

3723

DICTATOR MINES LTD. (N.P.L.)

Geochemical Report
Rob Claims

92C/15E

Latitude 48° 55' N Longitude 124° 35' W

AUTHOR: G. L. Anselmo

P. ENGINEER: W. G. Stevenson

DATE OF WORK: August 30 - September 18, 1971
June 14, 1972

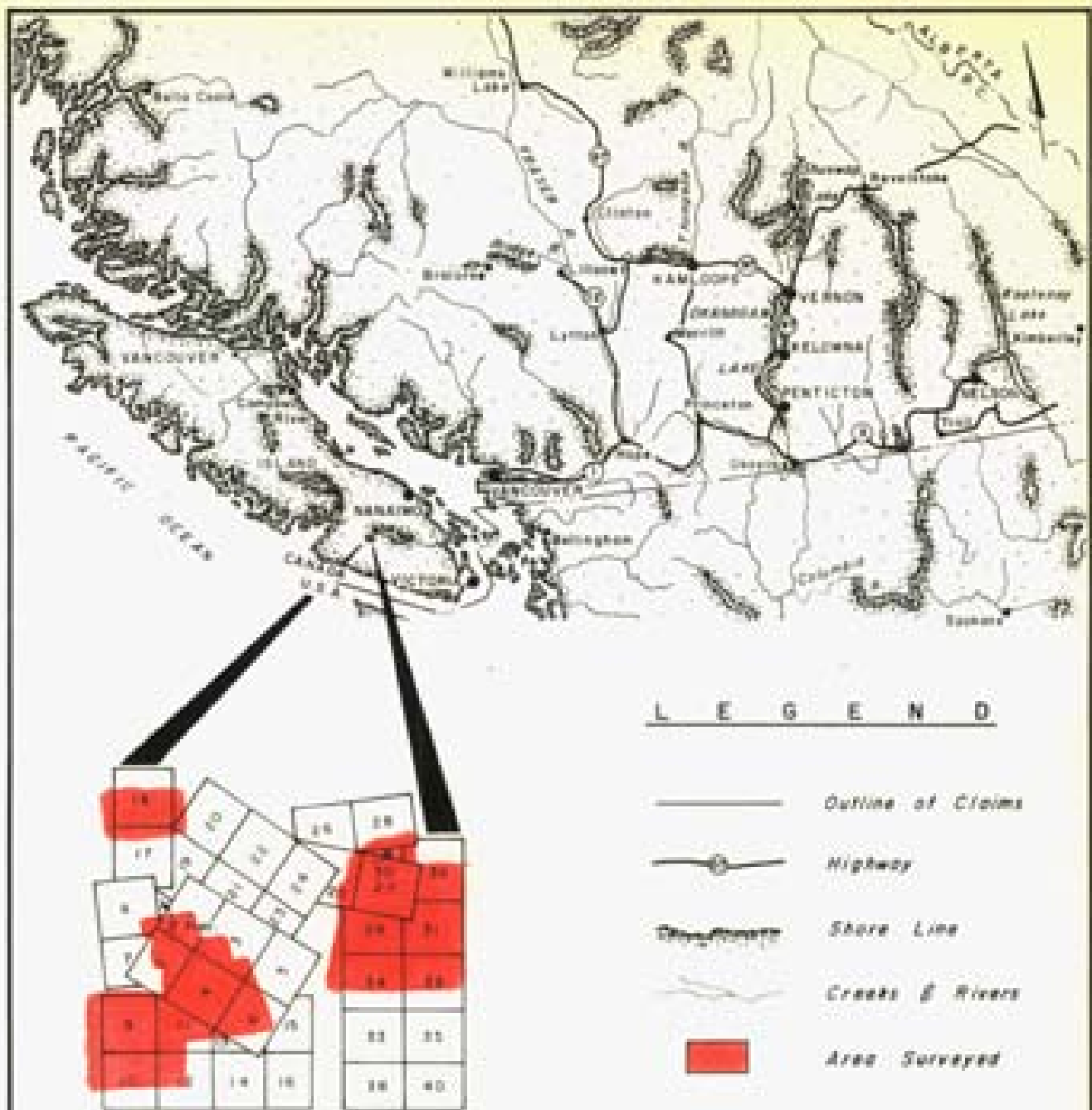
Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 3723 MAP.....
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DICTATOR MINES LTD. (N.P.L.)

ROB CLAIMS

SOUTHERN CROSS PROPERTY

LOCATION AND CLAIMS MAP

SCALE LOCATION MAP: 1" = 50 MILES APPROX. - CLAIMS MAP: 1" = 4000 FEET APPROX.

