

GEOPHYSICAL REPORT

on the

IP-RESISTIVITY SURVEY

conducted over the

RHUB & BARB CLAIM GROUP

near

OOTSA LAKE B.C.

for

ALTA VENTURES INC.

by

TARGET SURVEYS INC.

July 1989

19863



| TYPE OF REPORT/SURVEY(S) | TOTAL COST |
|--------------------------|------------|
| Geophysical | \$50,000 |

AUTHOR(S) ... Tam Mitchell SIGNATURE(S) *Tam Mitchell* signed for Tam Mitchell by David York geophysics

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED ... March 29, 1990 ... YEAR OF WORK 1990

PROPERTY NAME(S) ... Rhub. and Barb.

COMMODITIES PRESENT ... Gold and silver

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN ... None

MINING DIVISION ... Omineca NTS ... 93F/11W & 12E

LATITUDE ... 53° 37' north LONGITUDE ... 125° 30' west

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

. Barb. 1, #7930, 20 units; Rhub. 1-4, #7933-7936, 20 units each; Rhub. 5, #8041, 20 units; Rhub. 6, #8042, 12 units; Rhub. 7-13, #8043 to 8049, 20 units each. Total 268 units.

OWNER(S)

(1) Alta Ventures Inc. (2) Mingold Resources Inc.

MAILING ADDRESS

1250-400 Burrard Street
Vancouver, B.C., V6C 3A6

405-470 Granville Street
Vancouver, B.C., V6C 1V5

OPERATOR(S) (that is, Company paying for the work)

(1) Alta Ventures Inc. (2)

MAILING ADDRESS

1250-400 Burrard Street
Vancouver, B.C., V6C 3A6

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

Upper Triassic Takla Group Volcanics (intermediate to basic) overlain by mid-Jurassic Hazelton Group volcanics overlain by Upper Cretaceous to Eocene Ootsa Lake Volcanics (subaerial flows & pyroclastics of felsic to intermediate comp.) overlain by Oligocene to Miocene Endako Group. Epithermal quartz veins containing pyrite & gold/silver mineralization with associated epithermal alteration occurring within Ootsa Lake volcanics. Regional NW-trending fault zones:

REFERENCES TO PREVIOUS WORK ... Geochem, trenching, geophysics, drill in 2 private company reports for Mingold by K.J. Taylor (1987 and 1988).

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Appendix:

**SUB-RECORDER
RECEIVED**
MAR 29 1990
M.R. # \$
VANCOUVER, B.C.

Engineering Report by Locke & Kallock, prepared for Alta Ventures Inc. Entitled "IP Geophysical Surveys and Trenching Including Review of Previous Exploration, Rhub 1-13 and Barb 1 Mineral Claims, Ootsa Lake, Intata Reach Area, B.C., Omineca Mining Division" by Arctex Engineering Services, July 29, 1989.

Maps and Plots:

| | |
|---|------------|
| IP Anomaly Map (East & West Half) | Fig 1a, 1b |
| Silver Zone Anomalies I, J | Fig 2 |
| Chargeability Lon'g & X-Sections | Fig 3 |
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| (Ch*Pa)/100 Plan Map Level 1-5 | Fig 14-18 |
| Pseudo-Section Plots | Fig 19-57 |

Note:

The Engineering Report has been included to satisfy assessment requirements for filing the IP/resistivity Survey. The large maps within this report are not included since they almost entirely duplicate the large maps at the end of the IP/resistivity report.

SUMMARY

The intent of the IP Survey was to identify targets with the potential to host epithermal gold and silver mineralization. These targets are expected to be enriched in silica and/or carbonates as well as iron sulphides (pyrite, marcasite, etc.). A major fault system striking N 15°-20°E has been interpreted on the geological map. This system extends through the Silver Discovery grid. Three anomalies (H, I, and J) occur along this favorable structure. By far the most important, Anomaly J is an elongated feature striking about N16°E and dipping 45-50° Westerly. It envelopes an area some 900 meters long by 100 to 200 meters wide. Anomaly J appears to get stronger and more concentrated at depth. The core of this anomaly, an area some 480 meters long by 50 to 100 meters wide, should be drilled immediately. Follow up IP survey work is also recommended to the north and south along the fault zone to further delineate targets, followed by drilling Anomaly G and H if warranted.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

19,863

INTRODUCTION

This report summarizes work done by Target Surveys on the Rhub and Barb claims near Ootsa Lake B.C. At the request of J.G. Ager Consultants Ltd. an IP-Resistivity survey was conducted during the period of April 27 to May 29 1989. The intent of the survey was to be primarily of a reconnaissance nature with detailing of anomalous zones. A total of 24.87 km of line was surveyed at 30 meter station spacings.

INSTRUMENTATION

The transmitter used for the survey was a Phoenix Model IPT-1, manufactured by Phoenix Geophysics Ltd. of Markham Ontario. It was powered by a 2.5 kw Phoenix MG-2 motor generator.

The receiver was a Hunttec model Mark IV manufactured by Hunttec ('70) Limited of Scarborough Ontario. This equipment has software-controlled functions programmable through the front panel keyboard.

The Mark IV System is capable of time domain, frequency domain, and complex resistivity measurements.

THEORY

IP measurements are generally made in *time domain* or *frequency domain*. In time domain the decay voltage is measured as a function of time in various ways. Since the build up time is also finite the apparent resistivity, (actually a complex impedance) must vary with frequency, decreasing as the frequency increases. The measurement of apparent resistivity at two or more a.c. frequencies, generally below 10 Hz, is known as frequency domain IP.

Two effects indistinguishable by IP measurement are *membrane* or *electrolytic polarization* which constitutes the background or *normal IP effect*, and *electrode polarization* or *overvoltage*.

Electrolytic conduction is the predominating factor in most rocks and the only form of conduction when no minerals are present and the frequency is low. A rock structure must be somewhat porous to permit current flow when minerals are absent. Most rock minerals have a net negative charge at the at the interface between the rock surface and the pore fluid. Consequently positive ions are attracted towards, negative repelled from, this interface; this positive ion concentration may extend into the fluid zone to a depth of about 10^{-6} cm. If this is the order of width of the pore itself, negative ions will accumulate at one end of the zone and leave the other when a d.c. potential is applied across it. As a result of this polarized distribution, current flow is impeded. At a later time when the current is switched off the ions return to their original positions, taking a finite time to do so. The membrane IP effect is most pronounced in the presence of clay minerals, in which the pores are particularly

small. The magnitude of polarization, however does not increase steadily with clay mineral concentration, but reaches a maximum and then decreases again. This is because there must be an alternate passage of larger concentration in the material where the ion accumulation does not take place. Optimum concentration varies in different types of clay, being low in montmorillonite and higher in kaolinite. Shales, with a high percentage of clay minerals, have a relatively low polarization. The membrane effect also decreases with the salinity of the pore fluid. The overall background polarization is about what one would expect from a rock containing one to two percent conducting minerals, but can vary from one tenth to ten times this value. Since it can not be distinguished from electrode polarization, the background provides a level of geologic noise varying from place to place.

Electrode polarization exists when metallic material is present in the rock and the current flow is partly electronic, partly electrolytic. A chemical reaction occurs at the interface between the mineral and solution. The presence of a metallic mineral having, having net surface charges of opposite sign on either face, results in an accumulation of ions in the electrolyte adjacent to each. The action is that of electrolysis, when the current flows and an electron exchange takes place between the metal and the solution ions at the interface; an effect known as *overvoltage*.

Since the velocity of current flow in the electrolyte is much slower than in the metal, the pileup of ions is maintained by the external voltage. When the current is interrupted, the residual voltage decays as the ions diffuse back to their original equilibrium state.

Minerals which are electronic conductors exhibit electrode polarization. These include almost all the sulphides (except shpalerite, and possibly cinnabar and stibnite), some oxides such as magnetite, ilmenite, pyrolusite and cassiterite and, unfortunately, graphite.

For a particular mineral concentration the polarization decreases with the rock porosity, since there is an increasing number of alternate paths for electrolytic conduction. Thus one would expect a larger IP effect in a disseminated sulphide occurring in dense igneous rock than in a porous host rock. Polarization also varies with the fluid content of the rock; it has been shown that a maximum occurs when approximately 75% of the pore space is filled with water.

The magnitude of this electrode polarization depends, of course on the external current source and also on a number of characteristics of the medium. It varies with the mineral concentration, tending to be larger when the mineral is disseminated than when it is massive since it is a surface phenomenon. However the optimum particle size is influenced by the porosity of the host rock and it's resistivity. The fact that disseminated mineralization gives good IP response is a most attractive feature, since other electrical methods do not work very well in these circumstances.

SURVEY PROCEDURE

The IP and resistivity measurements were taken in the time domain mode using an 8-second wave charge cycle (2-seconds positive charge, 2-seconds off, 2-seconds negative charge, and 2-seconds off). The delay time used after the charge shuts off was 200 milliseconds. The integration time used was 1,500 milliseconds divided into 10 windows. A standard dipole-dipole array was used with a dipole length of 30 meters. On each line the array was normally read to 4 separations, and to 5 separations in anomalous zones. This configuration yields a theoretical penetration of 75 to 90 meters.

Stainless steel stakes were used for current electrodes. the potential electrodes were of metallic copper in copper sulphate solution, in non-polarizing, unglazed, porcelain pots, except when the ground was too swampy, in which case stainless steel stakes were used.

The lines R-1 to R-5, and R-7 were done on existing roads.

Line R-6 was placed to cross the "Barb Zone".

The remaining 15 lines were done in the "Silver Zone" on lines extended from an existing baseline at 40+00 N. An existing grid was in place in the area, but, since it appeared to deviate from the baseline by up to 100 meters in places it was ignored. East-West lines run at 90 meter intervals so as to intersect stations placed on the North-South lines. The North-South lines were set out on 100 meter intervals. All lines were laid out with a compass and hip chain. Most of the forested area was a mature pine stand and required very little cutting to produce an adequate enough line to facilitate the survey.

Data entry was performed in the field to produce terrain-corrected pseudo-sections of each line. A large anomalous zone was identified and isolated to the North of L 40+00 N between L 29+00 E and L 34+00 E. The zone was first identified on North-South lines and appeared to be running almost parallel to these lines. To enhance the resolution of this anomaly East-West lines were established and surveyed.

COMPILATION of PLOTS

The chargeability (IP) values are read directly from the instrument and no data processing is required prior to plotting. The resistivity values are derived from current and voltage readings taken in the field. These values are combined with the geometrical factor appropriate for the dipole-dipole array as listed below to compute the apparent resistivities.

$$P_a = \pi n(n+1)(n+2)xV_p/I$$

Where: P_a = apparent resistivity
 x = station spacing
 n = multiples of "x" separating dipoles
 V_p = voltage potential
 I = current

All data is represented on terrain-corrected pseudo-sections which are drawn by plotting each value at a point formed from the intersection of two lines drawn at a 45° degree angle from the mid-point of each of the two dipoles.

The anomalous area of the "Silver Zone" is further detailed by plan map representation of apparent resistivity, chargeability, and $(Ch \cdot Pa)/100$ for pseudosection levels 1 through 5. A plan map of the approximate surface elevations obtained from inclinometer readings was used to plot further representations of the chargeability anomalies.

IP INTERPRETATION and RECOMMENDATIONS (C.A. Ager, PhD, PEng)

The intent of the IP Survey was to identify targets with the potential to host epithermal gold and silver mineralization. These targets are expected to be enriched in silica and/or carbonates as well as iron sulphides (pyrite, marcasite, etc.). Hence resistivity and chargeability highs which are proximal and/or co-incident are considered prime targets. The chargeability times resistivity $((Ch \cdot Pa)/100)$ map enhances these search parameters.

A major fault system striking N 15°-20°E has been interpreted on the geological map. This system extends through the Silver Discovery grid. Anomalies H, I, and J occur along this favorable structure. By far the most important, Anomaly J, should be drilled immediately. Follow up IP survey work is also recommended to the north and south along the fault zone to further delineate targets, followed by drilling Anomaly G and H if warranted.

A more detailed interpretation follows:

LINE R1

No anomalies.

LINE R2 (Anomaly A)

Line R-2 is of minimal interest except for perhaps the beginnings of a chargeability anomaly (Anomaly A) at 12+00 and 75 meters depth (See Fig 1b, Fig 22). This is not a drill target at this time

LINE R3

No anomalies.

LINE R4 (Anomaly B)

Anomaly B is a moderate resistivity high zone (500-900 Ω -m) between 7+80 and 10+20 corresponding to an outcropping of felsic tuffs and is of no economic interest (see Fig 1b, Fig 26). There are no chargeability anomalies.

LINE R5 (Anomalies C, D, & E)

Three resistivity anomalies occur along Line R-5 as follows:

| Anomaly | Location | Depth | Peak Values |
|---------|-----------|----------------------|--------------|
| C | 2+40-2+70 | 50-75 ⁺ m | 750- 900 Ω-m |
| D | 4+60-5+30 | 30-75 ⁺ m | 750-1150 Ω-m |
| E | 6+00-6+60 | 45-75 ⁺ m | 750-2500 Ω-m |

(See Fig 1b, Fig 27)

Each anomaly is open to depth. Anomalies C and E are associated with very weak (8-11 msec) chargeability anomalies. Anomaly E starts 45 meters below an outcrop of felsic tuffs. Further field prospecting is needed to access their importance.

LINE R6 (Anomaly F)

A resistivity high anomaly (F) is situated between stns 0+90 and 1+50 with values ranging from 200-1200 Ω-m (see Fig 1a, Fig 30). This corresponds to an outcrop of felsic flow with perlite and sample sites 4121-23, and 4140-41 on the Barb Grid. It is of no economic interest at this time.

LINE R7 (Anomalies G,H)

There are two anomalous targets (G & H) of potential interest along reconnaissance IP line R7. These are discussed below:

Anomaly G (R7: 40+00 - 42+50) See Fig 1a, Fig 36

This is a broad weak (12 msec average) chargeability anomaly located between stations 40+00 and 42+50 at a depth of 45 to over 90 meters with a peak value of 21 msec centered at 40+50 and at depth 75 meters. Associated resistivity values vary from 100 Ω-m to over 1000 Ω-m and average about 300 Ω-m. The 500-1000 Ω-m zone is centered at 40+95 from 45 to over 90 m depth (n=5) is on the east flank of the IP anomaly. This is a drill target.

Anomaly H (R7: 46+00 - 49+00) See Fig 1a, Fig 37

A chargeability anomaly (30 msec) centered at 47+10 and depth of 75m (n=4) is closely associated with resistivity gradient (75-150 Ω-m) and an interpreted west dipping fault zone (48+30). This anomaly appears to be increasing with depth. This is on strike with the Silver Grid Anomaly. This is a prime drill target.

SILVER DISCOVERY GRID (Anomalies I & J)

The most detailed IP survey work was conducted over the Silver Discovery Grid. The anomalous zones are further discussed as follows:

Anomaly I (See Fig 1a, Fig 2)

Silver and gold values of limited extent have been delineated by trenching and drilling in altered volcanics in the vicinity of 39+00N, 29+00E (Silver Zone). This zone corresponds to a resistivity and chargeability anomaly (I) of limited area and depth extent. It has no economic significance and no further work is recommended.

Anomaly J (See Fig 1a-1b, Fig 2-18, Fig 39-59)

By far the most important target of the entire survey is Anomaly J. It is an elongated feature striking about N 16°E and dipping 45-50° Westerly. It envelopes an area some 900 meters long by 100 to 200 meters wide. (See fig 1, 2 & 3) The core of the anomaly starts at about 1000 meters elevation (45-60 m depth) and extends through the 950 m elevation level (90 m depth) and beyond the depth limits of the elevation survey. The core zone extends between 42+00N, 30+00E and 46+50N, 31+50E - covering an area some 480 meters long by 50-150 meters wide. The anomaly gets stronger and more concentrated at depth. It should be drilled in the core zone using vertical or 60° E drill holes to penetrate the zone through the 950 meter elevation.

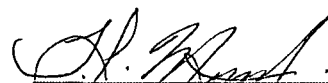
A prospecting trench at 48+00N, 32+00E has indicated altered volcanics containing pyrite, marcasite, and calcite with minor gold and silver values (50 ppb A_u , 300 ppb A_g). It is also on strike with a major fault system and Anomaly H. (see fig 1)

This adds ground truth to the importance of the anomaly as a potential epithermal gold/silver bearing system.

CERTIFICATE of QUALIFICATIONS

I hereby certify that:

1. I am the President of Target Surveys Inc. I am a graduate of B.C.I.T. in Survey Technology, and I have been practicing my profession for eleven years. I have extensive experience in petroleum and mineral geophysics and exploration.
2. Target Surveys Inc. is a registered company in B.C. It is in the business of providing resource exploration contracting services.
3. Neither I nor Target Surveys Inc. have any interest in the shares or properties of the companies involved with Alta Ventures Inc.
4. I personally performed the IP-Resistivity surveys and the subsequent data reduction as outlined in the accompanying report.
5. I consent to the use of my name as relating to work performed by me on the property covered in this report, in a prospectus, statement of facts or other public documents.



Tam Mitchell A.Sc.T.
Target Surveys Inc.

July 18 1989

**IP GEOPHYSICAL SURVEYS AND TRENCHING
INCLUDING REVIEW OF PREVIOUS EXPLORATION
RHUB 1-13 AND BARB 1 MINERAL CLAIMS
OOTSA LAKE, INTATA REACH AREA, B.C.
OMINECA MINING DIVISION
NTS 93F/11 W & 12 E
LATITUDE 53°37'NORTH, LONGITUDE 125°30'WEST**

**Prepared for
ALTA VENTURES INC.**

ARCTEX ENGINEERING SERVICES

**Löcke B. Goldsmith, P.Eng.
Consulting Geologist**

**Paul Kallock
Consulting Geologist**

July 29, 1989

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APPENDIX:

Rock Geochemical Analysis and Analytical Procedures

Rock Sample Descriptions

MAPS:

(Pocket inside back cover)

Grid, Sample and IP Survey Locations (West Half) 1:5000 Scale, Fig. 3

Grid, Sample and IP Survey Locations (East Half) 1:5000 Scale, Fig. 4

**GEOPHYSICAL SURVEY AND TRENCHING
INCLUDING REVIEW OF PREVIOUS EXPLORATION
RHUB 1-13 AND BARB 1 MINERAL CLAIMS
OOTSA LAKE, INTATA REACH AREA, B.C.
OMINECA MINING DIVISION**

SUMMARY

The Rhub and Barb claim groups are located in west-central British Columbia, 70 kilometres south of Burns Lake. Previous exploration for precious metals by Mingold Resources Inc. discovered gold-bearing boulders and subsequently delineated several zones of silica flooding and argillic alteration within rhyolite and rhyolite tuff units of the Tertiary Ootsa Lake volcanics. An epithermal-type mineralizing system had been proposed, and significant zones of quartz veining and pyrite mineralization had been trenched and drilled. Rock chip sampling of backhoe trenches has returned up to 4.71 oz Ag/ton and 0.170 oz Au/ton over 7.0 metres. Values up to 0.81 oz Ag/ton and 0.209 oz Au/ton had been recovered from up to 1.52 m of drill core in the Silver Discovery Zone. Numerous areas of silicification and/or mineralization have been identified on the large block of claims; some 10 km separate the Barb zone where a drill hole intersected 0.063 oz Au/ton over 1.52 m and the Discovery Boulder area where float of silicified rhyolite breccia with chalcedonic quartz contains 70 ppb Au. Subsequent acquisition by Alta Ventures Inc. and implementation of IP geophysical surveys has discovered a north extension of the Silver Zone mineralization.

A programme of diamond drilling is recommended to test the Silver Discovery Zone IP anomaly along 600 metres of length. Continued IP and trenching are also recommended on other targets at the property. A Phase 1 programme will require a budget of \$75,600. If results are encouraging, further drilling and peripheral surveys would require \$250,000 in Phase 2. Total of Phases 1 and 2 would require expenditure of \$325,600.

PROPERTY, LOCATION, ACCESS

The Rhub 1-13 and Barb 1 mineral claims are located 70 kilometres south of Burns Lake, British Columbia, on the north shore of Intata Reach within the watershed of the Nechako Reservoir. Davidson Lake is situated in the north-central part of the claim group. The property spans the boundary between NTS mapsheets 93 F/11 W and 93 F/12 E within the Omineca Mining Division. Latitude 53°37'N and longitude 125°30'W cross the centre of the claims. Glaciation has formed a subdued topography with elevations ranging from 900 metres (2950 feet) to 1370 metres (4500 feet).

Access to the property is made by paved and gravel road from Vanderhoof, 100 km to the northeast, or from Burns Lake, via the Francois Lake ferry, 70 km to the north. Numerous logging roads lead to clear-cut areas within the claim group.

The Rhub-Barb property consists of 283 units within 15 mineral claims totalling approximately 7075 hectares. The claims are held by Alta Ventures Inc. under option from Mingold Resources Inc. Statistics of the claims and dates of expiry are as follows:

| <i>Claim Name</i> | <i>Record Date</i> | <i>Record Number</i> | <i>Number of Units</i> | <i>Expiry Date</i> |
|-------------------|--------------------|----------------------|------------------------|--------------------|
| Barb 1 | Sept. 22, 1986 | 7930 | 20 | Sept. 22, 1993 |
| Rhub 1 | Sept. 24, 1986 | 7933 | 20 | Sept. 24, 1994 |
| Rhub 2 ✓ | Sept. 24, 1986 | 7934 | 20 | Sept. 24, 1990 |
| Rhub 3 | Sept. 23, 1986 | 7935 | 20 | Sept. 24, 1994 |
| Rhub 4 ✓ | Sept. 23, 1986 | 7936 | 20 | Sept. 24, 1990 |
| Rhub 5 ✓ | Oct. 23, 1986 | 8041 | 20 | Oct. 23, 1990 |
| Rhub 6 ✓ | Oct. 23, 1986 | 8042 | 12 | Oct. 23, 1990 |
| Rhub 7 | Oct. 23, 1986 | 8043 | 20 | Oct. 23, 1998 |
| Rhub 8 | Oct. 23, 1986 | 8044 | 20 | Oct. 23, 1998 |
| Rhub 9 | Oct. 23, 1986 | 8045 | 20 | Oct. 23, 1998 |
| Rhub 10 | Oct. 23, 1986 | 8046 | 20 | Oct. 23, 1993 |
| Rhub 11 | Oct. 23, 1986 | 8047 | 20 | Oct. 23, 1993 |
| Rhub 12 | Oct. 23, 1986 | 8048 | 20 | Oct. 23, 1993 |
| Rhub 13 | Oct. 23, 1986 | 8049 | 16 | Oct. 23, 1993 |

LOCATION MAP

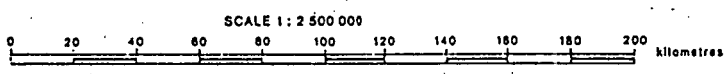
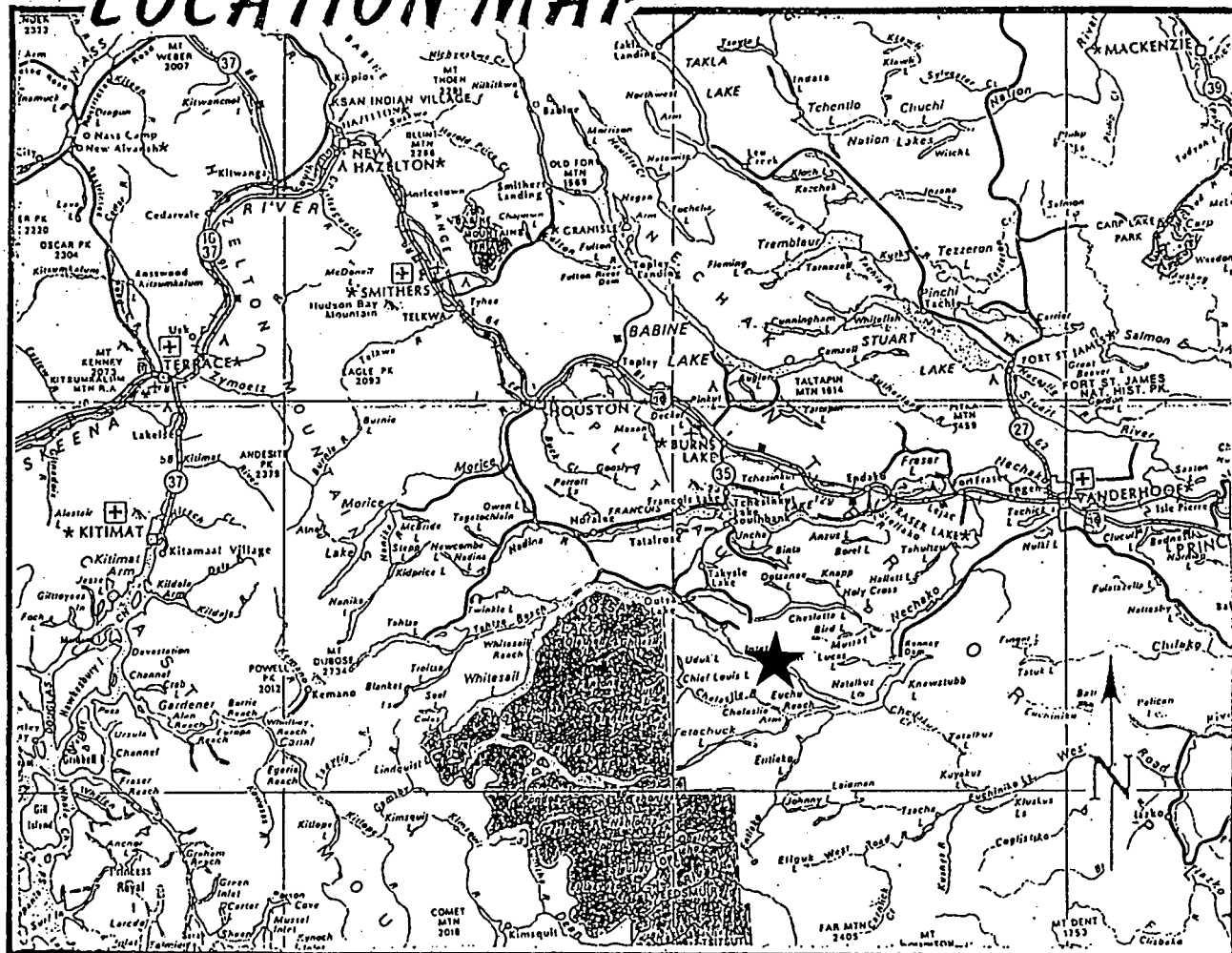


FIG. 1

ALTA VENTURES INC.

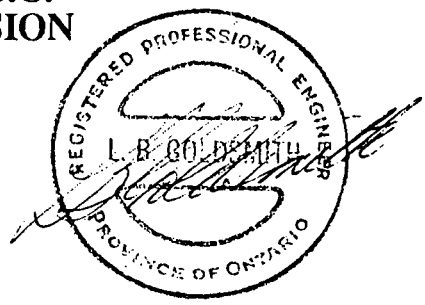
**RHUB AND BARB CLAIM GROUP
 INTATA REACH AREA, B.C.
 OMINECA MINING DIVISION
 93 F/11 W & 12 E**

To accompany report by

Locke B. Goldsmith, P.Eng.
 Consulting Geologist

Paul Kallock
 Consulting Geologist

ARCTEX ENGINEERING SERVICES



June 1989

CLAIM MAP

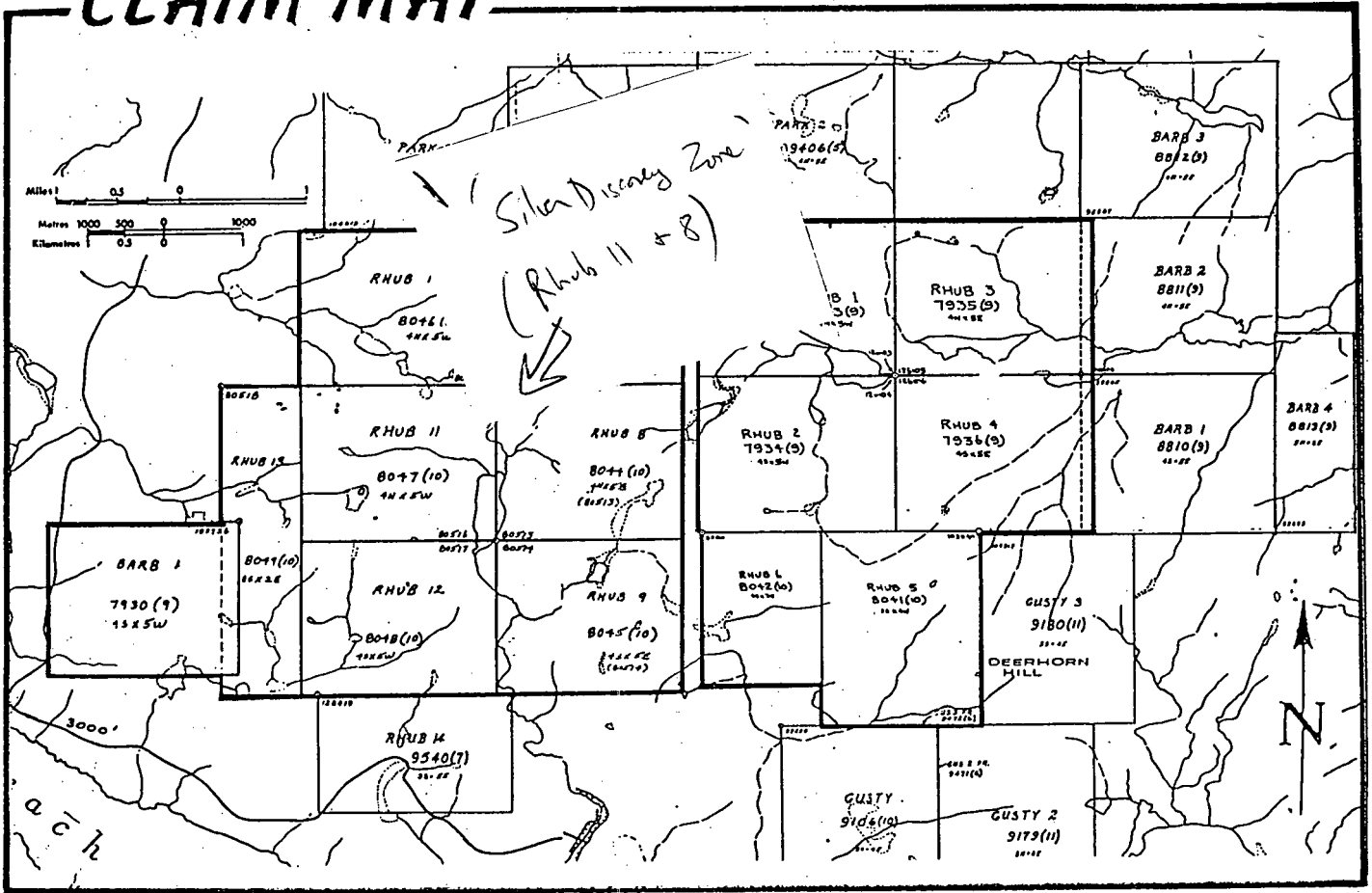


FIG. 2

ALTA VENTURES INC.

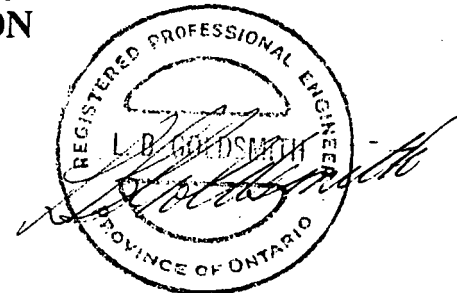
**RHUB AND BARB CLAIM GROUP
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To accompany report by

Locke B. Goldsmith, P.Eng.
 Consulting Geologist

Paul Kallock
 Consulting Geologist

ARCTEX ENGINEERING SERVICES



June 1989

HISTORY

The first recorded exploration in the Rhub-Barb claim area occurred in 1980 when Guichon Explorco Ltd. staked the Mar claims after recognizing the epithermal nature of mineralization. Silt and soil sampling was not encouraging but rock chip geochemistry outlined two zones of epithermal mineralization with elevated levels of arsenic, mercury and to a lesser extent gold. Evidently, no further exploration was undertaken until 1985 when Hudson Bay Exploration (Mingold Resources) discovered several chalcedonic quartz boulders containing up to 70 ppb gold. In 1986 the Rhub and Barb claims were staked by Mingold Resources Inc. Extensive soil sampling and VLF-EM geophysical surveys were undertaken and several mineralized zones were indicated. On the Barb and Silver Zones 1189.3 metres of reverse circulation drilling were completed in the fall of 1987. In 1988 more detailed grid was established on previously discovered geophysical targets and an additional 1036.9 metres of diamond drilling was carried out on the Silver Zone.

In 1989, Alta Ventures Inc. optioned the Rhub and Barb claim group from Mingold Resources Inc. An Induced Polarization survey was conducted over the Silver Zone, to the north of the Silver Zone, and also along numerous roads. In addition, 128 metres of backhoe trenches were excavated.

On June 6, 1989 the property was examined by one of the authors of this report. Rock chip geochemical samples were collected from 15.24 metres of the most recent excavations in "C" trench on the Silver Zone. Results are included in this report.

GEOLOGY

The Rhub and Barb claim group is located in the south-central part of the Intermontane Geological Belt in west-central British Columbia. The oldest rocks in the area are the Upper Triassic Takla Group Volcanics which consist of an island arc sequence of intermediate to basic volcanics. These were followed by the Hazelton Group Volcanics in early to mid-Jurassic time. The lower Mesozoic rocks are overlain unconformably by an extensive sequence known as the Ootsa Lake Volcanics. These are the dominant rocks in the area and are the host to the mineralization discovered to date. They consist of Upper Cretaceous to Eocene subaerial flows and pyroclastics mainly of felsic to intermediate composition. They are widespread, occupying depressions in the eroded pre-Tertiary surface.

The Ootsa Lake Volcanics are in turn overlain unconformably by andesitic to basaltic flows of the Oligocene to Miocene Endako Group. They are relatively flat lying and believed to have resulted from "plateau-type" extrusion into the area.

Regional northwest-trending fault zones are present in the area. In addition, northeasterly trending and northerly trending faults have also been developed and may be associated with a collapsed cauldron system (Taylor, 1988).

SILVER DISCOVERY ZONE (RHUB 7, 8 & 11 CLAIMS)

Most exploration has been directed to the Silver Discovery Zone (also referred to as the Silver Zone) which lies in the northeast part of the Rhub 11 and northwest part of the Rhub 8 claims. In addition to soil sampling and VLF-EM geophysics, 196 metres of trenching and 579.1 metres of reverse circulation drilling were carried out on the Silver Zone in 1987 by Mingold. Values up to 1.05 oz Ag/ton and 0.068 oz Au/ton over 4.57 metres were obtained. Reverse circulation drilling did not provide enough interpretable geological information. The following year Mingold conducted 1036.9 m of diamond drilling on the Silver Zone.

Five of the six diamond drill holes tested a north-south fault zone exposed in surface trenches which had been found to contain 4.71 oz Ag/ton and 0.17 oz Au/ton over 7.0 metres. Drill hole 9 assayed 0.81 oz Ag/ton and 0.209 oz Au/ton over 1.52 metres with an adjacent sample assaying 0.17 oz Ag/ton and 0.039 oz Au/ton over 1.22 metres. In drill hole 11, a 1.52 metre section contained 1.33 oz Ag/ton and 0.012 oz Au/ton.

One drill hole, SDH-8, was drilled to test an east-west trending vein. Five separate mineralized sections were intersected which varied from 1.23 oz Ag/ton and 0.002 oz Au/ton to 5.92 oz Ag/ton and 0.001 oz Au/ton over 1.52 metres.

The mineralization at the Silver Zone was found to be associated with pyrite-marcasite and possibly native gold and silver within argillically altered (kaolinized) and silicified Ootsa Lake rhyolite flows and tuffs. Zones either consist of brecciated rhyolite healed by grey to black amorphous silica or as a series of stockwork veins or veinlets of amorphous silica with varying amounts of pyrite and marcasite. All mineralization is microscopic in nature and not directly proportional to silica or sulphide content. Main controls for mineralization appear to be fracture intensity and porosity of host rock, rhyolite flows and tuffs being preferable (Taylor, 1988).

Since acquisition of the Rhub-Barb claims by Alta Ventures Inc. in 1989, an IP survey directed by Target Surveys was conducted over the Silver Zone. Favourable response over the known mineralization led to the discovery of a northerly extension of the zone. Backhoe trenching in an area 600 metres north of the previous diamond drilling revealed additional argillic altered and silicified rhyolite containing abundant disseminated and fracture filling pyrite. Over 128 metres of backhoe trenching were subsequently excavated, most of which contains silicification, argillic alteration, and pyritization. Rock chip sampling of the most recent trenching was undertaken on

June 6, 1989. Five continuous 10-foot-long (3.045 m) rock chip samples were collected from trench C as shown on the accompanying grid map. Samples were analysed by Chemex Labs of Vancouver, B.C. Certificates of analysis and analytical procedures, as well as rock sample descriptions are included in the Appendix. Sample results are also plotted on the accompanying grid map. High values of silver and gold in trench C are 0.2 ppm Ag and 55 ppb Au over 3.05 metres. A total of 15.24 metres (50 ft) of trench was sampled.

IP Geophysical Survey

The layout of the IP survey is also shown on the accompanying map. Fifteen grid lines totaling 10.02 km were run at the Silver Zone and 14.39 km of reconnaissance line were run along roads by Target Surveys with a time domain, Phoenix IPT-1 transmitter and a Hunttec Mark IV receiver. At the Silver Zone six north-south lines, 100 metres apart and nine east-west lines 90 metres apart used a spread of 30 metres between readings. In addition to profile lines, computer generated plan maps of each of five levels (representing 30, 45, 60, 75, and 90 metres below surface) help depict anomalous chargeability and apparent resistivity. The voluminous geophysical data are not reproduced for this report. One contour (chargeability value 12) from the n=3 level is shown to provide a general location of the conductor. It stretches from 40+90N 30+00E to 49+00N 32+25E, a distance over 800 metres in length and 100 metres in width. In this geological environment, chargeability may be directly proportional to sulphide content and apparent resistivity may be directly proportional to silica flooding.

Within the chargeability anomaly, areas of high resistivity are present. When metal factor (Chargeability times Apparent Resistivity divided by 100) is plotted, the anomalous values are very close to the chargeability plot.

Anomalous IP response continues to be strong below level 5 (90 m below surface). The mineralization has an undulating lower limit which appears to dip 45°-50° westerly (Target Surveys Inc., July 1989, p. 8). Perhaps mineralization reflects stratigraphy or manifests a mushroom-shaped blanket with a narrow neck or tabular fissure which is yet unrecognized. This configuration would approximate the shape of a fissure-controlled epithermal system. A broader electrode spacing could be expected to provide a more satisfactory resolution of IP conditions below level 5.

If a north-south fault as suggested by mapping and diamond drilling is present, it may help to explain the north extension of mineralization as defined by the IP survey. Mineralization may have spread laterally from the upper portions of this fault. Broad outlines of the IP chargeability contours may represent multiple zones which trend north-northeasterly, perhaps splaying from a north-trending structure. Drilling is expected to provide the correct interpretation.

BARB ZONE (BARB 1 CLAIM)

Mingold Resources Inc. drilled 8 reverse circulation holes on the Barb Zone which lies at the west end of the property. The main vein system here trends 140° and a secondary set trends 045°. Siliceous rhyolite breccia with pyrite and black silica was encountered in several of the holes but only three holes contained precious metal values greater than 0.025 oz Au/ton. The best intersection was in the first drill hole which contained 0.063 oz Au/ton over 1.52 m.

QUARRY ZONE

Mingold Resources Inc. also trenched and sampled in the eastern part of the property at the Quarry Zone where highly kaolinized Ootsa Lake rhyolite is brecciated and filled by medium grey amorphous silica. Rock chip sampling of trenches revealed values of gold and silver slightly above background.

OTHER ZONES

Several other grid areas were examined by Mingold Resources Inc. At the Discovery Boulder area, float of silicified rhyolite breccia with chalcedonic quartz was found. No source was discovered. At the Silica Grid, south of the map area, banded, crustified, silicified rhyolite does not host appreciable precious metal values. The Rain Zone is an area of hematitic stained rhyolite which contained up to 147,225 ppm arsenic. No precious metal trends were found in the soils nearby.

