

# MAR 19980004: NORTHERN/WESTERN

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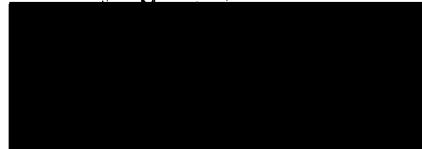
April 11, 1998

**Mr. Maurice Keylor**  
Ells River Resources Inc.  
17424 - 106A Avenue  
Edmonton, Alberta T5S 1E6  
Fax: (403) 486-0039; 3 Pages

Dear Maurice,

As promised, enclosed is a draft of a summary document that I am preparing for you that details the work we have done to date including the review of the geophysical airborne data. At present, I still need to review my prioritization of the anomalies based upon the new maps and profiles provided to me by GEDCO last Wednesday. Upon my return from South Africa I will finalize this document.

Best regards



Michael B. Dufresne, M.Sc., P.Geol.

## **Summary Review Of Magnetic Data For Ells River Resources Ltd.'s Northeast Alberta Metallic Mineral Permits**

### **Work Conducted**

Between about March 6 and April 6, 1998, personnel on behalf of APEX Geoscience Ltd. (APEX) and Geophysicon Exploration and Development Company (GEDCO) received digital airborne geophysical data from Ells River Resources Ltd. (Ells) that was subsequently downloaded into specialized software at GEDCO's office. The data was then used to produce several filtered maps in order to evaluate the data for the presence of possible near-surface kimberlite or lamproite diatremes.

After the initial set of maps were received from GEDCO, Mr. M. Dufresne visited GEDCO's office where he reviewed the entire set of total field magnetic data in profile form in conjunction with a geophysicist from GEDCO. A total of about 35 magnetic anomalies were identified of interest. Profiles of each of these 35 magnetic anomalies are provided. In addition, GEDCO had to relevel the original World Geoscience Ltd. magnetic data in order to insert the tieline data into the dataset prior to gridding the data for contouring. Three maps including a first vertical derivative and two shallow target enhancement maps are provided. The first order enhancement map is essentially the 1<sup>st</sup> vertical derivative of shallow band pass filtered data. The second order enhancement map is a 2<sup>nd</sup> vertical derivative of shallow band pass filtered data.

### **Summary Results**

The initial inspection of the shallow target enhancement maps and the first vertical derivative map indicate that there are no apparent targets of the quality of the magnetic targets that have yielded kimberlites in the Buffalo Head Hills. However, there are several important points to make about the Buffalo Head Hills pipes. First, there are a few spectacular anomalies that have yielded kimberlites, but there are many that are less than spectacular that have yielded kimberlites as well. In general, very few (perhaps one or two pipes) of the Buffalo Head Hills pipes are visible on the total field magnetics, however, most or all are visible as discreet anomalies on the bulk of the filtered magnetic maps. The Buffalo Head Hills magnetic data seems to indicate that the basement signature is quite a bit quieter than for the Birch Mountains. The Ells dataset for the Birch Mountains seems to yield few evident map anomalies that could be indicative of kimberlites. However, the background magnetic data from the basement beneath the Birch Mountains could be providing a significant amount of interference as it is significantly higher in magnetic signature than in the Buffalo Head Hills area.

Upon reviewing the total field magnetic data in profile form several unexpected magnetic anomalies that could be due to shallow sourced intrusions or volcanics were discovered. Anomalies that could be of interest are tabulated in the accompanying table. The more prospective anomalies include 4, 7, 8, 13 with lower quality anomalies such as 9, 10, 14a, 14 b, 17, 18, 26, 27, 28, 29, 31 and 34. In addition, anomalies 2 and 3 may warrant further investigation as they represent sharp, shallow-sourced magnetic features that are

April 11, 1998

actually indicative of a reversely magnetized geological unit such as a possible near-surface dyke or fault. Several of the above mentioned anomalies could be of interest for possible kimberlite or lamproite related intrusions or volcanic horizons and, therefore, warrant conducting further exploration. I recommend a field test of the targets that could include the following: (a) ground checking and prospecting all the potential anomalies of interest in order to eliminate those anomalies that are likely related to culture and/or natural features such as drainage, (b) collecting a number of till, soil or rock samples at each of the higher priority targets, and (c) conducting ground geophysical surveys over selected higher priority airborne magnetic anomalies in order to evaluate whether any of the anomalies are real and unexplained, and therefore possibly warrant a drill test, or whether the anomalies are related to drainage and/or culture. As well, the possibility of obtaining existing seismic data should be investigated.

At this stage, conducting further airborne geophysical surveys, including infilling the prior survey, is likely not going to result in the discovery of high quality magnetic anomalies that were not identified in the initial survey and that could be indicative of kimberlites or lamproites. Any further airborne geophysical surveys will likely only enhance the targets that have been identified to date. The existing data is regarded of sufficient quality to conduct the recommended ground follow-up fieldwork.

**APEX Geoscience Ltd.**



Michael B. Dufresne, M.Sc., P.Geol.

April 11, 1998

19980004

ASSESSMENT REPORT  
FOR  
METALLIC AND INDUSTRIAL MINERALS PERMITS

# 9393110069  
# 9393110070  
# 9393110071

HELD BY  
ELLS RIVER RESOURCES INC.

Submitted April 1, 1998

on behalf of

Ells River Resources Inc.

by

Mr. Henry Cieszynski, C.E.O.  
Mr. Maurice Keylor, President  
Mr. Raymond Caron, Director

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## I. SUMMARY

This report is being submitted by Ells River Resources Inc. for assessment work performed on the three (3) Metallic and Industrial Minerals permits as described in Section III. These permits involve a property we have defined as the "Western Block" located in the Fort McMurray/Fort MacKay region of northeastern Alberta.

Originally, the property was secured as a potential base metal and precious metals play. As a result, our initial exploration program was developed to prove up this potential and consisted of:

- a) information gathering - researching published reports, examination of maps, et cetera,
- b) area reconnaissance - mapping, examination of terrain, et cetera,
- c) accessing permits area - cutting access routes onto permitted lands,
- d) sample collection - outcrops, stream sediments, etc.,
- e) sample analysis - panning, detailed microscopic work, assaying, consultant input,
- f) documentation.

While in the field, rock samples and panned concentrates were collected. Rock samples from both areas have been assayed by certified Canadian laboratories for gold and other minerals. In addition, multi-element analysis was done on several of the samples. The panned concentrates were visually examined with the aid of a microscope to detect sulphides, gold, other heavy minerals and diamond indicator minerals. From this detailed examination selected concentrates were sent to assay laboratories for further analysis.

In 1997, our focus for the property changed as the result of work being done in the Buffalo Hills area by Ashton in terms of diamond exploration work.

Ells River Resources will continue to explore the Western Block in order to carry out further analytical work for base metals, precious metals and diamonds. However, certain portions, as detailed in Appendix C, will be surrendered back to the Crown.

## II. INTRODUCTION

There have been reports of gold and other precious metals being found in Alberta for over one hundred (100) years. These finds tended to small in comparison to the more promising discoveries in British Columbia and the Yukon. Consequently activity was centered in those areas drawing attention away from Alberta's potential. In addition, oil and gas finds, and the vast tar sands in northeastern Alberta overshadowed and exceeded any known metallic mineral potential.

In the 1990s Alberta's potential for producing gold and other precious metals was re-discovered. Individuals and companies began submitting applications to the Government of Alberta for permits to explore for metallic and industrial minerals throughout the province.

Mr. Henry Cieszynski, a financial analyst and prospector from Toronto, Ontario, began to investigate certain regions of northeastern Alberta with the intent of securing metallic and mineral permits. Eventually he secured several permits in this region thus allowing him to explore the Cretaceous and Devonian stratigraphy, on the properties, for economic mineral deposits. Cretaceous rocks present in the Western Block include the Clearwater, Grand Rapids, Shaftesbury, Dunvegan, and LaBiche Formations as well as the Smoky Group. The Middle Devonian rocks are found on the Northern Block (Green, 1970).

Shortly after receiving the permits, Mr. Cieszynski formed a partnership with Mr. Maurice Keylor, an Edmonton businessman. The mandate of the partnership was to explore the newly acquired properties and identify regions with anomalous metal concentrations for more detailed follow-up work. This work has included prospecting, examining heavy mineral concentrates, geochemical analysis on both rock and stream silt samples and basic research.

On December 9, 1994, Ells River Resources Inc. (formerly 635216 Alberta Ltd.) was incorporated pursuant to the Business Corporations Act (Alberta). The company named Mr. Cieszynski as Chief Executive Officer and Mr. Keylor as President. On July 7, 1995 the permits held by Mr. Cieszynski were transferred to Ells River Resources Inc. with Memorandums of Registration completed August 9, 1995.

This report is being submitted by Ells River Resources Inc. for assessment work related to three (3) mineral permits described in Section III. For assessment purposes, the work completed is for the following periods:

- A. Western Block : November 29, 1995 to November 29, 1997.



III. PERMIT TABULATION

The properties held by Ells River Resources Inc. are covered by three (3) Metallic and Industrial Minerals permits. The properties are located in an area which we have defined as the "Western Block" (Appendix A, Figure 1). A tabulation of the permits follows:

<u>Location</u>	<u>Permit #</u>	<u>Date Issue</u>	<u>Legal</u>	<u>Area (Ha)</u>
Western	9393110069	Nov 29/93	Sec 1-36, 95-13-W4	9,216
Western	9393110070	Nov 29/93	Sec 1-36, 96-13-W4	9,216
Western	9393110071	Nov 29/93	Sec 1-36, 97-13-W4	9,216

#### IV. PROPERTIES

This section will describe the location, physiography, access, general work completed, and an overall conclusion for the Western Block.

##### **A. WESTERN BLOCK**

###### 1. Location

The Western Block is situated in northeastern Alberta centered near 57 degrees 20'N latitude and 112 degrees 00'W longitude. It is located eighty (80) kilometers northwest from the city of Fort McMurray, consisting of approximately twenty-seven thousand six hundred forty-eight (27,648) hectares within Townships 95, 96 and 97 in Range 13.

###### 2. Physiography

The permits are situated on the eastern flank of the Birch Mountains. The southern two thirds of the property is fairly flat and dominated by areas of muskeg. In the northern part of the permits, the Birch Mountains rise to the northwest, providing more relief where mixed deciduous and coniferous forest is prevalent. Elevation ranges from three hundred forty (340) metres in the southeast, along the Ells River, up to seven hundred sixty (760) metres in the northwest corner of the property.

Three (3) streams and several of their tributaries flow across the permits. The largest of these is the Ells River which cuts the south east corner of the permits and flows to the east. The other two (2) streams are the Joslyn Creek and Tar River which generally run southeast through the property. The streams are sourced in the Birch Mountains and drain into the Athabasca River which is located approximately eighteen (18) kilometers to the east of the permits. The Tar and Ells Rivers have distinct valleys where Cretaceous rocks outcrop.

###### 3. Access

The property can be accessed by either helicopter or all-terrain vehicles (eg. quads, snowmobiles, etc.). In the winter of 1997, there was clear-cutting and logging activity on the extreme northern boundary of permit number 9393110071. This opened up a portion of this area for winter access by 4x4 vehicles.

A helicopter can be used to access several landing sites. It takes approximately twenty-five (25) minutes to fly from Fort McMurray.

Access to the southeast corner of the property is gained by driving fifty-two (52) kilometers from Fort McMurray to Fort

MacKay on paved highway No. 63. Off road vehicles are then used on cutlines, seismic lines, quad trails, trapper trails, et cetera that lead from Fort MacKay to the permits, approximately twenty-three (23) kilometers to the west.

#### 4. Work Completed

The work performed during the assessment period included the following:

- a. Research and Evaluation,
- b. Sample Analysis,
- c. High Resolution AeroMagnetic Survey - World Geoscience,
- d. HRAM Data Analysis - Image Interpretation Technologies,
- e. HRAM Data Analysis - APEX Geoscience Ltd.

##### a.) Research and Evaluation

Considerable work was done in the following areas:

1. evaluating drilling proposals,
2. reviewing access,
3. evaluating process methods and procedures,
4. monitoring activities of other company's working in the area.

##### b.) Sample Analysis

No samples were collected during this past assessment period. The few samples that were submitted for analysis were obtained prior to November, 1995 and had been held in inventory.

##### 1. Ledoux & Company

A sample identified as # 28-02-96LB-PTB obtained from Point B (see February, 1996 Assessment Report), along the Ells River. This buff coloured sandstone from the Clearwater formation was obtained from the colluvium on a cut-bank on the river. A fire assay was done using lead collection.

##### 2. Murox Industries Ltd.

Six (6) samples were forwarded to Murox Industries to be processed using a fire assay with lead flux. The samples are identified as follows:

5MDP003 - Point B on Ells River	5MDP017 - from the Tar River
5MDP009 - on Ells River	5DBO319 - on Ells River
5MDP013 - further west on Ells	5NFO002 - far west on Ells

Please refer to February, 1996 Assessment Report, Appendix G, Apex Geoscience Report for more details regarding these samples.

##### 3. Saskatchewan Research Council

Two samples, identified as Tar95-05/08 and Tar 95-09, were submitted to the SRC and analyzed for diamond indicator minerals. These samples were obtained from Site 2 (see February, 1996 Assessment Report) along the Tar River. Tar95-05/08 is a

composite of two samples (05 & 08) which were taken from a sandstone outcrop which consisted mostly of fine to coarse grained sand. Tar95-09 consisted of panned sands and gravels with abundant quartz.

c.) HRAM Survey - World Geoscience

A copy of the Exabyte tape containing the Located and Gridded data is included in Appendix E. The information not included but available upon request are laminated copies of the following:

1. - Total Magnetic Intensity (TMI) with N & E illuminations
2. - TMI reduced to Pole (RTP) First Vertical Derivative
3. - TMI RTP second Vertical Derivative
4. - TMI RTP Pseudo Depth Slice 1 with N & E illuminations
5. - TMI RTP Pseudo Depth Slice 2 with N & E illuminations
6. - TMI RTP Pseudo Depth Slice 3 with N & E illuminations

These are at a scale of 1 : 50,000

In addition, we have available upon request, mylar plots of:

1. - Flight Path
2. - TMI with Flight Path
3. - TMI RTP Second Vertical Derivative with Flight Path

These are at a scale of 1 : 50,000

d.) HRAM Interpretation - Image Interpretation Technologies

A copy of the report provided by IIT is included in Appendix F. The poster prepared by IIT is available on CD-ROM and is also included as part of Appendix F.

e.) HRAM Interpretation - APEX Geoscience

At the time of writing this report, APEX Geoscience had not completed their report on the analysis of the HRAM data. This report will be provided when completed to be inserted into Appendix G.

5. Conclusion

The 1997 exploration program developed and deployed by Ells River Resources Inc. identified at least six (6) magnetic anomalies potentially related to kimberlites. Many of the anomalies are closely grouped in a cluster, which is a common characteristic of kimberlite intrusions.

It is proposed that the 1998 exploration program will involve ground surveys of the most prospective anomalies.

From previous work, the stratigraphy of the two (2) northerly areas under permit (9393110070 and 9393110071) indicate the

presence of the Whitespecks Zone which can potentially host sulphide - base metal style mineralization. These areas require further detailed examination and analysis to exploit the Whitespeck potential.

It is the intention of Ells River Resources Inc. to maintain portions of the three (3) permits held for the Western Block (9393110069, 9393110070, and 9393110071). The portions being surrendered back to the crown are as described in Appendix C, Note 4.

V. BIBLIOGRAPHY

- Green, R., et al. (1970): Bedrock Geology of Northern Alberta; Research Council of Alberta; east half, 1:500 000 scale map.
- Rhine, J.L., and Smith, D.G. (1988): The late Pleistocene Athabasca braid delta of northeastern Alberta, Canada: a Paraglacial drainage system affected by aeolian sand supply. in: Fan deltas: Sedimentary and tectonic settings, eds. W. Nemec and R.J. Steele, Blackie and Son. p 158-169.

APPENDIX A  
LOCATION MAP OF PERMITS

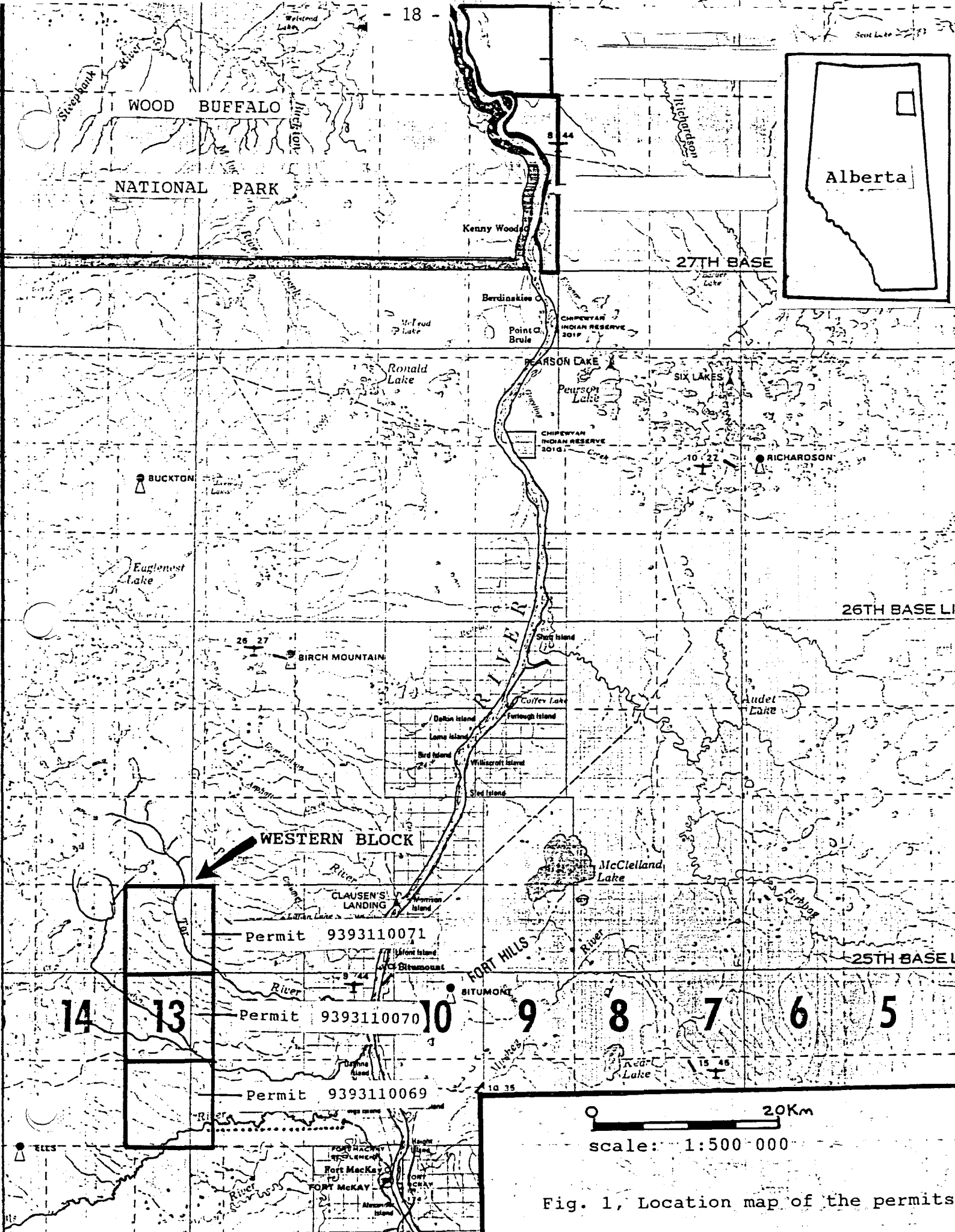
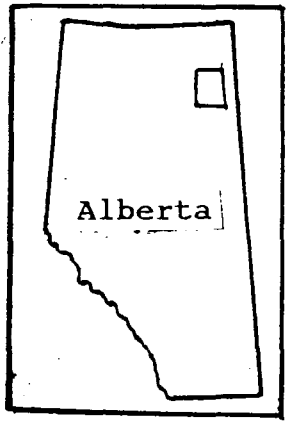


Fig. 1, Location map of the permits



**APPENDIX B**  
**AUTHORS' QUALIFICATIONS**

I, HENRY CIESZYNSKI, of the City of Toronto, in the Province of Ontario; state the following to be true:

I have received a Bachelor of Commerce degree from the University of Alberta, Edmonton, in 1965.

I have been engaged in mineral exploration for over thirty (30) years.

I hold a Prospector's License, Number A 51688, in the Province of Ontario.

I am the Chief Executive Officer of Ells River Resources Inc.

I am a co-author of this Assessment Report.

Dated this the 26 th day of March, 1998; in the City of Toronto, in the Province of Ontario.



Witnessed by:



for

Henry Cieszynski

I, MAURICE KEYLOR, of the City of Edmonton, in the Province of Alberta; state the following to be true:

I have received a Telecommunications Electrician diploma from the Northern Alberta Institute of Technology in 1969.

I have been interested in mineral exploration for over thirty (30) years.

I am the President of Ells River Resources Inc.

I am a co-author of this Assessment Report.

Dated this the 18th day of March, 1998; in the City of Edmonton, in the Province of Alberta.



Witnessed by:



Maurice Keylor

I, RAYMOND CARON, of the City of Edmonton, in the Province of Alberta; state the following to be true:

I have received a Bachelor of Commerce degree from the University of Alberta, Edmonton, in 1978.

I have held the position of Vice-President, Finance for Caron Services Ltd., for over fifteen (15) years.

I am a Director of Ellis River Resources Inc.

I am a co-author of this Assessment Report.

Dated this the 20th day of February, 1998; in the City of Edmonton, in the Province of Alberta.



Witnessed by:



Raymond Caron

The co-authors of this Assessment Report, Mr. Henry Cieszynski, Mr. Maurice Keylor, and Mr. Raymond Caron would like to thank the following for their contributions:

Mr. Tony Cowan  
Mr. Neil Firt

Much of the material contained within this report was obtained from field notes, observations, and/or research conducted by these individuals.

Their kind assistance has been of great benefit to Ells River Resources Inc., for which we are grateful.

APPENDIX C  
STATEMENT OF EXPENDITURES  
and  
DECLARATION OF EXPENDITURES

STATEMENT OF EXPENDITURES

A. PERMIT # 9393110071

Required to Maintain Permit: (9,216 hectares @ \$10/hectare)	\$ 92,160.00
Carry Forward from November, 1995 Report:	54,097.26
Carry Forward from October, 1996 Report:	38,062.74
TOTAL CLAIM FOR ASSESSMENT PURPOSES	<u>92,160.00</u>
Balance	\$ 0.00 =====

B. PERMITS # 9393110069 and 9393110070

Required to Maintain Permits (18,432 hectares @ \$10/hectare)	\$ 184,320.00
Equipment (includes F/A & Rentals)	11,082.95
Exploration Costs (includes Assays, Maps, Supplies, License & Permits)	64,573.96
Travel and Accommodation (includes, Hotel, Fuel & Food)	1,434.85
Office (includes Professional Fees)	14,712.91
Salaries & Wages	11,353.36
Directors' Soft Costs (Note 1)	37,196.00
Review of Airborne Magnetic Data (Note 2)	6,100.00
Ground Geophysics Work ( Note 3)	20,000.00
TOTAL CLAIM FOR ASSESSMENT PURPOSES	<u>\$ 151,741.12</u>
Balance	( \$ 32,578.88 ) =====

*5/B 166,454.03*  
*[Signature]*

As we are in a deficit position we are required to surrender Three Thousand Two Hundred Fifty-eight (3,258) hectares of land back to the crown. For details please see Note 4 on page 20a which follows.

NOTES

a.) Note 1

Directors' Soft Costs

A considerable amount of time has been expended by the founders and other directors in this project. They have received a total of "zero" remuneration from the corporation. However to accurately reflect the time they have expended in assessment work the following charges have been levied as "soft costs":

a. H. Cieszynski: 91.000 days @  
b. M. Keylor : 84.000 days @  
c. R. Caron : 67.460 days @



TOTAL DIRECTORS' SOFT COSTS \$ 37,196.00  
=====

b.) Note 2

Review of Airborne Magnetic Data

We have contracted the services of APEX Geosciences to review our airborne magnetic data for magnetic anomalies potentially related to kimberlites. At the time of finalizing this report, the review was not complete and will be provided at a later date as discussed and agreed to with the Department. The expenditure related to the work to be performed by APEX Geoscience is included as a part of this assessment report.

c.) Note 3

Ground Geophysics Work

We have retained the services of APEX Geoscience to initiate ground surveys over the most prospective anomalies identified from the analysis in Note 2 above. Due to several factors (weather, access, equipment shortages, failure in data logging equipment, etc.) this ground work was not completed at the time of submitting this assessment report. However, the monies were budgeted and committed for the assessment period and are included in this report. This is as per our discussion with the Department.



d.) Note 4

Lands to Be Surrendered

Ells River Resources Inc. will surrender the following properties back to the Crown:

<u>Permit #</u>	<u>Legal Description - Section</u>
9393110069	Twn 95 Ran 13 W4 - 13
"	" " " - 14
"	" " " - 23
"	" " " - 24
"	" " " - 25
"	" " " - 35
"	" " " - 36
9393110070	Twn 96 Ran 13 W4 - 1
"	" " " - 2
"	" " " - 11
"	" " " - 12
"	" " " - 13
"	" " " - 14

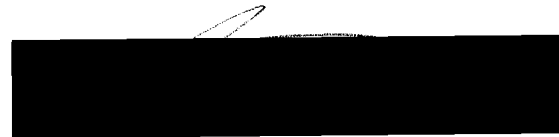
These thirteen sections represent an area of Three Thousand Three Hundred Twenty-eight (3,328) hectares more or less, given that there are Two Hundred Fifty-six (256) hectares per section. As previously stated we are required to return to the crown Three Thousand Two Hundred Fifty-eight (3,258) hectares.

DECLARATION OF EXPENDITURES

I, RAYMOND CARON, of the City of Edmonton, in the Province of Alberta; hereby certify and declare that the financial information contained in the "STATEMENT OF EXPENDITURES" found in Appendix D of this Assessment Report pertaining to the Metallic and Industrial Minerals Permits (9393110069, 9393110070, and 9933110071) held by Ells River Resources Inc., are true and correct to the best of my knowledge. The receipts substantiating these expenses have duly logged and are available for inspection upon request.

Dated this the 20th day of February, 1998 in the City of Edmonton, in Province of Alberta.

Witnessed by:

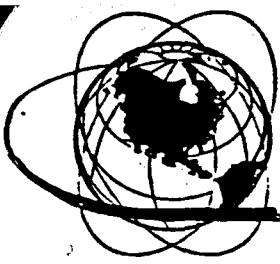
  
Raymond Caron  
Director  
Ells River Resources Inc.

APPENDIX D  
ASSAYS

1. Ledoux & Company



2. Murox Industries Ltd.



# MUROX INDUSTRIES LTD.

P.O. Box 3258, Station D Edmonton, Alberta, Canada T5L 4J1 (403) 454-3879 Fax (403) 939-2457

SAMPLE NAME or I.D.: ELLS RIVER DATE: DEC 4/95

SAMPLE TYPE: ( ) QUARTZ ORE (1) ~~ORE~~ SAND ( ) DORE ( ) ASHES  
( ) CARBON ( ) PRECIPITATES ( ) CONCENTRATES (5) ROCK

SAMPLE SIZE : SENT / (6) ( ) LBS. ( ) KGS. ( ) OZ. ( ) GRAMS  
ASSAYED / (6) ( ) LBS. ( ) GRAMS \* (1/2) ASSAY TON EACH  
\*Assay Ton (29.166 GRAMS) 2

### METHODS USED ON BULK SAMPLE:

FURNACE: (X) FIRE ASSAY ( ) HIGH TEMP SMELT (X) REDUCTION SMELT <sup>1900 - 2100 °F</sup>  
(X) LEAD COLLECTOR ( ) SILVER COLLECTOR ( ) COPPER COLLECTOR  
( ) GOLD COLLECTOR (X) CUPELED ( ) COLLECTOR ANODIZED  
( ) COLLECTOR ACID DIGESTED ( ) \_\_\_\_\_

LABORATORY: ( ) WET CHEMICAL (ACID) ( ) WET CHEMICAL (BASIC)  
( ) ACID FUSION ( ) ALKALI FUSION ( ) SELECTIVE LEACH  
( ) SELECTIVE DROP ( ) BULK DROP ( ) SPOT TEST ( ) DRY FUSION  
( ) GRAVITY CONCENTRATION ( ) \_\_\_\_\_

NOTES: ALL PRILLS A Au/Pt/Pd COMPOSITION.

MIXED BEAD ---->  OUNCES PER TON ----->

( ) BEAD COULD NOT BEAD RETURNED BECAUSE IT WAS SMALLER THAN 1 Mg.  
( ) OTHER \_\_\_\_\_

Au  Ag  Pt  Pd  Rh  Ir  Ru  Os

The above reported results are based solely on the samples submitted by the customer, using accepted analytical procedures. No warranty is made as to the reproducibility, or extractability of any of the values that may be found to exist in the sample(s) submitted, and no liability is assumed whatsoever as to the accuracy or usefulness of any of the information contained within this report. This report is for control purposes only and is not a Certificate of Analysis or a Certificate of Assay. All samples are discarded after 5 days, unless prior arrangements have been made with the customer.

CLIENT : ELLS RIVER RESOURCES

FIRE ASSAYS ON THE FOLLOWING SAMPLES USING 1/2 ASSAY TON OF ORE SAMPLE (14.58 GRAMS). PRILLS WERE LEFT IN THE CUPELS AND NOT WEIGHED.

<u>SAMPLE</u> <u>I.D.</u>	<u>APPROX. PRILL SIZE</u> <u>(THOUSANDS OF AN INCH)</u>
CUPEL #1 - NFO-2	.010"
CUPEL #2 - MDP-3	.005"
CUPEL #3 - MDP-17	.008"
CUPEL #4 - MDP-13	.007"
CUPEL #5 - MDP-9	.007"
CUPEL #6 - DBO-319	.006"

VISUAL INSPECTION OF THE ABOVE PRILLS INDICATES A GOLD, PLATINUM, PALLADIUM COMPOSITION. THESE PRILLS SHOULD BE SENT OUT FOR ATOMIC ABSORPTION OR ICP ANALYSIS TO DETERMINE THERE EXACT COMPOSITION.



WESTERN BLOCK SAMPLES OUT TO GARTH MURAN

<u>SAMPLE</u>	<u>LOCATION</u>	<u>WEIGHT</u>	<u>WEIGHT REMAINING</u>
5MDP003	POINT B	71 lb	3 lb
5NF0002	FAR WEST ELLS RIVER	1 lb	2.5 lb
5MDP009	ELLS	$\frac{3}{4}$ lb	< 3 lb
5DB0319	ELLS	$\frac{1}{2}$ lb	2 lb
5MDP013	ELLS	$\frac{2}{3}$ lb	2 lb
5MDP017	TAR	$\frac{1}{2}$ lb	1.5 lb

3  
DEC. 4/95

RE: GARTH ASSAY

TALKED WITH GARTH REGARDING ASSAY ON SAMPLES:

1. NFO-2 : .3 OZ/TON GOLD + PMG'S

2. MDP-9 : .112 OZ/TON GOLD + PMG'S

3. MDP-13 : .112 OZ/TON GOLD + PMG'S

4. MDP-17 : .15 OZ/TON GOLD + PMG'S

HE THINKS THAT WE MAY WANT TO CUT THE CUPPELLE AND TEST AS IT COULD HAVE ABSORBED SOME OF THE PRECIOUS METALS.

3. Saskatchewan Research Council

33-54  
**ELLS RIVER RESOURCES INC.**

17424 - 106A AVENUE, EDMONTON, ALBERTA, CANADA T5S 1E6  
TELEPHONE: 403-484-3842 FACSIMILE: 403-486-0039

March 7, 1997

Al Holsten  
Saskatchewan Research Council  
Geochem Lab  
15 Innovation Blvd.  
Saskatoon, Saskatchewan  
S7N 2X8

OT97.39  
Mar 10/97  
SN305

Dear Sir:

We have sent to you, two (2) samples on which we would like you to perform a Diamond Indicator Minerals Recovery for Sediment Samples. A Micro Probe Analysis of Indicator Mineral Grains may also be run pending the results of the initial analyses.

The first sample (TAR95-05/08) is from the Pelican Formation (Viking Equivalent) and weighs approximately 48 pounds. A small portion of the sample is lightly cemented but is too hard to break up by hand. Also note that it contains some shaley bits, if that might affect the operation of the shaker table.

The second sample (TAR95-09) weighs approximately 15 pounds and consists of panned sands and gravels.

Could we get from you initially, an estimate of when the analysis will be completed. Upon completion, a fax of the results would be appreciated.

Yours sincerely,



Anthony Cowen  
Ells River Resources Inc.

