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COMPAGNIE GÉNÉRALE DE GÉOPHYSIQUE

COMSTAFF PTY. LTD.

GEOPHYSICAL SURVEYS AT

- CHESTER PINNACLES
- QUE RIVER
- ARTHUR RIVER

March 1971

Job No. 501-1811-71

C.G.G.
26-28 Manning Street, SOUTH BRISBANE.

AMG REFERENCE POINTS ADDED

ABSTRACT

The geophysical surveys carried out by C.G.G. for Comstaff Pty. Ltd. in March 1971 in the Chester Pinnacles, Que River and Arthur River areas in north-western Tasmania included I.P., resistivity, self-potential, and Turam electromagnetic measurements.

On the Chester Pinnacles Northern Grid, a north-northeast/south-southwest trending I.P. anomalous zone having a length greater than 2,800 feet was located. This did not coincide with a conductivity anomaly and is assumed to be due to a zone of disseminated particles in a resistant matrix.

The four parallel I.P. anomalous axes detected on the Chester Pinnacles Southern Grid did not coincide with any resistivity axes but were parallel to a resistivity gradient located on profiles 175S and 185S.

One profile of I.P., resistivity and S.P. measurements made on the Charter Grid in the Que River area located two I.P. anomalies. Both coincided with resistivity anomalies and one, between 58E and 60E, with a geochemical anomaly.

On the Arthur River area, electromagnetic measurements of field amplitude ratio and phase difference located eight anomalies. Three of these, (A6, A4, A1), appear interesting and further magnetic and I.P. surveys have been recommended.

COMPAGNIE GÉNÉRALE DE GÉOPHYSIQUE

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INTRODUCTION

In March 1971, COMPAGNIE GENERALE DE GEOPHYSIQUE carried out geophysical surveys for COMSTAFF PTY. LTD. in four areas in northwestern Tasmania.

Induced Polarization, Apparent Resistivity measurements and Self Potential measurements were carried out on the Chester Pinnacles Northern and Southern Grids and on one profile on the Charter Grid. These three areas are located on the Cambrian Mount Read volcanics. Copper geochemical anomalies have been detected on these areas.

Electromagnetic TURAM measurements were carried out on the Mount Bischoff anticlinorium in the Arthur River area. Outcropping rocks are mostly Precambrian quartzites, sandstones and shales. Outside Mount Bischoff tin mineralization, several other small orebodies are known in the area. The anticlinorium is supposed to be a favourable structure. There is no conductive overburden. Therefore, the penetration of the TURAM was expected to be deeper than 500 feet.

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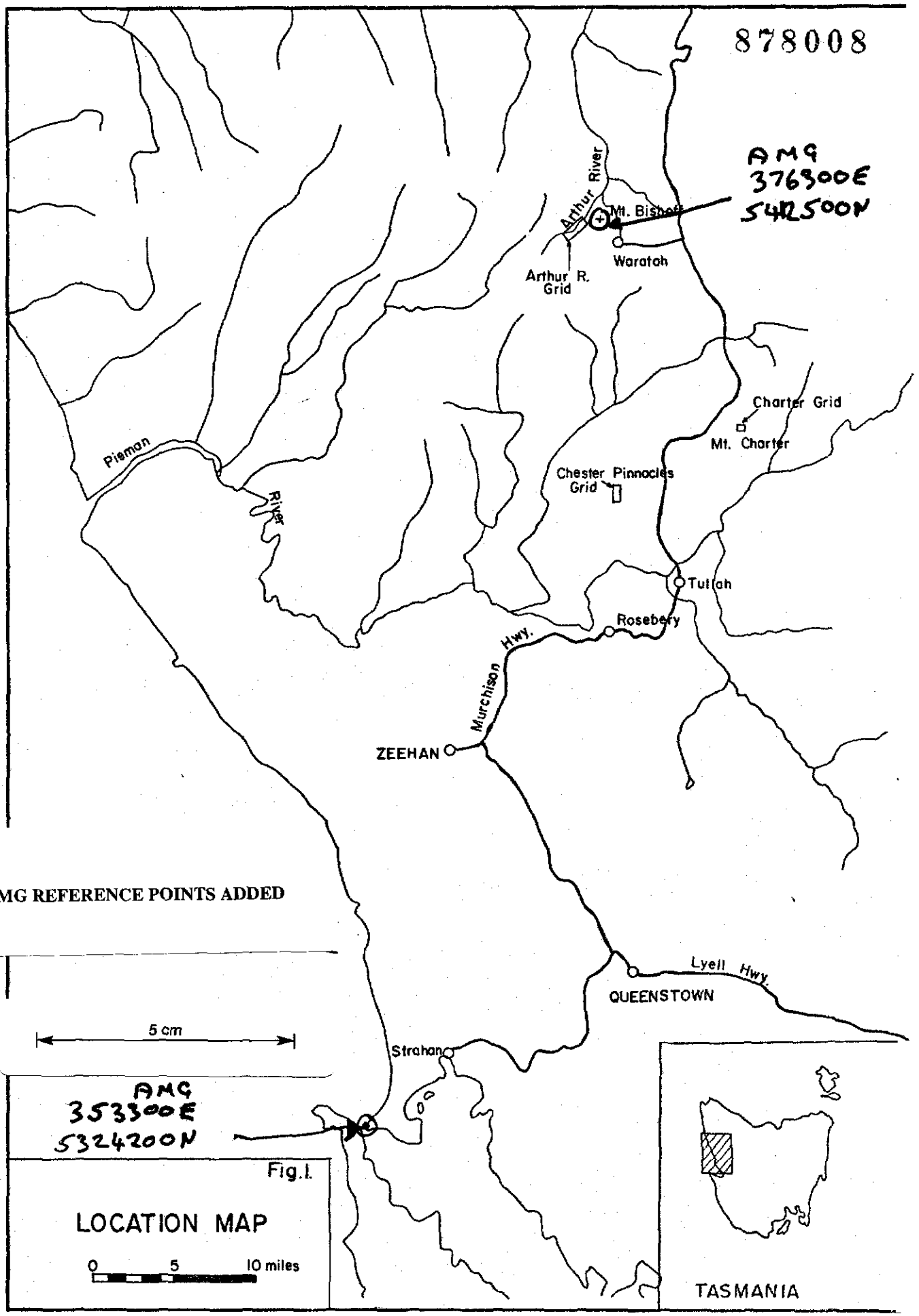

AMG REFERENCE POINTS ADDED

Fig.1.

LOCATION MAP

0 5 10 miles

1. FIELD AND GEOPHYSICAL CONDITIONS

1-1. Location - Acess - Terrain Conditions :

The Chester Pinnacles Grid is located on the Marionoaks River some 6 miles north-west of Tullah. Access is via a seven mile track suitable for four-wheel drive vehicles from the Murchison Highway. The terrain is hilly, and this, combined with thick horizontal scrub, makes progress along lines difficult in some places.

The Charter Grid is approximately fourteen road miles north of Tullah on the Murchison Highway and approximately one mile east of the highway. During the summer months, it is accessible to four-wheel drive vehicles by a bulldozed track.

The Arthur River Grid is located on the Arthur River some two miles from Waratah, between the junction of the Arthur River and Mine Creek and the Arthur River-Ritchie Creek junction. Acess is by the old Magnet Tramway and is suitable for all types of vehicles.

1-2. Electrical Conditions :

(a) Chester Pinnacles Grid

There is very little overburden and the bedrock is outcropping in some places; there is no conductive overburden. Measured differences of potential were generally several hundreds of millivolts for a current of three amperes and a potential dipole length of 100 feet.

(b) Charter Grid

There is a shallow overburden in this area to a depth of several metres. However, it is not conductive and for a current of two amperes potential differences exceeding several tens of millivolts were obtained.

(c) Arthur River Grid

The overburden is generally of sandy alluviums and screes, there is neither deep weathering nor conductive overburden. Conditions are good for E.M. methods.

2. FIELD OPERATIONS AND STATISTICS

2-1. Field Operations :

The crew was hampered by difficulties of terrain and vegetation. In some places, particularly on the Chester Pinnacles Grid, inadequate clearing and pegging of lines considerably reduced the measurement output. On the other hand, on the Que River area, the crew laid down 9,000 feet of cable, completed the readings and took up the cable again in the space of one day, on lines which had been properly prepared.

On the Chester Pinnacles Southern Grid, a double dipole-dipole array was used instead of a gradient array. Therefore, resolution is certainly not as good as the resolution obtained with a gradient array but the use of shorter lines and a light 25W transmitter saved much time; actually the survey was carried out in 16 hours. Due to the terrain conditions, a gradient array coverage would have lasted at least 5 days.

No problems were encountered in making readings during the I.P. survey. These generally comprised 4 integrated pulses for each Apparent Chargeability reading.

Some difficulty was encountered in obtaining a sufficient flow of current during the electromagnetic survey in the Arthur River area. Thus, the length of profiles ranges from 2,300 ft. to in excess of 3,000 ft. depending on the current flow obtained.

2-2. Statistics :

2-2-1. Composition of the Crew :

- 1 Party Chief : G. CLARIDGE
- 1 Observer : B. DIGBY
- 2 Field Assistants supplied by Comstaff Pty. Ltd.

2-2-2. Equipment :

- one HUNTEC 7.5 KVA I.P. Transmitter
- one IPR7 SCINTREX I.P. Receiver
- one 25W SCINTREX I.P. Transmitter
- one ABEM TURAM Set.
- one SCHLUMBERGER Potentiometer
- three 1W TOKAI Transceivers.

2-2-3. Measurement Output :

(a) Chester Pinnacles (Northern Grid)

During a total of 6½ working days, the following measurements were carried out :

- 1 Electrical Sounding and I.P. expander
- 95 Apparent Resistivity measurements
- 95 Apparent Chargeability measurements
- 95 Self Potential measurements
- Total length of profiles : 9,000 feet
- Number of profiles : 4
- Spacing between stations : 100 feet

(b) Que River (Charter Grid)

During one working day, the following measurements were carried out :

- 21 Apparent Resistivity measurements
- 21 Apparent Chargeability measurements
- 21 Self Potential measurements
- Total length of profiles : 1,000 feet
- Number of profiles : 1
- Spacing between stations : 50 feet

(c) Arthur River

During nine working days, the following measurements were carried out :

- 187 Phase Difference measurements
- 187 Field Amplitude Ratio measurements
- Total length of profiles : 18,700 feet
- Number of profiles : 7
- Spacing between stations : 100 feet

(d) Chester Pinnacles (Southern Grid)

During one working day, the following measurements were carried out :

- 178 Apparent Resistivity measurements
- 178 Apparent Chargeability measurements
- 178 Self Potential measurements

- Total length of profiles : 9,400 feet
- Number of profiles : 4
- Spacing between stations : 100 feet

3. RESULTS ON THE CHESTER PINNACLES NORTHERN GRID

3-1. Apparent Resistivity :

Apparent Resistivities are high, they range from 800 to 5,000 ohm-m. This shows that the bedrock is nearly outcropping throughout the area. Therefore, the penetration obtained with a 1,500 metre current electrode separation is certainly larger than 1,000 feet. E.S. 1 on profile 50S (see Fig. 2) confirms the above conclusions. There is no visible correlation between Apparent Resistivity profiles; there is certainly no graphitic shale stratum within the volcanics.

3-2. Apparent Chargeability :

An anomalous zone can be correlated from one profile to another, the general trend is north-northeast/south-southwest.

A main anomalous axis, A5, runs from profile 42S to profile 70S (see Plates 1, 2, 3, 4 and 5). The width of the anomaly varies between 400 and 600 feet. The depth of the polarizable body does not exceed 100 feet.

A6 correlates between profiles 42S and 50S, it is a narrow and very shallow polarizable body.

A7 is a small anomaly (amplitude 5 ms) which appears only on profile 70S.

