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ANNUAL REPORT OF EXPLORATION

ERL 125 – MT FITCH

FOR THE YEAR ENDING 22 AUGUST 2003

M.K. Boots
September 2003

CONTENTS

SUMMARY

During the year, work was concentrated on the Browns Project which adjoins the eastern boundary of ERL 125.

Very good base metal results were obtained from the Mt. Fitch South drilling in the previous year, and follow-up exploration was planned.

A joint venture with Phelps Dodge Australasia Inc. covering a portion of this tenement was commenced early in 2003. Phelps Dodge plan to do additional drill evaluation of the Area 55 prospect.

TENEMENT STATUS

ERL 125 was granted to Cameco Australia Pty. Ltd. on 23 August 1993 for a period of five years (Figure 1). It covered most of EL 4879 which was being evaluated by Compass Resources NL and Guardian Resources NL. On 8 September 1993 ERL 125 was transferred from Cameco Australia Pty. Ltd. to Compass Resources NL. The ERL was joint ventured with Billiton Australia Gold Pty. Ltd. (later Acacia Resources Limited) on 4 August 1993. Acacia Resources were the managers of the Mt. Fitch Joint Venture until Compass resumed management of the project on 16 June 1997. Compass Resources with 90% equity continues to be the manager of the tenement. Guardian Resources NL has a 10% equity.

In 2003 ERL 125 was renewed for a further period of 5 years, to the year 2008.

LOCATION AND ACCESS

ERL 125 is situated approximately 15 kilometres north-northwest of the Batchelor township, approximately 70 kilometres south of Darwin. MCN 984 occurs in the northern portion of the tenement covering the Mt. Fitch uranium deposit.

Access to the tenements is via sealed roads to Batchelor and via sealed roads to Browns Shaft and unsealed roads along the abandoned North Australia Railway. Access within the tenement is good, with a number of four wheel drive tracks remaining from previous exploration in the area. Access is also possible during the dry season by travelling south along the old railway line from the Darwin River Dam area.

REGIONAL GEOLOGY

ERL 125 and MCN 984 are situated in the Rum Jungle Region of the Pine Creek Geosyncline on the western and southwestern edge of the Rum Jungle Complex. The oval shaped complex consists predominantly of granite, granodiorite, quartz-monzonite, quartz-monzodiorite and rare tonalite and monzonite, and are unconformably overlain by the Early Proterozoic Geosynclinal Sequence.

The Crater Formation, up to 600 metres thick, forms the basalt conglomerate rich sequence with the Coomalie Dolomite conformably overlying the Crater Formation with a reported maximum thickness of 1,000 metres. The Coomalie Dolomite comprises stromatolitic magnesite, dolomitic marble and minor calcareous meta-amphibolite.

The Whites Formation, which overlies the Coomalie Dolomite, consists of a sequence of dolomitic, pyritic and carbonaceous argillites. Overlying the Whites Formation are the sediments of the Wildman Siltstone, which include the Acacia Gap Quartzite Member and the Mount Dean Volcanic Member. The Wildman Siltstone comprises shales and siltstones, quartz sandstone and minor felsic to intermediate volcanics.

Most of the uranium, lead-zinc-silver and copper deposits in the Rum Jungle Region are situated in the transitional zone between the Coomalie Dolomite and overlying Whites Formation. They appear to be stratiform in nature, predating the deformation of the host strata.

The Early Proterozoic sequence of the Rum Jungle Region underwent deformation during the peak of the Top End Orogeny, and subsequently during granitoid intrusion; resulting in tight to isoclinal folding, faulting and shearing (Ahmad, et al., 1993). Later movement during the Middle Proterozoic and Phanerozoic mainly caused reactivation of older faults and minor tilting. The Giants Reef Fault is the major fault in the region and is interpreted as a post-Early Proterozoic expression of the Western Fault Zone which extends over 200 kilometres and is part of the laterally extensive faults on the Halls Creek and Fitzmaurice Mobile Zones (Ahmad et al., 1993).

LOCAL GEOLOGY

Outcrop in ERL 125 is sparse, silicified and poorly preserved. However, the tenement is situated along the contact between the basement and Crater Formation and includes the overlying Coomalie Dolomite and Whites Formation. The Coomalie Dolomite is present in the eastern portion of the tenement, and comprises stromatolitic, tremolitic, silicified and saccharoidal dolomite. Minor cherty quartz units (most likely secondary), are interbedded with the dolomite and occasionally exhibit intense small scale folding. Zones of sericite alteration have been logged on various drill holes within the dolomite (Coles, 1988).

Graphitic to pyritic shales of the Whites Formation have been mapped throughout the tenement, increasing in thickness towards the central part of the tenement.

The presence of domal, stratiform and conical stromatolites have been observed elsewhere within the Coomalie Dolomite (Crick and Muir, 1980; Squire, 1995). Crick (1987) suggests the Whites Formation represents a facies change from the intertidal to supratidal evaporitic conditions of the Coomalie Dolomite to an intertidal to subtidal environment, and this change is therefore a typical transgressive sequence.

Transported soil and sand blankets much of the tenement and may be separated into two distinctly different types. The Cretaceous transported cover comprises fine to moderately coarse quartzose sands, silts and clays. The colour is generally pale cream, though colloidal iron staining has been observed near surface. The Tertiary transported cover is the most commonly observed transported material and may overlie the Cretaceous cover. It comprises ferruginous clays and sand with minor silicified scree.

PREVIOUS WORK

Copper was initially discovered in 1913 by E. T. Tamblyn, a Mine Manager from Pine Creek, resulting in development of the small Tamblyn Shaft located within MCN 984 (Boots, 1990). In 1950 two geologists from the Bureau of Mineral Resources, Geology and Geophysics (BMR) discovered yellow, secondary uranium mineralisation, possibly uranophane, nearby. Mapping and radiometric surveys of the area soon followed together with the sinking of two shallow shafts and the drilling of 3 shallow diamond drill holes. In 1952 low level airborne scintillometer surveys identified several anomalies. Territory Enterprises Pty. Ltd. (TEP) drilled 4 diamond holes and numerous rotary, churn and wagon holes in 1953 and also commenced a major costeaning programme. This work resulted in the identification of a copper anomaly extending along the Whites Formation – Coomalie Dolomite contact.

A low level airborne scintillometer survey confirmed the radiometric anomalies in 1954, however it was not until 1958 that a follow-up geochemical survey (800' by 400' to 2' deep) successfully outlined a large copper anomaly near BMR No. 2 shaft (Haldane and Debnam, 1958). This shows some similarities to the zonation observed in the Rum Jungle-Browns Mine area (ie. Pb to Cu to Cu/U to U). During the late 1950s and the 1960s many diamond, rotary and auger holes were drilled, though mainly testing for uranium mineralisation. A major structural study of the area was also conducted by Williams of TEP.

