81-1177-9947

ASSESSMENT REPORT

GEOPHYSICAL SURVEY

on the

NORTH AND SOUTH FLORENCE CLAIMS

QUEEN CHARLOTTE ISLANDS, B.C.

SKEENA M.D.

N. LAT. 53° 34.5' W. LONG 132° 15'

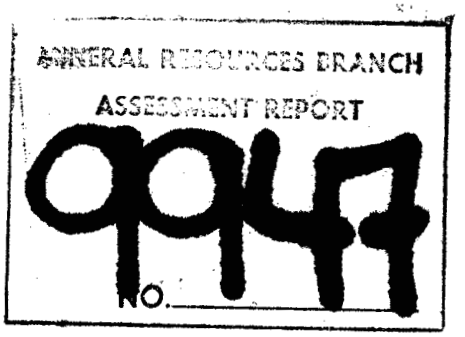
NTS 103F/9E, 9W

FOR

R. CALABRIGO & ASSOCIATES

VANCOUVER, BRITISH COLUMBIA

BY



R.J. ENGLUND, B.Sc.

STRATO GEOLOGICAL ENGINEERING LTD.

VANCOUVER, BRITISH COLUMBIA

DECEMBER 29, 1981

STRATO GEOLOGICAL ENGINEERING LTD.
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GEOPHYSICAL SURVEY

NORTH & SOUTH FLORENCE CLAIMS

SUMMARY

A recently completed magnetometer survey has indicated considerable variation of magnetic response within the host rocks underlying the claim groups and suggests a variation of rock units; presumably the Masset Formation to the west and Quaternary sediments overlying the Skonun Formation to the east. Although the contact is not well defined magnetically and does not display an apparent resistivity contrast, this area warrents further investigation since notable near east-west magnetic lineations occur which can be correlated to a series of weak VLF EM conductive zones near and crossing the contact area.

It is recommended that the magnetic survey be extended to more clearly define the contact and reconnaisance soil sampling be done in the area to outline specific areas of interest for further investigation.

Respectfully submitted,

STRATO GEOLOGICAL ENGINEERING LTD.

Ralph J. Englund, B.Sc.
Geophysicist

December 29, 1981.

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INTRODUCTION

Pursuant to a request by Mr. R. Calabrigo, a reconnaisance magnetometer survey was carried out over the western two thirds of the North and South Florence claims and a reconnaisance Induced Polarization line was conducted on the South Florence claim during July 1981.

The intent of the geophysical work was to delineate any geological structure, contacts and/or faults within the survey area. The results of 25.5 km of magnetic survey data and 4.5 km of IP Survey data are presented in this report.

LOCATION, ACCESS, TOPOGRAPHY

The claims are located in central Graham Island some 20 kilometers south - southwest of Port Clements and are accessible by MacMillan - Bloedel logging roads, Branch No. 4 cutting through the westerly third of the South Florence Claim. Other branch roads provide access near the northwest corner of the North Florence claim.

The claims are primarily in a logged area and the ground is under a ten year regrowth. The eastern areas are generally covered with virgin timber having a heavy undergrowth of salal.

