Report on an
Airborne Magnetometer Survey
for the
Lin Group of Mineral Claims
Report on an
Airborne Magnetometer Survey
of the
Lin Group of Mineral Claims
near Ross River, Y.T.

for
Golden Gate Explorations Ltd. (K.P.L.)
714 West Hastings Street,
Vancouver, B.C.

Survey by
Husky Industries and Services Ltd.,
97 - 845 Hornby Street,
Vancouver 1, P.C.

Interpretation by
Joseph Sullivan, P.Eng.
201 - 525 Seymour Street
Vancouver 2, B.C.

September 15, 1966.
Report on an
Airborne Magnetometer Survey
for the
Lin Group of Mineral Claims

Introduction:

On September 2, 1966 Husky Industries and Services Ltd.,
845 Hornby Street, Vancouver 1, B.C., conducted an airborne
magnetometer survey over the Lin Group of mineral claims owned
by Golden Gate Explorations Limited.

Mr. R. Robillard did the instrumentation in the field.
The compilation of data for this report was done by Mr. Don Fritz
of the Husky staff.

The starting markers for ground control were the responsi-
sibility of the client, Golden Gate Exploration.

Property and Location: (Lat. 62° 25' Long. 134° 10')

There are 56 located claims in one contiguous group owned
by Golden Gate Explorations Limited, 714 West Hastings Street,
Vancouver 1, B.C. They lie in the Pelly River Valley immediately
northeast of Glenlyon Lake. At this time the best access to the
group is by fixed wing aircraft from the Ross River townsite,
65 miles southeast.
Geological Summary: (G.S.C. Map 25 - 1960)

It is the writer's policy to use whatever geological data are available as an aid in the interpretation of the readings. For this survey the area flown is underlain on the southwest by basaltic flows, minor shales and conglomerate. On the northeast there is a Cambrian formation (?) which may consist of thin-bedded shale, argillite, limestone, rhyolitic tuff, greenstone and minor hornfels.

The Tintina fault, a major northwest structure, has segments on both the northeast and southwest sides of the group. Thus, it may be expected that it will encounter several smaller faults and shears on the claims themselves.

Method of Survey:

A magnetometer built to record the vertical component of the earth's magnetic field was mounted in a Hiller 12E helicopter. The readings were fed into a chart recorder so that a continuous record of the gamma changes appeared on the charts. The claim group was covered by sixteen northeast flight-lines at approximately 1000 - foot spacings. Control for the survey was a marker on the southeast corner of the claim group as a starting point. A camera mounted on the helicopter during the flights recorded any drift in the aircraft's flying, and all the important topographic features.

The operator's field record is included as Appendix 1 at the back of this report.
LEGEND:

1. Micaceous quartzite and quartz-mica schist; minor limy rocks

4. Slate, phyllite, spotted slate, and hornfels

5. Thin-bedded shale, argillite, and siliceous limestone; rhyolitic tuff and flows; greenstone and minor hornfels (may, in part, be equivalent to 4)

6. Andesitic and basaltic flows, breccia, and tuff; diorite; slate, phyllite, slaty limestone, chert, and carbonaceous shale

6a. Biotite granodiorite and quartz monzonite; minor leuco-quartz monzonite and biotite-hornblende quartz diorite

7a. Basaltic flows; minor shale and conglomerate

28. Glacial sand, gravel, silt, clay and till, volcanic ash, bog deposits, and soil

GEOLOGY
Interpretation:

The various trends noted on the charts have been plotted on the flight-line map as trend No's. 1 to 7.

Trend No. 1 is a magnetic trough along the southerly edge of a magnetic ridge.

Trend No. 2 is an isolated dipole, a well centered signature ranging from plus 450 gammas.

Trend No. 3 shows from line 11 to line 13. This is a broad magnetic zone with parallel magnetic depression on each side.

Trend No. 4 is a magnetic ridge crossing through the northerly half of lines 8 and 9.

Trend No. 5 is a broad magnetic depression bounded by well defined magnetic ridges on both the northerly and southerly sides.

Trend No. 6 is a well defined northwest trending magnetic ridge.

Trend No. 7 is a small isolated dipole picked up on line 4.

In general, many large changes were recorded, some beyond the limits of the chart paper. A few peaks are due to air turbulence and are marked "rough", others suggest an underlying basic formation with a relatively high magnetite content.
**Recommendations:**

This property should be prospected thoroughly, along with a small amount of geological mapping. Such an effort might well establish the importance of the various trends. Further, a ground magnetometer survey is recommend to delimit trend No's. 2, 6, and 7. These three are selected as the best possibilities for being, or associated with, sulphide mineralization, but the other four should not be entirely ignored. The prospecting may indicate the latter trends to be equally interesting.

Respectfully submitted,

[Signature]


September 15, 1966.
Appendix 1

Airborne Magnetometer Survey

For Golden Gate Exploration Ltd., (N.P.L.)

Line Group #1 - 56

<table>
<thead>
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<th>Line No.</th>
<th>Direction Flown</th>
<th>No. of Pictures</th>
<th>Tape Length</th>
<th>Mileage</th>
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<td>32.72</td>
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Date Flown - September 2, 1966

Line Bearings - 546° W approximately

Altitude - 700', Airspeed - 60 M.P.H.

Sensitivity - 1000 gamma full scale

Lines - 1000' apart

Operator - R. Robillard
CLAIM SKETCH