



31M04SW0045 2.1422 STRATHCONA

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2.1422

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PROJECTS UNIT

GEOPHYSICAL ENGINEERING LIMITED

NORTH BAY, ONTARIO

REPORT ON THE

GEOPHYSICAL SURVEY

OF

CLAIMS L357905 and L357906

SAVARD OPTION

STRATHCONA TOWNSHIP, ONTARIO

FOR

COPPERFIELDS MINING CORPORATION LIMITED

N. T. S. 31 M/4/sw

January 17, 1974

REPORT NO. 503 N. B.

H. D. McLeod (P. Eng.)



SUMMARY & RECOMMENDATIONS

Geophysical surveys of the claims failed to locate any conductors of interest. A small conductor lying a short distance to the south of the #3 post of claim L357905 may suggest an area of interest to the southwest.

The geophysical results suggest that the Huronian sedimentary series is thick.

No further work on the claims is warranted.

INTRODUCTION

Claims L357905 and L357906 Strathcona Township were acquired from L. Savard of North Bay, Ontario in June, 1973 as part of a larger group. Exploration work carried out during 1973 did not extend to this area but tested copper showings to the north. The prime purpose of these surveys was assessment work since the area is underlain by Huronian sediments, however the probable existence of an east west fault, the belief that the Huronian cover is thin and the existence of copper and copper-zinc mineralization in the nearby Archean warranted a geophysical test.

The claims presently are registered in the name R. I. Wright, P. O. Box 49, Suite 4900, Toronto Dominion Center, Toronto, Ontario.

The surveys and line cutting were done by A. McClemens, 19 McDonnell St., Noranda, Quebec, under contract to Geophysical Engineering Limited, 2189 Algonquin Ave., North Bay, Ontario. The writer planned and directly supervised the work which was carried out during the period December 23 to 28, 1973.

LOCATION & ACCESS

The claims are located in the central part of Strathcona Township, a distance of approximately 3 1/2 miles south of Temagami, Ontario.

An access road from Highway 11 to a nearby tourist camp lies a short distance to the west of the west boundary of the claims.

TOPOGRAPHY

The greater part of the claims area lies under Lowell Lake. The land portion on the south shore of the lake consists of a high steep-sided hill. This combined with several feet of snow prevented surveys over small sections of the area.

GEOPHYSICAL SURVEYS

A grid of north-south picket lines from an east-west base line was set out on the lake. Some lines extend inland where topography permitted.

V. L. F. electromagnetic and magnetometer surveys were done along the lines, readings being taken at 100-foot intervals. The survey methods are described in the appendix and the results shown on the accompanying maps.

GEOPHYSICAL RESULTS

The magnetometer survey shows only a gentle increase in intensity from the center of the group to the northwest corner. The change in values is only 300 gammas and probably reflects only thinning of the Huronian cover.

The electromagnetic survey outlined a weak anomalous trend extending completely across the claims in an east-west direction. In general the conductivity is weak, likely caused by overburden or topographic effects. At the west end however, and slightly to the south of the claims, a moderate conductor appears to have a legitimate bedrock source.

GEOLOGY

The shoreline of the lake is entirely Huronian greywackes and conglomerates. The results of the magnetometer survey suggest a basin of sediments with the deepest part near the #2 - #3 post of the two claims.

Show instrument technical data in each space for type of survey submitted or indicate "not applicable"

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations _____ Number of Readings _____
Station interval _____
Line spacing _____
Profile scale or Contour intervals _____
(specify for each type of survey)

MAGNETIC

Instrument Sharpe Fluxgate Model MP-1 Magnetometer
Accuracy - Scale constant _____
Diurnal correction method Hourly
Base station location See map.

