3750

FLOREX MINING CO. LTD.

149 E 15th St., North Vanc

Geological, Geochemical & Geophysical Report
"K" CLAIMS

Latitude 49° 22' North, Longitude 126° 16' West

AUTHOR: A. M. Homenuke, Geologist

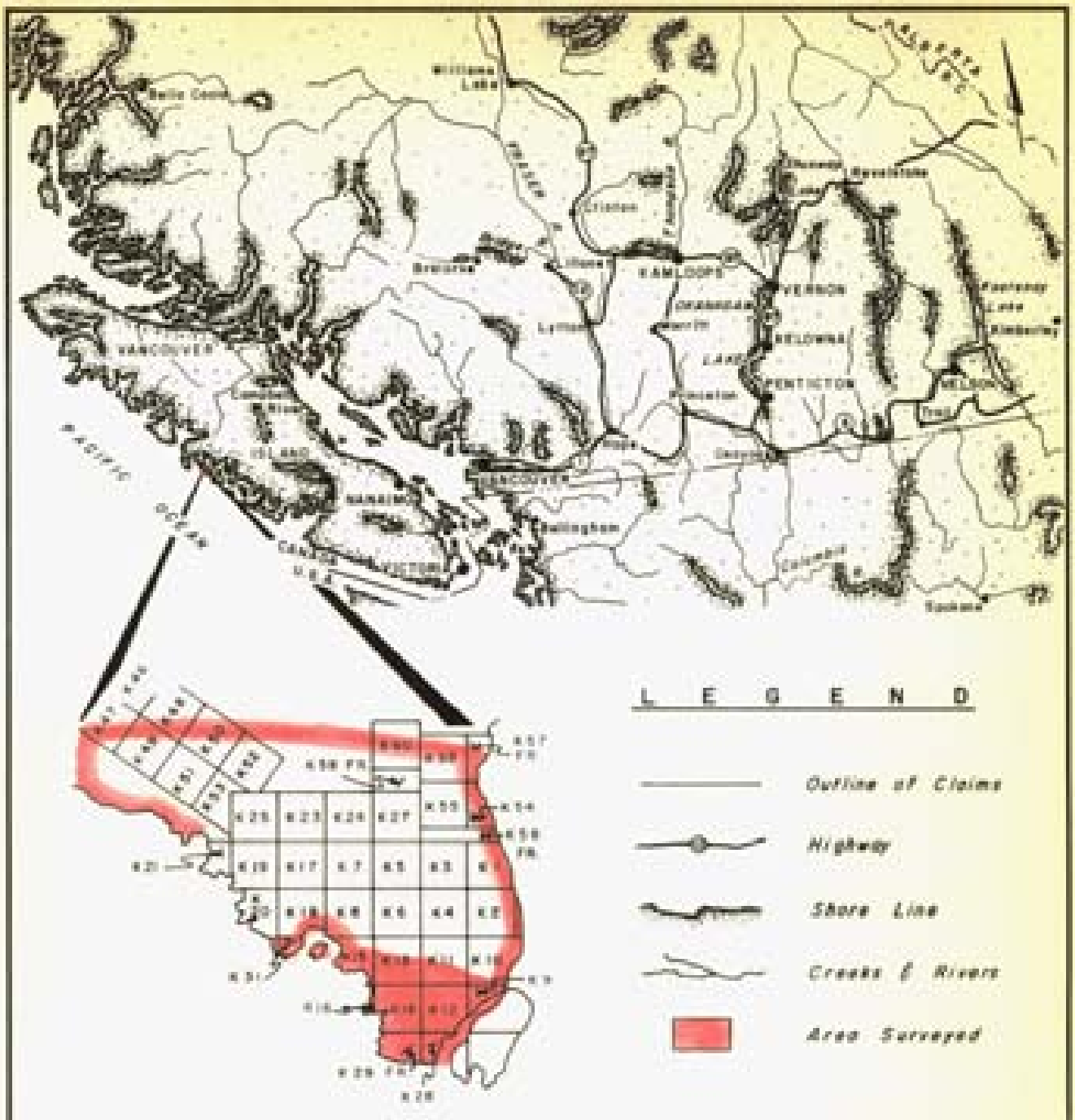
P. ENGINEER: W. G. Stevenson

92E/8W

DATE OF WORK: May 18 and 20, 1972
June 5 - 10, 1972

C O N T E N T S

I L L U S T R A T I O N S



FLOREX MINING CO. LTD.

