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79-1357 EL 27/76

GEOPHYSICAL SURVEYS

VOYAGER 12

ELLIOTT BAY, TASMANIA

S. T. Mudge

May, 1979.

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14 NOV 1979				
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INTRODUCTION

VOYAGER 12 is located in E.L. 27/76 (Elliott Bay) in south-west Tasmania.

The area is held under licence by Geopeko as part of a base metal exploration tenement.

The prospect is on the northern bank of the Lewis River, about 2 kms east of the Hudson River Waterloo Creek junction. Its location is shown in drawing no. 3964 S/A.

The prospect was developed following favourable geological results obtained from the 1979 survey of the area.

A combined aeromagnetic and electromagnetic (AEM) survey (Geoex-Lewis River Area) was flown over the area in 1975 for the previous tenure holder (BHP Co. Ltd.). AEM anomaly 35 lies in the vicinity of the VOYAGER 12 prospect.

During March 1979 reconnaissance geological and geophysical surveys were conducted in order to locate AEM anomaly 35. Outcropping gossan was discovered several hundred metres south of the anomaly. The area was subsequently covered with self potential (SP) and very low frequency EM (VLF-EM) surveys on a tape and compass grid.

An induced polarisation (IP) survey was also initiated to further test favourable results of the SP and VLF surveys.

The results of these surveys are the subject of this report.

GEOLOGY

The prospect is located on a belt of north-south striking steeply dipping, acid pyroclastics. The prospect is along strike to the north of the Voyager 2 prospect. Several gossan outcrops occur on lines 300S and 200S.

This group of rocks is believed to be the southern portion of the Cambrian Mt. Read volcanic suite.

The area is undulating, covered mainly by button grass. The eastern part of the grid (east of about 200E) is chiefly steep river valleys (Lewis River) and dense forest. Access in that area is difficult.

A massive sulphide deposit, similar to those found elsewhere in the Mt. Read volcanics, is the exploration model.

SELF POTENTIAL (SP)

An SP survey was conducted on lines 600S to 200N inclusive. A Fluke 8020A DVM was used with a pair of non-polarising copper in copper sulphate electrodes.

Readings were made (with respect to a base station established at 00E) at 25 metre intervals along each grid line. Measurements were made along the base line (00E) to tie each line to the survey measurement base, 00E 00N (0 mV). Line 600S was not tied to the base.

Profiles of self potential, reduced to the main survey base, are shown in drawing no. 4562 S/B. Contours are shown in drawing no. 4554 S/B. It should be noted that the topographic highs (hills) have associated negative potentials, valleys have positive potentials. This effect is attributed to moisture-capillary action down the slopes.

The contour plan (drawing no. 4554 S/B) has had grid slope corrections applied only to lines 100S, 200S and 300S. The grid eastings for these lines are true eastings.

The survey detected one significant anomaly of 170 mV amplitude at 300S 150E. The down slope SP profile and topographic profile are shown in drawing no. 4613 S/B.

The anomaly extends to the north although its strongest character is on line 300S. As such, a polarised sphere was chosen as the source in preference to a steeply dipping polarised sheet.

The best fit sphere model indicates a source centred 48 metres below true easting 138E. The polarisation axis is dipping 71° to the east. The observed profile is defined by a few measurement points which are not equally spaced down the slope. Thus, the above interpretation can only provide an approximation of the source parameters.

The anomaly has coincident IP and VLF responses.

The SP survey was extended eastward along line 100S to 1200E. Because of thick vegetation and steep topography it was not possible to maintain a measurement base at 100S 00E. As such, a gradient survey was done between 300E and 1200E using a 25 metre dipole. The observed gradient profile is shown in drawing no. 4560 S/B along with the integrated profile. Station 300E was used as an arbitrary zero level for this gradient survey.

The integrated profile exhibits a broad anomaly of about 60 mV at 850E. Little more can be said about the source of the anomaly. Further survey will be required.

VERY LOW FREQUENCY-EM (VLF-EM)

A VLF-EM survey was conducted over the entire grid.

The survey was aimed at detecting any VLF response over the SP anomaly on line 300S, and to provide a high resolution plan of any near surface structure or mineralisation.

A Geonics EM 16 VLF receiver was used in conjunction with the signal from the North West Cape (NWC) transmitter. NWC is the only transmitter having sufficient signal strength in the area.

Readings were taken at 25 metre intervals. Profiles of vertical in-phase and quadrature components are shown in drawing no. 4561 S/B.

Plotting of the profiles is such that an easterly dip of the in-phase component indicates the presence of a conductor. Orientation of the receiver with respect to the primary signal is also shown.

The in-phase profiles have been filtered in accordance with the method outlined by Fraser (1969). This filtering process phase shifts the profiles (as well as noise filtering) to produce a positive high at the point of maximum easterly dip. This positive high is a contourable parameter and is shown in drawing no. 4555 S/B.

The contour plan (drawing no. 4555 S/B) has had grid slope corrections applied only to lines 100S 200S and 300S. The grid eastings for these lines are true eastings.

The contour plan shows three prominent anomalous zones:-

- 007
1. A significant anomaly parallel to strike from 600S 300E to 200N 350E. This zone has a coincident IP anomaly at 00N 325E and a minor IP response at 100S 300E. Only a small portion of this anomaly was tested with IP. The IP response on lines 00N and 100S and its large linear extent, suggest that the anomaly may be due to mineralisation along a structural feature i.e. fault, contact etc.
 2. The anomaly from 100N 100E to 400S 175E which has significant IP and SP anomalies associated with it. Between lines 100S and 400S the anomaly is located near the bottom of steep topography. It is difficult to remove the effects of steep topography from the VLF data. However, the associated SP and IP anomalies and gossan outcrop on lines 200S and 300S indicate a mineralised source as the cause of the VLF anomaly.

Its extension north to line 100N has no associated IP and SP anomalies. This would suggest that only weak sulphide mineralisation, ionic conduction in the bedrock or a structural feature is the source of the anomaly.
 3. The anomaly from 600S 50E to 200N 50W has no associated IP or SP response. This source of the anomaly is also attributed to a ionic conductor or a subsurface structural feature.

NOTE: The amplitude of the filtered in-phase response is not only related to the conductivity thickness product of the source. It also depends upon source orientation with respect to the primary signal, overburden thickness and conductivity, and data spacing.

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The survey on line 100S was continued east to 1200E as a reconnaissance survey. A strong well developed anomaly was detected, indicating the presence of a conductor at about 950E, see drawing no. 4560 S/B.

The anomaly exhibits a strong in-phase component associated with a strong quadrature component. The two components are of the same polarity, indicative of a conductor in a non conductive host rock.

The anomaly is closely associated with a 60 mV SP anomaly.

INDUCED POLARISATION (IP)

A dipole-dipole IP survey was conducted on lines 200N, 00N, 100S, 200S and 300S. The survey was aimed at detecting any IP response from the SP and VLF anomalies on lines 200S and 300S, and to test VLF anomalies on lines 100S, 00N and 200N. Steep topography and dense vegetation prevented the IP survey from extending east of 300E and south of line 300S.

A 50 metre dipole length was used, considered a suitable compromise between resolution and depth sought. A Huntex 2.5 KW 2 second time domain transmitter was used in conjunction with a Scintrex IPR-8 receiver.

Signal-to-noise ratios were generally high.

The dipole arrays for each line were centred as follows:-

Line 200N at 100E
Line 00N at 300E and 50W
Line 100S at 100E
Line 200S at 50W
and Line 300S at 225E and 125W

Results are presented as pseudosections of apparent resistivity, chargeability and metal factor. Chargeabilities are those for the M_{232} portion of the Scintrex IPR-8 decay curve. Results are shown in drawing nos. 4556 S/B, 4557 S/B, 4558 S/B, 4559 S/B and 4570 S/B.

It is difficult to determine the effects of steep topography on the IP data. As such, the eastings on the above drawings are grid eastings, not true eastings.

Line 200N has no IP response. Areas of low resistivity at both the east and western ends of the line have no associated chargeability anomaly.

Line 00N exhibits a well developed but "unclosed" anomaly east of 300E. The line requires further survey to the east. The anomaly is coincident with a VLF anomaly.

Line 100S exhibits a weak but "unclosed" anomaly east of 275E. The resistivity low at 100E has no associated chargeability anomaly, and as such, is of little importance.

Line 200S exhibits a weak, but "unclosed" anomaly east of 100E. The source may be at depth (greater than 50 metres).

Line 300S exhibits a well developed anomaly at 175E. The source has depth extent and is near surface, of the order of $\frac{1}{2}$ a dipole length. It should be noted that this line is strongly affected by steep topography, see drawing no. 4613 S/B.

The IP survey has located a significant anomaly coincident with the SP/VLF anomalies on line 300S. The survey has also shown that the linear VLF anomaly along 300E has an IP response on lines 00N, 100S and 200S.

The IP survey ought to be continued further east to "close off" the anomalies on the lines 00N to 200S respectively. Lack of time and dense forest prevented this work being concluded during March 1979.

NOTE:- a well developed anomaly implies a coincident low resistivity and high chargeability, hence a high metal factor.

The IP survey was not extended along line 100S to test the VLF and SP anomalies in the area of 900E. This was because of difficult access due to steep topography and dense vegetation.

SUMMARY OF RESULTSSELF POTENTIAL (SP)

1. The SP results are strongly affected by the steep topography.
2. The survey located one significant 170 mV anomaly on lines 300S, interpreted as a source 48 metres below true easting 138E, polarisation axis dipping 71° to the east.
3. A 60 mV anomaly was located on line 100S at 850E. Further surveys will be required to better define the anomaly.