At the 4410 Grid area a cobble of silicified rhyolite contained 1400 ppb Au. It was thought that overburden was prohibitively deep and no further work was done.

The 4417 Grid, which is evidently located east of the Silver Zone, returned anomalous values of silver and gold. Prospecting had revealed mineralized float; trenching and two reverse circulation drill holes which penetrated to 18.9 metres of depth failed to reach bedrock. It was assumed that the float originated in the Silver Zone and was glacially transported.

IP ROAD TRAVERSES

Reconnaissance IP surveys totalling 14.39 km along the roads, labeled R-1 through R-7, displayed several anomalies. As expected, a strong response was found at the Silver Zone, R-2, station 360 m. Here the north-south fault zone as mapped by Mingold Resources Inc. appears to display a moderate easterly dip. Also on the R-2 road traverse, a moderately strong response was found at station 1200 m.

Other areas of interest include:

- R-3 at 560 m with moderate chargeability and metal factor;
- R-5 at 630 m, high apparent resistivity adjacent to high metal factor;
- R-6 at 120 m, an east-dipping structure with high resistivity and high metal factor;
- R-7 at 4050 m, and 4710 m, high chargeability and moderately high resistivity.

CONCLUSIONS

Encouraging IP geophysical response has been received from the Silver Zone (Anomaly J; Target Surveys Inc., July 1989), the southern end of which had previously been drilled by Mingold Resources Inc. and found to contain silver and gold values up to 5.92 oz Ag/ton and 0.209 oz Au/ton. Pyritic rhyolite flows, tuffs, and breccias have been altered with kaolin and silica. Main controls of mineralization appear to be fracture intensity and porosity. The IP survey has been successful in delineating a northerly extension of the Silver Zone where recent trenching has encountered pyrite-bearing silicified rhyolite. Rock chip samples have returned up to 0.2 ppm Ag and 55 ppb Au across 3.05 metres in an area 600 metres north of the previous drilling. These values should not be interpreted as discouraging results because a typical epithermal system may have more than one pulse of mineralizing solutions, all of which do not necessarily contain appreciable precious metal values. The large extent of the IP anomaly (+800 metres in length) provides an attractive target to probe for bonanza-type shoots.

Work on the property by Mingold Resources Inc. in 1987 and 1988 has shown that soil geochemical sampling is of limited value at the Rhub-Barb claim are due to masking effect of glacial till. VLF-EM surveys were effective in delineating fault zones but gave no indication of the presence of mineralization. Trenching in combination with prospecting were their preferred tools of exploration.

Following the determination by Alta Ventures Inc. that IP is another useful tool, several of the previously indicated target areas should be re-examined.

The precious metals at the Rhub-Barb property appear to be associated with a low-temperature (epithermal) system similar to the volcanic hosted gold-silver deposits found in the southwestern U.S. and elsewhere in B.C. The host rocks are Tertiary in age and may be part of a collapsed caldera-type environment.

RECOMMENDATIONS

A programme of diamond drilling at the Silver Zone should be undertaken to test the new IP target and the area beneath the recent trenches. Two drill fences consisting of three holes each should provide an initial test for mineralization. Average length of each hole could be in the order of 100 metres.

A continuing programme of prospecting, geological mapping and backhoe trenching combined with IP should also be directed to areas such as Mingold's Quarry Zone, Ram Zone, etc. The Barb Zone should be re-examined in conjunction with an IP survey grid. Similar examinations of the anomalous IP zones on the road traverses should also be completed.

COST ESTIMATE

Phase 1

Diamond drilling of the IP anomaly associated with the Silver Zone is the objective of the next programme.

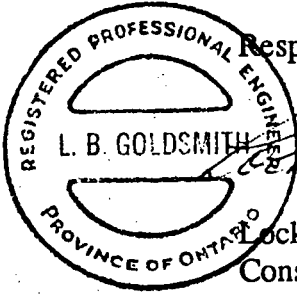
| | | |
|-----------------------------------|---------------|-----------|
| Diamond drilling, 600 m at \$75/m | \$ 45,000 | |
| Road construction, trenching | 2,500 | |
| Analyses | 5,000 | |
| Food, lodging | 2,000 | |
| Transportation | 2,000 | |
| Supervision | 4,000 | |
| Report | <u>2,500</u> | |
| | 63,000 | |
| Contingencies at 20% | <u>12,600</u> | |
| Total, Phase 1 | 75,600 | \$ 75,600 |

Phase 2

| | | |
|---|---------|----------------|
| IP surveys, backhoe trenching, contoured diamond drilling, allow | 250,000 | <u>250,000</u> |
| Total, Phases 1 and 2 | | \$325,600 |

Results of Phase 1 should be compiled into an engineering report; continuance to Phase 2 should be contingent upon favourable conclusions and recommendations from an engineer.

Respectfully submitted,



L. B. Goldsmith

Locke B. Goldsmith, P.Eng.
Consulting Geologist



Paul Kallock

PAUL KALLOCK
Paul Kallock
Consulting Geologist

Vancouver, B.C.
July 29, 1989

ENGINEER'S CERTIFICATE
LOCKIE B. GOLDSMITH

1. I, Locke B. Goldsmith, am a registered Professional Engineer in the Province of Ontario and the Northwest Territories, and a Registered Professional Geologist in the State of Oregon. My address is 301, 1855 Balsam Street, Vancouver, B.C.
2. I have a B.Sc. (Honours) degree in Geology from Michigan Technological University, a M.Sc. degree in Geology from the University of British Columbia, and have done postgraduate study in Geology at Michigan Tech and the University of Nevada. I am a graduate of the Haileybury School of Mines, and am a Certified Mining Technician. I am a Member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.
3. I have been engaged in mining exploration for the past 30 years.
4. I have co-authored the report: "IP Geophysical Surveys and Trenching, including Review of Previous Exploration, Rhub 1-13 and Barb 1 Mineral Claims, Ootsa Lake, Intata Reach Area, B.C., Omineca Mining Division", dated July 29, 1989. The report is based upon fieldwork by Mingold Resources Inc., Alta Ventures Inc., and a property examination on June 6, 1989.
5. I have no ownership in the property, nor in the stocks of Alta Ventures Inc. or Mingold Resources Inc.
6. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds. Sheets of analyses in the Appendix could be omitted from a prospectus because all values are plotted on maps.

Respectfully submitted,



Locke B. Goldsmith
Locke B. Goldsmith, P.Eng.
Consulting Geologist

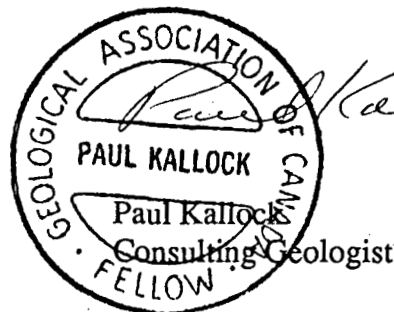
Vancouver, B.C.
July 29, 1989

GEOLOGIST'S CERTIFICATE
PAUL KALLOCK

I, Paul Kallock, do state: that I am a Geologist with Arctex Engineering Services, 301 - 1855 Balsam Street, Vancouver, B.C.

I Further State That:

1. I have a B.Sc. degree in Geology from Washington State University, 1970. I am a Fellow of the Geological Association of Canada.
2. I have engaged in mineral exploration since 1970, both for major mining and exploration companies and as an independent geologist.
3. I have co-authored the report : "IP Geophysical Surveys and Trenching, including Review of Previous Exploration, Rhub 1-13 and Barb 1 Mineral Claims, Ootsa Lake, Intata Reach Area, B.C., Omineca Mining Division." The report is based on previously accumulated geologic data and on a site visit.
4. I have no direct or indirect interest in any manner in either the property or securities of Alta Ventures Inc., Mingold Resources Inc., or their affiliates, nor do I anticipate to receive any such interest.
5. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds. Sheets of analyses in the Appendix could be omitted from a prospectus because all values are plotted on maps.



Vancouver, B.C.
July 29, 1989

REFERENCES

- Mitchell, T. June 1989. Geophysical report on the IP-Resistivity survey, Rhub & Barb claim group near Ootsa Lake, B.C. Private report for Alta Ventures Inc. by Target Surveys Inc.
- Taylor, K.J. 1987. Geochemical survey and trenching report on the Barb 1 and Rhub 1-13 claims. Private report for Mingold Resources Inc.
- Taylor, K.J. 1988. Geochemical and geophysical surveying, trenching and drilling report on the Barb 1 and Rhub 1-13 claims. Private report for Mingold Resources Inc.
- Tipper, H.W. 1963. Nechako River Map-area, B.C. GSC memoir 324.

APPENDIX



Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: ARCTEX ENGINEERING SERVICES

2390 - 1055 W. HASTINGS ST.
VANCOUVER, B.C.
V6E 2E9

Project: BARB

Comments: CC: P. KALLOCK

Page No. : 1

Tot. Pages: 1

Date : 15-JUN-89

Invoice #: I-8917606

P.O. #: NONE

CERTIFICATE OF ANALYSIS A8917606

| SAMPLE DESCRIPTION | PREP CODE | Au ppb FA+AA | Ag ppm Aqua R | | | | | | | | |
|--------------------|-----------|--------------|---------------|--|--|--|--|--|--|--|--|
| SIL-Z-C 30-40 | 205 --- | < 5 | 0.2 | | | | | | | | |
| SIL-Z-C 40-50 | 205 --- | < 5 | 0.2 | | | | | | | | |
| SIL-Z-C 50-60 | 205 --- | < 5 | 0.2 | | | | | | | | |
| SIL-Z-C 60-70 | 205 --- | 55 | 0.2 | | | | | | | | |
| SIL-Z-C 70-80 | 205 --- | 10 | < 0.2 | | | | | | | | |
| TRENCH C 45' | 205 --- | < 5 | < 0.2 | | | | | | | | |
| TRENCH C 55' | 205 --- | < 5 | < 0.2 | | | | | | | | |

CERTIFICATION :

Hart Bichler



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
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BRITISH COLUMBIA, CANADA V7J-2C1
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VANCOUVER, B.C.
V6E 2E9

A8917606

Comments: CC: P. KALLOCK

CERTIFICATE A8917606

ARCTEX ENGINEERING SERVICES
PROJECT : BARB
P.O.# : NONE

Samples submitted to our lab in Vancouver, BC.
This report was printed on 15-JUN-89.

SAMPLE PREPARATION

| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION |
|-------------|----------------|--------------------------------|
| 205 | 7 | Rock Geochem: Crush,split,ring |

ANALYTICAL PROCEDURES

| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION | METHOD | DETECTION LIMIT | UPPER LIMIT |
|-------------|----------------|---|---------------|-----------------|-------------|
| 100 | 7 | Au ppb: Fuse 10 g sample | FA-AAS | 5 | 10000 |
| 6 | 7 | Ag ppm: HNO ₃ -aqua regia digest | AAS-BKGD CORR | 0.2 | 100.0 |

ROCK SAMPLE DESCRIPTIONS

TRENCH "C" AT 32+00E 47+86N

(Trench extends 95' westerly and 20' easterly of 32+00E 47+86N)

| <i>Sample From To</i> | <i>Description</i> | <i>Analyses</i> | |
|---------------------------|--|-------------------|-------------------|
| | | <i>Au ppb</i> | <i>Ag ppm</i> |
| 30'W 40'W | Bleached and silicified rhyolite. Some banding of silica at 38'-40'. Patches of silica flooding. | 5 | 0.2 |
| 40'W 50'W | As above. Patches of silicification with pyrite in argillic alteration. | <5 | 0.2 |
| 50'W 60'W | As above. 55'-58'. Silicified zone with much disseminated + fracture filling + patchy pyrite. | <5 | 0.2 |
| 60'W 70'W | Bleached rhyolite. Argillic alt'n. Clay developed. | 55 | 0.2 |
| 70'W 80'W | As above. | 10 | <0.2 |

AFFIDAVIT OF EXPENSES

This is to certify that an induced polarization/resistivity survey was carried out on the Rhub and Barb claims situated at Ootsa Lake within the Omineca Mining Division, B.C. from April 27 to May 29, 1989 to the value of the following:

| | |
|---|--------------|
| Mobilization - demobilization | 3,000 |
| 4 man crew, 30 days @ 1,400/day | 42,000 |
| Data reduction, interpretation & report | <u>5,000</u> |
| | \$50,000 |

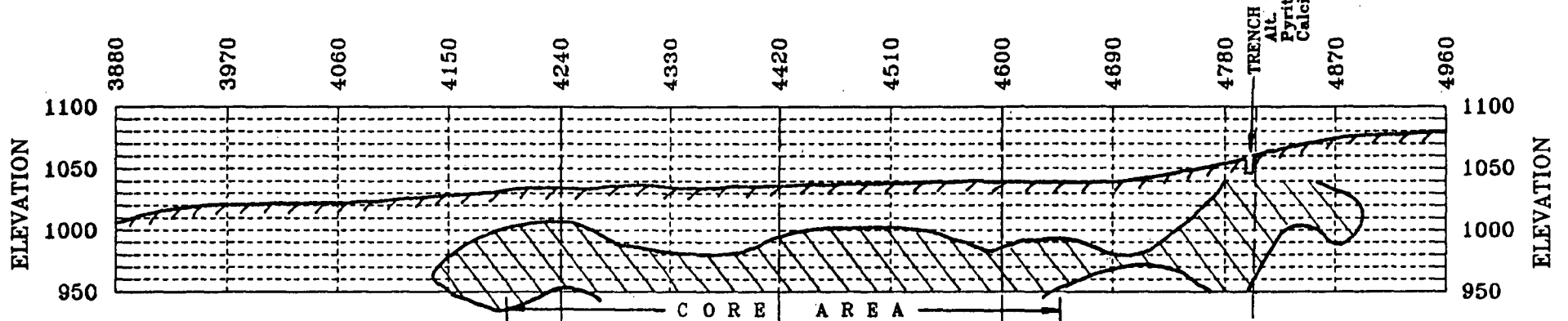
Within the Rhub III Claim Group, IP resistivity surveying was carried out on lines R-3, R-4, and R-5. This constituted 18.44% of the amount of work done resulting in \$9,220 spent on the Rhub III Claim Group. Assessment work to be filed will only be applied to the Rhub 2 and 4 claims which are part of the Rhub III Claim Group.

Respectfully submitted,
ALTA VENTURES INC.

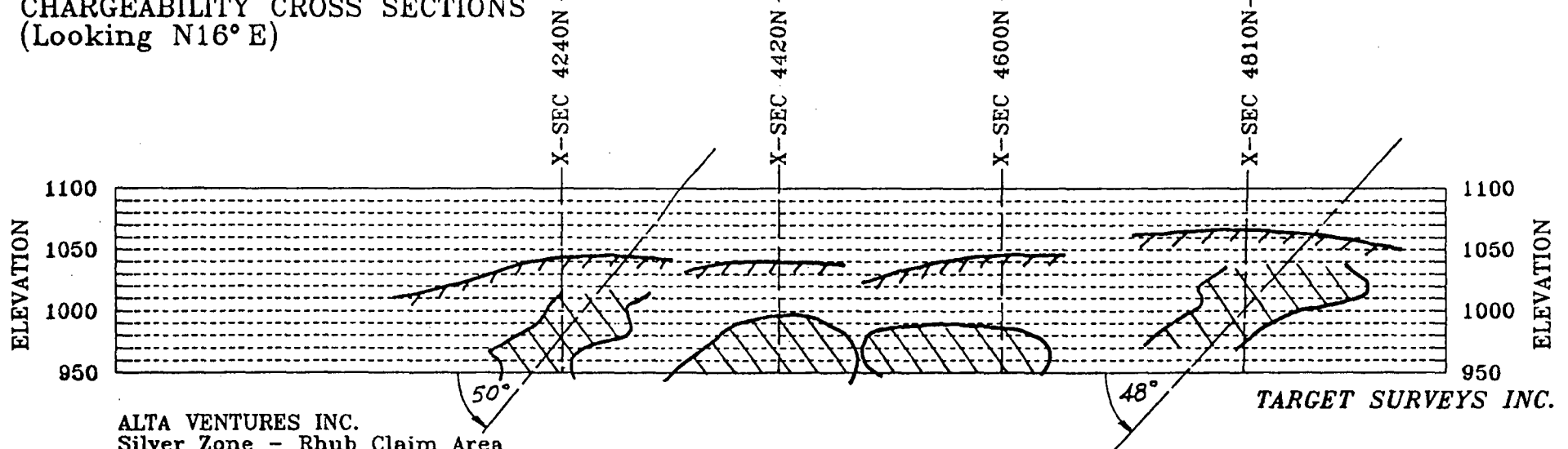


David G. Mark, geophysicist
Director

CHARGEABILITY LONGITUDINAL SECTION (N16° E)
(Looking Westerly)



CHARGEABILITY CROSS SECTIONS
(Looking N16° E)

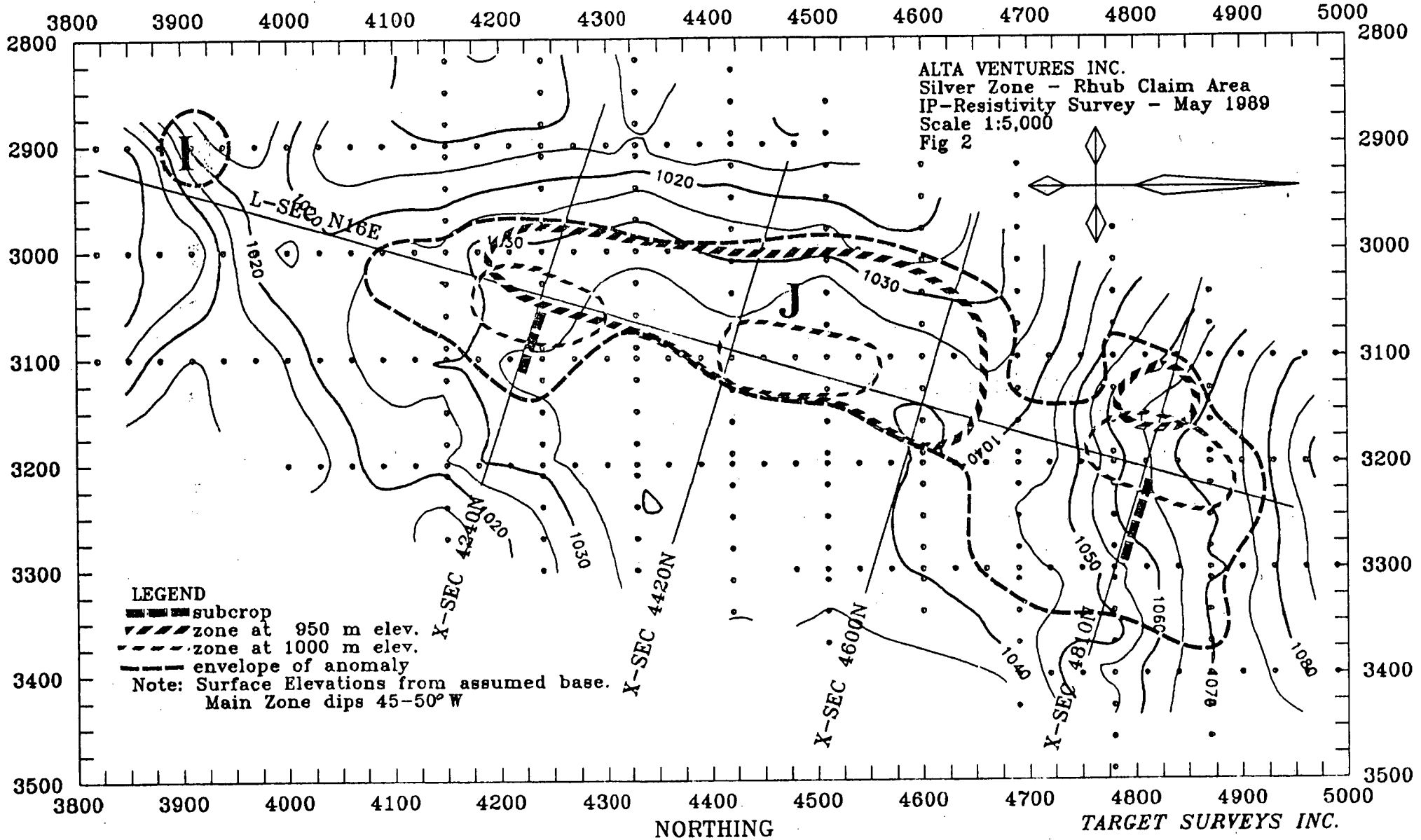


ALTA VENTURES INC.
Silver Zone - Rhub Claim Area
IP-Resistivity Survey - May 1989
Scale 1:5,000
Fig 3

TARGET SURVEYS INC.

SILVER ZONE ANOMALIES: I, J

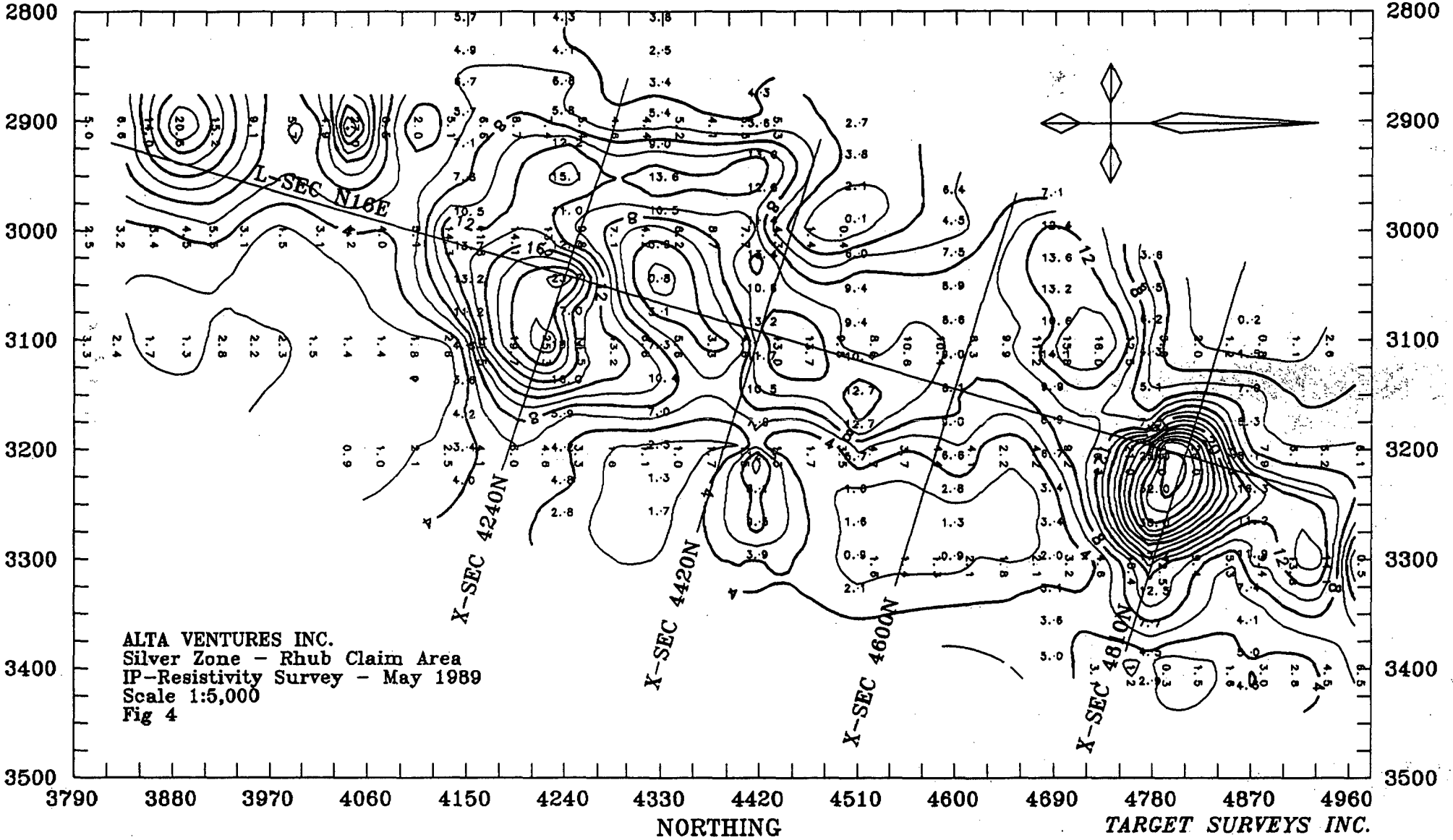
NORTHING



CHARGEABILITY: Level n=1 (30 m)

NORTHING

3790 3880 3970 4060 4150 4240 4330 4420 4510 4600 4690 4780 4870 4960

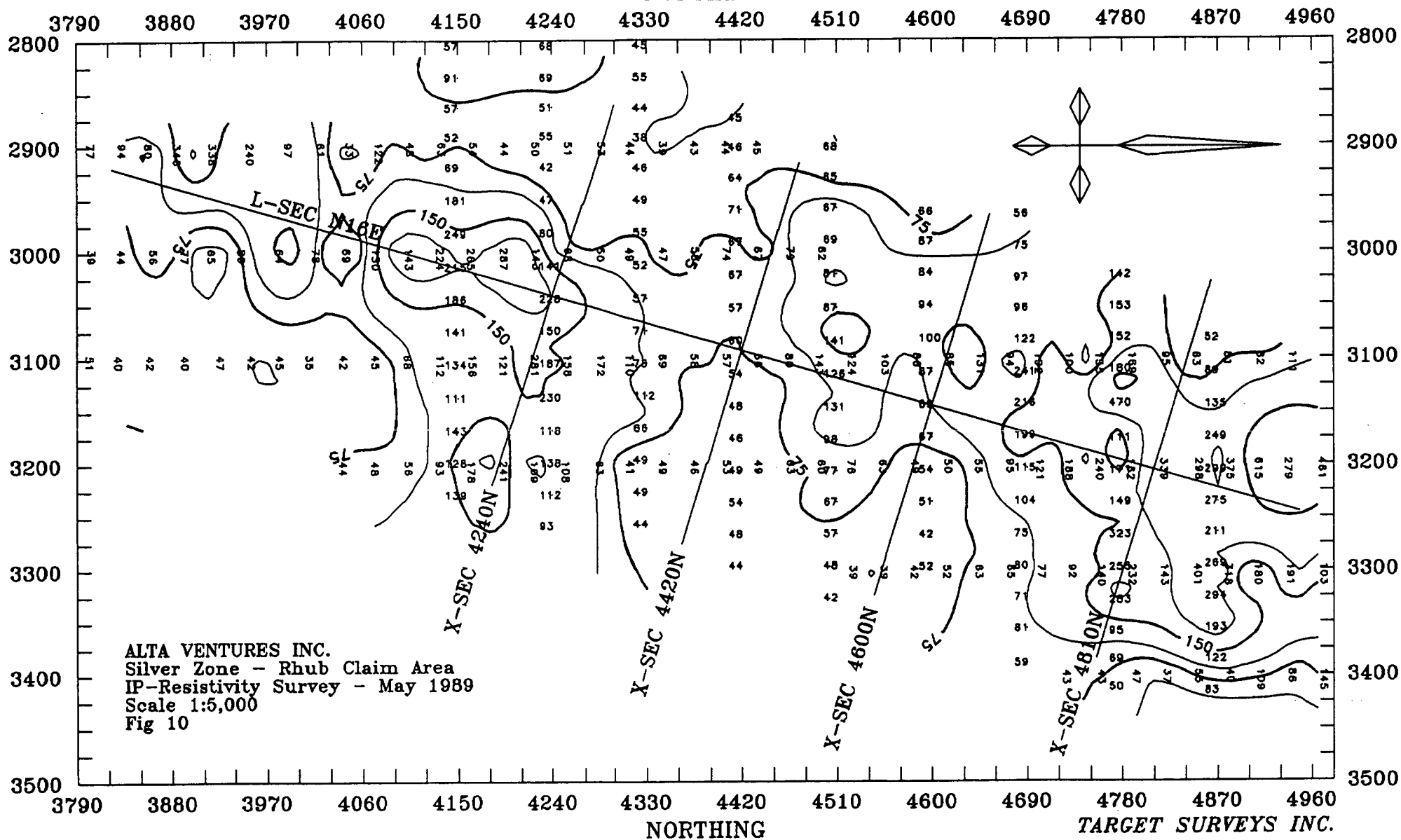


ALTA VENTURES INC.
Silver Zone - Rhub Claim Area
IP-Resistivity Survey - May 1989
Scale 1:5,000
Fig 4

TARGET SURVEYS INC.

RESISTIVITY: Level n=2 (45 m)

NORTHING

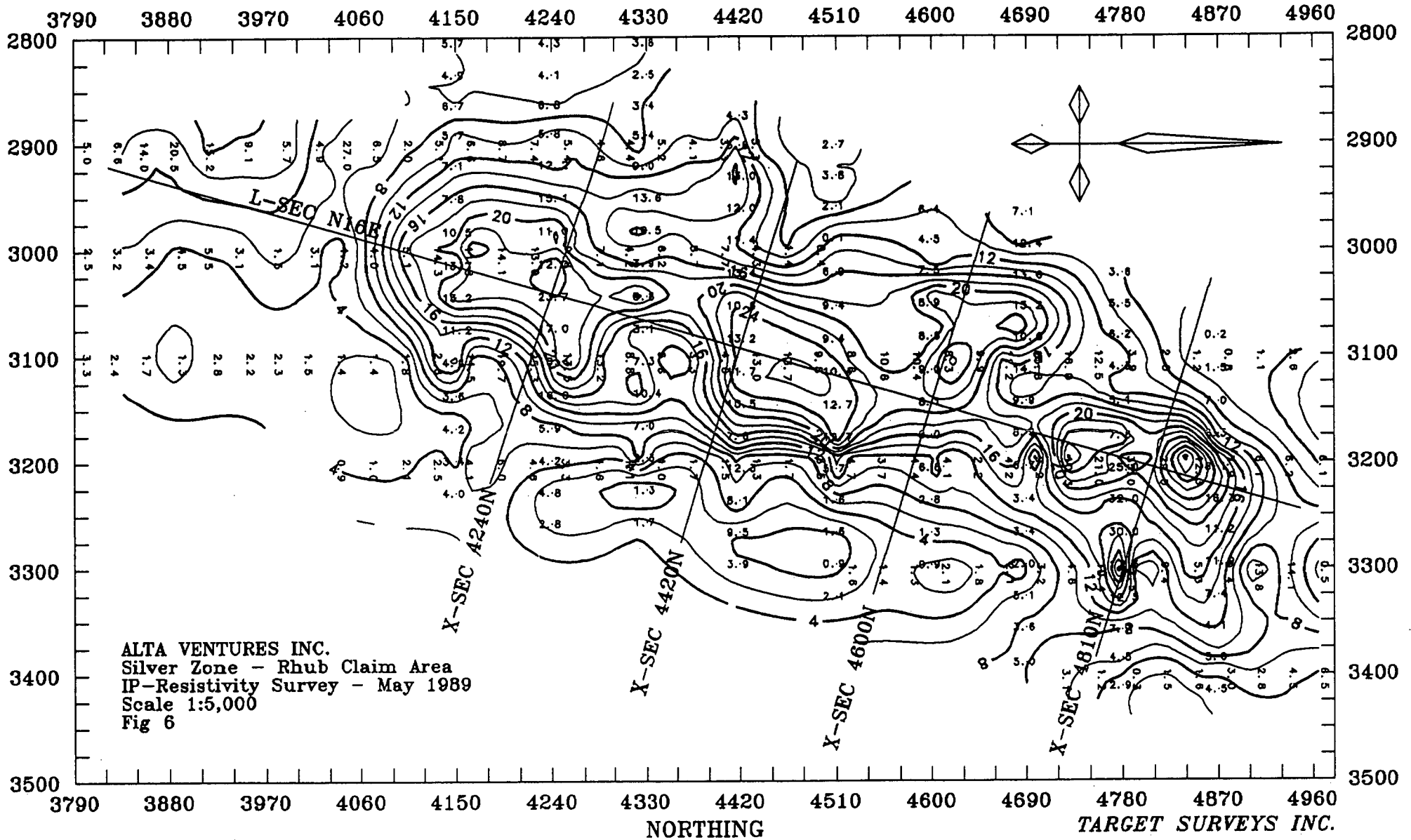


ALTA VENTURES INC.
Silver Zone - Rhub Claim Area
IP-Resistivity Survey - May 1989
Scale 1:5,000
Fig 10

TARGET SURVEYS INC.

CHARGEABILITY: Level n=3 (60 m)

NORTHING



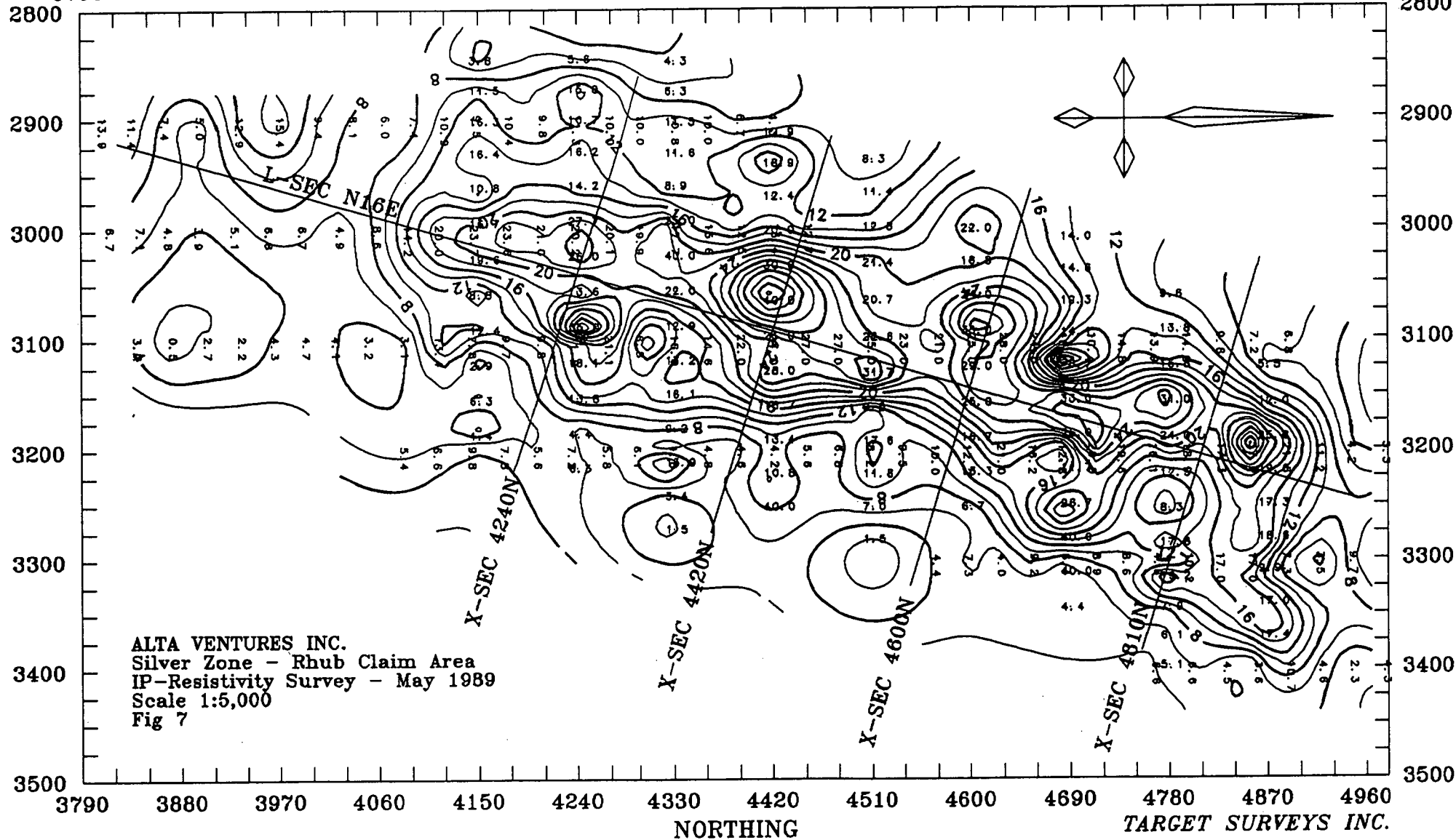
ALTA VENTURES INC.
Silver Zone - Rhub Claim Area
IP-Resistivity Survey - May 1989
Scale 1:5,000
Fig 6

TARGET SURVEYS INC.

CHARGEABILITY: Level n=4 (75 m)

NORTHING

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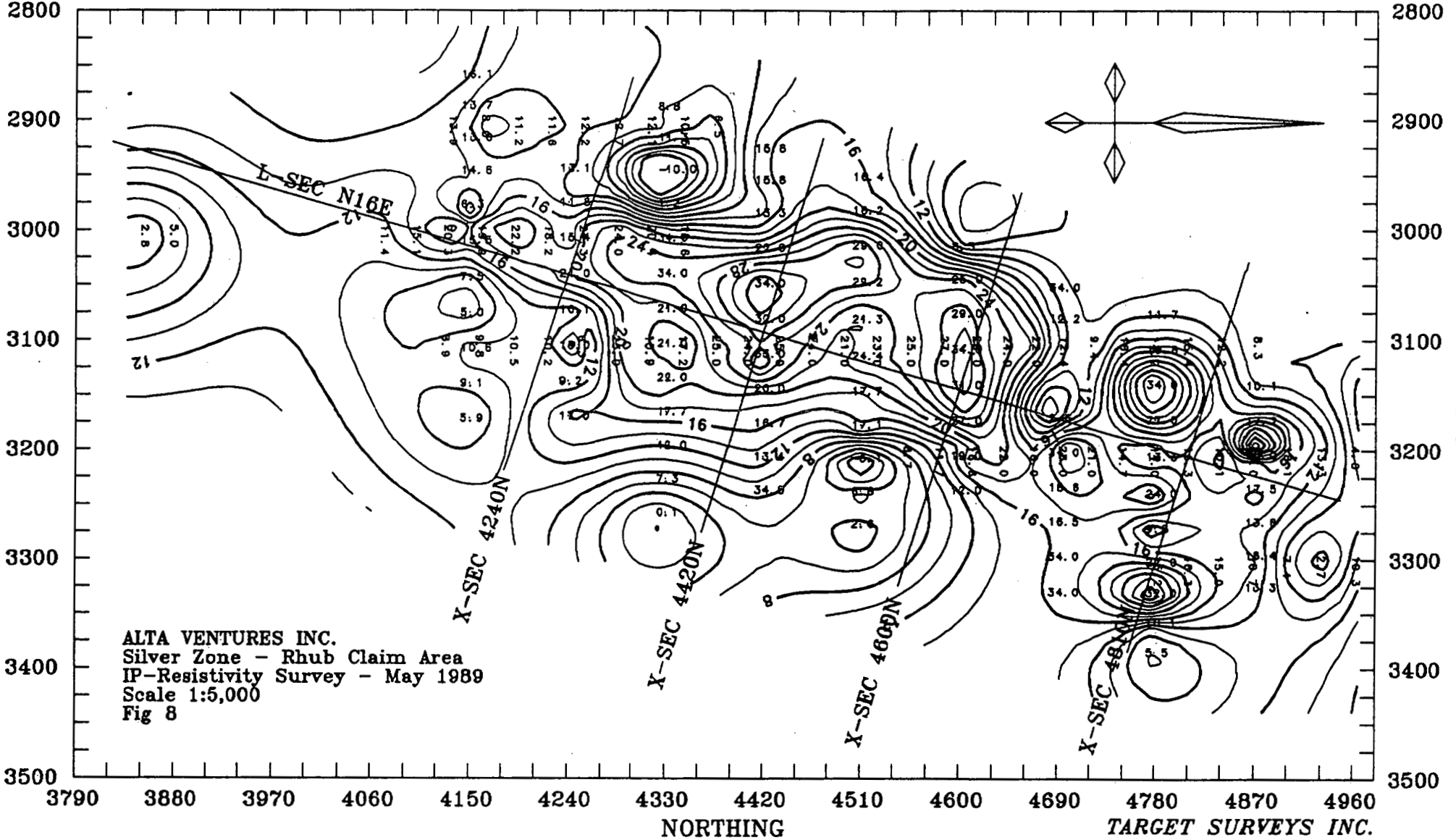
ALTA VENTURES INC.
Silver Zone - Rhub Claim Area
IP-Resistivity Survey - May 1989
Scale 1:5,000
Fig 7

TARGET SURVEYS INC.

