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CR92/137

EL 6988

Batchelor, Northern Territory

ANNUAL REPORT

FOR

PERIOD ENDING 30 JANUARY ~~1991~~ 1992

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Darwin
February 1992
0089J

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x Plastic copies in 'Final Report - EL 5429' submitted Feb. 1992

SUMMARY

In the first year of tenure of EL 6988 it has been established that the tenement has base metal and gold mineralization potential of the type defined in neighbouring tenements to the south and east.

A continuation of the six year programme is warranted.

1. INTRODUCTION

This report is the first Annual Report for Exploration Licence 6988, covering the period 31 January 1991 to 30 January 1992. The 9 block, 24 km^2 EL is located in the Rum Jungle Mineral Field in the Northern Territory.

2. TENEMENT STATUS

The EL was applied for in early 1990 by Edward Michael Wells, Andrew Michael Wells and Anthony Cardale Wells and was subsequently granted on 31 January 1991. The term of the EL is 6 years.

3. LOCATION

3.1 Cadastral

A land title search at the time of this EL application showed the ground to be partly Crown Land and partly freehold. The owners of the latter were notified as required under the Mining Act.

3.2 Geographical

The EL is situated on the western flank of the Rum Jungle Mineral Field. The western half of the EL is undulating ridge country and the eastern half flat swampy ground. The subsequent drainage pattern is to the north. (Fig 1)

The EL is centred at 13°0'S and 130°55'E

3.3 Geological

Government mapping shows the EL to be mainly underlain by Early Proterozoic, Finniss River Group, Burrell Creek FOrmation flysch sediments. The eastern part of the EL however is mapped to be underlain by older units of the Rum Jungle sequence VIZ. Cooomalie Dolomite, Whites Formation. (Fig 2)

3.4 Metallogenic

Being in the RJMF EL 6988 is located closeby base metal prospects. The Hoppy Anomaly (Uranerz 1983) (Earthrowl 1989, 1990, 1991, 1992) is located 1 km south of EL 6988 and has been the subject of a Joint Venture with the Wells Syndicate on their contiguous EL 5429. Here a Cu-Co-Ni association has been defined on surface and in deep drilling.

Area 5 (BMR 1962) is located east of EL 6988 and is currently being investigated by Compass Resources.

Gold arsenic anomalies are reported from EL 5429 south of EL 6988 in Annual Reports for that tenement (Earthrowl 1989, 1990)

4. PREVIOUS EXPLORATION

4.1 By Government

During the 1950's and 1960's uranium search in the

RJMF, the eastern part of EL 6988 was subjected to exploration by the BMR/TEP team. Some TEP drill holes fall within EL 6988. (Fig 3)

4.2 By Other Companies

Mines Department Open File data show the following tenements to have in the past covered a portion of EL 6988:

Tenement	Company	Report No
EL 1901	Uranerz Aust. Pty Ltd	CR 85/211
EL 1295	Uranerz Aust. Pty Ltd	CR 83/182, 82/237, 81/174 80/135, 79/99 78/93
EL 1298	Uranerz Aust. Pty Ltd	CR 83/162, 159, 82/239, 81/176, 80/138, 79/102, 78/96
EL 1359	Mobil Energy Mineral Aust.	CR 83/302, plus others
EL 2218	Inco Aust.	CR 81/16
EL 4879	CEGB Expln	CR 90/377, 88/314, 89/565

The following EL's are shown on old maps but no reports are on Open File: EL's 3469, 2133, 2124.

5. EXPLORATION PROGRAMME AND TARGET

The target mineralization is twofold

- quartz vein hosted gold
- base metal within the lower units, the near shore sediments flanking the Waterhouse Granite dome

6. METHODS

Library research was carried out at the Geological Library at the Department of Mines and Energy, Darwin.

Past exploration tenements in the vicinity of EL 6988 were traced using chronologically filed tenement maps. Open File reports were then accessed using the numerically filed microfiched data.

The old Uranerz grid put in 1978 was re established in the field and used as control for ground traversing and geophysics. A SIROTEM survey focused a MCN's 4173, 4174 in adjoining EL 5429, extended into EL 6988. (Plates 1, 2) (Fig 3)

7. WORK COMPLETED

The library research gave results of previous exploration, with most work being done in the east of the EL.

Field reconnaissance and prospecting in the south east corner of the EL was done to establish the stratigraphy of the eastern boundary of the EL.

The SIROTEM survey carried out over MCN 4173/4174 extended into EL 6988 - the data of this survey are attached. The survey consisted of Fixed Loop Channel 15 (2.425 m secs.) and Channel 19 (5.025 m secs) probing. (Fig 3) (Appendix 1)

8. RESULTS

The library research showed that all previous systematic exploration over what is now EL 6988 had been targeted at uranium mineralization - unconformity type. This exploration was limited to the eastern half of the the EL, below the Burrell Creek form.

The reconnaissance prospecting/mapping showed that complex quartz veining both concordant and disconcordant were present within the EL. Suboutcropps of silicified dolomite were located in the southeast of the EL.

In EL 6988, the SIROTEM results show a mainly linear X and Y component. The Z component and the resultant show are distinct subcircular closed anomaly at 51600N / 25800E

9. CONCLUSIONS

Field work on EL 6988 shows the stratigraphy of EL 5429 to the south extends northwards - and along with it potential for base metal and gold mineralization. Although UAL got no encouragement from their hole 1204-1212 little emphasis was placed on base metal search.

The SIROTEM anomaly indicates a subcircular intrusion or faulted block.

10. RECOMMENDATIONS

The EL warrants regional systematic prospecting for quartz vein gold mineralization in the EL as well as detailed investigations of the black shale/dolomite sequence in the south eastern corner.

11. EXPENDITURE

Year 1 expenditure of EL 6988 is as follows:

Consulting Geologist Fees	2,100.00
Consulting Geologist Expenses	200.00
Joint Venture (Poseidon Expl^{n})	
- Geophysics	4,000.00
- Expenses	10,000.00

Wells Syndicate Expenses	4,500.00
TOTAL	$ 20,800.00

12. NEXT YEAR'S PROGRAMME

Year 2 Programme is expected to be as follows:

Field Work

- Systematic BLEG Sampling
- Systematic Following Bed Rock Sampling

Costing:

Geologist/Field Assistant	5,000.00
Laboratory	1,500.00
Vehicle	500.00
Overheads	2000.00
Wells Syndicate	5000.00
TOTAL	$ 14,000.00

REFERENCES

Earthrowl J A (1989)
EL 5429 Annual Report to 4 October 1989

Earthrowl J A (1990)
EL 5429 Annual Report to 4 October 1990

Earthrowl J A (1991)
EL 5429 Relinquishment Report to 4 October 1990

Earthrowl J A (1992)
EL 5429 Final Report

Joshi DR M S (1989)
Annual Report for EL 5309 and 5429

Uranerz Aust. Pty Ltd (1983)
Final Report for EL 1296

Wells A M (1988)
Annual Report covering first year EL's 5309,5429

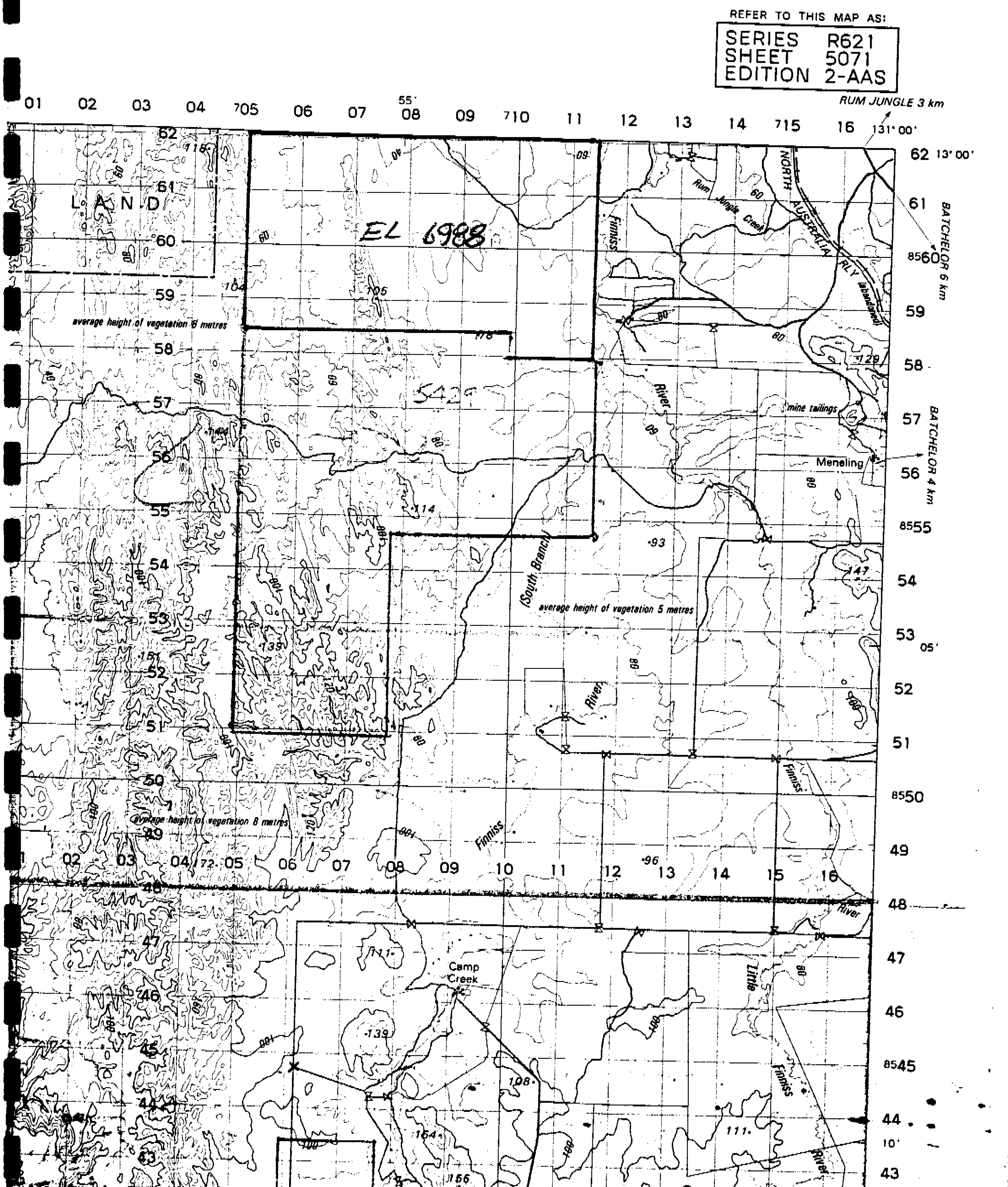

REFER TO THIS MAP AS:
SERIES R621
SHEET 5071
EDITION 2-AAS
RUM JUNGLE 3 km
131° 00'
13° 00'
BATCHELOR 6 km
BATCHELOR 4 km
LAND
EL 1988
5429
average height of vegetation 8 metres
average height of vegetation 5 metres
NORTH AUSTRALIA RLY (abandoned)
Rum Jungle Creek
Finniss
River
(South Branch)
mine tailings
Meneling
Little
Camp Creek
MOUNT
05'
10'