015

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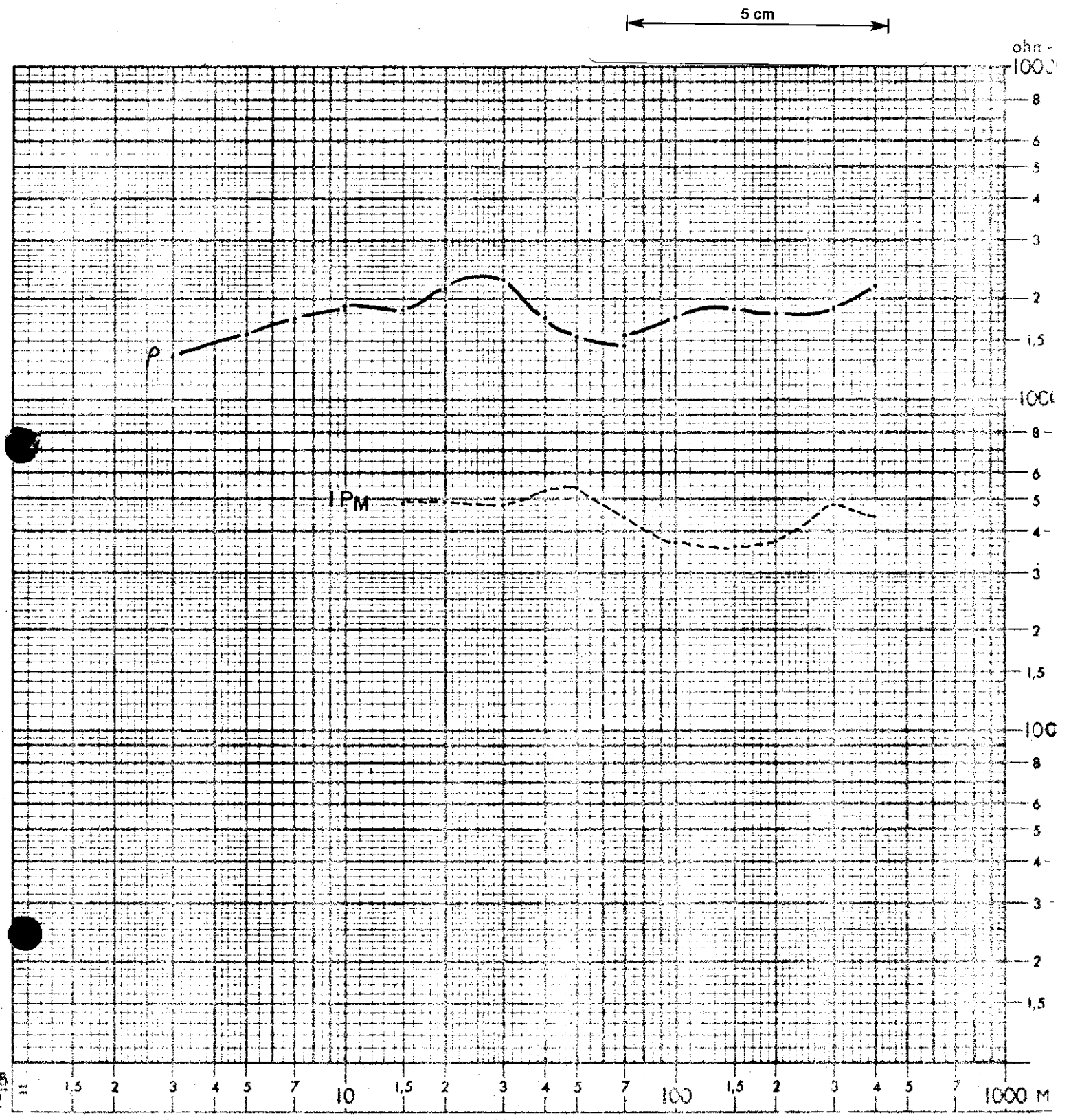
Fig. 2

CHESTER PINNACLES NORTHERN GRID

ES 150 W / 50 S



3-3. Self Potential :

No significant anomaly was detected. S.P. results confirm that the I.P. anomalies are due to disseminated conductive particles within a resistant matrix.

3-4. Conclusions and Recommendations :

A north-northeast/south-southwest I.P. anomalous zone runs from profile 42S to profile 70S, thus its total length is greater than 2,800 feet.

The Apparent Chargeability contrast is strong since the amplitude of anomalies reaches 20 ms and the general background is lower than 10 ms. The polarizable bodies are shallow; their depth does not exceed 100 feet and their dip is nearly vertical. The I.P. effect is due to disseminated conductive particles within a resistant matrix.

We would recommend drilling a hole on anomaly A5.

Drill collar on peg 2000W (profile 70S), dip 50°E, length 600 feet.

4. RESULTS ON THE CHESTER PINNACLES SOUTHERN GRID

4-1. Apparent Resistivity :

On the Chester Pinnacles Southern Grid, profiles have been covered with a double dipole-dipole array. The dipoles were 100 foot long and the distances between centers of dipoles 300 and 200 feet. On Plates 6, 7, 8 and 9, measurements are plotted at the middle of the dipole-dipole array.

Apparent Resistivities are generally of the same order of magnitude as on the Northern Grid. Thus, even with shorter arrays, the penetration is deeper than the top of the bedrock.

There is no visible correlation between profiles 165S and 175S.

Apparent Resistivities decrease at the eastern end of profiles 175S and 185S; the Apparent Resistivity gradient correlates between 175S and 185S following a northwest/southeast trend. The Apparent Resistivity gradient coincides most probably with a geological boundary.

4-2. Apparent Chargeability :

It seems possible to correlate three anomalous axes, A2, A7 and A4 (see Plate 1) from profile 165S to profile 185S. Between profiles 165S and 175S, the trend is north-northwest/south-southeast, between 175S and 185S, it becomes northwest/southeast. A fold or a fault may be the cause of this change of trend. The northwest/southeast trend between 175S and 185S is confirmed by the Apparent Resistivity measurements.

Anomaly A1 has been detected only on profile 165S. This does not mean that it does not exist on profiles 175S and 185S - perhaps A1 is further west than the extension of the survey on these lines. On profile 165S, A1 has a 17 ms amplitude. The polarizable body is steeply dipping and its top is less than 100 feet deep.

Anomalies A2 and A3 were detected on all profiles - the distance between the axes varies between 300 and 600 feet. On profile 165S, they may be due to a single polarizable body. The dipole-dipole array does not allow a determination of the width of the polarizable bodies.

The amplitude of A2 and A3 reaches a maximum on profile 185S (15 and 25 ms). The depth of the polarizable body is less than 100 feet.

Anomaly A4 is a weak anomaly located along an Apparent Resistivity gradient.

4-3. Self Potential :

No significant S.P. anomaly was detected; this confirms that the I.P. anomalies are due to disseminated conductive particles within a resistant matrix.

4-4. Conclusions and Recommendations :

Four anomalous I.P. axes have been detected on the Chester Pinnacles Southern Grid. A fold or a fault shifts the anomalies eastward on profile 185S. All anomalies are due to disseminated conductive particles within a resistant matrix. The tops of the polarizable

bodies are less than 100 feet deep. The largest anomalies are situated on profile 185S.

We would recommend extending exploration south from profile 185S and drilling two holes on A1 and A2-A3.

1. Drill collar on peg 1900W (profile 165S), dip 50°W, length 500 feet.

2. Drill collar on peg 1300E (profile 185S), dip 50°W, length 1,000 feet.

5. RESULTS ON THE QUE RIVER AREA (CHARTER GRID)

5-1. Apparent Resistivity :

The array used was a gradient array with a 1000m current electrode separation.

Most Apparent Resistivity values are within the 1,250 - 2,600 ohm-m range. The bedrock is nearly outcropping.

A small conductive anomaly is located between pegs 58E and 60E, a second one at the western end of the profile (Plate 10).

5-2. Apparent Chargeability :

The Apparent Chargeability non-anomalous level is 5 ms. Two anomalies are visible on the profile :

- between pegs 58E and 60E : the amplitude is rather small (5 ms) but the I.P. anomaly coincides with a conductive anomaly and a geochemical anomaly. The polarizable body is less than 50 feet deep.

- at the western end of the profile : the anomaly extends further than the last stations, its amplitude reaches at least 20 ms, it is located near a contact between the volcanics and a breccia.

5-3. Self Potential :

A wide -50mv anomaly is centered on the small I.P. anomaly but it coincides with a topographical high. Thus, the S.P. anomaly cannot be considered as being due to mineralization.

5-4. Conclusions and Recommendations :

Two I.P. anomalies have been detected on the Charter Grid traverse. In the middle of the line, a small I.P. anomaly coincides with a conductive anomaly and a geochemical anomaly. S.P. measurements seem to indicate that the I.P. anomaly is not due to a massive sulfide mineralization.

A large anomaly is located at the western end of the profile, it coincides with a contact between volcanics and a breccia.

We would recommend drilling two holes :

1. Drill collar at 58E, dip 50°E, length 200 feet.

2. Drill collar at 56.5E, dip 50°W, length 400 feet.

6. ELECTROMAGNETIC RESULTS ON THE ARTHUR RIVER AREA

6-1. Application of the E.M. TURAM Method in the Arthur River Area :

The transmitting wire creates an electromagnetic field which causes eddy currents in conductive bodies. These eddy currents create a secondary electromagnetic field (Fig. 3) which interferes with the primary field above the ground surface. Two receiving coils connected through an RC bridge are used to detect the resulting disturbances of the electromagnetic field; phase differences and abnormal amplitude ratios.

When the wire is straight and grounded at both ends, return currents circulating in the ground concentrate in conductive bodies and create another electromagnetic field. This conductive effect is stronger when the conductive body is elongated parallel to the wire (Fig. 4).

To create eddy currents in a buried conductive body, the primary electromagnetic field has to intersect the conductive body. The penetration of an E.M. field decreases as the ratio $\sqrt{\frac{\rho}{f}}$ where

ρ is the resistivity of the ground

f is the frequency.

In the Arthur River area, conditions are good because the bedrock is resistant and not covered by a conductive overburden.

The amplitude of anomalies due to the induction effect decreases as the inverse of the square of the depth. The amplitude of anomalies due to the conduction effect decreases as the inverse of the depth. Therefore, it was more interesting to use a

Fig. 3. EM TURAM : Induction Effect

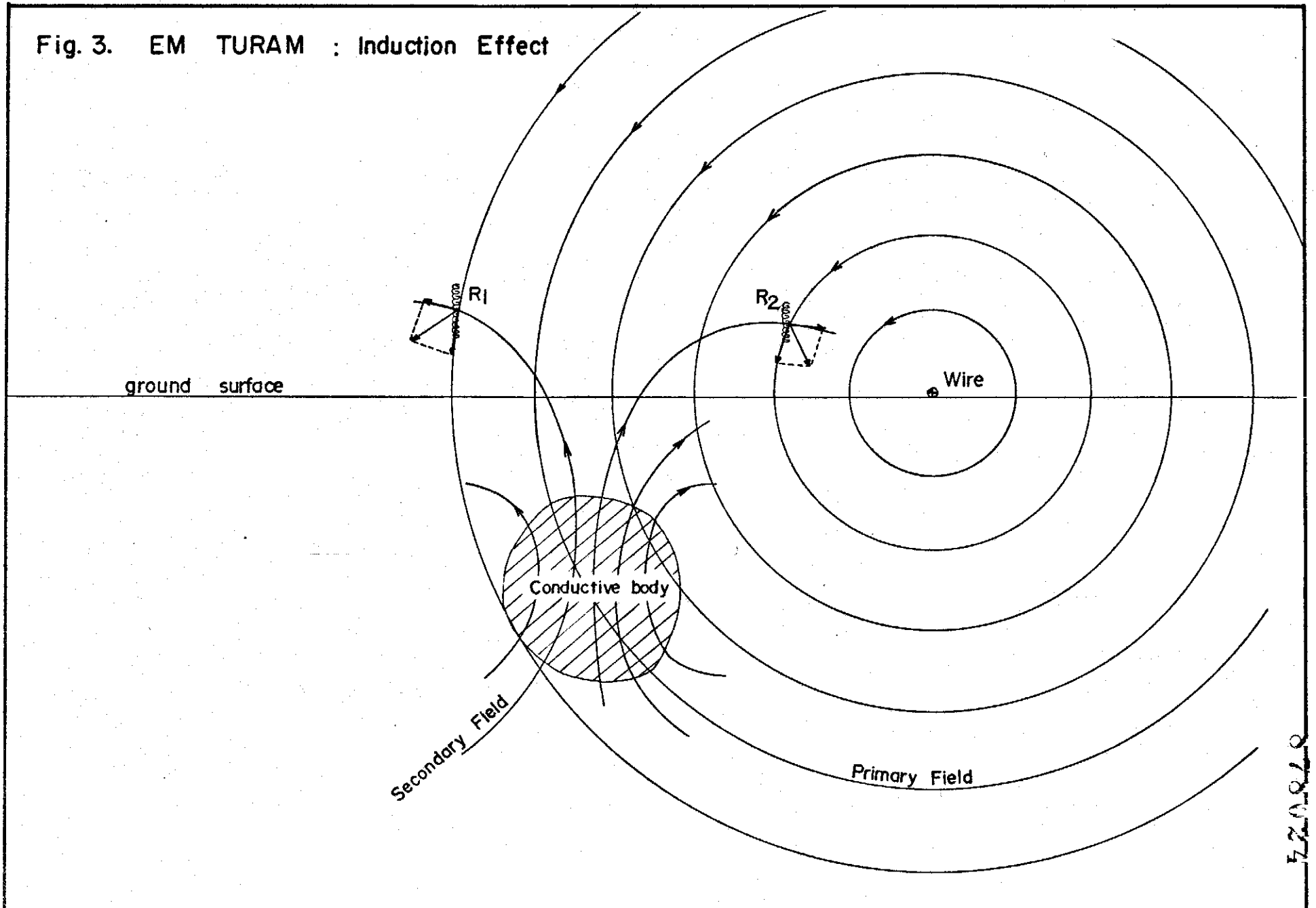
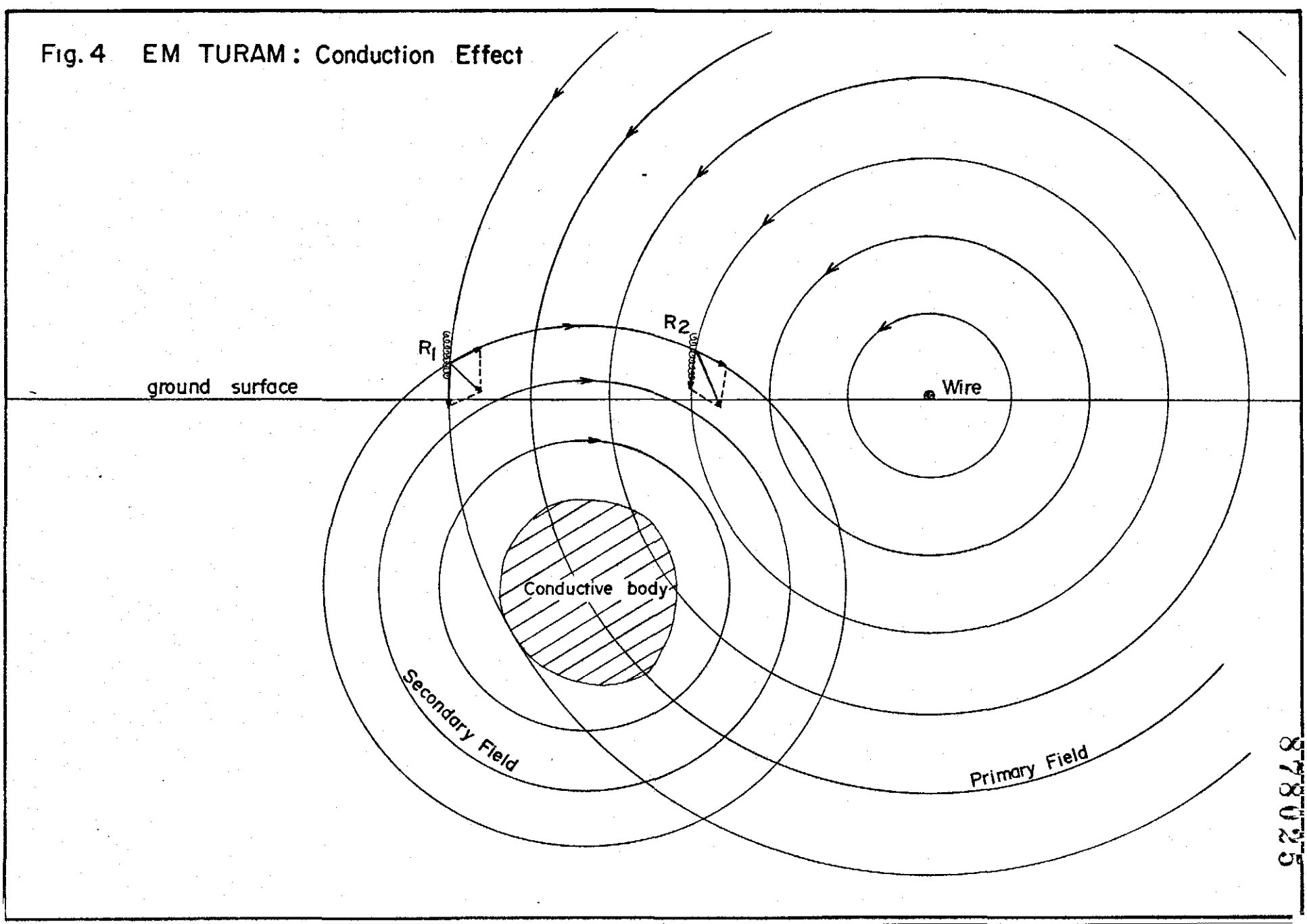