3723 M-1


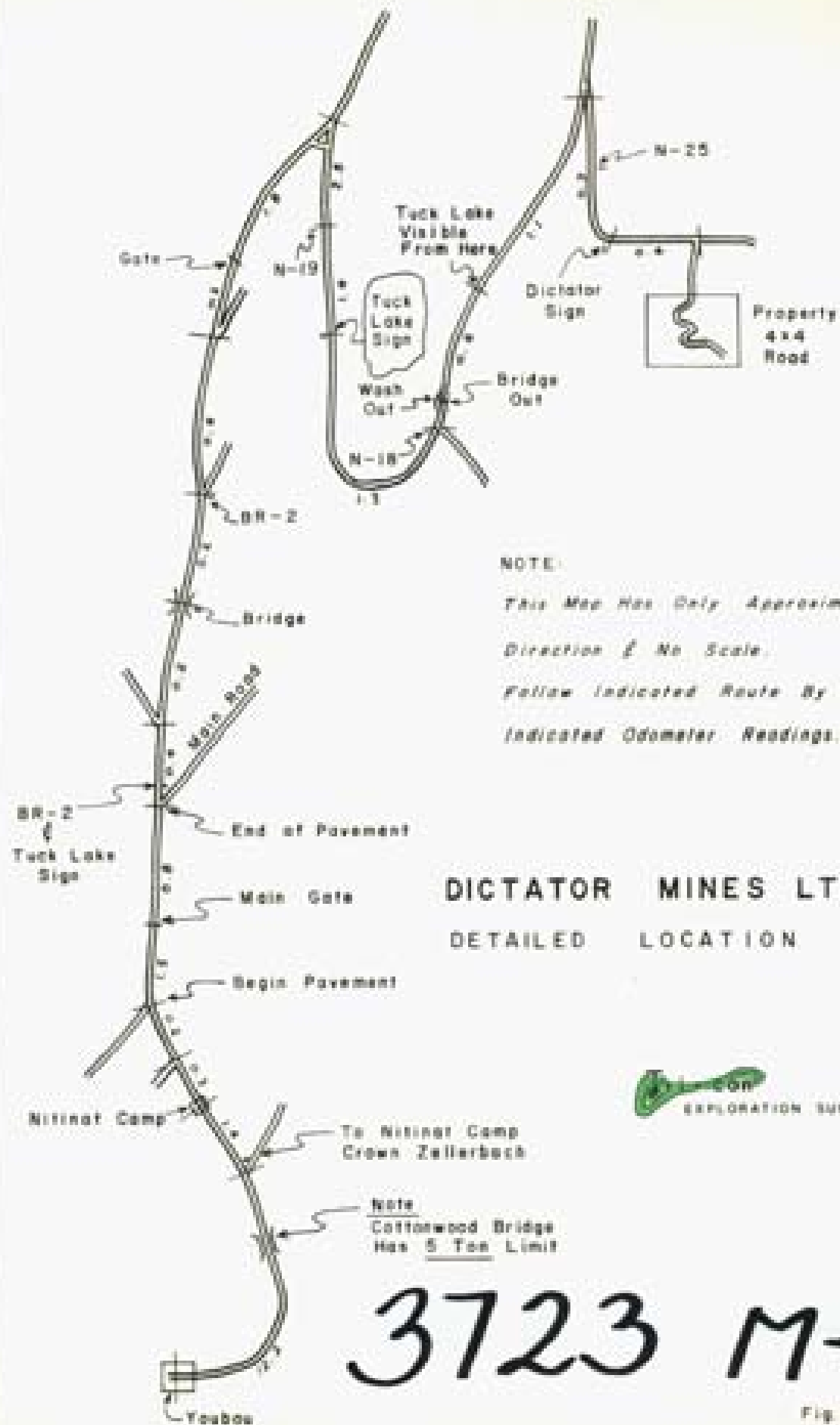
 EXPLORATION SURVEYS LTD.

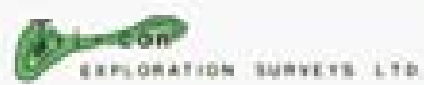
Fig. 1
Plate 1-1

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NO. 3723 M.P. #1



NOTE:
 This Map Has Only Approximate
 Direction & No Scale.
 Follow Indicated Route By
 Indicated Odometer Readings.

DICTATOR MINES LTD (NPL)
DETAILED LOCATION MAP



3723 M-2

Fig. 1A
 File: D1

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NO. 3723 MAP #2

INTRODUCTION

From August 30 to September 18, 1971, Mr. J. Hachey, on behalf of Dictator Mines Ltd., conducted a program of geochemical surveying on the Southern Cross Property (Figure 1), Alberni Mining Division, Province of British Columbia. The survey was checked on the ground and the geochemical anomalies defined by this survey were tested by G. L. Anselmo President of Tri-Con Exploration Surveys Ltd., on June 14, 1972.

LOCATION & ACCESS

The claims surveyed are situated approximately 40 miles from the village of Lake Cowichan, B.C. The exact location is at W. longitude $124^{\circ} 35'$ and N. latitude $48^{\circ} 55'$, N.T.S. 92 C/16.

