

OPEN FILE

PARTIAL RELINQUISHMENT REPORT

EXPLORATION LICENCES

7260, 7261, 7262, 7263,
7264 and 7824

For the Period
24th May, 1991 to 23rd May, 1994

CR 94 / 607

Licensee:	Ashton Mining Limited
Operator:	Ashton Mining Limited BHP Minerals Pty Ltd
Sheet Reference:	1:250,000 Mt Young (SE 53-15)
Submitted to:	Department of Mines & Energy, DARWIN

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(Diamond Exploration)

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SUMMARY

During the period 24th May, 1991 to 23rd May 1994, Ashton Mining Limited, on behalf of the Australian Diamond Exploration Joint Venture (ADEJV), carried out an exploration programme over Exploration Licences 7260, 7261, 7262, 7263, 7264 and 7824. This report provides a summary of the exploration activities undertaken within the relinquished portion of these tenements.

Diamond exploration work consisted of open file data review, reconnaissance stream sampling and bulk sampling. A total of 37 stream samples were collected within the relinquishment areas. As part of a regional bulk sampling programme, one bulk sample was collected from EL 7264. This sample was processed by HMS plant, situated at Cape Crawford, Northern Territory. The stream samples were transported to Perth where they were processed by Ashton's diamond laboratory.

Results were considered to be poor and no further work was warranted.

Exploration performed by BHP Minerals Pty Ltd, on the relinquished tenement areas consisted of airborne TEM, ground TEM, geochemical sampling and grid-based RC drilling to test the Cretaceous for manganese.

Two anomalies from the airborne TEM survey, possibly caused by base metal mineralisation in the basement, were followed up with ground TEM. Both features are due to surficial conductors. Selected TEM anomalies, possibly caused by manganese, were drill tested. Additional holes

were drilled on an approximately 6x3 kilometre grid to test the Cretaceous rocks away from the TEM anomalies. No manganese mineralisation was intersected. Some of the drilled TEM anomalies were explained by pyritic, black silts whereas others remain unexplained.

PROTEM soundings did not identify any bedrock conductors. An area of anomalous base metal stream sediment geochemistry was followed up with soil sampling which failed to enhance the anomaly.

1.0 INTRODUCTION

Exploration licences 7260, 7261, 7262, 7263, 7264 were granted to Ashton Mining Limited in 1991 and 7824 in 1992 (see Table 1). All licences were granted for a six year period. The licences presently cover a combined area of 714 blocks and are located on the Mt Young (SE 53-15) 1:250,000 map sheet.

Group reporting of these tenements was requested on the 20th January, 1993 and approved by the Department of Mines & Energy in February, 1993. These tenements are referred to as the Nathan River Project tenements.

On the 23rd April, 1994, in accordance with Section 26 of the Northern Territory Mining Act, the licences were reduced by a total of 526 blocks (Figures 1-6). Table 1 provides the retained areas for each licence. A full deferral has been requested for Exploration Licence 7341. Partial deferrals have been requested for ELs 7262 and 7263.

TABLE 1.
NATHAN RIVER PROJECT TENEMENTS

Tenement	Date Granted	Original Area (blocks)	Retained Area (blocks)		Expenditure Commitment
			1993	1994	
EL 7260	06/06/91	299	150	75	24,350
EL 7261	24/05/91	470	318	159	55,150
EL 7262	24/05/91	445	223	127	23,000
EL 7263	24/05/91	495	262	210	38,300
EL 7264	24/05/91	329	196	98	19,550
EL 7824	13/07/92	89	89	45	10,000

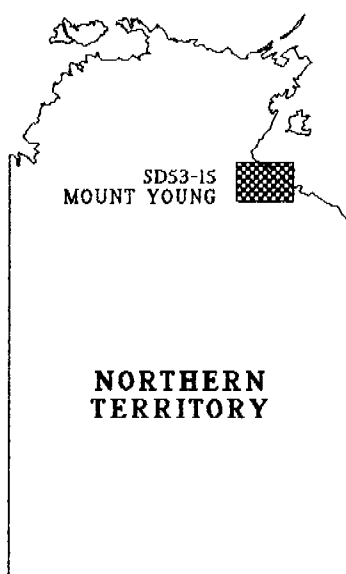
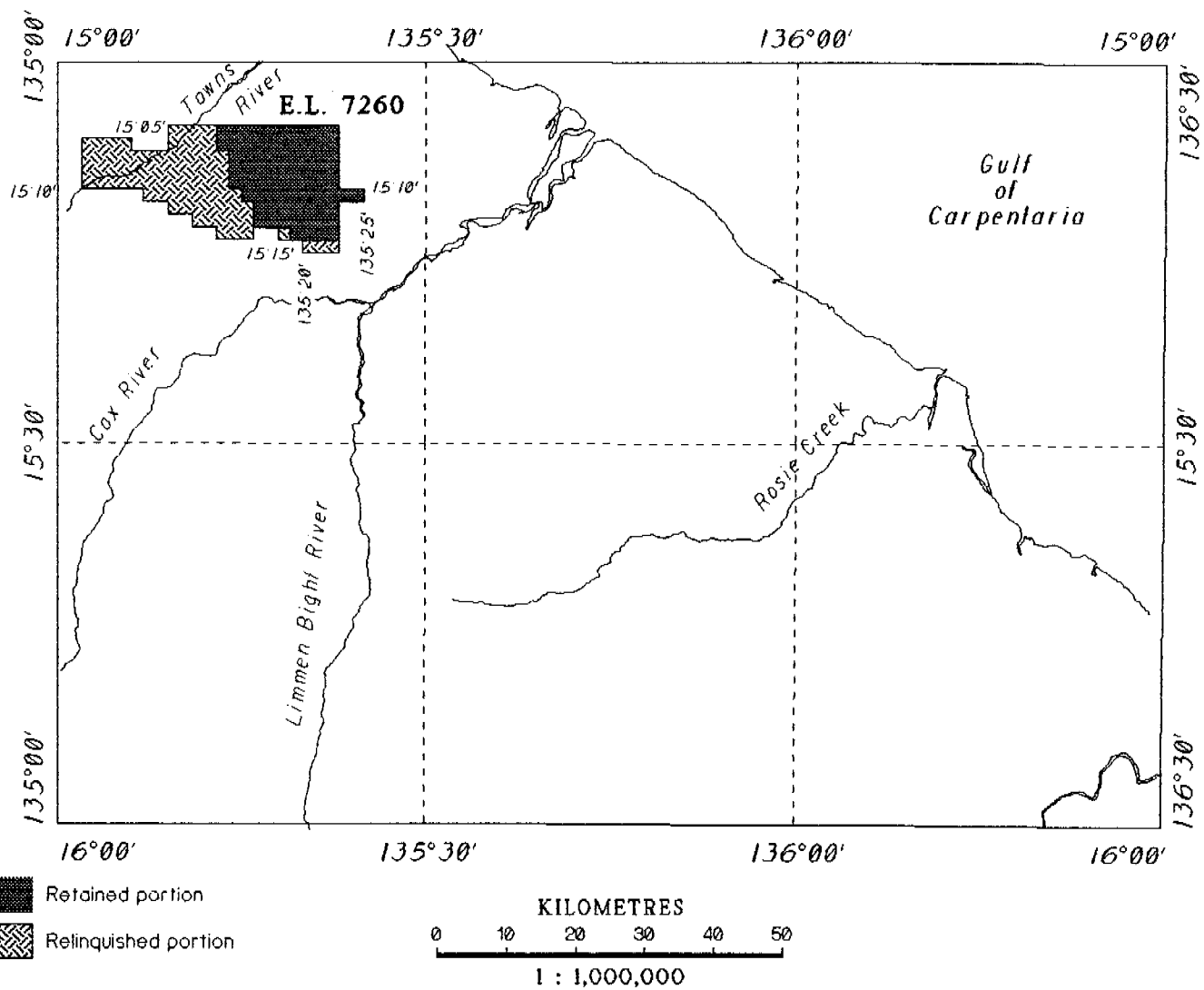
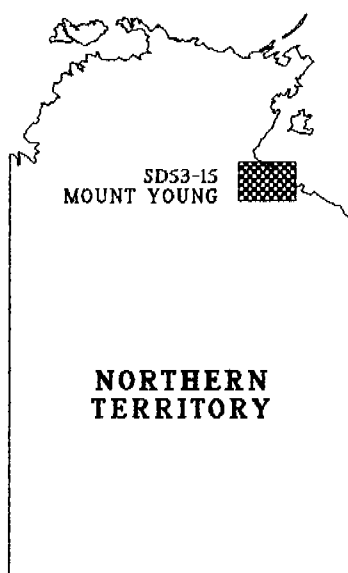
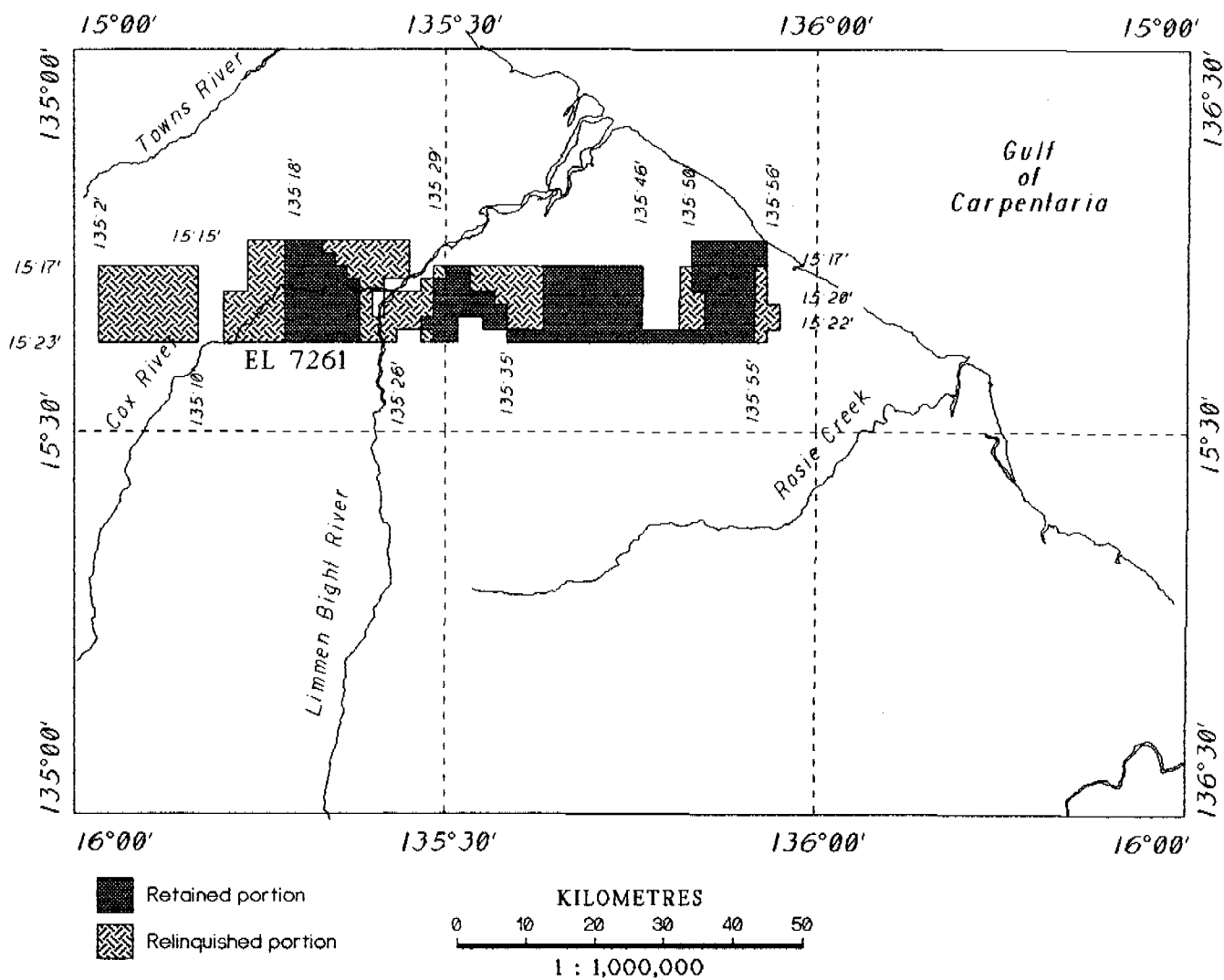


**FIGURE 1
E.L. 7260
LOCATION MAP**

**ASHTON MINING LIMITED
ADE JOINT VENTURE**

JULY , 1994



**ASHTON MINING LIMITED
ADE JOINT VENTURE**

**FIGURE 2
E.L. 7261
LOCATION MAP**

JULY, 1994

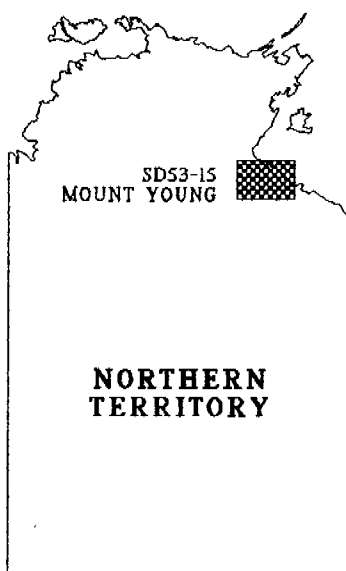
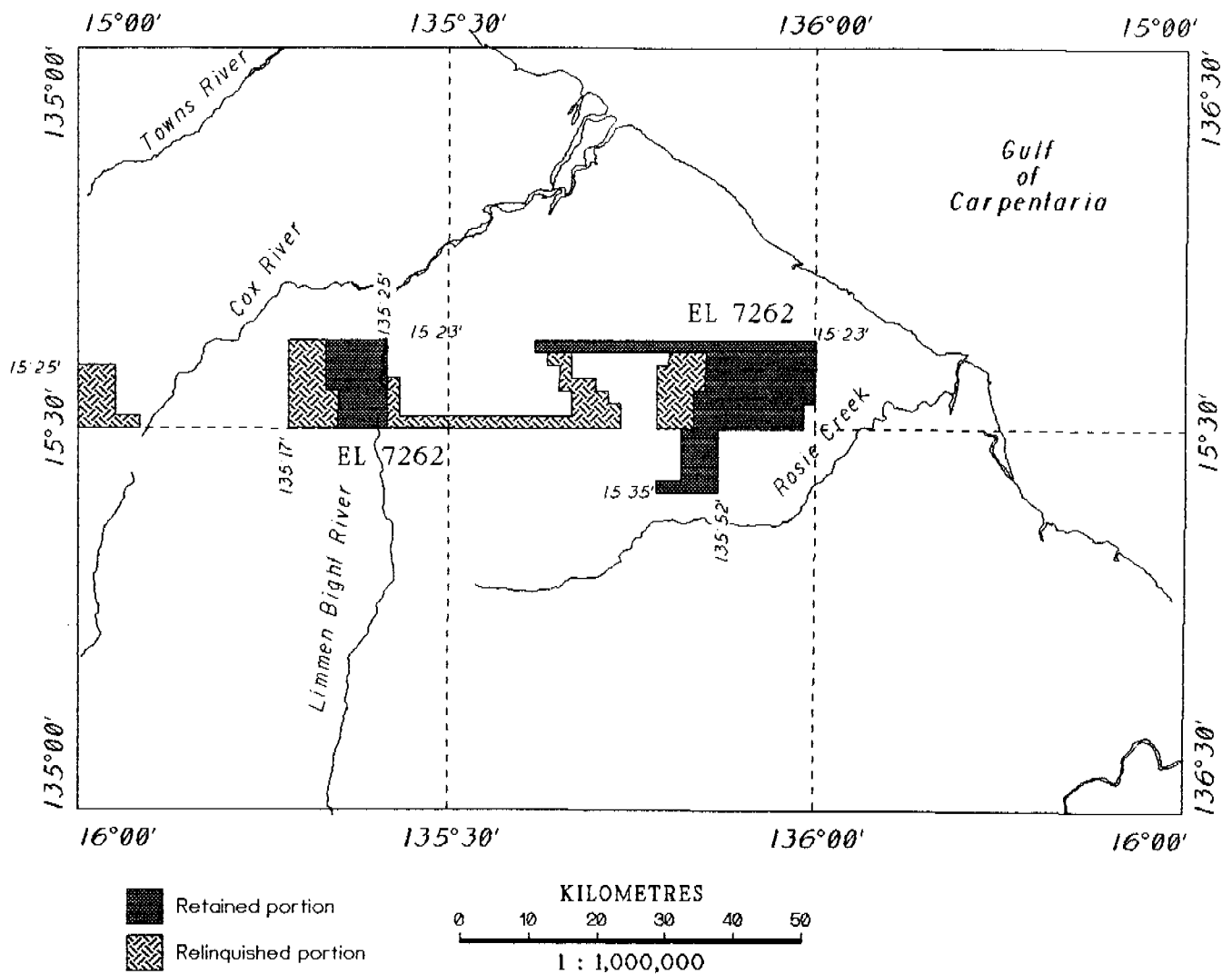


FIGURE 3
E.L. 7262
LOCATION MAP

ASHTON MINING LIMITED
ADE JOINT VENTURE

AUGUST , 1994

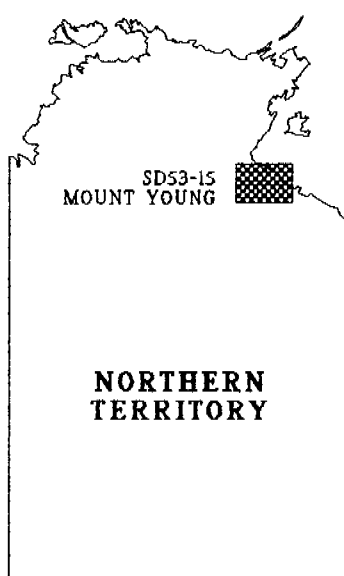
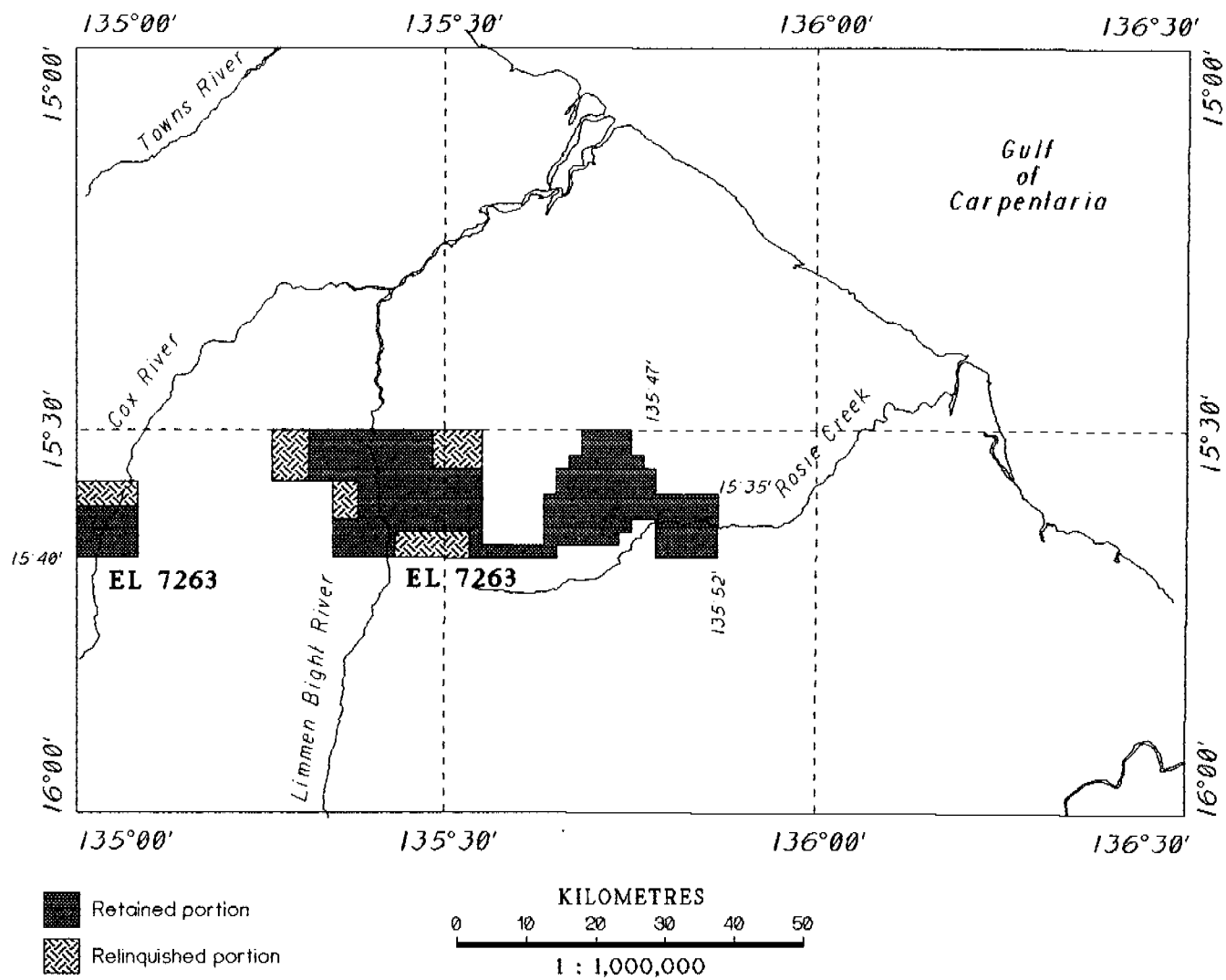


**FIGURE 4
E.L. 7263
LOCATION MAP**

**ASHTON MINING LIMITED
ADE JOINT VENTURE**

AUGUST , 1994

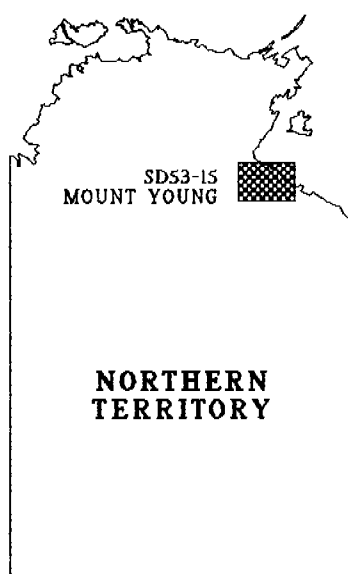
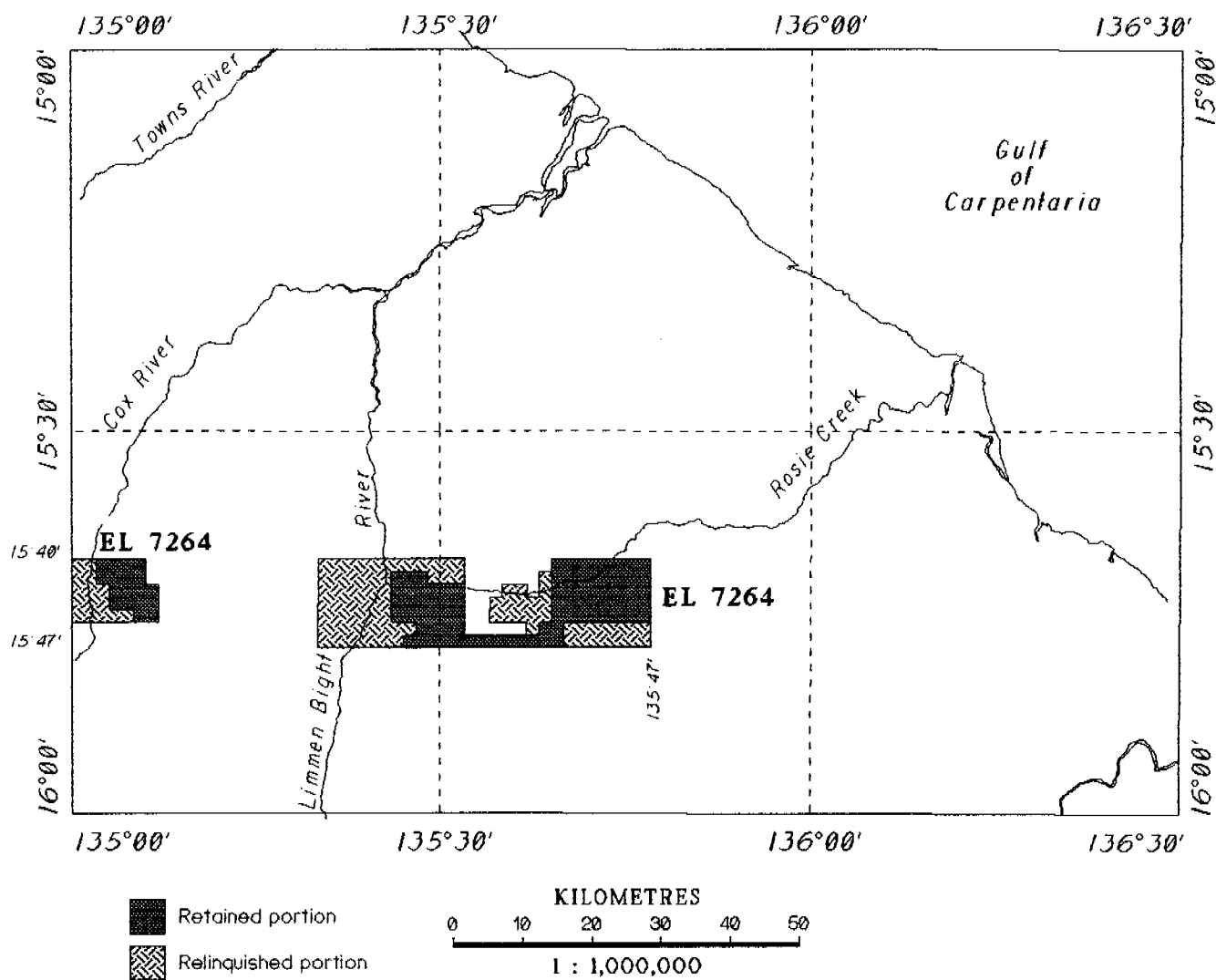
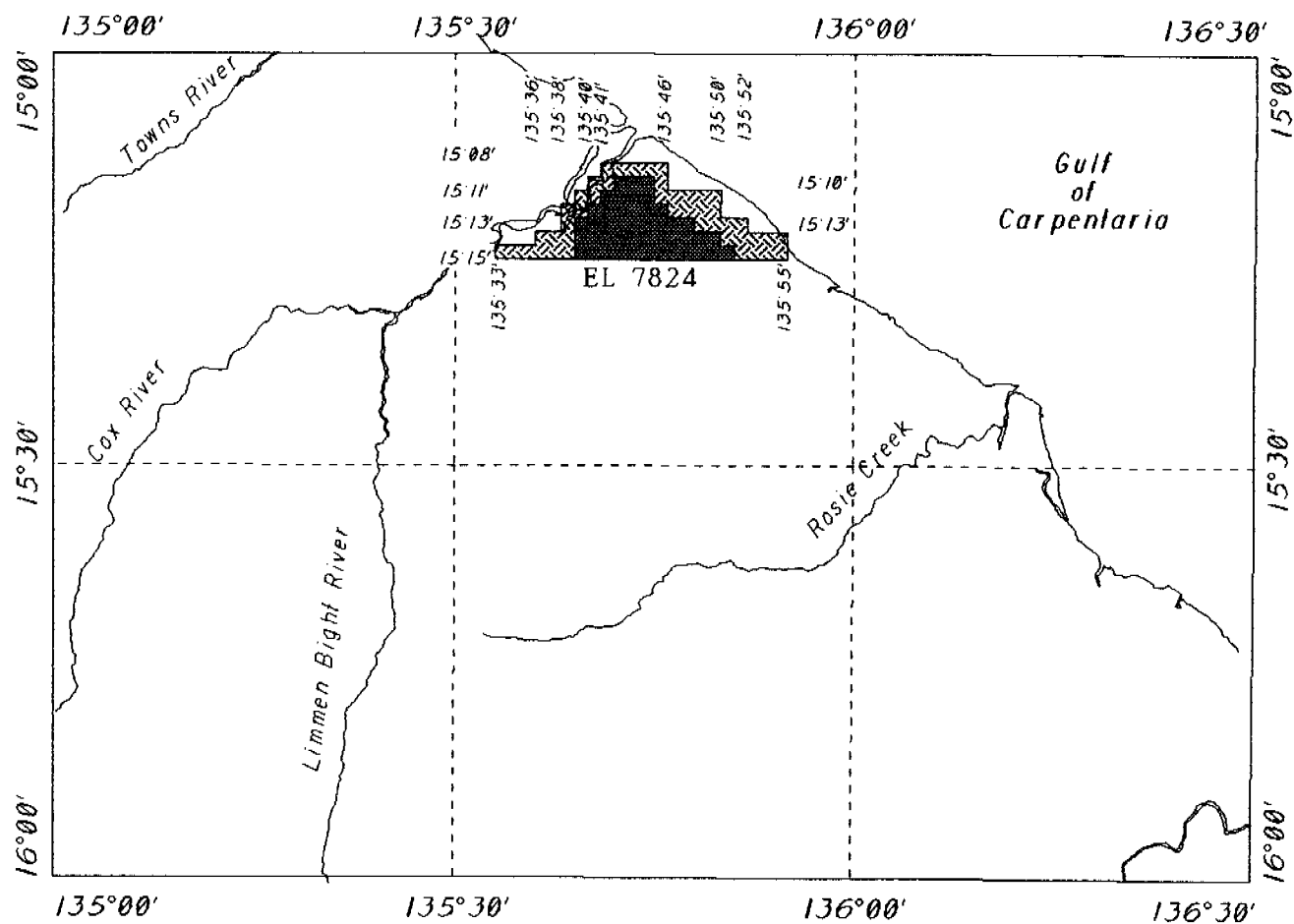


FIGURE 5
E.L. 7264
LOCATION MAP

ASHTON MINING LIMITED
ADE JOINT VENTURE

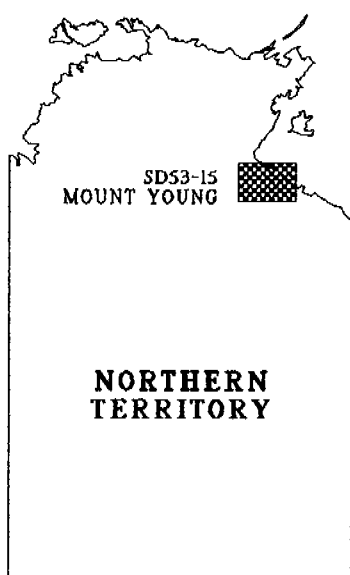
AUGUST , 1994



KILOMETRES

0 10 20 30 40 50

1 : 1,000,000



Retained portion

Relinquished portion

FIGURE 6
E.L. 7824
LOCATION MAP

ASHTON MINING LIMITED
ADE JOINT VENTURE

AUGUST, 1994

On the 24th January, 1992, Ashton Mining Limited, on behalf of the Australian Diamond Exploration Joint Venture (ADE JV), entered into a joint venture agreement with BHP Minerals Pty Ltd which would allow BHP to earn up to 80% of the base metal rights to these tenements. This joint venture is known as the McArthur River Joint Venture.

This report provides a summary of work undertaken, both by Ashton Mining and BHP Minerals, over the relinquished portion of the Nathan River tenements, during the reporting period 24th May, 1991 to 23rd May, 1994. A statement of expenditure is also included in this report.

2.0 DIAMOND EXPLORATION PROGRAMME

2.1 Data Review

Prior to commencing field work, a comprehensive data review of results and previous exploration in the tenement areas was undertaken. In addition, a study of available photography was made to assist in delineating structural and geomorphic features which could represent kimberlitic intrusives. Areas of low relief and poor drainages were also highlighted as these could contain preserved intrusives which had not shed significantly into the present drainages. Areas that had not been adequately explored were targeted for sampling. Proposed gravel sample locations were plotted in the office on 1:100,000 map sheets.

The Northern Territory Geological Survey (NTGS) aeromagnetic survey was acquired and assessed to identify any possible kimberlitic targets. Targets were located in three of the exploration licences, however none fell within the relinquished areas.

2.2 Reconnaissance Sampling

A helicopter supported stream sampling programme was initiated over the licence areas during the first and second year of tenure. A total of thirty-seven samples were collected in the relinquished areas. Table 2 provides a breakdown of sampling for each licence. All samples were forwarded to Ashton's Perth laboratory for analysis (see Section 2.4). Results are shown in Appendix 1. Sample locations are shown on Plans 1 to 5.

TABLE 2.

NATHAN RIVER SAMPLING

Tenement	No. of Gravel Samples
EL 7260	11
EL 7261	13
EL 7262	7
EL 7263	3
EL 7264	3
EL 7824	0

2.3 Bulk Sampling

One bulk sample (MYO 478) was collected in the relinquished area of EL 7264. This sample was carted to Ashton Mining's HMS plant, situated at Cape Crawford, for processing. The sample returned a positive result in the field. Further analysis was carried out by Ashton's diamond laboratory, based in Perth, but no further diamonds were recovered. The location of this bulk sample is shown in Plan 5.

2.4 Laboratory Procedure

All heavy mineral samples were processed by the Ashton Mining Limited Laboratory in Perth, where they were concentrated by Wilfley Table and heavily liquid separation techniques.

The heavy liquid used was tetrabromethane with a specific gravity of 2.96. The concentrates were then screened into various size fractions, further concentrated where required by magnetic and electrostatic separation techniques and a comprehensive grain by grain examination carried out on the minus 1.0mm plus 0.425mm fractions.

3.0 BHPM EXPLORATION PROGRAMMES

BHP Minerals has two concurrent programmes operating in the region. Base Metals and Manganese. For convenience, text and plans detailing exploration for each commodity have been kept separate.

BASE METALS

3.1 Geophysics

3.1.1 Airborne Geophysics

Aerodata Pty Ltd, Perth, was contracted to fly a combined airborne TEM/magnetics (QUESTEM) survey over those parts of the tenements covered by Cretaceous geology in search of base metal mineralisation on the Proterozoic basement. Flight lines were oriented east-west and flown one kilometre apart. A total of 5,065 line kilometres were flown. Details of the survey are given in Table 3. TEM profiles for the relinquished areas are presented in Appendix 2. A flight line diagram and TMI contours for the relinquished areas are shown on Plates 1 and 2.

Anomalies for ground follow-up were selected on the basis of decay characteristics, structural setting and geological environment. Two anomalies, MY5 (EL 7261) and MY27 (EL 7264) were selected for ground follow-up within the relinquished tenement areas (Plate 1).

TABLE 3 - AIRBORNE TEM SPECIFICATIONS

Aircraft	-	Britten Norman Trislander
Magnetometer	-	Split Beam Cesium Scintrex V201
Resolution	-	0.1 nT
Cycle rate	-	0.5 seconds
Sample interval	-	25 metres
Electromagnetic System	-	QUESTEM Time Domain EM
Transmitter Base Frequency	-	75 Hz
Receiver	-	Horizontal axis coil in towed bird
Cycle rate	-	0.25 second
Sample interval	-	12.5 metres
Window mean delay times (msec)	-	
em1 0.2467 em2 0.3509 em3 0.4550 em4 0.5592 em5 0.7154		
em6 0.9238 em7 1.1312 em8 1.3925 em9 1.6009 em10 1.8613		
em11 2.1738 em12 2.6425 em13 3.1634 em14 3.6842 em15 4.2050		
Data acquisition	-	11 Channel RMS GR33A Chart Recorder
	-	PICODAS Digital Acquisition System
Flight line direction	-	090 - 270 degrees
Flight line spacing	-	1,000 metres
Tie line spacing	-	15,000 metres
Mean terrain clearance	-	120 metres
Navigation	-	GPS satellite positioning

3.1.2 Questem Anomaly Geochemistry

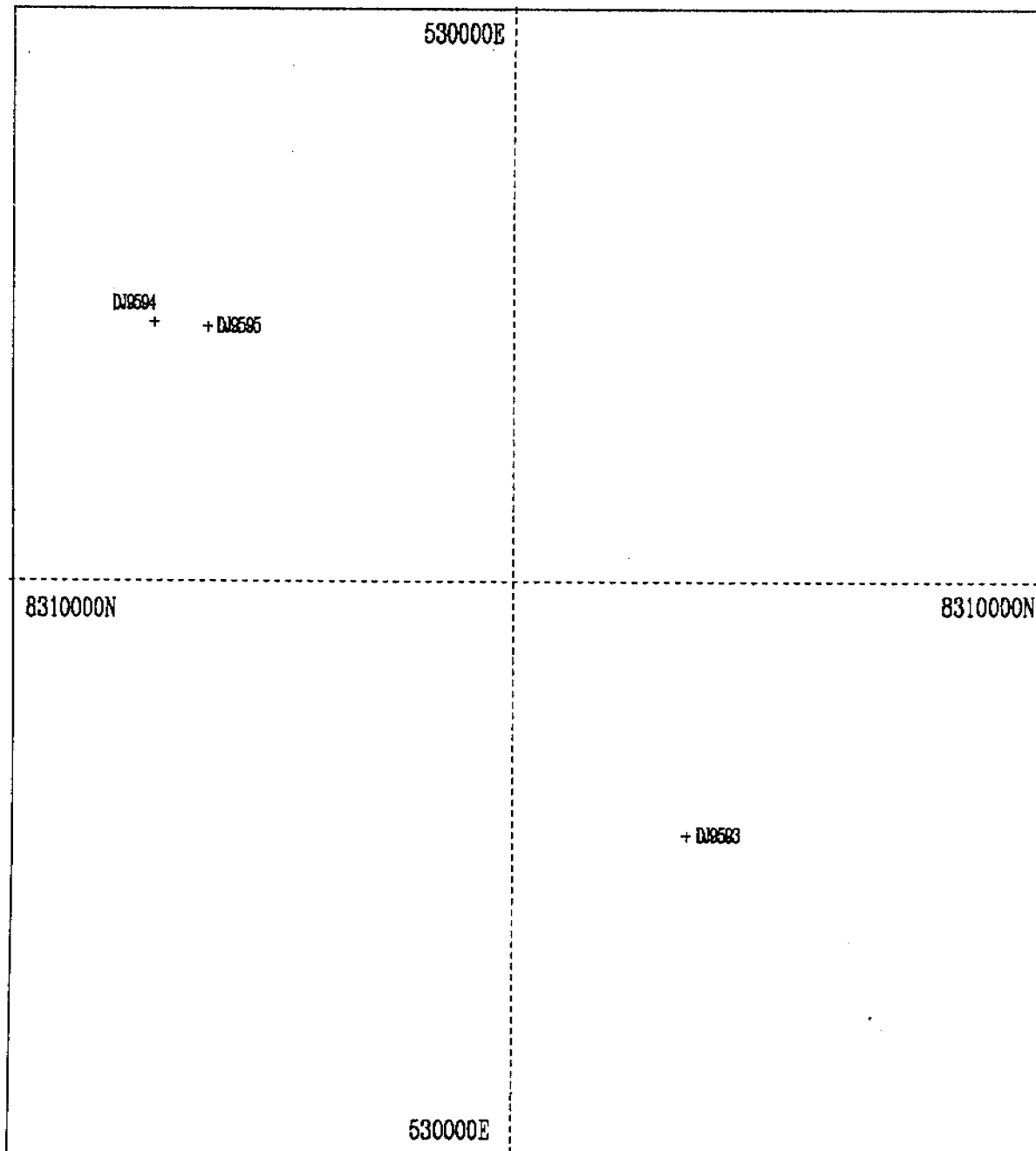
Each site (MY5, MY27) was gridded prior to the ground EM survey. Three 1.5 or 2km lines spaced 400m apart were centred over the anomaly. Lines were oriented east-west and pegged at 100m intervals.

Soil samples were collected at 100m intervals along the grid lines where residual soils were developed. In most cases, transported soil cover prevented effective sample collection. Three samples were collected at MY5 and five samples at MY27 (Figures 7 and 8).

Approximately 150 grams of the -2mm and -80# size fractions were collected from each site. The -2mm samples were analysed for Cu, Pb, Zn, Fe, Mn, As and Ag by Assaycorp Laboratories, Pine Creek, Northern Territory. Analytical methods and results are detailed in Appendix 3. There were no anomalous results.

3.1.3 SIROTEM Profiling/Soundings

Ground TEM detailing of two priority QUESTEM anomalies comprised moving loop SIROTEM at MY5 and SIROTEM soundings at MY27. Survey logistics are summarised in Table 4. The data are presented as both log and linear scaled profiles and graphs of apparent resistivity vs time in Appendix 2.



+ Soil Samples

Scale 1:10000

0 0.4 0.8 km

Universal Transverse Mercator Projection



BHP Minerals Pty. Ltd.
A.C.N. 008 694 782

Carpentaria Group

EL 7261

QUESTEM Anomaly MY5

Prepared:	AJH	Date:	10/08/1994
Drawn:	AJH	Revisions:	1
Checked:	DAH	Revised:	14/08/94

FIGURE: 7

562000E

8262000N

8262000N

+ 82620

+ 82621

8261000N

8261000N

+ 82619

+ 82618

+ 82617

562000E

+ Soil Sample

Scale 1:10000

0 0.4 0.8 km

Universal Transverse Mercator Projection



BHP Minerals Pty. Ltd.
A.C.N. 008 694 782

Carpentaria Group

EL 7264

QUESTEM Anomaly MY27

Prepared:	AJH	Date:	10/08/1994
Drawn:	AJH	Revisions:	1
Centre:	Perth	Draw No:	44-5622

FIGURE: 8

TABLE 4
GROUND TEM SURVEY LOGISTICS

EL	:	7341, 7261, 7263, 7264	
Contractor	:	Tesla-10 Pty Ltd	
Instrument	:	SIROTEM Mk3 receiver. SATX crystal synchronized transmitter	
Loop size/configuration	:	100 x 100 & 200 x 200 metres/moving	(profiling)
Base Frequency	:	Composite times, N = 30	
Receiver spacing/components	:	50 m / Z only	(profiling)
	:	200 m / Z only	(sounding)
Date	:	September - November 1993	
Duration	:	22 days production, 7 days standby	
Coverage	:	3 sites, 3 lines per site (MY5)	(profiling)
	:	9 loops per site. Both in- and out-of-loop readings (MY27)	(sounding)
Totals	:	10.5 line km	(profiling)
	:	36 soundings	(sounding)

MY5:

The airborne anomaly at MY5 would appear to be a surficial feature following interpretation of the ground TEM data. Quantitative analysis indicates the possibility of a deep (+200m) weakly conductive layer in the western part of lines 9700N and 10100N.

MY27:

Anomaly MY27 is a strong, shallowly buried QUESTEM feature located in an area of no exposure. Ground TEM indicates a conductive source possibly in the cover sequence, of approximate 10 siemens conductance. There is no suggestion of an enhanced thickening of conductive sediments at MY27 as would be expected in a sub-basin.

3.1.4 PROTEM Soundings

A grid based programme of TEM soundings was carried out over the eastern parts of ELs 7261 and 7262 to investigate the possibility of conductive shale basins within the Emu Fault zone. Twelve soundings were completed on the relinquished tenement area, all on EL 7261. Survey logistics are summarised in Table 5. The soundings locations are presented in Table 6 and shown in Figure 9. The data are presented as graphs of apparent resistivity vs time in Appendix 2. No bedrock conductors indicative of mineralised sub-basins were identified.

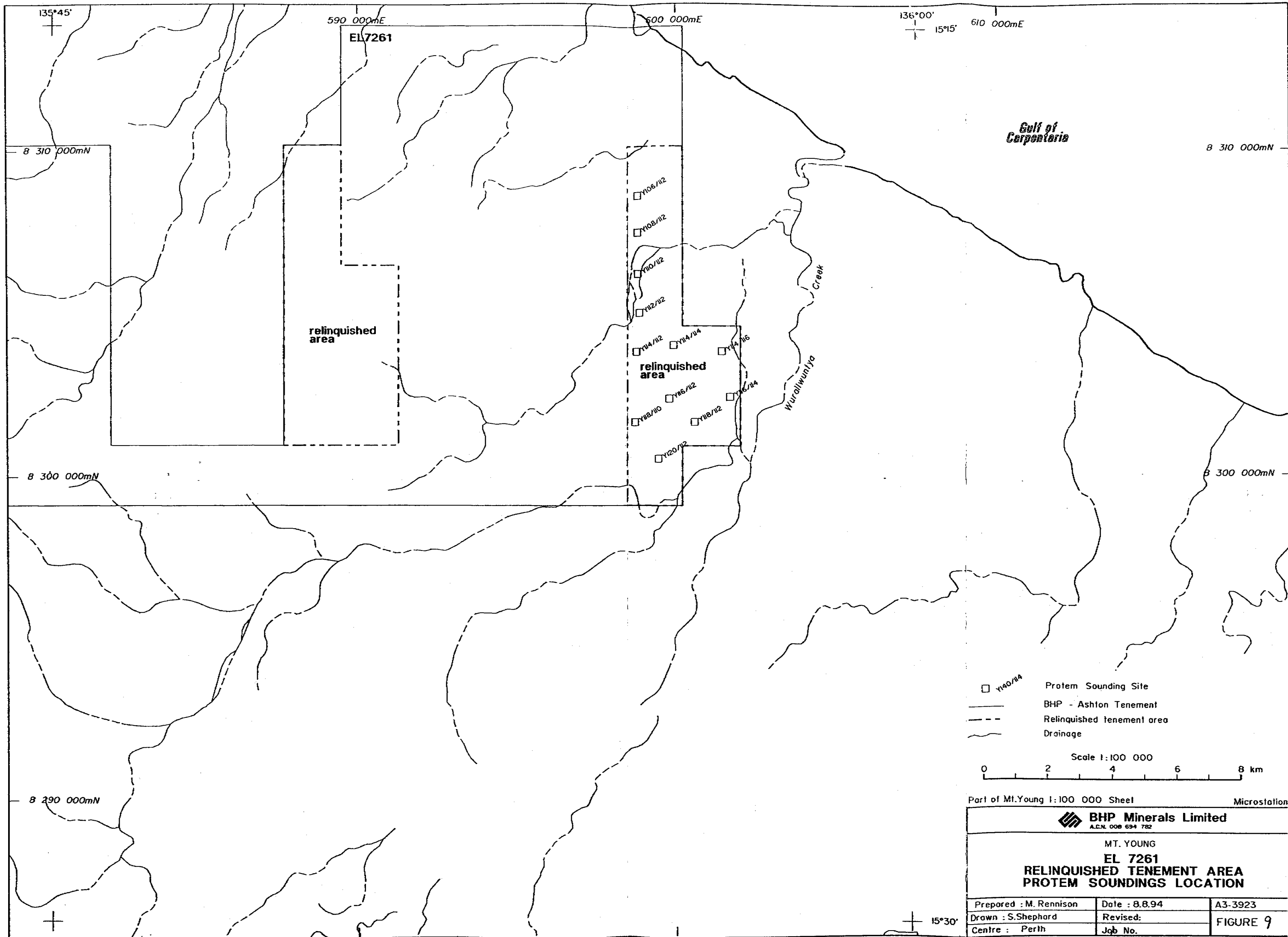
TABLE 5
PROTEM SOUNDINGS SURVEY LOGISTICS

EL	:	7261, 7262
Contractor	:	Geoterrex Pty Ltd
Instrument	:	PROTEM receiver. TEM 37 transmitter
Loop size/configuration	:	300 x 300 m/fixed diamond shaped
Base Frequency	:	25, 6.25 Hz. N = 20
Receiver spacing/components	:	300 m / Z only
Date	:	October 1993
Duration	:	18 days production, 2 days standby
Coverage	:	20 E-W lines (Y100-140) comprising 2-7 soundings. Both in- and out-of-loop readings.
Totals	:	94 soundings

TABLE 6

PROTEM SOUNDING LOCATIONS

Site Number	Easting	Northing	Tenement
Y106/112	598750	8308600	7261
Y108/112	598750	8307470	7261
Y110/112	598750	8306200	7261
Y112/112	598800	8305000	7261
Y114/112	598700	8303800	7261
Y114/114	599900	8304000	7261
Y114/116	601400	8303800	7261
Y116/112	599750	8302350	7261
Y116/114	601650	8302400	7261
Y118/110	598650	8301630	7261
Y118/112	600550	8301630	7261
Y120/112	599400	8300500	7261



3.2 Geochemistry

All samples were analysed by Assaycorp Pty Ltd, Pine Creek, Northern Territory. Stream sediment samples were analysed for Cu, Pb, Zn, Fe, Mn, As, Au, Ag and Tl. Soil and rock samples were analysed for Cu, Pb, Zn, Fe, Mn, As and Ag. Rock samples were crushed to -80#. Laboratory procedures and analytical results are presented in Appendix 3.

3.2.1 Stream Sediment Sampling

A total of 84 stream sediment samples were collected from the relinquished tenement areas, 10 on EL 7261, 23 on EL 7262, 20 on EL 7263 and 31 on EL 7264. The sampling was conducted as part of two regional surveys, Yiyintyi and Limmen Bight. Survey details are given in Table 7. Sample locations are shown on Plate 3.

**TABLE 7.
STREAM SEDIMENT SAMPLING DETAILS**

Survey	Mesh Size	Prefix
Yiyintyi	-80#	DV
Yiyintyi	+80# -2mm	DV
Yiyintyi	+2mm -4mm	DV
Limmen Bight	-80# (seived in lab to -150#)	DU
Limmen Bight	+20# -2mm	DU
Limmen Bight	+20# -2mm	DJ

Sample spacing was approximately 1-2 samples per square kilometre dependent upon drainage density. All samples were collected with helicopter assistance. The helicopter was contracted from Helimuster, Victoria River Downs, Northern Territory.

3.2.2 Threshold Value Calculations

It was concluded that the best anomaly contrast and definition occurred in the +20# -2mm size fraction for the Limmen Bight survey and the +80# -2mm size fraction for the Yiyintyi survey.

For the Yiyintyi survey, the threshold values calculated were 16 ppm Cu, 25 ppm Pb and 6 ppm Zn. The Limmen Bight survey threshold values were 40 ppm Cu, 45 ppm Pb and 30 ppm Zn.

3.2.3 Results

Yiyintyi

Isolated weak single point anomalies were returned from the Yiyintyi survey over the relinquished tenement areas. Peak values are 132 ppm Cu, 67 ppm Pb and 20 ppm Zn. Results were not considered worthy of follow-up.

Limmen Bight Survey

An area of elevated geochemistry was delineated on the relinquished portion of EL 7264, centred on 541000E, 8265000N covering approximately 7km². Balbarini Dolomite and Undifferentiated McArthur Group sediments outcrop in the area. Follow-up in 1994 consisted of soil and rock sampling (see Section 3.2.4).

Another area located at the northern end of the Mantungula Fault on the relinquished portion of EL 7262 displays weak copper anomalism. The area is centred on 531000E, 8287000N and drains outcropping Balbarini Dolomite and Mainoru Formation. Results were not considered worthy of follow-up.

3.2.4 Soil Sampling

A total of 16 line kilometres of helicopter assisted soil sampling was completed on EL 7264 centred on 541000E 8264000N. Three east-west traverses were completed to follow-up anomalous Open File rock chip results and anomalous BHP stream sediment samples. Sixty-nine soil and ten rock samples were collected (Plate 4).

Approximately 150 grams of the -2mm and -80# size fractions were collected from a depth of 0.1 metres at each site. Only the -80# size fraction was submitted for analysis.

The traverses covered an area of Balbarini Dolomite, Smythe Sandstone, mara Dolomite and areas of undifferentiated McArthur Group sediments. Most of the outcrop is highly siliceous presumably related to weathering processes.

No fault breccias or zones of mineralisation were noted on the traverses. A small area of barite veining was noted on the southern traverse at 539300E, 8261050N.

Analytical results for the soil samples were generally low with peak values of 74 ppm Cu, 33 ppm Pb and 68 ppm Zn.

Ten rock samples were collected along the soil sample traverses. Several rock samples of weathered ferruginous and manganiferous siliceous dolomite returned zinc values up to 1150 ppm.

3.2.5 RC Drill Hole Sampling

Bottom of hole geochemical samples of Proterozoic basement were collected from ten RC holes drilled on the relinquished tenement area as part of the manganese exploration. Analytical results are reported in Appendix 3. There were no anomalous results.

MANGANESE

3.3 Geophysics

Manganese is known to be conductive (eg. manganese dioxides used in batteries) so the airborne TEM survey data was examined for anomalies possibly caused by manganese. Modelling was carried out to see whether the conductive zones appeared to be shallow and flat-lying, both desirable characteristics for a Mn deposit.

Five airborne TEM anomalies in the now relinquished portions of the tenements were tested with RC drill holes. Anomaly, drilling and interpretation details are presented in Table 8.

TABLE 8.
AIRBORNE TEM ANOMALIES TESTED BY RC DRILLING

Anomaly	Easting	Northing	Flight Line	FID	Tested by Hole, Comments
MYQ22	572989	8291856	10780	4382	YER8/9, pyritic black shale
MYQ35	543356	8307600	10620	6441	TRR82, not explained
MYQ37	547036	8309240	10610	5656	TRR90, not explained
MYQ38	545716	8310760	10590	4199	TRR86, pyritic black shale
MYQ39	544716	8312840	10570	2799	TRR88, not tested, mislocated

3.4 RC Drilling

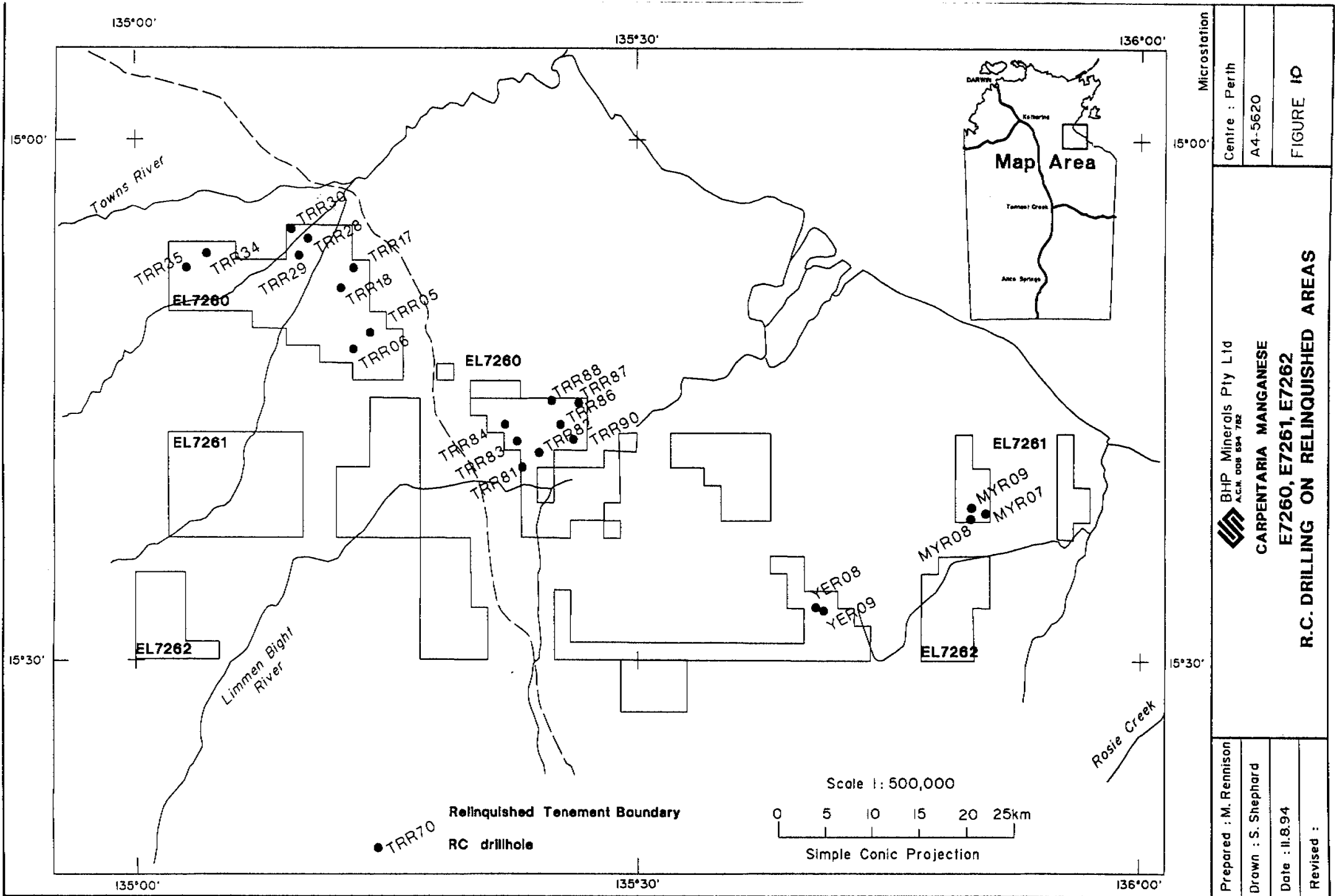
A total of 22 RC holes totalling 860 metres was drilled on the relinquished tenement areas. Five tested TEM targets and seventeen were drilled on an approximate 6 x 3 kilometre grid to test the Cretaceous rocks away from the TEM anomalies. Hole details are presented in Table 9 and locations are shown on Figure 10. Both text and summary pictorial logs are presented in Appendix 4.

Gaden Drilling of Batchelor, Northern Territory, carried out the drilling using a UDR-650 rig. Sampling and logging were carried out in two metre intervals. A number of the holes were gamma ray logged although other than to highlight clay bands this was of little use. Holes were drilled into the Proterozoic in order to be certain of fully penetrating the Cretaceous rocks and to provide samples of the Proterozoic for base metal geochemical data.

Determinations between Cretaceous and Proterozoic geology by drill chip logging is difficult, especially when drilling well away from stratigraphic diamond holes drilled during the 1992 field season. The idealised post-Proterozoic stratigraphy, as determined from diamond drilling, is shown in Table 10. This was used as a guide in logging, however lateral facies variations are thought to account for difficulties in correlations.

TABLE 9**RC DRILLING HOLE LOCATIONS AND DEPTHS**

Tenement	Hole	East	North	Depth
EL 7260	TRR05	525113	8320913	58
EL 7260	TRR06	523350	8319132	46
EL 7260	TRR17	523377	8327858	58
EL 7260	TRR18	522024	8325727	56
EL 7260	TRR28	518454	8330989	52
EL 7260	TRR29	517510	8329200	22
EL 7260	TRR30	516674	8331991	28
EL 7260	TRR34	507644	8329411	16
EL 7260	TRR35	505508	8327884	10
EL 7261	MYR07	590830	8301800	40
EL 7261	MYR08	589270	8301240	28
EL 7261	MYR09	589370	8302400	16
EL 7261	TRR81	541395	8306613	34
EL 7261	TRR82	543176	8308164	22
EL 7261	TRR83	540822	8309380	40
EL 7261	TRR84	539537	8311162	40
EL 7261	TRR86	545475	8311162	70
EL 7261	TRR87	547446	8313465	16
EL 7261	TRR88	544538	8313702	58
EL 7261	TRR90	546860	8309577	22
EL 7262	YER08	572800	8291860	58
EL 7262	YER09	573640	8291500	70



Microstation		 BHP Minerals Pty Ltd A.C.N. 008 634 762 CARPENTARIA MANGANESE E7260, E7261, E7262 R.C. DRILLING ON RELINQUISHED AREAS
Centre : Perth		
A4-5620		
FIGURE 10		
Prepared : M. Rennison		
Drawn : S. Shephard		
Date : 11.8.94		
Revised :		

TABLE 10.
IDEALISED POST-PROTEROZOIC STRATIGRAPHY, TOWNS RIVER AREA

Age - Unit	Description
Recent	Aeolian and shallow marine sands, local Pliocene Limestone
Tertiary	Nodular to pisolitic laterite and ferruginous sands
Cretaceous Unit 1	Buff sands, possibly a prograding sand barrier
Cretaceous Unit 2	Cyclic sandy/calcareous beds, with oolites, algal mats, black silts
Cretaceous Unit 3	Sub-aerially exposed mudstone/siltstone.

No manganese mineralisation was intersected. Samples of the Proterozoic rocks were collected and assayed, and are reported in section 3.2.1.

4.0 EXPLORATION EXPENDITURE

Exploration expenditure for the period 24th May, 1993 to 23rd May, 1994 amounted to \$ 313,856. A detailed breakdown is given in Appendix 5.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Diamond Exploration

Results, from the thirty-seven stream samples tested, were discouraging. Only one sample returned a positive result, containing one microdiamond. No indicator minerals were recovered. Despite the recovery of a macrodiamond in the bulk sample, it was decided that further work was not warranted in these areas, and partial relinquishment was recommended.

5.2 BHPM Exploration

Ground EM follow-up of two airborne EM anomalies for base metals indicated both features are surficial conductors not worthy of further work.

PROTEM soundings did not identify bedrock conductors.

Results of the Yiyinity stream sediment survey were generally poor with only single point low order anomalies returned. No follow-up work is recommended as a result of this survey.

Soil sampling over an area of elevated base metals in stream sediments on EL 7264 returned generally poor results. No further work is recommended.

No manganese mineralisation was intersected.

APPENDIX 1

Sample Results

**RESULTS FOR EXPLORATION LICENCE 7260
RELINQUISHMENT AREA**

SAMPLE	RESULT	TYPE	GRID	DIAMOND		CHROMITE	OTHER
				MICRO	MACRO		
MYO00417	neg	G	-	-	-	-	-
MYO00429	neg	G	-	-	-	-	-
MYO00433	neg	G	-	-	-	-	-
MYO00440	neg	G	-	-	-	-	-
MYO00443	neg	G	-	-	-	-	-
MYO00451	neg	G	-	-	-	-	-
MYO00454	neg	G	-	-	-	-	-
MYO00455	neg	G	-	-	-	-	-
MYO00458	neg	G	-	-	-	-	-
MYO00459	neg	G	-	-	-	-	-

SAMPLE METHODS/TYPES

G = Gravel

L = Loam

R = Rock

P = Pit

BG = Bulk gravel

BL = Bulk loam

BT = Bulk trench

TR = Trench/costean

LG = Loam on grid

L PF = Loam on photofeature

DS = Drill spoil

**RESULTS FOR EXPLORATION LICENCE 7261
RELINQUISHMENT AREA**

SAMPLE	RESULT	TYPE	GRID	DIAMOND		CHROMITE	OTHER
				MICRO	MACRO		
MYO00245	neg	G	-	-	-	-	-
MYO00247	neg	G	-	-	-	-	-
MYO00248	neg	G	-	-	-	-	-
MYO00249	neg	G	-	-	-	-	-
MYO00259	neg	G	-	-	-	-	-
MYO00262	neg	G	-	-	-	-	-
MYO00277	neg	G	-	-	-	-	-
MYO00301	neg	G	-	-	-	-	-
MYO00423	POS	G	-	1	-	-	-
MYO00426	neg	G	-	-	-	-	-
MYO00427	neg	G	-	-	-	-	-
MYO00428	neg	G	-	-	-	-	-
MYO00431	neg	G	-	-	-	-	-

SAMPLE METHODS/TYPES

G = Gravel

L = Loam

R = Rock

P = Pit

BG = Bulk gravel

BL = Bulk loam

BT = Bulk trench

TR = Trench/costean

LG = Loam on grid

L PF = Loam on photofeature

DS = Drill spoil

**RESULTS FOR EXPLORATION LICENCE 7262
RELINQUISHMENT AREA**

SAMPLE	RESULT	TYPE	GRID	DIAMOND		CHROMITE	OTHER
				MICRO	MACRO		
MYO00241	neg	G	-	-	-	-	-
MYO00266	neg	G	-	-	-	-	-
MYO00267	neg	G	-	-	-	-	-
MYO00283	neg	G	-	-	-	-	-
MYO00418	neg	G	-	-	-	-	-
MYO00419	neg	G	-	-	-	-	-
MYO00420	neg	G	-	-	-	-	-

SAMPLE METHODS/TYPES

G = Gravel	BG = Bulk gravel	LG = Loam on grid
L = Loam	BL = Bulk loam	L PF = Loam on photofeature
R = Rock	BT = Bulk trench	DS = Drill spoil
P = Pit	TR = Trench/costean	

**RESULTS FOR EXPLORATION LICENCE 7263
RELINQUISHMENT AREA**

SAMPLE	RESULT	TYPE	GRID	DIAMOND		CHROMITE	OTHER
				MICRO	MACRO		
MYO00203	neg	G	-	-	-	-	-
MYO00214	neg	G	-	-	-	-	-
MYO00215	neg	G	-	-	-	-	-

SAMPLE METHODS/TYPES

G = Gravel	BG = Bulk gravel	LG = Loam on grid
L = Loam	BL = Bulk loam	L PF = Loam on photofeature
R = Rock	BT = Bulk trench	DS = Drill spoil
P = Pit	TR = Trench/costean	

**RESULTS FOR EXPLORATION LICENCE 7264
RELINQUISHMENT AREA**

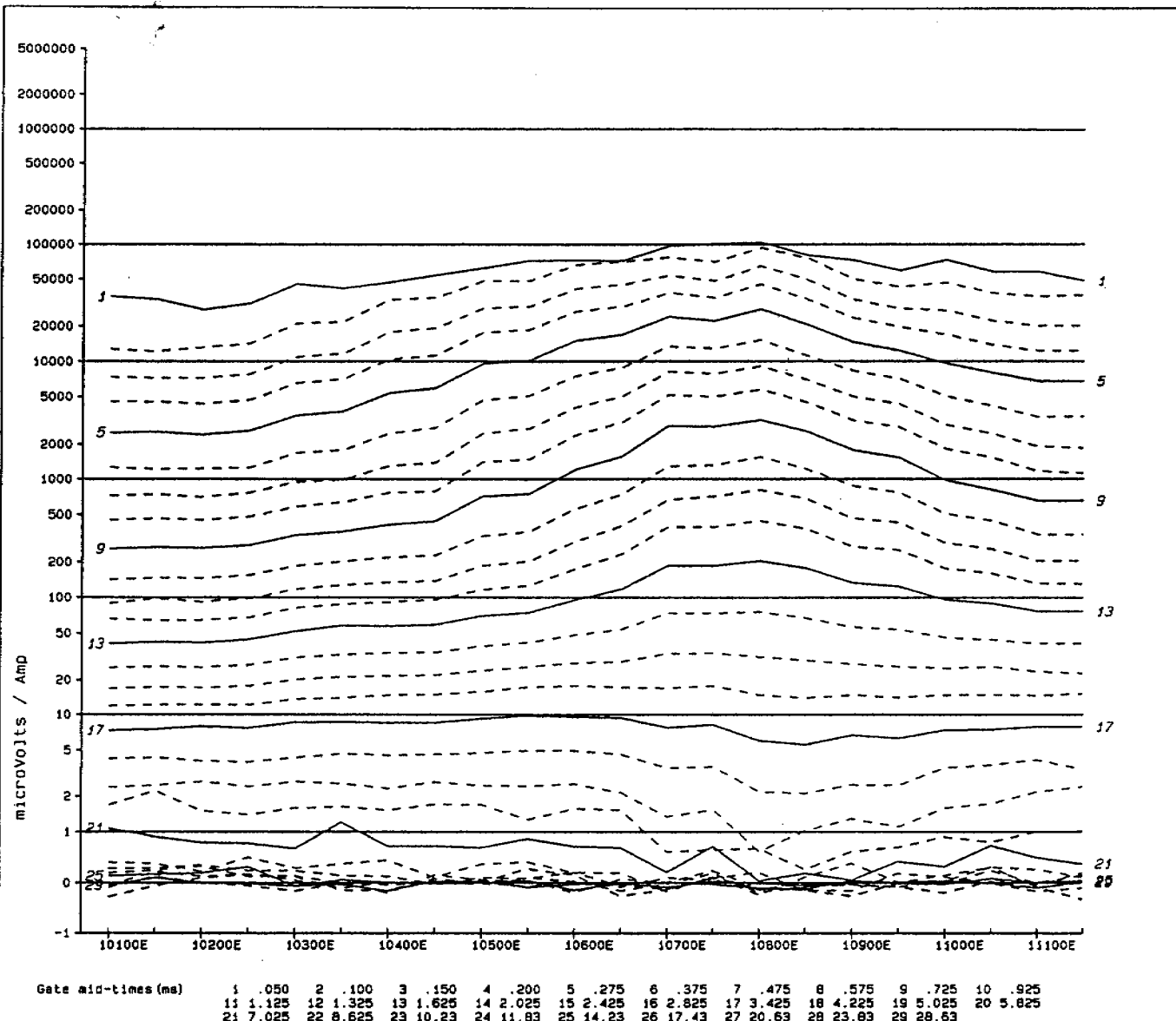
SAMPLE	RESULT	TYPE	GRID	DIAMOND		CHROMITE	OTHER
				MICRO	MACRO		
MYO00195	neg	G	-	-	-	-	-
MYO00200	neg	G	-	-	-	-	-
MYO00201	neg	G	-	-	-	-	-
MYO00478	POS	BG	-	-	1*	-	-

SAMPLE METHODS/TYPES

G = Gravel	BG = Bulk gravel	LG = Loam on grid
L = Loam	BL = Bulk loam	L PF = Loam on photofeature
R = Rock	BT = Bulk trench	DS = Drill spoil
P = Pit	TR = Trench/costean	

* Weight: 0.05 carats

APPENDIX 2.
Geophysical Data



CURRENT : 4.3 Amps

RAMP : .255 ms

DELAY : .245 ms

LOGARITHMIC PROFILES

200m X 200m TRANSMITTER LOOP

COMPOSITE TIME SERIES
SIROTEM MARK 3 RECEIVER

TESLA-10 PTY. LTD.

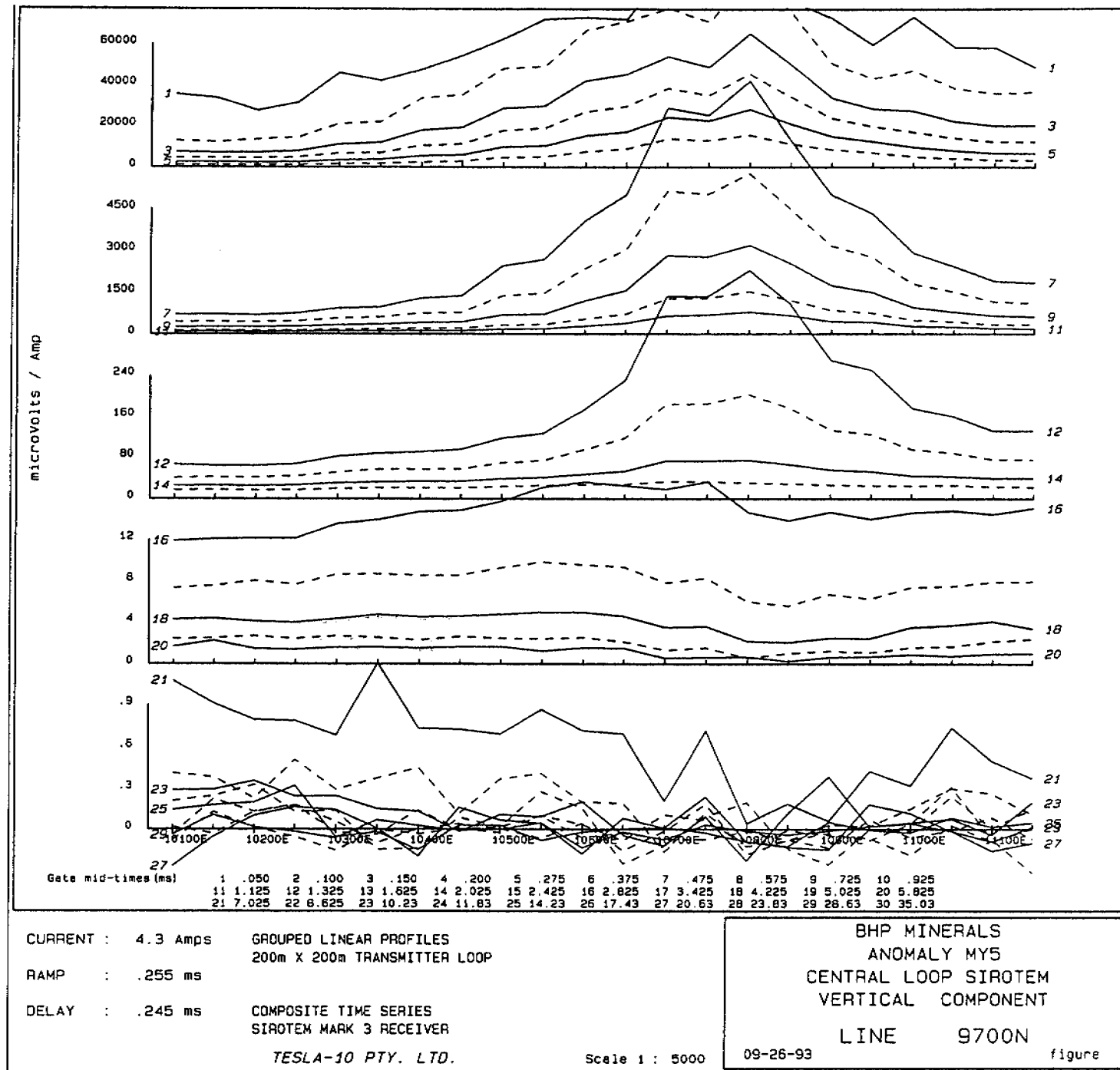
Scale 1 : 5000

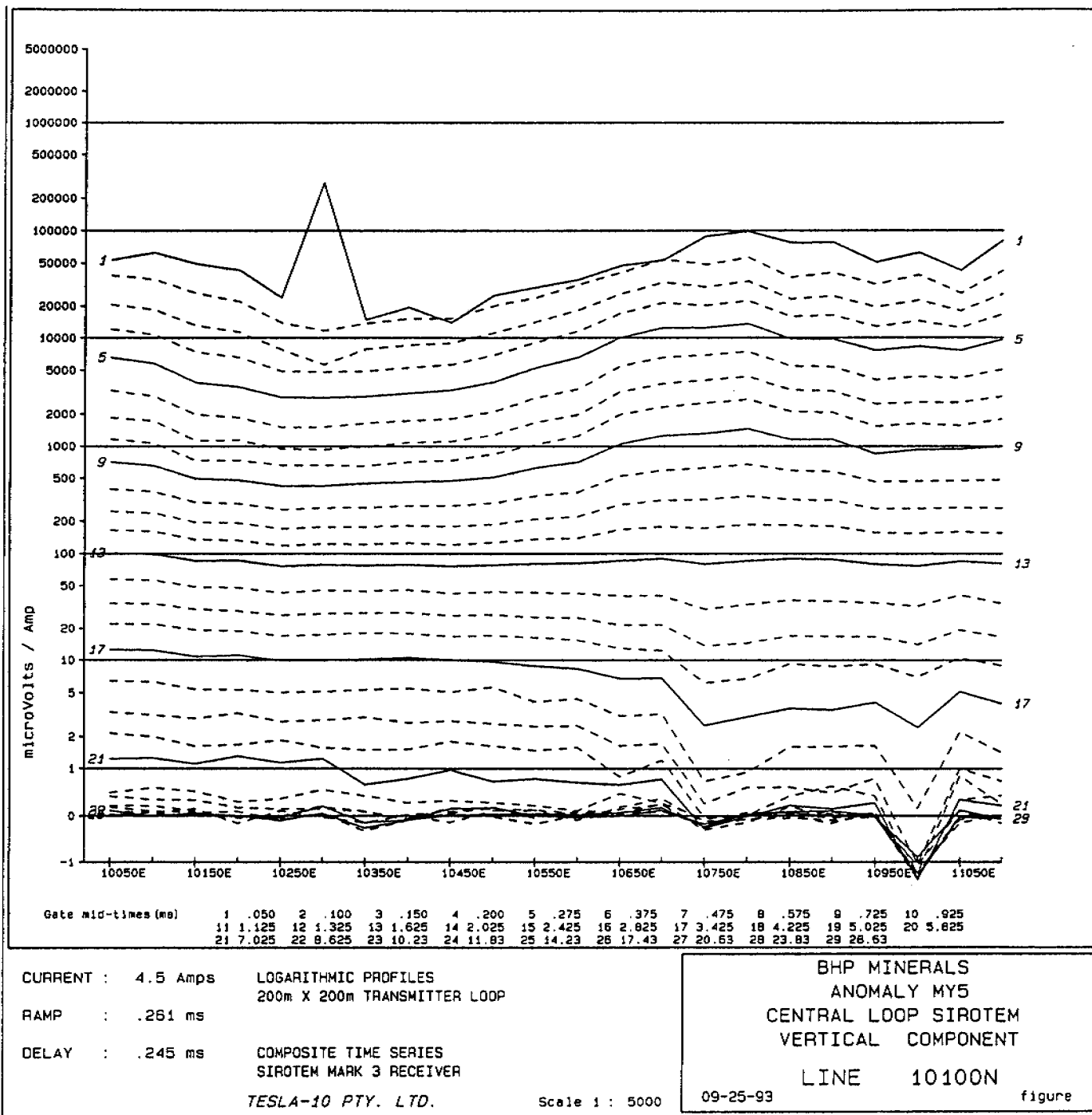
BHP MINERALS
ANOMALY MY5
CENTRAL LOOP SIROTEM
VERTICAL COMPONENT

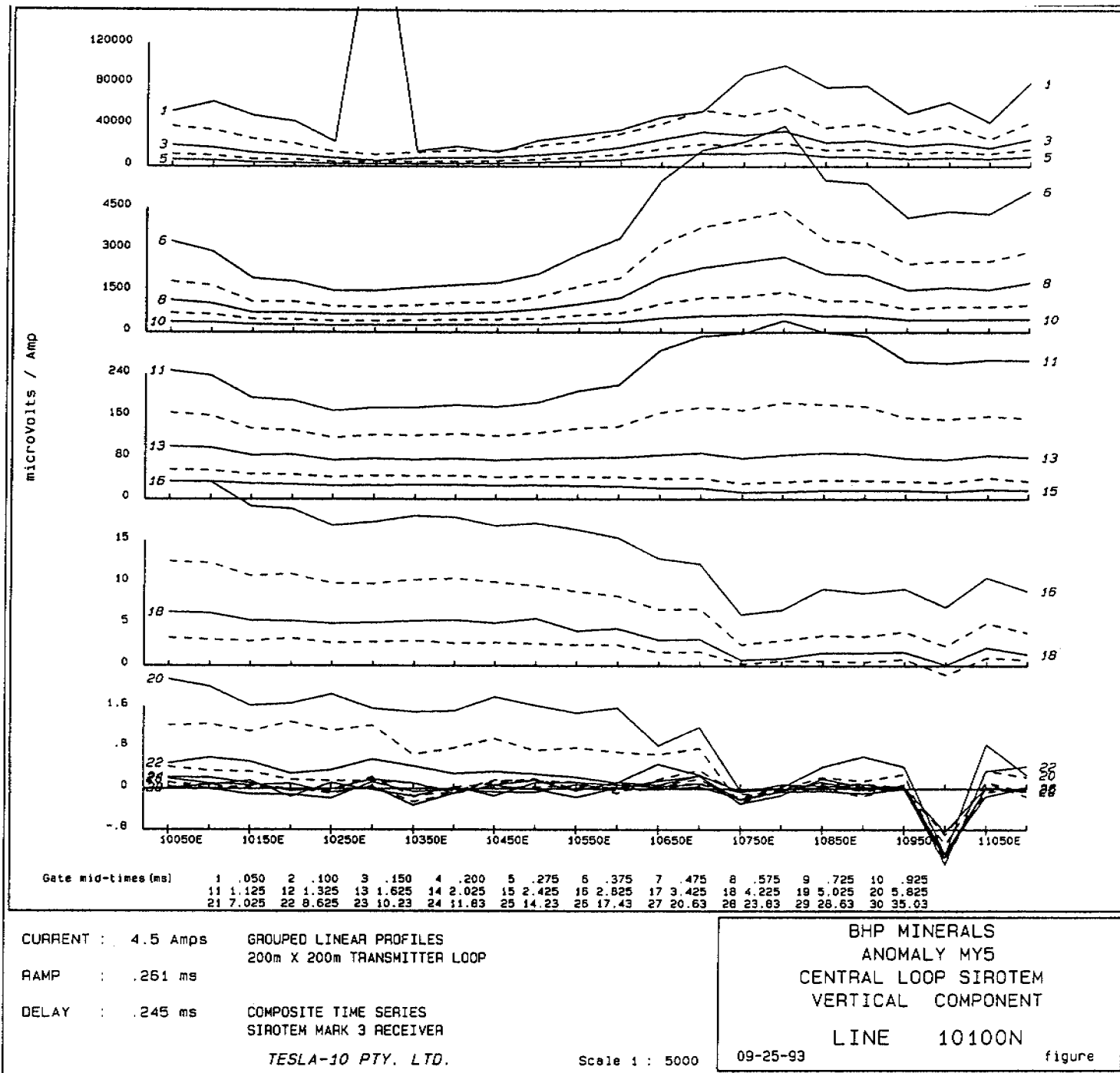
LINE 9700N

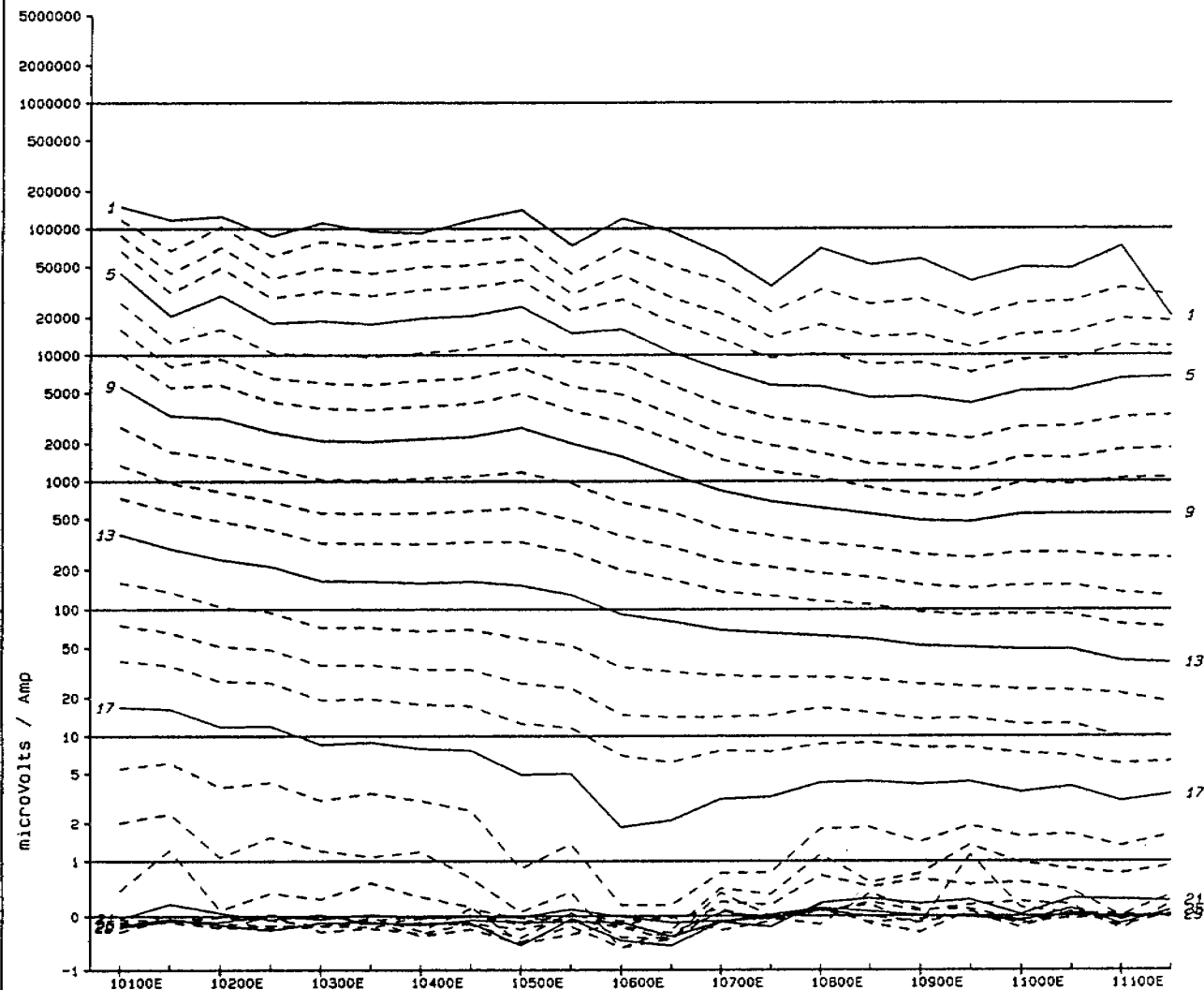
09-26-93

figure









Gate mid-times (ms)	1	2	3	4	5	6	7	8	9	10
	.050	.100	.150	.200	.275	.375	.475	.575	.725	.925
	11	1.125	12	1.325	13	1.625	14	2.025	15	2.425
	16	2.825	17	3.425	18	4.225	19	5.025	20	5.825
	21	7.025	22	8.625	23	10.23	24	11.63	25	14.23
	26	17.43	27	20.63	28	23.83	29	28.63		

CURRENT : 4.4 Amps

RAMP : .247 ms

DELAY : .245 ms

LOGARITHMIC PROFILES
200m X 200m TRANSMITTER LOOP

COMPOSITE TIME SERIES
SIROTEM MARK 3 RECEIVER

TESLA-10 PTY. LTD.

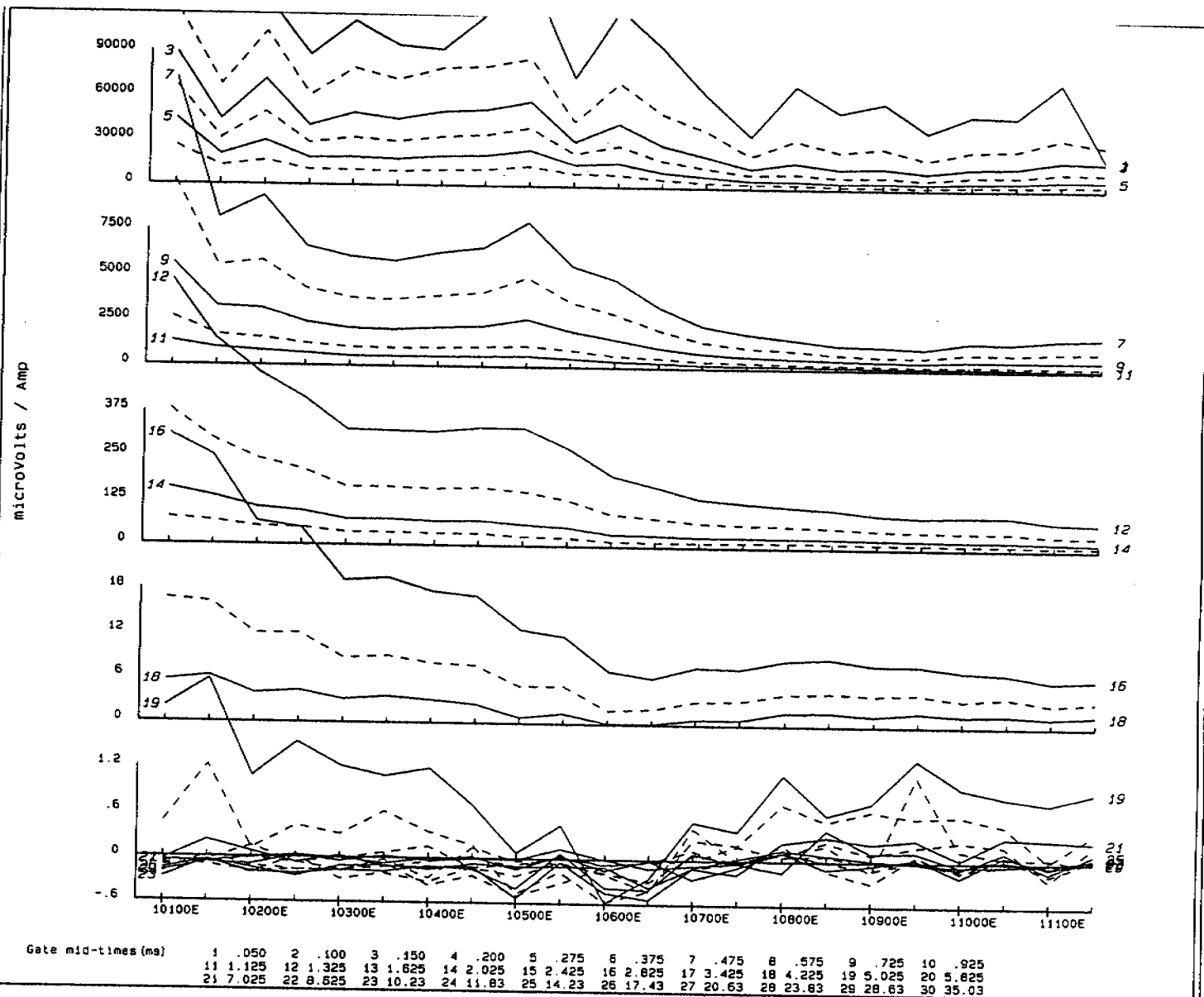
Scale 1 : 5000

BHP MINERALS
ANOMALY MYS
CENTRAL LOOP SIROTEM
VERTICAL COMPONENT

LINE 10500N

09-24-93

figure



CURRENT : 4.4 Amps

RAMP : .247 ms

DELAY : .245 ms

GROUPED LINEAR PROFILES
200m X 200m TRANSMITTER LOOP

COMPOSITE TIME SERIES
SIROTEM MARK 3 RECEIVER

TESLA-10 PTY. LTD.

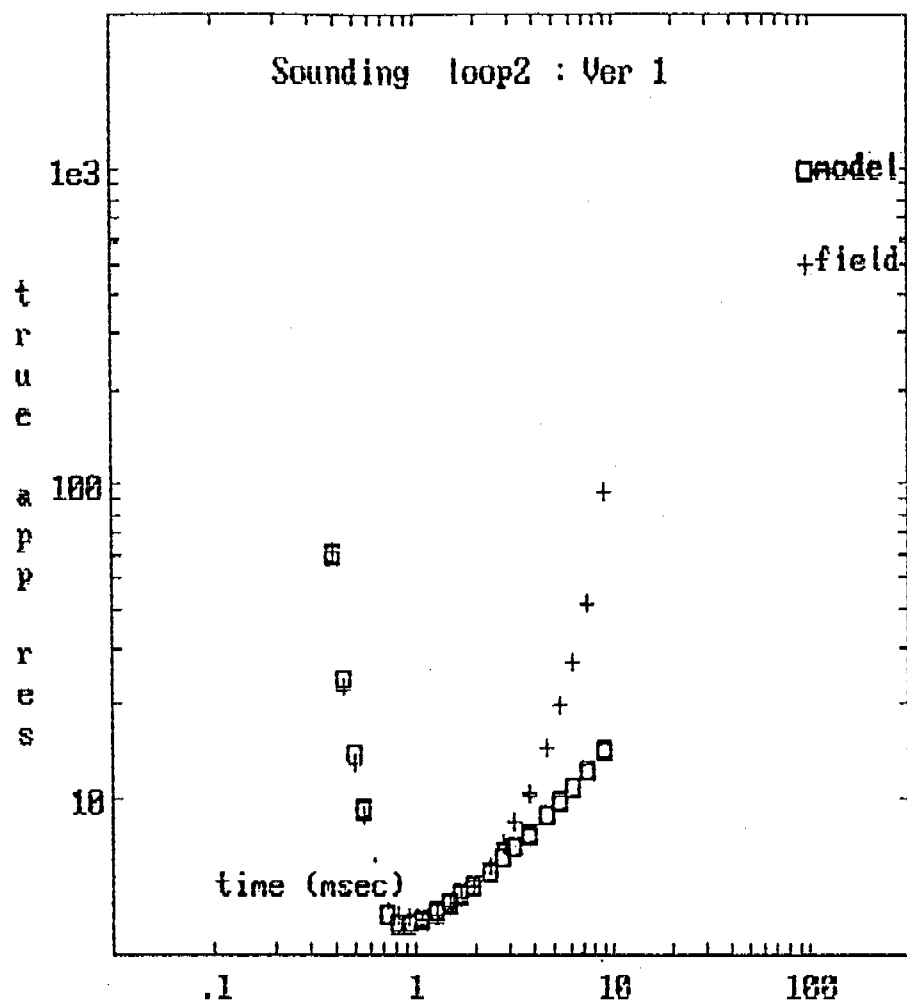
BHP MINERALS
ANOMALY MYS
CENTRAL LOOP SIROTEM
VERTICAL COMPONENT

LINE 10500N

Scale 1 : 5000

09-24-93

figure



SOUNDING: loop2 : Vers 1
 Site MY27 : 9700N . 11000E.