Saskatchewan Research Council Geoanalytical Services  
125-15 Innovation Blvd., Saskatoon, SK., S7N 2X8  
Phone:306-933-5426 Fax:306-933-5656

MI36 COWEN ELLIS RIVER APRIL 7 1997 (2) [INDICATOR MINERALS]

1 SAMPLE WEIGHT IN KG OT97.39  
2 +1.7mm WEIGHT IN KG  
3 MAGSTREAM MID FRACTION IN GRAMS  
4 MAGSTREAM HEAVY FRACTION IN GRAMS  
5 VISIBLE PYROPIC GARNET GRAIN COUNT  
6 VISIBLE Cr-DIOPSIDE GRAIN COUNT  
7  
8  
9

	SWT	+1.7	MIDS	HEAVY	PG	CD
TAR95 05 08	21.3	1.75	0.31	0.37	0	0
TAR95 05 09	6.3	0.54	12.87	47.09	0	0

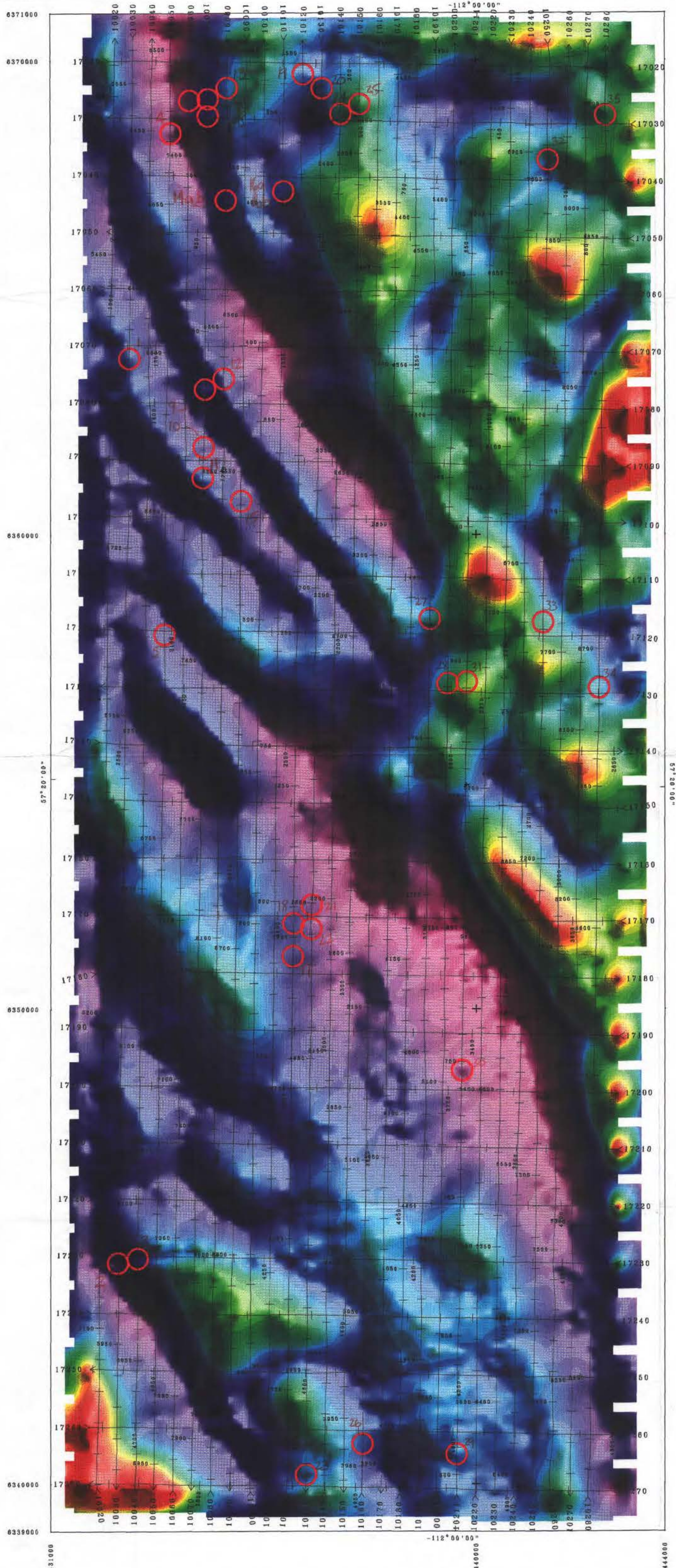
INDICATOR MINERAL GRAIN DESCRIPTION

GEOLOGIST/COMPANY: \_\_\_\_\_ GROUP #: OT97:39

DATE \_\_\_\_\_

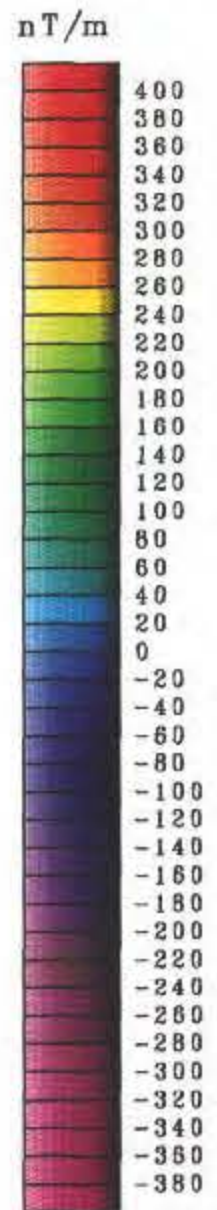
SAMPLE #	PYROPE	CR. DIOP.	ECLOG (POSS)	BLACK OPAQUE	OTHER	DEF. COUNT	GEN. COUNT
1 TAR95-05-08	0	0	0	0	10	0	0
COMMENTS: 10 black grain (Loaded in these grains)							CB
2 TAR95-05-09	0	0	2	2	12	0	2
COMMENTS: 2 Poss Chrome Diopside 10 black grains (Loaded in these grains)							CB
3							
COMMENTS:							
4							
COMMENTS:							
5							
COMMENTS:							
6							
COMMENTS:							
7							
COMMENTS:							
8							
COMMENTS:							
9							
COMMENTS:							
10							
COMMENTS:							
11							
COMMENTS:							
COMMENTS:							

APPENDIX E  
WORLD GEOSCIENCE AIRBORNE MAGNETIC DATA



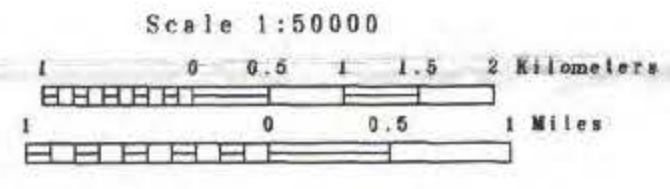
PROCESSING

REDUCTION TO POLE  
AND WIENER FILTERED  
1ST VERTICAL DERIVATIVE



57.34N 112.04W: 525.0m: 1987-06-15

Magnetic Field: 59860.79 nT  
Magnetic Inclination: 70.02  
Magnetic Declination: 20.40



SURVEY PARAMETERS

FLOWN BY: WORLD GEOSCIENCE

TRAVERSE LINE SPACING: 400 METERS N/S  
CONTROL LINE SPACING: 1200 METERS E/W  
FLYING HEIGHT: 120 METERS DRAPE  
SPHEROID: CLARKE 1866

PROJECTION PARAMETERS

PROJECTION: UTM  
ELLIPSOID: CLARKE 1866  
UNITS: METERS  
CENTRAL MERIDIAN: -111 DEGREES WEST  
LATITUDE ORIGIN: 0.0 DEGREES  
SCALE FACTOR: 0.9996  
FALSE EASTING: 500000.0 METERS  
FALSE NORTHING: 0.0 METERS

APEX GEOSCIENCE LTD

ELLS RIVER PROSPECT

1ST VERTICAL DERIVATIVE MAP

Date: APRIL 1998      Map: 1

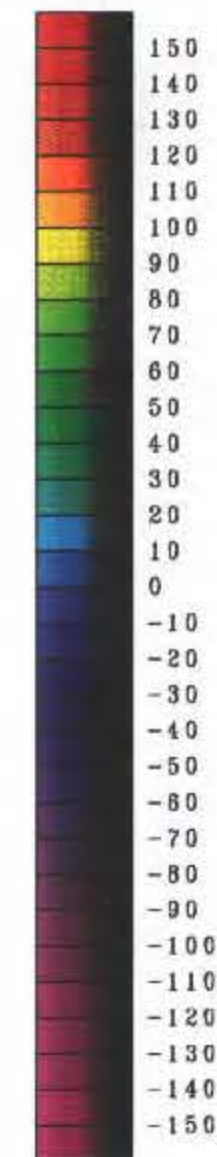
19980004



PROCESSING

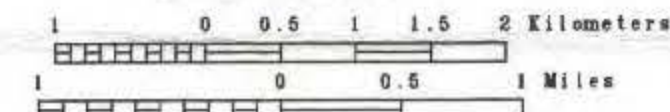
REDUCTION TO POLE  
AND WIENER FILTERED  
SEPARATION ABOVE 300m  
1ST VERTICAL DERIVATIVE

nT/m



57.34N 112.04W; 525.0m; 1997-06-15  
Magnetic Field: 59860.79 nT  
Magnetic Inclination: 79.92  
Magnetic Declination: 20.46

Scale 1:50000



SURVEY PARAMETERS

FLOWN BY: WORLD GEOSCIENCE

TRAVERSE LINE SPACING: 400 METERS N/S  
CONTROL LINE SPACING: 1200 METERS E/W  
FLYING HEIGHT: 120 METERS DRAPE  
SPHEROID: CLARKE 1866

PROJECTION PARAMETERS

PROJECTION: UTM  
ELLIPSOID: CLARKE 1866  
UNITS: METERS  
CENTRAL MERIDIAN: -111 DEGREES WEST  
LATITUDE ORIGIN: 0.0 DEGREES  
SCALE FACTOR: 0.9996  
FALSE EASTING: 500000.0 METERS  
FALSE NORTHING: 0.0 METERS

APEX GEOSCIENCE LTD

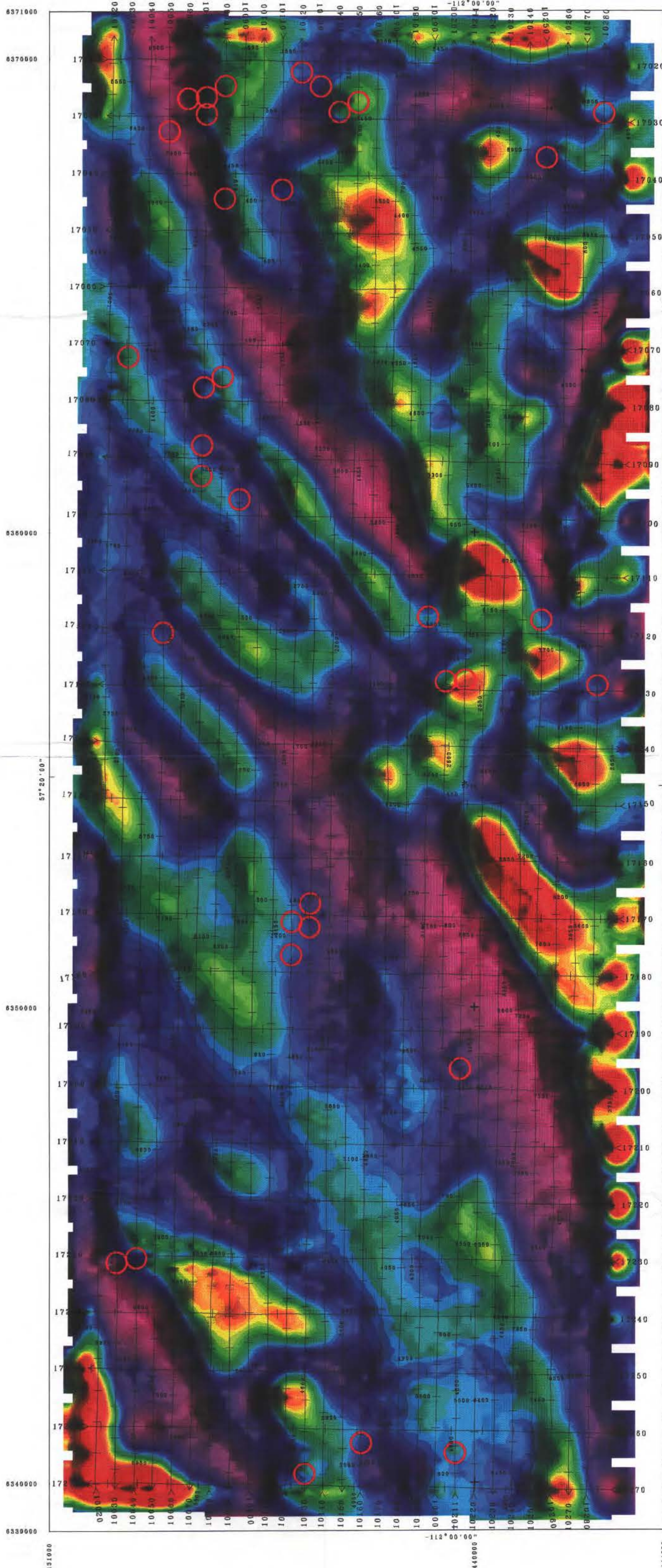
ELLS RIVER PROSPECT

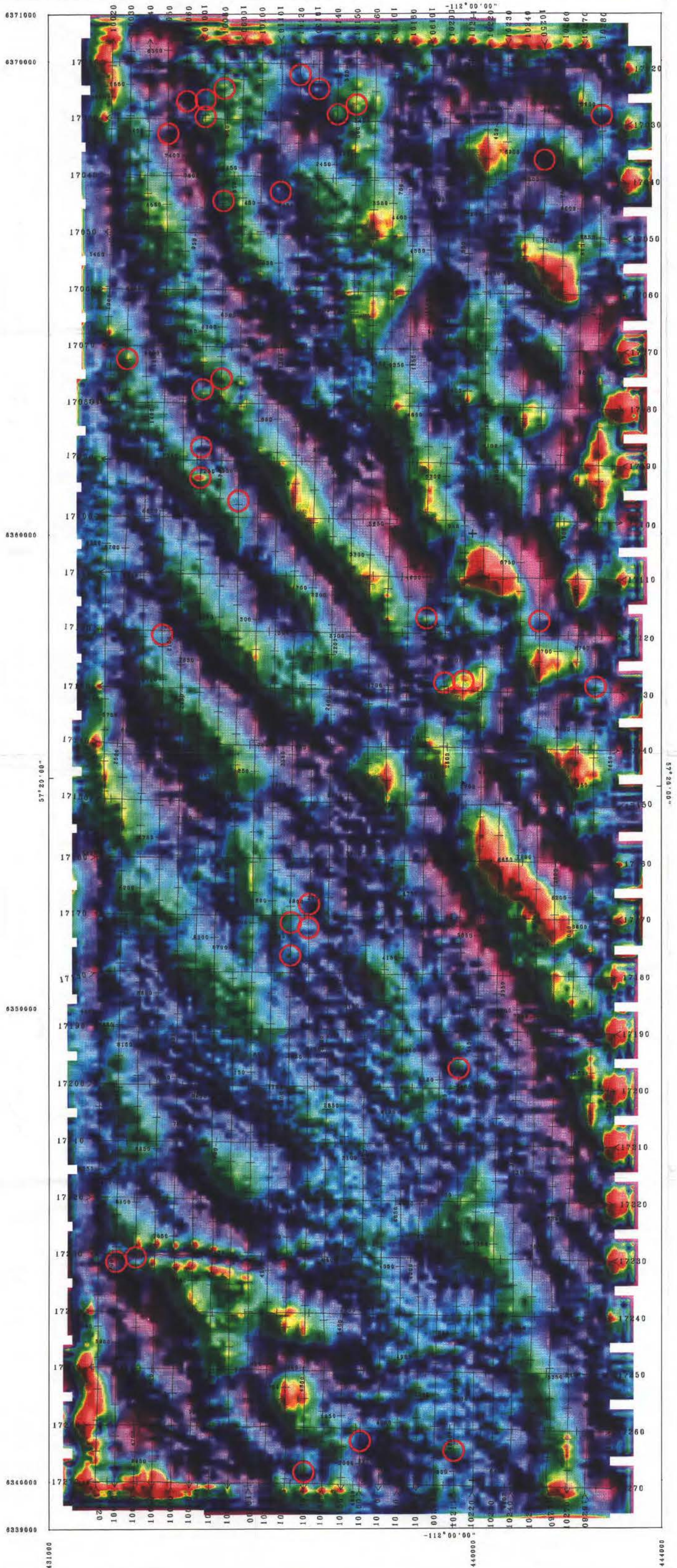
FIRST ORDER SHALLOW TARGET

Date: APRIL 1998

Map: 2

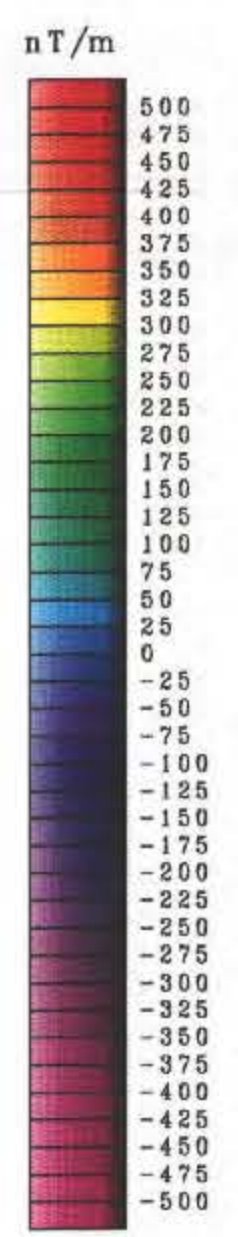
19980004





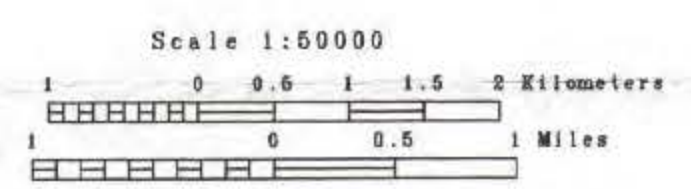
**PROCESSING**

REDUCTION TO POLE  
AND WIENER FILTERED  
SEPARATION ABOVE 300m  
2VD VERTICAL DERIVATIVE



57.34N 112.04W; 525.0m; 1997-06-15

Magnetic Field: 59860.79 nT  
Magnetic Inclination: 79.02  
Magnetic Declination: 20.49



**SURVEY PARAMETERS**

FLOWN BY: WORLD GEOSCIENCE

TRAVERSE LINE SPACING: 400 METERS N/S  
CONTROL LINE SPACING: 1200 METERS E/W  
FLYING HEIGHT: 120 METERS DRAPE  
SPHEROID: CLARKE 1866

**PROJECTION PARAMETERS**

PROJECTION: UTM  
ELLIPSOID: CLARKE 1866  
UNITS: METERS  
CENTRAL MERIDIAN: -111 DEGREES WEST  
LATITUDE ORIGIN: 0.0 DEGREES  
SCALE FACTOR: 0.9996  
FALSE EASTING: 500000.0 METERS  
FALSE NORTHING: 0.0 METERS

APEX GEOSCIENCE LTD

ELLS RIVER PROSPECT

SECOND ORDER SHALLOW TARGET

Date: APRIL 1998 Map: 3

19980004

APPENDIX F  
IMAGE INTERPRETATION TECHNOLOGIES REPORT

ELLS RIVER RESOURCES  
WEST BLOCK

*KIMBERLITE DETECTION USING HRAM*

February 1998

Submitted by:  
Image Interpretation Technologies  
Calgary, Alberta



**IMAGE INTERPRETATION**  
TECHNOLOGIES LTD.

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## **1. Introduction**

Using high resolution aeromagnetic (HRAM) data surveyed by World Geoscience, Ells River Resources commissioned Image Interpretation Technologies (IIT) to examine, model and report on the possibility of kimberlite and any other geophysical anomalies located in their property in northeastern Alberta. Whilst examining the data for potential kimberlite targets, the potential for other anomalies in the area was not to be overlooked. This report contains the results of that study.

## **2. Data Processing**

HRAM survey data was collected in June 1997. Detailed information regarding survey specifications and data acquisition can be found in Appendix I. Using proprietary World Geoscience software, the original gridded HRAM data was filtered into groups of frequencies contained in the data. This process is known as MagSlicing or pseudo depth slicing. The first MagSlice (MS1) was used for interpretation as it best revealed structural and high frequency anomalies.

Landsat TM provided structural information at both regional and local scales. The map titled 'Landsat TM RGB=357' is an RGB display with band 3 as the red band, band 5 as the green and band 7 as the blue. An equalization stretch was applied to bands 3 and 5 and a 99% clip with linear stretch was applied to band 7. The band combination is useful for geological features detection via topography, lithographic expression and correlation with vegetation.

## **3. Results and Discussion**

### **3.1 Euler Filtering**

Initially an euler filter was used to find vertical pipes. Euler algorithms work by passing a window of variable size across a grid. Different types of anomalies are detected by using a structural index which represents various types of structures. Since kimberlite pipes are similar to a cylinder, a corresponding structural index of 2 can be used. The results should show tight clusters of results over each anomaly. However, the results were not encouraging as they were scattered with little or no coherency. Consequently, the euler results were not utilized in this study.

### **3.2 Modelling**

The objective of the study was to examine the gridded data expressed in MS1 and locate possible kimberlite anomalies. In total, eight anomalies were located and modelled. Included in these was a dyke-like structure in the southwest corner of the property. Although not likely a kimberlite pipe, it was chosen due to its structural setting and because it was completely anomalous with regard to this setting.

The remaining anomalies were located in the northeast and central part of the property and represent the most likely kimberlites. These anomalies were small (< 500m diameter) and round with low amplitude. Most importantly these anomalies were isolated. Although kimberlite pipes are often located in clusters of odd numbered pipes their magnetic signatures are always isolated of each other.

The following sub-sections describe the modelled geometry of each anomaly. Anomaly numbers refer to the flight line number as indicated in the original data. Models can be found in Appendix II. On the models, susceptibilities shown are only relative and may not bear any resemblance to susceptibilities that were mapped in the field. Locations of selected anomalies can be found on the 1:50 000 scale maps titled 'Stream Sample Geochem Results' and 'MagSlice 1 and Anomaly Profiles'.

#### **3.2.1 Line 10060**

This was the first line modelled as part of the proposed southwest dyke. It was made up of a single large negatively magnetized body, shown in blue. Further to the north (to the right on the model) the depth of the overlying material increased to 400 metres. There was no physical data available regarding the

properties of the rock and, therefore, we were unable to accurately ascertain any remanent character to the dyke. Normally such a feature would be modelled with a negative susceptibility but in this case the body showed a positive susceptibility. The problem lies in that the dyke is very thin and the signal itself cannot be sampled with enough accuracy. Thus the true nature of its lithological properties cannot be determined from this line.

### **3.2.2 Line 10110**

Located at the eastern end of the dyke, this line again showed the possibility of remanence in the proposed dyke. The dyke thinned out considerably in comparison to what was modelled in Line 10060. Of note was a slight change in the depth of the overburden as distance increased away from the anomaly. This elevation change may indicate a late stage dyke that (1) was implaced at a different time (hence its remanent magnetism) and (2) is a much later development as indicated by a slower rate of weathering and different subsurface elevation. The surrounding sediments were comprised of very low susceptibility materials.

The anomalous feature, shown in blue, was modelled with a negative susceptibility to mimic a remanence that may exist in the body. This is not always accurate because it does not reflect any actual remanent property that may exist in the lithology. This body may in fact be a local magnetic low. However it was represented as a negative body because it exhibited the intense low similar to a remnant body further to the east. Lack of an intense low was probably due to the small size of the body which meant it was under-sampled by the aircraft's magnetometer. It is recommended that detailed ground follow up be done in this area to accurately ascertain the nature of this feature.

### **3.2.3 Line 10170**

This anomaly was localized and small and located in the central part of the property. One of the most significant properties revealed through modelling was its near surface depth. Examination of the Landsat TM image revealed no cultural features present and, as such, we propose that this feature is a pipe-like anomaly. The width of the anomaly was slightly over 100 metres making it a good candidate for follow up work.

### **3.2.4 Line 10180**

Located in the central part of the property, this anomaly consisted of three units (Figure 3.1). The first was the large body in the middle of the model coloured blue and the others were the pink coloured anomalies on either side of the blue. The blue anomaly was small, semi-localized and approximately 1500 metres wide. Of more interest were the two anomalies to the south (to the left on the model). Kimberlite intrusions often occur at times of remanence in the earth's magnetic field. Consequently, it is worthwhile to investigate negative anomalies as well as positive anomalies. These small anomalies were representative of a remnant anomaly and were represented by pink coloured bodies. The bodies were between 100 and 200 metres wide which is a more feasible size range than the 1500 metres of the main anomaly.

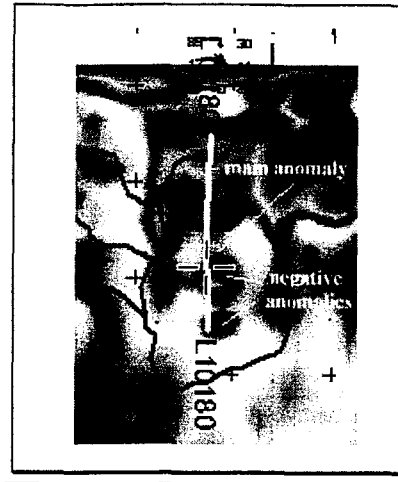
### **3.2.5 Line 10211**

This anomaly represents the first of three lines containing anomalies in what may be described as a cluster formation. The main anomaly, approximately 200 metres wide with lobes (in red) approximately 110 metres wide, was very close to the surface at a depth of about 50 metres. It was on a magnetic 'plateau' bounded on the western side by a subtle fault and possibly another fault on the eastern side. It was difficult to be certain about the eastern fault as it was very close to the edge of the survey area.

Two minor anomalies were also modelled. The first was to the south (left) of the anomaly described above and the second was to the right and appeared to be a sharp, positive anomaly. Both are not considered to be significant.

### **3.2.6 Line 10220**

East of Line 10211, this anomaly was also part of the 'plateau' and is the southern most anomaly of the cluster. Two anomalies were noted along this line and were marked on the map. The main anomaly was approximately 200 metres wide. While not more than 40 metres to the top of the body, it appeared to outcrop in some locations. The other anomaly to the north was identified but not considered a priority assessment.



**Figure 3.1**

**3.2.7 Line 10240**

This was the third and final anomaly in this area. It was characterized by a large anomaly dipping to the south and was approximately 200 metres wide. Modelling revealed that this anomaly also outcrops.

**3.2.8 Line 10250**

The anomaly located in the northern section of this line was the best single anomaly with respect to kimberlite geology. Small and isolated with a low but significant amplitude, this anomaly was quite complex in its modelled geometry. Five sections were identified as components of the model with a central stem in an ideal inverted carrot shape. The shape of the anomaly and its location suggest ground follow up work would be advisable.

**3.2.9 Line 10260**

Similar to the anomaly modelled on Line 10260, this anomaly was an isolated disturbance composed of a small amplitude signal. The main anomaly was made up of two slightly different bodies and is also worthy of follow up work.

**3.3 Geochemistry**

Stream samples as well as rock and channel samples were provided and the locations of the samples were plotted on 'Stream Sample Geochem Results with MagSlice 1'. Locations of all the samples and their identification tags can be found on the map title 'Geochem Locations and Rivers'.

The main thrust of placing the geochem results on the HRAM images was to find a correlation between geochem anomalies and magnetic anomalies. The dyke in the southwest corner of the survey area has a geochemical sample at its eastern end (Stream Sample No. 5DBC022). The sample indicates Zn, Cu and



Ni anomalies above detection limits. Further southeast there are a number of stream and channel samples that also have a Zn anomaly. This is assumed to be the background for the area as results are fairly similar.

Rock and channel sample No. 5MDO001, located in the middle of a magnetic high in the southern part of the property, produced an arsenic anomaly of 29 ppm and a gold anomaly of 4 ppb. Sample No. 5DBC027, directly beneath the anomaly modelled at Line 10211 produced readings of 47 ppm Zn, 7 ppm Pb and 10 ppm Cu. Platinum group elements failed to detect. Further southeast, Sample No. 5DBC028 produced anomalies in Cr and Mn only. Sample No. 5DBC026 was located over a HRAM high in the northern part of the survey area and produced the following significant results: Pb 20 ppm, Ni 20 ppm, Sr 104 ppm, Zn 24 ppm, Cu 24 ppm.

Overall, there were no spectacular geochemistry results that could be correlated with magnetic anomalies.

A detailed discussion of the geochemistry of the region can be found in 'Precious-Base Metal Exploration 1995: Ells River Area, Northeast Alberta' by APEX Geoscience.

### **3.4 Topography**

MagSlice 1 was overlaid with a digital elevation grid to find correlations between topography and magnetic anomalies. In this area the topography is sloping to the east off the Birch Mountains. There was no topographic impression in the area of the proposed dyke in the southwest part of the property. The most obvious observation was the broad magnetic low in the middle of the image which was bounded by a river to the northeast for some distance. It was interpreted as a fault. The southwestern edge of the magnetic low was not defined by either a magnetic or topographic boundary, but rather blended into the higher magnetic material to the southwest. Overall, there were not clear correlations between topography and magnetic anomalies in the northern section of the property.

### **3.5 Structural Interpretation**

Figure 3.2 illustrates a structural interpretation using HRAM pseudo depth slice 1 (PDS1) with northeast illumination. A subset of the TM scene over the HRAM survey area is shown in Figure 3.3 and includes interpretation overlay.

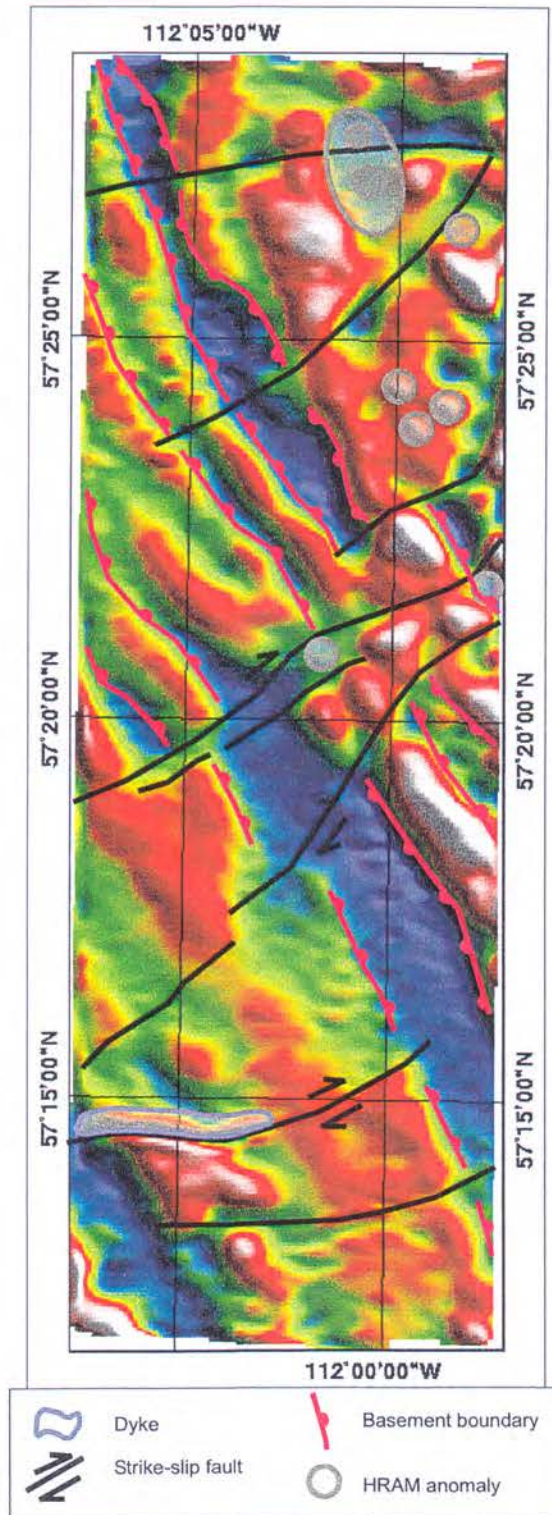
## **4. Conclusions**

Based on geophysical and structural investigation of MagSlice 1 there are several targets with 'good' potential as kimberlite pipes. These anomalies were located on profile Lines 10250, 10260 and possibly 10170. The best way to define the kimberlite potential of any area has always been mineral sampling of streams and land. Following leads provided by diamond indicator minerals sourced from the kimberlite family of rock types has been the most successful method employed world wide for finding diamond pipes. Kimberlites have an extremely variable chemistry where magnetite occurs only as an accessory, making detection of them difficult. As such, it is usually coincident that kimberlite pipes can be found on images after they have been found by other means. For example, aeromagnetic detection of kimberlites in the Northwest Territories was in part due to a very quiet background against which the kimberlites were more visible though in most instances they could not be distinguished at all.

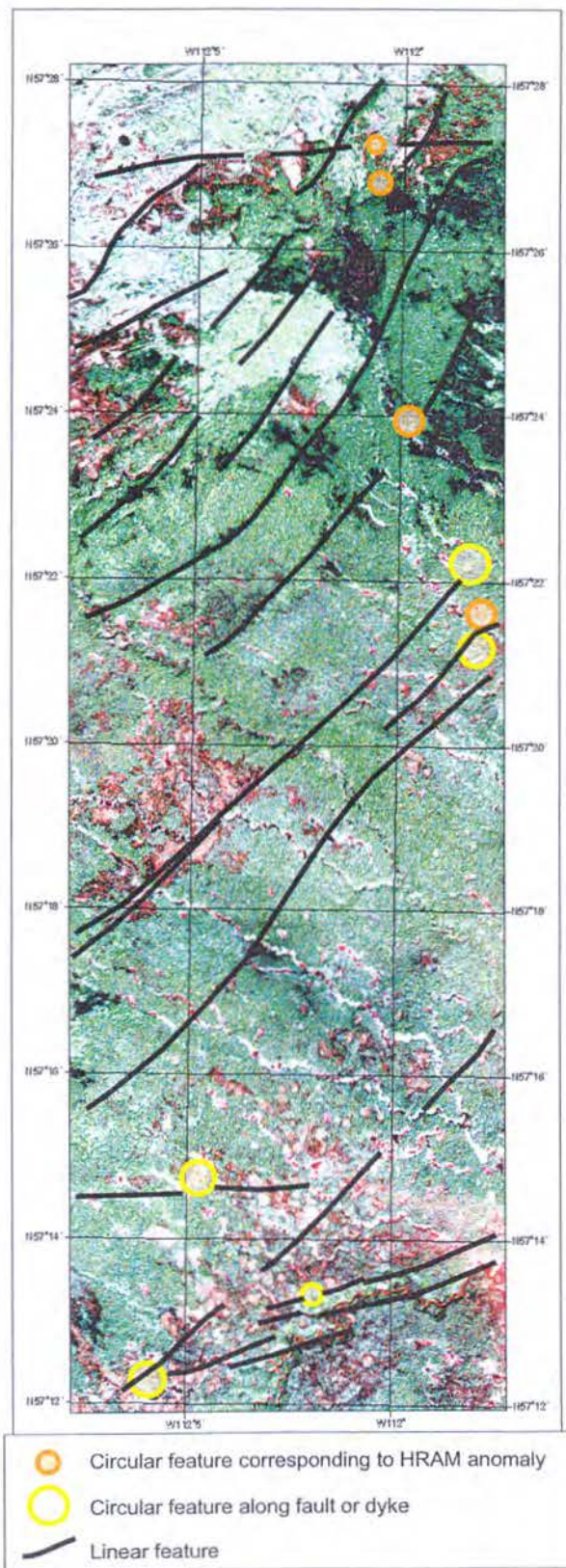
Structurally the area is well defined by faults that may provide better control for gold occurrences of massive sulphides. Although there are no geochemical anomalies co-located with magnetic anomalies this does not mean that the area is not prospective for base metals or gold. Given the structural setting and mineral prospects of the regions, the potential for success should not be discounted.

## **5. Recommendations**

Two recommendations can be made based up on the results of this study.



**Figure 3.2** HRAM PDS1 with northeast illumination and structural interpretation overlay.



**Figure 3.3** Landsat TM with structural interpretation.

- (1) ***Infill of HRAM to 200 m line spacing.*** Several of the anomalies found in the northeastern section of the survey area were approximately 100 metres in width. It is believed that with 400 x 1200 metre line spacing several of these anomalies were 'undersampled' by the aircraft's magnetometer. Lack of an intense magnetic signature inhibits accurate modelling and interpretation of these anomalies.
- (2) ***Geochemical sampling of all possible kimberlite anomalies.*** Several anomalies were identified as plausible kimberlite targets but lacked adequate sampling to confirm or refute these results.

## **Appendix I**

Data acquisition and processing parameters.

ELLS RIVER RESOURCES INC.  
WEST BLOCK  
AIRBORNE GEOPHYSICAL SURVEY

Surveyed and Compiled by  
WORLD GEOSCIENCE

### **SURVEY SPECIFICATIONS**

Job number: Q7705  
Aircraft: Cessna C206G Stationair  
Survey date: June 1997  
Flight lines: Spacing: 400 metres  
Direction: 000 – 180 degrees  
Tie lines: Spacing: 1200 metres  
Direction: 090 – 270 degrees  
Survey elevation: 120 metres  
Cycle rate: 0.1 second  
Nominal sample interval: 7 metres

### **DATA ACQUISITION**

Computer: PICODAS PDAS-1000 digital acquisition system  
Magnetometer: Split beam cesium vapour  
Instrument resolution: 0.001 nanotesla  
Navigation: NovAtel GPSCard

Total survey distance: 1, 118 kilometres

### **DATA PROCESSING**

Coordinate information: Clarke 1866 Spheroid  
North American 1927 Datum  
Universal Transverse Mercator Projection – zone 12

Final magnetic intensity corrections: IGRF model 1995 removed – base value 59875 nT  
Diurnal correction applied – base value 59695 nT  
System parallax removed

Data collected by each of the sources are checked for spikes and noise by complex procedures. A stringent series of quality checks were carried out daily on all aspects of the data and all quality controls products were made available to the client. Whenever these checks proved that the data was unacceptable, the affected lines or part lines were reflown. The process is summarized below:

- Apply any spike corrections to the raw magnetic variables.
- Interpolate undefined magnetic values.
- Apply fluxgate corrections and compensate the data with post-processed compensation files.
- Diurnal values were appropriately filtered and subtracted from individual magnetic readings.
- Regional effects of the earth's magnetic field were removed by subtracting the calculated IGRF value from each reading.
- Apply parallax corrections.