Fig. 4 EM TURAM : Conduction Effect



straight wire parallel to the axis of the Mount Bischoff anticlinorium. The penetration of the return current increases with the length of the wire and is maximum in the middle third of the wire. Therefore, a wire more than 3 kilometres long was used and the base line was extended in order to keep the traverses within the middle third of the wire.

The reduced ratios plotted on the profiles (Plates 12, 13, 14, 15, 16, 17 and 18) are defined as follows :

$$\text{"Reduced Ratio"} = \frac{\text{Measured Ratio of Amplitudes of the vertical E.M. field at coils } R_1 \text{ and } R_2}{\text{Theoretical Ratio of Amplitudes of the vertical E.M. field at } R_1 \text{ and } R_2 \text{ for a homogeneous medium}}$$

The calculation of the theoretical ratio is based on the distances between the coils and the transmitting wire. Therefore, the accuracy of the determination of the Reduced Ratios depends mainly on the accuracy of the map - a particularly important point in the present case since all traverses except T_2N follow winding creeks or a track.

6-2. T_1 North :

A small anomaly, A3, occurs near the wire (pegs 350 - 450). The interesting feature is that its amplitude is nearly the same for both frequencies. Therefore, the conductive body is not only superficial but rooted within the bedrock. The top of the conductive body is less than 100 feet deep.

A similar, but wider and smoother anomaly, A7, appears at the northern end of T_1 N. It may be due to a conductive body more than 200 feet deep or simply to a lithological variation.

6-3. T_1 South :

Anomaly A1 between peg 350 and peg 750 is due to a conductive body in the bedrock. Its depth is within the 100 - 200 feet range.

Anomaly A2 is a narrow anomaly due to a narrow, almost outcropping, conductive body in the bedrock.

6-4. T_2 North :

A8 (peg 2050) is a narrow anomaly due to an almost outcropping, narrow, conductive body in the bedrock.

A4 at the northern end of T_2 N has a Reduced Ratio amplitude which is large compared to the phase difference amplitude. Thus, the conductivity of the conductive body is high. A4 extends further than the last station and the depth of the conductive body cannot be estimated.

6-5. T_2 South :

On T_2 S there is only one anomaly, (A5), between peg 2450 and peg 2950. The low frequency amplitude is much smaller than the 660 c/s amplitude. The phase difference amplitude is comparatively high. Therefore, A5 is most probably due to a shallow, low, conductivity body, not deeply rooted in the bedrock.

6-6. T_3 North :

There is no significant anomaly on T_3 N.

6-7. T_3 South :

A6, between pegs 1050 and 1850, is the strongest anomaly of the

whole area. The 220 c/s reduced ratio is slightly larger than the 660 c/s reduced ratio. Therefore, A6 is due to a conductive body located within the bedrock. The phase difference variations are rather small compared to the reduced ratio and thus, the conductivity of the body is probably high. The dissymmetry of the anomaly indicates a southward dip. The depth of the conductive body does not exceed 150 feet.

No significant anomaly has been detected on the Tinstone Creek.

6-8. Conclusions and Recommendations :

Eight E.M. anomalies have been detected in the Arthur River area. Traverses are too far apart to allow any correlation.

The most interesting anomalies are :

- A6
- A4
- A1

The Mount Bischoff mineralization contains a high proportion of pyrrhotite. A similar mineralization in the Arthur River area would give rise to a magnetic anomaly.

We would recommend carrying out magnetometry profiling along the Arthur River traverses with a 50 foot spacing between stations.

All E.M. anomalies coinciding with magnetic anomalies would be drilling targets.

Before deciding on any further drilling, we would recommend checking with I.P. all E.M. anomalies which do not give rise to a magnetic anomaly.

The Party Chief

G. CLARIDGE

The Chief Geophysicist

G. OMNES

Brisbane, 19th May, 1971.

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COMSTAFF PTY. LTD. : 790 PL. I.

GEOPHYSICAL SURVEY AT CHESTER PINNACLES (TAS)

NORTHERN AND SOUTHERN GRIDS

878030

SCALE : 1/10,000

LEGEND

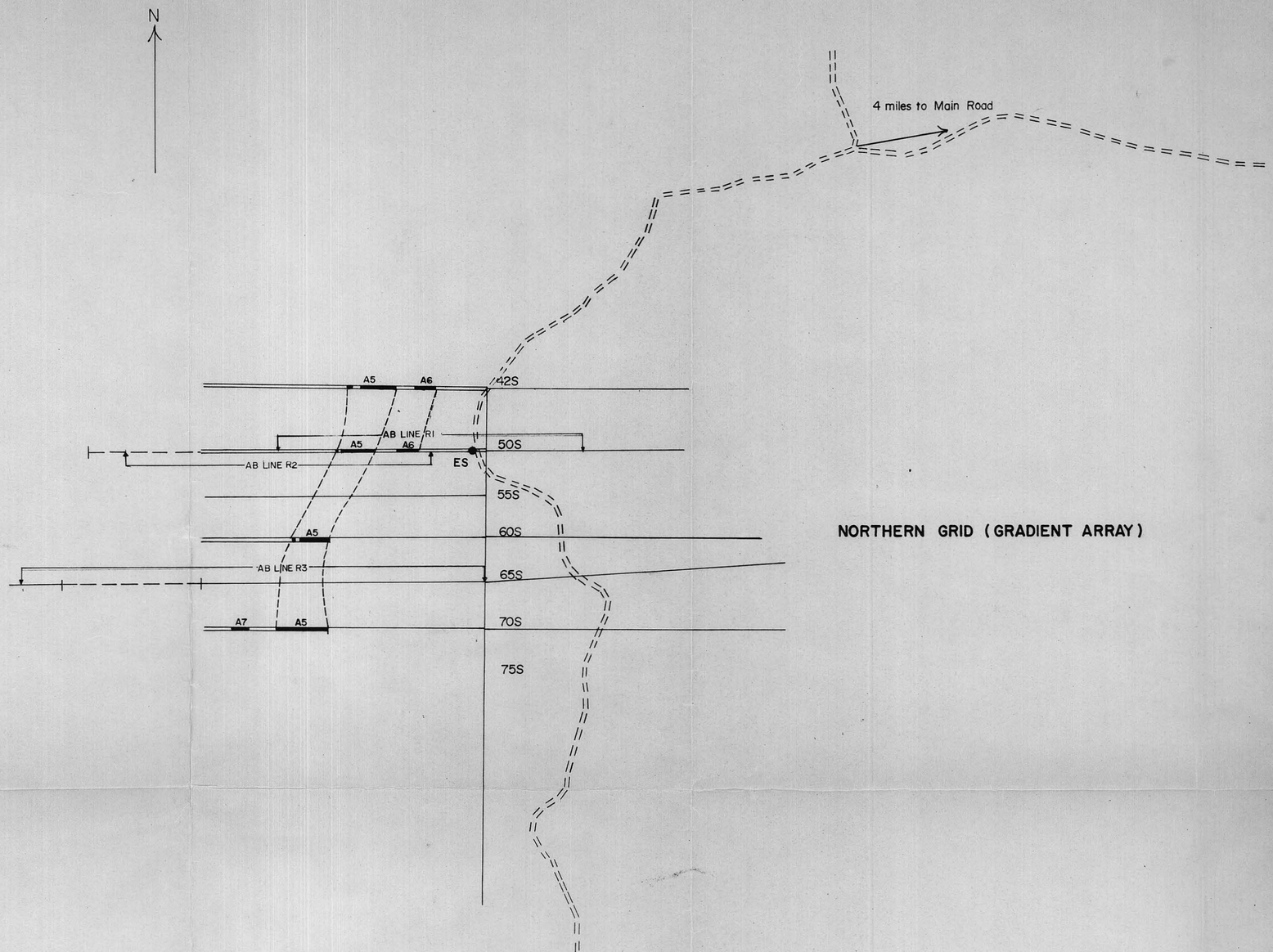
A3 I.P. Anomaly

Apparent chargeability correlation

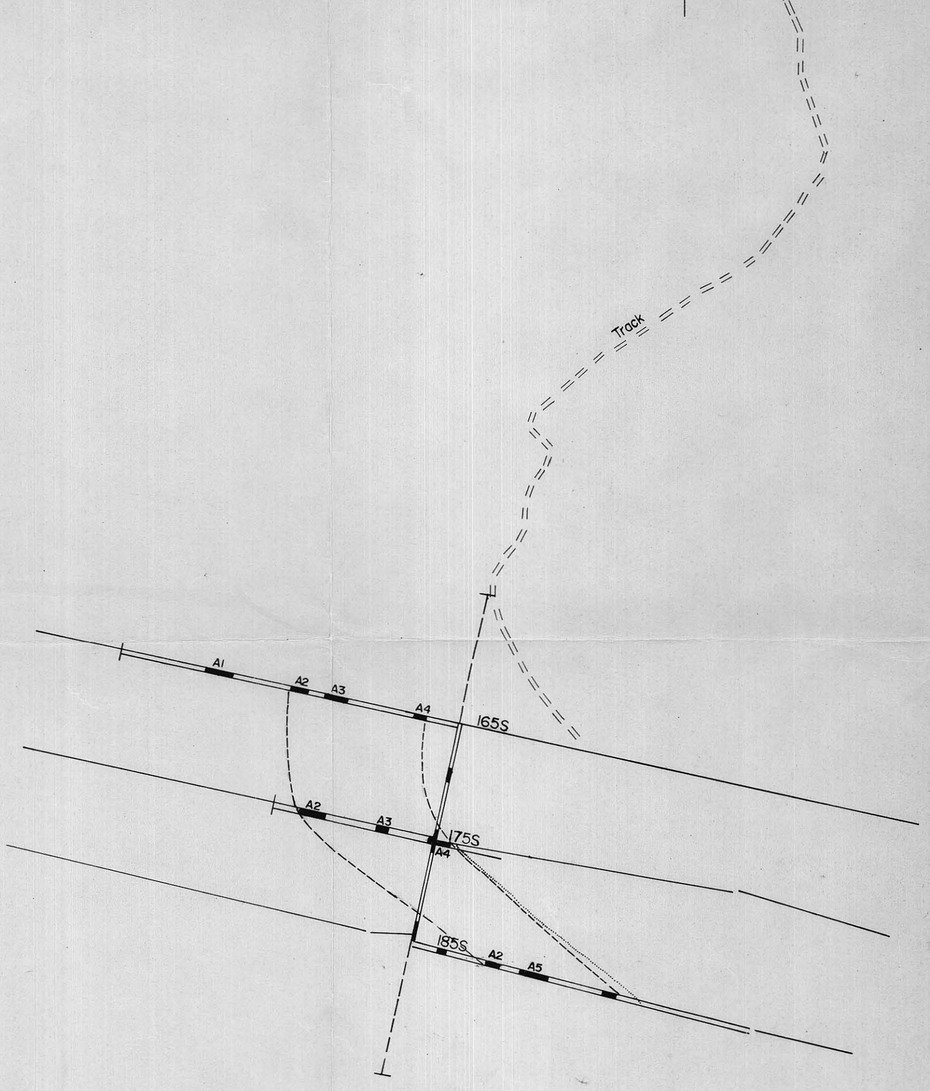
Apparent resistivity gradient

5 cm

C.G.G
26-28 Manning Street, South BRISBANE



NORTHERN GRID (GRADIENT ARRAY)



SOUTHERN GRID (DIPOLE - DIPOLE ARRAY)

41-962

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791

PL.2.