Access to the property is by highway #18 (paved road) from highway #1 at Duncan past Lake Cowichan. Thence, by gravel road to Nitinat. A detailed location map accompanying this report as Figure 1A shows the exact route to the property.

PROPERTY

The Southern Cross Prospect consists of 50 mineral claims, described as follows:

<u>Claim Name</u>	<u>Record Number</u>
Rob 2	13471
Rob 4	13473
Rob 6	13475
Rob 7	13476
Rob 8	13477
Rob 9	13478
Rob 10	13479
Rob 11	13480
Rob 12	13481
Rob 13	13482
Rob 14	13483
Rob 15	13484

<u>Claim Name</u>	<u>Record Number</u>
Rob 16	13485
Rob 17	13486
Rob 18	13487
Rob 19	13488
Rob 20	13489
Rob 1 Fraction	14997
Rob 2 Fraction	14998
Rob 1	13470
Rob 3	13472
Rob 5	13474
Rob 21	13490
Rob 22	13491
Rob 23	13492
Rob 24	13493
Rob 25	15036
Rob 26	15019
Rob 27	15020
Rob 28	15021
Rob 29	15022
Rob 30	15023
Rob 31	15024
Rob 32	15025
Rob 33	15026
Rob 34	15027
Rob 35	15028
Rob 36	15029
Rob 37	15160
Rob 38	15030
Rob 39	15161
Rob 40	15031
Rob 41	15032
Rob 42	15033
Rob 43	15034
Rob 44	15035
Rob 45	16379
Rob 46	16380
Rob 47	16381
Rob 48	16382

Physiography, Climate and Vegetation (Dawson, 1971)

The claims occupy parts of the valley bottom and the east sloping hillside above Parker Creek. Relief is in the order of 2,000 feet, the valley of Parker Creek being 300 to 400 feet A.S.L. and the highest

parts of the ridge west of the creek about 2,500 feet A.S.L. Topography in this part of Vancouver Island has been rounded by continental glaciation and there are no precipitous areas although much of the property has moderate to extreme relief. Overburden depths are fairly shallow (1-5 feet) as observed by the author near the ridge tops. However, clays and detritis are scattered along the slopes of the property creating varied geochemical conditions and overburden depths in the valley bottoms may be extreme.

The area has a high annual precipitation which falls mostly as rain and mostly in the winter months. Precipitation records show that the total varies widely from year to year, but exceeds 200 inches in most years. There is little snow below elevations of 1,000 feet. In the summer months, periods of rain are shorter and less frequent than in winter; however, the area is frequently blanketed in fog.

Vegetation is prolific and where it has not been logged off, consists of mature stands of large cedar, hemlock and fir trees with a profuse undergrowth of salal, salmonberry and devil's club. Most of the lower parts of the property lie on the B.C. Forest Product's license and were logged off some years ago. The main zone of interest lies in mature virgin timber on the MacMillan-Bloedel license; however, logging operations are currently only about a mile away, and it is anticipated that this area will be logged late this year or next year.

History (Dawson, 1971)

The property was first staked in 1930 when it was referred to as the Southern Cross. Prospecting, some minor trenching, and the driving of one short tunnel was carried out during 1931 and 1932.

In 1942, the property was (?) optioned to Bralorne Mines Ltd. who carried out some surface work and a total of 2,000 feet of diamond drilling in six holes. The property was relocated in 1947 when it was referred to as the Bornite Group. In 1953, it is reported that some of the old open cuts were cleaned out and American Standard Mines Ltd. mapped and sampled the main showings.

In 1955, the property was restaked and vended to Nadira Mines Ltd. (N.P.L.) which carried out some surface sampling, geological mapping and a self potential survey.

In 1956, a camp was constructed by this company, and a total of 11,902 feet of diamond drilling in 43 holes was completed. In 1957 an adit was driven for 102 feet to intersect a shear zone which outcrops on surface. Some surface stripping was carried out in 1958 and 1959.

In 1960, a total of 5,142 tons of ore was mined from open cuts and milled at the Cowichan Copper Company's mill on Cowichan Lake. The 261 tons of copper concentrate produced was shipped to Japan. There is no further record of work carried out by Nadira Mines Ltd. and the claims finally lapsed in 1968.

Amax Exploration Inc. restaked the property in 1968-69, and carried out an evaluation which consisted of detailed mapping, geo-chemical soil and silt sampling and resampling of the exposed trenches and mineralized outcrops. As a result of this preliminary evaluation, further work was recommended by Amax.

SURVEY SPECIFICATIONS

Survey Grids

(a) Central Area (as defined on Figure 2)

A grid was established on the property with 200 foot line spacings and 100 foot sample intervals.

(b) 3 Outlying Areas (as defined on Figure 2)

Three grids were established on the property with 400 foot line spacings and 200 foot sample intervals.

