LOGISTICAL REPORT

INDUCED POLARIZATION/RESISTIVITY SURVEYS

on the

BRISTOL TWP. PROPERTY
NTS: 42 A/5,6

near

TIMMINS, ONTARIO

for

TECK EXPLORATION LTD., NORTH BAY, ONTARIO

Waterdown, Ontario
April, 1995.
QIP Project P-107

Quantec IP Inc.
D. Dawson
D. Morrison
J. Legault

TABLE OF CONTENTS

1. INTRODUCTION

At the request of Teck Exploration Ltd., of 19 Legault St., RR #5, NorthBay, ON, P1B 8Z4, Quantec IP Inc. (QIP), of Waterdown, Ontario, Canada, conducted a multiple gradient/RealSection IP/Resistivity geophysical surveys at the Bristol Township Property, from October, 1994 to February, 1995. The Bristol Township Property is situated near the Town of Timmins, in Bristol Township (See Figure 1). The project was carried out under the direction of Mr. M. Houle and J. Jansen of Teck Exploration Ltd..

On the basis of a favourable test survey over a zone of interest (the mineralized Bristol Creek Zone), the RealSection technique was applied over the remainder of the property, with the objective of identifying similar structures and other features - missed in previous geophysical surveys. The RealSection technique was adopted based on its high resolution and deep penetration characteristics.

The "RealSection" survey design uses multiple gradient arrays - with variable depths of investigation controlled by successive changes in array size/geometry. The method of data acquisition and the "RealSection" presentation are based on the specifications developed by Dr. Perparim Alikaj, of the Polytechnic University of Tirana, Albania, over the course of 10 years of application. This technique has been further developed for application in Canada during the past four years, in association with Mr. Dennis Morrison, president of Quantec IP Inc.

This report outlines the survey technique used, the geophysical work undertaken and presents the final data results and plots.

2. GENERAL SURVEY DETAILS

2.1 Location and Access

The Bristol Twp. Property is located 20 km west of Timmins, ON, in Bristol Township. The grid is located east of the intersection of highways 101 and 144 (NTS 42 A/5,6).

The property can be accessed from Timmins via highway 101 west to Bristol Twp. The property was accessed daily by truck, from the Pine Ridge Motel, west of Timmins, where the survey crew was based. The survey lines are easily reached, on foot, from the highway, which intersects most of the profiles.

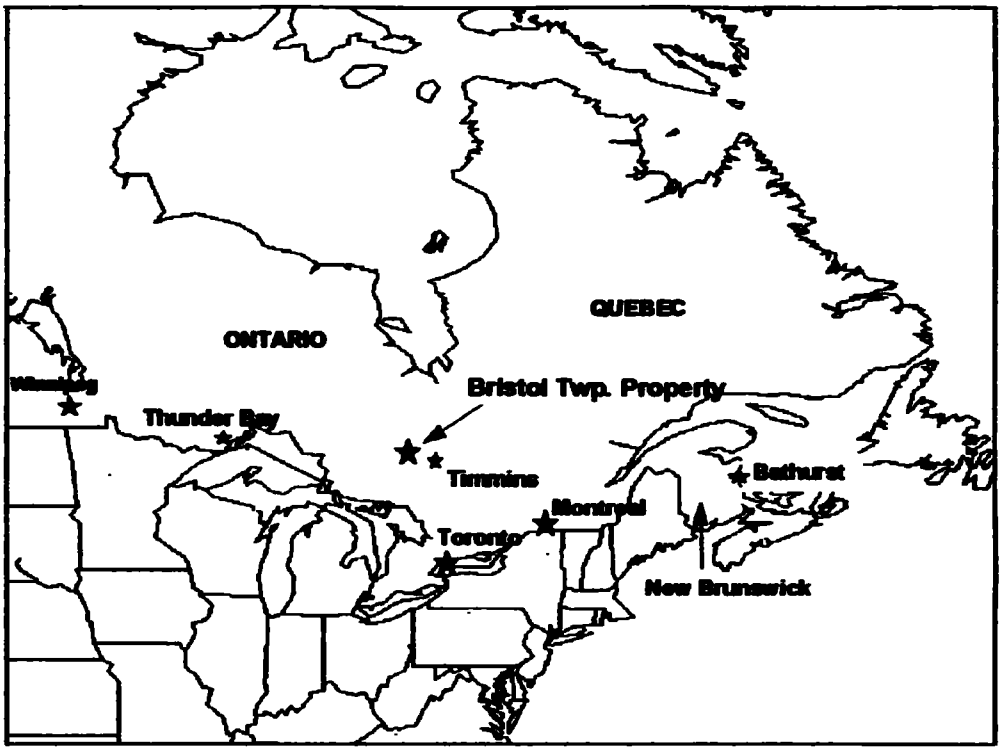


Figure 1: General location map showing Bristol Twp. Property.

2.2 Survey lines

The survey control consisted of a cut grid established prior to the survey by Teck Exploration Ltd. The survey grid comprised 100m spaced lines having baseline 0+0, Az.060° extended over 7.6 km. The station interval was 25 metres, without secant corrections. The NS survey line coverage is described in Appendix B. See also map P107-LOC-1 (Appendix E) for UTM coordinates.

3. SURVEY WORK UNDERTAKEN

3.1 Generalities

The geophysical program was undertaken in two periods, between September 28th to December 13th 1994 and from January 13th to February 11th, 1995. A total of three hundred seventeen thousand, four hundred and twenty five line-metres (317.425 km; pot-to-pot coverage) of gradient array IP/Resistivity surveys were conducted over the survey area.

In order to provide the current-source field required for the multiple gradient array measurements, several grounded dipoles (referred to as "AB's") were established over the survey grid (Table II-III). The dipoles were centred over the survey area and measured with a roll-along receiver spread of seven electrodes (six collinear dipoles, see figure 2) with a dipole "a" spacing (MN) of 25 metres. The array specifications and survey coverage are summarized in Table IV. Both the primary voltage and secondary voltage decay (chargeability) were acquired in the time-domain, using a square waveform transmitted at a frequency of 0.125 Hz at 50% duty cycle (2-seconds ON, 2 seconds OFF).

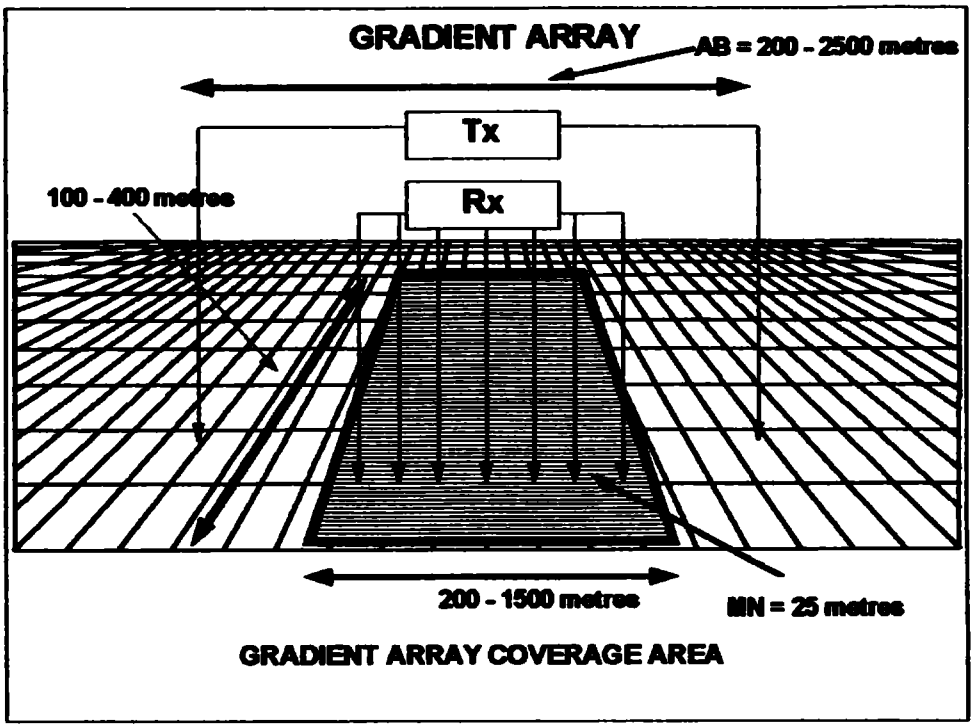


Figure 2: Gradient array used at the Bristol Twp. Property

Table II: AB Locations for 1994 Survey Coverage at Bristol Twp. Property.

AB Center Line	C1 min.	C2 max.	AB Length
15+00W	900S	1500N	(2400 m AB)
15+00W	1000N	500S	(1500 m AB)
15+00W	1000N	100S	(1100 m AB)
15+00W	0+50S	750N	(800 m AB)
15+00W	750N	350N	(400 m AB)
15+00W	0	400N	(400 m AB)
13+00W	1000N	900S	(2400 m AB)
8+00W	1500N	900S	(2000 m AB)
8+00W	1000N	900S	(1500 m AB)
10+00W	1500N	900S	(2400 m AB)
800W	1000N	0+50S	(1100 m AB)
800W	100N	700N	(800 m AB)
800W	250N	650N	(500 m AB)
500W	1500N	950S	(2400 m AB)
400W	1050N	450S	(1500 m AB)
200W	2400S	0	(2400 m AB)
300E	2500N	100S	(2400 m AB)
400E	2000S	400S	(1600 m AB)
400E	750S	1500S	(1200 m AB)
400E	1500S	7000S	(800 m AB)
400E	1300S	900S	(400 m AB)
800E	2500S	200S	(2300 m AB)
800E	2550S	200S	(2350 m AB)
800E	2300S	500S	(1800 m AB)
800E	1900S	500S	(1400 m AB)
800E	1600S	600S	(1000 m AB)
800E	1350S	750S	(600 m AB)
800E	1225S	825S	(400 m AB)
900E	1500S	500S	(1000 m AB)
900E	1400S	700S	(600 m AB)
900E	2600S	1300S	(1300 m AB)
700E	1600S	600S	(1000 m AB)
700E	1350S	750S	(600 m AB)
900E	2950S	700S	(2200 m AB)
900E	2950S	700S	(2200 m AB)
900E	2950S	1500S	(1400 m AB)
900E	2950S	1200S	(1700 m AB)
1300E	2800S	400S	(2400 m AB)
1400E	2800S	1000S	(1800 m AB)
1400E	2800S	1200S	(1400 m AB)
1400E	2800S	1600S	(1000 m AB)
1500E	2400S	1800S	(600 m AB)
1300E	1200N	1200S	(2400 m AB)
1300E	1200N	600S	(1800 m AB)
1400E	800N	600S	(1400 m AB)
1200E	800N	600S	(1400 m AB)
1200E	800N	200S	(1000 m AB)
1200E	600N	0	(600 m AB)
1200E	500N	100N	(400 m AB)
800E	1200N	1200S	(2400 m AB)
900E	1200S	600N	(1800 m AB)
900E	800S	600N	(1400 m AB)
900E	800S	200N	(1000 m AB)
900E	900S	100S	(800 m AB)
900E	800S	300S	(500 m AB)

AB Center Line	C1 min.	C2 max.	AB Length
1000E	500S	500N	(1000 m AB)
1000E	500N	200S	(700 m AB)
400E	1000S	1400S	(2400 m AB)
300E	1000N	1400S	(2400 m AB)
200E	1000N	1400S	(2400 m AB)
400E	900S	900N	(1800 m AB)
400E	900S	500N	(1400 m AB)
400E	900S	100N	(1000 m AB)
400E	500S	100N	(600 m AB)
200E	1000N	800S	(1800 m AB)
200E	800N	600S	(1400 m AB)
200E	800N	200S	(1000 m AB)
200E	600N	0	(600 m AB)
100W	1300N	1100S	(2400 m AB)
100W	1300N	500S	(1800 m AB)
100W	300S	1100N	(1400 m AB)
100W	0	1000N	(1000 m AB)
0	750N	150N	(600 m AB)
200W	800N	200N	(600 m AB)
200W	750N	325N	(425 m AB)
200W	425N	675N	(250 m AB)
100W	200N	800N	(600 m AB)
400W	175S	925N	(1100 m AB)
400W	100N	800N	(700 m AB)
1800E	1400N	1000S	(2400 m AB)
1800E	800N	1000S	(1800 m AB)
1800E	400N	1000S	(1400 m AB)
2300E	1350S	1400N	(2750 m AB)
2300E	1350S	850S	(2200 m AB)
2300E	1350S	350S	(1700 m AB)
2200E	675S	400S	(1100 m AB)
2200E	450S	250N	(700 m AB)
2200E	250S	0+50N	(300 m AB)
2200E	175N	2250N	(2400 m AB)
2200E	1950S	150S	(1800 m AB)
2200E	1700S	300S	(1400 m AB)
2200E	550S	1600S	(1000 m AB)
2200E	1450S	750S	(700 m AB)
2200E	1300S	900S	(400 m AB)
2400E	600S	1600S	(1000 m AB)
2400E	1500S	800S	(700 m AB)
2400E	1350S	950S	(400 m AB)

Table IIb: AB Locations for 1994 Survey Coverage at Bristol Twp. Property.

AB Center Line	C1 min.	C2 max.	AB Length
2800E	1100S	1500N	(2600 m AB)
2800E	1100S	700N	(1800 m AB)
2800E	500S	950N	(1400 m AB)
2800E	1100S	950N	(2000 m AB)
2800E	500S	450N	(1000 m AB)
1800E	2525S	225N	(2750 m AB)
1800E	1775S	225N	(2000 m AB)
1800E	1825S	400S	(1425 m AB)
1600E	1400S	400S	(1000 m AB)
3300E	1300S	1500N	(2300m AB)
3300E	800S	1000N	(1800m AB)
3300E	800S	500N	(1300m AB)
3300E	400S	500N	(900m AB)
3800E	600S	1500N	(2100m AB)
3800E	600S	1000N	(1600m AB)
3800E	600S	500N	(1100m AB)

Table IIC: AB Locations for 1995 Survey Coverage at Bristol Twp. Property.

3.2 Personnel

Dennis Morrison Washago, Ontario	Senior geophysicist/Supervisor
Kevin Blackshaw Toronto, Ontario	Senior geophysicist/Crew chief I
Albert Vickers Richmond Hill, Ontario	Senior geophysicist/Crew chief II
Richard Chasse Toronto, Ontario	Geophysical technician/Crew chief III
Neil Maukonen Orillia, Ontario	Geophysical technician, Foreman
Bruce Fagan Coldwater, Ontario	Geologist, Transmitter operator
Carmen Vucko Toronto, Ontario	Field assistant

3.3 Equipment and Survey Procedure

The survey was conductive with an IP6 time-domain induced polarization/resistivity receiver manufactured by IRIS Instruments, under license from BRGM Instruments of Orleans, France. The unit is a portable, microprocessor-controlled acquisition system capable of simultaneously measuring six dipoles. Geometric parameters, time parameters, intensity of current, array types and station numbers are fully programmable. For each dipole, the unit measures or calculates the self-potential (Sp - mV), primary voltage (Vp - mV), apparent resistivity (ρ_a - Ω-m), the secondary voltage decay over ten time slices, and the total apparent chargeability (M - mV/V). All programmed parameters, and measured and calculated values are stored in solid state memory. Its approximate weight, including rechargeable batteries, is 12 lb.

The IPT-2B variable frequency transmitter was employed (maximum output voltage 2400 volts, weight 90 lb.) in conjunction with an MG-15,consisting of a Westinghouse 30 kVA, 3-phase, 400 Hz. alternator coupled to a 25 H.P. Kohler motor-generator (350 lb.). Both units are manufactured by Phoenix Geophysics LTD, Unionville, Canada. The system provided a stable, regulated current (15 amps maximum) at an 8 second, 50 percent duty cycle.

The E-field signal ($\Delta V=E.dl$) is collected using end-on dipoles, consisting of 18-gauge copper wire connected to grounded stainless steel electrodes. Stainless steel electrodes connected via 10 gauge copper wire were used for current injection contacts. Electrode contacts were watered with saturated CaCl solution in order to improve the contact resistance. Contact resistances varied between 1k-15k ohms, with an overall average of 3 k-Ω. Transmitted currents between 600-12,000 milliamperes were achieved. Uniden VHF-band radios provided communication links for the crew in the field.

All measured values were routinely stored in the receiver's solid state memory, and at the end of each survey day, the IP-6 was interfaced with an Ultinet Portable micro-computer (486DX-66) and the data transferred to disk for storage and processing. Report-quality field

plots were generated on site, using a 24-pin colour printer, to monitor the data quality and to provide a preliminary interpretation capability.

The induced polarization survey implemented the gradient electrode configuration, using a dipole "a" spacing (MN) of 25 metres and current dipoles (AB) ranging from 400 to 2800 metres. The receiver array consisted 6 end-on dipoles, totaling 150 metres in length, and the profiles were surveyed using the roll-along technique. The 6 end-on dipoles consisted of 7 receiving stainless steel electrodes that are in turn connect to the receiver (Rx) with copper wire. Up to three thousand five hundred (3,500) line-metres of coverage were surveyed per field day.

3.5 Difficulties encountered and accuracy of measurement

The quality of measurements in the field was closely monitored during the course of the survey in order to detect any weaknesses, either technical or natural, which could have affected the quality of the data recorded. Overall, the survey progressed deliberately and efficiently, particularly in the 1994 phase, as evidenced in the high production levels.

Due to the location of the property to Timmins, and numerous adjoining cottages, the primary sources of difficulty were in identifying and discriminating geologic features from culture - including powerlines, surface buildings, etc. For example, a small powerline engendered weak negative background chargeabilities at the survey's onset. An additional source of difficulty was in establishing current injection points for the AB 's away from either cultural (obvious) and geologic structures (unavoidable) - the result of non-optimal site selections across the property is noticeably observed in the differences in chargeability and resistivity base levels from one current AB block to the next. Finally, a period of intense cold and high winds, between Feb. 4-6, reduced the survey efficiency due to equipment malfunctions.