GEOPHYSICAL SURVEY AT CHESTER PINNACLES (TAS)

NORTHERN GRID

PROFILE 42 S

GRADIENT ARRAY
AB = 3284 feet MN = 100 feet

Time on : 2seconds Time off : 2seconds

Integration from 450ms to 1150 ms after cut off

SCALE 1" = 100'

LEGEND

A_2 I.P. anomaly

878031

5 cm

C.G.G.
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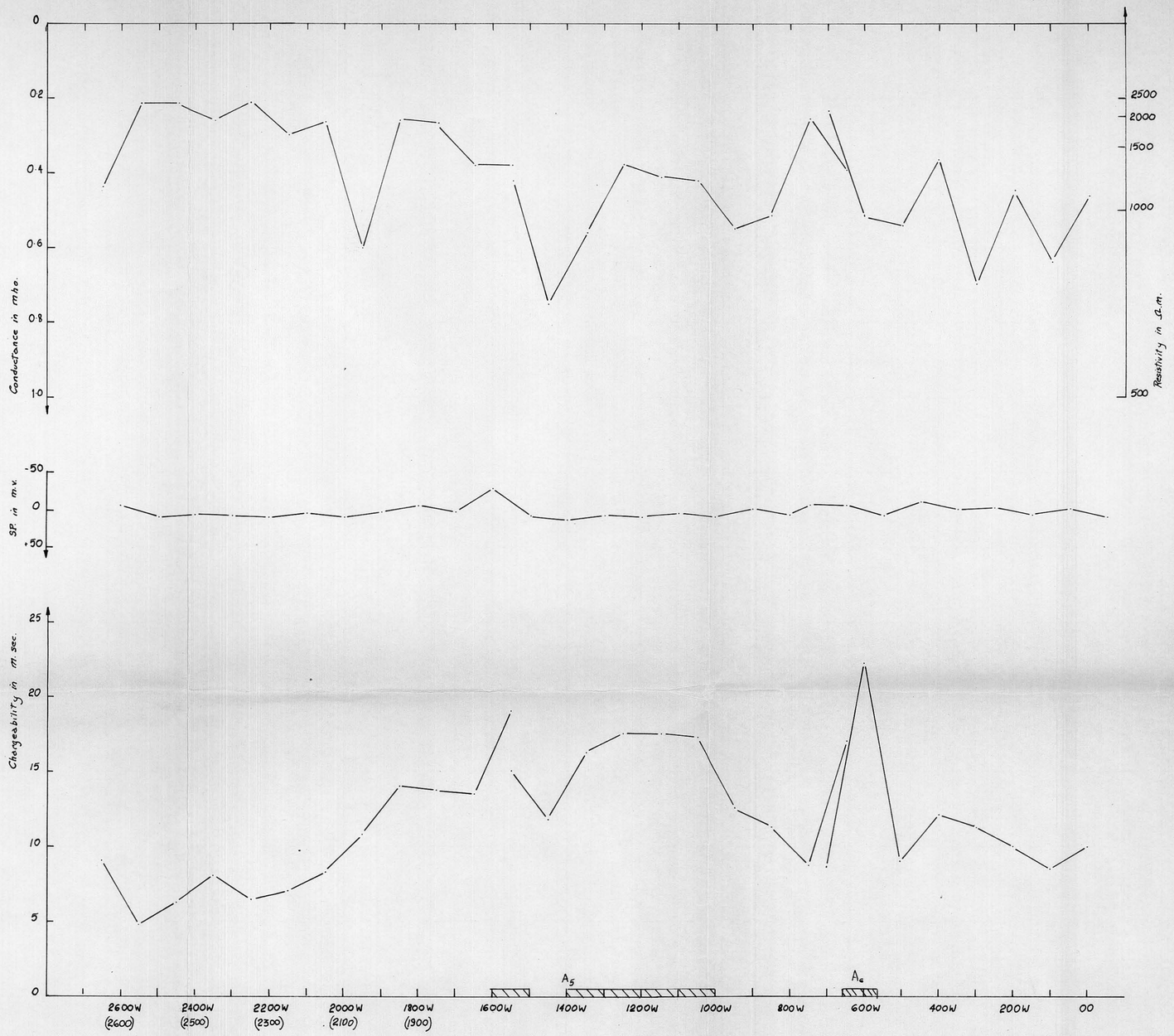

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792 PL. 3.

GEOPHYSICAL SURVEY AT CHESTER PINNACLES (TAS)

NORTHERN GRID

PROFILE 50 S

GRADIENT ARRAY
AB = 3284 feet MN = 100 feet

Time on : 2seconds Time off : 2seconds

Integration from 450ms to 1150 ms after cut off

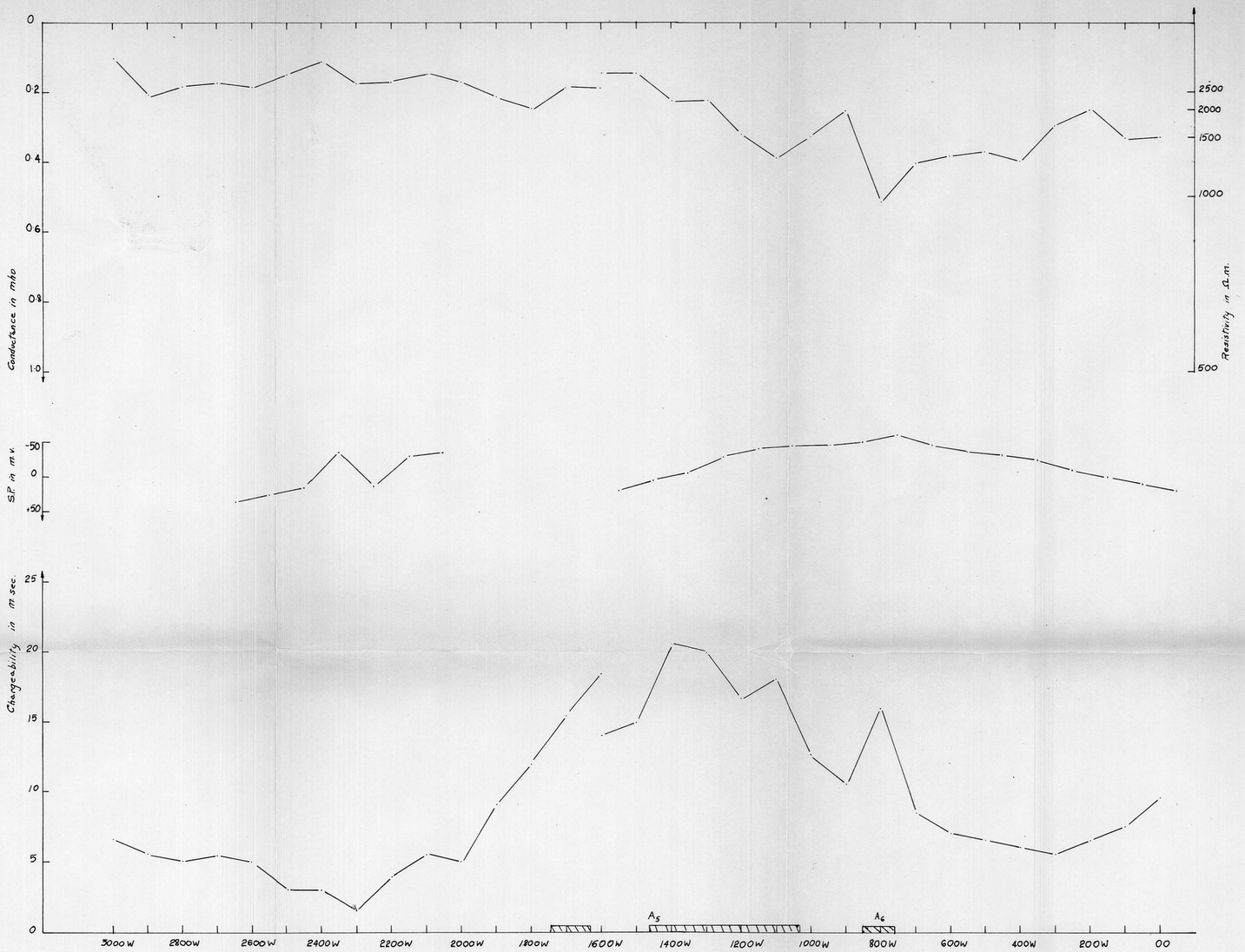
SCALE 1" = 100'

LEGEND

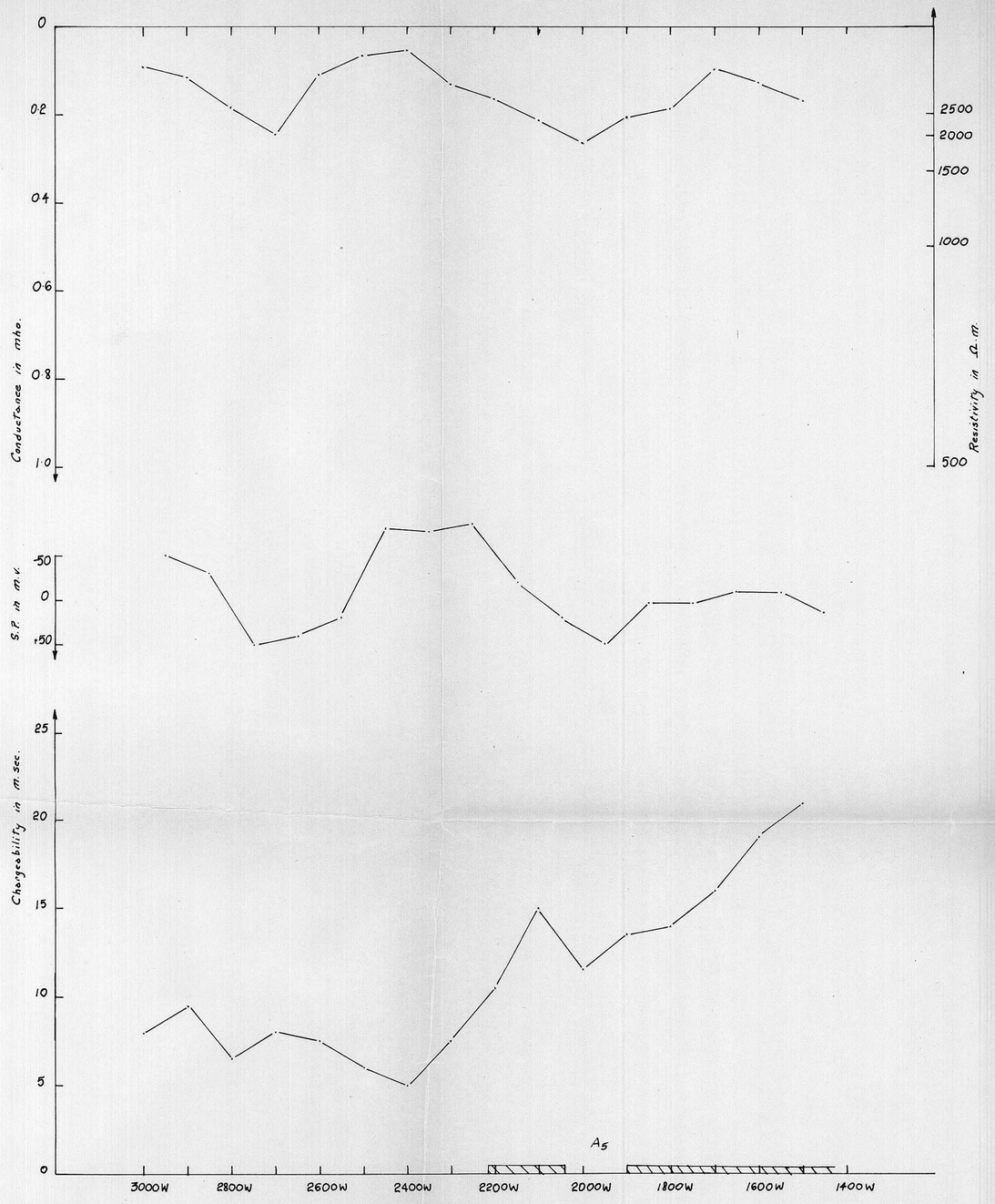
A_2 I.P anomaly

878032

5 cm



C.G.G.
26-28 Manning Street, South BRISBANE



GEOPHYSICAL SURVEY AT CHESTER PINNACLES (TAS)

NORTHERN GRID

PROFILE 60 S

GRADIENT ARRAY
AB = 5000 feet MN = 100 feet

Time on : 2seconds Time off : 2seconds

Integration from 450ms to 1150 ms after cut off

SCALE 1" = 100'

LEGEND

A_2 I.P. anomaly

878033

5 cm

C.G.G.
26-28 Manning Street, South BRISBANE

GEOPHYSICAL SURVEY AT CHESTER PINNACLES (TAS)

