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J M Dawson
Reports
77 Project

JAMES M. DAWSON, P. ENG.
GEOLOGIST

9 – 219 VICTORIA STREET
KAMLOOPS, B.C.

PHONE (604) 374-6427

March 31st., 1977.

A. F. Reeve,
Barrier Reef Resources Ltd. (NPL),
904 - 675 West Hastings Street,
VANCOUVER, B. C.,
V6B 1N2.

Dear Bert:

The following is a brief report of my activities re the 1977 Syndicate during March, 1977. Data accumulated previously re massive sulphide potential in B. C. was reviewed and up-dated. Those rock units with most potential are summarized and inter-related on the correlation chart which I prepared (figure 156-1).

I made a trip to Spokane and picked up quite a bit of data on Northern Washington potential for volcanogenic occurrences and believe two areas in particular deserve some attention: Anarchist rocks south of the Okanagan-Grand Forks region and Chilliwack and related rocks south of the Pit Meadows-Chilliwack area. I hope to pick out a couple of specific targets from the literature to do property examinations on.

I examined the Maiden Creek property (see separate report) and attempted to look at the Kentucky and Jo Dandy area but snow precluded this.

I have gotten a first refusal on two properties in "Eagle Bay" rocks from Ken Daughtry. These properties are located east and west of Sugar Lake (see map enclosed) and probably won't be snow free until the end of April. One in particular (see enclosed report) seems promising. This region seems to be an isolated outlier of Eagle Bay totally surrounded by Shuswap gneisses.

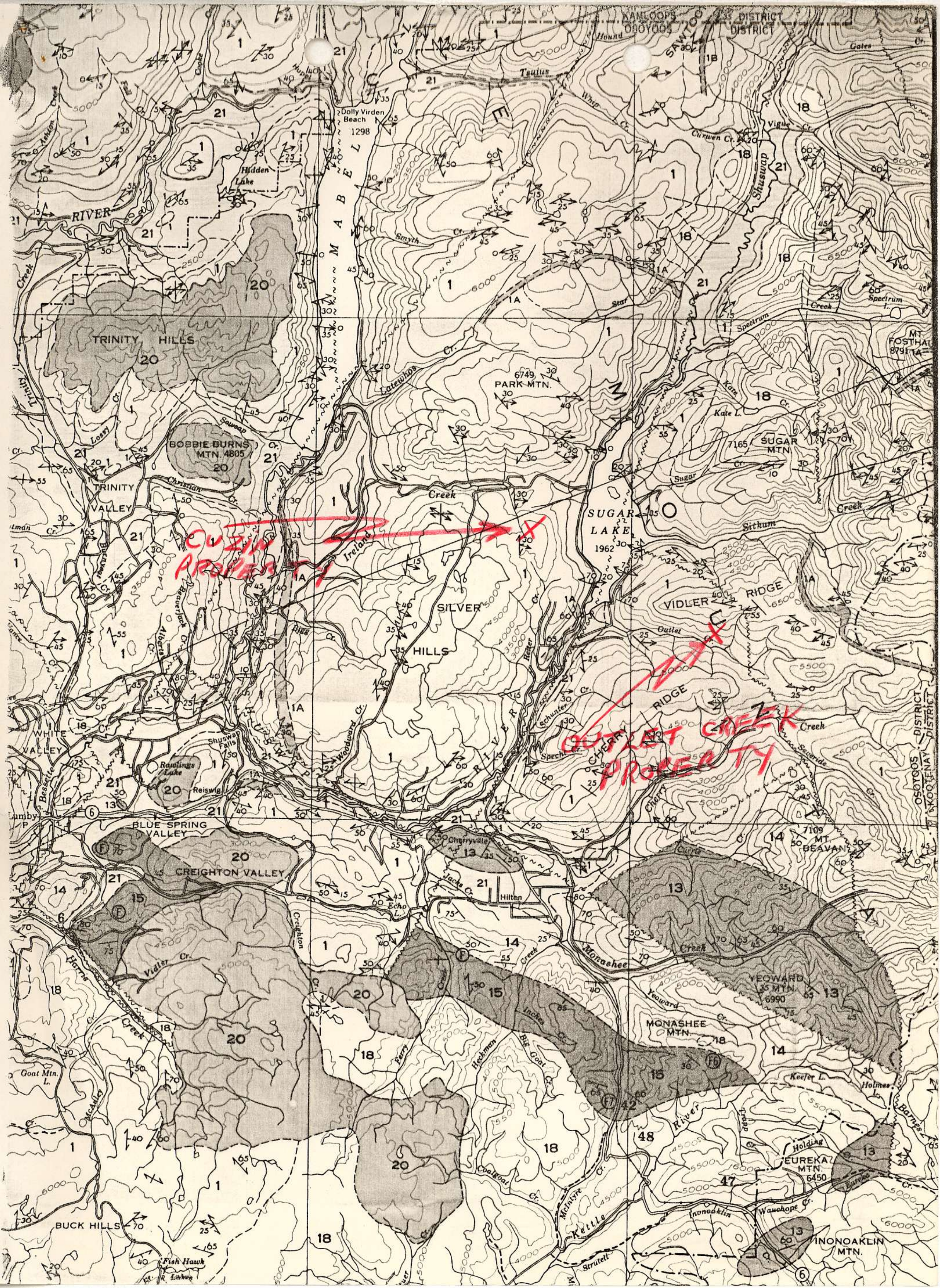
The whole volcanogenic concept and Eagle Bay region seems to be getting a lot of attention; I have heard rumors of another airborne survey (besides INCO's) and considerable staking is still going on in the Adam's Plateau - Shuswap Lake area. It has now spread to the west side of Adams Lake (not too far from our Fortuna property). Cominco is negotiating on a property on Adam's Plateau and Cyprus-Metallgeselshaft have optioned the Cotton-belt.