VLF-EM

1. Three prominent zones were detected by the survey.
2. One of these zones is coincident with the SP anomaly on line 300S.
3. The VLF anomaly along 300E has a well developed IP anomaly associated with it on line 00N, and a minor IP response on line 100S.
4. The zone from 600S 50E to 200N 50W has no IP or SP response associated with it. As such, it is of little importance with regard to mineralisation.

INDUCED POLARISATION (IP)

1. A significant IP anomaly was detected on line 00N at 325E coincident with a major VLF anomaly.

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The IP survey should continue further east to "close off" the anomalies.

2. The SP/VLF anomalies on lines 200S and 300S have IP anomalies associated with them.

A diagrammatic summary of these results is shown in drawing no. 4553 S/B. The eastings along lines 100S, 200S, and 300S, are true eastings.

CONCLUSIONS

The SP, VLF and IP surveys have located coincident anomalies on line 300S at 150E. Recommendations are made for testing the anomalies with a diamond drill hole.

Coincident IP and VLF anomalies on lines 00N and 100S at about 325E may be indicative of sulphide mineralisation.

The reconnaissance SP and VLF surveys further east on line 100S detected anomalies that may require further survey.

RECOMMENDATIONS

The coincident SP, VLF and IP anomalies on lines 300S are worthy of testing with a short diamond drill hole.

A hole drilled in a westerly direction along line 300S designed to pass through a point 48 metres below true easting 138E ought to test the SP anomaly.

Should the combined results of geology, geochemistry and geophysics indicate that further work is warranted, the IP survey should be continued further east on lines 00N and 100S. This extended survey should adequately define the IP anomalies at 325E.

The SP and VLF surveys should also be extended to cover an area between 500E and 1200E centred on line 100S. These surveys should determine the extent of the SP and VLF anomalies detected on line 100S.

APPENDICES

IP Metal Factors

Metal factors for the IP survey were calculated using:-

$$MF = \frac{M_{232}}{\rho_a} \times t \times 2000 \left[\Omega^{-1} m^{-1} \right]$$

where

M_{232} = M_{232} portion of the Scintrex IPR-8 decay curve $[mVV^{-1}]$

ρ_a = apparent resistivity $[\Omega m]$

t = integration period for the Scintrex IPR-8 M_{232} component, 520ms.

2000 is a scaling factor to obtain the units $\Omega^{-1} m^{-1}$.

GEOPEKO LIMITED

(Incorporated in New South Wales)

Phone: (02) 498 456

16.

INTER-OFFICE MEMO

Our Ref.: Gordon,.....

Your Ref.:

From: C.D. STRICKLAND

17-5-79

To: R.R. LARGE

Voyager 12 Grid: Survey Levelling.

For the purpose of accurate geophysical modelling of S.P. data and the designing of diamond drill hole targets a portion of the Voyager 12 grid was surveyed using a Wild T16 theodolite and staff.

An arbitrary datum was established at 100S/00E and designated 100m R.L.

The following tabulated data records the original eastings obtained during the reconnaissance tape and compass gridding, together with the surveyed eastings and R.L.'s. Intermediate eastings are recorded for more accurate topographic contouring and cross section requirements.

To avoid unnecessary line cutting during this "rush" surveying exercise, the "southings" of the original compass lines are considered accurate.

BASE LINE

<u>Original</u>	<u>Surveyed</u>	<u>R.L. (metres)</u>
100 S	100 S	100
150 S	151.0 S	97.67
200 S	201.1 S	93.97
250 S	259.0 S	88.92
300 S	304.6 S	82.35

100 S LINE

<u>Original</u>	<u>Surveyed</u>	<u>R.L. (metres)</u>
00 E	00 E	100
25 E	25.0 E	98.62
50 E	51.5 E	94.99
	68.0 E	92.86
	74.5 E	91.55
75 E	78.0 E	89.65
	87.5 E	86.06
100 E	113.0 E	70.01
125 E	139.5 E	63.58
Creek	151.5 E	63.38
150 E	161.0 E	66.60
	179.0 E	70.65
175 E	184.0 E	69.26
Creek	190.0 E	67.52
200 E	210.5 E	76.55
	231.5 E	80.46
225 E	235.3 E	82.92
	248.5 E	80.74
250 E	261.5 E	76.81
	281.0 E	70.98
275 E	293.5 E	62.09
	295.5 E	60.97
300 E Creek	359.5 E	11.72
325 E Lewis River (west bank)	377.5 E	8.85

200 S LINE

<u>Original</u>	<u>Surveyed</u>	<u>R.L. (metres)</u>
00 E	00 E	93.97
25 E	26.4 E	93.26
50 E	51.5 E	90.87
75 E	77.1 E	88.27
100 E	103.3 E	83.17
125 E	129.4 E	77.86

019

<u>Original</u>	<u>Surveyed</u>	<u>R.L. (metres)</u>
150 E	153.5 E	75.68
	173.7 E	67.79
175 E	183.9 E	61.18
Creek	205.0 E	51.06
200 E	209.7 E	60.92
	225.8 E	63.52
225 E	235.2 E	60.23
	259.7 E	51.05
250 E	262.3 E	49.70
	287.0 E	44.51
275 E	291.6 E	45.40
	302.7 E	45.97
300 E	315.1 E	41.95
Lewis River (west bank)	344.5 E	9.81

300 S LINE

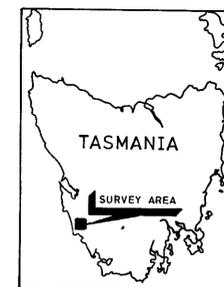
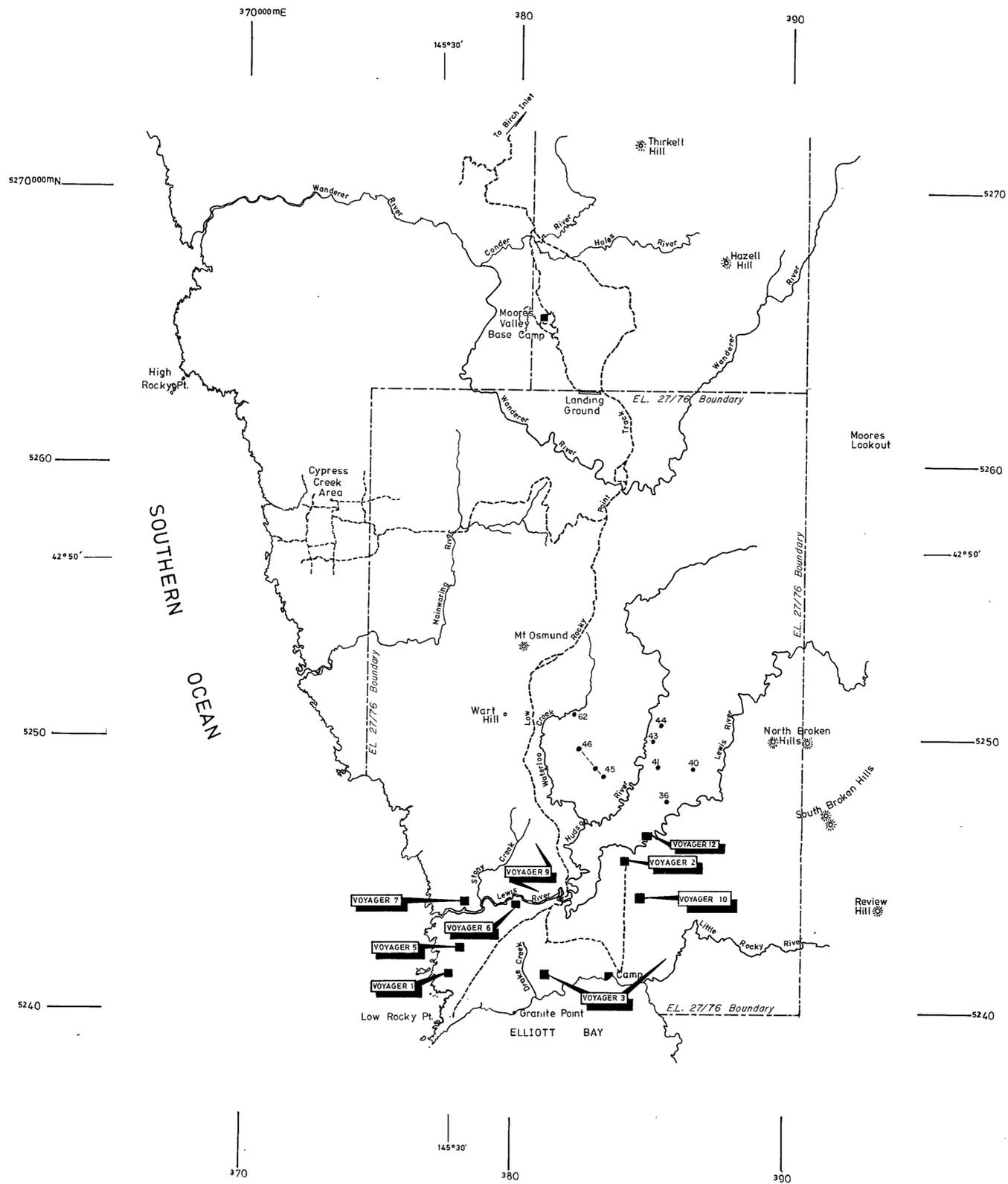
<u>Original</u>	<u>Surveyed</u>	<u>R.L. (metres)</u>
00 E	00 E	82.35
25 E	22.0 E	77.12
Creek	22.4 E	74.85
50 E	49.5 E	83.76
75 E	80.5 E	84.95
	89.1 E	83.27
100 E	102.5 E	77.00
125 E	125.8 E	68.31
	137.6 E	65.46
150 E	152.8 E	54.08
	157.6 E	49.85
	183.6 E	31.05
175 E	190.2 E	25.94
	196.8 E	21.79
Creek	213.7 E	14.93
200 E	214.7 E	16.61
	218.5 E	19.31

<u>Original</u>	<u>Surveyed</u>	<u>R.L. (metres)</u>
225 E	238.6 E	20.19
	245.5 E	20.18
250 E	263.0 E	19.86
275 E	287.0 E	19.95
	295.5	20.35
300 E	309.5 E	21.08
325 E	329.8 E	21.24
	336.8 E	18.45
Lewis River (west bank)	349.2 E	10.99

C.D. STRICKLAND
Senior Geologist.

