

86-958-15865  
12/87

PETER E. WALCOTT & ASSOC. LTD.

A REPORT

ON

ELECTROMAGNETIC, MAGNETIC

&

INDUCED POLARIZATION SURVEYS

Rossland Area, British Columbia

49° 05'N, 117° 48'W  
N.T.S. 82F/4W

FILMED

Claims Surveyed: ELANORE, IRON COLT, VIKING, GEORGIA  
POTT, CALEDONIA/PUTNAM, BUCKEYE,  
SILVERINE, EVENING STAR, GEORGIA  
FRACTION, LA BELLE, MASCOT/KAPAI FR.,  
ST. LAWRENCE, COPPER JACK/MICHIGANIE,  
G.B. ARCHITECT FR., NORTH STAR/TIP TOP,  
KAY & ALBERTA.

Survey Dates: April 27th - May 23rd, 1986

FOR

Operator: GALLANT GOLD MINES LTD.  
Vancouver, B.C.

Owners: M.C. Pelich, M. M. Butorac, C. Sideco  
Gallant Gold Mines Ltd.

BY

PETER E. WALCOTT AND ASSOCIATES LIMITED

Vancouver, B.C.

JANUARY 1987

GEOPHYSICAL SERVICES

15,865

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

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ACCOMPANYING MAPS - Scale 1:200

MAP POCKET

CONTOURS OF TOTAL FIELD INTENSITY	Grid 1	W-390-1
"    "    "    "    "	Grid 2	W-390-2
ELECTROMAGNETIC PROFILES	Grid 1	W-390-3
"                    "	Grid 2	W-390-4
TRUE GRID INTERPRETATION MAP	Grid 1	W-390-5
"    "                    "	Grid 2	W-390-6

INTRODUCTION.

Between April 27th and May 17th, 1986, Peter E. Walcott & Associates Limited carried out Genie electromagnetic and magnetic surveying over two grids, covering the Georgia property of Gallant Gold Mines Ltd., which is located just north of the town of Rossland, British Columbia.

The surveys were carried out over two grids, the lines of which were turned off at right angles from N 10°E and N 68° E handcut baselines respectively, and established using "hip chain and compass" techniques. Due to high magnetic gradients in places backsighting on closely spaced flagging tied to tree limbs had to be employed to keep the lines reasonably close to their planned positions.

Readings at three frequencies (Hz) pairs, 3037.5/112.5, 1012.5/112.5 and 337.5/112.5 were taken at 25 metre intervals along the lines using a Scintrex SE 88 electromagnetic unit with a coil separation of 100 metres.

Measurements of the total intensity of the earth's magnetic field were made every 25 metres along the survey lines using a GEM proton magnetometer. Corrections were applied for drift using an EDA base magnetometer.

In addition, between the 18th and 21st of May, six induced polarization (I.P.) traverses were carried out across the area of the main Georgia veins and showings using the dipole-dipole method of surveying.

Measurements (first to fourth separation) of apparent chargeability - the I.P. response parameter - and resistivity were made with a 25 metre dipole.

The E.M. and magnetic data are presented in profile form on idealized plan maps of the line grids that accompany this report, whereas the I.P. data are presented in pseudo-section form on individual line profiles that are bound in this report.

PROPERTY, LOCATION AND ACCESS.

The property, known as the Georgia property, is located in the Trail Mining Division of British Columbia and consists of the following claims:

CLAIM	OWNER	STATUS	LOT NO.	RECORD NO.
ELANORE	M & C DELICH	R.C.G.	951	369
IRON COLT		R.C.G.	795	367
VIKING		R.C.G.	4416	314
GEORGIA		R.C.G.	928	165
POTT		R.C.G.	733	363
CALEDONIA/PUTNAM		R.C.G.	734/4917	364
BUCKEYE		R.C.G.	534	365
SILVERINE		R.C.G.	732	
EVENING STAR	M M BURORAC	C.G.	801	
GEORGIA FRACTION		C.G.	4668	
LA BELLE		C.G.	729	
MASCOT/KAPAI FR.	C C SIDECO	R.C.G.	1344/11012	776
ST. LAWRENCE		R.C.G.	1197	777
COPPER JACK/MICHIGAMIE/ G.B. ARCHITECT FR.		R.C.G.	1185/1294/1707	778
NORTH STAR/TIP TOP		R.C.G.	797/798	779
ALBERTA	GALLANT GOLD MINES LTD.	R.C.G.		801
KAY	GALLANT GOLD MINES LTD.	m.g.c.	20 UNITS	774

R.C.G. - Reverted Crown-Granted Mineral Claims  
M.G.C. - Modified Grid Claims  
C.G. - Crown-Granted Mineral Claims.

These are situated on the northern outskirts of the town of Rossland, British Columbia on the flanks of the Columbia-Kootenay and Monte Cristo mountains.

Access was obtained by means of a good network of dirt roads that link up with ~~or are~~ a part of the town street complex.

PREVIOUS WORK.

Work has been carried out on the property since 1898 after the discovery of gold in the area in 1897.

Recently - 1983 and 84 - Gallant Gold Mines conducted limited prospecting and geological mapping and VLF EM surveys to further investigate the potential of the property.

The results of these and other previous work are well documented in reports held by Gallant Gold Mines Ltd.

PURPOSE.

The purpose of the survey was (1) to investigate the electromagnetic responses of the known veins in an effort to extend them and find more of the same in the overburden covered area of the property with the horizontal loop E.M. method, and (2) outline areas of disseminated sulphides with the I.P. technique in the Elise formation.

GEOLOGY.

The reader is referred to a report by Jenna Hardy of Mark Management Ltd. - October 1986 - and to the previously mentioned reports held by Gallant Gold Mines Ltd.

Basically the property is underlain by siltstones, tuffs and augite porphyry of the Elise Formation of Jurassic age intruded to the north and south by Cretaceous Nelson granodiorites. Abundant iron sulphides - pyrite and pyrrhotite - are found throughout the rocks of the Elise formation - up to 30% locally - on the property in the form of massive sulphide veins and/or disseminated sulphides, which in most cases assay in gold.

SURVEY SPECIFICATIONS.

The basic principle of any electromagnetic survey is that when conductors are subjected to primary alternating fields secondary magnetic fields are induced in them. Measurements of these secondary fields give indications as to the size, shape and conductivity of conductors. In the absence of conductors no secondary fields are obtained.

The electromagnetic survey was carried out using a SE 88 Genie electromagnetic system manufactured by Scintrex Limited of Metropolitan Toronto, Ontario. The operation of this system is based on the simultaneous transmission of two preselected, well-separated frequencies from the transmitter, and the simultaneous reception and amplitude comparison of the resultant signals by that single receiver. There is no cable link between the coils, and since there are effectively no coil geometry errors, the instrument is very effective in rugged topography and heavily forested areas. In the absence of atmospheric noise useful amplitude ratio changes may be made up to a transmitter-receiver separation of 200 metres.

On this survey measurements were made at three frequency pairs at a 100 metre coil separation.

The magnetic survey was carried out using a GSM-8 proton precession magnetometer manufactured by GEM Systems Inc. of Don Mills, Ontario. This instrument measures variations in the earth's magnetic field to an accuracy of  $\pm 1$  gamma. Corrections for diurnal variations were made by comparison with readings obtained on a base magnetometer manufactured by EDA Instruments Ltd. of Metropolitan Toronto, Ontario.

The induced polarization (I.P.) survey was carried out using a pulse type system, the principal components of which are manufactured by Hunttec Limited and Phoenix Geophysics Limited of Metropolitan Toronto, Ontario.

The system consists basically of three units, a receiver (Hunttec), a transmitter and a motor generator (Phoenix). The transmitter, which provides a maximum of 2.0 kw d.c. to the ground, obtains its power from a 2.0 kw 400 c.p.s. three phase alternator driven by a gasoline engine. The cycling rate of the transmitter is 2 seconds "current-on" and 2 seconds "current-off" with the pulses reversing continuously in polarity. The data recorded in the field consists of careful measurements of the current (I) in amperes flowing through electrodes  $C_1$  and  $C_2$ , the primary



SURVEY SPECIFICATIONS cont'd

voltage (V) appearing between the two potential electrodes,  $P_1$  and  $P_2$ , during the "current-on" part of the cycle, and the apparent chargeability ( $M_a$ ) presented as a direct readout using a 100 millisecond delay and a 1000 millisecond sample window by the receiver, a digital receiver controlled by a microprocessor.

The apparent resistivity ( $P_a$ ) in ohm metres is proportional to the ratio of the primary voltage and the measured current, the proportionality factor depending on the geometry of the array used. The chargeability and resistivity are called apparent as they are values which that portion of the earth sampled would have if it were homogeneous. As the earth sampled is usually inhomogeneous the calculated apparent chargeability and resistivity are functions of the actual chargeability and resistivity of the rocks.

The survey was carried out using the "dipole-dipole" electrode array. This electrode configuration and the methods of presenting the results are illustrated on the accompanying pseudo-sections. Depth penetration with this array is increased by increasing or decreasing "a" and/or "n".

In practise, the equipment is set up at a particular station of the line to be surveyed; three transmitting dipoles are laid out to the rear, measurements are made for all possible combinations of transmitting and receiving dipoles, up to the fourth separation, i.e.  $n = 4$ ; the equipment is then moved 3 "a" feet along the line to the next set-up.

A 25 metre dipole was employed on this survey, and first to fourth separation readings were obtained at 25 metre intervals along the lines.

In all some 30.3 kilometres of electromagnetic surveying, some 32.8 kilometres of magnetic surveying and some 4.2 kilometres of induced polarization surveying were carried out using the above methods.

DISCUSSION OF RESULTS.

This section should be studied in conjunction with the previously mentioned report by Hardy.

Two grids - Grids 1 & 2 - were established from baselines at  $068^{\circ}$  and  $010^{\circ}$  respectively with lines every 100 metres apart to cross the prevailing vein orientation, as determined from the previous geological work and VLF surveying, at roughly right angles to the strike, with some overlap in the Georgia-Evening Star area where both vein orientations were noted - see Maps W-390-5 & 6.

The results of the Genie E.M. survey, conducted over these grids, were not encouraging with the only conductor of good strike length and conductivity occurring on the Columbia-Kootenay claims - Conductor A on Map W-390-3 - Grid 1.

This conductor has a strike length of some 700 metres with widths of up to 20 metres, strikes subparallel to the baseline, and appears to coincide with the Columbia-Kootenay vein system.

A shorter - some 200 metre strike length - and generally less conductive and narrower conductor - Conductor B - occurs to the south of the above at about 4 + 25S between Lines 2 + 00 and 4 + 00E respectively. It is more conductive at its western end - conductivity thickness product of some 30 siemens - and appears related to the Mascot vein system.