K CLAIMS

LOCATION AND CLAIMS MAP

SCALE: LOCATION MAP: 1" = 80 MILES APPROX. — CLAIMS MAP: 1" = 5000 FEET APPROX.

3750 M-1

EXPLORATION SURVEYS LTD

Fig. 1
File: 04

Anthony M. Schampier 1972

SUMMARY

During the period June 5-June 10, 1972, Tri-Con Exploration Surveys Ltd., under the direction of W. G. Stevenson, P. Eng., carried out a program of reconnaissance geological, geochemical and geophysical surveying on the "K" Claim Group, Alberni Mining Division, British Columbia. The data and interpretation are presented on Figures 2-5, Figure 5 being a compilation of the significant data. A previously known zone of mineralization was sampled and a new area of interest was indicated.

CONCLUSIONS

The "Western" zone of interest, as outlined on Figure 5, has indications of economic mineralization, 0.6% copper and 5% and 10% zinc in selected samples, but does not appear to be extensive enough to warrant very high interest.

The "Eastern" zone, however, is largely overburdened and mineralization was only indicated from a few scattered rock samples. Although the samples were very low grade (Less than 0.1% copper) they are from a large enough area to indicate that the "Eastern" zone warrants further investigation.

Further geochemical investigation will probably have to be limited to rock sampling, as the soil survey indicated that soil geochemistry (at least for copper and zinc) is not a valid method in this particular small area. However, an orientation survey might show biogeochemical sampling to be of some assistance.

LOCATION & ACCESS

The area surveyed, the "K" Claim Group, is located on the north side of Refuge Cove on Vancouver Island approximately 20 miles northwest of Tofino, B.C. The exact location is latitude 49° 22' North, longitude 126° 16' West.

The property may be reached by boat or plane from Tofino.

TOPOGRAPHY

The area covered by the claims is bounded on its southern half by ocean beach. North from the ocean there is very little relief, reaching a maximum of 150 feet above sea level in the area surveyed.

For the most part this flat area is covered by closely spaced trees, heavy underbrush and small swamps.

PROPERTY

The "K" group includes the following claims and fractions:

Claim Name	Record Number
K 1-25	18013-18037
K 27, 28	18038, 18039
K 29 Fr.	18040
K 30-54	18041-18065
K 55	18066
K 56 Fr.-58 Fr.	18067-18069
K 59-60	18070-18071
K 61 Fr.-62 Fr.	18072-18073

SURVEY SPECIFICATIONS

Introduction

Control for the reconnaissance lines was based on N.T.S. Map 92 E/8 West Half (Hesquiat). A base map was prepared from this map at a scale of 1" = 500 feet.

Soil samples, rock samples and magnetometer readings were taken along the reconnaissance lines. Geology was mapped as encountered.

Geological Survey

Extensive outcrop occurs along the beach in Refuge Cove and on the ocean side of the property. This area was mapped in the greatest detail. Minor outcrops also occur inland. Hand specimens were taken from each of these outcrops for later study. In some cases these specimens were taken by digging through the overburden on the tops of small hills. Approximately 70 hand specimens were taken over the property for later study and classification. These specimens were grouped and 32 were studied in detail. The tabulation of this study and the cor-

responding rock geochemical analyses are shown in Appendix I.

Some blasting and sampling was carried out by Messrs. Sam Craig and Bill Huhtala on copper and zinc showings in a cove on the western side of the property. A description of these samples is contained in Appendix II.

The samples were assayed by Chemex Laboratories Ltd of North Vancouver, B.C.

Magnetic Survey

Several reconnaissance lines were run with a Scintrex MF-1 magnetometer. Corrections were made for diurnal variation by setting up a recording base station with a Scintrex MF-1R-100 magnetometer coupled to an Esterline-Angus chart recorder.

