82E/5W
SW-107

Report on the

CORVAL RESOURCES LTD. (N.P.L.)

001610

Property

NICKEL PLATE LAKE, B.C.

April 16th, 1971

Egil Livgard, B.Sc., P. Eng. Vancouver, B.C.

INTRODUCTION:

The area is well known to the writer through several visits in the past. The property was examined in December 1970 while snow-covered, and the following report, requested by Mr. W.L.C. Newsom, is mainly based on knowledge gained on previous visits and on published material of the area.

SUMMARY AND CONCLUSIONS:

The property consists of 12 contiguous claims at Nickel Plate Lake, 18 miles west of Penticton, British Columbia. The claims cover gently sloping drift covered ground between Nickel Plate Lake and Riordan Mountain. The rocks in the area are mapped as the Upper Triassic Nicola Group, consisting generally of volcanic rocks, quartzite and limestone. These rocks are surrounded and intruded by various igneous rocks of the Nelson Plutonic Rocks. There has been much mineralizing activity in the area and economic deposits of gold have been worked. Other deposits of copper, molybdenum and tungsten have been explored.

Most of the known deposits are of the contact metamorphic type.

The claim ground has small exposures of skarn containing copper and minor tungsten.

The geology and mineralization in this general area, together with geological indications on the claim ground, suggests to the writer that the claims are centrally located in an area that holds considerable exploration interest, and the probability of finding economic deposits of copper, tungsten, or gold are considered to be good.

RECOMMENDATIONS:

The mineralization of interest is of a contact metamorphic type, and therefore is probably of a higher magnetic intensity than the surrounding rocks, and a magnetic survey should outline all areas of interest.

Stage I

A geochemical survey would further outline favourable area. Samples should be analysed for copper. Any area of coincident high magnetic and high geochemical soil values would be of particular interest, and would require further exploration. To carry out these surveys a grid system would have to be established.

Stage II

The probability of finding coincident magnetic and soil anomalous values is considered to be high, and cat trenching would be required to expose bedrock in any such area.

The exposed mineralization should also be trenched to its limits.

A program of cat trenching is therefore recommended. The drift cover is thought to be light in most areas, and 200 hours of cat work should expose sufficient bedrock to make a preliminary evaluation of the mineralization.

COSTS:

Stage I

Grid System	
15 line miles – line spacing 400', stations at 100', plus 2 miles tie lines.	
17 miles @ $100./mile	$ 1,700.00
Magnetic Survey	
15 line miles @ $80./mile, plus report	1,200.00

Soil Survey		
Samples at 100' spacing, analysis and report	4,500.00	
Administration and Travel	1,000.00	
Consulting	500.00	
	8,900.00	
10% contingencies	890.00	$ 9,790.00
Stage II		
Cat Trenching		
200 hours @ $40./hour	8,000.00	
Mobilization	500.00	
Geological mapping and sampling of trenches.	500.00	
Administration, travel, analysis	800.00	
Consulting	500.00	
10,300.00	10,300.00	
10% contingencies	1,030.00	$11,330.00
		$21,120.00

PROPERTY:

The property consists of 12 contiguous claims named PATRICIA No. 1 – No. 12, staked on the 17th and 18th of December, 1970, and recorded on the 4th of January, 1971, by W.L.C. Newsom.

The PATRICIA No. 1 – No. 6 were examined in the field and found to have been staked properly, and to cover as nearly as could be determined the ground as outlined on the accompanying map. There may be some overlapping of previously staked ground along the western border.

LOCATION AND ACCESS:

The property is located about 18 miles west of Penticton, British Columbia, and can be reached by a dirt and gravel road about 25 miles long. The road crosses the property in the summer and is open to Apex Ski Hill in the winter, two miles from the property.

TOPOGRAPHY AND CLIMATE:

The claims border on Nickel Plate Lake on the west, and cover gentle slopes between the Lake and Riordan Mountain (6896' elevation) less than one mile east of the property. The claims are forest covered and few outcrops are found. The overburden is not thought to be deep. The elevation of the property is between 6100' and 6400' above sea level.

The precipitation is relatively light in the area, and the snow cover may reach about 4 – 5 feet and would stay from November till March or April. The temperature is moderate, and may go below 0^{o} for only short periods in winter.

