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A REPORT ON

ADDITIONAL ELECTRICAL INDUCED POLARIZATION SURVEYS

AT MT. LINDSAY, NEAR RENISON BELL, WEST COAST TASMANIA

ON BEHALF OF

RENISON LIMITED

E.L. 2/63

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A REPORT ON
ADDITIONAL ELECTRICAL INDUCED POLARIZATION SURVEYS
AT MT. LINDSAY, NEAR RENISON BELL, WEST COAST TASMANIA
ON BEHALF OF
RENISON LIMITED

BY

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SYDNEY, N.S.W.

MARCH, 1975

TAS-028

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S U M M A R Y

Further gradient array induced polarization work at Mt. Lindsay, enabled the extent and strike direction of anomalies located in the previous field season to be better delineated. These surveys, run using a 25 metre potential dipole, improved the resolution significantly.

Very limited detailed work including three array, Schlumberger soundings and small gradient set-ups, assisted in the assessment of the area. Unfortunately the programme had to be curtailed due to the onset of the rainy season.

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INTRODUCTION

At the request of Mr. L. Newnham, Chief Geologist of Renison Limited, a Scintrex Pty. Ltd. crew headed by Staff Geophysicist Mr. S. Baggott, B.App.Sc. (Geophys), carried out electrical induced polarization surveys on the Mt. Lindsay grid additional to those carried out during the 1973/74 field season described in report TAS-019B.

As previously, these surveys were carried out in both the Consolidated Gold Fields of Australia/Renison Limited joint venture area EL 18/73 and within the Aberfoyle Limited/Consolidated Gold Fields of Australia/Renison Limited joint venture area EL/2/63.

The work took place on 9 production days between 15th and 30th March, 1975, when the survey was abandoned due to the onset of the winter rainy season which brought movement in the area to a halt. Due primarily to the weather, productivity over the period was low.

On site geological supervision was undertaken by the site geologist, Mr. R. Schellekens, while overall control was vested in Mr. L.A. Newnham, Chief Geologist. Such additional technical supervision as was required was provided by A.W. Howland-Rose.

METHODS AND EQUIPMENT

As the methods and equipment are in every way comparable to those used in the previous season, no appendices have been included nor have the methods been described in detail. For details on both, refer to report TAS-019B.

However, one apparently small change in procedure should be highlighted. The original reconnaissance survey was carried out using a 50 metre potential dipole, while the present survey was carried out using a 25 metre dipole. This does not change the depth penetration obtained, but it does markedly change the resolution for narrow bodies and the ability to determine more accurate depth estimates for shallow features. This is dramatically illustrated in the work carried out on lines ML4, ML6, ML10 and ML12. The form of the anomaly associated with bodies wider than the potential dipole used will not change significantly as far as amplitude is concerned, however, for bodies whose widths are significantly less than the dipole used, the observed amplitudes are much reduced. Thus a number of anomalies of prime interest located on this

survey have clear correlatives on adjacent lines run at a greater potential dipole, the amplitude of which are much reduced, and their apparent interest consequently also reduced. The rule for the choice of potential dipoles in gradient surveys is that the smallest dipole possible should be employed, subject to the practical constraints of current density and reasonable station interval. In all future gradient surveys in the area, a 25 metre potential dipole is strongly recommended.

DISCUSSION OF RESULTS

A - EXTENSIONS TO THE GRADIENT ARRAY SURVEY

The data profiles are displayed on Plate 1 at the vertical scale of 1 centimetre = 10 millivolts/volt for chargeability while the apparent resistivity is shown in ohm-metres on a five centimetre log cycle.

Plates 2 and 3 display a contour interpretation of the resistivity and chargeability gradient array data from both the 1973/74 survey and the 1975 survey. As the re-surveying of the grid lines produced significant re-location of portions of the lines surveyed in 1973/74, it was decided to re-interpret the data. Thus these plates supersede plates 2 and 3 in report TAS-019B.

The horizontal scales used for both profile and contour display are 1:5000.

In all cases the current dipoles used in the additional work were those used in the initial survey. These are set out on pages 2 to 5 of report TAS-019B. However, the potential dipole used was 25 metres which gave superior resolution. (It should be noted that the penetration is not influenced, as that is controlled by the current dipole only).

Line by Line Data Review

The results of each line are reviewed separately below, together with the relevant portions of adjacent lines. The references used refer to the previous 1973/74 survey, report TAS-019B.

Line ML4: Between 1500N and 2300N. The minimum chargeability observed on this line was 25 millivolts/volt at 1850N, north and south of which the background increases.

A number of significant induced polarization anomalies were defined. At about 1662N a 40 millivolts/volt above background response was defined which is interpreted to come from a source whose width and maximum depth are less than 25 metres. A 75% fall in apparent resistivity to about 100 ohm-metres certainly understates the conductivity, as the source is

obviously narrower than the current dipole used. The total magnetic field shows a 1000 gamma increase which enhances the interest of this response.

Apparent resistivities of less than 80 ohm-metres were recorded for 25 metres either side of 1935N. At 1955N on the northern flank of the resistivity low, a 20 millivolt/volt induced polarization anomaly against background was observed from a source whose width and maximum depth was less than 25 metres. Again the total magnetic field over this response was higher than background by about 1000 gammas.

A 20 millivolts/volt anomaly above background, centred at 2100N having a maximum depth to source of 50 metres and a source width of up to 30 metres, is exactly coincident with a 1200 gamma magnetic response. Thus, although not as conductive a source as the type mineralisation, this anomaly is worthy of further detailed investigation.

An anomaly of up to 30 millivolts/volt centred at 2250N is associated with a 70% reduction in apparent resistivity to 300 ohm-metres. The source width is not greater than 40 metres while the maximum depth is interpreted to be 25 metres. An absence of distortion in the magnetic field reduces the interest of this anomaly.

The correlation of the above described anomalous responses with lines to the east or west is difficult. The profile form of the apparent resistivity and chargeability data does not allow an unambiguous correlation to be made.

