

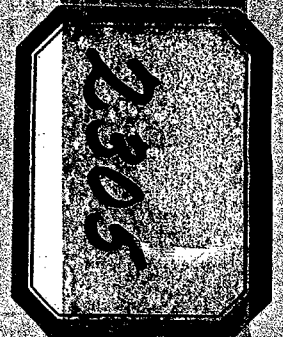
GEOCHEMICAL AND MAGNETOMETER SURVEYS  
REPORT ON THE DAWN, HILMA AND TEMPO CLAIMS  
HILMA, HILMA 1-7, DAWN, DAWN 1-7, TEMPO 1-8

Situated 40 miles south-southeast of Quesnel, B. C.  
122° 15'W; 52° 28'N

Submitted by: R. H. D. Philp, P. Eng.,

Owner: *C. FULLER, A. MATHESON, STURE PEARSON*

Work conducted by Direct Development Ltd., during  
May and June, 1969



2305

REPORT ON THE  
GEOCHEMICAL AND MAGNETOMETER SURVEYS  
ON THE  
DAWN, HILMA AND TEMPO GROUPS,  
CARIBOO MINING DIVISION, B. C.

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

March 1970

Department of  
Mines and Petroleum Resources  
**ASSESSMENT REPORT**

NO. **2305** MAP.....

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MAPS (*Rear Pocket*)

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|--|---------------|
| #1 BASE MAP                                    | 1" = 500 feet |
| #2 GEOCHEMICAL SURVEY PLAN<br>SHOWING READINGS | 1" = 500 feet |
| #3 MAGNETOMETER SURVEY PLAN                    | 1" = 500 feet |
| #4 GEOCHEMICAL SURVEY PLAN SHOWING<br>CONTOURS | 1" = 500 feet |

REPORT ON THE  
GEOCHEMICAL AND MAGNETOMETER SURVEYS  
ON THE  
DAWN, HILMA AND TEMPO GROUPS,  
CARIBOO MINING DIVISION, BRITISH COLUMBIA

INTRODUCTION

The Dawn, Hilma and Tempo Groups comprise a total of 24 claims located approximately 40 miles south-southeast of Quesnel, British Columbia.

Copper-molybdenum mineralization had previously been exposed by trenching near the western edge of the claims. During 1969, line cutting and geochemical soil sampling was conducted over the entire group and magnetometer and induced polarization surveys conducted over a portion. The line cutting and geochemical survey was conducted by personnel of Direct Development Ltd under the direction of the writer; the magnetometer survey by Brian Mottershead of Agilis Exploration Services Ltd. ,

GENERAL CONDITIONS

The claims are readily accessible by secondary roads from Macalister, 8 miles to the west. Topographic relief is low; logging operations have been conducted over a portion of the claims which are lightly forested. Overburden is extensive throughout the claims area.

The claims are mainly underlain by granitic rocks belonging to a north-south elongated intrusive body underlying Granite Mountain to the north. This generally consists of a coarse-grained gneissic diorite. Medium grained granodiorite mapped east of the group may extend onto the southern portion of the claims.

Limestone and schist, with associated magnetite and hematite, forming an east-west trending band likely extend through the extreme southern portion of the group in the vicinity of Anchor 3 and 5. Pyrite, chalcopyrite and molybdenite are associated with quartz veins near the extreme western edge of the group on Dawn 3 and Anchor 4 mineral claims.

### PROPERTY

The property consists of the following 24 mineral claims:

Claim	Record Number
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Dawn	22008
Dawn 1 - 7	22009 - 22015
Hilrna	22016
Hilrna 1 - 7	22017 - 22023
Tempo 1 - 8	22170 - 22173, 22553 - 22556

### GEOCHEMICAL SURVEY

#### Field Procedures:

The survey formed part of a larger survey on the adjoining claims to the west. East-west base lines from this earlier survey were extended over the claims, with north-south cross lines at 400 foot intervals. Lines were established by chain and compass, cut out, and stations marked every 200 feet. A total of 20 line miles of base and cross lines were established in this manner.

