VOLUME II

KLAWLI OPTION

NTS: 93N/7 & 8
INDUCED POLARIZATION SURVEY 1990

To Accompany the Klawli Option
Geology, Geophysics, Trenching & Drilling 1990

RECEIVED

DEC 05 1990

Gold Commissioner's Office
VANCOUVER, B.C.

Claims: KLA 1-12
Omineca Mining Division
55^{O} 17'N, 124^{O} 31'W

Owner: Rio Algom Exploration Inc.

Operator: Rio Algom Exploration Inc.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,612

Part 2 of 2

E Angus Campbell

November 1990

AN ASSESSMENT REPORT ON AN
INDUCED POLARIZATION SURVEY ON THE
KLAWLI CLAIMS
OMINECA MINING DIVISION
BRITISH COLUMBIA

LATITUDE 55°17'NORTH
LONGITUDE 124°31'WEST
N.T.S. 93N/7 AND 8

FOR

RIO ALGOM EXPLORATION INC.

BY

John Lloyd, M.Sc., P. Eng.
and
Daniel A. Klit, B.Sc.
LLOYD GEOPHYSICS INC.
VANCOUVER, BRITISH COLUMBIA

October, 1990

Lloyd Geophysics

SUMMARY

During the period June 25 to July 13, 1990 Lloyd Geophysics Inc. carried out a time domain Induced Polarization (IP) survey on part of the Klawli (KLA) claims held under option by RIO ALGOM EXPLORATION INC., near Chuchi Lake, British Columbia.

A ten hole diamond drill programme totalling 1350 metres has been recommended to test two substantial IP anomalies which indicate the presence of a large sulphide system.

Where land holdings permit additional IP surveying is recommended to close off two anomalies which presently remain open along strike.

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Klawli Grid

1.0 INTRODUCTION

During the period June 25 to July 13, 1990 Lloyd Geophysics Inc. carried out a time domain Induced Polarization (IP) survey on part of the Klawli (KLA) claims held under option by RIO ALGOM EXPLORATION INC., near Chuchi Lake, British Columbia.

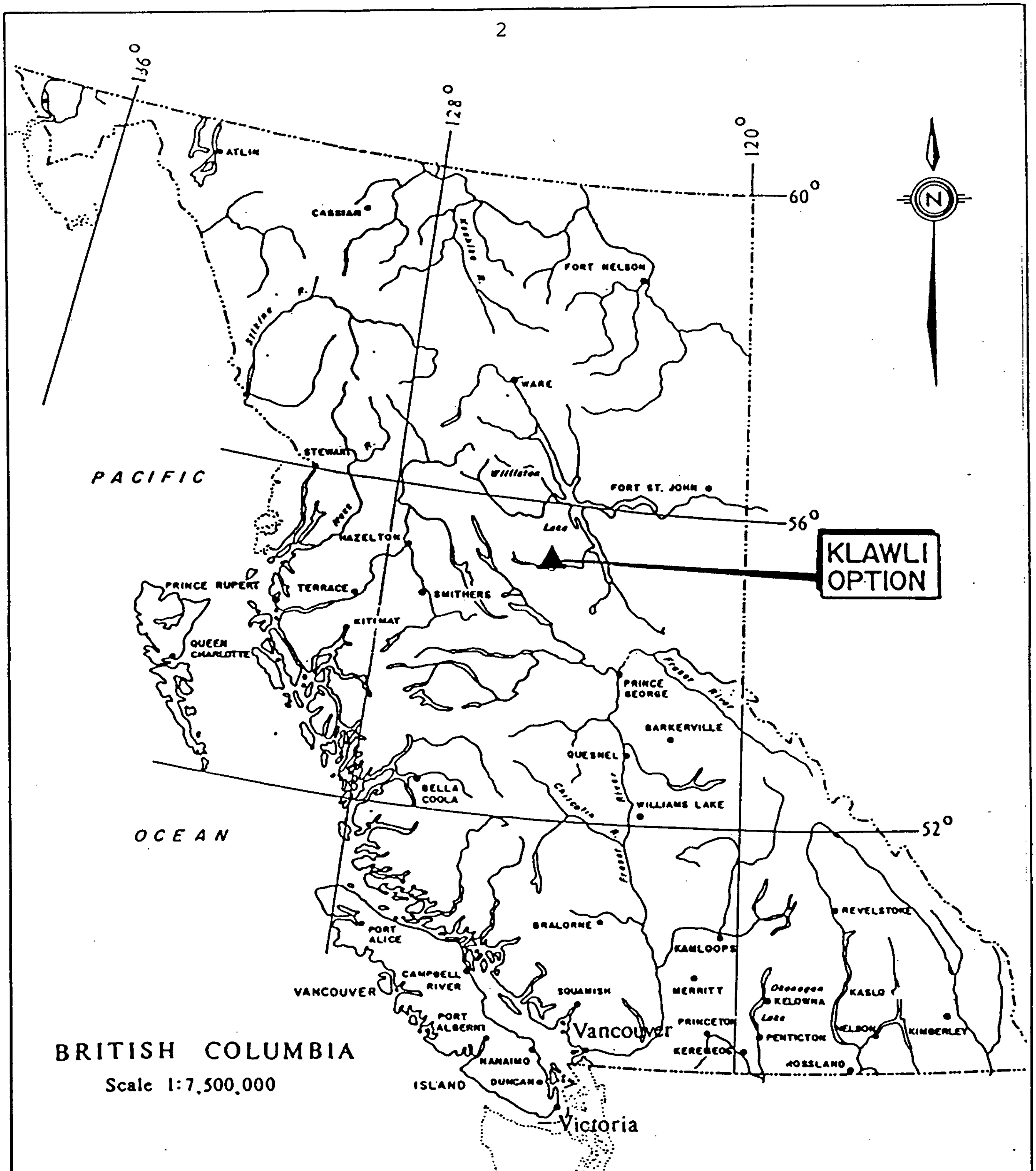
The survey was an extension of work carried out on the property during October, 1989 in order to close off three anomalies which remained open along strike (Lloyd, 1989).

2.0 PROPERTY LOCATION AND ACCESS

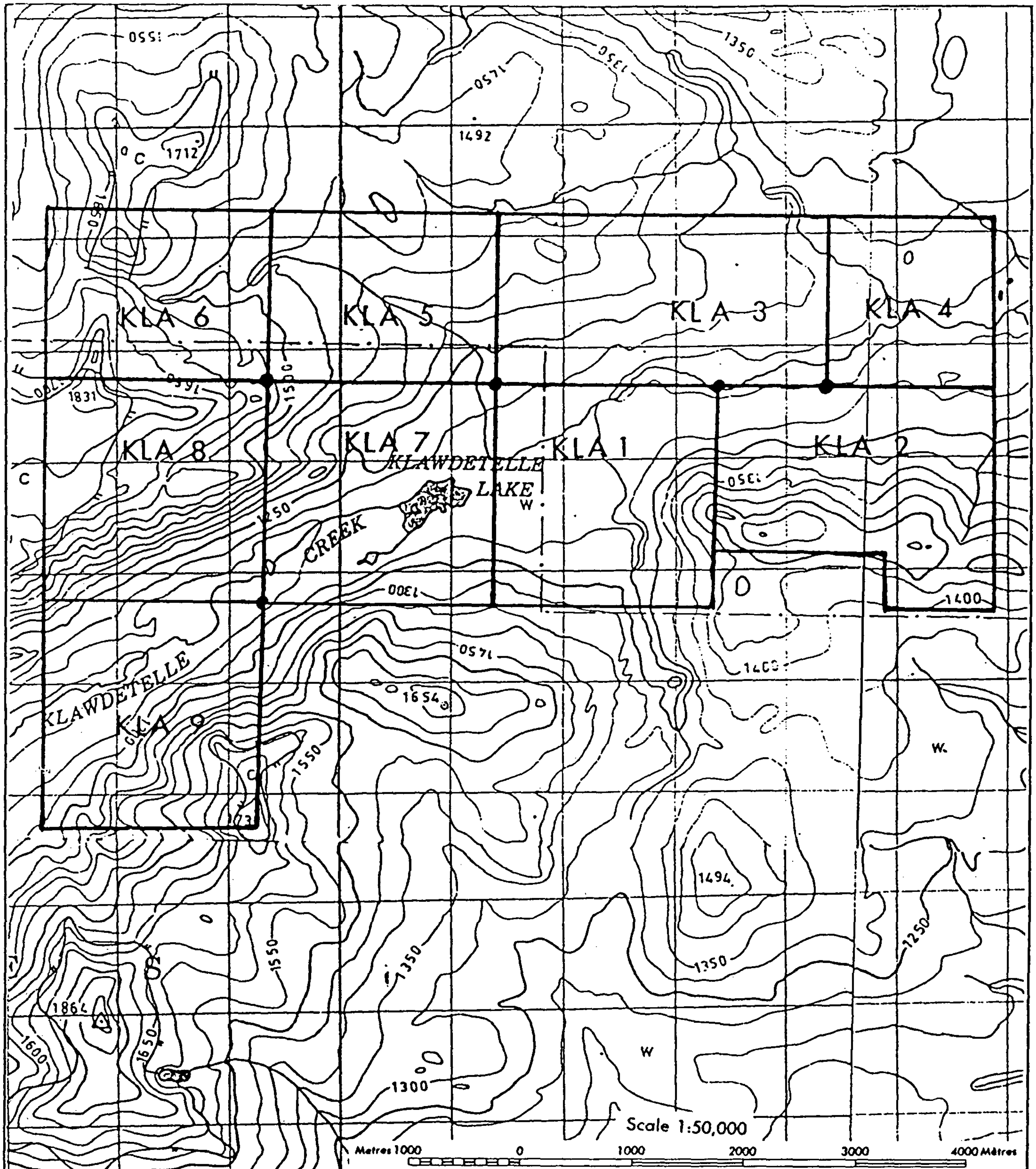
The Klawli Option is located 95 kilometres northwest of Fort St. James and 10 kilometres north of Chuchi Lake (Figures 1 and 2). The claims are located in the Omineca Mining Division, N.T.S. sheets 93N/7 and 8, centred on latitude 55°17'N and longitude 124°31'W. Access to the property is 100 kilometres north from Fort St. James via the "Omineca" or "North" road, then west for 14.1 kilometres along the Indata-Manson Creek Forestry Road, then north onto a logging road leading west. From a staging point along this logging road, the property can then be accessed via helicopter. Recently the logging road has been extended onto the property as far as Klawdetelle Lake.

