

Report on a Magnetometer and VLF Geophysical Survey

ERIN PROPERTY

ERIN 5 -9 CLAIMS

FORT STEELE MINING DIVISION

CRANBROOK AREA

N.T.S. 82G/4W, 4E & 5W

LAT: 49°15'N

LONG: 115°45'W

OWNER

L.G. STEPHENSON

1419 133A St  
Surrey, British Columbia  
V4A 6A2

Work Performed from May 15, 1998 through September 30, 1998

Report By: L. Stephenson  
Submitted: January, 1999

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

25,799

## TABLE OF CONTENTS

	Page
1.00 Introduction	1
2.00 Location, Access and Description	1
3.00 Geophysical Surveying	2
4.00 Conclusions	2
Exhibit "A" - Statement of Expenditure	4
Affidavit	5
Author's Qualifications	7
MAPS	
Figure 1 - Location Map	6
Figure 2 - Property Index Map	(in Pocket)
Figure 3 - VLF Survey Data	(in Pocket)
Figure 4 - Magnetometer Survey Data	(in Pocket)
Figure 5 a-i - VLF Profiles	

Report on a Geochemical Orientation Survey  
and  
Geological Prospecting Program

ERIN 5 -9 CLAIMS

FORT STEELE MINING DIVISION

L. Stephenson

January, 1999

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1.00      **Introduction**

Mr. L. Stephenson staked the five Erin Claims in 1992 and under took to evaluate and locate the projected trend of the "Pipeline Showing" on the adjacent claims to the east. As well the St. Eugene Mine trend is projected to cross the property.

The region has been an active area for base metals mineral development for over 100 years mainly due to the discovery of the St. Eugene Mine located six miles west of the property in the late 1890's. This mine produced over \$20 million of lead, zinc and silver. The Pipeline showing located on the adjacent claims was discovered in the 1970's. Exploration work on related to it has covered some of the area of the Erin Claims. In the late 1980's Kokanee Explorations staked claims that covered the area of the Erin Claims. They conducted reconnaissance geochemical and geological mapping that probably took in some of the Erin Claims area.

A Magnetometer and VLF geophysical survey was undertaken to establish and evaluate the trend of the "Pipeline Showing."

2.00      **Location, Access and Description**

The Erin Claims are located east southeast of the town of Moyie, British Columbia. Access is provided to the claims via the natural gas pipeline/B.C. Tel maintenance road.

The property consists of 5 claims staked by Mr. L. Stephenson, in 1992. They are listed in Table 1.

**TABLE 1**

Claim Name	Tag Number	Mineral Tenure #	Date Staked
Erin 5	647979M	314409	10/18/92
Erin 6	647980M	314410	10/18/92
Erin 7	650575M	314411	10/18/92
Erin 8	650576M	314412	10/18/92
Erin 9	650577M	314413	10/18/92

3.00

### Geophysical Surveying

A total of 10 kilometres of pace and compass lines of geophysical stations were established across the claims. A total of 220 magnetometer and VLF station readings were taken using a GEM-19 total field proton precession Magnetometer and a Geonic VLF unit and are plotted on Figures 3 (Mag plotted with 49,000 nanoTeslas base) and 4 (VLF Field Strength) and profiles of each line are plotted on Figure 5a-i.

In the VLF surveying the Seattle Station (Jim Creek) was utilized as the strongest, most consistent and best orientated to the survey grid. Some check readings on Cutler main were made.

The data is felt to be unreliable due to the presence of the pipeline. An electric current in the pipeline to reduce static charges and the metallic near surface make up of the pipeline almost atop of the east west striking zone outlined around the "Pipeline Showing" to the east overshadows any effect from the continuation of the zone on to the Erin Claims. No identifiable relationship between the results and the presence of a mineralized zone is possible using these instruments.

The magnetics and field strength follow the trend of the bedding but as this also approximates the trend of the pipeline the correlation is suspect.

More sophisticated geophysical methods that can filter out or see beneath the pipeline effect (such as I.P. and Deep EM surveying) could be useful in determining the extent of the mineralized zone.

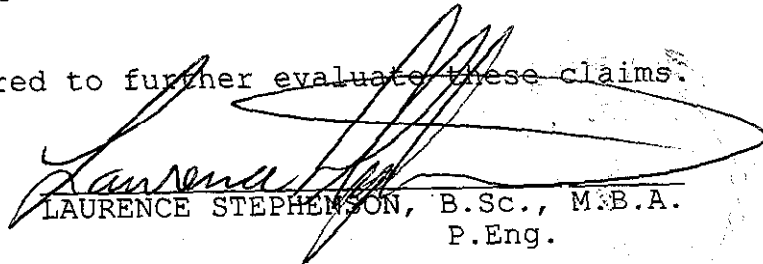
4.00

### Conclusions

The Erin Claims have the extension of the adjacent "Pipeline Showing" located in its boundaries. This showing is part of the projected trend associated with the St. Eugene Mine where it cuts the Creston rocks. A geophysical signature has not been established due to the presence of the Pipeline by utilizing VLF and Magnetometer surveying methods.

More sophisticated surveying methods are recommended to attempt to develop a geophysical trend and target exploration drilling effectively.

Further exploration is required to further evaluate these claims.



LAURENCE STEPHENSON, B.Sc., M.B.A.  
P.Eng.

EXHIBIT "A"

STATEMENT OF EXPENDITURES

MAGNETOMETER AND VLF GEOPHYSICAL SURVEYING

ON ERIN 5 - 9 CLAIMS  
FORT STEELE M.D.

Covering the period of May 15th 1998 to January 6th, 1999

SALARIES:

L. Stephenson - Geologist, P. Eng. Surveying 4 days  
Report writing  
Compilation of data &  
Map Preparation 3 Days  
Travelling - 4 days  
11 days @ \$400/ day \$4,400

TRANSPORTATION:

1 - 4x4 Pickup; 8 days @ \$65/day \$  
520

EQUIPMENT RENTAL: Exchanged for services (Value = 1 day) \$ 400

TOTAL= \$5,320

  
LAURENCE STEPHENSON, B.Sc., M.B.A.  
P.Eng.

