

GEOCHEMICAL-GEOPHYSICAL ASSESSMENT REPORT ON THE
SURPRISE AND W06 CLAIMS (LEO 2 GROUP)

NANAIMO M. D.

92F/1W

Latitude 49°06'

Longitude 124°25'

December 17-28, 1983

for

CANAMIN RESOURCES LTD.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,913

Vancouver, B. C.
January, 1984

S. Zastavnikovich
Geochemist/consultant

TABLE OF CONTENTS

| | <u>PAGE</u> |
|-------------------------------------|-------------|
| 1.- Index Map (Fig. 1)..... | 1 |
| 2.- Claim Map (Fig. 2)..... | 2 |
| 3.- Introduction & Description..... | 3 |
| 4.- General Geology..... | 3 |
| 5.- Geochemical Survey..... | 3 |
| 6.- Geophysical Survey..... | 4 |
| 7.- Conclusions..... | 6 |

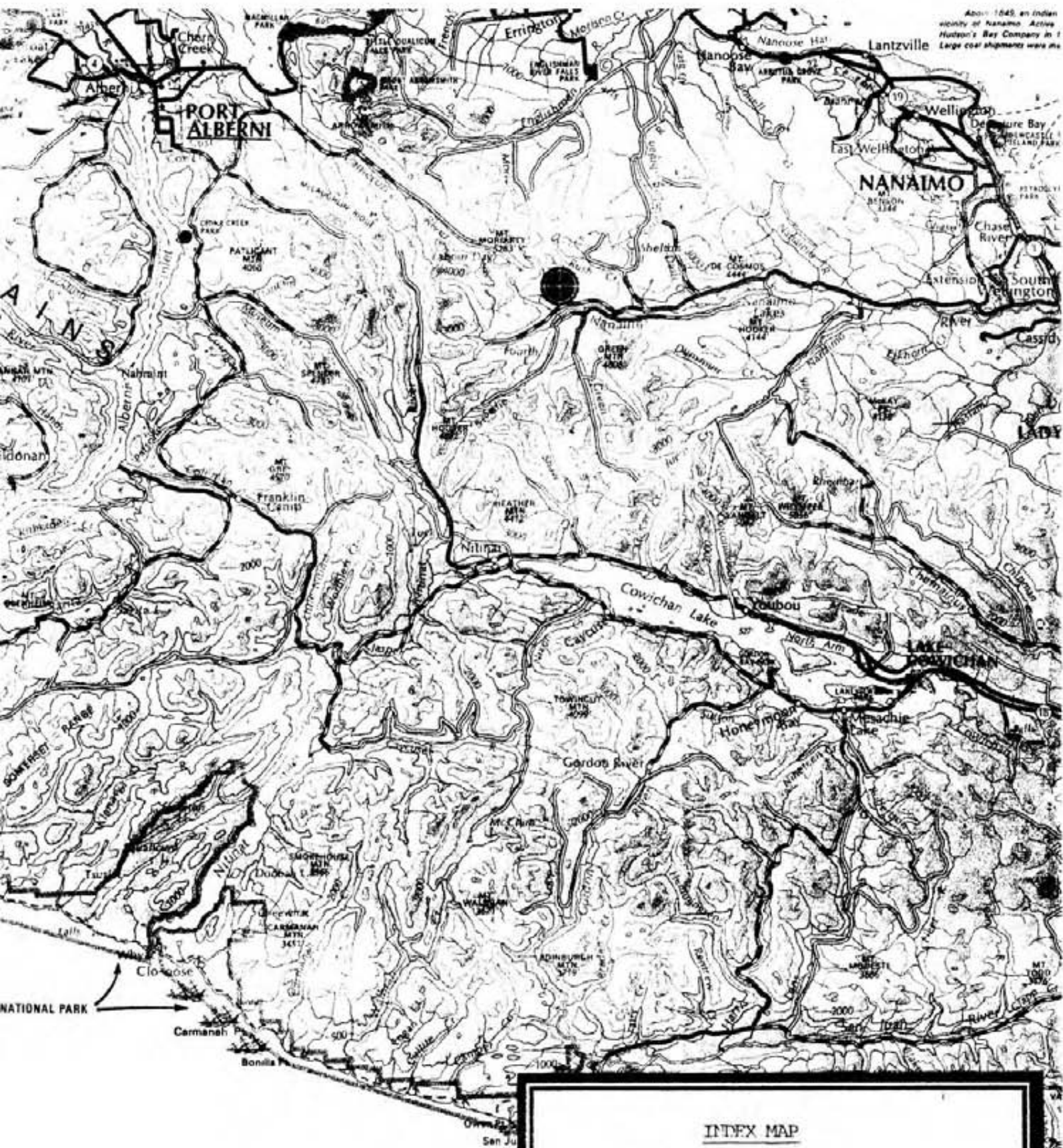
APPENDICES

- Appendix I Statement of Expenses
- Appendix II Statement of Qualifications
- Appendix III Analytical Results

MAPS

- 1.- Scale 1:2,000 Geophysical EMI6-VLF Grid Map, (Fig. 3)..... 5
- 2.- Scale 1:10,000 Geochemical and Geological Map (Fig. 4)
with claim outlines, sample and grid locations and
results.....In pocket

About 1845 an Indian
village of Nanaimo. Active
Hudson's Bay Company in 1
Large coal shipments were ma