Fig 1

RUM JUNGLE
NORTHERN TERRITORY

PART SHEET 14/1-1
1:50 000

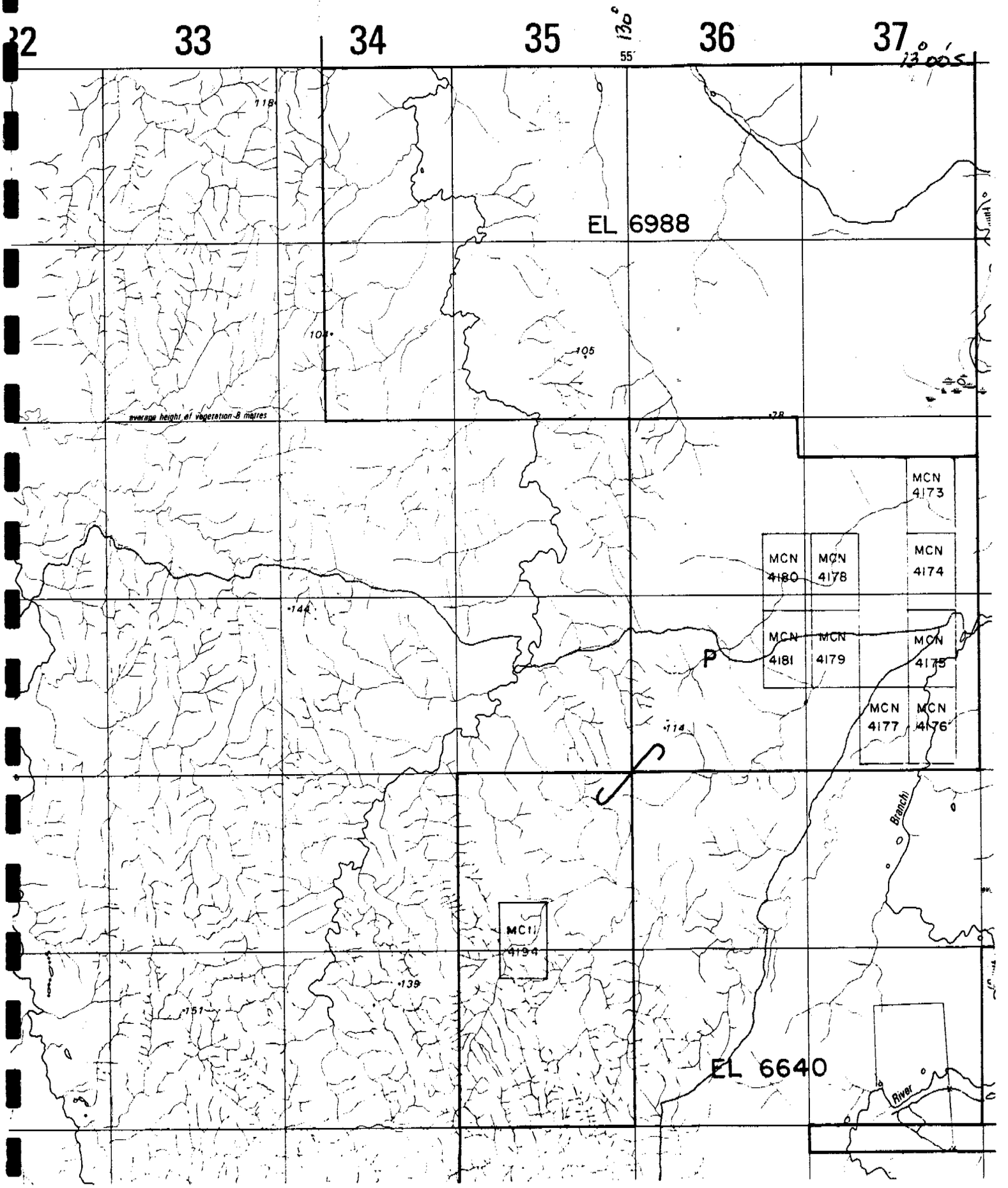


Fig 2

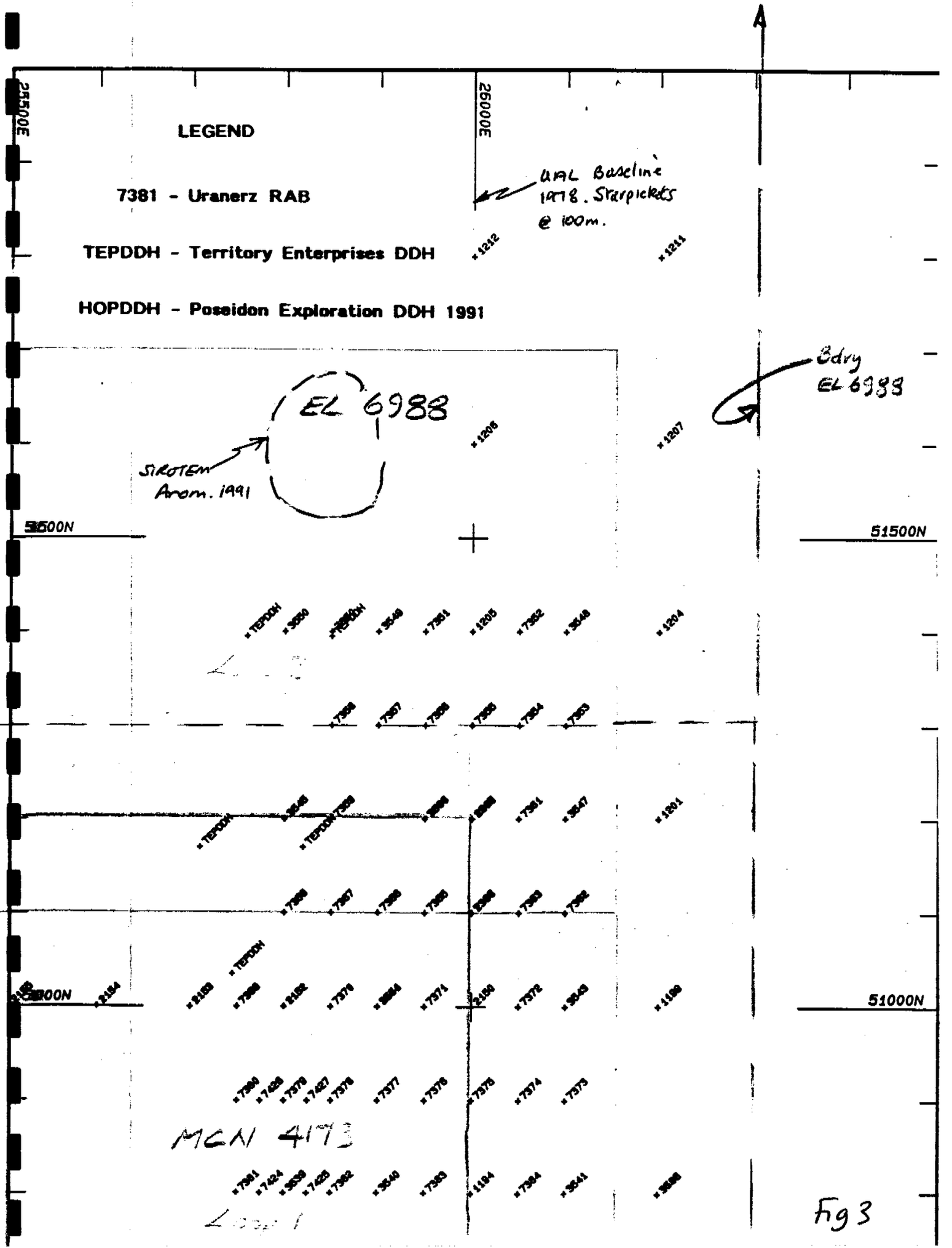

LEGEND
7381 - Uranerz RAB
TEPDDH - Territory Enterprises DDH
HOPDDH - Poseidon Exploration DDH 1991
25500E
26000E
UAL Baseline
1978. Starpickets
@ 100m.
EL 6988
SIROTEM
Aeom. 1991
Sdry
EL 6988
51500N
51000N
MCN 417

Fig 3

APPENDIX 1

SIROTEM REPORT

HOPPY, NORTHERN TERRITORY

FIXED LOOP STROTEM SURVEY, SEPTEMBER 1991

SURVEY SPECIFICATIONS:

Operator : Sirius Mineral exploration (T. Coff)

Equipment: Tx - Sirotem Mk III Satx (Standalone Transmitter)
Rx - Sirotem Mk III with Roving Vector Receiver (RVR)

Loop Size:	600 x 300m
Average Current:	14amps
Timing Sequence:	2 sec pulse
Line Spacing:	100m
Station Spacing:	50m
Components Measured:	x,y,z
Survey Date:	September 1991

SUMMARY OF RESULTS:

Loop 1

A confined conductor was detected within the survey area of loop 1.

The conductor appears to be faulted off to the north.

The thickest part of the conductor appears to be located immediately to the south of this loop.

A westerly dip is indicated.

Loop 2

A conductive response is observable in the data for Loop 2.

The observed anomaly is open to the south, however the data suggests that it has a limited strike extent in this direction.