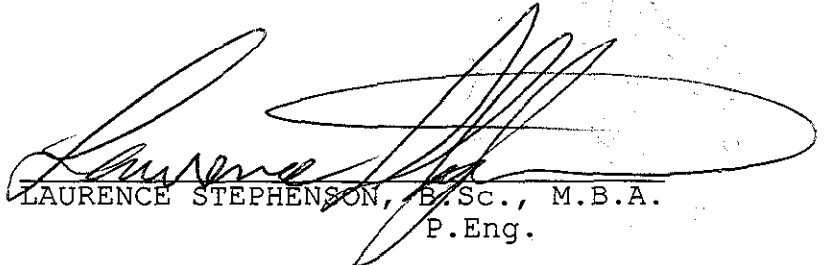
IN THE MATTER OF THE  
B.C. MINERAL ACT  
AND  
IN THE MATTER OF A MAGNETOMETER  
AND VLF GEOPHYSICAL SURVEYING PROGRAM

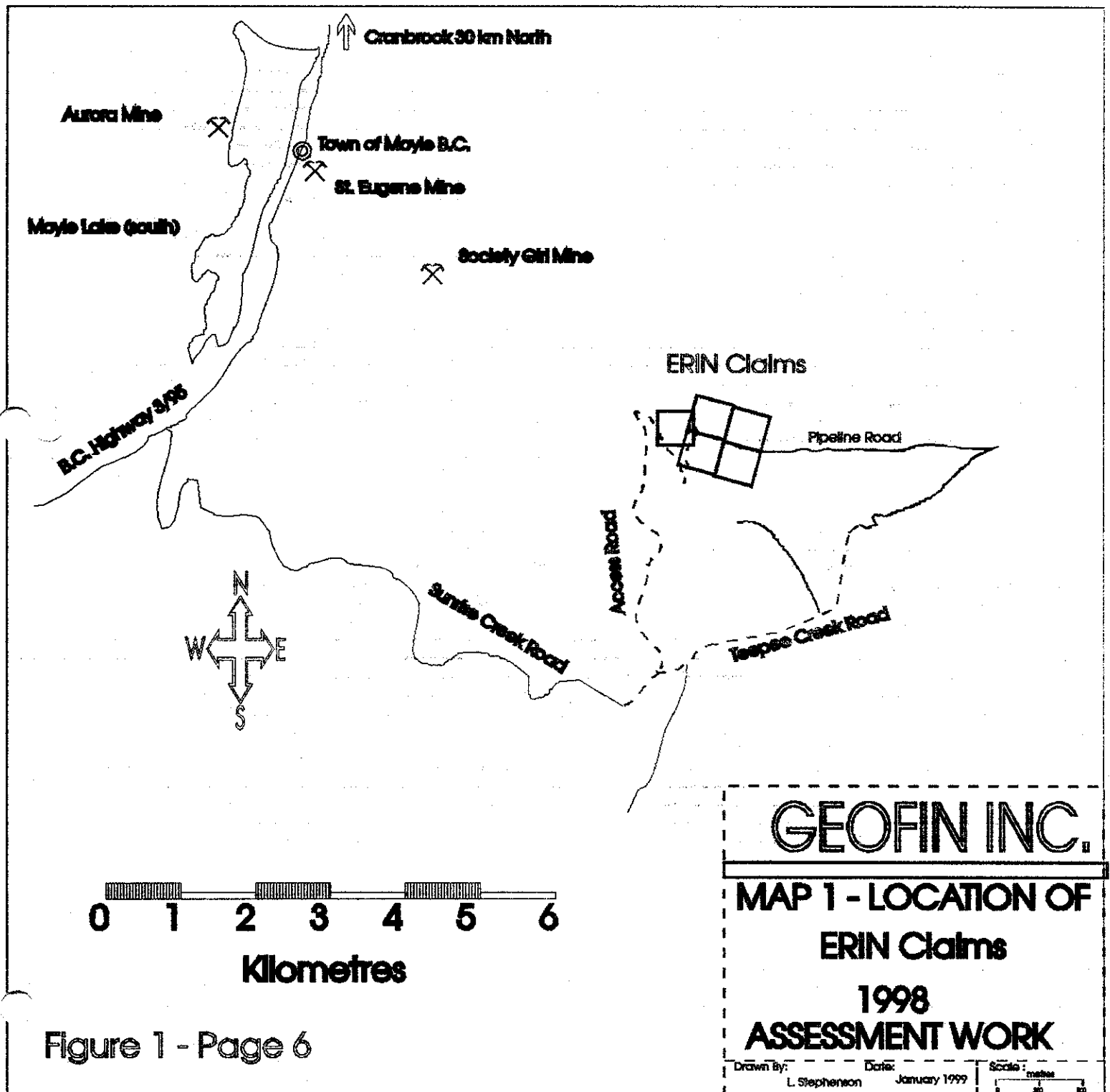
CARRIED OUT ON THE ERIN PROPERTY  
MOYIE AREA  
in the Fort Steele Mining Division  
of the province of British Columbia  
More Particularly N.T.S. 82G/5W, 4W & 4E

A F F I D A V I T

I, L. Stephenson, of the City of Surrey, in the Province of British Columbia, make an oath and say:

1. That I am employed as a geologist by GeoFin Inc. and as such have a personal knowledge of the facts to which I hereinafter depose:
2. That annexed hereto and marked as Exhibit "A" to this my Affidavit is a true copy of expenditures incurred on a geochemical surveying and geological prospecting program, on the Erin mineral claims;
3. That the said expenditures were incurred between the 15th day of May, 1998 and the 8th day of January 1999 for the purpose of mineral exploration.

  
LAURENCE STEPHENSON, B.Sc., M.B.A.  
P.Eng.