Australian Mining and Smelting Ltd. (AM and S) applied for title to the ground at Area 55 in May 1965 and approximately 7.8 square kilometres was granted as A to P 1280. This area is located at the southern boundary of ERL 125, which adjoins EL 6640 (now ERL 148). Prior to the application Spratt et.al. (1965) calculated the resource at that stage to be approximately 1,000,000 tons at 0.9% copper and 4.5% lead to a depth of 66 metres. MLNs 179-180 (Area 55 No 1 and 2, known prior to 1985 as MLs 363B and 364B) were granted on 11 August 1966 for a period of 21 years, expiring 31 December 1986. Substantial exploration has been completed by Compass Resources and Acacia Resources at the Area 55 prospect.

A major drill project was also undertaken to evaluate the Mt. Fitch uranium-copper prospect, with trial mining being undertaken in 1969, removing 920 tonnes of dolomite ore and 5 tonnes of shale ore. A resource of 3.5 million tonnes at 0.042% U_3O_8 (and 290,000 tonnes at 0.6% copper) was calculated for this area.

Uranerz and CEGBEA conducted several programmes in the 1980s, mainly exploring for uranium, resulting in many of the grids used today. Their work concentrated on the Mt. Fitch copper-uranium prospect, where a total of twenty-two drill holes were completed, 12 by Uranerz and 10 by CEGBEA. Little assaying for base metals was completed on this core; with later sampling by Acacia Resources locating good base metal values.

As part of a major programme to locate areas for ancillary purposes to support a mining operation of the Browns deposit, a series of 133 vertical RAB holes were completed over the southeastern portion of ERL 125. A sample from the bottom of each hole was assayed for a series of base metal elements.

A series of 14 deeper RC holes was completed to evaluate both base metal targets and magnesite targets within the tenements.

In 1998/1999 follow up drilling consisting of 8 RC holes at Blueys Prospect (located between Browns and Mt. Burton), was undertaken. This prospect is located at and near the stratigraphic top of the Coomalie Dolomite with massive potential for similar material to occur down dip, across strike and along strike.

In late 2001, six RC drill holes were completed at Blueys Magnesite prospect to try and establish extensions to the high quality magnesite previously located. These were located to the east of the previous holes and failed to locate any magnesite.

Likewise in late 2001, two RC drill holes were completed at the Mt. Fitch South prospect; these intersecting very encouraging base metal values that will require follow up evaluation. Immediately after this drilling, two RC drill holes were completed at the Area 55B prospect, these also intersected base metal mineralisation.

WORK COMPLETED DURING THE YEAR

A proposal to undertake a regional airborne EM survey to be part of a follow-up programme of the Mt. Fitch South prospect was abandoned when suitable joint venture funding could not be concluded. As part of this plan, the previous ground EM was modelled to determine the effectiveness of alternate methods. This work concluded that the fixed wing Tempest method would suitable. The report on this modelling is appended.

All existing exploration and drill data was re-evaluated from the Mt. Fitch area, to establish why previous intense uranium exploration programmes had failed to locate the Mt. Fitch South mineralisation. It was concluded that intense leaching had occurred in the oxide zone of the mineralisation, and as such, only subtle geochemical anomalism occurs in RAB or aircore holes drilled in this zone.

Three follow up drill holes were planned to further evaluate the Mt. Fitch South prospect, however these were deferred to early in the 2004 field season. As part of this planning some grid rehabilitation was undertaken, and the location of the ground EM conductor was flagged.

Existing drill data in the vicinity of the prospect was entered into a database to allow further investigation to be undertaken should new drill results prove positive.

PLANS FOR NEXT PERIOD

Evaluation of the area for base metals by further drilling at the Mt. Fitch South prospect is proposed for early 2004. Phelps Dodge plan to undertake prospect evaluation at the Area 55 prospect.

An expenditure exceeding $20,000 is proposed for this work.

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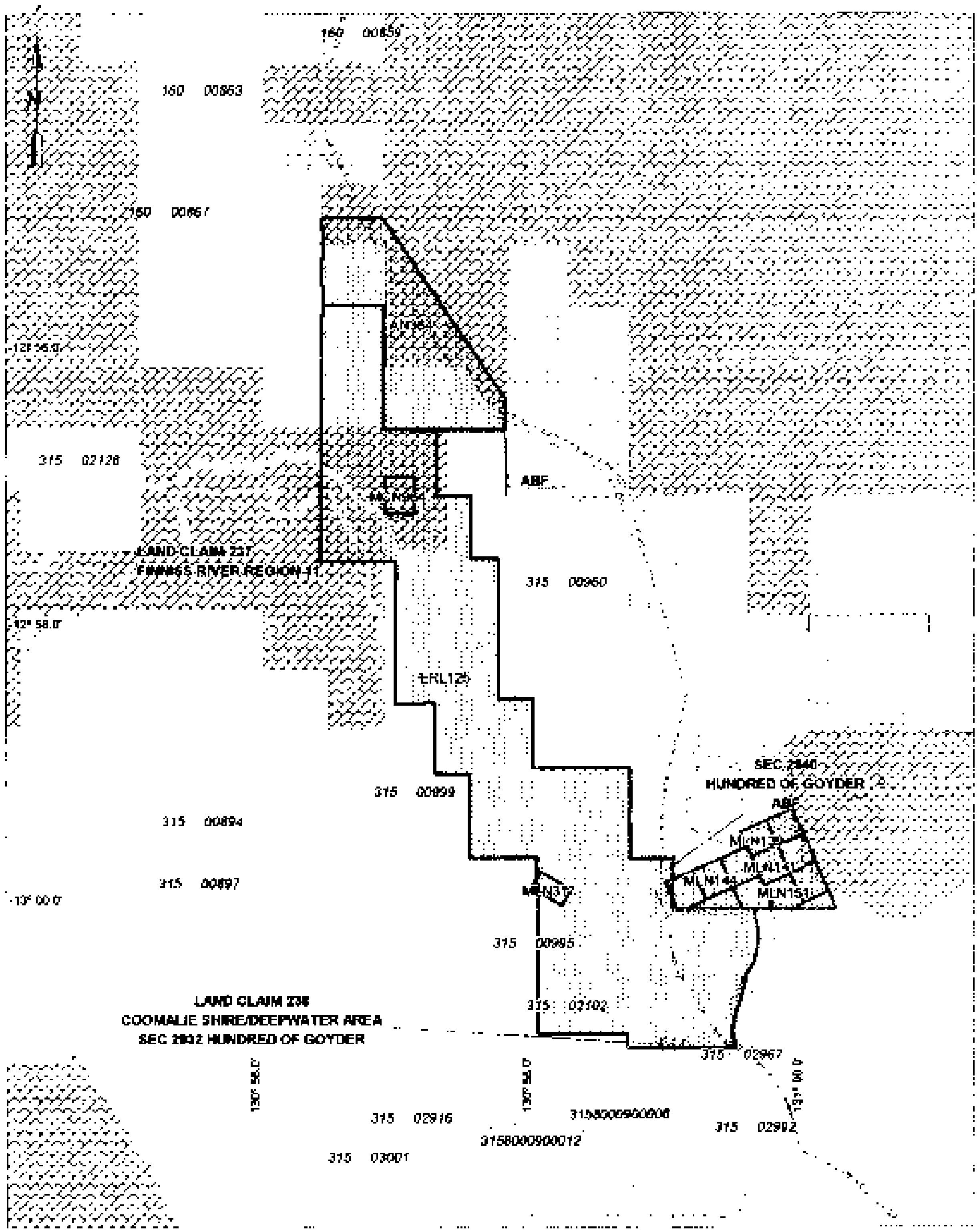
ERL 125 EXPENDITURE REPORT