CHARGEABILITY: Level n=5 (90 m)

NORTHING

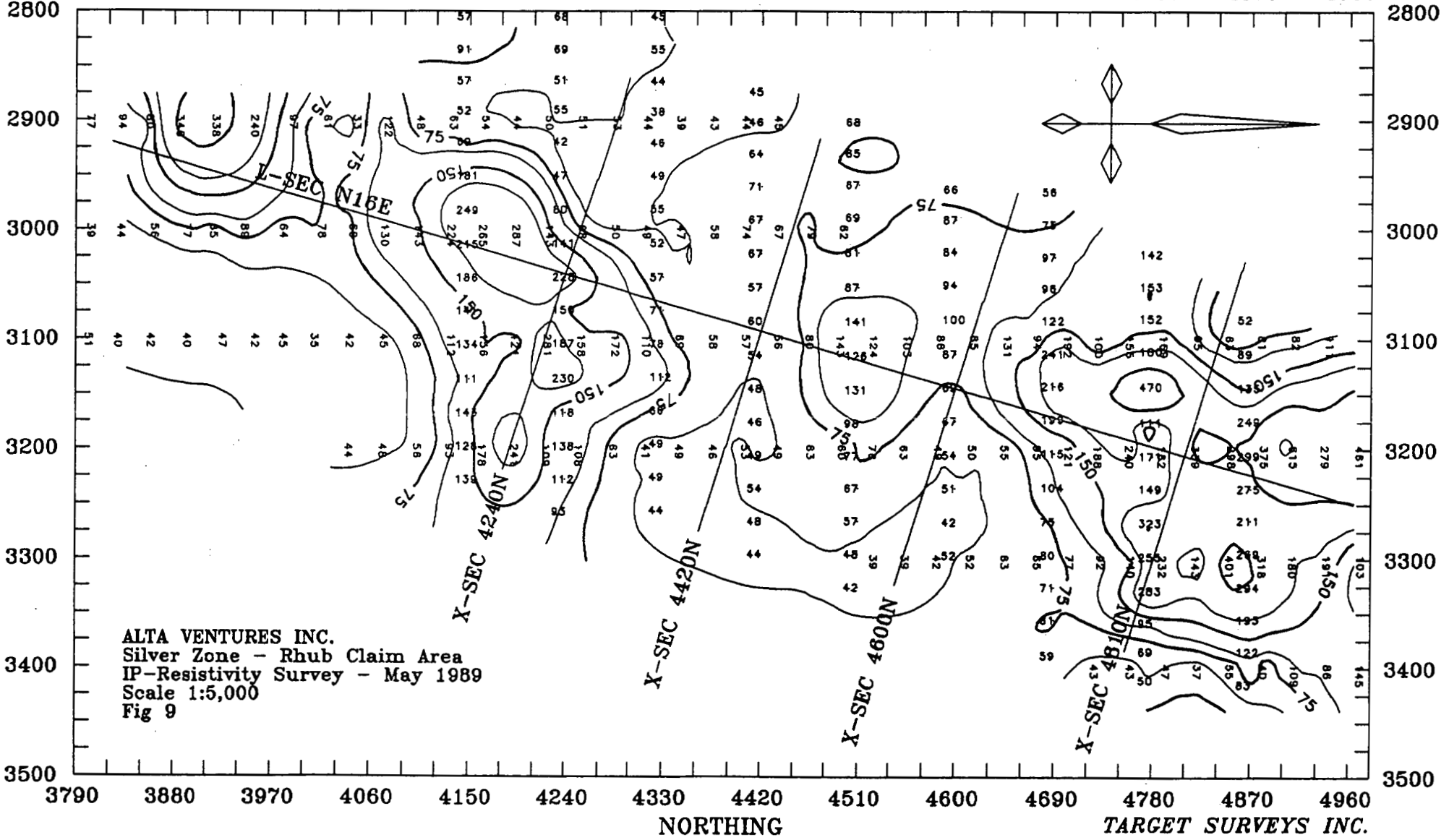
3790 3880 3970 4060 4150 4240 4330 4420 4510 4600 4690 4780 4870 4960



RESISTIVITY: Level n=1 (30 m)

NORTHING

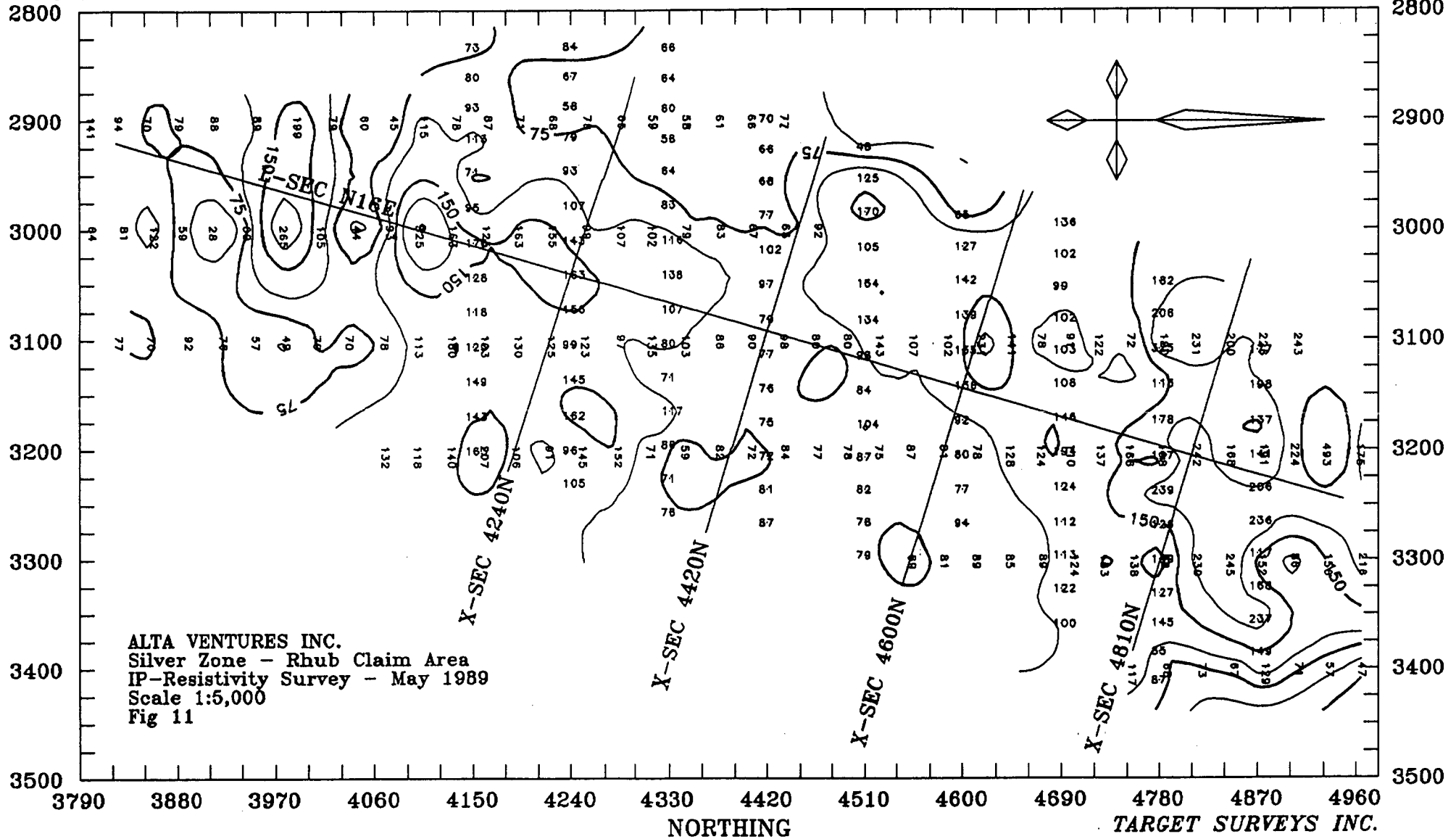
3790 3880 3970 4060 4150 4240 4330 4420 4510 4600 4690 4780 4870 4960



RESISTIVITY: Level n=3 (60 m)

NORTHING

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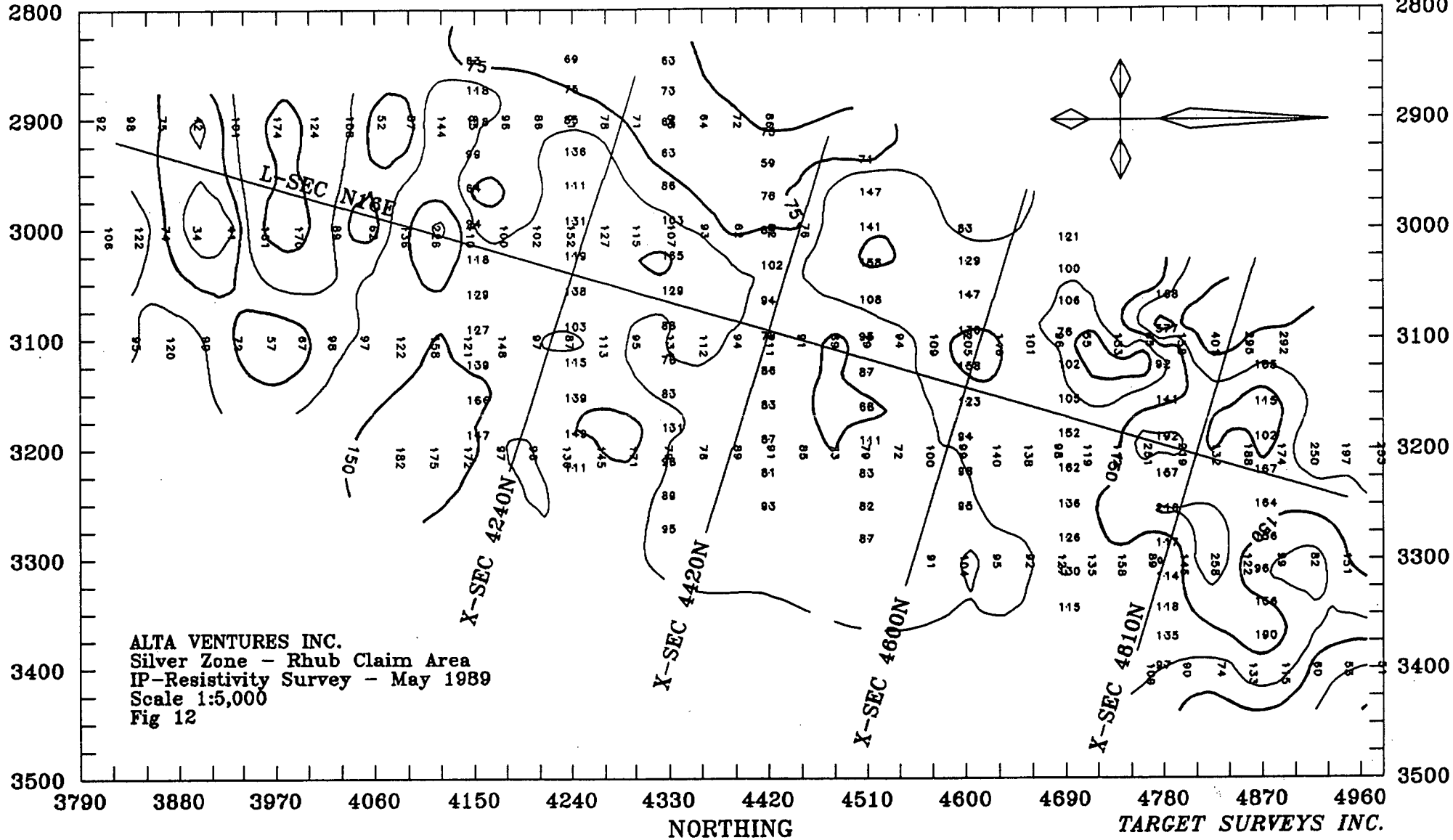


TARGET SURVEYS INC.

RESISTIVITY: Level n=4 (75 m)

NORTHING

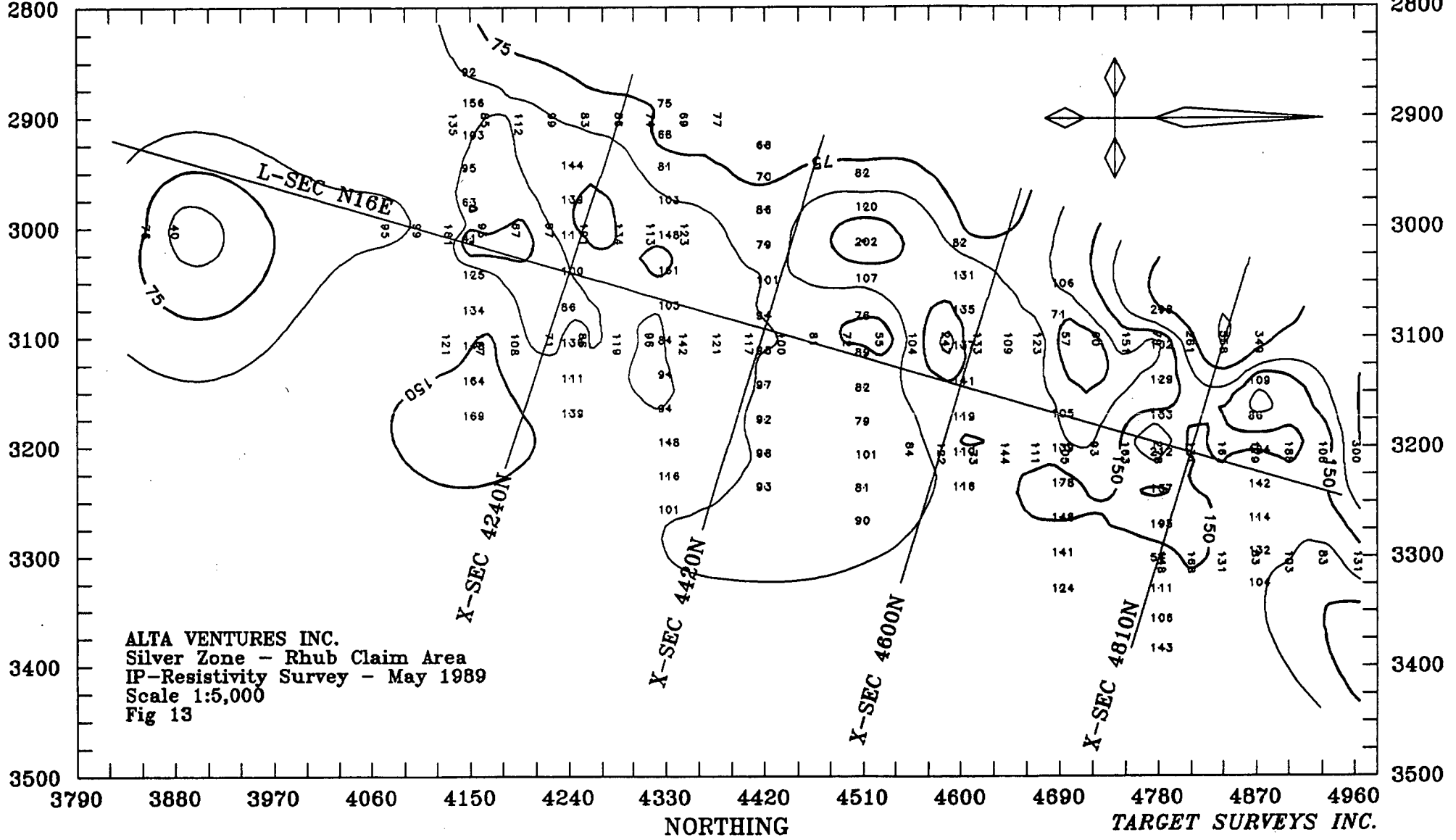
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RESISTIVITY: Level n=5 (90 m)

NORTHING

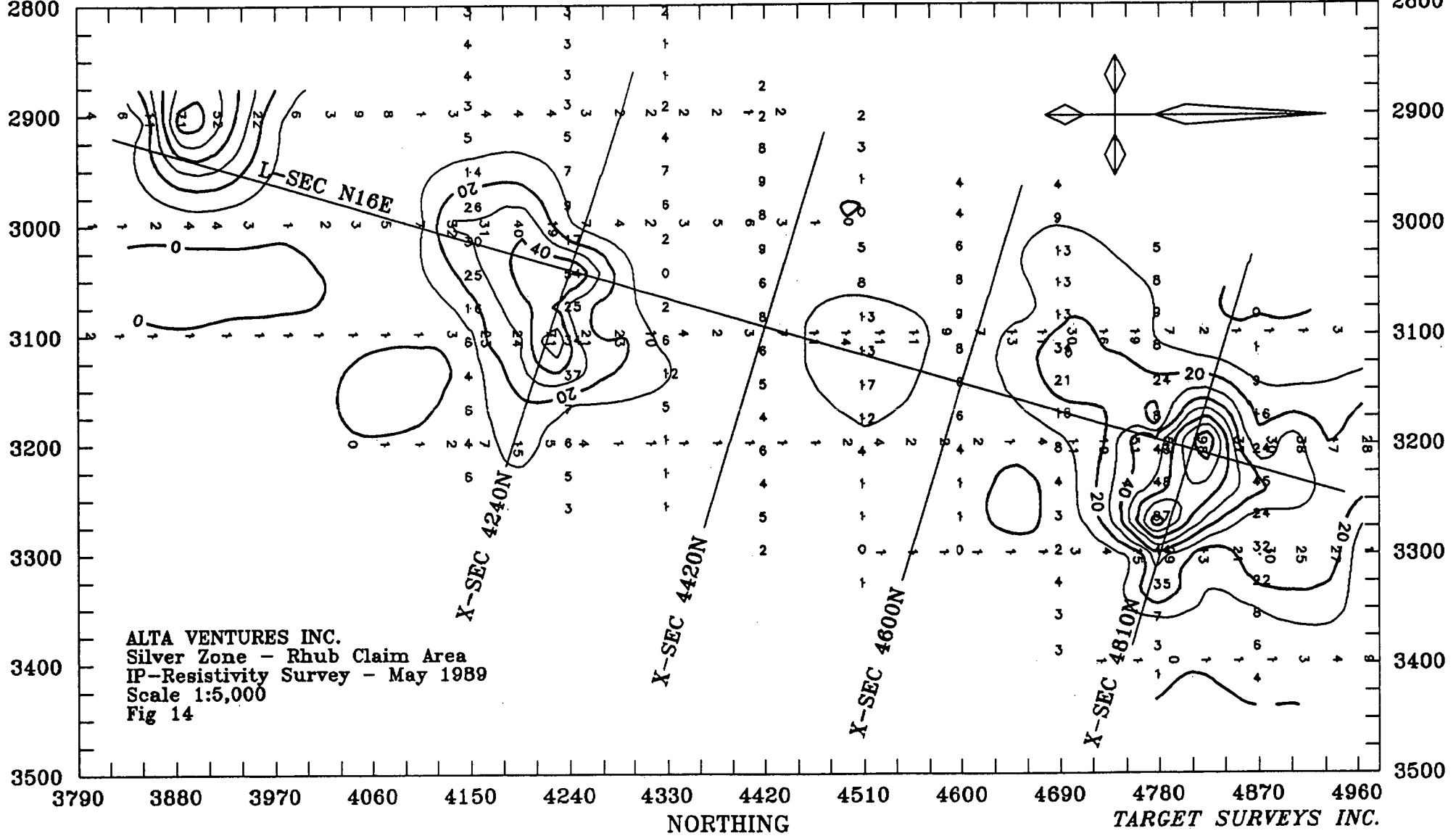
3790 3880 3970 4060 4150 4240 4330 4420 4510 4600 4690 4780 4870 4960



(Ch*Pa)/100 Level n=1 (30 m)

NORTHING

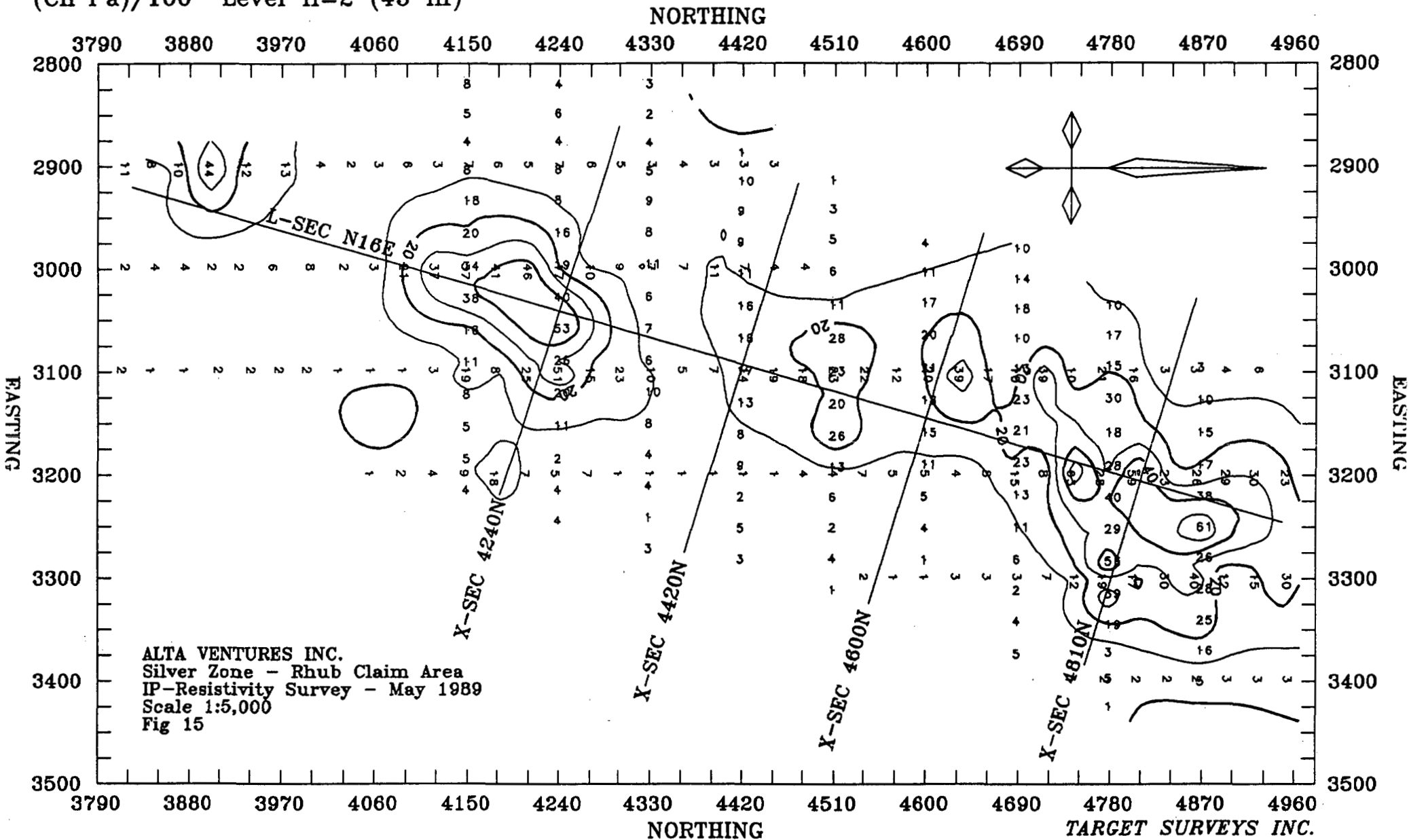
3790 3880 3970 4060 4150 4240 4330 4420 4510 4600 4690 4780 4870 4960



ALTA VENTURES INC.
Silver Zone - Rhub Claim Area
IP-Resistivity Survey - May 1989
Scale 1:5,000
Fig 14

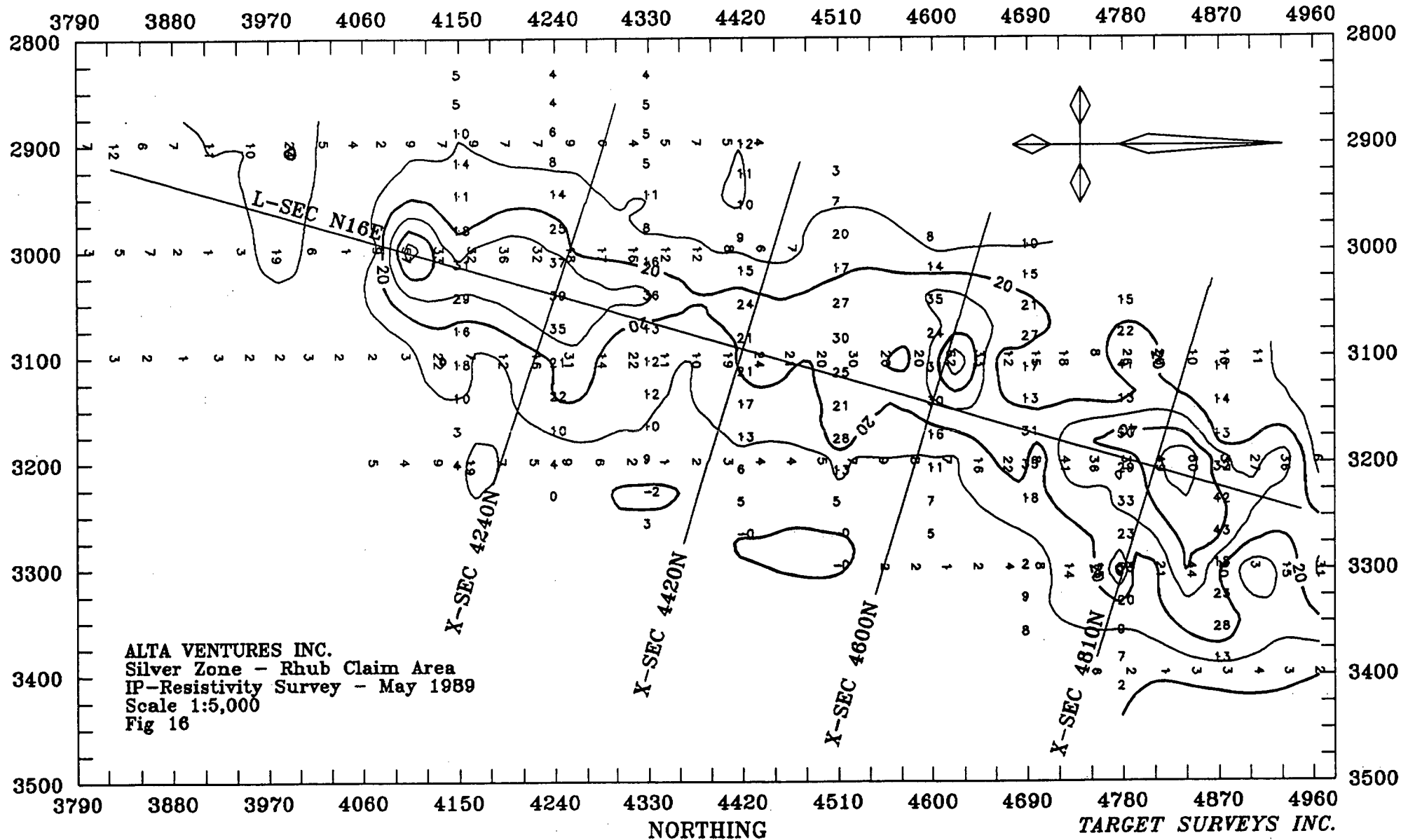
TARGET SURVEYS INC.

(Ch*Pa)/100 Level n=2 (45 m)



(Ch*Pa)/100 Level n=3 (60 m)

NORTHING



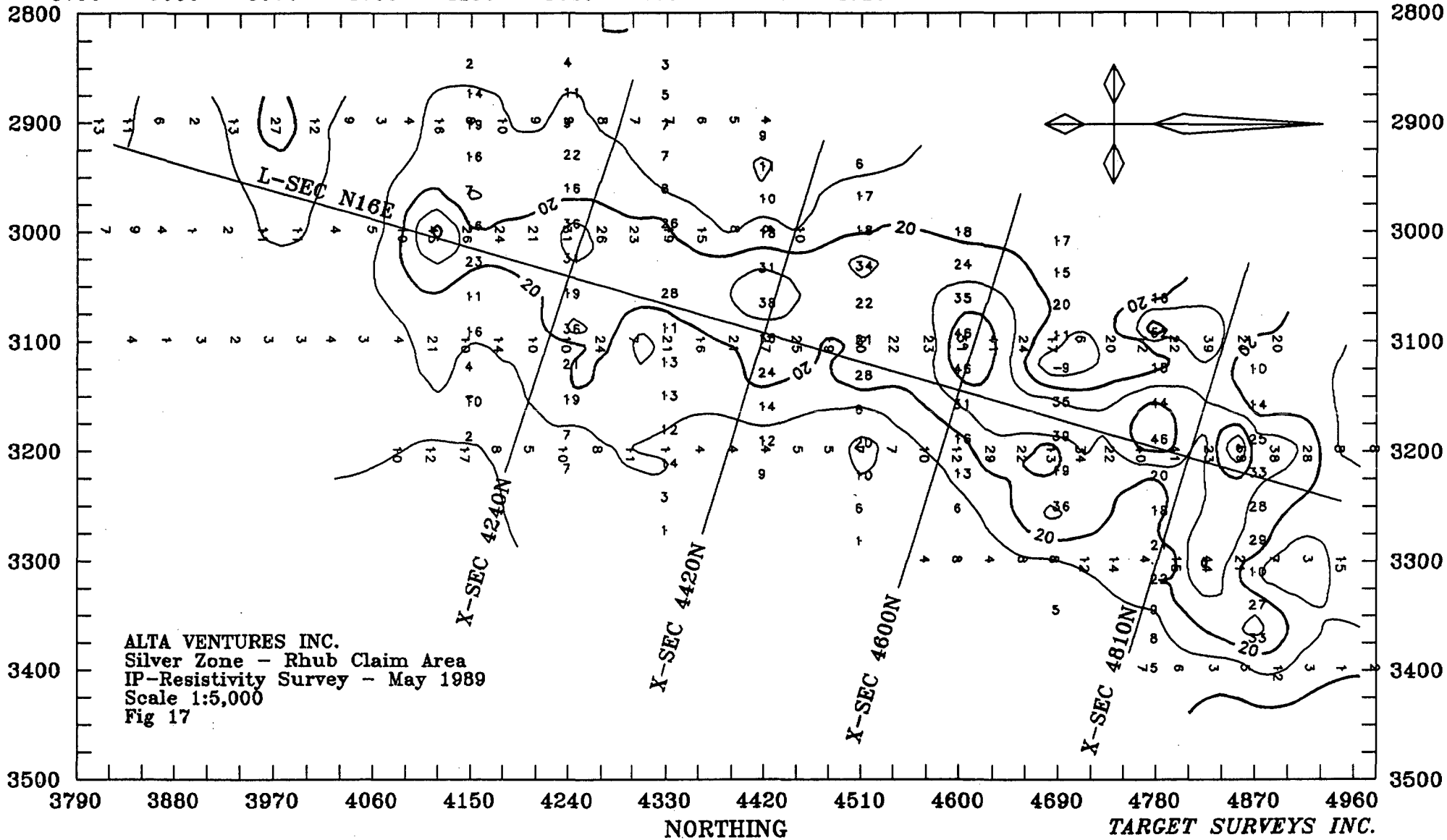
ALTA VENTURES INC.
Silver Zone - Rhub Claim Area
IP-Resistivity Survey - May 1989
Scale 1:5,000
Fig 16

TARGET SURVEYS INC.

(Ch*Pa)/100 Level n=4 (75 m)

NORTHING

3790 3880 3970 4060 4150 4240 4330 4420 4510 4600 4690 4780 4870 4960



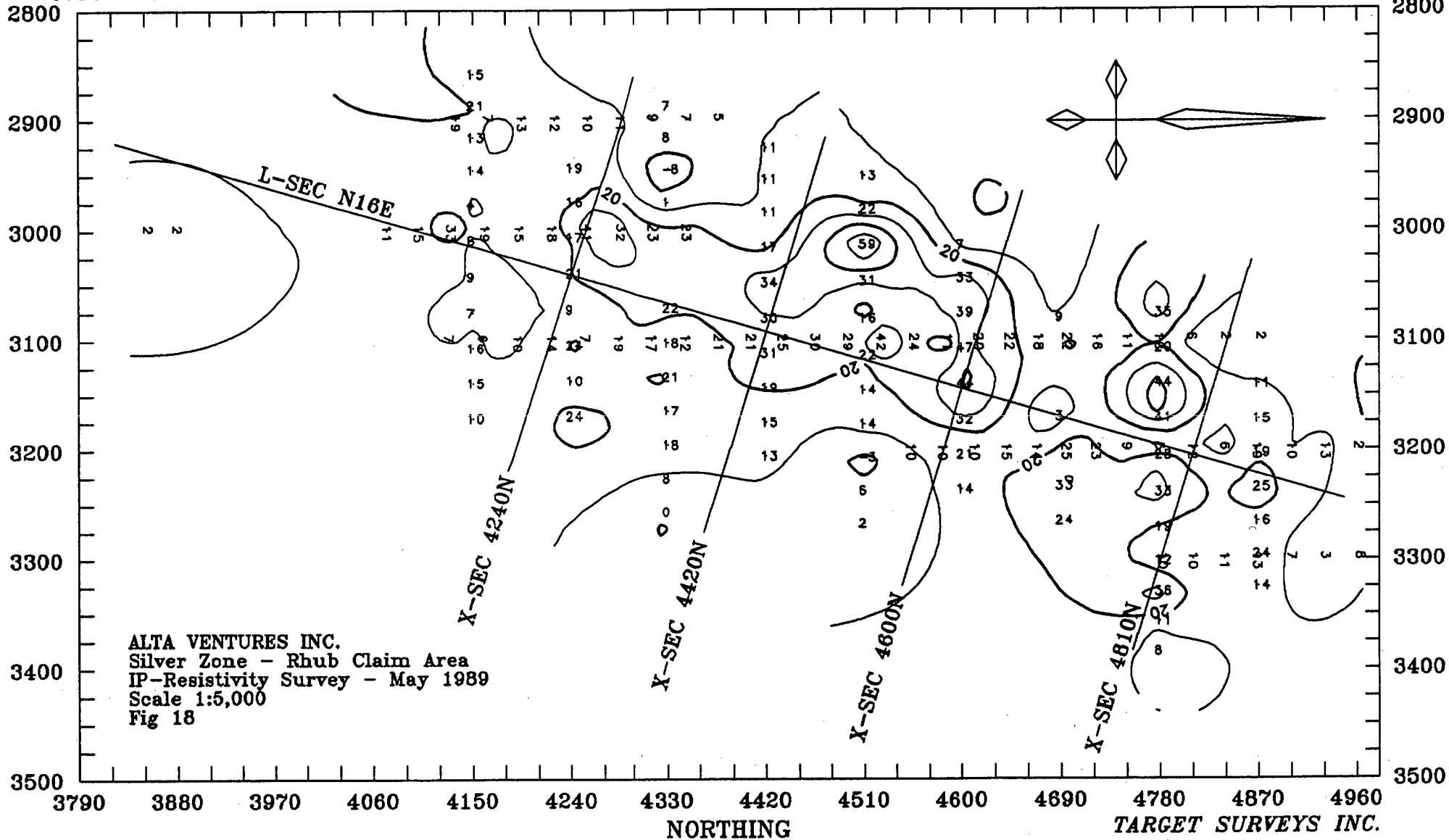
ALTA VENTURES INC.
Silver Zone - Rhub Claim Area
IP-Resistivity Survey - May 1989
Scale 1:5,000
Fig 17

TARGET SURVEYS INC.

(Ch*Pa)/100 Level n=5 (90 m)

NORTHING

3790 3880 3970 4060 4150 4240 4330 4420 4510 4600 4690 4780 4870 4960



ALTA VENTURES INC.
Silver Zone - Rhub Claim Area
IP-Resistivity Survey - May 1989
Scale 1:5,000
Fig 18

TARGET SURVEYS INC.

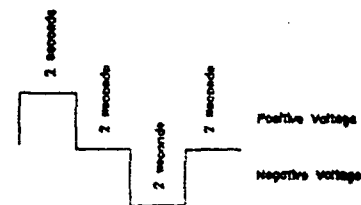
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500,
 750, 1000, etc. (Ohm-m)

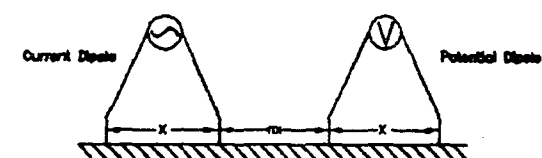
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15,
 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTED MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

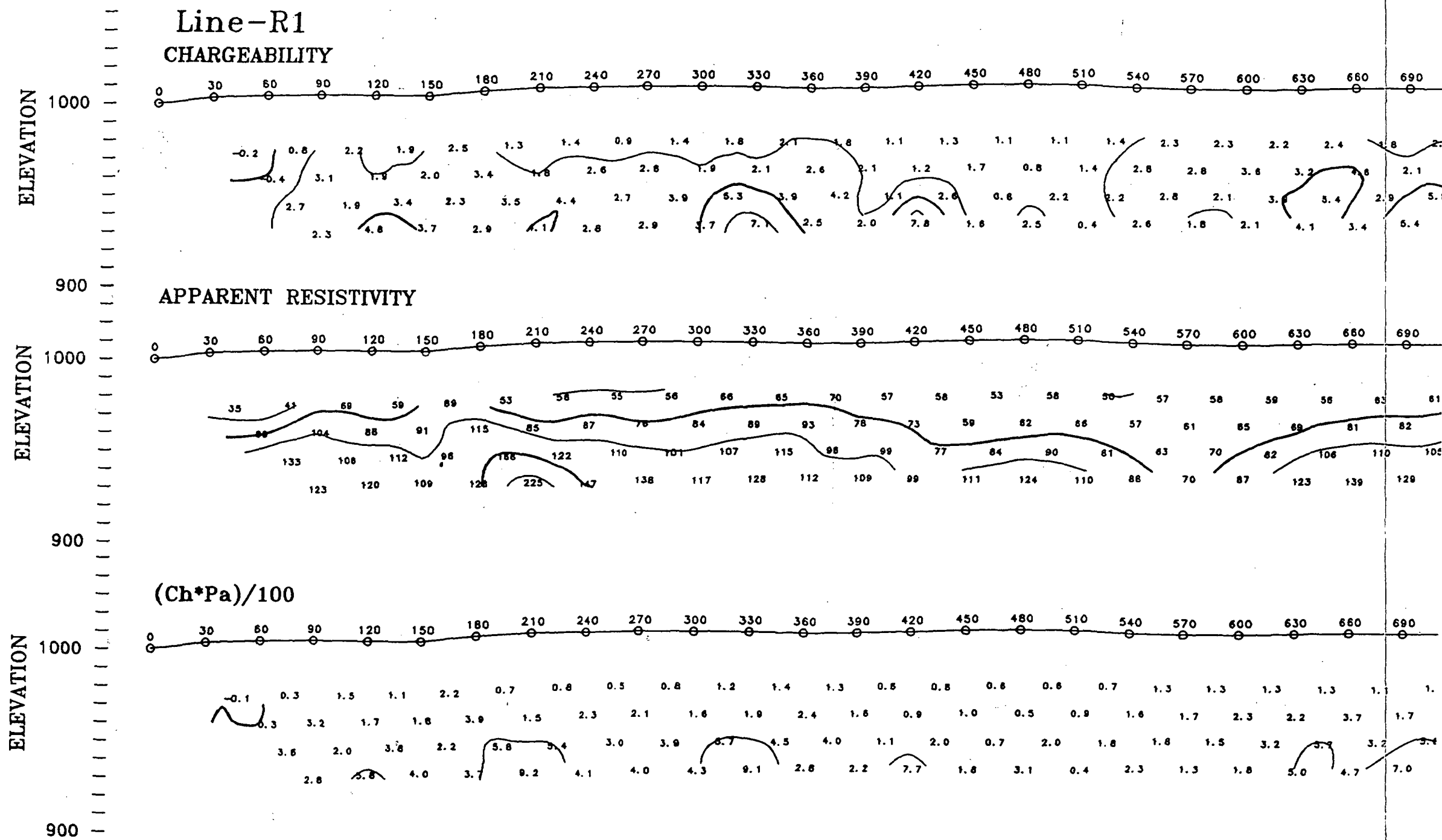
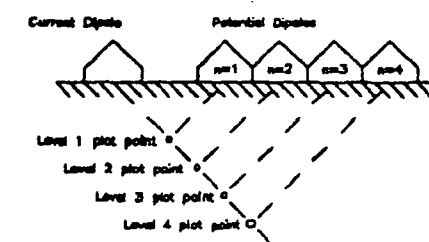
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-R1 FIG 19

ALTA VENTURES INC.