Line ML6: Between 1500N and 2450N. A broad correlation between line ML5 and line ML6 is discernible. The twice normal background chargeabilities north of 2175N on ML5 are equivalent to a similar zone north of 2300N on ML6. The very major increase in conductivity noted at 2112N on ML6 marked by a 90% fall in resistivity, is correlated to a somewhat lesser fall in apparent resistivity at 2000N on ML5. At the southern extremities of lines ML5 and ML6, small reductions in apparent resistivity at 1425N and 1575N respectively, are considered correlatives.

A number of significant induced polarization responses were defined as follows: At 1540N a single point anomaly in excess of 40 millivolts/volt above background is interpreted as coming from a source whose maximum depth and width are less than 12 metres. The anomaly lies within a broad magnetic high over 150 metres in width but which has no discernible specific response. This response is considered of tertiary interest only.

A similar response at 1688N interpreted as coming from a narrow, shallow source of the order of 12 to 15 metres is associated with a 3000 - 4000 gamma increase in the total

magnetic field. However, a complete absence of conductivity detracts from this anomaly's potential interest.

Between 1825N and 1925N an increase in the induced polarization effect from a background of 30 to 50 millivolts/volt to about 40 millivolts/volt above this level was recorded. The maximum depth inferred from profile shape is 40 metres. The southern section is characterised by a resistive host centred at 1825N, while at 1875N a local resistivity low of 70% less than this was recorded. Lines ML5 and ML7 show no anomalous responses over this section of the line as correlated via the resistivity data. There is no significant increase in the total magnetic field over this anomaly, indicating an absence of magnetite.

North of 2300N the chargeability background rises from the normal 40 - 45 millivolts/volt to above 70 millivolts/volt. This phenomenon was observed north of 2500N on line ML7 and north of 2150N on line ML5 also. Thus, a major rock type change is inferred. Within this high background a number of minor anomalies were observed at 2340N, 2388N and 2488N. The latter two were associated with a decrease in the recorded apparent resistivity. The maximum depths inferred are 25 to 40 metres. These responses are considered typical of variations within a variable and broad formational source. These were not noted on the initial reconnaissance data due to the 50 metre potential dipole being too great.

Line ML10 and ML12 - General Remarks

The correlation between lines ML9 and ML10 is excellent, and between lines ML10 and ML11, reasonable. Similarly the correlation between lines ML11 and ML12 is clear while between lines ML12 and ML13 the correlation is not so definite. The geological strike over this section is conformable.

The suggested correlation between lines ML9 to ML13 inclusive, as gauged from the resistivity profile form, is as follows:

ML13	1675N		2025N	2225N	-	-
ML12	1875N		2140N	2340N	none	3000N
ML11	1825N	1925N	2125N	2330N	2650N	2975N
ML10	1800N	1925N	2150N	2340N	2588N	2840N
ML9	1850N	1925N	2175N	2375N	2600N	2875N

It should be noted that allowance has been made for the greater resolving power of the 25 metre potential dipole on lines ML10 and ML12 in this correlation. The amplitude of the response at the 50 metre potential dipole used on lines ML13, ML11 and ML9 will be much reduced.

Line ML10: (Between 1500N and 2950N) A number of significant induced polarization anomalies were defined, each of which is described below.

A 25 millivolts/volt chargeability increase over background centred at 1640N is associated with high 600 to 700 ohm-metre

resistivities. The form suggests an extremely narrow source, perhaps at surface, but certainly no deeper than 12 metres. Although this anomaly is situated within a slightly anomalous zone, there is no direct correlation of the source to any distortion in the magnetic field. There are no obvious correlatives to the east or west.

A substantial induced polarization anomaly of over 40 millivolts/volt above background recorded at 1775N is associated with an 85% decrease in apparent resistivity to 150 ohm-metres. The anomaly is interpreted as coming from a source at a maximum depth of 25 metres. At 1812N resistivities were too low to record, and must be less than 10 to 20 ohm-metres. Similarly no chargeability readings were obtained. Electrically continuous graphite and/or sulphides are the inferred source. As there is no distortion in the magnetic field at this point, magnetite and/or pyrrhotite do not make up a significant proportion of the causative mineral assemblage. More diminutive anomalies at 1800N on line ML11 and 1825N on line ML9 may represent the westerly and easterly correlatives of this anomaly.

A relatively minor anomaly of 7 - 10 millivolts/volt at about 2020N is coincident with a 40% decrease in apparent resistivity and a 2000 gamma increase in the magnetic field. The source is narrow, significantly less than 25 metres, and

shallow, perhaps on surface. This target has the characteristics of the type mineralisation, but is not "substantial". Although no correlation can be unambiguously identified to the east or west, the anomaly at 2025N on line ML9 and 2040N on ML11 may well be related. It should be noted that both are more substantial, but neither are associated with any distortion in the magnetic field.

A substantial reduction in apparent resistivity from the 800 - 1000 ohm-metres background was observed between 2075N and 2225N, with the lowest 25 ohm-metres value being recorded centred at about 2140N. The associated chargeability response is far less substantial and is centred at about 2150N. The maximum depth assessed for the source is 40 metres, while the width must be less than the 25 metre potential used. As there is no distortion in the total magnetic field over this section, neither magnetite or pyrrhotite makes a major contribution to the observed induced polarization effect.

A single point 15 millivolts/volt anomaly coincident with a 95% drop in apparent resistivity was observed centred at 2340N. The maximum depth and width are significantly less than 25 metres, while the observed resistivity of 150 ohm-metres certainly grossly understates the conductivity of the source. This anomaly is clearly associated with a substantial 3000 gamma distortion in the earth's magnetic field. Magnetite,

although making a contribution to the source, is not considered to be the source for the chargeability anomaly. This anomaly is considered to be present on line ML9 at 2375N and ML11 at 2350N. In both cases the apparent resistivities recorded were also reduced together with distortions in the magnetic field. This marks this anomaly as being of special interest, particularly as the response on line ML11 is associated with anomalous tin values in the soils. One comment worth noting here is, the 25 metre dipole used resolved this response on line ML10 well, the 50 metre dipole used on lines ML9 and ML11 would have resulted in a greater averaging of the unmineralised section, thus very considerably reducing the amplitude of the anomaly. Thus, the anomalies on lines ML9 and ML11 may have appeared more significant had they been surveyed using a 25 metre dipole.

