

ARIS SUMMARY SHEET

District Geologist, Kamloops

Off Confidential: 89.05.03

ASSESSMENT REPORT 17831

MINING DIVISION: Clinton

PROPERTY: Ann
LOCATION: LAT 51 57 59 LONG 121 18 18
UTM 10 5758438 616449
NTS 092P14W

CLAIM(S): Ann 1-2
OPERATOR(S): Hemingson Gold
AUTHOR(S): White, G.E.
REPORT YEAR: 1988, 29 Pages

COMMODITIES
SEARCHED FOR: Copper, Gold, Silver, Zinc

GEOLOGICAL
SUMMARY: The property lies on the edge of magnetic alkalic stocks and dykes. The eastern half of the property is underlain by the Takomkane Batholith while the western half is underlain by andesite and breccia flows.

WORK
DONE: Geochemical, Geophysical
EMGR 115.0 km; VLF
Map(s) - 2; Scale(s) - 1:5000
LINE 120.0 km
MAGG 115.0 km
Map(s) - 2; Scale(s) - 1:5000
SOIL 2200 sample(s) ; AU, AG, CU
Map(s) - 3; Scale(s) - 1:5000
INFILE: 092P 002, 092P 034, 092P 035, 092P 115

LOG NO: 1007

RD.

ACTION:

HEMINGSON GOLD INC.

FILE NO:

GEOCHEMICAL GEOPHYSICAL REPORT

ANN 1 AND 2 CLAIMS CARIBOO MINING DIVISION
LAC LA HACHE AREA, B.C., N.T.S. 92P/14W

Lat. 51° 58' N, Long. 121° 18' W

AUTHOR: GLEN E. WHITE P.Eng.
DATE OF WORK: November 5-29/87, Feb. 23-29/88
DATE OF REPORT: June 24, 1988

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES
Rec'd SEP 23 1988
SUBJECT _____
FILE _____
VANCOUVER, B.C.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

FILMED

17,831

TABLE OF CONTENTS

| | |
|---|---------|
| INTRODUCTION | 3 |
| PROPERTY | 3 |
| LOCATION AND ACCESS | 4 |
| SURVEY GRID | 4 |
| REGIONAL GEOLOGY | 4 |
| PROPERTY GEOLOGY | 5 |
| PREVIOUS WORK | 6 |
| GEOCHEMICAL SURVEY | 7 |
| MAGNETOMETER VLF ELECTROMAGNETIC SURVEY | 7 |
| DISCUSSION OF RESULTS | 9 |
| CONCLUSION | 14 |
| RECOMMENDATIONS | 15 |
| BIBLIOGRAPHY | 16 |
| STATEMENT OF QUALIFICATIONS | 17 |
| COST BREAKDOWN | 18 |
| INSTRUMENT SPECIFICATIONS | 19 - 20 |

LIST OF FIGURES

| | | |
|--------|----|--------------------------------|
| FIGURE | 1 | GENERAL CLAIMS AREA |
| FIGURE | 2 | REGIONAL GEOLOGY |
| FIGURE | 3 | AIRBORNE MAGNETIC MAP |
| FIGURE | 4 | TOTAL FIELD MAGNETIC INTENSITY |
| FIGURE | 5 | VLF EM PROFILES CUTLER |
| FIGURE | 6 | VLF EM PROFILES SEATTLE |
| FIGURE | 7 | GEOCHEMISTRY COPPER |
| FIGURE | 8 | GEOCHEMISTRY GOLD |
| FIGURE | 9 | GEOCHEMISTRY SILVER |
| FIGURE | 10 | INTERPRETATION MAP |

FIGURES 11 TO 16 ARE 25% MAP SIZES FOR REPORT ENCLOSURE

INTRODUCTION

During the fall and winter of 1987 and 1988 a program consisting of grid preparation, soil sampling, magnetometer and VLF electromagnetic surveys were conducted over the Ann claims in the Spout Lake area near Lac La Hache, B.C.

The surveys were conducted on behalf of Hemingson Gold Inc. by White Geophysical Inc. from November 5 to February 29 th. 1988.

The purpose of the work was to explore the general area of a large magnetic high which is associated with a hydrothermally altered zone containing auriferous chalcopyrite mineralization on the adjoining Miracle claims to the south. Selected prospectors samples had returned assays up to 1.5 oz/ton gold on the Miracle claims.