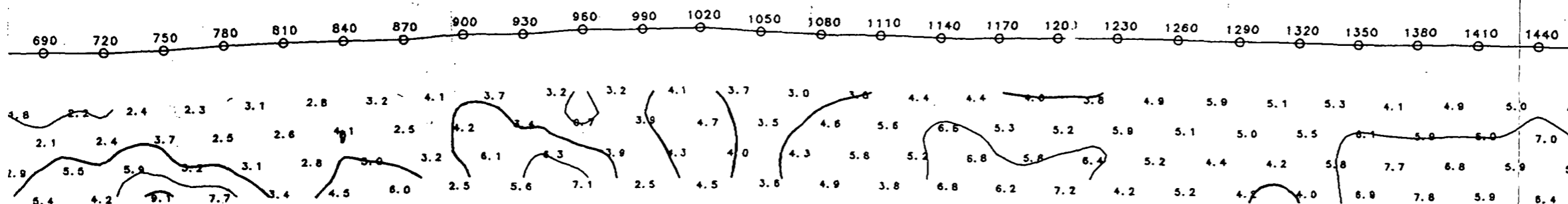
Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omicra M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

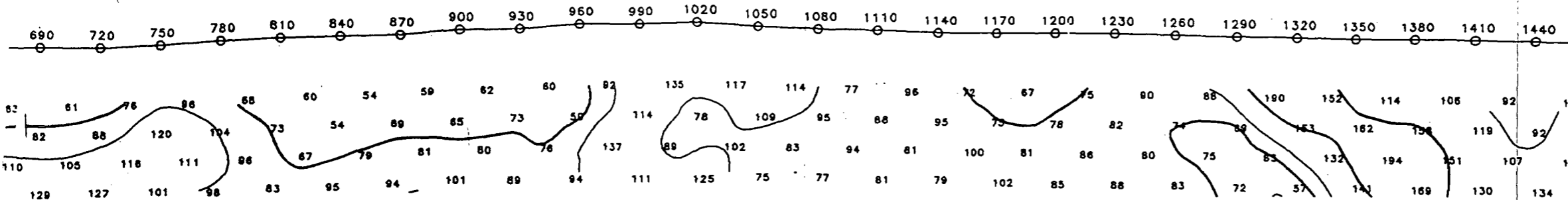
Date: June 1989 Scale: 1:2500
 Pre-Dr: TLR
 Plot No: 814V
 TARGET SURVEYS INC. Vancouver, B.C.

LINE R-1 (con't)

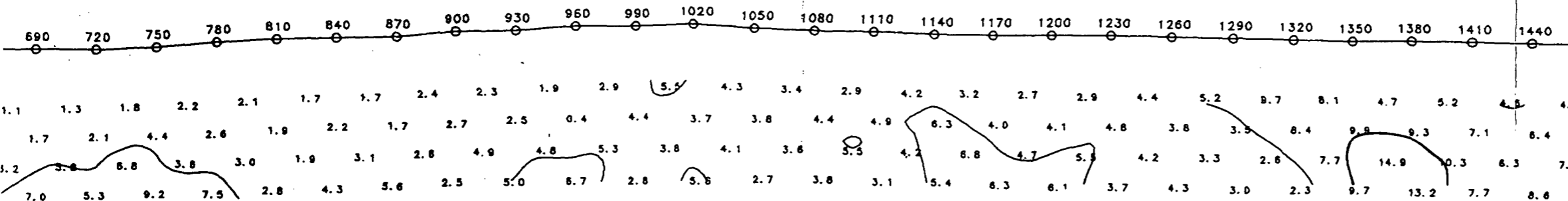
CHARGEABILITY



APPARENT RESISTIVITY



(Ch*Pa)/100



LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

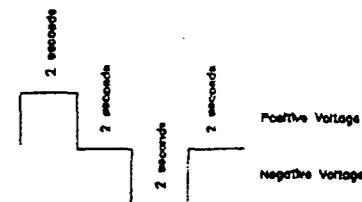
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION

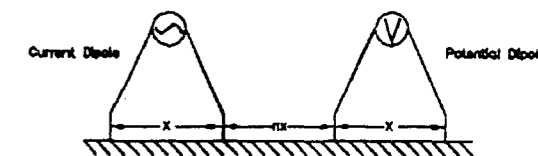
RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MC-2

SURVEY PARAMETERS

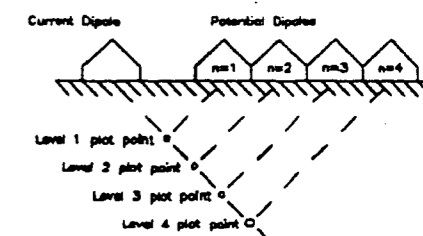
SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-R1

FIG 20

ALTA VENTURES INC.

Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION

Rhub & Barb Claims, Omenica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Prep. By: TLM
 Rep. No.: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

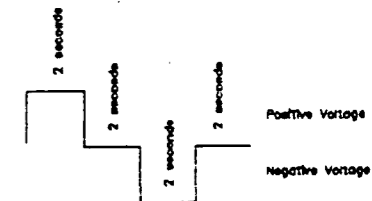
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500,
 750, 1000, etc. (Ohm-m)

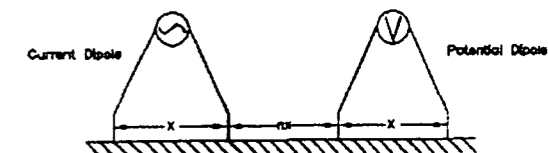
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15,
 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

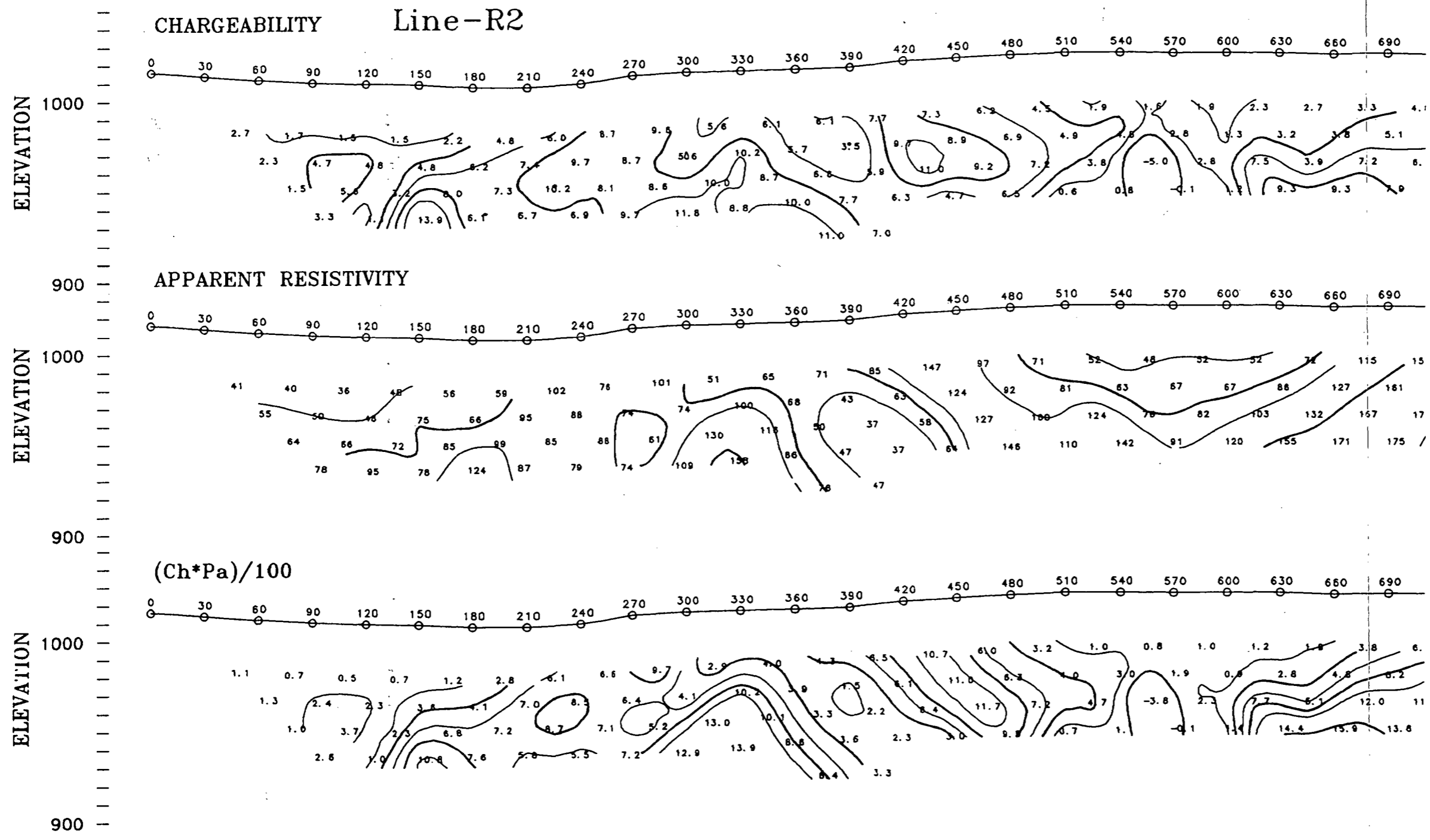
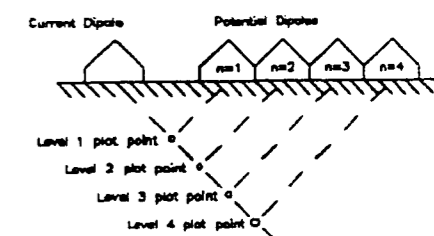
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-R2 FIG 21

ALTA VENTURES INC.

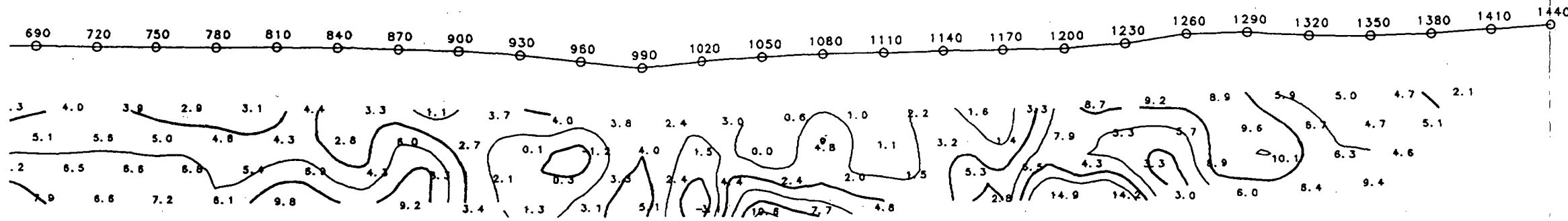
Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

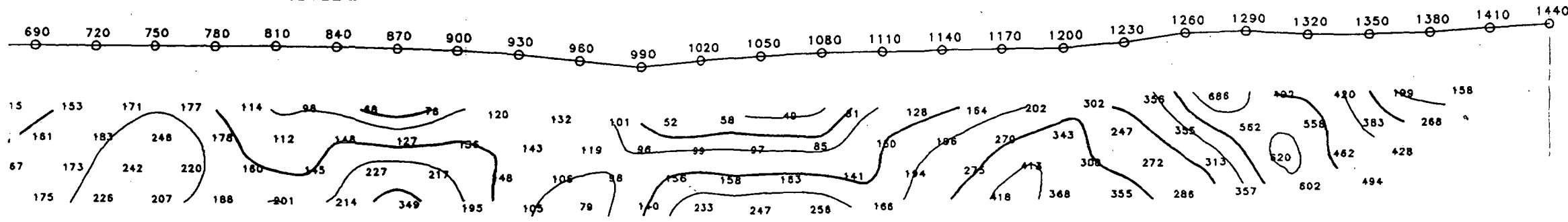
| | | |
|-------------------------------------|----------------|--------------------------------|
| Date: June 1989 | Scale: 1:2,500 | Prep. by: TLA Map No: 05AV- |
| TARGET SURVEYS INC. Vancouver, B.C. | | |

LINE R-2 (con't)

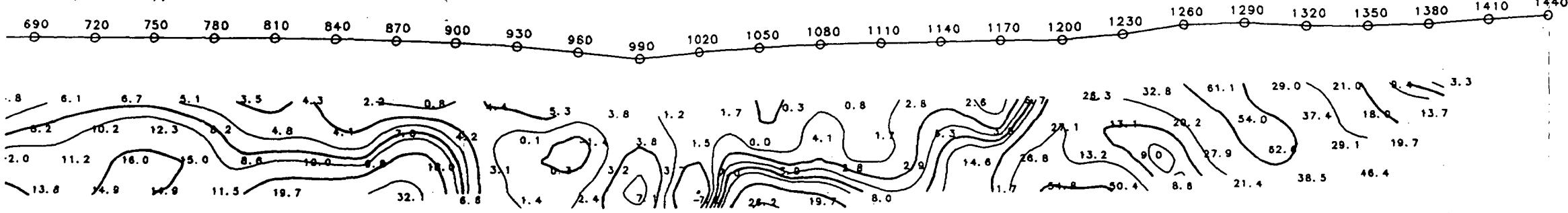
CHARGEABILITY



APPARENT RESISTIVITY



(Ch*Pa)/100



LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

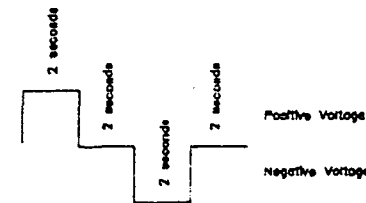
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION

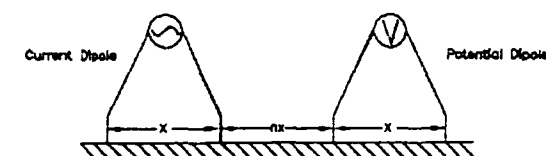
RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

SURVEY PARAMETERS

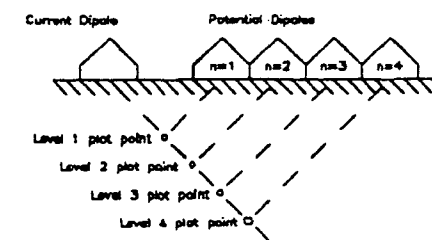
SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-R2

FIG 22

ALTA VENTURES INC.

Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omerica W.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Prepped by: TLR
 Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

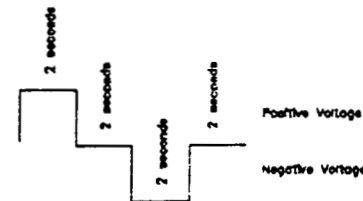
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500,
 750, 1000, etc. (Ohm-m)

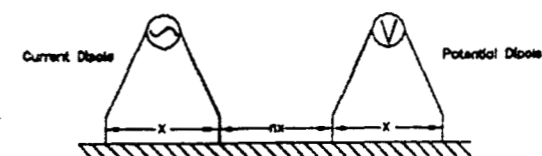
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15,
 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

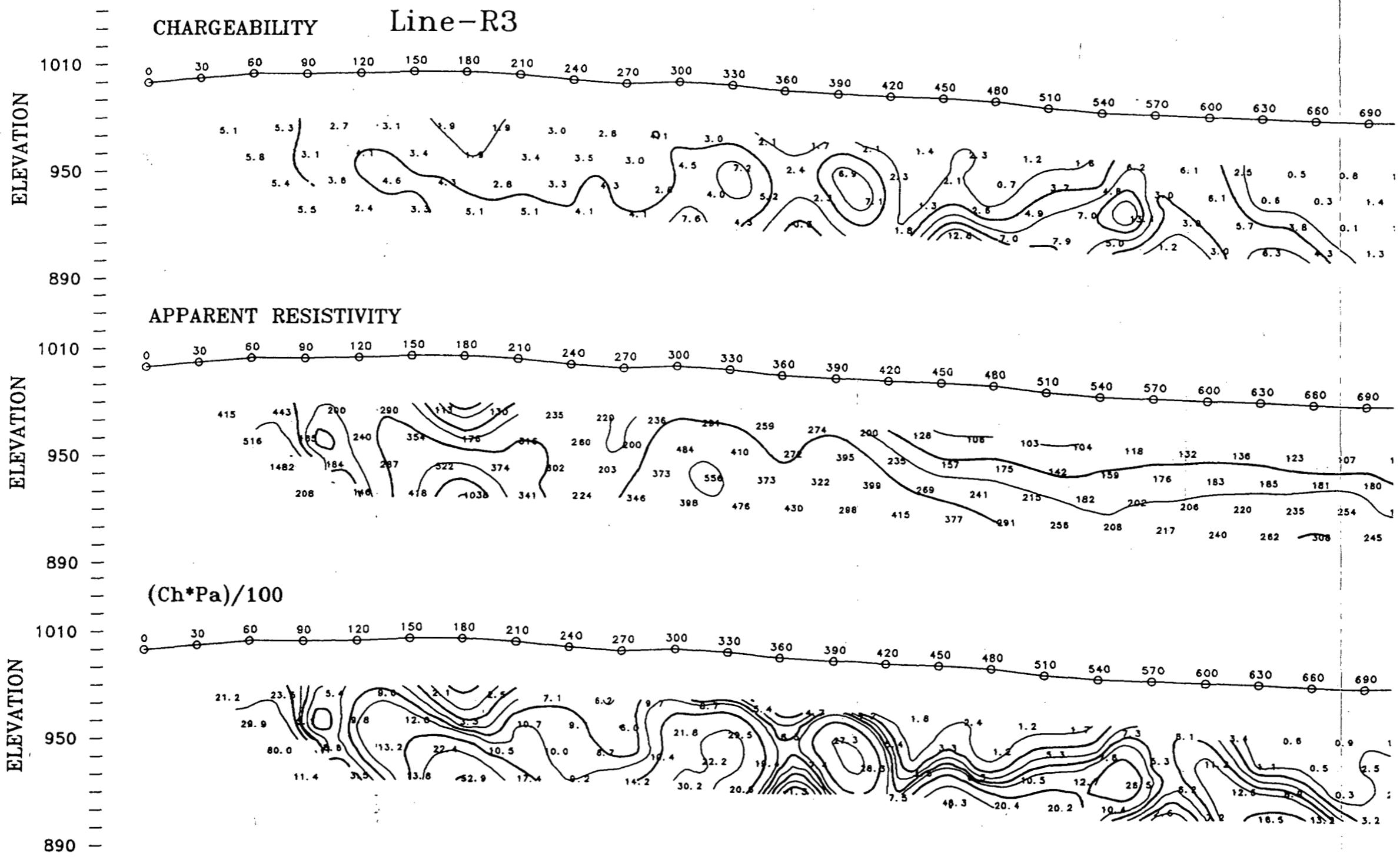
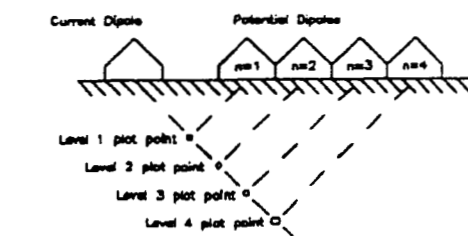
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD

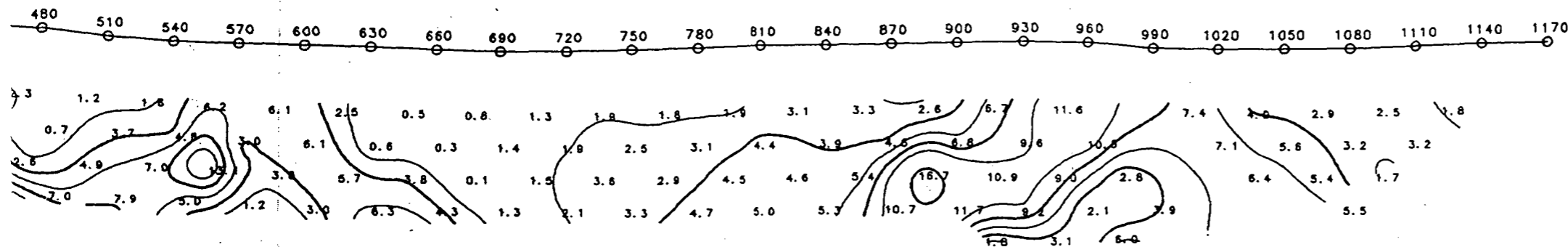


L-R3 FIG 23

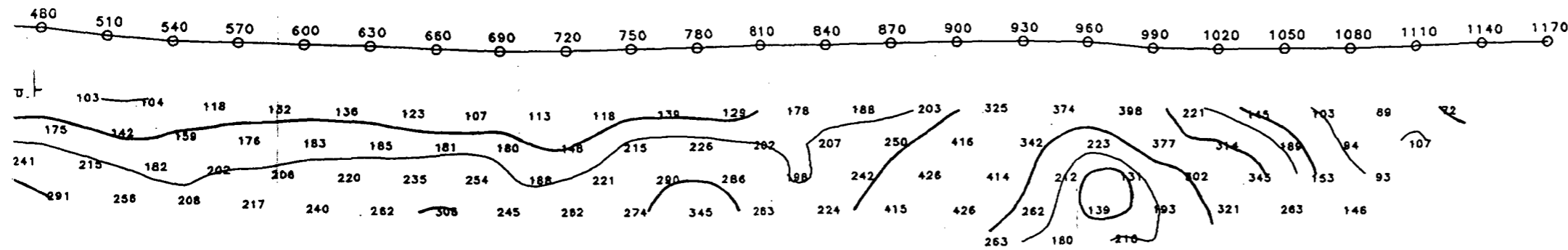
ALTA VENTURES INC.
 Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omernia M.D., N.T.S. 93F - 11, 12
J.G. AGER & ASSOCIATES LTD.
 Date: June 1989 Scale: 1:2,500
 TARGET SURVEYS INC. Vancouver, B.C.

LINE R-3 (con't)

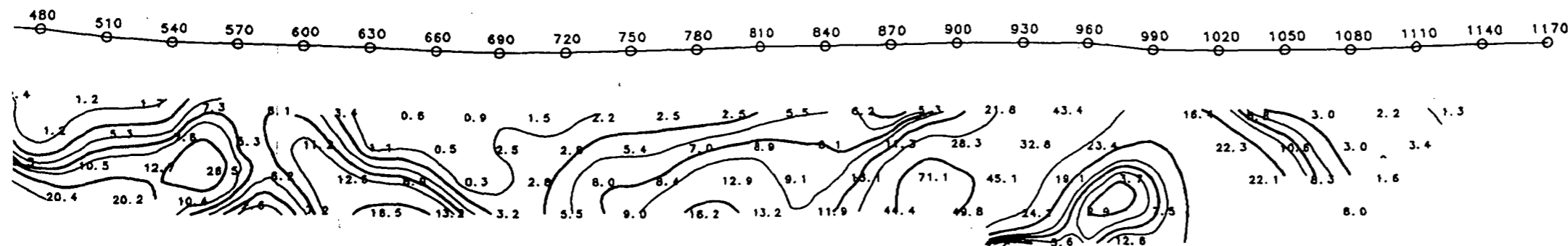
CHARGEABILITY



APPARENT RESISTIVITY



(Ch*Pa)/100



ELEVATION
1010
950
890
1010
950
890
1010
950
890

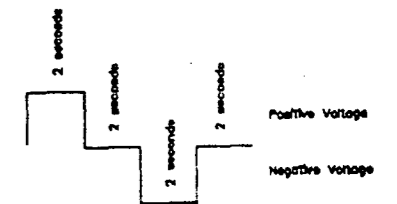
LEGEND

APPARENT RESISTIVITY
CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

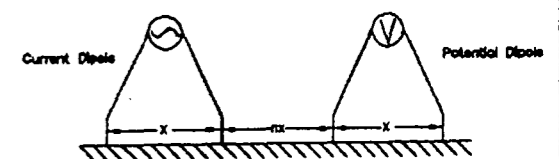
APPARENT CHARGEABILITY
CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
RECEIVER: HUNTED MARK IV
TRANSMITTER: PHOENIX IPT 1
GENERATOR: PHOENIX MG-2

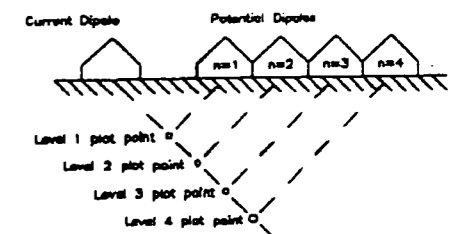
SURVEY PARAMETERS
SURVEY MODE: TIME DOMAIN
ARRAY: DIPOLE DIPOLE
DIPOLE LENGTH: 30 METERS
DIPOLE SEPARATION: n=1 to n=5
DELAY TIME: 200 MILLISECONDS
INTEGRATION TIME: 1,500 MILLISECONDS
CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-R3

FIG 24

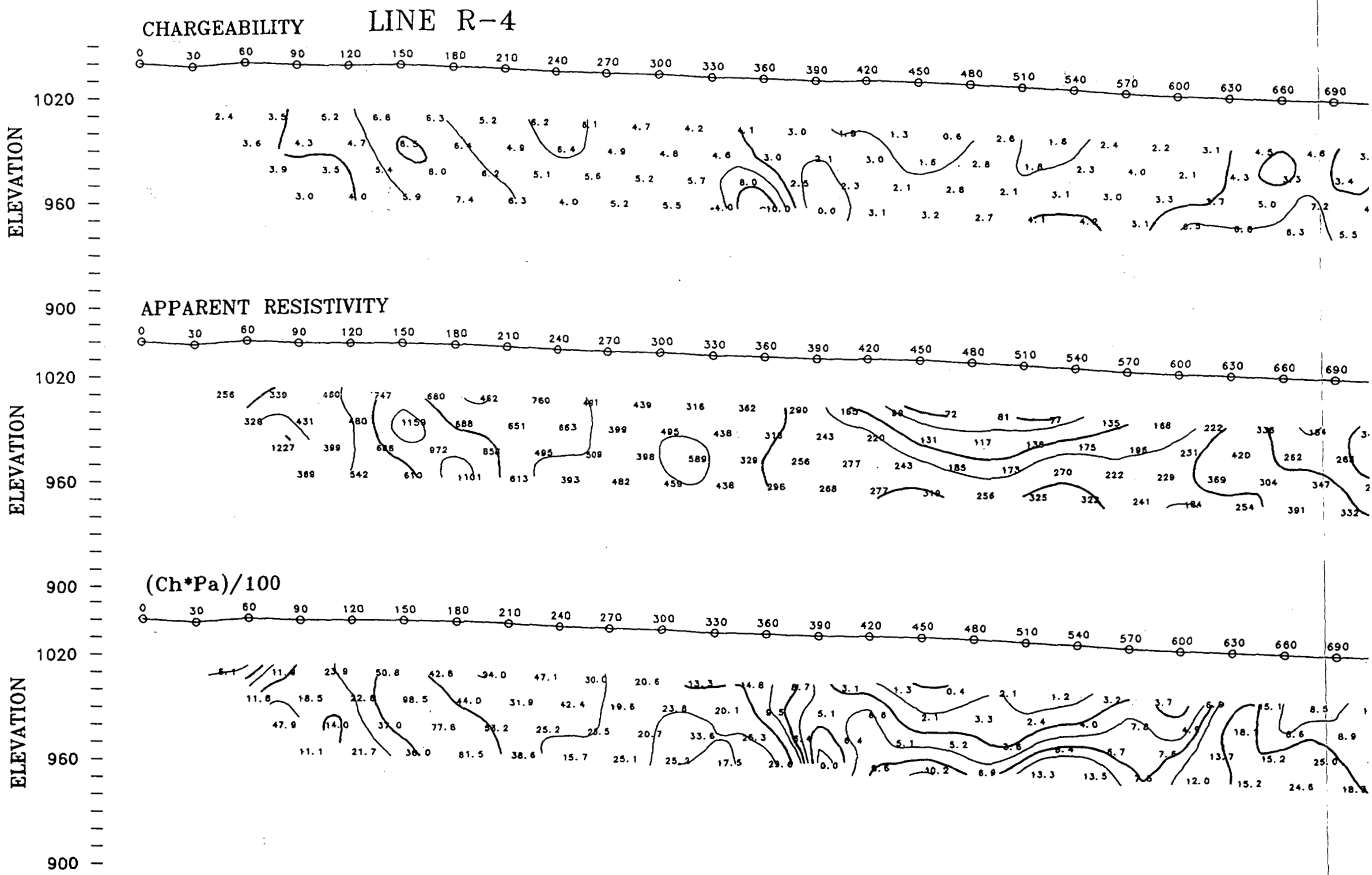
ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION

Rhub & Barb Claims, Omerica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
Prep. By: T.L.A. Map No: 89AV-
TARGET SURVEYS INC. Vancouver, B.C.



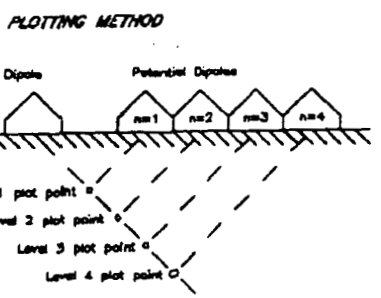
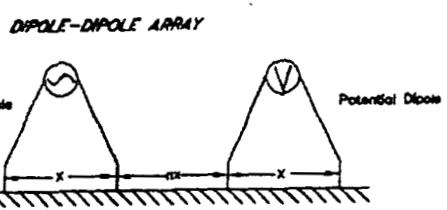
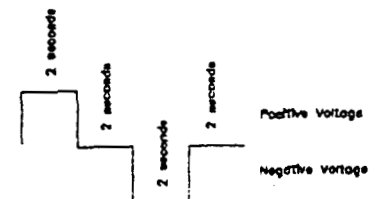
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



L-R4 FIG 25

ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omenica M.D., N.T.S. 93F - 11, 12

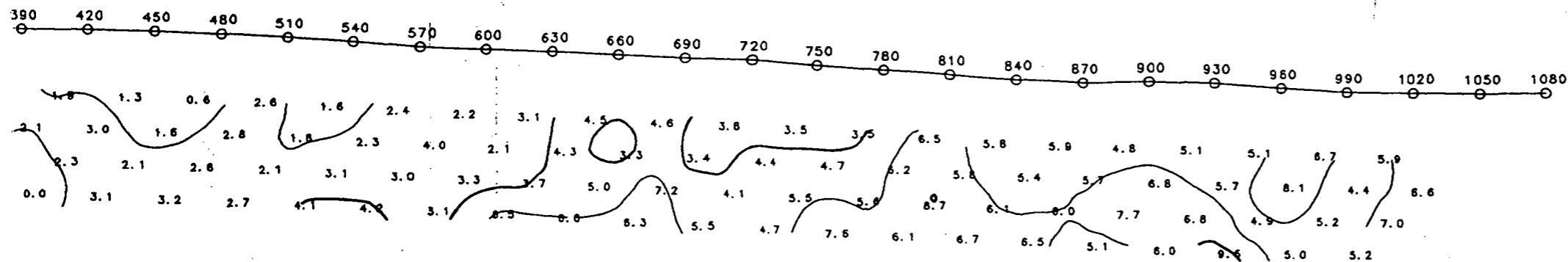
J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500 Prep. by: T.L.M.
 Rep. No: 89AV-

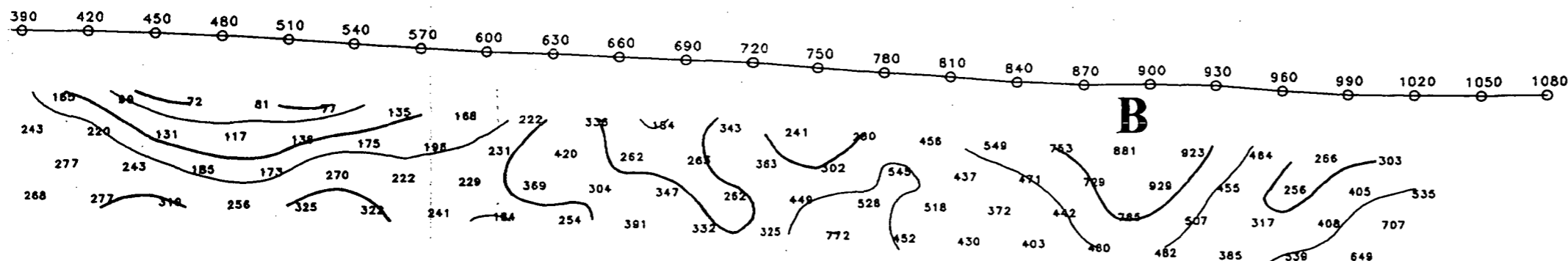
TARGET SURVEYS INC. Vancouver, B.C.

LINE R-4 (con't)

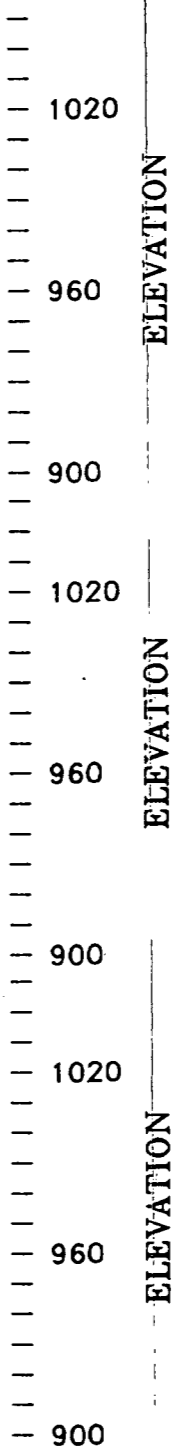
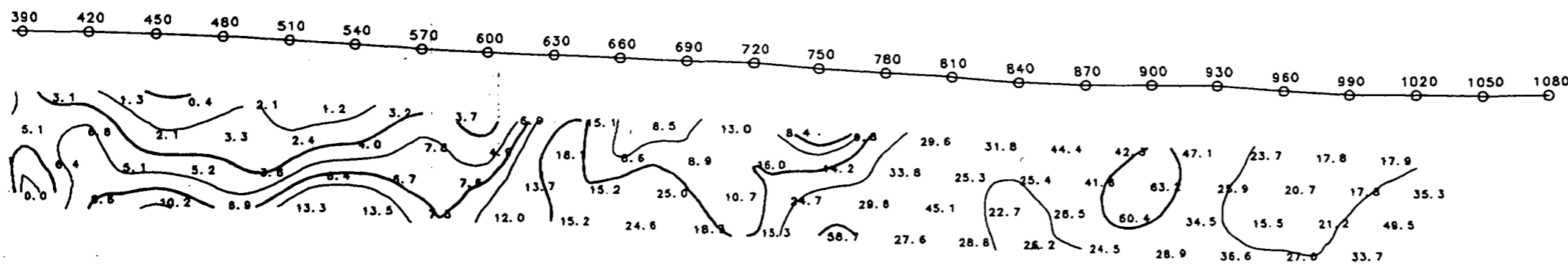
CHARGEABILITY



APPARENT RESISTIVITY



$(Ch \cdot Pa) / 100$



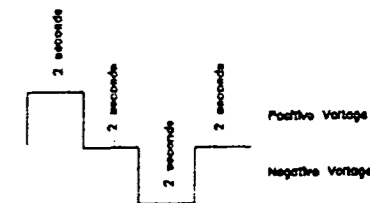
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

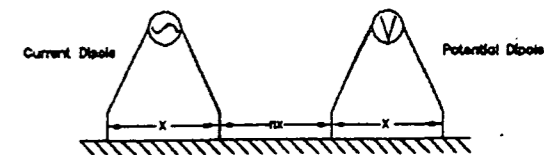
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

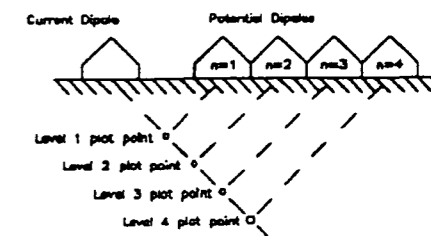
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-R4

FIG 26

ALTA VENTURES INC.

Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Prep By: TLM
 Prep No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500,
 750, 1000, etc. (Ohm-m)

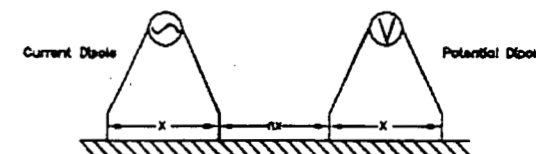
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15,
 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

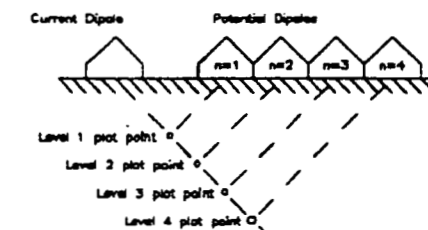
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: $n=1$ to $n=5$
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



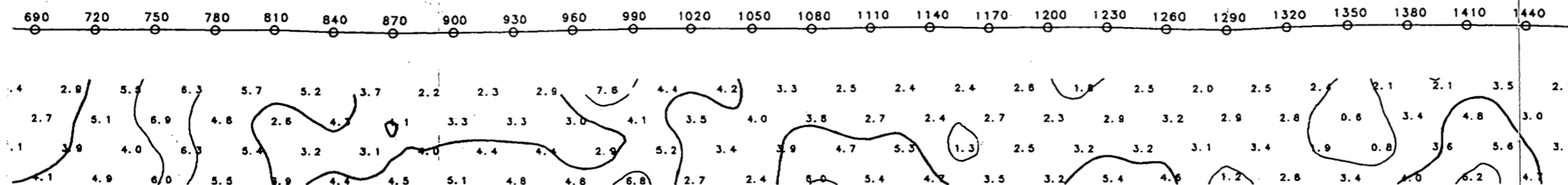
DIPOLE-DIPOLE ARRAY



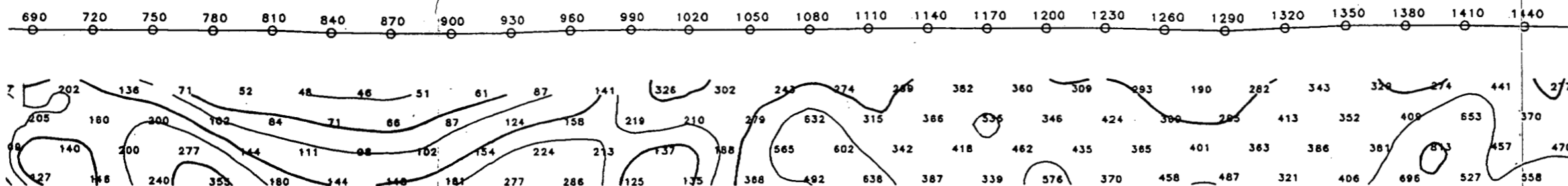
PLOTTING METHOD



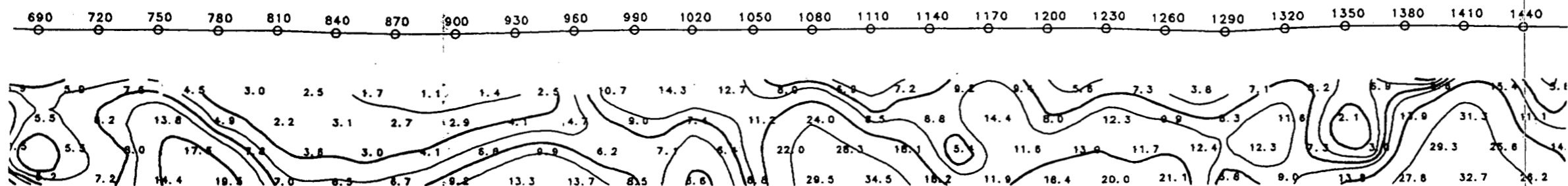
LINE R-5 (con't) CHARGEABILITY



APPARENT RESISTIVITY



(Ch*Pa)/100



L-R5

FIG 28

ALTA VENTURES INC.