REFERENCES

- FRASER, D.C. 1969: Contouring of VLF-EM Data; Geophysics, Vol. 34, pp 958-967.
- GEOEX PTY. LTD. 1975: Report on Helicopter Magnetic and Electromagnetic Survey in the Lewis River Area, Tasmania (for BHP Company Ltd).



5 cm

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Geophysical Surveys
Plan No. 3964 S/A

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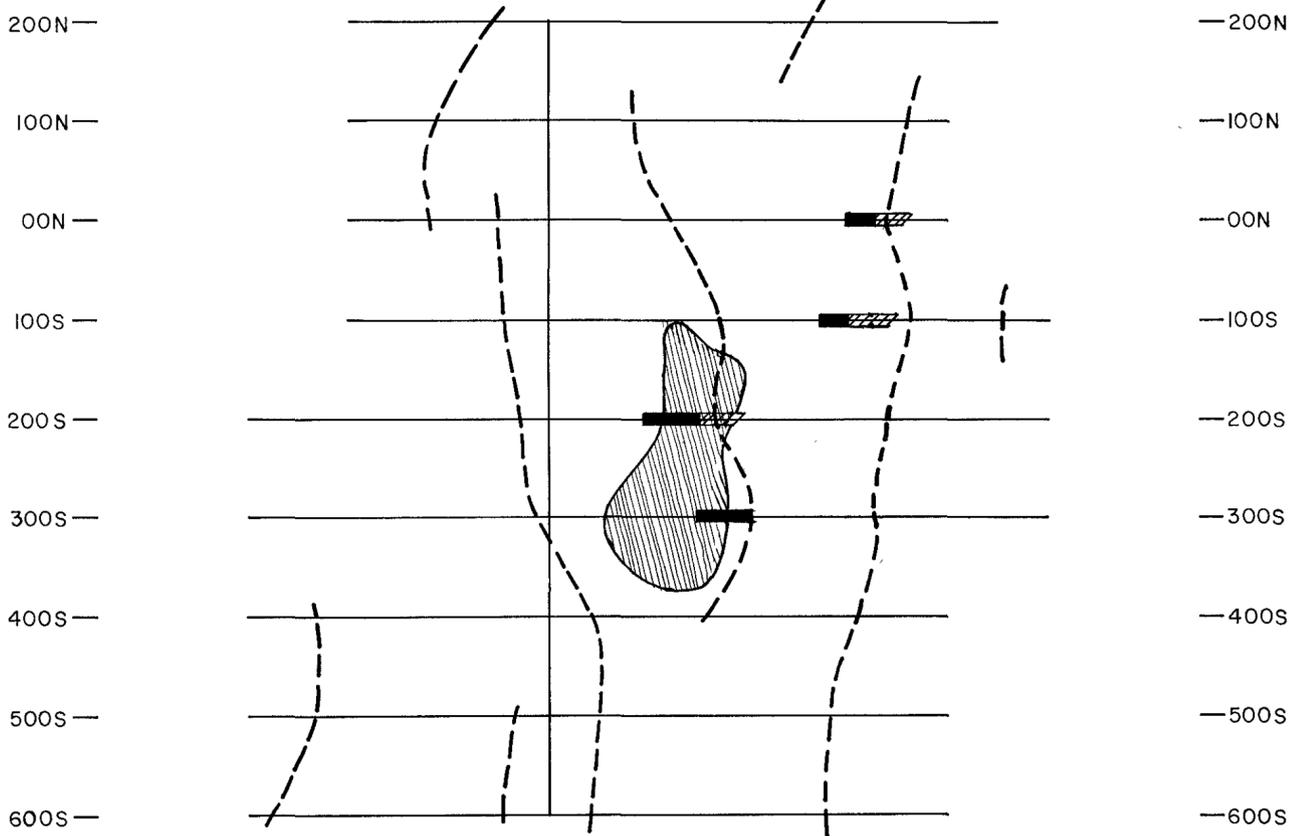
Amended - May 1979

KEY - ■ Prospect
● Airborne Electromagnetic Anomaly

Instrument		Datum		Hor. Scale	1:100 000	AREA	Elliott Bay - Tasmania EL 27/76
Observer	S. Mudge	Base Peg		Ver. Scale		PROSPECT	VOYAGER PROSPECTS
Scale Factor		Date	September 1978	Cont. Int.		PLAN SHOWS	Location Diagram



300W 200W 100W 00E 100E 200E 300E 400E 500E



300W 200W 100W 00E 100E 200E 300E 400E 500E



Key

- SP: Area of less than -40mV
- VLF: Centre of Conductor
- IP: Polarisable Zone
- Probable extension of Polarisable Zone

5 cm

163024

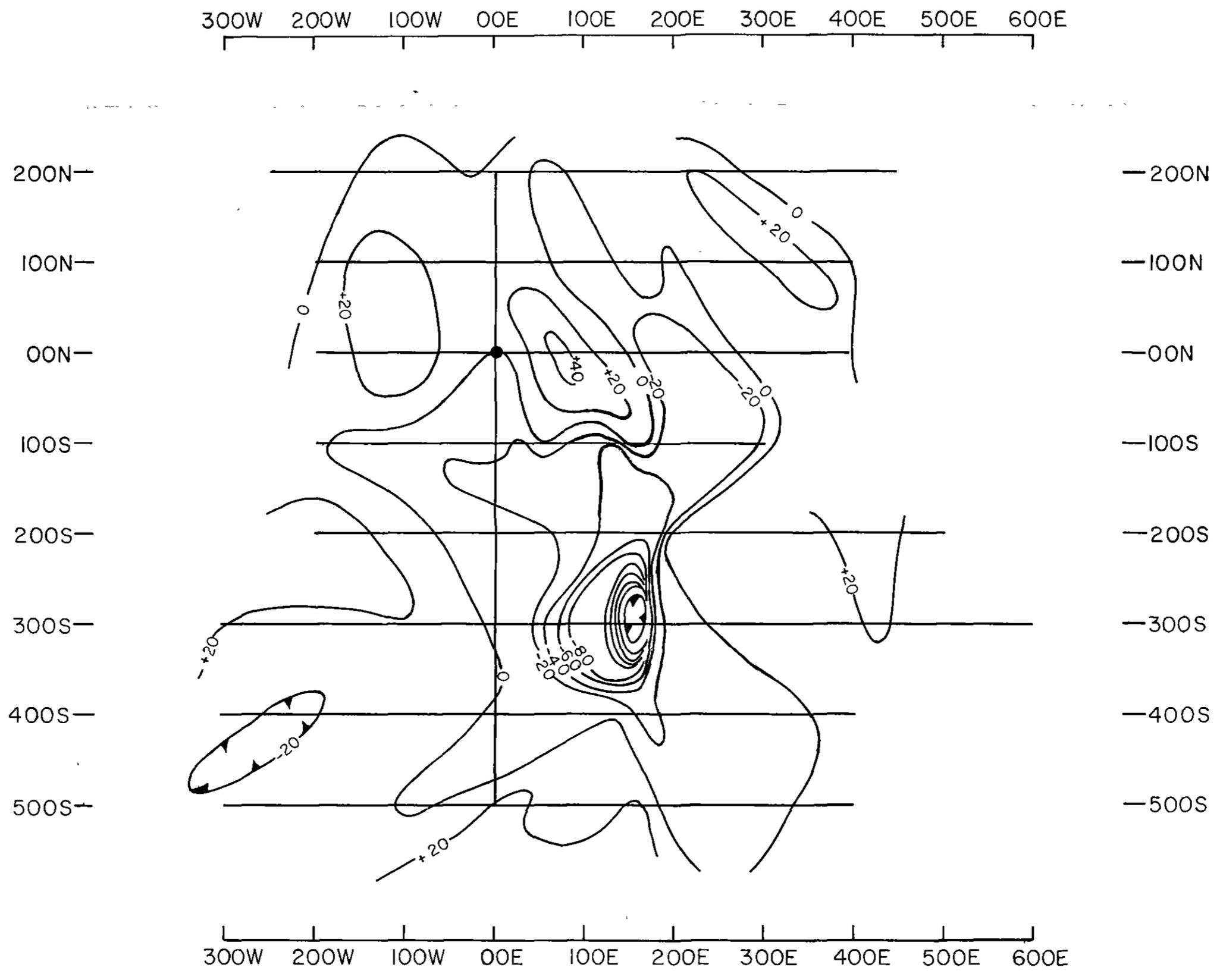
79-1357

GEOPEKO LTD. 002
Geophysical Surveys
Plan No 4553 S/B

Instrument		Datum		Hor Scale	1 5 000
Observer	S. Mudge	Base Peg		Vert Scale	
Scale Fact		Date	April 1979	Cont Int	