A third still shorter conductor - Conductor C with an indicated strike length of some 100 metres notwithstanding the fact that its projected axis was not covered by Line 4 + 00E - but generally more conductive than B - conductivity thickness product of some 12 siemens - occurs on Line 5 + 00 and Line 6 + 00E at approximately 6 + 50S. This coincides with an outcropping vein in a road cut a short distance to the east.

A moderate - conductivity thickness 12 siemens - single line conductor is also observed on Line 3 + 00W at 1 + 75W - Conductor D. This coincides or nearly so with one at 0 + 15W on Line 0 + 50 N on Grid 2, and appears to be part of the one at 0 + 95W on Line 0 - conductivity thickness products of 23 and 18 siemens respectively - Map W-390-4. Its axis corresponds with that of a VLF conductor from the 1984 survey - the grid for which was recovered and tied to the grids by the field crew.

The only other conductor on the property to entertain any strike length is the poor narrow conductor - Conductor E, conductivity thickness

DISCUSSION OF RESULTS cont'd

product 3 to 6 siemens - that strikes some 160° from Line 3 N to Line 7N. It is also partially coincident with a weak VLF conductor that itself extends further to the north.

Two other conductors - F - of weak to moderate conductivity, again roughly coincident with VLF conductor axes, are observed west of Conductor D between Lines 0 and 1 N.

The results of the magnetic survey - presented in profile form on Maps W-390-1 & 2 - exhibit a general overall erratic pattern with considerable local relief in places presumably due to near surface pyrrhotite and/or narrow magnetic dykes.

No attempt has been made to correlate these highs (lows) from line to line or to contour the data as both the line and station spacings are too large to place any confidence in the end results.

Although coincidence with the E.M. conductors is not one hundred percent more magnetic activity is noticed around the axes of Conductors A, B, C & D respectively suggesting pyrrhotite to be associated with their causative sources.

No changes in the magnetic background are readily observable between the sediments, volcanics and granodiorites.

A perusal of the results of the induced polarization survey, conducted with a 25 metre dipole, and the geology map suggests the area underlain by the Elise formation to have a background of about 20 to 30 milliseconds, while that underlain by the granodiorites to exhibit one in the teens - west ends of Lines 0, 1, 2 & 3 N.

Hence the lower chargeability and higher resistivity values observed at the east end of Line 5 N suggest that end is underlain by subcropping granodiorite.

Above these backgrounds several areas of higher chargeability are clearly discernible as shown on the respective pseudo-sections and on Map W-390-6. These anomalous areas are thought to have increases in sulphide mineralization in the underlying rocks as their causative sources.

The strongest of these anomalies could be joined to form two zones as described by Hardy. Each of these was tested by drilling and found to exhibit an increase in sulphide content in the underlying rocks - Holes G86-1, 2 & 5.

DISCUSSION OF RESULTS cont'd

No significant chargeability anomalies were obtained over the main Georgia-Evening Star vein system - see Line O.

A strong resistivity low coincident with the axis of Conductor E can be observed on Lines 3, 4 and 5 N. This was tested at depth by Hole G86-2, which was primarily designed to test the strong chargeability anomaly adjacent to the east, with no visible explanation.

Conductor D was tested with two holes - G86- 3 and 4, one from the east, the other from the west. Massive sulphide mineralization sufficient to account for the EM effects was encountered in hole 4 at the projected axis location but appeared lacking in hole 3.

Conductor C was also tested by two holes both from the north. Similar results were obtained as above with hole 6 intersecting some width of massive sulphide and hole 7 not, although considerable sulphides existed in the core of both holes 3 & 7.

Conductor B could not be economically tested at the time of drilling due to its topographic location.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.

Between April 27th and May 23rd, 1986, Peter E. Walcott & Associates Limited, undertook a combined electromagnetic, magnetic and induced polarization investigation of the Georgia property, located near the town of Rossland, B.C., for Gallant Gold Mines Ltd. in an effort to locate sulphide conductors that could be associated with gold mineralization in some form.

The results of the EM survey were fairly discouraging with the only sizeable conductor in the area being located on another's ground.

The other less significant conductors were investigated by borehole techniques with sulphide intersections but low gold occurrences.

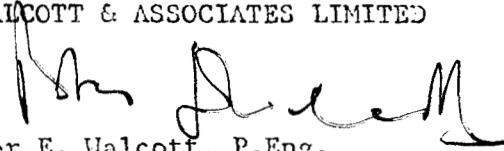
The limited induced polarization suggested significant areas of lower grade sulphide mineralization existed beneath the area surveyed. However assays of these in three boreholes returned low gold values.

Further I.P. coverage would delineate areas of sulphide concentration on the property. To say whether or not these would bear precious metal content is outside the scope of the writer's mandate.

Further work on the property should be at the discrimination of the company's geologists.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LIMITED

  
Peter E. Walcott, P.Eng.  
Geophysicist

Vancouver, B.C.

January 1987

PETER E. WALCOTT & ASSOC. LTD.

A P P E N D I X

GEOPHYSICAL SERVICES

COST OF SURVEY.

Peter E. Walcott & Associates Limited undertook the programme on a contract basis, a breakdown of which is as follows:

Mobilization	\$2,661.00
Establishing grids	6,995.00
Genie E.M. surveying	10,290.00
Magnetic surveying	3,280.00
I.P. surveying	4,520.00
Room and board	2,463.32
Draughting and report preparation	674.28
Discussions and report writing	2,025.00
Miscellaneous	<u>93.76</u>

Total cost of services provided \$33,002.36

PERSONNEL EMPLOYED ON SURVEY

NAME	OCCUPATION	ADDRESS	DATES
Peter E. Walcott	Geophysicist	Peter E. Walcott & Assoc. 605 Rutland Court, Coquitlam, B.C. V3J 3T8	June 1st, 16th - 18th, July 22nd & 23rd, 1986, Jan 6th - 8th, 87 Jan. 17th, 1987
R. Summerfield	Geophysical Operator	"	Apr. 27th - May 23rd 1986
B. Summerfield	"	"	"
V. Pashniak	"	"	Apr. 27th - May 23rd Aug. 27th & 28th, 86
D. Sloan	"	"	May 17th - 23rd, 86
G. MacMillan	Draughting	"	June 30th, 1986
J. Walcott	Typing	"	Jan. 17th, 1987
R. Rollings	Draughting	RWR Mineral Graphics 1024 - 470 Granville Vancouver, B.C.	June 10 - 11th, 86 Jan. 15th, 1987



CERTIFICATION.

I, Peter E. Walcott, of the Municipality of Coquitlam, British Columbia, hereby certify that:

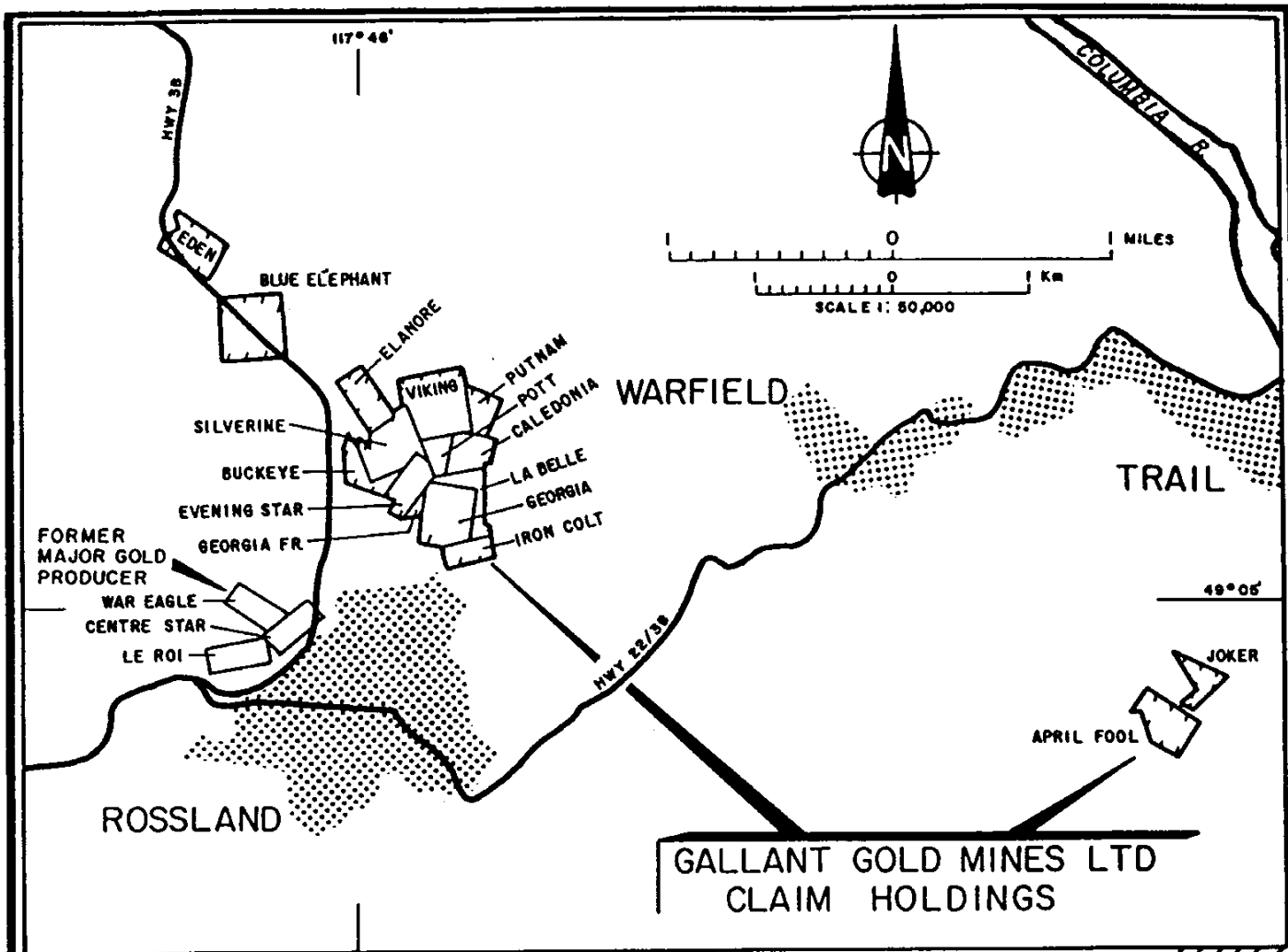
1. I am a Graduate of the University of Toronto in 1962 with a B.A.Sc. in Engineering Physics, Geophysics Option.
2. I have been practising my profession for the last twenty four years.
3. I am a member of the Association of Professional Engineers of British Columbia and Ontario.
4. I hold no interest, direct or indirect, in the securities or properties of Gallant Gold Mines Ltd.



Peter E. Walcott, P.Eng.

Vancouver, B.C.

January 1987



GALLANT GOLD MINES LTD  
CLAIM HOLDINGS



GALLANT GOLD MINES LTD.