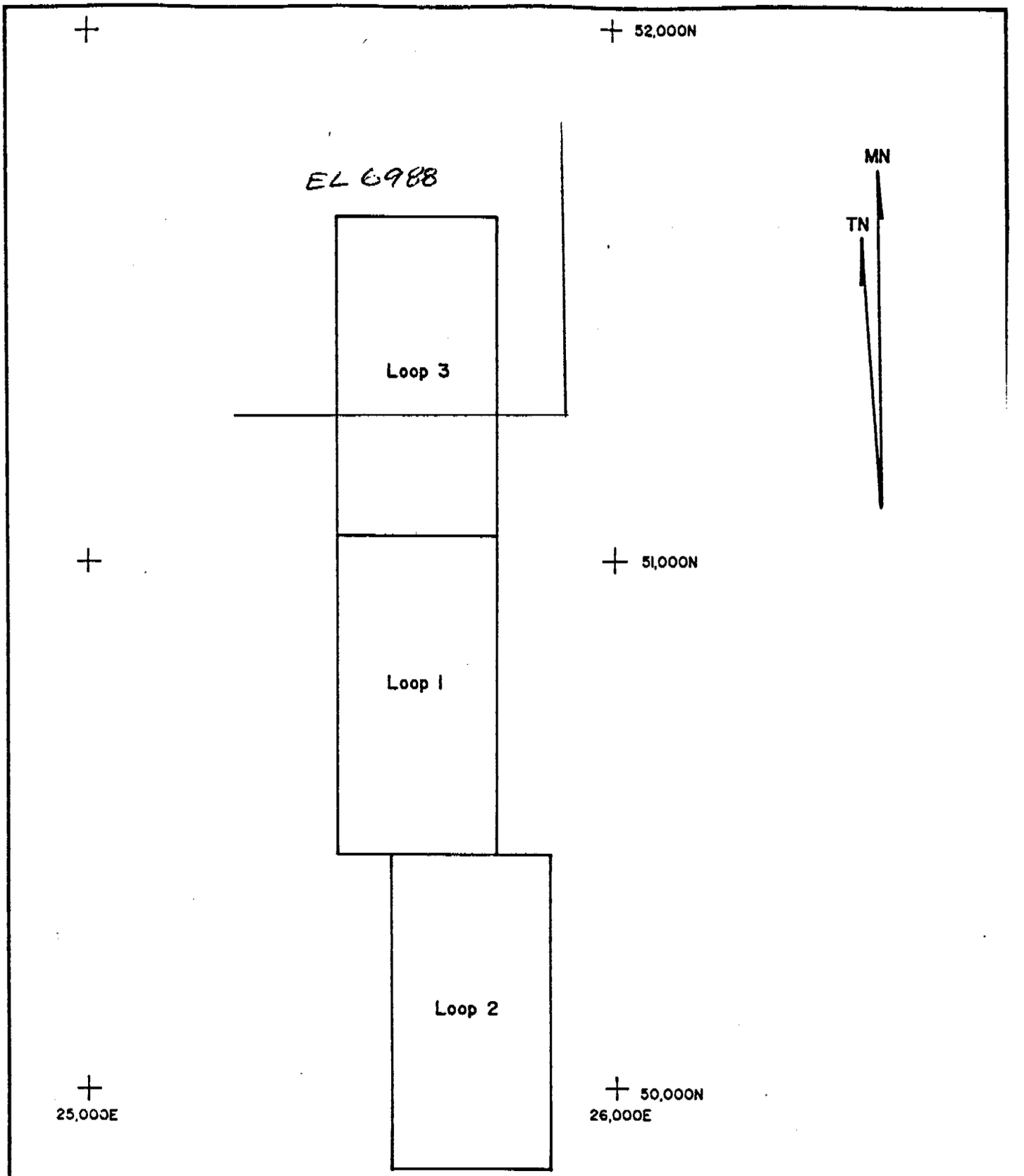
Loop 3

There is no major conductor apparent in the data for Loop 3. This is consistent with data from Loop 1 (immediately to the south) in that the conductor response observed in Loop 1 appears to be fault bounded at about 51050N

A weaker conductive response (less than 3msecs) is observable within the data.

A change in the strike direction is apparent. This change in strike direction to the NE is consistent with geochemical data in this area.

EZ 6988



0 500m.

Scale 1 : 10,000

Company
POSEIDON EXPLORATION LIMITED

Project
HOPPY PROSPECT - N.T.
MCN4173 to 4181
SIROTEM LOOP POSITIONS

Author A.T.P.	Scale 1 : 10,000
Drawn W.S.P.	Date JAN. 1992
Drawing No NTD079	Fig No

POSEIDON EXPLORATION LTD

AREA :NORTHERN TERRITORY TX LOOP:FIXED

PROJECT:HOPPY LOOP 3 LINE NO:51300

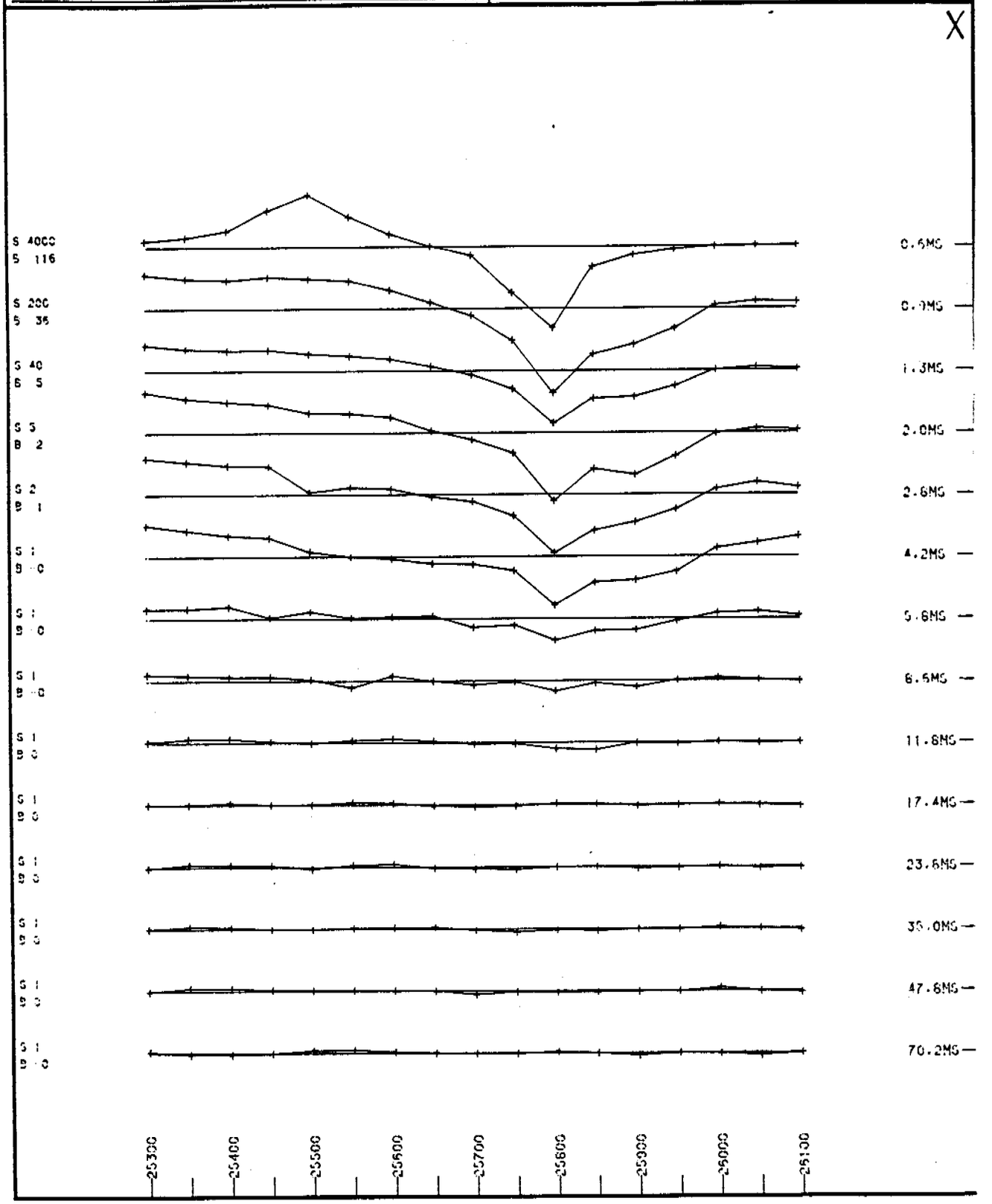
TDEM PROFILE PLOTS

0 120 240 360

1 CM = 60 METRES

SURVEY SEP 91

PLOT 9-DEC-91



POSEIDON EXPLORATION LTD

AREA : NORTHERN TERRITORY TX LOOP : FIXED

PROJECT : HOPPY LOOP 3 LINE NO : 51400

TDEM PROFILE PLOTS

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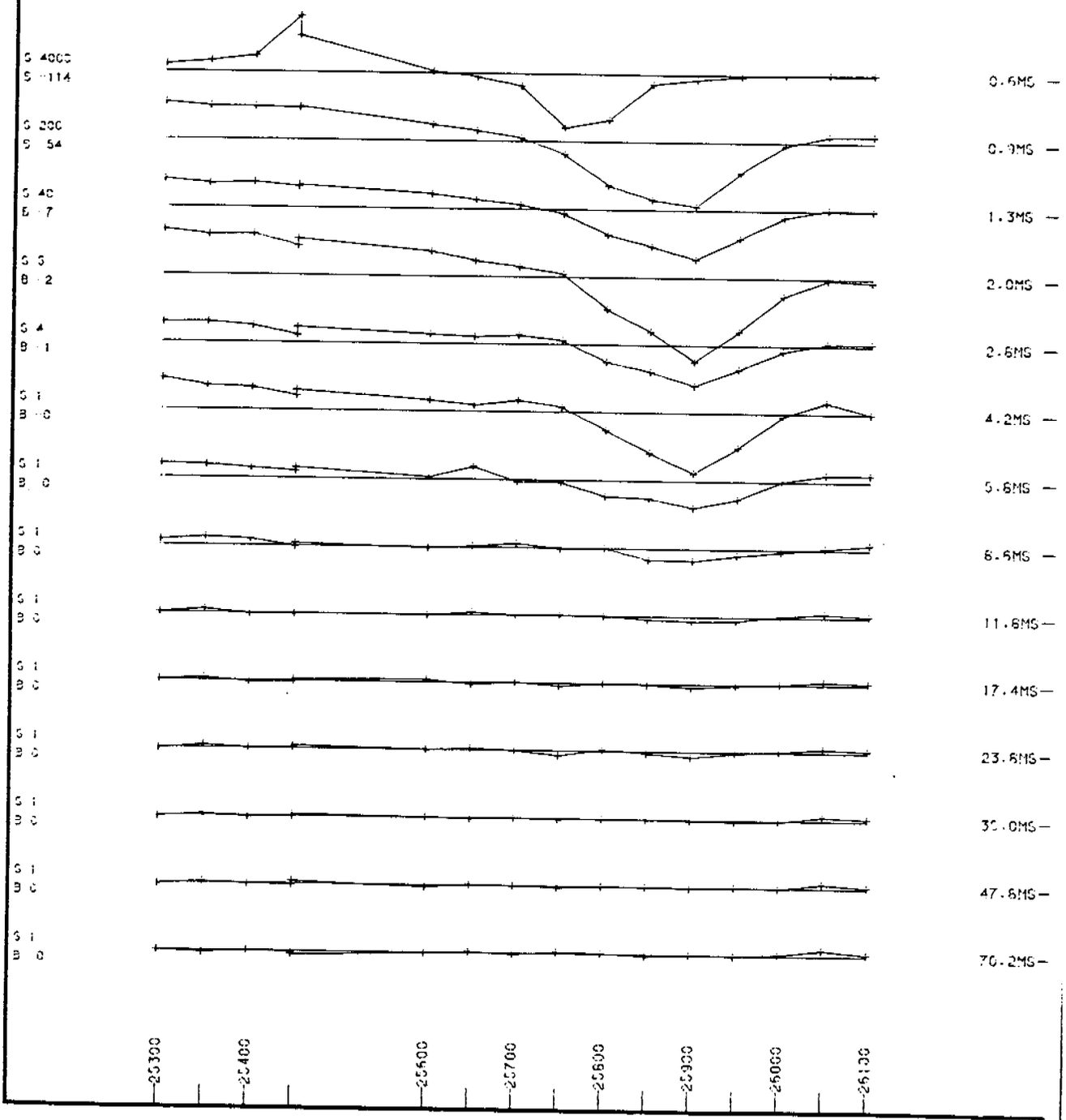
1 CM = 50 METRES