HISTORY:

Old work on the claim ground consists of a few shallow hand trenches. The writer knows of no other work having been carried out on the ground covered by the claims.

REGIONAL GEOLOGY:

The area was mapped in 1927 and 1958-59 by G.S.C. (see ref.) and shows the claim ground and the surrounding terrain as being drift covered but presumably underlain by rocks of the Upper Triassic Nicola Group, consisting of greenstone, tuff, quartzite, limestone argillite and schist. In the older mapping these rocks have been sub-divided into the Wolf Creek and the Hedley formations. The Wolf Creek formation generally comprises volcanic rocks and the Hedley formation the sedimentary rocks.

These rock types stretch from the edge of the map at the old Nickel Plate Mine at Hedley and northeast for 8 miles. The southeastern border is in part formed by a fault and in part by the contact to Cretaceous granodiorite. The granodiorite has also intruded the volcanic – sedimentary rocks to the northeast.

On the north the rocks border on a post-triassic granite.

Riordan Mountain, just east of the claim ground, is in part formed by an irregular dioritic plugg.

The three intrusive rock types of post triassic granite, granodiorite and diorite, gabbro, quartz diorite, have been mapped as Cretaceous Nelson plutonic rocks on the later G.S.C. Map.

Generally the granite rocks are found north of the claim area, the granodiorite south and east, while the third intrusive subdivision of diorite, gabbro, quartz-diorite forms dykes, sills and irregular intrusive masses in the Nicola group and other sedimentary and volcanic rocks in the area. Most mineralization in the area is associated with this latest intrusive.

The general structural features in the area consist of north-easterly and northerly striking faults which form some rock type boundaries, and to some extent seem to have guided intrusive activity.

Another notable feature of the area is the very large number of small intrusive bodies of various shapes occurring in an area from the claims and south.

Mineralization in the area has been extensive and significant. The most important being of course the gold mines at Hedley, 4 – 5 miles south-west of the claims. The mineralization at these mines consist of gold in contact metamorphic deposits. The rock is generally skarn-altered limestones of the Nicola Group. The minerals are pyrite, arsenopyrite, chalcopyrite and some sphalerite, galena and gold and bismuth tellurides. Other gold properties are found at Bradshaw Creek, 6 miles south of the claims, and at Apex Mountain, 2½ miles south east of the claims, but both of these are in rock types different from that at the claims. Both molybdenum and copper has also been produced from the area in small amounts.

At Riordan Mountain mineralization has been known since about 1900. It consists of copper and tungsten. The copper occurs as chalcopyrite in quartz veins and as blebs and stringers in skarn. During the war scheelite was discovered in the skarn and some exploration work, mainly hand trenching, was carried out.

CLAIM GEOLOGY:

The property is drift covered, and the only exposure is found in old trenches. These trenches expose skarn consisting primarily of brown garnet (garnetite). This rock contains scattered blebs and stringers of chalcopyrite and pyrrhotite. The extent of this mineralization is not known, but widely scattered float suggests a possible wide extent. The writer took two grab samples of this material from exposed bedrock. These assayed 1.08% Cu. and 0.57% Cu. and .02% and .04% Wo_3.

Large angular boulders of dioritic composition are found in several places on the northern part of the property, suggesting underlaying intrusive rocks and hence a favourable contact zone.

Respectfully submitted

"EGIL LIVGARD"
Egil Livgard, B.Sc., P. Eng.

