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MITRE GEOPHYSICS PTY LTD

MINERAL EXPLORATION AND ENGINEERING CONSULTANTS

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	DEPT. OF MINES			E & IL
REF. No.	9660/85			

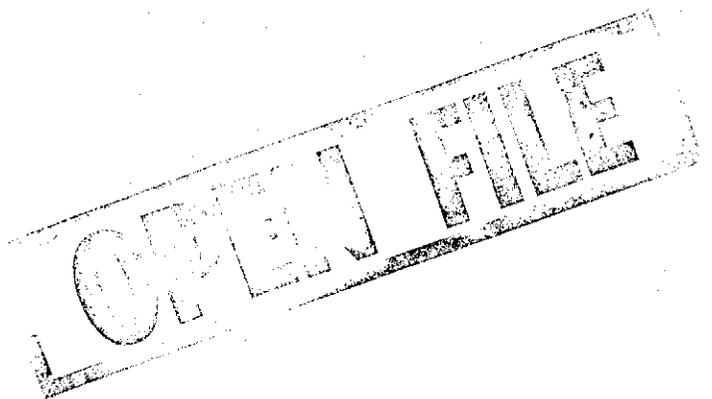
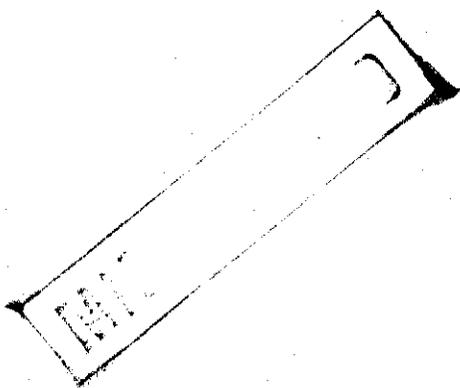
INTERPRETATION OF THE EM37 SURVEY
OVER THE CARBINE HILL GRID (E.L. 42/71).

for

Gold Fields Exploration Pty Ltd

by

Dr J.R. Bishop



GF/MG85/11
August, 1985.



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- (36) EM37 profiles.

Figures referred to, but not included in this report.

Geological plan (1:5,000 scale).



SUMMARY

An EM37 survey has been carried out over the Carbine Hill grid, which lies immediately to the south of the Renison mine lease. A large number of responses were recorded, including a zone over the 'Great Northern' magnetic anomaly. Interpretation of this zone was in agreement with the magnetics and a drill target ~200m below 900N/1550E is suggested.

Other EM anomalies associated with (apparently very shallow-sourced) magnetic anomalies were recorded at the northern end of the survey on lines 3400N and 3600N.

Several anomalies were recorded without associated magnetic responses but with promising geochemistry and/or geology. The most prospective of these is near the Great Northern Creek mine (drill target: 100m below 700N/1500E). Responses right on the E.L. border (eg, 00N/1375E) are also associated with anomalous (base metal) geochemistry and are of interest. A low amplitude, but apparently very conductive response was recorded at 100N/1600E. It is recommended that this line be geochemically sampled.



INTRODUCTION

The Carbine Hill grid lies in the south-east corner of E.L. 42/71 and together with the Black Hill grid, covers the prospective areas south of the Renison mine lease. The licence is held by Renison Ltd, but the exploration program of this area -called the Grand Prize -is being managed by Gold Fields Exploration.

An EM37 survey was carried out over the Carbine Hill grid in November, 1984 and this report interprets the results from that survey.

EXPLORATION TARGET AND GEOLOGICAL SETTING

Tin is the main commodity sought within E.L. 42/71. Economically, the most attractive deposit is a Renison style, replacement body (with mineralised 'feeder' faults). This type of target is being sought in carbonate horizons within the sediments underlying the grid. It occurs, at an uneconomic level, within carbonaceous sections of the Red Lead Conglomerate at the Grand Prize prospect.

A type of replacement/fault deposit which has been recognised as being quite different from the replacement of the dolomite horizons at Renison, is mineralisation associated with the ultramafic complex(es) in the area. This is the style of mineralisation at the nearby old Razorback mine and it may occur at Grand Prize. In this style of deposit, tin occurs along the carbonated margins of the ultrabasic and within adjacent fault structures. It also is a likely target for this area.

For both types of deposit, the bulk of the associated sulphide is expected to be pyrrhotite, which should be highly conductive and magnetic. Since the ultramafics are also (irregularly) conductive and magnetic, (geophysical) detection of mineralisation along their margins would prove difficult. This difficulty has been further increased at Grand Prize and (?)Razorback by weathering of the sulphides to depths in excess of 200m.

Another potential target is a stanniferous pyrite body in the style of the Queen Hill, Zeehan deposit. Such a body would be non-magnetic, but should be a good (though not excellent) conductor.

The Carbine Hill grid overlies Cambrian sediments of the Dundas Group. The Serpentine Hill ultramafics lie to the west and a north-easterly extension of the Razorback complex may underlie the sediments for part of the grid. Known mineralisation within the gridded area includes the old Kapi and Great Northern Creek mines: these were small tonnage, fissure-vein base metal deposits rich in silver. The now-abandoned Grand Prize tin mine lies within the Black Hill grid, in Dundas Group sediments, some 2.5kms to the west of the Carbine Hill grid.



The EM37 survey covered three separate areas within the Carbine Hill grid. The most prospective target was in the southern section (lines 00N to 1400N) where the survey was carried out to see if there were any conductors coincident with the Great Northern magnetic anomaly. Figure 1 shows that this anomaly lies on the aeromagnetic trend between the Razorback and Colebrook Hill ultramafic bodies and it may therefore have a similar source. (However it is pointed out that the easternmost part of the Colebrook Hill anomaly is due to pyrrhotite.) The geological plan shows a fault-bound block of (older) Hodge Slate (?) upthrust against the surrounding Carbine Hill Greywacke almost coincident with the extent of the magnetic anomaly.

The central section of the survey (lines 1900N to 2800N) covered an area of hydrothermally altered conglomerate with encouraging geochemistry. The northern section (lines 3200N to 3600N) covered the ultramafic contact and an area of anomalous tin and arsenic geochemistry.

EXPLORATION HISTORY

The area has been partially covered by earlier grids: the Kapi grid, the Kapi Fault grid and the North Dundas grids. The few geophysical surveys conducted over these grids have been summarised by Bishop (1983) and a listing of all the exploration undertaken in the Grand Prize area is given in Komysan (1985). Two holes have been drilled on the grid, both near the Kapi mine. Both holes intersected sequences of serpentinites (and minor amounts of sulphides).

The Carbine Hill grid was established in 1983/84. The magnetic and VLF surveys carried out during the 1983/84 field season are discussed by Bishop (1984).

INTERPRETATION

MAGNETICS

Two lines of EZ's Montezuma grid (lines M8 & M9) were covered with magnetics to give better definition to the eastern side of the Great Northern magnetic anomaly (Figure 2)*. Line 1000N of the Carbine Hill grid was modelled using interpolated data from these two lines. No good fit to the data was obtained from a single body. Steeply dipping easterly and westerly bodies were tried, but these gave comparable results to the body shown in Figure 3. For all models, the depth of burial was around 150m below the region 1550E to 1650E. This is in good agreement with the interpretation of the EM37 data (see later). The model shown in Figure 3 has a width of 50m at its shallowest, but this rapidly increases with depth. Alternative solutions are 2 or more

* A new base station was used to obtain these measurements and the values were 'best-fitted' to the Carbine Hill data.



steeply dipping adjacent bodies or, possibly, a number of flat-lying bodies (similar to Renison). The discrepancy between the model and observed responses on the eastern side is probably due to a widening of the magnetic body to the south (beneath line M9) or to a separate source there.

ELECTROMAGNETICS

An EM37 survey was carried out by Geoterrex in November, 1984. Three separate areas were covered. From south to north they were: the Great Northern magnetic anomaly; Confidence Saddle; and the Pine Hill area. Six loops were used for the survey: loops 1 & 2 were placed on the western side of the lines, while the remaining loops were to the east. The line interval was 100m and readings were made at a 50m station spacing with some anomalies detailed at 25m. Only the vertical component was read.

The survey recorded a large number of anomalies. The positions of these are shown on Figure 4 with the channels over which an individual response can be recognised, indicated. Given the model of a massive (stanniferous) pyrrhotite body, the most prospective responses are those associated with magnetic anomalies; ie, those over the Great Northern magnetic anomaly.

The anomalies overlying the Great Northern magnetic anomaly are part of a long line of anomalies which crosses all of the traverses in the southern section of this survey (ie, loops 1 & 2) and which has been divided into four zones. More conductive anomalies with higher amplitudes were recorded in other zones, however a well-defined response was recorded on line 900N, directly over the magnetic high. Interpretation of this response, suggests a discrete (rather than a formational) target beneath 900N/1550E at a depth of 120m +/- 30m (though one estimate of depth suggested about 175m). The dip is not confidently interpreted from the EM data (and not at all from the magnetics), but a steep dip to the west is suggested. The time constant is a low to moderate 1.8msecs).

The strongest anomaly of the survey was recorded in the southernmost zone on line 00N around 1375E. This large amplitude response shows considerable migration, indicating either a very shallow dip to the east or a wide, formational source at a depth of 100m plus (the time constant is a moderate 2.3msecs). It does not have any associated magnetic response. However, there are

* On the EM37 system there are 20 channels, numbered from 1 ('early-time' at 0.09ms) to 20 ('late-time' at 7.2ms).

The time constant is the inverse slope of the late-time decay. This translates to the moderate to high conductance of 50 Siemens +/- 20, assuming the smaller dimension of strike length or depth extent is between 200m and 400m. A larger value will result in a smaller conductance.



high base-metal values from rock chip samples over the anomaly. (These geochem values do not follow the EM zone to the north.)

Several other anomalies were recorded in the south-east corner of the grid. (Some of these were also detected by a Dighem survey which flew to the edge of this area: see Bishop, 1983.) The best of these anomalies is at 100N/1600E, where the response persists to late times (the time constant may be as high as 6msecs). This anomaly also has no magnetic expression. Line 100N was not geochemically sampled.

A pronounced anomaly lies immediately to the north of the Great Northern Creek mine (or Carbine mine). This mine was a small lead-silver vein deposit worked around the turn of the century. The anomaly at 700N/1500E indicates a depth of around 50m (early time) to 100m (late time) with a westerly dip. (Time constant was 2msecs). This anomaly has been correlated with a somewhat weaker anomaly to the south of the mine. Although shown as separate zones in Figure 4, this may be the shallower, southern end of the conductor associated with the Great Northern magnetic anomaly.

Some EM anomalies are associated (but not coincident) with the strong magnetic responses at the northern end of the grid (3400N/1200E to 3600N/1500E). The intensity of the magnetic contours suggest a very shallow or outcropping source. (Komyshan's (1985) geological map shows Melba Spilites; elsewhere these rocks are not so magnetic.) The EM responses here (including those with larger amplitudes) have short time constants which are not indicative of massive pyrrhotite.

Several other responses were obtained, but the above mentioned are considered to be the most interesting. No prospective responses were obtained over the Confidence Saddle area.

CONCLUSIONS AND RECOMMENDATIONS

The EM survey has recorded anomalies overlying the main area of interest: the Great Northern magnetic anomaly. Interpretation of the EM and magnetics are largely in agreement and a target beneath 900N/1550E, with its top buried to a depth of 120m, is indicated. The time constant does not suggest massive pyrrhotite* and the response may be due to serpentinite. Nevertheless, a drill-hole is recommended.

Pronounced EM responses were recorded at the northern end of the survey. Komyshan (1985) suggests that a "primary mineralised source is (also) present" here. The short time constants of the responses suggest that the sources are not massive pyrrhotite, however there are some strong local magnetic anomalies (probably

* It is recommended that a test survey be carried out over a massive pyrrhotite body at Renison, so that the validity of this statement can be confirmed and quantified.



with very shallow sources). There is also added encouragement from the geochemistry and further work in this area is recommended.

The responses over the Great Northern magnetic anomaly are part of a continuous line of responses which extends over 1400m. Although interpreted as four separate zones, a common 'link' seems likely and a shear zone is suggested. In places, this zone may have been intruded by ultrabasics; in other places it may be mineralised; elsewhere, the shear zone itself is conductive.

Those anomalies which do not have associated magnetic responses should not necessarily be disregarded. Several of the anomalies are either associated with known mineralisation or lie in areas of anomalous geochemistry. Although a base-metal (plus silver) deposit of economic proportions may be unlikely in this environment, there is the possibility of a stanniferous-pyrite body. Such a body would not give rise to a magnetic response, but should be reasonably conductive (ie, may give rise to a response similar to those observed here).

The most prospective of the non-magnetic EM anomalies are probably those straddling the Great Northern Creek mine. But the large anomalies defining the southernmost zone (00N/1375E to 500N/1475E) and the adjacent anomaly at 100N/1600E are also of interest. Base-metal highs associated with some of these responses may indicate geochemical zoning, with the tin deposit at depth or, in the case of the first example, along strike (beneath the Great Northern magnetic anomaly). Geochemical sampling along line 100N is recommended.

Other possible sources for the non-magnetic responses include conductive lithologies (eg, clays or graphitic shales -neither is indicated on the geological plan); shear zones and possibly altered (ie, non-magnetic) serpentinite*.

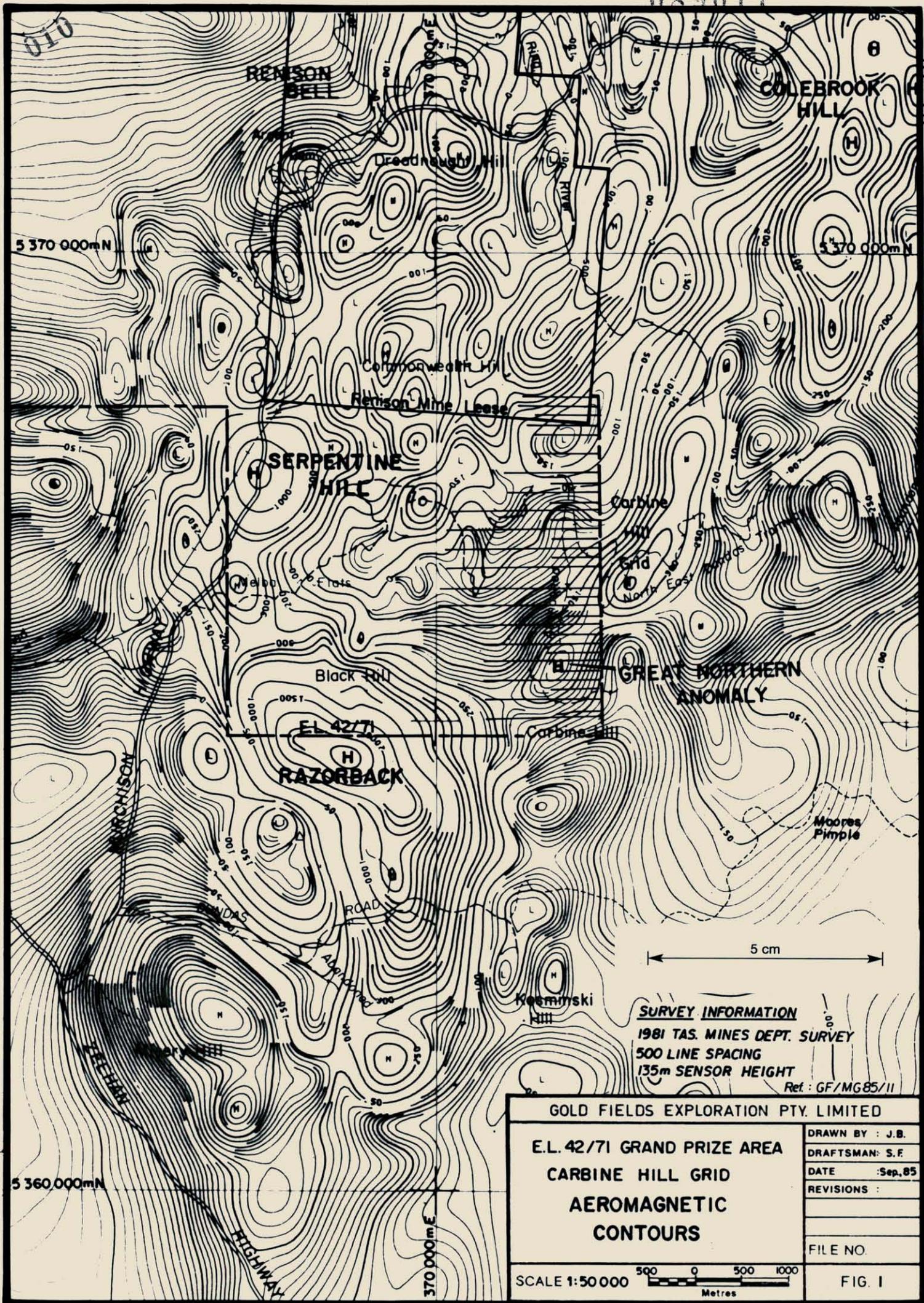
J.R. Bishop
August, 1985

* Electrical surveys elsewhere on the lease and the adjacent Renison mine lease have shown that the serpentinites may be quite conductive. They also have variable magnetic properties (eg, there is no evidence on the magnetic map for the sills of serpentinite at the Great Northern Creek mine (mentioned in Blissett, 1962)).



REFERENCES

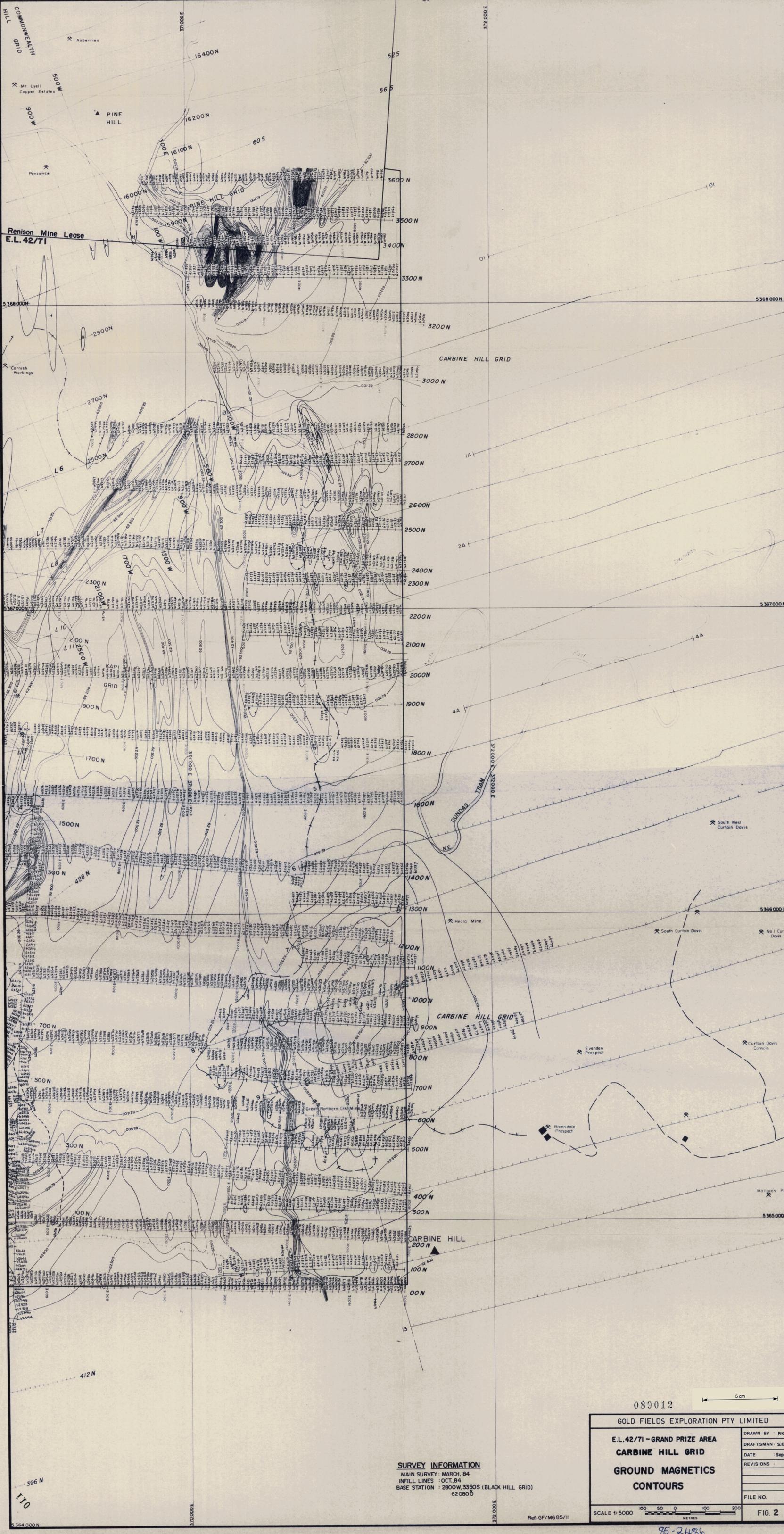
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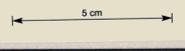
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 1981 T.A.S. MINES DEPT. SURVEY
 500 LINE SPACING
 135m SENSOR HEIGHT
 Ref: GF/MG85/11

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E.L. 42/71 GRAND PRIZE AREA CARBINE HILL GRID AEROMAGNETIC CONTOURS	
SCALE 1:50 000	
DRAWN BY : J.B. DRAFTSMAN: S.F. DATE : Sep. 85 REVISIONS : FILE NO.	FIG. I

85-2486

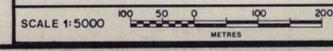


080012



GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 - GRAND PRIZE AREA CARBINE HILL GRID	
GROUND MAGNETICS CONTOURS	
DRAWN BY : PK.	DRAFTSMAN : S.E.
DATE : Sept, 85	REVISIONS :
FILE NO.	FIG 2

SURVEY INFORMATION
 MAIN SURVEY : MARCH, 84
 INFILL LINES : OCT, 84
 BASE STATION : 2800W, 3350S (BLACK HILL GRID)
 620800