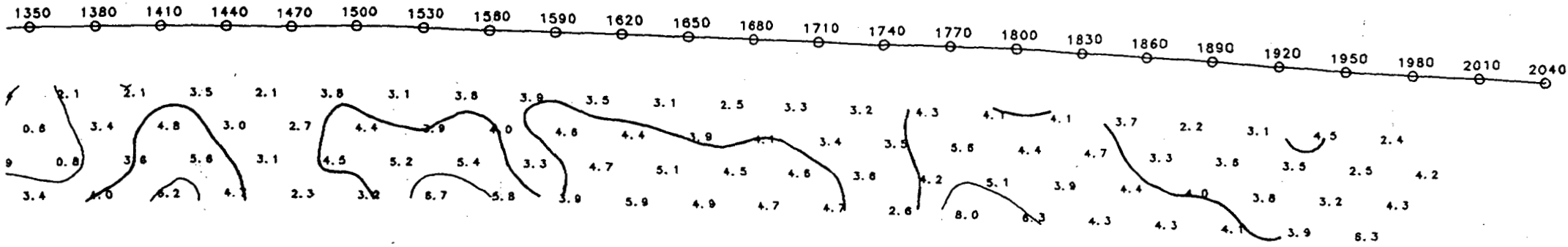
Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

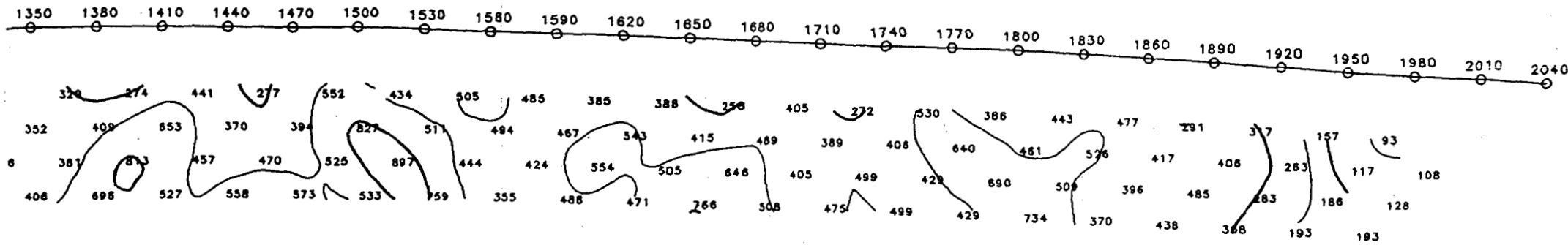
Date: June 1989 Scale: 1:2,500
 Prep. By: TLR
 Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

LINE R-5 (con't)

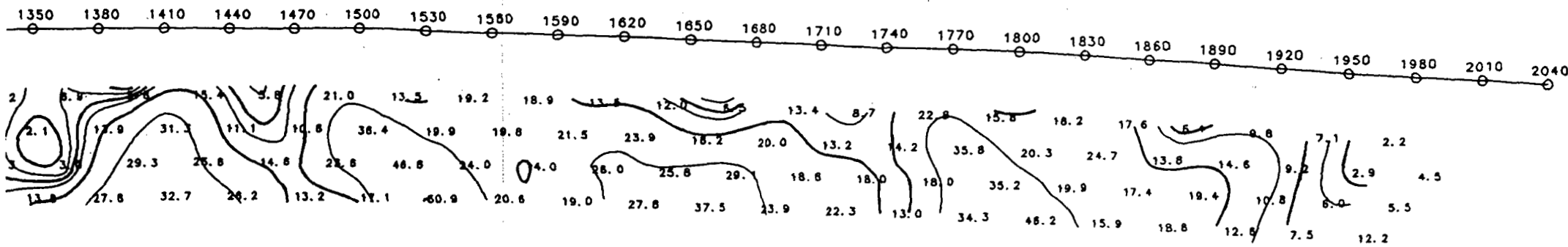
CHARGEABILITY



APPARENT RESISTIVITY



(Ch*Pa)/100



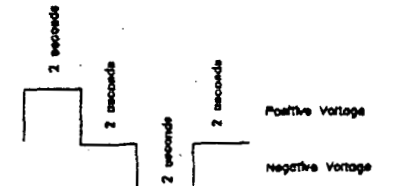
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

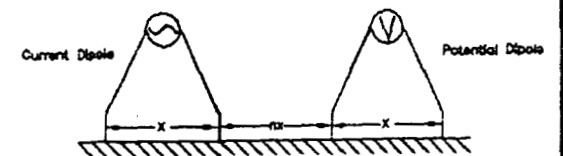
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

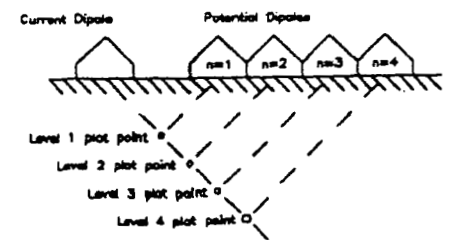
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



ELEVATION

ELEVATION

ELEVATION

L-R5

FIG 29

ALTA VENTURES INC.

Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omenica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Drawn By: T.L.A.
 Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

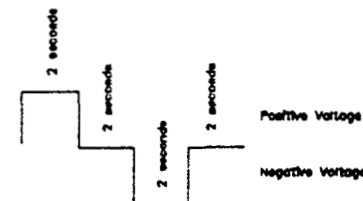
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

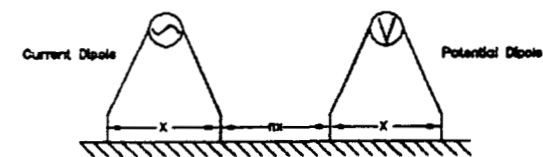
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

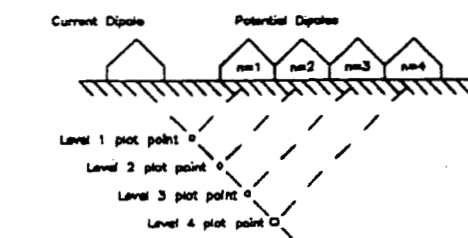
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-R6

FIG 30

ALTA VENTURES INC.

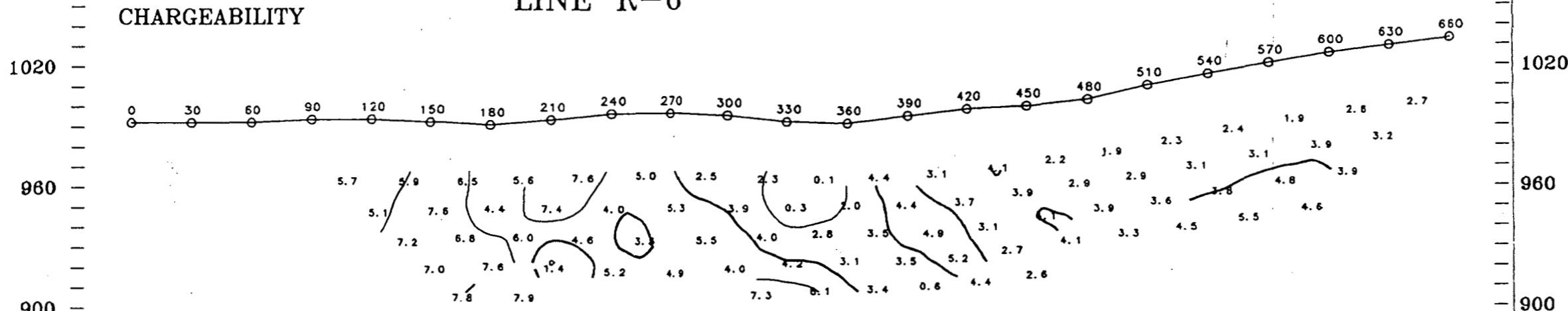
Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omerica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

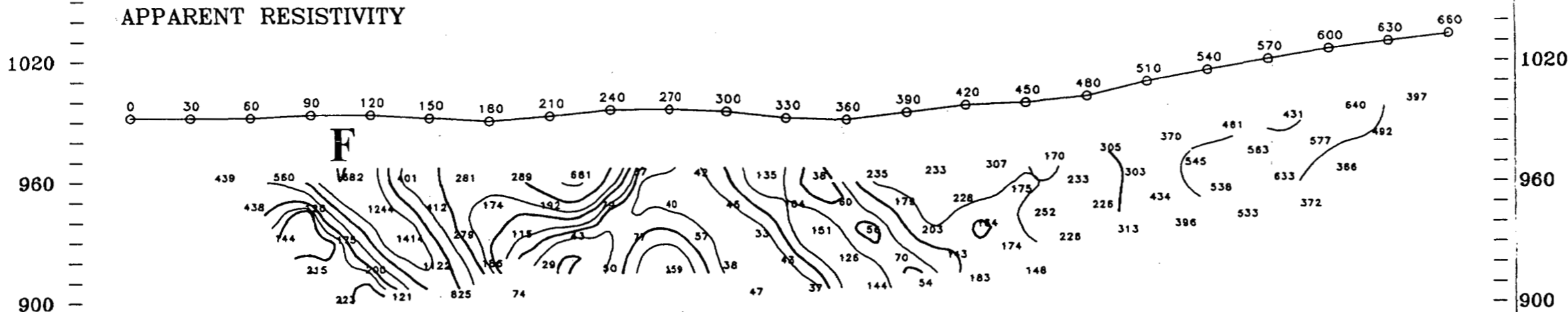
Date: June 1989 Scale: 1:2,500
 Prep. By: T.L.M.
 Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

LINE R-6

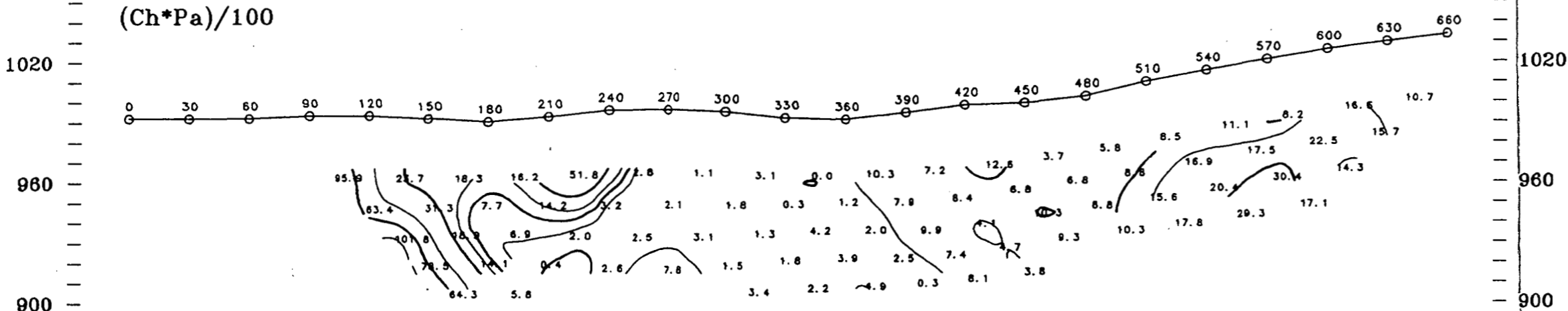
CHARGEABILITY



APPARENT RESISTIVITY



(Ch*Pa)/100



LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

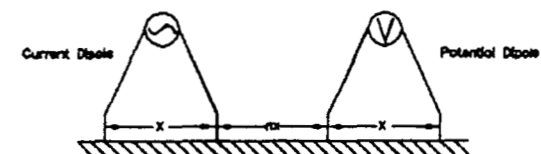
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

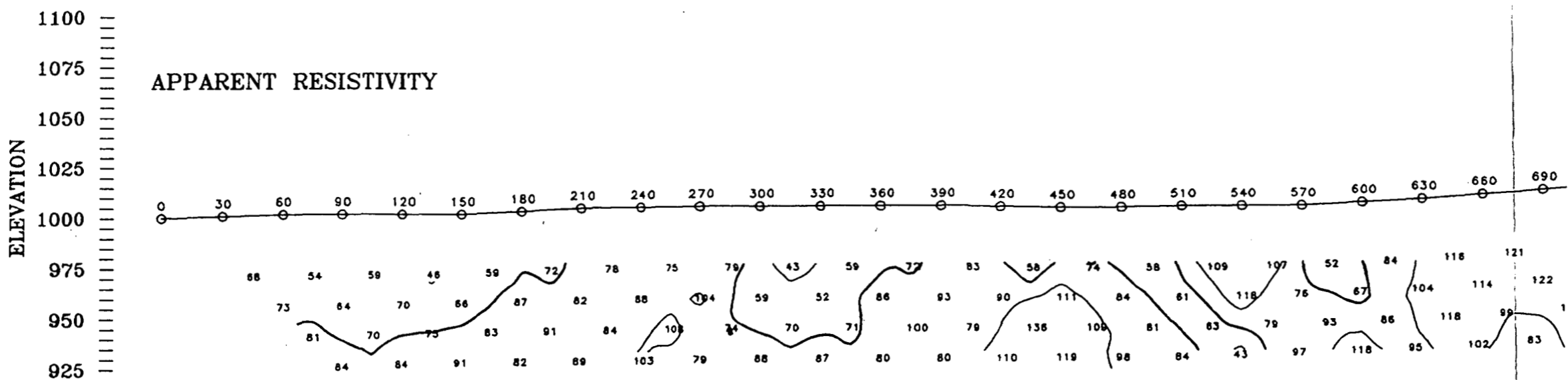
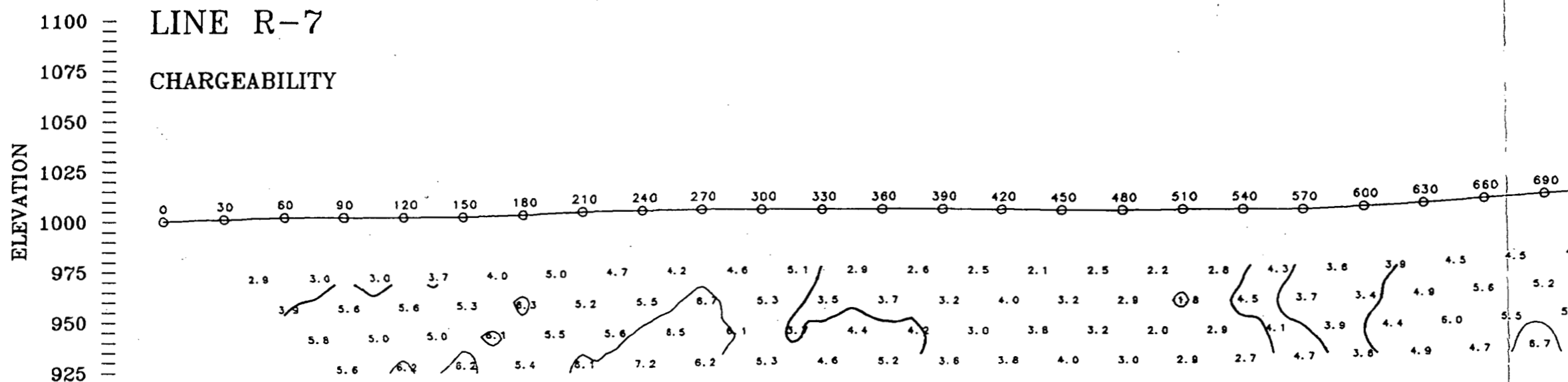
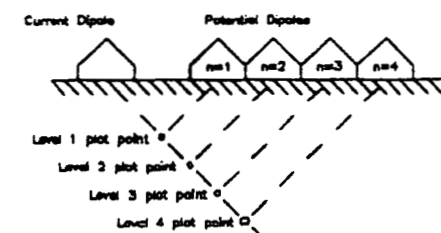
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: $n=1$ to $n=5$
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-R7 FIG 31

ALTA VENTURES INC.

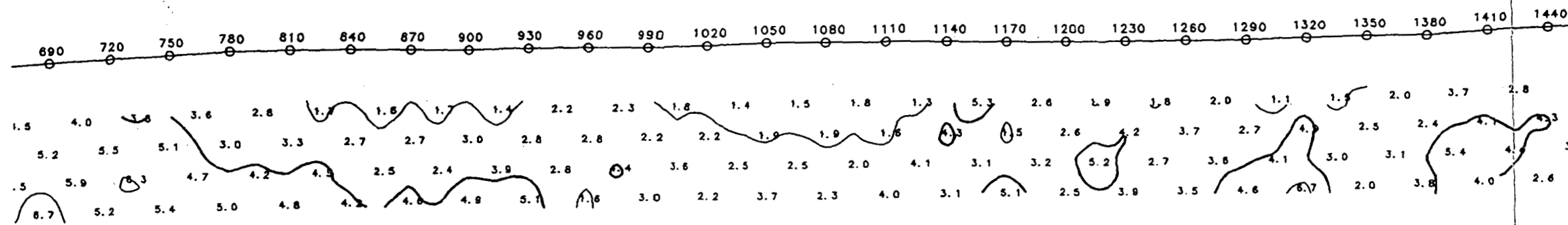
Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

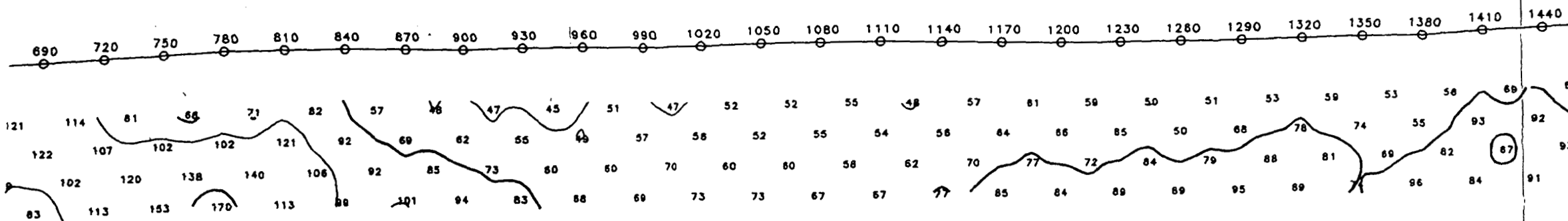
Date: June 1989 Scale: 1:2,500
 Drawn By: T.L.K.
 Map No: 89AV-
TARGET SURVEYS INC. Vancouver, B.C.

LINE R-7 (con't)

CHARGEABILITY



APPARENT RESISTIVITY



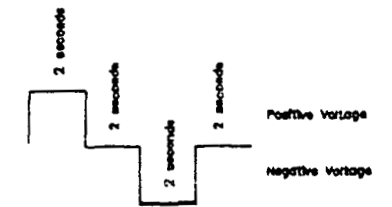
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

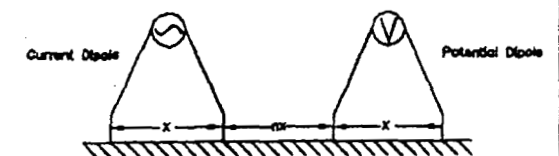
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: MUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

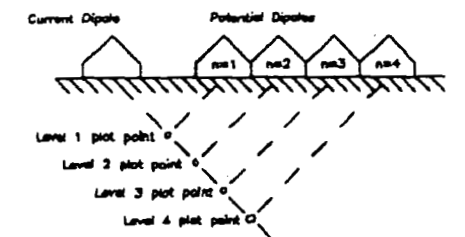
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: $n=1$ to $n=5$
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



FLOTTING METHOD



L-R7

FIG 32

ALTA VENTURES INC.

Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION

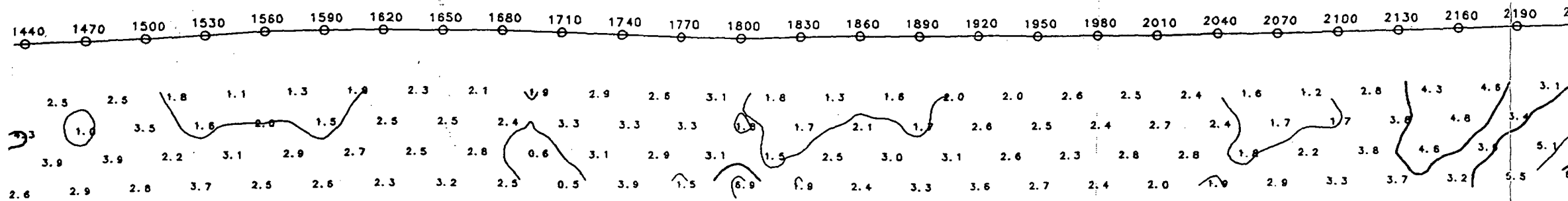
Rhub & Barb Claims, Omanica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

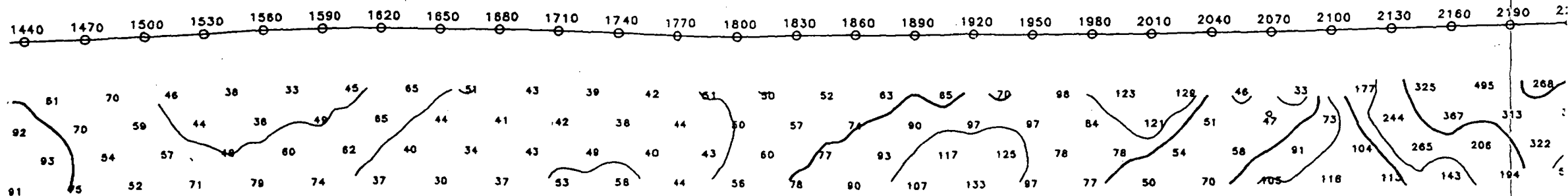
Date: June 1989 Scale: 1:2500
 Drawn By: T.A.M.
 Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

LINE R-7 (con't)

CHARGEABILITY



APPARENT RESISTIVITY



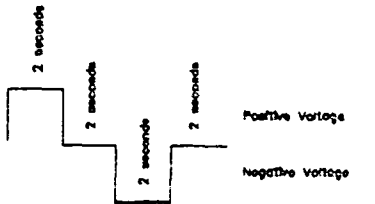
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

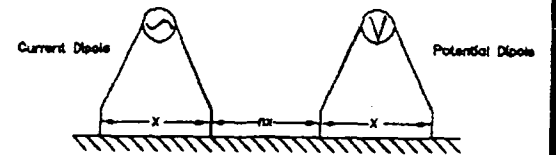
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: MUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

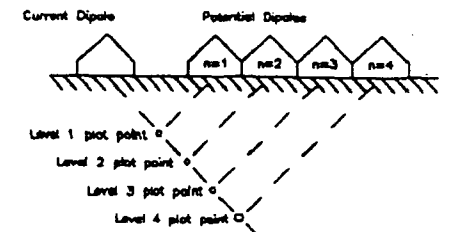
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: $n=1$ to $n=5$
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-R-7

FIG 33

ALTA VENTURES INC.

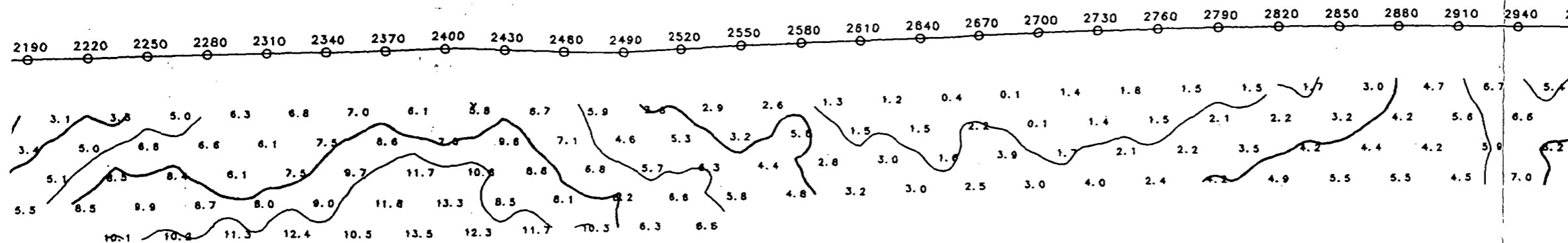
Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

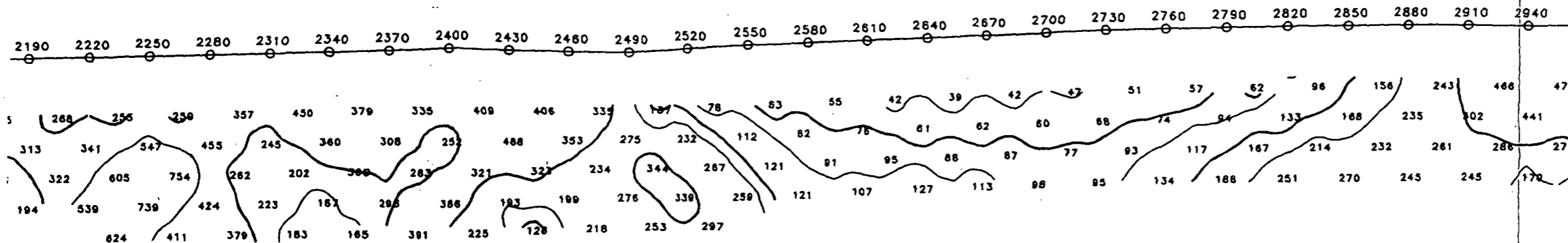
Date: June 1989 Scale: 1:2,500 Plot By: TLK
 Prep No: 89AV- TARGET SURVEYS INC. Vancouver, B.C.

LINE R-7 (con't)

CHARGEABILITY



APPARENT RESISTIVITY



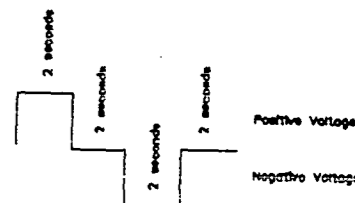
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

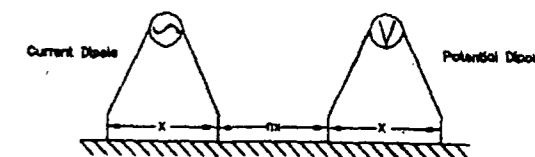
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

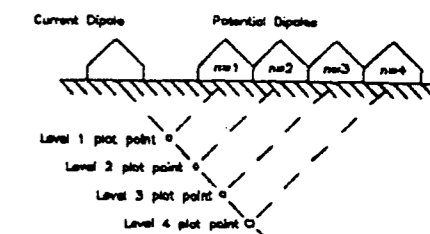
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-R7

FIG 34

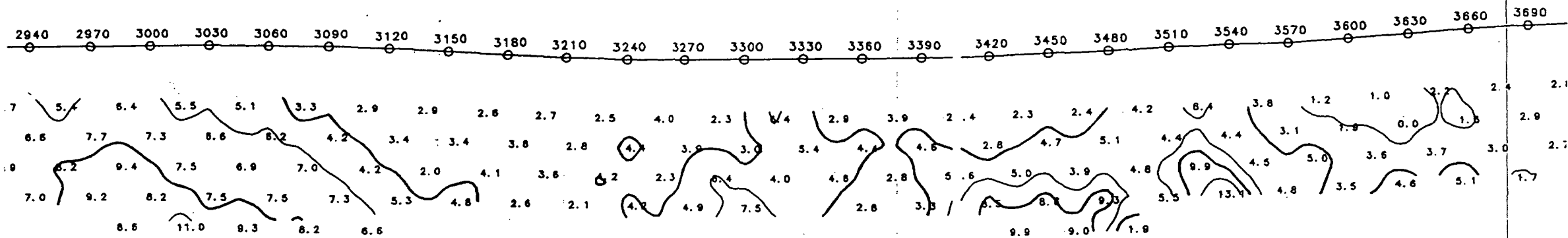
ALTA VENTURES INC.

Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omenica M.D., N.T.S. 93F - 11, 12

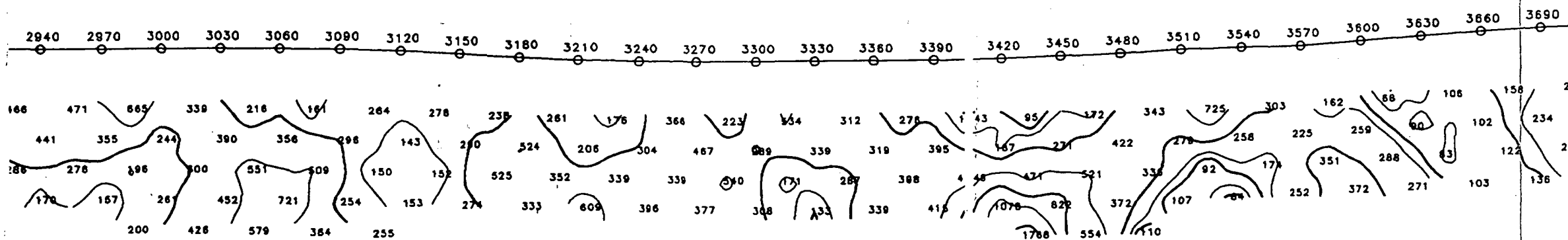
J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Prepr. by: TLA
 Map No.: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

LINE R-7 (con't) CHARGEABILITY



APPARENT RESISTIVITY



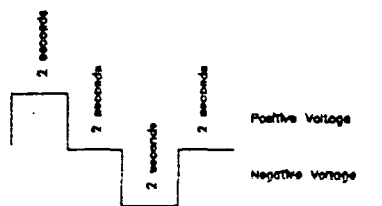
LEGEND

APPARENT RESISTIVITY
CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

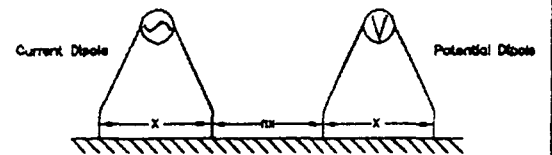
APPARENT CHARGEABILITY
CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
RECEIVER: HUNTEC MARK IV
TRANSMITTER: PHOENIX IPT 1
GENERATOR: PHOENIX MG-2

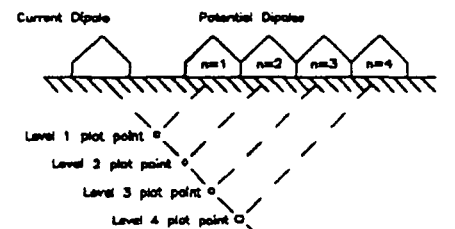
SURVEY PARAMETERS
SURVEY MODE: TIME DOMAIN
ARRAY: DIPOLE DIPOLE
DIPOLE LENGTH: 30 METERS
DIPOLE SEPARATION: n=1 to n=5
DELAY TIME: 200 MILLISECONDS
INTEGRATION TIME: 1,500 MILLISECONDS
CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-27

FIG 35

ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION

Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
Prep By: T.L.M. Map No: 89AV-
TARGET SURVEYS INC. Vancouver, B.C.

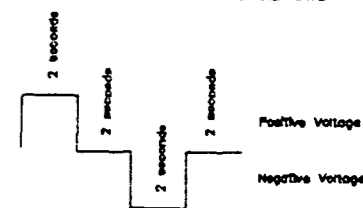
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500,
 750, 1000, etc. (Ohm-m)

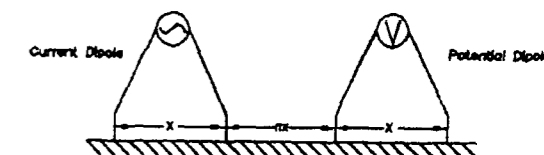
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15,
 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MQ-2

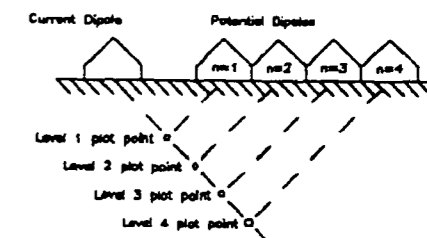
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: $n=1$ to $n=5$
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY

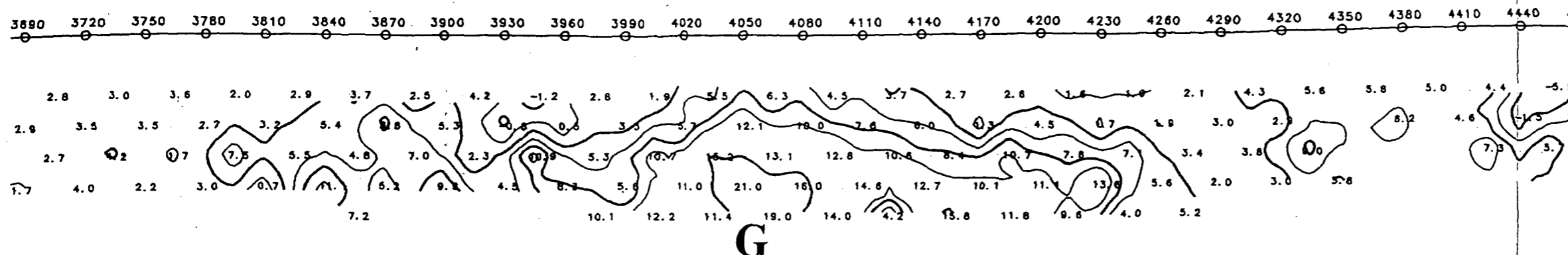


PLOTTING METHOD

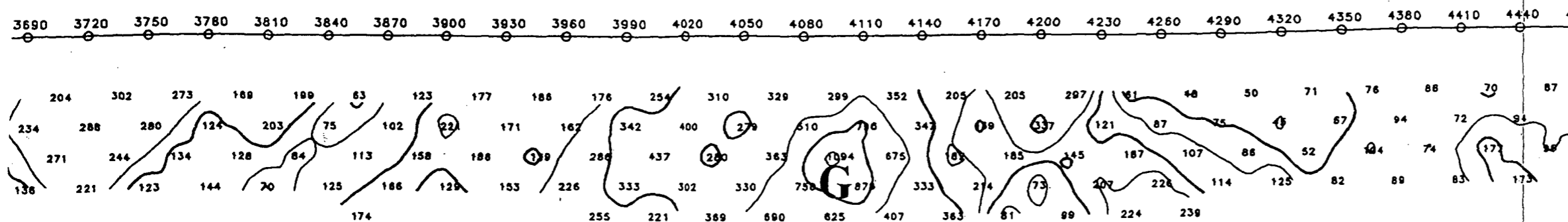


LINE R-7 (con't)

CHARGEABILITY



APPARENT RESISTIVITY



L-R7

FIG 36

ALTA VENTURES INC.

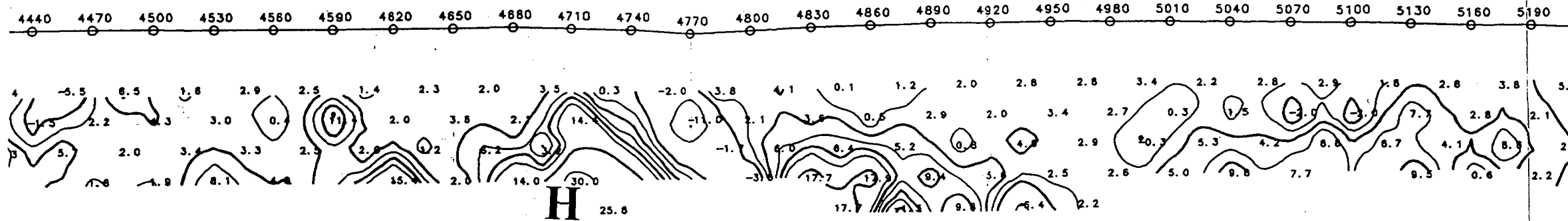
Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

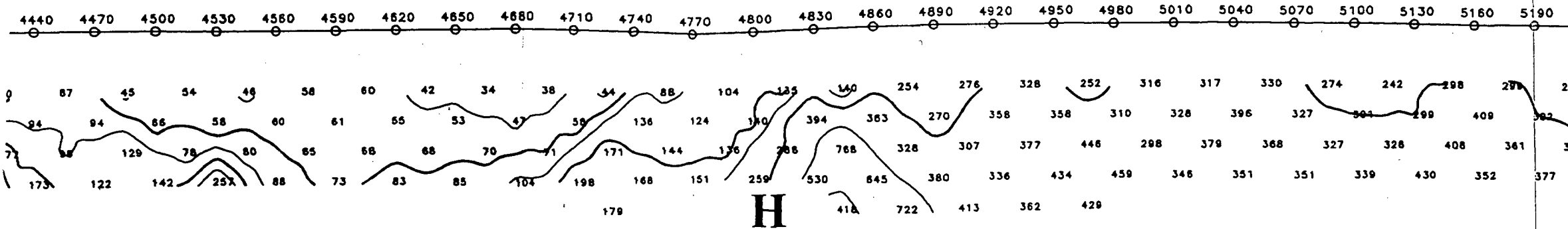
Date: June 1989 Scale: 1:2,500
 Drawn By: T.L.K.
 Map No.: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

LINE R-7 (con't)

CHARGEABILITY



APPARENT RESISTIVITY



LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

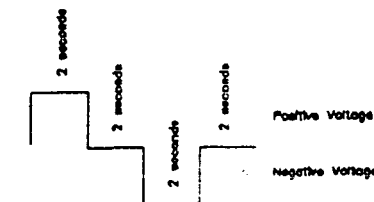
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION

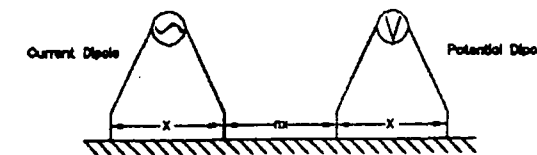
RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

SURVEY PARAMETERS

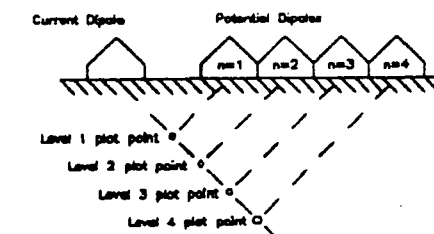
SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-R7

FIG 37

ALTA VENTURES INC.

Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omenica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Prepped by: T.L.M. Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

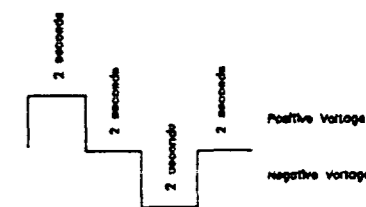
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500,
 750, 1000, etc. (Ohm-m)

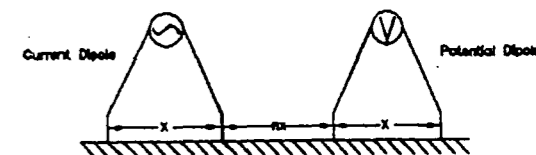
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15,
 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTED MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

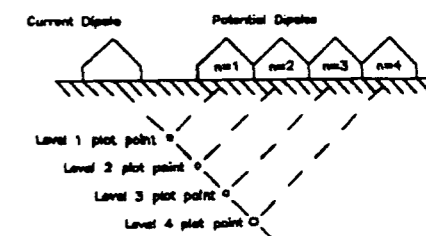
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: $n=1$ to $n=5$
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY

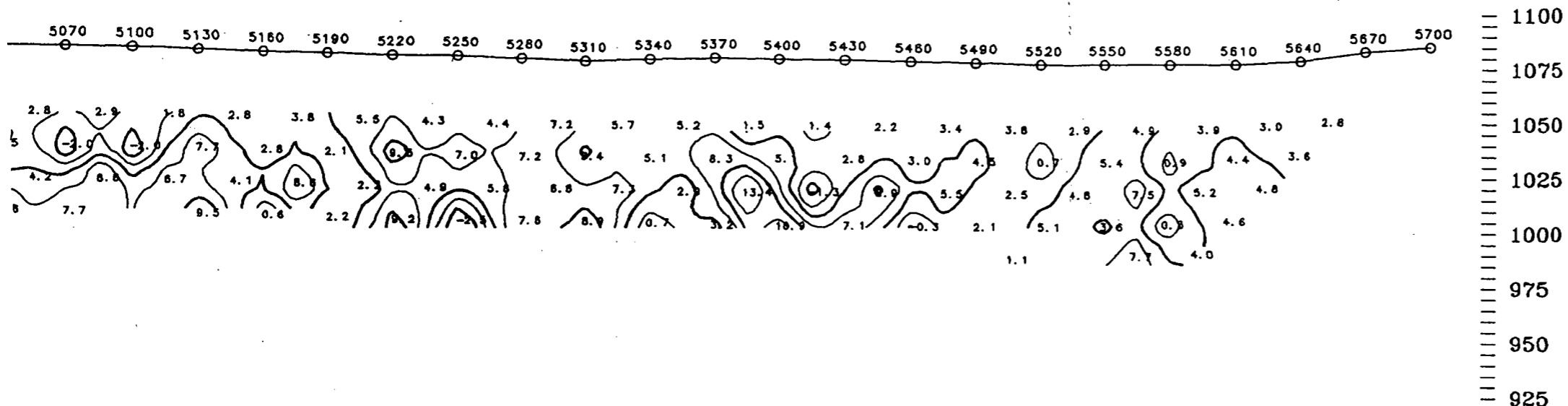


PLOTTING METHOD

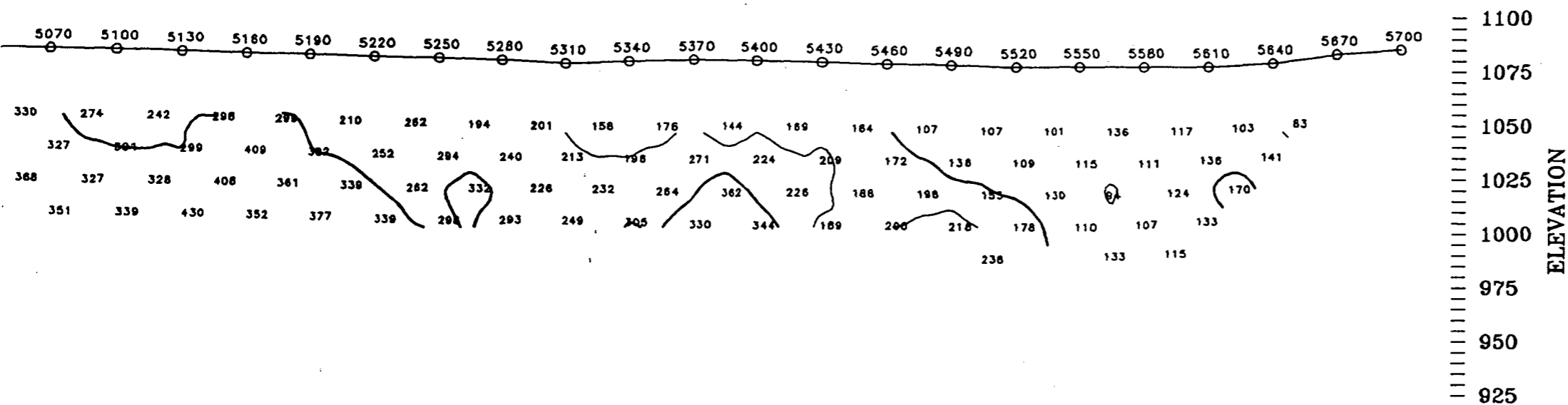


LINE R-7 (con't)

CHARGEABILITY



APPARENT RESISTIVITY



L-R7

FIG 38

ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

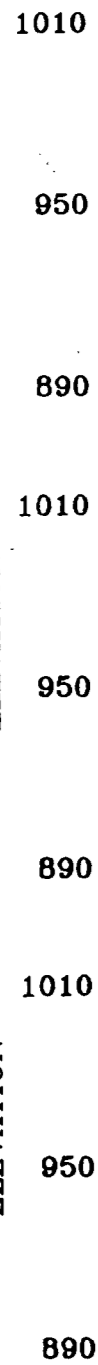
Date: June 1989 Scale: 1:2,500
 Drawn By: T.L.A.
 Map No: 89AV-
TARGET SURVEYS INC. Vancouver, B.C.

Line-29E

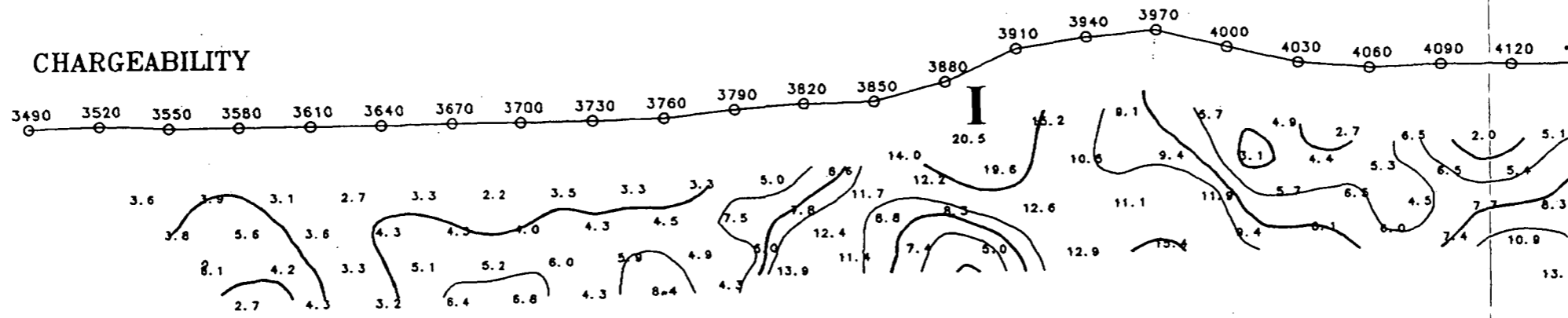
ELEVATION

ELEVATION

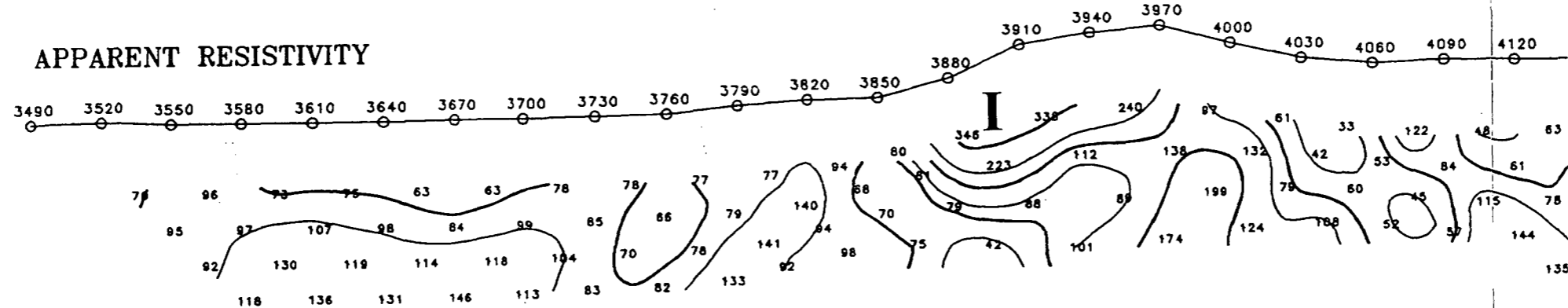
ELEVATION



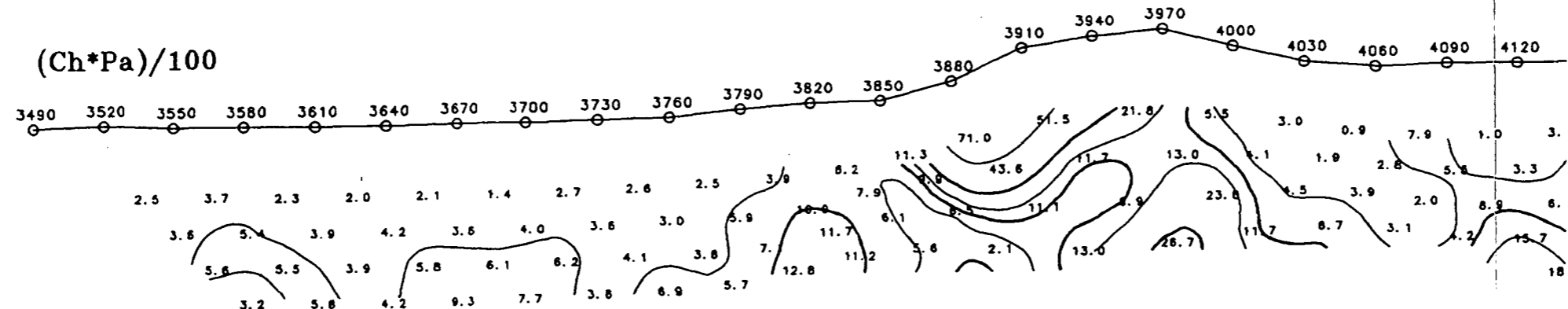
CHARGEABILITY



APPARENT RESISTIVITY



(Ch*Pa)/100



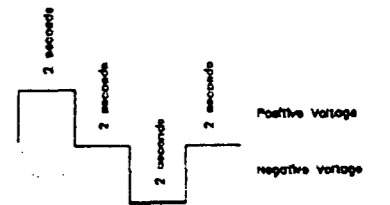
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

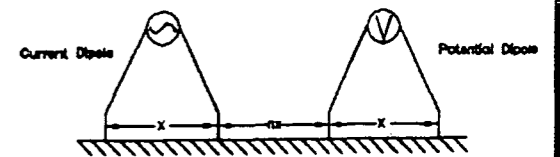
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

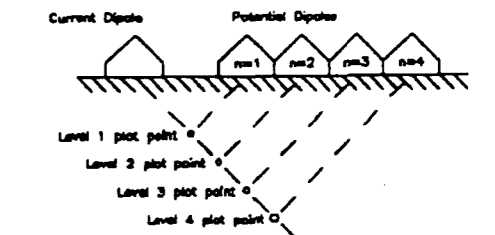
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-29E FIG 39

ALTA VENTURES INC.

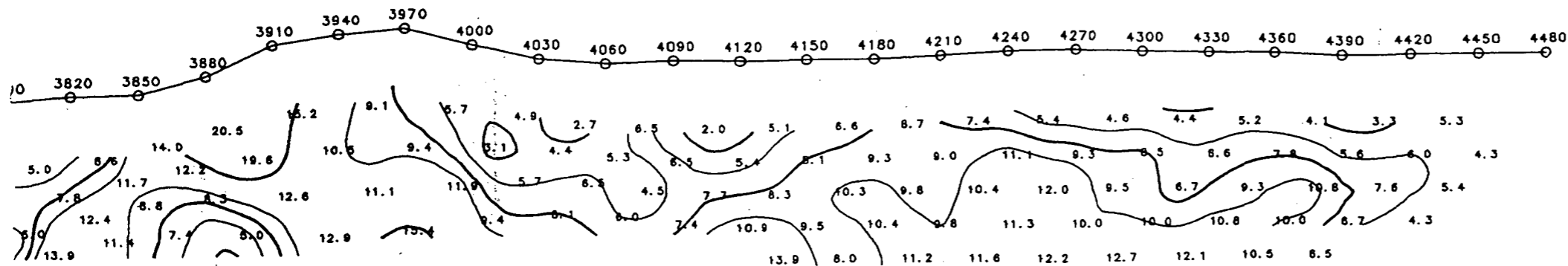
Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omernia M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

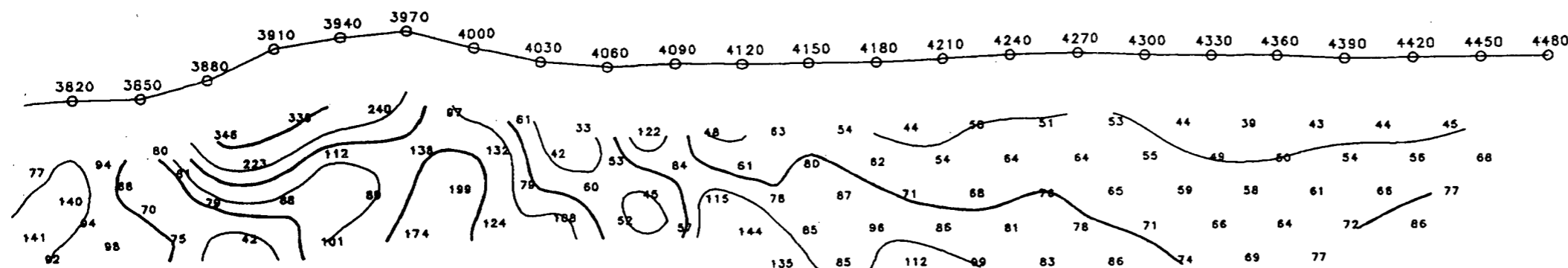
Date: June 1989 Scale: 1:2,500
 Drawn By: TLR
 Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

LINE 29+00 E (con't)

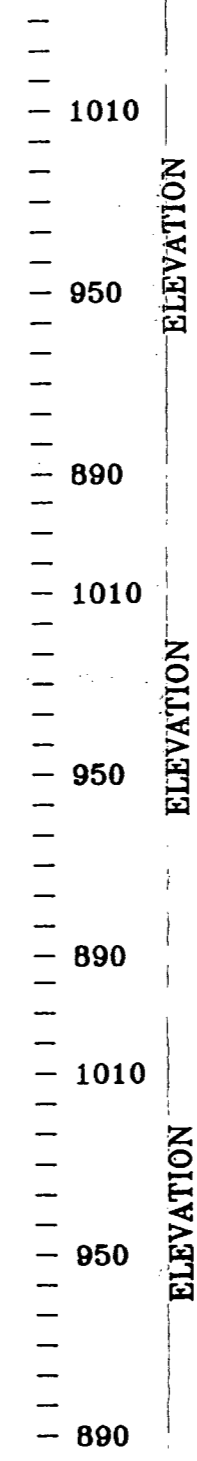
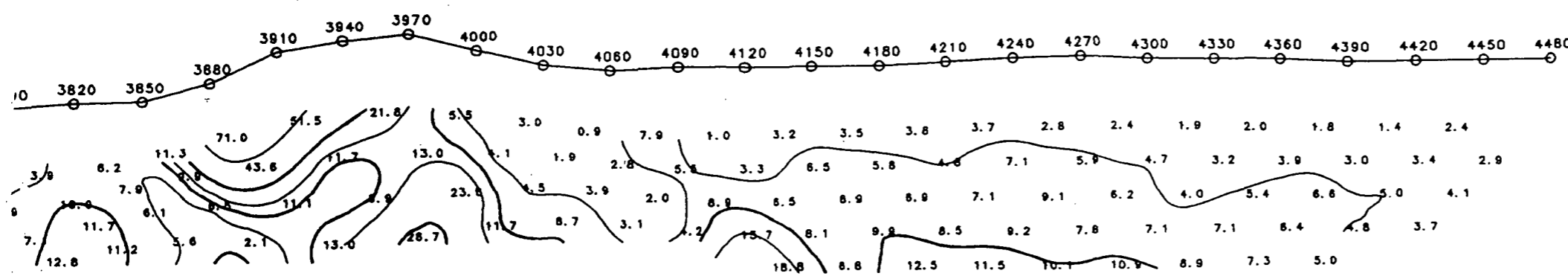
CHARGEABILITY



APPARENT RESISTIVITY



(Ch*Pa)/100



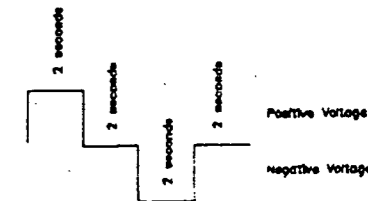
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

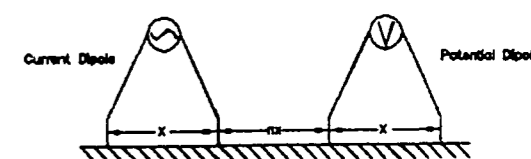
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTED MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

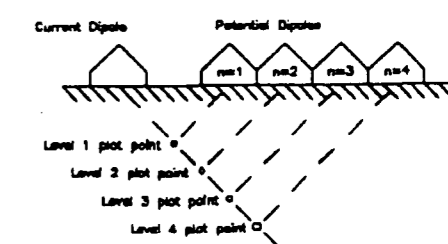
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-29E

FIG 40

ALTA VENTURES INC.

Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omerica M.D., N.T.S. 93F - 11, 12

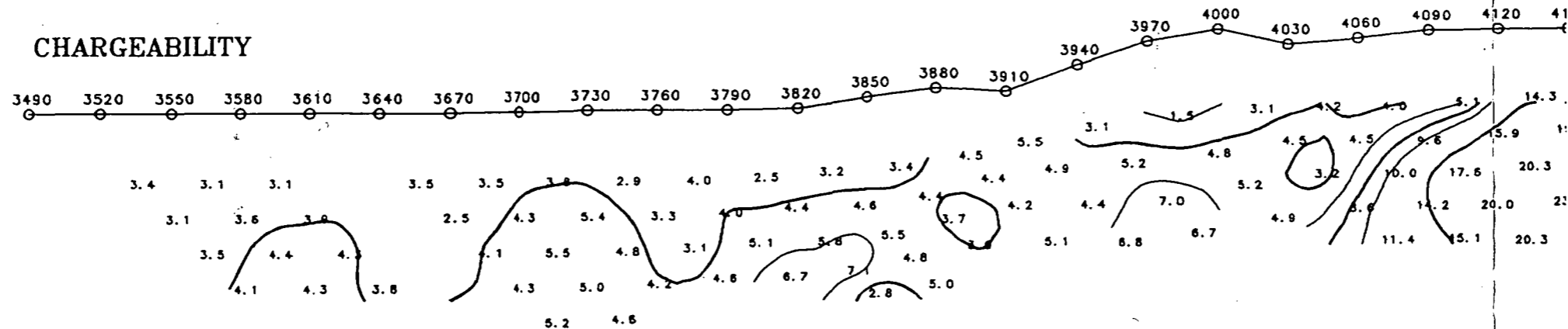
J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Prepped by: T.A.M.
 Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

Line-30E

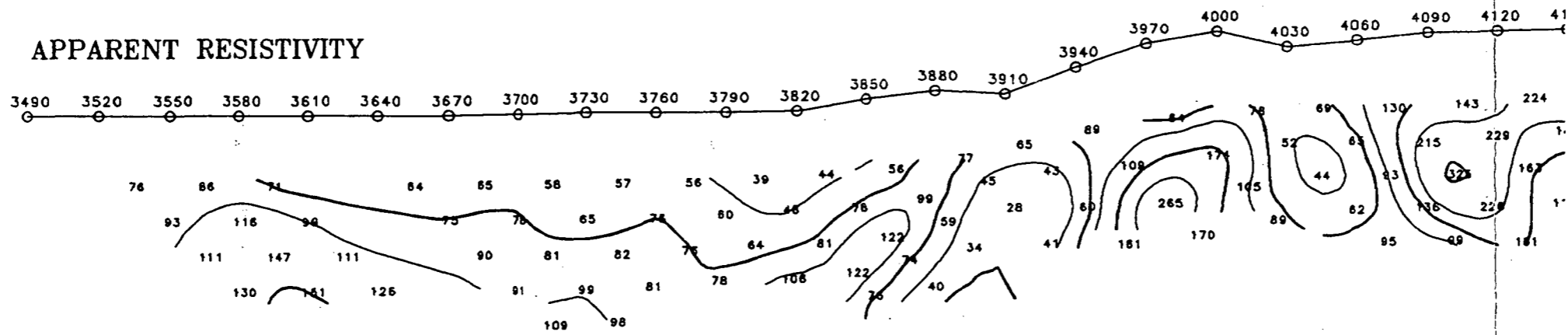
ELEVATION

CHARGEABILITY



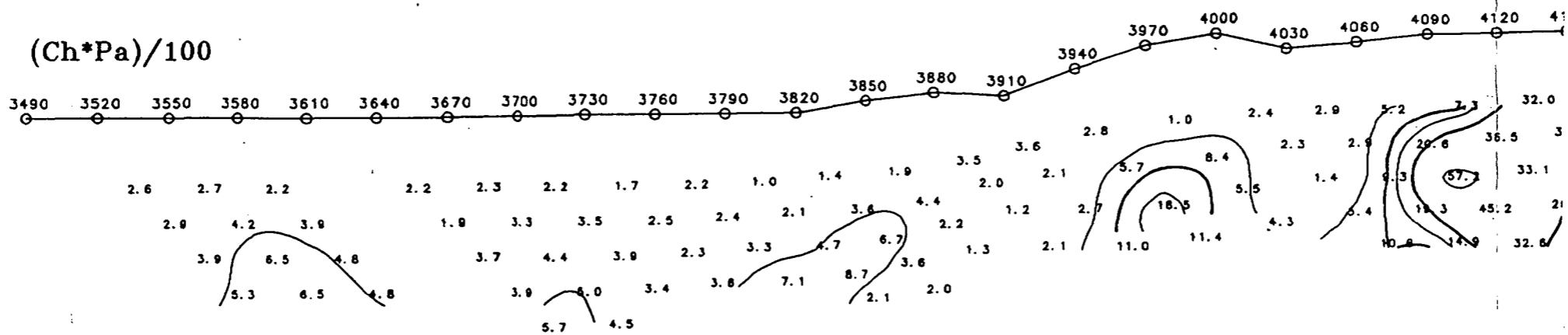
ELEVATION

APPARENT RESISTIVITY



ELEVATION

(Ch*Pa)/100



LEGEND

APPARENT RESISTIVITY

CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

APPARENT CHARGEABILITY

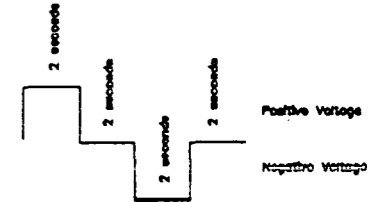
CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION

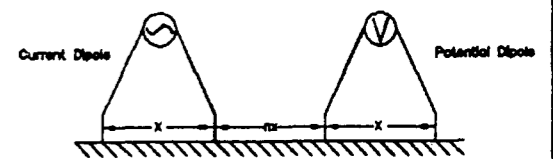
RECEIVER: HUNTEC MARK IV
TRANSMITTER: PHOENIX IPT 1
GENERATOR: PHOENIX MG-2

SURVEY PARAMETERS

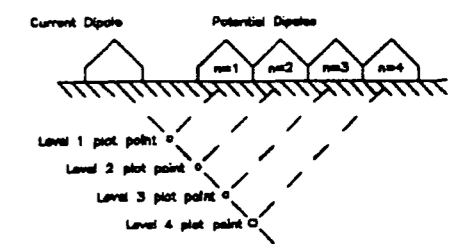
SURVEY MODE: TIME DOMAIN
ARRAY: DIPOLE DIPOLE
DIPOLE LENGTH: 30 METERS
DIPOLE SEPARATION: $n=1$ to $n=5$
DELAY TIME: 200 MILLISECONDS
INTEGRATION TIME: 1,000 MILLISECONDS
CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-30E

FIG 41

ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION

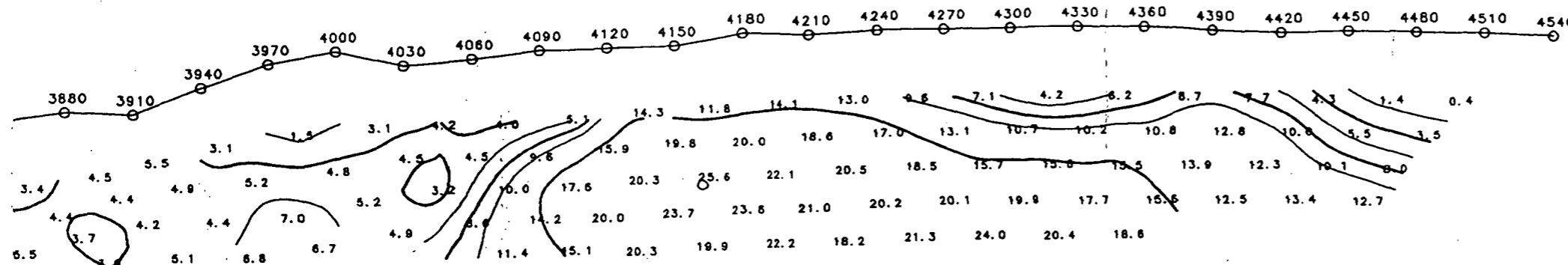
Rhub & Barb Claims, Omicra M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

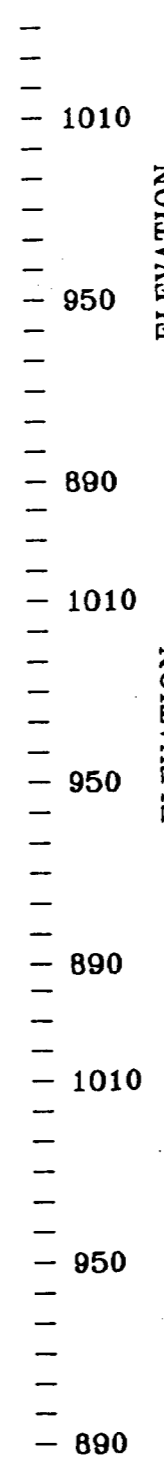
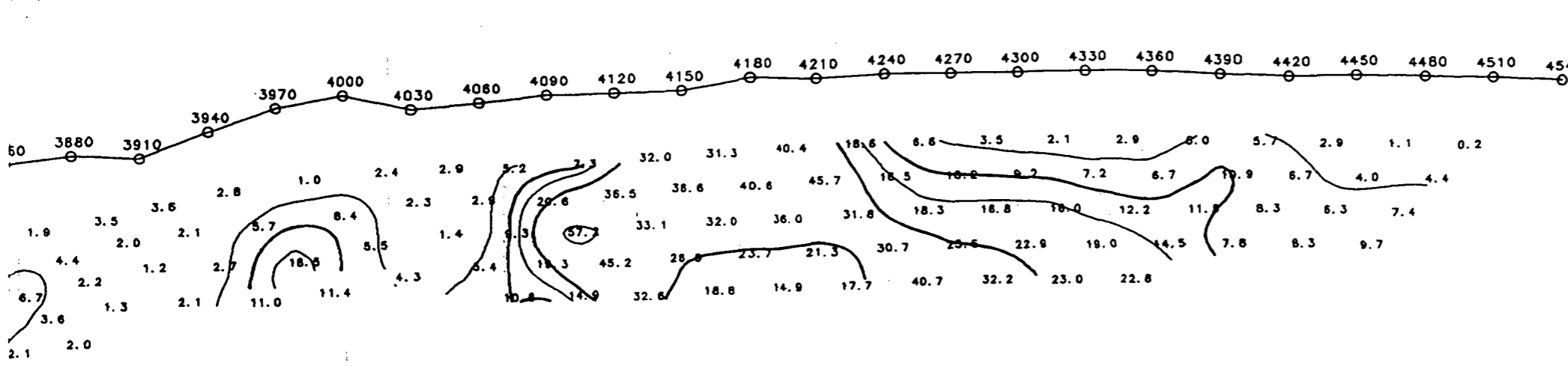
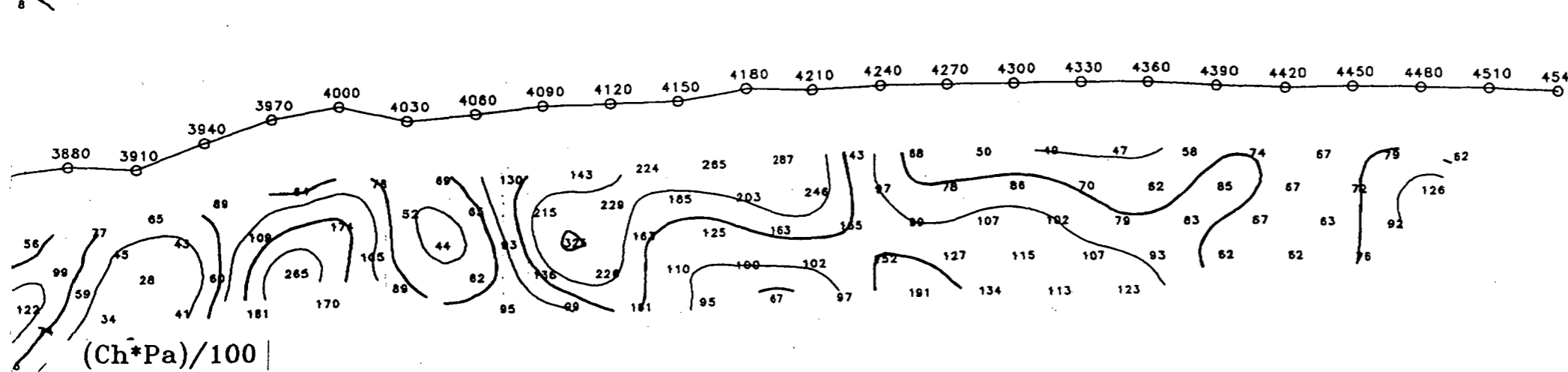
Date: June 1989 Scale: 1:2,500
Prep By: TLA
Map No: 09AV-
TARGET SURVEYS INC. Vancouver, B.C.

CHARGEABILITY

LINE 30+00 E (con't)



APPARENT RESISTIVITY



LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

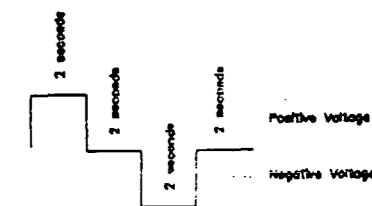
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION

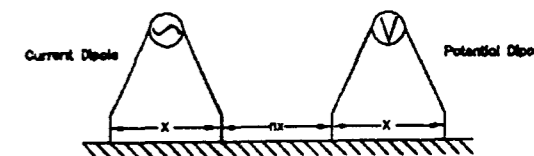
RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

SURVEY PARAMETERS

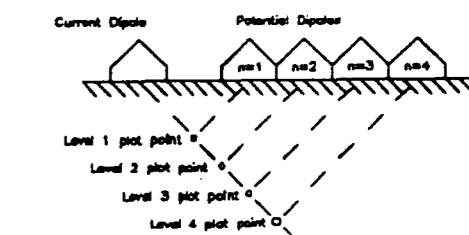
SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-30E

FIG 42

ALTA VENTURES INC.

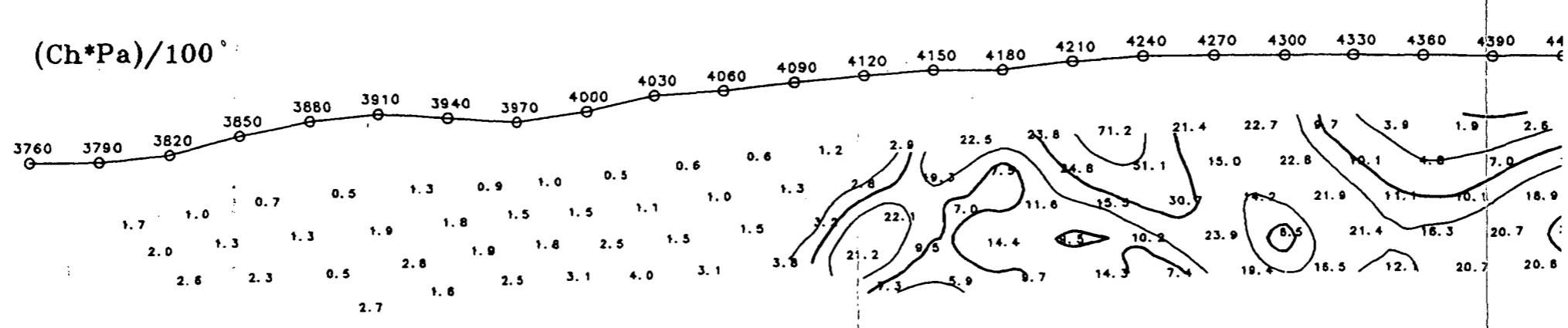
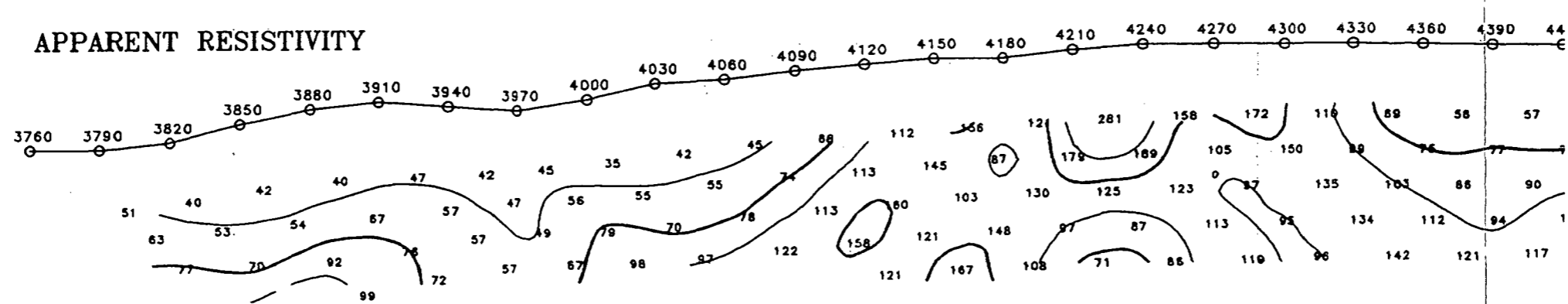
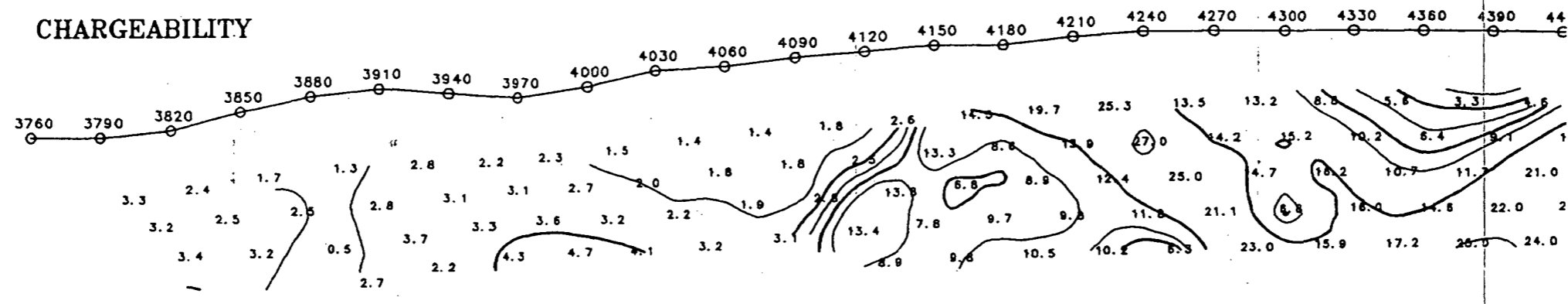
Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omenica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Prep. By: T.L.A. Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

Line-31E

ELEVATION
1050
990
930
1050
990
930
1050
990
930



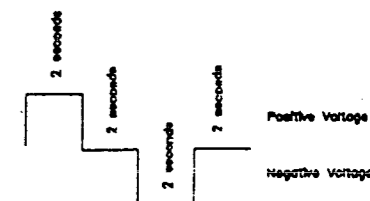
LEGEND

APPARENT RESISTIVITY
CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

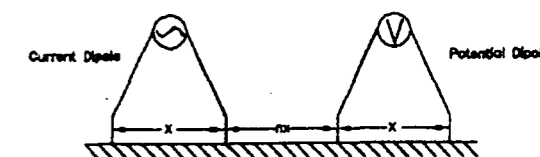
APPARENT CHARGEABILITY
CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
RECEIVER: HUNTEC MARK IV
TRANSMITTER: PHOENIX IPT 1
GENERATOR: PHOENIX MG-2

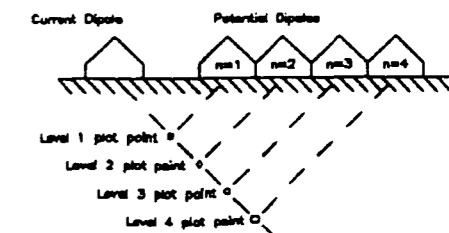
SURVEY PARAMETERS
SURVEY MODE: TIME DOMAIN
ARRAY: DIPOLE DIPOLE
DIPOLE LENGTH: 30 METERS
DIPOLE SEPARATION: n=1 to n=5
DELAY TIME: 200 MILLISECONDS
INTEGRATION TIME: 1,500 MILLISECONDS
CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-31E

FIG 43

ALTA VENTURES INC.

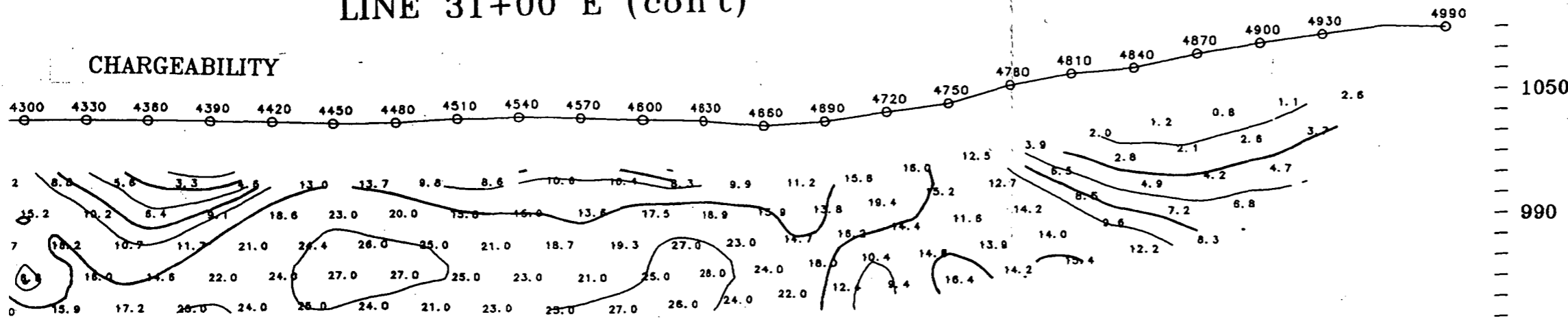
Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
Rhub & Barb Claims, Oronica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

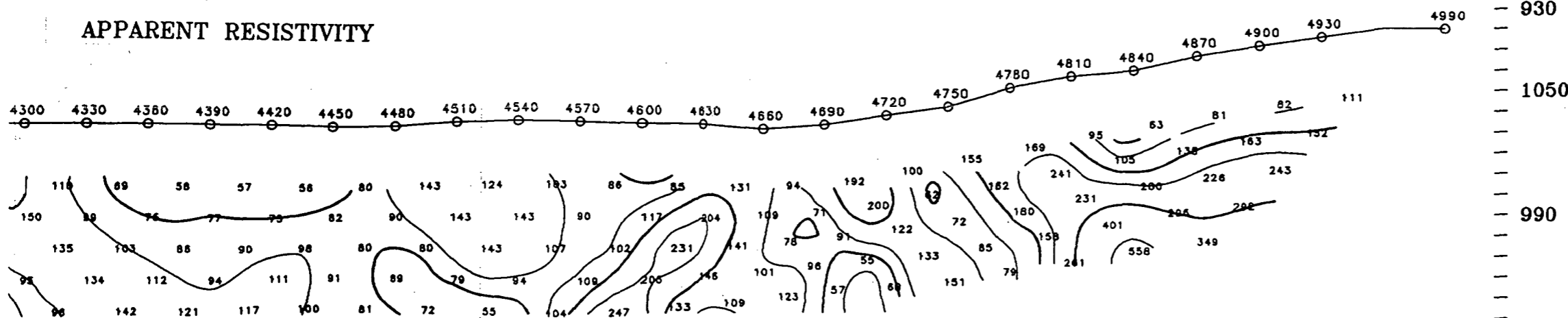
Date: June 1989 Scale: 1:2,500
Prep By: TLA
Map No: 89AV-
TARGET SURVEYS INC. Vancouver, B.C.

