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D. M.	A.O.	C.G.	E.O.	D.S.
				Register
D. DIR.	21 JUN 1985			E & L
	DEPT. OF MINES			
REF. No.	6379/85			

BRILLIANT CREEK

E.L. 24 / 82

OCEANIA TASMANIA PTY. LTD.

MICROFILMED

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145002

THE SCAMANDER GOLDFIELD

E.L. 24 / 82

OCEANIA TASMANIA PTY.LTD.

INTRODUCTION

The mobile crushing plan has been designed by Longworth & MacKenzie and it is intended to be commissioned depending upon milling arrangements being negotiated with E.Z.Company for our silver lead zinc, West Coast prospects.

Further work has therefore been done on defining the shear zone and mullock heap potential depicted in the 1984 annual report by geophysical methods. No geology or assays will be included in this report as that is covered in the 1984 report.

RESULTS OF WORK UNDERTAKEN.

1. Defining the mullock and alluvial depth and therefore tonnage estimate using a seismic retraction method.

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Interpretation of Seismic results from traces 1-12 figure 1, and graph figure 2.

$$\frac{1}{V_1} = \frac{(30-10) \times 10^{-3}}{(11-0.375)} = 1.85 \times 10^{-3}$$

$$V_1 = 531.25 \text{ M5}^1$$

$$\frac{1}{V_2} = \frac{(60-40) \times 10^{-3}}{52.25 - 19.125} = 6.04 \times 10^{-4}$$

$$V_2 = 1656.25 \text{ M5}^1$$

$$X_c = 15 \text{ metres}$$

By using $X_c = 2h_1 \frac{V_2 + V_1}{V_2 - V_1}$ we can calculate from the above data

$$\frac{15}{2} = h_1, \frac{1656.25 + 531.25}{1656.25 - 531.25}$$

$$\text{therefore: } 7.5 = h_1 (1.394)$$

$$\text{therefore: } h_1 = \frac{7.5}{1.394}$$

$$h_1 = 5.38 \text{ m}$$

h_1 is tertiary elluvial sediments mainly weathered and decomposed granite this layer goes to a depth of 5.38 metres.

2. Defining the shear zone at the Traphalgar Mine by resistivity.

Traverse	Layer	Resistivity ()	Depth (M)	Interpretation
1	1	4153	0	Dry Sand
1	2	176	0.99	Soil
1	3	352.5	3.66	Decomposed granite
1	4	865.6	17.33	Granite
2	1	239.5	0	Soil
2	2	2012	0.35	Soil
2	3	169.9	0.899	Wet soil
2	4	751.0	1.99	Granite

<u>Traverse</u>	<u>Layer</u>	<u>Resistivity (ρ)</u>	<u>Depth (M)</u>	<u>Interpretation</u>
3	1	2814	0	Soil
3	2	904.6	0.696	Soil
3	3	378.0	1.3	Granite
3	4	417.7	4.4	Granite

The traverses were done at the Traphalgar all running north, south, the centres being 50m apart and the maximum spread of 40m. The wenner array was used however the depth of penetration was low probably because of water filling the old workings. This method was not therefore effective in defining the mineralization.

The electromagnetic survey more effectively defined the shear zone and a phase change and slight ratio. Variation defined the course 300m south of the Traphalgar Mine and 200m north. These results need further processing and will be included in the next quarterly report.

CONCLUSION

The general theory of a massive shear zone seems to have been further proved by the electro-magnetic survey. The resistivity produced only information on soil depths and not all useful mineralization identification, this is probably due to the effect of equivalence. The Seismic survey defined a potential tertiary alluvial resource of considerable depth which will be further defined by resistivity profiling.