AREA	Elliott Bay Tasmania
PROSPECT	VOYAGER 12-GEOPHYSICS
PLAN SHOWS	Diagrammatic Interpretation Summary



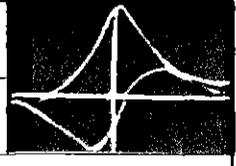


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GEOPEKO LTD. 003
 Geophysical Surveys
 Plan No. 4554 S/B

Instrument	Fluke 8020A	Datum		Hor Scale	1:5 000	AREA	Elliott Bay Tasmania
Observer	S. Ilton	Base Peg	00E/00N (0mV)	Vert Scale		PROSPECT	VOYAGER 12
Scale Fact		Date	March '79	Cont Int	20 mV	PLAN SHOWS	Contours of Self Potential

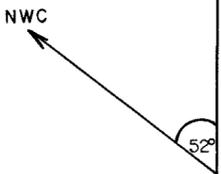


300W 200W 100W 00E 100E 200E 300E 400E 500E



300W 200W 100W 00E 100E 200E 300E 400E 500E

North
(348° Mag)



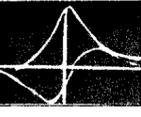
Note: Transmitter - North West Cape (NWC)

5 cm

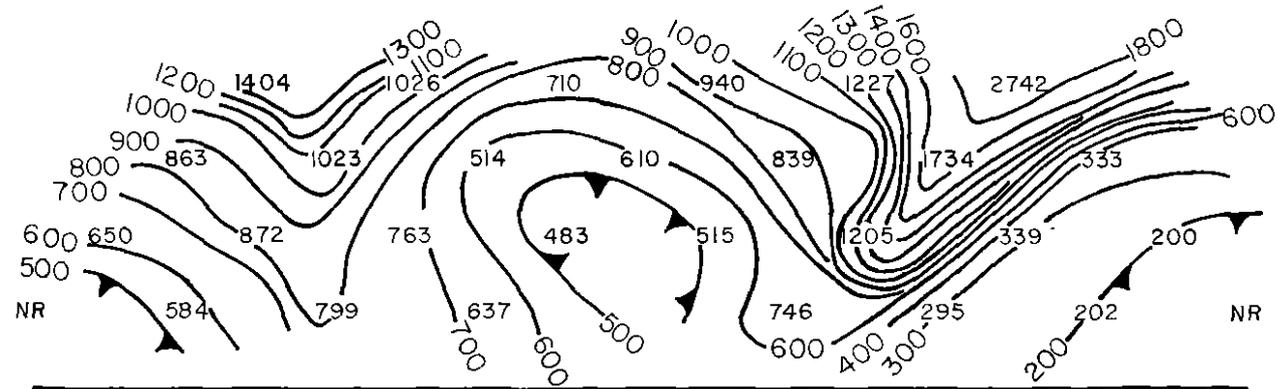
163026

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GEOPEKO LTD. 004 Geophysical Surveys. Plan No. 4555 S/B	Instrument	EM 16	Datum		Hor Scale	15 000	AREA	Elliott Bay Tasmania
	Observer	S. Ilton S. Mudge	Base Peg		Vert Scale		PROSPECT	VOYAGER 12
	Scale Fact		Date	March '79	Cont Int.	5%	PLAN SHOWS	Contours of Filtered In-Phase VLF-EM

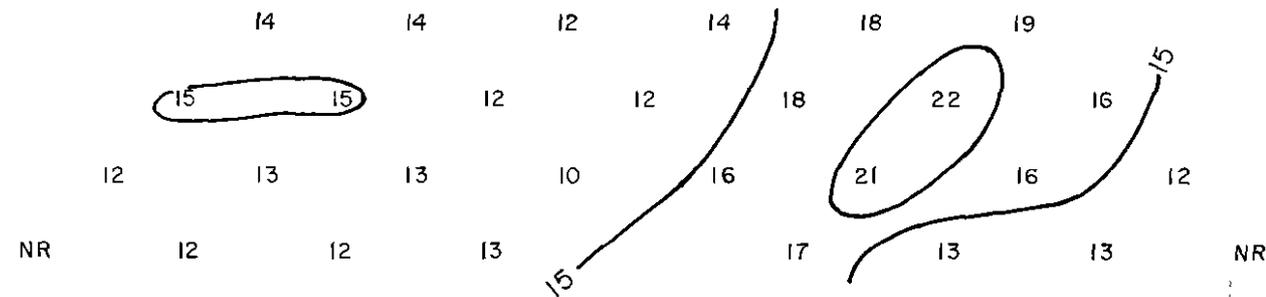


100W 50W 00E 50E 100E 150E 200E 250E 300E



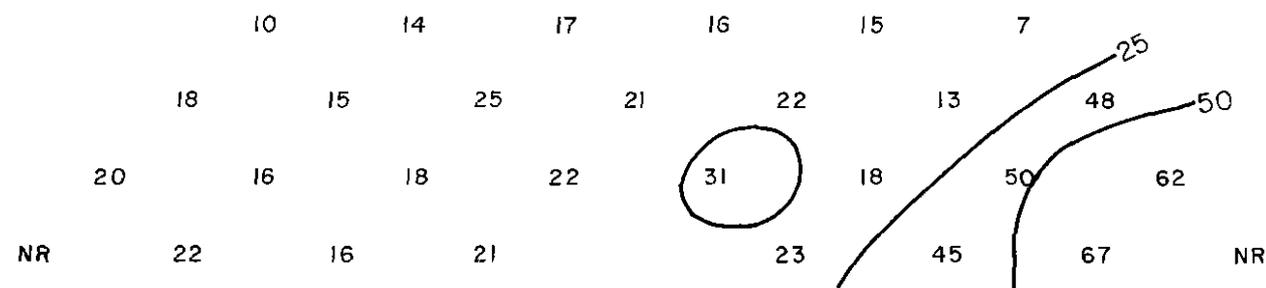
n=1
n=2
n=3
n=4

Apparent Resistivity (ρ_a)
Contour Interval 100 Ωm



n=1
n=2
n=3
n=4

Apparent Chargeability (M_{232})
Contour Interval 5mV V⁻¹



n=1
n=2
n=3
n=4

Apparent Metal Factor (M_{232})
Contour Interval 25 $\Omega^{-1} m^{-1}$

163027

100W 50W 00E 50E 100E 150E 200E 250E 300E

5 cm

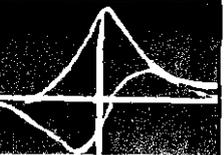
Note: Dipole Length = 50 metres

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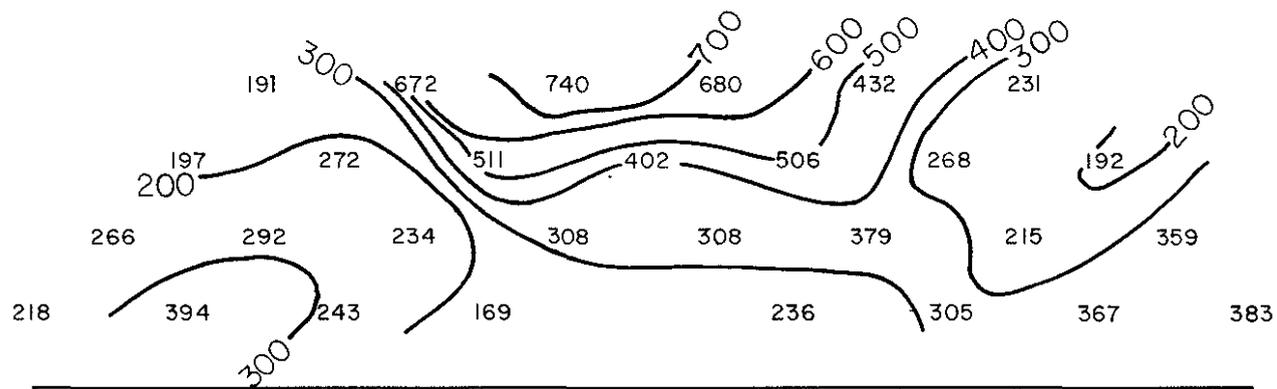
GEOPEKO LTD. 005
Geophysical Surveys
Plan No. 4556 S/B

Instrument	IPR-8	Datum		Hor Scale	1:2500
Observer		Base Peg		Vert Scale	
Scale Fact		Date	March '79	Cont Int	

AREA	Elliott Bay Tasmania
PROSPECT	VOYAGER 12 Line 100S
PLAN SHOWS	Pseudosections of Dipole-Dipole IP