Overall, a repeatability of approximately ±1% for the primary voltage, and ±0.5 mV/V for the chargeability were easily maintained throughout the course of the survey. In general, the excellent data quality is evidenced by the low standard errors of measurement and high repeatability -as well-shown in the smooth nature of the stacked profile plan presentation.

3.6 Data processing and Presentation of Results

Once the data have been collected in the field, the receiver is interfaced with a micro computer and the raw field data is transferred onto diskette for further reduction. Following this, the data sets are reduced, using the Geosoft™ program IPRED™ to apparent resistivity and total chargeability, as explained in the following figures and equations:

Using the following diagram (figure 3) for the gradient array electrode configuration and nomenclature:[1]

[1] From Terraplus\BRGM, IP-6 Operating Manual, Toronto, 1987.

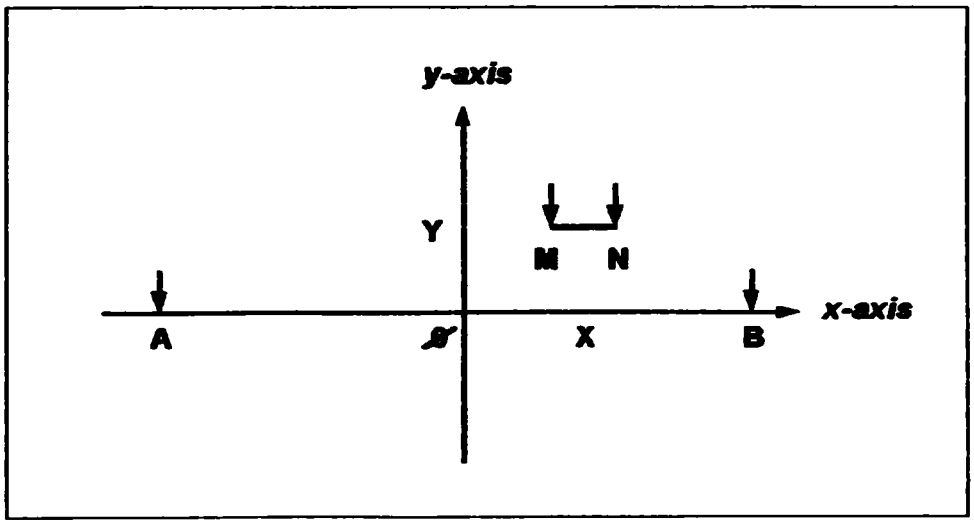


Figure 3: Gradient array configuration

where: the origin O is selected at the center of AB
the geometric parameters are in addition to a = AB/2 and b = MN/2
X is the abscissa of the mid-point of MN (positive or negative)
Y is the ordinate of the mid-point of MN (positive or negative)

gives the gradient array apparent resistivity:

Gradient Array Apparent Resistivity[2] :

$$\rho_a = K \frac{V_P}{I} \text{ ohm - metres}$$

$$\text{where: } K = \frac{2\pi}{(AM^{-1} - AN^{-1} - BM^{-1} + BN^{-1})}$$

$$AM = \sqrt{(a+x-b)^2 + y^2}$$

$$AN = \sqrt{(a+x+b)^2 + y^2}$$

$$BM = \sqrt{(x-b-a)^2 + y^2}$$

$$BN = \sqrt{(x+b-a)^2 + y^2}$$

Using the following diagram (figure 4) for the Total Chargeability:[2]

[2] From Terraplus\BRGM, IP-6 Operating Manual, Toronto, 1987.

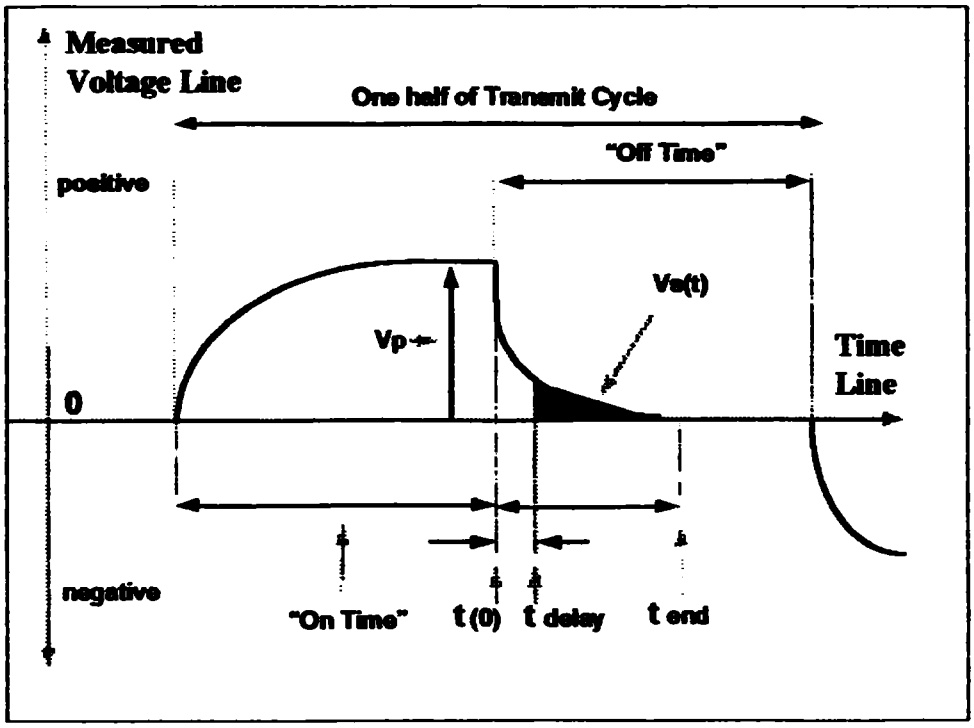


Figure 4: The measurement of the time-domain IP effect

the total apparent chargeability is given by:

Total Apparent Chargeability:[3]

$$Mr = \frac{1}{t_p V_p} \sum_{i=1\ to\ 10} \int_{t_i}^{t_{i+1}} Vs\ (t)\, dt \qquad \text{millivolts per volt}$$

where t_i, t_{i+1} are the beginning and ending times for each of the chargeability slices, which can be programmed, in the IRIS IP-6 receiver, to ensure optimum anomaly resolution and noise suppression - according to the specific geologic/geomorphologic environment. The chargeability time-gates chosen for Bristol are given in Table IV:

[3] From Telford, et al., Applied Geophysics, Cambridge U Press, New York, 1983..

Slice	Duration (msec)	Start (msec)	End (msec)	Mid-Point (msec)
Td	40	0	40	
T_1	20	40	60	50
T_2	30	60	90	75
T_3	30	90	120	105
T_4	30	120	150	140
T_5	180	150	330	245
T_6	180	330	510	425
T_7	180	510	690	605
T_8	360	690	1050	875
T_9	360	1050	1410	1235
T_{10}	360	1410	1770	1595
Total T_p	1690			

Table IV: Programmed time-slices, and MT gate chosen, for Bristol Survey.

Where the values T_1 to T_{10} represent the width, in milliseconds, of each IP time slice, T_d represents the time delay before measuring the IP decay and T_p represent the total time after the induced field is shut off

More detailed descriptions on the theory and application of the IP/Resistivity method, and the gradient RealSection technique can be found in the following reference papers:

Cogan, H., 1973, Comparison of IP electrode arrays, Geophysics, 38 737 - 761.

Langore, L., Alikaj, P. Gjovreku, D., 1989. Achievements in copper sulphide exploration in Albania with IP and EM methods, Geophysical Prospecting, 37, p 925 - 941.

The data was plotted and profiled in plan, according to the AB spacing (see Appendix using the Geosoft Mapping System programs. The ρ_a (apparent resistivity) and M7 chargeability (Total Chargeability omitted) are presented in stacked profile format, in plan, at the 1:5000 (1cm = 50 m) scale (2 maps; Appendix G). Within this study all apparent resistivities are in Ω-metres and all chargeability values are expressed in mV/volt.

3.7 Digital Data Formats

The data are averaged and separated according to AB dipole, geoelectric parameter, profile-line and station. They are stored in Geosoft ".XYZ" ASCII format on DS-HD 3.5 inch diskettes and the files use the following formats:

a) raw data files, named according to line/AB (CLLDAB.dmp)

where C is a grid or project code
LL is the line coordinate in 100's
D is the directional for the line coordinate
AB is the current dipole length in 100's

Format: Complete IP-6 dump file format (see Appendix C, *EDA\Terraplus manual*)

b) processed data XYZ files, according to "RealSection" line:

File: "RealSection" profile, with filename relating to the survey line, for example: Bristol Property line 8+00W = B8W.XYZ

Column 1: station position (metres)
Column 2: plotting depth (metres)
Column 3: Total Chargeability (mV/Volt)
Column 4: Apparent Resistivity (ohm-metres)
Column 5: Channel 1 chargeability (mV/V)
Column 6: Channel 2 chargeability (mV/V)
...
...
Column 13: Channel 8 Chargeability (mV/Volt)

c) digital map files

each of the maps included in Appendix F are provided on 3.5 inch diskettes, in Autocad™ ".DXF" format. All diskette files have been compressed into self expanding disc files using Pkware software

4.0 SUMMARY INTERPRETATION

The multiple gradient/RealSection induced polarization/resistivity surveys at **Bristol Twp. Property** provided a physical characterization of the geoelectric parameters of the grid area, from approximately 75 to 450m depths. The NE-SW geoelectric grain agrees with the regional geologic strike, with numerous EW and NS disruptions consistent with strike-slip structural features inferred geologically - notably the Bristol Fault. Variations in overburden appear to have little expression in the Real-Section results - except at small AB's.

The property wide IP/Resistivity signature features a band of low resistivity (<1k ohm-m) and high chargeability (>10mV/V) rocks lying along the northern property boundary - coinciding with pyritic to graphitic argillites and greywackes, of limited geologic/exploration. South-east of this undulating contact, near approximately 8+00N, the volcanics and greywackes which predominate the **Bristol Property** claims are characterized by moderate to high resistivities (1k-3k ohm-m) and low chargeabilities (< 5 mV/V) - reflecting the low mafic and sulphide/graphitic content in the rocks. Occasional broad-scale high resistivity/higher chargeability zones appear to identify the roots of possible felsic-altered porphyry systems, of obvious geologic interest. South and east of the property, a rapid decrease in the chargeability and resistivity (<1k Ohm-m, <3 mV/V) appears to mark the onset of deeper overburden and current channeling - likely associated with major NE and NW/SE structures associated with the Matagami River Fault zone.

However, of greatest significance is an east-westerly high-resistivity/moderate chargeability feature (>5k ohm-m, >5 mV/V), just south of the BL0. This narrow, undulating anomaly coincides with the mapped Bristol Zone, a quartz-altered, Au mineralized system which parallels major structural features regionally. It is shown to extend across much of the property, displaying splay-behaviour, and appears to strengthen with easting.

The **Bristol** RealSection survey has highlighted the high resolution and deep penetration characteristics of the technique. In addition to better defining known geologic structures, it has also identified additional zones of interest - as yet undiscovered with conventional geophysical arrays and methods. It is recommended that the anomalous structures detected be drill-tested and classed according to geologic interest.

RESPECTFULLY SUBMITTED,

QUANTEC IP INC.

Dennis Morrison
President

David JW Dawson
Senior geophysicist

Jean M Legault, P.Eng.
Senior geophysicist

April 3, 1995.

APPENDIX A

STATEMENT OF QUALIFICATIONS

I, David J. Dawson, hereby declare that:

1. I am a consulting geophysicist with residence in Porcupine, Ontario and am presently employed in this capacity with Quantec IP Inc., of Waterdown, Ontario.
2. I am a graduate of The University of Western Ontario, London, ON, in 1986, with a Bachelor of Science Degree, in geophysics.
3. I have practiced my profession continuously since graduation (May 1987) in North America, South America and Europe.
4. I have no interest nor do I expect to receive any interest, direct or indirect, in the properties or securities of **Teck Exploration Ltd.**
5. The statements made by me in this report represent my best opinion and judgment based on the information available to me at the time of the writing of this report.

Porcupine, Ontario
April, 1995.

David Dawson, B.Sc.
Geophysicist

APPENDIX A

STATEMENT OF QUALIFICATIONS

I, Jean M. Legault, hereby declare that:

1. I am a consulting geophysicist with residence in Timmins, Ontario and am presently employed in this capacity with Quantec Consulting Inc. of Porcupine, Ontario.

2. I am a graduate of Queen's University, Kingston, Ontario, in 1982, with a Bachelor's Degree with Honours, in geological engineering.

3. I am a member of the Ordre des Ingenieurs du Quebec, and am licensed to practice engineering in the province of Quebec, Canada.

4. I have practiced my profession continuously since graduation.

5. I am a member of the Prospectors and Developers Association, the Porcupine Prospectors and Developers Association and the Association des Prospecteurs du Quebec.

6. I have no interest nor do I expect to receive any interest, direct or indirect, in the properties or securities of Teck Exploration Ltd.

7. The statements made by me in this report represent my best opinion and judgment based on the information available to me at the time of the writing of this report.

Porcupine, ON
April, 1995.

Jean M. Legault, B.Sc., P.eng.
Senior geophysicist

APPENDIX B

PRODUCTION LOG

TDIP Survey

Teck Resources Corp
Real Section IP Survey
Bristol Township

Daily Production Log

Date	AB	Line	Start	End	Total (m)
Sept. 28, 1994	24	B15+00W	6+00S	10+00N	1600
	24	B16+00W	10+00N	7+00N	300
Sept. 29, 1994	24	B16+00W	7+00N	0	700
	24	B14+00W	6+00S	4+50N	1050
	24	B13+00W	3+75N	5+75S	950
	15	B15+00W	1+50S	7+50N	900
	15	B14+00W	4+50N	1+50S	600
Sept. 30, 1994	15	B16+00W	0	7+50N	750
	11	B16+00W	0	7+50N	750
	11	B15+00W	0	7+50N	750
	11	B14+00W	4+50N	0	450
	8	B15+00W	0+50S	6+50N	600
Oct. 1, 1994	4	B15+00W	0+50N	3+50N	300
	4	B15+00W	6+50N	4+00N	250
Oct. 2, 1994	24	B13+00W	2+75N	1+25S	400
	24	B12+00W	6+00S	4+50N	1050
	24	B11+00W	3+00N	3+00S	600
Oct. 3, 1994	24	B11+00W	1+25N	6+00S	725
	24	B10+00W	6+50S	3+75N	975
	24	B9+00W	4+50N	6+00S	1050
	24	B8+00W	6+00S	10+00N	1600
Oct. 4, 1994	24	B9+00W	4+50N	4+75N	25
	24	B7+00W	7+50N	0	750
	20	B8+00W	1+50N	7+50N	600
	15	B8+00W	7+50N	1+50N	600
Oct. 5, 1994	15	B7+00W	7+50N	0	750
	24	B8+00W	7+50N	0	750
Oct. 6, 1994	15	B9+00W	4+75N	0+25N	450
	24	B7+00W	0	7+50N	750
	24	B8+00W	10+00N	6+00S	1600
	24	B9+00W	6+00S	4+75N	1075
Oct. 7, 1994	24	B10+00W	6+00S	3+75N	975
	24	B11+00W	6+00S	2+75N	875
	24	B12+00W	6+00S	4+50N	1050
	24	B13+00W	0	3+75N	375
Oct. 8, 1994	10.5	B7+00W	0	7+50N	750
	10.5	B8+00W	1+50N	7+50N	600
	10.5	B9+00W	0+25N	4+75N	450

	8	B8+00W	1+00N	7+00N	600
	5	B8+00W	2+50N	6+50N	400
Oct. 9, 1994	24	B7+00W	10+00N	7+00S	1700
	24	B6+00W	10+00N	7+25S	1725
	24	B5+00W	5+00N	7+00S	1200
Oct. 10, 1994	24	B5+00W	5+00N	9+50N	450
	24	B4+00W	9+00N	7+00S	1600
	24	B3+00W	10+00N	7+00S	1700
	24	B2+00W	7+50N	3+00N	400
Oct. 11, 1994	15	B5+00W	2+50S	8+00N	1050
	15	B4+00W	2+50S	8+00N	1050
Oct. 12, 1994	24	B5+00W	15+25N	5+00N	1025
	24	B4+00W	15+75N	13+50N	225
	24	B4+00W	10+50N	5+00N	550
	24	B3+00W	16+00N	10+00N	600
	24	B3+00W	8+75N	5+00N	375
	24	B2+00W	5+00N	6+00N	100
	24	B2+00W	20+00N	9+00N	1100
	24	B1+00W	20+00N	5+00N	1500
Oct. 13, 1994	24	B0+00W	5+00S	20+00S	1500
	24	B1+00E	7+50S	15+00N	750
Oct. 15, 1994	24	B1+00E	5+00S	20+00S	1500
	24	B2+00E	5+00S	20+75S	1575
	24	B3+00E	5+00S	9+50S	450
Oct. 16, 1994	24	B3+00E	9+50S	21+50S	1200
	24	B4+00E	21+50S	5+00S	1650
	24	B5+00E	21+50S	5+00S	1650
	24	B6+00E	21+50S	15+50S	600
Oct. 17, 1994	16	B5+00E	7+00S	17+50S	1050
	16	B4+00E	7+00S	17+50S	1050
	16	B3+00E	7+00S	17+50S	1050
	24	B2+00E	10+25S	11+75S	150
	24	B5+00E	9+50S	11+00S	150
	24	B3+00E	8+00S	9+50N	150
Oct. 18, 1994	12	B5+00E	7+50S	15+00S	750
	12	B4+00E	7+50S	15+00S	750
	12	B3+00E	7+50S	15+00S	750
	8	B4+00E	8+00S	14+00S	600
	8	B4+00E	12+50S	9+75S	275
Oct. 20, 1994	24	B4+00E	8+00S	14+00S	600
	24	B4+00E	12+50S	9+75S	275
Oct. 21, 1994	23	B10+00E	24+00S	5+00S	1900
	23	B9+00E	23+50S	5+00S	1850
Oct. 22, 1994	23	B8+00E	23+00S	17+00S	600
Oct. 23, 1994	23	B8+00E	17+00S	5+00S	1200
	23	B11+00E			600
	18	B8+00E	7+00S	22+00S	1500
Oct. 24, 1994	18	B9+00E	22+00S	7+00S	1500
	18	B7+00E	21+50S	7+00S	1450
Oct. 25, 1994	14	B7+00E	17+50S	7+00S	1050