Soil samples, which were taken at 200 foot intervals on all cross lines, were collected using a mattock or auger from the soil horizon immediately beneath the surface humus layer. Soil type generally consisted of a light brown to grey silty sand.

Data regarding soil type, depth taken, vegetation, topography and any other pertinent features that could be used later in interpreting the results was recorded at each sample location.

#### Testing Procedure:

Samples were packaged in kraft envelopes and sent to Chemex Labs Ltd of North Vancouver where they were dried in an electric oven and screened to -80 mesh. Following this they were digested in a perchloric-nitric acid mixture and analyzed for total copper content by atomic absorption.

### Survey Results:

Background values vary up to approximately 40 parts per million (ppm) copper. Four main anomalous areas containing values of 100 ppm copper or greater were outlined, plus several lesser areas containing only 1 or 2 anomalous values. These latter are likely due to sampling errors or spurious values in the overburden and are not considered significant.

1. Anomalous values occur near the south end of lines 44 + 00E to 52 + 00E in an easterly trending zone on Anchor 3, open to the west on the adjoining claims. Peak value is 8800 ppm copper. Although no outcrop was noted, the anomaly probably represents copper mineralization associated with a limestone horizon outcropping further west.
2. An east-west trending anomaly measuring approximately 1600 by 400 feet is centered at 58 + 00E, 42 + 00N. This is the strongest anomaly found with a peak value of 11,400 ppm copper. Trenching has exposed chalcopyrite in diorite approximately 400 feet west of the anomaly.
3. Anomalous values occur on lines 112 + 00E and 116 + 00E, centered at 64 + 00N, with the anomalous area open to the east. No outcrop was reported within the anomalous area which measures 800 by 600 feet.
4. A smaller, more erratic anomalous area, measuring approximately 1100 by 500 feet, is centered at 76 + 00E, 60 + 00N. Peak value is 585 ppm copper. Several high values are also erratically distributed in the surrounding area. Diorite outcrops west of the main anomalous area.

### MAGNETOMETER SURVEY

A magnetometer survey was conducted in the southwest and northwest portions of the claims as an aid in future geological mapping and in interpreting the results of an induced polarization survey.

#### Field Procedures and Corrections:

The survey was run in conjunction with one on the adjoining property to the west. Base stations were established along the base lines by averaging two readings at each station. Readings were taken at 100 foot intervals on cross lines, each loop beginning and ending at a base station.

Readings were plotted on a plan at a scale of 1 inch = 500 feet and contoured at 100 gamma intervals.

### Survey Results:

The magnetic susceptibility is very uniform throughout the surveyed area, with values generally ranging between 150-350 gammas. Slightly lower values in the northeastern portion of the grid indicate that schists may underly a portion of this area.

Erratic highs in the southernmost portion surveyed probably reflect magnetite mineralization associated with an easterly trending limestone band outcropping several claim lengths to the west.


### CONCLUSIONS

Four anomalous areas warranting further investigation have been outlined by the geochemical survey. One may be associated with copper-magnetite mineralization in limestone. The others are believed to be underlain by intrusive rocks and possibly schists.

No significant variations were noted in the magnetics throughout the surveyed area. Erratic high values near the south ends of lines 52 + 00E and 56 + 00E further suggest that the magnetite bearing limestone band mapped to the west extends through this area.

An induced polarization survey has also been completed. Trenching and drilling are required to further test the anomalous areas outlined.

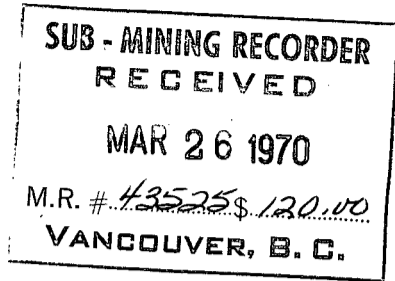
Respectfully submitted,

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

March, 1970

DOMINION OF CANADA:  
PROVINCE OF BRITISH COLUMBIA.  
To Wit:

In the Matter of



I, W. L. McCullagh

of #24, 448 Seymour St.  
Vancouver, B.C.

