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Lake Margaret EL 5/85

Tasmania

Technical Progress Report

for the Period

August 1988 to September 1989

Prepared By:

A. W. McNeill
GEOLOGIST

Endorsed by:

D. B. Wallace
REGIONAL MANAGER

Distribution

Department of Mines (1)
Aberfoyle - Burnie (1)
Aberfoyle - Hawthorn (1)
CRAE - Canberra (1)

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1. SUMMARY AND RECOMMENDATIONS

Exploration activity during the year ending 20 September, 1989 was focussed on the Red Hills prospect in the NW corner of the licence.

DHEM surveys in DDH RH5 indicated that an apparent off-hole conductor, interpreted from CRAE data, was an artefact and has confirmed the limited extent of mineralisation in this hole.

A UTEM survey east of the Red Hills lava dome failed to detect any anomalies beneath Cambro-Ordovician Owen Conglomerate cover, while a four loop survey (plate LMarg 6) over the Red Hills prospect located a steeply south plunging conductor on lines 84S to 104S. This target was tested by diamond drilling, (RH-18, 356m) on line 84S, which intersected a shale unit at the "host horizon" position with syngenetic pyrite-sphalerite-galena and pyrite-pyrrhotite-sphalerite mineralisation. It is considered that the source of the anomaly was not intersected and that DHEM surveys are required to detail the anomaly location.

One loop of DHEM was completed at reporting period end, but results are not yet processed. Two further loops are planned in the near future. If results from these are encouraging then further drilling should be undertaken.

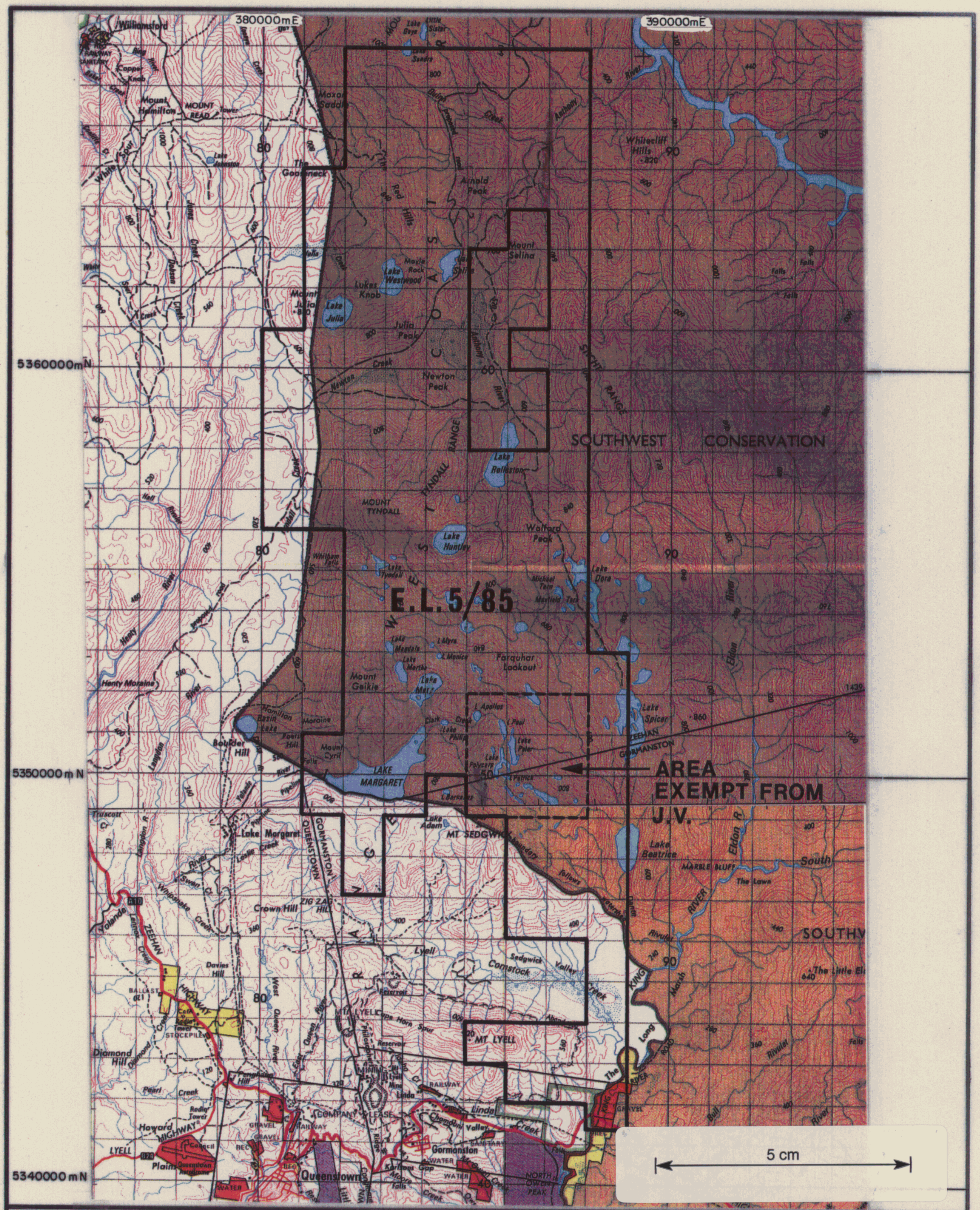
A review of data from the Lake Beatrice area suggests a similar stratigraphic setting to that at the Red Hills. Exploration was initiated during this reporting period but curtailed due to access problems. This programme should be completed during the next field season.

2. INTRODUCTION

The Lake Margaret exploration licence, 5/85, covers an area of 140 km^2 north and east of Queenstown from south of Mt. Sedgwick to north of the Red Hills (Figure 1).

This E.L. originally formed part of E.L. 9/66, initially granted to the Mt. Lyell Mining and Railway Company in August, 1966 and then expanded with the inclusion of E.L.'s 10/69, 41/77 and 21/76 before the area of E.L. 5/85 (135 km^2)was relinquished in compliance with Department of Mines regulations in August, 1984. Subsequently, the licence was granted to CRAE, on 20 October, 1985, who explored this area until 5 April, 1988 when a joint venture agreement with Aberfoyle Resources, as manager, was formalised. An area of approximately 9 km^2 centred on the Mt. Sedgwick east aeromagnetic anomaly (Figure 1) has been excluded from this joint venture and will be reported on separately. Following the relinquishment of E.L. 37/87, adjoining the north eastern corner of the licence, the boundaries of E.L. 5/85 were adjusted to conform to Australian Metric Grid by the addition of approximately 5 sq. km. on 21 April, 1989.

This report records exploration on E.L. 5/85, concentrated on the Red Hills prospect in the N.W. of the licence, for the period August, 1988 to 20 September, 1989.



Aberfoyle Resources Limited

EXPLORATION DIVISION

FIG. I

NORTH WEST TASMANIA

LAKE MARGARET E.L. 5/85 C.R.A. JV.

LOCALITY MAP

REVISIONS			
Init.	Date	Init.	Date

Location Code :

Scale : As shown

Date : September, 1989

Compiled : RJE

Drawn : Dept. Lands

Traced :

Checked :

Plate No. : L.Marg. 13

3. RED HILLS PROSPECT

3.1 Geological Setting

The geology of the Red Hills prospect, summarised on plate LMarg 11, has been described in detail by Corbett (1975), McNeill (1987) and von Strokirch (1987) and only a brief summary will be included herein.

The prospect is dominated by an elongate lense of rhyolitic to rhyodacitic feldspar-phyric lava, typical of the Central Volcanic Complex, referred to as the Red Hills lava dome. The 'dome' is unconformably overlain to the east by correlates of the Middle Owen Conglomerate, with some lenses of Jukes breccia equivalent at its base, and passes conformably to the west into a sequence of ash to medium lapilli grade felsic volcaniclastics, many of which have been described as ignimbrites. These lithologies are generally strongly cleaved with banding approximately parallel to cleavage. Within the volcaniclastics is a lense of steeply west dipping black shale and interbedded ash volcaniclastic, that wedges out at depth, and a small 'dome' like occurrence of lava around 5365000N, 382000E. Tyndall Group quartz-feldspar-phyric porphyry, on the flanks of the Gooseneck, abuts the Central Complex volcaniclastics on an interpreted north-south trending fault to the west. To the south, the Red Hills sequence is covered by Tyndall Group volcaniclastics, Owen Conglomerate and Quarternary glacials with the situation complicated further by probable block faulting.

3.2 Previous Exploration

The Red Hills area has had a long history of exploration that may be divided into three phases:

i) Pre 1966

Early prospecting for Cu, at the turn of the century was extensive as evidenced by the numerous small workings indicated on McNeill (1987). Some of these adits in a magnetite-pyrite-chalcopyrite stockwork at the northern end of the Red Hills rhyolite dome were extended and sampled by the Mt. Lyell Mining and Railway Company in 1907.

Between 1957 and 1961, Rio Tinto exploration, in conjunction with the Electrolytic Zinc Company, conducted extensive geophysical surveys, including Turam, over the prospect leading to the drilling of four holes; DDH GN-1, 2 and RHP-94, all of which intersected black shale and fine volcaniclastics hosting syngenetic pyrite and pyrrhotite, and DDH RHP-95 into the Red Hills lava.

ii) 1966-1984 (Bishop 1982, Purvis et al. 1983, Fitzgerald 1987)

Exploration by the Mt. Lyell Mining and Railway Company was again focused on the lava dome where 23 percussion drill holes and 4 DDH's (RH 1-4) failed to intersect significant Cu mineralisation. The lead-zinc potential of the black shale unit, intersected by RTAE drilling, was further investigated by IP Surveys and DDH RH-5 which intersected 2.8m of banded massive sulfide (34.5% Zn, 11.4% Pb, 250 g/t Ag, 6.5 g/t Au) hosted by a fine volcaniclastic between the shale and the Red Hills lava. The strike length of the shales and underlying 'host horizon' was tested by a further 12 DDH's (RH6-RH17) which failed to intersect further mineralisation of the tenor in RH-5. Re-assaying of core delineated a zone of significant Au mineralisation in the vicinity of RH-5 (maximum, outside RH-5, of 4.5m at 3.6 g/t in DDH RH-8).

It was concluded that both the Au and base metal mineralisation in this area were sub-economic.

iii) 1985-1988 (Von Strokirch 1988)

During this period CRAE continued exploration for both Au and base metals. The prospect area was extensively rock-chip sampled and further core re-assayed for Au. No significant mineralisation was indicated. Five lines of soil geochemistry, over the No. 1 north adit, were completed to detail a coincident IP and weak UTEM anomaly. A weak, 48 ppb, point Au anomaly was detected and may be due to close proximity of a sulphide vein.

One loop of UTEM was completed north of the Goldfields IP coverage and this, in association with a ground-magnetic survey, failed to locate any targets. A DHEM survey of RH5 indicated that the VMS did not extend far from the hole, while a further survey in DDH RH12 was also unsuccessful.

3.3 Geophysics

3.3.1 DHEM

A re-interpretation of the CRAE DHEM data (Funnell 1987) suggested the presence of an off hole vertical conductor, east of DDH RH-5. No response from this 'conductor' was seen in DDH RH-12. Further DHEM surveys using both Sirotem and EM-37 were completed by Aberfoyle Resources and indicate that the response seen in the CRAE data was not due to a conductive body, but probably the result of a field operational error. A detailed report of results and interpretations, including comments on a comparison of the Sirotem and EM-37 systems, is included in Appendix (1).

3.3.2 UTEM

UTEM surveys were conducted over the Red Hills and Red Hills east prospects, see plate LMarg 6 for reading lines and loop locations. The results from these surveys are summarised below;

i) Red Hills east

Previous exploration had not tested the potential for the repetition of the Red Hills mineralised sequence on the eastern flank of the Red Hills lava dome, as this area is covered by a considerable thickness of Cambro-Ordovician Owen Conglomerate. A recent interpretation (McNeill 1987) suggested that this cover was of the order of 250-300m thick and thus the interpreted underlying volcanics would be within the range of effective UTEM.

As the position of the target Host Horizon was not accurately known, two loops were used to survey the East Red Hills prospect. The area was initially read from loop 3 which aimed to efficiently energise steeply dipping targets within the Host Horizon, if this horizon was up to 400m from the front of Loop 4. The loop front was then extended 400m west and the area re-read from Loop 3. In this way an area from 84400E to 83600E was efficiently energised such that any sulfide accumulations in this region would have the maximum chance to produce a detectable eddy current EM anomaly. Outside of this area the current gathering effects of any sulfide accumulations were relied upon to produce detectable EM anomalies.

A total of 12.6 line km of 50m spaced single component (Hz) data was collected from these two loops. Stacked profiles are included in Appendix 2.

This survey did not identify any UTEM anomalies that were indicative of massive sulfide mineralisation. An early time current gathering anomaly extending only to channel 9, occurs on every line surveyed. This anomaly is generated by currents flowing in the saturated button grass areas on the eastern side of the Red Hills.

ii) Red Hills

The CRAE UTEM survey (Funnell, 1987) covered the northern part of the prospective volcanics on lines 38N-12S (Mt. Lyell 1969-1971 grid) but failed to locate any targets worthy of follow-up. The Mt. Lyell grid was re-established from 16S to 80S in December 1988, in preparation for a two loop UTEM survey designed to complete coverage of the exposed volcanics. These loops were positioned to the west of the prospective Host Horizon and overlying black shale to produce maximum coupling of the E field and any steeply dipping conductors.

Encouraging results from this initial programme lead to the re-establishment and surveying of line 84S to 112S, an area of dominantly Cambro-Ordovician and Quaternary glacial cover, from a third loop and detailing of lines 40 to 72S by a fourth loop located on the eastern side of the volcanics.

Loop locations and reading lines are shown on plate LMarg 6. Vertical component (Hz) data was collected at 50 metre spacings and closed to 25 or 12.5m spacing in areas of interest. Stacked profiles of continuous and point normalised data are included in Appendix 3 while results are shown on plate LMarg 5. A detailed written report is in preparation and will be completed following modelling of both UTEM and DHEM data (Section 3.4).

These surveys have failed to locate any conductors at the interpreted host horizon, confirming the DHEM results. However, an anomaly from 32-104S, associated with the black shale is considered to be due to both the shale and an adjacent conductive body. The northern part of this anomaly, 31-48S, has been tested by previous drilling (DDH's RH-8, 9, 12, 14R and 16) but DHEM surveys in RH-9, 16 and 14R are required to completely cover this area. It is considered that the area of greatest potential is from 72S to 104S as previous drilling has not tested this area adequately and the anomaly has a greater conductivity and a steep south plunge south of line 84S. It was recommended that this anomaly be tested by drilling on line 84S.

3.4 Diamond Drilling

3.4.1 DDH RH-18

Geology

DDH RH-18, collared at 5363402mN, 382403mE, was designed to test the UTEM anomaly centred at 1050-1075 mE on line 84S at a depth of approximately 220m.

To aid in the design of this hole the drill logs for DDH GN-2 were obtained, through the D.O.M. drilling database, and a section plotted (see plate LMarg 14). The collar of this hole when located in the field was not where shown on previous maps, but 10mN of line 84S at 1058mE (5363380mN, 382525mE). The DDH GN-2 section suggested two steeply west dipping shale units, separated by ?rhyolitic lava, that may represent the extension of the shale unit mapped to the north and a facies variant of the underlying host horizon. Extrapolating these shales to depth suggests the UTEM anomaly occurs at the base of the upper unit.

A detailed log of DDH RH-18 is included in Appendix 4. Seven petrological samples have been collected but descriptions are not yet available. A summary log is as follows:

0 - 14.1m	Tricone.
14.1 - 61.5m	Quartz-feldspar-phyric lava or intrusive (?Tyndall Group).
61.5 - 65.2m	No core.
65.2 - 97.5m	Sheared rhyolitic lapilli volcaniclastic.
97.5 - 112.1m	Siliceous ash volcaniclastic.
112.1 - 134.2m	Sheared quartz-phyric lava.
134.2 - 197.9m	Dominantly black shale with interbedded ash volcaniclastic and minor ?basalt lava (140.7 - 140.9m).
197.9 - 286.9m	Massive to brecciated andesitic-dacitic lava.
286.9 - 291.2m	Peperitic lava with black shale matrix.
291.2 - 299.5m	Sheared black shale with fault bounded ash volcaniclastic intervals.
299.5 - 356.8m	Interbedded ash and polymict fine to medium lapilli volcaniclastic.

The quartz-phyric lava, from 14.1 - 61.5m, is a probable correlate of the Tyndall Group lava, mapped on the flanks of the Gooseneck by McNeill (1987), and differs markedly from the dominantly volcaniclastic Tyndall Group correlates outcropping immediately south of the drill collar. This lava (or intrusive) is separated from highly sheared typical Central Volcanic Complex volcaniclastics by a cavity, interpreted to represent a major fault zone.

The volcaniclastics from 65.2 to 97.5m and 299.5 to 356.8m contain "fiamme" and pink rhyolitic lava fragments typical of the Central Volcanic Complex 'basinal sequence'. The lavas are however, atypical of those seen at surface, being quartz-phyric (112.1-134.2m) and possibly andesitic (197.9-286.9). The lower of these intervals has many textural features in common with the footwall andesites of the Que Hellyer Volcanics, including peperitic contacts with the enclosing shales. Base metal mineralisation, dominantly disseminated and vein sphalerite, with minor galena, occurs in the shales and intervening andesitic-dacitic lava, while disseminated pyrite and pyrrhotite, often as coatings on fracture surfaces, occur throughout the hole. Three bands of possible syngenetic mineralisation were recorded:

164.5m	0.5cm of sphalerite + pyrite in shale.
296.7m	1cm of sphalerite + galena with minor pyrite in black shale.
298.9m	1cm of pyrrhotite with trace sphalerite and pyrite. Possible barite blebs on uphole surface. Underlain by approximately 1.5cm of strongly sphalerite + pyrite veined black shale.

Geochemistry

Core grinding of RH-18 is not yet complete. Results will be presented in the next Annual Report.

Geophysics

One loop of DHEM (Sirotem) was completed by the end of the reporting period. No results have been processed to date. A further two loops are planned. These results will be included in the next Annual Report.

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4. LAKE BEATRICE

The Lake Beatrice prospect, referred to as the Beatrice prospect by Goldfields Exploration, is situated south and south east of Mt. Sedgwick in the south eastern part of the E.L. (Figure 1) A review of previous exploration data (Purvis et al. 1983, Reid et al. 1979) indicated that the geological setting of this prospect, a haematite-magnetite stockworked rhyolitic lava dome flanked by volcaniclastics and shale, is similar to that of the Red Hills. Goldfields extensively explored the area west of this dome (now in E.L. 102/87) but did not follow up soil and IP anomalies east of the dome. Further encouragement has been provided by the occurrence of sphalerite rich fragments and disseminated sphalerite and galena in fine grained volcaniclastics (Reid et al 1979) and the lack of UTEM coverage.

An initial programme of gridding, mapping and rock chip sampling was proposed. The origin point for this grid was surveyed and an approximately 2 km long access track, from the Comstock Valley track (534505N, 575750E) to the Goldfields helipad (5346550N, 388000E), was completed before the onset of inclement weather and lack of helicopter support curtailed this programme. However, a reconnaissance visit to the Beatrice dome (5347450N, 386400E) resulted in the collection of nine haematite-magnetite veined rhyolite lava samples. Assay results (Appendix 5) indicate low base metals and Au, up to 42 ppb.

APPENDIX 1

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ABERFOYLE RESOURCES LIMITED

Technical Report

DOWN HOLE ELECTROMAGNETIC INVESTIGATIONS

RED HILLS PROSPECT

LAKE MARGARET EL 5/85

TASMANIA

Prepared by:

J Read.

J J READ
Geophysicist

Distribution

1) Aberfoyle Resources Limited, Burnie
2) Aberfoyle Resources Limited, Hawthorn

Endorsed by:

J SILIC
Chief Geophysicist

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1. Introduction

The Lake Margaret EL is situated approximately 15 kilometres NE of Queenstown. Extensive exploration of the licence has occurred in the past, predominantly for base metal mineralization. Recently, prior to 1988, CRAE spent two years assessing the gold potential of the property. A total of 28 DDH's and 23 PDH's have been drilled on the property.

The Red Hills grid, lies in the NW corner of the EL and is the most intensely explored section of the licence. A Cambrian rhyolite dome forms the Red Hills, with sequences of volcaniclastic sediments, black tuff shales and ignimbrites occurring on both sides, and dipping steeply away from the rhyolite dome. Pervasive chlorite-hematite alteration occurs within the dome along with magnetite-pyrite-chalcopyrite-gold mineralization in both disseminated and vein form. A small, 2.8 m thick, massive sulphide lens (34.5% Zn, 11.35% Pb, 0.3% Cu, 250 g/t Ag, 6.5 g/t Au) was intersected in DDH RH5. Following up this intersection CRAE read DDH's RH5 and RH12 with DHEM (Em-37) and carried out 8.5 line/km of UTEM.

2. CRAE Down Hole EM Data

CRAE conducted a six loop, 2 hole, DHEM survey during November 1986. Three 200 m x 200 m loops were located around each of DDH RH5 and RH12, to determine if the massive sulphide intersected in RH5 extended away from RH5. The CRAE loop positions are shown on plate L Marg 4.

CRAE concluded that the massive sulphide intersected in RH5 did not extend far from the drill hole. Aberfoyle re-interpreted the CRAE DHEM data, suggesting that CRAE had not recognized a response due to an off-hole conductor. This interpretation was largely based upon the data recorded in

RH5, as the profiles from RH12 show no conductive responses at late time. The low signal levels measured indicate a very resistive environment.

Loop RH5E produced a profile where all channels increase in amplitude smoothly up to 130 m depth, with a steady decrease towards the end of the hole. A large increase in signal amplitude accompanies this profile. This behaviour was interpreted as indicating an off hole conductor that, had RH5 been drilled to a sufficient depth, would have produced a negative EM response as the drill hole passed over, or under, the top of the conductor.

The centre loop on RH5 produced a profile exhibiting a positive to negative cross over at 130 m depth, becoming slightly positive again towards the end of the hole. A large early time negative was produced by conductive black shales at the top of the hole. The NE loop produced a noisy profile, showing an early time response due to the black shales, but no late time responses.

The change in sign from the high amplitude positive of the east loop, to the low amplitude negative of the centre loop was interpreted to indicate a vertical conductor existed between loops RH5C and RH5E. The position of this conductor could have been such that the NE loop was in a null couple position, thus accounting for the lack of response from this loop.

3. Aberfoyle Sirotem Survey

To confirm the existence of the interpreted conductor, Aberfoyle planned a seven loop Sirotem DHEM survey. Four E-W trending loops were sited on RH5 with the remaining three loops on RH12. Although planned as 200 m x 200 m loops, the Sirotem loops were actually laid as 100 m x 100 m in size, in the positions shown on plate L Marg 4.

All three profiles for RH12 exhibit low signal amplitude and a significant noise level, especially at late time. Self response from the probe dominates the profiles to such an extent that little real EM data was recorded. An example is the lack of any response from the conductive black shales. The four data sets from RH5 are also dominated by self response and high noise levels. No responses indicative of off hole conductors were recorded.

Due to the error in laying the loops, the Sirotem survey was not a conclusive test of the hypothesis formulated from CRAE's Em-37 data. No direct comparison between the two sets of data could be attempted.

4. Aberfoyle Em-37 Survey

To fully test the interpretation of CRAE's Em-37 data Aberfoyle commissioned a seven loop Em-37 survey. Four E-W trending 200 m x 200 m loops were sited on RH5 and three 200 m x 200 m loops on RH12.

4.1 RH12 Results

The profiles from RH12 exhibit no late time responses indicative of off-hole conductive mineralization. An early time response evident from loops 1 and 3, with its maximum amplitude at 70-80 m, is probably due to pyrite associated with a silicified felsic tuff.

The character and amplitude of the profiles recorded from Aberfoyles Em-37 survey compare favourably with the earlier Em-37 data, when allowance is made for differences in loop positions. This comparison identified a problem exists with the sign convention of some profiles, as from CRA loop C a positive response was recoded down RH12, whereas from Loop 2 (in approximately the same position) a negative

response was recorded. Geoterrex. have addressed this problem with a new field procedure to determine probe polarity. Relative to the CRAE data, Aberfoyles Em-37 DHEM profiles have been shifted due to a negative DC shift in the equipment used.

A problem exists in explaining the large change in amplitude of the early time response of channels 1-10, in RH12, read from CRA loop C and Aberfoyle loop 2. For these similar loops the early time response was six times greater recorded from loop C than from loop 2. A current of 14 amps was used in loop C whereas 22.3 amps was used in loop 2. It was expected that this would produce a greater reponse, not the six factor decrease observed.

The observed change in response amplitude is difficult to explain, but may have been produced by some probe self-response during the CRA survey. Probe self response is not usual with EM-37 but the possibility that it may occur should be considered during future surveys.

4.2 RH5 Results

The results from the four loops sited on RH5 produced disappointing results. All loops showed only conductive responses at early times, due to the black shales that extend to 60 m depth in RH5.

The character and signal amplitude of the data recorded from loop 5 matched closely with the data recorded from CRAE's loop RH5C. Making allowance for differing loop positions the data from loops 6 and RH5NE also agree. Major discrepancies exist between the data recorded from loops 7 and RH5E, as the characteristics shown by the earlier CRAE data were not repeated in any way. Consequently the Aberfoyle

Em-37 data does not indicate that an off-hole conductor exists to the east of RH5. This result substantially downgrades the potential of the area immediately surrounding RH5.

One explanation as to why a DHEM response, similar to that produced by an off-hole conductor, was recorded from loop RH5E, is that while RH5 was being read from loop RH5E, loop RH5NE was connected at surface. This would produce a response that, after a maximum was reached, would pass through a zero point as the plane of the edge of loop RH5NE was crossed. The profile for loop RH5E suggests this would have occurred if RH5 had been a greater depth, hence crossing the plane of the edge of RH5NE.

It should be noted that the polarity of the CRAE data can not be relied upon as being correct. This polarity problem was identified during Aberfoyles Em-37 program and an operational procedure instigated to eliminate it. The polarity of each of Aberfoyles profiles from RH5 is in fact, opposite to its true polarity.

5. Comparison of Em-37 and Sirotem Data in RH5

In order to investigate the difference in data quality between Sirotem and Em-37, the 100 m x 100 m Sirotem loop 2 was re-laid as Em-37 loop 8 and RH5 re-read. Despite the smaller loop the Em-37 data clearly resolves the conductive shales, to 60 m depth, in RH5. A response from the shales is not clearly evident in the Sirotem data, as the Sirotem profile is dominated by probe self-response. A measure of this self-response can be gained by directly comparing the transient EM response measured by Em-37 and Sirotem. In order to do this the Em-37 response measured in nanovolts per amp metre squared must be multiplied by 10 to convert it

to the micro volts per amp units of the Sirotem response. If Sirotem channel 2 (0.8 ms) and Em-37 channel 10 (0.712) are compared, the Em-37 response is 50 m V/A whereas the Sirtoem response is 150 m V/A. This illustrates the degree to which the Sirotem transient EM response is polluted by self-response of the probe.

Another advantage of Em-37 is that its data is less affected by noise, hence producing DHEM profiles that are easier to interpret.

6. Conclusions

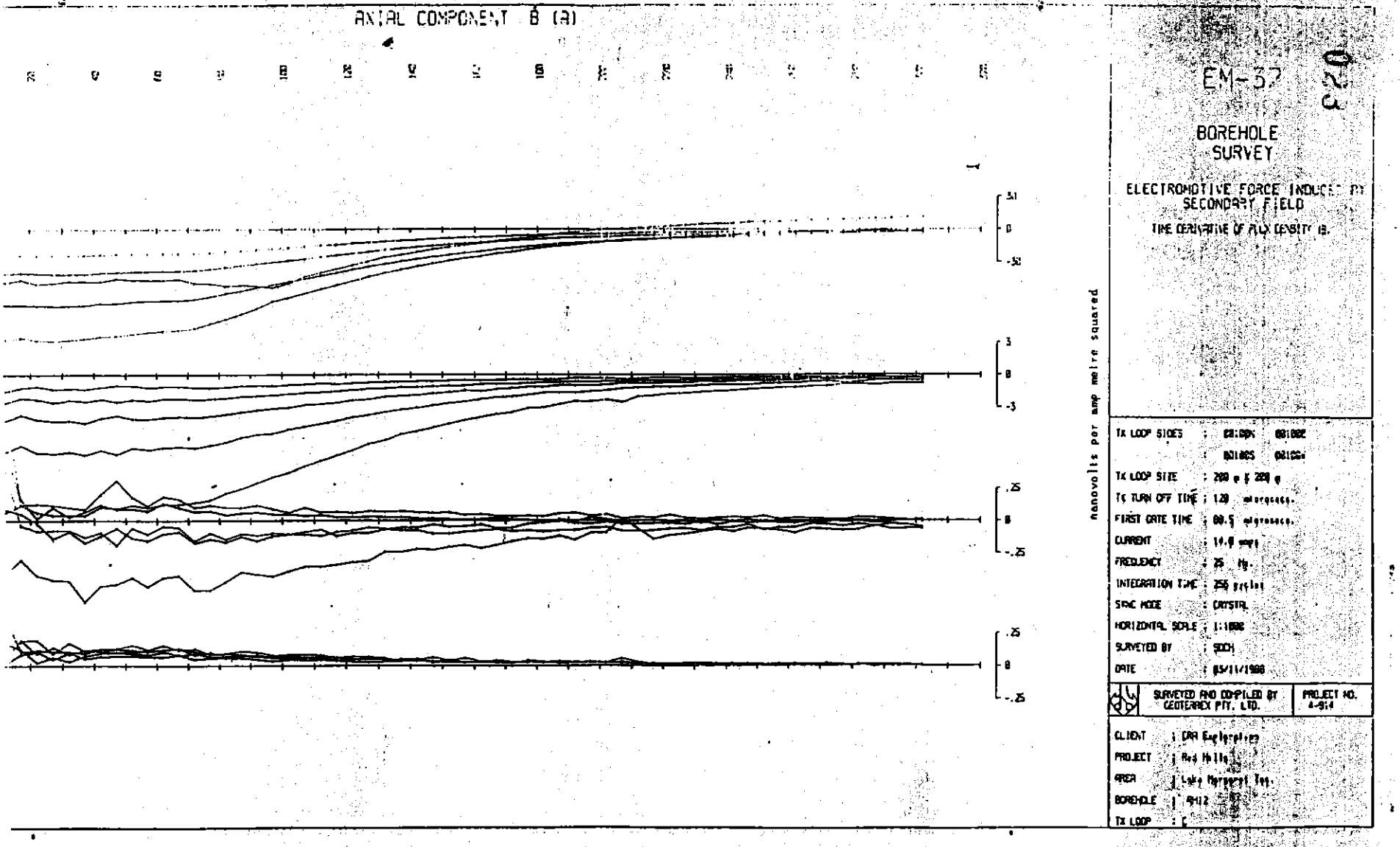
The crucial data that lead to Aberfoyles interpretation of an off-hole conductor from RH5, was not repeated during Aberfoyles Em-37 survey. It was thus shown that no off-hole conductor occurs to the east of DDH RH5. A field operational error is thought to account for the data that lead to Aberfoyles off-hole conductor interpretation. The potential of the area surrounding DDH's RH5 and RH12 has been substantially downgraded.

During the several phases of this investigation a comparison was carried out between Sirotem and Em-37 DHEM data. It has been concluded that Em-37 should be favoured for DHEM work as it produces higher quality data and usually does not suffer from Sirotems probe self response problem. Em-37 also provides a greater amount of early time EM data.

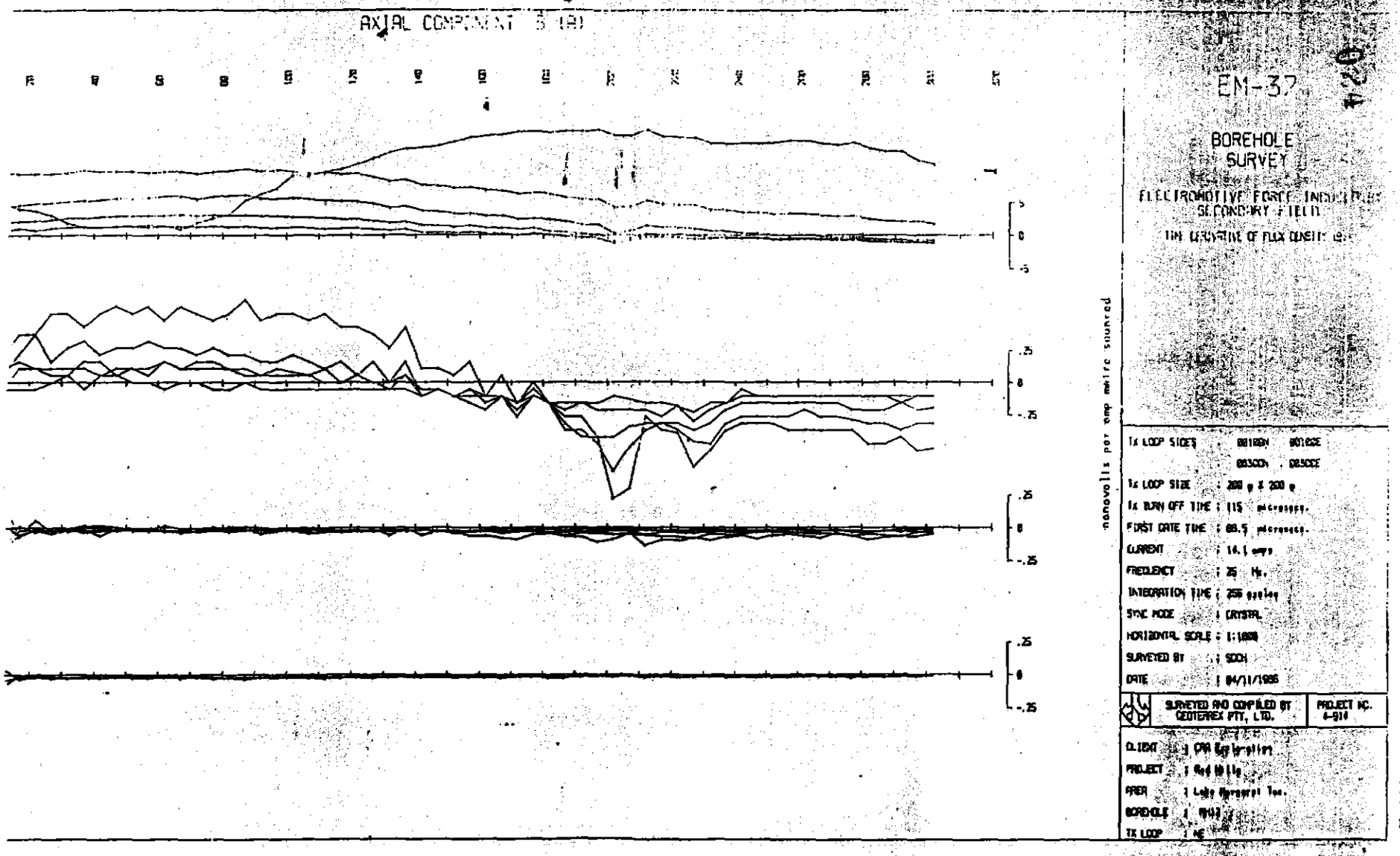
Appendix 1

CRAE Em-37 DHEM DATA

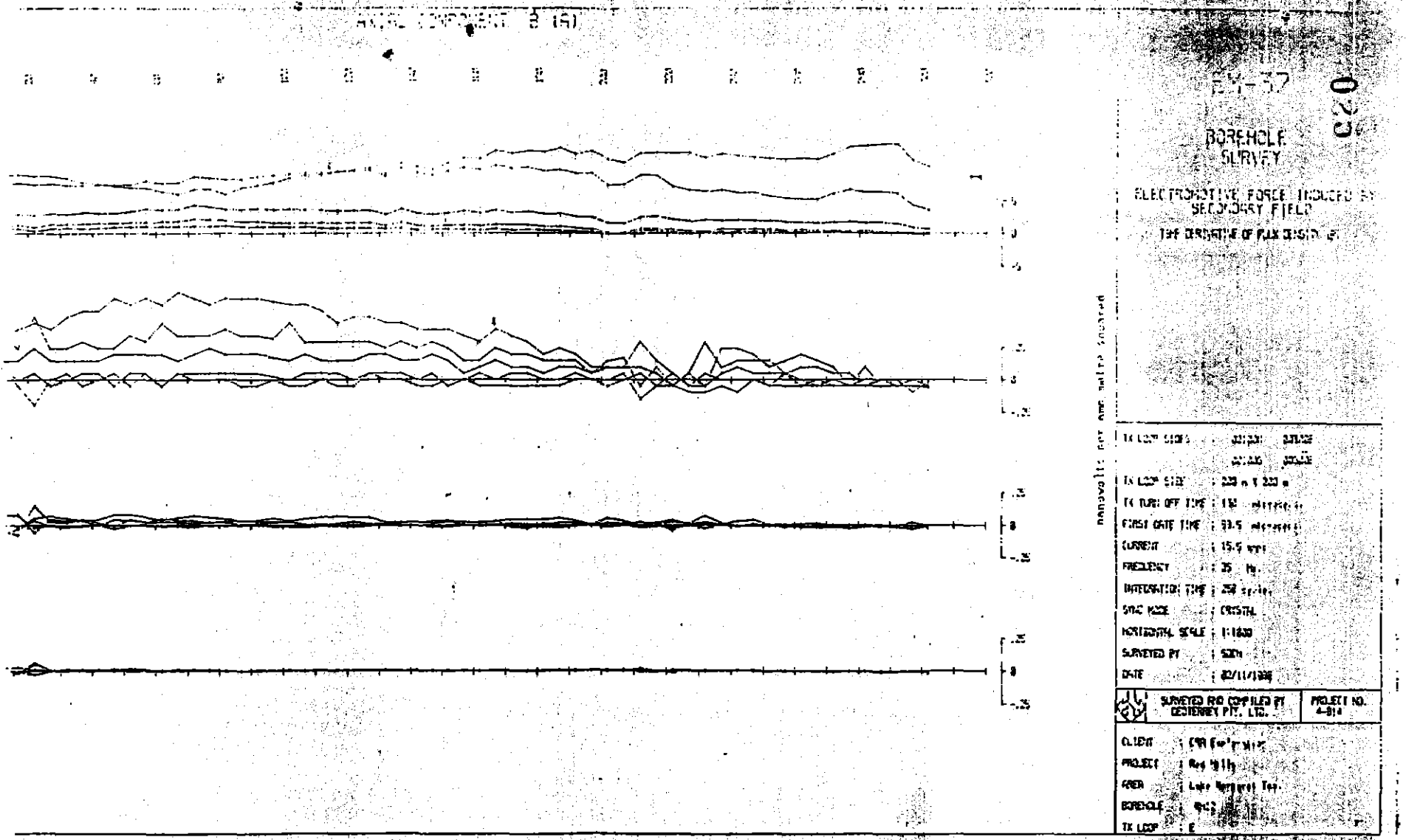
DDH RH5 AND DDH RH12


AXIAL COMPONENT B (B)
EM-37
BOREHOLE SURVEY
ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD
TIME DERIVATIVE OF FLUX DENSITY (B)
nanovolts per amp metre squared
TX LOOP SIZES
TX LOOP SITE
TX TURN OFF TIME
FIRST GATE TIME
CURRENT
FREQUENCY
INTEGRATION TIME
SYNC MODE
HORIZONTAL SCALE
SURVEYED BY
DATE
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.
PROJECT NO.
CLIENT
PROJECT
AREA
BOREHOLE
TX LOOP
5 cm

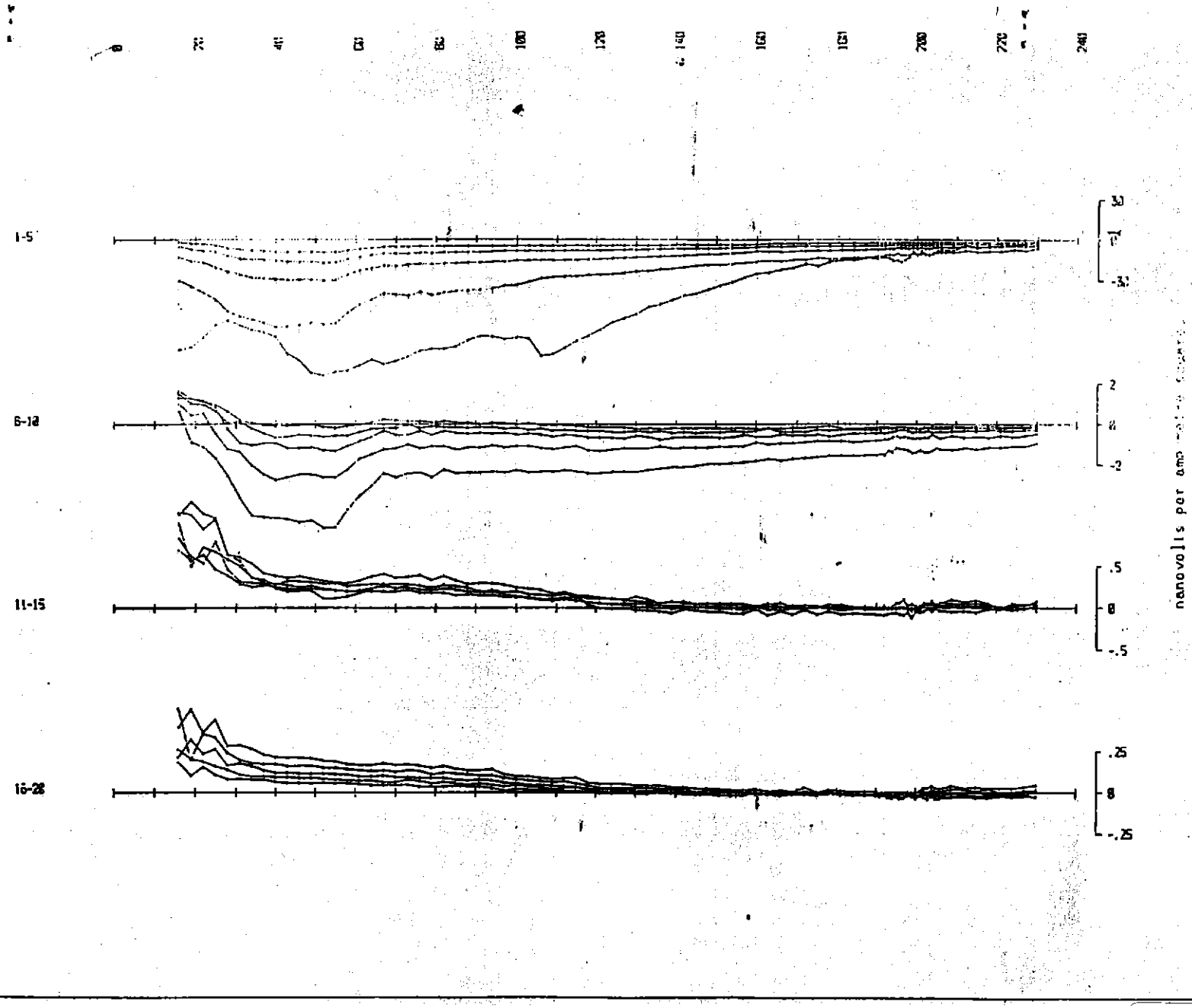
584024


AXIAL COMPONENT
EM-37
BOREHOLE
SURVEY
ELECTROMOTIVE FORCE INDICATED
SECONDARY FIELD
IN DERIVATIVE OF FLUX DENSITY
nanovolts per amp metre squared
Tx LOOP SIZES
Tx LOOP SIZE : 200 m X 200 m
Tx TURN OFF TIME : 115 microsecs.
FIRST GATE TIME : 88.5 microsecs.
CURRENT : 14.1 amps
FREQUENCY : 25 Hz.
INTEGRATION TIME : 256 stacks
SYNC MODE : CRYSTAL
HORIZONTAL SCALE : 1:1000
SURVEYED BY : SCCH
DATE : 04/11/1995
SURVEYED AND COMPILED BY
GEOTERREX PTY. LTD.
PROJECT NO.
CLIENT : CRA Exploration
PROJECT :
AREA : Lake Harquart Tas.
BOREHOLE :
Tx LOOP :
5 cm

584025


BOREHOLE
SURVEY
5 cm

[redacted]



EM-37

BOREHOLE SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	B312CN B312CE
	B313CS B312CW
TX LOOP SIZE	200 m x 200 m
TX TURN OFF TIME	120 microsecs.
FIRST GATE TIME	68.5 microsecs.
CURRENT	15.7 amps
FREQUENCY	25 Hz.
INTEGRATION TIME	256 cycles
SYNC MODE	CRYSTAL
HORIZONTAL SCALE	1:1000
SURVEYED BY	SDCH
DATE	29/10/1986

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 4-914

CLIENT : CRA Exploration

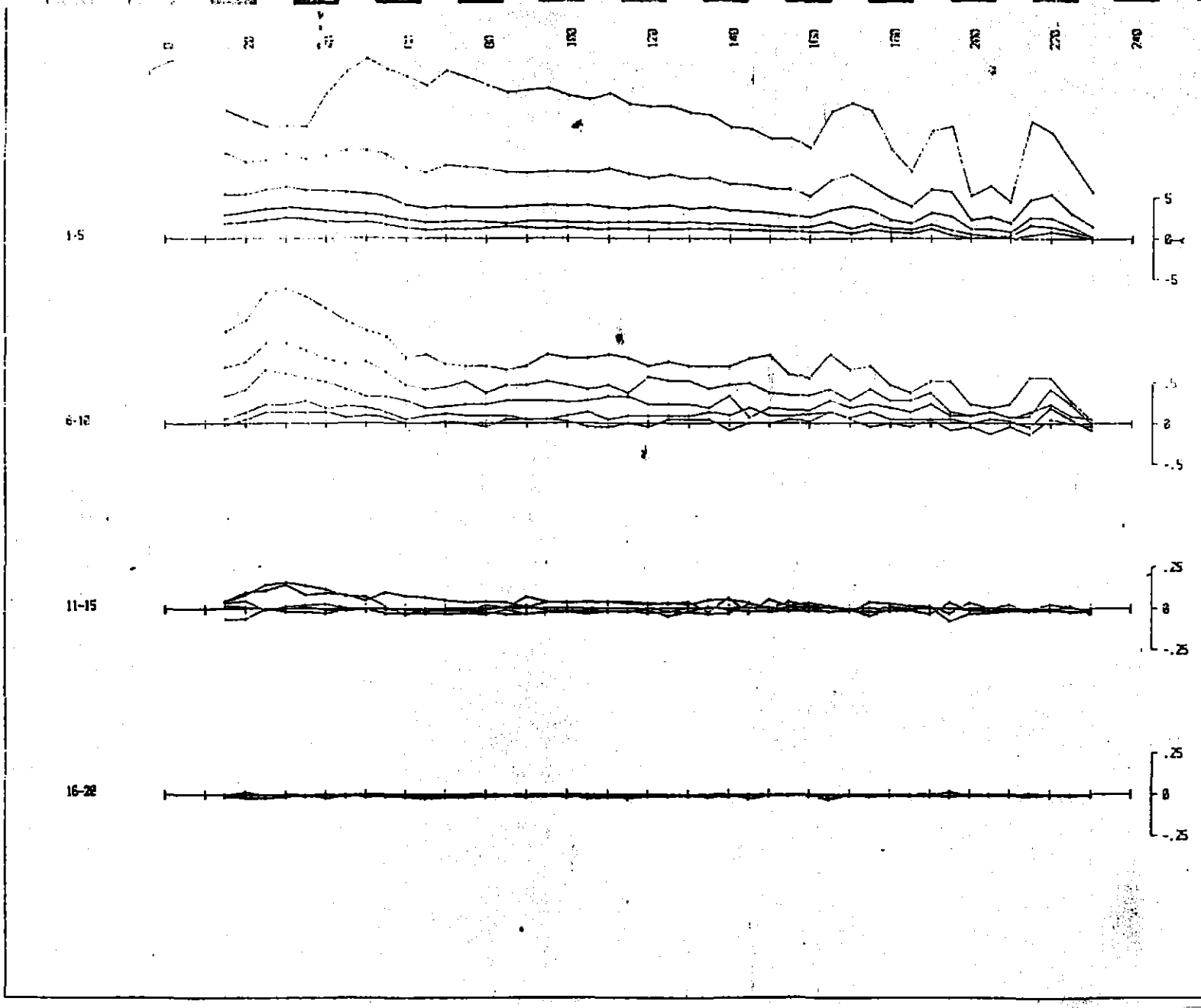
PROJECT : Red Hills

AREA : Lake Margaret Tas.

BOREHOLE : R15

TX LOOP : C

5 cm



EM-37

BOREHOLE SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	8227SN - 8815SE
	8827SN - 8835SE
TX LOOP SIZE	220 m X 220 m
TX TURN OFF TIME	150 microsecs.
FIRST GATE TIME	98.5 microsecs.
CURRENT	16.1 amps
FREQUENCY	25 Hz.
INTEGRATION TIME	256 cycles
SYNC MODE	CRYSTAL
HORIZONTAL SCALE	1:1000
SURVEYED BY	SDDH
DATE	01/11/1986

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 4-814

CLIENT : CRA Exploration

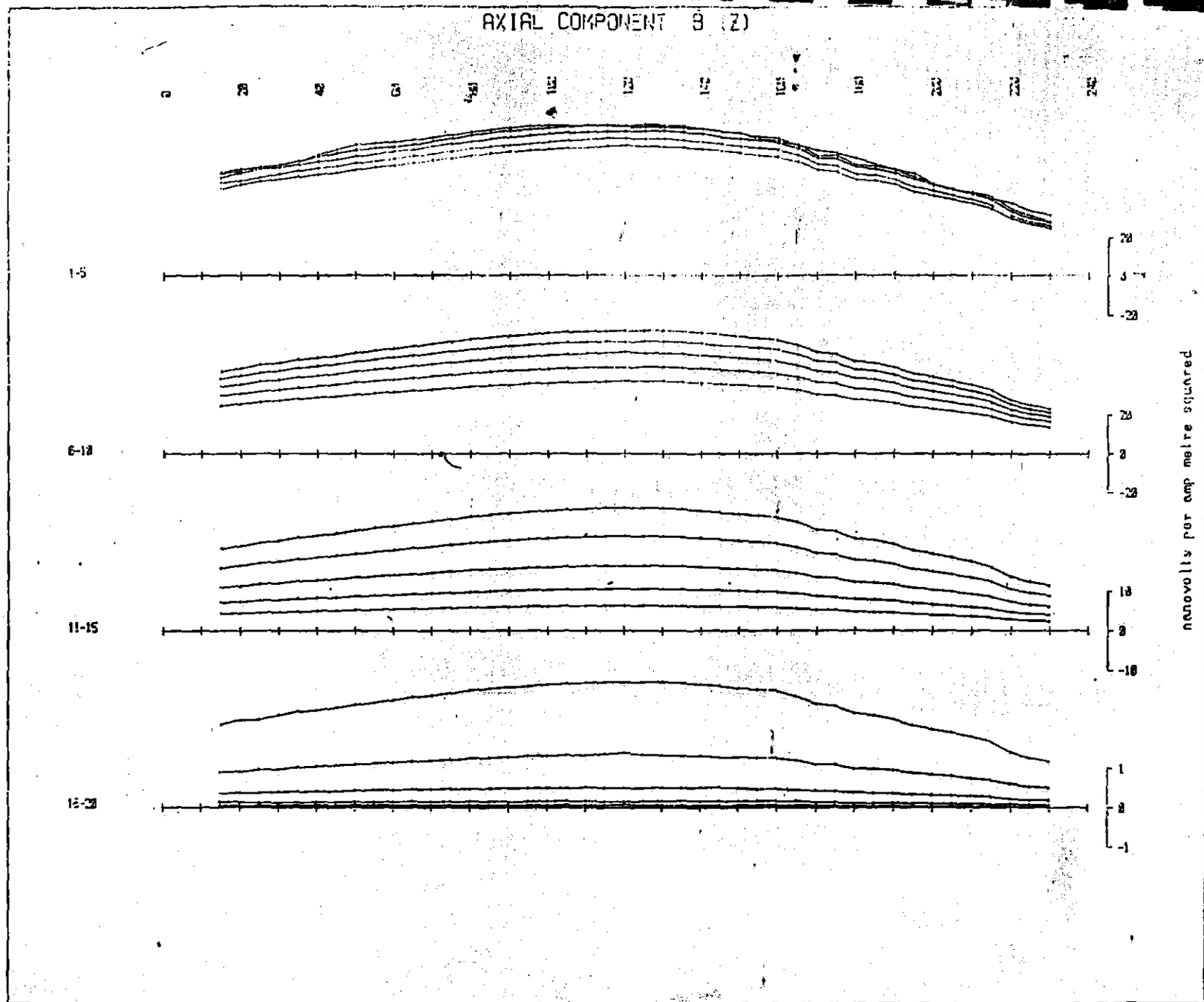
PROJECT : Red Hills

AREA : Lake Margaret Tas.