INDEX MAP
SURPRISE & W06 CLAIMS
N7S 92F/ 1W

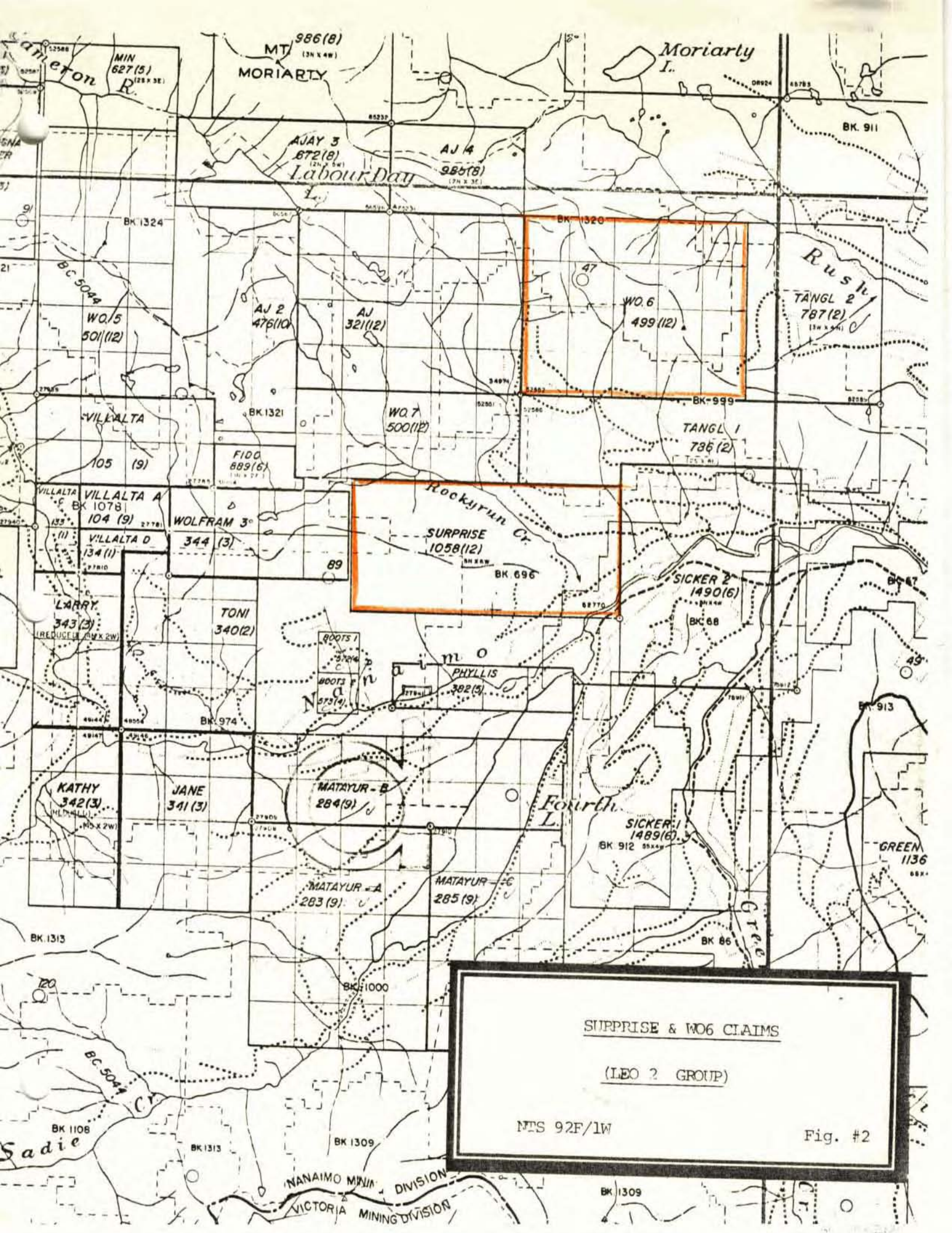
Fig. #1

CANADA
U.S.A. — JUAN DE FUCA

Juan de Fuca Strait
Re named by Capt. Charles W. Barkley of the trading ship
"Imperial Eagle" in 1781 after the Greek navigator Juan de Fuca
who claimed to have discovered and explored the strait in 1592

(Glacier Pt.)

Sheringham
124°



SURPRISE & WO6 CLAIMS
(LEO 2 GROUP)
 NTS 92F/1W Fig. #2

GEOCHEMICAL-GEOPHYSICAL ASSESSMENT REPORT ON THE

SURPRISE & WO6 Claims, Vancouver I.

INTRODUCTION & DESCRIPTION

The Surprise and WO6 claims, consisting of 18 and 20 units respectively, belong to the 'LEO 2' Claim Group, located on lower Rockyrun Creek, 8 km. SE from Labour Day Lake in south-central Vancouver Island in the Nanaimo M. D., as shown on the enclosed Index and Claim Maps, Figs. 1 & 2. Access to the claims area is along the Nanaimo Lakes logging road, or by helicopter some 35 air-km. west of Nanaimo.

The WO6 claim was staked on Dec. 11, 1979 and the Surprise claim on Nov. 29, 1981, both by Mr. E. Specogna for Canamin Resources Ltd., and are presently being optioned to Falconbridge Ltd. As described on the enclosed Statement of Exploration and Development, and illustrated on the 1:10,000 scale topographical map (in pocket), a geochemical soil sampling program and a geophysical EM-VLF survey were carried out by Mr. Specogna and an assistant in Dec. 1983 in the vicinity of some copper-bearing shears in the south-central portion of the LEO 2 claim group.

While the showing itself was investigated last year by limited packsack drilling (see Surprise Claim Assessment Report by P. W. Convoy, Jan. 1983), the present surveys were conducted in hope of locating the immediate extensions of the mineralization under heavily covered overburden.

GENERAL GEOLOGY

As shown on the enclosed 1:10,000 scale map, the Surprise and WO 6 claims are located over the Triassic Vancouver Group Kammtsen volcanics in the northern portion, and in the south over mid-Jurassic Island Intrusions, consisting mainly of granodiorites, monzonites and tonalites. According to the most recent regional 'Geology of Vancouver Island' map by J. E. Muller (GSC-O.F. 463), a north-south trending Band of Paleozoic Sicker Group limestone tuff, and sediments, skirts the claim group to the east. Several kilometers to the northwest, sediments of the Cretaceous Nanaimo Group are intruded by Tertiary 'Catface' intrusions, which are ever important for possible gold mineralization on Vancouver Island.

Numerous north-westerly and north-easterly faults transect the area, with the older rocks exposed in faulted sections.

GEOCHEMICAL SURVEY

A total of 54 'B' horizon soil samples were collected along three logging road extensions in the general vicinity of some malachite-stained shear zones discovered in a road cut.

The soil sample numbers and their locations are plotted on the 1:10,000 scale topographical map included in this report (Fig. 4, in pocket), on which are also inscribed the more useful analytical trace element values for Mo, Cu, Pb, Zn, Ag, Ni, Co, As, Hg, and Au.

The samples were sent to ACME Analytical Laboratories Ltd. at 852 E. Hastings St., Vancouver, to be dried in gas fired ovens and the -80 Mesh fraction retained for multielement ICP analysis. The analytical procedures consist of digesting a .5 gram -80 Mesh sample fraction with 3 ml. of 3:1:3 HCL/HNO₃/H₂O mixture at 90°C for 1 hour, then diluting to 10 mls. with water, and using an aliquot for the 30 element ICP trace element analysis. Gold is analyzed by Atomic Absorption using a 10 gram samples. Mercury is analyzed by the Hatch & Ott flameless AA method. Complete analytical results are enclosed at the back of the report.

