SCINTREX

309001

DATA FOR

EIP AND TOTAL MAGNETIC FIELD SURVEYS

OVER WHITE SPUR, HENTY RIVER, HENTY FAULT ZONE
WEST TYNDALL, LYNCH CREEK
NEAR QUEENSTOWN, TASMANIA

ON BEHALF OF

THE MOUNT LYELL MINING & RAILWAY COMPANY LTD.

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309002

SCINTREX

DETAILS OF
EIP AND TOTAL MAGNETIC FIELD SURVEYS
OVER WHITE SPUR, HENTY RIVER, HENTY FAULT ZONE
NEAR QUEENSTOWN, TASMANIA
ON BEHALF OF
THE MOUNT LYELL MINING & RAILWAY COMPANY LTD.

INTRODUCTION

At the request of Mr. K. Reid, Chief Geologist for The Mount Lyell Mining & Railway Company Ltd., Scintrex Pty. Ltd. executed electrical induced polarization and total magnetic field surveys over various areas near Queenstown, Tasmania. The work was carried out by Scintrex crewleader Mr. B. Ekstrom assisted by Mr. P. Duncan and Mr. K.E. Ryen. The details of the surveys are set down below.

SURVEY DETAILS

WHITE SPUR

Pole-Dipole

Line 37.5N	3450W - 2700W	8-11-79
Line 36N	2400W - 800W	7-11-79

Down-Hole

WSP-2	36 metres - 201 metres @ 2.5 metre spacing	12-12-79

HENTY FAULT ZONE

Gradient Array

Current Dipoles at 0 and 4400E on 300 feet south of 53N

Line 53N	2050E - 3550E	6-11-79
Line 52N	1550E - 2750E	6-11-79

HENTY RIVER

Magnetics

Line 11N	2025E - 2400E	23-11-79
Line 10N	2100E - 2700E	23-11-79
Line 9N	2200E - 2700E	23-11-79
Line 8N	2250E - 2700E	23-11-79
Line 7.5N	2300E - 3000E	23-11-79
Line 7N	2400E - 2800E	23-11-79
Line 6N	2400E - 2800E	23-11-79
Line 5N	2400E - 2700E	23-11-79

Gradient Array

Current Dipoles at 1600E and 3500E on line 8N

Line 11N	2037E - 2387E	22-11-79
Line 10N	2112.5E - 2687.5E	22-11-79
Line 9N	2212.5E - 2687.5E	22-11-79
Line 8N	2312.5E - 2687.5E	22-11-79
Line 7.5N	2312.5E - 2987.5E	20-11-79
Line 7N	2412.5E - 2787.5E	20-11-79

Line 6N 2412.5E - 2787.5E 19-11-79

Line 5N 2412.5E - 2687.5E 19-11-79

Pole-Dipole

Line 7N 2575E - 2812E 25 metre spacing 25-11-79

Line 10N 2425E - 2687E 25 metre spacing 25-11-79

DATA PRESENTATION

The data has been presented in the following format and at the following scales:-

WHITE SPUR

Pole-dipole

Presented as standard pseudo-section plots

Down-hole

Down-hole scale

Chargeability

Resistivity

HENTY FAULT ZONE

Horizontal scale 1 inch = 200 feet

Chargeability 1 inch = 5 millivolts/volt

Resistivity 5 inch log cycle in ohm-metres

HENTY RIVER

Magnetics

Horizontal scale 1:2500

Vertical Scale 1 centimetre = 20 gamma

Gradient Array

Horizontal scale 1:2500

Chargeability 1 centimetre = 2 millivolts/volt

Resistivity 5 centimetre log cycle expressed in ohm-metres

The gradient and total magnetic field data has been incorporated into the existing contour maps. (Scale 1:2500)

Pole-Dipole

Presented as standard pseudo section plots.

Note: As instructed, no interpretation of this data has been made.

A.W. HOWLAND-ROSE, MSc, DIC, AMAusIMM, FGS.

SCINTREX

APPENDIX TO REPORT TAS-073D

DETAILS OF
EIP SURVEYS
WEST TYNDALL AND LYNCH CREEK
NEAR QUEENSTOWN, TASMANIA
ON BEHALF OF
THE MOUNT LYELL MINING & RAILWAY COMPANY LTD.

SURVEY DETAILS

WEST TYNDALL

Dipole-dipole

		DATES
Line 12N	1350E - 1675E	11,14,15-6-80
Line 10N	2075E - 2250E	22-6-80

LYNCH CREEK

Dipole-dipole

Line 135N	2525E - 2925E	3,4-6-80
Line 130N	2500E - 2975E	5,6-6-80

309007

005

SCINTREX PTY. LTD.

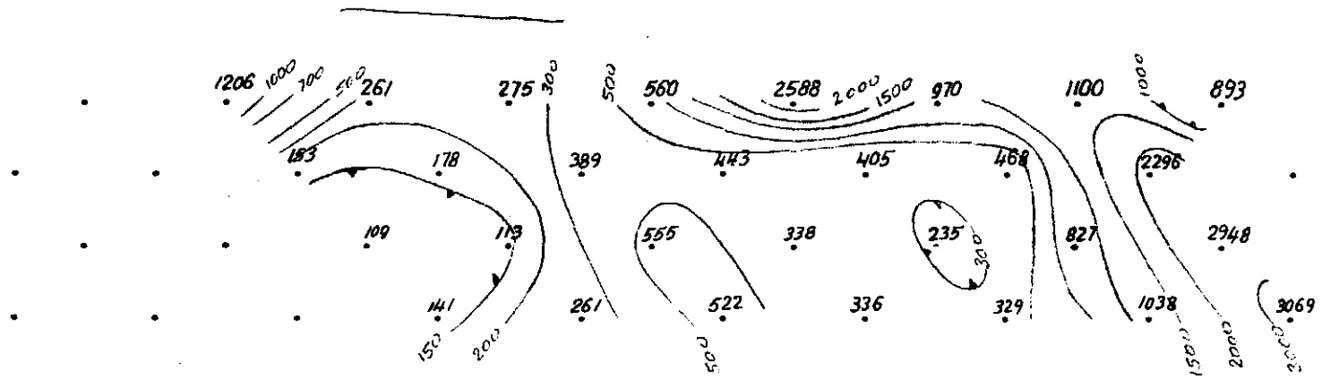
INDUCED POLARIZATION AND RESISTIVITY SURVEY

DIPOLE - DIPOLE ARRAY

DATE 8-11-79	LINE No. 37.5 N
PLOTTED BY B.E.	PROSPECT WHITE SPUR
PULSE 2 Sec. / Rx.	JOB No. TAS-073-D
DIPOLE SPACING 100'	

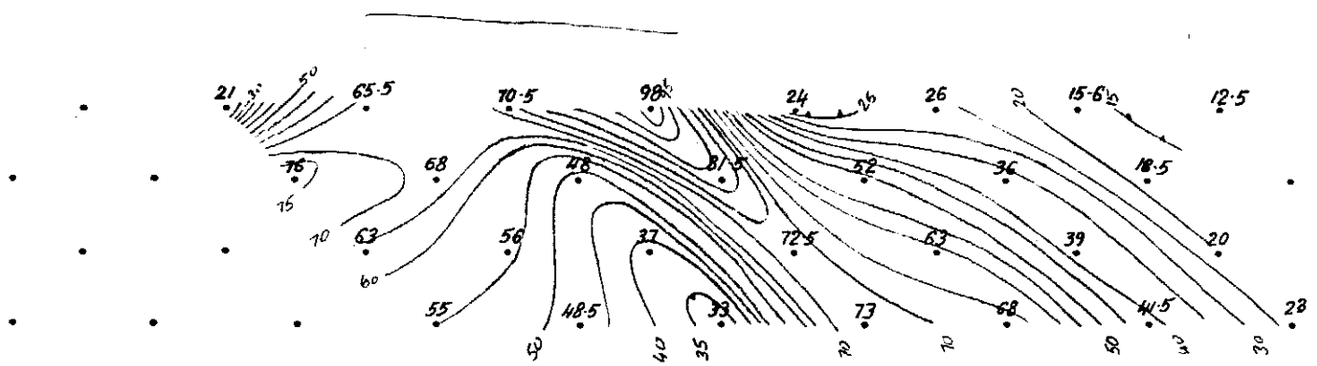
3500W 3400W 3300W 3200W 3100W 3000W 2900W 2800W 2700W

RESISTIVITY Ω m.



N-1
N-2
N-3
N-4

CHARGEABILITY



N-1
N-2
N-3
N-4

309008

006

SCINTREX PTY. LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

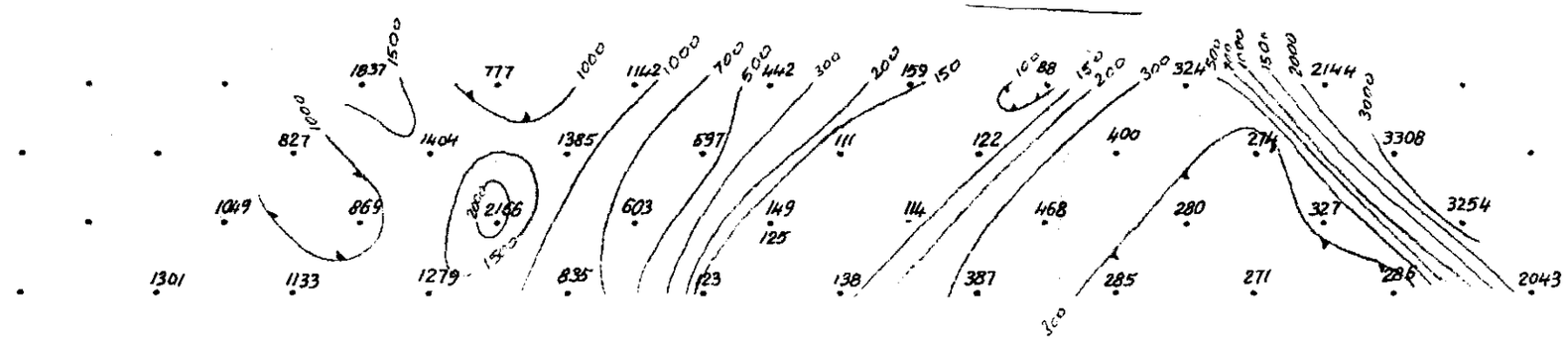
DIPOLE - DIPOLE ARRAY

DATE 7-11-79	LINE No. 36N
PLOTTED BY B.E.	PROSPECT WHITE SPUR
PULSE 2 Sec / Rx.	JOB No. TAS-073-D
DIPOLE SPACING 100'	