~~(192 ohm.m)~~	~~* 9.1 m.~~	9.1 m.
* 3.1 ohm.m	* 38.9 m.	
		* 47.8 m.
(198 ohm.m)		

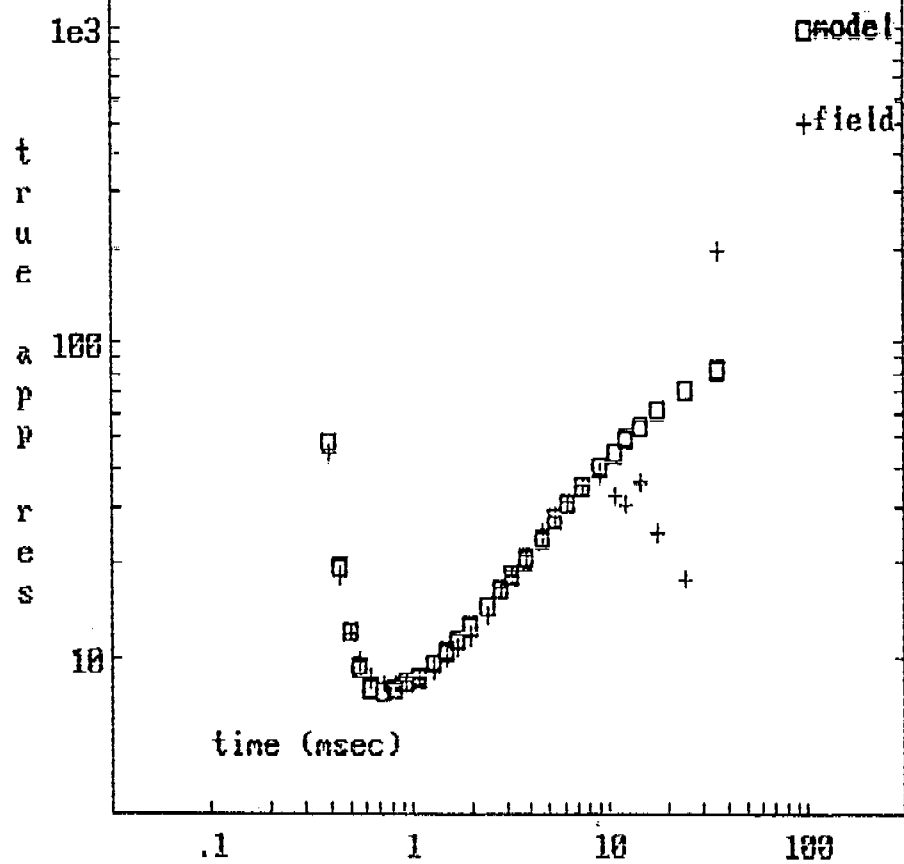
10002A1

~~(192)~~
* 3.1
(196)

STD ERR= 2.8% : S= 12 S

E= 3%
 S= 125

Sounding loop3 : Ver 1



SOUNDING: loop3 : Vers 1
Site MY27 : 9700N . 11900E.

(291.4 ohm.m) (19.8 m) 38.8 m.

(441 ohm.m) 446 m.

(119 ohm.m) (481 m.)

STD ERR= 4.5% : S= 8 S

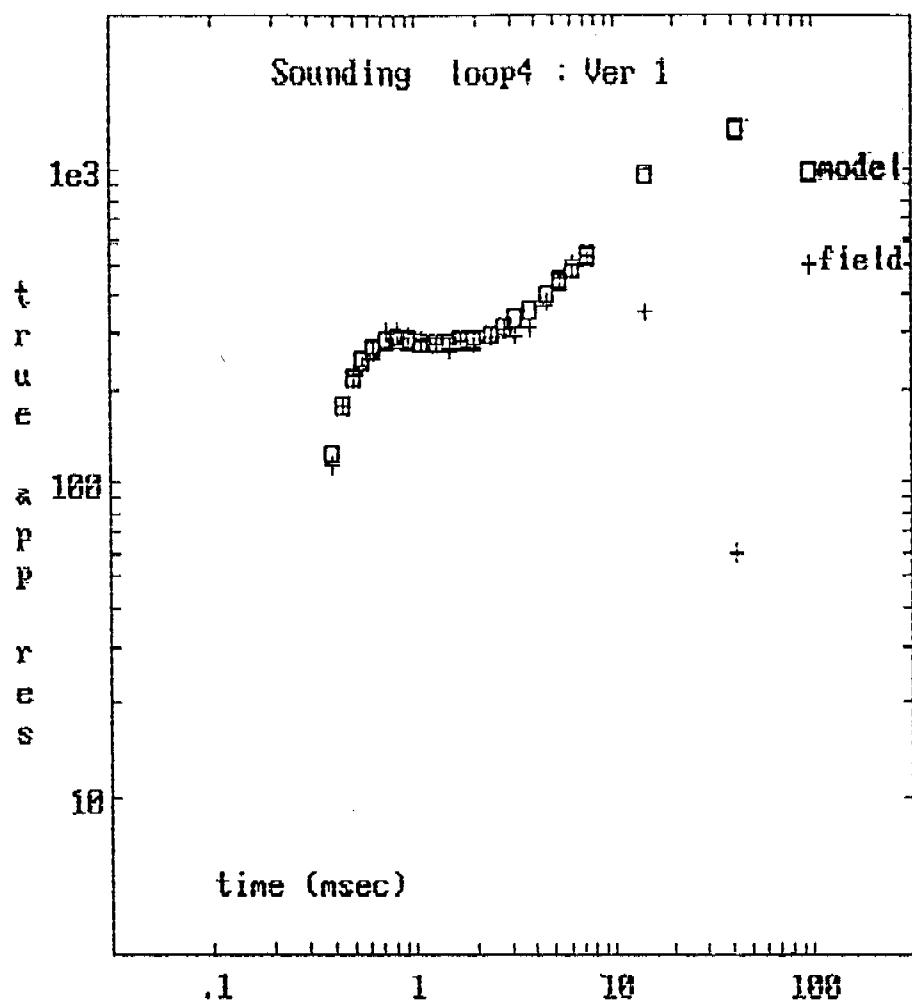
100001

(291.4)

(441)

(119)

E= 4%
S= 85



SOUNDING: loop4 : Vers 1
 Site MY27 : 10100N, 10100E.

loop4A1

* 141 ohm.m * 84.2 m.

 84.2 m.

* 141

(2662 ohm.m) * 298 m.

(2662)

24.0 ohm.m 33.1 m. * 382 m.

 *** ohm.m * 415 m.

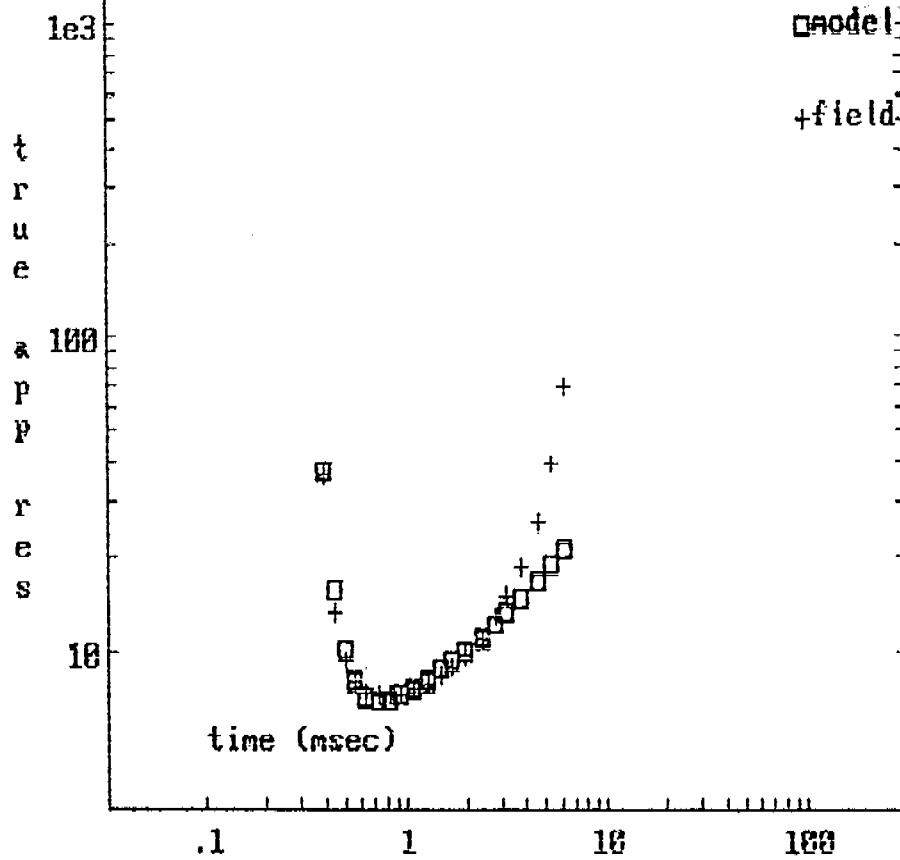
24.0

E= 4%

S= 25

STD ERR- 4.2% : S- 2 S

Sounding loop5 : Ver 1



SOUNDING: loop5 : Vers 1
 Site MY27 : 10100N, 11000E.

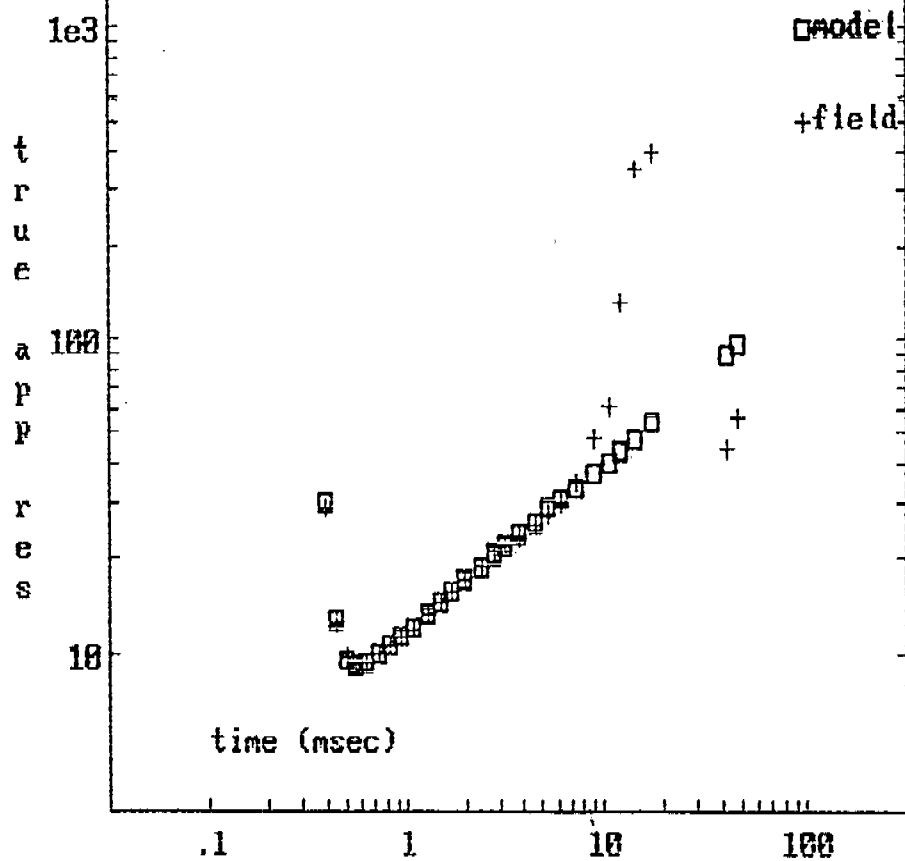
~~(239 ohm.m)~~	~~* 6.8 m~~	6.8 m.
* 6.2 ohm.m	* 53.0 m.	
		* 59.8 m.
253 ohm.m		

loop5A1
~~(239)~~
 * 6.2
 253

STD ERR= 9.5% : S= 9 S

E= 4%
 S= 85

Sounding loop6 : Ver 1



SOUNDING: loop6 : Vers 1
 Site MY27 : 10100N, 11900E.

~~(249 ohm.m) * 9.0 m 9.0 m.~~
~~* 7.0 ohm.m * 37.4 m.~~
~~* 46.5 m.~~

(170 ohm.m) (89.1 m.)
 _____ 136 m.

48.9 ohm.m 171 m.

_____ 306 m.
 (266 ohm.m)

STD ERR= 2.6% : S= 9 S

loop6A1

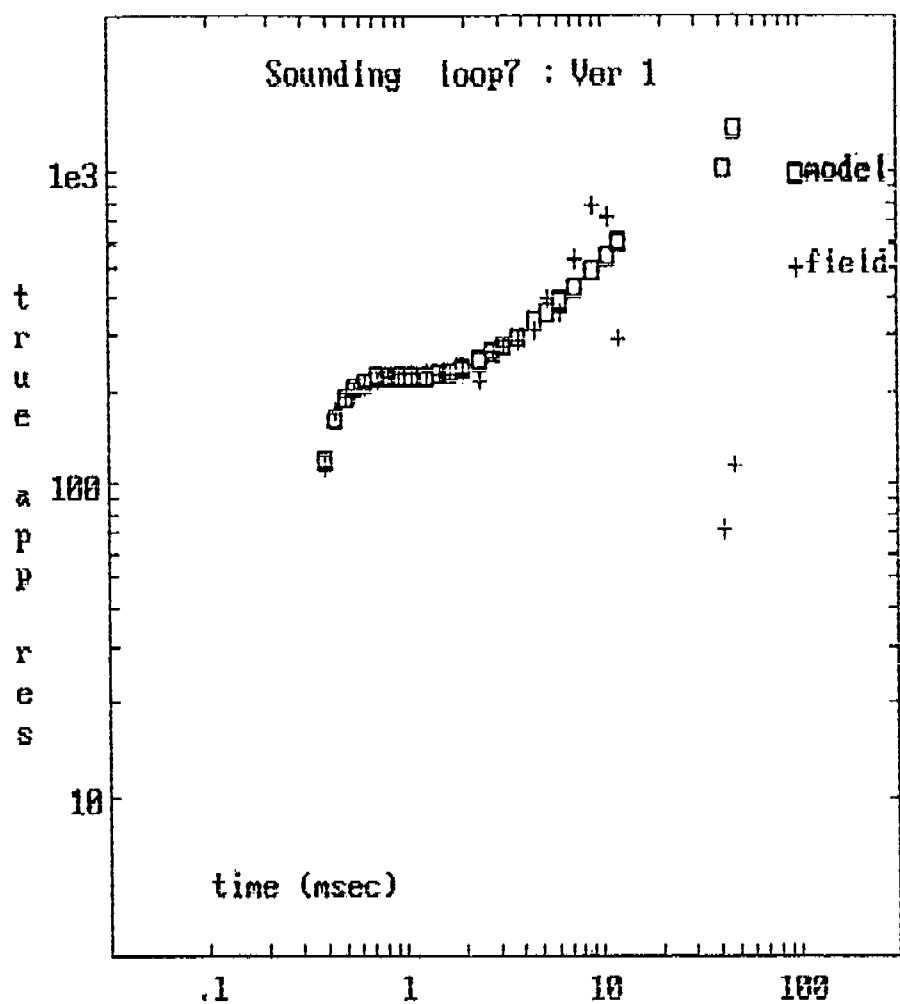
~~(249)~~
~~* 7.0~~

(170)

48.9

(266)

E= 3%
 S= 85



SOUNDING: loop7 : Vers 1
Site MY27 10500N, 10100E.

10007A1

* 134 ohm.m * 73.7 m.

* 134

* 73.7 m.

512 ohm.m * 208 m.

512

* 282 m.

121 ohm.m 136 m.

121

* 438 m.

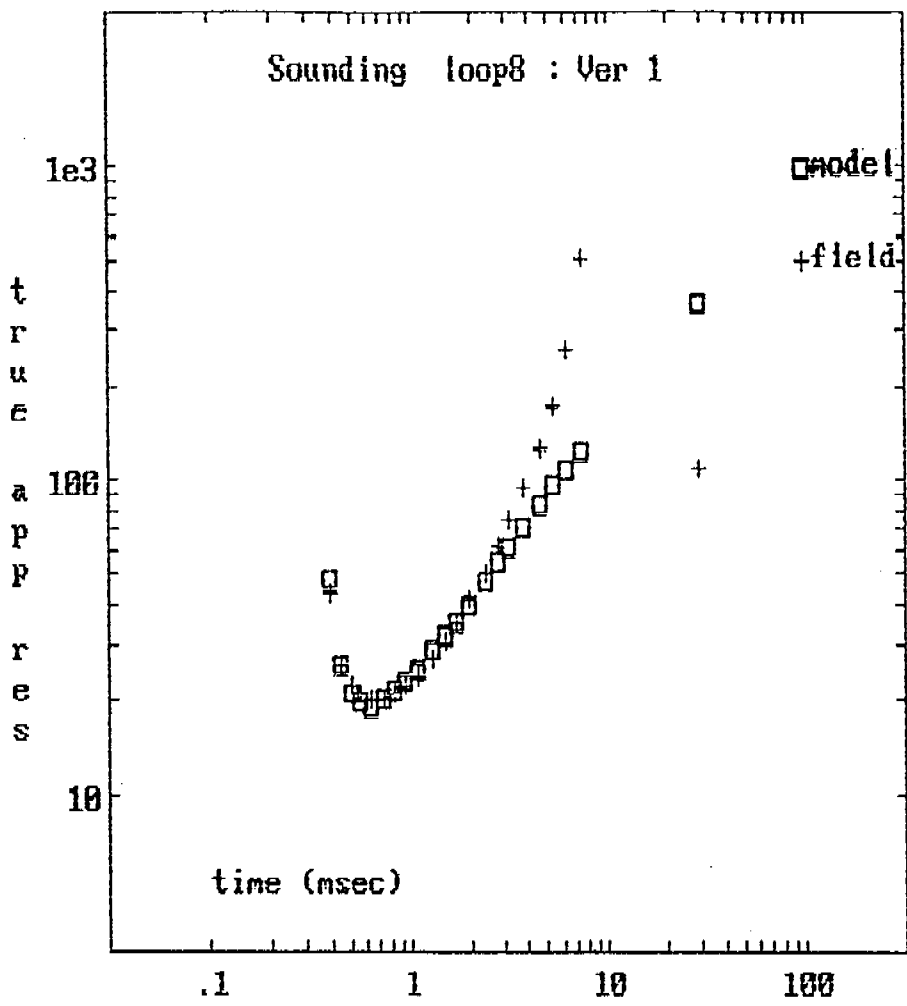
(4427 ohm.m)

(4427)

E= 5%

S= 2S

STD ERR= 5.4% : S= 2 S



SOUNDING: loop8 : Vers 1
 Site MY27 : 10500N, 11000E.

* 271 ohm.m	* 33.2 m.
~~1.7 ohm.m~~	~~0.8 m~~ * 33.2 m.
(1248 ohm.m)	

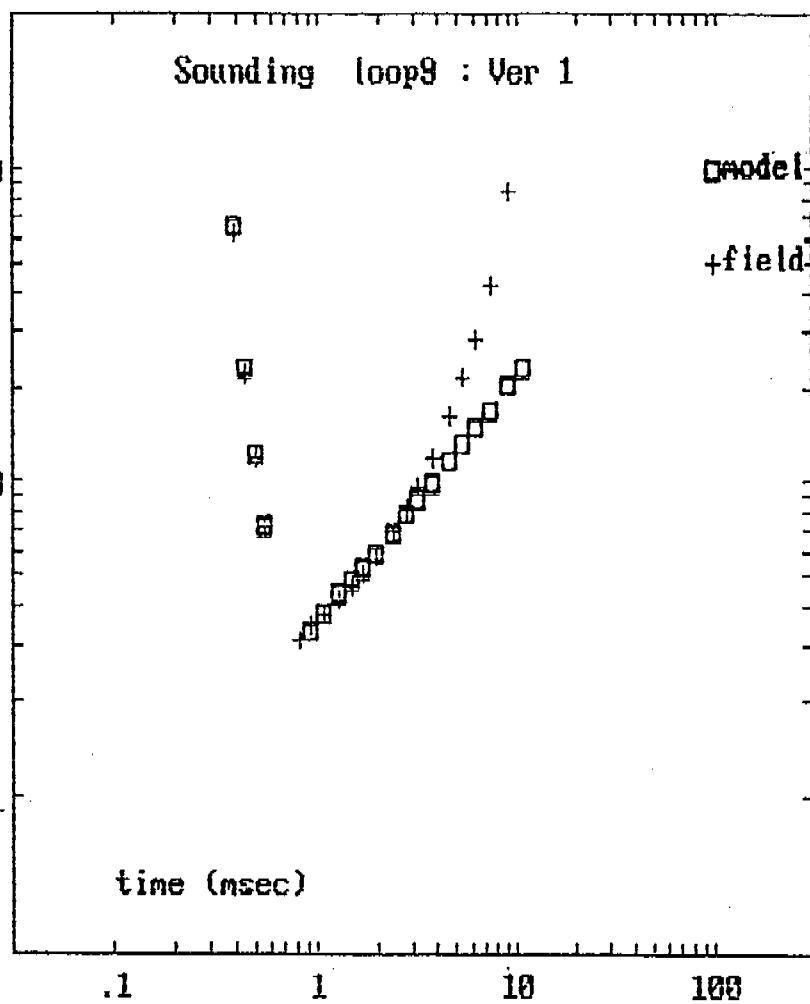
loop8:1

* 271
~~1.7~~
(1248)

STD ERR= 4.9% : S= 3 S

E= 5%
 S= 35

t
r
u
e
a
p
p
r
e
s



SOUNDING: loop9 : Vers 1
 Site MY27 : 10500N, 11900E.

(200 ohm.m)	* 13.8 m.
* .95 ohm.m	* 9.0 m.
	* 22.8 m.
238 ohm.m	

10009A1
(200)
* .95
238

STD ERR= 2.9% : S= 10 S

E= 3%
 S= 10%

Sounding 106112 : Ver 1

1e3

□model

+field

100

10

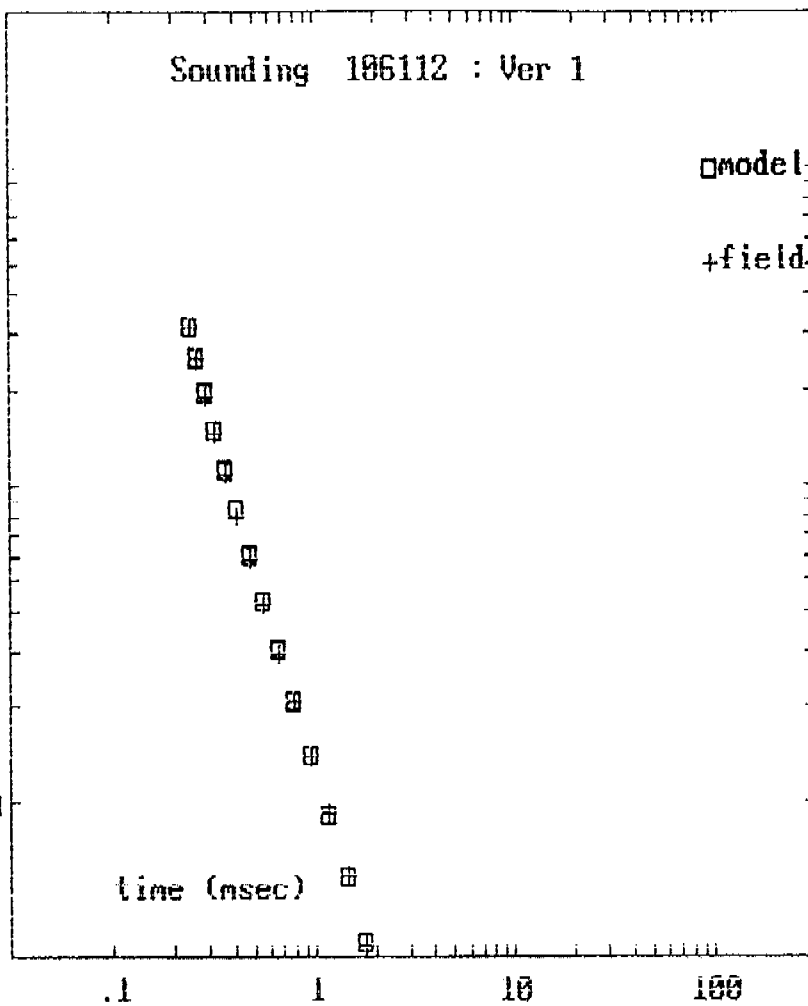
time (msec)

.1

1

10

100



SOUNDING: 106112 : Vers 1
Y106/112 25 Hz

~~100 ohm.m~~ * ~~7.1 m~~ 7.1 m.
* 1.2 ohm.m * 63.8 m.
-----x 70.9 m.
(50.2 ohm.m)

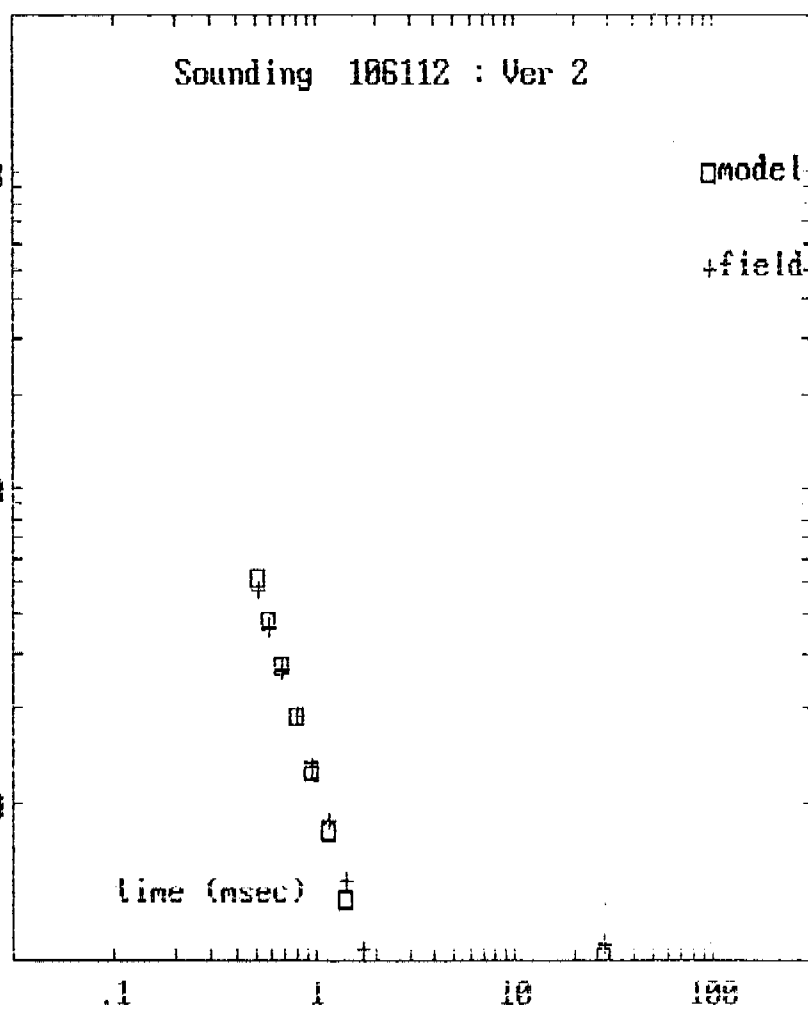
STD ERR= 3.0% : S= 53 S

106112A

~~100~~
* 1.2

(50.2)

E= 3%
S= 535



SOUNDING: 106112 : Vers 2
Y106/112 6.25 Hz

~~X 100 ohm.m 2.0 m. 2.0 m.~~
* 1.3 ohm.m * 55.6 m.
-----* 58.6 m.

40.2 ohm.m 140 m.

----- (208 m.)
(250 ohm.m)

STD ERR= 6.3% ; S= 54 S

106112A

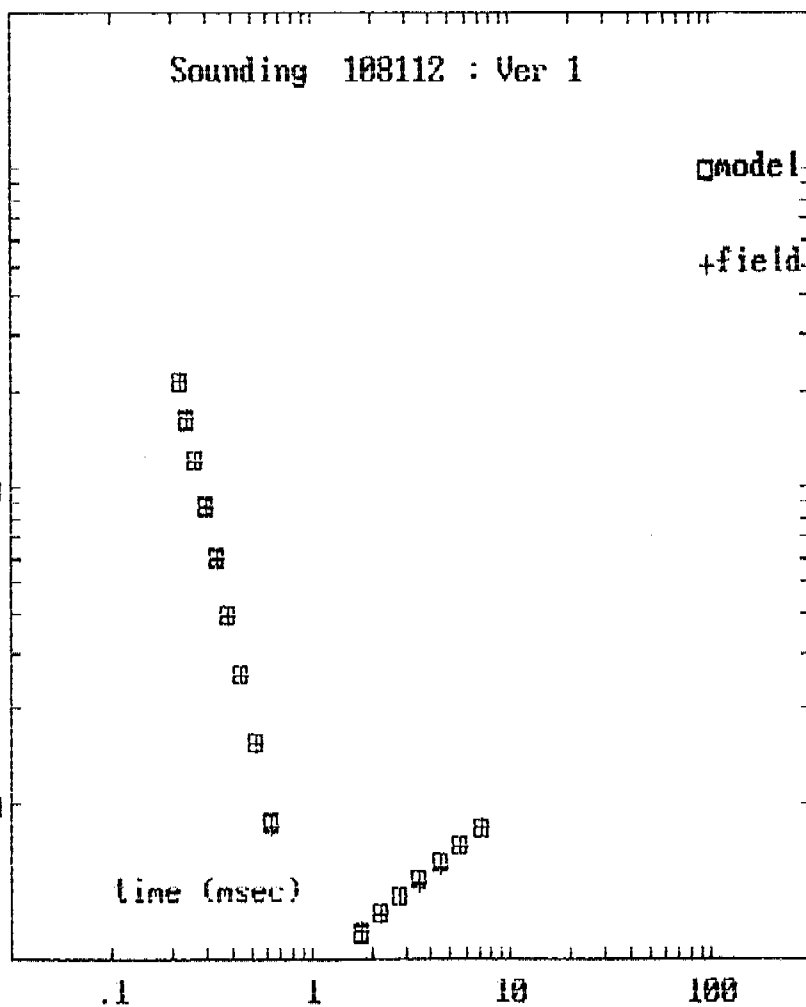
~~X 100~~
* 1.3

40.2

(250)

E= 5%
S= 54S

t
r
u
e
a
p
p
r
e
s



SOUNDING: 108112 : Vers 1
Y108/112 25 Hz

(109 ohm.m)	* 14 R m	14 R m
* 1 3 ohm.m	12 1 m	* 28.7 m

18.5 ohm.m

179 m.

86.4 ohm.m 208 m.

STD ERR= 1.1% : S= 21 S

108112A

(109)
* 1 3

18.5

86.4

E= 1%
S= 21S

Sounding 108112 : Ver c

1e3

model

+field

t
r
u
e

a
p
p
r
e
s

100

10

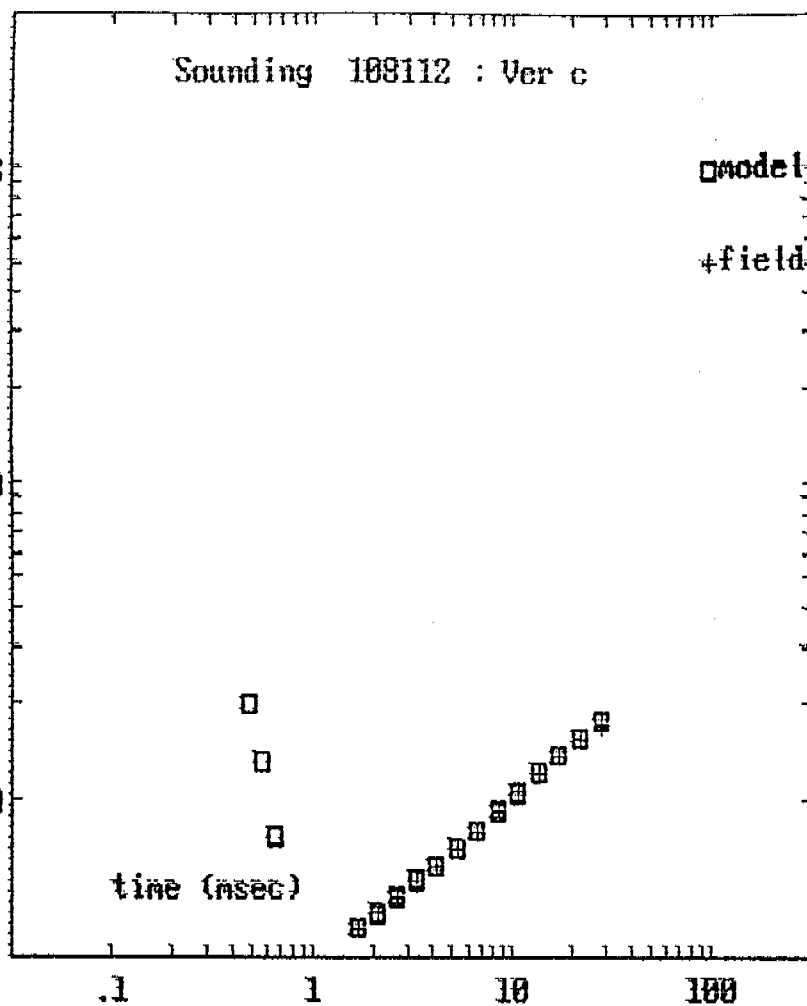
time (nsec)

.1

1

10

100



SOUNDING: 108112 : Vers c
Y108/112 6.25 Hz loop corrected

~~(74.3 ohm.m)~~ ~~(8.1 m.)~~ 8.1 m.)
* 3.3 ohm.m * 48.6 m.
* 49.4 ohm.m * 56.7 m.

STD ERR= 1.0% : S= 15 S

108112A

~~(74.3)~~
* 3.3

* 49.4

E= 1%
S= 15S

Sounding 110112 : Ver 1

1e3

□model

+field

100

10

time (msec)

.1

1

10

100

t
r
u
e
a
p
p
r
e
s

SOUNDING: 110112 : Vers 1
Y110/112 25 Hz

~~2.5 ohm.m~~ ~~7.1 m~~ 7.1 m.

* 9.9 ohm.m * 94.4 m.

----- * 91.5 m.
(1893 ohm.m)

STD ERR= .6% : S= 11 S

110112A

~~2.5~~

* 9.9

(1893)

E= 1%

S= 115

Sounding 110112 : Ver c

1e3

model

+field

t
r
u
e

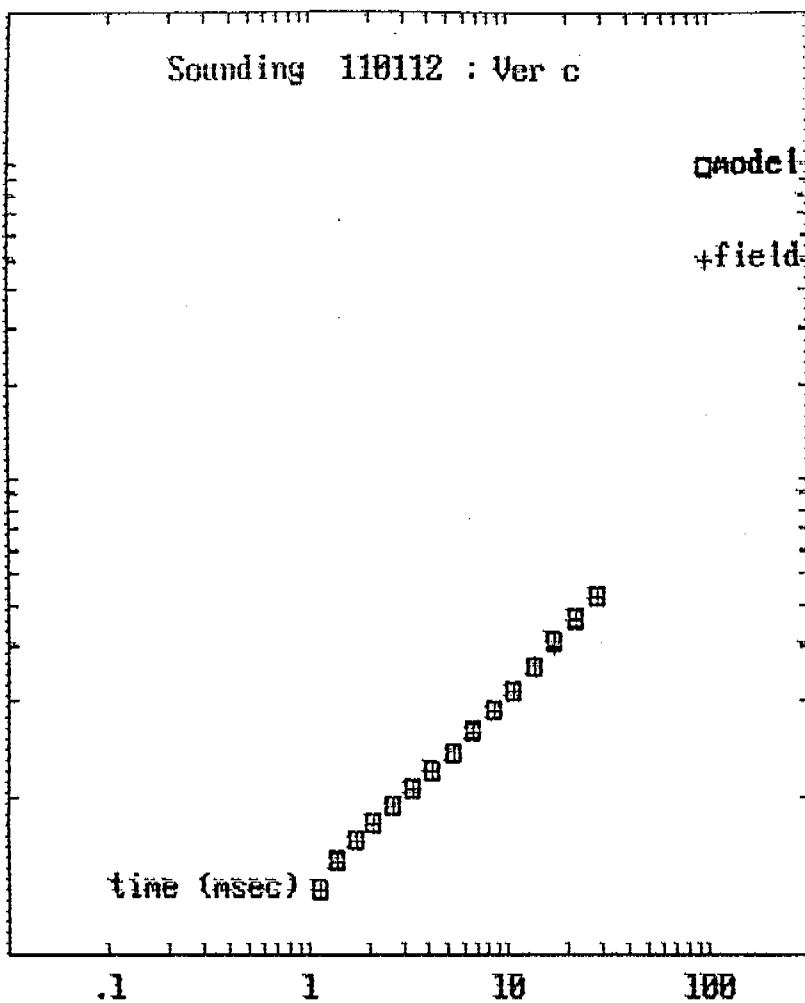
a
p
p
r
e
s

100

10

time (nsec)

.1 1 10 100



SOUNDING: 110112 : Vers c
 Y110/112 6.25 Hz loop corrected

~~* 5.5 ohm.m~~	~~* 48.6 m~~	48.6 m.
48.9 ohm.m	191 m.	
		238 m.

110112A
~~* 5.5~~
 48.9

(1142 ohm.m) { 826 m.}

(1142)

————— (1064 m.)
 (147 ohm.m)

(147)

STD ERR= .6% : S= 14 S

E= 1%
 S= 145

Sounding 112112 : Ver 2

1e3

□model

+field

100

10

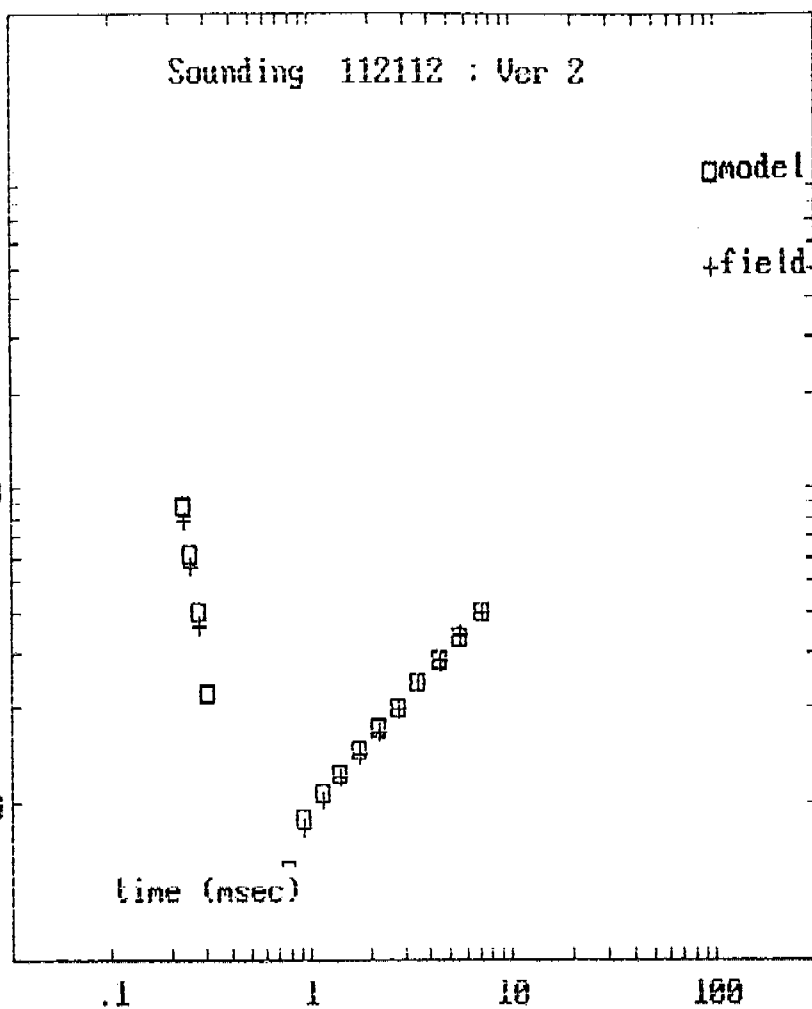
time (nsec)

.1

1

10

100



SOUNDING: 112112 : Vers 2
Y112/112 25 Hz

* 7.3 ohm.m	* 43.7 m
248 ohm.m	

STD ERR= 4.0% : S= 6 S

112112A

* 7.3

248

E= 4%
S= 6S

Sounding 112112 : Ver c

1e3

□model

+field

100

10

Time (msec)

.1

1

10

100

r

r

r

SOUNDING: 112112 : Vers c
 Y112/112 6.25 Hz loop corrected

* 6.8 ohm.m * 39.6 m * 39.6 m.

205 ohm.m * 553 m.

* 25.1 ohm.m * 593 m.

STD ERR= 1.7% : S= 9 5

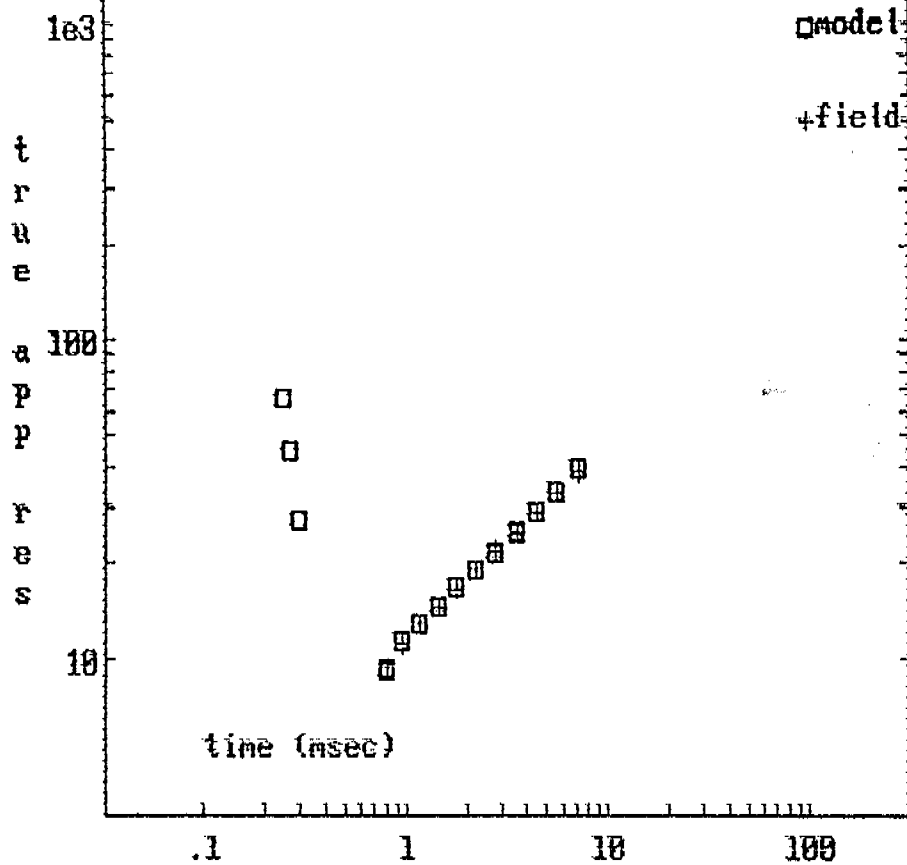
112112A
 * 6.8

205

* 25.1

E= 2%
 S= 95

Sounding 114112 : Ver 1



SOUNDING: 114112 : Vers 1
Y114/112 25 Hz

* 8.5 ohm.m * 41.8 m.
* 41.8 m.

75.0 ohm.m 220 m.

262 m.
(492 ohm.m)

STD ERR= 1.2% : S= 8 S

114112A

* 8.5

75.0

(492)

E= 1%
S= 8S

Sounding 114112 : Ver c

□model

+field

1e3

100

10

Time (msec)

.1

1

10

100

u

p

e

SOUNDING: 114112 : Vers c
Y114/112 6.25 Hz loop corrected

~~* 9.4 ohm.m~~ ~~* 48.7 m.~~ 48.7 m.

* 90.0 ohm.m * 1069 m.

—————* 1117 m.
(4.9 ohm.m)

STD ERR= 1.9% : S= 17 S

114112A

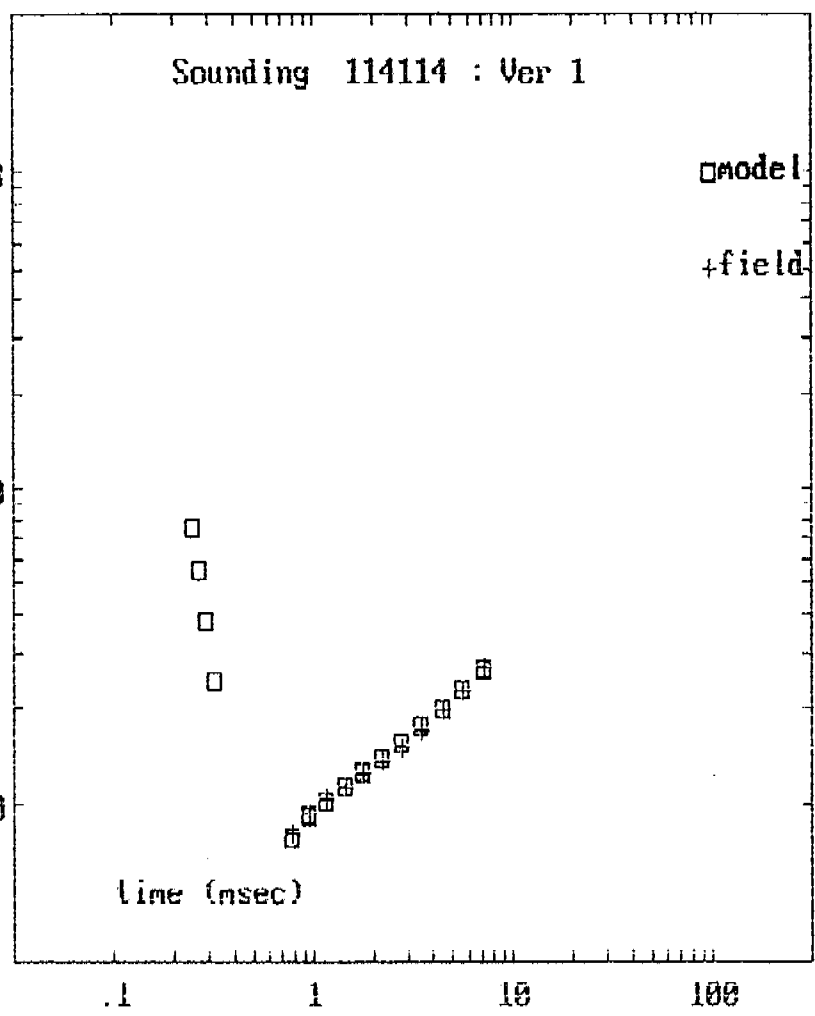
~~* 9.4~~

* 90.0

—————
(4.9)

E= 2%
S= 175

t
r
a
p
r
e
s
s



SOUNDING: 114114 ; Vers 1
Y114/114 25 Hz

* 9.2 ohm.m * 59.8 m.
-----* 59.8 m.

47.9 ohm.m 155 m.

(271 ohm.m) 215 m

STD ERR- 2.2% : S- 10 S

114114A

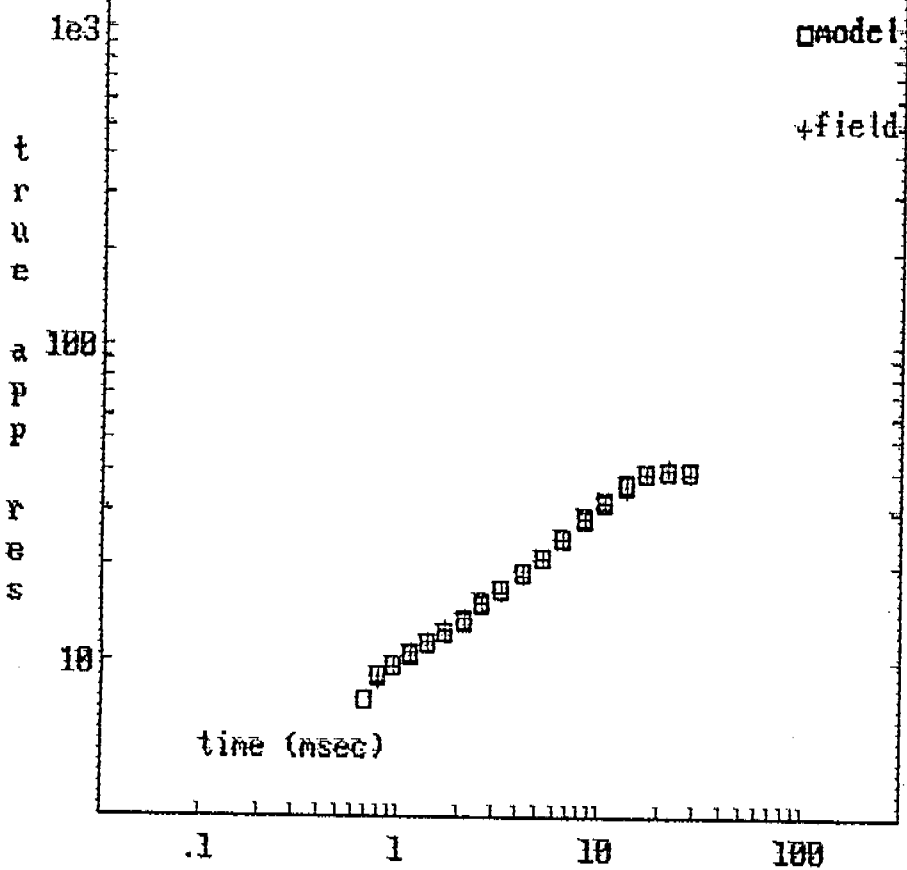
* 9.2

47.9

(271)

E= 2%
S= 10S

Sounding 114114 : Ver c



1111

10.4

* 97.8

(E . 4)

E = 2%
Z = 165

Sounding 114116 : Ver 1

1e3

□ model

+ field

t
r
a
p
p
r
e
s

100

10

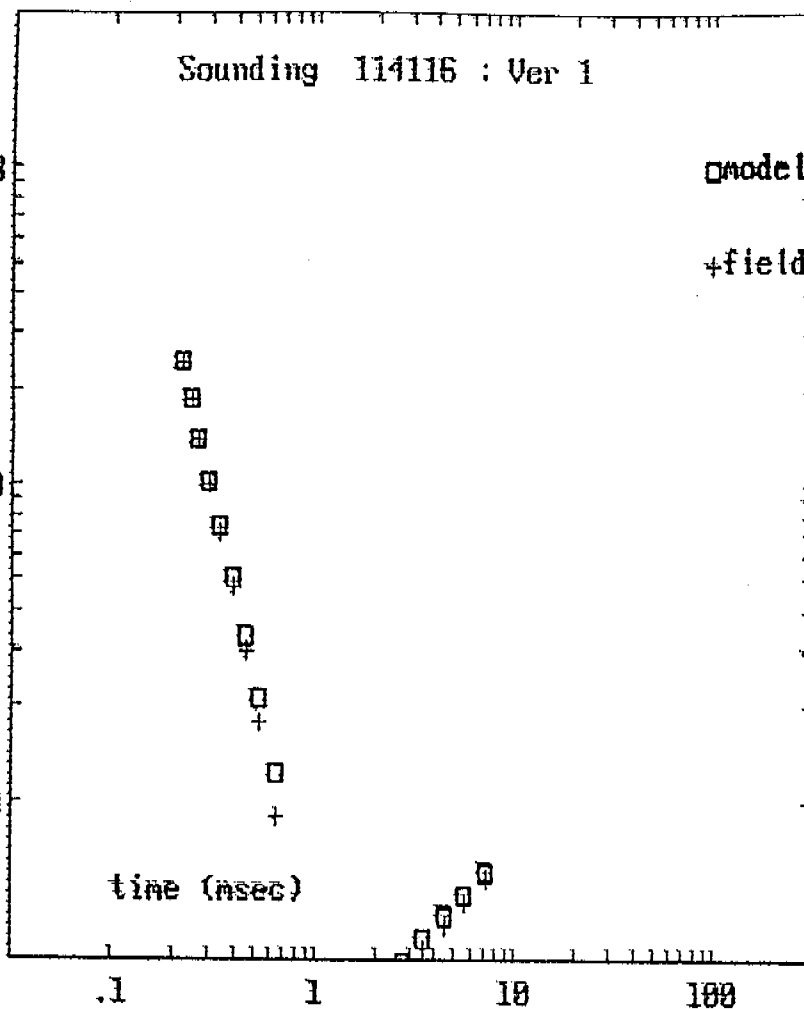
time (nsec)

.1

1

10

100



SOUNDING: 114116 : Vers 1
Y114/116 25 Hz

* 2.8 ohm.m * 55.2 m.
-----* 55.2 m.
(100 ohm.m)

STD ERR=10.7% : S= 20 S

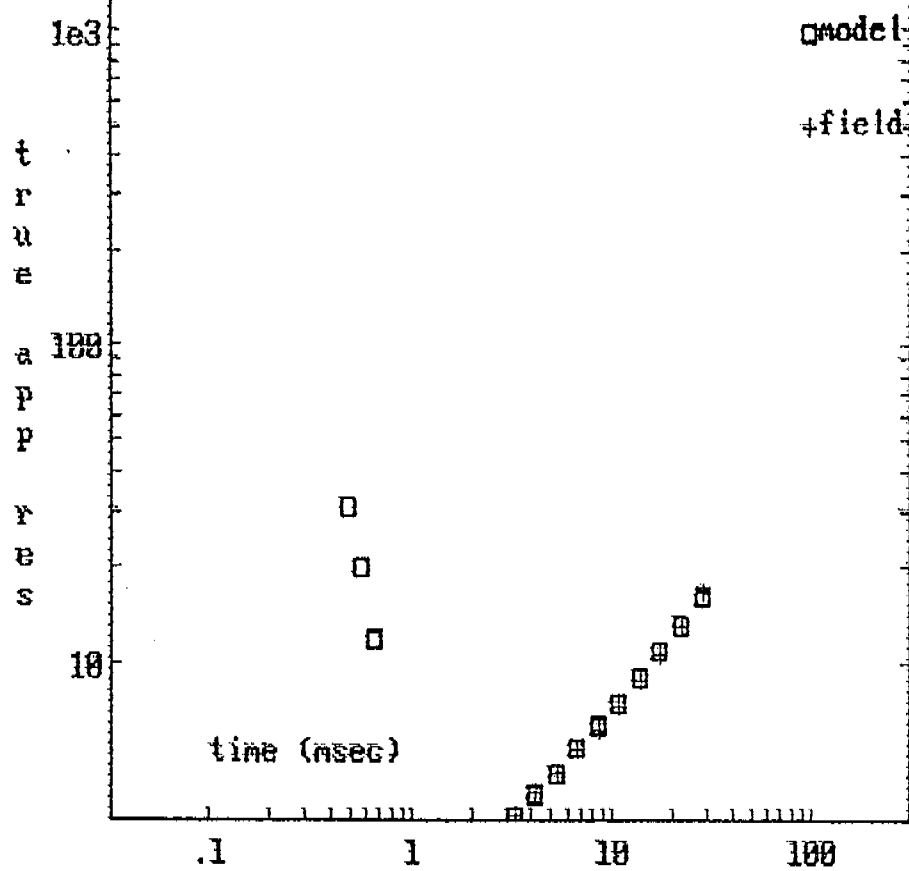
114116A

* 2.8

(100)

E=11%
S= 205

Sounding 114116 : Ver 2



SOUNDING: 114116 : Vers 2
Y114/116 6.25 Hz

* 2.3 ohm.m * 42.8 m.
-----* 42.8 m.

(71.8 ohm.m) (88.8 m.)

----- (131 m.)
(258 ohm.m)

STD ERR= 2.8% : S= 20 S

114116A

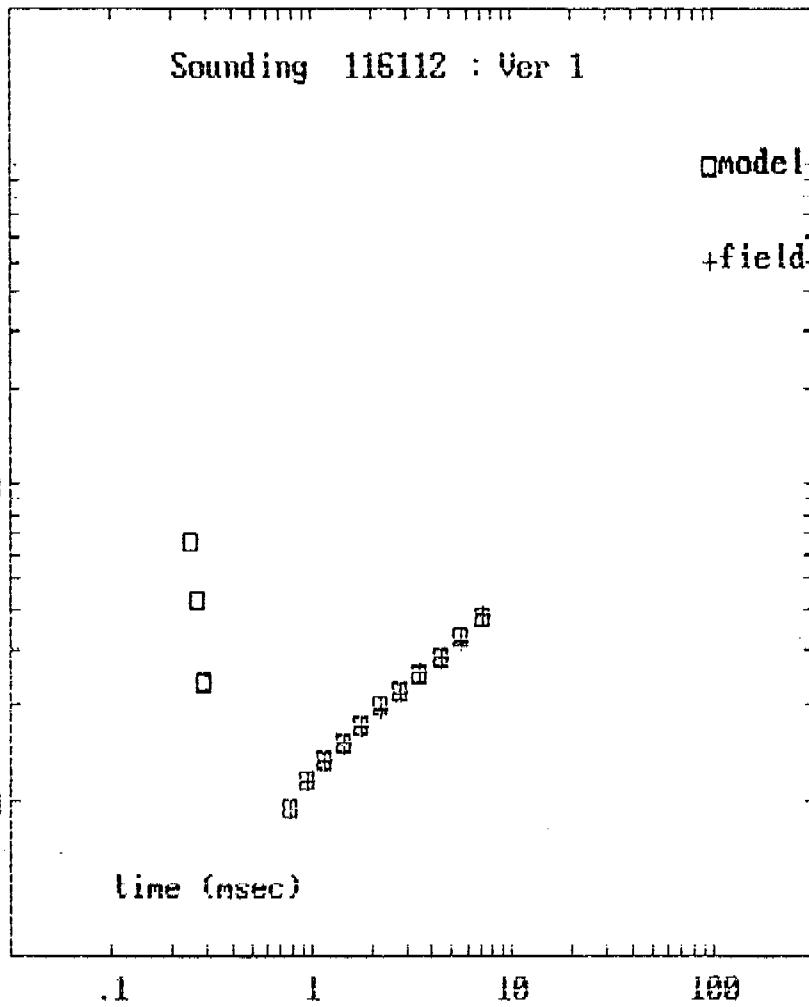
* 2.3

(71.8)

(258)

E= 3%

S= 20S



SOUNDING: 116112 : Vers 1
Y116/112 25 Hz

* 7.2 ohm.m	* 30.9 m	* 30.9 m
-------------	----------	----------

69.2 ohm.m 278 m.

(490 ohm.m)	309 m.
--------------	--------

STD ERR= .8% : S= 9 S

116112A

* 7.2

69.2

(490)

E= 1%
S= 88

Sounding 116112 : Ver c

1e3

model

+field

t
r
u
e

a
p
p
r
e
s

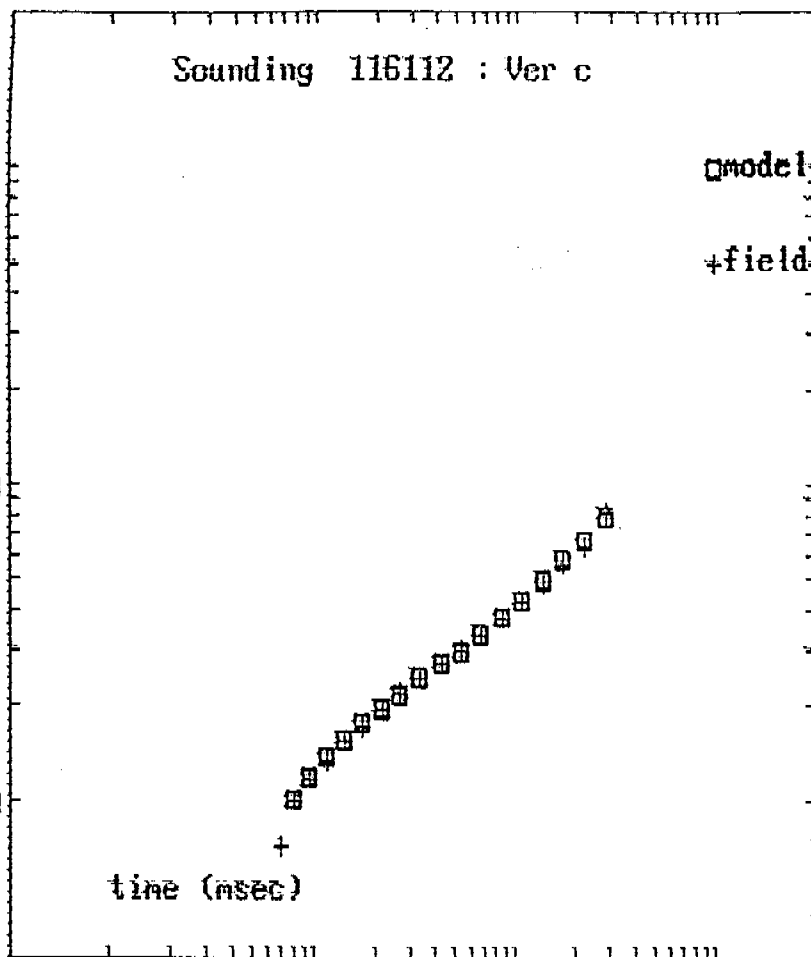
100

10

time (msec)

.1 1 10 100

+



SOUNDING: 116112 : Vers c
Y116/112 6.25 Hz loop corrected

Figure 1

* 7.0 ohm.m * 29.3 m. * 29.3 m.

$$\times 7.0$$

* 61.5 ohm.m * 360 m.

* 61.5

_____ # 380 m.
(861 ohm.m)

(861)

STD ERR= 2.8% : S= 10 S

E= 3%

S= 105

Sounding 116114 : Ver 1

1e3

□model

+field

100

10

time (nsec)

.1

1

10

100

SOUNDING: 116114 : Vers 1
Y116/114 25 Hz

~~(88.0 ohm.m)~~	~~# 11.5 m~~	11.5 m.
* 1.7 ohm.m	* 38.8 m.	
		* 50.3 m.
(101 ohm.m)		

116114A

~~(88.0)~~
* 1.7
(101)

STD ERR= 4 0% S= 23 S

E= 4%
S= 23S

SOUNDING: 120112 : Vers c
Y120/112 6.25 Hz loop corrected

~~5.9 ohm.m~~	~~9.9 m.~~	~~9.9 m.~~
* 31.7 ohm.m	* 137 m.	
		* 146 m.

471 ohm.m 902 m.

		1049 m.
141 ohm.m		

STD ERR= 1.8% : S= 8 S

120112A
~~5.9~~
* 31.7

471

141

E= 2%
S= 85

Sounding 120112 : Ver c

1e3

□model

+field

100

time (msec)

10

.1

1

10

100

u

a

P

e

SOUNDING: 120112 : Verb 1
Y120/112 25 Hz

~~33.6 ohm.m~~ ~~8.6 m~~ ~~8.6 m.~~
 * 12.4 ohm.m * 59.1 m.
 _____ * 67.7 m.
 * 229 ohm.m

STD ERR= 2.7% : S= 55

4-1-021

~~35.5~~
* 12.4
* 229

E= 3%
S= 55

Sounding 120112 : Ver 1

1e3

model

+field

t
r
a
c
e

a
p
p
r
e
s

100

10

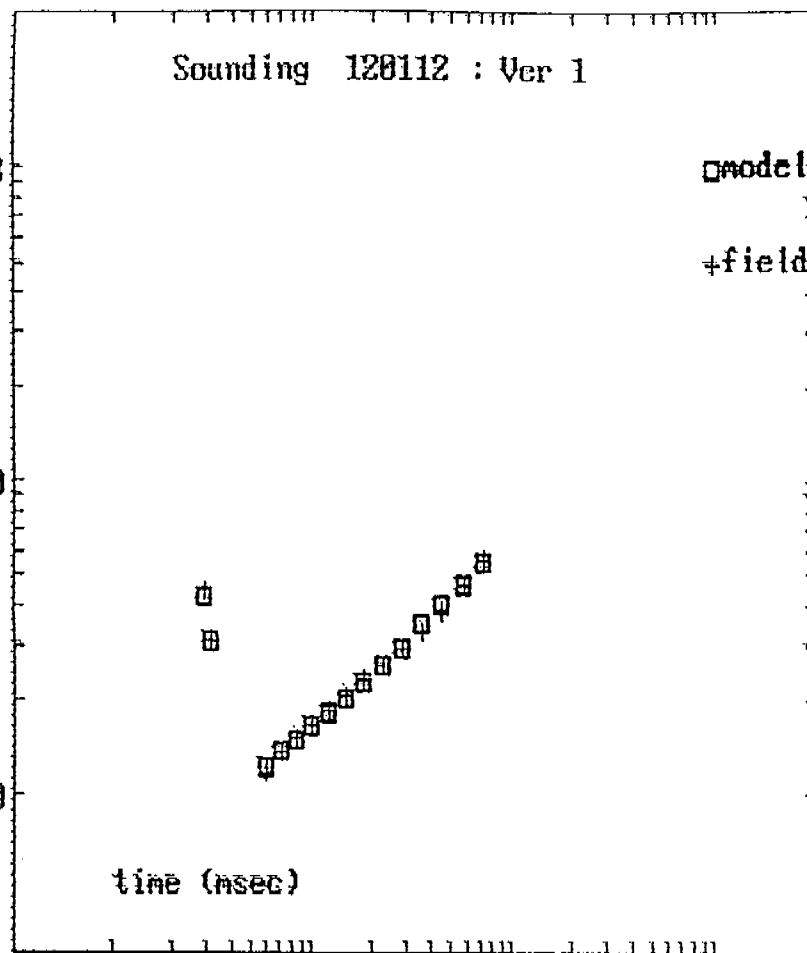
time (nsec)

.1

1

10

100



2191

* 12.8

* 22. 2

(3.1)

E= 1%

S= 195

Sounding 118112 : Ver c

1e3

model

+field

t

r

u

e

a

p

p

r

e

s

100

10

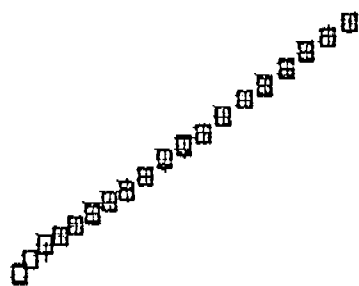
time (nsec)

.1

1

10

100



SOUNDING: 118112 : Vers 1
Y118/112 25 Hz

* 10.7 ohm.m * 47.0 m.
* 47.0 m.

* 38.3 ohm.m * 160 m.

* 207 m.
(258 ohm.m)

STD ERR= .8% : S= 9 S

118112

* 10.7

* 38.3

(258)

E= 1%
S= 95

Sounding 118112 : Ver 1

1e3

model

+field

100

10

time (nsec)

.1

1

10

100

t
r
u
e
a
p
p
r
e
s

SOUNDING: 118110 : Vers c
Y118/110 6.25 Hz loop corrected

* 8.4 ohm.m	* 32.9 m	* 32.9 m.
-------------	----------	-----------

118110A

* 8.4

E= 2%
S= 145

Sounding 118110 : Ver c

1e3

□model

+field

t
r
u
e
a
p
p
r
e
s

100

10

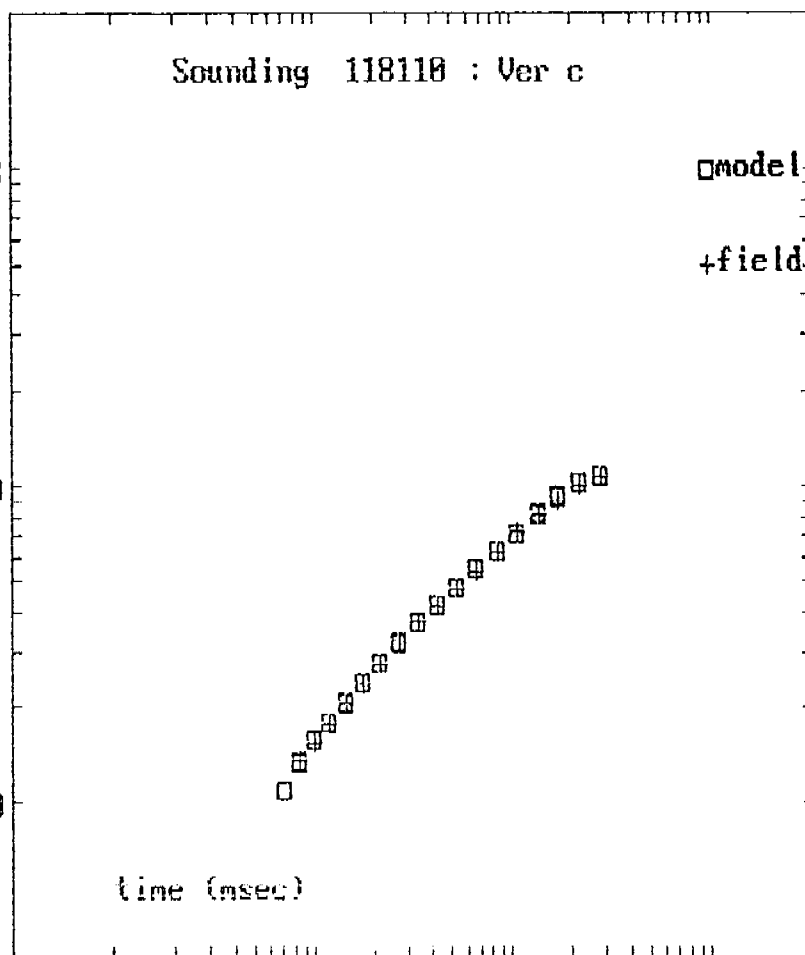
time (msec)

.1

1

10

100



SOUNDING: 118110 : Vers 1
Y118/110 25 Hz

* 10.8 ohm.m	* 48.8 m.
* 274 ohm.m	* 48.8 m.

STD ERR= 1.5% : S= 4 S

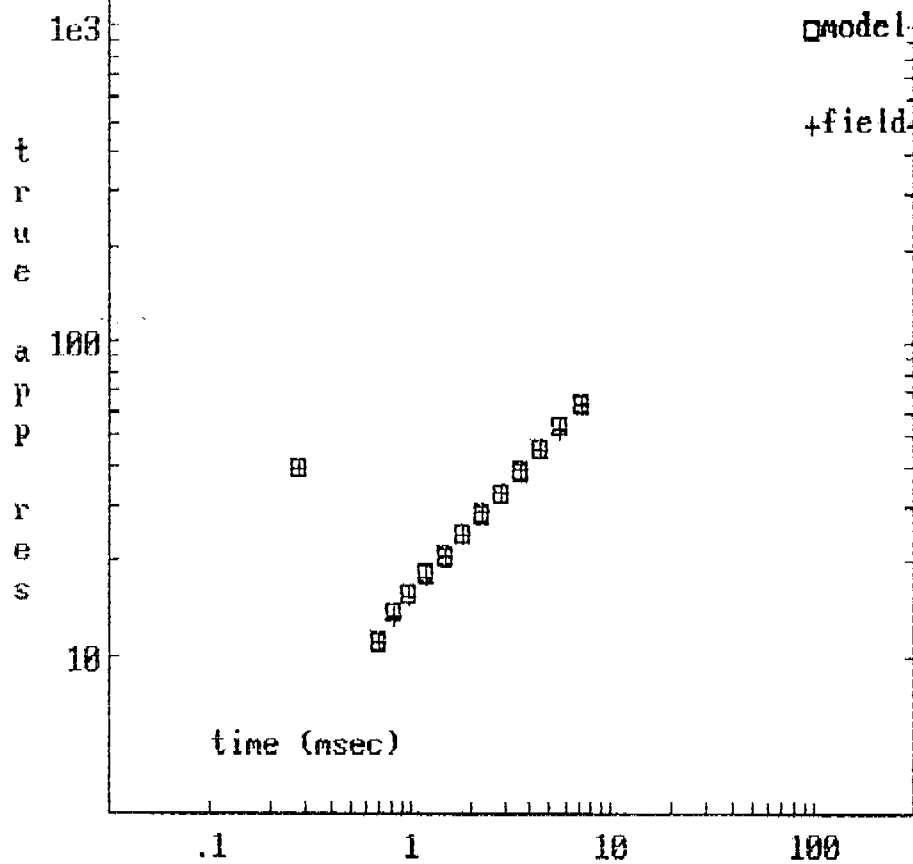
118110A

* 10.8

* 274

E= 1%
S= 45

Sounding 118110 : Ver 1



SOUNDING: 116114 : Vers 2
Y116/114 6.25 Hz

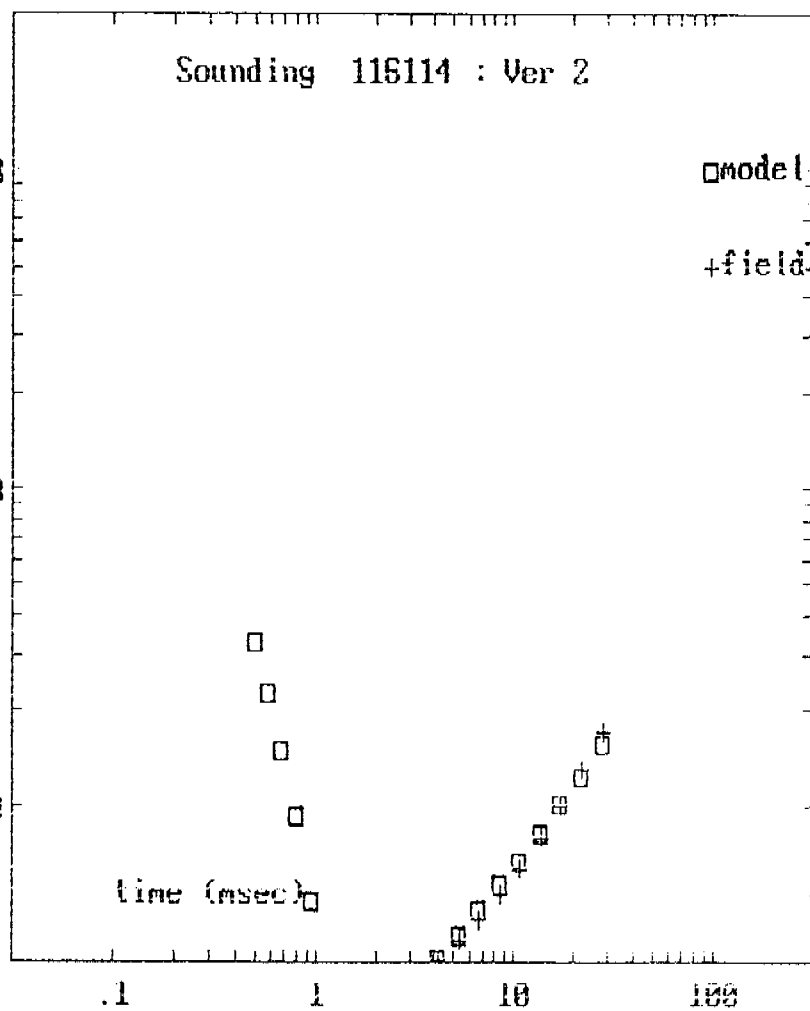
~~174.8 ohm.m~~	~~15.8 m~~	15.8 m
~~63.8 ohm.m~~	~~12.5 m~~	
(135 ohm.m)	(62.7 m.)	28.9 m.
		(91.0 m.)
625 ohm.m		

STD ERR= 6.7% : S= 20 S

116114A

~~174.8~~
~~63.8~~
(135)
625

E= 7%
S= 205



APPENDIX 3.
Analytical Results

Analytical Techniques

All geochemical analyses were carried out at Assaycorp Pty Ltd, Pine Creek, Northern Territory. Analytical methods, elements determined and detection limits used were as follows:

Detection Limits

AAS/MA-3	-	Cu	2	ppm	Prec. $\pm$ 10%
AAS/MA-3	-	Pb	2	ppm	Prec. $\pm$ 10%
AAS/MA-3	-	Zn	1	ppm	Prec. $\pm$ 10%
AAS/MA-3	-	Ag	0.5	ppm	Prec. $\pm$ 10%
AAS/MA-3	-	Mn	2	ppm	Prec. $\pm$ 10%
AAS/MA-3	-	Fe	20	ppm	Prec. $\pm$ 10%
AAS/MA-3	-	As	2	ppm	Prec. $\pm$ 10%
AAS/MA-4	-	Tl	1	ppm	Prec. $\pm$ 10%
FA50	-	Au	1	ppb	Prec. $\pm$ 10%

Analytical Methods

Base Metal Assays - Cu, Pb, Zn, Ag, Mn, Fe

A 0.3 g sample is digested in a triple mixture of hydrochloric, nitric and perchloric acids at 180°C. The cooled and dried residue is leached with concentrated HCl acid at 90°C and diluted with distilled water. After cooling the sample is mixed and left to stand for sediment settling. Elements are read on an atomic absorption spectrophotometer (AAS) against aqueous standards of pure metals for each element. Cu, Pb, Zn and Ag are read using an air acetylene flame and Fe and Mn using a nitrous oxide - acetylene flame.

Hydride Forming Element Assays - As

A 1:10 dilution is taken from the base metal digestion to give a concentration of 10% HCl and 0.2% KI solution. The solution is pumped into a GBC model HG 3000 hydride generator and mixed with concentrated HCl acid and Na BH₄. The gas which is given off passes through a gas-liquid separator and the gas passes to a quartz cell on the AAS for reading.

Thallium Assay

A 0.5 g sample is digested, leached, concentrated and diluted in the same manner as for base metal assays. A 1% aqueous solution of APDC is added at pH3 and an aliquot of water-saturated MI is added. The solution is shaken to extract Tl into the organic phase and the content is determined using an AAS and extracted standards.

Au Assays

A 50 g sample aliquot is mixed with a fire assay flux and fused in a crucible furnace at 1000°C for 50 minutes. The sample is poured and cooled and the lead button and slag are separated. The button is cupelled in a Mg cupel at 1050°C. The resulting dore prill is

treated with nitric acid to dissolve Au. The Au solution is diluted and DIBK with 1% Aliquot 336 is added. Au is extracted into organic phase with mixing and determined using extracted standards with an AAS.