PROPERTY

| CLAIM | #UNITS | RECORD # | RECORD DATE |
|-------|--------|----------|-------------|
| Ann 1 | 20 | 2184 | May 4, 1987 |
| Ann 2 | 20 | 2185 | May 4, 1987 |

The mineral claims were recorded in the Clinton Mining Division at the village of Clinton, B.C. and are in good standing through to 1990.

LOCATION AND ACCESS

The Ann claims are located some 20 kilometers north-northeasterly from the village of Lac La Hache, in the Cariboo region of British Columbia. A secondary gravel road crosses the claim line between the Ann 1 and 2 claims, a road distance of some 30 kilometers.

Access is via the Spout Lake and Murphy Lake road, to Rail Lake where the secondary logging road turns eastward. The Spout Lake Murphy Lake road is kept open all though the year.

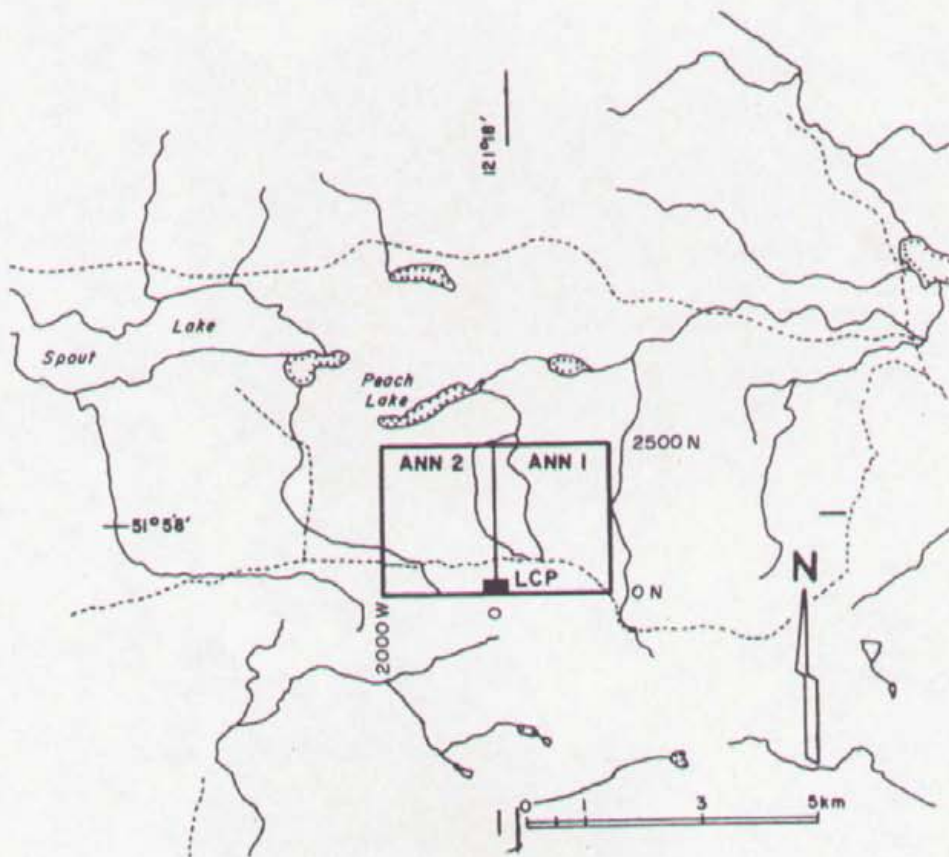
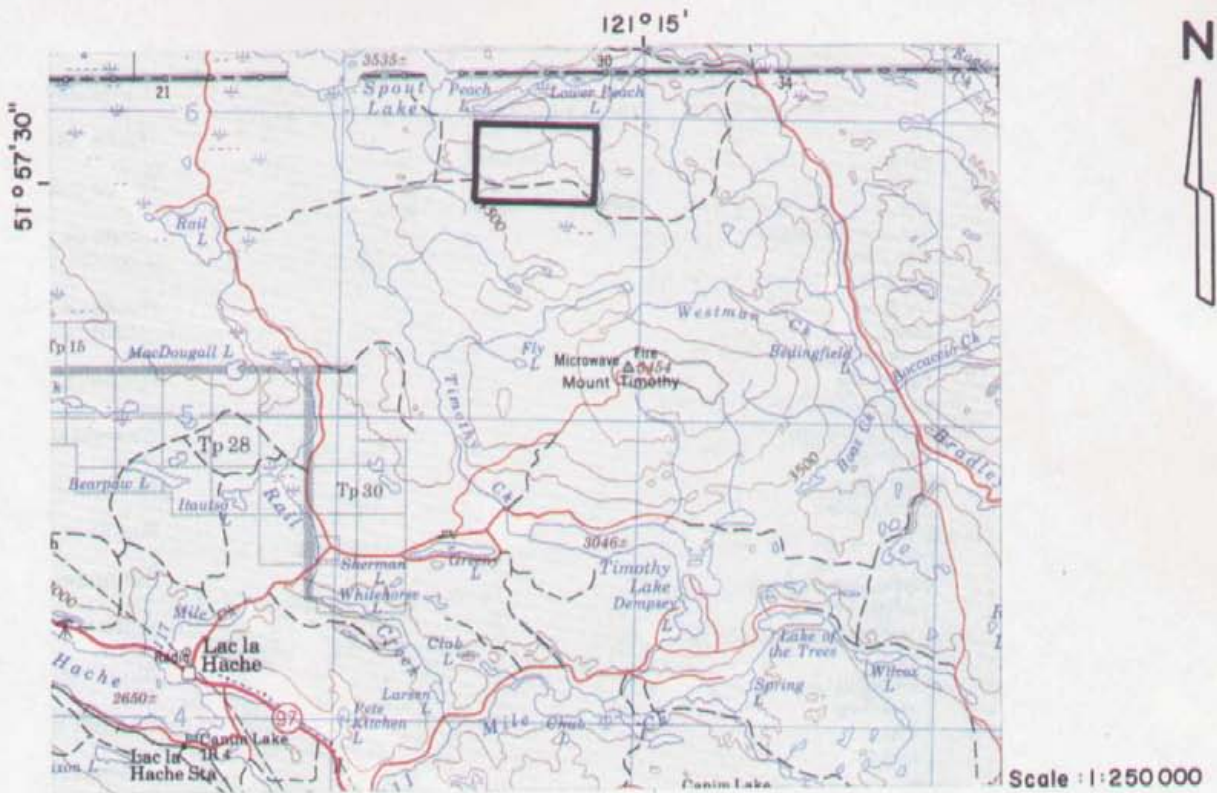
Lat. $51^{\circ} 58' N$, Long. $121^{\circ} 18'' W$, N.T.S 92 P/14W.