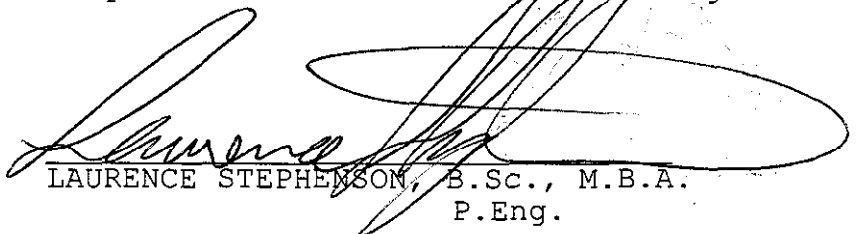




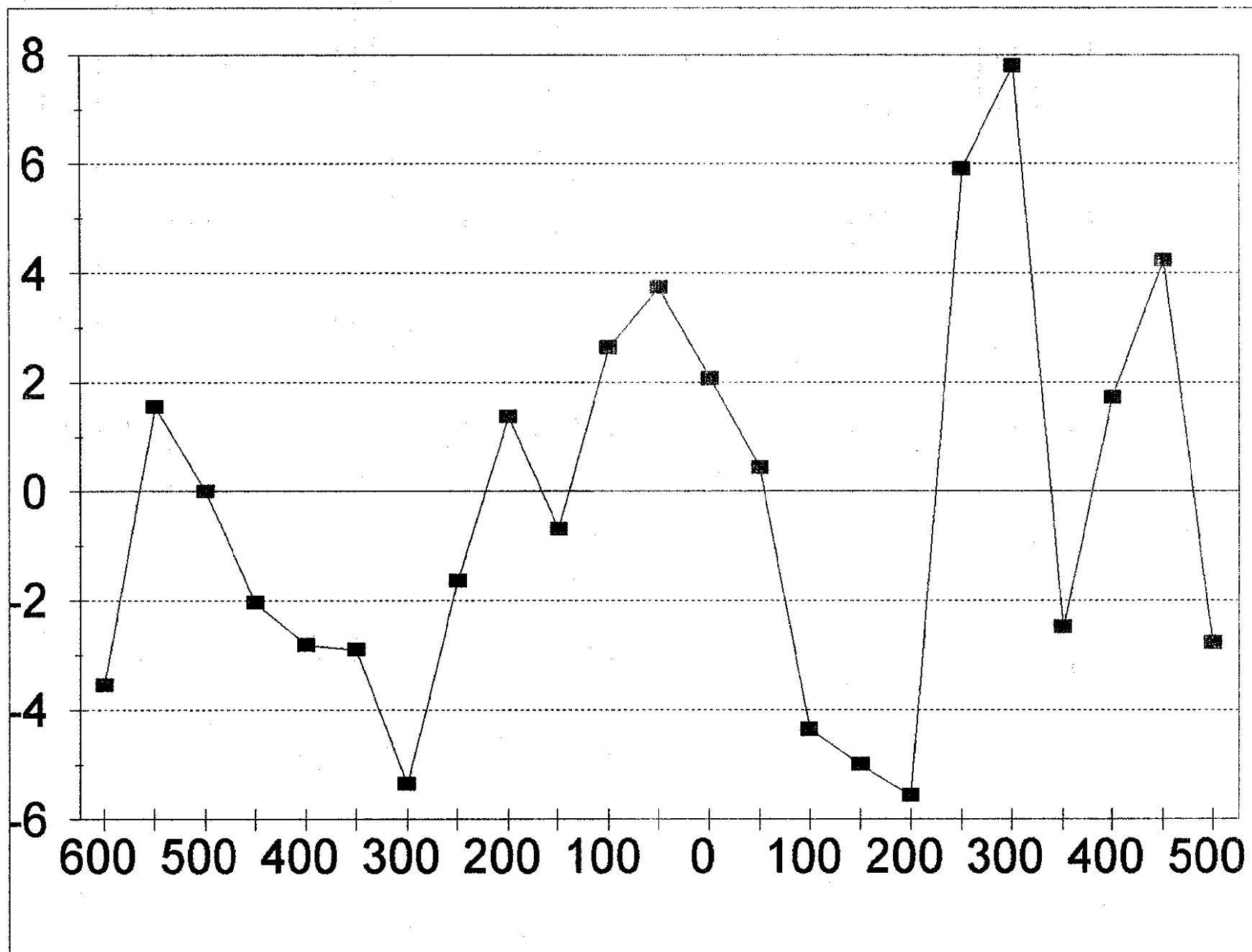
#### AUTHOR'S QUALIFICATIONS

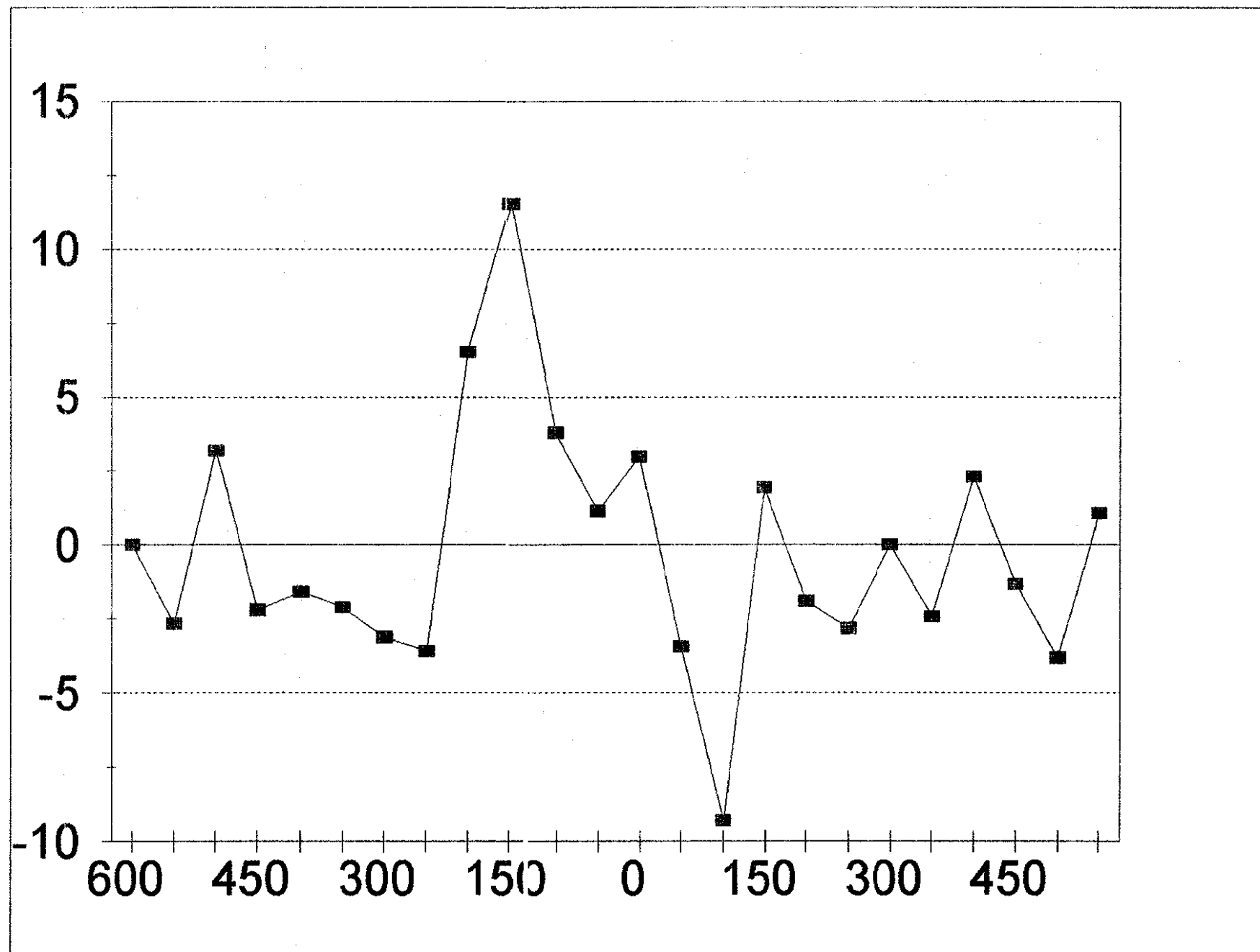
I, Laurence Stephenson, of the City of Surrey, in the Province of British Columbia, do hereby certify that:

