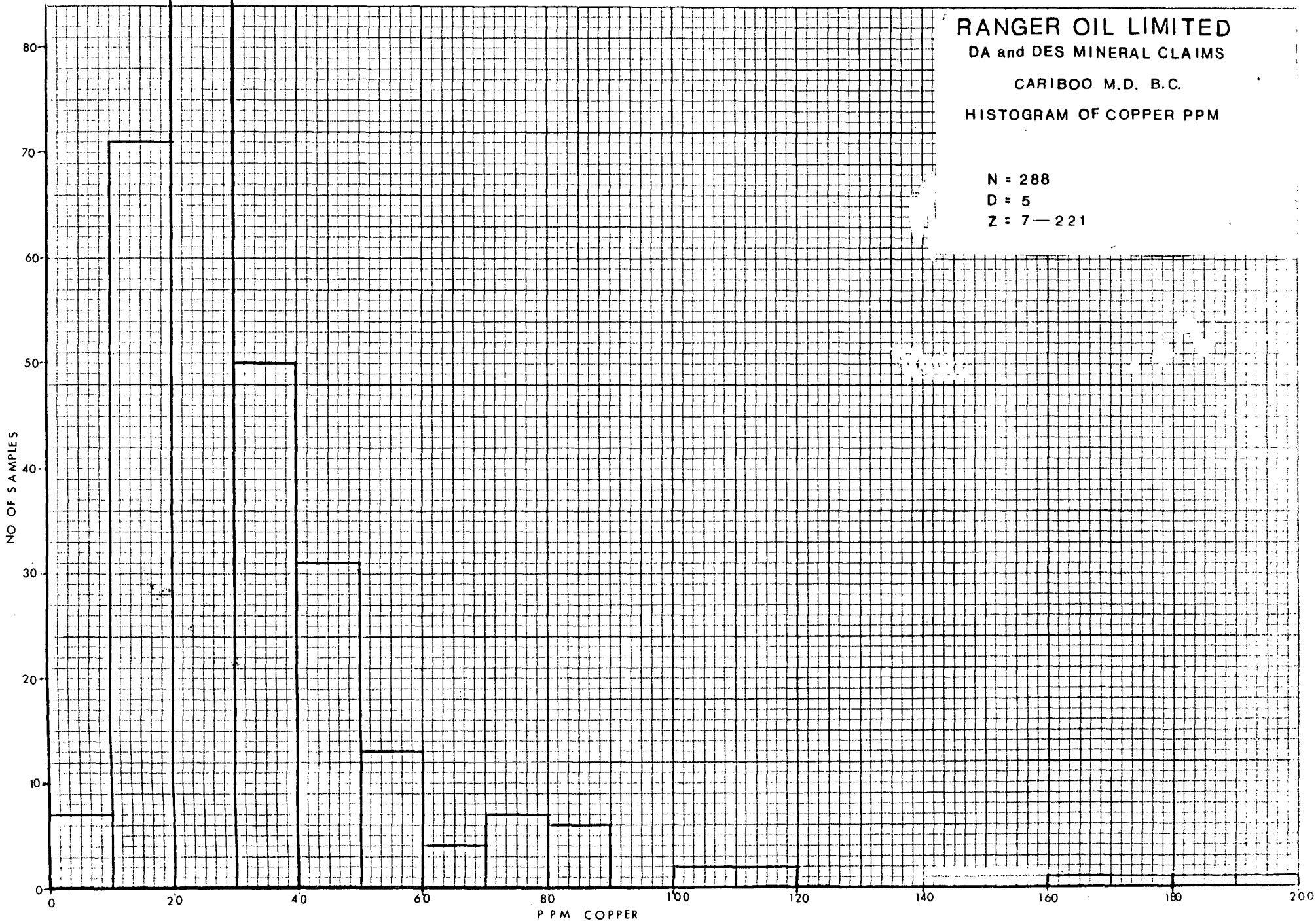
Cont'd...