Geochemical Survey

The soils on the property are very poorly developed, poorly drained, organic podzols. In many cases only organic material was present, even on bedrock.

Several soil samples were taken during the course of the survey. They were placed in water resistant kraft envelopes where they remained until analysis.

Rock samples were taken at locations corresponding to the hand specimens in Appendix I. Some other rock samples were also taken.

The soils and rocks were delivered to Chemex Laboratories Ltd. of North Vancouver, B.C., where preparation (in the case of the soils, drying and -80 mesh sieving and in the case of the rocks, crushing and pulverizing to -100 mesh), 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 as follows:

Figure 2	Geological Map-assay results, hand specimen locations.
Figure 3	Geochemical Map-soil sample values rock geochem values.

Figure 4 — Geophysical Map-Magnetic values contoured at 500 gamma intervals.

Figure 5 — Compilation Map-Geochemical highs, mineralization locations, magnetic interpretation features.

DISCUSSION OF RESULTS

Geology

The survey indicated the geology of the property to be relatively complex. As there is a limited amount of published information available on the area, the ages and relationships of the rock units can only be inferred. However if the G.S.C. Open File Map by J. E. Muller, 1971, "Geological Reconnaissance Map of Vancouver Island and Gulf Islands" is considered accurate the following interpretation can be made:

1. Intrusion of Paleozoic and/or Lower Mesozoic sediments (map units 2 & 3) by diorite, microdiorite as sills and dykes, and granodiorite (map units 4. 5, 6, 7).
2. The volcanics (Unit 1) may be part of a sedimentary-volcanic sequence or they may have been extruded later. As no evidence of water cooling of volcanic rock was observed the latter is the more acceptable hypothesis.
3. Regional metamorphism of sediments and volcanics to the greenschist facies, as evidenced by widespread epidote and recrystallized plagioclase.
4. Intrusion of quartz monzonite (Unit 8), which is probably part of the Jurassic Island Intrusions.
5. Deposition of Tertiary sediments.
6. Mineralization may have accompanied intrusion or it may have been segregated by metamorphism.

How? By what?

The petrography of the map units is based on the study compiled in Appendix I and may be summarized as follows:

Unit 1: Volcanics - largely metamorphosed, epidotized andesite.

Unit 2: Metasediments-undivided, but consisting largely of phyllites and quartzites.

Unit 3: Mainly quartzite.

Unit 4: Fine to coarse grained, sometimes gneissic, granodiorite.

Unit 5: Microdiorite as sills and dykes probably related to Unit 6. Often contains a few percent of magnetite.

Unit 6: Diorite, often containing magnetite.

Unit 7: Gneissic diorite, otherwise equivalent to Unit 6.

Unit 8: Quartz monzonite.

Unit 9: Tertiary sediments-sandstone, siltstone, conglomerate.

Jointing, shearing, foliation and gossan zones were observed and are shown on Figure 2. Mineralization was noted and sampled as described below:

Mineralization

There are two mineralized areas which are of interest. The first, on the western part of the claim block has been blasted and sampled. There are two sheared zones, the western most of which is mineralized with chalcopyrite. The zone is about 20-30 feet wide, strikes NW, and dips steeply to the NE. The chalcopyrite occurs as stringers and blebs up to ½ inch wide in the epidotized andesite. A sample of the better looking material from the zone ran 0.60% copper.

Approximately 1200 feet east of this zone is the other shear zone which is associated with a minor skarn. This zone is about 20 feet wide, 5 feet of which is well mineralized with sphalerite. A representative sample across the 5 feet ran 5.00% zinc. A sample of the best looking material ran 10.30% zinc.

Three other samples were taken in this area but were not of economic interest. The samples are described in Appendix II and the locations and analyses are shown on Figure 2.

The second mineralized area is on the mainland to the north of Mate Island. Minor chalcopyrite and magnetite were observed in microdiorite and gneissic diorite. Values of 980, 800, 523, 212 and 108 ppm. copper were recorded from samples at various locations extending from the beach up to 2000 feet west. These locations and values are shown on Figure 3.