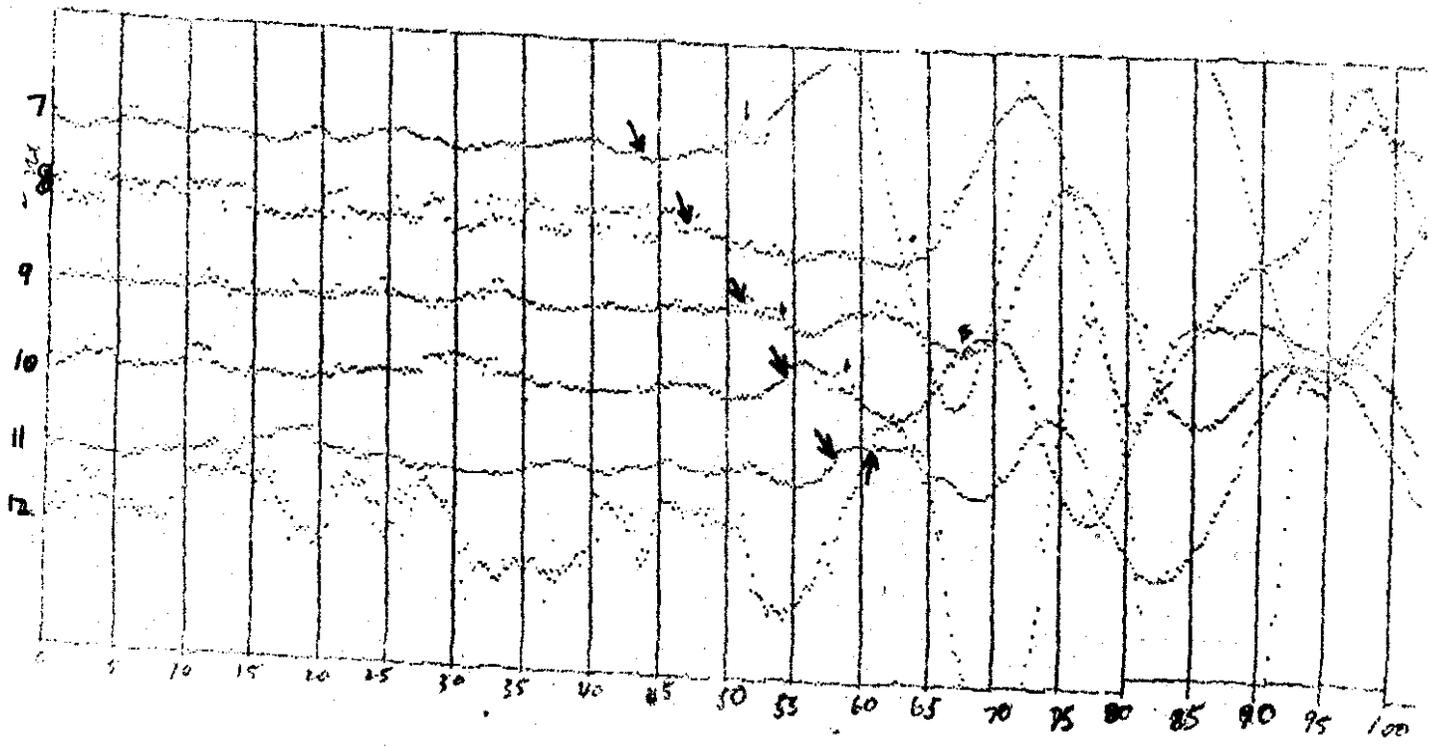