Lab Batch Code	EL	Mesh	Sample Number	Sample Type	AMG Easting	AMG Northing	Zone	Cu ppm	Zn ppm	Pb ppm	Fe ppm	Mn ppm	As ppm	Au ppb	Au-Rep ppb	Ag ppm	Tl ppm
AC 03982	7261	+2mm-4mm	DV6008	SSSED	563482	8302351	53	4	2	4	15200	86	NA	<1		NA	<1
AC 03982	7261	-80#	DV6008	SSSED	563482	8302351	53	2	3	10	4021	18	NA	<1		NA	<1
AC 03982	7261	+80#-2mm	DV6008	SSSED	563482	8302351	53	4	<1	7	4529	78	NA	<1	<1	NA	<1
AC 03982	7261	-80#	DV6007	SSSED	563447	8302500	53	3	5	12	6793	33	NA	<1		NA	<1
AC 03982	7261	+80#-2mm	DV6007	SSSED	563447	8302500	53	6	1	9	6398	99	NA	<1		NA	<1
AC 03982	7261	+2mm-4mm	DV6007	SSSED	563447	8302500	53	9	3	10	31000	209	NA	<1		NA	<1
AC 03982	7261	+2mm-4mm	DV6006	SSSED	564422	8303837	53	4	2	4	49600	133	NA	<1		NA	<1
AC 03982	7261	+2mm-4mm	DV6010	SSSED	565334	8302672	53	4	2	3	29600	103	NA	<1		NA	<1
AC 03982	7261	-80#	DV6010	SSSED	565334	8302672	53	<2	<1	4	2027	29	NA	<1		NA	<1
AC 03982	7261	+80#-2mm	DV6010	SSSED	565334	8302672	53	4	<1	8	4320	69	NA	<1		NA	<1
AC 03982	7261	-80#	DV6006	SSSED	564422	8303837	53	2	2	7	2795	13	NA	<1		NA	<1
AC 03982	7261	+80#-2mm	DV6006	SSSED	564422	8303837	53	6	<1	4	5480	108	NA	<1		NA	<1
AC 03982	7261	-80#	DV6005	SSSED	562466	8304888	53	5	8	12	8506	136	NA	<1		NA	<1
AC 03982	7261	+80#-2mm	DV6005	SSSED	562466	8304888	53	11	1	5	10300	232	NA	<1		NA	<1
AC 03982	7261	+2mm-4mm	DV6005	SSSED	562466	8304888	53	7	2	4	50700	182	NA	<1		NA	<1
AC 05024	7261	<150#	DU8784	SSSED	524791	8300008	53	3	13	<2	11200	55	<2	<1		<1	<1
AC 05024	7261	<150#	DU8758	SSSED	545527	8302304	53	3	8	3	8150	190	<2	NA		<1	<1
AC 05024	7261	<150#	DU8757	SSSED	547345	8301403	53	4	9	11	6980	105	<2	NA		<1	<1
AC 05024	7261	<150#	DU8756	SSSED	546463	8302204	53	4	12	6	13000	196	<2	NA		<1	<1
AC 05024	7261	<150#	DU8755	SSSED	545225	8301983	53	10	20	5	24300	472	3	NA		<1	<1
AC 05025	7261	+20#-2mm	DU8758	SSSED	545527	8302304	53	7	8	14	20100	953	9	<1		<1	<1
AC 05025	7261	+20#-2mm	DU8757	SSSED	547345	8301403	53	7	6	17	39200	109	14	<1		<1	<1
AC 05025	7261	+20#-2mm	DU8756	SSSED	546463	8302204	53	7	10	15	18800	204	5	<1		<1	<1
AC 05025	7261	+20#-2mm	DU8755	SSSED	545225	8301983	53	31	18	67	128000	3008	33	<1		<1	<1
AC 05025	7261	+20#-2mm	DU8784	SSSED	524791	8300008	53	NA	NA	NA	NA	NA	NA	NA		NA	NA
AC 10224	7261	-2mm	DJ9593	SOIL	530264	8309617	53	2	<1	4	3600	12	1	NA		NA	NA
AC 10224	7261	-2mm	DJ9594	SOIL	529451	8310393	53	2	<1	4	6900	112	<1	NA		NA	NA
AC 10224	7261	-2mm	DJ9595	SOIL	529533	8310386	53	3	1	5	7300	61	<1	NA		NA	NA
AC 03982	7262	-80#	DV6017	SSSED	571355	8293768	53	<2	<1	<2	2693	55	NA	<1		NA	<1
AC 03982	7262	+80#-2mm	DV6017	SSSED	571355	8293768	53	5	2	5	9456	81	NA	<1		NA	<1
AC 03982	7262	+2mm-4mm	DV6028	SSSED	574772	8292040	53	5	9	12	159000	244	NA	<1		NA	<1
AC 03982	7262	-80#	DV6028	SSSED	574772	8292040	53	10	10	3	12300	462	NA	<1	<1	NA	<1
AC 03982	7262	+80#-2mm	DV6028	SSSED	574772	8292040	53	5	3	4	16100	170	NA	<1		NA	<1
AC 03982	7262	+2mm-4mm	DV6034	SSSED	573255	8288188	53	6	16	36	307000	286	NA	<1		NA	<1
AC 03982	7262	-80#	DV6034	SSSED	573255	8288188	53	2	3	<2	3612	44	NA	<1		NA	<1
AC 03982	7262	+80#-2mm	DV6034	SSSED	573255	8288188	53	5	2	6	11700	81	NA	<1		NA	<1
AC 03982	7262	-80#	DV6033	SSSED	574245	8289259	53	3	4	2	6813	41	NA	<1		NA	<1
AC 03982	7262	+80#-2mm	DV6033	SSSED	574245	8289259	53	4	3	4	9272	70	NA	<1		NA	<1
AC 03982	7262	+2mm-4mm	DV6054	SSSED	584962	8292689	53	10	12	21	154000	304	NA	<1		NA	<1
AC 03982	7262	-80#	DV6054	SSSED	584962	8292689	53	2	<1	11	3374	10	NA	NA		NA	<1

Lab Batch Code	EL	Mesh	Sample Number	Sample Type	AMG Easting	AMG Northing	Zone	Cu ppm	Zn ppm	Pb ppm	Fe ppm	Mn ppm	As ppm	Au ppb	Au-Rep ppb	Ag ppm	Tl ppm
AC 03982	7262	+80#-2mm	DV6054	SSSED	584962	8292689	53	3	1	7	6093	89	NA	<1		NA	<1
AC 03982	7262	+80#-2mm	DV6226	SSSED	547717	8288129	53	7	2	8	8079	146	NA	<1		NA	<1
AC 03982	7262	-80#	DV6226	SSSED	547717	8288129	53	10	4	12	6782	222	NA	<1		NA	<1
AC 03982	7262	+2mm-4mm	DV6226	SSSED	547717	8288129	53	89	13	31	178000	1071	NA	<1		NA	<1
AC 03982	7262	-80#	DV6225	SSSED	547698	8287002	53	5	4	10	5510	259	NA	NA		NA	<1
AC 03982	7262	+80#-2mm	DV6225	SSSED	547698	8287002	53	3	1	9	6024	91	NA	<1		NA	<1
AC 03982	7262	+2mm-4mm	DV6225	SSSED	547698	8287002	53	32	17	23	155000	166	NA	<1		NA	<1
AC 03982	7262	-80#	DV6224	SSSED	548087	8287176	53	18	6	12	9079	488	NA	<1		NA	<1
AC 03982	7262	+80#-2mm	DV6224	SSSED	548087	8287176	53	17	3	11	16900	407	NA	<1		NA	<1
AC 03982	7262	+2mm-4mm	DV6224	SSSED	548087	8287176	53	132	13	42	174000	2929	NA	<1		NA	<1
AC 03982	7262	+2mm-4mm	DV6033	SSSED	574245	8289259	53	9	10	17	177000	228	NA	<1		NA	<1
AC 03982	7262	+2mm-4mm	DV6032	SSSED	574782	8290357	53	6	6	13	150000	211	NA	<1		NA	<1
AC 03982	7262	-80#	DV6032	SSSED	574782	8290357	53	10	10	8	12400	163	NA	<1		NA	<1
AC 03982	7262	+80#-2mm	DV6032	SSSED	574782	8290357	53	7	2	5	10300	133	NA	<1		NA	<1
AC 03982	7262	-80#	DV6031	SSSED	575579	8291107	53	3	3	<2	4820	67	NA	NA		NA	<1
AC 03982	7262	+80#-2mm	DV6031	SSSED	575579	8291107	53	6	2	5	15500	113	NA	<1		NA	<1
AC 03982	7262	+2mm-4mm	DV6031	SSSED	575579	8291107	53	6	9	19	151000	228	NA	<1		NA	<1
AC 03982	7262	-80#	DV6027	SSSED	573869	8293422	53	3	5	3	5947	126	NA	<1	<1	NA	<1
AC 03982	7262	+80#-2mm	DV6027	SSSED	573869	8293422	53	24	11	29	242000	251	NA	<1		NA	<1
AC 03982	7262	+2mm-4mm	DV6027	SSSED	573869	8293422	53	4	2	3	11900	107	NA	<1		NA	<1
AC 03982	7262	+2mm-4mm	DV6017	SSSED	571355	8293768	53	5	11	28	228000	261	NA	<1		NA	<1
AC 05024	7262	<150#	DU8748	SSSED	544870	8290761	53	6	10	6	13000	128	<2	<1		<1	<1
AC 05024	7262	<150#	DU8744	SSSED	547774	8287193	53	7	7	6	5940	201	<2	NA		<1	<1
AC 05024	7262	<150#	DU8743	SSSED	547944	8287335	53	5	7	6	6930	165	<2	NA		<1	<1
AC 05024	7262	<150#	DU8780	SSSED	531048	8291176	53	2	6	<2	12600	53	<2	<1		<1	<1
AC 05024	7262	<150#	DU8779	SSSED	530991	8288917	53	29	6	2	9950	400	3	NA		<1	<1
AC 05024	7262	<150#	DU8778	SSSED	530654	8287780	53	19	13	<2	14600	225	3	<1		<1	<1
AC 05024	7262	<150#	DU8777	SSSED	532018	8287280	53	13	12	<2	20800	264	2	NA		<1	<1
AC 05024	7262	<150#	DU8776	SSSED	532638	8288425	53	19	6	6	17100	209	2	<1		<1	<1
AC 05024	7262	<150#	DU8775	SSSED	532745	8292854	53	8	8	13	10300	97	<2	<1		<1	<1
AC 05024	7262	<150#	DU8774	SSSED	533277	8296423	53	8	8	11	12900	143	<2	<1		<1	<1
AC 05024	7262	<150#	DU8773	SSSED	534138	8295635	53	14	13	15	15800	371	<2	<1		<1	<1
AC 05024	7262	<150#	DU8772	SSSED	535643	8295052	53	10	9	4	17000	153	<2	<1		<1	<1
AC 05025	7262	+20#-2mm	DU8748	SSSED	544870	8290761	53	8	9	8	40600	146	11	<1		<1	<1
AC 05025	7262	+20#-2mm	DU8780	SSSED	531048	8291176	53	4	4	5	32700	26	5	<1		<1	<1
AC 05025	7262	+20#-2mm	DU8779	SSSED	530991	8288917	53	44	8	10	96400	223	57	<1		<1	<1
AC 05025	7262	+20#-2mm	DU8778	SSSED	530654	8287780	53	56	22	16	156000	536	68	<1		<1	<1
AC 05025	7262	+20#-2mm	DU8777	SSSED	532018	8287280	53	40	25	43	88600	1502	23	<1		<1	<1
AC 05025	7262	+20#-2mm	DU8776	SSSED	532638	8288425	53	43	11	15	77400	900	18	<1		<1	<1
AC 05025	7262	+20#-2mm	DU8775	SSSED	532745	8292854	53	10	8	11	62500	82	19	<1		<1	<1

Lab Batch Code	EL	Mesh	Sample Number	Sample Type	AMG Easting	AMG Northing	Zone	Cu ppm	Zn ppm	Pb ppm	Fe ppm	Mn ppm	As ppm	Au ppb	Au-Rep ppb	Ag ppm	Tl ppm
AC 05025	7262	+20#-2mm	DU8774	SSSED	533277	8296423	53	7	5	16	38000	31	17	<1		<1	<1
AC 05025	7262	+20#-2mm	DU8773	SSSED	534138	8295635	53	9	7	14	41400	61	14	<1		<1	<1
AC 05025	7262	+20#-2mm	DU8772	SSSED	535643	8295052	53	9	7	10	36900	52	11	<1		<1	<1
AC 05025	7262	+20#-2mm	DU8744	SSSED	547774	8287193	53	4	8	5	25900	34	7	<1		<1	<1
AC 05025	7262	+20#-2mm	DU8743	SSSED	547944	8287335	53	6	9	6	56600	43	18	<1		<1	<1
AC 10168	7262		EH1928	ROCK	533888	8295802	53	56	306	9	487000	1810	9	NA		NA	NA
AC 05024	7263	<150#	DU8233	SSSED	548906	8270882	53	16	13	7	15000	241	2	<1		<1	<1
AC 05024	7263	<150#	DU8702	SSSED	539279	8275173	53	5	19	7	18200	177	<2	NA		<1	<1
AC 05024	7263	<150#	DU8701	SSSED	540382	8273725	53	10	12	13	18000	110	<2	NA		<1	<1
AC 05024	7263	<150#	DU8734	SSSED	551926	8271225	53	2	4	2	6190	58	<2	<1		<1	<1
AC 05024	7263	<150#	DU8742	SSSED	548957	8269837	53	5	4	4	6750	89	<2	NA		<1	<1
AC 05024	7263	<150#	DU8740	SSSED	551998	8268565	53	12	10	3	10300	231	<2	NA		<1	<1
AC 05024	7263	<150#	DU8739	SSSED	551432	8269759	53	12	12	14	12600	246	<2	NA		<1	<1
AC 05024	7263	<150#	DU8738	SSSED	551691	8270042	53	2	3	<2	3020	41	<2	NA		<1	<1
AC 05024	7263	<150#	DU8737	SSSED	551869	8270644	53	4	4	2	5110	39	<2	<1		<1	<1
AC 05024	7263	<150#	DU8736	SSSED	550738	8271098	53	8	4	<2	5760	226	<2	NA		<1	<1
AC 05024	7263	<150#	DU8735	SSSED	550537	8271073	53	5	5	2	7220	563	<2	NA		<1	<1
AC 05024	7263	<150#	DU8705	SSSED	539045	8278002	53	6	11	8	11000	225	<2	<1		<1	<1
AC 05024	7263	<150#	DU8704	SSSED	540684	8277298	53	9	6	7	8920	64	<2	<1		<1	<1
AC 05024	7263	<150#	DU8703	SSSED	539604	8276541	53	8	12	16	15800	186	<2	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8233	SSSED	548906	8270882	53	3	5	5	14400	29	3	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8705	SSSED	539045	8278002	53	15	24	18	28500	851	<2	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8704	SSSED	540684	8277298	53	60	17	16	120000	522	29	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8703	SSSED	539604	8276541	53	18	18	28	84600	377	14	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8702	SSSED	539279	8275173	53	16	51	17	125000	1034	12	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8701	SSSED	540382	8273725	53	7	12	12	193000	131	33	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8742	SSSED	548957	8269837	53	2	3	7	5010	9	<2	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8740	SSSED	551998	8268565	53	2	7	3	9180	36	2	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8739	SSSED	551432	8269759	53	2	7	6	6140	23	<2	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8738	SSSED	551691	8270042	53	<2	6	5	5210	13	<2	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8737	SSSED	551869	8270644	53	2	8	8	13000	29	3	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8736	SSSED	550738	8271098	53	2	7	2	7250	43	2	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8735	SSSED	550537	8271073	53	13	8	5	61500	270	17	<1		<1	<1
AC 05025	7263	+20#-2mm	DU8734	SSSED	551926	8271225	53	<2	8	4	9660	46	<2	<1		<1	<1
AC 08770	7263	+20#-2mm	DJ8707	SSSED	530044	8285809	53	47	19	53	117000	2943	62	NA		<1	NA
AC 08770	7263	+20#-2mm	DJ8704	SSSED	530461	8284282	53	39	16	19	113000	1053	26	NA		<1	NA
AC 08770	7263	+20#-2mm	DJ8703	SSSED	530503	8284099	53	30	19	18	113000	873	31	NA		<1	NA
AC 08770	7263	+20#-2mm	DJ8702	SSSED	532471	8281170	53	22	20	19	140000	512	51	NA		<1	NA
AC 08770	7263	+20#-2mm	DJ8701	SSSED	532541	8281377	53	10	15	10	139000	106	43	NA		<1	NA
AC 08770	7263	+20#-2mm	DJ8700	SSSED	533698	8281301	53	18	17	14	130000	294	41	NA		<1	NA

Lab Batch Code	EL	Mesh	Sample Number	Sample Type	AMG Easting	AMG Northing	Zone	Cu ppm	Zn ppm	Pb ppm	Fe ppm	Mn ppm	As ppm	Au ppb	Au-Rep ppb	Ag ppm	Ti ppm
AC 03982	7264	-80#	DV6180	SSSED	568391	8264938	53	3	2	16	3430	17	NA	<1		NA	<1
AC 03982	7264	+80#-2mm	DV6180	SSSED	568391	8264938	53	10	2	20	10200	217	NA	<1	<1	NA	<1
AC 03982	7264	+2mm-4mm	DV6180	SSSED	568391	8264938	53	8	3	13	15300	134	NA	NA		NA	<1
AC 05024	7264	<150#	DU8230	SSSED	552042	8265005	53	10	16	<2	20000	126	3	<1		<1	<1
AC 05024	7264	<150#	DU8675	SSSED	539882	8259684	53	10	17	13	21200	365	<2	<1		<1	<1
AC 05024	7264	<150#	DU8674	SSSED	538134	8257541	53	6	7	12	13800	69	<2	NA		<1	<1
AC 05024	7264	<150#	DU8673	SSSED	539155	8258374	53	5	10	11	6490	50	<2	<1		<1	<1
AC 05024	7264	<150#	DU8672	SSSED	539555	8255785	53	13	12	12	16900	159	<2	<1		<1	<1
AC 05024	7264	<150#	DU8671	SSSED	539340	8255843	53	4	4	<2	8440	50	<2	NA		<1	<1
AC 05024	7264	<150#	DU8741	SSSED	549556	8267375	53	9	11	3	12500	586	2	NA		<1	<1
AC 05024	7264	<150#	DU8688	SSSED	537676	8267821	53	4	12	12	16600	62	<2	NA		<1	<1
AC 05024	7264	<150#	DU8687	SSSED	536748	8267405	53	4	11	7	10600	92	<2	<1		<1	<1
AC 05024	7264	<150#	DU8683	SSSED	540777	8266315	53	21	22	21	25200	264	4	NA		<1	<1
AC 05024	7264	<150#	DU8682	SSSED	542138	8265155	53	9	17	14	13600	276	<2	<1		<1	<1
AC 05024	7264	<150#	DU8681	SSSED	541830	8264089	53	15	20	11	23700	262	4	<1		<1	<1
AC 05024	7264	<150#	DU8679	SSSED	535703	8262107	53	12	18	21	14600	87	<2	NA		<1	<1
AC 05024	7264	<150#	DU8678	SSSED	536217	8261257	53	10	13	19	20600	235	<2	<1		<1	<1
AC 05024	7264	<150#	DU8677	SSSED	536594	8260057	53	6	8	12	12900	170	<2	NA		<1	<1
AC 05024	7264	<150#	DU8676	SSSED	537362	8259170	53	6	10	13	17100	389	<2	NA		<1	<1
AC 05024	7264	<150#	DU8686	SSSED	536893	8266956	53	3	11	8	11200	146	<2	NA		<1	<1
AC 05024	7264	<150#	DU8685	SSSED	537125	8266164	53	4	8	8	16600	431	<2	<1		<1	<1
AC 05024	7264	<150#	DU8684	SSSED	539039	8266440	53	26	12	18	22600	519	2	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8230	SSSED	552042	8265005	53	4	11	8	21000	58	6	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8688	SSSED	537676	8267821	53	7	14	18	168000	69	32	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8687	SSSED	536748	8267405	53	5	17	12	155000	128	30	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8686	SSSED	536893	8266956	53	4	13	17	180000	89	31	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8685	SSSED	537125	8266164	53	9	13	16	268000	149	40	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8684	SSSED	539039	8266440	53	37	18	16	42900	861	9	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8683	SSSED	540777	8266315	53	25	43	15	83500	706	27	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8682	SSSED	542138	8265155	53	18	22	16	32400	394	11	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8681	SSSED	541830	8264089	53	55	33	85	96200	4389	28	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8679	SSSED	535703	8262107	53	14	21	13	17900	95	<2	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8678	SSSED	536217	8261257	53	19	19	33	50700	560	4	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8677	SSSED	536594	8260057	53	39	18	72	150000	2062	23	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8676	SSSED	537362	8259170	53	37	19	29	153000	747	26	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8675	SSSED	539882	8259684	53	19	17	10	64900	506	20	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8674	SSSED	538134	8257541	53	3	7	4	30800	113	5	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8673	SSSED	539155	8258374	53	6	11	10	9620	59	<2	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8672	SSSED	539555	8255785	53	19	14	12	21000	141	5	<1		<1	<1
AC 05025	7264	+20#-2mm	DU8671	SSSED	539340	8255843	53	10	4	8	42500	42	12	<1		<1	<1

Lab Batch Code	EL	Mesh	Sample Number	Sample Type	AMG Easting	AMG Northing	Zone	Cu ppm	Zn ppm	Pb ppm	Fe ppm	Mn ppm	As ppm	Au ppb	Au-Rep ppb	Ag ppm	Tl ppm
AC 05025	7264	+20#-2mm	DJ8741	SSSED	549556	8267375	53	7	10	4	13600	335	<2	<1		<1	<1
AC 08770	7264	+20#-2mm	DJ8682	SSSED	549570	8267725	53	4	3	<2	10700	351	<1	NA		<1	NA
AC 08770	7264	+20#-2mm	DJ8681	SSSED	549756	8267555	53	14	6	<2	14400	341	1	NA		<1	NA
AC 08770	7264	+20#-2mm	DJ8680	SSSED	550058	8266422	53	8	14	<2	27800	205	1	NA		<1	NA
AC 08770	7264	+20#-2mm	DJ8679	SSSED	550264	8266146	53	17	24	<2	50600	318	2	NA		<1	NA
AC 08770	7264	+20#-2mm	DJ8678	SSSED	543121	8267489	53	14	20	19	73200	770	26	NA		<1	NA
AC 08770	7264	+20#-2mm	DJ8677	SSSED	541775	8267292	53	7	4	8	37400	85	13	NA		<1	NA
AC 08770	7264	+20#-2mm	DJ8674	SSSED	537964	8265025	53	8	12	21	88600	538	17	NA		<1	NA
AC 08770	7264	+20#-2mm	DJ8673	SSSED	541641	8263096	53	17	26	29	38300	1280	4	NA		<1	NA
AC 08770	7264	+20#-2mm	DJ8672	SSSED	540649	8261608	53	40	24	199	97500	11800	32	NA		<1	NA
AC 08770	7264	+20#-2mm	DJ8671	SSSED	540877	8261668	53	21	39	24	156000	2527	30	NA		<1	NA
AC 08770	7264	+20#-2mm	DJ8670	SSSED	540294	8260772	53	35	26	151	75000	21800	25	NA		<1	NA
AC 10223	7264	-2mm	EH2617	SOIL	562533	8260576	53	8	20	3	9900	351	3	NA		NA	NA
AC 10223	7264	-2mm	EH2618	SOIL	562261	8260551	53	6	10	2	7800	285	3	NA		NA	NA
AC 10223	7264	-2mm	EH2619	SOIL	561984	8260568	53	12	24	5	12500	531	3	NA		NA	NA
AC 10223	7264	-2mm	EH2621	SOIL	562402	8261383	53	5	17	3	9200	253	<1	NA		NA	NA
AC 10223	7264	-2mm	EH2620	SOIL	562346	8261322	53	6	17	5	9600	292	1	NA		NA	NA
AC 10398	7264		EH1283	ROCK	539310	8261060	53	41	24	<2	40200	421	33	NA		<1	NA
AC 10398	7264		EH1282	ROCK	539310	8261060	53	46	38	7	40500	2170	20	NA		<1	NA
AC 10398	7264		EH1281	ROCK	542900	8265000	53	179	39	12	138000	299	5	NA		<1	NA
AC 10398	7264		EH1280	ROCK	539300	8265000	53	55	169	48	68600	356	18	NA		<1	NA
AC 10398	7264		EH1274	ROCK	543000	8267200	53	82	565	29	524000	5800	3360	NA		2	NA
AC 10398	7264		EH1273	ROCK	541250	8267000	53	220	1150	85	421000	88000	29	NA		<1	NA
AC 10398	7264		EH1269	ROCK	539640	8267000	53	110	109	32	49300	951	8	NA		<1	NA
AC 10398	7264		EH1270	ROCK	539700	8267050	53	90	697	74	116000	625	8	NA		<1	NA
AC 10398	7264		EH1272	ROCK	540850	8267000	53	27	30	6	63500	11400	1	NA		<1	NA
AC 10398	7264		EH1271	ROCK	540800	8267000	53	12	32	7	33500	9100	1	NA		<1	NA
AC 10467	7264	-80#	EH1308	SOIL	543950	8267000	53	14	16	20	24000	342	1	NA		<1	NA
AC 10467	7264	-80#	EH1312	SOIL	538600	8267000	53	2	2	11	3100	127	<1	NA		<1	NA
AC 10467	7264	-80#	EH1316	SOIL	539100	8267000	53	8	5	17	13900	767	2	NA		<1	NA
AC 10467	7264	-80#	EH1314	SOIL	539000	8267000	53	8	5	15	14600	794	2	NA		<1	NA
AC 10467	7264	-80#	EH1366	SOIL	539000	8265000	53	26	11	12	9300	843	5	NA		<1	NA
AC 10467	7264	-80#	EH1364	SOIL	538900	8265000	53	74	22	19	17600	1560	9	NA		<1	NA
AC 10467	7264	-80#	EH1362	SOIL	538800	8265000	53	33	17	29	10600	981	7	NA		<1	NA
AC 10467	7264	-80#	EH1360	SOIL	538700	8265000	53	4	3	11	4400	347	1	NA		<1	NA
AC 10467	7264	-80#	EH1358	SOIL	538600	8265000	53	8	8	21	10600	438	6	NA		<1	NA
AC 10467	7264	-80#	EH1356	SOIL	538500	8265000	53	24	15	33	13700	867	7	NA		<1	NA
AC 10467	7264	-80#	EH1354	SOIL	538400	8265000	53	14	7	33	10100	821	4	NA		<1	NA
AC 10467	7264	-80#	EH1352	SOIL	543000	8267200	53	20	40	12	30400	2420	36	NA		<1	NA
AC 10467	7264	-80#	EH1382	SOIL	539800	8265000	53	5	2	12	5400	326	<1	NA		<1	NA

Lab Batch Code	EL	Mesh	Sample Number	Sample Type	AMG Easting	AMG Northing	Zone	Cu ppm	Zn ppm	Pb ppm	Fe ppm	Mn ppm	As ppm	Au ppb	Au-Rep ppb	Ag ppm	Ti ppm
AC 10467	7264	-80#	EH1380	SOIL	539700	8265000	53	3	1	13	3800	89	1	NA		<1	NA
AC 10467	7264	-80#	EH1378	SOIL	539600	8265000	53	8	1	15	9600	189	2	NA		<1	NA
AC 10467	7264	-80#	EH1376	SOIL	539500	8265000	53	10	5	12	9600	354	2	NA		<1	NA
AC 10467	7264	-80#	EH1374	SOIL	539400	8265000	53	7	5	11	9800	303	2	NA		<1	NA
AC 10467	7264	-80#	EH1372	SOIL	539300	8265000	53	28	14	9	15200	792	5	NA		<1	NA
AC 10467	7264	-80#	EH1370	SOIL	539200	8265000	53	37	15	12	17700	1490	7	NA		<1	NA
AC 10467	7264	-80#	EH1368	SOIL	539100	8265000	53	53	18	11	14700	1070	5	NA		<1	NA
AC 10467	7264	-80#	EH1398	SOIL	540900	8265000	53	30	14	11	18900	381	10	NA		<1	NA
AC 10467	7264	-80#	EH1396	SOIL	540700	8265000	53	12	5	3	4800	288	4	NA		<1	NA
AC 10467	7264	-80#	EH1394	SOIL	540600	8265000	53	24	8	10	7400	721	5	NA		<1	NA
AC 10467	7264	-80#	EH1392	SOIL	540500	8265000	53	35	16	13	7900	898	7	NA		<1	NA
AC 10467	7264	-80#	EH1390	SOIL	540400	8265000	53	16	7	4	4900	831	4	NA		<1	NA
AC 10467	7264	-80#	EH1388	SOIL	540300	8265000	53	12	11	6	7800	731	5	NA		<1	NA
AC 10467	7264	-80#	EH1386	SOIL	540000	8265000	53	15	12	7	12100	7158	3	NA		<1	NA
AC 10467	7264	-80#	EH1384	SOIL	539900	8265000	53	5	2	11	3900	208	1	NA		<1	NA
AC 10467	7264	-80#	EH1350	SOIL	542900	8267200	53	11	17	15	15200	1140	7	NA		<1	NA
AC 10467	7264	-80#	EH1348	SOIL	541800	8267000	53	1	2	13	4300	39	<1	NA		<1	NA
AC 10467	7264	-80#	EH1346	SOIL	541700	8267000	53	2	1	7	3500	116	<1	NA		<1	NA
AC 10467	7264	-80#	EH1344	SOIL	541500	8267000	53	1	<1	13	1900	65	<1	NA		<1	NA
AC 10467	7264	-80#	EH1342	SOIL	541400	8267000	53	2	<1	9	3100	123	<1	NA		<1	NA
AC 10467	7264	-80#	EH1340	SOIL	541300	8267000	53	14	8	15	8700	507	1	NA		<1	NA
AC 10467	7264	-80#	EH1338	SOIL	541200	8267000	53	11	14	30	15500	956	4	NA		<1	NA
AC 10467	7264	-80#	EH1336	SOIL	540900	8267000	53	14	7	19	20200	1620	3	NA		<1	NA
AC 10467	7264	-80#	EH1334	SOIL	540800	8267000	53	8	6	13	11400	608	<1	NA		<1	NA
AC 10467	7264	-80#	EH1332	SOIL	540400	8267000	53	3	1	14	7500	118	<1	NA		<1	NA
AC 10467	7264	-80#	EH1330	SOIL	540000	8267000	53	5	<1	11	4500	742	<1	NA		<1	NA
AC 10467	7264	-80#	EH1328	SOIL	539900	8267000	53	2	1	11	2600	114	<1	NA		<1	NA
AC 10467	7264	-80#	EH1326	SOIL	539800	8267000	53	2	<1	9	2300	36	<1	NA		<1	NA
AC 10467	7264	-80#	EH1324	SOIL	539700	8267000	53	26	21	21	20700	268	6	NA		<1	NA
AC 10467	7264	-80#	EH1322	SOIL	539600	8267000	53	9	7	11	8600	239	1	NA		<1	NA
AC 10467	7264	-80#	EH1320	SOIL	539500	8267000	53	6	2	11	6500	165	<1	NA		<1	NA
AC 10467	7264	-80#	EH1318	SOIL	539200	8267000	53	9	6	24	20500	523	3	NA		<1	NA
AC 10467	7264	-80#	EH1310	SOIL	543850	8267000	53	19	23	14	34600	445	4	NA		<1	NA
AC 10467	7264	-80#	EH1306	SOIL	544050	8267000	53	16	22	20	21500	1010	2	NA		<1	NA
AC 10467	7264	-80#	EH1302	SOIL	544250	8267000	53	9	26	19	22900	351	1	NA		<1	NA
AC 10467	7264	-80#	EH1304	SOIL	544150	8267000	53	10	19	15	17400	336	2	NA		<1	NA
AC 10467	7264	-80#	EI5802	SOIL	541700	8265000	53	39	16	15	23700	403	6	NA		<1	NA
AC 10467	7264	-80#	EI5818	SOIL	539400	8261000	53	31	19	6	15200	1450	13	NA		<1	NA
AC 10467	7264	-80#	EI5816	SOIL	539300	8261000	53	58	68	6	31700	9500	55	NA		<1	NA
AC 10467	7264	-80#	EI5838	SOIL	541600	8261100	53	40	10	7	12200	795	4	NA		<1	NA

Lab Batch Code	EL	Mesh	Sample Number	Sample Type	AMG Easting	AMG Northing	Zone	Cu ppm	Zn ppm	Pb ppm	Fe ppm	Mn ppm	As ppm	Au ppb	Au-Rep ppb	Ag ppm	Tl ppm
AC 10467	7264	-80#	EI5836	SOIL	541500	8261100	53	33	17	16	7300	1020	2	NA		<1	NA
AC 10467	7264	-80#	EI5834	SOIL	541400	8261100	53	53	9	18	13800	695	3	NA		<1	NA
AC 10467	7264	-80#	EI5832	SOIL	541300	8261100	53	49	5	18	7400	539	1	NA		<1	NA
AC 10467	7264	-80#	EI5830	SOIL	541200	8261100	53	66	46	8	18300	1640	5	NA		<1	NA
AC 10467	7264	-80#	EI5828	SOIL	541100	8261100	53	22	37	6	17600	1340	3	NA		<1	NA
AC 10467	7264	-80#	EI5826	SOIL	541000	8261100	53	11	10	2	13900	267	2	NA		<1	NA
AC 10467	7264	-80#	EI5824	SOIL	540100	8261000	53	13	9	13	23300	651	13	NA		<1	NA
AC 10467	7264	-80#	EI5822	SOIL	539950	8261000	53	6	3	8	11300	194	13	NA		<1	NA
AC 10467	7264	-80#	EI5820	SOIL	539500	8261000	53	27	19	10	14200	1340	12	NA		<1	NA
AC 10467	7264	-80#	EI5806	SOIL	542800	8265000	53	9	7	10	10200	166	<1	NA		<1	NA
AC 10467	7264	-80#	EI5810	SOIL	543000	8265000	53	6	5	14	7500	776	1	NA		<1	NA
AC 10467	7264	-80#	EI5812	SOIL	543800	8265000	53	15	14	15	26200	569	1	NA		<1	NA
AC 10467	7264	-80#	EI5814	SOIL	539200	8261000	53	34	29	10	30800	4950	42	NA		<1	NA
AC 10467	7264	-80#	EI5808	SOIL	542900	8265000	53	6	5	12	6700	444	2	NA		<1	NA
AC 10467	7264	-80#	EI5804	SOIL	542200	8265000	53	14	12	16	17900	354	3	NA		<1	NA

APPENDIX 4.

Manganese Drilling Data

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

GRID: AMG

ZONE: 53

RELIABILITY: SATL

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 21-JUN-93

EASTING: 525113

NORTHING: 8320913

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR05

HOLE NUMBER : TRR05

COMMENTS:

LOGGED BY : PRD & DWW

TOTAL DEPTH : 58.0

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Laterite Sand	sandy	pisolitic	medium red	brown f sand	to med sand	weak	
2.0	4.0		PRO	Sandstone	quartzose		medium red	brown f sand	to med sand	weak	
4.0	6.0		PRO	Sandstone	quartzose		patchy red	brown f sand	to med sand	mod'ly strong	
6.0	8.0		PRO	Sandstone	quartzose		patchy grey	brown f sand	to med sand	strong	
8.0	10.0		PRO	Sandstone	quartzose		patchy grey	brown f sand	to med sand	strong	
10.0	12.0		PRO	Sandstone	ferruginous		medium red	brown f sand	to med sand	strong	
12.0	14.0		PRO	Sandstone	clayey	ferruginous	patchy brown	grey vf sand	to f sand	mod'ly strong	
14.0	16.0		PRO	Sandstone	quartzose		light pink	grey f sand	to med sand	strong	
16.0	18.0		PRO	Sandstone	quartzose		light pink	grey f sand	to med sand	strong	
18.0	20.0		PRO	Sandstone	clayey		banded grey	brown vf sand	to f sand	mod'ly strong	
20.0	22.0		PRO	Sandstone	ferruginous		dark red	brown vf sand	to f sand	mod'ly strong	
22.0	24.0		PRO	Sandstone	massive	ferruginous	dark red	brown vf sand	to f sand	mod'ly strong	
24.0	26.0		PRO	Sandstone	massive	ferruginous	dark red	brown vf sand	to f sand	mod'ly strong	
26.0	28.0		PRO	Sandstone	ferruginous		medium red	brown vf sand	to f sand	mod'ly strong	
28.0	30.0		PRO	Claystone Sandstone	ferruginous	clayey	medium red	brown vf sand	to f sand	mod'ly strong	
30.0	32.0		PRO	Sandstone	quartzose		light grey	vf sand	to f sand	mod'ly strong	
32.0	34.0		PRO	Sandstone	quartzose		light grey	vf sand	to f sand	mod'ly strong	
34.0	36.0		PRO	Sandstone	quartzose		light grey	vf sand	to f sand	mod'ly strong	
36.0	38.0		PRO	Shale	sandy		medium grey	vf sand	to f sand	mod'ly strong	
38.0	40.0		PRO	Shale Sandstone	sandy		medium grey	vf sand	to f sand	mod'ly strong	
40.0	42.0	DZ838	PRO	Sandstone Sandstone Sandstone	quartzose massive shaly		medium grey	f sand	to med sand	strong	

SHEET 2 OF 2 HOLE NUMBER : TRR05

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0	DZ838	PRO	Sandstone	shaly	medium	grey	vf sand	to f sand	strong	
44.0	46.0	DZ838	PRO	Sandstone	shaly	medium	grey	vf sand	to f sand	strong	
46.0	48.0	DZ838	PRO	Slate	micaceous						
				Shale	sandy	medium	grey	med silt	to vf sand	strong	
48.0	50.0	DZ838	PRO	Shale	sandy	medium	grey	med silt	to vf sand	strong	
50.0	52.0	DZ839	PRO	Shale	sandy	medium	grey	med silt	to vf sand	strong	
52.0	54.0	DZ839	PRO	Shale	sandy	medium	grey	med silt	to vf sand	strong	
54.0	56.0	DZ839	PRO	Shale	sandy	medium	grey	med silt	to vf sand	strong	
56.0	58.0	DZ839	PRO	Sandstone							
				Sandstone	shaly	medium	grey	vf sand	to f sand	strong	

EOH at 58.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

GRID: AMG ZONE: 53

RELIABILITY: SATL

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 21-JUN-93

EASTING: 523350

NORTHING: 8319132

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR06

HOLE NUMBER : TRR06

COMMENTS:

LOGGED BY : PRD & DWW

TOTAL DEPTH : 46.0

DEPTHS From To (m) (m)		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS		
1.0	2.0		TER	Sand	quartzose	light	orange	brown	f sand	to med sand	loose		
2.0	4.0		PRO	Sandstone	quartzose	clayey	light	orange	brown	f sand	to med sand	soft	
4.0	6.0		PRO	Sandstone	quartzose	clayey	light	orange	brown	f sand	to med sand	soft	
6.0	8.0		PRO	Mudstone	ferruginous		medium	red	brown	med silt	to f sand	weak	
8.0	10.0		PRO	Mudstone	ferruginous		medium	red	brown	med silt	to f sand	weak	
10.0	12.0		PRO	Sandstone	quartzose		light	grey		f sand	to med sand	strong	
12.0	14.0		PRO	Sandstone Clay	quartzose ferruginous		light	grey		f sand	to med sand	strong	alternating hard qtz sandstone and weathered clay
14.0	16.0		PRO	Sandstone	quartzose		medium	grey		f sand	to med sand	strong	
16.0	18.0		PRO	Sandstone	shaly		medium	grey		vf sand	to f sand	strong	
18.0	20.0		PRO	Mudstone Sandstone	shaly quartzose	sandy	pale	grey	white	med silt	to vf sand	strong	
20.0	22.0		PRO	Sandstone	quartzose		light	grey	tan	f sand	to med sand	strong	
22.0	24.0		PRO	Sandstone	quartzose		light	grey	tan	f sand	to med sand	strong	
24.0	26.0		PRO	Sandstone	quartzose		banded	red	grey	f sand	to med sand	strong	
26.0	28.0		PRO	Sandstone	quartzose	ferruginous	patchy	grey	brown	f sand	to med sand	strong	
28.0	30.0		PRO	Sandstone	quartzose		light	grey		f sand	to med sand	very strong	
30.0	32.0		PRO	Sandstone	quartzose		light	grey		f sand	to med sand	very strong	
32.0	34.0		PRO	Sandstone	quartzose		banded	grey	brown	f sand	to med sand	very strong	
34.0	36.0	D2840	PRO	Sandstone	quartzose		banded	grey	brown	f sand	to med sand	very strong	
36.0	38.0	D2840	PRO	Sandstone	quartzose		banded	grey	brown	f sand	to med sand	very strong	
38.0	40.0	D2840	PRO	Sandstone	quartzose		banded	grey	brown	f sand	to med sand	very strong	
40.0	42.0	D2840	PRO	Sandstone	quartzose		light	grey		f sand	to med sand	very strong	

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0	DZ840	PRO	Sandstone	quartzose	light	grey	f sand	to med sand	very strong	
44.0	46.0	DZ841	PRO	Shale	sandy	dark	grey	med silt	to f sand	strong	

EOH at 46.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 28-JUN-93

HOLE NUMBER : TRR17

COMMENTS:

LOGGED BY : PRD & DWW
TOTAL DEPTH : 58.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 523377 NORTHING: 8327858 R.L.: 20.0
SHEET 1 OF 2 HOLE NUMBER : TRR17

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)											
0.0	2.0		TER	Laterite Sand	pisolitic	medium	red	brown	med sand	to vs pebble	loose	
2.0	4.0		TER	Laterite Sand	pisolitic	medium	red	brown	med sand	to vs pebble	loose	
4.0	6.0		CRE	Sandstone Sand	silty	light	tan	brown	vf sand	to med sand	weak	
6.0	8.0		CRE	Sandstone Sand	silty	light	tan	brown	vf sand	to med sand	weak	
8.0	10.0		CRE	Sandstone Sand	silty	light	tan	brown	vf sand	to med sand	weak	
10.0	12.0		CRE	Sandstone Sand	silty	light	tan	brown	vf sand	to med sand	weak	
12.0	14.0		CRE	Sandstone Sand	gritty quartzose	pale	tan	brown	c sand	to granule	weak	
14.0	16.0		CRE	Sand	gritty quartzose	pale	grey		c sand	to vc sand	loose	
16.0	18.0		CRE	Grit Sand	sandy	medium	tan	brown	med sand	to granule	soft	
18.0	20.0		CRE	Grit Sand	sandy	medium	tan	brown	med sand	to granule	soft	
20.0	22.0		CRE	Conglomerate	clayey	light	brown	grey	granule	to s pebble	soft	start unit 2?
22.0	24.0		CRE	Conglomerate Clay	sandy	light	brown	grey	f sand	to med pebble	soft	
24.0	26.0		CRE	Sandstone Mudstone	ferruginous	light	tan	brown	vf sand	to med sand	weak	could be start of proterozoic
26.0	28.0		CRE	Sandstone Mudstone	ferruginous	light	tan	brown	vf sand	to med sand	weak	
28.0	30.0		CRE	Sandstone Mudstone	ferruginous	light	tan	brown	vf sand	to med sand	weak	
30.0	32.0		PRO	Sandstone	ferruginous	medium	red	brown	f sand	to med sand	mod'ly strong	
32.0	34.0		PRO	Siltstone	siliceous laminated	medium	red	brown	med silt	to vf sand	mod'ly strong	
34.0	36.0		PRO	Mudstone	ferruginous	medium	brown		med silt		mod'ly strong	
36.0	38.0		PRO	Mudstone Clay	ferruginous	medium	red	brown	med silt	to vf sand	weak	rock is soft & clayey - cretaceous?
38.0	40.0		PRO	Mudstone Clay	ferruginous	medium	red	brown	med silt	to vf sand	weak	sample is like thick clayey soup with small rock chips
40.0	42.0		PRO	Mudstone Clay	ferruginous	medium	red	brown	med silt	to vf sand	weak	sample is like thick clayey soup with small rock chips

OH at 58.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 28-JUN-93

HOLE NUMBER : TRR18

COMMENTS:

LOGGED BY : PRD & DW
TOTAL DEPTH : 56.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 522024 NORTHING: 8325727

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR18

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Sand		medium	red	brown	med sand	to vs pebble	loose
				Pisolite	lateritic						
2.0	4.0		TER	Sand		medium	red	brown	med sand	to vs pebble	loose
				Pisolite	lateritic						
4.0	6.0		CRE	Sandstone	clayey	light	orange	brown	vf sand	to f sand	weak
				Sand							
6.0	8.0		CRE	Sandstone	clayey	light	orange	brown	vf sand	to f sand	weak
				Sand							
8.0	10.0		CRE	Clay	sandy	medium	orange	brown	clay	to f sand	firm
10.0	12.0		CRE	Sand	quartzose	light	grey	brown	med sand	to vc sand	friable
12.0	14.0		CRE	Sand	clayey	light	grey	brown	vf sand	to med sand	soft
14.0	16.0		CRE	Sand	clayey	light	grey		vf sand	to med sand	soft
16.0	18.0		CRE	Sand	clayey	light	grey	brown	f sand	to c sand	soft
				Sandstone	ferruginous						qtz frags present also
18.0	20.0		CRE	Grit	clayey	medium	red	brown	vf sand	to granule	soft
20.0	22.0		CRE	Sand	clayey	medium	red	brown	vf sand	to med sand	soft
				Clay							
22.0	24.0		CRE	Conglomerate	gritty clayey	medium	red	brown	f sand	to vs pebble	soft
											clasts include: qtz grains, fe snst, cherty frags
24.0	26.0		CRE	Conglomerate	clayey	light	grey	brown	f sand	to s pebble	soft
				Clay	sandy						
26.0	28.0		CRE	Conglomerate	clayey	light	grey	brown	f sand	to s pebble	soft
				Clay	sandy						
28.0	30.0		CRE	Conglomerate	clayey	light	grey	brown	f sand	to s pebble	soft
				Clay	sandy						
30.0	32.0		CRE	Clay		light	grey	brown	clay	to s pebble	soft
											clay with cherty frags (2-3 cm diameter)
32.0	34.0		CRE	Siltstone	siliceous	light	grey	brown	clay	to f sand	weak
				Clay							contains pisolites - contamination?
34.0	36.0		CRE	Sandstone	clayey	light	grey	brown	clay	to f sand	weak
				Clay							contains pisolites - contamination?
36.0	38.0		CRE	Sandstone	clayey	light	grey	brown	clay	to f sand	weak
				Clay							
38.0	40.0		CRE	Sandstone		light	grey	brown	f sand	to med sand	weak
				Ironstone	pisolitic						
40.0	42.0		CRE	Clay	gritty	light	grey	brown	clay	to granule	weak
				Ironstone	pisolitic						

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
from (m)	To (m)										
44.0	44.0		CRE	Sandstone	light	grey	brown	f sand	to med sand	weak	sample is clayey liquid with frags of snst & fe snst
44.0	46.0		PRO	Sandstone	ferruginous	medium	brown	f sand	to med sand	mod'ly strong	
48.0	48.0		PRO	Sandstone	ferruginous	medium	brown	f sand	to med sand	mod'ly strong	
50.0	50.0		PRO	Sandstone	ferruginous	medium	brown	f sand	to med sand	mod'ly strong	
52.0	52.0		PRO	Chert							
52.0	52.0		PRO	Dolomite	silicified	medium	tan	brown		strong	cavities present
56.0	56.0	DZ856	PRO	Dolomite	silicified	medium	tan	brown		strong	cavities present

H at 56.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

GRID: AMG ZONE: 53

RELIABILITY: SATL

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 02-JUL-93

EASTING: 518454

NORTHING: 8330989

R.L.: 20.0

SHEET 1 OF 2 HOLE NUMBER : TRR28

HOLE NUMBER : TRR28

COMMENTS:

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE			STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)												
0.0	2.0		TER	Soil	sandy	ferruginous	m light	brown		med silt	to vf sand	soft	
2.0	4.0		TER	Sandstone	lateritic	weathered	patchy	red	grey	med silt	to f sand	hard	
4.0	6.0		CRE	Claystone	siliceous		palest	orange	grey	vf silt	to med silt	weak	trace mn oxides.
5.0	8.0		CRE	Carbonate	siliceous		palest	orange	grey	vf silt	to med silt	weak	trace mn oxides.
6.0	8.0			Claystone	siliceous								
8.0	10.0		CRE	Chert	massive								
8.0	10.0		CRE	Claystone	sandy		patchy	red	grey	f silt	to vf sand	weak	
10.0	12.0			Sandstone	ferruginous								
10.0	12.0		CRE	Claystone	sandy		patchy	red	grey	f silt	to vf sand	weak	possibly transported basement material
12.0	14.0			Sandstone	ferruginous								
12.0	14.0		CRE	Claystone	silty		patchy	red	grey	vf silt	to med silt	weak	possibly transported basement material
14.0	16.0			Claystone	ferruginous								
14.0	16.0		CRE	Sandstone	ferruginous	clayey	patchy	red	grey	med silt	to vf sand	weak	
16.0	18.0			Carbonate	siliceous								
16.0	18.0		CRE	Sandstone	ferruginous	ferruginous	patchy	red	grey	med silt	to vf sand	weak	
18.0	20.0			Carbonate	siliceous								
18.0	20.0		CRE	Clay	gritty		light	brown	grey	vf silt	to vf sand	hard	
20.0	22.0												
20.0	22.0		CRE	Claystone	sandy		patchy	orange	grey	vf silt	to vf sand	hard	
22.0	24.0												
22.0	24.0		CRE	Claystone	gritty		patchy	red	grey	vf silt	to vf sand	hard	
24.0	26.0												
24.0	26.0		CRE	Claystone	sandy		m light	orange	red	vf silt	to vf sand	hard	
26.0	28.0												
26.0	28.0		CRE	Claystone	massive		m light	orange	red	vf silt	to vf sand	hard	
28.0	30.0			Sandstone	ferruginous								
28.0	30.0		CRE	Claystone	massive		m light	orange	red	vf silt	to vf sand	hard	
30.0	32.0			Sandstone	ferruginous								
30.0	32.0		CRE	Claystone	sandy		medium	orange	red	vf silt	to vf sand	hard	
32.0	34.0			Sandstone	ferruginous								
32.0	34.0		CRE	Claystone	ferruginous		medium	orange	brown	vf silt	to vf sand	hard	
34.0	36.0			Sandstone	ferruginous								
34.0	36.0		CRE	Claystone	ferruginous		medium	orange	brown	vf silt	to vf sand	hard	
36.0	38.0			Sandstone	ferruginous								
36.0	38.0		CRE	Claystone	gritty		medium	orange	red	vf silt	to c silt	weak	
38.0	40.0												
38.0	40.0		CRE	Claystone	gritty		light	orange	grey	vf silt	to c silt	weak	
40.0	42.0												
40.0	42.0		CRE	Sandstone	ferruginous	weathered	medium	orange	brown	vf sand	to f sand	weak	
				Clay	ferruginous								

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		CRE	Clay	ferruginous	medium	red	brown	med silt	to vf sand	weak
				Sandstone	ferruginous						
44.0	46.0		CRE	Claystone	ferruginous gritty	medium	red	f silt	to vf sand	weak	

EOH at 52.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 07-JUL-93

HOLE NUMBER : TRR29

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 22.0

GRID: AMG ZONE: 53

RELIABILITY: SATL

EASTING: 517510

NORTHING: 8329200

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR29

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Soil	sandy	lateritic	light	red	brown	med silt	to f sand	friable
2.0	4.0		TER	Soil	sandy	lateritic	light	red	brown	med silt	to f sand	hard
4.0	6.0		CRE	Laterite Sandstone	weathered ferruginous	clayey	patchy	red	grey	c silt	to f sand	weak
6.0	8.0		PRO	Sandstone	clayey	fresh	light	brown	grey	med silt	to f sand	mod'ly strong
8.0	10.0		PRO	Chert Sandstone	laminated clayey	fresh	pale	grey		med silt	to f sand	mod'ly strong
10.0	12.0		PRO	Chert Sandstone	laminated clayey	fresh	patchy	orange	grey	med silt	to f sand	mod'ly strong
12.0	14.0		PRO	Sandstone	ferruginous clayey	fresh	patchy	orange	grey	med silt	to f sand	mod'ly strong
14.0	16.0		PRO	Sandstone	ferruginous clayey	fresh	patchy	orange	grey	med silt	to f sand	mod'ly strong
16.0	18.0	DZ868	PRO	Sandstone	ferruginous clayey	fresh	pale	grey		med silt	to f sand	mod'ly strong
18.0	20.0	DZ868	PRO	Sandstone	clayey	fresh	pale	grey		med silt	to f sand	mod'ly strong
20.0	22.0	DZ868	PRO	Sandstone	clayey	fresh	pale	grey		med silt	to f sand	mod'ly strong

EOH at 22.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 07-JUL-93

HOLE NUMBER : TRR30

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 28.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 516674 NORTHING: 8331991 R.L.: 20.0
SHEET 1 OF 1 HOLE NUMBER : TRR30

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor								
0.0	2.0		TER	Soil	ferruginous	sandy	light	orange	brown	f silt	to vf sand	friable
2.0	4.0		TER	Soil	ferruginous	sandy	light	orange	brown	vf silt	to vf sand	firm
4.0	6.0		CRE	Sandstone	clayey	gritty	patchy	red	grey	med silt	to med sand	weak
6.0	8.0		PRO	Sandstone	fresh	massive	patchy	red	grey	c silt	to f sand	weak
8.0	10.0		PRO	Sandstone	ferruginous		patchy	red	grey	med silt	to vf sand	weak
10.0	12.0		PRO	Sandstone	fresh	silty	patchy	red	grey	med silt	to vf sand	weak
12.0	14.0		PRO	Sandstone	ferruginous	sandy	light	orange		f silt	to vf sand	weak
14.0	16.0		PRO	Sandstone	fresh	silty	light	orange		f silt	to vf sand	weak
16.0	18.0		PRO	Siltstone	ferruginous	interbedded	light	orange		f silt	to vf sand	weak
18.0	20.0		PRO	Clay	ferruginous	sandy	light	orange		f silt	to vf sand	weak
20.0	22.0		PRO	Sandstone	ferruginous		light	orange	grey	med silt	to f sand	weak
22.0	24.0		PRO	Sandstone	clayey		patchy	orange	grey	med silt	to f sand	weak
24.0	26.0	DZ869	PRO	Clay	sandy		light	orange		vf silt	to vf sand	weak
26.0	28.0	DZ869	PRO	Sandstone	sandy		light	orange		vf silt	to vf sand	weak
28.0		DZ869	PRO	Sandstone	fresh		light	orange	grey	med silt	to vf sand	weak
				Clay	sandy							

BOH at 28.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7260

SHEET : TOWNS

JOB NO : MAY

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 08-JUL-93

HOLE NUMBER : TRR34

COMMENTS:

LOGGED BY : DWW

TOTAL DEPTH : 16.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 507644

NORTHING: 8329411

R.L.: 20.0

SHEET 1 OF 1 HOLE NUMBER : TRR34

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Laterite	weathered	med dark red	brown	f silt	to vf sand	hard	
2.0	4.0		TER	Sandstone	lateritic clayey	patchy red	grey	vf silt	to f sand	hard	
4.0	6.0		PRO	Sandstone	clayey	patchy red	grey	med silt	to vf sand	weak	weathered basement.
6.0	8.0		PRO	Sandstone	ferruginous clayey	patchy red	grey	med silt	to vf sand	weak	weathered basement.
8.0	10.0		PRO	Sandstone	ferruginous clayey	patchy grey	red	med silt	to vf sand	weak	weathered basement.
10.0	12.0	DZ873	PRO	Sandstone	clayey ferruginous	patchy orange	grey	f silt	to vf sand	mod'ly strong	
12.0	14.0	DZ873	PRO	Siltstone	silicified clayey ferruginous	patchy orange	grey	f silt	to vf sand	mod'ly strong	
14.0	16.0	DZ873	PRO	Siltstone	silicified fresh clayey	patchy red	grey	vf silt	to vf sand	mod'ly strong	

BOH at 16.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7260
SHEET : TOWNS
JOB NO : MAY

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 08-JUL-93

HOLE NUMBER : TRR35

COMMENTS:

LOGGED BY : DW
TOTAL DEPTH : 10.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 505508 NORTHING: 8327884 R.L.: 20.0
SHEET 1 OF 1 HOLE NUMBER : TRR35

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Laterite	sandy	weathered	medium	red	brown	vf silt	to vf sand	stiff	
2.0	4.0		PRO	Sandstone	lateritic		medium	orange	red	c silt	to f sand	weak	weathered basement.
4.0	6.0	D2874	PRO	Sandstone	ferruginous	weathered	m light	orange	red	vf sand	to f sand	weak	weathered basement.
6.0	8.0	D2874	PRO	Sandstone	ferruginous		patchy	orange	grey	vf sand	to f sand	weak	weathered basement.
8.0	10.0	D2874	PRO	Sandstone	fresh massive		patchy	red	grey	vf sand	to f sand	weak	

EOH at 10.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : Mt Young
JOB NO : MAZ

CONTRACTOR : Gaden Drilling
RIG TYPE : UDR-650
DATE DRILLED: 18-AUG-93

HOLE NUMBER : MYR07

COMMENTS:

LOGGED BY : PRD
TOTAL DEPTH : 40.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 590830 NORTHING: 8301800 R.L.: 15.0
SHEET 1 OF 1 HOLE NUMBER : MYR07

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		CEN	Sand	clayey	light	brown	f sand	to med sand	soft	
0.0	4.0		CRE	Claystone	sandy	patchy	brown	grey	clay	to f sand	weak
0.0	6.0		CRE	Siltstone	sandy	light	grey		med silt	to vf sand	weak
0.0	8.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
0.0	10.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
0.0	12.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
2.0	14.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
4.0	16.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
6.0	18.0		CRE	Clay	sandy	light	grey		clay	to f sand	soft
8.0	20.0		CRE	Clay	sandy	light	brown		clay	to f sand	soft
0.0	22.0		CRE	Clay	sandy	light	brown		clay	to f sand	soft
2.0	24.0		CRE	Clay	sandy	light	brown		clay	to f sand	soft
4.0	26.0		CRE	Sandstone	ferruginous	ferruginous	light	brown	grey	f sand	weak (proterozoic?)
6.0	28.0		CRE	Sandstone	clayey	ferruginous	light	brown	grey	f sand	weak (proterozoic?)
28.0	30.0		PRO	Sandstone	quartzose	light	pink	grey	f sand	to med sand	mod'ly strong
30.0	32.0		PRO	Sandstone	quartzose	light	pink	grey	f sand	to med sand	weak
32.0	34.0		PRO	Sandstone	quartzose	light	pink	grey	f sand	to med sand	weak
34.0	36.0		PRO	Sandstone	quartzose	ferruginous	light	pink	grey	f sand	weak
36.0	38.0	DZ975	PRO	Mudstone	clayey	medium	red	brown	med silt	to vf sand	stiff
38.0	40.0	DZ975	PRO	Mudstone	clayey	medium	red	brown	med silt	to vf sand	stiff

EOH at 40.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 19-AUG-93

HOLE NUMBER : MYR08

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 28.0

R.L.: 15.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 589270

NORTHING: 8301240

SHEET 1 OF 1 HOLE NUMBER : MYR08

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)										
0.0	2.0		CEN	Sand Claystone	clayey silty	light	grey	brown	f sand to med sand	loose	
2.0	4.0		CRE	Claystone Sandstone	sandy ferruginous	patchy	brown	grey	clay to f sand	weak	
4.0	6.0		CRE	Sandstone	clayey	light	grey		med silt to f sand	weak	
6.0	8.0		CRE	Clay	silty	light	grey		clay to med silt	soft	
8.0	10.0		CRE	Clay	sandy	light	grey		clay to f sand	soft	
10.0	12.0		CRE	Clay	sandy	medium	khaki	brown	clay to f sand	soft	
12.0	14.0		CRE	Clay Sandstone	sandy ferruginous	medium	khaki	brown	clay to f sand	soft	
14.0	16.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	mod'ly strong	probably warramanna sandstone, part of tawallah group
16.0	18.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	mod'ly strong	
18.0	20.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	mod'ly strong	
20.0	22.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	mod'ly strong	
22.0	24.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	strong	
24.0	26.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	strong	
26.0	28.0		PRO	Sandstone	quartzose	light	grey	brown	med sand to c sand	strong	

BOH at 28.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 19-AUG-93

HOLE NUMBER : MYR09

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 16.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 589370

NORTHING: 8302400

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : MYR09

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)				major/ minor							
0.0	2.0		CEN	Sand	clayey	light	khaki	brown	f sand	to med sand	loose	
2.0	4.0		CRE	Clay	sandy	light	grey	brown	clay	to f sand	soft	
4.0	6.0		CRE	Clay	sandy	light	grey	brown	clay	to f sand	soft	
6.0	8.0		CRE	Clay	sandy	light	grey	brown	clay	to f sand	soft	
8.0	10.0		CRE	Clay	sandy	light	grey	brown	clay	to f sand	soft	
10.0	12.0		CRE	Clay	sandy	light	brown	grey	clay	to f sand	soft	
12.0	14.0	DZ976	PRO	Sandstone	quartzose	ferruginous	medium	red	brown	f sand	to med sand	strong
14.0	16.0	DZ976	PRO	Sandstone	quartzose	ferruginous	medium	red	brown	f sand	to med sand	very strong

EOH at 16.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : TOWNS
JOB NO : MAZ

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 30-JUL-93

HOLE NUMBER : TRR81

COMMENTS:

LOGGED BY : APO
TOTAL DEPTH : 34.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 541395 NORTHING: 8306613 R.L.: 15.0
SHEET 1 OF 1 HOLE NUMBER : TRR81

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
0.0	2.0		TER	Laterite Pisolite	silty	medium brown	yellow clay	to c silt	soft	
2.0	4.0		TER	Sand Pisolite	clayey	medium brown	yellow vf sand	to vs pebble	soft	lateritized clayey sand
4.0	6.0		CRE	Sand	silty	m light yellow	vf sand	to vf silt	firm	weakly lateritized silty sand
6.0	8.0		CRE	Sand	clayey	light grey	brown vf sand	to clay	stiff	minor disseminated wad
8.0	10.0		CRE	Sand	clayey	medium red	brown vf sand	to clay	stiff	hematite mottled, minor pebble size quartzite fragments
10.0	12.0		CRE	Silt	clayey	med dark red	brown med silt	to clay	stiff	hematite mottled, trace disseminated mn
12.0	14.0		CRE	Sand	clayey	m light pink	white clay	to c sand	firm	? top of unit 2
14.0	16.0		CRE	Sand	clayey	pale white	clay	to med sand	stiff	trace dissem. mn
16.0	18.0		CRE	Sand	clayey	m light yellow	clay	to f sand	hard	
18.0	20.0		CRE	Sand	clayey	pale yellow	grey clay	to f sand	hard	trace disseminated mn
20.0	22.0		CRE	Conglomerate	clayey	m light yellow	blue clay	to med pebble	hard	chert and quartzite frags.
22.0	24.0		CRE	Conglomerate	clayey	m light yellow	blue clay	to med pebble	hard	chert and quartzite frags.
24.0	26.0		PRO	Silt	shaly	m light yellow	blue clay	to f silt	hard	pru
26.0	28.0		PRO	Silt	shaly	m light yellow	clay	to f silt	hard	minor quartzite
28.0	30.0	DZ941	PRO	Silt	shaly	med dark purple	clay	to f silt	hard	mixture of greenish and ferruginous silty shale
30.0	32.0	DZ941	PRO	Silt	shaly	m light purple	white clay	to f silt	hard	laminated silty shale, ferruginous
32.0	34.0	DZ941	PRO	Silt	shaly	med dark purple	clay	to f silt	hard	laminated silty shale, ferruginous

10H at 34.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : TOWNS

JOB NO : MAZ

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 30-JUL-93

HOLE NUMBER : TRR82

COMMENTS:

LOGGED BY : APO

TOTAL DEPTH : 22.0

GRID: AMG

ZONE: 53

RELIABILITY: SATL

EASTING: 543176

NORTHING: 8308164

R.L.: 15.0

SHEET 1 OF 1 HOLE NUMBER : TRR82

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
0.0	2.0		CRE	Sand silty	m light tan		f silt	to f sand	friable	minor mn coatings
2.0	4.0		CRE	Sand clayey	m light khaki tan		clay	to vf sand	firm	minor mn coatings
4.0	6.0		CRE	Sand clayey	light tan white		clay	to vf sand	firm	
6.0	8.0		CRE	Sand clayey	light yellow tan		clay	to f sand	firm	
8.0	10.0		CRE	Sand clayey	light tan yellow		clay	to f sand	firm	minor ferruginous mottling
10.0	12.0		CRE	Sand clayey	pale white		clay	to f sand	firm	minor ferruginous mottling
12.0	14.0		PRO	Quartzite Chert	pale white grey		clay	to vf sand	mod'ly strong	chert occurs as replacement of the fine sandstone ?ptl
14.0	16.0		PRO	Quartzite Chert	palest white		clay	to vf sand	mod'ly strong	laminated chert ?ptl
16.0	18.0	D2942	PRO	Quartzite Chert	palest white		clay	to vf sand	mod'ly strong	laminated chert ?ptl
18.0	20.0	D2942	PRO	Quartzite Chert	palest white		clay	to vf sand	mod'ly strong	laminated chert ?ptl
20.0	22.0	D2942	PRO	Quartzite Chert	palest white		clay	to vf sand	mod'ly strong	laminated chert ?ptl

EOH at 22.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : TOWNS

JOB NO : MAZ

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 31-JUL-93

HOLE NUMBER : TRR83

COMMENTS:

LOGGED BY : APO

TOTAL DEPTH : 40.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 540822 NORTHING: 8309380 R.L.: 15.0
SHEET 1 OF 1 HOLE NUMBER : TRR83

DEPTHS From To (m) (m)	SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR	GRAIN SIZE	STRENGTH/ HARDNESS	COMMENTS
0.0 2.0		CEN	Sand clayey	medium yellow tan clay	to f sand	soft	minor dissem. mn
2.0 4.0		CEN	Sand clayey	medium yellow tan clay	to f sand	soft	
4.0 6.0		CEN	Silt clayey	med dark red brown clay	to c silt	firm	
6.0 8.0		CRE	Clay gravelly	med dark red brown clay	to vs pebble	stiff	contains small angular quartzite pebbles
8.0 10.0		CRE	Clay	m light pink red clay		firm	
10.0 12.0		CRE	Clay silty	pale grey white clay	to f silt	firm	
12.0 14.0		CRE	Clay Chert fragmental transported	pale grey white clay	to vf sand	firm	contains small transported chert and quartzite pebbles
14.0 16.0		CRE	Clay silty	pale grey white clay	to f silt	stiff	several specks of mn oxides present
16.0 18.0		CRE	Clay Conglomerate sandy	pale grey white clay	to c sand	stiff	contains quartzite and chert pebbles
18.0 20.0		CRE	Clay Conglomerate sandy	m light yellow tan clay	to c sand	stiff	contains quartzite and chert pebbles, chert dominant
20.0 22.0		CRE	Clay sandy	m light purple red clay	to f sand	stiff	minor quartzite fragments
22.0 24.0		CRE	Clay sandy	m light purple red clay	to granule	stiff	
24.0 26.0		CRE	Clay sandy	m light purple red clay	to granule	stiff	
26.0 28.0		PRO	Sandstone clayey	med dark red clay	to f sand	stiff	contains fine mica, and thin indurated fine sandstone la
28.0 30.0		PRO	Sandstone clayey	med dark red clay	to f sand	stiff	as above, but more sandstone pru
30.0 32.0		PRO	Sandstone clayey	med dark red clay	to f sand	stiff	as above, but even more sandstone pru
32.0 34.0		PRO	Sandstone clayey	med dark red grey clay	to f sand	mod'ly strong	interlam. fg hematitic sandstone and grey micaceous shal
34.0 36.0	DZ943	PRO	Sandstone clayey	m light grey white clay	to f sand	mod'ly strong	interlam. fg hematitic sandstone and grey micaceous shal
36.0 38.0	DZ943	PRO	Sandstone clayey	med dark grey clay	to f sand	mod'ly strong	interlam. fg hematitic sandstone and grey micaceous shal
38.0 40.0	DZ943	PRO	Siltstone sandy	med dark grey f silt	to vf sand	mod'ly strong	grey sandy siltstone (micaceous) pru

EOH at 40.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : TOWNS
JOB NO : MAZ

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 31-JUL-93

HOLE NUMBER : TRR84

COMMENTS:

LOGGED BY : APO
TOTAL DEPTH : 40.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 539537 NORTHING: 8311162 R.L.: 15.0
SHEET 1 OF 1 HOLE NUMBER : TRR84

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
0.0	2.0		TER	Laterite	pisolitic	light white tan	f sand	to s pebble	soft	pisoliths with yellow sandy matrix
2.0	4.0		CRE	Sand	clayey	light tan	clay	to f sand	firm	
4.0	6.0		CRE	Laterite	pisolitic	m light red white	clay	to f sand	firm	
6.0	8.0		CRE	Sand	clayey	m light red white	clay	to f sand	firm	
8.0	10.0		CRE	Clay	sandy	med dark pink red	clay	to c sand	firm	
10.0	12.0		CRE	Clay	sandy	med dark pink red	clay	to c sand	firm	minor grey shale and chert frags
12.0	14.0		CRE	Clay	sandy	med dark pink white	clay	to med sand	firm	wthd frags of fg ferug sandstone
14.0	16.0		CRE	Clay	sandy	med dark pink red	clay	to med sand	firm	wthd frags of fg ferug sandstone, minor chert frags
16.0	18.0		CRE	Clay	sandy	med dark pink red	clay	to med sand	firm	wthd frags of fg ferug sandstone, minor chert frags
18.0	20.0		CRE	Clay	sandy	pale white red	clay	to f sand	stiff	wthd frags of fg ferug sandstone,
20.0	22.0		CRE	Clay	sandy	pale white red	clay	to f sand	stiff	wthd frags of fg ferug sandstone,
22.0	24.0		CRE	Clay	sandy	pale white red	clay	to f sand	stiff	wthd frags of fg ferug sandstone,
24.0	26.0		CRE	Clay	sandy	light pink white	clay	to med pebble	stiff	frags of; silic. ooid grainstone, ?algal chert, sil. sil
26.0	28.0		CRE	Conglomerate	sandy	medium yellow	clay	to granule	firm	minor chert frags
28.0	30.0		CRE	Clay	sandy	medium yellow pink	clay	to med pebble	stiff	frags of; silic. ooid grainstone, ?algal chert, sil. silt
30.0	32.0		CRE	Clay	sandy	medium pink red	clay	to vc sand	firm	minor fg sandst. fragments
32.0	34.0		CRE	Clay	sandy	medium pink red	clay	to vc sand	firm	minor fg sandst. fragments
34.0	36.0	DZ944	PRO	Siltstone	ferruginous	medium pink white	f silt	to f sand	hard	intercal. green-grey siltst and fg purple sandst. pr
36.0	38.0	DZ944	PRO	Siltstone	ferruginous	med dark grey white	f silt	to f sand	hard	intercal. green-grey siltst and fg purple sandst. pr
38.0	40.0	DZ944	PRO	Siltstone	ferruginous	med dark grey white	f silt	to f sand	hard	intercal. green-grey siltst and fg purple sandst. pr

EOH at 40.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : TOWNS

JOB NO : MAZ

GRID: AMG

ZONE: 53

RELIABILITY: SATL

CONTRACTOR : GADEN DRILLING

RIG TYPE : UDR-650

DATE DRILLED: 31-JUL-93

EASTING: 545475

NORTHING: 8311162

R.L.: 15.0

SHEET 1 OF 2 HOLE NUMBER : TRR86

HOLE NUMBER : TRR86

lost return-black clay

LOGGED BY : APO

TOTAL DEPTH : 70.0

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor								
1.0	2.0		CEN	Sand	silty		pale tan	white	med silt	to med sand	loose	weakly lateritized
2.0	4.0		CEN	Sand	silty		medium tan		med silt	to med sand	soft	weakly lateritized
4.0	6.0		TER	Sand	silty	pisolitic	light pink		med silt	to med sand	stiff	lateritized sandstone
6.0	8.0		TER	Sand	clayey	pisolitic	medium red	blue	clay	to med sand	stiff	lateritized sandstone
8.0	10.0		CRE	Sand Sandstone	clayey		m light pink	red	clay	to med sand	hard	contains weakly indurated fine quartz sandst. ?unit 2
10.0	12.0		CRE	Sand Sandstone	clayey		light pink	white	clay	to med sand	hard	contains weakly indurated fg ferrug qtz sandst. ?unit 2
12.0	14.0		CRE	Sand Sandstone	clayey		light white	tan	clay	to med sand	hard	as above but more clay
14.0	16.0		CRE	Sand Conglomerate	clayey		light white	tan	clay	to vs pebble	stiff	contains white chert frags
16.0	18.0		CRE	Sand Conglomerate	clayey		light white		clay	to vs pebble	stiff	contains white chert frags-synerysis cracks, silic. calc
18.0	20.0		CRE	Sand Conglomerate	clayey		light white	grey	clay	to vs pebble	stiff	as above, but secondary silic. dissem mn
20.0	22.0		CRE	Clay	silty		pale white		clay	to med silt	stiff	clean kaolinitic clay
22.0	24.0		CRE	Clay	sandy		pale white	tan	clay	to med sand	stiff	minor chert frags
24.0	26.0		CRE	Clay	sandy		pale tan	white	clay	to med sand	stiff	contains charcoal ? contamination
26.0	28.0		CRE	Clay Conglomerate	sandy		pale tan	white	clay	to s pebble	stiff	contains chert and fg ferrug. sandst. frags
28.0	30.0		CRE	Clay Conglomerate	sandy		pale tan	white	clay	to s pebble	stiff	contains chert and fg ferrug. sandst. frags
30.0	32.0		CRE	Clay Conglomerate	sandy		m light yellow		clay	to s pebble	stiff	contains chert and fg ferrug. sandst. frags
32.0	34.0		CRE	Clay Conglomerate	sandy		m light white	yellow	clay	to s pebble	stiff	contains chert and fg ferrug. sandst. frags
34.0	36.0		CRE	Clay	sandy		medium yellow	pink	clay	to c sand	stiff	contains chert and fg ferrug. sandst. frags
36.0	38.0		CRE	Clay			light white		clay	to f silt	stiff	minor ferrug. clay
38.0	40.0		CRE	Clay			med dark red	white	clay	to f silt	stiff	minor ferrug. clay
40.0	42.0		CRE	Clay			med dark red	white	clay	to f silt	stiff	minor ferrug. clay

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
42.0	44.0		CRE	Clay		medium	yellow	clay	to f silt	stiff	
44.0	46.0		CRE	Clay		medium	yellow	clay	to f silt	stiff	
46.0	48.0		CRE	Clay	sandy	medium	yellow	clay	to vf sand	stiff	
48.0	50.0		CRE	Clay		medium	yellow	clay	to f silt	stiff	minor fine sand; puggy clay
50.0	52.0	DZ946	CRE	Clay		medium	yellow grey	clay	to f silt	stiff	contains some dark grey clay, ?manganiferrous
52.0	54.0	DZ946	CRE	Clay		v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
54.0	56.0	DZ946	CRE	Clay		v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
56.0	58.0	DZ946	CRE	Clay		v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
58.0	60.0	DZ947	CRE	Clay		v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
60.0	62.0	DZ947	CRE	Clay	silty	v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous age dating sample take
62.0	64.0	DZ947	CRE	Clay	silty	v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
64.0	66.0	DZ947	CRE	Clay	silty	v dark	grey	clay	to f silt	stiff	dark grey clay ?manganiferrous
66.0	68.0		CRE	Clay	sandy	med dark khaki	yellow clay		to med sand	stiff	contains sandst. and chert frags
68.0	70.0		CRE	Clay	sandy	med dark khaki	yellow clay		to med sand	stiff	as above-mixture of oxidized yellow and reduced grey cla

EOH at 70.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : TOWNS
JOB NO : MAZ

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 02-AUG-93

HOLE NUMBER : TRR87

COMMENTS:

LOGGED BY : APO
TOTAL DEPTH : 16.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 547446 NORTHING: 8313465 R.L.: 15.0
SHEET 1 OF 1 HOLE NUMBER : TRR87

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)			major/ minor							
0.0	2.0		TER	Laterite	sandy	pisolitic	med dark red	brown med silt	to med sand	soft	lateritized sand
2.0	4.0		TER	Laterite	sandy	pisolitic	med dark red	brown med silt	to med sand	soft	lateritized sand
4.0	6.0		CRE	Sand	clayey		m light red	yellow clay	to granule	soft	contains quartz sand/granules and minor lateritic pisoli
6.0	8.0		CRE	Conglomerate	sandy		pale white	clay	to l pebble	stiff	contains sandst. and chert frags
8.0	10.0		PRO	Sandstone			pale white	med silt	to med sand	mod'ly strong	?pml-pru
10.0	12.0	DZ948	PRO	Sandstone			m light pink	red med silt	to med sand	mod'ly strong	?pml-pru
12.0	14.0	DZ948	PRO	Sandstone			med dark red	brown med silt	to med sand	mod'ly strong	contains minor ferrug. chert ?pml-pru
14.0	16.0	DZ948	PRO	Sandstone			med dark red	med silt	to med sand	mod'ly strong	contains minor ferrug. chert ?pml-pru

EOH at 16.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : TOWNS
JOB NO : MAZ

GRID: AMG

ZONE: 53

RELIABILITY: SATL

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 02-AUG-93
EASTING: 544538

HOLE NUMBER : TRR88

LOGGED BY : DWW
TOTAL DEPTH : 58.0
R.L.: 15.0

COMMENTS:

NORTHING: 8313702
SHEET 1 OF 2

HOLE NUMBER : TRR88

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR			GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)											
0.0	2.0	TER	Sand	ferruginous	light	orange	red	vf sand	to f sand			
2.0	4.0	TER	Sand	ferruginous	m light							
4.0	6.0	TER	Sand	ferruginous	light	brown	red	med silt	to f sand	stiff		
6.0	8.0	TER	Laterite	weathered	sandy	patchy	grey	red	f silt	to f sand	hard	cretaceous?
8.0	10.0	CRE	Sandstone	ferruginous		patchy	orange	red	f silt	to f sand	hard	
10.0	12.0	CRE	Sandstone	clayey	ferruginous	patchy	grey	orange	f silt	to f sand	hard	
12.0	14.0	CRE	Sandstone	clayey	ferruginous	patchy	red	orange	f silt	to f sand	hard	
14.0	16.0	CRE	Sandstone	clayey	ferruginous	patchy	orange	grey	f silt	to f sand	stiff	rounded transported chert fragments
16.0	18.0	CRE	Sandstone	clayey	ferruginous	patchy	orange	grey	f silt	to vc sand	stiff	
18.0	20.0	CRE	Sandstone	clayey	ferruginous	patchy	orange	grey	f silt	to vc sand	stiff	
20.0	22.0	CRE	Sandstone	clayey	ferruginous	m light	grey	red	vf silt	to vf sand	stiff	
22.0	24.0	CRE	Clay	sandy	ferruginous	m light	red	grey	vf silt	to vf sand	hard	
24.0	26.0	CRE	Clay	sandy	ferruginous	light	grey		clay	to c silt	weak	
26.0	28.0	CRE	Clay	silty		light	red	grey	clay	to vf sand	weak	
28.0	30.0	CRE	Clay	silty		m light	grey	red	vf silt	to vf sand	hard	
30.0	32.0	CRE	Clay	sandy		patchy	brown	grey	f silt	to f sand	hard	
32.0	34.0	CRE	Clay	sandy		patchy	brown	grey	f silt	to f sand	weak	sandstone seems to be more consolidated
34.0	36.0	CRE	Sandstone	ferruginous	ferruginous	patchy	brown	grey	f silt	to vc sand	hard	
36.0	38.0	CRE	Sandstone	clayey	ferruginous	patchy	brown	grey	f silt	to vf sand	hard	minor mn oxides present
38.0	40.0	CRE	Grit	sandy		pale	grey		vf silt	to vf sand	hard	minor mn oxides present
40.0	42.0	CRE	Grit	sandy		pale	red	grey	clay	to c silt	weak	minor mn oxides present

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
42.0	44.0		CRE	Claystone	sandy	pale red	grey clay	to c silt	weak	minor mn oxides present
44.0	46.0		CRE	Claystone	sandy	patchy red	grey vf silt	to vf sand	hard	minor mn oxides present
				Chert	fragmental					
46.0	48.0		CRE	Claystone	sandy	patchy red	grey vf silt	to vf sand	hard	minor mn oxides present
48.0	50.0		CRE	Claystone	silty	patchy red	grey clay	to c silt	weak	
50.0	52.0		CRE	Claystone	silty	pale red	grey clay	to med silt	weak	
52.0	54.0		CRE	Claystone	silty	pale red	grey clay	to med silt	weak	
54.0	56.0		CRE	Claystone	silty	pale red	grey clay	to med silt	weak	
56.0	58.0		CRE	Clay		v dark grey	clay	to vf silt	weak	same "black clay" as seen in trr86, age dating sample ta

EOH at 58.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : TOWNS
JOB NO : MAZ

CONTRACTOR : GADEN DRILLING
RIG TYPE : UDR-650
DATE DRILLED: 03-AUG-93

HOLE NUMBER : TRR90

COMMENTS:

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 546860 NORTHING: 8309577 R.L.: 16.0
SHEET 1 OF 1 HOLE NUMBER : TRR90

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR			GRAIN SIZE		STRENTGH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor									
0.0	2.0		TER	Soil	sandy	weathered	medium	yellow	brown	f silt	to vf sand	stiff	
2.0	4.0		CRE	Laterite Conglomerate Clay	pisolitic sandy sandy	weathered	patchy	red	grey	vf silt	to med pebble	stiff	conglomerate bed followed by manganiferrous clay layer
4.0	6.0		CRE	Conglomerate Siltstone	cherty		patchy	yellow	grey	med silt	to med pebble	hard	alternating layers of conglomerate and clay or siltstone
6.0	8.0		CRE	Siltstone Chert	sandy fragmental		light	grey		f silt	to vf sand	weak	
8.0	10.0		CRE	Siltstone Chert	sandy fragmental		light	yellow	grey	f silt	to vf sand	weak	
10.0	12.0		CRE	Siltstone	clayey		patchy	red	grey	f silt	to c silt	weak	
12.0	14.0		CRE	Siltstone	clayey		med dark	red	brown	f silt	to med silt	weak	
14.0	16.0		CRE	Clay	silty		med dark	brown		vf silt	to f silt	weak	
16.0	18.0	DZ950	CRE	Chert Clay	quartzose silty		patchy	brown	grey	vf silt	to f silt	mod'ly strong	oolitic chert fragments seen
18.0	20.0	DZ950	PRO	Chert Clay	quartzose silty		patchy	brown	grey	vf silt	to f silt	mod'ly strong	
20.0	22.0	DZ950	PRO	Chert	quartzose		patchy	brown	grey	vf silt	to f silt	mod'ly strong	basement material

EOH at 22.0 m

PROJECT : CARPENTARIA

LOCALITY: EL 7261

SHEET : Mt Young

JOB NO : MAZ

CONTRACTOR : Gaden Drilling

RIG TYPE : UDR-650

DATE DRILLED: 13-AUG-93

HOLE NUMBER : YER08

COMMENTS:

LOGGED BY : PRD

TOTAL DEPTH : 58.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 572800 NORTHING: 8291860 R.L.: 40.0

SHEET 1 OF 2 HOLE NUMBER : YER08

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES		COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS	
From (m)	To (m)			major/ minor								
0.0	2.0		CEN	Sand	clayey	light	brown	vf sand	to med sand	loose		
				Laterite	pisolitic							
2.0	4.0		CEN	Clay	sandy	ferruginous	medium	orange	brown	clay	to f sand	soft
4.0	6.0		CRE	Claystone	silty	sandy	light	khaki	grey	clay	to vf sand	weak
6.0	8.0		CRE	Claystone	silty	sandy	light	khaki	grey	clay	to vf sand	weak
8.0	10.0		CRE	Clay	silty	sandy	light	khaki	grey	clay	to vf sand	hard
10.0	12.0		CRE	Clay	silty	sandy	light	khaki	grey	clay	to vf sand	stiff
12.0	14.0		CRE	Clay	silty		light	khaki	brown	clay	to med silt	stiff
14.0	16.0		CRE	Clay	silty		light	khaki	brown	clay	to med silt	stiff
16.0	18.0		CRE	Clay	silty		light	grey	brown	clay	to med silt	stiff
18.0	20.0		CRE	Clay	silty		light	brown	purple	clay	to med silt	stiff
20.0	22.0		CRE	Sand	clayey		light	brown	purple	f sand	to med sand	stiff
22.0	24.0		CRE	Clay			light	brown		clay		firm
24.0	26.0	DZ967	CRE	Clay			v dark	grey		clay		firm
26.0	28.0	DZ967	CRE	Clay			v dark	grey		clay		firm
28.0	30.0	DZ967	CRE	Sandstone	shaly	clayey	v dark	grey		vf sand	to f sand	weak
30.0	32.0		CRE	Sandstone	shaly	clayey	v dark	grey		vf sand	to f sand	weak
32.0	34.0		CRE	Sandstone	clayey		v dark	grey		vf sand	to f sand	weak
34.0	36.0		CRE	Sandstone	quartzose		dark	grey		med sand	to vc sand	weak
36.0	38.0		CRE	Sandstone	quartzose		medium	grey		med sand	to vc sand	weak
38.0	40.0		CRE	Sandstone	clayey		medium	grey		med sand	to vc sand	weak
40.0	42.0		CRE	Sandstone	quartzose		medium	grey		med sand	to vc sand	weak
				Sandstone	clayey							

possibly proterozoic?

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
42.0	44.0		CRE	Clay	silty	dark grey	clay	to med silt	soft	
44.0	46.0		CRE	Clay	sandy	dark grey	clay	to med sand	firm	
46.0	48.0		PRO	Sandstone	quartzose	medium orange brown	med sand	to c sand	weak	yyintyi sandstone?
48.0	50.0		PRO	Sandstone	quartzose	medium orange brown	med sand	to c sand	weak	
50.0	52.0		PRO	Chert	laminated	light grey	med silt	to vf sand	strong	
52.0	54.0	DZ968	PRO	Chert	laminated	light grey	med silt	to vf sand	strong	
54.0	56.0	DZ968	PRO	Chert	laminated	light grey	med silt	to vf sand	strong	
56.0	58.0	DZ968	PRO	Chert	laminated	light grey	med silt	to vf sand	strong	

EOH at 58.0 m

PROJECT : CARPENTARIA
LOCALITY: EL 7261
SHEET : Mt Young
JOB NO : MAZ

CONTRACTOR : Gaden Drilling
RIG TYPE : UDR-650
DATE DRILLED: 13-AUG-93

HOLE NUMBER : YER09

COMMENTS:

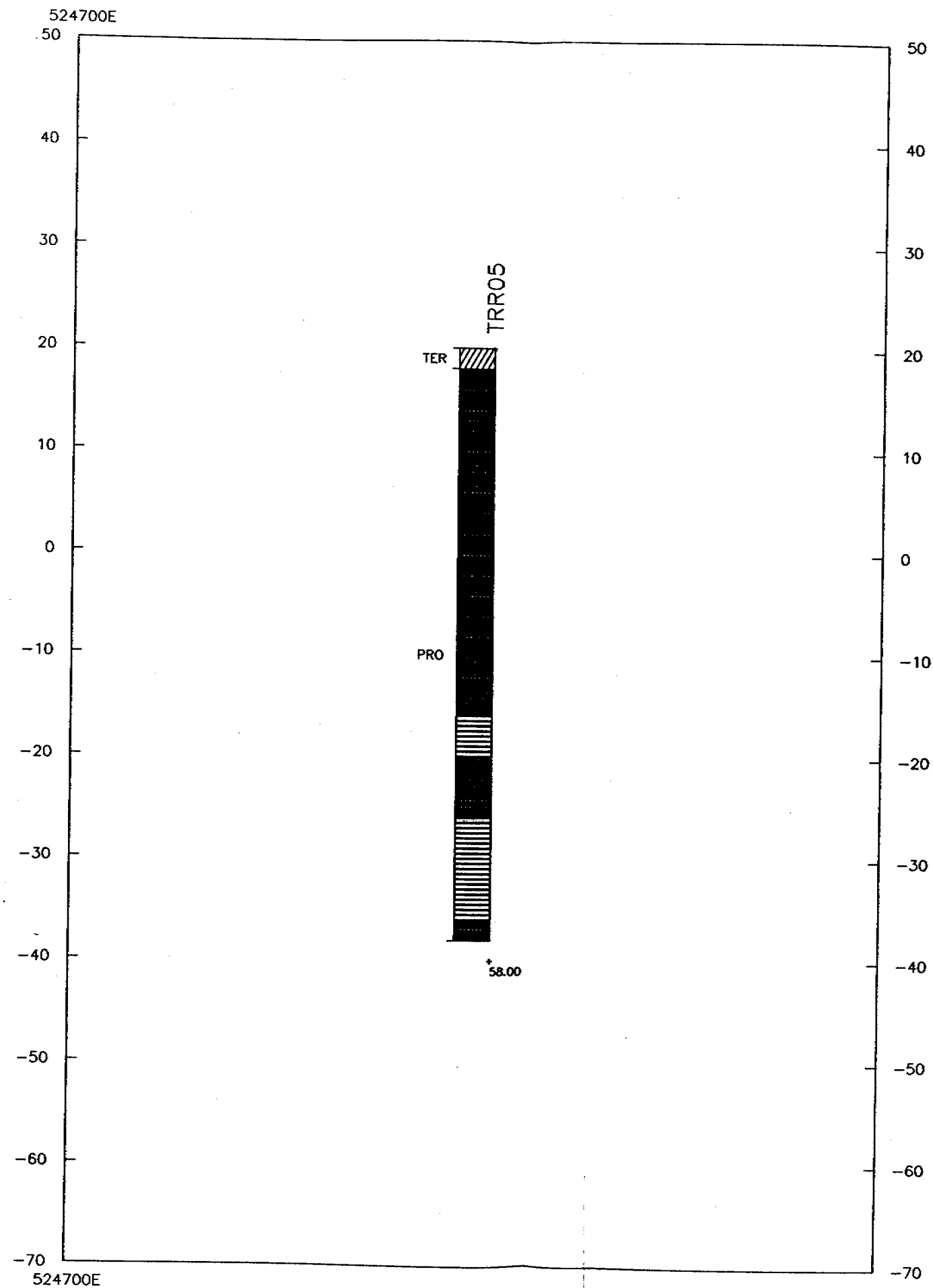
LOGGED BY : PRO
TOTAL DEPTH : 70.0

GRID: AMG ZONE: 53 RELIABILITY: SATL EASTING: 573640 NORTHING: 8291500 R.L.: 40.0
SHEET 1 OF 2 HOLE NUMBER : YER09

DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
0.0	2.0	CEN	Clay	sandy	medium	khaki	brown	clay	to f sand	stiff
			Laterite	pisolitic						
2.0	4.0	CEN	Clay	sandy	medium	khaki	brown	clay	to f sand	stiff
4.0	6.0	CRE	Claystone	sandy	banded	grey	brown	clay	to vf sand	weak
6.0	8.0	CRE	Claystone	sandy	medium	grey	brown	clay	to vf sand	weak
8.0	10.0	CRE	Claystone		medium	khaki	brown	clay	to med silt	weak
10.0	12.0	CRE	Clay	silty	light	grey	brown	clay	to med silt	firm
12.0	14.0	CRE	Clay	silty	light	grey	brown	clay	to med silt	firm
14.0	16.0	CRE	Clay		light	grey	brown	clay	to med silt	firm
16.0	18.0	CRE	Clay		light	grey	brown	clay	to med silt	firm
18.0	20.0	CRE	Clay		light	grey	brown	clay	to med silt	firm
20.0	22.0	CRE	Clay		light	grey	brown	clay	to med silt	firm
22.0	24.0	CRE	Clay		light	grey	brown	clay	to med silt	firm
24.0	26.0	CRE	Clay		medium	grey		clay	to med silt	firm
26.0	28.0	CRE	Clay		dark	grey		clay	to med silt	firm
28.0	30.0	CRE	Clay	sandy	dark	grey		clay	to med silt	firm
30.0	32.0	CRE	Clay	sandy	dark	grey		clay	to med silt	firm
32.0	34.0	CRE	Clay	sandy	dark	grey		clay	to med silt	firm
34.0	36.0	CRE	Clay	sandy	dark	grey		clay	to med silt	firm
36.0	38.0	CRE	Clay	sandy	dark	grey		clay	to vf sand	firm
38.0	40.0	CRE	Clay	sandy	dark	grey		clay	to f sand	firm
40.0	42.0	CRE	Clay	sandy	dark	grey		clay	to f sand	stiff

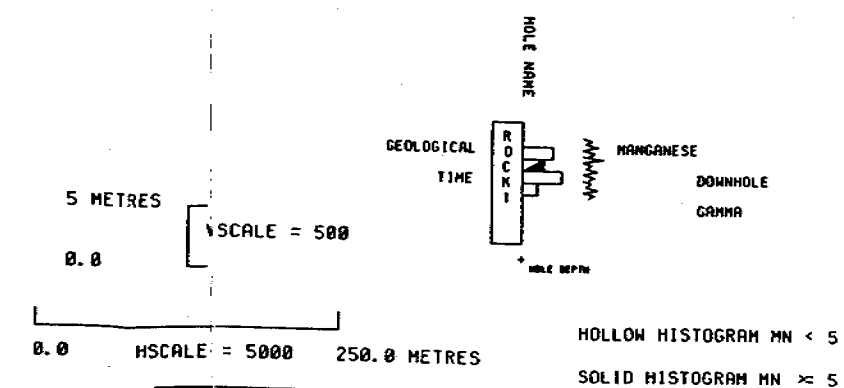
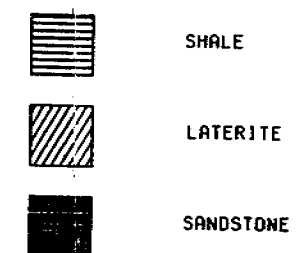
DEPTHS		SAMPLE NUMBER	GEOL. TIME	ROCK TYPES major/ minor	COLOUR		GRAIN SIZE		STRENGTH/ HARDNESS	COMMENTS
From (m)	To (m)									
42.0	44.0	CRE	Clay	sandy	dark	grey	clay	to f sand	stiff	
44.0	46.0	CRE	Clay	sandy	dark	grey	clay	to f sand	stiff	
46.0	48.0	CRE	Sand	clayey	dark	grey	f sand	to med sand	firm	
48.0	50.0	CRE	Sand	quartzose clayey	dark	grey	f sand	to med sand	firm	
50.0	52.0	CRE	Sand	quartzose clayey	dark	grey	f sand	to med sand	firm	
52.0	54.0	CRE	Sand	quartzose	medium	grey	f sand	to med sand	friable	
54.0	56.0	CRE	Sand	quartzose	medium	grey	f sand	to med sand	friable	
56.0	58.0	CRE	Sand Sandstone	quartzose clayey	medium	grey	f sand	to med sand	friable	
58.0	60.0	CRE	Sand Sandstone	quartzose clayey	medium	grey	f sand	to med sand	friable	
60.0	62.0	PRO	Sand	quartzose	light	yellow brown	med sand	to vc sand	friable	
62.0	64.0	PRO	Sand	quartzose	light	yellow brown	med sand	to vc sand	friable	
64.0	66.0	PRO	Sand	quartzose gritty	light	brown grey	c sand	to vc sand	friable	
66.0	68.0	PRO	Sand	quartzose gritty	pale	pink grey	c sand	to vc sand	friable	
68.0	70.0	PRO	Sand Chert	quartzose	pale	pink grey	c sand	to vc sand	friable	

EOH at 70.0 m



LEGEND

GEOLOGY



BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR05		
PREPARED BY: A. HADJIOANNIS	DATE: 17-MAR-94	CHECKED BY: J. HADJIOANNIS
DRAWN BY: A. HADJIOANNIS	REVISED BY:	
CHECKED BY:	DRAWING NO.:	

523000E
50

40

30

20

10

0

-10

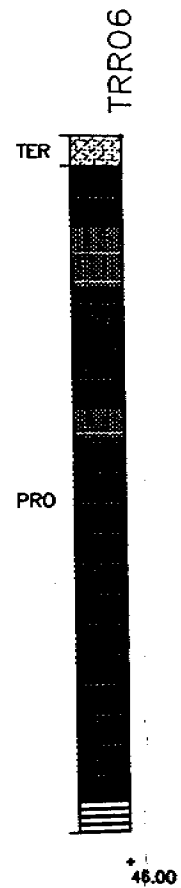
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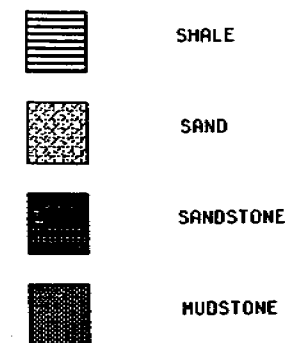
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LEGEND

GEOLOGY

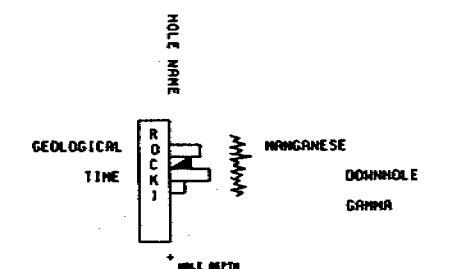


5 METRES

0.0

VSCALE = 500

0.0 HSCALE = 5000 250.0 METRES



HOLLOW HISTOGRAM MN < 5

SOLID HISTOGRAM MN >= 5

BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR06		
PREPARED BY: H. HADJIOPOULOS	DATE: 17-MAR-94	CHECKED BY: H. HADJIOPOULOS
DRAWN BY: H. HADJIOPOULOS	REVISED BY:	
CHECKED BY:	DRAWING NO.:	

523100E

50

40

30

20

10

0

-10

-20

-30

-40

-50

-60

523100E

TRR17

TER

CRE

PRO

+58.00

50

40

30

20

10

0

-10

-20

-30

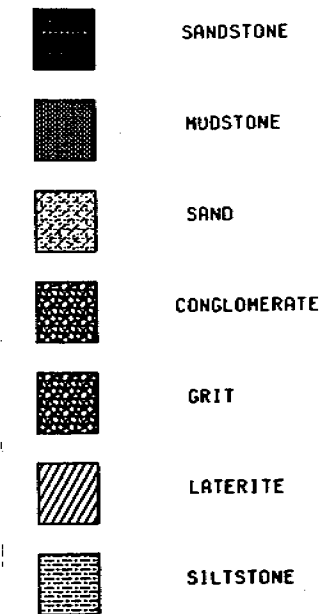
-40

-50

-60

LEGEND

GEOLOGY



5 METRES

0.0

VSCALE = 500

0.0

HSCALE = 5000 250.0 METRES

HOLE NAME

GEOLOGICAL
TIME

ROCK

MANGANESE
DOWNHOLE
GAMMA

+ HOLE DEPTH

HOLLOW HISTOGRAM MN < 5

SOLID HISTOGRAM MN ≥ 5

BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1893		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR17		
PREPARED BY: A. SMITH	DATE: 21-08-91	CHECKED BY: MATHIAS
DRAWN BY: A. SMITH	REVISED BY:	
CHECKED BY:	DRAWING NO.:	

521700E

50

40

30

20

10

0

-10

-20

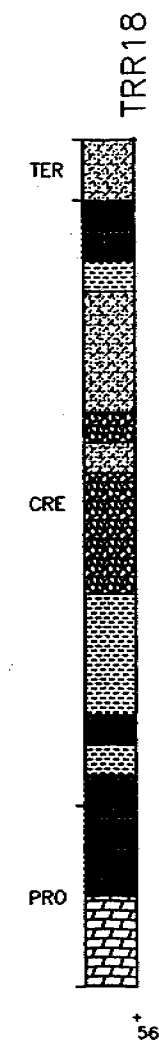
-30

-40

-50

-60

521700E



LEGEND

GEOLOGY

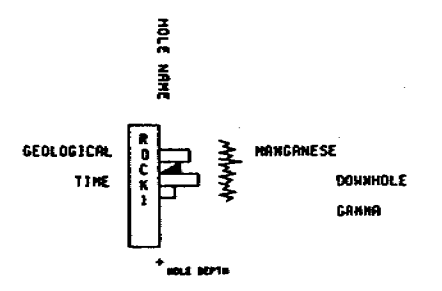
- SANDSTONE
- DOLOMITE
- SAND
- CONGLOMERATE
- GRIT
- CLAY

5 METRES

0.0

VSCALE = 500

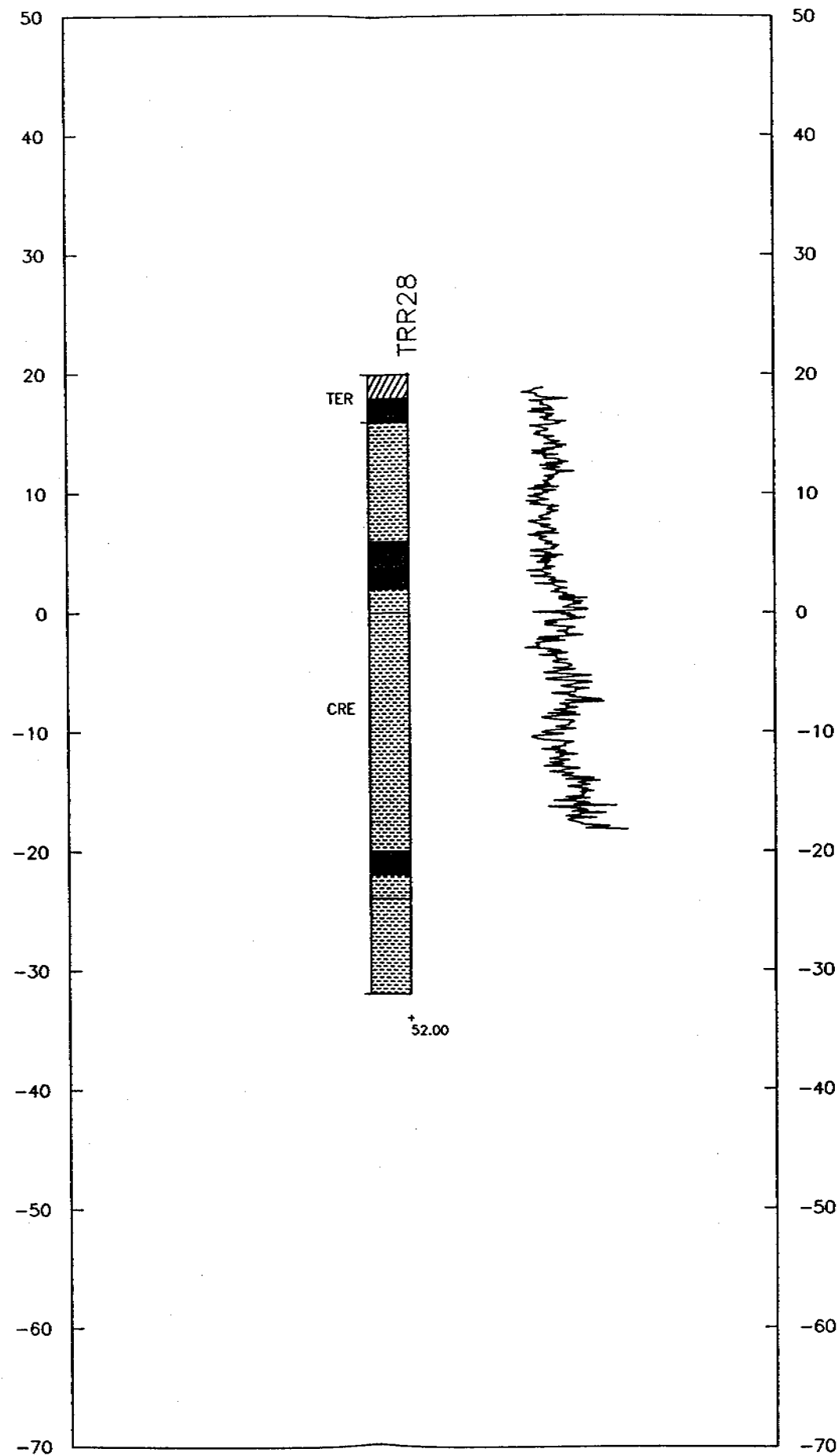
0.0 HSCALE = 5000 250.0 METRES



BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR18		
PREPARED BY: H. HADJIS	DATE: 21-NOV-93	CENTRE: MANTHORN
DRAWN BY: H. HADJIS	REVIEWED:	
CHECKED:	DRAWING NO.:	

