

LOG NO. 0624	REV.

**A GEOPHYSICAL REPORT ON  
AN INDUCED POLARIZATION SURVEY  
ON THE LAKEWATER PROPERTY**

**SKEENA MINING DIVISION  
BRITISH COLUMBIA**

**LATITUDE 56°37'N  
LONGITUDE 130°30'W  
NTS 104B/9W**

**SUB-RECORDER  
RECEIVED  
JUN 14 1991  
M.R. # ..... \$.....  
VANCOUVER, B.C.**

**FOR**

**TYMAR RESOURCES INC.  
AKIKO-LORI GOLD RESOURCES LTD.  
VARITECH RESOURCES LTD.**

**BY**

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

**and**

**Daniel A. Klit, B.Sc.**

**LLOYD GEOPHYSICS INC.**

**MARCH, 1991**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**21,432**

## SUMMARY

During the periods August 8-24, 1990 and September 26-30, 1990, Lloyd Geophysics Inc. carried out a time domain Induced Polarization (IP) survey over certain portions of the Lakewater property near Eskay Creek, British Columbia. This property is held equally as a Joint Venture between Tymar Resources Inc., Akiko-Lori Gold Resources Ltd. and Varitech Resources Ltd.

An 18 hole diamond drill programme totalling 2700 metres has been recommended to test 5 IP anomalies coincident with VLF-EM conductors.

Furthermore, additional IP coverage on the property is recommended in order to determine the continuity and extent of those anomalous chargeability zones which remain open along strike.

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## **1.0 INTRODUCTION**

During the periods August 8-24, 1990 and September 26-30, 1990, Lloyd Geophysics Inc. carried out a time domain Induced Polarization (IP) survey over certain portions of the Lakewater property near Eskay Creek, British Columbia. This property is held equally as a Joint Venture between Tymar Resources Inc., Akiko-Lori Gold Resources Ltd. and Varitech Resources Ltd.

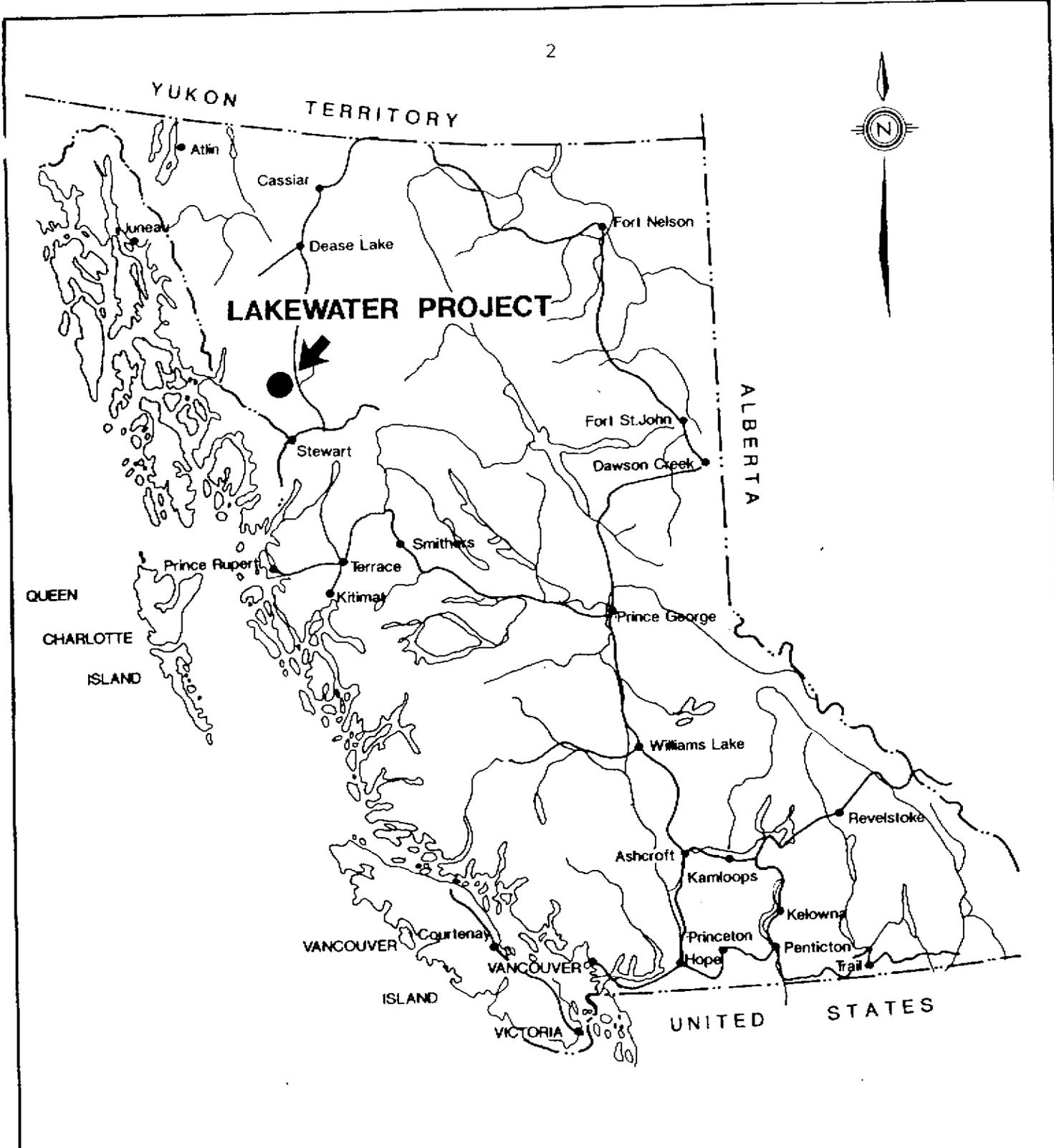
## **2.0 PROPERTY LOCATION AND ACCESS**

The Lakewater property is situated approximately 100 kilometres northwest of Stewart, British Columbia (see Figure 1). The claims are located within NTS 104B/9W and are centred on latitude 56°37'N and longitude 130°30'W (see Figure 2).

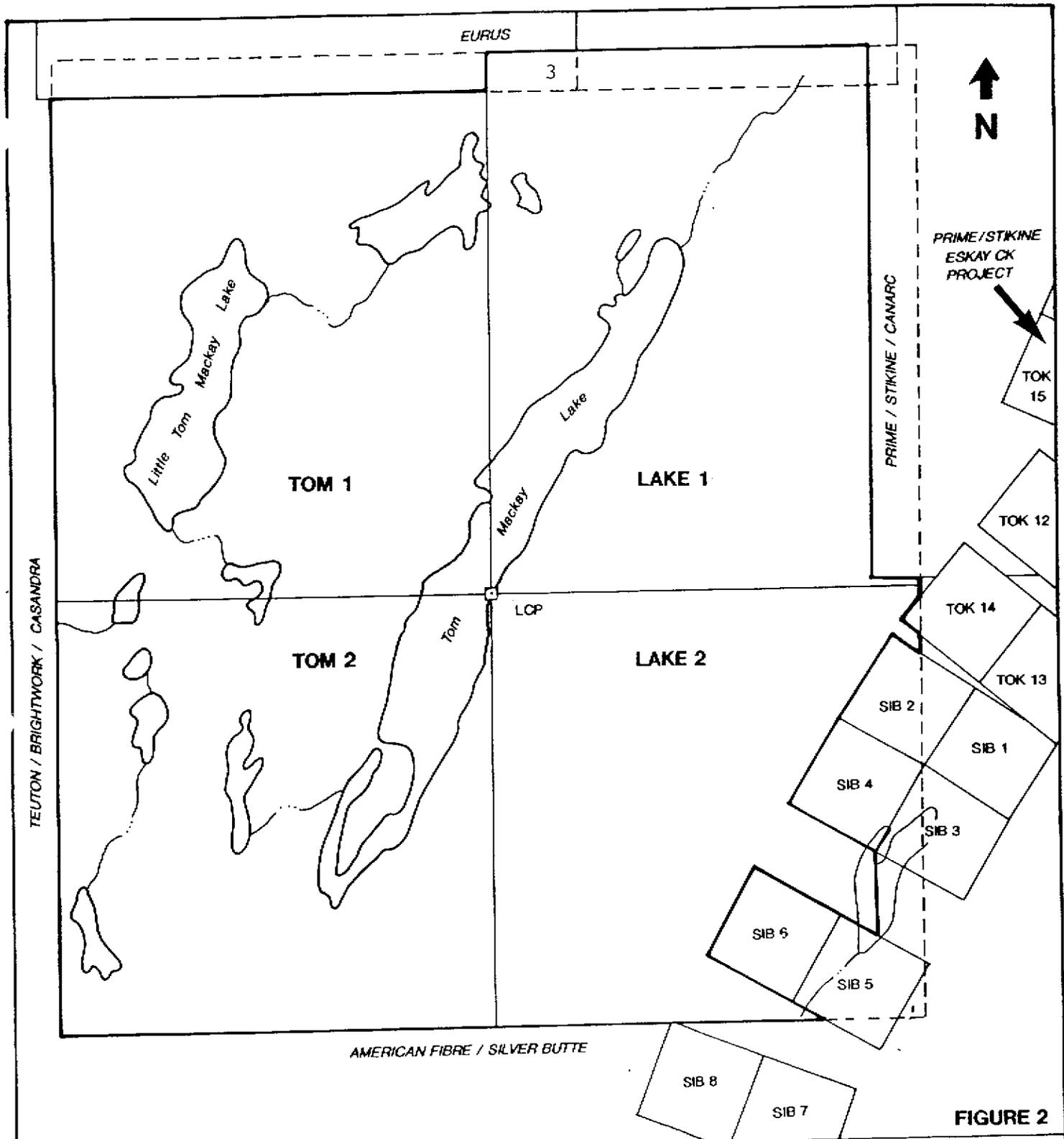
Access to the property is by helicopter, or by float or ski-equipped aircraft on Tom McKay Lake. Helicopter access may be gained from the Bell Irving service station which is about 25 kilometres east of the property on highway 37 or from the Bronson airstrip approximately 40 kilometres west of the property. The Bronson airstrip is serviced regularly by air from Terrace and Smithers.

## **3.0 PROPERTY STATUS AND CLAIM HOLDINGS**

The Lakewater property consists of four contiguous mineral claims totalling 72 units. The claims, their record numbers and recording dates are outlined in the table below.



<b>PRIME EQUITIES INC.</b>	
TYMAR RES. INC. / AKIKO-LORI GOLD RES. LTD. / WARTech RES. LTD.	
<b>LAKEWATER PROJECT</b>	
<b>LOCATION MAP</b>	
FIG: 1	
DATE: NOV. /1990	DRAFTED BY: B.R.



**FIGURE 2**

**PRIME EQUITIES INC.**  
 TYMAR RES. INC. / AKIKO-LORI GOLD RES. LTD. /  
 VARITECH RES. LTD.  
**LAKEWATER PROJECT**  
**CLAIM MAP**  
 Date: November 7, 1990  
 Drafted by: E.R.  
 0 .5 1Km  
 Scale 1:25,000  
 Fig. 2

<u>Claim</u>	<u>Units</u>	<u>Record Number</u>	<u>Recording Date</u>
LAKE 1	20	6287	July 20, 1987
LAKE 2	16	6288	July 20, 1987
TOM 1	20	7779	August 15, 1989
TOM 2	16	7780	August 15, 1989

#### 4.0 REGIONAL GEOLOGY

The Lakewater property lies within the Intermontane Tectonostratigraphic belt, one of five northwest-southeast trending belts which make up the Canadian Cordillera.

Regionally, the property is situated in the Stikine Terrane bounded to the west by the Coast Plutonic Complex, to the north by the Stikine Arch, to the east by the Quesnel Terrane and to the south by the Skeena Arch (Wheeler et al, 1988). The Stikine Terrane is composed of late Triassic to early Jurassic volcanic rocks and is overlain by the Middle and Upper Jurassic Bowser Basin Sediments.

The lobe of the Stikine Terrane along the western edge of the Bowser Basin is referred to as the Stewart Complex. The Stewart Complex is comprised of Upper Triassic epiclastic volcanics, marbles, sandstones and siltstones of the Stuhini Group. The package is overlain by the Hazelton Group which is made up of three distinct formations. The first is the Unuk River Formation which is overlain by the Betty Creek Formation which in turn is overlain by the Mount Dilworth Formation. It is the Mount Dilworth Formation which hosts the Eskay Creek 21B deposit.

## **5.0 LOCAL GEOLOGY**

Much of the central and northern portion of the Lakewater property is covered by a thick folded and faulted sequence of clastic sediments belonging to the basal Ashman Formation of the Bowser Lake Group (Anderson, 1989 and Gunning 1986). The Ashman Formation is comprised of shales, siltstones sandstones and conglomerates.