SURVEY SEP 91

PLOT 9-DEC-91

X



POSEIDON EXPLORATION LTD

AREA :NORTHERN TERRITORY TX LOOP:FIXED

PROJECT:HOPPY LOOP 3 LINE NO:S1500

TDEM PROFILE PLOTS

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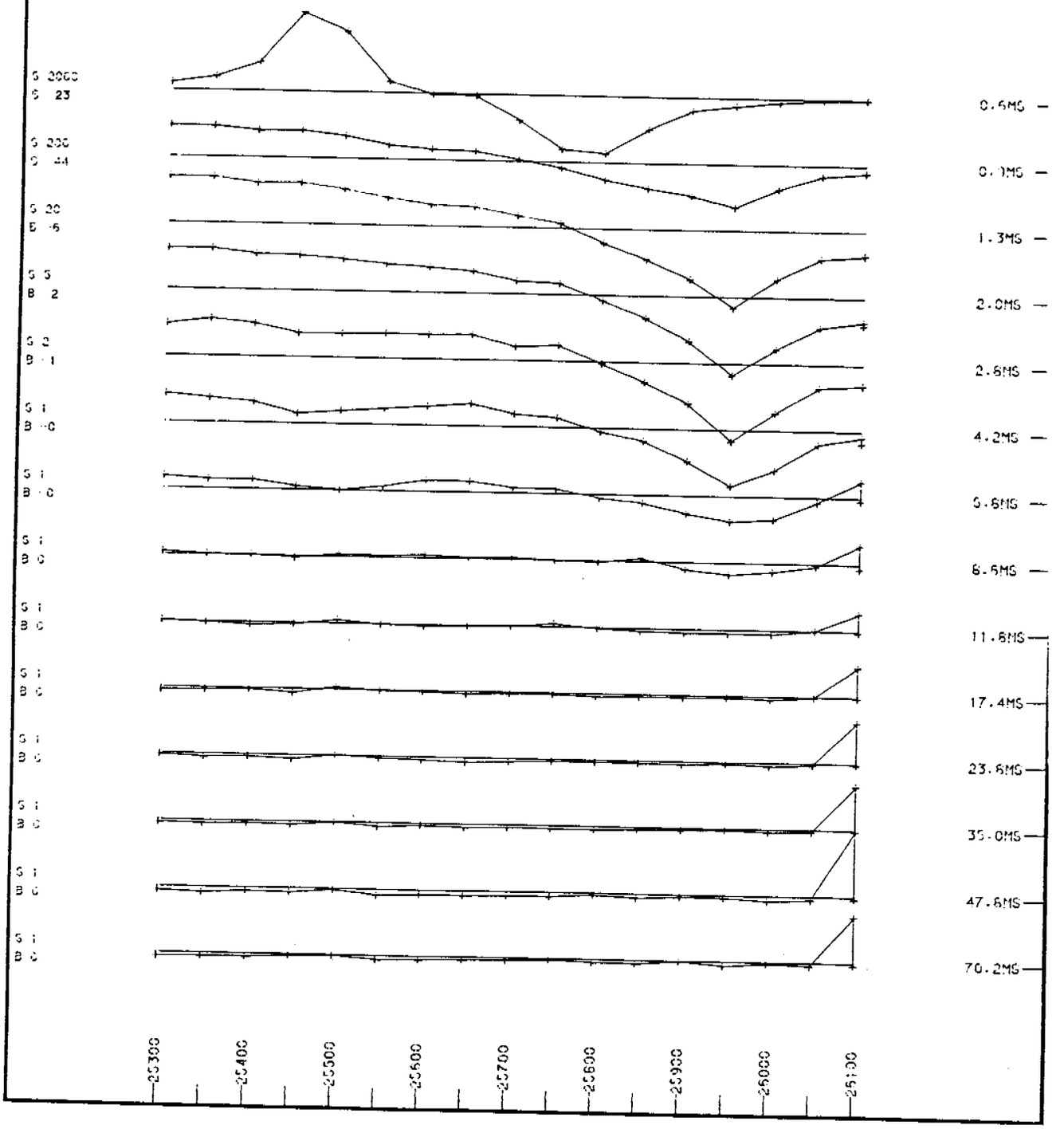
1 CM = 60 METRES

SURVEY SEP 91

PLOT 9-DEC-91

X



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PROJECT : HOPPY LOOP 3 LINE NO : 51600

TDEM PROFILE PLOTS

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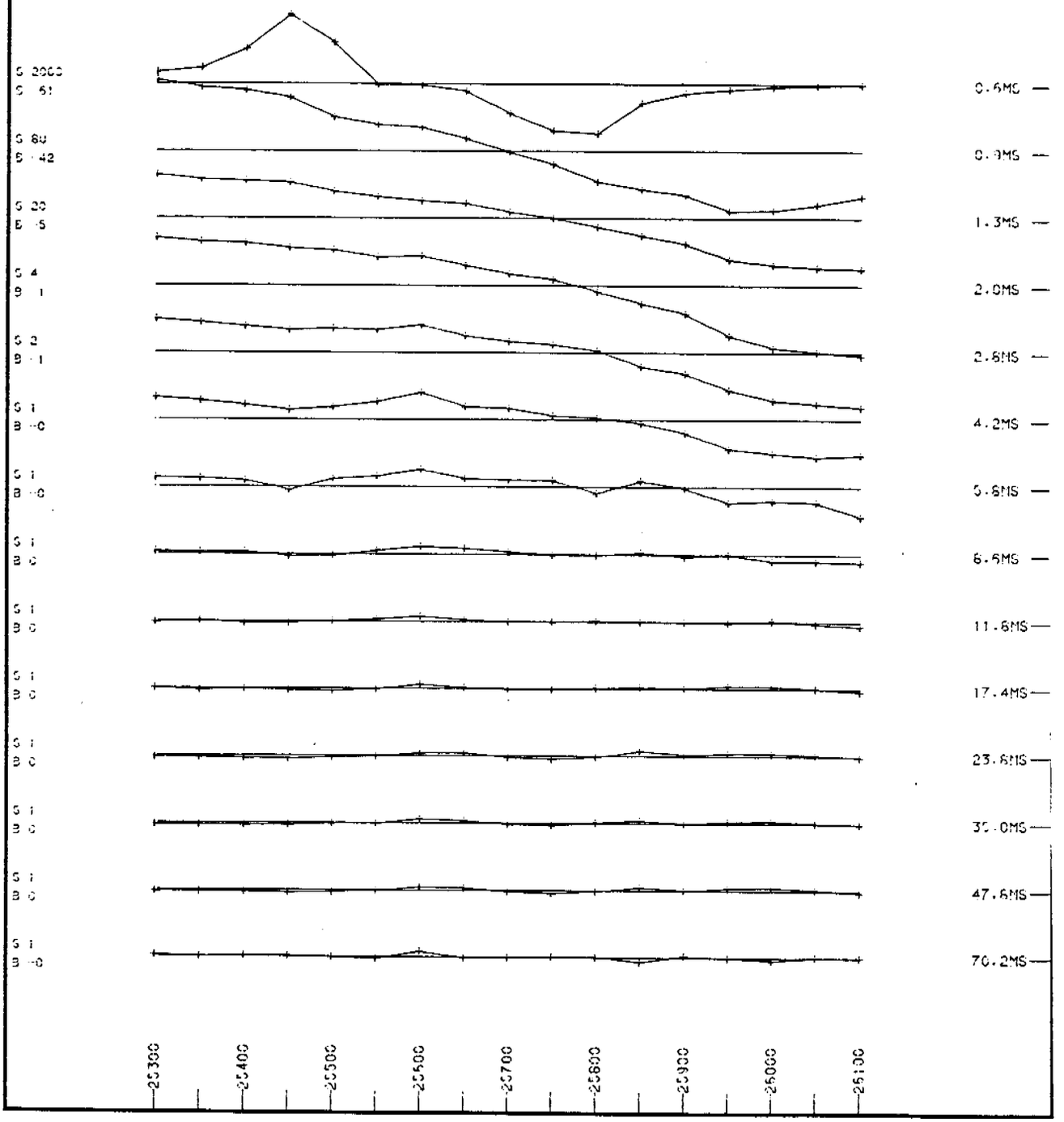
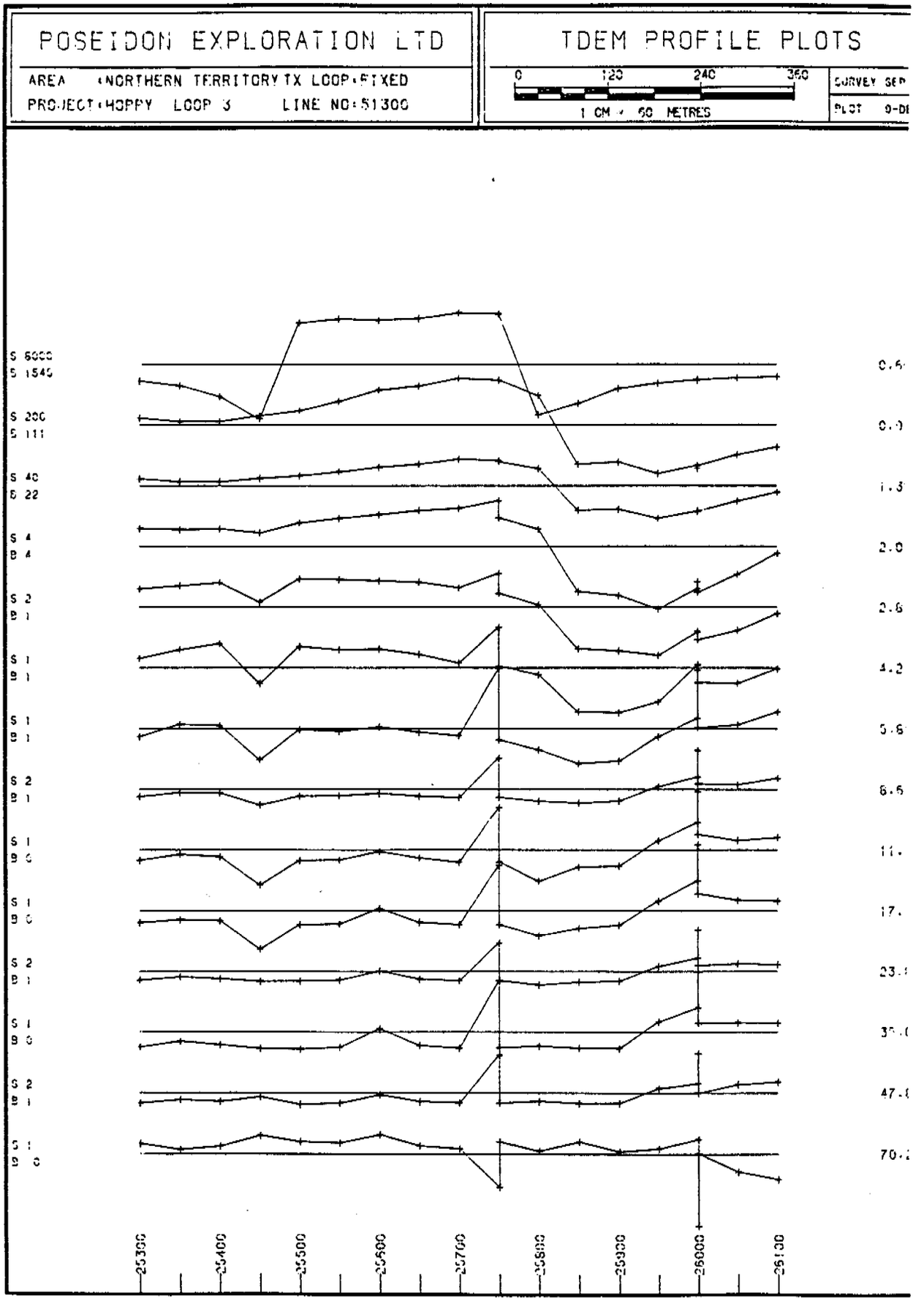
1 CM = 50 METRES