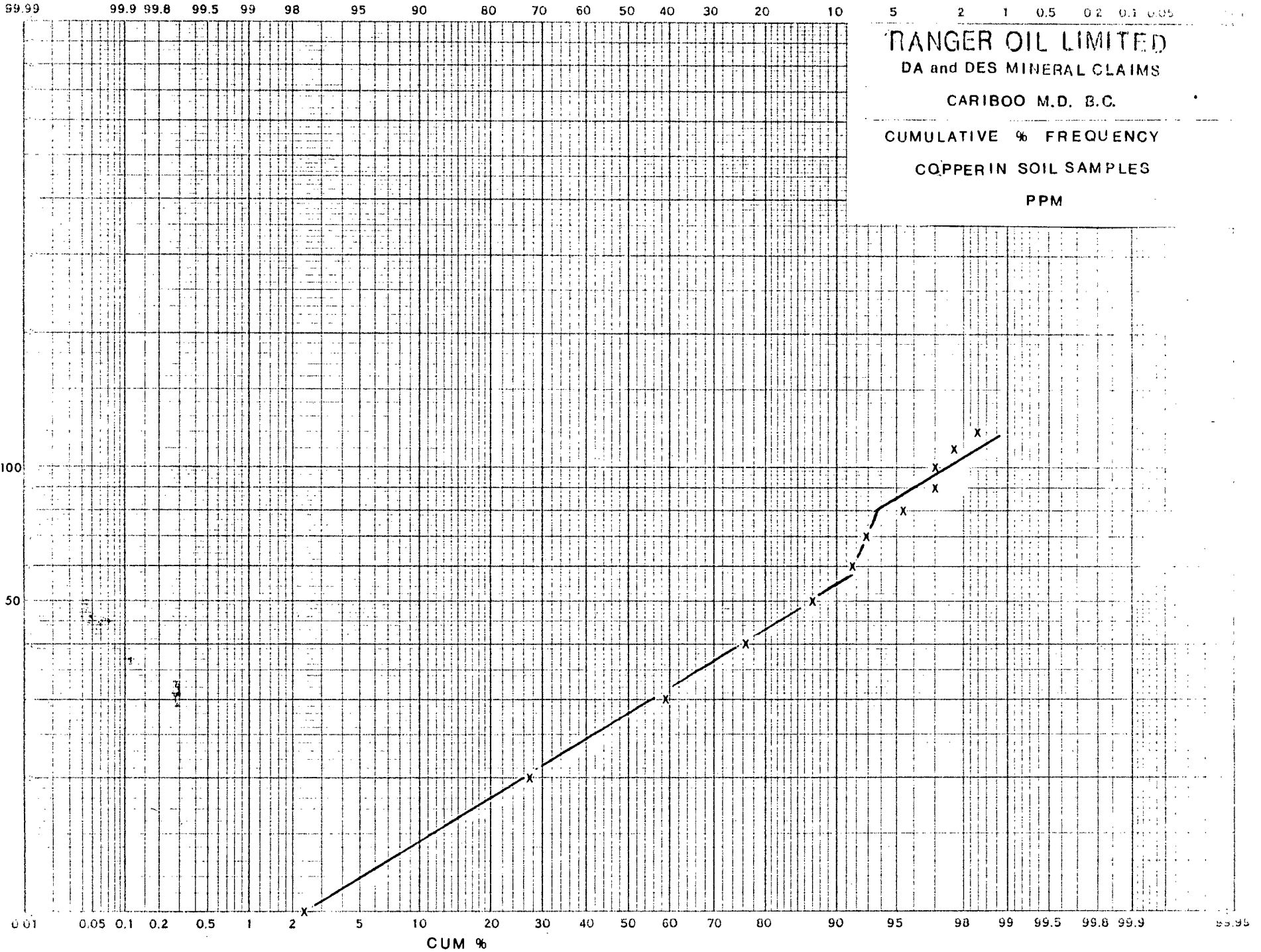


G11-8
12 X 12 to the inch
MADE IN CANADA

RANGER OIL LIMITED
DA and DES MINERAL CLAIMS
CARIBOO M.D. B.C.
HISTOGRAM OF COPPER PPM

N = 288
D = 5
Z = 7—221



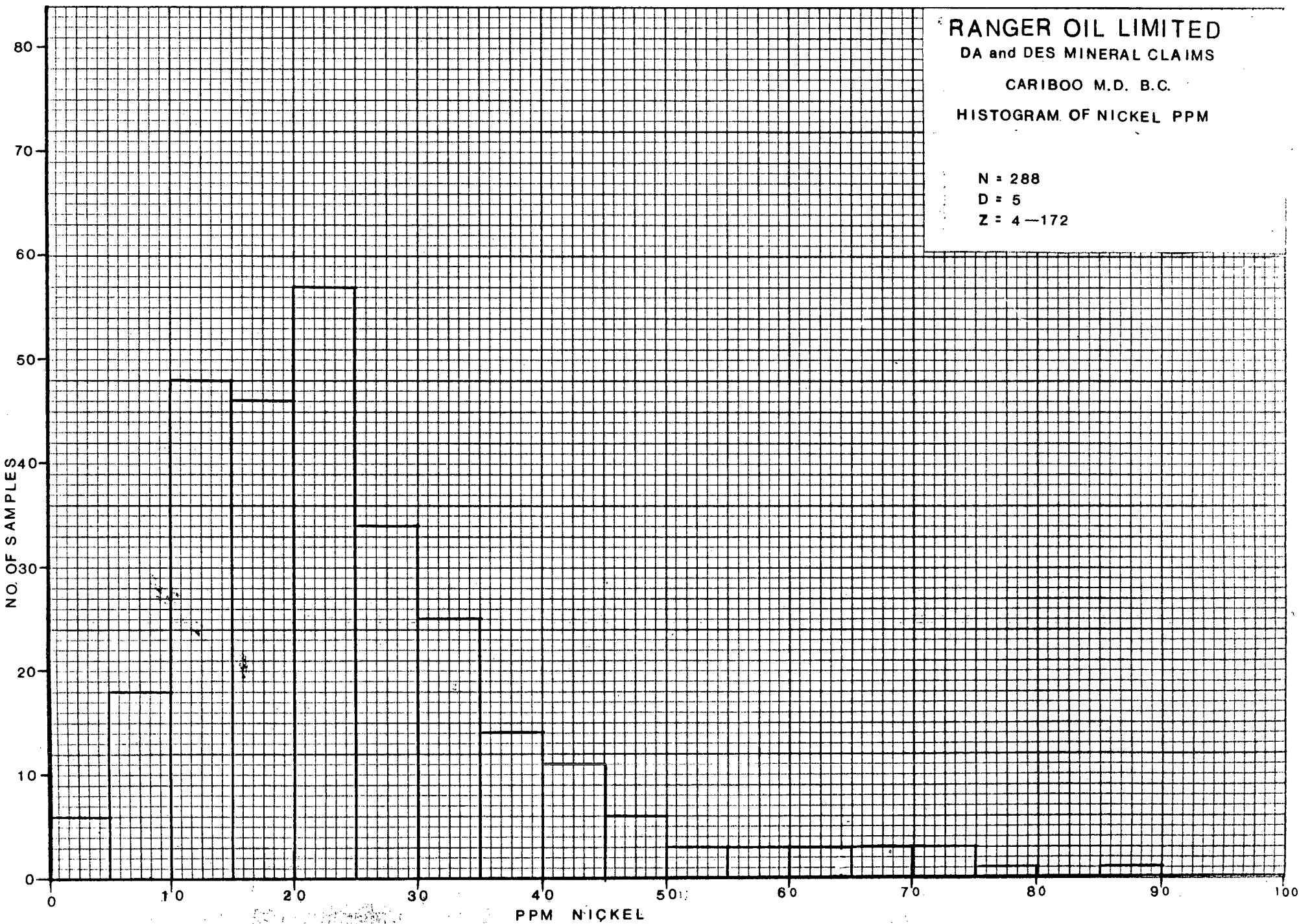




G¹-8
12 X 12 to the inch
MADE IN CANADA

RANGER OIL LIMITED
DA and DES MINERAL CLAIMS
CARIBOO M.D. B.C.
HISTOGRAM OF NICKEL PPM

N = 288
D = 5
Z = 4-172



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

RANGER OIL LIMITED

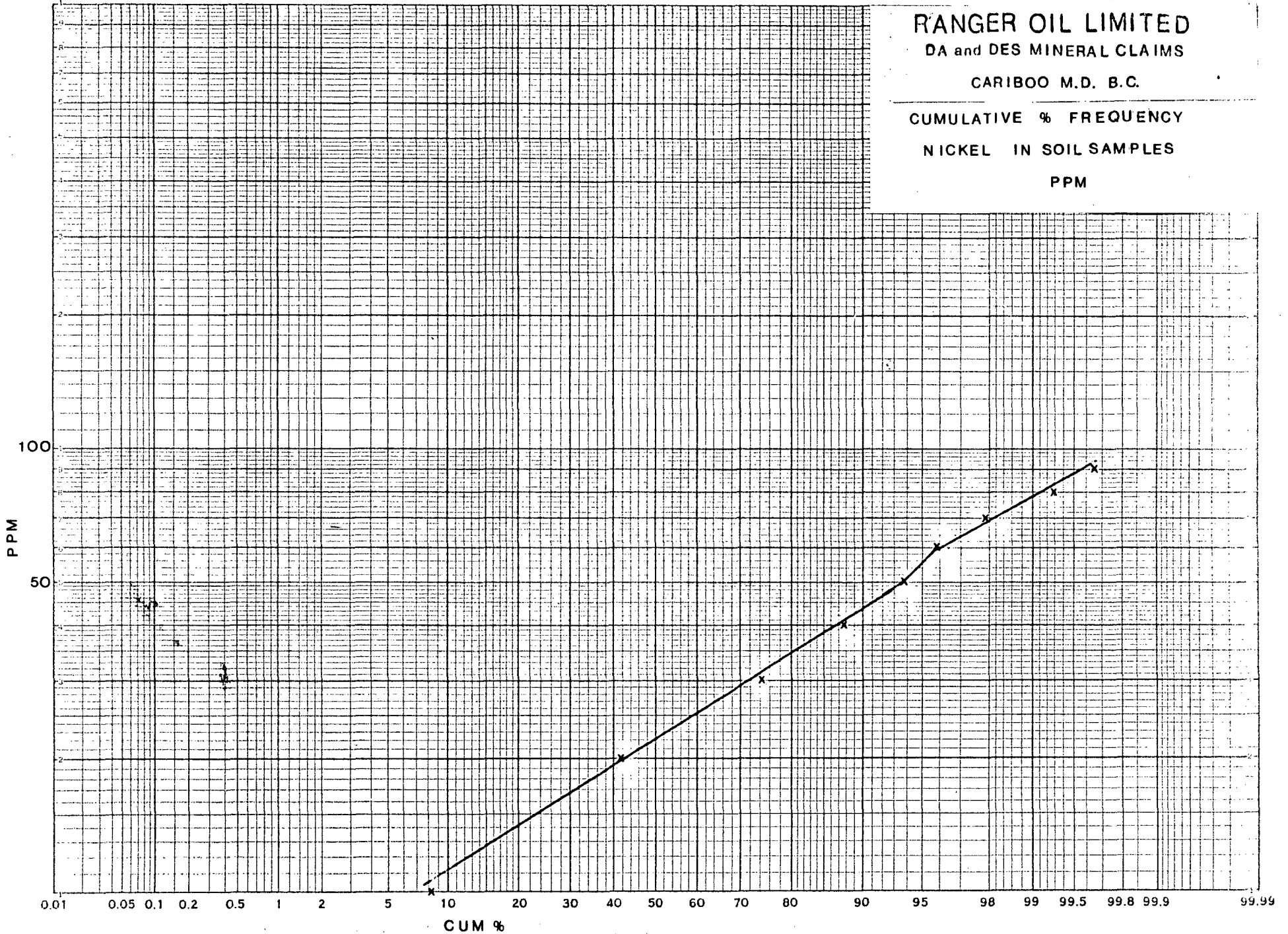
DA and DES MINERAL CLAIMS

CARIBOO M.D. B.C.

CUMULATIVE % FREQUENCY

NICKEL IN SOIL SAMPLES

PPM



6. GEOCHEMICAL RESULTS, Cont'd...

(c) Zinc

The arithmetic mean of all of the zinc analysis is 23.2 ppm. These analysis are shown on a frequency histogram and a cumulative percent frequency plot on log probability paper. On the latter plot the background value at the 50 percentile is 66 ppm. A break in the slope of this curve occurs at 190 ppm. A less noticable break in the slope occurs at 140 ppm and this break was used to set the threshold value as follows.

150 - 200 ppm possible anomalous
200 - 250 ppm probably anomalous
over 250 ppm definitely anomalous

Values over 150 ppm made up 3.5% of the total sample population but again were not readily contoured due to their dispersion over the property with the exception of high values northwest of Beaverhouse Lake. There, an area 400m x 100m is indicated by four anomalous samples.

CONCLUSIONS:

A small anomalous area coincident in copper and zinc was found approximately 300 m north west of Beaverhouse Lake. One sample in this area was also anomalous in nickel. However, it is the writer's opinion that most of the anomalous values are the result of dispersion in an area of poor drainage or possibly the result of mechanical transportation in this well glaciated area.

The sampling northeast of Beaverhouse Lake, done on a larger spacing than that done in 1974 did not confirm the earlier sampling even when sample stations were almost identical. This would indicate that many of the anomalous values obtained in 1974 were spot highs.