I have reviewed all Pat's data on Uranium occurrences and was approached by Ken Daughtry regarding a Uranium property in the Kamloops area; however, Union Oil also had it submitted to them so Ken has to examine it for them first. If they don't want it, then I suppose we can look at it.

Best regards,

Jim

JMD:rd



KAMLOOPS DISTRICT
OSOYOOS DISTRICT
MABEL LAKE
Dolly Varden Beach
1298
RIVER
Hidden Lake
Ashton Creek
Tsuius
Hound
Whip Cr.
Curwen Cr.
Vigue Cr.
Shuswap
Gates
Smyth Cr.
Star
Spectrum Creek
Spectrum L.
MT. FOSTHALL
8791
TRINITY HILLS
Trinity
Latewhos Cr.
6749
PARK MTN.
BOBBIE BURNS MTN. 4805
Kate Cr.
Kate L.
7165
SUGAR MTN.
Sugar Cr.
TRINITY VALLEY
Christian Cr.
Creek
Ireland
SUGAR LAKE
1962
Sitkum
CUZIN PROPERTY
X
SILVER HILLS
VIDLER RIDGE
Outlet
X
CHERRY RIDGE
OUTLET CREEK PROPERTY
Creek
Severide
Woodward Cr.
RIVER
Schunter
WHITE VALLEY
Shuswap Falls
Rawlings Lake
Reiswig
Lumby
BLUE SPRING VALLEY
CREIGHTON VALLEY
Cherryville
Hilton
Jacks Cr.
Echo L.
7109
MT. BEAVAN
Monashee
YEOWARD MTN.
6990
Yeoward
MONASHEE MTN.
Creighton Cr.
Vidler Cr.
Harris Creek
Goat Mtn.
Keefer L.
Holmes L.
Barnes Cr.
River
Holding
EUREKA MTN.
6450
Eureka
Coalgoat Cr.
Big Goat Cr.
Heckman
Inonoaklin
Wauchope Cr.
INONOAKLIN MTN.
BUCK HILLS
Fish Hawk Lakes
Kettle
Strutell
OSOYOOS DISTRICT
KOOTENAY DISTRICT

LUZIN PROPERTY

GEOLOGICAL REPORT ON THE

MABEL LAKE PROPERTY

TORNADO DEVELOPMENT CORP. LTD. (NPL)

A 1-27 AND NEW 1-13,

VERNON MINING DIVISION, B.C.