	14	B8+00E	17+50S	7+00S	1050
	14	B9+00E	17+50S	7+00S	1050
	10	B8+00E	14+50S	7+00S	750
	6	B8+00E	13+00S	8+00S	500
	4	B8+00E	12+00S	8+50S	350
Oct. 26, 1994	10	B9+00E	6+50S	14+00S	750
	6	B9+00E	7+50S	12+00S	450
	13	B9+00E	16+00S	22+00S	600
	10	B7+00E	14+50S	7+00S	750
	6	B7+00E	8+00S	12+50S	450
Oct. 27, 1994	22.5	B9+00E	18+00S	25+50S	750
Oct. 28, 1994	22.5	B11+00E	18+00S	27+00S	900
	22.5	B10+00E	18+00S	25+25S	725
	22.5	B8+00E	17+75S	25+00S	725
	22.5	B7+00E	17+50S	25+00S	750
	22.5	B6+00E	18+00S	24+00S	600
	14.5	B8+00E	18+00S	24+00S	600
	14.5	B9+00E	22+00S	25+00S	300
Oct. 29, 1994	14.5	B9+00E	22+00S	17+50S	450
	17.5	B9+00E	15+50S	25+50S	1000
	17.5	B9+00E	25+00S	14+50S	1050
Oct. 31, 1994	14.5	B9+00E	22+00S	17+50S	450
	17.5	B9+00E	15+50S	25+50S	1000
Nov. 1, 1994	24	B13+00E	25+50S	7+50S	1800
	24	B14+00E	25+50S	7+50S	1800
Nov. 2, 1994	24	B15+00E	25+00S	7+00S	1800
	18	B15+00E	25+00S	12+00S	1300
	24	B16+00E	25+00S	19+00S	600
Nov. 3, 1994	18	B14+00E	25+00S	13+00S	1200
	18	B13+00E	25+75S	13+00S	1275
	14	B13+00E	24+00S	15+00S	900
	14	B14+00E	24+00S	15+00S	900
Nov. 4, 1994	14	B15+00E	24+00S	15+00S	900
	14	B14+00E	17+50S	24+25S	675
Nov. 5, 1994	10	B15+00E	23+50S	18+75S	475
	6	B15+00E	23+25S	18+75S	450
Nov. 6, 1994	24	B11+00E	4+50N	9+00S	1350
	24	B12+00E	10+00N	9+00S	1900
	24	B13+00E	9+50N	5+00N	450
Nov. 7, 1994	24	B13+00E	5+00S	8+50S	1350
	24	B14+00E	25+75S	9+00S	1950
	24	B15+00E	24+00S	9+00S	1950
	24	B16+00E	25+75S	2+50S	750
Nov. 8, 1994	18	B11+00E	4+50N	4+50S	900
	18	B12+00E	10+50N	4+50S	1500
	18	B13+00E	9+50N	4+00S	1350
	18	B14+00E	11+00N	4+50S	1500
	18	B15+00E	10+50N	4+50N	600
Nov. 9, 1994	18	B15+00E	4+50N	4+50S	900
	14	B15+00E	6+00N	4+50S	1050
	14	B14+00E	4+50S	6+00N	1050
	14	B13+00E	6+00N	4+50S	1050

	14	B12+00E	4+00N	5+00N	900
	14	B11+00E	4+50N	4+50S	900
Nov. 10, 1994	10	B12+00E	1+00S	5+50N	650
	10	B12+00E	0	4+50N	450
	6	B12+00E	0+50N	5+00N	450
	4	B12+00E	1+50N	4+50N	300
Nov. 11, 1994	24	B11+00E	5+00S	1+00N	600
	24	B10+00E	6+50S	4+00N	1050
	24	B9+00E	7+50S	1+50N	900
	24	B8+00E	7+00S	0+50N	750
	24	B7+00E	6+50S	2+50N	900
	24	B6+00E	6+50S	3+00S	950
Nov. 12, 1994	18	B10+00E	8+00S	4+00N	1200
	18	B9+00E	8+00S	1+00N	900
	18	B8+00E	8+00S	1+00N	900
	14	B8+00E	6+50S	1+00N	750
Nov. 13, 1994	14	B9+00E	4+00N	6+50S	1200
	14	B9+00E	1+25N	6+50S	900
	10	B9+00E	6+50S	1+00N	900
Nov. 14, 1994	8	B9+00E	8+00S	2+00S	600
	5	B9+00E	3+75S	7+25S	350
	10	B10+00E	4+00N	3+50S	750
	7	B10+00E	1+00S	4+00N	500
Nov. 16, 1994	24	B4+00E			600
Nov. 17, 1994	24	B4+00E	6+75S	3+75N	1050
	24	B5+00E	6+50S	3+00N	1100
	24	B3+00E	6+75S	5+25N	1200
Nov. 18, 1994	24	B2+00E	6+00S	6+00N	1200
	24	B2+00E	6+75S	5+00N	1175
Nov. 19, 1994	18	B4+00E	4+50N	6+00S	1050
	18	B4+00E	3+75N	6+00S	975
Nov. 21, 1994	18	B5+00E	3+00N	6+00S	900
	14	B5+00E	3+00N	6+00S	900
	14	B4+00E	3+00N	6+00S	900
	14	B3+00E	3+00N	6+00S	900
Nov. 22, 1994	10	B4+00E	0	6+00S	450
	6	B4+00E	0	4+50S	600
	18	B2+00E	5+00N	5+50S	1050
	18	B2+00E	6+00N	5+50S	1150
Nov. 23, 1994	14	B2+00E	5+00S	5+00N	1000
	14	B2+00E	5+00S	6+00N	1100
	10	B2+00E	1+00S	5+00N	600
	6	B2+00E	0+50N	5+00N	450
Nov. 24, 1994	24	B2+00E	1+50N	6+00N	450
	24	B2+00E	7+50S	7+50N	1500
	24	B2+00E	10+00N	5+50N	1550
	24	B2+00E	9+75N	4+25N	550
Nov. 25, 1994	18.5	B2+00W	3+50S	10+00N	1350
	18.5	B1+00W	3+50S	10+00N	1350
	18.5	B0+00W	3+50S	7+50N	1100
	24	B2+00W	4+25S	6+50S	1075

Nov. 26, 1994	14	B2+00W	0+75S	8+25N	900
	14	B1+00W	0+50S	8+50N	900
	14	B0+00W	0	7+50N	750
	10	B0+00W	2+00N	7+50N	550
	10	B1+00W	2+50N	8+50N	600
	10	B2+00W	1+50N	7+50N	600
	6	B0+00W	2+00N	7+00N	500
Nov. 27, 1994	6	B2+00W	2+75N	7+25N	450
	4.25	B2+00W	3+50N	7+25N	375
	2.5	B2+00W	4+50N	6+00N	150
	6	B1+00W	3+00N	7+50N	450
	11	B4+00W	0	7+50N	750
	11	B4+00W	0	7+50N	750
	7	B4+00W	2+00N	6+50N	450
Nov. 29, 1994	24	B16+00E	6+50S	10+00N	1650
	24	B17+00E	6+00S	10+50N	1650
	24	B18+00E	7+50S	12+00N	1200
	24	B19+00E	7+50S	1+50N	900
Nov. 30, 1994	24	B19+00E	1+50S	12+00N	1050
	24	B20+00E	7+50S	12+00N	1950
	24	B21+00E	6+00S	0	600
	18	B18+00E	6+00N	0	600
Dec. 1, 1994	18	B20+00E	0	7+50N	750
	18	B19+00E	7+50S	5+25N	1275
	18	B18+00E	7+50S	6+00N	1350
	14	B14+00E	1+50N	7+50S	900
	14	B14+00E	1+50N	7+50S	900
	14	B14+00E	1+50N	7+50S	900
Dec. 2, 1994	28	B21+00E	10+00S	12+00N	1200
	28	B22+00E	12+00N	1+50N	1050
Dec. 3, 1994	28	B22+00E	1+50N	10+50S	900
	28	B23+00E	10+50S	12+00N	2250
	28	B24+00E	12+50N	5+00S	1750
Dec. 4, 1994	28	B24+00E	5+00S	10+50S	550
	28	B25+00E	10+50S	12+50N	2300
	28	B26+00E	6+50N	2+50S	900
Dec. 5, 1994	22	B21+00E	6+00N	10+50S	1650
	22	B22+00E	10+50S	4+50N	1500
	22	B23+00E	5+00N	10+00S	1500
	22	B24+00E	10+00S	6+00S	400
Dec. 6, 1994	22	B24+00E	6+00S	5+00N	1100
	22	B25+00E	10+00S	5+00N	1500
	17	B21+00E	10+00S	2+00N	1200
	17	B22+00E	10+00S	2+50S	750
Dec. 7, 1994	17	B22+00E	2+50S	2+00N	450
	17	B23+00E	10+00S	2+00N	1200
	11	B23+00E	5+50S	2+00N	750
	11	B22+00E	2+00N	4+00S	600
Dec. 8, 1994	11	B21+00E	4+00S	2+00N	600
	7	B22+00E	3+00S	1+00N	400
	3	B22+00E	0	1+50S	150
Dec. 9, 1994	24	B22+00SE	3+00S	20+25S	1700

	24	B21+00SE	5+00S	20+00S	1500
	24	B20+00SE	5+00S	20+00S	1500
	24	B23+00SE	11+00S	20+00S	900
Dec. 10, 1994	24	B23+00SE	11+00S	5+00S	600
	24	B24+00SE	20+00S	5+00S	1500
	18	B24+00SE	16+00S	5+50S	1050
	18	B23+00SE	16+00S	5+50S	1050
	18	B22+00SE	16+00S	7+50S	850
Dec. 11, 1994	18	B22+00SE	7+50S	5+50S	150
	18	B21+00SE	16+00S	5+50S	1050
	14	B21+00SE	15+00S	6+00S	900
	14	B22+00SE	15+00S	6+00S	900
	14	B23+00SE	15+00S	6+00S	900
	14	B24+00SE	15+00S	6+00S	900
Dec. 12, 1994	10	B22+00SE	14+50S	6+00S	850
	7	B22+00SE	13+50S	7+00S	650
	4	B22+00SE	12+50S	9+50S	300
Dec. 13, 1994	10	B24+00SE	14+50S	7+00S	750
	7	B24+00SE	14+25S	8+50S	575
	4	B24+00SE	13+00S	10+00S	300
TOTAL (meters)					238,325

Date	AB	Line	Start	End	Total (m)
January 13, 1995	Set up 2600/AB on Line 28E				
January 14, 1995		Read lines - B26E *2 Wrong Window Setup!			
January 15, 1995	26	B26+00E	10+00N	8+00S	1800
		B28+00E	10+00N	8+00S	1800
		B27+00E	2+00N	8+00S	1000
January 16, 1995	26	B27+00E	10+00N	8+00S	1800
		B29+00E	10+00N	8+00S	1800
January 17, 1995	26	B30+00E	10+00N	8+00S	1800
		B31+00E	7+50N	BL0+00	750
	Set up 1800/AB	11+00S to 7+00N			
	18	B30+00E	4+00N	8+00S	1200
January 18, 1995	18	B29+00E	4+50N	8+00S	1250
		B28+00E	4+50N	8+00S	1250
		B27+00E	2+00N	8+50S	1050
		B26+00E	4+00N	8+00S	1200
January 19, 1995	Set up 1400/AB	5+00S to 9+50N			
	14	B26+00E	7+00N	3+50S	1050
		B28+00E	7+00N	3+50S	1050
		B27+00E	2+00N	3+50S	550
January 20, 1995	14	B27+00E	7+00N	4+00N	300
		B29+00E	7+00N	3+50S	1050
		B30+00E	7+00N	3+50S	1050
	Set up 2000/AB	11+00S TO 9+50N			
January 21, 1995	20	B26+00E	6+50N	8+00S	1450
		B27+00E	6+50N	8+00S	1450
		B28+00E	6+50N	8+00S	1450
		B29+00E	6+50N	8+00S	1450
		B30+00E	6+50N	8+00S	1450

January 22, 1995	Set up 1000/AB 4+50N to 5+00S				
	10	B29+00E	3+50N	3+50S	700
		B28+00E	3+50N	3+50S	700
		B27+00E	2+00N	3+50S	550
	Set up next block: 2800/AB L18+00E 25+25S to 2+25N				
January 23, 1995	28	B20+00E	2+00S	24+00S	2200
		B19+00E	9+00S	24+00S	1500
January 24, 1995	28	B19+00E	2+00S	9+00S	700
		B18+00E	2+00S	24+00S	2200
		B17+00E	2+00S	7+50S	550
		B16+00E	2+00S	23+00S	2100
	overlap	B15+00E	5+00S	20+00S	1500
January 26, 1995	Change AB 20				
	20	B20+00E	5+00S	15+50S	1050
		B19+00E	5+00S	15+50S	1050
		B18+00E	5+00S	15+50S	1050
		B17+00E	5+00S	15+50S	1050
January 27, 1995	20	B16+00E	5+00S	15+50S	1050
	Change AB 1400 4+00S to 18+25S				
	14	B16+00E	5+00S	15+50S	1050
		B17+00E	5+00S	15+50S	1050
		B18+00E	5+00S	15+50S	1050
		B19+00E	5+00S	15+50S	1050
		B20+00E	7+00S	14+50S	750
January 28, 1995	Change AB 1000 L16+00E 4+00S to 14+00S				
	10	B16+00E	5+50S	13+00S	750
	Change AB 2300 L33+00E 15+00N to 8+00S				
January 29, 1995	23	B31+00E	11+50N	6+50S	1800
		B32+00E	12+00N	6+00S	1800
		B33+00E	12+00N	7+00N	500
January 30, 1995	33	B33+00E	7+00N	5+00S	1200
		B34+00E	11+50N	5+00S	1650
		B35+00E	11+50N	4+00N	750
January 31, 1995	23	B35+00E	4+00N	4+00S	800
	overlap	B36+00E	4+50N	3+50S	750
	Change AB				
February 1, 1995	18	35+00E	7+50N	4+00S	1150
		34+00E	7+00N	4+50S	1200
		38+00E	7+50N	BL0+00	750
February 2, 1995	18	33+00E	BL0+00	5+00S	500
		32+00E	7+50N	5+50S	1300
		31+00E	7+50N	6+00S	1350
	Set up AB13				
	13	31+00E	3+50N	6+00S	950
		32+00E	3+50N	BL0+00	350
February 3, 1995	13	L32+00E	BL0+00	5+50S	550
		L33+00E	3+50N	4+50S	800
		L34+00E	3+50N	4+50S	800
		L35+00E	3+50N	4+00S	750
	Set up AB 9 4+00S to 5+00N				
February 4, 1995	9	L32+00E	2+00N	2+50S	450
		L33+00E	2+00N	2+50S	450

		L34+00E	2+00N	2+50S	450
	Set up next block AB 21 15+00N to 6+00S				
February 5, 1995	21?	L36+00E	12+00N	4+00S	1600
		L37+00E	4+50N	3+00S	750
February 6, 1995	21?	L37+00E	12+00N	4+50N	750
		L38+00E	12+00N	4+00S	1600
		L39+00E	3+00N	4+00S	700
TOTAL (meters)					79100

APPENDIX C

INSTRUMENT SPECIFICATIONS
(from IRIS Instruments IP 6 Operating Manual)

Weather proof case	
Dimensions:	31 cm x 21 cm x 21 cm
Weight:	6 kg with dry cells
	7.8 kg with rechargeable bat.
Operating temperature:	-20°C to 70°C
	(-40°C to 70°C with optional screen heater)
Storage:	(-40°C to 70°C)
Power supply:	6 x 1.5 V dry cells (100 hr. @ 20°C) or
	2 x 6 V NiCad rechargeable (in series) (50 hrs @ 20°C) or
	1 x 12 V external
Input channels:	6
Input impedance:	10 Mohm
Input overvoltage protection:	up to 1000 volts
Input voltage range:	10 V maximum on each dipole
	15 V maximum sum over ch 2 to 6
SP compensation:	automatic ± 10 V with linear drift correction up to 1 mV/s
Noise rejection:	50 to 60 Hz powerline rejection
	100 dB common mode rejection (for Rs=0)
	automatic stacking
Primary voltage resolution:	1 μV after stacking
accuracy:	0.3% typically; maximum 1 over whole temperature range
Secondary voltage windows:	up to 10 windows; 3 preset window specs. plus fully programmable sampling.
Sampling rate:	10 ms
Synchronization accuracy:	10 ms, minimum 40 μV
Chargeability resolution:	0.1 mV/V
accuracy:	typically 0.6%. maximum 2% of reading ± 1 mV/V for V_p > 10 mV
Battery test:	manual and automatic before each measurement
Grounding resistance:	0.1 to 467 kohm
Memory capacity:	2505 records, 1 dipole/record
Data transfer:	serial link @ 300 to 19200 baud
	remote control capability through serial link @ 19200 baud