The magnetic data was leveled using tie-line cross-over values to compute miss-tie errors which were distributed by least-square procedures until errors were minimized. The IGRF corrections were computed for each value. Final gridding of the data used enhanced bi-cubic spline interpolation methods.

Quality control inspections of the imaged data were carried out to detect erroneous data between tie-line cross-over points. Some of these errors were removed using diurnal data. Then data then required further application of proprietary microlevelling techniques to remove residual errors. Note that this procedure is always corrected back to the line located data and not just applied to gridded data. These procedures ensure the magnetic data are free from blemishes when subjected to inspection.

**Appendix II**

Profile models of Lines 10060, 10110, 10170, 10180, 10211, 10220, 10240, 10250 and 10260. Susceptibilities shown are relative numbers *only* and may not bear any resemblance to susceptibilities mapped in the field.

## **Appendix III**

### **Selected References**

Besserer, D.J. and Dufresne, M.B. (1995) Ells River Resources Inc. Precious-Base Metal Exploration 1995: Ells River Area, Northeast Alberta.

Dufresne, M.B. et al (1995) The Diamond Potential of Alberta. Alberta Geological Survey.



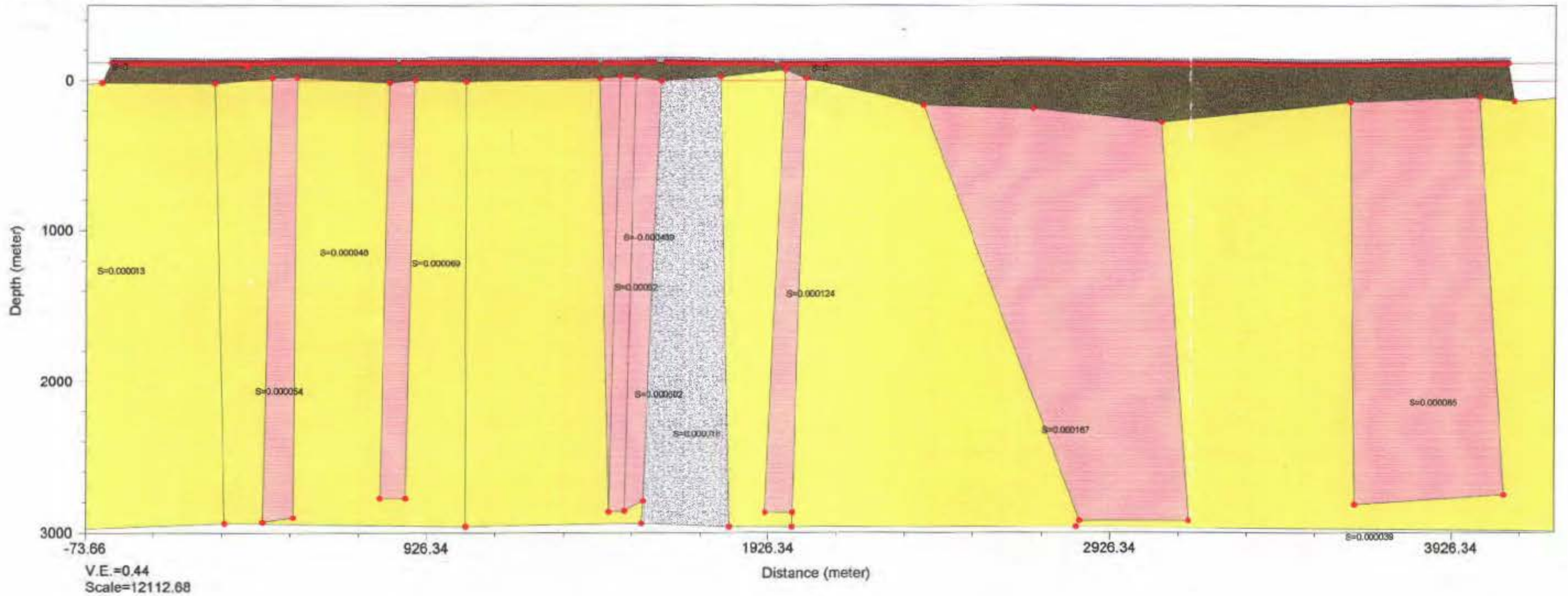
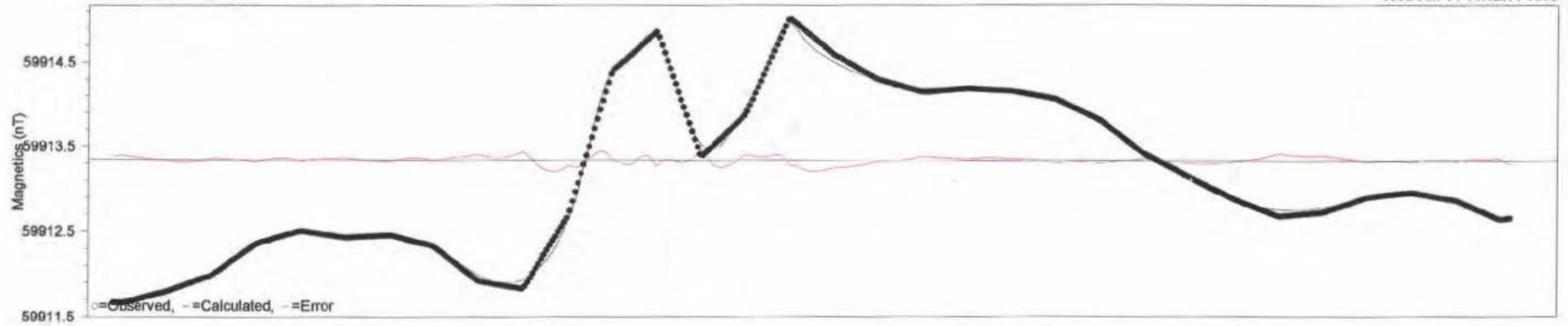
#### IMAGE INTERPRETATION TECHNOLOGIES CD-ROM

Along with their final report Image Technologies included a CD-ROM. We have attempted to have this duplicated but at the time of submission of our Assessment Report the copies were not available. When they are available we will provide them as part of Appendix F.

# Line 10060

Ells River Resources

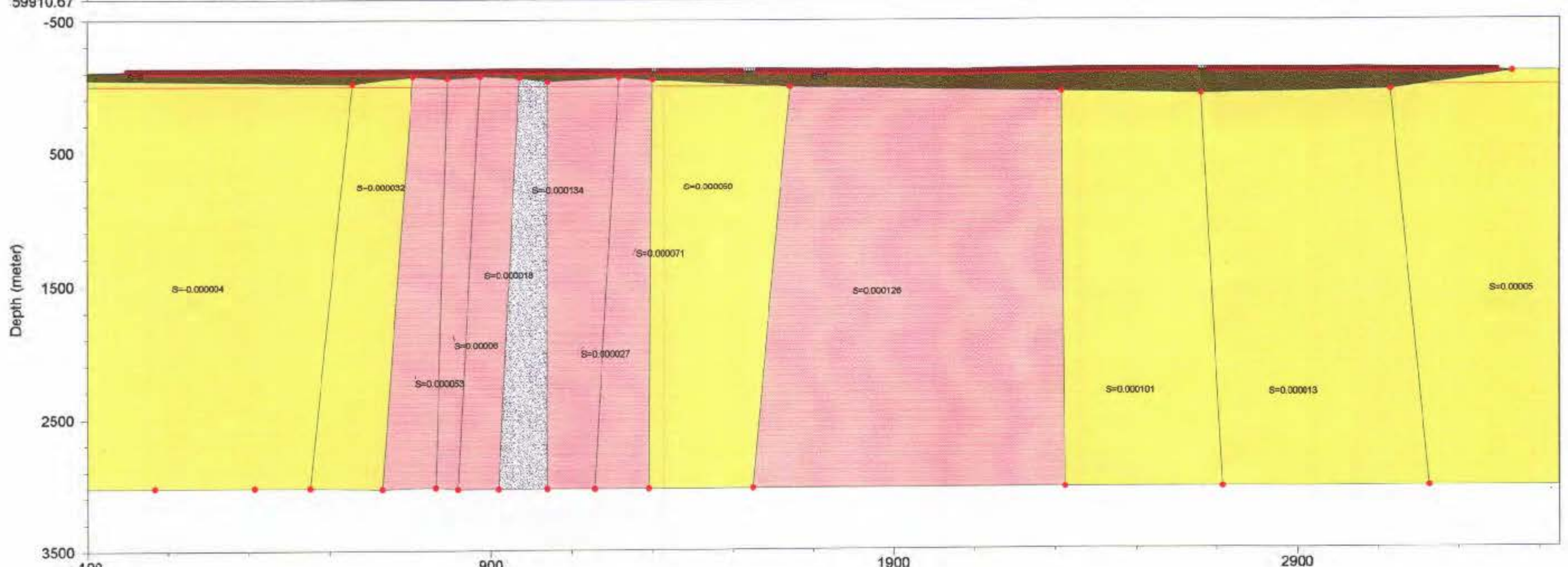
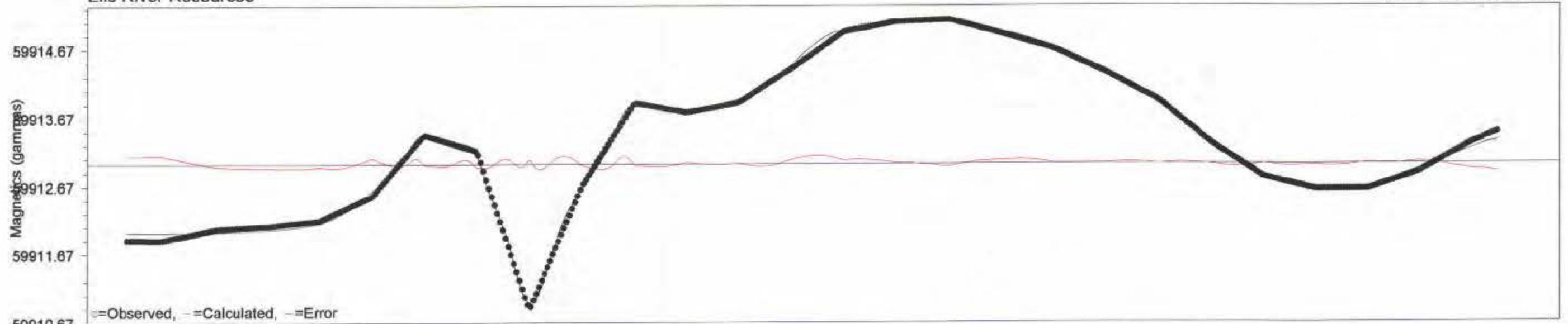
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# Line 10110

Ells River Resources

Wed Jan 14 14:42:32 1998



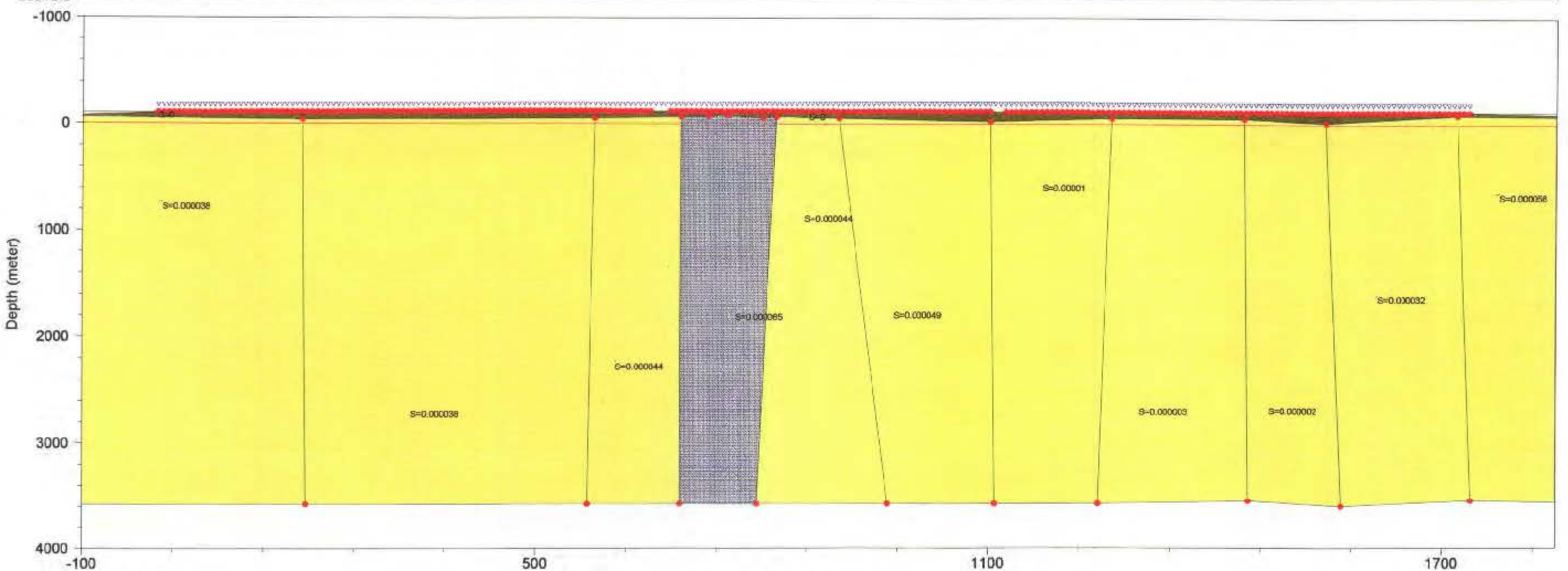
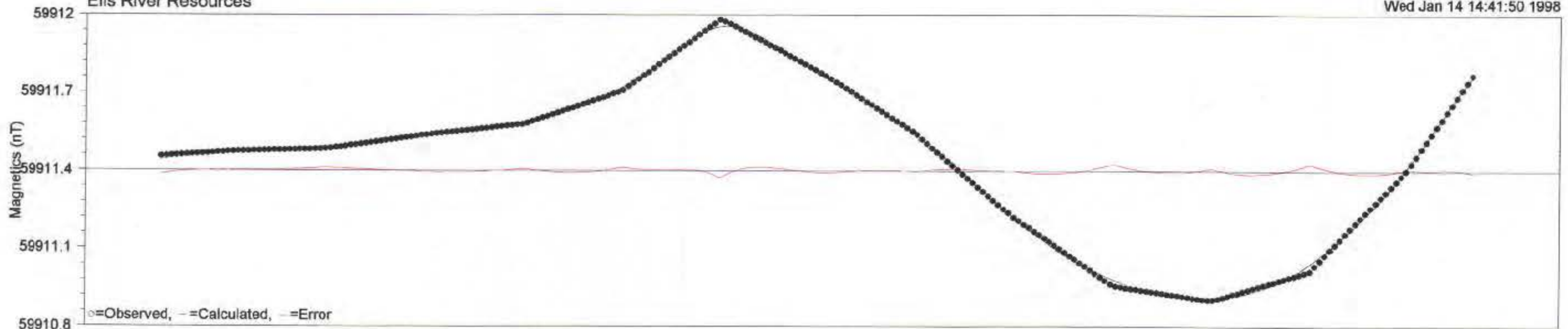
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Scale=10428.57

Distance (meter)

# Line 10170

Ells River Resources

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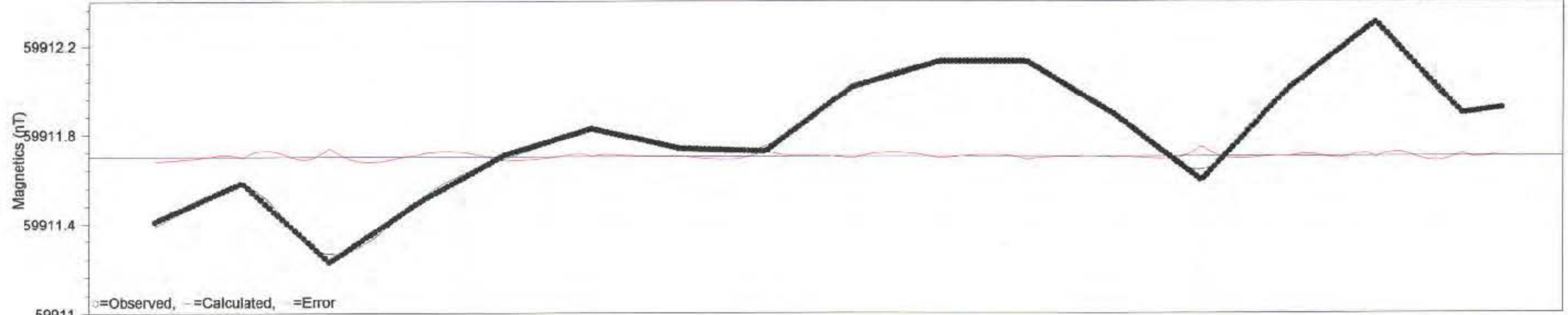


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Scale=5492.96

# Line 10180

Ells River Resources

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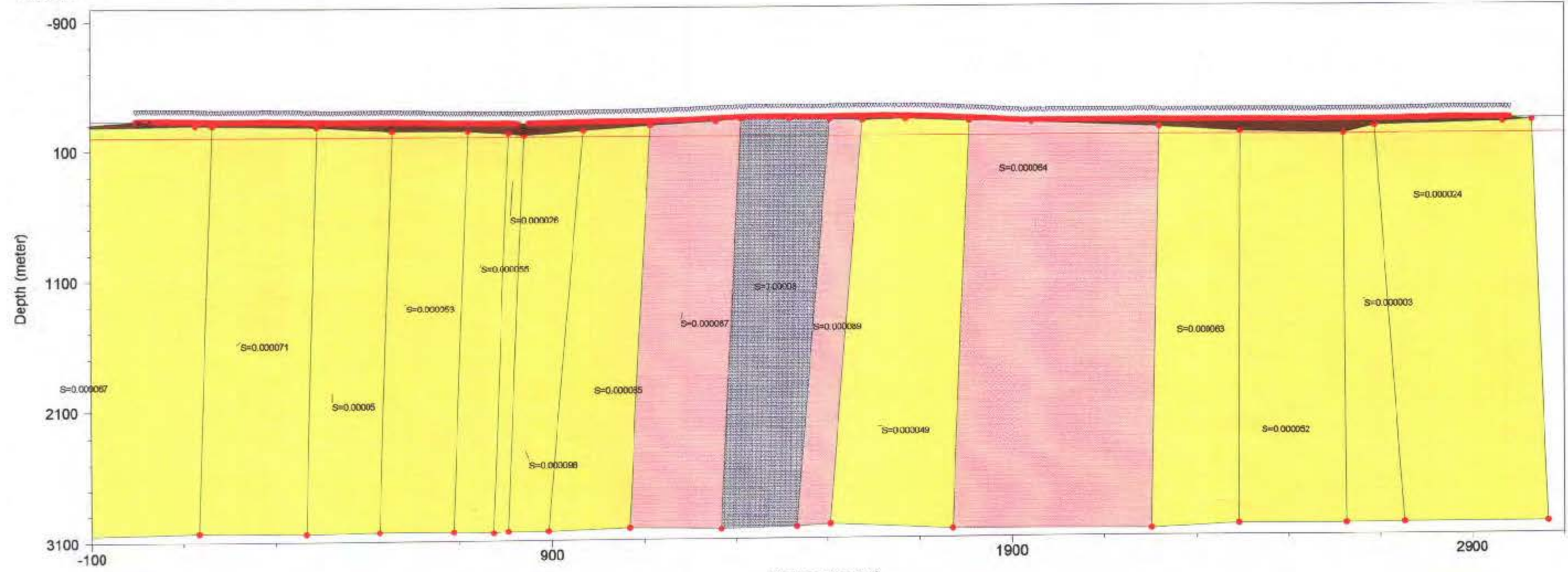
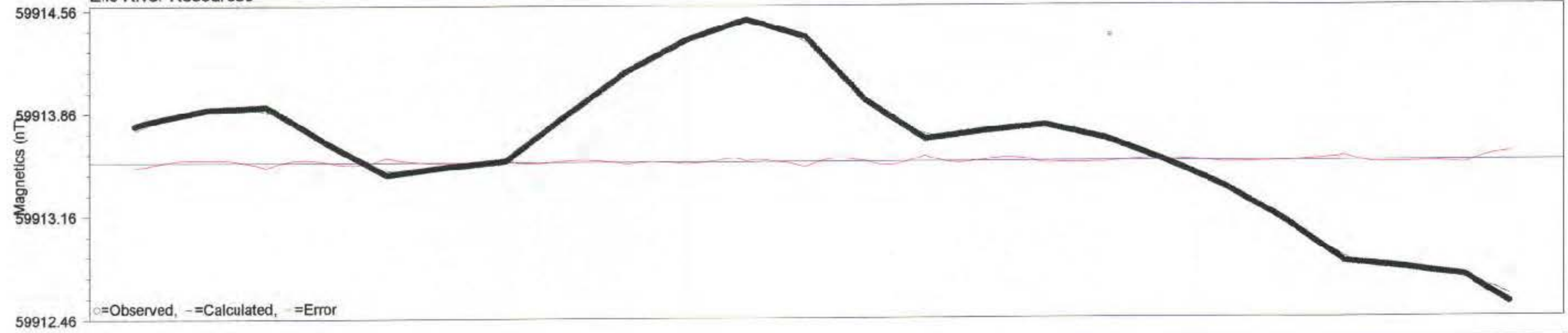


V.E.=0.16  
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# Line 10220

Ells River Resources

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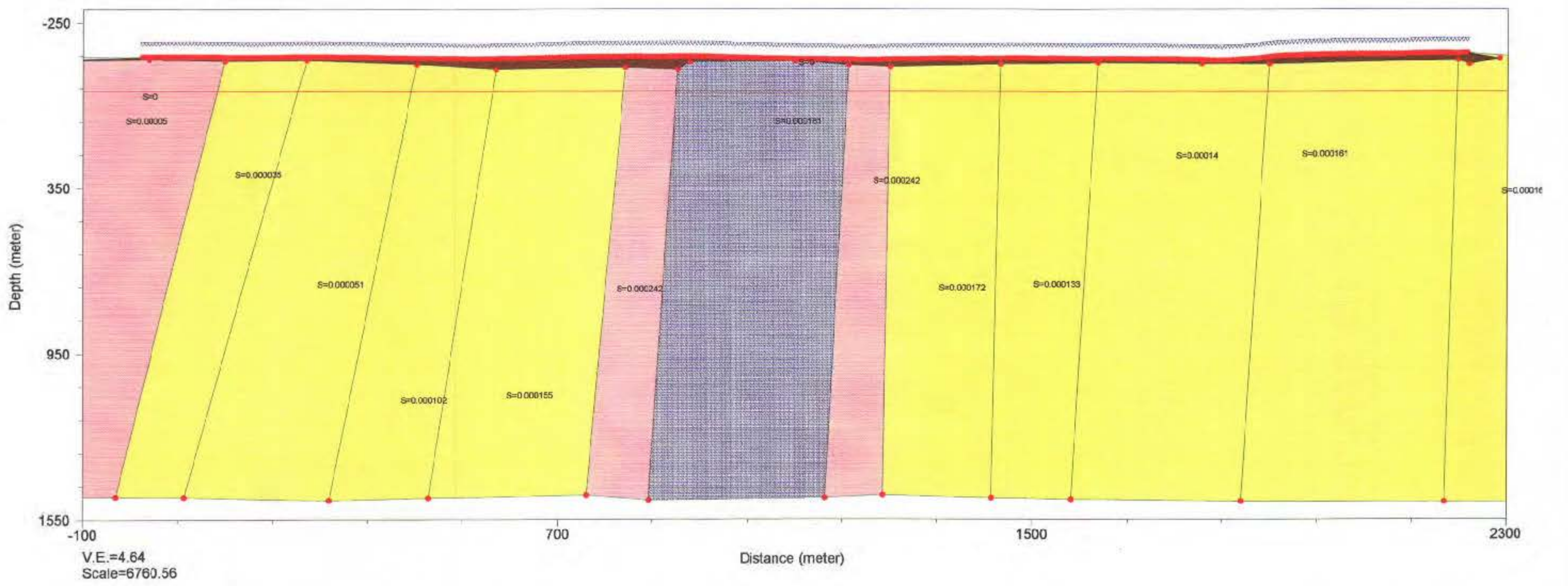


V.E.=0.28  
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# Line 10240

Ells River Resources

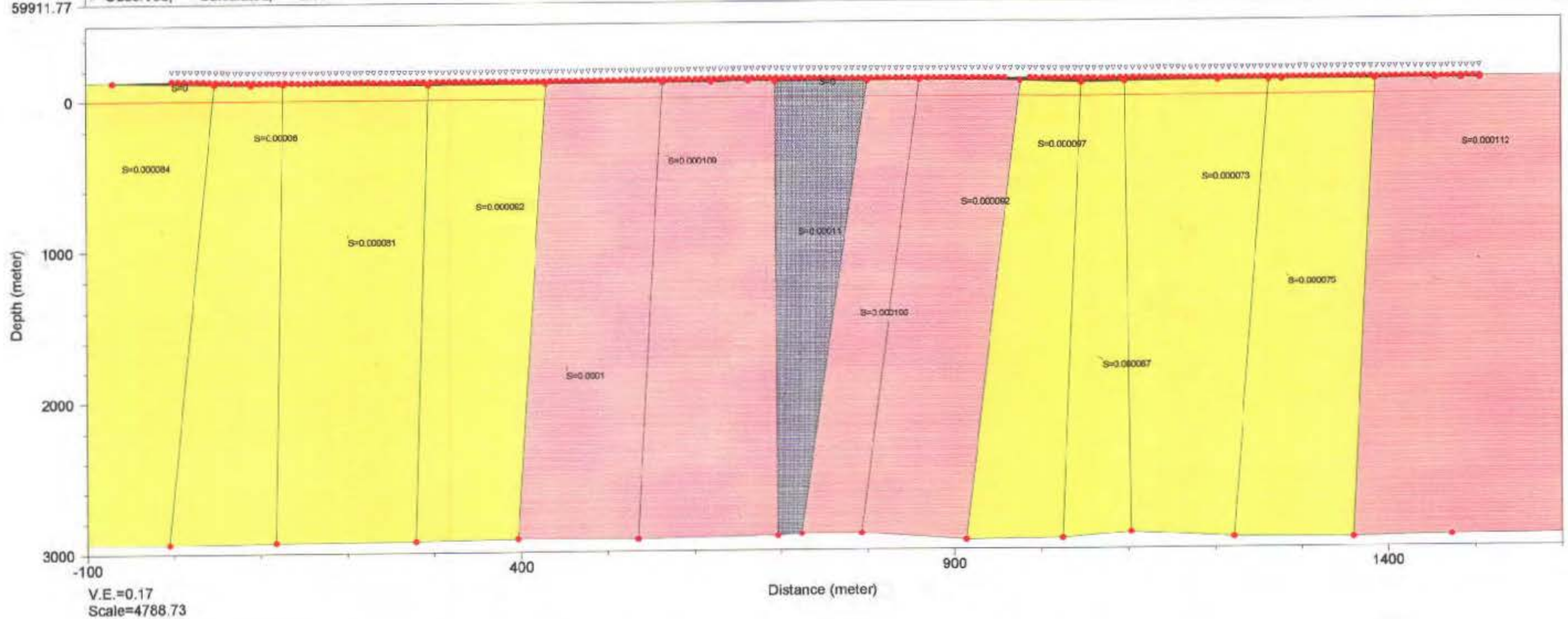
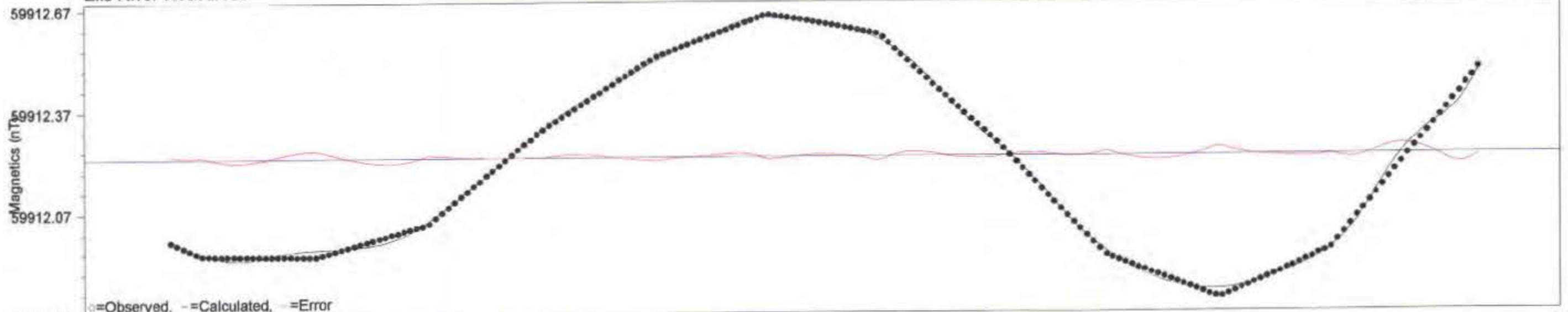
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# Line 10250

Ells River Resources

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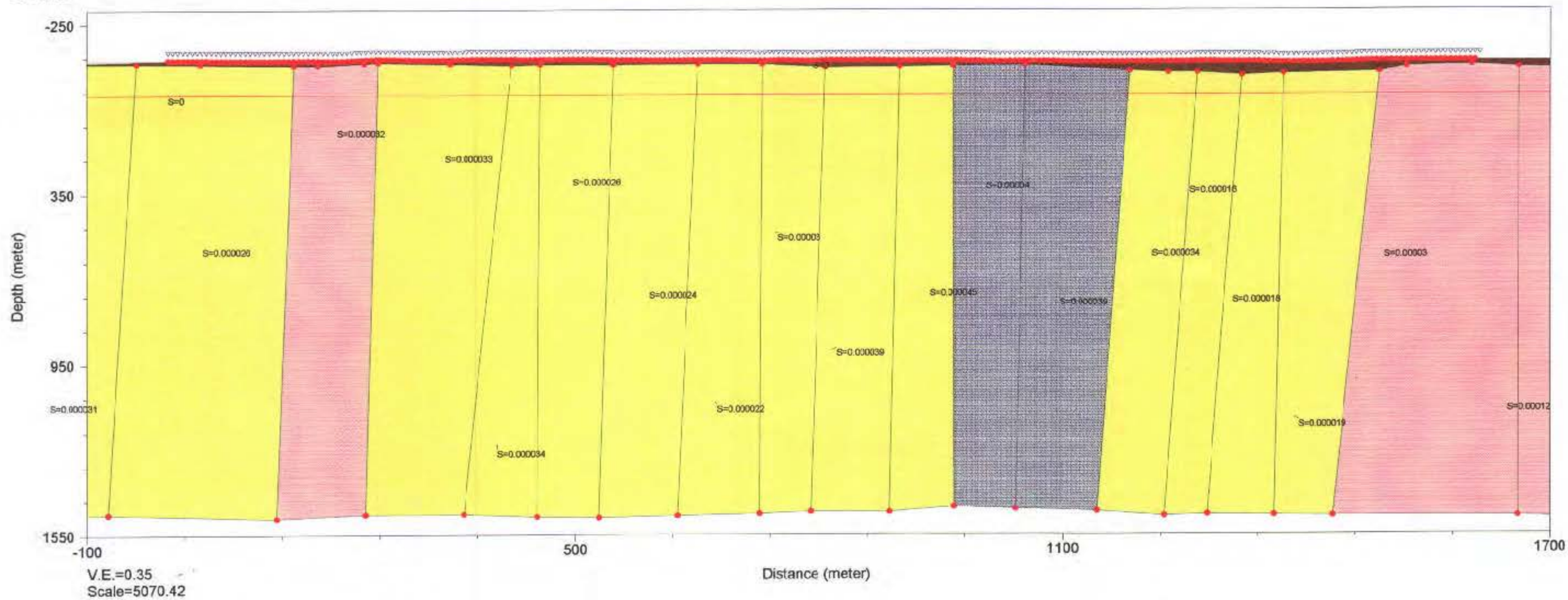
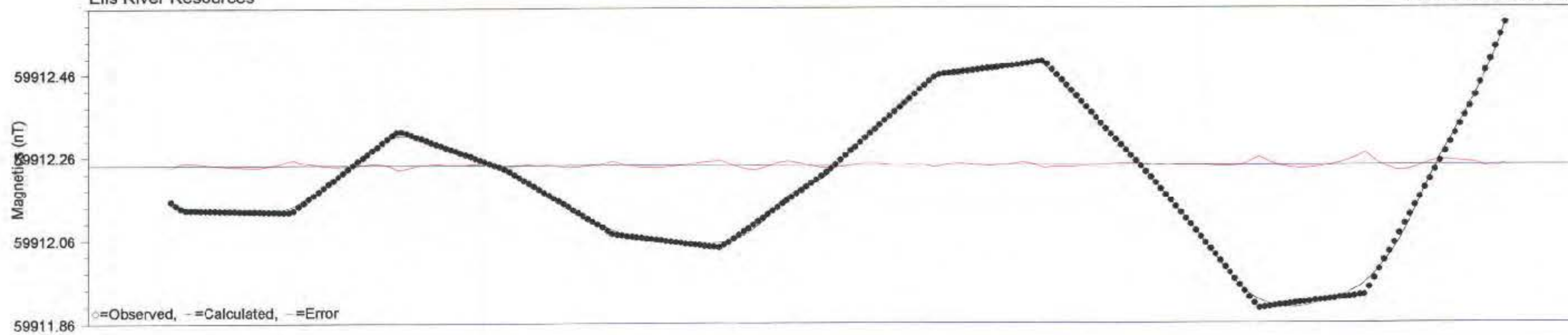