SURVEY SEP 01

PLOT 9-DEC-01

X

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AREA «NORTHERN TERRITORY TX LOOP«FIXED
PROJECT«HOPPY LOOP 3 LINE NO«51300
TDEM PROFILE PLOTS
0 120 240 360
1 CM = 60 METRES
SURVEY SEP
PLOT 9-DE
S 6000
S 1540
S 200
S 111
S 40
S 22
S 4
S 2
S 1
S 1
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S 2
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0.6
0.0
1.3
2.0
2.6
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35.
47.
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25300
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26100

POSEIDON EXPLORATION LTD

AREA : NORTHERN TERRITORY TX LOOP : FIXED

PROJECT : HOPPY LOOP 3 LINE NO : 51400

TDEM PROFILE PLOTS

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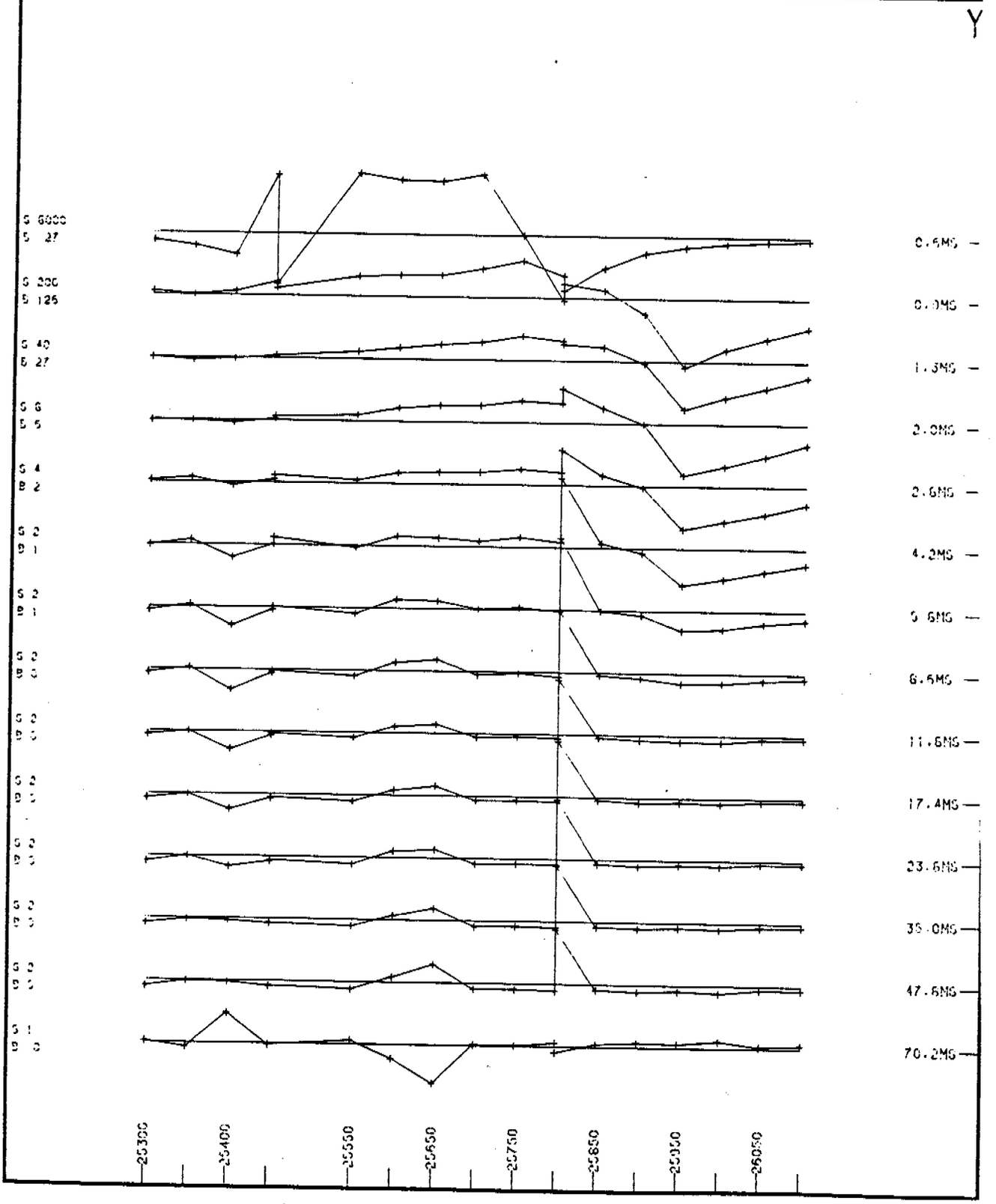
1 CM = 60 METRES

SURVEY SEP 91

PLOT 9-DEC-91



POSEIDON EXPLORATION LTD

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PROJECT:HOPPY LOOP 5 LINE NO:51000