These mineralized areas are also outlined on the Compilation Map, Figure 5.

Geochemistry

Results from the soil samples did not reflect bedrock situations. Due to poor drainage and poor soil development, a highly acid soil environment was formed. The soil has a poor cation exchange capacity and as a result copper and zinc were almost completely leached out.

The rock geochem sample results were more encouraging. Values ranged from 14-980 ppm. copper and a zone of interest was found as described under mineralization.

The results of the soil and rock samples are shown on Figure 3.

Magnetic Survey

Due to the difficulty of moving along the coast and through the underbrush, magnetic coverage was somewhat limited. However, close correlation between readings on two sub parallel lines indicates a general north-south trend of magnetic features. As magnetite was found in many of the rock specimens, its prescence may have caused some of the magnetic highs.

Magnetic interpretation features are included on the Compilation Map.

RECOMMENDATIONS

1. Further investigation in detail of the mineralized areas, especially the eastern zone.
2. For geochemical investigation purposes, the utility of biogeochemical sampling should be tested.

Respectfully submitted,
TRI-CON EXPLORATION SURVEYS LTD.

A. M. Homenuke
Geologist

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 6 day of July, 1972.

TRI-CON EXPLORATION SURVEYS LTD.

Alex Homenuke

A. M. Homenuke
Geologist

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 "K" 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 July 6, 1972 based on work conducted by Tri-Con Exploration Surveys Ltd. under my supervision.

DATED at Vancouver, British Columbia, this 6th day of July, 1972.

W. G. STEVENSON & ASSOCIATES LIMITED
Consulting Geologists

W. G. Stevenson, P. Eng.

APPENDIX I

Hand Specimen Data

Spec. No.	Rock Type	Description	Analysis ppm. Copper
1	Gneissic Diorite	Med. grained, gray, parallel orientation of mafics and feldspars, some very fine grained sections, less than 5% quartz, 1-2% magnetite.	58
2	Gneissic Diorite (altered)	Appears to be variation of (1); less gneissic, contains epiodote (5%) and segregations of orthoclase. No magnetite.	80
3	Granodiorite	Very slightly gneissic, 10% quartz, 5% epidote, fine stringer of secondary quartz and orthoclase, mafics mainly biotite.	60
4	Diorite contact? porphyry	Very fine grained, porphyritic; may be volcanic. Blebs and phenocrysts of orthoclase and quartz, pervasive epidote stringers and blebs, minor pyrite.	18
5	Quartz monzonite	Med. grained, biotite. This rock is unaltered and fresh appearing, especially compared to the other rocks on the property.	10
6	Andesite or microdiorite	Aphanitic, very dark gray; may be slightly metamorphosed as there appears to be some recrystallization of plagioclase. Contains minor pyrite, chalcopyrite in minute stringers. Probably a dyke or a sill.	800
7	Gneissic Diorite	Same as (1) except sheared and contains 2-3% magnetite, minor chalcopyrite.	980
8	Gneissic Diorite (unaltered)	Similar to (1), but contains no magnetite; is somewhat kaolinized and chloritized; cross-fractured with epidote and orthoclase in the fractures.	18
9	Gneissic Diorite	Same as (7), but not sheared; chalcopyrite not identified.	523
10	Microdiorite	Very fine grained, almost aphanitic; dark gray, probably dyke or sill; epidotized orthoclase (?) stringer, minor magnetite.	52