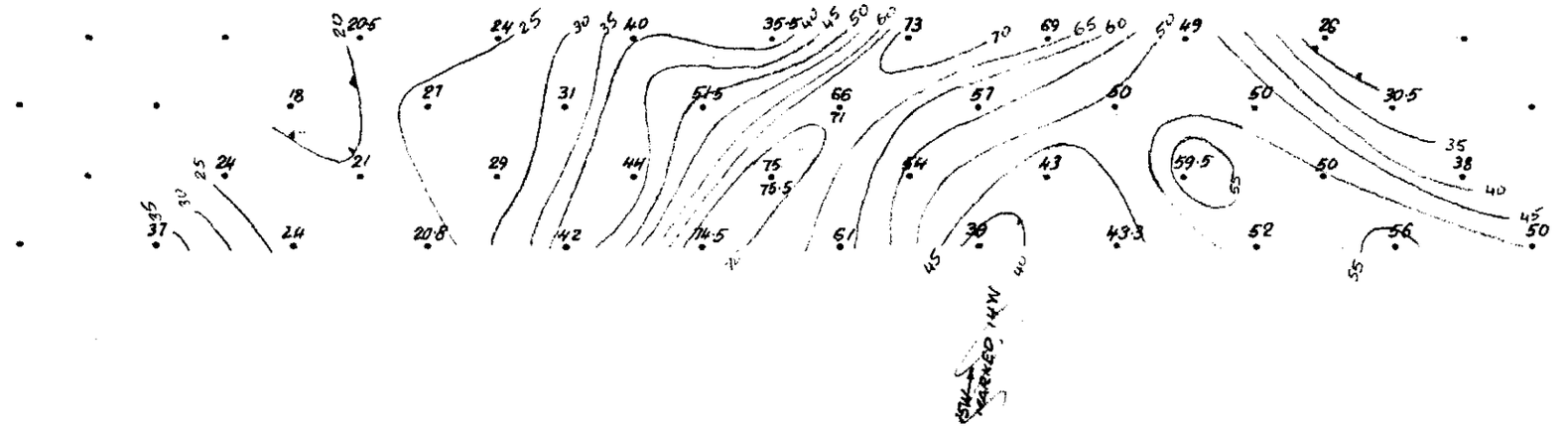
2200W 2100W 2000W 1900W 1800W 1700W 1600W 1500W 1400W 1300W 1200W 1100W 1000W 900W

14 13 12 11 10 9 8 7 6 5 4

RESISTIVITY Ω m.



