

180-#937-#8649

GEOPHYSICAL REPORT

ON A

GROUND MAGNETOMETER SURVEY

OVER THE

SIL 2 CLAIM

TAWEEL LAKE AREA, KAMLOOPS M.D., B.C.

SIL CLAIM : 17 km S80W of Clearwater, B.C.  
 : 51° 37' N latitude,  
 : 120° 17' W longitude  
 : N.T.S. 92 P/9

WRITTEN FOR : Simon A. Jutras  
 Owner and Operator  
 Box 1930  
 Salmon Arm, B.C.

BY : David G. Mark  
 Geophysicist  
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 403-750 West Pender Street  
 Vancouver, B.C., V6C 2T7

DATE : February 2, 1981



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 Engineering & Mining Geophysicists  
 VANCOUVER, CANADA

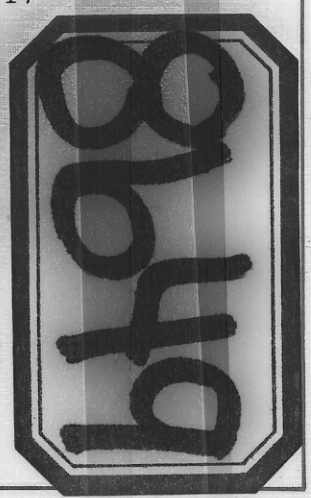


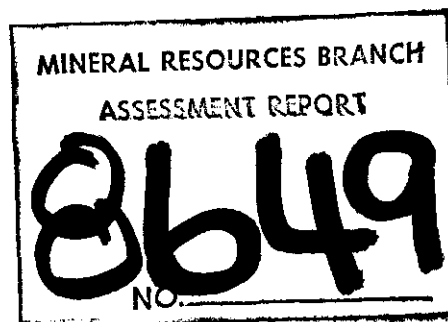
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### SUMMARY

On June 12 and 13, 1980 a ground magnetic survey was performed on the SIL 2 Mineral Claim. This property is situated 17 kilometers S80W of Clearwater, B.C.

The purpose of this survey was to verify and further delineate a magnetic high (as outlined by published government surveys) located near the southeast shore of Taweel Lake.

Although rock outcroppings are limited, regional mapping by the Geological Survey of Canada indicates that Triassic sediments underlie the claim. Potential mineral targets include lead and silver hosted in the above-mentioned sediments, molybdenum in the pegmatites, or alkali-granite stocks of Cretaceous age which possibly intrude the Triassic sediments of the claim area.

The magnetic readings were taken every 30 meters on lines spaced 100 meters apart. These readings were diurnally corrected, plotted, contoured and profiled.

### CONCLUSIONS

The survey conducted did verify the presence of a magnetic high. However, the amount of work performed was insufficient to completely define the magnetic anomaly in the claim area. Further work on the property is warranted.

### RECOMMENDATIONS

1. The magnetic survey should be extended in all directions, especially to the north and east.

2. Soil samples should also be picked up on the same stations and the samples tested for lead, silver, copper, molybdenum, as well as possibly, gold.
3. A VLF-EM survey may be quite useful in mapping geological structure and/or mineralized zones.
4. The property should be geologically mapped and prospected.
5. Depending on the above results, further work may include induced polarization and/or Maxmin EM surveys.

**GEOPHYSICAL REPORT**  
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**GROUND MAGNETIC SURVEY**  
**OVER THE**  
**SIL 2 CLAIM**  
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**INTRODUCTION AND GENERAL REMARKS**

This report discusses the survey procedure, compilation of data, and discussion of results of a ground magnetic survey carried out over a portion of the SIL 2 Claim during the period of June 11th to 14th, 1980.

The field work was carried out by 2 men. The total number of line km done was 2.4.

The purpose of the survey was to verify and further delineate a magnetic high found on the government aeromagnetic survey map for the area. Some aeromagnetic highs in the general region are associated with sulphide mineralization.