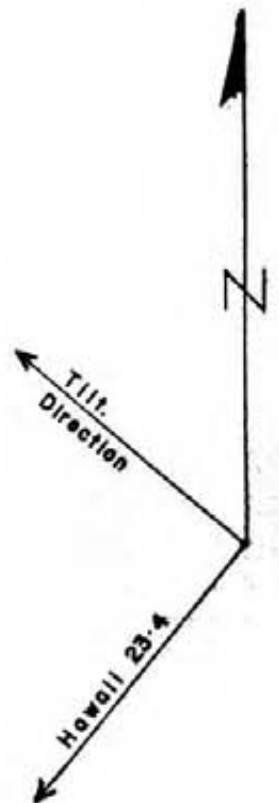
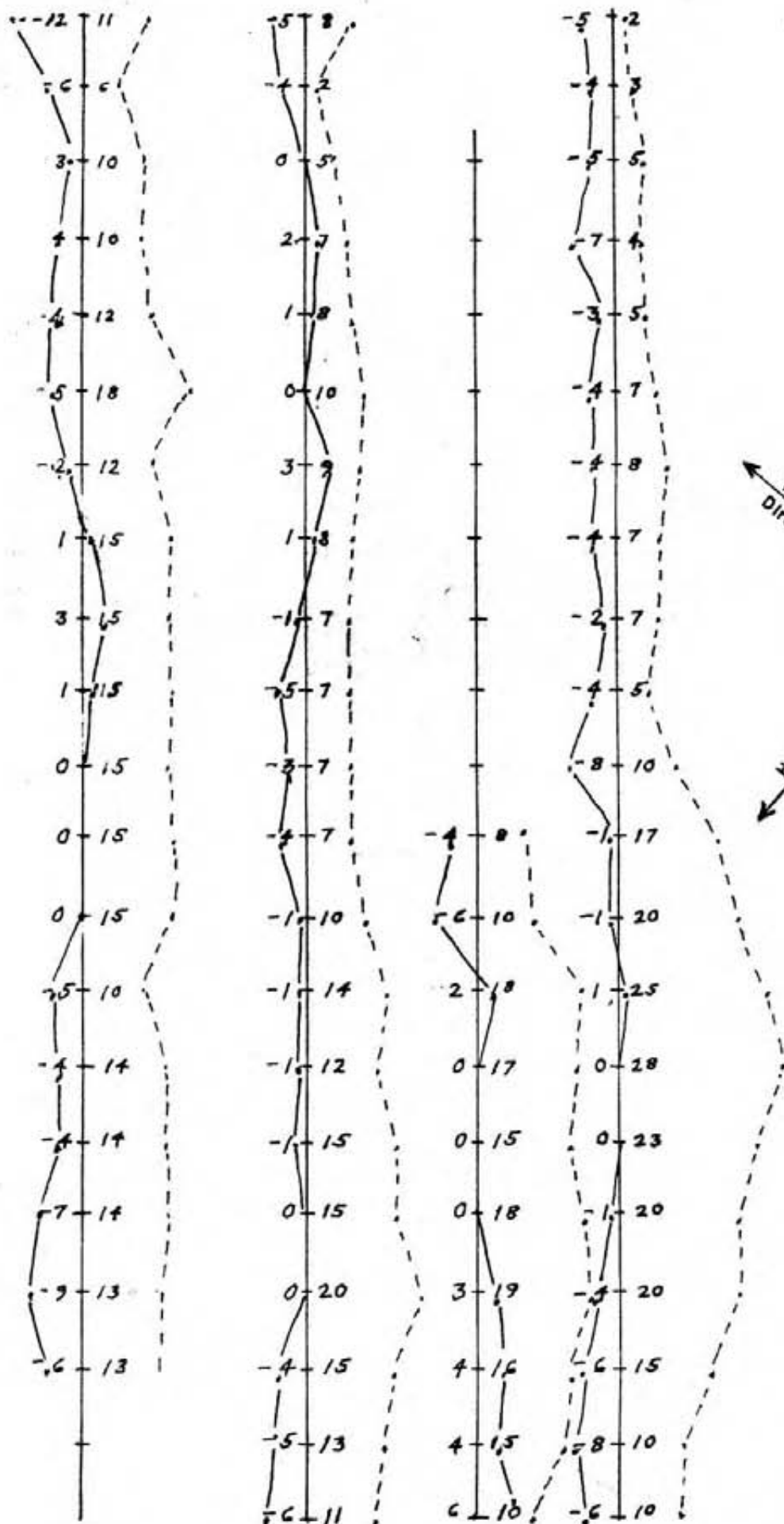
The primary purpose of the soil sampling survey was to determine whether trace element geochemistry could be used for tracing possible extensions of known mineralization under heavy vegetation-covered overburden. Three available logging road spurs in the vicinity of previously discovered minor copper mineralization in roadside shears were sampled on the average at 50 m. intervals. Highly anomalous copper values were obtained, ranging up to 893 ppm., particularly in the uppermost roadcut, some 200 m upslope from the known Cu-bearing shear zones. Other trace elements, while complementary, are only mildly enriched. A single highly anomalous 405 ppb. Au gold value, located next to the highest copper sample has elevated nickel trace element content associated with it, perhaps due to a gold-enriched basic dyke.

Due to the preliminary nature of the soil sampling survey only partial interpretation of the analytical results is possible. In general, molybdenum values are dispersed downslope, while arsenic is more concentrated in proximity to the postulated fault zones. Mercury can also be expected to reflect structural features, while lead concentrations are too low to be a useful indicator.

Additional soil sampling done on a regular grid system at a pre-determined sample density, is necessary to extract the full potential of this geochemical method in locating overburden-covered mineralization in the claims area.

GEOPHYSICAL SURVEY

The complete results of the geophysical EM16-VLF survey are presented on the 1:10,000 topo map, (Fig 4, in pocket). Detailed readings taken near the mineralized shear zones are presented overleaf at a scale of 1:2,000 as Fig. 3. No major anomalies are discernable from the results obtained in this survey.



LEGEND
 ——— IN. PHASE
 - - - - QUADRATURE

E.M.16 PROFILE
VLF HAWAII 23.4
SCALE. 1:2.000
 0 ——— 50m

FIG. NO.: 3

CONCLUSIONS

- 1.- 'B' horizon soil samples are mildly enriched in several trace elements in the vicinity of the known copper-bearing minor shear zones in intrusive rocks on the 'Leo 2' group of claims.
- 2.- Similar and stronger enrichments exist, particularly in copper and gold, upslope from the known shears, suggesting the likelihood of undiscovered mineralization.
- 3.- Additional soil sampling, done on a rectangular grid system at a predetermined sample density, is necessary to maximize the potential of this geochemical method in locating possible mineralization under the heavily-covered overburden in the claims area.
- 4.- No distinct conductors were revealed by the EM-VLF survey.

APPENDICES I, II, & III

Appendix I.

ITEMIZED COST

Geochemical Soil Sampling

| | |
|-------------------|-----------|
| Labor 2 X 3 X 350 | \$1050.00 |
| Transportation | 120.00 |
| Supply | 50.00 |
| Assay | 688.50 |
| Report | 350.00 |
| | <hr/> |
| TOTAL | \$2258.50 |

Geophysical Survey

| | |
|-------------------|-----------|
| Labor 2 X 4 X 300 | \$1200.00 |
| Transportation | 200.00 |
| Supply | 40.00 |
| Instrument Rental | 300.00 |
| Report | 500.00 |
| | <hr/> |
| Total | \$2340.00 |

Grand Total

\$4598.50

Appendix II.

STATEMENT OF QUALIFICATIONS

I.- Sam Zastavnikovich, do hereby certify that:

1. I am a graduate of the University of Alberta with the Degree of B. Ed. in Physical Sciences, 1969.
2. I have been a practicing exploration geochemist with Falconbridge Ltd. of Toronto and Vancouver for thirteen continuous years as:

1969-1975: Field geochemist, international.
1975-1979: Project geologist-geochemist, B. C.
1979-1982: Exploration geochemist, worldwide, where I was engaged in all aspects of geochemical exploration, including research and development of improved sampling techniques, and advanced geochemical interpretation, as well as the writing of final, budget, and assessment reports.
3. I am a voting member of the Association of Exploration Geochemists.
4. I am a consulting geochemist with offices at 5063 - 56th. St., Delta, B. C.