CERTIFICATE

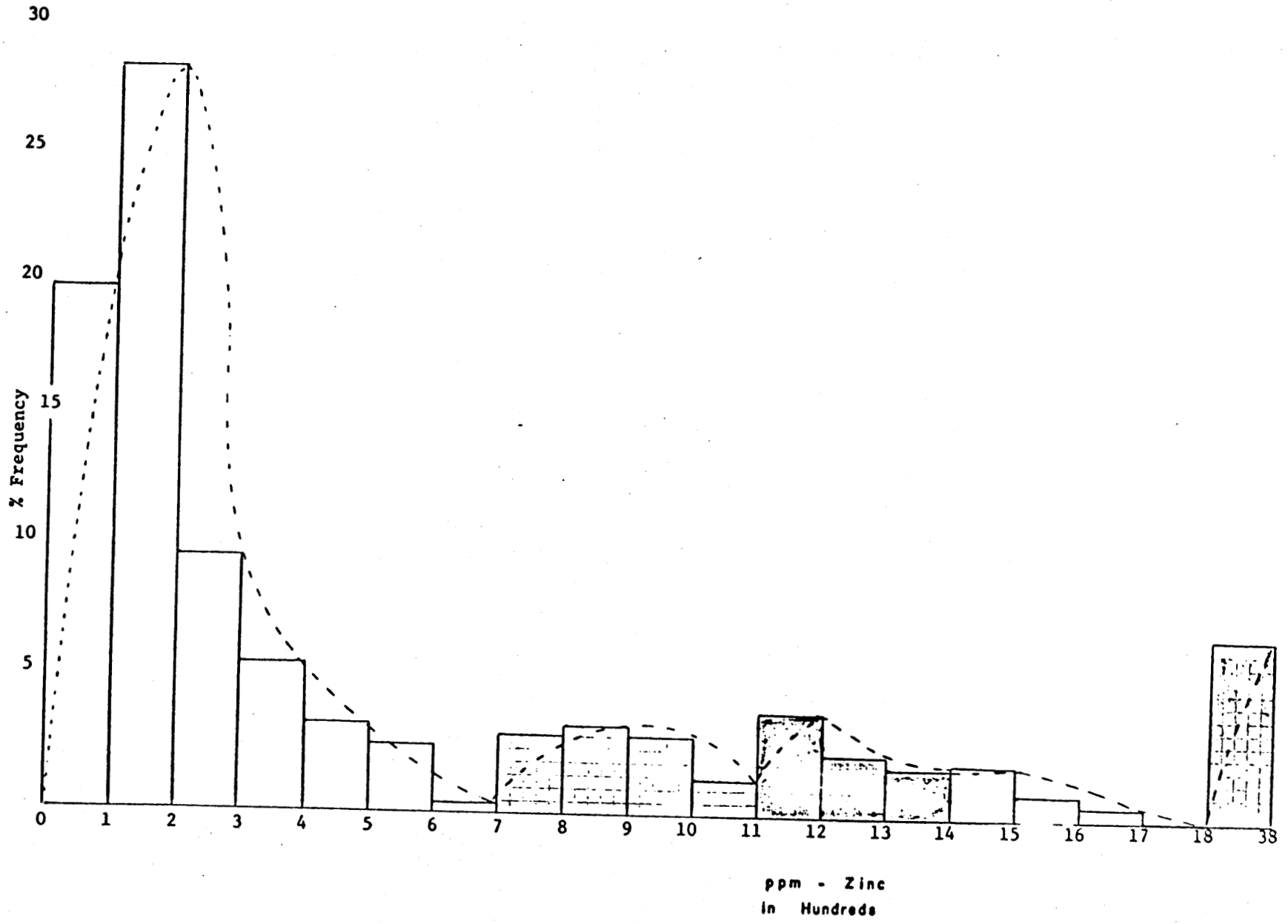
I, EGIL LIVGARD, with business and residential addresses in Vancouver, British Columbia, do hereby certify that:

1. I am a consulting geological engineer.
2. I am a graduate of the University of British Columbia, B.Sc., 1960, Geological Sciences.
3. I am a Member of the Association of Professional Engineers of the Province of British Columbia.
4. From 1960 to 1970 I was engaged in mining and exploration geology in Canada and Norway.
5. I have not received, nor do I expect to receive any interest, directly or indirectly, in the properties described herein, or in the properties or securities of any company to which these properties may be sold.