On investigation of the anomalous areas, as shown in Figure 2, the author found the base line and grid lines to be well flagged and well marked with stations easily readable. The lines were not slashed out, however, such work would be superfluous as rapid growth of underbrush would obscure such work in a very short period.

Geochemical Survey

The soil of the property is well developed with angular rock in the B and C horizons indicating proximity of bedrock. Where clays are encountered on the property, angular rock is absent and round rock is evidence of glacial debris.

Detailed studies of the soil can be seen in Plates 1-3.

The soil sample holes were dug with a mattock to an average depth of 10". The soils were placed in water resistant sample envelopes where they remained until analysis. The author noted some of the sample holes during his investigation and found them to his satisfaction.

The soils were delivered to Core Laboratories Ltd. of 325 Howe Street, Vancouver, B.C. where drying, -80 mesh sieving, pyro-sulfate fusion and analysis by atomic absorption was carried out under the supervision of professional chemists.

Analysis of the soil profiles, as shown in Plates 1-3, was carried out by Chemex Laboratories Ltd. of North Vancouver, B.C. where drying, -80 mesh sieving, perchloric acid digestion and analysis by atomic absorption was carried out under the supervision of professional chemists.

The soils were taken in the field by the author and as the day was rainy, pH's were run on the samples a day later using a pH kit with color standard charts and reagents giving a test accuracy of 0.1 on a range of 1-14.

Data Presentation

The survey data accompany this report as planimetric maps and illustrations as follows:

Figure 2	Geochemical Map-Copper
Plate 1	Soil Profile #1
Plate 2	Soil Profile #2
Plate 3	Soil Profile #3

MINERALIZATION

On investigating the soil anomalies as shown on Figure 2; the author encountered mineralization at Profile Sites 1 and 2. A grab sample across 25 feet at Profile Site #1, labeled as "Grab Sample S.C. #1" gave an assay of 1.76% copper. A grab sample across 5 feet, 50 feet south of Profile Site #2 labeled as "Grab Sample S.C. #2" gave an assay of 2.88% copper. In both cases, the major type of mineralization was chalcopyrite in fracture fillings and replacement zones, with azurite and malachite staining on weathered surfaces.

The main mineralized zone is roughly 2,000 feet by 400 feet as presently outlined by visual methods. Within this area a number of pockets of high grade mineralization exists. The geochemical data shows the same zone to be some 2,400 feet by 800 feet. Ninety rock chip samples over a total length of 770 feet were taken by Amax Exploration Inc. from mineralized outcrops within this zone. The report of Christoffersen and Mustard (1969) states that:

"Weighted average for all samples of mineralized skarn is 1.73% Cu and about 0.20 oz/Ag per ton (770 feet) The highest assay was 5.65% copper over a length of 10 feet. Other assays are as follows (Christoffersen and Mustard, 1969):

<u>% Cu</u>	<u>Ag-oz/ton</u>	<u>Sample Length</u>
1.29	0.17	35 feet
1.61	0.14	118 feet
.97	0.08	30 feet

<u>% Cu</u>	<u>Ag-oz/ton</u>	<u>Sample Length</u>
3.76	0.38	28 feet
1.19	0.12	60 feet
1.39	0.15	40 feet
1.65	0.13	40 feet
1.16	0.24	50 feet
1.68	0.36	30 feet

....Most gold assays gave trace amounts only, three samples returned 0.02 oz/ton."

Hot and cold extractions were employed on the soil profiles by Chemex Laboratories Ltd. and the results are plotted on profile Plates 1-3. This procedure was employed to determine whether the copper anomalies were due to copper in particle or ionic form.

DISCUSSION OF RESULTS

There are several well defined copper geochemical anomalies on the property. In general, there are two distinct geochemical populations. The central grid is relatively void of overburden and clays although it does extend into clay covered areas.

The pH of the soils in this area (as shown in Plates 1-3) show that ion migration will take place. However, the high degree of oxidation seen in the soil provides the necessary environment for a copper-precipitation process in the form of copper carbonate, thereby "tying-up" most ionic copper and consequently limiting ion migration to very short distances laterally and vertically.

The ratio of cold-extractable copper to total extractable copper shows that a large portion (the major part) of the intensity in the anomalous areas, is due to copper in particle form.

The outlying grids are in rather heavily overburdened areas and copper response is expected to be severely hampered in surface sam-

ples due to the underlying clays. These anomalies then, have a high degree of importance though the values are considerably lower than those in the non-overburdened areas.