CLAIM & LOCATION MAP

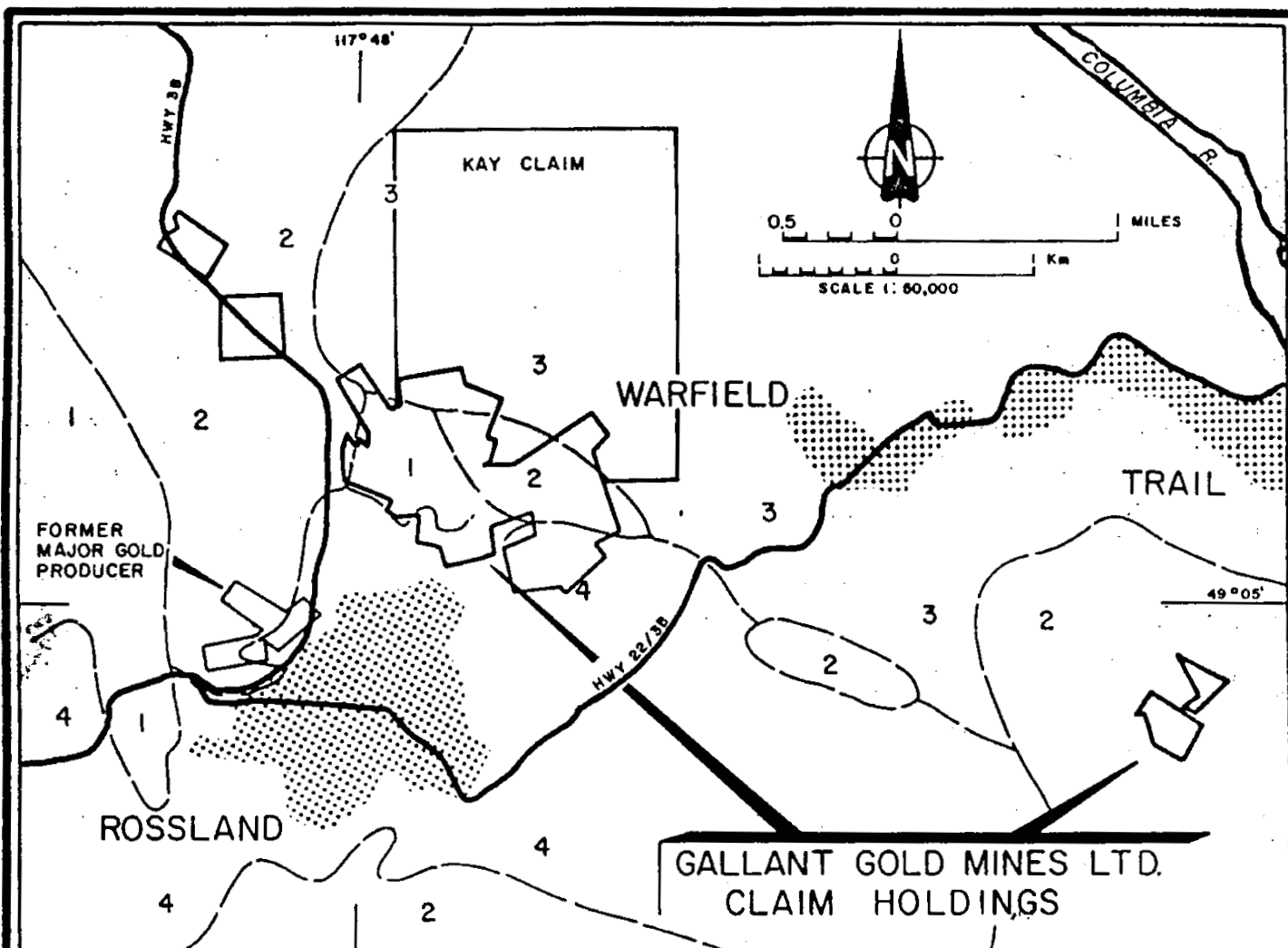
TRAIL CREEK M.D. - B.C.

NTS. 82-F-4

AGT./r.w.r.

SEPT., 1982

FIGURE 1



**LEGEND:**

LOWER CRETACEOUS (?)

NELSON PLUTONIC ROCKS

4 ROSSLAND MONZONITE: monzonite, porphyritic monzonite

3 TRAIL BATHOLITH: granodiorite, diorite, quartz diorite.

LOWER JURASSIC

2 ROSSLAND FORMATION: andesite, latite, basalt, flow breccia, augite porphyry, agglomerate, tuff; minor shale.

PENNSYLVANIAN (?)

1 MOUNT ROBERTS FORMATION: slate, limestone, argillaceous quartzite, greenstone.

GALLANT GOLD MINES LTD.

GEOLOGY OF  
THE ROSSLAND AREA

TRAIL CREEK M.D.-B.C.

NTS. 82-F-4

JCF./rwr.

FEB., 1985

FIGURE 2

I.P. PSEUDO-SECTIONS



Anomalous Zone



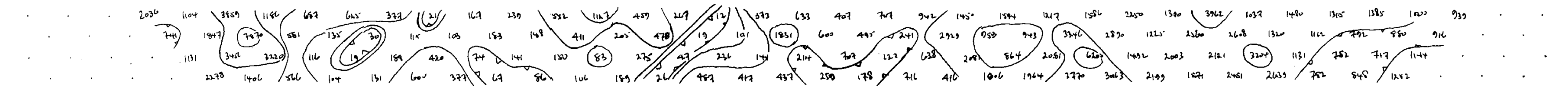
Possible Anomalous Zone



Low Resistivity

600-W      500-W      400-W      300-W      200-W      100-W      BASE LINE      100-E      200-E      300-E

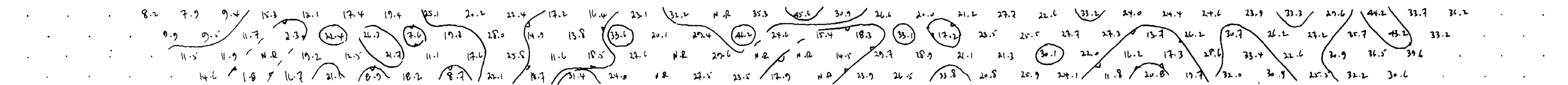
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n = 2  
n = 3  
n = 4



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

**APPARENT RESISTIVITY**  
(OHM - METRES)

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



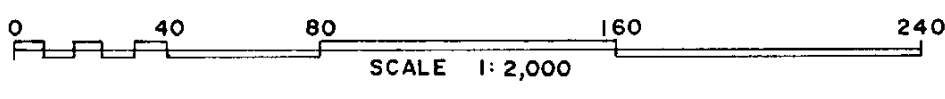
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n = 3  
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**APPARENT CHARGEABILITY**  
(MILLI-SECONDS)

**GEOLOGICAL BRANCH ASSESSMENT REPORT**

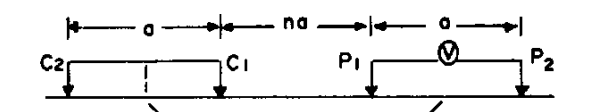
**15,865**

**GALLANT GOLD MINES LTD.**  
GEORGIA PROPERTY  
ROSSLAND, B.C.  
GRID # 2  
**LINE 0+00**



**INDUCED POLARIZATION SURVEY**

**DIPOLE - DIPOLE ELECTRODE CONFIGURATION**



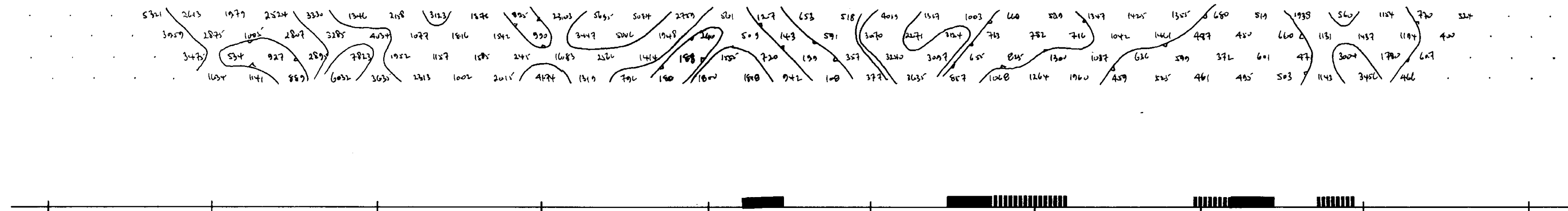
CURRENT ELECTRODE EAST OF POTENTIAL ELECTRODE  
DIPOLE SEPARATION "a" - 25 METRES  
TIME DELAY - 200 MILLI-SECONDS  
SAMPLING TIME - 1000 MILLI-SECONDS  
RECEIVER - HUNTEC MARK IX  
TRANSMITTER - PHOENIX IPT 1

CONTOUR INTERVAL  
APPARENT RESISTIVITY - 50, 100, 300, 1000, 3000, & 7000  
APPARENT CHARGEABILITY - 10, 20, 30, 40, 50, 60 & 70

SURVEY BY  
**PETER E. WALCOTT & ASSOC. LTD.**  
MAY - 1986

600-W      500-W      400-W      300-W      200-W      100-W      BASE LINE      100-E      200-E      300-E

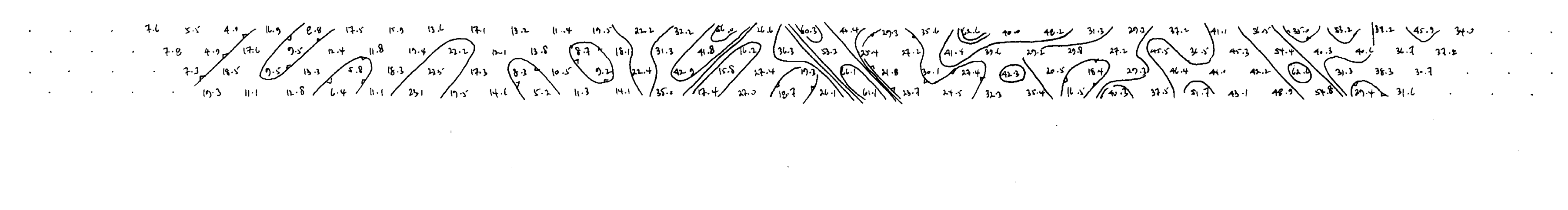
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n = 2  
n = 3  
n = 4