A broad zone of anomalous induced polarization response was observed between 2512N and 2675N. The source is considered to be at least 80 to 100 metres in width and of maximum depth of 50 metres, while over the entire width a 40% reduction in apparent resistivities were observed to a still high level of over 1000 ohm-metres, indicating very weak conduction within the host. However, at 2588N a narrow section of less than 25 metres in width is somewhat more conductive, and the 400 ohm-metre apparent resistivity certainly overstates the degree of conductivity within the source. Some distortion of

the magnetic field was observed in the vicinity of this anomaly, but cannot be unambiguously interpreted as coming from the source of the chargeability response. Similar chargeability anomalies were recorded between 2575N and 2760N on line ML11 and between 2600N and 2712N on line ML9, both of which are associated with a reduction in apparent resistivities to still high levels over the anomalous induced polarization. Both are the obvious correlatives of this response. The lack of a clear magnetic response over this anomaly on all three lines suggests a secondary priority.

A relatively minor 8 millivolts/volt anomaly at 2838N is coincident with a reduction in apparent resistivity by about 40% to still high levels of 900 ohm-metres. This anomaly has correlatives on line ML9 at about 2925N and line ML11 at 2975N. In the latter case the anomaly is significant and is associated with some very sharp distortions in the magnetic field caused by near surface material. Less substantial but still significant responses were seen on this line (ML10) also. The maximum depth is guesstimated to be about 30 to 35 metres.

Line ML12: Broadly, the resistivity profile is similar to that observed on line ML11, indicating a continuation of the geological sequence seen to the east. Correlation with line ML13 however, is not as definite. (See above under lines ML10 and ML12 - General Remarks).

The significant features observed on this line are as follows:

The two resistivity lows defined on line ML11 at 1825N and 1925N are combined to form a single wide resistivity low between 1838N and 1930N on line ML12. On line ML13, the correlative is considered to be at 1675N. On line ML12 there is little above background induced polarization response, however, on line ML13 the apparent correlative is a distinct 10 to 12 millivolts/volt above background, while on line ML11 only the resistivity low at 1825N had a moderate response while the northerly resistivity low had no response whatsoever. Relatively minor responses were however observed at 1950N and 2012N to the north of this low on line ML12.

A minor response of one or so millivolts/volt at about 2225N has no significance on this line, however, the assumed correlative on line ML13 at 2130N has a material response of 12 to 15 millivolts/volt above background which is associated with a marked drop in resistivity.

At 2150N apparent resistivities of less than 100 ohm-metres combined with an induced polarization response in excess of 20 millivolts/volt above background is coincident with very sharp changes in the magnetic field characteristic of near surface magnetite concentrations. As this anomaly lies within a zone of anomalous geochemistry, it has all the features

associated with the signature of the type mineralisation and is therefore of primary interest. There is no clear correlation of this anomaly with any seen on line ML11, but 2125N is suggested based on the form of the resistivity profile, while to the west a 35 millivolts/volt anomaly at 2050N on line ML13 represents the westerly strike extension of this response on that line. The anomaly does not have as sharp a form on line ML13 due to the 50 metre potential dipole. The substantial induced polarization anomaly on line ML11 at 2040N is considered to be the correlative of the small response referred to above at 2025N on line ML12, and not to 2150N on line ML12. The maximum depth estimated to the source is 40 metres, while the source width is of the order of 35 to 40 metres. The profile form suggests a south dip.

A second zone of considerable interest whose electrical and magnetic characteristics are almost identical to those described above, was defined at 2330N. The maximum depth to this 40 millivolts/volt above background response is 40 metres while the maximum width is less than the potential dipole employed, namely 25 metres. A significant and substantial 6000 - 7000 gamma above background magnetic anomaly clearly indicates the source material contains significant quantities of magnetite. This anomaly is of primary interest. The correlative on line ML11 was recorded at 2350N and on line

ML13 at 2280N, in both cases the reduced amplitude may, in part, be due to the dilution effect of the larger 50 metre potential dipole. The apparent resistivity is substantially reduced over that observed on line ML12, however, a smaller dipole was used. As this response again becomes of interest on line ML10 (where a 25 metre dipole was also used), this zone should be carefully investigated on all five lines (ML9 to ML13) across which this anomaly was recorded.

The broad chargeability high observed centred at 2650N on line ML11, and clearly seen on lines to the east, was not recorded on this line, although two broad 20 millivolts/volt responses at 2575N and 2775N may be related. In both cases no significant reduction in apparent resistivity was noted and no sympathetic distortion in the magnetic field observed. Neither are considered of major interest.

The most northerly anomaly defined on this line was observed centred at 3000N where a 30 millivolts/volt above background anomaly is associated with a minor fall in apparent resistivity to still very high levels of 1000 ohm-metres. This response is coincident with a sharp increase in the observed magnetic field by about 3000 gammas. Thus, this anomaly warrants further investigation, and may be related to that observed at 2975N on line ML11.

CONTOUR INTERPRETATIONS

The contour interpretations of the induced polarization and apparent resistivity data are shown on Plates 2 and 3 at the scales of 1:5000. The contour interpretations of the 1973/74 data shown on Plates 2 and 3 of report TAS-019B have been modified for the repositioning of lines and the additional data obtained in the present survey. Changes outside the new area were made in view of the trending given to the magnetic data but only where this data is considered a more reliable indication of strike than the induced polarization or apparent resistivity data. The geochemical data was not used to bias the data as superficial migration of anomalies is possible in the area.

In the area of new chargeability data (from lines ML3 to ML7 and ML9 to ML13 north of about 1500N) there are few major changes. One difficulty in depicting the new data is that the smaller dipole used gave very much improved resolution for narrow sources obtained with the 25 metre dipole. This gives the perhaps false impression that anomalies located with the smaller dipole are more important. This of course is not necessarily so. In some cases anomalies appear only as "shoulders" on lines run with 50 metre potential dipoles.