# Line 10260

Ells River Resources

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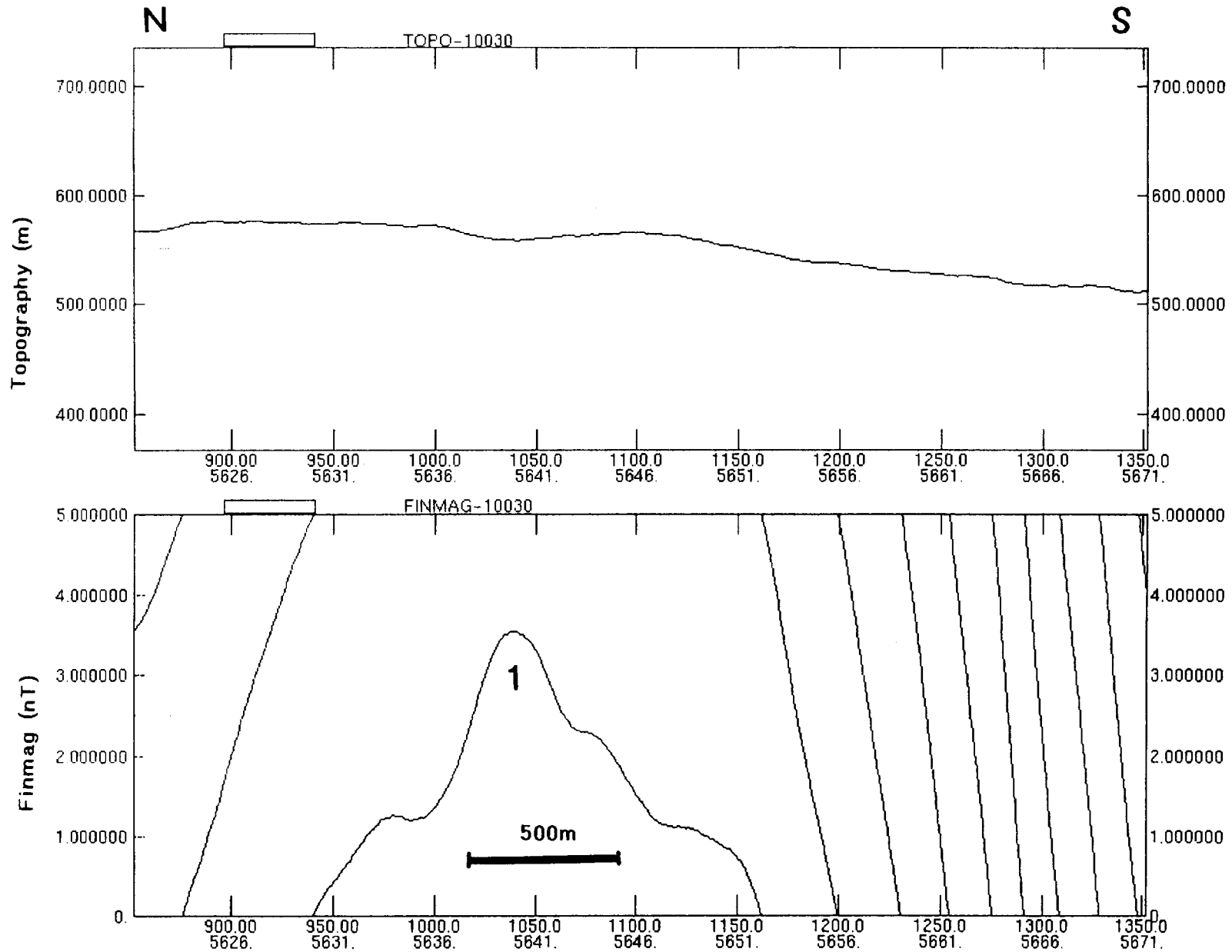


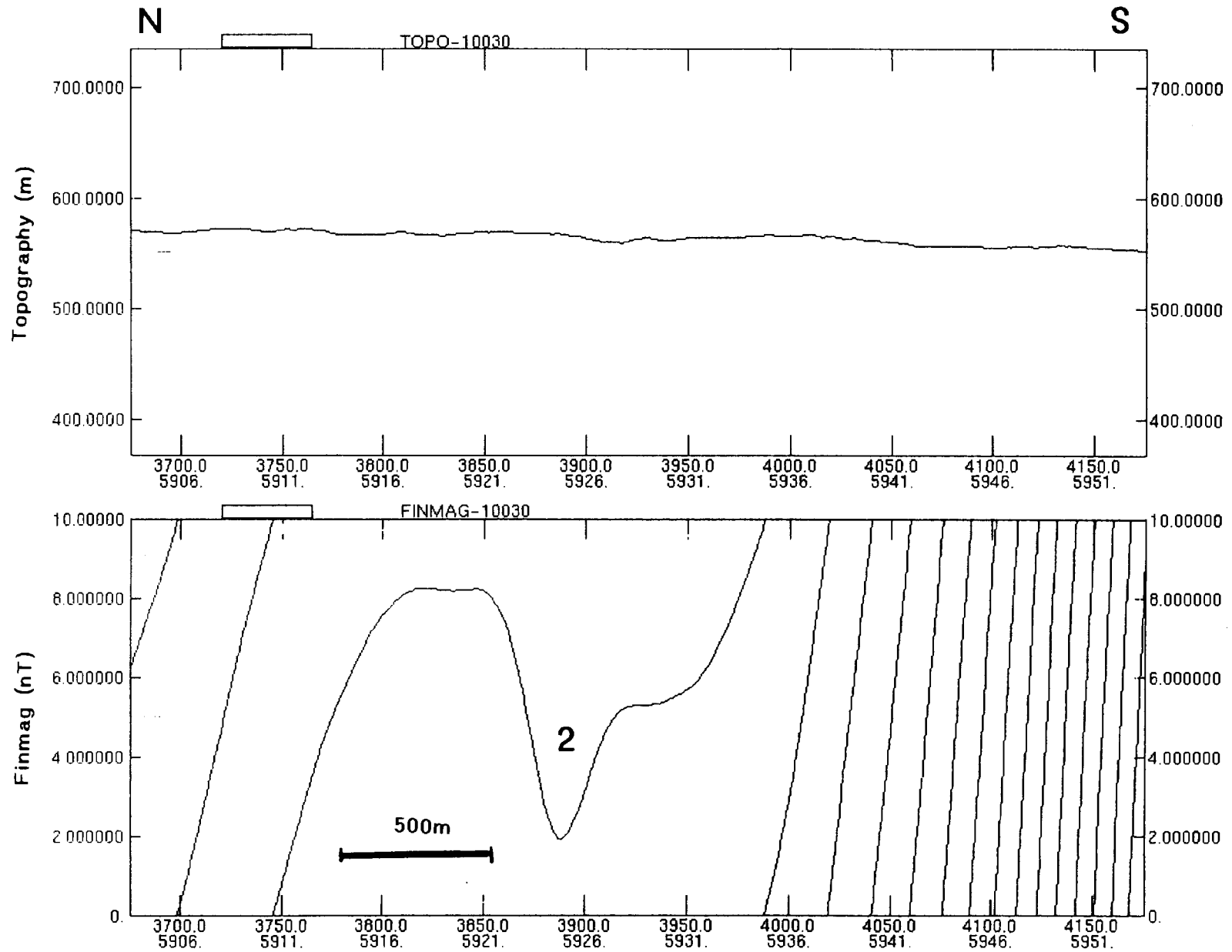
## ELLS RIVER RESOURCES (Magnetic Anomalies of Interest)

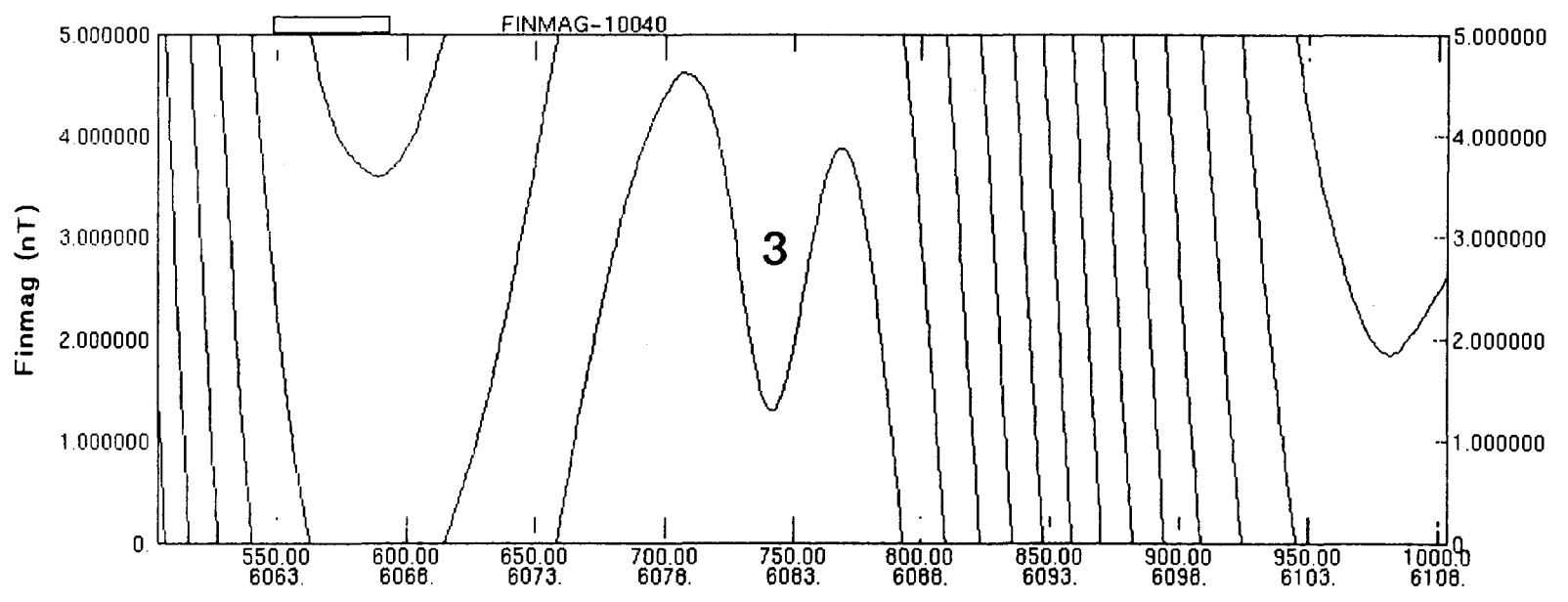
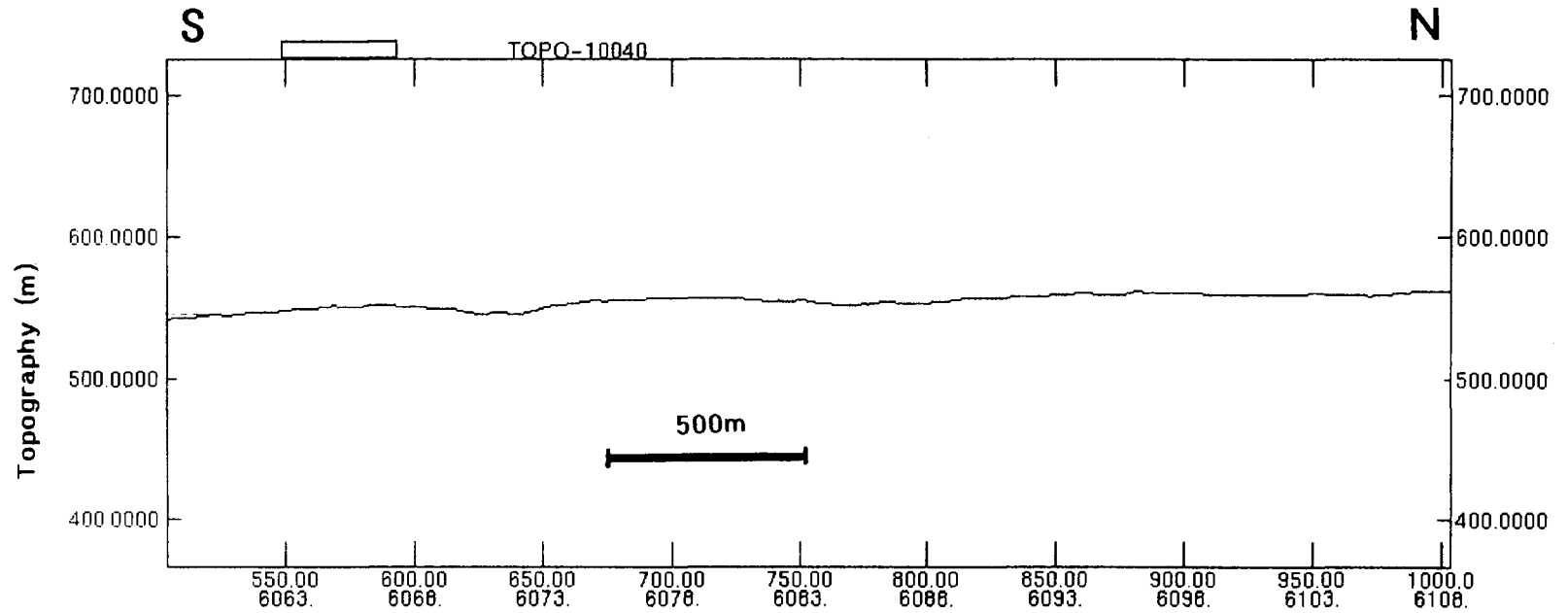
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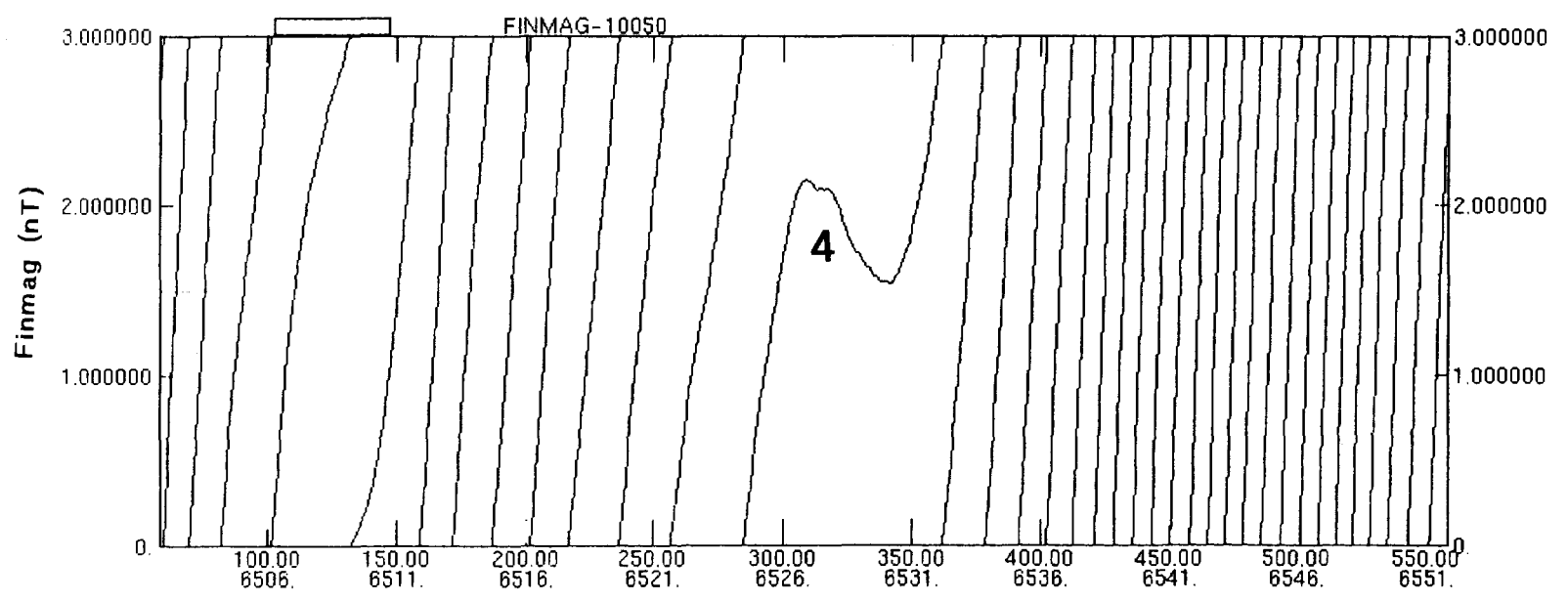
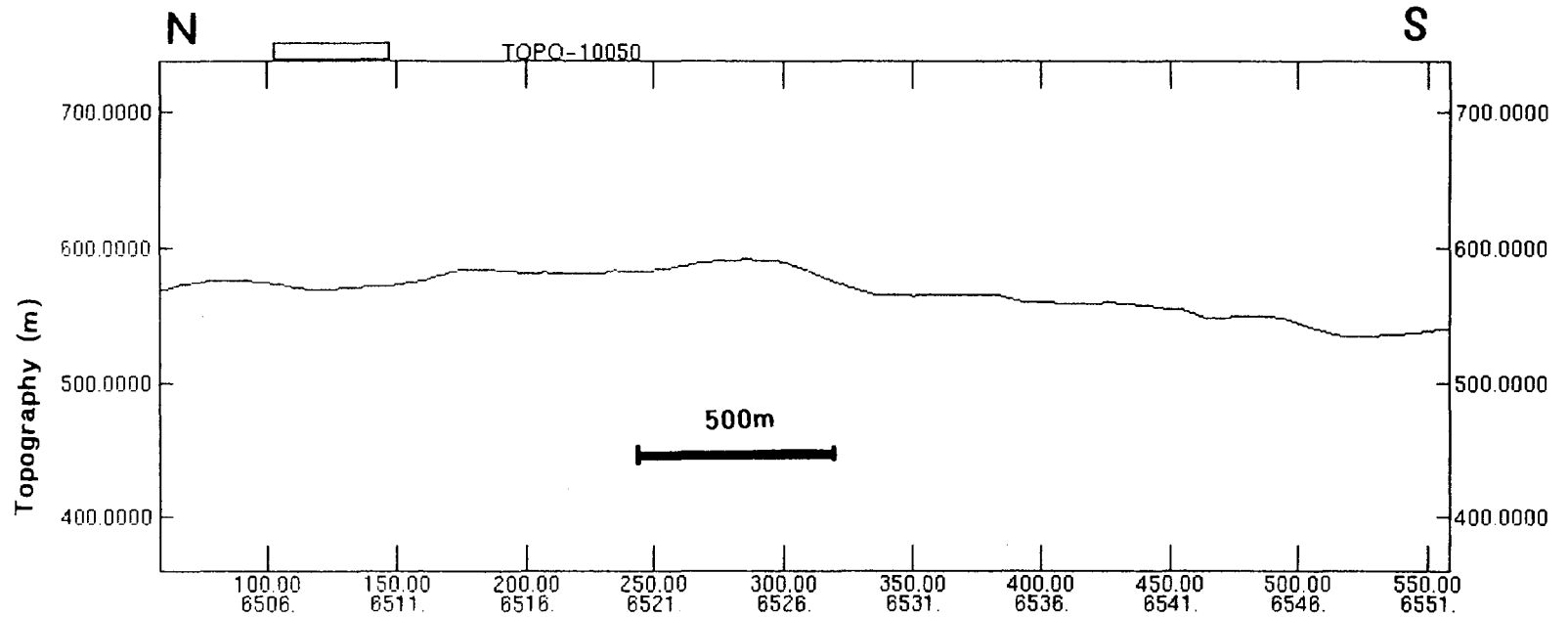
Anomaly	Line#	Fiducial	Priority	Description	UTM	UTM
					Easting	Northing
	10030	5425		Broad, 5 nT peak that could be part of broad basement feature		
1	10030	5640	low	2 nT peak on top of large basement anomaly; note 2 shoulders on edge, roughly 520 m in diameter and likely near surface	432674	6363722
2	10030	5925	low	Fault again, 5-6 nT reversely magnetized peak	432432	6344647
3	10040	6082	low	magnetized peak	432649	6344740
4	10050	6527	high	Excellent 1.5-2.0 nT sharp well defined peak, about 340 m diameter and at surface; note slight surface expression	433551	6368475
5		6666	low	weak shoulder possibly of interest 0.5 nT and likely near surface	433416	6357892
6	10060	7418	low to med	Weak shoulder, near surface 1 nT anomaly, 150-200 m wide	433951	6369159
7	10070	7474	med	Interesting 0.5-1.0 nT anomaly that is 280 m wide and near surface	434345	6369192
8	10070	7480	med	Interesting 1.0-1.5 nT peak, 270m wide and at surface; both this and prior anomalies are on edge of basement anomaly	434341	6368830
9	10070	7568	med	Continuation of 10080-8283, roughly 1.0 nT anomaly at surface, prominent shoulder peak	434278	6363071
10	10070	7585	med to high	Interesting, similar well defined sharp shoulder 0.5-1.0 nT; at surface in Mag low	434243	6361847
11	10070	7595	low	Sharp peak on apex of basement high; 3-4 nT and shallow but part of linear basement trend	434227	6361198
	10070	7815		Weak broad anomaly part of basement likely continuation from prior 2 or 3 lines		
12	10080	8283	low to med	Width of 320 m and at surface with 1.0-1.5 nT well defined interesting peak but part of linear trend (basement?)	434673	6363290
13	10080	8375	med to high	Interesting well defined 1 nT anomaly, 390 m diameter and half width = near surface	434745	6369426
	10080	8020-8025		Continuation of 10090-8778, about 10 nT about about 880 m width to 900 m, depth below surface 160 m - broad shoulder		
14a	10080	8339	low to med	Tieline or real anomaly?, off to side of tieline, 2 weak peaks, roughly 200 m diameter, shallow	434722	6366944
14b	10080	8343	low to med		434723	6367165
	10090	8354		Treline anomaly		
15	10090	8558	low to med	Poor map anomaly 0.5-1.0 nT shoulder, shallow and not very wide	435032	6360706
	10090	8778		Anomaly that we were on edge of at 10100-109 7-8 nT, roughly 800 m wide with half width depth 130 m below surface		
	10100	109		Could be treline or related to anomaly on next line 5 nT, 750 m wide, 110-120 m depth but could be edge of anomaly		
	10100	392		Could be treline or topographic-suspect anomaly		
	10110	702		Subtle shoulder, real poor anomaly 1.0-1.5 nT		
16a	10110	572			435940	6367419
16b	10110	578	low	Basement peak with anomaly on either side or top; weak shallow anomaly-note topo change	435928	6367146
17	10120	1194	med	Interesting 1 nT anomaly, reasonably well defined, roughly 500 m width, 40 to 50 m below surface	436129	6351104
18	10120	1205	med	Very similar to prior anomaly but could be product of tieline interference	436139	6351800

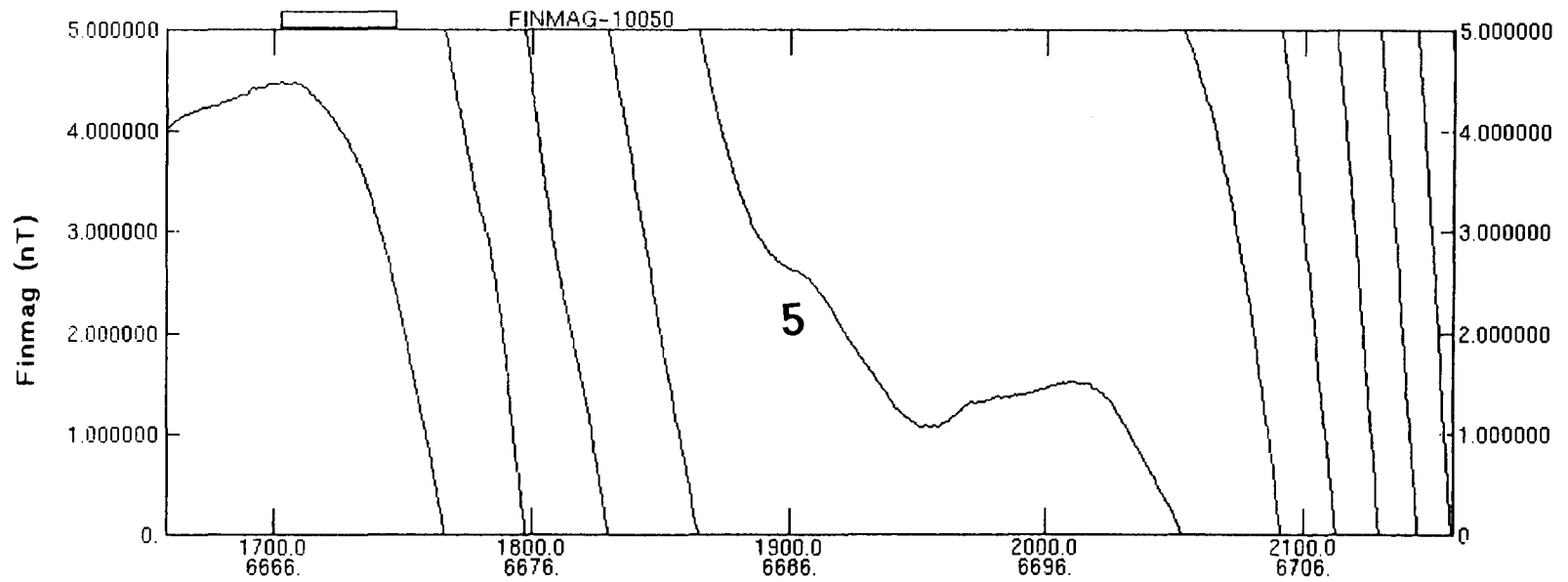
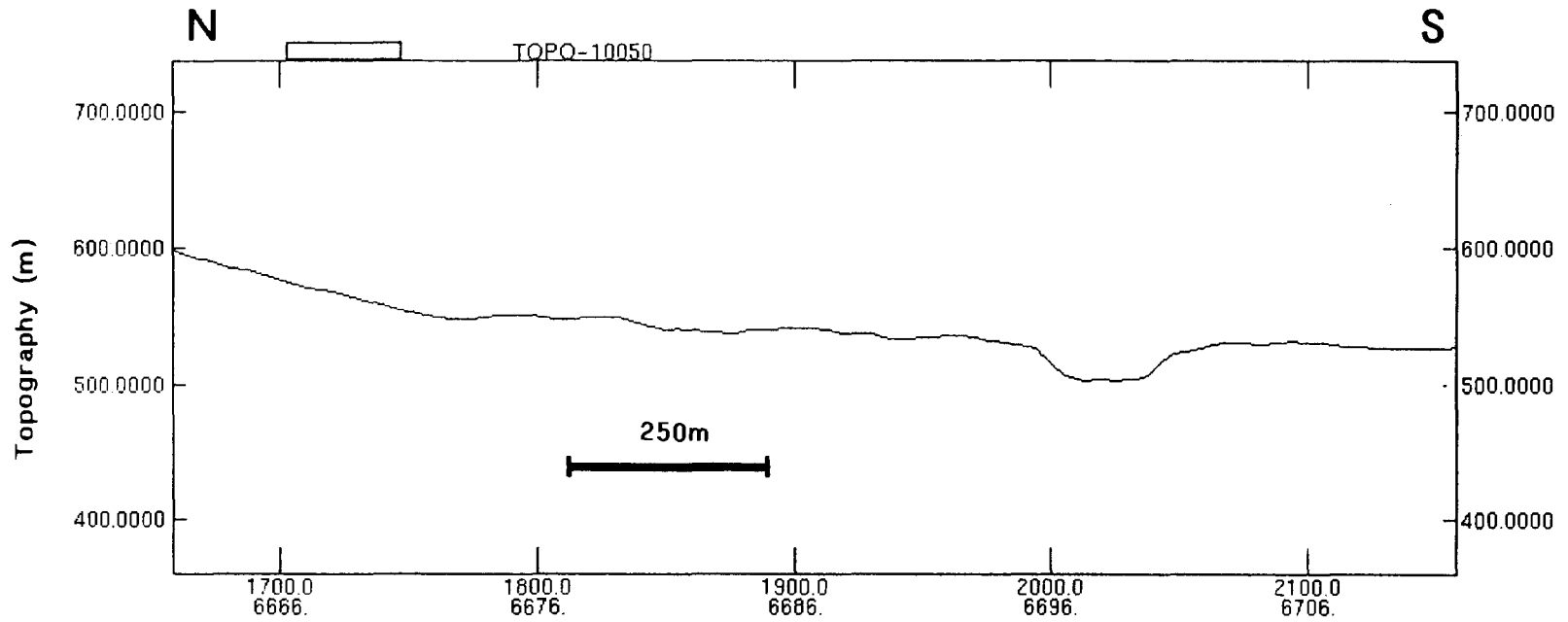
19	10120	1492	very low	High risk treeline anomaly	436355	6369712
20	10130	1542	very low	Indicates that this anomaly part of trend of 10140-2469 and 10150-2535; all likely basement	436752	6369410
	10130	1720		Interesting map anomaly, looks like basement		
21	10130	1800	med to low	1 nT well defined shoulder, 380 m wide, roughly 60-70 m depth	436530	6352186
22	10130	1809	med to low	1.5 nT about 520 m width, roughly 70 m below surface or at surface. Both this and prior anomaly at edge or on top of basement high; possible dyke in basement or intrusion in sed	436514	6351686
23	10130	1984	low	Interesting 1-2 nT shoulder, poorly defined; also close to river	436406	6340190
24	10140	2469	very low	Same as anomaly 10150-2535, 3-5 nT peak and about 30 m below surface, roughly 600 m wide, relatively sharp; of interest	437146	6368870
25	10150	2535	low	5 nT anomaly, shoulder, of interest, roughly 60 m below surface , roughly 1km diameter-difficult to pick and could be basement	437544	6369074
26	10160	3008	very low	5-6 nT anomaly, broad shoulder about 130 m below surface, 750 m wide but broad - difficult to tell if of interest, close to river bank	437802	6340838
	10160	3038		Broad and deep		
	10160	3162		Broad bump in trough , treeline anomaly?		
	10170	3723		Broad shoulder poorly developed 10-15 nT roughly 180 m below surface bur very broad 300-500 m diameter		
	10180			Nothing of interest		
27	10190	4662	med	Roughly 1 nT, 160 m diameter and very shallow; of interest	439022	6358217
	10190	4960		Edge of Ells River 3-4 nT anomaly, likely to topographic effect		
	10200	5014		Interesting 3nT anomaly, but correlates with edge of bank on Ells River; high risk		
28	10200	5232	low	Same as anomaly 10211-892, same look 10nT peak, shallow, very similar characters as prior anomaly	439395	6356859
29	10211	608	med to high	Nice well defined 3nT peak, roughly 500 m roughly 100 m below surface	439589	6340624
30	10211	747	med	2nT shoulder plus 2 other weak peaks at 752 ,751 of interest, shallow anomalies	439698	6348703
31	10211	892	low	No visible anomaly on map but profile shows 15 nT anomaly, about 470 m wide, 60-100m below surface, on edge of broad Mag high	439801	6356885
	10220	5520		Deflection, Ells River, looks like drainage (bank) effect		
	10230			Nothing of interest		
	10240			Nothing of interest		
32	10250	6994	very low	Large broad shoulder 7-8 nT, roughly 800m wide, basement, 110-135m below surface may indicate component not in basement?	441524	6367900
33	10250	7128	very low	Poor defined shoulder 3-4 nT might be of interest, very very broad peak; poor	441414	6358148
	10250	7139		Basement, strong Mag very broad, 15-20nT could be 50 nT		
	10260	7515		Treeline anomaly		
	10270	7968		Very poor deflection, 2-3nT, better on large scale, 720 m diameter, too broad, basement?		
	10270	7988		Basement, 30-40 nT, broad basement		
	10270	8103		10-15 nT, broad shoulder, basement		
	10270	8130		Broad basement feature 1.2 km		
	10280	8469		Poor 0.5nT anomaly, edge of vally bank		
34	10280	8686	med	Well defined 0.5nT anomaly in Magnetic low - close to fault		
35	10280	8896	low	Broad amplitude shoulder 1.0-1.5nT in Magnetic low; dosen't show on map well	442600	6358767
	17130	2348		10 nT, same anomaly as 10211-892 and 10200-5014 interesting, shows as roughly 120-130 m below surface, broad feature on map 800*800 m	442739	6368839



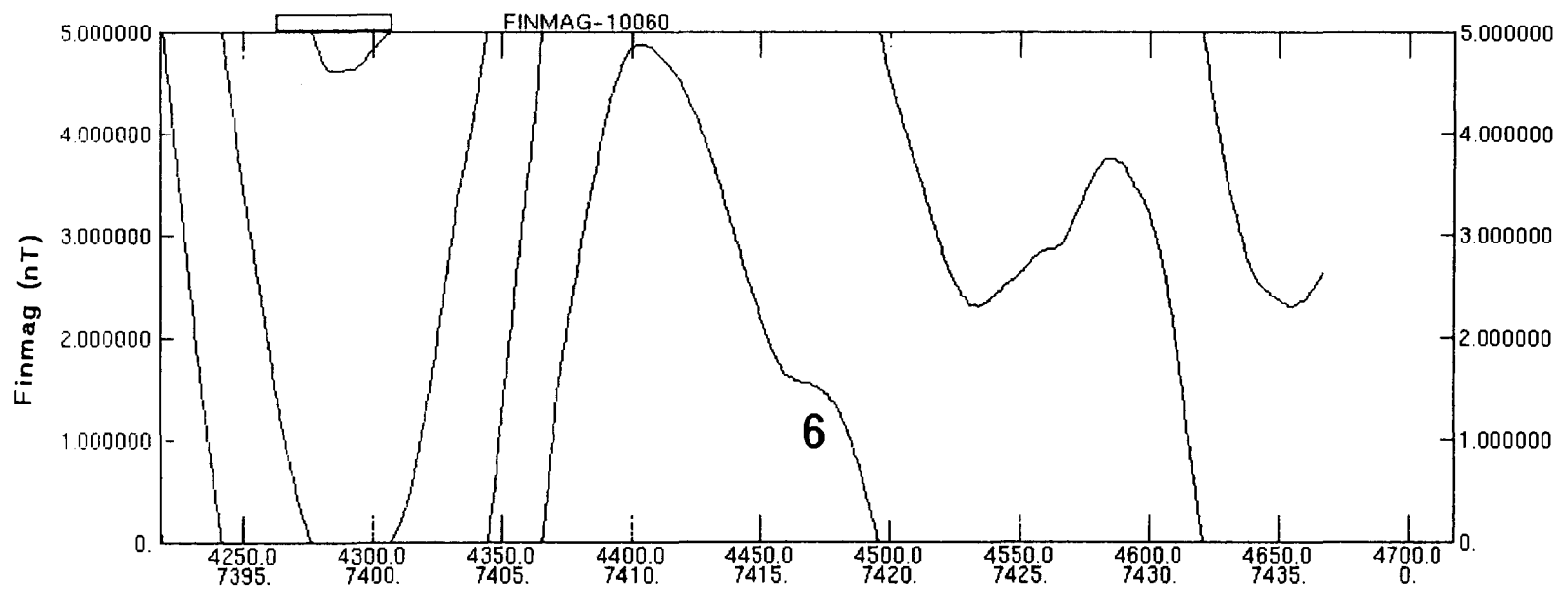
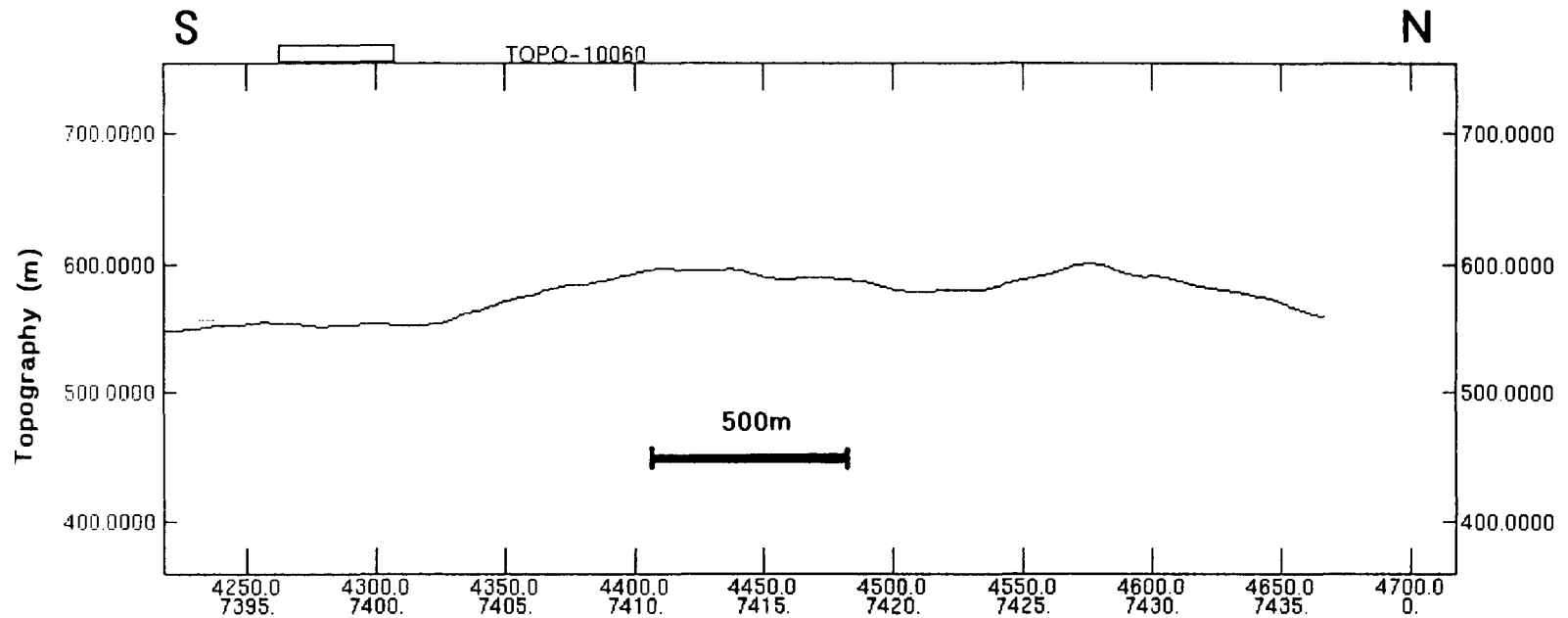


