

FLOREX MINING CO. LTD.

Geological, Geochemical & Geophysical Report JR CLAIMS Latitude 49° 19' North, Longitude 126° 07' West

AUTHOR: A. M. Homenuke, Geologist

P. ENGINEER: W. G. Stevenson

DATE OF WORK: June 1-4, 1972

92E/8E

Department of

Mines and Petroleum Resources

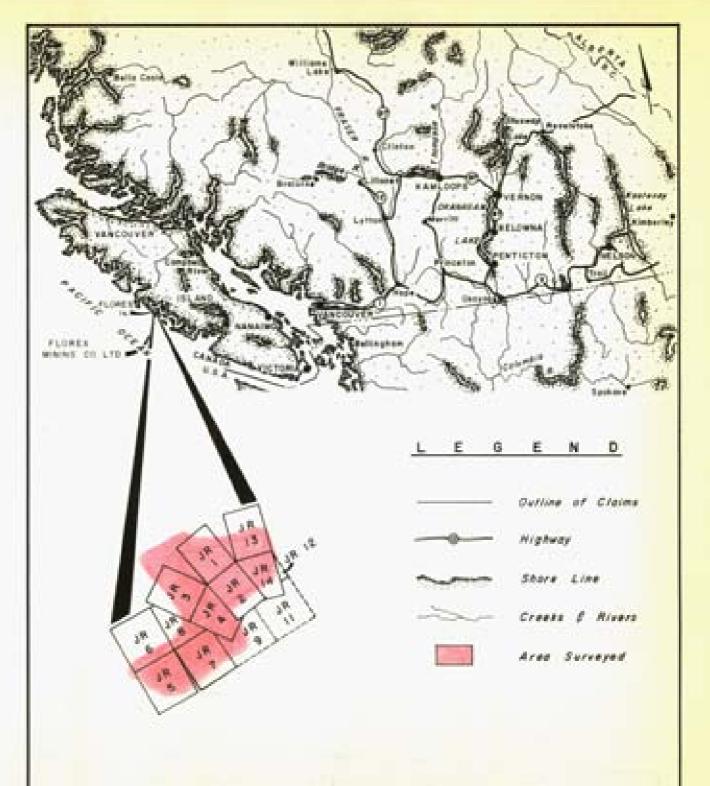
ASSESSMENT REPORT

NO 3689

MAAD

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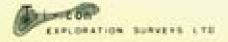


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JR CLAIMS

LOCATION AND CLAIMS MAP

SCALE LOCATION WAP: F - BD WILES APPROX - CLAIMS MAP F - 5000 FEET APPROX



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MAD #

SUMMARY

During the period June 1 to June 4, 1972, Tri-Con Exploration Surveys Ltd., under the direction of W. G. Stevenson, P. Engineer, carried out a program of reconnaissance geological, geochemical and geophysical surveying on the JR Claim Group, Alberni Mining Division, British Columbia. The information collected is shown on Figures 2-5 in the back of this report, Figure 5 being a compilation of the significant data. An area of interest deserving further investigation was outlined in the center of the claim group.

CONCLUSIONS

The geological survey indicated the rocks on the claim group to be intrusive, mainly quartz monzonite, but with sections of quartz diorite, granite, and aplite.

A broad geochemical anomaly (greater than 20 p.p.m.) across the center of the property indicates a possible coincident zone of mineralization. This comment is based on the fact that known mineralization and mineralized float occurrences are within this broad zone.

Assay values were too low (less than 0.1% Copper) to be of economic importance, but they do indicate the presence of some porphyry copper mineralization. Due to the sparse outcrop, the lack of any strong magnetic features and the small number of assays taken, it appears that this zone merits some further attention.

LOCATION & ACCESS

The claims surveyed, JR 1-14, are located near the center of Flores Island off the West Coast of Vancouver Island approximately 15 miles northwest of Tofino, B.C. The exact location is latitude 49° 19' N, Longitude 126° 07' W.

The property may be reached by taking a boat or plane to Flores Island and following a well marked trail on foot for 3 miles to the camp at elevation 1030 feet. It may also be reached by helicopter.