AUGUST, 1973

VANCOUVER, B.C.

AGILIS ENGINEERING LTD.
CONSULTING ENGINEERS & GEOLOGISTS
107 - 325 HOWE STREET, VANCOUVER 1, B.C.

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GEOLOGICAL REPORT ON THE
MABEL LAKE PROPERTY
TORONADO DEVELOPMENT CORP. LTD. (NPL)
A 1-27 and MM/F 1-13,
VERNON MINING DIVISION, B.C.

1-00 INTRODUCTION:

The Mabel Lake property of Toronado Development Corp. Ltd. (NPL) is under option to the company from O. Gillespie of Merritt, B.C.

The property A claims were staked in August, 1972 for O. Gillespie, further staking was conducted in Mid-May, 1973 when the MM/F 1-13 claims were tied to the A claims.

At the time of the later staking reconnaissance geological and geochemical surveying was performed by personnel of Agilis Engineering Ltd. under the direction of D.P. Taylor, geologist.

2-00 LOCATION AND ACCESS:

The property is located in the Vernon Mining Division, B.C. north of Lumby, some 2.5 miles west of Sugar Lake in the Shuswap Highland.

The centre of the property is located at 50°24'N, 118°35'W.

Access from Lumby is via the Mabel Lake road to the Squaw Valley road turnoff and good summer logging roads 13 miles up the Squaw Valley road, which is not kept clean in the winter. Logging roads in poor condition cover most of the property.

3-00 PHYSIOGRAPHY AND CLIMATE:

The property is located on the north facing slope of Ireland Creek, at a mean elevation of 3,800 feet A.S.L. Topographic relief is relatively gently sloping with steep drop-offs directly north and east of the property. The entire area is covered by dense cedar and spruce forests, and is often swampy. Several areas have been logged and are covered by recent slash burn.

This area of south central B.C. has considerable precipitation being on the edge of the Columbia rain belt. The summer are hot with moderate precipitation and the winters are cold with 6-8 feet of snow between November and May.

Water is available at all locations for exploration purposes.

4-00 PROPERTY:

The A claims were staked by M. Marchand 21st August, 1972 and recorded September 5th. The claims are now owned by Toronado Development Corp. Ltd. (NPL). In May 1973 further staking was conducted by A. Turner and these claims NEWF 1-13 are also owned by Toronado Development Corp Ltd.

Claim	Record Number
A 1-27	16958 - 16984
NEWF 1-13	17048 - 17060

All claims are located in the Vernon Mining Division, B.C.

5-00 REGIONAL GEOLOGY:

The property lies in the metamorphics of the Shuswap complex. Regional trends in the Bugar Lake are generally striking. Broad scale regional faulting in the area is generally northwesterly and west northwesterly striking. The grade of metamorphism generally increases toward the east, from muscovite-chlorite schists in the west to biotite-garnet gneiss in the east. The most significant mineralization in the area is the Big Ledge zinc deposit of Cominco, some 20 miles east of the property.

6-00 PROPERTY GEOLOGY:

Out-crop exposure on the property is very poor, generally only being found in the road cuts and rarely in creeks. A very rapid reconnaissance mapping survey was conducted over the property in conjunction with a claim survey and some soil sampling and additional staking in May 1975.

The area is overlain by what is believed to be very shallow but continuous overburden.

The property is generally underlain by a relatively horizontal lying sequence of quartz-biotite, biotite sericite, and calc-schists. A biotite gneiss was noted on the southeast boundary of the property.

The lithologic sequence is believed to be:

Fine grained biotite schist
Quartz biotite schist
Biotite schist
Calc-sericite schist
Biotite gneiss.

The stratigraphic top of the sequence is yet to be determined.

Attitudes of the metamorphics vary considerably over the property but generally indicate a strike of N 30 W with northerly dips varying from 15 to 45°, probably regionally 10 to 15°.

Minor fold structures noted indicate these to be the general attitudes, N 30 W strike, N 15° dip with the folds plunging 17° S 20 E.