3.0 PROPERTY STATUS AND CLAIM HOLDINGS

The KLAWLI Option comprises twelve contiguous mineral claims, totalling 160 units which are held under option by Rio Algom Exploration Inc. from Westmin Resources Limited. Pertinent claim information is outlined below:



Rio Algom Exploration Inc.
KLAWLI OPTION
PROPERTY LOCATION
LLOYD GEOPHYSICS INC. FIGURE 1



Rio Algom Exploration Inc.

KLAWLI OPTION

LOCATION MAP

LLOYD GEOPHYSICS INC. FIGURE 2

Claim	Units	Record Number	Expiry Date*
KLA-1	16	10032	December 18, 2000
KLA-2	20	10033	December 18, 2000
KLA-3	18	10734	October 17, 2000
KLA-4	9	10735	October 15, 2000
KLA-5	12	10736	October 17, 1997
KLA-6	12	10737	October 19, 1997
KLA-7	16	11072	September 10, 2000
KLA-8	16	10738	October 19, 1998
KLA-9	16	10739	October 16, 1998
KLA-10	12	11378	January 21, 2000
KLA-11	9	11379	January 21, 2000
KLA-12	4	12230	July 6, 1999

*At the time of compilation of this report the expiry dates are based on acceptance of the work submitted for assessment credit on the claims

4.0 REGIONAL AND PROPERTY GEOLOGY

The KLAWLI Option claim group lies within the Quesnel Trough, a Lower Mesozoic belt of volcanic and sedimentary rocks. Regionally, this trough is bounded to the west by the Pinchi Fault and to the east by the Manson Creek fault. The claim area lies on the fringe of the southern tip of the Hogem Batholith, a Lower Cretaceous to Upper Triassic composite intrusive that ranges from alkaline to calcalkaline (Garnet, 1978).

Locally the Klawli property is underlain by alkalic intrusive satellites of the Hogem Batholith, in contact with flows, tuffs, and fragmentals of the Triassic-Jurassic Takla Group.

Geologic mapping on the KLA 1, 2 & 7 claims suggests that the central portion of the grid area is comprised of a north-south ($\pm 15°$) striking, shallow, east dipping sequence of latitic flows, fragmentals and bedded tuffs. The bedded tuffs are both overlain and underlain by latitic flows and fragmentals and are regularly cut by monzonite sills. These tuffs are extensive extending eastward from line 3400E. Further eastward on KLA-2 a flat lying andesitic-basaltic augite porphyry flow that caps the previously described volcanic rock sequence is well exposed along the east-west trending ridge that extends along the southern portion of KLA-2.

Minerals on the property include pyrite, pyrrhotite, magnetite and minor chalcopyrite. Alteration to varying degrees includes propylitic, potassic and carbonate alteration.

5.0 INSTRUMENT SPECIFICATIONS

The equipment used to carry out this survey was a time domain measuring system consisting of a Wagner Leland/Onan motor generator set and a Mark II transmitter manufactured by Huntec Limited, Toronto, Canada and a 6 channel IP-6 receiver manufactured by BRGM Instruments, Orleans, France.

The Wagner Leland/Onan motor generator supplies in excess of 7.5 kilowatts of 3 phase power to the ground at 400 hertz via the Mark II transmitter.

The transmitter was operated with a cycle time of 8 seconds and the duty cycle ratio: [(time on)/(time on + time off)] was 0.5. This means the cycling sequence of the transmitter was 2 seconds current "on" and 2 seconds current "off" with consecutive pulses reversed in polarity.

The IP-6 receiver can read up to 6 dipoles simultaneously. It is microprocessor controlled, featuring automatic calibration, gain setting, SP cancellation and fault diagnosis. To accommodate a wide range of geological conditions, the delay time, the window widths and hence the total integration time is programmable via the keypad. Measurements are calculated automatically every 2 to 4 seconds from the averaged waveform which is accumulated in memory.

The window widths of the IP-6 receiver can be programmed arithmetically or logarithmically. For this particular survey the instrument was programmed arithmetically into 10 equal window widths or channels, Ch_0, Ch_1, Ch_2, Ch_3, Ch_4, Ch_5, Ch_6, Ch_7, Ch_8, and Ch_9, (See Figure 3). These are recorded individually and summed up automatically to obtain the total chargeability. Similarly the resistivity (ϱ_a) in ohm-metres is also calculated automatically.

The instrument parameters chosen for this survey were as follows:

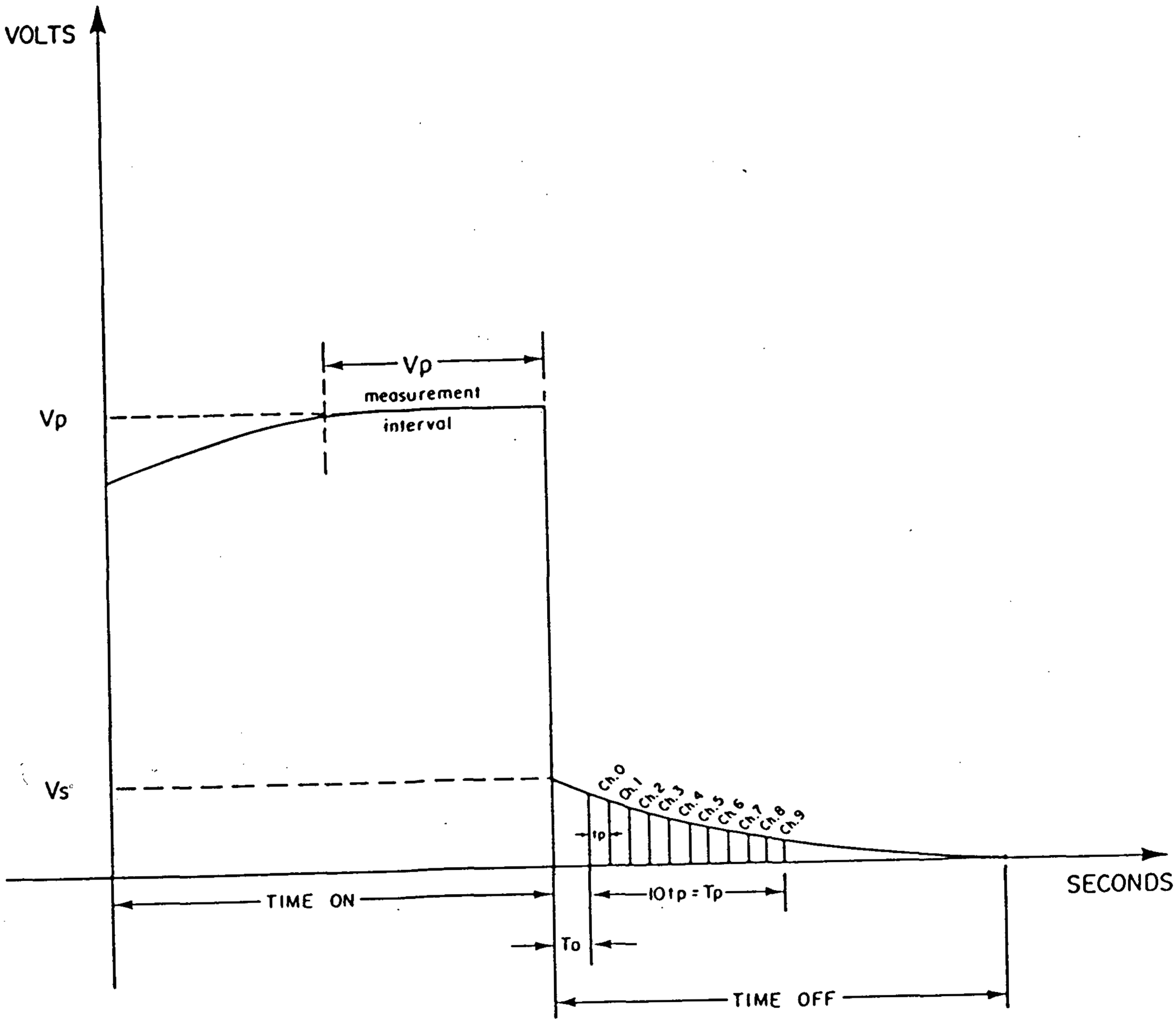
Cycle Time (T_c) = 8 seconds

Ratio $\frac{\text{(Time On)}}{\text{(Time Off)}}$ = 1:1

Duty Cycle Ratio

$\frac{\text{(Time On)}}{\text{(Time On)+(Time Off)}}$ = 0.5

Delay Time (T_D) = 120 milliseconds



BRGM IP-6 RECEIVER PARAMETERS

Figure 3

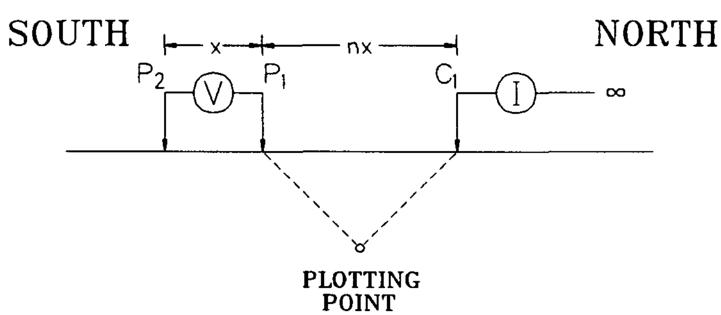
Window Width (t_p) = 90 milliseconds

Total Integrating Time (T_p) = 900 milliseconds

6.0 SURVEY SPECIFICATIONS

The configuration of the POLE-DIPOLE array used for the survey is shown below:

POLE-DIPOLE ARRAY



x = 50 metres n = 1, 2, 3 and 4

On the KLAWLI Grid the current electrode C_1 was NORTH of the potential measuring dipole P_1P_2. Here the lines were 200 metres apart and measurements were taken for x = 50 metres and n = 1, 2, 3 and 4.

The dipole length (x) is the distance between P_1 and P_2 and determines mainly the sensitivity of the array. The electrode separation (nx) is the distance between C_1 and P_1 and determines mainly the depth of penetration of the array.

7.0 DATA PROCESSING

The data collected was processed in the field at the end of each survey day using a portable Compaq 286 computer and a Fujitsu printer.

The IP pseudo-sections were plotted out in the field and contoured using in-house software based on the mathematical solution known as kriging.

In the office the data was merged with the 1989 survey data and transferred to mylar using a Hewlett Packard Draftsmaster II Plotter and a DL2400 Fujitsu Printer for preparation of the final pseudo-sections and contour plan maps.

8.0 DATA PRESENTATION

The data obtained from the survey described in this report are presented on 29 pseudo-sections and 2 contour plan maps as follows:

Pseudo-Sections

Line No.	Dwg. No.	Line No.	Dwg. No.
800E	90306-1	3800E	90306-16
1000E	90306-2	4000E	90306-17
1200E	90306-3	4200E	90306-18
1400E	90306-4	4400E	90306-19
1600E	90306-5	4600E	90306-20
1800E	90306-6	4800E	90306-21
2000E	90306-7	5000E	90306-22
2200E	90306-8	5200E	90306-23
2400E	90306-9	5400E	90306-24
2600E	90306-10	5600E	90306-25
2800E	90306-11	5800E	90306-26
3000E	90306-12	6000E	90306-27
3200E	90306-13	6200E	90306-28
3400E	90306-14	6400E	90306-29
3600E	90306-15		

Contour Plan Maps

Chargeability 10 Point Triangular Filter	90306-30
Resistivity 10 Point Triangular Filter	90306-31

9.0 DISCUSSION OF RESULTS

An IP response depends largely on the following factors:

1. The volume content of sulphide minerals

2. The number of pore paths that are blocked by sulphide grains

3. The number of sulphide faces that are available for polarization

4. The absolute size and shape of the sulphide grains and the relationship of their size and shape to the size and shape of the available pore paths

5. The electrode array employed

6. The width, depth, thickness and strike length of the mineralized body and its location relative to the array

7. The resistivity contrast between the mineralized body and the unmineralized host rock

The sulphide content of the underlying rocks is one of the critical factors that we would like to determine from field measurements. Experience has shown that this is both difficult and unreliable because of the large number of variables, described above, which contribute to an IP response. The problem is further complicated by the fact that rocks containing magnetite, graphite, clay minerals and variably altered rocks produce IP responses of varying amplitudes.

A detailed study has been made of the pseudo-sections which accompany this report. These pseudo-sections are not sections of the electrical properties of the sub-surface strata and cannot be treated as such when determining the depth, width and thickness of a zone which produces an anomalous pattern.

From this study the anomalies selected are shown on the individual pseudo-sections and are classified into 4 groups. These are definite, probable and possible anomalies and anomalies which have a deeper source.

This classification is based partly on the relative amplitudes of the chargeability and to a lesser degree on the resistivity response. Of equal importance in this classification is the overall anomaly pattern and the degree to which this pattern may be correlated from line to line, provided of course that the correlation is not so extensive along strike so as to most probably represent only the subcrop of a geological formation.

Geological mapping and drilling to date indicate that apart from magnetite and sulphides, there are no rock units containing graphite in sufficient quantities to detract from the effectiveness of the IP method. This is encouraging with respect to further drilling and exploration on the rest of the property by geophysical methods. The two most useful geophysical parameters for interpretation in this type of geological environment are the magnetic and chargeability responses with less emphasis put on the resistivity response.

Drilling to date consists of a total of 691.73 metres in 5 holes concentrated in the southern area of the main grid. The 1989 IP survey detected a large zone of increased chargeability immediately surrounding the area tested by drilling. Results from drilling and trenching exposed monzonite stocks and/or dykes and intrusive breccias. Disseminated pyrite was generally 1% to 3% and locally 5% to 10% with traces of chalcopyrite found in holes 3 and 4. The locations of the 1990 drill holes are outlined below:

Hole No.	Collar Location (Grid Coordinates)	Dip	Azimuth	Length of Hole
1	3658S, 2986E	-50°	270°	137.16m
2	3658S, 3205E	-50°	270°	137.60m
3	3666S, 3400E	-50°	270°	135.64m
4	3941S, 3601E	-90°	-	136.55m
5	3949S, 3201E	-50°	270°	144.78m

The 1990 IP survey has extended the grid mainly to the north, east and west. Referring to Dwg. No. 90306-30, the Ten Point Triangular Filter of the chargeability data, approximately 25% of the total grid area is underlain by rocks having chargeabilities greater than 20 milliseconds with the overall background varying from 3 to 7 milliseconds. These areas of higher chargeability have been interpreted to indicate the presence of a fairly large sulphide system.