PROPERTY

The property consists of 14 mineral claims as follows:

| Claim Name | Record Number | | |
|------------|---------------|--|--|
| JR 1-11 | 17813-17823 | | |
| JR 12 Fr. | 17824 | | |
| JR 13-14 | 17825-17826 | | |

SURVEY SPECIFICATIONS

Introduction

Control for the reconnaissance lines was established by surveying the claim location lines and tying the claim group into the topography. A base map was prepared at a scale of 1'' = 500 feet from N.T.S. Map 92 E/8 East Half (Hesquiat).

Reconnaissance lines were run by chain and Brunton compass to give a general coverage of the claim block.

Soil samples were taken at 500 foot intervals along the lines and magnetometer readings at 100 foot intervals. Geology was mapped as encountered.

Geological Survey

Rock outcrops in the channel of JR Creek near camp and in several bluffs along the sidehills. However total outcrop on the property is less than 5%.

The geology of the exposed rocks in the channel of JR Creek was mapped by W. G. Stevenson, P. Engineer. 20 rock specimens were taken and delivered to Dr. H. Carswell for petrographic study. The details of this study are shown in Appendix I and the locations are shown on Figure 2.

The geology of the rest of the property was mapped by the author during the course of the reconnaissance survey. Several more specimens were taken and correlated with those studied by Dr. Carswell.

Three samples were also taken to be assayed. These values are shown on the Geological Map.

Geochemical Survey

Upon examination of the soil on the property it was found to be a residual humic podzol, varying from a few inches to several feet in depth. Some laterization was noticed near bedrock in deeper soils along the creek banks.

A soil profile was taken to determine relative copper concentration in each horizon. The metal values, pH values and detailed description of the horizons are shown on Plate 1. Classification of the soil and identification of the horizons are based on THE SYSTEM OF SOIL CLASSIFICATION FOR CANADA (Canada Department of Agriculture, 1970).

Samples were taken from the "B" horizon with a mattock and placed in water resistant kraft envelopes where they remained until analysis.

The soils were delivered to Chemex Labs Ltd. of North Vancouver, B.C., where drying, -80 mesh sieving, perchloric acid digestion and analysis by atomic absorption were carried out under the supervision of professional chemists.

Data Presentation

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

| Figure 2 | Geological Map-assay results, hand |
|----------|---|
| | specimen locations. |
| Figure 3 | Geochemical Map-Copper contoured at 20, |
| | 30, 40 ppm. |
| Figure 4 | Geophysical Map-Magnetic values contoured |
| | at 200 gamma intervals. |
| Figure 5 | Compilation Map-Geochemical anomaly, min- |
| | eralization locations, magnetic features. |
| Plate 1 | Soil Profile. |

DISCUSSION OF RESULTS

Geology

The rocks on the property were all intrusive. Dr. Carswell identified quartz monzonite, quartz diorite, granite and aplite. He also stated that all the rocks show similarities in textures and composition that indicate they are consanguinous. The relatively coarse grain size and undirected fabric imply that they crystallized well within a large pluton.

Dr. Carswell has summarized his report as follows:

In general the rocks contain fine grained round to graphic quartz; medium grained often euhedral plagioclase; anhedral, slightly finer grained K-feldspar and small amounts of solitary to clustered euhedral biotite and acicular hornblende. With the exception of the aplite, all the rocks are medium grained and have similar generally granitic but slightly porphyritic textures. Many specimens are mineralized; mafics and quartz are the minerals replaced. The ore minerals identified are chalcopyrite, pyrite, chalcocite and native copper (?).

The medium to fine grained, anhedral, pink to brown weathering K-feldspars form a matrix in which the slightly coarser, more euhedral, white weathering plagioclase phenocrysts are set. Of the 20 specimens examined seven have been classified as quartz monzonite, five as quartz diorite, seven as granite and one as aplite. A thin section of one of the specimens of quartz monzonite showed 30% interstitial K-feldspar and 10% biotite which has replaced hornblende.

Where strongly fractured the rocks should make good host rocks for ore.