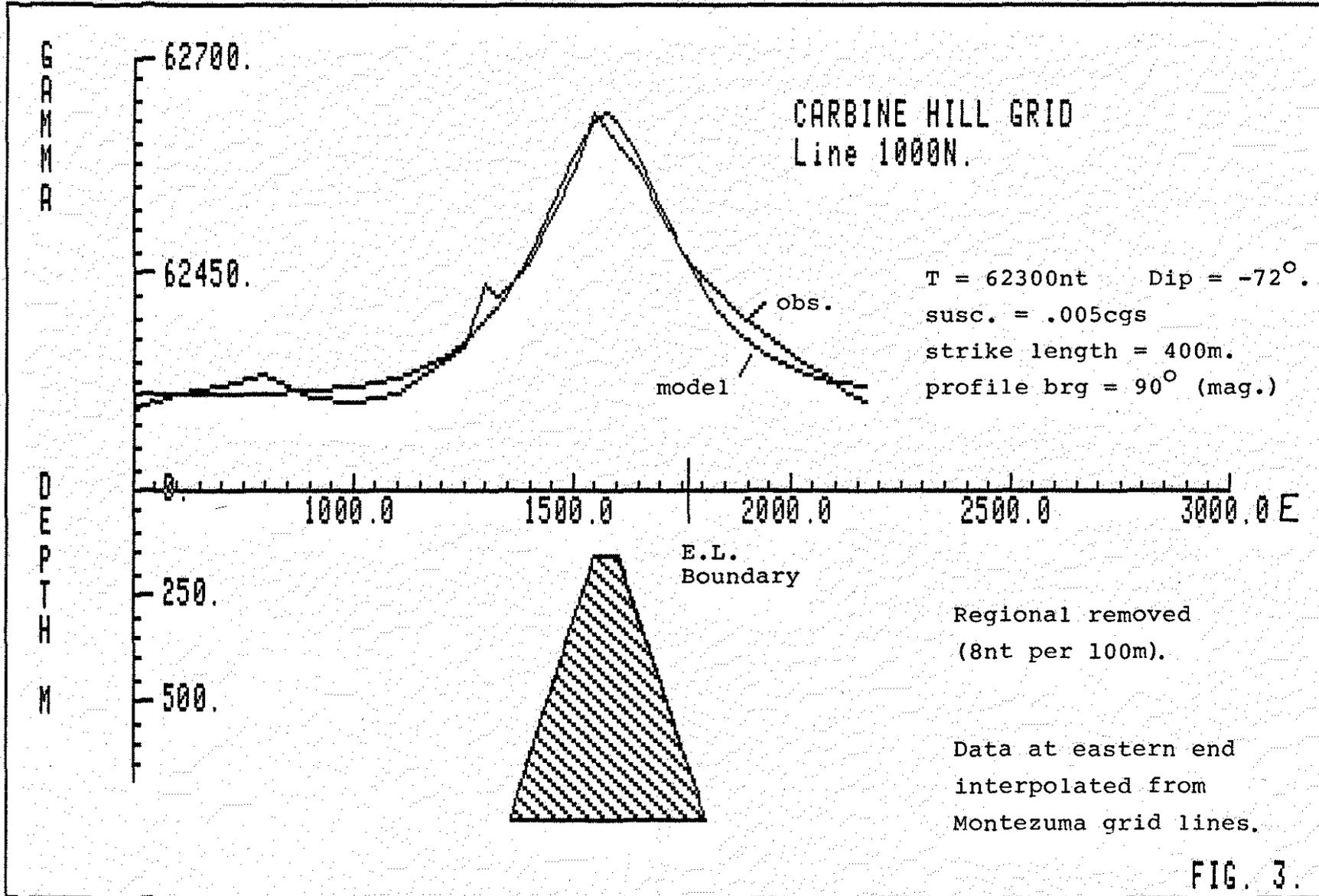
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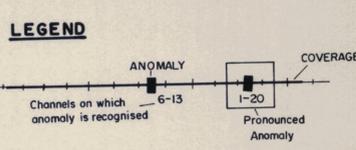
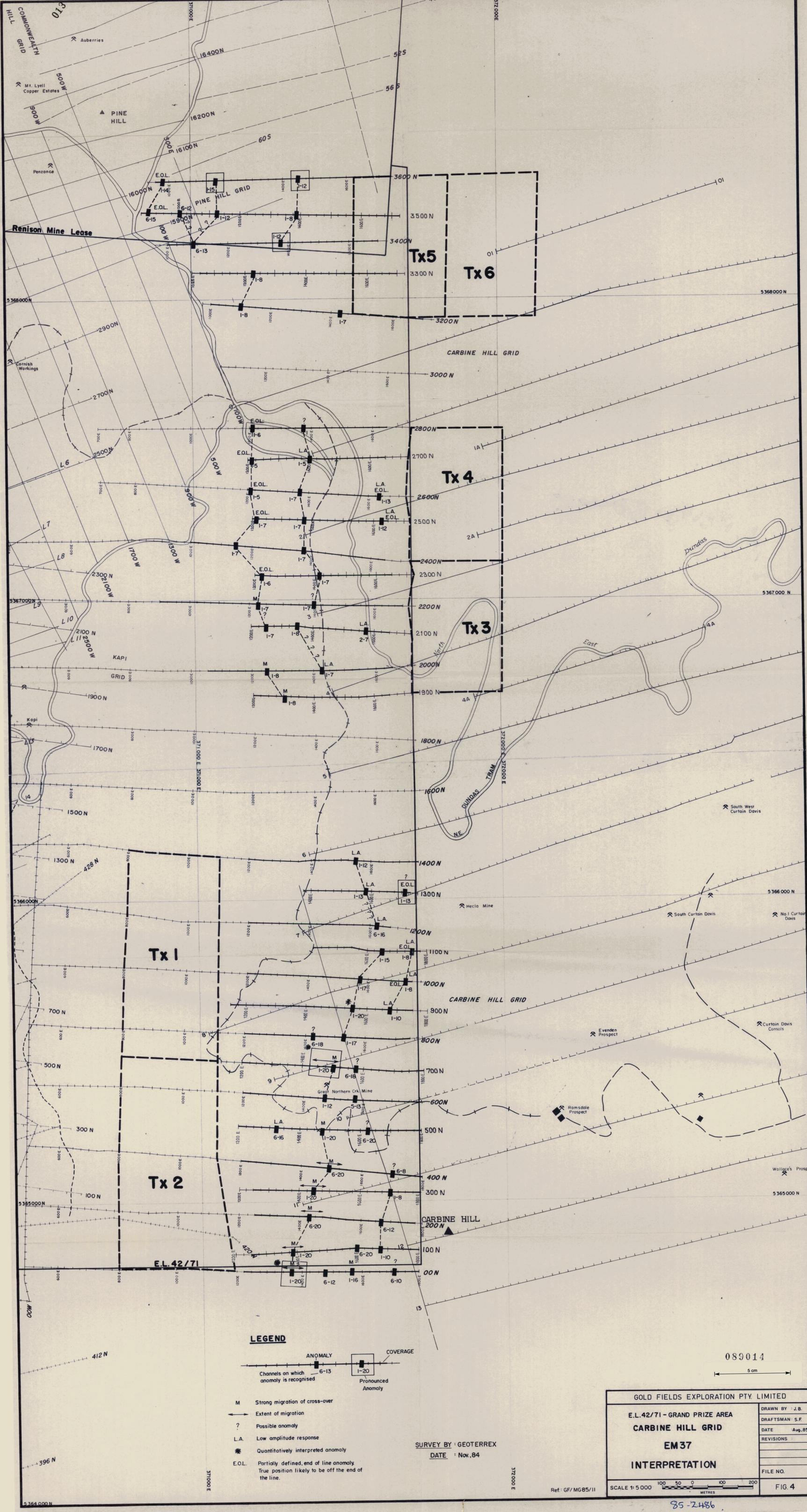
GREAT NORTHERN MAGNETIC ANOMALY

012

85-2486



089013



- M Strong migration of cross-over
- Extent of migration
- ? Possible anomaly
- L.A. Low amplitude response
- ★ Quantitatively interpreted anomaly
- E.O.L. Partially defined, end of line anomaly
True position likely to be off the end of the line.

SURVEY BY: GEOTERREX
DATE: Nov. 84

089014
5 cm

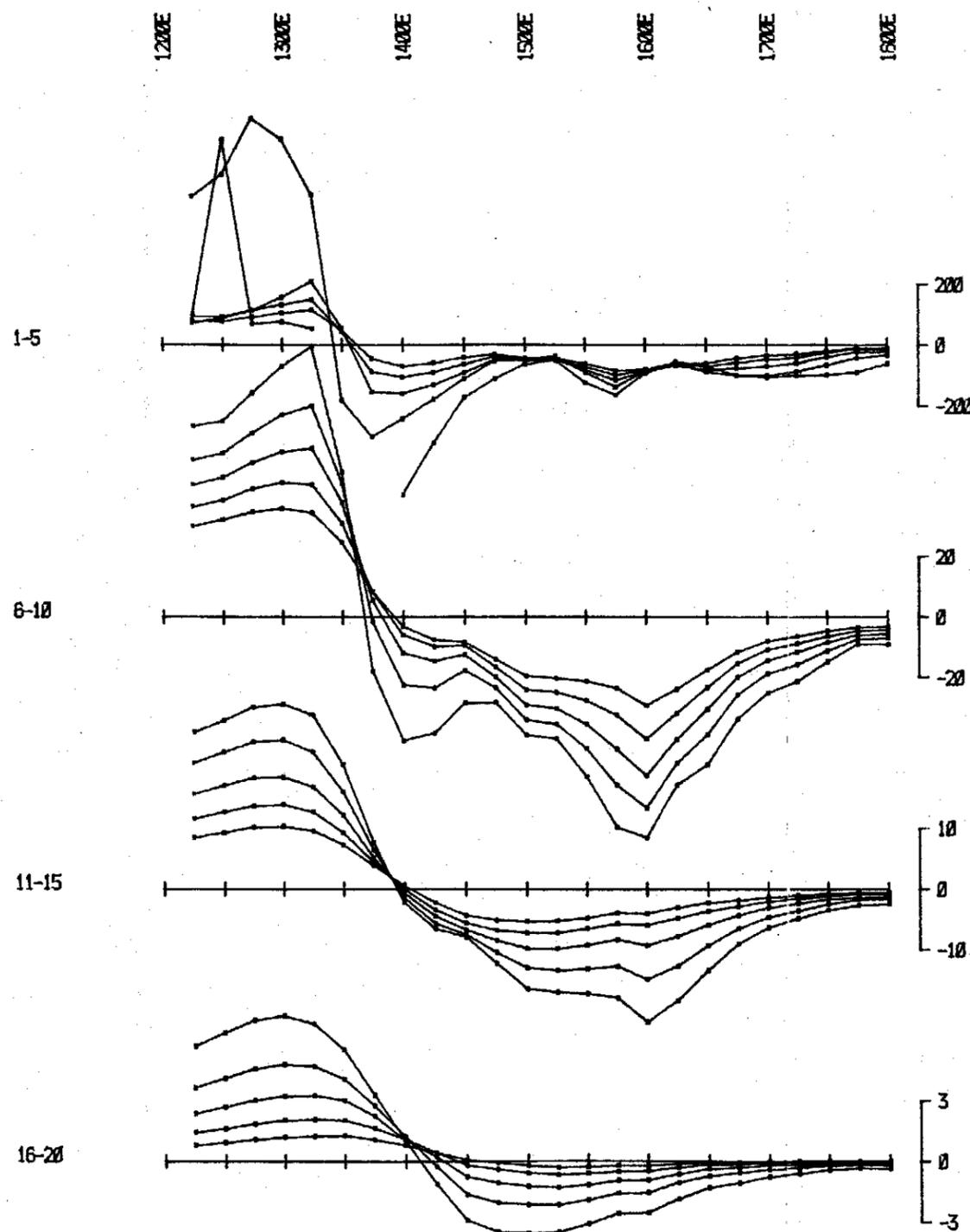
GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 - GRAND PRIZE AREA CARBINE HILL GRID EM37 INTERPRETATION	
DRAWN BY: J.B. DRAFTSMAN: S.F. DATE: Aug. 85 REVISIONS:	FILE NO. FIG. 4
SCALE 1:5000 100 50 0 100 200 METRES	

Ref: GF/MG85/11

85-2486

014

VERTICAL COMPONENT \dot{B} (Z)

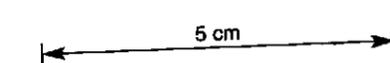


EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (\dot{B})

nanovolts per amp metre squared



TX LOOP SIDES : 00700N 01100E
 : 00000N 00800E
TX LOOP SIZE : 700 m X 300 m
TX TURN OFF TIME : 360 microsecs.
FIRST GATE TIME : 88.5 microsecs.
CURRENT : 13.5 amps
FREQUENCY : 25 Hz.
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HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 23/11/1984

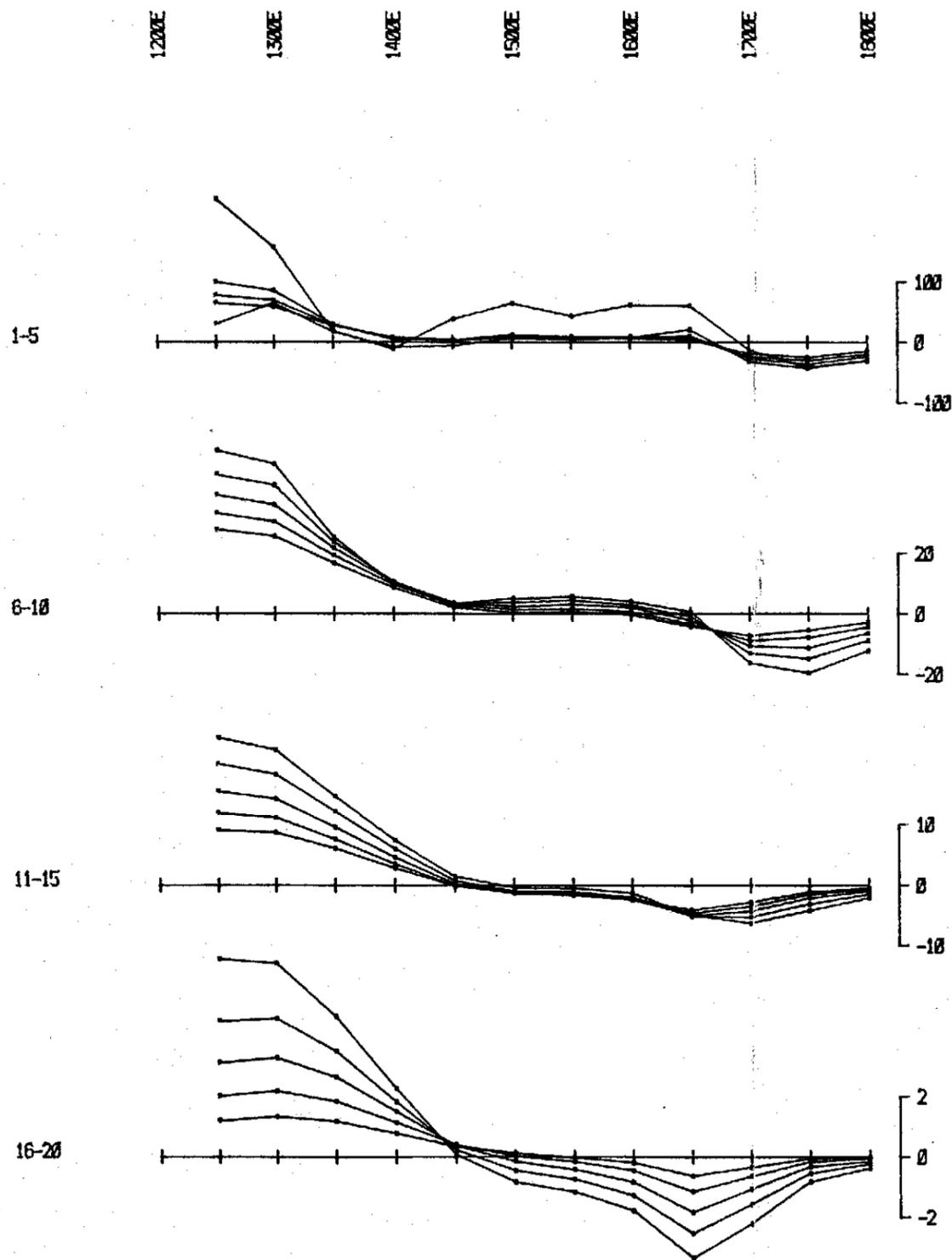


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GEOTREX PTY. LTD.

PROJECT NO.
85-1647

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PROJECT : CARBINE HILL
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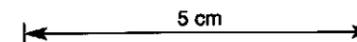
VERTICAL COMPONENT \dot{B} (Z)



nanovolts per amp metre squared

EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)

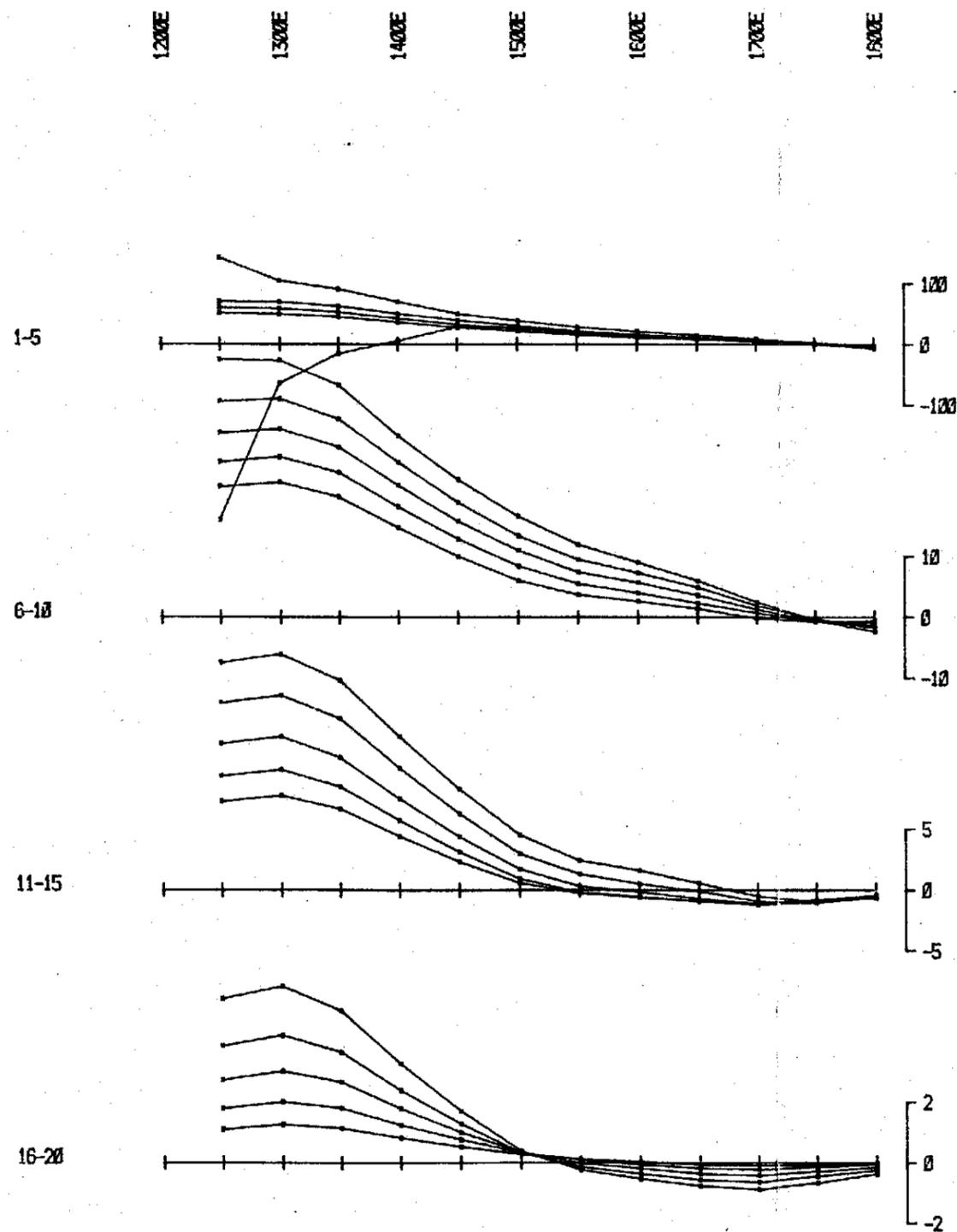


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FIRST GATE TIME : 99.5 microseconds.
CURRENT : 13.5 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 23/11/1994

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	CLIENT : GOLD FIELDS EXP.	

PROJECT	: CARBINE HILL
AREA	: GRAND PRIZE
LINE	: 00100N Z
TX LOOP	: 2

VERTICAL COMPONENT \dot{B}_z (Z)



EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

5 cm

nanovolts per amp metre squared

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 : 00000N 00300E
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TX TURN OFF TIME : 360 microseconds.
FIRST GATE TIME : 99.5 microseconds.
CURRENT : 13.5 amps
FREQUENCY : 25 Hz.
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HORIZONTAL SCALE : 1:5000
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DATE : 23/11/1984



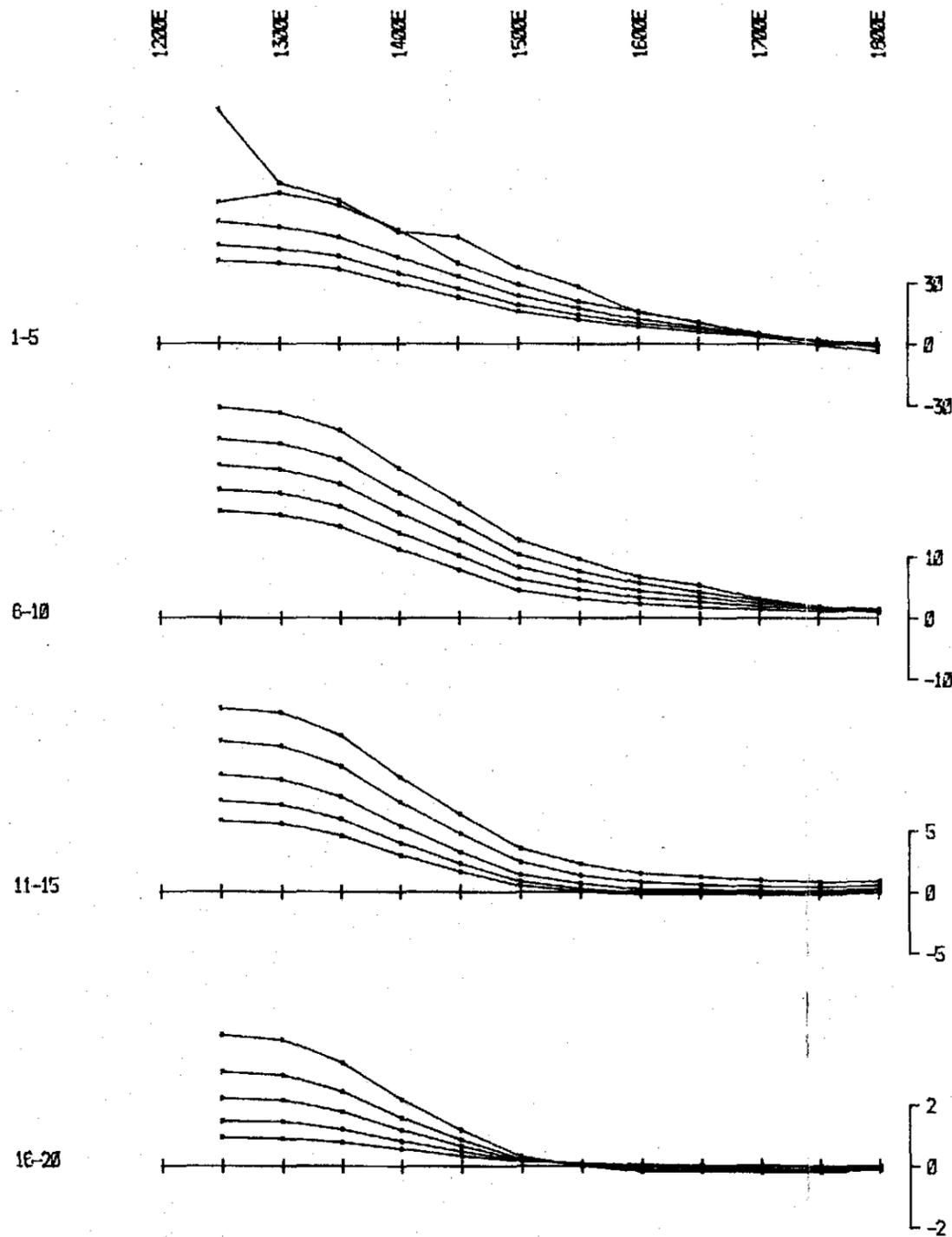
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GEOTREX PTY. LTD.