The resistivity data in the area of the new data shows little change in detail, although subject to the greater resolving

power of the 25 metre dipole. The magnetic data has allowed areas of uncertainty not previously contoured to be contoured over the central sections of all lines west of ML11. In other areas the magnetic data has dictated a re-trending of the apparent resistivity information - for instance, over the far north western section of the grid.

The contour interpretations presented in this report are considered more reliable than those presented last year due to the repositioning of the lines, the new data and the magnetics. Although the trends look similar, in many cases the actual peaks trended have changed due to repositioning of the lines. The profile matching between lines is considered more reliable with the new surveyed positions of those lines.

DISCUSSION OF RESULTS CONTINUEDB - DETAILED SURVEYS

The data is displayed on Plate 4 at the scales shown.

(1) - Three Array Survey

Unfortunately the curtailment of the planned programme due to adverse weather conditions allowed only one of the seven three array detailed depth determinations to be carried out. This work was carried out using separations of $12\frac{1}{2}$ metres and 50 metres, the data plotting point on the profiles being the point midway between the nearest potential to the current electrode and the current electrode.

The position of the major resistivity low recorded between 1950N and 2050N is confirmed, but a thin resistive surface is inferred. The induced polarization data shows a source to be present at 2010N whose width is about 50 metres and where maximum depth is less than 10 metres. Also the causative sulphides and/or graphite increase in importance with depth. By way of comment, the three chargeability profiles show a "double peak" anomaly from a "wide" source.

The chargeability anomalies seen on the southern end of the line at about 1925N more than likely represent the northern half of a double peaked response from the source defined at

1875N on the gradient survey. If so, the depth indicated is less than $12\frac{1}{2}$ metres.

(ii) - Detailed Gradient Survey

A very limited gradient array survey was carried out over the road on lines ML13 and ML14 using a 600 metre current dipole placed midway between the two lines. The potential dipole used was $12\frac{1}{2}$ metres. The results are shown on a horizontal scale of 1:5000 on Plate 4. The objective of this limited survey was to accurately position the chargeability source on the road.

On ML13 very high chargeabilities in excess of 80 millivolts/volt were recorded at and north of 060N with a local peak at 112N, whose maximum depth is about 25 metres. Both the above emanate from host rocks which are more conductive than the enclosing material. This is especially true with the anomaly at and north of 060N where apparent resistivities of 20 ohm-metres were recorded.

The profile observed on line ML14 shows high chargeabilities of 60 millivolts/volt in conjunction with low apparent resistivities of the order of 15 ohm-metres at 050N and at, or slightly north of 200N. The depth estimated in both cases is of the order of 25 metres.

The conclusion is that the data does not indicate an "on surface" or sub-cropping source, but one which is between 10 metres and 25 metres in depth.

(iii) - Electrical Sounding at 1850N on ML16

An electrical sounding was carried out at 1850N on line ML16 in an attempt to ascertain the depth to the granite intrusion which, on structural grounds is considered to be at a shallow depth beneath surface in this vicinity.

The data is displayed on Plate 4 on a 5 inch log cycle for spacing (in metres) and apparent resistivity (in ohm-metres). The observed chargeability is shown on a scale of 1 centimetre = 10 millivolts/volt while the residual chargeability (Ma - M1) is shown on a 5 inch log cycle.

A resistive layer about 4 metres thick is inferred by the data. However, near surface inhomogeneities could also have produced the profile form. Within the near surface layer, background chargeabilities of between 10 and 12 millivolts/volt are inferred. The resistivity of the zone beneath is estimated to be between 200 and 300 ohm-metres. Beneath the conductive layer, a resistive layer was defined, the depth of which may be as shallow as 35 metres, while the inferred resistivity of that layer is of the order of 2000 ohm-metres.

Due to the problem of inhomogeneities over the section across which the sounding was made, it is not possible to be certain of the interpretation given above. However, it seems extremely likely that the granite lies beneath the section sounded, at a depth of perhaps as little as 35 metres. However, the form of the data does not permit a unique interpretation, and thus the suggested depth of 35 metres must be considered an "inference" rather than a certainty.

CONCLUSIONS AND RECOMMENDATIONS

- 1 - The additional section of lines ML4, ML6, ML10, and ML12 which were surveyed using gradient array, enabled a more positive contour interpretation to be made.
- 2 - The 25 metres potential dipole employed improved the resolution of both the chargeability and the apparent resistivity characteristics of the anomalies located, and enabled a more accurate interpretation of position, width and maximum depth to be made.
- 3 - As would be expected, the background resistivities and chargeabilities are similar to those recorded on the adjacent lines surveyed in the 73/74 season.
- 4 - A similar variation in induced polarization responses was observed over the four lines surveyed with gradient array as during the last season. A summary of the interpretation of each of the zones considered significant is given below. The priority of each anomaly is assessed with respect to the similarity or otherwise of the apparent resistivity, chargeability and distortion in the magnetic field, to the "type" mineralisation.

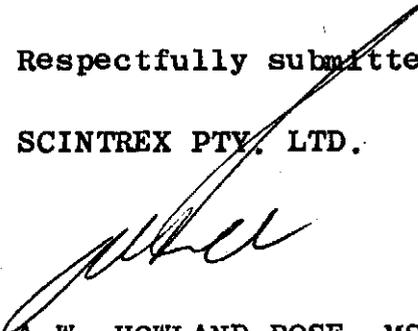
<u>Line</u>	<u>Station</u>	<u>Width</u>	<u>Max. Depth</u>	<u>Conductivity</u>	<u>Magnetics</u>	<u>Priority</u>
ML4	1662N	25m	25m	yes	1000 gamma	A
ML4	1955N	25m	25m	yes	yes	B
ML4	2100N	30m	50m	yes	yes	B
ML4	2250N	40m	25m	yes	no data	C
ML6	1540N	12m?	12m?	no	general High	C
ML6	1688N	15m?	15m?	no	4000 gamma	C
ML6	1825N-1925N	100m	40m	part	none	C
ML10	1640N	12m	12m	no no	no	C
ML10	(1775N	25m?	25m	yes	no	B
	(1825N	?	25m	very	none	B
ML10	2020N	12m?	12m	yes	none	B/C
ML10	2150N	20m	40m	very	no	B
ML10	2340N	12m?	12m?	very	yes	A
ML10	2512-2675N	100m	50m	in part	in part	B
ML10	2838N	?	30m	very weak	yes	B
ML12	1950N	?	25m	weak	-	B/C
ML12	2012N	?	25m	slight	-	B/C
ML12	2150N	40m	40m	very	yes	A
ML12	2330N	25m	40m	very	yes	A
ML12	2575N	?	?	none	none	C
ML12	2775N	?	?	none	none	C
ML12	3000N	70m	50m	very weak	yes	B/A