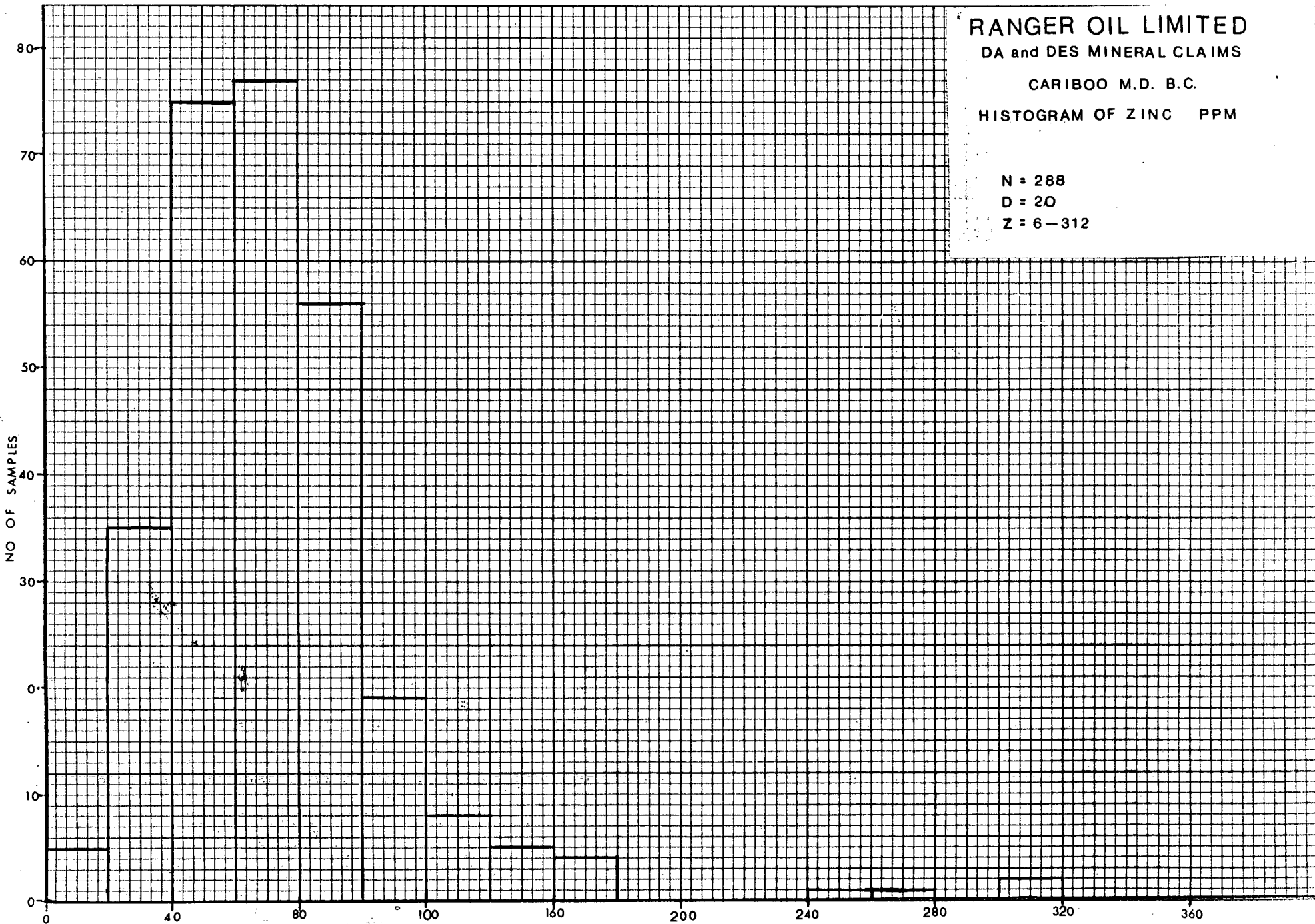
Cont'd...

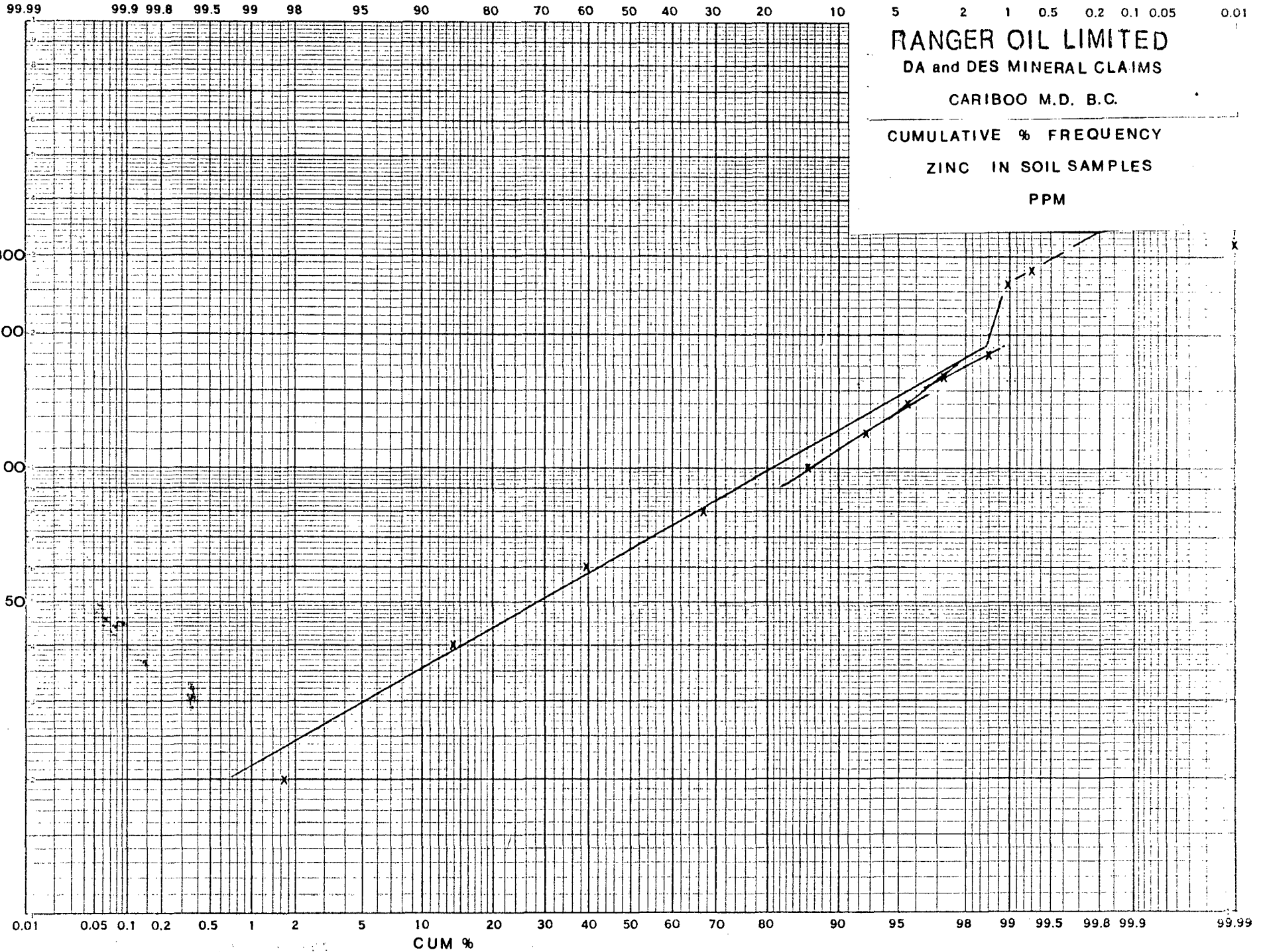


G11-8
12 X 12 to the inch
MADE IN CANADA

RANGER OIL LIMITED
DA and DES MINERAL CLAIMS
CARIBOO M.D. B.C.
HISTOGRAM OF ZINC PPM

N = 288
D = 20
Z = 6-312





CONCLUSIONS, Cont'd...