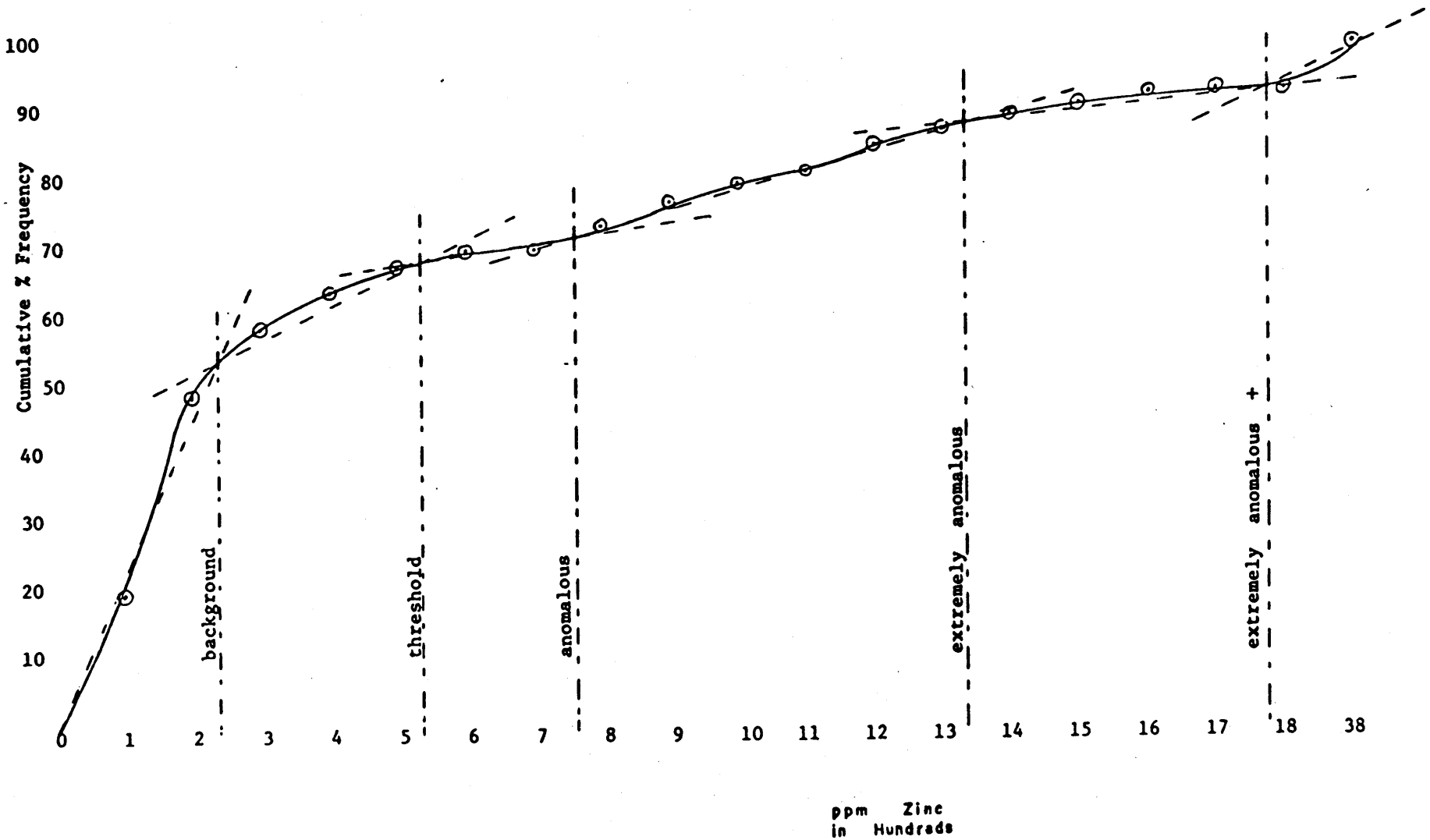
DATED at Vancouver, British Columbia, this 16th day of April, 1971.