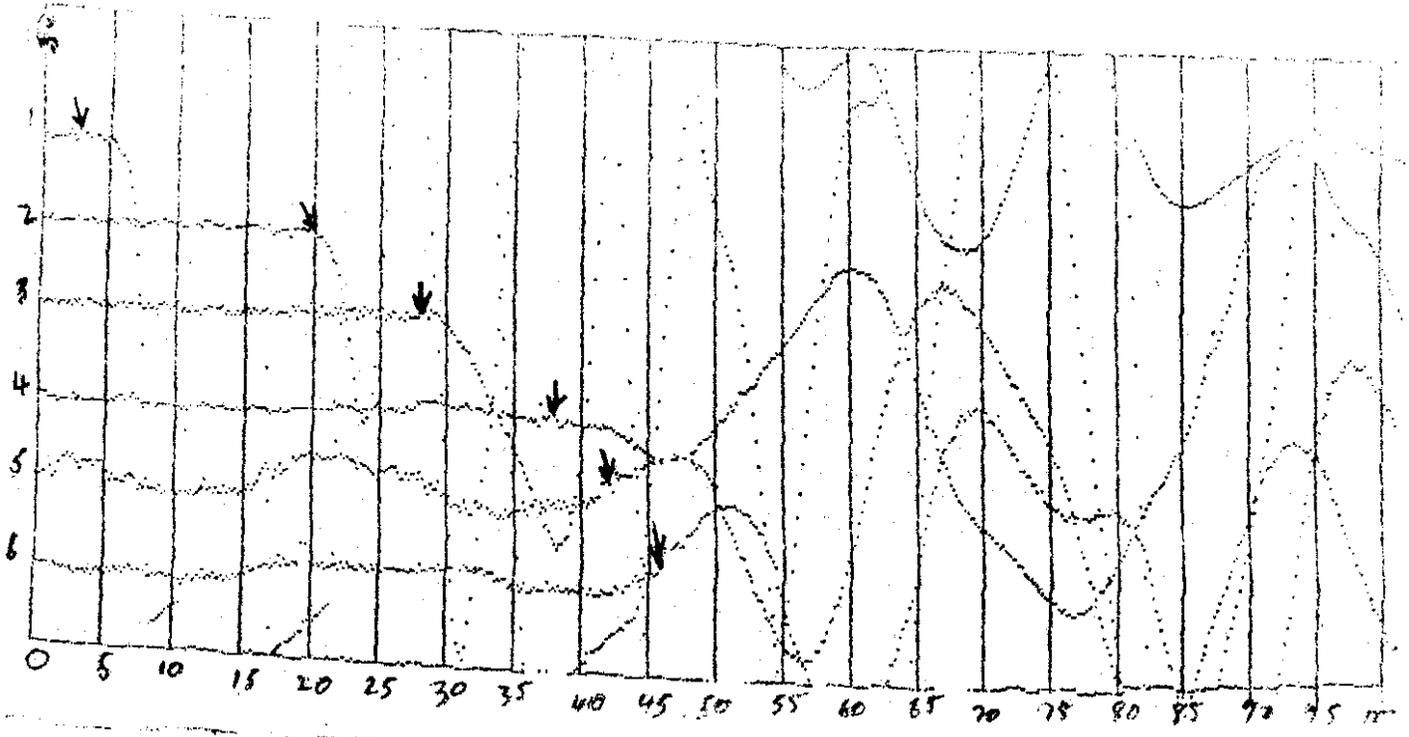