BOREHOLE : RH5

TX LOOP : NE

5 cm



EM-37

BOREHOLE SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

IN-PHASE QUADRATURE COMPONENTS

TX LOOP SIDES	; 681881 6825SE
	; 681885 681SSE
TX LOOP SIZE	; 220 m X 200 m
TX TURN OFF TIME	; 140 microsecs.
FIRST GATE TIME	; 88.5 microsecs.
CURRENT	; 17.5 amps
FREQUENCY	; 25 Hz.
INTEGRATION TIME	; 256 cycles
SYNC MODE	; CRYSTAL
HORIZONTAL SCALE	; 1:1000
SURVEYED BY	; SDCH
DATE	; 31/12/1988

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 4-914

CLIENT.	; CRA Exploration
PROJECT.	; Red Hill
AREA.	; Lake Margaret Tas.
BOREHOLE.	; RH5
TX LOOP.	; 5

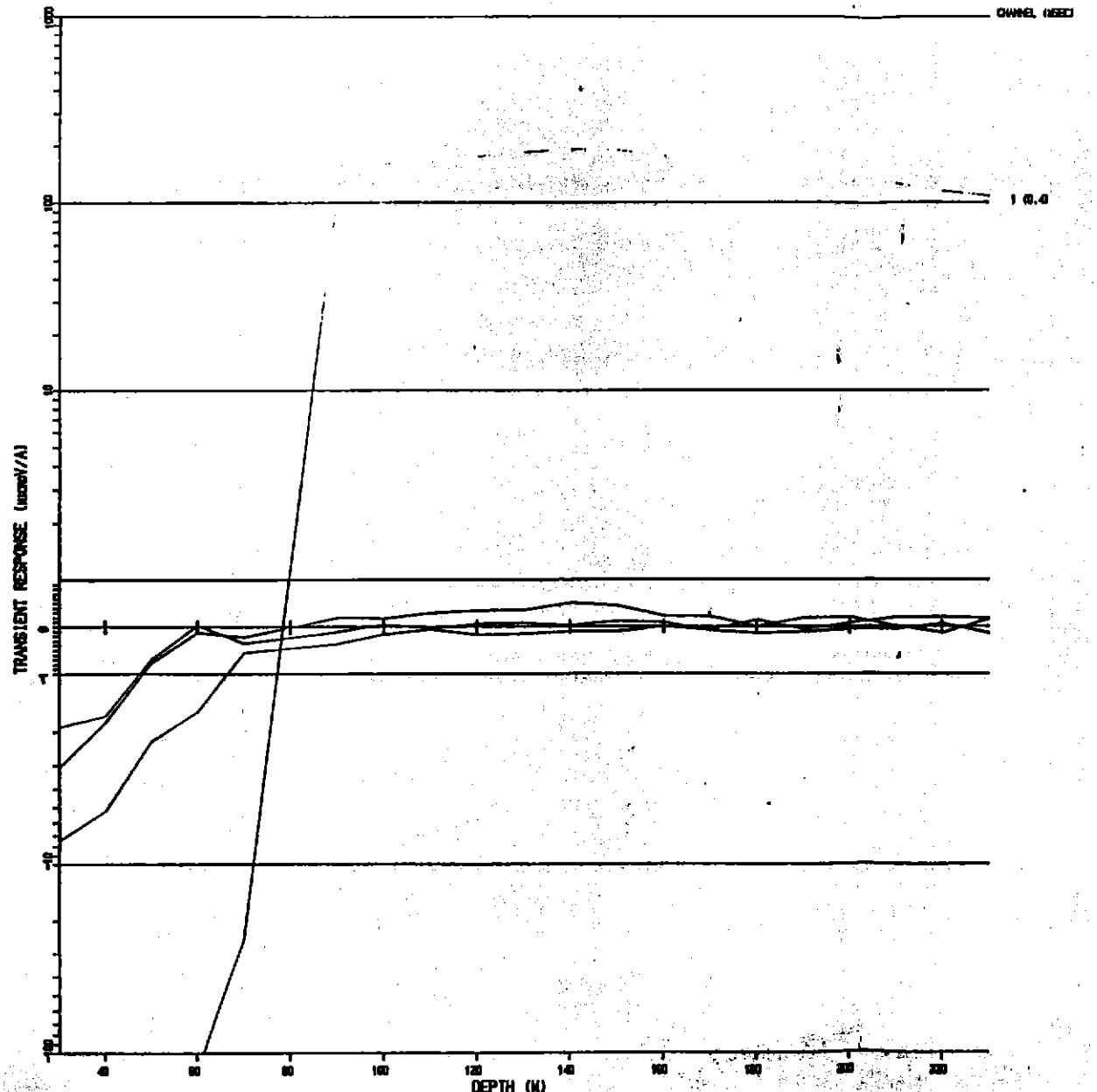
5 cm

584029

Appendix 2

ABERFOYLE SIROTEM DHEM DATA

DDH RH5 AND DDH RH12



SURVEY SPECIFICATIONS

DATA ACQUIS'N : McKENZIE GEOPHYSICS P/L

SURVEY DATE : SEPT 1990
CONFIGURATION : 100M SQUARE TRANSMITTER LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 2048
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1236
CURRENT : 12.0 AMPS
OPERATOR : P McKENZIE

PLOT SPECIFICATIONS

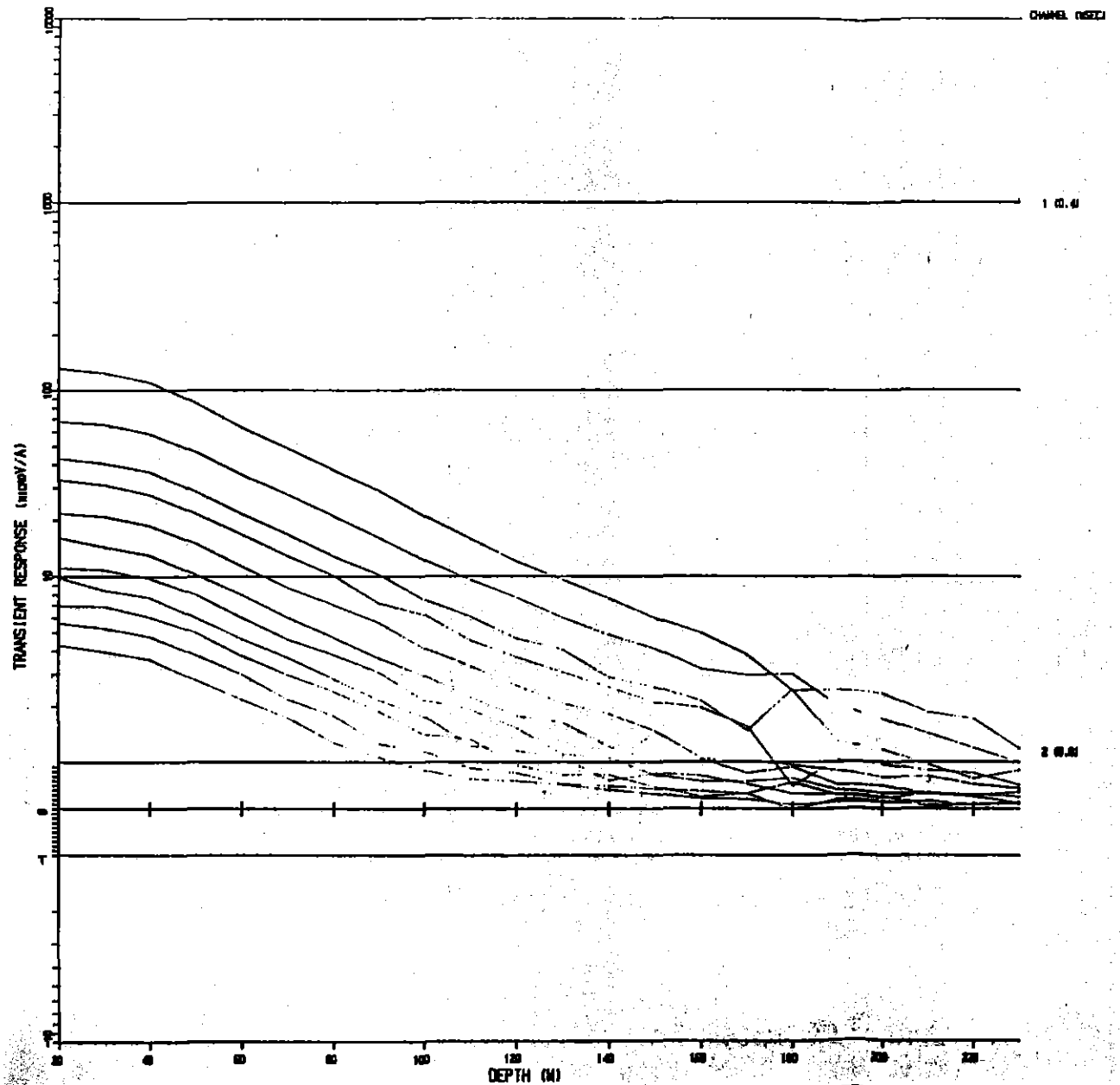
HORIZONTAL SCALE : LINEAR
VERTICAL SCALE : LOGARITHMIC
4CM. PER DECADE
LINEAR BETWEEN -1 AND +1

5 cm

ABERFOYLE EXPLORATION

TASMANIA
RED HILLS
SIROTEM PROFILE
LINE RH5 LOOP 1

SCALE - 1:1000



SURVEY SPECIFICATIONS

DATA ACQUIS'N : McSKIMMING GEOPHYSICS P/L

SURVEY DATE : SEPT 1988
CONFIGURATION : 100m SQUARE TRANSMITTER LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 1024
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1235
CURRENT : 11.9 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:1000
VERTICAL SCALE - LOGARITHMIC
4CM. PER DECADE
LINEAR BETWEEN -1 AND 1

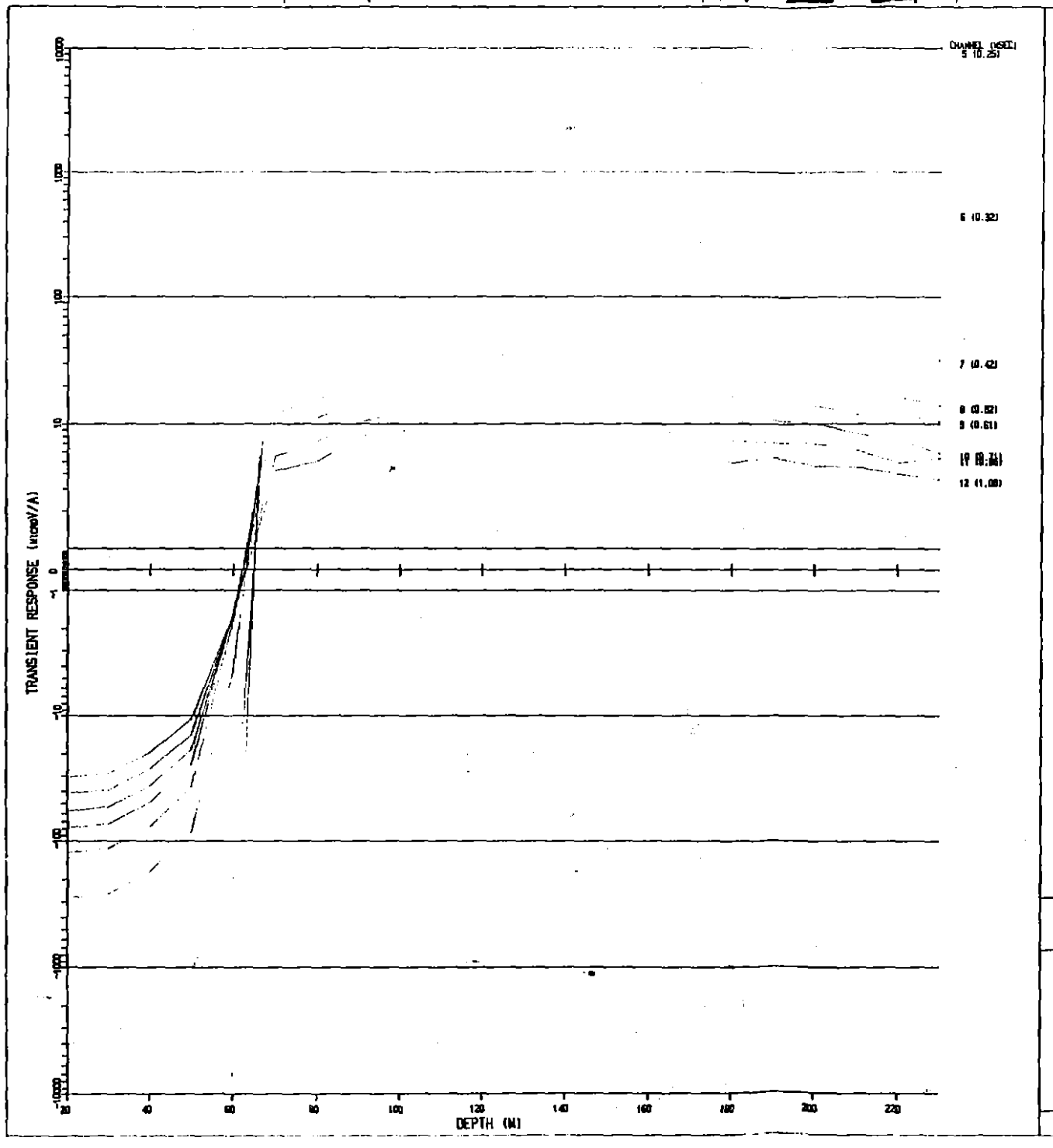
5 cm

ABERFOYLE EXPLORATION

TASMANIA
RED HILLS
SIROTEM PROFILE
LINE RH5 LOOP 2

SCALE - 1:1000

T30



SURVEY SPECIFICATIONS

SURVEY DATE : SEPT 1988
CONFIGURATION : 100M SQUARE TRANSMITTER LOOP,
DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 1024
TRANSMITTER : MEDIUM POWER
RECEIVER : SYSTEM II S/N 1235
CURRENT : 12.2 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:1000
VERTICAL SCALE - LOGARITHMIC
3CM. PER DECADE
LINEAR BETWEEN -1 AND 1

5 cm

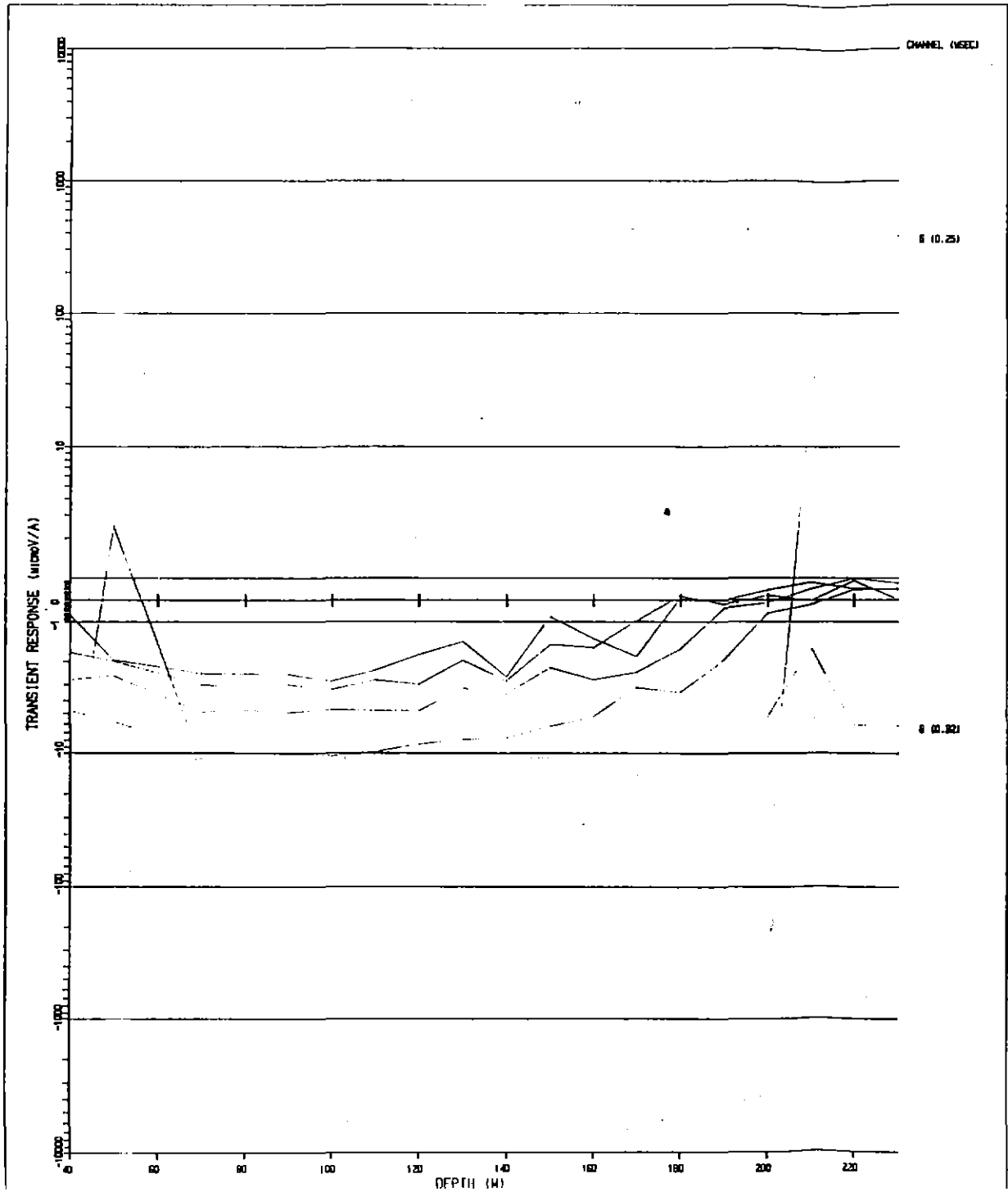
ABERFOYLE EXPLORATION

TASMANIA
RED HILLS
SIROTEM PROFILE
LINE RH5 LOOP 3 ET

SCALE - 1:1000

032

584033



SURVEY SPECIFICATIONS

SURVEY DATE : SEPT 1988
CONFIGURATION : 100M SQUARE TRANSMITTER LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 2048
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1236
CURRENT : 14.5 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:1000
VERTICAL SCALE - LOGARITHMIC
8CM. PER DECADE
LINEAR BETWEEN -1 AND 1

5 cm

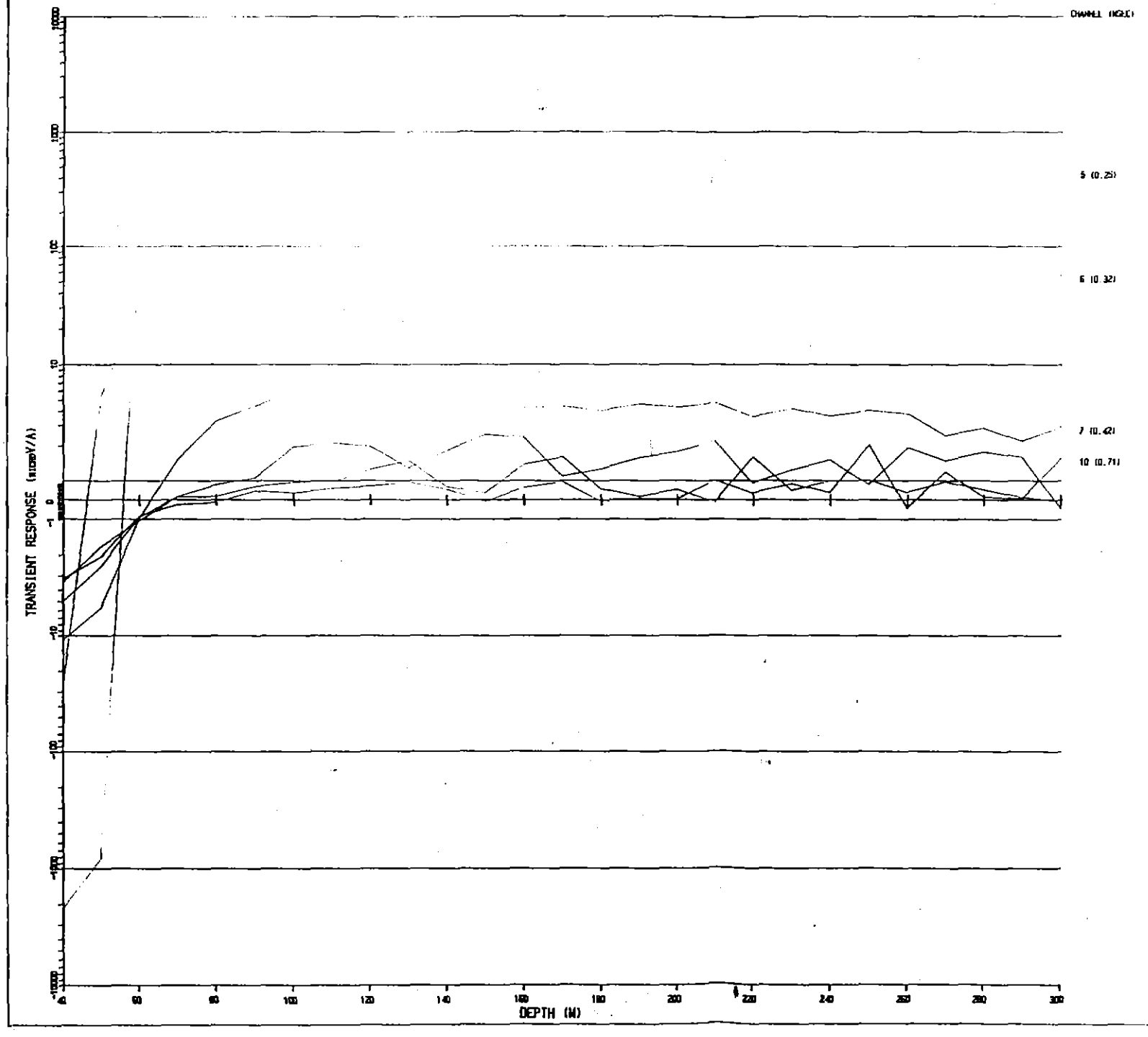
ABERFOYLE EXPLORATION

TASMANIA
RED HILLS
SIROTEM PROFILE
LINE RH5 LOOP 4 ET

SCALE - 1:1000

033

584034



SURVEY SPECIFICATIONS

SURVEY DATE : SEPT 1988
CONFIGURATION : 100M SQUARE TRANSMITTER LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 2048
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1235
CURRENT : 14.4 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:1000
VERTICAL SCALE - LOGARITHMIC
3CM. PER DECADE
LINEAR BETWEEN -1 AND 1

5 cm

ABERFOYLE EXPLORATION

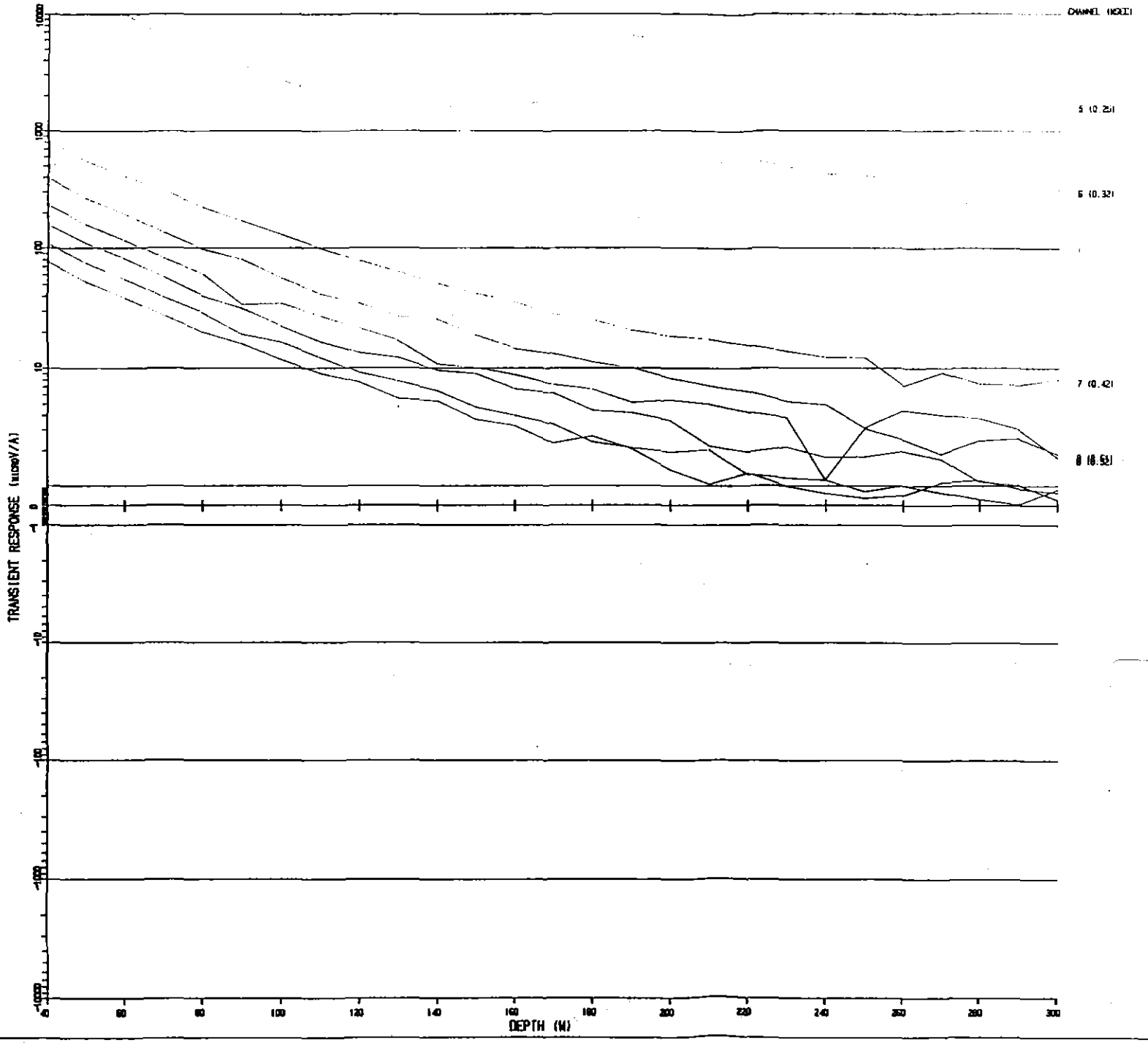
TASMANIA

RED HILLS

SIROTEM PROFILE

LINE RH12 LOOP 1 ET

SCALE - 1:1000



SURVEY SPECIFICATIONS

SURVEY DATE : SEPT 1988
CONFIGURATION : 100M SQUARE TRANSMITTER LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 512
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1236
CURRENT : 14.6 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

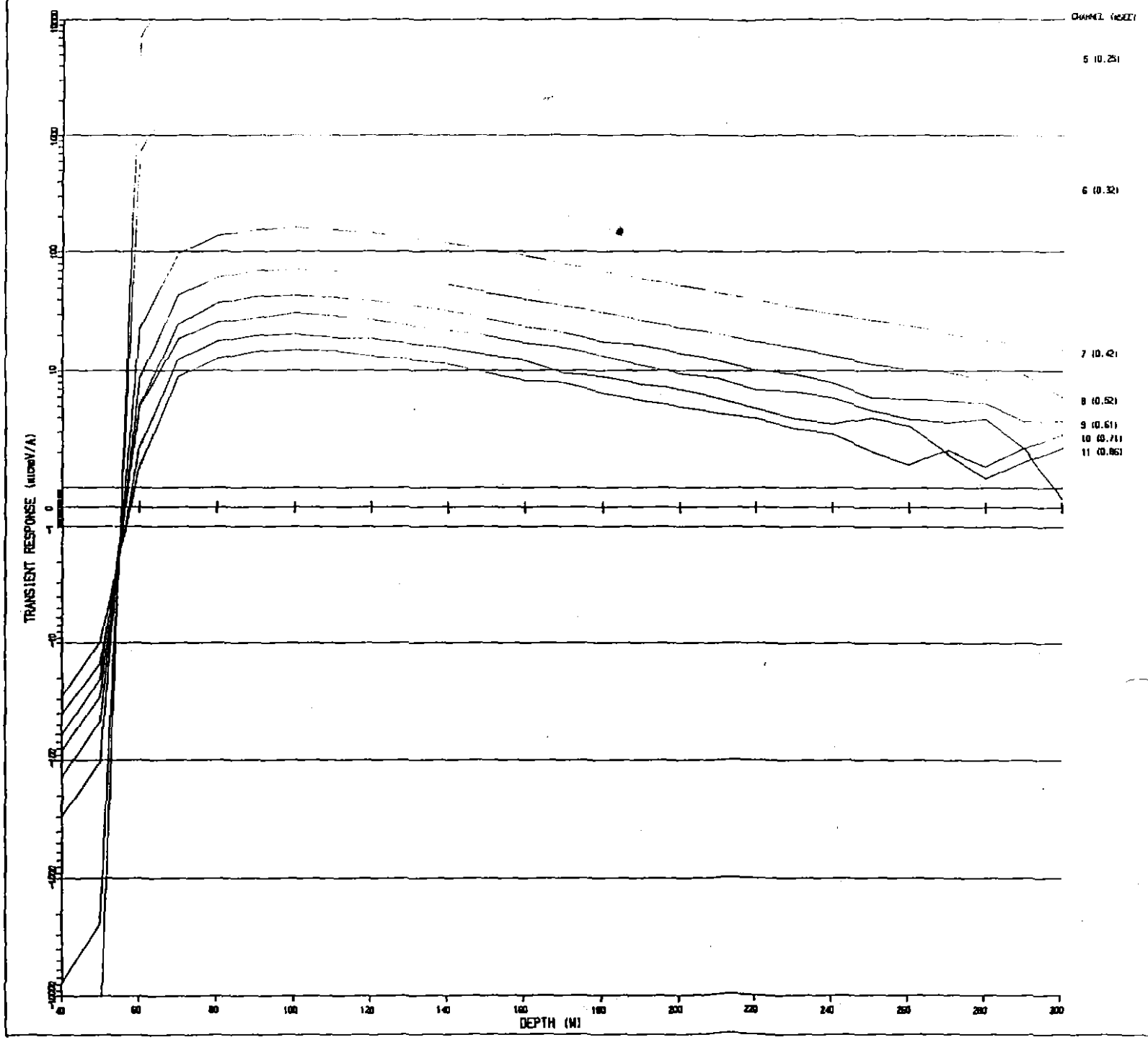
HORIZONTAL SCALE - 1:1000
VERTICAL SCALE - LOGARITHMIC
3CM. PER DECADE
LINEAR BETWEEN -1 AND 1

5 cm

ABERFOYLE EXPLORATION

TASMANIA
RED HILLS
SIROTEM PROFILE
LINE RH12 LOOP 2 ET

SCALE - 1:1000



SURVEY SPECIFICATIONS

SURVEY DATE : SEPT 1988
CONFIGURATION : 100M SQUARE TRANSMITTER LOOP, DRILL HOLE SURVEY
READING (M). : 20 METRES
NO. OF STACKS : 2048
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1236
CURRENT : 13.3 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

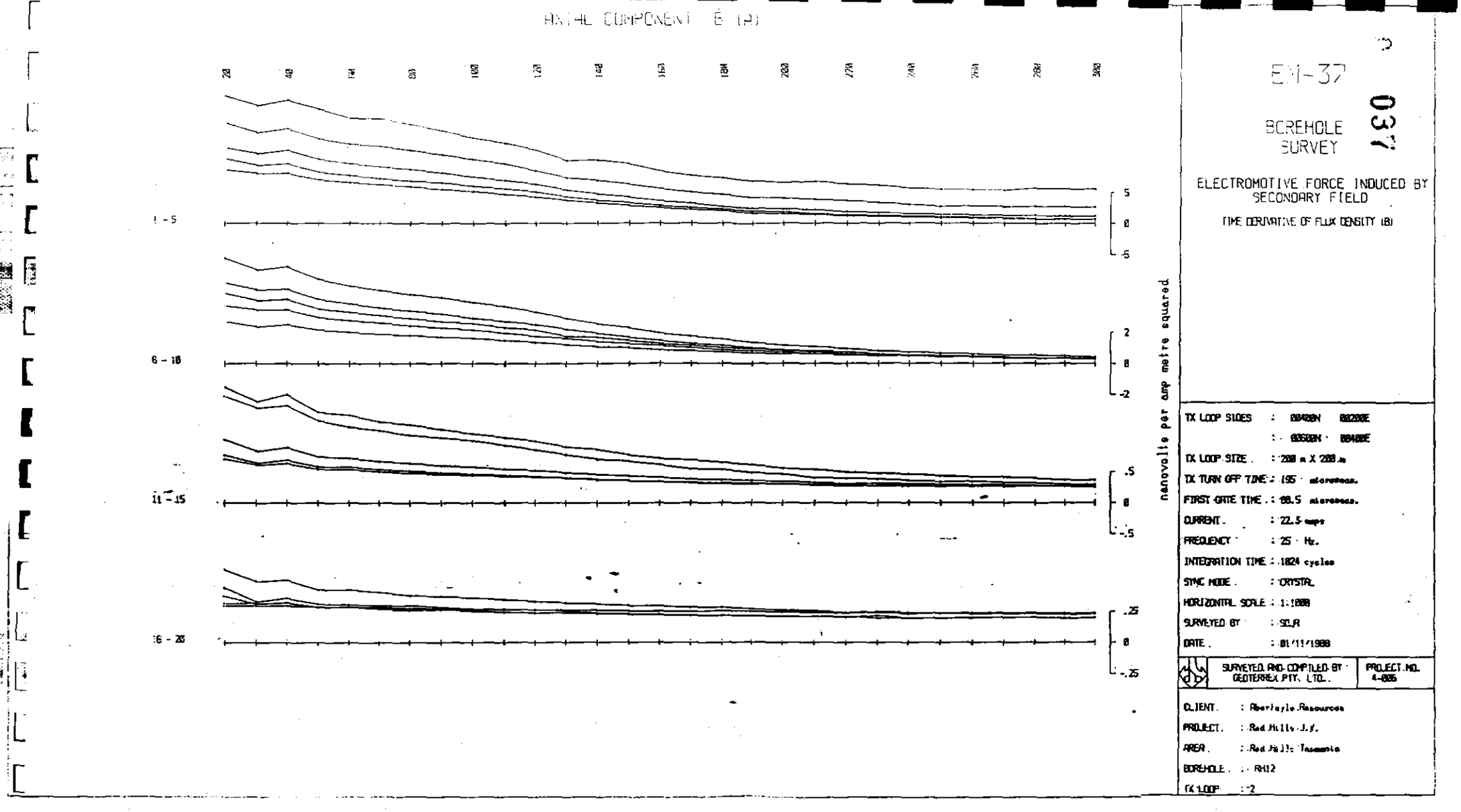
HORIZONTAL SCALE - 1:1000
VERTICAL SCALE - LOGARITHMIC
3CM. PER DECADE
LINEAR BETWEEN -1 AND 1

5 cm

ABERFOYLE EXPLORATION

TASMANIA
RED HILLS
SIROTEM PROFILE
LINE RH12 LOOP 3 ET

SCALE - 1:1000



EM-37

BOREHOLE SURVEY

037

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	: 08400N 08200E
	: 08600N 08400E
TX LOOP SIZE	: 200 m X 200 m
TX TURN OFF TIME	: 195 microsecs.
FIRST GATE TIME	: 88.5 microsecs.
CURRENT	: 22.5 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 1024 cycles
SYNC MODE	: CRYSTAL
HORIZONTAL SCALE	: 1:1000
SURVEYED BY	: SCLR
DATE	: 01/11/1988

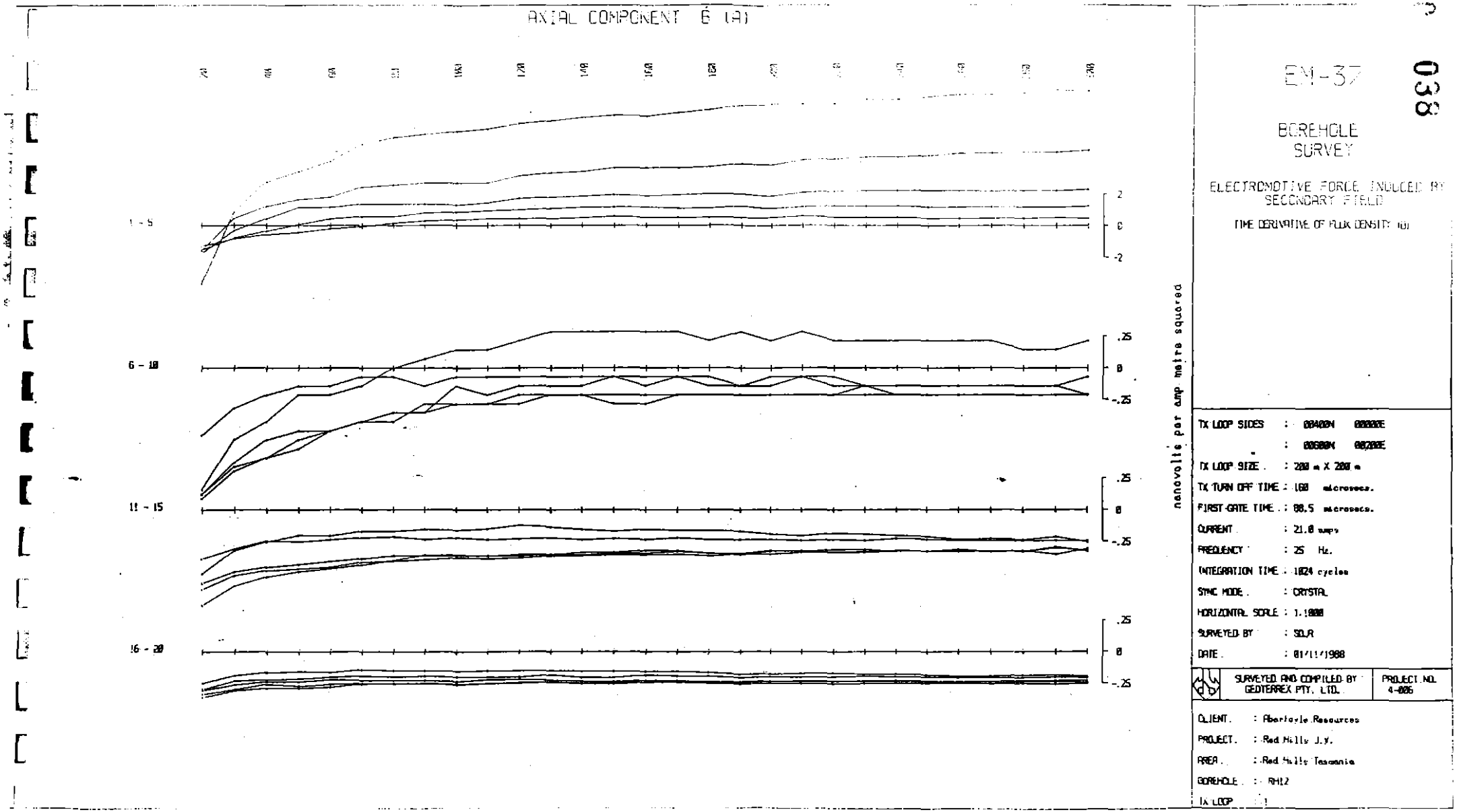
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 4-086

CLIENT	: Aberfoyle Resources
PROJECT	: Red Hills J.V.
AREA	: Red Hills Tasmania
BOREHOLE	: RH12
TX LOOP	: 2

5 cm

584038



EM-37

BOREHOLE SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (dB)

TX LOOP SIDES	: 00400N 00000E
	: 00000N 00200E
TX LOOP SIZE	: 200 m X 200 m
TX TURN OFF TIME	: 160 microsecs.
FIRST GATE TIME	: 88.5 microsecs.
CURRENT	: 21.0 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 1024 cycles
SYNC MODE	: CRYSTAL
HORIZONTAL SCALE	: 1:1000
SURVEYED BY	: SDLR
DATE	: 01/11/1988

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

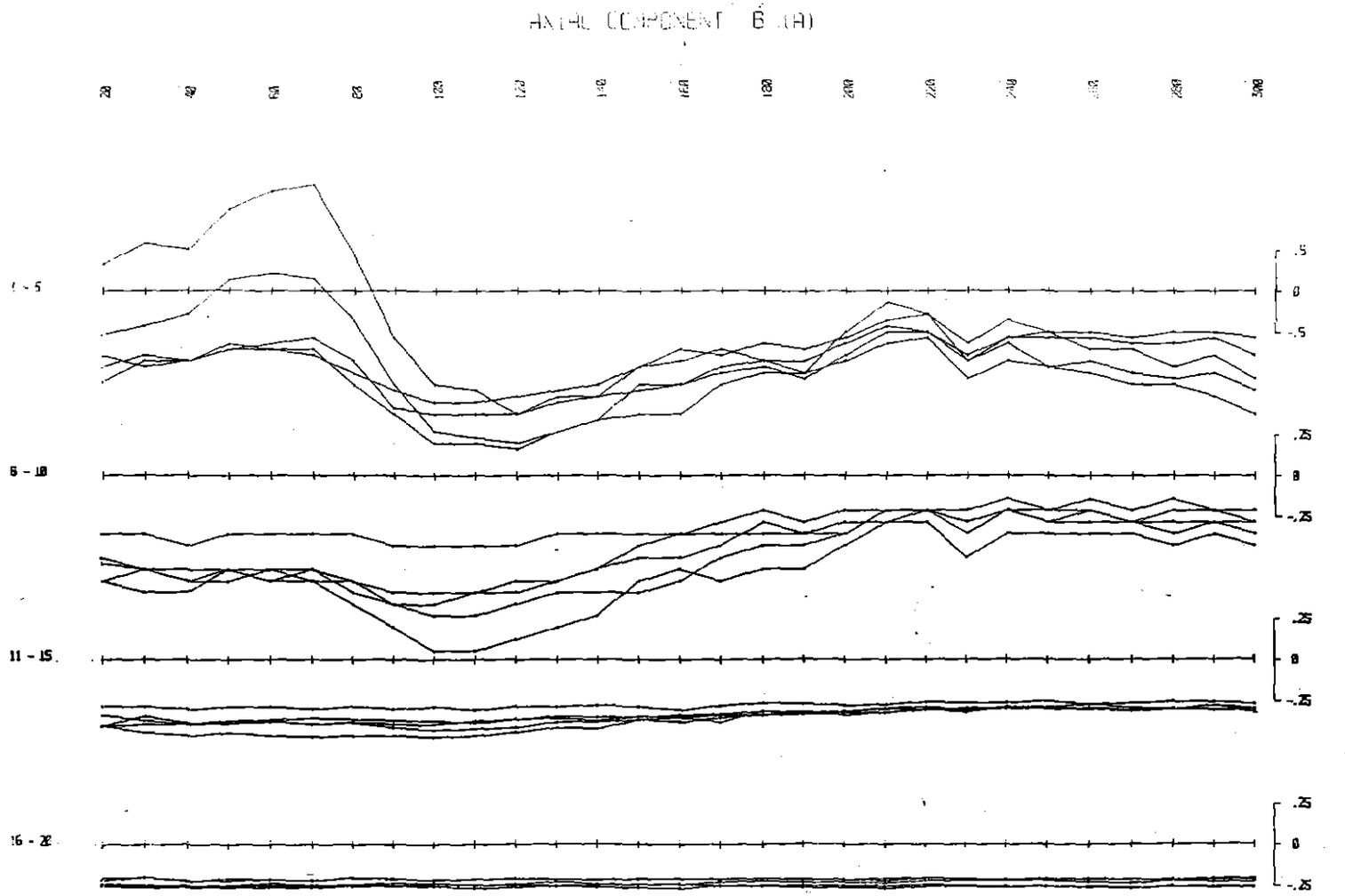
PROJECT NO. 4-006

CLIENT	: Aberfoyle Resources
PROJECT	: Red Hills J.V.
AREA	: Red Hills Tasmania
BOREHOLE	: RH12
TX LOOP	: 1

5 cm

038

584039



EM-37

BOREHOLE SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

039

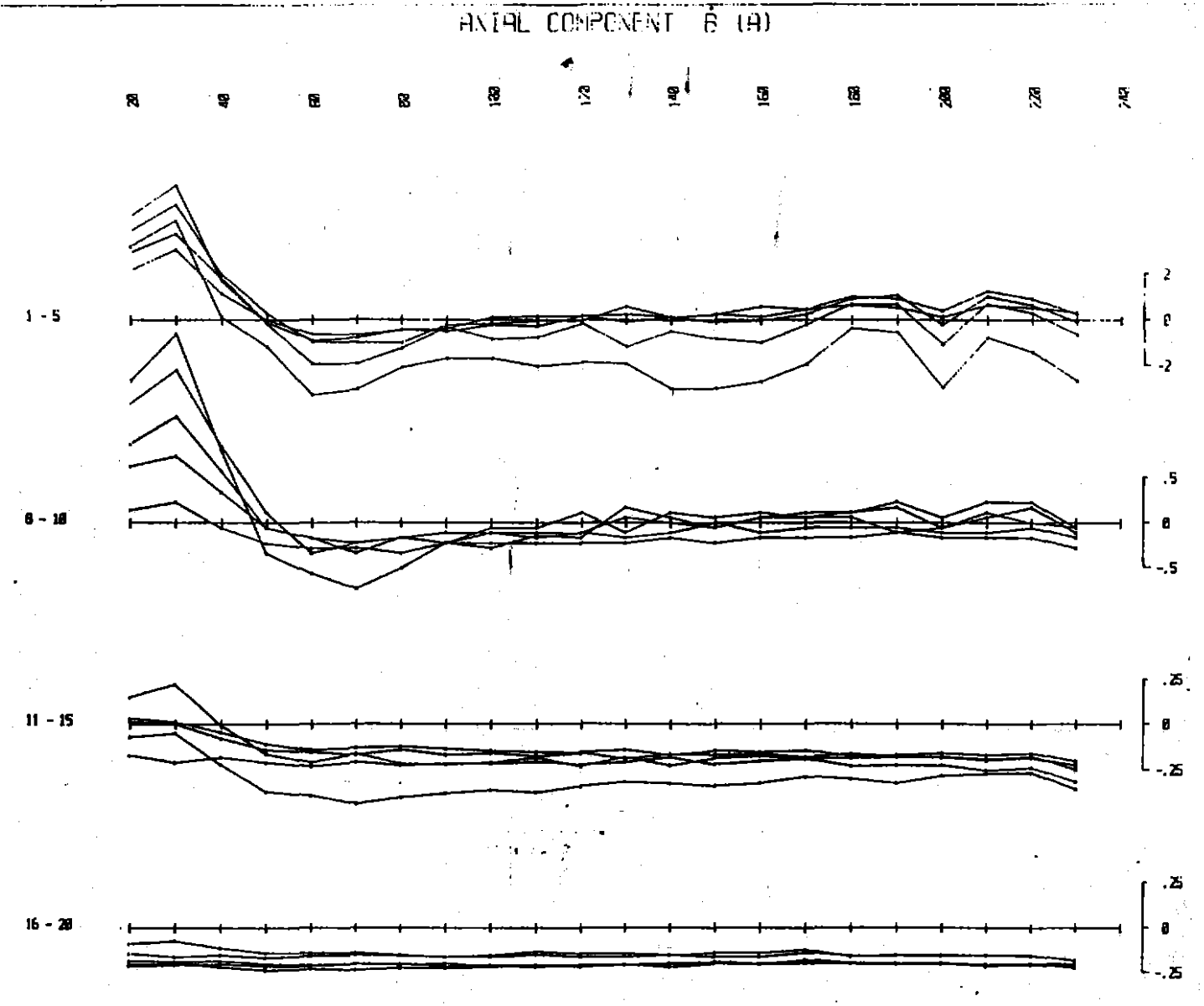
TX LOOP SIDES	: 08400N 08400E
	: 08600N 08600E
TX LOOP SIZE	: 200 m X 200 m
TX TURN OFF TIME	: 195 microsecs.
FIRST GATE TIME	: 88.5 microsecs.
CURRENT	: 21.8 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 1024 cycles
SYNC MODE	: CRYSTAL
HORIZONTAL SCALE	: 1:1000
SURVEYED BY	: SDJR
DATE	: 01/11/1988

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 4-086

CLIENT	: Abelle Resources
PROJECT	: Red Hills J.V.
AREA	: Red Hills Tasmania
BOREHOLE	: RH12
TX LOOP	: 3

5 cm

584040



040

EM-37

BOREHOLE
SURVEY

ELECTROMOTIVE FORCE INDUCED BY
SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

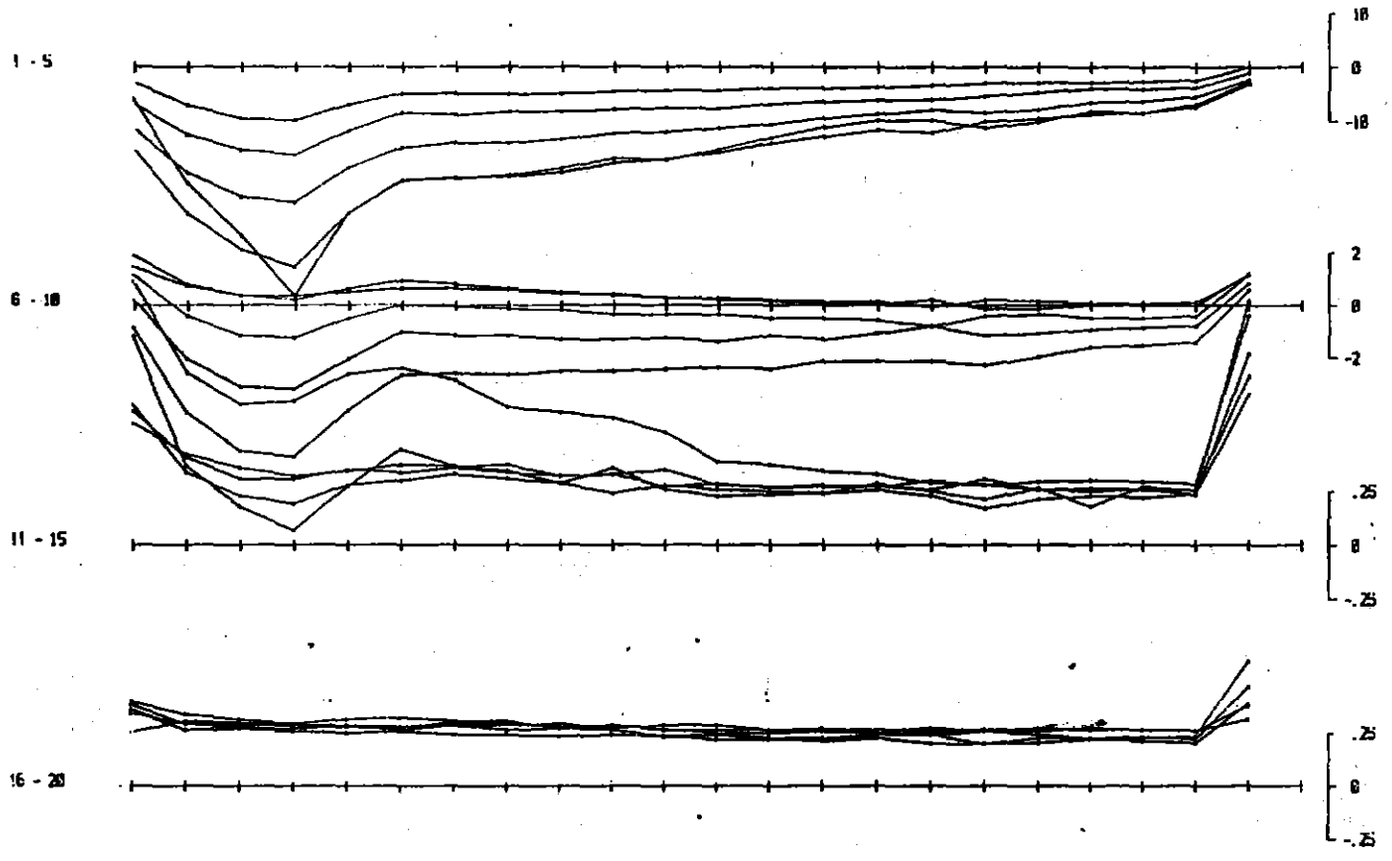
5 cm

nanovolts per amp m

TX LOOP SIDES	: 00800N 00200E	
	: 00200N 00400E	
TX LOOP SIZE	: 200 m X 200 m	
TX TURN OFF TIME	: 200 microsecs.	
FIRST GATE TIME	: 88.5 microsecs.	
CURRENT	: 26.5 amps	
FREQUENCY	: 25 Hz.	
INTEGRATION TIME	: 1024 cycles	
SYNC MODE	: CRYSTAL	
HORIZONTAL SCALE	: 1:1000	
SURVEYED BY	: SDJR	
DATE	: 01/11/1988	
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.		PROJECT NO. 4-005
CLIENT	: Aberfoyle Resources	
PROJECT	: Red Hill J.V.	
AREA	: Red Hill Tasmania	
BOREHOLE	: RH 5	
TX LOOP	: 4	

584041

AXIAL COMPONENT $\dot{B}$ (A)



EM-37

BOREHOLE SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY ($\dot{B}$)

nanovolts per amp m

5 cm

TX LOOP SIDES	:	88888N 88488E
	:	88288N 88688E
TX LOOP SIZE	:	200 m X 200 m
TX TURN OFF TIME	:	190 microsecs.
FIRST GATE TIME	:	88.5 microsecs.
CURRENT	:	28.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	1024 cycles
SYNC MODE	:	CRYSTAL
HORIZONTAL SCALE	:	1:1000
SURVEYED BY	:	SDJR
DATE	:	01/11/1988

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 4-005

CLIENT : Aberfoyle Resources

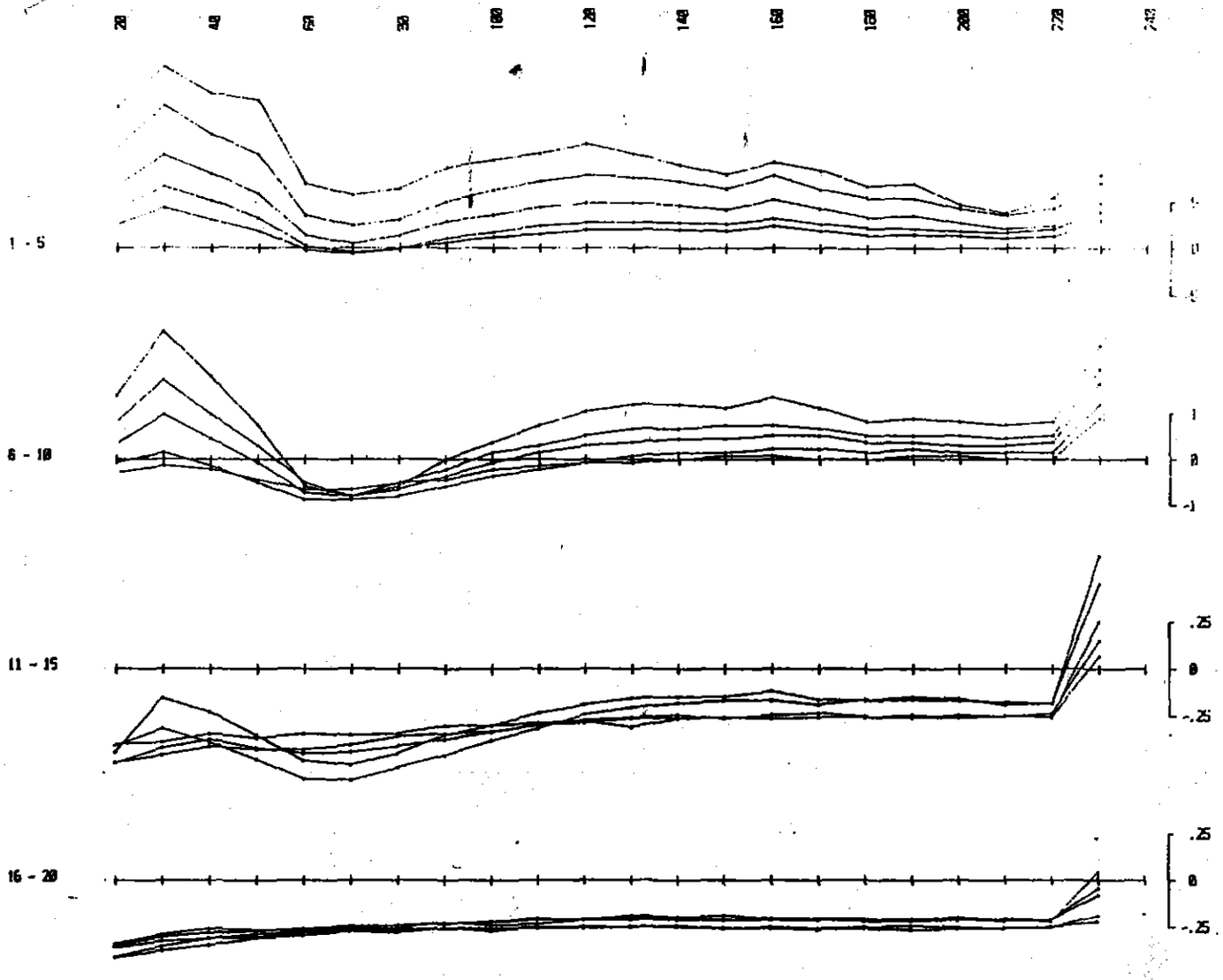
PROJECT : Red Hills, N.Y.

AREA : Red Hills, Tasmania

BOREHOLE : RH5

TX LOOP : 5

AXIAL COMPONENT B (B)



EM-37

BOREHOLE SURVEY

042

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	; 00000N 00000E
	; 000000N 00000E
TX LOOP SIZE	; 200 m X 200 m
TX TURN OFF TIME	; 185 microsecs.
FIRST GATE TIME	; 88.5 microsecs.
CURRENT	; 20.3 amps
FREQUENCY	; 25 Hz.
INTEGRATION TIME	; 1024 cycles
SYNC MODE	; CRYSTAL
HORIZONTAL SCALE	; 1:1000
SURVEYED BY	; SDLR
DATE	; 02/11/1988

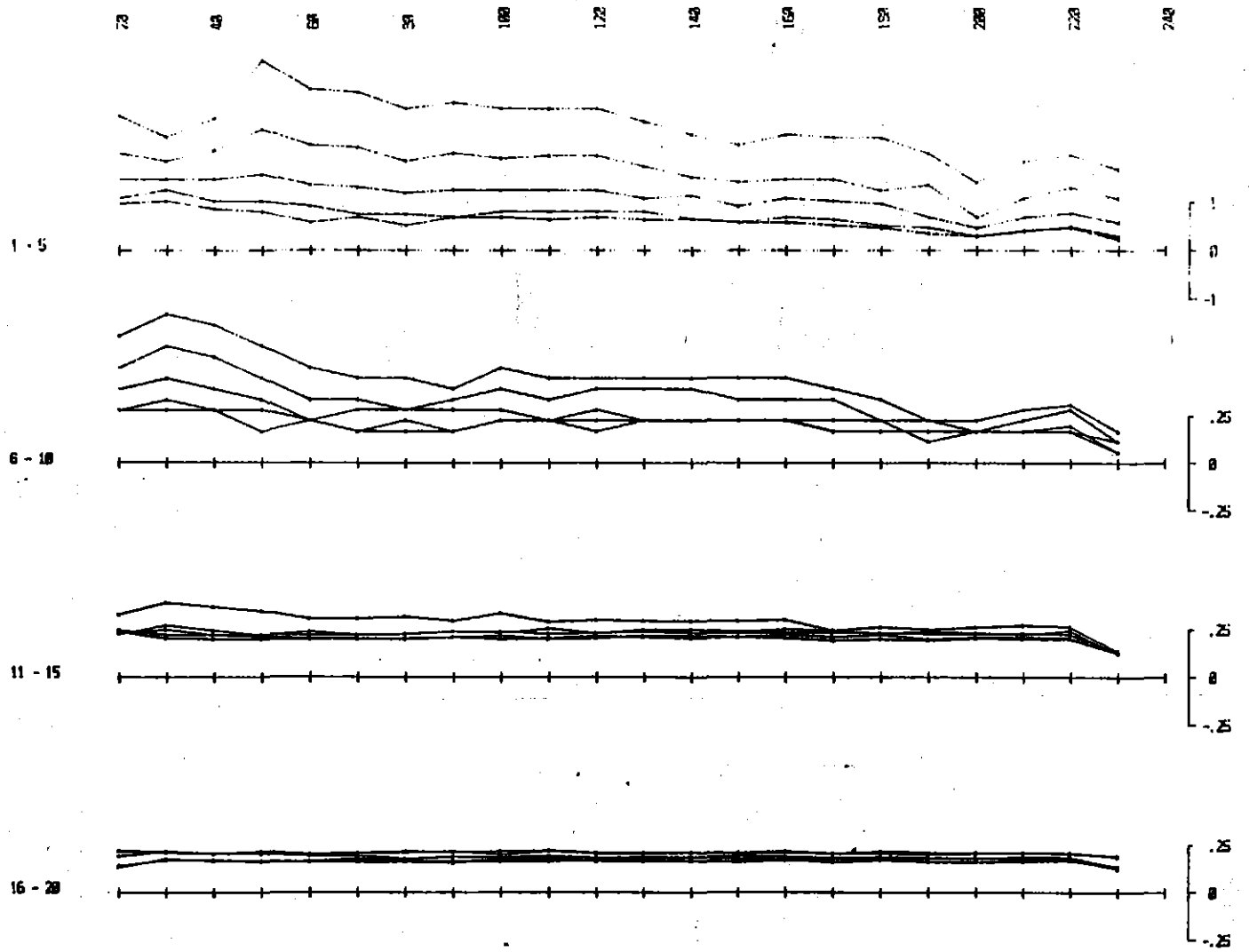
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 4-886

CLIENT	; Aberfoyle Resources
PROJECT	; Red Hills J.V.
AREA	; Red Hills Tasmania
BOREHOLE	; RH5
TX LOOP	; 6

584043

AXIAL COMPONENT B (A)



nanovolts per amp metre squared

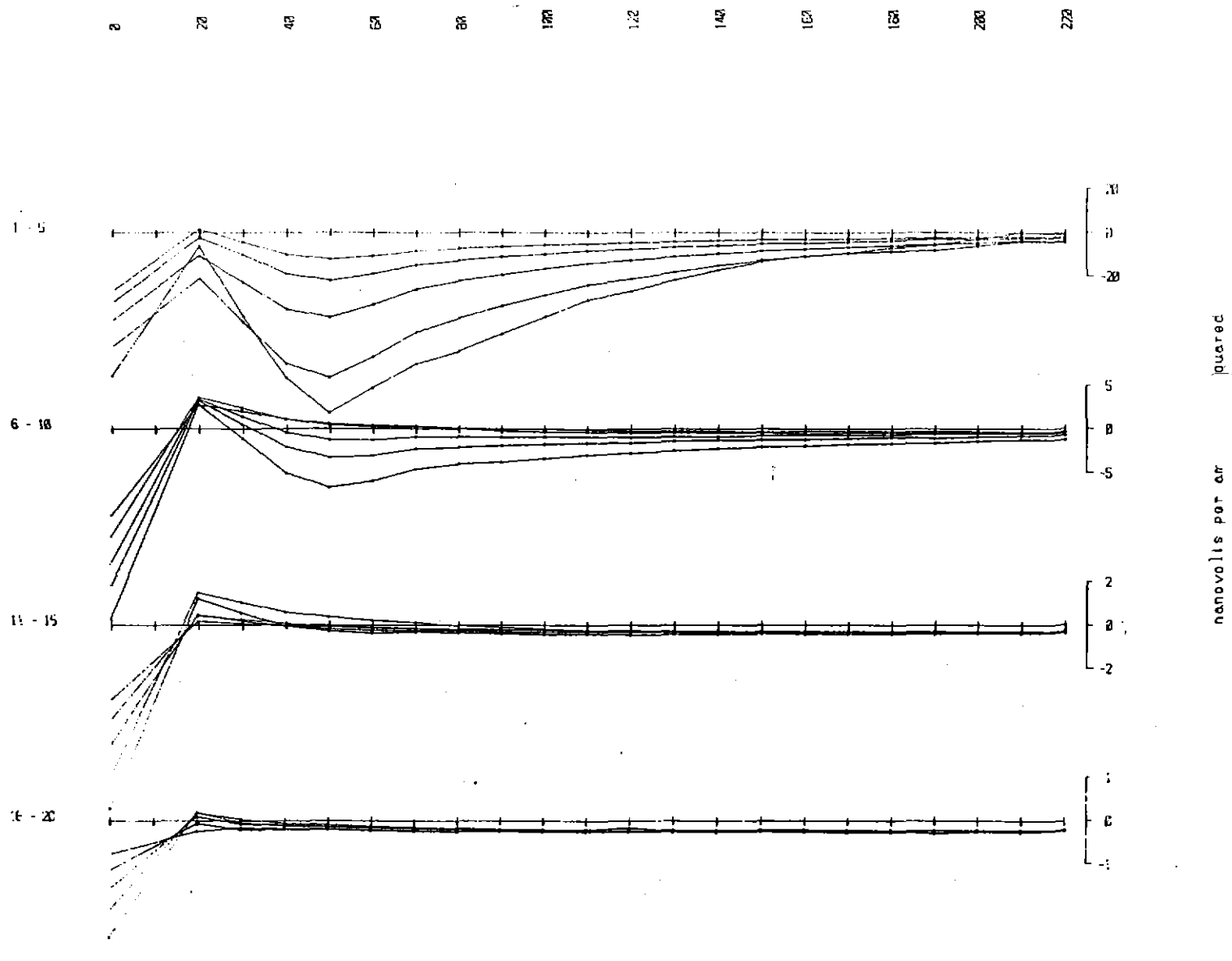
5 cm

TX LOOP SIDES	: 00000N	00000E
	: 00200N	01000E
TX LOOP SIZE	: 200 m X 200 m	
TX TURN OFF TIME	: 235 microsecs.	
FIRST GATE TIME	: 88.5 microsecs.	
CURRENT	: 26.5 amps	
FREQUENCY	: 25 Hz.	
INTEGRATION TIME	: 1024 cycles	
SYNC MODE	: CRYSTAL	
HORIZONTAL SCALE	: 1:1000	
SURVEYED BY	: SDJR	
DATE	: 02/11/1988	

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.	PROJECT NO. 4-886

CLIENT : Aberfoyle Resources
PROJECT : Red Hills J.V.
AREA : Red Hills Tasmania
BOREHOLE : RH5
TX LOOP : 7

AXIAL COMPONENT B (A)



EM-37

0414

BOREHOLE SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

IN TERMS OF FLUX DENSITY (B)

squared

5 cm

nanovolts per am

TX LOOP SIDES	:	00050N 00450E
	:	00150N 00550E
TX LOOP SIZE	:	100 m X 100 m
TX TURN OFF TIME	:	120 microsecs.
FIRST GATE TIME	:	98.5 microsecs.
CURRENT	:	21.2 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	1024 cycles
SYNC MODE	:	CRYSTAL
HORIZONTAL SCALE	:	1:1000
SURVEYED BY	:	SOJA
DATE	:	02/11/1986

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 4-006

CLIENT : Aberfoyle Resources

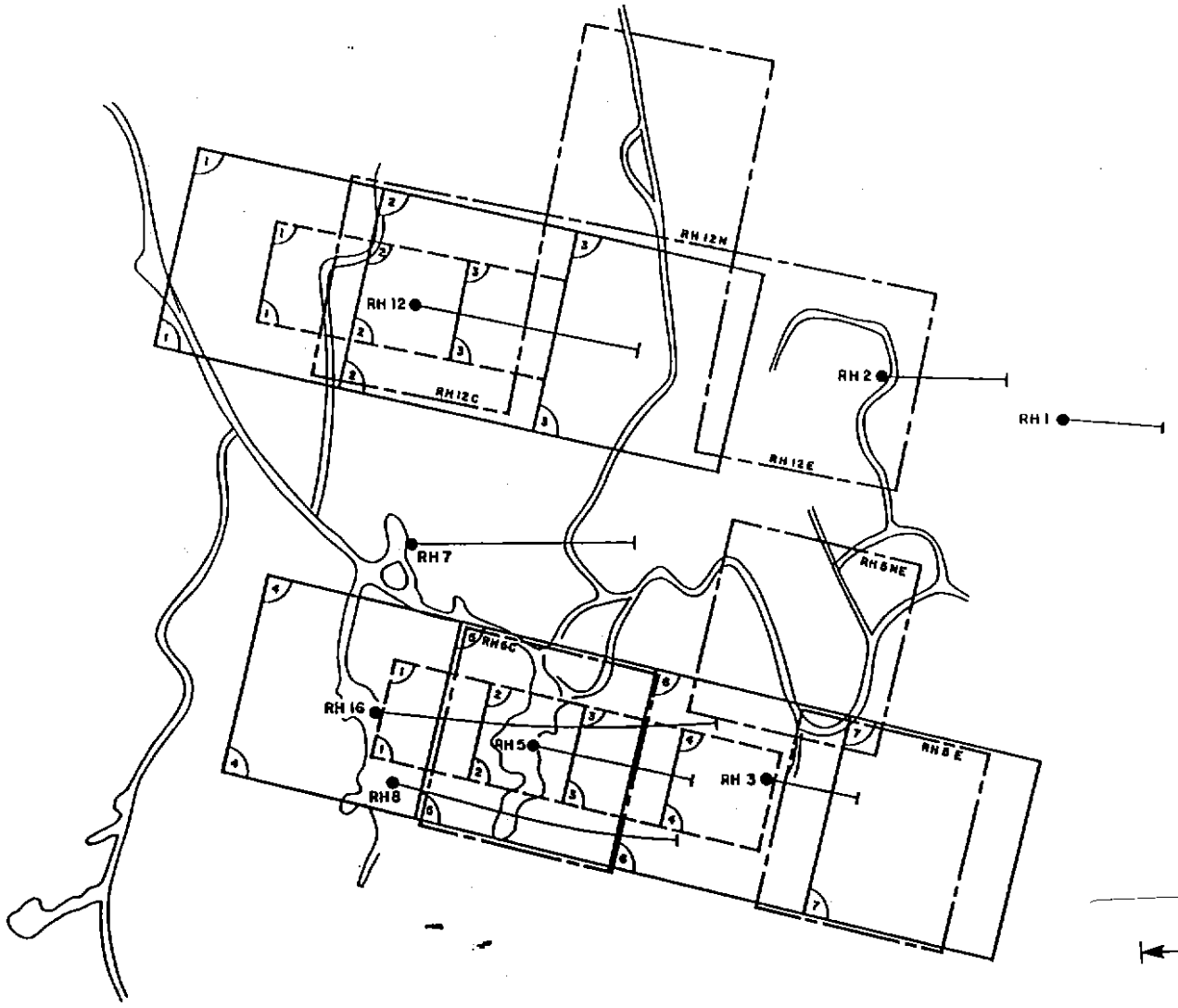
PROJECT : Red Hills, N.W.