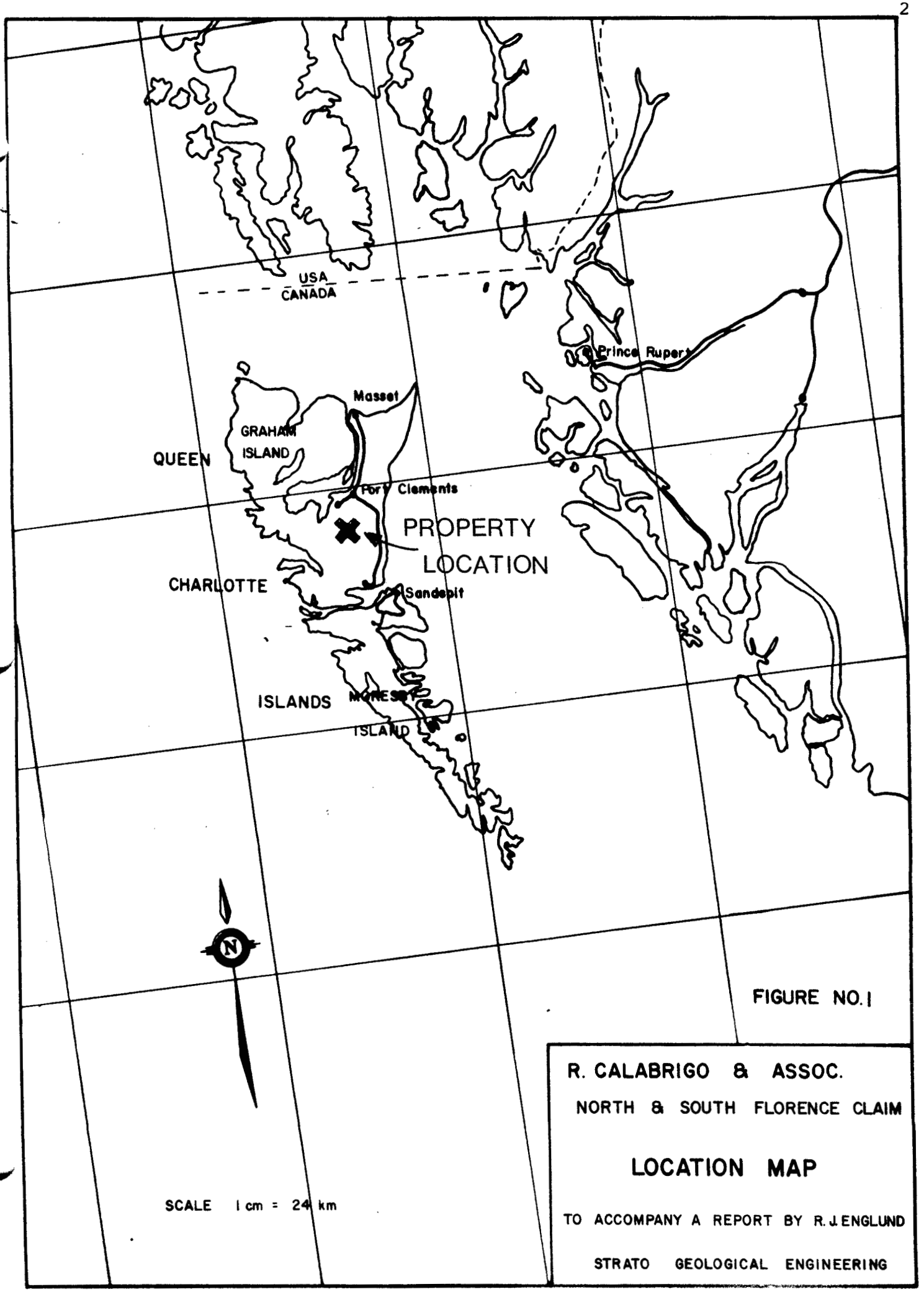


FIGURE NO. 1

R. CALABRIGO & ASSOC.

NORTH & SOUTH FLORENCE CLAIM

LOCATION MAP

TO ACCOMPANY A REPORT BY R. J. ENGLUND

STRATO GEOLOGICAL ENGINEERING

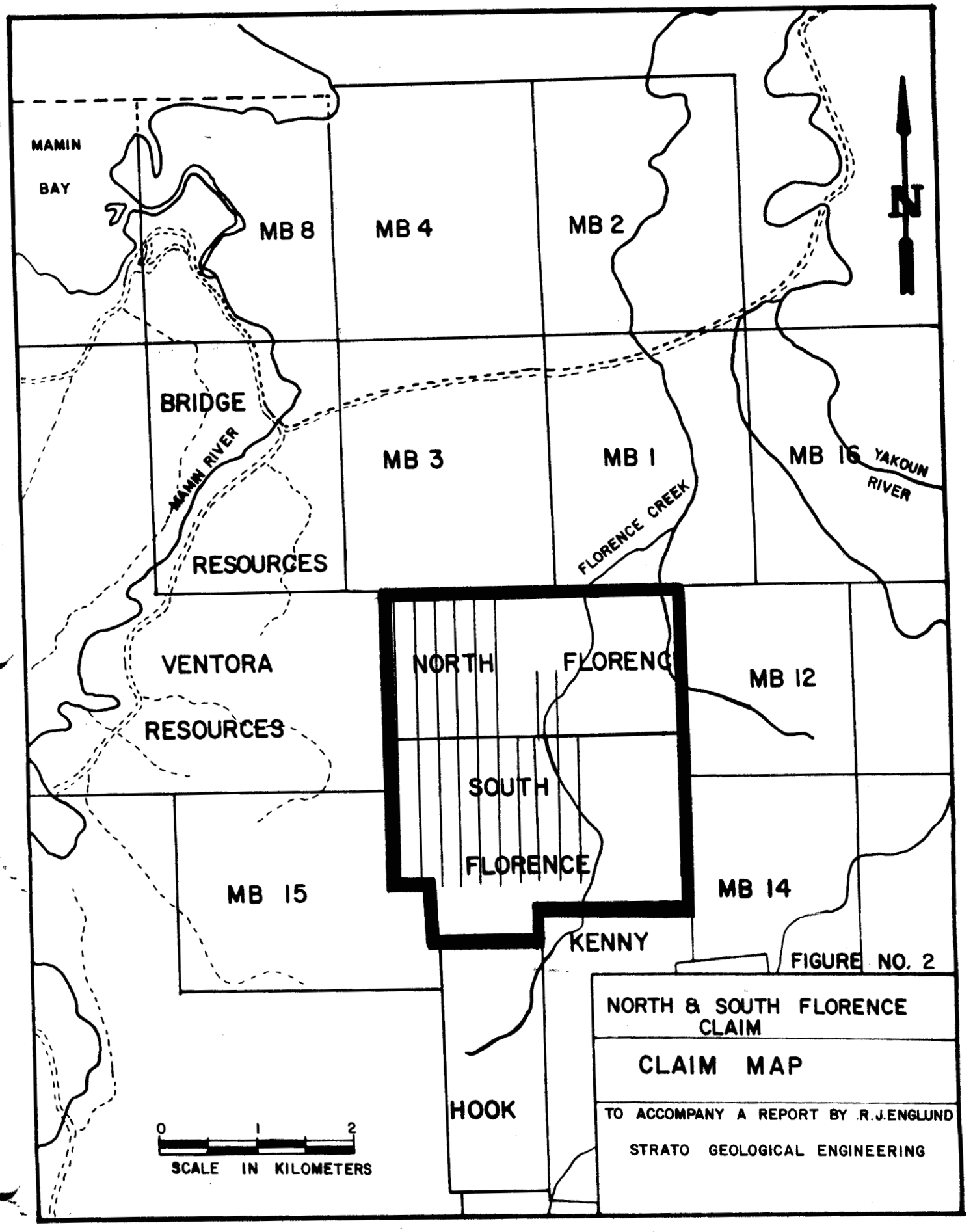
Florence Creek flows northerly, bisecting the claims and topography is quite rough in the southern claim areas. Elevation vary from 60 meters in the north central areas to over 200 meters in the southwest areas of the claims.

CLAIM

The property comprises 38 contiguous mineral claim units in the Skeena Mining Division and is recorded as follows:

Name	Units	Record No.	Expiry Date
NORTH FLORENCE	18	801	October 16/81
SOUTH FLORENCE	20	1792	October 15/81

Assessment work has been filed, this report being part of the work, to maintain the claims in good standing until October 1982. The claims show on B.C. Department of Mines and Petroleum Resources Mineral Titles Reference Map 103F/9E and 9W. The L.C.P. is located in accordance with the specifications of the Mining Act.