- 5 - As recommended in Report TAS-019B, the anomalies having the greatest similarity to the type mineralisation should be investigated first (A). However, those showing variants of the type deposit should also receive careful scrutiny (B).
- 6 - Where feasible it is recommended that all further gradient array induced polarization carried out for similar deposits should employ a 25 metre dipole in preference to a 50 metre dipole.

We look forward to discussing the data contained in this report.

Respectfully submitted on behalf of:

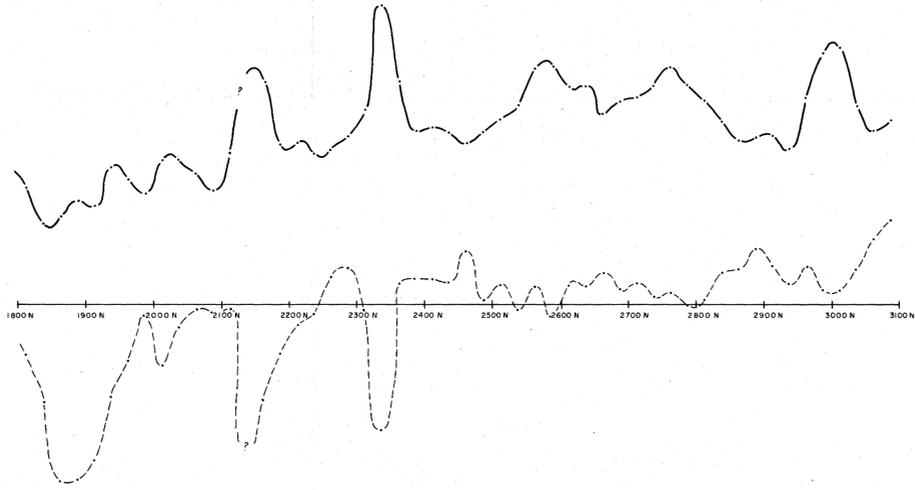
SCINTREX PTY. LTD.



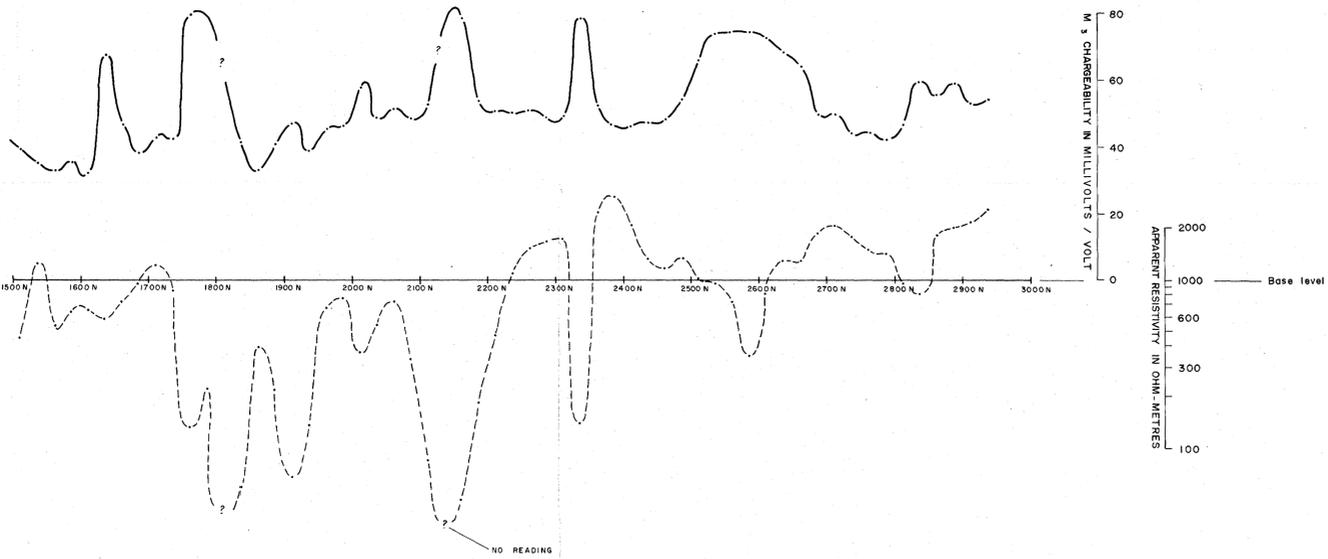
A.W. HOWLAND-ROSE, MSc, DIC, AMAusIMM, FGS.