CONCLUSIONS

- A geochemical survey has been carried out on the claims listed in this report. Field investigation and sampling of anomalous areas for the purpose of correlation, verification and further interpretation has been conducted and the author is therefore assured of the survey's validity.
- Soils of the property are well developed and the B horizon is extremely oxidized. Two distinct geochemical populations make separate interpretations of areas necessary.
- Lower valued anomalies on outlying grids are considered to reflect mineralization. This is particularly the case in the north-western most grid as shown in Figure 2.
- Geochemical anomalies in the central grid reflect mineralization. Profile studies, pH testing, mineralization sampling and visual examinations of these zones lead to the conclusion that the mineralization is of a grade in excess of present economic standards and in all probability is considerably higher. A conservative ratio of copper in bedrock to geochemical response in the areas designated as most anomalous as shown in Figure 2 is 8:1.
- Based on previous reports and the author's examination, mineralization appears to be of sufficient grade and extent to be of high economic interest.

RECOMMENDATIONS

Phase I

- Extend the grid to the north and southwest to intersect the grids already existing in this area.
- Geochemically survey these new grids.
- Perform Electromagnetometer and Magnetometer surveys on the entire grid area.
- Perform a geological survey of the entire grid area.

Phase II

- Based on the interpretation of combined data from Phase I, a program of trenching and drilling will be recommended.

Respectfully submitted,
TRI-CON EXPLORATION SURVEYS LTD.

A handwritten signature in cursive script, appearing to read "G. L. Anselmo". The signature is written in dark ink and is positioned above the typed name and title.

G. L. Anselmo
President

R E F E R E N C E S

- Dawson, James M., 1971: Report on the Nadira Copper Property
- Christoffersen, J. E. and
- Mustard, D. K., 1969: Geological Report on the Rob Claims....Nadira
Copper Property; private report to Amax Ex-
ploration Inc.

ASSESSMENT REPORT

NO. 3723 MAP #4



DICTATOR MINES LTD. (N.P.L.)

ROB CLAIMS

SOIL PROFILE No. 1

SCALE: 1" = 10"



EXPLORATION SURVEYS LTD.

Plate 1
File 23

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HORIZON	DEPTH	Cu ppm	COLO EXTRACTABLE Cu ppm	PH
L-H	0-4"	330	12	4.8
B1	4"-12"	1200	74	5.2
B1	12"-24"	1120	44	5.5
B1	24"-36"	1000	58	5.3
B1	36"-40"	1240	96	5.6
Rock From Total Hole		600	224	7.4

