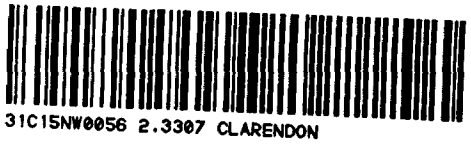
2.3307

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# SELCO MINING CORPORATION LIMITED

## GEOPHYSICAL REPORT

## CLAIMS EO-502014 - 502019

## CLARENDON TOWNSHIP

## FRONTENAC COUNTY, ONTARIO



I.G.L. Sinclair,
April, 1980.

## INTRODUCTION

This report describes the results of geophysical surveys on a group of six claims in Clarendon Township. The field work was carried out by N. Wilson and D. Watkins under the supervision of I.G.L. Sinclair.

## LOCATION AND ACCESS

The claims are located approximately 3 kms. north-east of Ardoch on Lots 33 and 34 in Concession II and Lot 34 in Concession III.

The property can be reached by driving south from the village of Ompah on the Green Lake Road for some 5 kms.

## CLAIM STATUS

The claims EO-502014 - 502019, were recorded on May 12th, 1977. Reports on geological and geochemical surveys have previously been filed for assessment by St. Joseph Explorations Ltd. and the claims are in good standing until May 12th, 1980.

The claims have now been transferred from St. Joseph Explorations Ltd. to Selco Mining Corporation Limited.

2/....

## GEOLOGICAL SETTING

The claims are underlain by metasedimentary rocks of the Grenville Supergroup. Rock types include graphitic marble, silicified marble and biotite paragneiss.

The regional structural trend, as defined by schistosity and compositional layering, is approximately N70°E.

## GEOPHYSICAL SURVEYS

### V.L.F. Survey

This survey was conducted using a Crone Radem VLF-EM instrument; dip angles were measured using the signal being transmitted from the station at Cutler, Maine. Readings were taken at 30m intervals along grid lines 1+20m apart; data obtained were filtered, using the Fraser method, prior to being plotted.

### Magnetometer Survey

A Sharpe Fluxgate MF-1 instrument was used for this survey; readings were taken at 30m intervals along grid lines 1+20m apart. Base stations were established at the intersection of the base line with each cross line and readings were corrected to allow for diurnal variations. A contoured plan of the results is attached.

3/....

The geophysical plans also show results obtained from surveys conducted on an extension of the grid to east over land, the mineral rights of which have been optioned from a private landowner.

RESULTS AND RECOMMENDATIONS

The hydro power line which crosses the north-western portion of the surveyed area has severely distorted both the V.L.F. and magnetometer results along its length; this distortion appears to be limited to the area within the boundaries of the hydro right-of-way. The V.L.F. readings taken over Green Lake also appear to be distorted, presumably due to the presence of conductive lake bottom sediments.

The V.L.F. shows the presence of numerous conductive zones of varying strength, throughout the area, most of which are extended parallel to the regional strike of the bedrock. Many of these may be caused by topographic and structural features of the area but those which can be correlated with geochemical anomalies should be investigated further by trenching and, if warranted, by drilling; the most interesting such anomaly lies at the N.E. corner of claim 502018 where a conductive zone has been detected at the possible up-ice termination of a strong, linear zinc anomaly.

4/....

The magnetometer survey reveals the presence of several anomalous zones which show a general tendency to be elongated parallel to the regional strike. The magnetic anomalies show little correlation with conductive zones or geochemical anomalies and appear to be related to variations in bedrock lithology rather than to the presence of mineralized zones.

# SELCO MINING CORPORATION LIMITED

## GEOPHYSICAL REPORT

## CLAIMS: EO-502033 - 502038

## CLARENDON TOWNSHIP

## FRONTENAC COUNTY, ONTARIO

I.G.L. Sinclair,

May, 1980.

## INTRODUCTION

This report describes the results of geophysical surveys on a group of six claims in Clarendon Township. The field work was carried out by N. Wilson and D. Watkins under the supervision of I.G.L. Sinclair.

## LOCATION AND ACCESS

The claims are located approximately 2 km. north-east of the village of Ardoch on Lots 32 and 33 in Concession IV and Lot 33 in Concession V.