GEOPHYSICIST

ML 12



ML 10



LEGEND

CHARGEABILITY

SCALE - 1 cm = 10 Millivolts / volt

Base level = 0 Millivolts / volt

M_s = ————

SUBSCRIPT DENOTES SLICE PRESENTED

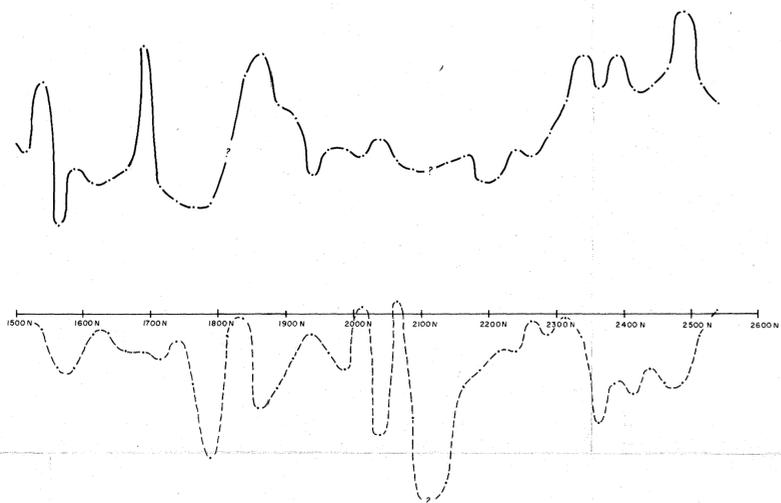
APPARENT RESISTIVITY

SCALE - 5 cm = 1 Logarithmic cycle

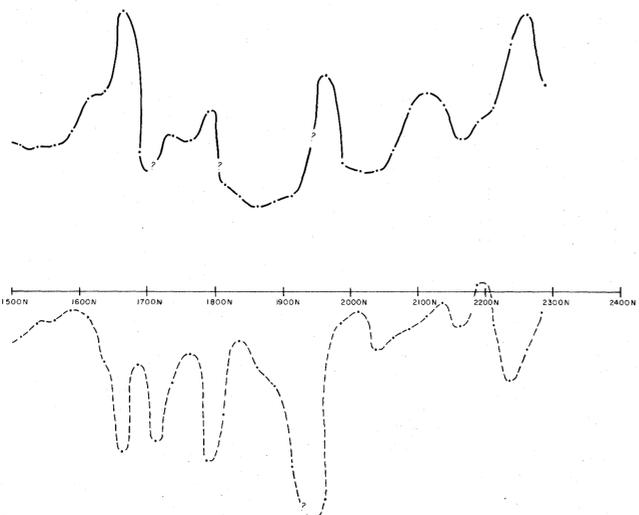
Base level = 1000 Ohm-metres

P_a = - - - - -

ML 6



ML 4



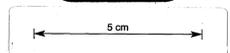
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**ELECTRICAL INDUCED POLARIZATION
SURVEY
DATA PROFILES**

SURVEYED AND COMPILED BY
SCINTREX PTY LTD
MARCH 1975



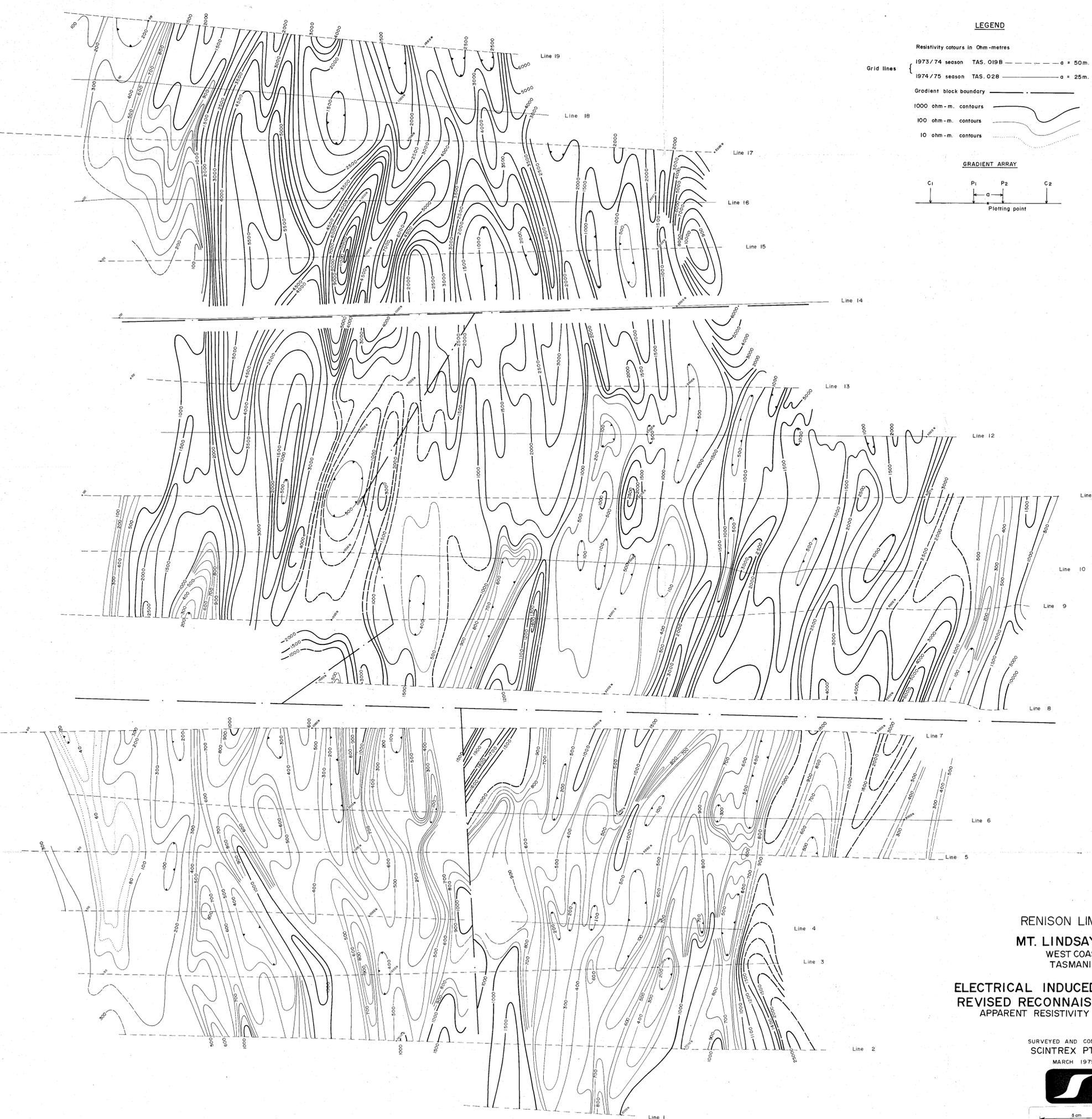
75-1081



1 : 5000



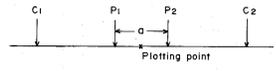
536029



LEGEND

Resistivity contours in Ohm-metres
 Grid lines { 1973/74 season TAS. O19B --- a = 50m.
 1974/75 season TAS. O28 --- a = 25m.
 Gradient block boundary ---
 1000 ohm-m. contours ---
 100 ohm-m. contours ---
 10 ohm-m. contours ---