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

**APPARENT RESISTIVITY**  
(OHM - METRES)

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

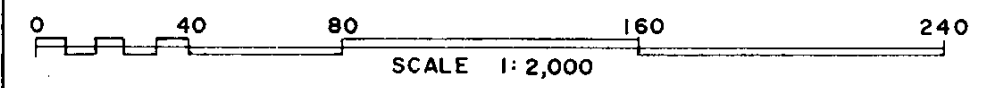


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n = 2  
n = 3  
n = 4

**APPARENT CHARGEABILITY**  
(MILLI-SECONDS)

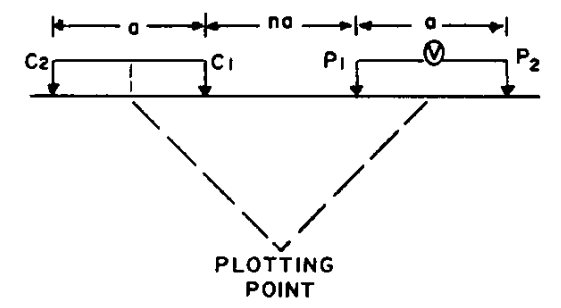
**GEOLOGICAL BRANCH ASSESSMENT REPORT**  
  
**15,865**

**GALLANT GOLD MINES LTD.**  
GEORGIA PROPERTY  
ROSSLAND, B.C.  
GRID # 2  
**LINE 1+00 NORTH**



**INDUCED POLARIZATION SURVEY**

**DIPOLE - DIPOLE ELECTRODE CONFIGURATION**



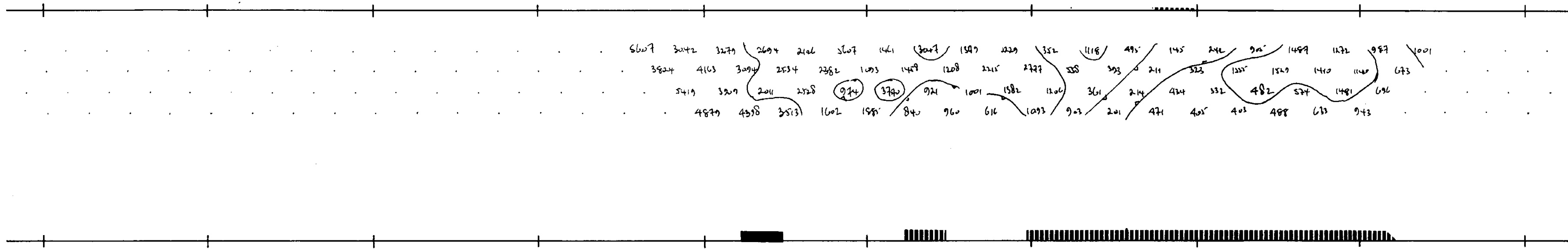
CURRENT ELECTRODE EAST OF POTENTIAL ELECTRODE  
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SURVEY BY  
**PETER E. WALCOTT & ASSOC. LTD.**  
MAY - 1986

600-W      500-W      400-W      300-W      200-W      100-W      BASE LINE      100-E      200-E      300-E

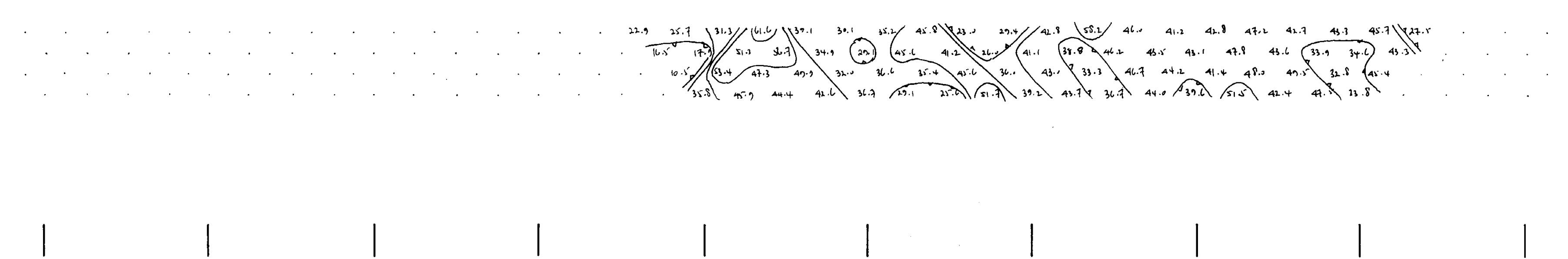
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n = 3  
n = 4



APPARENT  
RESISTIVITY  
(OHM - METRES)

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

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



APPARENT  
CHARGEABILITY  
(MILLI-SECONDS)

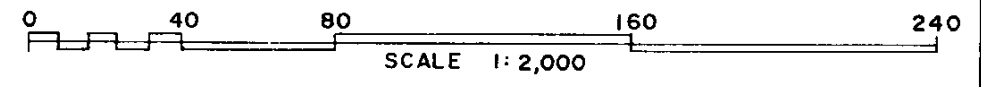
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n = 3  
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**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,865**

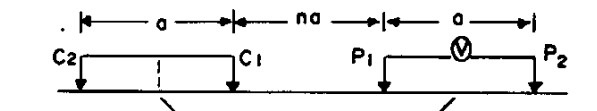
**GALLANT GOLD MINES LTD.**  
GEORGIA PROPERTY  
ROSSLAND, B.C.

GRID # 2  
**LINE 2+00 NORTH**



**INDUCED POLARIZATION SURVEY**

DIPOLE - DIPOLE  
ELECTRODE CONFIGURATION



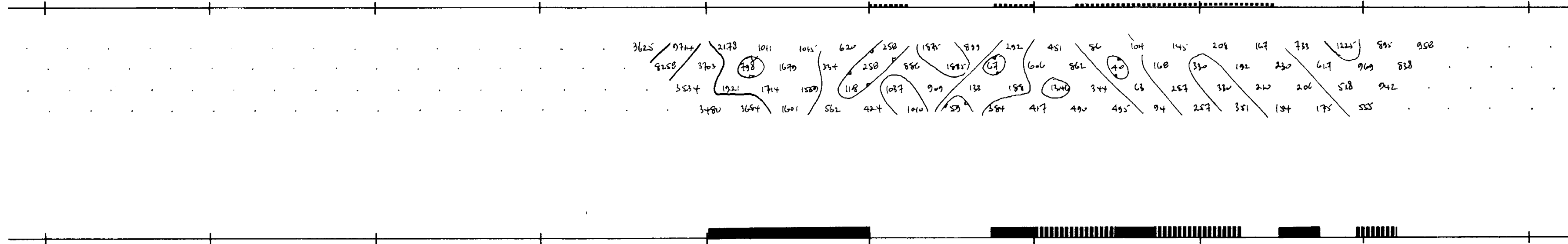
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SURVEY BY  
PETER E. WALCOTT & ASSOC. LTD.  
MAY - 1986

600-W      500-W      400-W      300-W      200-W      100-W      BASE LINE      100-E      200-E      300-E

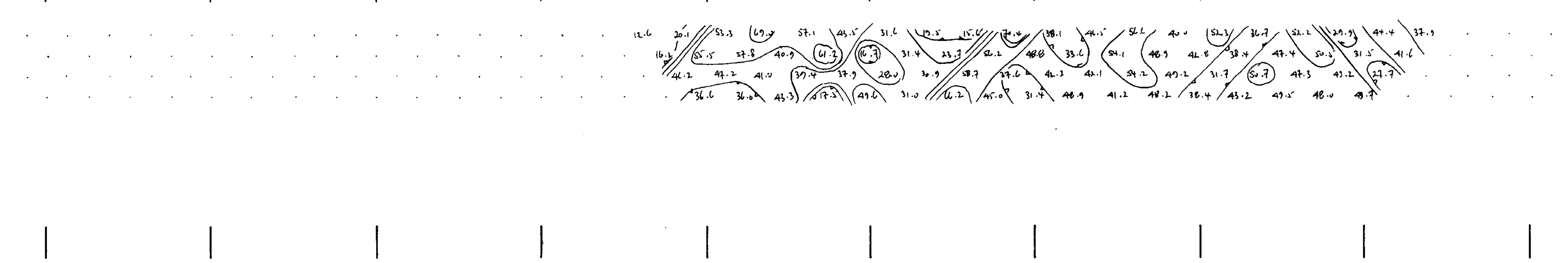
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n = 2 —  
n = 3 —  
n = 4 —



— n = 1  
— n = 2  
— n = 3  
— n = 4

**APPARENT RESISTIVITY**  
(OHM - METRES)

n = 1 —  
n = 2 —  
n = 3 —  
n = 4 —



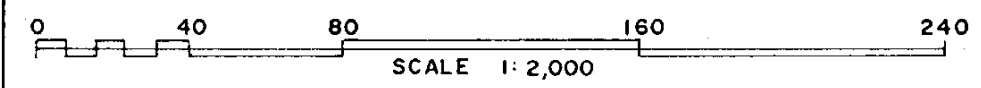
— n = 1  
— n = 2  
— n = 3  
— n = 4

**APPARENT CHARGEABILITY**  
(MILLI-SECONDS)

**GEOLOGICAL BRANCH ASSESSMENT REPORT**

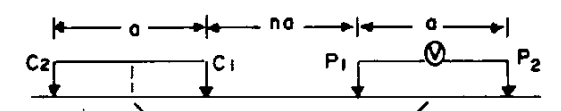
**15,865**

**GALLANT GOLD MINES LTD.**  
GEORGIA PROPERTY  
ROSSLAND, B.C.  
GRID # 2  
**LINE 3+00 NORTH**



**INDUCED POLARIZATION SURVEY**

**DIPOLE - DIPOLE ELECTRODE CONFIGURATION**



CURRENT ELECTRODE EAST OF POTENTIAL ELECTRODE  
DIPOLE SEPARATION "a" - 25 METRES  
TIME DELAY - 200 MILLI-SECONDS  
SAMPLING TIME - 1000 MILLI-SECONDS  
RECEIVER - HUNTEC MARK IV  
TRANSMITTER - PHOENIX IPT1

**CONTOUR INTERVAL**  
APPARENT RESISTIVITY - 50, 100, 300, 1000, 3000, & 7000  
APPARENT CHARGEABILITY - 10, 20, 30, 40, 50, 60 & 70

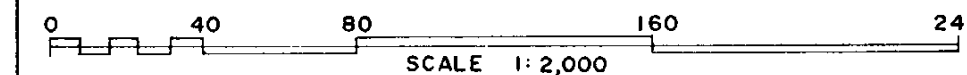
SURVEY BY  
**PETER E. WALCOTT & ASSOC. LTD.**  
MAY - 1986



**GALLANT GOLD MINES LTD.**

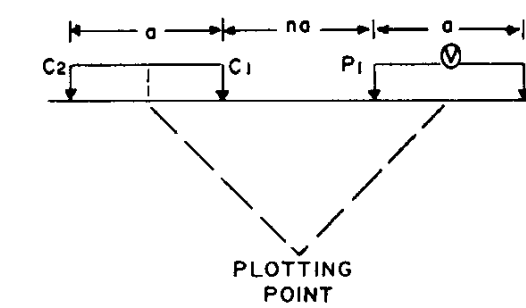
GEORGIA PROPERTY  
ROSSLAND, B.C.