CHARGEABILITY



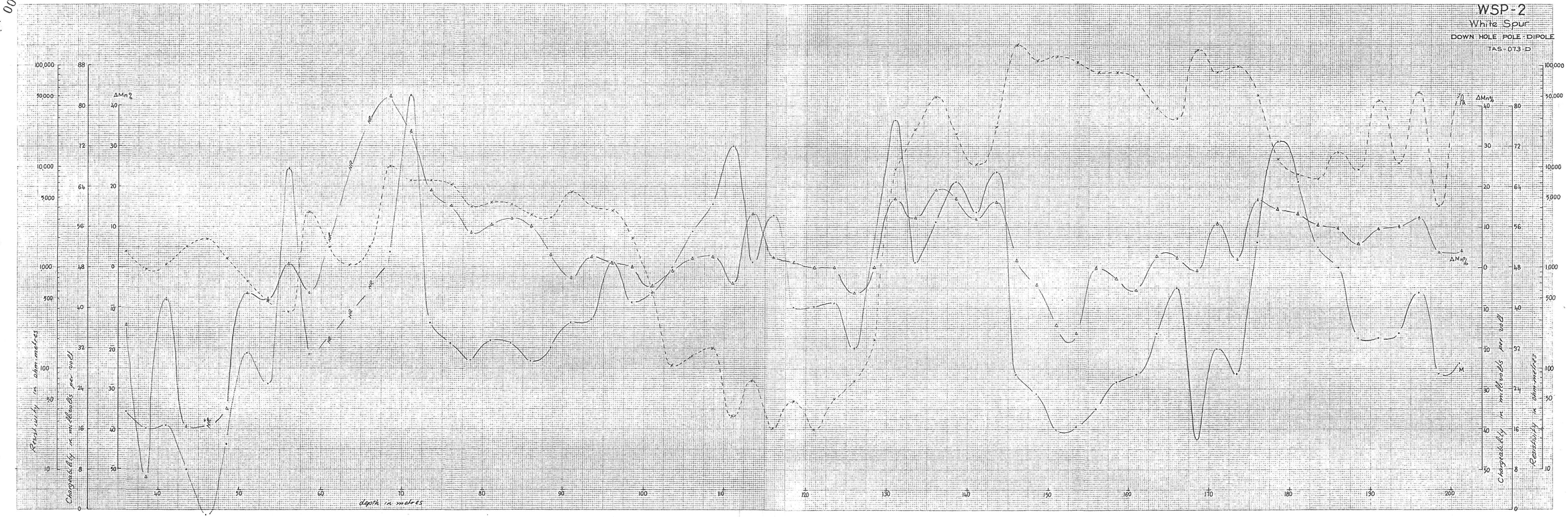
F163

WSP-2

White Spur

DOWN HOLE POLE-DIPOLE

TAS-073-D



009

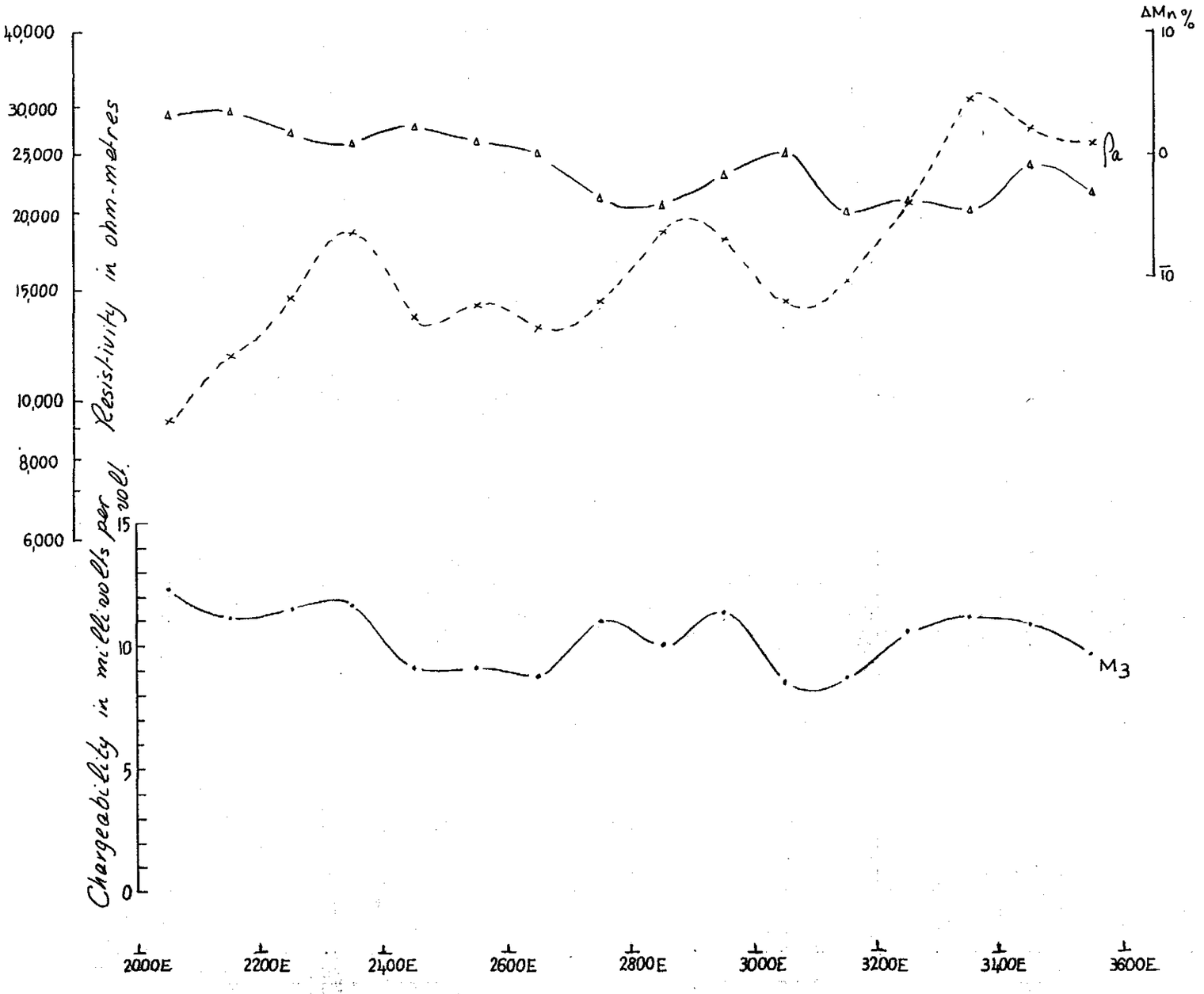
309010

Line 53 N

Henty Fault

GRADIENT ARRAY EIP

TAS-073 D



008

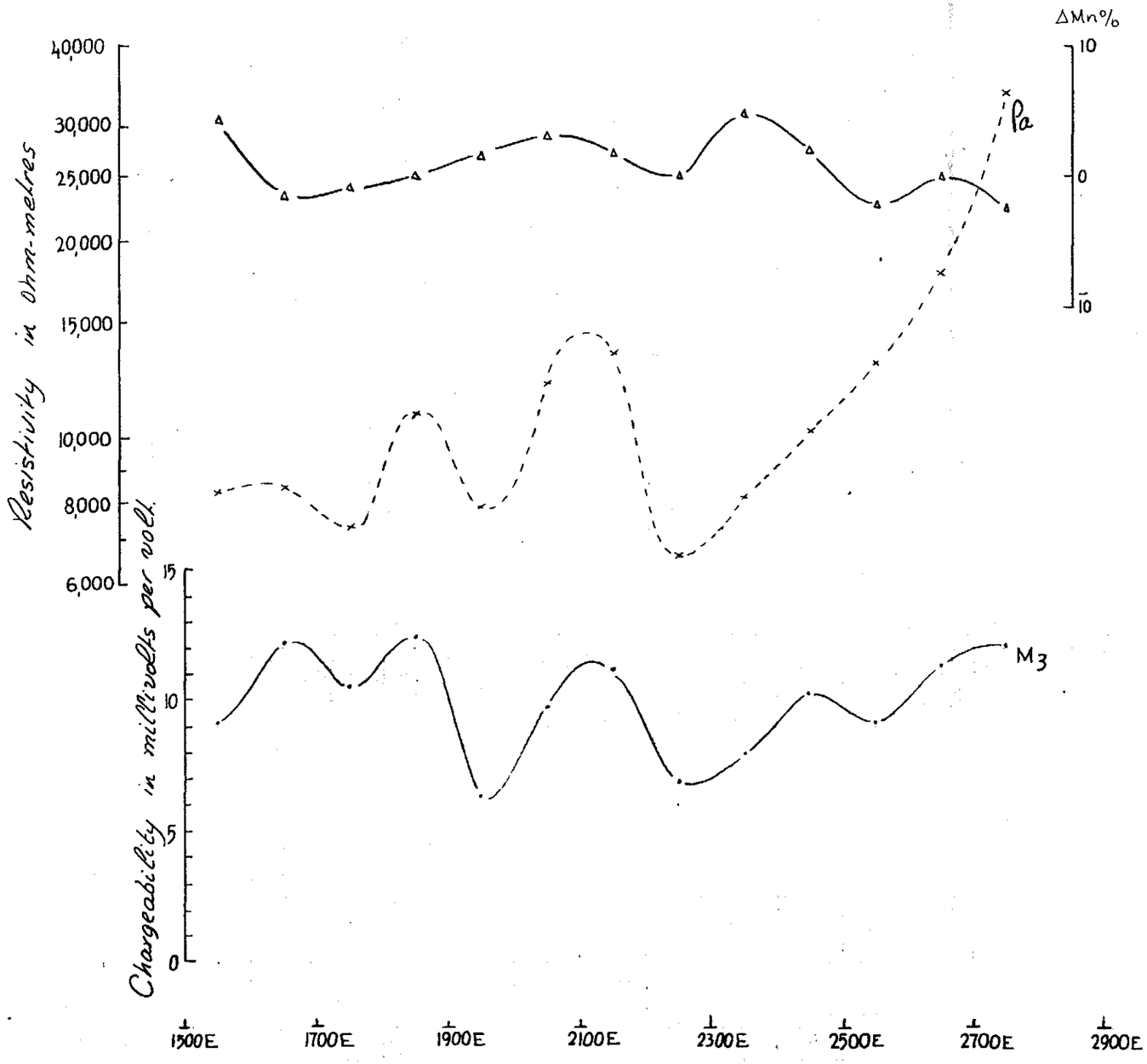
309011

Line 52N

Henty Fault

GRADIENT ARRAY EIP

TAS-073 D



309012

N

Henty River

MAGNETICS

TAS-073-D

63019

63069

63082

62950

62800 γ

62700 γ

62600 γ

62500 γ

62400 γ

2100E

2200E

2300E

2400E

309013

011

ION

Henty River

MAGNETICS

TAS-073-D

63044
63203
63010
63099

62800 γ

62700 γ

62600 γ

62500 γ

62400 γ

2100E
2200E
2300E
2400E
2500E
2600E
2700E

6943

V121 V4

012

309014

9N

Henty River

MAGNETICS

TAS-073-D

63057
63122
62910

62800 γ

62700 γ

62600 γ

62500 γ

62400 γ

2200E

2300E

2400E

2500E

2600E

2100E

309015

013

8N

Henty River

MAGNETICS

TAS-073-D

62800 S

62700 S

62600 S

62500

62400

63006

63007

63006

2300E

2400E

2500E

2600E

2700E

014

309016

T 5 N

Henty River