AREA : Red Hills, Tasmania

BOREHOLE : RH5

TX LOOP : B

584045



LEGEND

RH4 — CRA Exploration Diamond Drill Hole

EM-37 Survey Nov. 88 Aberfoyle Resources

Sirotem Survey Sept. 88 Aberfoyle Resources

RH8E — Em-37 Survey Oct 86 CRA Exploration

4WD Track

0 100 200 300 400 METRES

Aberfoyle Resources Limited

EXPLORATION DIVISION

REVISIONS			
Init	Date	Init	Date
Location Code			

TASMANIA

LAKE MARGARET E.L.

RED HILLS DOWN HOLE E.M. LOOP LOCATIONS

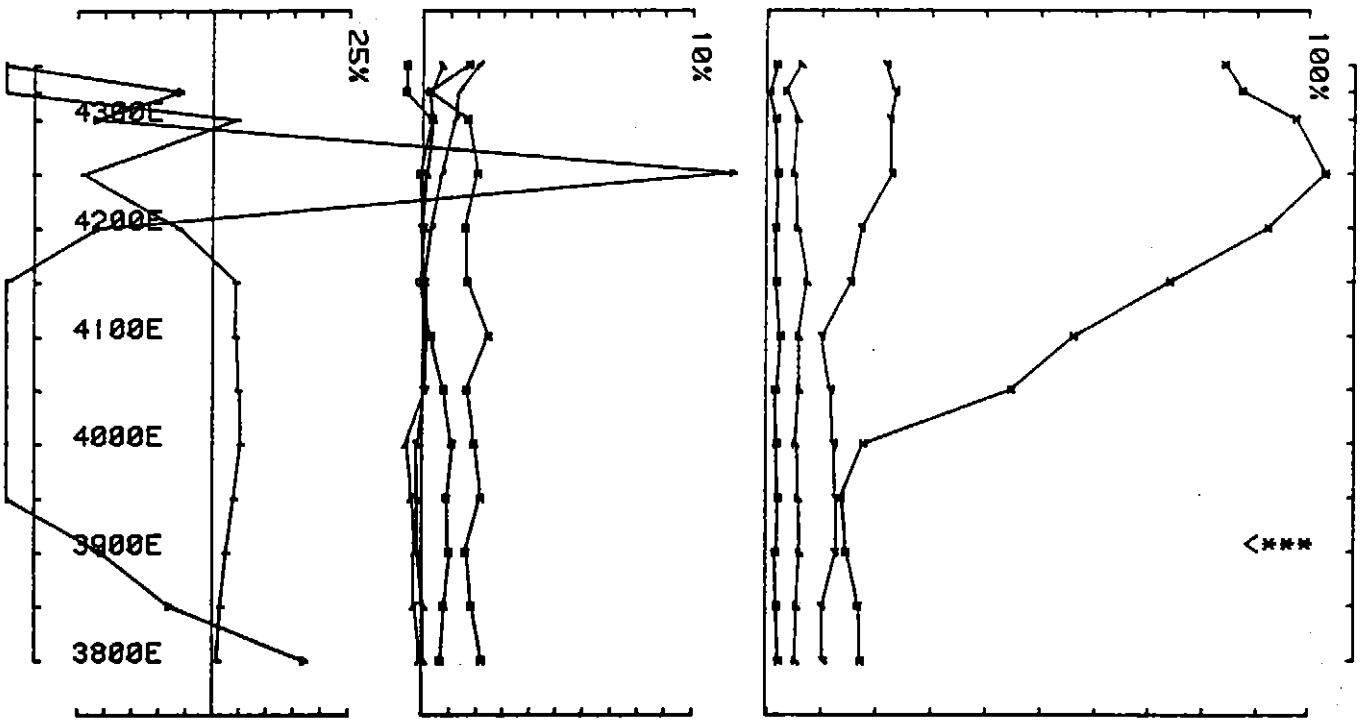
Scale 1:5000 | Date Nov '88

Compiled JJR
Drawn JJR
Traced Geo Drafting
Checked
Plate No L MARG 4

0145

5840046

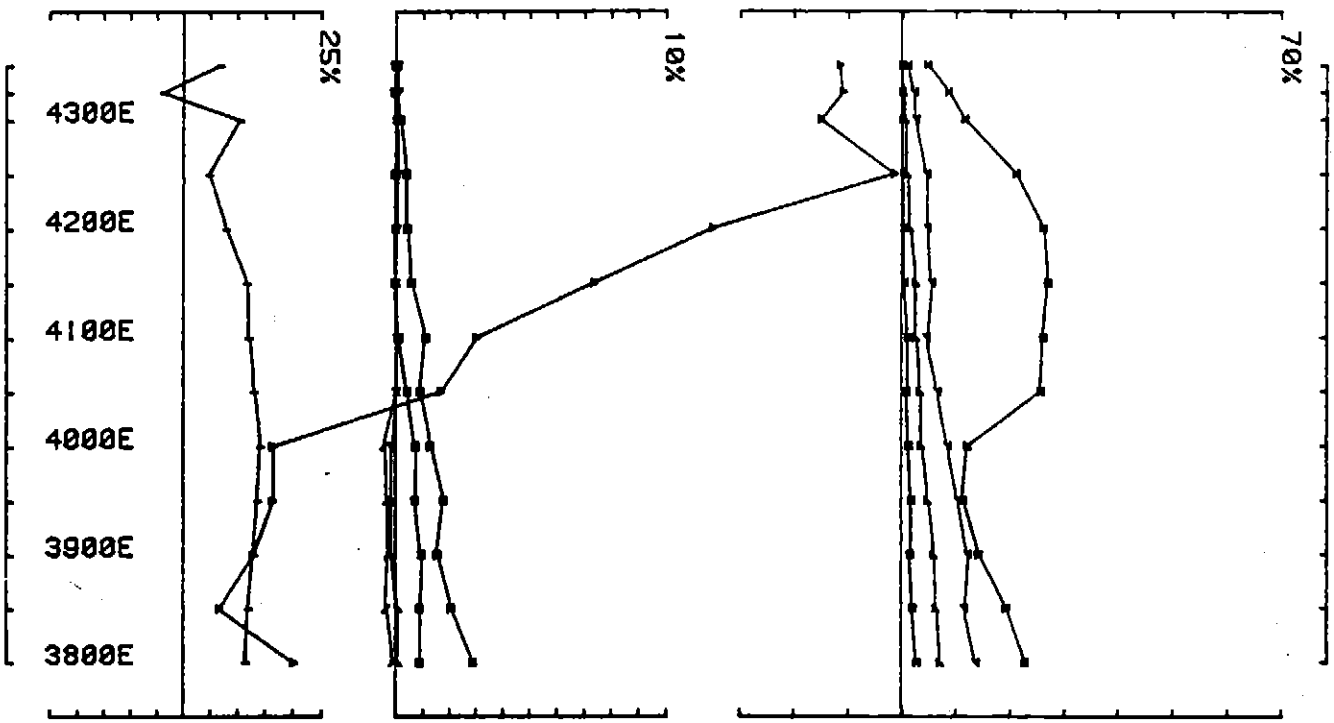
APPENDIX 2



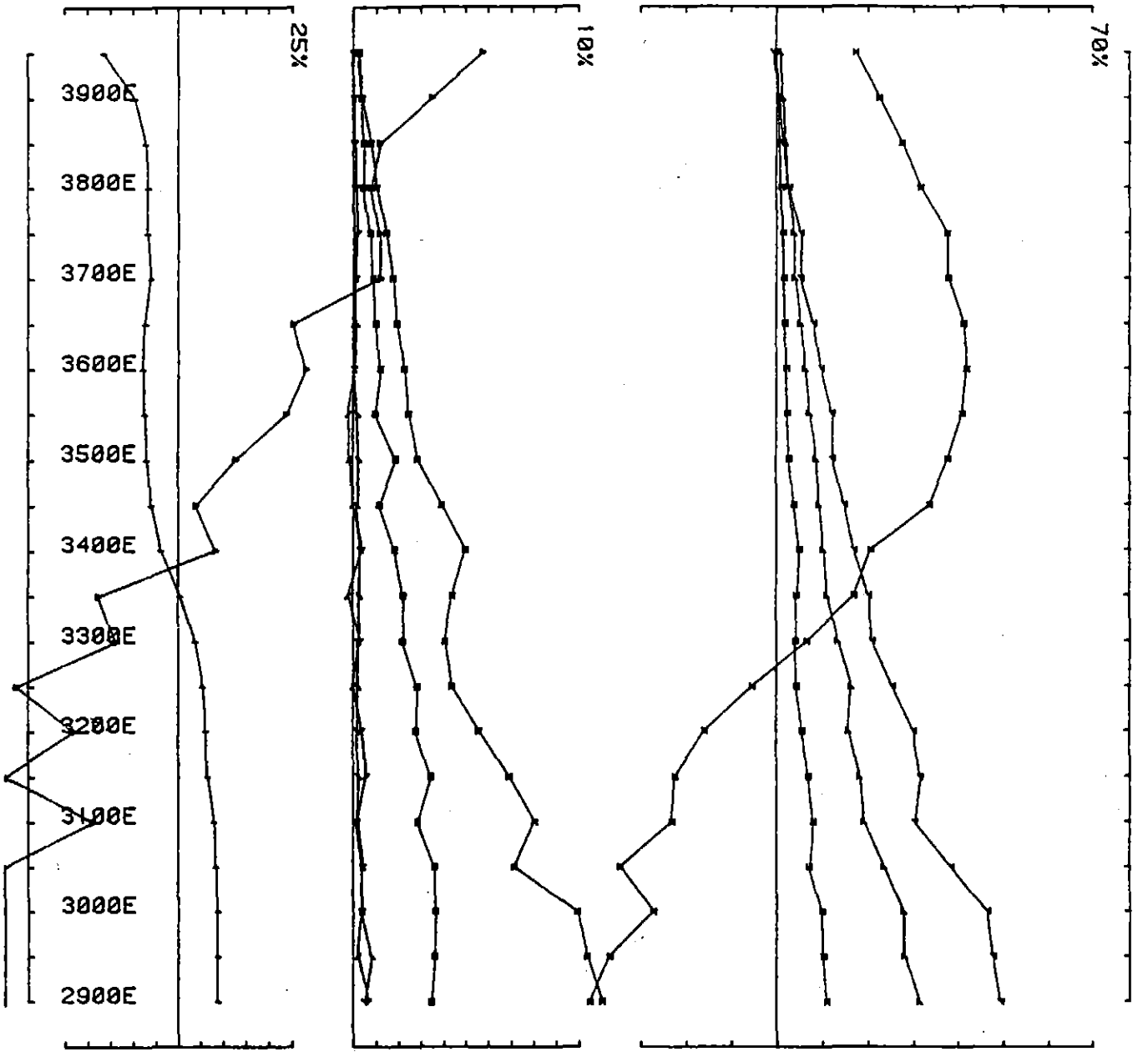
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230 JAN 1989

loop no 4 line 4000N component Hz secondary field Ch 1 point norm.



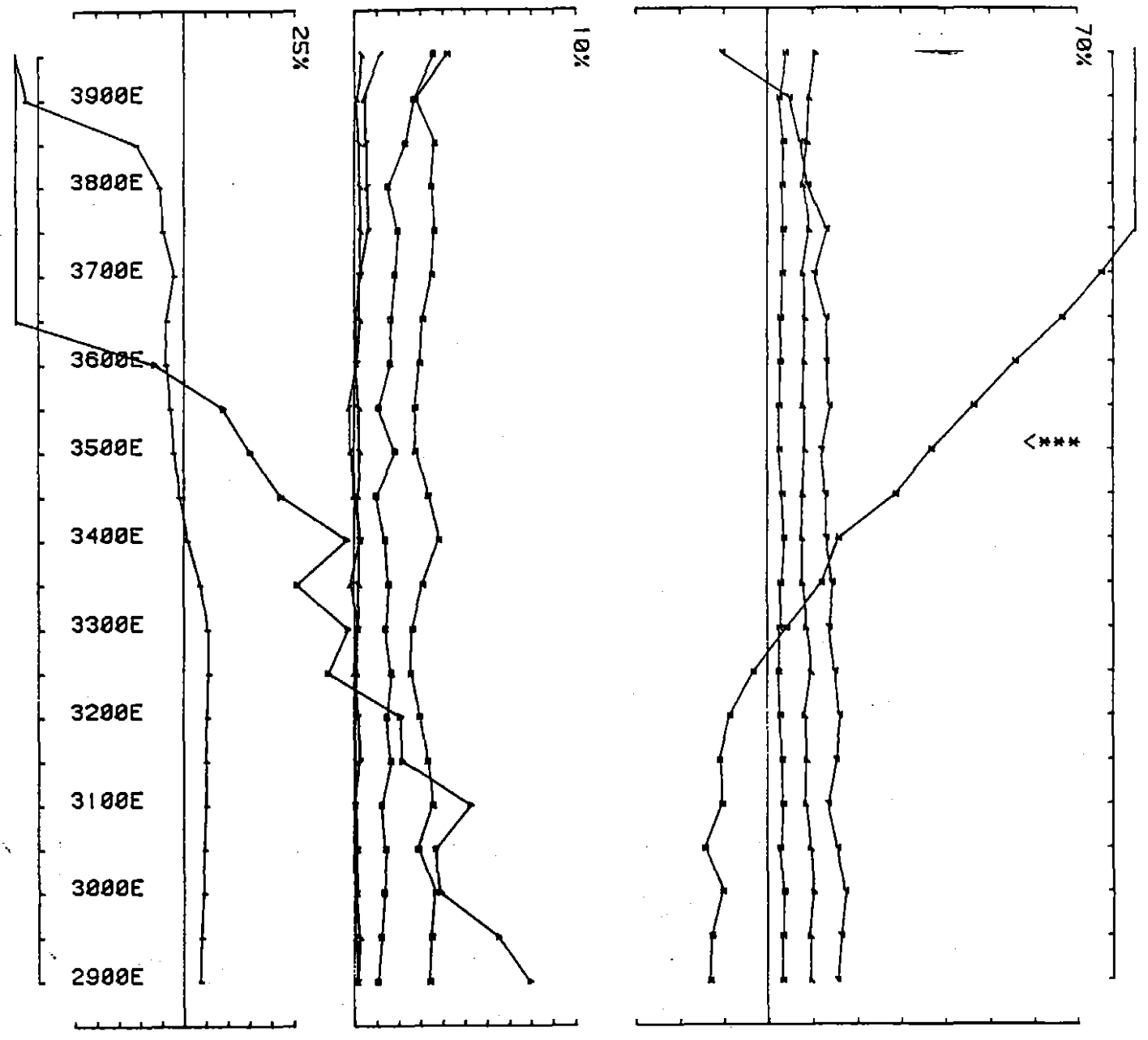
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS. , LAMONTAGNE Job 8901 base freq (hz) 26.230
loop no 4 line 4000N component Hz secondary field Ch 1 contin. norm.



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230
loop no 3 line 4000N component Hz secondary field Ch 1 contin. norm.

050

584051



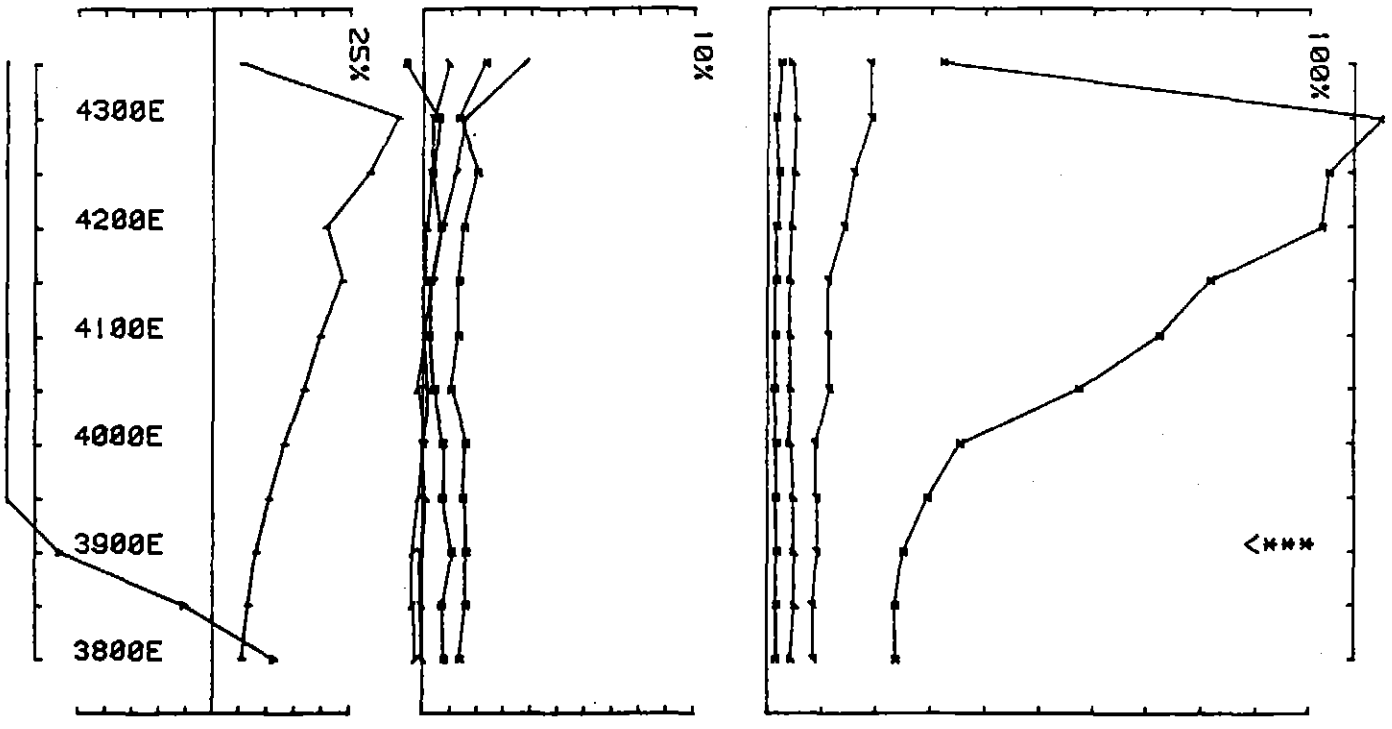
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS., LAMONTAGNE Job 8901 base freq (hz) 26.230 JAN 1989

loop no 3 line 4000N component Hz secondary field Ch 1 point norm.

051

584052



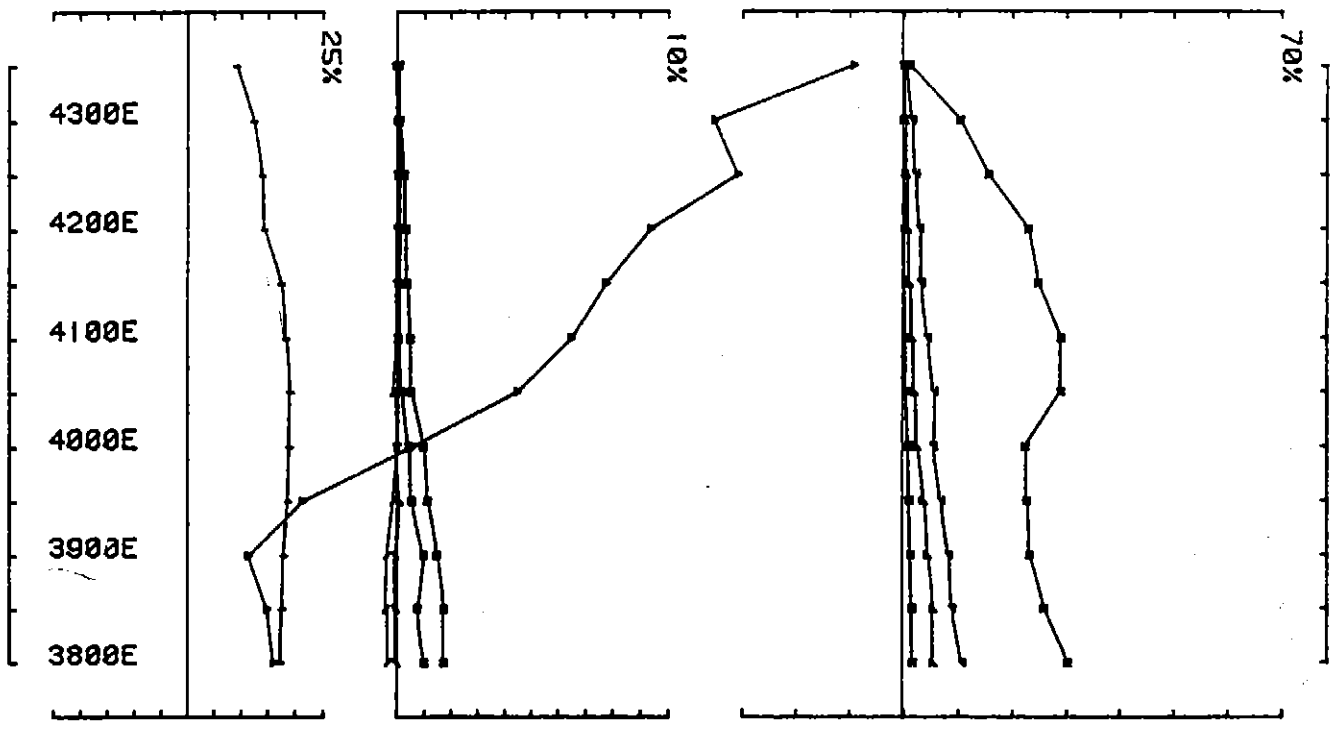
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230 JAN 1989

loop no 4 line 4200N component Hz secondary field Ch 1 point norm.

052

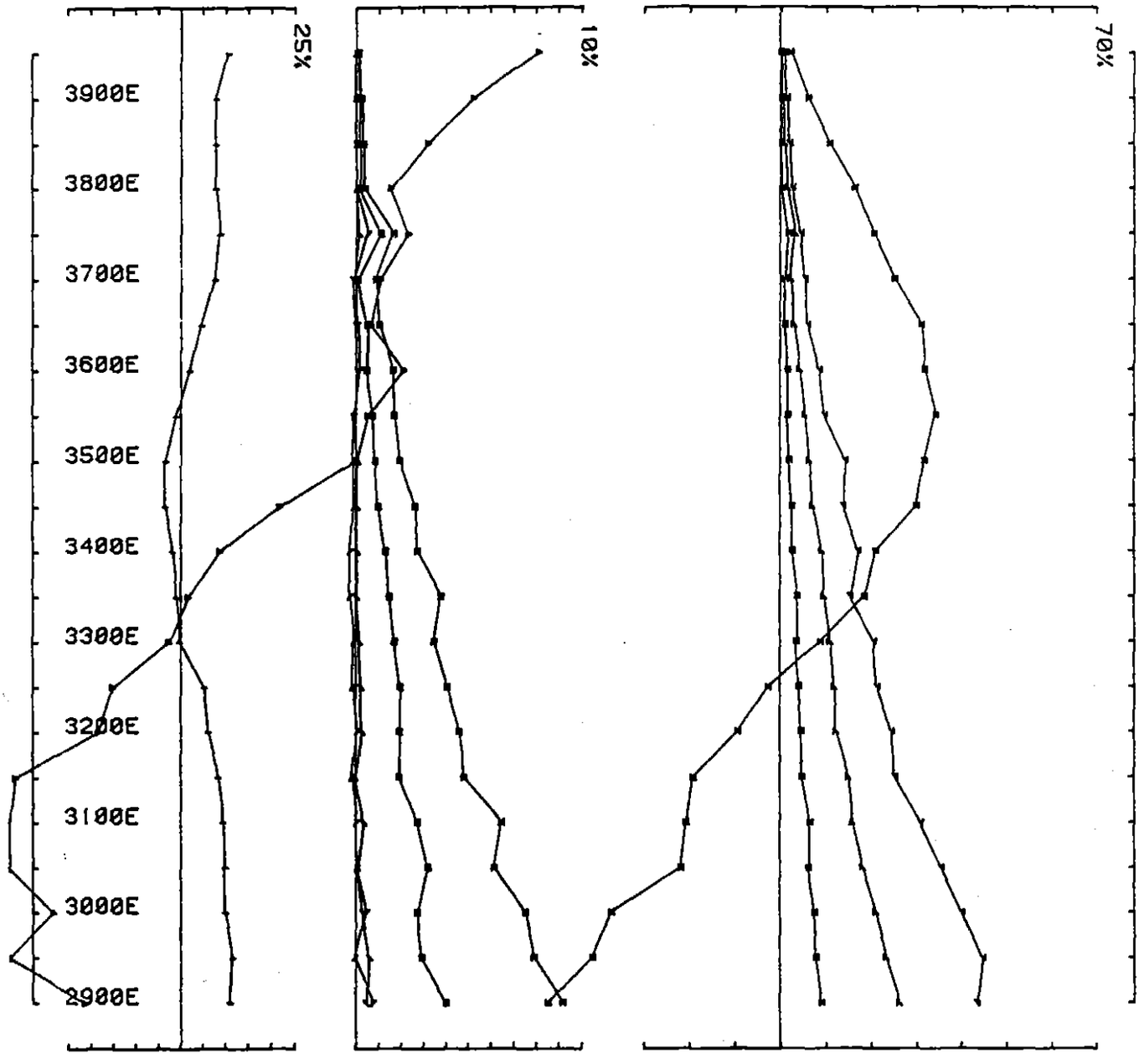
584053



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS. , LAMONTAGNE Job 8901 base freq (hz) 26.230
loop no 4 line 4200N component Hz secondary field Ch 1 contin. norm.

053

584054



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
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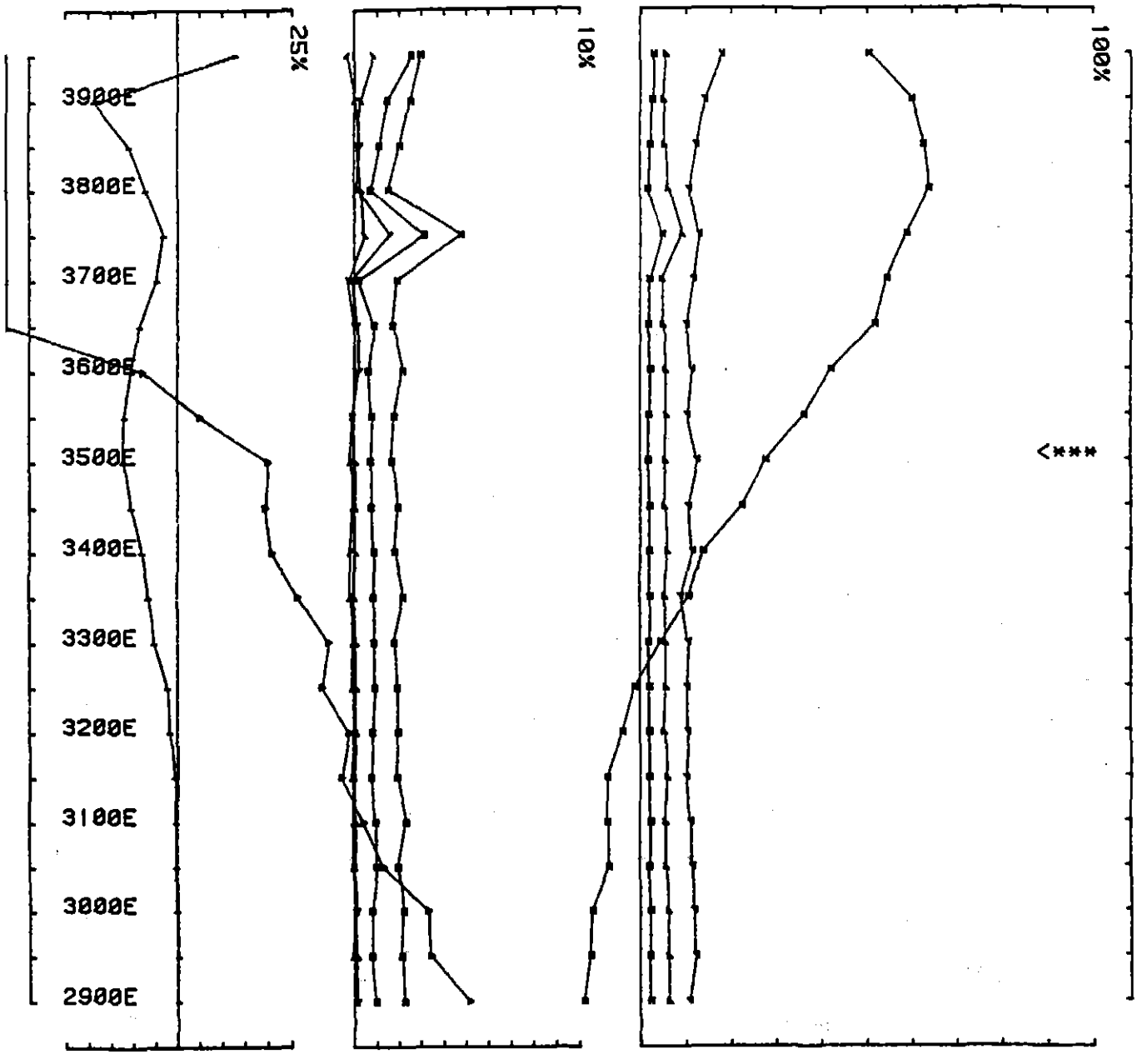
584055

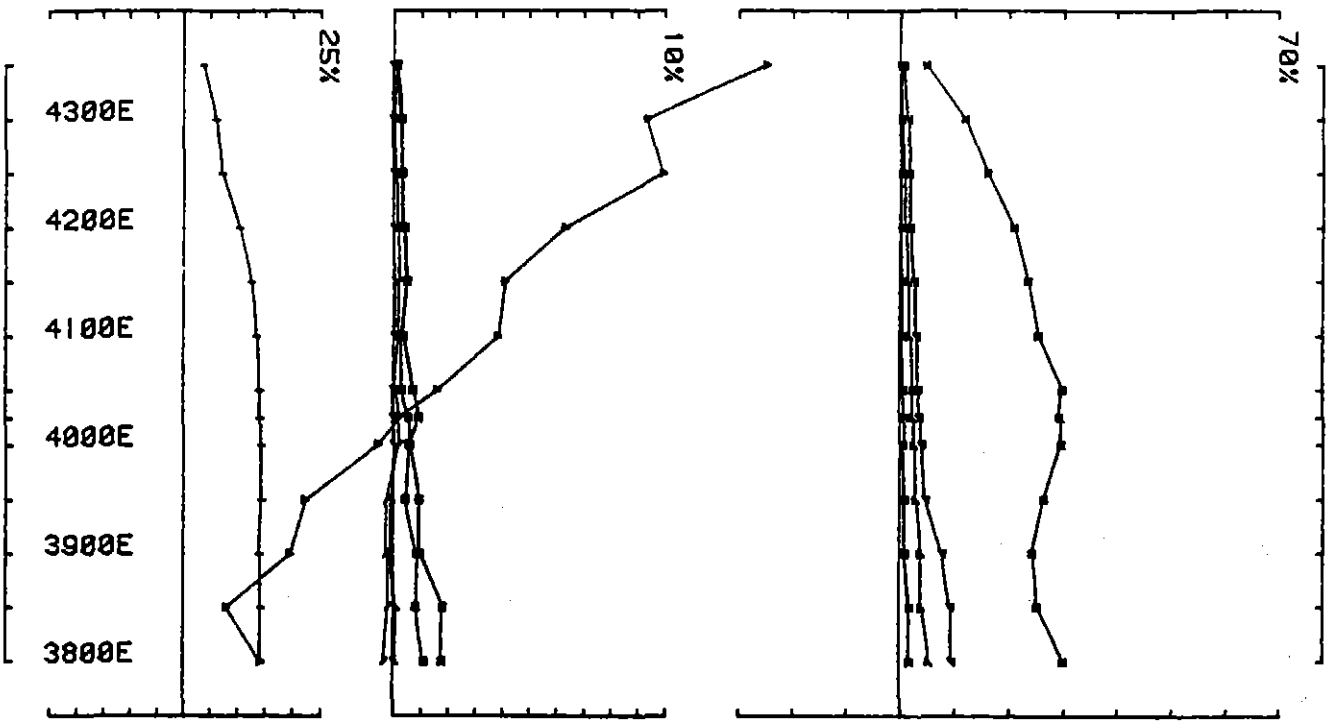
054



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS.,LAMONTAGNE Job 8901 base freq (hz) 26.230 JAN 1989
loop no 3 line 4200N component Hz secondary field Ch 1 point norm.

584056

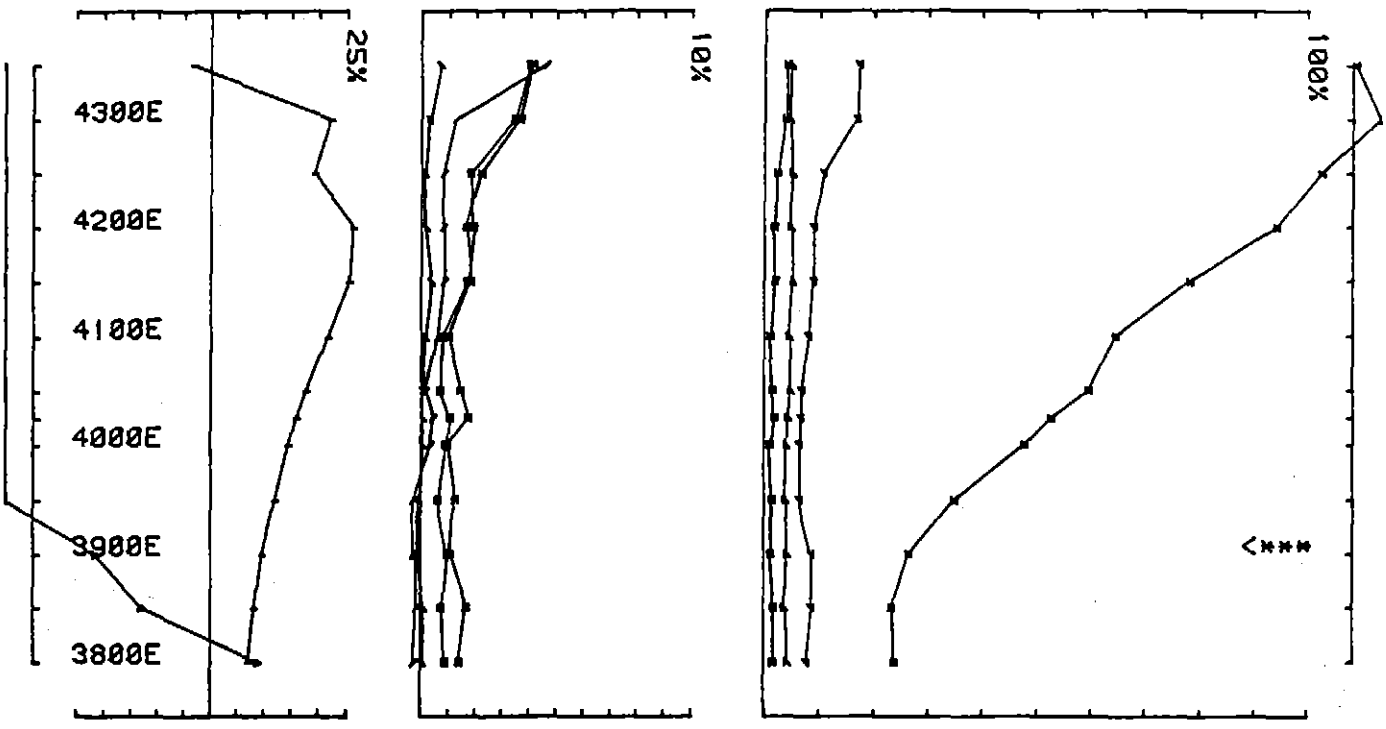
055



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS. , LAMONTAGNE Job 8901 base freq (hz) 26.230
loop no 4 line 4400N component Hz secondary field Ch 1 contin. norm.

584057

056



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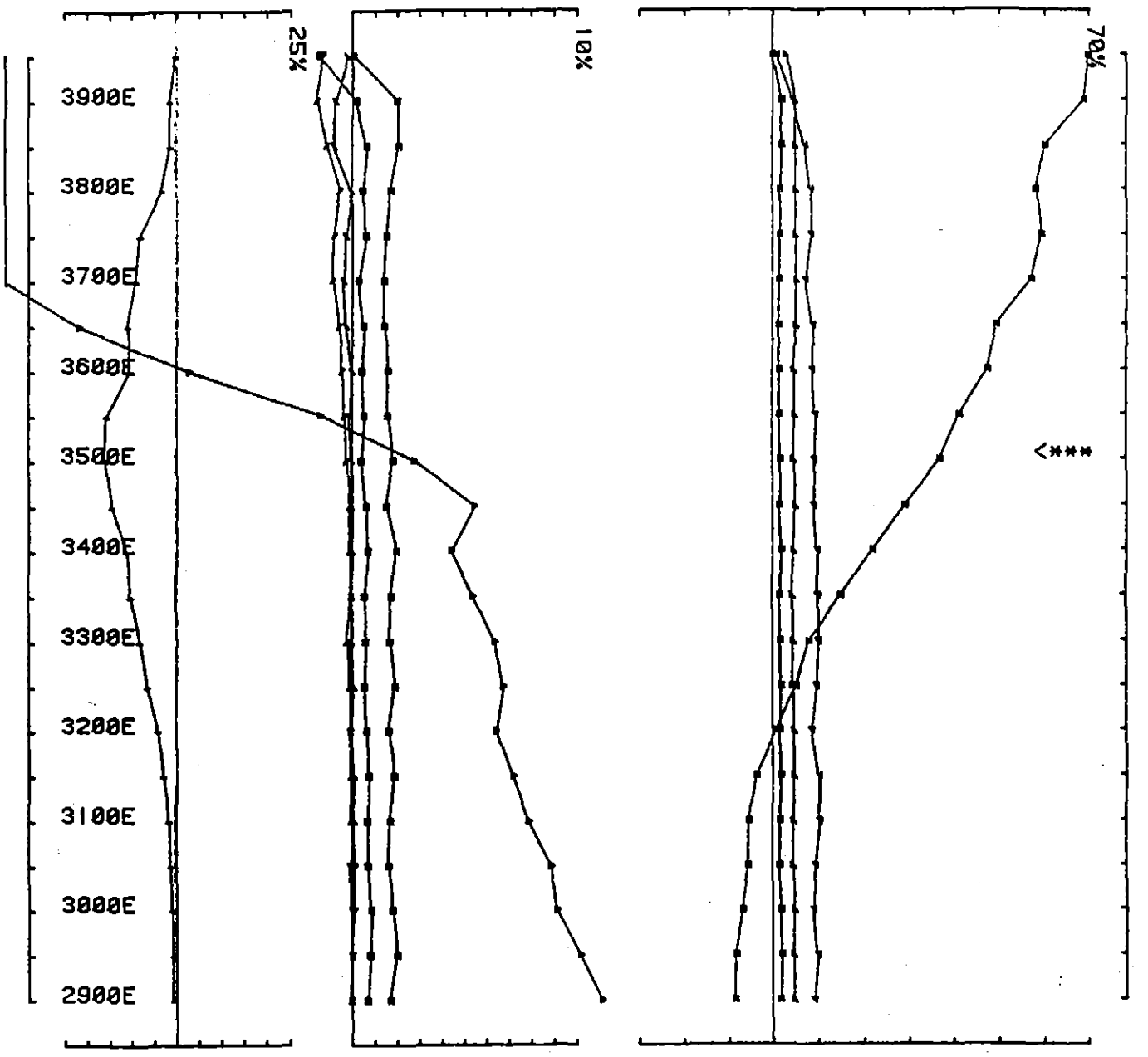
conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230 JAN 1989

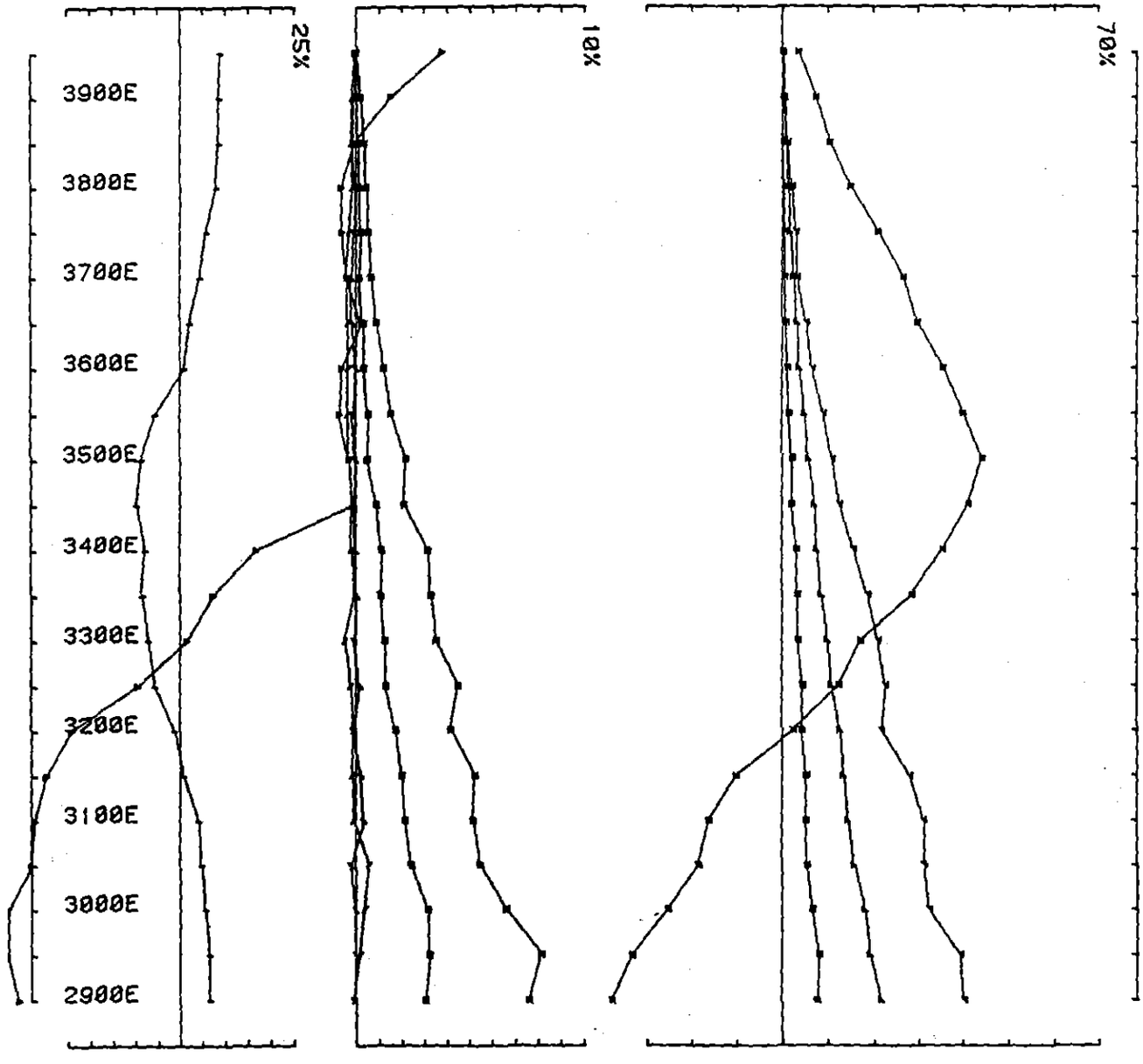
loop no 4 line 4400N component Hz secondary field Ch 1 point norm.

584758

057



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS.,LAMONTAGNE Job 8901 base freq (hz) 26.230 JAN 1989
loop no 3 line 4400N component Hz secondary field Ch 1 point norm.



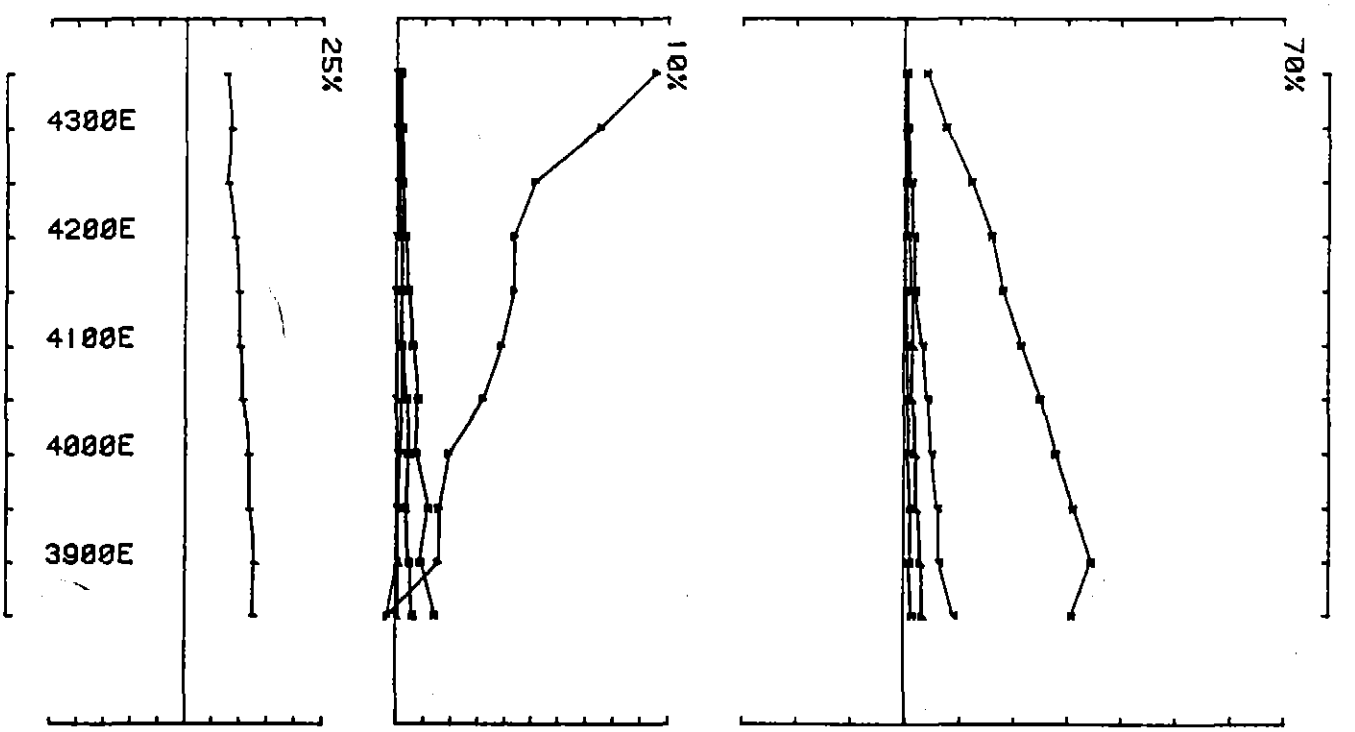
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS., LAMONTAGNE Job 8901 base freq (hz) 26.230

loop no 3 line 4400N component Hz secondary field Ch 1 contin. norm.

059

584060



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
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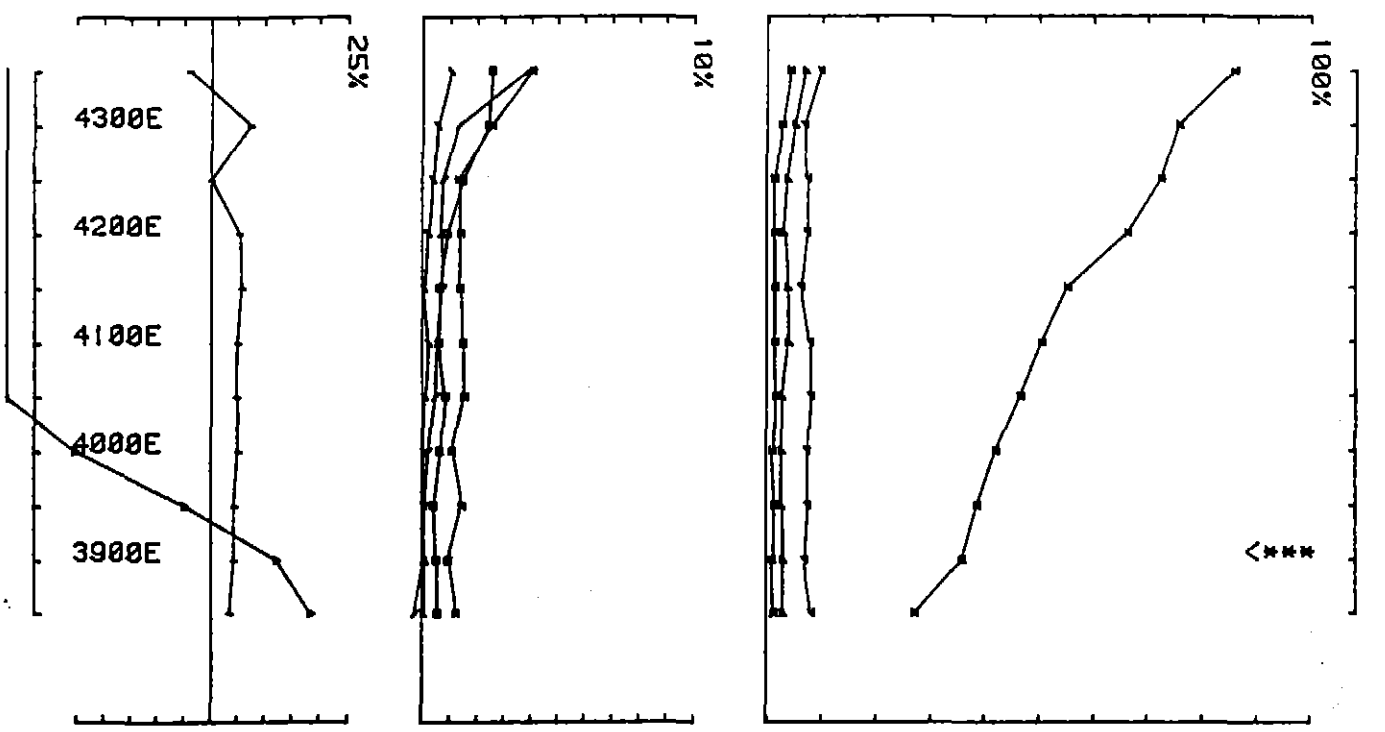
loop no 4 line 4600N component Hz secondary field Ch 1 contin. norm.

060

584061



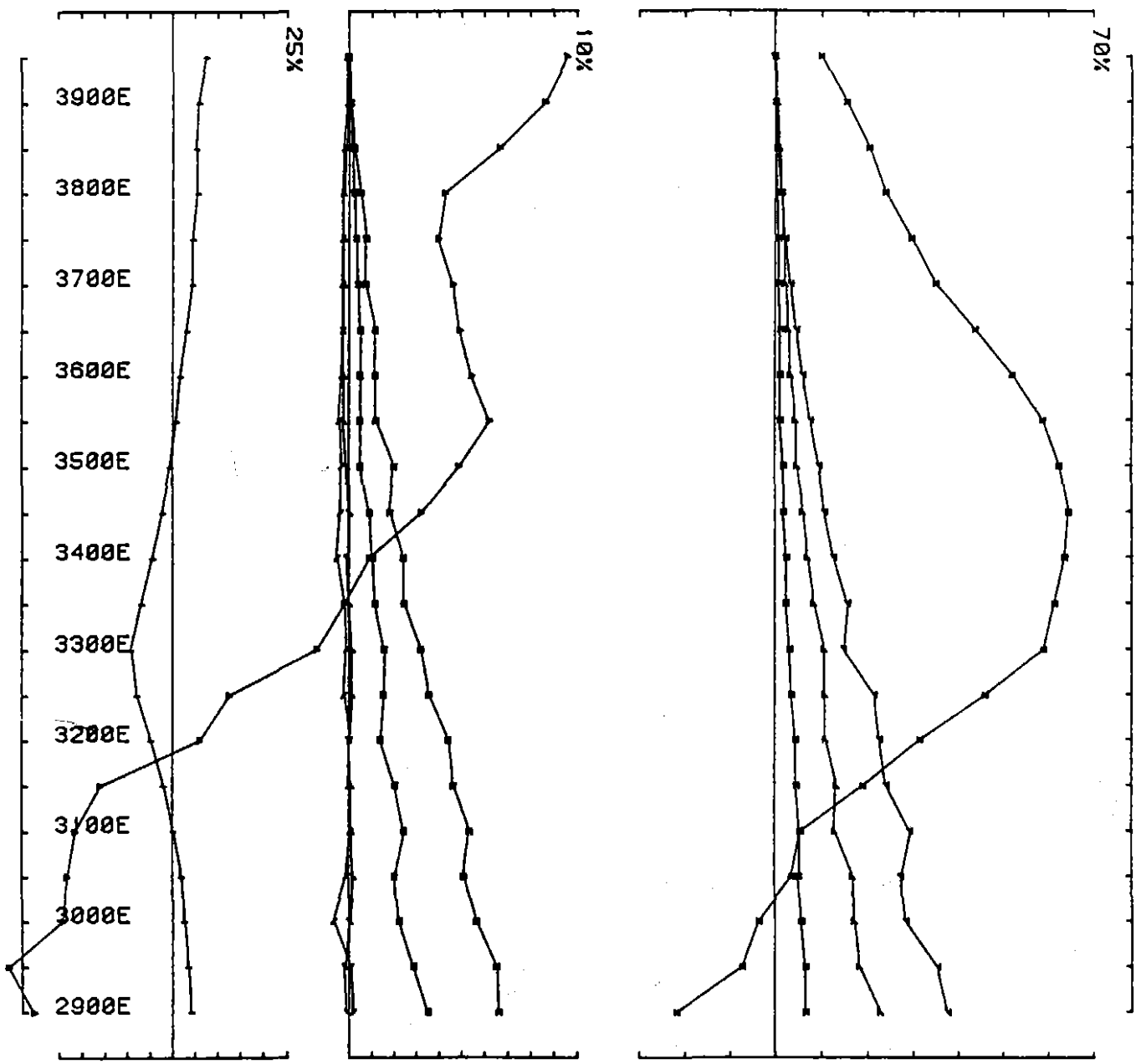
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230 JAN 1989

loop no 4 line 4600N component Hz secondary field Ch 1 point norm.