The property can be reached by driving south from the village of Ompah on the Green Lake road for some 6 km.

## CLAIM STATUS

The claims, EO-502033 - 502038, were recorded on May 12th, 1977. Reports on geological and geochemical surveys have previously been filed for assessment by St. Joseph Explorations Limited and the claims are in good standing until May 12th, 1980.

2/....

The claims have now been transferred from St. Joseph Explorations Limited to Selco Mining Corporation Limited.

## GEOLOGICAL SETTING

The claims are underlain by metasedimentary rocks of the Grenville Supergroup. Rock types present include graphitic marble, silicified marble and biotite paragneiss. A geological map of the claims was previously filed for assessment by St. Joseph Exploration Limited.

The regional strike, as defined by schistosity and compositional banding, is approximately N70$^{O}$E.

## GEOPHYSICAL SURVEYS

### V.L.F. Survey

This survey was conducted using a Crone Radem V.L.F.-E.M. instrument; dip angles were measured using the signal transmitted from Cutler, Maine. Readings were taken at 30m intervals along grid lines 1+20m apart and are plotted on the accompanying plan; the readings were filtered by computer using the Fraser method and the contours are based on the results of the filtering.

3/....

Magnetometer Survey

A Sharpe Fluxgate MF-1 instrument was used for this survey; readings were taken at 30m intervals along grid lines 1+20m apart. Base stations were established at the intersections of the base line with each cross line and readings were corrected, when necessary, to allow for diurnal variations. A contoured plan of the results is attached.

RESULTS AND RECOMMENDATIONS

The hydro power line which crosses the area surveyed appears to have severely distorted the V.L.F. results and cast doubts on the validity of any conductors located in its vicinity. Results of the magnetometer survey within the vicinity of the power line area also suspect.

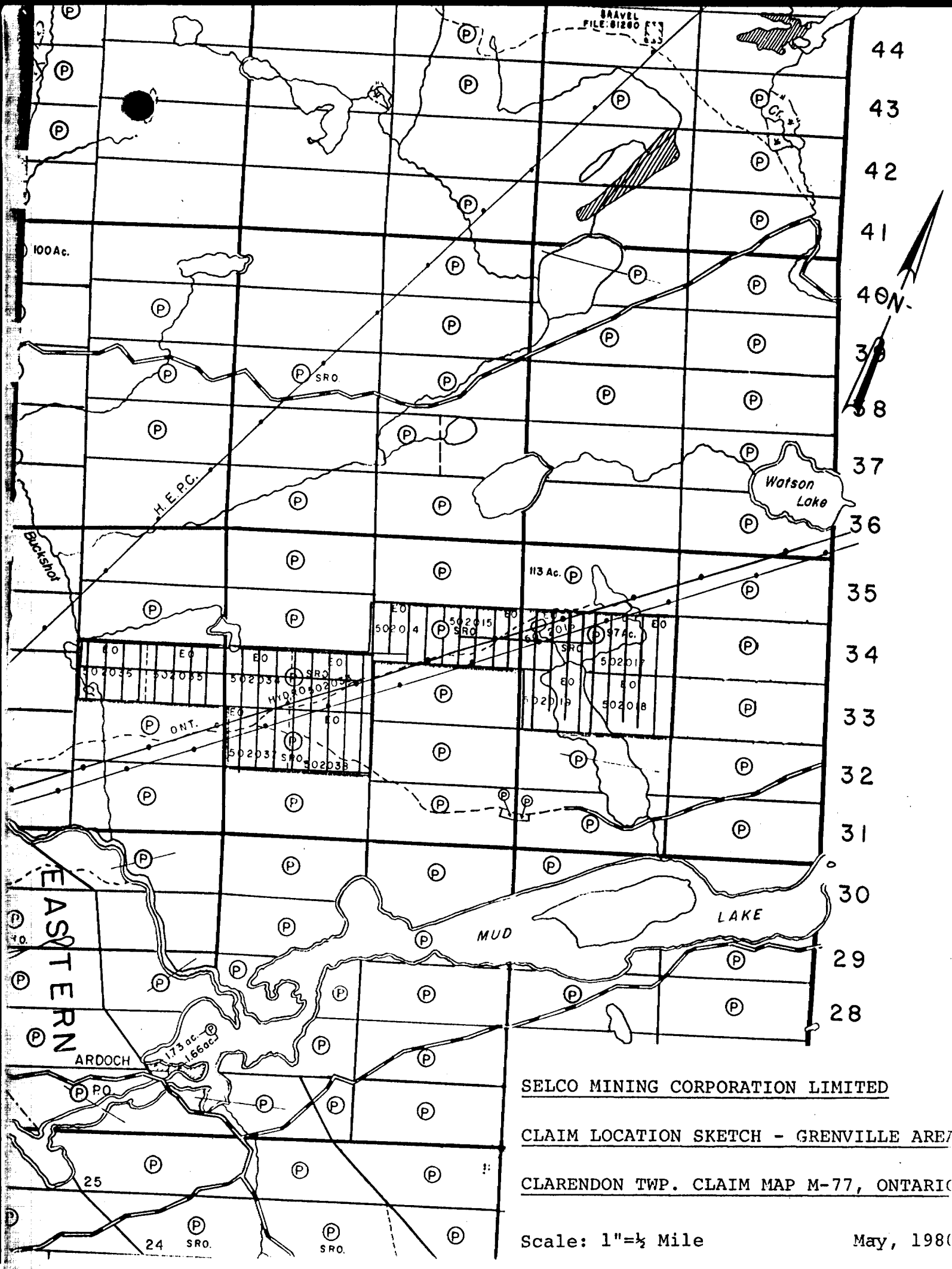
Elsewhere in the area a strong conductor is located south of the base line at the west end of the survey area and is flanked by a magnetic anomaly. No significant geochemical anomaly is associated with this conductor and it is regarded as having low priority as a drill target. Detailed geological examination of available outcrop and some additional soil sampling will, however, be carried out in the vicinity of the conductor.