S. Zastavnikovich,
Expl. Geochemist.

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca, P, Mg, Al, Ti, La, Na, K, W, Ba, Sr, Cr AND B. An DETECTION 3 ppm.
ANALYSIS BY AA FROM 10 GRAM SAMPLE. HGT ANALYSIS BY FLAMELESS AA FROM .500 GRAM SAMPLE. SAMPLE TYPE - SOIL

DATE RECEIVED DEC 22 1983

DATE REPORTS MAILED

Dec 24/83

ASSAYER

N. Toy

DEAN TOYE, CERTIFIED B.C. ASSAYER

CANAMIN RESOURCES FILE # 83-3194

PAGE # 1

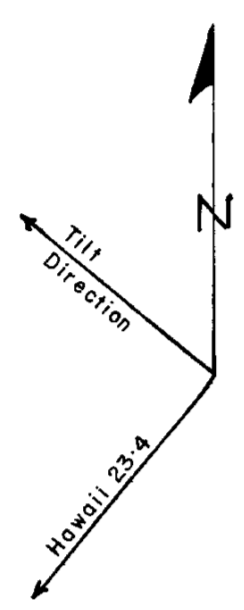
| SAMPLE # | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Hg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Au1 ppb | Hgt ppb |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|---------|--------|-----------|-----------|---------|-----------|---------|----------|---------|---------|--------|----------|------------|------------|
| T-0 | 1 | 200 | 7 | 53 | .3 | 17 | 23 | 385 | 3.89 | 4 | 2 | ND | 2 | 53 | 1 | 2 | 2 | 57 | 1.31 | .17 | 5 | 7 | .90 | 28 | .10 | 5 | 2.54 | .01 | .02 | 2 | 15 | 60 |
| T-50 | 1 | 104 | 8 | 77 | .6 | 43 | 24 | 726 | 5.36 | 2 | 5 | ND | 2 | 37 | 1 | 2 | 2 | 141 | .45 | .07 | 4 | 58 | .89 | 76 | .18 | 5 | 4.17 | .01 | .05 | 2 | 5 | 70 |
| T-120 | 1 | 230 | 7 | 65 | .4 | 134 | 30 | 847 | 5.84 | 2 | 5 | ND | 2 | 37 | 1 | 2 | 2 | 131 | .43 | .07 | 8 | 68 | 1.07 | 178 | .16 | 7 | 4.63 | .01 | .04 | 2 | 405 | 100 |
| T-195 | 1 | 123 | 5 | 65 | .8 | 44 | 26 | 487 | 5.79 | 2 | 8 | ND | 2 | 35 | 2 | 2 | 2 | 151 | .24 | .09 | 3 | 63 | .98 | 77 | .23 | 5 | 4.30 | .01 | .03 | 2 | 5 | 90 |
| T-270 | 10 | 893 | 8 | 70 | 1.0 | 74 | 71 | 1069 | 14.44 | 2 | 4 | ND | 2 | 19 | 1 | 4 | 2 | 149 | .12 | .18 | 4 | 71 | .81 | 47 | .01 | 2 | 4.86 | .01 | .03 | 2 | 35 | 120 |
| T-350 | 2 | 267 | 8 | 32 | .2 | 15 | 14 | 287 | 5.32 | 2 | 4 | ND | 2 | 7 | 1 | 2 | 2 | 58 | .05 | .06 | 31 | 13 | .90 | 69 | .01 | 5 | 3.14 | .01 | .05 | 2 | 25 | 20 |
| T-410 | 1 | 254 | 12 | 58 | .4 | 53 | 28 | 454 | 6.77 | 8 | 7 | ND | 2 | 37 | 2 | 2 | 2 | 174 | .24 | .08 | 3 | 67 | 1.29 | 55 | .30 | 6 | 6.02 | .01 | .03 | 2 | 35 | 180 |
| T-490 | 1 | 165 | 7 | 59 | .8 | 37 | 19 | 406 | 5.49 | 5 | 6 | ND | 2 | 24 | 1 | 4 | 2 | 167 | .18 | .07 | 3 | 59 | .95 | 34 | .32 | 5 | 6.08 | .01 | .03 | 2 | 5 | 120 |
| T-525 | 1 | 172 | 8 | 54 | .4 | 41 | 23 | 438 | 5.81 | 2 | 6 | ND | 2 | 32 | 1 | 2 | 2 | 155 | .24 | .07 | 3 | 53 | .85 | 53 | .26 | 5 | 4.22 | .01 | .03 | 2 | 10 | 110 |
| T-670 | 1 | 299 | 7 | 58 | .3 | 43 | 18 | 438 | 5.62 | 4 | 7 | ND | 2 | 26 | 1 | 2 | 2 | 167 | .17 | .05 | 2 | 68 | 1.12 | 26 | .43 | 4 | 6.07 | .01 | .02 | 2 | 10 | 60 |
| T-730 | 7 | 547 | 7 | 64 | .4 | 50 | 40 | 599 | 9.69 | 5 | 6 | ND | 2 | 31 | 2 | 2 | 2 | 166 | .19 | .14 | 4 | 53 | 1.33 | 17 | .26 | 4 | 5.55 | .01 | .02 | 2 | 10 | 170 |
| T-795 | 1 | 153 | 9 | 59 | .6 | 35 | 24 | 608 | 6.20 | 12 | 4 | ND | 2 | 47 | 2 | 2 | 2 | 144 | .33 | .07 | 2 | 42 | .77 | 30 | .36 | 5 | 3.95 | .01 | .02 | 2 | 20 | 50 |
| T-845 | 1 | 289 | 10 | 68 | .4 | 55 | 27 | 437 | 5.70 | 4 | 7 | ND | 2 | 26 | 2 | 7 | 2 | 177 | .20 | .05 | 3 | 75 | 1.11 | 37 | .45 | 5 | 6.89 | .01 | .03 | 2 | 5 | 100 |
| T-875 | 1 | 485 | 5 | 73 | .7 | 74 | 32 | 543 | 5.87 | 10 | 6 | ND | 2 | 24 | 1 | 4 | 2 | 131 | .36 | .05 | 9 | 50 | 1.20 | 39 | .35 | 6 | 4.65 | .02 | .03 | 2 | 5 | 60 |
| T-1025 | 1 | 106 | 8 | 58 | .4 | 33 | 20 | 535 | 4.77 | 2 | 5 | ND | 2 | 48 | 2 | 2 | 2 | 148 | .76 | .04 | 2 | 43 | .72 | 52 | .34 | 4 | 4.45 | .02 | .05 | 2 | 5 | 60 |
| T-1060 | 1 | 213 | 14 | 93 | .4 | 82 | 84 | 1133 | 9.36 | 6 | 7 | ND | 2 | 29 | 2 | 2 | 2 | 155 | .48 | .05 | 6 | 52 | .87 | 58 | .30 | 5 | 4.27 | .02 | .03 | 2 | 35 | 50 |
| T-1100 | 1 | 33 | 7 | 41 | .4 | 15 | 9 | 430 | 4.13 | 2 | 5 | ND | 2 | 21 | 1 | 2 | 2 | 142 | .24 | .04 | 2 | 31 | .34 | 36 | .29 | 4 | 2.04 | .01 | .02 | 2 | 20 | 40 |