HOLLOW HISTOGRAM MN < 5
SOLID HISTOGRAM MN >= 5

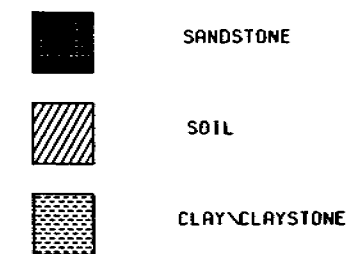
8330700N



8330700N

LEGEND

GEOLOGY

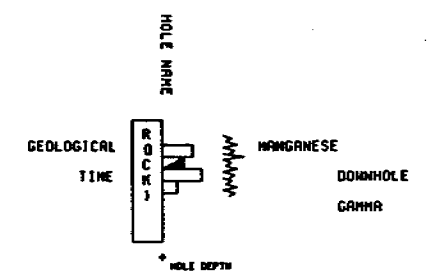


5 METRES

0.0

VSCALE = 500

HSCALE = 5000 250.0 METRES



BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR28		
PREPARED BY: J. HODGSON	DATE: 22-MAR-94	CHECKED BY: J. HODGSON
DRAWN BY: J. HODGSON	REVISED BY:	
CHECKED BY:	REVIEWED BY:	

517200E

50

40

30

20

10

0

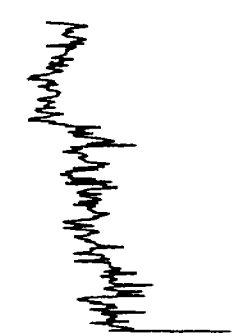
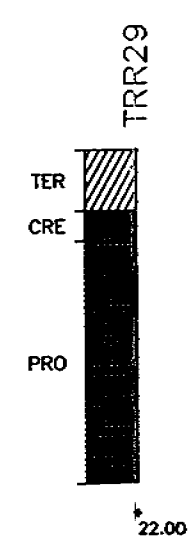
-10

-20

-30

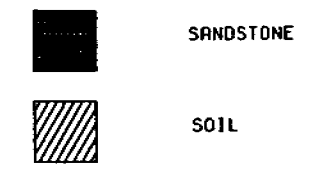
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517200E



LEGEND

GEOLOGY

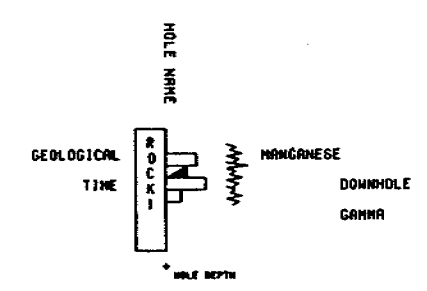


5 METRES

0.0

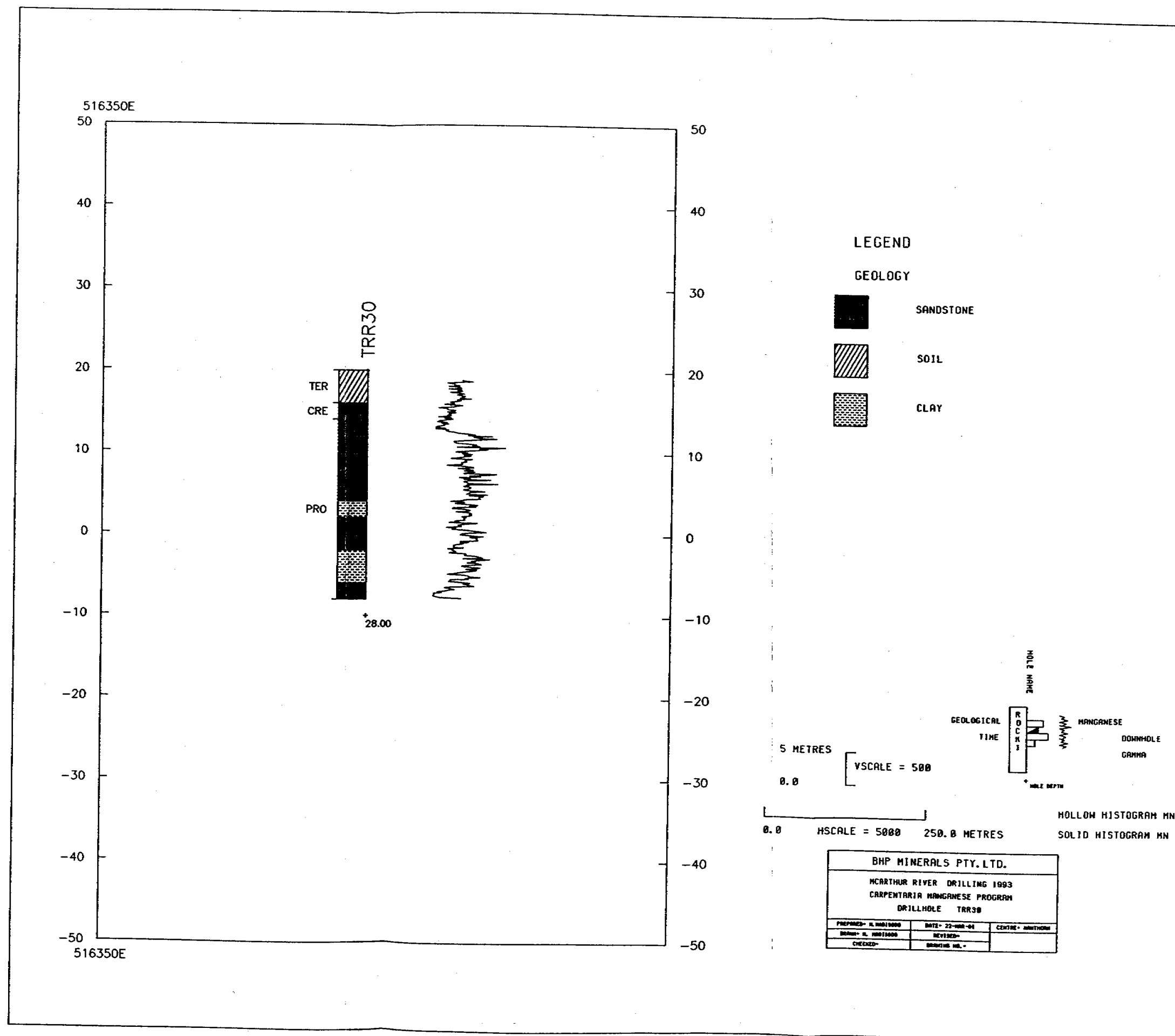
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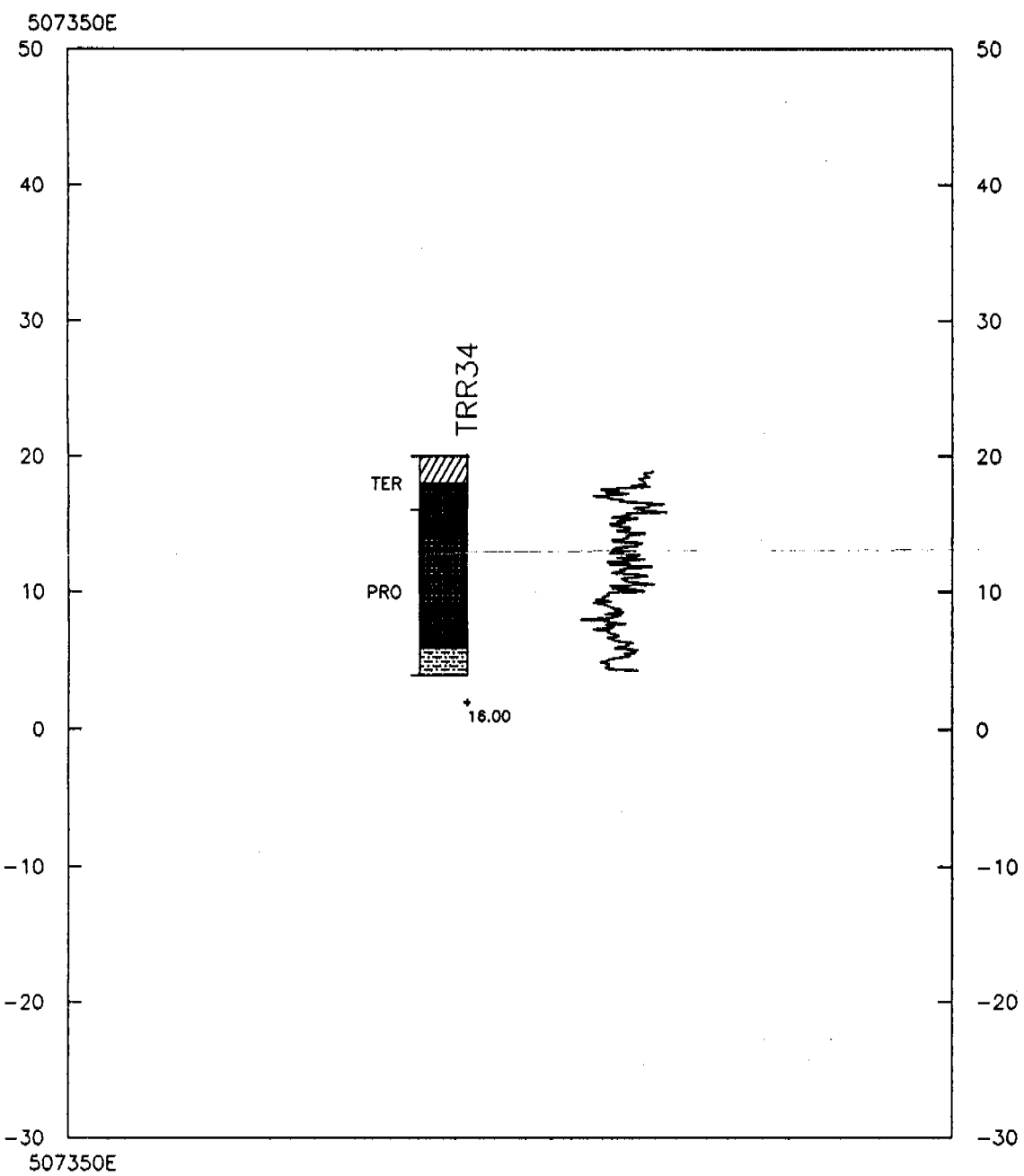
0.0 HSCALE = 5000 250.0 METRES



HOLLOW HISTOGRAM MN < 5
SOLID HISTOGRAM MN >= 5

BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR29		
PREPARED BY: H. MORTIMER	DATE: 22-MAR-94	CHECKED BY: H. MORTIMER
DRAWN BY: H. MORTIMER	REVISED BY:	
CHECKED BY:	DRAWING NO.:	





LEGEND

GEOLOGY

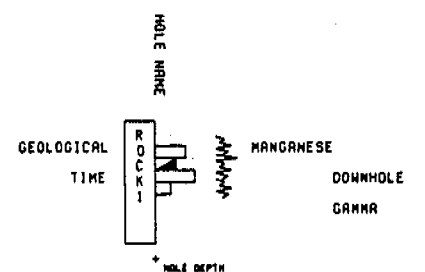


5 METRES

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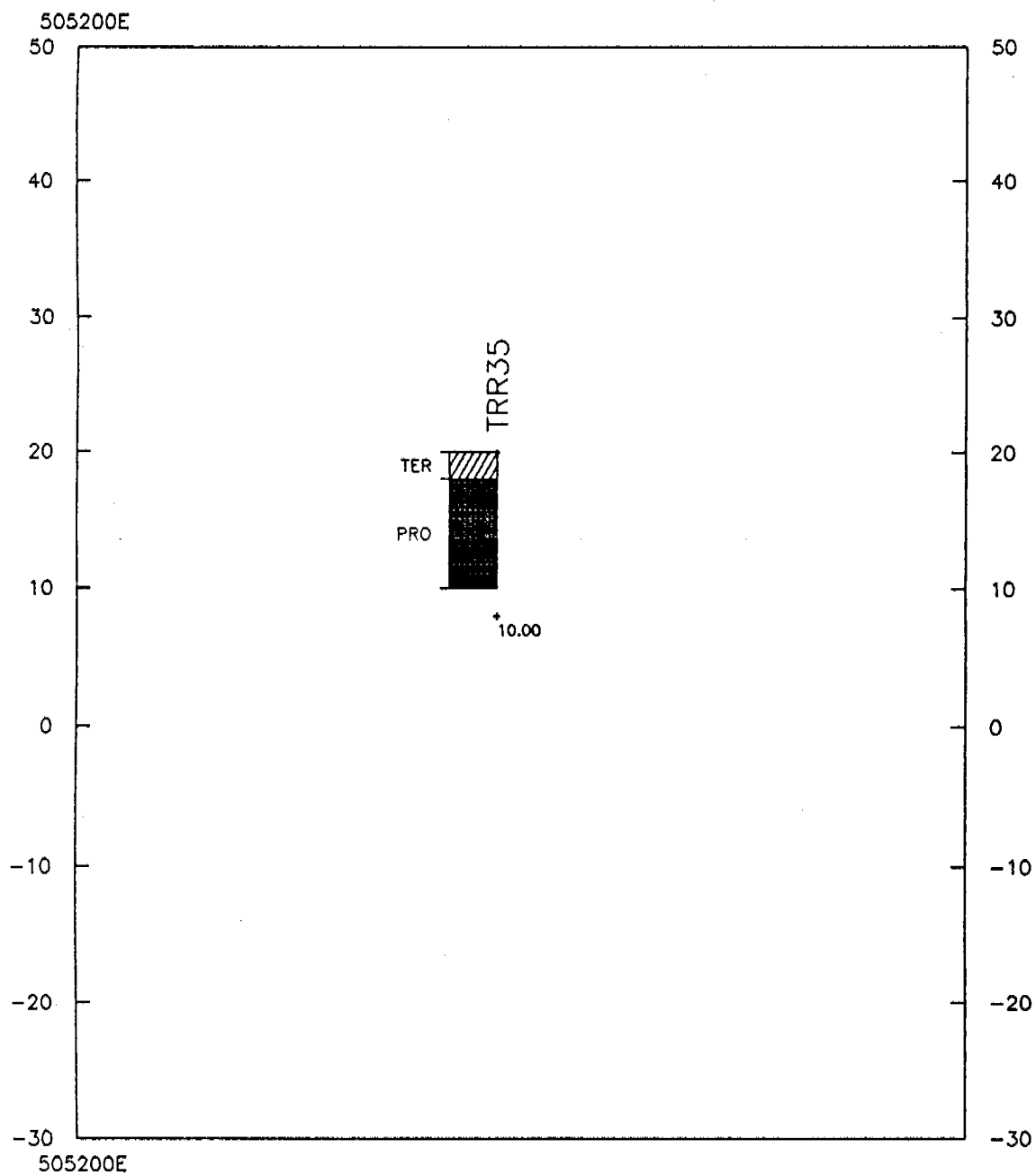
VSCALE = 500

0.0 HSCALE = 5000 250.0 METRES



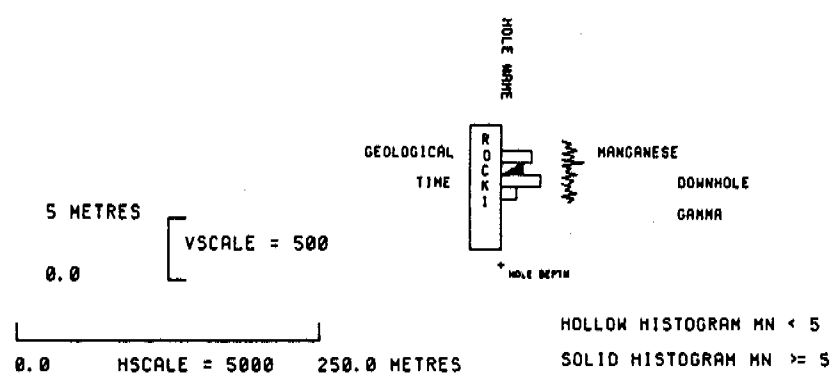
HOLLOW HISTOGRAM MN < 5
SOLID HISTOGRAM MN >= 5

BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR34		
PREPARED BY: N. ANDERSON	DATE: 22-MAR-94	CENTRE: MANTHORN
DRAWN BY: N. ANDERSON	REVISED:	
CHECKED:	DRAWING NO.:	



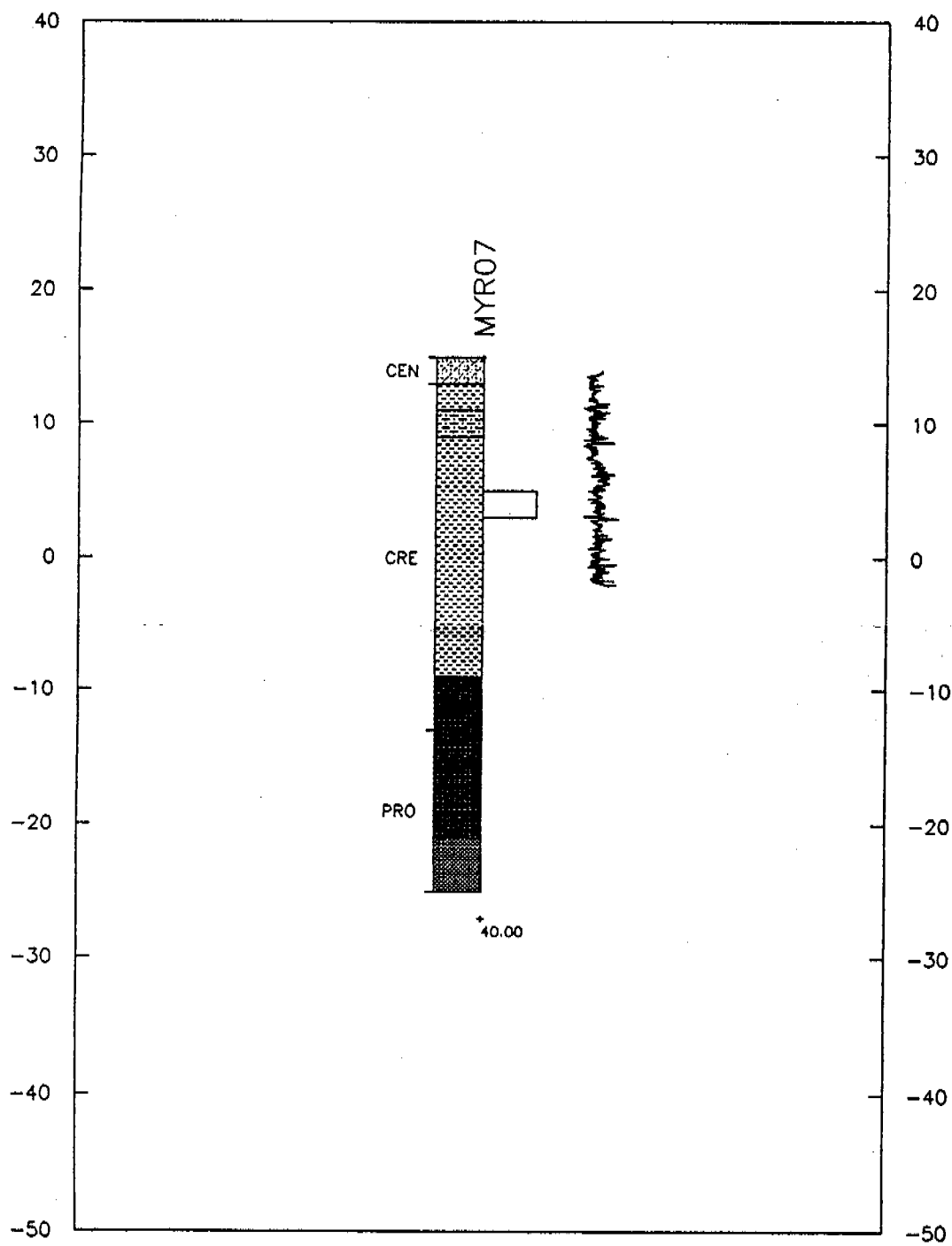
LEGEND

GEOLOGY



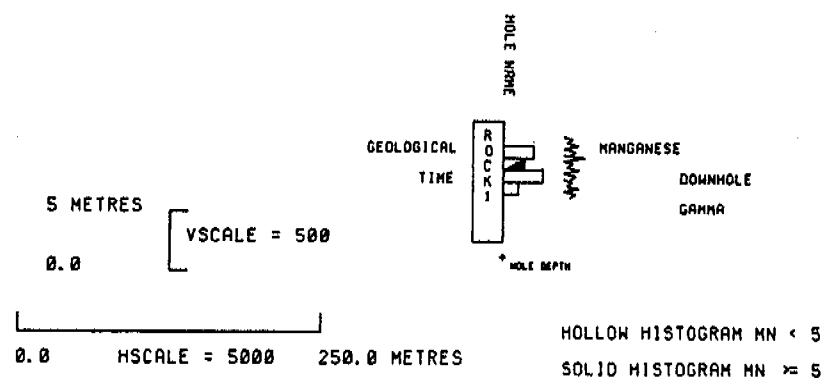
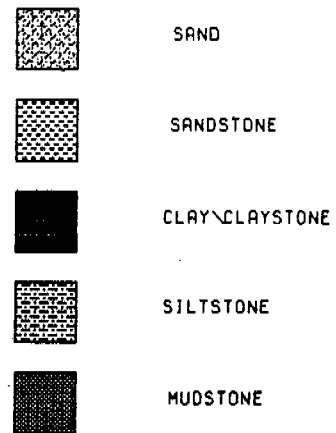
BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRASS		
PREPARED BY: N. HODGSON	DATE: 22-MAR-94	CENTRE: MANTON
DRAWN BY: N. HODGSON	REVISED:	
CHECKED:	DRAWING NO.:	

8301500N



LEGEND

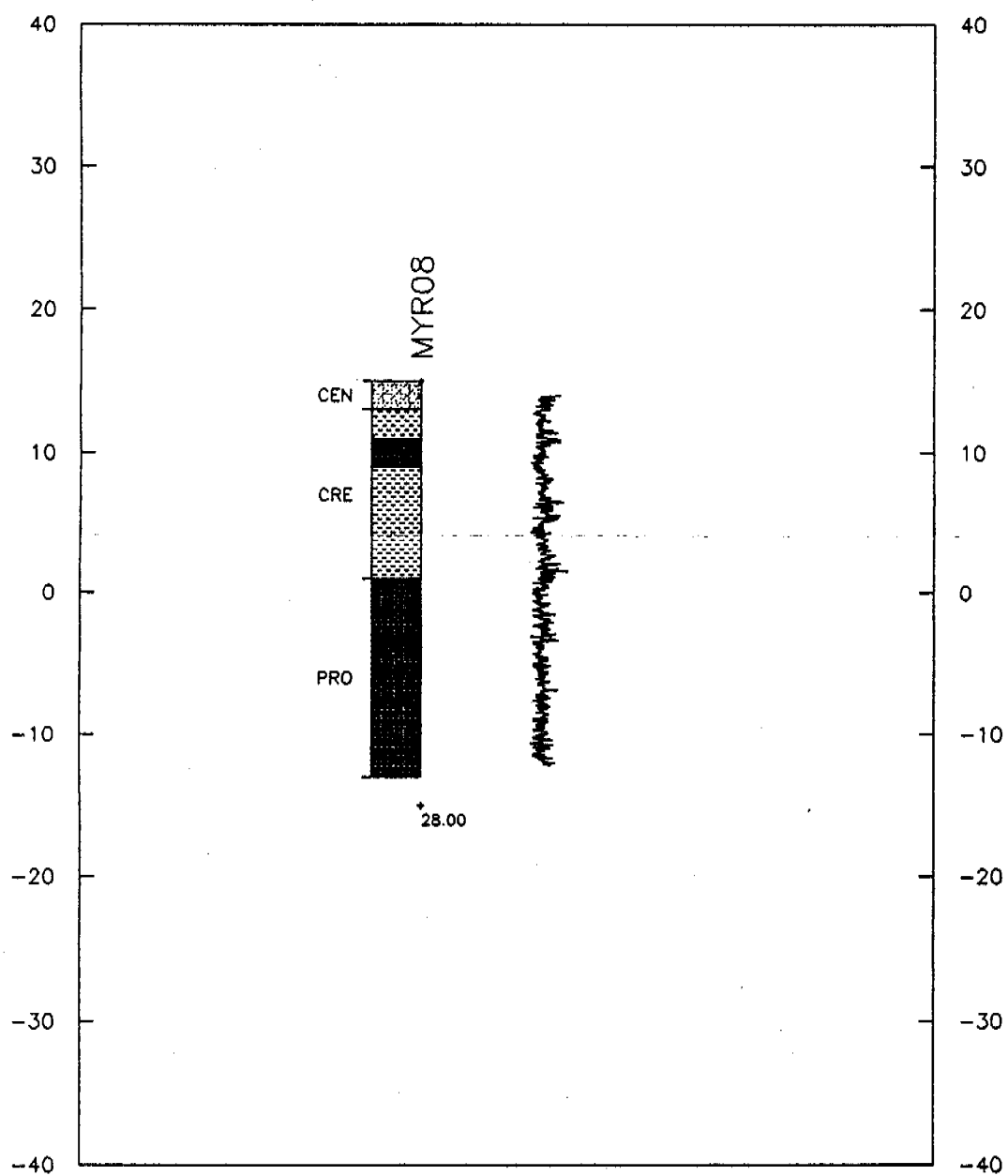
GEOLOGY



BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE MYR07		
PREPARED BY: H. ANDERSON	DATE: 11-08-93	CENTRE: MANTHAN
DRAWN BY: H. ANDERSON	REVISED:	
CHECKED:	DRAWING NO.:	

8301500N

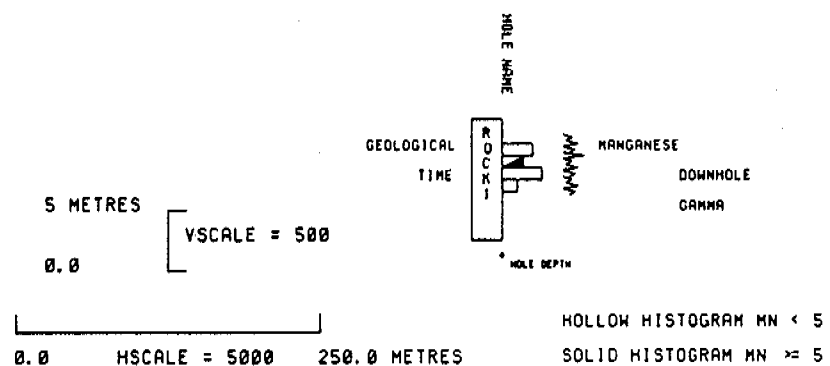
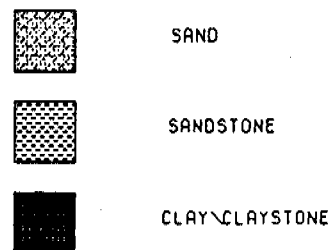
8301000N



8301000N

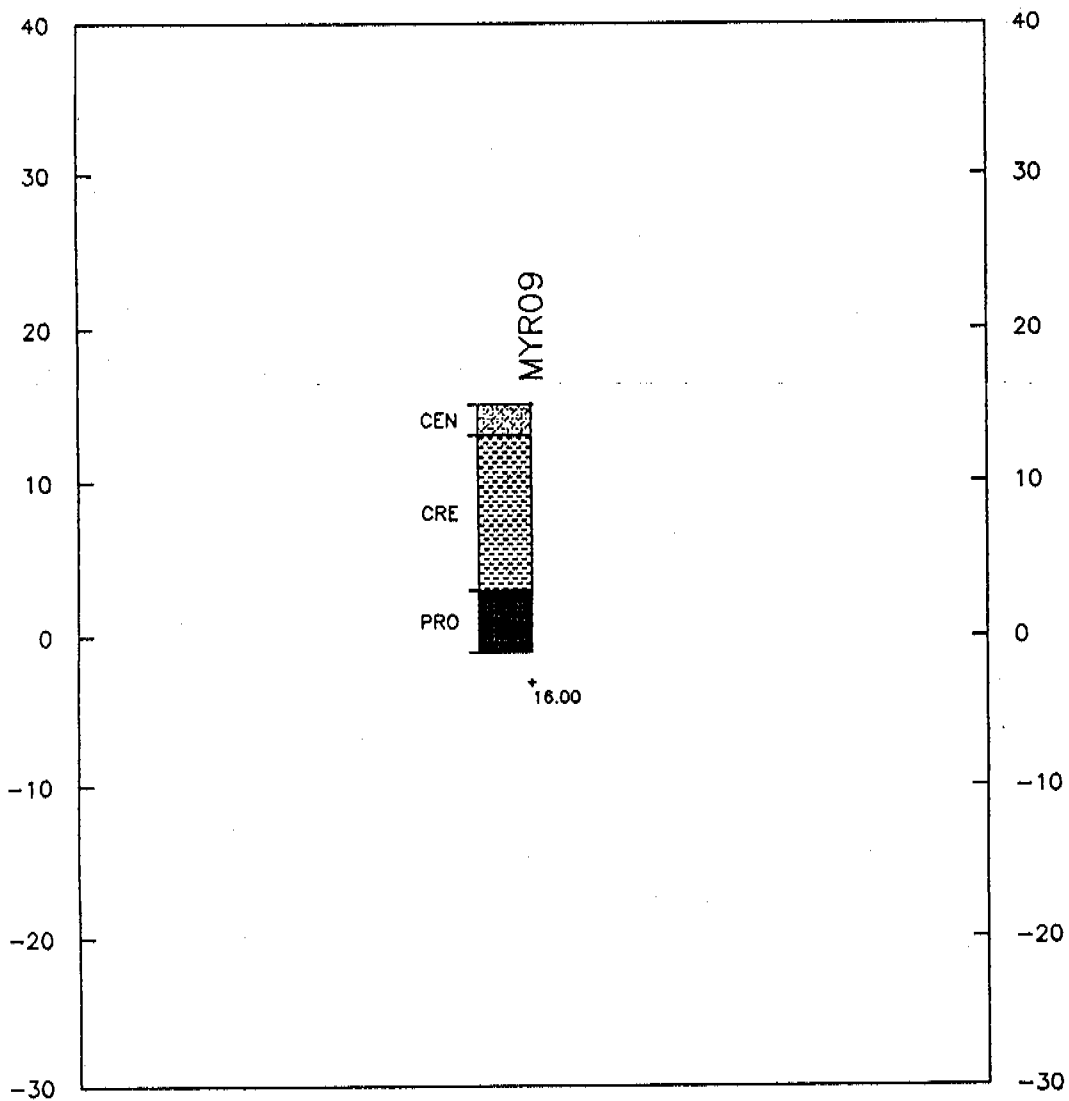
LEGEND

GEOLOGY



BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE MYR08		
PREPARED BY: J. ANDERSON	DATE: 11-MAR-94	CENTRE: MANTHORPE
DRAWN BY: J. ANDERSON	REVISED:	
CHECKED BY:	DRAWING NO.:	

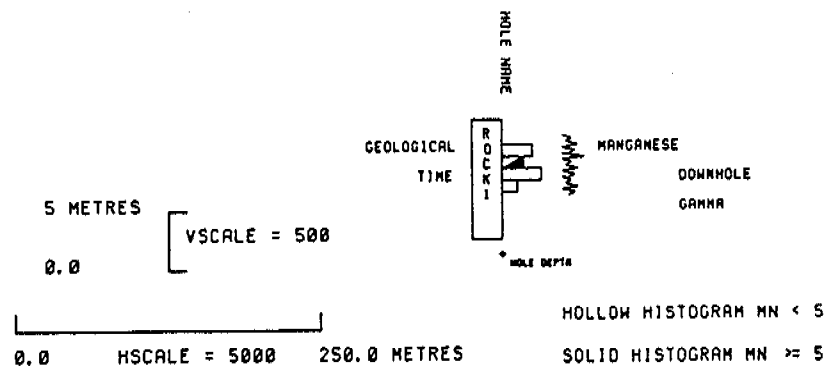
8302100N



LEGEND

GEOLOGY

- SAND
- SANDSTONE
- CLAY



BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1999		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE MYR09		
PREPARED BY: N. ANDERSON	DATE: 11-09-99	CENTRE: HARTHOLM
DRAWN BY: N. ANDERSON	REVIEWED BY:	
CHECKED BY:	DRAWING NO.:	

542850E

50

40

30

20

10

0

-10

-20

-30

-40

-50

542850E

TRR82

CRE

PRO

+ 22.00

50

40

30

20

10

0

-10

-20

-30

-40

-50

LEGEND

GEOLOGY



QUARTZITE



SAND

5 METRES

0.0

VSCALE = 500

0.0

HSCALE = 5000 250.0 METRES

GEOLOGICAL
TIMEHOLE NAME
ROCK
1
HOLE DEPTHMANGANESE
DOWNHOLE
GAMMA

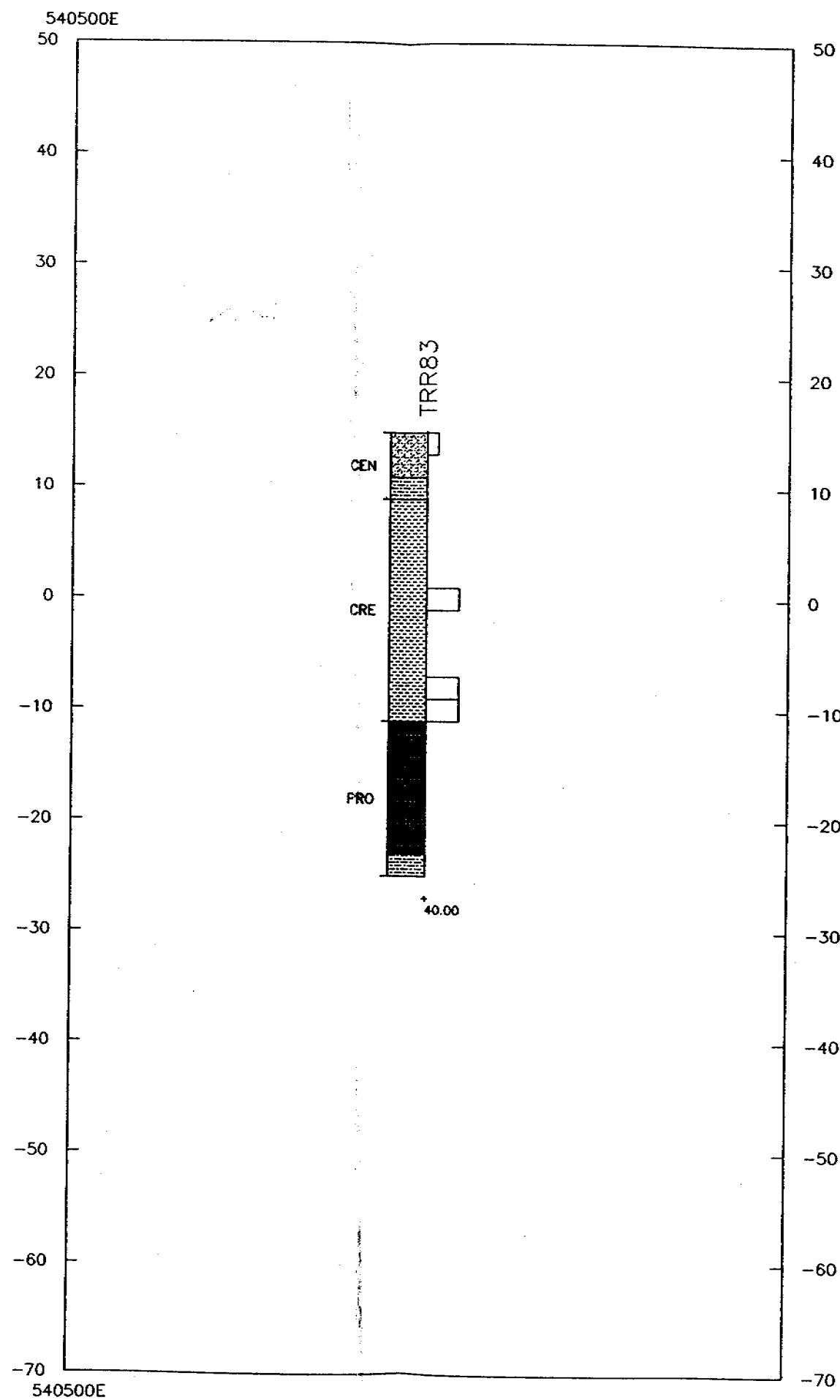
HOLLOW HISTOGRAM MN < 5

SOLID HISTOGRAM MN > 5

BHP MINERALS PTY. LTD.

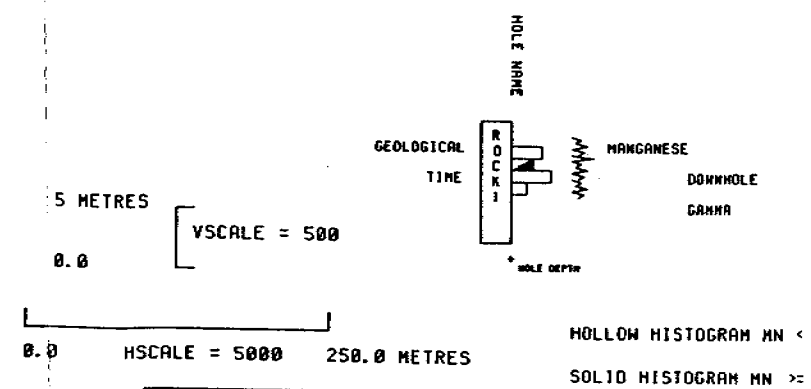
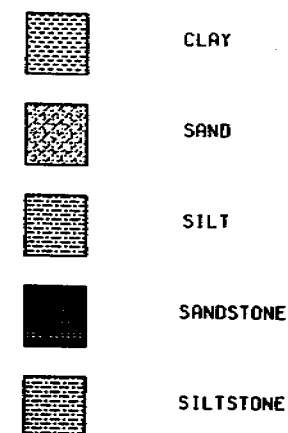
MCARTHUR RIVER DRILLING 1993
CARPENTARIA MANGANESE PROGRAM
DRILLHOLE TRR82

PREPARED - A. HARRISON	DATE - 25-MAR-94	CHECKED - ANTHONY
DRAWN - A. HARRISON	REVISED -	
CHECKED -	DRAWING NO. -	

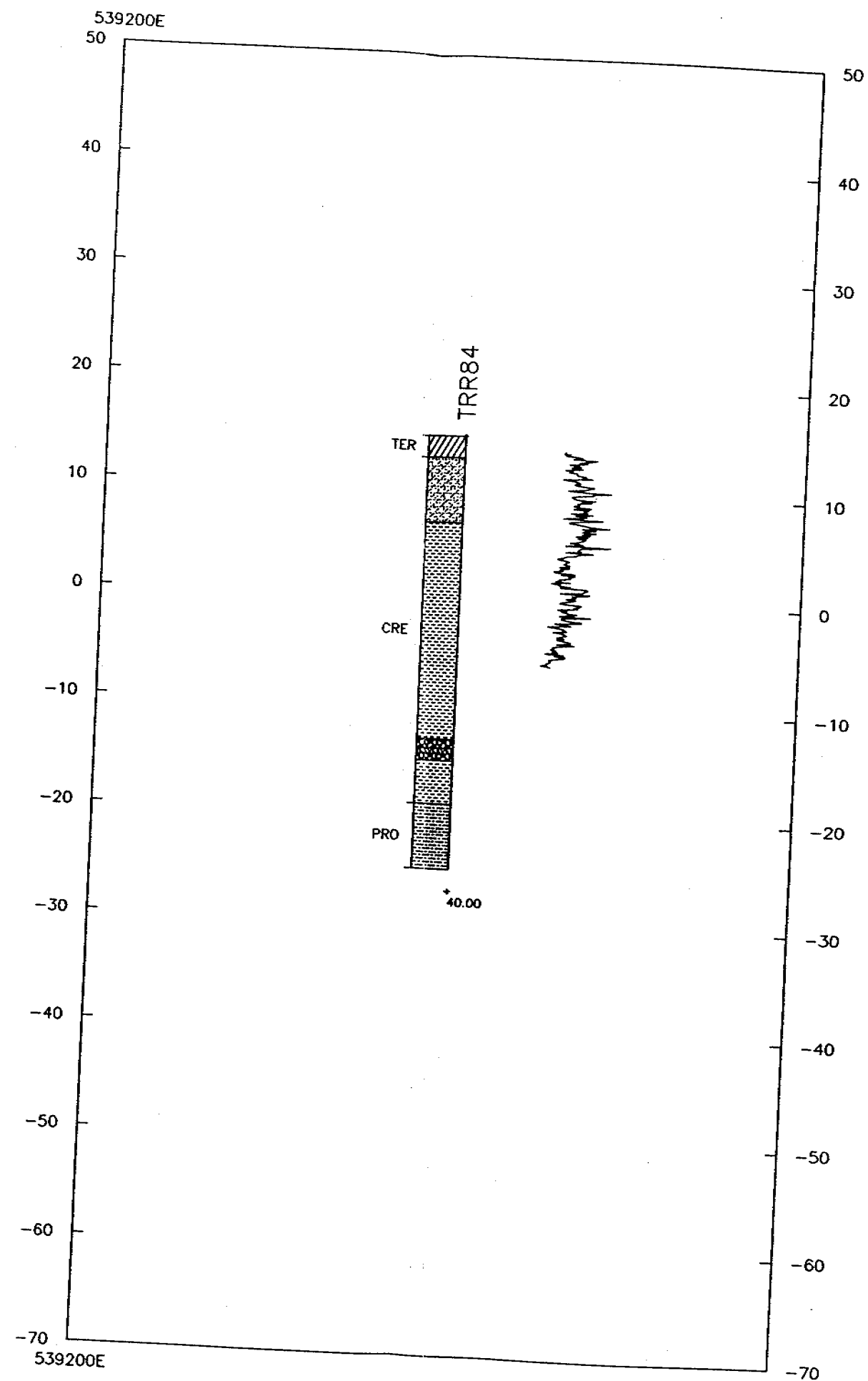


LEGEND

GEOLOGY

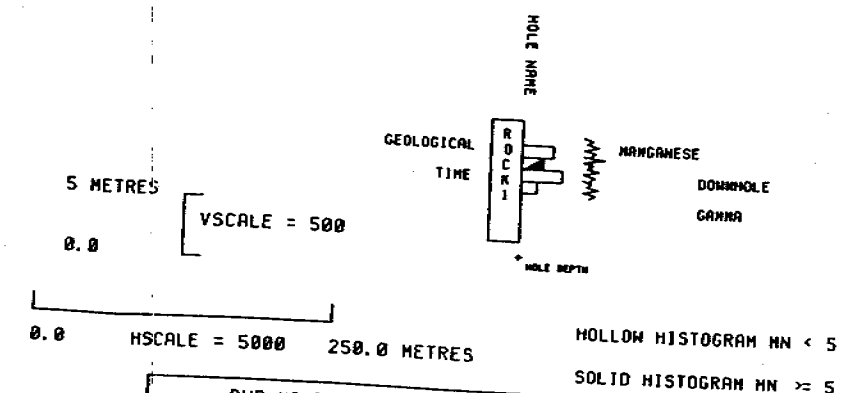
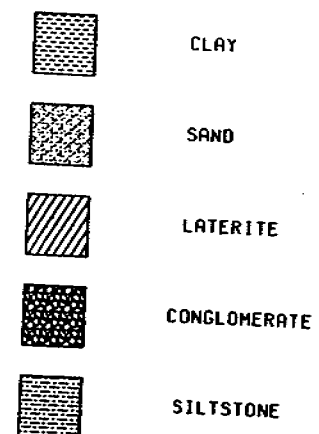


BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR83		
PREPARED BY AL 001000	DATE 25-08-93	CENTRE MCARTHUR
DRAWN BY AL 001000	REVISED	
CHECKED	DRAWING NO.	

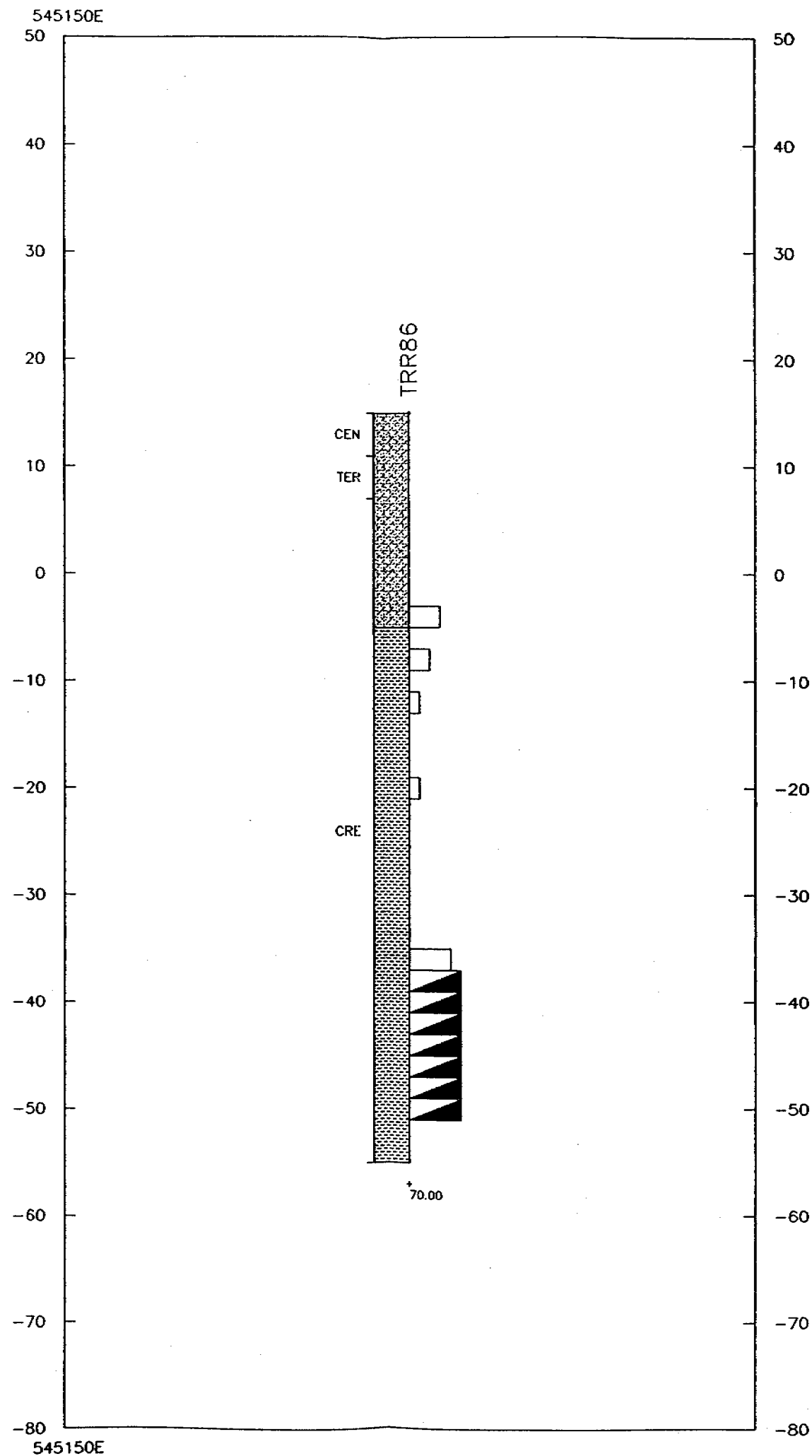


LEGEND

GEOLOGY

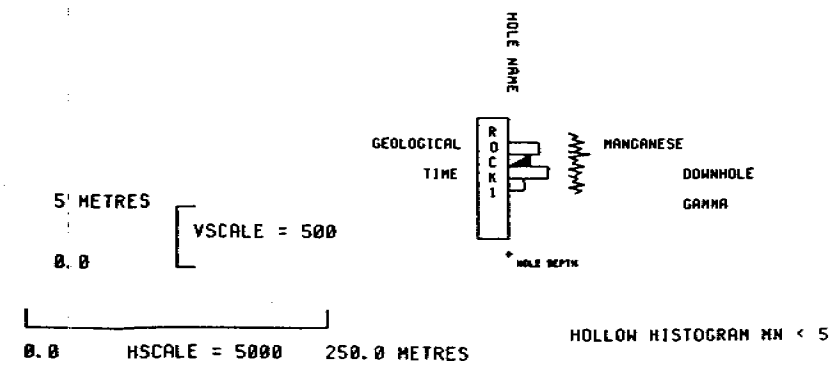
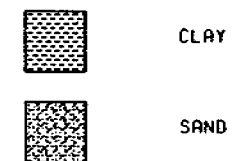


BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR84		
PREPARED BY: H. ANDERSON	DATE: 28-MAR-94	CENTRE: MANTON
DRAWN BY: H. ANDERSON	REVISED:	
CHECKED:	DRAWING NO.:	

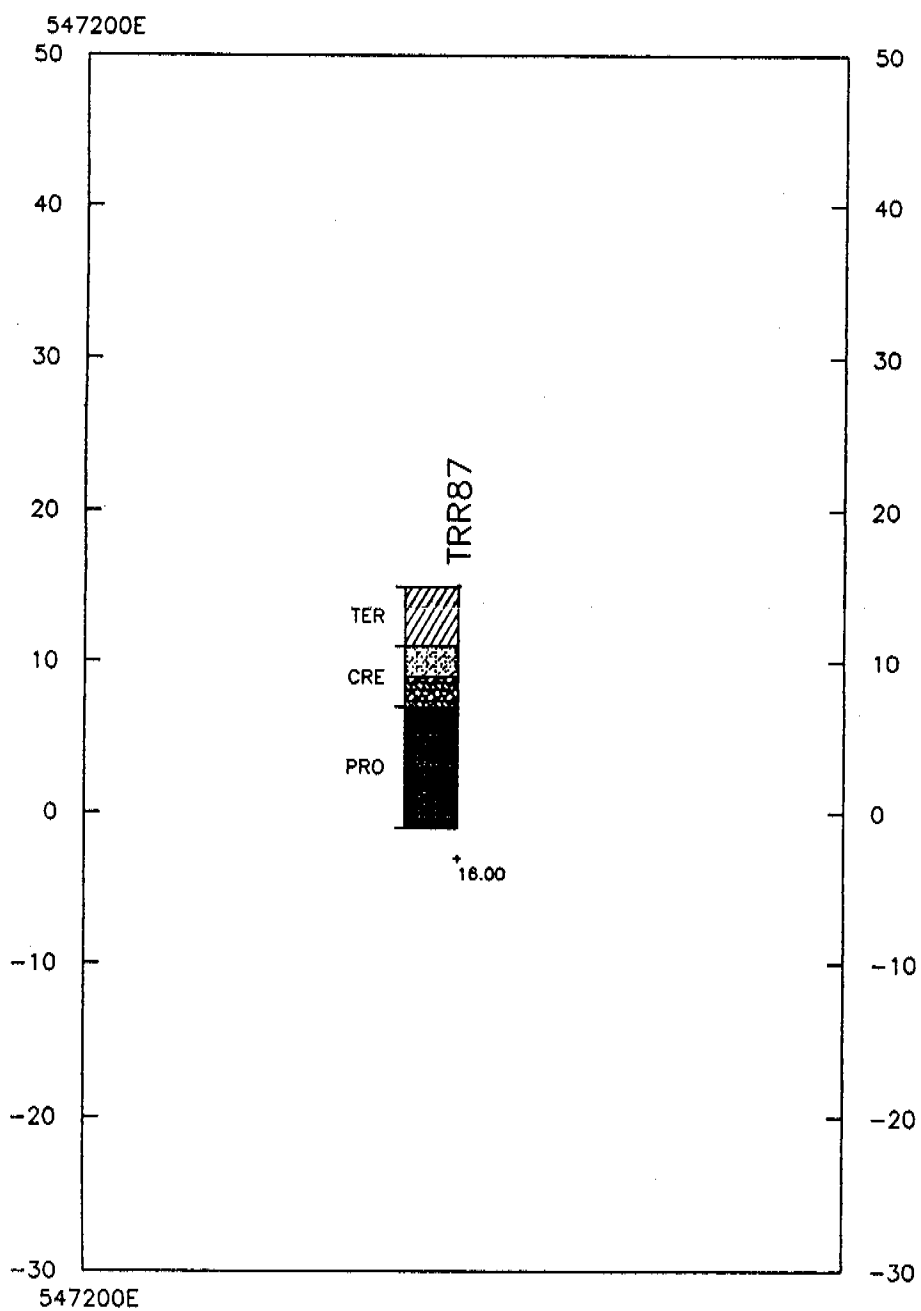


LEGEND

GEOLOGY

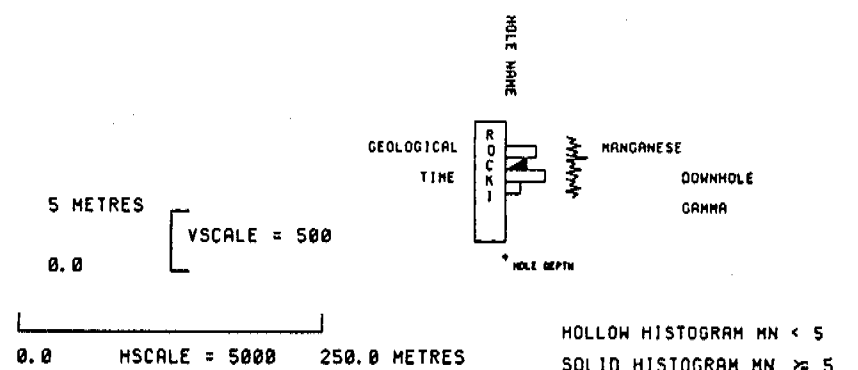
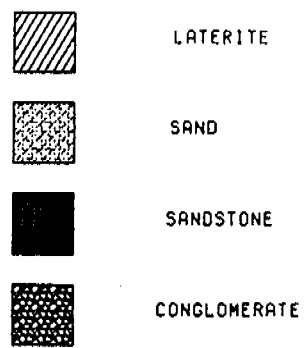


BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR86		
PREPARED - N. HADISSON	DATE - 25-MAR-94	CENTRE - MANTHORN
DRAWN - N. HADISSON	REVISED -	
CHECKED -	REVISION NO. -	

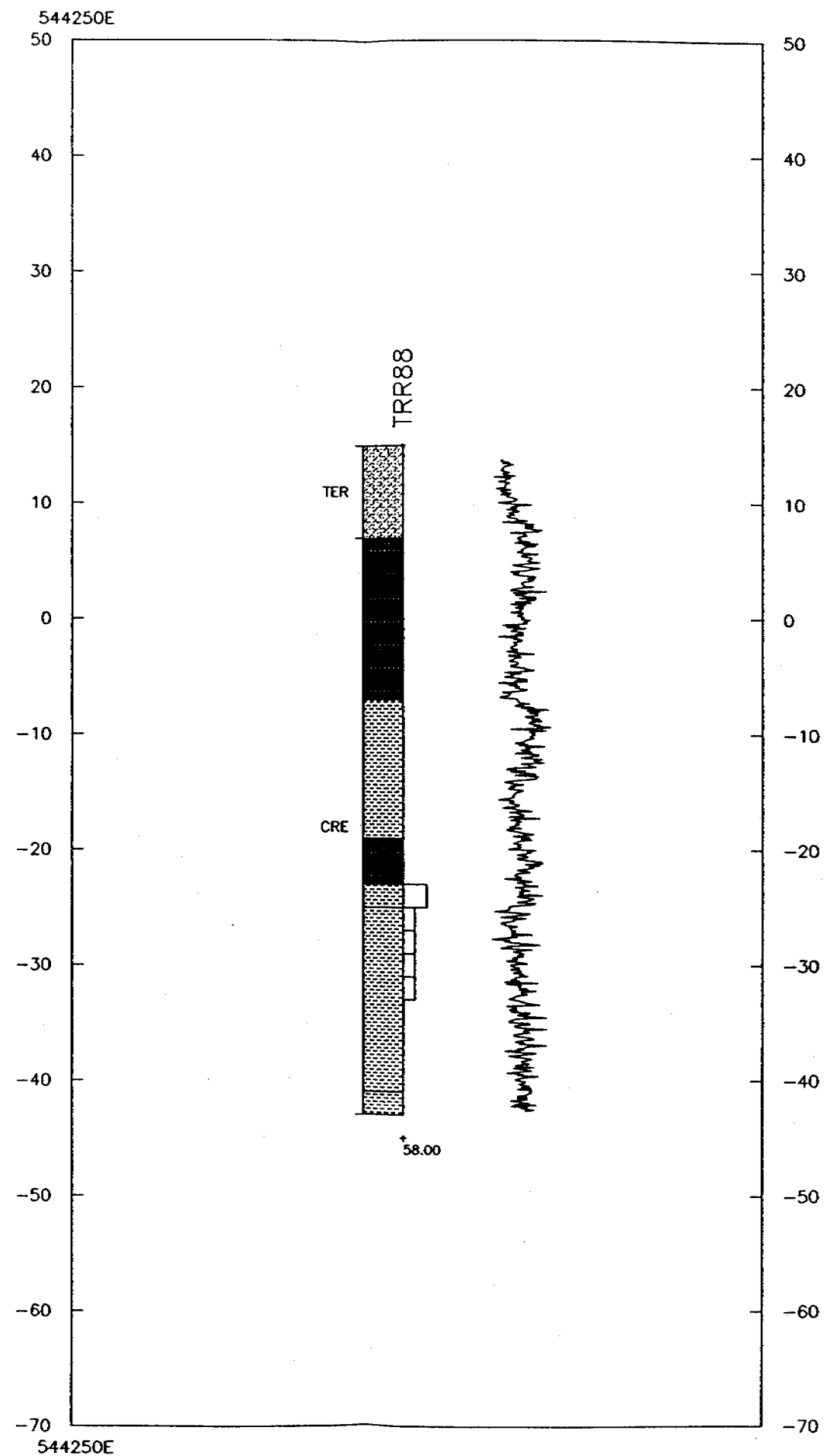


LEGEND

GEOLOGY



BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR87		
PREPARED BY: M. HADJIOSSO	DATE: 26-MAR-94	CENTRE: NANTHORN
DRAWN BY: M. HADJIOSSO	REVISED BY:	
CHECKED BY:	DEPUTY MGR:	



LEGEND

GEOLOGY



CLAY\CLAYSTONE



SAND



SANDSTONE

5 METRES

0.0

VSCALE = 500

0.0

HSCALE = 5000

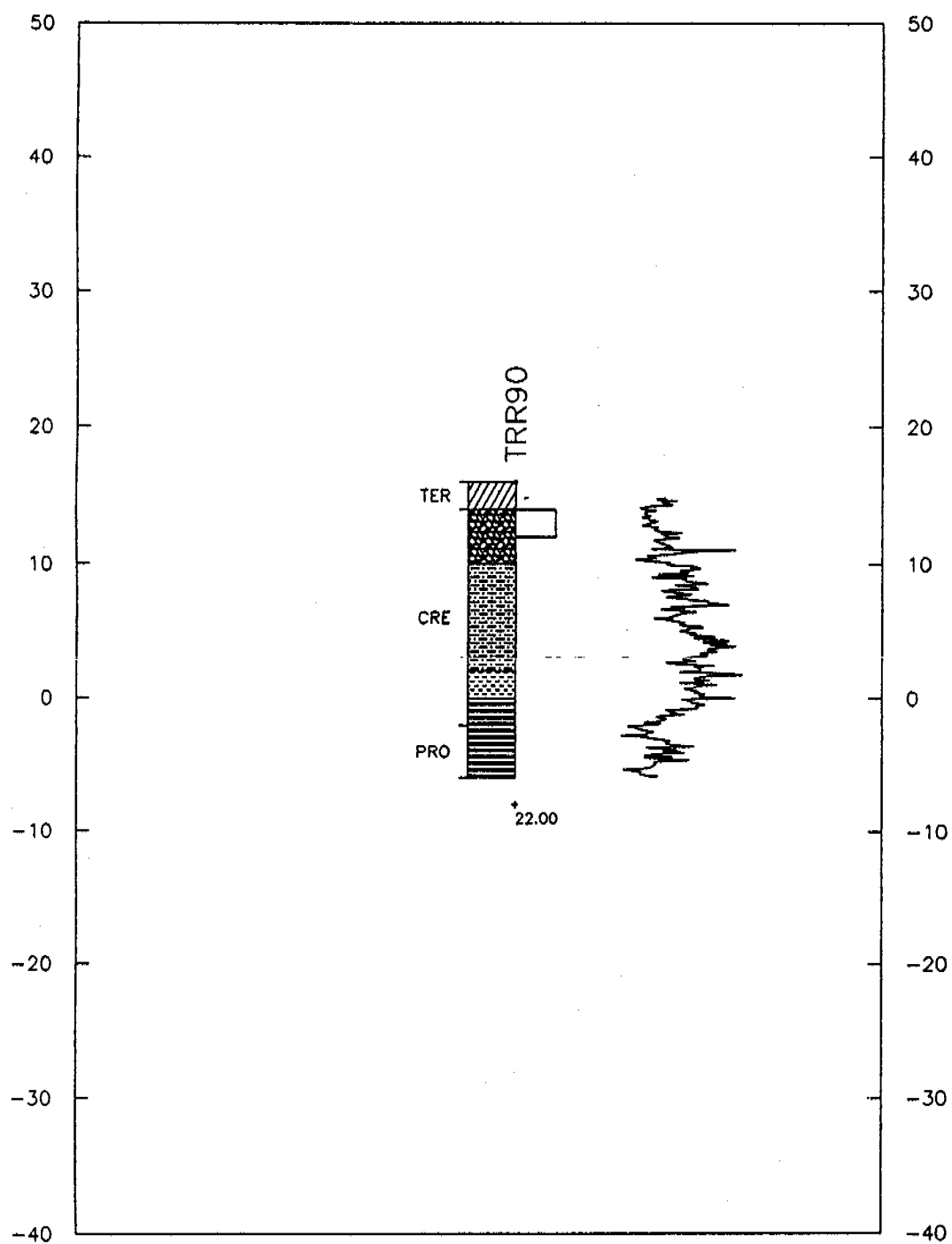
250.0 METRES

HOLLOW HISTOGRAM

SOLID HISTOGRAM

BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR88		
PREPARED- A. HADJIS	DATE- 20-08-94	CENTRE- MANTON
DRAWN- A. HADJIS	REVISED-	
CHECKED-	DRAWING NO.-	

8309250N

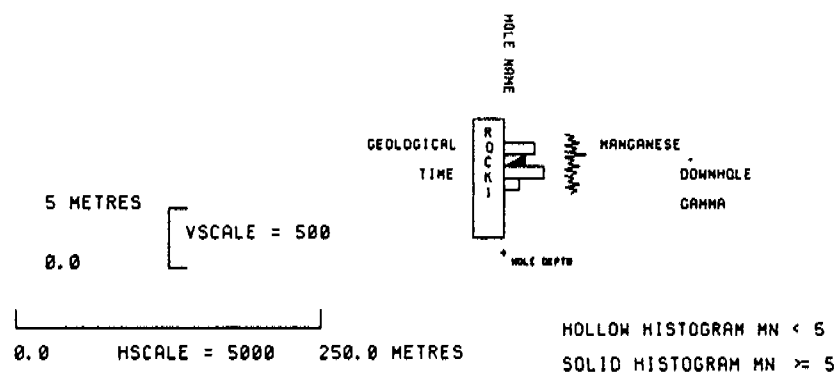


8309250N

LEGEND

GEOLOGY

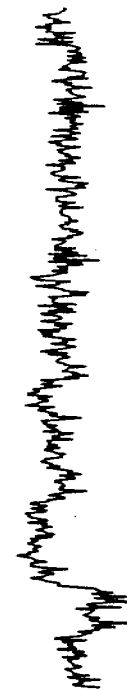
-  CONGLOMERATE
-  SOIL
-  SILT
-  CLAY
-  CHERT



BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE TRR90		
PREPARED BY: N. HINDS	DATE: 29-MAR-94	CERTIFY: M. HINDS
DRAWN BY: N. HINDS	REVISED:	
CHECKED:	DRAWING NO.:	

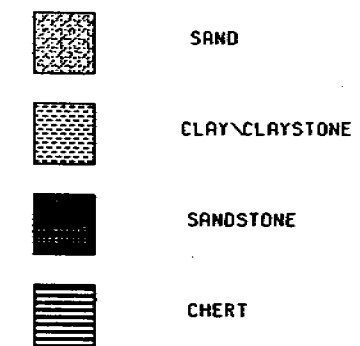
572500E
70
60
50
40
30
20
10
0
-10
-20
-30
-40
-50
572500E

YER08
CEN
CRE
PRO
+58.00



LEGEND

GEOLOGY

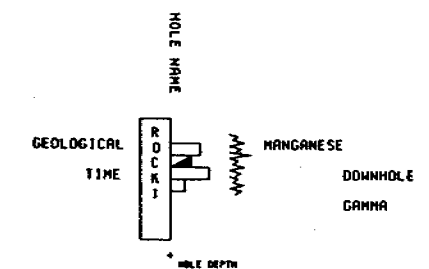


5 METRES

0.0

VSCALE = 500

0.0 HSCALE = 5000 250.0 METRES

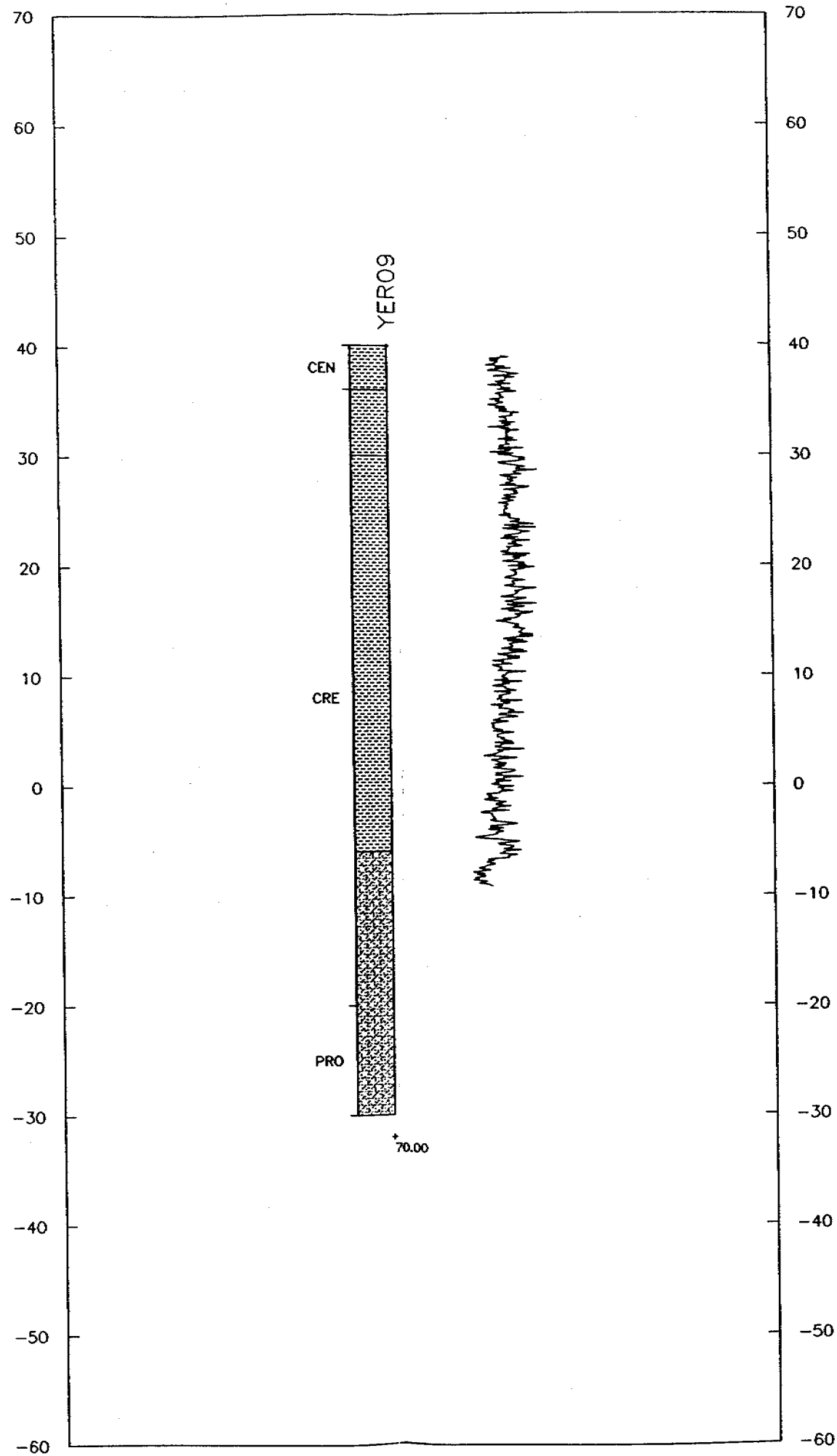


HOLLOW HISTOGRAM MN < 5

SOLID HISTOGRAM MN ≥ 5

BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE YER08		
PREPARED BY: H. ANDERSON	DATE: 17-MAR-93	CHECKED BY: M. HARTMAN
DRAWN BY: H. ANDERSON	REVISED:	
CHECKED:	DRAWING NO.:	

8291200N



LEGEND

GEOLOGY



SAND



CLAY/CLAYSTONE

5 METRES

0.0

VSCALE = 500

0.0 HSCALE = 5000 250.0 METRES

HOLE NAME

GEOLOGICAL
TIMEROCK
1

HOLE DEPTH

MANGANESE

DOWNHOLE
GAMMA

HOLLOW HISTOGRAM MN < 5

SOLID HISTOGRAM MN > 5

BHP MINERALS PTY. LTD.		
MCARTHUR RIVER DRILLING 1993		
CARPENTARIA MANGANESE PROGRAM		
DRILLHOLE YER09		
PREPARED BY: A. HARRISON	DATE: 17-MAR-94	CENTRE: MANTON
DRAWN BY: A. HARRISON	REVISED:	
CHECKED:	DRAWING NO.:	

APPENDIX 5.

Statements of Expenditure

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7260

For the Period
24th May, 1991 to 23rd May, 1994

Geoscientist/Professional	18,228
Field Support/Office Staff	9,879
Other Contractors	3,312
Equipment Hire	5,808
Vehicles	2,641
Aircraft Charter	45
Geophysics	13,679
Laboratory	2,976
Drafting	344
Drilling	25,361
Geochemistry	1,583
Surveys	46
Office Expenses	187
Sub-Total	84,089
Overheads 10%	8,408
TOTAL:	\$ 92,497

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7261

For the Period
24th May, 1991 to 23rd May, 1994

Geoscientist/Professional	17,920
Field Support/Office Staff	6,157
Other Contractors	1,461
Travel/Accommodation/Meals	94
Equipment Hire	10,896
Vehicles	2,990
Helicopter Charter	1,560
Fixed Wing Air Charter	3,221
Geophysics	22,443
Laboratory	1,590
Drafting/Computing	595
Drilling	15,295
Geochemistry	1,165
Surveys	1,143
Office Expenses	65
Sub-Total	86,595
Overheads 10%	8,659
TOTAL:	\$ 95,254

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7262

For the Period
24th May, 1991 to 23rd May, 1994

Geoscientist/Professional	11,992
Field Support/Office Staff	4,365
Other Contractors	1,248
Equipment Hire	4,344
Vehicles	1,536
Fixed Wing Air Charter	677
Geophysics	7,926
Laboratory	124
Drafting/Computing	454
Drilling	5,041
Geochemistry	3,036
Surveys	541
Office Expenses	118
Sub-Total	41,402
Overheads 10%	4,140
TOTAL:	\$ 45,542

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7263

For the Period
24th May, 1991 to 23rd May, 1994

Geoscientist/Professional	6,938
Field Support/Office Staff	2,953
Other Contractors	692
Travel/Accommodation/Meals	26
Equipment Hire	2,706
Vehicles	740
Freight/Storage	98
Fixed Wing Air Charter	2,625
Geophysics	9,929
Laboratory	695
Drafting/Computing	360
Geochemistry	1,844
Surveys	746
Office Expenses	138
Sub-Total	30,490
Overheads 10%	3,049
TOTAL:	\$ 33,539

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7264

For the Period
24th May, 1991 to 23rd May, 1994

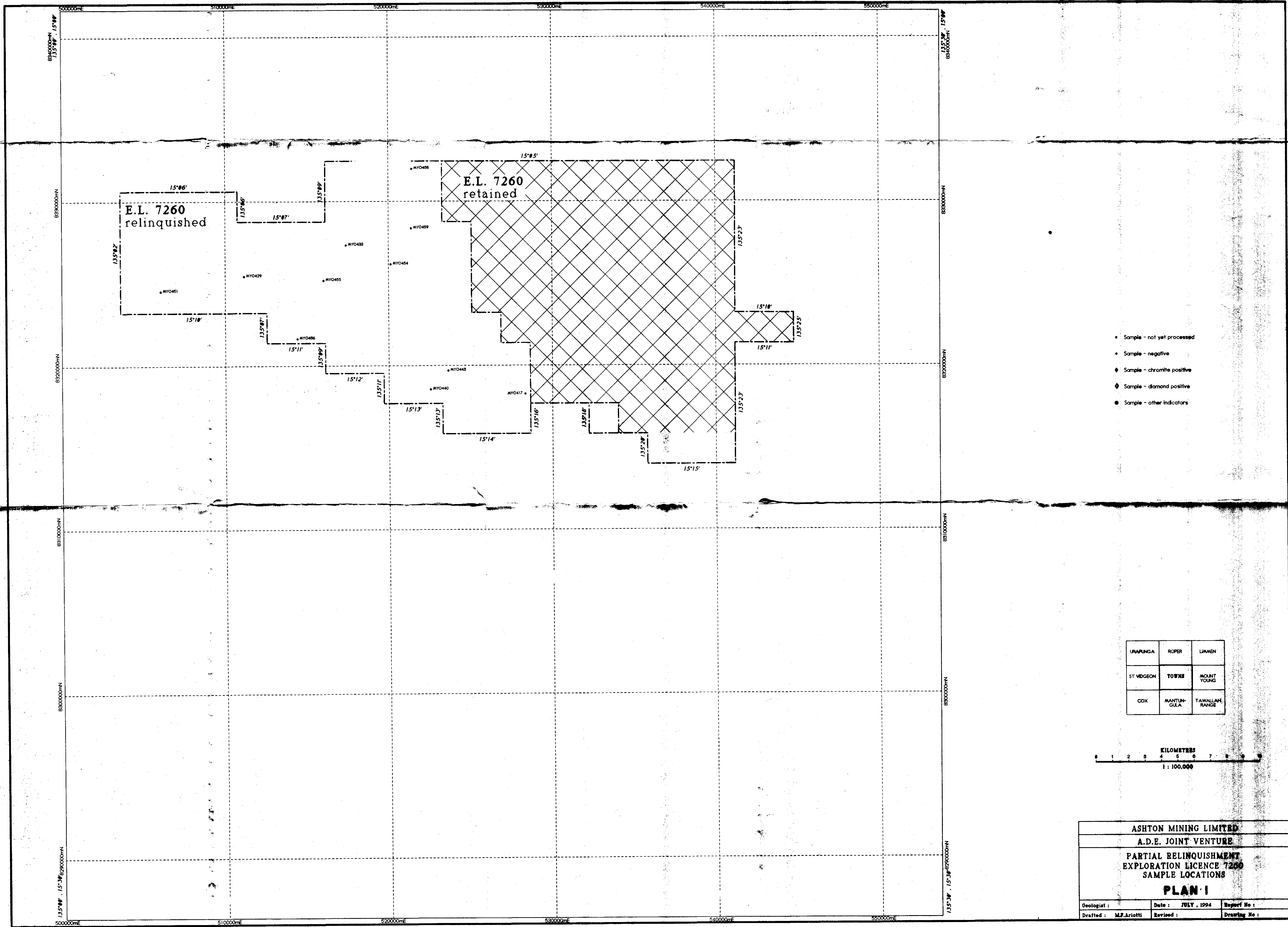
Geoscientist/Professional	7,334
Field Support/Office Staff	3,907
Other Contractors	1,000
Travel/Accommodation/Meals	86
Field Supplies	67
Equipment Hire	2,177
Vehicles	692
Helicopter Charter	1,852
Fixed Wing Air Charter	1,338
Geophysics	9,849
Laboratory	922
Drafting/Computing	254
Geochemistry	2,672
Surveys	651
Office Expenses	275
Sub-Total	33,076
Overheads 10%	3,076
TOTAL:	36,152

STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 7824

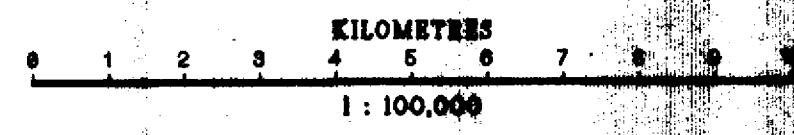
For the Period
24th May, 1991 to 23rd May, 1994

Geoscientist/Professional	4,172
Field Support/Office Staff	2,489
Travel/Accommodation/Meals	130
Field Supplies	335
Equipment Hire	590
Vehicles	779
Freight/Storage	119
Air Charter	687
Geophysics	283
Drafting/Computing	340
Library	12
Sub-Total	9,936
Overheads 10%	936
TOTAL:	\$ 10,872



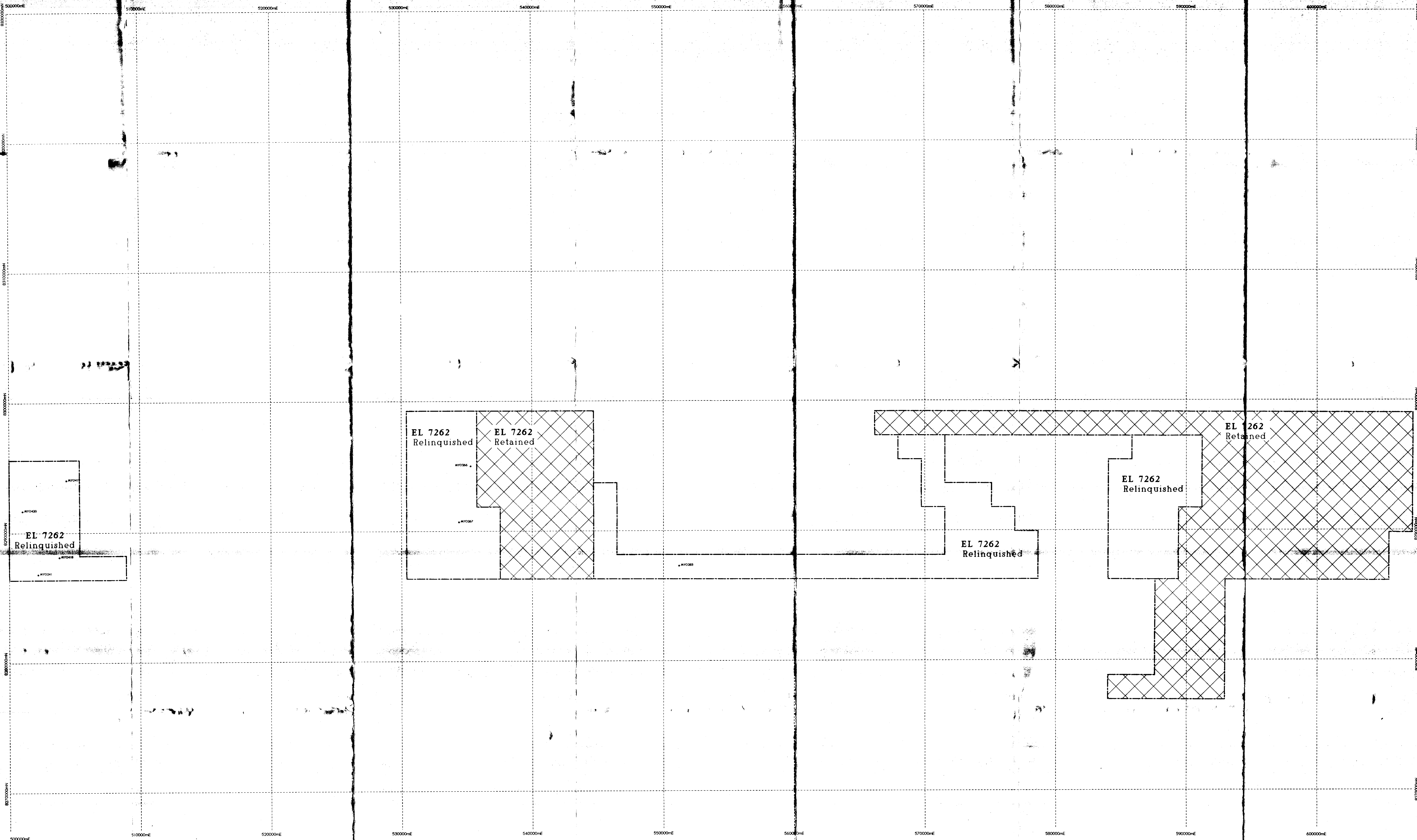
- Sample - not yet processed
- Sample - negative
- Sample - chromite positive
- Sample - diamond positive
- Sample - other indicators

URAPUNGA	ROPER	LIMMEN
ST VIDGEON	TOWNS	MOUNT YOUNG
COX	MANTUNGULA	TAWALLAH RANGE



ASHTON MINING LIMITED		
A.D.E. JOINT VENTURE		
PARTIAL RELINQUISHMENT EXPLORATION LICENCE 7260 SAMPLE LOCATIONS		
PLAN 1		
Geologist :	Date : JULY, 1994	Report No :
Drafted : M.F. Ariotti	Revised :	Drawing No :

CR 94/107



- Sample - not yet processed
- Sample - negative
- Sample - chromite positive
- Sample - diamond positive
- Sample - other indicators

KILOMETERS
1 : 100,000

ASHTON MINING LIMITED		
A.D.E. JOINT VENTURE		
PARTIAL RELINQUISHMENT		
EXPLORATION LICENCE 9262		
SAMPLE LOCATIONS		
PLAN 3		
Drafted :	Revised :	Drawing No :

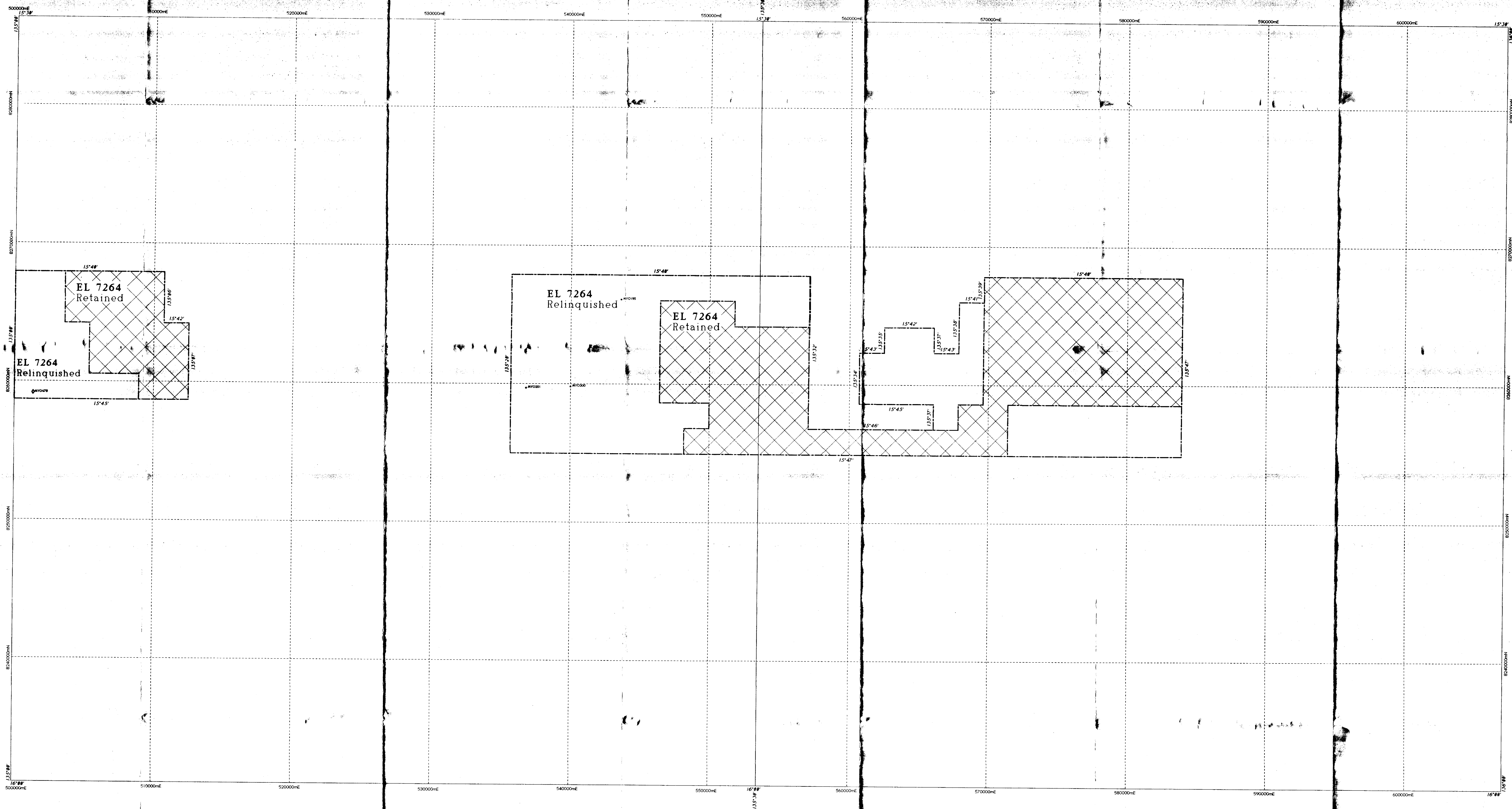


- Sample - not yet processed
- Sample - negative
- Sample - chrome positive
- Sample - diamond positive
- Sample - other indicators

KILOMETRES
1 : 100,000

ASHTON MINING LIMITED		
A.D.E. JOINT VENTURE		
PARTIAL RELINQUISHMENT		
EXPLORATION LICENCE 7263		
SAMPLE LOCATIONS		
PLAN 4		
Sheet No. 1	Sheet No. 2	Sheet No. 3
Sheet No. 4	Sheet No. 5	Sheet No. 6

CR94607



ST VESION	TOVNS	MOUNT YOUNG	ROSE CREEK
COX	MARTIN-GILL	TAWALLAR BANGE	BING BONG
TANNA-GRV	BARRON-DOING	BATTEN	BORROLOOLA

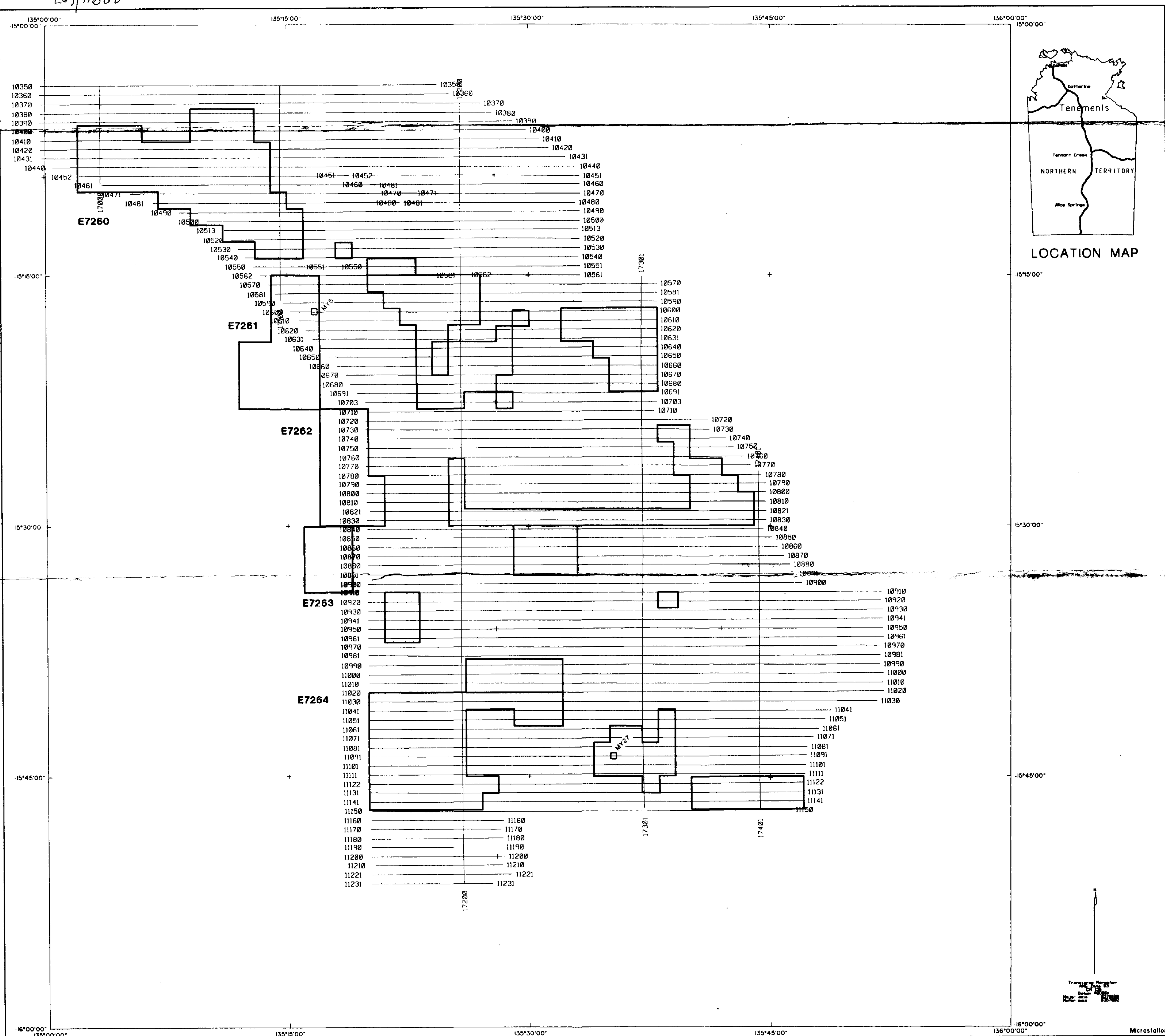
KILOMETRES
0 1 2 3 4 5 6 7 8 9 10
1 : 100,000

- Sample - not yet processed
- Sample - negative
- Sample - chromite positive
- Sample - diamond positive
- Sample - other indicators

ASHTON MINING LIMITED			
A.D.E. JOINT VENTURE			
PARTIAL RELINQUISHMENT			
EXPLORATION LICENCE 7264			
SAMPLE LOCATIONS			
PLAN 5			
Drawn by:	Date:	July 2004	Report No.: 50017
Drawn:	Revised:		Drawing No.:

CK94/607

log/11600



AIRBORNE SURVEY SPECIFICATIONS

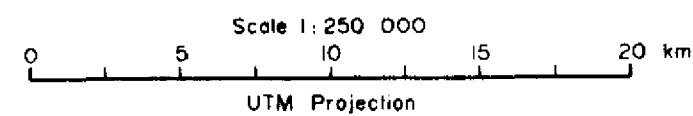
Contractor: Aerodata
Magnetometer: Split Beam Cesium Scintrex V201
Magnetometer Sample Interval: 0.5 seconds (approx 25 metres)
Flight Path Recovery: GPS
Flight Line Direction: 90 degrees
Flight Line Spacing: 1000 metres
Flying Height: 123 metres
Total line kms of survey: 5065 km
Survey flown: July 1992



Relinquished Area



Questem anomaly location & number



BHP Minerals Pty. Ltd.
A.C.N. 008 084 732

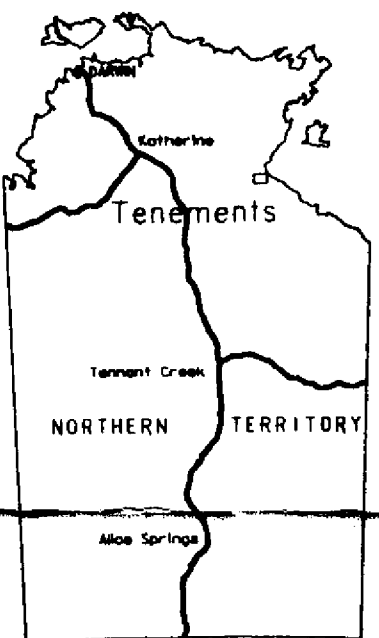
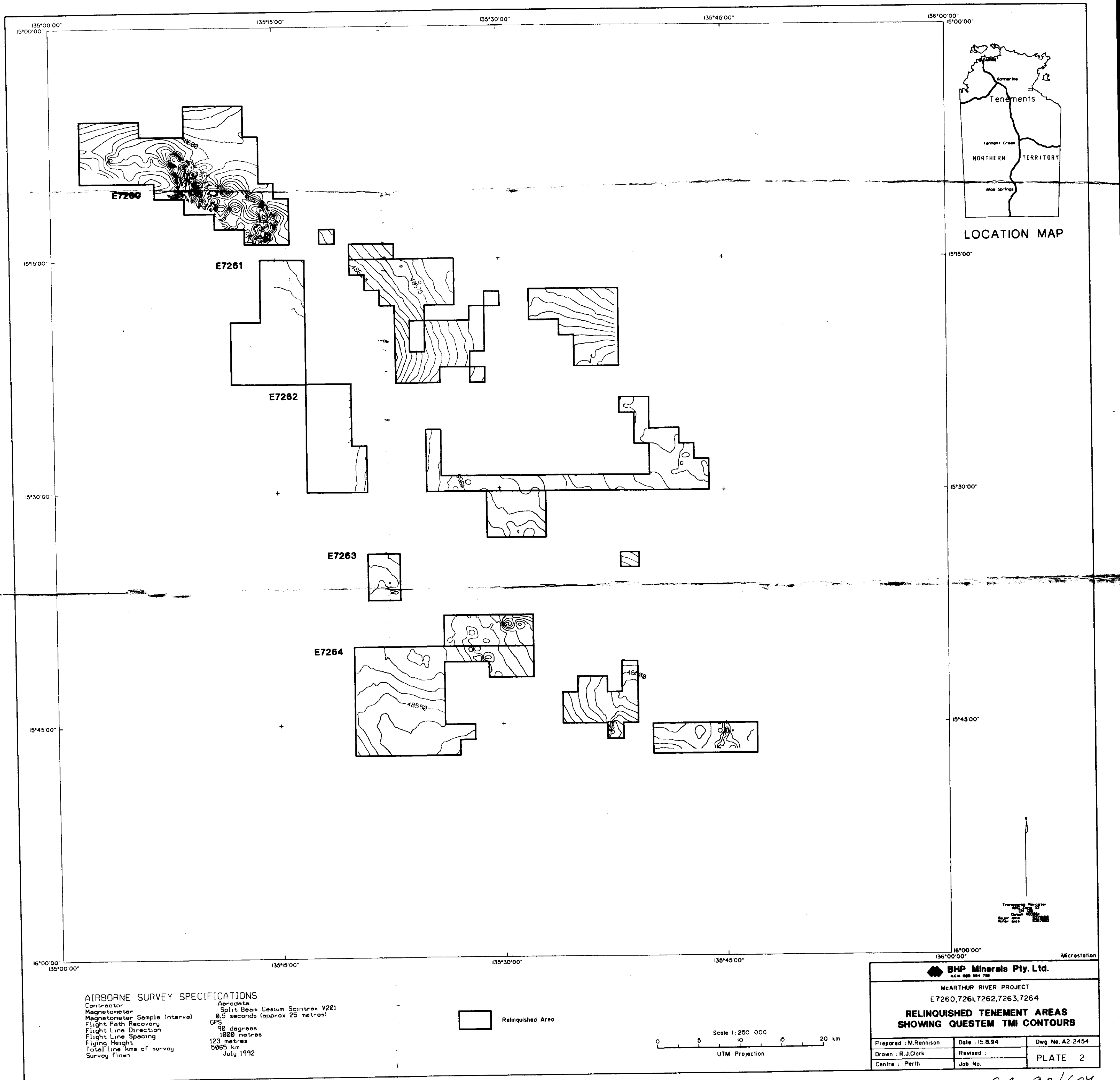
McARTHUR RIVER PROJECT

E 7260, 7261, 7262, 7263, 7264

RELINQUISHED TENEMENT AREAS QUESTEM FLIGHT LINES

Prepared: M.Rennison	Date: 15.8.94	Dwg No. A2 2455
Drawn: R.J.Clark	Revised:	PLATE 1
Centre: Perth	Job No.	