ELECTROMAGNETIC

Instrument Crone Radem V. L. F. unit
Coil configuration Vertical
Coil separation Not applicable
Accuracy _____
Method: [x] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency 17.8 KHZ Cutler, Maine

Parameters measured Dip angle in degrees from the horizontal of the magnetic component of the F. L. F. field.
(specify V.L.F. station)

GRAVITY

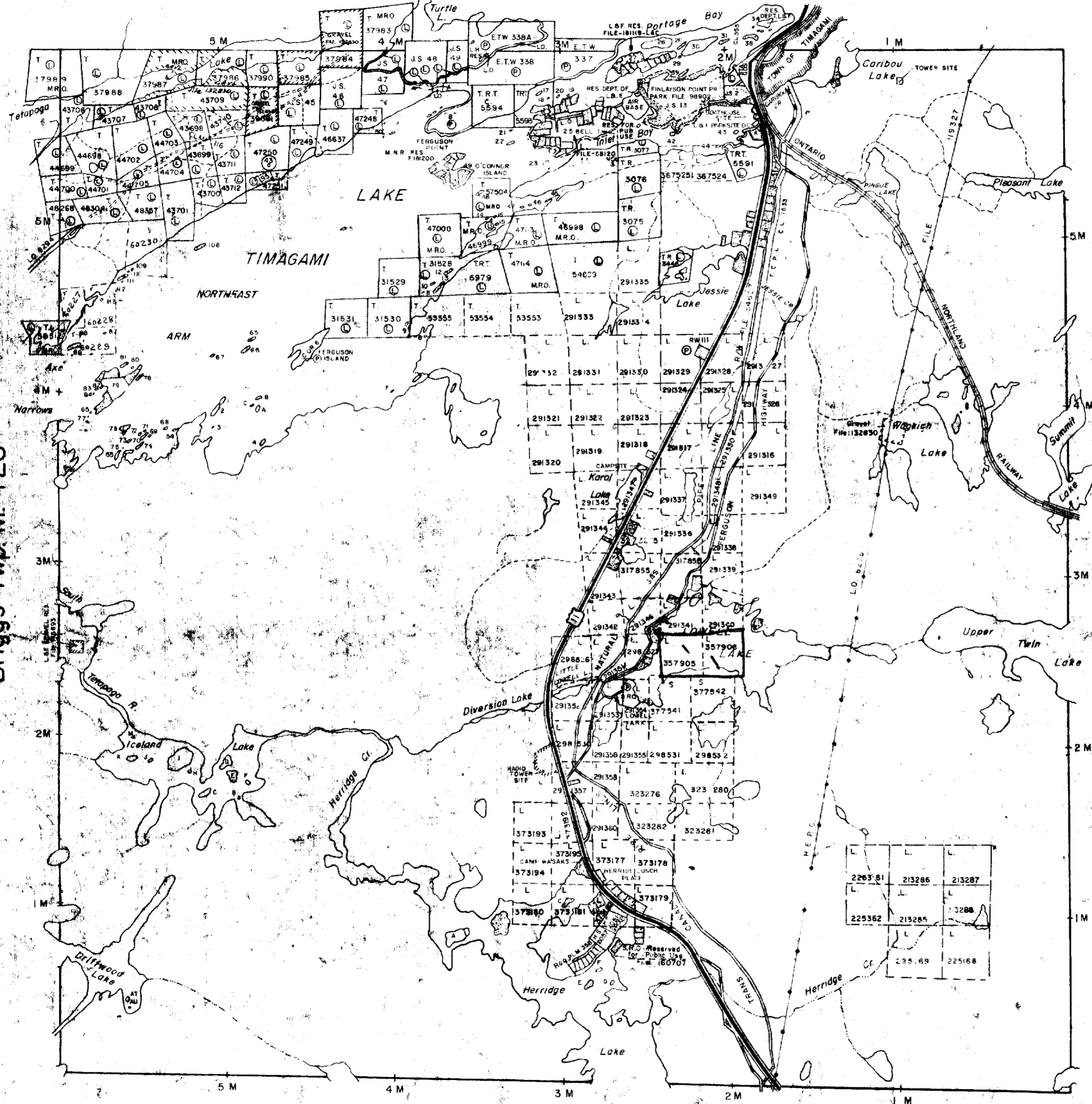
Instrument _____
Scale constant _____
Corrections made _____
Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION - RESISTIVITY