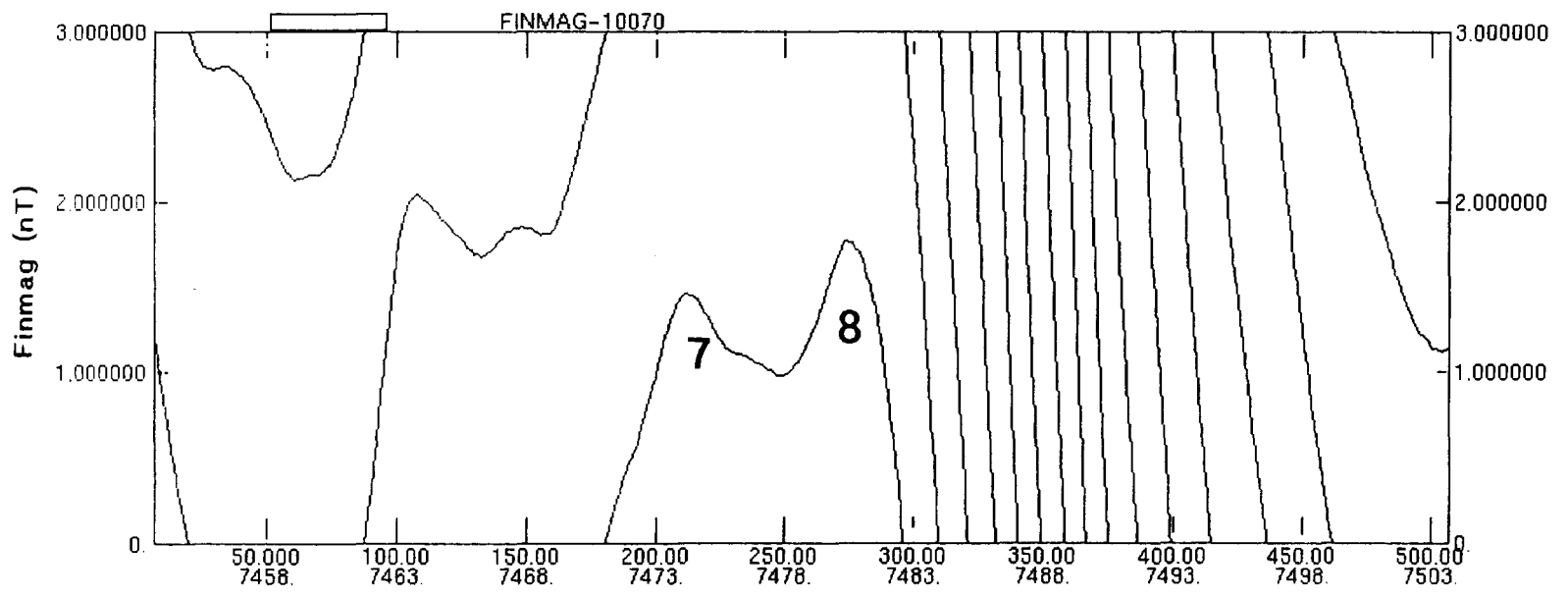
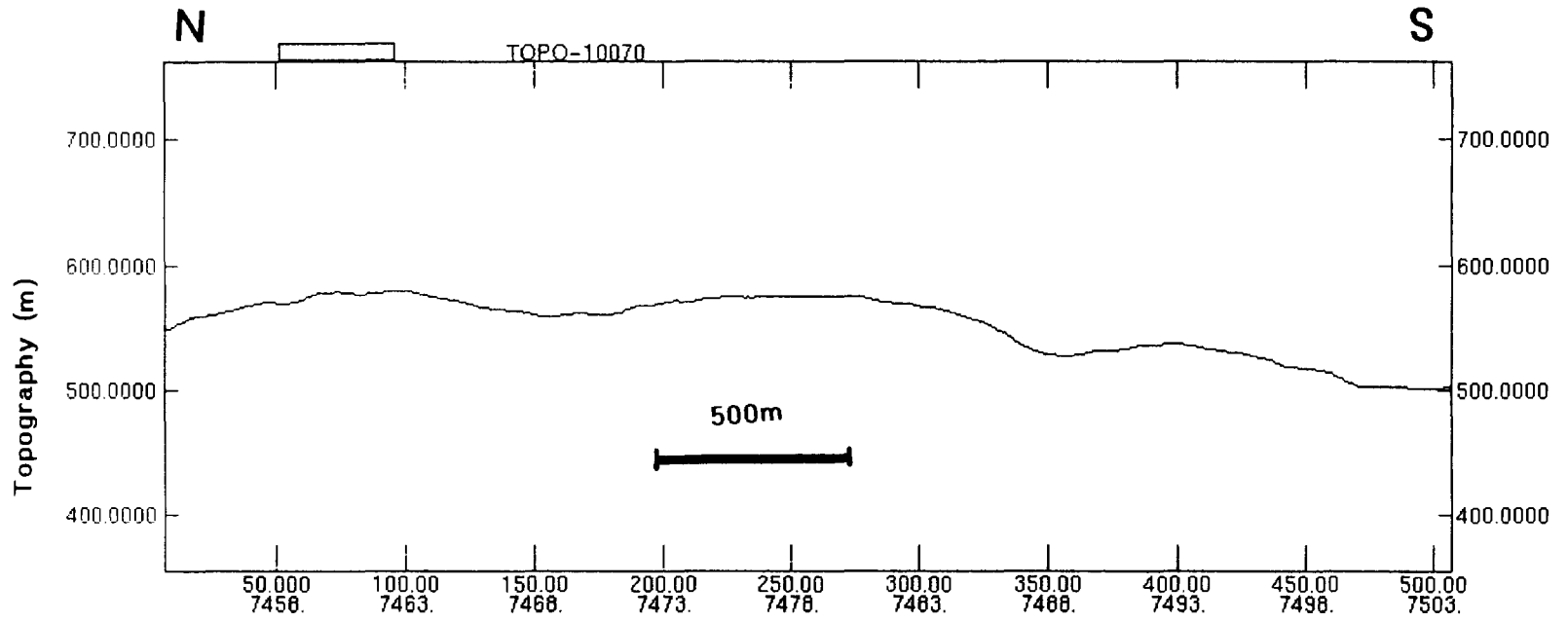


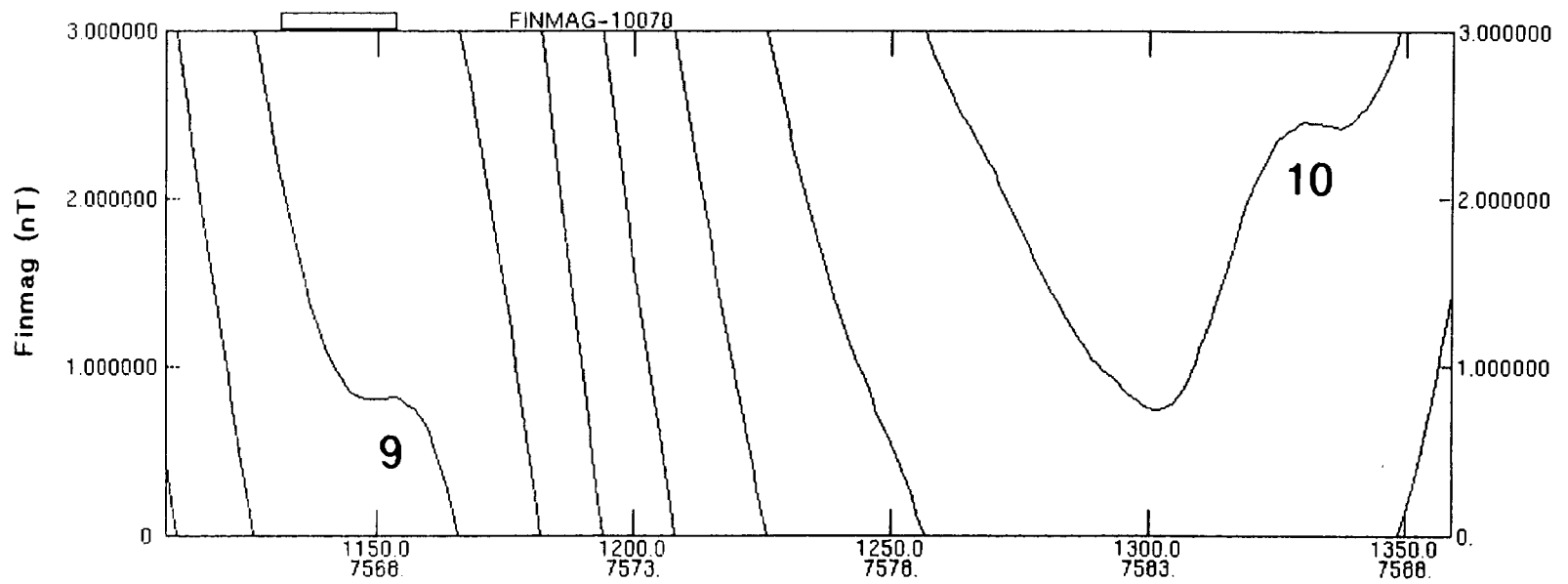
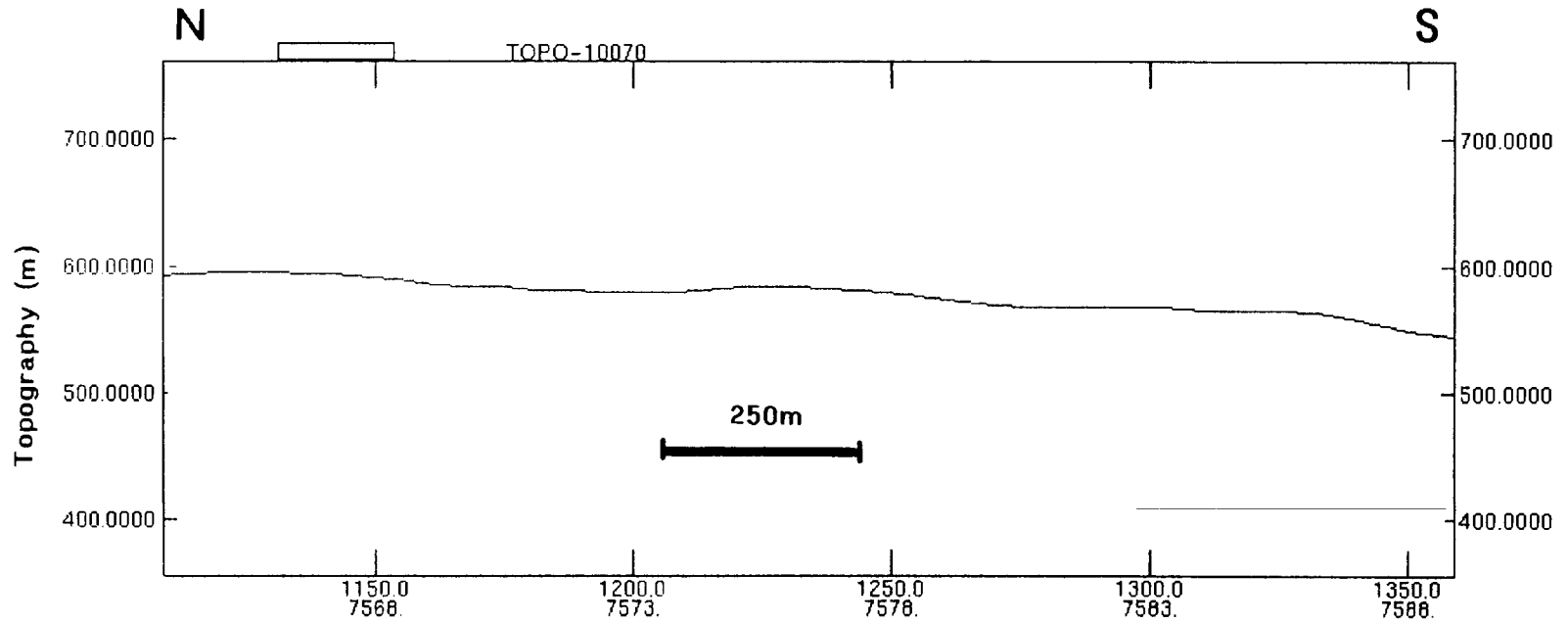


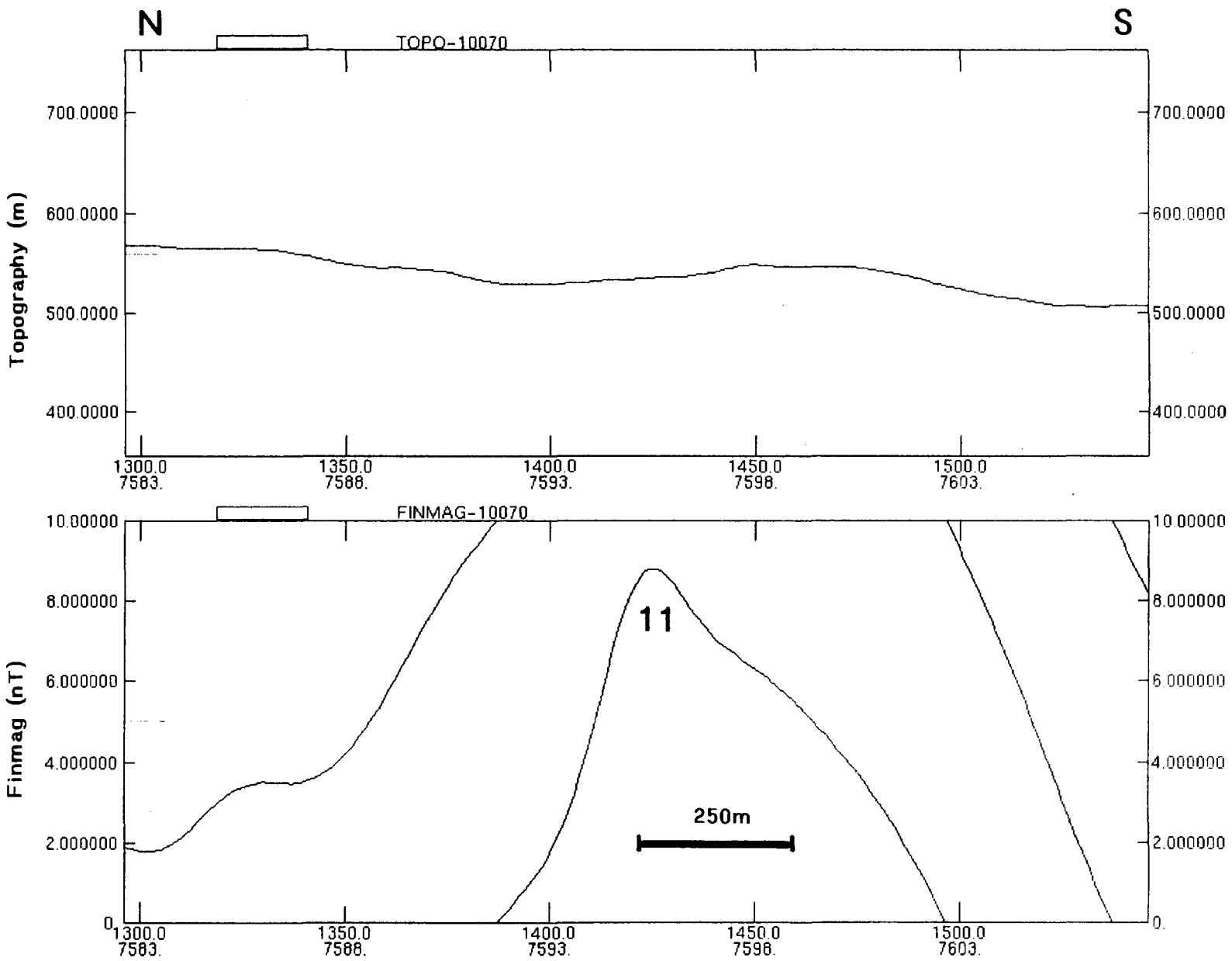


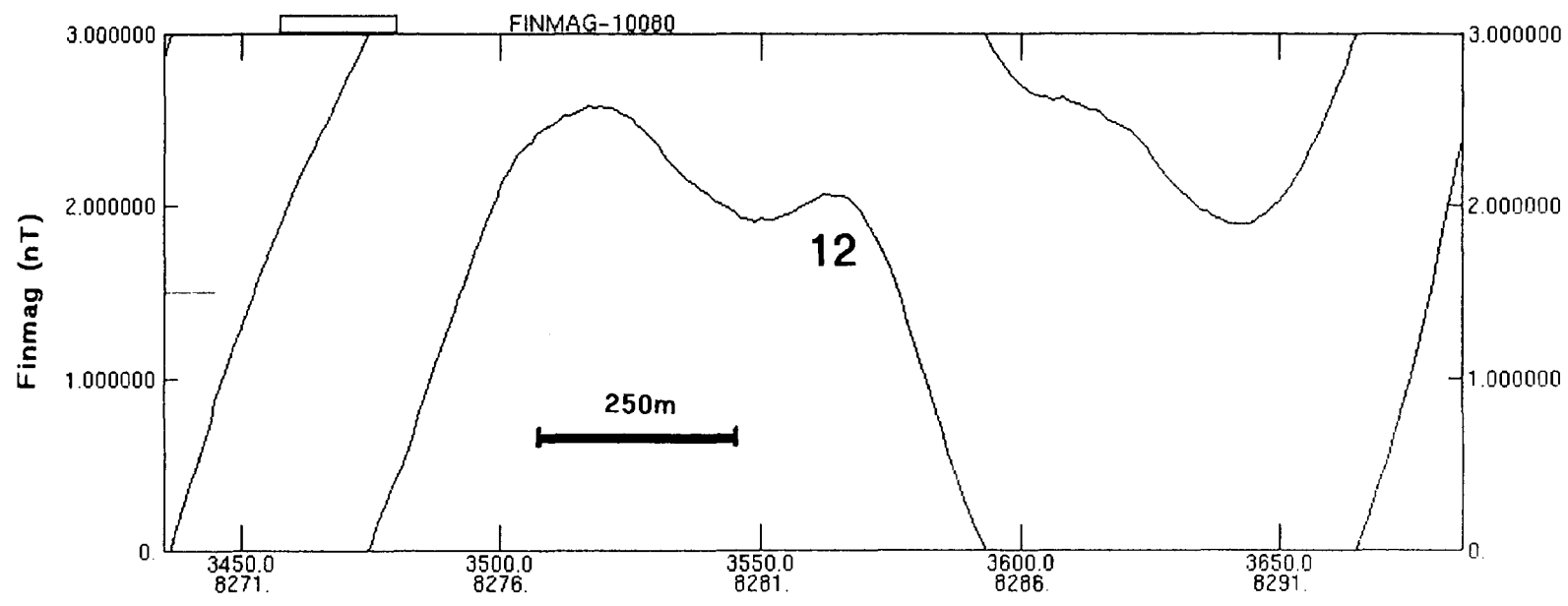
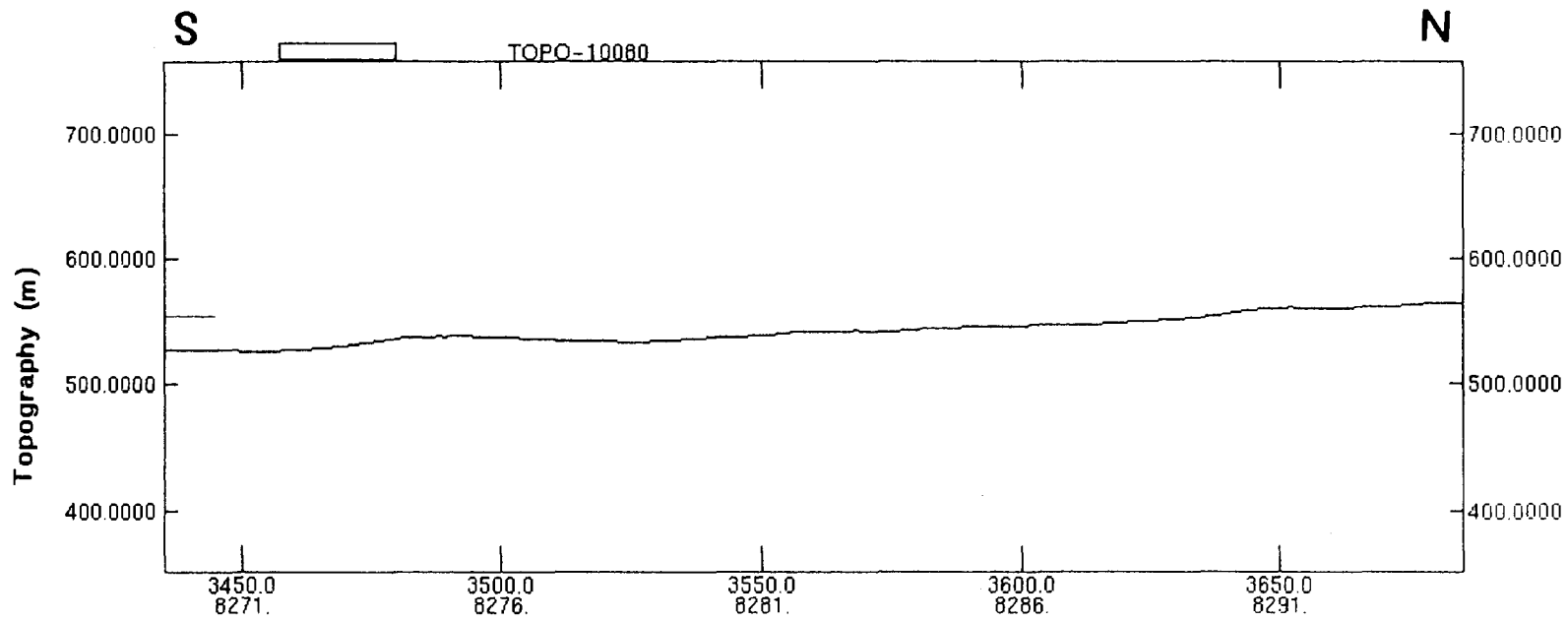


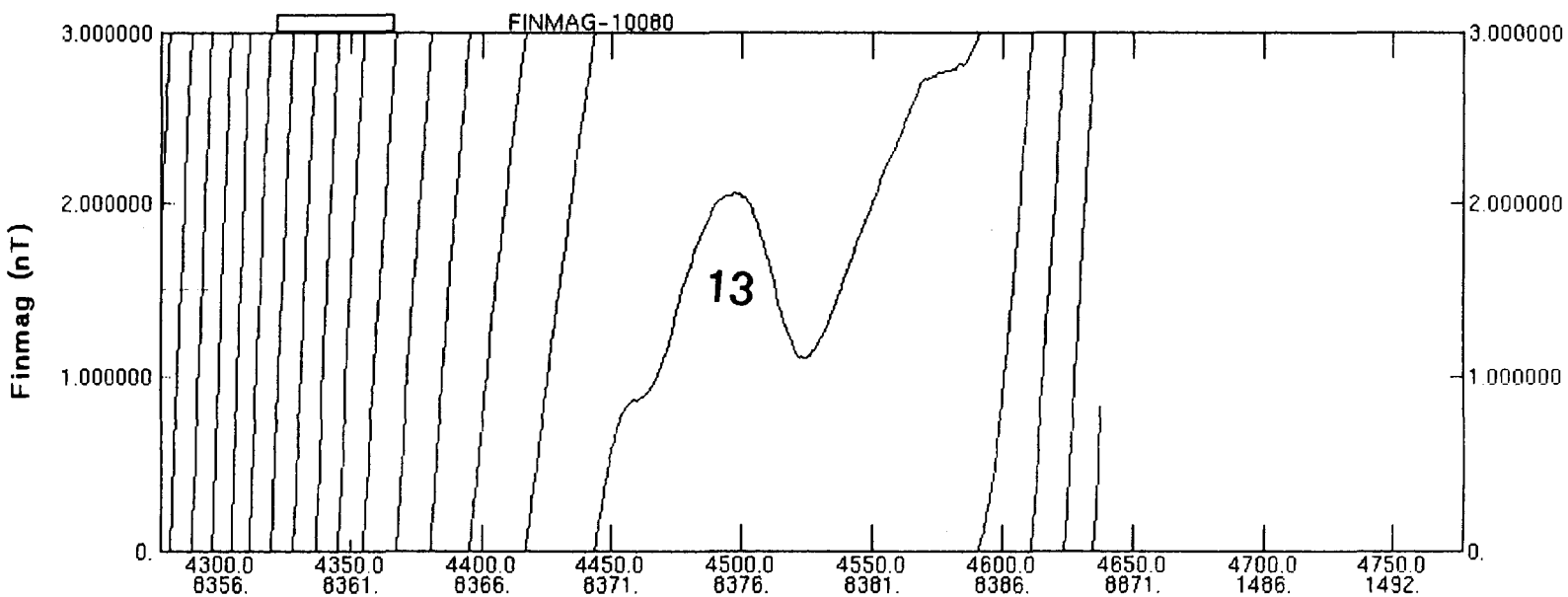
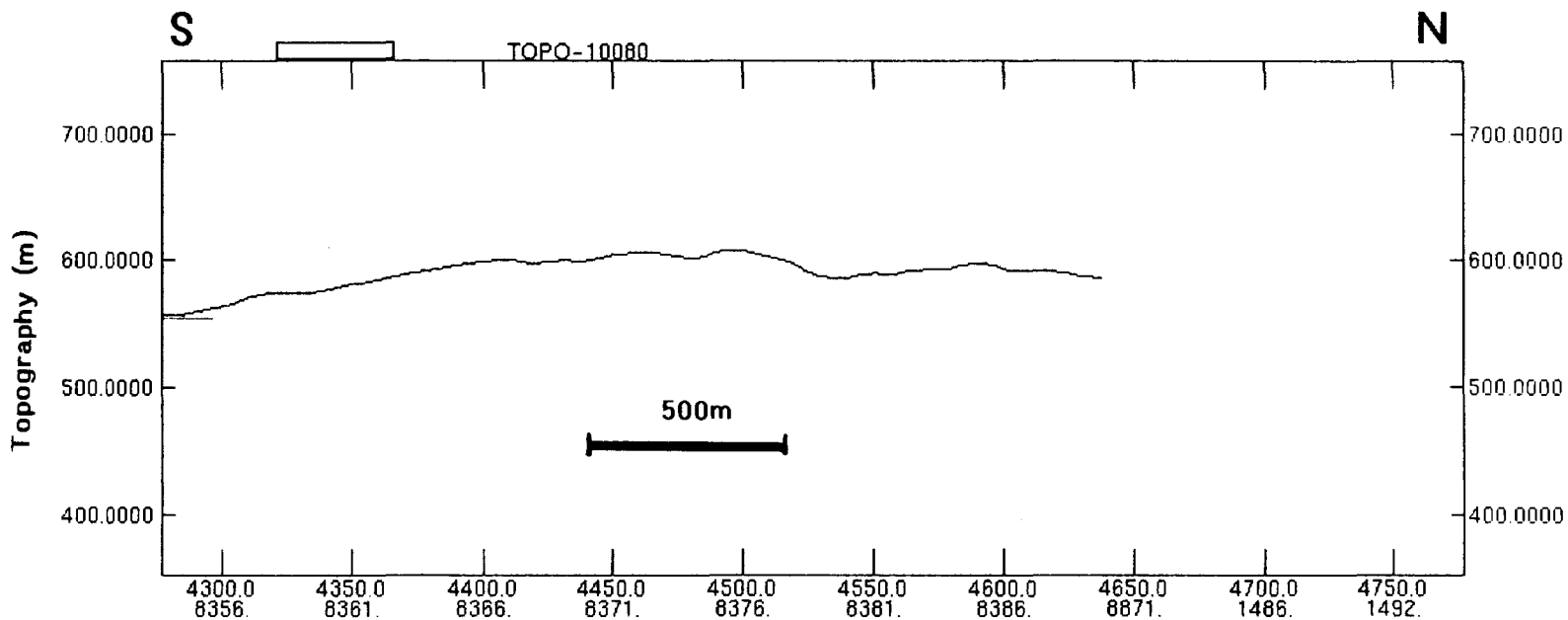


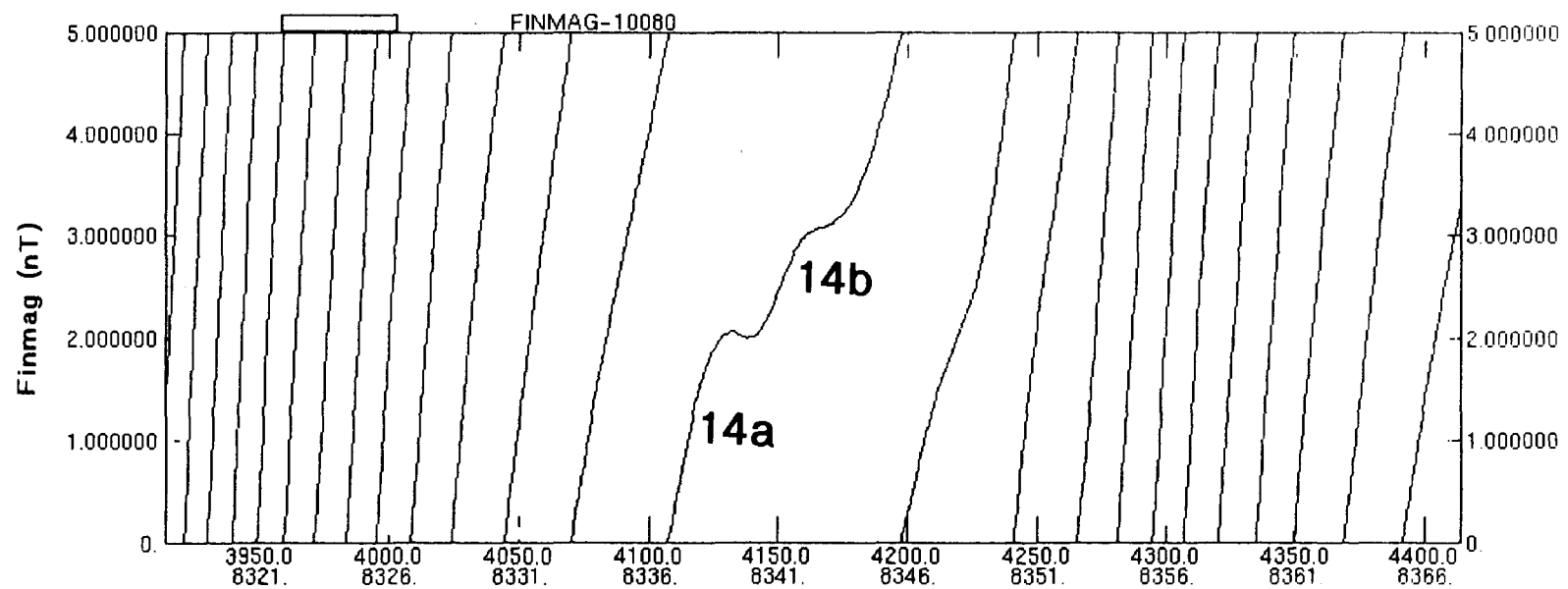
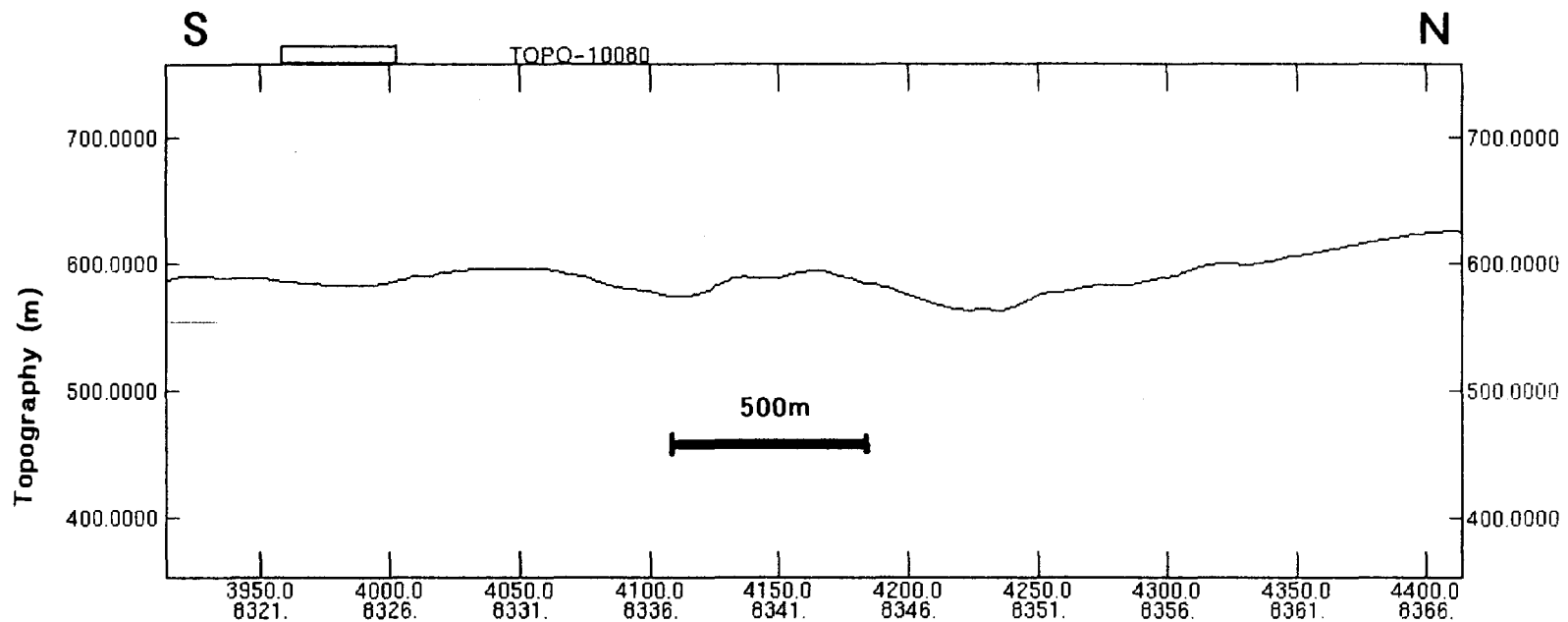