**PROPERTY AND OWNERSHIP**

The property consists of one 20 unit claim as shown in Figure 2 and described below:

<u>Claim Name</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Date Recorded</u>
SIL 2	20	1996	August 14, 1979

The owner and operator of the SIL 2 Claim is Simon A. Jutras of Salmon Arm, B.C.

#### LOCATION AND ACCESS

The SIL 2 Claim (Kamloops Mining Division) lies to the immediate east of the southeast end of Taweel Lake, approximately 17 kilometers S80W of the town of Clearwater, B.C.

The geographical coordinates are 120° 17' W longitude and 51° 37' N latitude.

Access is by 4-wheel drive vehicle along an unimproved road which follows the Lemieux Creek valley from Highway 24 near Little Fort, B.C. The distance is approximately 25 km.

#### PHYSIOGRAPHY

The property is located at the northern end of the Thompson Plateau near its border with the Shuswap Highlands, both physiographic diversions of the Interior Plateau System. Typical of this area, the terrain is flat to gently rolling with the elevation ranging from 1220 m to 1340 m a.s.l., a difference of only 120 m.

The vegetation is that of a coniferous forest, medium to thick in density.

The main water source is Taweel Lake on the southeast edge of the property. One or two intermittent streams are found on the property as well.

## GEOLOGY

Regional mapping by the Geological Survey of Canada indicates that the property is Triassic sediments; limestones and siliceous argillaceous rocks and their metamorphic equivalents. Exploration targets are sediment-hosted lead and silver mineralization similar to the mineral occurrence located immediately to the south of the claim, at the headwaters of Lemieux Creek.

These Triassic sediments are cut elsewhere by the Raft Batholith and related intrusive rocks. A small, leucoquartz monzonite plug (perhaps genetically related to the Raft Batholith) is found northeast of Tintlhohtan Lake. Molybdenum mineralization is associated with this intrusive body, thus, if this plug also cuts the sediments of the claim then molybdenite or powellite may represent an exploration target.

## INSTRUMENTATION AND THEORY

The magnetic survey was performed using a Scintrex portable precession magnetometer (model MP-2). This instrument utilizes the phenomenon of nuclear magnetic resonance to measure the flux density of the total magnetic field. Owing to varying associations of magnetic minerals such as magnetite and pyrrhotite with differing rock units, magnetic surveys enable basic geologic mapping of these rock units, the exploration for certain mineral deposits associated with them, and the revelation of subsurface plutons.

## SURVEY PROCEDURE

The readings were taken every 30 meters on east-west lines spaced 100 meters apart. Fluorescent flagging, with the grid coordinates worked thereon were placed at each 30 meter station.

The magnetic diurnal change was monitored in the field by the closed loop method and the appropriate corrections were subsequently applied to the data obtained.

#### COMPILATION OF DATA

The data was plotted on a plan of the survey area being Figure 3 to a scale of 1:3000 (1 cm = 300 m) and then contoured at a 100-gamma contour interval. It was also profiled on Figure 4 at the same horizontal scale and at a vertical scale of 1 cm = 400 gammas.

#### DISCUSSION OF RESULTS

The data varies from a low of 58,283 gammas to a high of 59,466 gammas to give a range of 1183 gammas. This is a rather large range for such a small survey area and is due entirely to the magnetic high located in the eastern central part of the survey area.

The anomaly is a verification of the government aeromagnetic anomaly. The GSC geology map shows the whole area to be underlain by sediments which certainly could not be the cause of such high magnetics. Therefore, possible causes are an intrusive high in magnetite content underlying basic volcanics, or a zone of magnetite-rich mineralization.

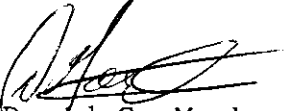
There are a number of magnetic highs in the area with which sulphide mineralization is associated. The most notable is the recent discovery to the southeast of Little Fort where mineralization is located on the flank of a magnetic high. The Windpass Mine east of Little Fort as well is found within a magnetic high. Here the high is caused by basic intrusives associated with the



zone of mineralization

The magnetic field within the western part of the survey area is quite flat and is likely a result of the underlying sedimentary bedrock.