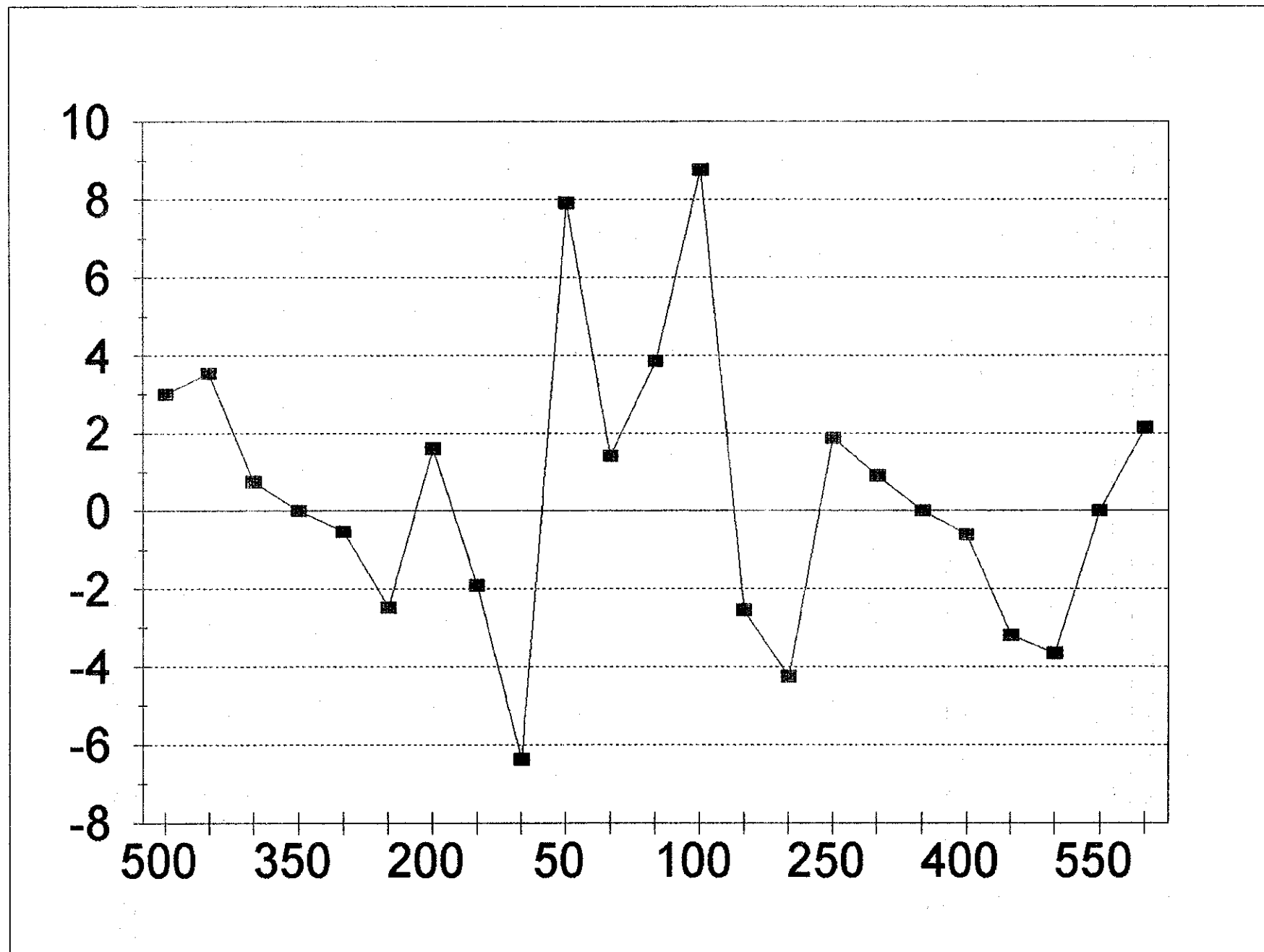
1. I graduated from Carleton University in 1975 with a Bachelor of Science degree in Geology then, in 1985, graduated from York University with a Masters of Business Administration;
2. I am registered as a Professional Engineer for the Province of Ontario (1981);
3. I have had over 30 years experience in the field of mining exploration.