Spec. No.	Rock Type	Description	Analysis ppm. Copper
11	Diorite	Very slightly gneissic; similar to (9), but contains less than 1% magnetite.	92
12	Gneissic Diorite	Similar to (1), but slightly coarser grained and containing less mafics.	80
13	Microdiorite	Similar to (10) but slightly coarser grained, may be very fine grained diorite.	108
14	Metasediment or metavolcanic	Lineation very apparent; dark greenish gray almost glassy; 2-3% magnetite lineated and in cross fractures, minor secondary pyrite.	68
15	Gneissic Granodiorite	Fine grained, slightly fractured, minor pyrite.	98
16	Diorite ? (altered)	Fine grained; chloritic alteration; may be a metavolcanic or metasediment.	14
17	Quartzite	Highly metamorphosed; epidote filling fractures; occasionally vuggy with epidote and secondary quartz crystals.	20
18	Microdiorite or metasediment?	Dark gray, aphanitic, minor pyrite. May be metasediment or metavolcanic or volcanic dyke or sill.	14
19	Microdiorite	Similar to (10), but contains 3-5% magnetite mainly in fractures.	66
20	Microdiorite	Same as (19), but magnetite disseminated and only 1-2%; also siliceous sub parallel fracture fillings.	63
21	Phyllitic Metasediment	Probably originally a mudstone; appears to be mainly quartzite, but it is dark gray with thin black laminae containing magnetite; could be considered a very low-grade taconite; some radiating recrystallized feldspars.	22
21-A	Microdiorite	Slightly metamorphosed (gneissic) 1-2% magnetite.	18

Spec. No.	Rock Type	Description	Analysis ppm. Copper
22	Phyllitic metasediment?	Similar to (21), but with more magnetite (2-3%), minor bands of epidotic material; also similar to (14); minor secondary pyrite.	42
23	Diorite or porphyritic microdiorite	Very fine grained but biotite and plagioclase up to 2 mm; siliceous fracture filling, minor magnetite and secondary pyrite.	38
24	Rhyolite Tuff	Light gray, aphanitic; quartz phenocrysts, euhedral pyrite.	18
25A	Quartzite, pyritic	Metamorphosed (sheared?), 5% secondary pyrite, limonitic staining.	14
25B	Microdiorite	Dyke; siliceous fracture fillings, 1-2% magnetite, minor pyrite.	66
26	Microdiorite	Fine grained; dyke.	56
27	Microdiorite	Similar to (25B) but from same dyke as (26).	56
28	Diorite (altered)	Med. to coarse grained, very similar to (12) but not apparently gneissic; epidote as blebs and fracture fillings.	60
29	Granodiorite	Fine grained, highly mafic (mainly biotite) with pyrite along siliceous stringer.	54

A P P E N D I X II

Assay Sample Data

Sample No.	Description	Analysis Cu.	Zn.	Au. oz/ton	Ag.
K-1	Chalcopyrite in fractures and shears in epidotized andesite (map Unit 1). Zone appears to be 20-30 feet wide and in excess of 100 feet long. Sample of better looking material from exposed section of zone.	0.60%		0.016	
K-2	Chip sample of the andesite south of shear zone of sample K-1. Largely pyrite, with very minor chalcopyrite.	0.09%		0.016	
K-3	Sample of pyritic quartzite between east and west coves. Causes minor gossan.	<0.01%			
K-4	Sample from sheared skarn zone well mineralized with sphalerite. Best looking material.		10.3%		0.02%
K-5	Same zone as K-4; across 5 feet.		5.00%		0.01%
K-6	Barren skarn south of sphalerite. Minor garnet, pyrite.	0.07%	0.03%		

A P P E N D I X III

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

A P P E N D I X III

Instrument Specifications

BASE STATION MAGNETOMETER AND RECORDER

A. Instrument

1. Magnetometer
   (a) Type - Fluxgate
   (b) Make - Sharpe MF-1R-100
2. 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.