TO 22 AUGUST 2003

Salaries/wages/on costs	13,640.93
Tenement/landowner searches and costs	1,870.50
Travel & Accommodation	1,172.01
Geological Consultants	2,445.59
Field costs	1,697.00
Assay Costs	658.50
Motor Vehicle Cost Allocation	1,330.00
Overheads	3,422.18
Total Expenditure	26,236.71



erl125

Datum. AGD84
Date: 23/11/1999
Prepared By. Dept Mines and Energy
Prepared For:
Comments:

APPENDIX

Model Study for Mount Finch Area

Peter Wolfgram, 6 June, 2003

Model construction:

A ground TEM survey report via fax as well as additional information over the telephone was provided by Max Boots of Compass Resources NL. The ground report showed that a conductive plate provided a reasonable fit to late-time channels of the 25Hz ground data. The background response appeared variable from line to line of the ground data, but it was difficult to pin a resistivity to it. The cover in the area has moderate thickness (up to 30 m), and consists of

(a) carbonatious black shales in the western part of the area (hanging wall of the major contact), and

(b) sand – clay (up to 15m total thickness) – conglomerate layers in the western part (footwall of the contact).

Given this information the following series of models was constructed:

Thin conductive plate embedded in a host medium: 500 m by 500 m at 75 m depth (to top), dipping 50 degrees from the horizontal, with a conductance of 30 Siemens. The host medium was modelled at three different resistivities: 1000 Ohm-m ("Resistive Host"), 100 Ohm-m ("Moderate Host"), and at 10 Ohm-m ("Conductive Host"). This results in a total of 3 different models.

Airborne systems:

Two different airborne systems were modelled:

(a) The Hummingbird system at 30 m bird altitude, and with the following standard specifications:

Frequency	880 Hz	980 Hz	6.6 kHz	7.0 kHz	34 kHz
Orientation	Vertical Coplanar	Horizontal Coaxial	Vertical Coplanar	Horizontal Coaxial	Vertical Coplanar
Coil Separation	6.01 m	6.01 m	6.26 m	6.26 m	4.93 m

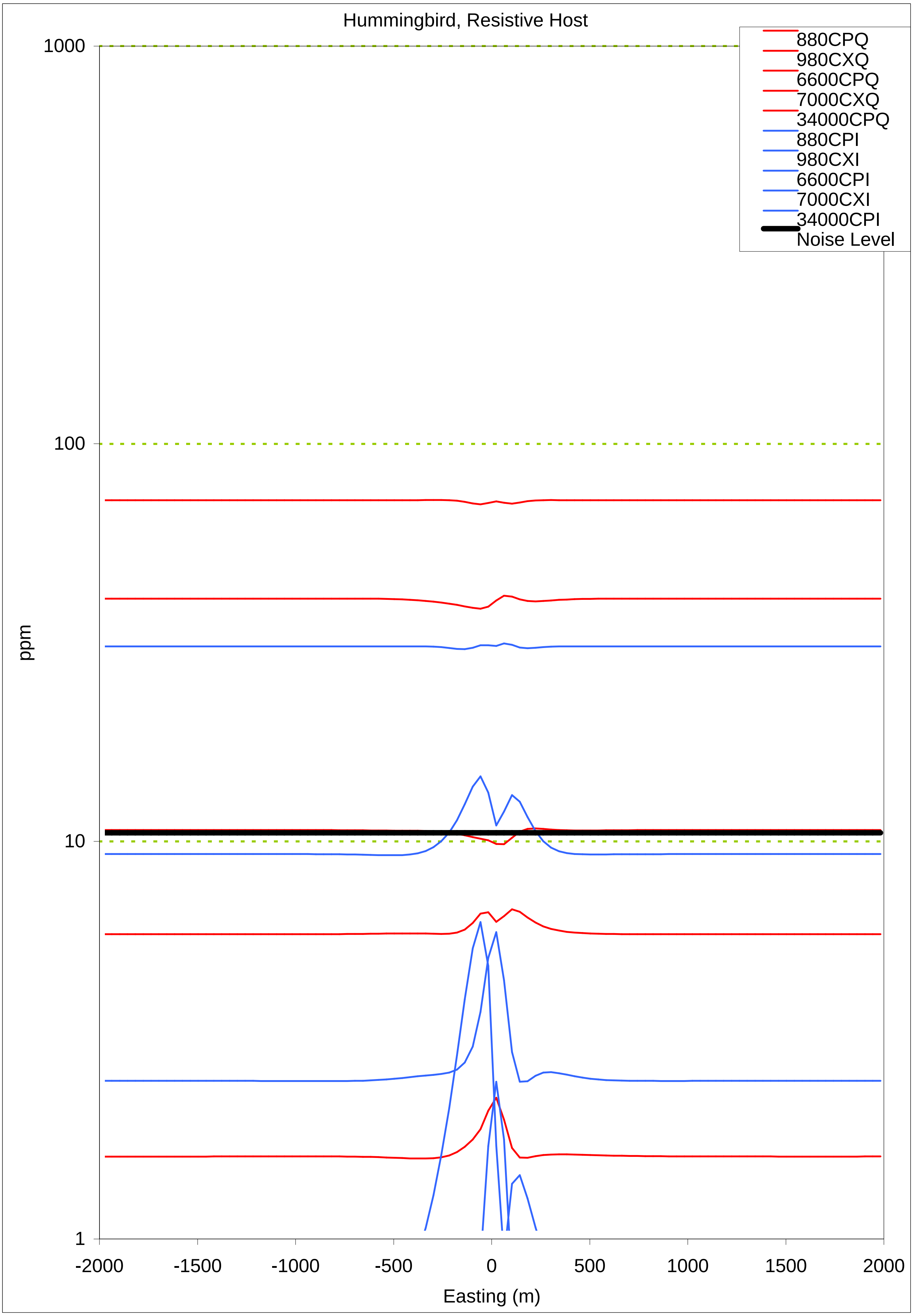
(b) The X and Z components of the TEMPEST system with the standard specifications