MAMIN
BAY
MB 8
MB 4
MB 2
N
BRIDGE
RESOURCES
MAMIN RIVER
MB 3
MB 1
FLORENCE CREEK
MB 16
YAKOUN
RIVER
VENTORA
RESOURCES
NORTH
FLORENCE
MB 12
SOUTH
FLORENCE
MB 15
MB 14
KENNY
HOOK
0
1
2
SCALE IN KILOMETERS
FIGURE NO. 2
NORTH & SOUTH FLORENCE
CLAIM
CLAIM MAP
TO ACCOMPANY A REPORT BY R.J.ENGLUND
STRATO GEOLOGICAL ENGINEERING

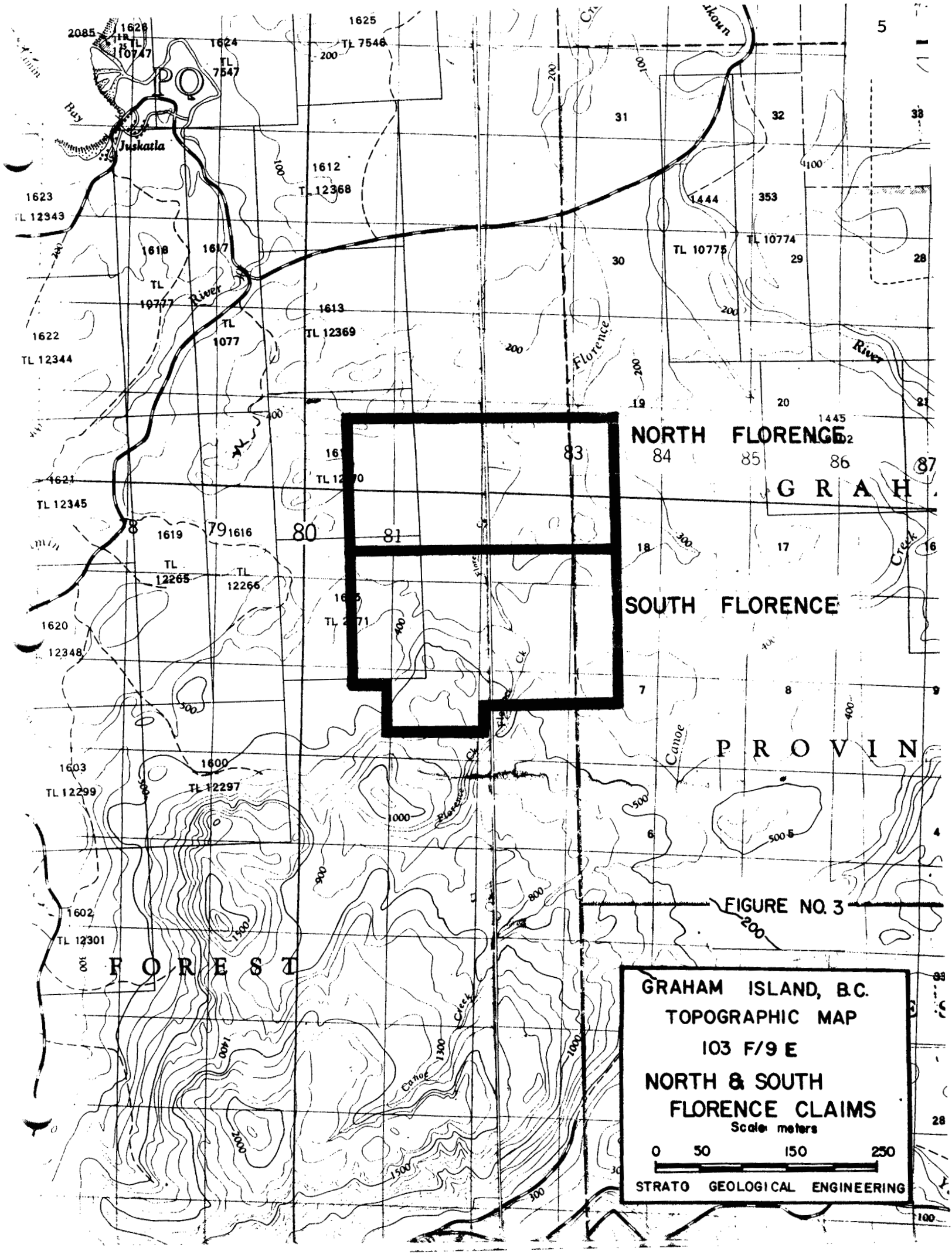

NORTH FLORENCE
SOUTH FLORENCE
GRAHAM ISLAND, B.C.
TOPOGRAPHIC MAP
103 F/9 E
NORTH & SOUTH
FLORENCE CLAIMS
Scale: meters
0 50 150 250
STRATO GEOLOGICAL ENGINEERING
Juskatla
Florence River
Florence Ck
Canoe Creek
FOREST
PROVIN
GRAH

FIGURE NO. 3

GENERAL GEOLOGY

The southwestern hald of the claims, as mapped by A. Sutherland Brown, Bulletin No. 54, is underlain by Paleocene Masset Formation consisting of subaerial basalt flows and breccias, rhyolite ash flows, and lesser dacite.

The northeast half of the claims is mapped as Quaternary sediments overlying the Skonun Formation of sands, mudstone, sandstone and conglomerates. No structure is mapped in the claim area.

A.F. Roberts, P. Eng., has previously noted basalt and rhyolite ash with pyrite in the area.

> "However, it is quite possible that the Sandspit fault or one of its strands passes through the property. It is this fault which is believed to be associated with the gold mineralization on the Consolidated Cinola property." (2)

HISTORY

A reconnaissance VLF Electromagnetic survey was completed over the South Florence claim in August 1980 with results indicating some near east-west trending

conductive zones. The reader is referred the report by A.F. Roberts, P. Eng., dated February 6, 1981

INSTRUMENTATION and SURVEY PROCEDURE

The survey grid for the magnetometer survey was established from the North and South Florence LCP with an east-west base line run along the common claim boundary. North-south survey lines were compassed and chained at 200 meter line interval and 25 meter station spacing both north and south of the base line