061

584062



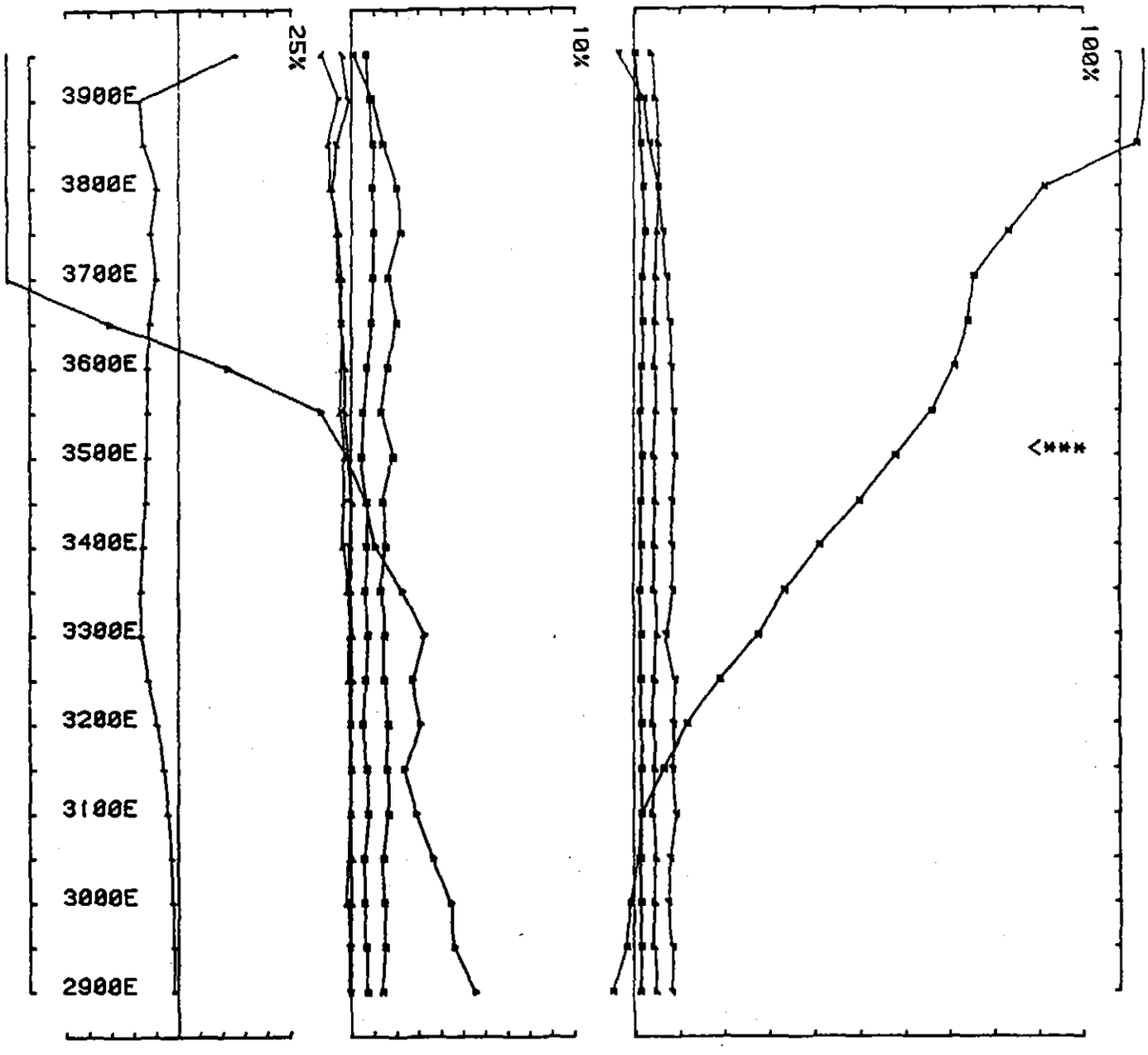
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS.,LAMONTAGNE job 8901 base freq (hz) 26.230

loop no 3 line 4600N component Hz secondary field Ch 1 contin. norm.

062

584063



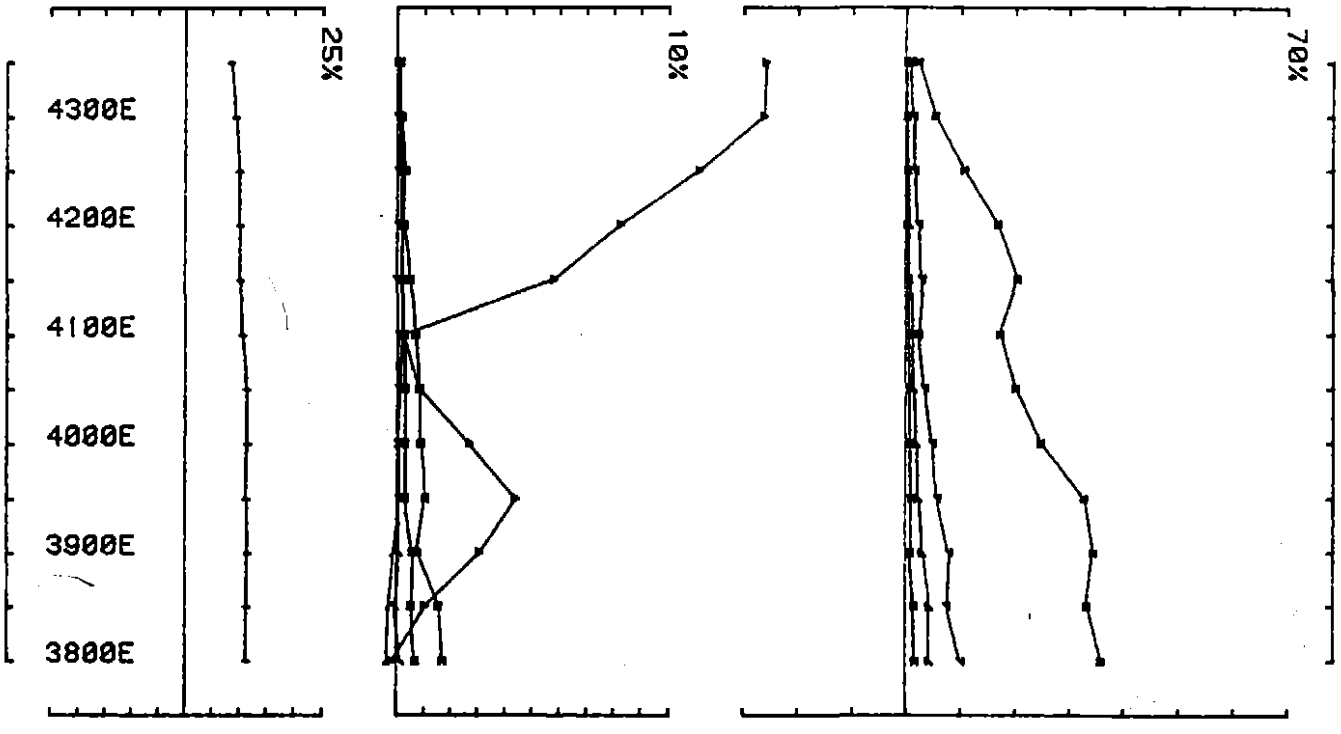
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS.,LAMONTAGNE Job 8901 base freq (hz) 26.230 JAN 1989

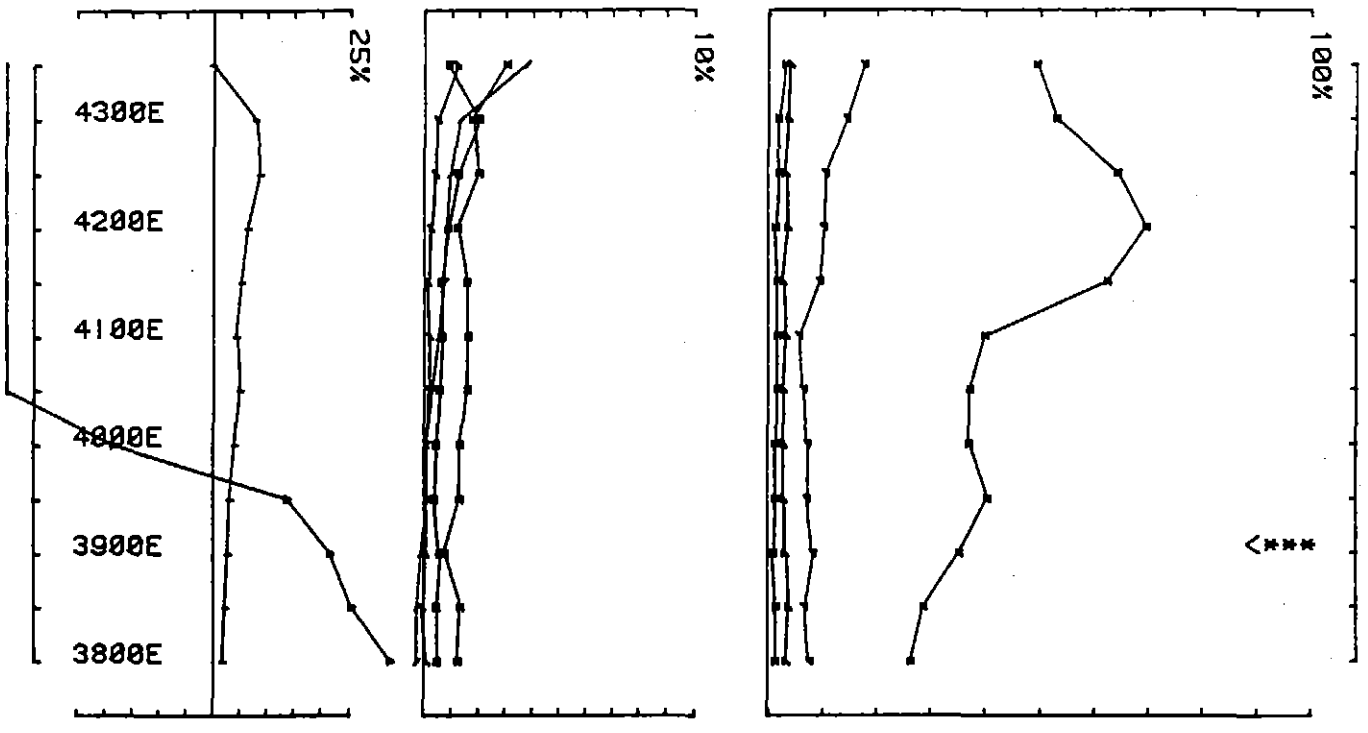
loop no 3 line 4600N component Hz secondary field Ch 1 point norm.

063

584064



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS. , LAMONTAGNE Job 8901 base freq (hz) 26.230
loop no 4 line 4800N component Hz secondary field Ch 1 contin. norm.



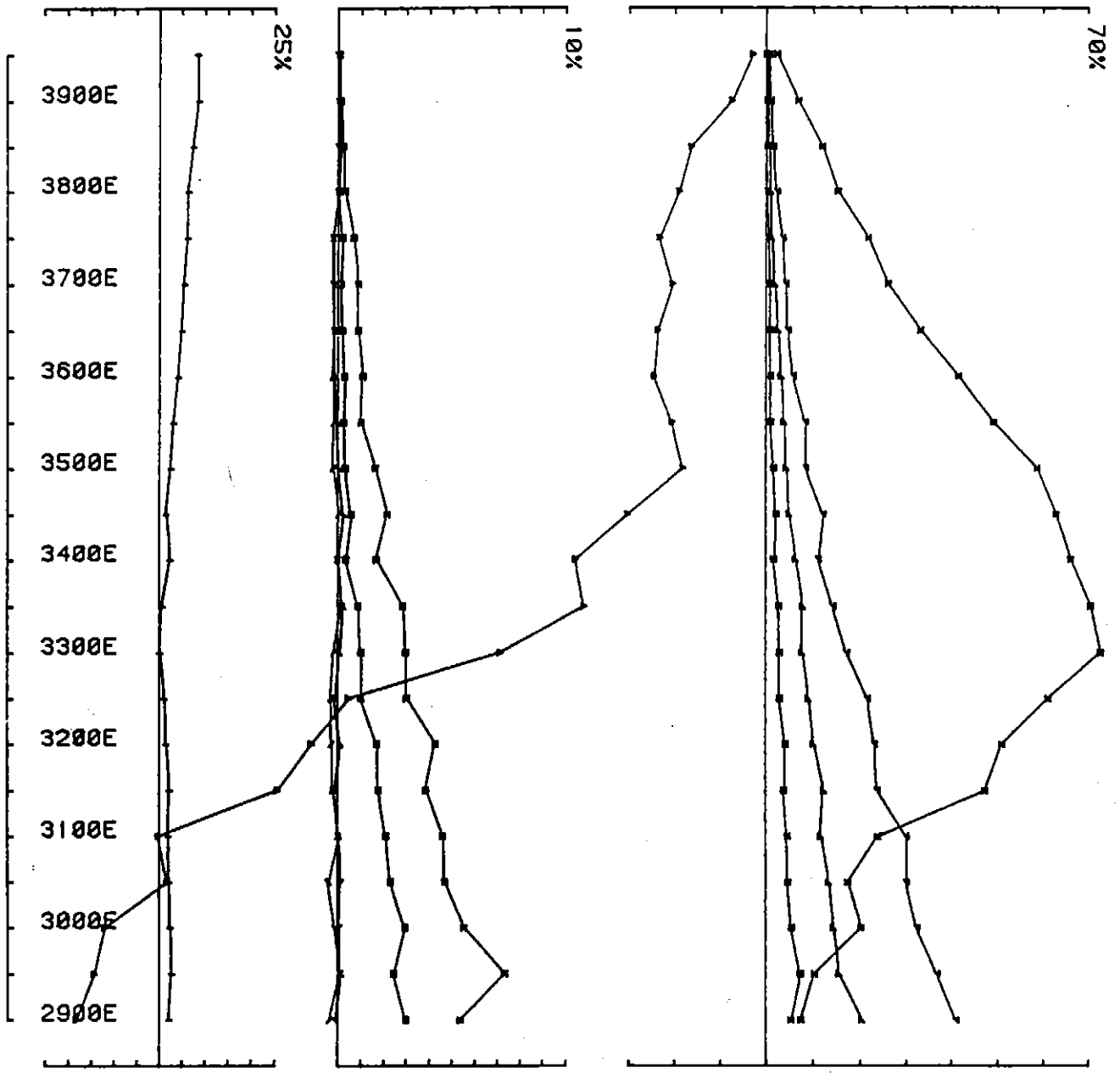
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230 JAN 1989

loop no line 4800N component Hz secondary field Ch 1 point norm.

065

584066



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
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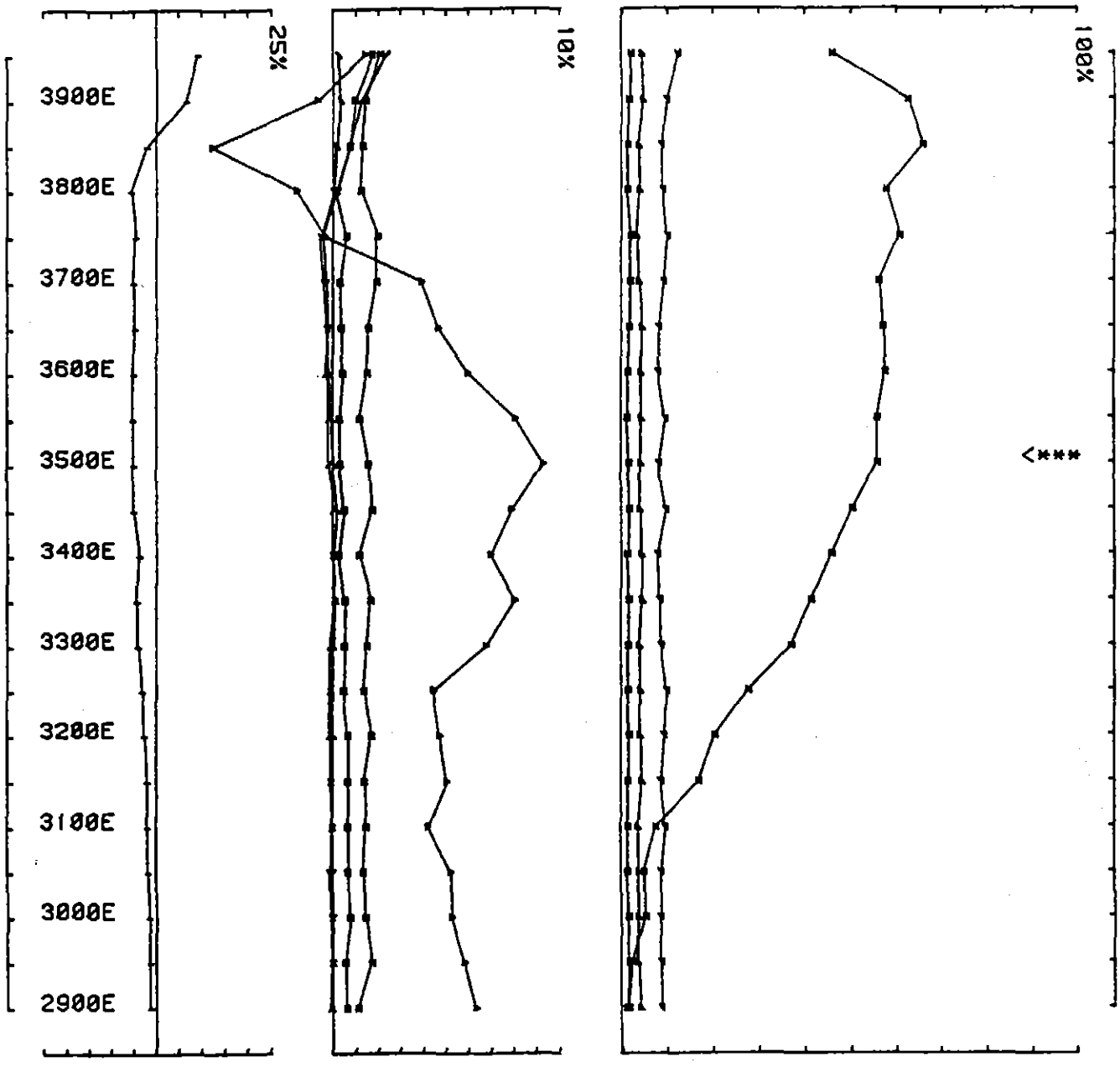
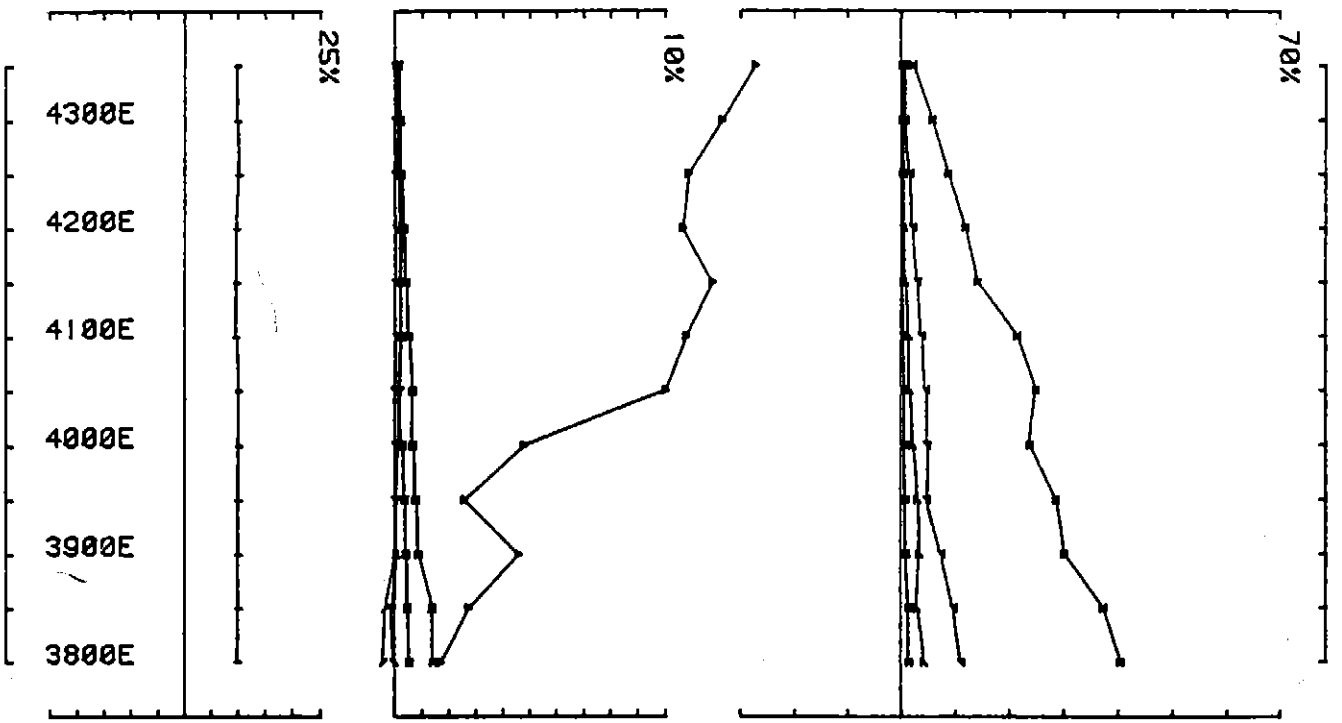
loop no 3 line 4800N component Hz secondary field Ch 1 contin. norm.

584067

066



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS., LAMONTAGNE Job 8901 base freq (hz) 26.230 JAN 1989
loop no 3 line 4800N component Hz secondary field Ch 1 point norm.



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
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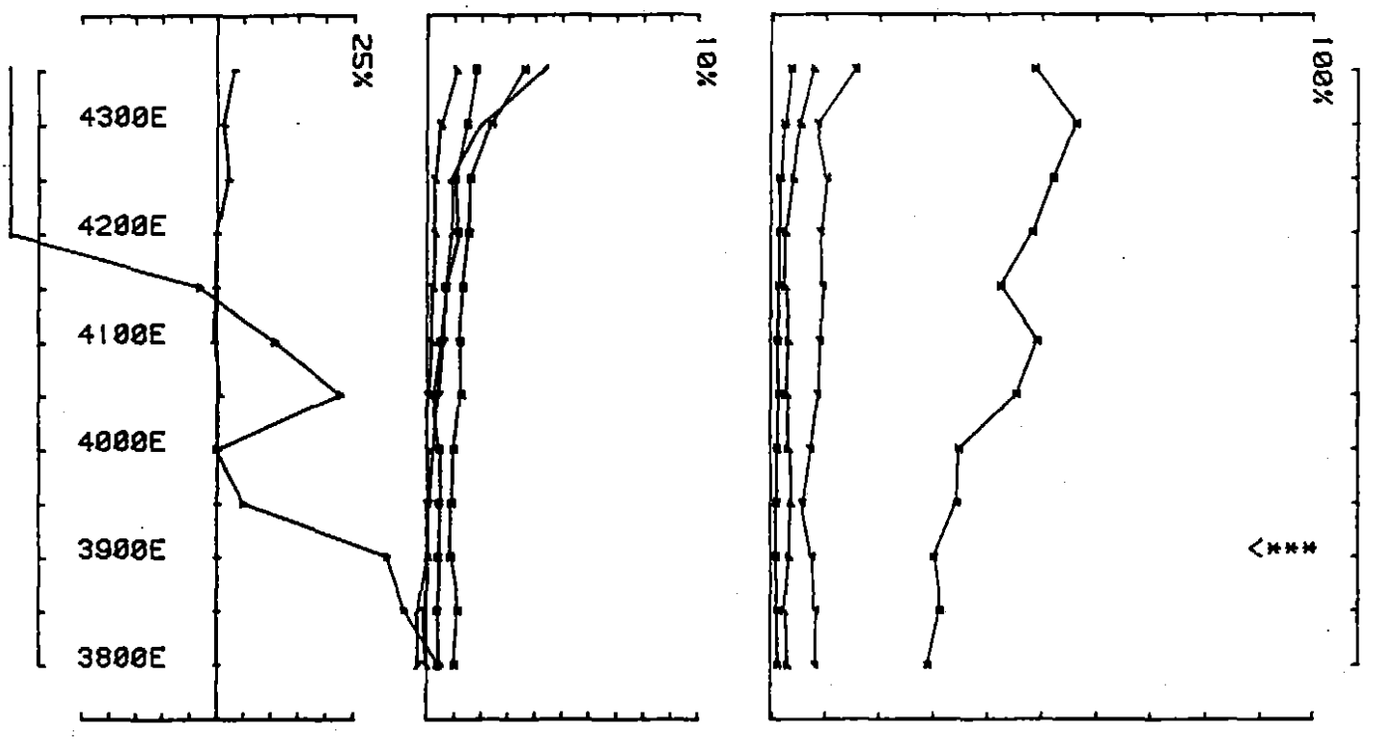
loop no 4 line 5000N component Hz secondary field Ch 1 contin. norm.

068

584069



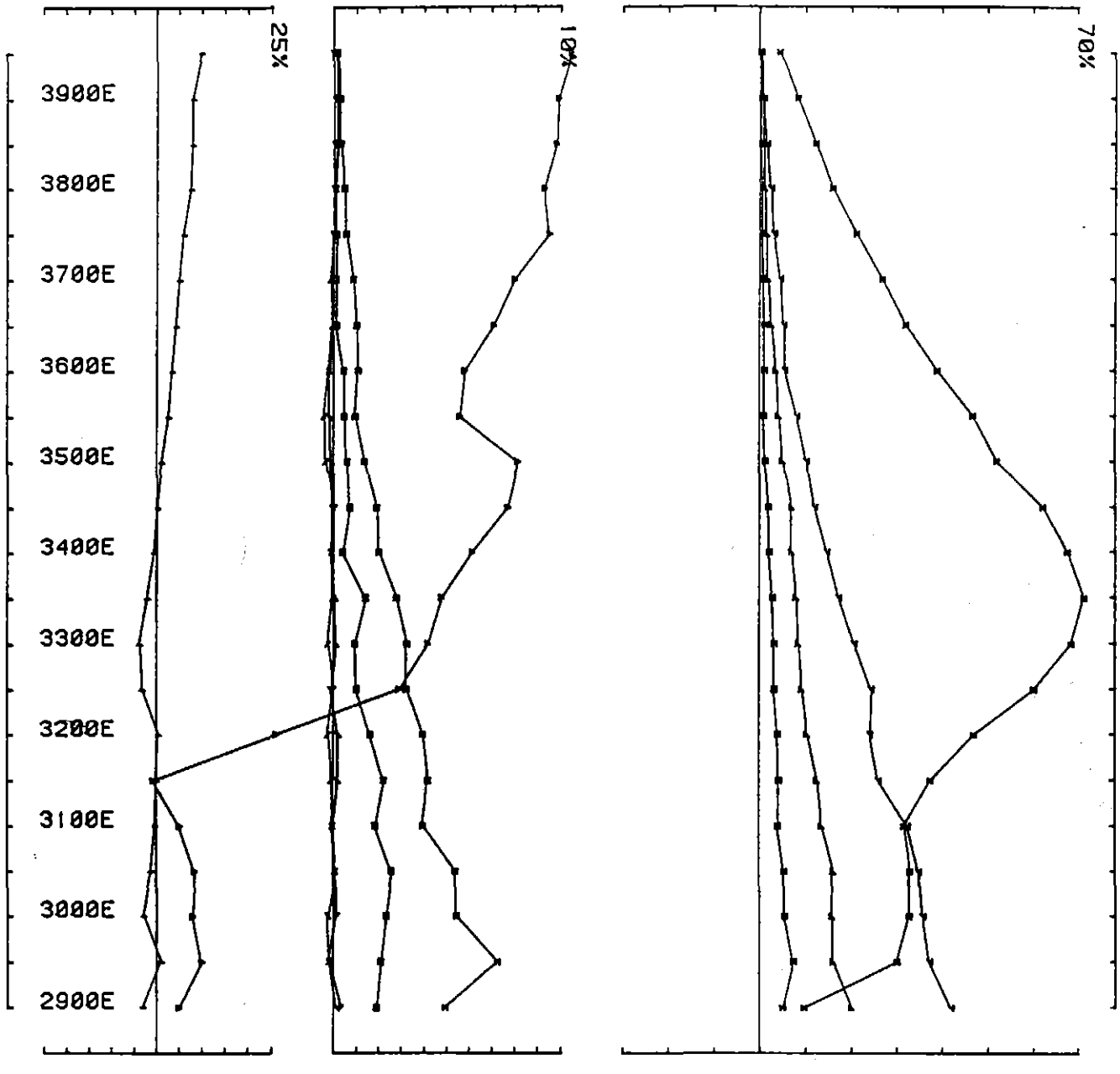
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230 JAN 1989

loop no 4 line 5000N component Hz secondary field Ch 1 point norm.

069

584070



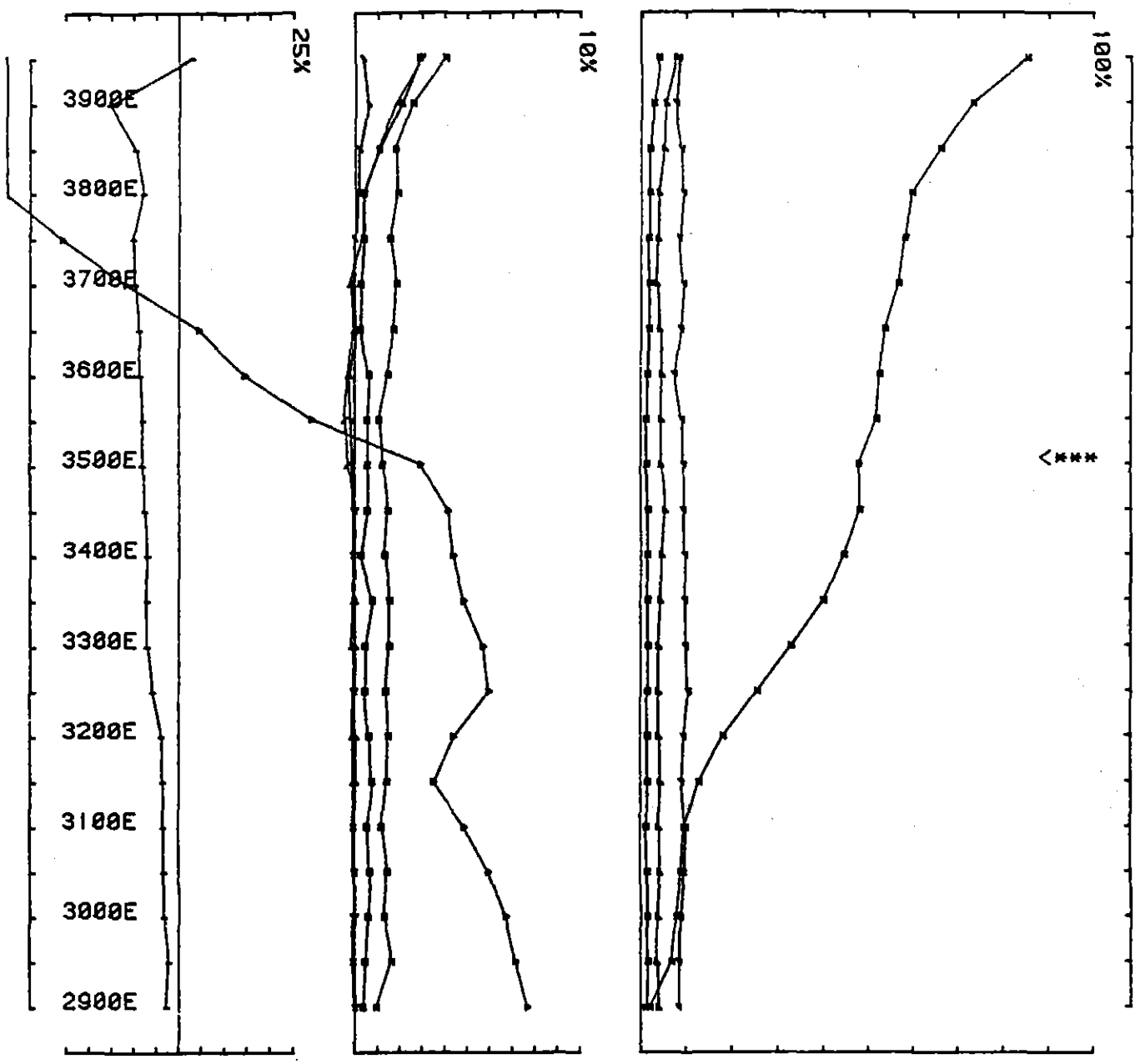
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS.,LAMONTAGNE job 8901 base freq (hz) 26.230

loop no 3 line 5000N component Hz secondary field Ch 1 contin. norm.

70

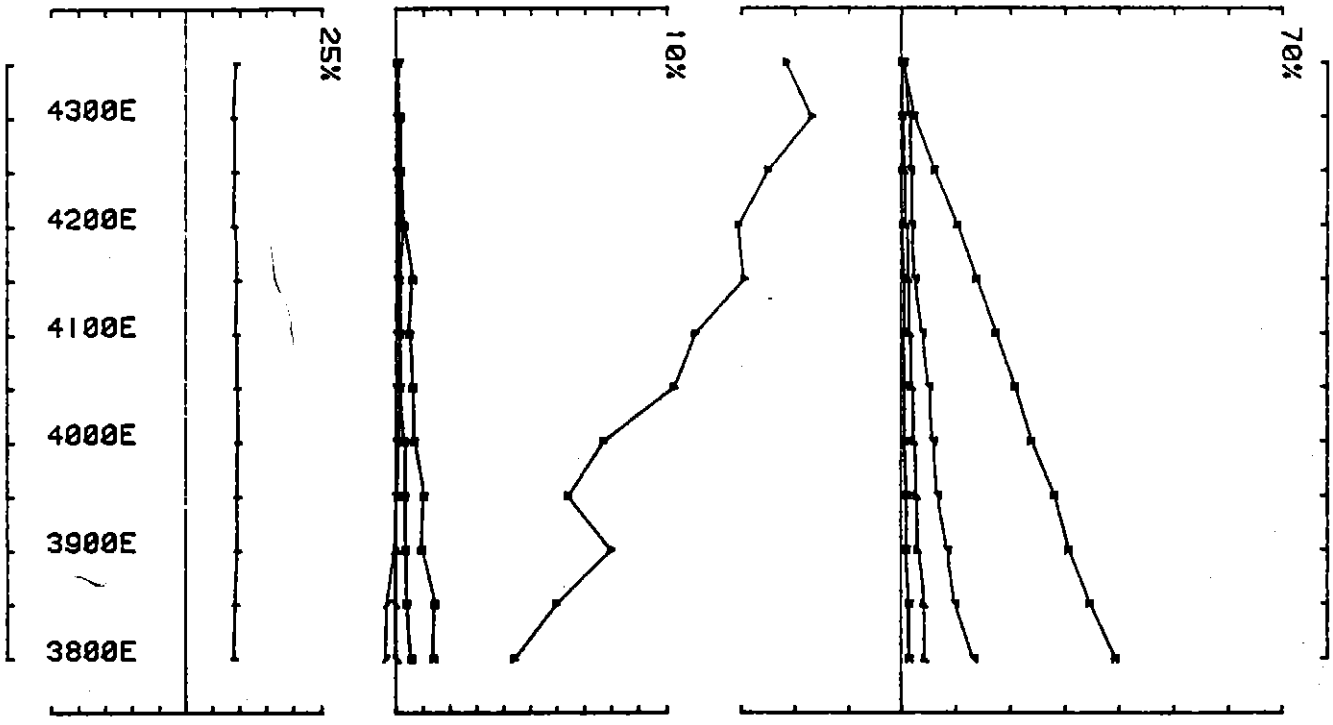
584071



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS.,LAMONTAGNE job 8901 base freq (hz) 26.230 JAN 1989
loop no 3 line 5000N component Hz secondary field Ch 1 point norm.

071

584072



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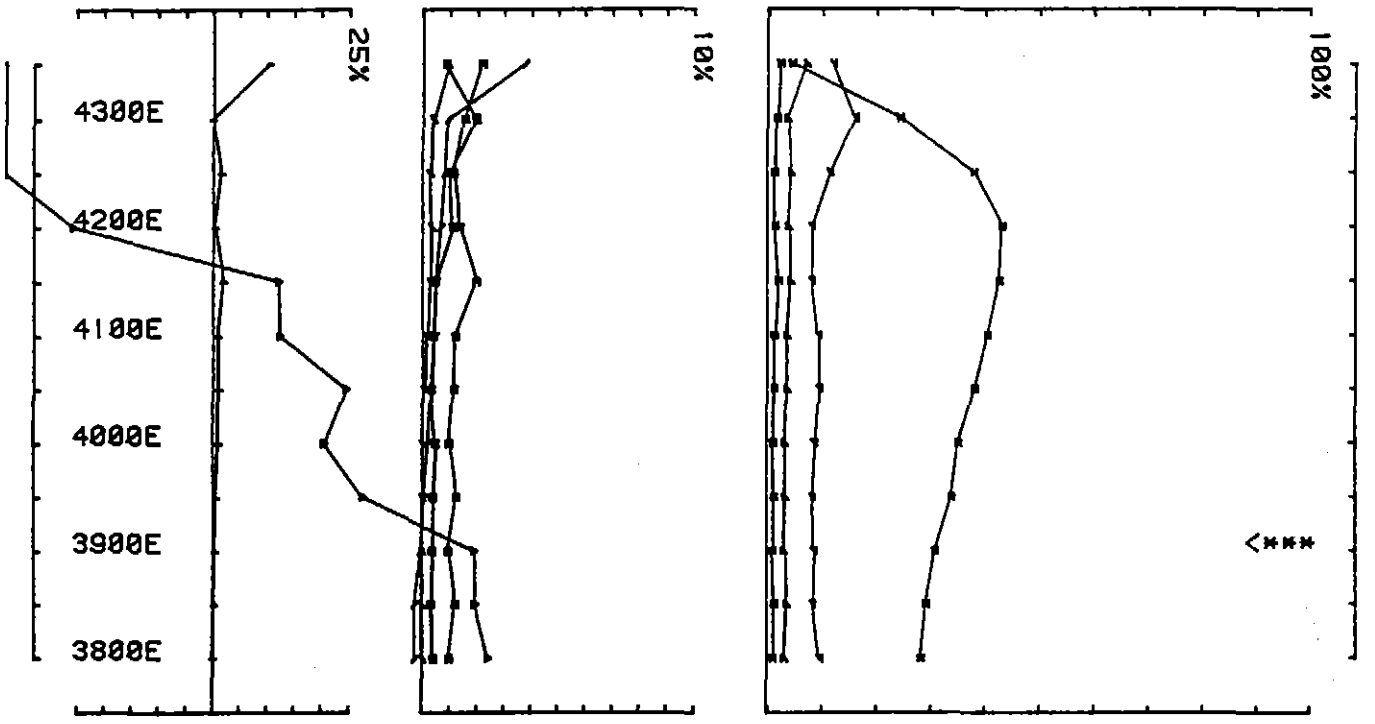
loop no 4 line 5200N component Hz secondary field Ch 1 contin. norm.

584073

072



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
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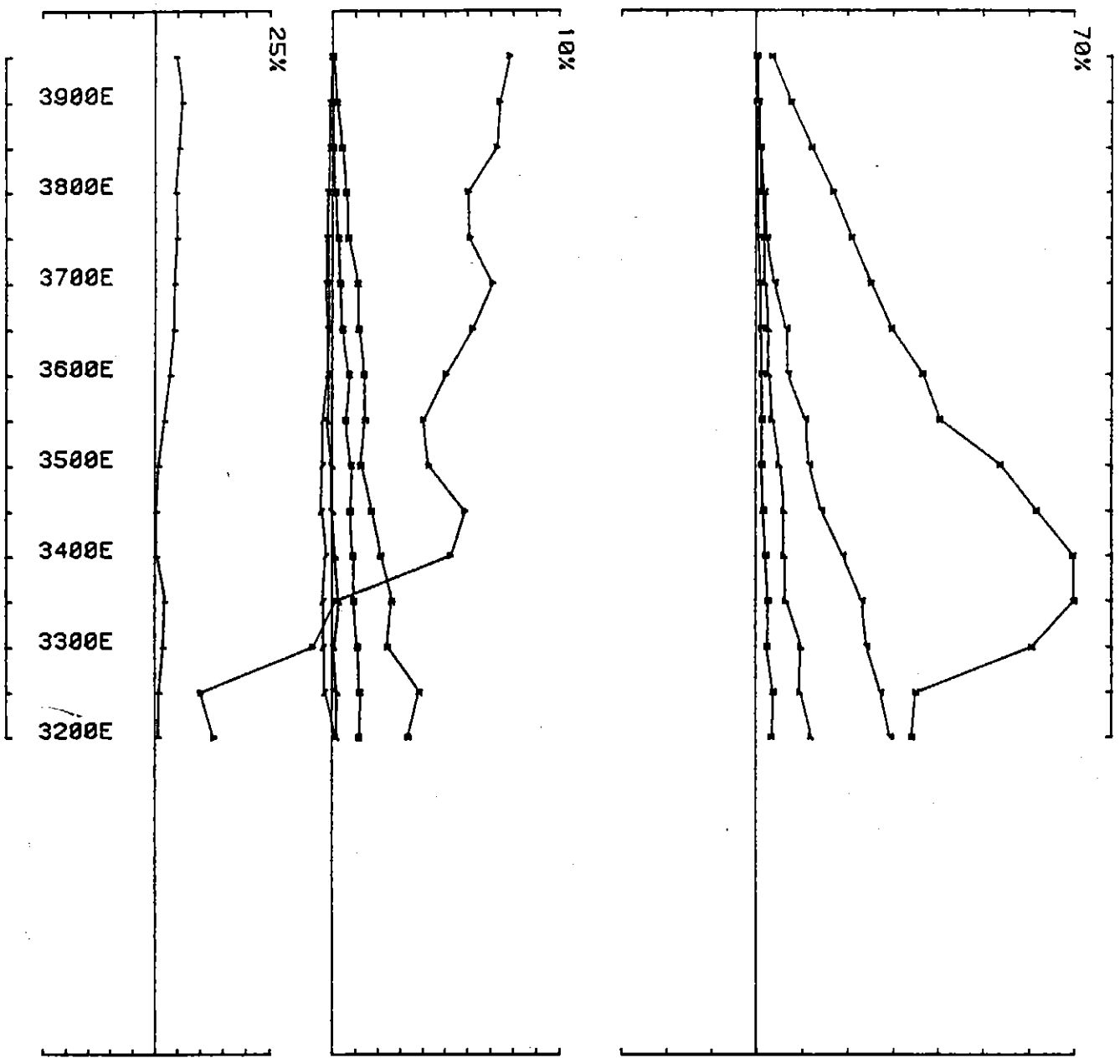
loop no 4 line 5200N component Hz secondary field Ch 1 point norm.

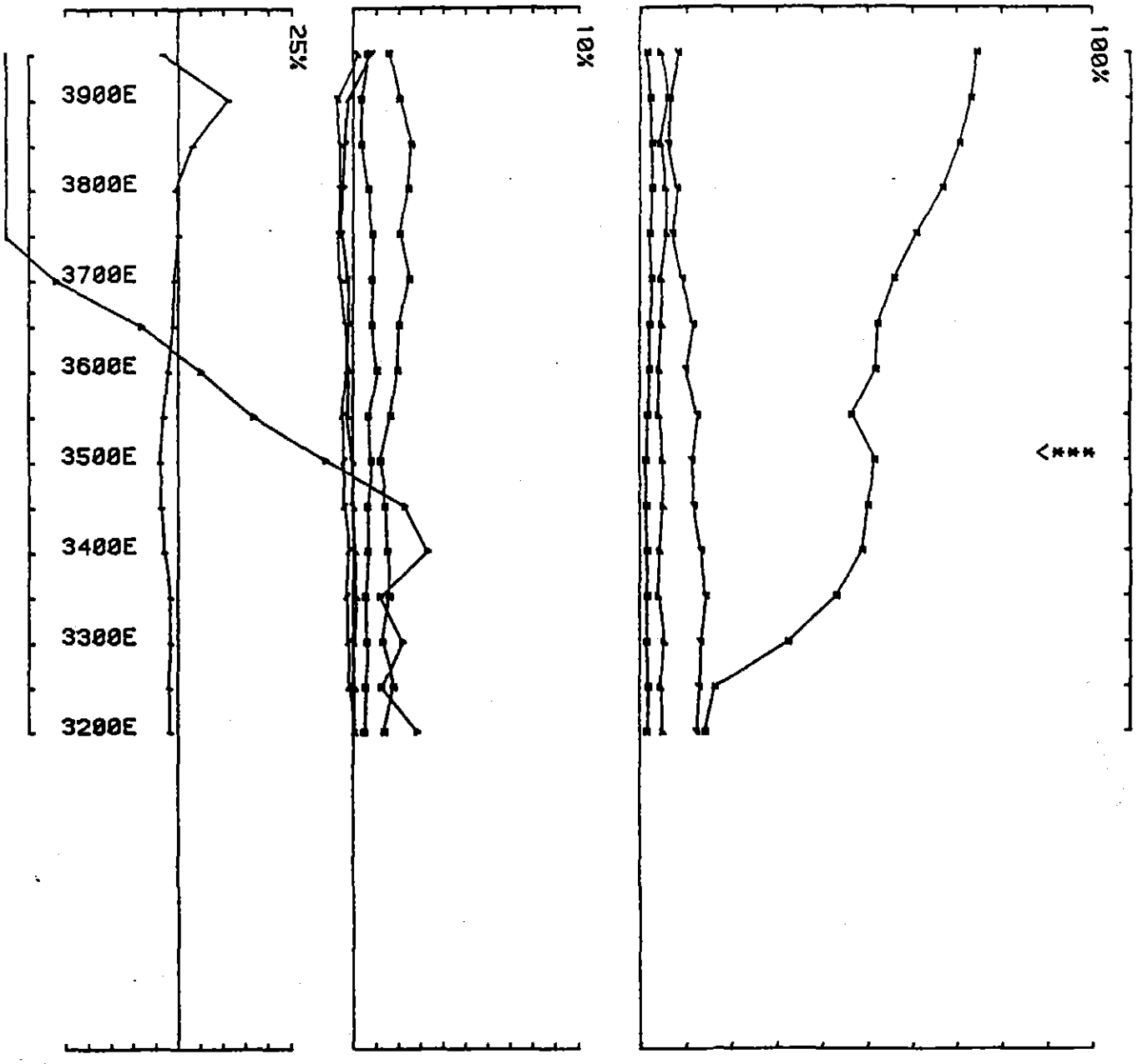
073

584074



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230
loop no 3 line 5200N component Hz secondary field Ch 1 contin. norm.

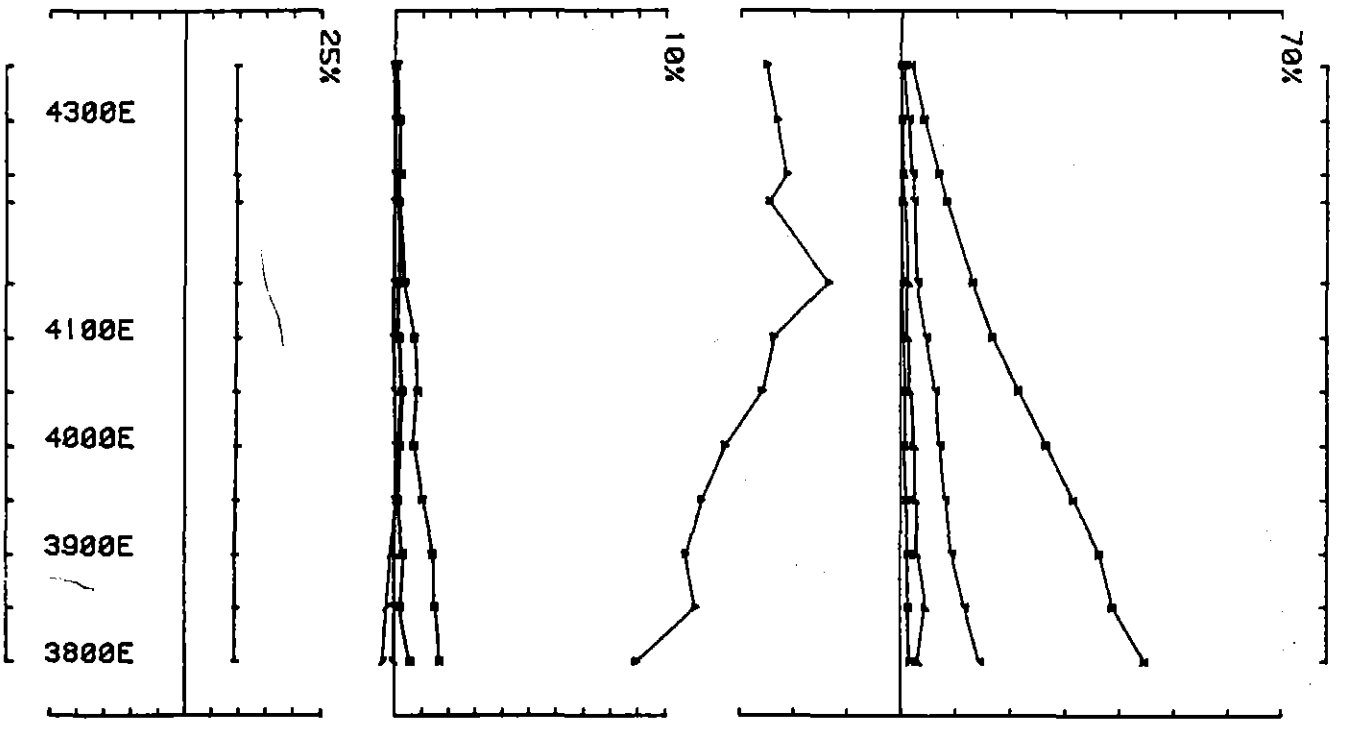
584075



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230 JAN 1989
loop no 3 line 5200N component Hz secondary field Ch 1 point norm.

075

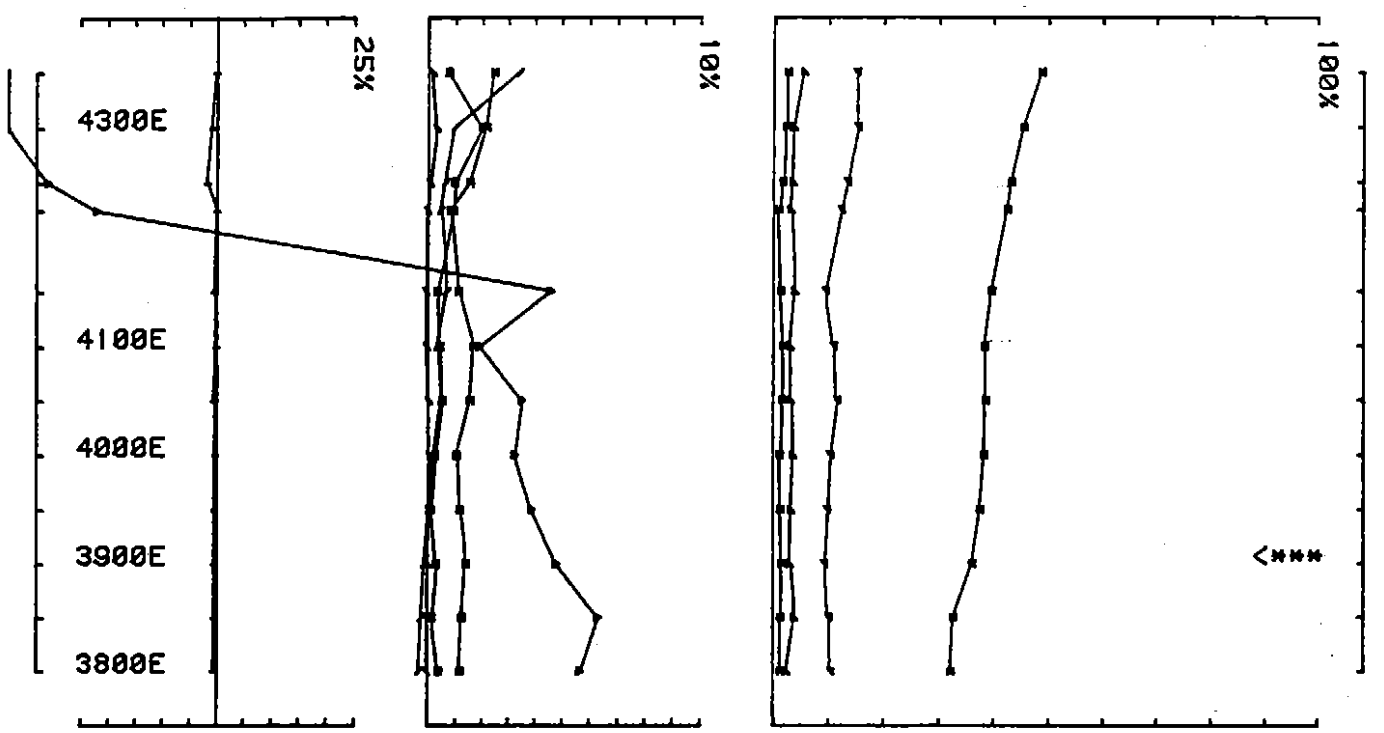
584076



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS.,LAMONTAGNE job 8901 base freq (hz) 26.230
loop no 4 line 5400N component Hz secondary field Ch 1 contin. norm.

076

584077



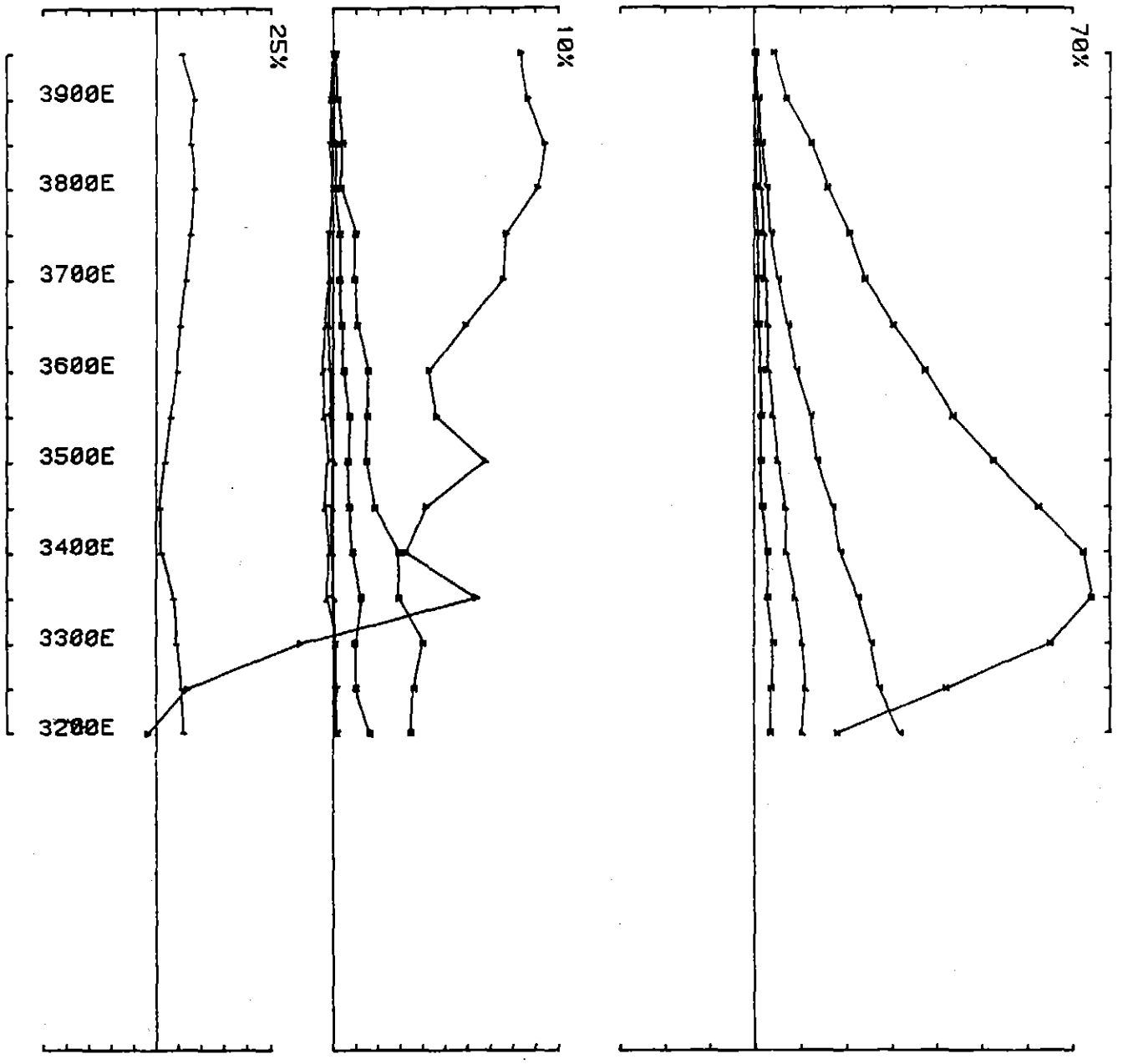
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230 JAN 1989

loop no 4 line 5400N component Hz secondary field Ch 1 point norm.

077

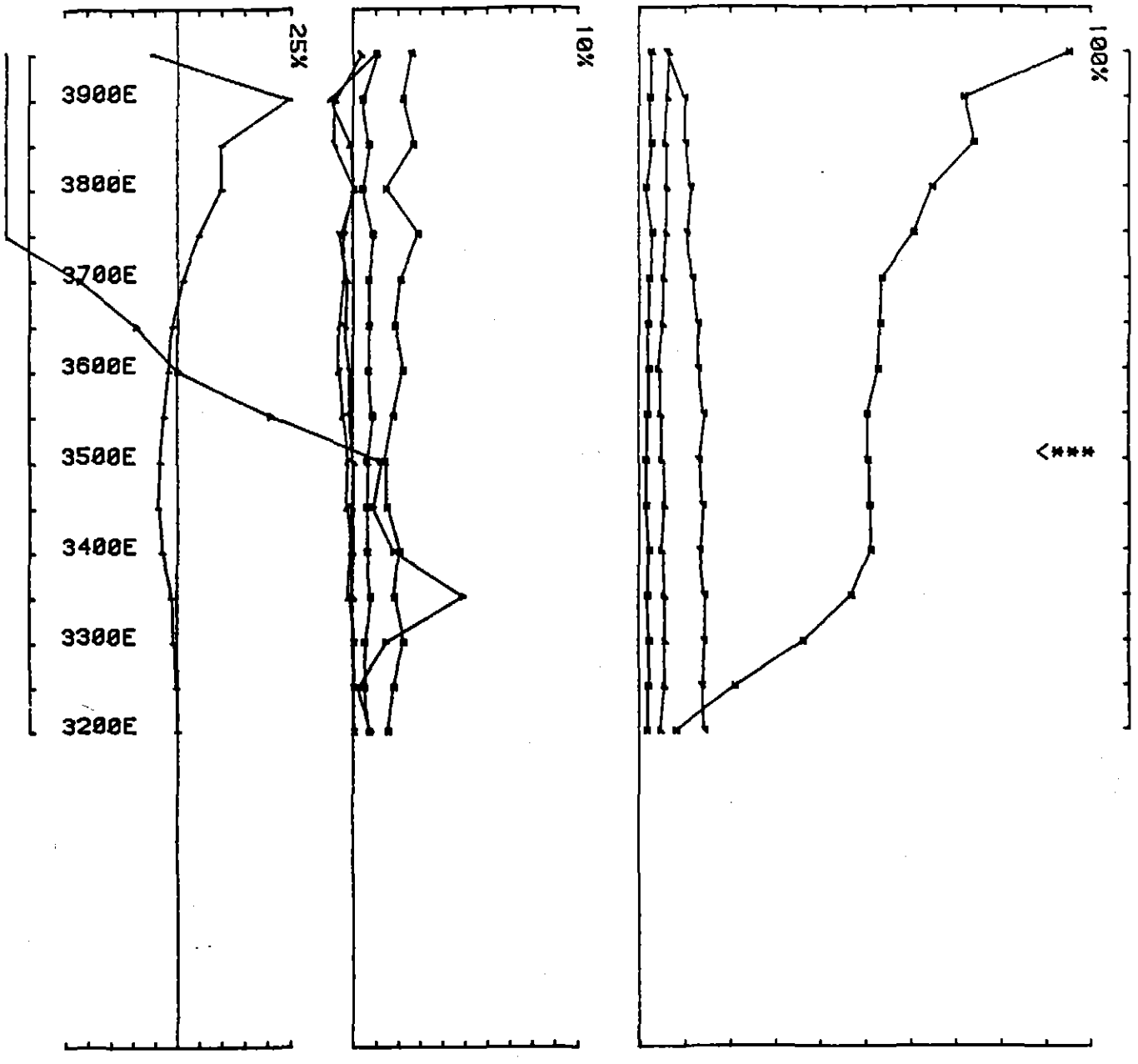
584078



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS.,LAMONTAGNE Job 8901 base freq (hz) 26.230
loop no 3 line 5400N component Hz secondary field Ch 1 contin. norm.