CK94/607



LOCATION MAP

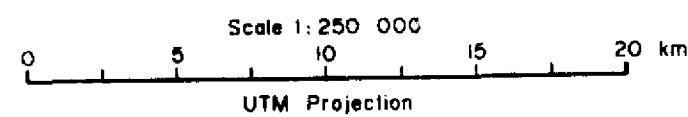


AIRBORNE SURVEY SPECIFICATIONS

Contractor	Aerodata
Magnetometer	Split Beam Cesium Scintrex V201
Magnetometer Sample Interval	0.5 seconds (approx 25 metres)
Flight Path Recovery	GPS
Flight Line Direction	90 degrees
Flight Line Spacing	1000 metres
Flying Height	123 metres
Total line kms of survey	5065 km
Survey flown	July 1992



Relinquished Area



BHP Minerals Pty. Ltd.

McARTHUR RIVER PROJECT
E7260,7261,7262,7263,7264

**RELINQUISHED TENEMENT AREAS
SHOWING QSTEM TMI CONTOURS**

Prepared : M.Rennison	Date : 15.8.94	Dwg No. A2-2454
Drawn : R.J.Clark	Revised :	PLATE 2
Centre : Perth	Job No.	



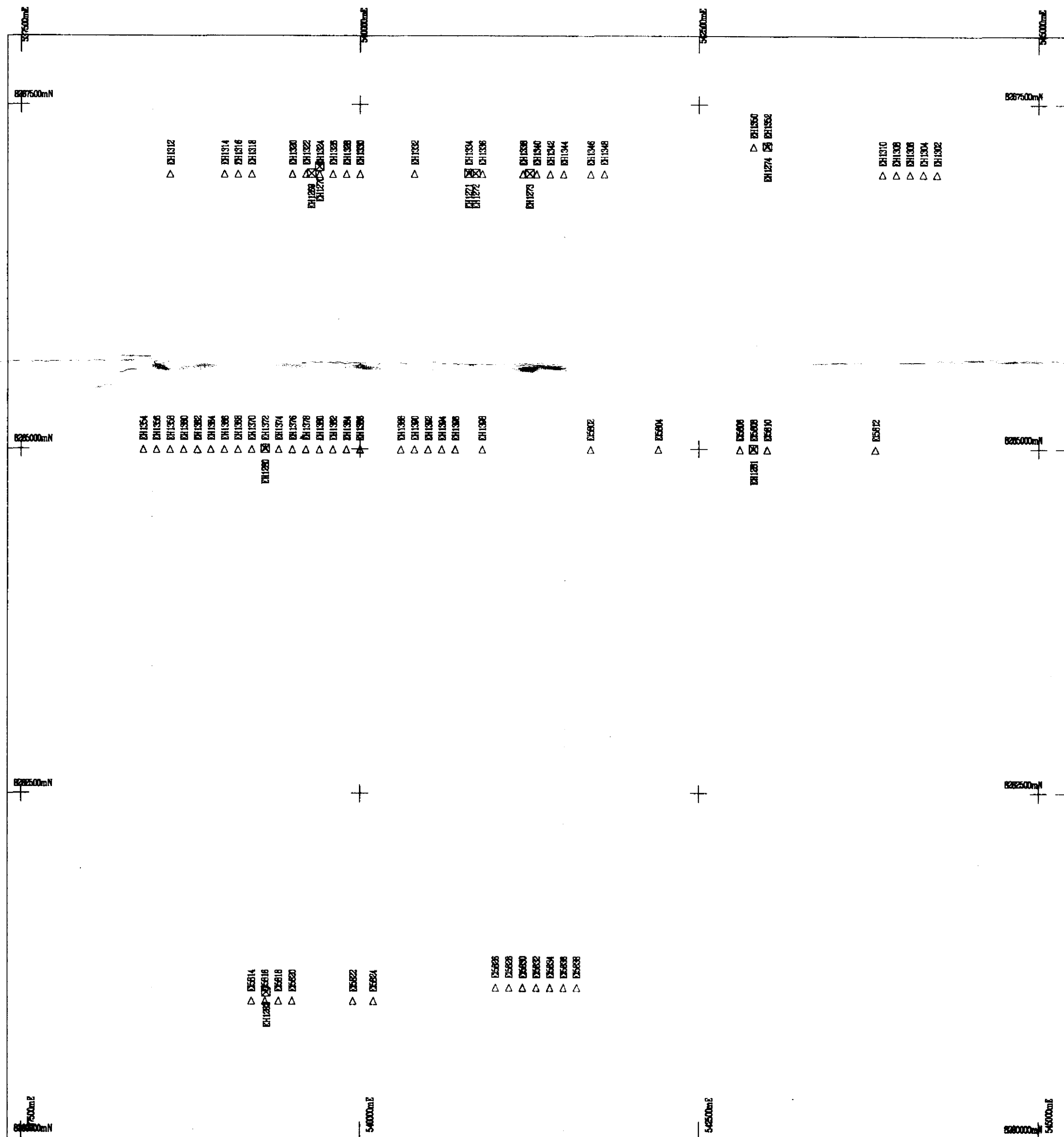
~ Tenement Bounds
· 'Stream Samples'

Scale 1:100000
0 2 4 6 8 km
Universal Transverse Mercator Projection

BHP Minerals Pty. Ltd. A.C.N. 608 694 782			
Carpentaria Group Kallian River Project EL. 7261, 7262, 7263, 7264			
Relinquished Areas Stream Sampling			
Prepared: AJH	Date: 10/08/1994	Regions: 1	PLATE: 3
Drawn: AJH	Regions: 1	No. A1-6681	
Centre: Perth	No. A1-6681		

CR94/607

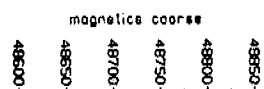
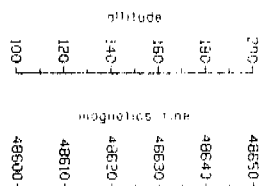
CR94/607



BHP Minerals Pty. Ltd. A.C.N. 008 694 782		
Carpentaria Group Mulkhan River Project		
EL 7264 Relinquished Area		
Soil & Rock Sample Locations		
Prepared: AM	Date: 10/02/1994	PLATE: 4
Drawn: AM	Revisions: 1	
Centre: Perth	Dwg. No.: A1-6880	

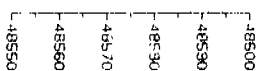
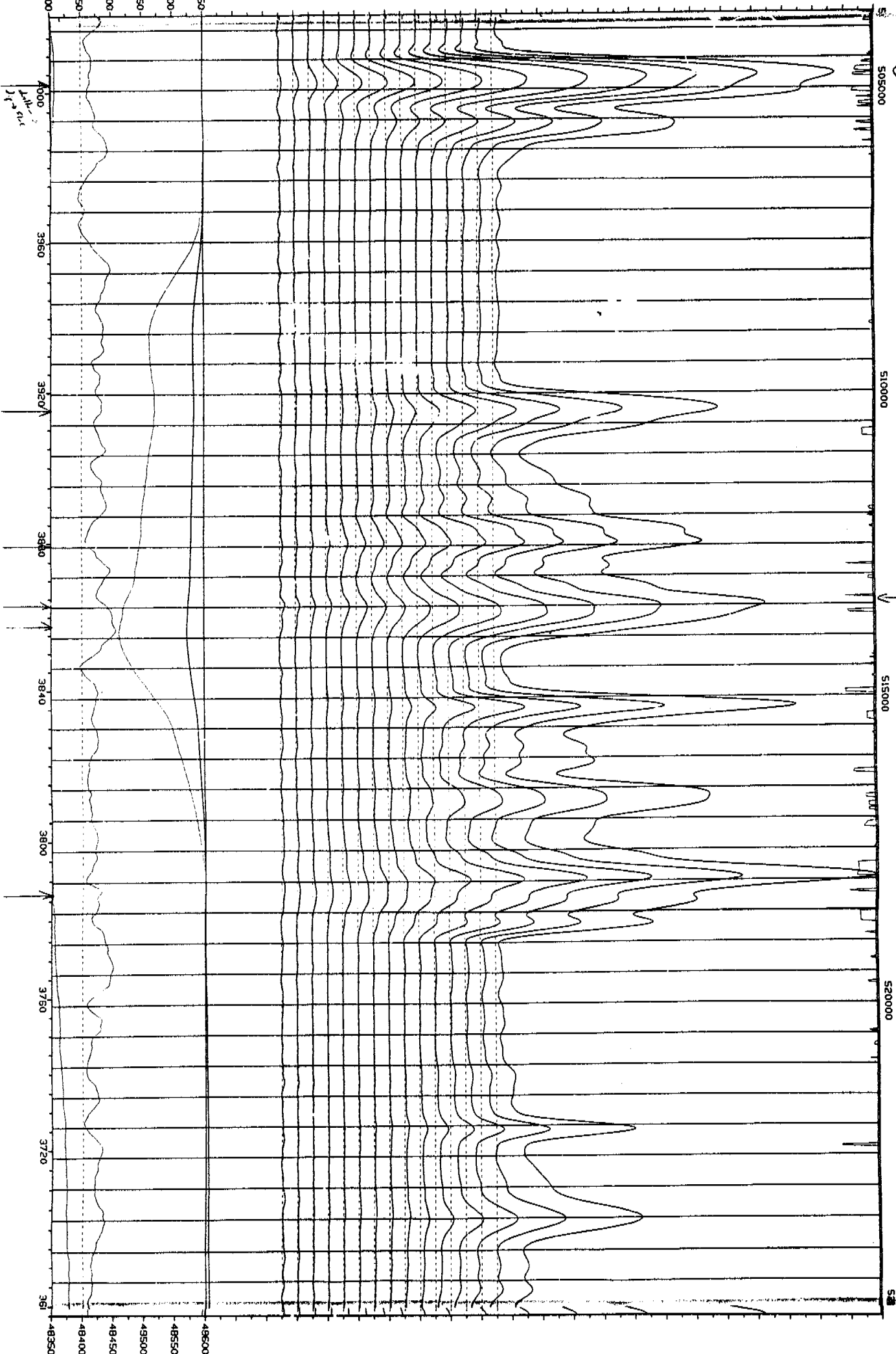
AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 10431
flight no. 38
direction 270
date flown 17 Jun 92
time flown 12:49:53.00 13:05:34.00
fiducial no. 3146 4087
line location 8327028 8327022
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

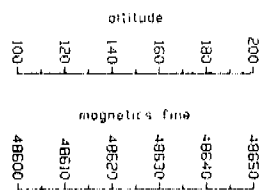
omg netres
spherics/powerline
time constant (msec/cm)



AERODATA QUESTEM SYSTEM

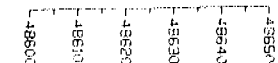
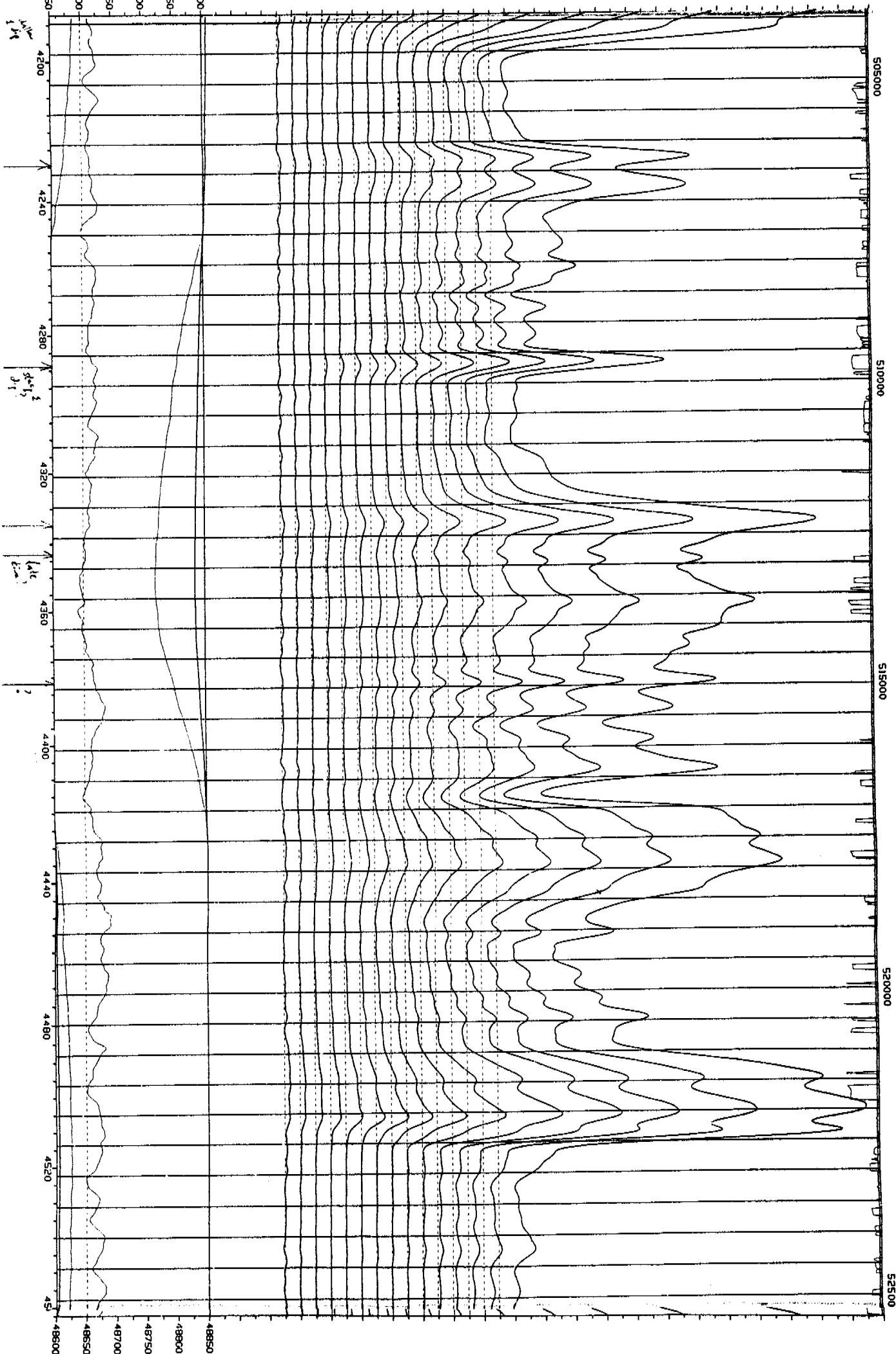
Base frequency 75.0 Hz.

line no. 10420
flight no. 38
direction 90
date flown 17 Jun 92
time flown 13:07:04.00 13:23:30.00
fiducial no. 4111 5097
line location 8327965 8328005
client BHP
job 1297
area Borroloola
scale 1:50000



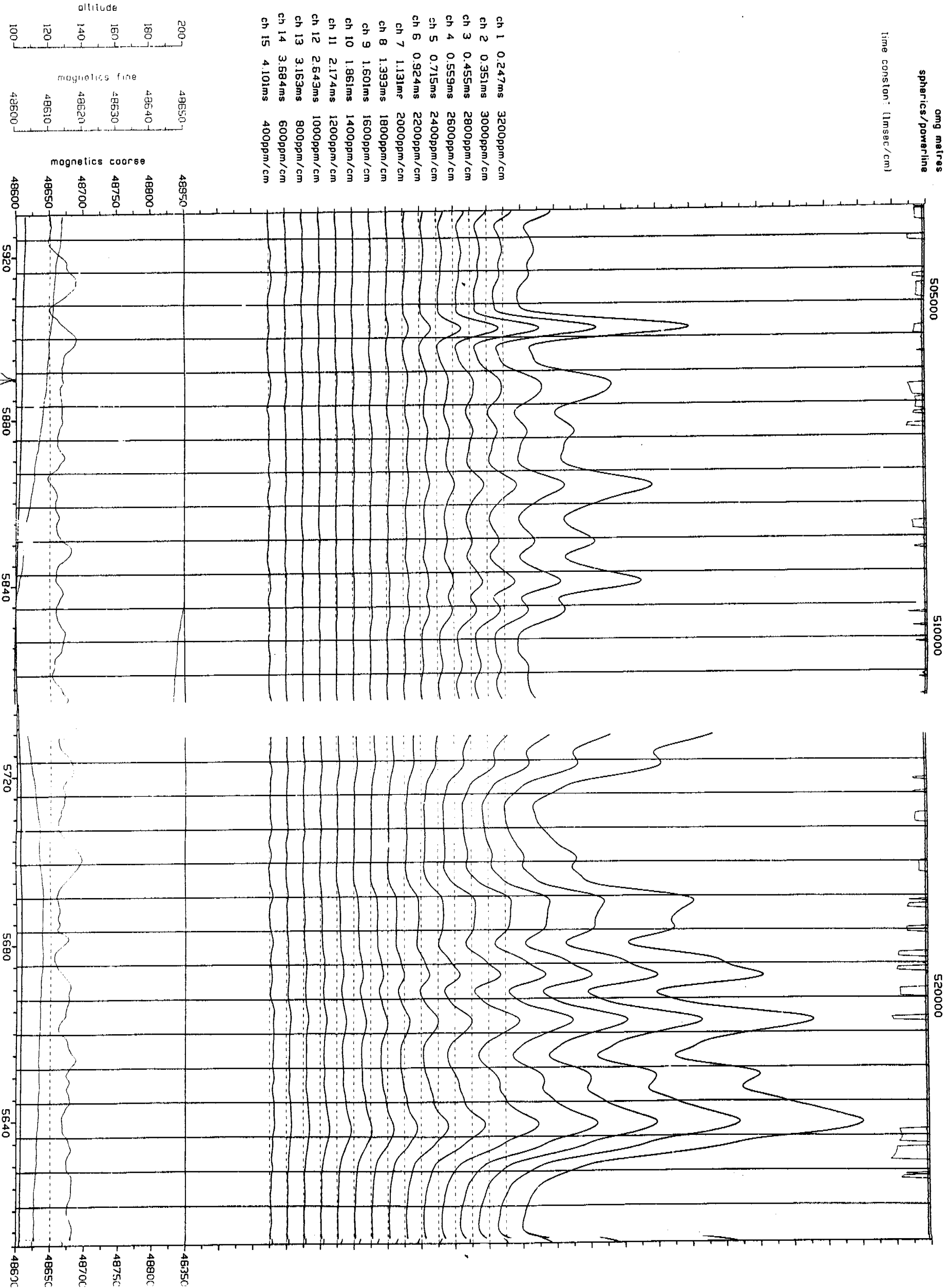
ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.851ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

magnetics coarse



AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

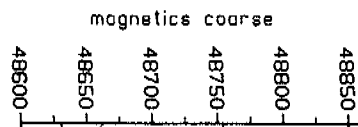
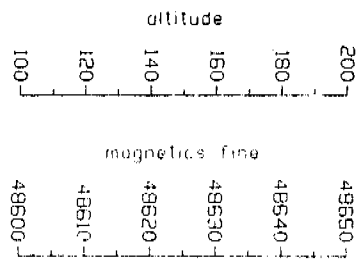
line no. 10410
flight no. 38
direction 270
date flown 17jun92
time flown: 13:25:04.00 13:40:03.00
fiducial no. 5099 5998
line location 8328987 8328942
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

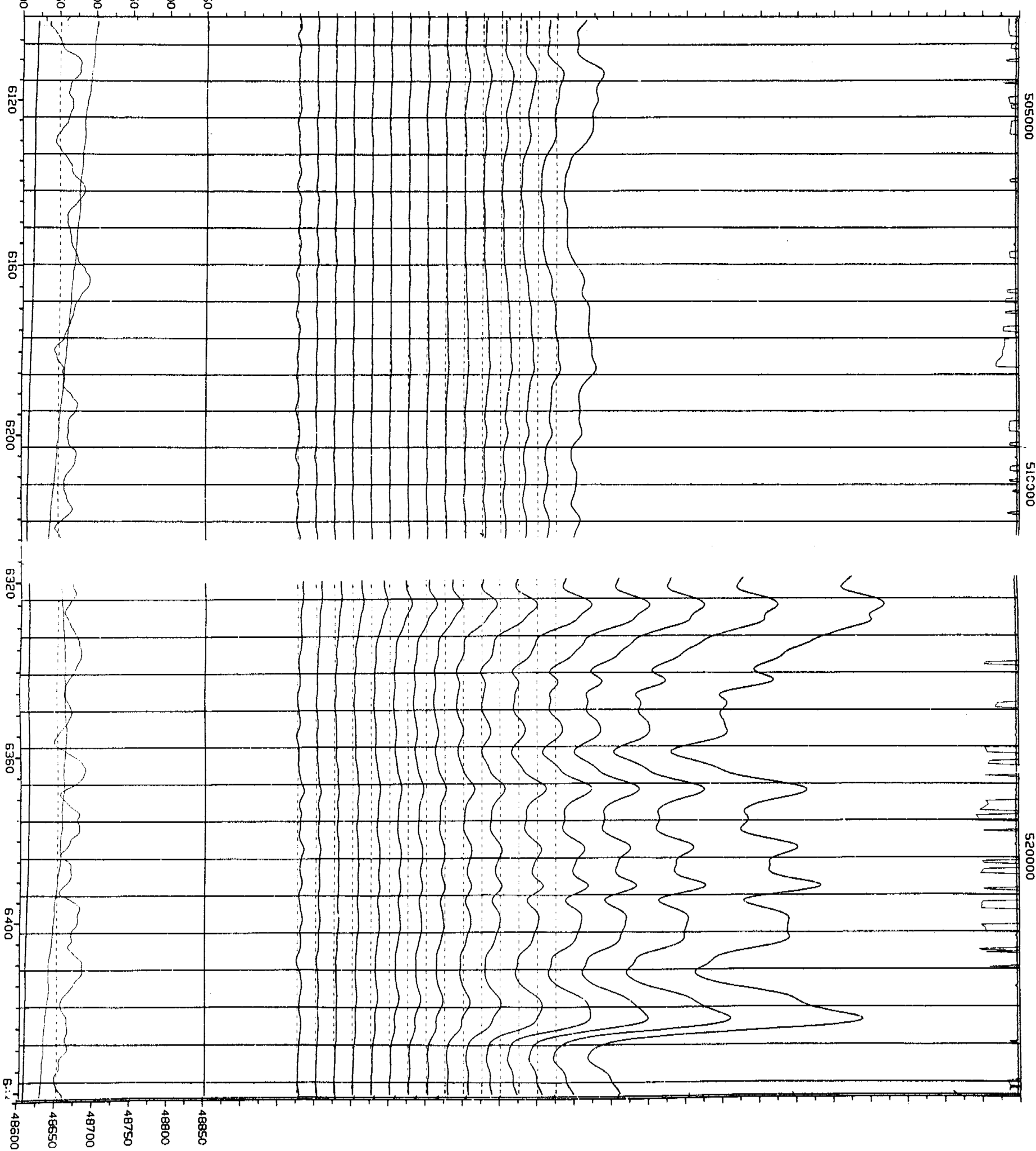
Base frequency 75.0 Hz.

line no. 10400
flight no. 38
direction 90
date flown 17jun92
time flown 13:41:39.00 13:57:28.00
fiducial no. 6027 6976
line location 8330038 8325974
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

omg metres
spherics/powerline
time constant (msec/cm)



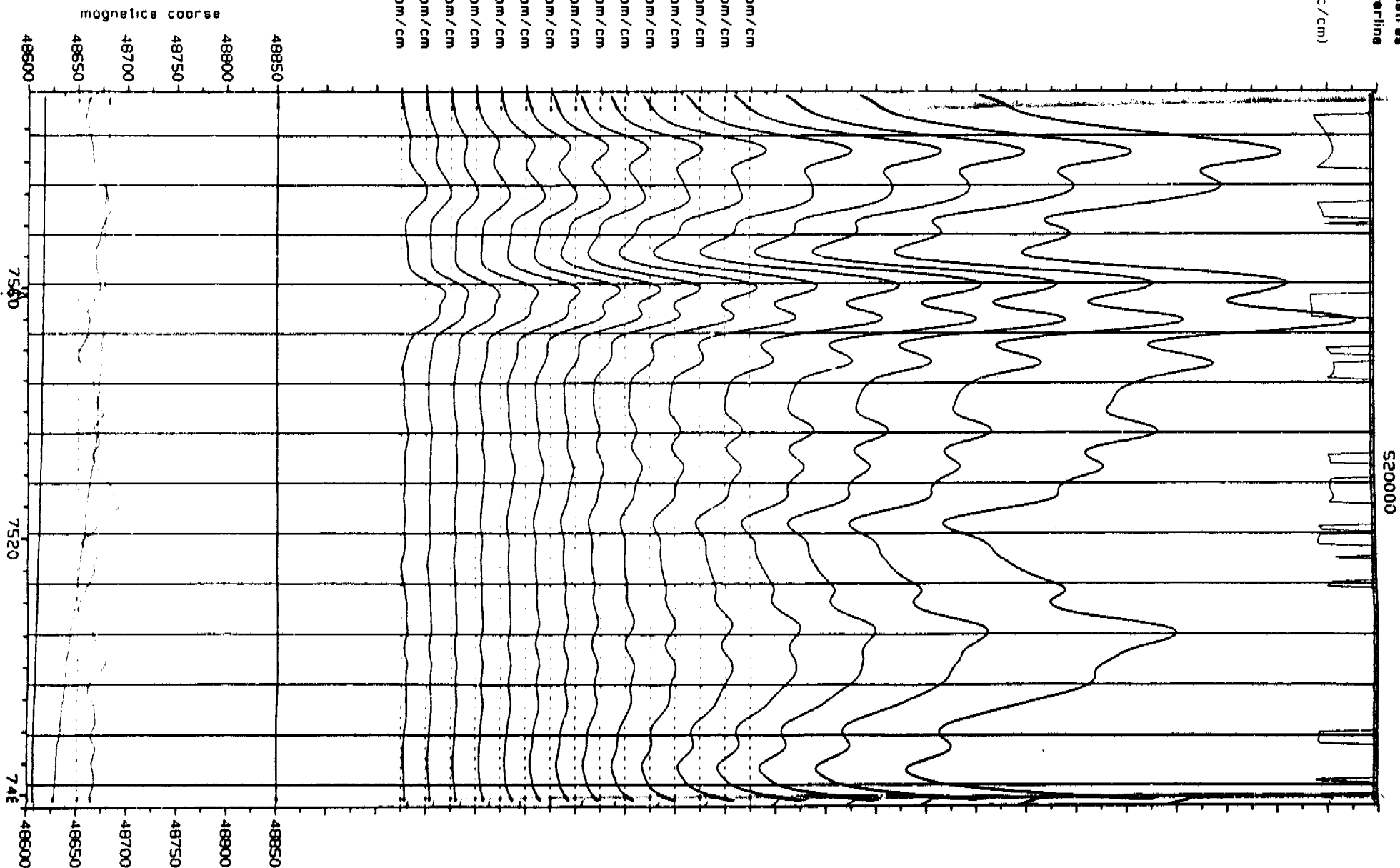
AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10390
 flight no. 38
 direction 270
 date flown 17 jun 92
 time flown 13:59:32.00 14:13:27.00
 fiducial no. 7018 7853
 line location 8330987 8331003
 client BHP
 job 1297
 area Borroloola
 scale 1:50000

ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

omg metres
 spherics/powerline
 time constant (1msec/cm)



48850
48800
48750
48700
48650
48600
48550
48500

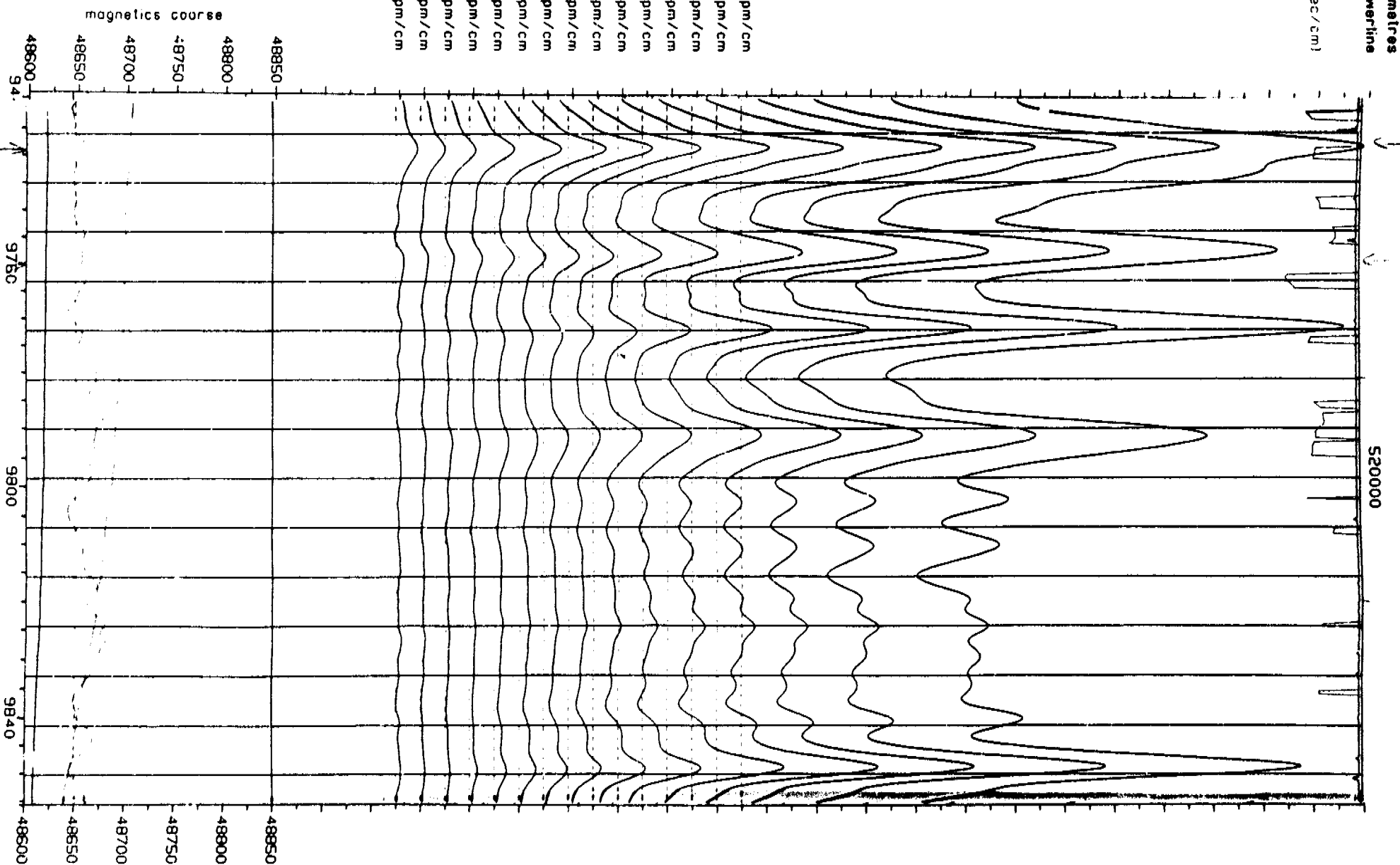
AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10380
flight no. 42
direction 90
date flown 23jun92
time flown 14:32:55.00 14:47:39.00
fiducial no. 9439 10323
line location 8331943 8331936
client BHP
job 1297
area Borroloola
scale 1:50000

ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

mg metres
spherics/powerline
time constant (lmsec/cm)



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

page 1 of 2

line no. 10490
 flight no. 37
 direction 270
 date flown 17jun92
 time flown 08:52:44.00 09:05:22.00
 fiducial no. 2007 2765
 line location 8321036 8320975
 client BHP
 job 1297
 area Borroloola
 scale 1:50000

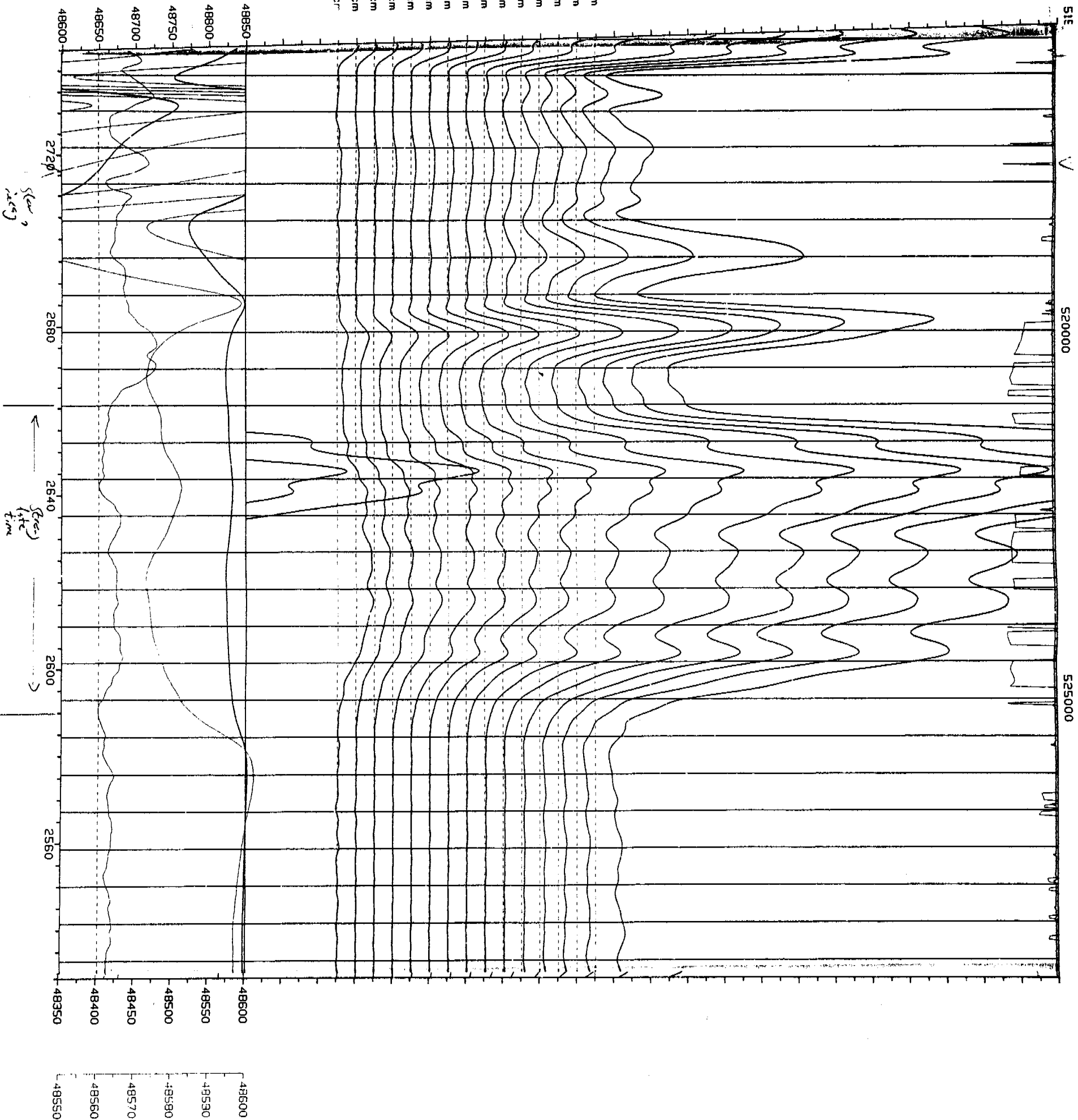
omg metres
 spheres/powerline
 time constant (lmsec/cm)

ch 1 0.247ms 3200ppm/cm
 ch 2 0.351ms 3000ppm/cm
 ch 3 0.455ms 2800ppm/cm
 ch 4 0.559ms 2600ppm/cm
 ch 5 0.715ms 2400ppm/cm
 ch 6 0.924ms 2200ppm/cm
 ch 7 1.131ms 2000ppm/cm
 ch 8 1.393ms 1800ppm/cm
 ch 9 1.601ms 1600ppm/cm
 ch 10 1.861ms 1400ppm/cm
 ch 11 2.174ms 1200ppm/cm
 ch 12 2.643ms 1000ppm/cm
 ch 13 3.163ms 800ppm/cm
 ch 14 3.684ms 600ppm/cm
 ch 15 4.101ms 400ppm/cm

altitude
 100 120 140 160 180 200

magnetics fine
 48650 48640 48630 48620 48610 48600

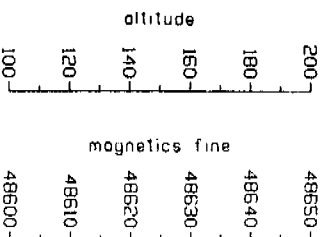
magnetics coarse
 48850 48800 48750 48700 48650 48600



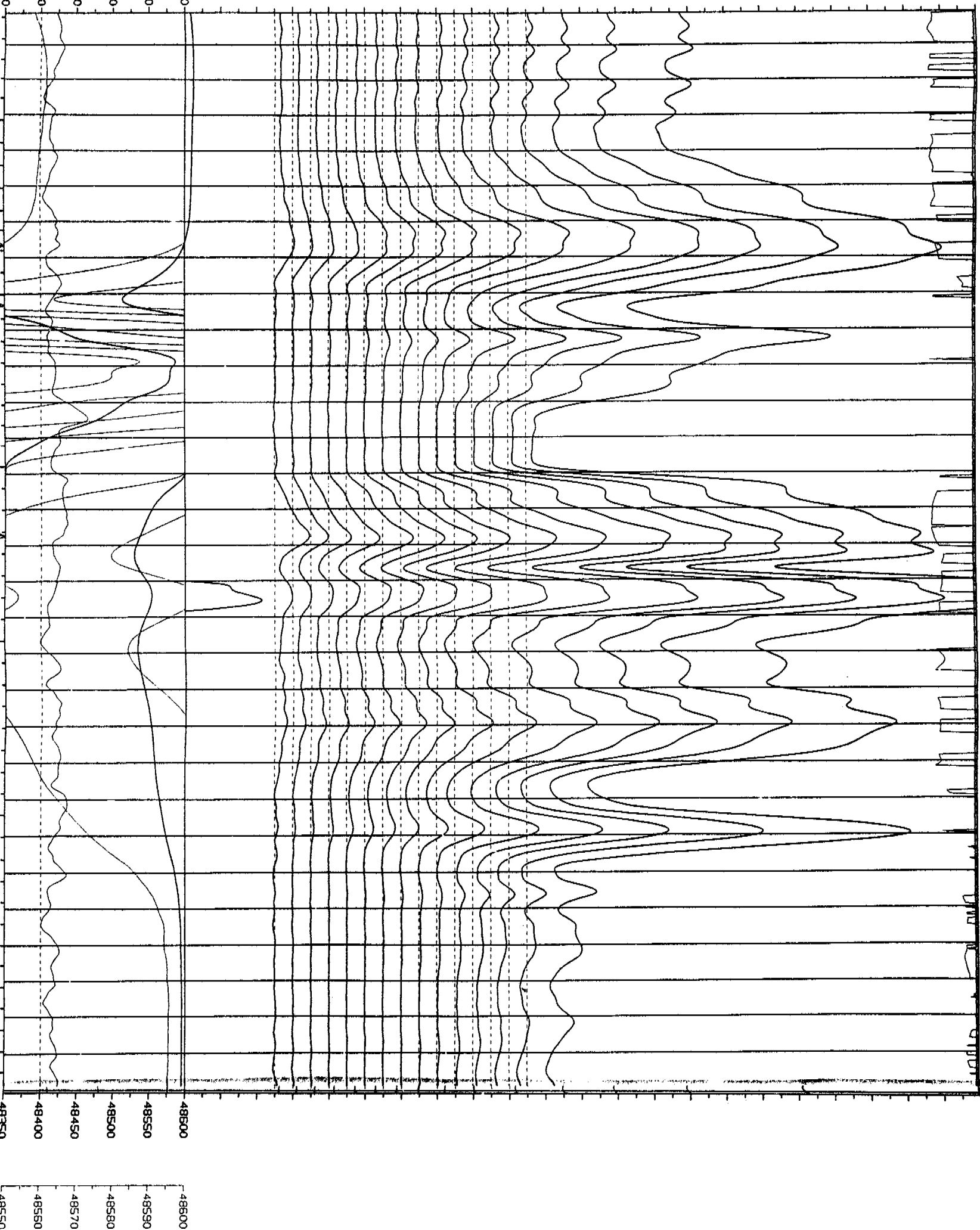
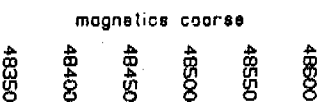
AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10481
 flight no. 37
 direction 90
 date flown 17jun92
 time flown 09:51:26.00 09:59:06.00
 fiducial no. 4534 4994
 line location 8322008 8321997
 client BHP
 job 1297
 area Barrooloolo
 scale 1:50000



ch 1 0.247ms 3200ppm/cm
 ch 2 0.351ms 3000ppm/cm
 ch 3 0.455ms 2800ppm/cm
 ch 4 0.559ms 2600ppm/cm
 ch 5 0.715ms 2400ppm/cm
 ch 6 0.924ms 2200ppm/cm
 ch 7 1.131ms 2000ppm/cm
 ch 8 1.393ms 1800ppm/cm
 ch 9 1.601ms 1600ppm/cm
 ch 10 1.861ms 1400ppm/cm
 ch 11 2.174ms 1200ppm/cm
 ch 12 2.643ms 1000ppm/cm
 ch 13 3.163ms 800ppm/cm
 ch 14 3.684ms 600ppm/cm
 ch 15 4.101ms 400ppm/cm

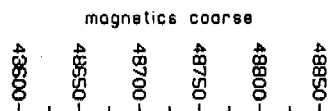
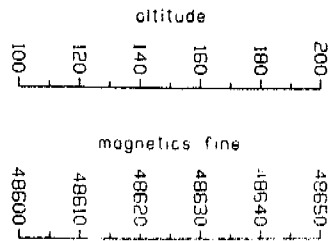


ong metres
 spheres/powerline
 time constant (lmsec/cm)

AERODATA QUESTEM SYSTEM

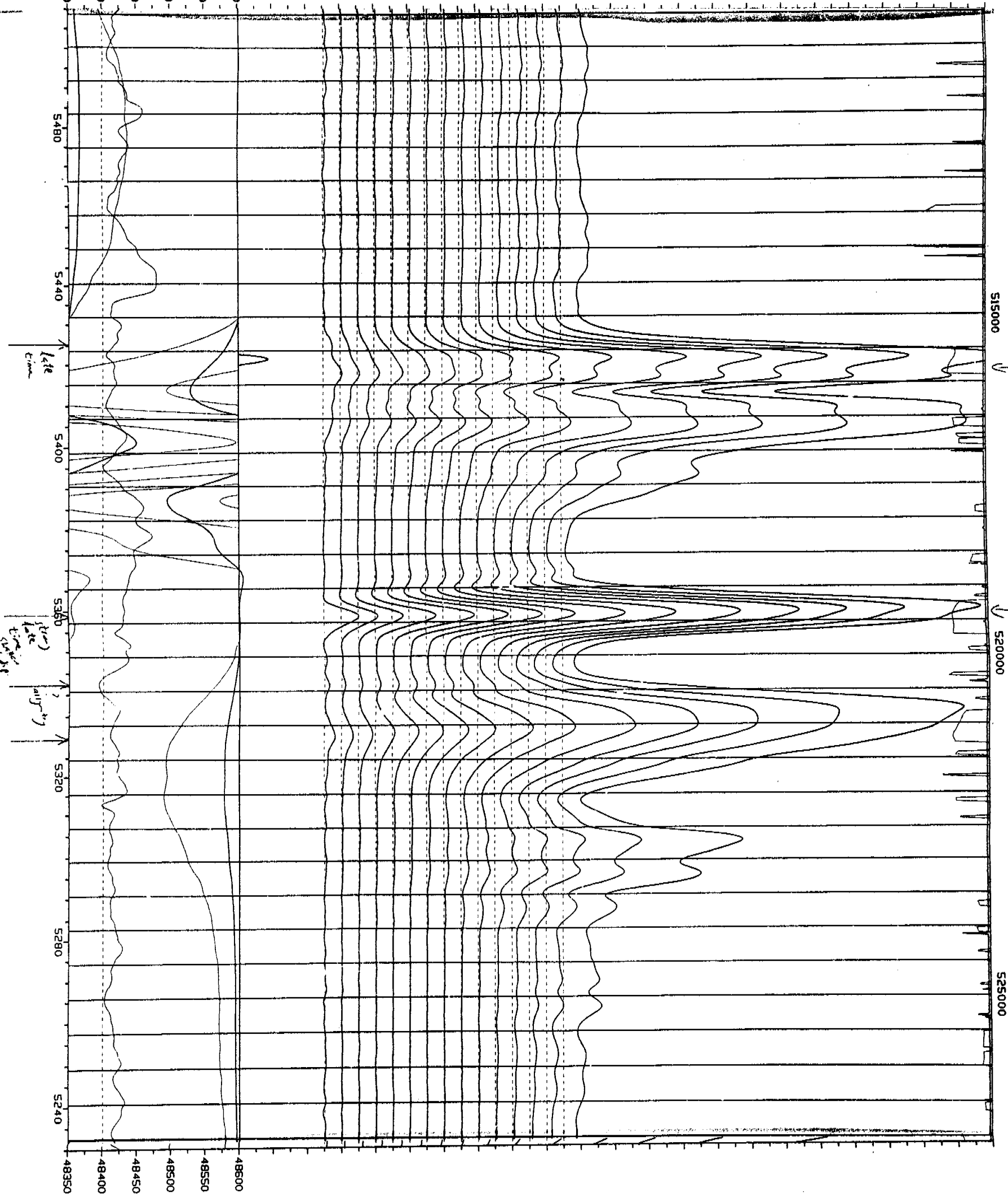
Base frequency 75.0 Hz.

line no. 10471
flight no. 37
direction 270
date flown 17 Jun 92
time flown 10:00:30.00 10:09:15.00
fiducial no. 5000 5525
line location 8323072 8323052
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

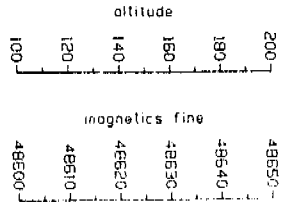
cmg metres
spherics/powerline
time constant (1msec/cm)



AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

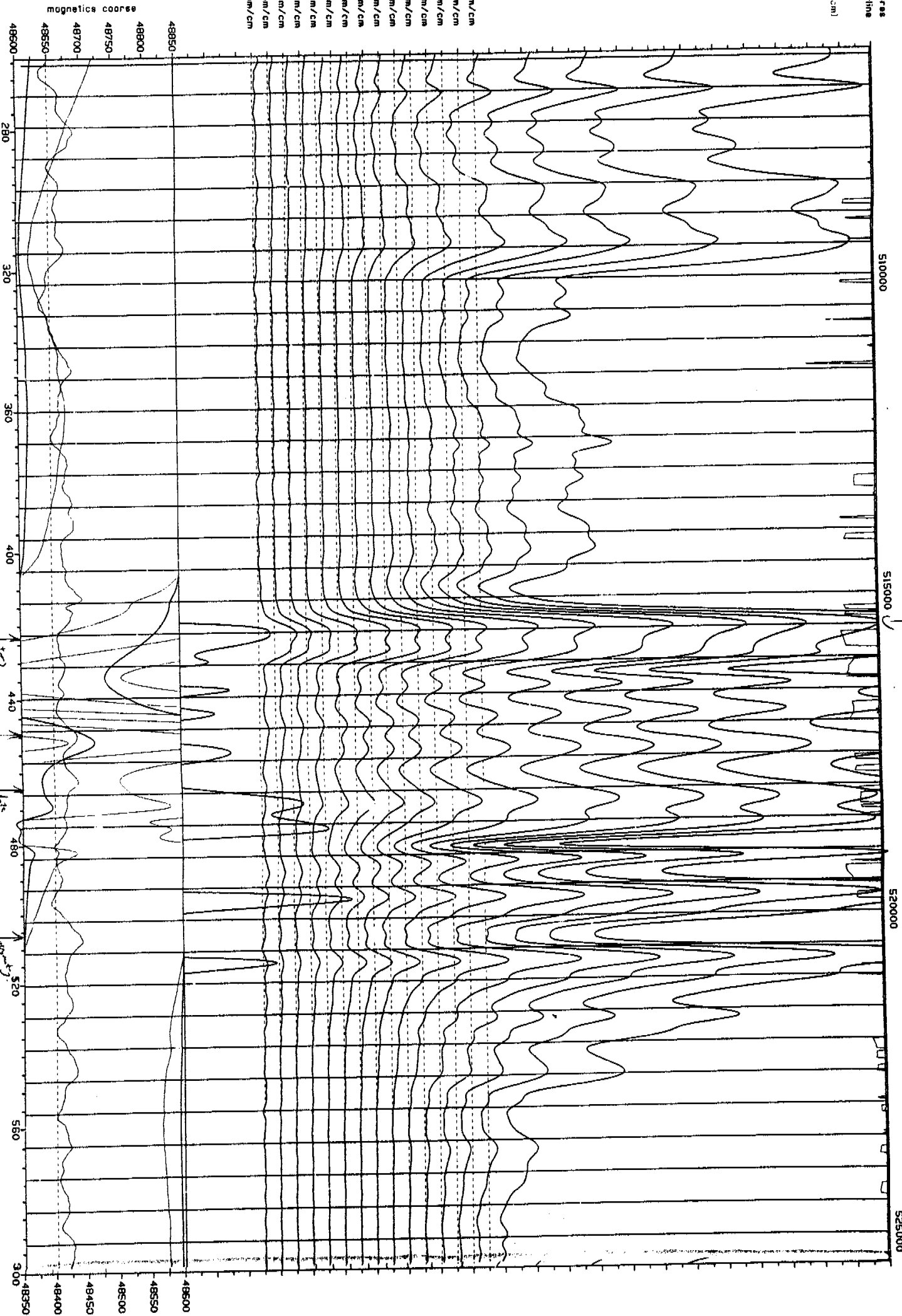
page 1 of 1

line no. 10461
flight no. 38
direction 90
date flown 17jun92
time flown 11:43:28.00 11:52:29.00
fiducial no. 259 800
line location 8324024 8323973
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.333ms 1800ppm/cm
ch 9 1.501ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

omg metres
spheres/powerline
time constant (tmsec/cm)

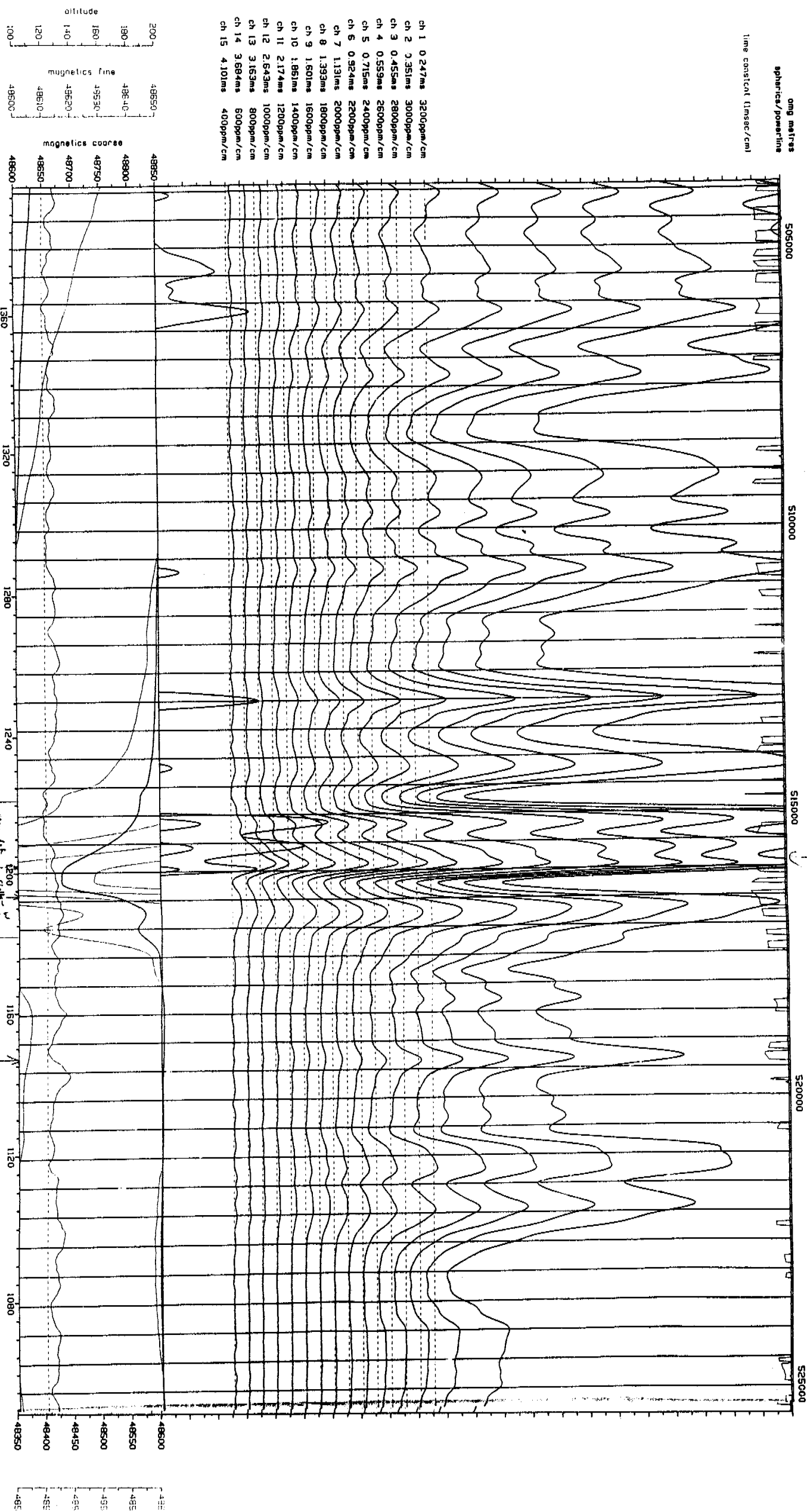


MICROFORMS

21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

page 1 of 1

line no.	10452	
flight no.	38	
direction	270	
date flown	17jun92	
time flown	11:56:14.00	12:04:23.00
fiducial no.	909	1398
line location	8324994	8325005
client	BHP	
job	1297	
area	Borroloola	
scale	1:50000	

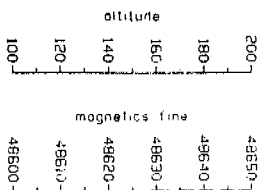


MICROFORMS

AERODATA QUESTEM SYSTEM

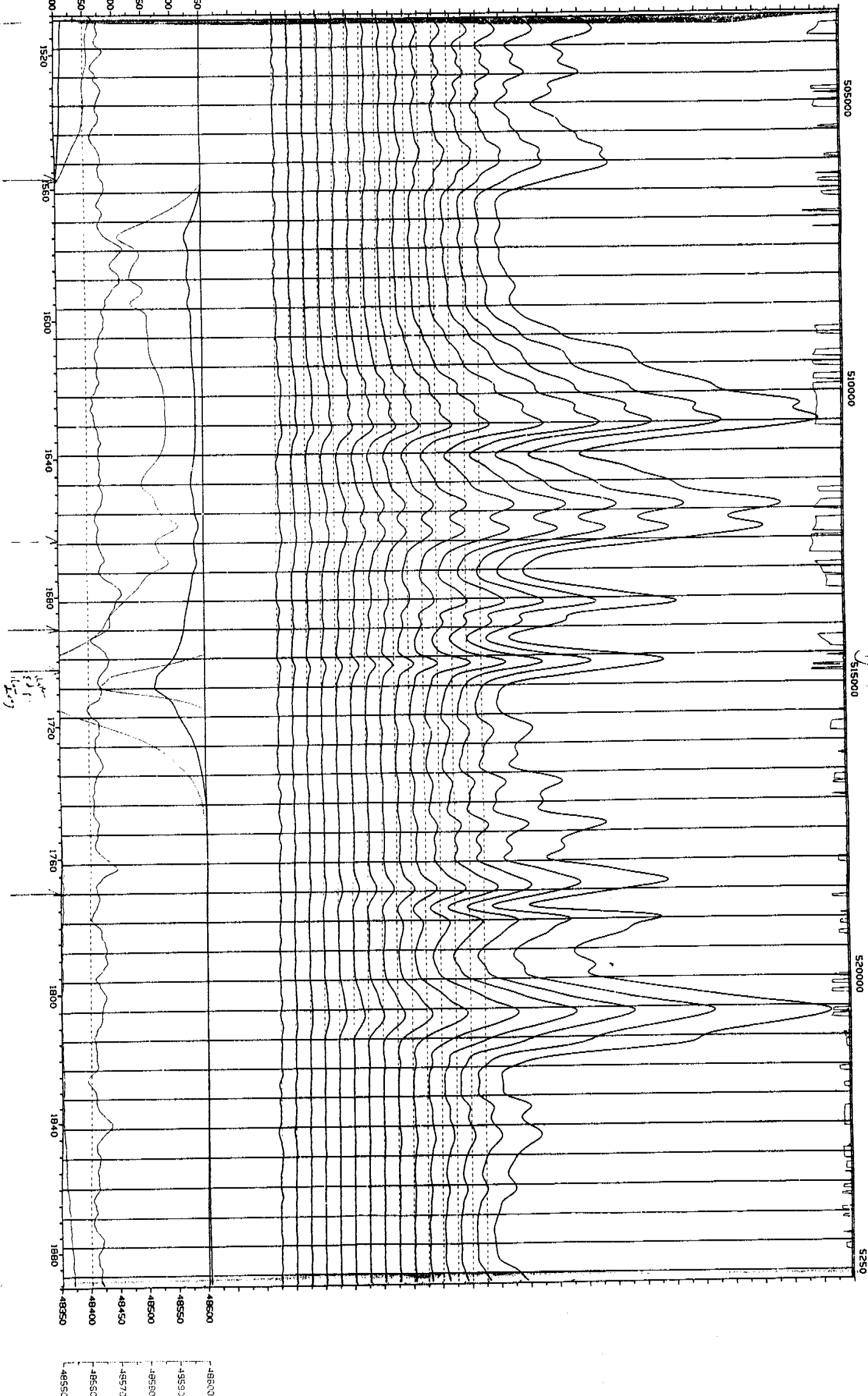
Base frequency 75.0 Hz.

line no. 10440
flight no. 38
direction 90
date flown 17 jun 92
time flown 12:07:35.00 12:24:43.00
fiducial no. 1465 2493
line location 8326017 8325965
client BHP
job 1257
area Barro Colorado
scale 1:50000



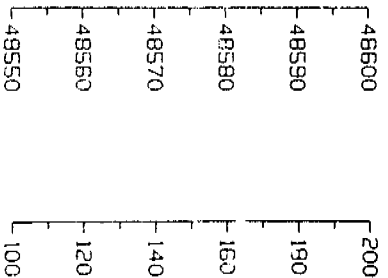
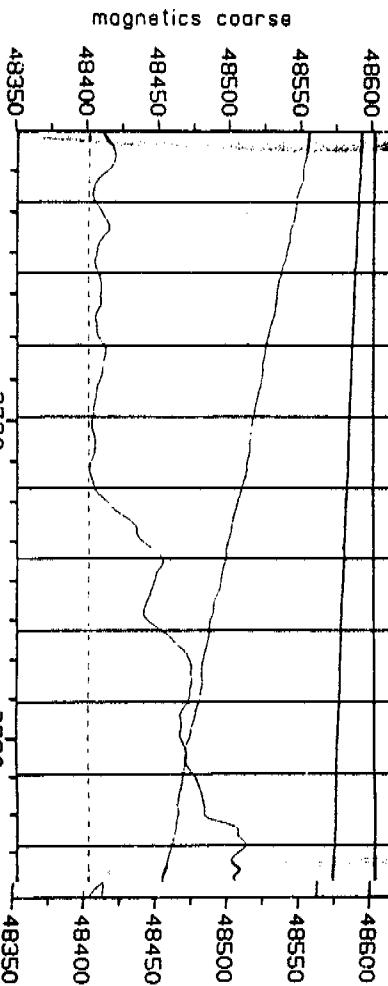
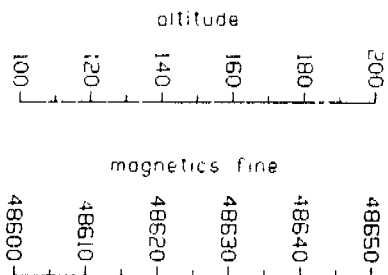
ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.338ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

mg metres
spheres/powerties
time constant (msec/cm)



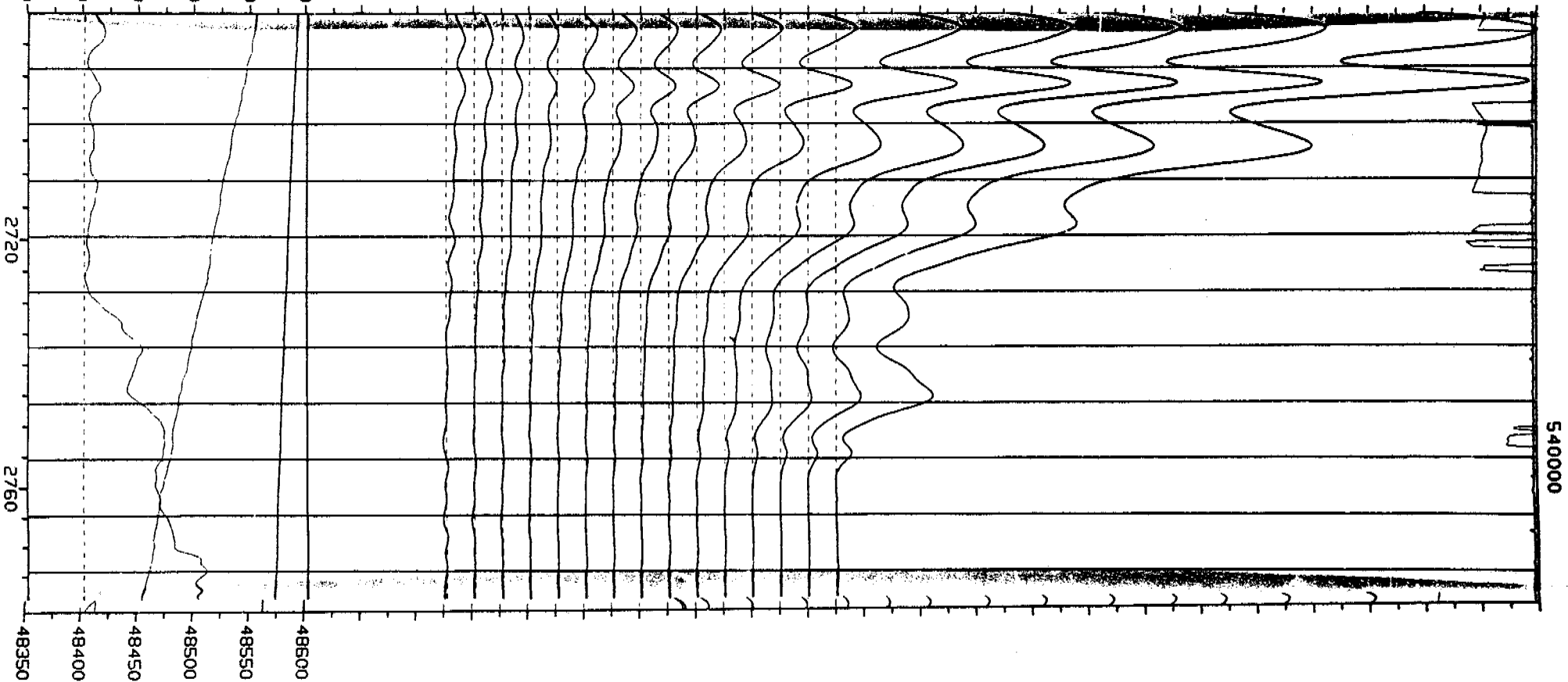
AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 10551
flight no. 44
direction 90
date flown 26jun92
time flown 15:52:16.00 16:00:17.00
fiducial no. 2617 3098
line location 8314979 8314986
client BHP
job 1297
area Borroloola
scale 1:50000



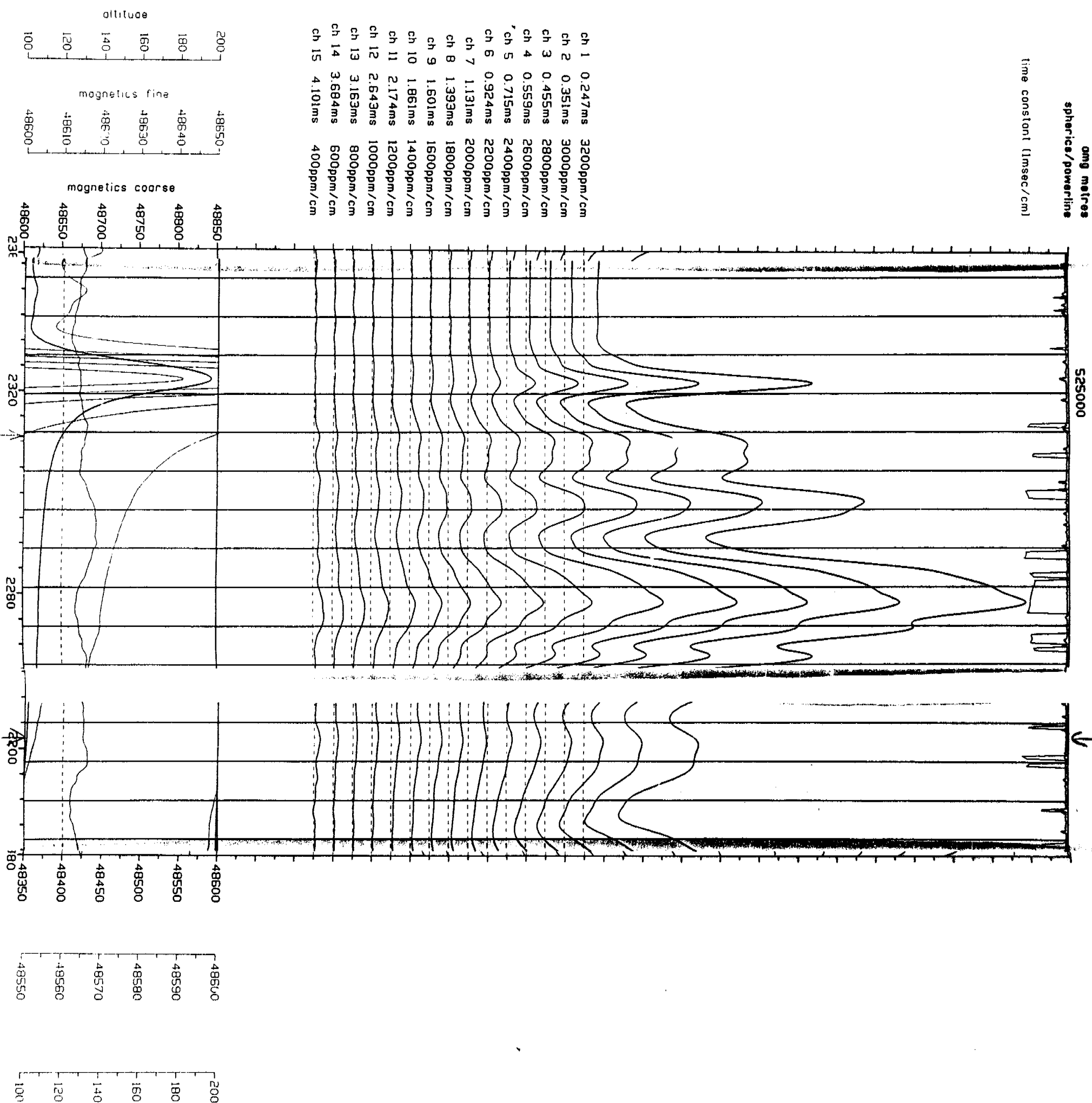
ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

cmg metres
spherics/powerline
time constant (1ms/cm)



540000

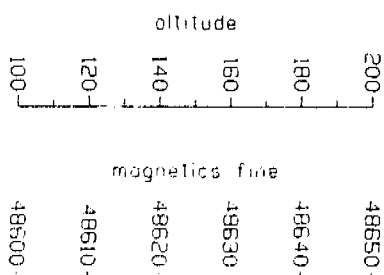
ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
'ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm



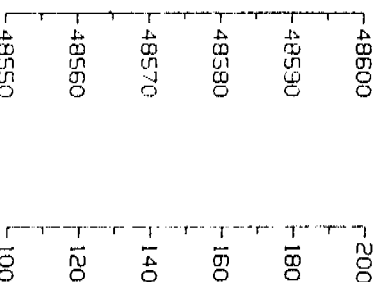
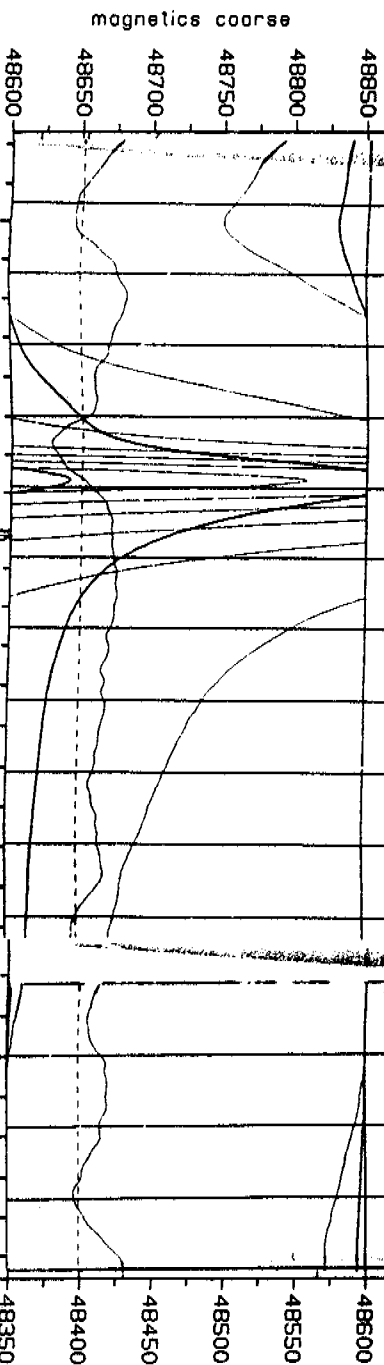
AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10530
flight no. 43
direction 90
date flown 24jun92
time flown 07:52:14.00 08:03:41.00
fiducial no. 1081 1768
line location 8316922 8317001
client BHP
job 1297
area Borrooloola
scale 1:50000



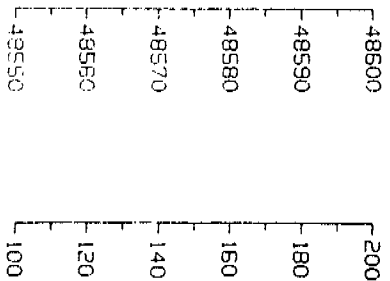
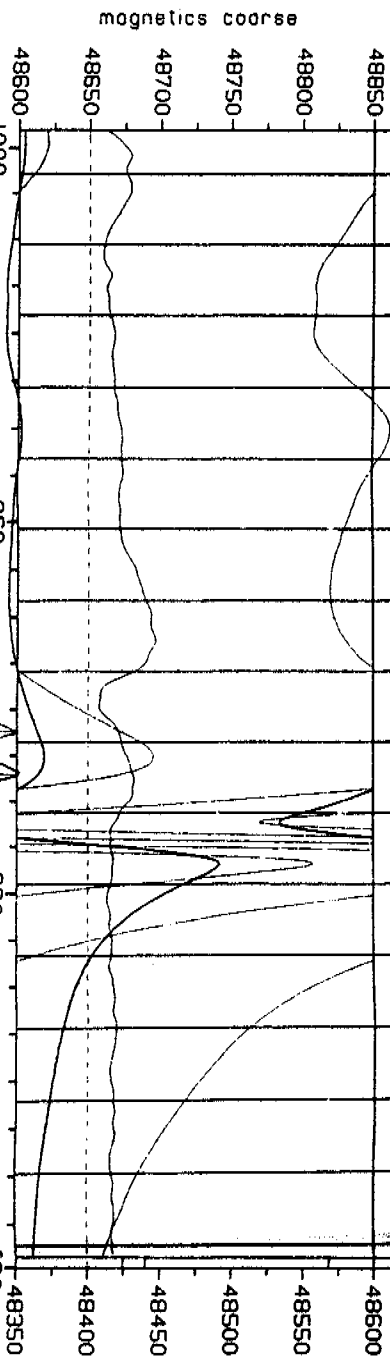
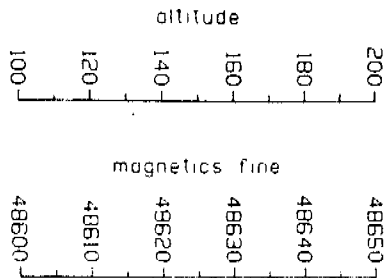
ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10520
flight no. 43
direction 270
date flown 24 jun 92
time flown 07:39:16.00 07:49:08.00
fiducial no. 410 1002
line location 8318010 8317935
client BHP
job 1297
area Borroloola
scale 1:50000

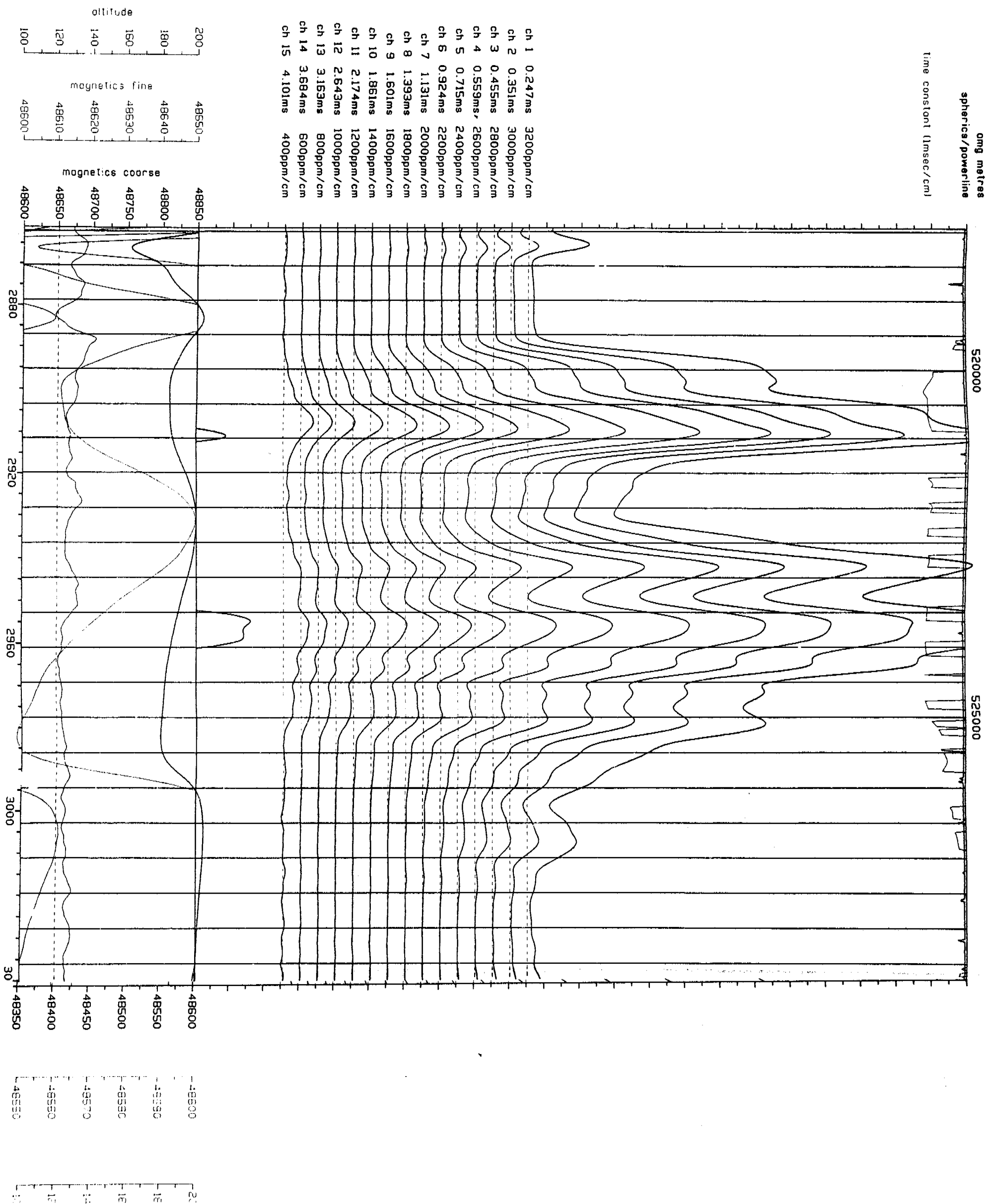


ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

mg metres
spheres/powerline
time constant (1ms/cm)

525000

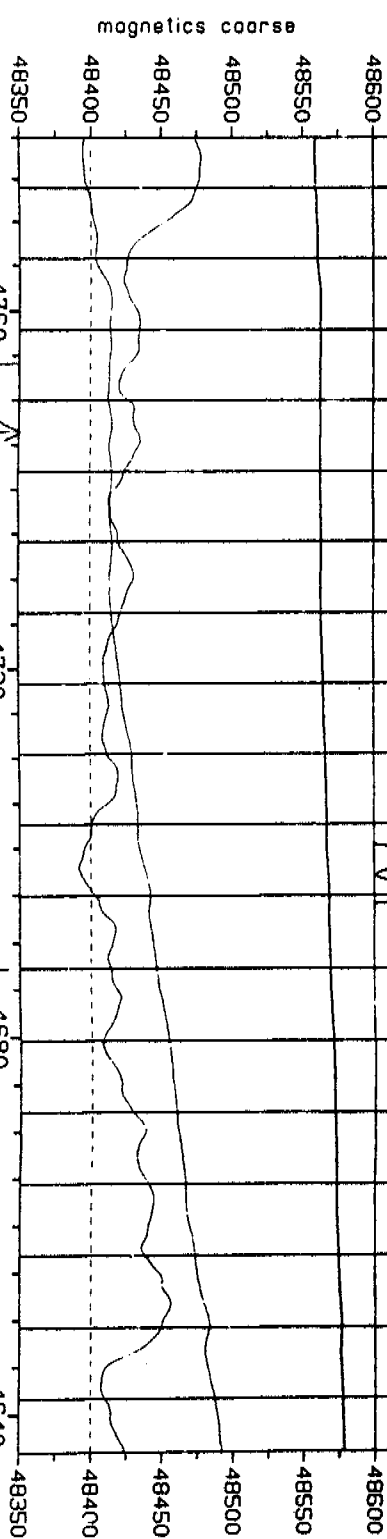
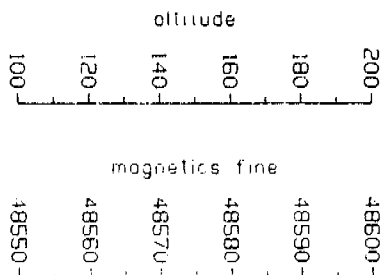
line no.	10500	
flight no.	37	
direction	90	
date flown	17jun92	
time flown	09:08:13.00	09:19:38.00
fiducial no.	2861	3546
line location	8319980	8319984
client	BHP	
job	1297	
area	Borroloola	
scale	1:50000	



AERODATA QUESTEM SYSTEM

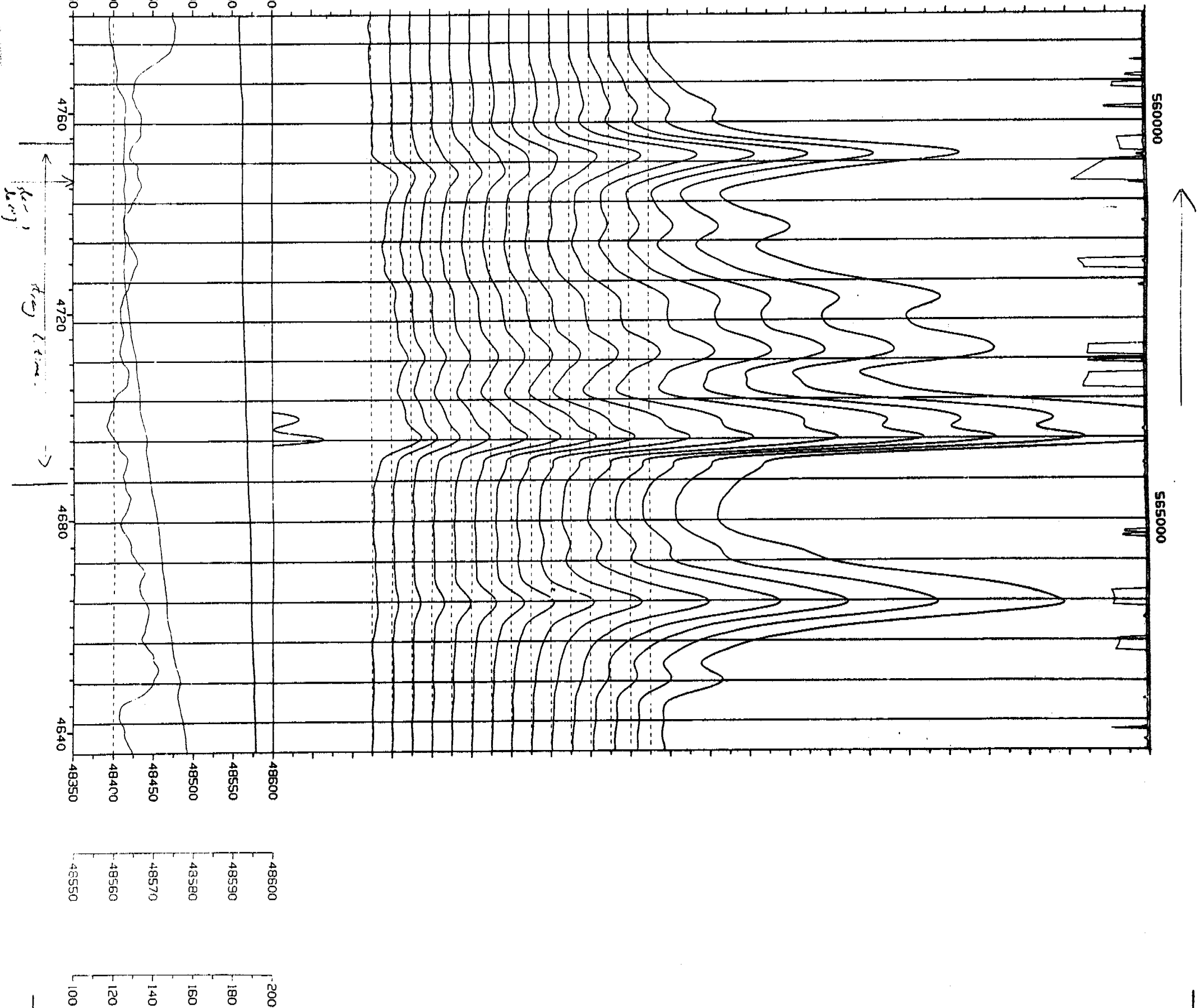
Base frequency 75.0 Hz.

line no. 10600
 flight no. 44
 direction 270
 date flown 26jun92
 time flown 16:31:45.00 16:42:28.00
 fiducial no. 4636 5279
 line location 8310067 8310022
 client BHP
 job 1297
 area Borroloola
 scale 1:50000