SURVEY GRID

The survey grid consists of lines turned off at right angles from an east to west baseline which was placed along line 1000 N midway through the property length. The lines were spaced 100 meters apart and numbered at 50 meter intervals. Detail lines spaced 50 meters apart were established in several areas where previous operators had detected gold geochemical soil values. Some 120 line kilometers of grid was established.

REGIONAL GEOLOGY

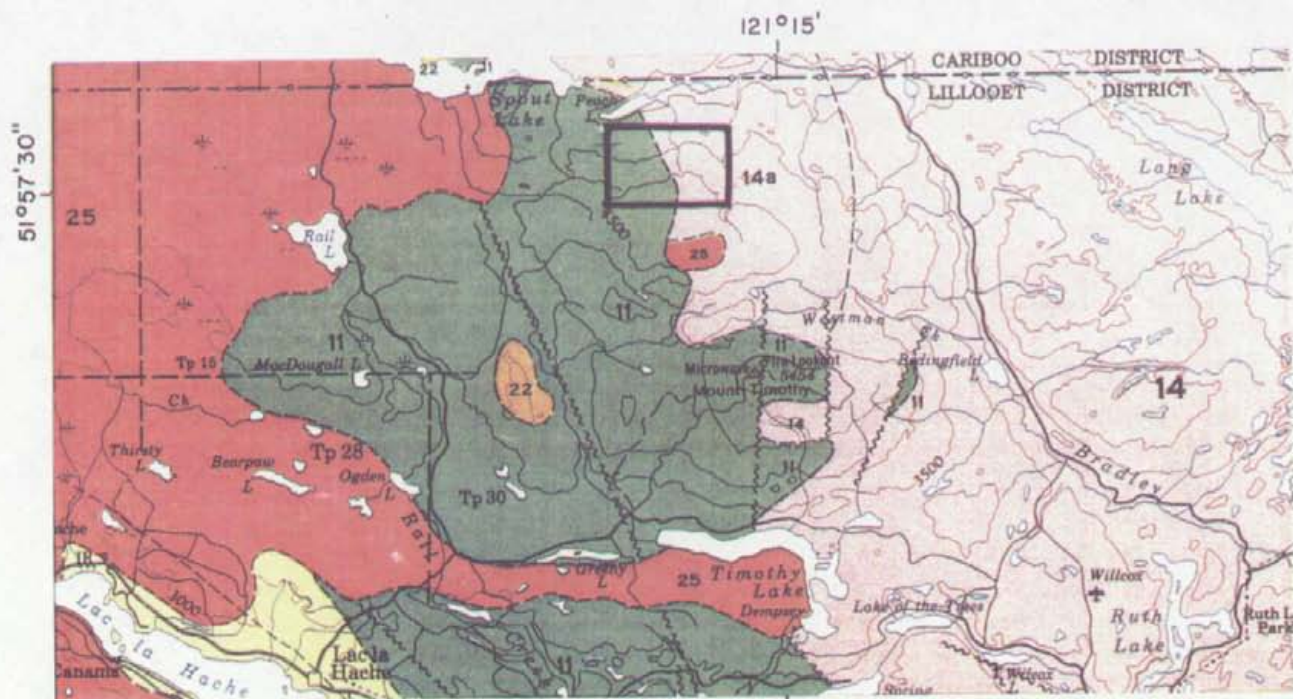
The regional geology for the area is shown on Figure 2 as depicted by G.S.C. Map 1278A, Bonaparte Lake Map Area, 1972. The Ann claims are situated near the eastern edge of the



HEMINGSON GOLD INC.
ANN 1 & 2 CLAIMS
GENERAL CLAIMS AREA

N.T.S. 92P/14W

FIG. 1



LEGEND

- TRIASIC OR JURASSIC**
SHASTIAN OR HETTANIAN
 14a THUYA AND TRADOMIXITE BATHOLITES AND SIMILAR GRANITIC ROCKS.
 Hornblende-gabbro quartz diorite and gabbroquartz, minor hornblende diorite,
 and quartz gabbro, hornblende, feldspar and amphibolite. Top: Kootenai
 melange and gneissology.
- MESOZOIC**
- TRIASSIC**
KARNIAN AND NORIAN
 11 MIDDLE GROUP
 Argill. sandstone flows and basalt, with argillite, greywacke, grey limestone,
 etc. Includes minor 3 and 10.

- Rock outcrop
- Geological boundary (approximate)
- Bedding, tops unknown (inclined, vertical)
- Bedding (as shown on cross-sections)
- Schistosity, cleavage (horizontal, inclined, vertical)
- Foliation (as shown on cross-sections)
- Lamination (horizontal, inclined)
- Fault (approximate, assumed)
- Thrust fault (approximate, assumed)
- Anticline (defined, approximate)
- Syncline (defined, approximate)
- Fossil locality
- Mineral occurrence

MINERALS

| | | | |
|-----------|------|--------------|-----|
| Coal | Coal | Molybdenite | mo |
| Copper | Cu | Silver | Ag |
| Diatomite | diat | Volcanic ash | ash |
| Gold | Au | Zinc | Zn |
| Lead | Pb | | |

Geology by R.B. Campbell and H.W. Tupper 1984, 1985

To accompany Memoir 363 by R.B. Campbell and H.W. Tupper

Geological cartography by the Geological Survey of Canada

Base-map compiled by the Department of Lands, Forests and Water Resources,
 British Columbia, 1986. Produced by the Survey and Mapping Branch, 1989

Magnetic declination 1970 varies from 23° 23' easterly at centre of east edge to
 23° 30' easterly at centre of west edge. Mean annual change decreasing 3.3'