in the Province of British Columbia, do solemnly declare that

Expenses to Date on the Granite Lake Group  
of claims are:

Geo-chemical Survey

Wages

A. Watson Sr. June - July @ 600.00 per mo.	\$1200.00
A. Watson Jr. June - July @ 600.00 per mo.	1200.00

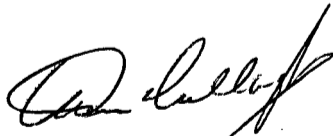
Chemex Labs Soil Testing	400.00
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Agillis Exploration Services	500.00
Interpretation of results and reports	

\$3300.00

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City  
of Vancouver, in the  
Province of British Columbia, this 26  
day of March 1970, A.D.



Julie Suran  
A Commissioner for taking Affidavits within British Columbia or  
A Notary Public in and for the Province of British Columbia.  
Sub-Mining Recorder



**In the Matter of**

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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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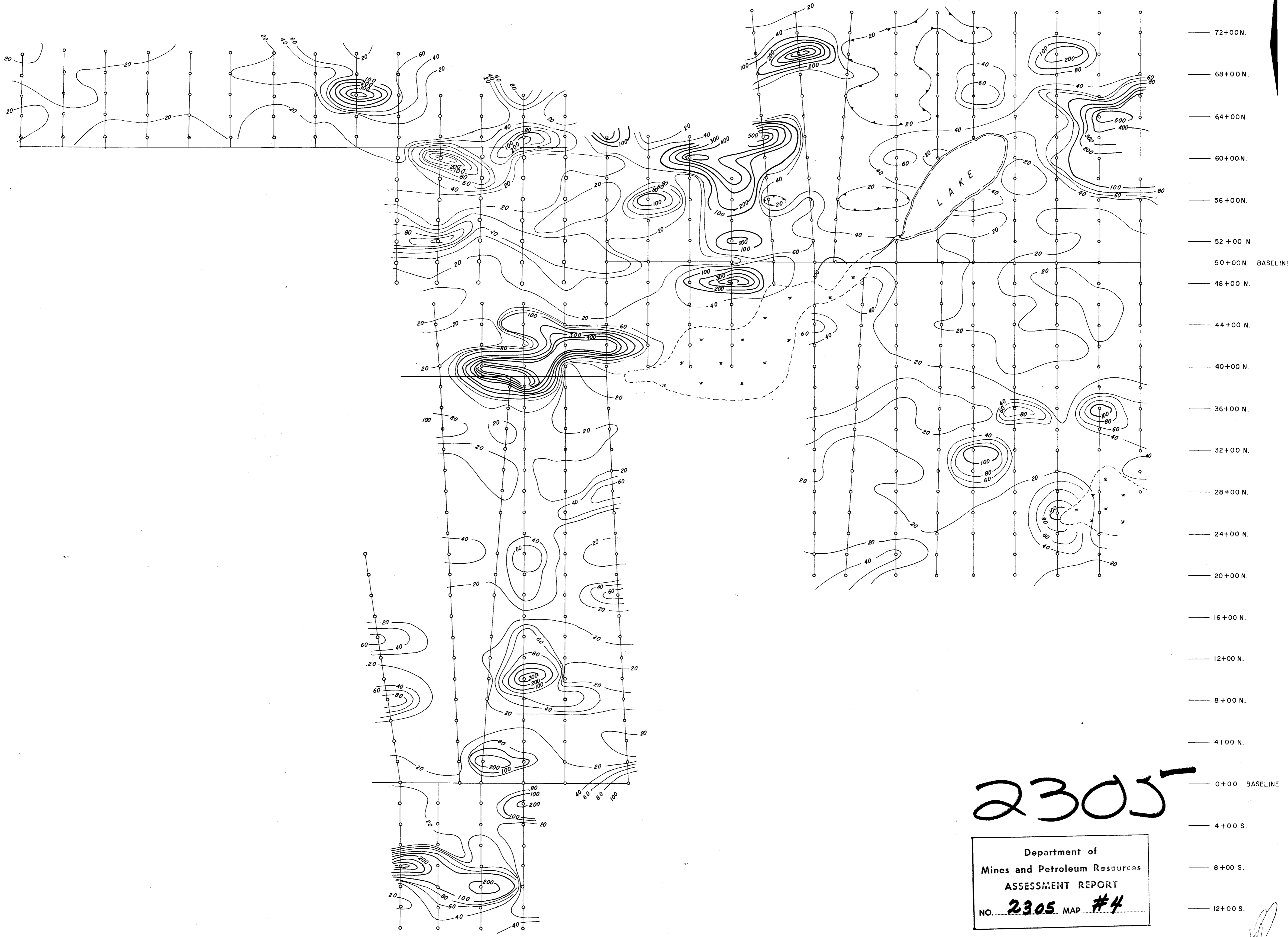
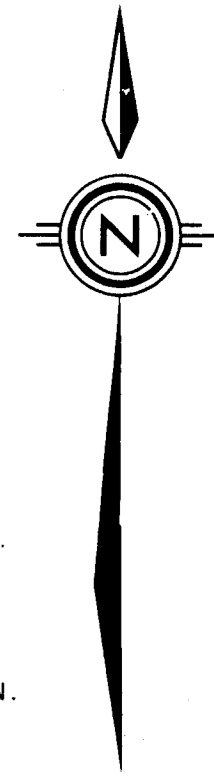
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**Statutory Declaration**  
(CANADA EVIDENCE ACT)