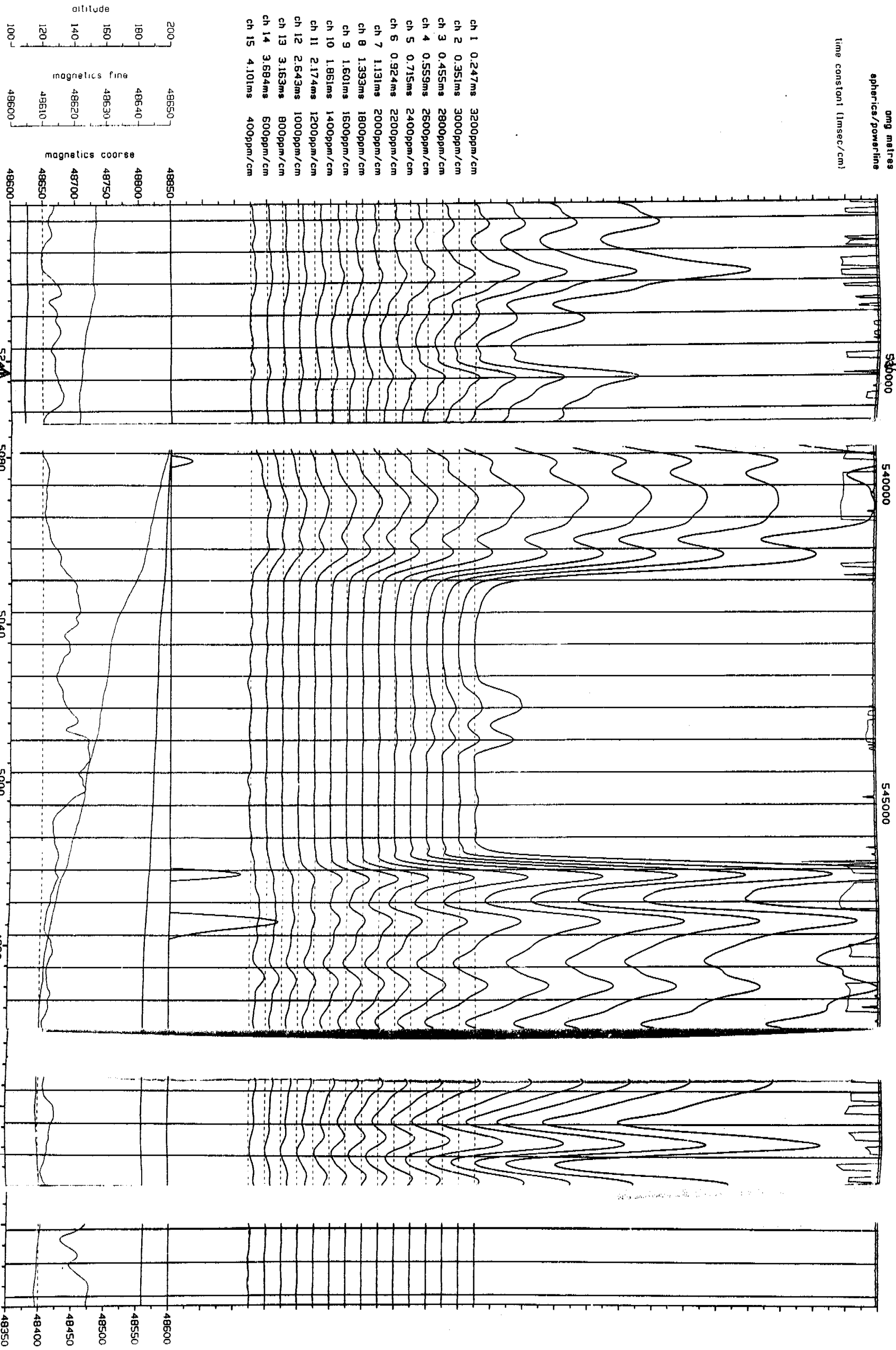
ch 1 0.247ms 3200ppm/cm
 ch 2 0.351ms 3000ppm/cm
 ch 3 0.455ms 2800ppm/cm
 ch 4 0.559ms 2600ppm/cm
 ch 5 0.715ms 2400ppm/cm
 ch 6 0.924ms 2200ppm/cm
 ch 7 1.131ms 2000ppm/cm
 ch 8 1.393ms 1800ppm/cm
 ch 9 1.601ms 1600ppm/cm
 ch 10 1.861ms 1400ppm/cm
 ch 11 2.174ms 1200ppm/cm
 ch 12 2.643ms 1000ppm/cm
 ch 13 3.163ms 800ppm/cm
 ch 14 3.684ms 600ppm/cm
 ch 15 4.101ms 400ppm/cm

mg metres
 spheres/powerline
 time constant (1msec/cm)



AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

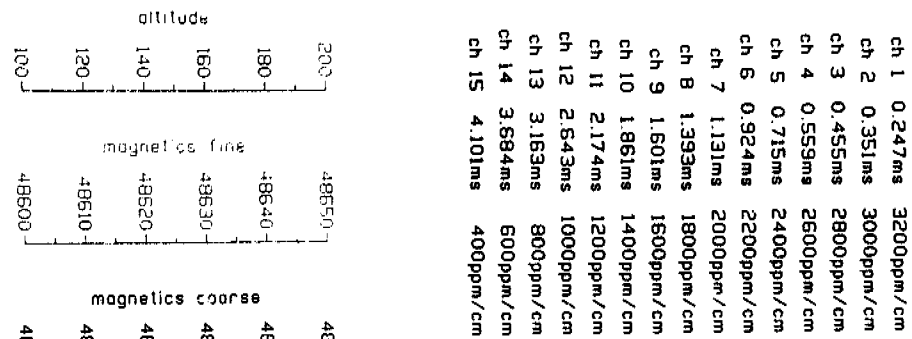
line no. 10600
flight no. 44
direction 270
date flown 26jun92
time flown 16:31:45.00 16:42:28.00
fiducial no. 4636 5279
line location 8310067 8310022
client BHP
job 1297
area Borroloola
scale 1:50000



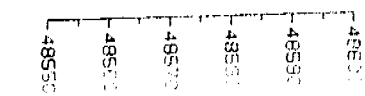
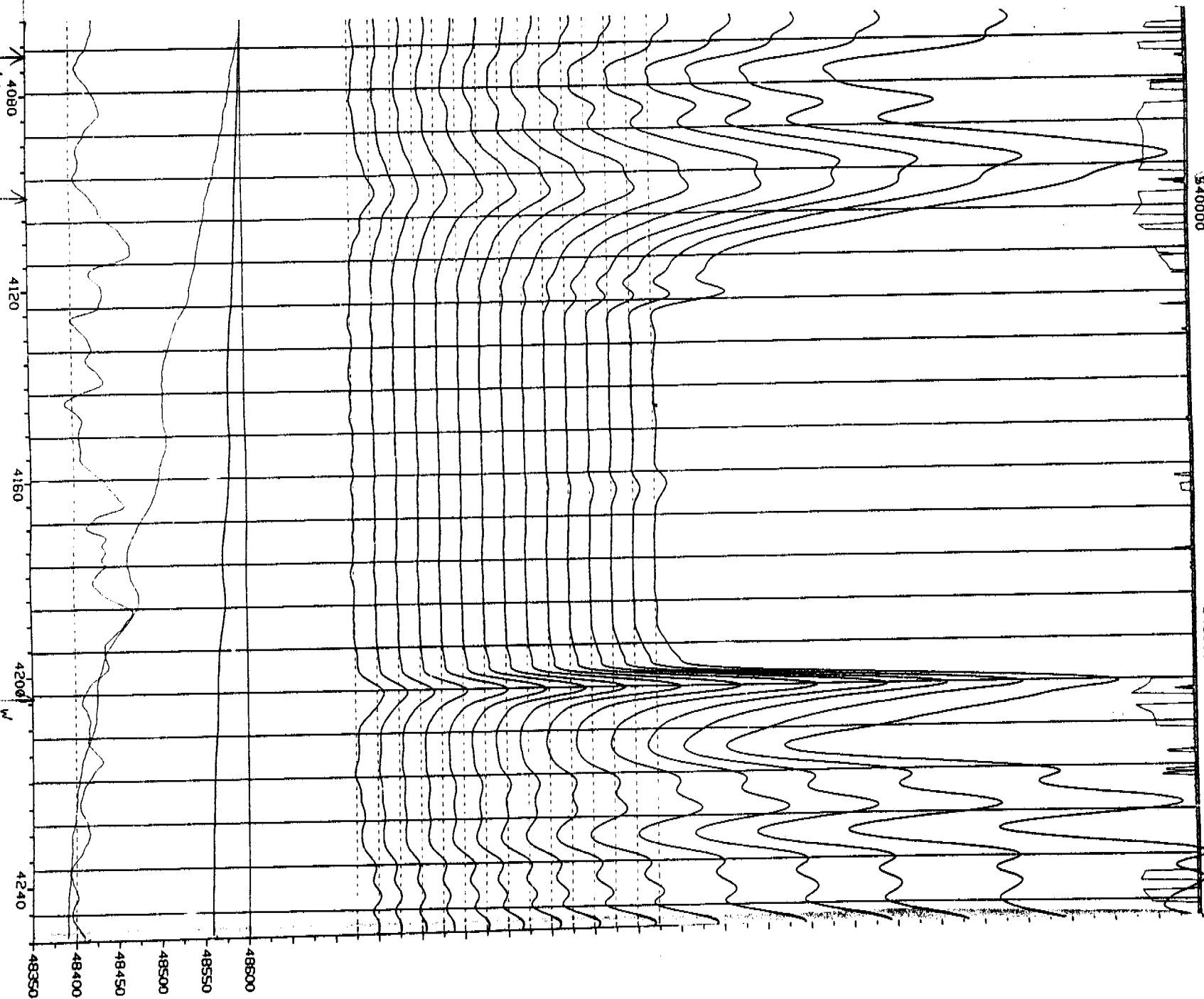
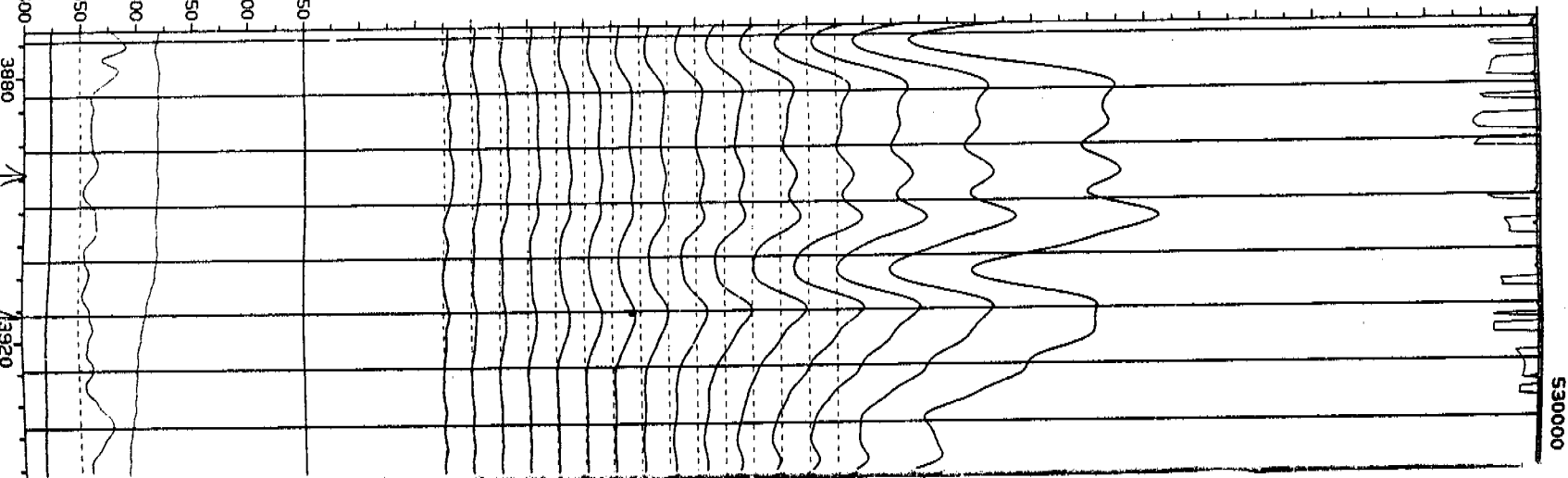
AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10590
flight no. 44
direction 90
date flown 26 Jun 92
time flown 16:18:10.00 16:30:17.00
fiducial no. 3873 4600
line location 8311004 8311052
client BHP
job 1297
area Barroloola
scale 1:50000



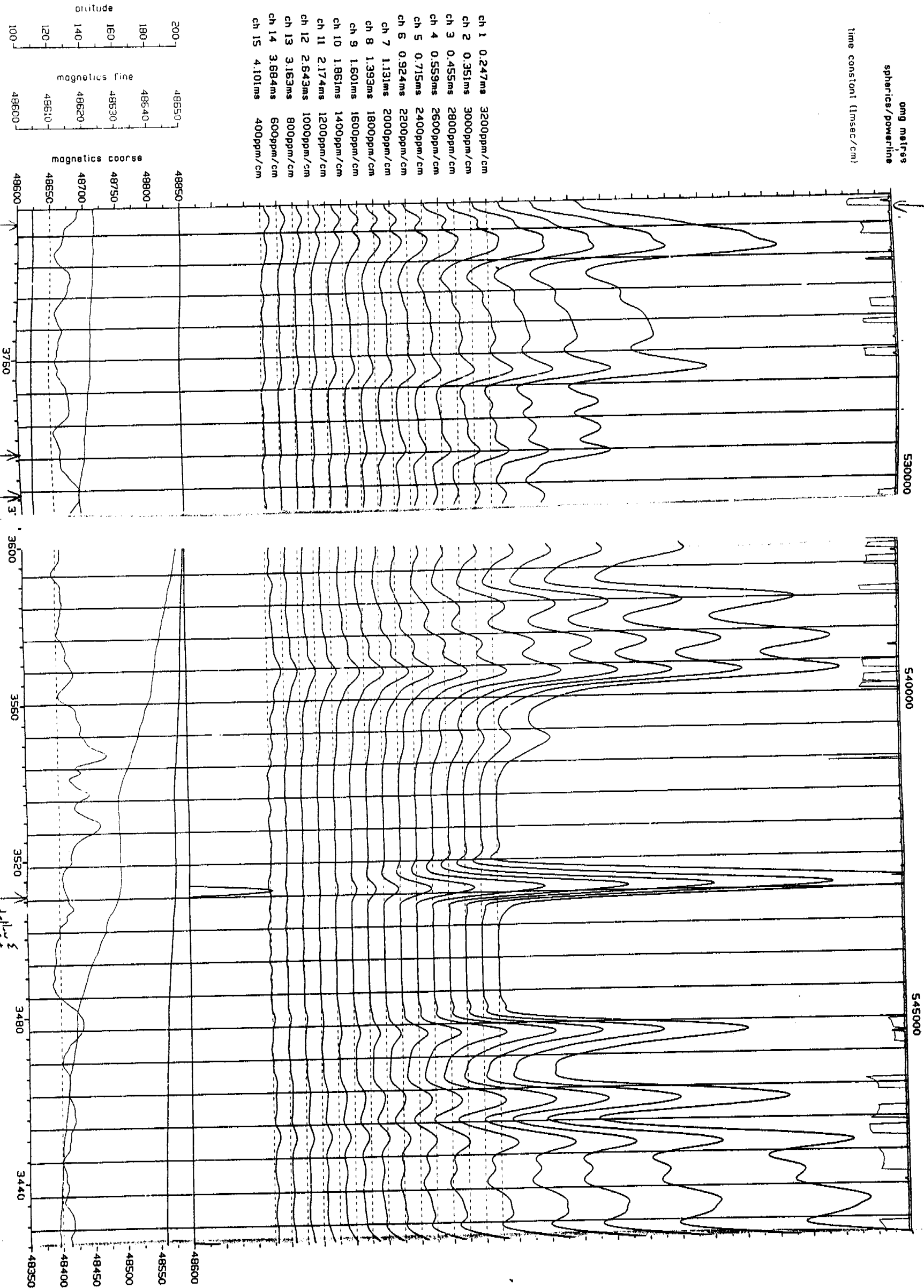
cmg metres
spherics/powertine
time constant (msec/cm)



AERODATA QUESTEM SYSTEM

Bose frequency 75.0 Hz.

line no. 10581
flight no. 44
direction 270
date flown 26jun92
time flown 16:04:31.00 16:15:53.00
fiducial no. 3117 3799
line location 8312036 8311989
client BHP
job 1297
area Borroloola
scale 1:50000

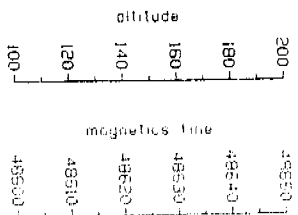


AERODATA QUESTEM SYSTEM

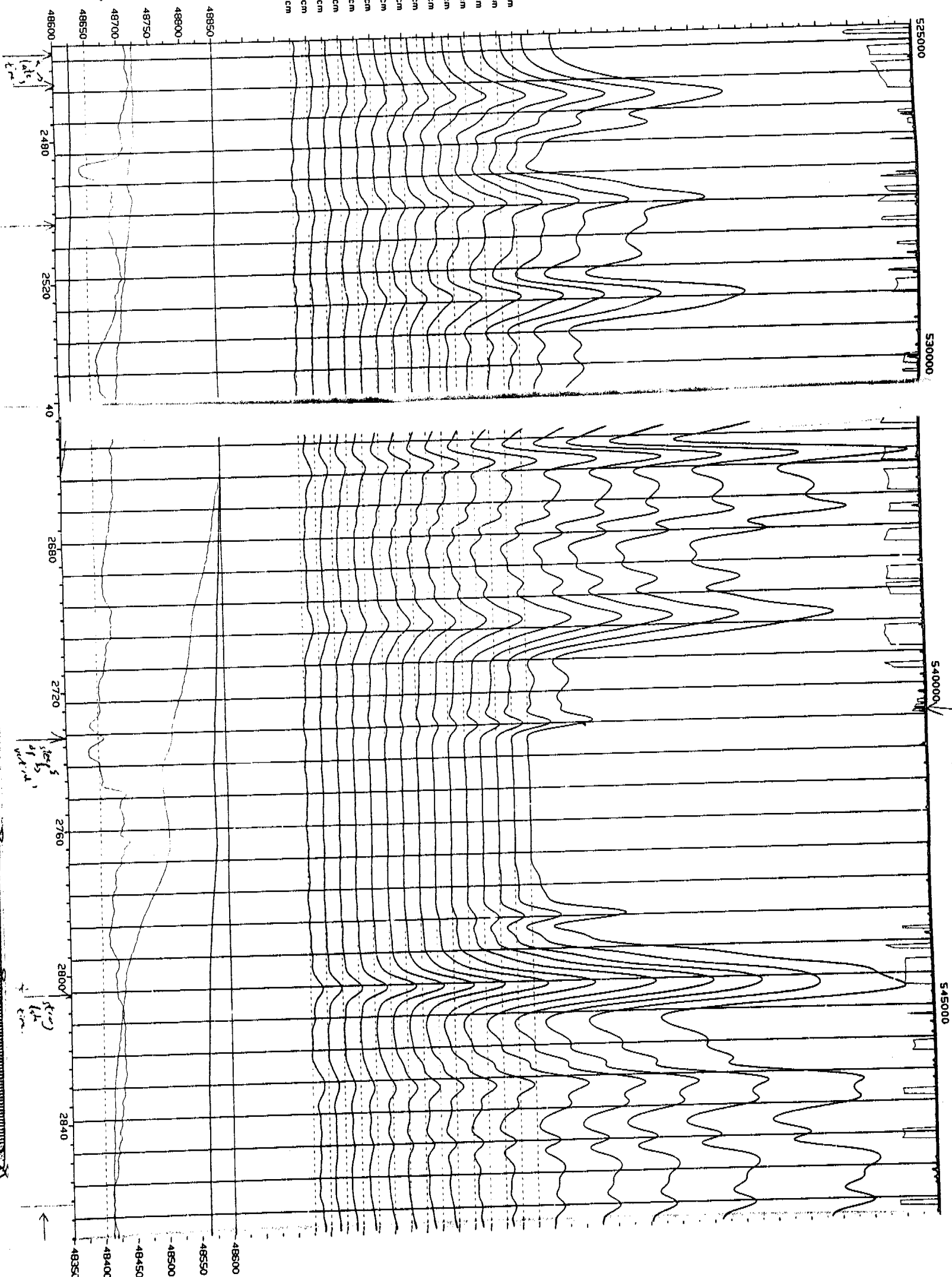
Base frequency 75.0 Hz.

line no 10570
flight no. 43
direction 90
date flown 24 Jun 92
time flown 08:17:51.00 08:30:35.00
fiducial no. 2453 3217
line location 8313014 8313027
client BHP
job 1297
area Borroloola
scale 1:50000

ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm



magnetics coarse

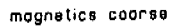
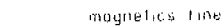
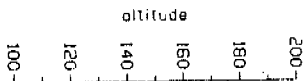


ong metres
spheres/powerline
time constant (1msec/cm)

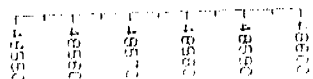
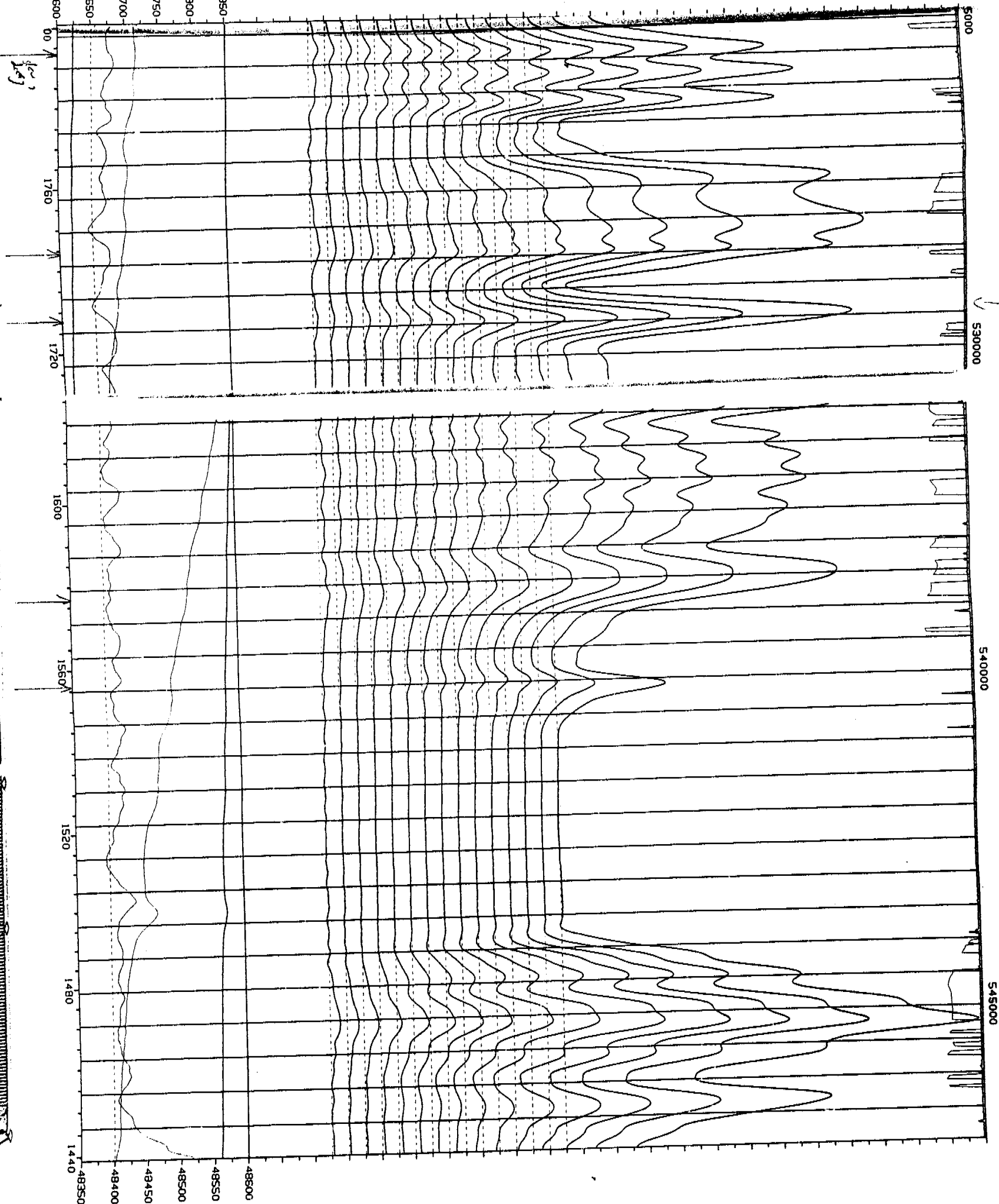
AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 10562
flight no. 44
direction 270
date flown 26 Jun 92
time flown 15:15:48.00 15:22:05.00
fiducial no. 1439 1816
line location 8314026 8314001
client BHP
job 1297
area Borroloola
scale 1:50000

ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm



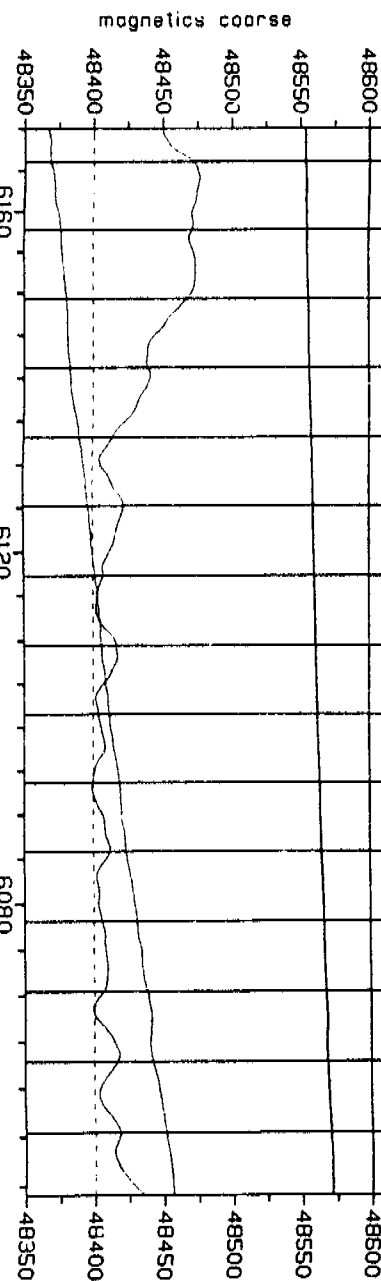
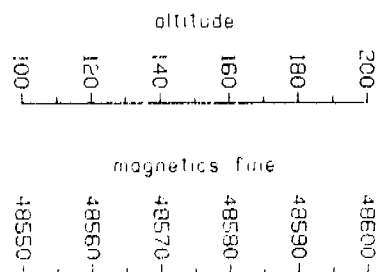
amg metres
spherics/powerline
time constant (msec/cm)



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10620
flight no. 44
direction 270
date flown 26 jun 92
time flown 16:57:38.00 17:07:51.00
fiducial no. 6049 6662
line location 8308013 8307935
client BHP
job 1297
area Borroloola
scale 1:50000

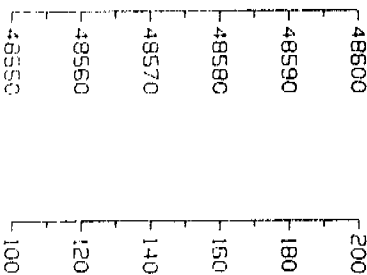


ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

time constant (1msec/cm)

ang metres
spherics/powerline

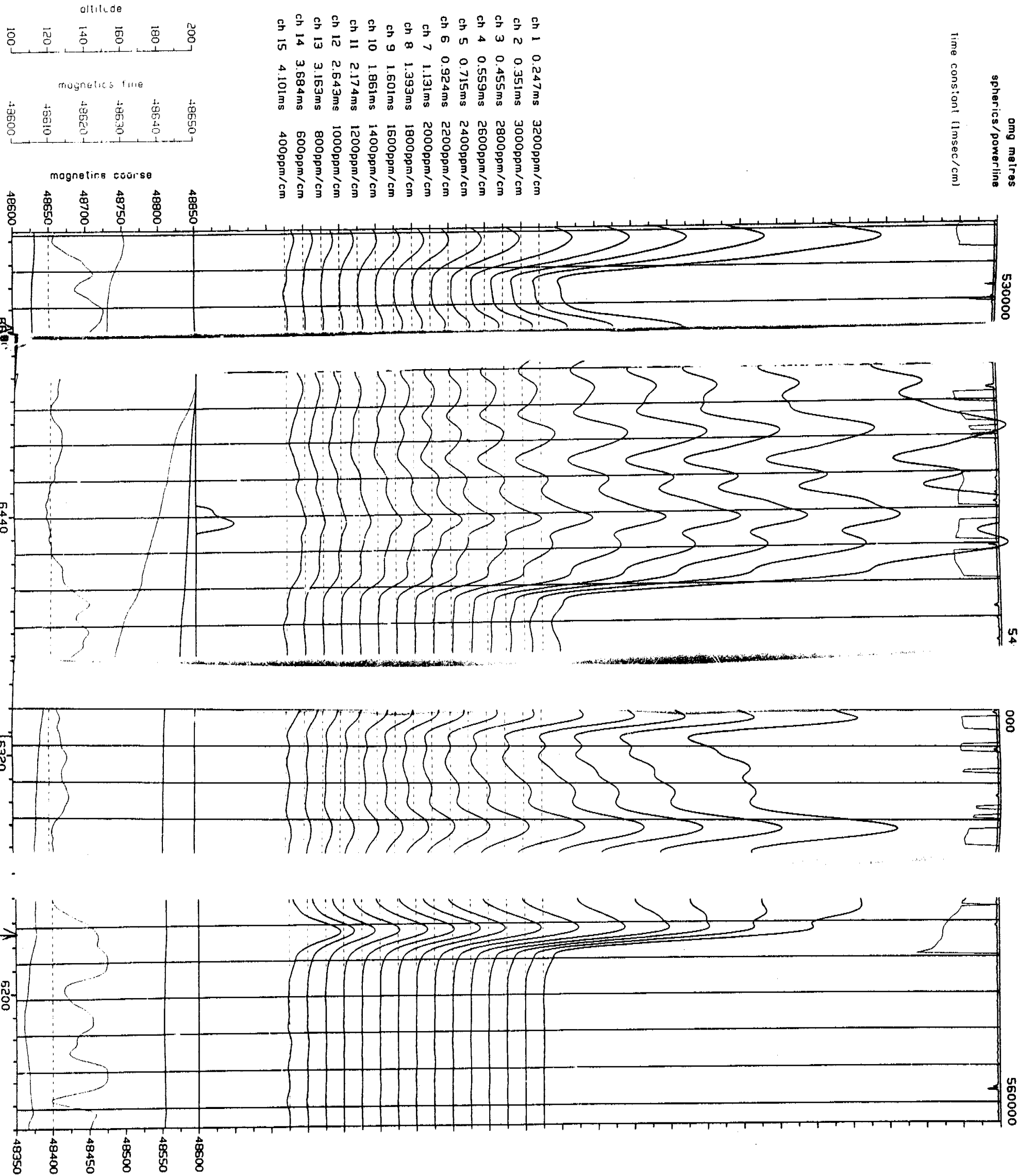
565000



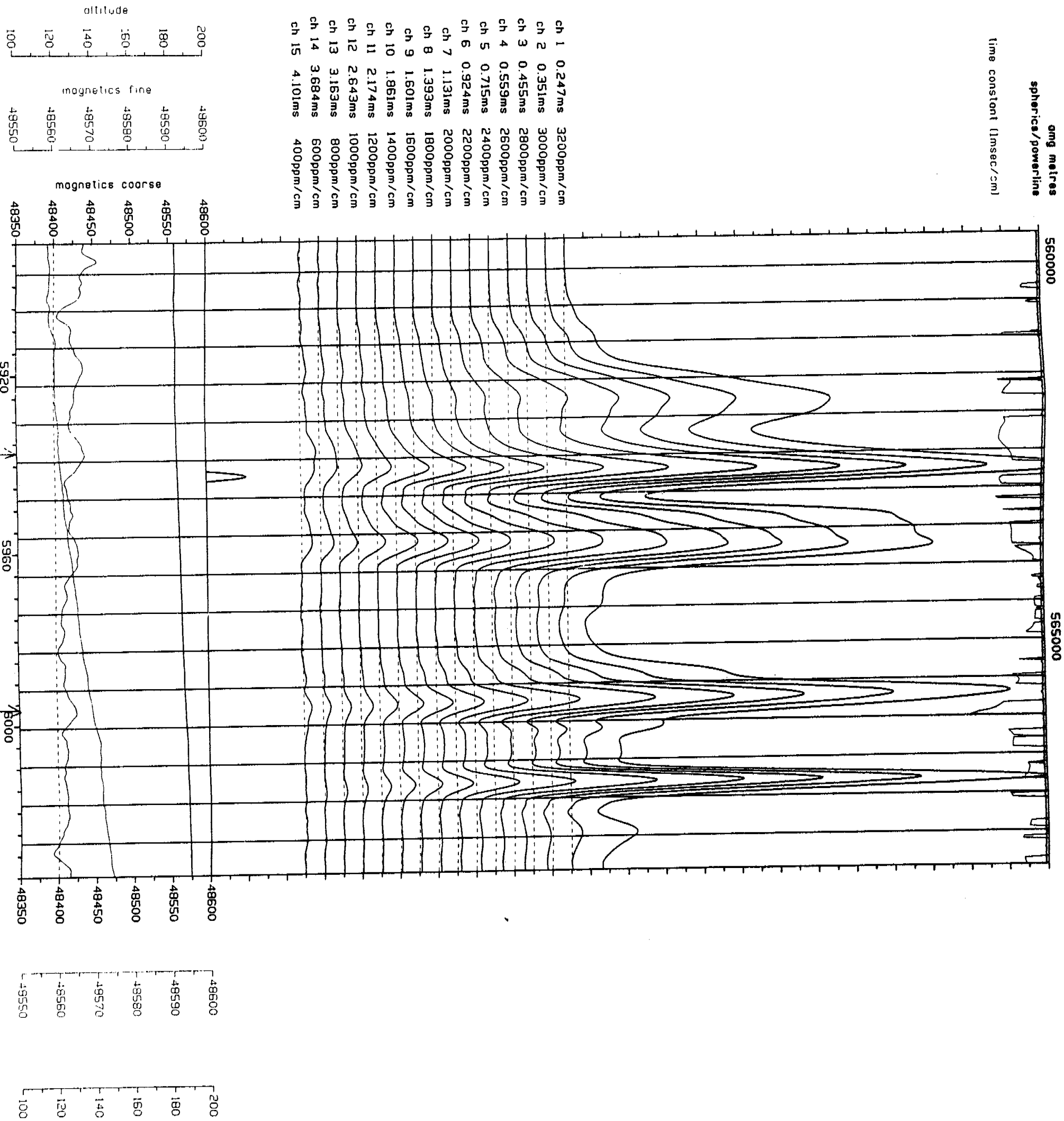
AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10620
flight no. 44
direction 270
date flown 26jun92
time flown 16:57:38.00 17:07:51.00
fiducial no. 6049 6662
line location 8308013 8307935
client BHP
job 1297
area Borroloola
scale 1:50000

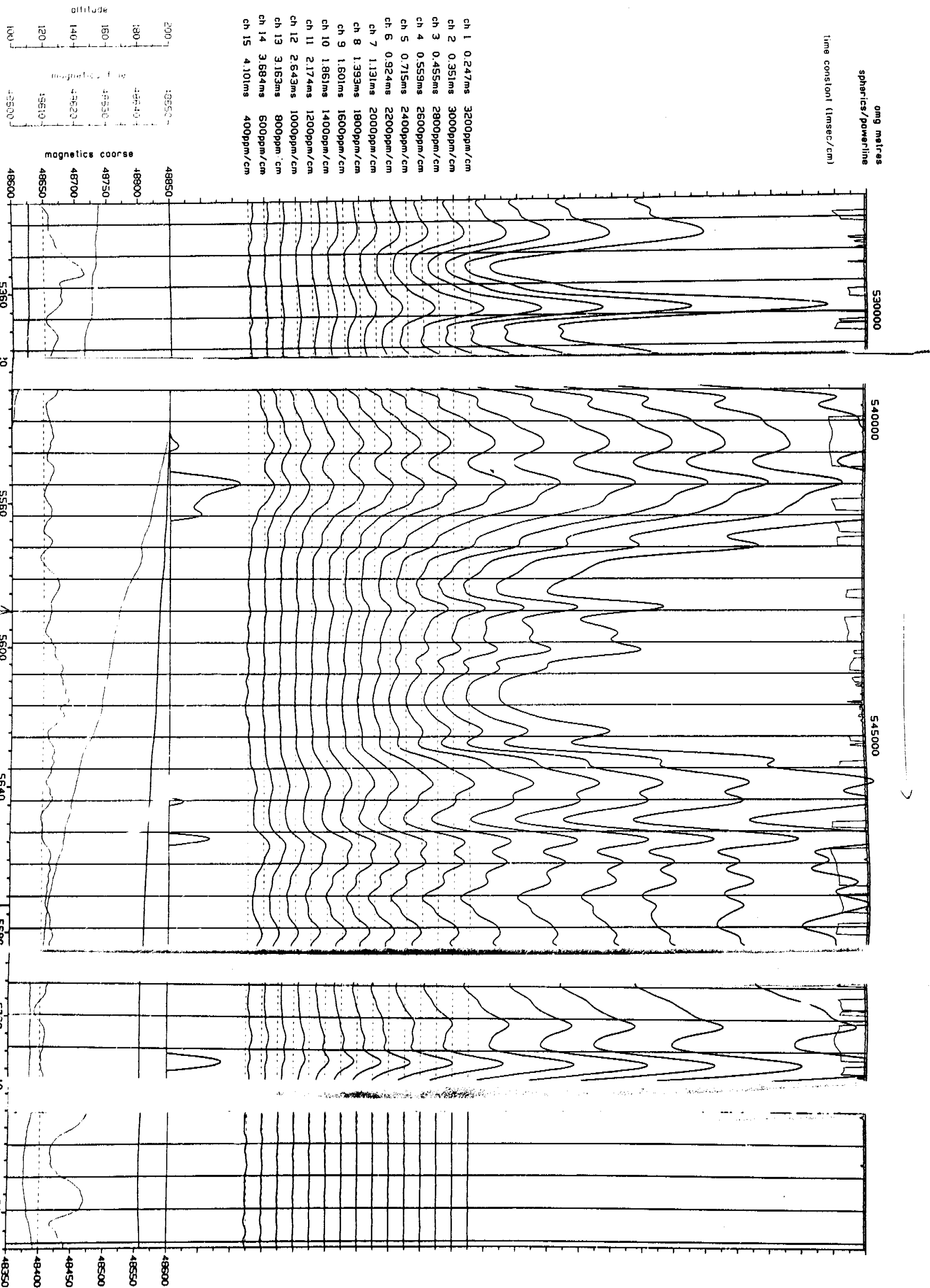


line no. 10610
flight no. 44
direction 90
date flown 26jun82
time flown 16:44:15.00 16:55:55.00
fiducial no. 5335 6035
line location 8309045 8308982
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

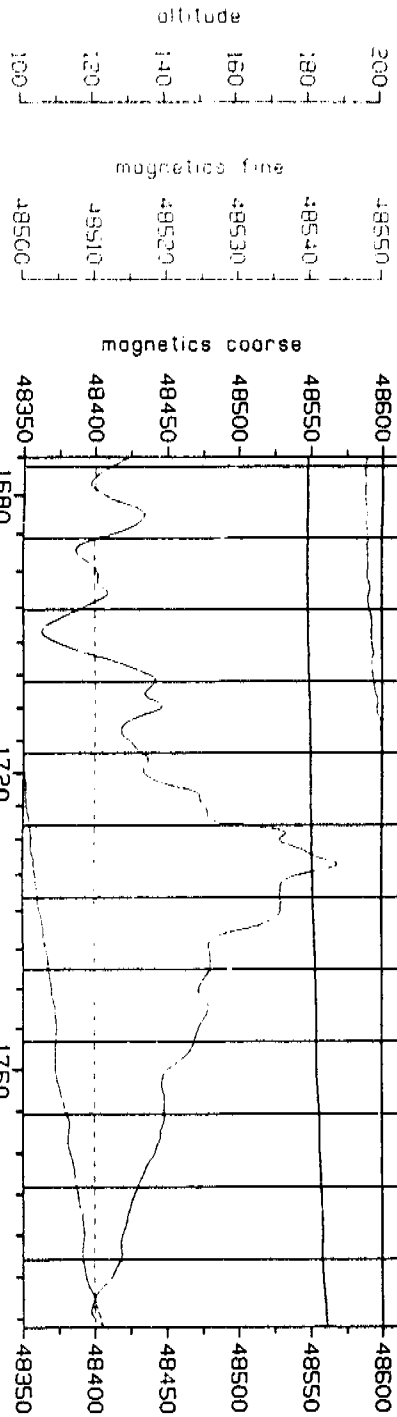
line no. 10610
flight no. 44
direction 90
date flown 26 Jun 92
time flown 16:44:15.00 16:55:55.00
fiducial no. 5335 6035
line location 8309045 8308982
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

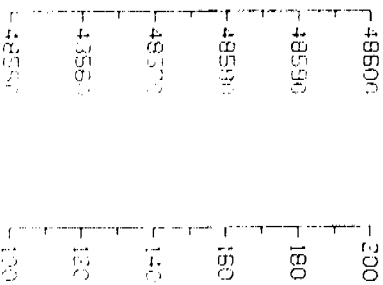
line no. 10640
flight no. 45
direction 90
date flown 27 jun 92
time flown 07:44:52.00 07:56:03.00
fiducial no. 1120 1791
line location 8305975 8306011
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.851ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

omg metres
spherics/powerline
time constant (1msec/cm)

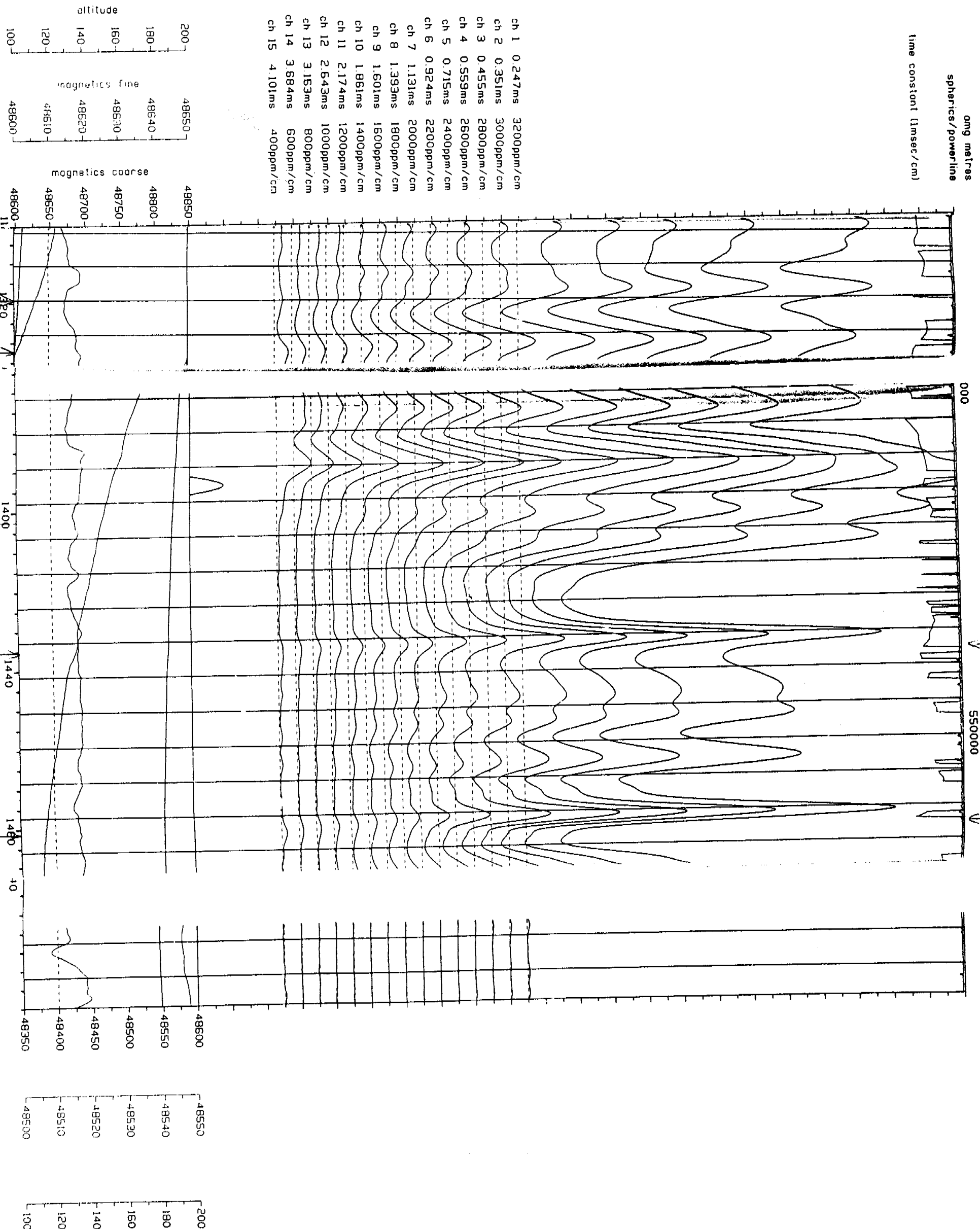
565000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

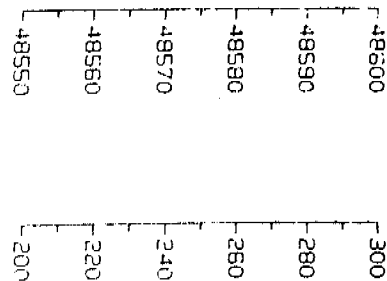
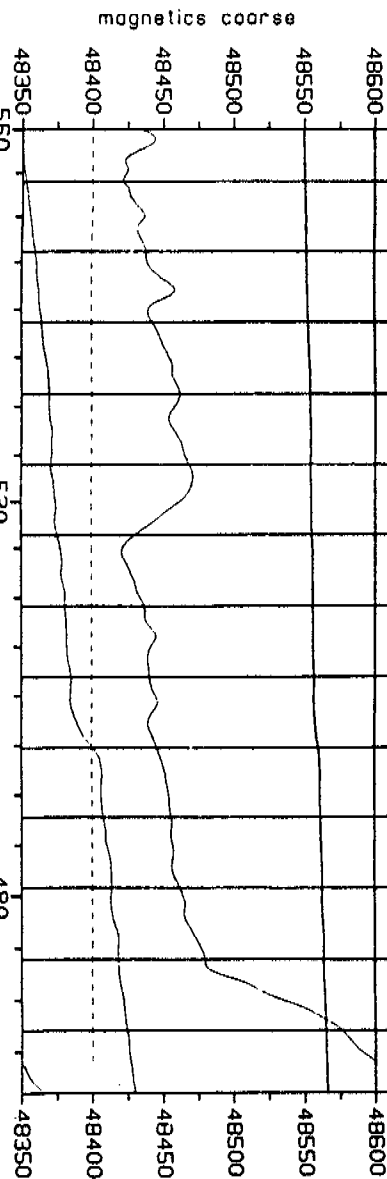
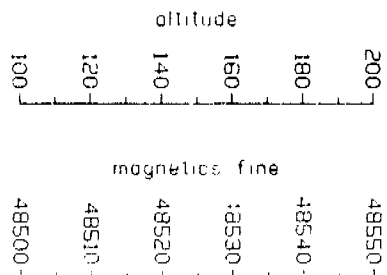
line no. 10640
flight no. 45
direction 90
date flown 27 Jun 92
time flown 07:44:52.00 07:56:03.00
fiducial no. 1120 1791
line location 8305975 8306011
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10631
flight no. 45
direction 270
date flown 27 jun 92
time flown 07:32:47.00 07:42:26.00
fiducial no. 461 1040
line location 8307010 8307013
client BHP
job 1297
area Borroloola
scale 1:50000



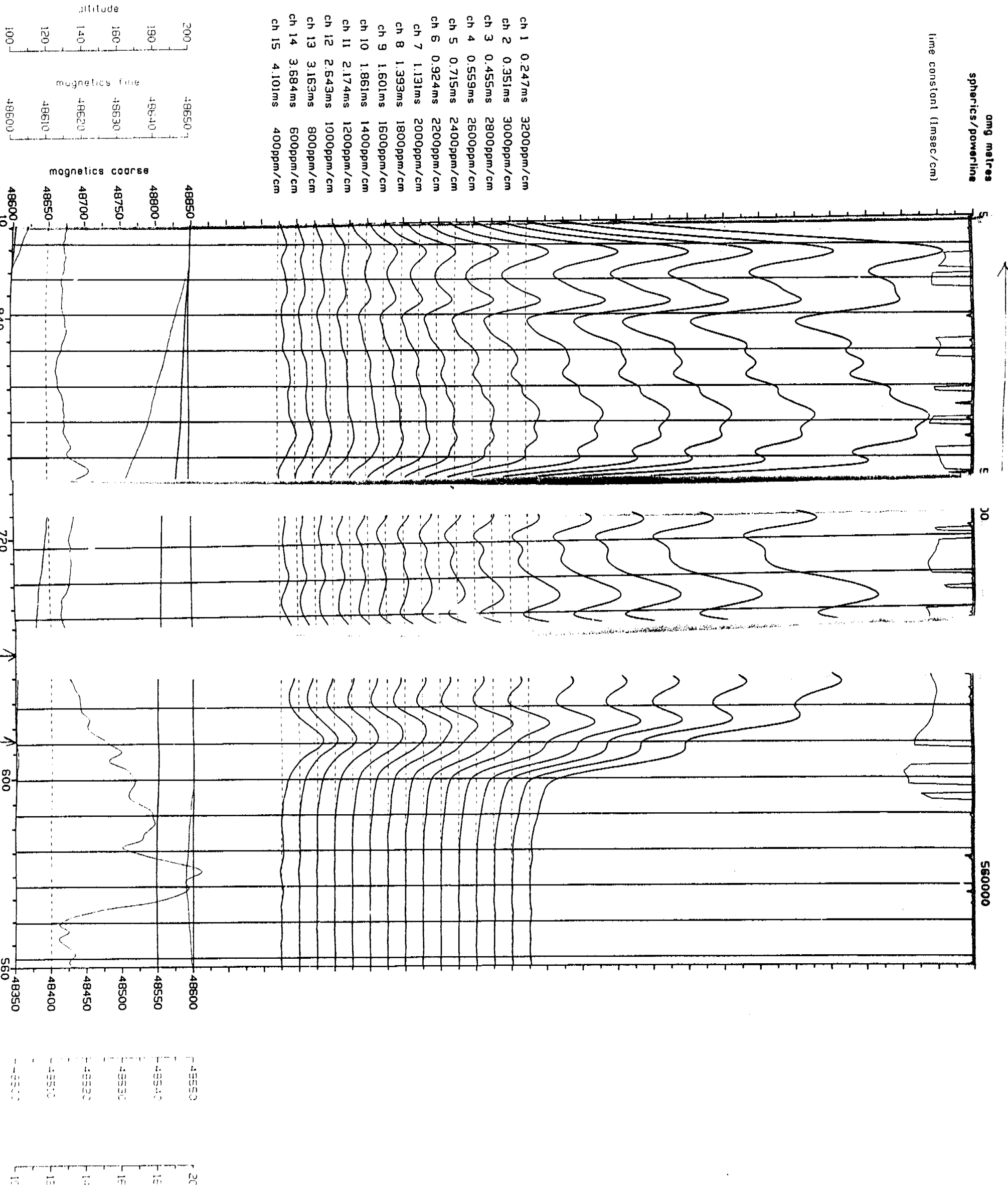
ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

cmg metres
spherics/powerline
time constant (lmsec/cm)

565000

AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

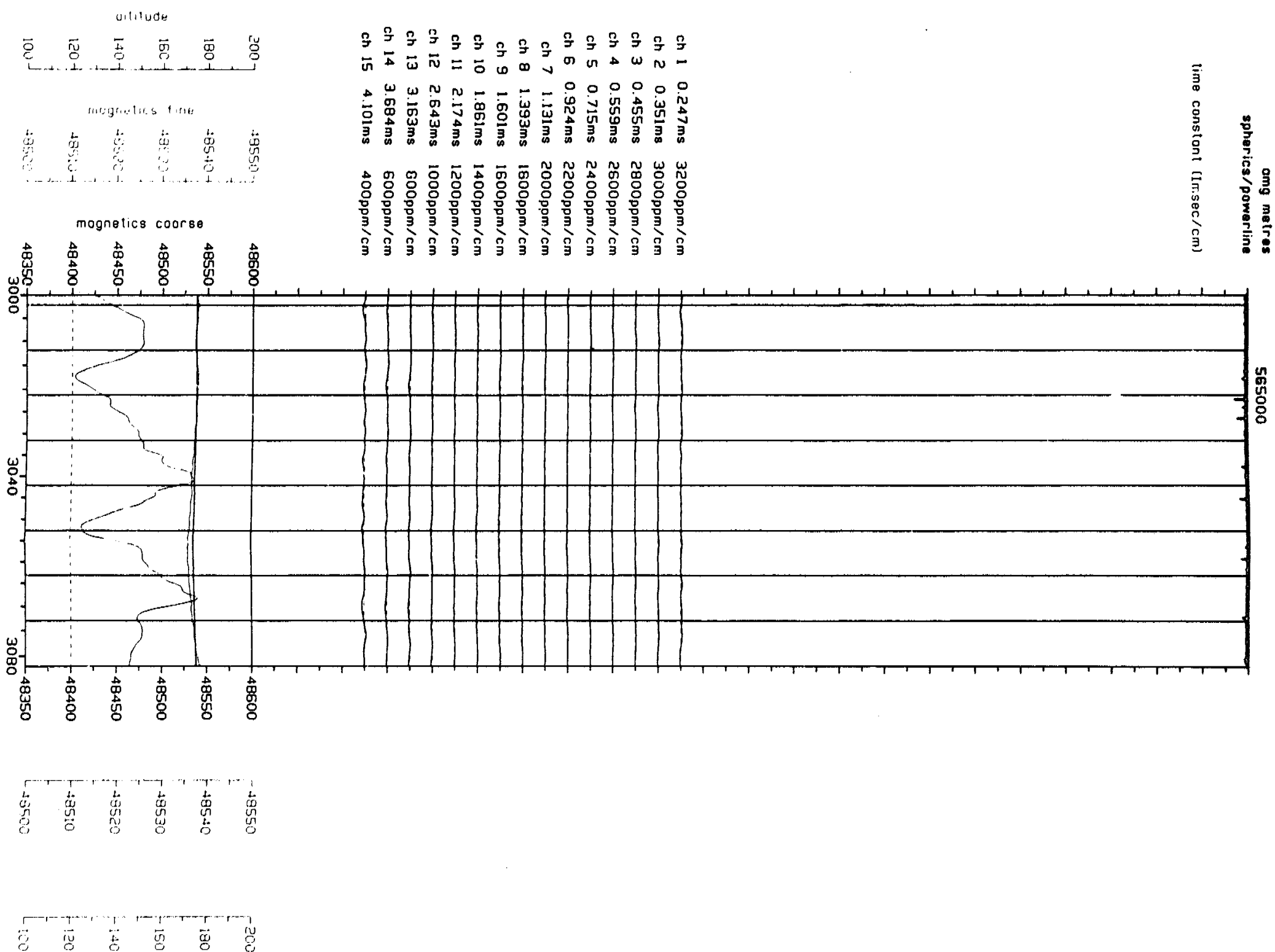
line no. 10631
flight no. 45
direction 270
date flown 27 jun 92
time flown 07:32:47.00 07:42:26.00
fiducial no. 461 1040
line location 8307010 8307013
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

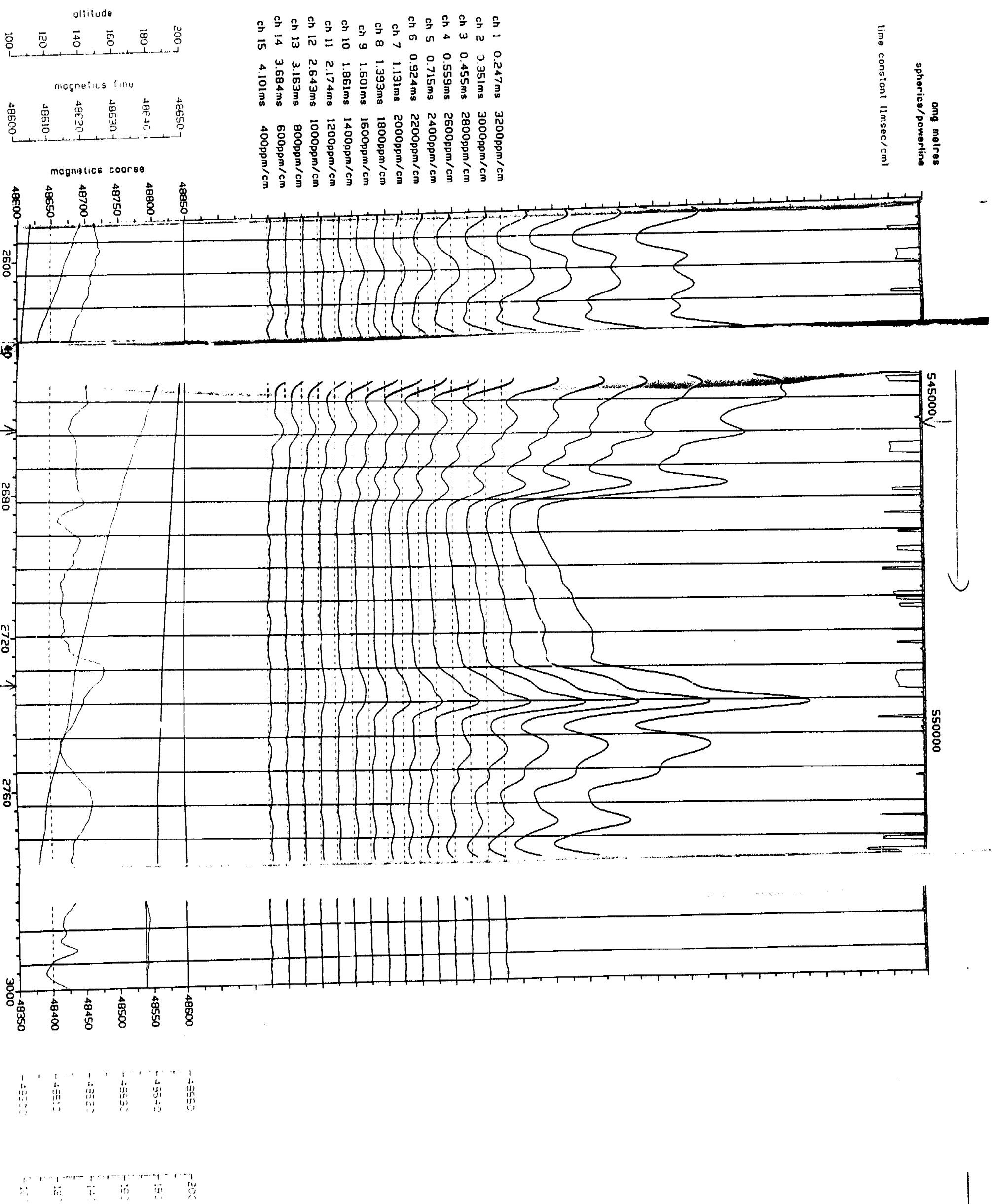
line no.	10660	
flight no.	45	
direction	90	
date flown	27jun92	
time flown	08:08:35.00	08:19:23.00
fiducial no.	2434	3082
line location	8304016	8303995
client	BHP	
job	1297	
area	Borroloola	
scale	1:50000	



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

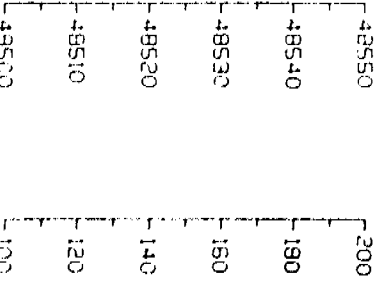
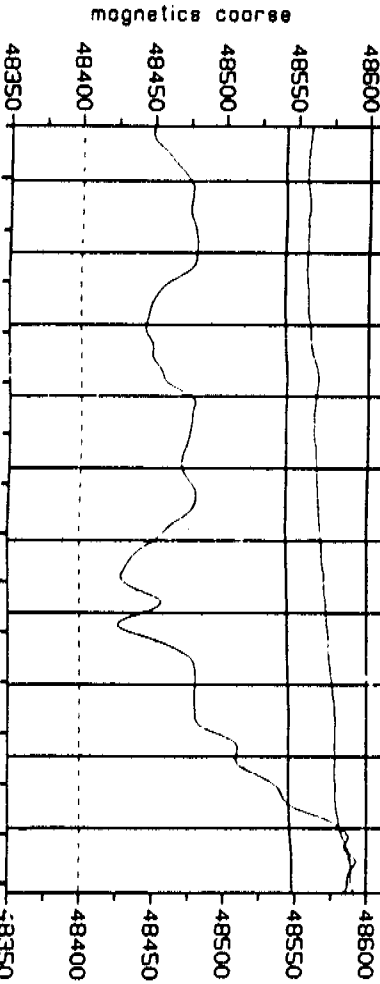
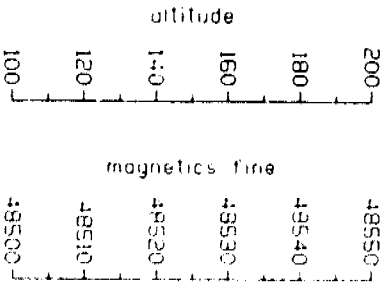
line no. 10660
flight no. 45
direction 90
date flown 27 jun 92
time flown 08:08:35.00 08:19:23.00
fiducial no. 2434 3082
line location 8304016 8303995
client BHP
job 1297
area Barrooloola
scale 1:50000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10650
flight no. 45
direction 270
date flown 27jun92
time flown 07:57:23.00 08:06:32.00
fiducial no. 1809 2358
line location 8305060 8305031
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

cmg metres
spheres/powerline
time constant (lmsec/cm)

565000

AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10650
 flight no. 45
 direction 270
 date flown 27 Jun 92
 time flown 07:57:23.00 08:06:32.00
 fiducial no. 1809 2358
 line location 8305060 8305031
 client BHP
 job 1297
 area Borroloola
 scale 1:50000

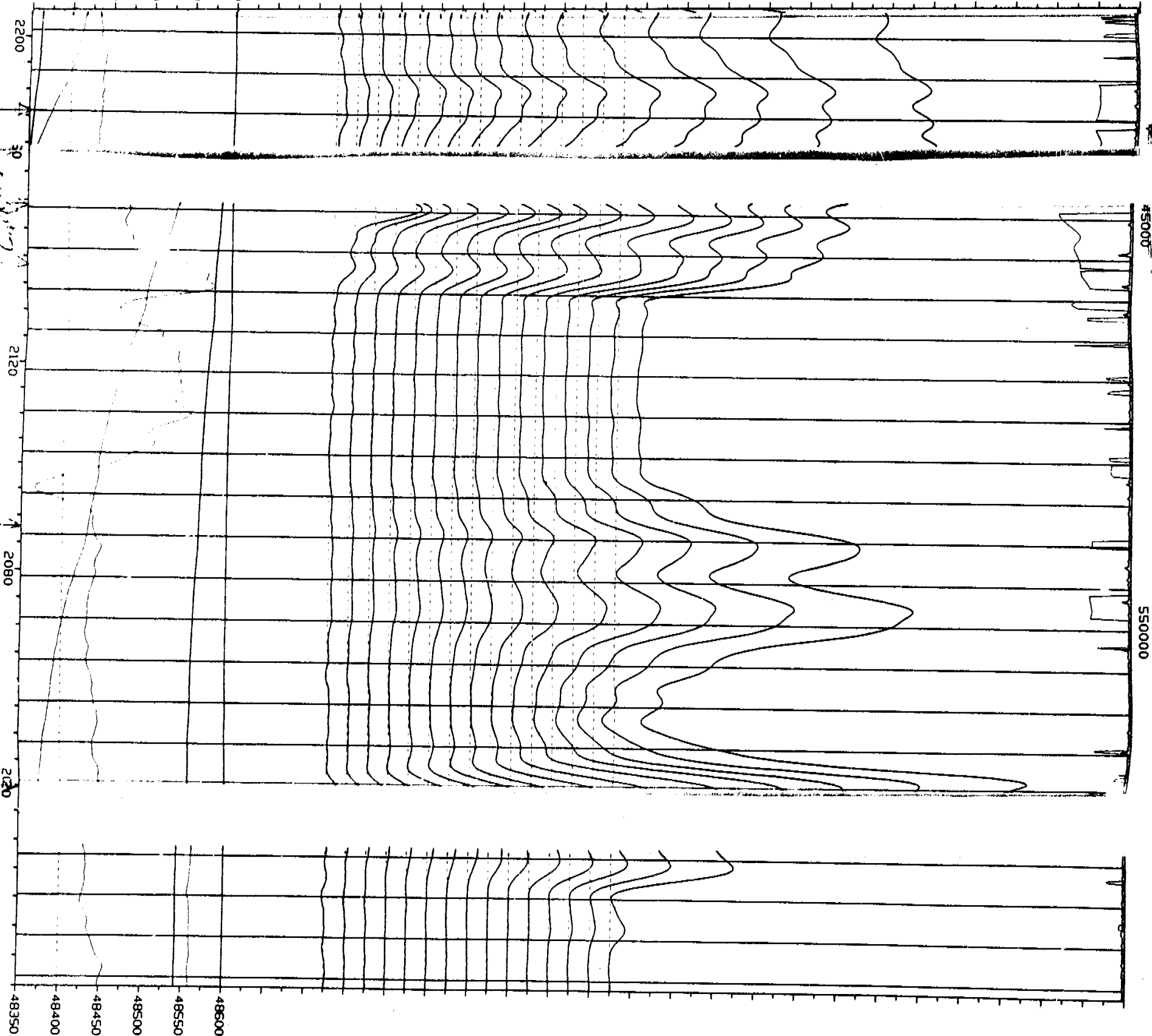
altitude
 200
 180
 160
 140
 120
 100

ch 1 0.247ms 3200ppm/cm
 ch 2 0.351ms 3000ppm/cm
 ch 3 0.455ms 2800ppm/cm
 ch 4 0.559ms 2600ppm/cm
 ch 5 0.715ms 2400ppm/cm
 ch 6 0.924ms 2200ppm/cm
 ch 7 1.131ms 2000ppm/cm
 ch 8 1.393ms 1800ppm/cm
 ch 9 1.601ms 1600ppm/cm
 ch 10 1.861ms 1400ppm/cm
 ch 11 2.174ms 1200ppm/cm
 ch 12 2.643ms 1000ppm/cm
 ch 13 3.163ms 800ppm/cm
 ch 14 3.684ms 600ppm/cm
 ch 15 4.101ms 400ppm/cm

magnetics coarse

48850
 48800
 48750
 48700
 48650
 48600

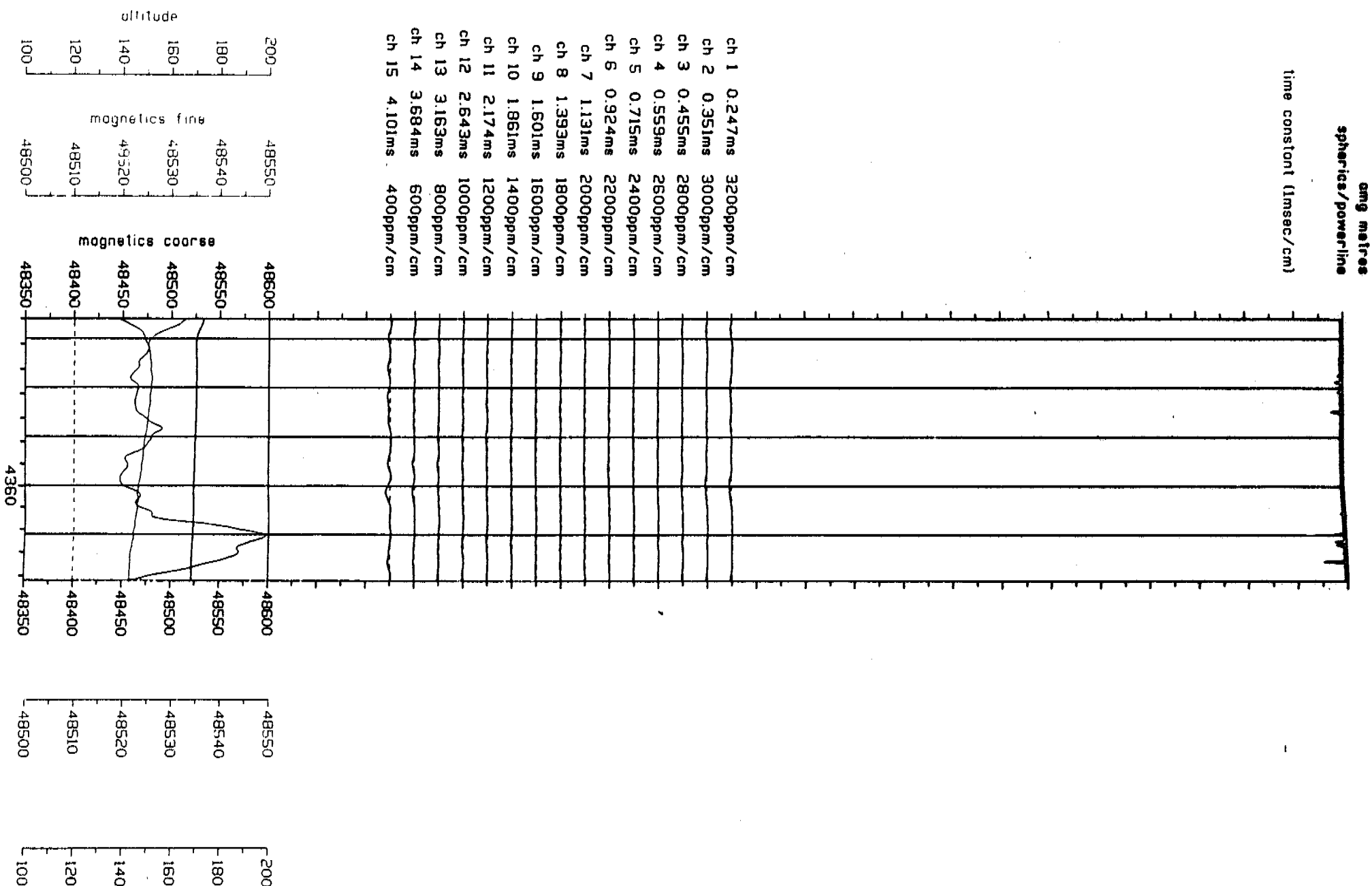
cmg metres
 spherics/powerline
 time constant (1msec/cm)



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

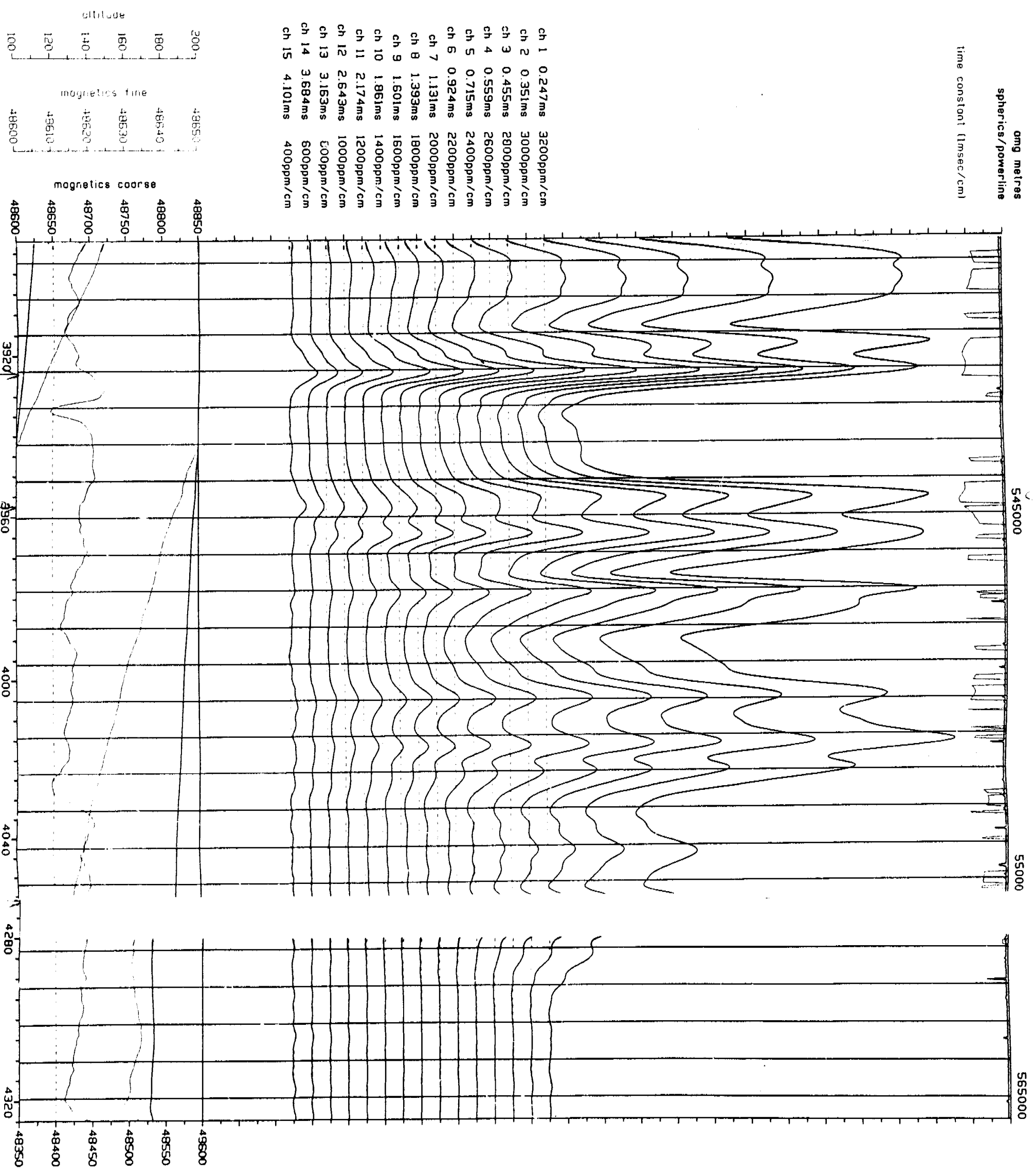
line no. 10680
flight no. 45
direction 90
date flown 27 jun 92
time flown 08:32:46.00 08:43:06.00
fiducial no. 3761 4381
line location 8301988 8302005
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

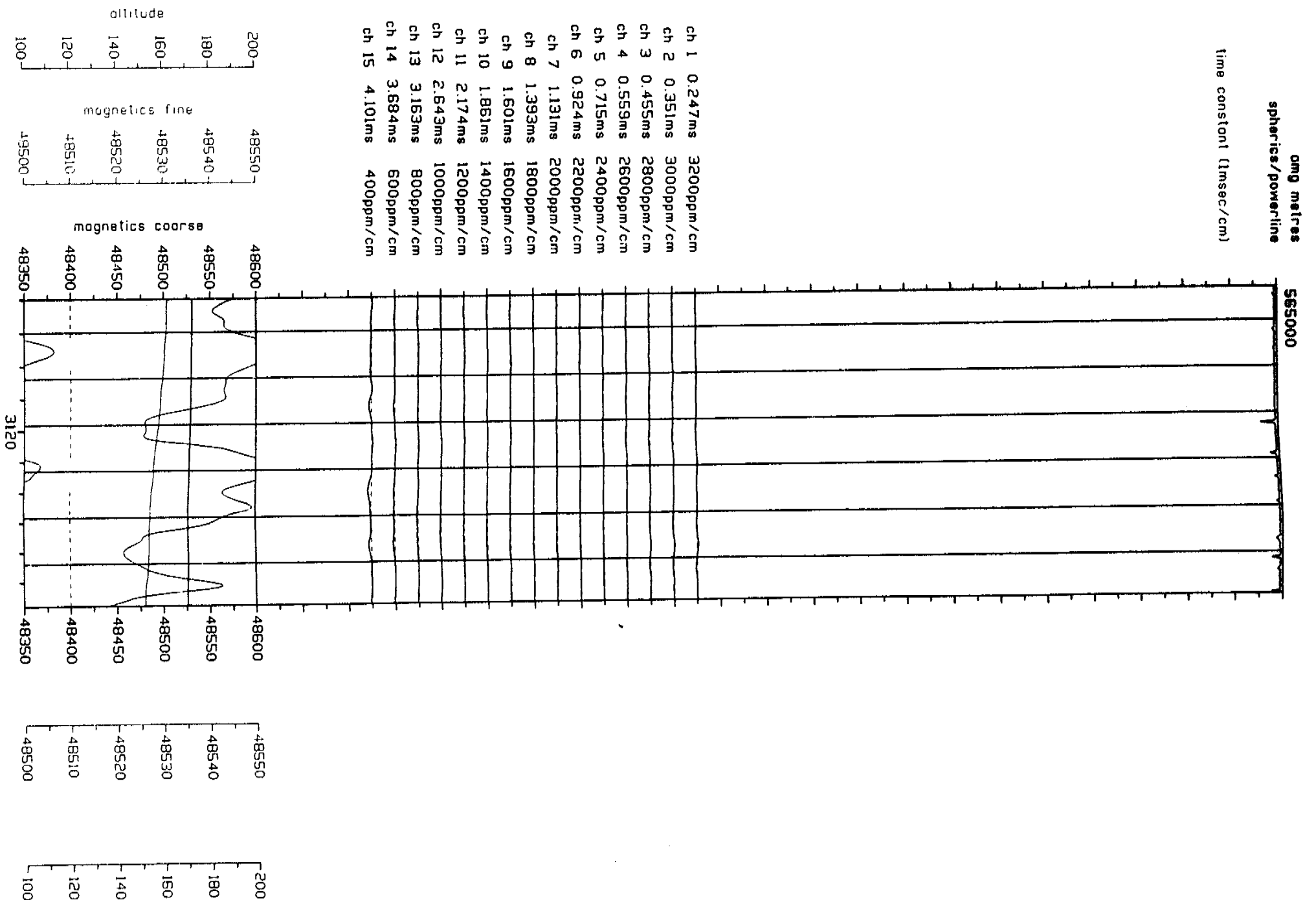
line no. 10680
flight no. 45
direction 90
date flown 27jun92
time flown 08:32:46.00 08:43:06.00
fiducial no. 3761 4381
line location 8301988 8302005
client BHP
job 1297
area Barroolala
scale 1:50000



AERODATA QUESTEM SYSTEM

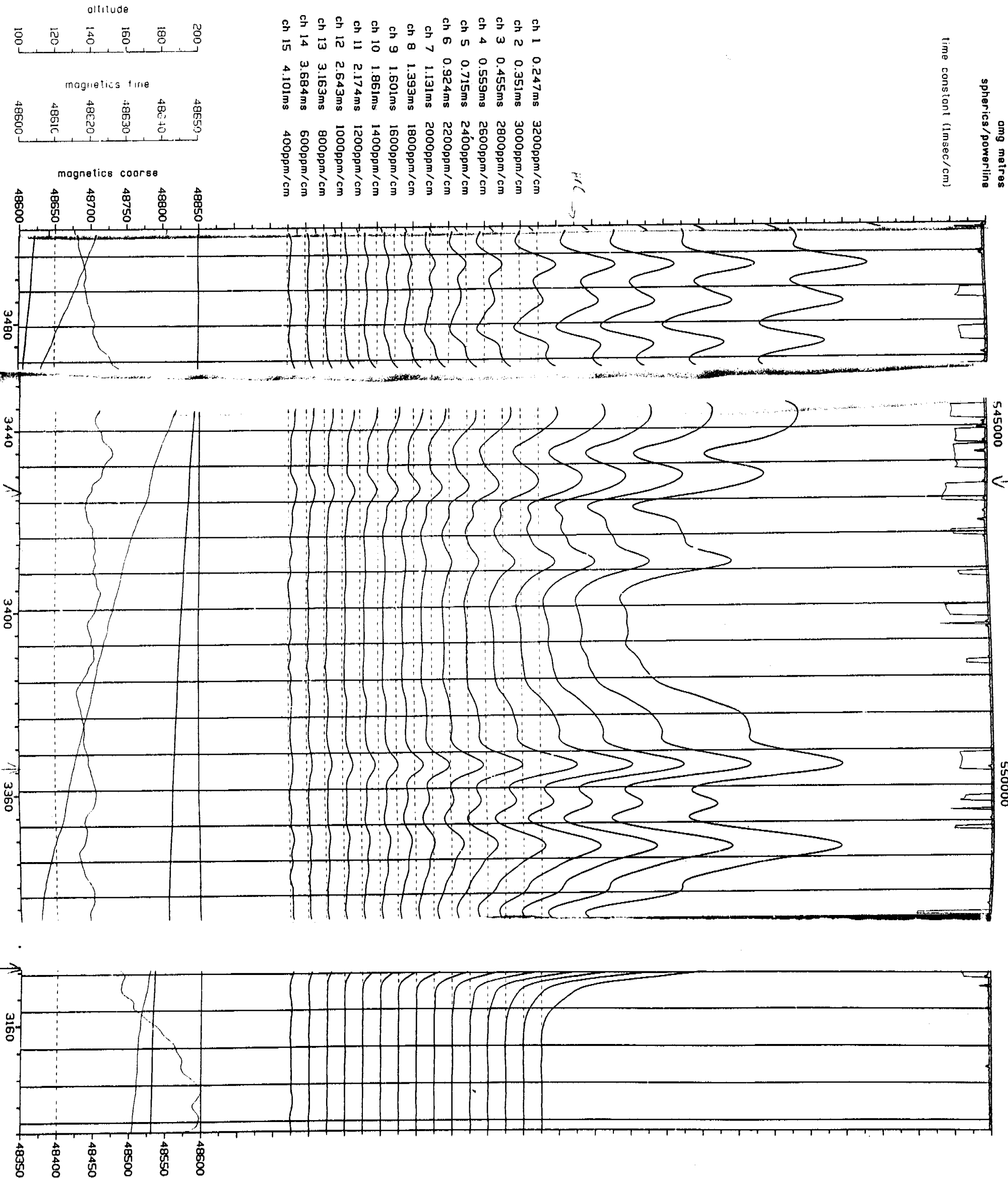
Base frequency 75.0 Hz.

line no. 10670
flight no. 45
direction 270
date flown 27jun92
time flown 08:20:18.00 08:29:11.00
fiducial no. 3091 3624
line location 8302998 8303038
client BHP
job 1297
area Borroloola
scale 1:50000



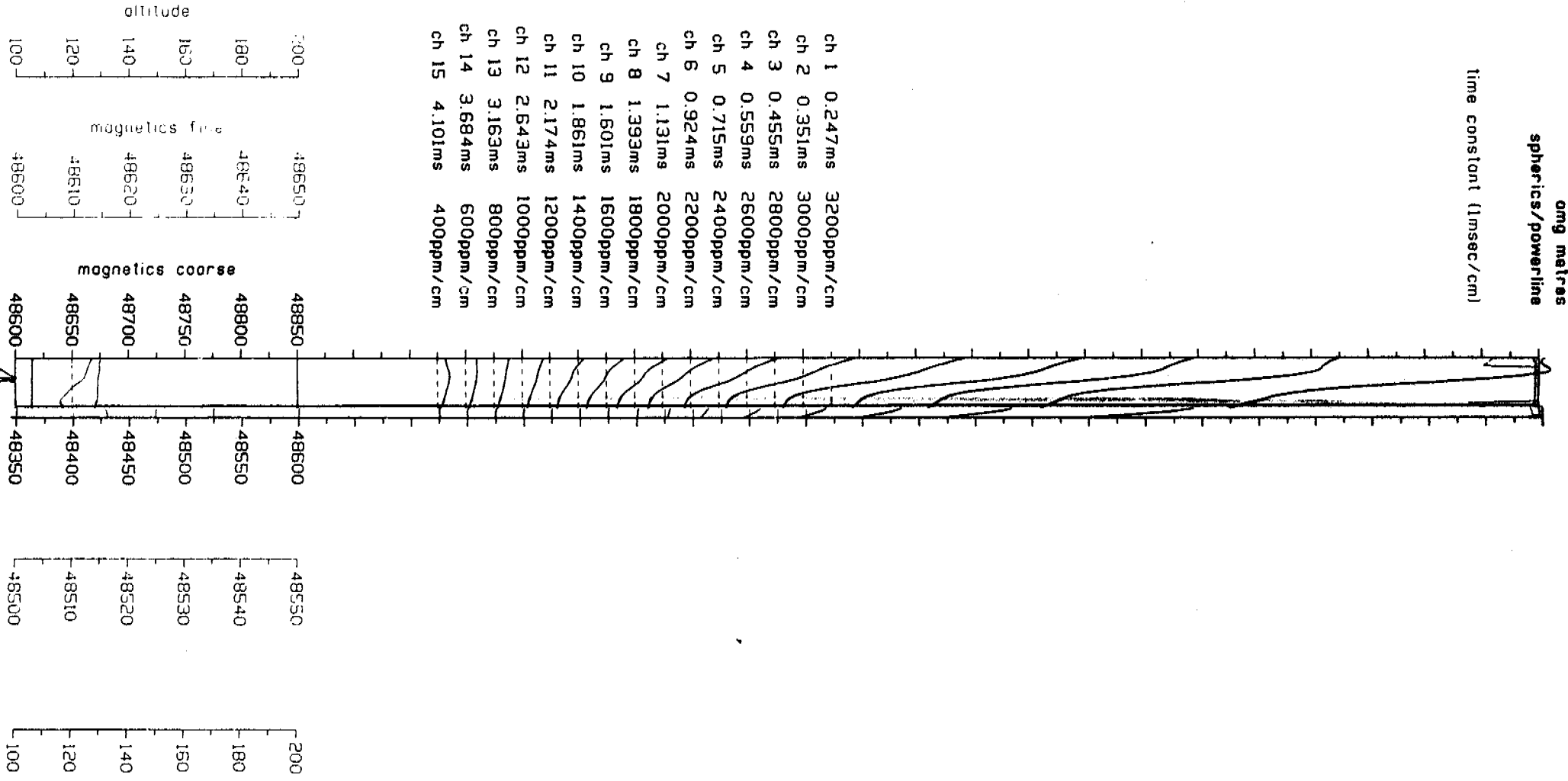
AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 10670
flight no. 45
direction 270
date flown 27jun92
time flown 08:20:18.00 08:29:11.00
fiducial no. 3091 3624
line location 8302998 8303038
client BHP
job 1297
area Borrolcno
scale 1:50000



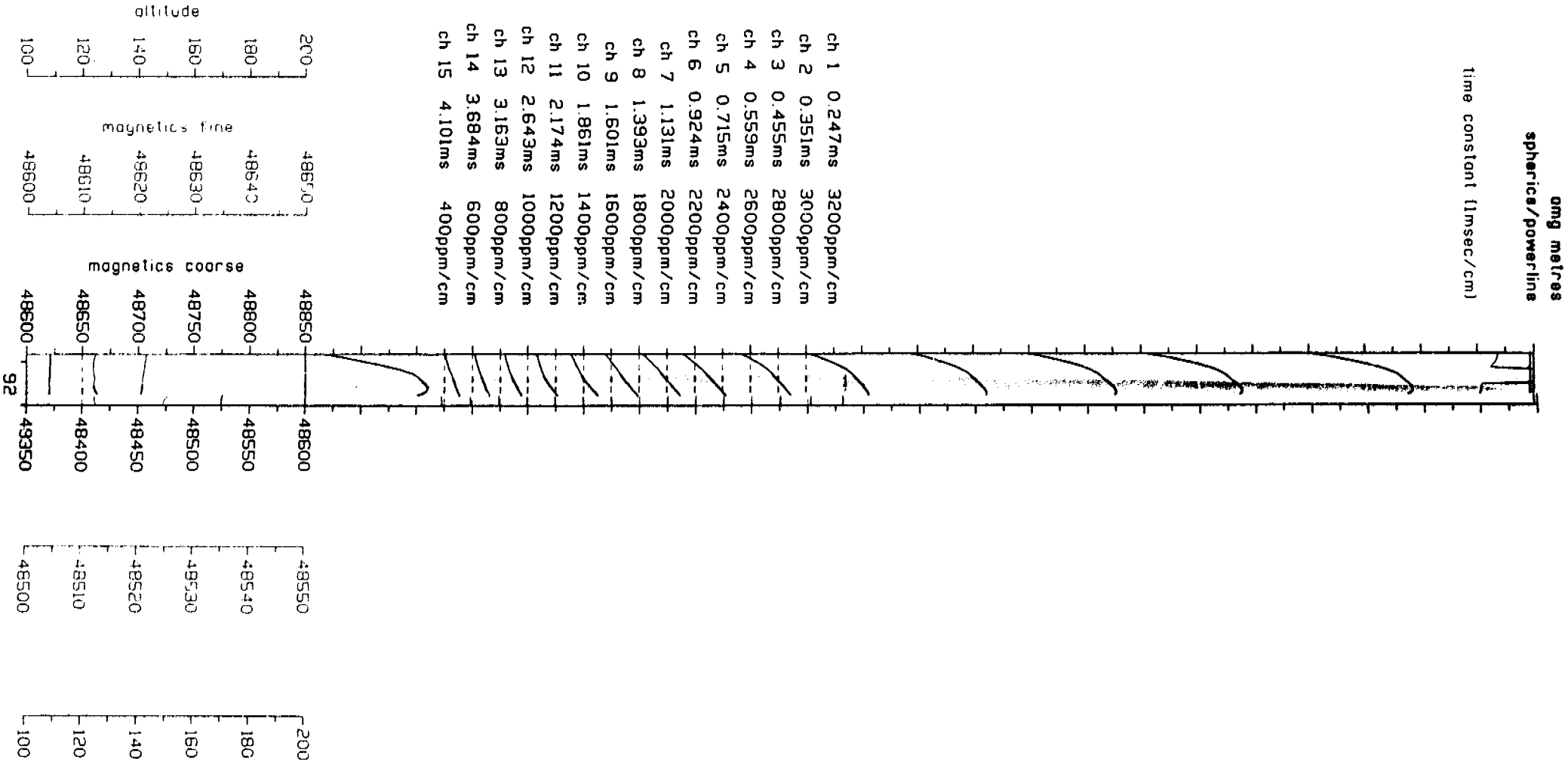
AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 10730
flight no. 29
direction 90
date flown 12jun92
time flown 10:22:19.00 10:34:40.00
fiducial no. 7936 8677
line location 8297006 8296950
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