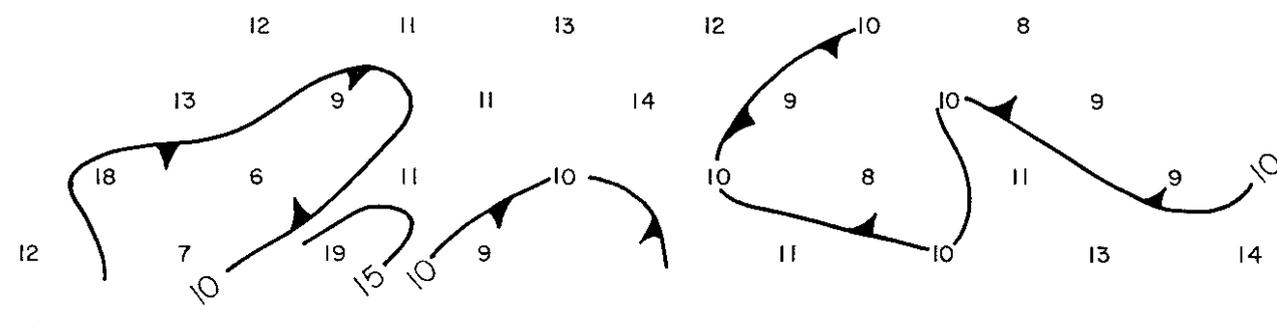


100W 50W 00E 50E 100E 150E 200E 250E 300E



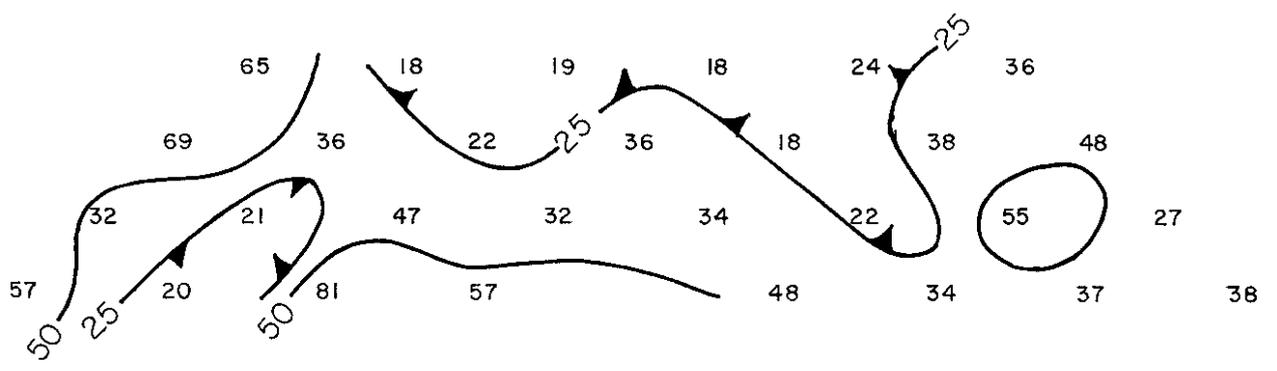
n=1
n=2
n=3
n=4

Apparent Resistivity (ρ_a)
Contour Interval 100 Ωm



n=1
n=2
n=3
n=4

Apparent Chargeability (M_{232})
Contour Interval 5 mV V⁻¹



n=1
n=2
n=3
n=4

Apparent Metal Factor (M_{232})
Contour Interval 25 $\Omega^{-1} m^{-1}$

100W 50W 00E 50E 100E 150E 200E 250E 300E

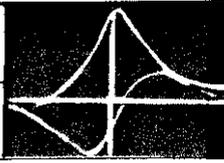
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5 cm

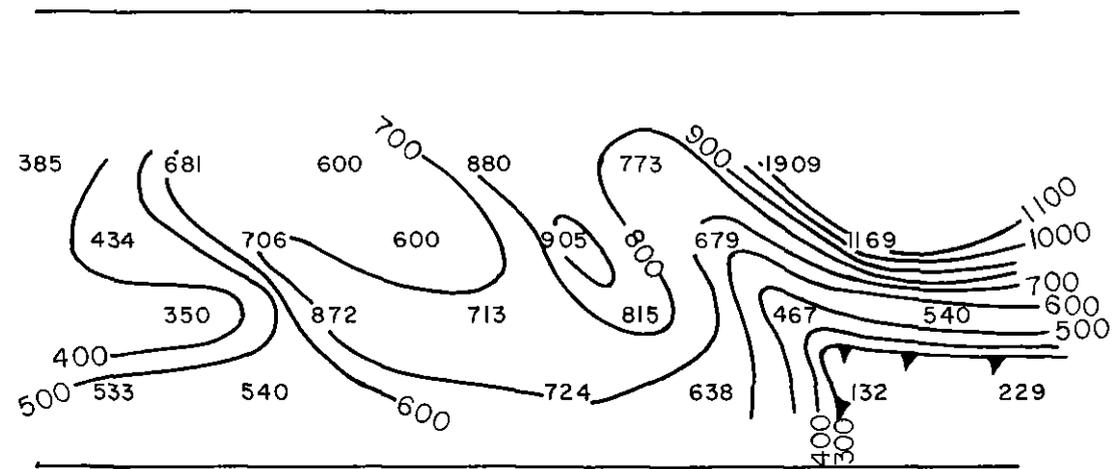
Note Dipole Length = 50 metres

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GEOPEKO LTD. 003 Geophysical Surveys. Plan No. 4557 S/B	Instrument	IPR-8	Datum		Hor Scale	1:2 500	AREA	Elliott Bay Tasmania
	Observer	S Ilton	Base Peg		Vert Scale		PROSPECT	VOYAGER 12 Line 200N
	Scale Fact		Date	March '79	Cont Int		PLAN SHOWS	Pseudosection of Dipole-Dipole IP

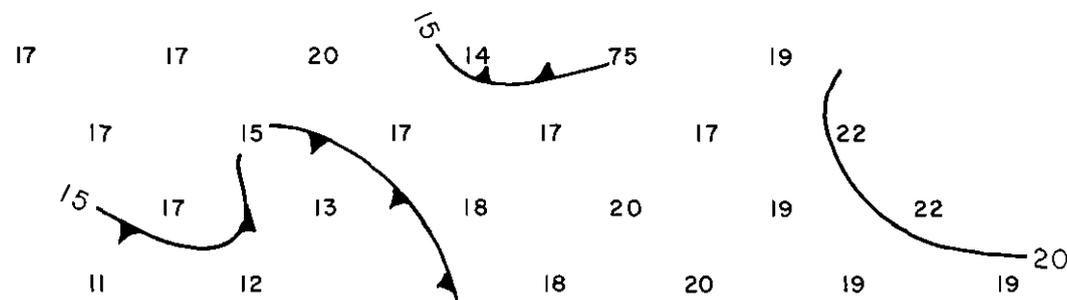


200W 150W 100W 50W 00E 50E 100E 150E



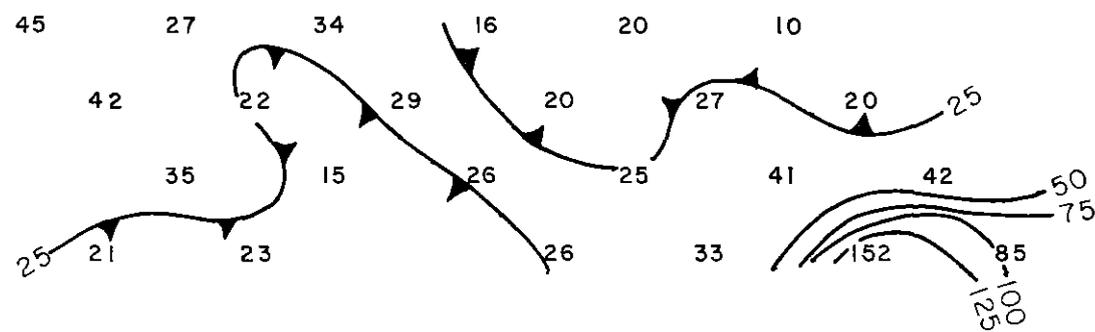
n=1
n=2
n=3
n=4

Apparent Resistivity (ρ_a)
Contour Interval 100 Ωm



n=1
n=2
n=3
n=4

Apparent Chargeability (M_{232})
Contour Interval 5 $mV V^{-1}$



n=1
n=2
n=3
n=4

Apparent Metal Factor (M_{232})
Contour Interval 25 $\Omega^{-1} m^{-1}$

200W 150W 100W 50W 00E 50E 100E 150E

5 cm

163029

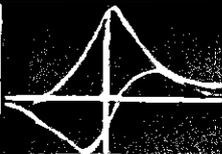
Note: Dipole Length = 50m

79-1357

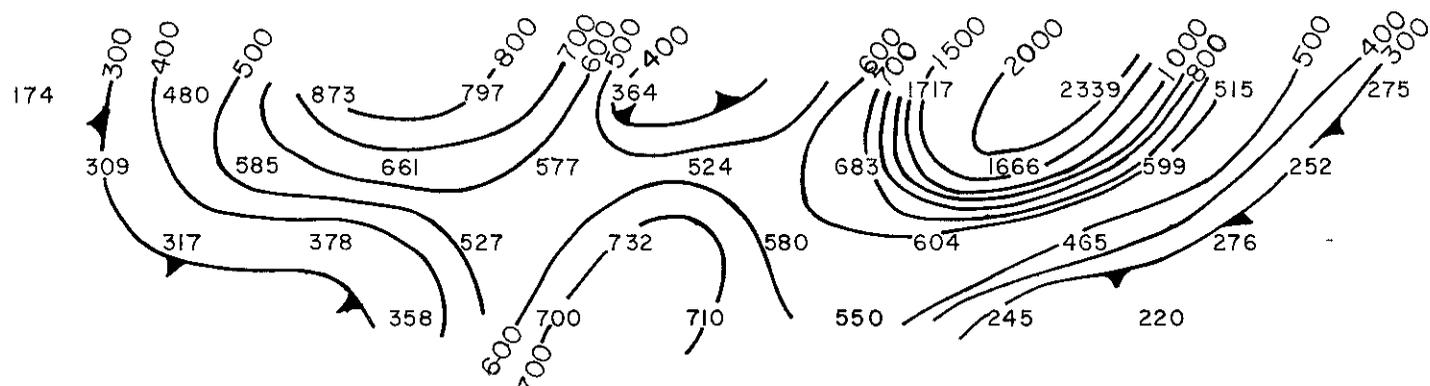
GEOPEKO LTD. 007
Geophysical Surveys
Plan No. 4558 S/B