Respectfully submitted,  
GEOTRONICS SURVEYS LTD.



David G. Mark,  
Geophysicist

SELECTED BIBLIOGRAPHY

Aeromagnetic Map, Clearwater, B.C., Geol. Survey of  
Can., Map 5229G, Sheet 92P/9 1968

Campbell, R.B., Tipper, H.W., Geology of Bonaparte  
Lake Map - Area, B.C. Geol. Survey of Can., Mem. 363,  
1971

GEOPHYSICIST'S CERTIFICATE

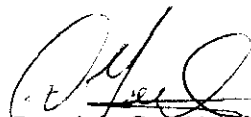
I, DAVID G. MARK, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

THAT I am a Consulting Geophysicist of Geotronics Surveys Ltd., with offices at #403-750 West Pender Street, Vancouver, British Columbia.

I further certify:

1. I am a graduate of the University of British Columbia (1969) and hold a B.Sc., degree in Geophysics.
2. I have been practising my profession for the past 12 years and have been active in the mining industry for the past 15 years.
3. That I am an active member of the Society of Exploration Geophysicists and a member of the European Association of Exploration Geophysicists.
4. This report is compiled from data obtained from a ground magnetic survey carried out by Roland Wood during the period of June 11th to 14th, 1980.
5. I do not hold any interest in the SIL 2 Claim on Taweel Lake nor do I expect to receive any interest as a result of writing this report.

February 2, 1980

  
David G. Mark,  
Geophysicist

AFFIDAVIT OF EXPENSES

The proton precession magnetometer survey was carried out from June 11th to 14th, 1980 on the SIL 2 Claim, Taweel Lake area, Kamloops Mining Division to the value of the following:

FIELD:

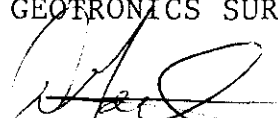
3 man crew, 4 days @ \$270/day	\$ 1,080.00
Vehicle rental (4 wheel drive) and gas	422.00
Lodging costs	240.00
Instrument rental	80.00
Survey supplies	20.00
	<u>\$ 1,762.00</u>

REPORT:

Geophysicist, 5 hours @ \$37.50/hour	\$ 187.50
Geophysicist technician, 3 hours @ \$20/hour	60.00
	<u>\$ 247.50</u>

TOTAL	<u>\$ 2,009.50</u>
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Respectfully submitted,  
GEOTRONICS SURVEYS LTD.