NORTHERN GRID

PROFILE 70 S

GRADIENT ARRAY
AB = 5000 feet MN = 100 feet

Time on : 2 seconds Time off : 2 seconds

Integration from 450 ms to 1150 ms after cut off

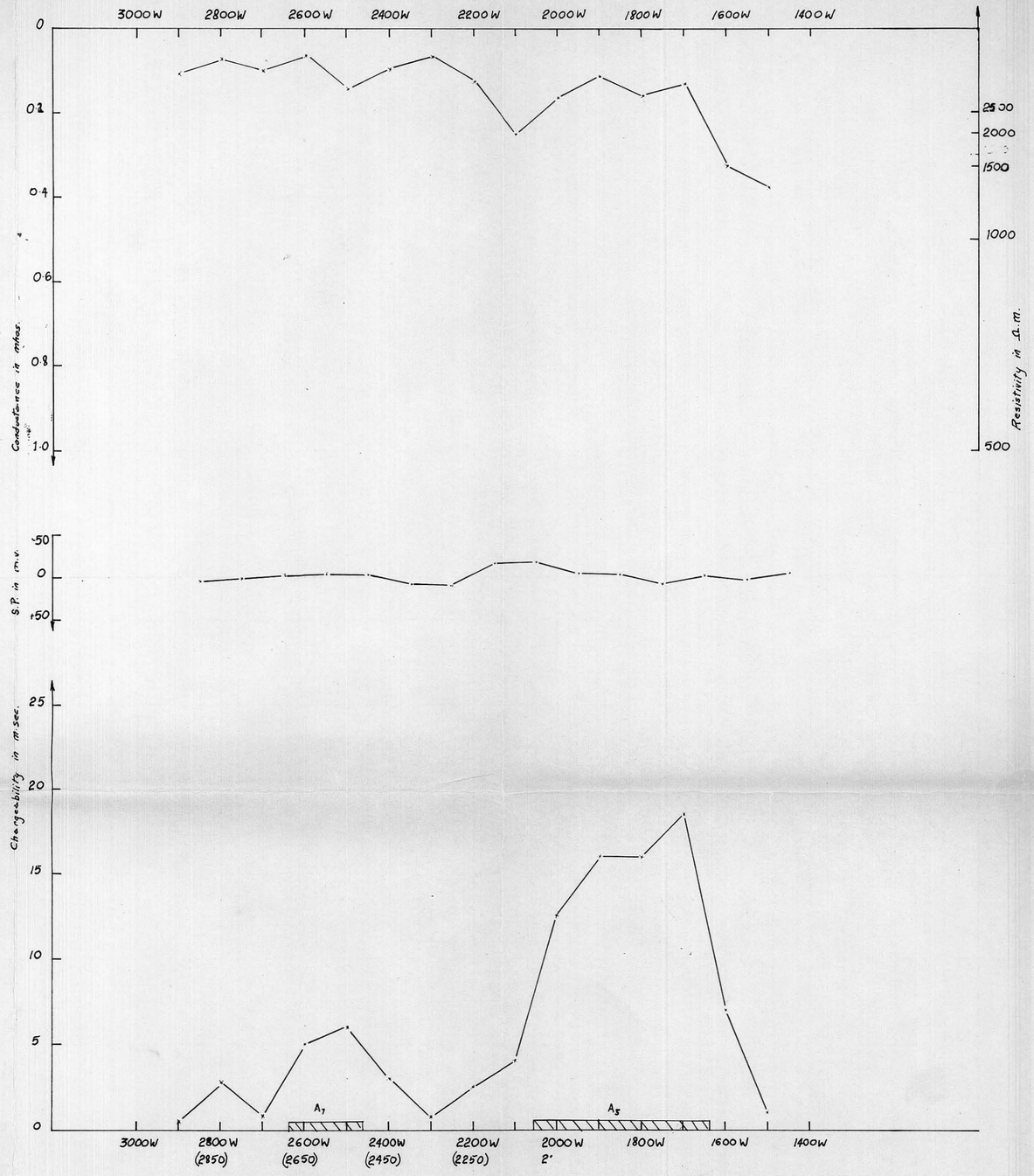
SCALE 1" = 100'

LEGEND

A_2 I.P. anomaly

878034

5 cm



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GEOPHYSICAL SURVEY AT CHESTER PINNACLES (TAS)

SOUTHERN GRID

PROFILE 00 (BASE LINE)

DIPOLE - DIPOLE

A B 100' 200' M N 100' Receiver 2

A B 100' 100' M N 100' Receiver 1

Time on : 2seconds Time off : 2seconds

Integration from 450ms to 1150ms after cut off

SCALE 1" = 100'

LEGEND

878035

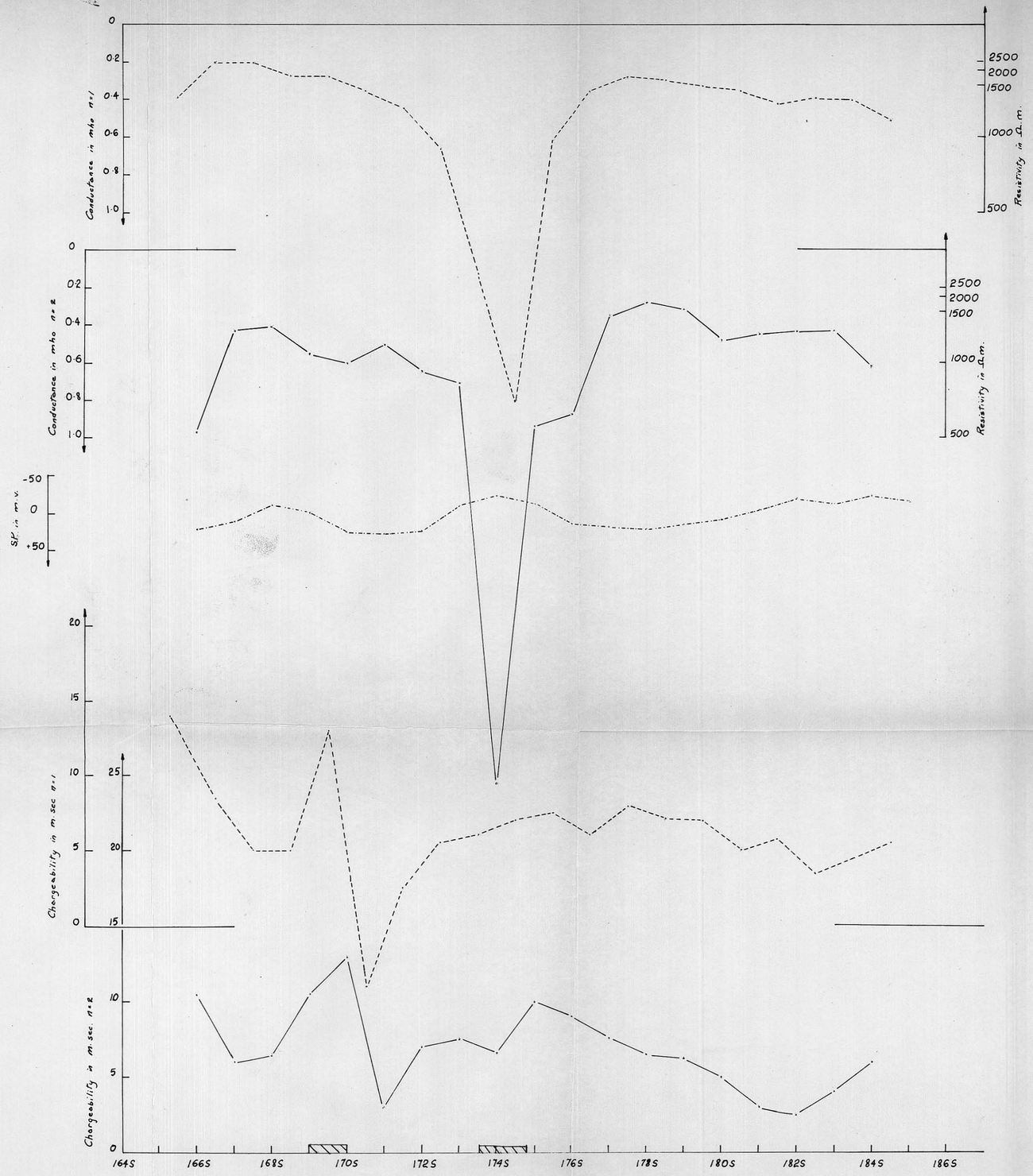
A2 I.P. anomaly

Conductance and chargeability n = 1

" " " n = 2

5 cm

C.G.G
26 - 28 Manning Street, South BRISBANE



GEOPHYSICAL SURVEY AT CHESTER PINNACLES (TAS)

SOUTHERN GRID

PROFILE 165S

DIPOLE - DIPOLE

A B 100' 200' M N 100' Receiver 2

A B 100' 100' M N 100' Receiver 1

Time on : 2seconds Time off : 2seconds

Integration from 450ms to 1150ms after cut off

SCALE 1" = 100'

LEGEND

A2 I.P. anomaly

Conductance and chargeability n=1

" " " n=2

878036

5 cm

C.G.G
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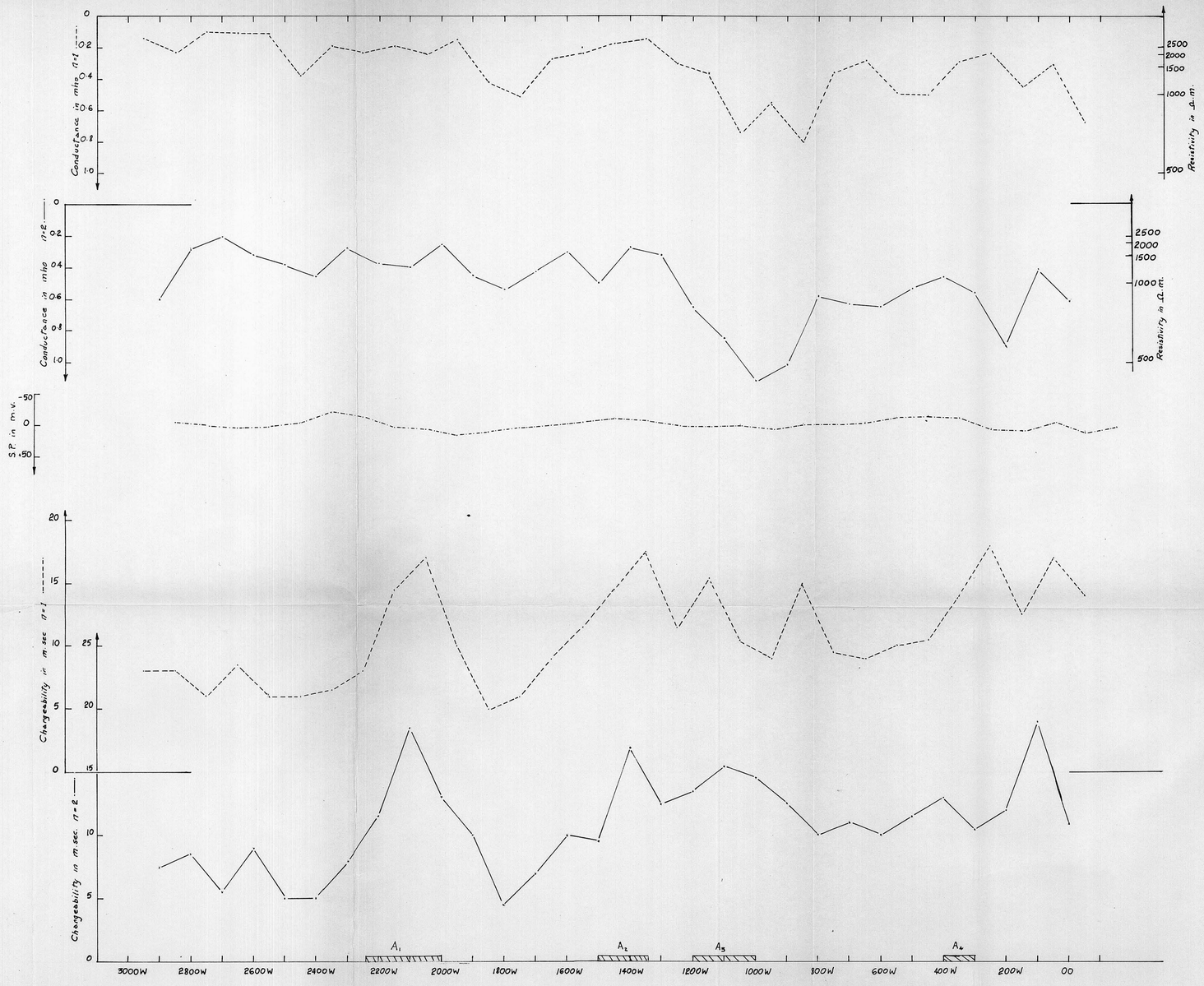

COMSTAFF PTY LTD PL. 8.