Results:

The results are displayed in a series of graphs on the following pages. Each graph shows the various frequencies (for Hummingbird) or delay time channels (for TEMPEST) along the profile line. Superimposed on each graph is a single line indicating the typical noise level of the system. Only responses larger than this level could be reliably interpreted in terms of conductivity. The conclusions can be drawn:

1. The Hummingbird responds to the conductive plate only in the resistive host. Even the 100 Ohm-m host eliminates the anomaly from most of the frequency channels. The conductive host causes a large response but completely masks the anomaly. In conclusion: conductors similar to the plate modelled here could be missed by the Hummingbird over a good portion of the area.

2. The TEMPEST anomaly is above the system noise level in all three environments. It is defined by several channels in all three cases and it would therefore be picked by an interpreter. In conclusion: the TEMPEST system would safely detect a conductor similar to the plate modelled here over the entire area. (Given that the environments modelled are a good representation of the actual conductivity environments in the area.)


Hummingbird, Resistive Host
880CPQ
980CXQ
6600CPQ
7000CXQ
34000CPQ
880CPI
980CXI
6600CPI
7000CXI
34000CPI
Noise Level
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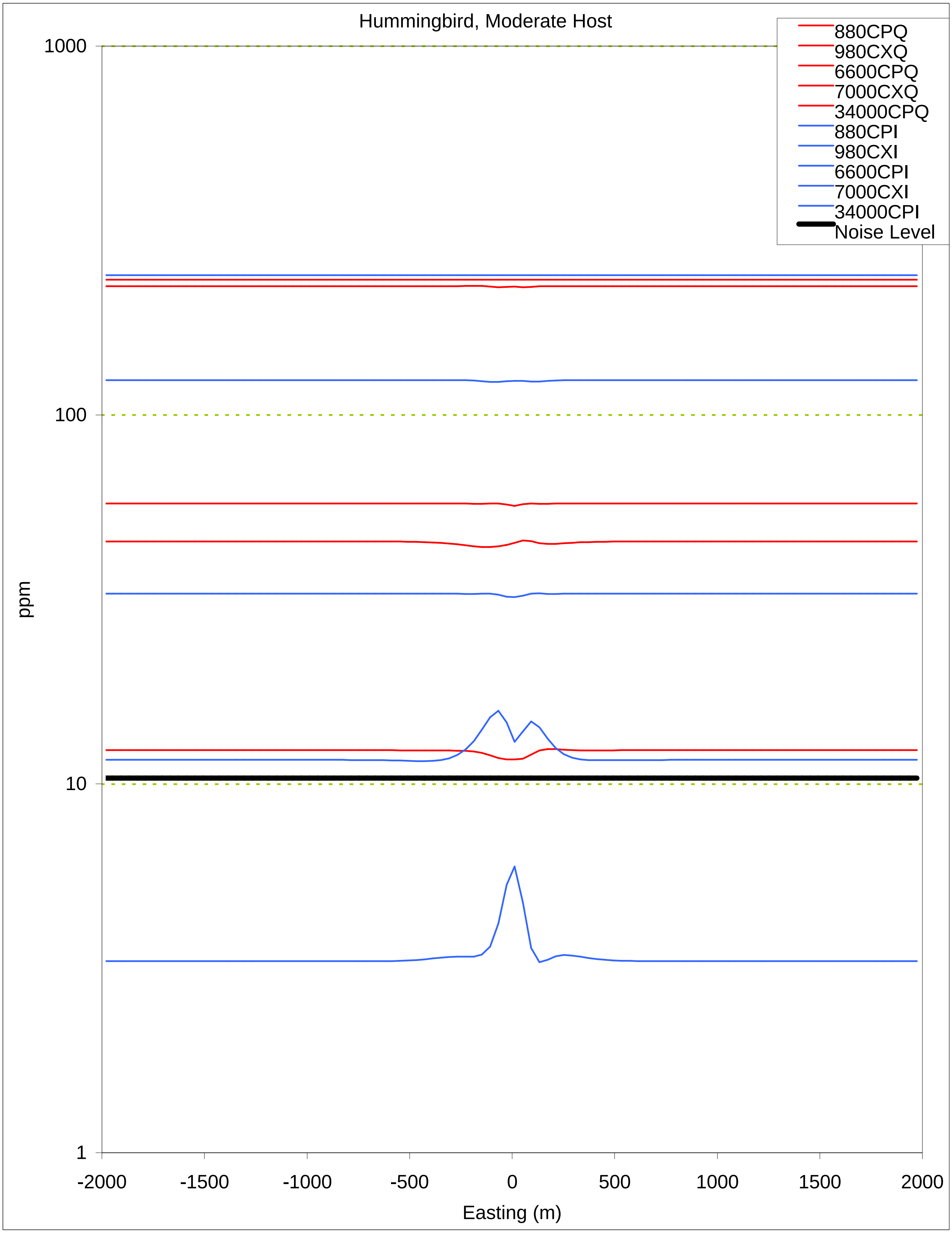
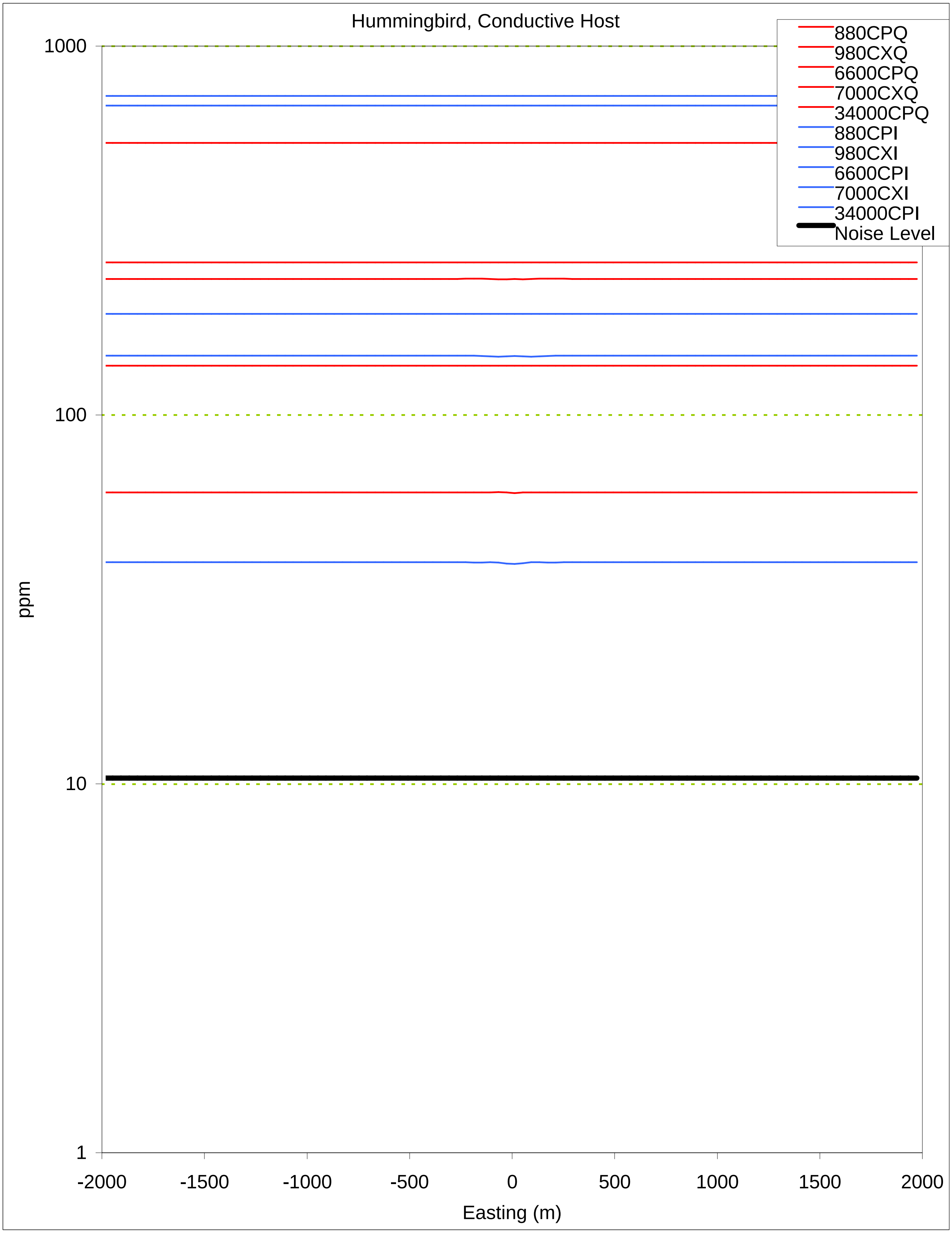
100
10
1
ppm
-2000
-1500
-1000
-500
0
500
1000
1500
2000
Easting (m)