The northeast trending, west dipping sequence of volcanics and sediments in the southeast corner of the Lakewater Property belong to the Lower Jurassic Hazelton Group and are in contact with the Bowser sediments. This contact may be a fault displayed along Argillite and Coulter Creeks.

*Dacitic tuffs, breccias and epiclastics are exposed on the North and South SIB Claim Gaps. The dacites host pyritic and siliceous gossans which contain precious metal and/or base metal mineralization. Overlying the dacites are carbonaceous and calcareous wacke and lesser andesitic tuffs. Together with the dacitic volcanics, these rocks are believed to be the Betty Creek Formation.*

The Betty Creek Sequence is conformably overlain by resistant, whitish weathering, siliceous, rhyolitic-dacitic flows, tuffs and breccias which have been correlated to the Mount Dilworth Formation (Aldrick, 1987). The rhyolite is locally intruded by rusty-weathering, rubbly andesite dykes, thought to be feeders of the overlying Salmon River volcanics.



## 6.0 INSTRUMENT SPECIFICATIONS

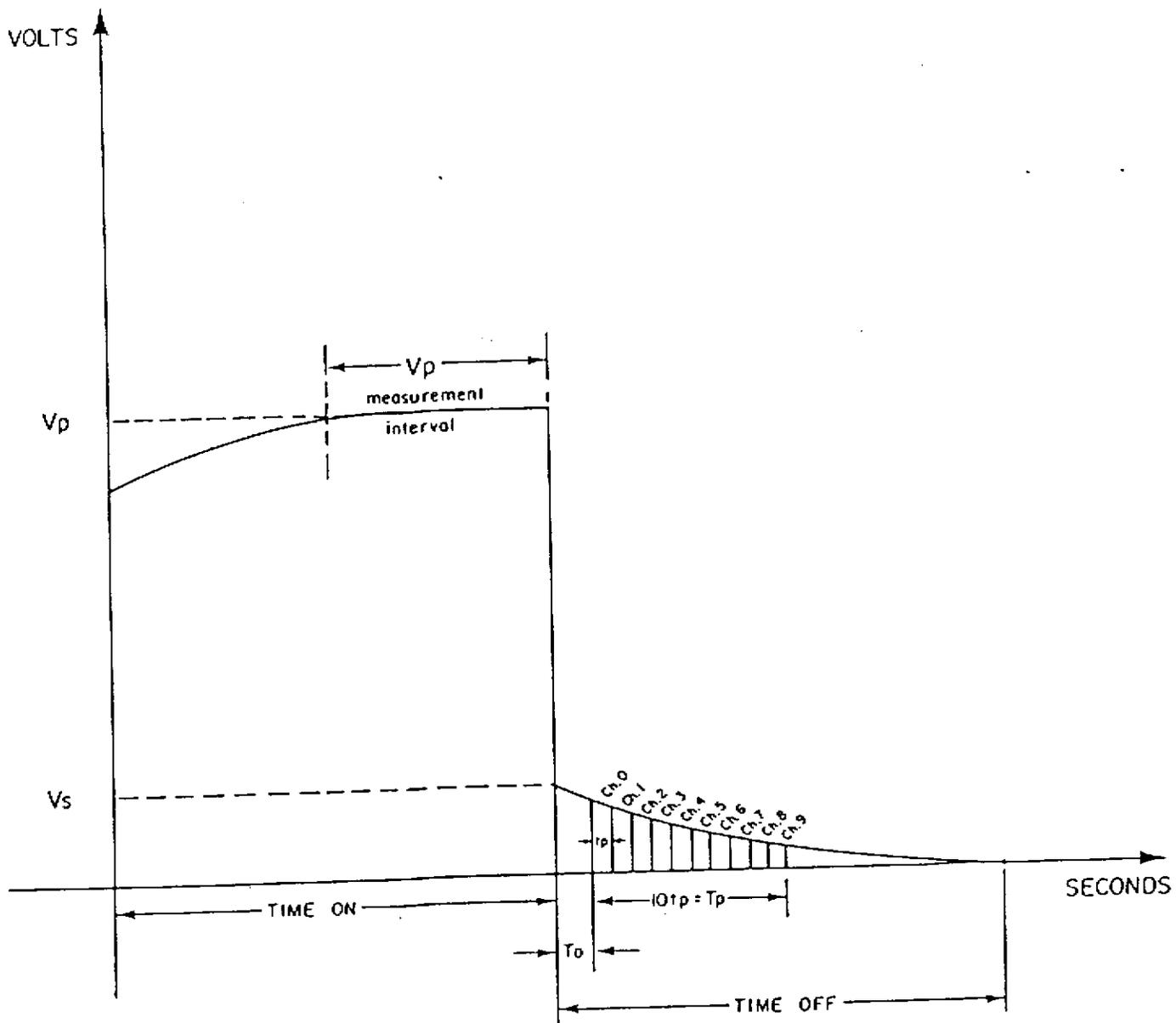
The equipment used to carry out this survey was a time domain measuring system consisting of a Wagner Leland/Onan motor generator set and a Mark II transmitter manufactured by Hunttec Limited, Toronto, Canada and a 6 channel IP-6 receiver manufactured by BRGM Instruments, Orleans, France.

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<sub>0</sub>, Ch<sub>1</sub>, Ch<sub>2</sub>, Ch<sub>3</sub>, Ch<sub>4</sub>, Ch<sub>5</sub>, Ch<sub>6</sub>, Ch<sub>7</sub>, Ch<sub>8</sub>, Ch<sub>9</sub> (see Figure 3). These may be recorded individually and summed up automatically to obtain the total chargeability. Similarly the resistivity ( $\rho_s$ ) in ohm-metres is also calculated automatically.



**BRGM IP-6 RECEIVER PARAMETERS**

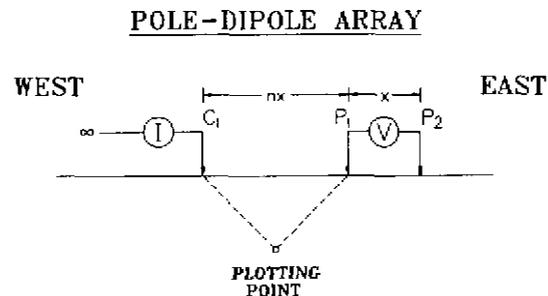
Figure 3

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
Window Width ( $t_p$ )	= 90 milliseconds
Total Integrating Time ( $T_p$ )	= 900 milliseconds

## 7.0 SURVEY SPECIFICATIONS

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



$$x = 25 \text{ metres} \quad n = 1, 2, 3 \text{ and } 4$$

On the Lakewater grid the current electrode was WEST of the potential measuring dipole  $P_1P_2$ . Here the lines were 100 metres apart and measurements were taken for  $x = 25$  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.

## **8.0 DATA PROCESSING**

At the end of each survey day the data collected was processed in the field, for a quick review of anomalies, data integrity checks and inspection by the client's representative.

In the office the data was transferred to a COMPAQ 386 coupled to a Hewlett Packard Draftmaster II plotter for preparation of final pseudo-sections and contour plan maps on mylar.

## **9.0 DATA PRESENTATION**

The data obtained from the survey described in this report is presented on 14 pseudo-sections, 2 IP survey maps, 1 magnetic survey map\* and 2 VLF-EM survey maps\* as follows:

Pseudo-Sections

<u>Line No.</u>	<u>Dwg. No.</u>	<u>Line No.</u>	<u>Dwg. No.</u>
2400S	90312-1	1500S	90312-8
2300S	90312-2	1400S	90312-9
2200S	90312-3	1300S	90312-10
2100S	90312-4	200S	90312-11
2000S	90312-5	100S	90312-12
1900S	90312-6	0	90312-13
1600S	90312-7	100N	90312-14

Plan Maps and Profiles

Chargeability 10 Point Triangular Filter	90312-15
Resistivity 10 Point Triangular Filter	90312-16
Total Field Magnetic Contours	90312-17
VLF-EM In-Phase and Out-Phase Profiles	90312-18
VLF-EM Fraser Filter Contours	90312-19

\* The Total Field Magnetic Data and VLF-EM data were provided by Prime Equities Inc.

10.0 DISCUSSION OF RESULTS

The Total Field Magnetic data and VLF-EM data referred to in this report were provided by Prime Equities Inc.

The magnetometer survey outlined a number of low amplitude magnetic anomalies of roughly 200nT above background (say 400nT). Many of these anomalies lie along trend with the magnetic signature associated with the hosting stratigraphy of the Eskay Creek 21B

Deposit. The majority of the area covered by both the ground magnetometer and IP surveys shows little or no variation in magnetic response above background.

The most useful geophysical exploration surveys in the Eskay Creek type of environment are the Induced Polarization/Resistivity and VLF-EM surveys.

Prior to discussing the results of the IP survey, mention should be made of the main factors contributing to an IP response. These factors are:

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 presence of magnetite, graphite, clay minerals and variably altered rocks
6. The electrode array employed
7. The width, depth, thickness and strike length of the mineralized body and its location relative to the array
8. The resistivity contrast between the mineralized body and the unmineralized host rock

In view of these variables it is encouraging to use IP as an exploration tool in search for the

carbonaceous mudstones hosting mineral deposits found in the Eskay Creek type of geological environment.

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 on the resistivity response which in this geological setting is a valuable parameter with respect to interpretation. 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.

Referring to maps 90312-15, the Chargeability 10 Point Triangular Filter, and 90312-19, the VLF-EM Fraser Filter Contours there are 5 zones of increased chargeability with coincident VLF-EM conductors worthy of further exploration by drilling.

The first zone of increased chargeability is centred on station 500W on line 100S. Chargeability values within this zone range from 17 to over 23 milliseconds while background values in the immediate vicinity vary between 9 and 13 milliseconds. Based on the chargeability response, this zone may be up to 50 metres wide with its axis running from 450W on line 100N to 457W on line 200S. The axis of the VLF-EM conductor lies along the eastern edge of the high chargeability zone and runs from about 450W on line 200N to 425W on line 200S.

The second zone occurs in the SIB claim gap on the eastern limits of lines 1400S to 1600S. This zone may be represented by andesitic wackes which run northeast to southwest along strike with Eskay Creek's 21B deposit. A well-defined VLF-EM conductor is coincident with this high chargeability zone with its axis running from 880E on line 1300S to 845E on line 1600S. This zone of increased chargeability has been extensively tested by drill holes LW90-2, LW90-3, LW90-5, LW90-6, LW90-7, LW90-9, LW91-21, LW91-22 and LW91-24. It appears, however, from the VLF-EM data supplied by Prime Equities Inc., that the conductor may lie to the west of the previously drilled holes and therefore may require further testing by drilling.

The third zone trends from 325E on line 1300S to 300E on line 1600S and remains open to the north and south. The conductor associated with this anomalous chargeability zone is well regarded and extends from 325E on line 1500S to 275E on line 2100S.

The fourth zone is on the south end of the grid between lines 1900S and 2400S. Here chargeabilities are generally high (over 25 milliseconds) to the west of 550E and resistivities are fairly uniform and low (200 to 400 ohm-metres). To the east of 550E chargeabilities drop off and resistivities increase abruptly representing a probable geologic contact or fault. A well defined chargeability anomaly occurs along the western edge of this resistivity break from 450E on line 2200S to 475E on line 2400S. There is a VLF-EM conductor coincident with this anomaly on line 2200S, however, there was no VLF-EM data collected south of line 2200S or to the east of station 500E over this portion of the grid, making it difficult to determine the true axis and extent of the conductor.

Another zone of anomalous chargeability values trends from 200E on line 1900S to 225E on line 2400S and is worthy of further investigation by drilling. This anomaly remains open to the north and to the south.



Finally an IP anomaly occurs on the western limits of lines 2100S to 2300S. This anomaly remains open to the west and requires further coverage by Induced Polarization techniques prior to recommendations for drilling.

## **11.0 CONCLUSIONS AND RECOMMENDATIONS**

From a study of the IP, Magnetic and VLF-EM data described in this report, several high chargeability zones with coincident Magnetic and VLF-EM responses are recommended for further exploration by drilling.

Zone 1, as described in the discussion of results, is worthy of limited drilling to test the conductor along the eastern edge of the anomalous chargeability zone.

<u>Drill Hole</u>	<u>Line No.</u>	<u>Location</u>	<u>Dip</u>	<u>Direction</u>	<u>Length</u>
1	0	500W	-45°	west to east	150 metres
2	100S	475W	-45°	west to east	150 metres
3	100S	525W	-45°	west to east	150 metres

Further drilling in this area should be based on the success of these first three holes.