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ROB CLAIMS

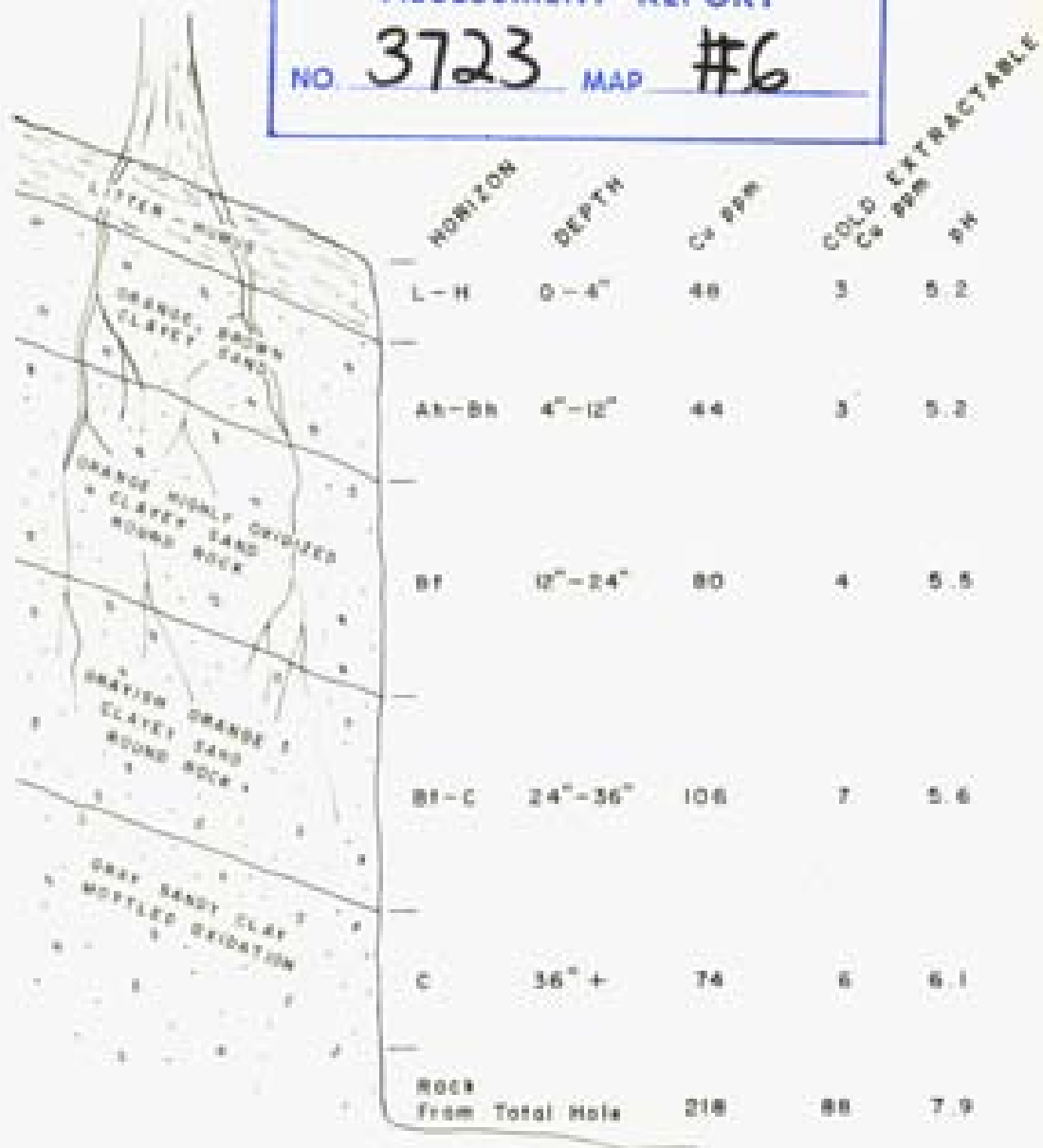
SOIL PROFILE No. 2

SCALE 1" = 10"



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NO. 3723 MAP #6



DICTATOR MINES LTD. (N.P.L.)

ROB CLAIMS

SOIL PROFILE No. 3

SCALE: 1" = 10"



EXPLORATION SURVEYS LTD.

Plate 3
File 3.1

CERTIFICATE

I, Garry L, Anselmo, DO HEREBY CERTIFY:

- That I am President of Tri-Con Exploration Surveys Ltd. with offices at Suite 200-1405 Hunter Street, North Vancouver, British Columbia, and a Consultant in Geochemical Exploration.
- That I studied Geology and Geochemistry at the University of British Columbia for three years and am a graduate of Simon Fraser University with the Degree of Bachelor of Arts.
- That I have been engaged in Mining Exploration for seven years.
- That I have no direct, indirect or contingent interest in the Rob Mineral Claims, nor do I intend to receive any such interest.
- That this report dated June 27, 1972 is based on information derived from a Geochemical Survey performed by J. Hachey, on behalf of Dictator Mines Ltd. and by field investigation by G. L. Anselmo of Tri-Con Exploration Surveys Ltd.

DATED at Vancouver, British Columbia,
This 27th day of June, 1972.

TRI-CON EXPLORATION SURVEYS LTD.



G. L. Anselmo, B.A.
President

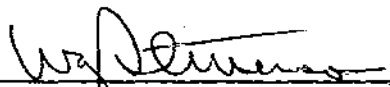
CERTIFICATE

I, William G. Stevenson, DO HEREBY CERTIFY:

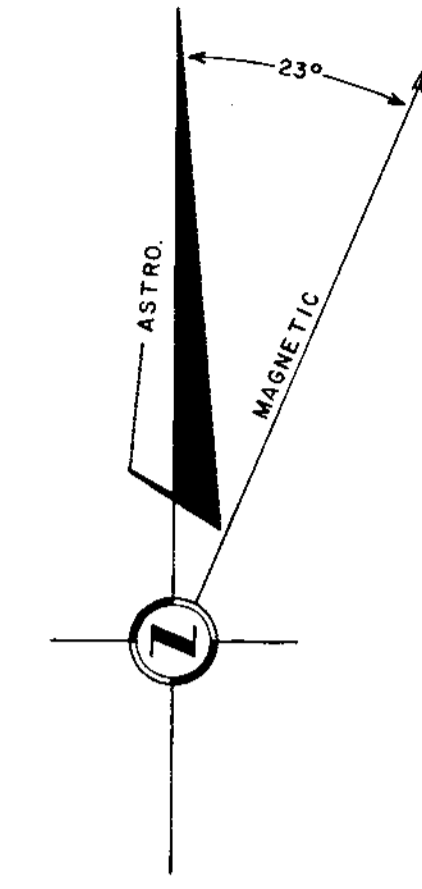
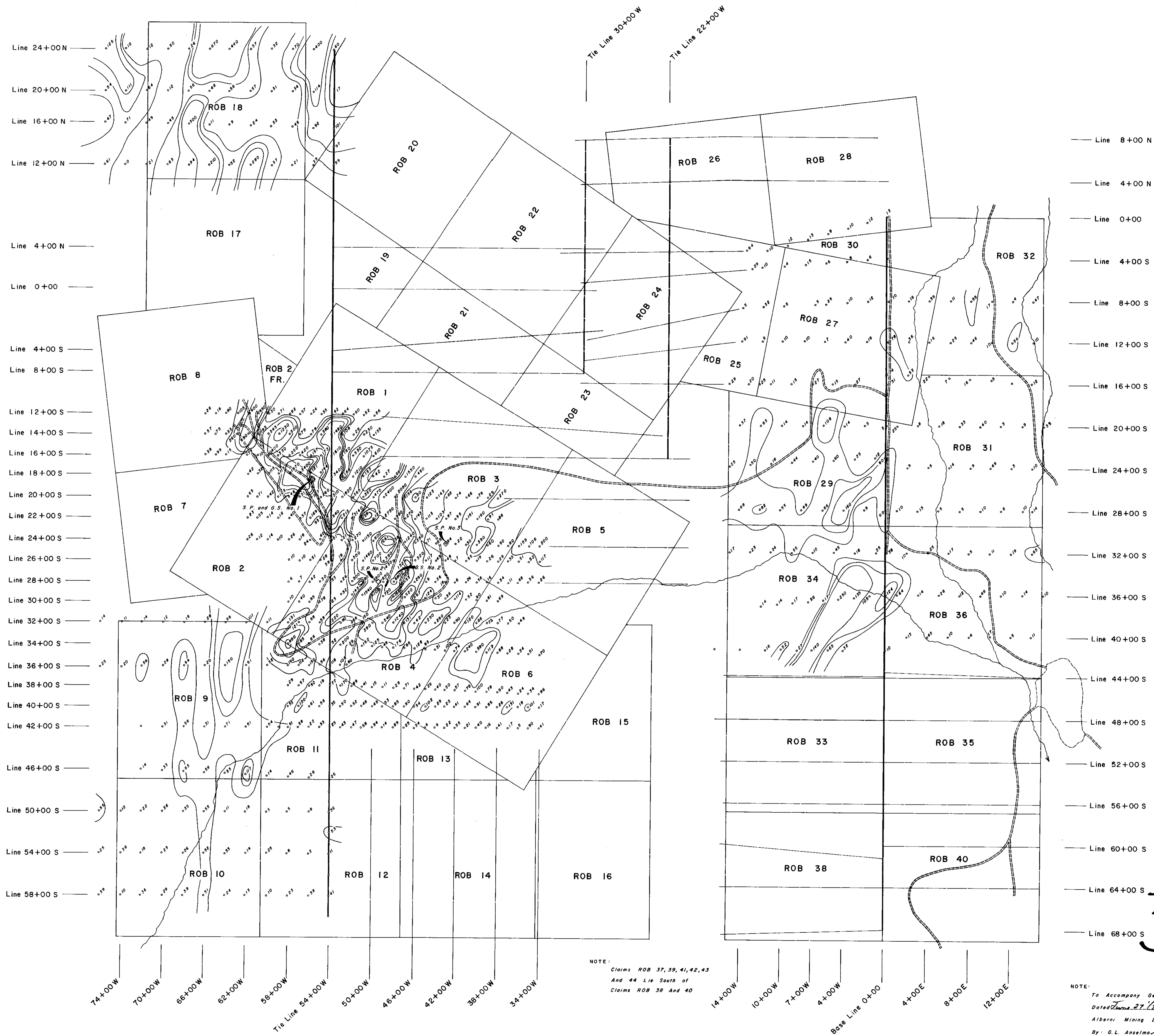
- That I am a Consulting Geological Engineer with offices at Suite 209, Stock Exchange Building, 475 Howe Street, Vancouver 1, B.C.
- That I am a graduate of the University of Utah, 1946, with a B.Sc. Degree.
- That I am a registered Professional Engineer in the Association in British Columbia.
- That I have practised my profession for 22 years.
- That I have no direct, indirect or contingent interest in the Rob Mineral Claims or in the securities of Dictator Mines Ltd., nor do I intend to receive any such interest.
- That I have reviewed a report dated June 27, 1972 based on work conducted by J. Hachey and Tri-Con Exploration Surveys Ltd.

DATED at Vancouver, British Columbia, this 29th day of June 1972.