One apparently continuous band of biotite schist covers extensive areas of the property, apparently underlying most of it. This band is notably rusty in appearance and generally carries disseminated traces of pyrrhotite, and pyrite.

In the area of the old log camp material from this strata, some bearing massive pyrrhotite, has been found containing notable chalcopyrite. Occasional specks of chalcopyrite can be seen in most of the rusty biotite schist band. Sphalerite is impossible to distinguish in trace quantities in the biotite schist but hydrozincite staining at the "high grade" showing at the log camp indicated its presence.

The showings at the old log camp are the most significant noted on the property. Higher grade float was seen in a sloughed trench, reportedly originally in bedrock, than anywhere else on the property. About 1 mile east of the camp, on the break of the mountain slope down to Sugar Lake, extensive very rusty biotite schist is exposed in a road cut.

This rusty occurrence was found to continue on strike to another road about 1,000 feet northwesterly. These road cuts were grab sampled for check assay and yielded 0.01% copper, 0.01-0.7% Zn and 0.05-0.14oz/ton silver. No assayable lead was encountered.

Assay on samples from the old strip "high grade" material yielded:

	Copper	Silver	Zinc
Median	0.17	.36	0.01
"High grade"	0.70	2.26	0.71

It is believed that the rusty bleached schist strata is lying as a shallow disk under the property, outcropping in a roughly circular form.

7-09 GEOCHEMICAL SURVEY:

Two geochemical survey traverses were run across the property as an orientation survey for further work. A total of 111 samples were taken and analysed for copper, lead, zinc.

7-10 Results:

The sample results were plotted on probability paper, i.e. accumulated percent versus parts per million for each element assayed and from the plot background, and anomalous values were read.

Copper:

Copper values range between 10 ppm and 170 ppm with the background value being 22 ppm and anomalous value being above 60 ppm. A total of 14 samples or 11% are classified as anomalous.

Zinc:

Zinc values range from 20 to above 300 ppm with the background being 160 ppm and anomalous values are greater than 270 ppm. Only 5 samples or 4% can be classified as anomalous.

Lead:

The probability plot for lead shows erratic distribution, not more than two points along a straight line, and hence is inconclusive.

In further geochemical sampling copper and zinc appear to be best suitable to be used to outline possibly mineralized areas of interest.

8-00 CONCLUSIONS:

Traces of mineralization have been located on the Mable Lake property of Toronado Development Corp. Ltd. (NPL) apparently localised in a rusty appearing biotite schist. Economically significant mineralization has not been encountered to date.

The mineralised strata of the metamorphics appears to be relatively flat lying, horizontal, forming a saucer shaped feature outcropping close to the boundaries of the property.

Minor folds noted near the west boundary of the property indicate probable minor folding in the biotite schist.

Should larger scale folding occur the hinge areas of such folds may be the foci of concentrations of economic mineralization.

In a geochemical survey copper and zinc would be suitable elements to use to outline possible areas of mineralization.

9-00 RECOMMENDATIONS:

Potential mineralization of economic significance on this property is considered to be most likely concentrated around the ridge crests of larger folds.

Pervasive pyrrhotite and pyrite mineralization noted in the showings found to date suggest probable accumulations of these minerals with any economically significant mineralization. A magnetometer survey is recommended with the prupose of locating any sub-surface accumulations of pyrrhotite.

A soil sample survey on a grid of 200 x 400 feet is recommended, to be interpreted in light of the orientation survey already conducted. The geochemical survey grid will also serve for the magnetometer survey.

Should encouraging results be produced from these surveys an electromagnetic survey, probably most cost effectively conducted with Sx - 16, should be conducted over the grid.

Significant anomalies may be trenched and/or drilled at the direction of a consultant.