PROJECT NO.
85-1947

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PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 00200N Z
TX LOOP : 2

910

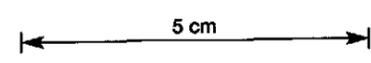
VERTICAL COMPONENT \dot{B} (Z)



EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (\dot{B})



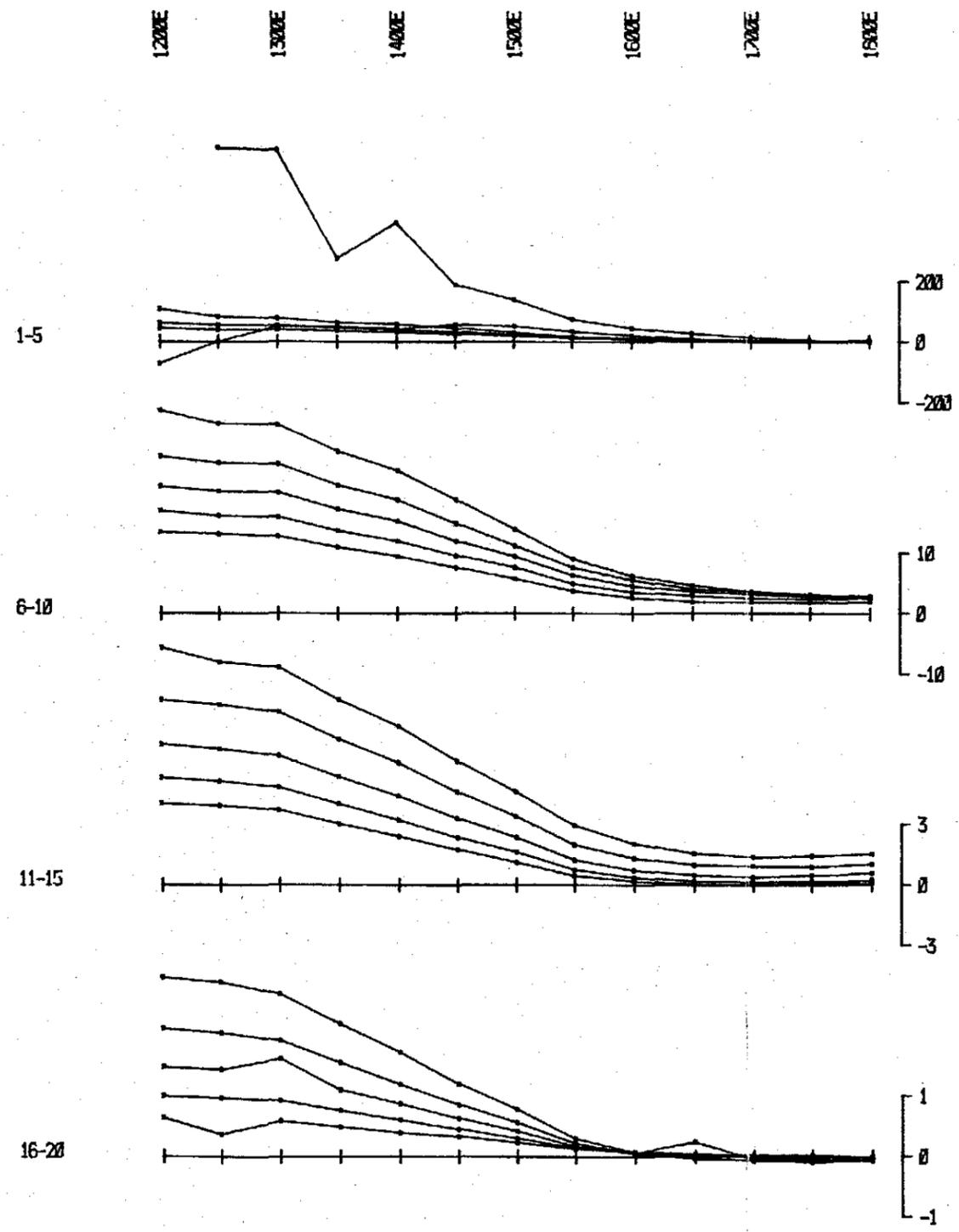
nanovolts per amp metre squared

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FIRST GATE TIME : 93.5 microseconds.
CURRENT : 13.5 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 23/11/1994

	SURVEYED AND COMPILED BY GEO TERREX PTY. LTD.	PROJECT NO. 95-1947
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210

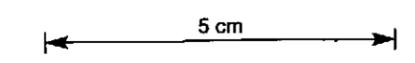
VERTICAL COMPONENT B (Z)



nanovolts per amp metre squared

EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)

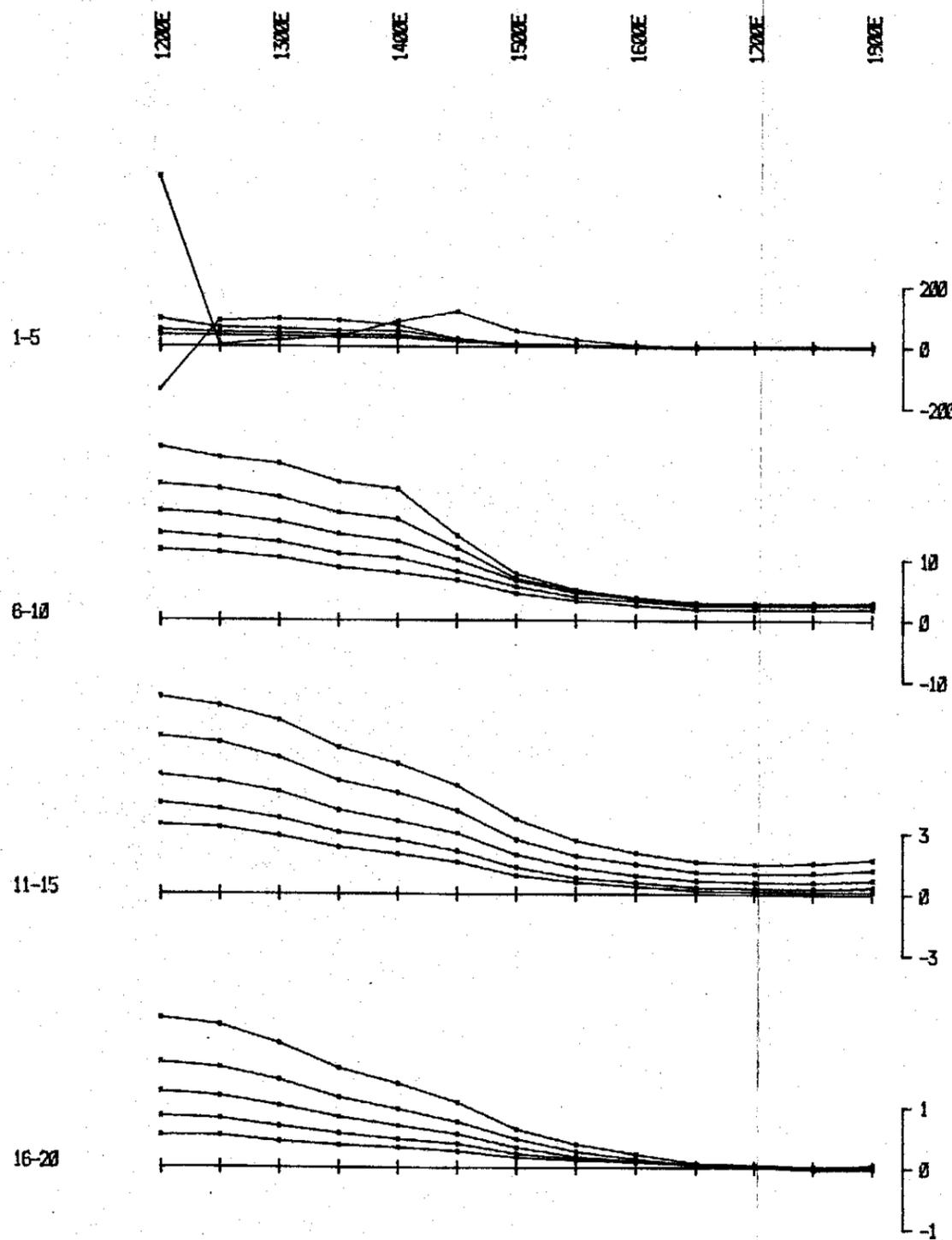


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CURRENT : 13.5 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
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HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 22/11/1994

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 85-1847
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810

VERTICAL COMPONENT \dot{B} (Z)

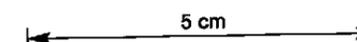


nanovolts per amp metre squared

EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

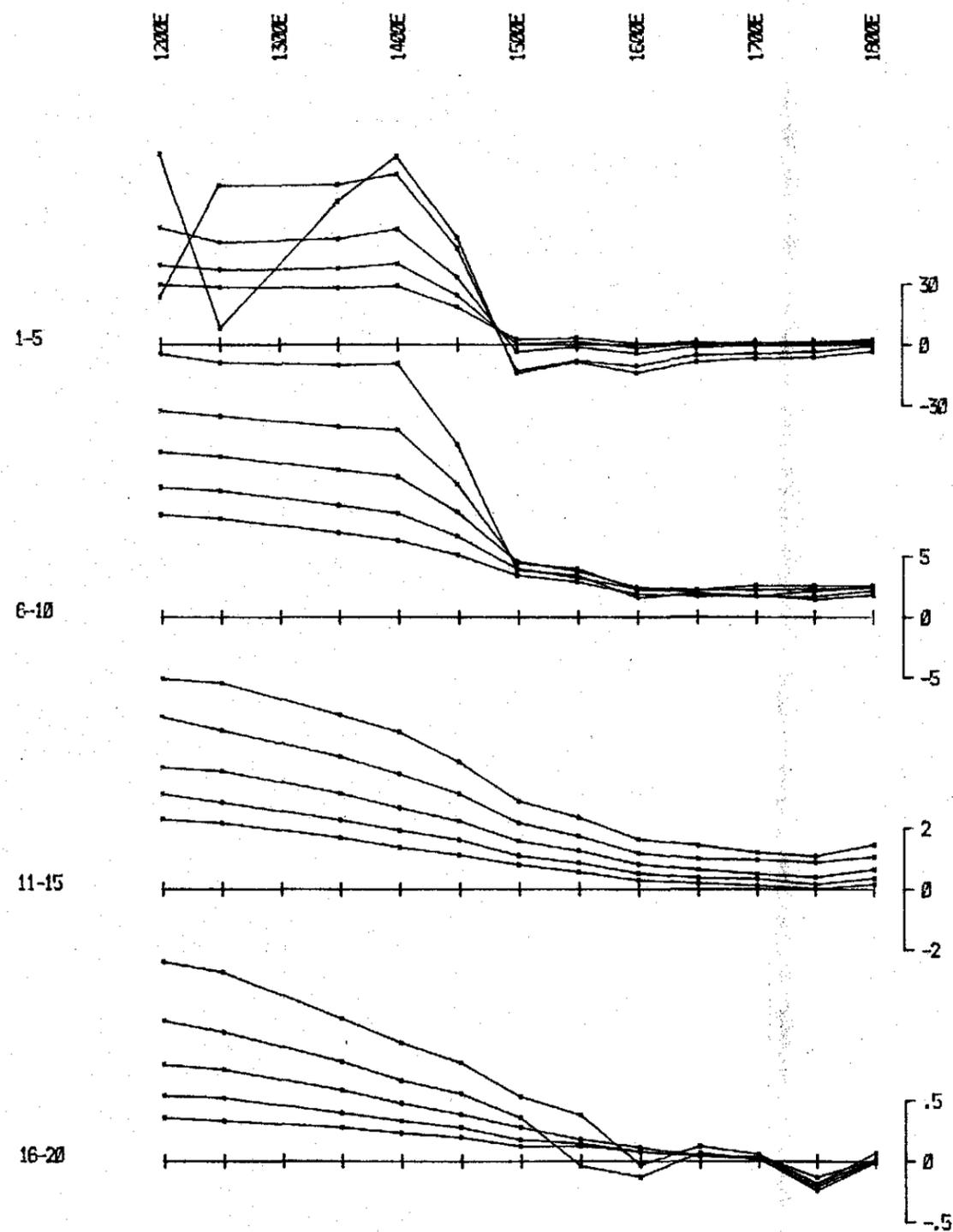


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FIRST GATE TIME : 99.5 microseconds.
CURRENT : 13.5 amps
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INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
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DATE : 22/11/1984

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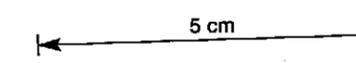
610

VERTICAL COMPONENT \dot{B}_z (Z)



EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)



nanovolts per amp metre squared

TX LOOP SIDES : 20700N 01100E
 : 00200N 00900E
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TX TURN OFF TIME : 300 microsecs.
FIRST GATE TIME : 99.5 microsecs.
CURRENT : 13.5 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 22/11/1994

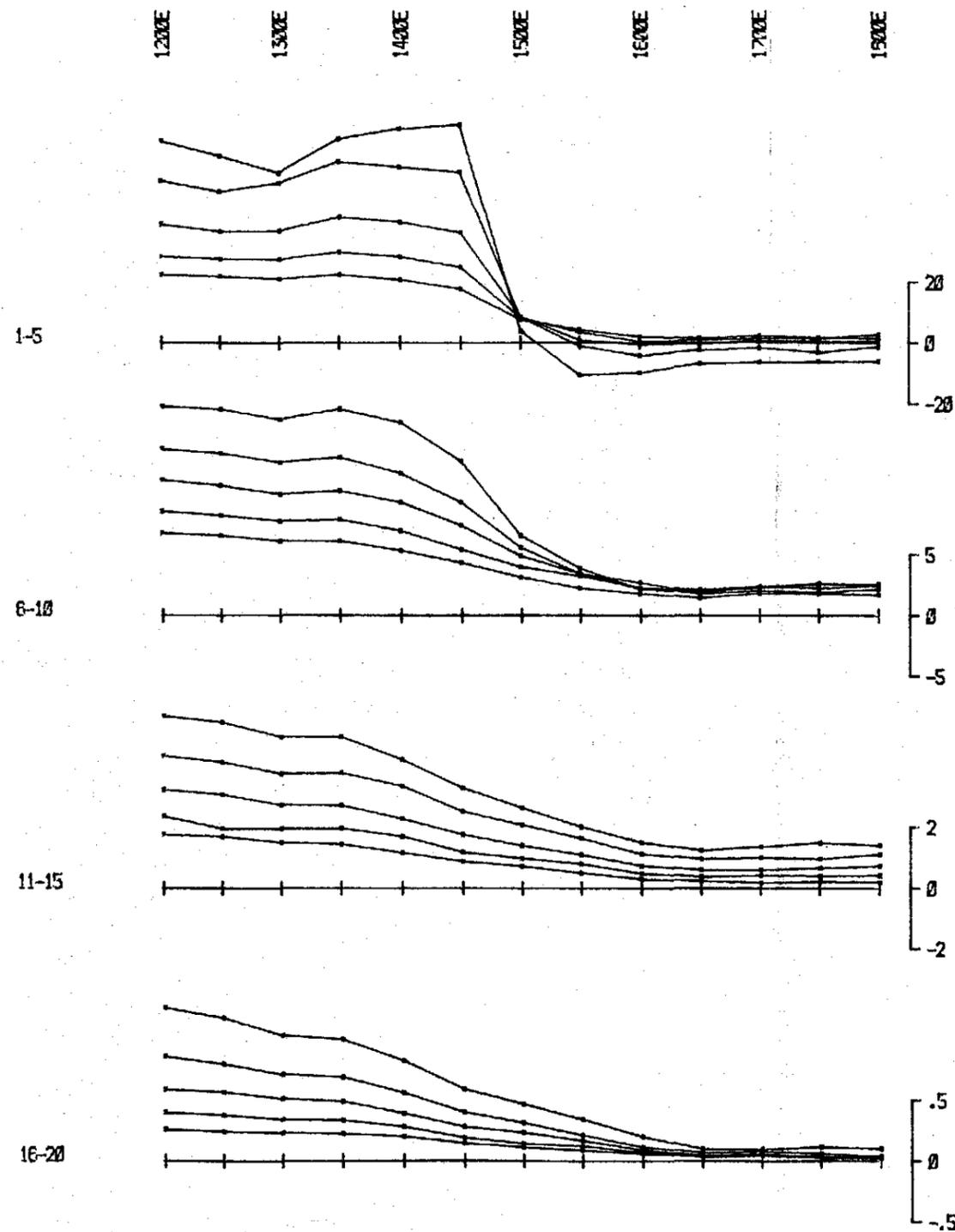
	SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP.	

PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 00600N Z
TX LOOP : 2

020

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C

VERTICAL COMPONENT \dot{B} (Z)



EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

5 cm

nanovolts per amp metre squared

TX LOOP SIDES : 00700N 01100E
 : 00000N 00900E
TX LOOP SIZE : 700 m X 300 m
TX TURN OFF TIME : 300 microseconds
FIRST GATE TIME : 93.5 microseconds
CURRENT : 13.5 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 22/11/1994

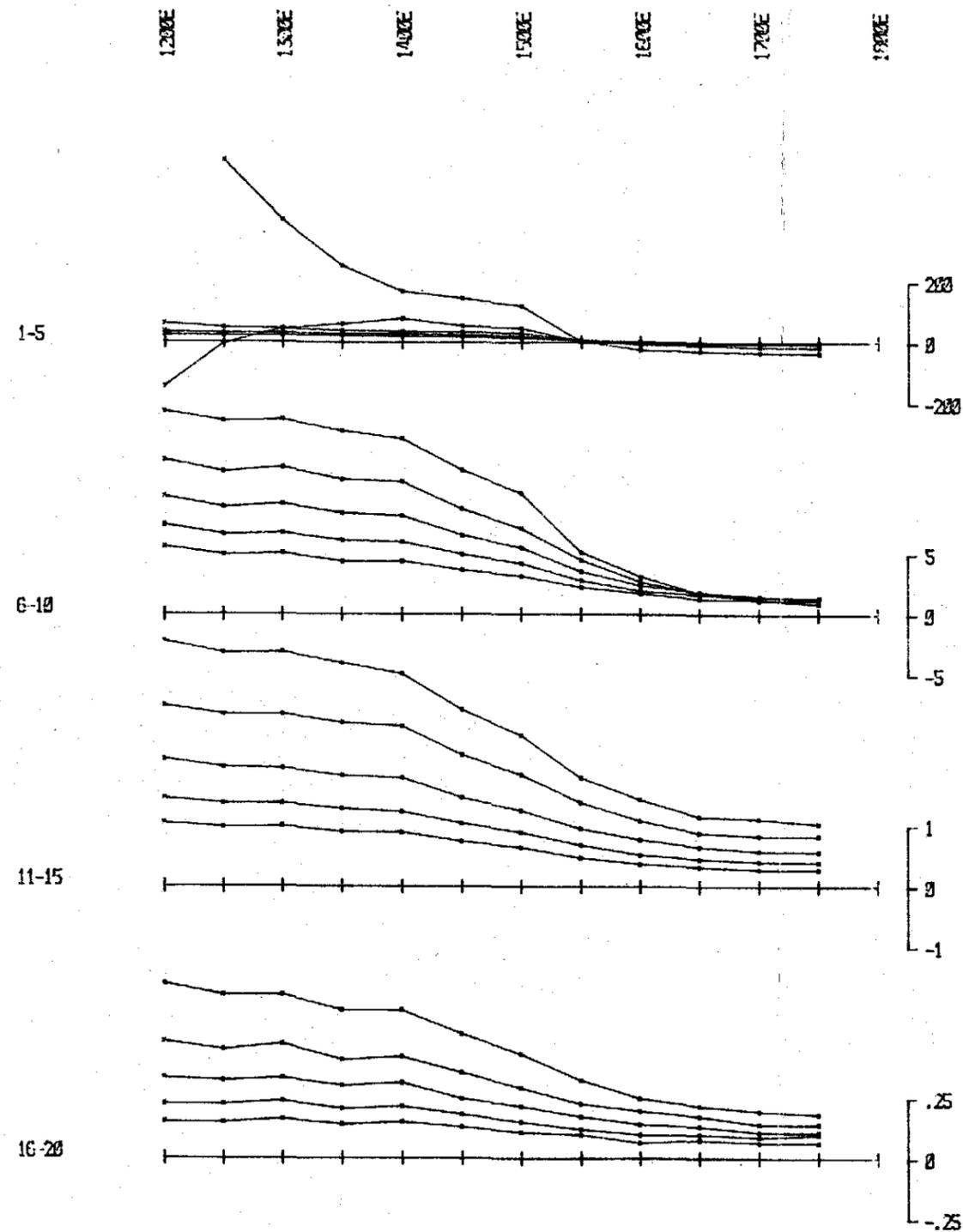


SURVEYED AND COMPILED BY
GEOTREX PTY. LTD.

PROJECT NO.
95-1947

CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 00700N Z
TX LOOP : 2

VERTICAL COMPONENT B (Z)



EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

nanovolts per amp metre squared

5 cm

TX LOOP SIDES : 01400N 01100E
 : 00700N 00300E
TX LOOP SIZE : 700 m X 300 m
TX TURN OFF TIME : 360 microseconds
FIRST GATE TIME : 88.5 microseconds
CURRENT : 14.8 amp
FREQUENCY : 25 Hz.
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : ST30
DATE : 21/11/1984

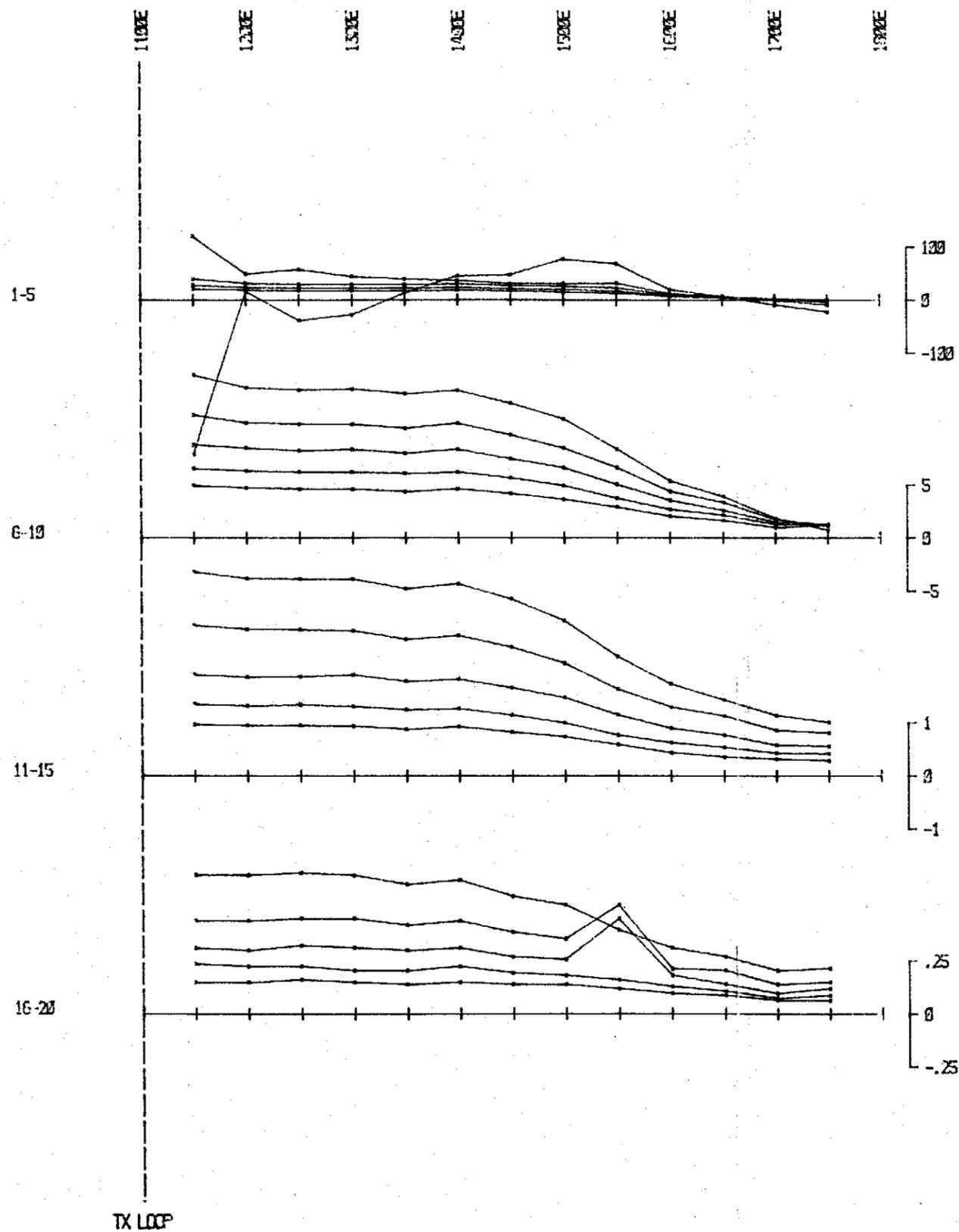


SURVEYED AND COMPILED BY
GEOTREX PTY. LTD.