GRADIENT ARRAY



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**ELECTRICAL INDUCED POLARIZATION
 REVISED RECONNAISSANCE SURVEY
 APPARENT RESISTIVITY CONTOUR MAP**

SURVEYED AND COMPILED BY
 SCINTREX PTY LTD
 MARCH 1975



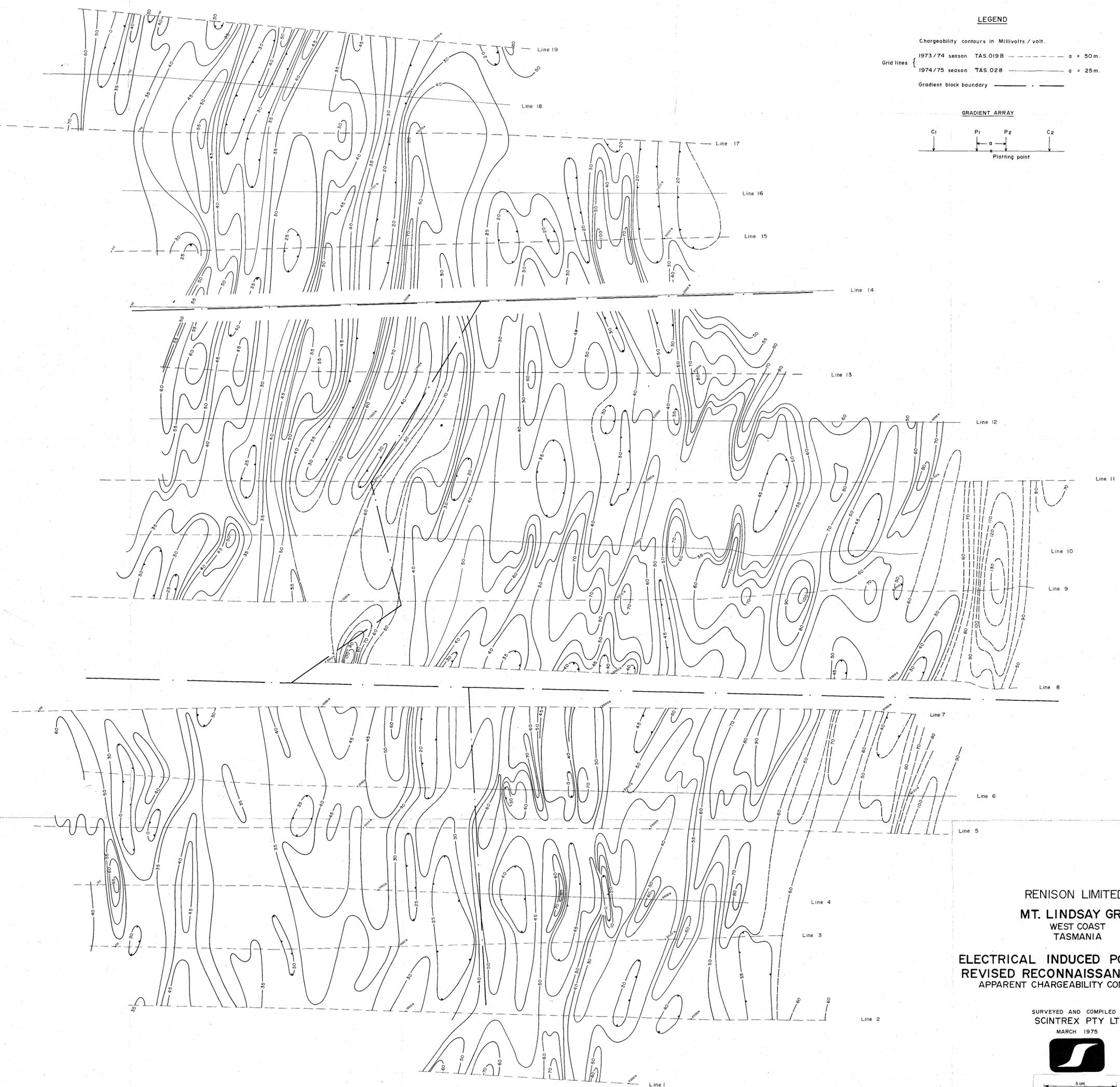
75-1081



1: 5000

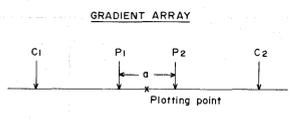


536030



LEGEND

Chargeability contours in Millivolts / volt.
 Grid lines { 1973/74 season TAS.019B - - - - - a = 50 m.
 1974/75 season TAS.028 ————— a = 25 m.
 Gradient block boundary ————



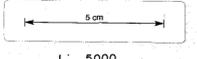
RENISON LIMITED
 MT. LINDSAY GRID
 WEST COAST
 TASMANIA

**ELECTRICAL INDUCED POLARIZATION
 REVISED RECONNAISSANCE SURVEY
 APPARENT CHARGEABILITY CONTOUR MAP**

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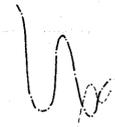
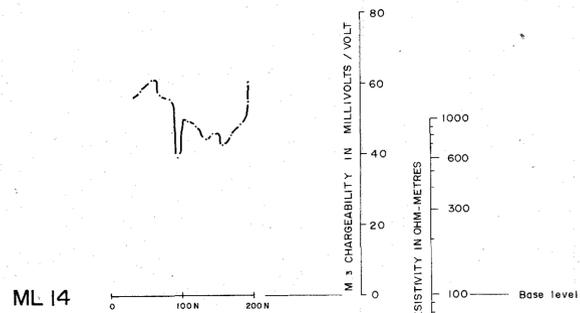