HEMINGSON GOLD INC.
ANN 1 & 2 CLAIMS
REGIONAL GEOLOGY

N.T.S. 92P/14W

Scale 1:250000

FIG. 2

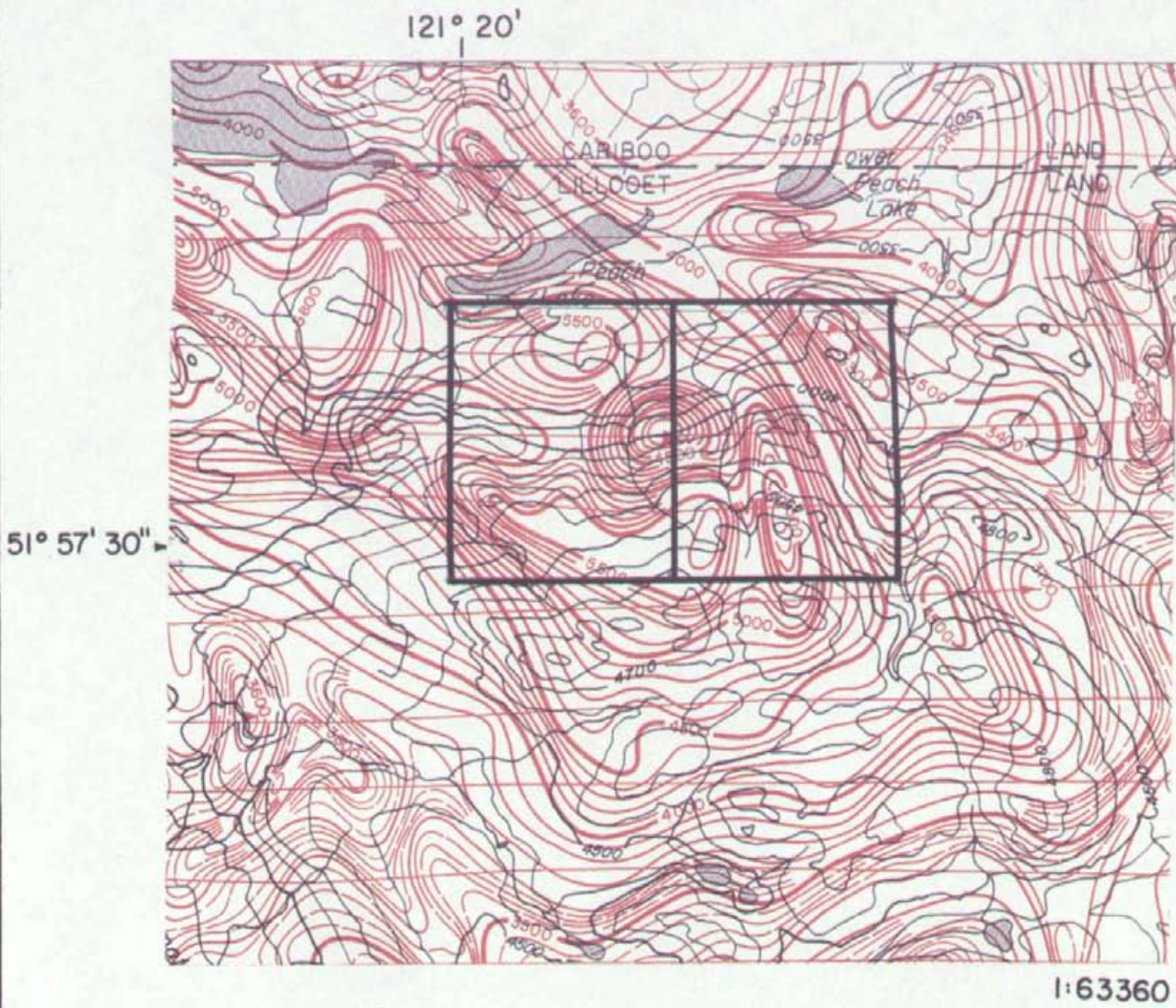
Intermontane belt, a northwesterly trending assemblage of Upper Triassic-Lower Jurassic volcanic rocks. This belt of rocks comprises units of the Nicola, Takla and Stuhini Groups and is often referred to as the Quesnel Trough.

Nicola volcanic rocks of Triassic age underlay the property. They have been mapped as augite, andesite flows and breccia; tuff, argillite, greywacke and grey limestone. The Takomkane granitic batholith of Triassic-Jurassic age lies to the east of this sequence of rocks. An extensive cover of Upper Tertiary (Miocene-Pliocene) basaltic lavas of the plateau type lie to the west.