When considered over the total claim block the rocks appear to be mainly quartz monzonite, with lesser sections of quartz diorite and granite. The aplite probably occurs as dykes or segregations. A well-defined set of joints was observed, in many cases forming sharp bluffs 10-20 feet high. These strike roughly East-West and North-South and dip close to vertical. There is also some nearly horizontal jointing.

Mineralization

Of the samples collected for assay, two from the JR Creek channel assayed 0.08% Copper and negligible Molybdenum, and a sample 2500 feet west assayed 0.03% Copper and negligible Molybdenum. The mineralization consists of visible chalcopyrite and, as mentioned before, minor pyrite, chalcocite and native copper.

Several specimens of mineralized float were also observed across the center of the property.

Geochemistry

The geochemical survey indicates a very low background for copper (less than 20 p.p.m.). This is due to leaching by a combination of acid soil (pH 4.0 - 5.5), relatively high rainfall, and rapid runoff of groundwater.

However, there is a consistent pattern of geochemical response of greater than 20 p.p.m. Copper across the center of the claim block from east to west. This broad anomaly coincides with known mineralization and mineralized float occurrences. It is apparently due to mineralization in the bedrock. A note of interest is that the highest geochemical value (52 p.p.m.) is at an open end of the anomaly.

Magnetics

The magnetic relief is relatively low, ranging between 1100 and 2300 gammas, and appears to trend essentially north-south. However, due to the reconnaissance nature of the program the lines were quite widely spaced and some bias may have been introduced. Magnetic interpretation features are shown on the general compilation map, Figure 5.

RECOMMENDATIONS

Further investigation of the broad geochemically anomalous zone in the center of the claim block by the following means:

- 1. Detailed geochemical sampling.
- 2. Detailed investigation and petrographic study of all outcrops and to enhance the geology, a study of float in the area.
- 3. Induced Polarization survey on a less detailed plan than above.
- 4. Recommendation of further work based on the outcome of 1-3.

Respectfully submitted,
TRI-CON EXPLORATION SURVEYS LTD.

Alex Homernk

A. M. Homenuke Geologist

Department of

Mines and Petroleum Resources

ASSESSMENT REPORT

NO 3689

MAP #

Vegetation - hemiock, fed cedar, yellow cedar moss, minor shrubs

| Light Color III Color | koa1 | . Ac | A N. A. | VALA | |
|-----------------------|--------|-----------|------------------|---------|-----|
| 13/12 | al. | ^` | ANAL | YSIS. | |
| 1811 101 101 | 40, | DE PTH | Cu (ppm) | Mo(ppm) | рH |
| Medium oronge and | L-F-H | 0-2" | 4 | ∢i | 4.3 |
| highly oronge, | Ae | 2 - 4 " | 6 | <1 | 4.6 |
| Sona | Bh- Bf | 4 - 12" | 40 | <† | 5.5 |
| | | | | | |
| 1 - 1 - 1 - 1 | | Bedrock - | Quartz monzonite | | |

FLOREX MINING CO. LTD.

JR CLAIMS
SOIL PROFILE

EXPLORATION SURVEYS LTD.

PLATE NO. I FILE : D - 3

APPENDIX

Instrument Specifications

MAGNETOMETER

- A. Instrument
 - (a) Type Fluxgate
 - (b) Make Scintrex MF-1
- B. Specifications
 - (a) Measurement Vertical Magnetic Field
 - (b) Range ±100K gammas in 5 ranges
 - (c) Sensitivity Maximum 20 gammas per scale division
 (d) Accuracy ±10 gammas
- C. Survey Procedures
 - (a) Method ground survey with base station recorder.
 - (b) Corrections (i) base
 - (ii) diurnal
 - (iii) addition of constant to eliminate negative values for contouring.
 - (c) Station relationship each station read for intensity of vertical magnetic field.