| T-1150 | 1 | 97 | 11 | 65 | .3 | 36 | 23 | 866 | 4.61 | 3 | 5 | ND | 2 | 21 | 2 | 2 | 2 | 140 | .35 | .04 | 5 | 52 | .75 | 57 | .21 | 5 | 4.36 | .01 | .03 | 2 | 5 | 60 |
| T-1300 | 1 | 434 | 9 | 92 | .3 | 78 | 38 | 637 | 5.81 | 4 | 9 | ND | 2 | 27 | 2 | 2 | 2 | 165 | .25 | .07 | 3 | 67 | 1.42 | 48 | .45 | 5 | 4.70 | .02 | .03 | 2 | 5 | 140 |
| L-0 | 1 | 16 | 9 | 23 | .2 | 6 | 5 | 313 | 2.32 | 2 | 3 | ND | 2 | 11 | 1 | 2 | 2 | 57 | .17 | .04 | 15 | 13 | .28 | 79 | .03 | 5 | 1.75 | .01 | .06 | 2 | 5 | 40 |
| L-50 | 1 | 41 | 8 | 46 | .2 | 12 | 8 | 280 | 3.69 | 3 | 2 | ND | 2 | 14 | 1 | 2 | 2 | 99 | .17 | .06 | 7 | 28 | .41 | 65 | .08 | 5 | 4.16 | .01 | .04 | 2 | 5 | 60 |
| L-100 | 3 | 128 | 16 | 48 | .3 | 15 | 12 | 427 | 3.57 | 4 | 7 | ND | 4 | 19 | 1 | 2 | 2 | 85 | .27 | .08 | 13 | 27 | .44 | 95 | .04 | 7 | 5.75 | .01 | .05 | 2 | 5 | 110 |
| L-150 | 1 | 202 | 5 | 107 | .3 | 47 | 24 | 725 | 5.76 | 3 | 8 | ND | 2 | 26 | 2 | 2 | 2 | 211 | .27 | .07 | 6 | 89 | 1.33 | 125 | .53 | 4 | 5.90 | .02 | .05 | 2 | 5 | 40 |
| L-200 | 1 | 256 | 9 | 94 | .6 | 48 | 25 | 623 | 6.50 | 14 | 10 | ND | 2 | 22 | 2 | 2 | 2 | 245 | .24 | .05 | 6 | 70 | 1.51 | 53 | .68 | 4 | 5.87 | .02 | .03 | 2 | 5 | 120 |
| L-250 | 1 | 109 | 9 | 60 | .3 | 28 | 20 | 657 | 4.09 | 6 | 5 | ND | 2 | 22 | 1 | 2 | 2 | 119 | .42 | .06 | 6 | 41 | .97 | 49 | .26 | 7 | 3.02 | .02 | .04 | 2 | 5 | 20 |
| L-300 | 1 | 113 | 16 | 99 | .4 | 37 | 16 | 659 | 5.62 | 4 | 9 | ND | 2 | 20 | 2 | 2 | 2 | 170 | .33 | .12 | 3 | 61 | 1.17 | 104 | .41 | 5 | 4.13 | .02 | .04 | 2 | 5 | 80 |
| L-350 | 3 | 138 | 9 | 68 | .6 | 31 | 20 | 382 | 5.29 | 9 | 7 | ND | 2 | 20 | 2 | 2 | 2 | 210 | .26 | .05 | 11 | 52 | .71 | 40 | .38 | 6 | 4.66 | .01 | .03 | 2 | 5 | 90 |
| L-400 | 1 | 111 | 9 | 66 | .5 | 37 | 19 | 444 | 5.03 | 12 | 7 | ND | 2 | 21 | 1 | 2 | 2 | 157 | .22 | .05 | 4 | 70 | .93 | 35 | .42 | 4 | 5.14 | .01 | .03 | 2 | 5 | 60 |
| L-450 | 1 | 70 | 6 | 79 | .3 | 33 | 28 | 586 | 4.68 | 2 | 5 | ND | 2 | 27 | 2 | 2 | 2 | 148 | .34 | .05 | 6 | 53 | .61 | 62 | .28 | 5 | 4.02 | .01 | .03 | 2 | 5 | 30 |
| L-515 | 2 | 98 | 9 | 65 | .3 | 33 | 16 | 409 | 4.87 | 5 | 9 | ND | 2 | 21 | 1 | 2 | 2 | 144 | .23 | .06 | 3 | 57 | .90 | 56 | .39 | 5 | 4.68 | .02 | .04 | 2 | 10 | 60 |
| L-560 | 6 | 105 | 11 | 71 | .3 | 42 | 23 | 456 | 5.30 | 2 | 7 | ND | 2 | 22 | 2 | 2 | 2 | 165 | .26 | .06 | 5 | 58 | .96 | 68 | .43 | 5 | 5.10 | .01 | .03 | 2 | 5 | 40 |
| L-600 | 3 | 77 | 7 | 52 | .2 | 25 | 14 | 327 | 4.13 | 6 | 7 | ND | 2 | 21 | 1 | 2 | 2 | 118 | .22 | .06 | 4 | 44 | .73 | 40 | .28 | 6 | 3.47 | .01 | .02 | 2 | 5 | 50 |
| L-650 | 4 | 91 | 9 | 58 | .3 | 35 | 26 | 631 | 4.45 | 8 | 9 | ND | 2 | 24 | 1 | 2 | 2 | 119 | .43 | .05 | 10 | 49 | .97 | 157 | .27 | 6 | 3.92 | .01 | .03 | 2 | 5 | 50 |
| L-700 | 11 | 100 | 13 | 51 | .9 | 30 | 17 | 439 | 4.02 | 6 | 13 | ND | 3 | 22 | 1 | 2 | 2 | 109 | .31 | .09 | 9 | 47 | .86 | 106 | .22 | 6 | 4.86 | .02 | .05 | 2 | 15 | 140 |
| L-775 | 5 | 118 | 13 | 64 | .3 | 45 | 23 | 455 | 5.23 | 4 | 11 | ND | 2 | 32 | 2 | 3 | 2 | 153 | .39 | .03 | 6 | 59 | 1.08 | 213 | .30 | 6 | 5.01 | .02 | .04 | 2 | 10 | 30 |
| L-850 | 3 | 129 | 12 | 78 | .4 | 42 | 24 | 592 | 5.10 | 6 | 11 | ND | 2 | 24 | 1 | 2 | 2 | 146 | .28 | .06 | 5 | 50 | .96 | 104 | .30 | 5 | 4.62 | .01 | .04 | 2 | 5 | 50 |
| L-950 | 10 | 108 | 8 | 59 | .3 | 41 | 23 | 428 | 5.12 | 5 | 31 | ND | 2 | 25 | 1 | 4 | 2 | 154 | .25 | .03 | 9 | 58 | .99 | 120 | .31 | 5 | 5.05 | .01 | .04 | 2 | 5 | 60 |
| STD A-1 | 1 | 30 | 40 | 181 | .4 | 37 | 12 | 1043 | 2.70 | 12 | 2 | ND | 2 | 38 | 2 | 2 | 2 | 63 | .63 | .10 | 8 | 76 | .76 | 259 | .09 | 7 | 2.29 | .02 | .20 | 2 | 500 | 50 |