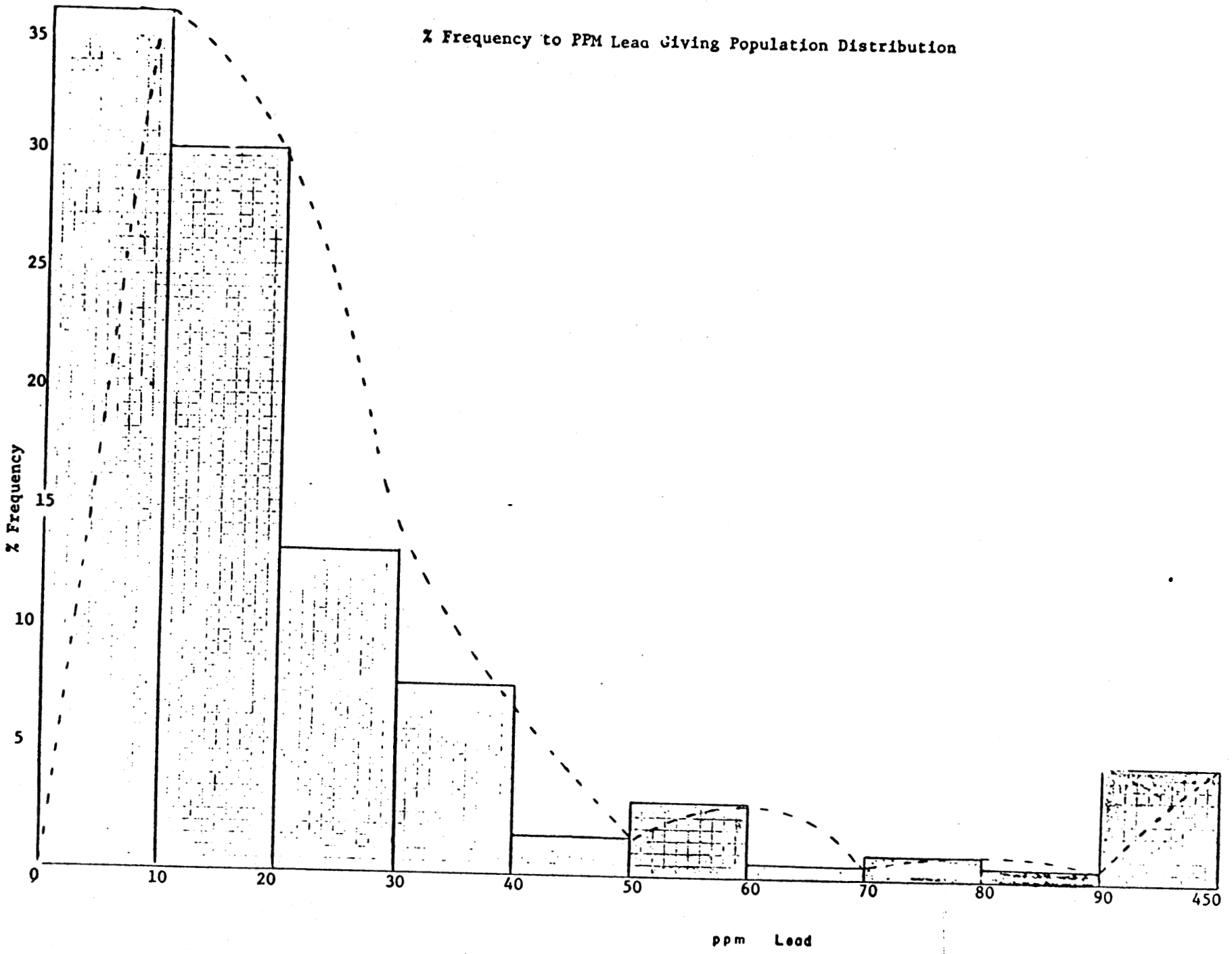
"EGIL LIVGARD"
Egil Livgard, B.Sc., P.Eng.
Vancouver, B.C.