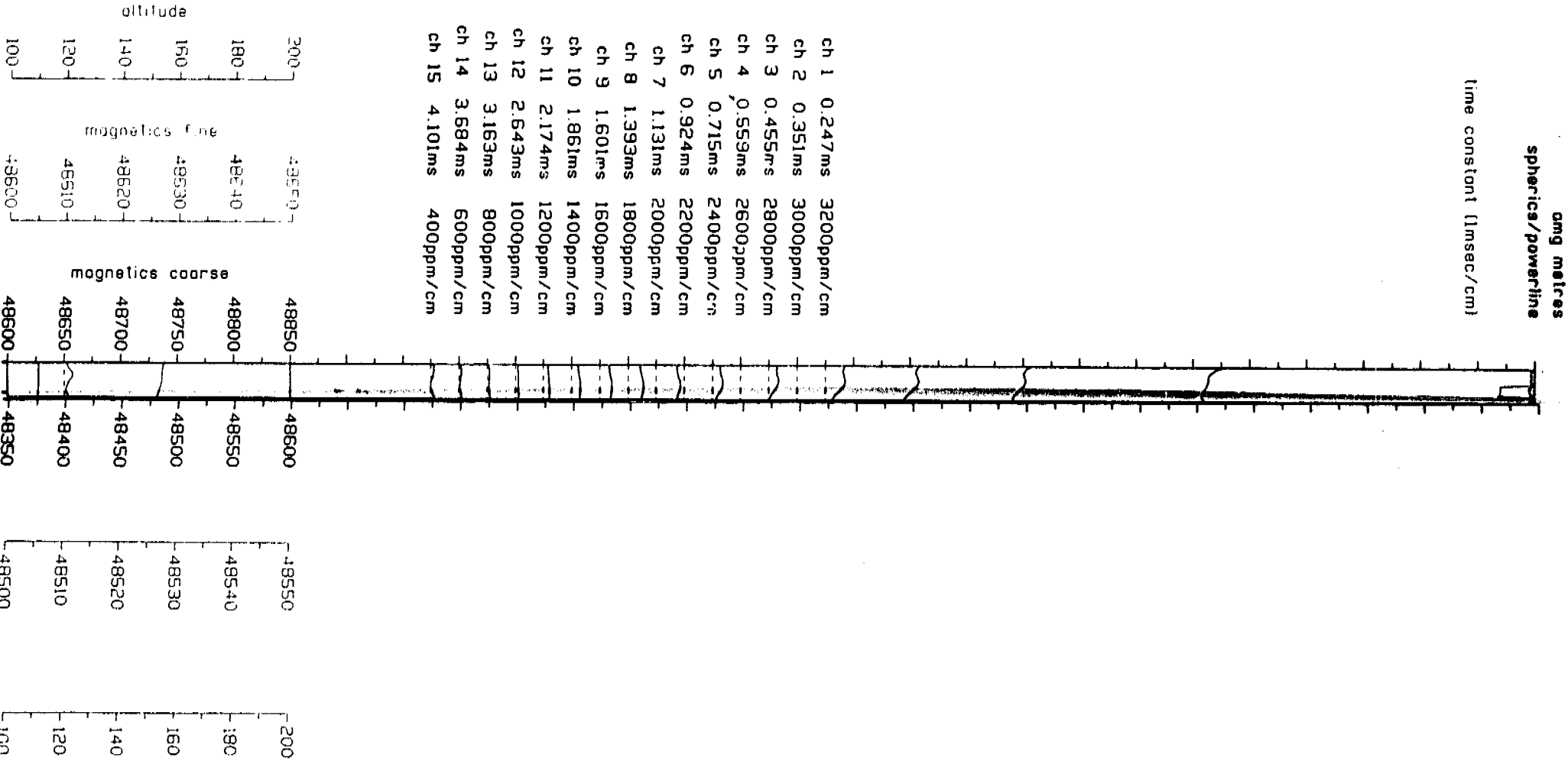
line no. 10720
flight no. 29
direction 270
date flown 12jun92
time flown 10:36:03.00 10:46:10 00
fiducial no. 8679 9286
line location 8297981 8297957
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

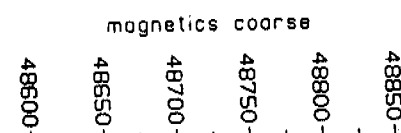
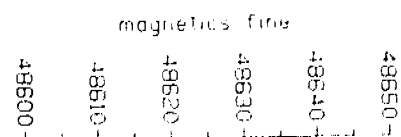
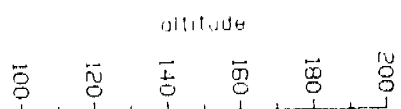
line no. 10710
flight no. 29
direction 90
date flown 12jun92
time flown 10:48:29.00 10:58:22.00
fiducial no. 9335 9928
line location 8298963 8299022
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

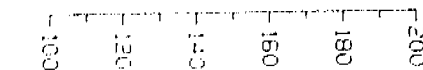
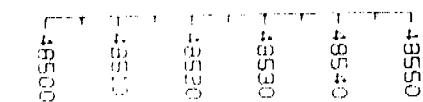
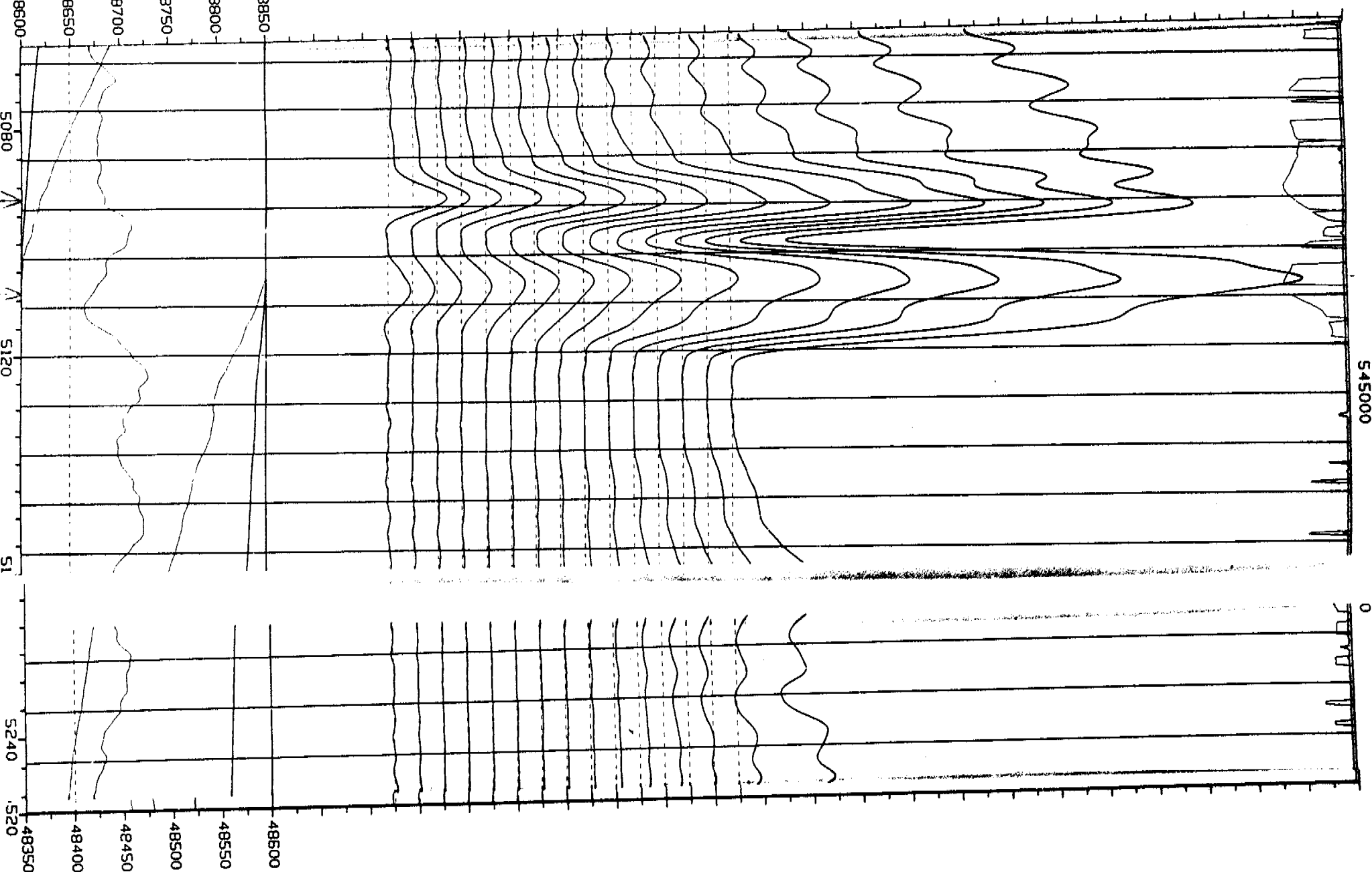
Base frequency 75.0 Hz.

line no. 10703
flight no. 45
direction 90
date flown 27 jun 92
time flown 08:54:39.00 09:04:12.00
fiducial no. 4966 5539
line location 8300005 8300003
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

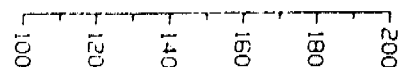
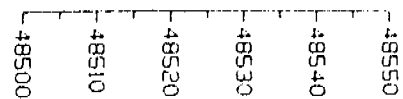
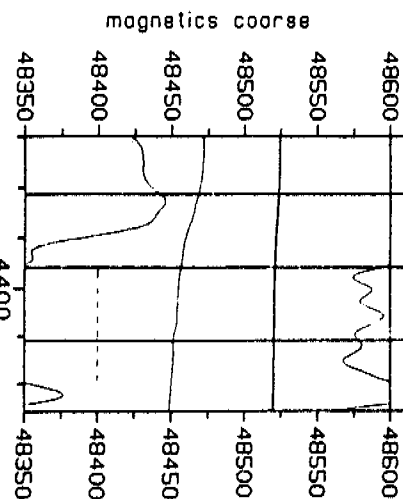
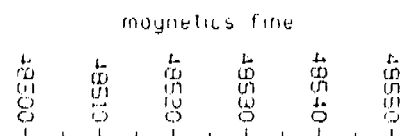
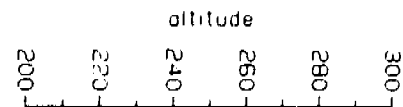
dmg metres
spherics/powerline
time constant (lmsec/cm)



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10691
flight no. 45
direction 270
date flown 27 jun 92
time flown 08:44:01.00 08:52:44.00
fiducial no. 4387 4910
line location 8301054 8301003
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

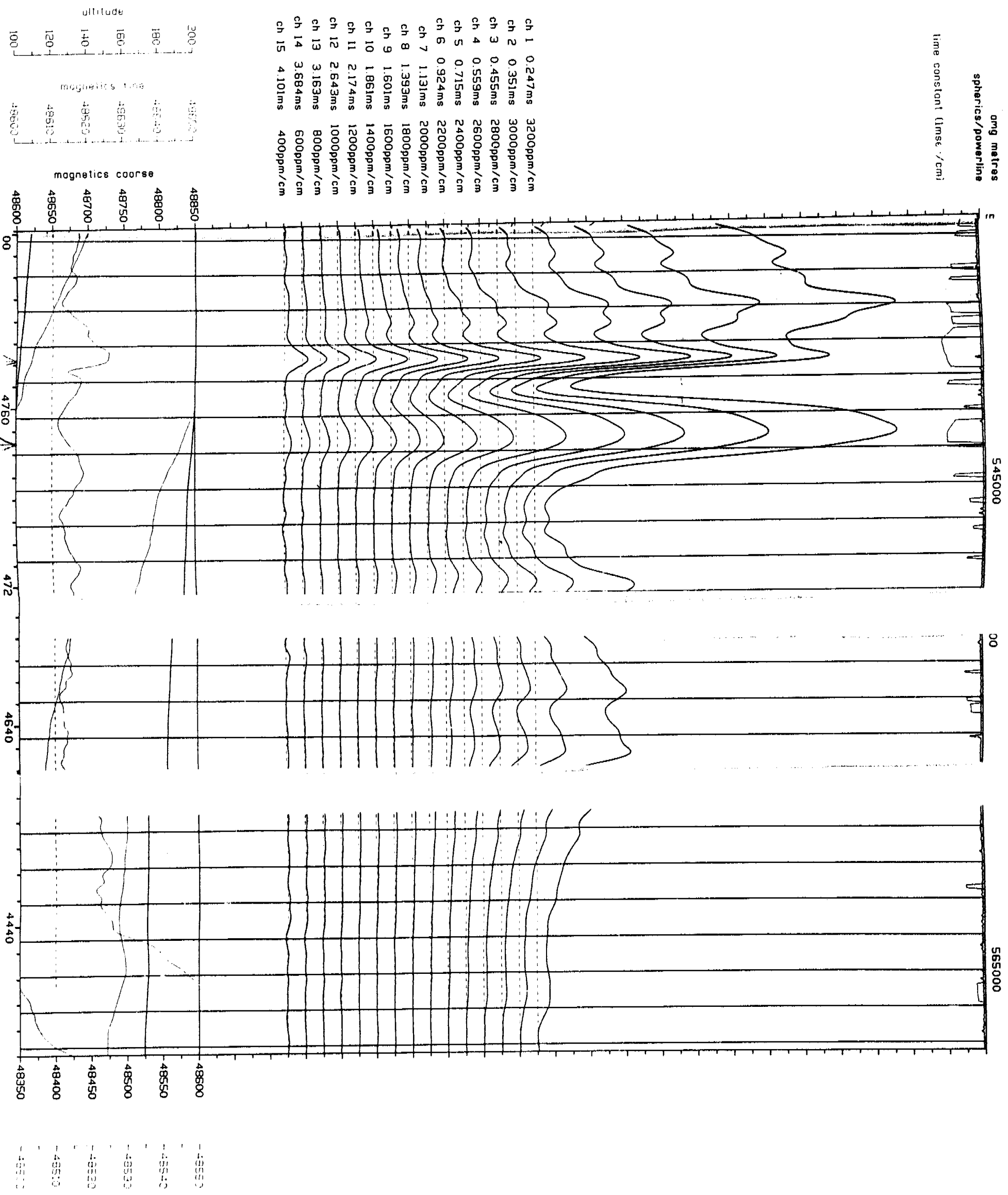
time constant (1msec/cm)

amg metres
spherics/powerline

AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

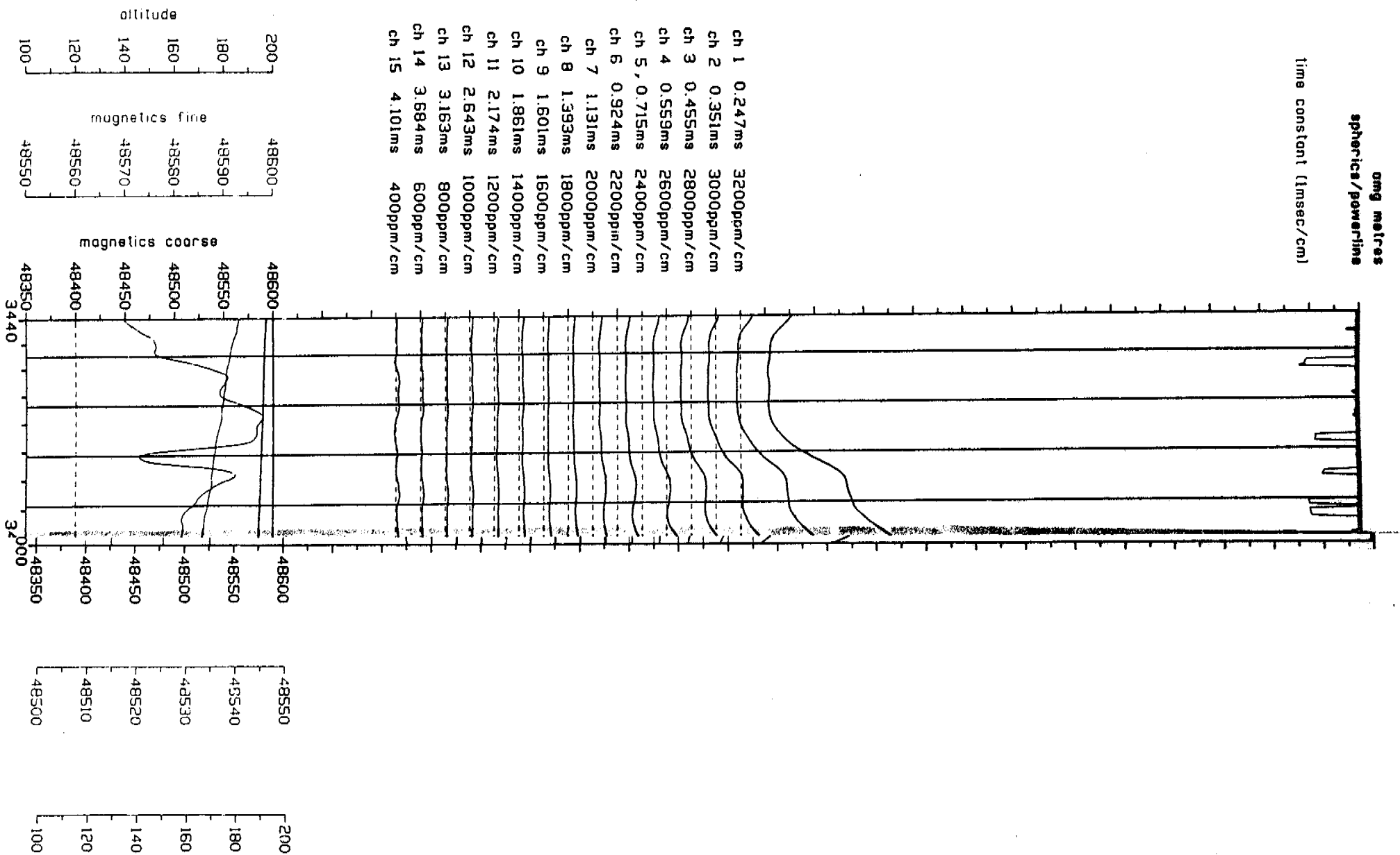
line no. 10691
flight no. 45
direction 270
date flown 27 jun92
time flown 08:44:01.00 08:52:44.00
fiducial no. 4387 4910
line location 8301054 8301003
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

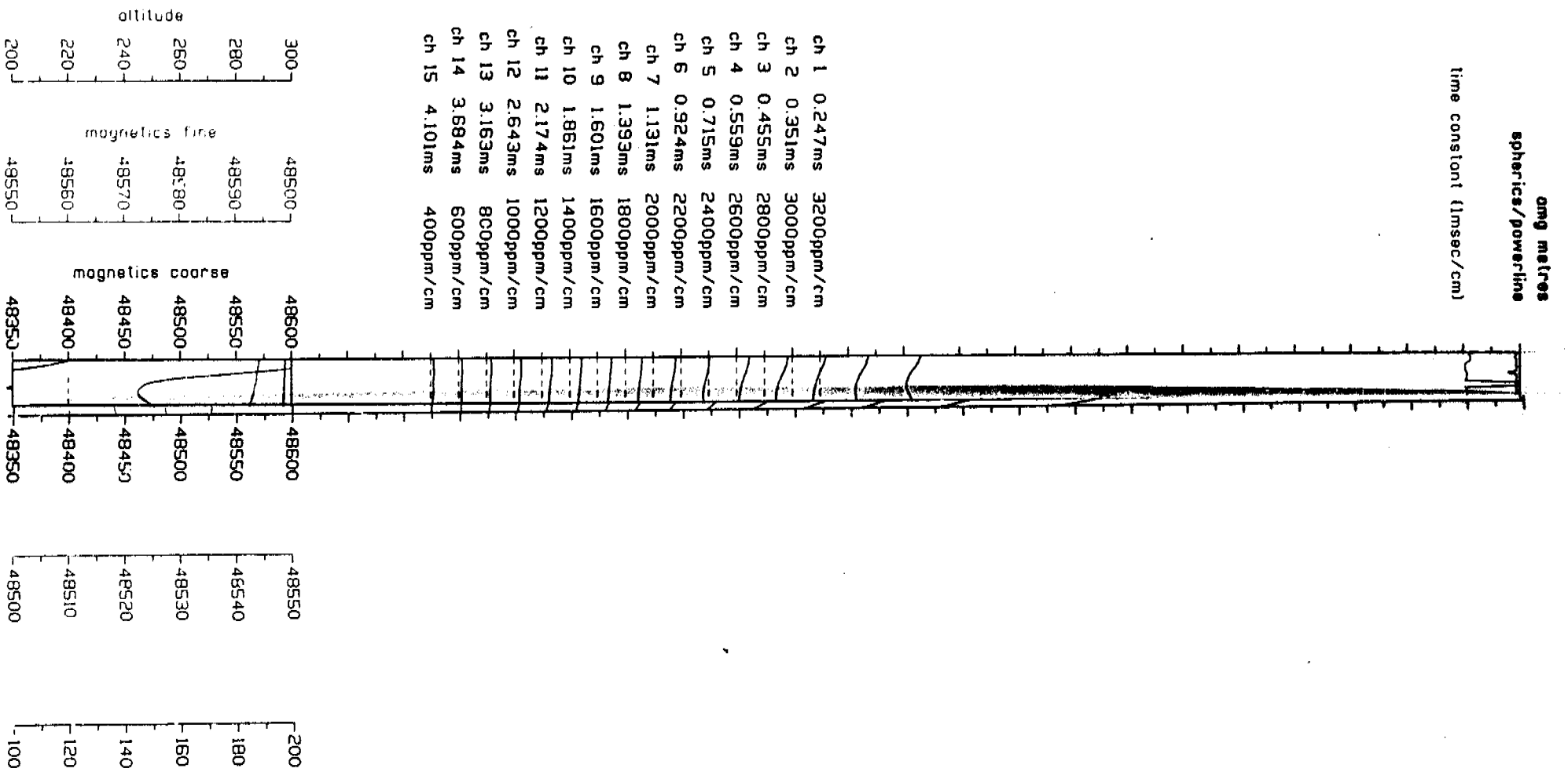
line no. 10790
flight no. 29
direction 90
date flown 12jun92
time flown 08:54:16.00 09:07:51.00
fiducial no. 3440 4255
line location 8291006 8291007
client BHP
job 1297
area Borraloala
scale 1:50000



AERODATA QUESTEM SYSTEM

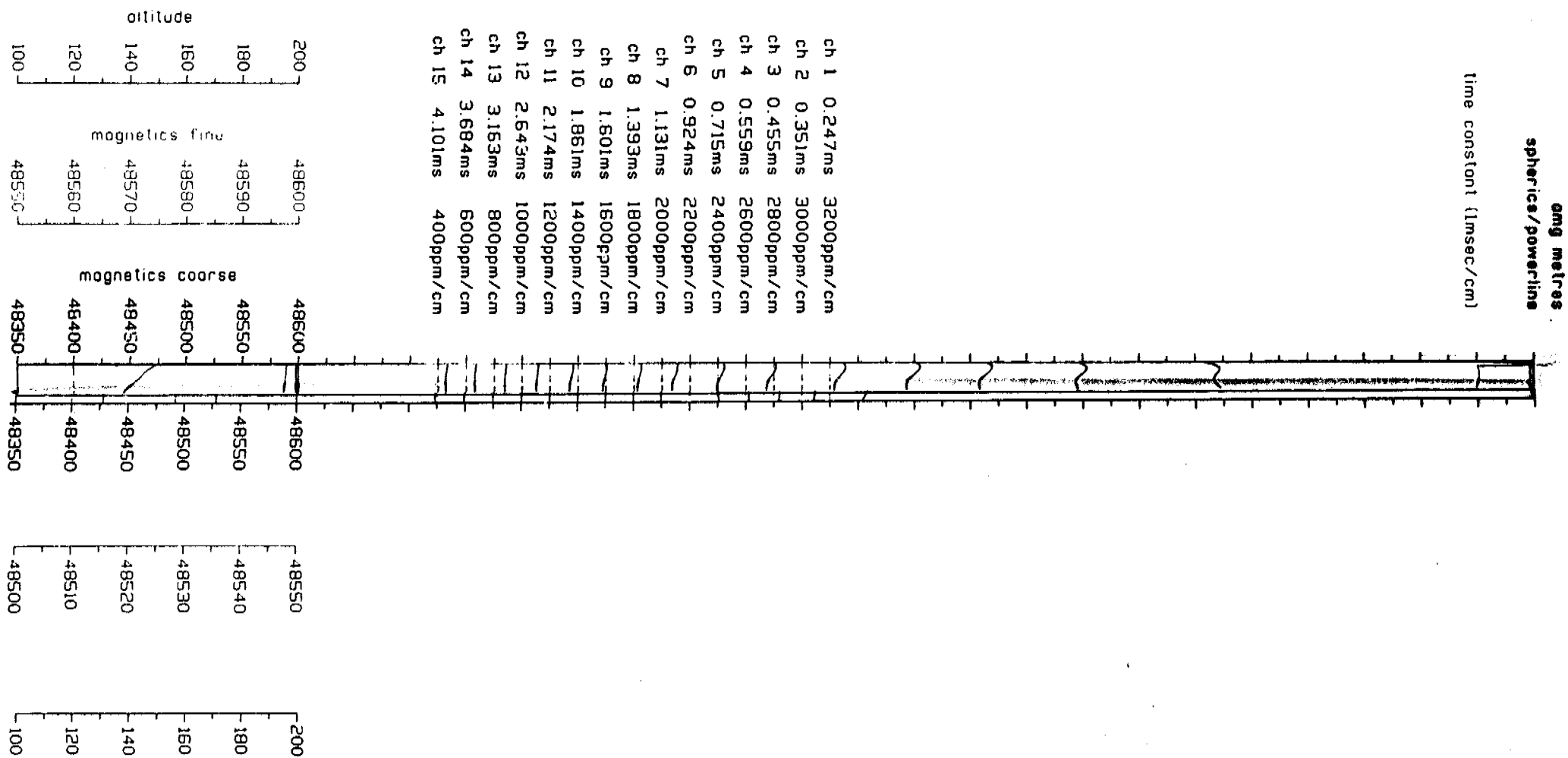
Bose frequency 75.0 Hz.

line no. 10780
flight no. 29
direction 270
date flown 12jun92
time flown 09:09:23.00 09:20:32.00
fiducial no. 4280 4949
line location 8291929 8291953
client BHP
job 1297
area Borroloola
scale 1:50000



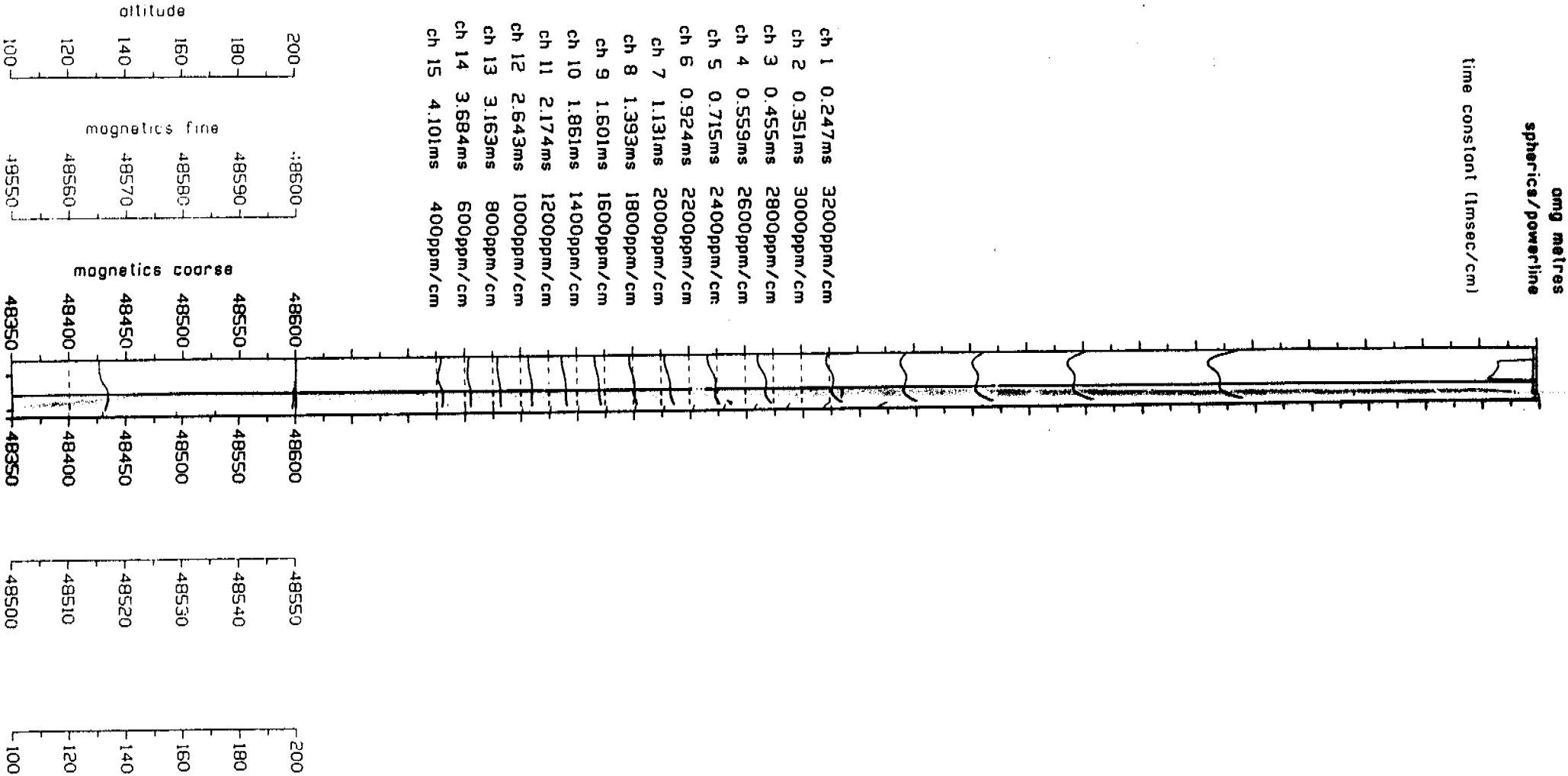
AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 10770
flight no. 29
direction 90
date flown 12jun92
time flown 09:22:19.00 09:35:35.00
fiducial no. 4981 5777
line location 8292983 8292997
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

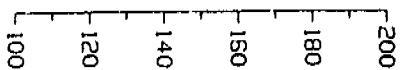
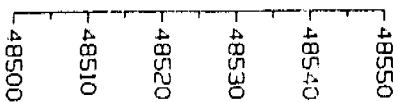
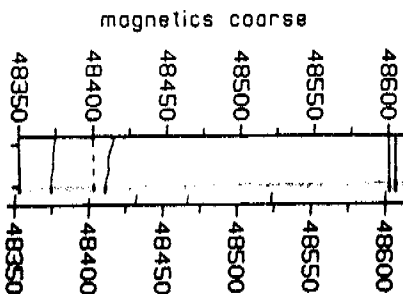
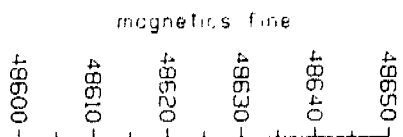
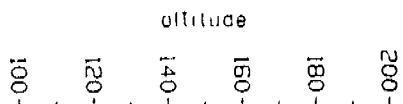
line no. 10760
flight no. 29
direction 270
date flown 12jun92
time flown 09:37:22.00 09:48:11.00
fiducial no. 5808 6457
line location 8293959 8293960
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10750
flight no. 29
direction 90
date flown 12jun92
time flown 09:54:59.00 10:07:16.00
fiducial no. 6509 7246
line location 8294966 8294984
client BHP
job 1297
area Barroolola
scale 1:50000



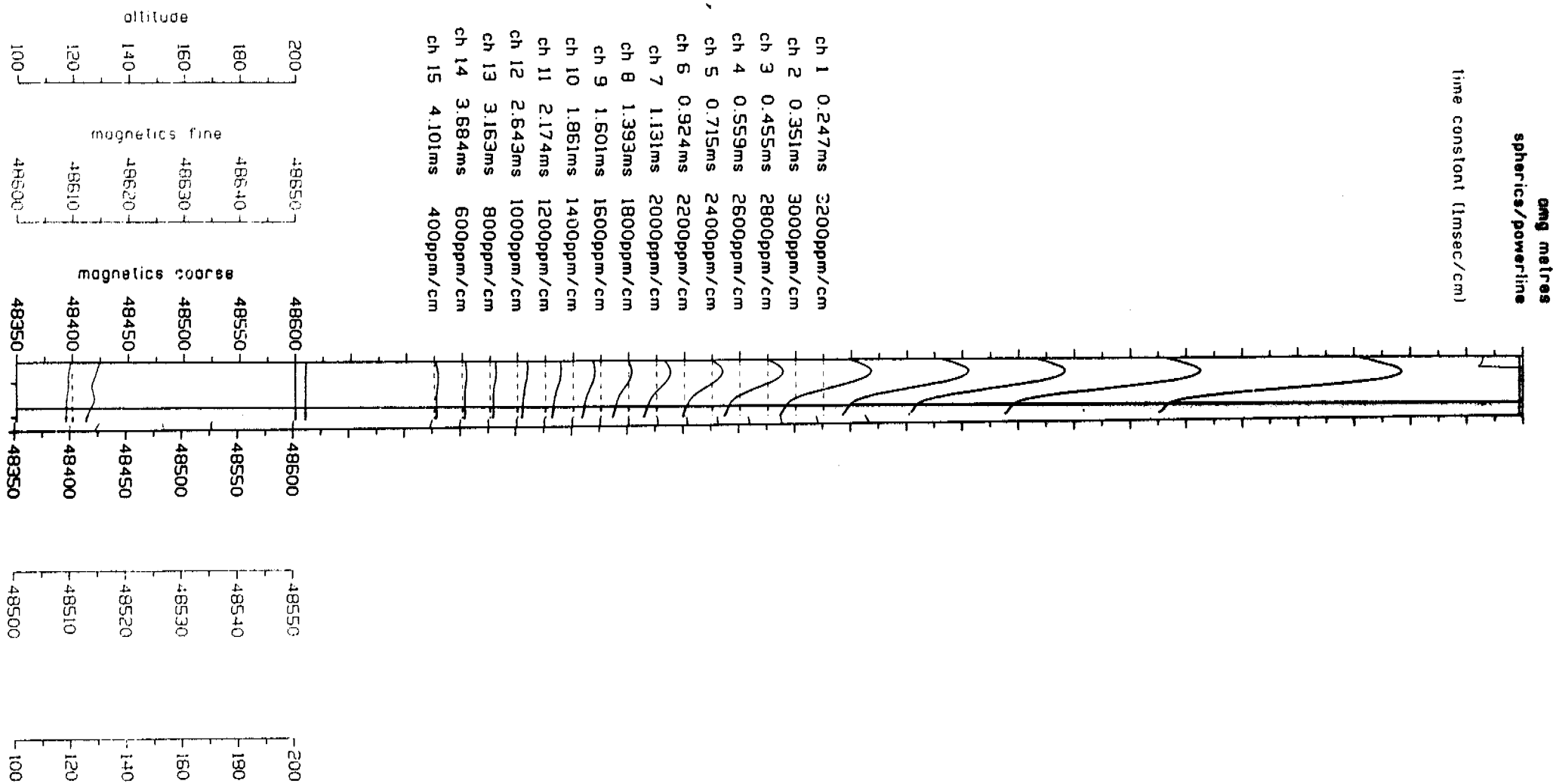
ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

time constant (lmsec/cm)

omg metres
spherics/powerline

AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

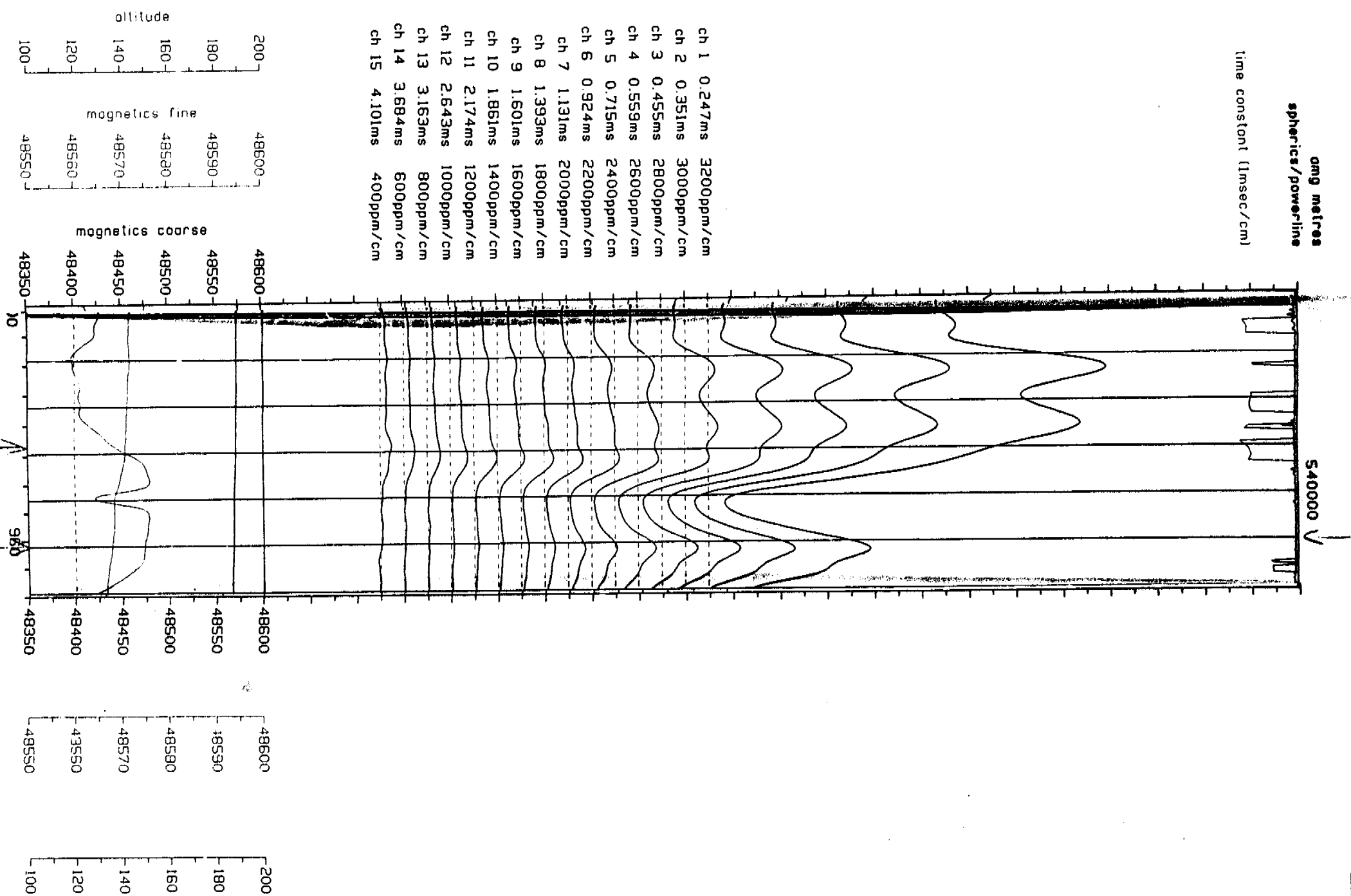
line no. 10740
flight no. 29
direction 270
date flown 12jun92
time flown 10:09:37.00 10:20:08.00
fiducial no. 7267 7898
line location 8295972 8296015
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

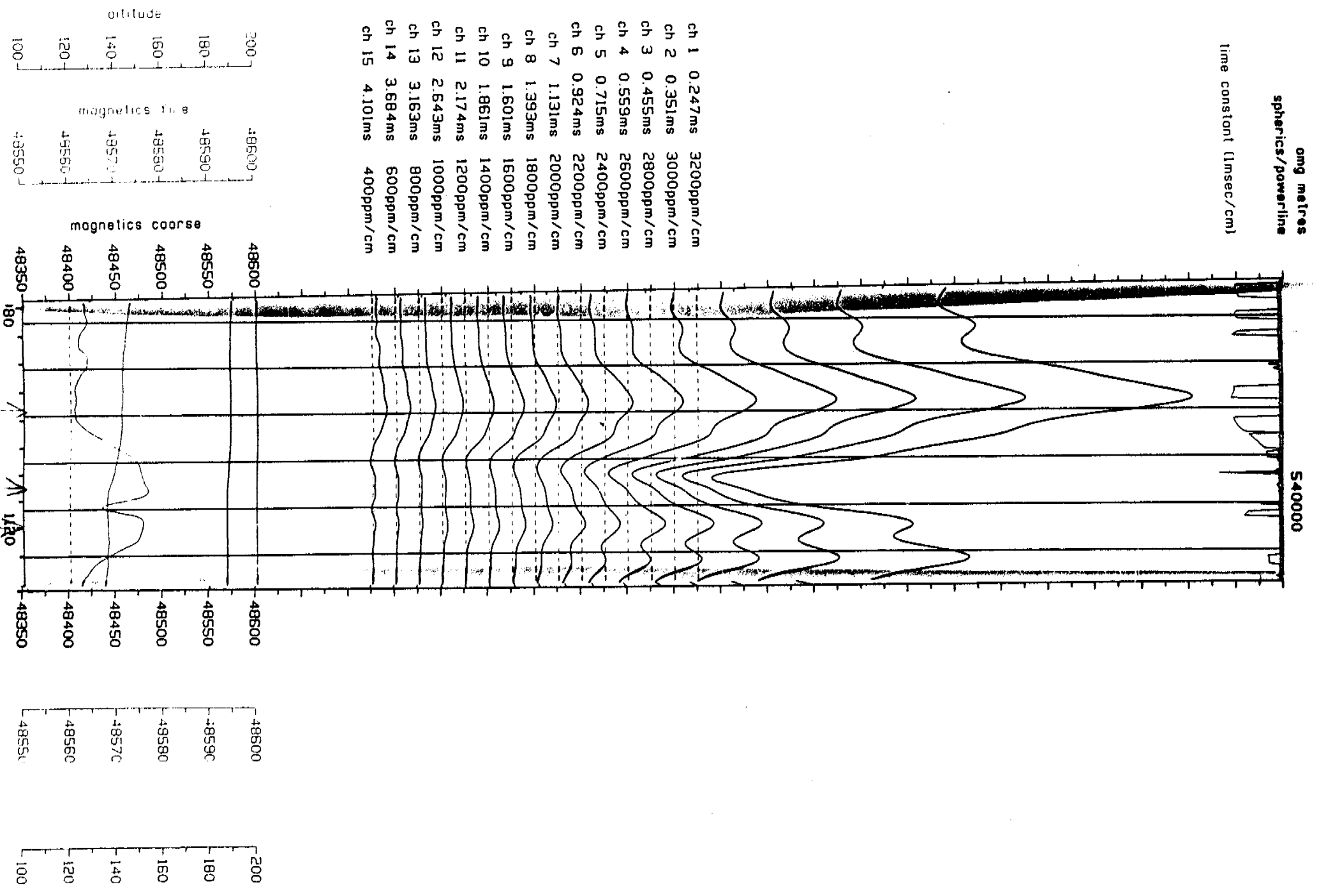
line no. 10920
 flight no. 28
 direction 270
 date flown 11jun92
 time flown 15:00:51.00 15:16:16.00
 fiducial no. 111 1036
 line location 8278017 8278000
 client BHP
 job 1297
 area Borroloola
 scale 1:50000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

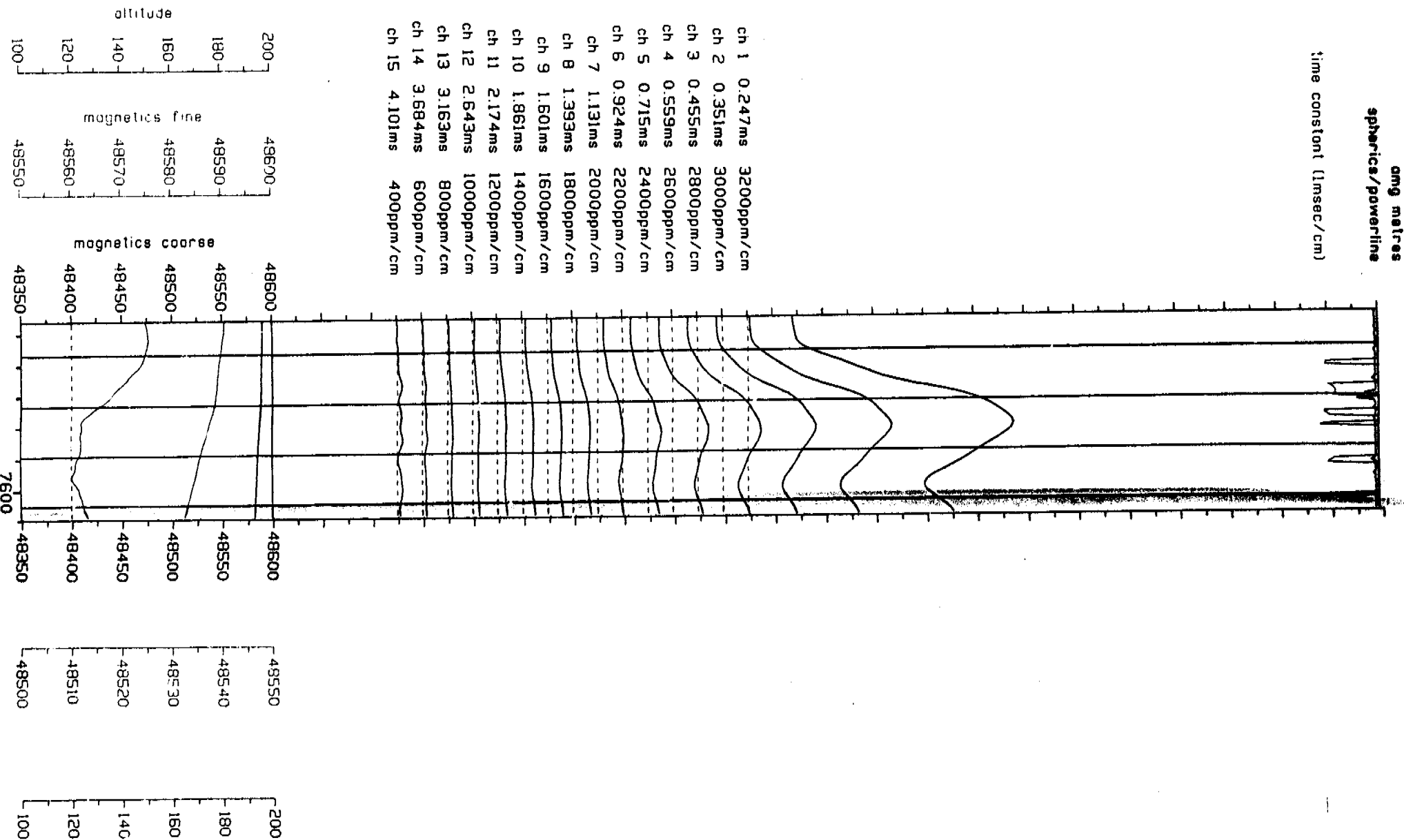
line no. 10910
flight no. 28
direction 90
date flown 11jun92
time flown 15:17:39.00 15:33:35.00
fiducial no. 1047 2003
line location 8279053 8278990
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

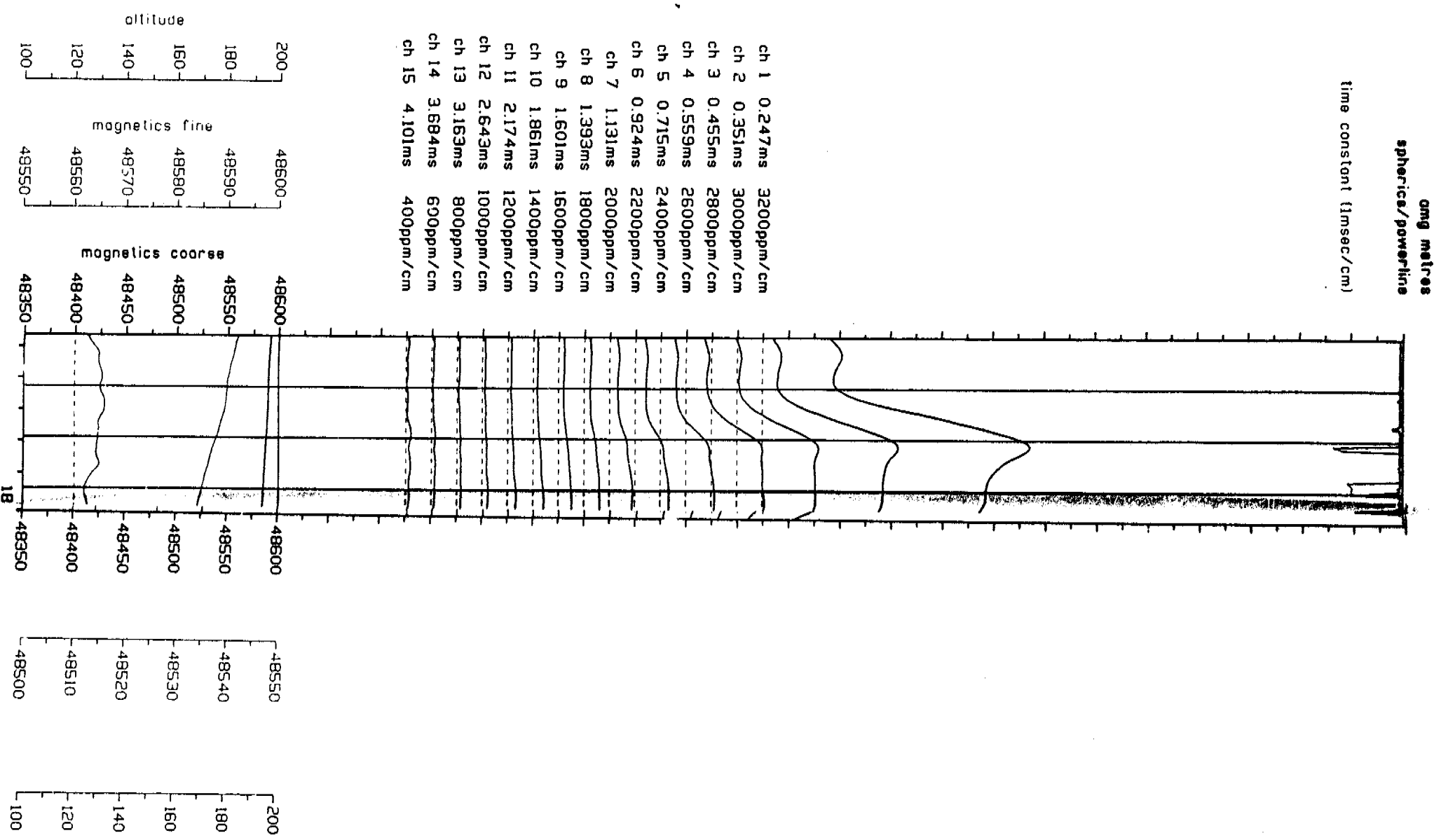
Base frequency 75.0 Hz.

line no. 10830
flight no. 28
direction 90
date flown 11jun92
time flown 17:22:28.00 17:34:53.00
fiducial no. 7573 8318
line location 8287002 8286956
client BHP
job 1297
area Barrooloola
scale 1:50000



AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 10821
flight no. 29
direction 270
date flown 12jun92
time flown 08:11:59.00 08:23:06.00
fiducial no. 1160 1827
line location 8287941 8287998
client BHP
job 1297
area Borroloola
scale 1:50000



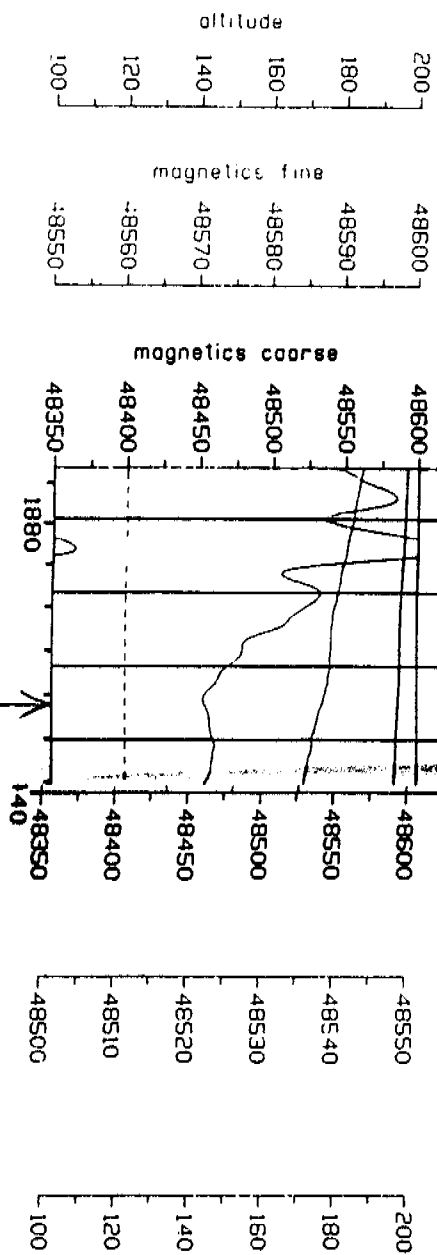
AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10810
flight no. 29
direction 90
date flown 12jun92
time flown 08:25:25.00 08:39:02.00
fiducial no. 1873 2690
line location 8289005 8288994
client BHP
job 1297
area Borroloola
scale 1:50000

ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

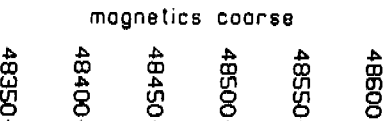
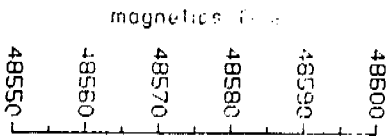
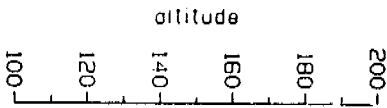
ang metres
spherics/powerline
time constant (lmsec/cm)



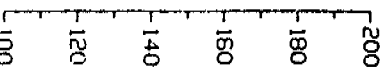
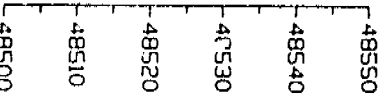
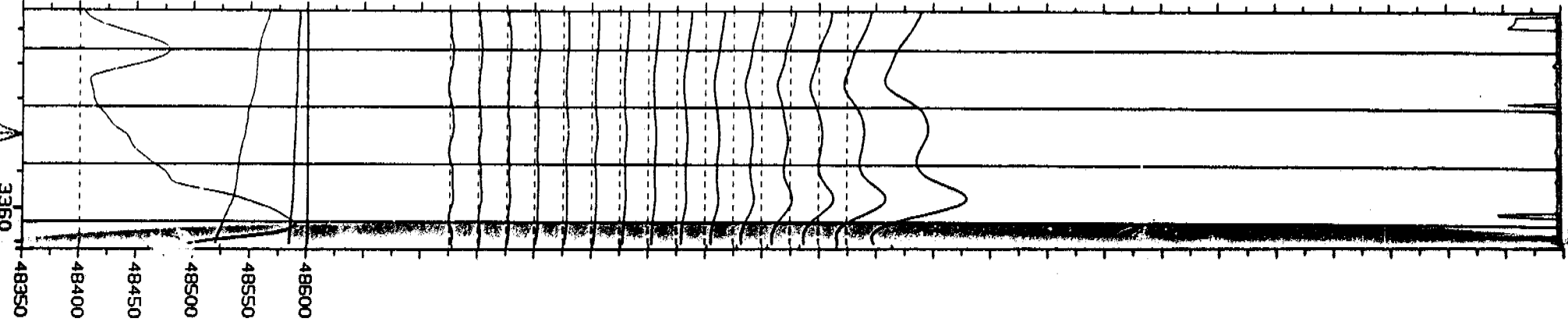
AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10800
flight no. 29
direction 270
date flown 12jun92
time flown 08:40:49.00 08:52:02.00
fiducial no. 2715 3388
line location 8290042 8290002
client BHP
job 1297
area Barrooloola
scale 1:50000



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm



cmg metres
spherics/powerline
time constant (1msec/cm)

AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 11000
 flight no. 24
 direction 270
 date flown 10 Jun 92
 time flown 16:54:16.00 17:09:35.00
 fiducial no. 3638 4557
 line location 8270032 8269970
 client BHP
 job 1297
 area Borroloola
 scale 1:50000

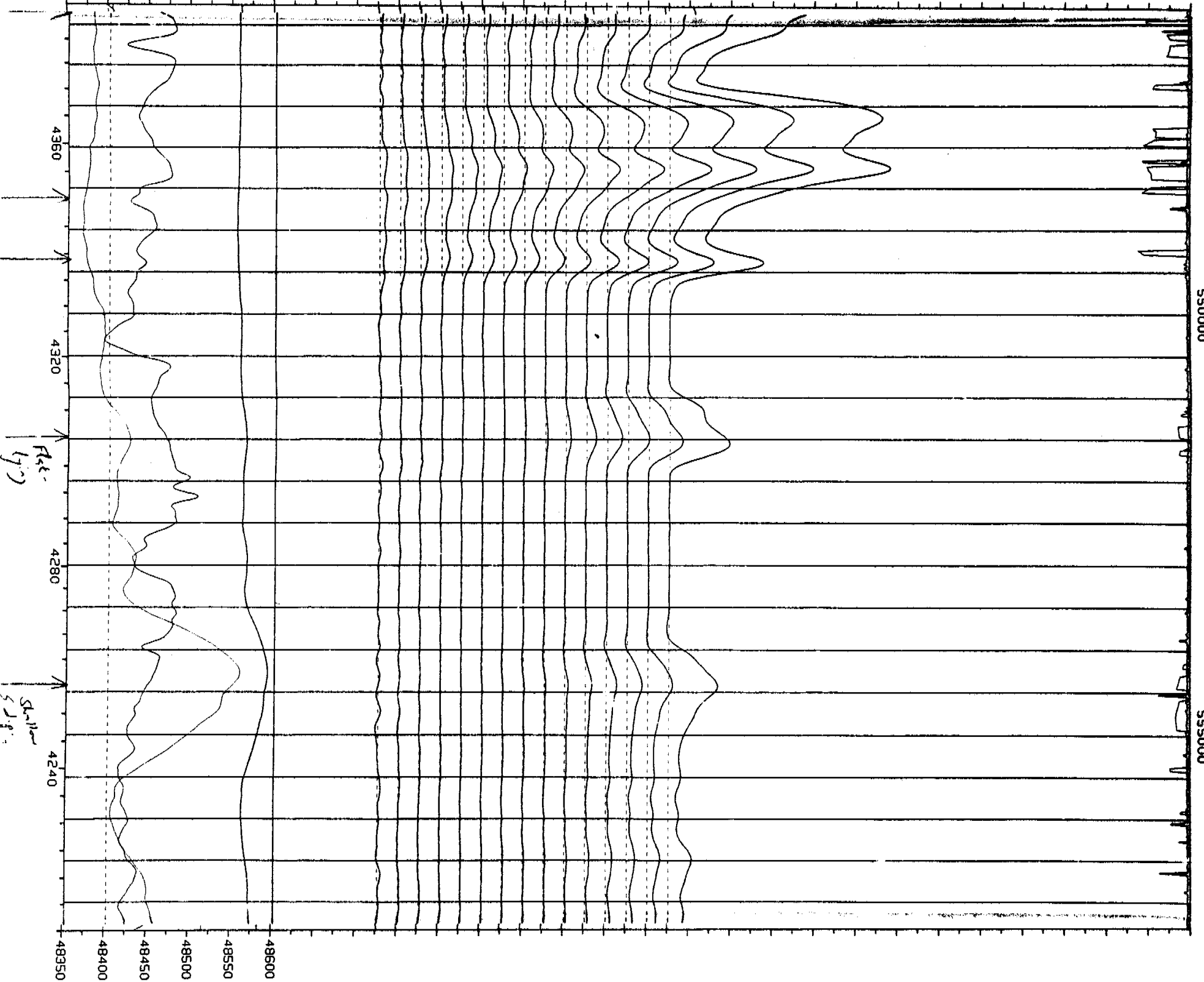
omg metres
 spherics/powerline
 time constant (1msec/cm)

ch	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0.247ms	0.351ms	0.455ms	0.559ms	0.715ms	0.924ms	1.131ms	1.393ms	1.601ms	1.861ms	2.174ms	2.643ms	3.163ms	3.684ms	4.101ms	
3200ppm/cm	3000ppm/cm	2800ppm/cm	2600ppm/cm	2400ppm/cm	2200ppm/cm	2000ppm/cm	1800ppm/cm	1600ppm/cm	1400ppm/cm	1200ppm/cm	1000ppm/cm	800ppm/cm	600ppm/cm	400ppm/cm	

altitude
 100 120 140 160 180 200

magnetics fine
 48550 48560 48570 48580 48590 48600

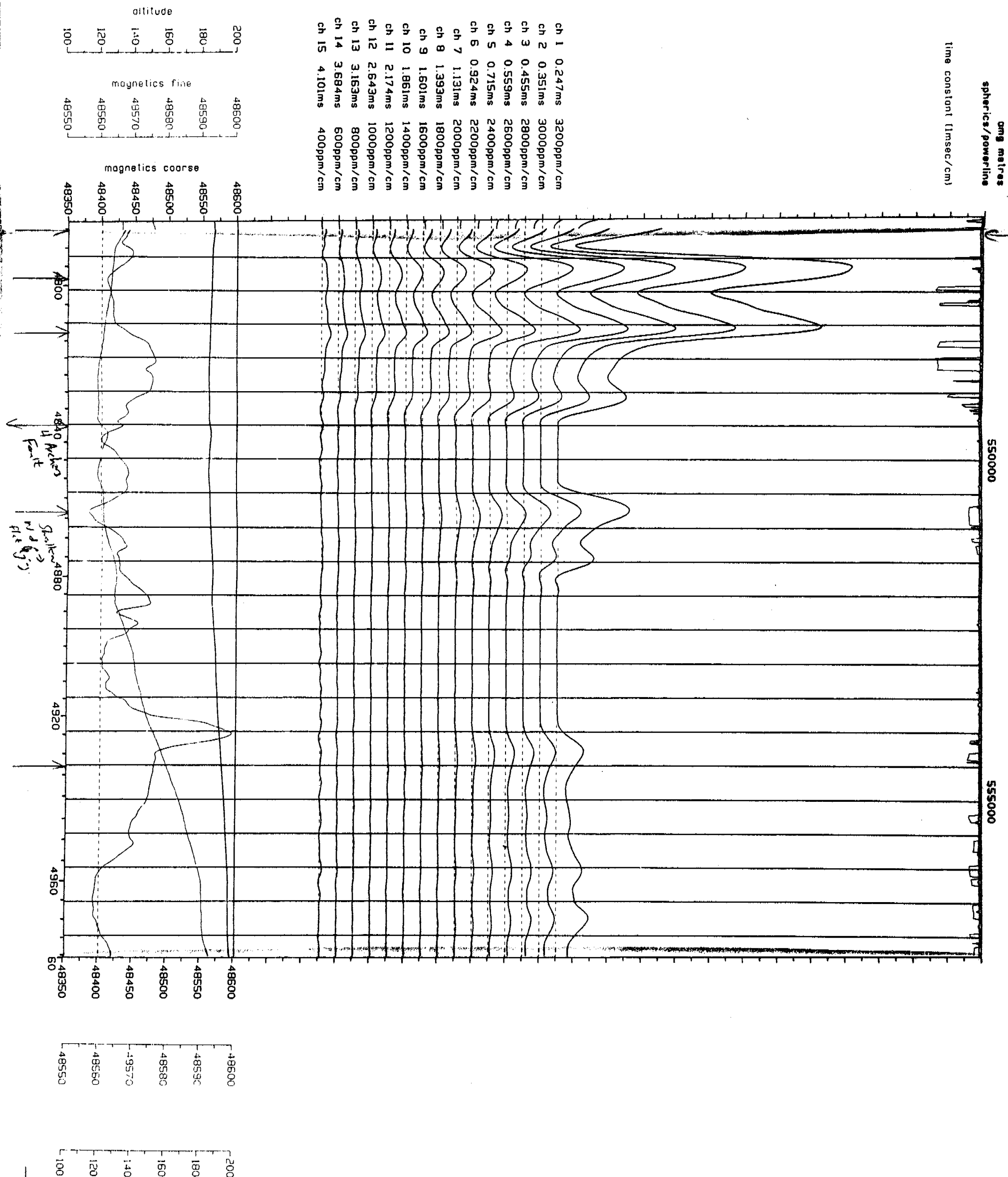
magnetics coarse
 48350 48400 48450 48500 48550 48600



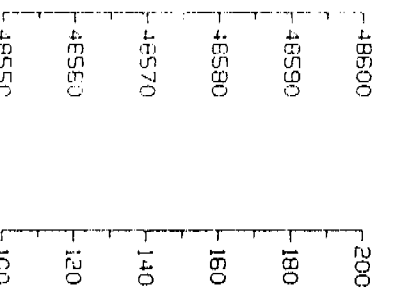
48550 48560 48570 48580 48590 48600

100 120 140 160 180 200

line no.	10990	
flight no.	24	
direction	90	
date flown	10jun92	
time flown	17:11:23.00	17:28:12.00
fiducial no.	4593	5602
line location	8271000	8270993
client	BHP	
job	1297	
area	Borroloola	
scale	1:50000	



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 10950
flight no. 25
direction 90
date flown 11jun92
time flown 09:00:24.00 09:18:35.00
fiducial no. 4354 5445
line location 8275024 8274992
client BHP
job 1297
area Borroloola
scale 1:50000

altitude
100 120 140 160 180 200

magnetics fine
48550 48560 48570 48580 48590 48600

magnetics coarse
48350 48400 48450 48500 48550 48600
4400 4440 4480

48550 48560 48570 48580 48590 48600

100 120 140 160 180 200

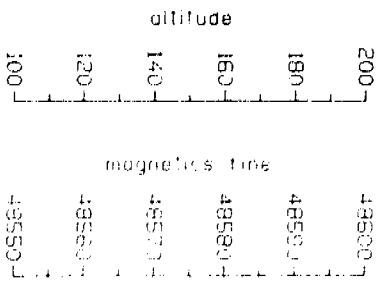
ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

cmg metres
spherics/powerline
time constant (1msec/cm)

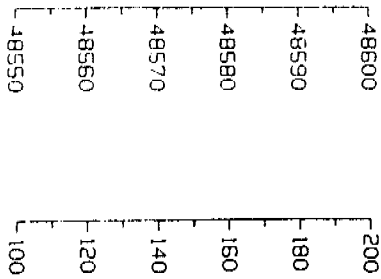
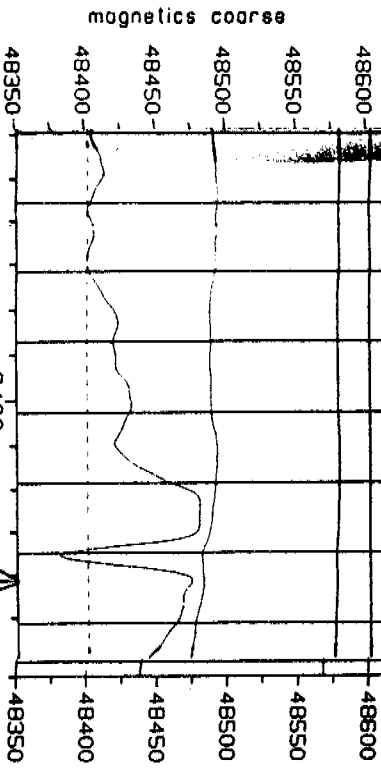
540000

AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 10941
flight no. 45
direction 270
date flown 27 jun92
time flown 09:16:51.00 09:31:57.00
fiducial no. 5553 6459
line location 8276025 8275960
client BHP
job 1297
area Barroololo
scale 1:50000



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm



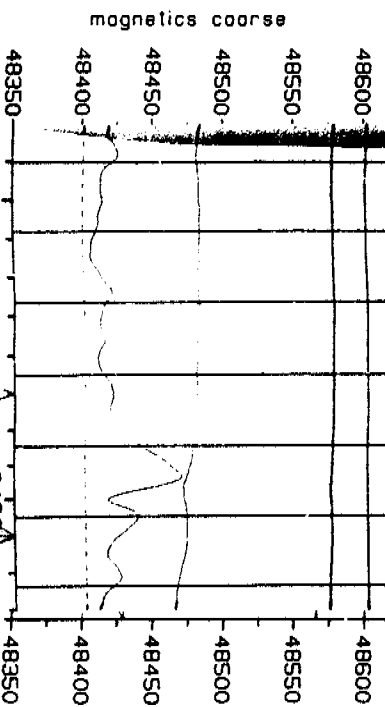
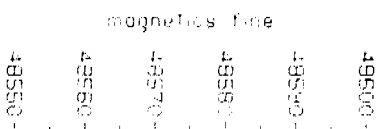
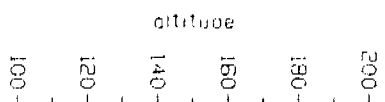
cmg metres
spherics/powerline
time constant (1msec/cm)

540000

AERODATA QUESTEM SYSTEM

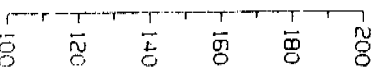
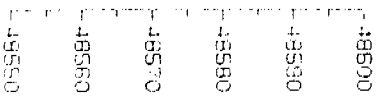
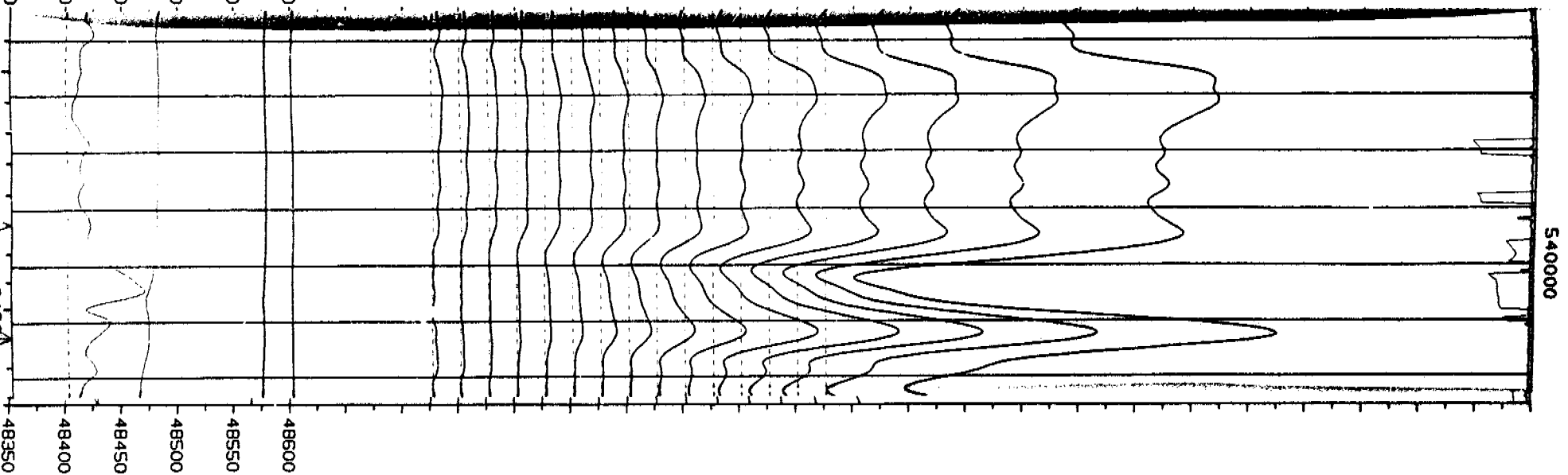
Base frequency 75.0 Hz.

line no. 10930
flight no. 25
direction 90
date flown 11jun92
time flown 09:37:39.00 09:55:39.00
fiducial no. 6393 7473
line location 8276962 8277010
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

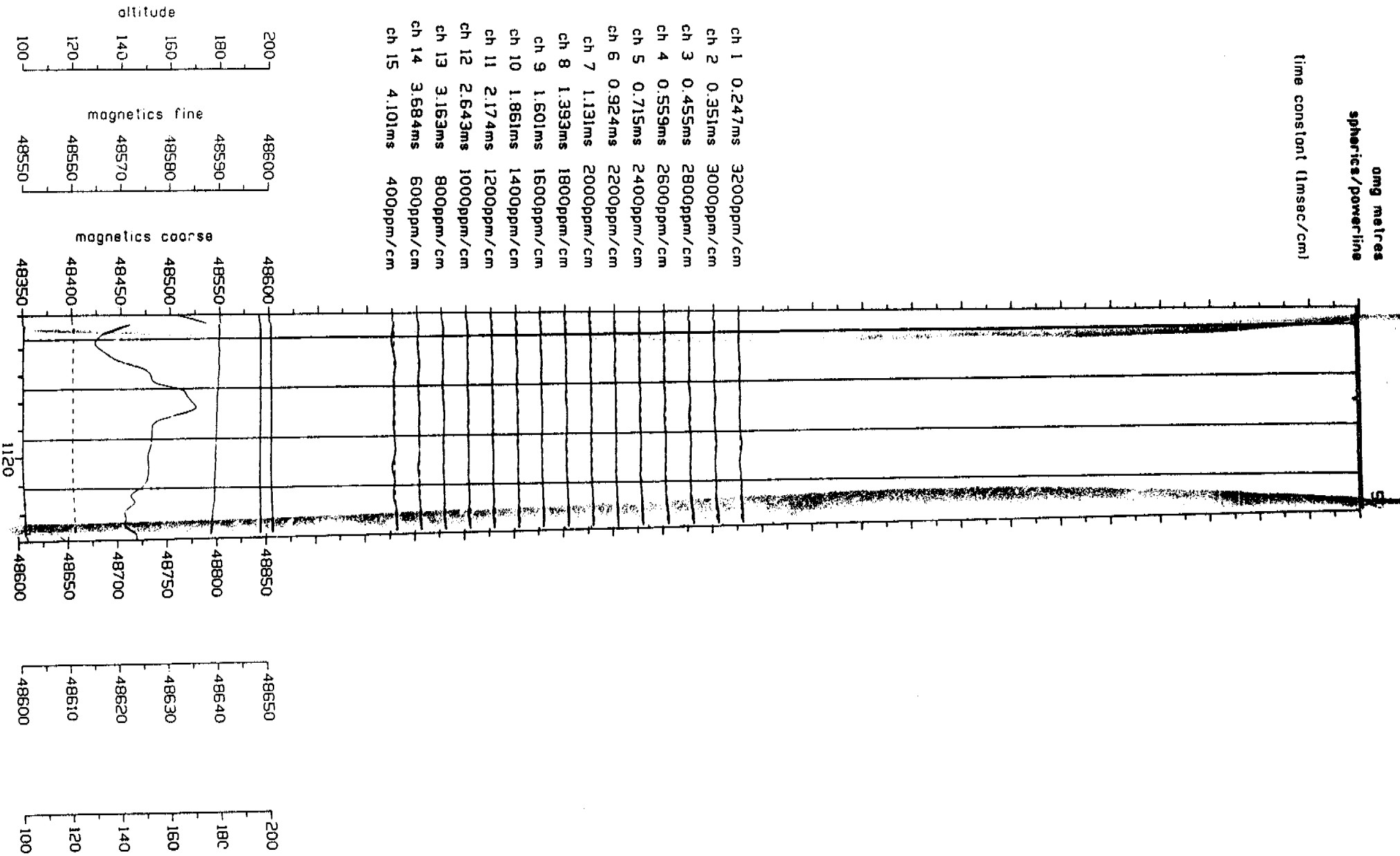
avg metres
spherics/power line
time constant (1msec/cm)



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

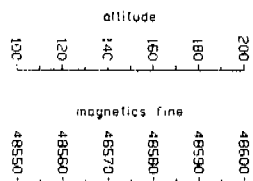
line no. 11041
flight no. 46
direction 270
date flown 27 jun 92
time flown 11:40:10.00 11:53:58.00
fiducial no. 824 1652
line location 8265964 8265972
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

Bose frequency 75.0 Hz

line no. 11041
flight no. 46
direction 270
date flown 27 Jun 92
time flown 11:40:10.00 11:53:58.00
fiducial no. 824 1652
line location 8265964 8265972
client BHP
job 1297
area Borraloola
scale 1:50000

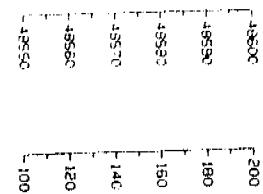
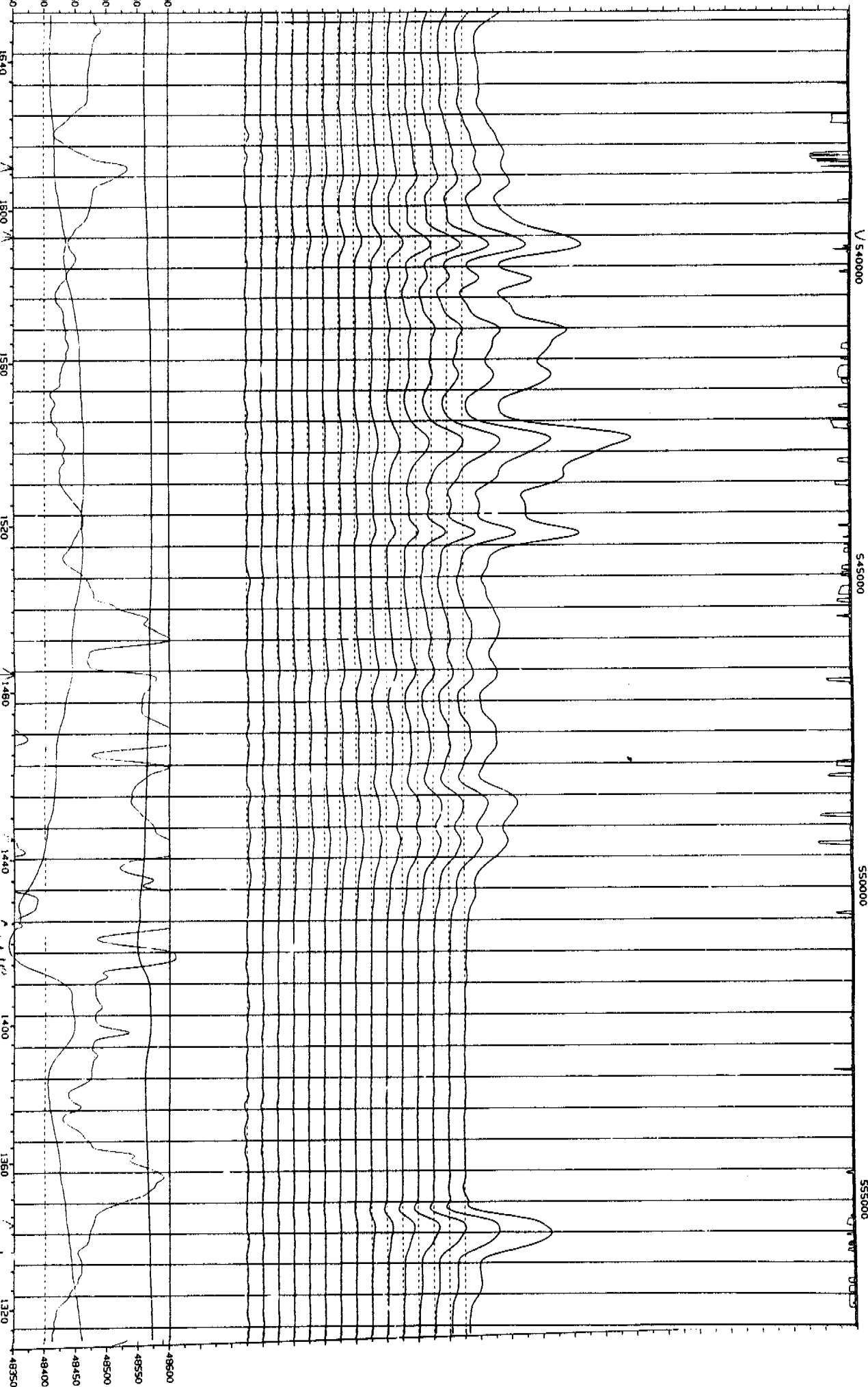


magnetics coarse

48350 48400 48450 48500 48550 48600

ch 1 0.247ms 3200000/cm
ch 2 0.351ms 3000000/cm
ch 3 0.455ms 2800000/cm
ch 4 0.559ms 2600000/cm
ch 5 0.715ms 2400000/cm
ch 6 0.924ms 2200000/cm
ch 7 1.131ms 2000000/cm
ch 8 1.339ms 1800000/cm
ch 9 1.571ms 1600000/cm
ch 10 1.861ms 1400000/cm
ch 11 2.174ms 1200000/cm
ch 12 2.643ms 1000000/cm
ch 13 3.163ms 800000/cm
ch 14 3.684ms 600000/cm
ch 15 4.101ms 400000/cm

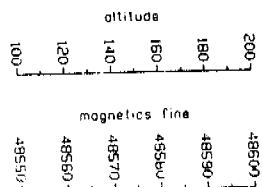
ong metres
spheres/powerline
time constant 1ms/cm



AERODATA QUESTEM SYSTEM

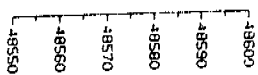
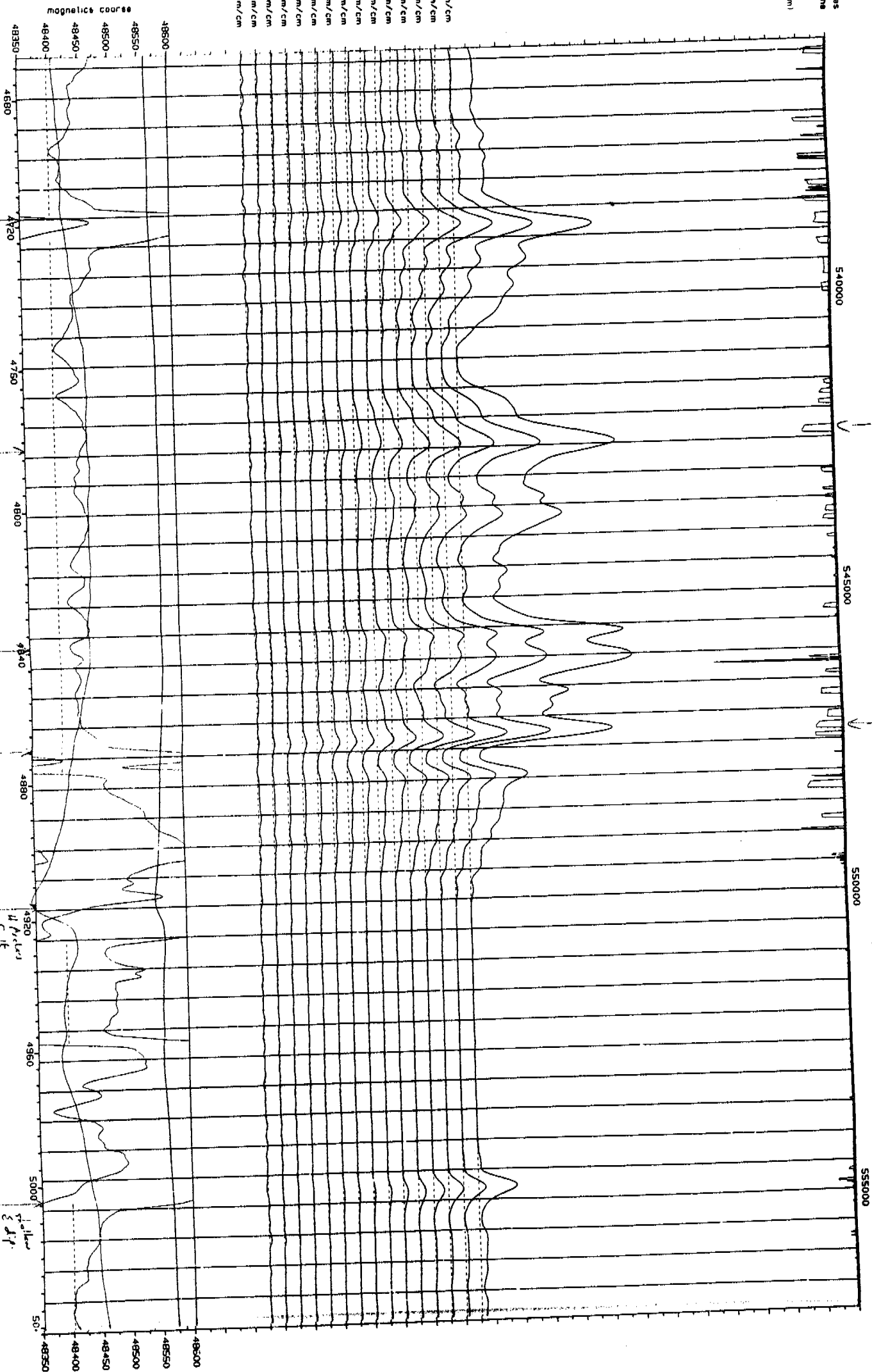
Base frequency 75.0 Hz.

line no 11030
flight no 23
direction 90
date flown 10jun92
time flown 12:17:23.00 12:33:42.00
fiducial no. 4667 5646
line location 8267050 8266935
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 800ppm/cm
ch 13 3.163ms 600ppm/cm
ch 14 3.684ms 400ppm/cm
ch 15 4.101ms 200ppm/cm

mg metres
spheres/pixel/line
time constant (1ms/cm)



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

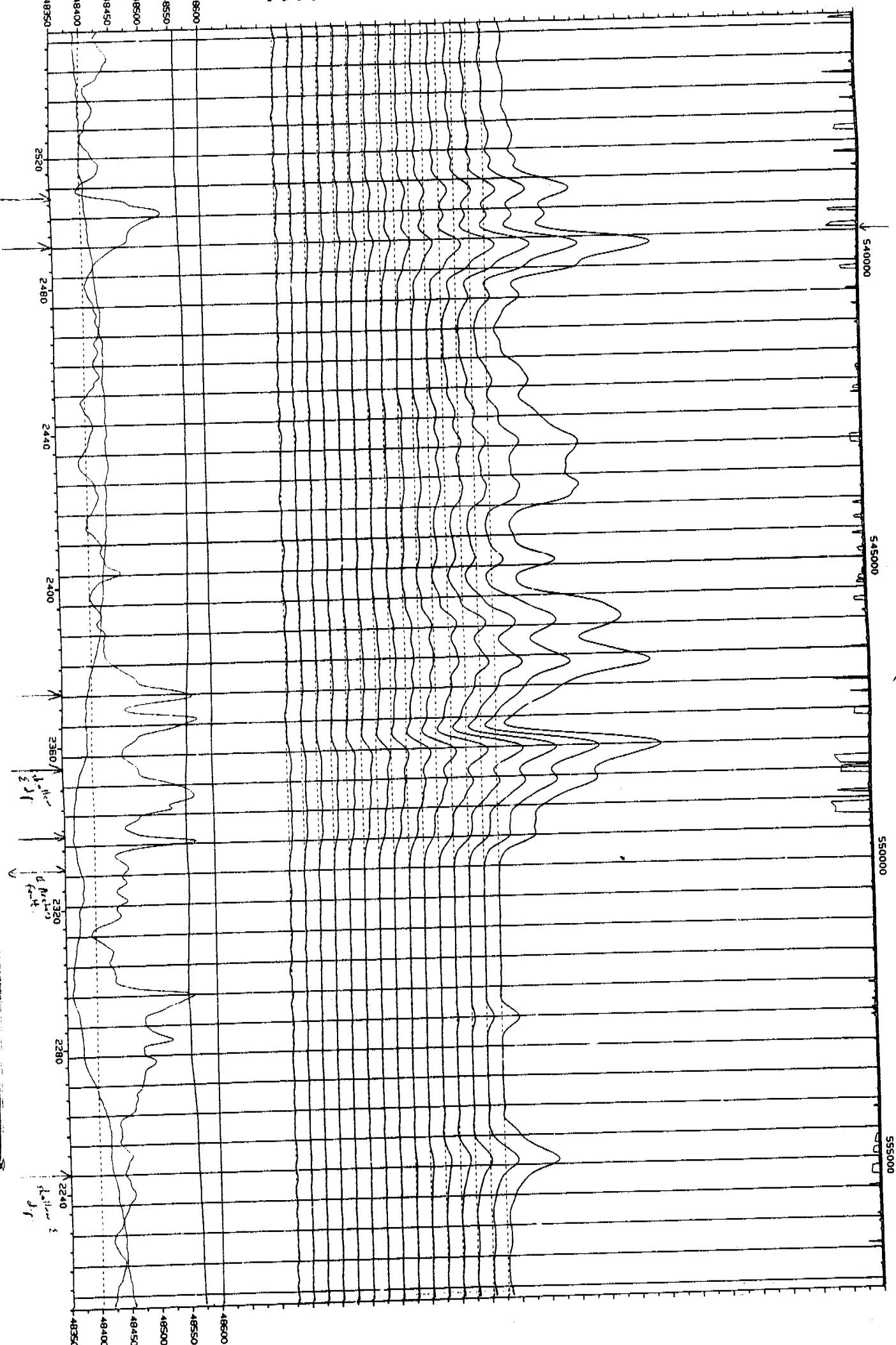
line no. 11020
flight no. 24
direction 270
date flown 10jun92
time flown 16:18:01.00 16:33:39.00
fiducial no. 1616 2554
line location 8268039 8268018
client BHP
job 1297
area Barro Colorado
scale 1:50000

ung metres
spheres/powerline
time constant (1msec/cm)

ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.339ms 1800ppm/cm
ch 9 1.501ms 1600ppm/cm
ch 10 1.61ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

altitude
100 120 140 160 180 200
magnetics fine
48550 48590 48590 48590 48590 48590

magnetics coarse
48550 48590 48590 48590 48590 48590

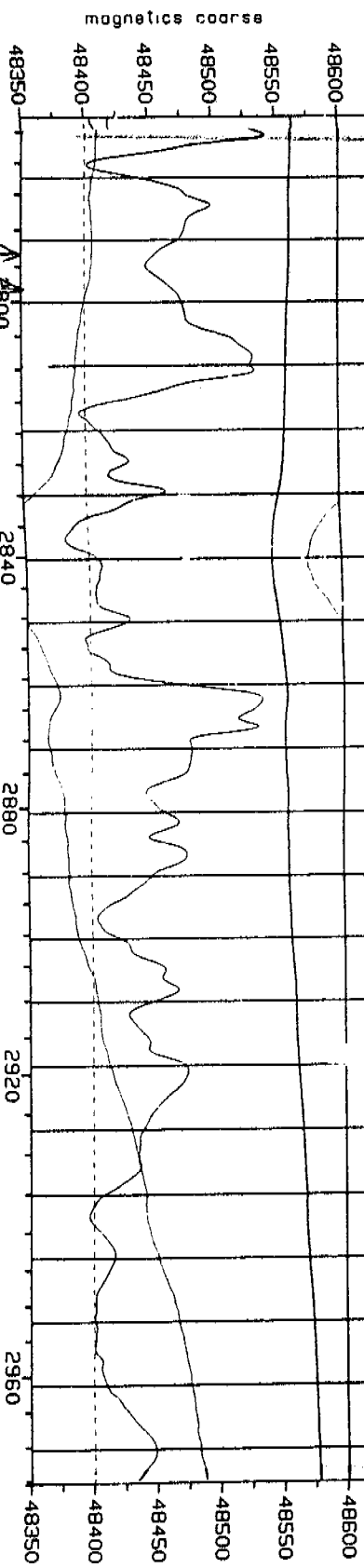
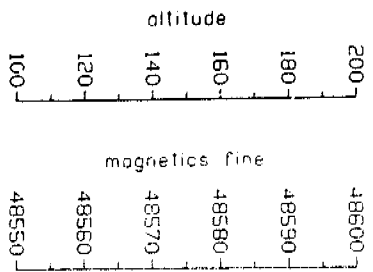


48550 48590 48590 48590 48590 48590

AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 11010
flight no. 24
direction 90
date flown 10jun92
time flown 16:35:15.00 16:52:33.00
fiducial no. 2581 3619
line location 8269000 8268982
client BHP
job 1297
area Borroloola
scale 1:50000