GRID # 2  
**LINE 4+00 NORTH**



**INDUCED POLARIZATION SURVEY**

DIPOLE - DIPOLE  
ELECTRODE CONFIGURATION



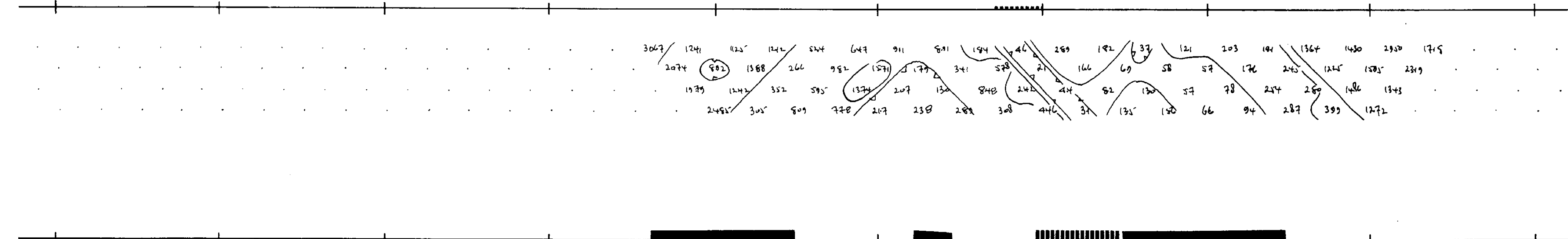
CURRENT ELECTRODE EAST OF POTENTIAL ELECTRODE  
DIPOLE SEPARATION "a" - 25 METRES  
TIME DELAY - 200 MILLI-SECONDS  
SAMPLING TIME - 1000 MILLI-SECONDS  
RECEIVER - HUNTEC MARK IV  
TRANSMITTER - PHOENIX IPT I

CONTOUR INTERVAL  
APPARENT RESISTIVITY - 50, 100, 300, 1000, 3000, & 7000  
APPARENT CHARGEABILITY - 10, 20, 30, 40, 50, 60 & 70

SURVEY BY  
PETER E. WALCOTT & ASSOC. LTD.  
MAY - 1986

600-W    500-W    400-W    300-W    200-W    100-W    BASE LINE    100-E    200-E    300-E

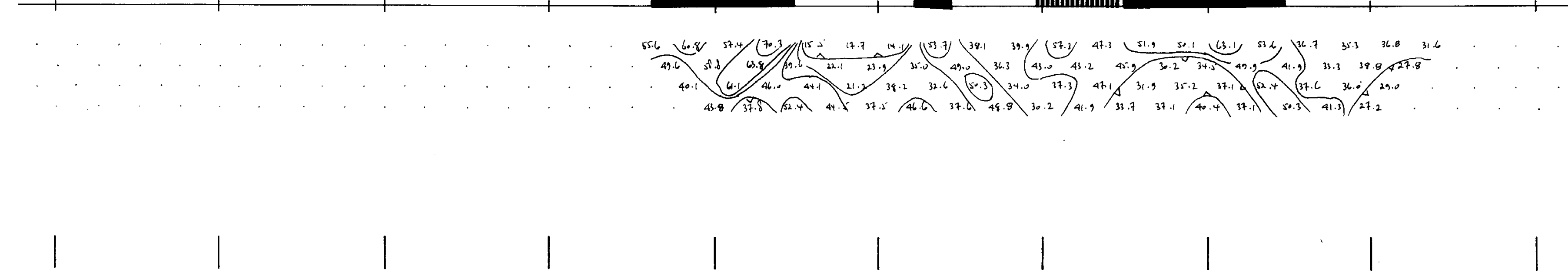
n = 1 —  
n = 2 —  
n = 3 —  
n = 4 —



n = 1 —  
n = 2 —  
n = 3 —  
n = 4 —

**APPARENT RESISTIVITY**  
(OHM - METRES)

n = 1 —  
n = 2 —  
n = 3 —  
n = 4 —



n = 1 —  
n = 2 —  
n = 3 —  
n = 4 —

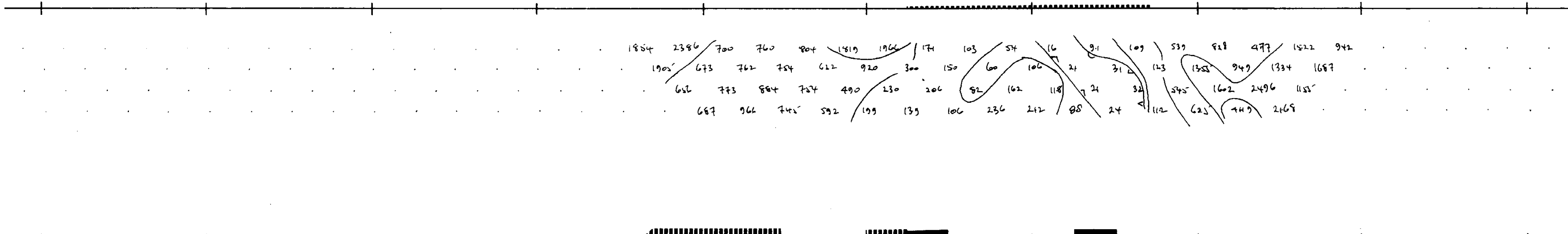
**APPARENT CHARGEABILITY**  
(MILLI-SECONDS)

**GEOLOGICAL BRANCH ASSESSMENT REPORT**

**15,865**

600-W      500-W      400-W      300-W      200-W      100-W      BASE LINE      100-E      200-E      300-E

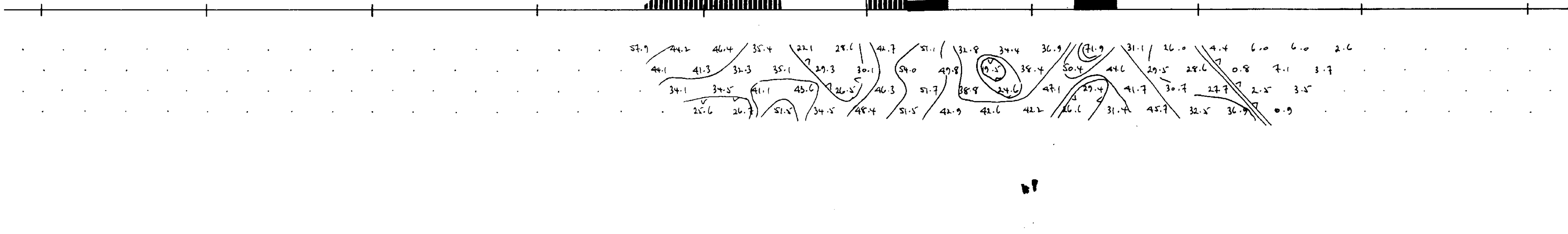
n = 1  
n = 2  
n = 3  
n = 4



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

**APPARENT RESISTIVITY**  
(OHM - METRES)

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



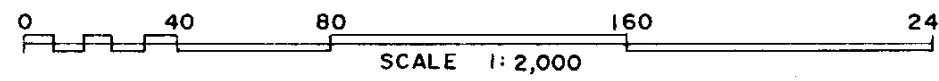
n = 1  
n = 2  
n = 3  
n = 4

**APPARENT CHARGEABILITY**  
(MILLI-SECONDS)

**GEOLOGICAL BRANCH ASSESSMENT REPORT**

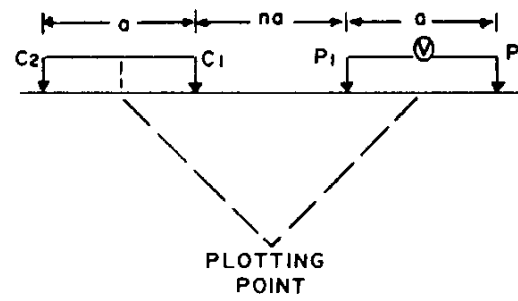
**15,865**

**GALLANT GOLD MINES LTD.**  
GEORGIA PROPERTY  
ROSSLAND, B.C.  
GRID # 2  
**LINE 5+00 NORTH**



**INDUCED POLARIZATION SURVEY**

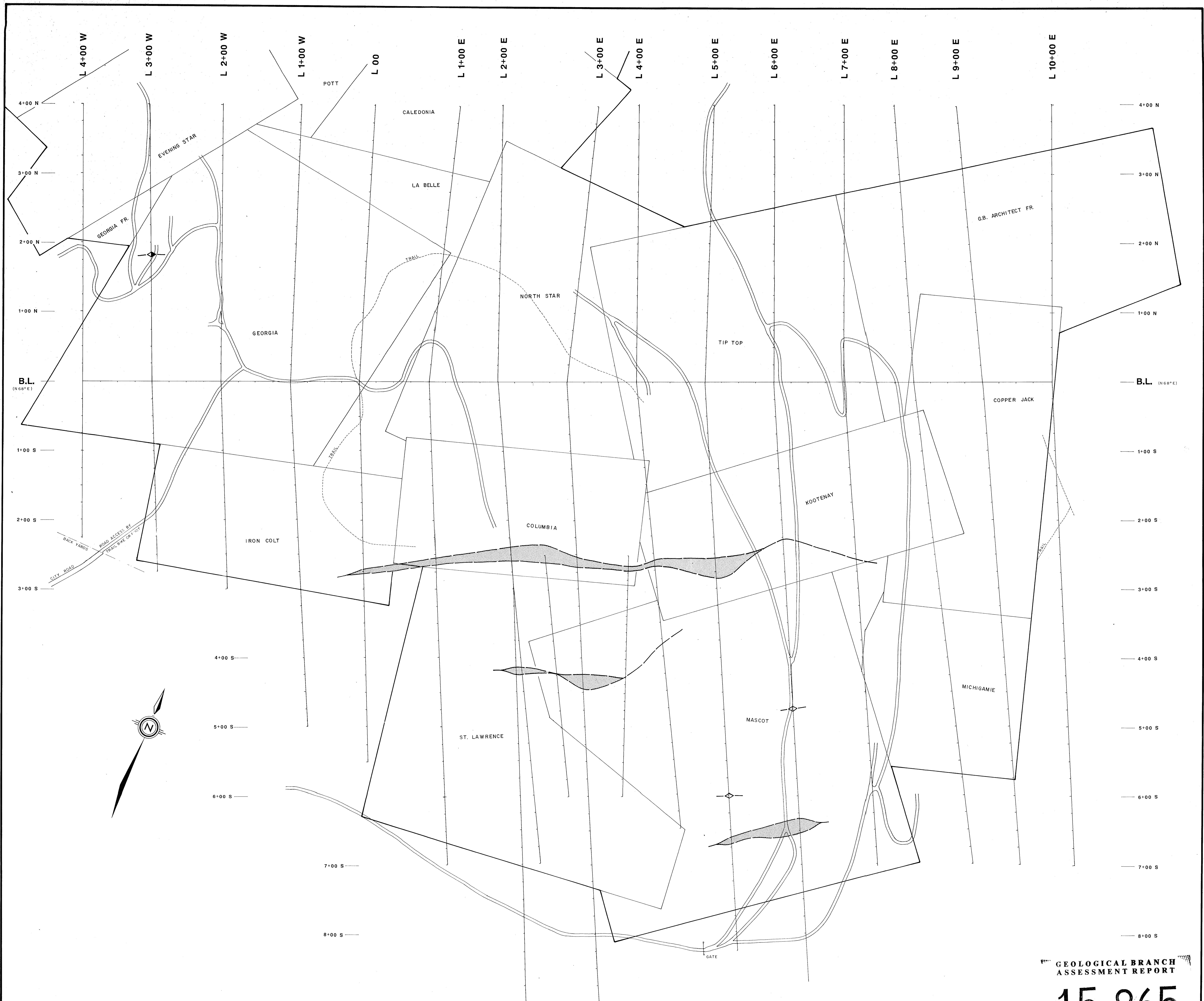
**DIPOLE - DIPOLE ELECTRODE CONFIGURATION**