MAGNETICS

TAS-073-D

62922

62800 γ

62700 γ

62600 γ

62500 γ

62400 γ

2300E 2400E 2500E 2600E 2700E 2800E 2900E 3000E

015

309017

7N

Henty River

MAGNETICS

TAS-073-D

63081

62800 γ

62700 γ

62600 γ

62500 γ

62400 γ

2400E

2500E

2600E

2700E

2800E

016

309018

6N

Henty River

MAGNETICS

TAS-073-D

62962

62800 γ

62700 γ

62600 γ

62500 γ

62400 γ

2400E

2500E

2600E

2700E

2800E

017

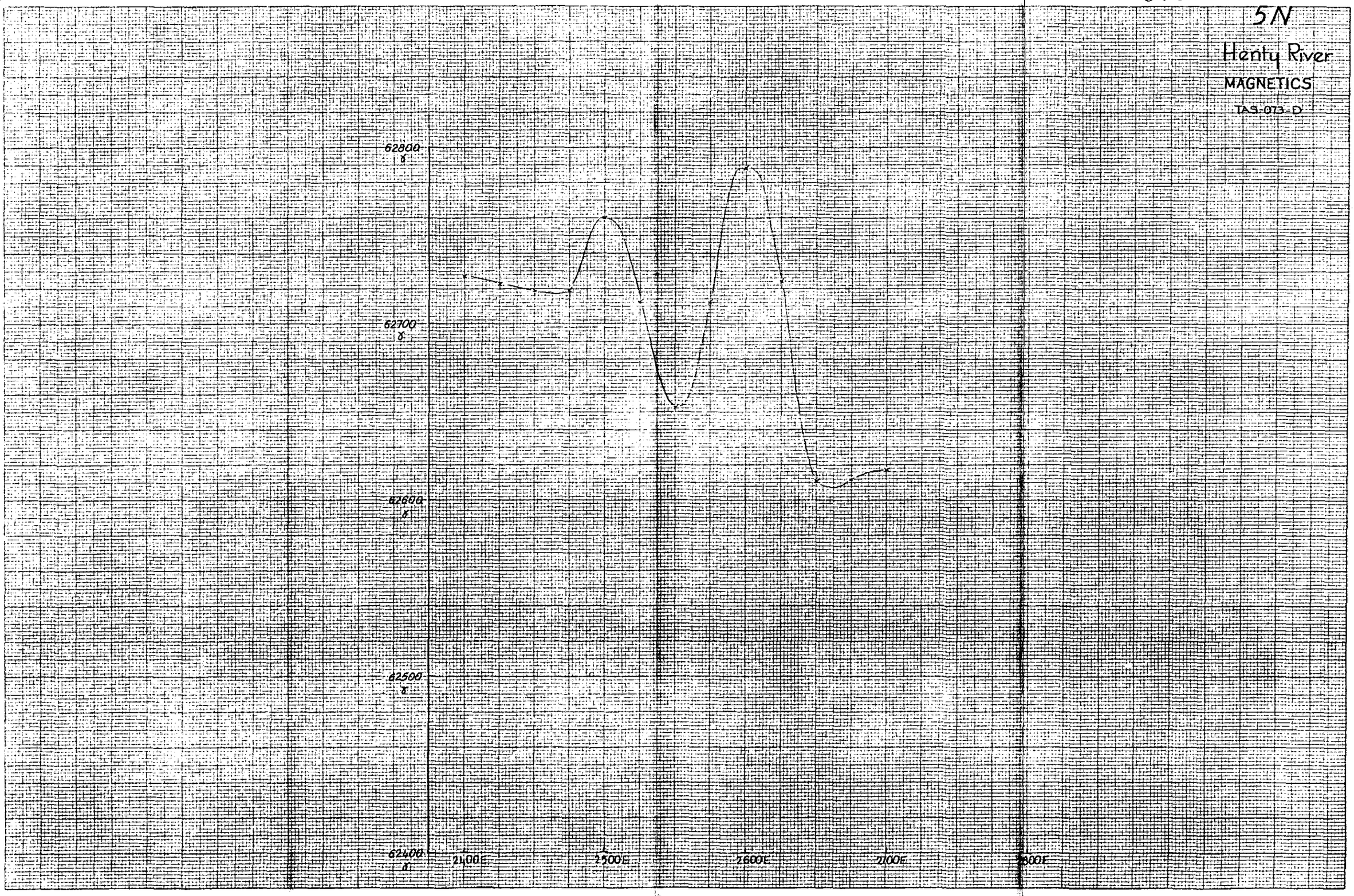
309019

5N

Henty River

MAGNETICS

TAS-073-D



018

309020

N

Henty River

GRADIENT ARRAY

TAS-013-D

ΔMn%

10

0

-10

C

24

20

16

12

8

4

0

Chargeability in milliseconds per volt

10,000

5000

2,000

1000

Resistivity in ohm-metres

M_3

ρ_a

1900E

2100E

2200E

2300E

2400E

309021

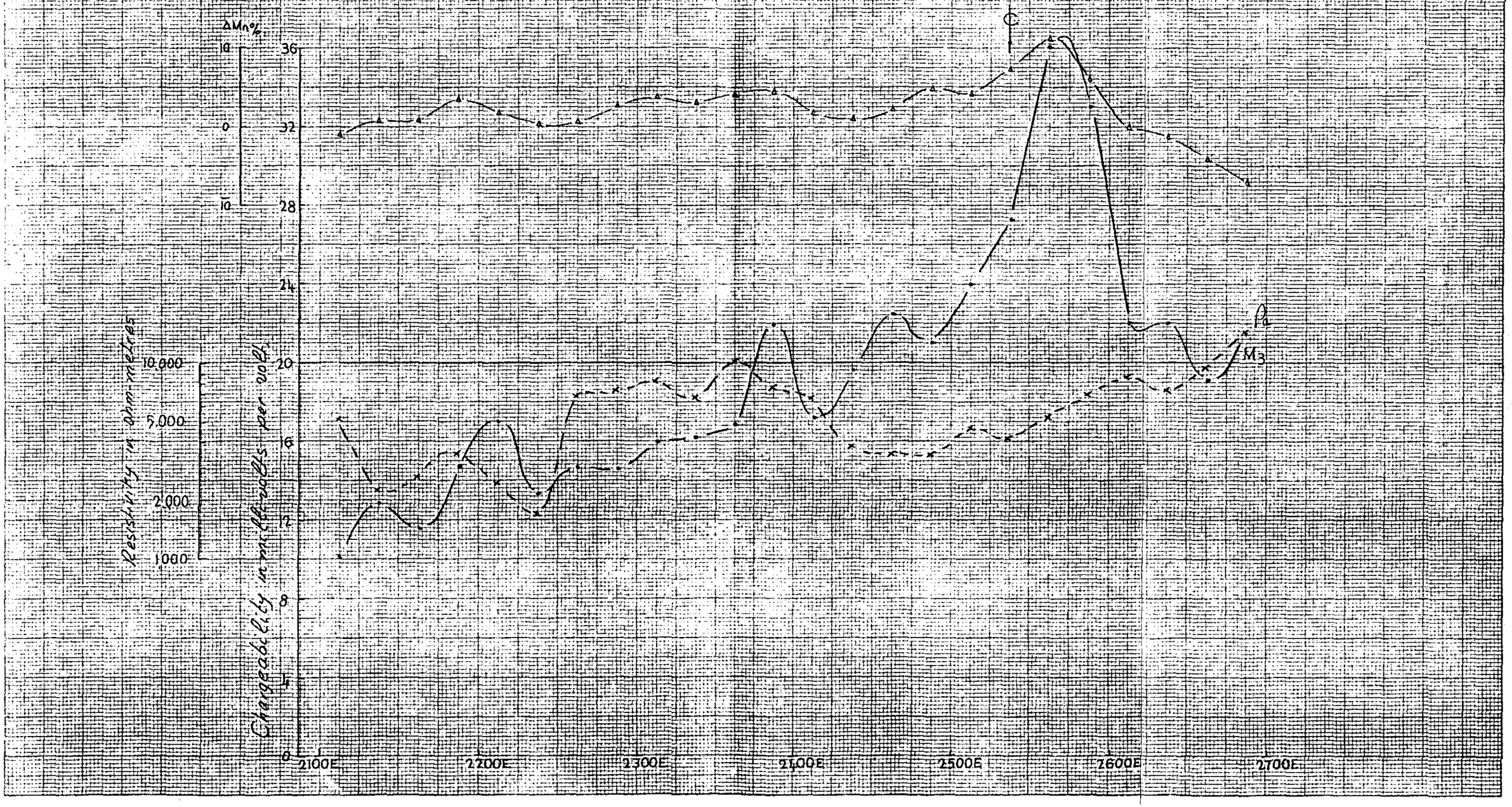
019

10 N

Henty River

GRADIENT ARRAY

TAS-073-D



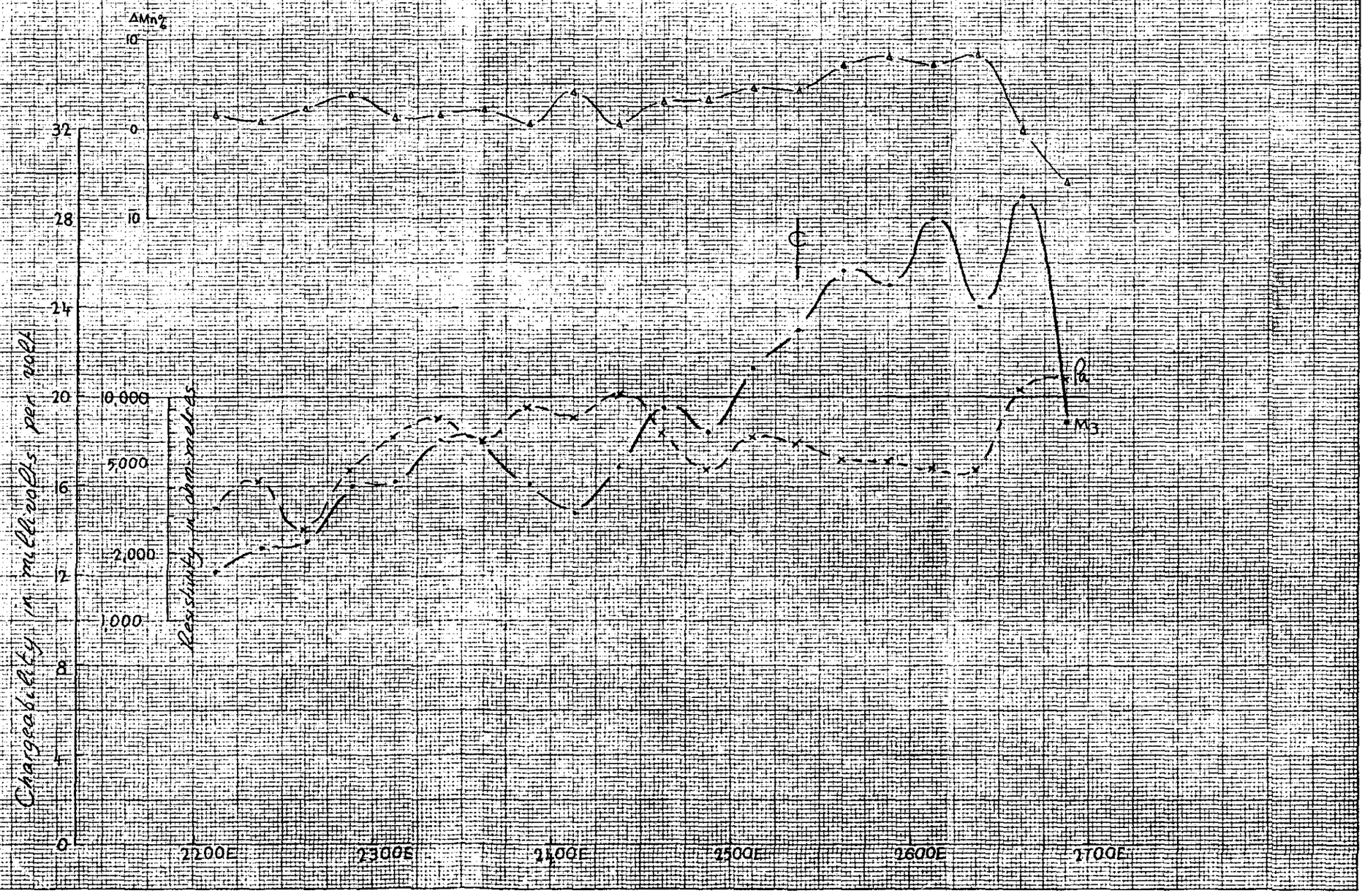
309022

9N

Henty River

GRADIENT ARRAY

TAS-073-D



021

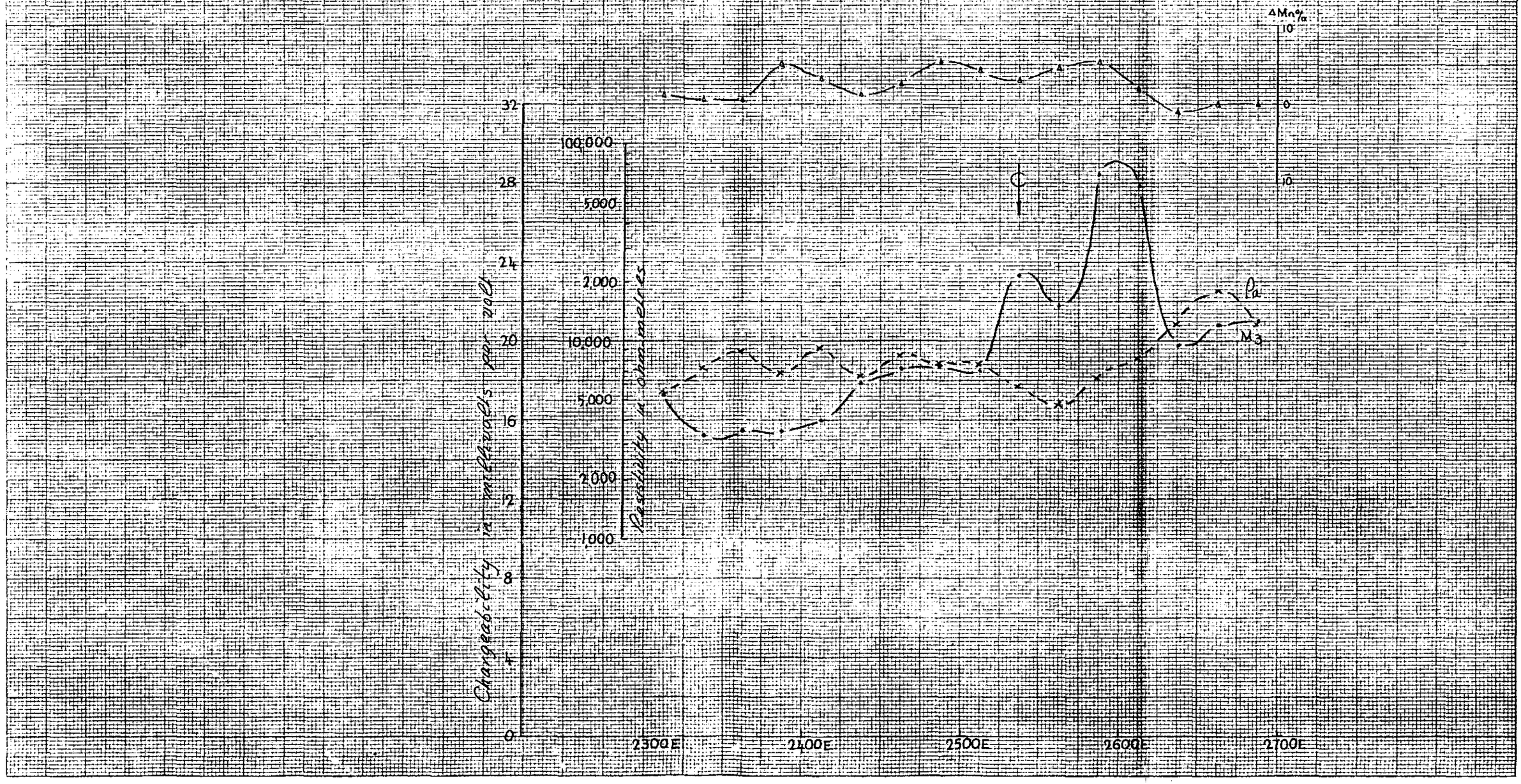
309023

8N

Henty River

GRADIENT ARRAY

