81-# 1105 - 9871

#### ASSESSMENT REPORT

MAGNETOMETER SURVEY

on the

MB2 CLAIM

QUEEN CHARLOTTE ISLANDS, B.C.

SKEENA M.D.

N. LAT. 53° 37'

W. LONG 132° 14.5'

NTS 103 F/9E

FOR

ANGELO TOSI

VANCOUVER, BRITISH COLUMBIA

ΒY

R.J. ENGLUND, B.Sc. STRATO GEOLOGICAL ENGINEERING LTD.

VANCOUVER, BRITISH COLUMBIA

NOVEMBER 24, 1981





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#### MAGNETOMETER SURVEY

MB2 CLAIM, QUEEN CHARLOTTE ISLANDS, B.C.

#### SUMMARY

A recently completed magnetometer survey has indicated considerable local variation of magnetic response within an area of generally low magnetic relief. The results are attributed to near surface features and indicate a single rock unit, presumably sediments overlying the Skonun Formation, in the claim area. Some north-south lineation is apparent and conforms to previous electromagnetic survey results which indicate several northerly trending conductive zones.

A geochemical sampling program is recommended to establish specific areas of interest for more detailed follow-up work on the property.

Respectfully submitted, STRATO GEOLOGICAL ENGINEERING LTD.

Ralph J. Englund, B.Sc. Geophysicist

November 24, 1981

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# INTRODUCTION

Pursuant to a request by Mr. A. Tosi, a magnetometer survey was conducted over the MB2 Claim Group during July 1981. The intent of the work was to delineate any geological structure, contacts and/or faults within the survey area. The results of 19 kilometers of survey data over the southern 16 units of the claim group are presented in this report.

## LOCATION, ACCESS, TOPOGRAPHY

The property lies some 16 kilometers southwest of Port Clements and the main road passes through the southeast corner of the claim group. The Canoe Main logging road, with several branch roads, services the eastern side of the claims and the western side is also accessible from logging roads.

Florence Creek, flowing north, bisects the MB2 claim and is deeply incised in places. In general the property is one of low relief with elevations ranging between 30 and 60 meters above sea level. (Figure 3)



More than half of the property has been logged off and is covered with second growth and slash. The southwestern area is in virgin timber and there is indication of heavy overburden cover.

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## CLAIMS

The property comprises twenty contiguous mineral claim units in the Skeena Mining Division about 16 kilometers southwesterly of Port Clements.

The claim is recorded as follows:

| Name | Units | Record No. | Expiry Date  | Recorded Holder |
|------|-------|------------|--------------|-----------------|
| MB2  | 20    | 854        | 20 Dec. 1981 | A. Tosi         |

Assessment work has been filed, this report being part of the work to maintain the claims in good standing until 1982. The claims are shown on B.C. Department of Mines and Petroleum Resources Mineral Titles Reference Map 103 F/9E.

The L.C.P. is located in accordance with the specifications of the Mining Act. Exact location and the claim area can only be proven by a legal survey.





### GENERAL GEOLOGY

The entire property, as mapped by A. Sutherland Brown, Bulletin No. 54, is overlain by Quaternary sediments overlying the Skonun formation of mudstones, sandstones and conglomerates. This formation is believed to unconformably overlie the Masset Formation of sub-aerial basalt flows, rhyolite ash flows, and some dacite where it laps onto this formation.

No outcrops were found or have been reported on the property.

# HISTORY

Previous work on the property consists of a VLF Electromagnetic survey completed in August 1980 and a reconnaissance type geochemical survey completed during the 1979 field season.

The VLF Electromagnetic survey has indicated several weak, north-south conductive zones throughout the southern three quarters of the claim group. Of these,

one zone just east of Florence Creek appears to have a strike length of more than 1000 meters, and a second near parallel conductor of over 400 meters in length lies near the eastern boundary of the claims.

# INSTRUMENTATION AND SURVEY PROCEDURE

The survey grid was established from the legal corner post in the southwest corner of the MB2 claim. East-west lines were compassed and chained at 200 meter line separation and 25 meter station interval from north-south baselines on the west boundary of the claim group.

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.

#### THE MAGNETIC MAP

The magnetic results are presented in plan form as Figure 4. Magnetic relief in the area is generally low but is quite variable within the survey area. The variations observed are indicative of variable magnetite content within the surface rocks and no distinct features are evident to indicate any change of rock units within the claim group. Some north-south lineation does however occur in the central claim area and may be indicative of northerly trending structural variation in this area.

#### CONCLUSIONS

The magnetic survey has indicated considerable local variation within an area of generally low magnetic relief and the results are indicative of surface feature variations rather than major structural changes. Some north-south lineation is apparent and conforms to previous VLF electromagnetic survey results indicating a number of north-south conductive zones. No geological contacts and/or major fault structures are discernible within the survey area.

# RECOMMENDATIONS

A geochemical sampling program is recommended for the claim group.

Relationships established between geochemical results and magnetics and/or VLF E.M. should then lead to consideration of follow-up geophysics on a tighter grid spacing in selected areas of interest.

Respectfully submitted, Strato Geological Engineering Ltd.

R.J. Englund, B.Sc.

Geophysicist

November 24, 1981

# REFERENCES

- B.C. Department of Mines & Petroleum Resources, Bulletin No. 54, Geology of the Queen Charlotte Islands, A. Sutherland Brown, 1968.
- (2) Report on the MB2 Claim VLF E.M. Survey,A.F. Roberts, P. Eng., February 6, 1981.

TIME COST DISTRIBUTION:

Magnetometer and VLF E.M. surveys were conducted over the MB 2 and MB 4 claims by STRATO GEOLOGICAL ENG-INEERING LTD. during the period July 2 to July 31,1981. The work program has been applied to cover assessment requirements for the Claim Group including the following mineral claims:

MB 2 , MB 4 , MB 7 , MB 8

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

# Personnel

- G. Hackett Geophysical Operator & Field Supervisor
- K. Anderson Geophysical Operator
- N. Stevenson Geophysical Operator
- W. Davidson Field Assistant
- M. Coughlin Field Assistant

## Cost Distribution

| Labour             | 11,     | 217.94  |
|--------------------|---------|---------|
| Room & Board       | 1,      | 347.32  |
| Transportation     | 2,      | 117.07  |
| Instrumentation    |         | 515.00  |
| Camp & Field Costs | 2,      | 143.21  |
| Drafting & Misc.   |         | 860.00  |
| Reports            | 1,      | 800.00  |
|                    | <u></u> | <u></u> |

\$ 20, 000.54

Signed

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STRATO GEOLOGICAL ENGINEERING LTD.

... MINERAL EXPLORERS .

## 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 myB.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 continously for
  9 years. I have worked as a geophysical consultant on numerous projects in Western North America 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 MB2 Claims, nor do I expect to receive any such interest.

Dated in Vancouver, B.C. this 24th day of November, 1981.

Ralph J. Englund, B.Sc. Geophysicist

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