W. G. STEVENSON & ASSOCIATES LIMITED
Consulting Geologists



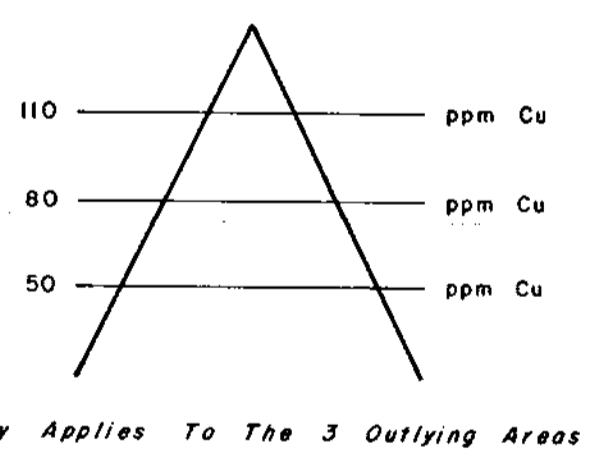
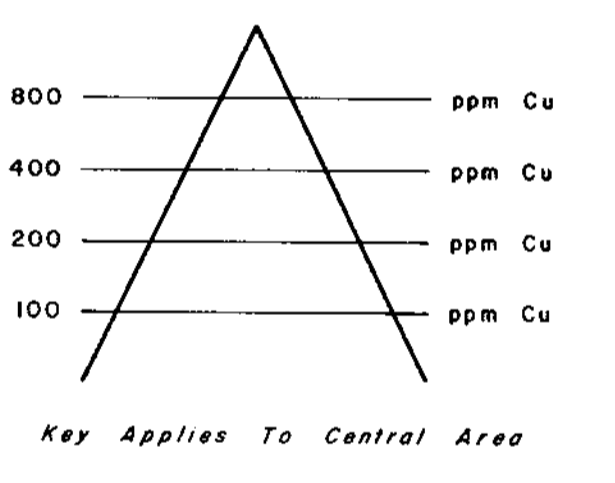
W. G. Stevenson, P. Eng.



L E G E N D

- Contour Line
- Stations Surveyed & Values
- Outline of ROB CLAIMS
- Base Line
- Tie Line
- Gravel Road
- Creeks Showing Direction of Flow
- Survey Line Extensions

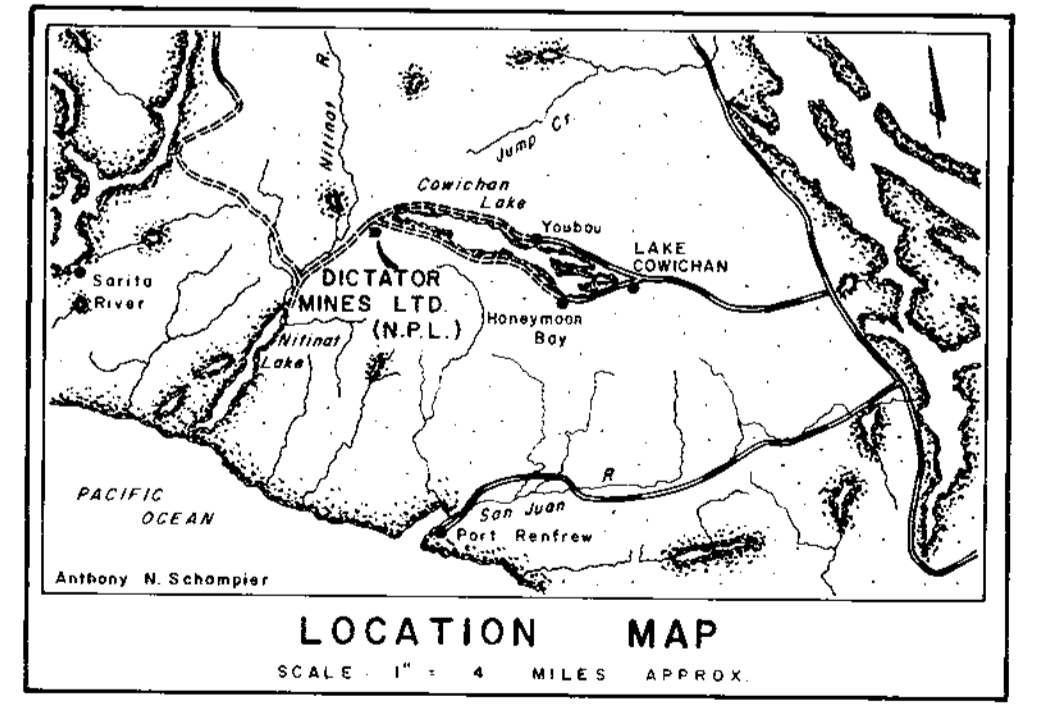
GEOCHEMICAL KEYS



NOTE:
 ◊ Soil Profile
 ○ Grab Sample

M-3
 3723

N.T.S. 92 C/16



SCALE 1" = 4 MILES APPROX

DICTATOR MINES LTD. (N.P.L.)			
SOUTHERN CROSS PROPERTY			
ROB CLAIMS			
ALBERNI MINING DIVISION - BRITISH COLUMBIA, CANADA			
GEOCHEMICAL MAP			
COPPER			
INTERPRETED BY G.L. ANSELMO		DRAFTED BY ANTHONY H. SCHOMPNER	
EXPLORATION SURVEYS LTD.		CHECKED BY G.L. ANSELMO	
DATE: June 1972	REVISED:	PROJECT No: 7206	FILE: 01

NOTE:
 To Accompany Geochemical Report,
 Dated June 27, 1972, on ROB CLAIMS,
 Alberni Mining Division - British Columbia, Canada
 By: G.L. Anselmo, President.