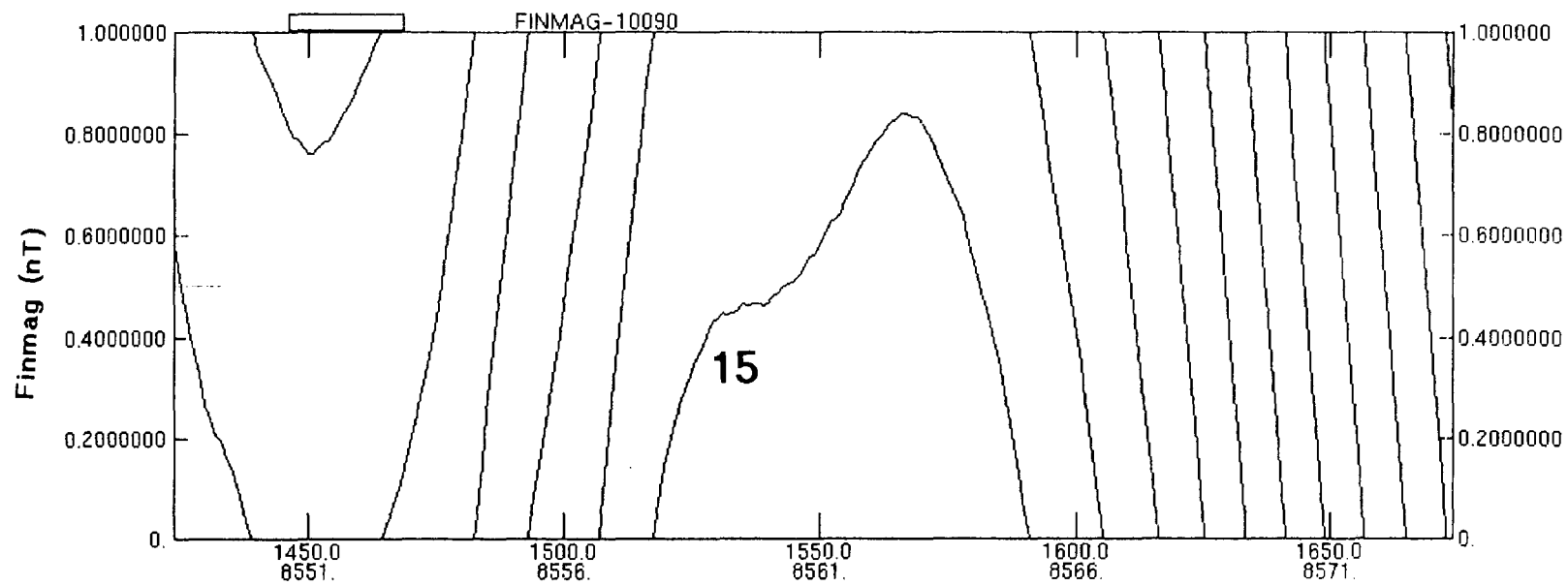
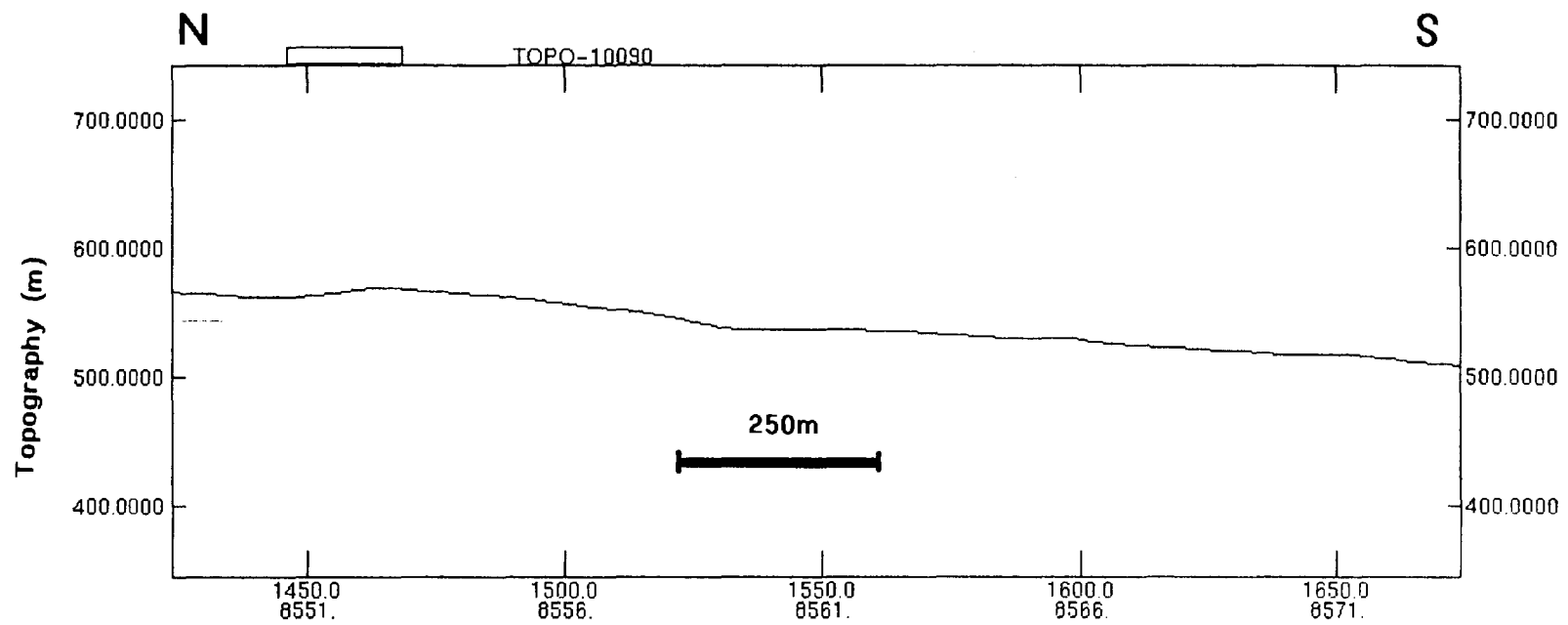




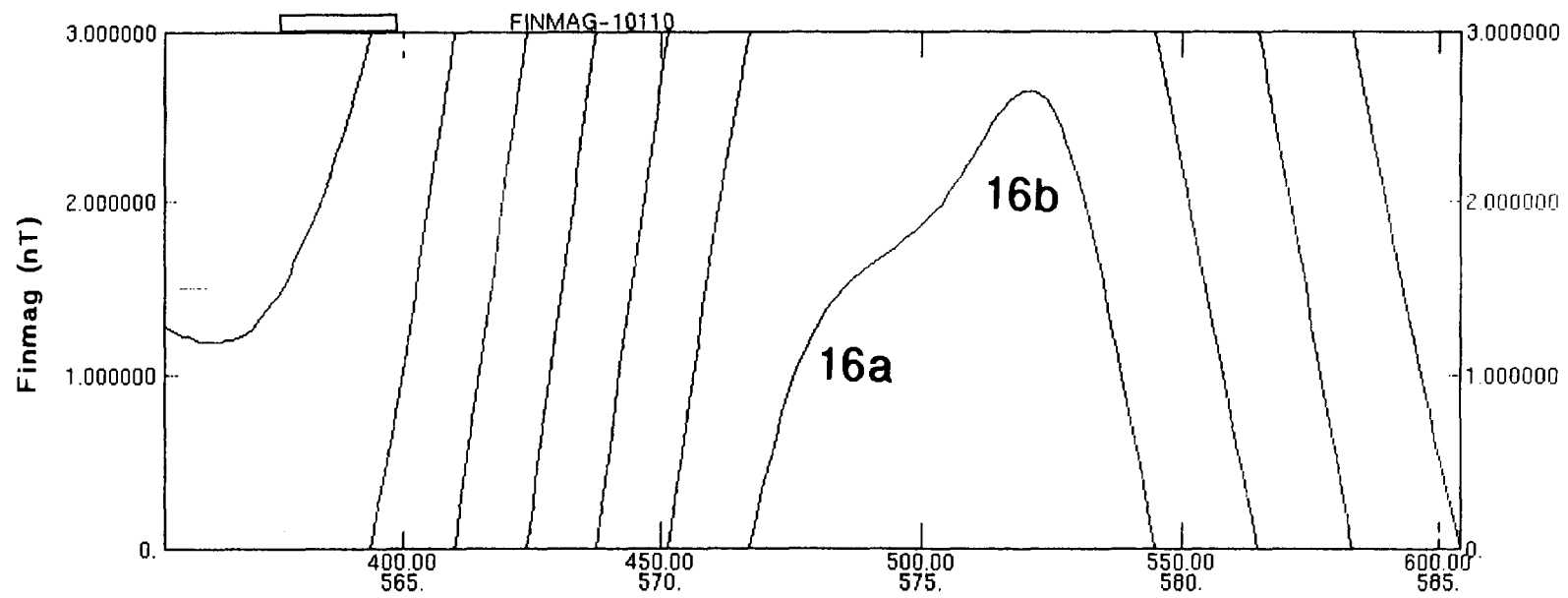
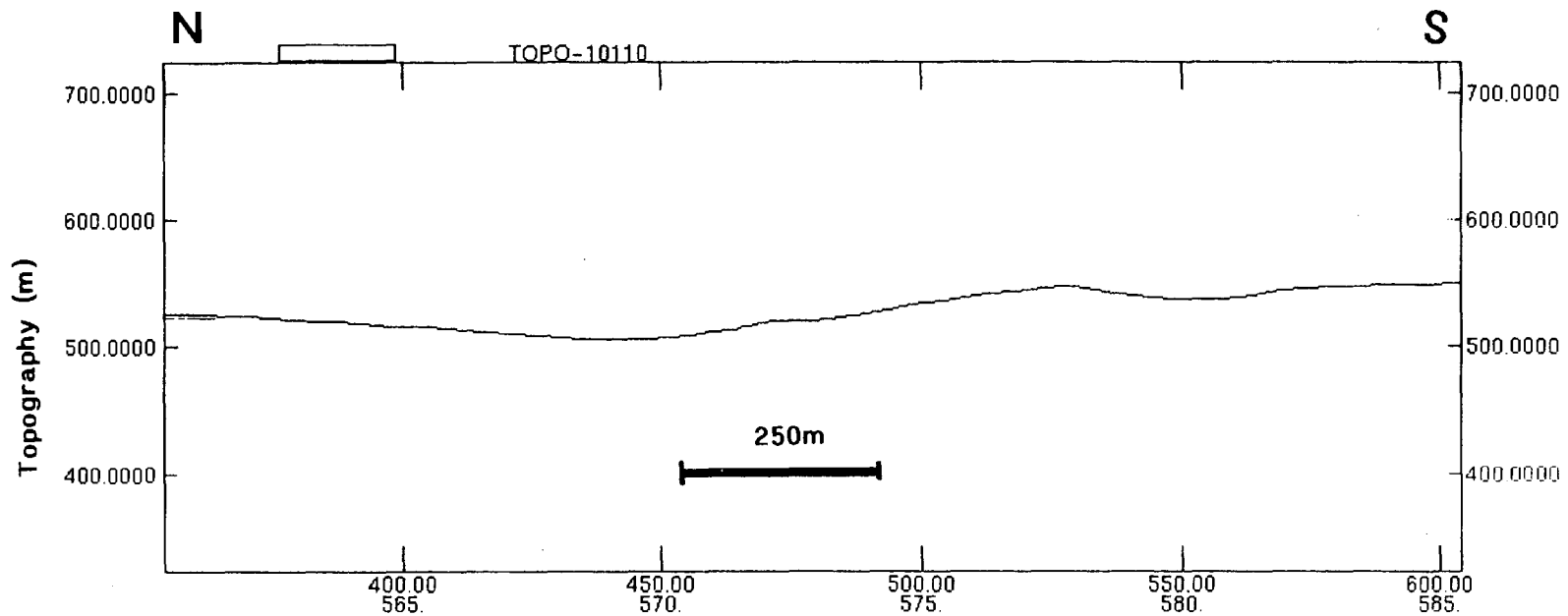


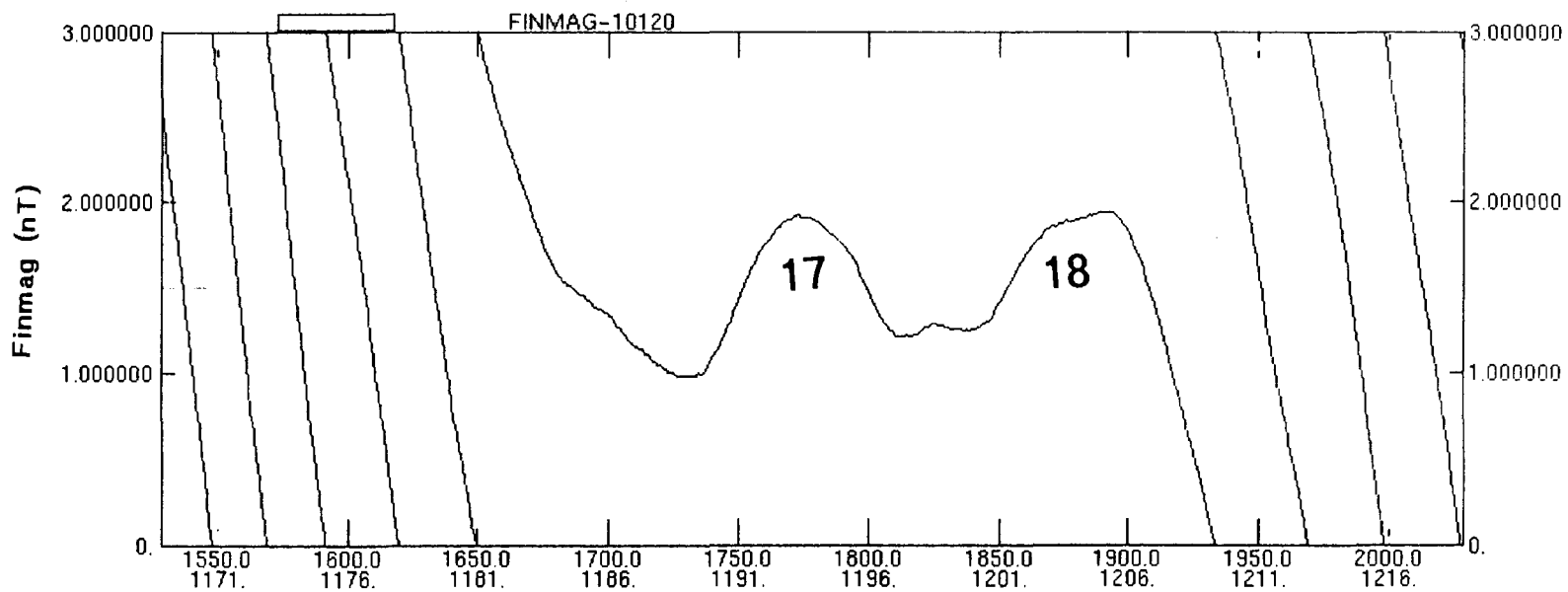
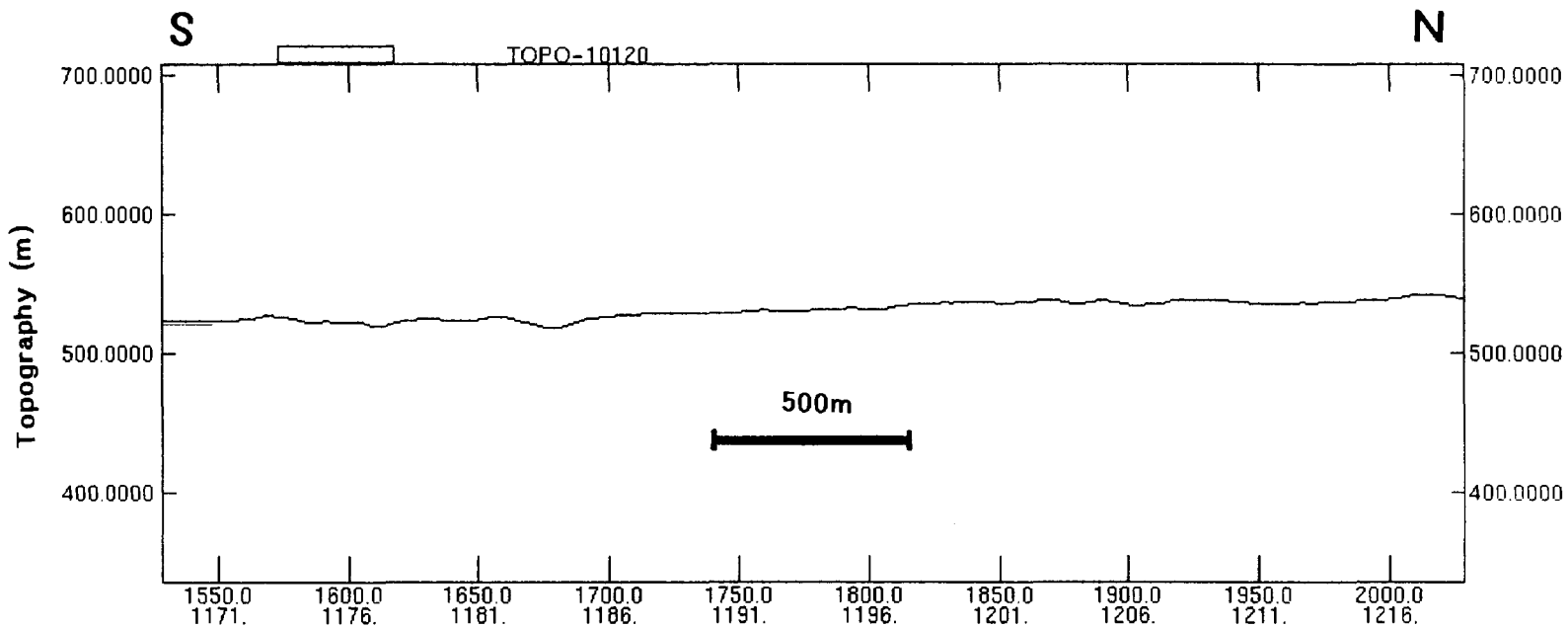


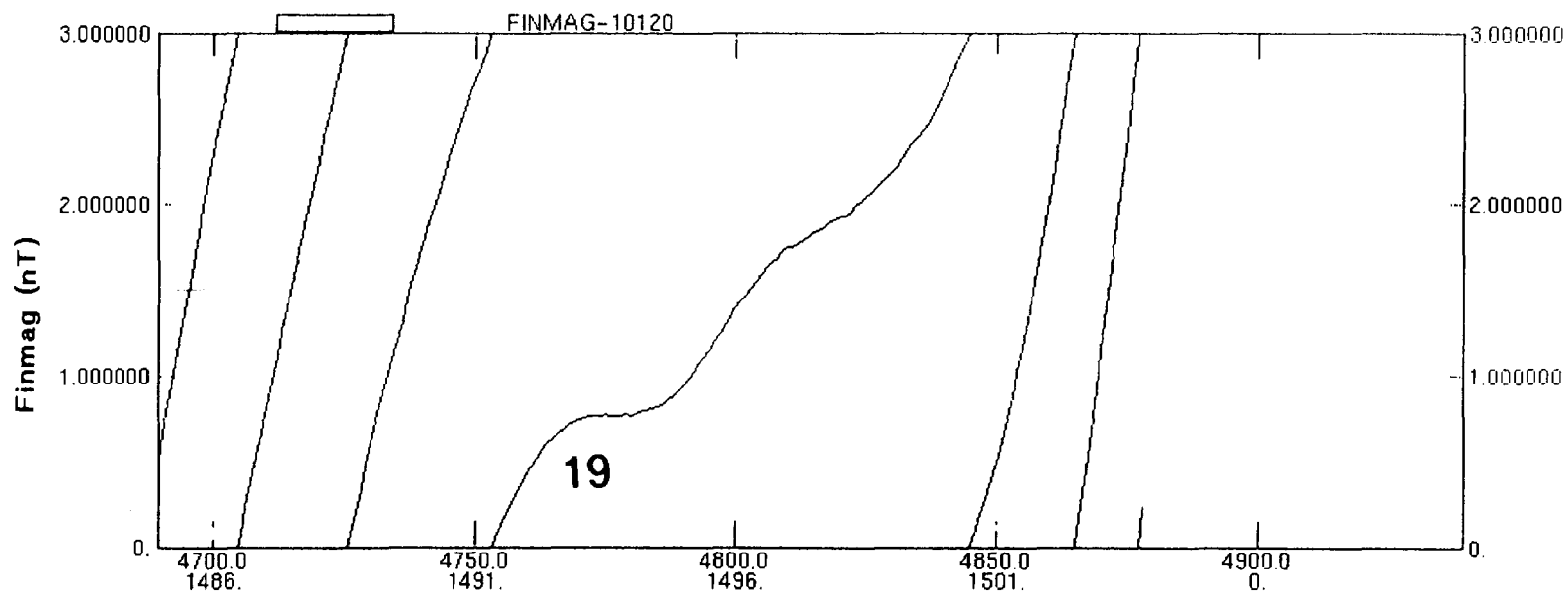
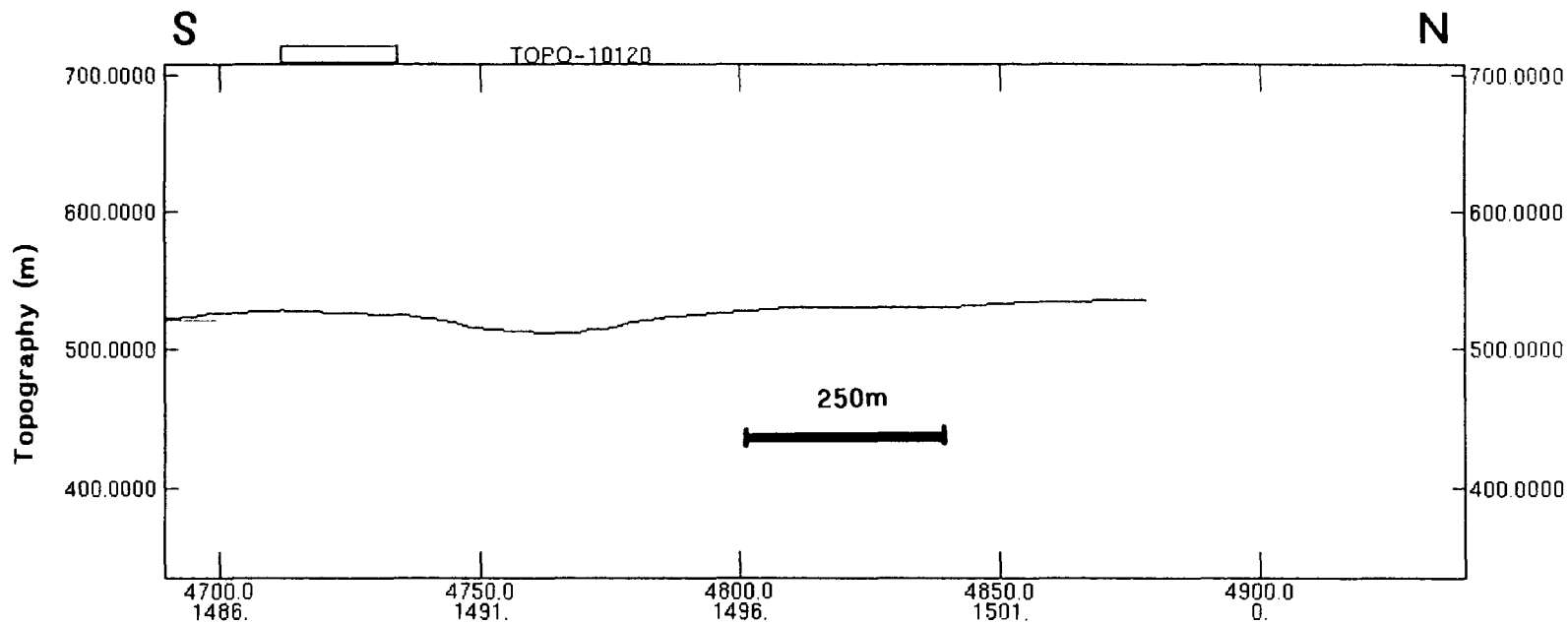


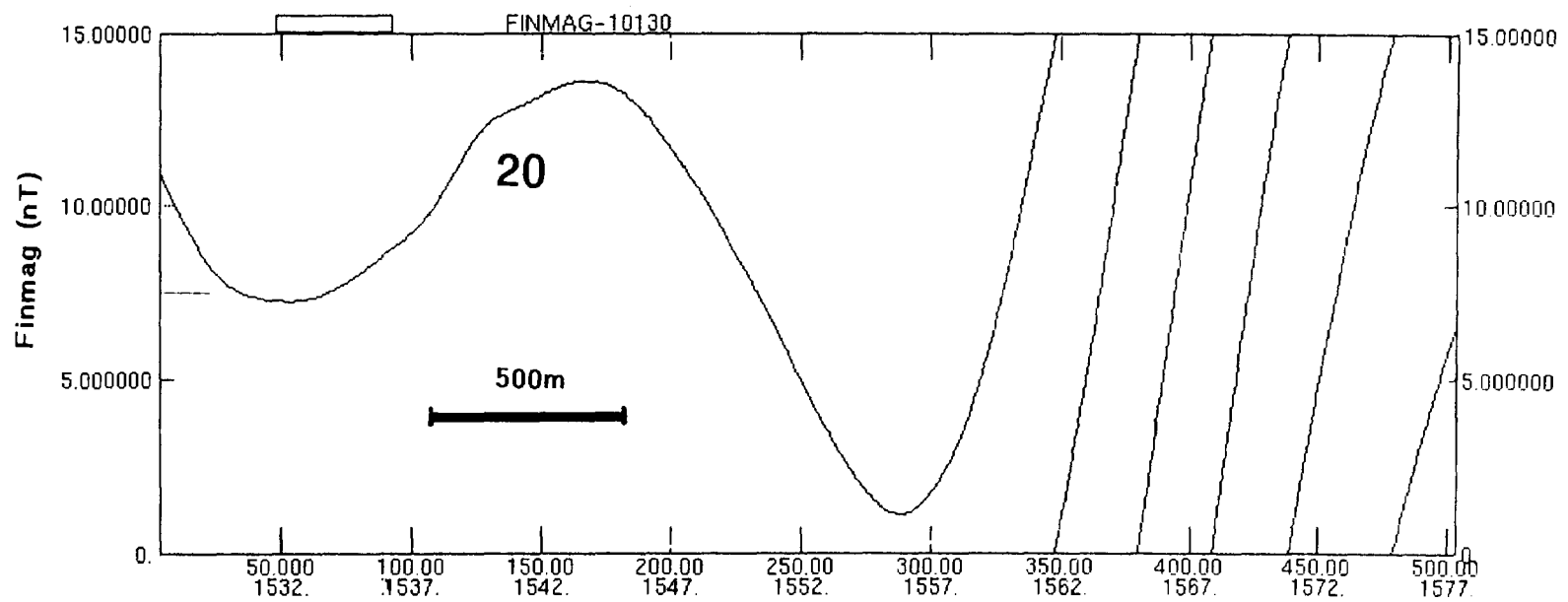
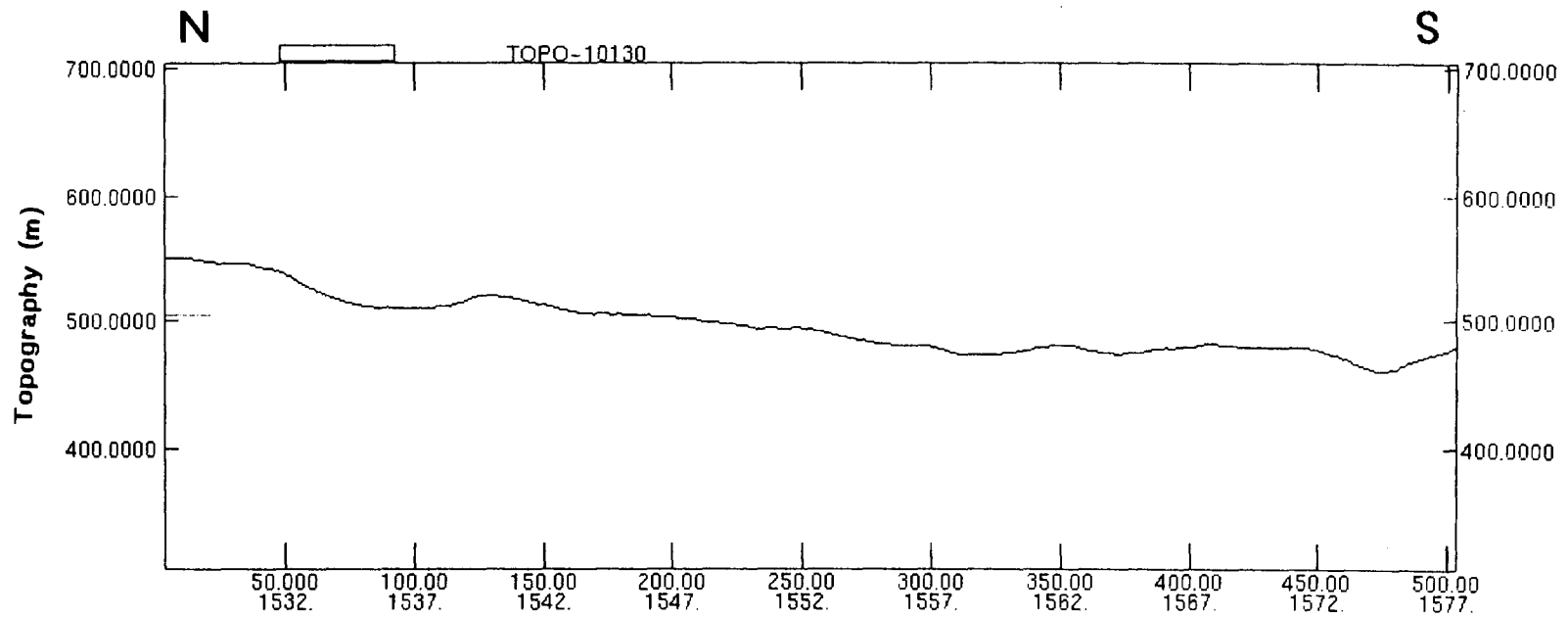


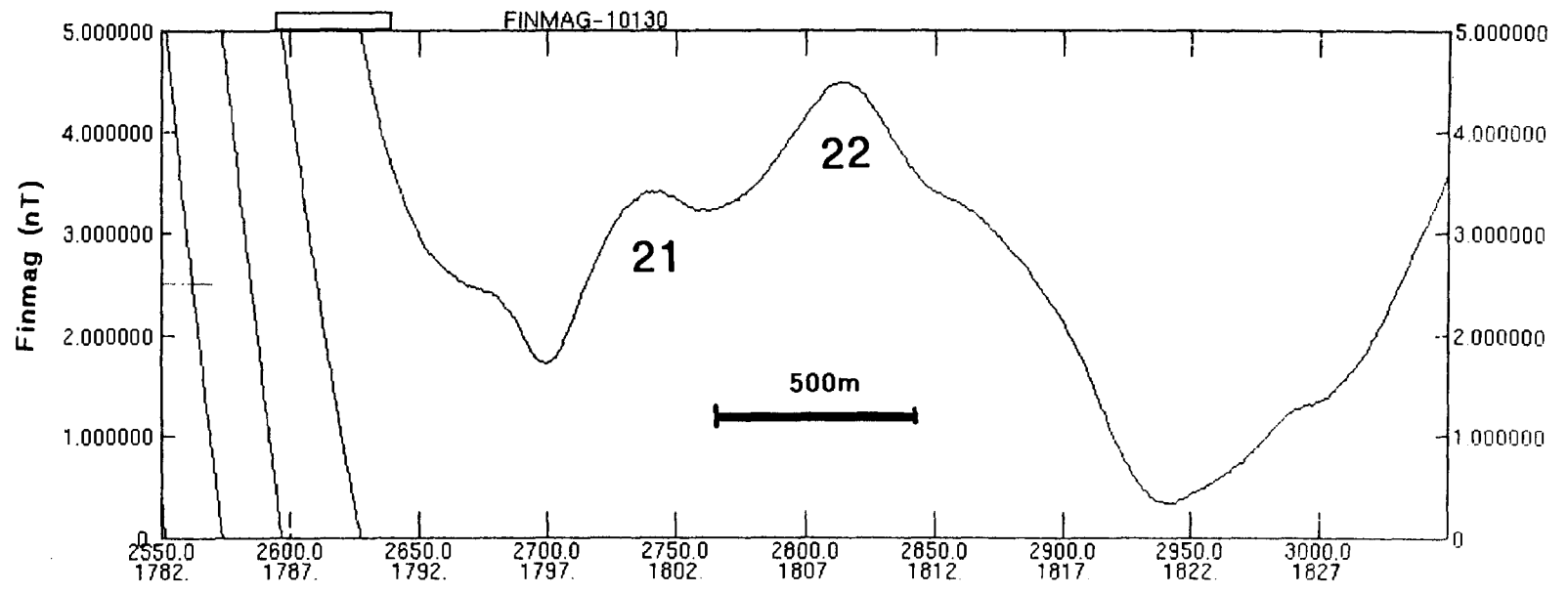
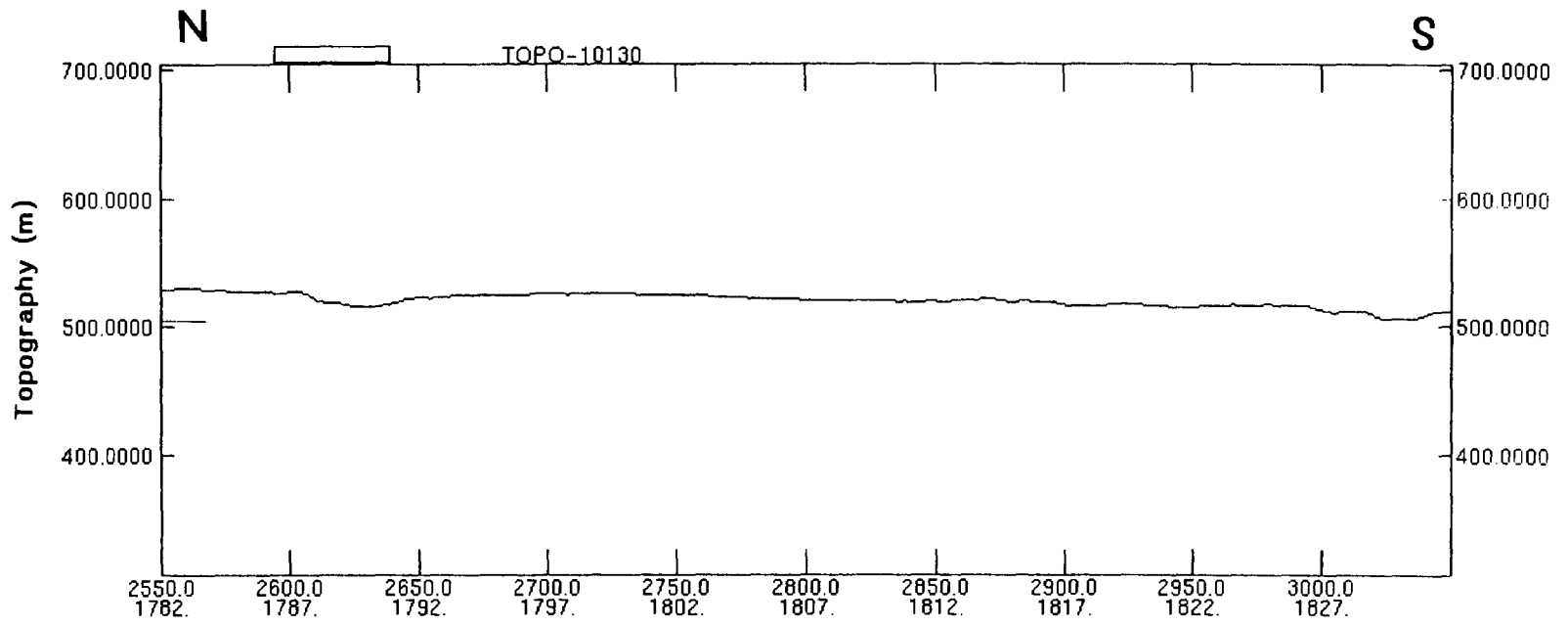


