2905

MAGNETOMETER SURVEY REPORT

ON THE ZZ CLAIMS

KAMLOOPS MINING DIVISION, B. C.

for

GRANDEUR MINES LTD (NPL)

by

R. H. D. Philp, P. Eng.,

March 15, 1971

Vancouver, B. C.

AGILIS EXPLORATION SERVICES LTD.
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on the

ZZ CLAIMS, KAMLOOPS MINING DIVISION, B. C.,

for

GRANDEUR MINES LTD (N. P. L.)

INTRODUCTION

The ZZ claims comprise a group of 26 mineral claims lying 7 miles west of Kamloops, British Columbia, and held by Grandeur Mines Ltd (N. P. L.)

Situated near the northern edge of the Iron Mask Batholith, the claims are believed to be underlain mainly by Kamloops Group volcanics, which cap the older intrusive, and possibly volcanic rocks in this area.

During 1969 the company conducted a geochemical survey over the entire claim group. This was followed by a magnetometer survey conducted over most of the claim group during 1970.

All field work, plotting, etc. was carried out by personnel of Direct Development Ltd. The writer has reviewed the data and assessed the results of this survey.

GENERAL CONDITIONS

The claims are situated 7 miles west of Kamloops, British Columbia, with Highway No. 1 passing near the southern edge of the group. Several secondary roads traverse the property.

Co-ordinates near the center of the group are 120° 30 1/2' west longitude, 50° 41' north latitude.

Topographic relief is low to moderate, with elevations varying between approximately 1600 and 2800 feet above sea-level.

Much of the area consists of open grazing country while other areas are lightly treed mainly with jackpine. Climate is semi-arid.

PROPERTY

The property consists of 26 mineral claims recorded in the Kamloops Mining Division of British Columbia. These are the ZZ 2-8, 15-20, 27-32, 39-44.

The magnetometer survey was conducted on all but a portion of claims ZZ 43, 44, 31, 32, 19, 20, 7, 8.

GEOLOGY

Regional geological mapping of the area by the Geological Survey of Canada and the British Columbia Department of Mines is available at scales of 1 inch = 4 miles and 1 inch = approximately 3300 feet.

These indicate that the property is underlain mainly by volcanic rocks belonging to the Kamloops Group of Tertiary Age. In the region of the ZZ claims these younger volcanics cap the northern contact of the Iron Mask Batholith. These intrusives, outcropping to the south, consist mainly of microdiorite, porphyritic microdiorite, diorite, monzonite, and syenite, with narrow bands of picrite, basalt and serpentinite.

Copper mineralization is widespread throughout the intrusives to the south and southeast, occurring in shears, veins, breccia zones and disseminations.

MAGNETOMETER SURVEY

General:

The magnetometer survey was conducted over the previously established grid, readings being taken at 200 foot intervals on north-south cross-lines spaced 400 feet apart.

A total of approximately 27 miles of cross-lines plus 4 miles of base and tie lines were surveyed in this manner.

Instrument:

The instrument employed was a Sharpe Model MF-1 Fluxgate magnetometer. This is a hand held instrument, self orienting and requiring only course levelling.

Range of the instrument is plus or minus 100,000 gammas on the highest scale and sensitivity is plus or minues 20 gammas on the most sensitive, or 1000 gamma scale, with a readability of 5 gammas.

A high latitude adjustment permits zeroing of the instrument for the area being surveyed.

Field Procedure:

Base stations were established along base and tie lines, being the average of two readings taken at each station.

Following this readings were taken in loops along cross lines, each loop beginning and ending at a base station.

Corrections:

The instrument has been compensated for normal temperature variations and the only corrections required are for diurnal changes, which were applied to each loop. This variation is assumed to be linear and the correction for any station in a loop is the ratio of the time elapsed when the reading is taken at that station divided by the total elapsed time for the loop, multiplied by the total diurnal variation for that loop.

Results:

The magnetic susceptibility of the area surveyed is relatively uniform, varying between extremes of + 35 and + 2896 gammas. The central portion is most uniform. In the north a series of weak highs and lows extend westerly from the eastern boundary at 18 + 00N.