% Frequency to PPM Zinc
Giving Population Distribution

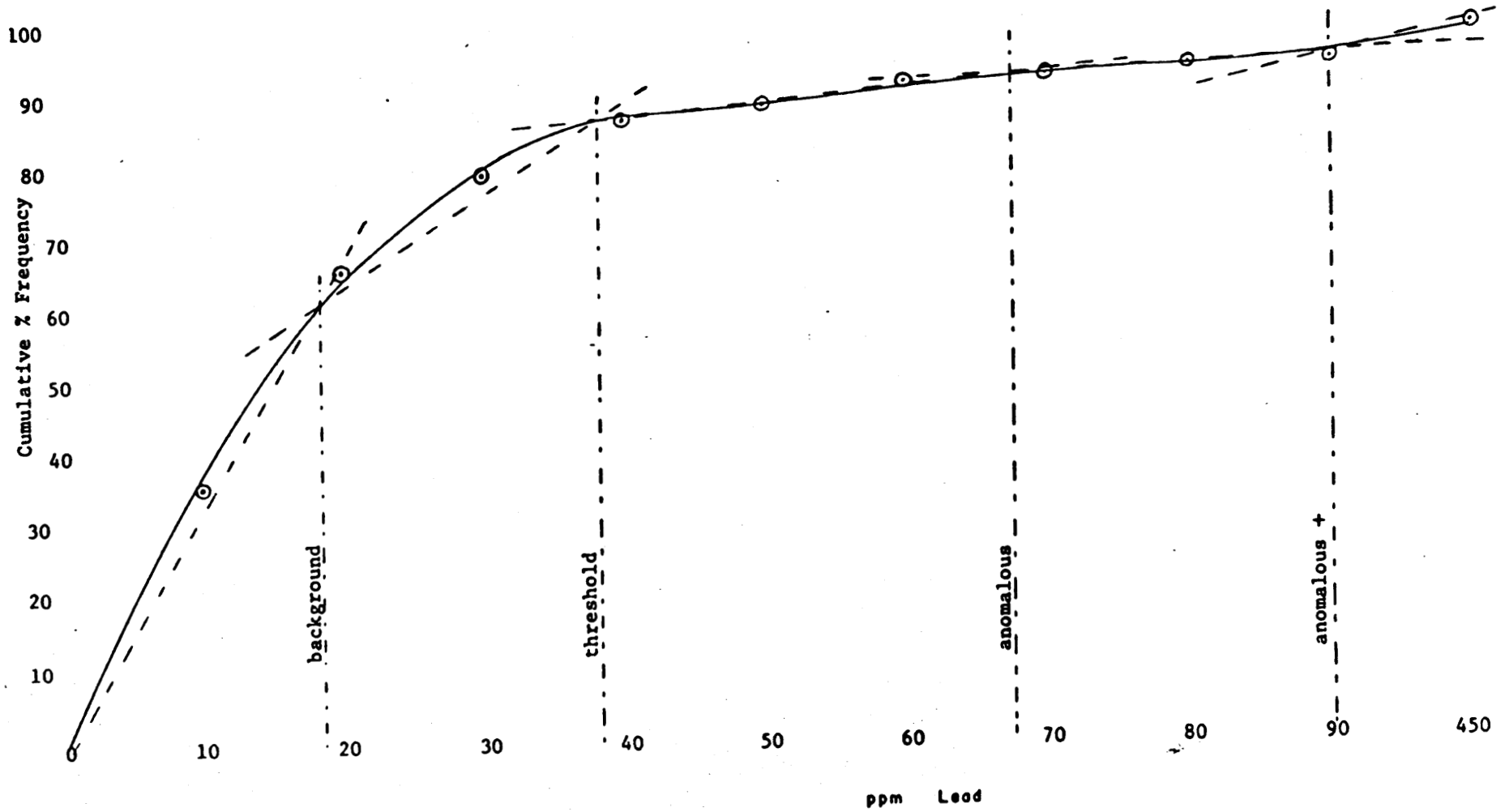


Cumulative % Frequency to PPM Zinc
Giving Approximate Threshold & Anomalous Zones




% Frequency to PPM Lead Giving Population Distribution
35
30
25
20
15
10
5
0
% Frequency
10
20
30
40
50
60
70
80
90
450
ppm Lead

Cumulative % Frequency to PPM Lead
Giving Approximate Threshold & Anomalous Zones



OLALLA

SIMILKAMEEN DISTRICT B. C.

SCALE 1 Inch to 1 Mile

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LEGEND

CENOZOIC

TERTIARY

13 MARRON FORMATION mainly basalt and andesite, more acid lavas in northern part of map-area, related breccia, agglomerate and tuff, conglomerate

12 SPRINGBROOK FORMATION mainly conglomerate, sandstone, shale, tuff, talus deposits

MESOZOIC

POST-TRIASSIC

11 Granite, porphyry.

10 Granite.

9 Granodiorite.

8 Syenite

7 / Mainly diorite, gabbro, quartz diorite

6 Pyroxenite

TRIASSIC? WOLFE CREEK FORMATION AND HEDLEY FORMATION (undifferentiated)

5 5a, WOLFE CREEK FORMATION (mainly) andesite, basalt, breccia, tuff, minor sediments
5b, HEDLEY FORMATION (mainly) quartzite, cherty quartzite, argillite, limestone, breccia, tuff

TRIASSIC OR OLDER

4 OLD TOM FORMATION mainly basalt and andesite (greenstone) related dioritic intrusives, chert

3 SHOEMAKER FORMATION mainly chert, tuff, greenstone, limestone

2 INDEPENDENCE FORMATION chert, greenstone, breccia, argillite, limestone.

1 BRADSHAW FORMATION argillite, tuff, quartzite, breccia, andesite.

A Massive limestone, breccia, conglomerate (at base) Unconformably overlies (3) and (4), age unknown