Zone 2 has been tested by drill holes LW90-2, LW90-3, LW90-5, LW90-6, LW90-7, LW90-9, LW91-21, LW91-22 and LW91-24. Drill hole LW90-2 returned anomalous values of 1.197 ounces per ton gold and 1.70 ounces per ton silver over three metres. Further drilling in this area is recommended to test a coincident IP/VLF-EM conductor running from 880E on line 1300S to 850E on line 1600S as follows:

<u>Drill Hole</u>	<u>Line No.</u>	<u>Location</u>	<u>Dip</u>	<u>Direction</u>	<u>Length</u>
4	1400S	850E	-45°	west to east	150 metres
5	1300S	850E	-45°	west to east	150 metres
6	1500S	850E	-45°	west to east	150 metres
7	1450S	850E	-45°	west to east	150 metres

The third zone of anomalous chargeability values is on the eastern flank of a VLF-EM conductor on lines 1300S and 1400S and is VLF-EM coincident on lines 1500S and 1600S. Drilling recommendations for this zone are as follows:

<u>Drill Hole</u>	<u>Line No.</u>	<u>Location</u>	<u>Dip</u>	<u>Direction</u>	<u>Length</u>
8	1300S	315E	-45°	west to east	150 metres
9	1300S	525E	-45°	west to east	150 metres
10	1500S	300E	-45°	west to east	150 metres
11	1400S	285E	-45°	west to east	150 metres

The south-west portion of the Lakewater grid (L1900S to 2400S) displays a large area of anomalous chargeability values. Two individual zones within this area warrant testing by drilling at this time. The first is Zone Four which has been interpreted as lying to the west of a geologic contact or fault. To date the only hole testing this anomaly is LW91-20. Recommended follow-up drilling for this zone is outlined below:

<u>Drill Hole</u>	<u>Line No.</u>	<u>Location</u>	<u>Dip</u>	<u>Direction</u>	<u>Length</u>
12	1900S	360E	-45°	west to east	150 metres
13	2100S	325E	-45°	west to east	150 metres
14	2300S	330E	-45°	west to east	150 metres
15	2300S	380E	-45°	west to east	150 metres

The second zone in the southwest portion of the Lakewater grid trends from 200E on line 1900S to station 225E on line 2400S, lies between two VLF-EM conductors and is VLF-EM coincident on line 1900S only. Recommended drill holes along this anomaly are as follows:

<u>Drill Hole</u>	<u>Line No.</u>	<u>Location</u>	<u>Dip</u>	<u>Direction</u>	<u>Length</u>
16	1900S	165E	-45°	west to east	150 metres
17	2100S	170E	-45°	west to east	150 metres
18	2200S	190E	-45°	west to east	150 metres

Finally, additional IP surveying is recommended to determine the size and extent of those anomalies which remain open along strike.

Respectfully Submitted,  
LLOYD GEOPHYSICS INC.



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



Daniel A. Klit, B.Sc.  
Geophysicist

March, 1991

(A)

**PERSONNEL EMPLOYED ON SURVEY**

<u>Name</u>	<u>Occupation</u>	<u>Address</u>	<u>Dates</u>
J Lloyd	Geophysicist	Lloyd Geophysics Inc. 1503-1166 Alberni Street Vancouver, B.C. V6E 3Z3	Mar 21-22/91
D Klit	Geophysicist	"	Mar 18-20/91
F Dziuba	Geophysicist	"	Aug 8-24, Sept 26-30/90
D Boitard	Geophysical Technician	"	Aug 8-24/90
S MacDougall	Geophysical Technician	"	Sept 26-30/90
F VonHeyking	Helper	"	Aug 8-24, Sept 26-30/90
R Lloyd	Helper	"	Aug 8-24/90
D Collins	Helper	"	Aug 8-24/90
R Wheater	Helper	"	Sept 26-30/90
P Bullock	Helper	"	Sept 26/90
L Hanson	Helper	"	Sept 27-30/90

(B)

**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.

(C)

STATEMENT OF COSTS

Induced Polarization Surveying

1) August 8-24, 1990 (Inv. 0763/Aug. 31, 1990) 22,675.64  
-includes mob/demob.

2) September 26-30, 1990 (Inv. 0772/Nov. 08, 1990) 7,375.00

Data Processing/Report Writing (Inv. 0791/Jan. 30, 1991) 1,549.17  
-includes equipment rental

Total: \_\_\_\_\_  
31,599.81

EURUS

TOM 1

LAKE 1



PRIME/STIKINE  
FSKAY CK  
PROJECT

TOK 15

TOK 12

TOK 14

TOK 13

SIB 2

SIB 1

SIB 4

SIB 3

SIB 6

SIB 5

TOM 2

LAKE 2

AMERICAN FIRE / SILVER BUTTE

SIB 8

SIB 7

FIGURE 2

**PRIME EQUITIES INC.**

TYMAR RES. INC. / AKKO-LON GOLD RES. LTD. /  
VARITECH RES. LTD

**LAKEWATER PROJECT  
CLAIM MAP**

Date: October 2, 1991

Drafted by: E.R.

0 5 1Km

Scale 1:25,000

TELTON / BRIGHTWICK / CASANDRA

Little Tom  
Mackey Lake

Tom

LCF

10+00S

12+00S

14+00S

16+00S

18+00S

20+00S

22+00S

24+00S

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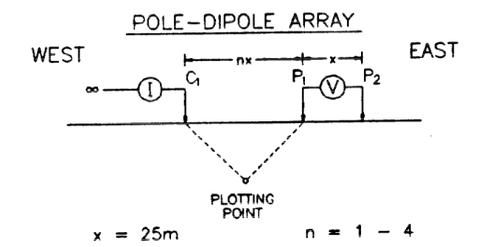
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TYMAR RESOURCES INC.  
AKIKO LORI GOLD RESOURCES LTD.

LAKEWATER PROJECT  
ESKAY CREEK, B.C.

LINE: 2400S



CURRENT ELECTRODE C<sub>1</sub> WEST  
OF POTENTIAL DIPOLE P<sub>1</sub>P<sub>2</sub>

SURFACE PROJECTION  
OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

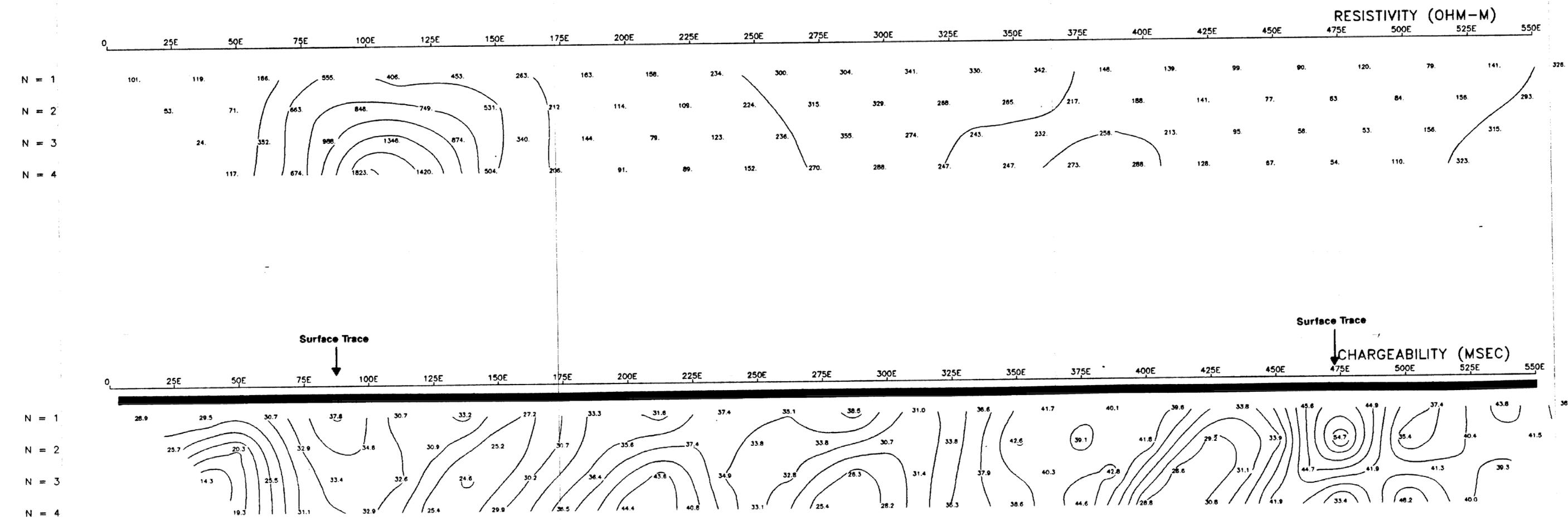
SCALE 1 : 1000

CONTOUR INTERVALS  
APP.CHARGEABILITY : 2.5 (msec)  
APP.RESISTIVITY : 250 (ohm-m)

DATE SURVEYED: Sept. 26 1990  
Tx: Huntec Mk2 Model 7500  
Rx: EDA IP-6

21432 pg. 24  
**LLOYD GEOPHYSICS  
INC.**

INDUCED POLARIZATION SURVEY  
DRAWING NUMBER : 90312-1



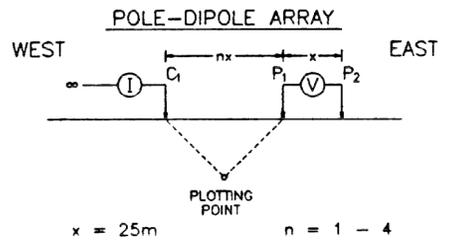


TYMAR RESOURCES INC.  
AKIKO LORI GOLD RESOURCES LTD.

LAKEWATER PROJECT

ESKAY CREEK, B.C.

LINE: 2300S



CURRENT ELECTRODE C<sub>1</sub> WEST OF POTENTIAL DIPOLE P<sub>1</sub>P<sub>2</sub>

SURFACE PROJECTION OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

SCALE 1 : 1000

CONTOUR INTERVALS  
APP. CHARGEABILITY : 2.5 (msec)  
APP. RESISTIVITY : 250 (ohm-m)

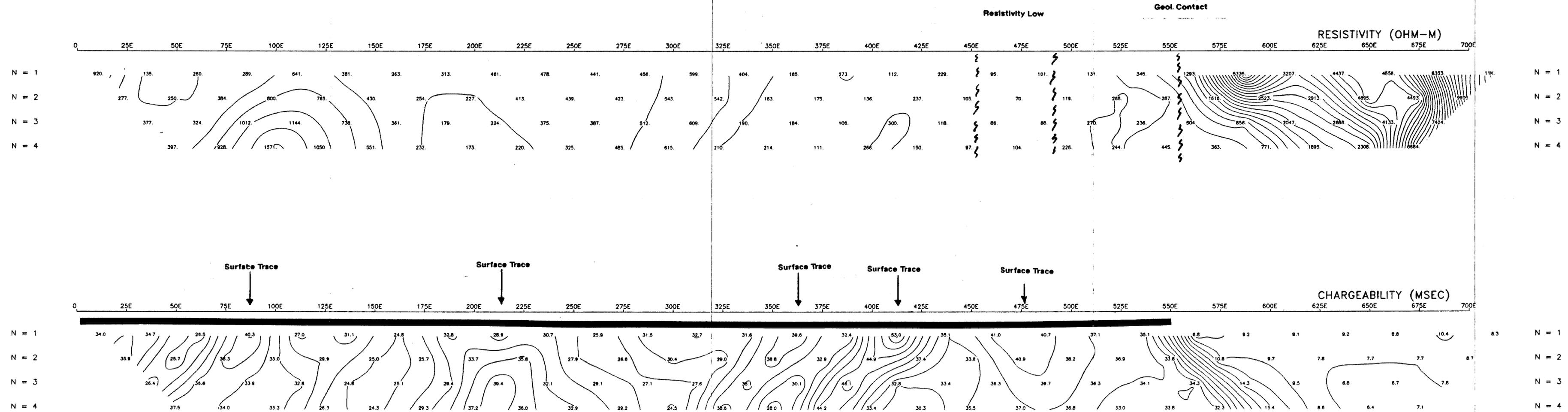
DATE SURVEYED: Sept. 27 1990  
Tx: Huntec MK2 Model 7500  
Rx: EDA IP-6

21432 pg 25

**LLOYD GEOPHYSICS INC.**

INDUCED POLARIZATION SURVEY

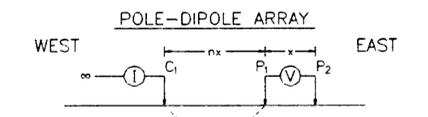
DRAWING NUMBER : 90312-2



TYMAR RESOURCES INC.  
AKIKO LORI GOLD RESOURCES LTD.

LAKEWATER PROJECT  
ESKAY CREEK, B.C.