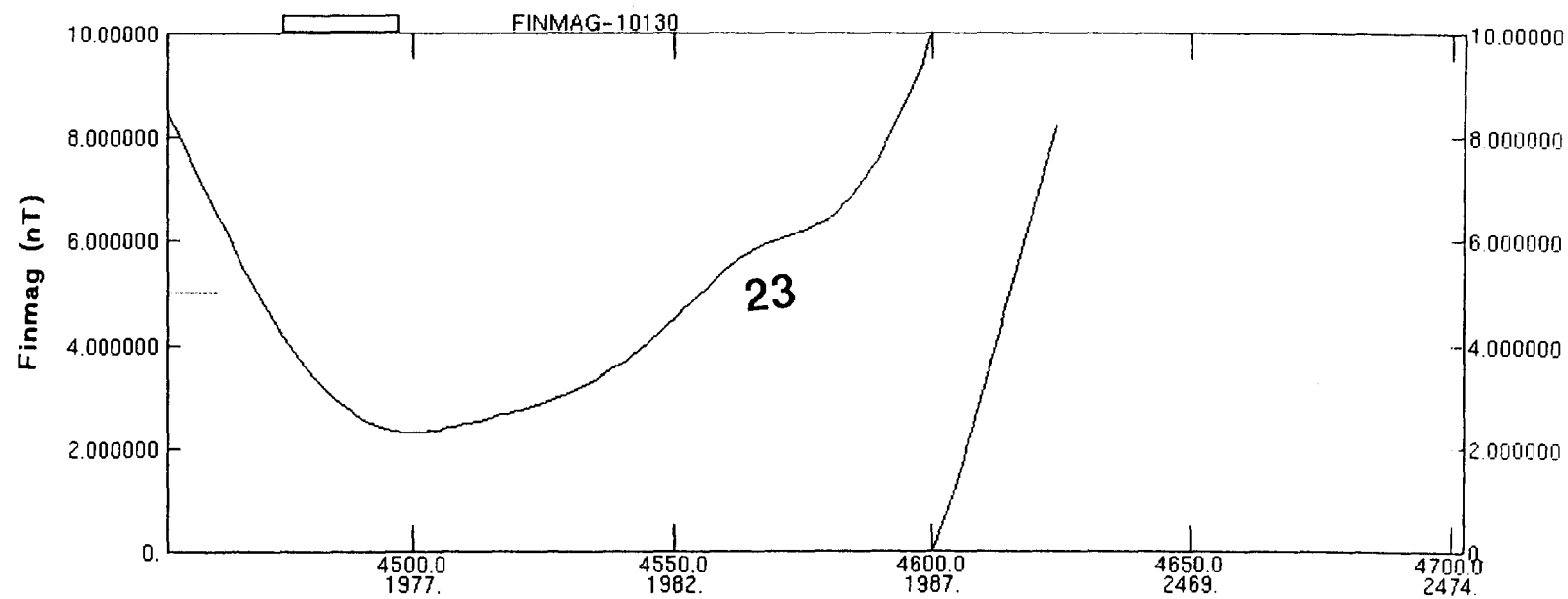
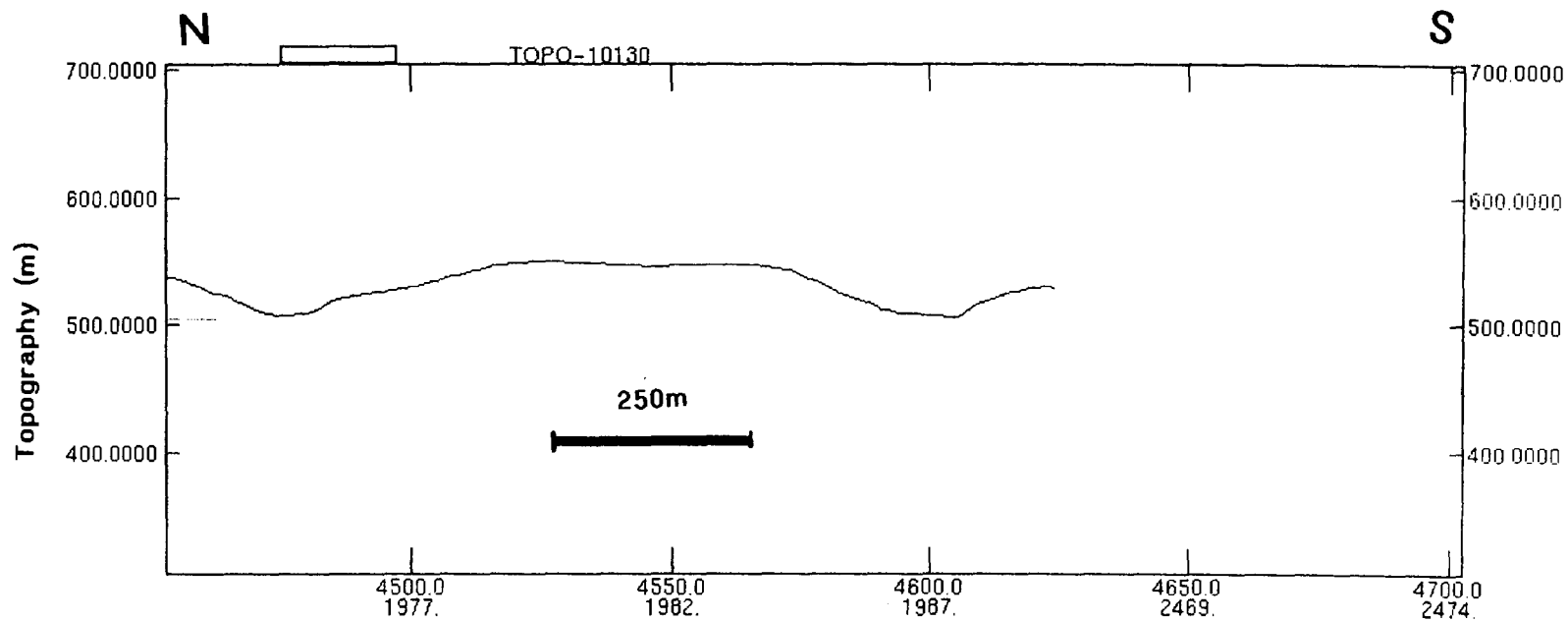


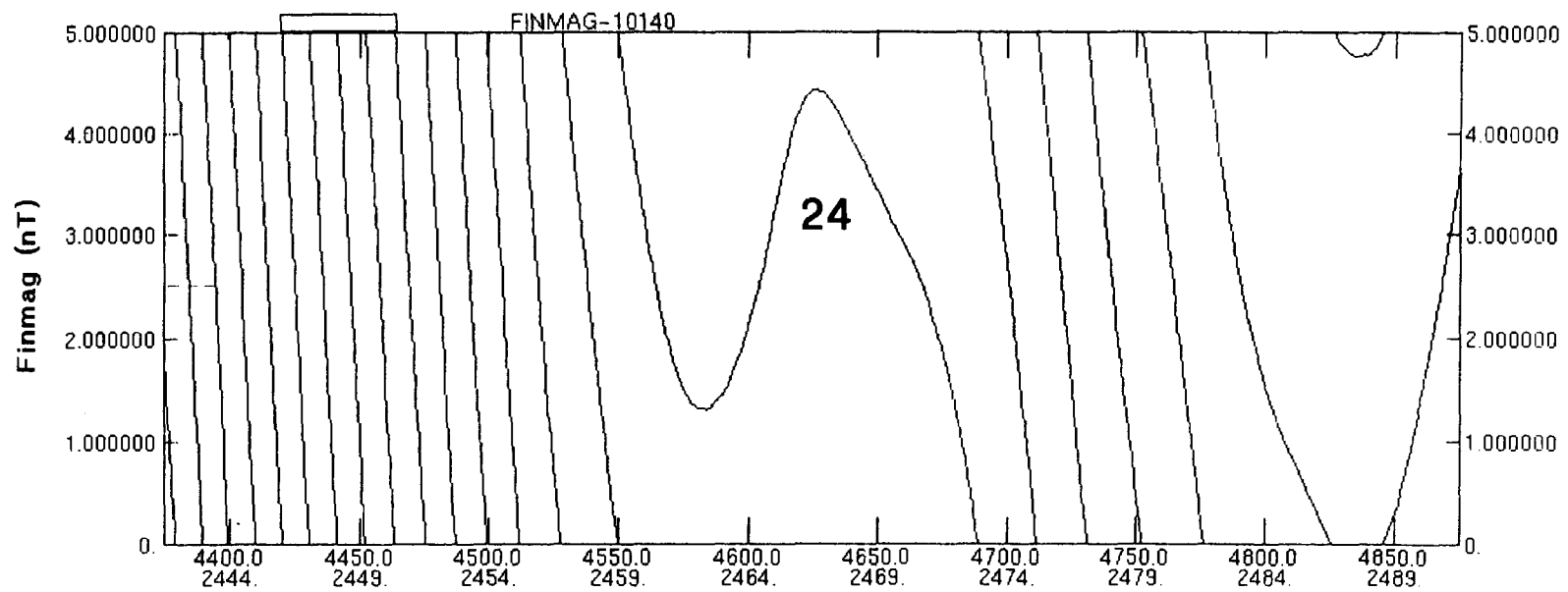
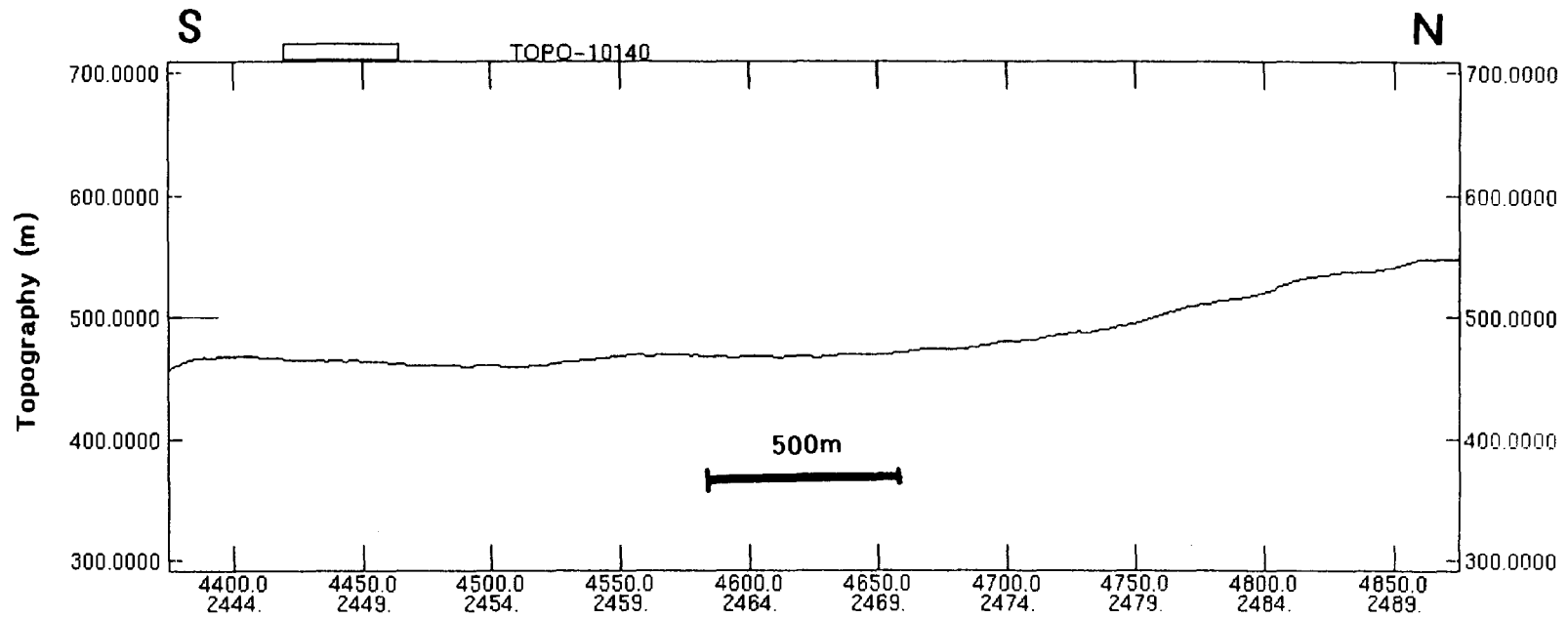


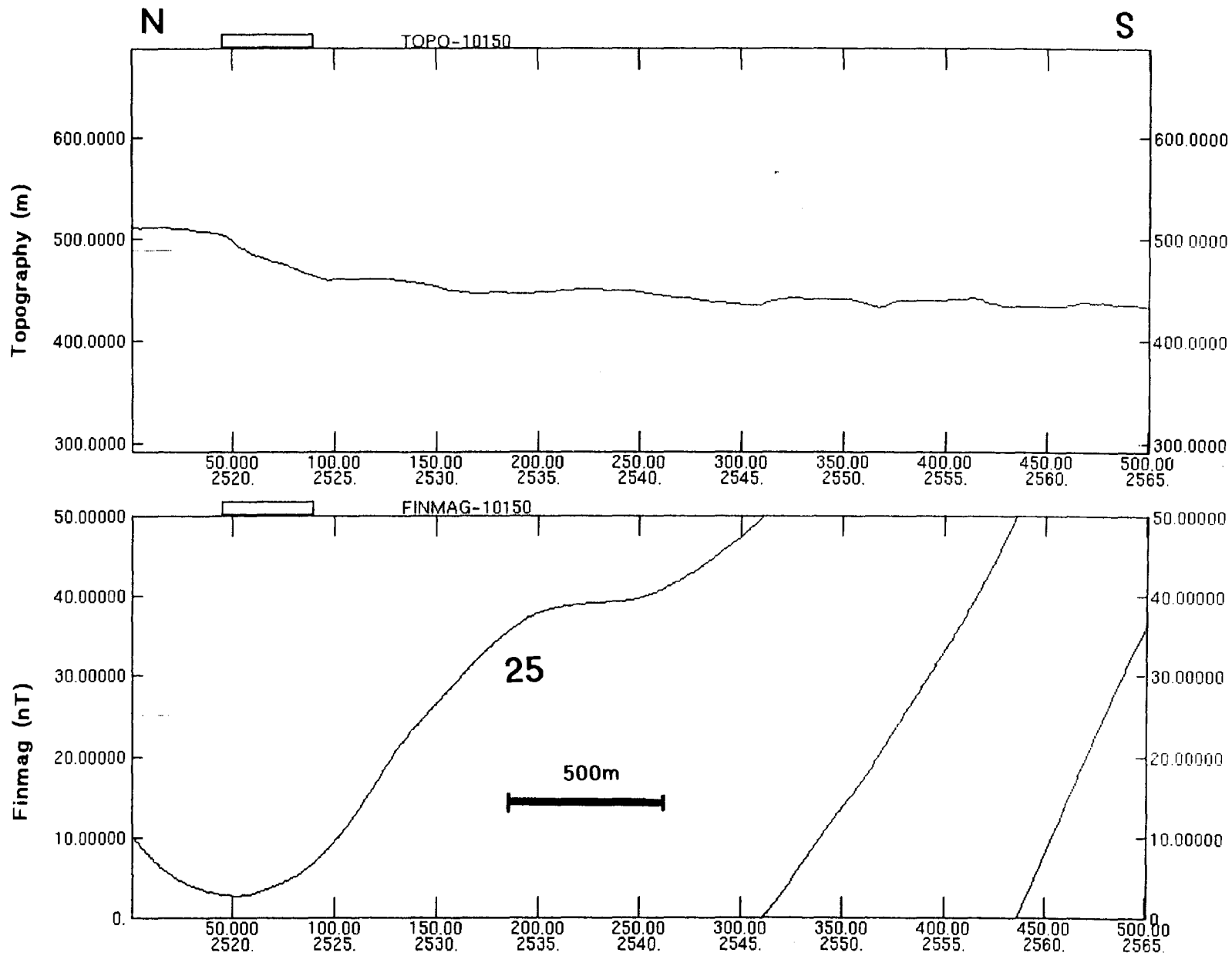




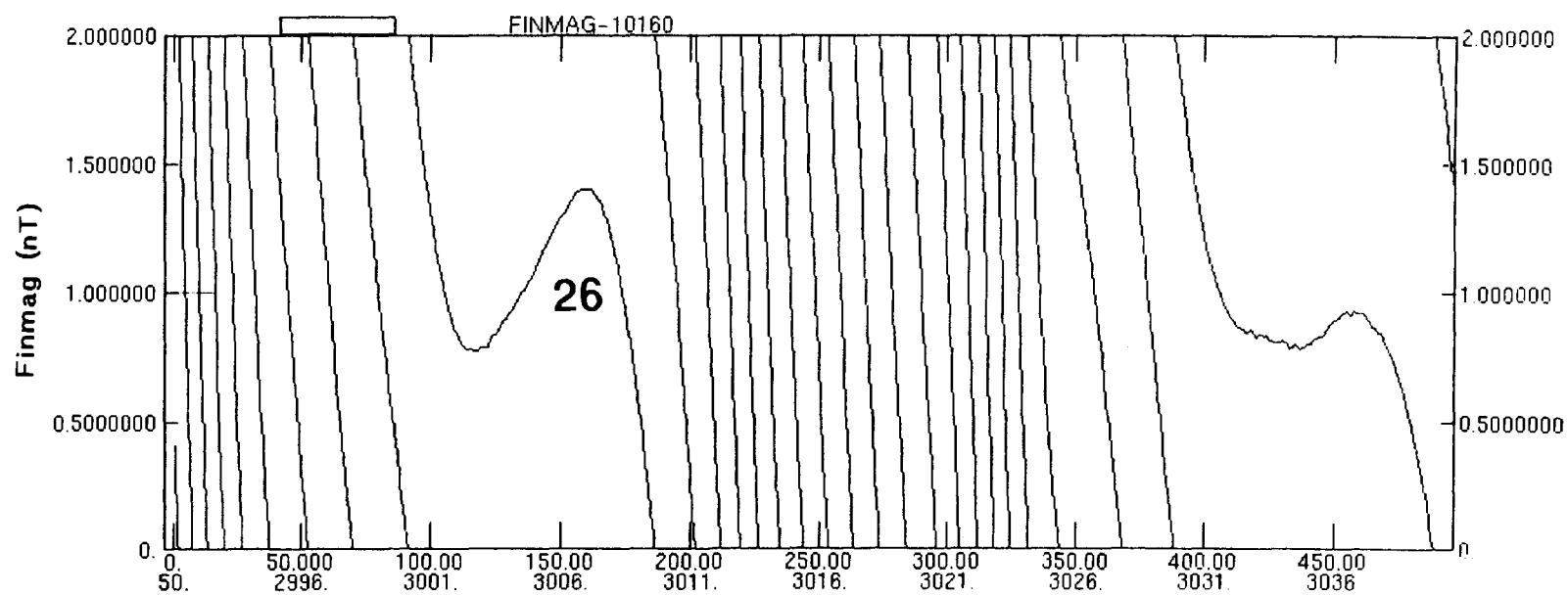
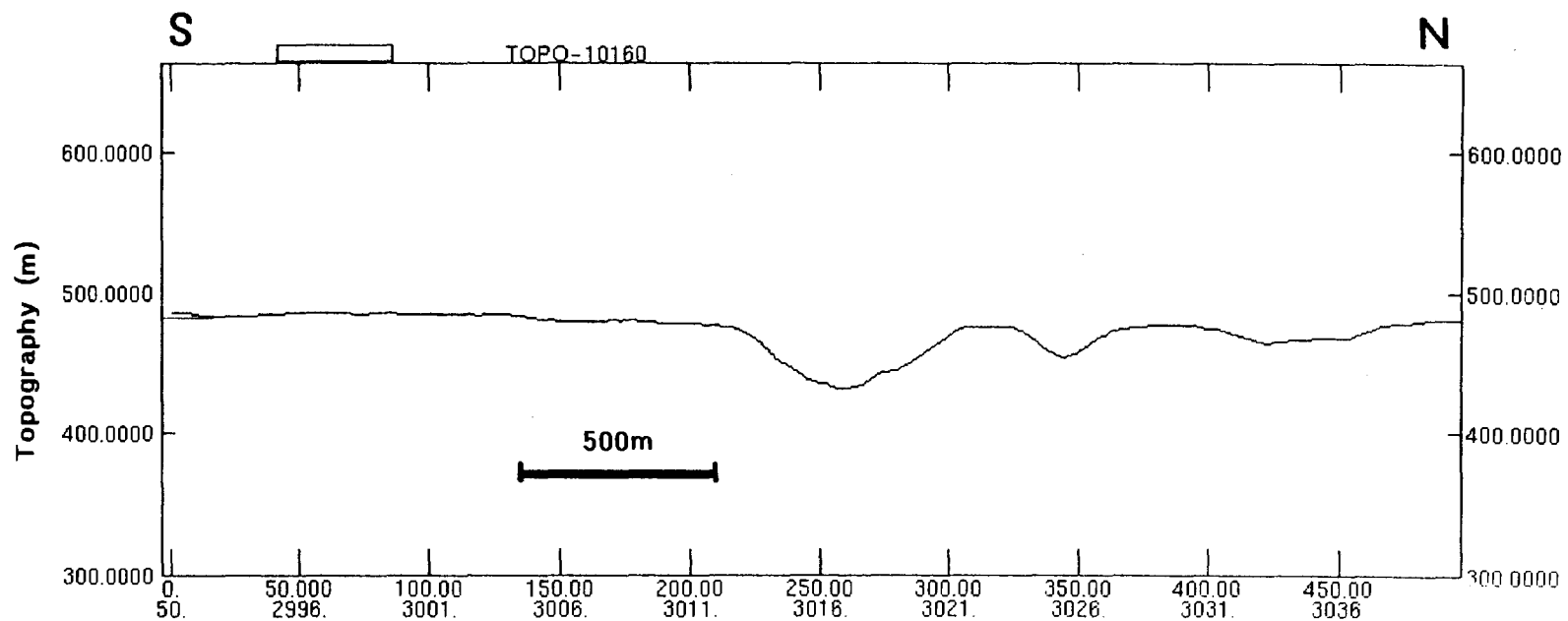


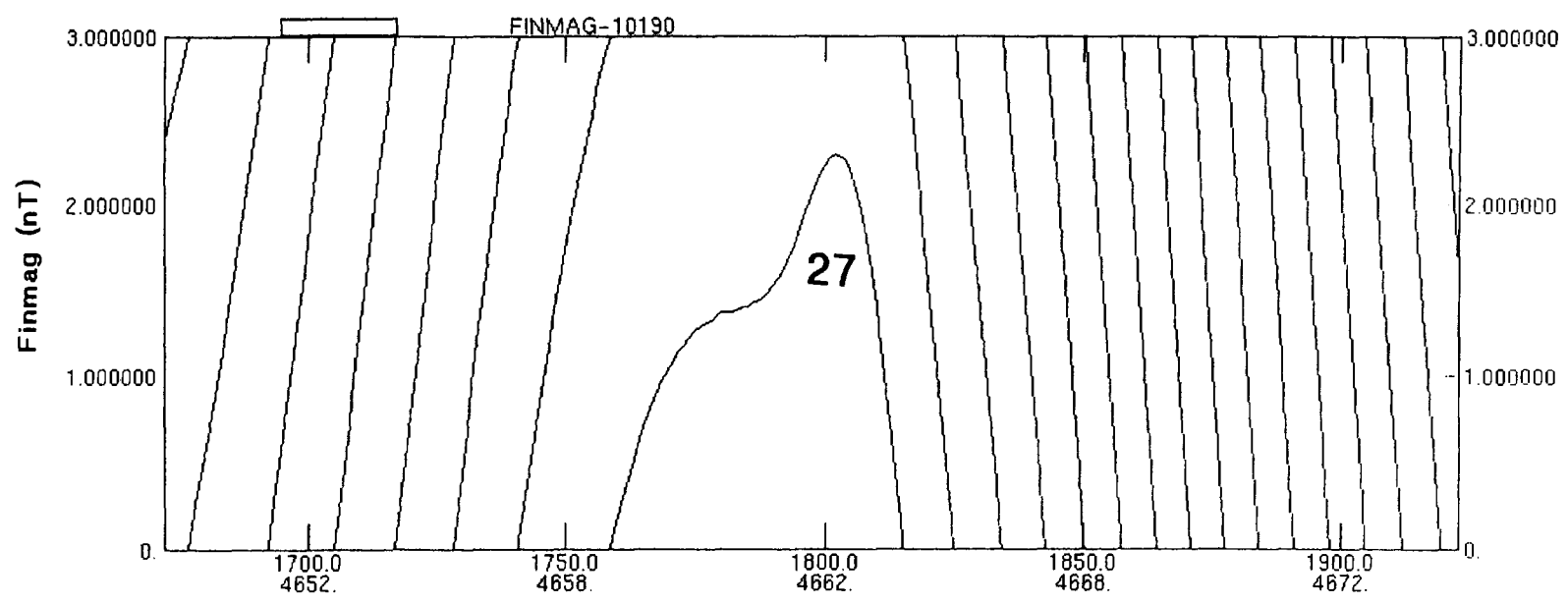
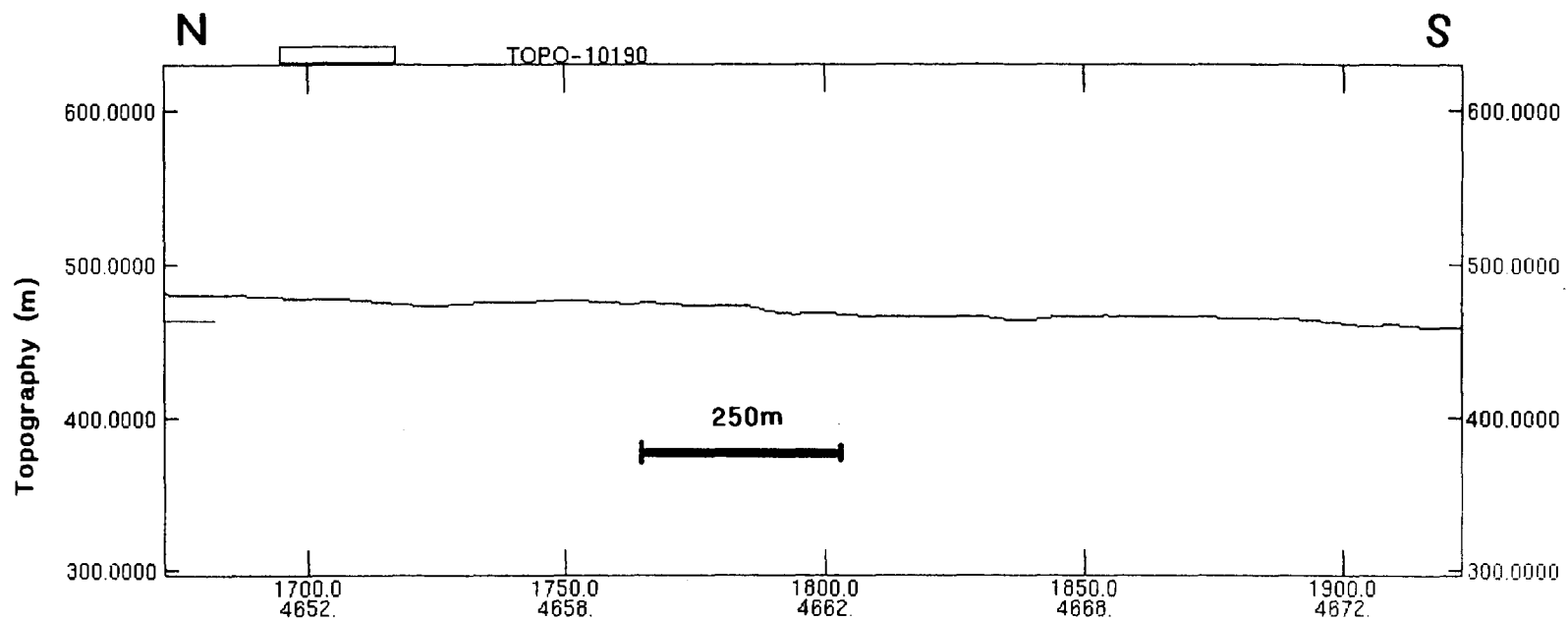


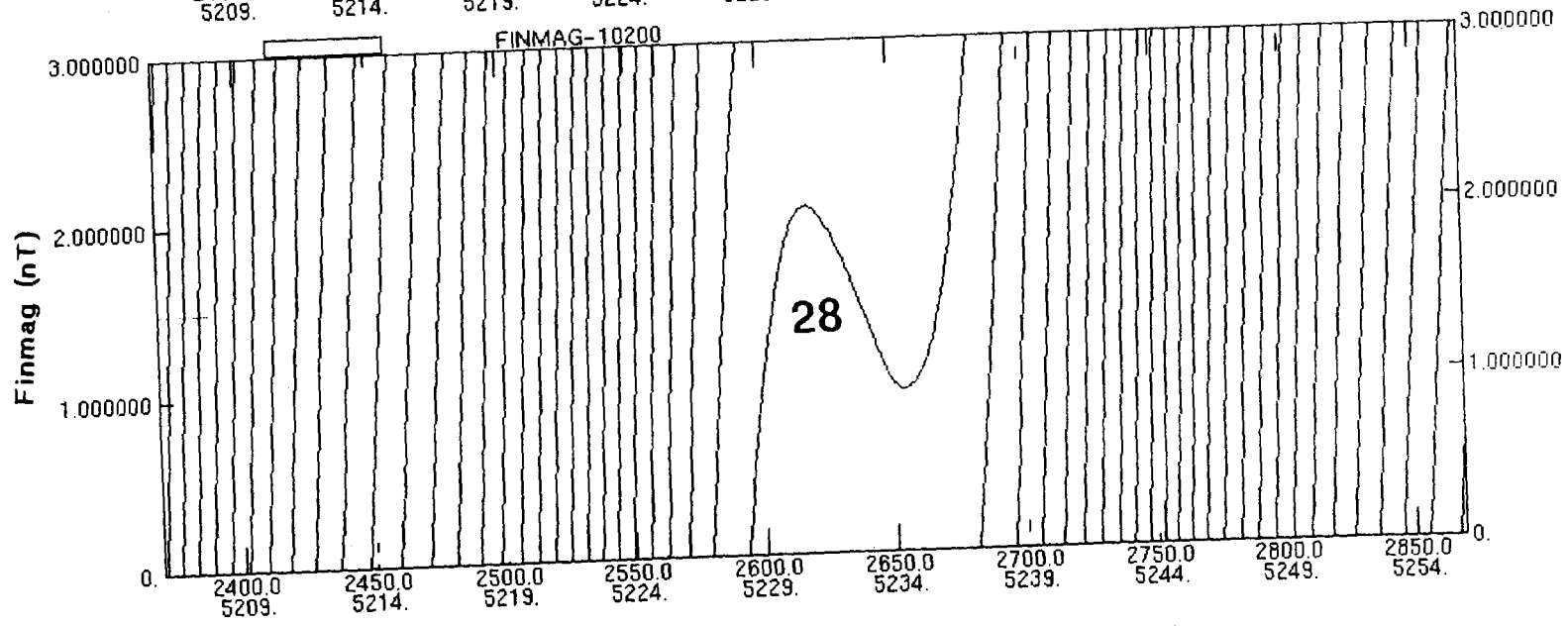
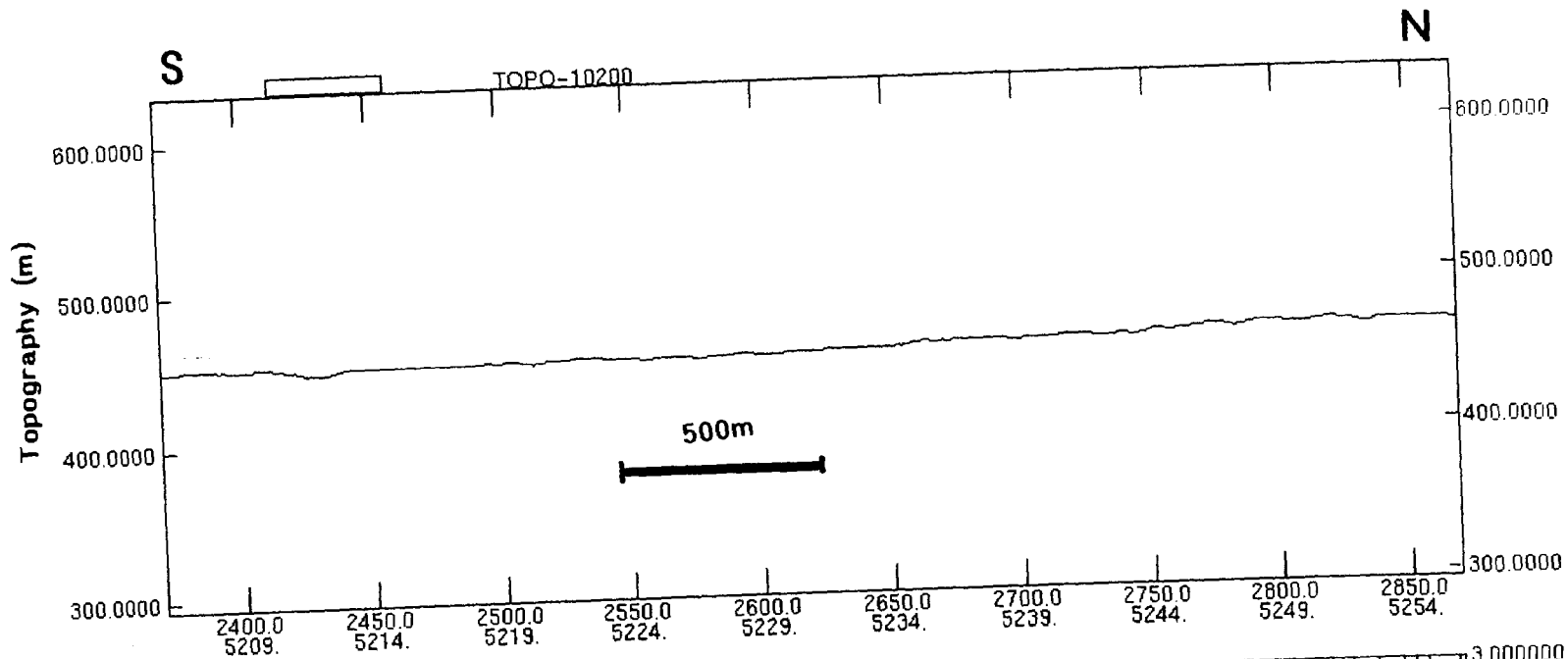