Hummingbird, Moderate Host
1000
100
10
1
ppm
-2000
-1500
-1000
-500
0
500
1000
1500
2000
Easting (m)
880CPQ
980CXQ
6600CPQ
7000CXQ
34000CPQ
880CPI
980CXI
6600CPI
7000CXI
34000CPI
Noise Level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980CXQ
6600CPQ
7000CXQ
34000CPQ
880CPI
980CXI
6600CPI
7000CXI
34000CPI
Noise Level
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ppm
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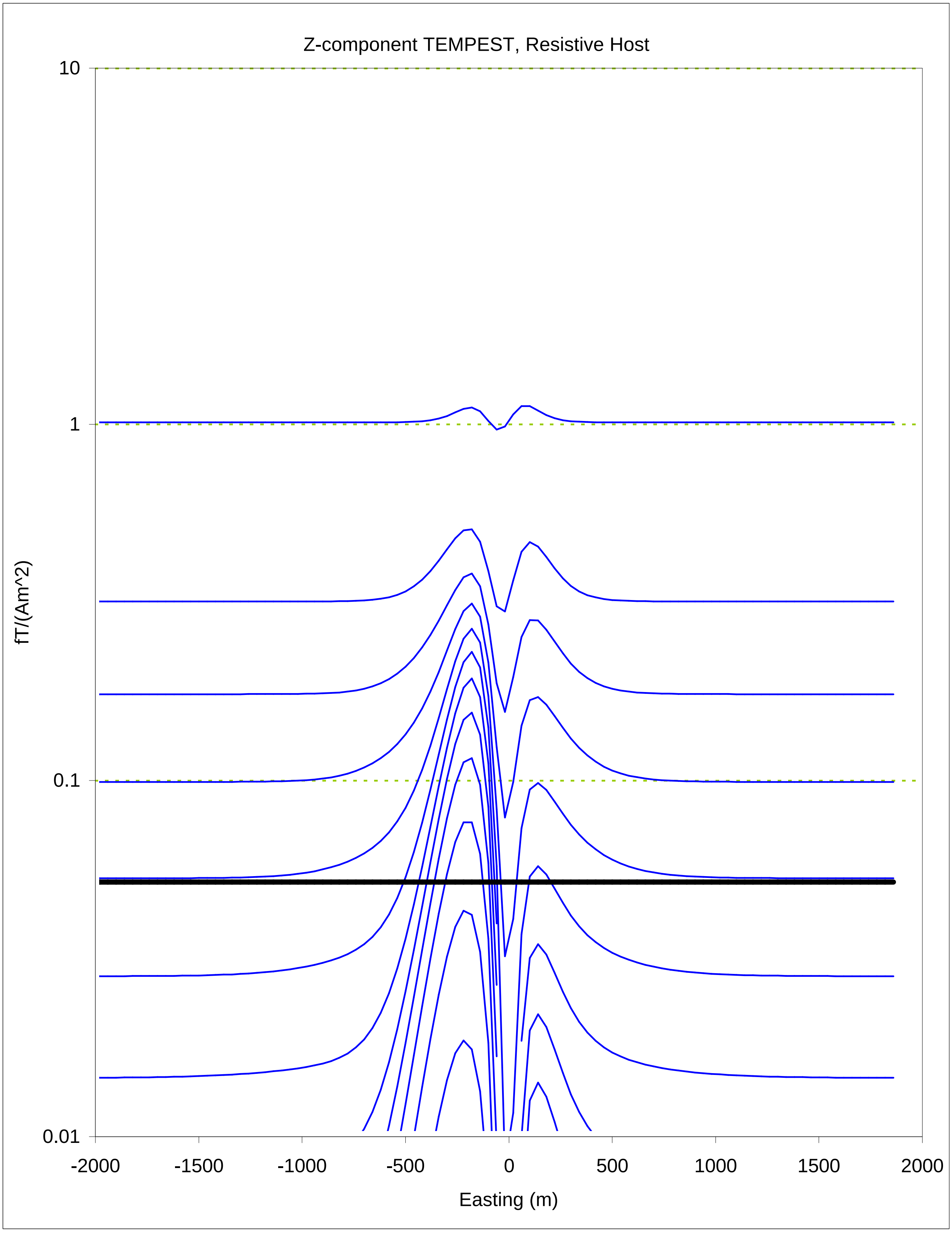
Easting (m)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10
1
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fT/(Am^2)
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-1500
-1000
-500
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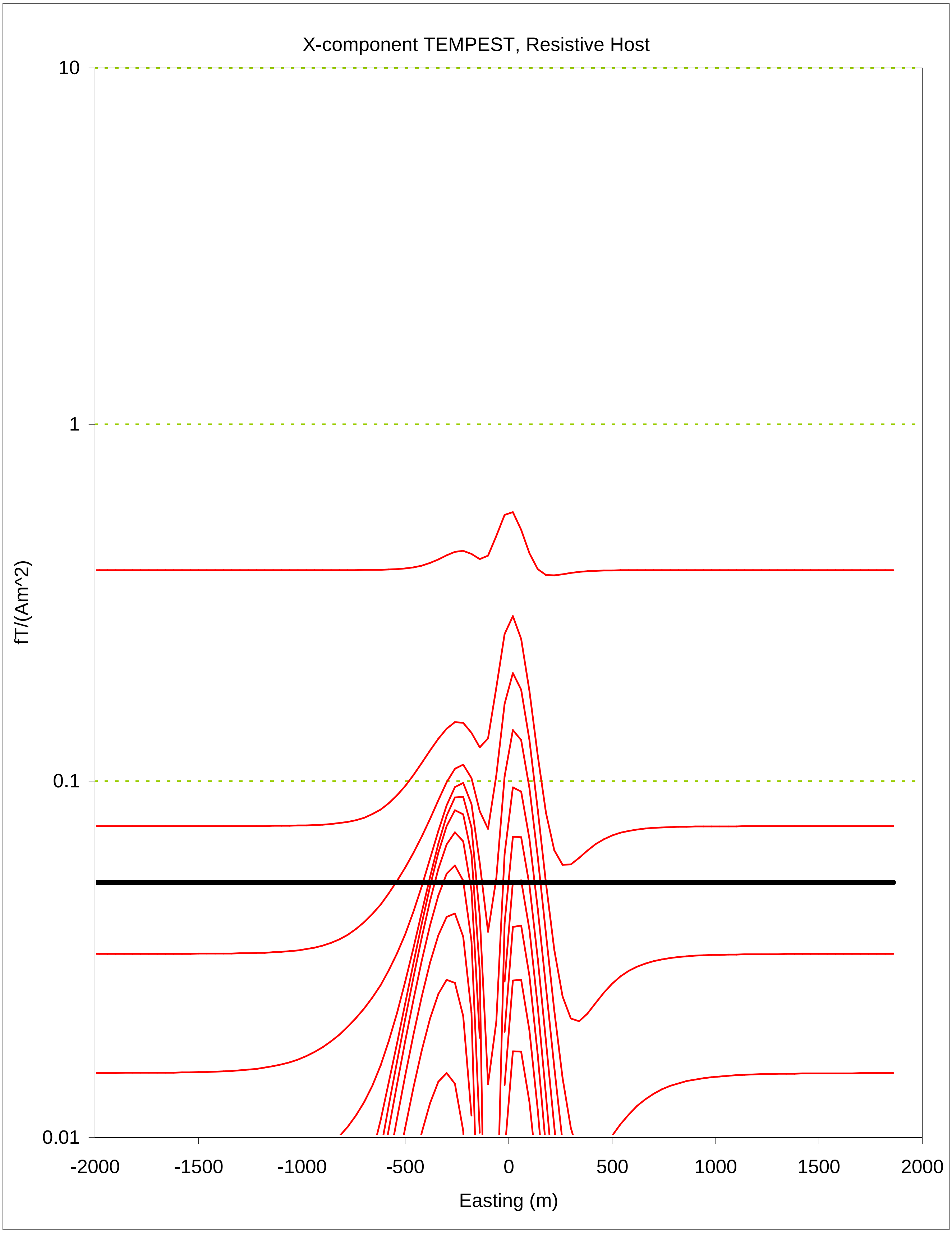
500
1000
1500
2000