Instrument _____
Time domain _____ Frequency domain _____
Frequency _____ Range _____
Power _____
Electrode array _____
Electrode spacing _____
Type of electrode _____

Strathy Twp. M.596



Briggs Twp. M.428

Riddell Twp. M.578

Law Twp. M.529

THE TOWNSHIP OF
STRATHCONA

DISTRICT OF NIPISSING

SUDBURY MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

- PATENTED LAND
- CROWN LAND SALE
- LEASES
- LOCATED LAND
- LICENSE OF OCCUPATION
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- ROADS
- IMPROVED ROADS
- KING'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKIE
- MINES
- CANCELLED

NOTES

- 400' Surface Rights Reservation around all lakes and rivers.
- Sand and gravel in this Township reserved until further notice.
- For status of island in this Twp. and summer resort locations shown thus:
- please contact Dept. of Lands & Forests.
- Islands in Lake Timagami Not Open for Staking.

MINING LANDS -
DATE OF ISSUE
FEB 26 1974
MINISTRY
OF NATURAL RESOURCES

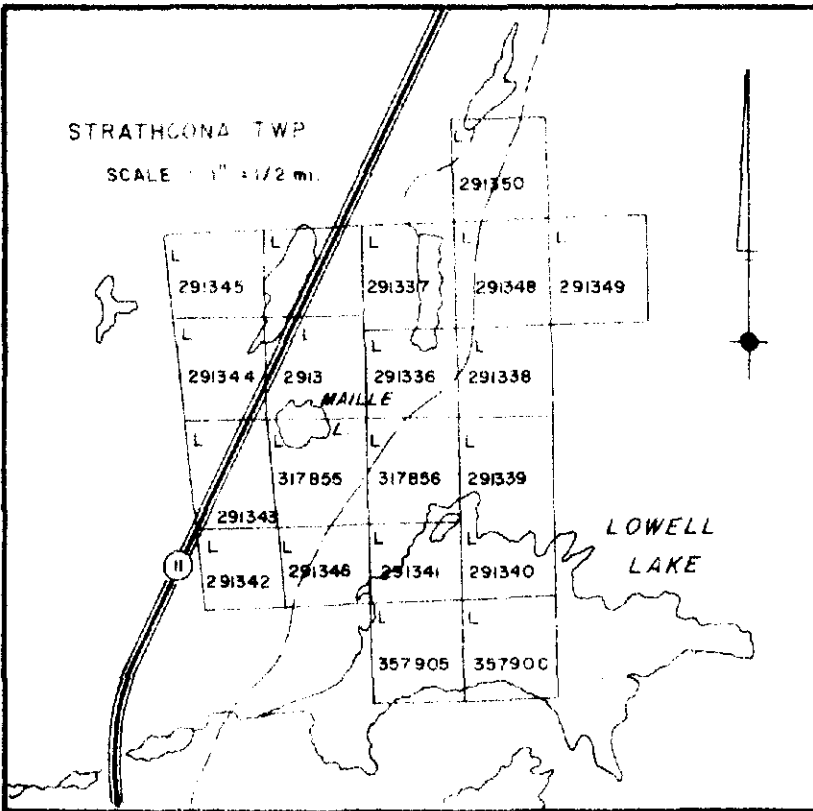
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PLAN NO. M.595