CANAMIN RESOURCES FILE # B3-3194

PAGE # 2

| SAMPLE # | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Mi ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Hg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | AuI ppb | HgI ppb |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|---------|--------|-----------|-----------|---------|-----------|---------|----------|---------|---------|--------|----------|------------|------------|
| L-1000 | 1 | 126 | 9 | 59 | .2 | 38 | 20 | 417 | 5.56 | 17 | 11 | ND | 2 | 18 | 1 | 2 | 2 | 173 | .16 | .04 | 6 | 60 | .95 | 89 | .38 | 5 | 4.72 | .01 | .04 | 2 | 5 | 100 |
| L-1060 | 1 | 99 | 12 | 63 | .2 | 49 | 20 | 455 | 4.89 | 9 | 7 | ND | 2 | 27 | 1 | 2 | 5 | 127 | .31 | .04 | 6 | 42 | .81 | 128 | .15 | 5 | 3.67 | .01 | .04 | 2 | 5 | 40 |
| L-1125 | 1 | 181 | 11 | 74 | .4 | 49 | 28 | 543 | 6.11 | 18 | 10 | ND | 2 | 29 | 1 | 2 | 2 | 167 | .26 | .05 | 7 | 65 | 1.25 | 81 | .30 | 6 | 4.56 | .01 | .04 | 2 | 5 | 80 |
| L-1240 | 2 | 159 | 8 | 63 | .3 | 46 | 25 | 494 | 5.95 | 19 | 9 | ND | 2 | 28 | 2 | 2 | 2 | 172 | .19 | .05 | 7 | 66 | 1.21 | 121 | .33 | 6 | 4.79 | .01 | .03 | 2 | 5 | 70 |
| L-1350 | 3 | 107 | 14 | 53 | .1 | 30 | 18 | 556 | 5.29 | 13 | 10 | ND | 2 | 19 | 1 | 2 | 2 | 149 | .23 | .07 | 6 | 49 | .74 | 63 | .32 | 7 | 3.71 | .01 | .03 | 2 | 5 | 110 |
| L-1450 | 2 | 169 | 15 | 56 | .3 | 40 | 19 | 380 | 5.75 | 23 | 7 | ND | 2 | 23 | 2 | 2 | 2 | 185 | .17 | .05 | 6 | 75 | .96 | 54 | .42 | 8 | 5.65 | .01 | .03 | 2 | 5 | 100 |
| L-1550 | 1 | 238 | 4 | 68 | .4 | 57 | 33 | 497 | 6.87 | 32 | 8 | ND | 2 | 30 | 2 | 2 | 2 | 200 | .18 | .06 | 6 | 80 | 1.32 | 91 | .38 | 7 | 5.70 | .01 | .04 | 2 | 5 | 110 |
| LB-200 | 1 | 138 | 8 | 68 | .9 | 36 | 19 | 417 | 5.28 | 24 | 5 | ND | 2 | 17 | 2 | 2 | 2 | 168 | .16 | .05 | 8 | 60 | .97 | 47 | .38 | 7 | 4.55 | .01 | .04 | 2 | 5 | 150 |
| LB-250 | 8 | 176 | 6 | 66 | .5 | 35 | 24 | 570 | 4.91 | 20 | 19 | ND | 2 | 21 | 1 | 2 | 2 | 131 | .33 | .05 | 10 | 48 | .95 | 106 | .27 | 6 | 4.13 | .01 | .03 | 2 | 5 | 60 |
| LB-340 | 5 | 149 | 10 | 73 | .4 | 36 | 23 | 557 | 4.98 | 22 | 8 | ND | 2 | 15 | 1 | 2 | 2 | 127 | .19 | .10 | 7 | 45 | .80 | 81 | .25 | 6 | 4.41 | .01 | .04 | 2 | 5 | 110 |
| LB-420 | 10 | 119 | 11 | 70 | .4 | 31 | 23 | 2065 | 4.49 | 19 | 15 | ND | 2 | 20 | 2 | 2 | 2 | 105 | .37 | .11 | 8 | 39 | .60 | 93 | .20 | 6 | 4.59 | .01 | .03 | 2 | 5 | 120 |
| LB-480 | 10 | 93 | 7 | 73 | .1 | 32 | 19 | 555 | 4.84 | 16 | 7 | ND | 2 | 20 | 1 | 2 | 2 | 125 | .27 | .07 | 5 | 41 | .76 | 72 | .25 | 5 | 3.74 | .01 | .03 | 2 | 10 | 80 |
| LB-555 | 9 | 114 | 8 | 45 | .2 | 22 | 14 | 596 | 3.62 | 12 | 5 | ND | 6 | 19 | 1 | 2 | 2 | 74 | .50 | .11 | 15 | 33 | .80 | 142 | .16 | 6 | 2.19 | .01 | .05 | 2 | 5 | 20 |
| LB-590 | 12 | 135 | 8 | 63 | .2 | 40 | 19 | 442 | 5.56 | 20 | 8 | ND | 2 | 19 | 2 | 2 | 2 | 147 | .25 | .06 | 6 | 58 | 1.03 | 58 | .34 | 5 | 3.98 | .01 | .03 | 2 | 5 | 90 |
| LB-660 | 10 | 158 | 7 | 72 | .3 | 35 | 20 | 469 | 5.78 | 15 | 10 | ND | 2 | 19 | 1 | 2 | 2 | 174 | .22 | .07 | 11 | 66 | .85 | 67 | .42 | 5 | 4.59 | .01 | .03 | 2 | 5 | 110 |
| LB-810 | 5 | 196 | 10 | 81 | .2 | 43 | 19 | 385 | 6.89 | 26 | 10 | ND | 2 | 19 | 2 | 2 | 2 | 220 | .19 | .10 | 9 | 62 | .79 | 81 | .38 | 6 | 5.38 | .01 | .05 | 2 | 5 | 100 |
| LB-950 | 2 | 105 | 8 | 58 | .3 | 21 | 11 | 309 | 4.86 | 15 | 6 | ND | 2 | 15 | 1 | 2 | 2 | 150 | .16 | .04 | 4 | 45 | .53 | 33 | .37 | 5 | 3.29 | .01 | .02 | 2 | 5 | 90 |
| STD A-T | 1 | 32 | 39 | 179 | .3 | 36 | 12 | 1025 | 2.87 | 14 | 2 | ND | 2 | 37 | 2 | 2 | 2 | 62 | .62 | .10 | 8 | 76 | .74 | 250 | .08 | 7 | 2.01 | .02 | .19 | 2 | 500 | 50 |