TAS-013 D



022

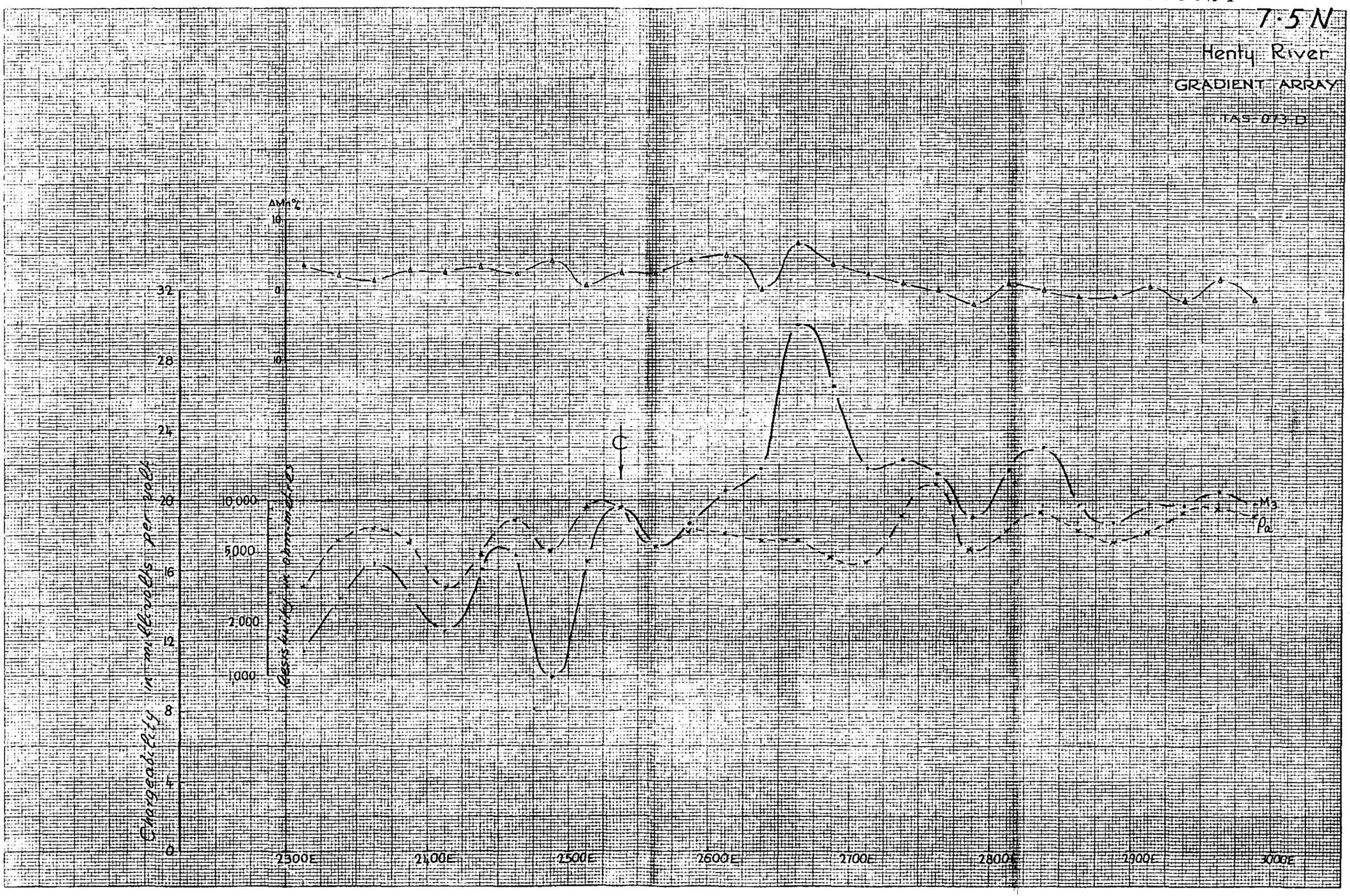
309024

7·5N

Henty River

GRADIENT ARRAY

ITAS-073-D



309025

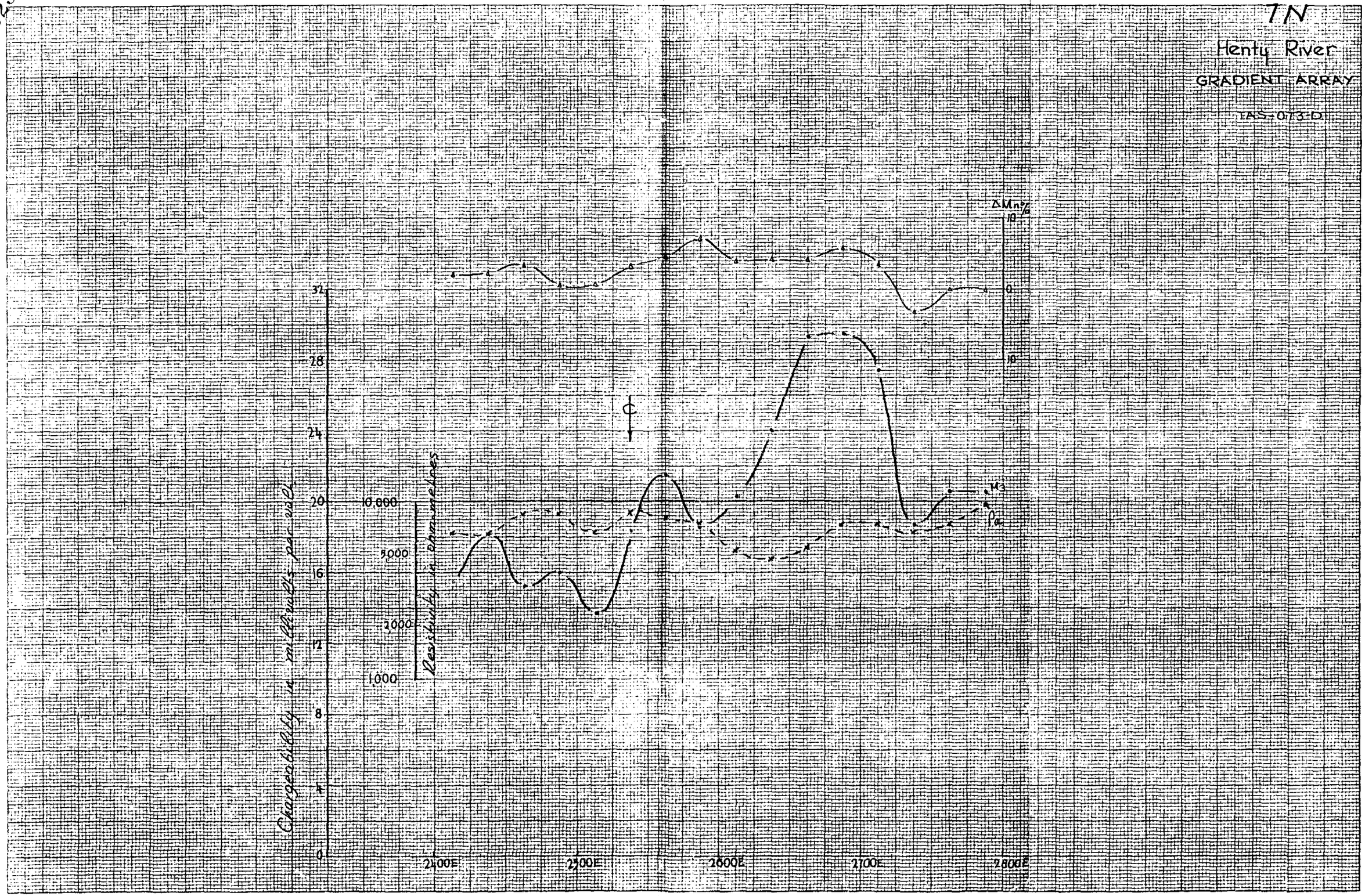
023

7N

Henty River

GRADIENT ARRAY

TAS-073-D1



024

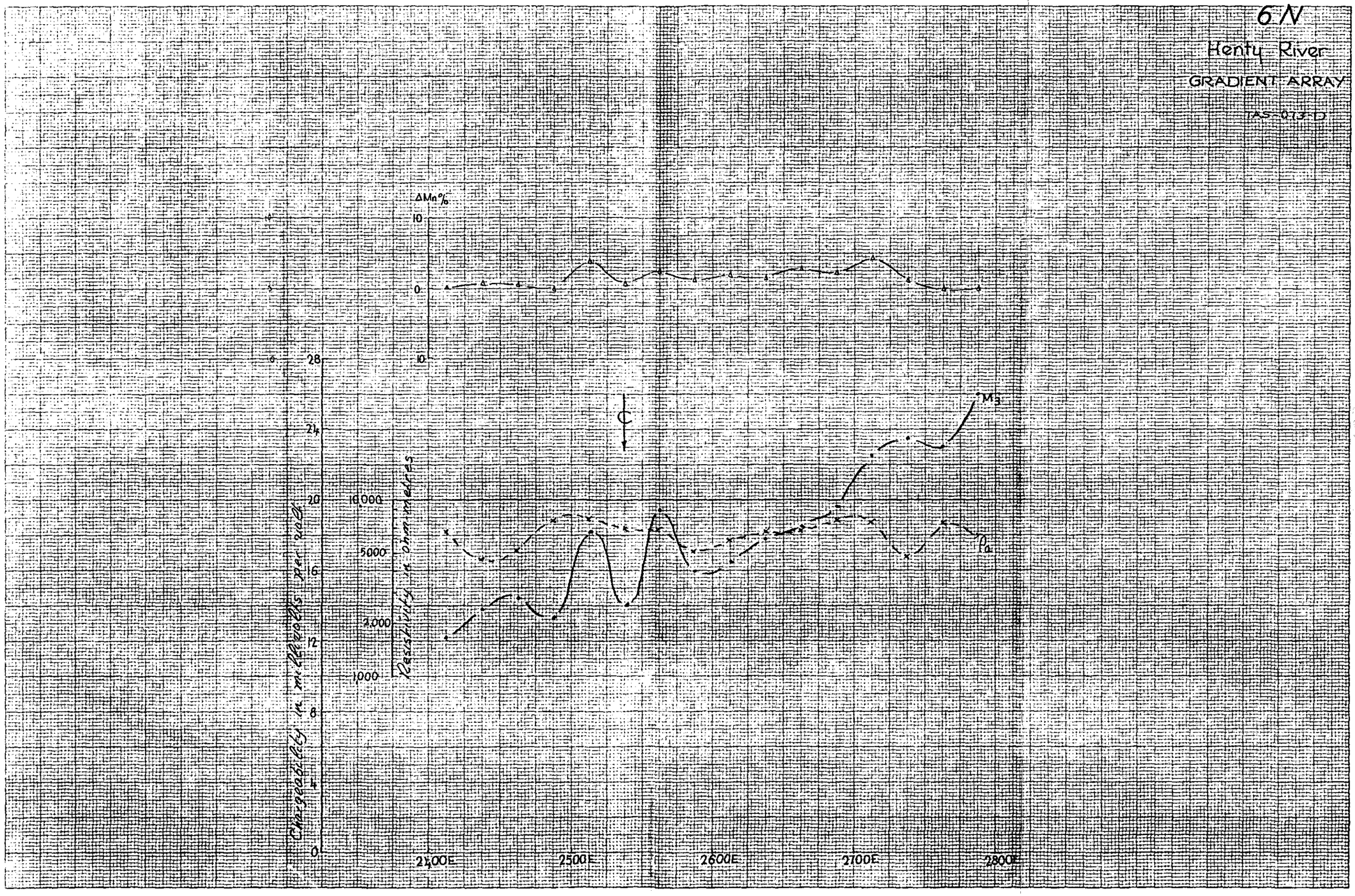
309026

6N

Henty River

GRADIENT ARRAY

TAS-013-D



025

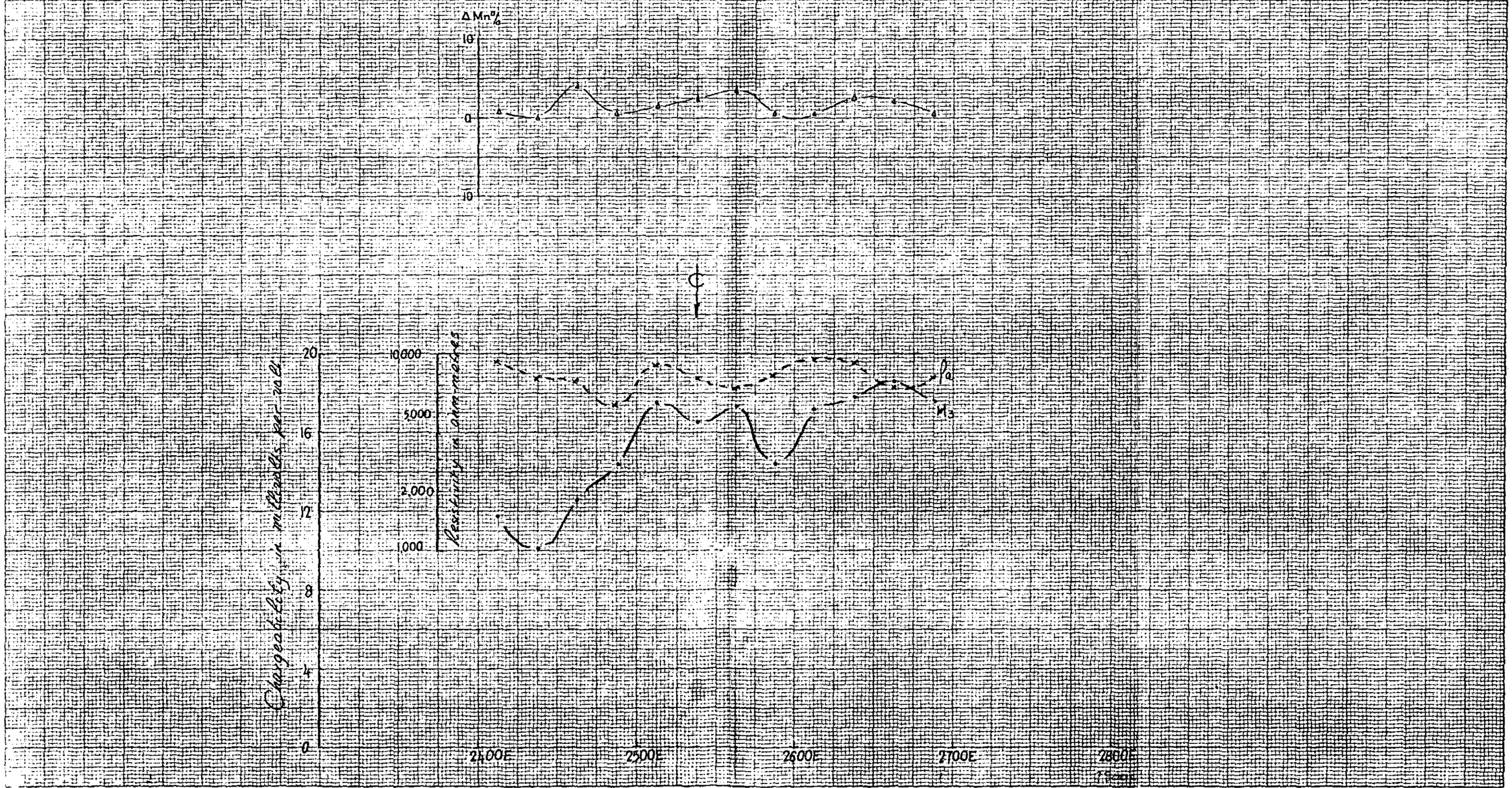
309027

5N

Henty River

GRADIENT ARRAY

TAS-013-D



026

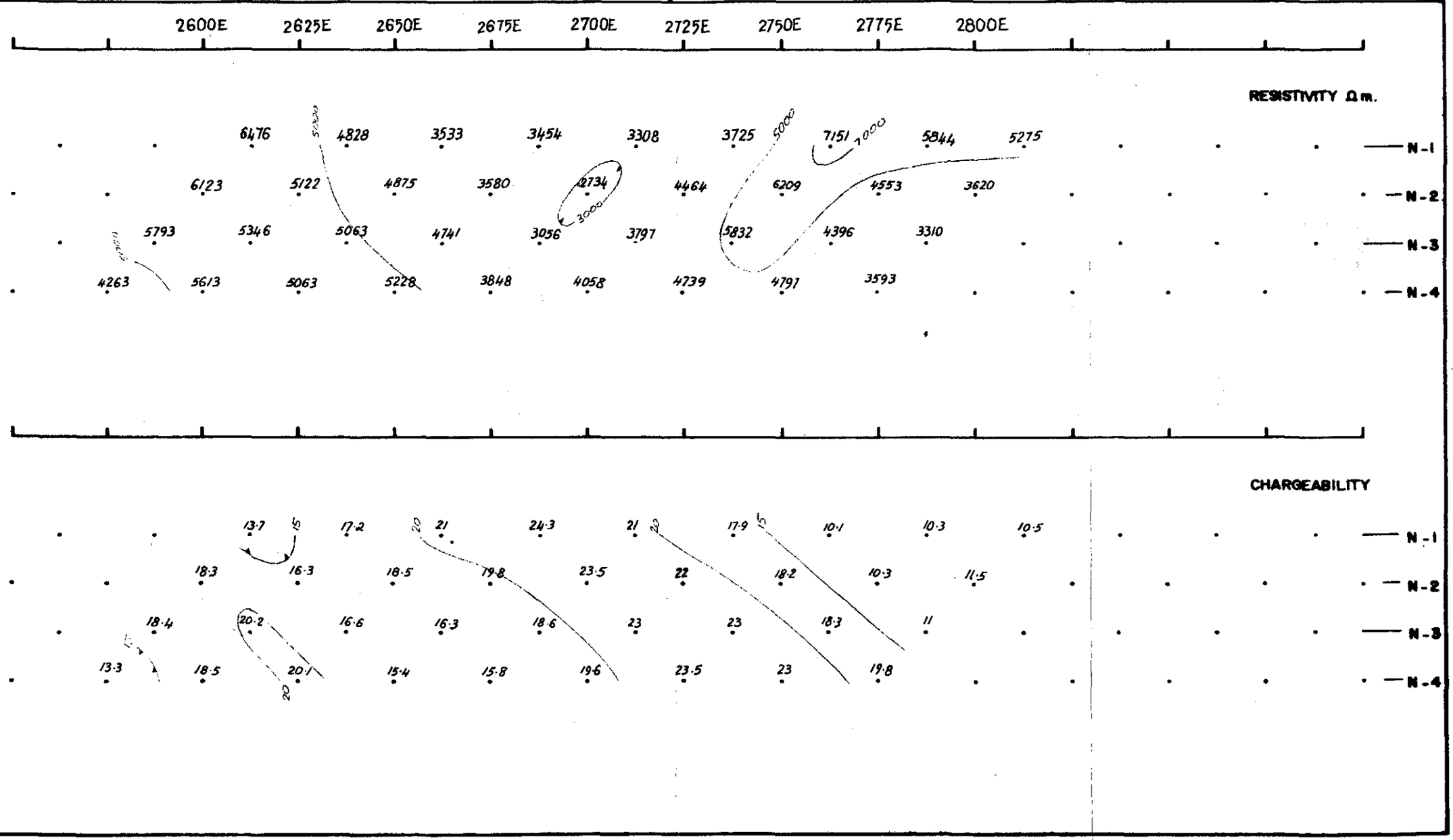
309028

SCINTREX PTY. LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

POLE - DIPOLE ARRAY

DATE	25-11-79
PLOTTED BY	B.E.
PULSE	2 sec
Rx.	
DIPOLE SPACING	25 m.
LINE No.	7N
PROSPECT	HENTY RIVER
JOB No.	TAS-073-D



309029

027

SCINTREX PTY. LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

POLE - DIPOLE ARRAY

DATE 25-11-79	LINE No. 10N
PLOTTED BY B.E.	PROSPECT HENTY RIVER
PULSE 2 sec. / Rx.	JOB No. TAS-073-D
DIPOLE SPACING 25m	

2400E 2425E 2450E 2475E 2500E 2525E 2550E 2575E 2600E 2625E 2650E 2675E 2700E

RESISTIVITY Ω m.