Figure 1 Trafalgar seismic results

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Time (msec)

Seismic Plot for TRAFALGAR MINE; BBQ site; end shot

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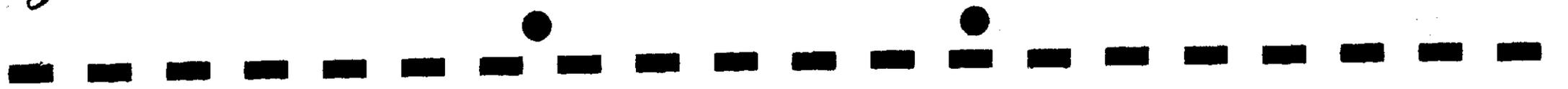
571.25 m/s

1656.25 m/s²

0 1 2 3 4 5 6 7 8 9 10 11 12 Geophone No.
 -5 0 5 10 15 20 25 30 35 40 45 50 55 Distance from geophone 1 (m)
 X_C

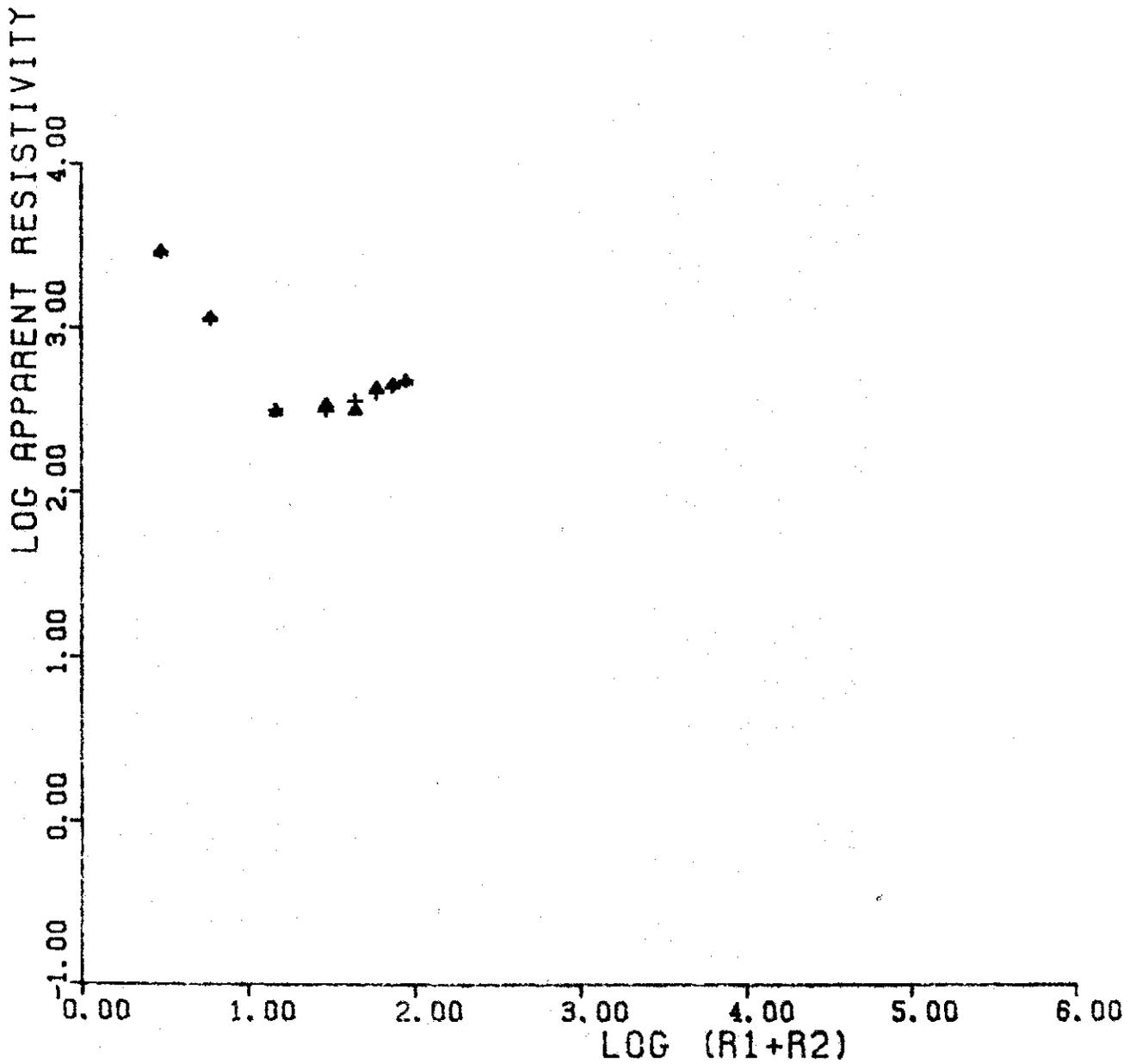
Figure 2 Trafalgar seismic plot

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TRAVERSE 1 AT TRAFALGAR MINE.



TRAVERSE 1 AT TRAFALGAR MINE.

THE NUMBER OF LAYERS = 4
 THE NUMBER OF ELECTRODE SPACINGS= 8
 THE FLAG FOR THIS RUN IS 2

THE INITIAL MODEL IS

I	RO(I)	H(I)	DEPTH
1	.2010E+04	.1000E+01	0.
2	.3000E+03	.1000E+01	.1000E+01
3	.5000E+03	.2000E+01	.2000E+01
4	.1000E+03	.4000E+01	.4000E+01

THE INPUT DATA FOR THIS MODEL IS

I	R1	R2	R3	R4	APP.RES.
1	.1000E+01	.2000E+01	.2000E+01	.1000E+01	.2889E+04
2	.2000E+01	.4000E+01	.4000E+01	.2000E+01	.1156E+04
3	.5000E+01	.1000E+02	.1000E+02	.5000E+01	.3060E+03
4	.1000E+02	.2000E+02	.2000E+02	.1000E+02	.3390E+03
5	.1500E+02	.3000E+02	.3000E+02	.1500E+02	.3110E+03
6	.2000E+02	.4000E+02	.4000E+02	.2000E+02	.4270E+03
7	.2500E+02	.5000E+02	.5000E+02	.2500E+02	.4477E+03
8	.3000E+02	.6000E+02	.6000E+02	.3000E+02	.4712E+03