Although minor sulphide was found in Beaverhouse Creek its extent was limited and the assay returns from samples of this material are low in copper, nickel and zinc. The thirty element spectographic analysis did not indicate the presence of any other potentially valuable minerals.

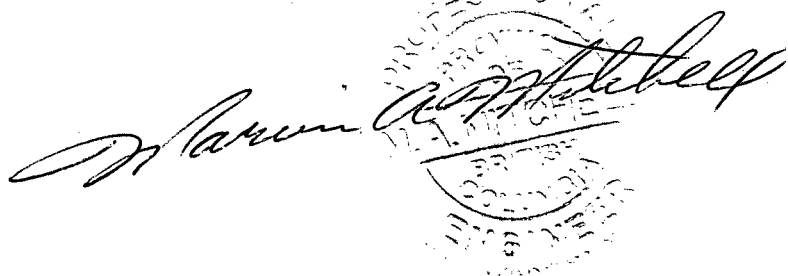
The aeromagnetic anomaly is thought to be a response to a gabbro dike swarm or small lenticular mass of gabbro northeast of Beaverhouse Lake. It is therefore recommended that the option on this property be allowed to lapse.

Respectfully Submitted,



MARVIN A. MITCHELL, P. ENG.
EXPLORATION MANAGER MINERALS
RANGER OIL LIMITED

May 22, 1981



STATEMENT OF QUALIFICATIONS

The fieldwork for this report was performed by Marvin A. Mitchell, P.Eng., Manager - Minerals Exploration, Ranger Oil Limited and D. McClymont, field assistant.

The following is a statement of the qualifications of Marvin A. Mitchell, P. Eng..

I, MARVIN A. MITCHELL

1. Reside at #203 - 2825 Spruce St., Vancouver, B. C., V6H 2R4
2. Office Address - #350 - 885 Dunsmuir St., Vancouver, B. C., V6C 1N5
3. Graduated from Montana College of Mineral Science and Technology in 1968 with a B.Sc. in Geological Engineering.
4. Have been a member of the Association of Professional Engineers of British Columbia since 1972.
5. Have been employed by Ranger Oil Limited since 1977.

REFERENCES

1. Map 979 A - Carp Lake, B.C., Geology by J.E. Armstrong, H. W. Tipper and J. W. Hoadley, Geological Survey of Canada, 1946.
2. Map 11-1961 - (Sheet 930) - Pine Pass, B.C., Geology by J. E. Muller, Geological Survey of Canada, 1961.
3. Map 1204 A - McLeod Lake, B. C., Geology by J. E. Armstrong, H. W. Tipper, J. W. Hoadley and J. E. Muller, Geological Survey of Canada, 1968.
4. Noel, G.A., - 1974 Assessment Report No. 4999, Geological and Geochemical Report on the Bruce Claim Group, Cariboo M.D., British Columbia