GEOPHYSICAL SURVEY AT CHESTER PINNACLES (TAS)

SOUTHERN GRID

PROFILE 175 S

DIPOLE - DIPOLE

A B 100' 200' M N 100'
A B 100' 100' M N 100'

Receiver 2
Receiver 1

Time on : 2seconds Time off : 2seconds

Integration from 450ms to 1150ms after cut off

SCALE 1" = 100'

LEGEND

878037

A_2 I.P. anomaly

Conductance and chargeability n=1

" " " n=2

5 cm

C.G.G.
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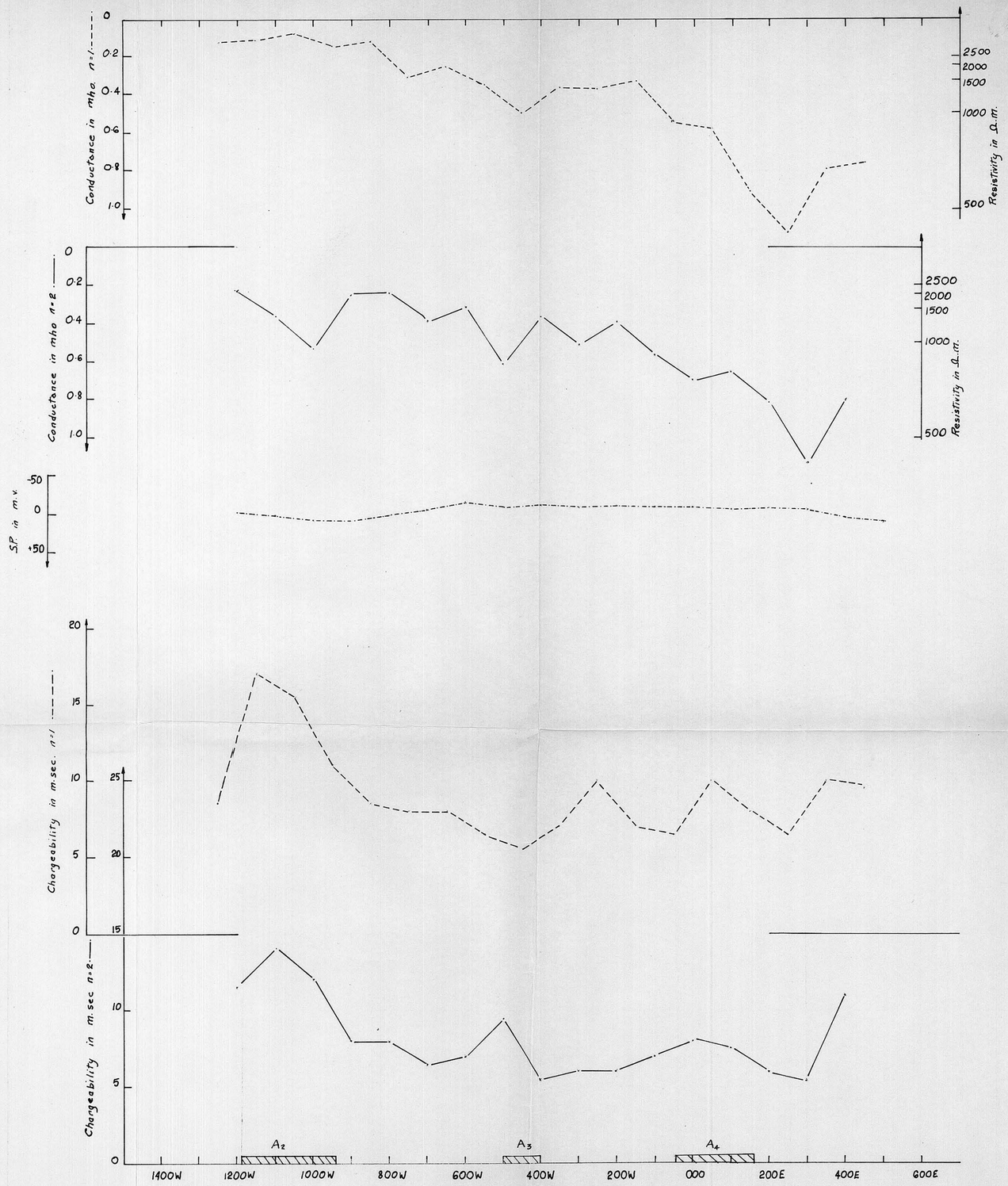


GEOPHYSICAL SURVEY AT CHESTER PINNACLES (TAS)

SOUTHERN GRID

PROFILE 185 S

DIPOLE - DIPOLE

A B 100' 200' M N 100' Receiver 2

A B 100' 100' M N 100' Receiver 1

Time on : 2seconds Time off : 2seconds

Integration from 450ms to 1150ms after cut off

SCALE 1" = 100'

LEGEND

A2 I.P. anomaly

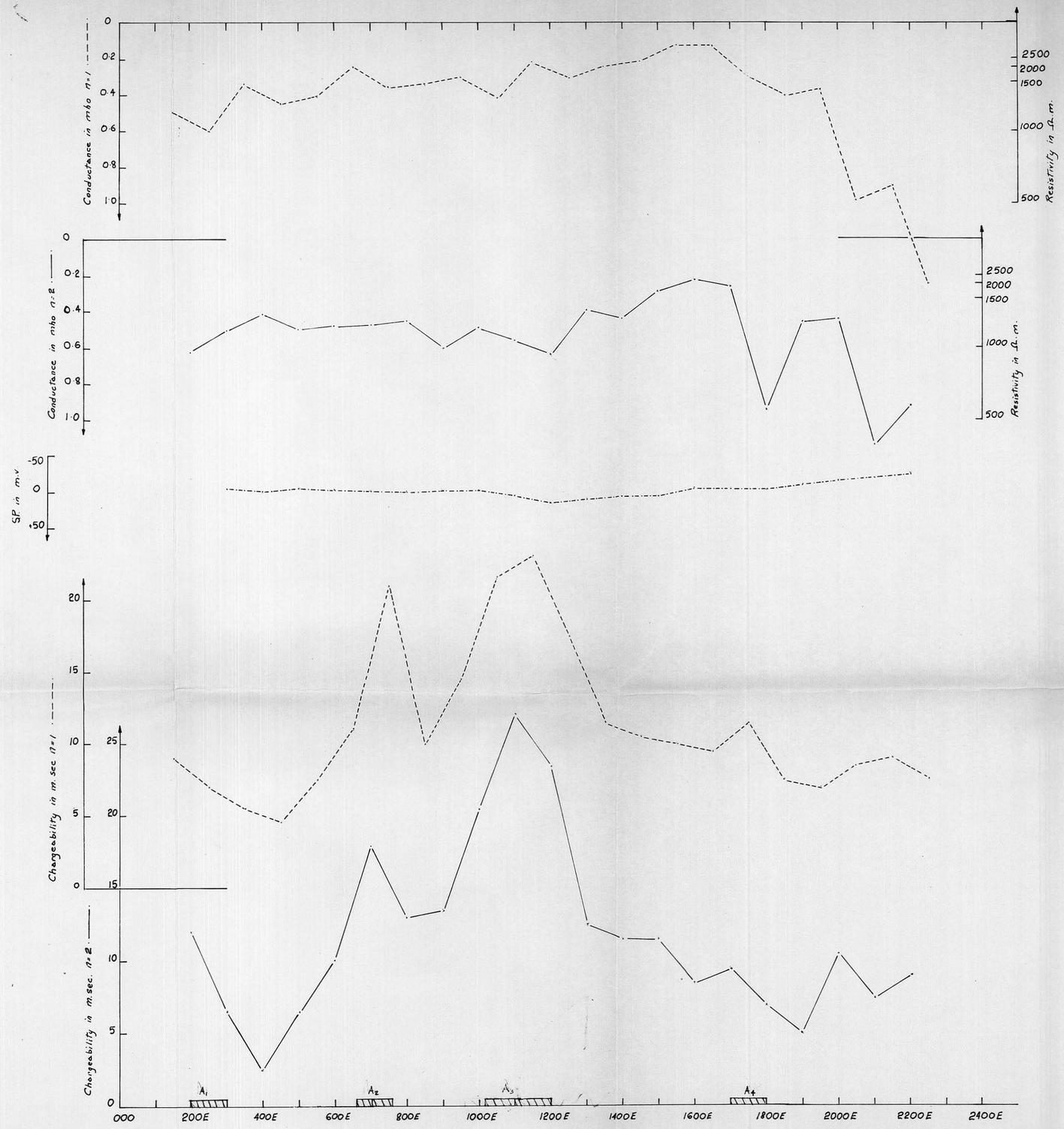
Conductance and chargeability n=1

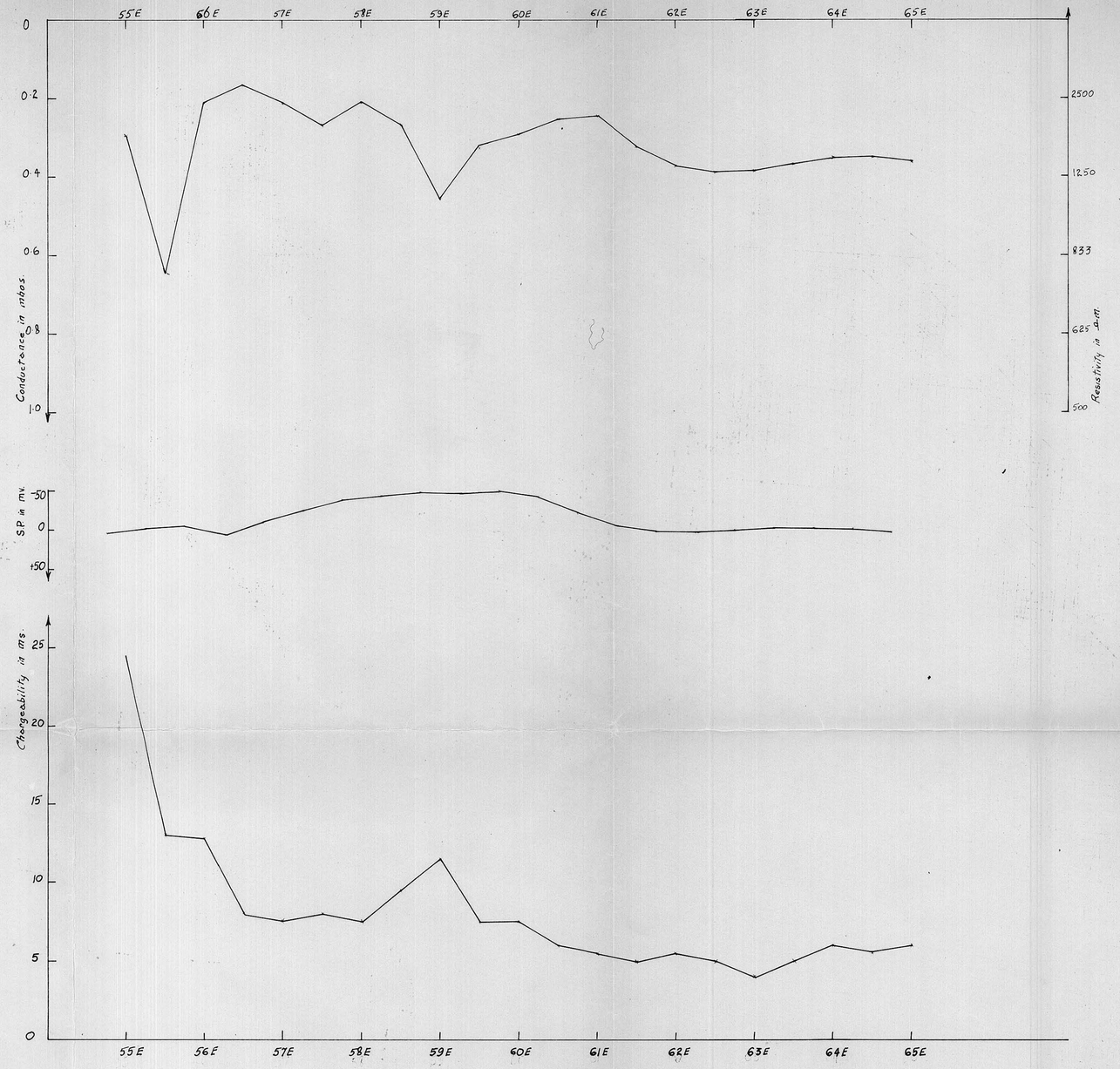
" " " n=2

878038

5 cm

C.G.G.
26 - 28 Manning Street, South BRISBANE





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PL 10

GEOPHYSICAL SURVEY AT QUE RIVER (TAS)

CHARTER GRID

PROFILE 60N

GRADIENT ARRAY

AB = 3284 feet MN = 100 feet

Time on : 2seconds Time off : 2seconds

Integration from 450ms to 1150 ms after cut off

SCALE 1" = 100'

LEGEND

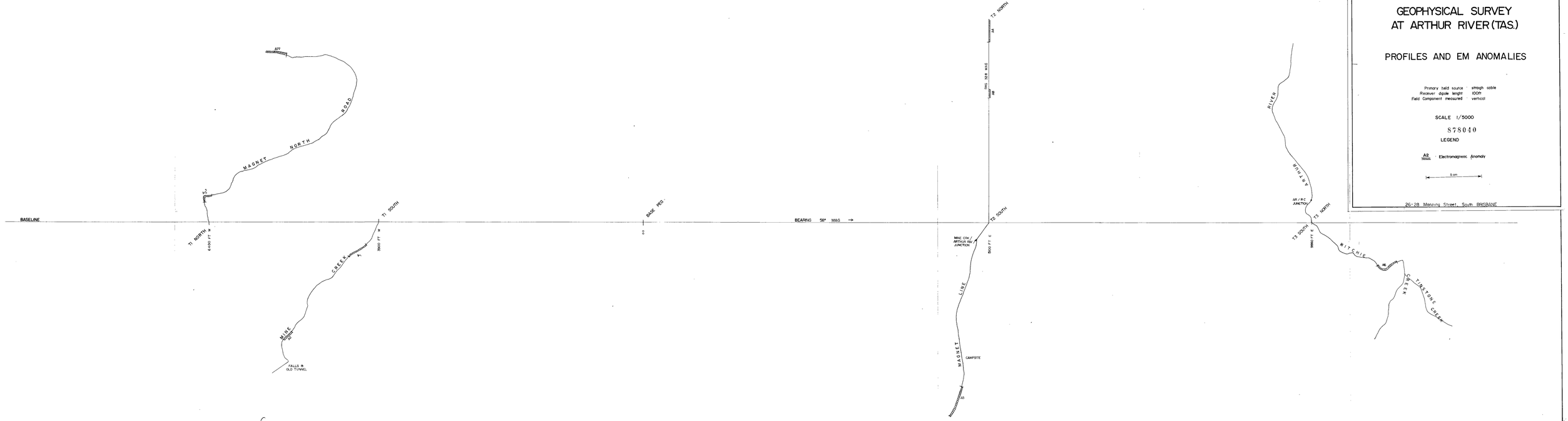
A_2 I.P. anomaly

878039

5 cm

C.G.G.