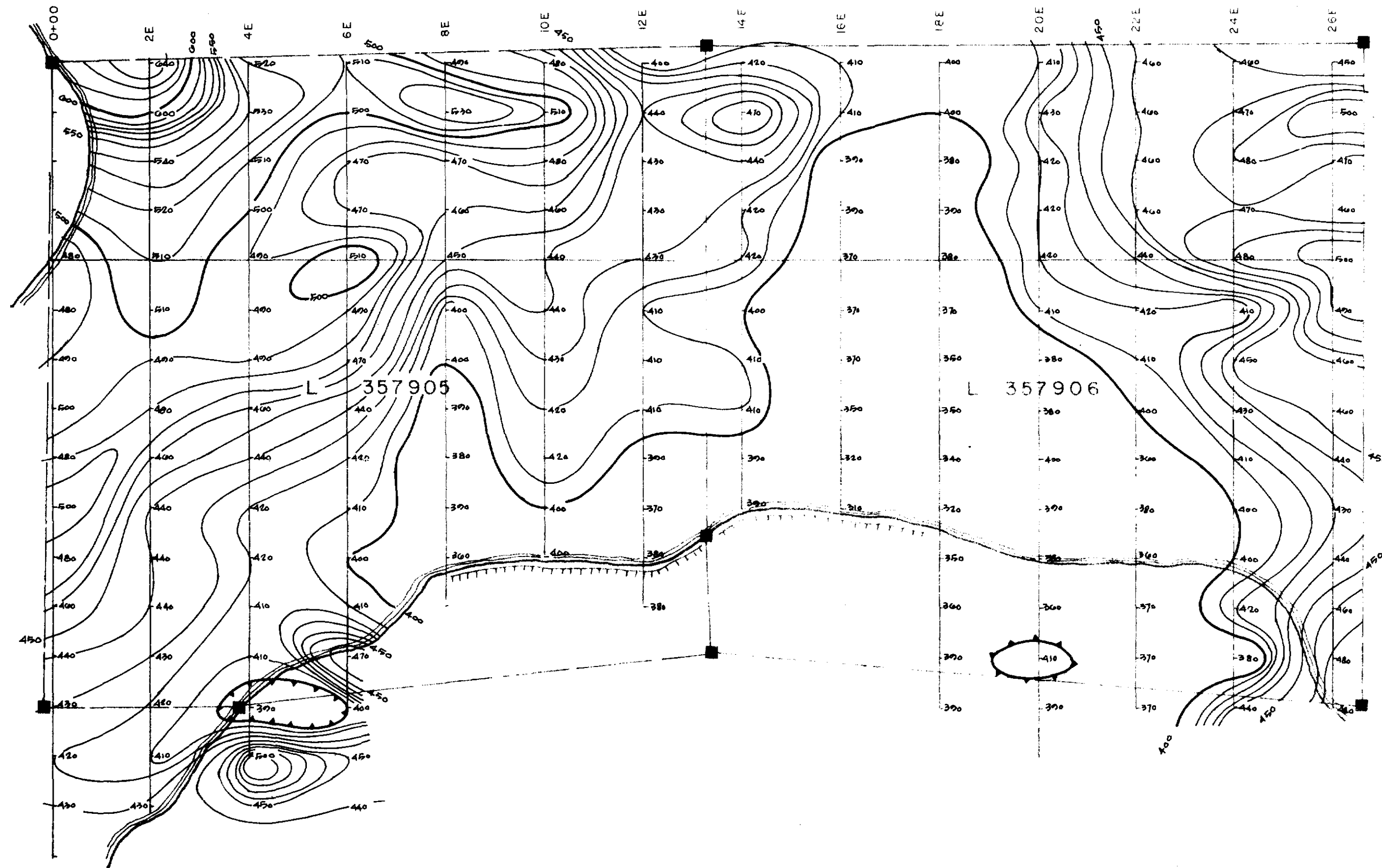


STRATHCONA TWP

SCALE 1" = 1/2 mi.