APPENDIX

Instrument Specifications

BASE STATION MAGNETOMETER AND RECORDER

A. Instrument

- 1. Magnetometer
 - (a) Type Fluxgate
 - (b) Make Sharpe MF-1R-100
- Recorder Esterline-Angus Chart Recorder

B. Specifications

- 1. Magnetometer
 - (a) Measurement Vertical Magnetic Field
 - (b) Range ±100,000 gammas in 6 ranges
 - (c) Sensitivity Maximum ±5 gammas per scale division
 - (d) Accuracy ±5 gammas.

2. Recorder

- (a) Record permanent on carbon impregnated chart paper
- (b) Output Continuous
- (c) Speed 3 inches per hour

C. Procedure

- (a) Base station recorder runs continuously while survey is being carried out.
- (b) Recorded diurnal variations are applied to survey magnetometer data.

STATEMENT OF OPERATOR'S QUALIFICATIONS

I, Alexander M. Homenuke, DO HEREBY CERTIFY:

- That I am a graduate in Mining Technology from the British Columbia Institute of Technology.
- That I have further studied Geological Engineering at the Colorado School of Mines.
- That I have been employed by Tri-Con Exploration Surveys Ltd. since June of 1969 in mineral exploration as a geochemical, geological and geophysical operator.
- That I am presently employed by Tri-Con Exploration Surveys Ltd. in the capacity of Geologist.

DATED at Vancouver, British Columbia this 23 day of June , 1972

TRI-CON EXPLORATION SURVEYS LTD.

A. M. Homenuke Geologist

Alex Homember

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 JR Claim Group or in the securities of Florex Mining Co. Ltd., nor do I intend to receive any such interest.
- That I have reviewed a report dated 5000 23,1976 based on work conducted by Tri-Con Exploration Surveys Ltd. under my supervision.

DATED at Vancouver, British Columbia, this 23 day of June 1972.

W. G. STEVENSON & ASSOCIATES LIMITED Consulting Geologists

W. G. Stevenson, P. Engineer

APPENDIX

Petrographic Study Of 20 Hand Specimens*

bу

H. T. Carswell, Phd. Petrographer

* The locations of these specimens are shown on Figure 2.

KEY TO ABBREVIATIONS USED IN APPENDIX

vfg.

fg.

mg.

hb.

plag.

bi.

сру.

an.

рy.

very fine grained

fine grained

medium grained

hornblende

plagioclase

biotite

chalcopyrite

anorthite

pyrite

Specimen A Slightly Porphyritic Quartz Monzonite.

20% Quartz - fg, round

10% Clusters of mafics - irregular

20% Euhedral, chalky white weathering feldspar (probably plag.)

50% Anhedral, cream coloured, fg white feldspar. Probably K-feldspar.

The rock contains a small amount of fg pyrite.

Specimen B Mg. Hb. Quartz Diorite

20% - Fg, round quartz

40% - Mg. to fg. pyriboles as euhedral crystals, or 5mm., irregular bunches of fg. crystals.

40% - White plag. (?) less than 5mm., but mg.

The rock is mg. and mesocratic, and undirected, large plag. grains are euhedral. No sulfides and little limonite is visible.

Specimen C. Mg. Quartz Diorite

10% Quartz-round, fg.

20% Less than 2mm biotite and hb., often in mg. clusters.

70% Mg. very slightly pinkish feldspar, probably mainly plag. (?)

The rock is cut by a 1 cm. thick white feldspar dike. Very minor pyrite is present.

Specimen D Mg. Quartz Diorite

20% Quartz-fg, round.

15% Mafics - biotite and hb. hb extremely acicular to irregular, fg.

65% Grey feldspar-mg, probably mainly plag.
Also minor, vfg pyrite.

The rock is mg. and texturally isotropic. A thin wash of limonite coats the fracture surfaces but the tiny amount of pyrite present is unweathered. The rock is undirected and has a slight limonite stain. Euhedral white plag. "phenocrysts" occur in a fg., anhedral matrix of quartz and K-feldspar.

Specimen F "Aplite"

20% - Quartz-Fg., round to graphic

75% - Fg. white feldspar

5% - Fg. biotite

The texture is fg. and sugary. The rock contains minute biotite grains and has limonite-stained fracture surfaces.