PROJECT NO.
55-1947

CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 00300N Z
TX LOOP : 1

VERTICAL COMPONENT \dot{B}_z (Z)



EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)

nanovolts per amp metre squared

5 cm

TX LOOP SIDES : J1420N B1120E
 : J0730N B0300E
TX LOOP SIZE : 700 m X 300 m
TX TURN OFF TIME : 360 microseconds.
FIRST GATE TIME : 33.5 microseconds.
CURRENT : 14.0 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : ST30
DATE : 21/11/1994

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.		PROJECT NO. 55-1947
	CLIENT : GOLD FIELDS EXP. PROJECT : CARBINE HILL AREA : GRAND PRIZE LINE : 20900N Z TX LOOP : 1		

023

EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

EM-37
FIXED

nanovolts per amp metre squared

5 cm

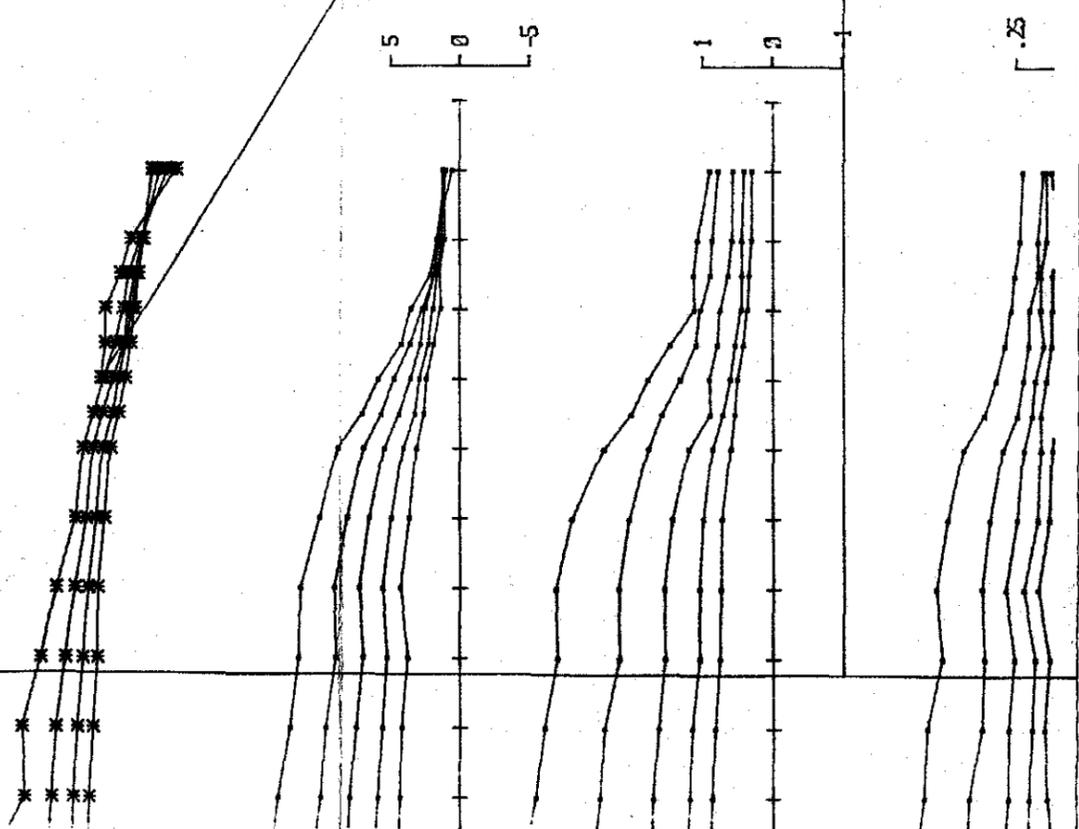
TX LOOP SIDES : 01400N 01120E
 : 00700N 00300E
TX LOOP SIZE : 700 m X 300 m
TX TURN OFF TIME : 360 microseconds.
FIRST GATE TIME : 53.5 microseconds.
CURRENT : 14.8 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : ST30
DATE : 21/11/1984



SURVEYED AND COMPILED BY
GEOTREX PTY. LTD.

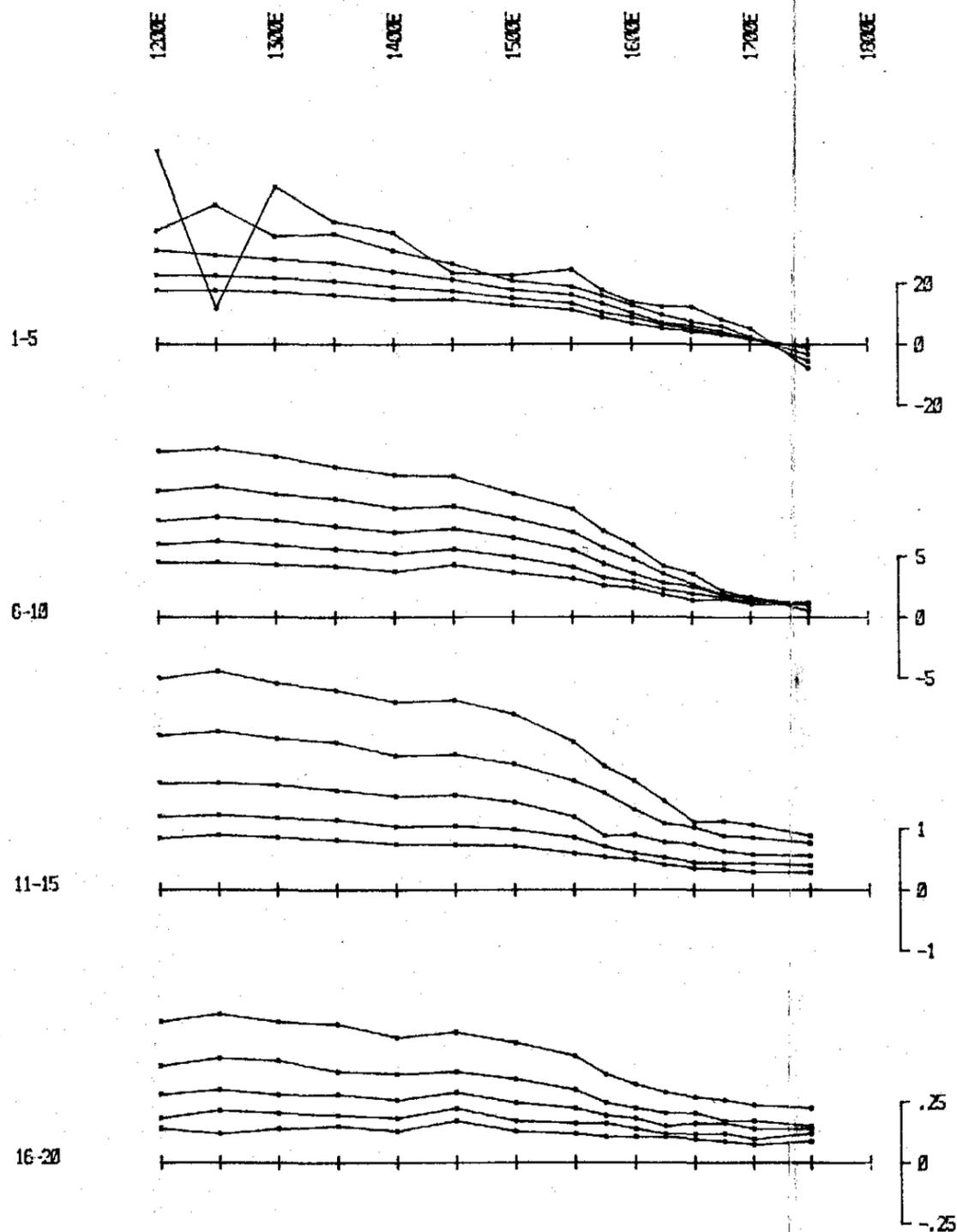
PROJECT NO.
55-1947

CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 00900N Z
TX LOOP : 1



420

VERTICAL COMPONENT B (Z)



EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

5 cm

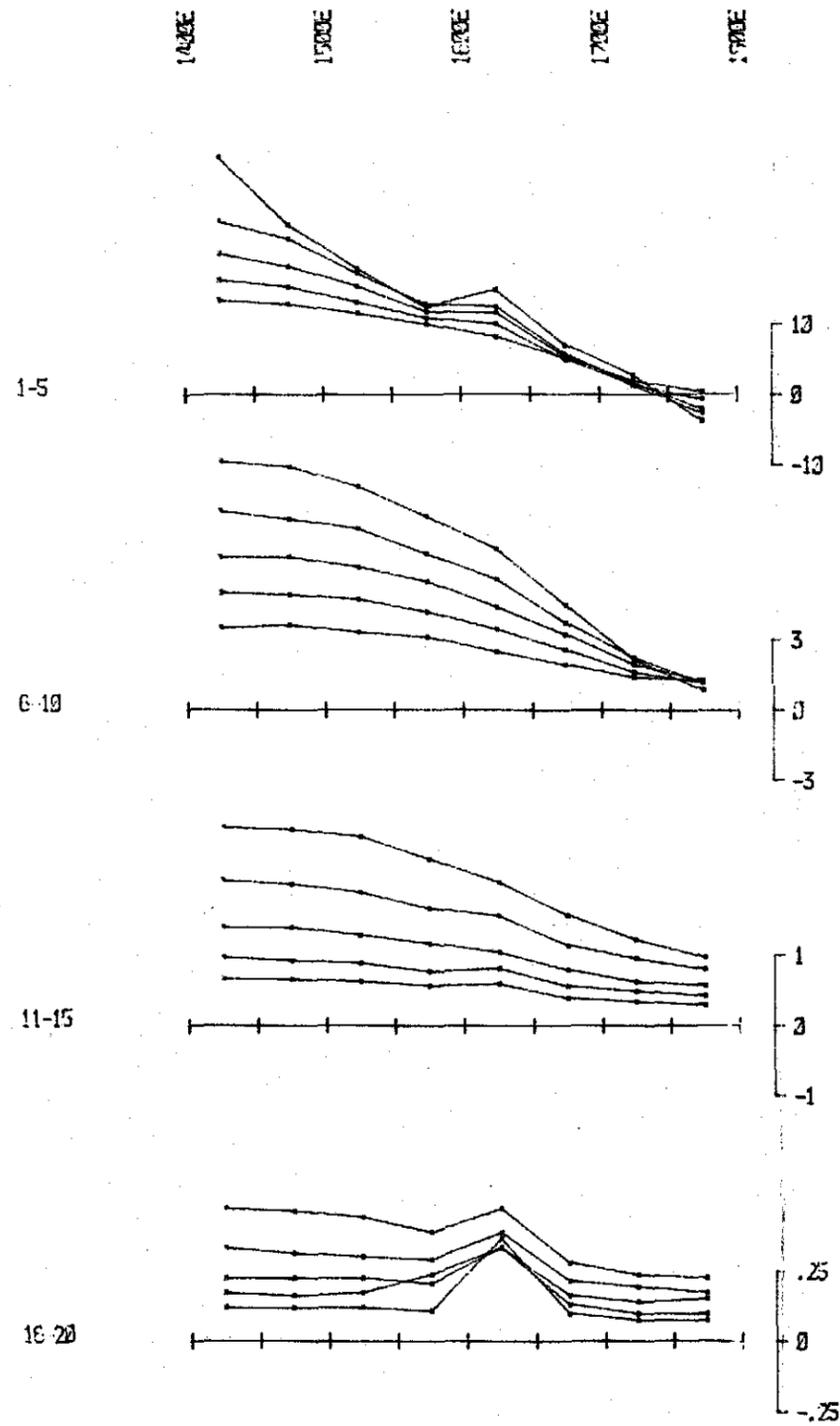
nanovolts per amp metre squared

TX LOOP SIDES : 01400N 01100E
 : 00700N 00300E
TX LOOP SIZE : 700 m X 320 m
TX TURN OFF TIME : 300 microseconds.
FIRST GATE TIME : 99.5 microseconds.
CURRENT : 14.0 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 21/11/1984

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 55-1947
	CLIENT : GOLD FIELDS EXP. PROJECT : CARBINE HILL AREA : GRAND PRIZE LINE : 01000N Z TX LOOP : 1	

025

VERTICAL COMPONENT B (Z)



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

5 cm

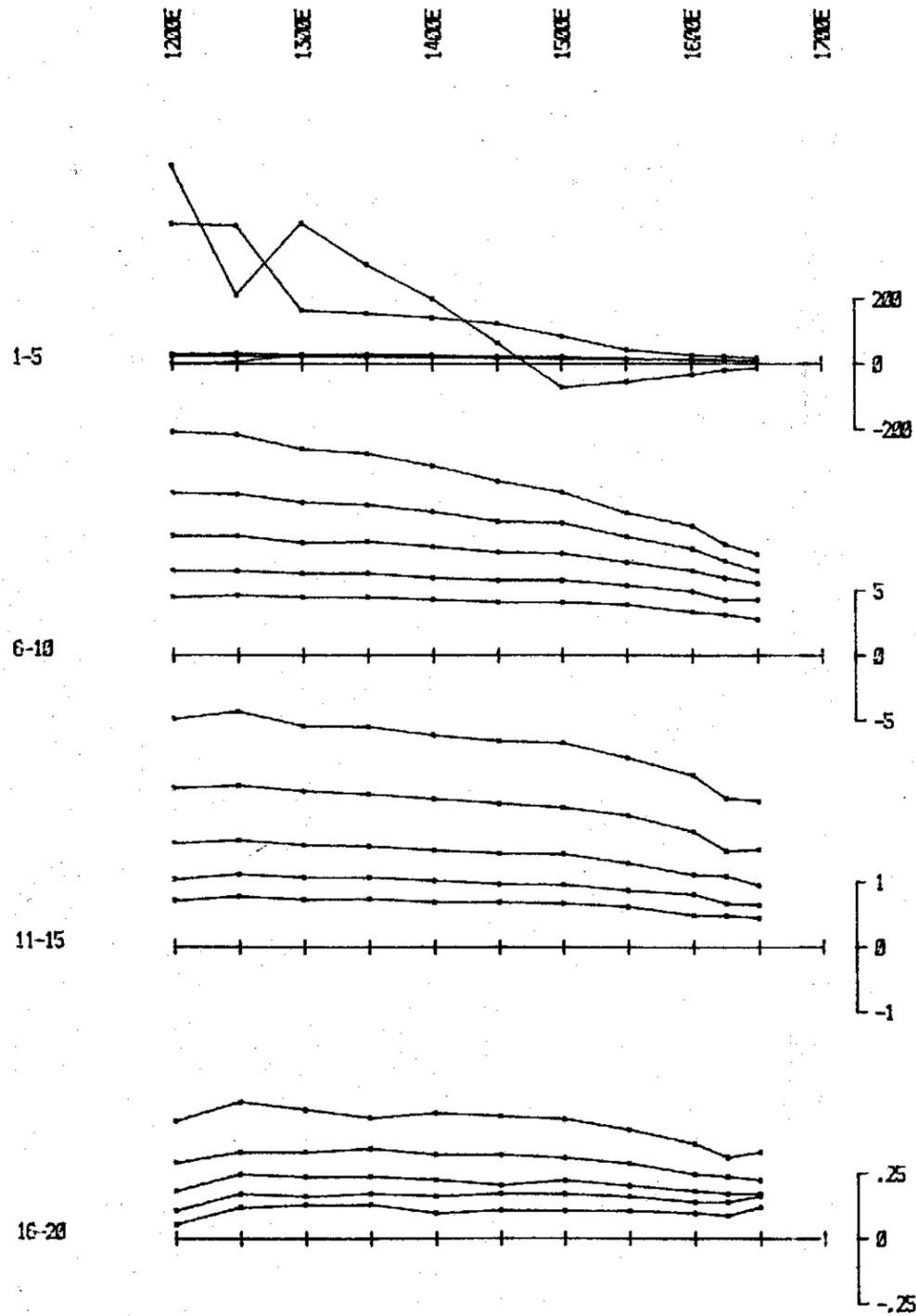
nanovolts per amp metre squared

TX LOOP SIDES : 01400N 01100E
 : 00700N 00300E
 TX LOOP SIZE : 700 m X 300 m
 TX TURN OFF TIME : 360 microseconds
 FIRST GATE TIME : 33.5 microseconds
 CURRENT : 14.0 amps
 FREQUENCY : 25 Hz.
 INTEGRATION TIME : 250 cycles
 SYNC MODE : CRYSTAL
 HORIZONTAL SCALE : 1:5000
 SURVEYED BY : GT3D
 DATE : 21/11/1994

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP. PROJECT : GARBINE HILL AREA : GRAND PRIZE LINE : 01100N Z TX LOOP : 1	

026

VERTICAL COMPONENT B (Z)



EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

5 cm

nanovolts per amp metre squared

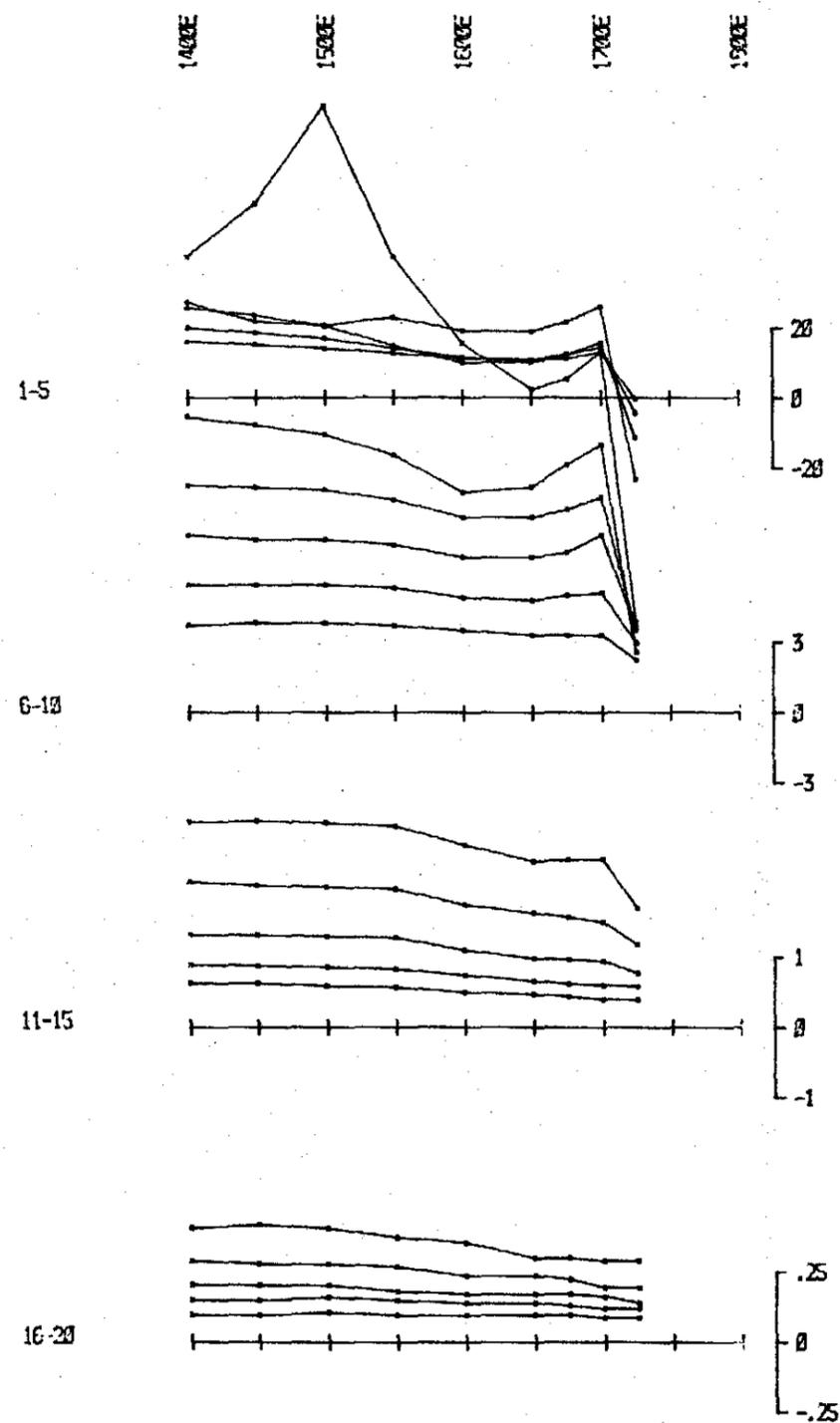
TX LOOP SIDES : 01400N 01100E
 : 00700N 00900E
TX LOOP SIZE : 700 m X 300 m
TX TURN OFF TIME : 360 microseconds.
FIRST GATE TIME : 99.5 microseconds.
CURRENT : 14.0 amp.
FREQUENCY : 25 Hz.
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:50000
SURVEYED BY : ST90
DATE : 20/11/1994

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP.	

PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 01200N Z
TX LOOP : 1

027

VERTICAL COMPONENT B (Z)



nanovolts per amp metre squared

EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

5 cm

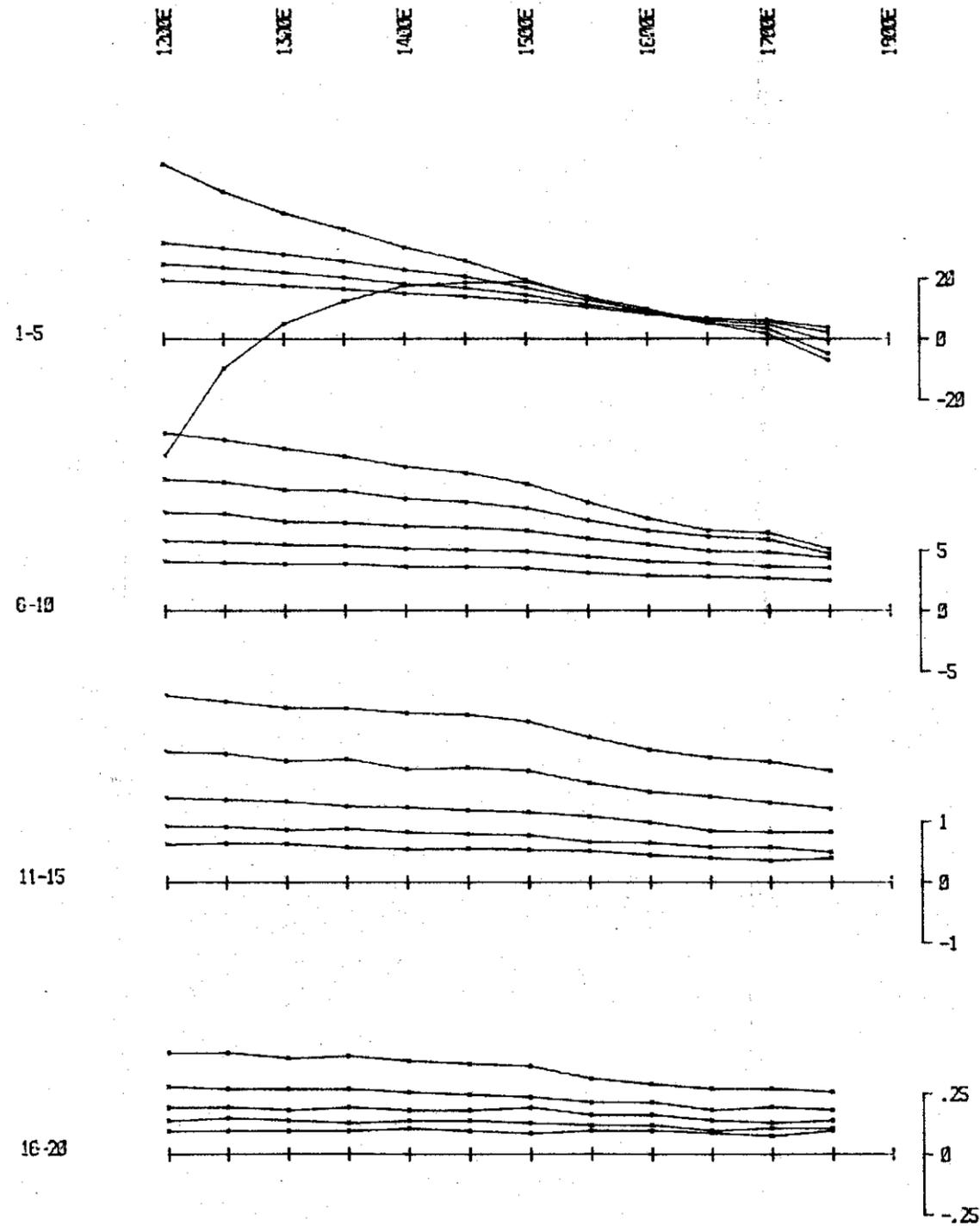
TX LOOP SIDES : 01400N 01100E
 : 00700N 00300E
 TX LOOP SIZE : 700 m X 300 m
 TX TURN OFF TIME : 300 microseconds.
 FIRST GATE TIME : 93.5 microseconds.
 CURRENT : 14.0 amps
 FREQUENCY : 25 Hz.
 INTEGRATION TIME : 250 cycles
 SYNC MODE : CRYSTAL
 HORIZONTAL SCALE : 1:5000
 SURVEYED BY : STSD
 DATE : 20/11/1994

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP. PROJECT : CARBINE HILL AREA : GRAND PRIZE LINE : 01300N Z TX LOOP : 1	

028

089030

VERTICAL COMPONENT \dot{B} (Z)



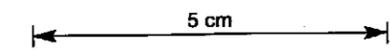
nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)



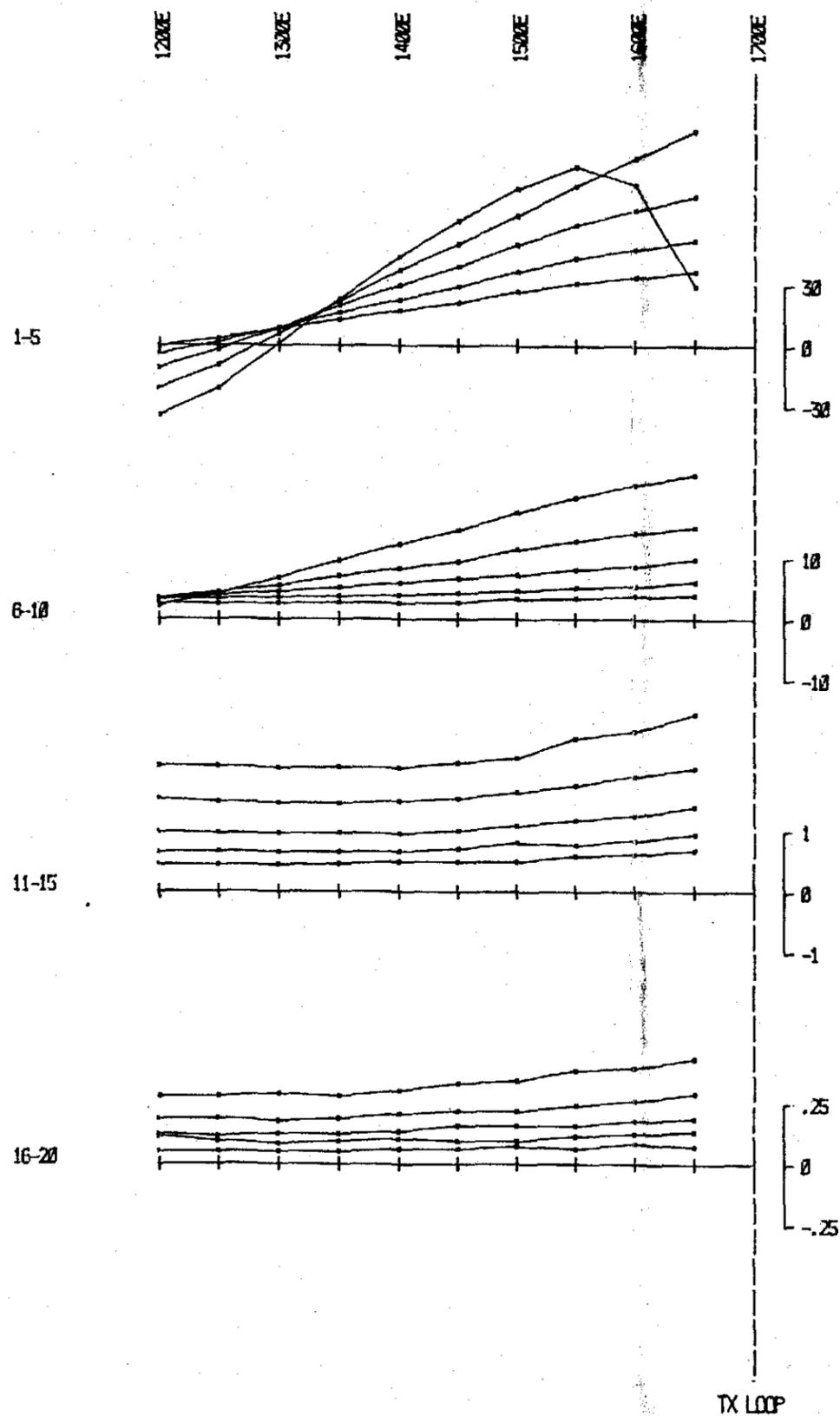
TX LOOP SIDES : 01400N 01100E
 : 00700N 00300E
 TX LOOP SIZE : 700 m X 300 m
 TX TURN OFF TIME : 360 microseconds.
 FIRST GATE TIME : 93.5 microseconds.
 CURRENT : 14.0 amp.
 FREQUENCY : 25 Hz.
 INTEGRATION TIME : 250 cycles
 SYNC MODE : CRYSTAL
 HORIZONTAL SCALE : 1:5000
 SURVEYED BY : ST30
 DATE : 20/11/1984

	SURVEYED AND COMPILED BY GESTREX PTY. LTD.	PROJECT NO. 55-1947
	CLIENT : GOLD FIELDS EXP. PROJECT : CARBINE HILL AREA : GRAND PRIZE LINE : 01400N Z TX LOOP : 1	

029

089031

VERTICAL COMPONENT B_z



EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)

nanovolts per amp metre squared

5 cm

TX LOOP SIDES : 02400N 02000E
 : 01900N 01700E
TX LOOP SIZE : 500 m X 300 m
TX TURN OFF TIME : 290 microseconds.
FIRST GATE TIME : 99.5 microseconds.
CURRENT : 14.5 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 25/11/1994



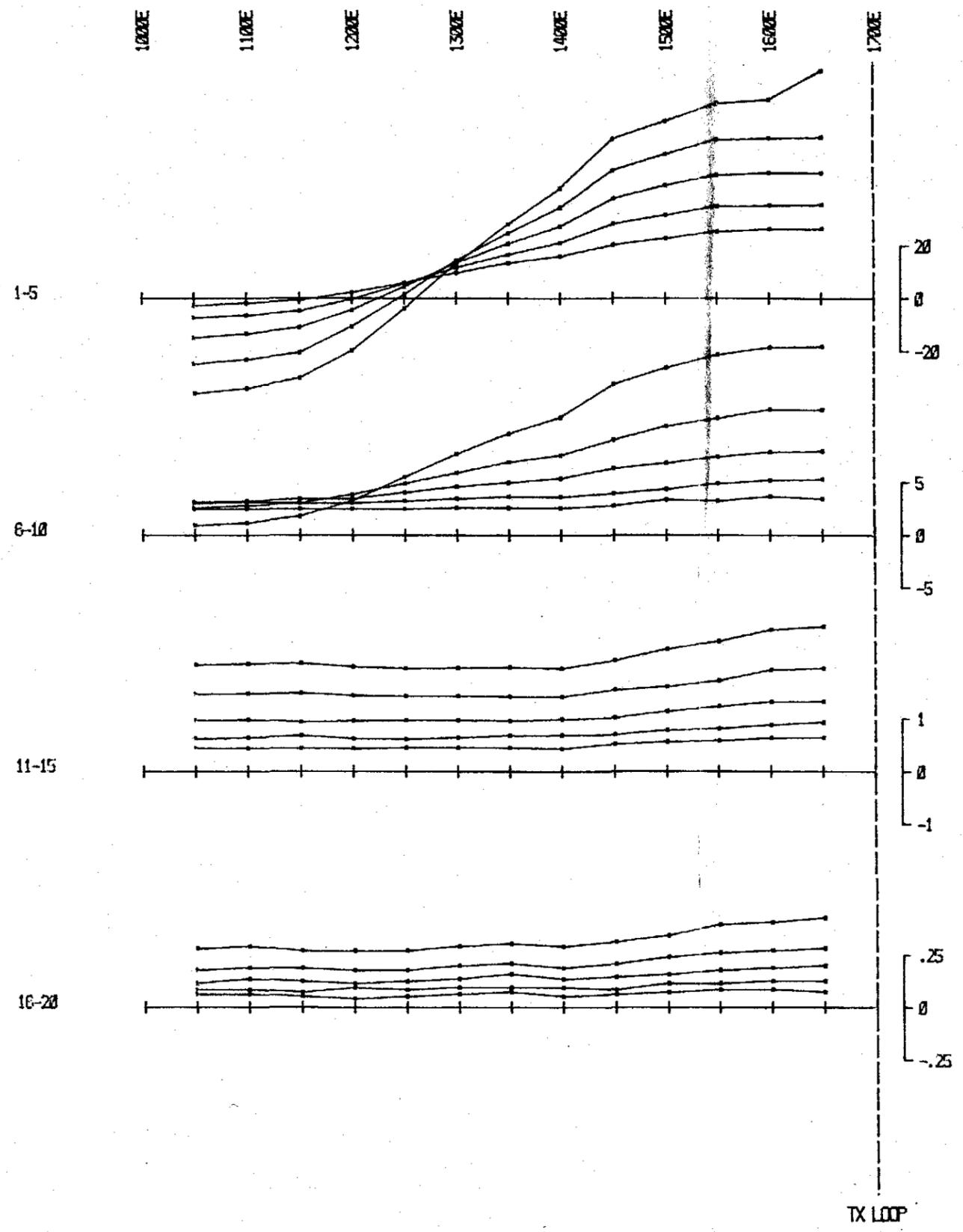
SURVEYED AND COMPILED BY
GEOTREX PTY. LTD.

PROJECT NO.
85-1847

CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 01900N Z
TX LOOP : 3

030

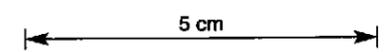
VERTICAL COMPONENT \dot{B} (Z)



nanovolts per amp metre squared

EM-37
FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (\dot{B})



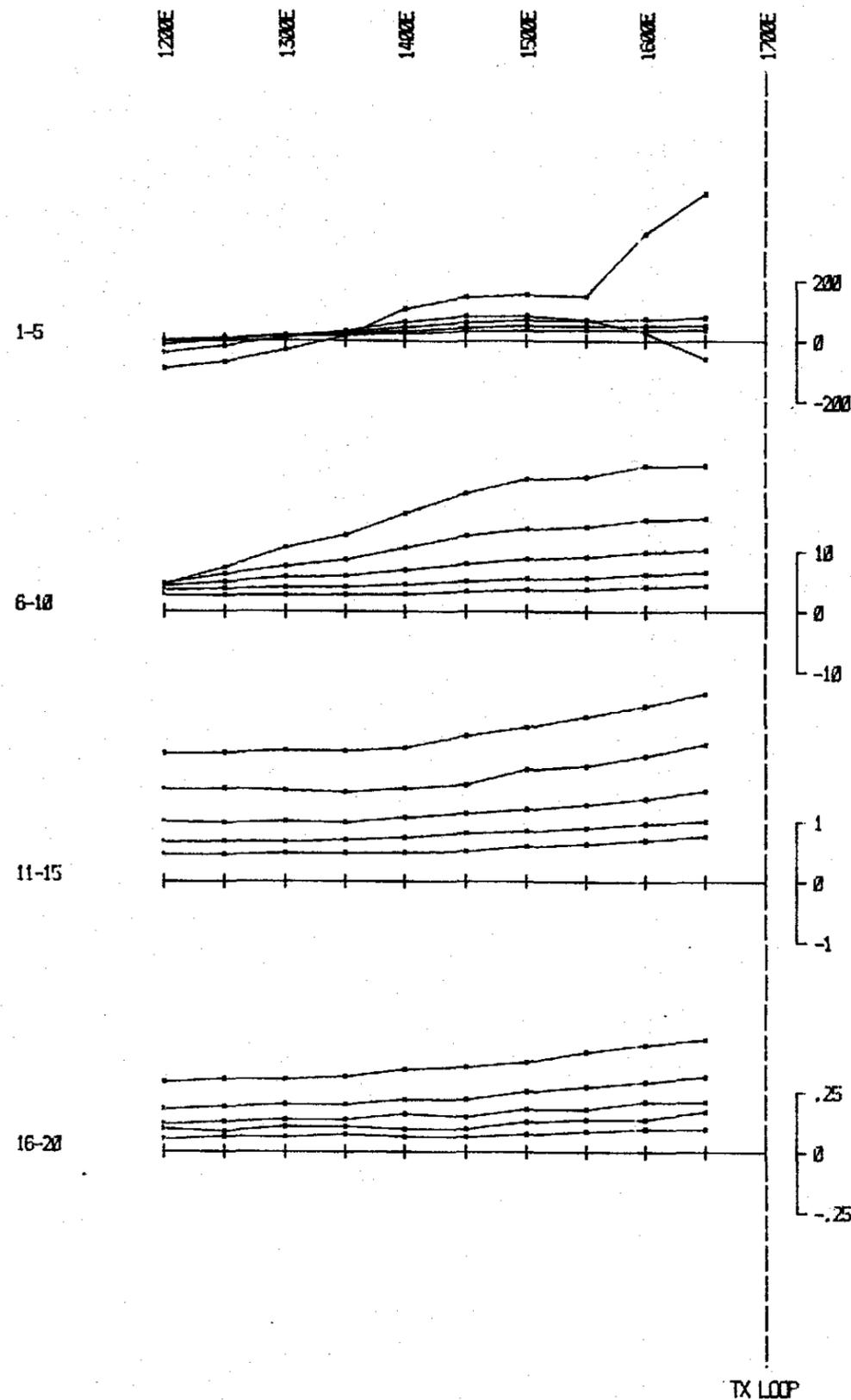
TX LOOP SIDES : 02400N 02000E
 : 01900N 01700E
TX LOOP SIZE : 500 m X 300 m
TX TURN OFF TIME : 290 microseconds.
FIRST GATE TIME : 99.5 microseconds.
CURRENT : 14.5 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 25/11/1994

	SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP.	

PROJECT	: CARBINE HILL
AREA	: GRAND PRIZE
LINE	: 02000N Z
TX LOOP	: 3

130

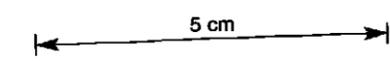
VERTICAL COMPONENT \dot{B}_z (Z)



nanovolts per amp metre squared

EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)



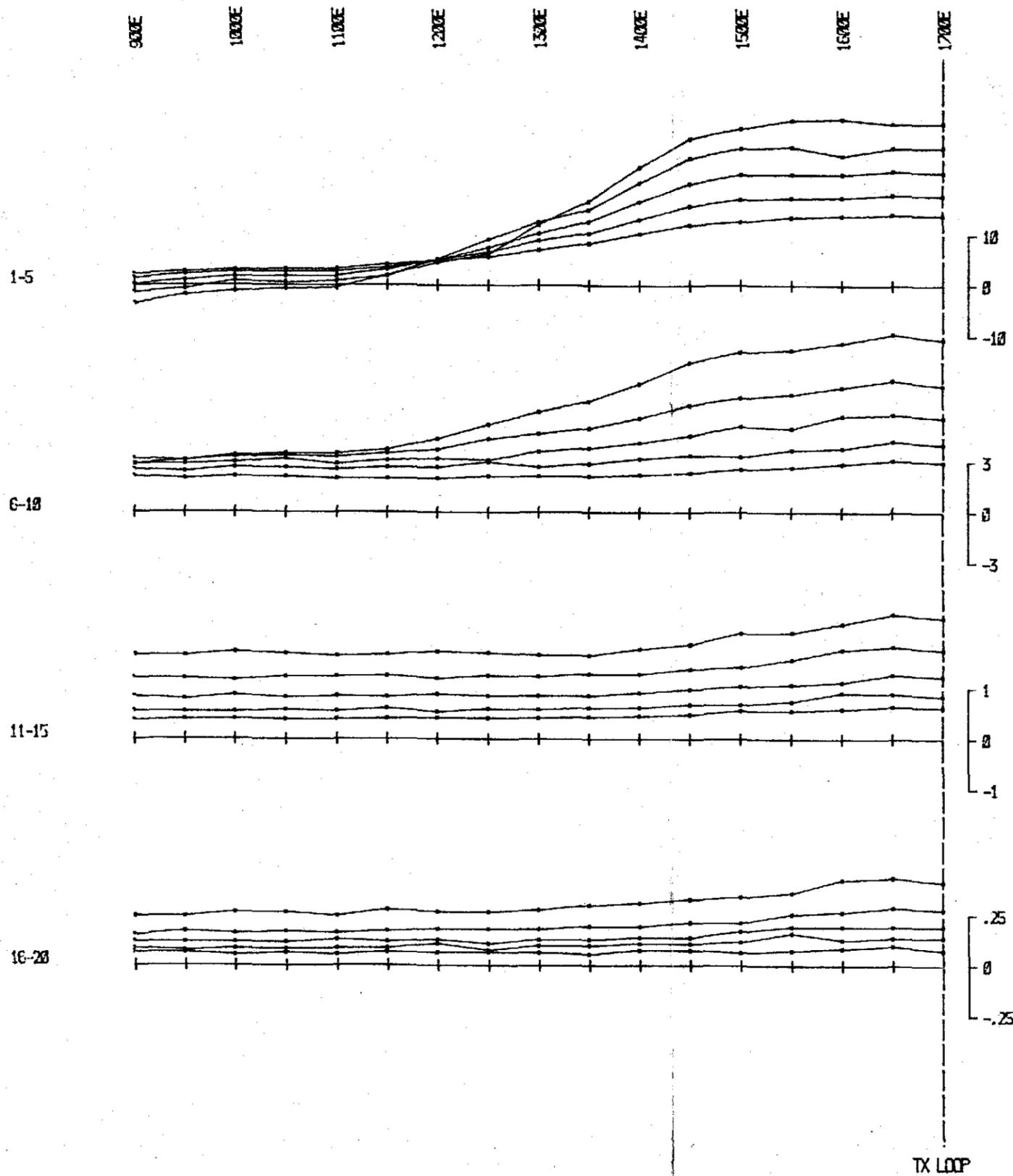
TX LOOP SIDES : 02400N 02000E
 : 01900N 01700E
TX LOOP SIZE : 500 m X 300 m
TX TURN OFF TIME : 290 microseconds.
FIRST GATE TIME : 88.5 microseconds.
CURRENT : 14.5 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 25/11/1994

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 85-1847
	CLIENT : GOLD FIELDS EXP.	

PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 02100N Z
TX LOOP : 3

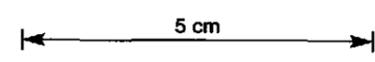
032

VERTICAL COMPONENT \dot{B}_z (Z)



EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)



nanovolts per amp metre squared

TX LOOP SIDES : 02400N 02000E
 : 01300N 01700E
TX LOOP SIZE : 500 m X 300 m
TX TURN OFF TIME : 200 microseconds
FIRST GATE TIME : 90.5 microseconds
CURRENT : 14.2 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 26/11/1994

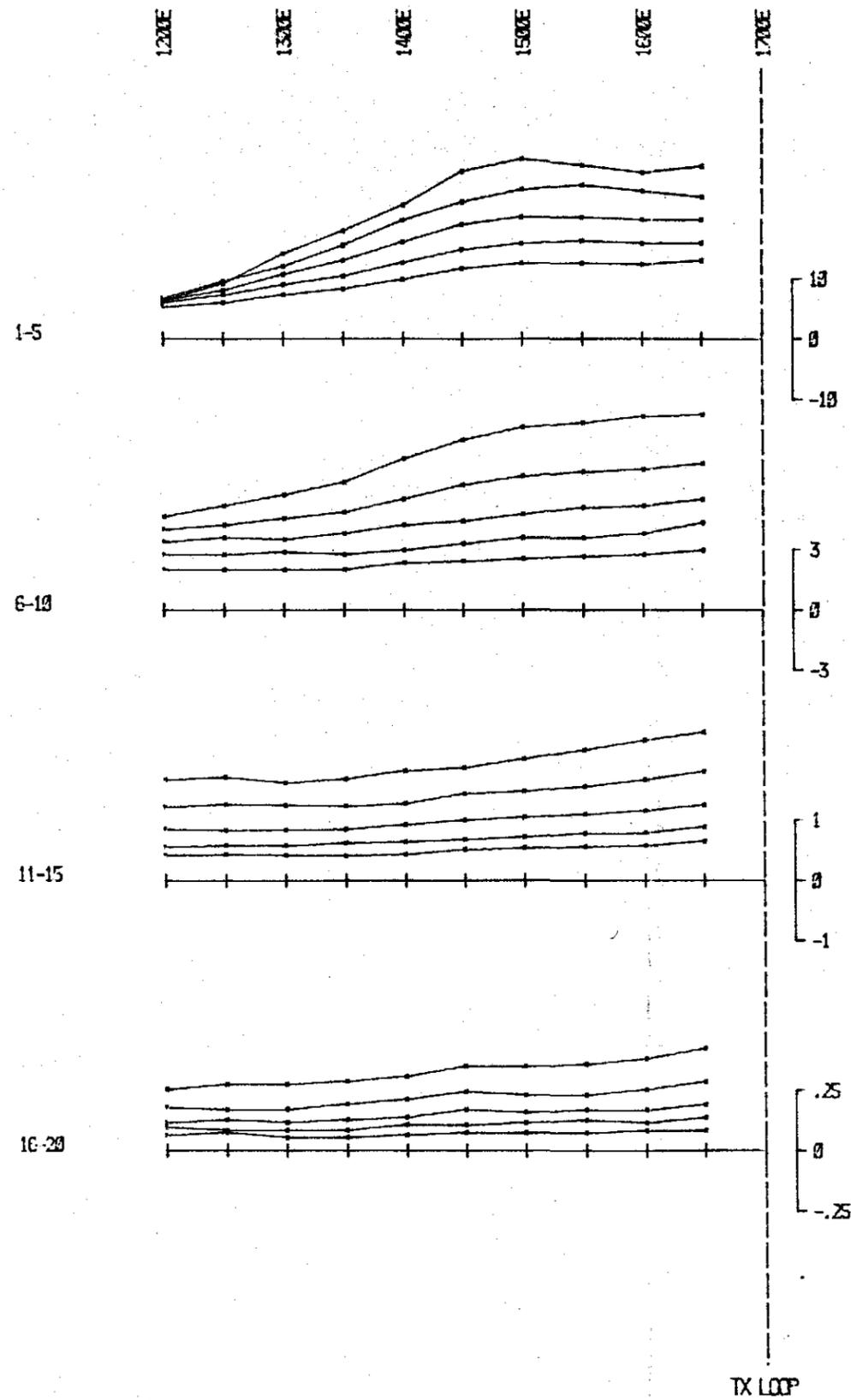
	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP.	

PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 02200N Z
TX LOOP : 3

880

089035

VERTICAL COMPONENT B (Z)



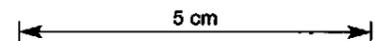
EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

nanovolts per amp metre squared



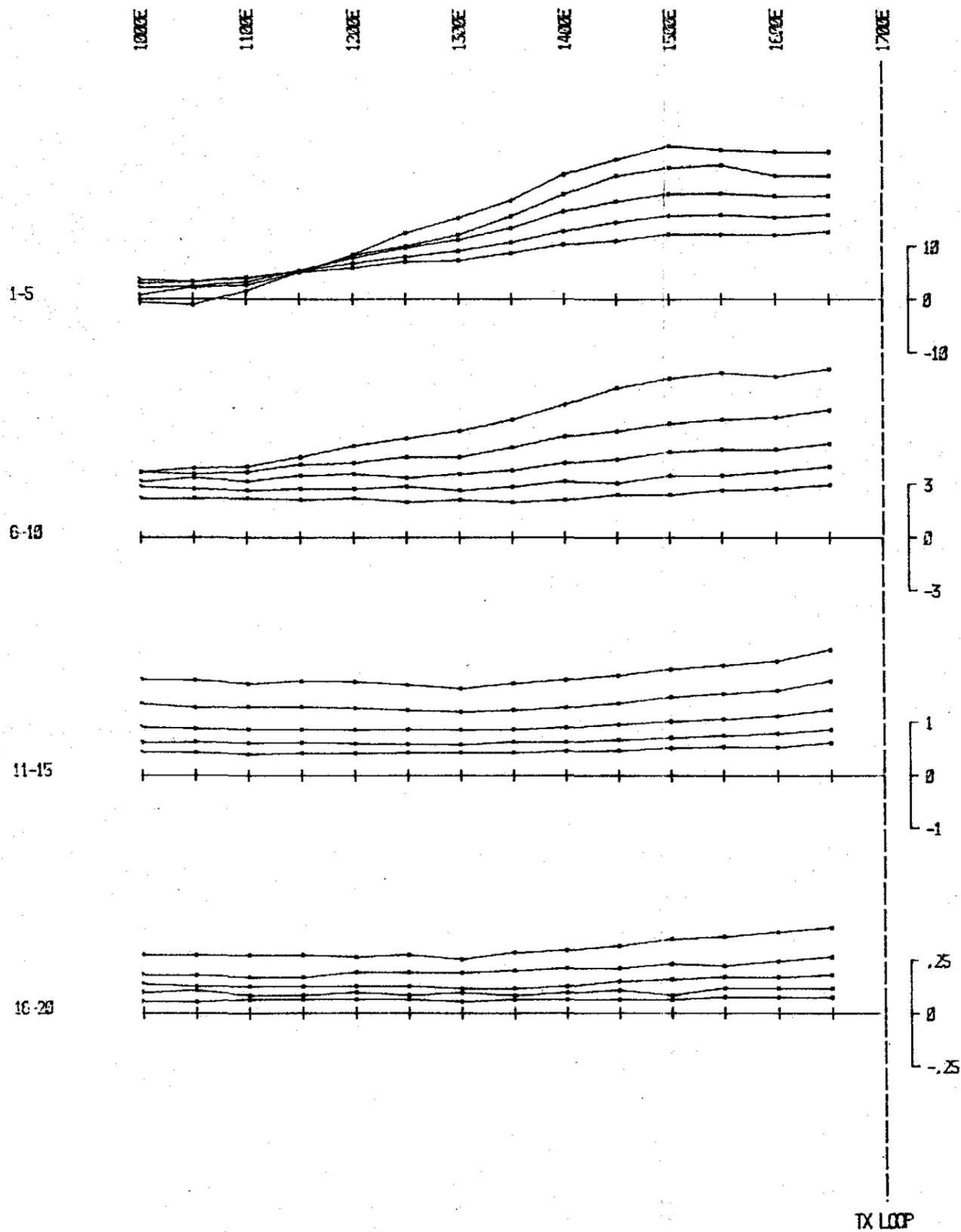
TX LOOP SIDES : 02400N 02000E
 : 01900N 01700E
 TX LOOP SIZE : 500 m X 300 m
 TX TURN OFF TIME : 200 microseconds.
 FIRST GATE TIME : 99.5 microseconds.
 CURRENT : 14.2 amp.
 FREQUENCY : 25 Hz.
 INTEGRATION TIME : 256 cycles
 SYNC MODE : CRYSTAL
 HORIZONTAL SCALE : 1:5000
 SURVEYED BY : STSD
 DATE : 26/11/1994

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP.	

PROJECT : CARBINE HILL
 AREA : GRAND PRIZE
 LINE : 02300N Z
 TX LOOP : 3

034

VERTICAL COMPONENT \dot{B} (Z)



EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)

5 cm

nanovolts per amp metre squared

TX LOOP SIDES : 02400N 02000E
 : 01900N 01700E
TX LOOP SIZE : 500 m X 300 m
TX TURN OFF TIME : 200 microseconds
FIRST GATE TIME : 99.5 microseconds
CURRENT : 14.2 amp
FREQUENCY : 25 Hz.
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : ST30
DATE : 26/11/1994



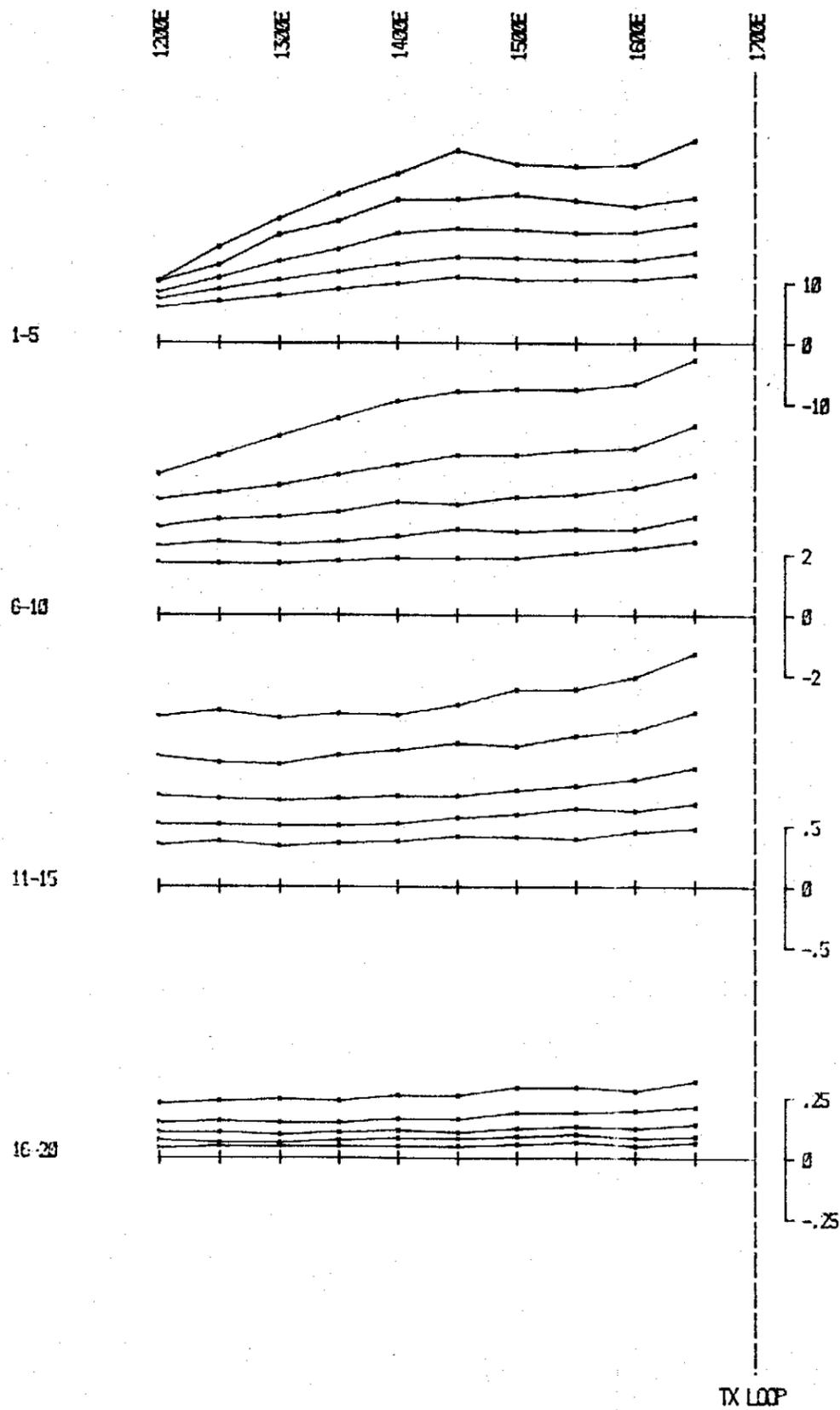
SURVEYED AND COMPILED BY
GEOTEPREX PTY. LTD.

PROJECT NO.
95-1947

CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 02400N Z
TX LOOP : 3

0350

VERTICAL COMPONENT B (Z)



EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

5 cm

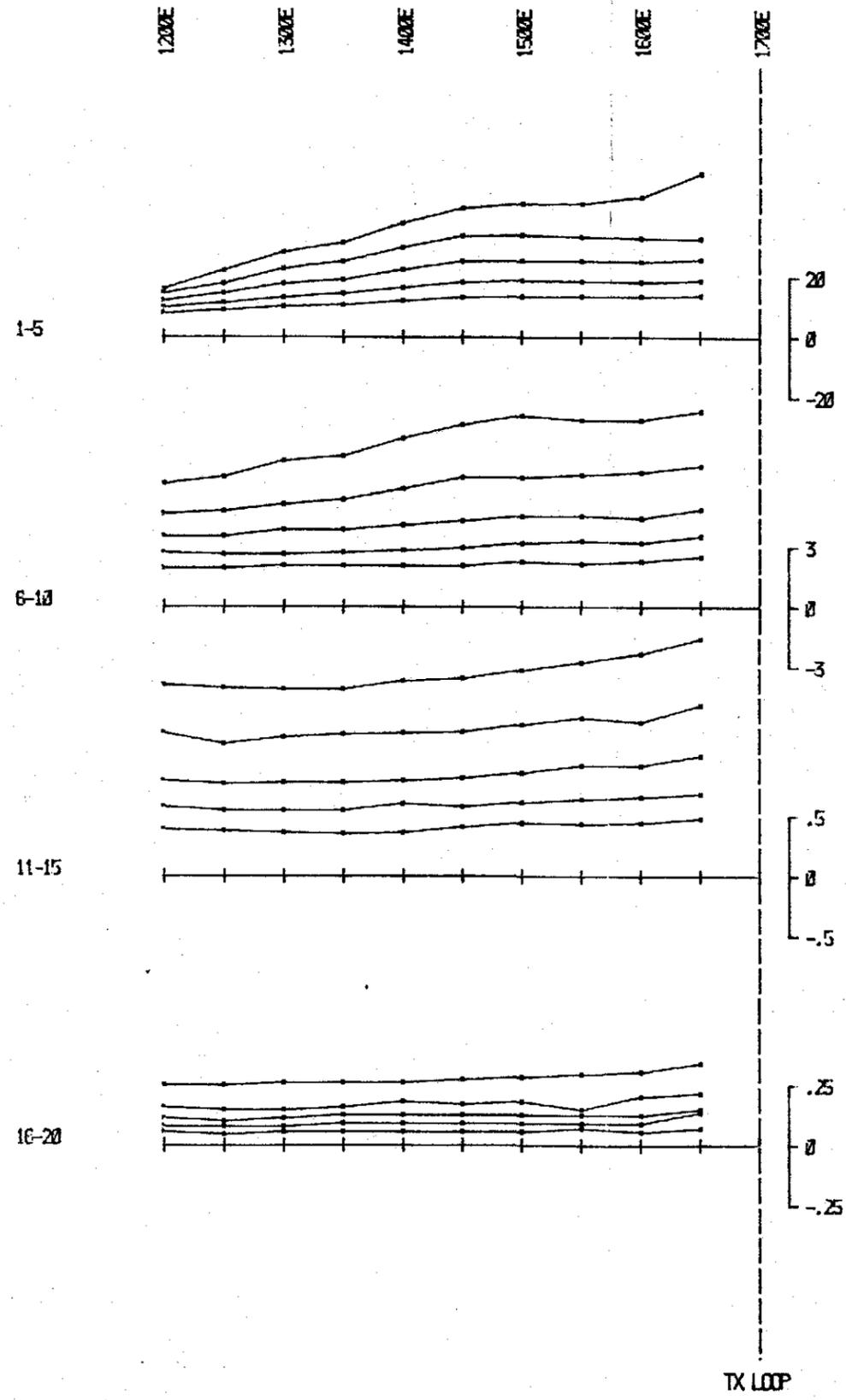
nanovolts per amp metre squared

TX LOOP SIDES : 02300N 02000E
 : 02400N 01700E
 TX LOOP SIZE : 400 m X 300 m
 TX TURN OFF TIME : 300 microseconds
 FIRST GATE TIME : 88.5 microseconds
 CURRENT : 19.5 amps
 FREQUENCY : 25 Hz.
 INTEGRATION TIME : 256 cycles
 SYNC MODE : CRYSTAL
 HORIZONTAL SCALE : 1:5000
 SURVEYED BY : STSD
 DATE : 27/11/1994

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP. PROJECT : CARBINE HILL AREA : GRAND PRIZE LINE : 02300N Z TX LOOP : 4	

930

VERTICAL COMPONENT B (Z)

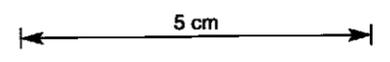


EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)

nanovolts per amp metre squared

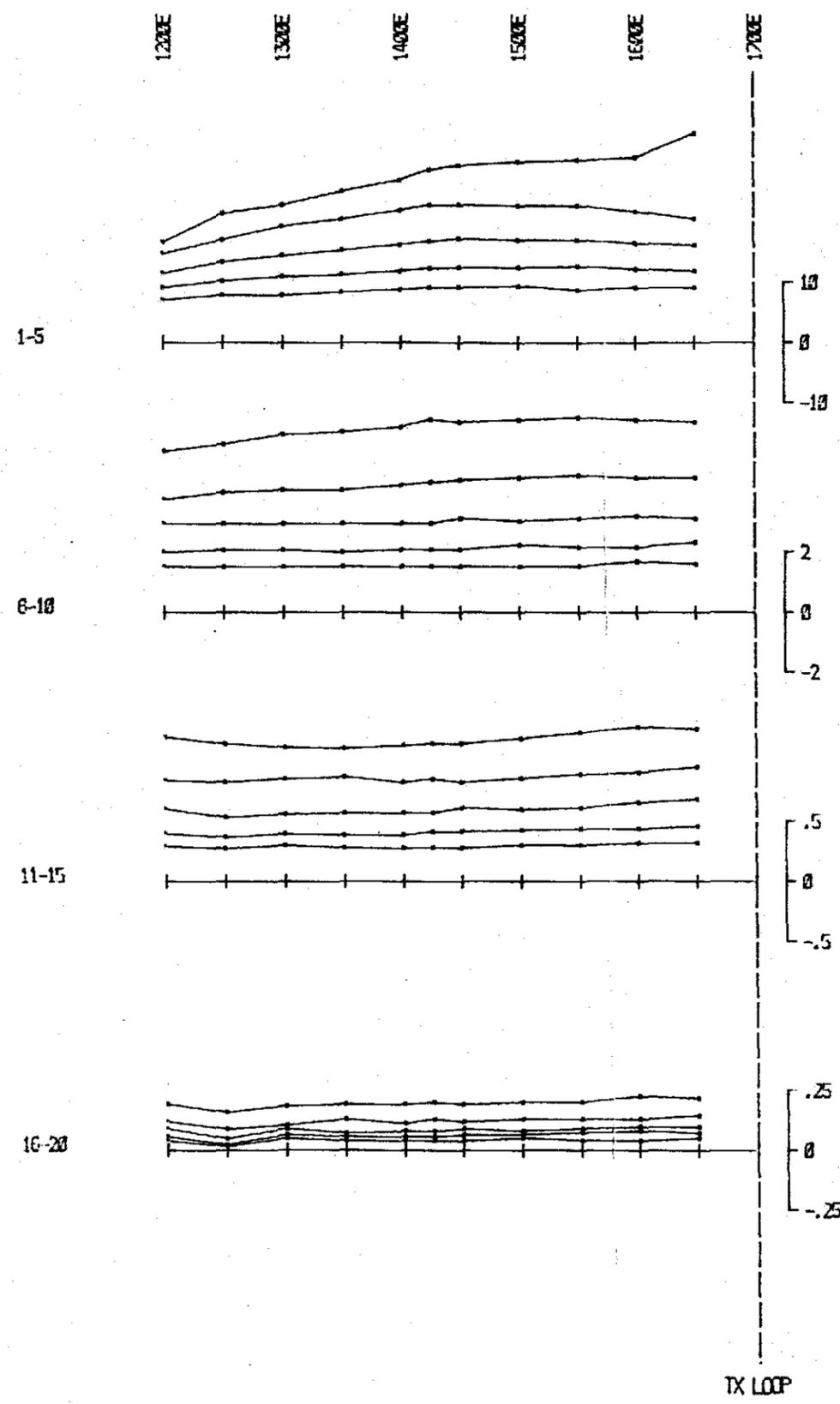


TX LOOP SIDES : 02300N 02000E
 : 02400N 01700E
TX LOOP SIZE : 400 m X 300 m
TX TURN OFF TIME : 240 microseconds
FIRST GATE TIME : 89.5 microseconds
CURRENT : 13.2 amp
FREQUENCY : 25 Hz
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 29/11/1994

	SURVEYED AND COMPILED BY GEOTREX P.Y. LTD.	PROJECT NO. 85-1947
	CLIENT : GOLD FIELDS EXP. PROJECT : CABINE HILL AREA : GRAND PRIZE LINE : 02600N Z TX LOOP : 4	

037

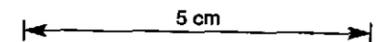
VERTICAL COMPONENT \dot{B} (Z)



EM-37
FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)

nanovolts per amp metre squared



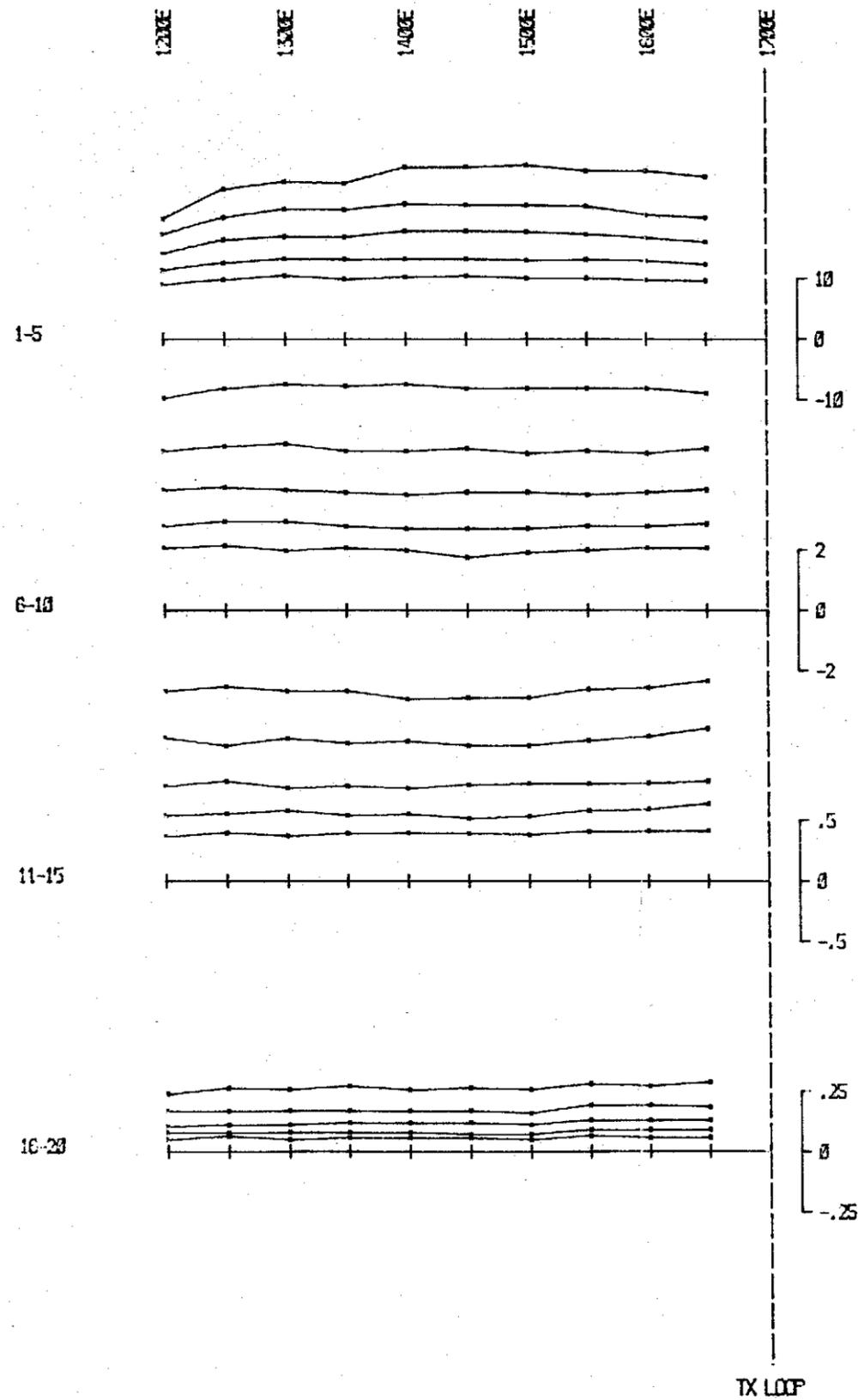
TX LOOP SIDES : 02500N 02000E
 : 02400N 01700E
TX LOOP SIZE : 400 m X 300 m
TX TURN OFF TIME : 300 microseconds.
FIRST GATE TIME : 93.5 microseconds.
CURRENT : 19.9 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:50000
SURVEYED BY : STSD
DATE : 29/11/1994

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP.	

PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 02700N Z
TX LOOP : 4

890

VERTICAL COMPONENT \dot{B}_z (Z)



nanovolts per amp metre squared

EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)

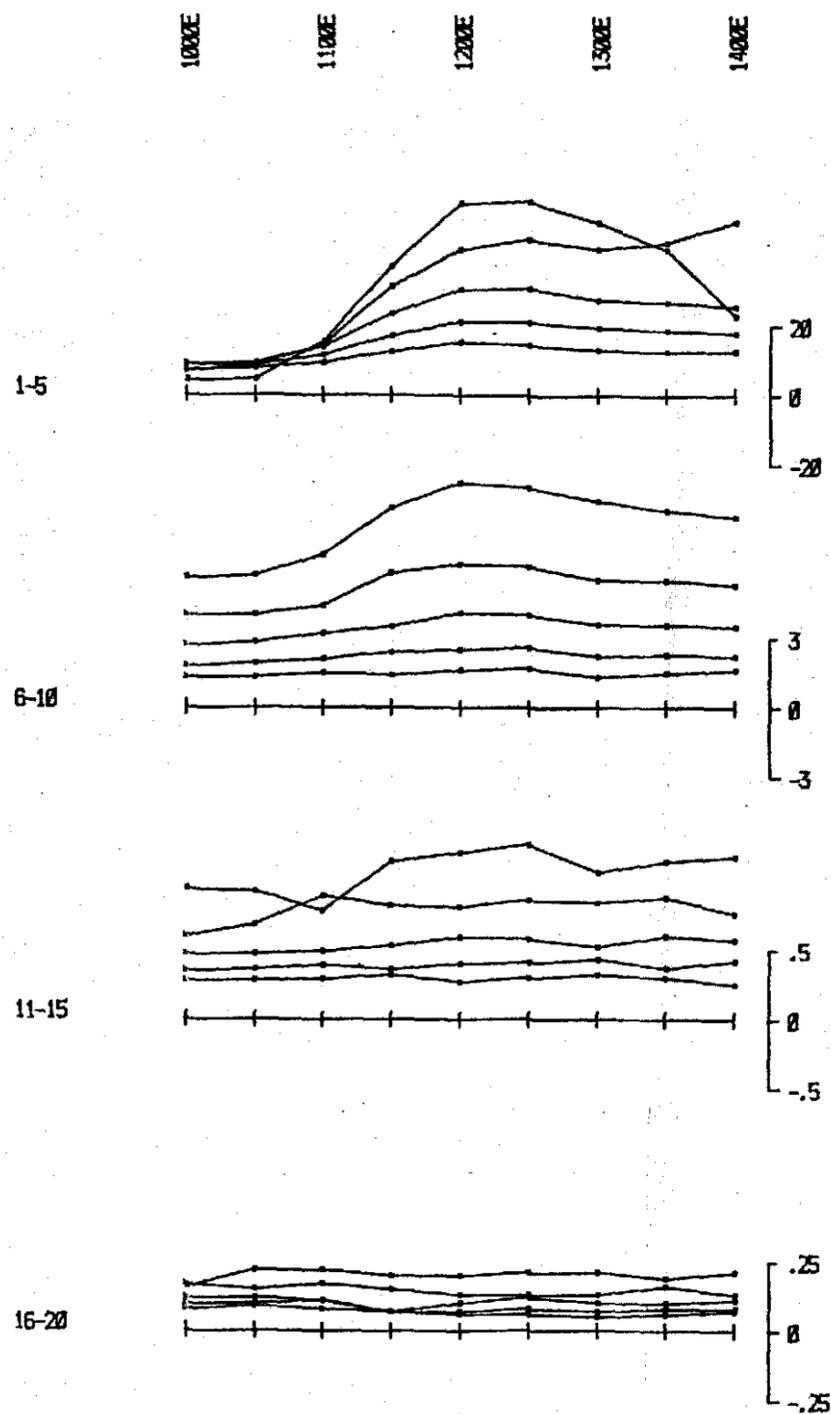
5 cm

TX LOOP SIDES : 02300N 02000E
: 02400N 01700E
TX LOOP SIZE : 400 m X 300 m
TX TURN OFF TIME : 300 microseconds
FIRST GATE TIME : 99.5 microseconds
CURRENT : 19.8 amp
FREQUENCY : 25 Hz
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 28/11/1984

	SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP. PROJECT : CARBINE HILL AREA : GRAND PRIZE LINE : 02300N Z TX LOOP : A	

630

VERTICAL COMPONENT \dot{B} (Z)



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

nanovolts per amp metre squared

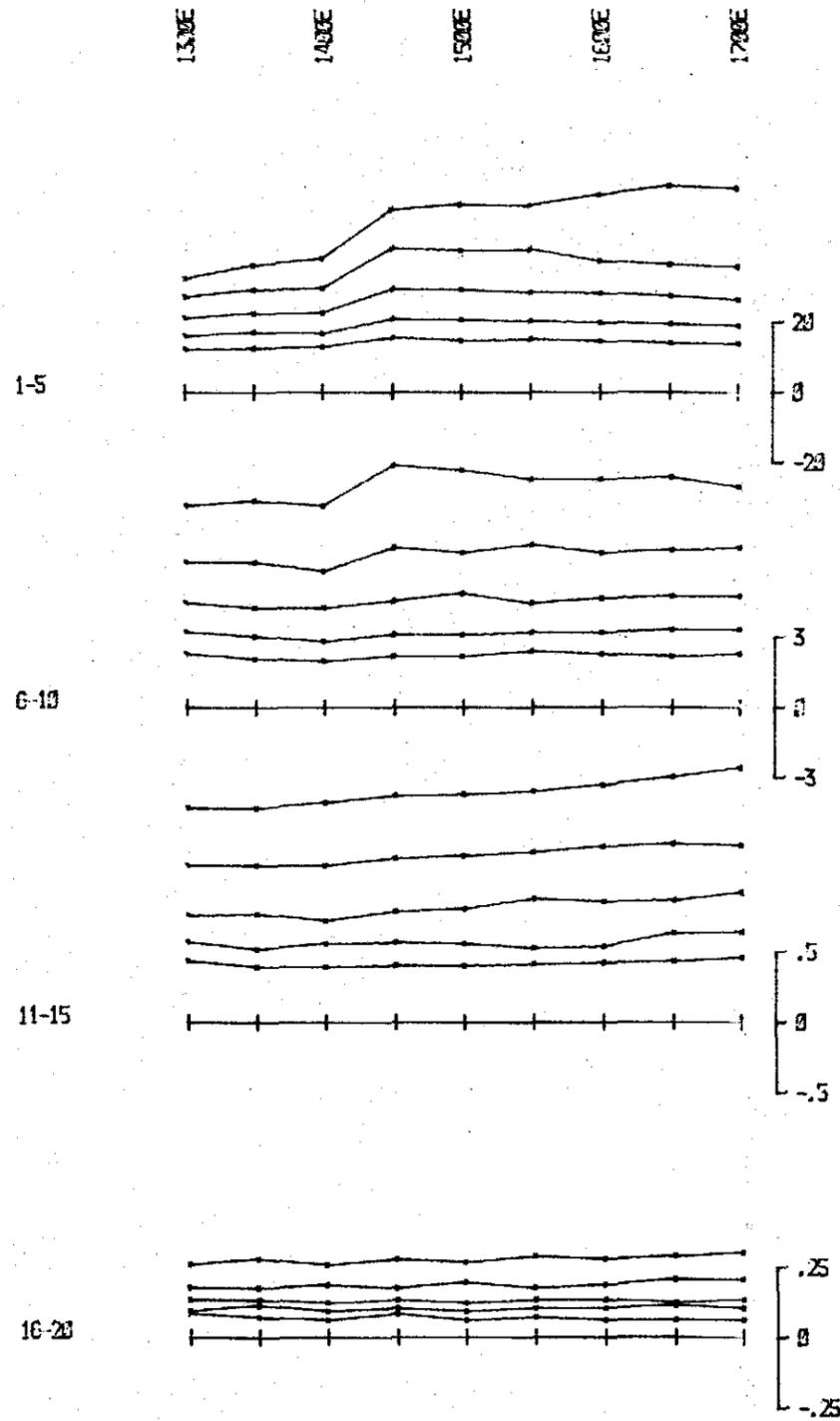
5 cm

TX LOOP SIDES : 03600N 01925E
 : 03200N 01625E
 TX LOOP SIZE : 400 m X 300 m
 TX TURN OFF TIME : 250 microsecs.
 FIRST GATE TIME : 88.5 microsecs.
 CURRENT : 15.0 amps
 FREQUENCY : 25 Hz.
 INTEGRATION TIME : 256 cycles
 SYNC MODE : CRYSTAL
 HORIZONTAL SCALE : 1:5000
 SURVEYED BY : STSD
 DATE : 29/11/1984

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 85-1847
	CLIENT : GOLD FIELDS EXP. PROJECT : CARBINE HILL AREA : GRAND PRIZE LINE : 03200N Z TX LOOP : 5	

040

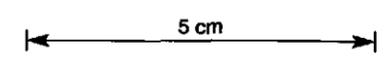
VERTICAL COMPONENT \dot{B} (Z)



nanovolts per amp metre squared

EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)



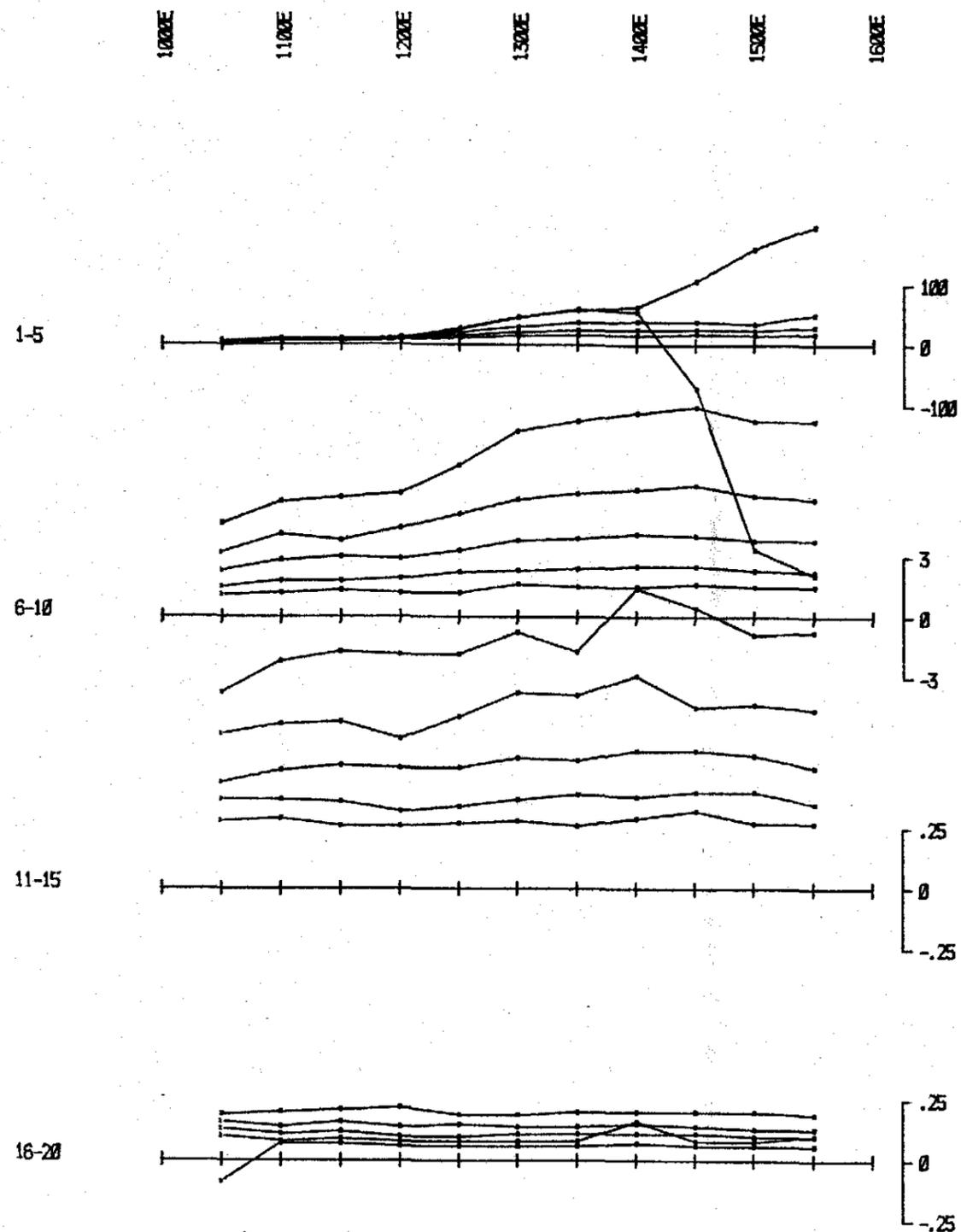
TX LOOP SIDES : J3000N 02125E
 : J3200N 01925E
TX LOOP SIZE : 400 m X 300 m
TX TURN OFF TIME : 273 microseconds
FIRST GATE TIME : 88.5 microseconds
CURRENT : 14.5 amp
FREQUENCY : 25 Hz
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : SD
DATE : 02/12/1984

	SURVEYED AND COMPILED BY GEOTREX PVT. LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP.	

PROJECT	: CARBINE HILL
AREA	: GRAND PRIZE
LINE	: J3200N E
TX LOOP	: E

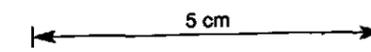
170

VERTICAL COMPONENT B (Z)



EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)



nanovolts per amp metre squared

TX LOOP SIDES : 03600N 01925E
 : 03200N 01625E
TX LOOP SIZE : 400 m X 300 m
TX TURN OFF TIME : 260 microseconds.
FIRST GATE TIME : 88.5 microseconds.
CURRENT : 15.0 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 29/11/1984



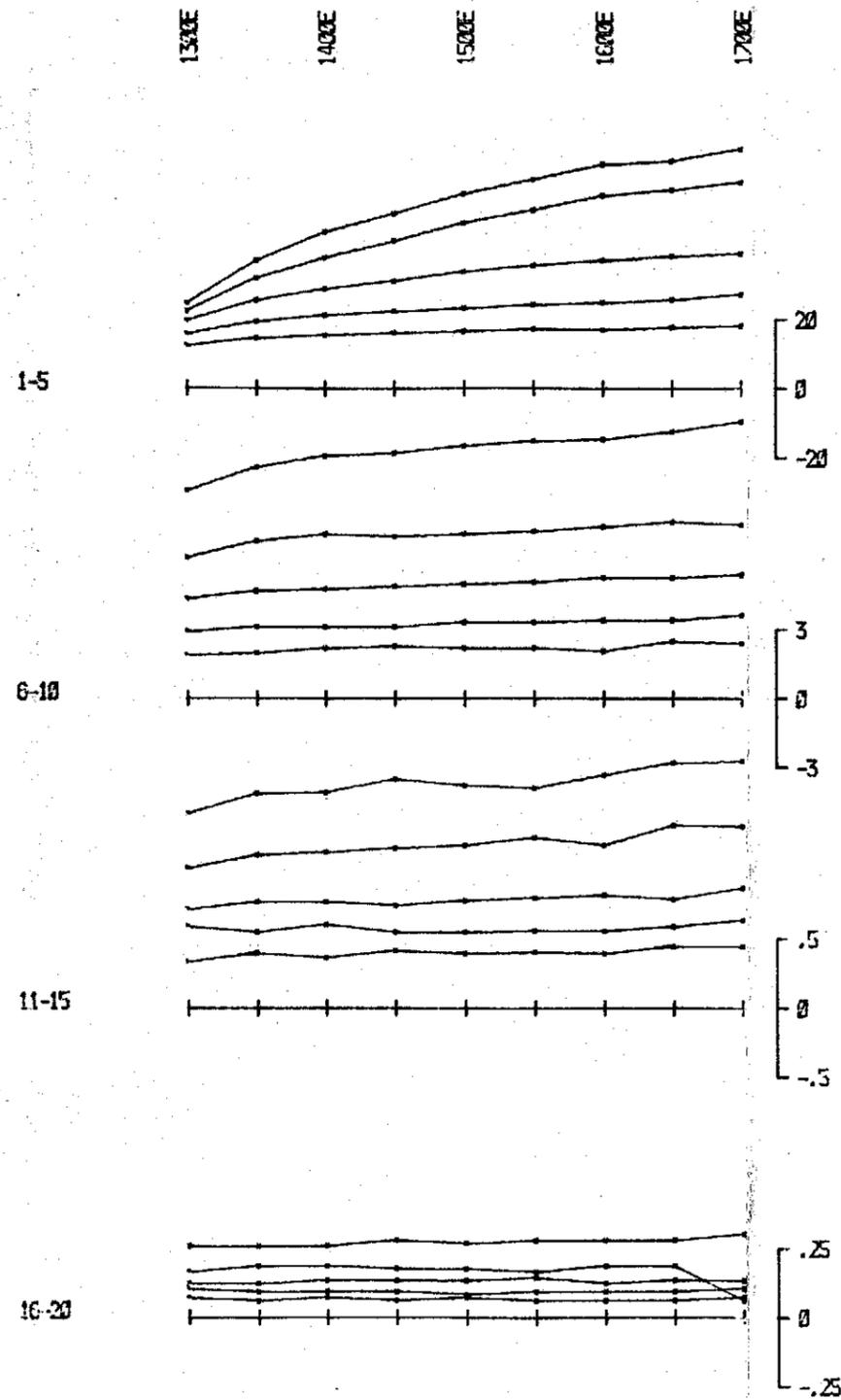
SURVEYED AND COMPILED BY
GEOTREX PTY. LTD.

PROJECT NO.
85-1847

CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 03300N Z
TX LOOP : 5

042

VERTICAL COMPONENT \bar{B} (Z)



microvolts per ampere-metre-squared

EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

5 cm

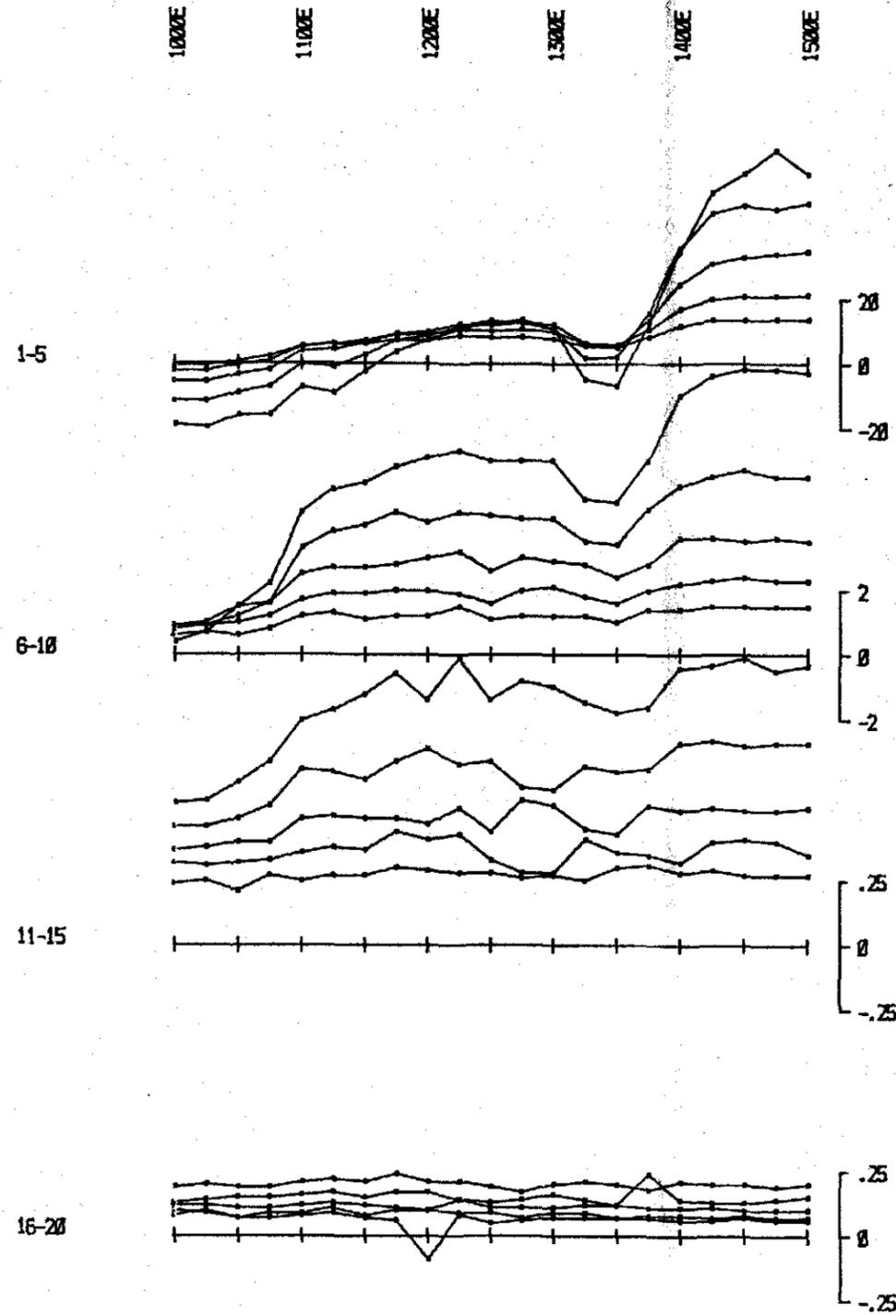
TX LOOP SIDES : 03600N 02125E
 : 03200N 01925E
TX LOOP SIZE : 400 m X 300 m
TX TURN OFF TIME : 250 microseconds.
FIRST GATE TIME : 93.5 microseconds.
CURRENT : 14.5 amp.
FREQUENCY : 25 Hz.
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 30/11/1984