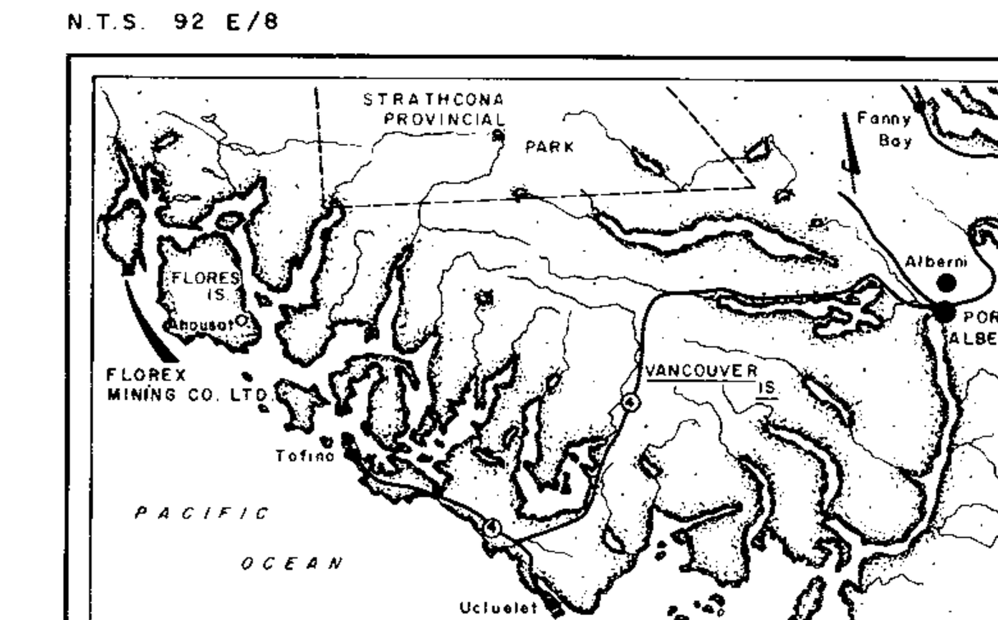
(b) Recorded diurnal variations are applied to survey magnetometer data.


LEGEND
Magnetic Contour, Contour Interval 500 gammas
Magnetic Lows
Stations Surveyed & Values
Outline of K CLAIMS
Creeks
INSTRUMENT
Survey Magnetometer – SHARPE MF-I (Fluxgate)
Base Station – SHARPE MF-IR-100 (Fluxgate)
Magnetometer & Esterline Angus Chart Recorder
MAGNETIC INTENSITY KEY
3000 gammas
2500 gammas
2000 gammas
1500 gammas
1000 gammas
500 gammas
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3750 MAP #4
NTS 92 E/8
LOCATION MAP
SCALE: 1" = 16 MILES APPROX
SCALE: 500 0 500 1000 FEET
1" = 500'
PACIFIC
OCEAN
Refuge
Cove
MATE
ISLAND
Logging Camp
Cabin
Telephone Line (Approximate Location)
K 46
K 47
K 48
K 49
K 50
K 51
K 52
K 53
K 25
K 23
K 24
K 27
K 60
K 59
K 57 FR.
K 58 FR.
K 55
K 54
K 56 FR.
K 21
K 19
K 17
K 7
K 5
K 3
K 1
K 20
K 18
K 8
K 6
K 4
K 2
K 31
K 15
K 13
K 11
K 10
K 16
K 14
K 12
K 9
K 29 FR.
K 28
NOTE:
To Accompany Geological, Geochemical & Geophysical Report,
Dated July 6, 1972, on K CLAIMS,
Alberni Mining Division – British Columbia, Canada.
By: A.M. Homenuke Geologist.
FLOREX MINING CO. LTD.
K CLAIMS
ALBERNI MINING DIVISION – BRITISH COLUMBIA, CANADA.
GEOPHYSICAL MAP
VERTICAL MAGNETIC INTENSITY (gammas)
EXPLORATION SURVEYS LTD.
INTERPRETED by: A.M. Homenuke
DRAFTED by: Anthony N. Schampier
CHECKED by:
Fig. 4
DATE: June 1972
REVISED:
PROJECT No. 7207 A
FILE: D4

L E G E N D

9	Tertiary Sediments: Sandstone, Siltstone, Conglomerate
8	Quartz Monzonite
7 5 6	6 – Gneissic Diorite, 7 – Diorite, 5 – Microdiorite Sill or Dykes
4	Granodiorite
2 3	Metasediments: 2 – Undivided, 3 – Mainly Quartzite
1	Volcanics: Mainly Metamorphosed, Epidotized Andesite
	Float
	Geologic Contact (Mapped, Inferred)
	Limit of Outcrop
60	Bedding With Dip (Tops Undetermined)
65	Foliation With Dip
	Fault (Mapped, Inferred)
	Shear Zone
80	Joint (Inclined With Dip, Vertical)
	Gossan
	Hand Specimen Location & Number
x	Assay Sample (Grab Sample, Sample Accross Known Width)
	Topographic Contour (Interval 100')