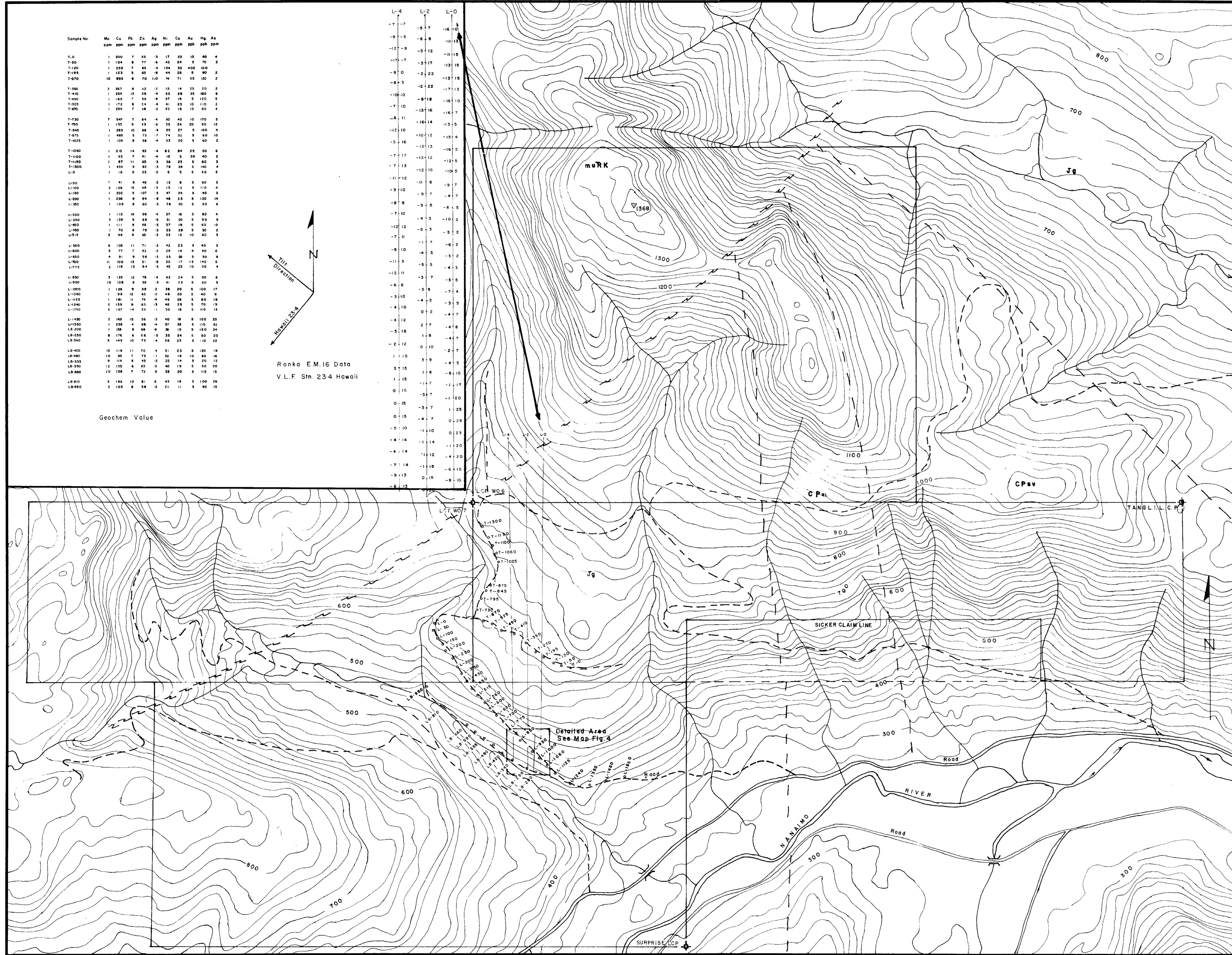
| Sample No. | Mo | Cu | Pb | Zn | Ag | Ni | Co | Au | Hg | As |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppb | ppm |
| T-0 | 1 | 200 | 7 | 53 | 5 | 17 | 23 | 15 | 80 | 4 |
| T-90 | 1 | 104 | 8 | 27 | 4 | 43 | 24 | 5 | 70 | 5 |
| T-120 | 1 | 230 | 7 | 45 | 4 | 134 | 30 | 405 | 100 | 2 |
| T-195 | 1 | 153 | 5 | 60 | 8 | 44 | 26 | 5 | 80 | 2 |
| T-470 | 10 | 693 | 8 | 10 | 3 | 74 | 71 | 15 | 100 | 2 |
| T-380 | 2 | 267 | 8 | 32 | 2 | 15 | 14 | 23 | 20 | 2 |
| T-410 | 1 | 254 | 12 | 58 | 4 | 53 | 28 | 35 | 180 | 8 |
| T-490 | 1 | 145 | 7 | 59 | 8 | 37 | 19 | 5 | 120 | 5 |
| T-525 | 1 | 12 | 8 | 54 | 4 | 41 | 22 | 10 | 110 | 2 |
| T-670 | 1 | 299 | 7 | 58 | 3 | 43 | 18 | 10 | 60 | 4 |
| T-730 | 7 | 547 | 7 | 64 | 4 | 50 | 40 | 10 | 170 | 5 |
| T-795 | 1 | 155 | 9 | 59 | 6 | 35 | 24 | 20 | 50 | 12 |
| T-845 | 1 | 289 | 10 | 68 | 4 | 55 | 27 | 5 | 100 | 4 |
| T-875 | 1 | 485 | 5 | 73 | 7 | 74 | 32 | 5 | 60 | 10 |
| T-1025 | 1 | 106 | 8 | 58 | 4 | 33 | 20 | 5 | 60 | 2 |
| T-1060 | 1 | 215 | 14 | 93 | 4 | 82 | 84 | 35 | 50 | 6 |
| T-1100 | 1 | 33 | 7 | 41 | 4 | 15 | 5 | 20 | 40 | 2 |
| T-1150 | 1 | 97 | 11 | 65 | 3 | 36 | 23 | 5 | 60 | 5 |
| T-1300 | 1 | 434 | 9 | 92 | 3 | 78 | 38 | 5 | 140 | 4 |
| L-0 | 1 | 16 | 5 | 23 | 2 | 6 | 5 | 5 | 40 | 2 |
| L-50 | 1 | 41 | 8 | 46 | 2 | 12 | 8 | 5 | 60 | 3 |
| L-100 | 3 | 128 | 16 | 48 | 3 | 13 | 12 | 5 | 110 | 4 |
| L-150 | 1 | 202 | 5 | 107 | 3 | 47 | 24 | 5 | 40 | 3 |
| L-200 | 1 | 236 | 9 | 94 | 6 | 48 | 25 | 5 | 120 | 14 |
| L-250 | 1 | 109 | 9 | 60 | 5 | 28 | 20 | 5 | 20 | 6 |
| L-300 | 1 | 113 | 18 | 99 | 4 | 37 | 16 | 5 | 80 | 4 |
| L-350 | 3 | 138 | 9 | 68 | 4 | 31 | 20 | 5 | 90 | 5 |
| L-400 | 1 | 111 | 9 | 65 | 5 | 37 | 19 | 5 | 60 | 12 |
| L-450 | 1 | 70 | 6 | 79 | 3 | 33 | 28 | 5 | 30 | 2 |
| L-515 | 2 | 98 | 6 | 65 | 3 | 23 | 16 | 10 | 60 | 2 |
| L-600 | 6 | 105 | 11 | 71 | 3 | 42 | 23 | 5 | 40 | 2 |
| L-650 | 3 | 77 | 7 | 52 | 2 | 28 | 14 | 5 | 50 | 4 |
| L-700 | 4 | 81 | 9 | 58 | 3 | 35 | 26 | 5 | 50 | 8 |
| L-750 | 11 | 100 | 15 | 61 | 3 | 30 | 17 | 15 | 140 | 6 |
| L-775 | 3 | 118 | 13 | 64 | 3 | 45 | 25 | 10 | 30 | 4 |
| L-850 | 3 | 120 | 12 | 78 | 4 | 42 | 24 | 5 | 50 | 4 |
| L-900 | 10 | 108 | 8 | 59 | 3 | 41 | 23 | 5 | 60 | 5 |
| L-1000 | 1 | 126 | 9 | 59 | 2 | 38 | 20 | 5 | 100 | 17 |
| L-1050 | 1 | 139 | 12 | 63 | 2 | 49 | 30 | 5 | 40 | 9 |
| L-1125 | 1 | 181 | 11 | 74 | 4 | 49 | 28 | 5 | 80 | 18 |
| L-1240 | 2 | 159 | 8 | 63 | 3 | 46 | 25 | 5 | 70 | 19 |
| L-1300 | 3 | 107 | 14 | 53 | 1 | 20 | 18 | 5 | 110 | 15 |
| L-1430 | 2 | 169 | 15 | 56 | 3 | 40 | 18 | 5 | 100 | 23 |
| L-1550 | 1 | 238 | 4 | 66 | 4 | 37 | 35 | 5 | 110 | 32 |
| L-1700 | 1 | 138 | 8 | 68 | 9 | 36 | 19 | 5 | 150 | 24 |
| L-1850 | 8 | 116 | 6 | 64 | 5 | 35 | 24 | 5 | 60 | 20 |
| L-1840 | 5 | 149 | 10 | 73 | 4 | 36 | 23 | 5 | 110 | 22 |
| L-1920 | 10 | 119 | 11 | 70 | 4 | 31 | 23 | 5 | 120 | 19 |
| L-1980 | 10 | 93 | 7 | 75 | 1 | 32 | 19 | 10 | 80 | 16 |
| L-1955 | 9 | 114 | 8 | 45 | 2 | 20 | 14 | 5 | 20 | 12 |
| L-1990 | 12 | 135 | 8 | 43 | 2 | 40 | 19 | 5 | 80 | 20 |
| L-1860 | 10 | 158 | 7 | 72 | 3 | 39 | 20 | 5 | 110 | 15 |
| L-1810 | 5 | 196 | 10 | 81 | 4 | 43 | 18 | 5 | 100 | 26 |
| L-1850 | 2 | 105 | 8 | 58 | 3 | 21 | 11 | 5 | 90 | 15 |