078

584079



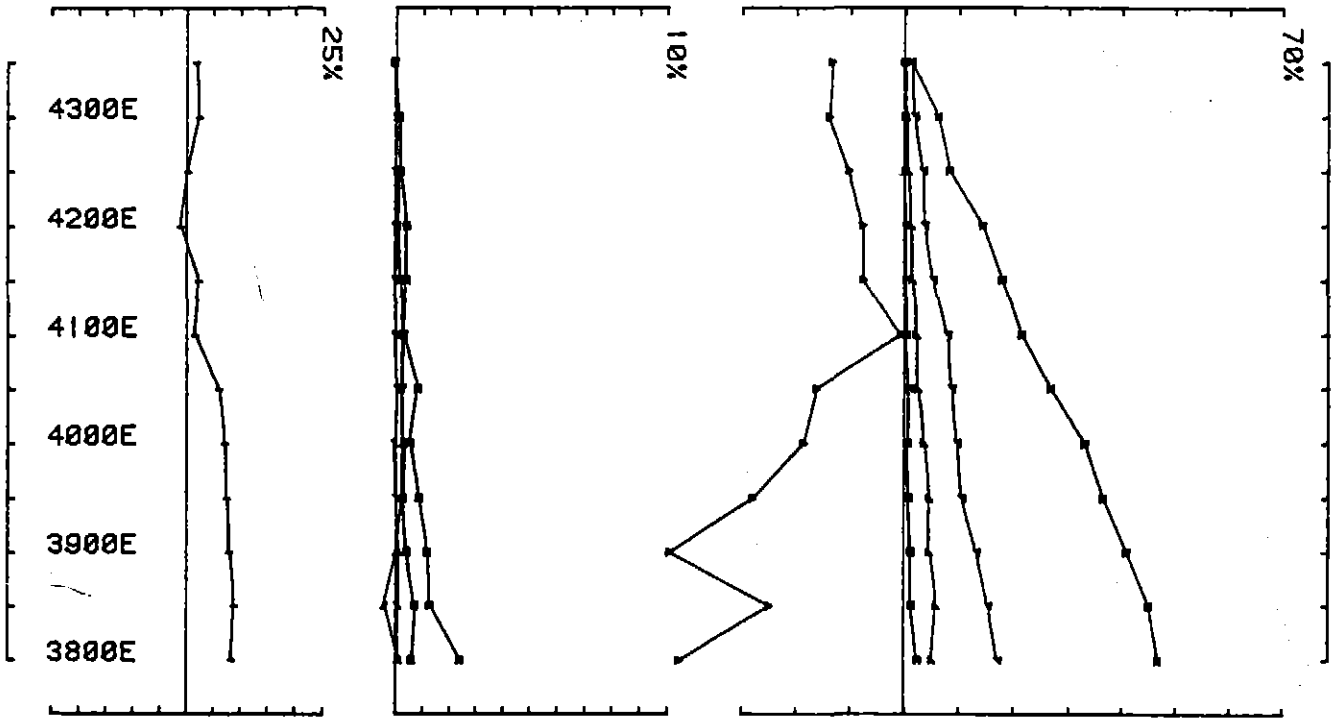
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS., LAMONTAGNE Job 8901 base freq (hz) 26.230 JAN 1989

loop no 3 line 5400N component Hz secondary field Ch 1 point norm.

079

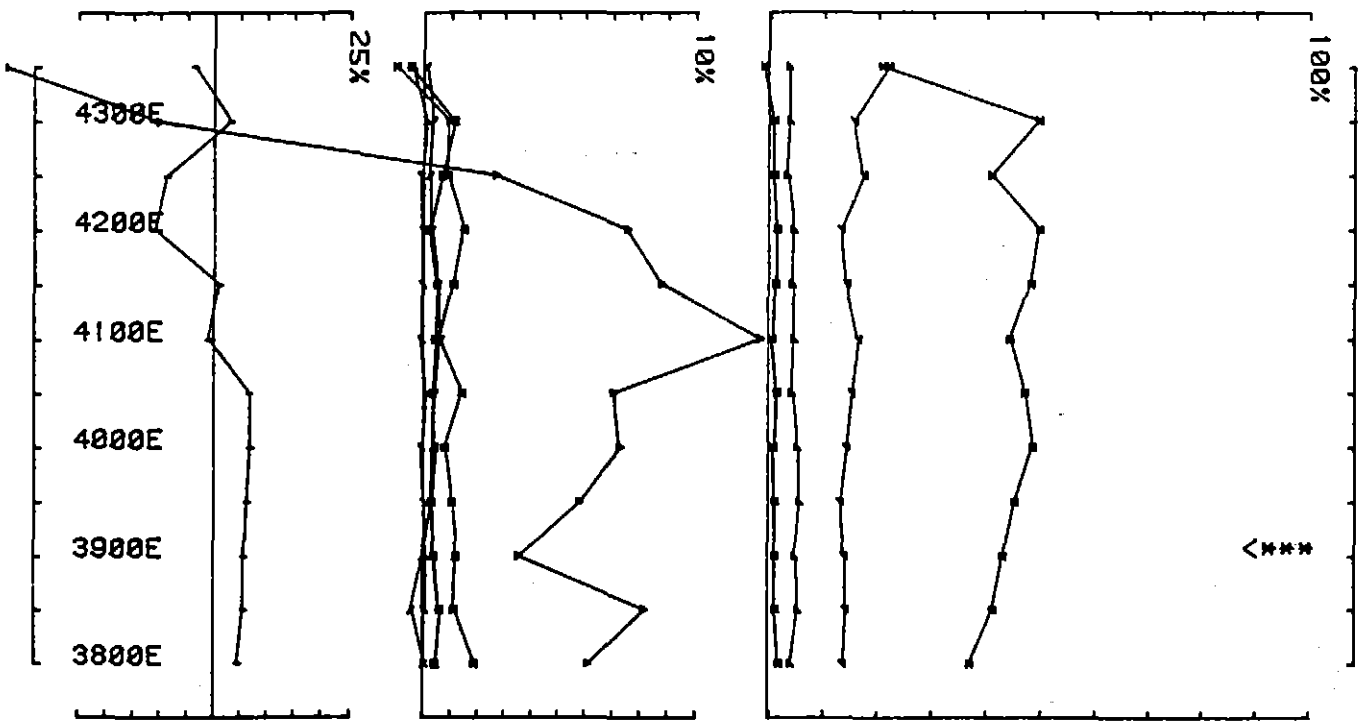
584080



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS.,LAMONTAGNE job 8901 base freq (hz) 26.230
loop no 4 line 5600N component Hz secondary field Ch 1 contin. norm.

080

584081



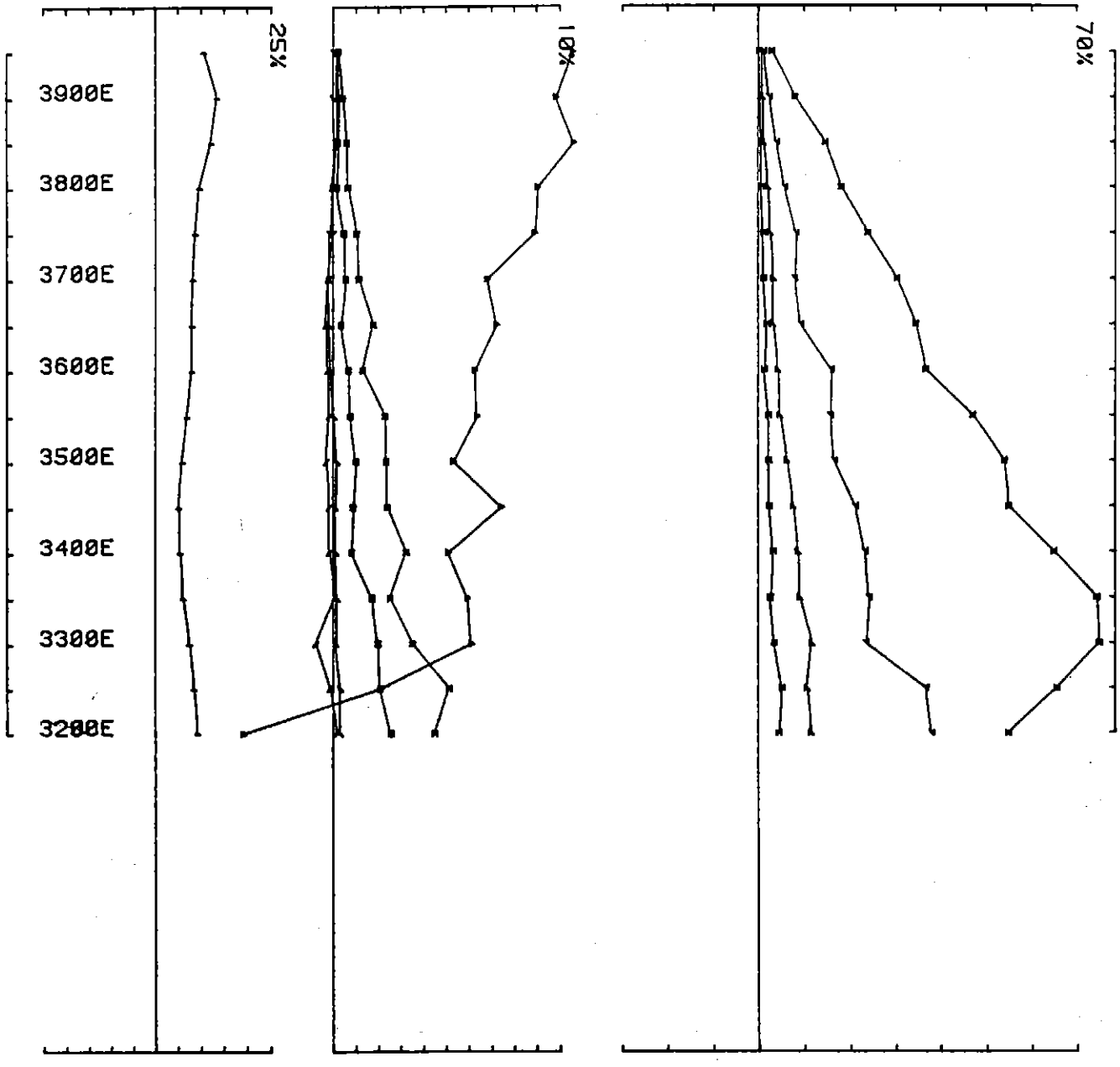
UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS., LAMONTAGNE Job 8901 base freq (hz) 26.230 JAN 1989

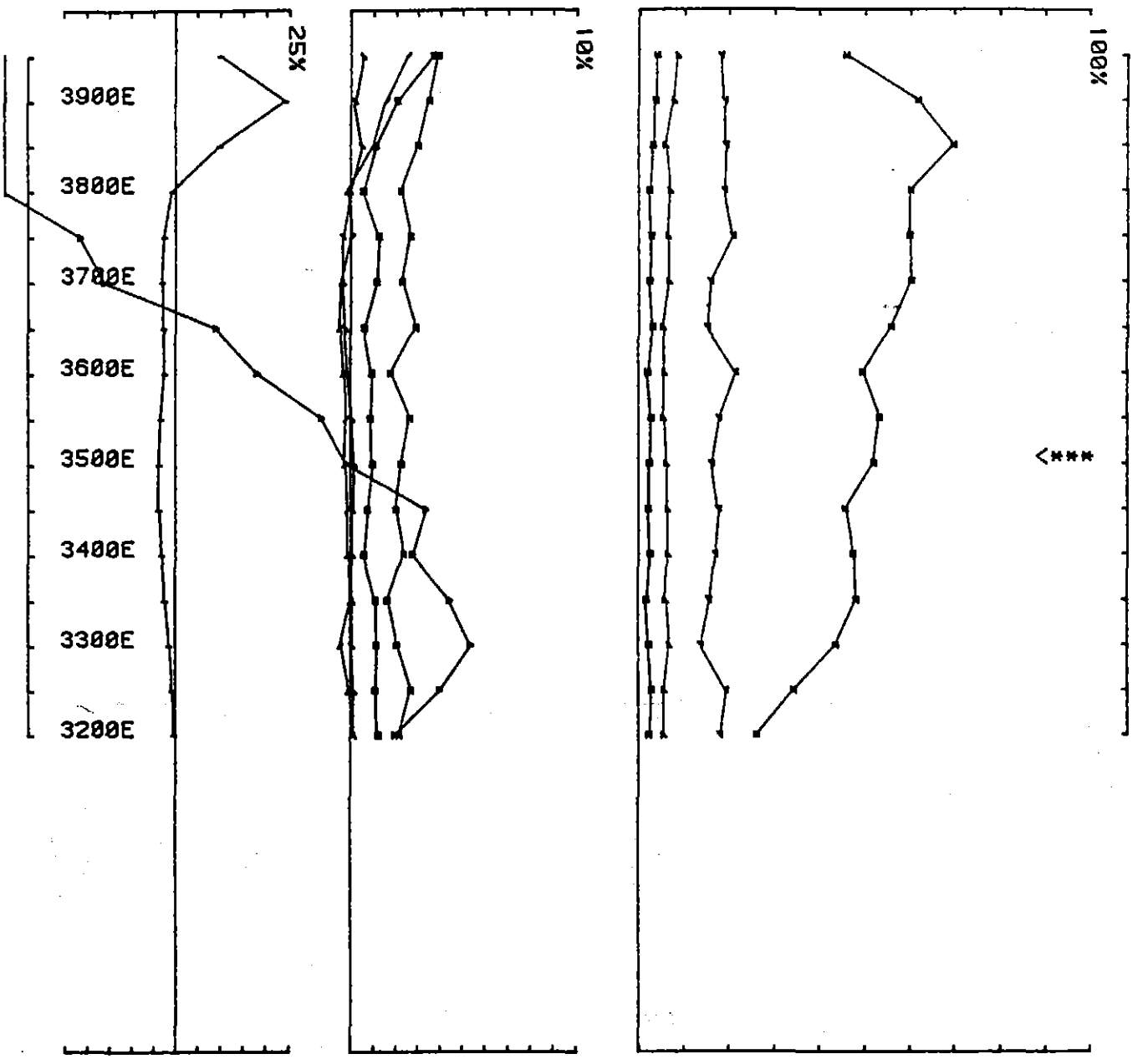
loop no 4 line 5600N component Hz secondary field Ch 1 point norm.

081

584082



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.
conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230
loop no 3 line 5600N component Hz secondary field Ch 1 contin. norm.



UTEM SURVEY at EAST RED HILLS for ABERFOYLE RESOURCES LTD.

conducted by SJV CONS., LAMONTAGNE job 8901 base freq (hz) 26.230 JAN 1989

loop no 3 line 5600N component Hz secondary field Ch 1 point norm.

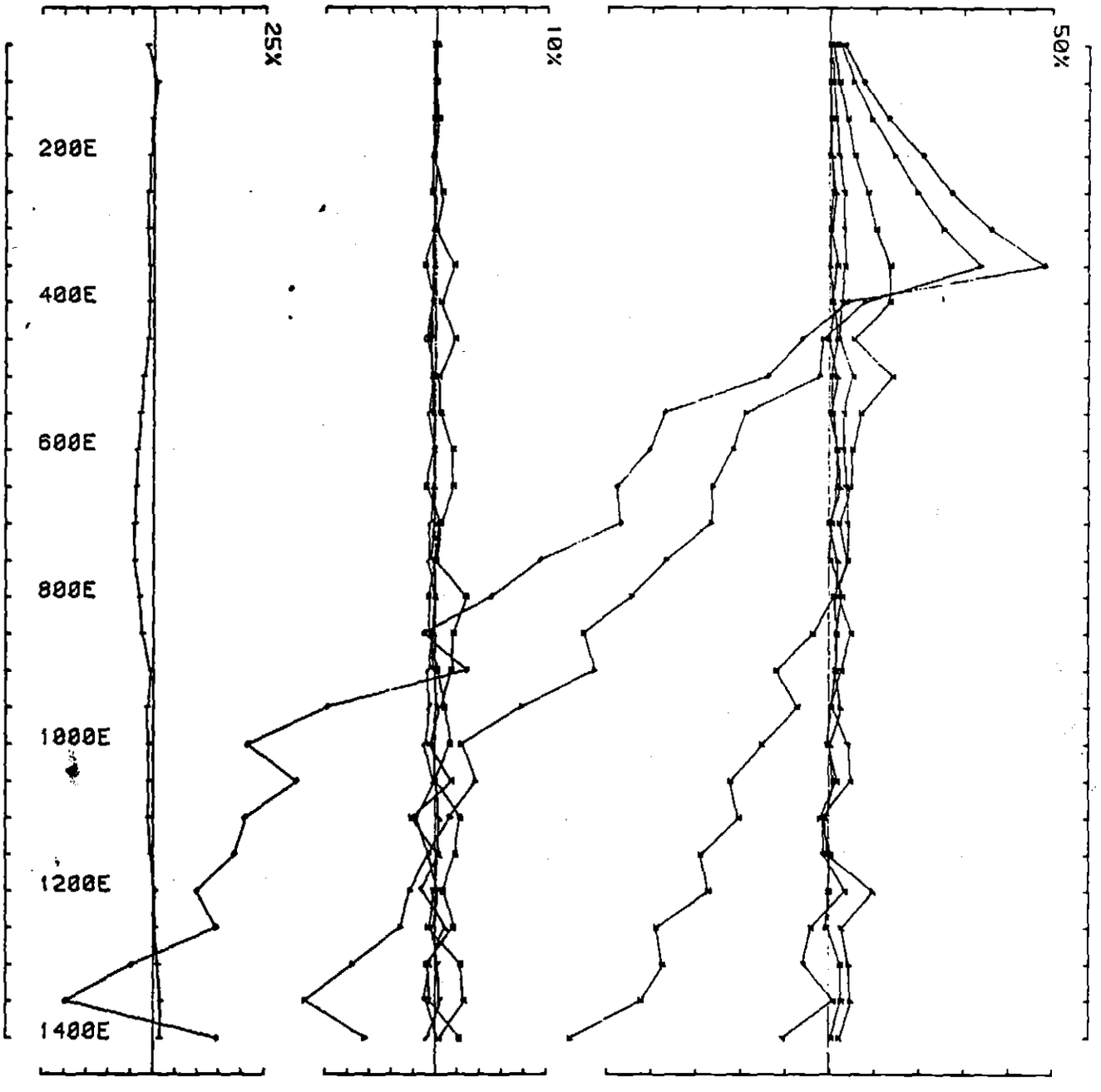
584084

APPENDIX 3

LOOP 1 DATA

085

584086



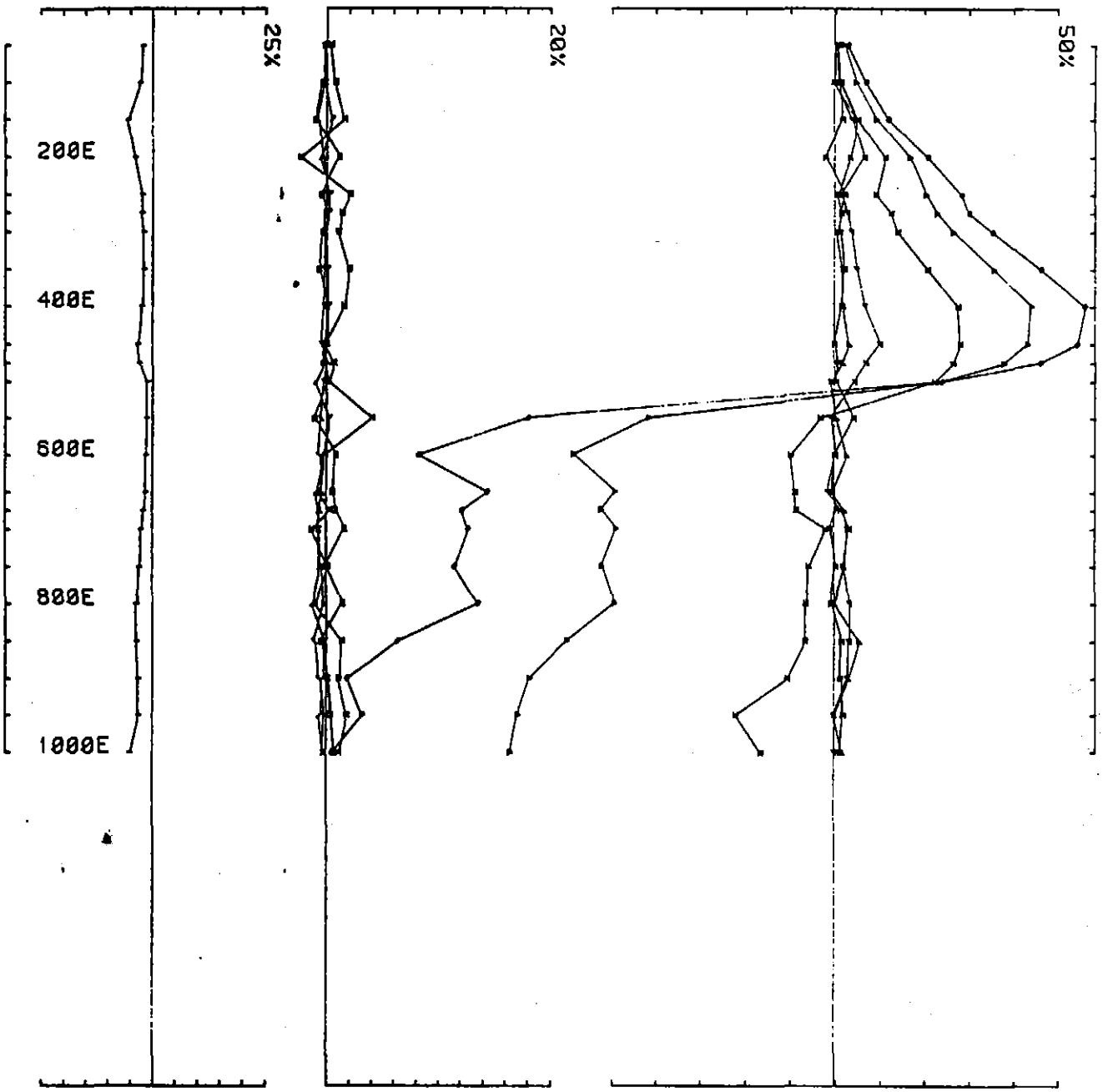
LAMONTAGNE GEOPHYSICS LTD job 8863
client ABERFOYLE RESOURCES
area RED HILLS
UTEM SURVEY at base freq (hz) 26.230

loop dimensions
1000x1000m

loop no 1
line 24S
component Hz
secondary field
Chl contin norm
08/12/88

584087

086

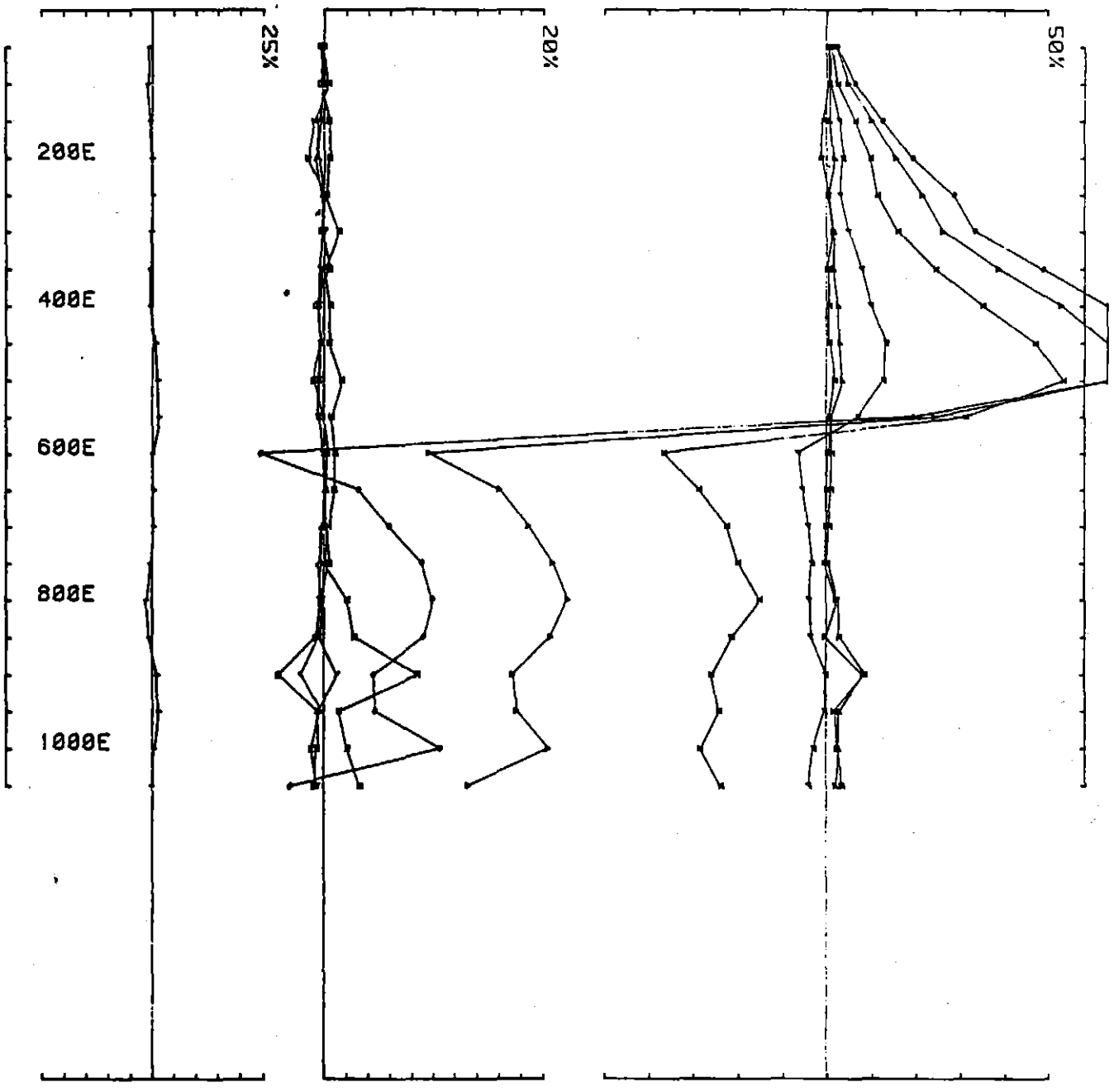


LAMONTAGNE GEOPHYSICS LTD job 8863
client ABERFOYLE RESOURCES
area RED HILLS
UTEM SURVEY at base freq (hz) 26.230

loop dimensions
1000x1800m

loop no 1
line 32S
component Hz
secondary field
Chl contin norm
06/12/88

584088



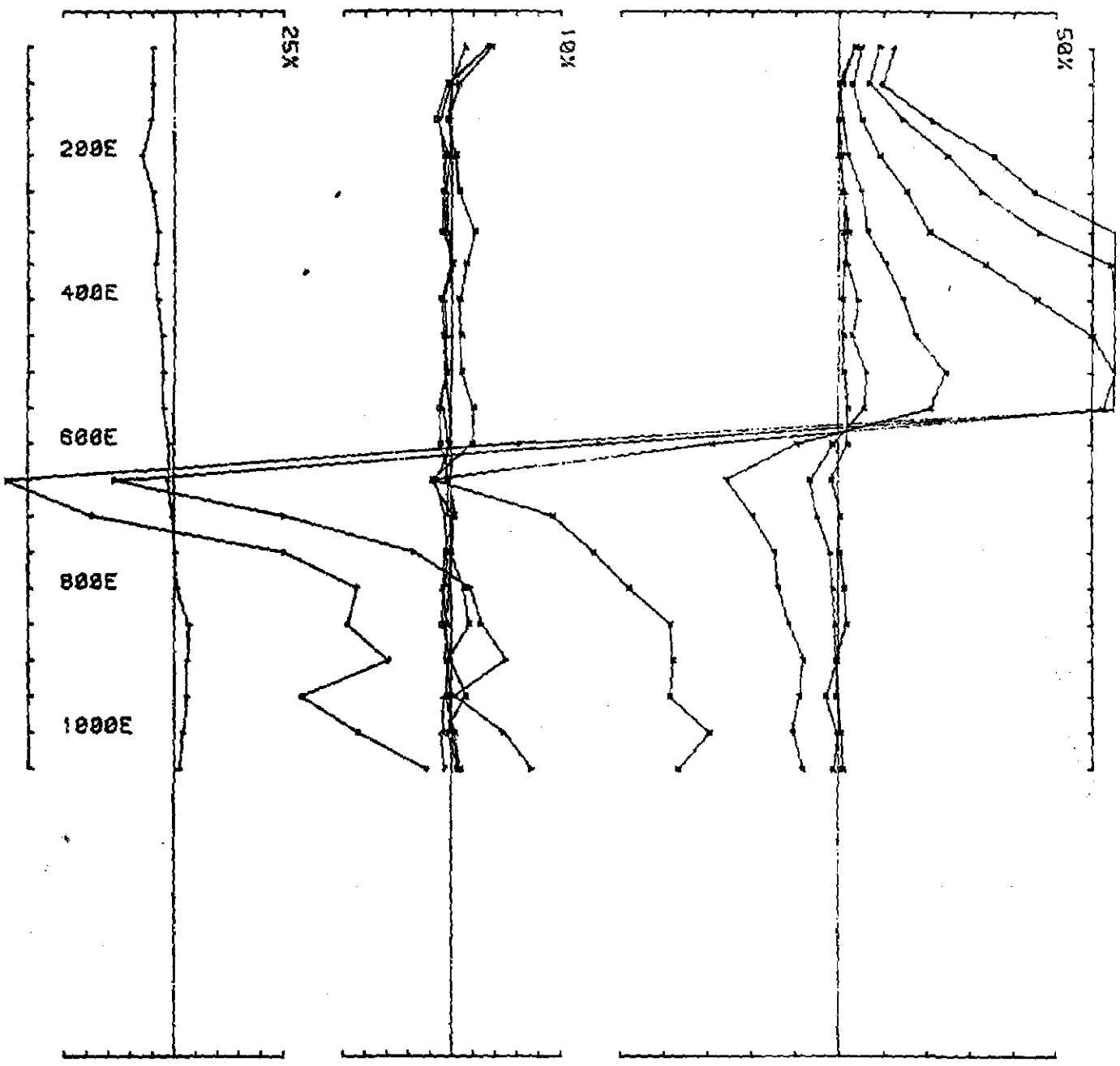
LAMONTAGNE GEOPHYSICS LTD job 8863
client ABERFOYLE RESOURCES
area RED HILLS
UTEM SURVEY at base freq (hz) 26.230

loop dimensions
1000x1000m

loop no 1
line 40S
component Hz
secondary field
Chl contin norm
08/12/88

088

584089



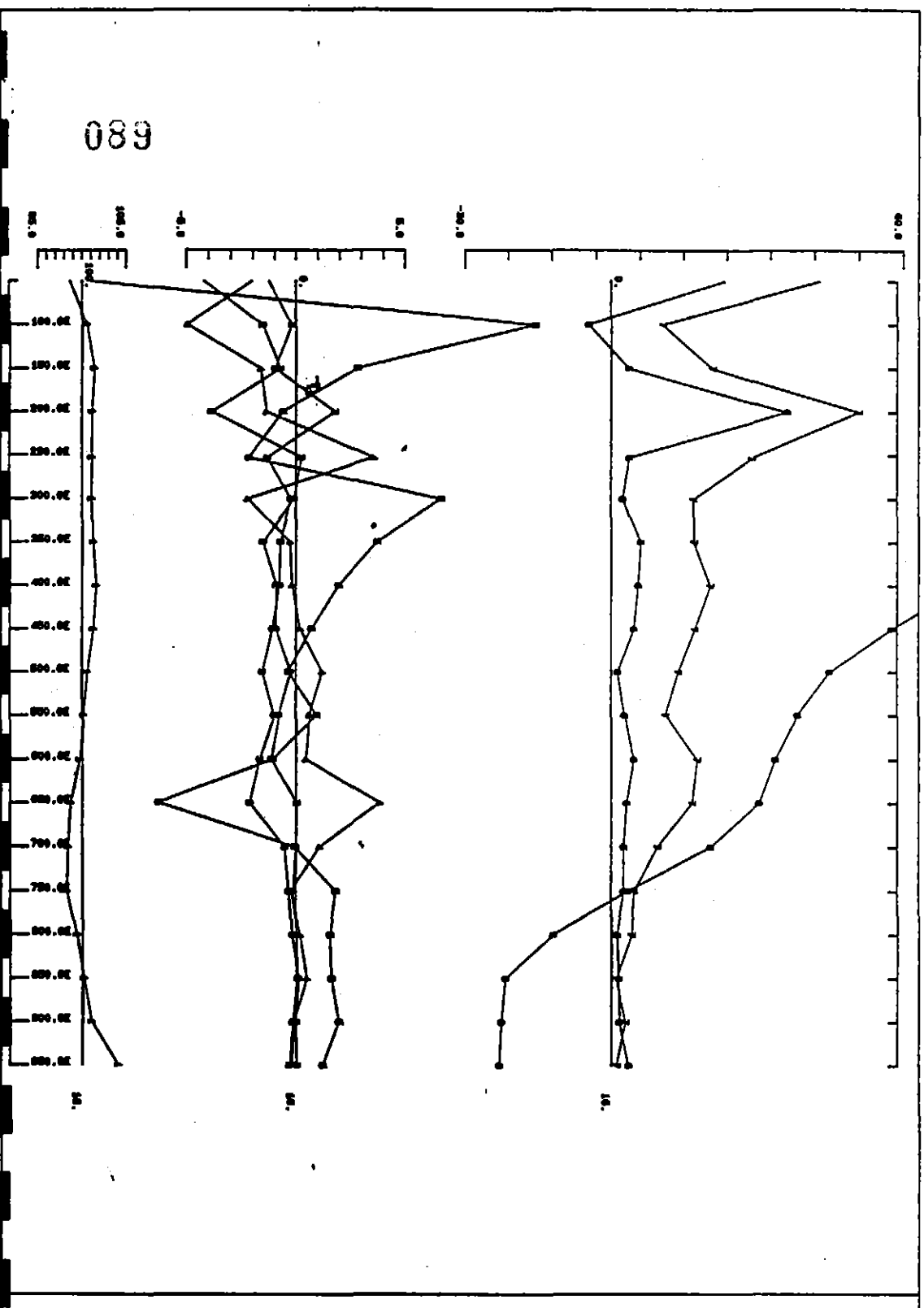
LAMONTAGNE GEOPHYSICS LTD job 8863
client ABERFOYLE RESOURCES
area RED HILLS
UTEM SURVEY at base freq (hz) 26.230

loop dimensions
1000x1000m

loop no 1
line 48S
component Hz
secondary field
Chl contin norm
10/12/88

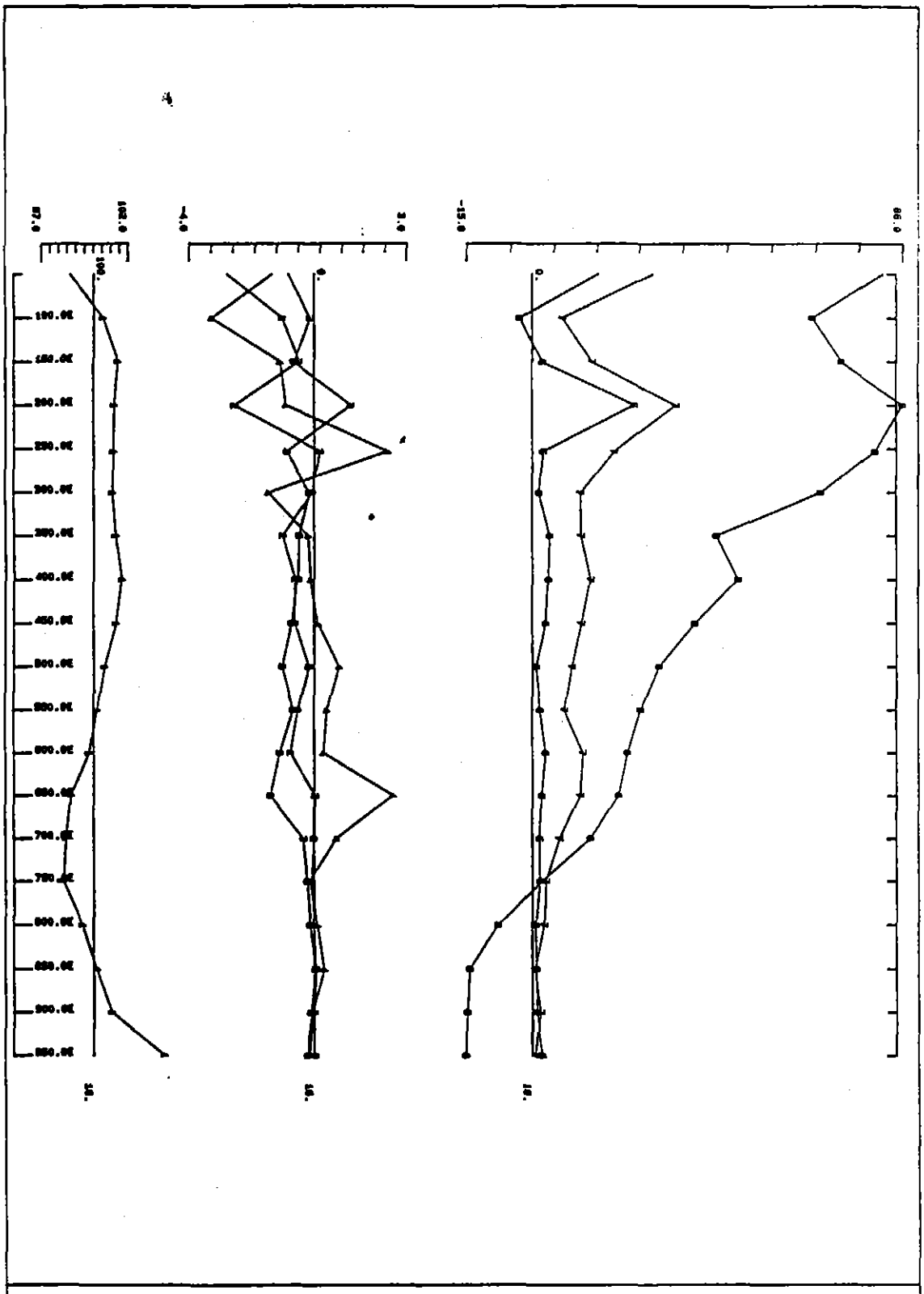
089

584090

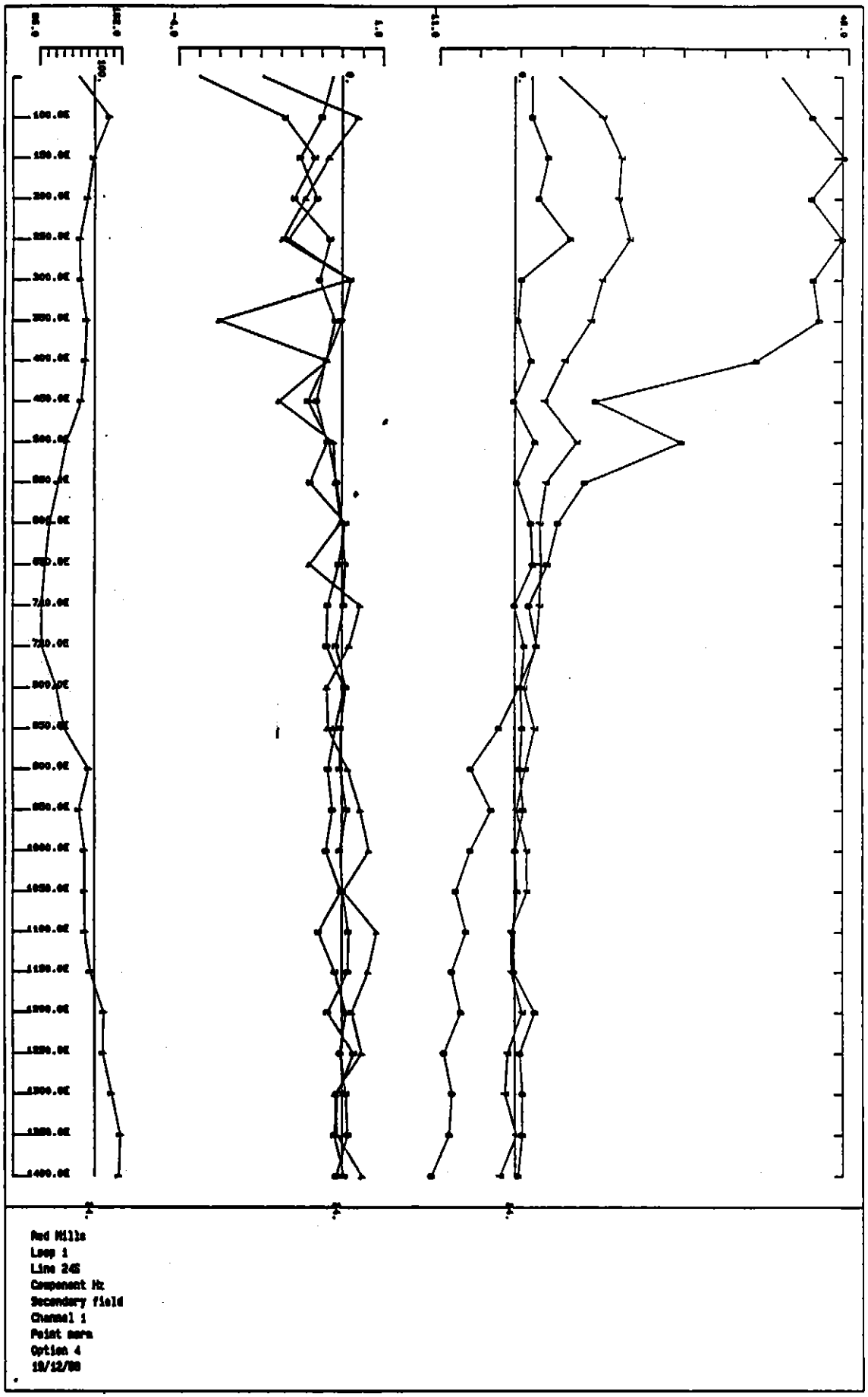


Red Hills
Loop 1
Lines 100
component Hz Stacked Profiles (ch. 6,7)
Secondary field
Channel 1
Point zero at 700E
Option 4
10/12/88

584091

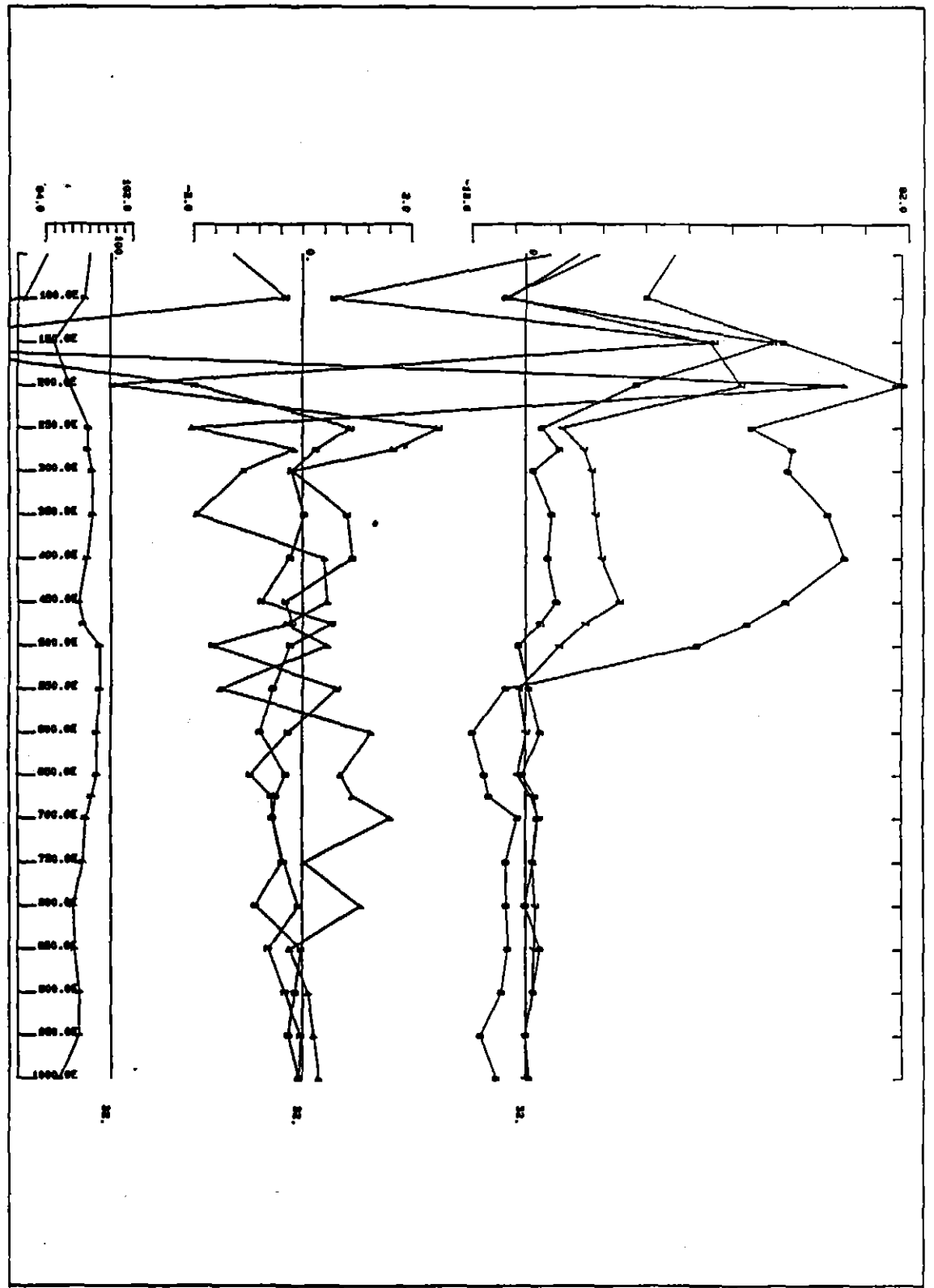


Red Hills
Loop 1
Line 103
Component Hz
Secondary field
Channel 1
Point zero
Option 4
10/12/90



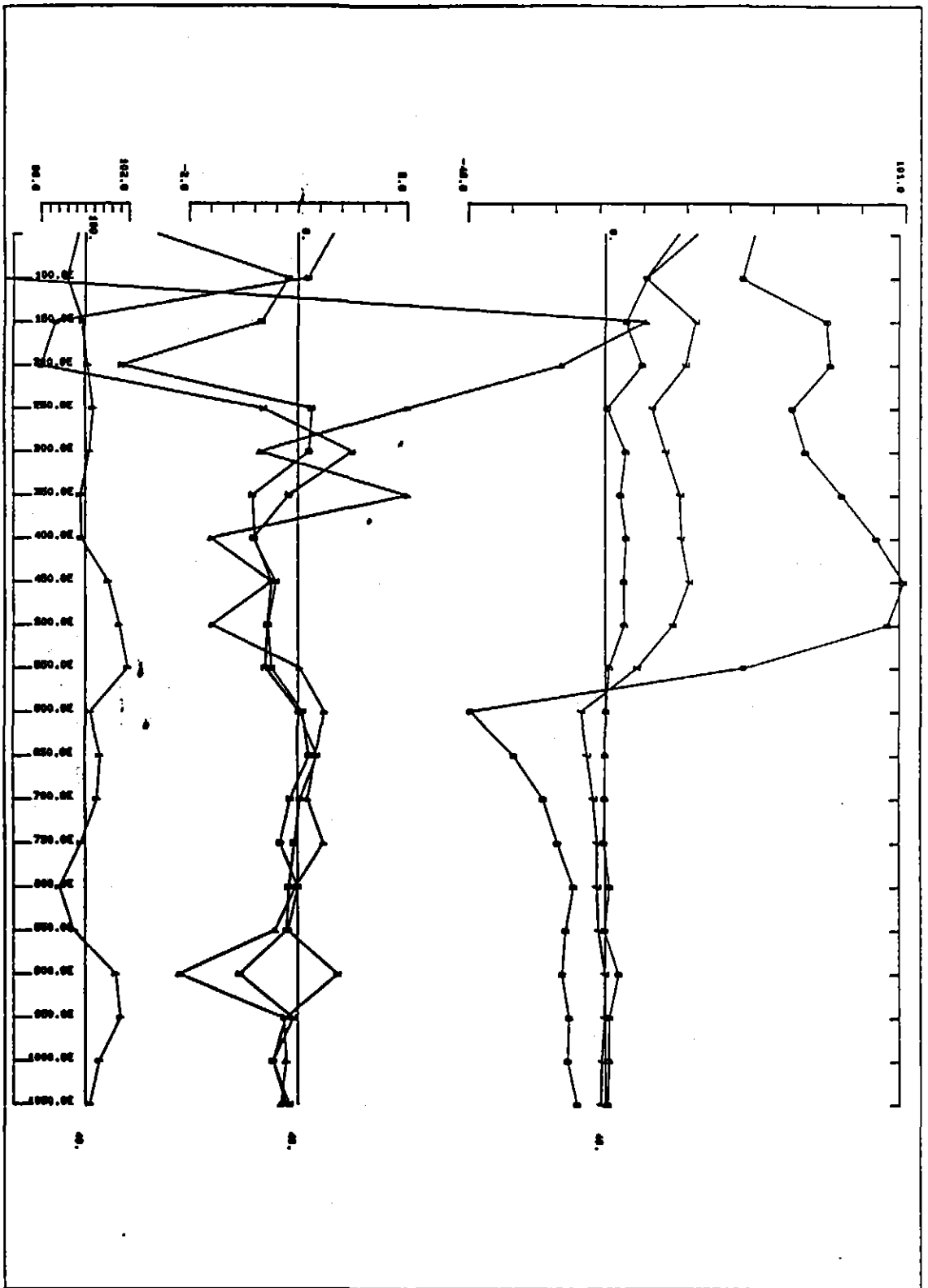
092

584093



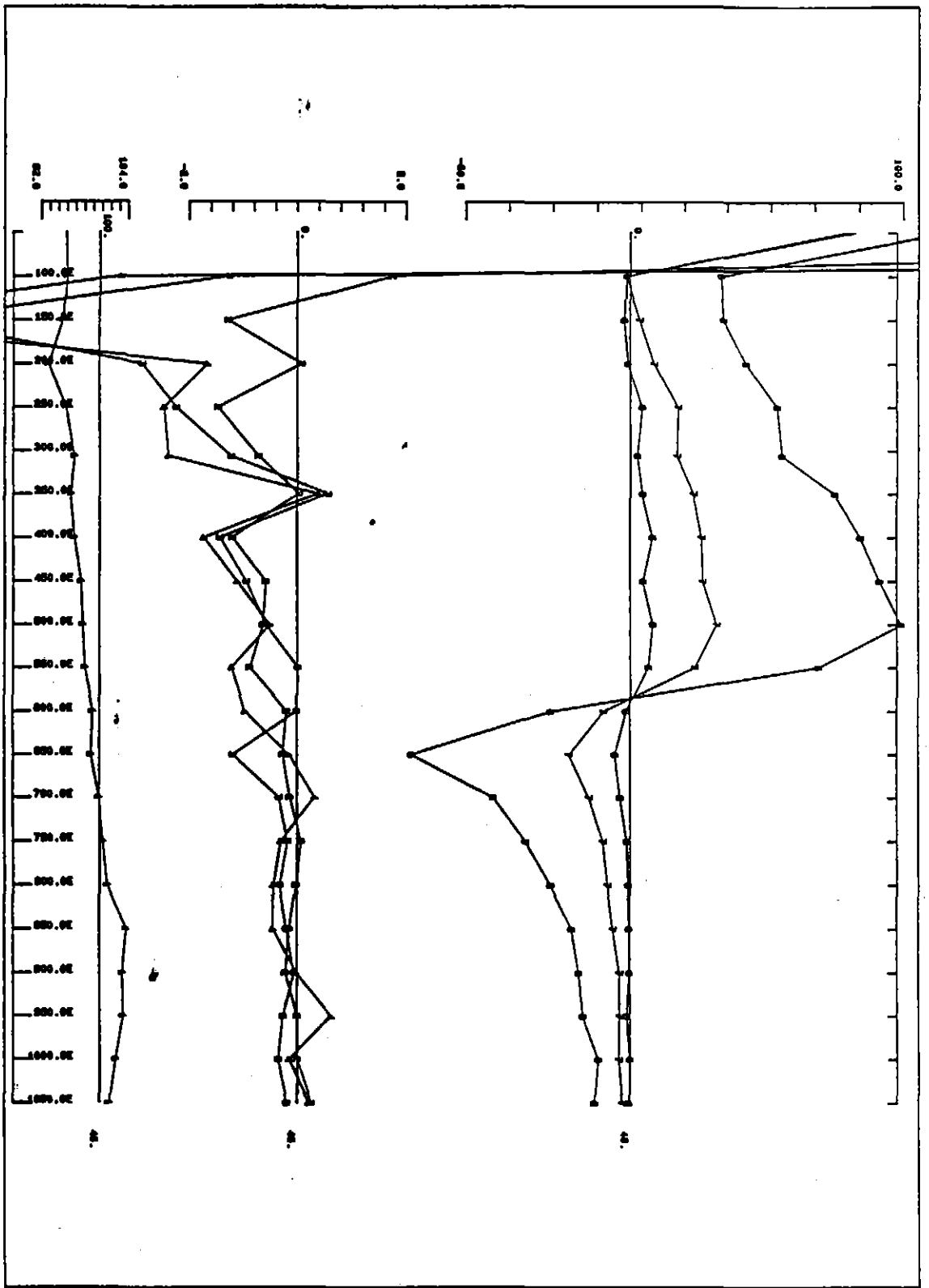
Red Hills
Loop 1
Line 325
Component Hz
Secondary field
Channel 1
Point mara
Option 4
10/12/86

584091



Red Hills
Loop 1
Line 40S
Component Hz
Secondary field
Channel 1
Point nora
Option 4
19/12/88

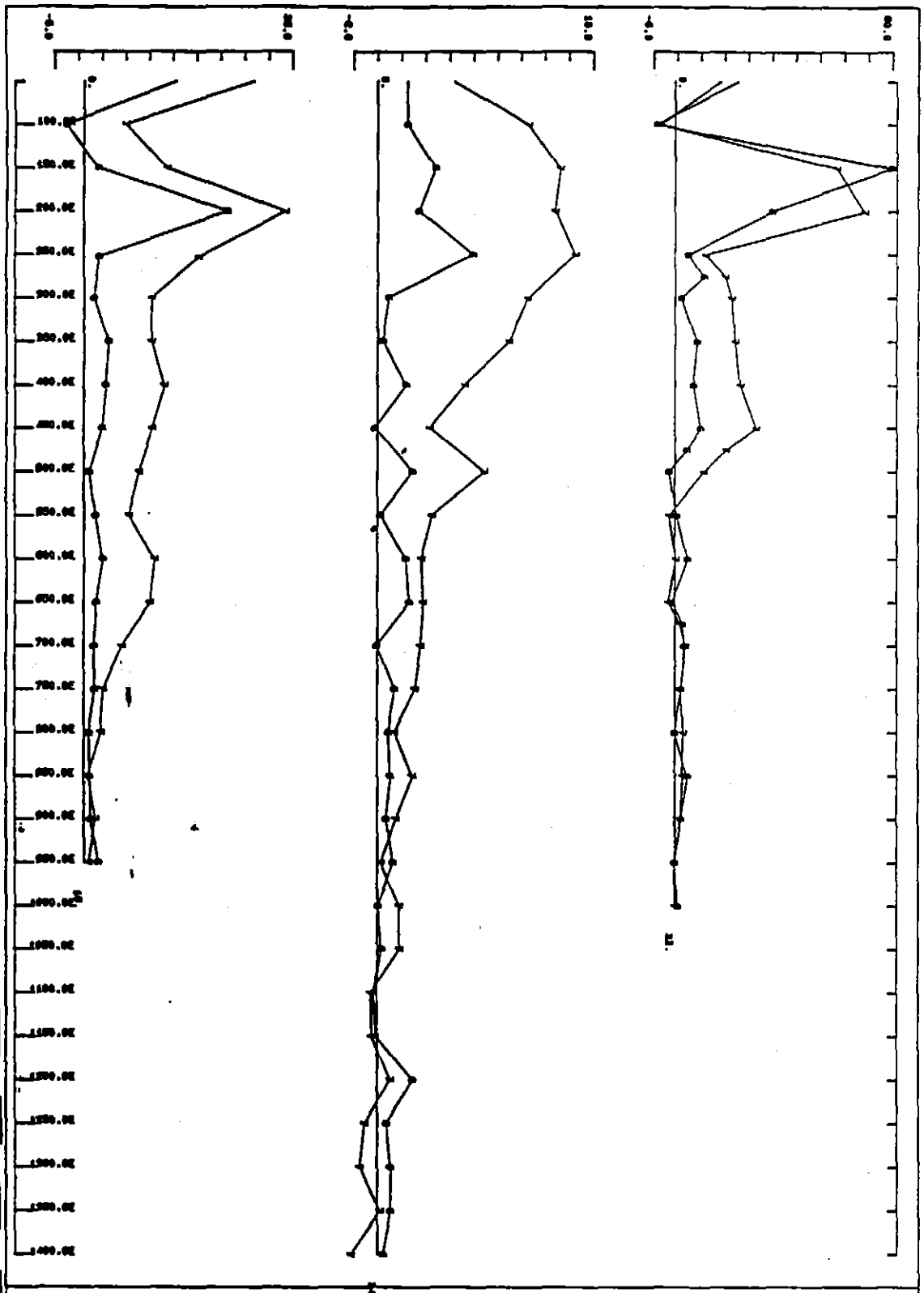
584095



Red Hills
Loop 1
Line 485
Component Hz
Secondary field
Channel 1
Point nors
Option 4
18/12/88