4/....

No other zones of interest were located as a result of this survey although there are some weakly conductive zones and scattered magnetic highs in the northern half of the area.


I.G.L. Sinclair.

:fa




SELCO MINING CORPORATION LIMITED

CLAIM LOCATION SKETCH - GRENVILLE AREA

CLARENDON TWP. CLAIM MAP M-77, ONTARIO

Scale: 1"=½ Mile

May, 1980

GEOPHYSICAL – GEOI
TECHNICAL [illegible]


900

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey Geophysical

Township or Area Clarendon - M-77

Claim holder(s) Selco Mining Corporation Limited

Author of Report I.G.L. Sinclair

Address Suite 1700, 55 University Ave., Toronto

Covering Dates of Survey February 1 - 24, 1980
(linecutting to office)

Total Miles of Line cut 17.05 miles

SPECIAL PROVISIONS
CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

| | DAYS per claim |
|---|---|
| Geophysical | |
| --Electromagnetic | |
| --Magnetometer | 20 / 20 |
| --Radiometric | |
| --Other | |
| Geological | |
| Geochemical | |

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: May 20. 80 SIGNATURE: [signature]
~~Author of~~ Report or Agent

PROJECTS SECTION

Res. Geol. _____ Qualifications 2.3058

Previous Surveys _____

Checked by _____ date _____

L D.

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

**MINING CLAIMS TRAVERSED**
List numerically

| (prefix) | (number) |
|---|---|
| EO | 502014 |
| EO | 502015 |
| EO | 502016 |
| EO | 502017 |
| EO | 502018 |
| EO | 502019 |
| EO | 502033 |
| EO | 502034 |
| EO | 502035 |
| EO | 502036 |
| EO | 502037 |
| EO | 502038 |

TOTAL CLAIMS 12

If space insufficient, attach list

SPECIAL JOB ONLY

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

# GEOPHYSICAL TECHNICAL DATA

## GROUND SURVEYS

Number of Stations EM =1012 MAG = 1605 Number of Readings EM = 1012 MAG = 1605

Station interval 25m/12.5m

Line spacing 120m

~~Profile scale or~~ Contour intervals 10% Every 100 gammas to 1000

(specify for each type of survey) Every 500 gammas thereafter

## MAGNETIC

Instrument Sharpe Fluxgate MF-1/McPhar M-700

Accuracy - Scale constant ± 5 gammas

Diurnal correction method Base stations

Base station location Taken at the intersection of B.L. & Cross Lines

## ELECTROMAGNETIC

Instrument Crone Radem

Coil configuration

Coil separation

Accuracy ± 10

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency Cutler Maine

(specify V.L.F. station)

Parameters measured Dip angle of secondary field.

## 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

Miller Twp. (M.127)

Barrie Twp. (M.50)

Palmerston Twp. (M.139)

Twp.(M.109)

Olden Twp.(M.136)

# THE TOWNSHIP OF CLARENDON

2.3307

COUNTY OF FRONTENAC

EASTERN ONTARIO MINING DIVISION

SCALE: 1-INCH=40 CHAINS

## LEGEND

| | |
|---|---|
| PATENTED LAND | (P) |
| CROWN LAND SALE | C.S. |
| LEASES | (L) |
| LOCATED LAND | Loc. |
| LICENSE OF OCCUPATION | L.O. |
| MINING RIGHTS ONLY | M.R.O. |
| SURFACE RIGHTS ONLY | S.R.O. |
| ROADS | |
| IMPROVED ROADS | |
| KING'S HIGHWAYS | |
| RAILWAYS | |
| POWER LINES | |
| MARSH OR MUSKEG | |
| MINES | |
| CANCELLED | C. |
| TRAILS | |
| PATENTED S.R.O. | |

## NOTES

This Map Is Not To Be Used FOR SURVEY PURPOSES

Lot And Concession Lines Shown Hereon Are Projected From The Best Information Available, But Their True Position Is Not Guaranteed, For Official Survey Purposes Consult The Original Survey Plans And Field Notes Of Records In The Ministry of Natural Resources.

400' surface rights reservation along the shores of all lakes and rivers.

Flooded Lands Shown Thus:

Flooding Rights Reserved On Cross Lake And Fawn Lake To Elevation 110.5'. File: 126113.

Original Survey Line Of Frontenac Road Shown Thus:

Islands in Clarendon Lake shown thus

Surface Rights Only withdrawn from staking. File 160705

AREAS WITHDRAWN FROM STAKING

S.R. – SURFACE RIGHTS M.R.–MINING RIGHTS

| | Section | Order No. | Date | Disposition | File |
|---|---|---|---|---|---|
| (R1) | Reserved for Public Use | | | SR | 87431 |
| (R2) | " " " " | | | SR & MR | 59062 |
| (R3) | " " " " | | | SR | 125573 |
| (R4) | M.N.R. Reservation | | | SR | 140861 |
| (R5) | " " | | | SR & MR | 92175 |
| (R6) | Reservation | | | | |

DATE OF ISSUE
MAY 27 1980
SURVEYS AND MAPPING BRANCH

PLAN NO.-M.77

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

31C15NW0056 2.3307 CLARENDON

200

960mW 840mW 720mW 600mW 480mW 360mW 240mW 120mW 0 120mE 240mE 360mE 480mE 600mE 720mE 840mE 960mE

(L9+60W)

200mN
100mN
BASE LINE
100mS
200mS
300mS
400mS
500mS
600mS

200mN
(BASELINE 1+50S
OF GREEN L.GRID)
100mN
BASE LINE AZ. 69°
100mS
200mS
300mS
400mS
500mS
600mS

502036
502035
502034
502033
502037
502038

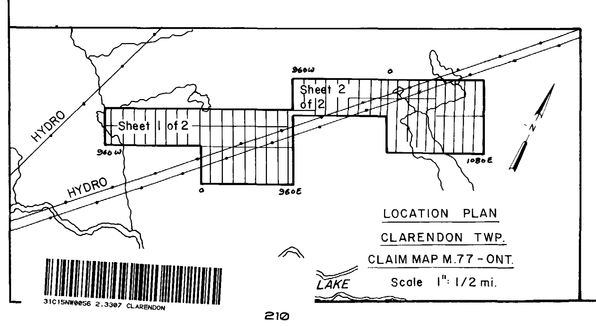
ROAD
ROAD
ROAD

NORTH BOUNDARY
POWER LINE

SOUTH BOUNDARY
POWER LINE

N

NOTE: REFER TO S.M.2913 — MAG.
S.M.2943C — V.L.F., CLAIMS, LOC. PLAN (Sheet 2 of 2)
S.M.2943 — MAG. (Sheet 2 of 2)




LOCATION PLAN
CLARENDON TWP.
CLAIM MAP M.77 - ONT.
Scale 1" = 1/2 mi.

**ELECTROMAGNETIC INSTRUMENT**

TYPE: CRONE

V.L.F.
Instrument: RADEM Station: CUTLER, MAINE
Degrees of Dip Angle
Profile Scale:
Filtered Dip Angles (Fraser)
Contour Interval: 10%

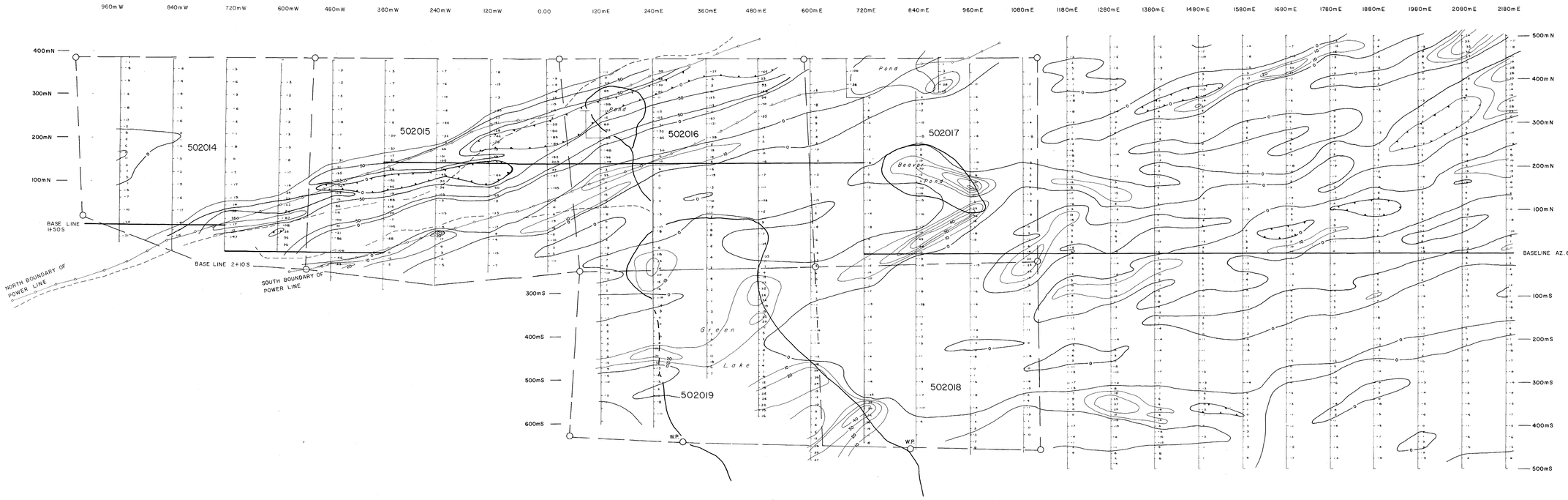
1 : 2500
0 100
METRES

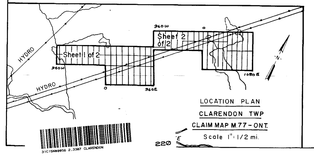
Sheet 1 of 2

# SELCO MINING CORPORATION
(EXPLORATION DIVISION) LIMITED

## GRENVILLE AREA
## CLARENDON TWP.— V.L.F. SURVEY
CLAIMS EO 502033 TO EO 502038

| DRAWN BY | DATE | PLAN NO. S.M.2913C |
|---|---|---|
| TRACED BY Data Plot J.L. | DATE MAY '80 | |




NOTE : REFER TO SM.2943 — MAG.,
SM.2913 — MAG. Sheet 1 of 2
SM.2913 — V.L.F. Sheet 2 of 2

**ELECTROMAGNETIC INSTRUMENT**

**TYPE:** CRONE

**V.L.F.**

*Instrument:* RADEM *Station:* CUTLER, MAINE

*Degrees of Dip Angle* ●—● —

*Profile Scale:*

*Filtered Dip Angles (Fraser)* [-6 +6 / -3 +6

*Contour Interval:* 10%

1: 2500

0 100

METRES

Sheet 2 of 2

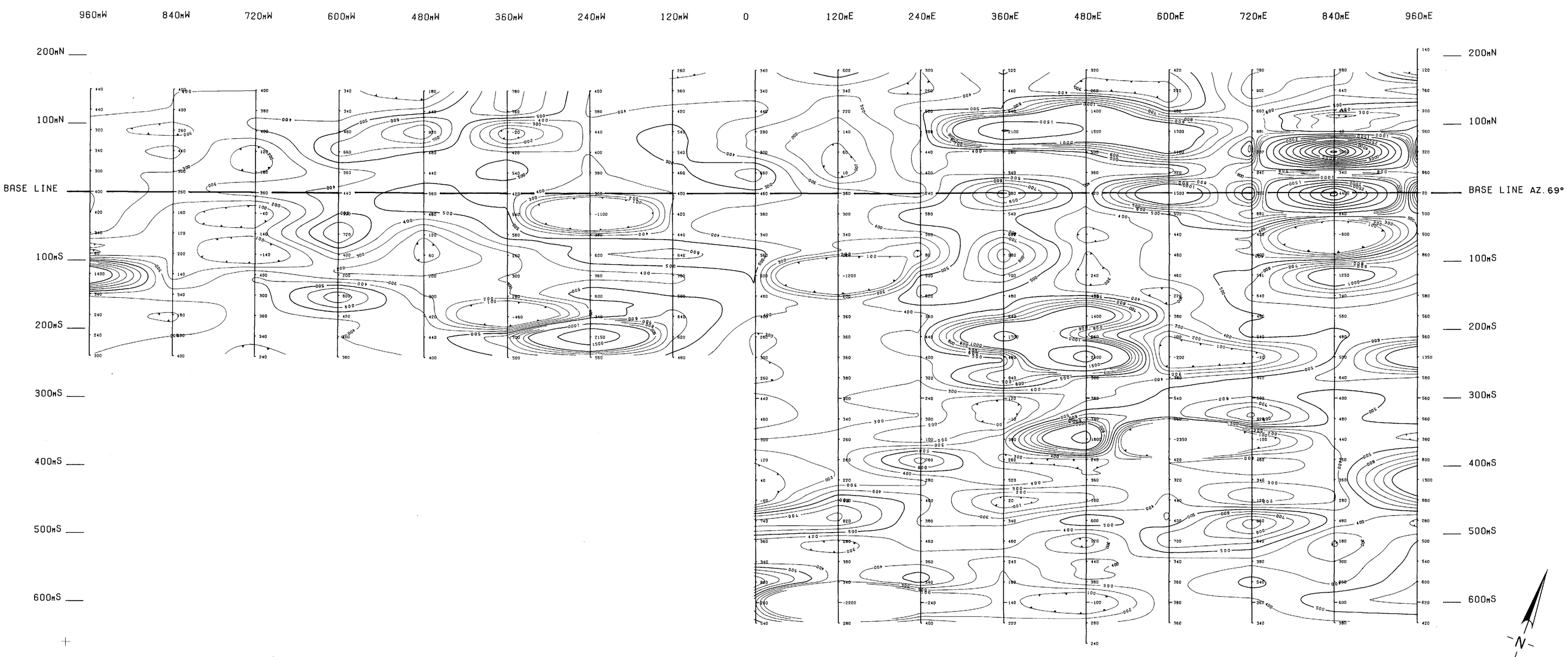
**SELCO MINING CORPORATION**
(EXPLORATION DIVISION) LIMITED

GRENVILLE AREA

CLARENDON TWP.— V.L.F. SURVEY

CLAIMS EO 502014 TO EO 502019

| DRAWN BY | DATE | FILE NO. |
|---|---|---|
| J.L. | April '80 | SM.2943C |




NOTE: REFER TO S.M. 2913C — V.L.F.
S.M. 2943 — MAG. (Sheet 2 of 2)
S.M. 2943C — V.L.F., CLAIMS, LOC. PLAN (Sheet 2 of 2)

*MAGNETOMETER INSTRUMENT*
*TYPE*: McPHAR M-700
*Readings in Gammas:* 380 / 440
*Base:*
*Profile:*
*Contour Interval:* Every 100 Gammas to 1000 Gammas
Every 500 Thereafter

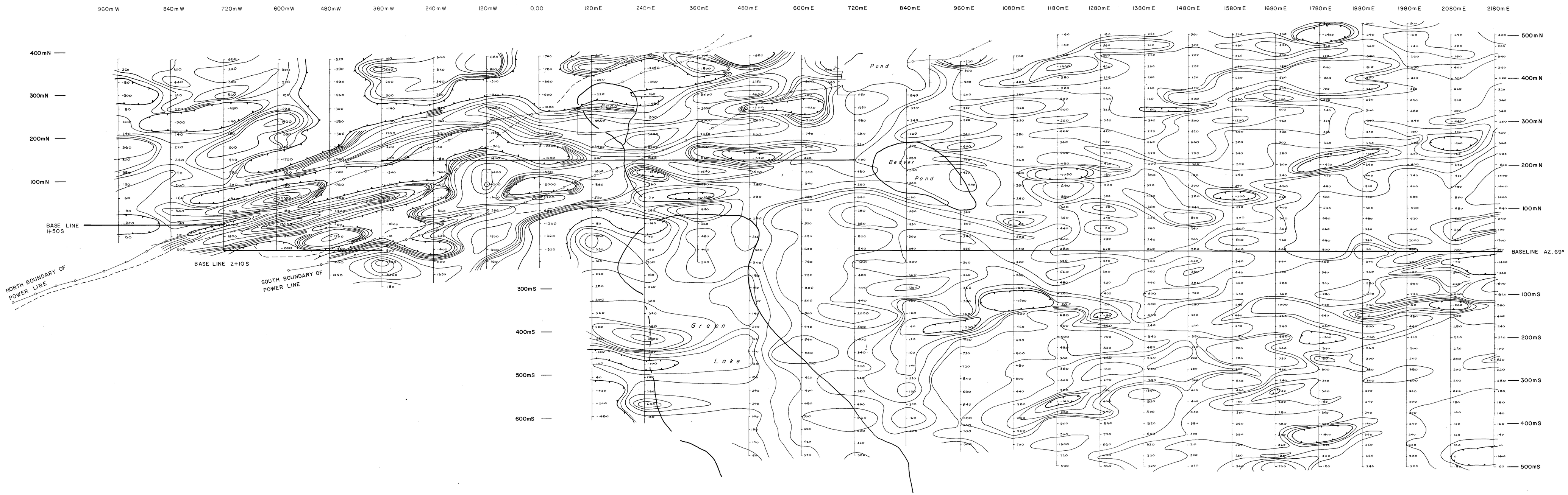
1 : 2500
0 — 100
METRES

Sheet 1 of 2

SELCO MINING CORPORATION
(EXPLORATION DIVISION) LIMITED

GRENVILLE AREA
CLARENDON TWP.—MAG. SURVEY
CLAIMS E0 502033 TO E0 502038

| DRAWN BY | DATE | PLAN NO. S.M. 2913 |
|---|---|---|
| TRACED BY DAVID PUFF K.A. | DATE APRIL '80 | |




NOTE: REFER TO SM.2943C — V.L.F.
SM.2913 — MAG. Sheet 1 of 2
SM.2913 — V.L.F. Sheet 2 of 2

*MAGNETOMETER INSTRUMENT:*
*TYPE:* SHARPE FLUXGATE MF-1
*Readings in Gammas:* [ 1200 / 600 ]
*Base:*
*Profile:*
*Contour Interval:* Every 100 Gammas to 5000 Gammas,
Every 500 Gammas to 10000 Gammas
Every 5000 Gammas thereafter

1: 2500
0 100
METRES

Sheet 2 of 2

SELCO MINING CORPORATION
(EXPLORATION DIVISION) LIMITED

GRENVILLE AREA
CLARENDON TWP. — MAG. SURVEY
CLAIMS E0 502014 TO E0 502019

| | | | |
|---|---|---|---|
| DRAWN BY | | DATE | DWG. NO. SM.2943 |
| TRACED BY | J.L. | DATE | April 80 |

240