N-1: 3900 2361 1649 1523 5275 1539 3425 3448 5060

N-2: 2417 2143 1453 1064 1713 1592 9279 4269 3088

N-3: 5011 3451 2766 1713 1190 2386 1681 2531 3702 3986

N-4: 5840 5024 4710 2324 1552 2150 2355 2126 3179 3603

CHARGEABILITY

N-1: 15·3 18·2 22·5 34 35 20 12·6 15·5 13·6

N-2: 16·2 18·5 25 26 31 31·5 22·5 14·2 12·8

N-3: 16 14·5 17·7 24 22 33 26 30·5 23·3 11·5

N-4: 14·8 17·6 17·6 23·8 23·6 20 21 23·3 30·8 22

028

309030

SCINTREX PTY. LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

DIPOLE - DIPOLE ARRAY

DATE 22-6-80	LINE No. 10N
PLOTTED BY A.J.	PROSPECT WEST TYNDALL
PULSE 2 Sec / Rx. 708/03	JOB No. TAS-073-D
DIPOLE SPACING 25m	

2000E 2025E 2050E 2075E 2100E 2125E 2150E 2175E 2200E 2225E 2250E 2275E 2300E 2325E

RESISTIVITY Ω m.

N-1 N-2 N-3 N-4

CHARGEABILITY

N-1 N-2 N-3 N-4

309031

029

SCINTREX PTY. LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

DIPOLE - DIPOLE ARRAY

DATE	17-6-80
PLOTTED BY	A.J.
PULSE	2 sec
Rx.	708103
DIPOLE SPACING	25m

LINE No.	
PROSPECT	
JOB No.	