FINAL MODEL AFTER INVERSION

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I	RO(I)	H(I)	DEPTH
1	.4153E+04		0.
2	.1760E+03	.9906E+00	.9906E+00
3	.3525E+03	.2673E+01	.3663E+01
4	.8656E+03	.1367E+02	.1733E+02

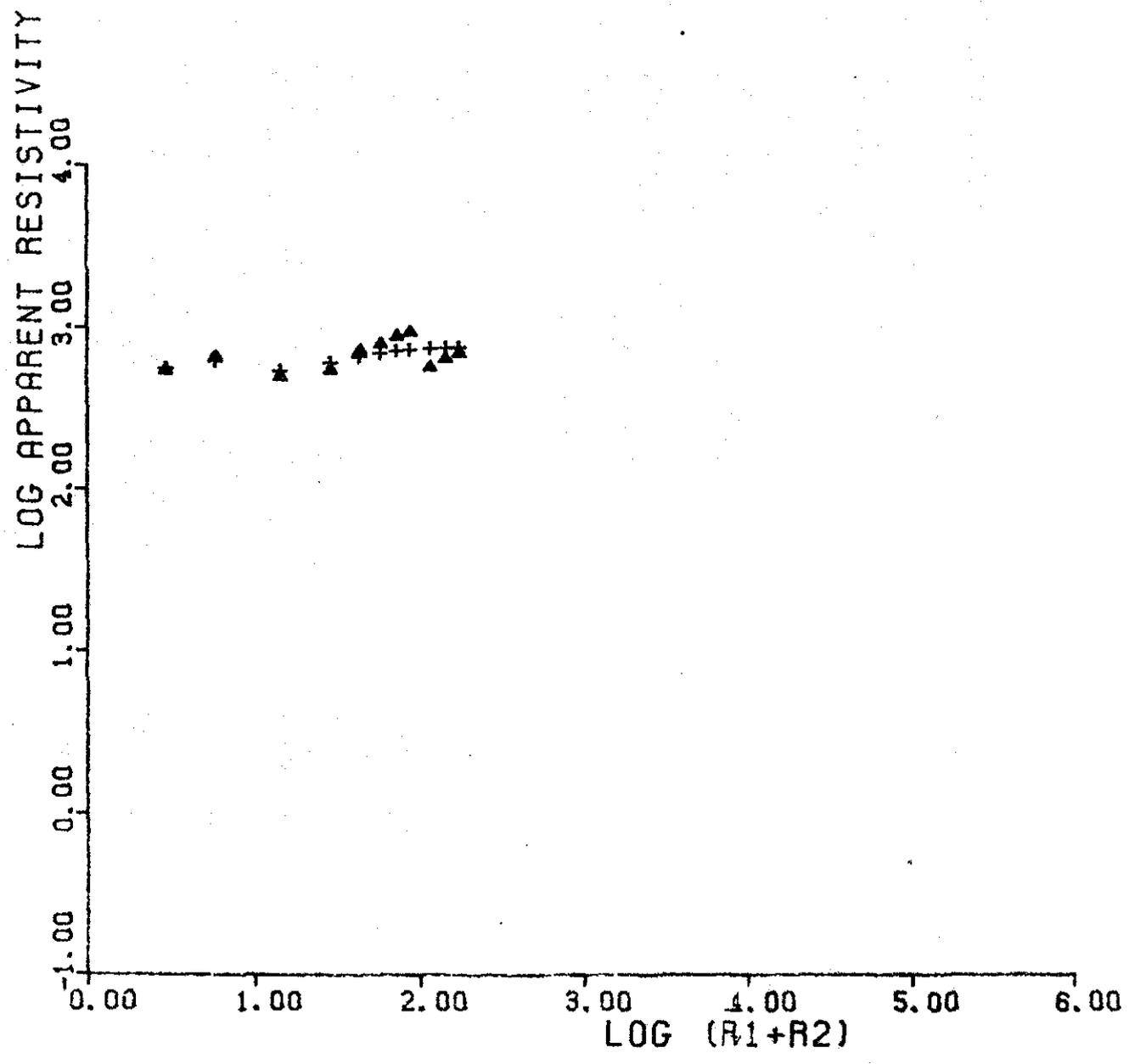
MEAN PERCENT VARIATION IS .6380E+01

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TRAVERSE 2 AT TRAFALGAR MINE.