Ronka E.M.16 Data
V.L.F. Stn. 234 Hawaii

Geochem Value

| | | | | | | |
|-----|-----|----|-----|-----|-----|-----|
| L-4 | -7 | -7 | -5 | -7 | -16 | -10 |
| L-2 | -9 | -5 | -6 | -8 | -11 | -12 |
| L-0 | -12 | -8 | -3 | -17 | -13 | -15 |
| | -17 | -7 | -3 | -17 | -13 | -15 |
| | -8 | 0 | -2 | -22 | -13 | -15 |
| | -8 | 3 | -2 | -22 | -17 | -13 |
| | -10 | 10 | -10 | -16 | -16 | -10 |
| | -10 | 10 | -10 | -16 | -16 | -10 |
| | -8 | 11 | -16 | -14 | -13 | -5 |
| | -12 | 10 | -10 | -12 | -15 | -4 |
| | -5 | 16 | -13 | -13 | -15 | -4 |
| | -7 | 17 | -12 | -12 | -12 | -5 |
| | -7 | 13 | -12 | -10 | -10 | -5 |
| | -11 | 12 | -11 | 8 | -9 | -7 |
| | -9 | 10 | -9 | 7 | -4 | -7 |
| | -8 | 8 | -9 | 5 | -6 | -5 |
| | -7 | 10 | -4 | 3 | -10 | -2 |
| | -12 | 12 | -6 | 3 | -5 | -2 |
| | -7 | 11 | -1 | 7 | -6 | -2 |
| | -8 | 10 | -4 | 5 | -5 | -2 |
| | -11 | 5 | -5 | 5 | -4 | -3 |
| | -12 | 11 | -3 | 7 | -5 | -5 |
| | -6 | 6 | -5 | 8 | -7 | -4 |
| | -3 | 10 | -2 | 10 | -3 | -5 |
| | -4 | 10 | 0 | 2 | -4 | -7 |
| | -4 | 12 | 2 | 7 | -4 | -8 |
| | -5 | 18 | 1 | 8 | -4 | -7 |
| | -2 | 12 | 0 | 10 | -2 | -7 |
| | 1 | 15 | 3 | 9 | -4 | -5 |
| | 3 | 15 | 1 | 8 | -6 | -10 |
| | 1 | 15 | 1 | 8 | -6 | -10 |
| | 0 | 15 | -5 | 7 | -1 | -20 |
| | 0 | 15 | -3 | 7 | 1 | -25 |
| | -5 | 10 | -1 | 10 | 0 | -23 |
| | -4 | 14 | -1 | 14 | -1 | -20 |
| | -4 | 14 | -1 | 12 | -4 | -20 |
| | -7 | 14 | -1 | 15 | -6 | -15 |
| | -9 | 13 | 0 | 15 | -8 | -10 |
| | -6 | 13 | 0 | 15 | -1 | -20 |



- LEGEND**
- mURK KARMUTSEN VOLCS
 - Jg ISLAND INTRUSIONS
 - CPsv SICKER VOLCANICS
 - CPsl BUTTLE LK. LIMESTONE
 - - - FAULT
 - - - CONTACT
 - GEOCHEMISTRY
 - o L-300 SAMPLE NUMBER AND LOCATION

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,913

SCALE: 1:10,000

| | | |
|------------------------------|--|-----------|
| CANAMIN RESOURCES LTD | | |
| PROPERTY: | Surprise & W06 Claims | |
| LOCATION: | Nanaimo Area B.C. | |
| TYPE OF MAP: | Geochem, Geophysical & Claims Location | |
| WORKING PLACE: | | |
| BASED ON: | | |
| DATE OF WORK: | MAP REF. NO.: | FIG. NO.: |
| DRAWN BY: G.T. | | |
| DATE: Jan. 1984 | N.T.S. NO.: 92-F-1W | 4 |