Easting (m)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fT/(Am^2)
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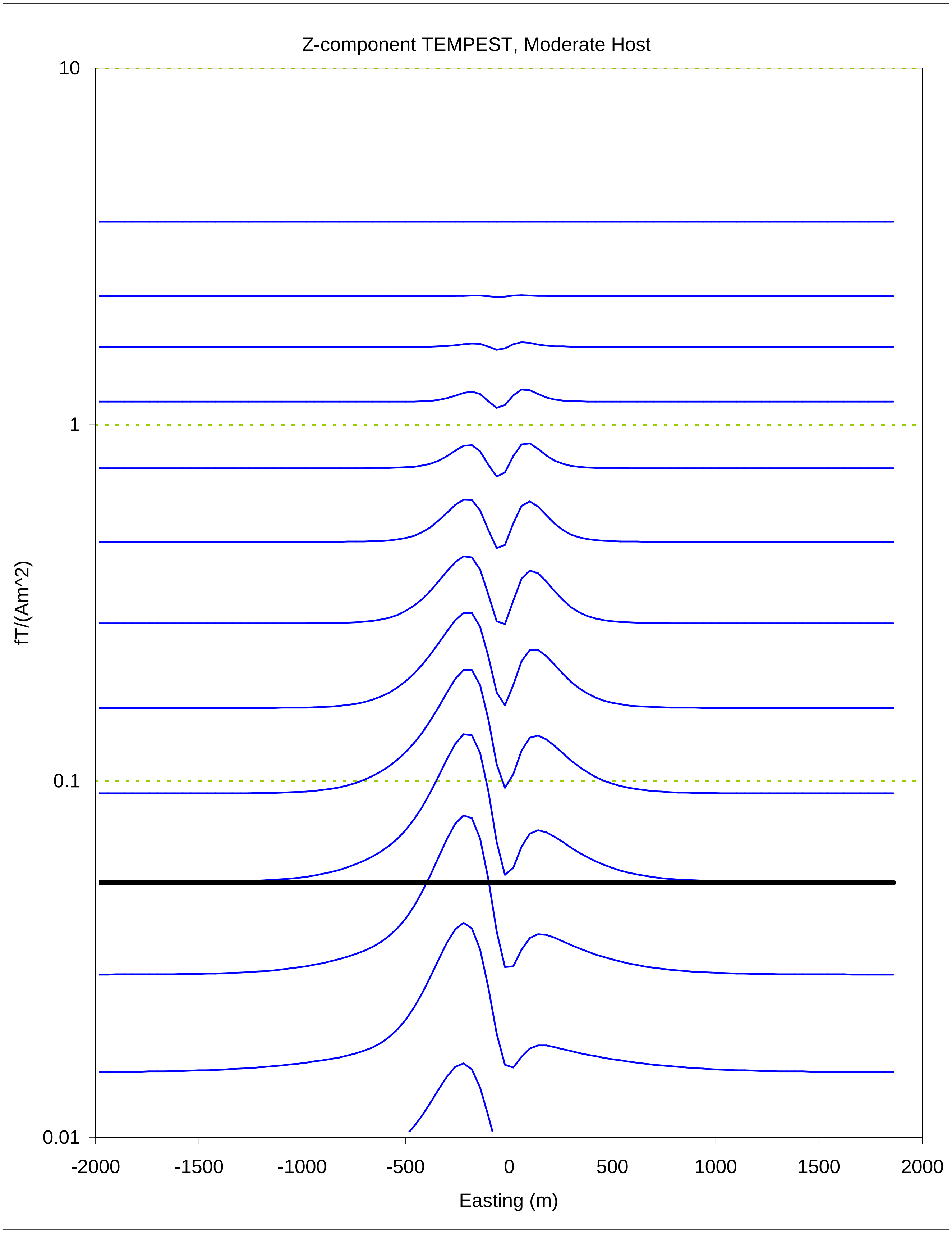
Easting (m)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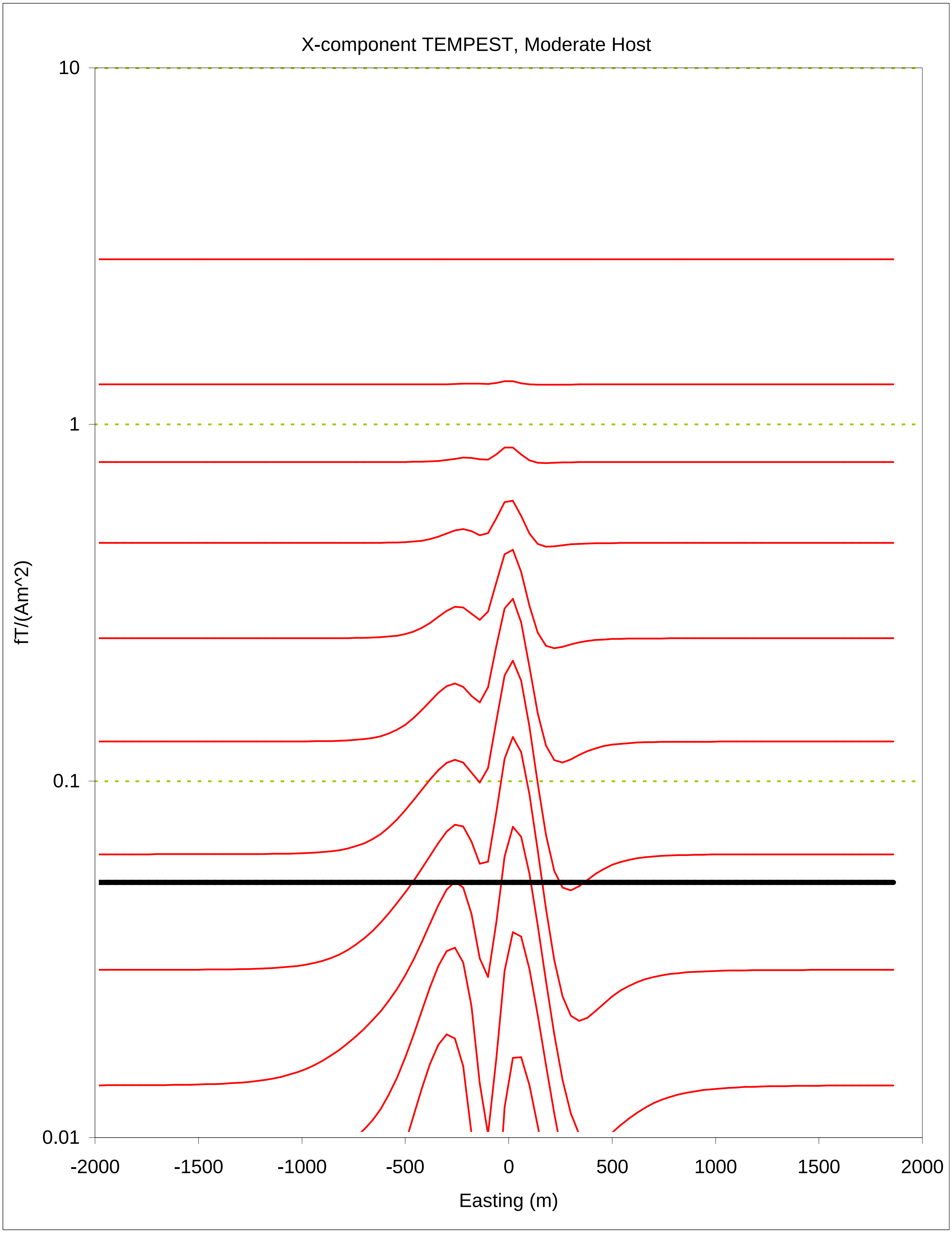
Easting (m)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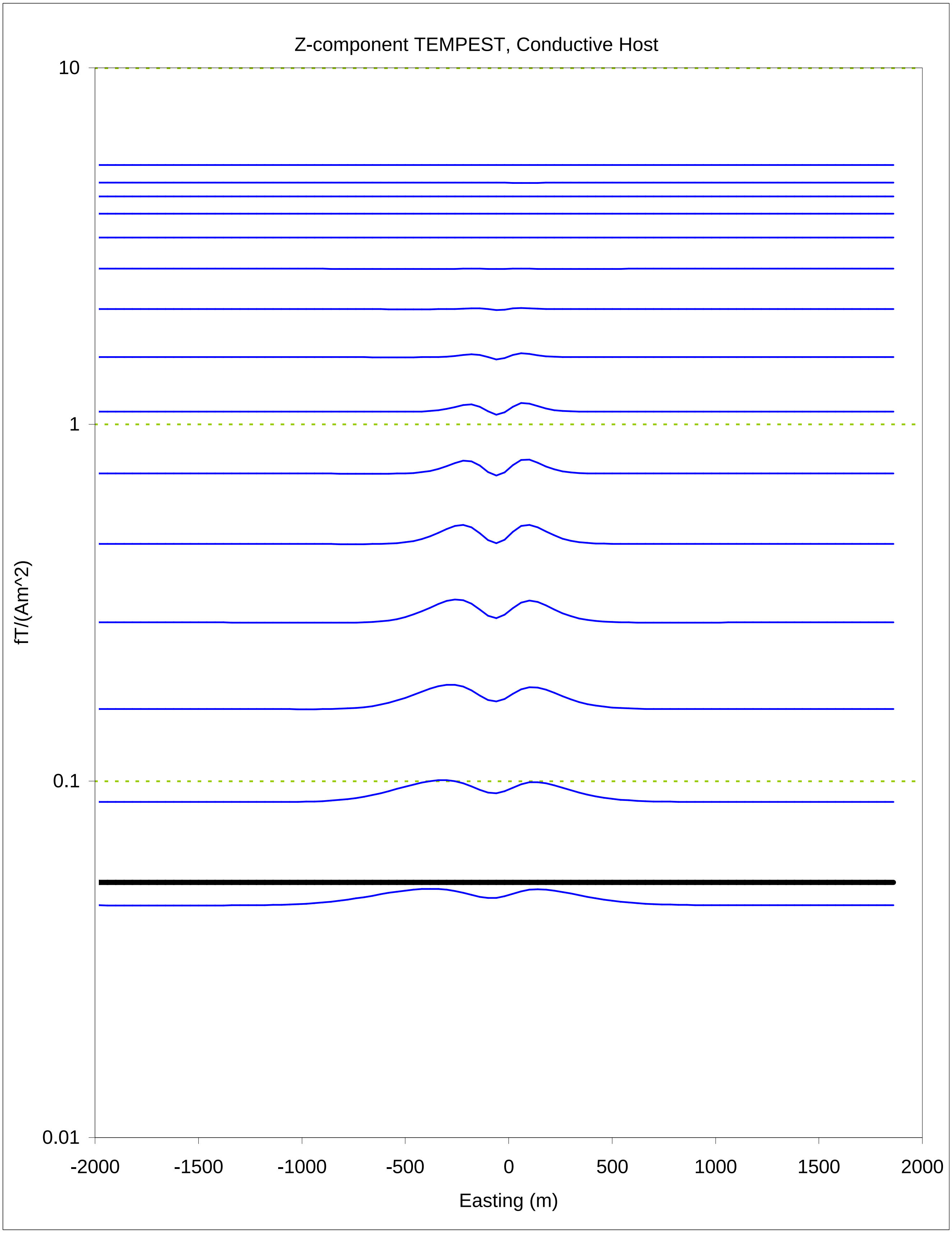
Easting (m)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0