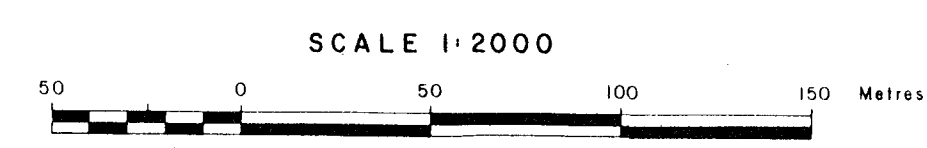
CURRENT ELECTRODE EAST OF POTENTIAL ELECTRODE  
DIPOLE SEPARATION "a" - 25 METRES  
TIME DELAY - 200 MILLI - SECONDS  
SAMPLING TIME - 1000 MILLI - SECONDS  
RECEIVER - HUNTEC MARK IV  
TRANSMITTER - PHOENIX IPT 1

CONTOUR INTERVAL  
APPARENT RESISTIVITY - 50, 100, 300, 1000, 3000, & 7000  
APPARENT CHARGEABILITY - 10, 20, 30, 40, 50, 60 & 70

SURVEY BY  
**PETER E. WALCOTT & ASSOC. LTD.**  
MAY - 1986



- E.M. LEGEND:
- CONDUCTOR AXIS WITH WIDTH
  - GOOD CONDUCTOR
  - MODERATE CONDUCTOR
  - POOR CONDUCTOR



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

**15,865**

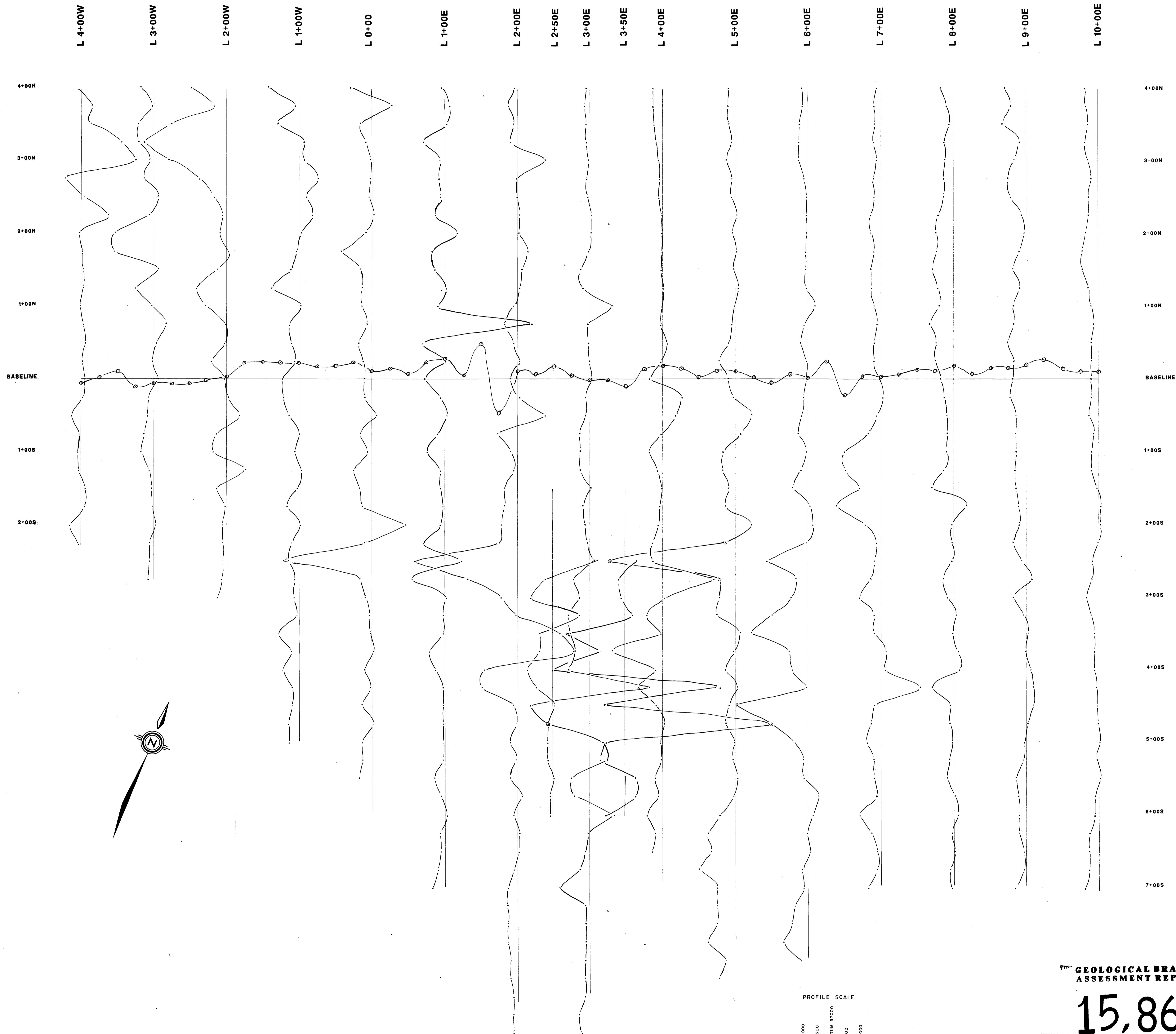
GALLANT GOLD MINES LTD.  
GEORGIA PROPERTY ; ROSSLAND B.C.

GRID #1

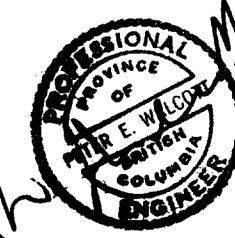
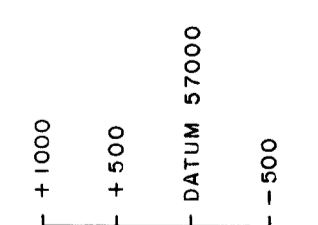
COMPILATION MAP

MAP No. W-390-5 PETER E. WALCOTT & ASSOC. LTD.  
GRID #1 MAY/1986

*Handwritten signature*



PROFILE SCALE



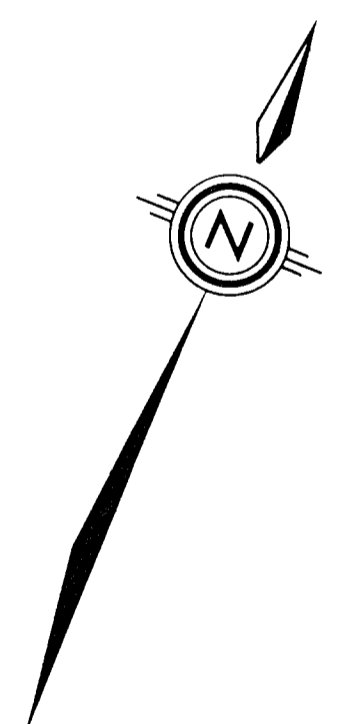
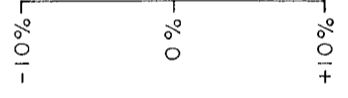
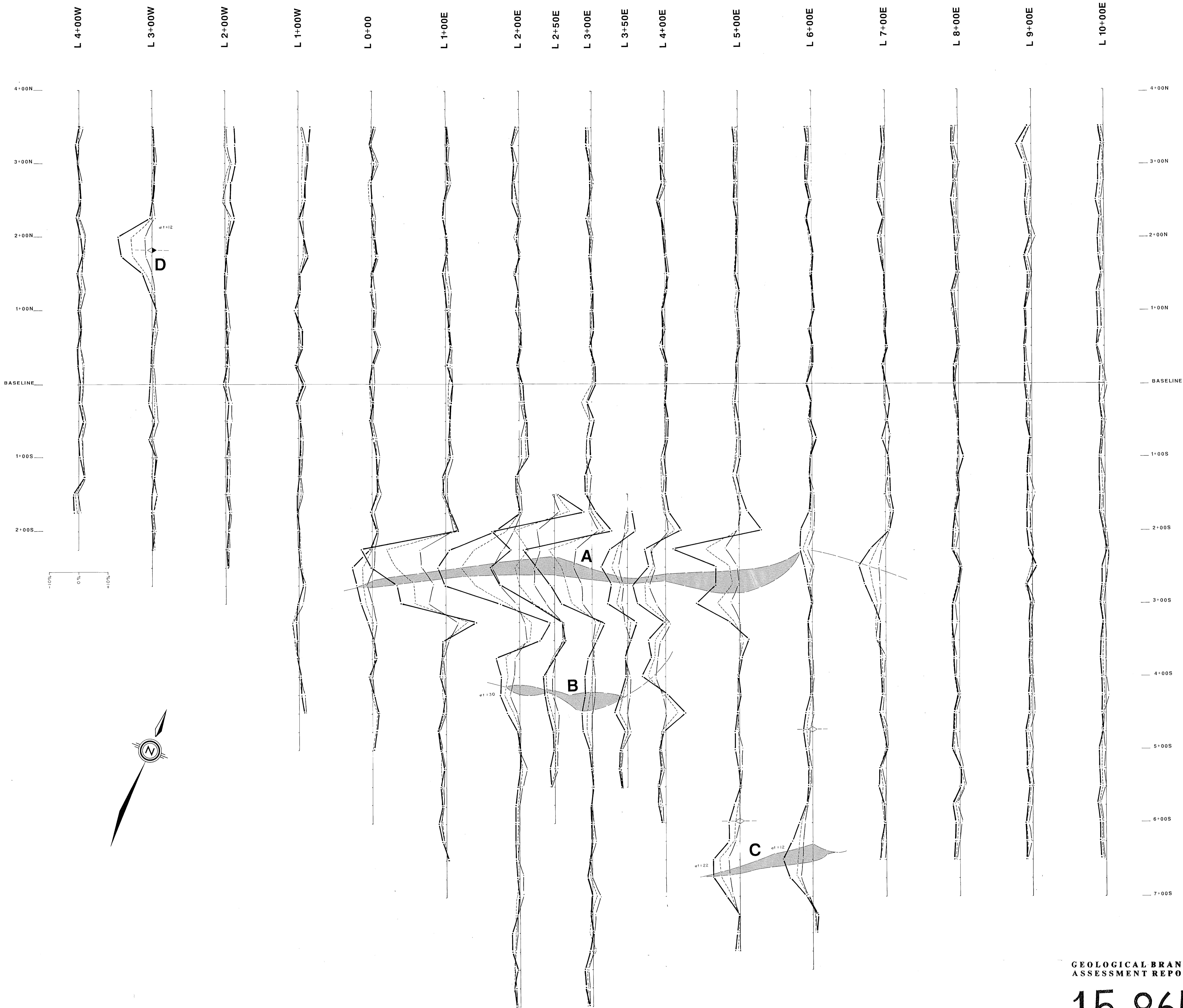
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,865**

GALLANT GOLD MINES LTD.  
GEORGIA PROPERTY; ROSSLAND B.C.