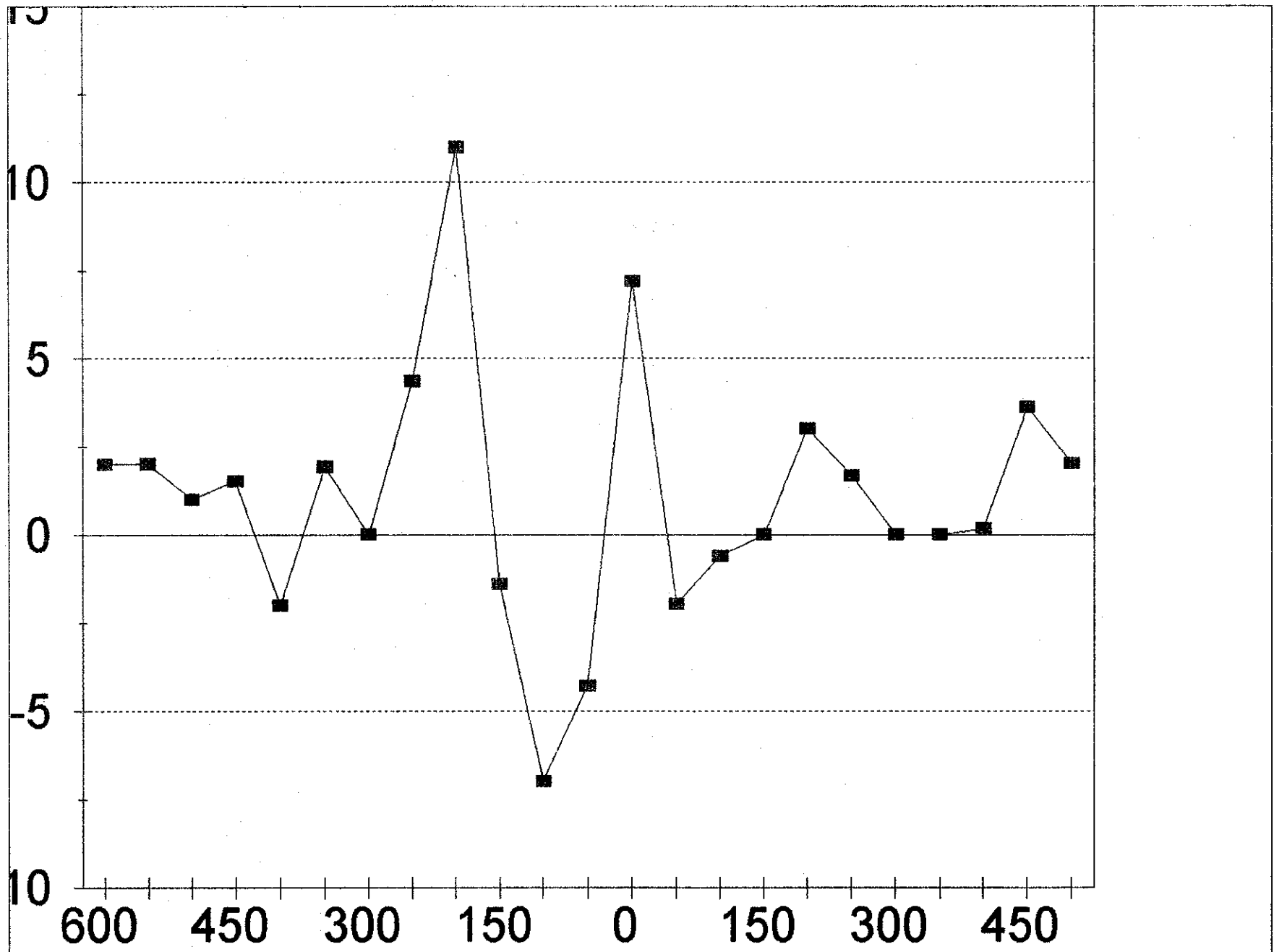


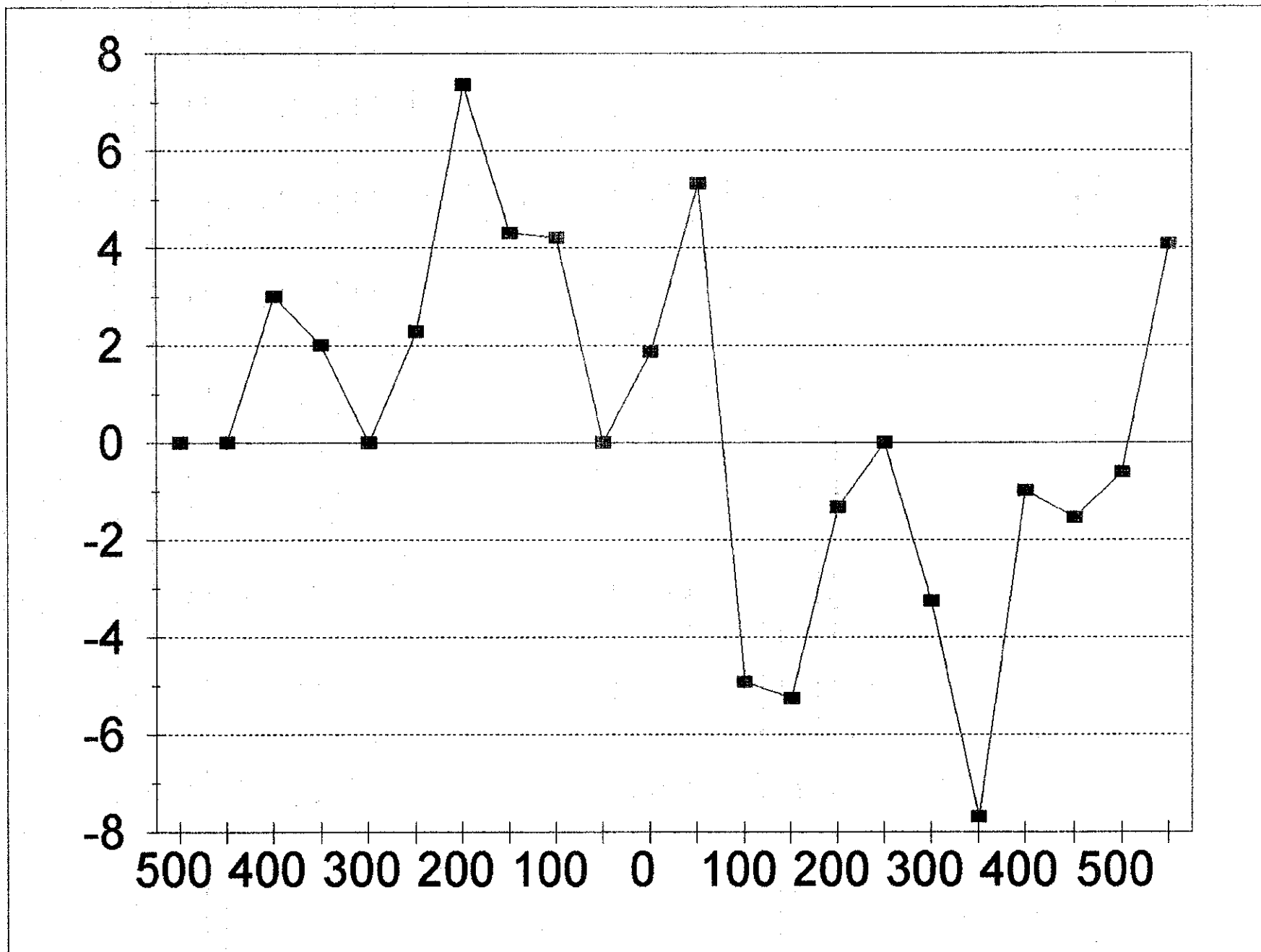
LAURENCE STEPHENSON, B.Sc., M.B.A.  
P.Eng.