Specimen G Porphyritic Quartz Monzonite

40% quartz - fg., round

30% white feldspar-euhedral, striated, mg. plag.

15% fg., slightly pinkish K-feldspar (?)

15% mg. to fg. Bi. and hb.

Plag. "phenos" sometimes subhedral. Solution of hb. leaves cavities on weathered surface.

Specimen H Sheared and Mineralized fg. Granite.

60% White, unstricted feldspar megacrysts and quartz-feldspar clusters less than 5 mm., euhedral.

30% Intergrown quartz-fg.

7% Chalcopyrite, bornite, pyrite, covellite, chalcocite (?).

The original rock was probably a fg. granite. It has been sheared along parallel fractures spaced at 5 mm. intervals to give the rock a gneissic appearance. Mafics occur along the shear planes as well as in the rock itself as clusters of fine grains. Sulfides have replaced quartz and mafics along fractures and in the body of the rock.

Specimen I Mg. Granite

10% Mg. subhedral, chalky weathering, white plagioclase (?)-fine-grained.

10% fg. elongate, dark hb. and bi.

25% Round, fg. quartz.

55% Pink-weathering feldspar - probably K-feldspar.

This rock is similar to the quartz monzonites R. & G., but contains fewer plag. grains. The K-feldspar is slightly less fine. Limonite has coated and permeated the rock.

Specimen O Mg. Quartz Diorite

20% quartz-fg., round to graphic

20% Mg. to Fg., single to clustered hb. and minor bi.

60% Mg., anhedral plag.

20% Mg. to fg. bi. and hb.

Minor fg. py. and cpy. Slight directed texture.

Specimen P Porphyritic Granite (?)

- 30% Quartz-fg., round.
- 10% Plag. phenos.-white, subhedral, less than 5 mm.
- 10% Mafics acicular hb. and monor bi. less than 2 mm. often clustered.
- 50% Mg. to fg., anhedral white feldspar, possibly K-feldspar.

No mineralization and little evidence of weathering were found in this rock. A faint limonite stain extends to a depth of 5 mm. from the surface.

Specimen Q Porphyritic Granite

- 10% White Plag.-striated, euhedral, less than 8 mm.
- 15% Quartz round, fg.
- 15% euhedral to anhedral hb. and minor bi.
- 60% anhedral white feldspar-mg. to fg. stains pink where invaded by limonite. Probably K-feldspar.
- 1% Pyrite, chalcopyrite, native Cu (?)

Mineralization of mafic and quartz grains. Limonite pervades rock to depth of 1 cm. from coated fracture surfaces.

Specimen R (Thin Section) Quartz Monzonite

- 25% less than 3 mm., euhedral to subhedral plagioclase-An 20.
- 30% fg., interstitial K-feldspar (microperthite) intergrown with fg. quartz.
- 35% fg., round to mg., square quartz.
- 10% euhedral to corroded biotite-mg. to fg.
- 1% fg., corroded, elongate hornblende
- 1% fg., anhedral <u>opaques</u> assoc. with biotite.
 Also apatite, zircon

The texture is generally granitic, but quartz is equant. Some quartz and K-feldspar form a fg. intergrowth. Biotite has replaced hornblende.

Specimen S. Fg. Granite

- 20% Quartz-fg., round.
- 10% less than 2 mm. altered and limonite stained plag. (?)
- 65% less than 1 mm. white, fresh K-feldspar. Granular. on weathered surfaces shows pink.
 - 5% Fg., acicular hb. with minor Bi.

The rock is limonite-stained and contains minor disseminated cpy., py.

Specimen T Porphyritic Quartz Monzonite

- 30% Quartz-round, fg.
- 20% White feldspar-less than 4 mm., anhedral. Shows only in weathered rock. Probably plag.
- 10% Fg., euhedral, sometimes clustered hb.
- 40% Faintly pinkish K-feldspar (?)

Chalcopyrite and pyrite (?) occur as fg. to vfg. crystals in hb., quartz. Limonite stain coats fracture surfaces.