  
David G. Mark,  
Geophysicist

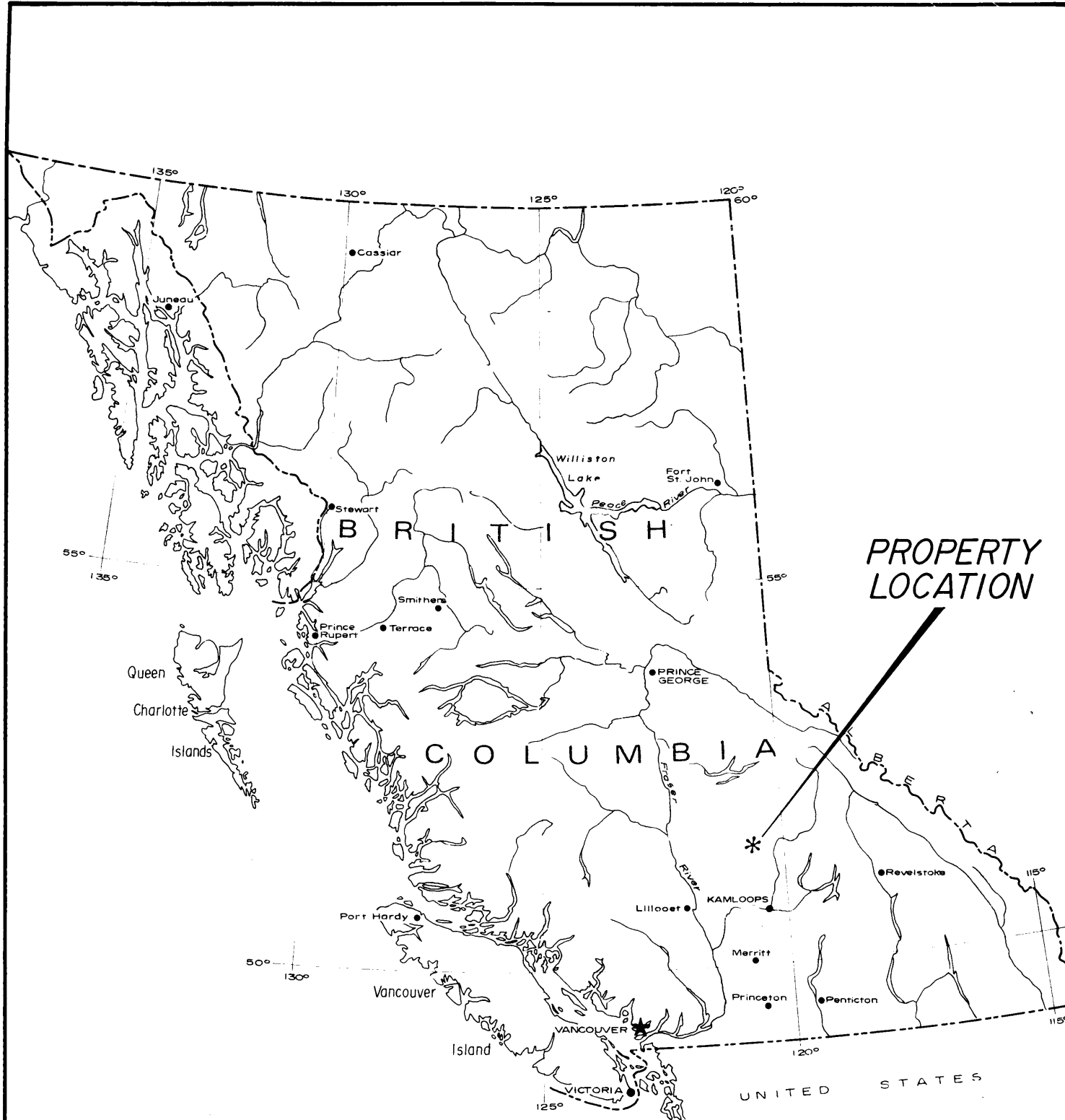