TDEM PROFILE PLOTS

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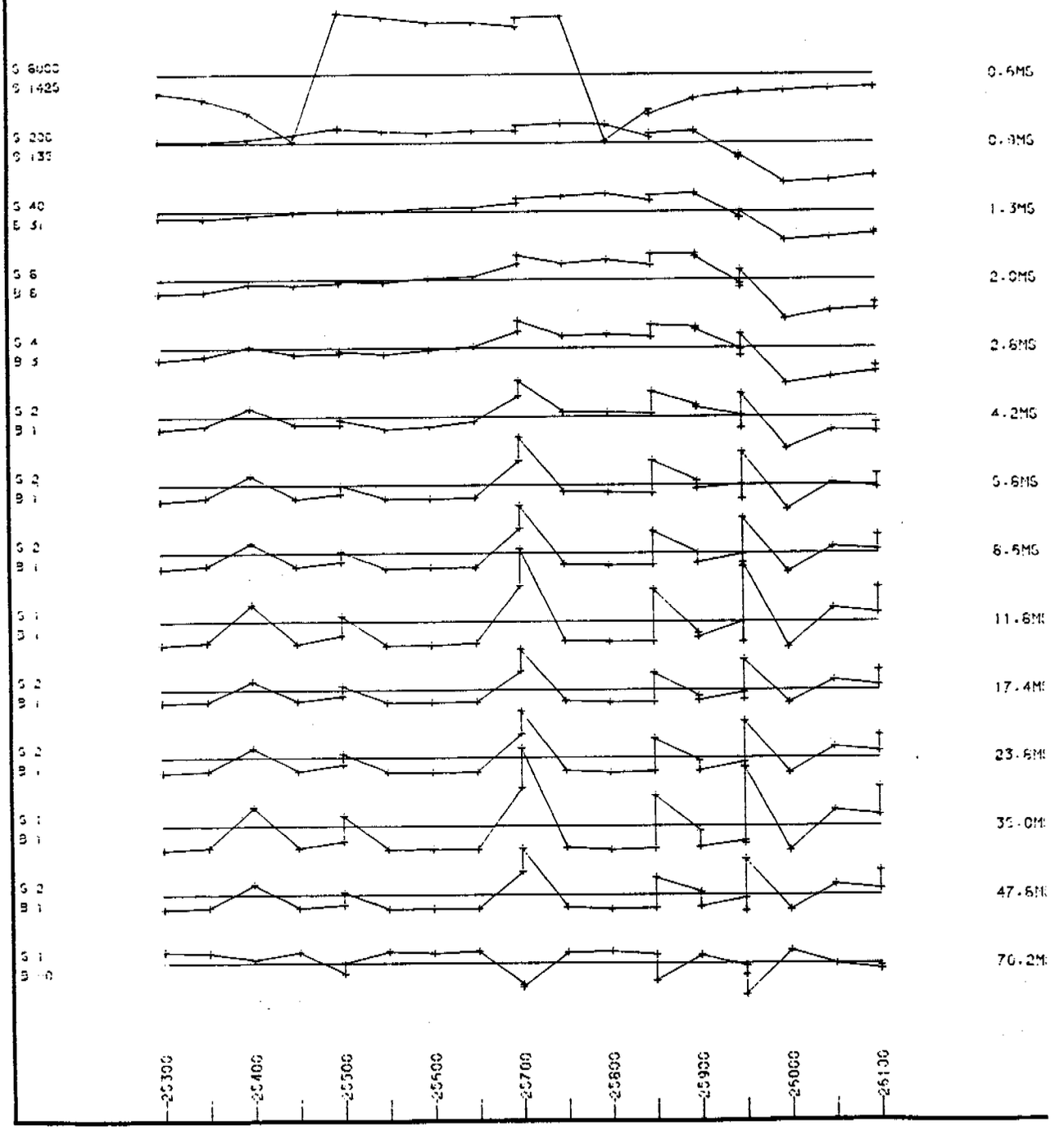
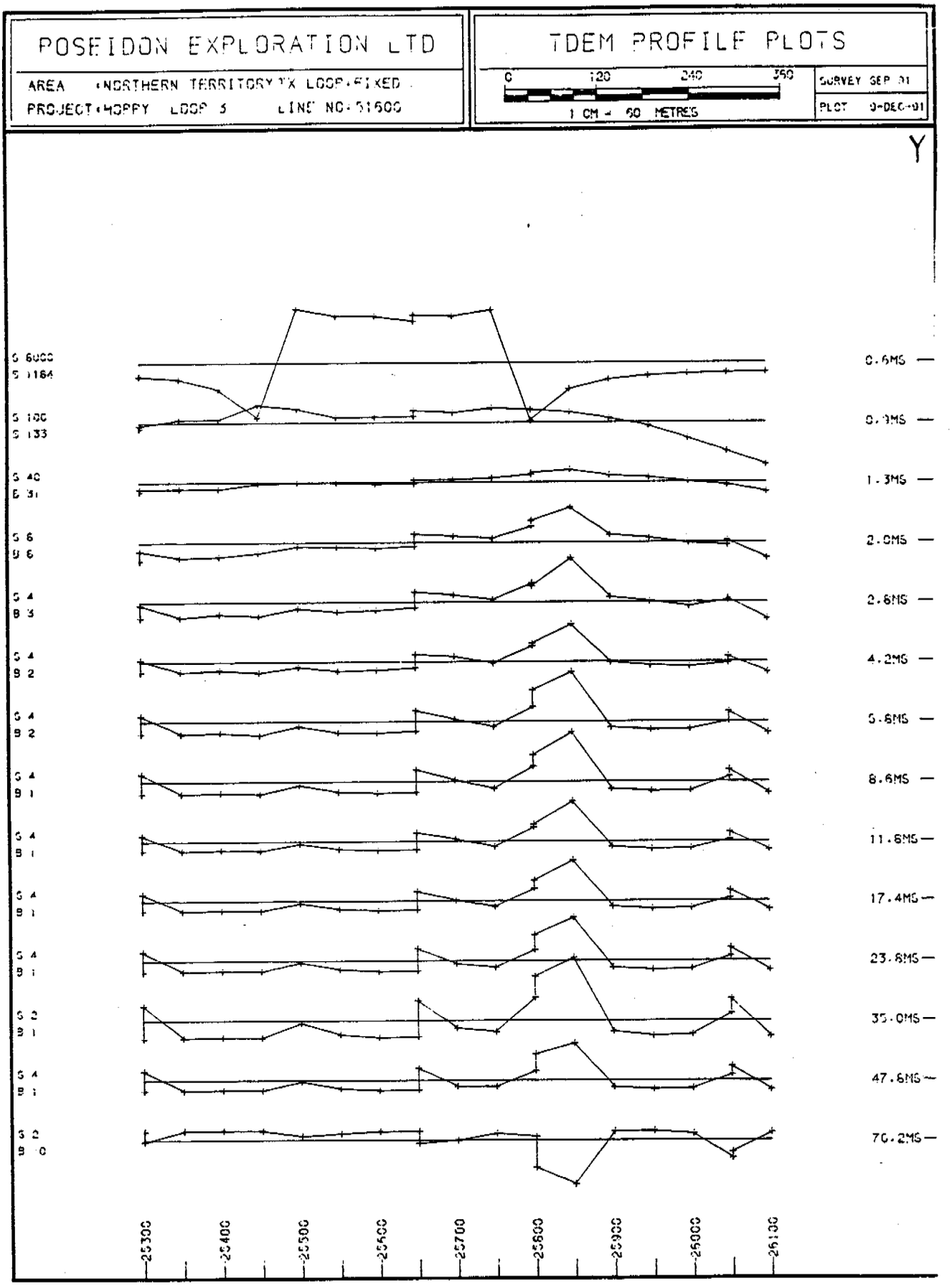
1 CM = 60 METRES

SURVEY SEP 31

PLOT 9-DEC-9




POSEIDON EXPLORATION LTD
AREA (NORTHERN TERRITORY) (X LOOP) (FIXED
PROJECT (HOPPY LOOP 5 LINE NO: 51600
TDEM PROFILE PLOTS
0 120 240 360
1 CM = 60 METRES
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PLOT 9-DEC-91
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S 3164
S 100
S 133
S 40
B 31
S 6
B 6
S 4
B 3
S 4
B 2
S 4
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S 4
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S 2
B 1
S 4
B 1
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25600
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26000
26100

POSEIDON EXPLORATION LTD

AREA : NORTHERN TERRITORY TX LOOP : FIXED

PROJECT : HOPPY LOOP 3 LINE NO : 51300

TDEM PROFILE PLOTS

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1 CM = 60 METRES

SURVEY SEP 91

PLOT 9-DEC-91

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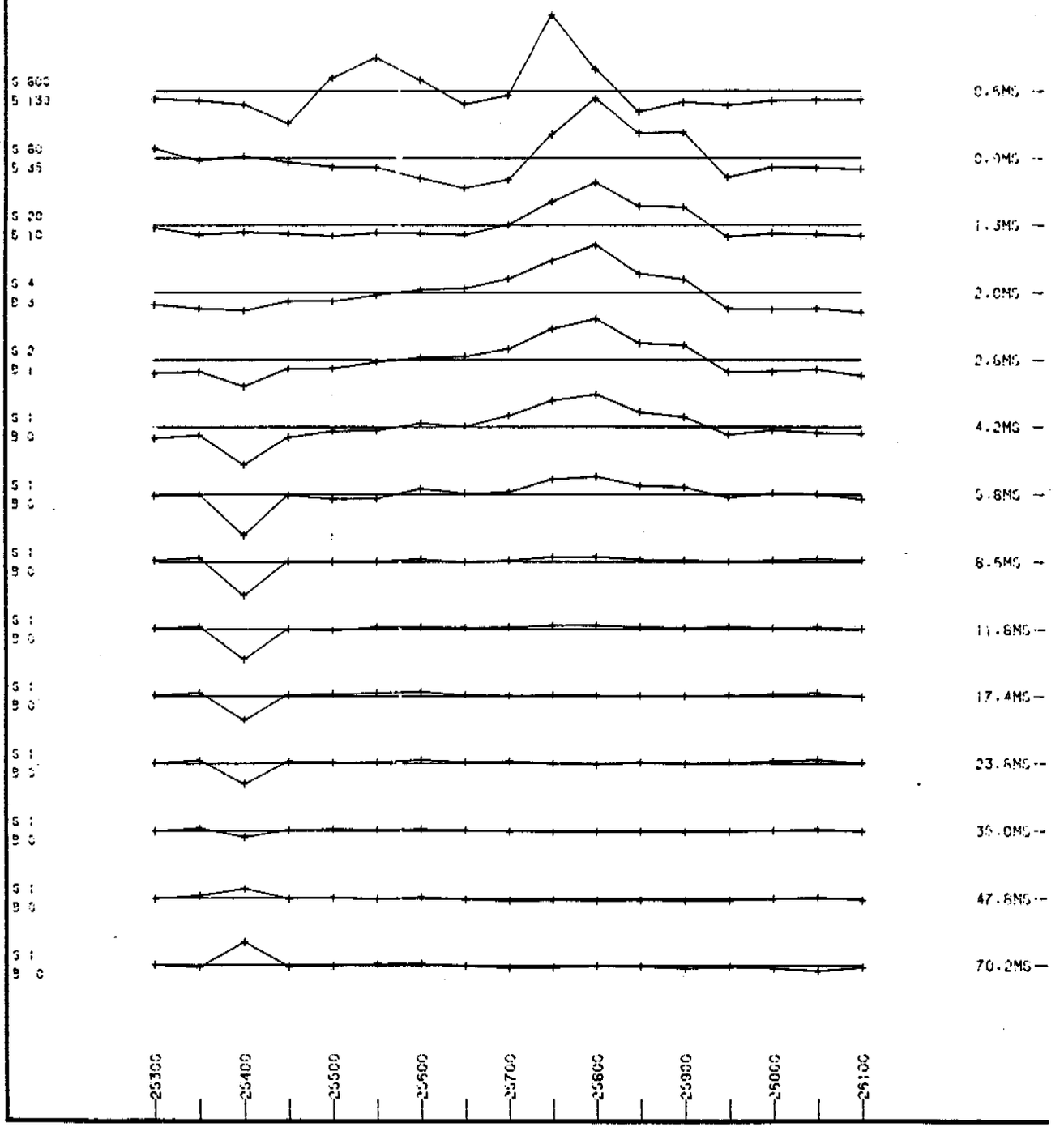

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PROJECT (HOPPY LOOP 3 LINE NO (S1400