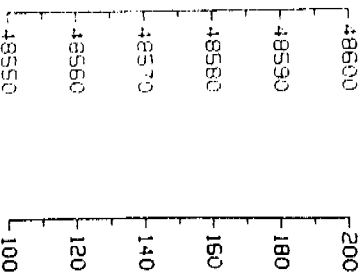


ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

ang metres
spherics/powertine
time constant (msec/cm)

550000

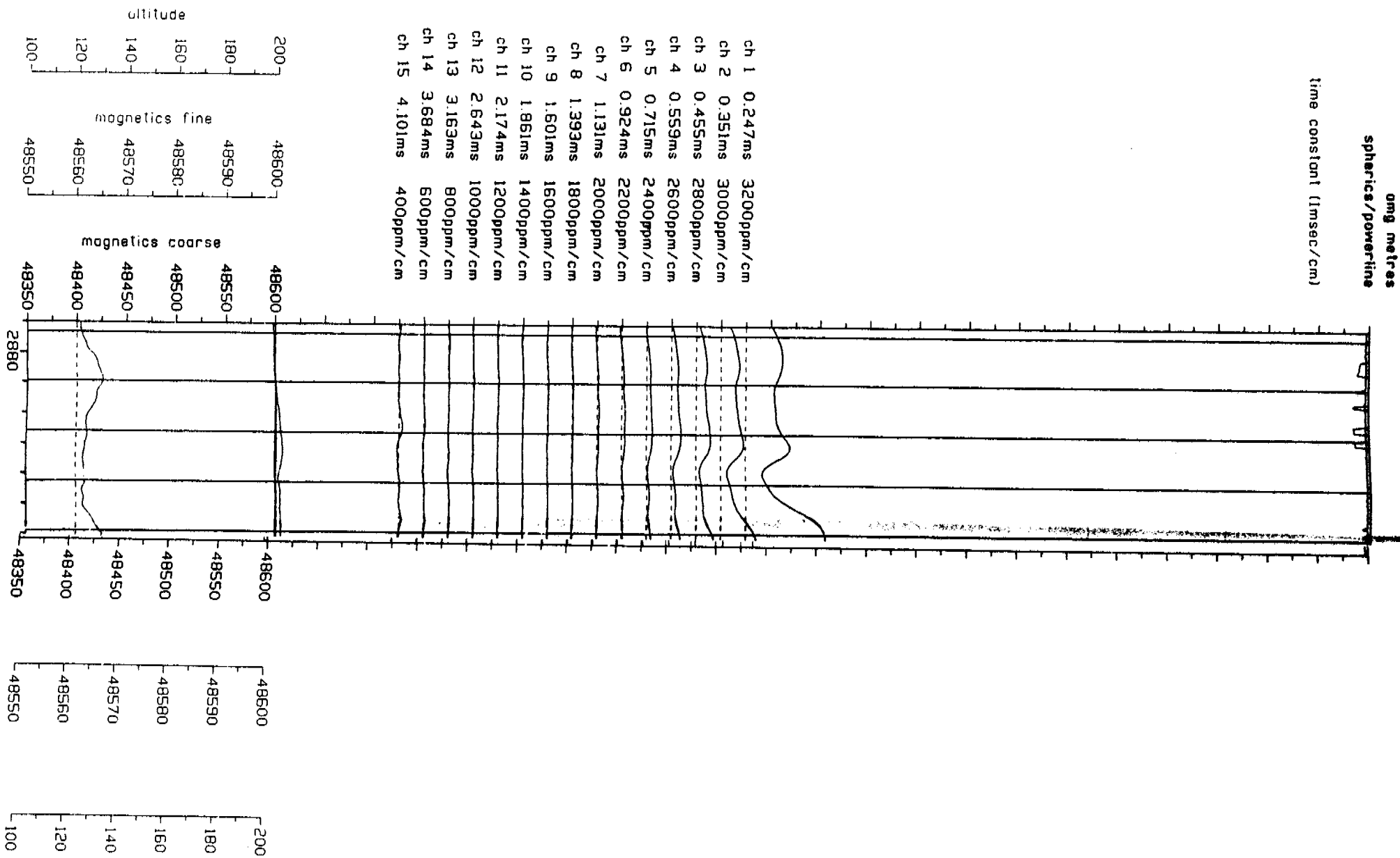
555000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

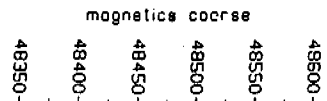
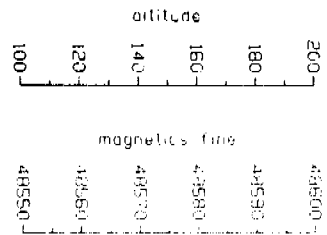
line no. 11061
flight no. 46
direction 270
date flown 27 jun 92
time flown 12:11:07.00 12:24:28.00
fiducial no. 2587 3388
line location 8263951 8263989
client BHP
job 1297
area Borrololo
scale 1:50000



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

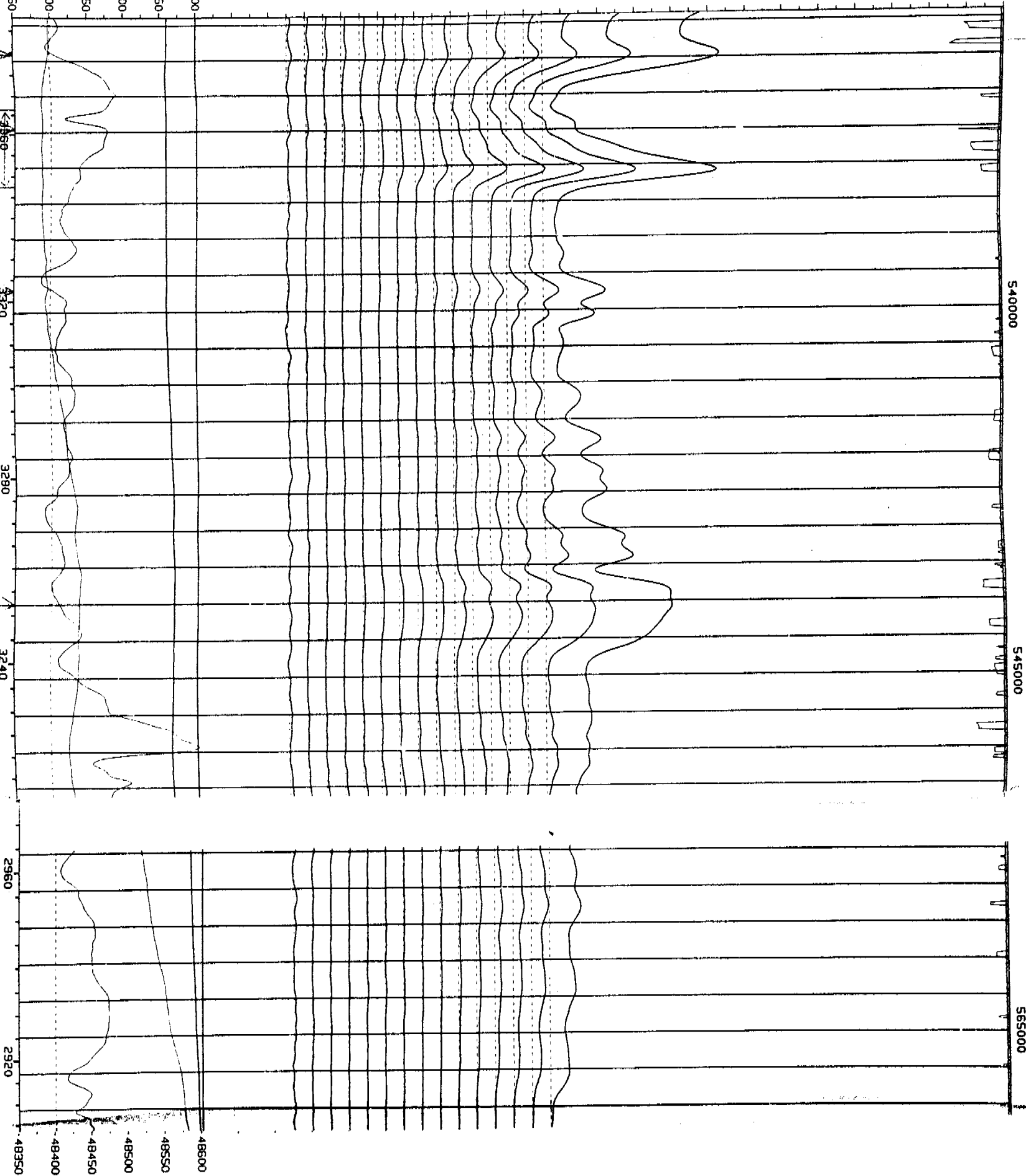
line no. 11061
flight no. 46
direction 270
date flown 27 Jun 92
time flown 12:11:07.00 12:24:28.00
fiducial no. 2587 3388
line location 8263951 8263989
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.851ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

time constant (1mssec/cm)

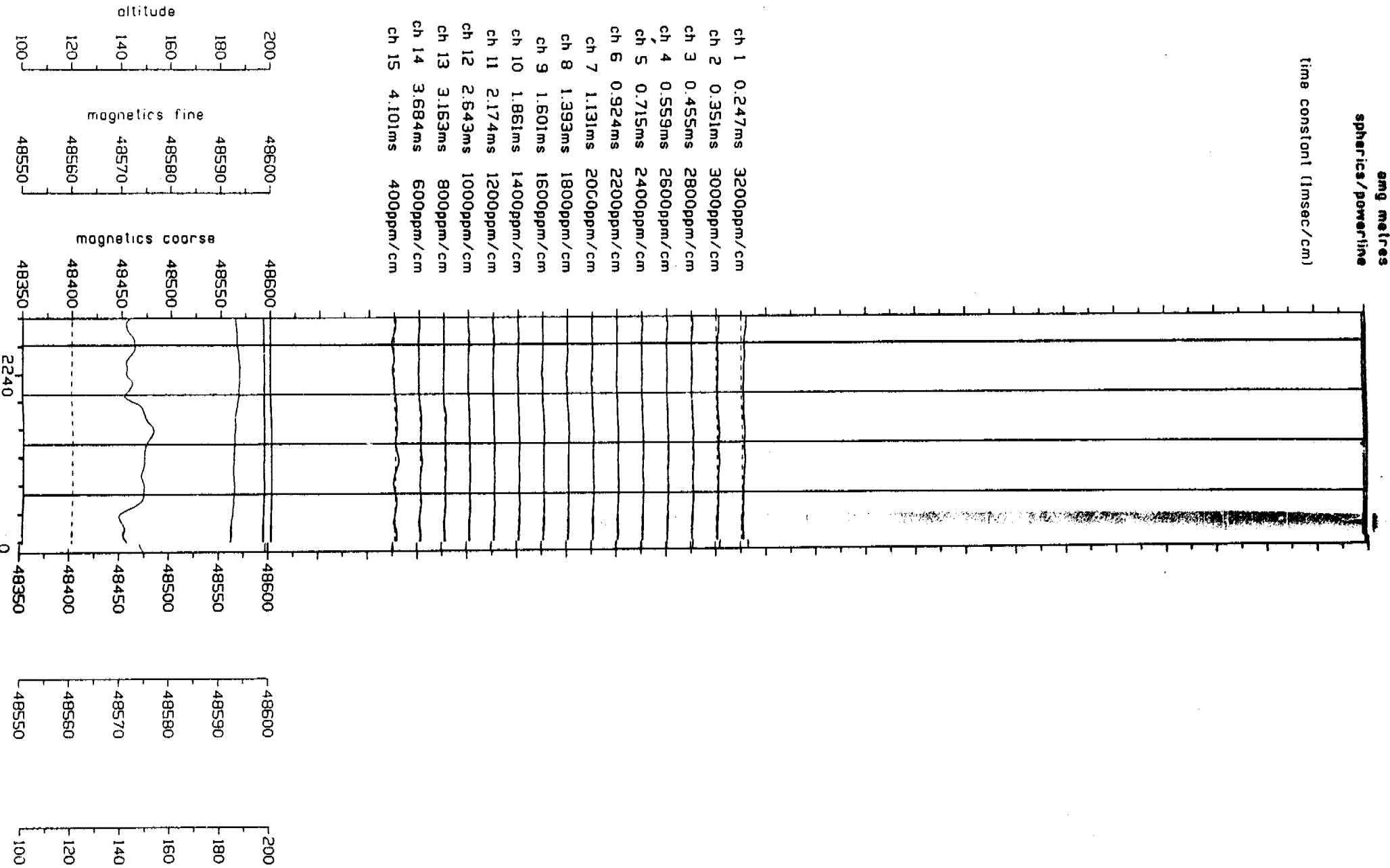
avg metres
spherics/powerline



48350
48400
48450
48500
48550
48600

AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

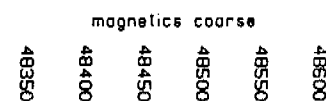
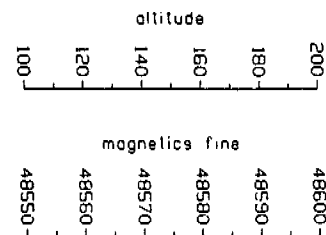
line no. 11051
flight no. 46
direction 90
date flown 27 jun 92
time flown 11:55:01.00 12:09:56.00
fiducial no. 1669 2564
line location 8264997 8264993
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

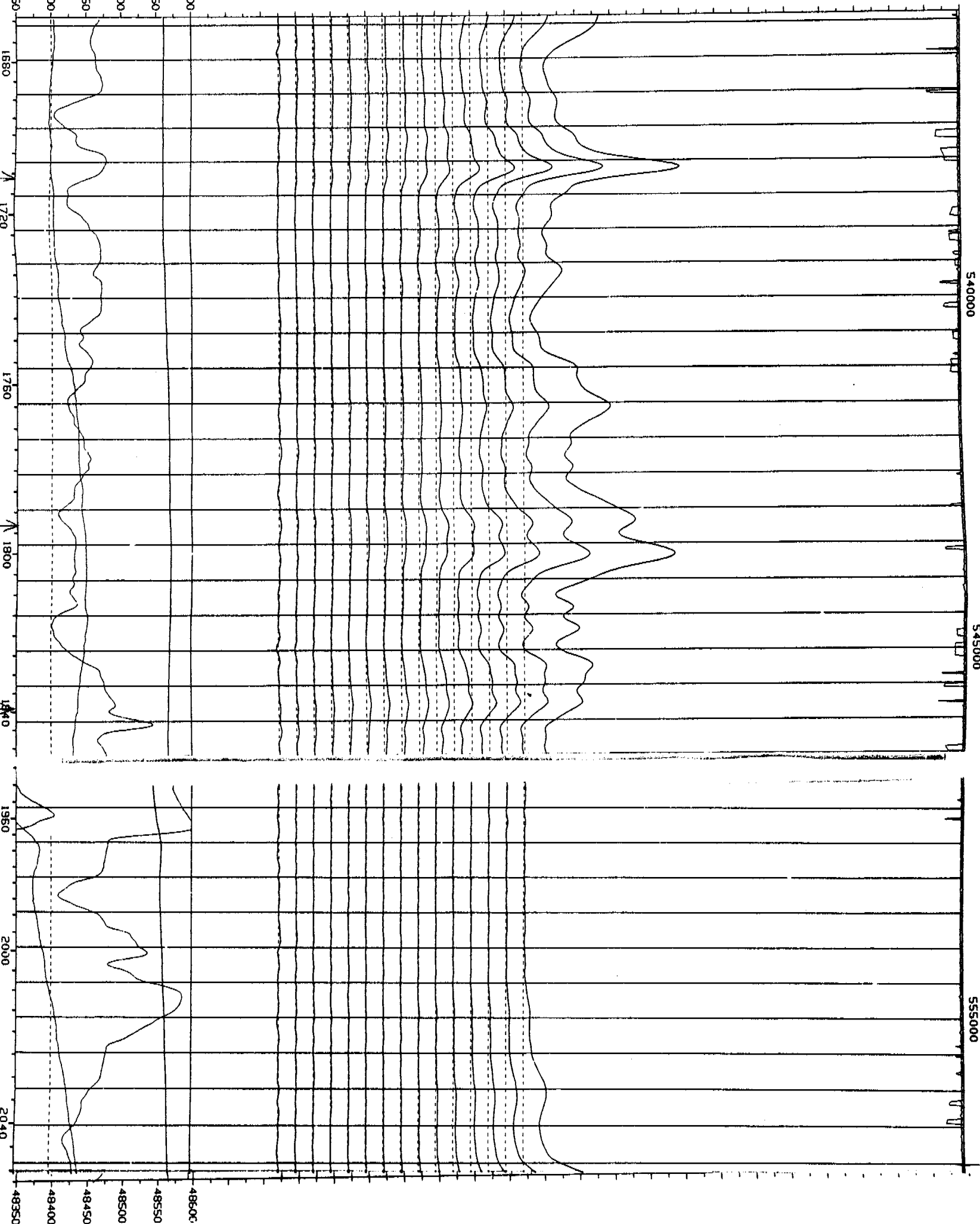
Base frequency 75.0 Hz.

line no. 11051
 flight no. 46
 direction 90
 date flown 27jun92
 time flown 11:55:01.00 12:09:56.00
 fiducial no. 1669 2564
 line location 8264997 8264993
 client BHP
 job 1297
 area Borroloola
 scale 1:50000



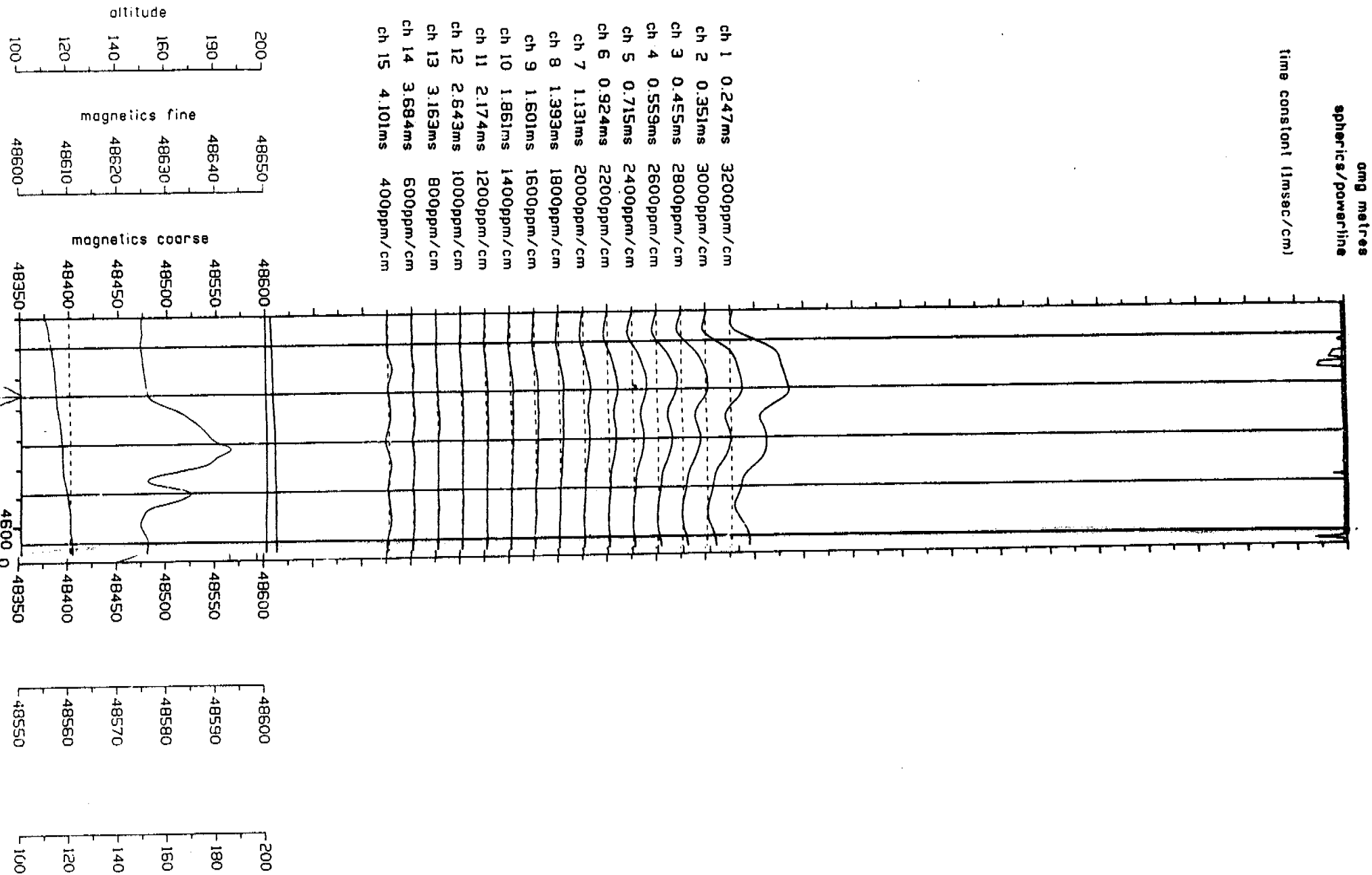
ch 1 0.247ms 3200ppm/cm
 ch 2 0.351ms 3000ppm/cm
 ch 3 0.455ms 2800ppm/cm
 ch 4 0.559ms 2600ppm/cm
 ch 5 0.715ms 2400ppm/cm
 ch 6 0.924ms 2200ppm/cm
 ch 7 1.131ms 2000ppm/cm
 ch 8 1.393ms 1800ppm/cm
 ch 9 1.601ms 1600ppm/cm
 ch 10 1.861ms 1400ppm/cm
 ch 11 2.174ms 1200ppm/cm
 ch 12 2.643ms 1000ppm/cm
 ch 13 3.163ms 800ppm/cm
 ch 14 3.684ms 600ppm/cm
 ch 15 4.101ms 400ppm/cm

mg metres
 spheres/powerline
 time constant (1ms/cm)



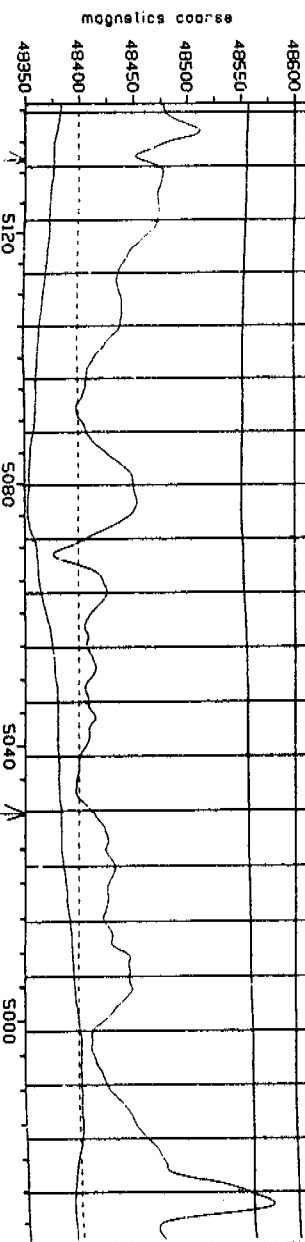
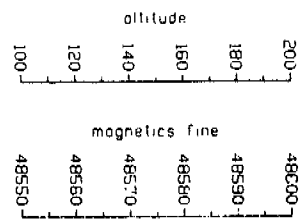
AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 11081
flight no. 46
direction 270
date flown 27 jun 92
time flown 12:43:00.00 12:56:04.00
fiducial no. 4357 5141
line location 8261967 8261952
client BHP
job 1297
area Borroloola
scale 1:50000



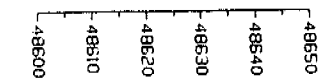
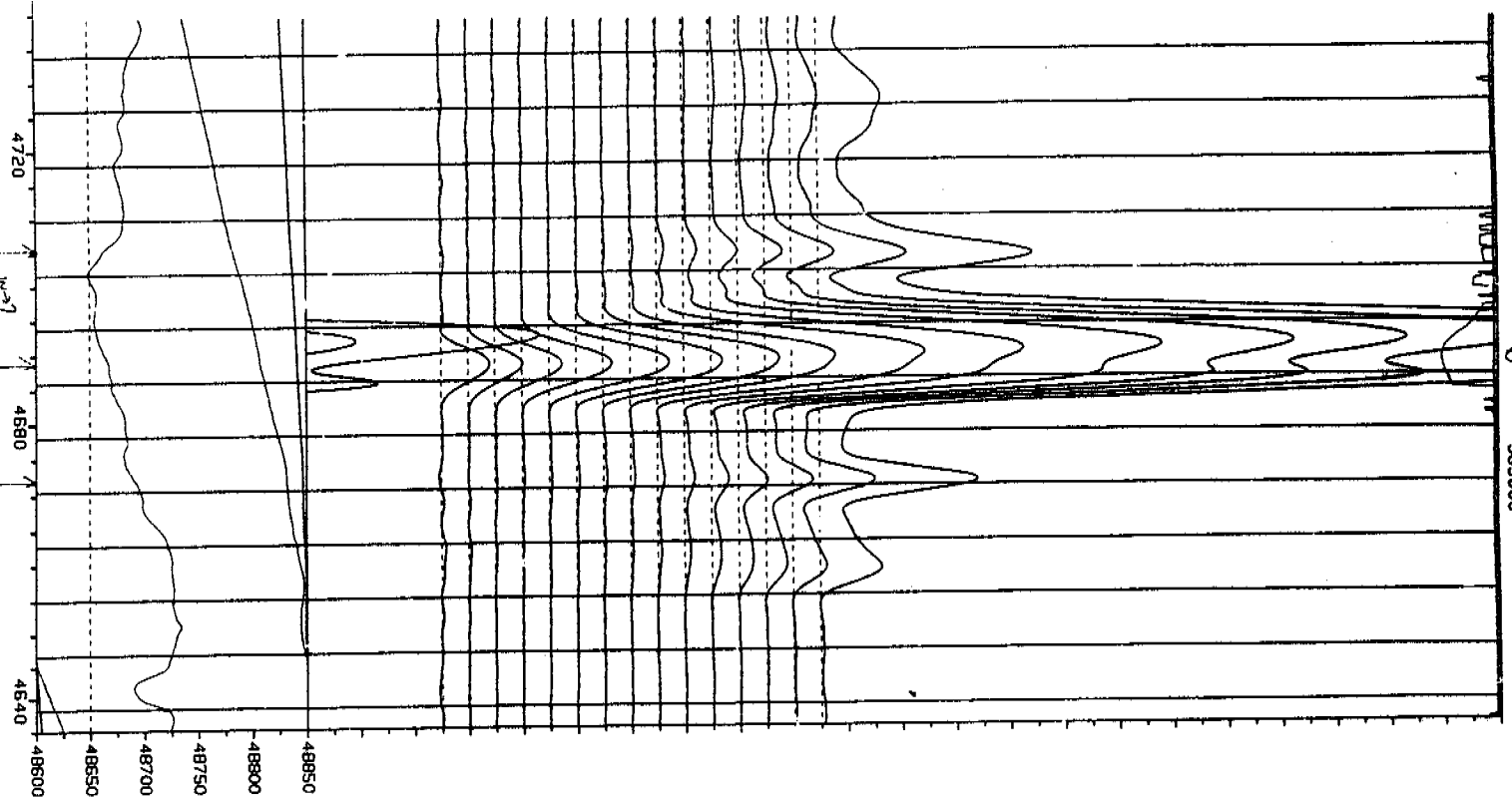
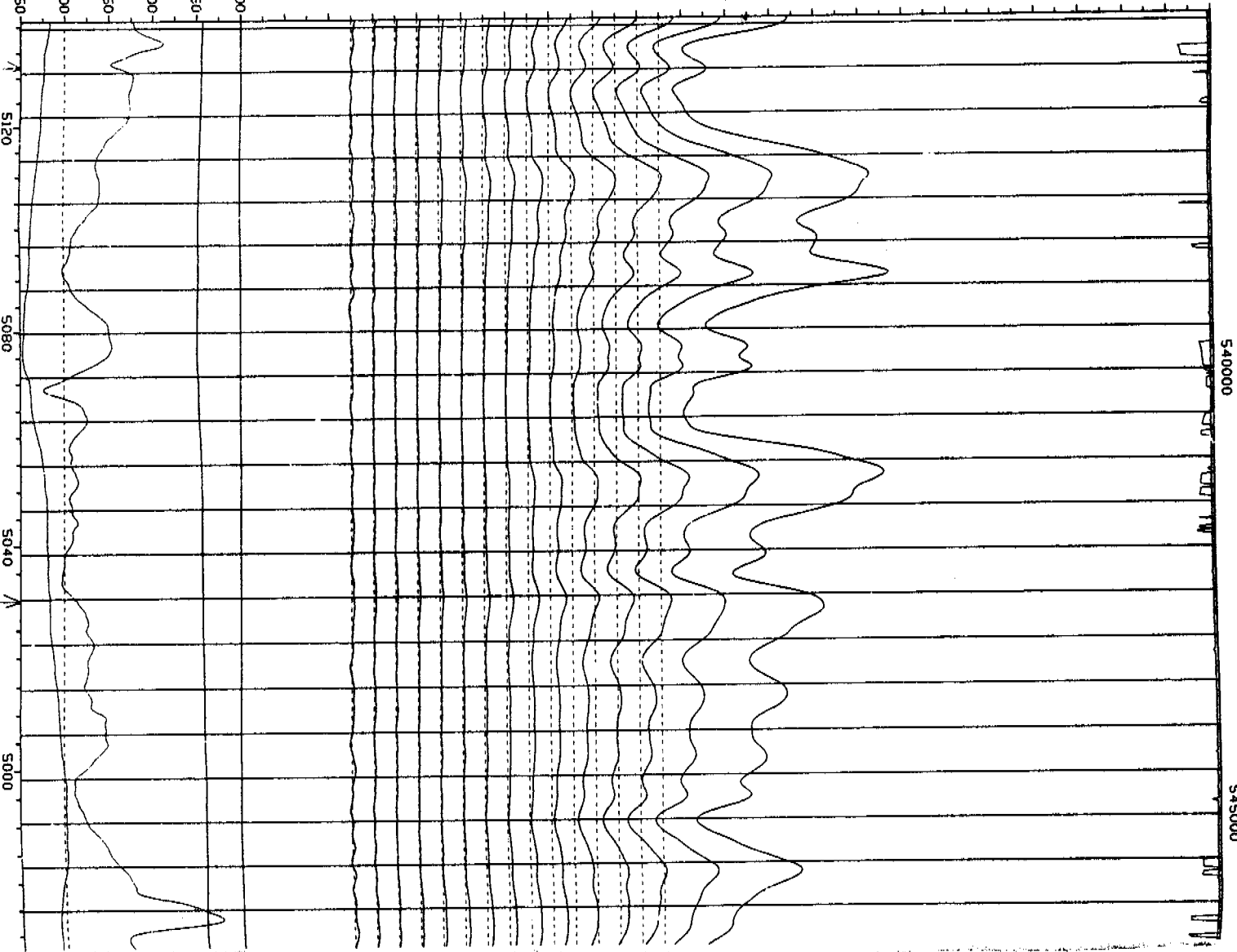
AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 11081
flight no. 46
direction 270
date flown 27 Jun 92
time flown 12:43:00.00 12:56:04.00
fiducial no. 4357 5141
line location 8261967 8261952
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.383ms 1800ppm/cm
ch 9 1.61ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

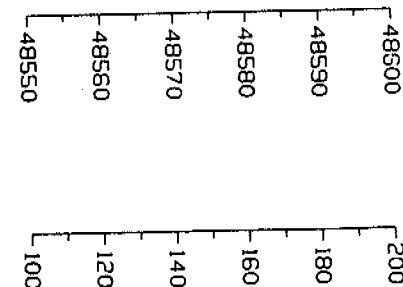
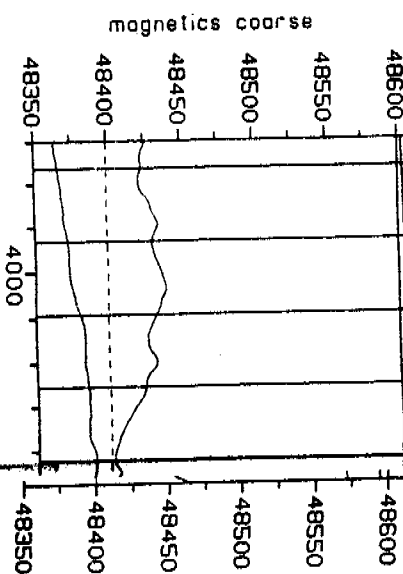
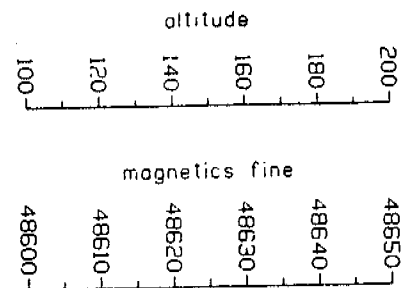
omg metres
spheres/powerline
time constant (1 msec/cm)



AERODATA QUESTEM SYSTEM

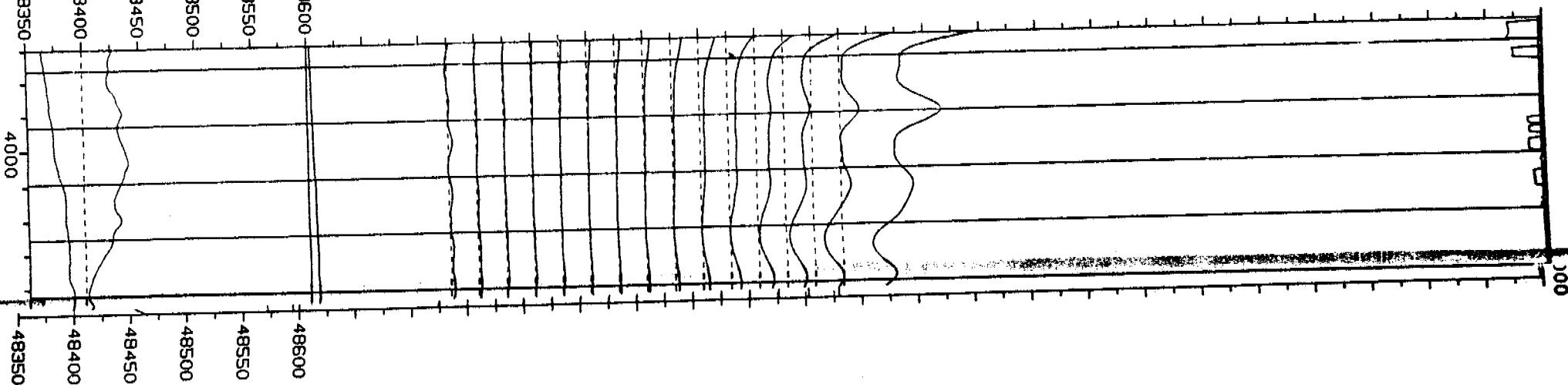
Base frequency 75.0 Hz.

line no. 11071
flight no. 46
direction 90
date flown 27 Jun 92
time flown 12:25:57.00 12:40:23.00
fiducial no. 3433 4299
line location 8263014 8263048
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

avg metres
spherical/powerline
time constant (1msec/cm)



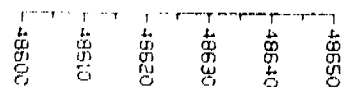
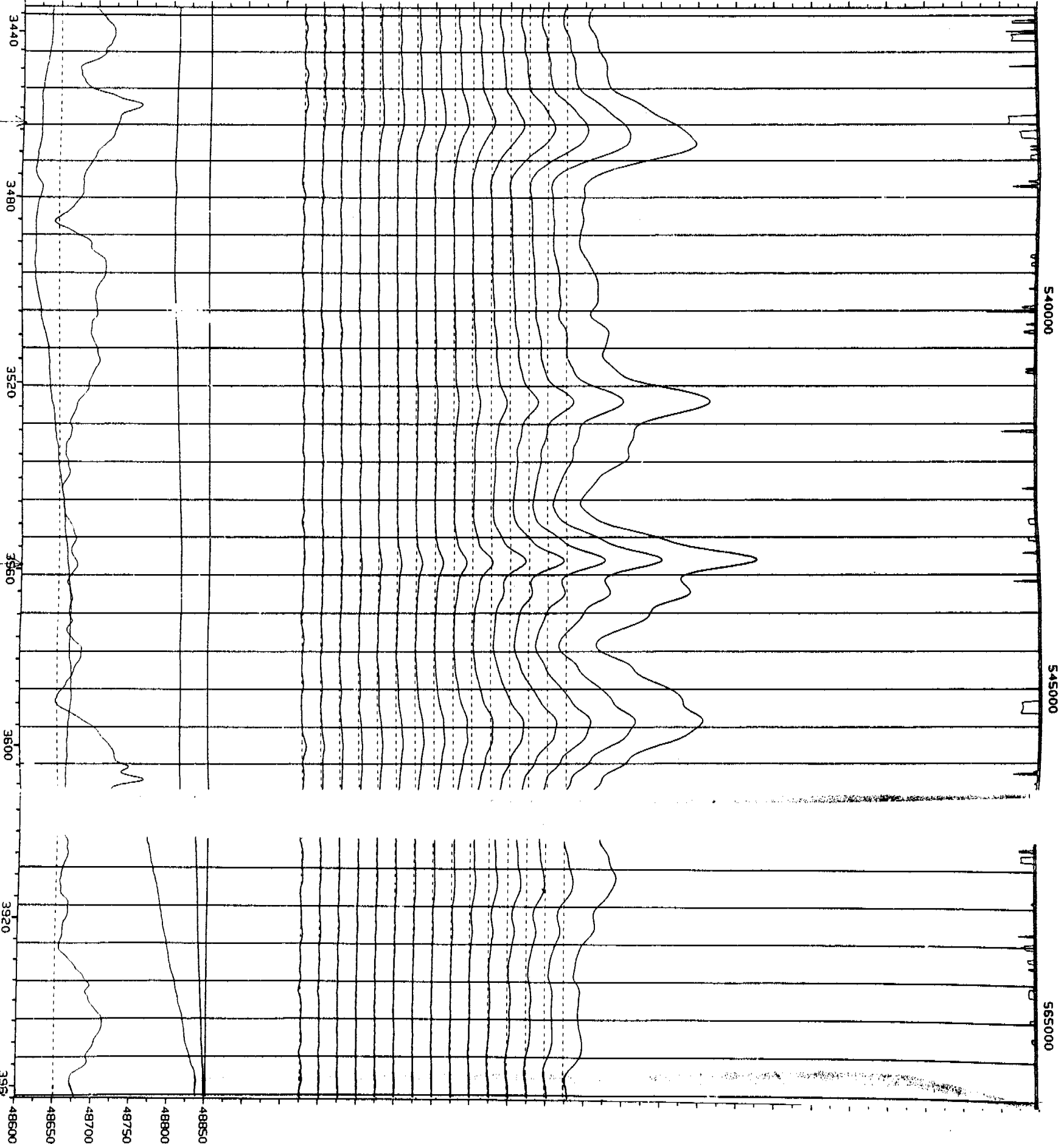
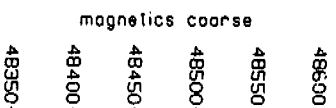
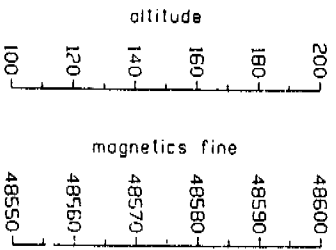
AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 11071
flight no. 46
direction 90
date flown 27 jun 92
time flown 12:25:57.00 12:40:23.00
fiducial no. 3433 4299
line location 8263014 8263048
client BHP
job 1297
area Borroloola
scale 1:50000

mg metres
spherics/powerline
time constant (1 msec/cm)

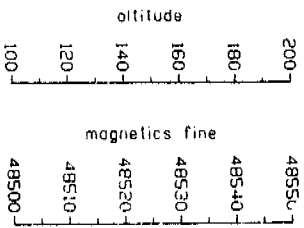
ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm



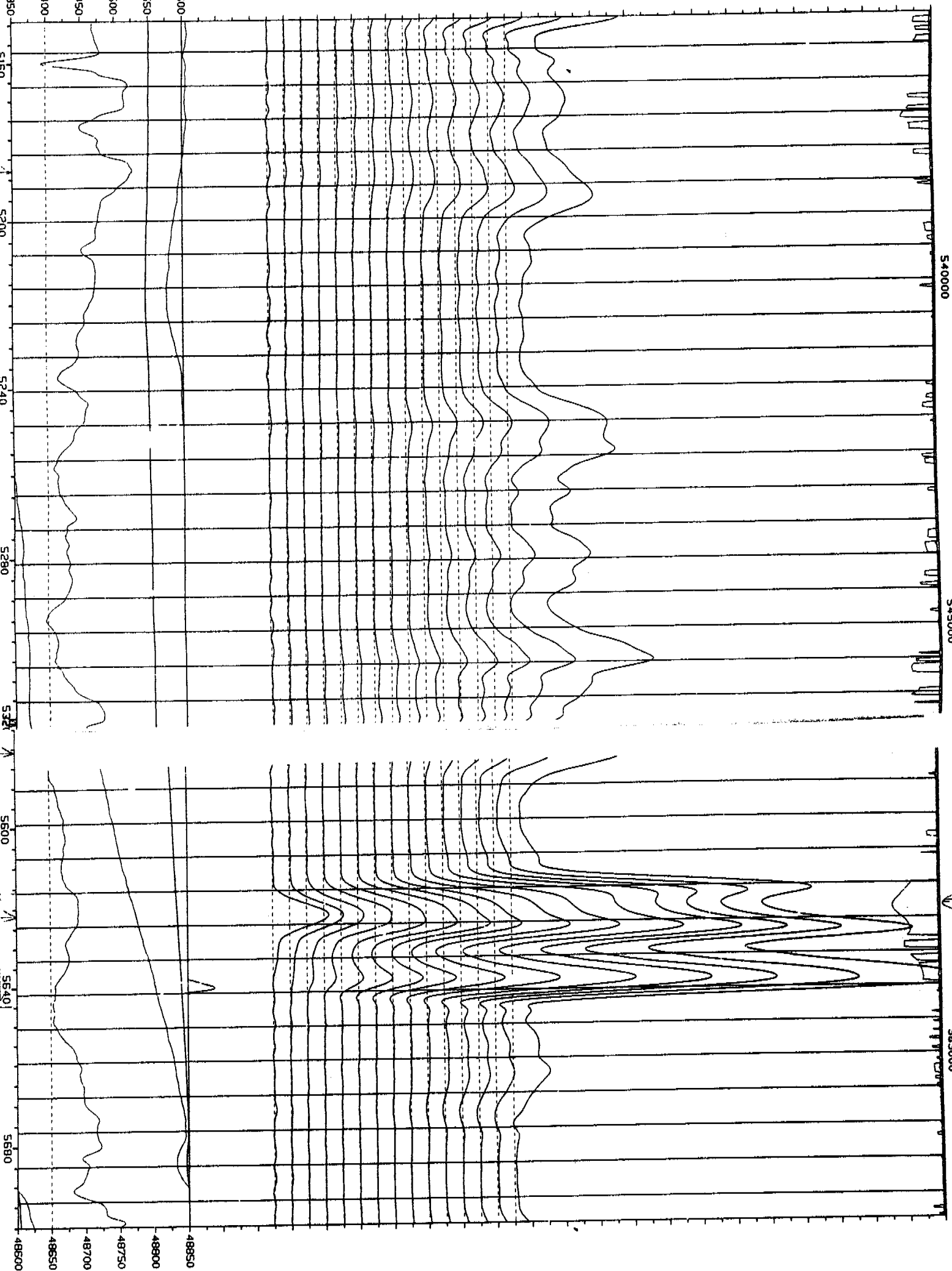
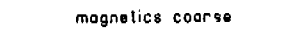
AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

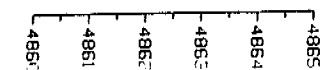
line no. 11091
flight no. 46
direction 90
date flown 27 Jun 92
time flown 12:56:58.00 13:11:06.00
fiducial no. 5149 5997
line location 8260995 8261051
client BHP
job 1297
area Barrooloola
scale 1:50000



- ch 1 0.247ms 3200ppm/cm
- ch 2 0.351ms 3000ppm/cm
- ch 3 0.455ms 2800ppm/cm
- ch 4 0.559ms 2600ppm/cm
- ch 5 0.715ms 2400ppm/cm
- ch 6 0.924ms 2200ppm/cm
- ch 7 1.13ms 2000ppm/cm
- ch 8 1.393ms 1800ppm/cm
- ch 9 1.601ms 1600ppm/cm
- ch 10 1.861ms 1400ppm/cm
- ch 11 2.174ms 1200ppm/cm
- ch 12 2.643ms 1000ppm/cm
- ch 13 3.163ms 800ppm/cm
- ch 14 3.684ms 600ppm/cm
- ch 15 4.101ms 400ppm/cm



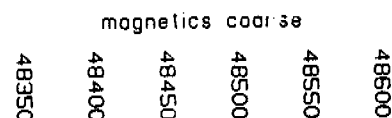
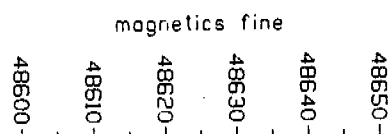
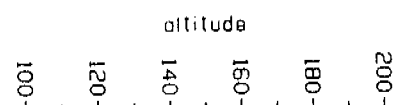
ong metres
spheres/powerline
time constant (1ms/cm)



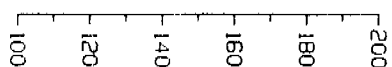
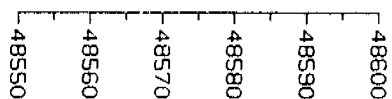
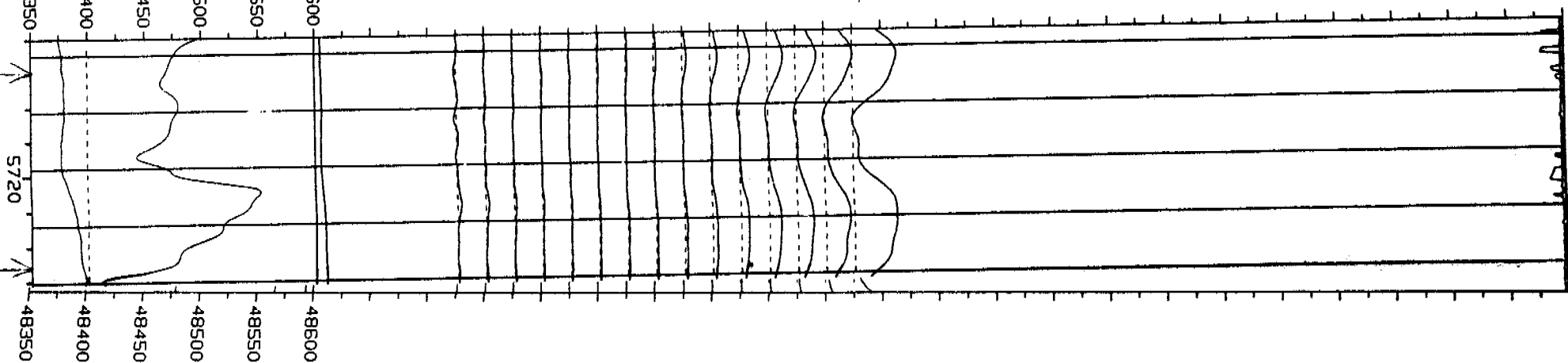
AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 11091
flight no. 46
direction 90
date flown 27jun92
time flown 12:56:58.00 13:11:06.00
fiducial no. 5149 5997
line location 8260995 8261051
client BHP
job 1297
area Borroloola
scale 1:50000



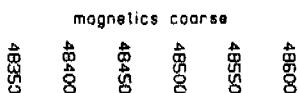
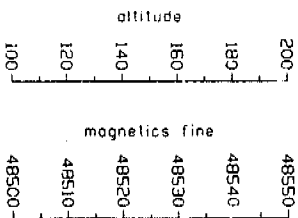
ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm



cmg metres
spherics/powerline
time constant (1msec/cm)

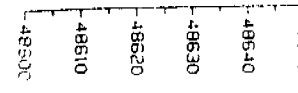
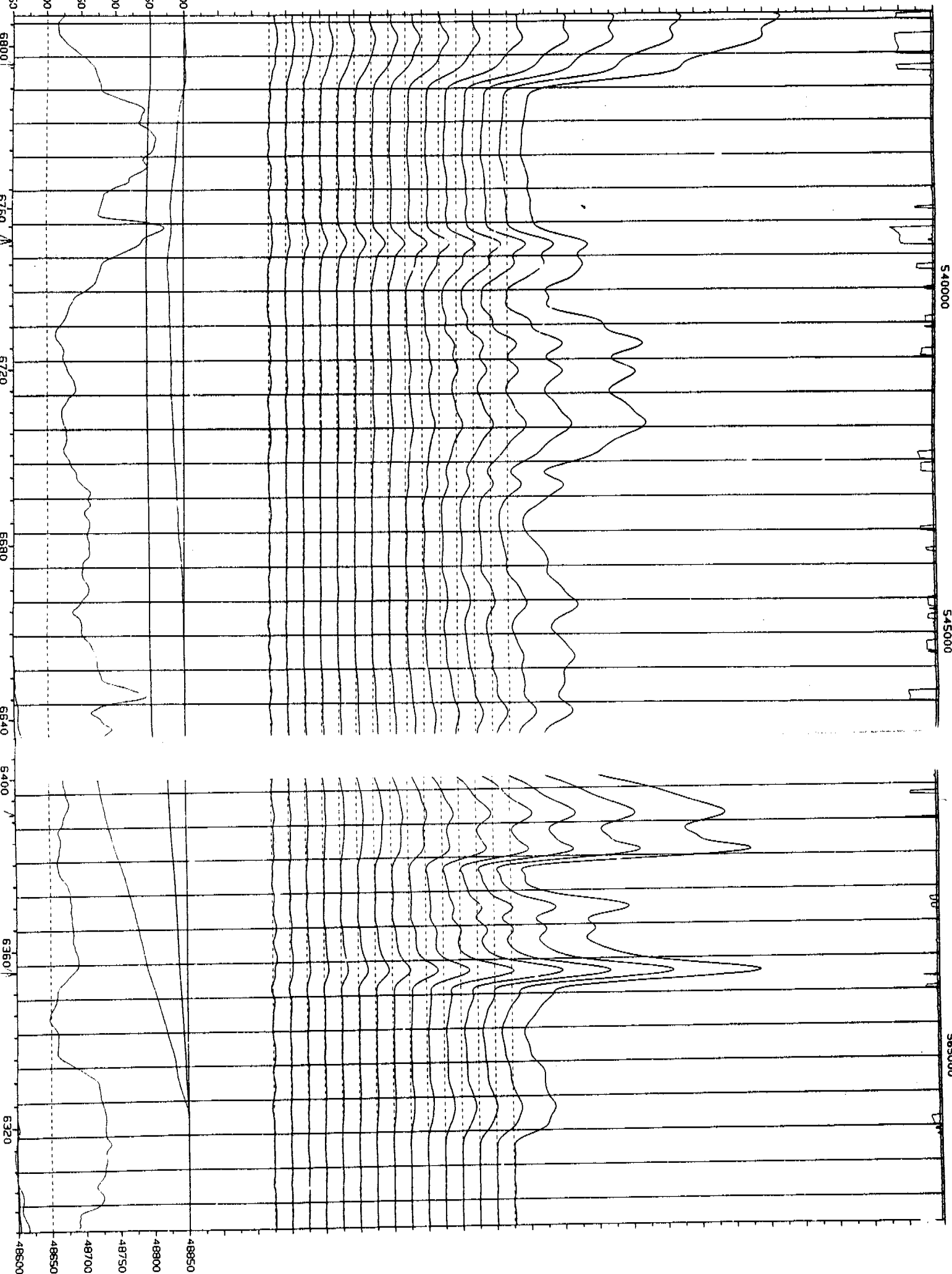
AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 11101
flight no. 46
direction 270
date flown 27 jun 92
time flown 13:12:09.00 13:25:20.00
fiducial no. 6016 6807
line location 8259974 8259970
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.333ms 1800ppm/cm
ch 9 1.501ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

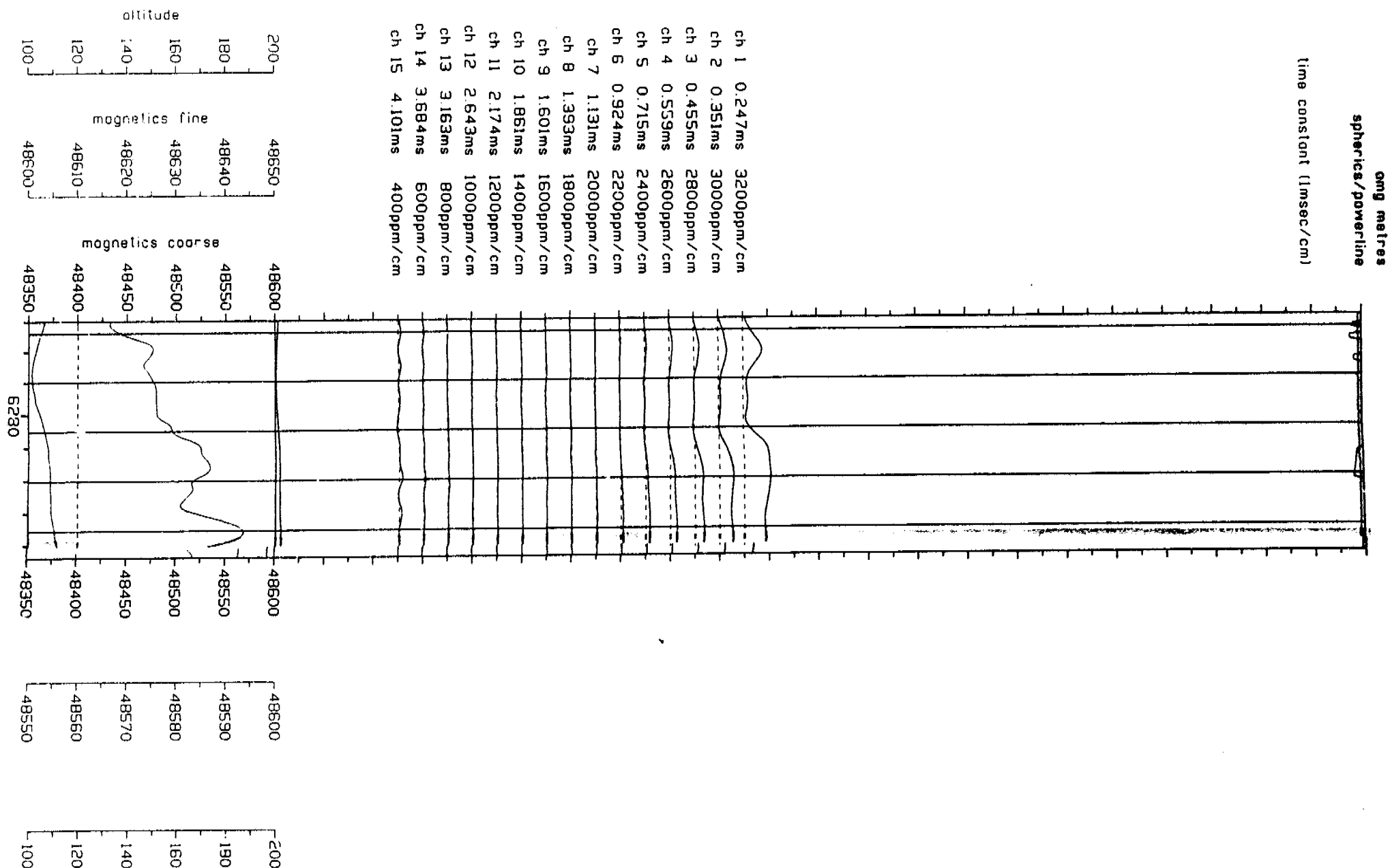
ong metres
spherics/powerline
time constant (1ms/cm)



AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

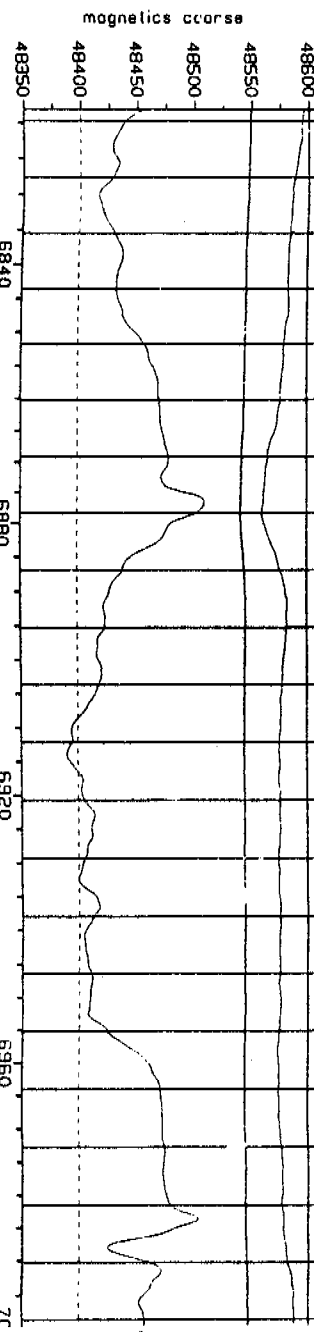
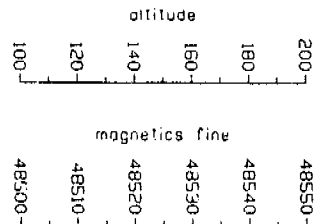
line no. 11101
flight no. 46
direction 270
date flown 27 Jun 92
time flown 13:12:09.00 13:25:20.00
fiducial no. 6016 6807
line location 8259974 8259970
client BHP
job 1297
area Barrooloola
scale 1:50000



AERODATA QUESTEM SYSTEM

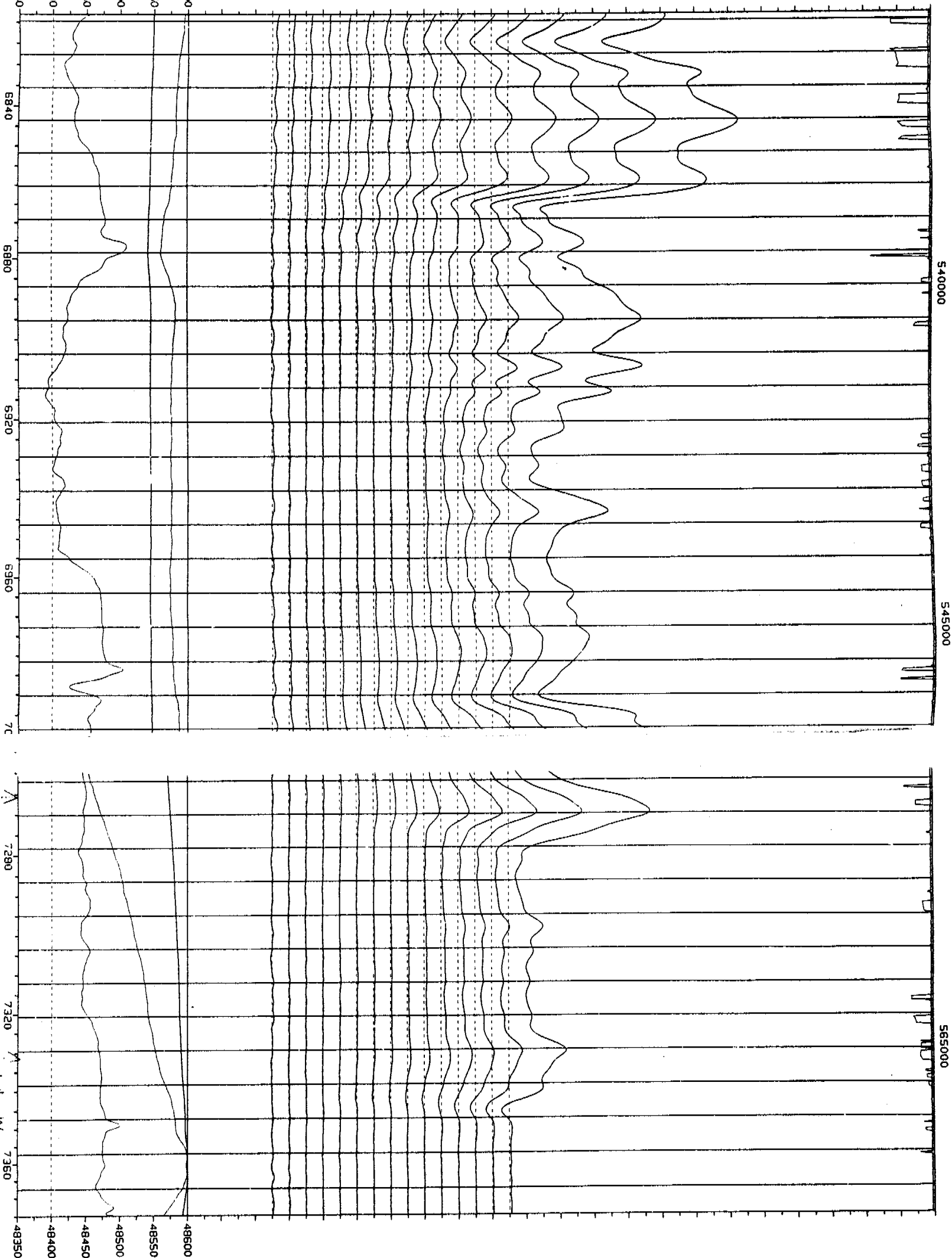
Base frequency 75.0 Hz.

line no. 11111
flight no. 46
direction 90
date flown 27 jun 92
time flown 13:26:21.00 13:40:33.00
fiducial no. 6818 7670
line location 8258996 8258994
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1100ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

avg metres
spheres/powerline
time constant (msec/cm)

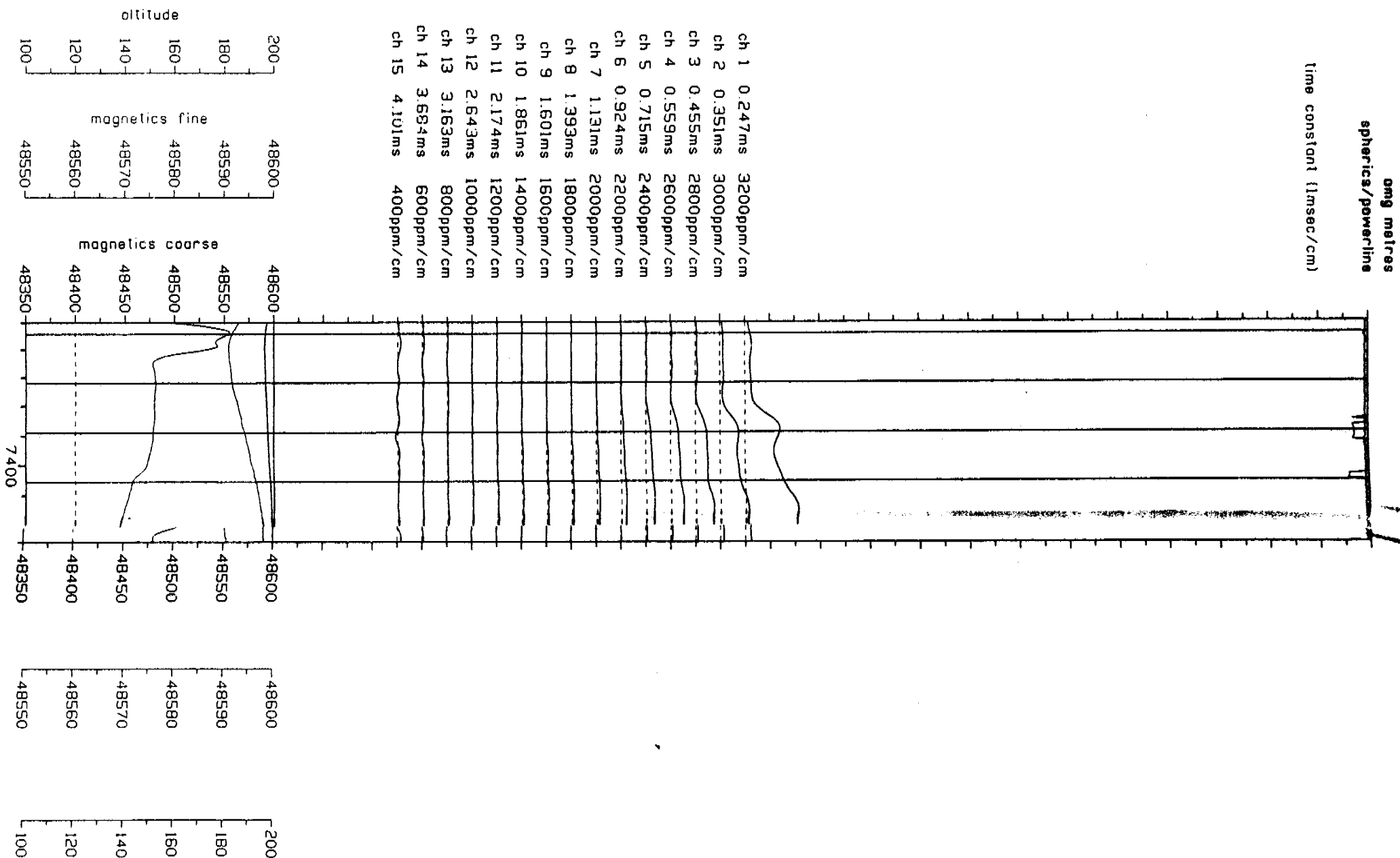


54000 54500 55000 55500 56000 56500 57000 57500 58000 58500 59000 59500 60000 60500 61000 61500 62000 62500 63000 63500 64000 64500 65000 65500 66000 66500 67000 67500 68000 68500 69000 69500 70000 70500 71000 71500 72000 72500 73000 73500 74000 74500 75000 75500 76000 76500 77000 77500 78000 78500 79000 79500 80000 80500 81000 81500 82000 82500 83000 83500 84000 84500 85000 85500 86000 86500 87000 87500 88000 88500 89000 89500 90000 90500 91000 91500 92000 92500 93000 93500 94000 94500 95000 95500 96000 96500 97000 97500 98000 98500 99000 99500 100000

AERODATA QUESTEM SYSTEM

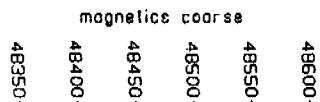
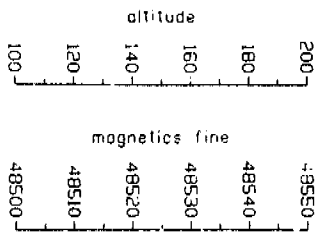
Base frequency 75.0 Hz.

line no. 11111
flight no. 46
direction 90
date flown 27 jun 92
time flown 13:26:21.00 13:40:33.00
fiducial no. 6818 7670
line location 8258996 8258994
client BHP
job 1297
area Borraloola
scale 1:50000



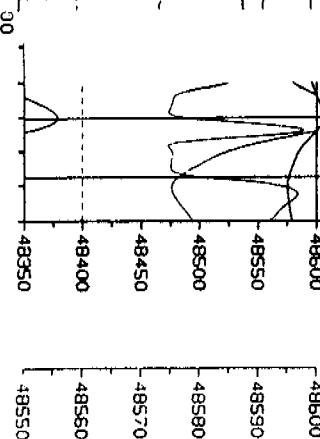
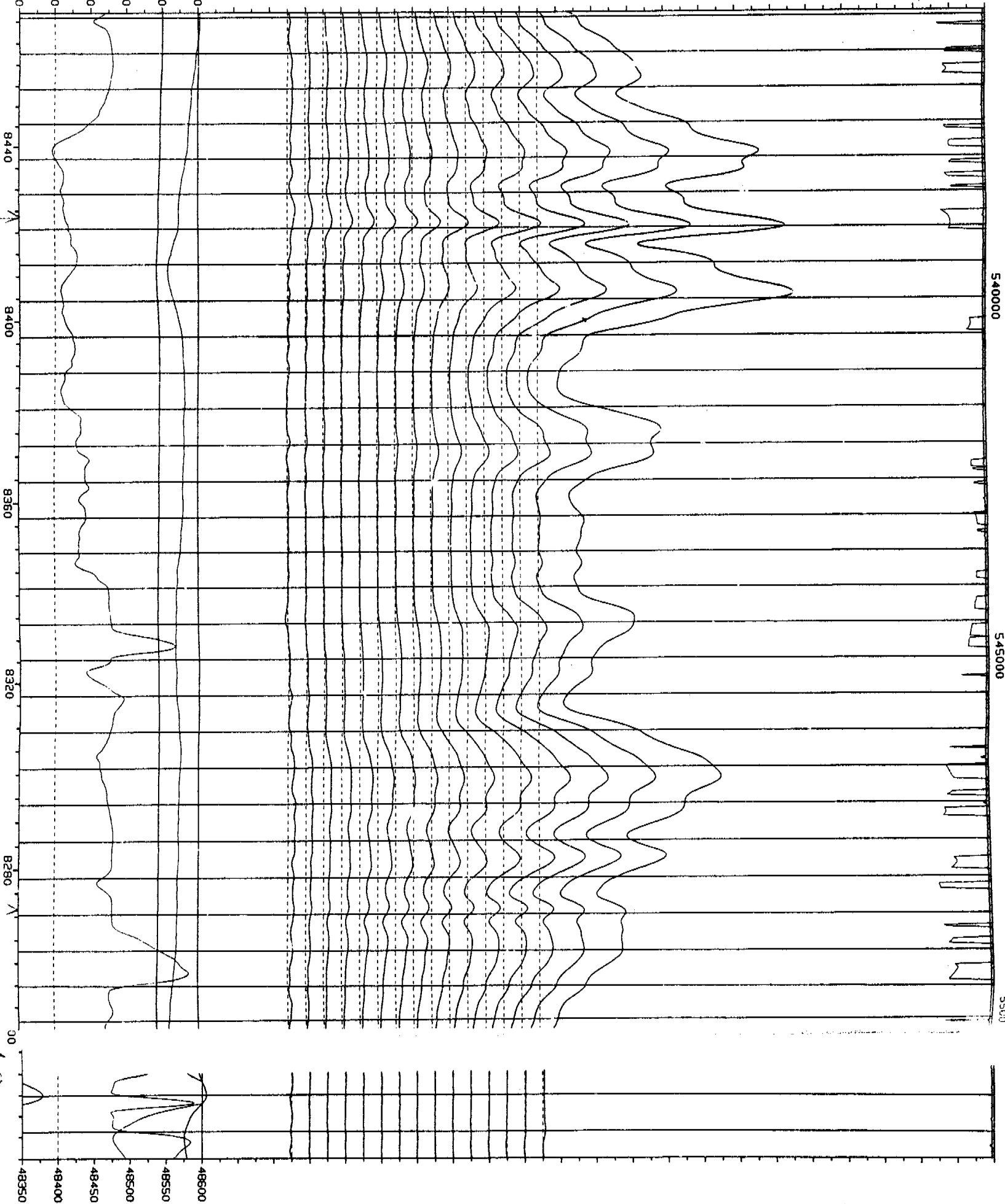
AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 11122
flight no. 46
direction 270
date flown 27 Jun 92
time flown 13:43:51.00 13:56:33.00
fiducial no. 7710 8472
line location 8258036 8257975
client BHP
job 1297
area Barrooloolo
scale 1:50000



ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.684ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

dmg metres
spheres/powerline
time constant (1msec/cm)

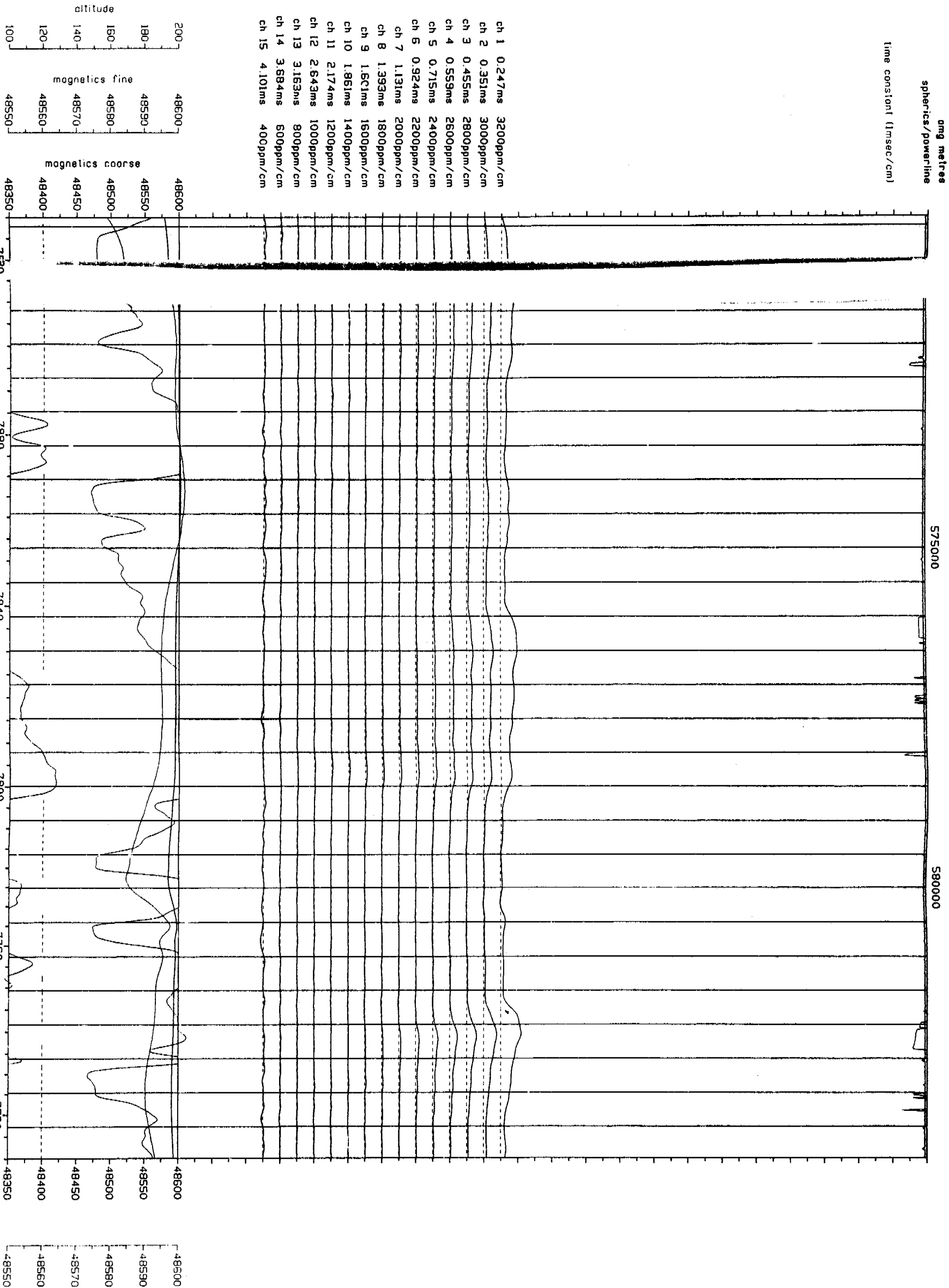


8472
8472

AERODATA QUESTEM SYSTEM

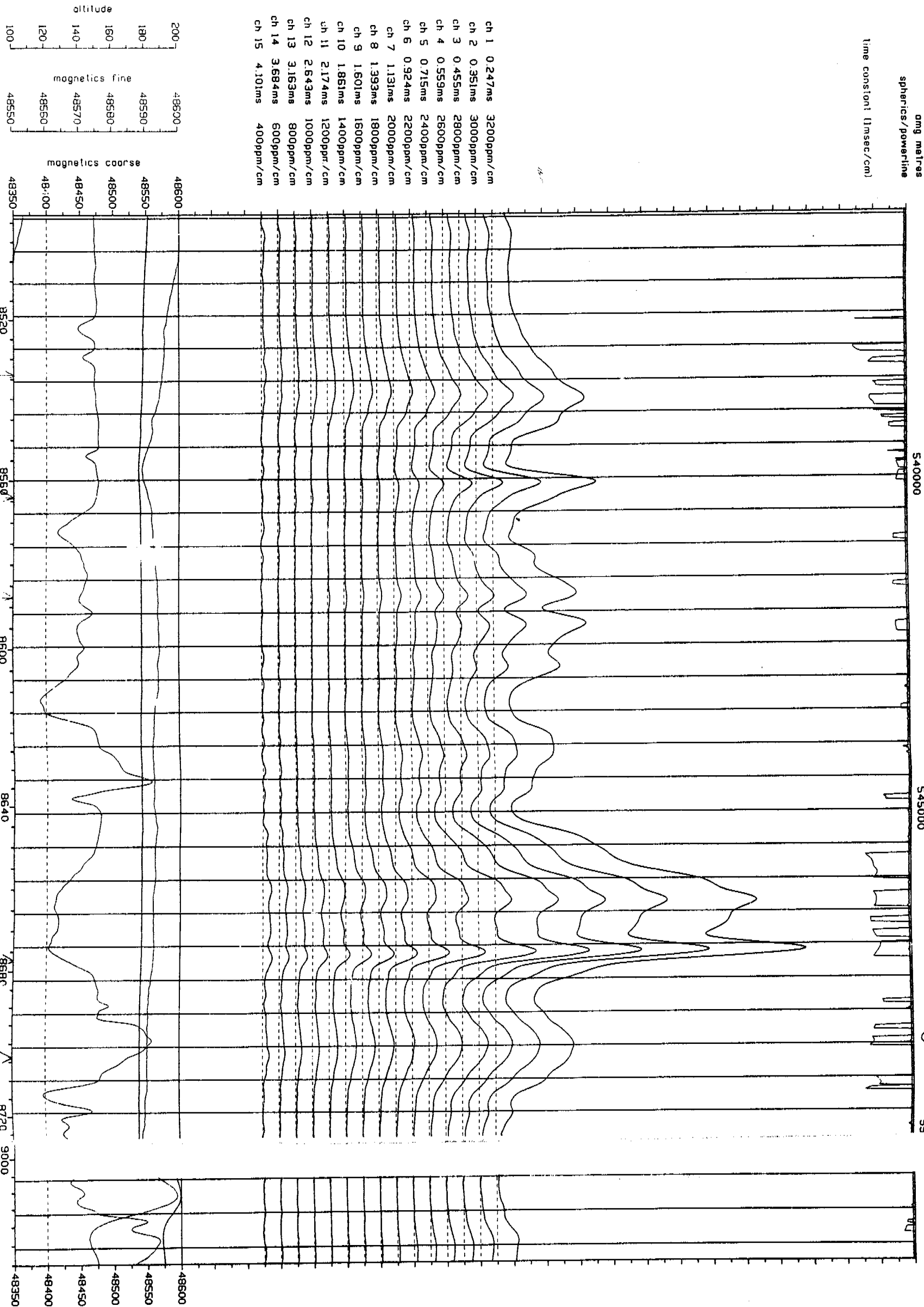
Base frequency 75.0 Hz.

line no. 11122
flight no. 46
direction 270
date flown 27 jun 92
time flown 13:43:51.00 13:56:33.00
fiducial no. 7710 8472
line location 8258036 8257975
client BHP
job 1297
area Borroloola
scale 1:50000



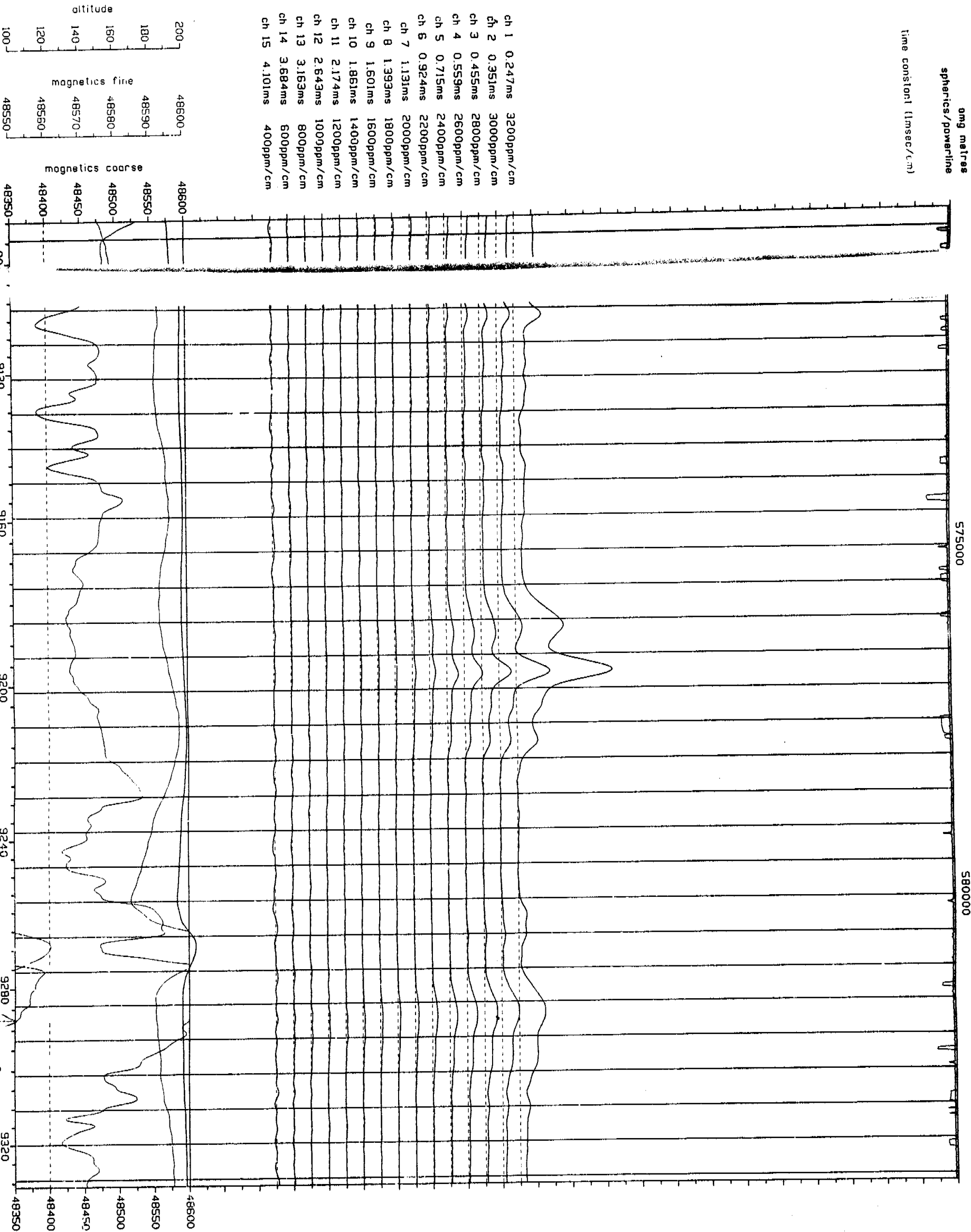
AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

line no. 11131
flight no. 46
direction 90
date flown 27 jun 92
time flown 13:57:46.00 14:11:44.00
fiducial no. 8493 9331
line location 8257037 8256971
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM
Base frequency 75.0 Hz.

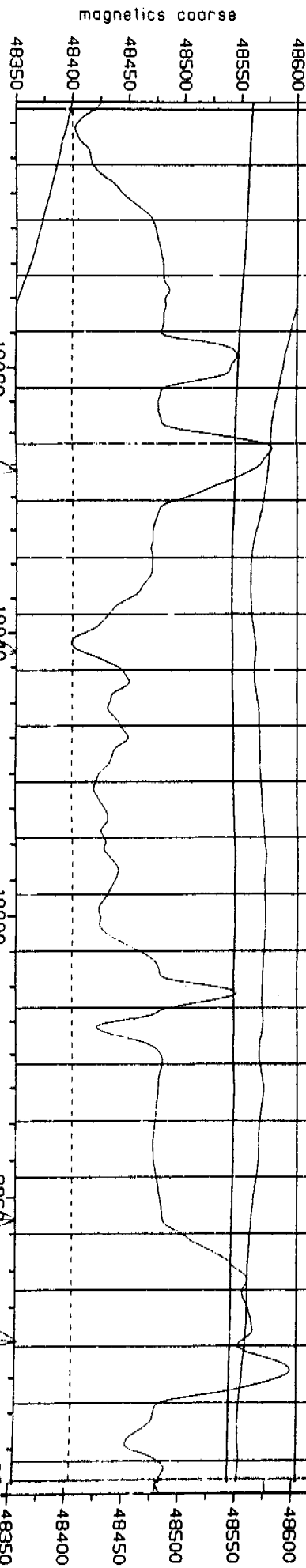
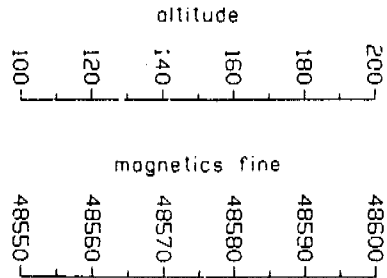
line no. 11131
flight no. 46
direction 90
date flown 27 jun 92
time flown 13:57:46.00 14:11:44.00
fiducial no. 8493 9331
line location 8257037 8256971
client BHP
job 1297
area Borroloola
scale 1:50000



AERODATA QUESTEM SYSTEM

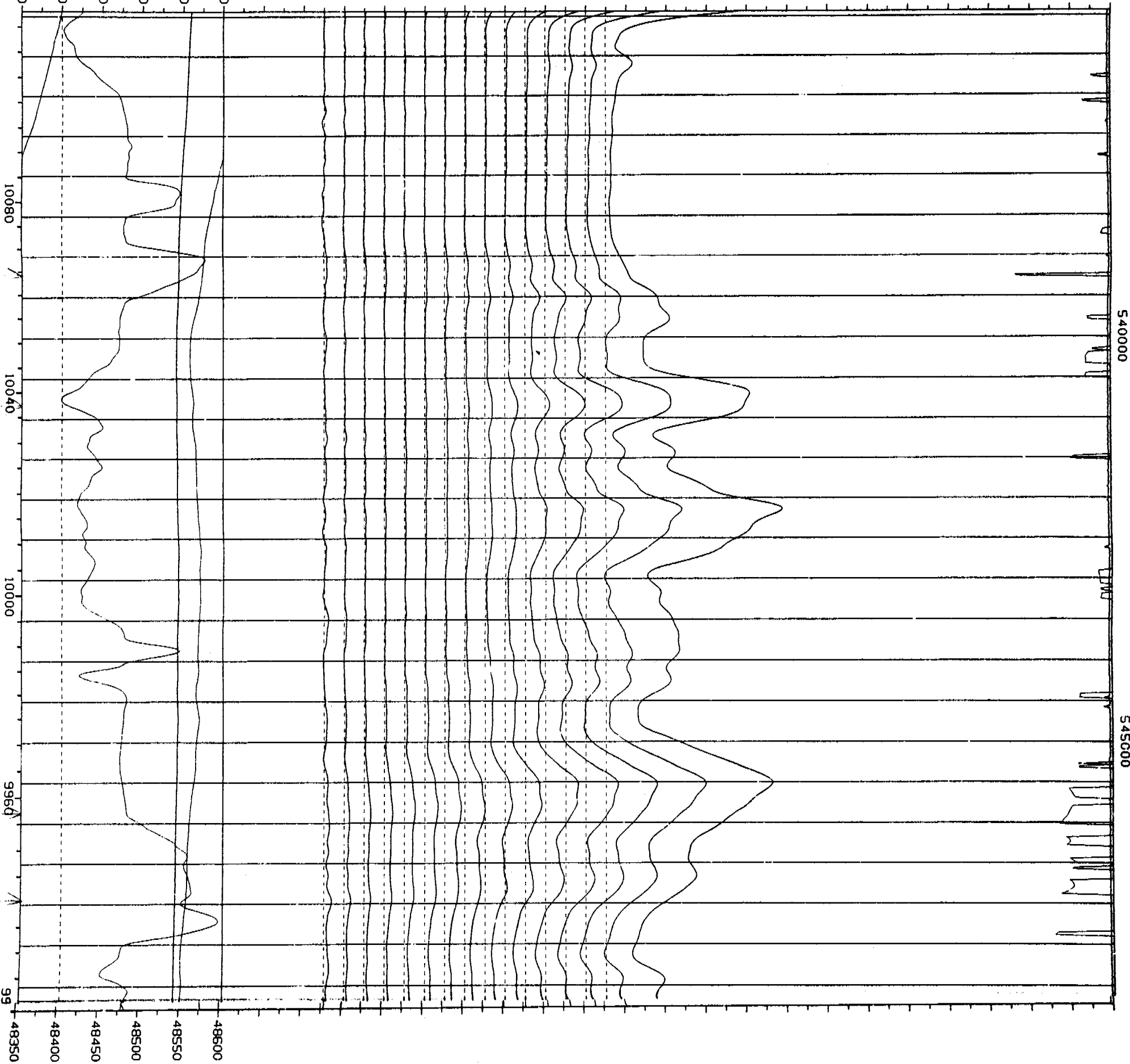
Base frequency 75.0 Hz.

line no. 11141
flight no. 46
direction 270
date flown 27 jun 92
time flown 14:12:50.00 14:25:39.00
fiducial no. 9349 10118
line location 8255983 8255999
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1 0.247ms 3200ppm/cm
ch 2 0.351ms 3000ppm/cm
ch 3 0.455ms 2800ppm/cm
ch 4 0.559ms 2600ppm/cm
ch 5 0.715ms 2400ppm/cm
ch 6 0.924ms 2200ppm/cm
ch 7 1.131ms 2000ppm/cm
ch 8 1.393ms 1800ppm/cm
ch 9 1.601ms 1600ppm/cm
ch 10 1.861ms 1400ppm/cm
ch 11 2.174ms 1200ppm/cm
ch 12 2.643ms 1000ppm/cm
ch 13 3.163ms 800ppm/cm
ch 14 3.584ms 600ppm/cm
ch 15 4.101ms 400ppm/cm

amg metres
spherics/powerline
time constant (1msec/cm)



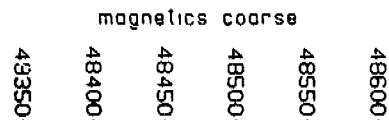
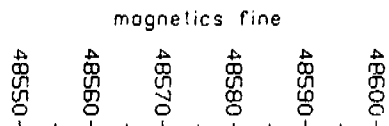
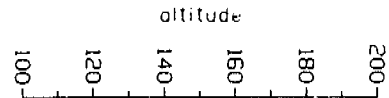
540000

545000

AERODATA QUESTEM SYSTEM

Base frequency 75.0 Hz.

line no. 11141
flight no. 46
direction 270
date flown 27 jun 92
time flown 14:12:50.00 14:25:39.00
fiducial no. 9349 10118
line location 8255983 8255999
client BHP
job 1297
area Borroloola
scale 1:50000



ch 1	0.247ms	3200ppm/cm
ch 2	0.351ms	3000ppm/cm
ch 3	0.455ms	2800ppm/cm
ch 4	0.559ms	2600ppm/cm
ch 5	0.715ms	2400ppm/cm
ch 6	0.924ms	2200ppm/cm
ch 7	1.131ms	2000ppm/cm
ch 8	1.393ms	1800ppm/cm
ch 9	1.601ms	1600ppm/cm
ch 10	1.861ms	1400ppm/cm
ch 11	2.174ms	1200ppm/cm
ch 12	2.643ms	1000ppm/cm
ch 13	3.163ms	800ppm/cm
ch 14	3.684ms	600ppm/cm
ch 15	4.101ms	400ppm/cm