Respectfully submitted:

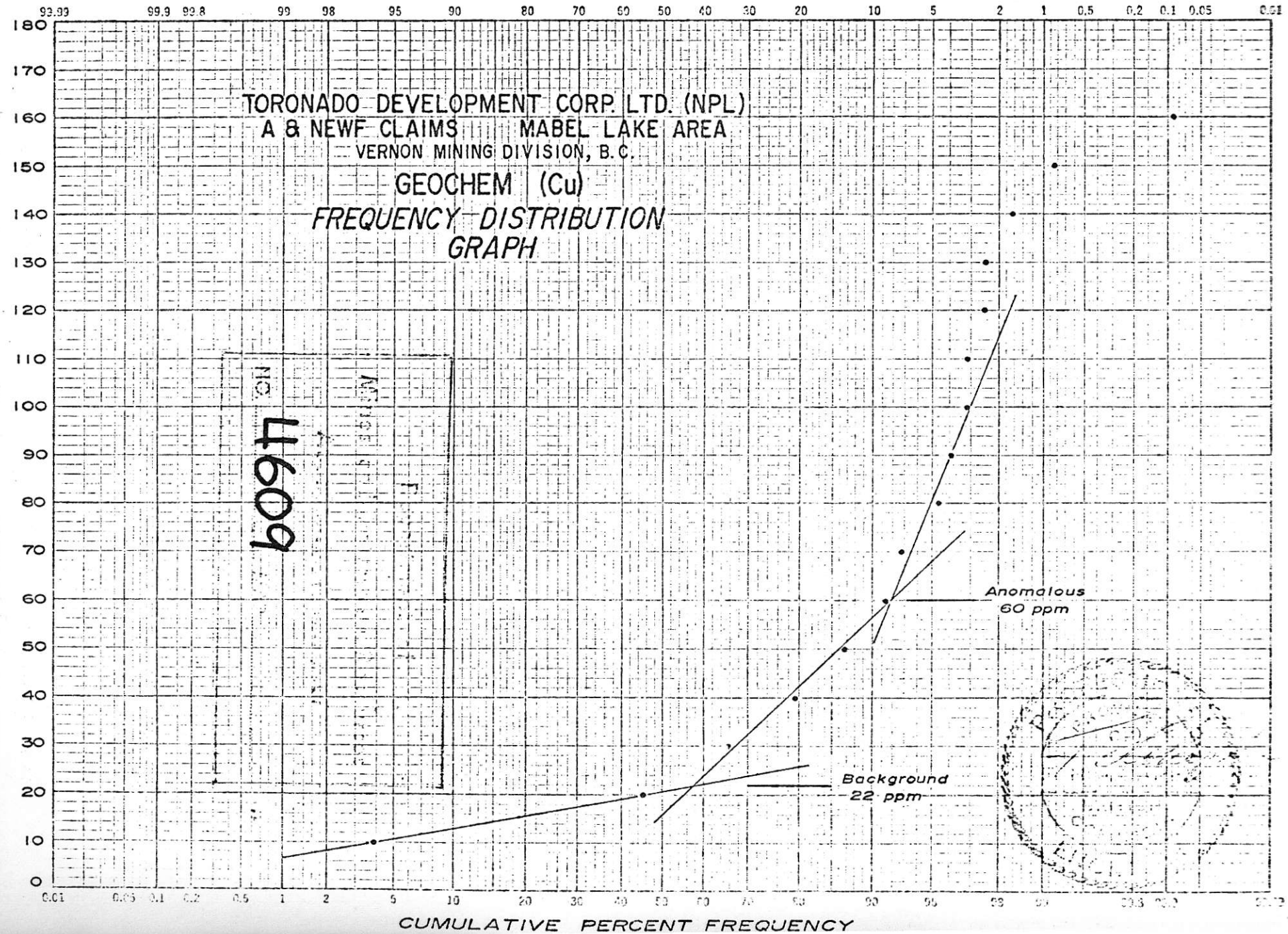