IP 6 Dump File Format

```
*   IP 6 (V9.1) *
*=====================*

#77     Jul  1 1980        11:57
   dipole 1 trigger 1 domain Time  T wave
   Programmable wind.  Grad. RCTGL array

   V= 331.605 Sp= -319  I= 1350.00 Rs=  0.50
   Ro=  6679.4 Ohm.m   M=  11.97 E=  0.4
   M1= 40.44  M2= 33.55  M3= 29.48  M4= 26.68
   M5= 20.95  M6= 15.52  M7= 12.50  M8=  9.77
   M9=  7.50  M10=  6.05

   cycl=  19 Time= 2000  V_D= 1280  M_D=  40
   T_M1=  20  T_M2=  30  T_M3=  30  T_M4=  30
   T_M5= 180  T_M6= 180  T_M7= 180  T_M8= 360
   T_M9= 360  T_M10= 360

   Spacing config. :  Imperial grid
    XP=-1300.0  Line=  400.0
     D= -100.0  AB/2= 2500.0

#78     Jul  1 1980        11:57
   dipole 2 trigger 1 domain Time  T wave
   Programmable wind.  Grad. RCTGL array

   V= 285.781 Sp=  388  I= 1350.00 Rs=  1.41
   Ro=  4687.7 Ohm.m   M=  26.75 E=  0.0
   M1= 76.18  M2= 66.06  M3= 59.31  M4= 54.53
   M5= 44.38  M6= 34.29  M7= 28.35  M8= 22.83
   M9= 18.06  M10= 14.96

   cycl=  19 Time= 2000  V_D= 1280  M_D=  40
   T_M1=  20  T_M2=  30  T_M3=  30  T_M4=  30
   T_M5= 180  T_M6= 180  T_M7= 180  T_M8= 360
   T_M9= 360  T_M10= 360

   Spacing config. :  Imperial grid
    XP=-1400.0  Line=  400.0
     D= -100.0  AB/2= 2500.0
```

APPENDIX D

LIST OF MAPS

Grid Location Map: (1: 10 000)

Grid/line location	UTM coordinates	P107-LOC-1

Stacked Profile Plan Maps: (stacked total chargeability and gradient apparent resistivity, linear vertical scales, mV/V and ohm-m, 1: 10 000 horizontal scale)

AB 200m through 600m	chargeability	P107-PLAN-CHG-AB2t6
AB 600m through 1000m	chargeability	P107-PLAN-CHG-AB6t10
AB 1100m through 1400m	chargeability	P107-PLAN-CHG-AB11t14
AB 1500m through 1800m	chargeability	P107-PLAN-CHG-AB15t18
AB 2000m through 2300m	chargeability	P107-PLAN-CHG-AB20t23
AB 2400m through 2800m	chargeability	P107-PLAN-CHG-AB24t28
AB 200m through 600m	apparent resistivity	P107-PLAN-RES-AB2t6
AB 600m through 1000m	apparent resis.	P107-PLAN-RES-AB6t10
AB 1100m through 1400m	apparent resis	P107-PLAN-RES-AB11t14
AB 1500m through 1800m	apparent resis	P107-PLAN-RES-AB15t18
AB 2000m through 2300m	apparent resis	P107-PLAN-RES-AB20t23
AB 2400m through 2800m	apparent resis	P107-PLAN-RES-AB24t28

APPENDIX E

LIST OF CLAIMS SURVEYED

No of Claims	Claim Numbers	Township	No of Units	Percent Covered by IP	Option
1	738194	Bristol	1	0	Placer-Dome
2	738195	Bristol	1	0	Placer-Dome
3	738196	Bristol	1	0	Placer-Dome
4	738197	Bristol	1	0	Placer-Dome
5	738198	Bristol	1	0	Placer-Dome
6	738199	Bristol	1	0	Placer-Dome
7	738200	Bristol	1	0	Placer-Dome
8	738201	Bristol	1	0	Placer-Dome
9	738202	Bristol	1	0	Placer-Dome
10	738203	Bristol	1	0	Placer-Dome
11	738204	Bristol	1	0	Placer-Dome
12	738205	Bristol	1	0	Placer-Dome
13	738206	Bristol	1	0	Placer-Dome
14	738207	Bristol	1	0	Placer-Dome
15	738208	Bristol	1	0	Placer-Dome
16	738209	Bristol	1	0	Placer-Dome
17	738210	Bristol	1	0	Placer-Dome
18	738211	Bristol	1	0	Placer-Dome
19	738212	Bristol	1	0	Placer-Dome
20	738213	Bristol	1	0	Placer-Dome
21	876377	Bristol	1	40	Placer-Dome
22	876378	Bristol	1	0	Placer-Dome
23	876379	Bristol	1	0	Placer-Dome
24	876380	Bristol	1	0	Placer-Dome
25	985601	Bristol	1	100	Placer-Dome
26	985602	Bristol	1	100	Placer-Dome
27	985603	Bristol	1	100	Placer-Dome
28	985604	Bristol	1	100	Placer-Dome
29	985605	Bristol	1	100	Placer-Dome
30	985608	Bristol	1	100	Placer-Dome
31	985609	Bristol	1	100	Placer-Dome
32	985610	Bristol	1	100	Placer-Dome
33	985611	Bristol	1	100	Placer-Dome
34	985612	Bristol	1	100	Placer-Dome
35	985613	Bristol	1	0	Placer-Dome
36	985614	Bristol	1	0	Placer-Dome
37	985615	Bristol	1	40	Placer-Dome
38	985616	Bristol	1	90	Placer-Dome
39	985617	Bristol	1	100	Placer-Dome
40	985618	Bristol	1	100	Placer-Dome
41	985619	Bristol	1	50	Placer-Dome
42	985622	Bristol	1	0	Placer-Dome
43	985623	Bristol	1	50	Placer-Dome
44	985624	Bristol	1	60	Placer-Dome
45	985625	Bristol	1	5	Placer-Dome
46	985626	Bristol	1	0	Placer-Dome
47	985627	Bristol	1	0	Placer-Dome
48	985628	Bristol	1	0	Placer-Dome
49	985629	Bristol	1	100	Placer-Dome
50	985630	Bristol	1	100	Placer-Dome
51	985631	Bristol	1	100	Placer-Dome
52	985632	Bristol	1	100	Placer-Dome
53	985633	Bristol	1	100	Placer-Dome
54	985634	Bristol	1	100	Placer-Dome
55	985635	Bristol	1	100	Placer-Dome
56	985636	Bristol	1	100	Placer-Dome
57	985637	Bristol	1	100	Placer-Dome
58	985638	Bristol	1	100	Placer-Dome
59	985639	Bristol	1	100	Placer-Dome
60	985640	Bristol	1	100	Placer-Dome

No of Claims	Claim Numbers	Township	No of Units	Percent Covered by IP	Option
61	985641	Bristol	1	100	Placer-Dome
62	985642	Bristol	1	100	Placer-Dome
63	985643	Bristol	1	100	Placer-Dome
64	985644	Bristol	1	100	Placer-Dome
65	985645	Bristol	1	100	Placer-Dome
66	985646	Bristol	1	100	Placer-Dome
67	985647	Bristol	1	100	Placer-Dome
68	985720	Ogden	1	0	Placer-Dome
69	985721	Ogden	1	0	Placer-Dome
70	985722	Ogden	1	0	Placer-Dome
71	985723	Ogden	1	0	Placer-Dome
72	985724	Ogden	1	0	Placer-Dome
73	985725	Ogden	1	0	Placer-Dome
74	985726	Ogden	1	0	Placer-Dome
75	985727	Bristol	1	85	Placer-Dome
76	985728	Bristol	1	40	Placer-Dome
77	985729	Bristol	1	100	Placer-Dome
78	985730	Bristol	1	100	Placer-Dome
79	985731	Bristol	1	100	Placer-Dome
80	985732	Bristol	1	100	Placer-Dome
81	985733	Bristol	1	10	Placer-Dome
82	985734	Bristol	1	0	Placer-Dome
83	985735	Bristol	1	0	Placer-Dome
84	985736	Bristol	1	5	Placer-Dome
85	985737	Bristol	1	100	Placer-Dome
86	985738	Bristol	1	100	Placer-Dome
87	985739	Bristol	1	100	Placer-Dome
88	985740	Bristol	1	95	Placer-Dome
89	985741	Bristol	1	0	Placer-Dome
90	985742	Bristol	1	0	Placer-Dome
91	985743	Bristol	1	0	Placer-Dome
92	985744	Bristol	1	0	Placer-Dome
93	985745	Bristol	1	80	Placer-Dome
94	985746	Bristol	1	100	Placer-Dome
95	985747	Bristol	1	95	Placer-Dome
96	985748	Bristol	1	50	Placer-Dome
97	985749	Bristol	1	0	Placer-Dome
98	985750	Bristol	1	0	Placer-Dome
99	985751	Bristol	1	0	Placer-Dome
100	985752	Bristol	1	0	Placer-Dome
101	985753	Bristol	1	5	Placer-Dome
102	985754	Bristol	1	5	Placer-Dome
103	997457	Bristol	1	50	Placer-Dome
104	997458	Bristol	1	100	Placer-Dome
105	997459	Bristol	1	100	Placer-Dome
106	997460	Bristol	1	100	Placer-Dome
107	997461	Bristol	1	100	Placer-Dome
108	997462	Bristol	1	100	Placer-Dome
109	997463	Bristol	1	100	Placer-Dome
110	997464	Bristol	1	100	Placer-Dome
111	997465	Bristol	1	100	Placer-Dome
112	997466	Bristol	1	100	Placer-Dome
113	997467	Bristol	1	100	Placer-Dome
114	997468	Bristol	1	100	Placer-Dome
115	997469	Bristol	1	100	Placer-Dome
116	997470	Bristol	1	100	Placer-Dome
117	997471	Bristol	1	100	Placer-Dome
118	997472	Bristol	1	100	Placer-Dome
119	997473	Bristol	1	100	Placer-Dome
120	997474	Bristol	1	100	Placer-Dome

No of Claims	Claim Numbers	Township	No of Units	Percent Covered by IP	Option
121	997475	Bristol	1	100	Placer-Dome
122	997476	Bristol	1	100	Placer-Dome
123	1089764	Bristol	1	100	Poirier
124	1189881	Bristol	9	95	Band-Ore
125	1189882	Bristol	1	100	Band-Ore
126	1189883	Bristol	10	5	Band-Ore
127	1189884	Bristol	3	100	Band-Ore
128	1189885	Bristol	2	100	Band-Ore
129	1189889	Bristol	8	50	Band-Ore
130	1189890	Bristol	2	67	Band-Ore
131	1190941	Bristol	6	50	Band-Ore
131			164		

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number: W9560.00230

Personal information collected on this form is obtained under the authority of the I this collection should be directed to the Provincial Manager, Mining Lands, Mi Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

42A06NW0011 2.16073 BRISTOL

900

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for requirements of filing assessment work or consult the Mining Recorder.
- A separate copy of this form must be completed for each Work Group.
- Technical reports and maps must accompany this form in duplicate.
- A sketch, showing the claims the work is assigned to, must accompany this form.

Recorded Holder(s): TECK CORPORATION		Client No.: 200408
Address: SUITE 600, 200 BURRARD ST VANCOUVER B.C.		Telephone No.: 604-687-1117
Mining Division: PORCUPINE	Township/Area: BRISTOL	M or G Plan No.:
Dates Work Performed — From: SEPT 28/94	To: FEB 11/95	

Work Performed (Check One Work Group Only)

	Work Group	Type
✓	Geotechnical Survey	GEOPHYSICAL SURVEY GRADIENT I.P.
	Physical Work, Including Drilling	
	Rehabilitation	
	Other Authorized Work	
	Assays	
	Assignment from Reserve	

RECEIVED
JUN 8 1995
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs $ 196,166

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
QUANTEC I.P. INC. DENNIS MORRISON	WATERDOWN, ONTARIO
J. LEGAULT	QUANTEC CONSULTING, PORCUPINE ONT.

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date: APRIL 06/95	Recorded Holder or Agent (Signature): M. Y. Houle

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying: MAURICE Y. HOULE. PROJECT GEOLOGIST	8-125 KIRBY AVE TIMMINS ONT. P4N 1J7	
Telepone No.: 705-268-3357	Date: APRIL 06/95	Certified By (Signature): M. Y. Houle

For Office Use Only

Total Value Cr. Recorded: $196,166.	Date Recorded: A/	Mining Recorder: T. Pirkey	Received Stamp
	Deemed Approval Date: JULY 6, 1995	Date Approved	
	Date Notice for Amendments Sent		

RECEIVED
APR 7 1995
@ 12:35 (c) Qx
PORCUPINE MINING DIVISION

0241 (03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
✓	876377	1	863	0	0	863
✓	985601	1	2157	0	0	2157
✓	985602	1	2157	0	0	2157
✓	985603	1	2157	0	0	2157
✓	985604	1	2157	0	0	2157
✓	985605	1	2157	0	0	2157
✓	985608	1	2157	0	0	2157
✓	985609	1	2157	0	0	2157
✓	985610	1	2157	0	0	2157
✓	985611	1	2157	0	0	2157
✓	985612	1	2157	0	0	2157
✓	985615	1	863	0	0	863
✓	985616	1	1941	0	0	1941
✓	985617	1	2157	0	0	2157
✓	985618	1	2157	0	0	2157
✓	985619	1	1079	0	0	1079
✓	985623	1	1079	0	0	1079
	17	Total Number of Claims	31709	0	0	31709
			Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

0241 (03/91)

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as prioritized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

Signature

Date

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
✓	985624	1	1294	0	0	1294
*	985625	1	108	0	0	108
✓	985629	1	2157	0	0	2157
✓	985630	1	2157	0	0	2157
✓	985631	1	2157	0	0	2157
✓	985632	1	2157	0	0	2157
✓	985633	1	2157	0	0	2157
✓	985634	1	2157	0	0	2157
✓	985635	1	2157	0	0	2157
✓	985636	1	2157	0	0	2157
✓	985637	1	2157	0	0	2157
✓	985638	1	2157	0	0	2157
✓	985639	1	2157	0	0	2157
✓	985640	1	2157	0	0	2157
✓	985641	1	2157	0	0	2157
✓	985642	1	2157	0	0	2157
✓	985643	1	2157	0	0	2157
	17		33757	0	0	33757
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

0241 (03/91)

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

Signature

Date

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
✓	985644	1	2157	6	0	2157
✓	985645	1	2157	0	0	2157
✓	985646	1	2157	0	0	2157
✓	985647	1	2157	0	0	2157
✓	985727	1	1834	0	0	1834
*	985728	1	863	0	0	863
*	985729	1	2157	0	0	2157
✓	985730	1	2157	0	0	2157
✓	985731	1	2157	0	0	2157
✓	985732	1	2157	0	0	2157
✓	985733	1	219	0	0	219
*	985736	1	108	0	0	108
✓	985737	1	2157	0	0	2157
✓	985738	1	2157	0	0	2157
✓	985739	1	2157	0	0	2157
✓	985740	1	2049	0	0	2049
✓	985745	1	1726	0	0	1726
	17		30526	0	0	30526
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

0841 (03/91)

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritze the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

Signature

Date

Ministry of Northern Development and Mines

Ontario

Ministère du Développement du Nord et des mines

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction: W9560.00230

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type SURVEY COSTS		158,409
	ON SITE INTERPRETATION		8,820
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
	Total Direct Costs Total des coûts directs		167,229

2. Indirect Costs/Coûts indirects

** Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type TRUCK RENTAL	10,802	
			10,803
Food and Lodging Nourriture et hébergement	FOOD + ACCOMMODATION	15,198	15,198
Mobilization and Demobilization Mobilisation et démobilisation	MOB-DEMOB	2,936	2,936
	Sub Total of Indirect Costs Total partiel des coûts indirects		28,937
	Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)		28,937
	Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs) / **Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles)**		196,166

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
x 0.50 =	

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Évaluation totale demandée
x 0,50 =	

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as PROJECT GEOLOGIST I am authorized
(Recorded Holder, Agent, Position in Company)

to make this certification.

Attestation de l'état des coûts

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ je suis autorisé
(titulaire enregistré, représentant, poste occupé dans la compagnie)

à faire cette attestation.

RECEIVED
APR 7 1995
10:35 (c) QC
PORCUPINE MINING DIVISION

Signature	Date
	APRIL 06/95

0212 (04/91)

Nota : Dans cette formule, lorsqu'il désigne des personnes, le masculin est utilisé au sens neutre.

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Geoscience Approvals Section
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

July 28, 1995

Our File: 2.16073
Transaction #: W9560.00230

Mining Recorder
Ministry of Northern Development & Mines
60 Wilson Avenue, 1st Floor
Timmins, Ontario
P4N 2S7

Dear Mr. White:

Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS 876377 et al. IN BRISTOL TOWNSHIP

All deficiencies associated with this work report have been corrected. Accordingly, assessment credits have been approved as outlined on the report of work form. The credits have been approved under Section 14 (Geophysical) of the Mining Act Regulations.

The approval date is July 20, 1995.

If you have any questions regarding this correspondence, please contact Steven Beneteau at (705) 670-5858.

Yours sincerely,

Mark Hall
Acting Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

SBB/lj

cc: Resident Geologist
Timmins, Ontario

Assessment Files Library
Sudbury, Ontario

MOUNTJOY TWP.

MAP SYMBOLOGY

- Aerial Cableway
- Boundary
  - International
  - Interprovincial
  - District, Township Indian Reserve
  - Approximate
  - Lot, Concession
  - Approximate
  - Park Boundary
- Bridge
- Road, Railroad
- Building
- Chimney
- Cliff, Pit, Pile
- Contours
  - Interpolated
  - Approximate
- Depression
- Control Points
  - Horizontal
  - Vertical
- Culvert
- Falls
- Fence, Hedge, Wall
- Feature Outline (Construction features, etc.)
- Flooded Land
- Lock
- Marsh or Swamp
- Mast
- Mine Head Frame
- Outcrop
- Pipeline (above ground)
- Railroad
  - Single Track
  - Double Track
  - Abandoned
  - Turntable
- Road
  - Highway, County Township
  - Access (road of doubtful maintenance or significant driveway)
  - Trail, Bush Road (portage alley)
- Rapids
  - Double line river with multiple rapids
  - Double line river with multiple rapids
- Reservoir
- River, Stream, Canal
  - Approximate apparent direction of flow
- Rock
  - Significant
  - Shoal
- Spot Elevation (loose elevations)
- Tower
- Transmission Line
  - Poles, Pylons
- Tunnel
- Utility Poles
- Wharf, Dock, Pier
- Wooded Area

REFERENCES

L.O. 6613 - BOOMING GROUNDS - COVERS THE WESTERLY HALF OF THE BED OF THE MATTAGAMI RIVER FLOWING THROUGH THE TOWNSHIP FILE: 73543

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File

(R1) ~~BONA FIDE APPLICATION UNDER P.L.A. FOR SURFACE RIGHTS~~

(R2) NRW 51/79, 2/11/79 S.R.O.