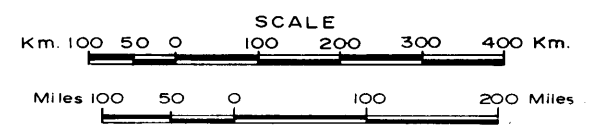
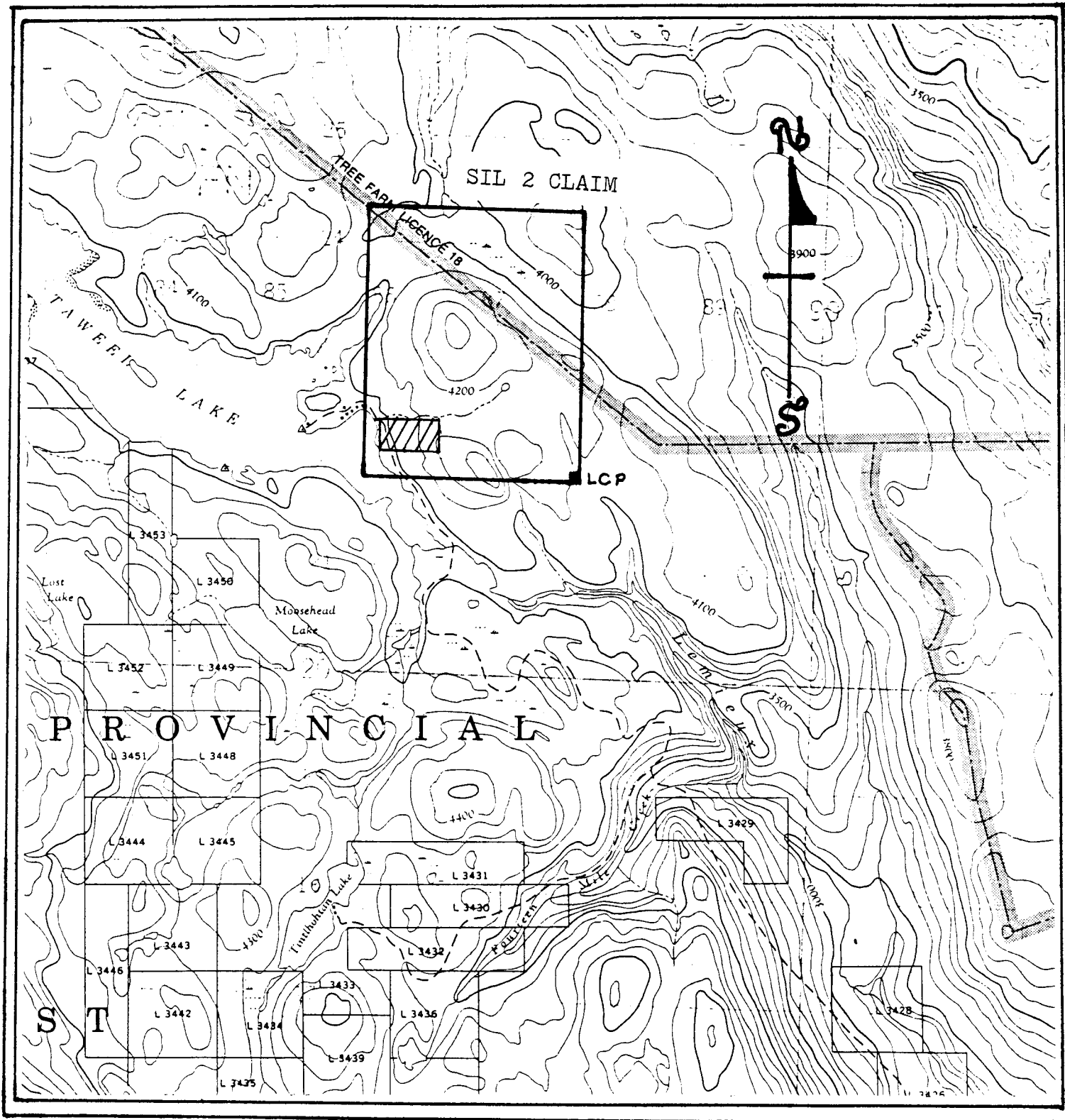