145011

TRAVERSE 2 AT TRAFALGAR MINE.

THE NUMBER OF LAYERS = 4
 THE NUMBER OF ELECTRODE SPACINGS=11
 THE FLAG FOR THIS RUN IS 2

THE INITIAL MODEL IS

I	RO(I)	H(I)	DEPTH
1	.2010E+04	.1000E+01	0.
2	.2400E+04	.1000E+01	.1000E+01
3	.5000E+03	.2000E+01	.2000E+01
4	.1000E+03	.4000E+01	.4000E+01

THE INPUT DATA FOR THIS MODEL IS

I	R1	R2	R3	R4	APP.RES.
1	.1000E+01	.2000E+01	.2000E+01	.1000E+01	.5341E+03
2	.2000E+01	.4000E+01	.4000E+01	.2000E+01	.6535E+03
3	.5000E+01	.1000E+02	.1000E+02	.5000E+01	.4869E+03
4	.1000E+02	.2000E+02	.2000E+02	.1000E+02	.5341E+03
5	.1500E+02	.3000E+02	.3000E+02	.1500E+02	.7068E+03
6	.2000E+02	.4000E+02	.4000E+02	.2000E+02	.7791E+03
7	.2500E+02	.5000E+02	.5000E+02	.2500E+02	.8639E+03
8	.3000E+02	.6000E+02	.6000E+02	.3000E+02	.9245E+03
9	.4000E+02	.8000E+02	.8000E+02	.4000E+02	.5529E+03
10	.5000E+02	.1000E+03	.1000E+03	.5000E+02	.6293E+03
11	.6000E+02	.1200E+03	.1200E+03	.6000E+02	.6785E+03

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145012

FINAL MODEL AFTER INVERSION

I	RO(I)	H(I)	DEPTH
1	.2395E+03		0.
2	.2012E+04	.3500E+00	.3500E+00
3	.1699E+03	.5495E+00	.8996E+00
4	.7510E+03	.1096E+01	.1996E+01