The eastern edge of the Intermontane belt contains a linear band of alkalic stocks composed of diorite, monzonite and syenite. These stocks intrude the volcanic strata and commonly alter the country rocks. They are hosts for several alkalic suite porphyry mineral deposits such as Copper Mountain, Afton, Cariboo-Bell and the recently discovered QR gold Mine. The QR discovery is reported to contain some 6500 kilograms of gold reserves.

PROPERTY GEOLOGY

The property lies on the nose of a major magnetic high as shown on Figure 3. This feature forms an arc like pattern which curves eastward and is some 10 miles in length. Geological investigation has shown this anomaly to be caused by magnetite rich alkalic stocks and dikes. Initial investiga-



HEMINGSON GOLD INC.
ANN 1 & 2 CLAIMS
AIRBORNE MAGNETIC INTENSITY
N.T.S. 92P/14W

FIG.3

tions in the area began in the late 60's when regional soil sampling located extensive evidence of copper mineralization.

Two principle properties were located at that time; the WC claims around Spout Lake, and the Tim claims which adjoin the Ann to the east. Craigmont Mines Ltd. diamond drilled on the WC claims and located a zone containing 20 feet of 2.47% copper, no assays were done for precious metals. The Tim claims were tested by Stallion Resources Ltd. in the fall of 1983, a zone of 10.7 meters assayed 4.6% copper, 1.7 oz/ton silver and a 1.5m section with 0.119 oz/ton gold.

The Miracle showing is located on the strong magnetic high in the adjoining Miracle claims to the south. It initially occurred as a minor exposure of heavy malachite stain along a new logging landing. Minor scraping exposed primary chalcopyrite in highly propylitized andesites. The author visited the property at that time and recommended further work. G W R Resources Inc. optioned the claims and completed a more extensive trenching program. Prospectors samples yielded over 1.5 oz/ton gold.

PREVIOUS WORK

Exploration in the region began in 1966 with a reconnaissance geochemical soil sampling program conducted by Coranex Limited under the direction of J.R. Woodcock, followed by Amax Asarco, Craigmont and others. BP-Selco conducted a broad scale soil sampling program in the early 80's and located

several strong copper-gold geochemical anomalies that were not explored. Several of their geochemical anomalies were located on the Ann claims, though no follow up work was recorded.

The 1967 work reported on by R. H. Janes P. Eng., describes some trenching work south of Peach Lake which located some 40 feet of .33% copper and .02 to .06 oz/ton gold. Minor induced polarization work located several good anomalies but no record can be found of further follow-up.

GEOCHEMISTRY

The soil samples were collected from the "B" horizon with the aid of a lightweight mattock and were sent to a Professional geochemical Lab for analysis. In the laboratory the samples were oven dried at approximately 60 degrees centigrade. The dried samples were ring pulverized to approximately -100 mesh and were analyzed for the elements silver, gold, and copper, by atomic absorption after digestion with hot concentrated nitric and hydrochloric acids. Some 2200 samples were obtained and analyzed.

MAGNETOMETER VLF ELECTROMAGNETIC SURVEYS

The VLF EM and Magnetic surveys were conducted simultaneously utilizing the Omni-Plus VLF/MAGNETOMETER System built by EDA Instruments Inc. This instrument contains several microprocessors and associated circuitry for monitoring, pro-

cessing and storing data. The VLF EM portion of this instrument utilizes the VLF-electromagnetic fields generated by submarine navigation and communication stations which operate in the 15-30 khz frequency band.

The field generated by these stations is primarily horizontal. The instrument indicates the presence of a secondary field due to a conductor as a distortion in this horizontal field.

The distortion of this field produces an anomaly in the tilt angle, quadrature and total field intensity readings. VLF EM data is corrected for facing direction during data processing and is edited for spurious noise spikes.

For maximum coupling, a transmitter station located in the same direction as the geological strike of interest should be selected, since the direction of the horizontal electromagnetic field is perpendicular to the direction from the transmitting station. The advantage of the Omni-Plus is that several stations can be recorded simultaneously since the instrument automatically orientates to the individual station direction.