Instrument	IPR 8	Datum		Hor Scale	1:2500
Observer	Silton	Base Peg		Vert Scale	
Scale Fact		Date	March '79	Cont Int	

AREA	Elliott Bay Tasmania
PROSPECT	VOYAGER 12 Line 200S
PLAN SHOWS	Pseudosections of Dipole Dipole IP

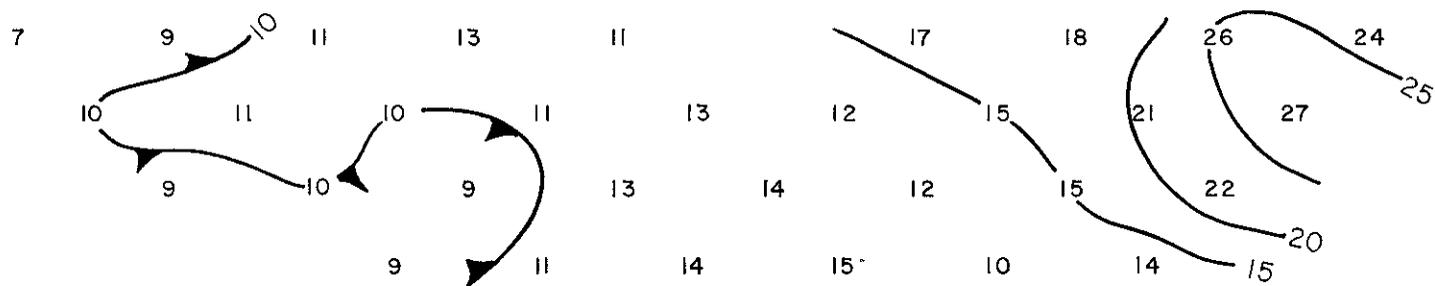


100W 50W 00E 50E 100E 150E 200E 250E 300E



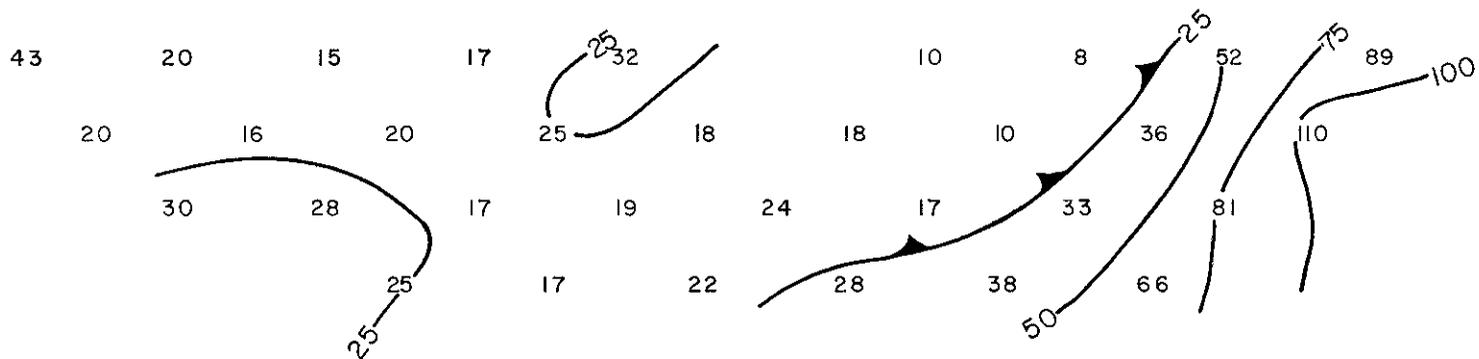
n=1
n=2
n=3
n=4

Apparent Resistivity (ρ_a)
Contour Interval 100 Ωm



n=1
n=2
n=3
n=4

Apparent Chargeability (M_{232})
Contour Interval 5 mVv⁻¹



n=1
n=2
n=3
n=4

Apparent Metal Factor (M_{232})
Contour Interval 25 $\Omega^{-1}m^{-1}$

100W 50W 00E 50E 100E 150E 200E 250E 300E

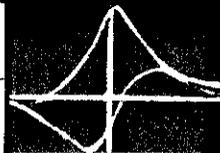
163030

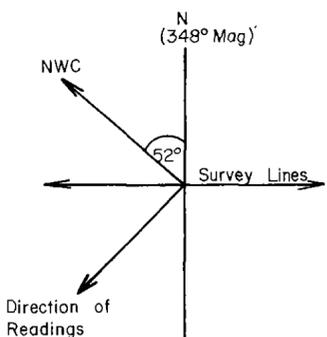
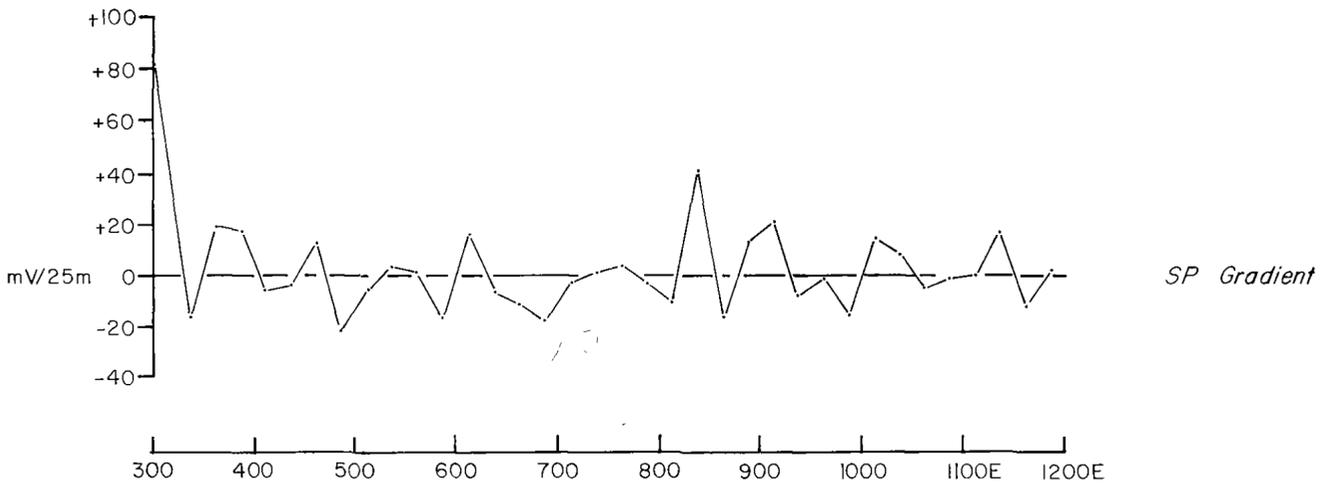
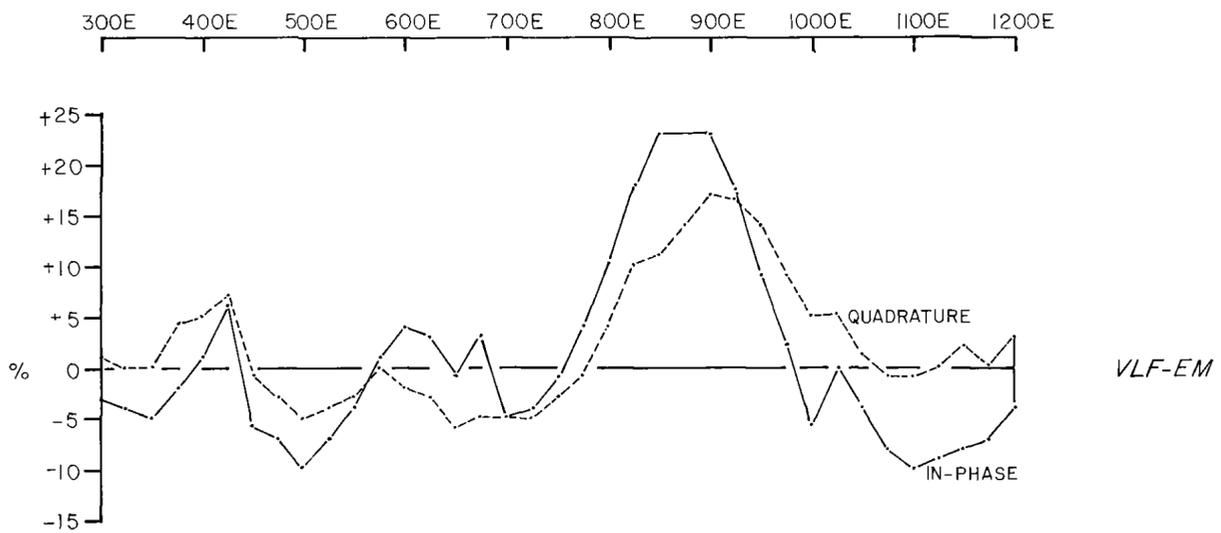
5 cm

Note:- Dipole Length = 50m

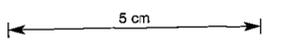
79-1357

GEOPEKO LTD. 008 Geophysical Surveys Plan No. 4559 S/B	Instrument	IPR 8	Datum		Hor Scale	1:2 500	AREA	Elliott Bay Tasmania
	Observer	S Ilton	Base Peg		Vert Scale		PROSPECT	VOYAGER 12 Line 00N
	Scale Fact		Date	March '79	Cont Int		PLAN SHOWS	Pseudosections of Dipole-Dipole IP