N.T.S. 92 E/8



LOCATION MAP

SCALE: 1" = 16 MILES APPROX

SCALE: 500 0 500 1000 FEET

1" = 500'

NOTE:

To Accompany Geological, Geochemical & Geophysical Report, Dated July 6, 1972, on K CLAIMS, Alberni Mining Division – British Columbia, Canada.

By: A.M. Homenuke Alex Homenuke Geologist.

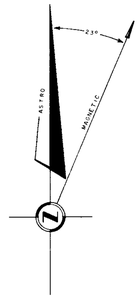
FLOREX MINING CO. LTD.

K CLAIMS

ALBERNI MINING DIVISION – BRITISH COLUMBIA, CANADA

GEOLOGICAL MAP

EXPLORATION SURVEYS LTD	INTERPRETED by: A.M. Homenuke	
	DRAFTED by: Anthony N. Schompier	
	CHECKED by: AmH	Fig. 2
DATE: June 1972 · REVISED:	PROJECT No. 7207 A	FILE: D 4



LEGEND

- Soil Sample
- Rock Sample
- 17 / 20 — Copper (if Only one value it is Copper) / Zinc
- Outline of K CLAIMS
- Creeks
- 100 – 300 ppm
- 300 – 500 ppm
- > 500 ppm

NOTE:
To Accompany Geological, Geochemical & Geophysical Report,
Dated July 6, 1972, on K CLAIMS,
Alberni Mining Division – British Columbia, Canada.
By: A.M. Homenuke Geologist.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3750 MAP #3

N.T.S. 92 E/6

LOCATION MAP
SCALE 1" = 16 MILES APPROX

SCALE 500 0 500 1000 FEET
1" = 500'

FLOREX MINING CO. LTD.
K CLAIMS
ALBERNI MINING DIVISION – BRITISH COLUMBIA, CANADA

GEOCHEMICAL MAP
COPPER

EXPLORATION SURVEYS LTD		INTERPRETED by A.M. Homenuke	
		DRAFTED by Anthony N. Schampier	
		CHECKED by AMH	Fig. 3
DATE June 1972	REVISED	PROJECT No. 7207 A	FILE D4


L E G E N D
Magnetic High >2500 gammas
Magnetic Low <1500 gammas
Magnetic Linear
Outline of Zone of Interest
x Mineralization
cp Chalcopyrite
sp Sphalerite
mag Magnetite
py Pyrite
ASTRO
MAGNETIC
23°
Telephone Line (Approximate Location)
Cabin
Logging Camp
Refuge
Cove
PACIFIC
OCEAN
MATE
ISLAND
K 46
K 47
K 48
K 49
K 50
K 51
K 52
K 53
K 60
K 59
K 57 FR.
K 58 FR.
K 55
K 54
K 25
K 23
K 24
K 27
K 56 FR.
K 21
K 19
K 17
K 7
K 5
K 3
K 1
K 20
K 18
K 8
K 6
K 4
K 2
K 31
K 15
K 13
K 11
K 10
K 16
K 14
K 12
K 9
K 29 FR.
K 28
200
100
WESTERN ZONE
Area of Known Mineralization
EASTERN ZONE
Area of Rock Geochemical Anomaly (Copper >100 ppm)
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3750 MAP #5
N.T.S. 92 E/8
LOCATION MAP
SCALE 1" = 16 MILES APPROX.
SCALE 500 0 500 1000 FEET
1" = 500'
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K CLAIMS
ALBERNI MINING DIVISION - BRITISH COLUMBIA, CANADA.
COMPILATION MAP
EXPLORATION SURVEYS LTD.
INTERPRETED by: A.M. Homenuke
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CHECKED by: Amll
Fig. 5
DATE: June 1972
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