David P. Taylor, Geologist

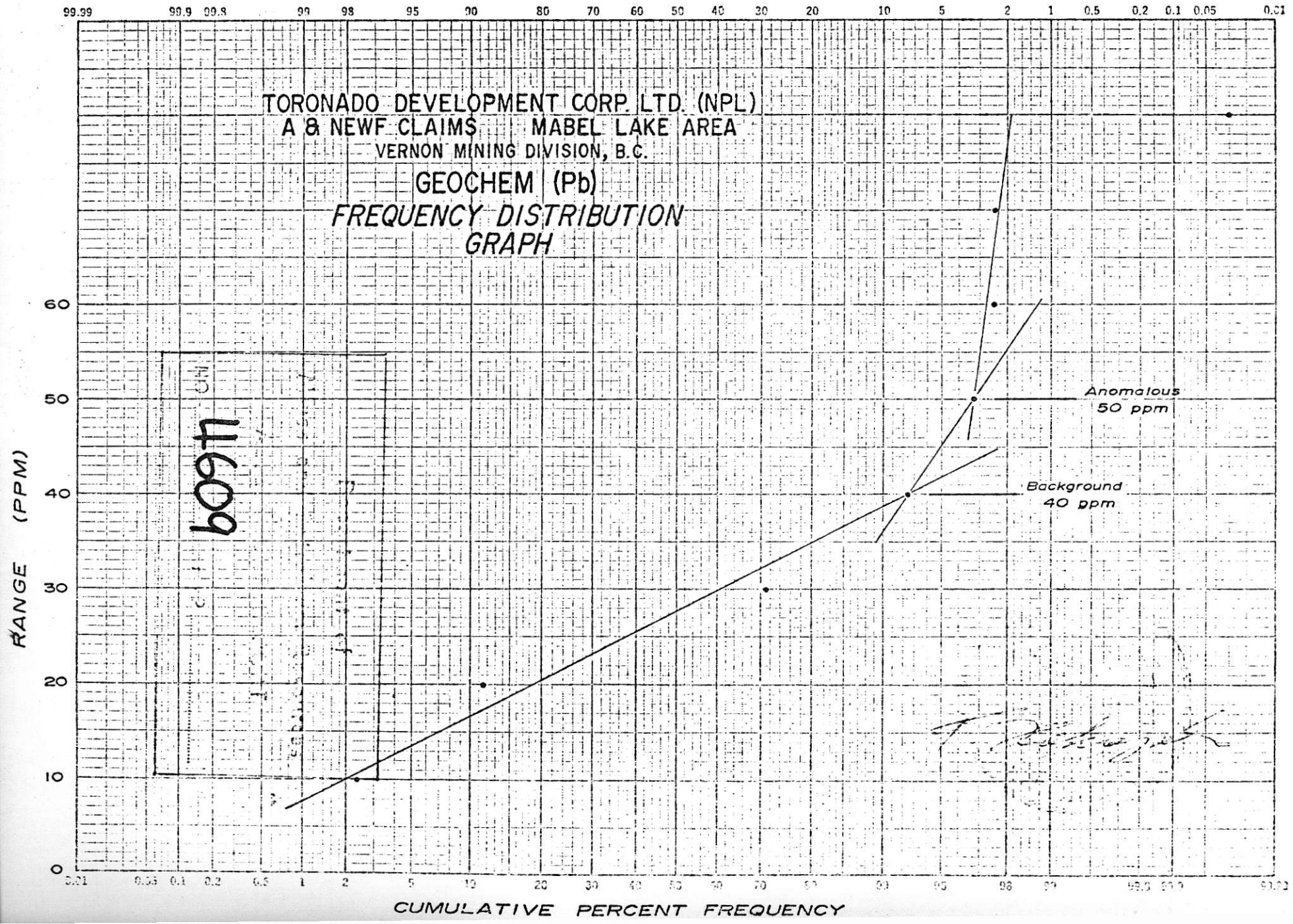
Endorsed by:

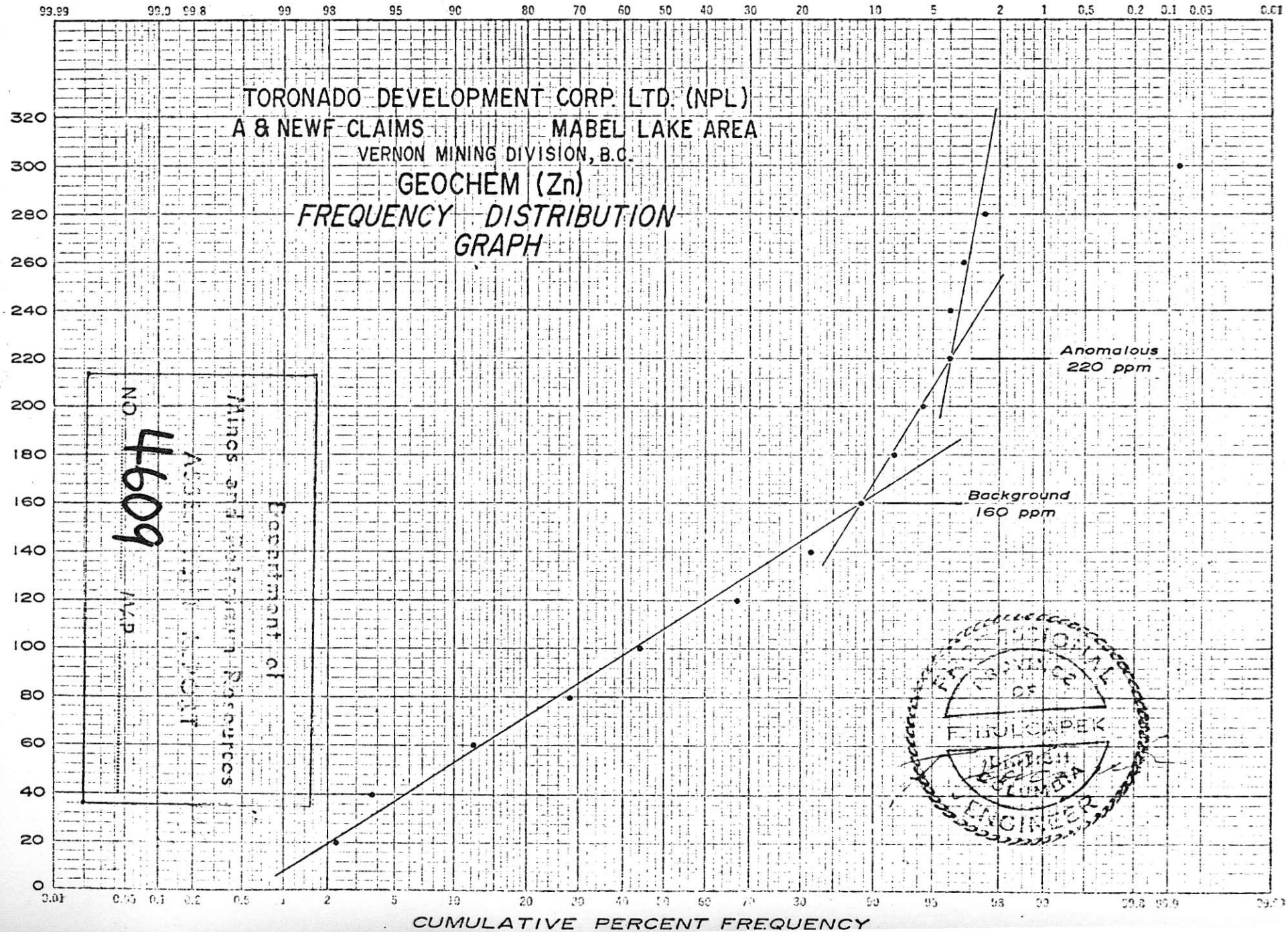
F. Holcapek, P. Eng.