Specimen U. Fg. Quartz Diorite

- 70% White feldspar-some plag.
- 10% Quartz
- 5% Hornblende
- 5% Biotite
- 5% Muscovite
- 2% Metallic minerals chalcopyrite, pyrite, bornite

The rock is generally fg., with hb. crystals up to 3 mm. in length. It is pale grey and limonite-stained. Quartz is round, whereas feldspar is euhedral. Copper sulfides are associated with mafics. There is no sign of alteration.

Specimen V Fg. Quartz Monzonite

As specimen X, except for slightly more mafics, less chalcopyrite.

- 20% Quartz
- 10% Biotite
- 65% Feldspars-both plag. and K-feldspar may be included.
- 5% Hornblende also chalcopyrite, pyrite.

Specimen W

- 55% Pink to brown K-feldspar
- 10% White fledspar probably plag.
- 10% Biotite
- 10% Quartz-fg., round
- 5% Hornblende
- 1% Chalcopyrite

The rock is identical to specimen V except that 2 types of feldspar are discernable, and the hb. is extremely acicular but undirected.

Specimen X Fg. Quartz Monzonite

2 mm. round grains of chalky weathering K-feldspar (?) in a groundmass of white plag., chloritized mafics, minor muscovite, and metallics associated with altered mafics. The weathered surface is limonite-stained. Cpy assoc. mafics. Limonite stains around some sulfides.

- 20% Quartz-round, fg.
- 20% Chalky weathering feldspar less than 2 mm., round.
- 55% White plag. (?) 1 mm., fg.
- 5% Mafics biotite, chlorite, hornblende, also muscovite, chalcopyrite.

Specimen Y Mg. Granite

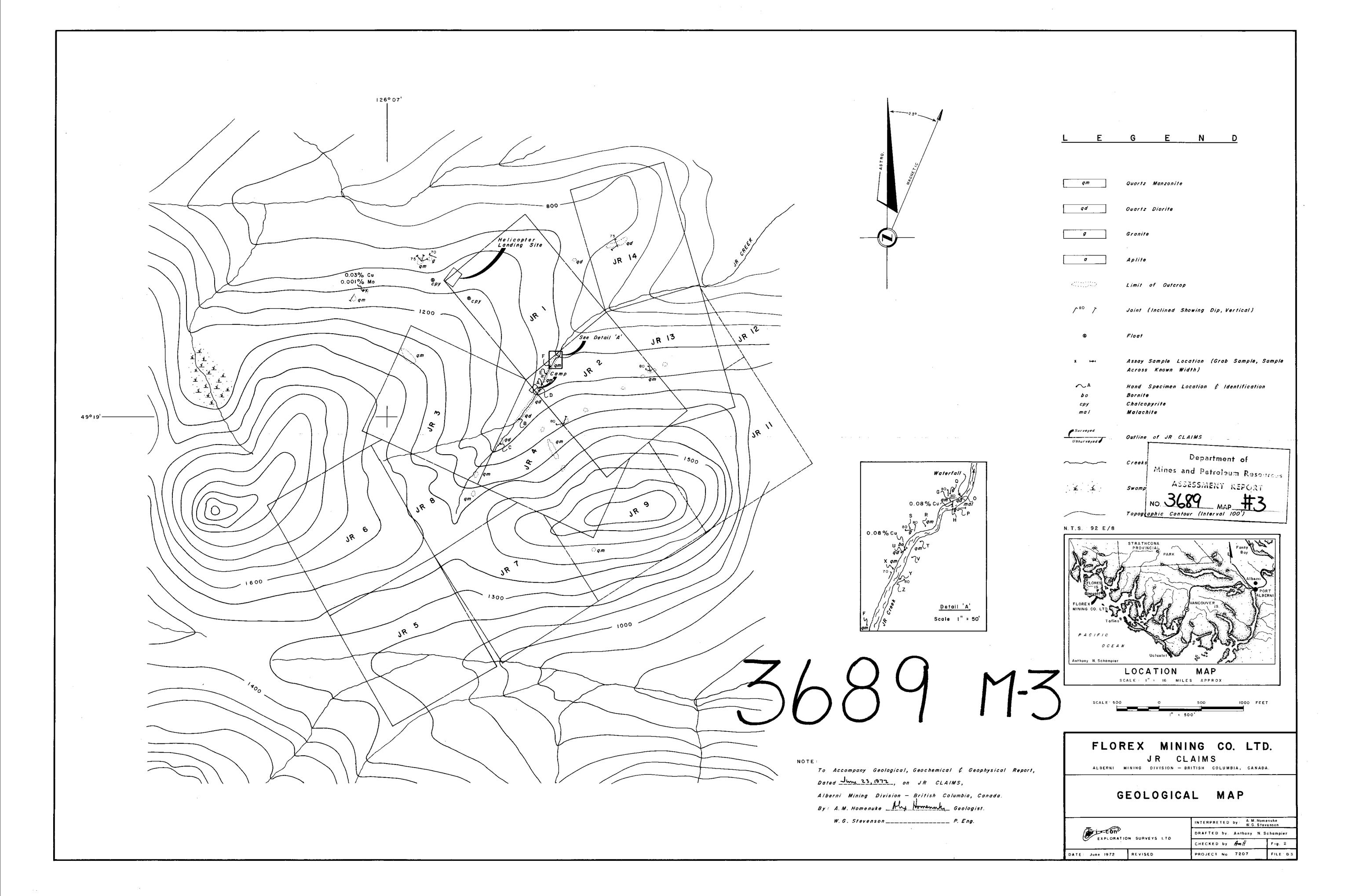
- 30% Quartz-fg., round, some graphic.
- 55% Brown to white feldspar-probably mainly K-feldspar; some plag.
- 10% Biotite-fg.
- 5% Hb., (?) weathers out, also cpy.