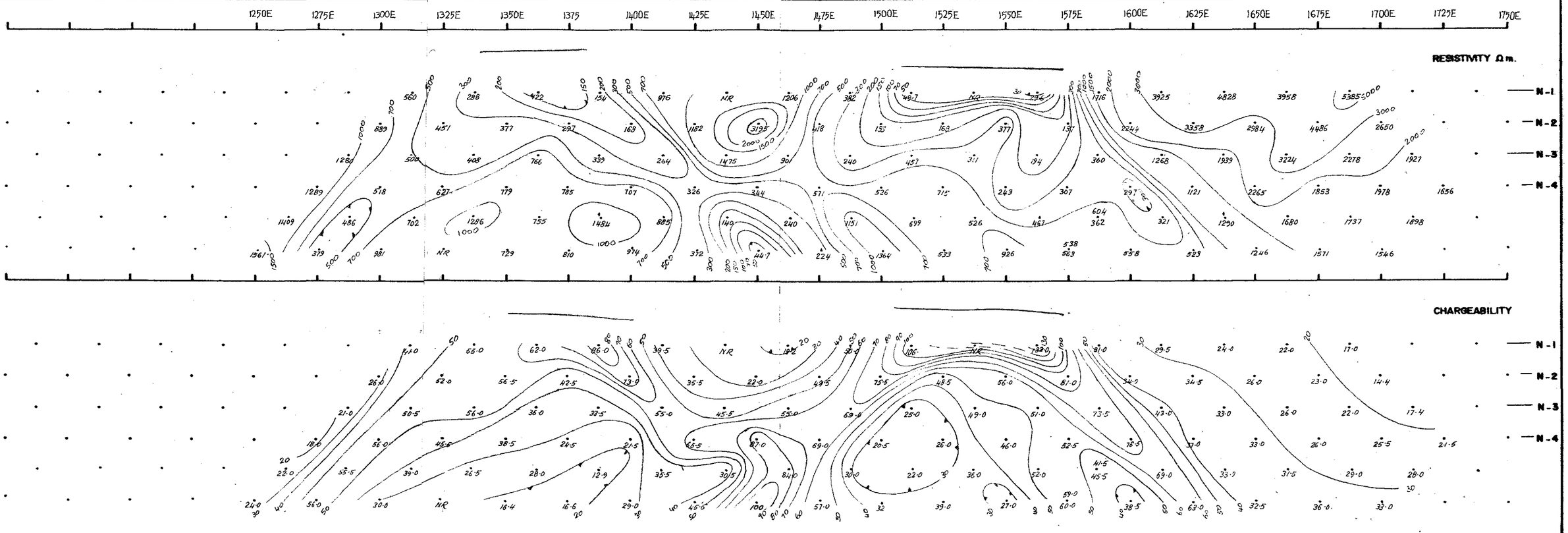
SCINTREX PTY. LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

DIPOLE - DIPOLE ARRAY

DATE	11-6-80
PLOTTED BY	A.J.
PULSE	2 sec
Rx.	708103
DIPOLE SPACING	25m

LINE No.	12N
PROSPECT	WEST TYNDALL
JOB No.	TAS-073-D



030

SCINTREX PTY. LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

DIPOLE - DIPOLE ARRAY

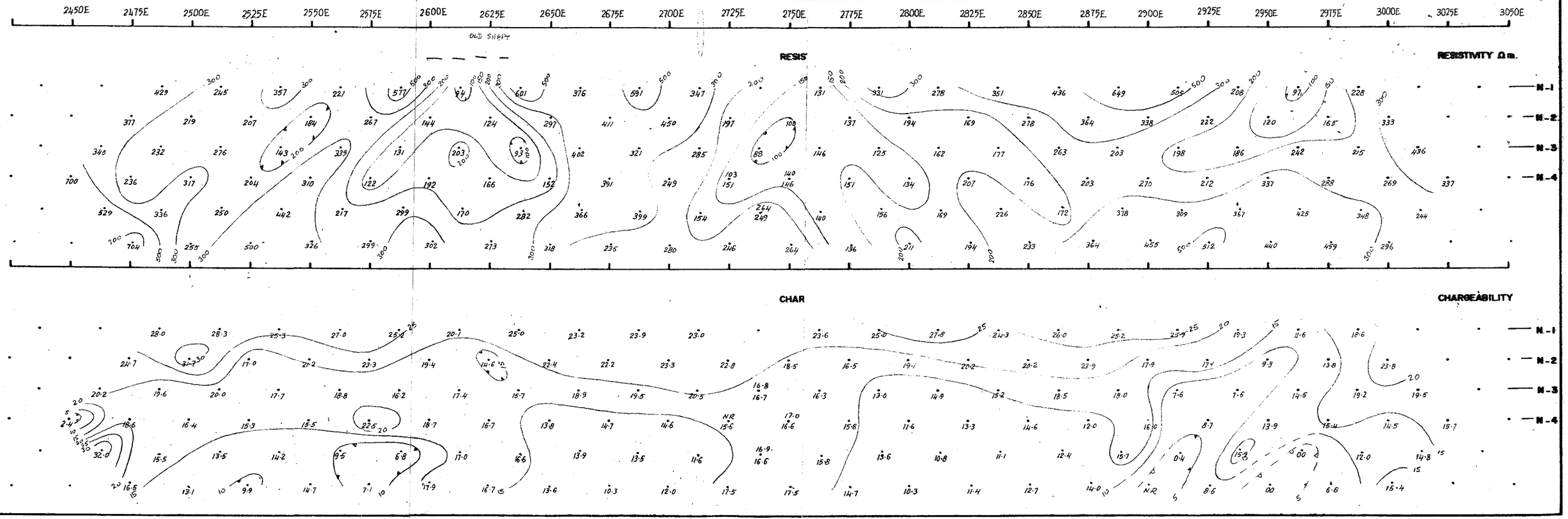
DATE	5·6·80
PLOTTED BY	A.J.
PULSE	2 Sec.
Rx.	708103
DIPOLE SPACING	25m
LINE No.	
PROSPECT	
JOB No.	

SCINTREX PTY. LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

DIPOLE - DIPOLE ARRAY

DATE	6·6·80
PLOTTED BY	A.J.
PULSE	2 Sec
Rx.	708103
DIPOLE SPACING	25m
LINE No.	130 N
PROSPECT	LYNCH CREEK
JOB No.	TAS-073-D



031

309033

SCINTREX PTY. LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY

DIPOLE - DIPOLE ARRAY

DATE	4-6-80
PLOTTED BY	A.J.
PULSE	2 sec
Rx.	708103
DIPOLE SPACING	25m

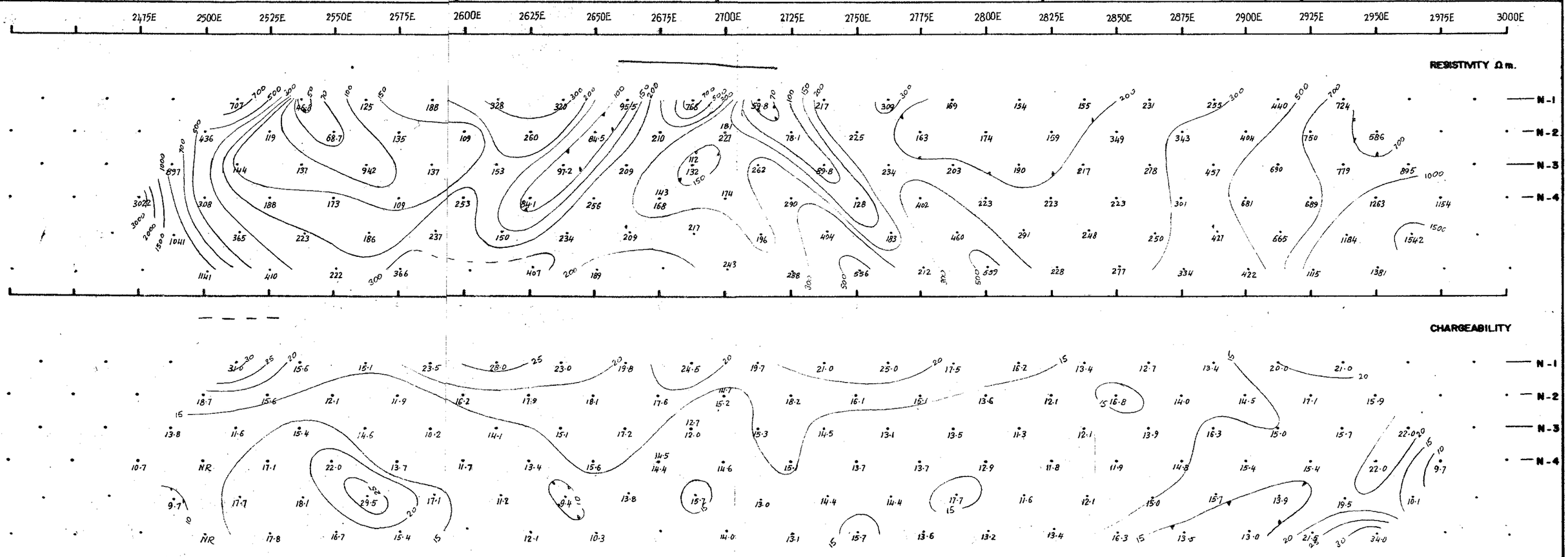
SCINTREX PTY. LTD.

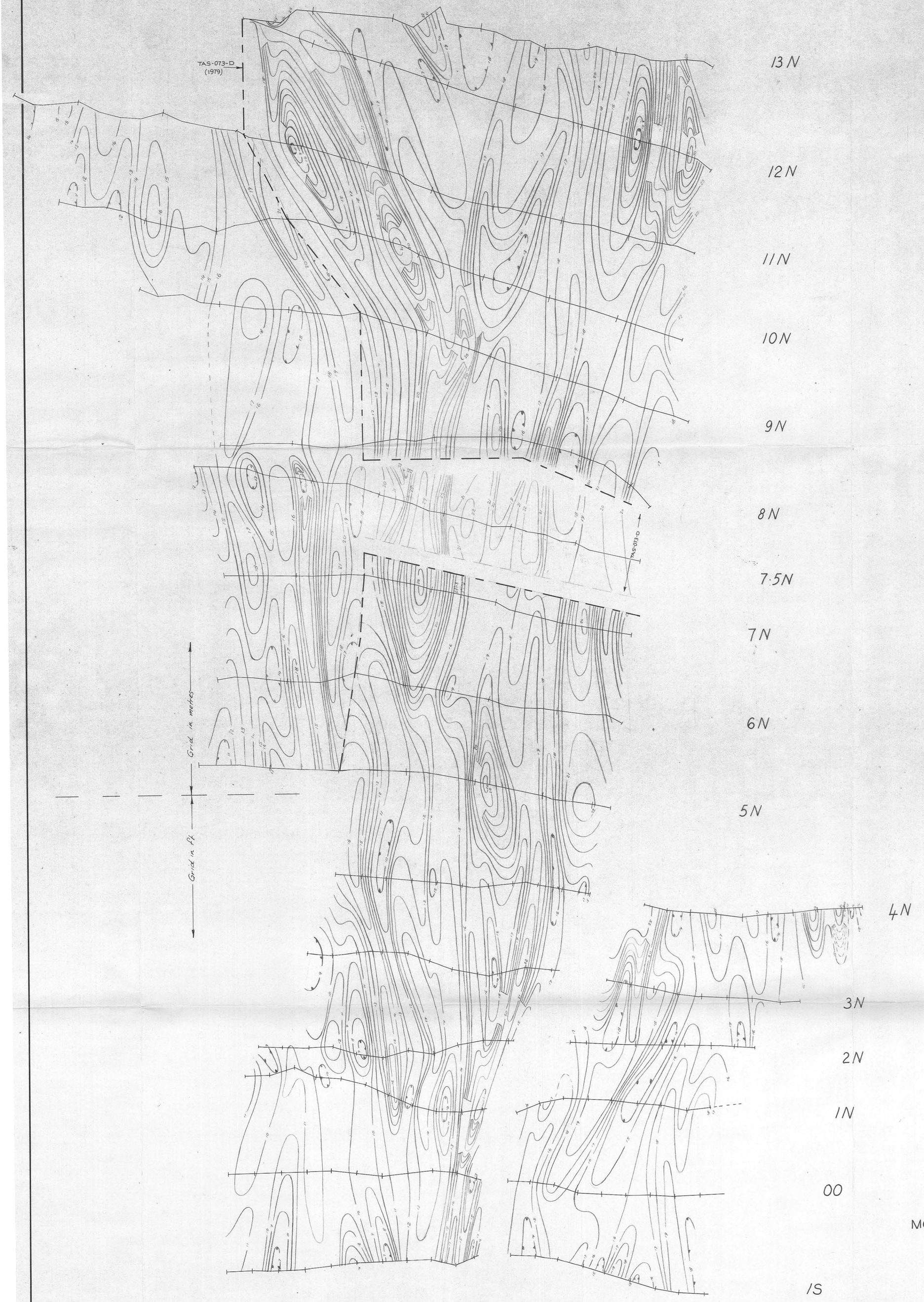
INDUCED POLARIZATION AND RESISTIVITY SURVEY

DIPOLE - DIPOLE ARRAY

DATE	3-6-80
PLOTTED BY	A.J.
PULSE	2 Sec
Rx.	708103
DIPOLE SPACING	25m

LINE No.	135 N
PROSPECT	LYNCH CREEK
JOB No.	TAS-073-D





309034

MOUNT LYELL MINING & RAILWAY COMPANY LTD.