The magnetic survey was conducted with a Sabre Electronics, Model M100, Fluxgate Magnetometer measuring the vertical component of the earth's magnetic field. All survey data was tied to an established base station and all lines were "looped" at frequent intervals to allow for correction of durinal variations in accordance with standard practice. The methods are well known and fully described in the literature.

A Huntec Mark IV portable Induced Polarization system was used to measure apparent ground resistivity and chargeability alongside a logging road traversing near east-west close to the common claim boundary before turning south along Florence Creek (Figure 5). This reconnaisance I.P. traverse was started at the LCP and conducted using a dipole-dipale array, spacing a = 50 meters, n = 2, and 50 meter station intervals. The method is well known and is fully described in the literature.

THE MAGNETIC MAP

The magnetic results are presented in plan form as Figure 4. Magnetic relief is quite variable in the western and southwestern grid areas, while values are generally lower and more consistant in the northeastern areas. Results then indicate a possible change in rock units or a considerable increase in overburden depth on the east side of the grid area. It is possible that the contact between the Masset Formation and the Quaternary sediments is mapped by the variable magnetic response. Although poorly defined due to wide line spacing, the contact shows as a northwest-southeast arc passing approximately through line 7+00E, 0+00 to line 19+00E, 13+005.

The variable magnetic response also indicates some near east-west lineation within the southwestern "Masset" unit.