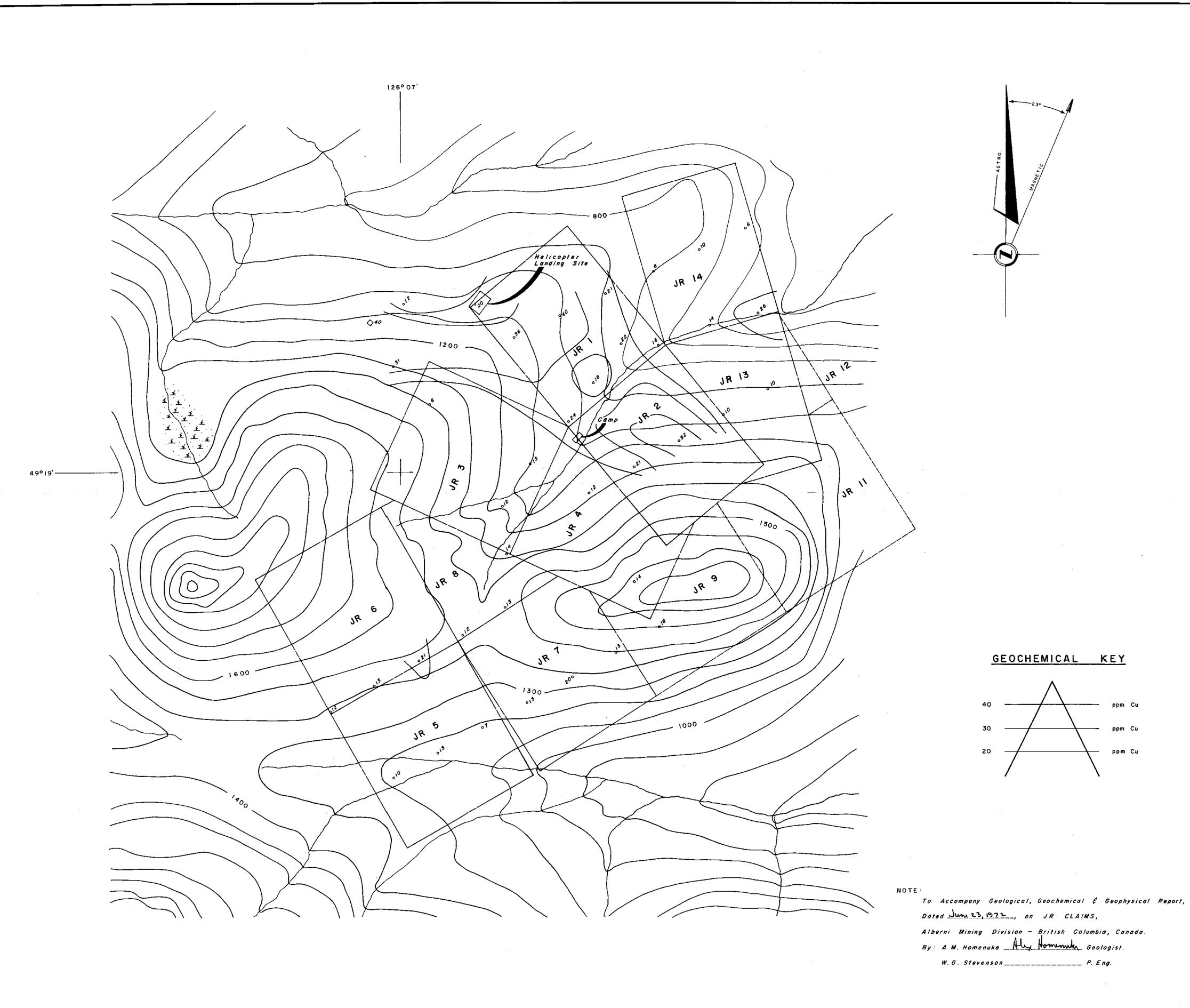
The rock is mg,m undirected, with fg., graphic quartz; fg. mafics; and mg. unstriated feldspars. One bi. grain contains vfg. cpy. The weathered surface is pitted and pink.