MEAN PERCENT VARIATION IS .1558E+02

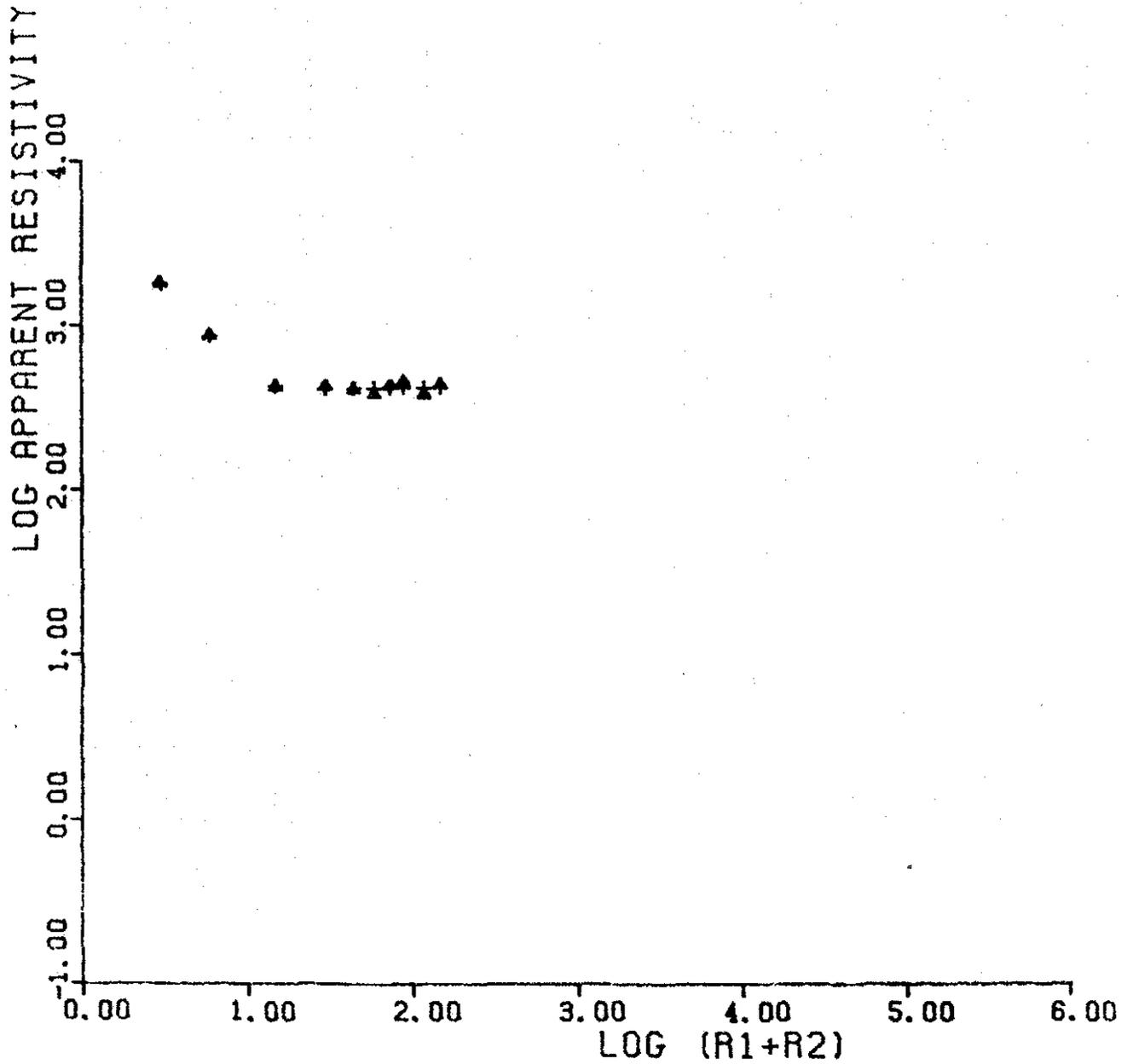
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(1)

TRAVERSE 3 AT TRAFALGAR MINE.



145014

TRAVERSE 3 AT TRAFALGAR MINE.

THE NUMBER OF LAYERS = 4
 THE NUMBER OF ELECTRODE SPACINGS=10
 THE FLAG FOR THIS RUN IS 2

THE INITIAL MODEL IS

I	RO(I)	H(I)	DEPTH
1	.2010E+04		0.
2	.2400E+04	.1000E+01	.1200E+01
3	.5000E+03	.1000E+01	.2000E+01
4	.1000E+03	.2000E+01	.4000E+01

THE INPUT DATA FOR THIS MODEL IS

I	R1	R2	R3	R4	APP.RES.
1	.1000E+01	.2000E+01	.2000E+01	.1000E+01	.1822E+04
2	.2000E+01	.4000E+01	.4000E+01	.2000E+01	.8671E+03
3	.5000E+01	.1000E+02	.1000E+02	.5000E+01	.4241E+03
4	.1000E+02	.2000E+02	.2000E+02	.1000E+02	.4273E+03
5	.1500E+02	.3000E+02	.3000E+02	.1500E+02	.4053E+03
6	.2000E+02	.4000E+02	.4000E+02	.2000E+02	.3833E+03
7	.2500E+02	.5000E+02	.5000E+02	.2500E+02	.4320E+03
8	.3000E+02	.6000E+02	.6000E+02	.3000E+02	.4524E+03
9	.4000E+02	.8000E+02	.8000E+02	.4000E+02	.3770E+03
10	.5000E+02	.1000E+03	.1000E+03	.5000E+02	.4398E+03

870

FINAL MODEL AFTER INVERSION

I	RO(I)	H(I)	DEPTH
1	.2814E+04	.6959E+00	0.
2	.9046E+03	.6013E+00	.6959E+00
3	.3780E+03	.3094E+01	.1297E+01
4	.4177E+03		.4391E+01

MEAN PERCENT VARIATION IS .5423E+01

014

145015

ASSOCIATED COMPANIES

SWANSEA MINING CO. PTY. LTD.
OCEANIA TASMANIA PTY. LTD.
TRIAL HARBOUR MINING CO. PTY. LTD.
KYNANCE PTY. LTD.