B Crystalline rocks of granitic composition Origin uncertain

Drift-covered area

Limestone beds. Not all of the same age Ls

Fault

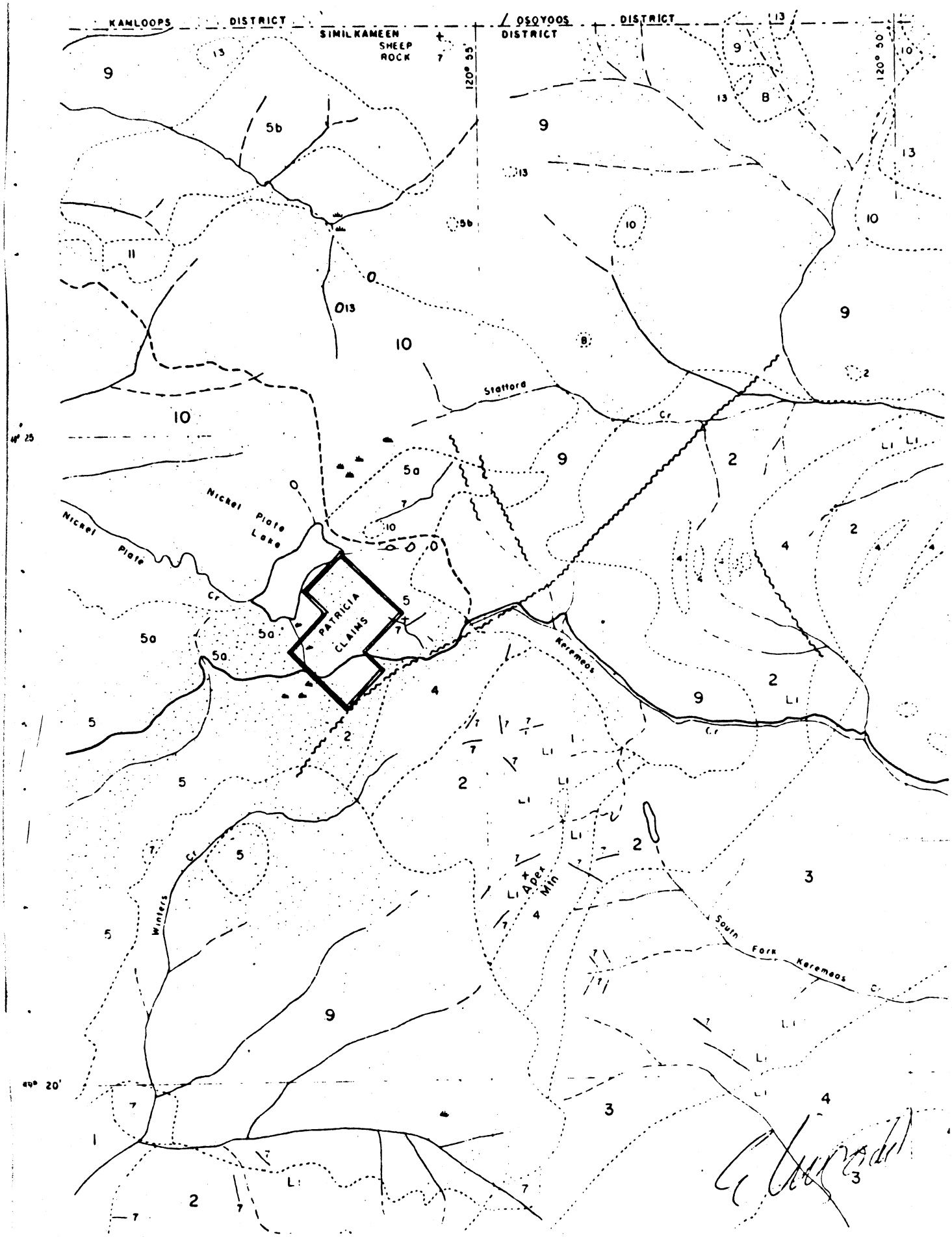
Road well travelled

Road not well travelled

Stream (position approximate)

Marsh

Land District boundary


KAMLOOPS DISTRICT
SIMILKAMEEN DISTRICT
OSOYOOS DISTRICT
SHEEP ROCK
120° 55'
120° 50'
49° 25'
49° 20'
Nickel Plate Lake
Nickel Plate Cr.
PATRICIA CLAIMS
Stafford Cr.
Keremeos Cr.
Winters Cr.
Li Apex Min
South Fork Keremeos Cr.