Note: Gradient Dipole = 25m
Transmitter - North West Cape (NWC)



103031

79-1357

GEOPEKO LTD. 003
Geophysical Surveys
Plan No. 4560 S/B

Instrument	Fluke 8020A/EMI6	Datum		Hor Scale	1:5 000
Observer	Sifton S Mudge	Base Peg	300E=0mV	Vert Scale	20mV and 20mV/ 25m = 1cm 5% = 1cm
Scale Fact		Date	March '79	Cont Int	

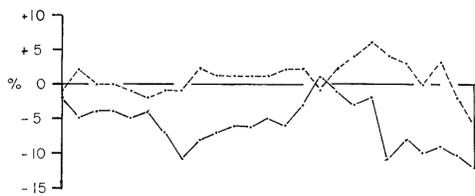
AREA	Elliott Bay Tasmania
PROSPECT	VOYAGER 12 Line 100S
PLAN SHOWS	Profiles of SP and VLF-EM



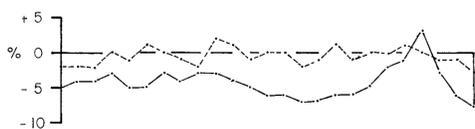
300W 200W 100W 00E 100E 200 300E 400E 500E



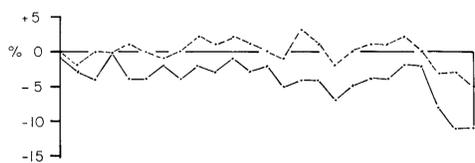
Line 400N



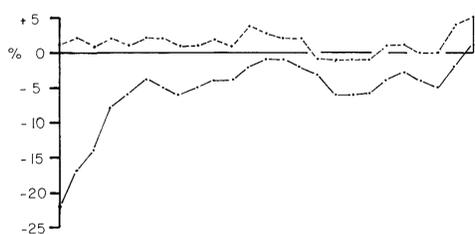
Line 200N



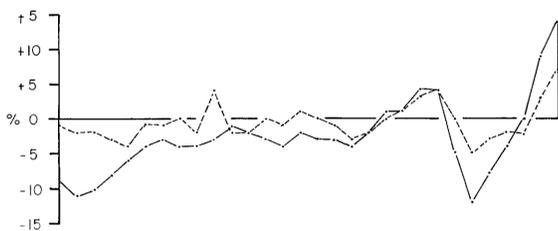
Line 100N



Line 00N



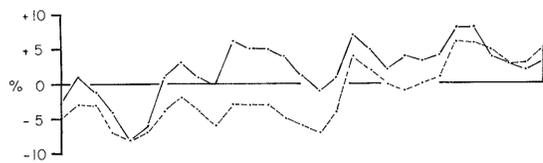
Line 100S



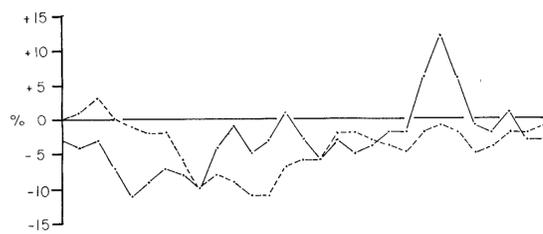
Line 200S



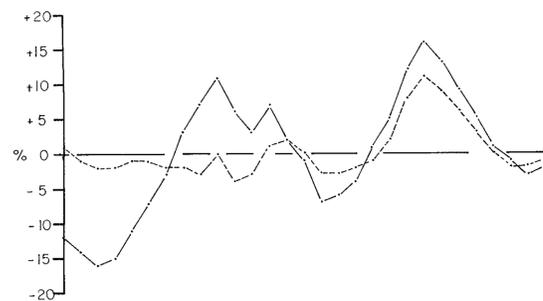
Line 300S



Line 400S

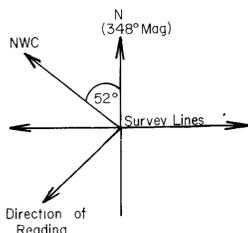


Line 500S



Line 600S

300W 200W 100W 00E 100E 200E 300E 400E 500E



Key
 — In-Phase
 - - - Quadrature

Note Transmitter-North West Cape (NWC)

163032

5 cm

79-1354

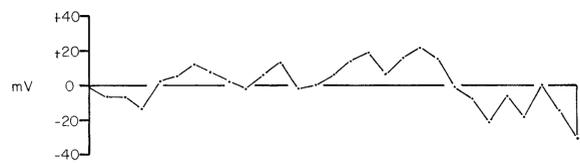
GEOPEKO LTD.
 Geophysical Surveys
 Plan No. 4561 S/B

010

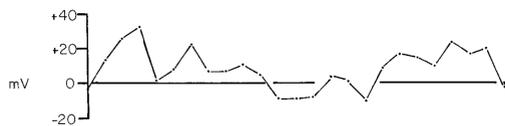
Instrument	EM16	Datum		Hor Scale	1:5000	AREA	Elliott Bay Tasmania
Observer	S. Iltton, S. Mudge	Base Peg		Vert Scale	5% c.m.	PROSPECT	VOYAGER 12
Scale Fact		Date	March 1979	Cont Int		PLAN SHOWS	Profiles of VLF-EM



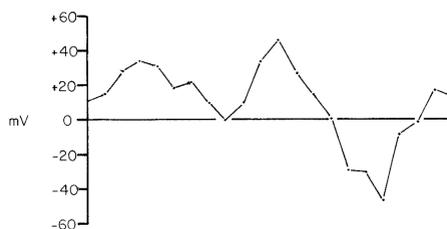
300W 200W 100W 00E 100E 200E 300E 400E 500E 600E



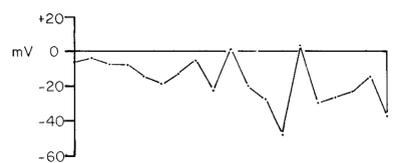
Line 200N



Line 100N



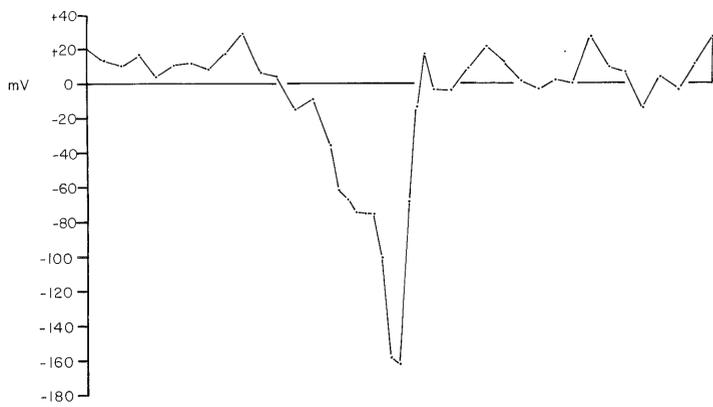
Line 00N



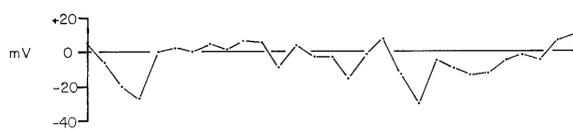
Line 100S



Line 200S



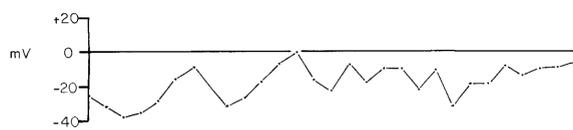
Line 300S



Line 400S



Line 500S



Line 600S
(Not tied to 00E/00N)

300W 200W 100W 00E 100E 200E 300E 400E 500E 600E

163033

5 cm

79-354

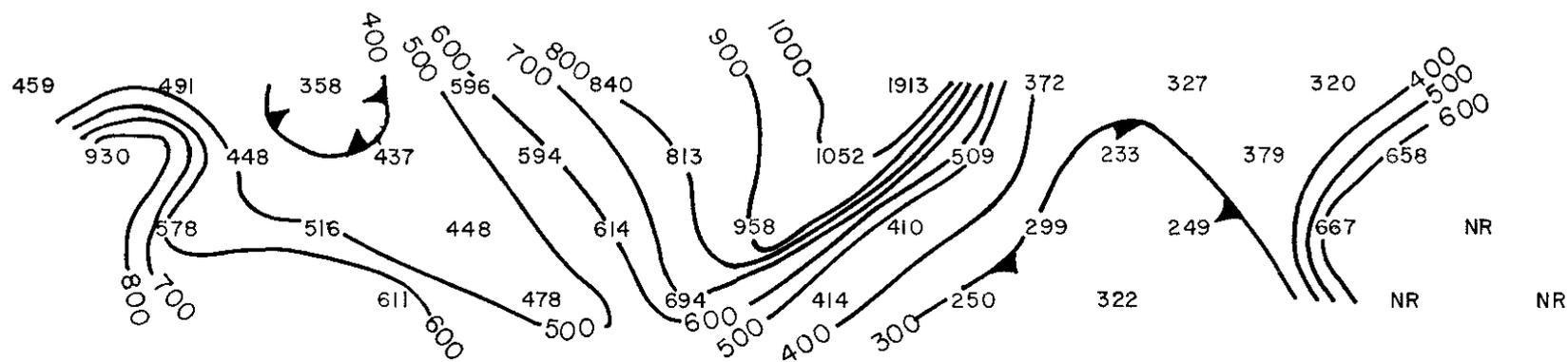
GEOPEKO LTD.
Geophysical Surveys
Plan No. 4562 S/B