LINE: 2100S



x = 25m n = 1 - 4

CURRENT ELECTRODE C<sub>1</sub> WEST  
OF POTENTIAL DIPOLE P<sub>1</sub>P<sub>2</sub>

SURFACE PROJECTION  
OF ANOMALOUS ZONES



SCALE 1 : 1000

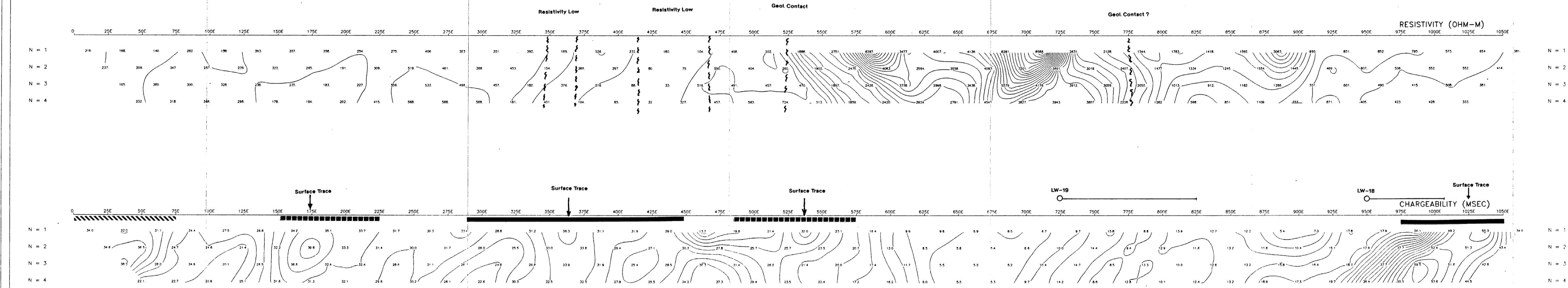
CONTOUR INTERVALS  
APP CHARGEABILITY 2.5 (msec)  
APP RESISTIVITY 250 (ohm-m)

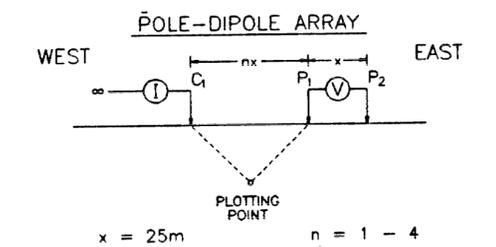
DATE SURVEYED: Sept 29 1990  
Tx: Huntco M42 Model 7500  
Rx: EDA IP-6

21432 pg 26

LLOYD GEOPHYSICS  
INC.

INDUCED POLARIZATION SURVEY  
DRAWING NUMBER : 90312-4





CURRENT ELECTRODE C<sub>1</sub> WEST  
OF POTENTIAL DIPOLE P<sub>1</sub>P<sub>2</sub>

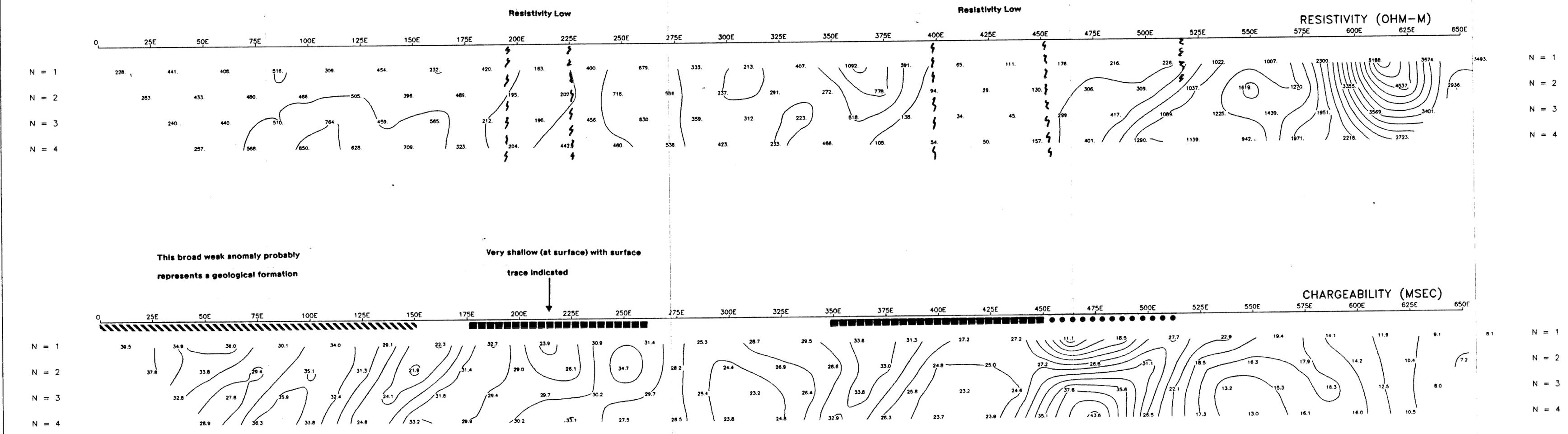
SURFACE PROJECTION  
OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

SCALE 1 : 1000

CONTOUR INTERVALS  
APP. CHARGEABILITY : 2.5 (msec)  
APP. RESISTIVITY : 250 (ohm-m)

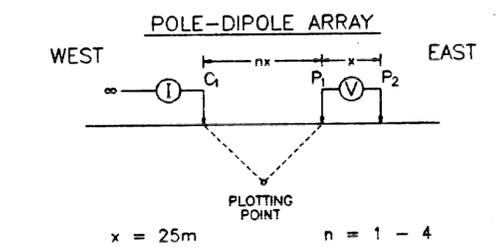
DATE SURVEYED: 08-18/09-30 1990  
Tx: Huntex Mk2 Model 7500  
Rx: EDA IP-6



TYMAR RESOURCES INC.  
AKIKO LORI GOLD RESOURCES LTD.

LAKEWATER PROJECT  
ESKAY CREEK, B.C.

LINE: 1900S



CURRENT ELECTRODE C<sub>1</sub> WEST OF POTENTIAL DIPOLE P<sub>1</sub>P<sub>2</sub>

SURFACE PROJECTION OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

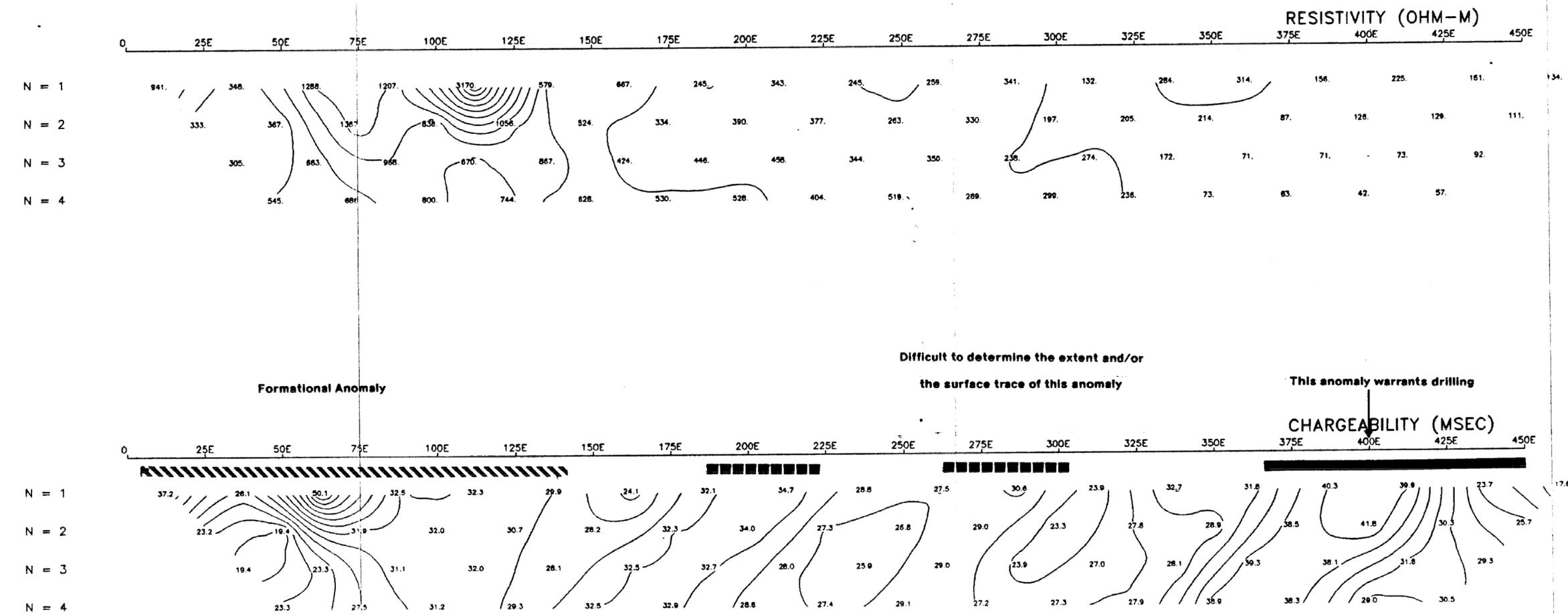
SCALE 1 : 1000

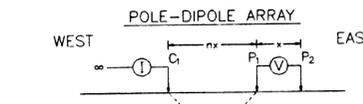
CONTOUR INTERVALS  
APP. CHARGEABILITY : 2.5 (msec)  
APP. RESISTIVITY : 250 (ohm-m)

DATE SURVEYED: August 17, 18 1990  
Tx: Huntec Mk2 Model 7500  
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY  
DRAWING NUMBER : 90312-6





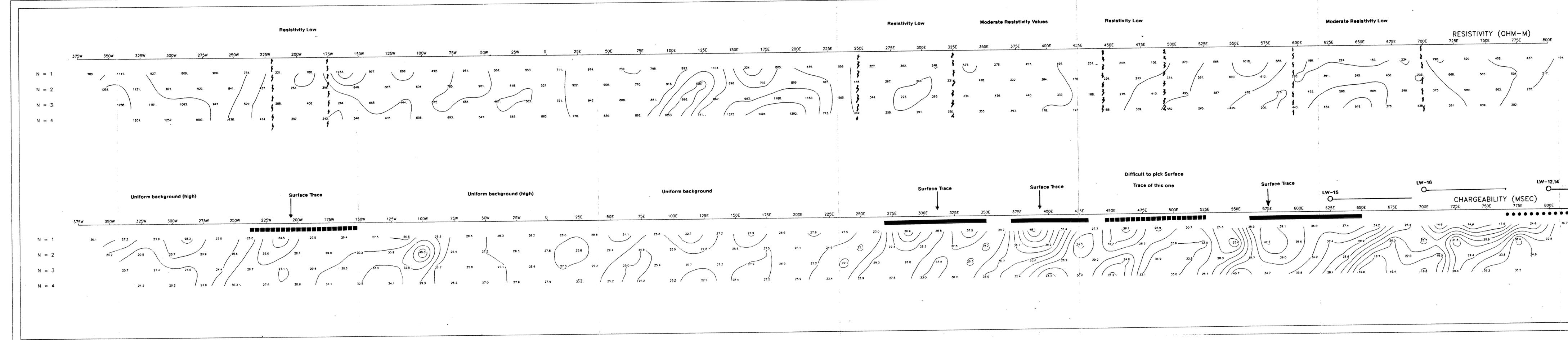
WEST EAST  
x = 25m n = 1 - 4  
CURRENT ELECTRODE C<sub>1</sub> WEST OF POTENTIAL DIPOLE P<sub>1</sub>P<sub>2</sub>

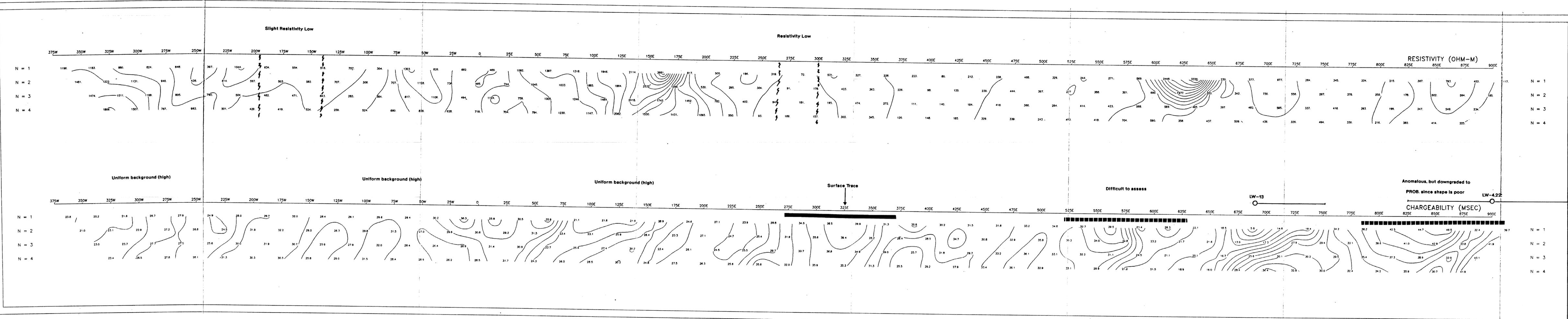
SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE  
PROBABLE  
POSSIBLE  
AT DEPTH