LOWELL LAKE

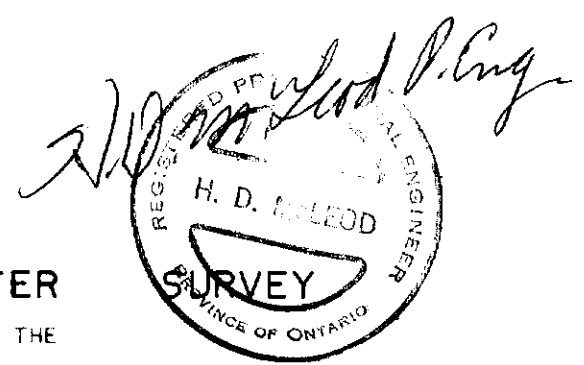


600
500
400

All readings shown
are in gammas

Contour interval 100 gammas

INSTRUMENT: Sharpe Fluxgate MF-1 Magnetometer
OPERATOR: A. McClellens



MAGNETOMETER
OF THE
SAVARD OPTION
IN
STRATHCONA TWP, ONTARIO
FOR

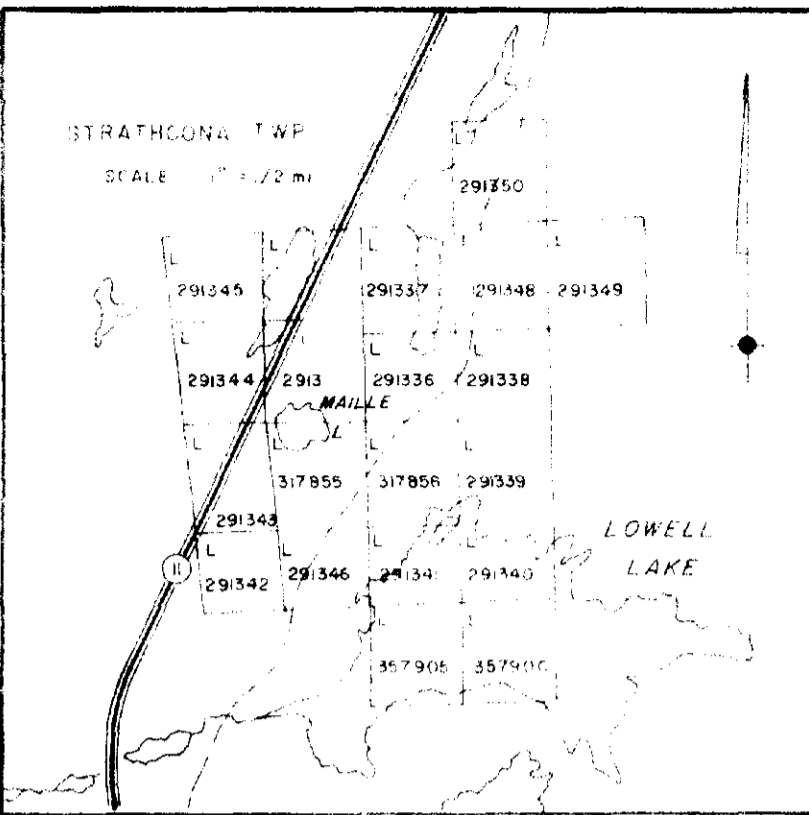
COPPERFIELDS MINING CORP LTD
BY
GEOPHYSICAL ENGINEERING LTD



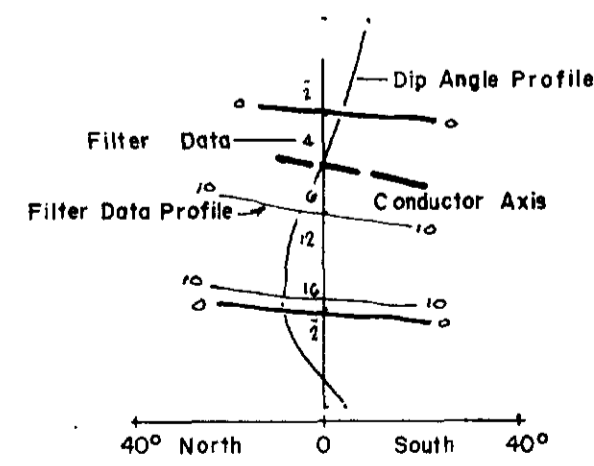