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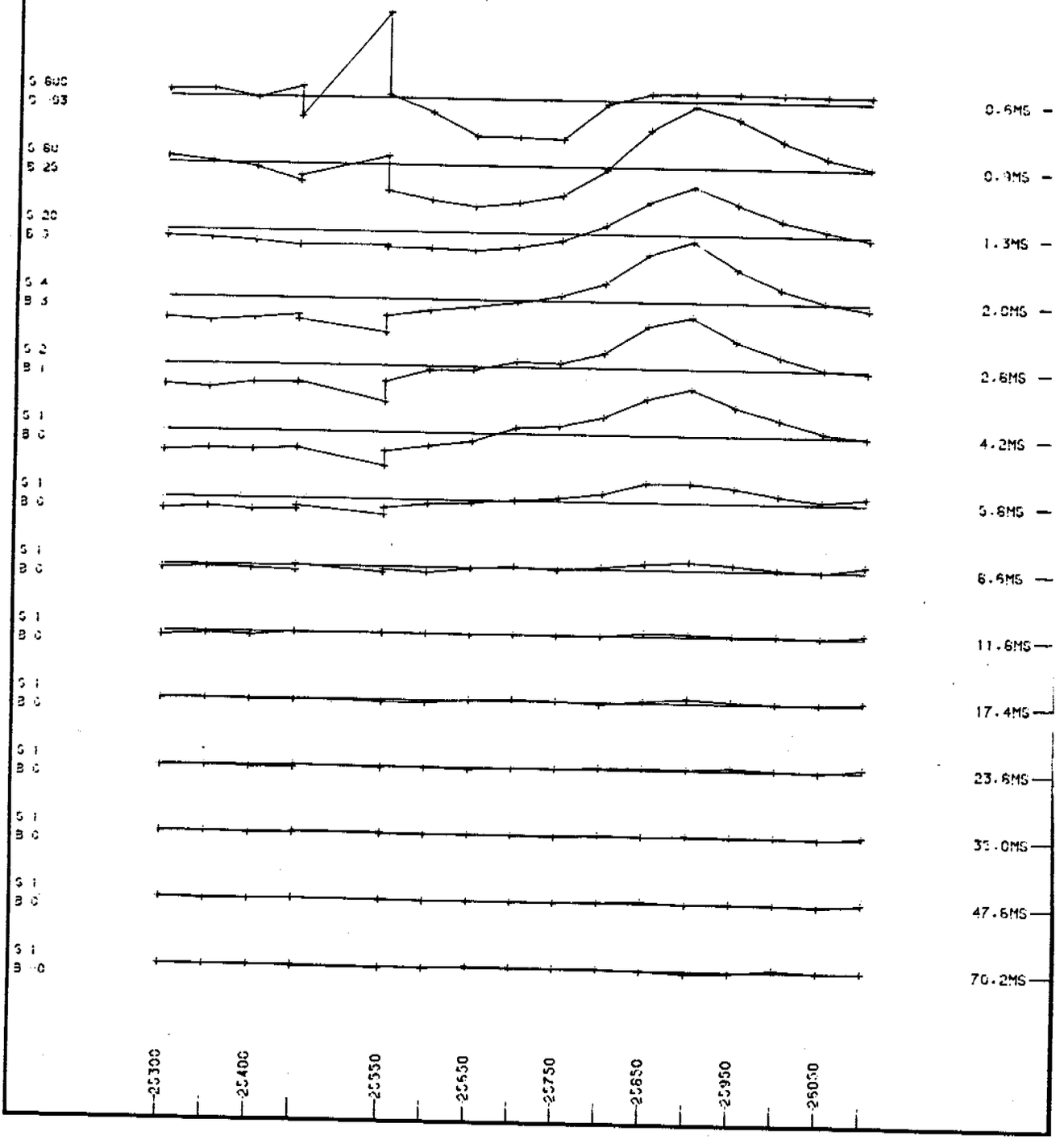
SURVEY SEP 91

PLOT 9-DEC-91



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TDEM PROFILE PLOTS

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SURVEY SEP 91

PLOT 9-DEC-91

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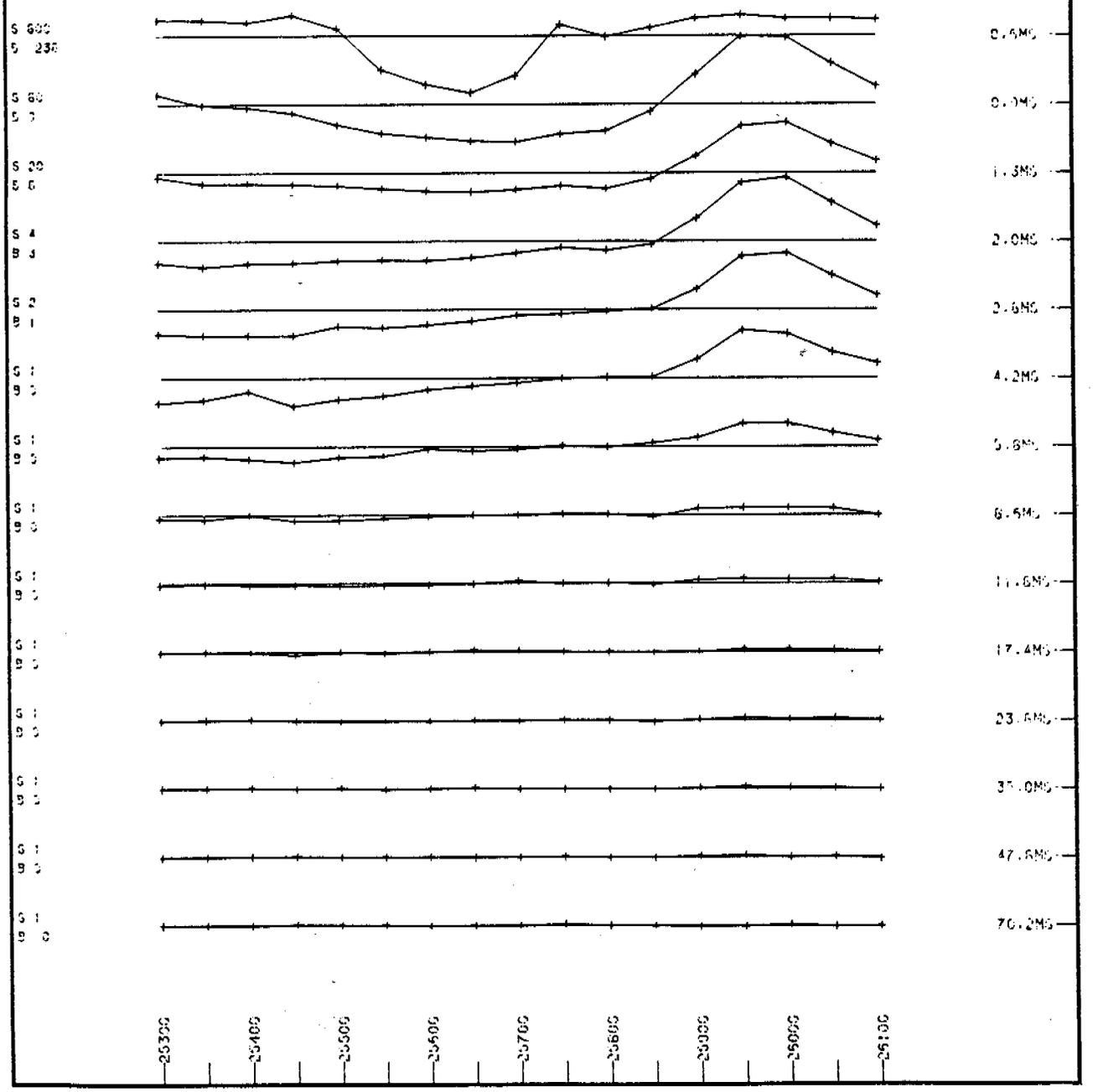

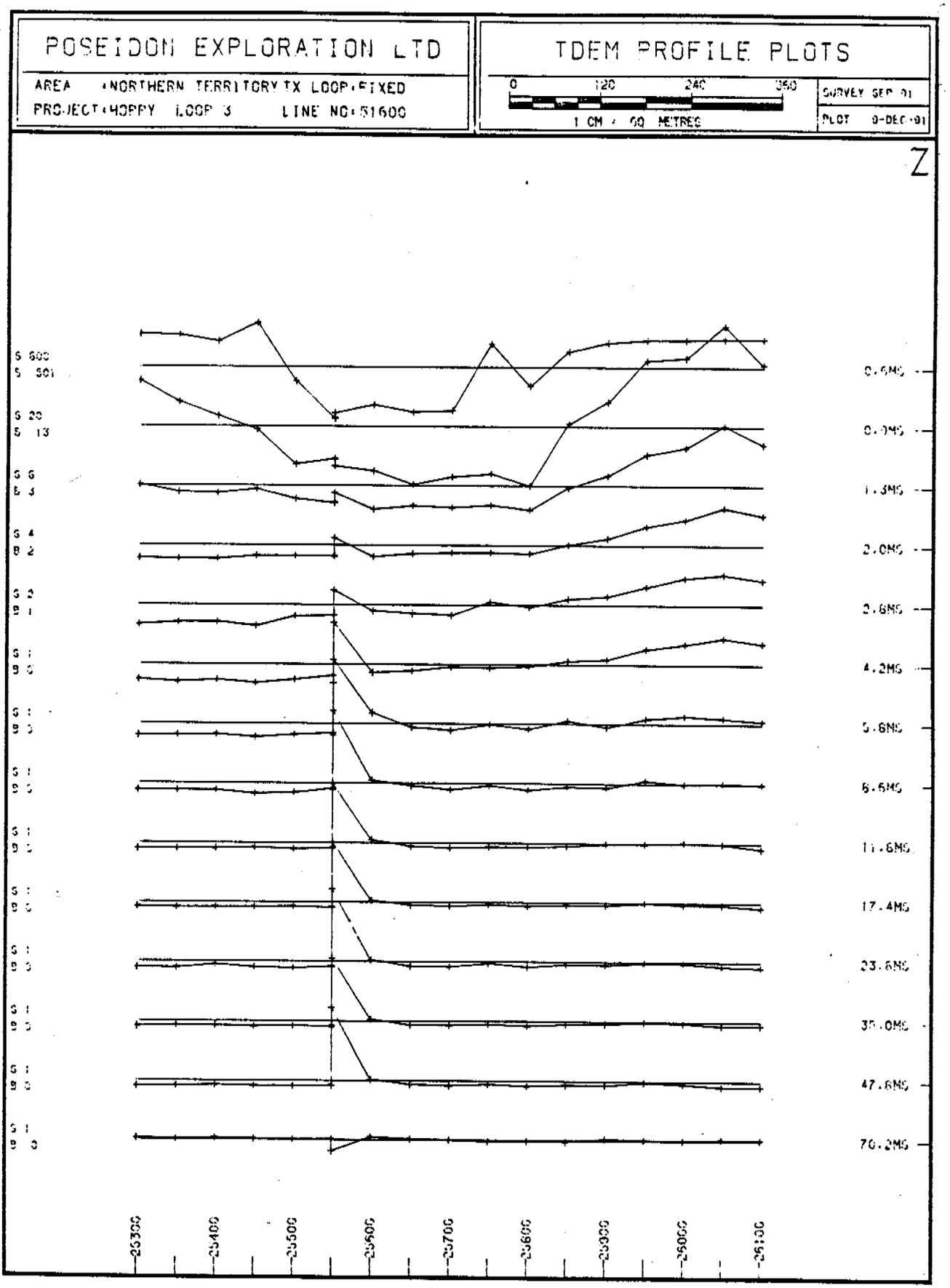
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AREA NORTHERN TERRITORY TX LOOP: FIXED
PROJECT: HOPPY LOOP 3 LINE NO: 51600
TDEM PROFILE PLOTS
0 120 240 360
1 CM = 60 METRES
SURVEY SEP 91
PLOT 9-DEC-91
Z
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S 501
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S 13
S 6
S 4
S 4
B 2
S 2
B 1
S 1
B 0
S 1
B 0
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S 1
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0.9MS
1.3MS
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5.6MS
8.6MS
11.6MS
17.4MS
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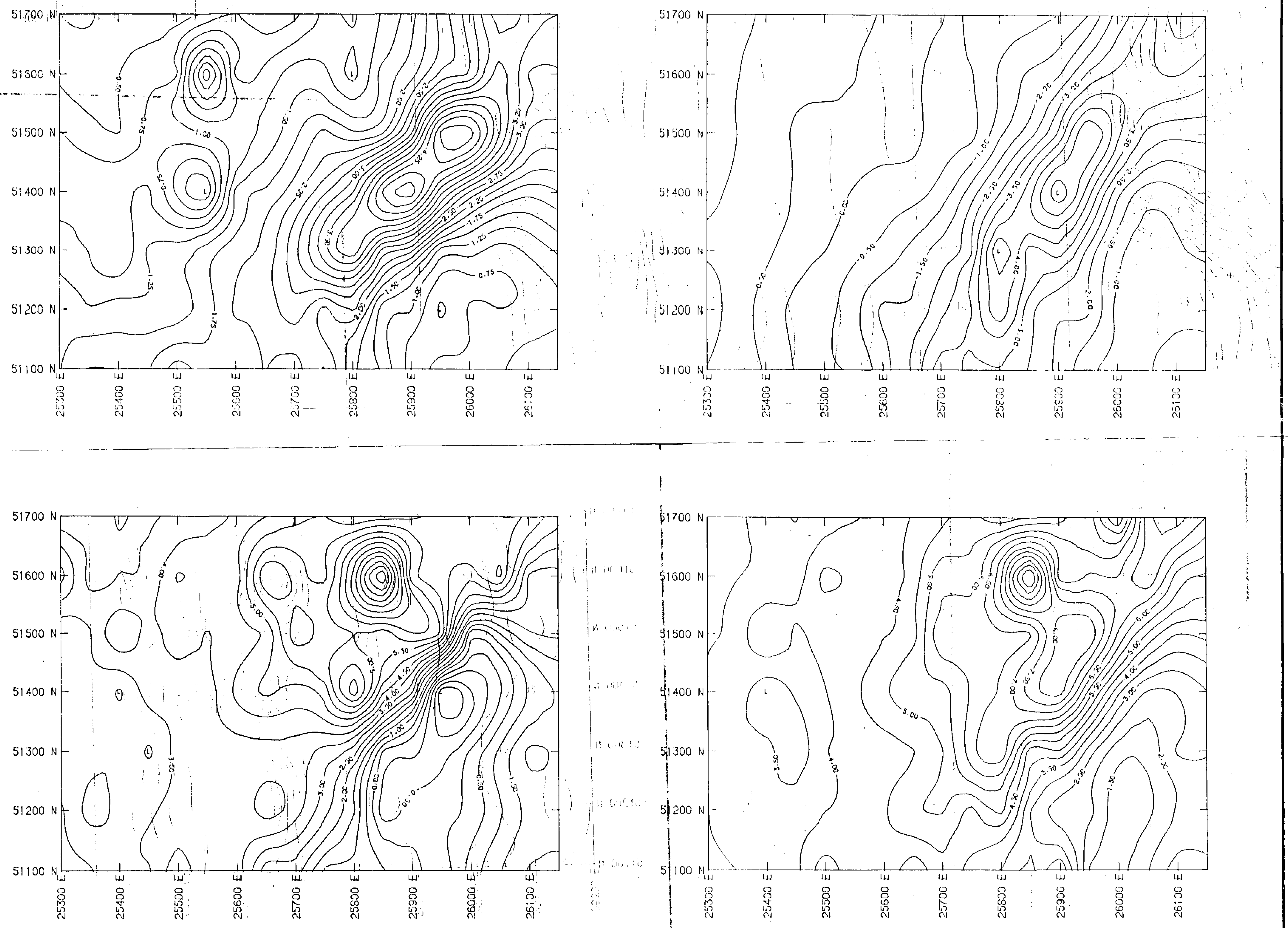