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AUSTRALIA 7000.
TELEPHONE: (002) 34 6533

OCEANIA TASMANIA PTY. LTD.

9th July, 1986..

Director of Mines,
P.O. Box 56,
ROBBY HAK Tas. 7018

14 JUL 1986

F.No. 6418/80

Dear Sir,

Further to your letter of the 25th June, 1986, I am supplying the additional information you require regarding exploration licences 23/82 and 24/82.

Re: EL 24/82. Resistivity results. *(Breenwick)*

The measuring instrument was a Tellohm soil resistance meter with a plus/minus 1% accuracy. It has 150 volt alternating current being applied through current electrodes C & C2 (See diagram 1) and that potential difference being measured by inner electrodes P, & P2.

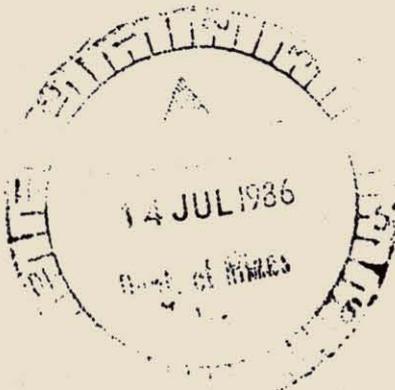
The electrode configuration used in the field was a Wenner array keeping a constant centre and increasing electrode spacing "a" (Diagram 1) up to a maximum of a = 40 metres. Line centre intervals were also 40 metres (Diagram 2).

The interpretation technique was through a computer programme, matching type curves to the data to define the different layers intersected. The results in Ω M were then interpreted relating to commonly acknowledged resistivity values for different materials plus regard to features known from field inspection.

Re: EL 23/82.

Line number 1 is marked on accompanying photostat (Diagram 3) in red pen, and as stated in the report "The transit line followed the bulldozer track which starts from the bottom level of the Ringarooma United Mine and proceeds up the ridge to the old Mines Dept. drill site; then on up the hill to the Cannon Mine via a track cut by Oceania Tasmania Pty.Ltd.

Yours faithfully,



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Diagram 1

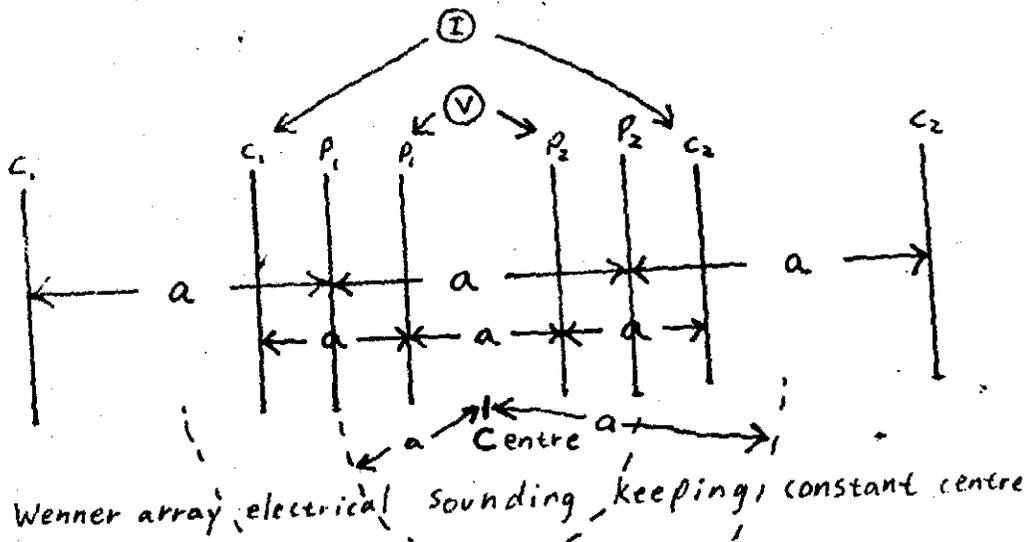


Diagram 2