In the southern portion of the group a series of magnetic lows trends southwesterly from 0 + 00W, 34 + 00S to 28 + 00W, 56 + 00S. These lie along the northern edge of a similarly trending weak copper geochemical anomaly. The linear nature exhibited by the lows suggests they may be indicative of some structural feature such as a fault zone.

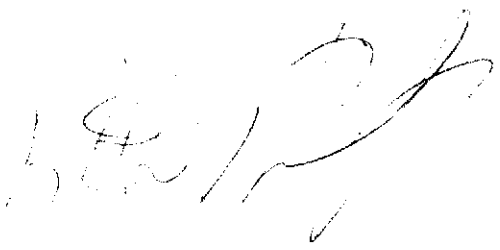
CONCLUSIONS AND RECOMMENDATIONS

The magnetometer survey failed to show any features indicative of intrusives being exposed through the volcanic capping. The only significant feature is a southwesterly trending magnetic low in the southeastern portion of the claims. This lies adjacent to a copper geochemical anomaly and may be indicative of a fault zone.

Detailed geological mapping should be conducted in the vicinity of the geochemical anomaly and magnetic low, followed by possible trenching.

Respectfully submitted,

R. H. D. Philp, P. Eng.,



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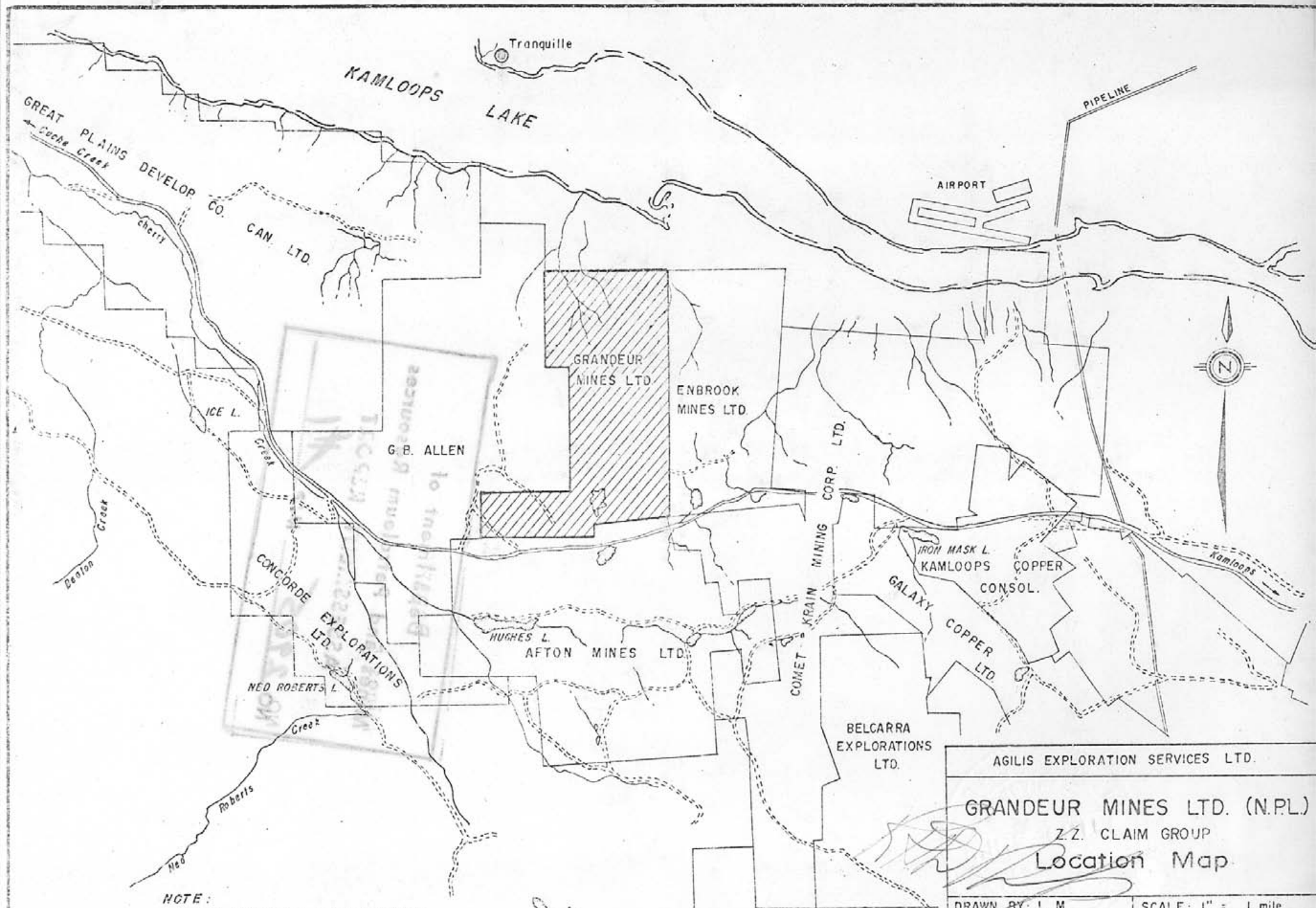