SCALE 1 : 1000

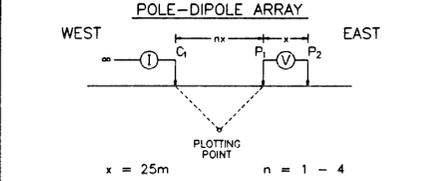
CONTOUR INTERVALS  
APP. CHARGEABILITY : 2.5 (msec)  
APP. RESISTIVITY : 250 (ohm-m)  
DATE SURVEYED: August 15, 16 1990  
Tx: Huntec Mk2 Model 7500  
Rx: EDA IP-6





TYMAR RESOURCES INC.  
AKIKO LORI GOLD RESOURCES LTD

LAKEWATER PROJECT  
ESKAY CREEK, B.C.  
LINE: 1500S

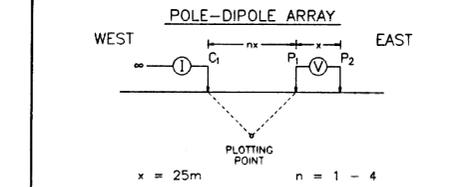


CURRENT ELECTRODE C1 WEST OF POTENTIAL DIPOLE P1P2  
SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ■■■■■■  
PROBABLE ■■■■■■  
POSSIBLE ■■■■■■  
AT DEPTH .....  
SCALE 1 : 1000

CONTOUR INTERVALS  
APP CHARGEABILITY : 2.5 (msec)  
APP RESISTIVITY : 250 (ohm-m)  
DATE SURVEYED: August 13, 14 1990  
Tx: Huntac Mk2 Model 7500  
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.  
INDUCED POLARIZATION SURVEY  
DRAWING NUMBER : 90312-8

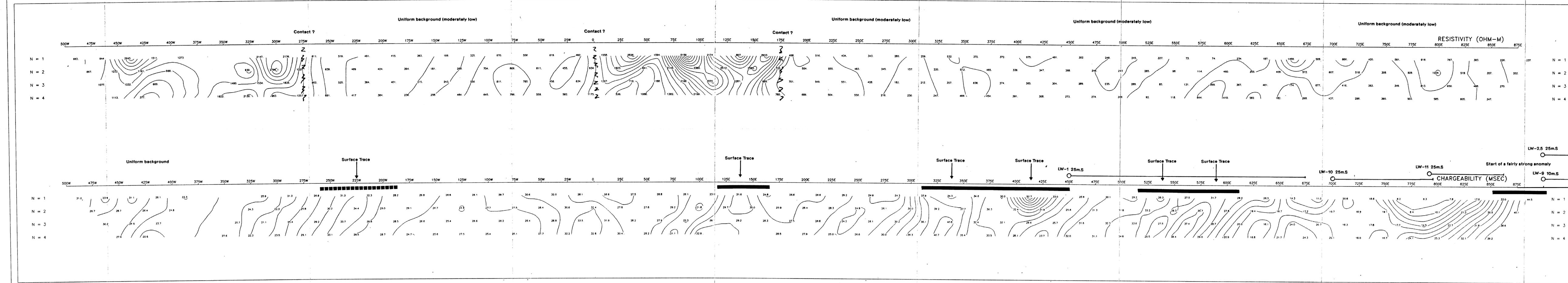


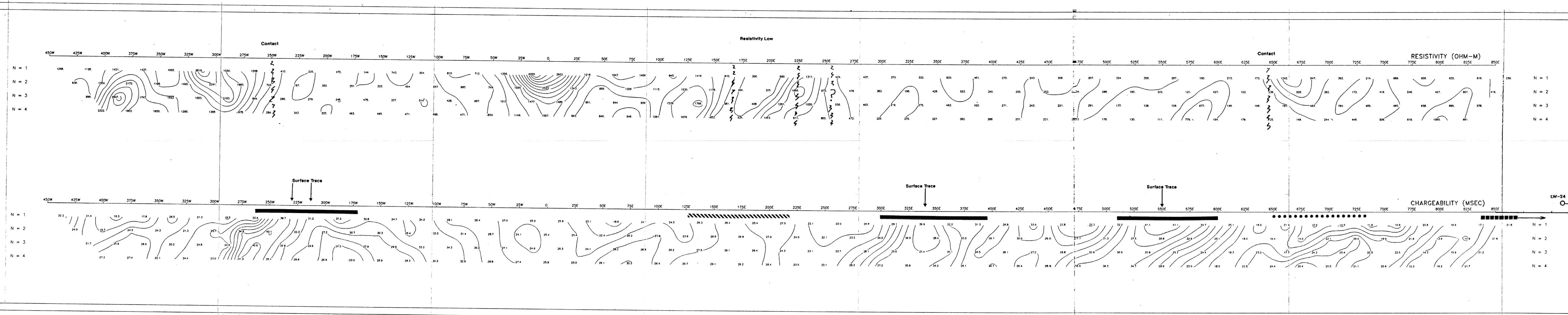
CURRENT ELECTRODE C<sub>1</sub> WEST OF POTENTIAL DIPOLE P<sub>1</sub>P<sub>2</sub>

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE ■■■■■■  
PROBABLE ■■■■■■  
POSSIBLE ■■■■■■  
AT DEPTH .....  
SCALE 1 : 1000

CONTOUR INTERVALS  
APP.CHARGEABILITY : 2.5 (msec)  
APP.RESISTIVITY : 250 (ohm-m)  
DATE SURVEYED: August 11-13 1990  
Tx: Huntex MK2 Model 7500  
Rx: EDA IP-6

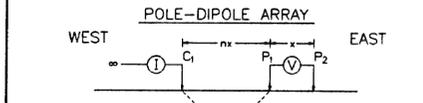




TYMAR RESOURCES INC.  
AKIKO LORI GOLD RESOURCES LTD.

LAKEWATER PROJECT  
ESKAY CREEK, B.C.

LINE: 1300S



WEST EAST  
x = 25m n = 1 - 4  
CURRENT ELECTRODE C1 WEST OF POTENTIAL DIPOLE P1P2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE  
PROBABLE  
POSSIBLE  
AT DEPTH

SCALE 1 : 1000  
CONTOUR INTERVALS  
APP. CHARGEABILITY : 2.5 (msec)  
APP. RESISTIVITY : 250 (ohm-m)  
DATE SURVEYED: August 19, 20 1990  
Tx: Hunttec M42 Model 7500  
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.  
INDUCED POLARIZATION SURVEY  
DRAWING NUMBER : 90312-10

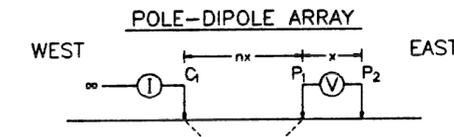
LW-24



**TYMAR RESOURCES INC.  
AKIKO LORI GOLD RESOURCES LTD.**

**LAKEWATER PROJECT**  
ESKAY CREEK, B.C.

**LINE: 200S**



x = 25m      n = 1 - 4

CURRENT ELECTRODE C<sub>1</sub> WEST  
OF POTENTIAL DIPOLE P<sub>1</sub>P<sub>2</sub>

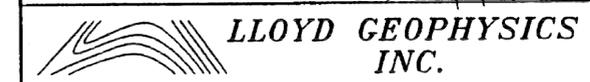
SURFACE PROJECTION  
OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

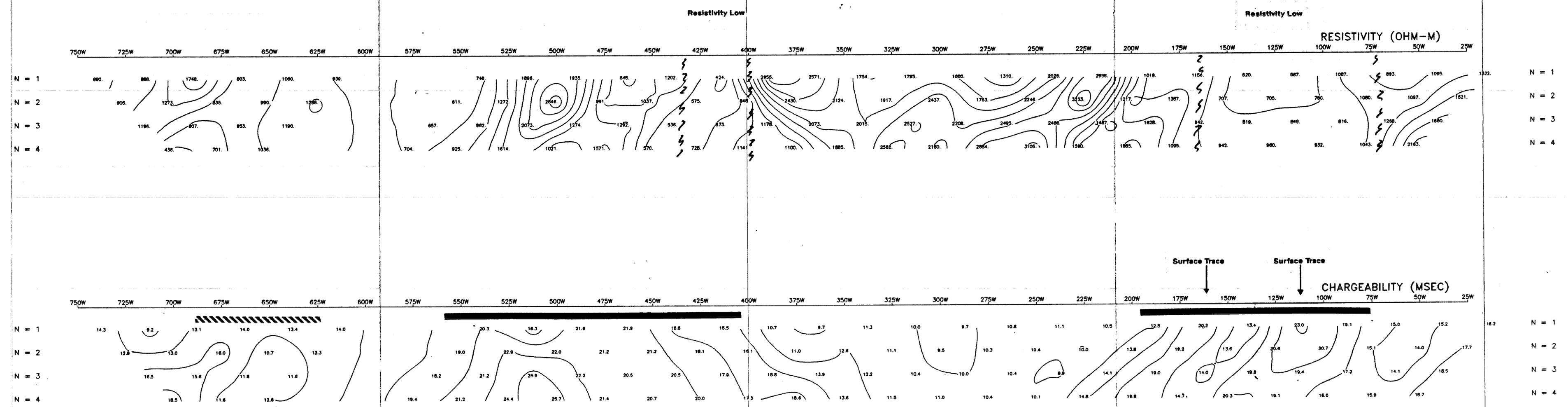
SCALE 1 : 1000

CONTOUR INTERVALS  
APP. CHARGEABILITY : 2.5 (msec)  
APP. RESISTIVITY : 250 (ohm-m)

DATE SURVEYED: August 23,24 1990  
Tx: Huntec Mk2 Model 7500  
Rx: EDA IP-6

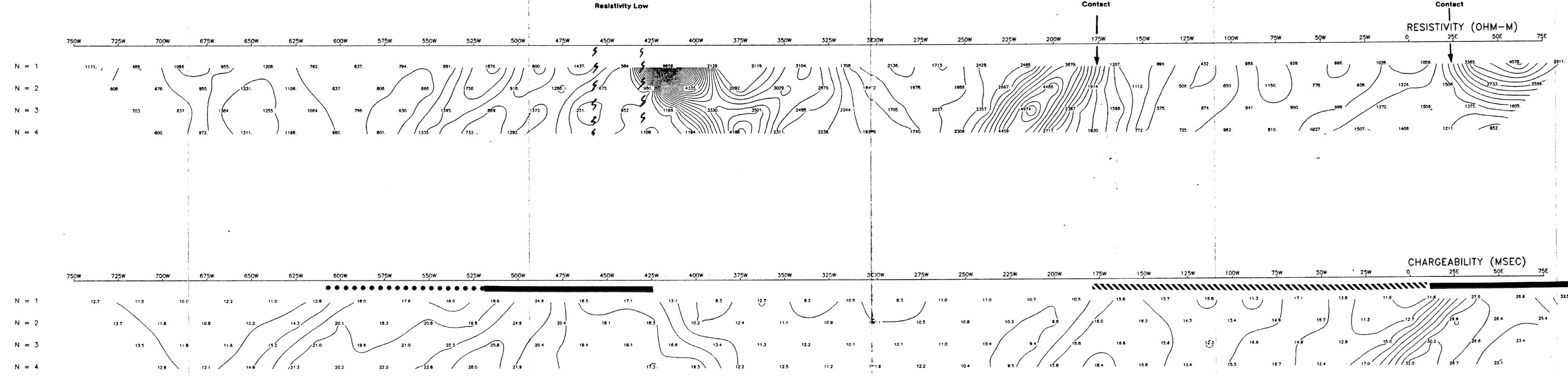


**LLOYD GEOPHYSICS  
INC.**  
INDUCED POLARIZATION SURVEY  
DRAWING NUMBER : 90312-11



N = 1  
N = 2  
N = 3  
N = 4  
  
N = 1  
N = 2  
N = 3  
N = 4

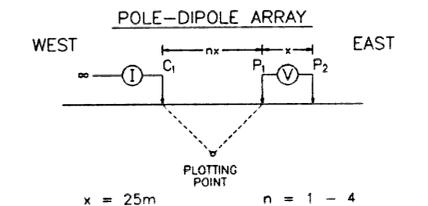
pg. 33



TYMAR RESOURCES INC.  
AKIKO LORI GOLD RESOURCES LTD.

LAKEWATER PROJECT  
ESKAY CREEK, B.C.