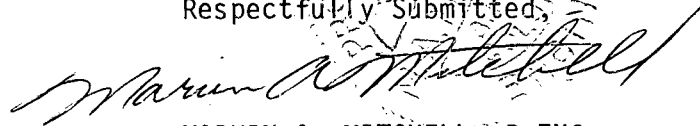
STATEMENT OF COSTS FOR 1980

WORK ON THE D.A. & DES #1 MINERAL CLAIMS

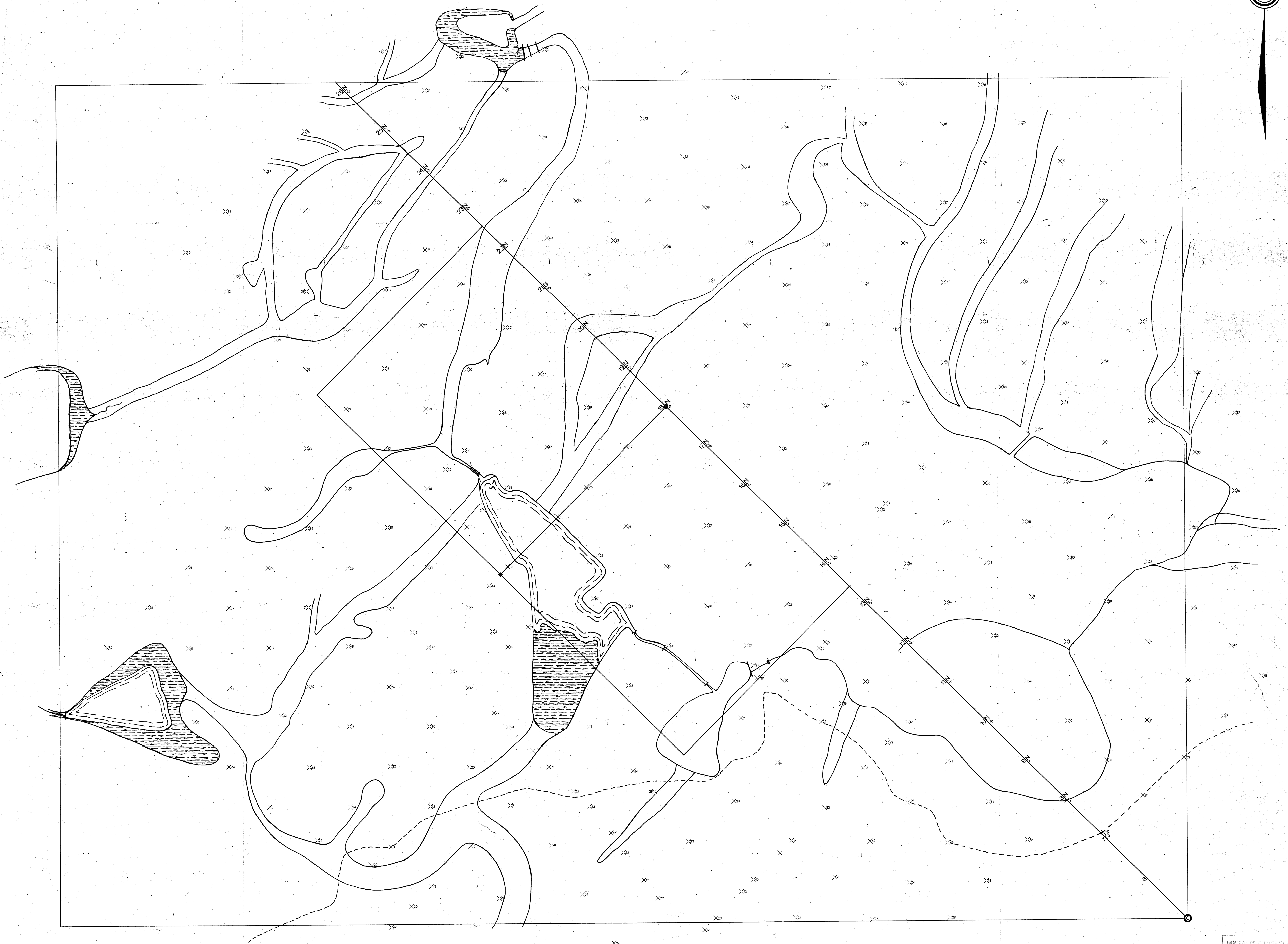
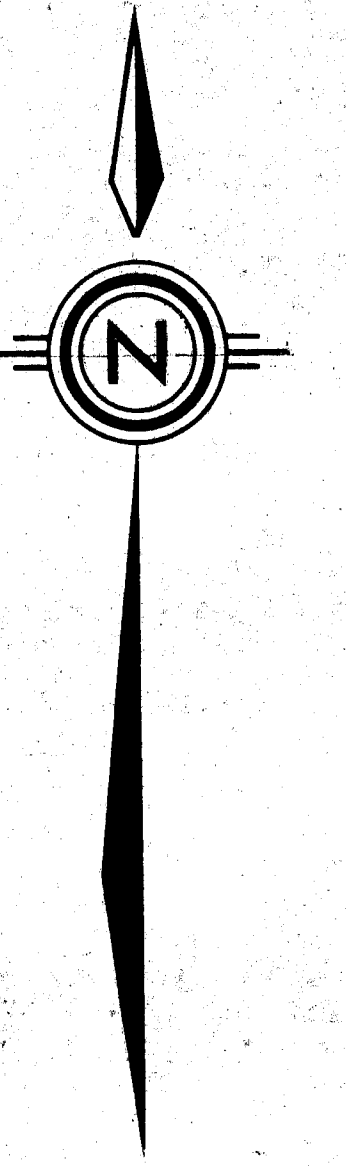
JUNE 3 - JUNE 10, 1980





AUTO TRAVEL AND SUBSISTENCE -	\$ 999.23
HELICOPTER TRAVEL -	\$3,057.80
WAGES -	\$1,312.50
ASSAYING -	\$1,362.76
REPORT PREPARATION -	\$ 350.00
	<u>\$7,082.29</u>