NOTE:
property boundaries are approximate.

AGILIS EXPLORATION SERVICES LTD.

GRANDEUR MINES LTD. (N.P.L.)

Z.Z. CLAIM GROUP

Location Map

DRAWN BY: L. M.	SCALE: 1" = 1 mile
CHECKED BY: R. P.	DATE: October, 1969

76+00 W | 72+00 W | 68+00 W | 64+00 W | 60+00 W | 56+00 W | 52+00 W | 48+00 W | 44+00 W | 40+00 W | 36+00 W | 32+00 W | 28+00 W | 24+00 W | 20+00 W | 16+00 W | 12+00 W | 8+00 W | 4+00 W | B.L. 0+00

40+00 N
36+00 N
32+00 N
28+00 N
B.L. 26+00N
24+00 N
20+00 N
16+00 N
12+00 N
8+00 N
4+00 N
B.L. 0+00
4+00 S
8+00 S
12+00 S
16+00 S
20+00 S
24+00 S
28+00 S
B.L. 30+00S
32+00 S
36+00 S
40+00S
44+00 S
48+00 S
52+00 S
56+00 S
B.L. 58+00S
60+00 S
64+00 S
68+00 S
72+00 S

Z.Z. No. 39 | Z.Z. No. 41 | Z.Z. No. 43
Z.Z. No. 40 | Z.Z. No. 42 | Z.Z. No. 44
Z.Z. No. 27 | Z.Z. No. 29 | Z.Z. No. 31
Z.Z. No. 28 | Z.Z. No. 30 | Z.Z. No. 32
Z.Z. No. 15 | Z.Z. No. 17 | Z.Z. No. 19
Z.Z. No. 16 | Z.Z. No. 18 | Z.Z. No. 20
Z.Z. No. 3 | Z.Z. No. 5 | Z.Z. No. 7
Z.Z. No. 50 | Z.Z. No. 2 | Z.Z. No. 4 | Z.Z. No. 6 | Z.Z. No. 8

LAKE
SWAMP
TRANS CANADA HIGHWAY

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2905 MAP #2

2905 M-2

GRANDEUR MINES LIMITED N.P.L.
Z.Z. MINERAL CLAIMS
KAMLOOPS B.C.
BASE MAP

DRAWN BY:	SCALE: 1" = 400'
CHECKED BY:	DATE:

76+00W | 72+00W | 68+00W | 64+00W | 60+00W | 56+00W | 52+00W | 48+00W | 44+00W | 40+00W | 36+00W | 32+00W | 28+00W | 24+00W | 20+00W | 16+00W | 12+00W | 8+00W | 4+00W | 0+00