(R3) ~~BONA FIDE APPLICATION UNDER P.L.A., MAY 9, 1985~~

(R4) BONA FIDE APPLICATION UNDER P.L.A. PLOTTED JUNE 4, 1985

(LUP) APPLICATION PENDING UNDER PUBLIC LANDS ACT NOTICE RECEIVED 93-MAR-30 (SNOWMOBILE TRAIL)

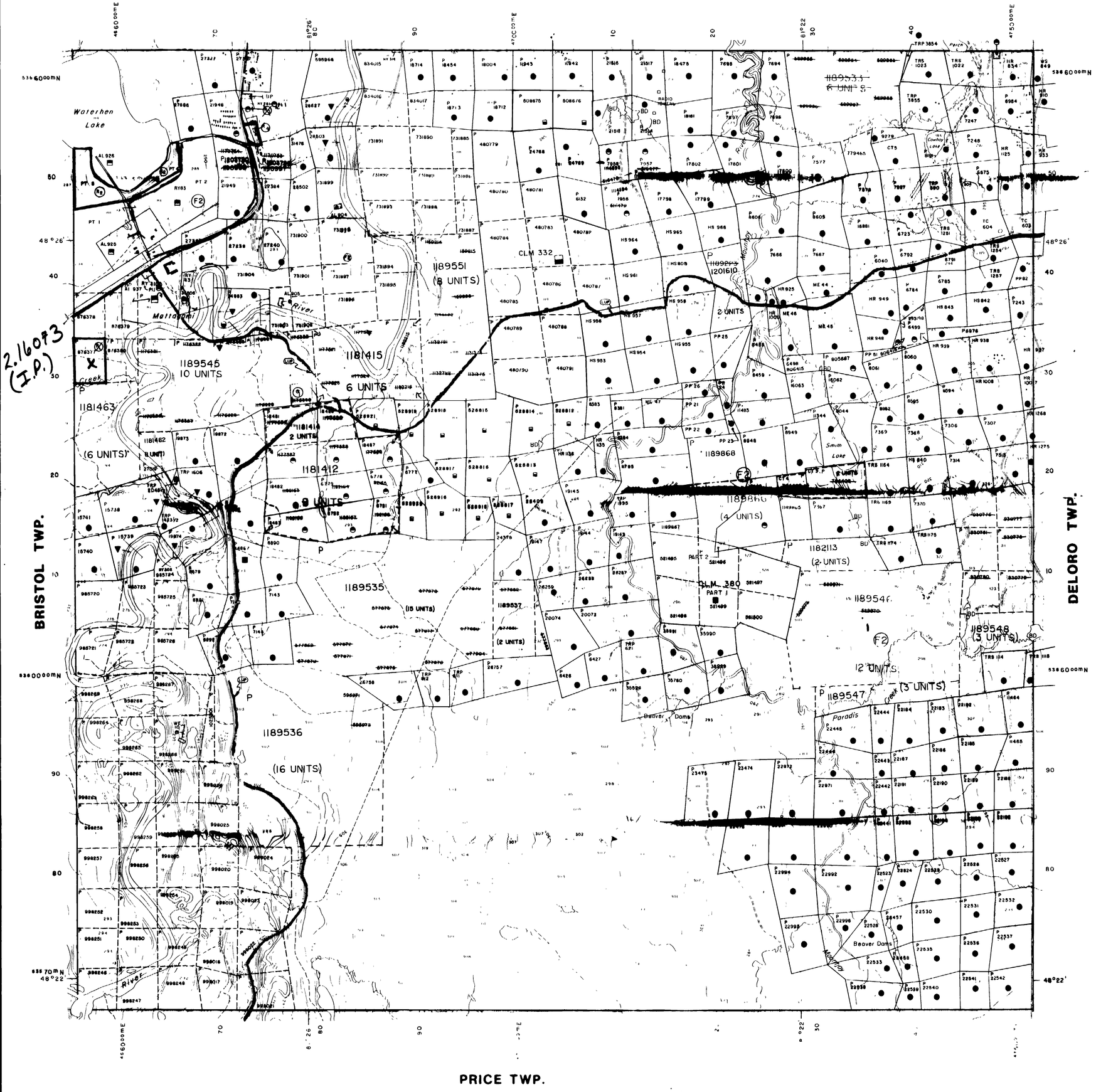
(Q) AGGREGATE PERMIT

(T) ~~THIS TWP. IS SUBJECT TO FORESTRY ACTIVITIES IN 92/93. FURTHER INFORMATION AVAILABLE ON FILE.~~

(F2) THIS TWP. SUBJECT RIGHTS TO FOREST ACTIVITY IN 1995/96 FURTHER INFORMATION AVAILABLE ON FILE

~~MRO Open~~
~~June 6/94~~
~~8:00 AM~~

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON



LEGEND

- HIGHWAY AND ROUTE No
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS, BASE LINES ETC
  - LOTS, MINING CLAIMS PARCELS, ETC
- UNSURVEYED LINES
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	⊖
" MINING RIGHTS ONLY	⊖
LEASE SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	■
" , MINING RIGHTS ONLY	■
LICENCE OF OCCUPATION	▼
ORDER IN COUNCIL	OC
RESERVATION	Ⓡ
CANCELLED	Ⓒ
SAND & GRAVEL	Ⓢ

NOTE MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913 VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT R.S.O. 1970 CHAP. 380, SEC. 63 SUBSEC. 1

Metres 500 0 1000 Metres
Chains 10 0 10 20 30 40 50 60 70 Chains
Feet 500 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000
GRID ZONE : 17

NOTES

ISSUED
JUN 27 1995
PORCUPINE MINING DIVISION

2.16073

TOWNSHIP
OGDEN

M N R ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE

Ontario Ministry of Natural Resources — Land Management Branch

ORIGINAL COMPILATION JULY 1984
ACTIVATED JULY 13 1992 BY DC
REVISED

Number G-3979

42A08NW0011 2 16073 BRISTOL

200

MAP SYMBOLOGY

Aerial Cableway
Boundary
International
Interprovincial
District, Township, Indian Reserve
Approximate
Lot, Concession
Approximate
Park Boundary
Bridge
Road, Railroad
Building
Chimney
Cliff, Pit, Pile
Contours
Interpolated
Approximate
Depression
Control Points
Horizontal
Vertical
Culvert
Falls
Double line river
Fence, Hedge, Wall
Feature Outline (Construction features, etc.)
Flooded Land
Lock
Marsh or Swamp
Mast
Mine Head Frame
Outcrop
Pipeline (above ground)
Railroad
Single Track
Double Track
Abandoned
Turntable
Road
Highway County Township
Access (road of doughtful maintenance or significant driveway)
Trail, Bush Road (portage alley)
Rapids
Double line river with multiple rapids
Double line river with multiple rapids
Reservoir
River, Stream, Canal
Approximate seasonal direction of flow
Rock
Significant
Shoal
Spot Elevation (lake elevations)
Tower
Transmission Line
Poles
Pylons
Tunnel
Utility Poles
Wharf, Dock, Pier
Wooded Area

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
(R1)			S.R.O.	164584

(R) ~~PROSPECTING, STAKING, SALE OR LEASE, SECTION 36 THE MINING ACT RSO 1980 ORDER NO. W-88/86 WR DATED 86-OCT-30.~~

(R2) MINING AND SURFACE RIGHTS RE-OPENED TO PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT R.S.O. 1990 ORDER NO. O-P-22/92 NER DATED 92-AUG-01 (CLAIM NO.'S P-451541 TO P-451548 INCL., P-453999, P-454000, P-479503 TO P-479506 INCL. AND P-480315 TO P-480317 INCL.)

(R3) ~~MINING AND SURFACE RIGHTS WITHDRAWN FROM PROSPECTING, STAKING, SALE OR LEASE, SECTION 36 OF THE MINING ACT, RSO 1980 ORDER NO. W-50/86 DATED 86-MAY-21.~~

(F) ~~THIS TWP. SUBJECT TO FOREST ACTIVITY IN 1992/93. FURTHER INFORMATION AVAILABLE ON FILE.~~

(R3) MINING AND SURFACE RIGHTS RE-OPENED TO PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT, R.S.O. 1990 ORDER NO. O-P-24/92 NER DATED 92-SEP-10 AT 7:00 A.M. E.S.T (CLAIM NO.S P-528266 TO P-528272 INCL. AND P-528309 TO P-528312 INCL.)

(R2) MINING AND SURFACE RIGHTS RE-OPENED TO PROSPECTING STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT, R.S.O. 1990 ORDER NO O-P 29/92 NER DATED 92-NOV-02 AT 7:00 A.M. E.S.T (CLAIM NO.S P-451531 TO P-451533 INCL.)

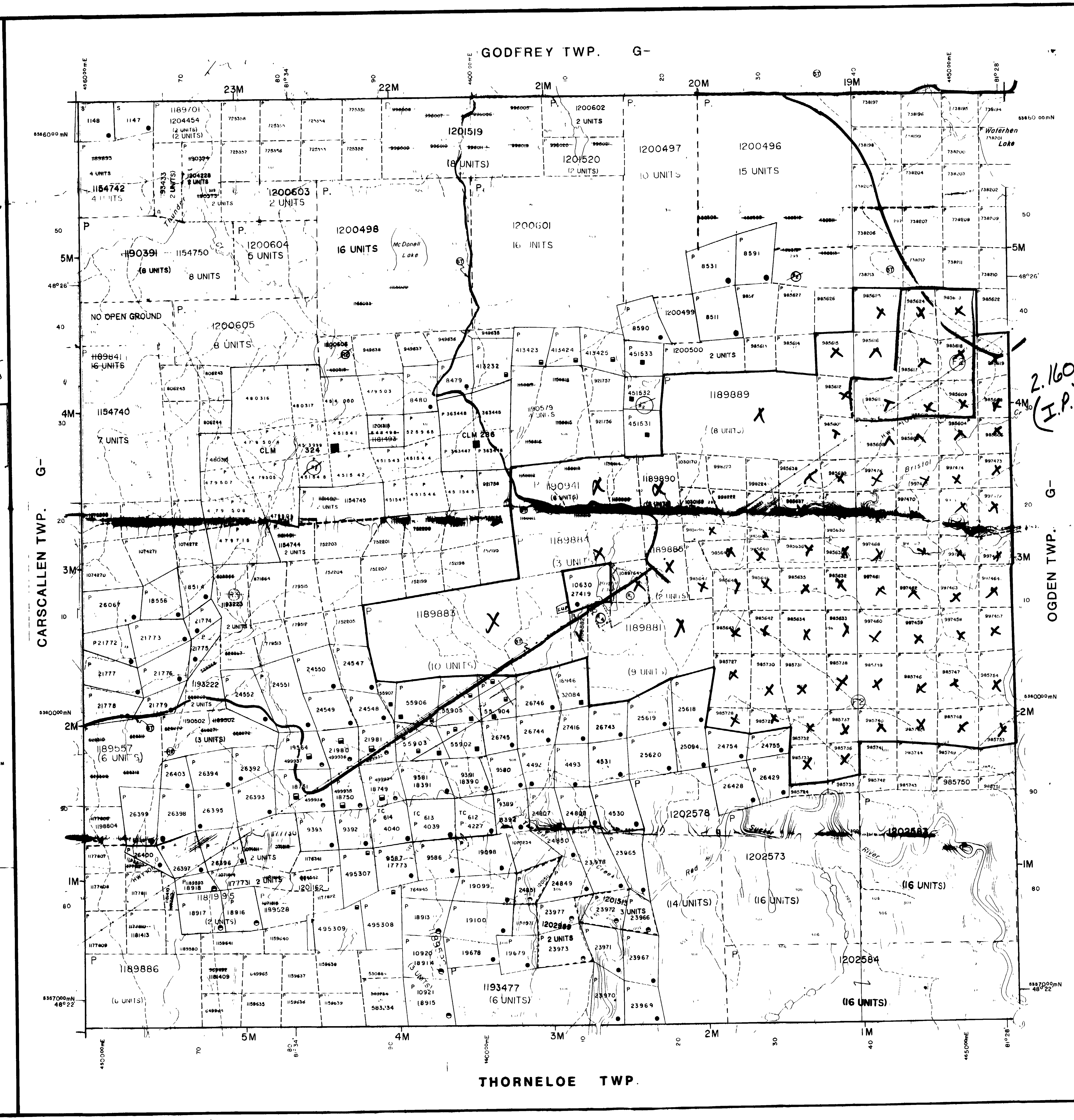
(R2) MINING AND SURFACE RIGHTS RE-OPENED TO PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 35 OF THE MINING ACT R.S.O. 1990 ORDER NO O-P 30/92 NER DATED 92 NOV-02 AT 7:00 AM E.S.T (CLAIM NO.S P 480308 TO P 480313 INCL. AND P-480318)

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON

KEY PLAN
For O.B.M. Map

20 17 4500 53600	20 17 4600 53600
20 17 4500 53500	20 17 4600 53500

not to scale



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT SURFACE & MINING RIGHTS	●
SURFACE RIGHTS ONLY	◓
MINING RIGHTS ONLY	◒
LEASE SURFACE & MINING RIGHTS	■
SURFACE RIGHTS ONLY	⬒
MINING RIGHTS ONLY	⬓
LICENCE OF OCCUPATION	▼
ORDER IN COUNCIL	OC
RESERVATION	(R)
CANCELLED	⊗
SAND & GRAVEL	(S)

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6 1913 VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT R.S.O. 1970 CHAP. 380 SEC. 63 SUBSEC. 1

Metres 500 0 1000 Metres
Chains 10 0 10 20 30 40 50 60 70 Chains
Feet 500 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000
ZONE 17

(ST) APPLICATION PENDING UNDER THE PUBLIC LANDS ACT NOTICE RECEIVED 92-DEC-21 SNOWMOBILE TRAILS

(R4) APPLICATION FOR CROWN LAND UNDER THE PUBLIC LANDS ACT NOTICE RECEIVED 93-MAY-4 CGB EXCAVATION TOP SOIL HOLDING STORAGE ETC.

(F2) THIS TWP SUBJECT TO FOREST ACTIVITY IN 1995/96. AREAS DESIGNATED EXACTLY AS SUBMITTED BY MNR TIMMINS

ISSUED
JUN 27 1995
PORCUPINE MINING DIVISION

2.16073

TOWNSHIP
BRISTOL

M N R ADMINISTRATIVE DISTRICT
TIMMINS
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE

Ministry of Natural Resources — Land Management Branch
Ontario

ORIGINAL COMPILATION JULY 1984
ACTIVATED JULY 13, 1992 BY DC
REVISED
CHECKED BY GW

Number
G-3998

42A08NW0011 2.16073 BRISTOL
210

459000E 460000E 461000E 462000E 463000E 464000E 465000E 466000E 467000E

5366000N 5365000N 5364000N 5363000N 5362000N 5361000N 5360000N 5359000N

Godfrey Twp.
Bristol Twp.
Mountjoy Twp.
Ogden Twp.
Waterhen Creek
Waterhen Lake
McDonell Lake
Bristol Creek
HWY 101
Mattagami River
Thunder Creek
Mattagami River

T.L. 15+00N
T.L. 10+00N
T.L. 5+00N
T.L. 10+00S
T.L. 20+00S
T.L. 25+00S
B.L. 0+00 Az.060°
300+06
300+01
400+01
400+06
0+00
25+00S
90+00

N

LEGEND

GEOTEM CONDUCTORS (O.G.S. Survey, TIMMINS AREA)

11-12 Chan. 9-10 Chan. 7-8 Chan. 5-6 Chan. 3-4 Chan. 1-2 Chan.

ENGINEER-ENGINEER
ONTARIO LIBERTY
33174

0 200m 400m 600m 800m

2.16073 1:10,000

TECK EXPLORATION LTD.

BRISTOL TP. PROPERTY

Surveyed by:
QUANTEC IP INC.

DATE DRAWN: February 1995	SCALE: 1:10 000	DWG No:	
DRAWN By: LAMBERT GEOSCIENCES LTD.	JOB No: 16320	P107-_GC-1	
APPROVED By: M.Y.HOULE	N.T.S: 42 A/5,6		

42A06NW0011 2.16073 BRISTOL

220

Godfrey Twp.
Bristol Twp.
Mountjoy Twp.
Ogden Twp.