LINE 31+00 E (con't)

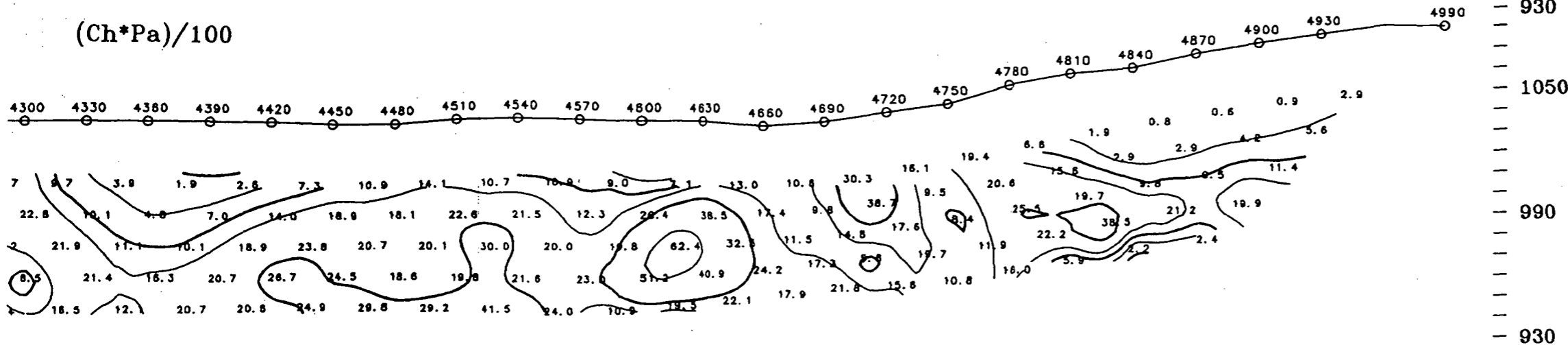
CHARGEABILITY



APPARENT RESISTIVITY



(Ch*Pa)/100



ELEVATION

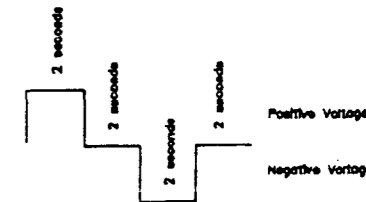
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

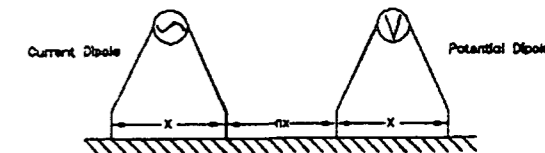
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

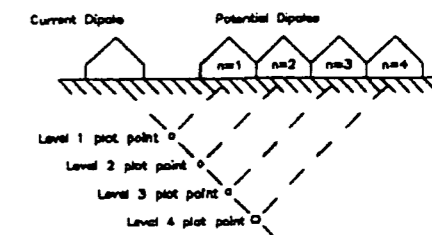
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-31E

FIG 44

ALTA VENTURES INC.

Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omanica M.D., N.T.S. 93F - 11, 12

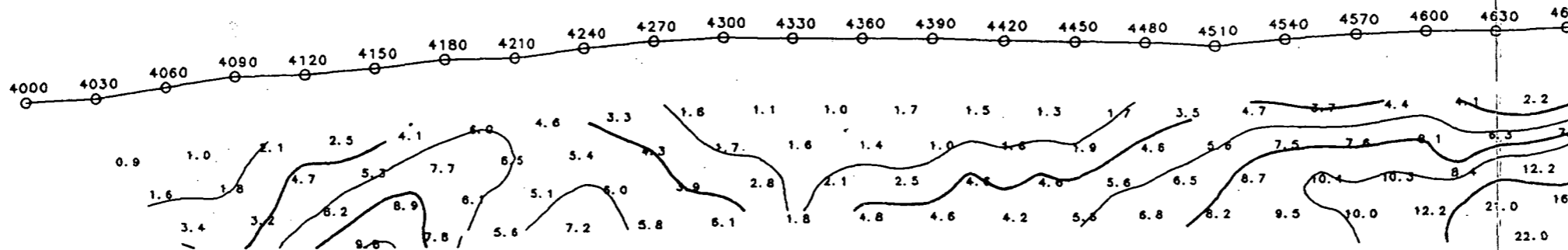
J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Prep. By: T.L.A.
 Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

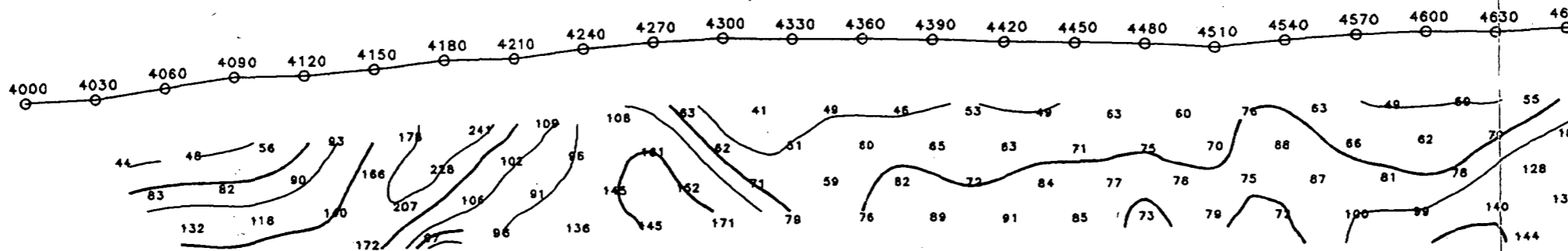
Line-32E

ELEVATION
1070
1010
950
1070
1010
950
1070
1010
950

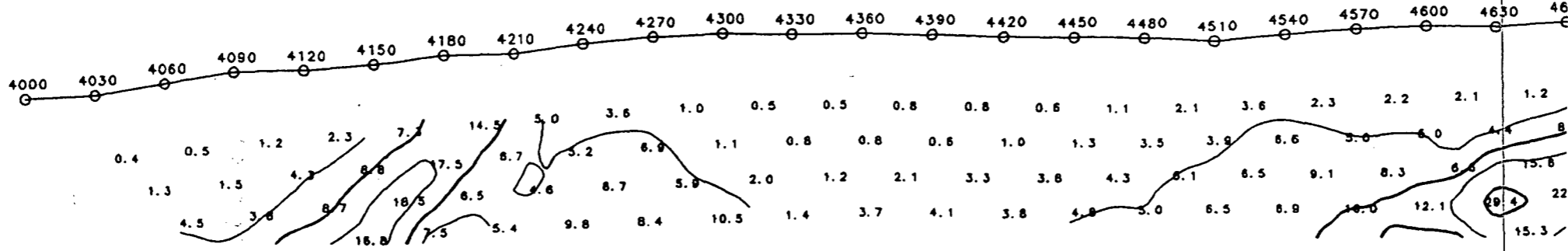
CHARGEABILITY



APPARENT RESISTIVITY



(Ch*Pa)/100



LEGEND

APPARENT RESISTIVITY
CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500,
750, 1000, etc. (Ohm-m)

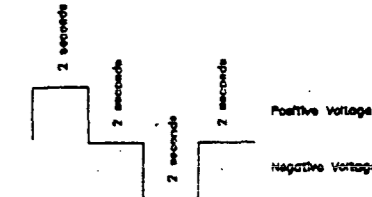
APPARENT CHARGEABILITY
CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15,
25, 50, 100 (m-sec)

INSTRUMENTATION

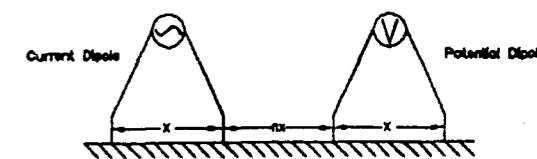
RECEIVER: HUNTEC MARK IV
TRANSMITTER: PHOENIX IPT 1
GENERATOR: PHOENIX MG-2

SURVEY PARAMETERS

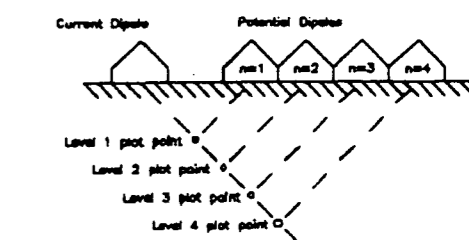
SURVEY MODE: TIME DOMAIN
ARRAY: DIPOLE DIPOLE
DIPOLE LENGTH: 30 METERS
DIPOLE SEPARATION: $n=1$ to $n=5$
DELAY TIME: 200 MILLISECONDS
INTEGRATION TIME: 1,500 MILLISECONDS
CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-32E

FIG 45

ALTA VENTURES INC.

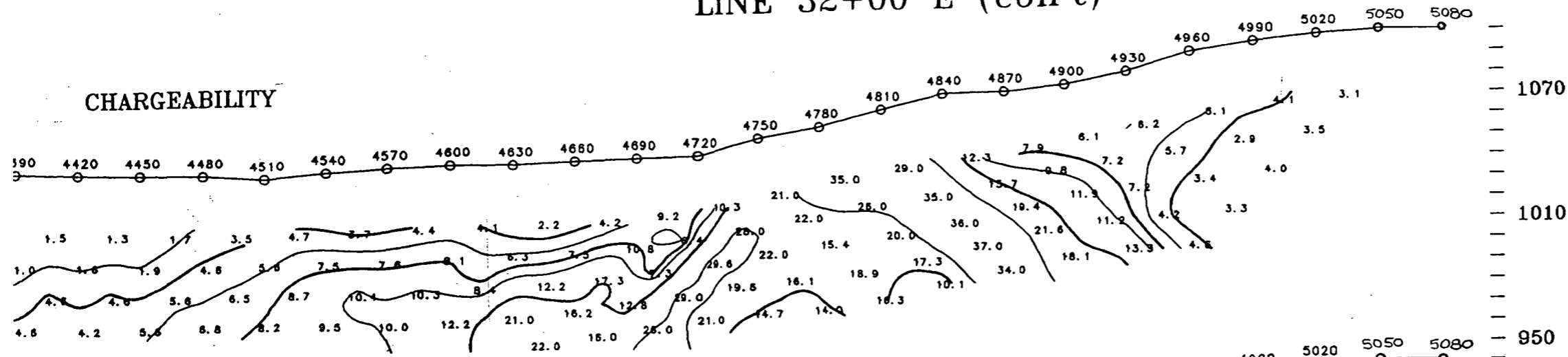
Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

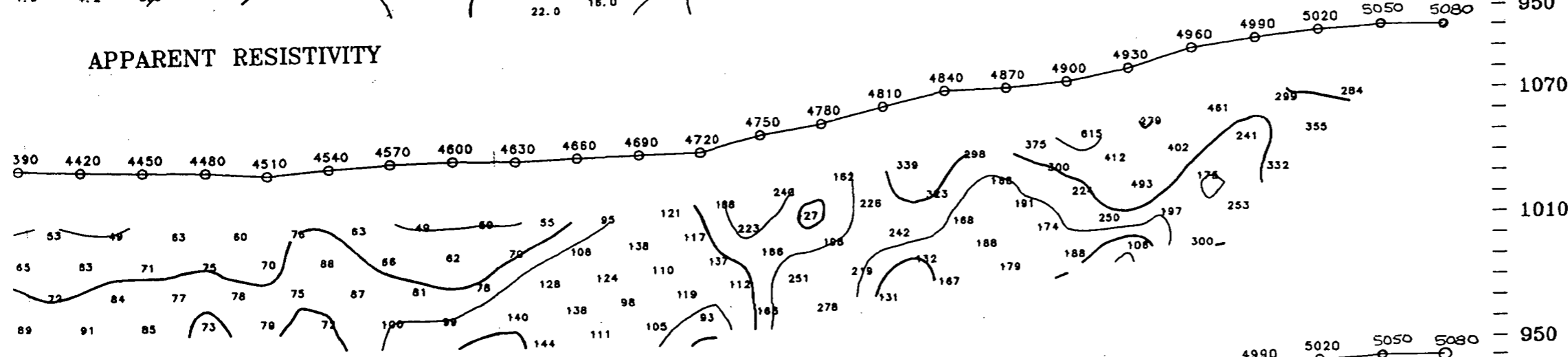
Date: June 1989 Scale: 1:2,500
Prep By: T.L.K. Map No: BMV-
TARGET SURVEYS INC. Vancouver, B.C.

LINE 32+00 E (con't)

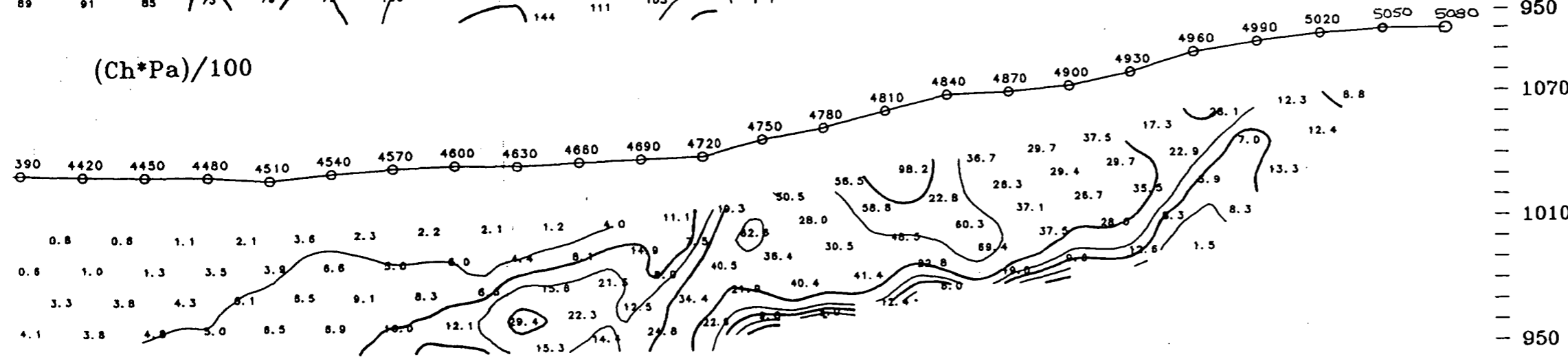
CHARGEABILITY



APPARENT RESISTIVITY



$(Ch \cdot Pa) / 100$



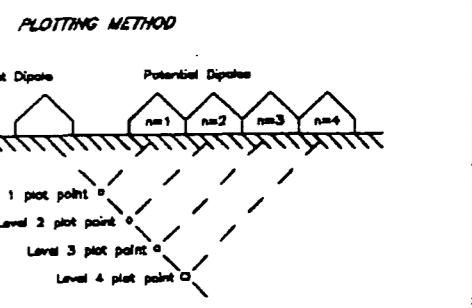
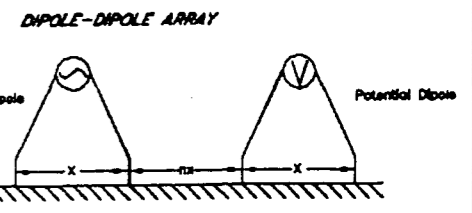
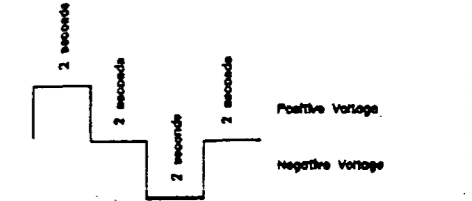
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: $n=1$ to $n=5$
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



L-32E FIG 46

ALTA VENTURES INC.

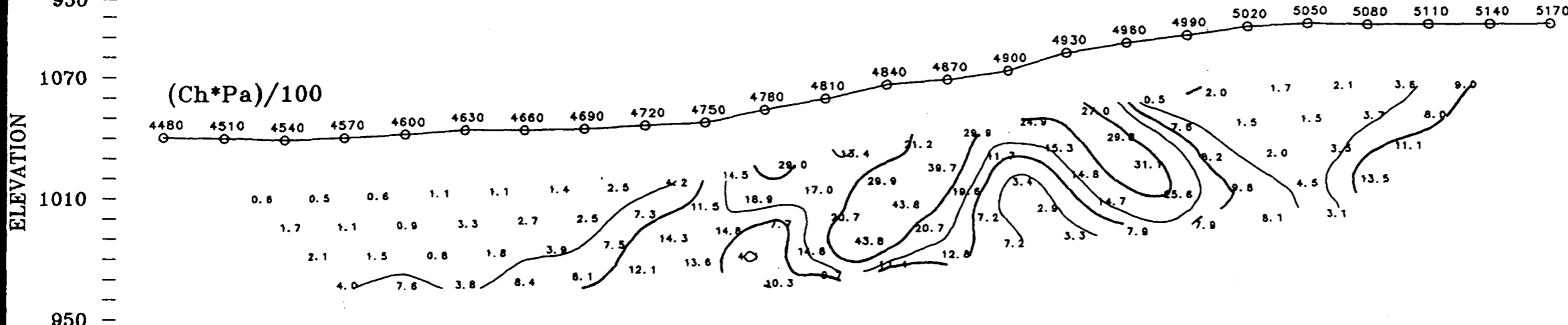
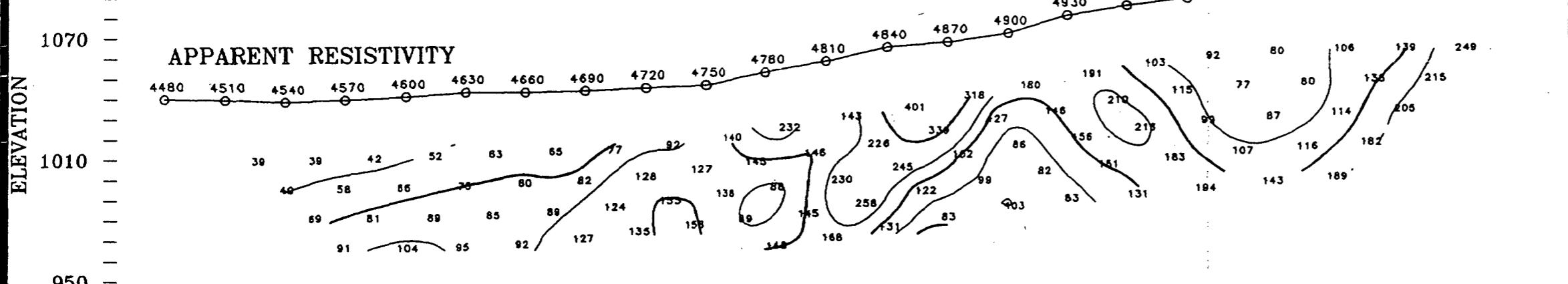
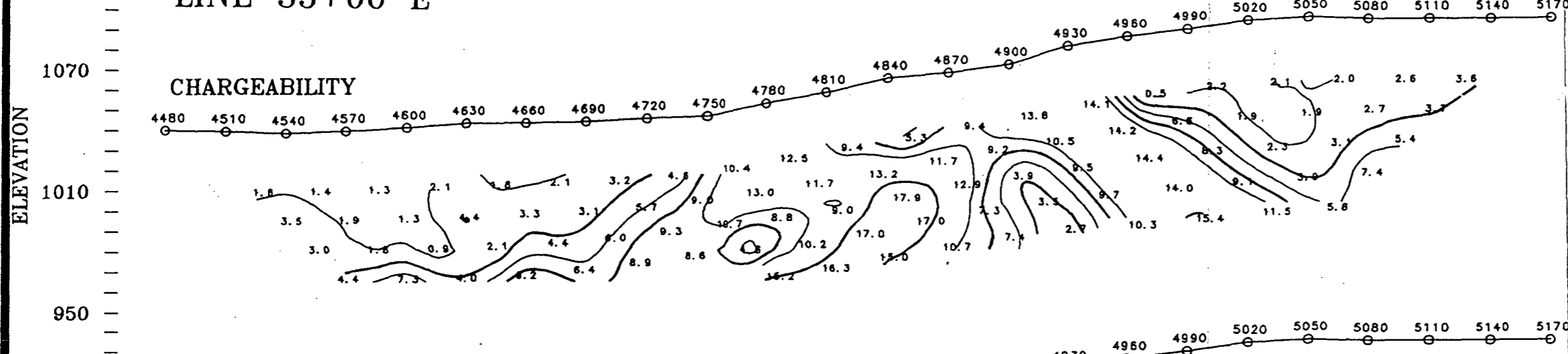
Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omenica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500 Prep. By: TLA
Map No: 09AV- Map No: 09AV-

TARGET SURVEYS INC. Vancouver, B.C.

LINE 33+00 E



LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500,
 750, 1000, etc. (Ohm-m)

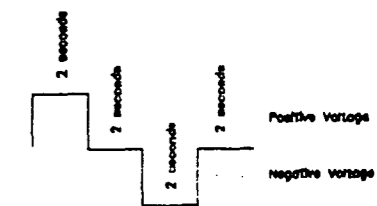
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15,
 25, 50, 100 (m-sec)

INSTRUMENTATION

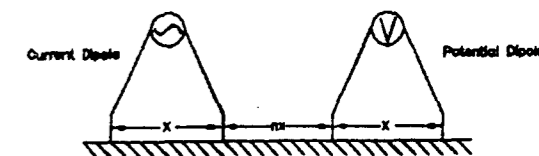
RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MQ-2

SURVEY PARAMETERS

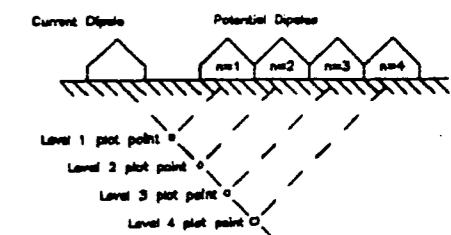
SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECOND
 INTEGRATION TIME: 1,500 MILLISECOND
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-33E

FIG 47

ALTA VENTURES INC.

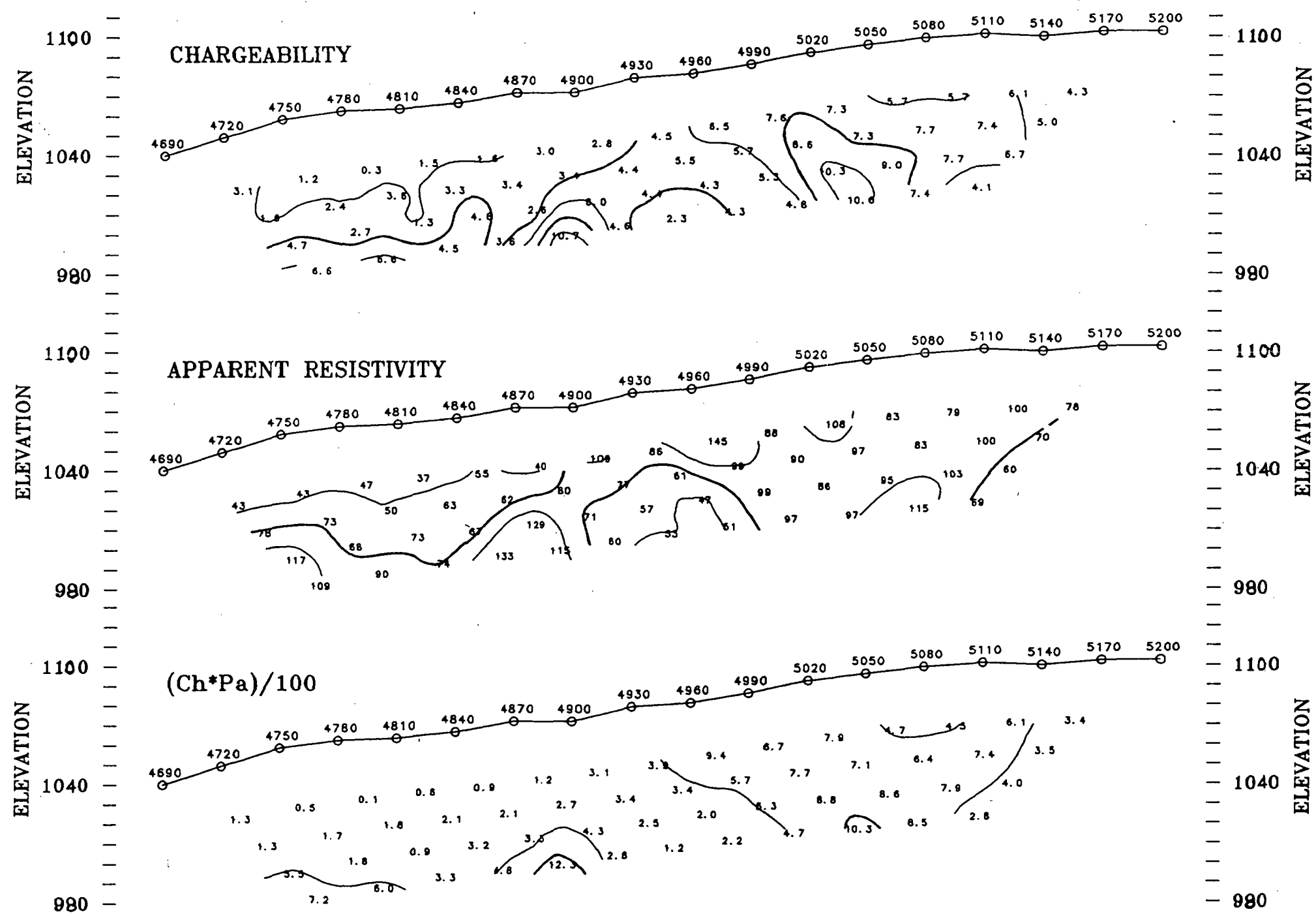
Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION

Rhub & Barb Claims, Omernica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Prepped by: T.L.A. Map No: 054V-
 TARGET SURVEYS INC. Vancouver, B.C.

Line-34E



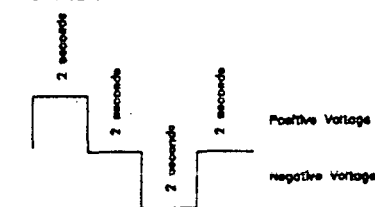
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500,
 750, 1000, etc. (Ohm-m)

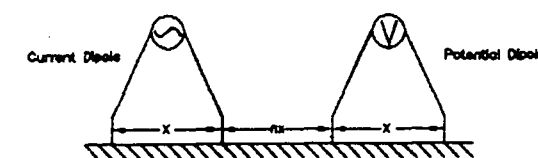
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15,
 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MQ-2

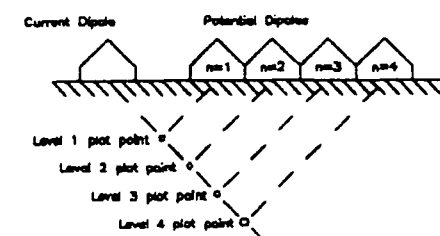
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: $n=1$ to $n=5$
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-34E

FIG 48

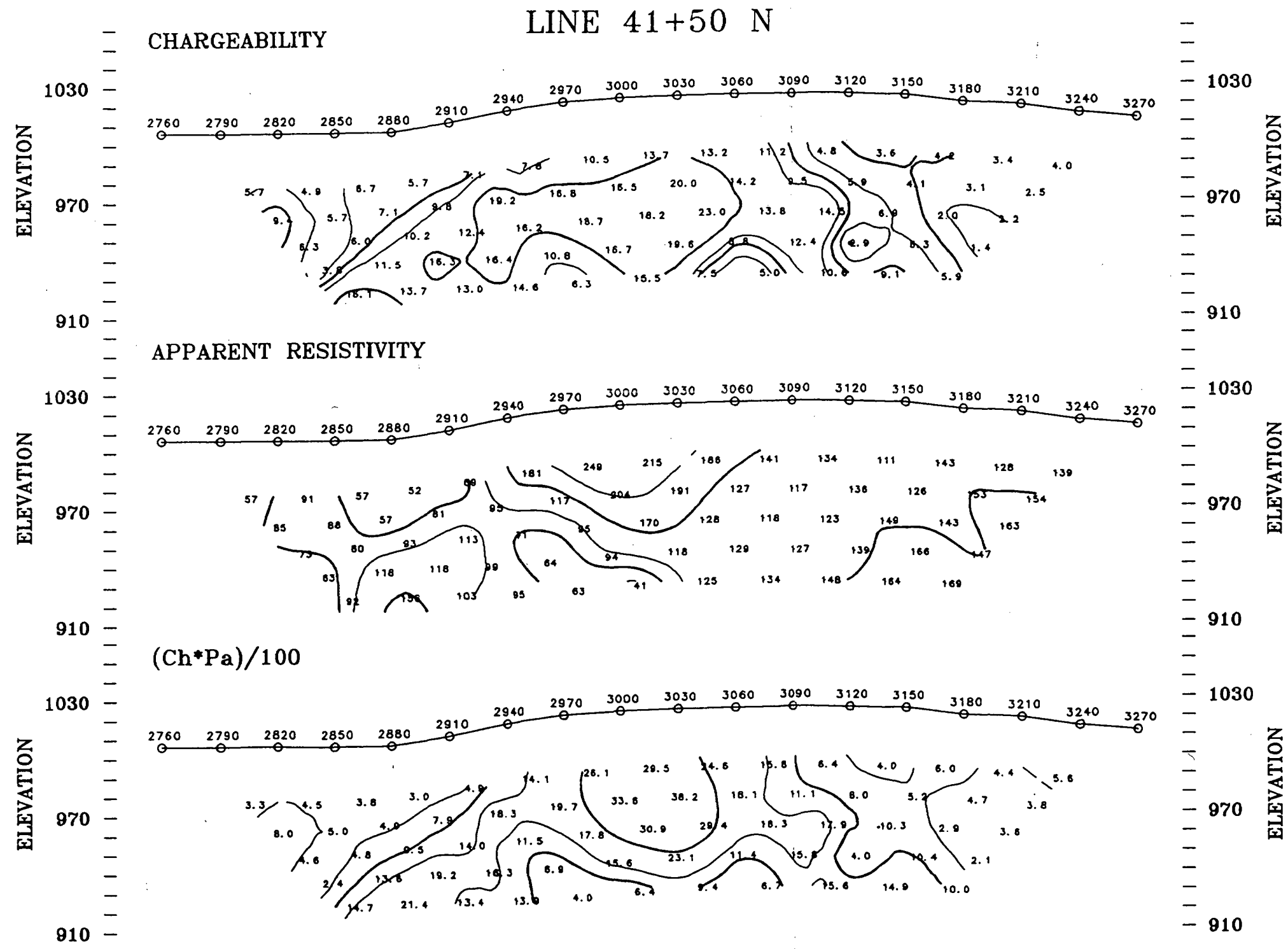
ALTA VENTURES INC.

Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION

Rhub & Barb Claims, Omnicia M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Drawn by: T.L.H.
 Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.



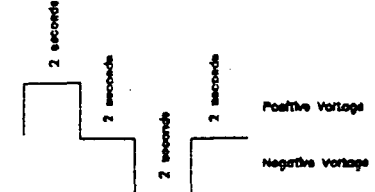
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

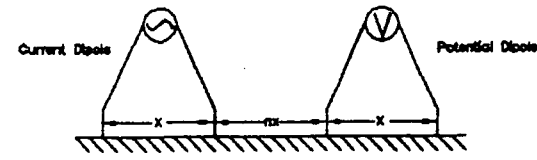
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 20, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MQ-2

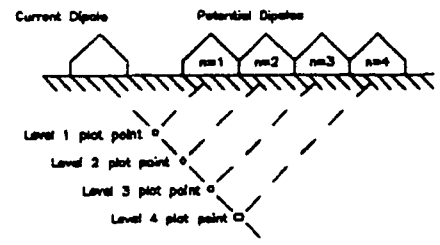
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECOND
 INTEGRATION TIME: 1,500 MILLISECOND
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-41+50 N FIG 49

ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Prepped by: TLA
 Map No: 89AV-
TARGET SURVEYS INC. Vancouver, B.C.

LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

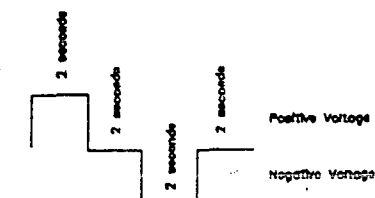
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION

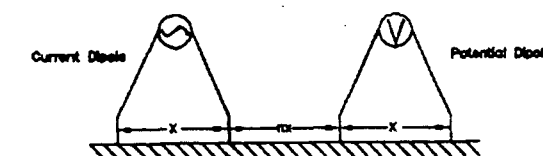
RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

SURVEY PARAMETERS

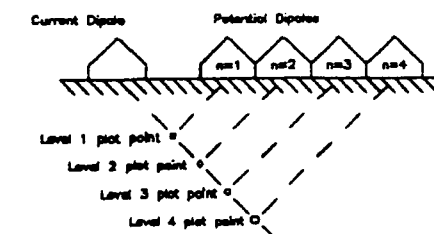
SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: $n=1$ to $n=5$
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-42+40 N

FIG 50

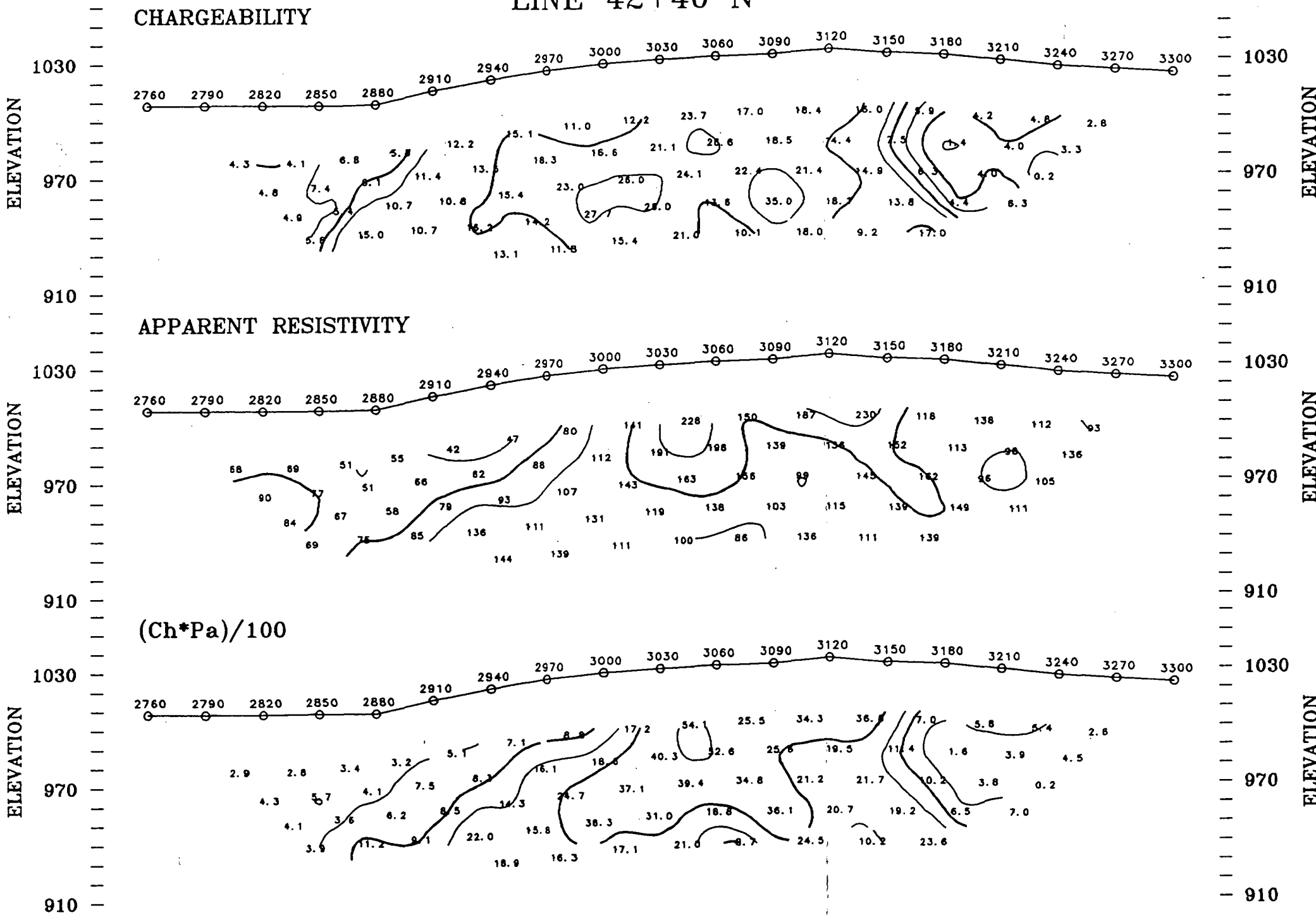
ALTA VENTURES INC.

Rhub-Barb Project
 IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

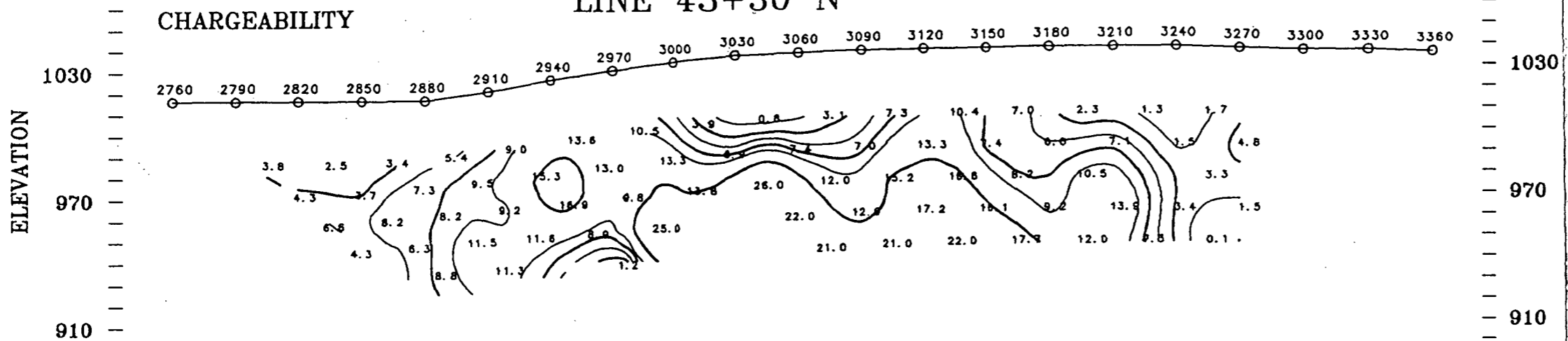
Date: June 1989 Scale: 1:2,500
 Prepped by: T.L.H. Map No: 89AV-
 TARGET SURVEYS INC. Vancouver, B.C.