In addition to further delineating two previously detected zones of increased chargeability (Lloyd, December, 1989), two new zones were detected by the recent survey.

The largest of these four is located in the southern portion of the main grid. The east-west dimension has been extended by 350 metres to the east. The axis of this zone runs from approximately 3750S on line 1800E to about 3625S on line 4600E resulting in an overall length of 2750 metres, with its width varying from 350 metres to 600 metres. The chargeability response of this zone varies from about 20 milliseconds to greater than 55 milliseconds with background chargeabilities immediately outside the zone varying from about 5 to 10 milliseconds.

The eastern portion of this zone of increased chargeability shows an abrupt increase in width to about 1100 metres on lines 4200E and 4400E. The associated resistivities are low varying from 150 to 300 ohm-metres. This may indicate a north-south fault somewhere between these two lines.

A second zone of increased chargeability occurs near the centre of the main grid with its axis running from about 2625S on line 2800E to 2575S on line 3800E resulting in a strike length of 1000 metres. Chargeabilities within this zone range from 10 to over 20 milliseconds with background in the immediate vicinity of the anomaly varying from 2 to 7 milliseconds. A narrow resistivity low trends from approximately 2650S on line 3000E to 2200S on line 4400E which may indicate the presence of a fault passing through this anomaly.

Two smaller coaxial zones of increased chargeability were detected in the north-east portion of the grid trending from 2325S on line 4600E to 2525S on line 6200E. Chargeabilities range from about 10 to 17 milliseconds with background in the immediate vicinity varying from 4 to 7 milliseconds. The eastern zone remains open along strike immediately east of line 6200E where no IP survey work has yet been carried out. From the pseudo-sections accompanying this report (Dwg. Nos. 90306-26, 27, and 28) this easternmost zone exhibits a "classic" style anomaly which is not typically "porphyry style" but could rather be interpreted as being caused by a shallow and narrow body with limited depth extent.

Finally, two more areas of increased chargeability occur on the western portion of the main grid. The first is on line 1600E centred on 2725S and remains open to the west. The second occurs on lines 800E and 1000E and remains open to the east and west.

10.0 CONCLUSIONS AND RECOMMENDATIONS

From a study of the IP data described in this report and from the general geological information provided by Rio Algom Exploration Inc. it has been concluded that the large anomaly on the southern portion of the main grid is most probably caused by sulphides and is worthy of further exploration by drilling. The second smaller anomaly centred on line 3200E station 2650S also warrants further exploration by drilling.

Based mainly on the IP survey data a total of 1350 metres of drilling in 10 holes is recommended to further test the larger anomaly on the southern portion of the grid as well as the smaller anomaly directly to the north. The locations of these holes are as follows:

Hole No.	Line No.	Station No.	Angle	Direction	Length (metres)
1	4400E	3550S	-45°	East to West	135
2	4400E	3650S	-45°	East to West	135
3	4400E	3450S	-45°	East to West	135
4	4200E	3100S	-45°	East to West	135
5	4200E	3200S	-45°	East to West	135
6	4200E	3000S	-45°	East to West	135
7	3200E	2650S	-45°	East to West	135
8	3200E	2550S	-45°	East to West	135
9	3400E	2650S	-45°	East to West	135
10	3400E	2550S	-45°	East to West	135

No priorities have yet been assigned to these drill holes. Prior to commencing with the drilling programme priorities should be based on areas showing favourable geology and soil geochemistry results in conjunction with those areas chosen for testing from the IP data. The completion of the 1350 metres of drilling will depend on the results obtained from the first few holes.

At this point no drilling has been recommended on the two coaxial anomalies in the north-east quadrant of the grid. The eastern-most anomaly, which remains open to the east, has been interpreted as representing a shallow, narrow source with limited depth extent.

Finally, where land holdings permit and if favourable geology exists, additional IP surveying is recommended to determine the size and extent of two anomalies which remain open to the west on lines 800E and 1600E.

Respectfully Submitted,
LLOYD GEOPHYSICS INC.

John Lloyd, M.Sc., P.Eng.
Geophysicist

Daniel A. Klit, B.Sc.
Geophysicist

Vancouver, B.C.
October, 1990

(A)

PERSONNEL EMPLOYED ON SURVEY

Name	Occupation	Address	Dates
J Lloyd	Geophysicist	1503-1166 Alberni Street Vancouver, B.C. V6E 3Z3	Oct 30/90
D Klit	Geophysicist	"	June 25-July 14/90 Oct 25,26,29/90
A Lloyd	Geophysical Technician	"	June 25-July 14/90
S MacDougall	Helper	"	June 25-July 14/90
C Pearson	Helper	"	June 25-July 14/90
M Lagan	Helper	"	June 25-July 14/90

(B)

COST OF SURVEY AND REPORTING

Lloyd Geophysics Inc. contracted the IP data acquisition on a per diem basis. Mobilization/Demobilization, camp costs, data processing, computer plotting, map reproduction, interpretation and report writing were additional costs. The breakdown of these costs was as follows:

Mobilization/Demobilization	$ 3,433.10
Camp Charges	3,150.00
Living & Travelling Expenses	368.97
Data Acquisition	24,000.00
Data Processing and Computer Plotting	1,475.00
Consumables and Reproduction Costs	574.23
Interpretation and Report Writing	1,300.00
TOTAL COST	$ 34,301.30

(C)

CERTIFICATION OF SENIOR AUTHOR

I, John Lloyd, of 1503-1166 Alberni Street, in the City of Vancouver, in the Province of British Columbia, do hereby certify that:

1. I graduated from the University of Liverpool, England in 1960 with a B.Sc. in Physics and Geology, Geophysics Option.

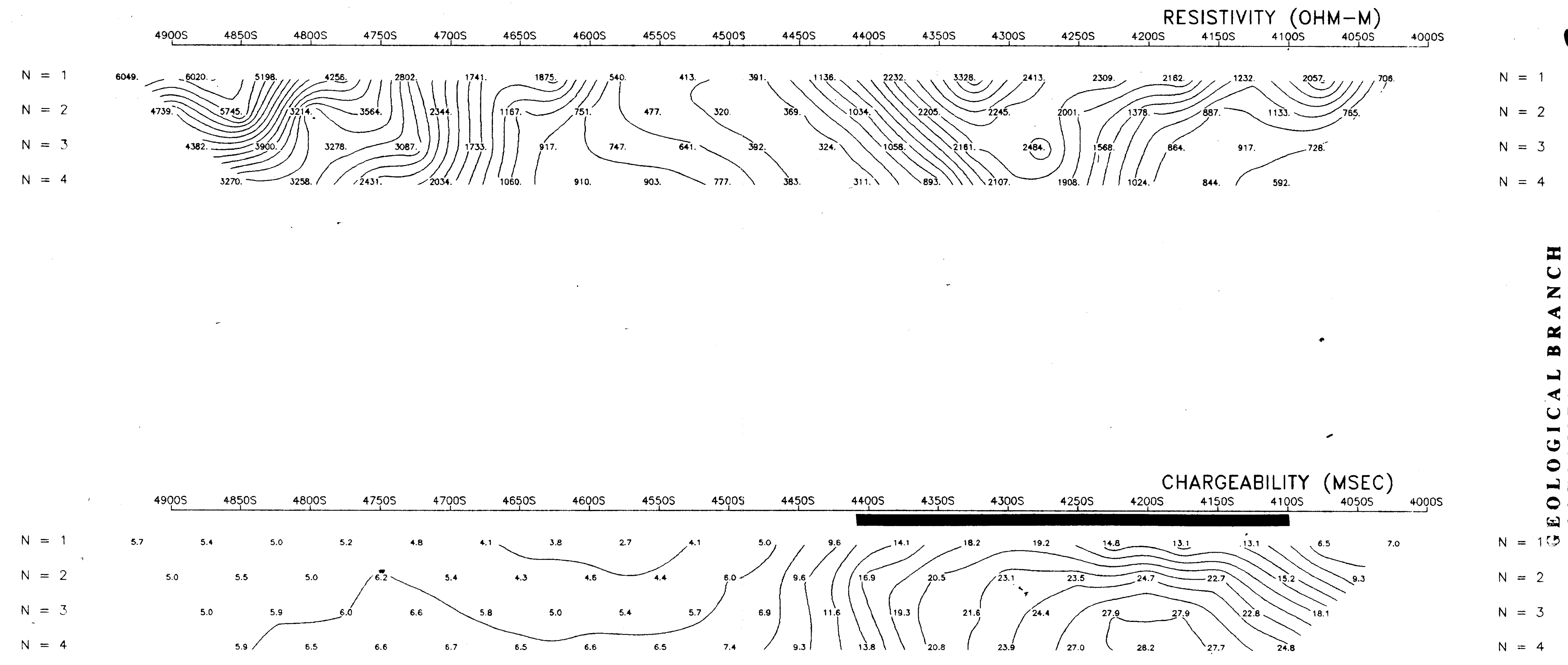
2. I obtained the diploma of the Imperial College of Science and Technology (D.I.C.), in Applied Geophysics from the Royal School of Mines, London University in 1961.