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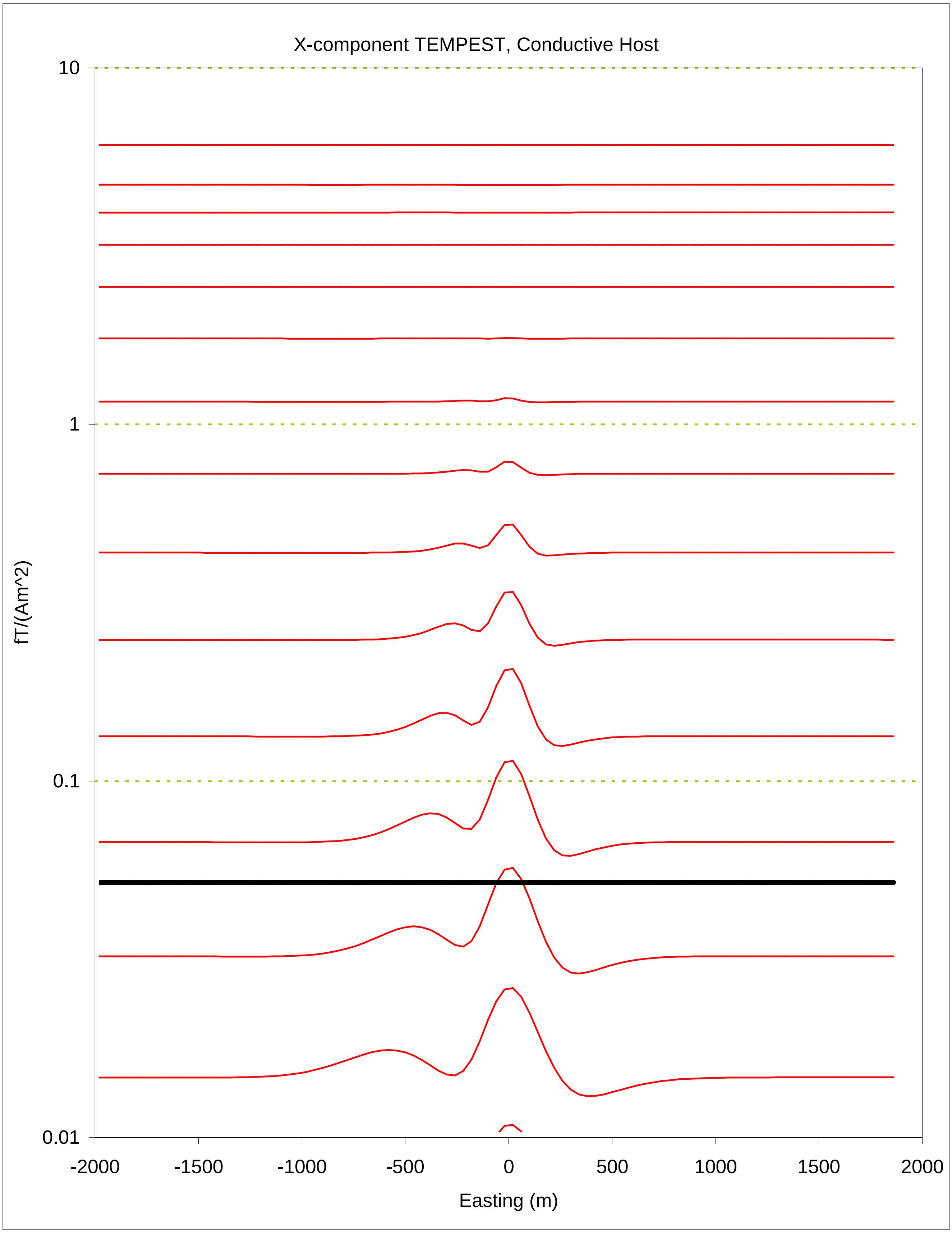
1000
1500
2000
Easting (m)



X-component TEMPEST, Conductive Host
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1
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0.01
fT/(Am^2)
-2000
-1500
-1000
-500
0
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1000
1500
2000
Easting (m)