FIG. 1  
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 SIL 2 CLAIM  
 TAWEEL LAKE, KAMLOOPS M.D., B.C.

**LOCATION MAP**

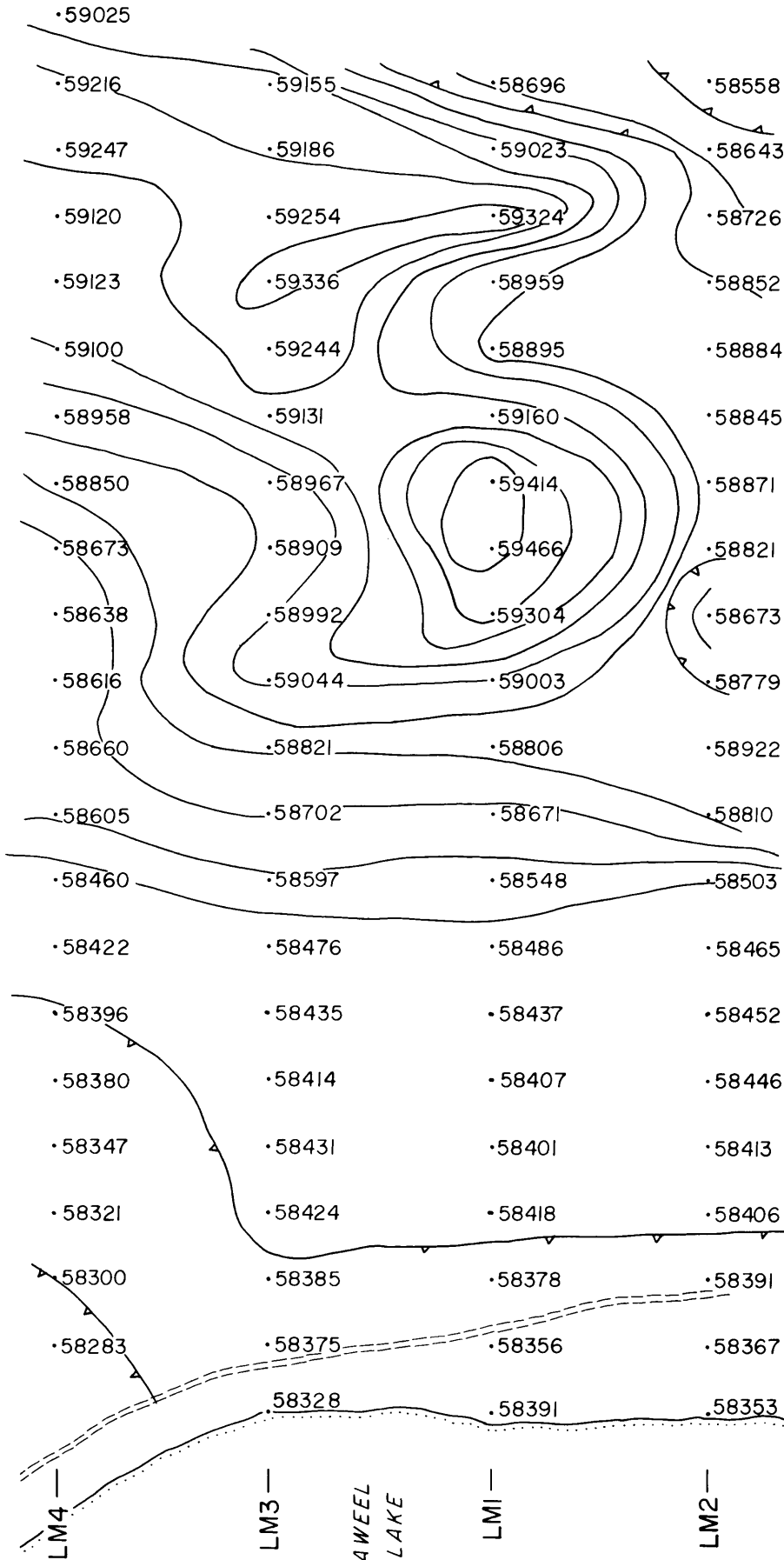




SIL 2 CLAIM : MAP SHEET 92 P/9  
Scale 1:50,000

 Survey Area

SIMON A. JUTRAS  
SIL 2 CLAIM  
Taweel Lake, Kamloops M.D., B.C.  
CLAIM MAP  
FIGURE 2