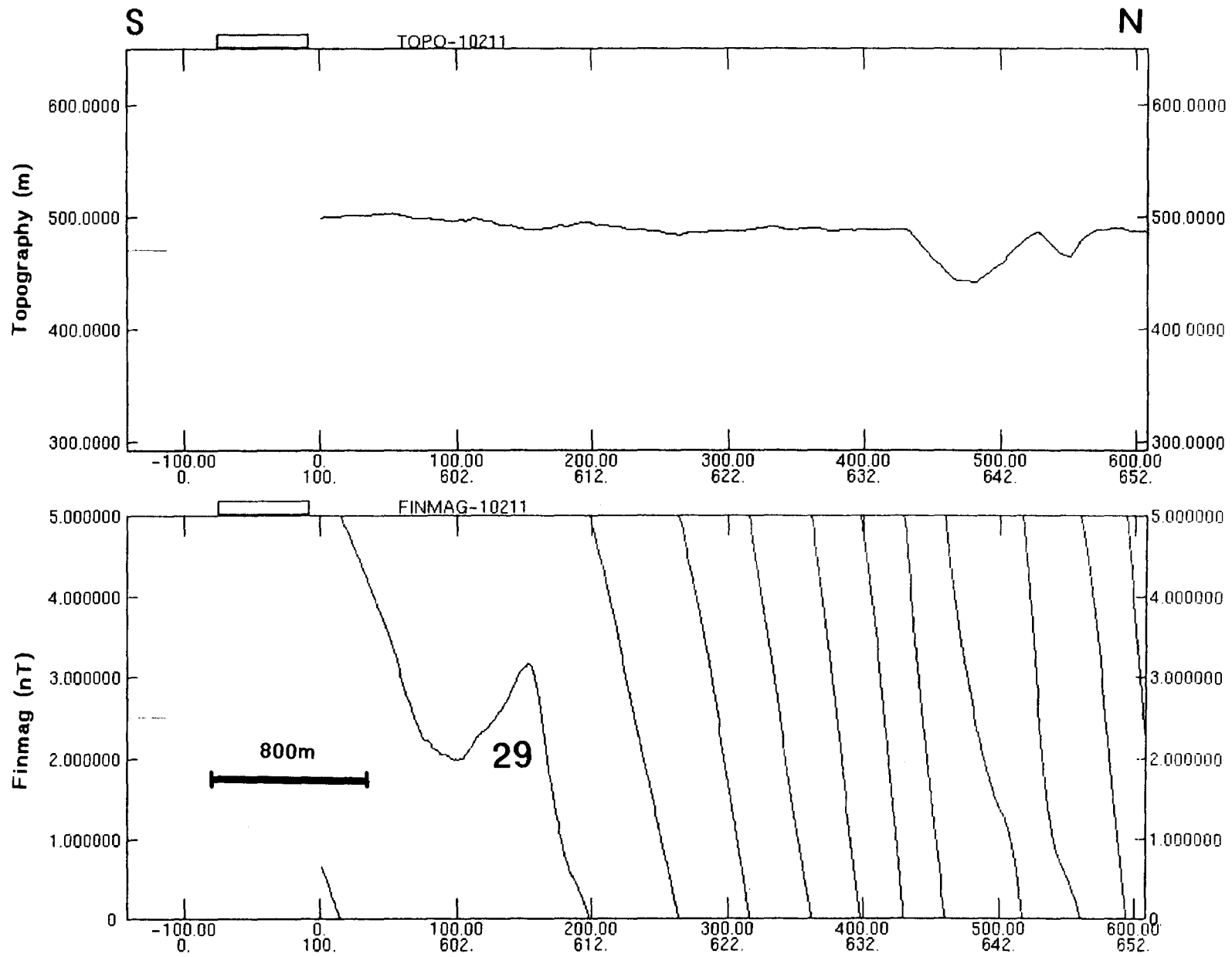


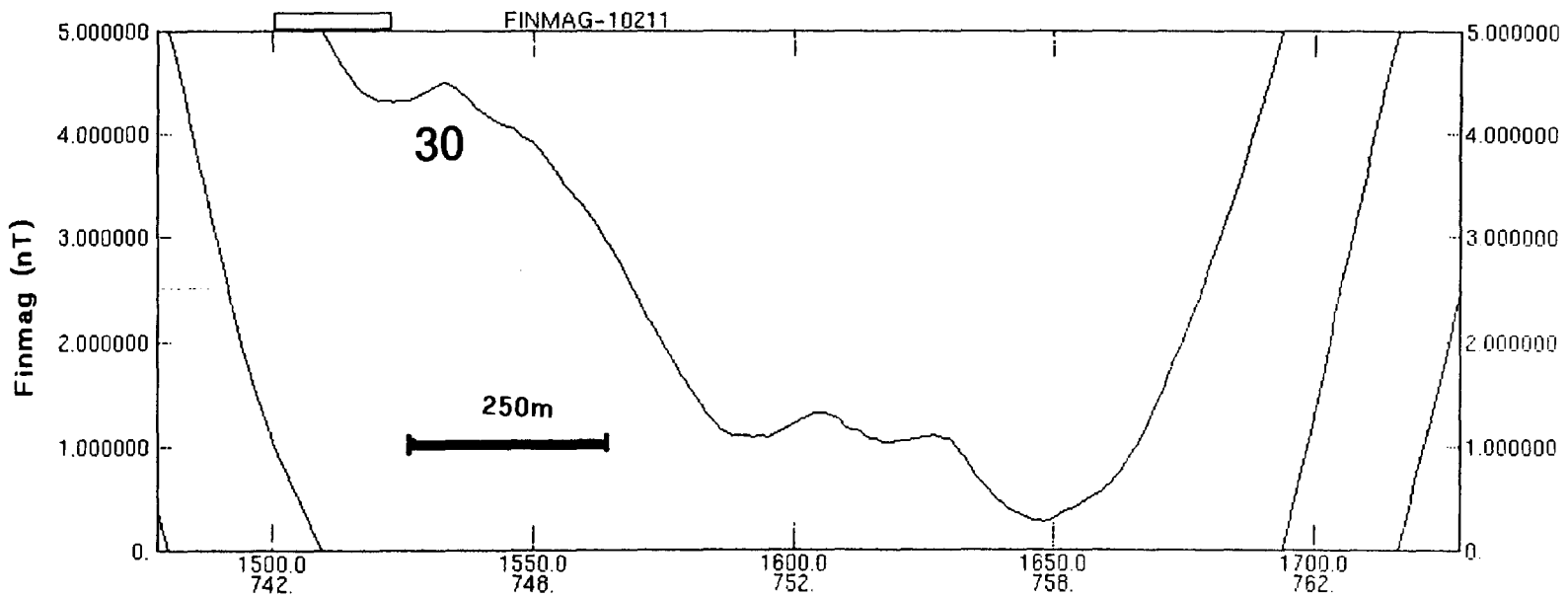
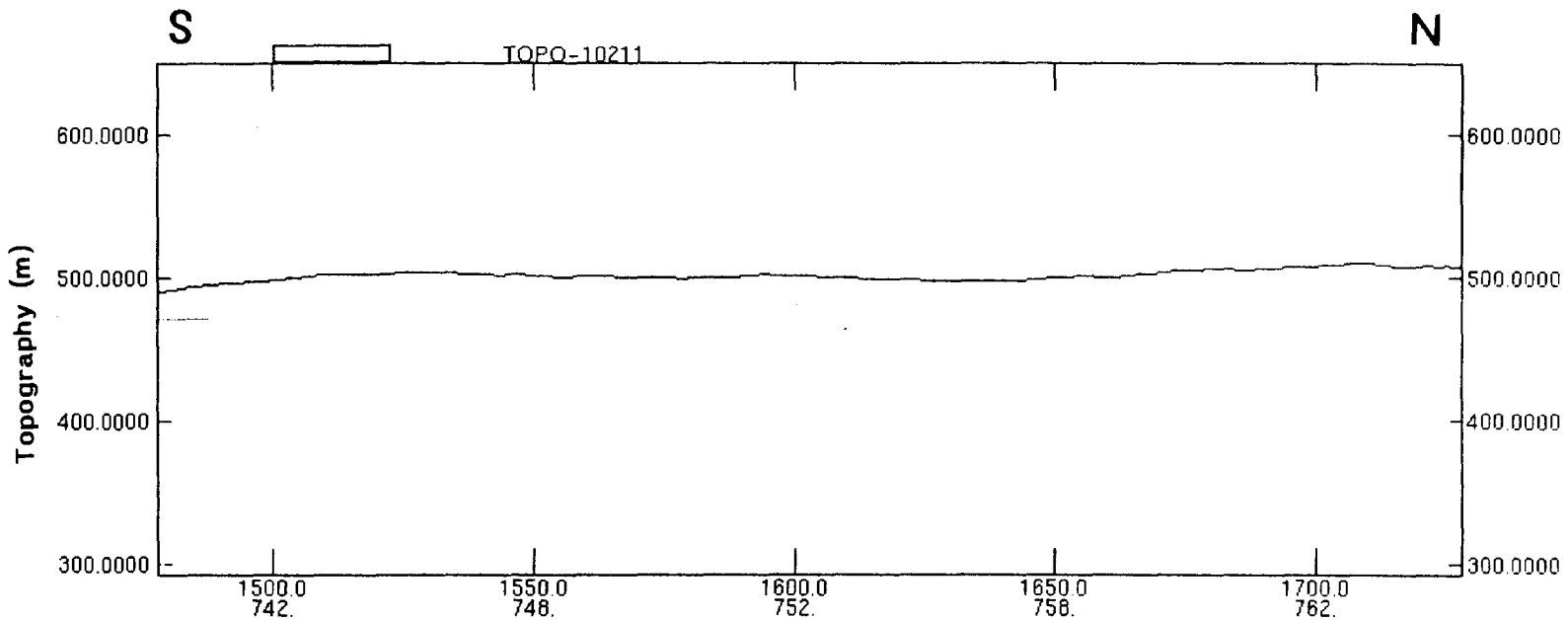


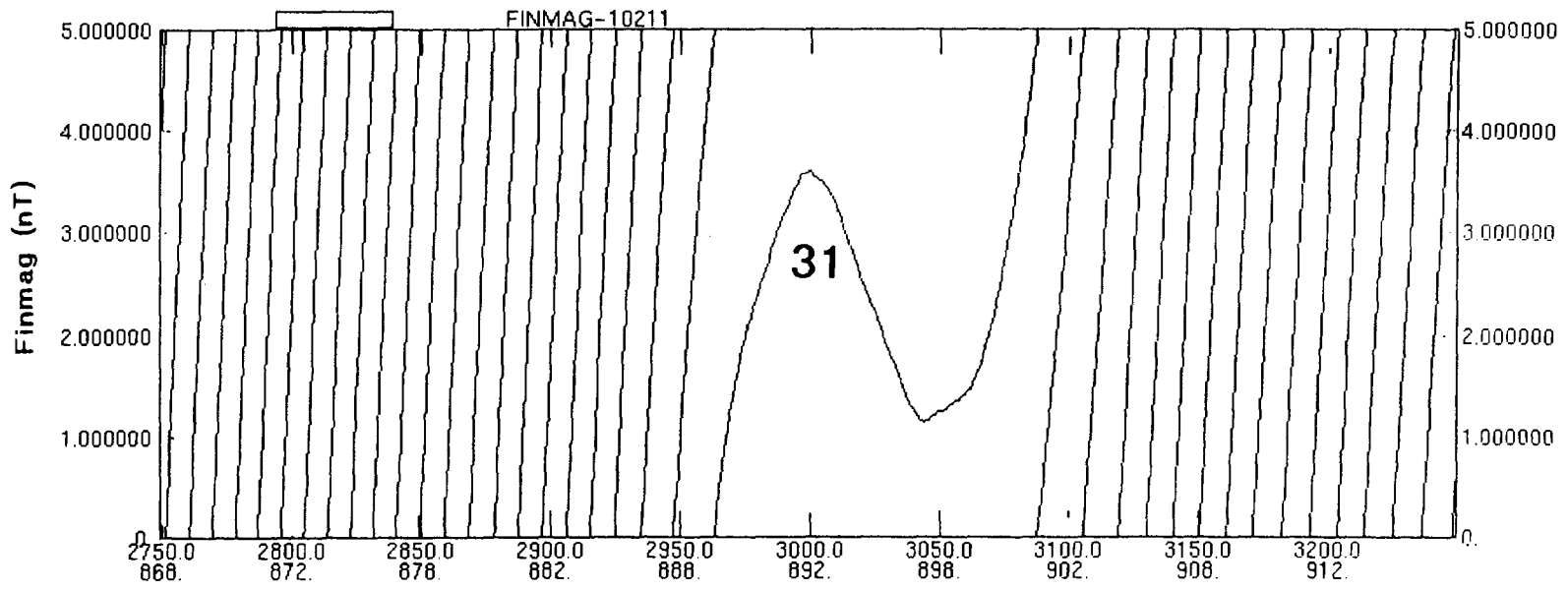
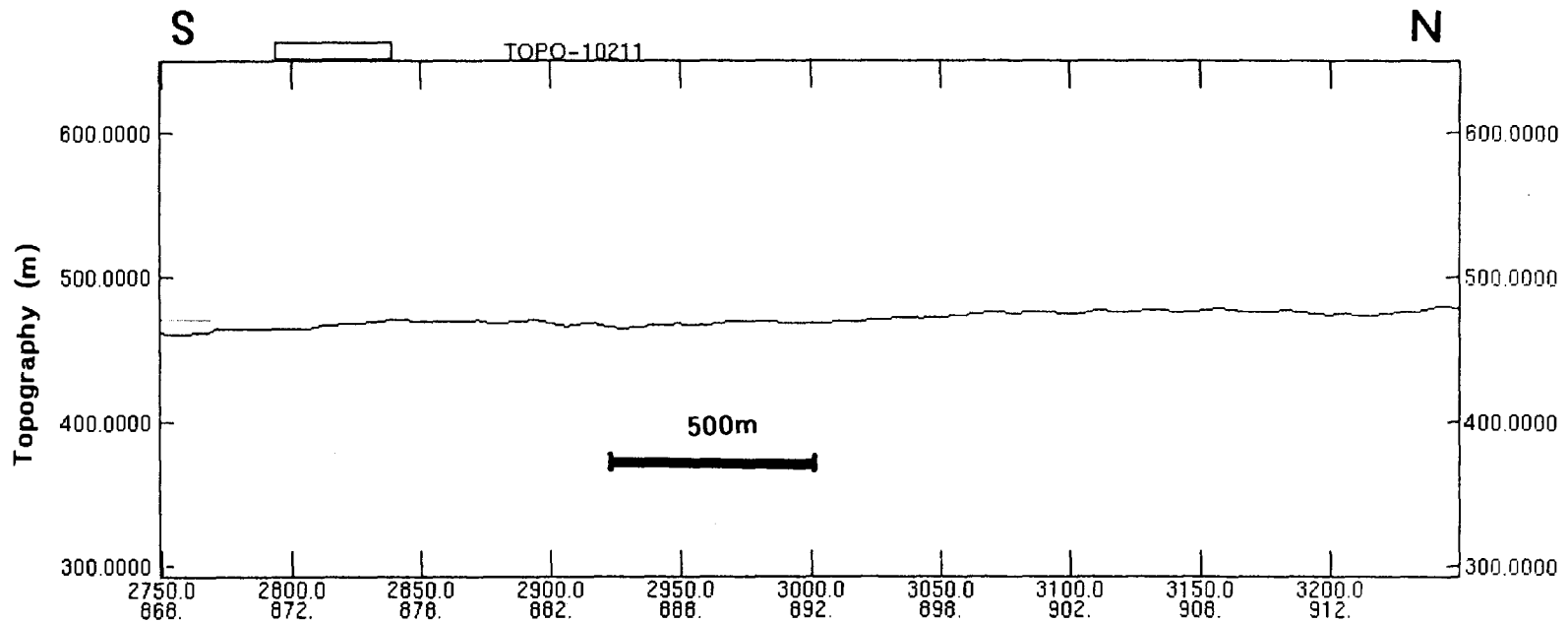


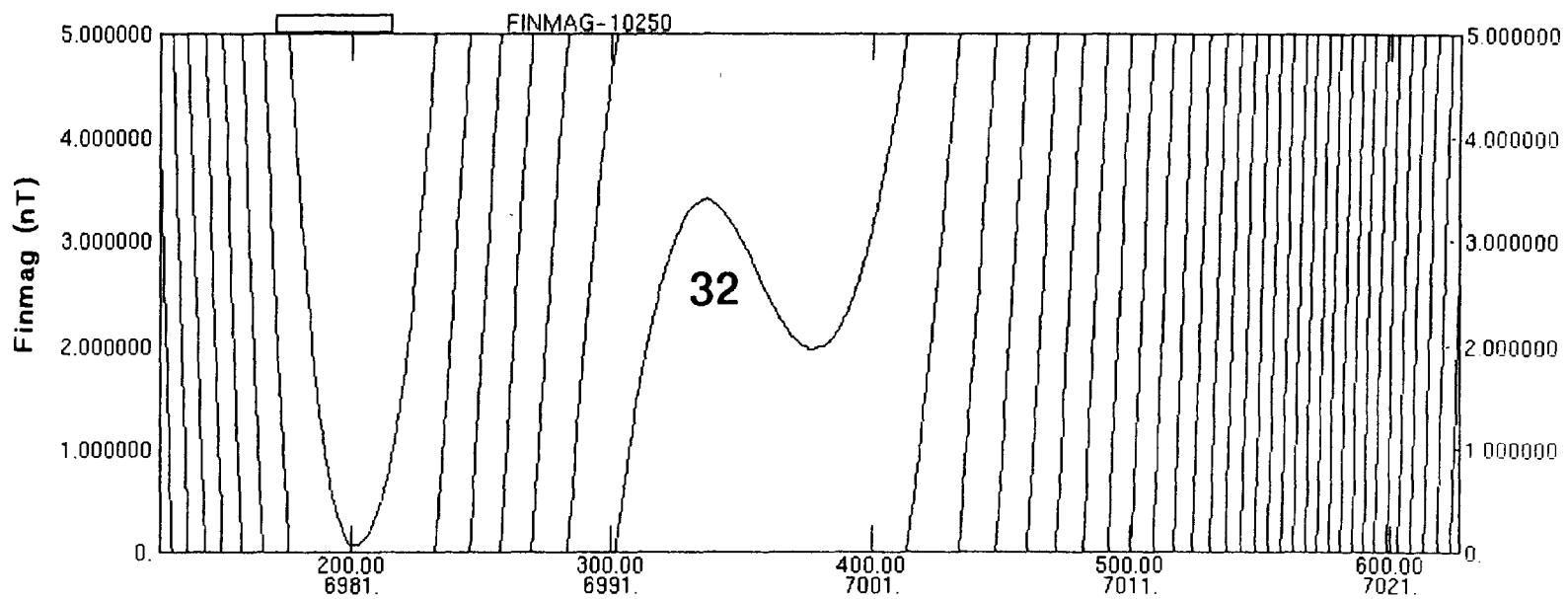
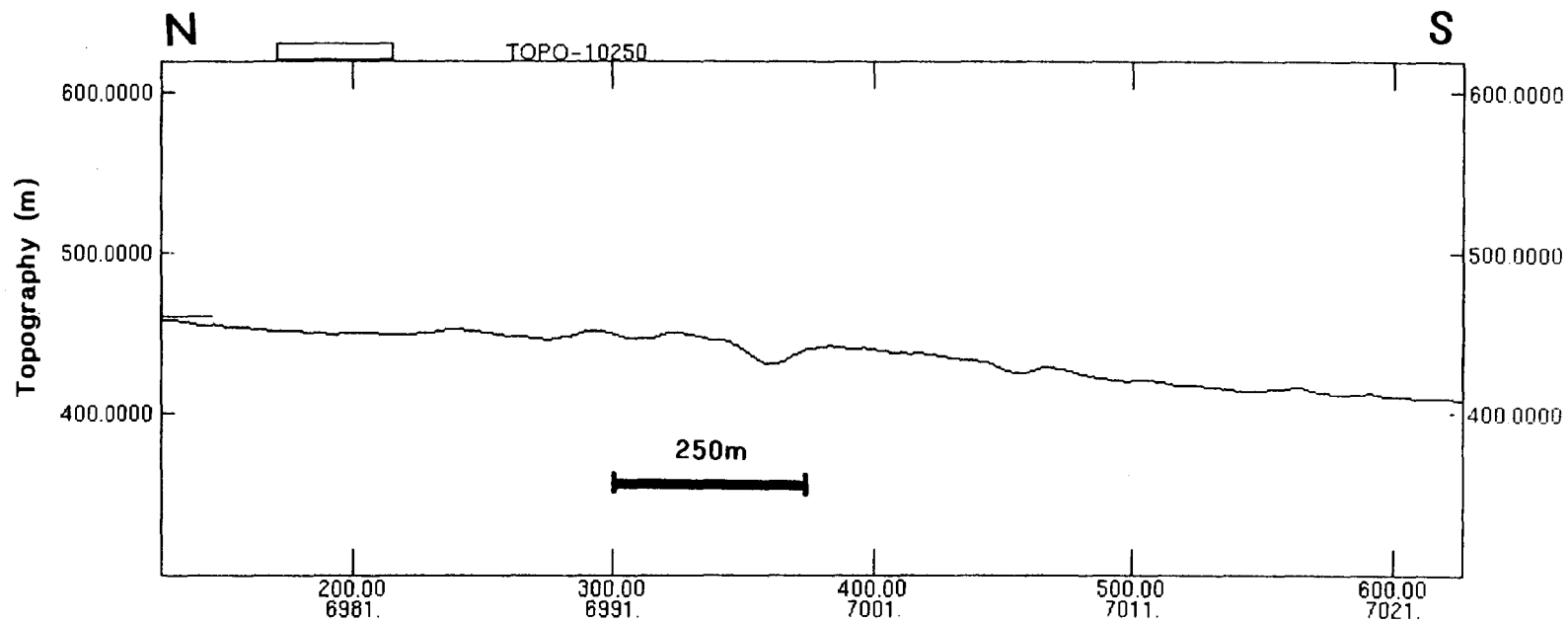


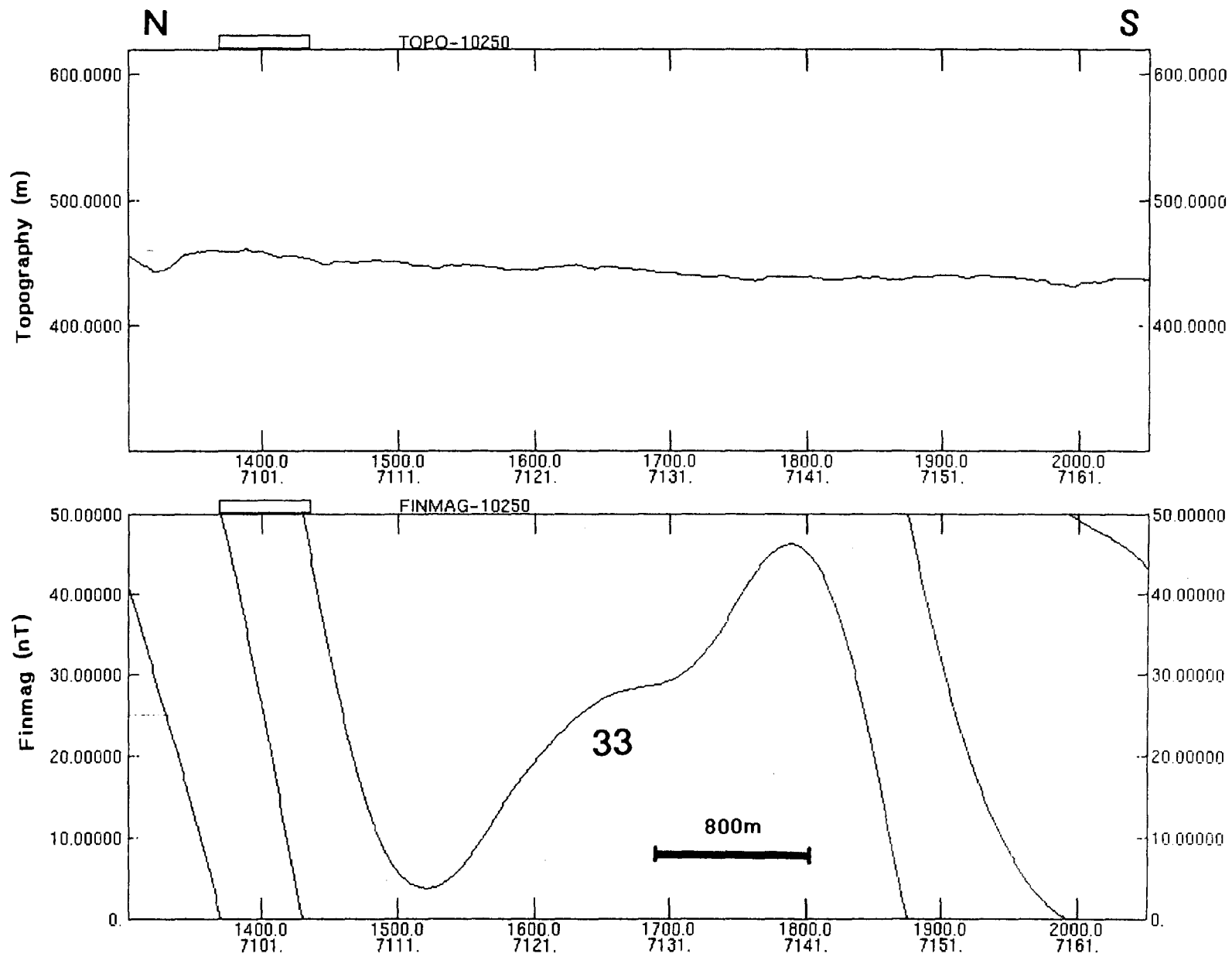




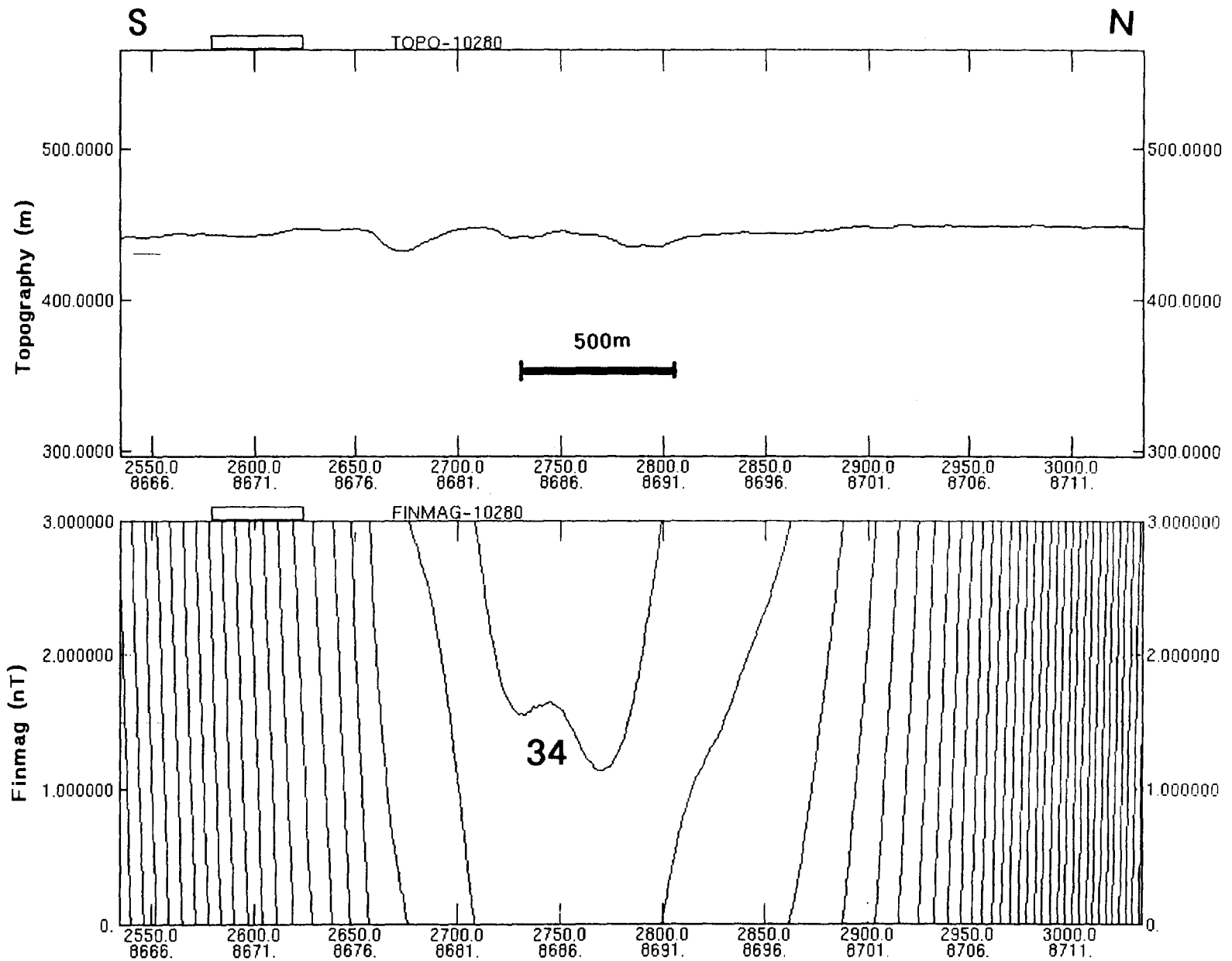


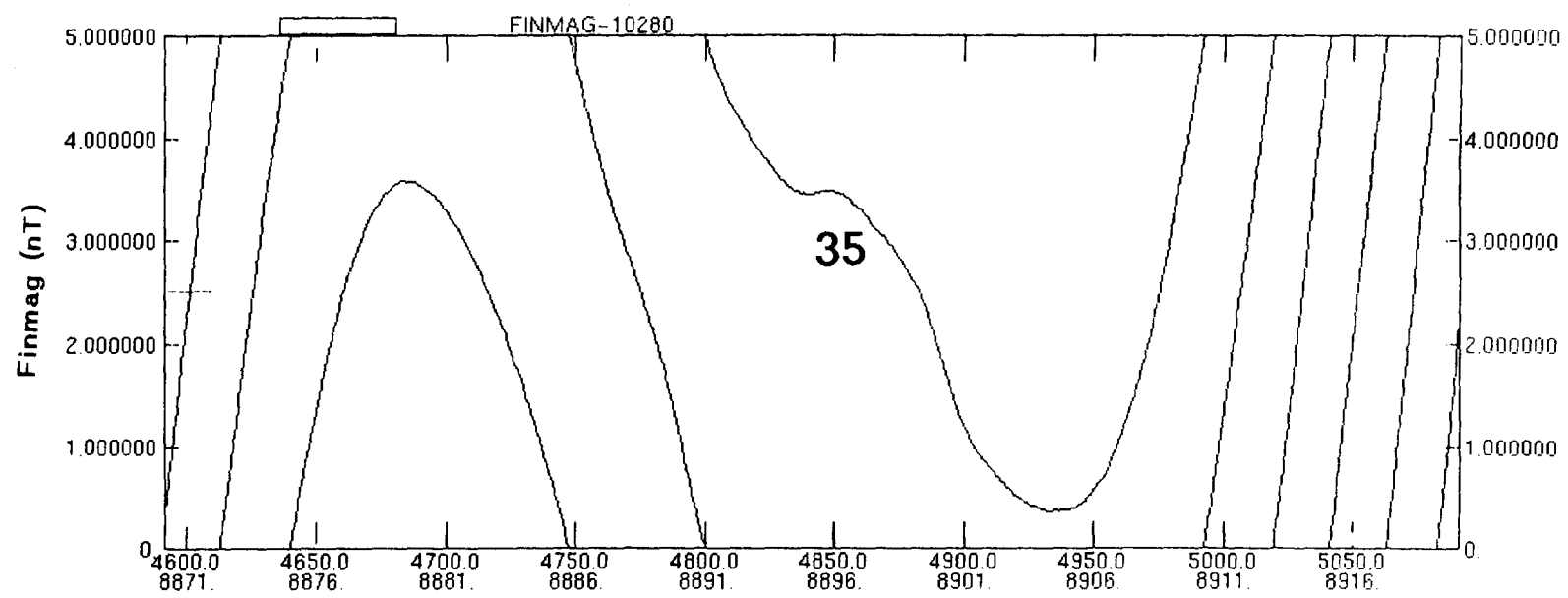
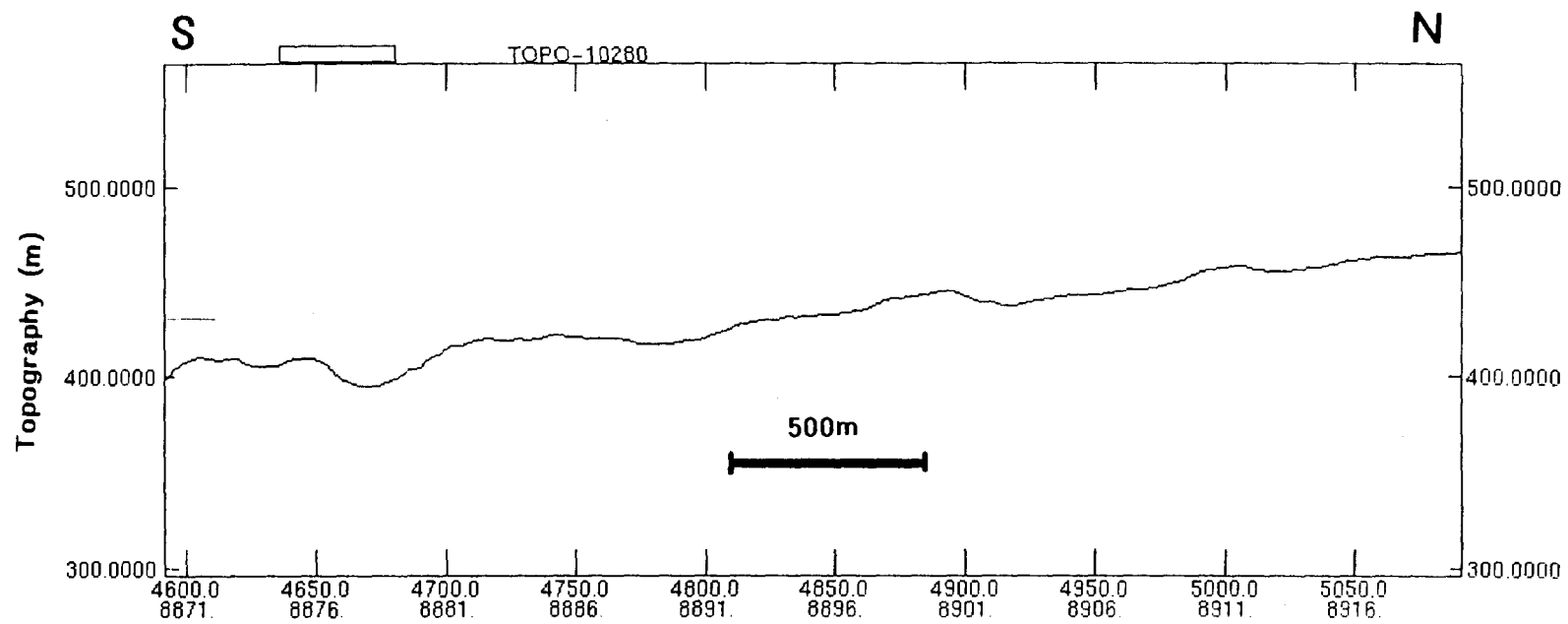












APPENDIX G

APEX GEOSCIENCE ANALYSIS REPORT

#### APEX GEOSCIENCE ANALYSIS REPORT

At the time of submission of our Assessment Report this report was not yet finalized. Mr. Mike Dufresene, of Apex Geoscience, advised us verbally on March 31st that the report was nearing completion and should be finalized by April 3rd. As per our cover letter we will supply this documentation when it is available.