3. I obtained the degree of M.Sc. in Geophysics from the Royal School of Mines, London University in 1962.

4. I am a member in good standing of the Association of Professional Engineers in the Province of British Columbia, the Society of Exploration Geophysicists of America, the European Association of Exploration Geophysicists and the Canadian Institute of Mining and Metallurgy.

5. I have been practising my profession for over twenty-five years.

Vancouver, B.C.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,612

Part 2 of 2

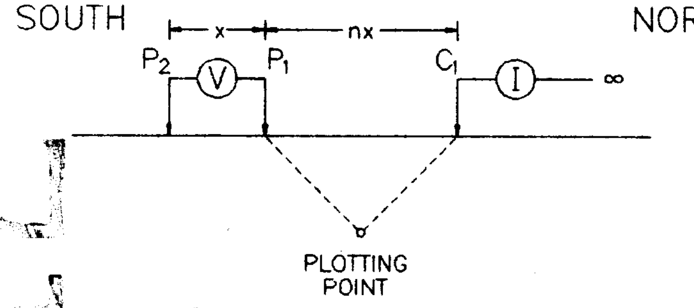
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 800E

POLE–DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

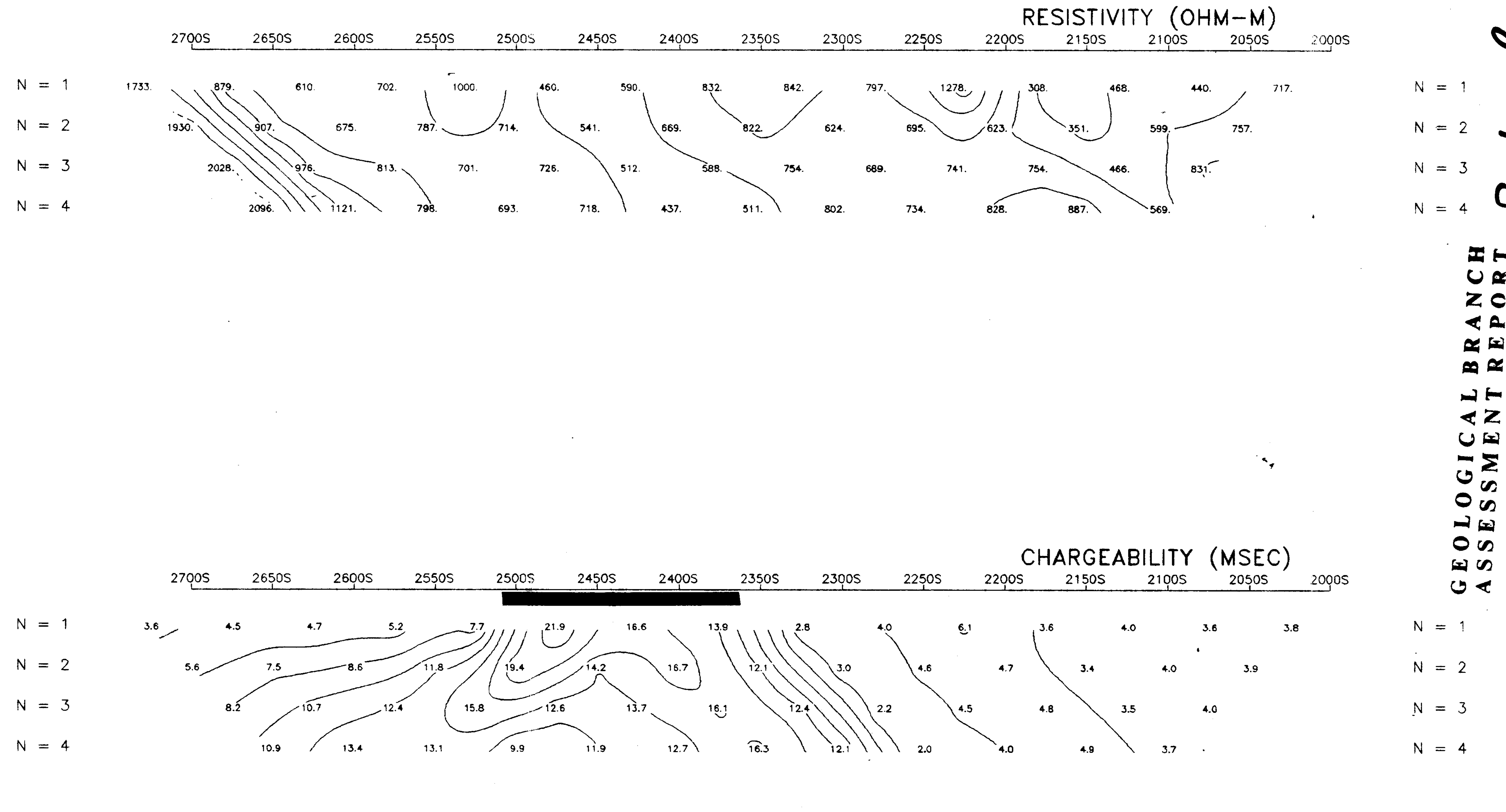
CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: July 1, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–1



GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Part 2 of 2

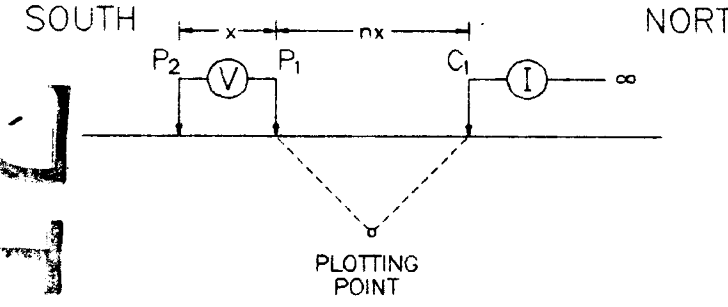
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 5800E

POLE-DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

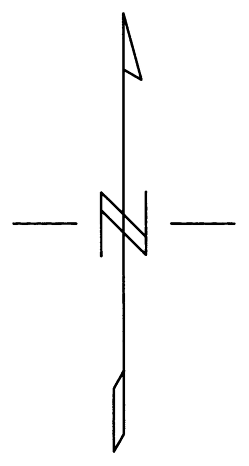
CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm-m)

DATE SURVEYED: July 11, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306-26



LEGEND

INDUCED POLARIZATION SURVEY

POLE-DIPOLE ARRAY

DIPOLE SEPARATION : 50 METERS

CURRENT ELECTRODE NORTH OF POTENTIAL DIPOLE

CONTOUR INTERVALS

———	100 OHM-M
———	500 OHM-M
———	2500 OHM-M

INTERPRETATION

SURFACE PROJECTION OF ANOMALOUS CHARGEABILITY ZONES AS DERIVED FROM PSEUDOSECTIONS N = 1 TO 4

▬▬▬▬▬▬	DEFINITE
■■■■■■■■■■	PROBABLE
\\\\\\\\\\	POSSIBLE
● ● ● ● ● ● ● ● ● ●	AT DEPTH

To Accompany a Report by
JOHN LLOYD M.Sc., P. Eng.
October 1990

Scale 1:5000
100 0 100 200 300 400
(metres)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,612 Part 2 of 2

RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

Omenica Mining Division

Chuchi Lake Area, British Columbia

RESISTIVITY
10 POINT TRIANGULAR FILTER

NTS 93 N/7 and N/8

Scale 1 : 5000 DRAWING 90306-31

LLOYD GEOPHYSICS INC.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,612

Part 2 of 2

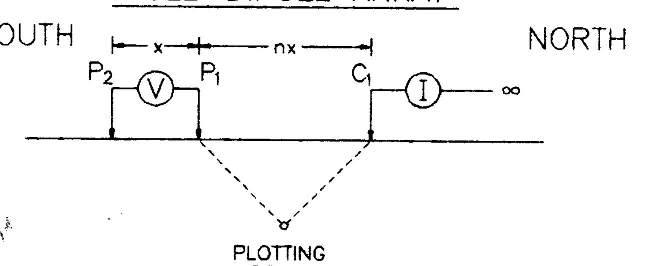
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 1000E

POLE–DIPOLE ARRAY



x = 50m   n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: July 1, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–2

LEGEND

INDUCED POLARIZATION SURVEY
POLE-DIPOLE ARRAY
DIPOLE SEPARATION : 50 METERS
CURRENT ELECTRODE NORTH OF POTENTIAL DIPOLE

CONTOUR INTERVALS

2.0 MSEC
10.0 MSEC
50.0 MSEC

INTERPRETATION

SURFACE PROJECTION OF ANOMALOUS CHARGEABILITY ZONES AS DERIVED FROM PSEUDOSECTIONS N = 1 TO 4

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

To Accompany a Report by
JOHN LLOYD M.Sc., P. Eng.
October 1990

Scale 1:5000
(metres)

GEOLOGICAL BRANCH
ASSESSMENT REPORT
20,612 Part 2 of 2

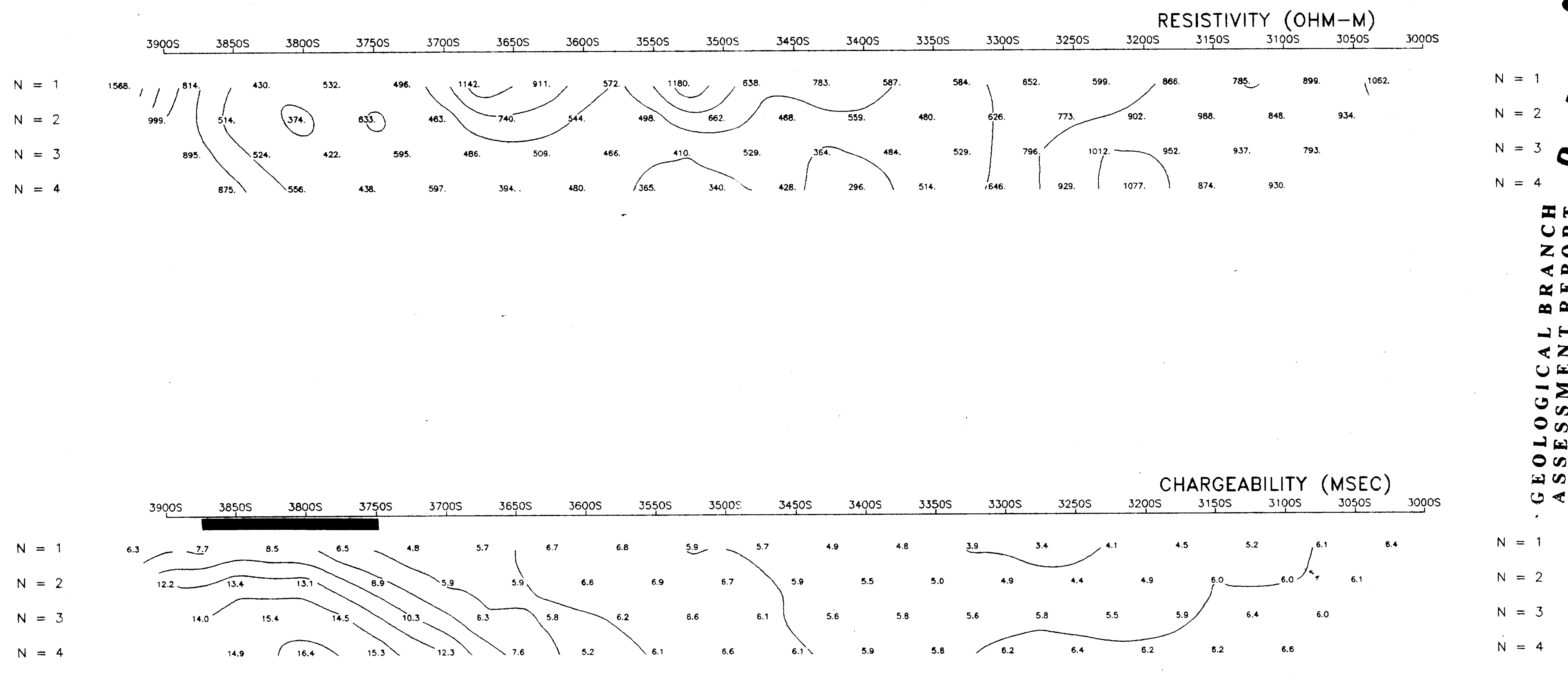
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS
Omenica Mining Division
Chuchi Lake Area, British Columbia

CHARGEABILITY
10 POINT TRIANGULAR FILTER

NTS 93 N/7 and N/8
Scale 1 : 5000 DRAWING 90306-30

LLOYD GEOPHYSICS INC.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

part 2 of 2

20,612

RIO ALGOM EXPLORATION INC.

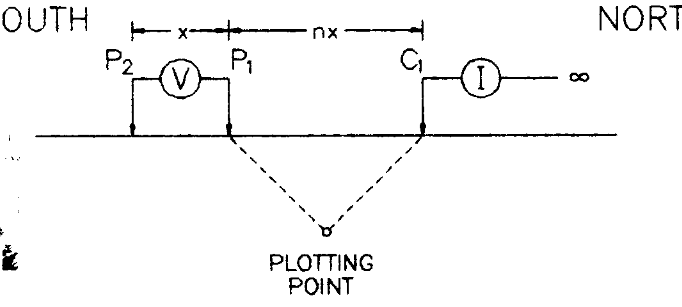
KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 1200E

POLE–DIPOLE ARRAY

SOUTH NORTH



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

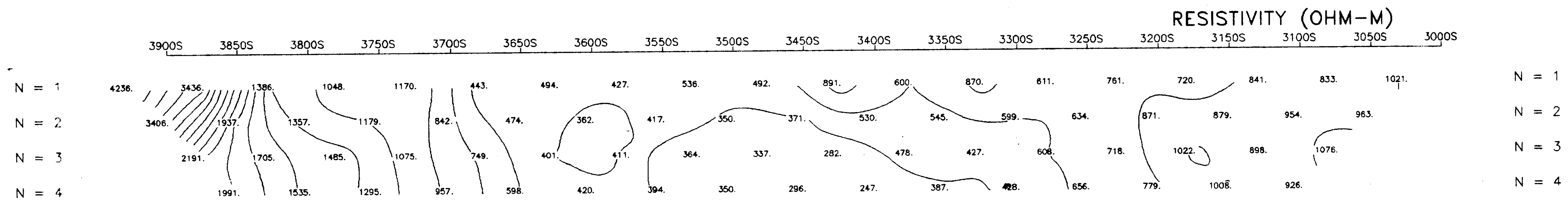
CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

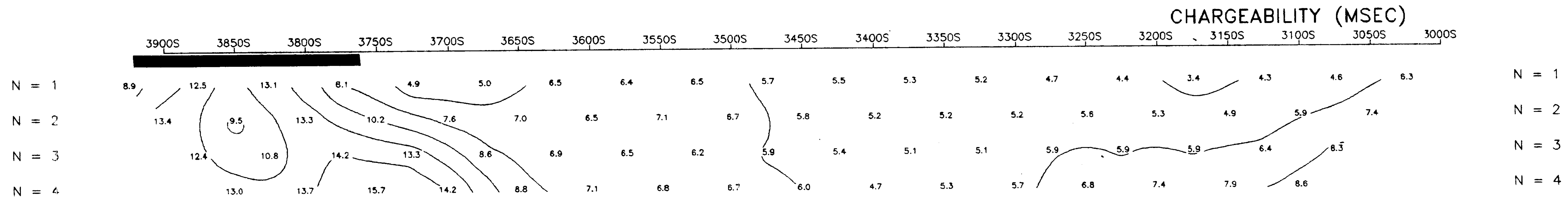
DATE SURVEYED: JUNE 30,1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–3





GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,612

Part 2 of 2

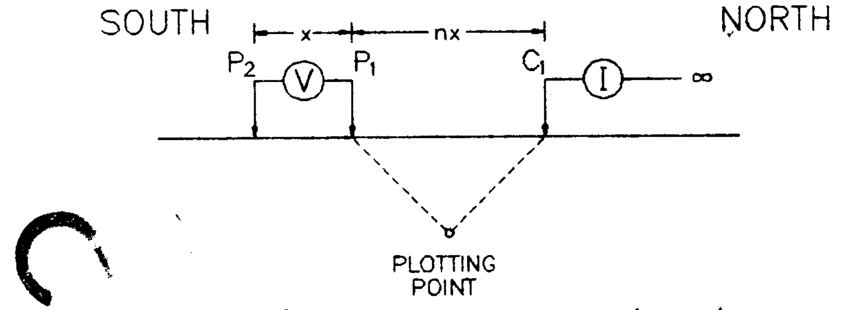
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 1400E

POLE-DIPOLE ARRAY



x = 50m n = 1 − 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm−m)

DATE SURVEYED: JUNE 29,1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP−6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306−4

Part 2 of 2

LOGICAL BRANCH
SSMENT REPORT

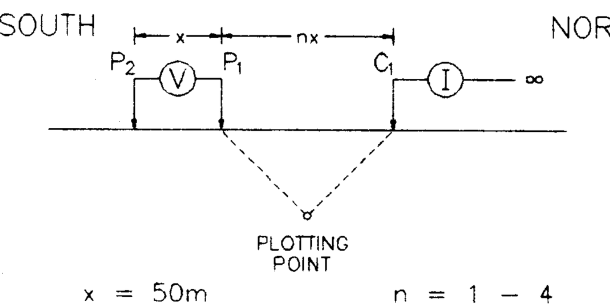
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 1600E

POLE–DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: JUNE 28, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306-5

RIO ALGOM EXPLORATION INC.

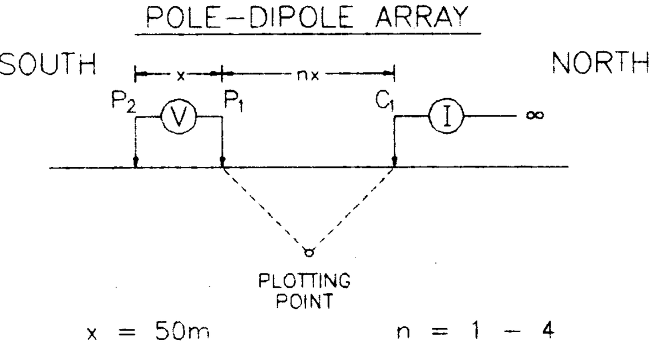
KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 1800E

Part 2 of 2

POLE-DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY 200 (ohm-m)

DATE SURVEYED: JULY 02,1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306-6

GEOLOGICAL BRANCH ASSESSMENT REPORT

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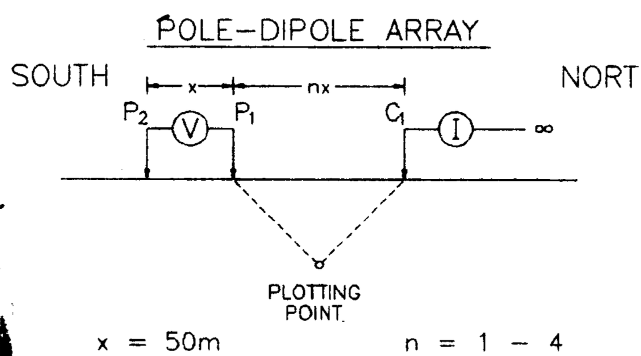
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 2000E



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: JULY 03,1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–7

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GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,612

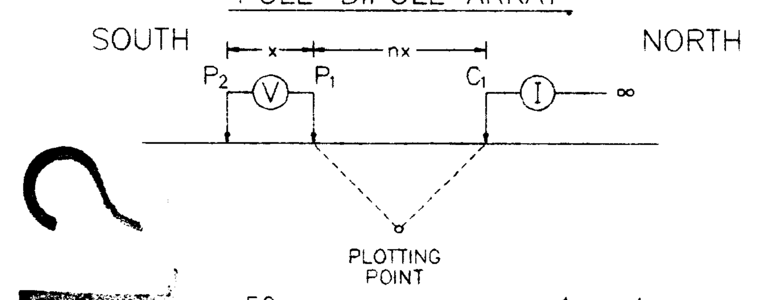
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 2200E

POLE–DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: JULY 03,1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–8


RESISTIVITY (OHM-M)
CHARGEABILITY (MSEC)
N = 1
N = 2
N = 3
N = 4
RIO ALGOM EXPLORATION INC.
KLAWLI CLAIMS
OMINECA MINING DIVISION
LINE: 2400E
POLE-DIPOLE ARRAY
SOUTH
NORTH
PLOTTING POINT
x = 50m
n = 1 - 4
CURRENT ELECTRODE C1 NORTH OF POTENTIAL DIPOLE P1P2
SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE
AT DEPTH
SCALE 1 : 2500
CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm-m)
DATE SURVEYED: JULY 4,1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6
LLOYD GEOPHYSICS INC.
INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 90306-9
GEOLOGICAL BRANCH ASSESSMENT REPORT
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ASSESSMENT REPORT

20,612

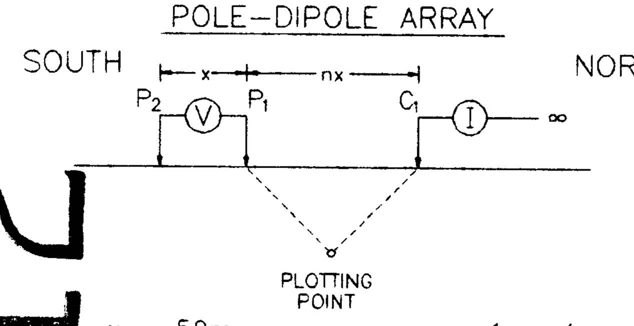
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 2600E

POLE–DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH
OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION
OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: JULY 4,1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–10

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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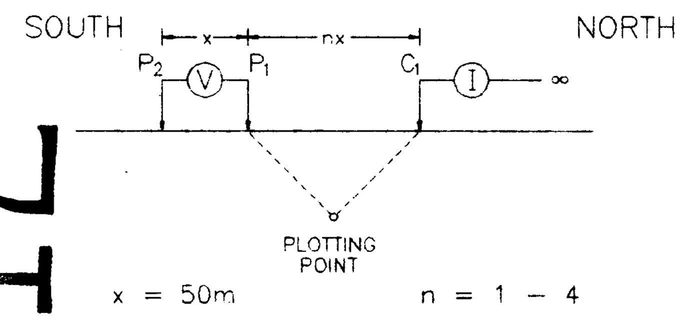
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 2800E

POLE–DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: JULY 5,1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–11

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,612 part 2 of 2

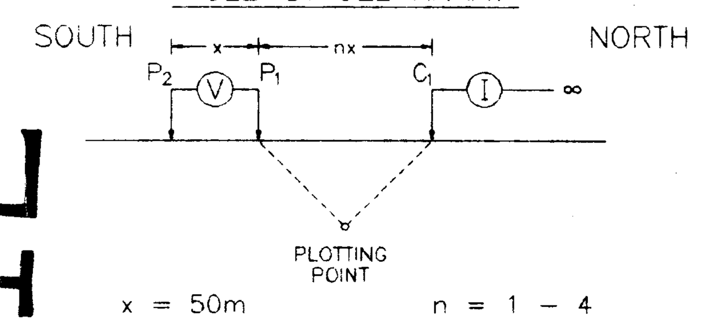
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 3000E

POLE-DIPOLE ARRAY



x = 50m n = 1 - 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm-m)

DATE SURVEYED: June 5, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306-12