00 095

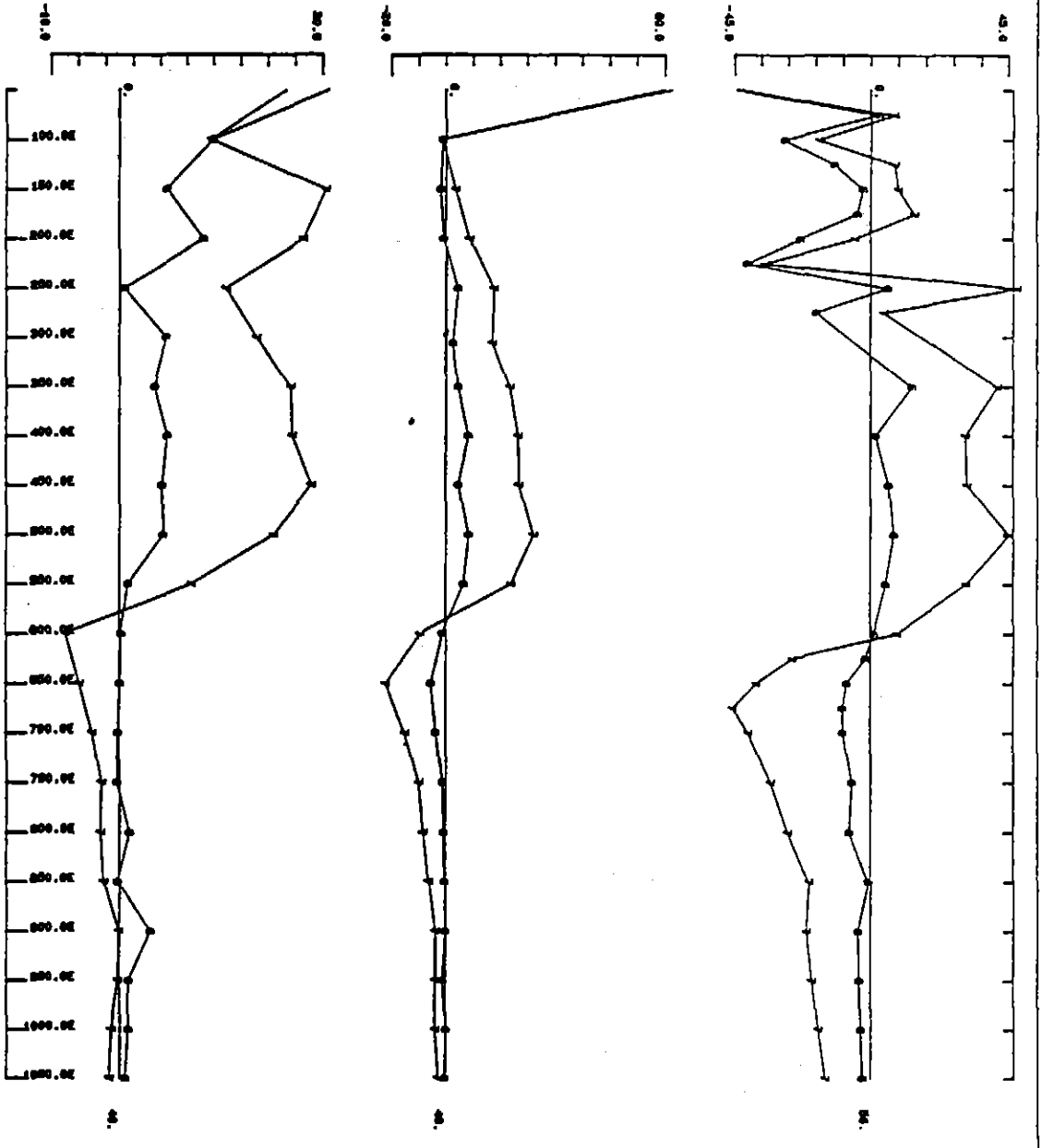
584096



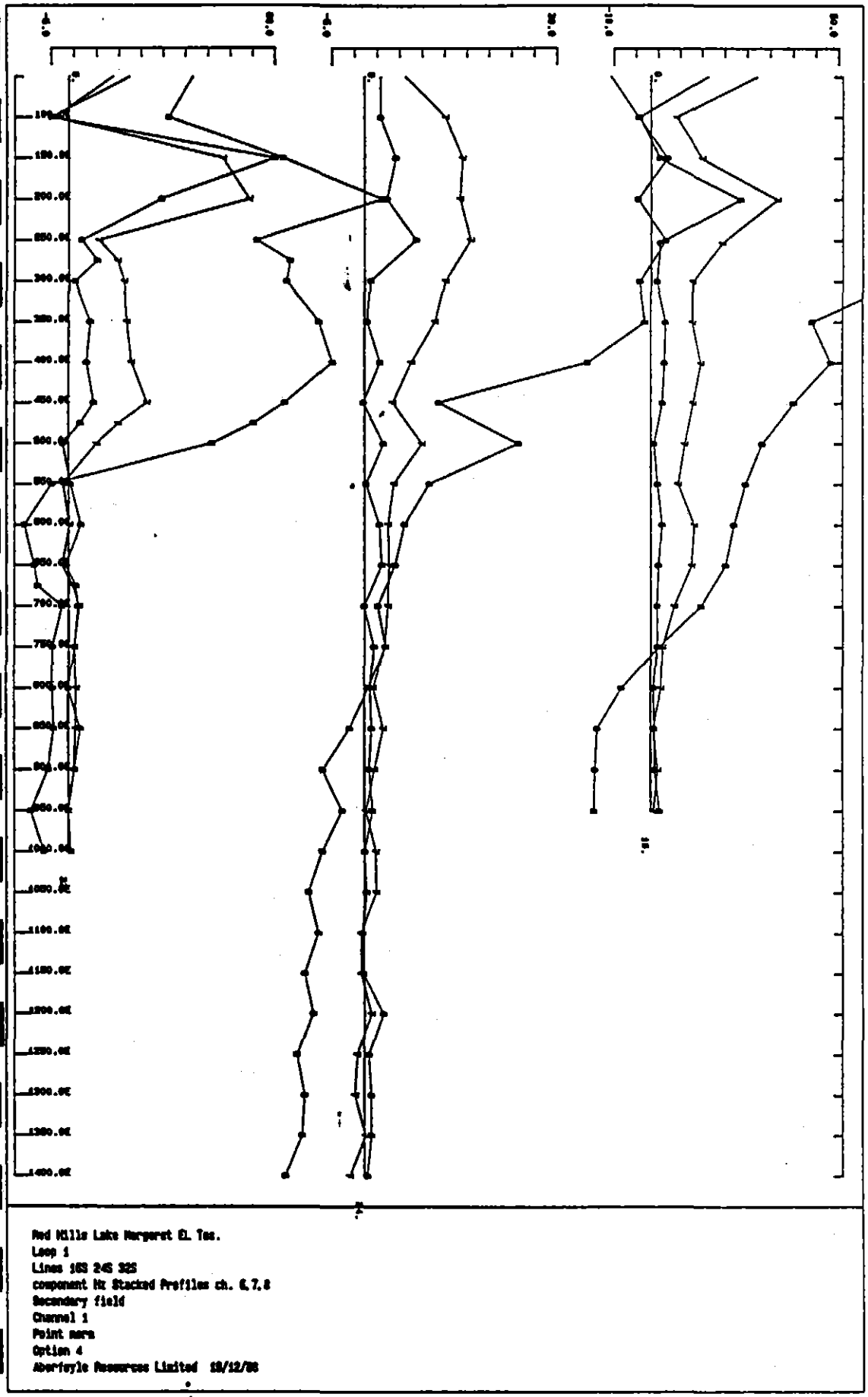
Red Hills
Loop 1
Lines 16S 24S 32S
Component Hz Stacked Profiles (ch. 4,7)
Secondary field
Channel 1
Point Rcvr
Option 4
19/12/88

096

584097



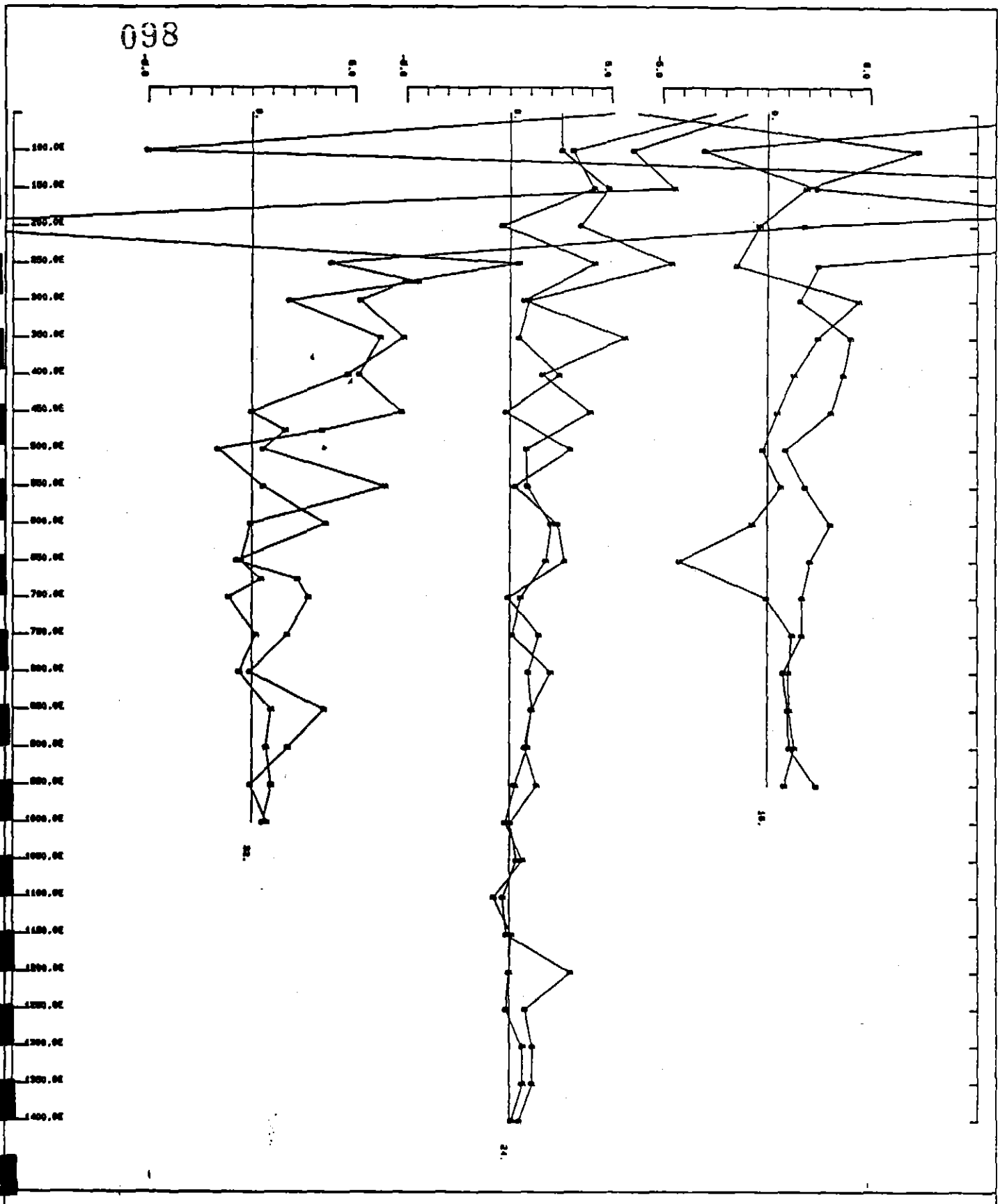
Red Hills
Loops 1 and 2
Lines 405 405 505
Component Hz Stacked Profiles (ch. 6,7)
Secondary field
Channel 1
Point norm
Option 4
19/12/88



Red Hills Lake Margaret Q. Tas.
Loop 1
Lines 165 245 325
component Hz Stacked Profiles ch. 6,7,8
Secondary field
Channel 1
Point mara
Option 4
Aberfoyle Resources Limited 18/12/86

584099

098



Red Hills Lake Margaret EL Tec.
Loop 1
Lines 103 2at 328
component Hz Stacked Profiles ch 5,6
Secondary field
Channel 1
Point mere
Option 4
Aberfoyle Resources Limited 19/12/88

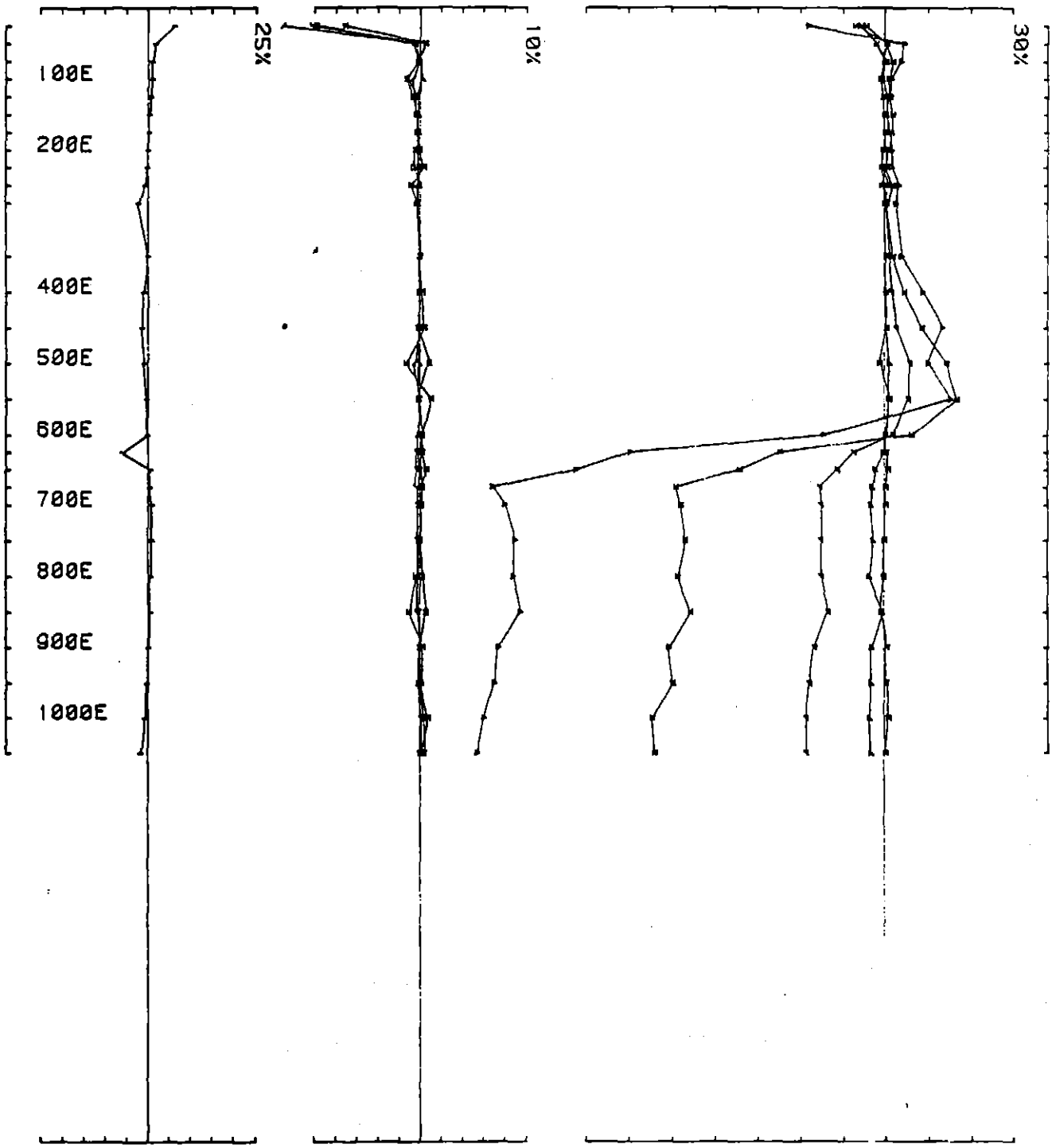
584100

099

LOOP 2 DATA

100

584101



LAMONTAGNE GEOPHYSICS LTD job 8863
client ABERFOYLE RESOURCES
area RED HILLS
UTEM SURVEY at base freq (hz) 26.230

loop dimensions
1000x1000m

Chl contin norm

secondary field

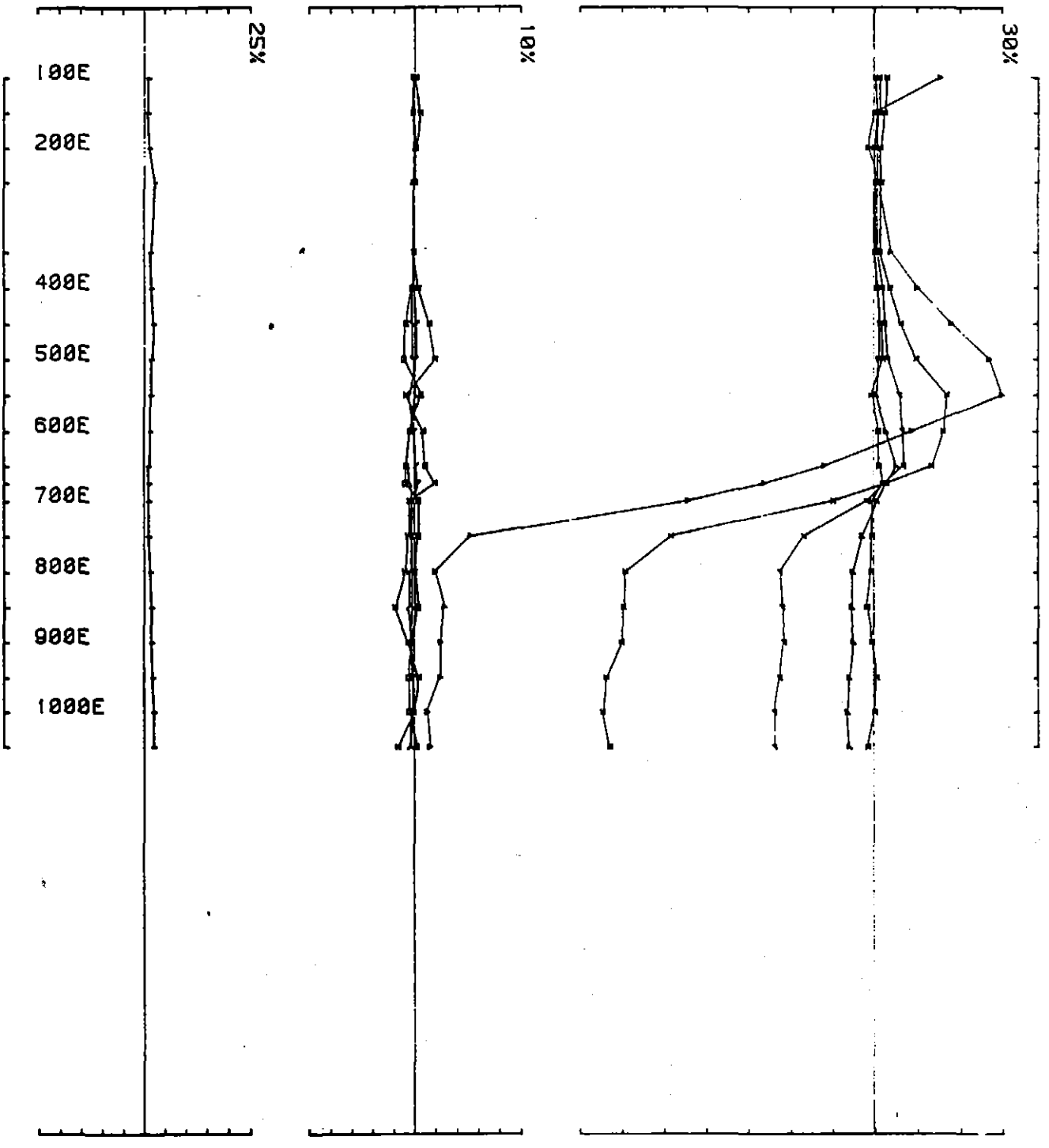
component Hz

line 56S

Idemp no 2

584102

101



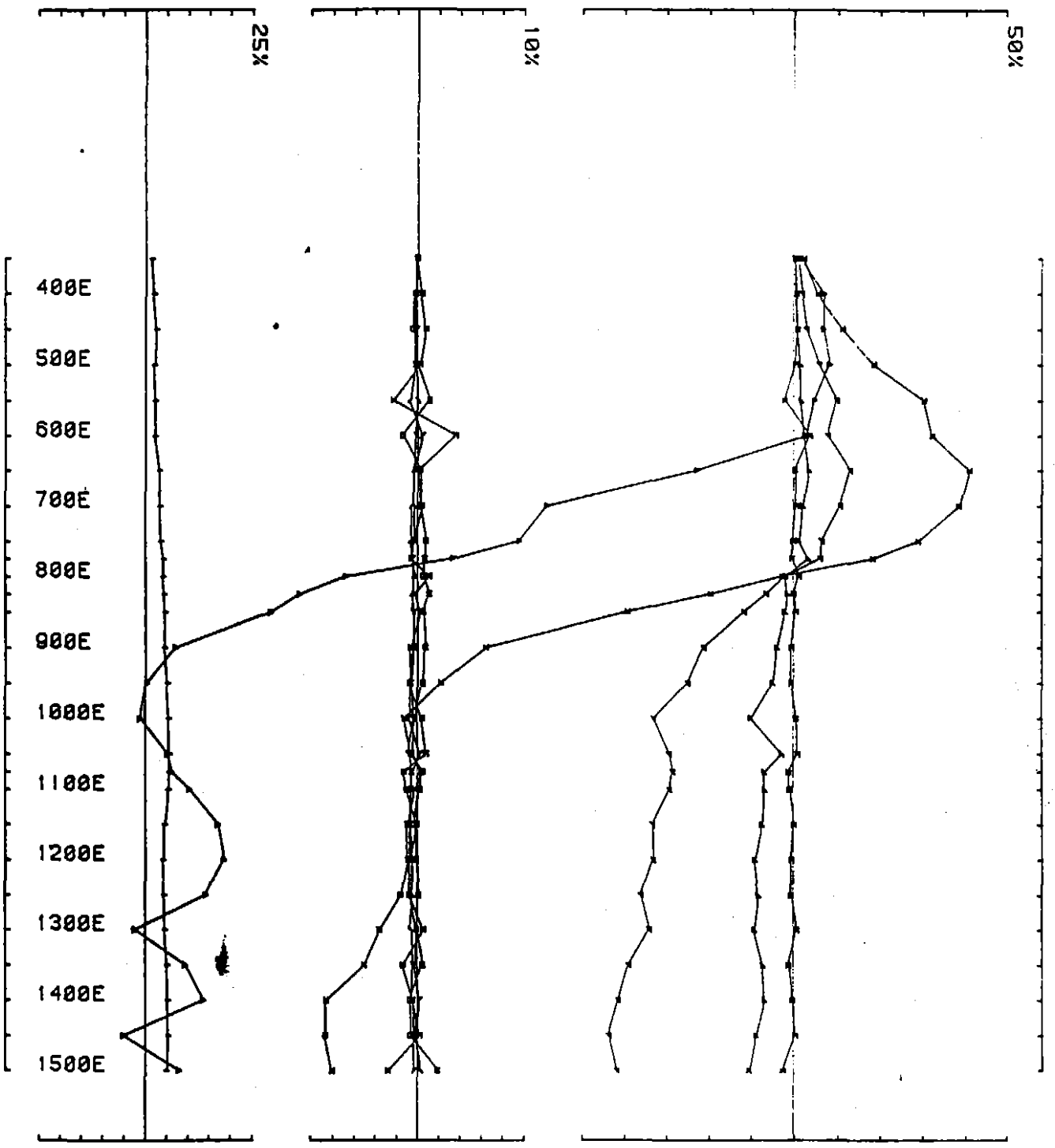
LAMONTAGNE GEOPHYSICS LTD job 8863
client ABERFOYLE RESOURCES
area RED HILLS
UTEM SURVEY at base freq (hz) 26.230

loop dimensions
1000x1000m

loop no 2
line 64S
component Hz
secondary field
Chl contin norm
07/12/88

102

584103



LAMONTAGNE GEOPHYSICS LTD job 8863
client ABERFOYLE RESOURCES
area RED HILLS
UTEM SURVEY at base freq (hz) 26.230

loop dimensions
1000x1000m

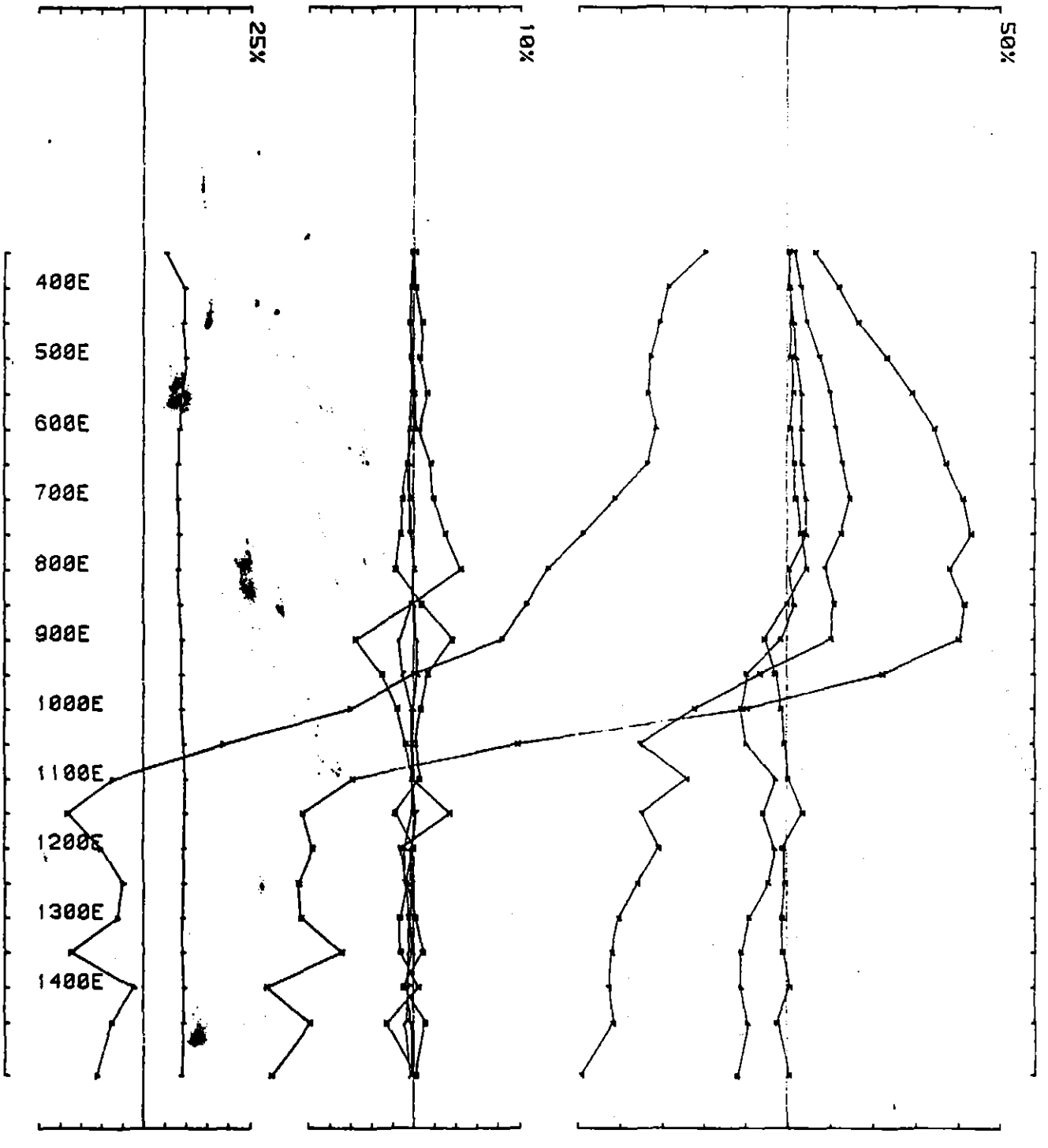
Chl contin norm
07/12/88

secondary field
component Hz

loop no 2
line 725

103

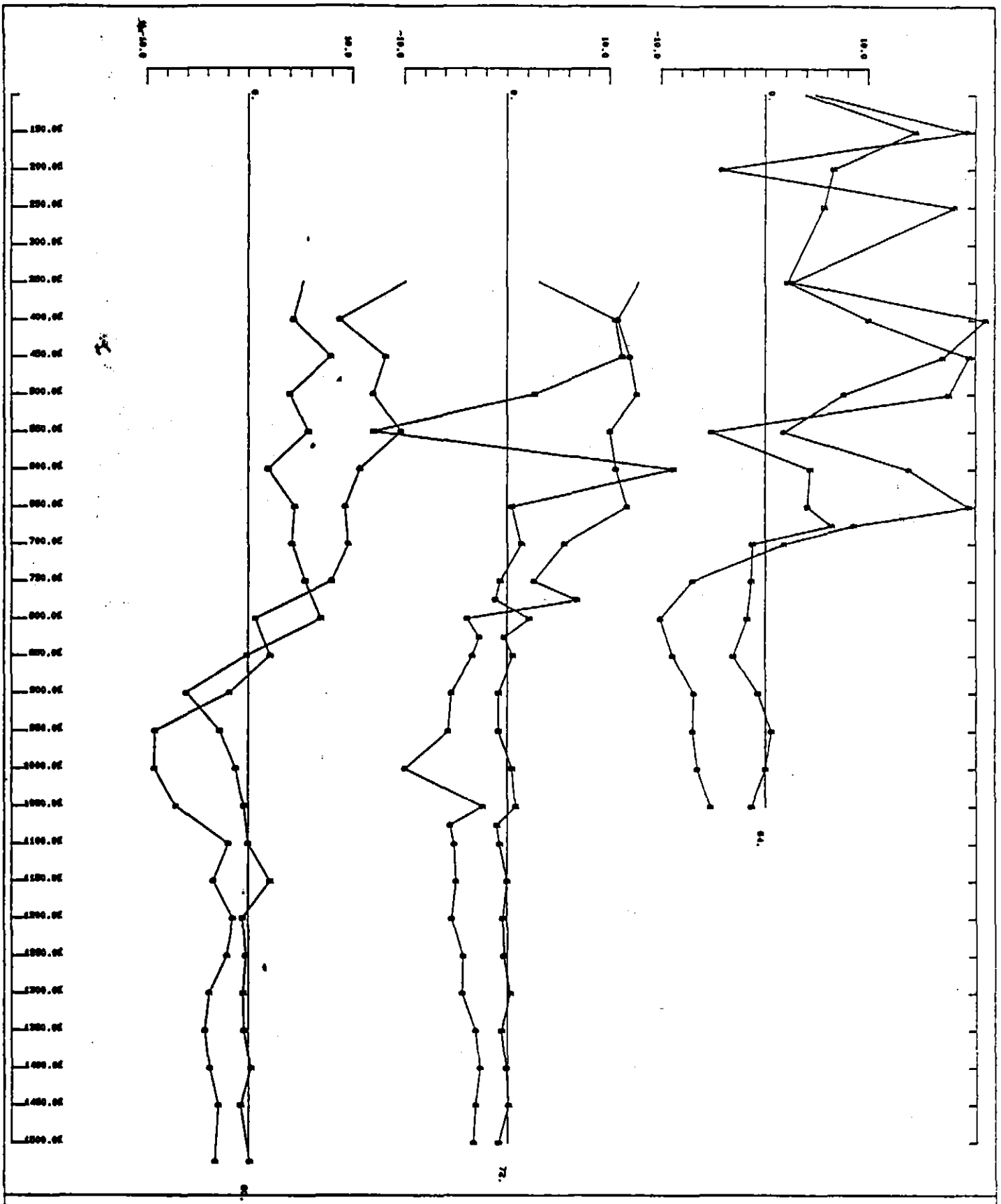
584104



LAMONTAGNE GEOPHYSICS LTD job 8863
client ABERFOYLE RESOURCES
area RED HILLS
UTEM SURVEY at base freq (hz) 26.230

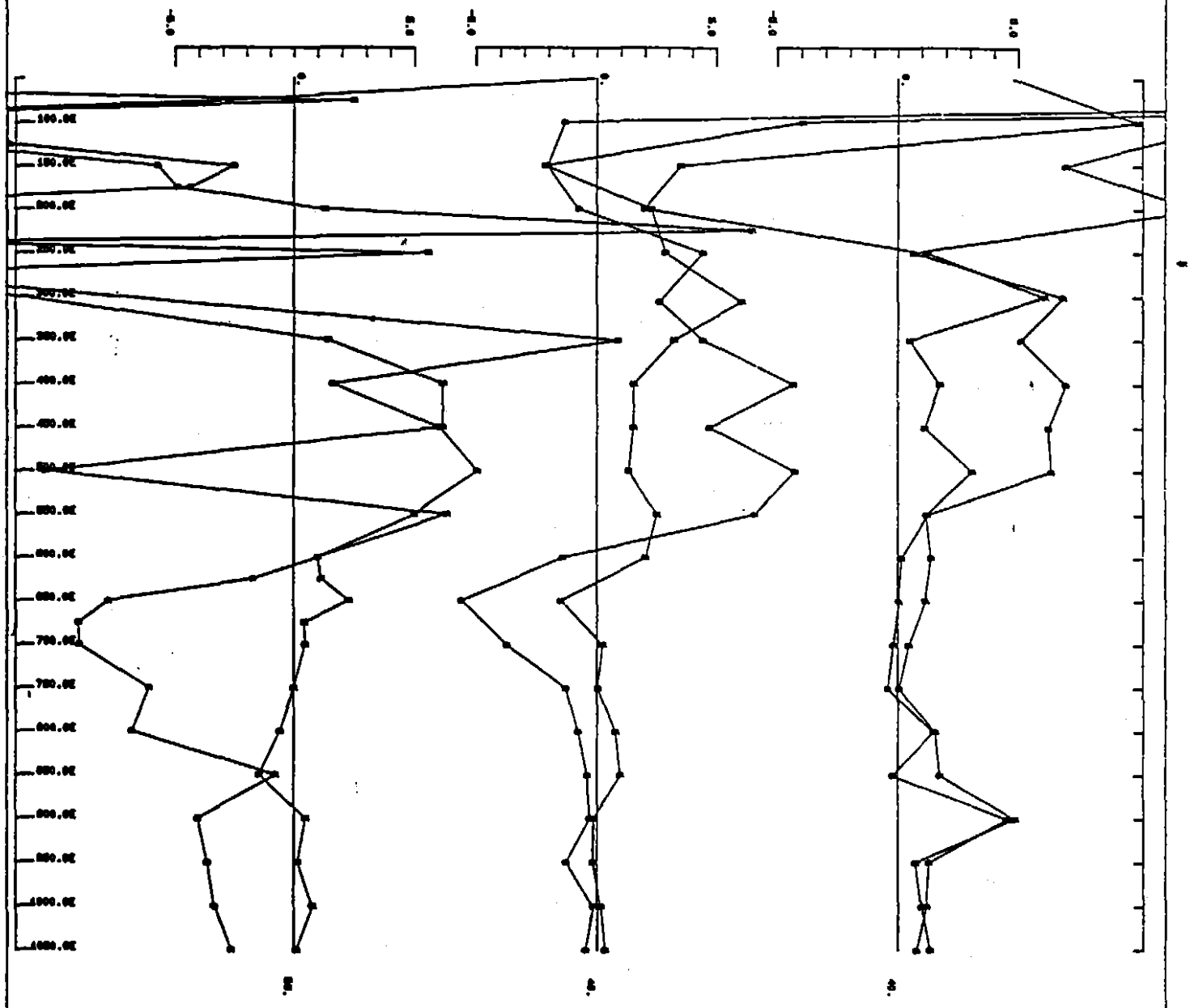
loop dimensions
1000x1000m

loop no 2
line 80S
component Hz
secondary field
chl contin norm
87/12/88



Red Hills Lake Margaret EL Tas.
Loop 1
Lines 648 728 808
Component Hz Stacked Pirofiles ch 5,6
Secondary field
Channel 1
Point Corr
Option 4
Aberfoyle Resources Limited 19/12/88

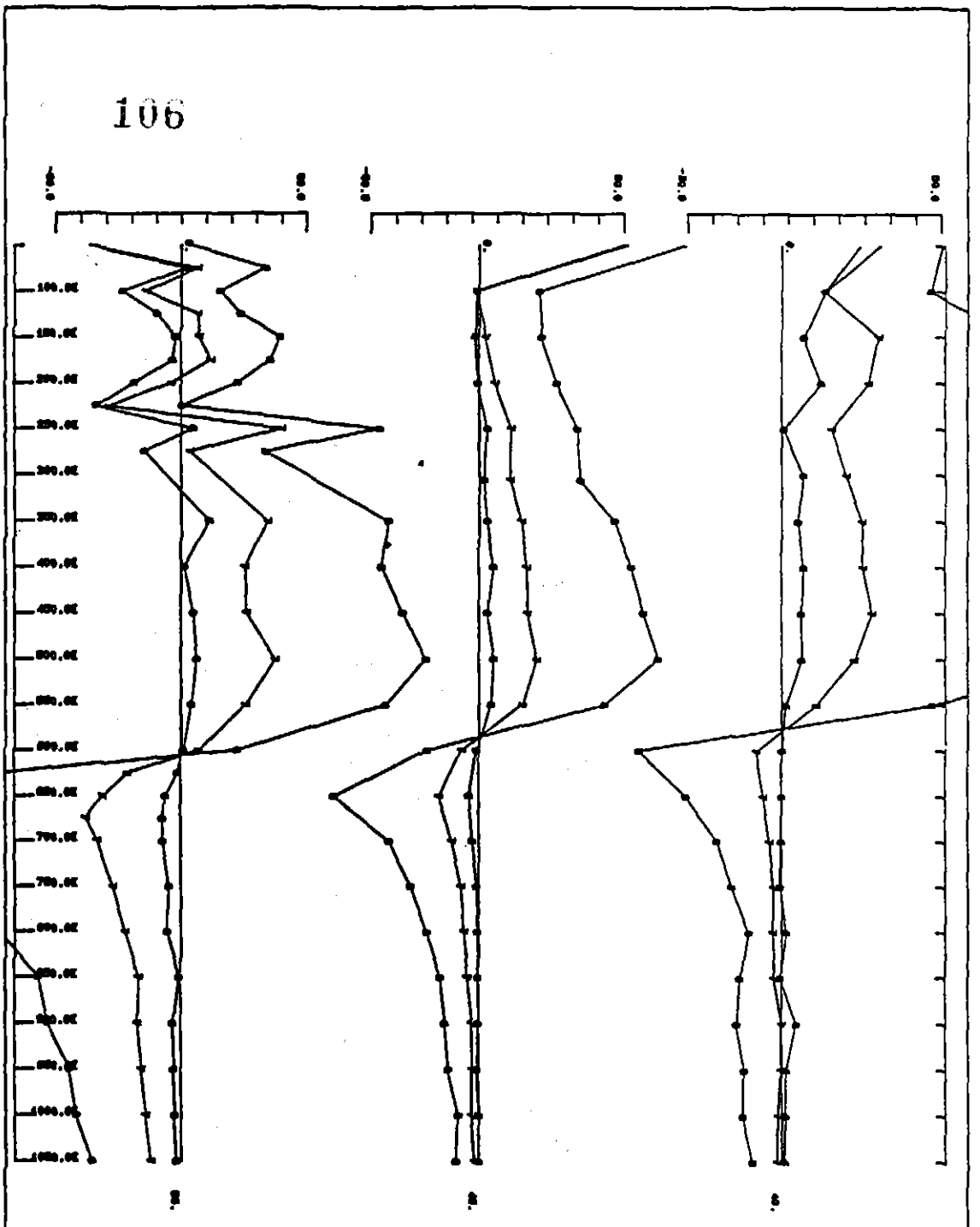
105



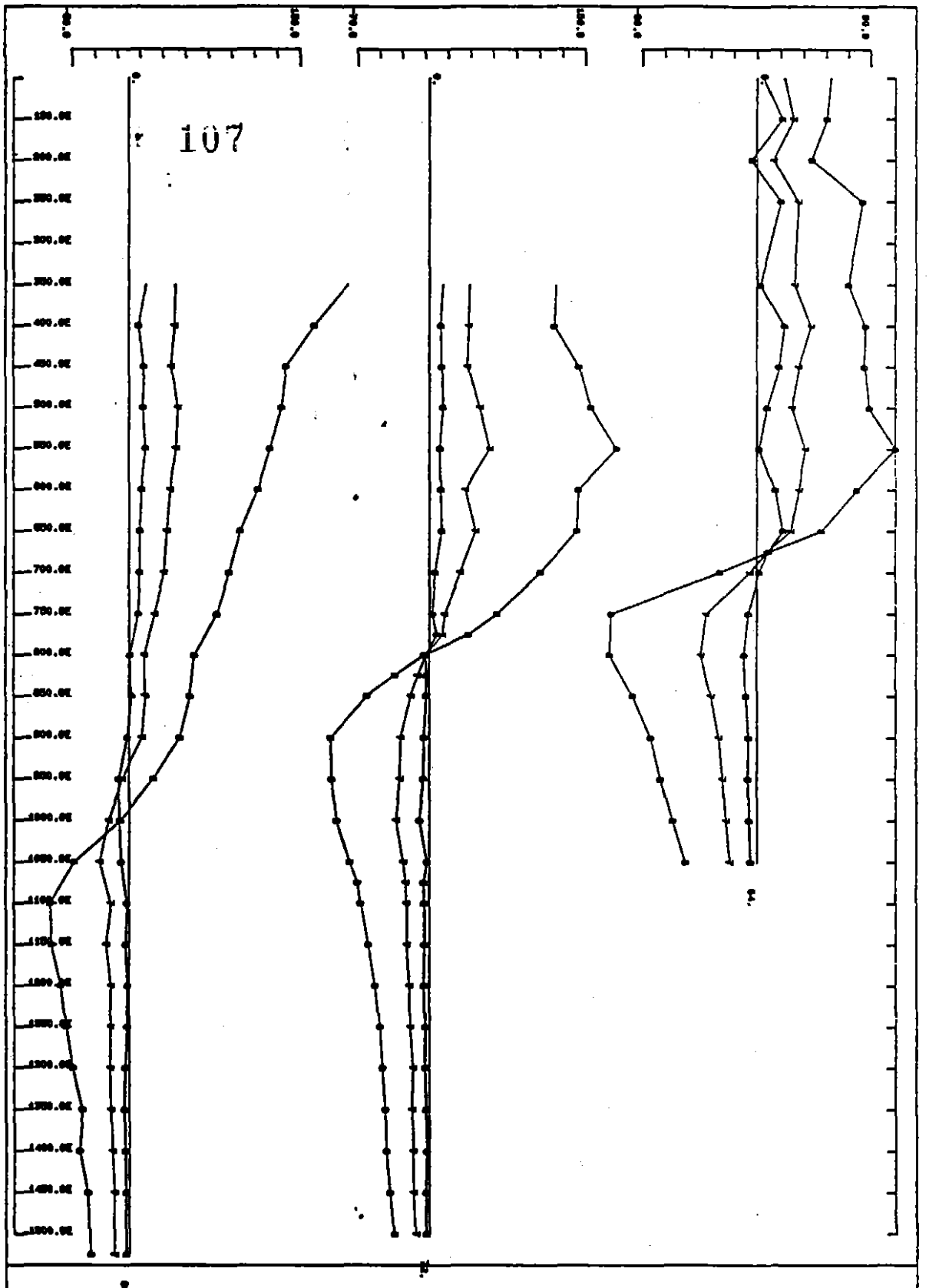
Red Hills Lake Margaret El. Tec.
Loop 1
Lines 401 402 803
component dz Stacked Profiles ch 5,6
Secondary field
Channel 1
Point zero
Option 4
Aberfoyle Resources Limited 10/12/88

584107

106

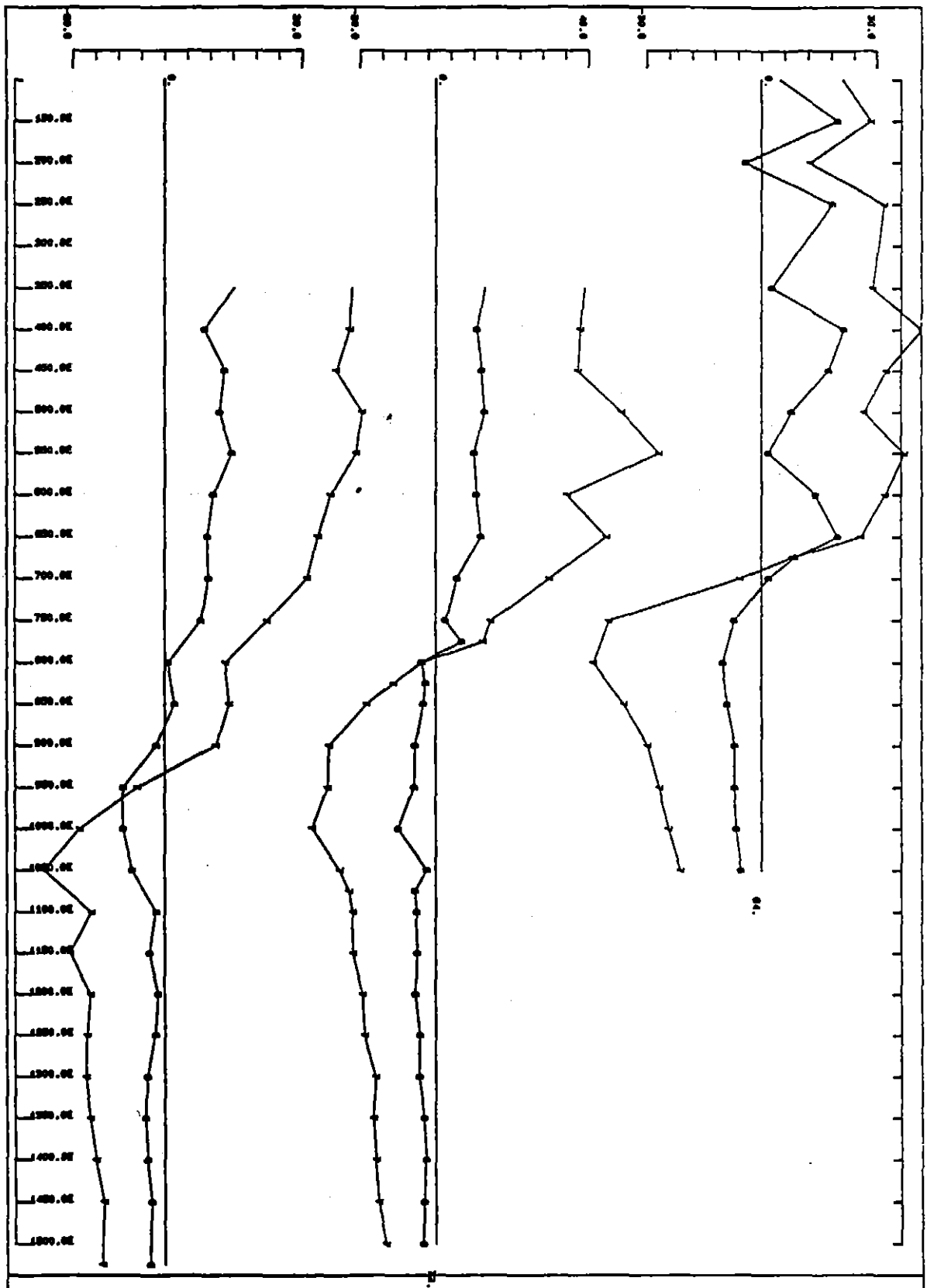


Red Hills Lake Margaret E. Tas.
Loops 1 and 2
Lines 400 401 [illegible]
component Hz Stacked Profiles ch. 6,7,8
Secondary field
Channel 1
Point mode
Option 4
Aberfoyle Resources Limited 18/12/90

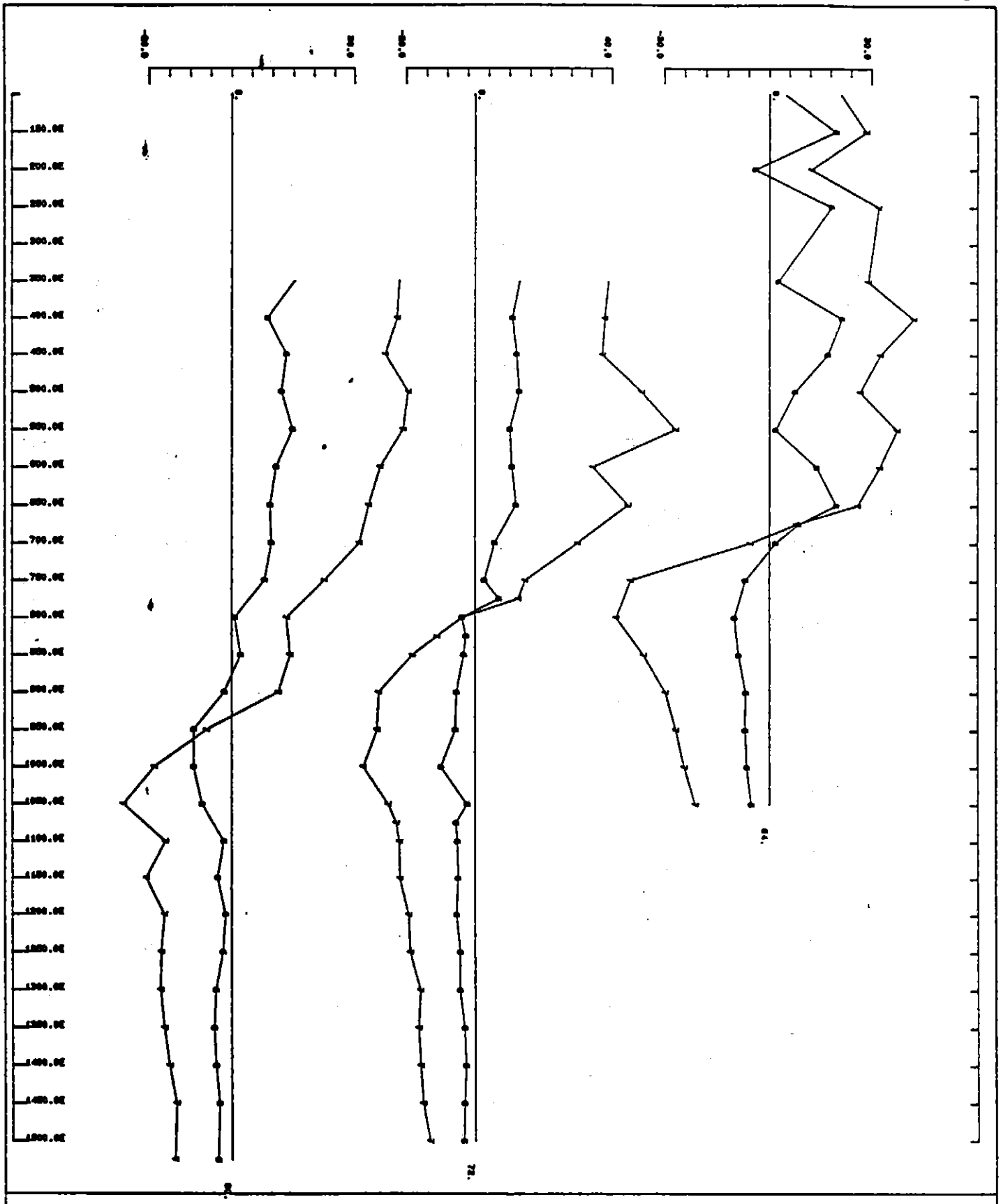


Red Hills Lake:Margaret E. Tse.
Loop 1
Lines 848 728 808
component Hz Stacked Profiles ch. 6,7,8
Secondary field
Channel 1
Point mode
Option 4
Aberfoyle Resources Limited 18/12/90

584109

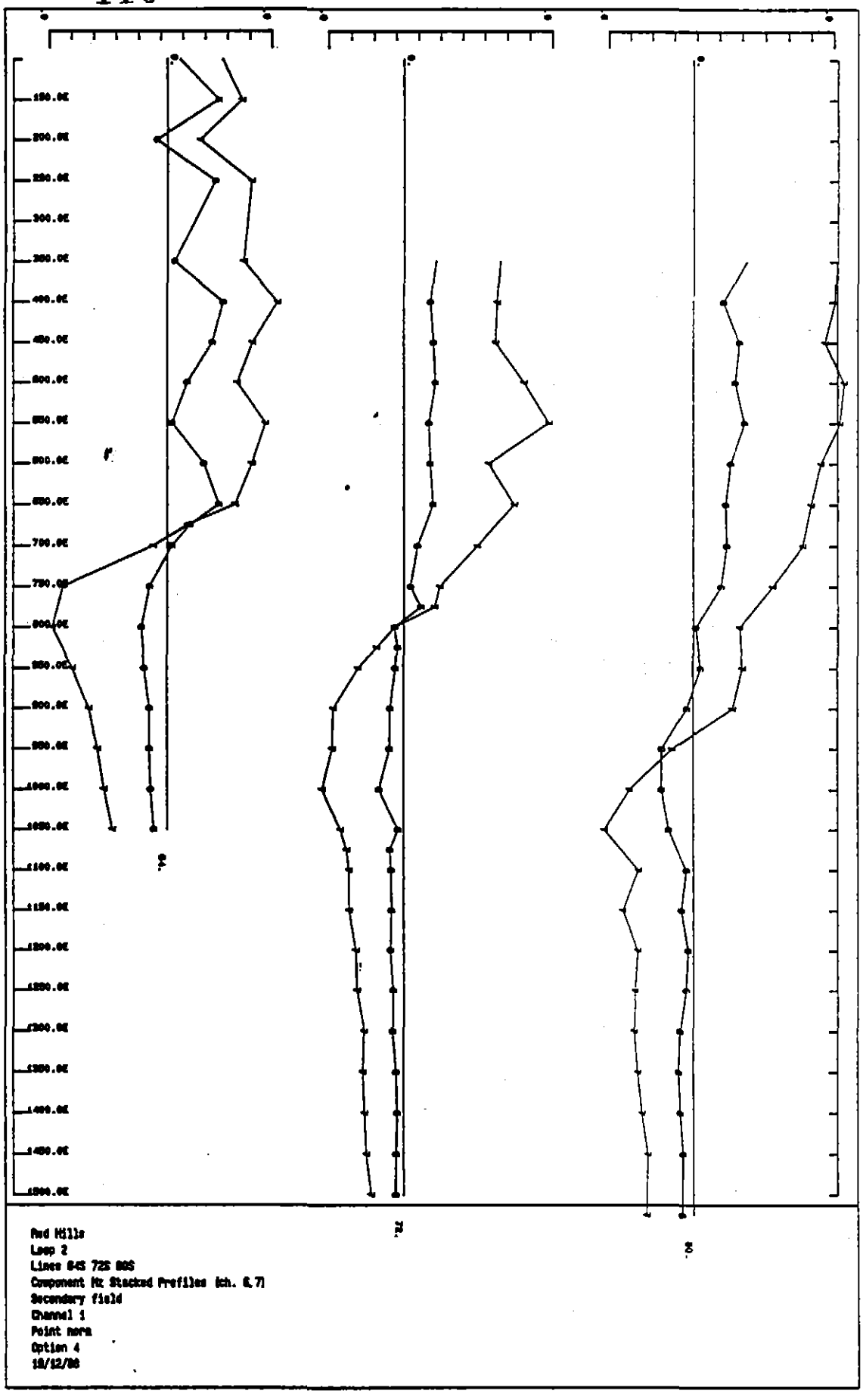

Red Hills Lake Margaret EL Tas.
Loop 1
Lines 848 728 808
Component Hz Stacked Profiles ch. 6,7
Secondary field
Channel 1
Point Rare
Option 4
Aberfoyle Resources Limited 18/12/88

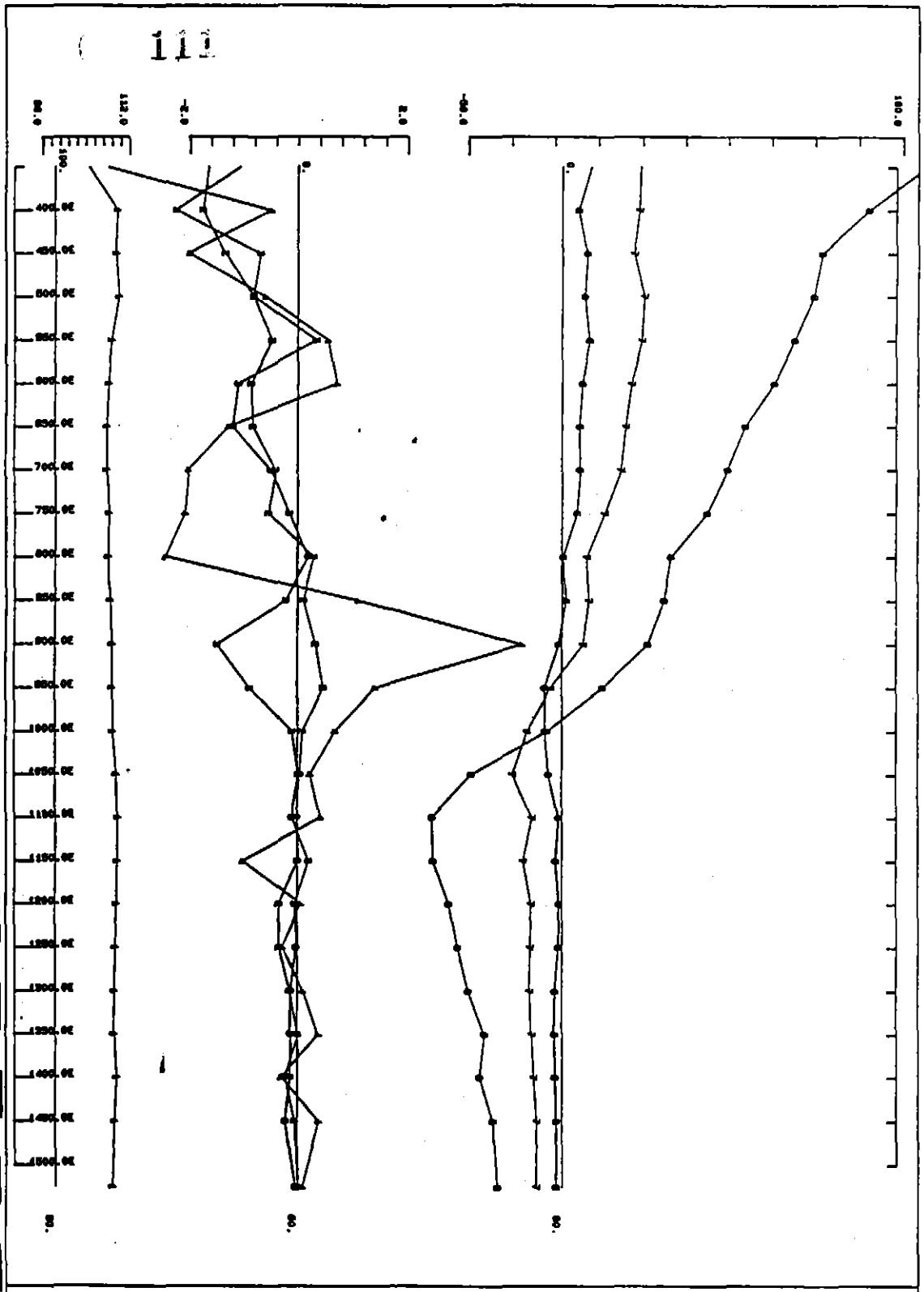
584110



Red Hills Lake Margaret E. Tma.
Loop 1
Lines 845 725 805
component Hz Stacked Profiles ch. 6,7
Secondary field
Channel 1
Point mara
Option 4
Aberfoyle Resources Limited 18/12/88

584111

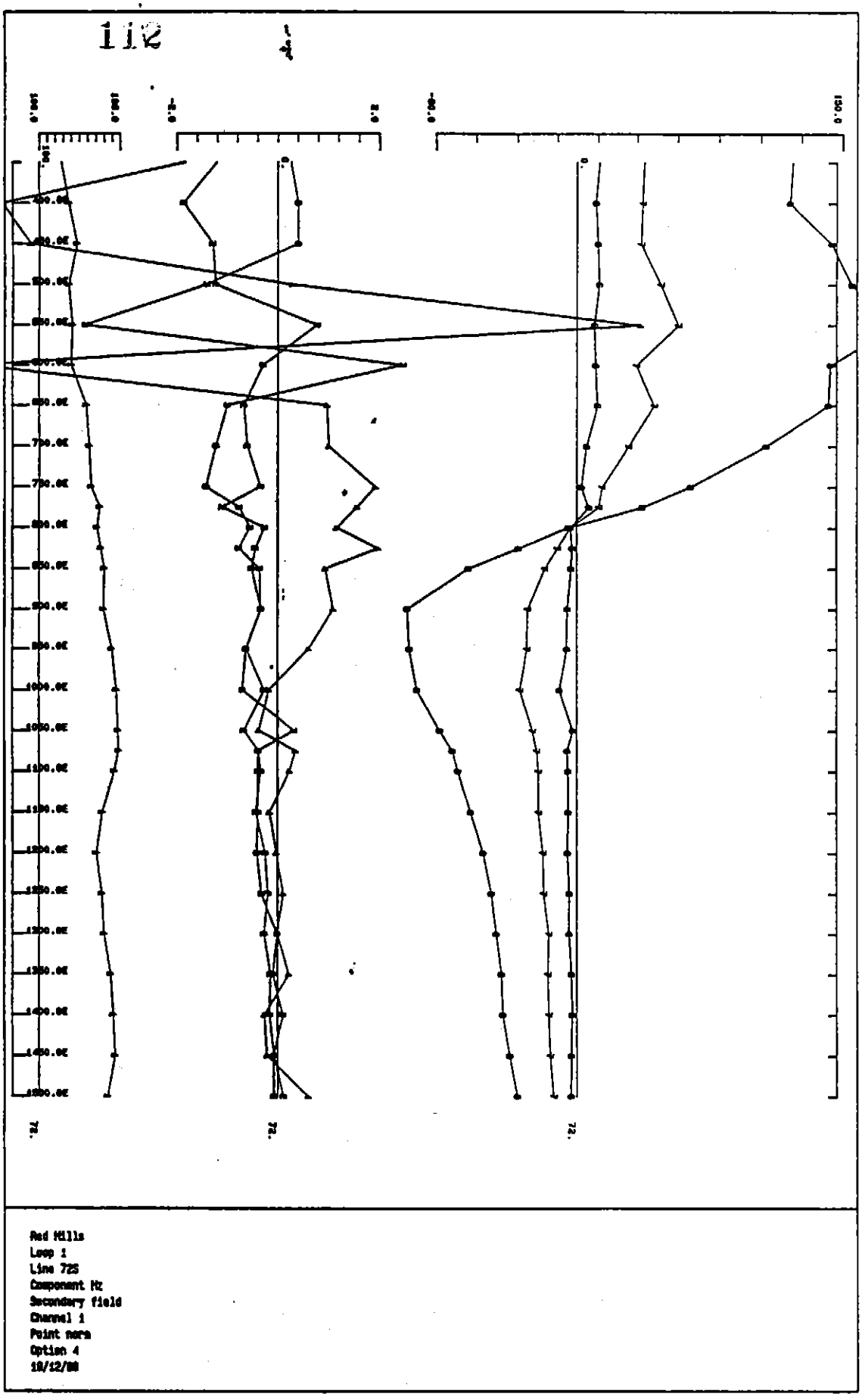

Red Hills
Loop 2
Lines 645 725 805
Component Hz Stacked Profiles (ch. 6,7)
Secondary field
Channel 1
Point mode
Option 4
10/12/88