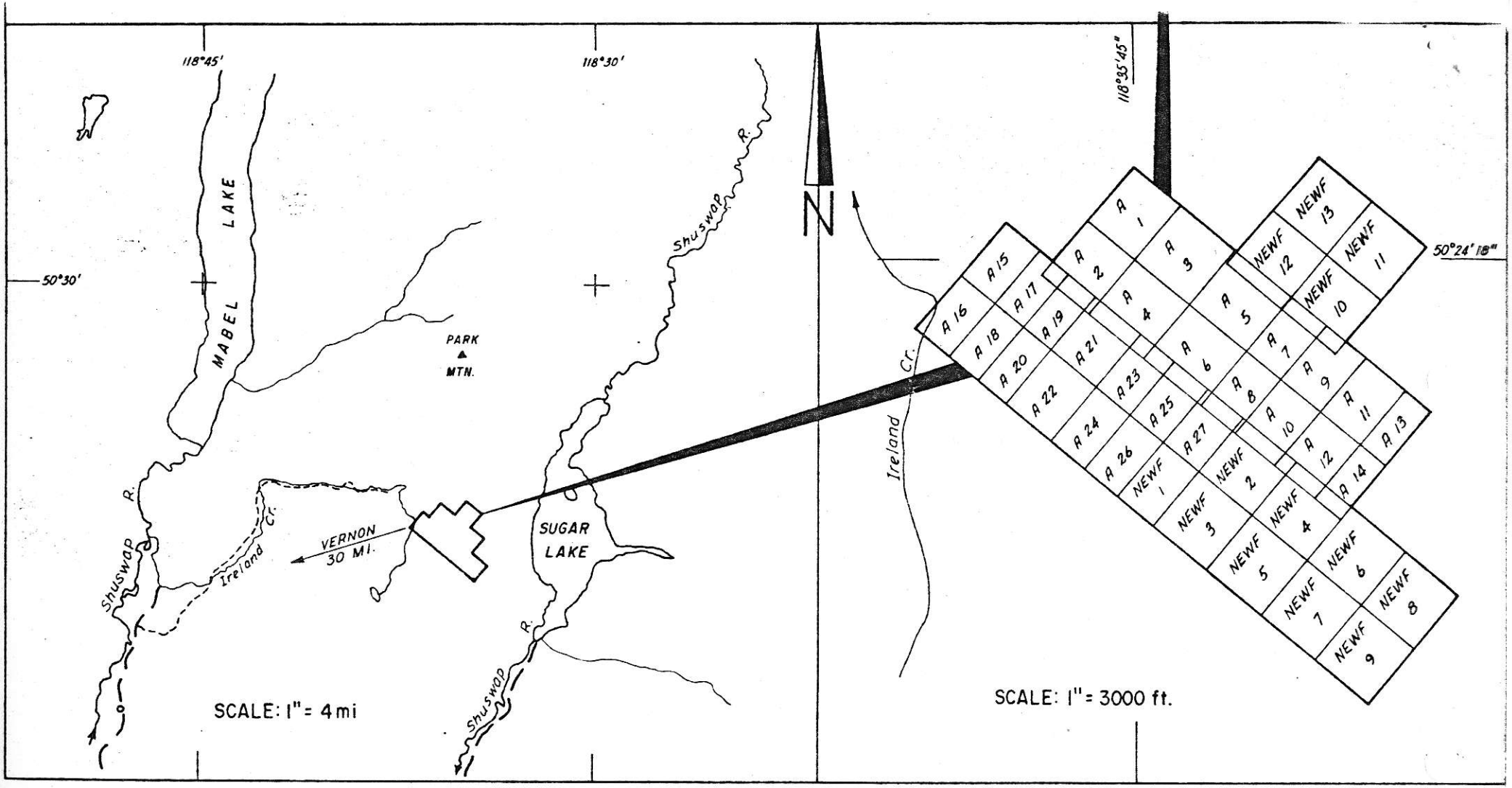
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
F. HOLCAPEK

X 90 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.








118°45'
118°30'
118°35'45"
50°30'
50°24'18"
MABEL LAKE
PARK MTN.
Shuswap R.
Ireland Cr.
VERNON 30 MI.
SUGAR LAKE
SCALE: 1" = 4 mi
A 1
A 2
A 3
A 4
A 5
A 6
A 7
A 8
A 9
A 10
A 11
A 12
A 13
A 14
A 15
A 16
A 17
A 18
A 19
A 20
A 21
A 22
A 23
A 24
A 25
A 26
A 27
NEWF 1
NEWF 2
NEWF 3
NEWF 4
NEWF 5
NEWF 6
NEWF 7
NEWF 8
NEWF 9
NEWF 10
NEWF 11
NEWF 12
NEWF 13
SCALE: 1" = 3000 ft.