40+00N
36+00N
32+00N
28+00N
B.L. 26+00N
24+00N
20+00N
16+00N
12+00N
8+00N
4+00N
B.L. 0+00
4+00S
8+00S
12+00S
16+00S
20+00S
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28+00S
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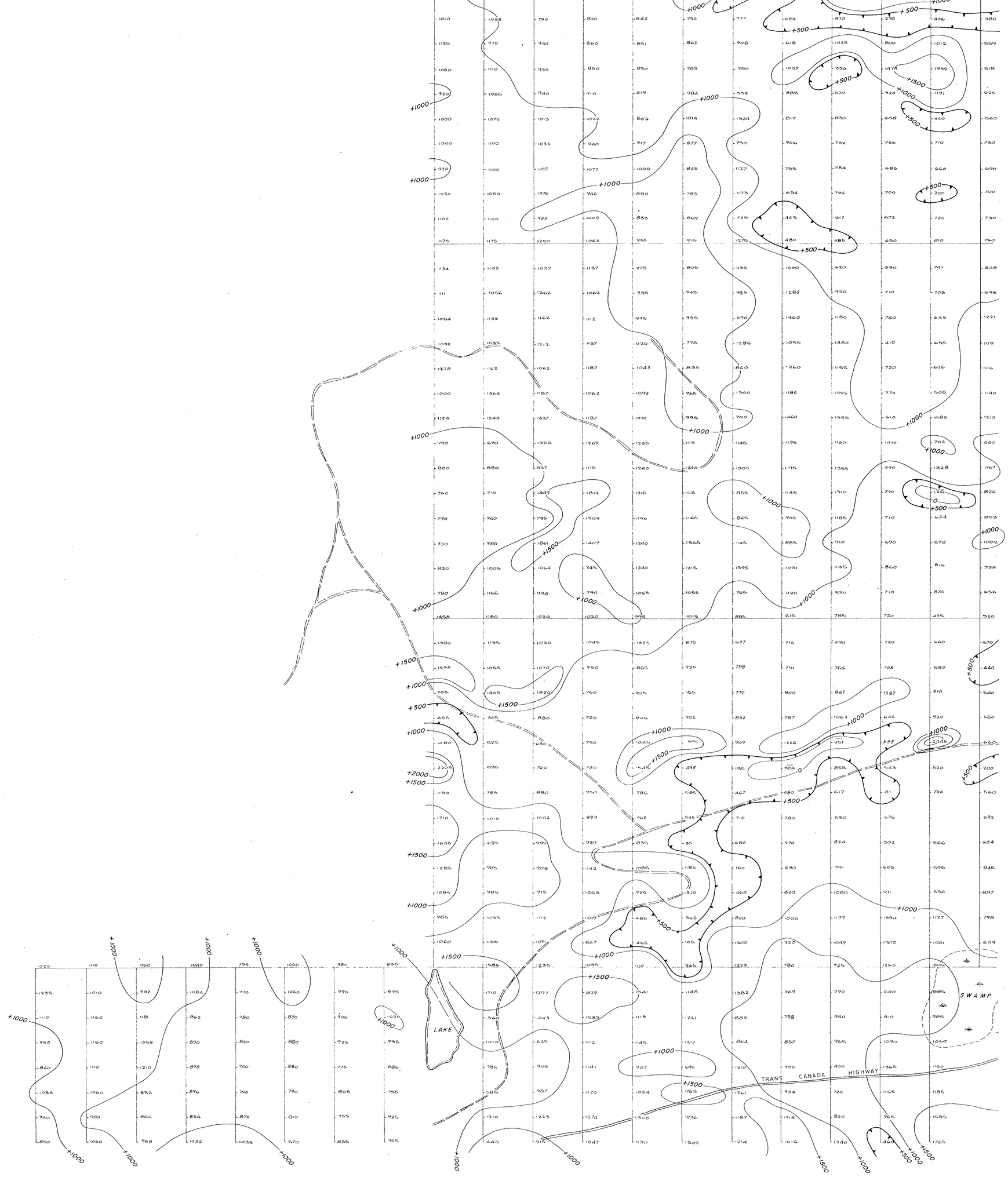

NOTE:
INSTRUMENT - SHARPE M.F.-I
500 GAMMAS - CONTOUR INTERVAL

2905 M-3

GRANDEUR MINES LIMITED N.P.L.
Z.Z. MINERAL CLAIMS
KAMLOOPS B.C.

MAGNETOMETER CONTOUR PLAN

DRAWN BY:	SCALE: 1" = 400'
CHECKED BY:	DATE: