



42A14SE0161 63.1607 TULLY

010

REPORT  
ON PROPERTIES OF  
JELEX MINES LTD.  
TIMMINS AREA, ONT.

INTRODUCTION

The following report covers the result of electromagnetic surveys carried out on four separate properties held by Jelex Mines Ltd. in the Timmins area of Ontario. The properties included in this report are located in Jamieson, Jessop, Tully and Prosser townships.

The results of the surveys are plotted on separate maps and the results are dealt with separately in this report.

PROPERTIES AND LOCATION

All properties covered in this report are situated in the Porcupine Mining Division of Ontario and they include the following claims registered with the Department of Mines.

JAMIESON TOWNSHIP

No. Claims

P 61638 to P 61641 inclusive

4

P 61646 - P 61647

2

P 61656 - P 61657

2

Total:

8 claims

JESSOP TOWNSHIP

P 62768 to P 62775 inclusive

8 claims

TULLY TOWNSHIP

~~P 55358 to P 55360 inclusive~~

3

P 60099

1

P 60102

1

Total:

5 claims

PROSSER TOWNSHIP

P 65882 to P 65885 inclusive

4 claims

GEOLOGY

Rock outcrops are quite scarce in the area and all geology must be interpreted from published geological maps. Map No. 2046, published by the Ontario Department of Mines is a geological compilation of all data available.

Jamieson and Jessop townships are largely underlain by volcanic rocks which include both andesite and

rhyolite. It would appear that these two properties are underlain by volcanic rocks.

Rock outcrops are almost negligible in Tully township but it would appear to be underlain by both volcanic and sedimentary rocks which have been intruded by some basic intrusives. Prosser township, immediately to the west of Tully, likewise is almost devoid of outcrops. One area is mapped as being underlain by rhyolite and it is safe to assume that a good portion of the township is underlain by volcanics.

#### RESULTS OF THE GEOPHYSICAL SURVEYS AND INTERPRETATION

Electromagnetic surveys were carried out on all properties and a magnetic survey was carried out over a portion of the Jamieson township property.

A Ronka Mark IV electromagnetic unit and a Sharpe A-2 magnetometer were used in the surveys. The results of the surveys are shown on separate maps for each property which accompany this report. A description of the results on each property follows:

JAMIESON TOWNSHIP PROPERTY (MAP NO. 1)

The electromagnetic survey outlined a northeast trending conductor in the southeast corner of the property. It has a length of at least 1,200 feet but a portion of this is off the property in Jessop township. The conductor shows a width of about 25 feet and has fair conductivity considering the probable overburden.

There is also a parallel conductor to the north but it is quite weak.

A magnetic survey was carried out over the area of the conductive zones, as shown on the accompanying Map No. 1. This shows a northeast trending anomaly which extends onto the adjacent property to the south. It would appear that the main conductor may be related to the magnetic anomaly and that the conductor could well represent sulphides.

JESSOP TOWNSHIP PROPERTY (MAP NO. 2)

The electromagnetic survey on this property did not indicate any responses that are indicative of a conductive zone. A few irregular responses were obtained but these are due to overburden or other extraneous conditions.

TULLY TOWNSHIP PROPERTY (MAP NO. 3)

The survey on this property likewise did not indicate a conductor, as seen on the accompanying map.

PROSSER TOWNSHIP PROPERTY (MAP NO. 4)

An examination of this map indicates that no conductive zone was outlined in the survey.

SURVEY METHODS AND INSTRUMENT DATA

The electromagnetic survey was carried out using the Ronka Mark IV horizontal loop equipment with a 300 foot coil interval. In the horizontal loop type of survey both the in-phase and out-of-phase components of the secondary field are measured, whose special characteristics make possible a fairly accurate evaluation of the conductivity. A conductor caused by sulphide mineralization will produce a curve going from positive readings through zero to negative and back again to positive. Both the in-phase and out-of-phase readings show the same general curve. The ratio between the in-phase and out-of-phase readings over a conductor is an indication of the conductivity of the body. A good conductor would cause a

greater deviation of the in-phase component than the out-of-phase component. The opposite is true of a poor conductor.

In some areas secondary currents are induced in swamps and lakes. These anomalies can usually be distinguished from a regular conductor as they cause a response of the out-of-phase component with little or no deviation of the in-phase component.

The magnetic readings were taken with a Sharpe A-2 magnetometer measuring the variations of the vertical component of the earth's magnetic field. Readings were plotted as gammas and contoured on the accompanying maps after correction for diurnal variation.

#### CONCLUSIONS AND RECOMMENDATIONS

The geophysical surveys were successful in outlining two parallel conductive zones on the property in Jamieson township but nothing of importance was indicated on the other properties.

The zone on the Jamieson property is a good conductor for this area but unfortunately part of it is off the property. It is quite possible that this zone could

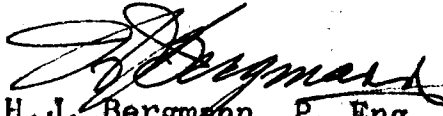
represent sulphide mineralization and thus warrants investigation by diamond drilling.

It is apparent from the surveys on the other properties that if any sulphide zones exist, they are below the penetration of the equipment used.









Respectfully submitted,

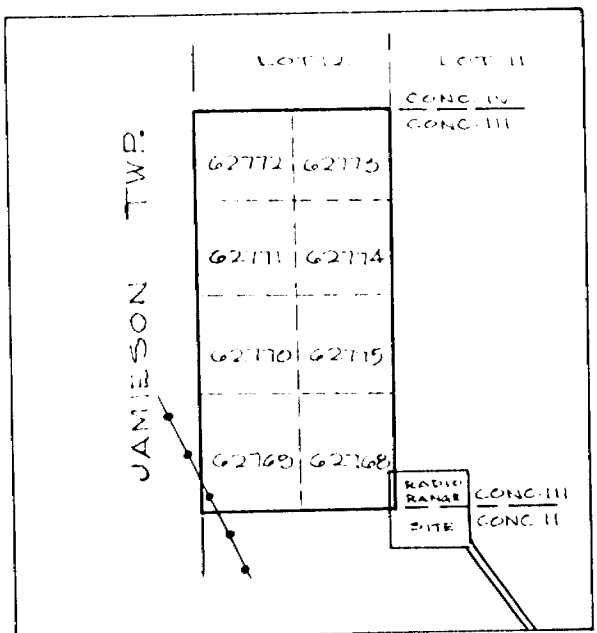
PROSPECTING GEOPHYSICS LTD.

Montreal, Que.  
May 11, 1965.

  
H.J. Bergmann, P. Eng.

## LEGEND

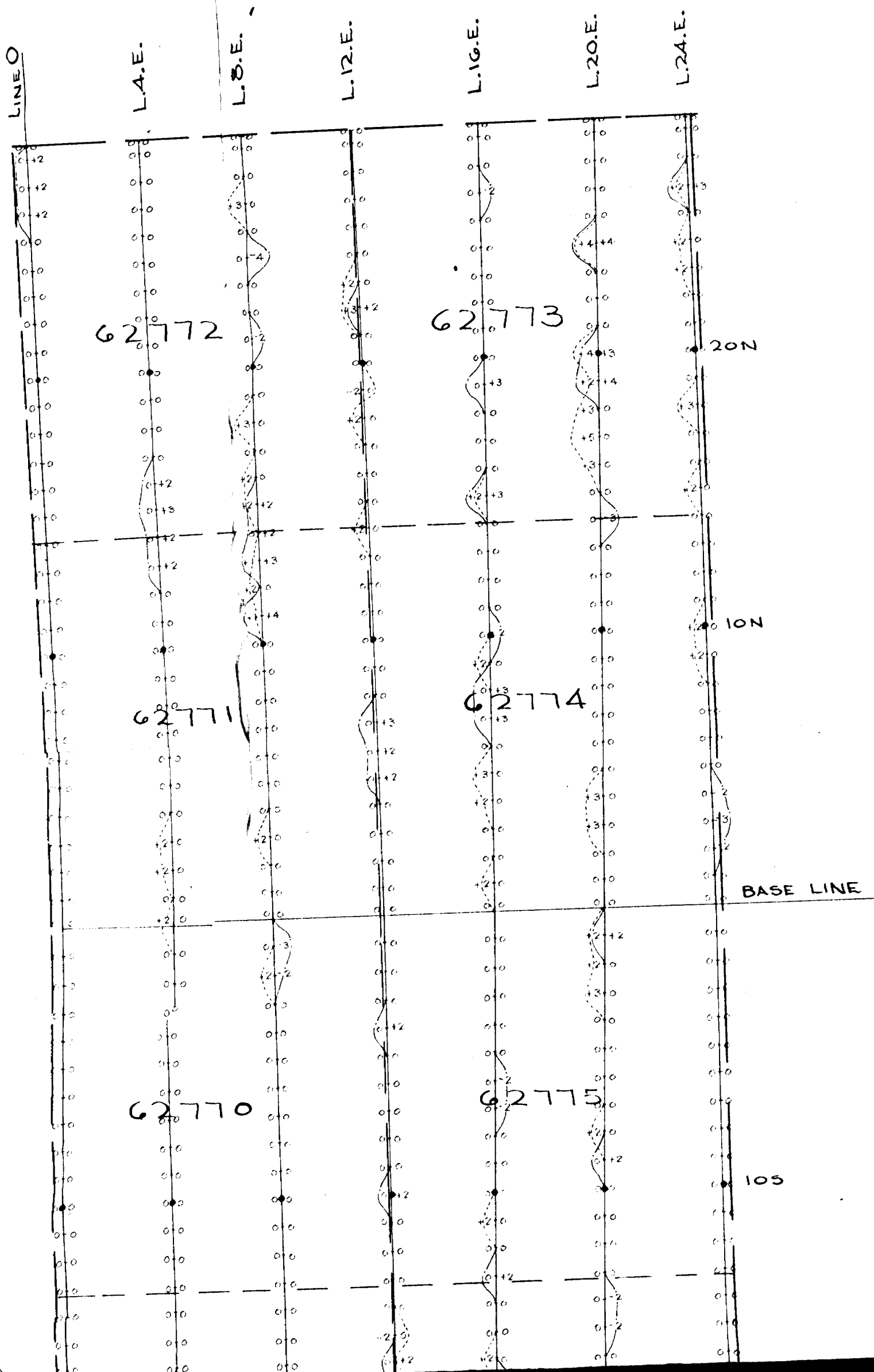
- 
 MEASUREMENT STATIONS ALONG PICKET LINES
-  +8  
 -3  
 ELECTROMAGNETIC READINGS - In Phase Component (%)
-  +8  
 -3  
 ELECTROMAGNETIC READINGS - Out of Phase Component (%)
- 
 PROFILE - In Phase Component (Scale 1" = 10%)
- 
 PROFILE - Out of Phase Component (Scale 1" = 10%)
- 
 ELECTRICAL CONDUCTOR

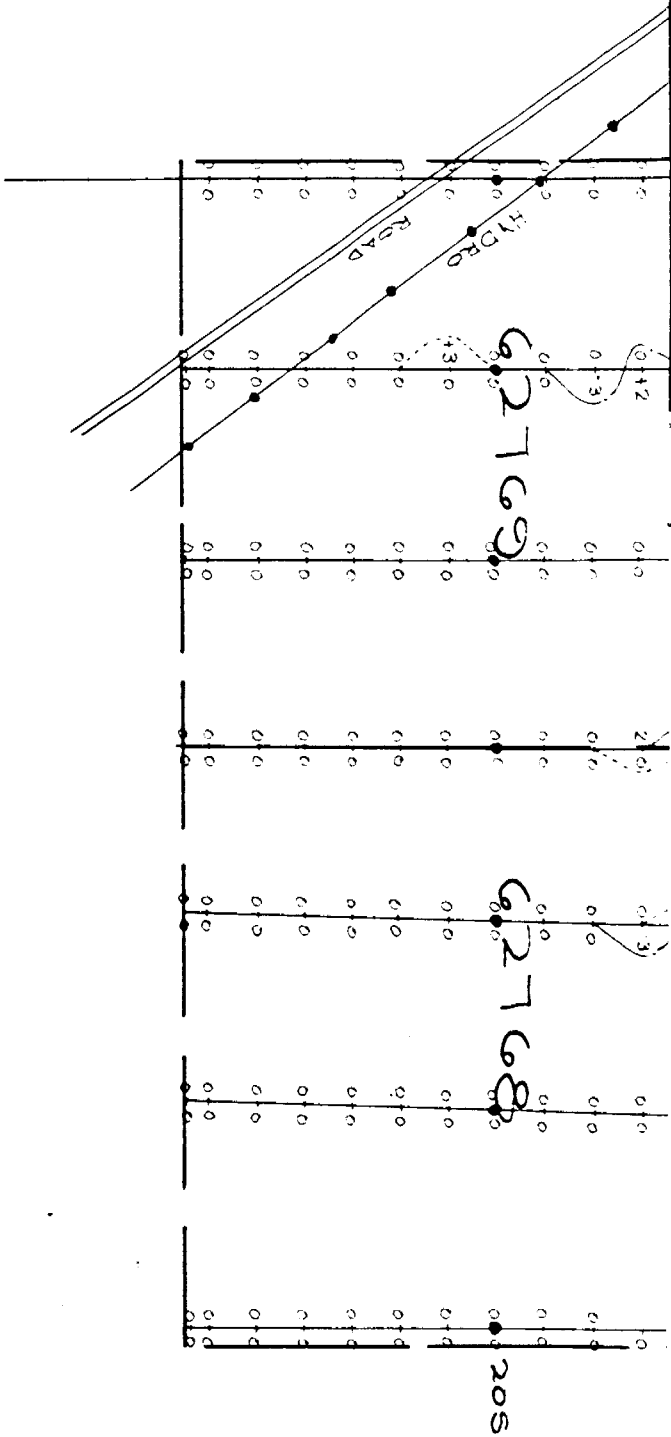


### CLAIM GROUP

- 1 INCH = 40 CHAINS -







ELECTROMAGNETIC SURVEY

- for -

**JELEX MINES LTD.**

JESSOP TWP., ONTARIO.

- by -

PROSPECTING GEOPHYSICS LTD.

SCALE

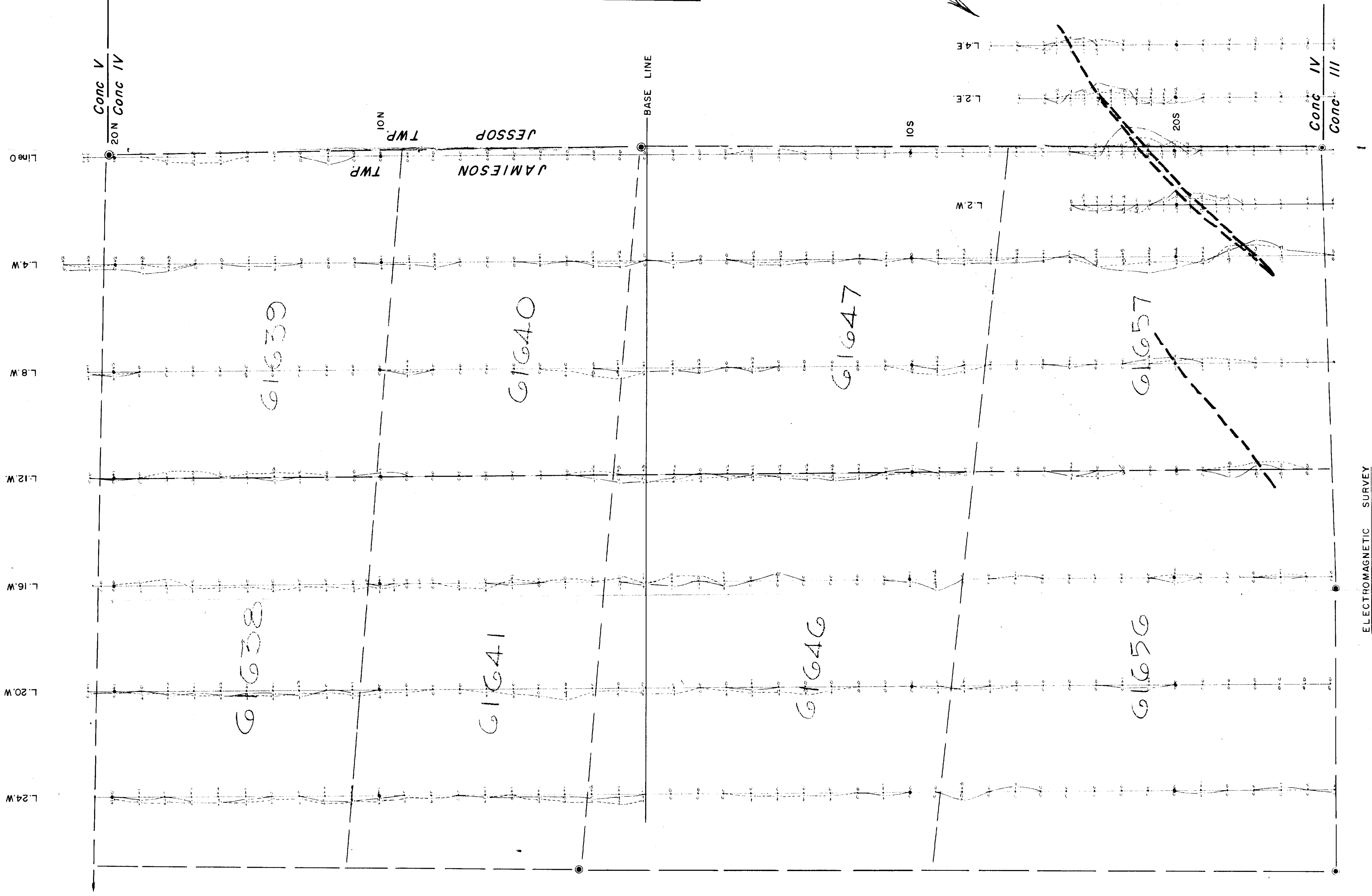


APRIL 1965

*[Handwritten signature]*

**MAP-2-**

63.1607

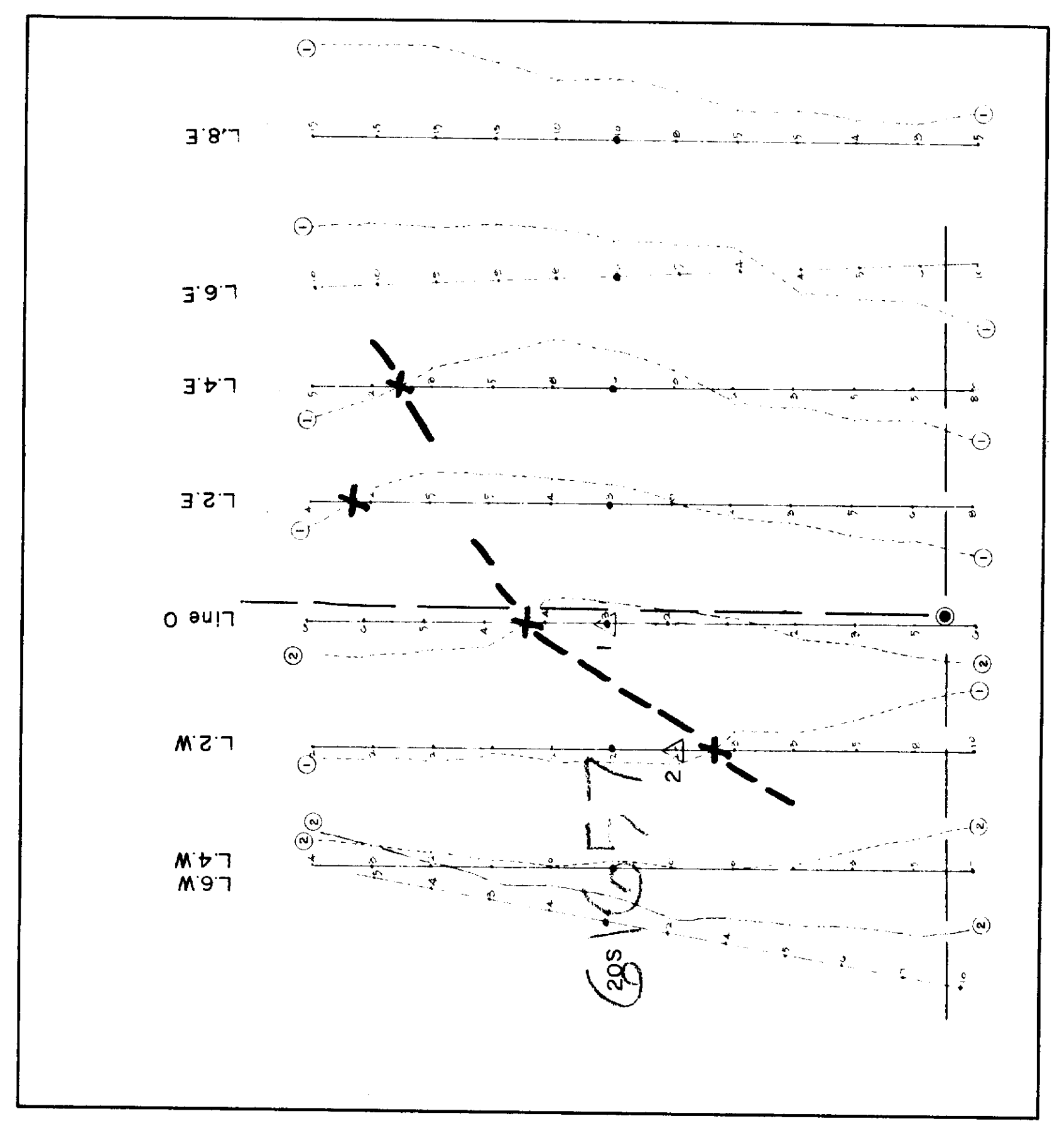
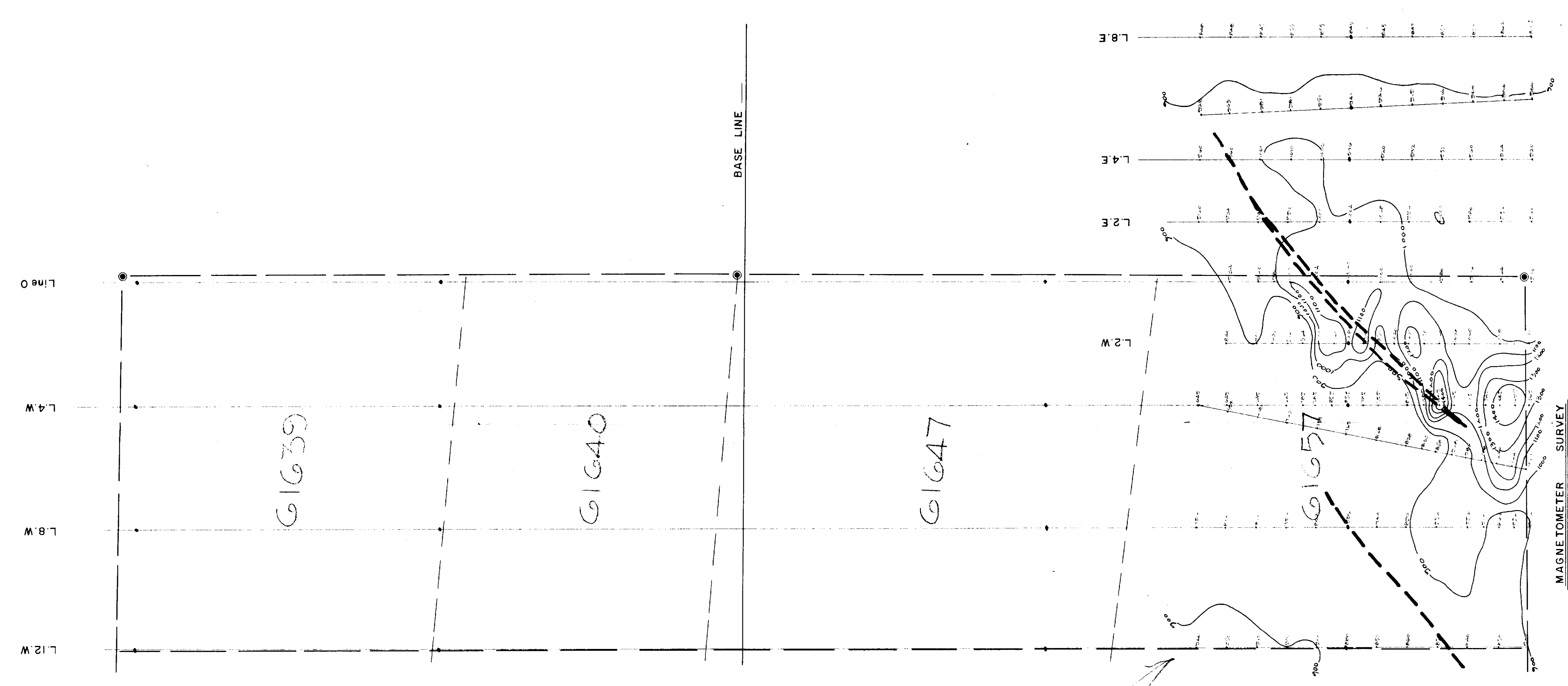


**LEGEND**

- MEASUREMENT STATIONS ALONG PICKET LINES
- ELECTROMAGNETIC READINGS - in Phase Component (%)
- ELECTROMAGNETIC READINGS - Out of Phase Component (%)
- PROFILE - in Phase Component (Scale 1" = 2.2%)
- PROFILE - Out of Phase Component (Scale 1" = 2.2%)
- ELECTRICAL CONDUCTOR

GEOLOGICAL SURVEYS  
- for -  
**JELEX MINES LTD.**  
JAMIESON TOWNSHIP, ONTARIO  
- by -  
PROSPECTING GEOPHYSICS LTD.  
MAY 1965  
SCALE 1" = 200 FEET  
63-1007

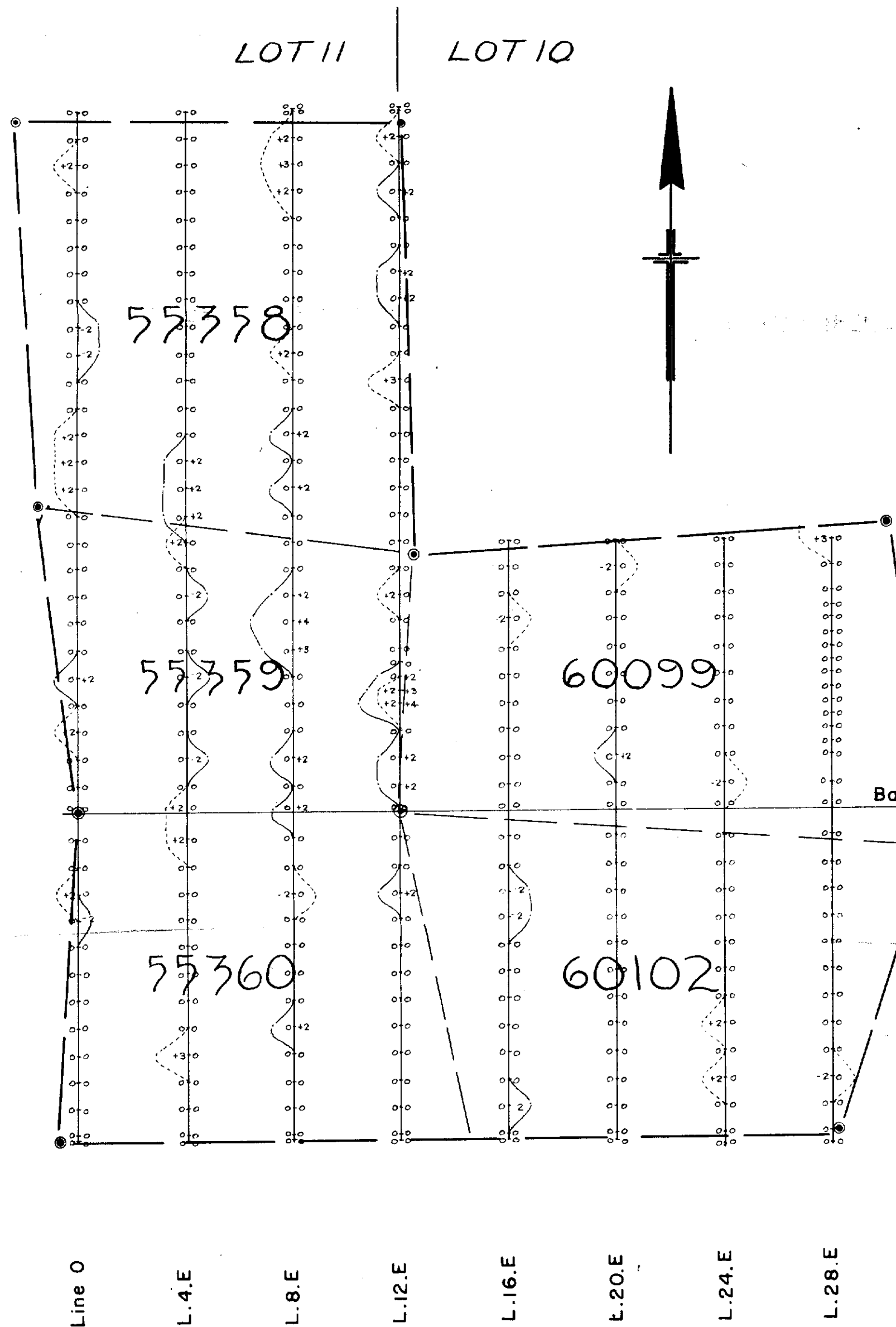
**MAP-1**



**LEGEND**

- MEASUREMENT STATIONS ALONG PICKET LINES
- RELATIVE VALUES OF THE VERTICAL COMPONENT FORCE OF THE EARTH'S MAGNETIC FIELD (in Gamma)
- MAGNETIC CONTOURS
- MAGNETIC BASE STATION
- ELECTRICAL CONDUCTOR

63-1007



**LEGEND**

- MEASUREMENT STATIONS ALONG PICKET LINES
- ELECTROMAGNETIC READINGS - In Phase Component (%)
- ELECTROMAGNETIC READINGS - Out of Phase Component (%)
- PROFILE - In Phase Component (Scale 1"=10 %)
- PROFILE - Out of Phase Component (Scale 1"=10 %)
- ELECTRICAL CONDUCTOR

ELECTROMAGNETIC SURVEY  
 - for -  
**JELEX MINES LTD.**

TULLY TWP, ONTARIO.

- by -  
 PROSPECTING GEOPHYSICS LTD.



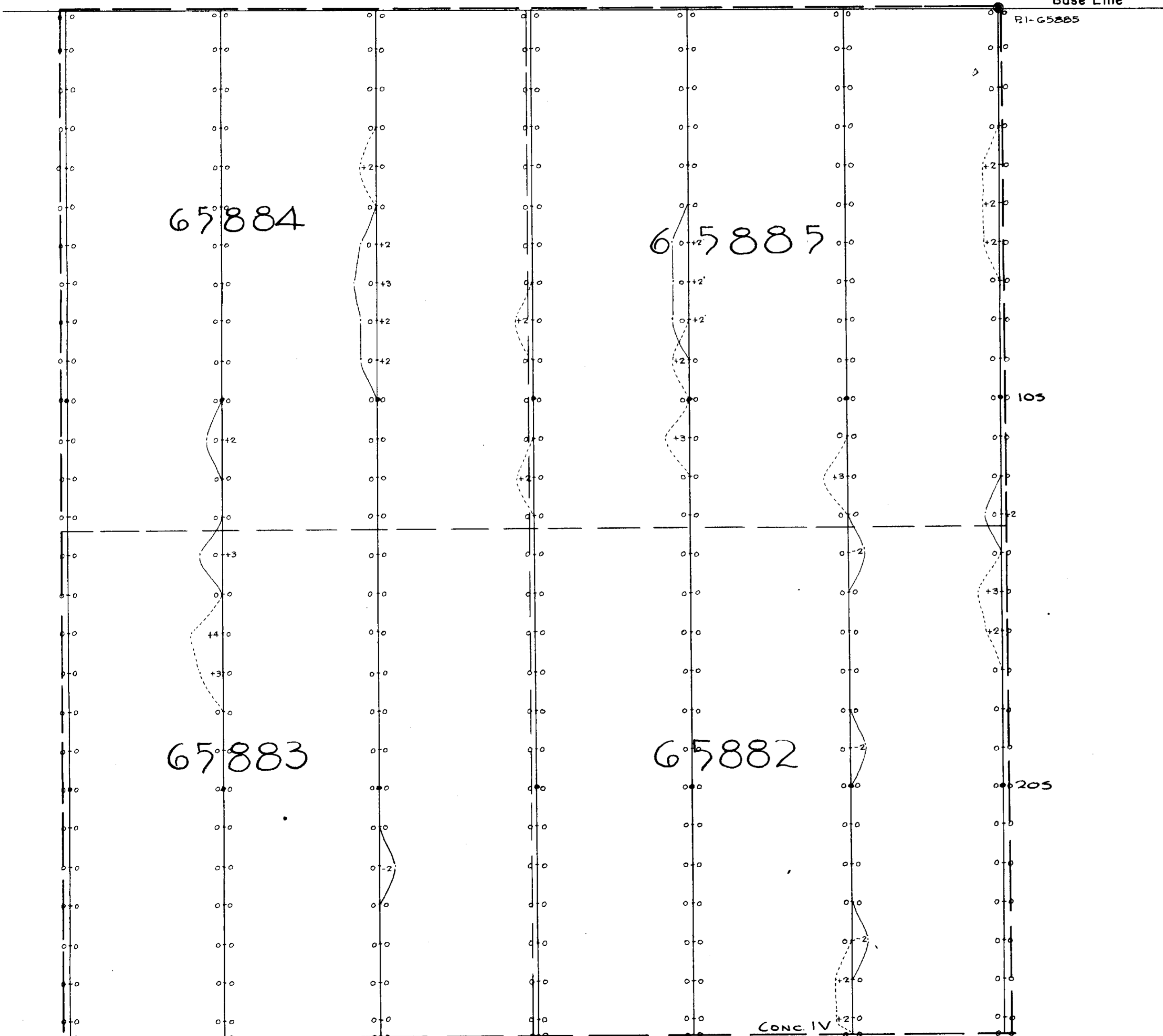
MAP-3-



L.24.W      L.20.W      L.16.W      L.12.W      L.8.W      L.4.W      Line 0

Base Line

R1-65285



**LEGEND**

- ↑ MEASUREMENT STATIONS ALONG PICKET LINES
- ↑ +8  
↑ -5  
ELECTROMAGNETIC READINGS - In Phase Component (%)
- ↑ +8  
↑ -5  
ELECTROMAGNETIC READINGS - Out of Phase Component (%)
- ~ PROFILE - In Phase Component (Scale 1" = 10%)
- ~ PROFILE - Out of Phase Component (Scale 1" = 10%)
- ELECTRICAL CONDUCTOR



ELECTROMAGNETIC SURVEY

- for -

**JELEX MINES LTD.**

PROSSER TWP, ONTARIO.

- by -

PROSPECTING GEOPHYSICS LTD.

SCALE 0 200 400 600 FEET

APRIL 1965

*Handwritten signature*

MAP-4-

63.1607



42A145E9161 03.1687 TULLY

220

LOT 3

CONC. IV  
CONC. III

105

205

65884

65885

65883

65882