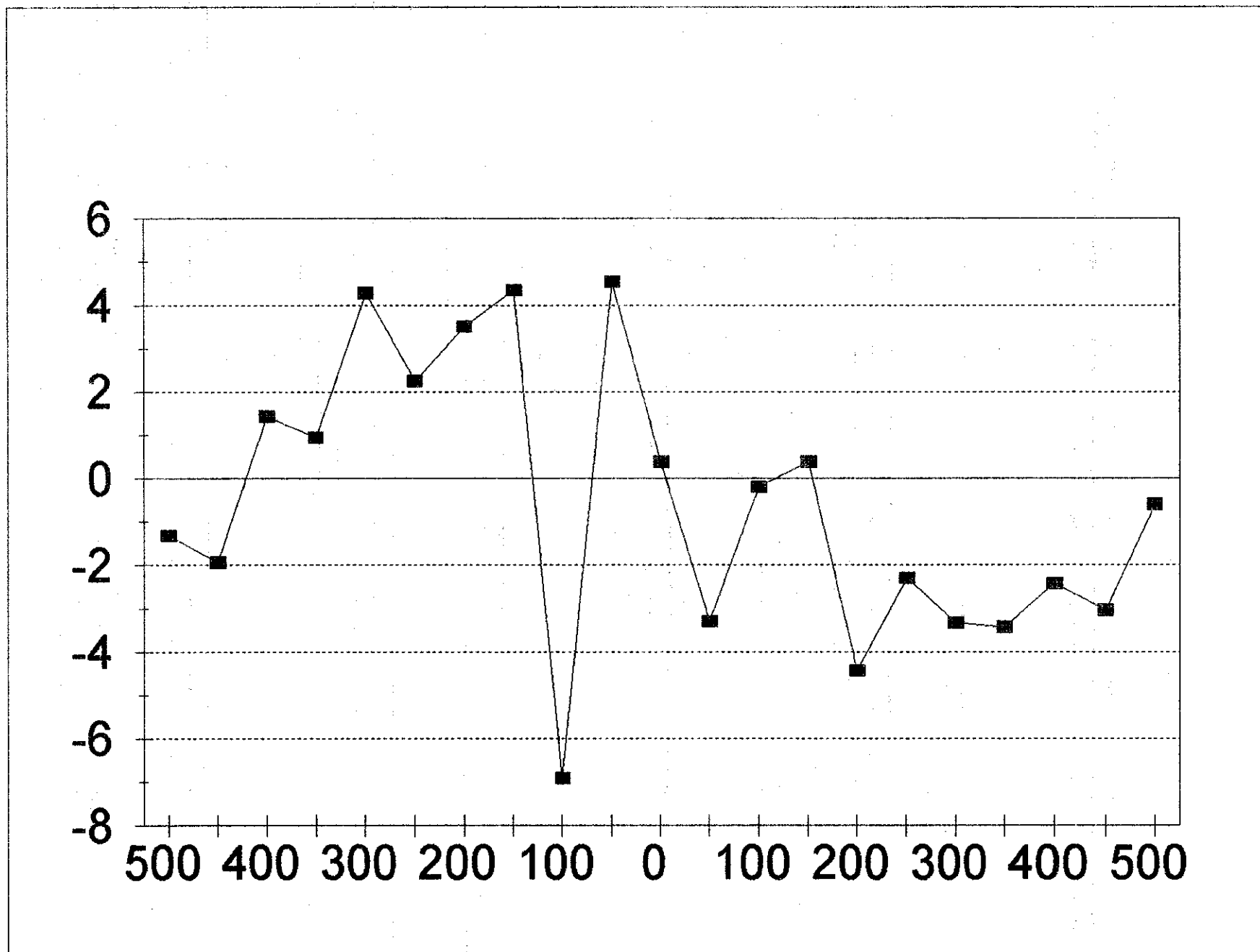


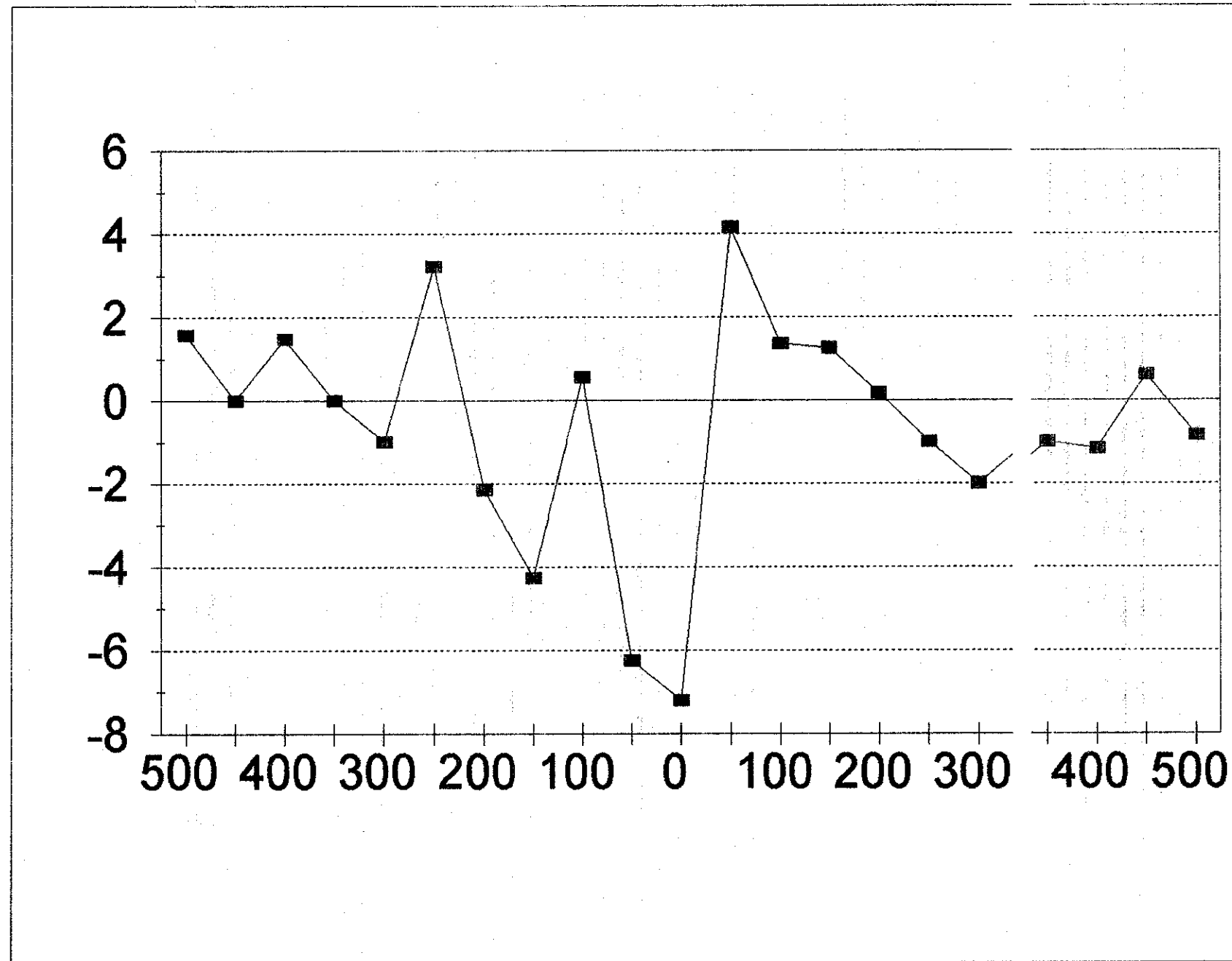




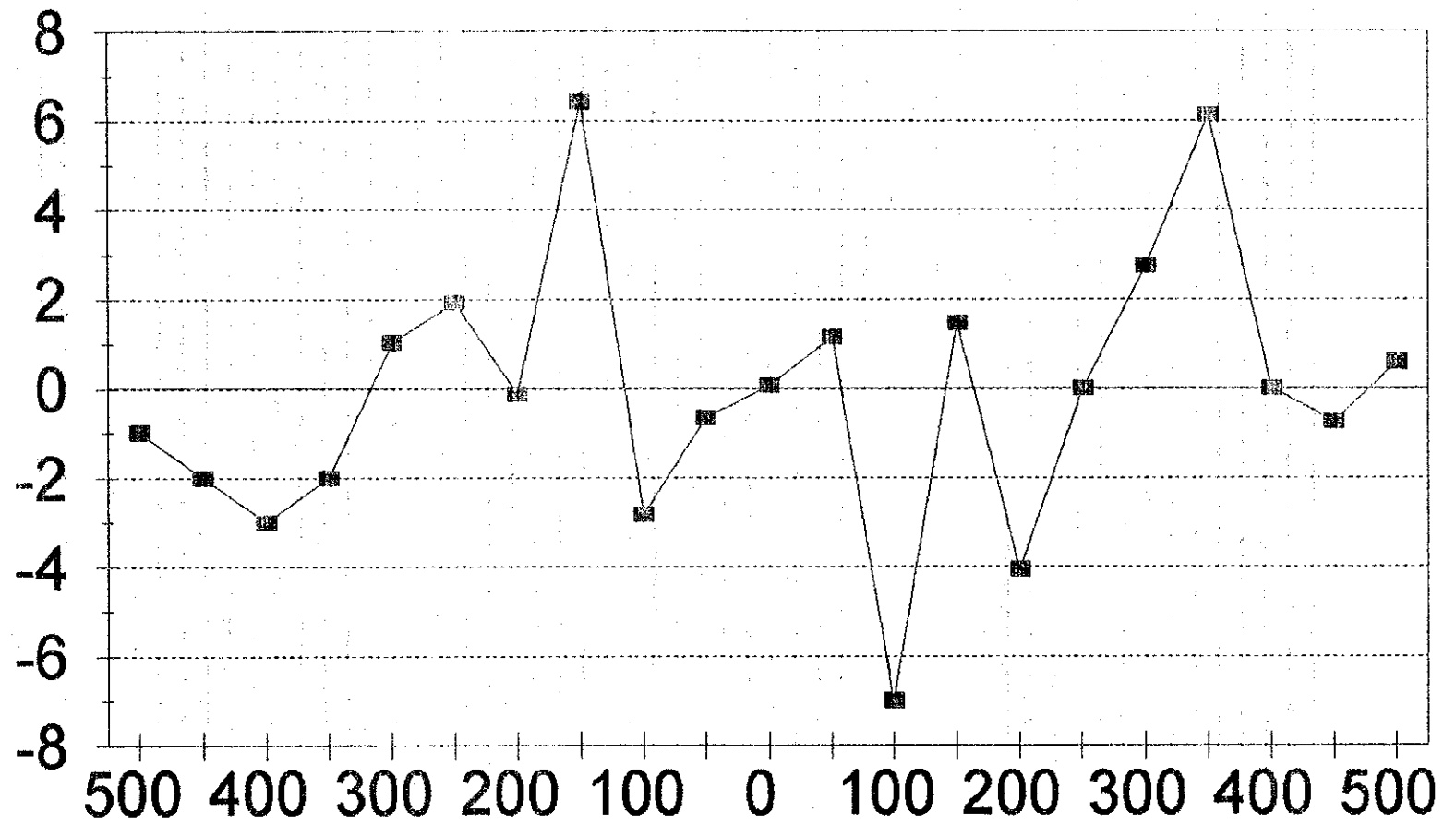