PATRICIA CLAIMS

SIMILKAMEEN DISTRICT B.C.

SCALE 1 = 3000'

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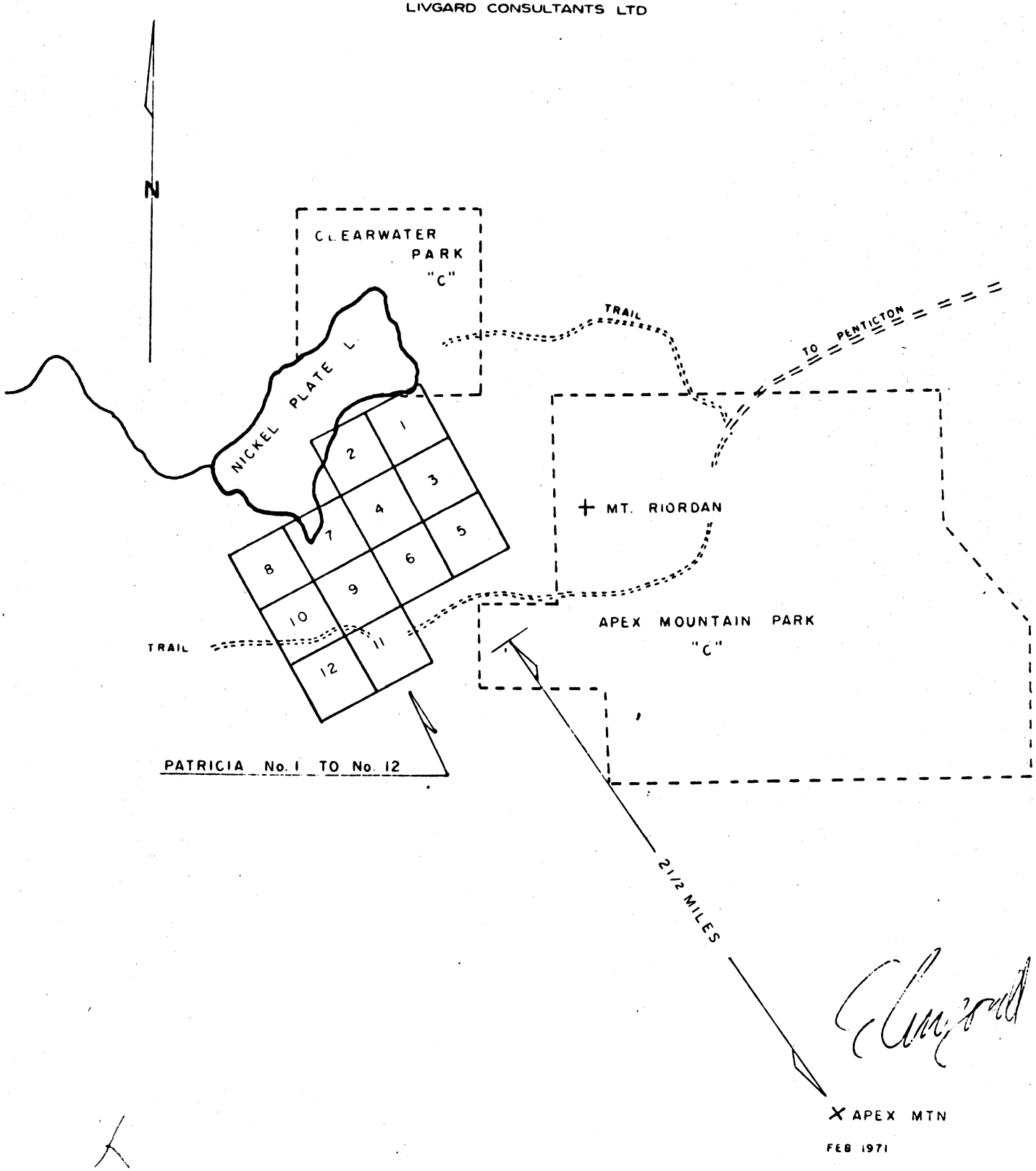
LIVGARD CONSULTANTS LTD



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