WEST HENTY GRID

NR. QUEENSTOWN - TASMANIA

GRADIENT ARRAY EIP SURVEY

CHARGEABILITY CONTOUR PLAN

(mv/V)

SURVEYED & COMPILED BY

SCINTREX

JUNE 1978 (TAS-054)

NOV '78 & JAN '79 (TAS-062)

NOVEMBER 1979 (TAS-073-D)

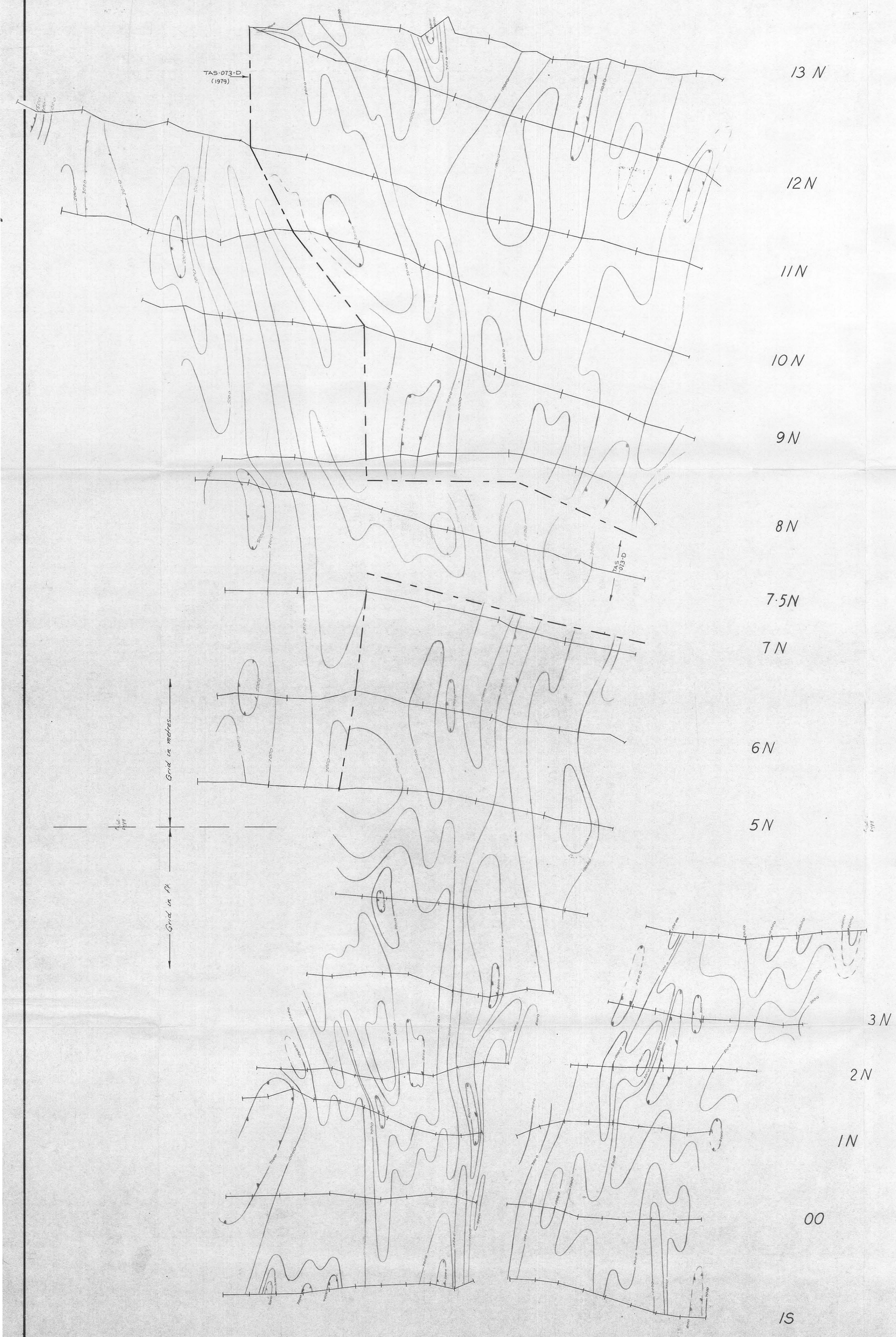
SCALE 1:2500

Job N° TAS-062 (-054)(-073D) Sht 1 of 1 PLATE 1

5 cm

032

84-2251



309035

MOUNT LYELL MINING & RAILWAY COMPANY LTD

WEST HENTY GRID

NR. QUEENSTOWN - TASMANIA

GRADIENT ARRAY E I P SURVEY

RESISTIVITY CONTOUR PLAN

SURVEYED & COMPILED BY
SCINTREX

JUNE 1978 (TAS-054)
NOV '78 & JAN '79 (TAS-062)
NOVEMBER 1979 (TAS-073-D)

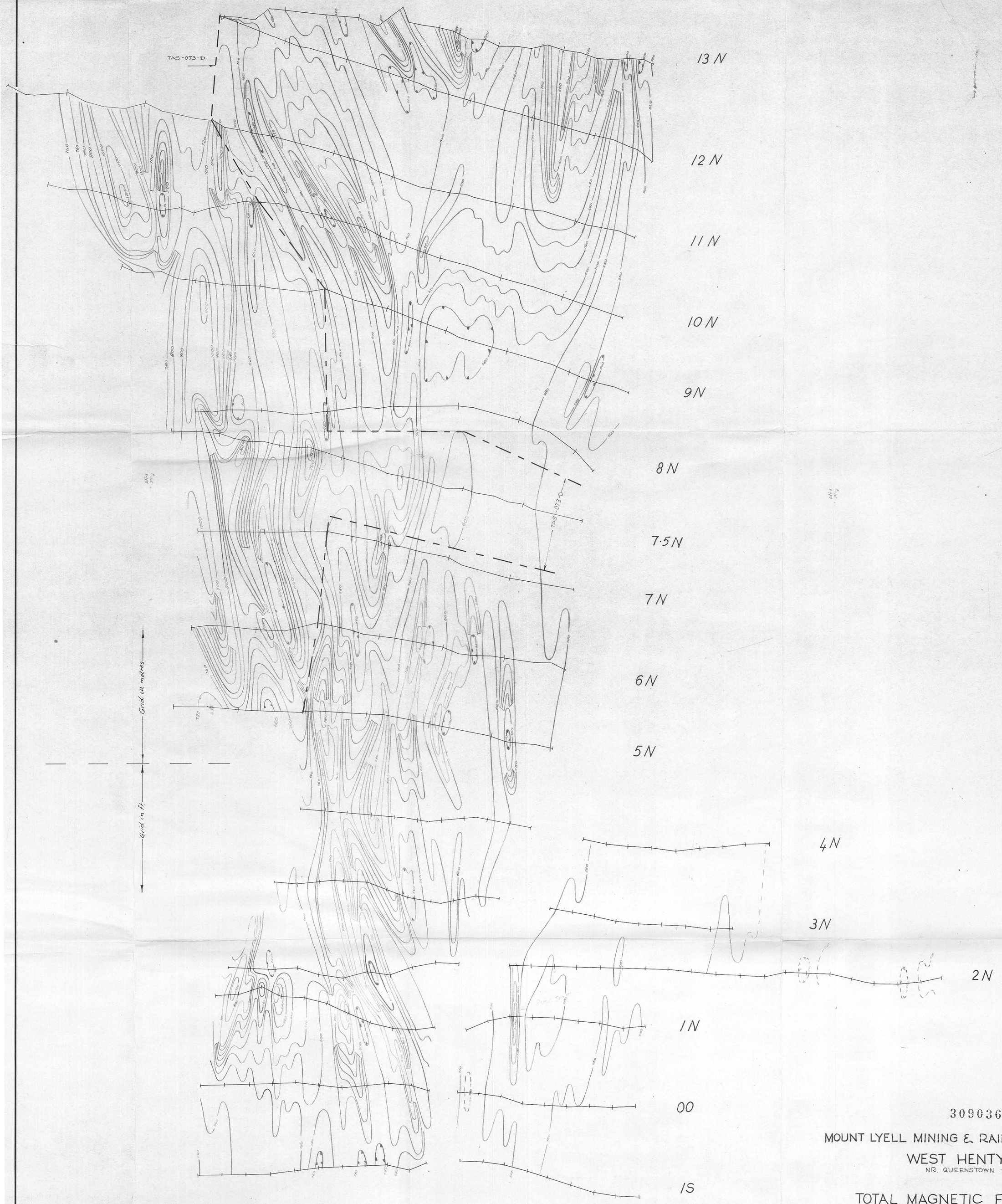
SCALE 1:2500

Job. Nº TAS-062 (054)(073D) Sht 1 of 1 PLATE 2.

5 cm

033

84-2251



309036

MOUNT LYELL MINING & RAILWAY COMPANY LTD

WEST HENTY GRID

NR. QUEENSTOWN - TASMANIA

TOTAL MAGNETIC FIELD SURVEY
CONTOUR PLAN

SURVEYED & COMPILED BY
SCINTREX

JANUARY 1979
NOVEMBER 1979 (TAS-073-D)

SCALE 1:2500

Job N° TAS-062 (073D) Sht 1 of 1 PLATE 3

Note : For total magnetic field add 62000 gammas to all values

5 cm

034

84-2251