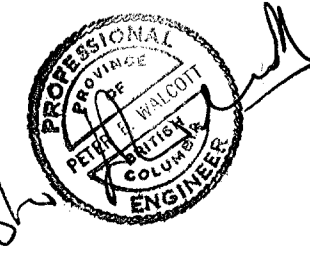
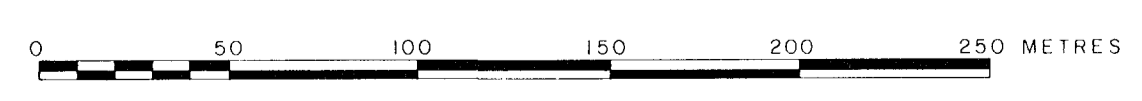
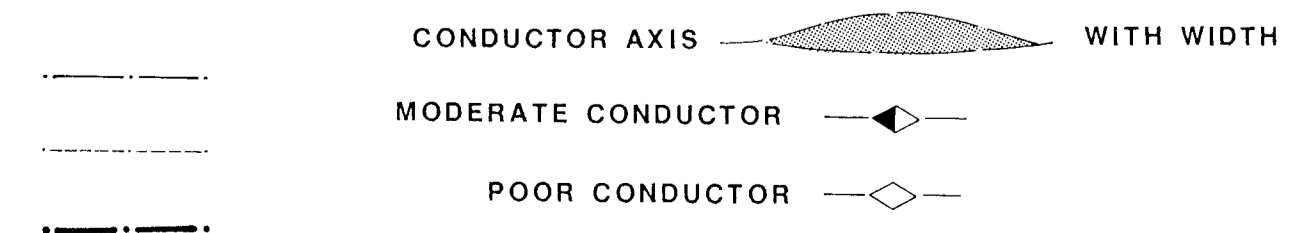
**MAGNETOMETER SURVEY  
PROFILES OF TOTAL FIELD INTENSITY  
(GAMMAS)**  
SCALE 1:2000

MAP NO. W-390-1 PETER E. WALCOTT & ASSOC. LTD.  
GRID #1 MAY 1986



**LEGEND**

- RATIO 337/112
- RATIO 1012/112
- RATIO 3037/112

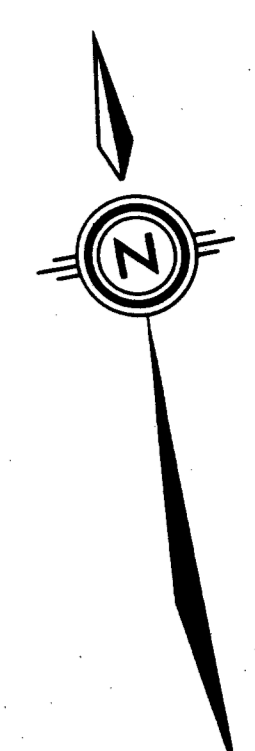


**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,865**

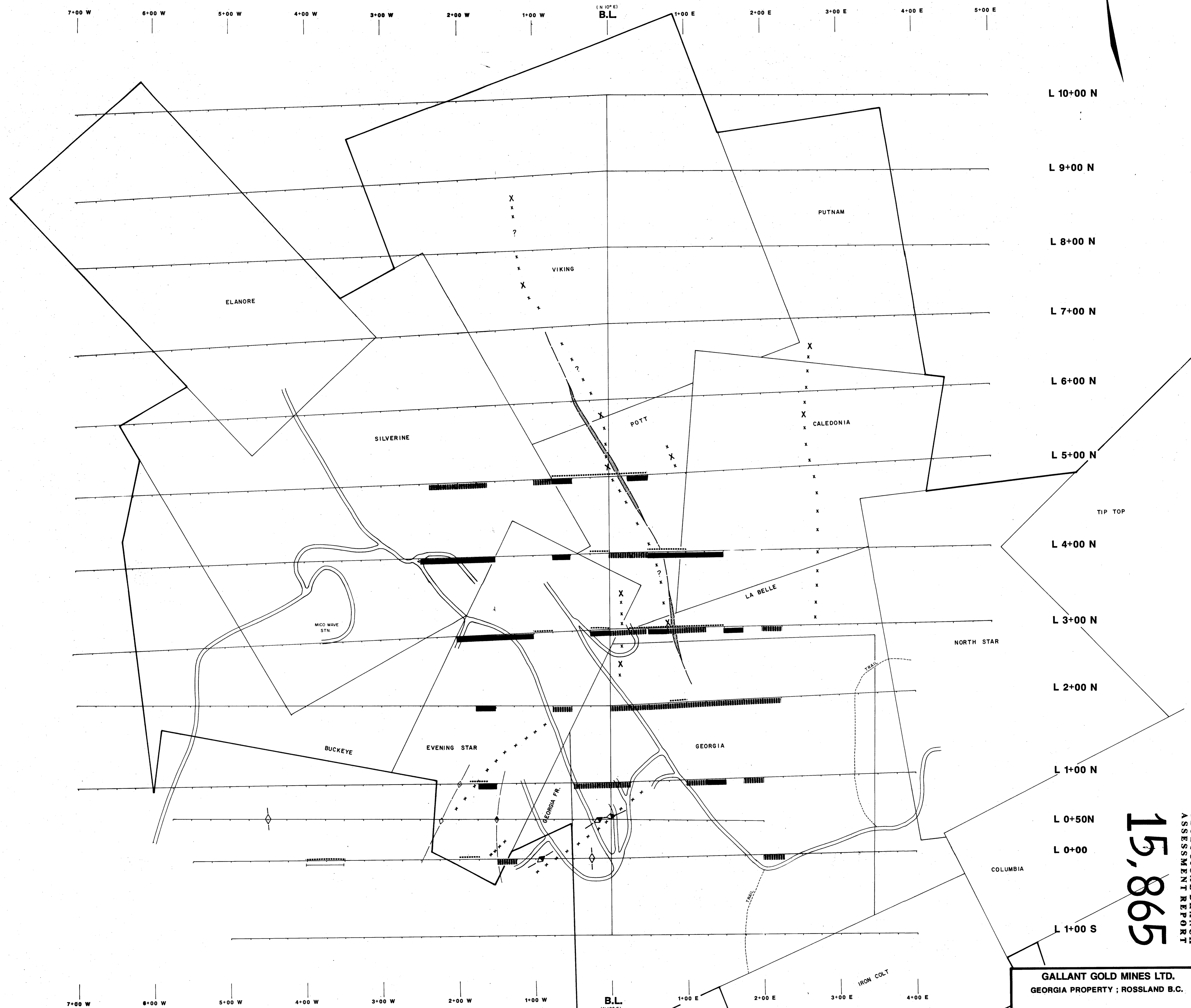
**GALLANT GOLD MINES LTD.  
GEORGIA PROPERTY ; ROSSLAND B.C.**

S.E. 88 GENIE SYSTEM  
**ELECTROMAGNETIC PROFILES**  
"a" = 100 METRES  
SCALE 1 : 2000



7+00 W 6+00 W 5+00 W 4+00 W 3+00 W 2+00 W 1+00 W B.L. (N 10° E) 1+00 E 2+00 E 3+00 E 4+00 E 5+00 E

L 10+00 N  
L 9+00 N  
L 8+00 N  
L 7+00 N  
L 6+00 N  
L 5+00 N  
L 4+00 N  
L 3+00 N  
L 2+00 N  
L 1+00 N  
L 0+50N  
L 0+00  
L 1+00 S



7+00 W 6+00 W 5+00 W 4+00 W 3+00 W 2+00 W 1+00 W B.L. (N 10° E) 1+00 E 2+00 E 3+00 E 4+00 E

**I.P. LEGEND**  
..... RESISTIVITY LOW  
████████ ANOMALOUS ZONE  
▨▨▨▨ POSSIBLE ANOMALOUS ZONE

**E.M. LEGEND**  
CONDUCTOR AXIS WITH WIDTH  
MODERATE CONDUCTOR —◆—  
POOR CONDUCTOR —◇—  
POSSIBLE FLAT LYING CONDUCTOR ———