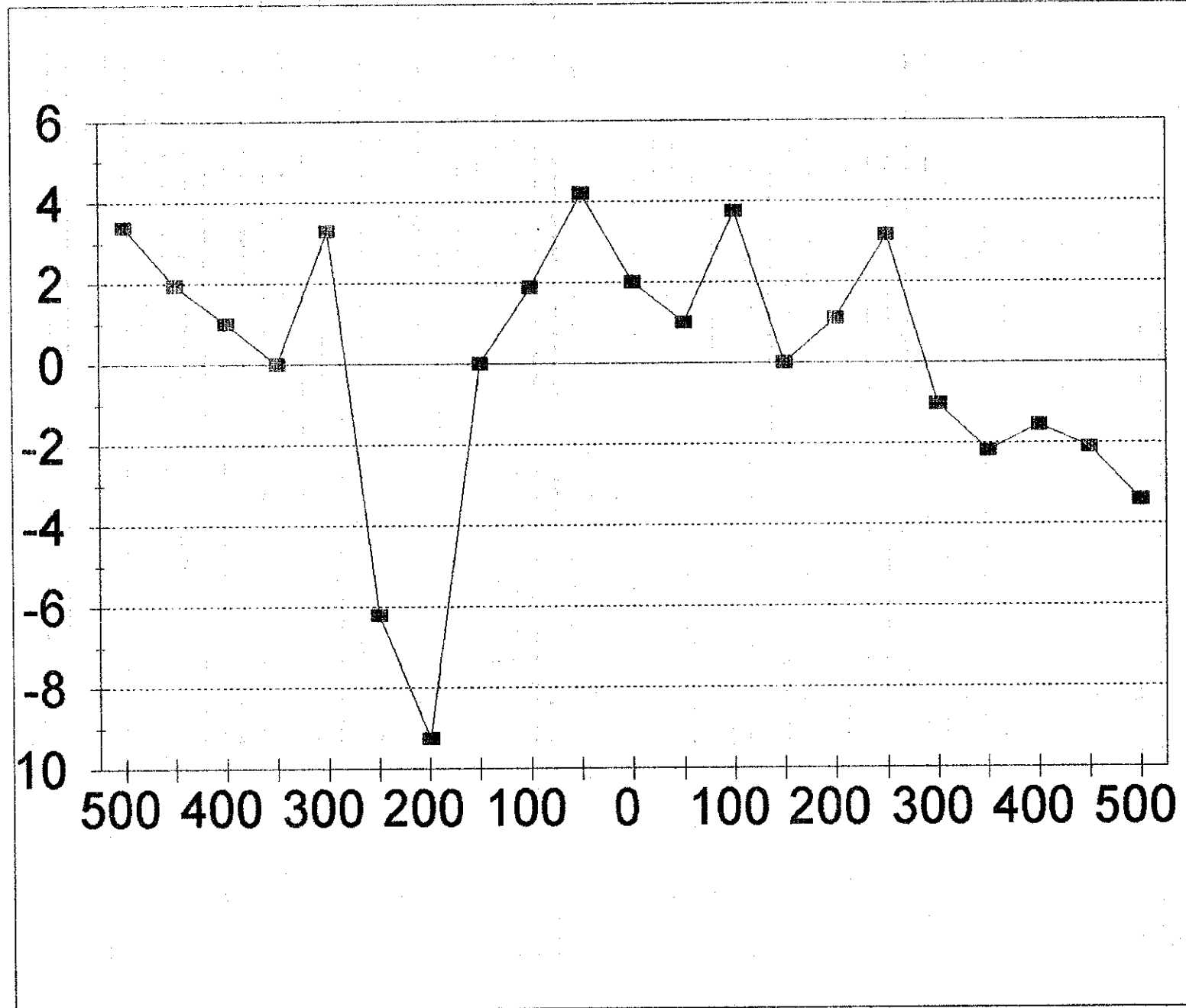












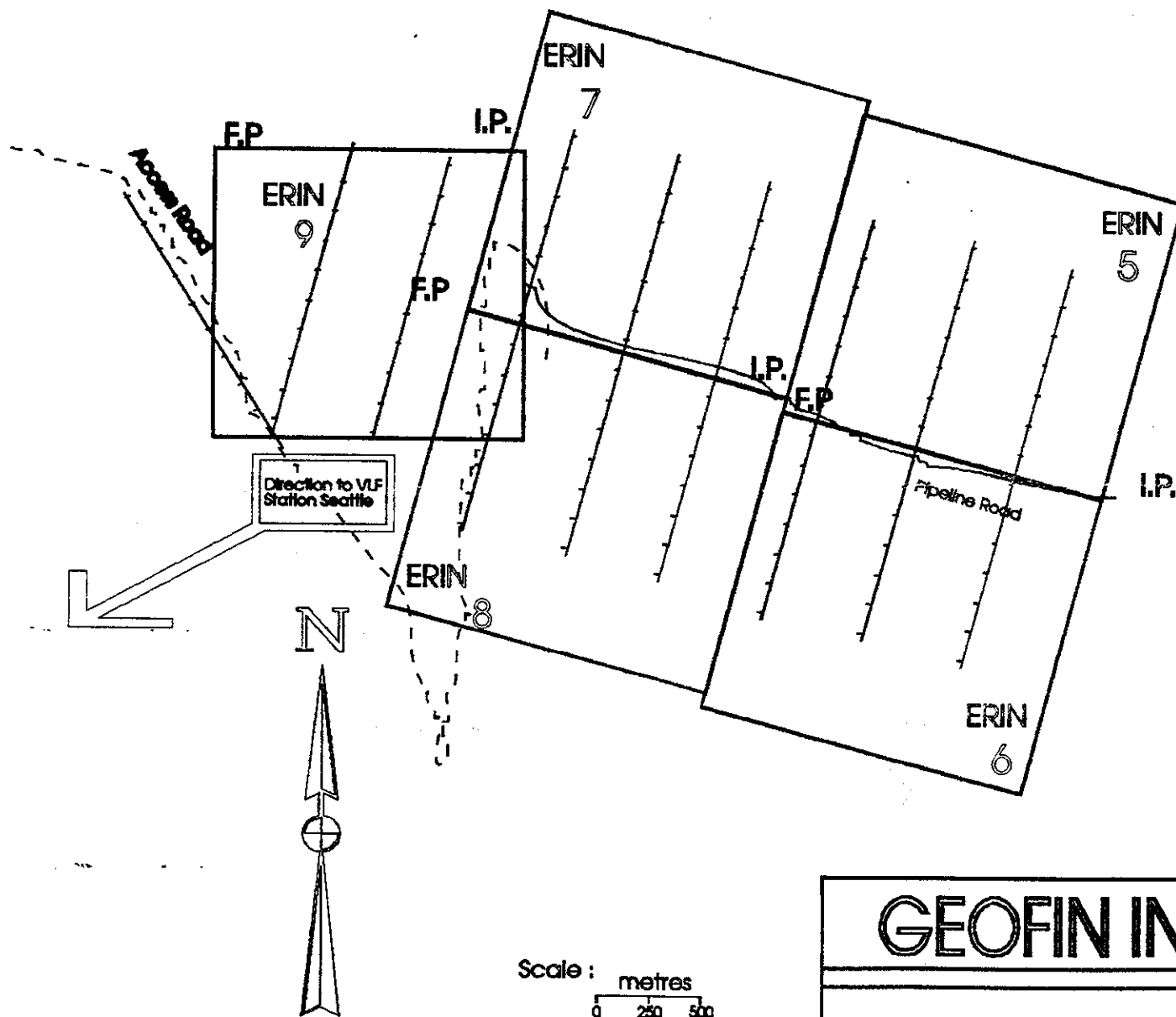


Figure 2

**GEOFIN INC.**

**ERIN CLAIMS  
1998  
ASSESSMENT WORK**

VLF and Magnetometer Survey Data

Drawn by: L. Stephenson Date: October 1998 Scale: metres  
0 50 100