5366000mN

5359000mN

457000mE

466000mE

N

Thunder Creek

McDonell Lake

Creek

Waterhen Lake

PLACER-DOME

BAND-ORE

AUBE OPTION

POIRIER

Bristol Lake

Bristol Creek

Thunder Creek

River

Mattagami River

Tatachikapika River

HWY 144

T.L.10+00N

T.L.5+00N

T.L.0+00

T.L.5+00S

T.L.10+00S

T.L.15+00S

T.L.20+00S

1994-1995 I.P. Survey Boundary

2.160 KM

0 200 400 600 800 METRES

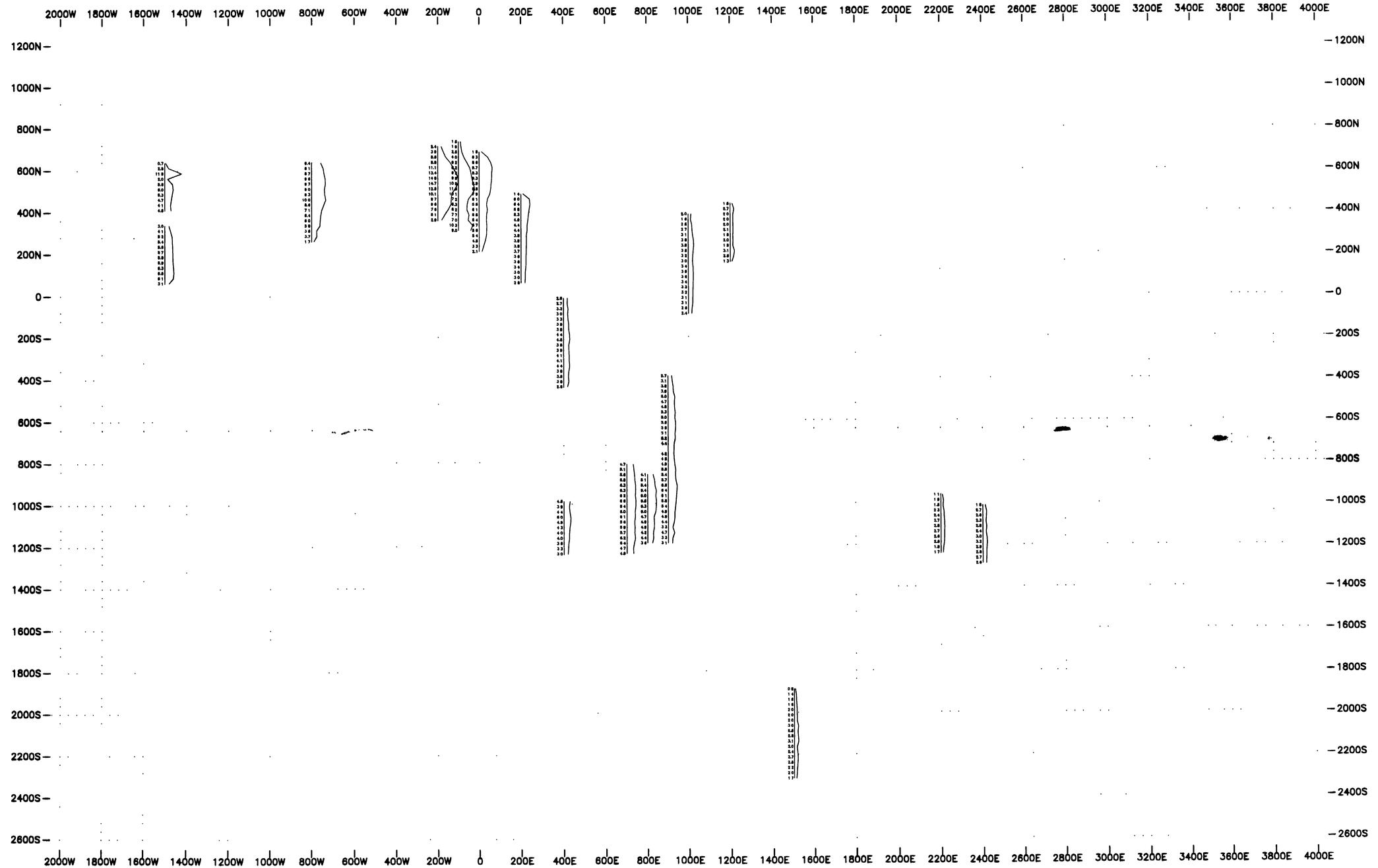
TECK EXPLORATION LTD.

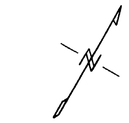
PROPERTY MAP
BRISTOL TP. PROPERTY

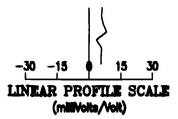
DATE DRAWN:	JULY 1995	SCALE: 1:10 000	DWG No: 7101
DRAWN By:	B.G. HOPKINS	JOB No: 16320	
APPROVED By:	M.Y.HOULE	N.T.S: 42 A/5,6	

230

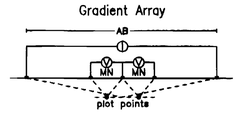
Total Chargeability (mV/V)







Gradient Array



Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

2.16073

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

TOTAL CHARGEABILITY

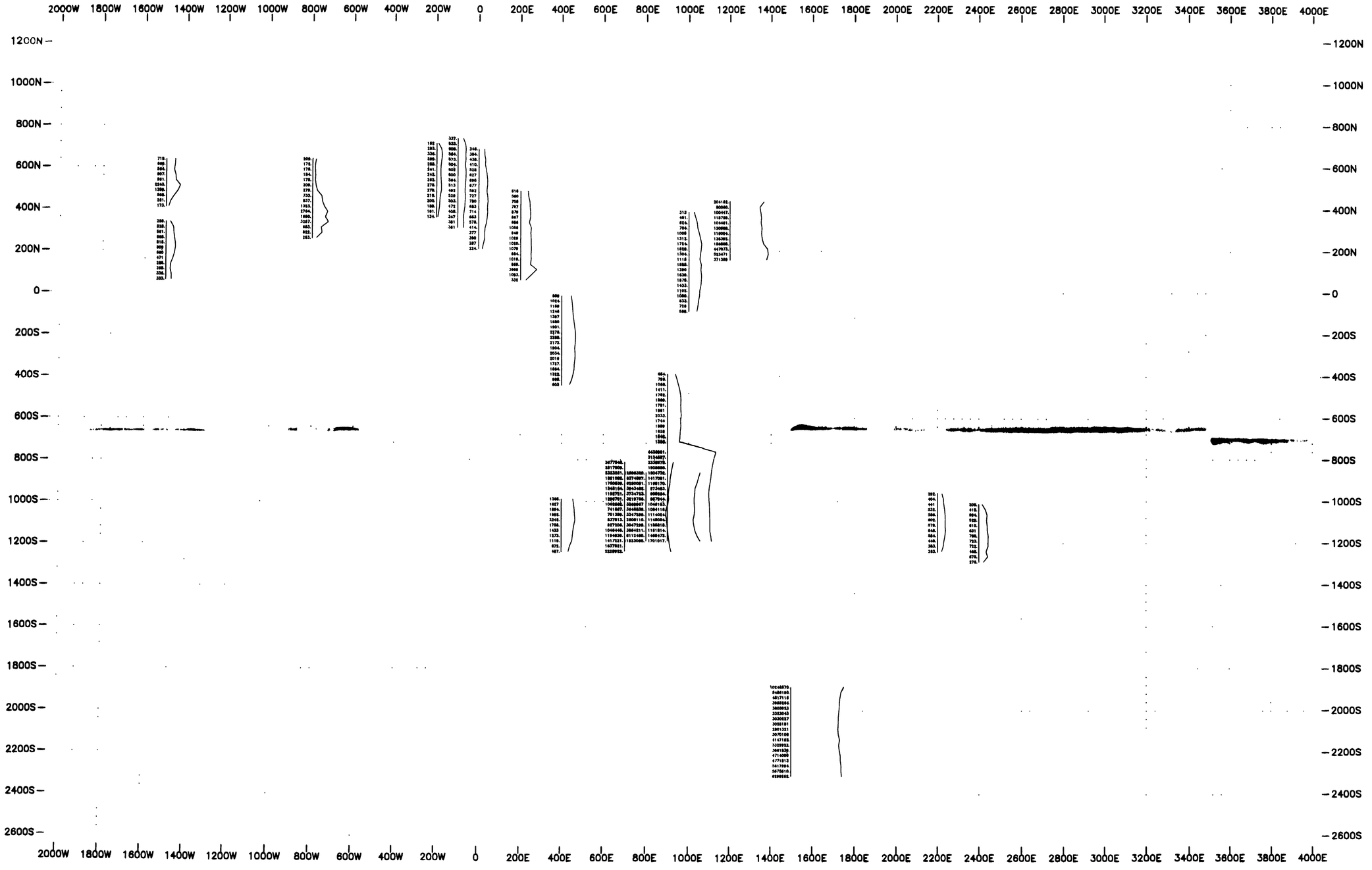
AB=200 to 600 meters

Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time:	4 seconds
Station Interval:	25 meters
Chargeability Profile Scale:	15 units/cm

Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6 Tx = Huntec Mk4 (7.5 kW)

Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-CHG-AB216

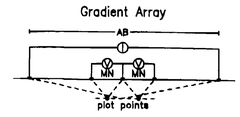
Apparent Resistivity (ohm-meters)



100 10000

LOG PROFILE SCALE
(milliVolts/Volt)

Gradient Array



Scale 1:10000

100 0 100 200 300 400 500 600
(metres)

2.10073

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

APPARENT RESISTIVITY

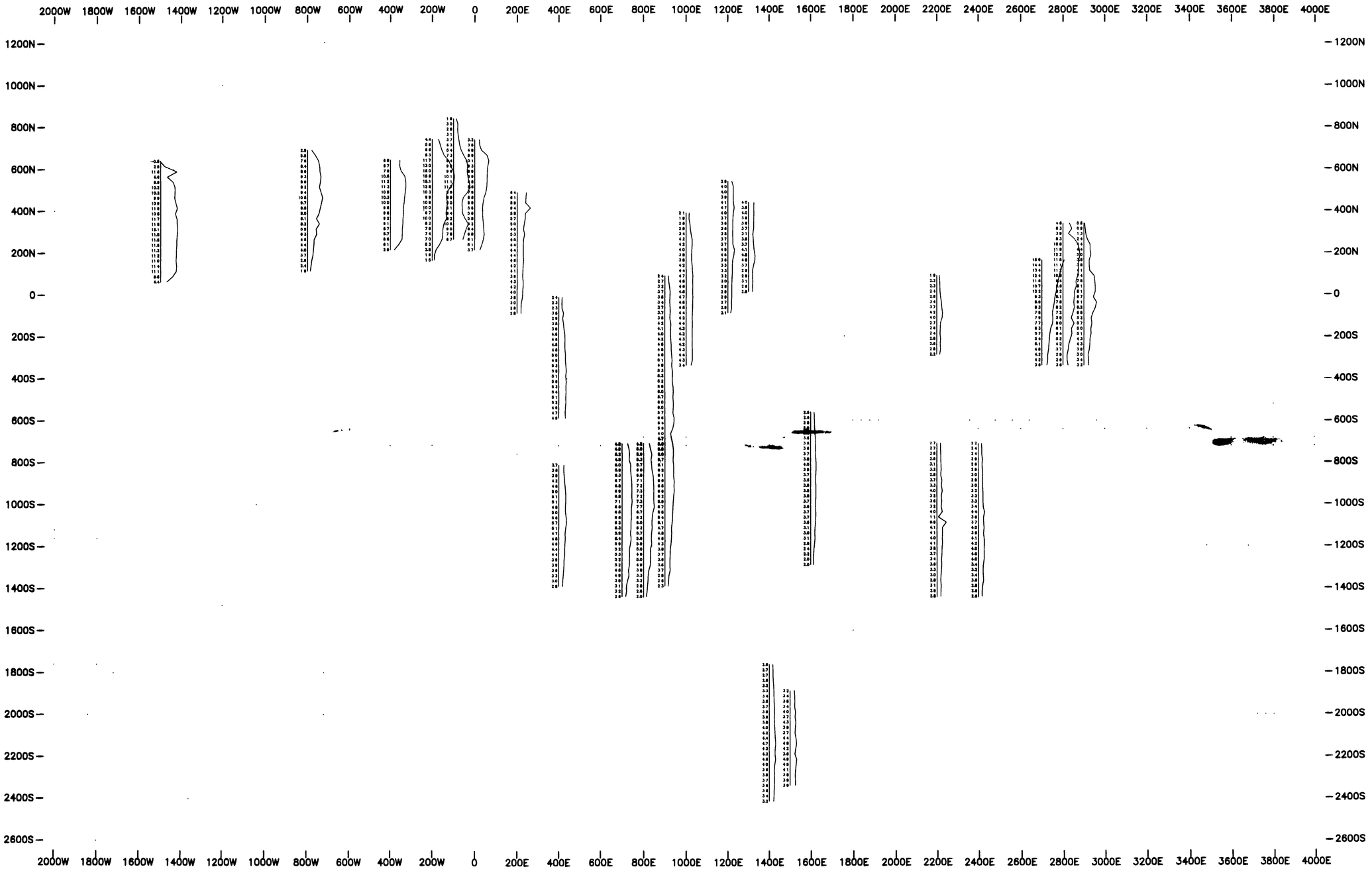
AB=200 to 600 meters

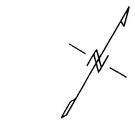
Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time:	4 seconds
Station Interval:	25 meters
Resistivity Profile Scale:	2 decades/cm
Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6 Tx = Huntec Mk4 (7.5 kW)

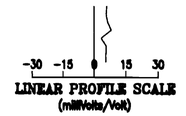
Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-RES-AB2t6

42A08NW0011 2 10073 BRISTOL

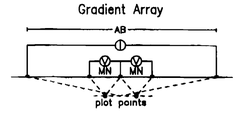
Total Chargeability (mV/V)







Gradient Array



Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

2.1603

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

TOTAL CHARGEABILITY

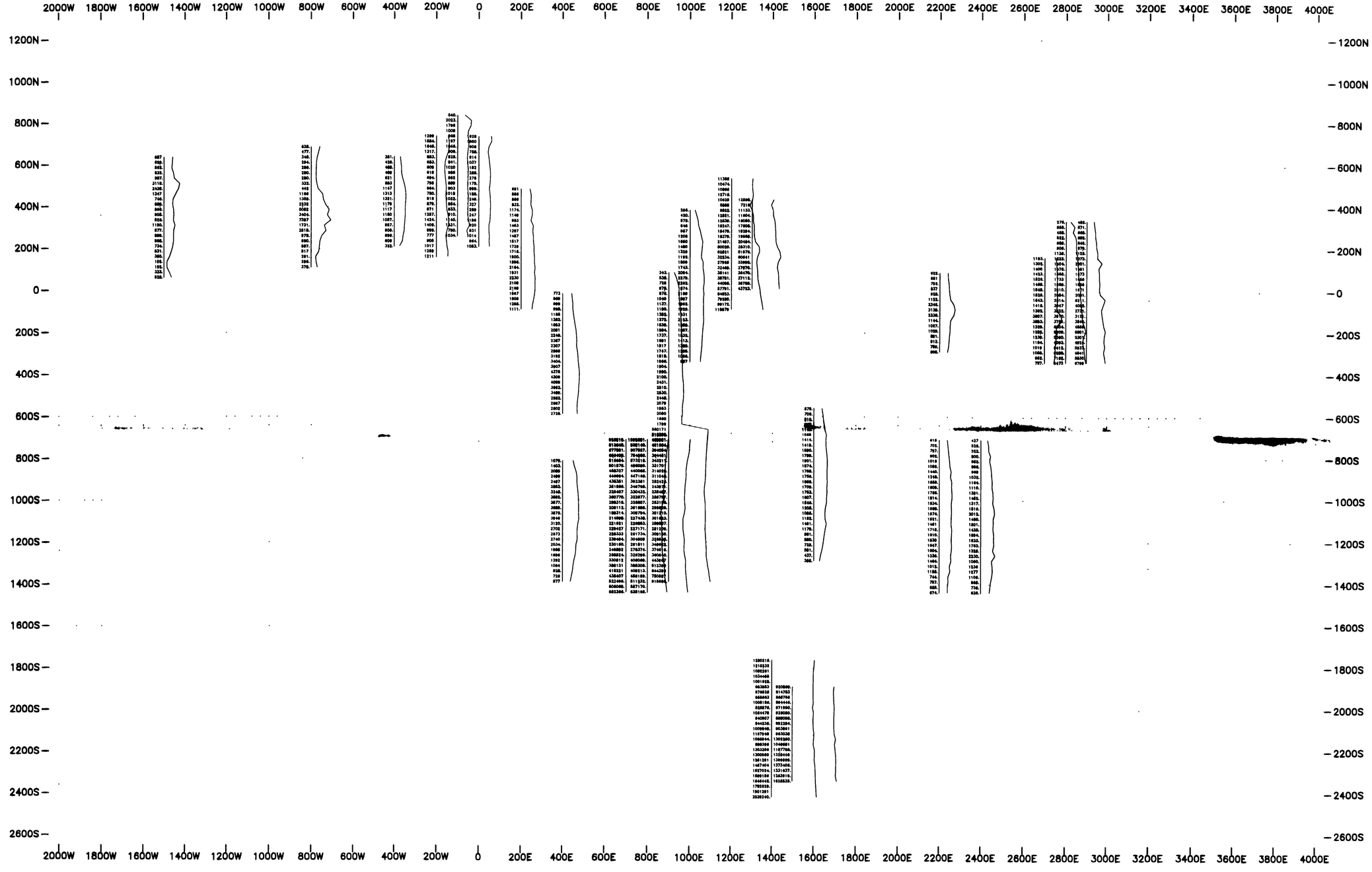
AB=600 to 1000 meters

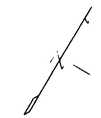
Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time:	4 seconds
Station Interval:	25 meters
Chargeability Profile Scale.	15 units/cm

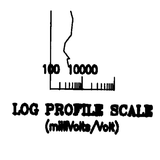
Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6
	Tx = Huntec Mk4 (7.5 kW)

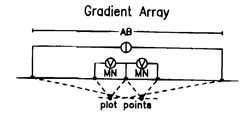
Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-CHG-AB6t10

Apparent Resistivity (ohm-meters)









Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

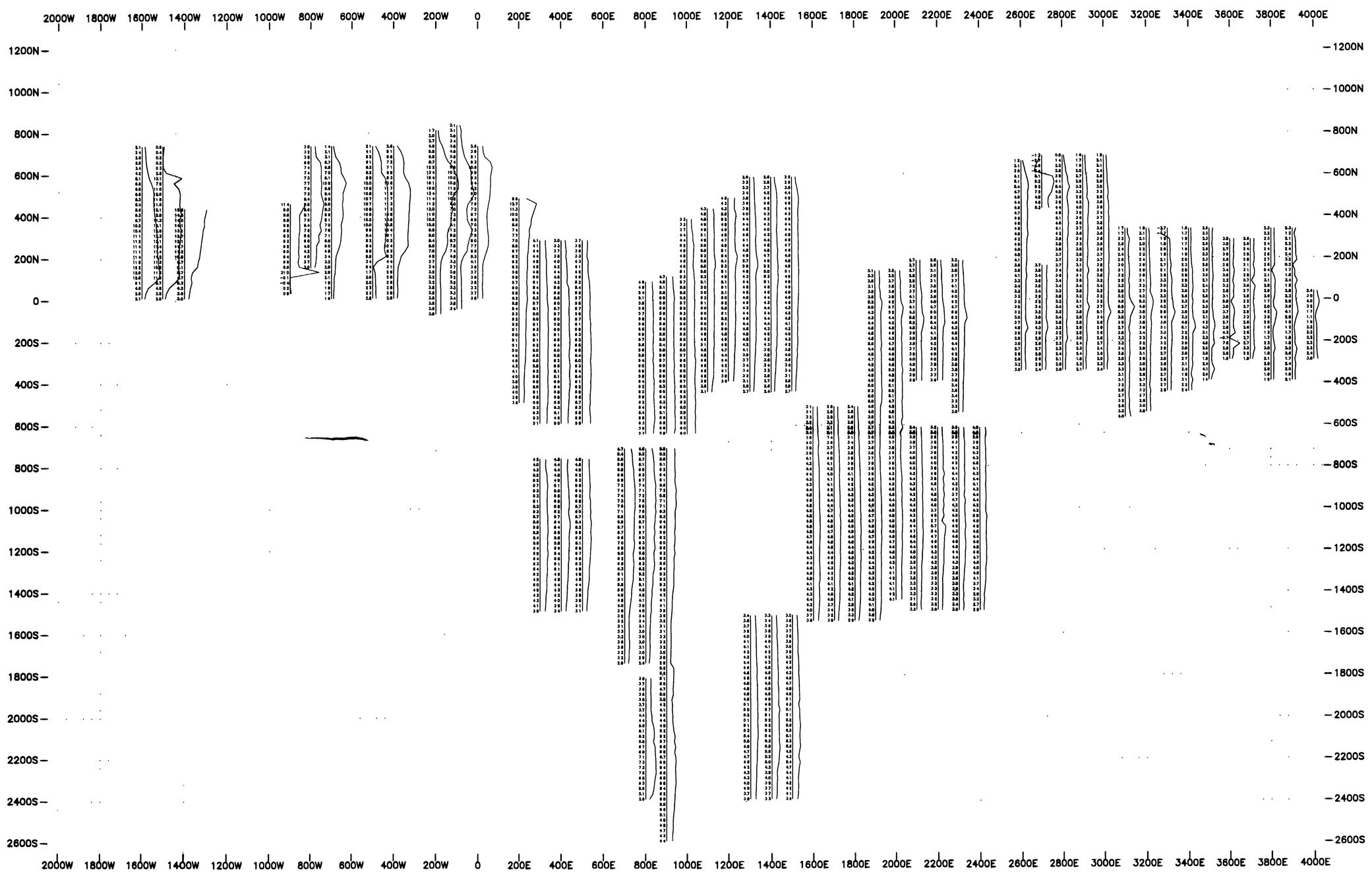
APPARENT RESISTIVITY

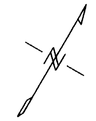
AB=600 to 1000 meters

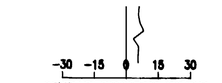
Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time:	4 seconds
Station Interval:	25 meters
Resistivity Profile Scale:	2 decades/cm
Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6 Tx = Huntec Mk4 (7.5 kW)

Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-RES-AB6t10

Total Chargeability (mV/V)

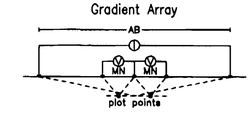






2.100

Gradient Array



Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

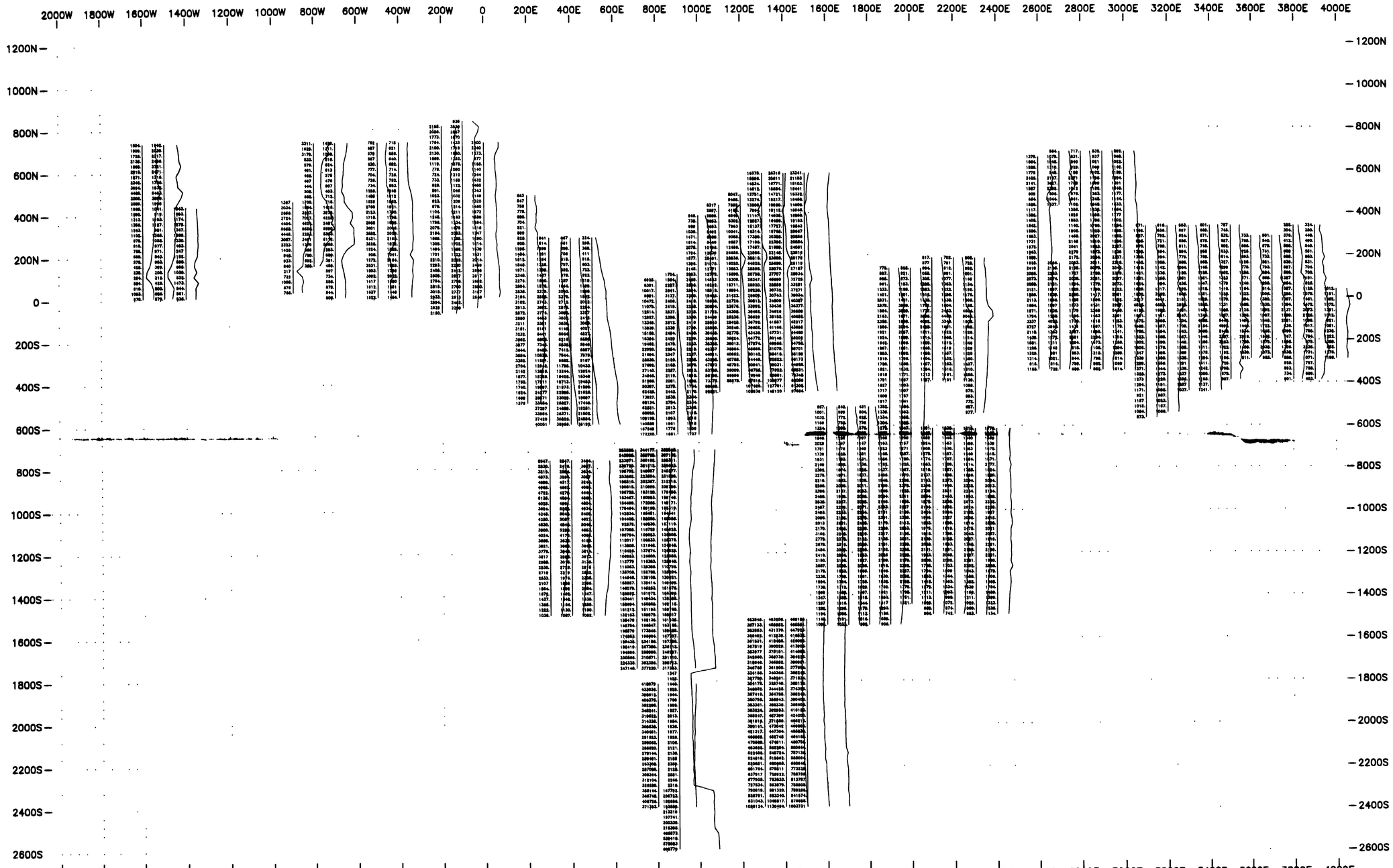
TOTAL CHARGEABILITY

AB=1100 to 1400 meters

Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time:	4 seconds
Station Interval:	25 meters
Chargeability Profile Scale:	15 units/cm
Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6 Tx = Huntec Mk4 (7.5 kW)

Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-CHG-AB11t14

Apparent Resistivity (ohm-meters)

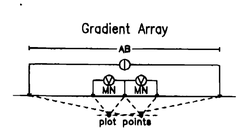


100 10000

LOG PROFILE SCALE (mV/Volts/VoR)

2.1073

Gradient Array



Scale 1:10000

100 0 100 200 300 400 500 600 (meters)

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

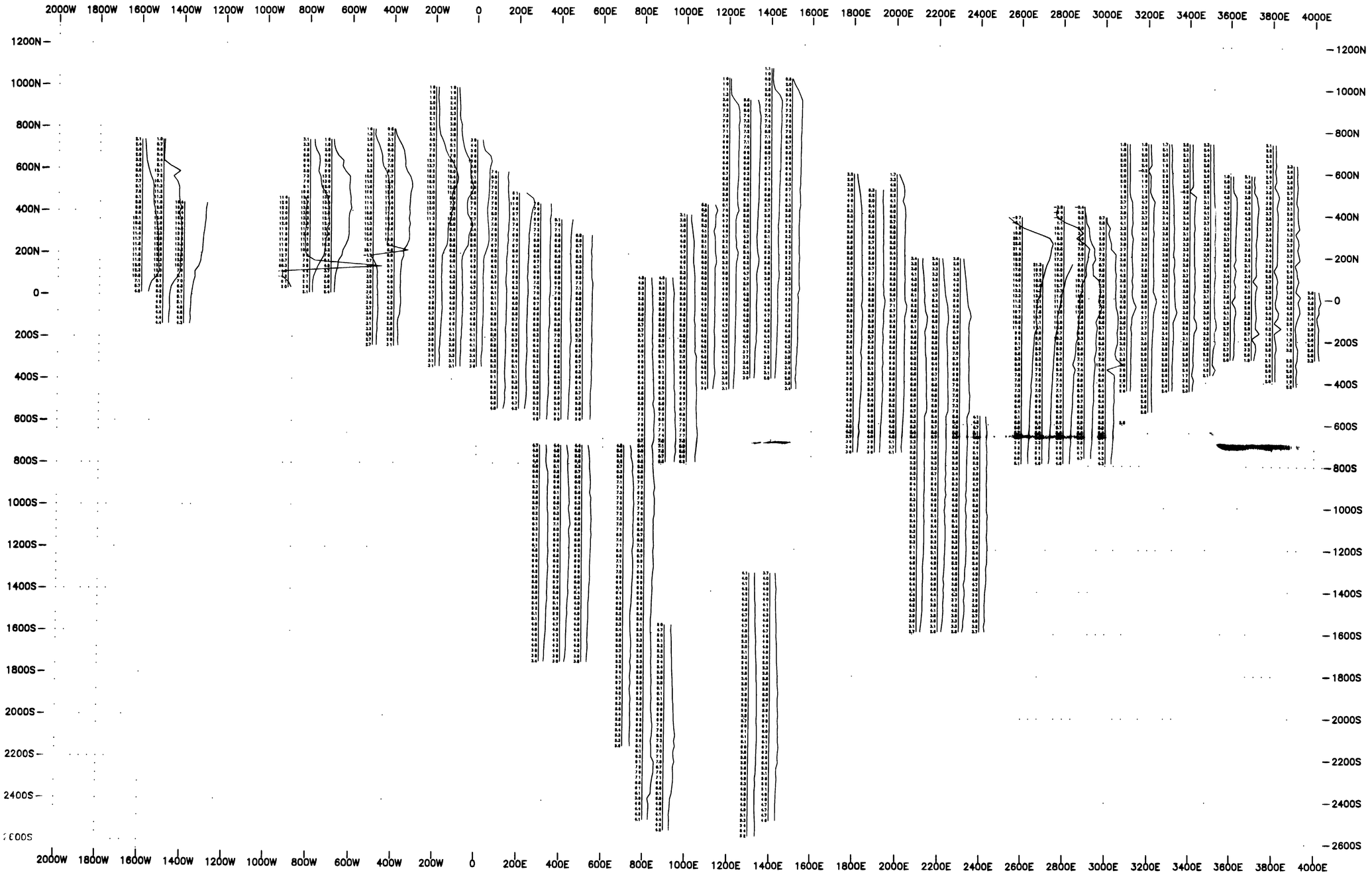
APPARENT RESISTIVITY

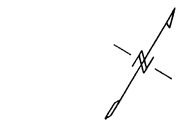
AB=1100 to 1400 meters

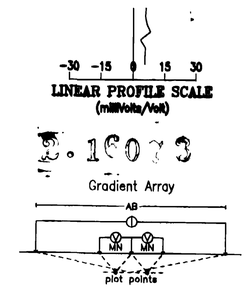
Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time:	4 seconds
Station Interval:	25 meters
Resistivity Profile Scale:	2 decades/cm
Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6
	Tx = Huntec Mk4 (7.5 kW)

Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-RES-AB1114

Total Chargeability (mV/V)







Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

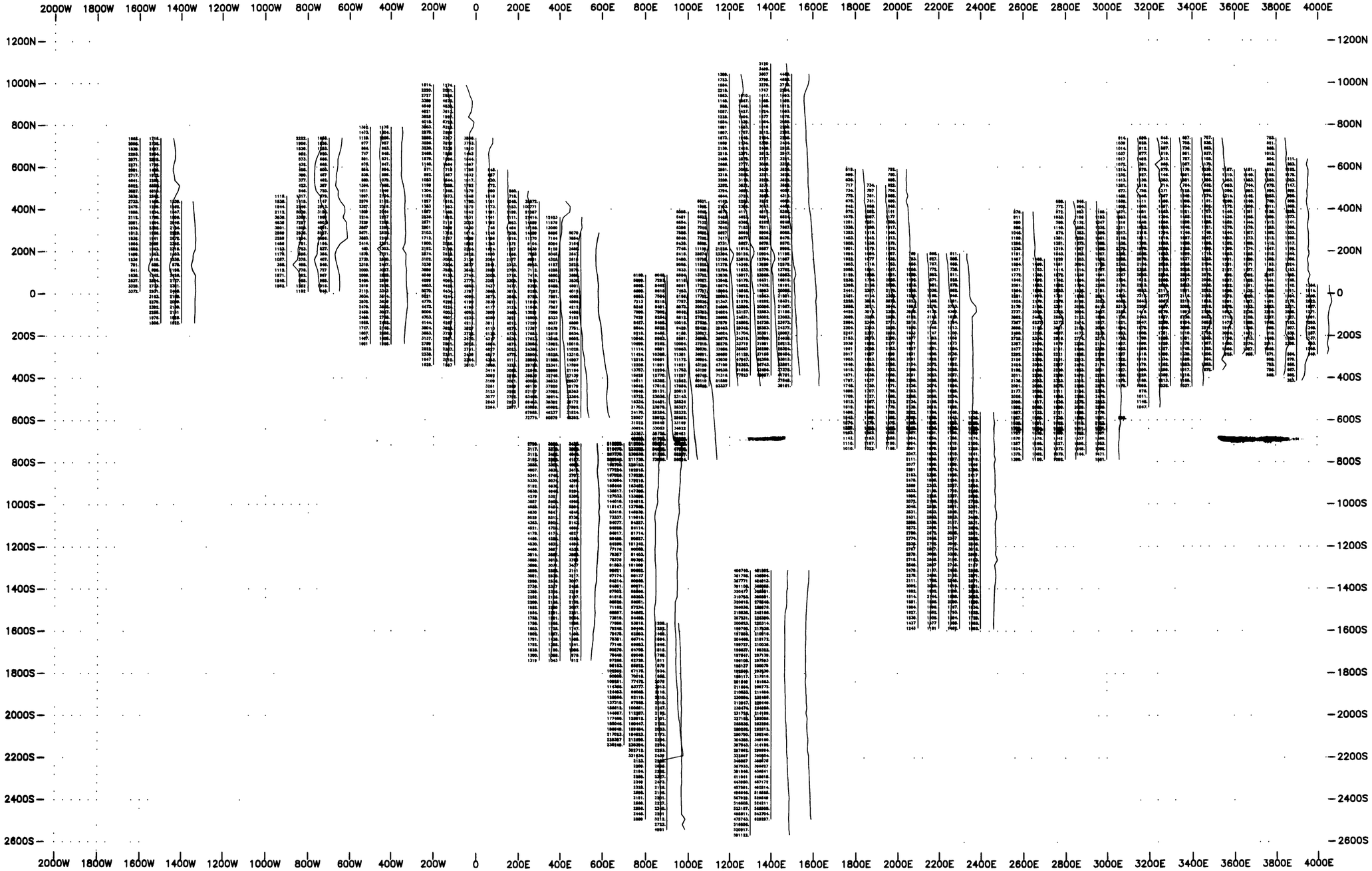
TOTAL CHARGEABILITY

AB=1500 to 1800 meters

Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time:	4 seconds
Station Interval:	25 meters
Chargeability Profile Scale:	15 units/cm
Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6 Tx = Huntec Mk4 (7.5 kW)

Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-CHG-AB15118

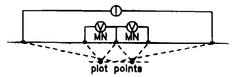
Apparent Resistivity (ohm-meters)



100 10000

LOG PROFILE SCALE (milliVolts/Volt)

Gradient Array



Scale 1:10000

100 0 100 200 300 400 500 600 (meters)