26-28 Manning Street, South BRISBANE


COMSTAFF PTY LTD
800
PL II
GEOPHYSICAL SURVEY
AT ARTHUR RIVER (TAS.)
PROFILES AND EM ANOMALIES
Primary field source : straigh cable
Receiver dipole lenght : 100ft
Field Component measured : vertical
SCALE 1/5000
878040
LEGEND
A2 : Electromagnetic Anomaly
5 cm
26-28 Manning Street, South BRISBANE
BASELINE
T1 NORTH
6400 FT N
T1 SOUTH
3800 FT N
BASE PEG
BEARING 56° MAG
T2 NORTH
T2 SOUTH
3800 FT E
MINE CON./ ARTHUR RD JUNCTION
MAGNET LINE
CAMPSITE
T3 NORTH
T3 SOUTH
3800 FT E
AR / RC JUNCTION
RIVER
ARTHUR
WITCHIE
CREEK
TIMESTONE CREEK
A77
MAGNET NORTH ROAD
A7
MINE
FALLS IN OLD TUNNEL

COMSTAFF PTY LTD

GEOPHYSICAL SURVEY AT ARTHUR RIVER (TAS)

PROFILE T1-N

Primary field source : straight cable

Receiving dipole length : 100 feet

Field component measured : vertical

SCALE 1" = 200'

LEGEND

Phase difference 660 c/s

" " 220 c/s

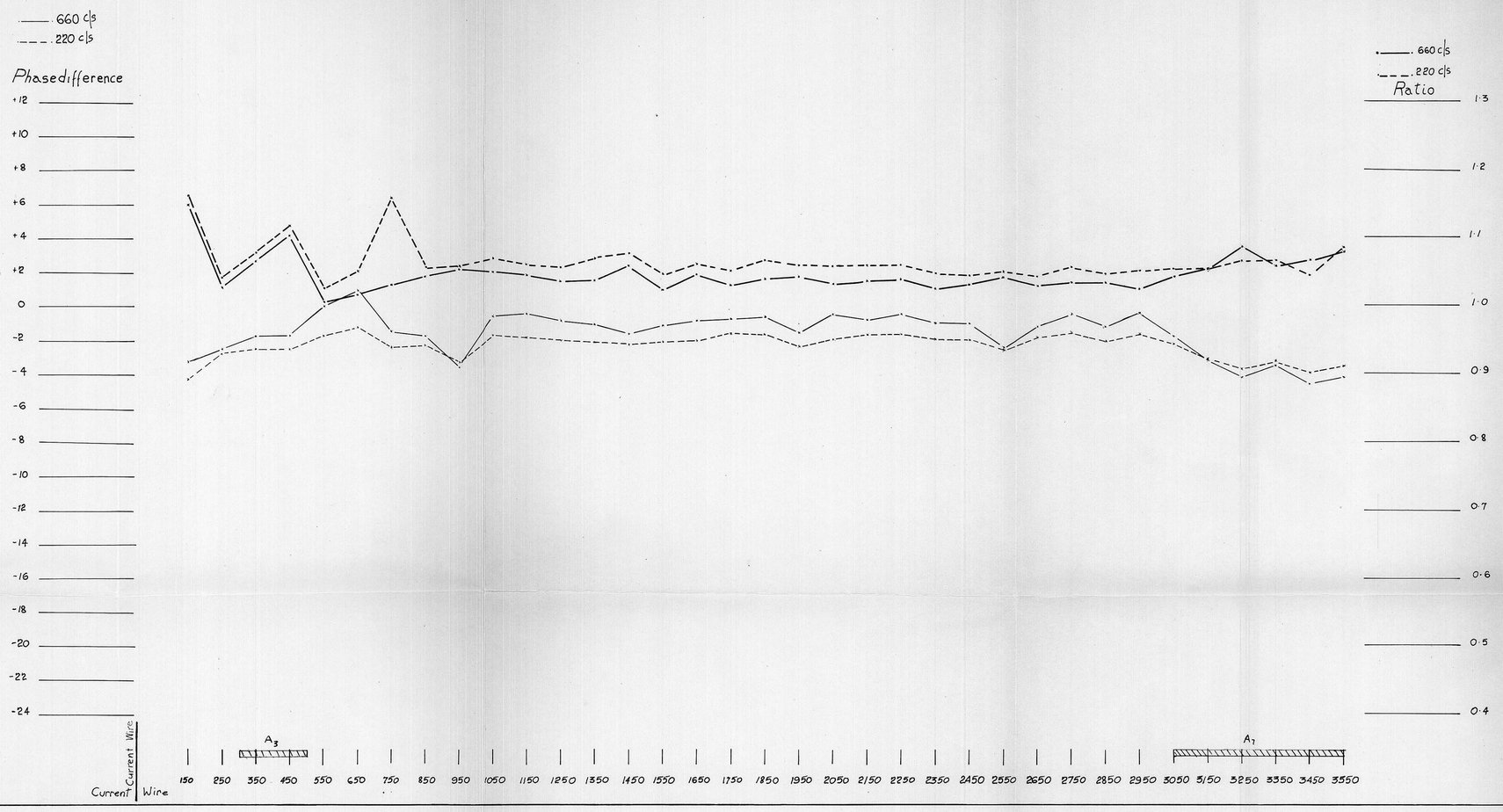
Ratio 660 c/s

" 220 c/s

878041

5 cm

C.G.G.
26-28 Manning Street, South BRISBANE



GEOPHYSICAL SURVEY AT ARTHUR RIVER (TAS)

PROFILE TI-S

Primary field source : straight cable

Receiving dipole length : 100 feet

Field component measured : vertical

SCALE 1" = 200'

LEGEND

Phase difference 660 c/s

" " 220 c/s

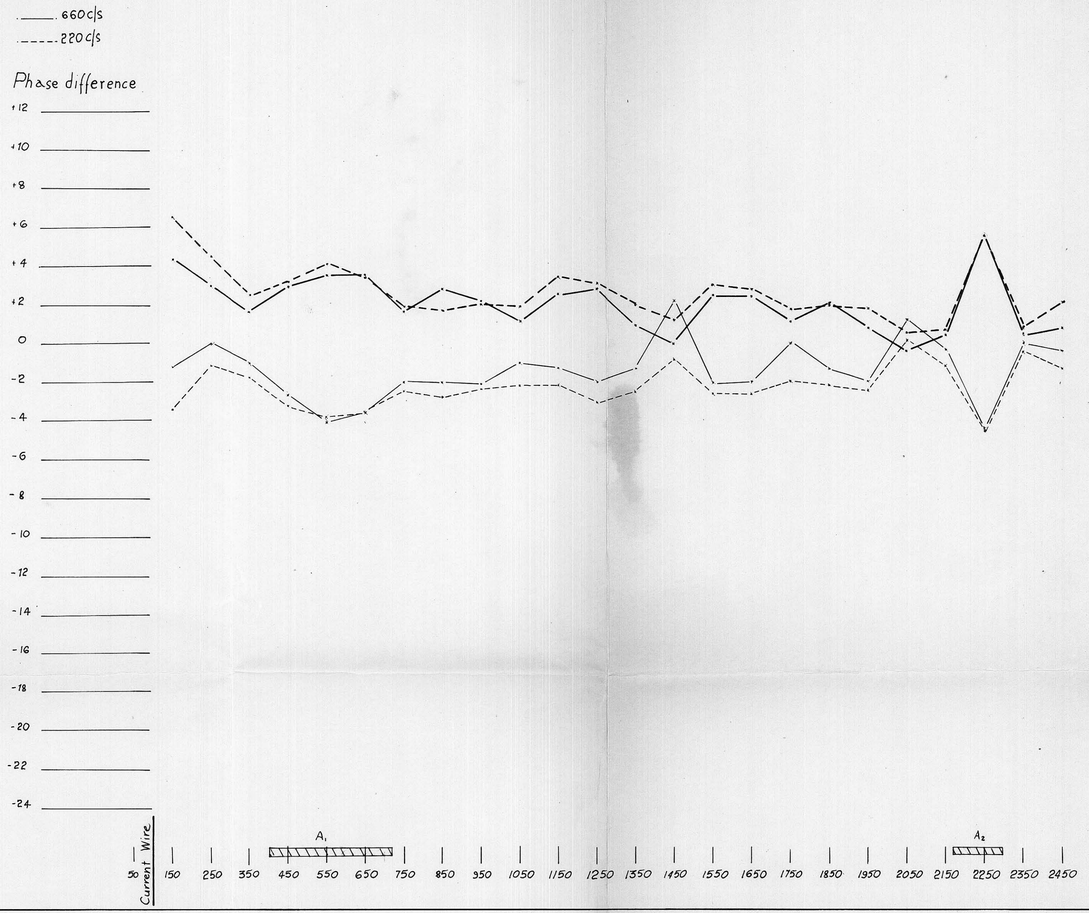
Ratio 660 c/s

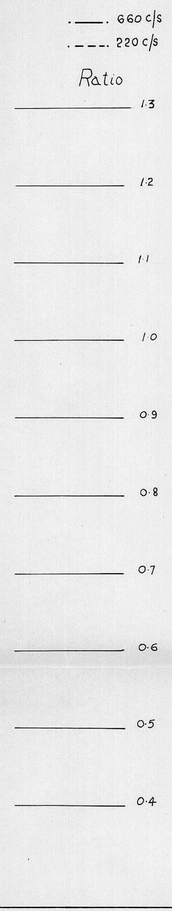
" 220 c/s

878042

5 cm

C.G.G.
26-28 Manning Street, South BRISBANE



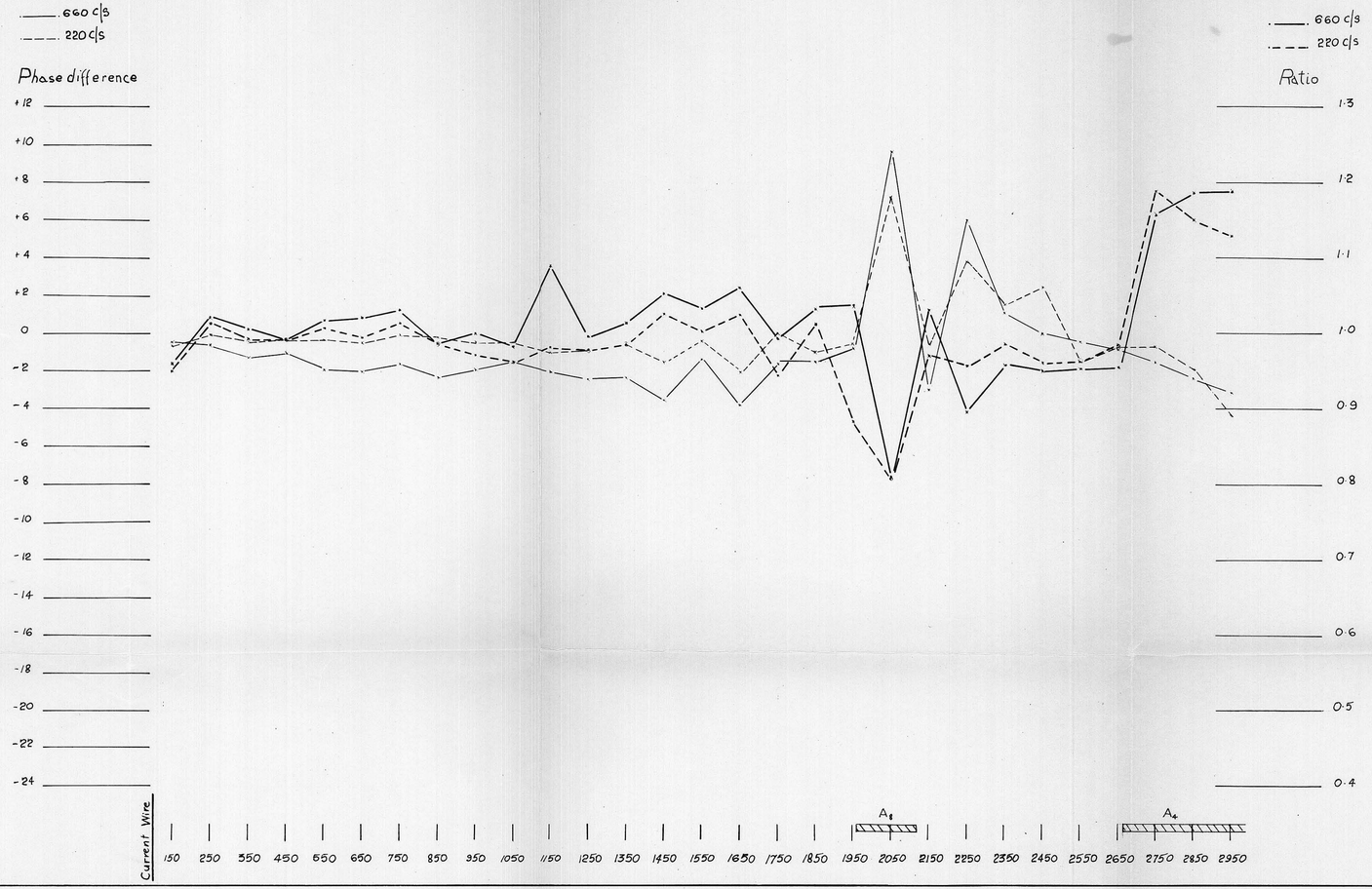


GEOPHYSICAL SURVEY AT ARTHUR RIVER (TAS)

PROFILE T2-N

Primary field source : straight cable
Receiving dipole length : 100 feet
Field component measured : vertical

SCALE 1" = 200'



LEGEND

Phase difference 660 c/s
" " 220 c/s
Ratio 660 c/s
" 220 c/s

8780 13

5 cm

C.G.G.
26-28 Manning Street, South BRISBANE

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GEOPHYSICAL SURVEY AT ARTHUR RIVER (TAS)