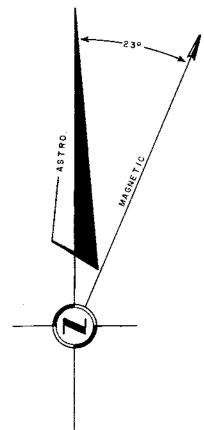
Specimen Z Granite (?)

- 15% Biotite
- 30% Quartz
- 55% Pale brown feldspar probably mainly K-feldspar.

The rock is mg. and contains a few specks of pyrite in biotite. The weathered surface shows 2 mm. anhedral quartz in a matrix of feldspar. Biotite is partly weathered out. No plag. was identified.

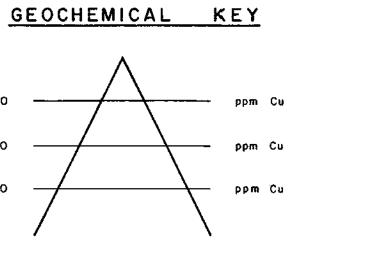


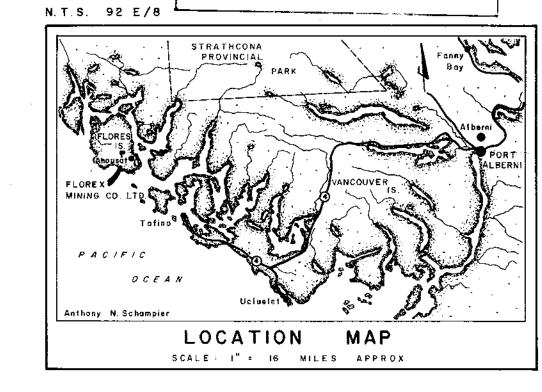




Contour Line, Contour Interval 10 ppm Stations Surveyed & Values Soil Profile Outline of JR CLAIMS

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JR CLAIMS

ALBERNI MINING DIVISION — BRITISH COLUMBIA, CANADA.

GEOCHEMICAL MAP COPPER

| EXPLORATE | ON SURVEYS LTD. |
|-----------------|-----------------|
| DATE: June 1972 | REVISEO: |

| INTERPRETED by: | A. M. Homenuke |
|---------------------|------------------|
| DRAFTED by: Anth | ony N. Schampier |
| CHECKED by: Amh | / Fig. 3 |
| PROJECT No. 720 | 7 FILE: 03 |