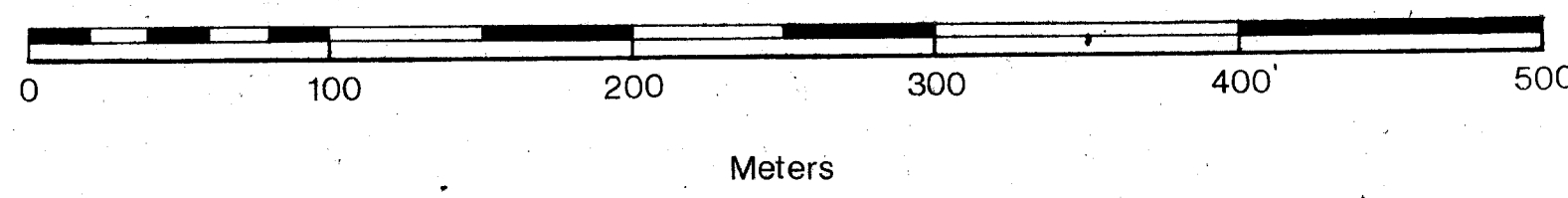
Respectfully Submitted,



MARVIN A. MITCHELL, P.ENG.
EXPLORATION MANAGER MINERALS
RANGER OIL LIMITED



-  Marsh
-  Lake, Pond
-  Road
-  Copper



*To ACCOMPANY THE
REPORT ON THE
D.A.L.D.S.
MINERAL CLAIMS*

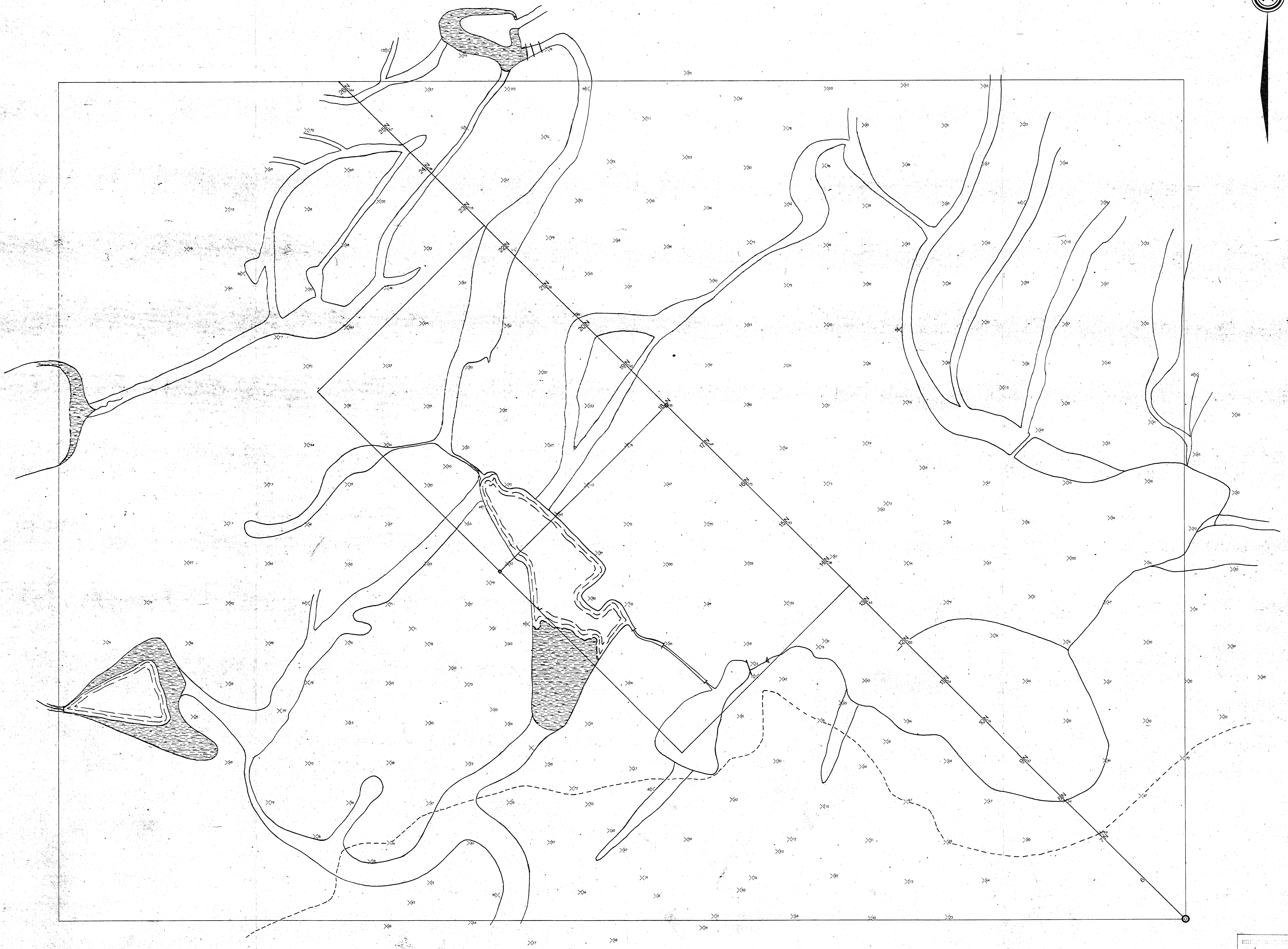
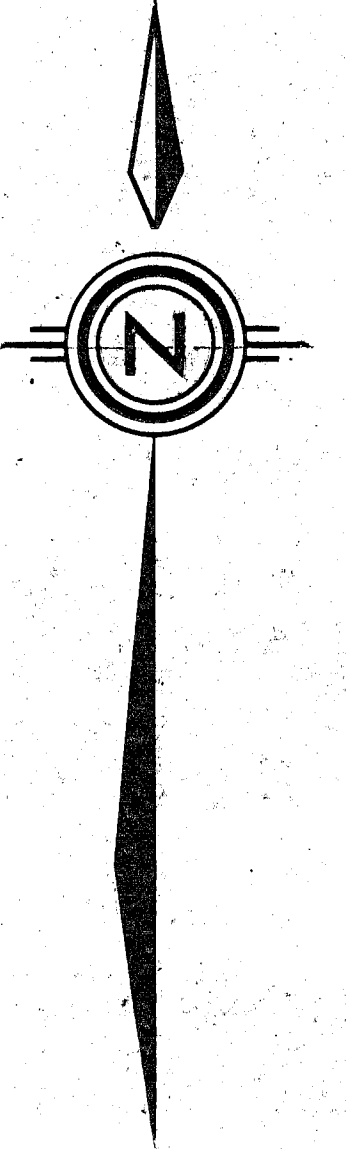
M. W. ...




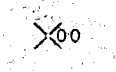
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9297
NO.