PROFILE T2-S

Primary field source : straight cable

Receiving dipole length : 100 feet

Field component measured : vertical

SCALE 1" = 200'

878044

LEGEND

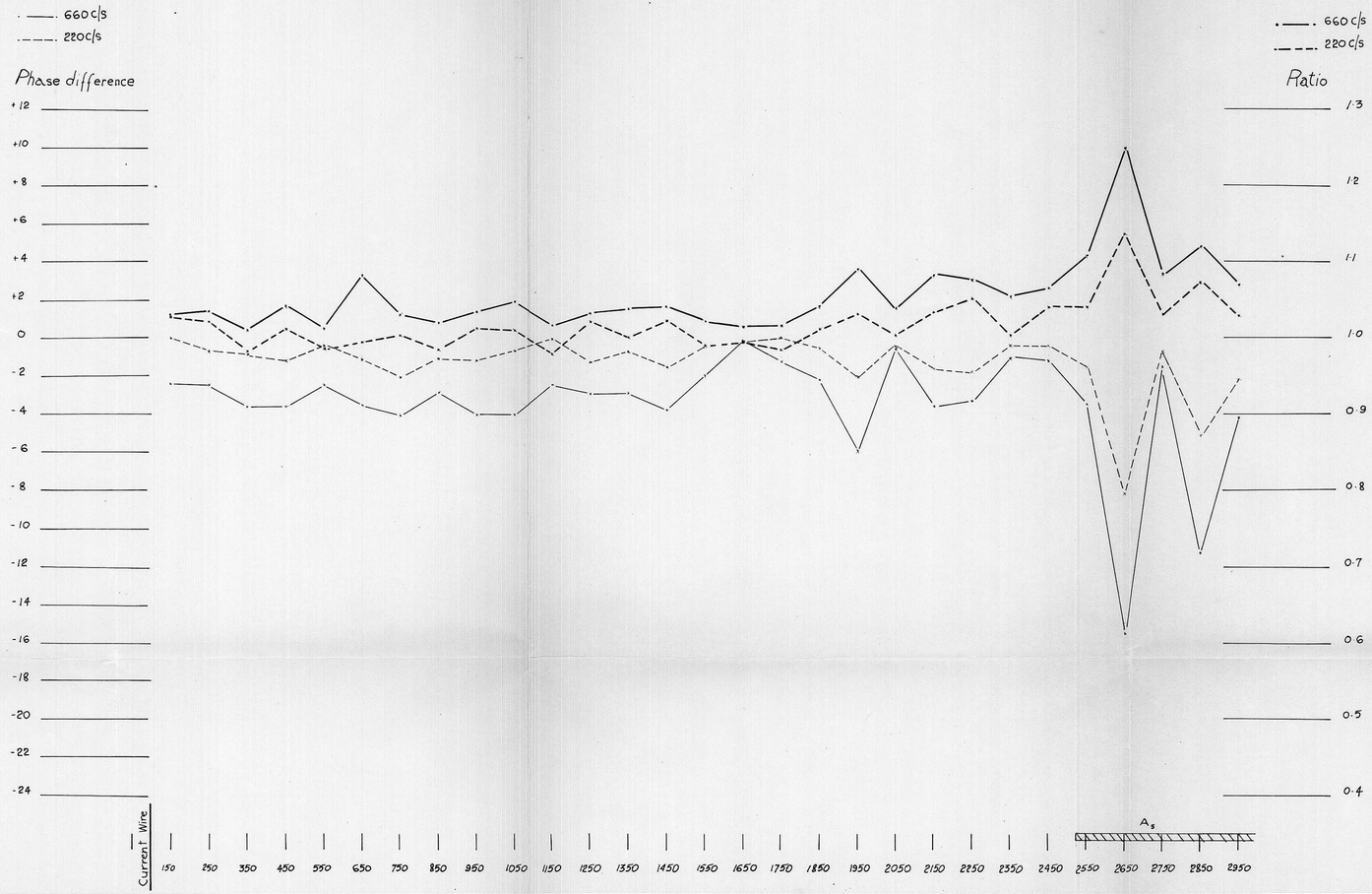
Phase difference 660 c/s

" " 220 c/s

Ratio 660 c/s

" 220 c/s

5 cm



C.G.G.
26-28 Manning Street, South BRISBANE

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GEOPHYSICAL SURVEY AT ARTHUR RIVER (TAS)

PROFILE T3-N

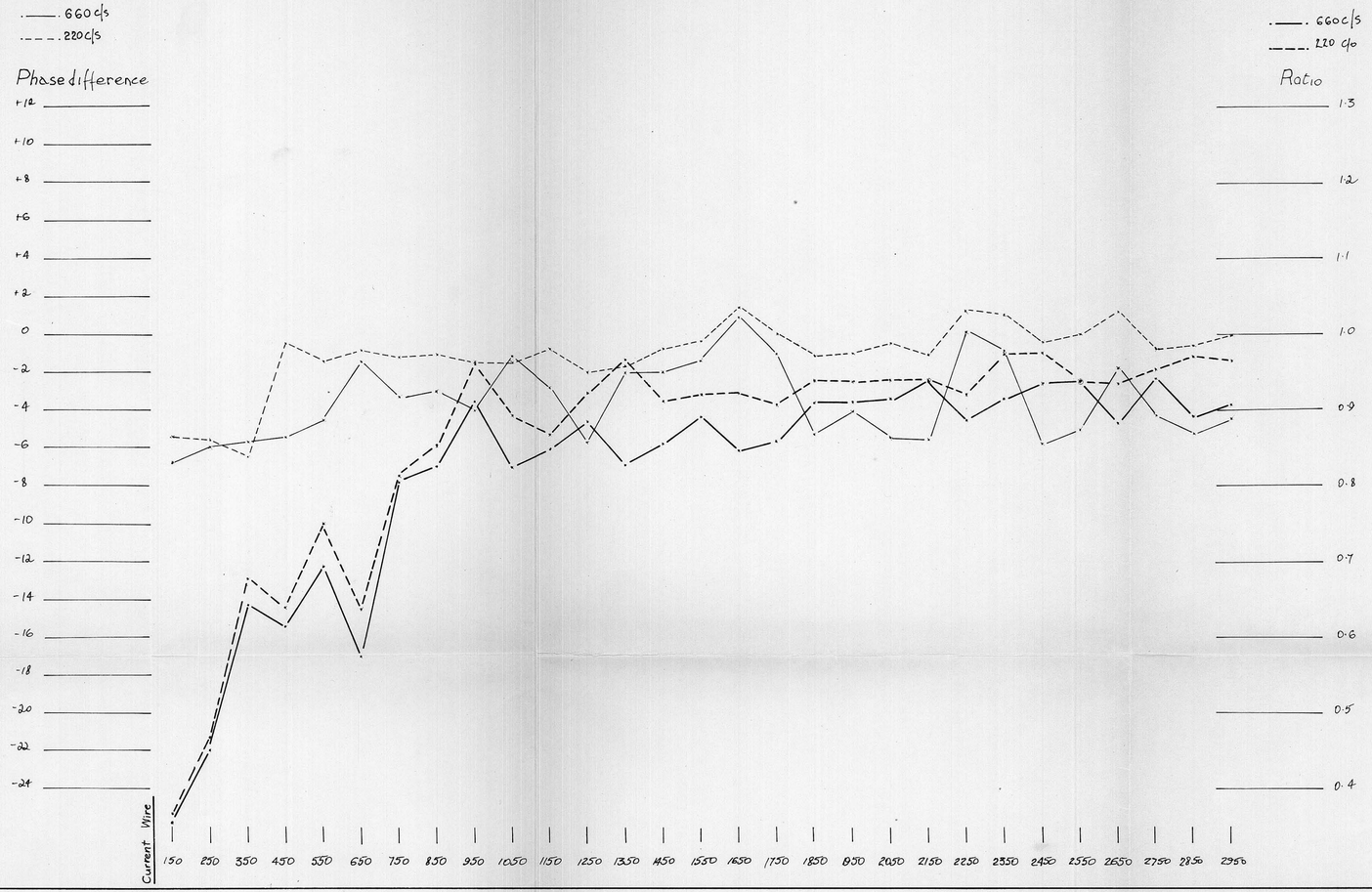
Primary field source : straight cable

Receiving dipole length : 100 feet

Field component measured : vertical

878045

SCALE 1" = 200'



LEGEND

Phase difference 660 c/s

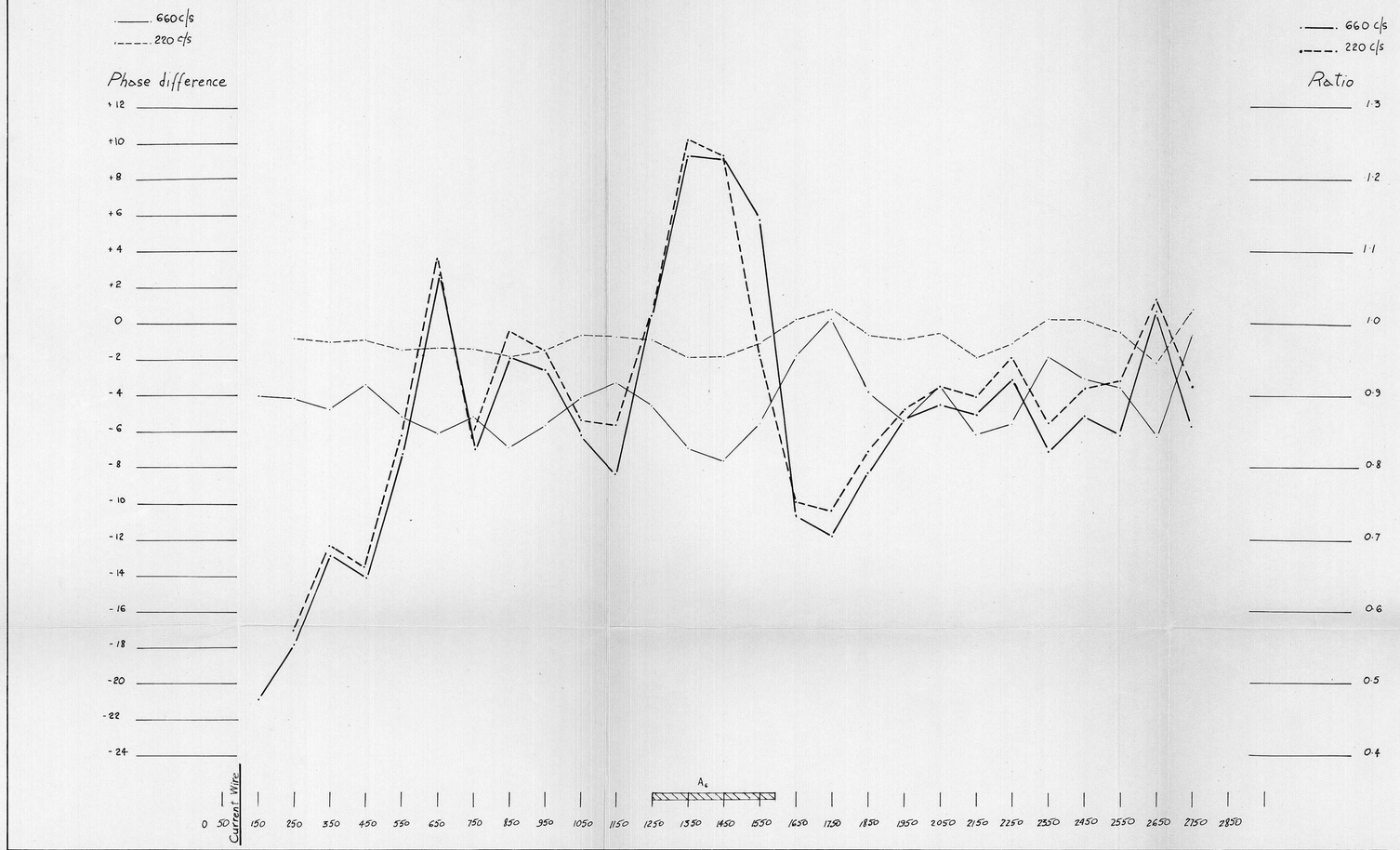
" " 220 c/s

Ratio 660 c/s

" 220 c/s

5 cm

C.G.G.
26-28 Manning Street, South BRISBANE



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806

PL. 17.

GEOPHYSICAL SURVEY AT ARTHUR RIVER (TAS)

PROFILE T3-S

Primary field source : straight cable

Receiving dipole length : 100 feet

Field component measured : vertical

SCALE 1" = 200'

878046

LEGEND

Phase difference 660 c/s

" " 220 c/s

Ratio 660 c/s

" 220 c/s

5 cm

C.G.G.
26-28 Manning Street, South BRISBANE

71-762

COMSTAFF PTY LTD

807 PL. 18.

GEOPHYSICAL SURVEY AT ARTHUR RIVER (TAS)

PROFILE T3-S

(TINSTONE CREEK)

Primary field source : straight cable

Receiving dipole length : 100 feet

Field component measured : vertical

878047

SCALE 1" = 200'

LEGEND

Phase difference 660 c/s

" " 220 c/s

Ratio 660 c/s

" 220 c/s

5 cm

C.G.G.
26-28 Manning Street, South BRISBANE

660 c/s
220 c/s

Phase difference

+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24

Current Wire

660 c/s
220 c/s

Ratio

1·3
1·2
1·1
1·0
0·9
0·8
0·7
0·6
0·5
0·4

n.r. n.r. n.r. n.r. n.r. n.r. n.r.

1750 1850 1950 2050 2150 2250 2350 2450 2550 2650 2750 2850