Although previous VLF electromagnetic survey lines could not be tied directly into the present survey grid, several indicated conductive zones correlate well with magnetic low lineations in the South Florence claim area.

INDUCED POLARIZATION PROFILE

The I.P. traverse, giving both chargeability and resistivity profiles, is presented as Figure 5. The chargeability values can be considered as background values, generally less than 2.0 milliseconds, with no anomalous results being measured.

Resistivity values along the east-west section, 0+00 to 23+50 meters, generally vary between 100 and 200 ohm. meters. No significant variation in resistivity is observed that would indicate a change in rock units along this traverse. Several one station higher resistivity values (i.e. 450 ohm. meters at 10+00) are not considered significant in that they occur near road bends and road junctions.

The southerly traverse, 23 + 50 to 42 + 50 meters, indicates two significantly higher resistivity zones at 32 + 00 to 35 + 00 and 39 + 00 to 42 + 00. These zones may be attributed to lesser overburden effects and/or a more competent rock unit in these areas. A rock quarry is located alongside the road at 39 + 50 meters.

No faults and/or geological contacts are clearly defined by the resistivity results and the generally low I.P. effects do not indicate the presence of any significant sulphide mineralization and/or clays along the traversed line.

CONCLUSIONS

Although not well defined, or confirmed by resistivity contrast, the magnetic survey results suggest a probable northwest - southeast geological contact passing through the west central portion of the claims. Some near east-west magnetic lineation correlates with previous VLF electromagnetic results indicating several weak conductive zones near to and crossing the contact area.

RECOMMENDATIONS

A continuation of the magnetometer survey is recommended on intermediate lines so as to more clearly position any geological contact.

A reconnaisance geochemical soil sampling program is also recommended for this area. Correlation between magnetic and geochemical results should then lead to consideration of further work in selected areas of interest.

Respectfully submitted,

STRATO GEOLOGICAL ENGINEERING LTD.

Ralph J. Englund, B.Sc.
Geophysicist

December 29, 1981.

References

(1) B.C. Department of Mines & Petroleum Resources, Bulletin No. 54, Geology of the Queen Charlotte Islands, A. Sutherland Brown, 1968.

(2) Report on the VLF - EM Survey, South Florence Claim by A.F. Roberts, P. Eng., dated February 6, 1981.

TIME-COST DISTRIBUTION

The claim group toward which work is being applied with this report consists of the following mineral claims:

Mineral Claim	Record No.
North Florence	801
South Florence	1792
MB 12	864
MB 13	865
MB 14	866

The magetometer survey and the I.P. traverse on the North and South Florence claims were conducted by Strato Geological Engineering Ltd. during the period June 29 to August 1, 1981.

A listing of personnel and distribution of costs is as follows:

Personnel

G. Hackett	Field Supervisor and Geophysical Operator
K. Anderson	Geophysical Operator
H. Brownlow	Geophysical Operator
G. Plante	Geophysical Operator
J. Bertrand	Field Assistant
M. Hilchie	Field Assistant
W. Davidson	Field Assistant
G. May	Field Assistant

COST DISTRIBUTION

Labour	$10,861.81
Room & Board	1,328.00
Transportation	2,049.86
Instrument Rental	1,933.00
Camp and Field Supplies	2,099.13
Drafting & Misc.	430.00
Report	900.00
TOTAL	$19,601.80

Signed: _____

STRATO GEOLOGICAL ENGINEERING LTD.

CERTIFICATE OF QUALIFICATIONS

I, Ralph J. Englund, do hereby certify that:

1) I am practising geophysicist with offices at #103-709 Dunsmuir Street, Vancouver, B.C., Canada, V6C 1M9.
2) I am a graduate of U.B.C. where I obtained by B.Sc. (Physics) in 1971.
3) I am a member in good standing of the following professional organization:
   a) B.C. Geophysical Society
4) I have been engaged in the study, teaching, and practice of exploration geophysics continuously for 9 years. I have worked as a geophysical consultant on numerous projects in Western North American since 1972.
5) The Geophysical field work and the interpretation of the results in this report were done under my direct supervision.
6) I have no direct, indirect or contingent interest in the North and South Florence claims, nor do I expect to receive any such interest.