LINE: 100S



CURRENT ELECTRODE C<sub>1</sub> WEST  
OF POTENTIAL DIPOLE P<sub>1</sub>P<sub>2</sub>

SURFACE PROJECTION  
OF ANOMALOUS ZONES

- DEFINITE [Solid black bar]
- PROBABLE [Dense hatching]
- POSSIBLE [Diagonal hatching]
- AT DEPTH [Dotted pattern]

SCALE 1 : 1000

CONTOUR INTERVALS  
APP.CHARGEABILITY : 2.5 (msec)  
APP.RESISTIVITY : 250 (ohm-m)

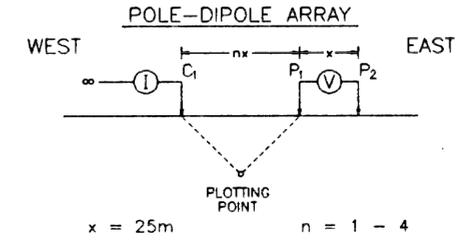
DATE SURVEYED: August 22,23 1990  
Tx: Huntlec Mk2 Model 7500  
Rx: EDA IP-6

**LLOYD GEOPHYSICS  
INC.**  
INDUCED POLARIZATION SURVEY  
DRAWING NUMBER : 90312-12

TYMAR RESOURCES INC.  
AKIKO LORI GOLD RESOURCES LTD.

LAKEWATER PROJECT  
ESKAY CREEK, B.C.

LINE: OS



CURRENT ELECTRODE C<sub>1</sub> WEST  
OF POTENTIAL DIPOLE P<sub>1</sub>P<sub>2</sub>

SURFACE PROJECTION  
OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

SCALE 1 : 1000

CONTOUR INTERVALS  
APP. CHARGEABILITY : 2.5 (msec)  
APP. RESISTIVITY : 250 (ohm-m)  
DATE SURVEYED: August 22 1990  
Tx: Huntec Mk2 Model 7500  
Rx: EDA IP-6

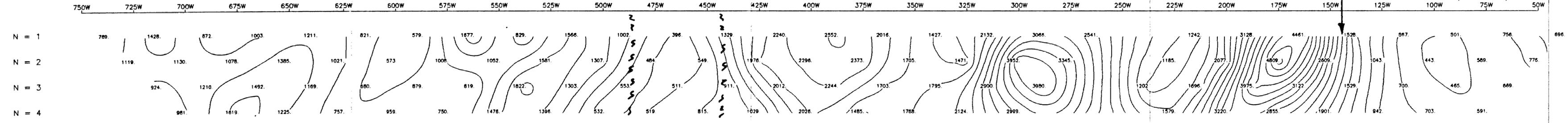
LLOYD GEOPHYSICS  
INC.

INDUCED POLARIZATION SURVEY  
DRAWING NUMBER : 90312-13

Resistivity Low

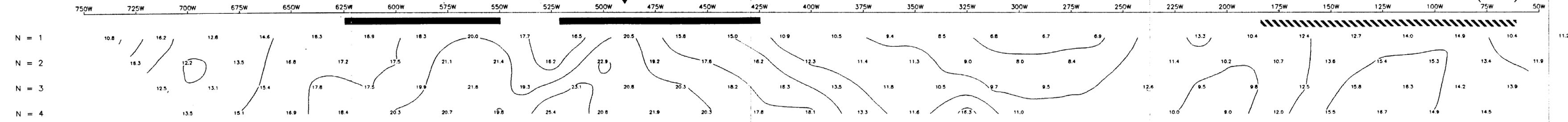
Contact

RESISTIVITY (OHM-M)



Surface Trace

CHARGEABILITY (MSEC)

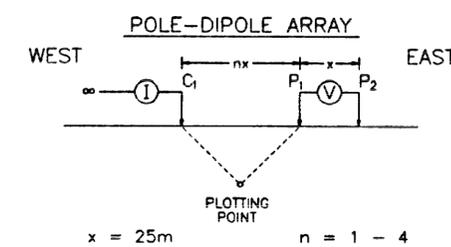


Pg 35

**TYMAR RESOURCES INC.**  
**AKIKO LORI GOLD RESOURCES LTD.**

**LAKEWATER PROJECT**  
 ESKAY CREEK, B.C.

**LINE: 100N**



CURRENT ELECTRODE  $C_1$  WEST OF POTENTIAL DIPOLE  $P_1P_2$

SURFACE PROJECTION OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

SCALE 1 : 1000

CONTOUR INTERVALS  
 APP.CHARGEABILITY : 2.5 (msec)  
 APP.RESISTIVITY : 250 (ohm-m)

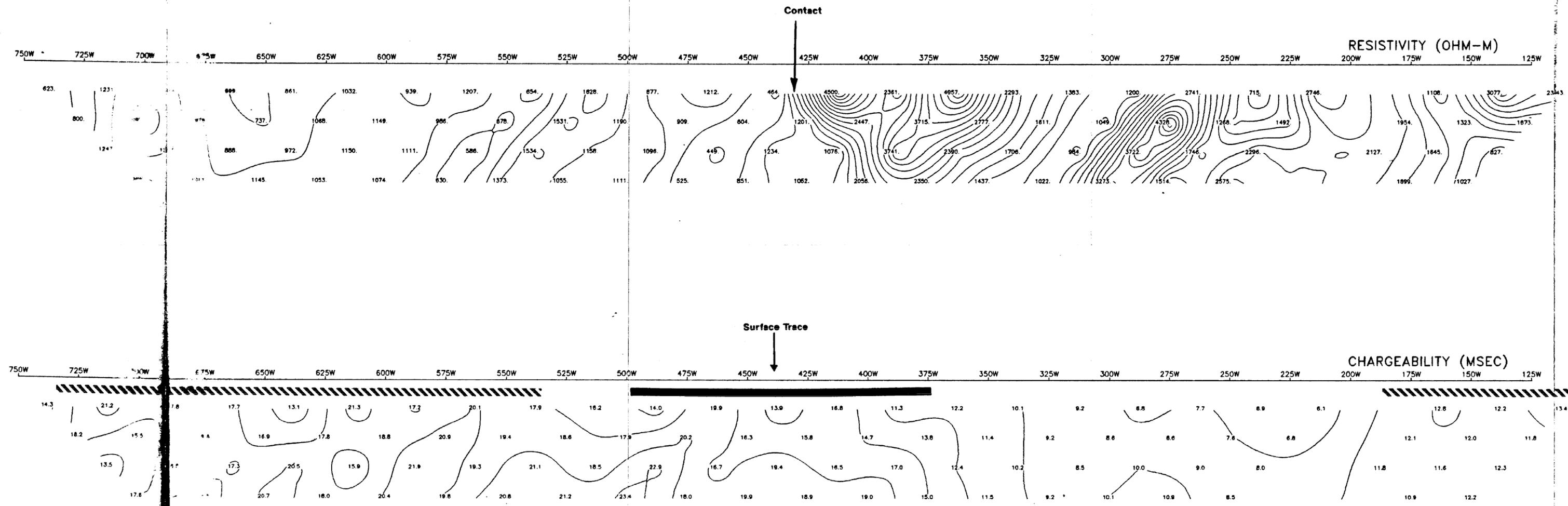
DATE SURVEYED: August 21 1990  
 Tx: Huntec MK2 Model 7500  
 Rx: EDA IP-6

21432 pg. 36

**LLOYD GEOPHYSICS INC.**

**INDUCED POLARIZATION SURVEY**

DRAWING NUMBER : 90312-14



N = 1  
 N = 2  
 N = 3  
 N = 4

N = 1  
 N = 2  
 N = 3  
 N = 4

N = 1  
 N = 2  
 N = 3  
 N = 4

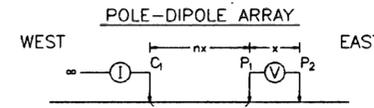
N = 1  
 N = 2  
 N = 3  
 N = 4

TYMAR RESOURCES INC.  
AKIKO LORI GOLD RESOURCES LTD.

LAKEWATER PROJECT

ESKAY CREEK, B.C.

LINE: 2200S



x = 25m n = 1 - 4

CURRENT ELECTRODE C<sub>1</sub> WEST OF POTENTIAL DIPOLE P<sub>1</sub>P<sub>2</sub>

SURFACE PROJECTION OF ANOMALOUS ZONES

- DEFINITE
- PROBABLE
- POSSIBLE
- AT DEPTH

SCALE 1 : 1000

CONTOUR INTERVALS

APP. CHARGEABILITY : 2.5 (msec)

APP. RESISTIVITY : 250 (ohm-m)