VLF CONDUCTOR AND AXIS EXTRAPOLATED FROM PREVIOUS SURVEY X X X

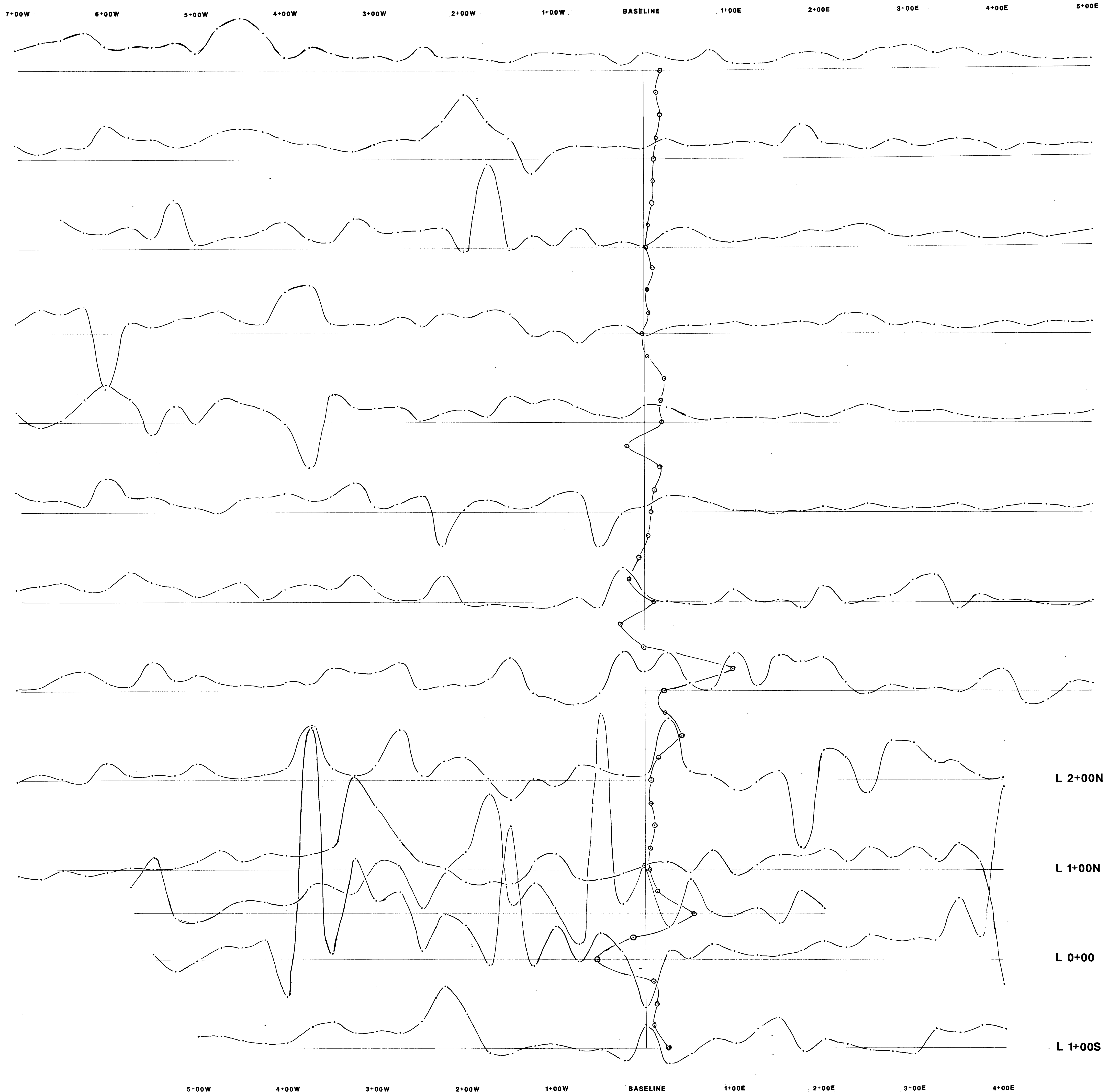
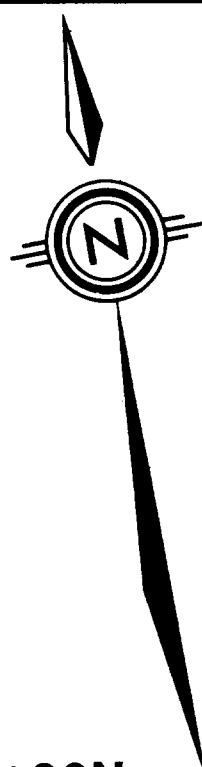
SCALE 1:2000  
0 50 100 150 Metres

**15,865**

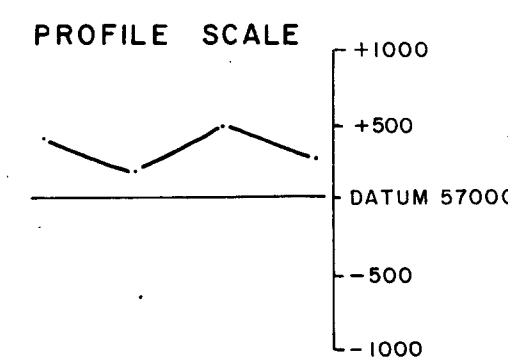
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

GALLANT GOLD MINES LTD.  
GEORGIA PROPERTY ; ROSSLAND B.C.  
GRID #2  
**COMPILATION MAP**  
MAP No. W-390-6 PETER E. WALCOTT & ASSOC. LTD.  
GRID #2 MAY/1988

*Handwritten signature*



5+00W 4+00W 3+00W 2+00W 1+00W BASELINE 1+00E 2+00E 3+00E 4+00E



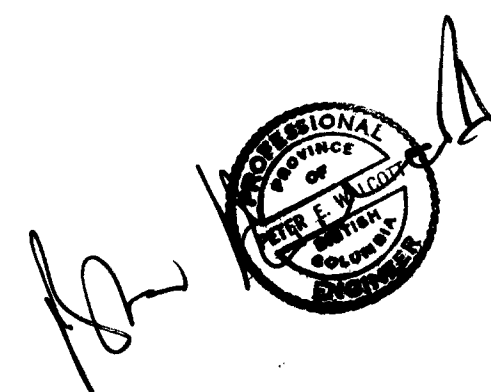
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

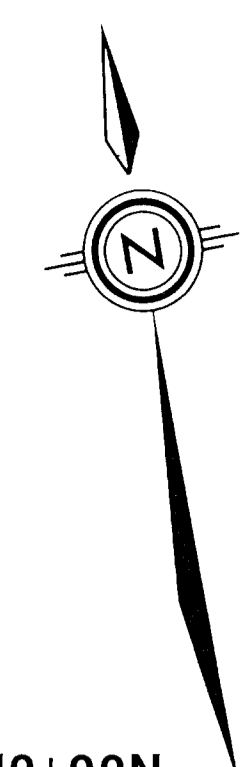
L 1+00S

**15,865**

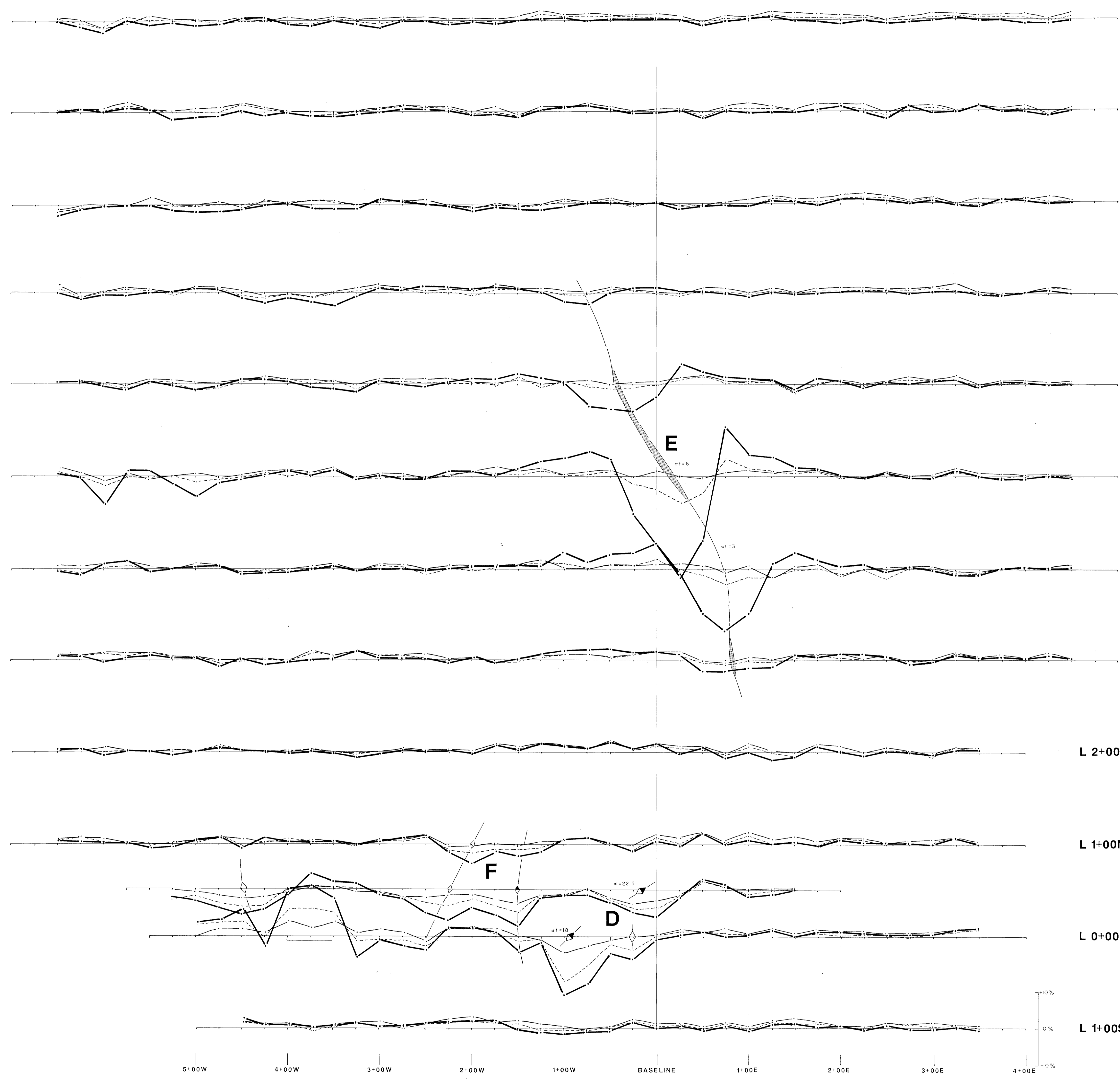
GALLANT GOLD MINES LTD.  
GEORGIA PROPERTY; ROSSLAND B.C.  
MAGNETOMETER SURVEY  
PROFILES OF TOTAL FIELD INTENSITY  
(GAMMAS)  
SCALE 1:2000

MAP NO. W-390-2 PETER E. WALCOTT & ASSOC. LTD.  
GRID #2 MAY 1986





7+00W 6+00W 5+00W 4+00W 3+00W 2+00W 1+00W BASELINE 1+00E 2+00E 3+00E 4+00E 5+00E

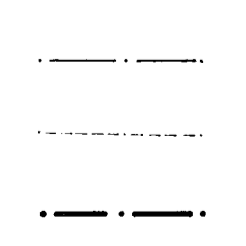


L 10+00N  
L 9+00N  
L 8+00N  
L 7+00N  
L 6+00N  
L 5+00N  
L 4+00N  
L 3+00N  
L 2+00N  
L 1+00N  
L 0+00  
L 1+00S

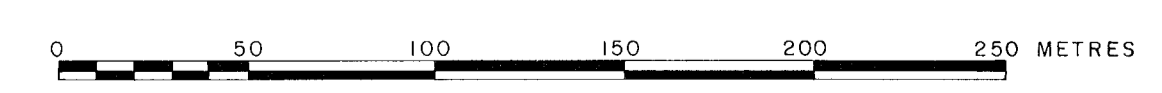
5+00W 4+00W 3+00W 2+00W 1+00W BASELINE 1+00E 2+00E 3+00E 4+00E

LEGEND

RATIO 337/112  
RATIO 1012/112  
RATIO 3037/112



CONDUCTOR AXIS WITH WIDTH  
MODERATE CONDUCTOR  
POOR CONDUCTOR



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

15,865

GALLANT GOLD MINES LTD.  
 GEORGIA PROPERTY ; ROSSLAND B.C.

S.E. 88 GENIE SYSTEM  
**ELECTROMAGNETIC PROFILES**  
 "a" = 100 METRES  
 SCALE 1 : 2000

MAP No. W-390-4 PETER E. WALCOTT & ASSOC. LTD.  
 GRID # 2 MAY/1986