	SURVEYED AND COMPILED BY GEOTREX P. Y., LTD.	PROJECT NO. 95-1947
	CLIENT : GOLD FIELDS EXP. PROJECT : CABINE HILL AREA : GRAND PRIZE LINE : 03300N Z TX LOOP : 6	

049

089045

VERTICAL COMPONENT B (Z)



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

nanovolts per amp metre squared

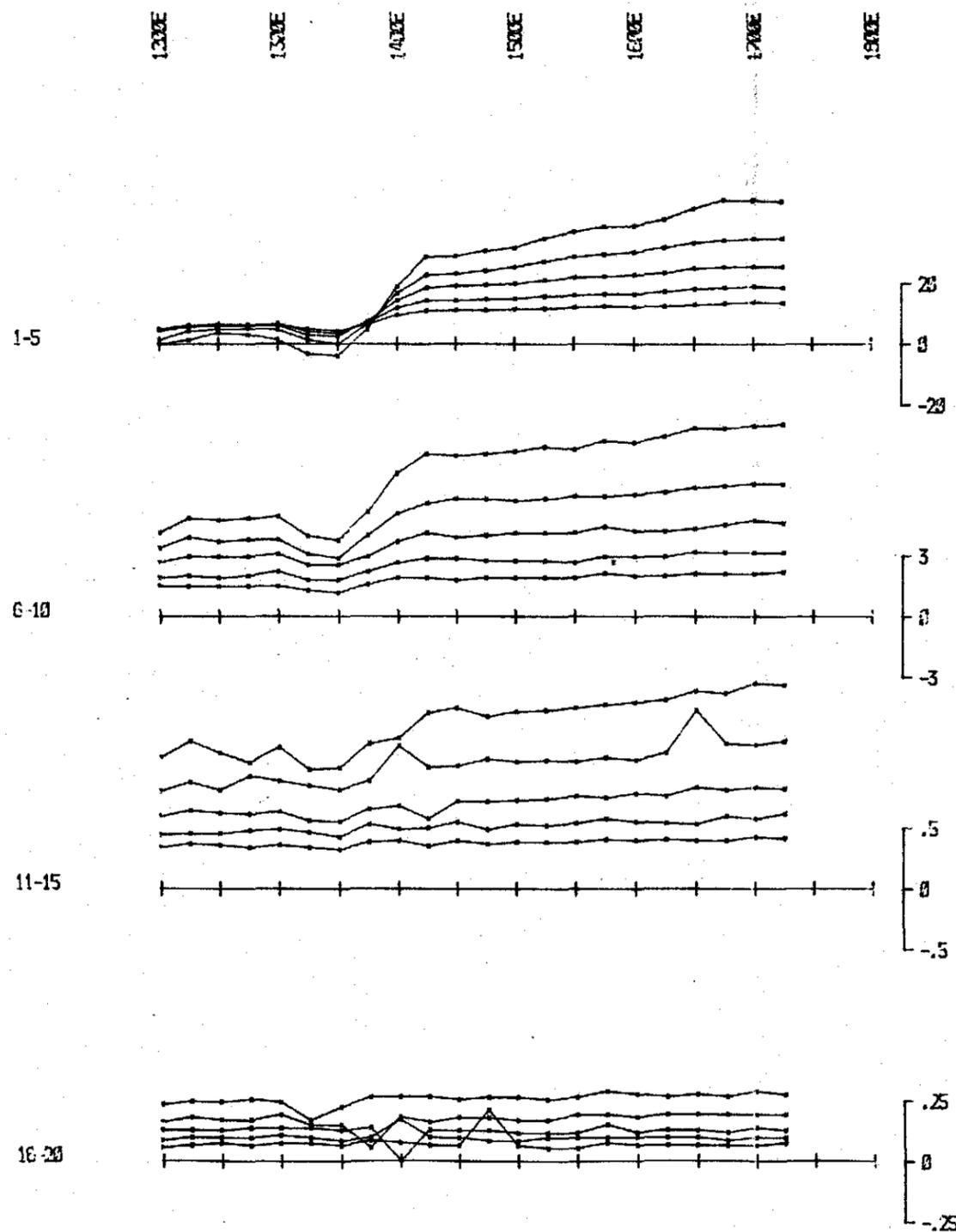
5 cm

TX LOOP SIDES : 03600N 01925E
 : 03200N 01625E
 TX LOOP SIZE : 400 m X 300 m
 TX TURN OFF TIME : 260 microsecs.
 FIRST GATE TIME : 88.5 microsecs.
 CURRENT : 15.0 amps
 FREQUENCY : 25 Hz.
 INTEGRATION TIME : 256 cycles
 SYNC MODE : CRYSTAL
 HORIZONTAL SCALE : 1:5000
 SURVEYED BY : STSD
 DATE : 29/11/1984

	SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.	PROJECT NO. 85-1847
	CLIENT : GOLD FIELDS EXP. PROJECT : CARBINE HILL AREA : GRAND PRIZE LINE : 03400N Z TX LOOP : 5	

044

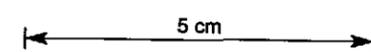
VERTICAL COMPONENT B (Z)



nanoVolts per amp metre squared

EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)

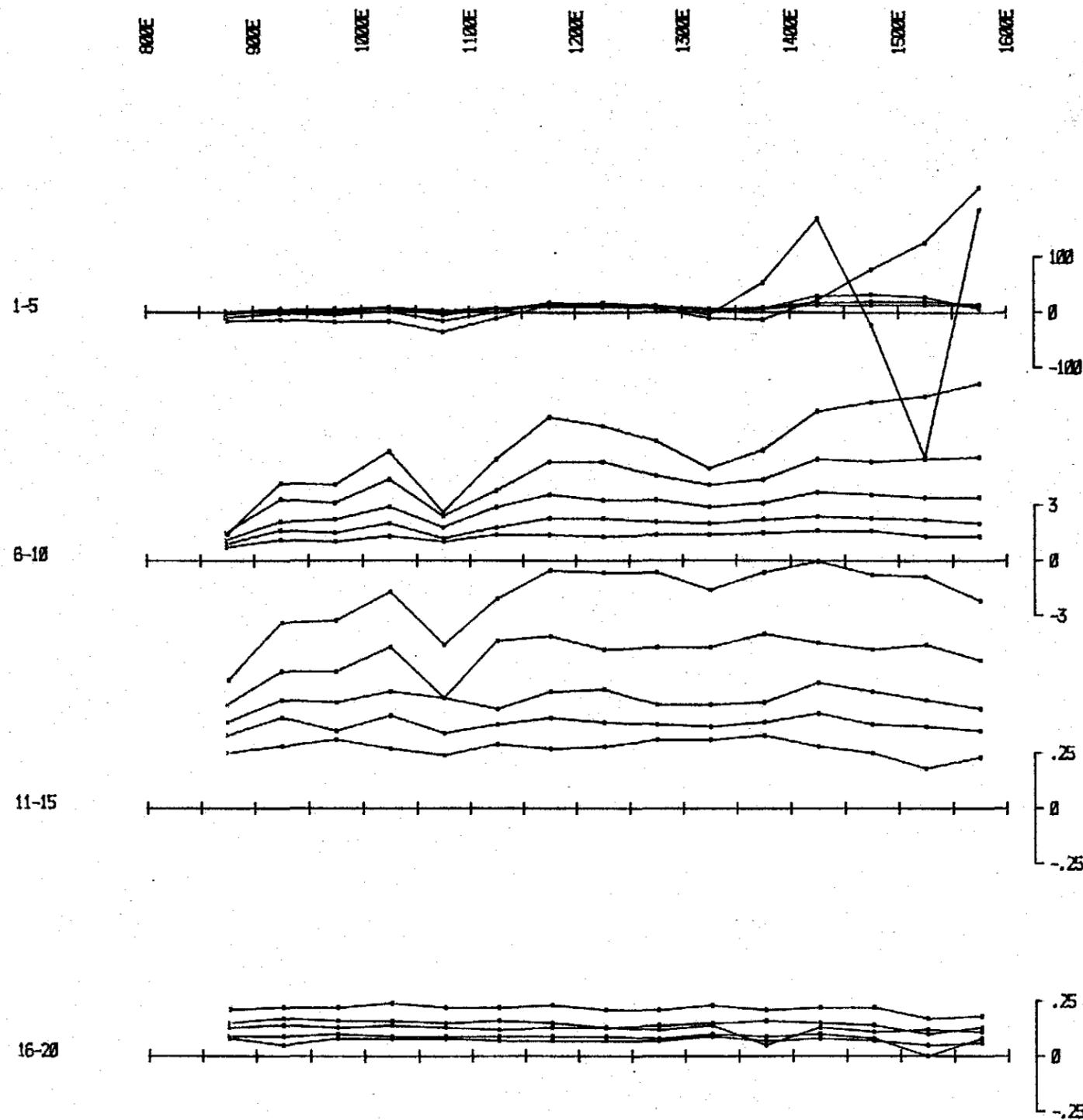


TX LOOP SIDES : 0360N 0212SE
 : 0320N 0192SE
TX LOOP SIZE : 400 m X 300 m
TX TURN OFF TIME : 250 microseconds.
FIRST GATE TIME : 93.5 microseconds.
CURRENT : 14.2 amp.
FREQUENCY : 25 Hz.
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : SD
DATE : 03/12/1994

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 55-1947
	CLIENT : GOLD FIELDS EXP. PROJECT : CARBINE HILL AREA : GRAND PRIZE LINE : 0340N Z TX LOOP : E	

045

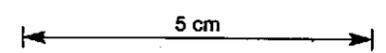
VERTICAL COMPONENT B (Z)



nanovolts per amp metre squared

EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)

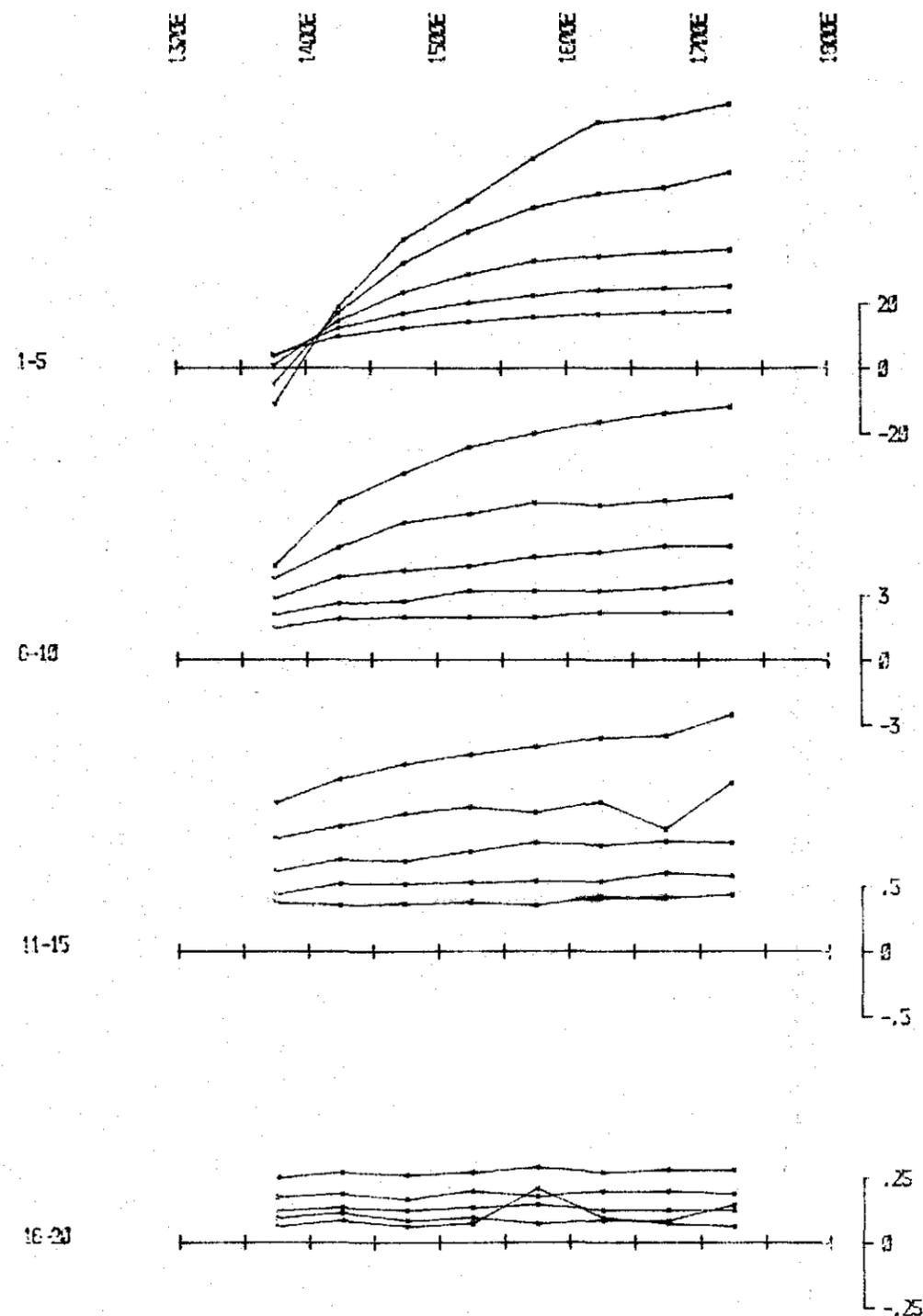


TX LOOP SIDES : 03600N 01925E
 : 03200N 01625E
TX LOOP SIZE : 400 m X 300 m
TX TURN OFF TIME : 280 microseca.
FIRST GATE TIME : 88.5 microseca.
CURRENT : 15.0 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 29/11/1984

	SURVEYED AND COMPILED BY GEOTREX PTY. LTD.	PROJECT NO. 85-1847
	CLIENT : GOLD FIELDS EXP. PROJECT : CARBINE HILL AREA : GRAND PRIZE LINE : 03500N Z TX LOOP : 5	

046

VERTICAL COMPONENT B (Z)



EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)

nanovolts per amp metre squared

5 cm

TX LOOP SIDES : J3000N 02125E
 : J3200N 01925E
TX LOOP SIZE : 400 m X 300 m
TX TURN OFF TIME : 250 microseconds
FIRST GATE TIME : 53.5 microseconds
CURRENT : 14.5 amps
FREQUENCY : 25 Hz
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 30/11/1994

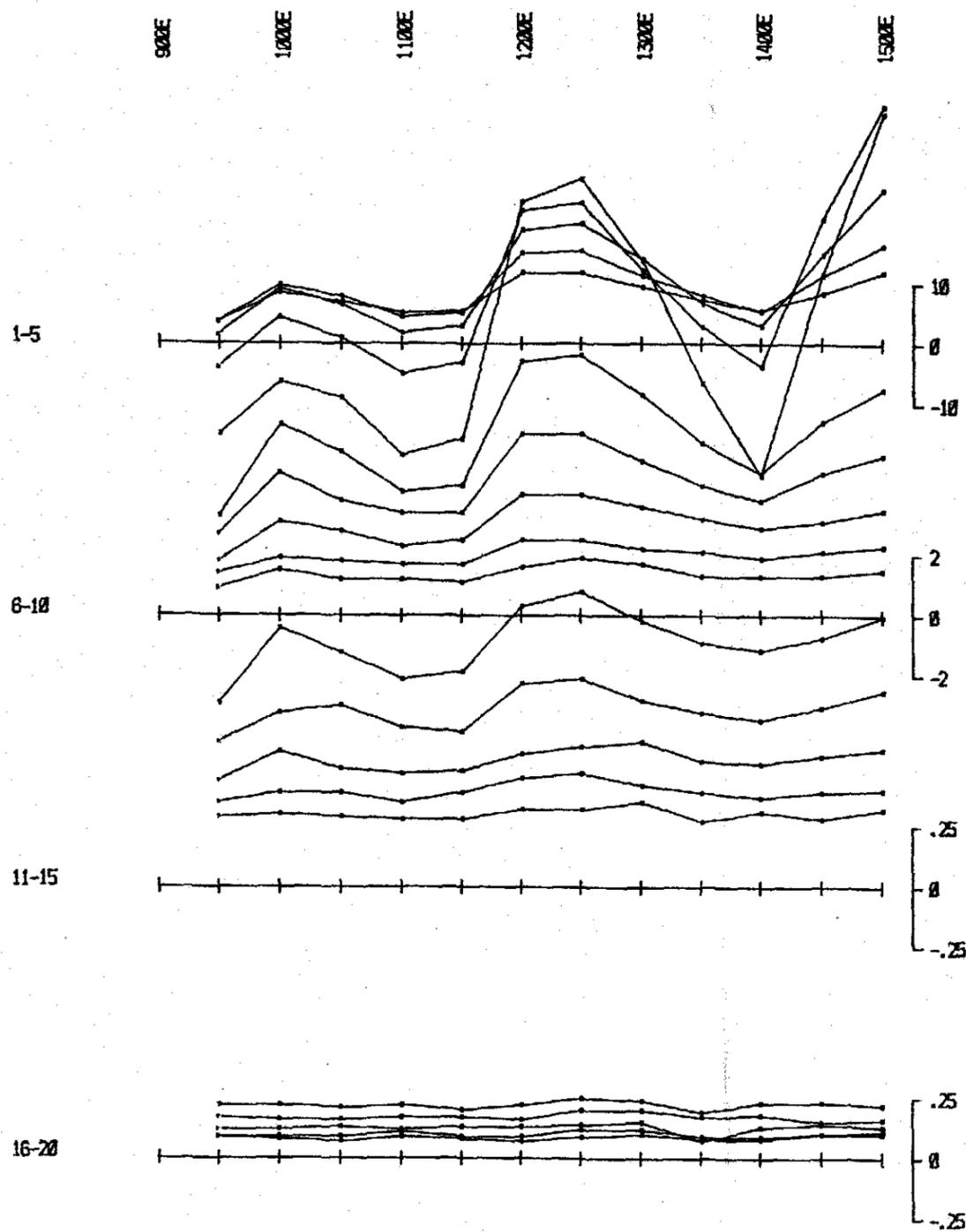


SURVEYED AND COMPILED BY
GESTERREX PTY. LTD.

PROJECT NO.
55-1947

CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 03500N Z
TX LOOP : 6

VERTICAL COMPONENT \dot{B} (Z)



EM-37
FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (\dot{B})

nanovolts per amp metre squared

5 cm

TX LOOP SIDES : 03600N 01925E
 : 03200N 01625E
TX LOOP SIZE : 400 m X 300 m
TX TURN OFF TIME : 250 microseconds
FIRST GATE TIME : 88.5 microseconds
CURRENT : 15.0 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:5000
SURVEYED BY : STSD
DATE : 29/11/1984

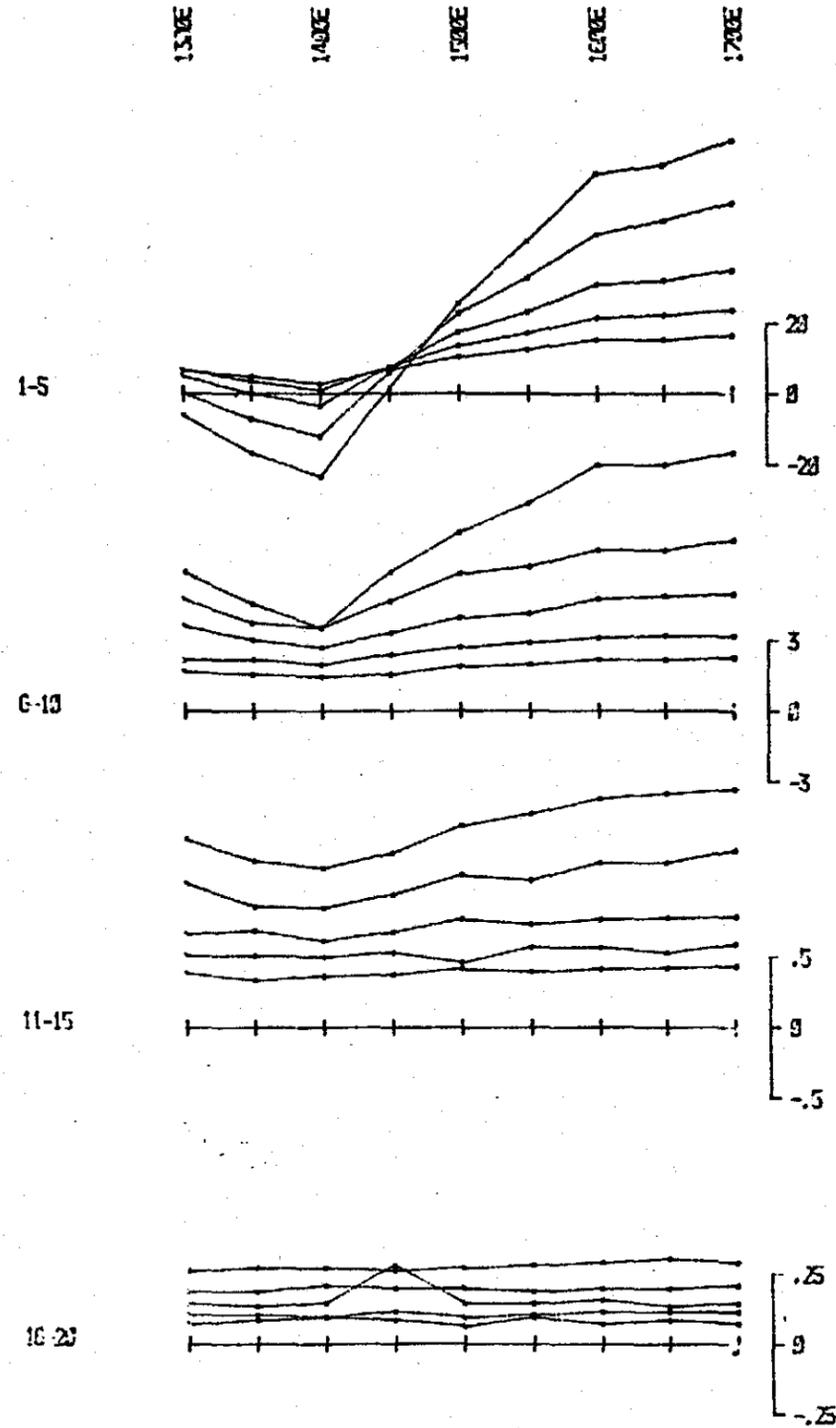


SURVEYED AND COMPILED BY
GEOTREX PTY. LTD.

PROJECT NO.
85-1847

CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 03600N Z
TX LOOP : 5

VERTICAL COMPONENT B (Z)



EM-37

FIXED
TRANSMITTER
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

nanovolts per amp metre squared

TX LOOP SIDES : 0500N 02125E
 : 0520N 01925E
TX LOOP SIZE : 400 m X 300 m
TX TURN OFF TIME : 250 microseconds.
FIRST GATE TIME : 88.5 microseconds.
CURRENT : 14.5 amp
FREQUENCY : 25 Hz.
INTEGRATION TIME : 250 cycles
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:1000
SURVEYED BY : GJD
DATE : 3/11/1994

	SURVEYED AND COMPILED BY GEOTEK PTY. LTD.		PROJECT NO. 55-1947
	CLIENT : GOLD FIELDS EXP. PROJECT : CARBINE HILL AREA : GRAND PRIZE LINE : 0500N 2 TX LOOP : 6		

5 cm

049