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

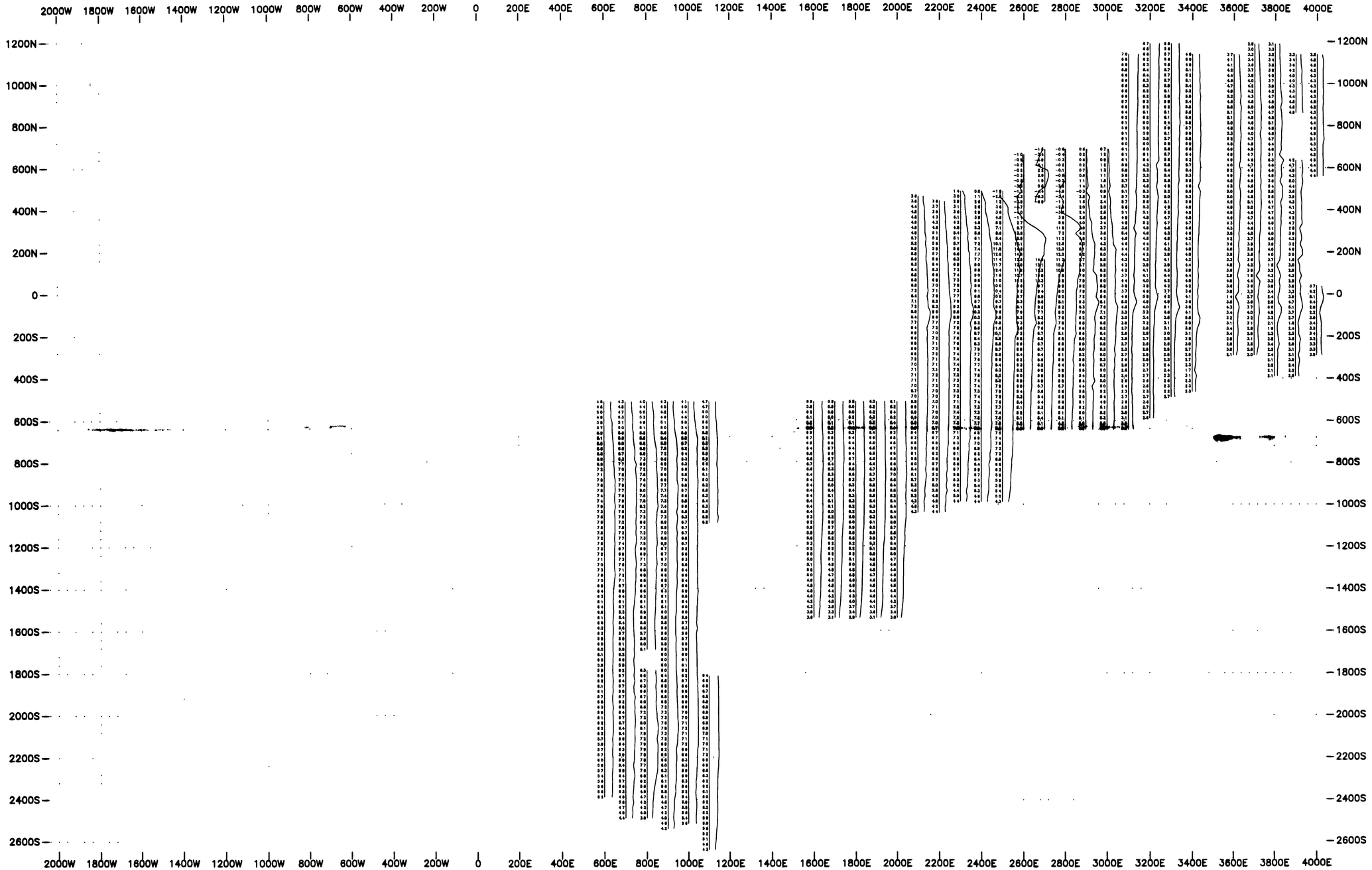
APPARENT RESISTIVITY

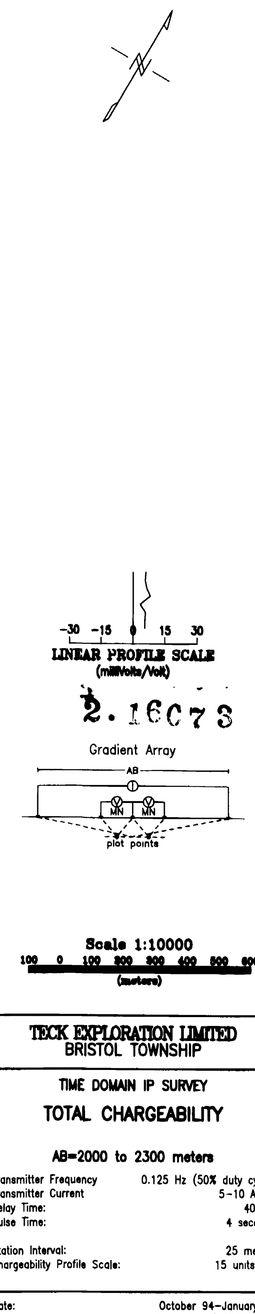
AB=1500 to 1800 meters

Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time:	4 seconds
Station Interval:	25 meters
Resistivity Profile Scale:	2 decades/cm
Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6 Tx = Huntec Mk4 (7.5 kW)

Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-RES-AB15t18

Total Chargeability (mV/V)





Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

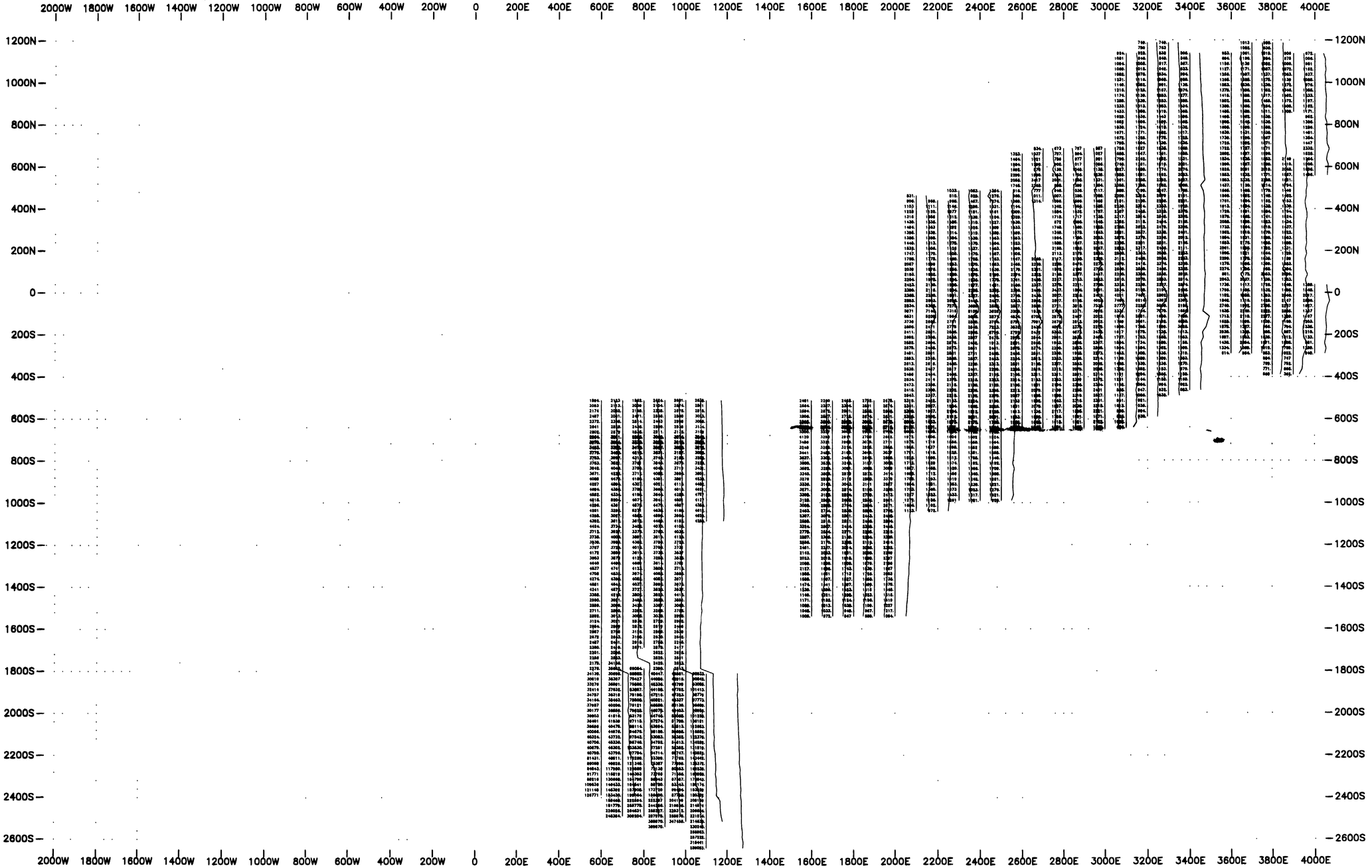
TOTAL CHARGEABILITY

AB=2000 to 2300 meters

Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time:	4 seconds
Station Interval:	25 meters
Chargeability Profile Scale:	15 units/cm
Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6 Tx = Huntec Mk4 (7.5 kW)

Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-CHG-AB20123

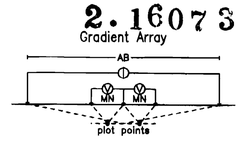
Apparent Resistivity (ohm-meters)



100 10000

LOG PROFILE SCALE
(milliVolts/Volt)

2.16073
Gradient Array



Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

APPARENT RESISTIVITY

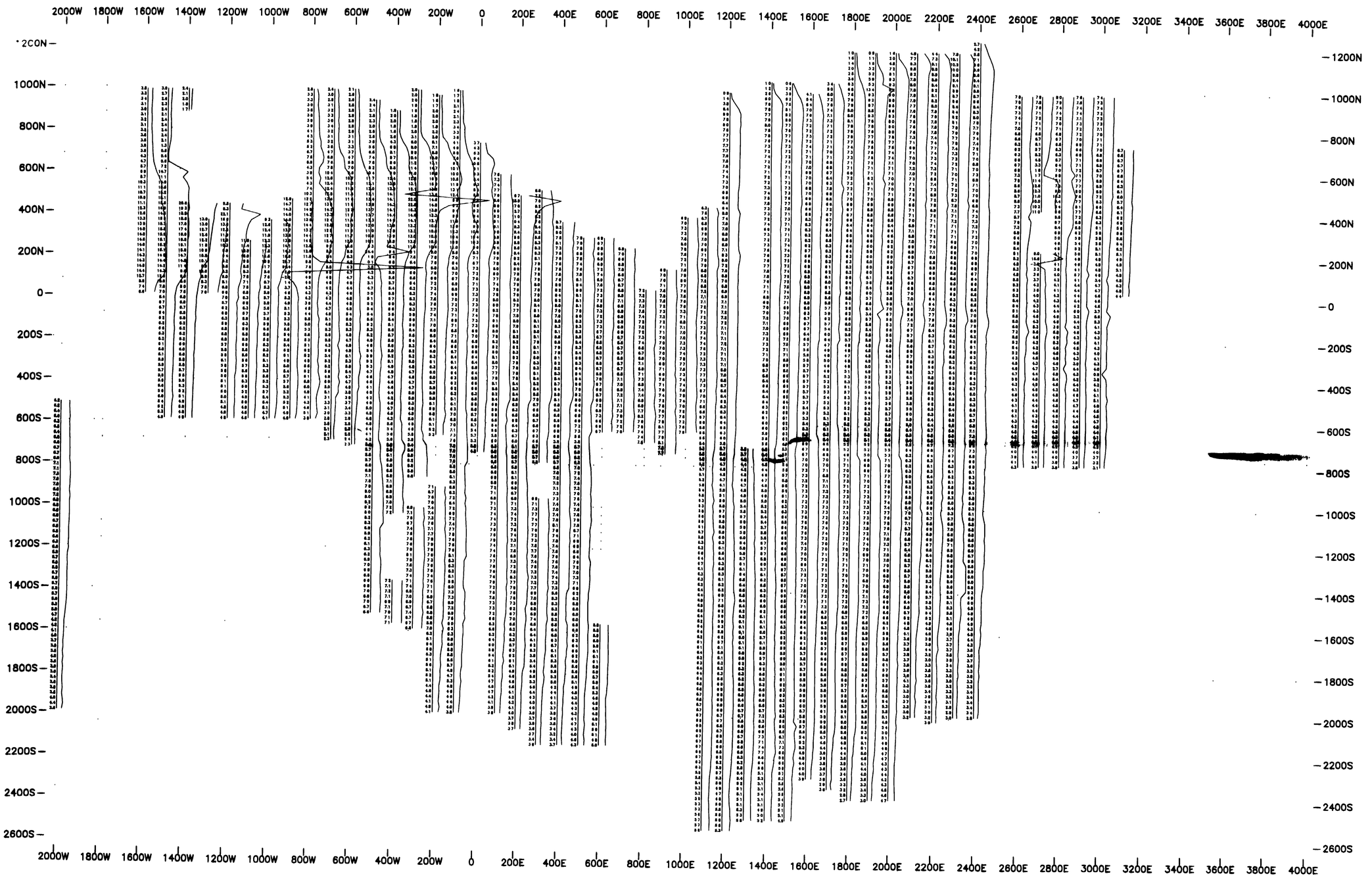
AB=2000 to 2300 meters

Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time:	4 seconds
Station Interval:	25 meters
Resistivity Profile Scale:	2 decades/cm
Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6 Tx = Huntec MK4 (7.5 kW)

Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-RES-AB2to23

42A06NW0011 2 16073 BRISTOL

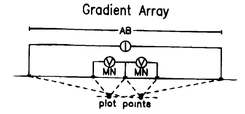
Total Chargeability (mV/V)



-30 -15 0 15 30
LINEAR PROFILE SCALE
(milliVolts/Volt)

2.16073

Gradient Array



Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

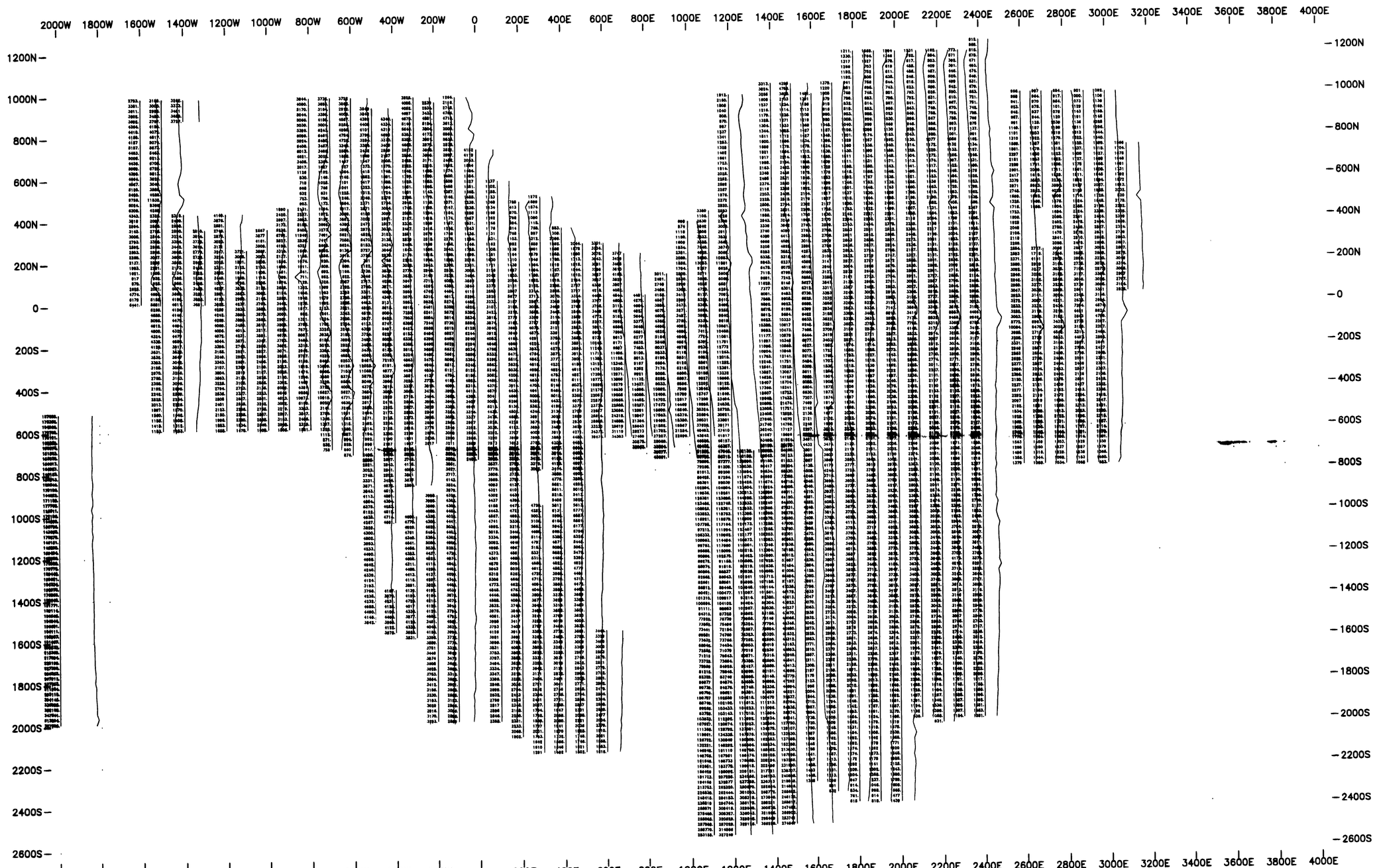
TOTAL CHARGEABILITY

AB=2400 to 2800 meters

Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time.	4 seconds
Station Interval:	25 meters
Chargeability Profile Scale:	15 units/cm
Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6 Tx = Huntec Mk4 (7.5 kW)

Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-CHG-AB2412B

Apparent Resistivity (ohm-meters)

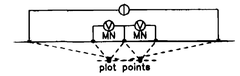


100 10000

LOG PROFILE SCALE
(milliVolts/Volt)

5,160*3

Gradient Array



Scale 1:10000

100 0 100 200 300 400 500 600
(meters)

TECK EXPLORATION LIMITED
BRISTOL TOWNSHIP

TIME DOMAIN IP SURVEY

APPARENT RESISTIVITY

AB=2400 to 2800 meters

Transmitter Frequency	0.125 Hz (50% duty cycle)
Transmitter Current	5-10 Amps
Delay Time:	40 ms
Pulse Time:	4 seconds
Station Interval:	25 meters
Resistivity Profile Scale.	2 decades/cm
Date:	October 94-January 95
Instrumentation:	Rx = Iris / BRGM IP-6 Tx = Huntec Mk4 (7.5 kW)

Surveyed & Processed by:
QUANTEC IP INC.
DWG. #: P107-PLAN-RES-AB2412B