Dated in Vancouver, B.C., this 29th day of December, 1981.

Ralph J. Englund, B.Sc.
Geophysicist

CLAIM BOUNDARY

14+00 N
12+00 N
10+00 N
8+00 N
6+00 N
4+00 N
2+00 N
0+00
2+00 S
4+00 S
6+00 S
8+00 S
10+00 S
12+00 S
14+00 S

LCP 47278
LCP 56254

CLAIM BOUNDARY

TIE LINE (15 S)

1+00 E
3+00 E
5+00 E
7+00 E
9+00 E
11+00 E
13+00 E
15+00 E
17+00 E
19+00 E

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9947
NO.

FIGURE NO. 4

R. CALABRIGO & ASSOC.

NORTH & SOUTH FLORENCE

SKEENA MINING DIVISION
NTS 103 F/9E, 9W

MAGNETIC CONTOUR MAP

BASE: 5000 ɣ

0 100 200 300
SCALE IN METERS

DEC. 29, 1981.

TO ACCOMPANY A REPORT BY R.J. ENGLUND

SURVEY BY:

STRATO GEOLOGICAL ENGINEERING
103-709 DUNSMUIR ST.
VANCOUVER B. C.

STRATO GEOLOGICAL

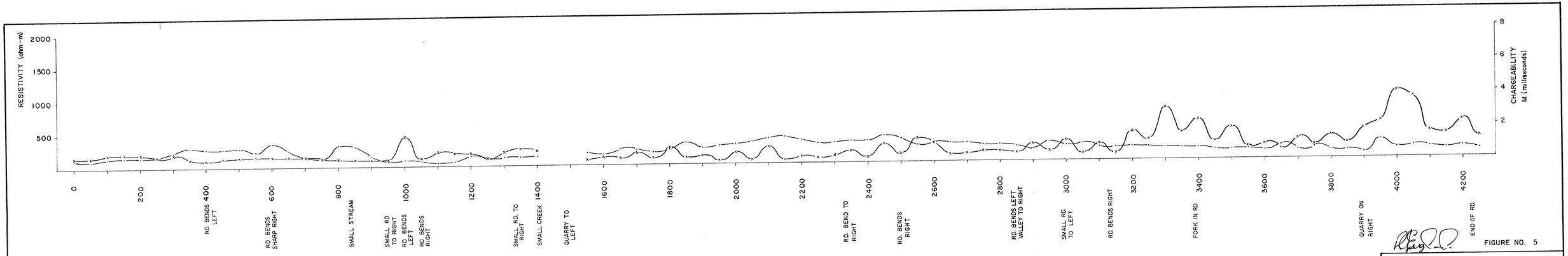
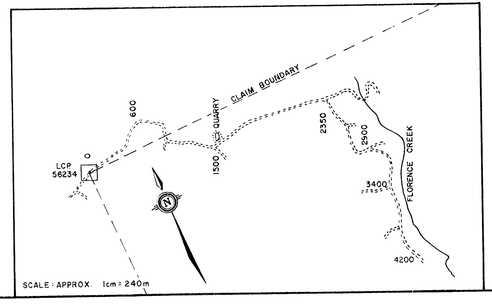


FIGURE NO. 5



LEGEND

RESISTIVITY : x—x

CHARGEABILITY : ·—·

DEC. 29, 1981

R. CALABRIGO & ASSOC.

SOUTH FLORENCE CLAIM

SKEENA M.D. NTS 103 F/9E, 9W

INDUCED POLARIZATION PROFILE

50 0 100 200

SCALE IN METERS

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