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8+00 E. 12+00 E. 16+00 E. 20+00 E. 24+00 E. 28+00 E. 32+00 E. 36+00 E. 40+00 E. 44+00 E. 48+00 E. 52+00 E. 56+00 E. 60+00 E. 64+00 E. 68+00 E. 72+00 E. 76+00 E. 80+00 E. 84+00 E. 88+00 E. 92+00 E. 96+00 E. 100+00 E. 104+00 E. 108+00 E. 112+00 E. 116+00 E.



72+00 N.  
68+00 N.  
64+00 N.  
60+00 N.  
56+00 N.  
52+00 N.  
50+00 N. BASELINE  
48+00 N.  
44+00 N.  
40+00 N.  
36+00 N.  
32+00 N.  
28+00 N.  
24+00 N.  
20+00 N.  
16+00 N.  
12+00 N.  
8+00 N.  
4+00 N.  
0+00 BASELINE  
4+00 S.  
8+00 S.  
12+00 S.

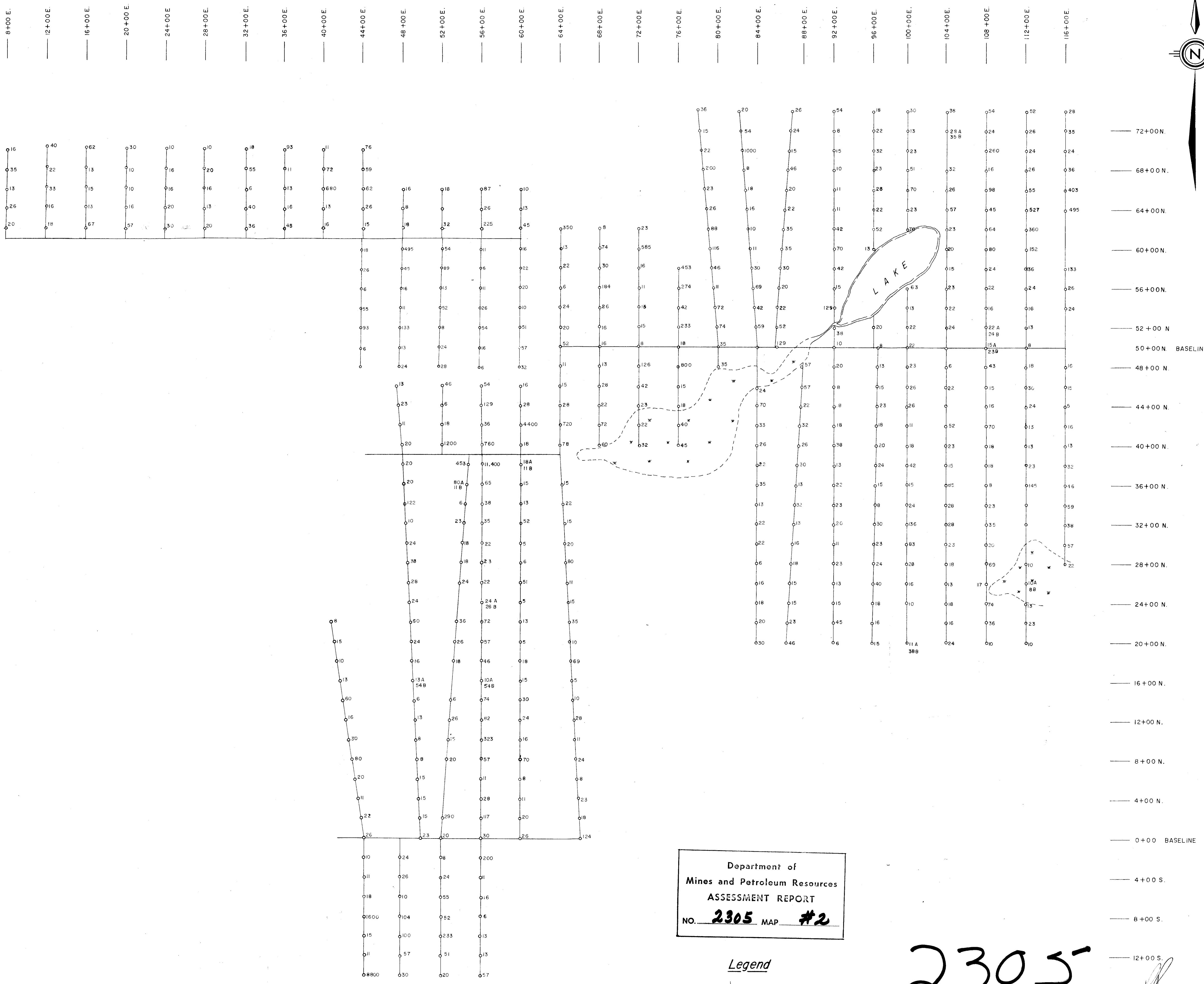
2305

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2305 MAP #4

**Legend**

— 80 — COPPER CONTOUR (Contour Interval 20 ppm.)

AGILIS EXPLORATION SERVICES LTD.	
ENSBROOK MINES LTD.(N.P.L.)	
McLeese Lake Property Geochemical Survey CONTOUR MAP	
DRAWN BY: K. K.	SCALE: 1" = 500 Feet
CHECKED BY: R. P.	July, 1969