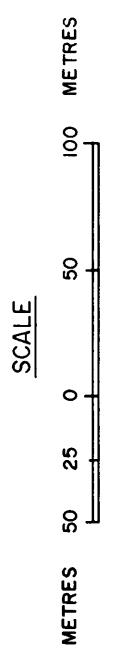
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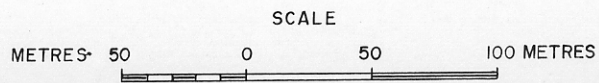
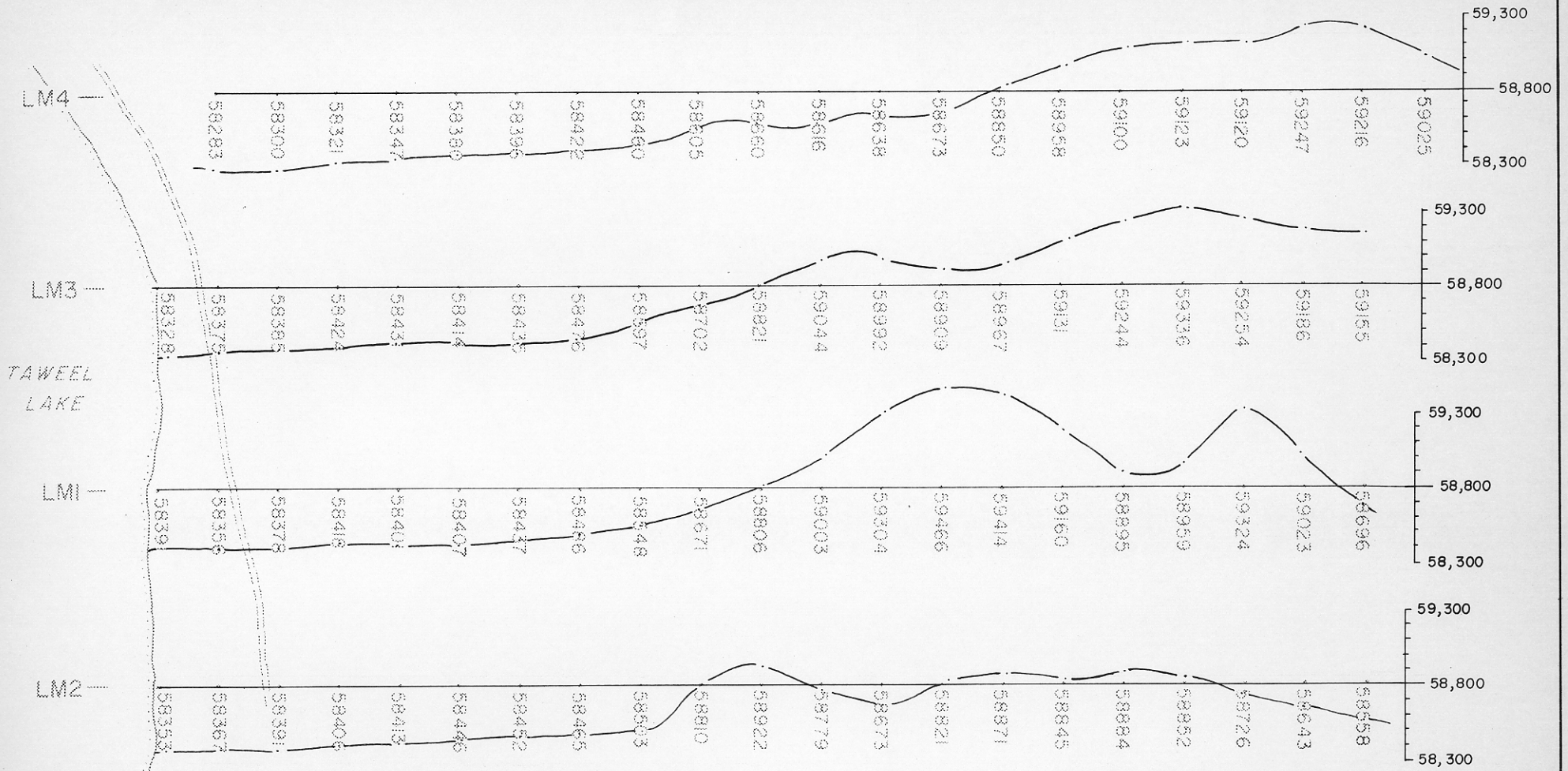
SIMON A JUTRAS  
SIL 2 CLAIM  
TAWEEL LAKE, KAMLOOPS M.D., B.C.

### MAGNETIC SURVEY DATA & CONTOURS

CONTOUR INTERVAL - 100 GAMMAS.  
INSTRUMENT : PROTON PRECESSION  
SCINTREX MODEL MP-2

DRAWN BY: D.G.M.	JOB. No. 80-85	DATE: JAN. 1981	SCALE: 1:3,000	FIG. No. 3
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SIL 2 CLAIM			
TAWHEEL LAKE, KAMLOOPS M.D., B.C.			
MAGNETIC SURVEY			
PROFILES			
DRAWN BY:	JOB. No.	DATE:	SCALE:
D.G.M.	80-85	JAN. 1981	1:3,000
FIG. No.			4