Red Hills
Loop 1
Line 80S
Component Hz
Secondary field
Channel 1
Point norm
Option 4
18/12/88

112

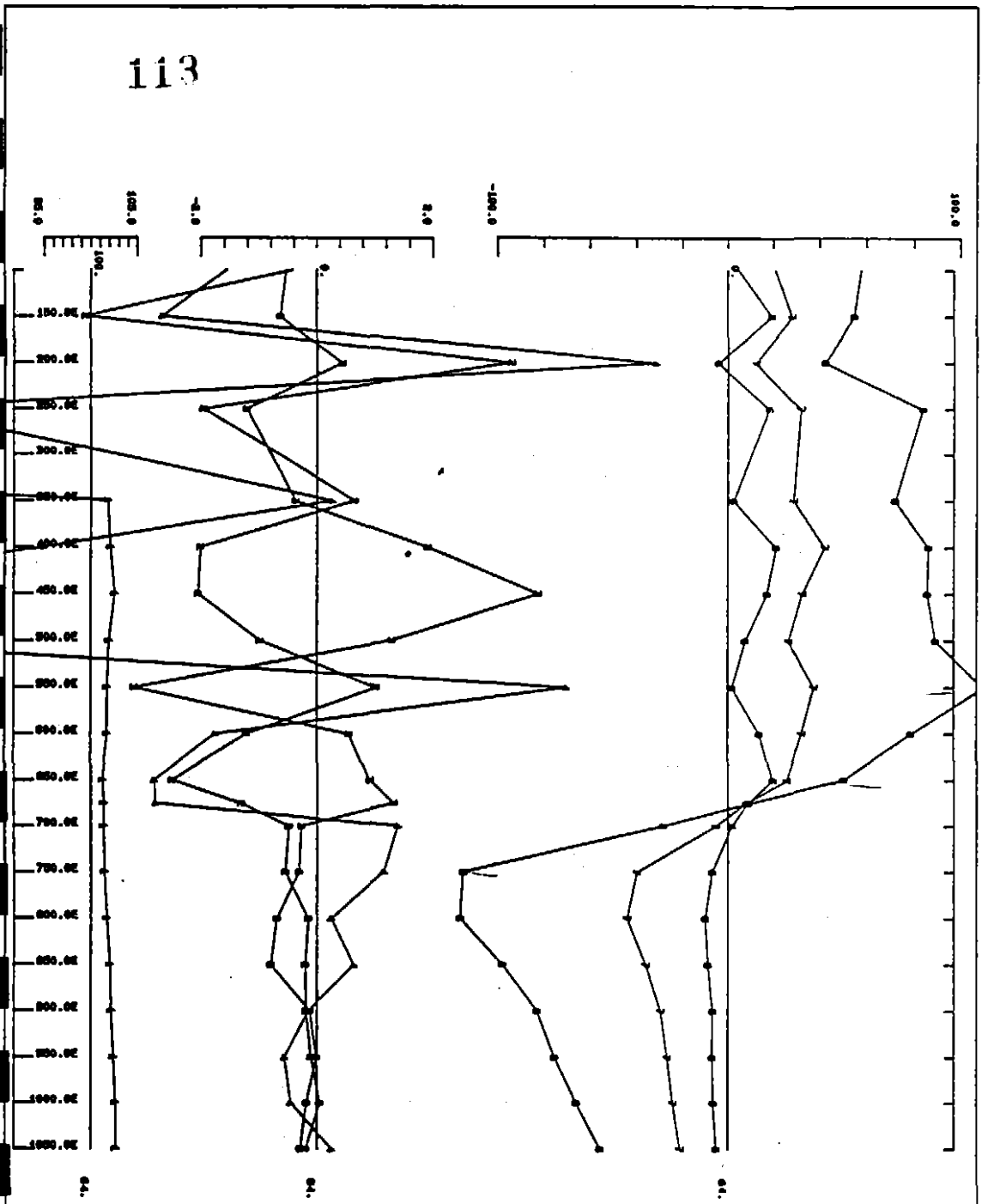
584113



Red Hills
Loop 1
Line 725
Component Hz
Secondary field
Channel 1
Point nora
Option 4
10/12/88

584114

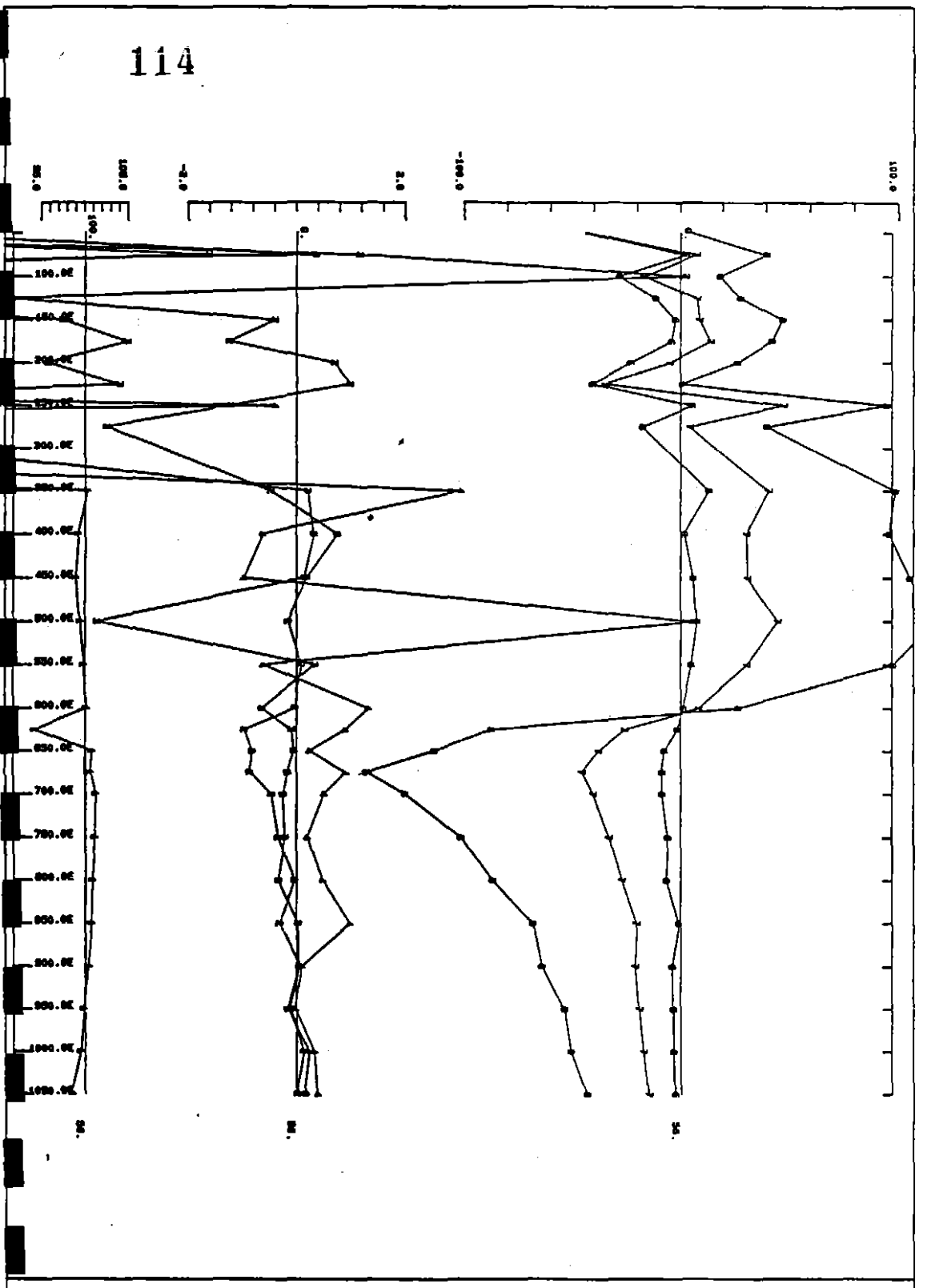
113



Red Hills
Loop 1
Line 64S
Component Hz
Secondary field
Channel 1
Point sora
Option 4
18/12/80

114

584115

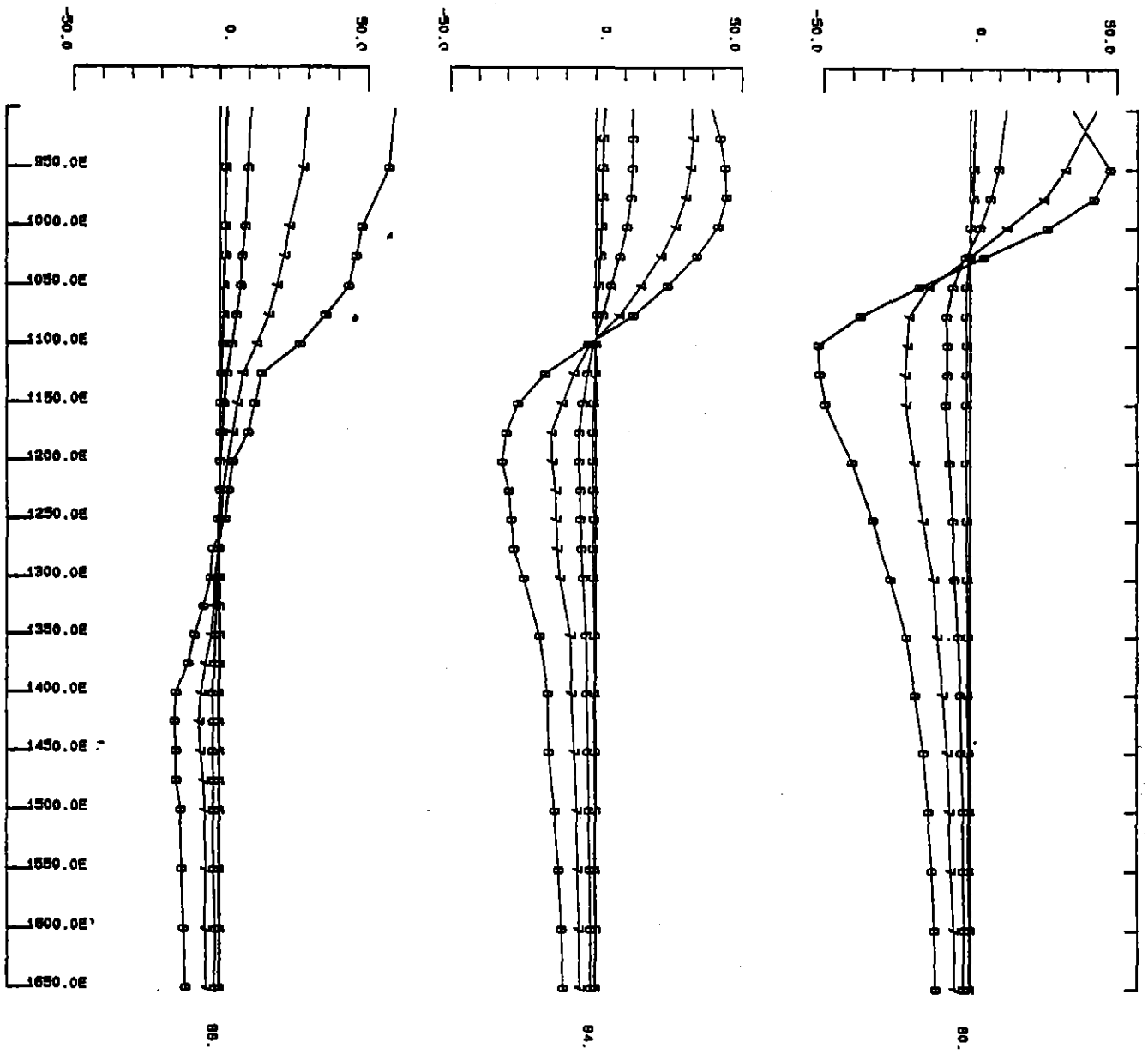


Red Hills
Loop 1
Line 565
Component Hz
Secondary field
Channel 1
Point norm
Option 4
19/12/96

LOOP 3 DATA

116

584117

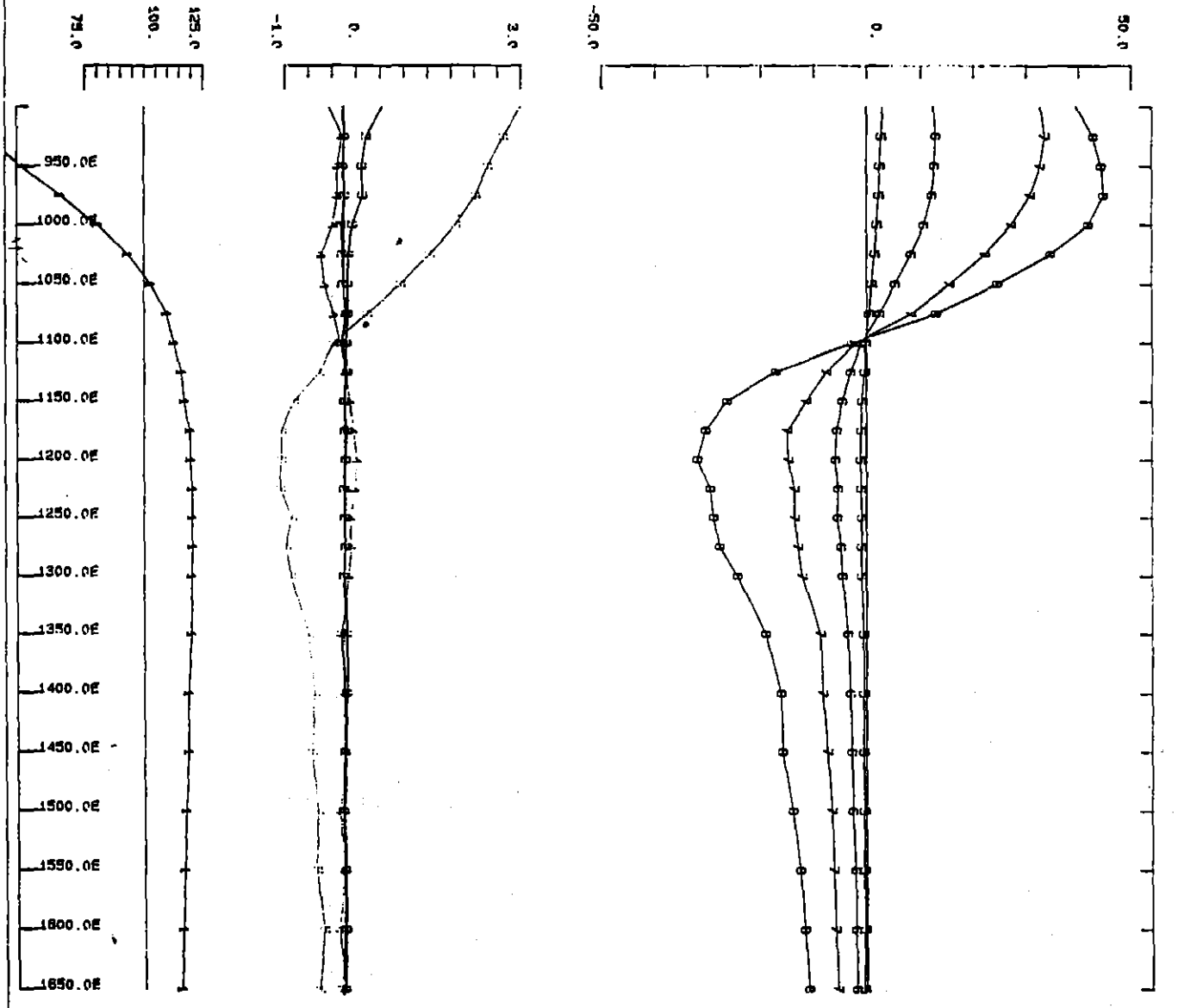


Lake Margaret EL Redhills Prospect
Stacked Profiles
Loop 11 Lines 80 S 84 S 88 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

117

584118

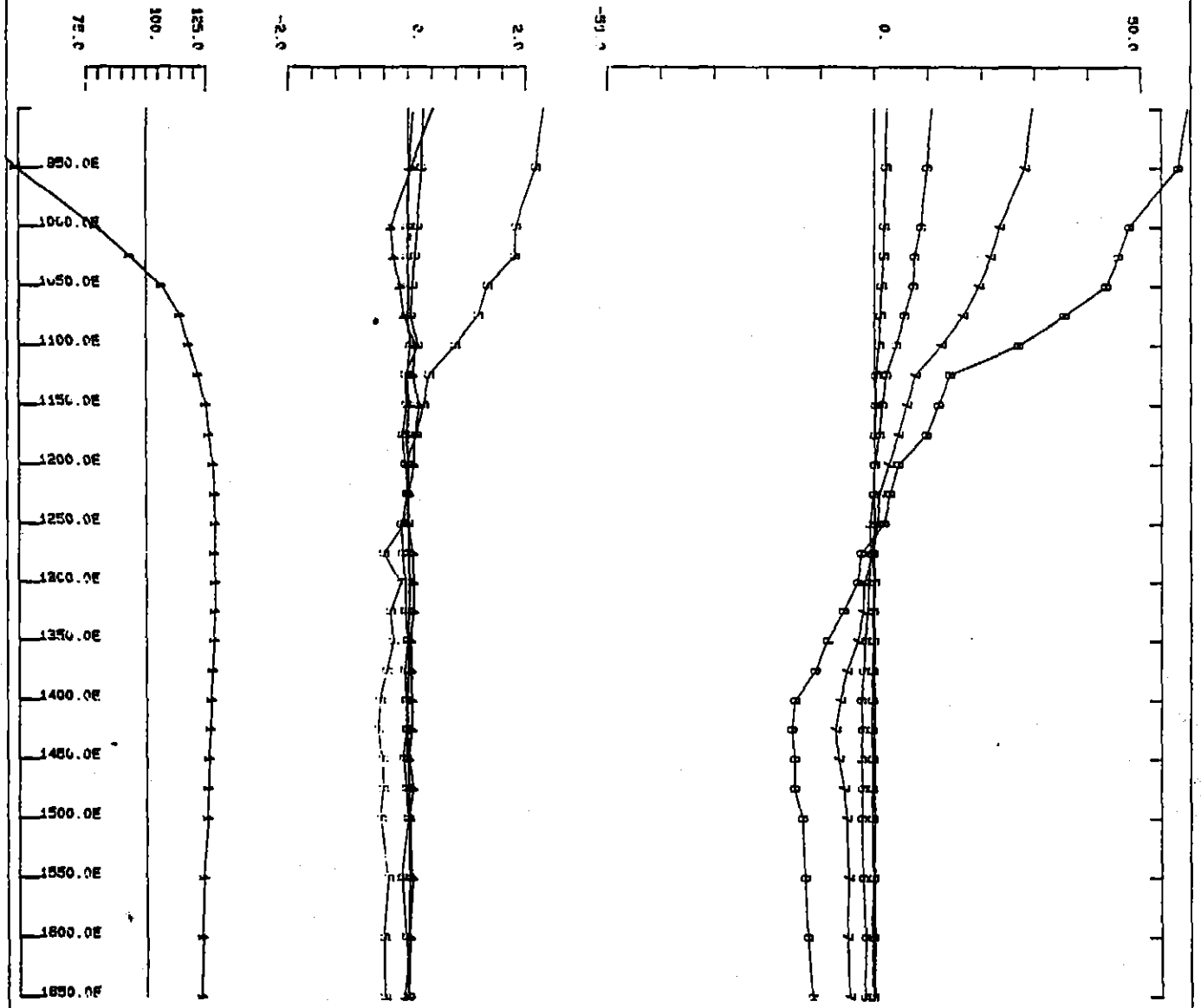


Lake Margaret EL Redhills Prospect
Loop 11 Line 84 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 26/2/89
Plot Date :28/02/89 Horiz Scale 1: 5000.0

5 cm

118

584119

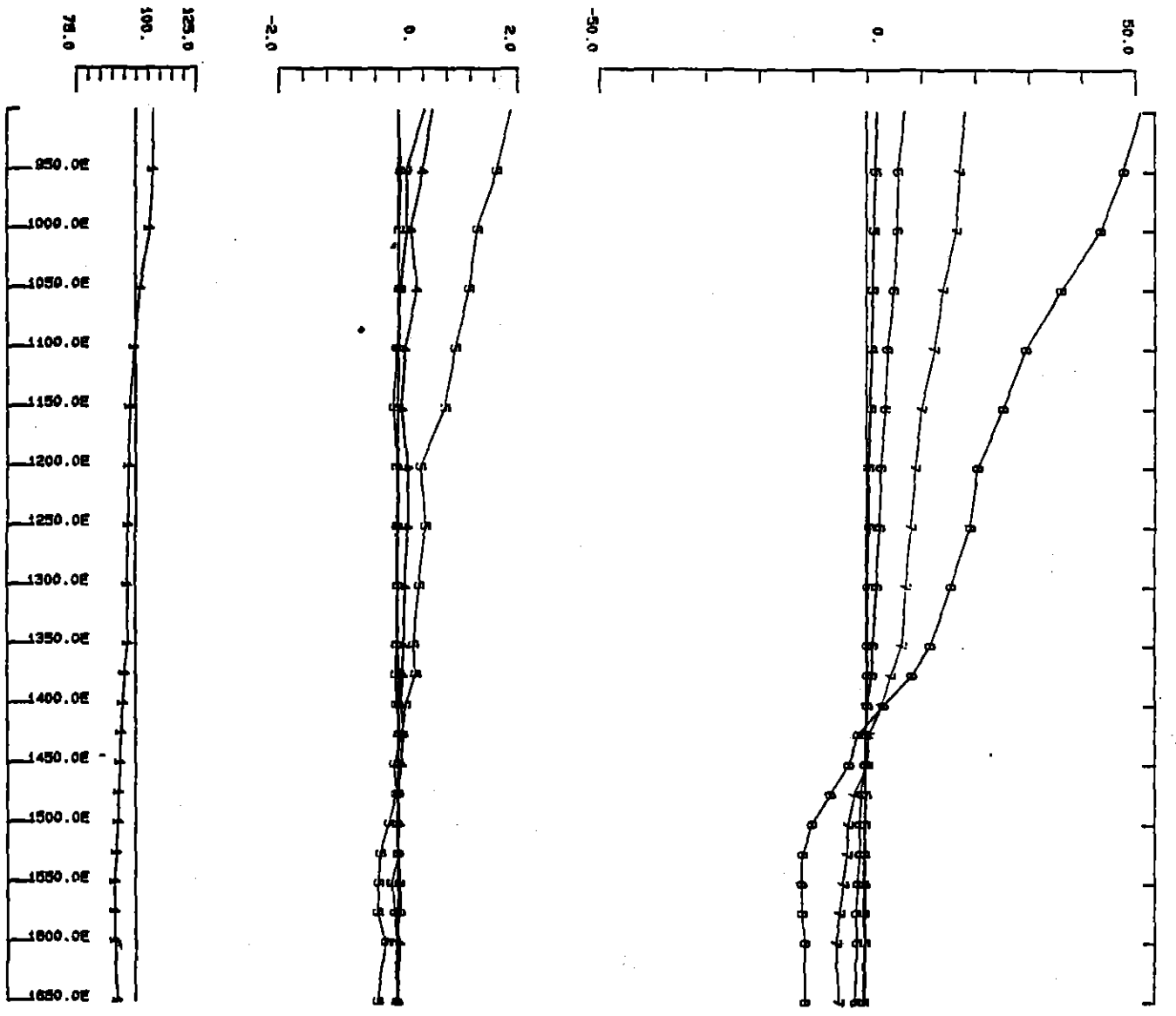


Lake Margaret EL Redhills Prospect
Loop 11 Line 88 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

119

584120

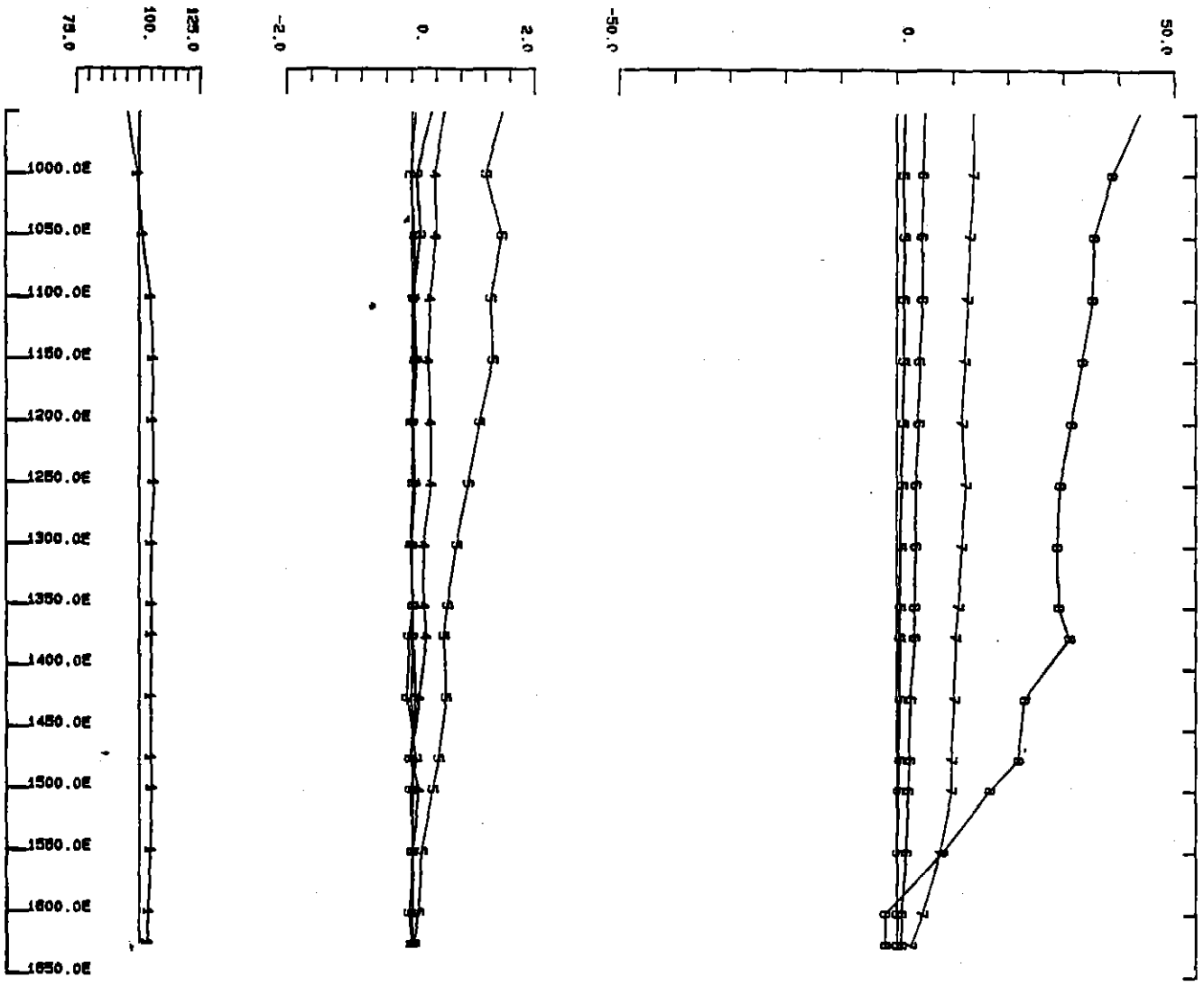


Lake Margaret EL Redhills Prospect
Loop 11 Line 96 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

584121

120

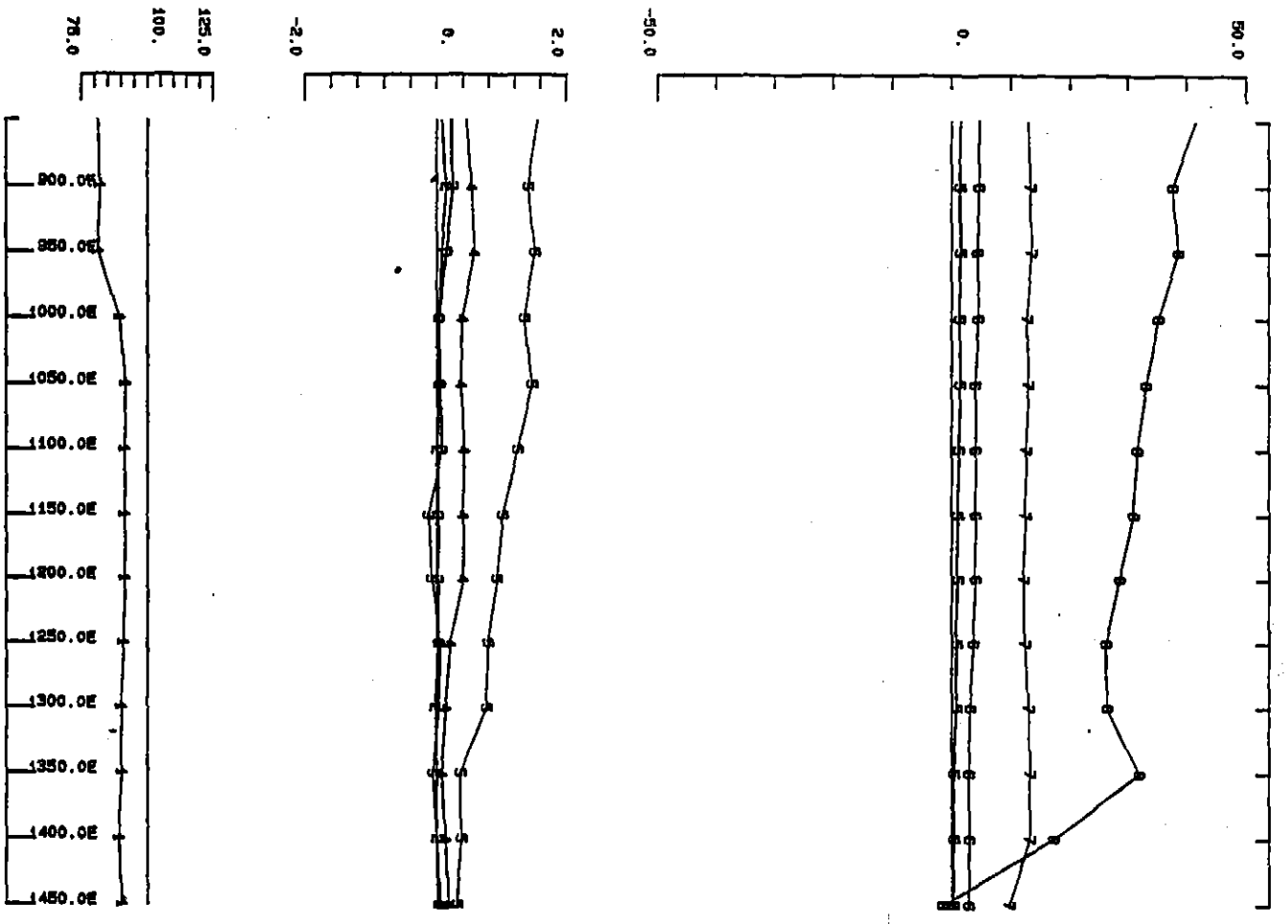


Lake Hargaret EL Redhills Prospect
Loop 11 Line 104 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

121

584122

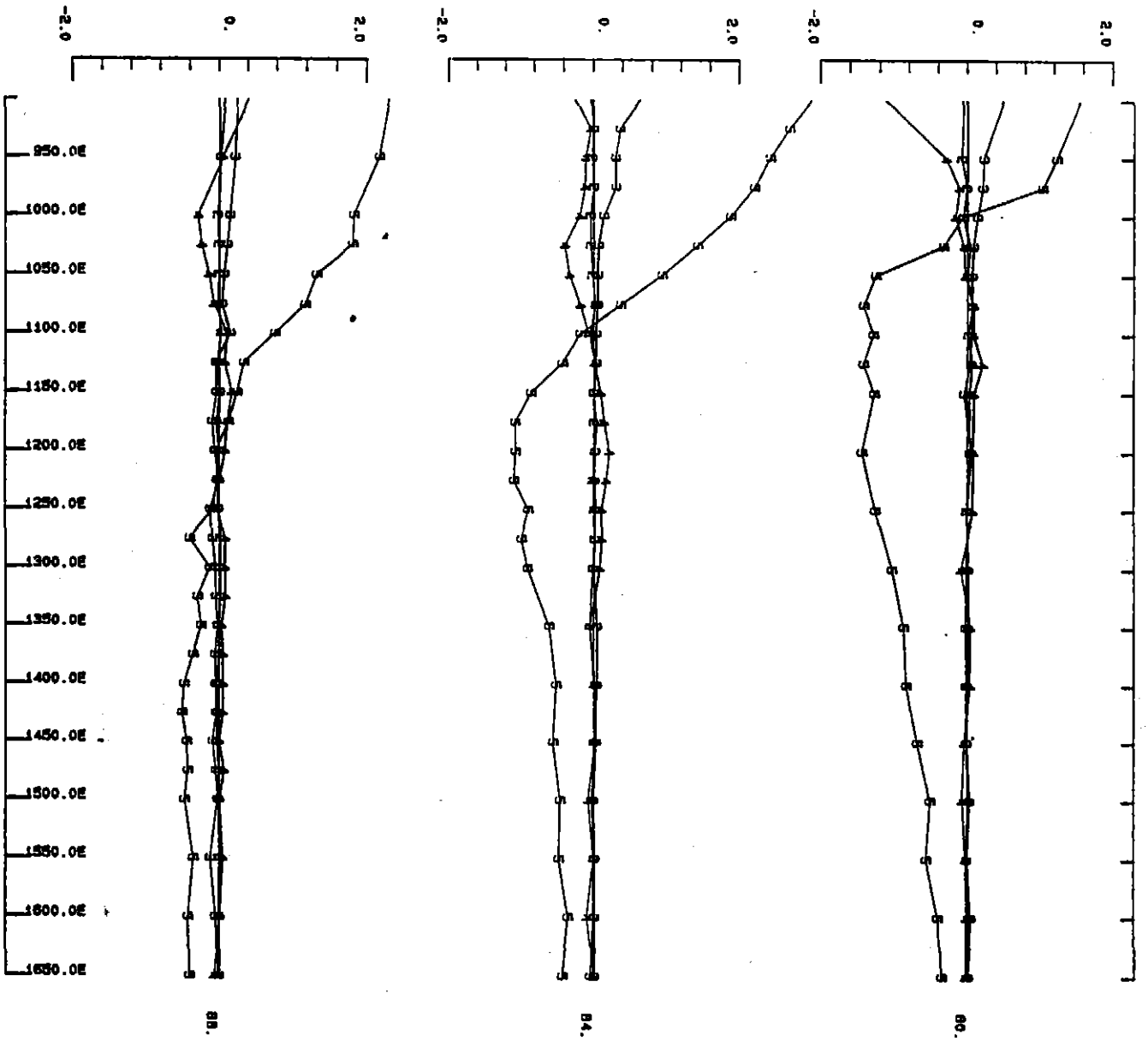


Lake Margaret EL Redhills Prospect
Loop 11 Line 112 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

122

584123

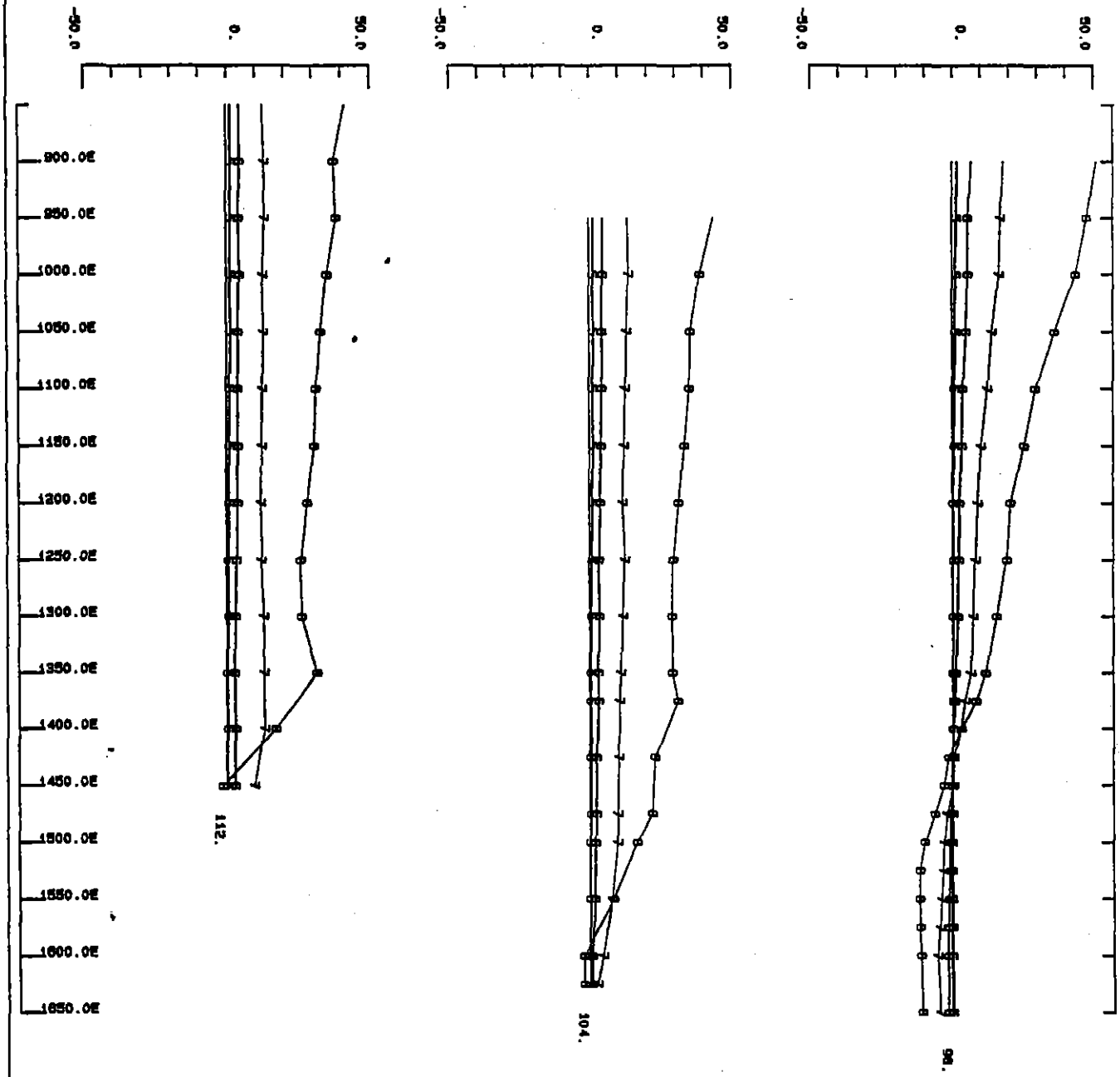


Lake Margaret EL Redhills Prospect
Stacked Profiles
Loop 11 Lines 80 S 84 S 88 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

584124

123

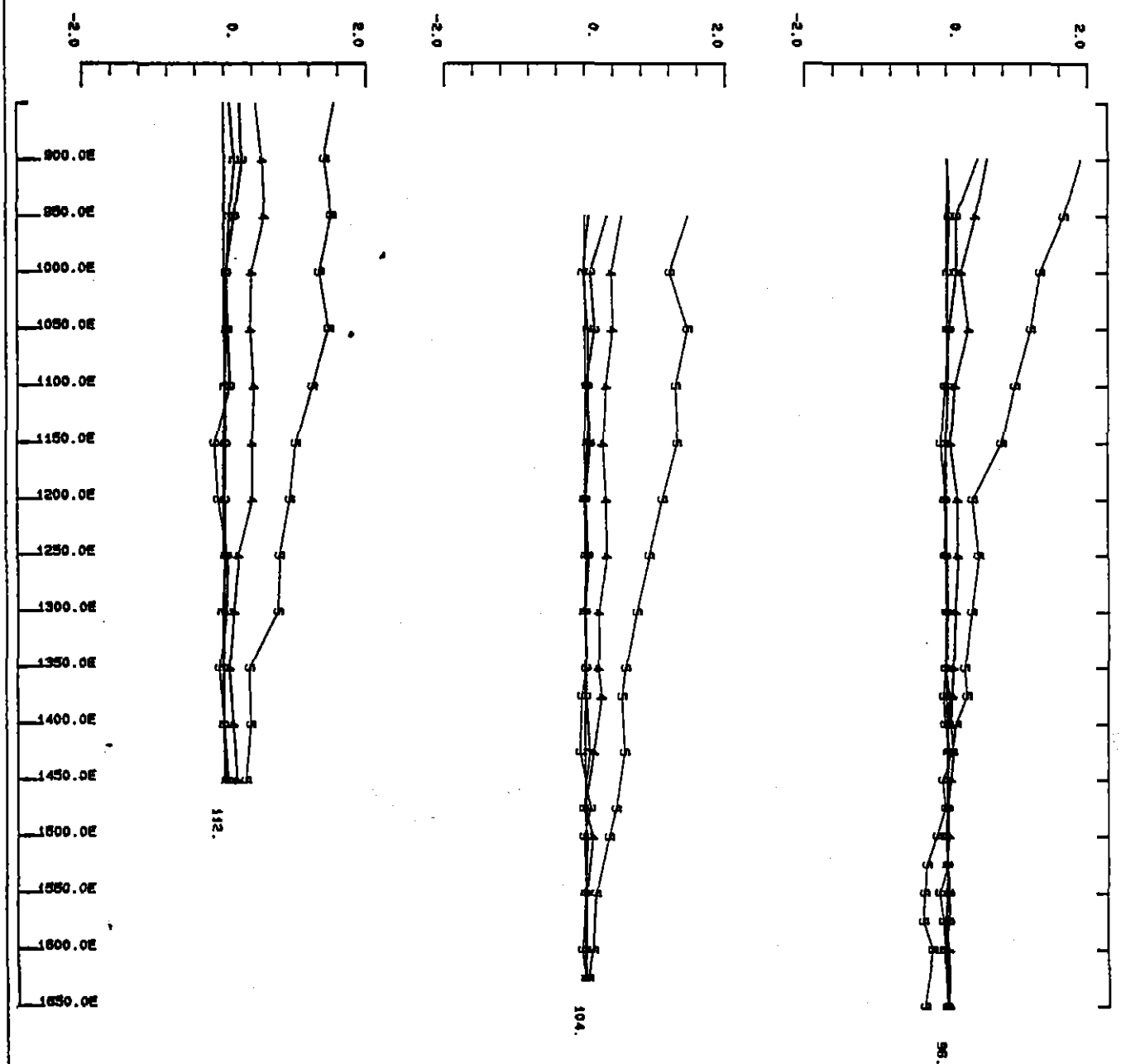


Lake Margaret EL Redhills Prospect
Stacked Profiles
Loop 11 Lines 96 S 104 S 112 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

584125

124

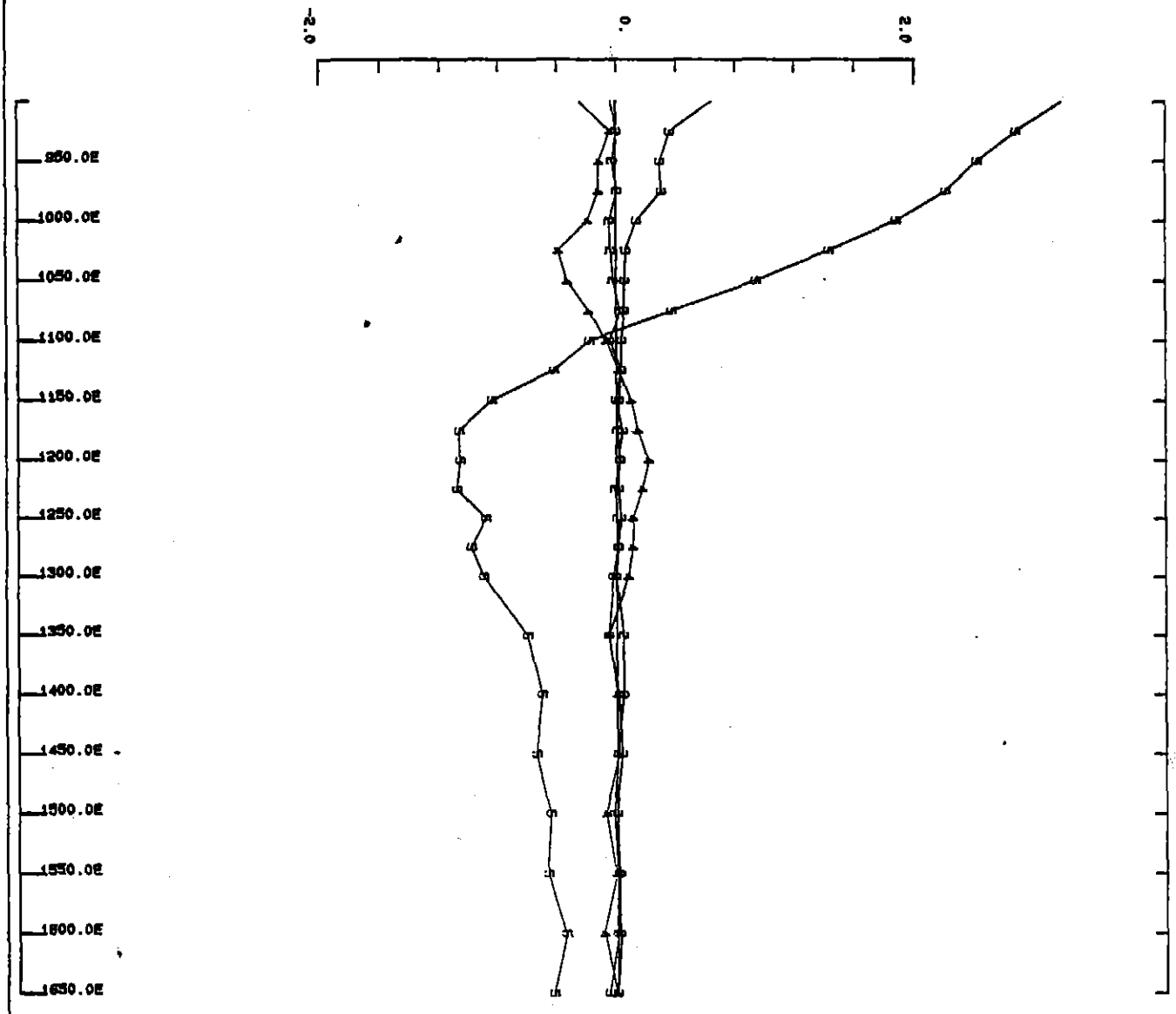


Lake Margaret EL Redhills Prospect
Stacked Profiles
Loop 11 Lines 96 S 104 S 112 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

125

584126

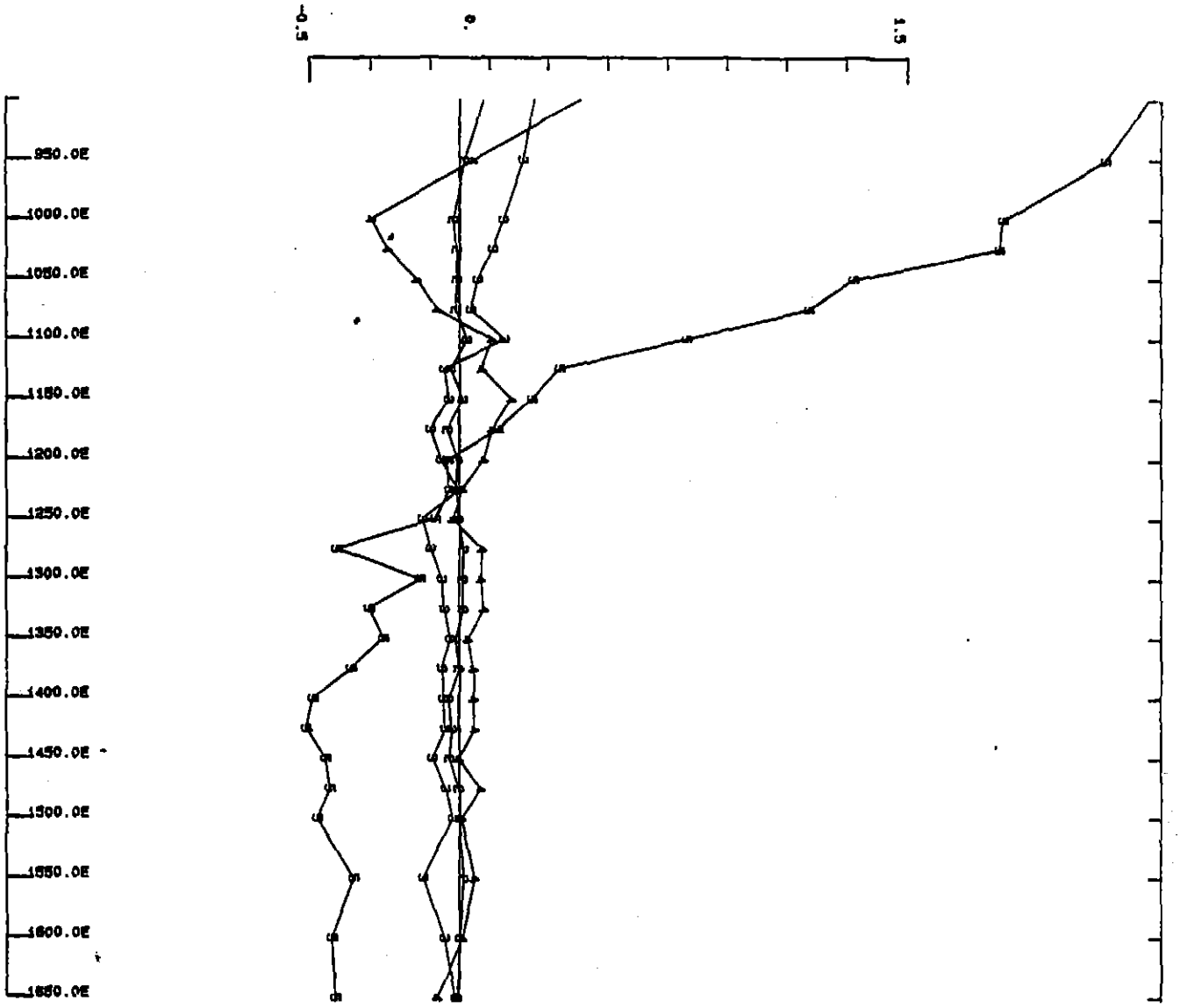


Lake Margaret EL Redhills Prospect
Line 84 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

126

534127

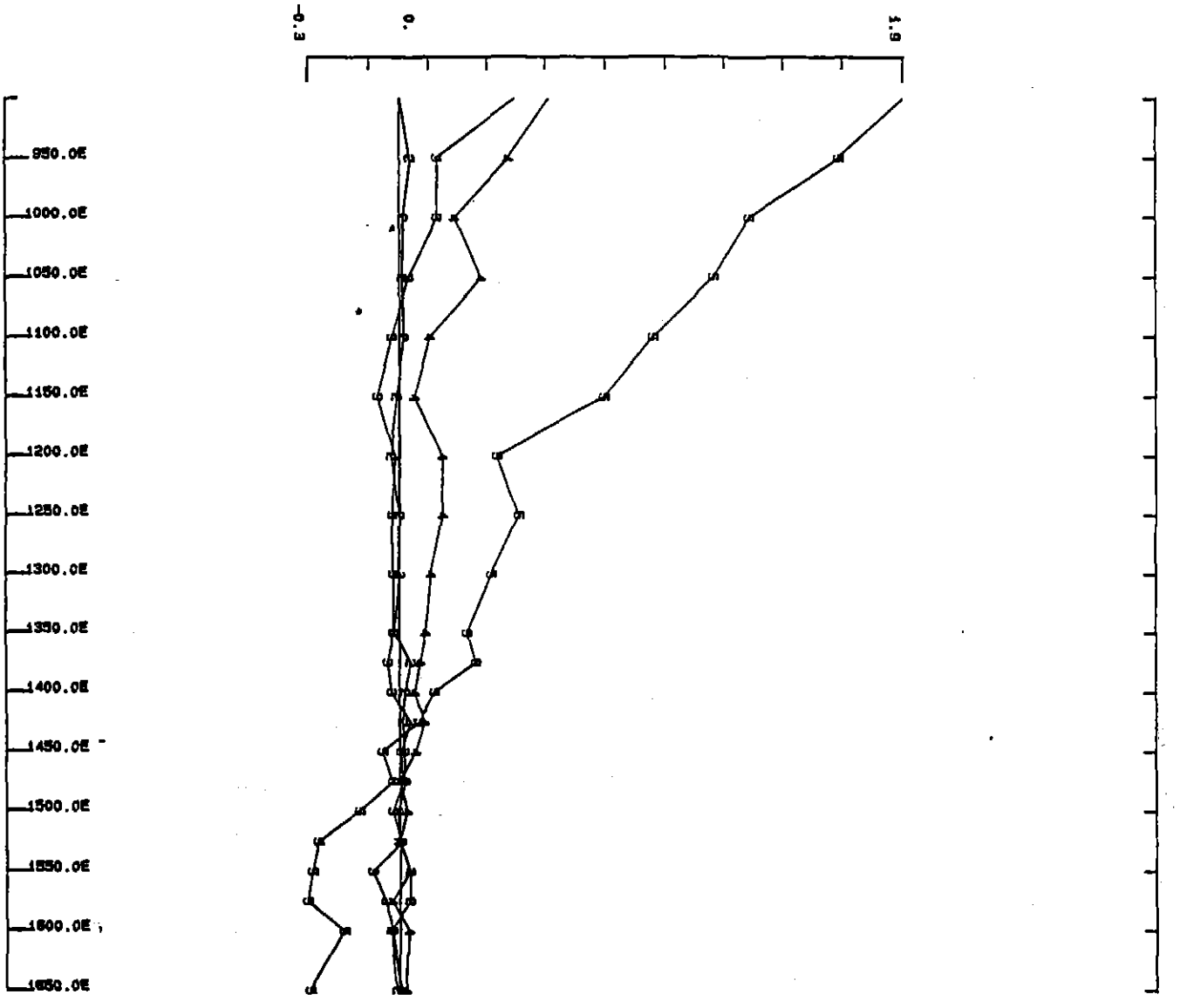


Lake Margaret EL Redhills Prospect
Line 88 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

127

584128

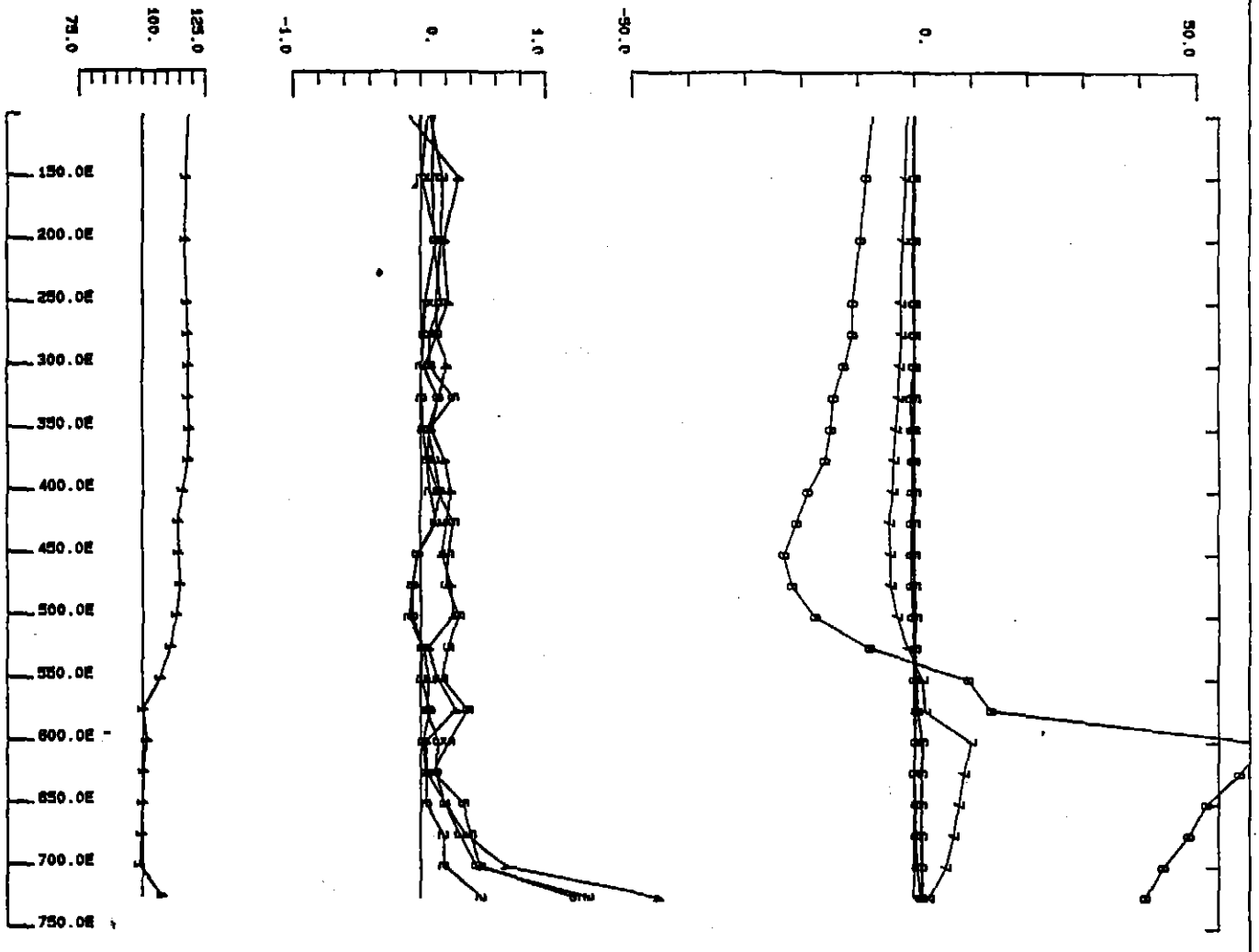


Lake Margaret EL Redhills Prospect
Line 96 S
Chi Point Normalization at 84 S 1000 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