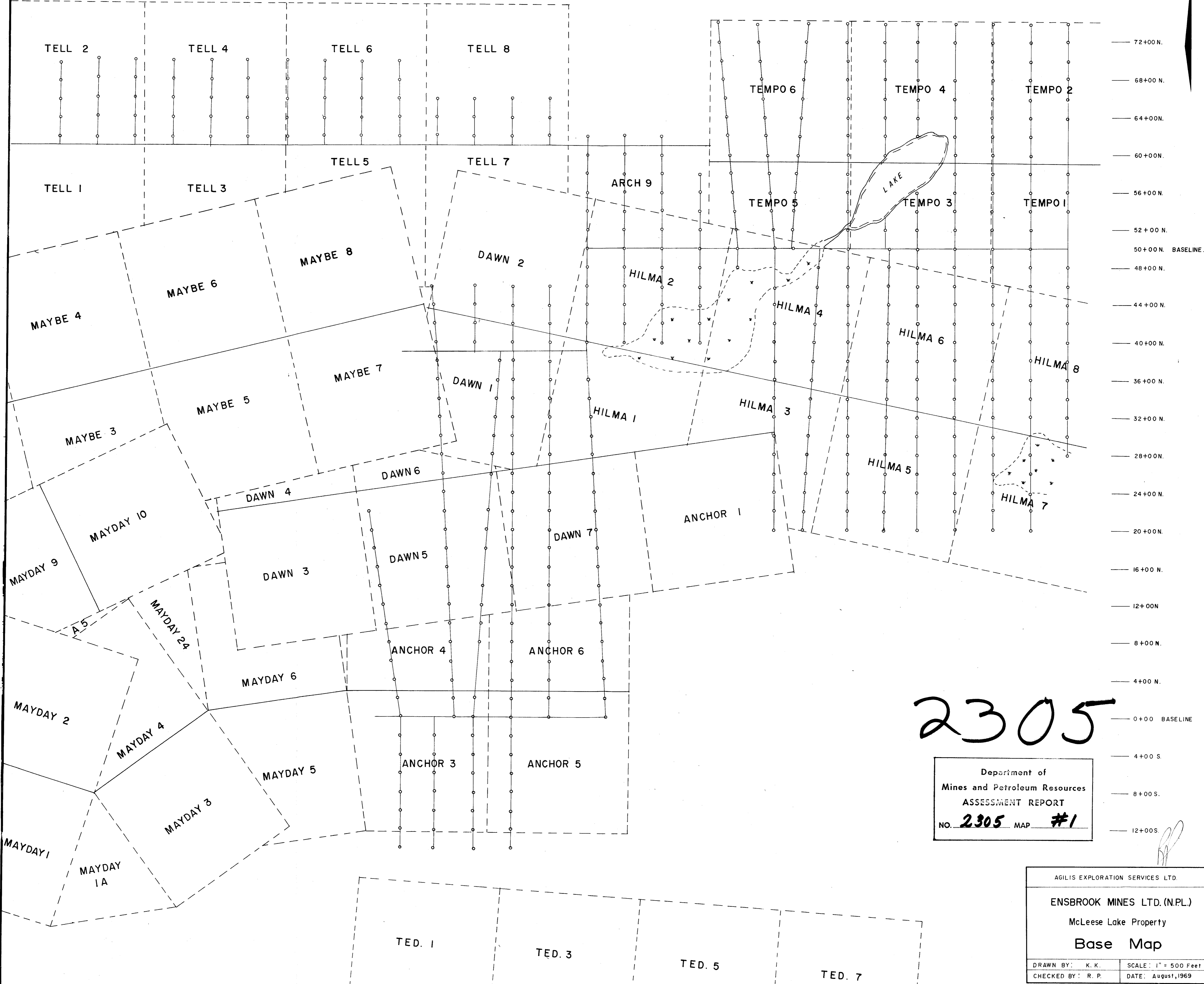
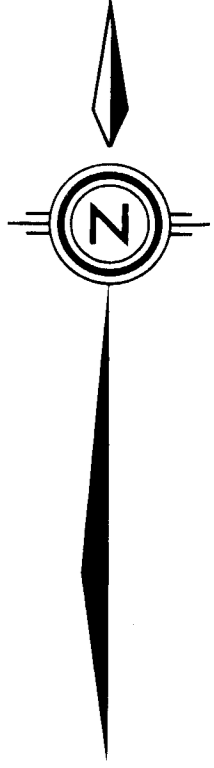
Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. **2305** MAP **#2**

Legend  
○<sub>60</sub> Copper value in ppm.

**2305**

AGILIS EXPLORATION SERVICES LTD.	
ENSBROOK MINES LTD.(N.P.L.)	
McLeese Lake Property	
<b>Geochemical Survey</b>	
DRAWN BY: K. K.	SCALE: 1" = 500 Feet
CHECKED BY: R. P.	July, 1969