011

Instrument	Fluke 8020A	Datum Level	0 mV	Hor Scale	1:5000	AREA	Elliott Bay Tasmania
Observer	S Illton	Base Peg	00E/00N (0mV)	Vert Scale	20 mV/cm	PROSPECT	VOYAGER 12
Scale Fact		Date	March 1979	Cont int		PLAN SHOWS	Profiles of Self Potential

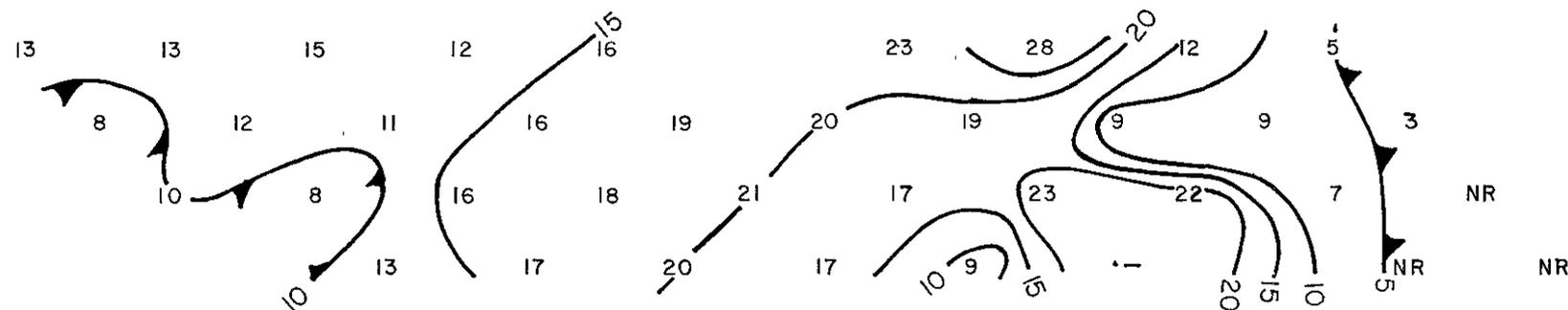


200W 150W 100W 50W 00E 50E 100E 150E 200E 250E 300E 350E



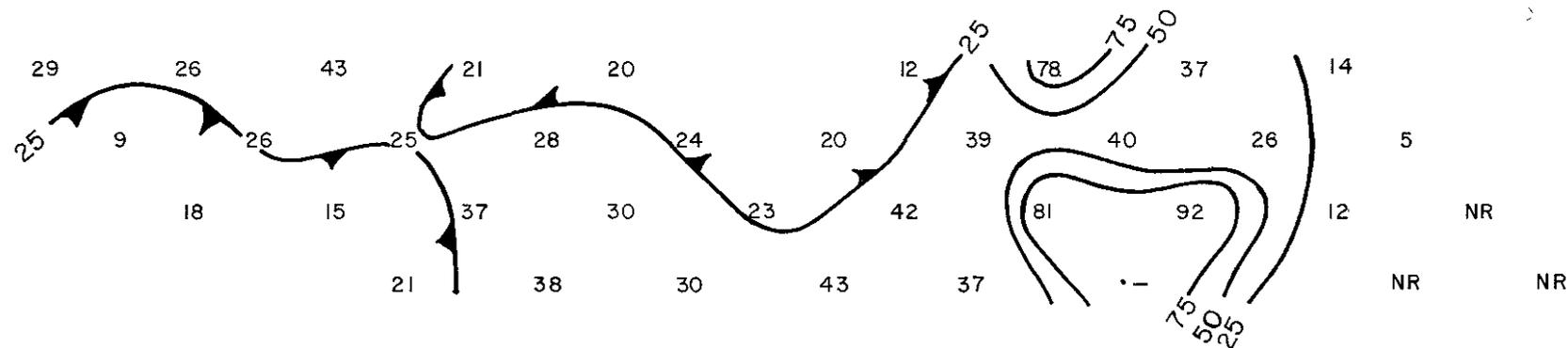
n=1
n=2
n=3
n=4

Apparent Resistivity (ρa)
Contour Interval - 100 Ωm



n=1
n=2
n=3
n=4

Apparent Chargeability (M_{232})
Contour Interval - 5m VV^{-1}



n=1
n=2
n=3
n=4

Apparent Metal Factor (M_{232})
Contour Interval - 25 $\Omega^{-1} m^{-1}$

200W 150W 100W 50W 00E 50E 100E 150E 200E 250E 300E 350E

163034

5 cm

Note:- Dipole Length = 50metres
NR - No Reading

79-1357

GEOPEKO LTD: 012
Geophysical Surveys.

Instrument IPR 8

Datum

Hor Scale 1:2500

AREA

Elliott Bay Tasmania

Observer S. Ilton

Base Peg

Vert Scale

PROSPECT

VOYAGER 12 Line 300S

Plan No. 4570 S/B

Scale Fact

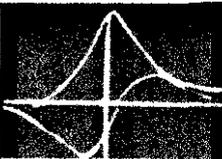
Date

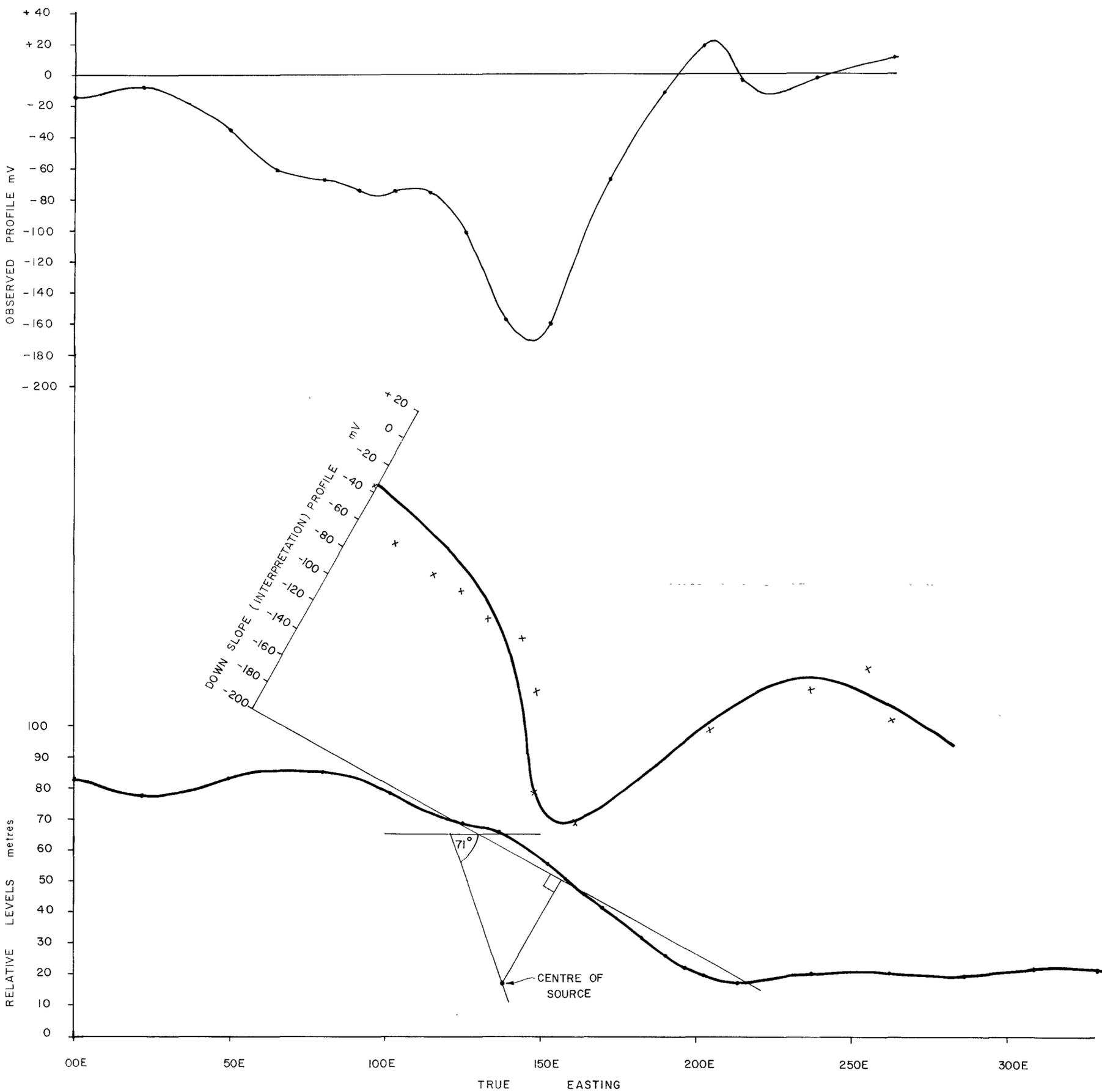
March '79

Cont Int

PLAN SHOWS

Pseudosection of Dipole-Dipole IP





INTERPRETATION - Spherical source centred
48 metres below 138 East
dipping 71° East.

5 cm

163035 79-1351

GEOPEKO LTD. 013
Geophysical Surveys

Plan No 4613 S/B

Instrument	Fluke 8020A	Datum		Hor Scale	1:1000
Observer	S Mudge	Base Peg		Vert Scale	1:1000 & 20 mV/cm
Scale fact		Date	May 1979	Cont Int	

AREA	Elliott Bay Tasmania
PROSPECT	VOYAGER 12 LINE 300S
PLAN SHOWS	Profiles of Topography and S.P. Interpretation