LOOP 4 DATA

129

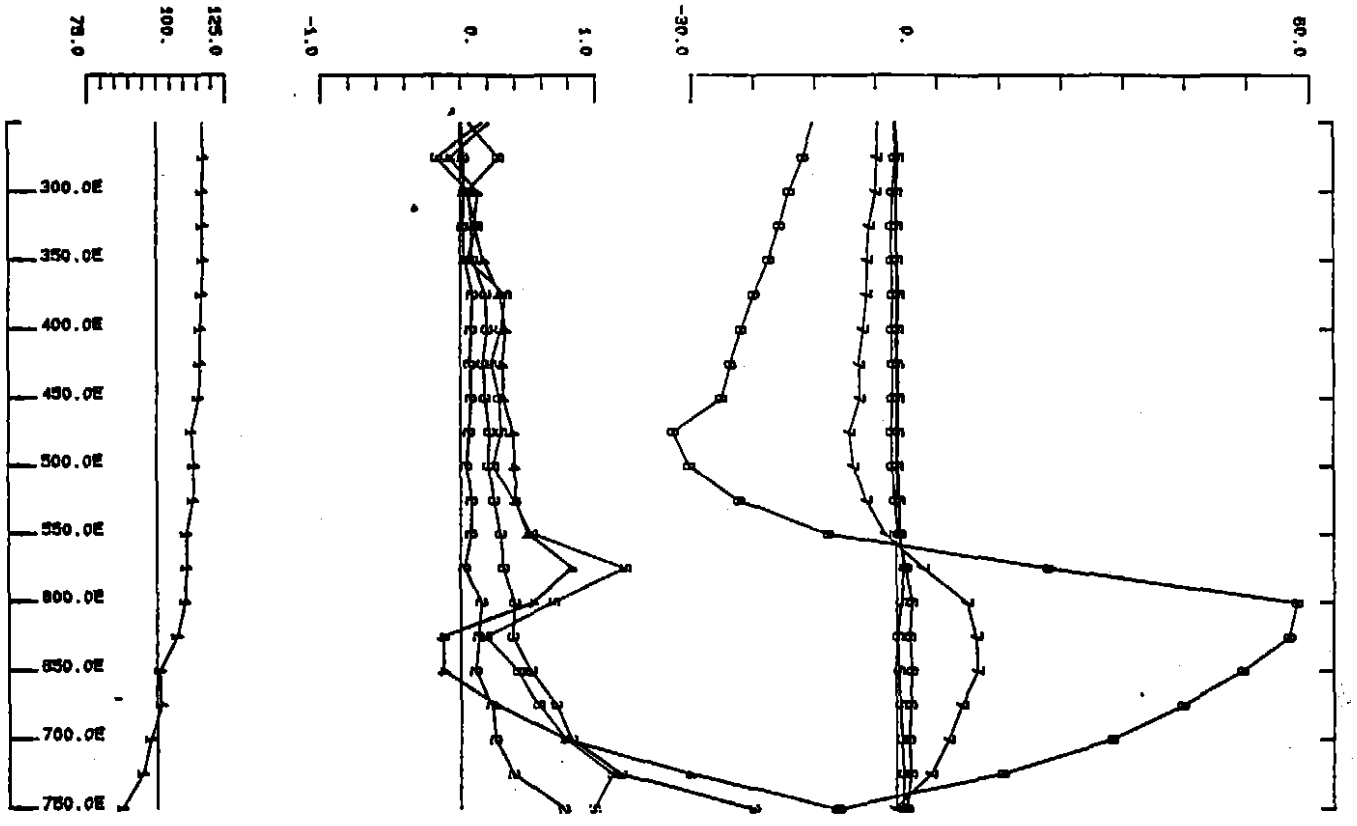


Lake Margaret EL Redhills Prospect
Line 40 S
Chi Point Normalization at 48 S 550 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

584131

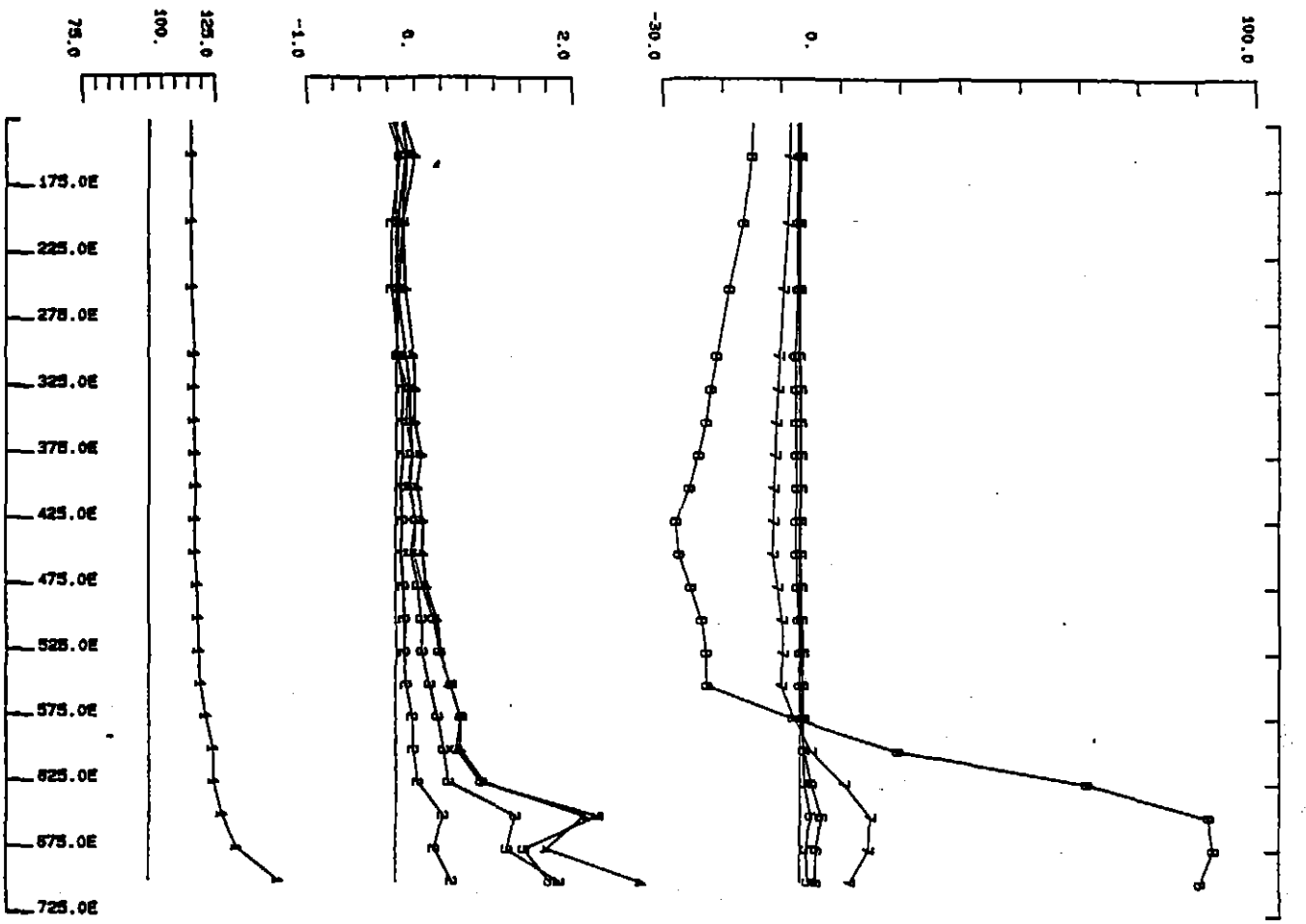
130



Lake Margaret EL Redhills Prospect
Line 48 S
Chi Point Normalization at 48 S 550 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

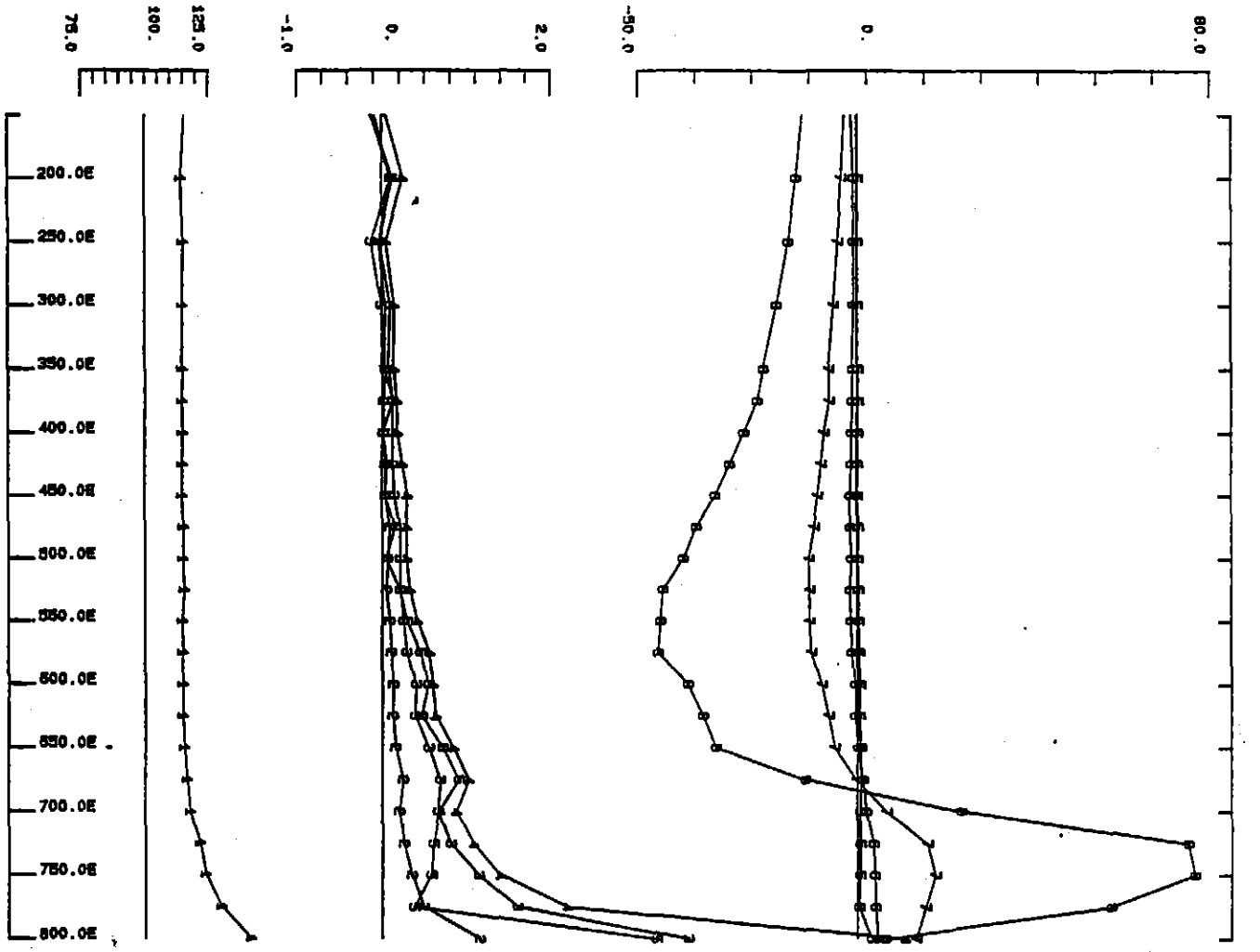
131



Lake Margaret EL Redhills Prospect
Line 56 S
Chi Point Normalization at 48 S 550 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

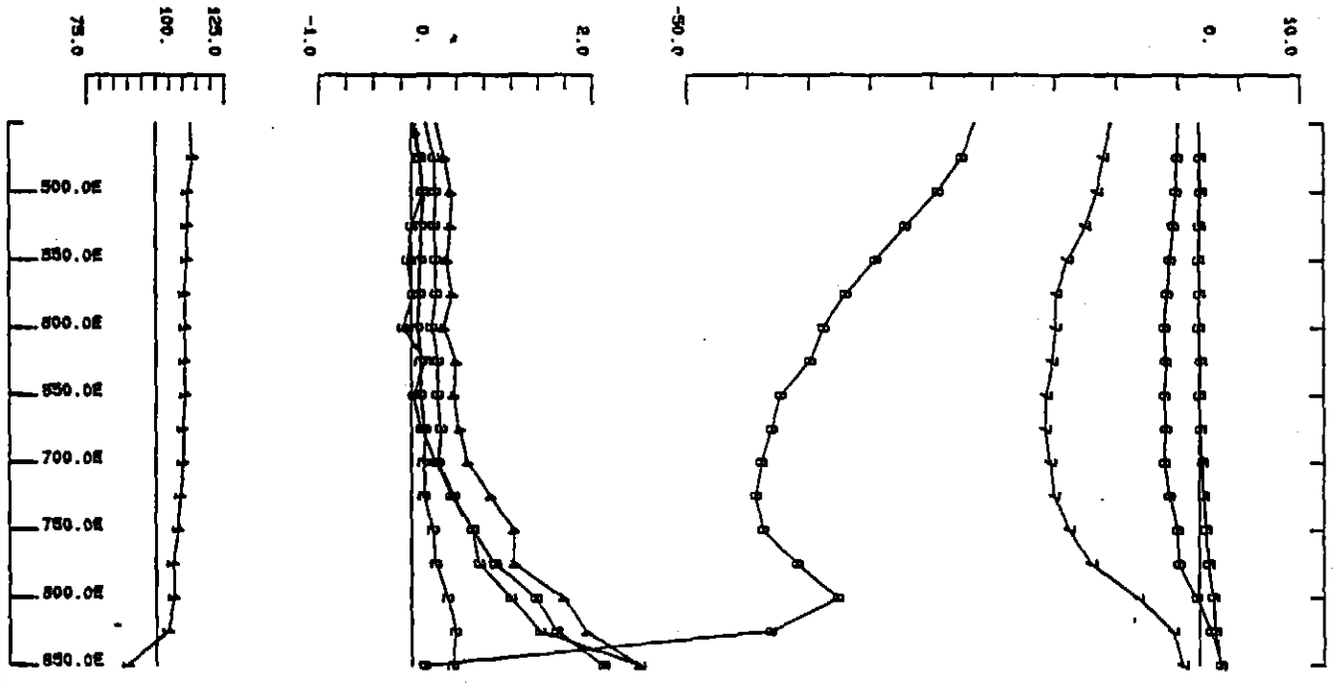
132



Lake Margaret EL Redhills Prospect
Line 64 S
Chi Point Normalization at 48 S 550 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

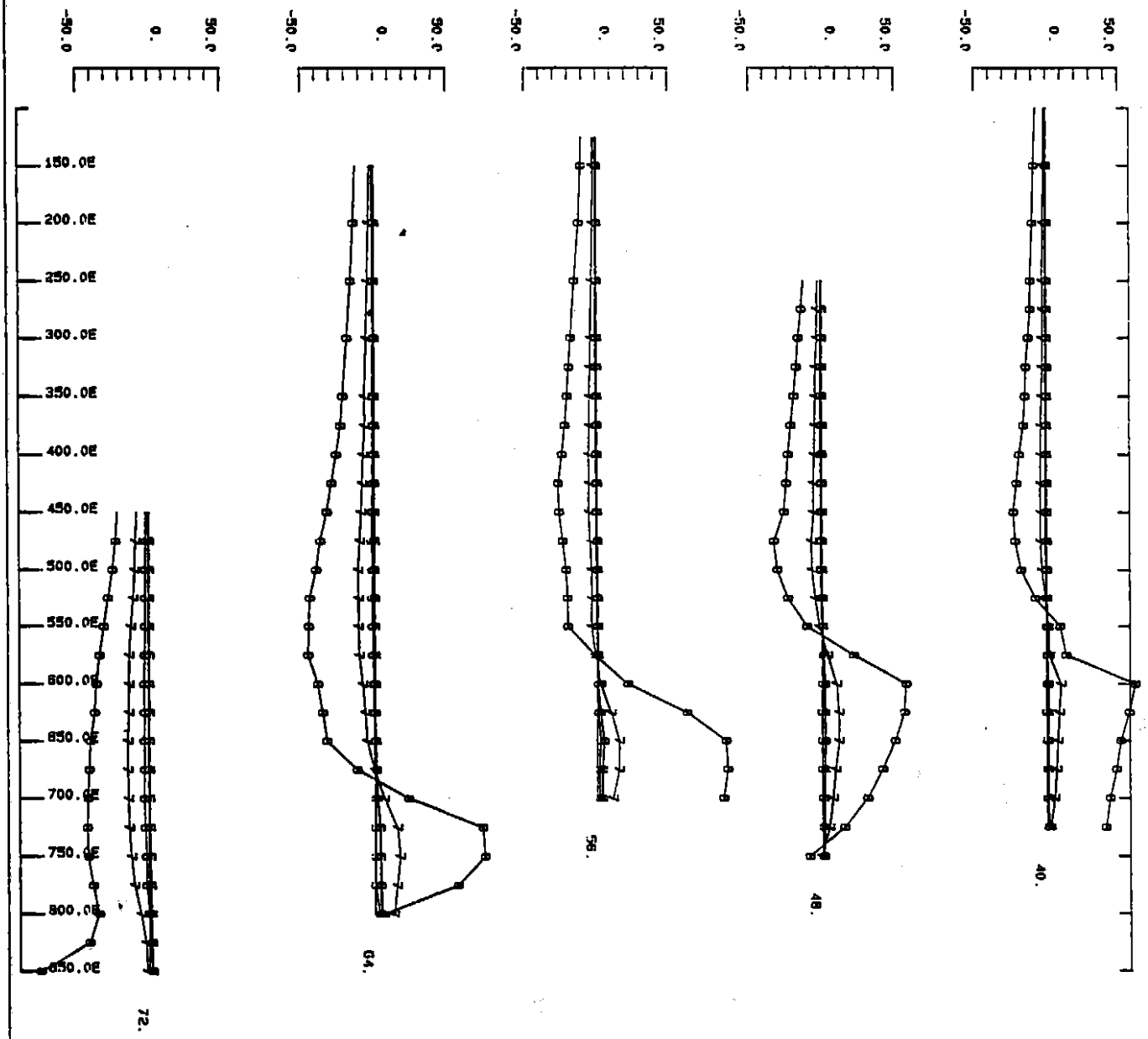
133



Lake Margaret EL Redhills Prospect
Line 72 S
Chi Point Normalization at 48 S 550 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

134



Lake Margaret EL Redhills Prospect
Stacked Profiles
Lines 40 S 48 S 56 S 64 S 72 S
Chi Point Normalization at 48 S 550 E
Aberfoyle Resources Limited 28/2/89
Plot Date :28/02/89 Horiz scale 1: 5000.0

5 cm

APPENDIX 4

ABERFOYLE EXPLORATION

DRILL HOLE RECORD

In Davis 584137

Location Red Hills | Property Lake Margaret | District Tasmania | Bearing (M) 101°35' | Hole No RH-18

Commenced 13-6-89 | Completed 25-7-89 | % Recovery | Grid bearing (M) – | Date

Objective | Logged AMcN

Test UTEM anomaly on line 845 | Co-ordinates 5363402.0mN 382403.6mE | Dip -70°7' | Alt./R.L. 667.3m.

SURVEY DATA				GRAPH DERIVED DATA			CALCULATED CO-ORDINATES			REMARKS
DEPTH	DIP	BEARING(M)	INSTRUMENT TYPE	DEPTH	DIP	BEARING(M)	NORTHING	EASTING	ALTITUDE	
10	-69.7	95	Eastman.	0	-70	97.5	5363402.0	382403.6	667.3	Collar pick-up: L. Mackenzie and associates. AMG coordinates
40	-68.4	95.5		25	-69	96.5				
70	-67	93.5		50	-69	95				
91	-63	83.5		75	-66	92				
106	-60.5	87		100	-61	88.2				
121	-60	87		125	-60	86				
151	-59.7	85		150	-59.5	84				
191	-59.2	81		175	-59	81.5				
211	-58.7	85		200	-59	83				
241	-57.7	85		225	-58	85				
271	-57	85		250	-57.5	85				
301	-56.7	84		275	-57	85				
331	-56	85		300	-56.5	84				
356.8	-55	82.5		325	-56	85				
				350	-55	83.5				
				356.8	-55	82.5				
										0-14m Tricone
						* Bearings are Magnetic				14-15 HW
										15-54 HQ
										54-356.8m NQ
										32mm Class K Pvc to bottom of hole
										15m HW casing left in hole.

Aberfoyle Resources Limited
EXPLORATION DIVISION

DIAMOND DRILL LOG

584138

137

PROJECT: Lake Margaret

PROSPECT: Red Hills

HOLE NO: RH-1R
PAGE: 1 of 9
LOGGED: AMN
DATE: 3-7-89

DEPTH	DRILL RUNS	CORE LOSS	LITHOLOGY: ROCK NAME	LITHOLOGY: DESCRIPTION	ALTERATION	VEINING	MINERALISATION	STRUCTURE	WEATHERING	VISUAL LOG	REMARKS
0–14.1				No Core							
14.1			Tyndall Group Quartz Porphyry	Quartz - feldspar (sericitised) - phyric Rhyolitic lava/intrusive. Quartz phenocrysts to 5mm diameter. Weakly sheared to massive.	Pervasive Hmt (1-2) Pervasive Se (1-2)				Lch 2		HW / HQ 15.0
18.6								18.6 fault = 65° to CA. 19.8 fault.			This lithology is similar in appearance to the Tyndall Group porphyry at the Gooseneck, Hence its assignment to the Tyndall Gp.
24.9								24.9 fault = 25° to CA. 25.8 fault = 35° to CA. 26.9 fault = 35° to CA. 27.2 fault.			
~26						Qv (1-2) fine					
40.0				Zones of massive cream lava with intervening sheared and weakly sericite altered zones		41.6 Qtz vein 0.5cm thick. fine Qv (1-2) sub parallel to cleavage		40.0 fault 40.9 Cleavage = 35° to CA			

Aberfoyle Resources Limited
EXPLORATION DIVISION

DIAMOND DRILL LOG

584139

PROJECT : Lake Margaret

PROSPECT : Red Hills

HOLE NO : RH-11

PAGE : 2 of 9

LOGGED : AMN

DATE : 3-7-89

DEPTH	DRILL RUNS	CORE LOSS	ROCK NAME	DESCRIPTION	ALTERATION	VEINING	MINERALISATION	STRUCTURE	WEATHERING	VISUAL LOG	REMARKS
44–62				Rhyolitic lava/intrusive as above. 50m–51m Sheared lava. not coarsely quartz phyric.	Pink Hmt (1-2) Pale Se (1-2). 58.5 Hmt (2-3) diss.	Qv (1-2)		43.1 fault. 49.8m broken + sheared Zone. 51.0m Fault Zone			HQ / NQ 56m. 57.7m 561975 petrology. 60.5 lost water. 61.5
62		66. 97%		Contact not Seen - Occurs in Cavity							Cavity. 64.5
65–84		85% 15%	Rhyolitic volcaniclastic (Contact Complex.)	65.2 Sheared mottled light-dark green quartz-feldspar-phyric rhyolitic crystal rich volcaniclastic. 67.2 pink quartz-phyric rhyolitic lava and green pyritic fragment, to 15 cm dia, with possible red volcaniclastic clasts in a sheared mottled green matrix. 73.6 Stretched R.L. fr. ≃8 cm in diameter. 76.2 Thin, clean, green-grey and pink-grey rich volcaniclastic interbeds. Tectonically disrupted. 78.5 granular pink bands ∥ to S₁ - deformed clasts? 82.6 Qv (1) Pink R.L. Clasts. Veins at a high angle to cleavage. Sheared. 83.6 Rhyolitic lava Clasts Disappear.	Se & Cl (1) Pink Hmt (1-2)	QHo (1-2) veins sheared and undeformed Qv (2) ∥ cleavage. Qtz fol vn (2) at 10-20° to cleavage	82.5 Py diss. (1).	76.2m Cleavage: bedding = 40° to CA. 82.6 fault @ 55° to CA.			67.2m ?extensional lineation on cleavage surfaces. 72.7m petrology 561976

Aberfoyle Resources Limited
EXPLORATION DIVISION

DIAMOND DRILL LOG 534140

PROJECT: Lake Margaret

PROSPECT: Red Hills

HOLE NO: 2H-N

PAGE: 3 of 9

LOGGED: HMN

DATE: 1-7-94

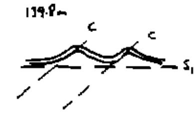
DEPTH	ROCK NAME	DESCRIPTION	ALTERATION	VEINING	MINERALISATION	STRUCTURE	REMARKS
to 97.55	Rhyolitic Volcaniclastic (Central Complex)	fine grained green lapilli volcaniclastic with minor rhyolitic lava clasts and dark green sericitic "fiamme". Some lava fragments have classic pull-apart features. Unit strongly sheared. Clasts coarser below 97.5m. 91.1–91.4 grey-green ash volcaniclastic interbed Volcaniclastic appears to become weakly polymict. c green-grey and dark-pink lava clasts.		Q (1-2) 96.6 Coarse Q+Ca+Cl+py vn. undeveloped. 6cm wide. Q+Cl+py vn adjacent to contact.	Nil 91.4 py(1) diss.	87.4 fault = 65° to CA. 95.8–96m broken core = fault 97.55 Contact = 50° to CA.	96 m lose water
97.55 – 111.1	Ash Volcaniclastic	Pink Siliceous very fine grained volcaniclastic with wispy sericitic patches. aphyric and weakly laminated 104m Color change to Dark green 105m Colour change to pink	Si(1-2) Se(1-2)	Q+Ca+Cl (1-2) veins often boudinaged 105.2 Q+Ca+?Ab vns (1-3) in patches 109.5 Q+Ca+py vn. 111.5 Q+Ca+py vn.	py+po (1) dominantly on fracture surfaces.	106 bedding = 00° to CA 109.1 bedding = 40° to CA. 109.9 fault = 35° to CA. 110.4 fault = 35° to CA. 110.9 fault = 65° to CA. Contact = fault = 35° to CA.	106.0 petrology 561977
111.1 –	Quartz-phyric ?lava.	Mottled grey to light green Quartz-phyric, phenocrysts to 0.8cm diameter, weakly sheared, siliceous lava? 113.5–113.6 10cm of infaulted black shale 114.1–114.2 intercalated sheared grey shale, ash volcaniclastic and Quartz eye lava 114.8–115.5 Dominantly a coarse Q+Ca+Cl vein.	Si(2) Se+Cl(1)	Q+Ca (1-2) 119.5–120.4 Q+Ca+Cl+po vn. roughly parallel to Core axis Q+Ca+ tr Cl (1-2)	Po(1) on fracture surfaces 114.1–114.8 trace py, po, cpy veinlets.	115.5 fault = 65° to CA. 115.6 fault = 65° to CA 117.1 fault = 65° to CA 117.3 fault = 60° to CA (Some py) 126.3 fault = 80° to CA. 126.6 fault = 65° to CA	

Aberfoyle Resources Limited
EXPLORATION DIVISION

DIAMOND DRILL LOG 584141

PROJECT : Lake Margaret
PROSPECT: Red Hills

HOLE NO: RH-14
PAGE: 4 of 4
LOGGED: AMcN
DATE: 17/4/89

DEPTH	DRILL RUNS	CORE LOSS	ROCK NAME	DESCRIPTION	ALTERATION	VEINING	MINERALISATION	STRUCTURE	WEATHERING	VISUAL LOG	REMARKS
128–134.2			Quartz-phyric ?lava (134.2)	broken core at contact - possibly some intercalation	Si(2-4) Sc(l(1)	Qtz(o + fr.cl. (1-4)	po + py(1) on fracture surfaces	131 faults 30° to CA 133.9 fault = 60° to CA.			130.2 Petrology 561978 131.52 lost water
134.2–140.7			black shale; Basalt lava (140.7)	Sheared, graphitic black shale 136.2 minor interbedded volcanic 137.5 kink fold in S1 139.8 Possible SC fabric		Co(1-2) 136.2 Qtz(o(3) in volcanic 139.2 - 139.3 Po vn (2)	136.2 py(3) in volcanic 139.2 - 139.3 py pat (2)	138.25 fault = 45° to CA. 139.7 fault = 50° to CA. 140.3 fault = 75° to CA.			136.5 lost water ↓ 139.3 139.8m 
140.9–148.8			Black Shale	143 Minor light grey silica thick, fine sandstone interbeds, become more common downhole. 144.4 few thick grey-green ash volcaniclastic		Qtz(o(1-2) 144.1 - 144.4 py vn (3-4) 144.2 ↓ Sp vn(1-2)	py bands (1-3) py pat (1-2) po on fracture surfaces.	140.9 contact = weakly pyrrhotitic Minor conformable = 60° to CA			
148.8–149.7			149.7 ash volcaniclastic - green-grey, weakly laminated.			Qtz(o(1-2)	py(1)	149.7 contact = 55° to CA			
149.7–152.8			Black Shale	Sheared graphitic black shale		Qtz(o(1-3); Qtz(o + Cp(1-1); Sp(1) Py(1-2)	py pat (1-2) po on fracture.	149.9 fault = 60° to CA. 152.4, 152.5 faults.			
152.8–157.5			ash volcaniclastic	grey-green ash volcaniclastic, weakly devitrified from 152.8 - 157m.		Qtz(o(1-2)	py + po on fracture surfaces	153.4m bedding = 50° to CA.			
157.5–			black Shale	Sheared graphitic black shale 160 to 160.2m light green fine lapilli volcaniclastic (with ash volcaniclastic + rhyolitic lava clasts) interbedded		Qtz(o(1-3); Qtz(o + py (1-2); Py (1-1); Qtz(o + [illegible] (1) - veins often disrupted by shearing - may be boudinaged	py pat. (1-2) diss py (1-2) 164.5 possible syngenetic 5cm py band 5mm wide.	160 → faults = 45° to CA. - folded zone 5cm wide. 164.5 fault = 60° to CA. 167 fault + py breccia 167.1 faults py at 35° to CA.			

Aberfoyle Resources Limited
EXPLORATION DIVISION

DIAMOND DRILL LOG 584142

PROJECT : Lake Margaret

PROSPECT: Red Hills

HOLE NO: RH-N

LOGGED: Amen

DATE: 17/8/79

DEPTH	DRILL RUNS	CORE LOSS	LITHOLOGY: ROCK NAME	LITHOLOGY: DESCRIPTION	ALTERATION	VEINING	MINERALISATION	STRUCTURE	WEATHERING	VISUAL LOG	REMARKS	DEPTH
170			black Shale	Sheared graphitic black shale		Qtz(1-2); Py(1); Qtz+Py(1) Qtz(o+Sp(1)	Py pat + diss (1-2) to po on fracture surfaces	169.9 fault: 50° to CA.				
172												
174												
176				176.2		176						
178				Common, thin (1-2cm thick) siliceous ash Volcaniclastic interbeds		Po vn (1-2)						
						178						
180				179.5		180.0 2cm Qtz+Py vn.						
				190.5 - 190.7 fault bounded grey-green ash volcaniclastic.								
182												
184												
186												
188												
190												
192								191.6 fault = 85° to CA				
								192.7 fault pug				
194								193 fault breccia + pug				
196								195.2 fault = 45° to CA				
								196.5 fault = pug.				
198			197.9					197.2 fault = 65° to CA.				
200			Andesitic - Dacite lava	Mottled light green-grey feldspar-phyric lava clasts in a green chert - Shale matrix. lava is moderately sheared.			diss Py(1-2)	199.3 fault = 75° to CA.			199.2 petrology 561979	
202											brecciated part of lava texturally similar to footwall andesites at Hellyer.	
204							diss Py(1-2); diss Sp(1-2)					
206				205.4 - 205.5 interbed of mannerist fine lapilli volcaniclastic								
208				208 lava less brecciated		Qtz(o(1)	Py (1-2)					
							Sp(1-2)					
210							Py(1)					

Aberfoyle Resources Limited

EXPLORATION DIVISION

DIAMOND DRILL LOG

584143

PROJECT : Lake Margaret

PROSPECT: Red Hills

HOLE NO: RH-18

PAGE: 6 of 9

LOGGED: AMcN

DATE: 17-8-89

DEPTH	DRILL RUNS	CORE LOSS	ROCK NAME	DESCRIPTION	ALTERATION	VEINING	MINERALISATION	STRUCTURE	WEATHERING	VISUAL LOG	REMARKS
212			Andesitic - Dacitic lava	-212m Massive mottled light-dark green (relatively phenocryst poor lava) brecciated in part with variable amounts of chlorite spotting. Some feldspar phenocryst rich zones.	Se Si (2)	Qtz Co (1)	Py (1)				
214						-213.5 Co + Sp Va.	diss Sp (1-2)				
216											
218											
220							diss Sp (2-3) (at most over small intervals)				
224						Qtz Co (2)					
226						Qtz Co + Sp (2-3)	diss Sp (2); diss Py (1)				
228						Qtz Co + Py + Sp va (1-2)					
230						-10 cm Coarse Qtz Co + Cl + Py/Sp va. to 230.2 1 cm Qtz Co Sp va.	diss Sp (3) Py (1) ← Py (2) Sp (2-3); Py (2) Po (1) no diss Sp; Sp (2) Py (3-4)				
232						Qtz Co (1-2); Sp + Py Gn va (1-2)	Sp (3) Gn (1)				
234											
236					Se Si (2)	Qtz Co (1-2); Py (1-2)	Sp (2-3); Gn (1) Py (1-2)				
238				-237.4 breccia with light grey cherty matrix -237.6		Qtz Co + Py Sp va (1-2)	Sp (1-2) Py (2) Gn (1); Sp (2) Py (1-3)	238.6 Contact 50° to CA			
240						Qtz Co (2)	239.4 Pod Sp (2); Py (1)				-240.7 Petrology 561920
242				Possibly development of some siliceous alteration		-241.5 Coarse Qtz Co + Py of lava rimmed c pyrite					
244						Qtz Co (1-2)					
246						Coarse Qtz Co Cl + Py va (2-3); Late Qtz Co Cl + Sp + Py va. coarse grained					
248						Qtz Co + Sp (Cl + Py) va (1-2)	-248.3 Some diss Sp + Py (3)				
250							diss Py (1)				
252											
254						Qtz Co + Sp Py (1)					

Aberfoyle Resources Limited

EXPLORATION DIVISION

DIAMOND DRILL LOG

584144

PROJECT : Lake Margaret

PROSPECT : Red Hills

HOLE NO: RH-N

LOGGED: AMcN

DATE: 17-9-89

ROCK NAME	DESCRIPTION	ALTERATION	VEINING	MINERALISATION	STRUCTURE	REMARKS
Andesitic to dacitic lava.	Massive to weakly brecciated light to dark green feldspar-phyric lava with chlorite spots and patchy pink-brown alteration	Si(2)	Qtz(1)			
	Pink alteration more intense	?Si fd(2)	ca Cl py vn.	Po(1) on fracture surfaces.		262.35 petrology 561981
			Qtz+py(1-2) 264.7 Qtz+ca+cl py vn.			
			Qtz(1-2)			
	Pink alteration dies out. Green, weakly feldspar-phyric, chlorite spotted lava.			Po(1) on fracture surfaces.		
			279.6 Cl+ca+py vn(2)			
			Qtz(2)			
	286.5 lava becomes coarsely feldspar-phyric 286.9 minor shale intercalations		285.5-285.7 Qtz+Ga±Cpy (2)	Sp(1-2) py(1)		
287.6m			287 Ga+Sp+Qtz vn.			
black shale	Dominantly black shale with scattered feldspar-phyric lava clasts.	Cl(2) of lava fragments.	Qtz(3)	Sp(3-4) in lava fr. Ga+Sp(1-2) in shale Sp(1-3) in fr. Sp(1-3) in shale		
			Sp+Ga+Qtz (2-3); Qtz(2) fine.	Sp+Ga(2-3) in matrix & clasts.		
	291.2 lava clasts disappear. Weakly graphitic black shale		Qtz + Sp(2)	Po+py(2) Sp(1)	292.2 fault 35° to CA.	
	293.4 8 cm thick fine laminated volcaniclastic interbed. 293.9 2 cm thick fine laminated volcaniclastic interbed			Po+py(2) Sp(1-2) both veins and disseminated. Po(1) on fracture surfaces.	293.5 fault 50° to CA.	
	graphitic black shale					*296.7m 1 cm band of Sp+Ga(4) py(1-2) - Syngenetic incl. in fr.
				Py+Po(2-3) vn.		

Aberfoyle Resources Limited
EXPLORATION DIVISION

DIAMOND DRILL LOG

584145

144

PROJECT : Lake Harmaci

PROSPECT : Red Hills

HOLE NO: RH-1V

PAGE: 8 of 9

LOGGED: JMCN

DATE: 14-9-89

DEPTH	ROCK NAME	DESCRIPTION	ALTERATION	VEINING	MINERALISATION	STRUCTURE	REMARKS
298–299.5	black shale	graphitic black shale 297.4–298 faintly banded green ash volcaniclastic 298.5–298.9 faintly banded green-grey ash volcaniclastic		Qtz (3) fine	Py + Po (2-3) vn. Py + Po (2-3) Sp (1-2) * see also remarks.	297.4 faults 65° to CA. 298 faults 65° to CA. 298.5 bedding 55° to CA. 298.9 fault 70° to CA (clay)	* 298.95 thin band of [illegible] po + py. Possible [illegible] on up-hole surface. underlain by 1.5 m of Sp + Py (?) material
299.5–309.1	felsic lapilli volcaniclastic	[illegible] green medium to fine lapilli grade clasts of rhyolitic lava, ash volcaniclastic and chlorite 'fiamme', in a fine lapilli matrix. minor interbedded ash volcaniclastic		Qtz (2)	Cpy + Po (1-2) Sp (1) Sp (1) Po (1-2) Py (1) 304.6 thin Sp + Cpy (4) Py (1) Po (1)	307.5 bedding 60° to CA	
309.1–316.5	ash volcaniclastic	laminated green-grey ash volcaniclastic minor interbedded fine lapilli volcaniclastic. – Considerable soft sediment deformation. Flame structures suggest facing up-hole 315.5 interbedded ash and fine lapilli volcaniclastic	Se Si (1-2)	Qtz ± Cl (1-2)	Py (1) Po (1) Py (1)	310.4 bedding 65° to CA. 311.4 faults 65° to CA.	310.5 petrology 561982
316.5–	felsic lapilli volcaniclastic	green fine lapilli volcaniclastic, weakly sheared, clasts of pink rhyolitic lava, green andesitic–dacitic lava and ash volcaniclastic fiamme like clasts appear at 319 m. 326 weakly pink and green banded 327.6 ↓ 328.3 sharp contact to siliceous mottled green-pink ash volcaniclastic (massive volcaniclastic) At 329.1 m [illegible] gradational to medium lapilli volcaniclastic. Clast types as above. Common 'fiamme'. Minor ash volcaniclastic interbeds. Clast size increases down-hole. 336.6 clasts of rhyolite lava to 8 cm dia. appear. 337.6–339 fine lapilli [illegible].		Qtz (1) 319.2 Qtz + tr Cl (2-3) over 15 cm 328.5 Qtz (2) + fine grey sulfide veins (1-2) 329.1–329.6 Qtz + fine vn. 335–335.3 m Qtz + [illegible] (5)	Py (1) 323 Py (2) over 10 cm. 325.4 Py (2) over 10 cm. Py (1)	326.4 bedding 55° to CA 331.5 m Cleavage 40° to CA 334.2 S1 deformed by kink style folds. 339.2 bedding 65° to CA.	322.65 Petrology 561983

Aberfoyle Resources Limited

EXPLORATION DIVISION

DIAMOND DRILL LOG

584146 145

PROJECT: Lake Margaret

PROSPECT: Red Hills

HOLE NO: RH-18

PAGE: 9 of 9

LOGGED: AMcN

DATE: 20-9-89

Depth scale (m): 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376

LITHOLOGY

ROCK NAME	DESCRIPTION
felsic (Rhyolite ?) lapilli Volcaniclastic (polymict)	fine to medium lapilli volcaniclastic.
	-339.7 Appearance of Rhyolite lava clasts to 12 cm dia.
	fine to medium lapilli volcaniclastic c Scattered Rhyolitic lava clasts to 15 cm diameter.
	-344.8 [illegible] Coarsening to medium lapilli volcaniclastic with minor fine lapilli intervals.
	-346.6 Rhyolitic lava clast ≥ 20 cm in diameter.
	348.1
	green-pink fine lapilli volcaniclastic
	350.3
	Medium to Coarse lapilli volcaniclastic with clasts of Chloritic 'pumice', ash volcaniclastic, green feldspar-phyric Andesitic–dacitic lava, Rhyolitic lava. Clasts to 15 cm diameter. Some 'ash volcaniclastic' clasts intensely Co altered.
	-356.3–356.5 grey-green sheared ash volcaniclastic interbed
356.6m EOH	

ALTERATION

VEINING

Qtz(0)(1-2)

-348.3–348.5 Qtz+Fe(sulphide?) [illegible](3)

Qtz(0)(1)

MINERALISATION

Py(1)

Py(1-2) Cpy(1)

-346.4–346.5 diss py (2-3)

Po(1) on fractures.

STRUCTURE

-339.6 S_1 kinked

-342.6 fault.

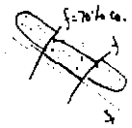
-346.7 kink style folds in S_1

WEATHERING

VISUAL LOG

REMARKS

-342.5



Small scale faults cut ash volcaniclastic clast

-352.15 petrology 561984.

APPENDIX 5

584148

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ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

Phone (09) 458 7999 52 Murray Road, Welshpool, W.A. 6106 Telex AA92560
FAX: 004 31 8890

ANALYTICAL REPORT No. 23.3.08.06037

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Aberfolye Resources Exp. Division
P.O. Box 952
Burnie
Tasmania 7320

ORDER No.	PROJECT
5668	

DATE RECEIVED	RESULTS REQUIRED
22/02/89	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
1	15/03/89	1	9

STATE OF SAMPLES	PRE-TREATMENT								ANALYSIS		
REFER BELOW	SAMPLE NUMBERS	DRY	CRUSH	SPLIT	PULVERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD
	515066/74	RC	Prep: 009,011,012,013,016						Cu,Pb,Zn,Ag/101,As/114		
	515066/74	RC							Ba/401,Au/309		

RESULTS TO

Aberfolye Resources Exp. Division
P.O. Box 952
Burnie
Tasmania 7320

RESULTS TO

REMARKS

BEATRICE DOME

STATE OF SAMPLES		ANALYSIS — PREPARATION				ANALYSIS — METHOD	
whole core	WC	perchloric acid	A1	cold acid	CA	atomic absorbtion	AAS
split core	SC	hydrochloric acid	A2	specific sulphide	SS	x-ray fluorescence	XRF
cutting	CU	nitric acid	A3	other mixed acids	Ma	spectrophotometry	SPEC
rock	Ro	aqua regia	A4	alkaline attack	AA	colorimetry	COL
soil	SO	nitric-perchloric	A5	volatilization	VO	chromatography	CHR
pulp	PU	HF mixture	A6	ignition	IG	titration	TTN
water	WA	HF under pressure	A7	pressed powder (XRF)	PP	other chemicals means	CHEM
tissue	TI	fusion	A8	glass fusion (XRF)	GF	miscellaneous	MISC
stream sediment	SS					fluorescence	FLUOR
heavy mineral	HM					inductively coupled plasma	ICP

AUTHORISED OFFICER

ANALABS

A Division of Macdonald Hamilton & Co. Pty Ltd.

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584140

ANALYTICAL DATA

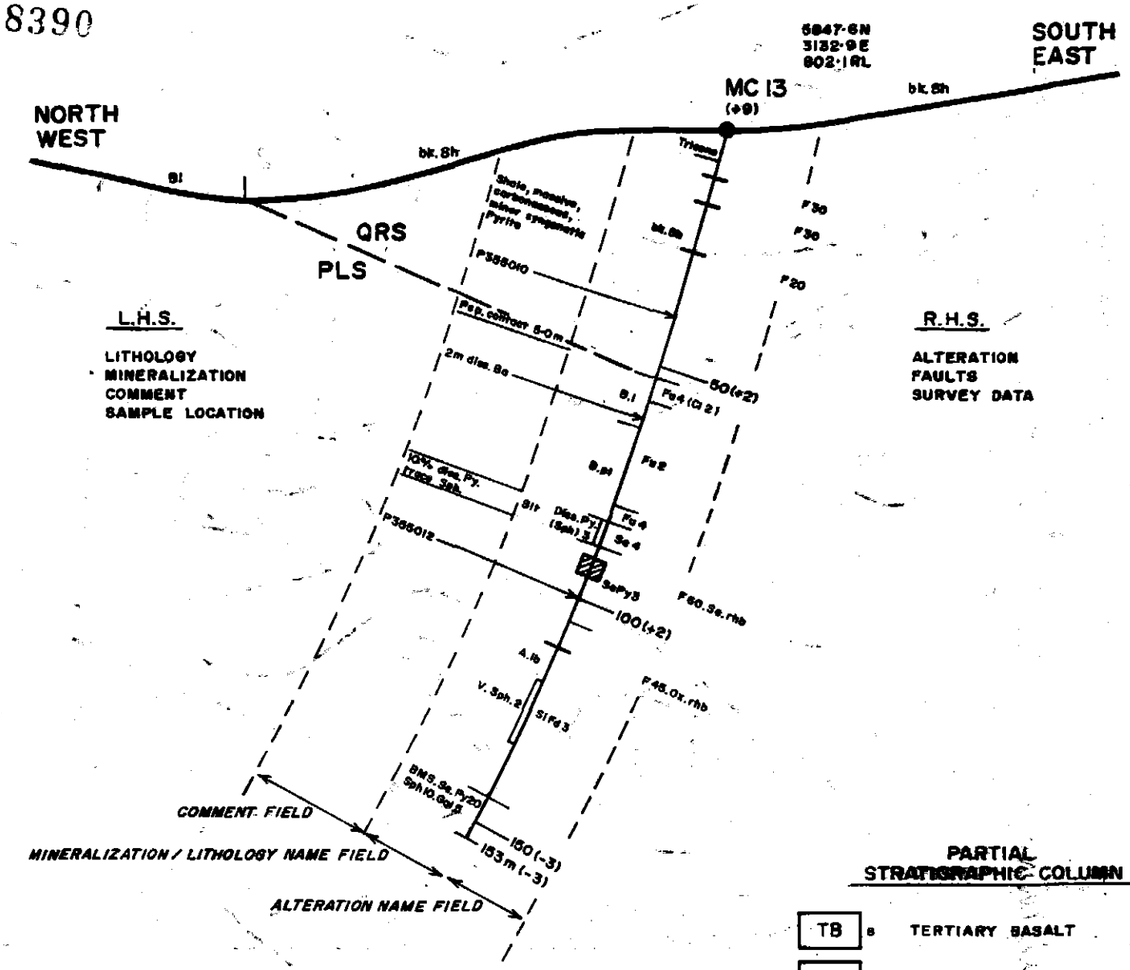
SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	23.3.08.06037	15/03/89	5668	1 OF 1

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Au	Ba	As		
1	515066	110	50	90	<0.5	0.042	1800	13		
2	515067	90	140	145	<0.5	<0.008	520	6		
3	515068	65	160	125	1.0	0.010	450	10		
4	515069	30	125	85	<0.5	0.021	2100	79		
5	515070	25	25	95	<0.5	<0.008	1500	12		
6	515071	20	30	105	<0.5	0.012	2450	11		
7	515072	50	25	85	<0.5	<0.008	140	12		
8	515073	25	30	170	<0.5	<0.008	2050	11		
9	515074	15	15	50	<0.5	<0.008	2800	9		
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	0.5	0.008	10	1		
24	UNITS	PPM	PPM	PPM	PPM	PPM	PPM	PPM		
25	METHOD	101	101	101	101	309	401	114		

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER

8390



MC 13 (+9)	DDH number, DDH collar distance behind (+), in front (–) of section (-35/100,60)	Fu4 (Cl2)	Alteration composition, intensity. Subordinate alteration type in brackets (/50)
5847·6 N 3132·9 E 802·1 RL	Survey pick-up of collar (/60)	F60.Se.rhb	Fault zone, angle to core axis, gouge composition (-35/60)
50(+2)	Downhole fiducial, 50m interval for 1:1000 section (-25/60)	F46.Qz.rhb	Fault, angle to core axis, gouge composition (-35/50)
	Lithology, alteration boundary – DDH and surface (-/8/)	Diss.Py. (Sph) 3	Low grade mineralization disseminated, composition, intensity. Minor sulphides in brackets (-18/50)
	DDH to surface correlation (-35/)	V.Sph. (Py) 2	Low grade mineralization vein, composition, intensity. Minor sulphides in brackets (-18/50)
S.pl	Lithology abbreviation classification, colour on adjoining table (/50)	P 356010	Petrology sample location, specify other sample type eg. Pb isotope (/50)
QRS	Stratigraphic classification (/100)	BMS.Se.Py20 Sph.10.Gal.5	High grade mineralization, composition, visual estimate (/50)

ALL LINEWORK AND LETTERING SHOWN AT ACTUAL SIZE
(LINE THICKNESS / LEROY LETTER SIZE)

NOTE : GEOPHYSICAL AND GEOCHEMICAL DATA ARE SHOWN ON OVERLAYS

PARTIAL STRATIGRAPHIC COLUMN

TB	8	TERTIARY BASALT
JD	32	JURASSIC DOLERITE
OCG	20	ORDOVICIAN SILICICLASTICS
URS	65	UPPER RHYOLITIC SEQUENCE
QRS	68	QUE RIVER SHALE
MGW	71	MT. CHARTER MICACEOUS GREYWACKE
HBS	45	HELLYER BASALT SEQUENCE
HVS / WB	86	HANGINGWALL VOLCANICLASTIC SEQUENCE / SWITCHBACK VOLCANICLASTIC SEQUENCE
HMS	21	HELLYER MINERALISED SEQUENCE
FPS	48	ANDESITE FELDSPAR PHYRIC SEQUENCE

VOLCANICS

R.l R.lb	55	Rhyolite lava, lava breccia
R.av R.lv R.bv R.xv	56	Rhyolite volcaniclastic
YR.av YR.lv YR.bv	66	Rhyolitic Polymict volcaniclastic
D.l D.l.b	63	Dacite lava, lava breccia
D.av D.lv D.bv D.xv	64	Dacite volcaniclastic
YD.av YD.lv YD.bv	66	Dacitic Polymict volcaniclastic
A.fp.l A.fp.lb	48	Andesite feldsparphyric lava, lava breccia
A.l A.lb	41	Andesite lava, lava breccia
A.av A.lv A.bv A.xv	44	Andesite volcaniclastic
YA.av YA.lv YA.bv	40	Andesitic Polymict volcaniclastic
B.l B.lv	45	Basalt lava, lava breccia
B.pl	50	Basalt pillow lava
B.av B.lv B.bv B.xv	49	Basalt volcaniclastic
YB.av YB.lv YB.bv	42	Basaltic Polymict volcaniclastic
Y.av Y.lv Y.bv	58	Polymict rock
av	52	Ash volcaniclastics (composition not determined)

SEDIMENTS

Ss Gw	71	Sandstone, micaceous Greywacke
Sh	66	Shale, black (carbonaceous, pyritic)
Slr	68	Siltstone, tuffaceous Siltstone

SULPHIDES, SULPHATES

BMS	21	Base Metal Sulphide rock
MPy	25	Massive pyrite rock
GS P	23	Glassy silica, colloform pyrite rock
Ba	22	Barite

POST CAMBRIAN ROCKS

TB	8	Tertiary Basalt
JD	32	Jurassic Dolerite
OCg	20	Ordovician Siliciclastics

ALTERATION ROCK TYPES

HA	6	Highly altered rock
Qll	16	Quallite
Q-lb Q-bx	17	Quallite fragmental

ALTERATION

Si	2	Silica	SeCl	30	Sericite Chlorite
SlFd	13	Silica Feldspar	SePy	39	Sericite Pyrite
SlFdCl	14	Silica Feldspar Chlorite	Se	38	Sericite
Cl	47	Chlorite	Fu	46	Fuchsite
ClCa	41	Chlorite Carbonate	Il	19	Illite

INTENSITY SCALE

1 : Trace
2 : Weak
3 : Moderate
4 : Strong
5 : Extreme

584150

Aberfoyle Exploration Pty Ltd

REVISIONS			
Init	Date	Init	Date
GLC	12·85		

NORTH WEST TASMANIA

MACKINTOSH E.L.2/70, HATFIELD E.L.15/73

GEOLOGICAL LEGEND
1:1000 SCALE DDH SECTIONS

Location Code: K55/6/44 | Scale: ——— | Date: November, 1985

Compiled:	AMH
Drawn:	AMH
Traced:	GLC
Checked:	AMH
Plate No:	MAC 115

RMO 554

8389

RH7 RH61 RH8 RH5 RH3 RH14&14R RH13 RH9 RPH95 RH10 BH1 RH11 RH15 RH18 GN2 RH17

1E 2E 1W 2W

Cvl Oc Cvs Qg Ts

5365000mN 5364000mN 383000mE

GN

LEGEND

Qg	Quaternary glacials
Oc	Owen Conglomerate
Ts	Tyndall group Sediments
Cv	Undifferentiated Central Complex volcanics
Cvl	Central Complex felsic lavas – Red Hills dome
Cvs	Interbedded Shale & ash volcaniclastics
	Host horizon
	Mineralised volcaniclastics } projected from drill intersections
	Adit
	Strike & dip of bedding, flow banding

5 cm

0 250 500metres

584151 89-3023

Aberfoyle Resources Limited

EXPLORATION DIVISION

REVISIONS			
Init.	Date	Init.	Date
AMcN/rje	21·9·89		

Location Code :

NORTH WEST TASMANIA

LAKE MARGARET E.L. 5 / 85

RED HILLS PROSPECT

SUMMARY INTERPRETED GEOLOGY

Scale : As shown

Date : June, 1989

Compiled : AMcN

Drawn :

Traced : JLR

Checked :

Plate No. : LMARG II


8391
381 000 mE
382 000 mE
383 000 mE
5 366 000 mN
5 365 000 mN
5 364 000 mN
5 363 000 mN
N
E.L. 5/85
0 E
306 E
700 E
16 S
24 S
32 S
40 S
48 S
56 S
64 S
72 S
80 S
84 S
88 S
96 S
104 S
112 S
Black Shales
UTEM Anomaly sourced by base metals and pyrite within the shales at depth.
Major UTEM Anomaly source disseminated pyrite within ignimbrites overlying shales.
UTEM Anomaly due to shale only
This section of the UTEM anomaly shows the greatest promise. In this region the anomaly extends to 1·8 ms delay time, while to the north it extends only to 0·45ms. Consequently a significant increase in the conductivity of the anomaly source has occurred. Inferred anomaly source at depth.
Shale response evident in early time data, not in late time data.
Anomaly may extend to 104S At this point the anomaly is quite weak. A source at great depth (+500m) is implied.
LEGEND
Approximate geological boundary
Inferred geological boundary
Cross over position of UTEM anomaly (Number indicates latest time channel anomaly is evident on.
Decay Constant
Depth to top of conductor
Cross over position of UTEM anomaly indicating approximate depth to top of conductor (50m) and decay constant.
Zone within which conductor may occur. The lateral position is uncertain.
Poor to moderately conductive lithological unit.
0
500
METRES
5 cm
584152
89-3023
Aberfoyle Resources Limited
EXPLORATION DIVISION
REVISIONS
Init. Date Init. Date
TN 3·89
TASMANIA
LAKE MARGARET E.L.5/85
RED HILLS PROSPECT
DEC 1988 UTEM SURVEY INTERPRETATION
Compiled : JJR
Drawn : JJR
Traced : Geo Drafting
Checked :
Location Code :
Scale : 1:5000
Date : January 1989
Plate No : LM 5

5368000m N (Top of licence)

382000m E

380000m E

381000m E

5 366 000 mN

5362000mN

5361000mN

83 84 85 86 87

67 66 65 64 63 62

1000 900 800 700 600 500

BURNIE

RED HILLS CREEK

CONSERVATION BOUNDARY

ANTHONY RIVER

84400E
65600N

1 2 3 4

16S 24S 32S 40S 48S 56S 64S 72S 80S 84S 88S 96S 104S 112S

305E

RED HILLS PROSPECT

EAST RED HILLS PROSPECT

△ Arnold Peak

HEC

HEC POWERLINE

SOUTHWEST CONSERVATION AREA

SHELL EL 103/87

Mt. Selina △

LAKE SELINA

LAKE WESTWOOD

△ Moyle Rock

△ Lukes Knob

JULIA CREEK

700E

△ Mt. Julia

LAKE JULIA

Julia Peak △

HUSKISSON ROAD

— LEGEND —

Lines completed

UTEM Loop No. 2

TASMANIA

BURNIE DEVONPORT LAUNCESTON

Lake Margaret E.L.5/85

QUEENSTOWN HOBART

0 100Km

0 500 1000metres

Index to Sheets

A B C D

5cm

584153

89-3023.

Aberfoyle Resources Limited
EXPLORATION DIVISION

REVISIONS				
Init.	Date	Init.	Date	
RJE	26-4-89			

Location Code :

NORTH WEST TASMANIA

LAKE MARGARET E.L.5/85 CRA J.V.

RED HILLS - UTEM LOCATIONS

Scale : 1:10 000

Date : February, 1989

Compiled : AMcN

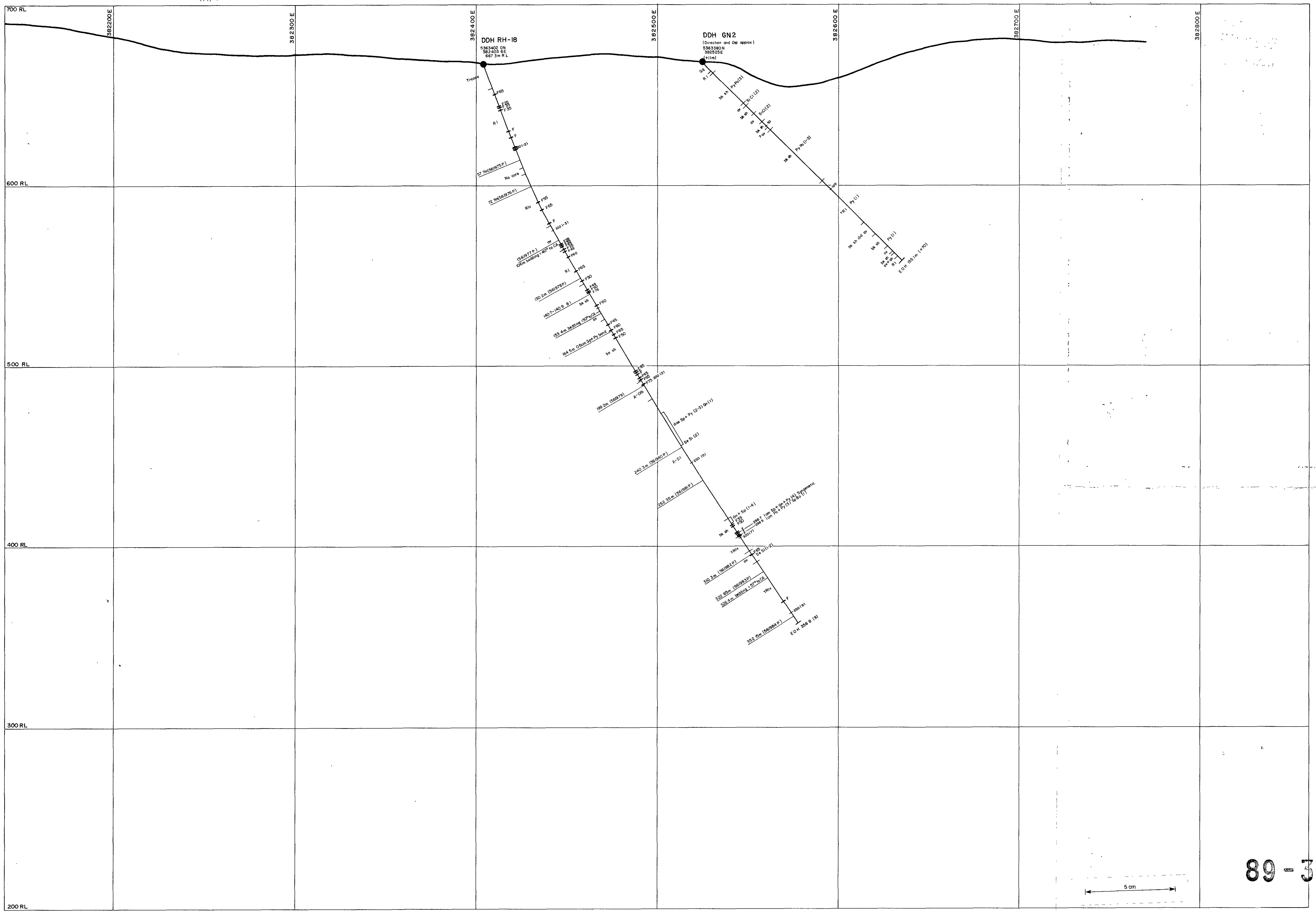
Drawn : JLR

Traced : RJE

Checked :

Plate No : LMARG 6

8393



89-3023

Aberfoyle Resources Limited EXPLORATION DIVISION		584154
REVISIONS (Init. Date Init. Date)	NORTH WEST TASMANIA LAKE MARGARET E.L.5/85 CRA JV. RED HILLS PROSPECT SECTION ON 090° MAG.-DDH RH-18	Compiled AMcN Drawn AMcN Traced RJE Checked AMcN
Location Code	Scale: 1:1000 Date: September, 1989	Plate No: L Marg 14