DATE SURVEYED: Sept. 27, 28 1990

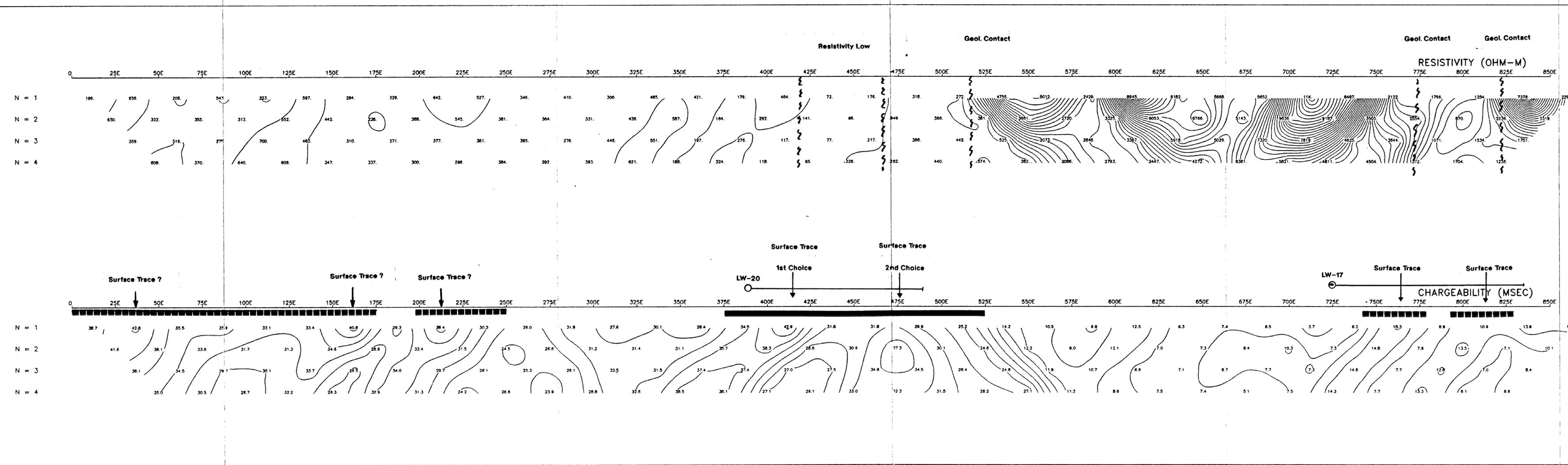
Tr: Huntec Mk2 Model 7500

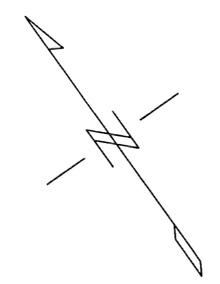
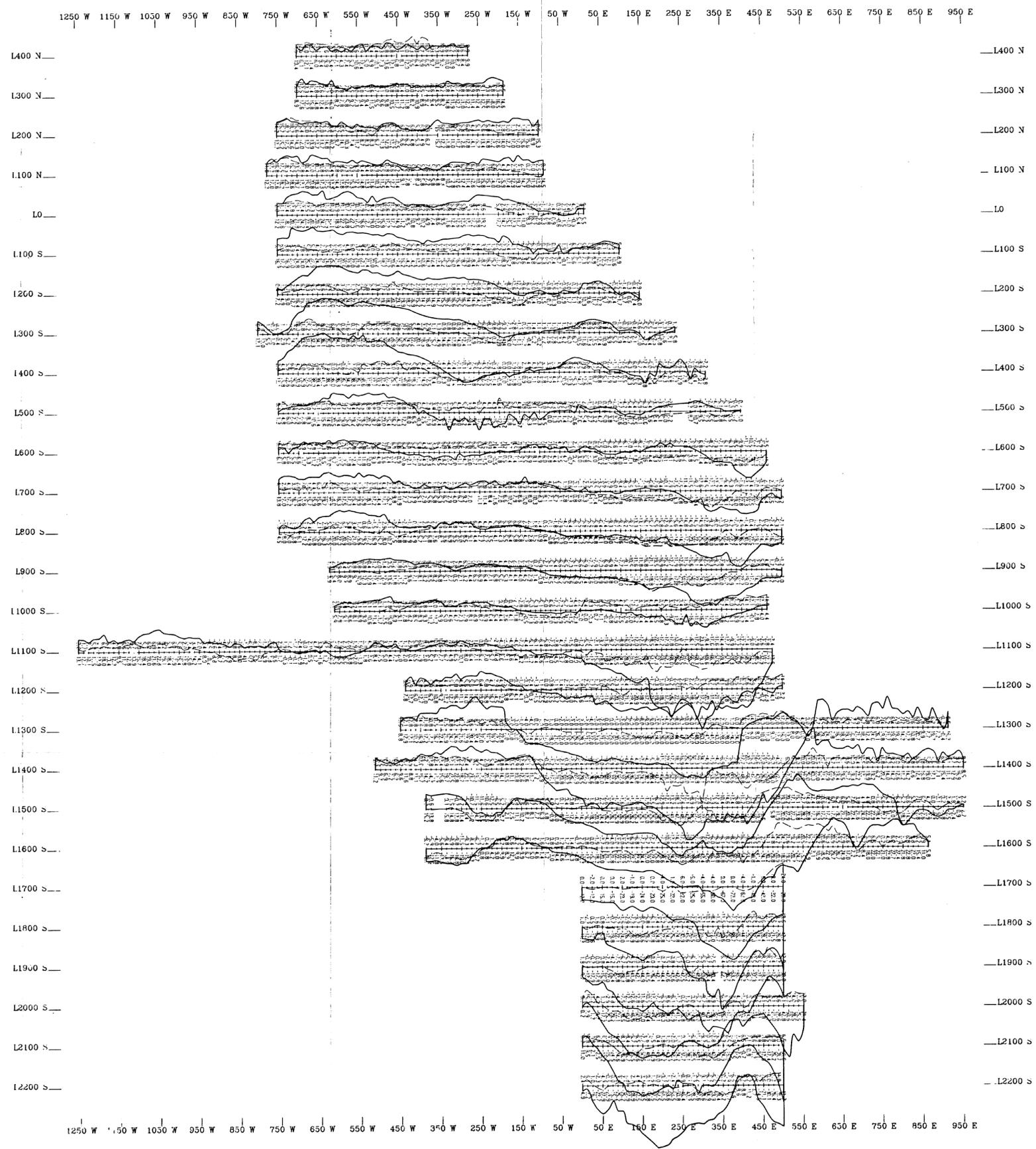
Rx: EDA IP-6

**LLOYD GEOPHYSICS INC.**

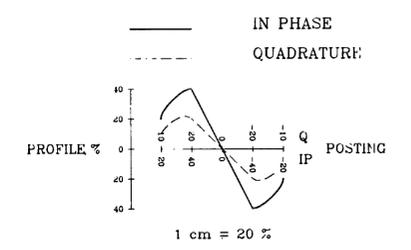
INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 90312-3 P. 37





**LEGEND**



**TRANSMITTER LOCATION**  
LUALUALEI, HAWAII (NPM 23.4 kHz)

**INSTRUMENT**  
EDA OMNI PLUS  
3 Orthogonal Rx. Coils, Tilt Compensated

VLF-EM DATA SUPPLIED BY  
PRIME EQUITIES INC.

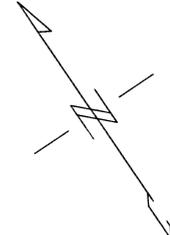
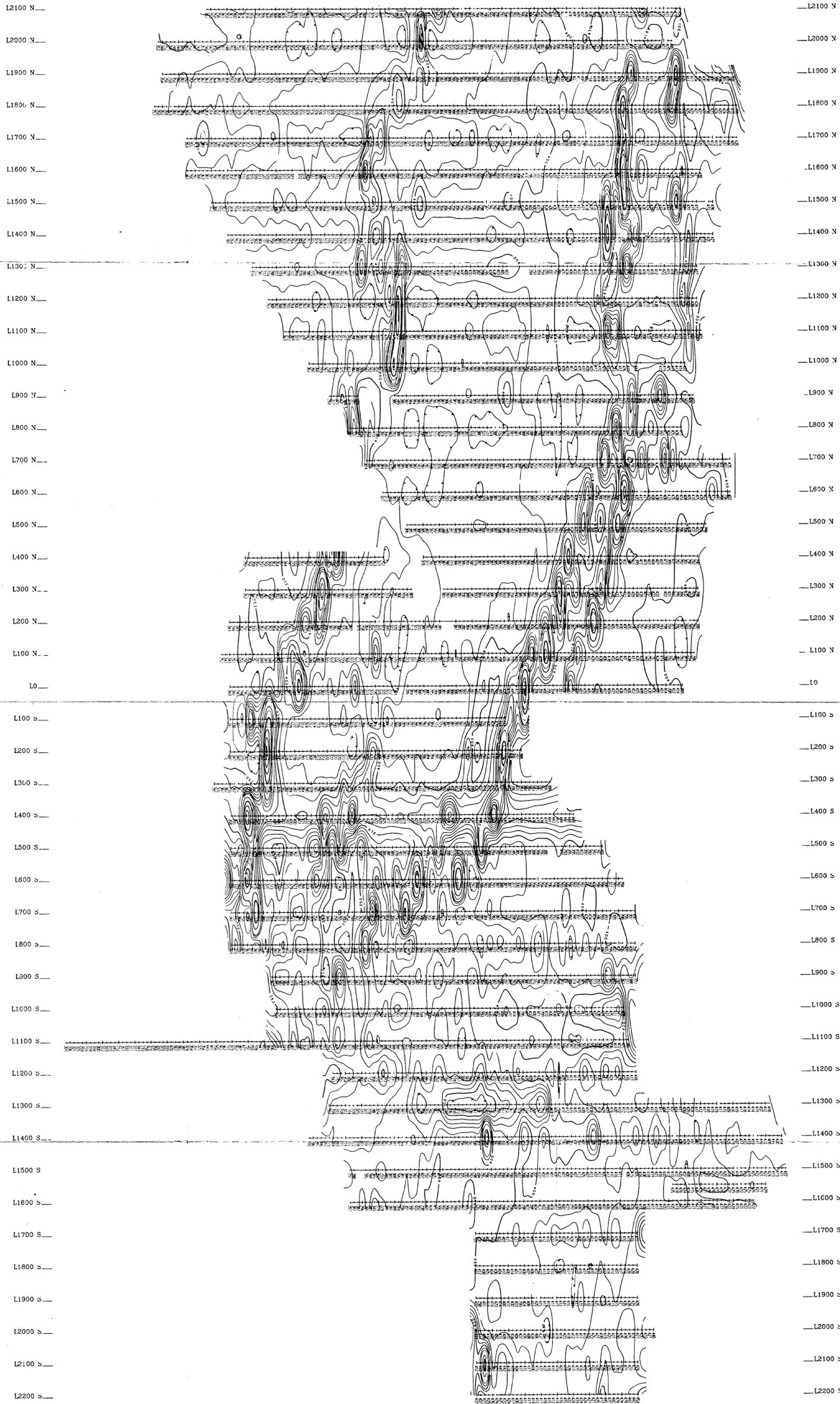


PRIME EQUITIES INC. TYMAR RESOURCES INC. AKIKO LORI GOLD RESOURCES LTD.
LAKEWATER PROPERTY Skeena Mining Division
VLF-EM PROFILES NTS 104B/9W Map Scale 1 : 5000 Drawing : 90312-18
LLOYD GEOPHYSICS INC.

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

21,432 (1)

1300 W 1200 W 1100 W 1000 W 900 W 800 W 700 W 600 W 500 W 400 W 300 W 200 W 100 W 0 100 E 200 E 300 E 400 E 500 E 600 E 700 E 800 E 900 E 1000 E



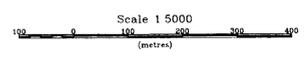
**LEGEND**

CONTOUR INTERVALS  
 ——— 10 nT  
 ——— 50 nT  
 ——— 250 nT

BASE LEVEL OF 57000 nT REMOVED FROM ALL READINGS

INSTRUMENT  
 EDA OMNI PLUS  
 EDA OMNI IV BASESTATION

MAGNETIC DATA SUPPLIED BY  
 PRIME EQUITIES INC.

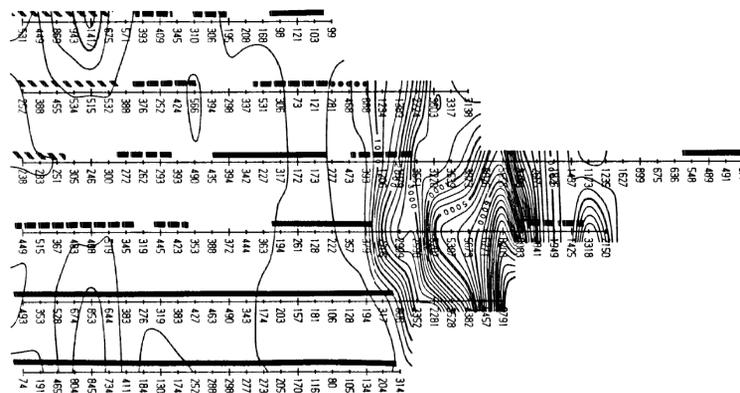
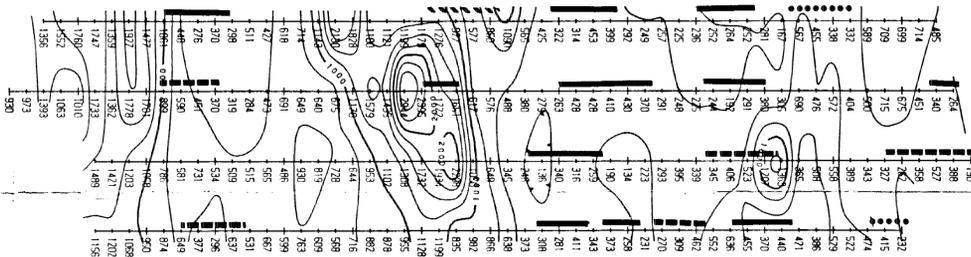
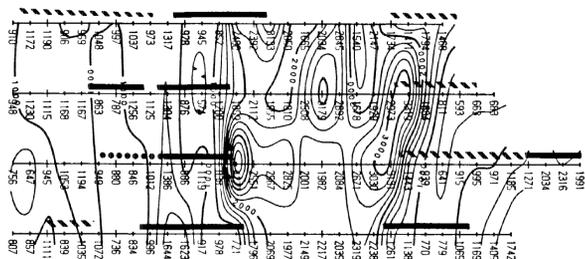


PRIME EQUITIES INC. TYMAR RESOURCES INC. AKIKO LORI GOLD RESOURCES LTD.
LAKEWATER PROPERTY Skeena Mining Division
TOTAL FIELD MAGNETIC CONTOURS NTS 104B/9W Map Scale 1 : 5000 Drawing : 90312-17
LLCYD GEOPHYSICS INC.

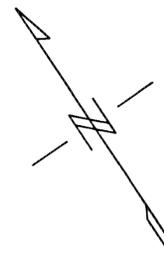
1300 W 1200 W 1100 W 1000 W 900 W 800 W 700 W 600 W 500 W 400 W 300 W 200 W 100 W 0 100 E 200 E 300 E 400 E 500 E 600 E 700 E 800 E 900 E 1000 E

800 W 700 W 600 W 500 W 400 W 300 W 200 W 100 W 0 100 E 200 E 300 E 400 E 500 E 600 E 700 E 800 E 900 E 1000 E

L100 N  
L0  
L100 S  
L200 S  
L300 S  
L400 S  
L500 S  
L600 S  
L700 S  
L800 S  
L900 S  
L1000 S  
L1100 S  
L1200 S  
L1300 S  
L1400 S  
L1500 S  
L1600 S  
L1700 S  
L1800 S  
L1900 S  
L2000 S  
L2100 S  
L2200 S  
L2300 S  
L2400 S



800 W 700 W 600 W 500 W 400 W 300 W 200 W 100 W 0 100 E 200 E 300 E 400 E 500 E 600 E 700 E 800 E 900 E 1000 E



**LEGEND**

INDUCED POLARIZATION SURVEY  
POLE-DIPOLE ARRAY  
DIPOLE SEPARATION : 25 METRES  
CURRENT ELECTRODE WEST OF POTENTIAL DIPOLE

**CONTOUR INTERVALS**

———— 250 OHM-M  
———— 1000 OHM-M  
———— 5000 OHM-M

**INTERPRETATION**

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

———— DEFINITE  
- - - - - PROBABLE  
/ / / / / POSSIBLE  
..... AT DEPTH

**INSTRUMENT**

RX : BRGM ELEC IP-6  
TX : HUNTEC Mk II 7.5kW

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

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

PRIME EQUITIES INC.  
TYMAR RESOURCES INC.  
AKIKO LORI GOLD RESOURCES LTD.