CR92/137

PLAN LAYOUT

X Component	Y Component
Z Component	RESULTANT

DATA ACQUISITION

Operator : T.Cuff
Transmitter : Smtx
Receiver : Sirotem MkIII
Coil : Sirotem MkIII RVR
Loop Size : 600x300m (Fixed)
Average Current : 14amps
Timing Sequence : 2 secs

Line Spacing : 100m
Station Spacing : 50m
Components Measured : X,Y,Z

Survey Date : September, 1991

0 100 200 300 M
SCALE 1:5000

N

NORMANDY POSEIDON GROUP

POSEIDON EXPLORATION LTD.

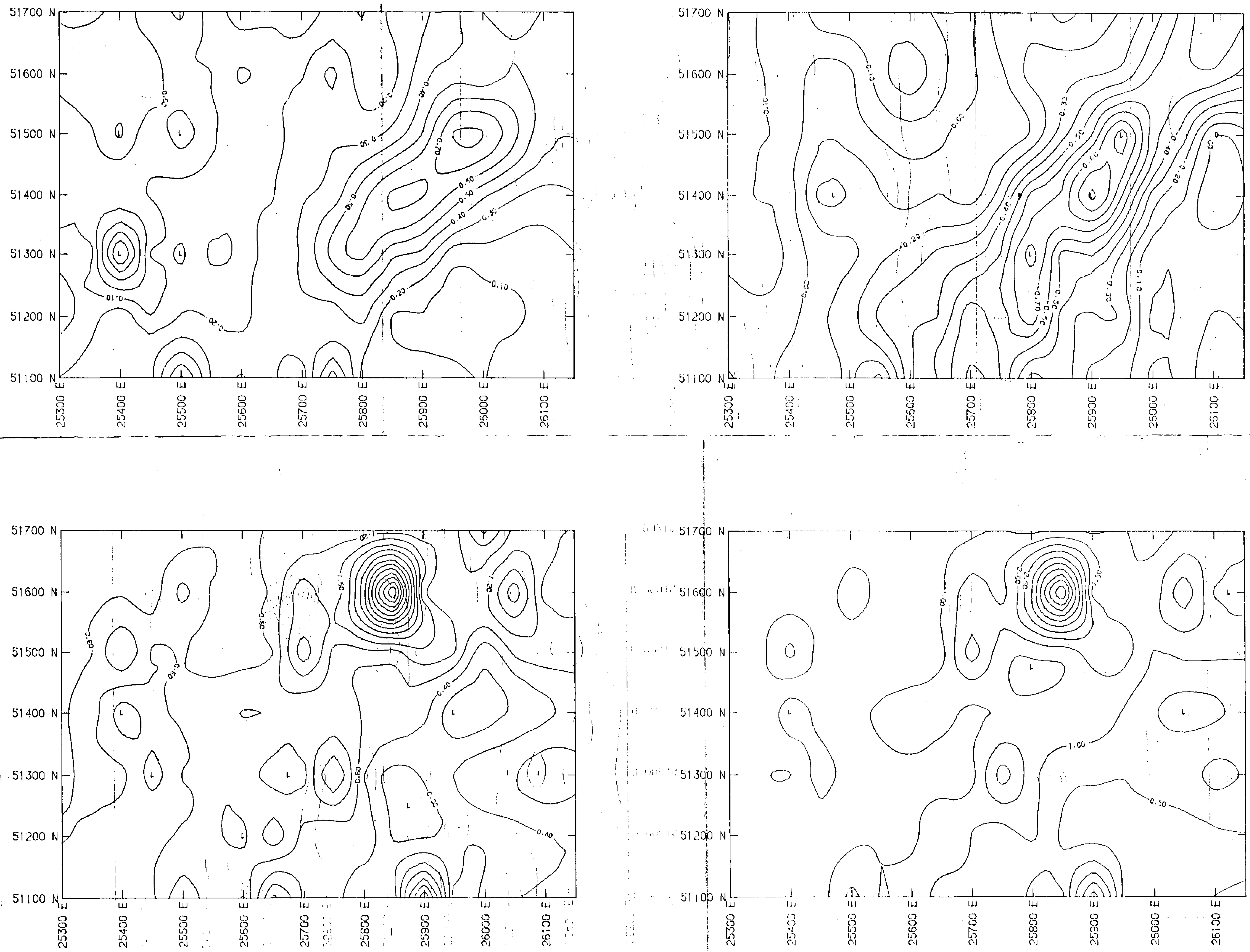
HOOPY AREA

FIXED LOOP SIROTEM - LOOP 3
CHANNEL 15 (2.425msecs)

Author : A.M.Foley | Ref. :
Date : 20-9-91 | Figure No. :

PLATE 1

CR 92/137



PLAN LAYOUT

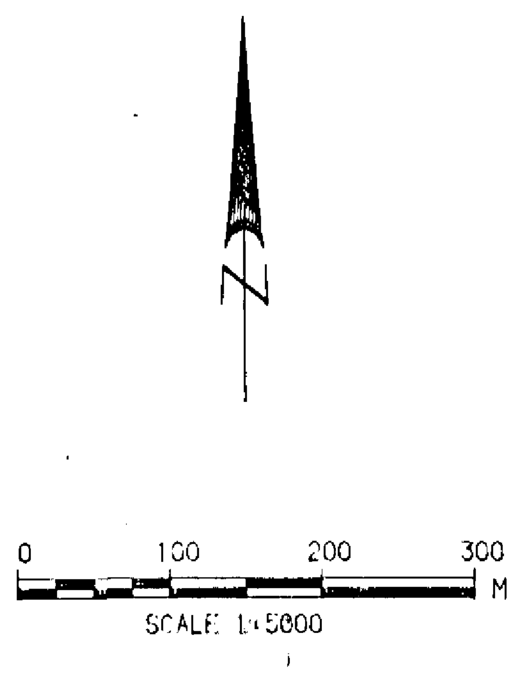
X Component	Y Component
Z Component	RESULTANT

DATA ACQUISITION

Operator : T.Cuff
Transmitter : Smtx
Receiver : Sirotem MkIII
Coil : Sirotem MkIII RVR
Loop Size : 600x300m (Fixed)
Average Current : 14amps
Timing Sequence : 2 secs

Line Spacing : 100m
Station Spacing : 50m
Components Measured : X,Y,Z

Survey Date : September, 1991



NORMANDY POSEIDON GROUP

POSEIDON EXPLORATION LTD.

HOOPY AREA

FIXED LOOP SIROTEM - LOOP 3
CHANNEL 19 (5.025msecs)

Author : A.M.Foley	Ref. :
Date : 20-9-91	Figure No. :

PLATE 2