75-1081



1 : 5000

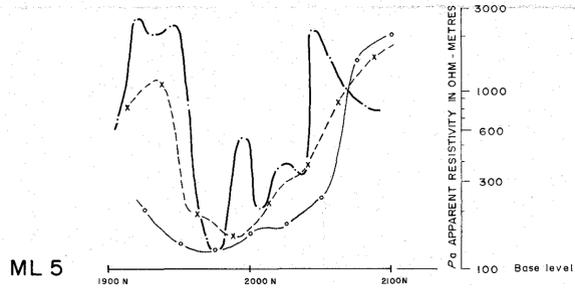




CHARGEABILITY

THREE ARRAY

Scale 1:1250



APPARENT RESISTIVITY

LEGEND

CHARGEABILITY

GRADIENT ARRAY

Scale 1cm. = 10 millivolts/volt

Base level = 0 millivolts/volt

M₃ = - - - - -

THREE ARRAY

Scale 1cm. = 5 millivolts/volt

Base level = 0 millivolts/volt

M₃ = - - - - - a = 12.5 m.

x - - - - - x a = 25 m.

o - - - - - o a = 50 m.

APPARENT RESISTIVITY

GRADIENT ARRAY

Scale 5cm. = 1 logarithmic cycle

Base level = 100 ohm-metres

P_a = - - - - -

THREE ARRAY

Scale 5cm. = 1 logarithmic cycle

Base level = 100 ohm-metres

P_a = - - - - - a = 12.5 m.

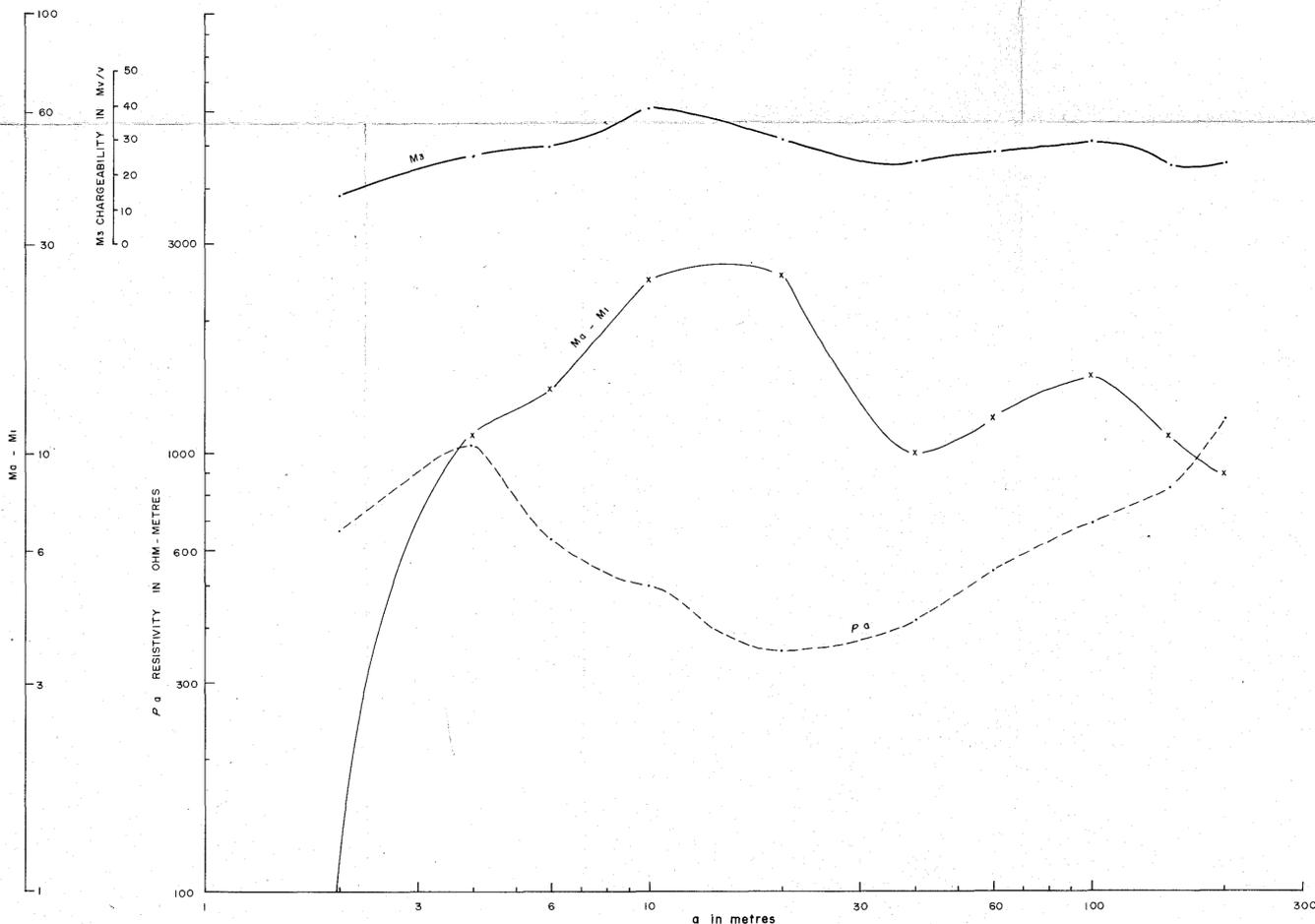
x - - - - - x a = 25 m.

o - - - - - o a = 50 m.

SCHLUMBERGER EXPANDER

at 1850 N on LINE ML16

Grid N-S Direction



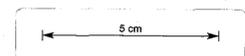
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**ELECTRICAL INDUCED POLARIZATION
 DETAILED SURVEY
 DATA PROFILES**

SURVEYED AND COMPILED BY
 SCINTREX PTY LTD
 MARCH 1975



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