LAKEWATER PROPERTY  
Skeena Mining Division

RESISTIVITY  
10 POINT TRIANGULAR FILTER

NTS 104B/9W  
Map Scale 1 : 5000 Drawing : 90312-16

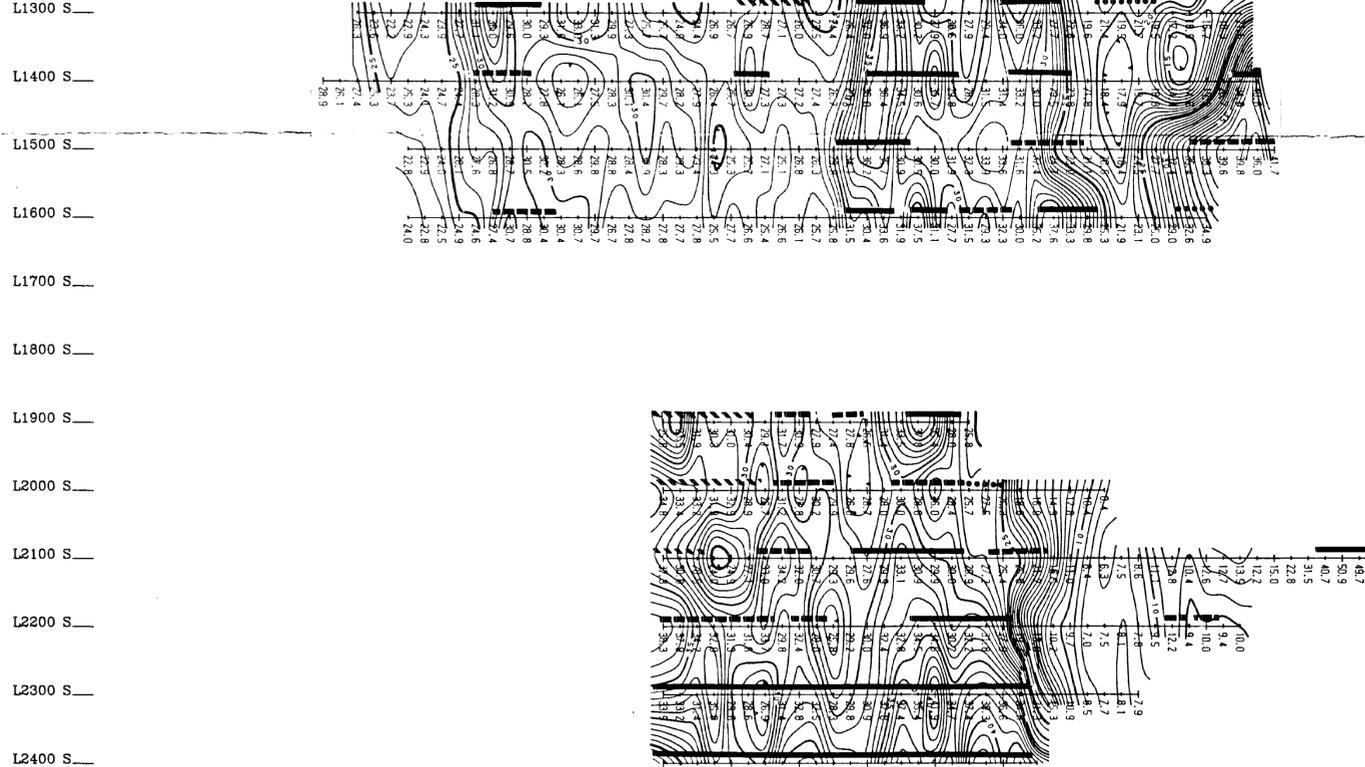
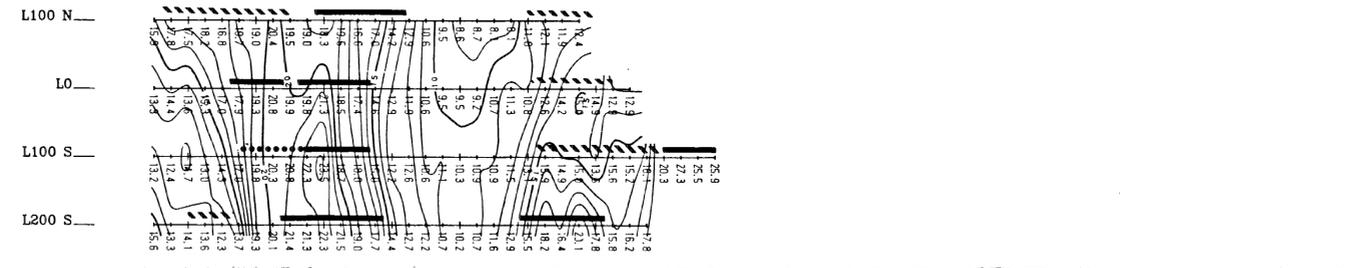
LLOYD GEOPHYSICS INC.

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

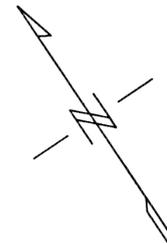
21,432



800 W 700 W 600 W 500 W 400 W 300 W 200 W 100 W 0 100 E 200 E 300 E 400 E 500 E 600 E 700 E 800 E 900 E 1000 E



800 W 700 W 600 W 500 W 400 W 300 W 200 W 100 W 0 100 E 200 E 300 E 400 E 500 E 600 E 700 E 800 E 900 E 1000 E



**LEGEND**

INDUCED POLARIZATION SURVEY  
 POLE-DIPOLE ARRAY  
 DIPOLE SEPARATION : 25 METRES  
 CURRENT ELECTRODE WEST OF POTENTIAL DIPOLE

**CONTOUR INTERVALS**  
 \_\_\_\_\_ 1.0 MSEC  
 \_\_\_\_\_ 5.0 MSEC  
 \_\_\_\_\_ 25.0 MSEC

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

———— DEFINITE  
 - - - - - PROBABLE  
 // // // // // POSSIBLE  
 ..... AT DEPTH

**INSTRUMENT**  
 RX : BRGM ELREC IP-6  
 TX : HUNTEC Mk II 7.5kW

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

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

PRIME EQUITIES INC.
TYMAR RESOURCES INC.
AKIKO LORI GOLD RESOURCES LTD.
LAKEWATER PROPERTY
Skeena Mining Division
<b>CHARGEABILITY</b>
<b>10 POINT TRIANGULAR FILTER</b>
NTS 104B/9W
Map Scale 1 : 5000 Drawing : 90312-15
LLOYD GEOPHYSICS INC.

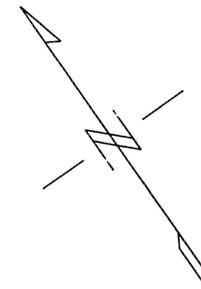
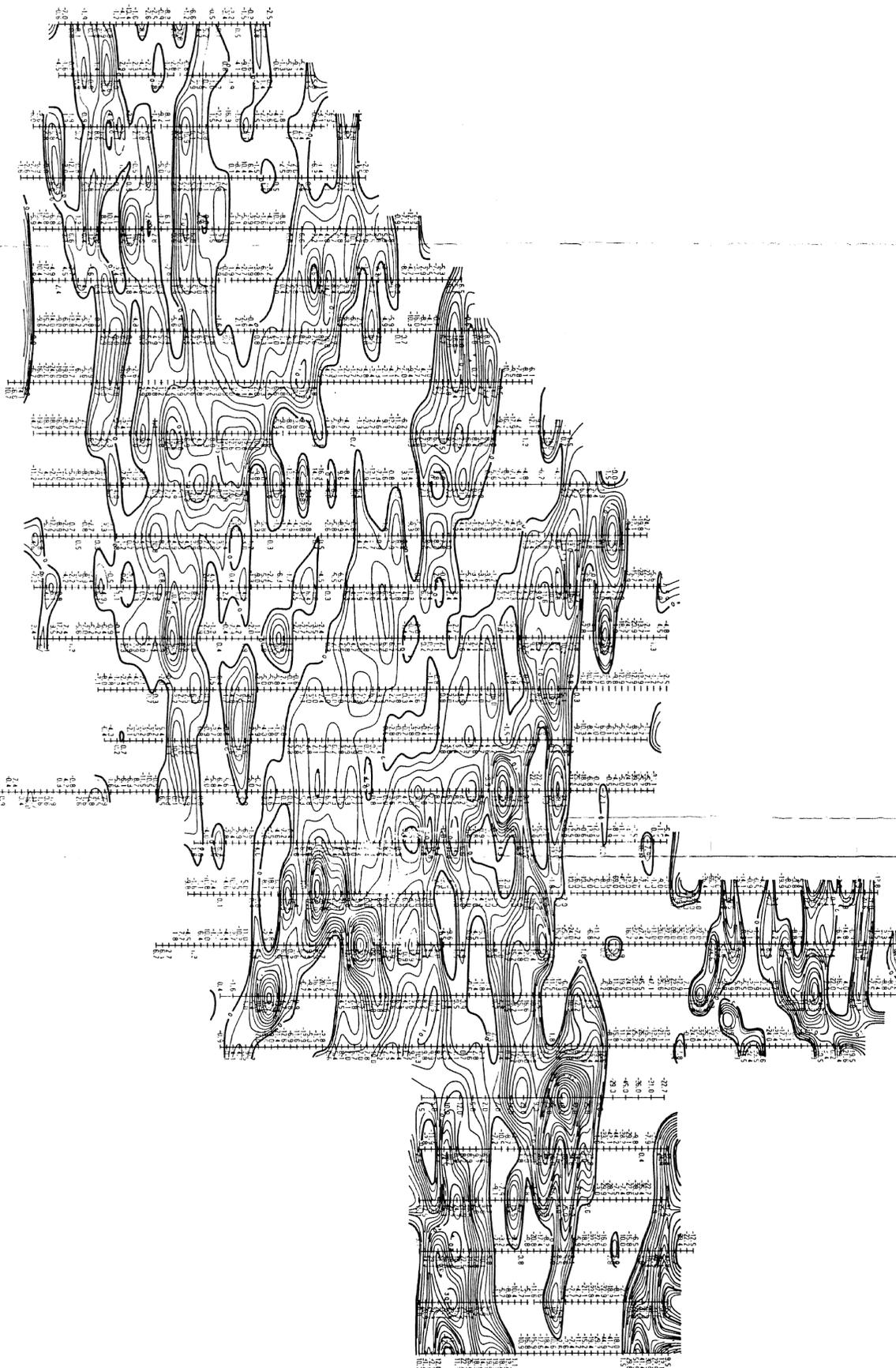
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

21,432<sup>Ⓒ</sup>

1250 W 1150 W 1050 W 950 W 850 W 750 W 650 W 550 W 450 W 350 W 250 W 150 W 50 W 50 E 150 E 250 E 350 E 450 E 550 E 650 E 750 E 850 E 950 E

L400 N  
L300 N  
L200 N  
L100 N  
L0  
L100 S  
L200 S  
L300 S  
L400 S  
L500 S  
L600 S  
L700 S  
L800 S  
L900 S  
L1000 S  
L1100 S  
L1200 S  
L1300 S  
L1400 S  
L1500 S  
L1600 S  
L1700 S  
L1800 S  
L1900 S  
L2000 S  
L2100 S  
L2200 S

L400 N  
L300 N  
L200 N  
L100 N  
L0  
L100 S  
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L400 S  
L500 S  
L600 S  
L700 S  
L800 S  
L900 S  
L1000 S  
L1100 S  
L1200 S  
L1300 S  
L1400 S  
L1500 S  
L1600 S  
L1700 S  
L1800 S  
L1900 S  
L2000 S  
L2100 S  
L2200 S



**LEGEND**

**CONTOUR INTERVALS**

- 2.0
- 10.0
- 50.0

READING DIRECTION : WEST TO EAST

**TRANSMITTER LOCATION**

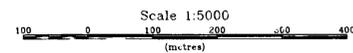
LUALUALEI, HAWAII (NPM 23.4 kHz)

**INSTRUMENT**

EDA CMNI PLUS

3 Orthogonal Rx. Coils, Tilt Compensated

VLF-EM DATA SUPPLIED BY  
PRIME EQUITIES INC.



1250 W 1150 W 1050 W 950 W 850 W 750 W 650 W 550 W 450 W 350 W 250 W 150 W 50 W 50 E 150 E 250 E 350 E 450 E 550 E 650 E 750 E 850 E 950 E

PRIME EQUITIES INC.
TYMAR RESOURCES INC. AKIKO LORI GOLD RESOURCES LTD.
LAKEWATER PROPERTY Skecna Mining Division
VLF-EM FRASER FILTER CONTOURS NTS 104B/9W Map Scale 1 : 5000 Drawing : 9C312-19
LLOYD GEOPHYSICS INC.

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

21,432 (5)