LINE 42+40 N

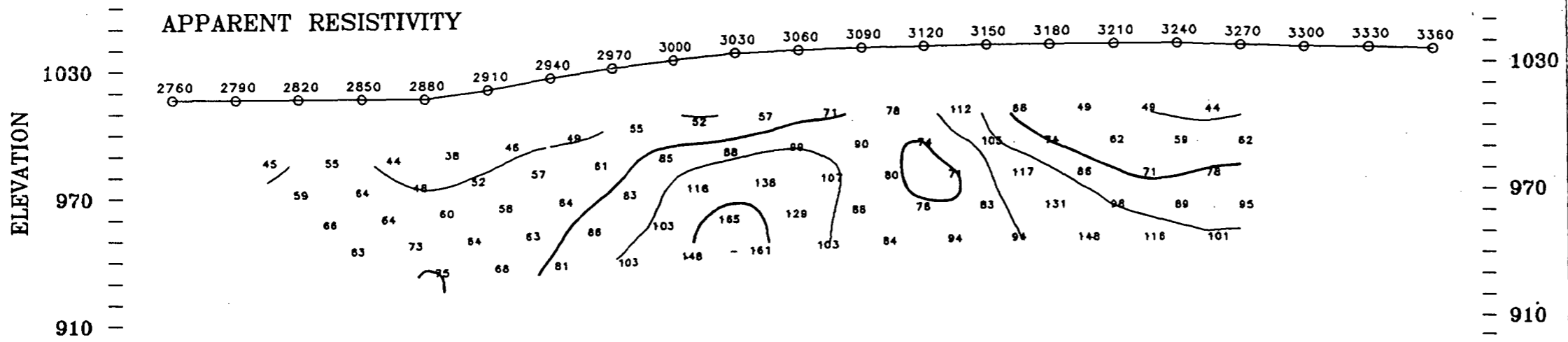


LINE 43+30 N

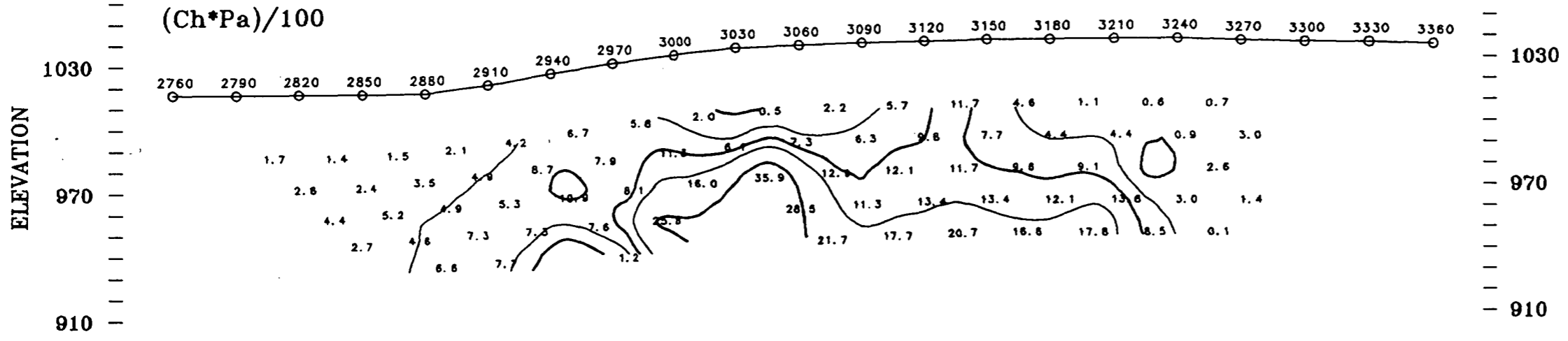
CHARGEABILITY



APPARENT RESISTIVITY



(Ch*Pa)/100



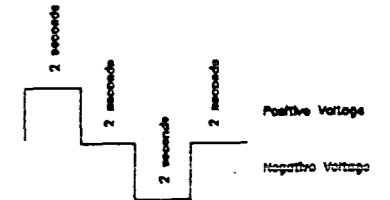
LEGEND

APPARENT RESISTIVITY
CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500,
750, 1000, etc. (Ohm-m)

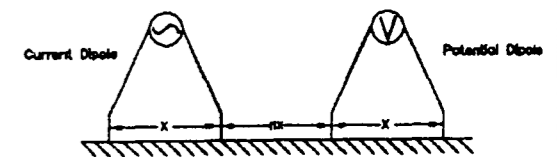
APPARENT CHARGEABILITY
CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15,
25, 50, 100 (m-sec)

INSTRUMENTATION
RECEIVER: HUNTEC MARK IV
TRANSMITTER: PHOENIX IPT 1
GENERATOR: PHOENIX MQ-2

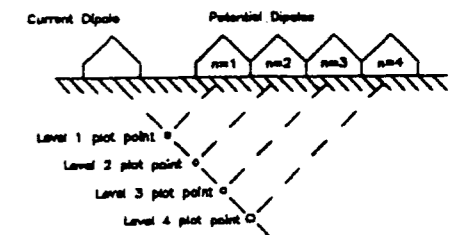
SURVEY PARAMETERS
SURVEY MODE: TIME DOMAIN
ARRAY: DIPOLE DIPOLE
DIPOLE LENGTH: 30 METERS
DIPOLE SEPARATION: n=1 to n=5
DELAY TIME: 200 MILLISECONDS
INTEGRATION TIME: 1,500 MILLISECONDS
CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



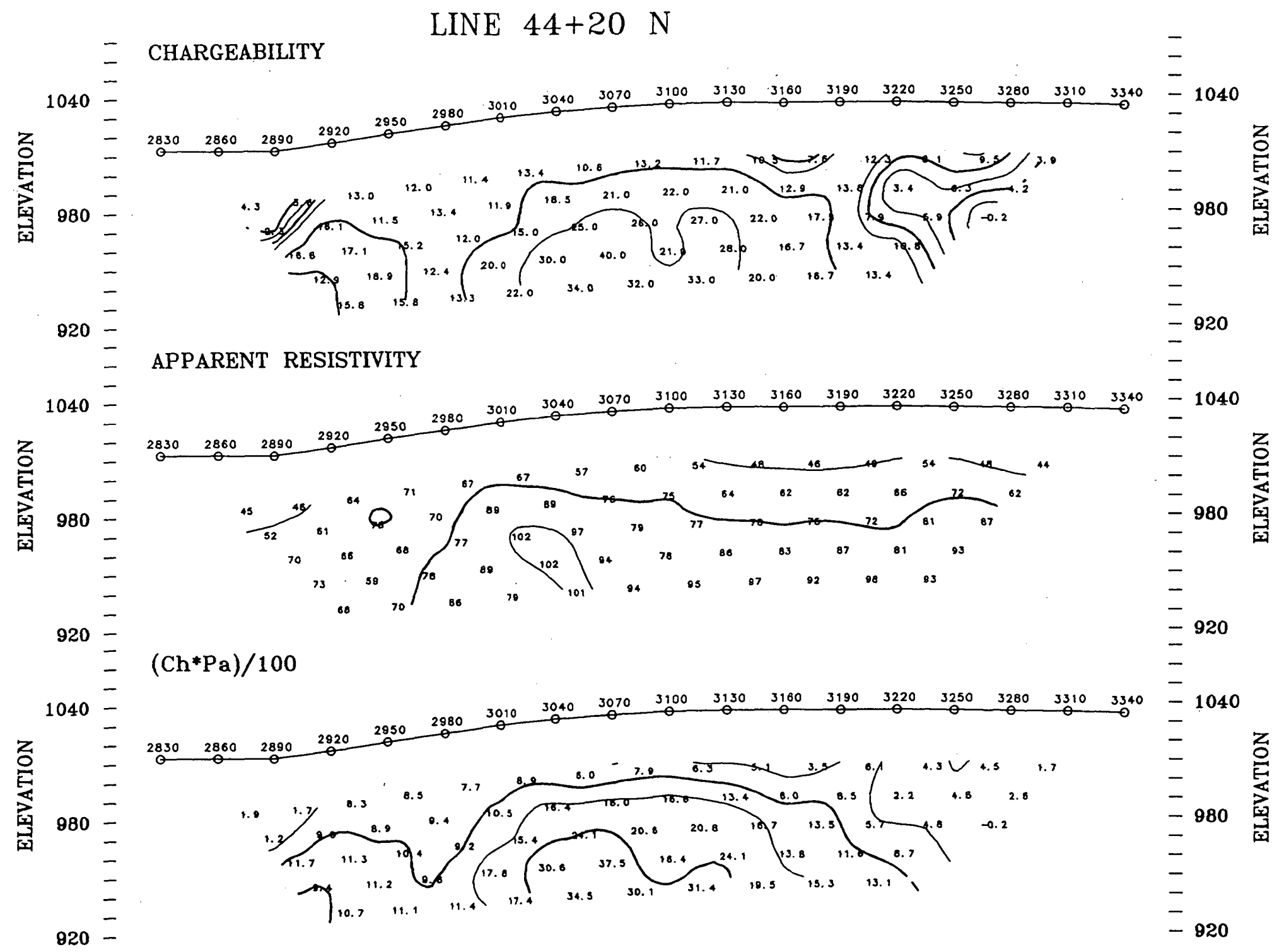
L-43+30N AG 51

ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
Rhub & Barb Claims, Omenica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500 Prep. By: T.L.K.
Map No: 89AV-1
TARGET SURVEYS INC. Vancouver, B.C.



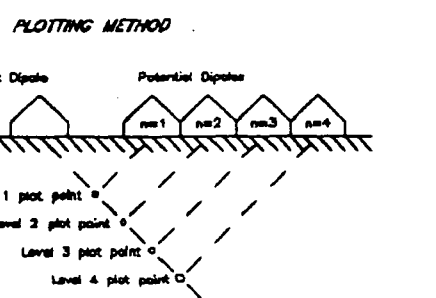
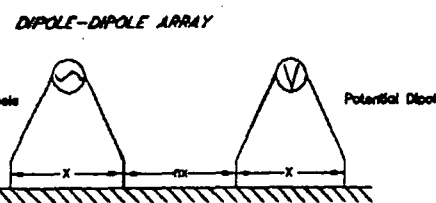
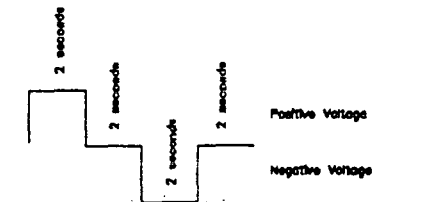
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: $n=1$ to $n=5$
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



L-44+20N FIG 52

ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

| | | |
|-------------------------------------|----------------|----------------------------------|
| Date: June 1989 | Scale: 1:2,500 | Prep By: T.L.A. Map No: 89AV- |
| TARGET SURVEYS INC. Vancouver, B.C. | | |

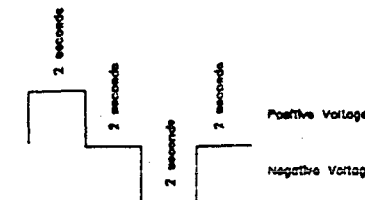
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

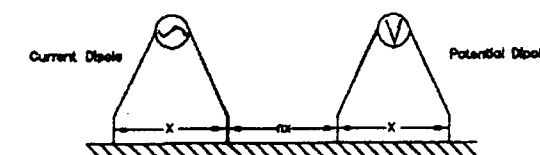
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTED MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

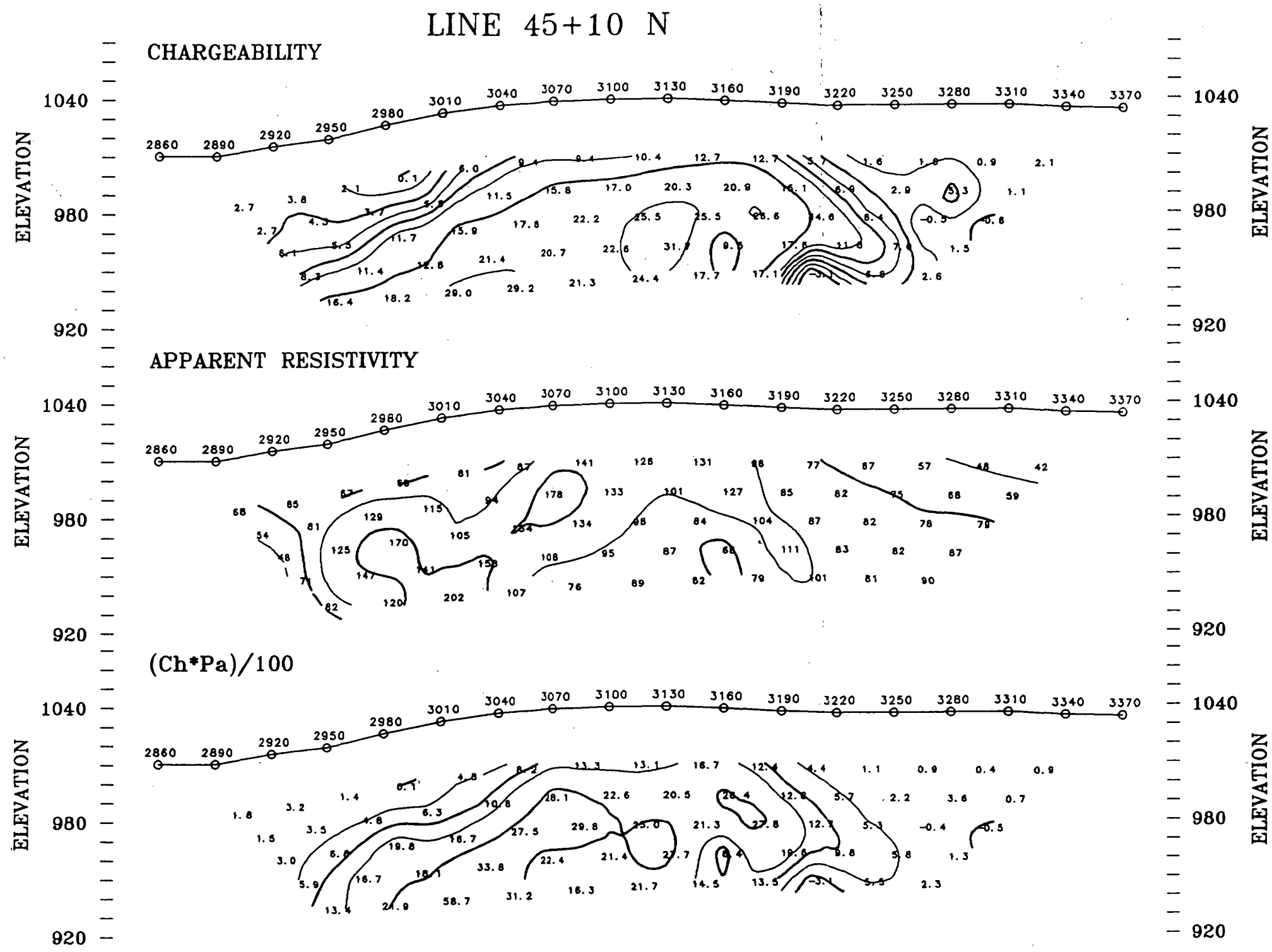
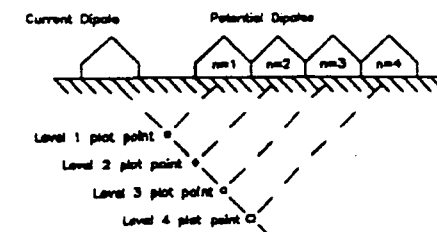
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



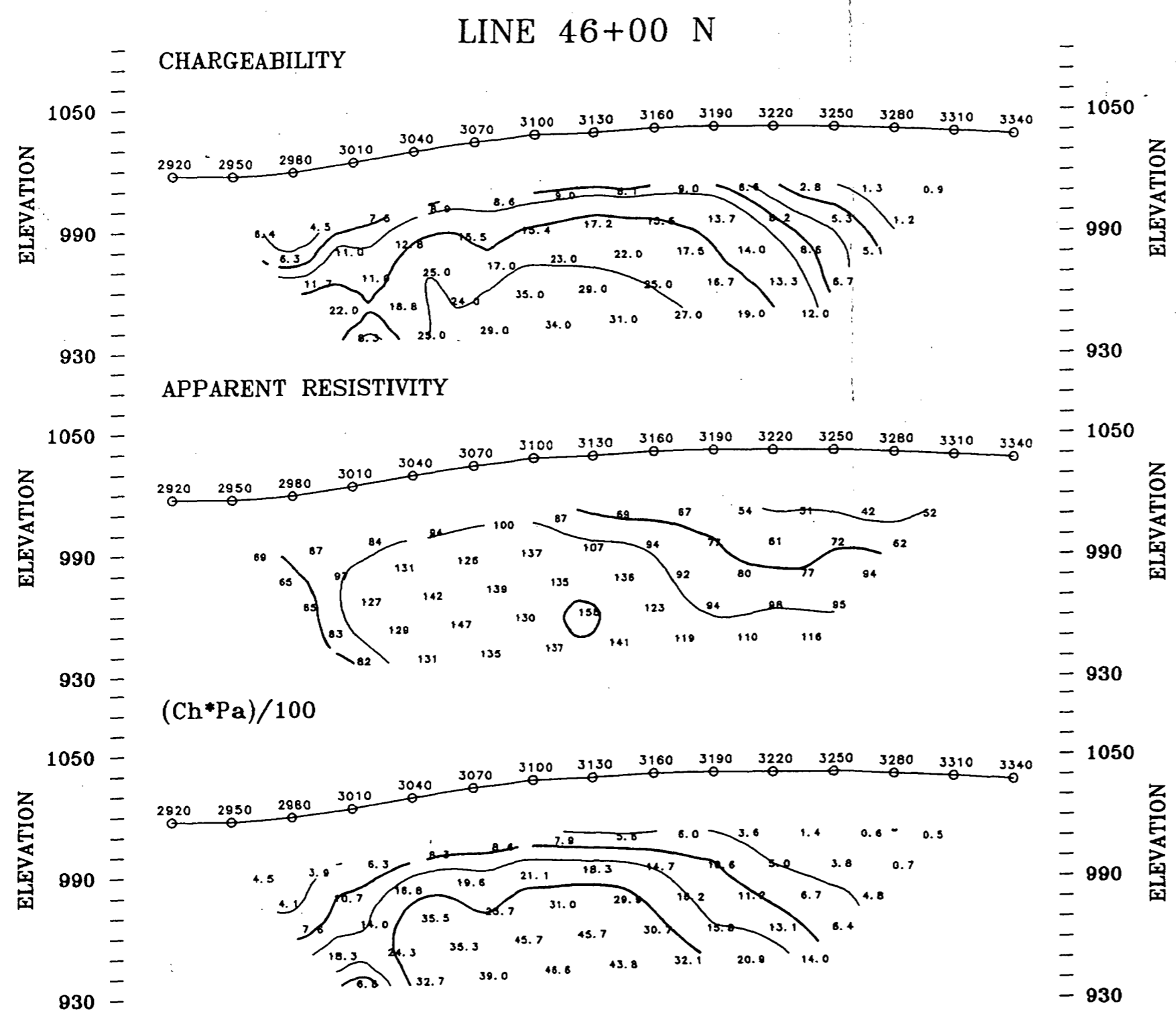
L-45+10N FIG 53

ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

| | | |
|-------------------------------------|----------------|-----------------------------------|
| Date: June 1989 | Scale: 1:2,500 | Prep. By: T.L.M. Map No: 89AV- |
| TARGET SURVEYS INC. Vancouver, B.C. | | |



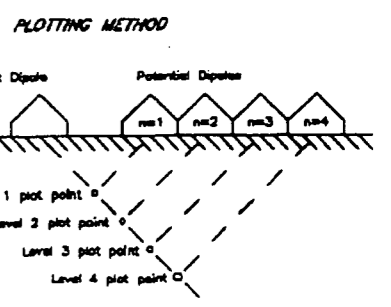
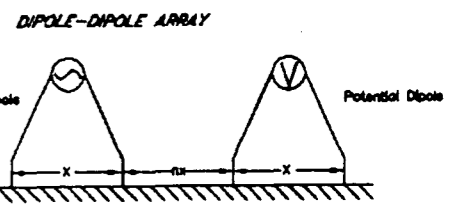
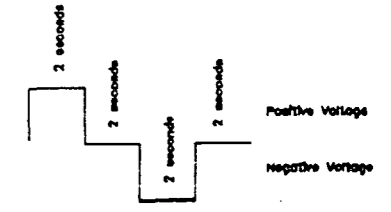
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECOND
 INTEGRATION TIME: 1,500 MILLISECOND
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



L-46+00N FIG 54

ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omerica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500 Prep. by: T.L.A.
 Map No: 89AV- TARGET SURVEYS INC. Vancouver, B.C.

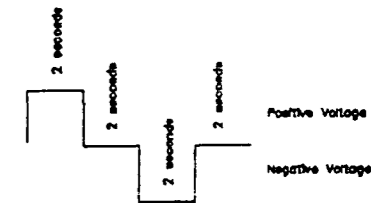
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500,
 750, 1000, etc. (Ohm-m)

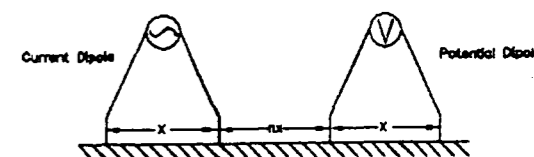
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15,
 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX WQ-2

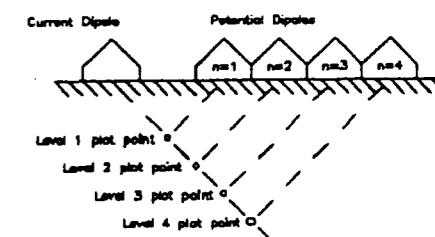
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: $n=1$ to $n=5$
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY

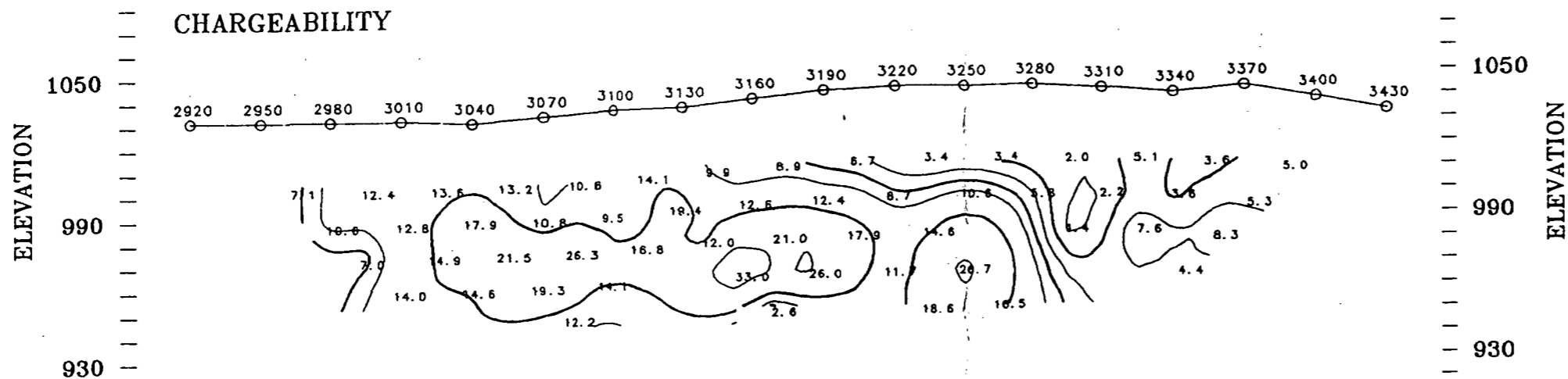


PLOTTING METHOD

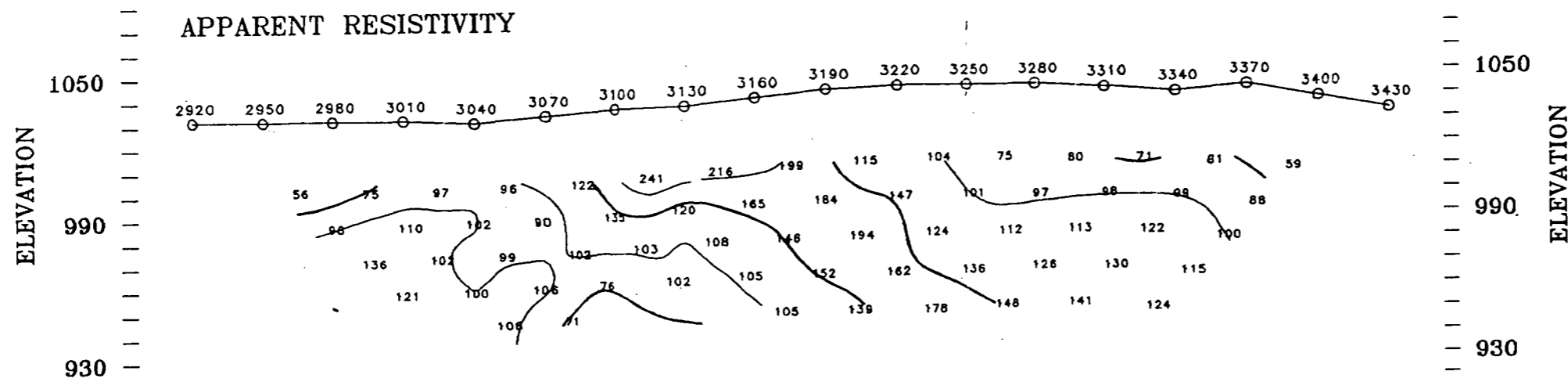


LINE 46+90 N

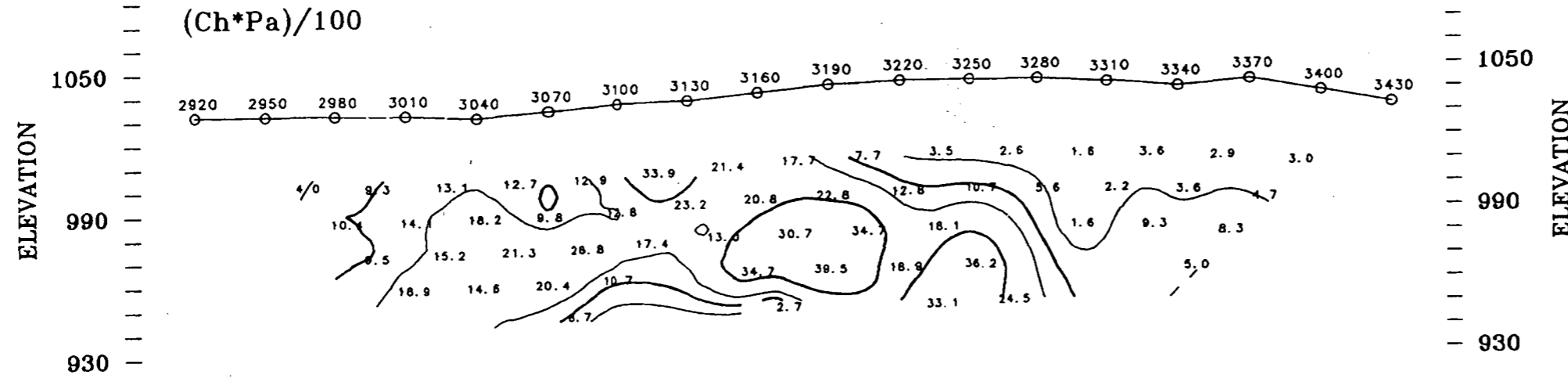
CHARGEABILITY



APPARENT RESISTIVITY



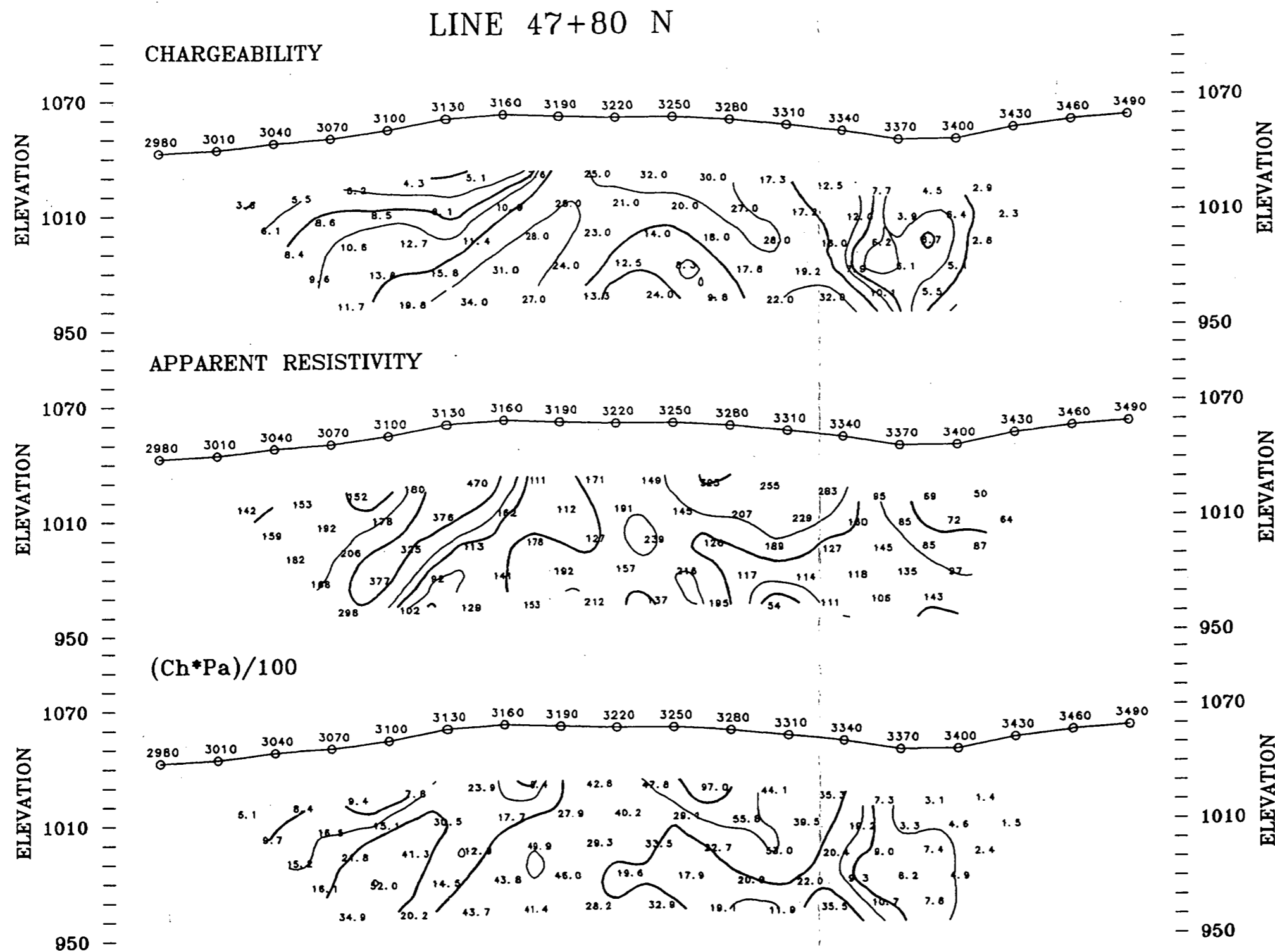
(Ch*Pa)/100



L-46+90 N FIG 55

ALTA VENTURES INC.
 Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12
J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500
 Drawn by: T.A.K.
 Map No: 89AV-
TARGET SURVEYS INC. Vancouver, B.C.



LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

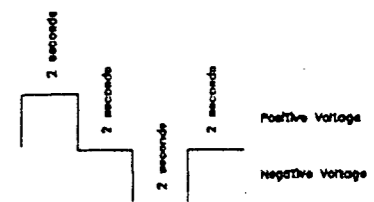
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION

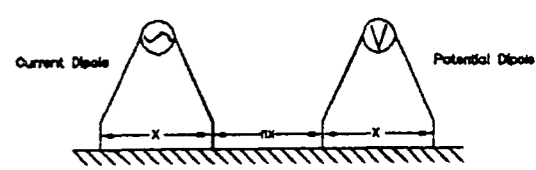
RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MQ-2

SURVEY PARAMETERS

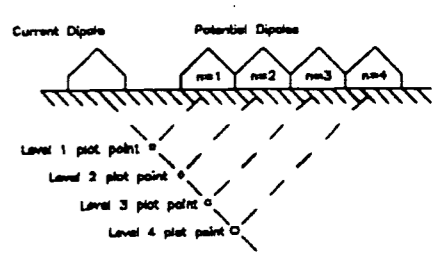
SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



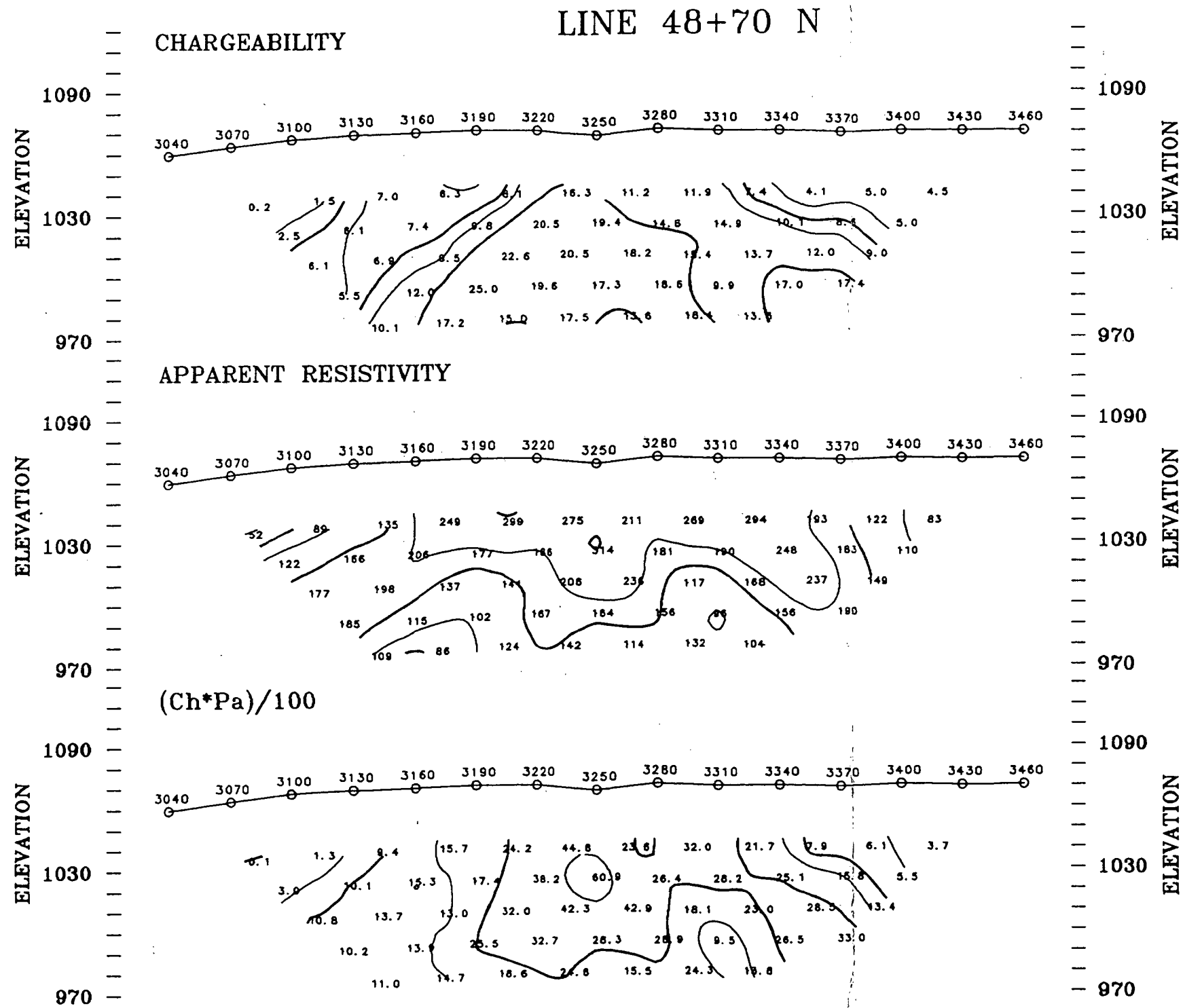
L-47+80N FIG 56

ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500 Prep. by: T.L.A.
 Map No: 89AV- TARGET SURVEYS INC. Vancouver, B.C.



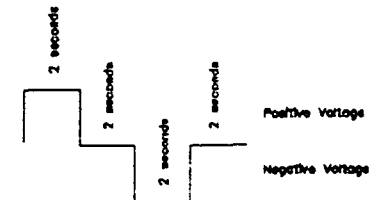
LEGEND

APPARENT RESISTIVITY
 CONTOUR INTERVAL: 25, 50, 75, 100, 150, 200, 500, 750, 1000, etc. (Ohm-m)

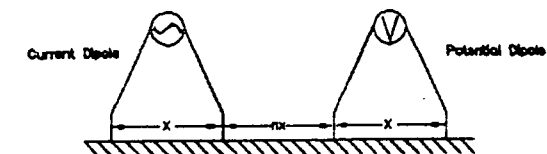
APPARENT CHARGEABILITY
 CONTOUR INTERVAL: -10, -5, 0, 2, 4, 6, 8, 10, 15, 25, 50, 100 (m-sec)

INSTRUMENTATION
 RECEIVER: HUNTEC MARK IV
 TRANSMITTER: PHOENIX IPT 1
 GENERATOR: PHOENIX MG-2

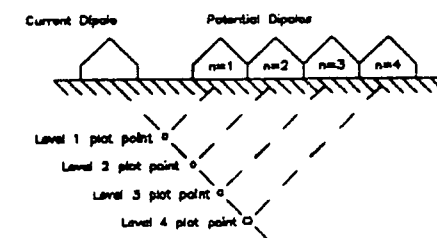
SURVEY PARAMETERS
 SURVEY MODE: TIME DOMAIN
 ARRAY: DIPOLE DIPOLE
 DIPOLE LENGTH: 30 METERS
 DIPOLE SEPARATION: n=1 to n=5
 DELAY TIME: 200 MILLISECONDS
 INTEGRATION TIME: 1,500 MILLISECONDS
 CHARGE CYCLE: 8 SECOND SQUARE WAVE



DIPOLE-DIPOLE ARRAY



PLOTTING METHOD



L-48+70N

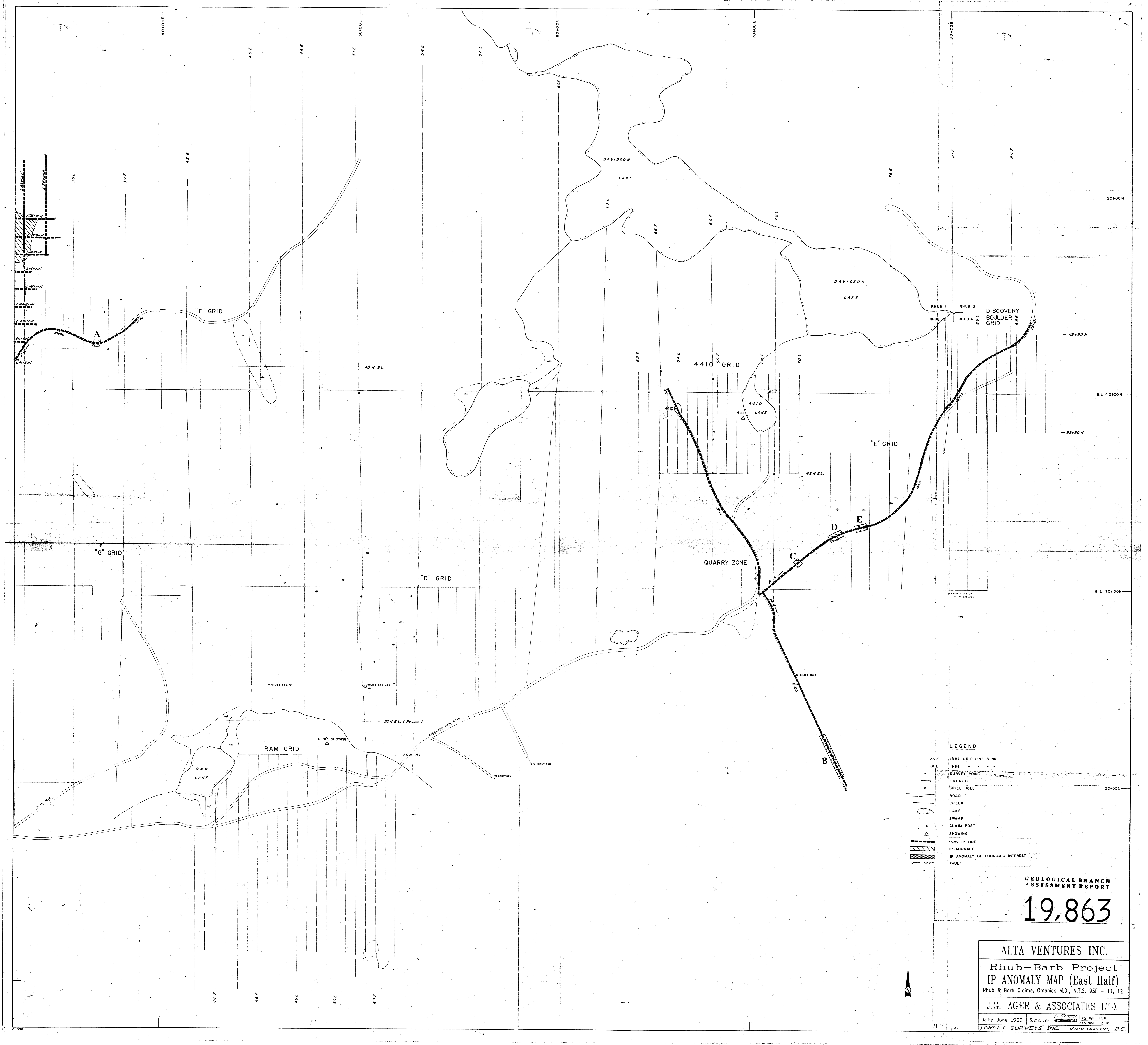
FIG 57

ALTA VENTURES INC.

Rhub-Barb Project
IP-RESISTIVITY PSEUDO-SECTION
 Rhub & Barb Claims, Omenica M.D., N.T.S. 93F - 11, 12

J.G. AGER & ASSOCIATES LTD.

Date: June 1989 Scale: 1:2,500 Prep. By: T.L.A.
 Map No: 014V-
TARGET SURVEYS INC. Vancouver, B.C.



LEGEND

- 70 E 1987 GRID LINE & N°
- 80 E 1988 " " " "
- △ SURVEY POINT
- TRENCH
- DRILL HOLE
- ROAD
- CREEK
- LAKE
- SWAMP
- CLAIM POST
- △ SHOWING
- 1989 IP LINE
- IP ANOMALY
- IP ANOMALY OF ECONOMIC INTEREST
- FAULT

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

19,863

ALTA VENTURES INC.
 Rhub-Barb Project
IP ANOMALY MAP (East Half)
 Rhub & Barb Claims, Omineca M.D., N.T.S. 93F - 11, 12
J.G. AGER & ASSOCIATES LTD.
 Date: June 1989 Scale: 1:50,000
 TARGET SURVEYS INC. Vancouver, B.C.