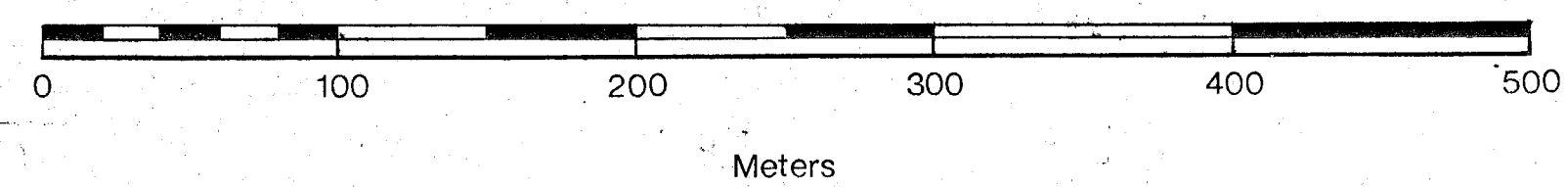
RANGER OIL LIMITED

**COPPER GEOCHEMISTRY
MCLEOD LAKE PROJECT
Des No.1 Claim**

Cariboo M.D.	Ref. No. - M80005	93J/1/E
DRAWN BY: D.E.M.	JUNE 1980	4:2500



-  Marsh
-  Lake, Pond
-  Road
-  Zinc

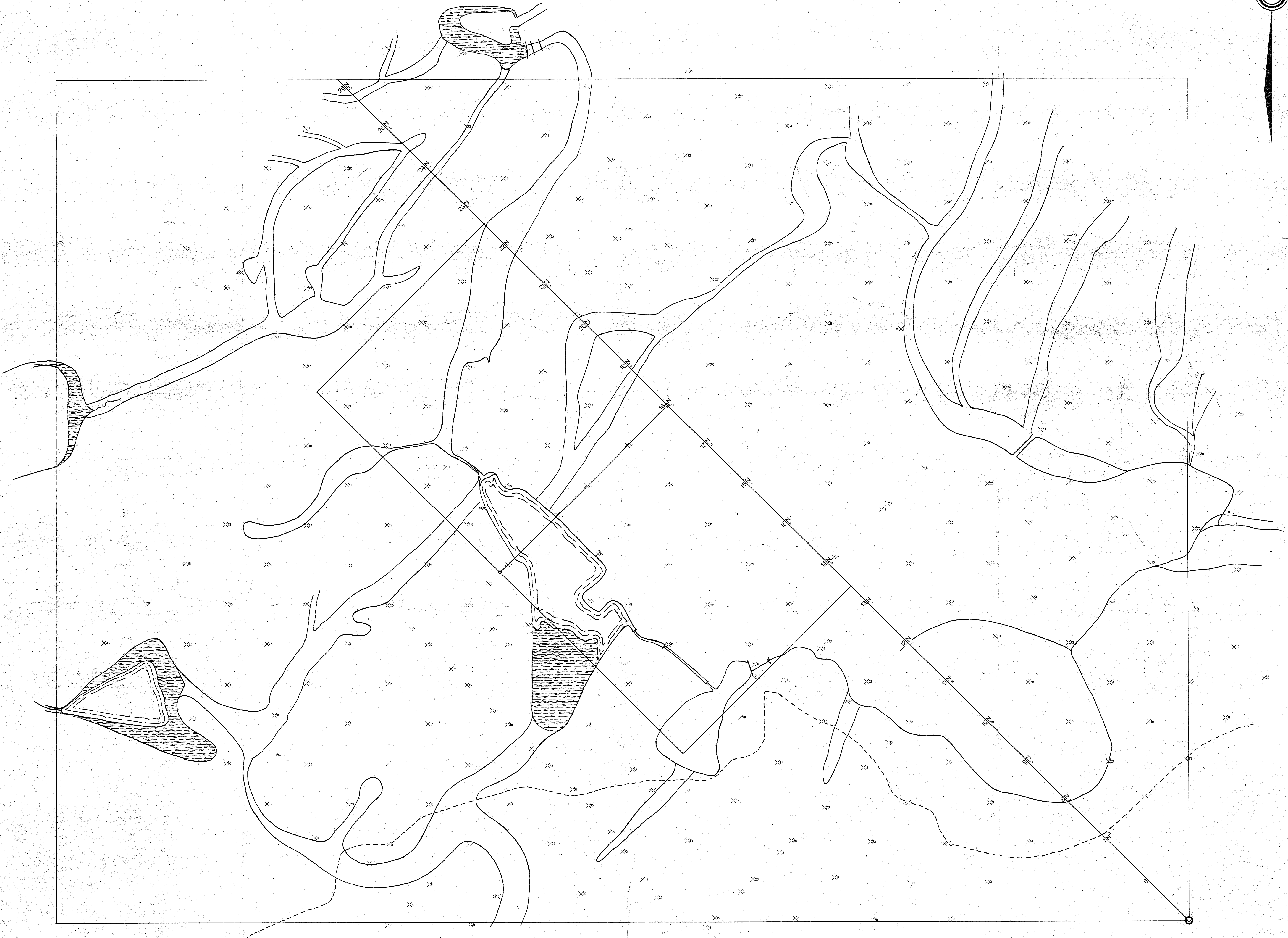
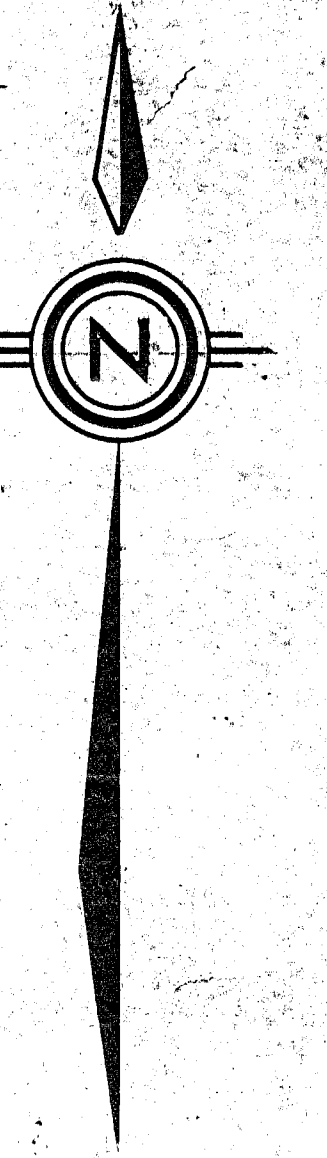


*To ACCOMPANY THE
1980 REPORT ON THE
DRAI DES MINERAL
CLAIMS*

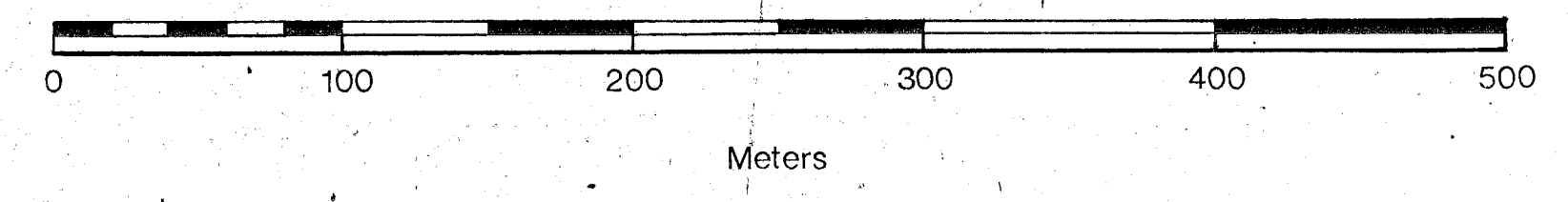
D. E. M.

9297

RANGER OIL LIMITED		
ZINC GEOCHEMISTRY		
MCLEOD LAKE PROJECT		
Des No.1 Claim		
Cariboo M.D.	Ref. No. - M80095	98J/WE
DRAWN BY: D.E.M.	JUNE 1980	1:2500



- Marsh
- Lake, Pond
- Road
- Nickel



*To ACCOMPANY
THE REPORT ON THE
DAYS DES
MINERAL CLAIMS*

M. A. M. M. M.

9297

RANGER OIL LIMITED		
NICKEL GEOCHEMISTRY		
MCLEOD LAKE PROJECT		
Des No.1 Claim		
Cariboo M.D.	Ref. No. -M80005	93J/4E
DRAWN BY: D.E.M.	JUNE 1980	1:2500