RESISTIVITY (OHM-M)
CHARGEABILITY (MSEC)
GEOLOGICAL BRANCH
ASSESSMENT REPORT
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RIO ALGOM EXPLORATION INC.
KLAWLI CLAIMS
OMINECA MINING DIVISION
LINE: 3200E
POLE-DIPOLE ARRAY
SOUTH
NORTH
PLOTTING POINT
x = 50m
n = 1 - 4
CURRENT ELECTRODE C1 NORTH OF POTENTIAL DIPOLE P1P2
SURFACE PROJECTION OF ANOMALOUS ZONES
DEFINITE
PROBABLE
POSSIBLE
AT DEPTH
SCALE 1 : 2500
CONTOUR INTERVALS
APP CHARGEABILITY 2.0 (msec)
APP RESISTIVITY 200 (ohm-m)
DATE SURVEYED: June 5-6, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6
LLOYD GEOPHYSICS INC.
INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 90306-13

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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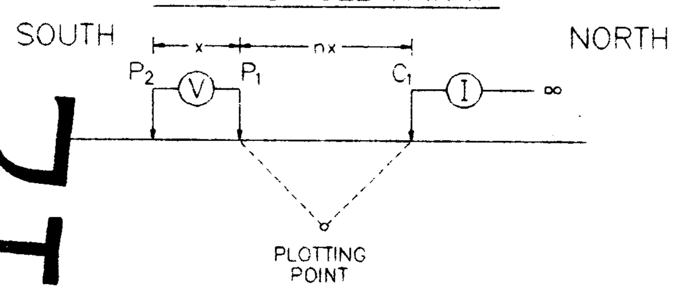
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 3400E



x = 50m   n = 1 - 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm-m)

DATE SURVEYED: June 6, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306-14

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Part 2 of 2

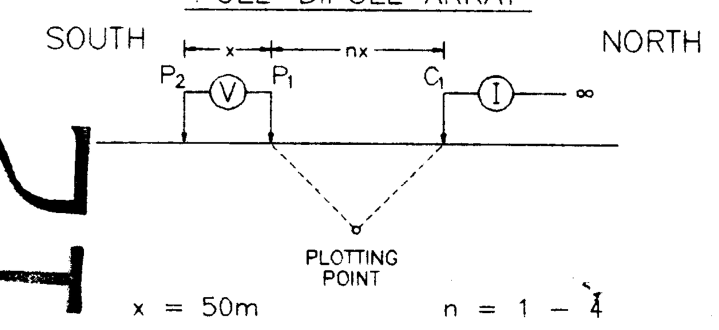
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 3600E

POLE–DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: June 6, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–15

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Part 2 of 2

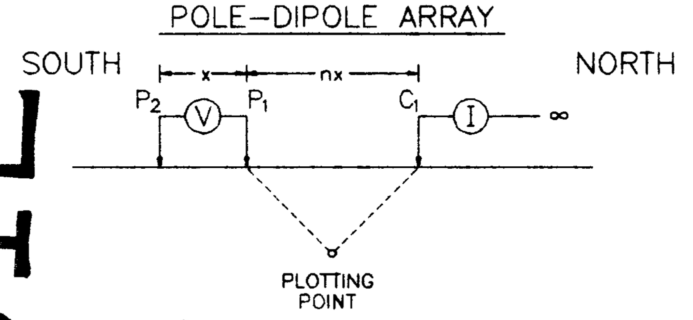
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 3800E

POLE–DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: Oct 23–24, 1989
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–16

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GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,612

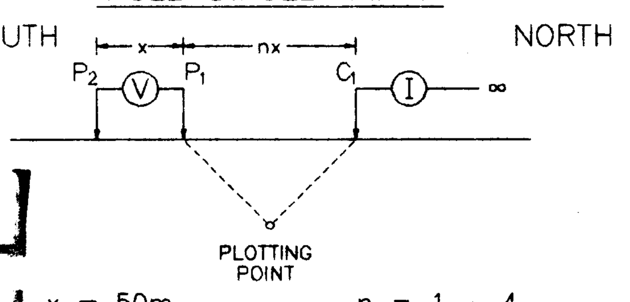
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 4000E

POLE–DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: Oct 24, 1989
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–17

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GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,612

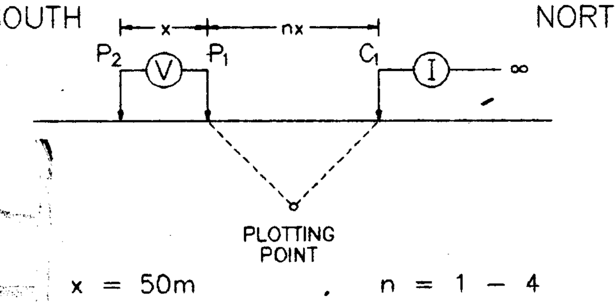
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 4200E

POLE–DIPOLE ARRAY



x = 50m , n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: Oct. 25–26, 1989
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–18

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Part 2 of 2

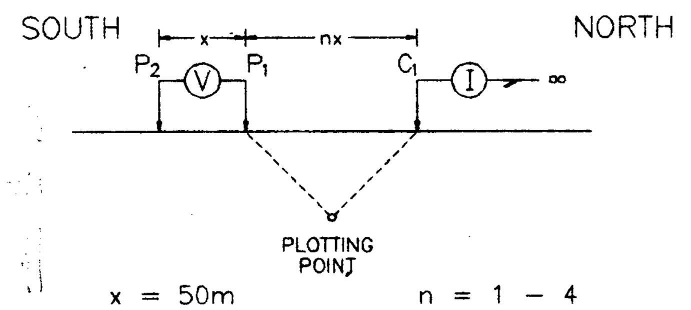
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 4400E

POLE-DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: June 6–7, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–19

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Part 2 of 2

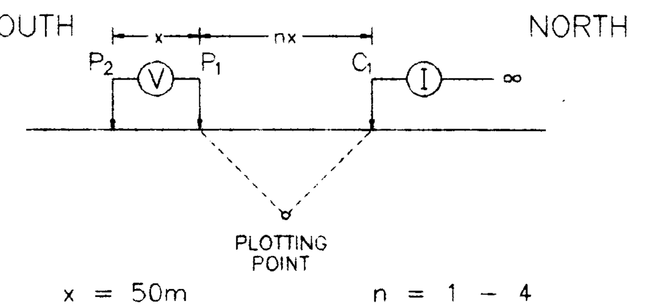
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 4600E

POLE-DIPOLE ARRAY



x = 50m n = 1 - 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm-m)

DATE SURVEYED: June 7-8, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306-20

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,612

Part 2 of 2

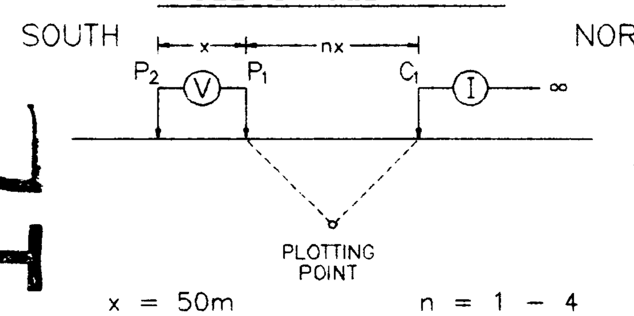
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 4800E

POLE–DIPOLE ARRAY



x = 50m n = 1 – 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm–m)

DATE SURVEYED: June 9, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP–6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306–21

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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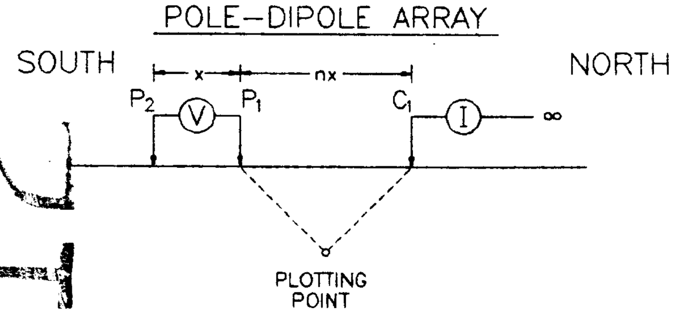
RIO ALGOM EXPLORATION INC.

KLAWLI CLAIMS

OMINECA MINING DIVISION

LINE: 5000E



x = 50m n = 1 - 4

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2500

CONTOUR INTERVALS
APP.CHARGEABILITY : 2.0 (msec)
APP.RESISTIVITY : 200 (ohm-m)

DATE SURVEYED: June 10, 1990
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90306-22