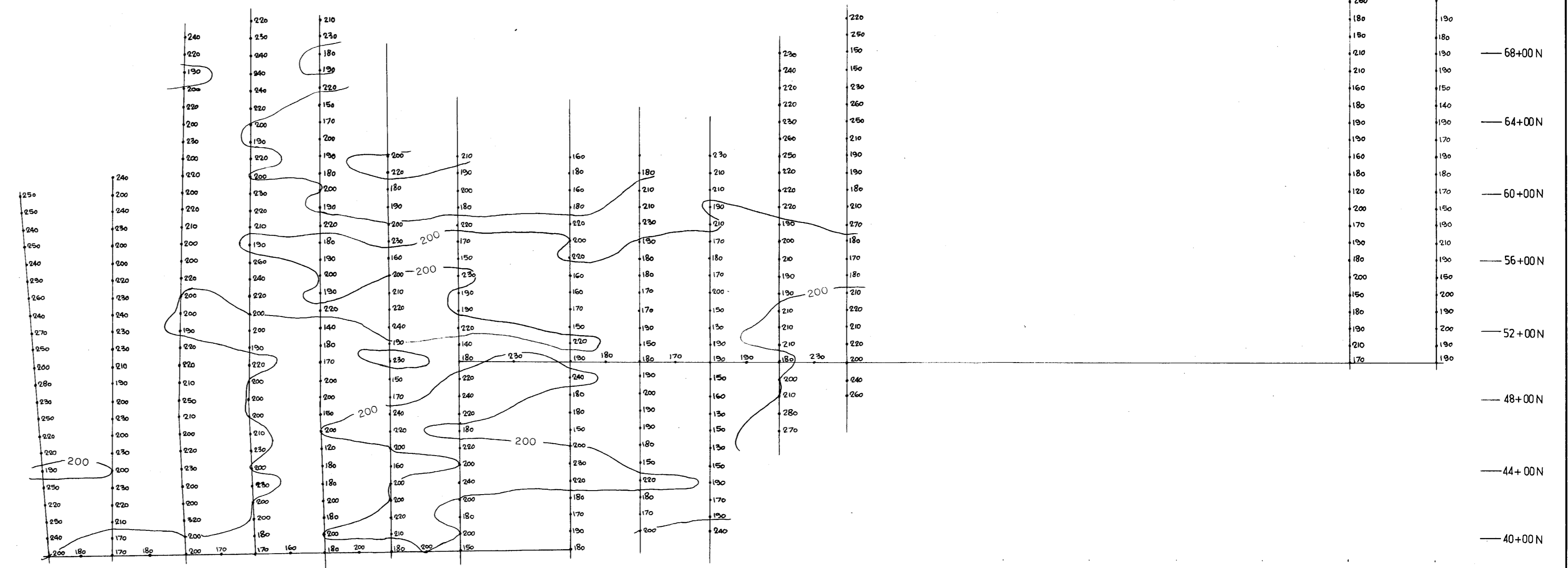
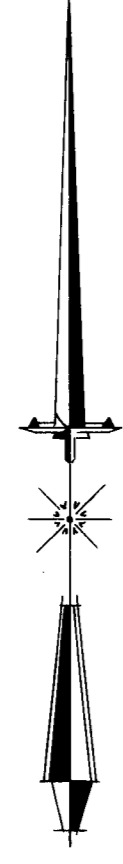
8+00 E. 12+00 E. 16+00 E. 20+00 E. 24+00 E. 28+00 E. 32+00 E. 36+00 E. 40+00 E. 44+00 E. 48+00 E. 52+00 E. 56+00 E. 60+00 E. 64+00 E. 68+00 E. 72+00 E. 76+00 E. 80+00 E. 84+00 E. 88+00 E. 92+00 96+00 E. 100+00 E. 104+00 E. 108+00 E. 112+00 E. 116+00 E.



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Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2305 MAP #1

AGLIS EXPLORATION SERVICES LTD.  
ENSBROOK MINES LTD. (N.P.L.)  
McLeese Lake Property  
Base Map  
DRAWN BY: K. K. SCALE: 1" = 500 Feet  
CHECKED BY: R. P. DATE: August, 1969



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Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2305 MAP #3

AGILIS EXPLORATION SERVICES LTD.  
ENSBROOK MINES LIMITED NPL.  
McLEESE LAKE PROPERTY  
CARIBOO MINING DIVISION  
MAGNETOMETER SURVEY  
(VALUES)  
DRAWN BY: P.V. SCALE: 1" = 500'  
CHECKED BY: R.P. DATE: JANUARY, 1970