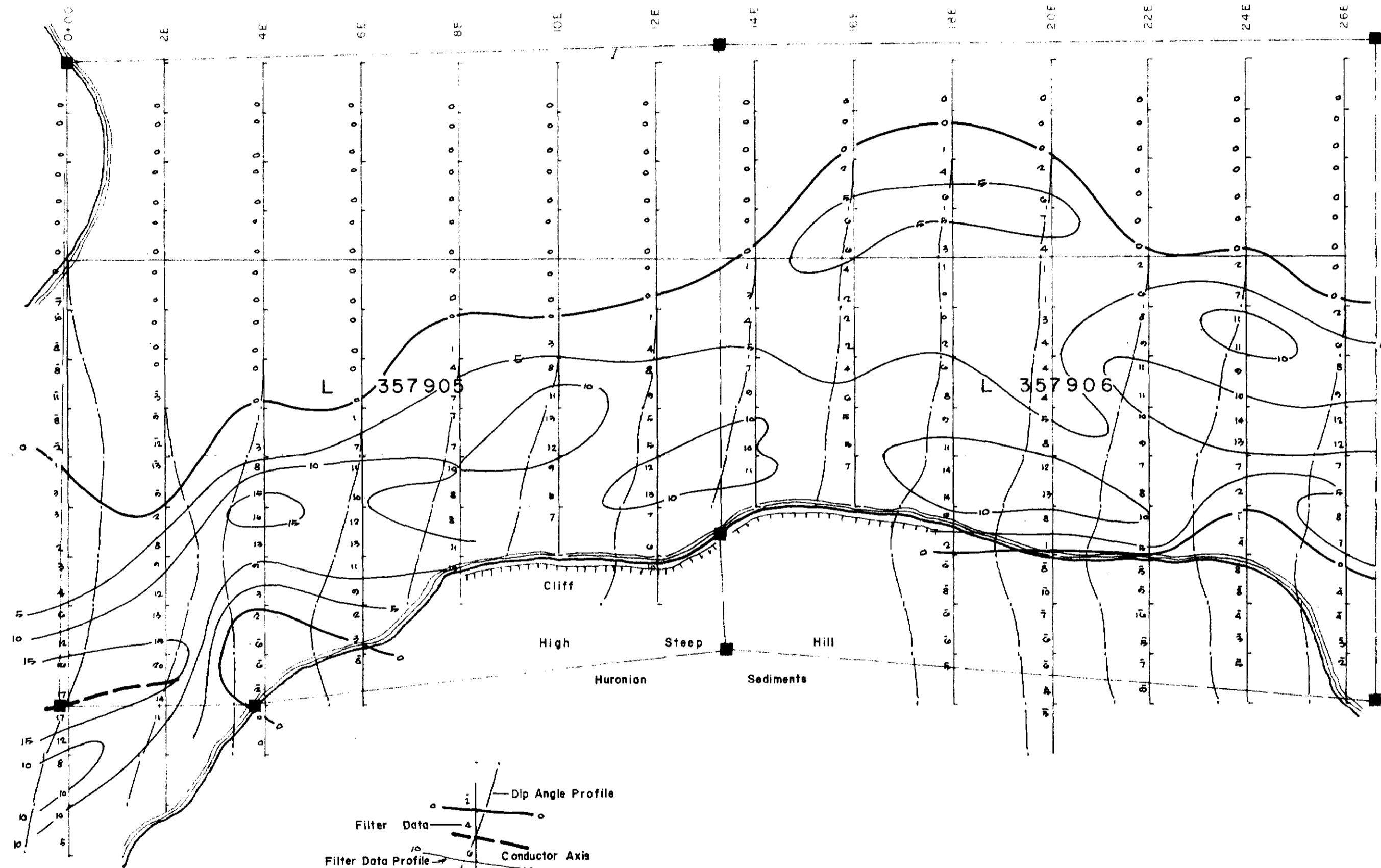


STRATHCONA TWP

SCALE 1" = 200'



LOWELL LAKE



Tx. Station - Cutler, Maine
Instrument - Crane Radem V.L.F. Unit.
Operator - A. McClemens



ELECTROMAGNETIC
OF THE
SAVARD OPTION
IN
STRATHCONA TWP, ONTARIO

FOR
COPPERFIELDS MINING CORP. LTD
BY
GEOPHYSICAL ENGINEERING LTD.

Scale = 1 Inch = 200'

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