The magnetics portion of this survey was conducted using the magnetometer system built into the Omni-Plus in conjunction with an EDA base magnetometer. The quartz clocks in the two instruments are synchronized in the morning. At the end of each survey day the field unit's readings are corrected using an RS232C interface and the built in microprocessors.

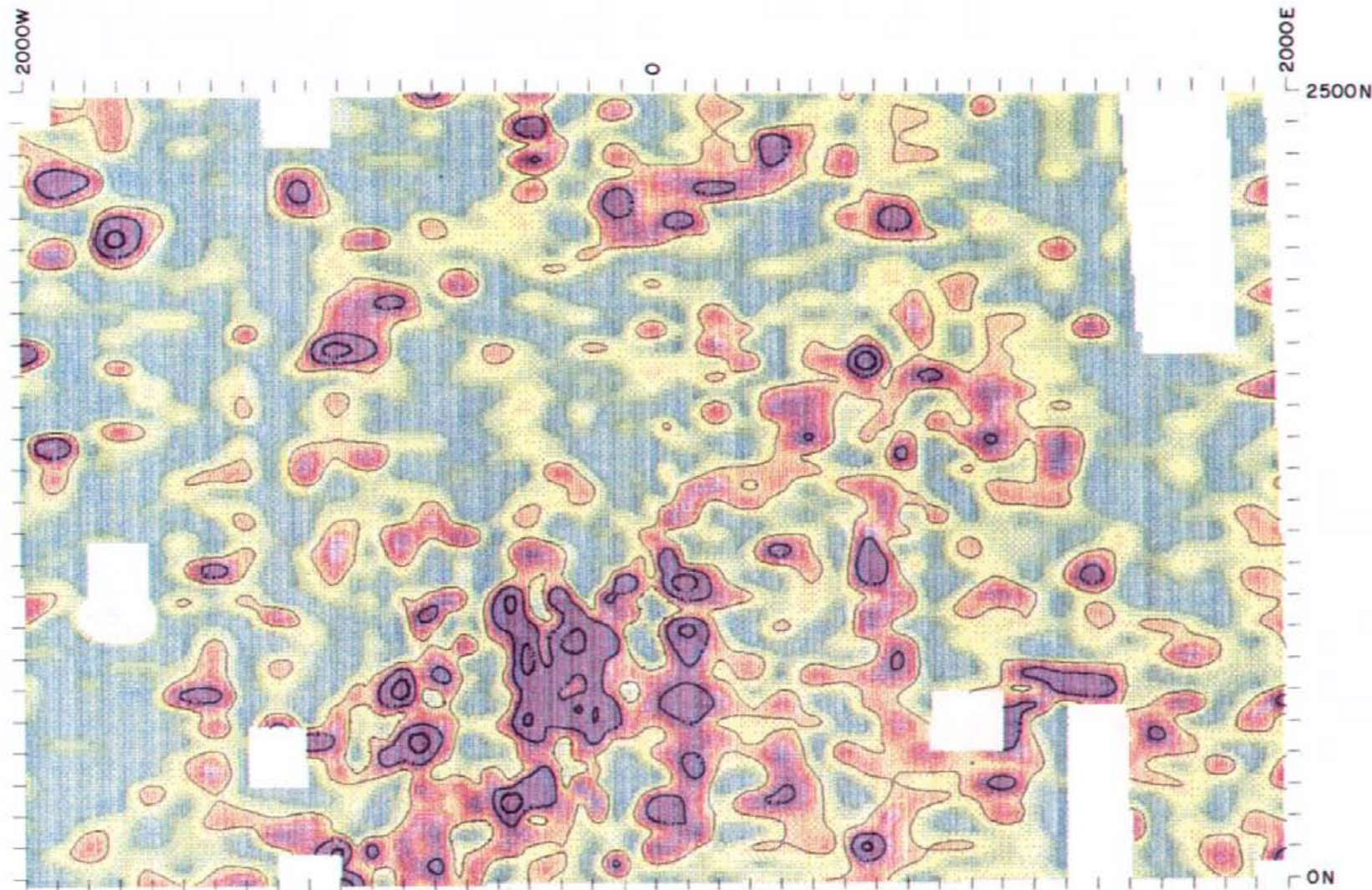
Following the diurnal correction procedure, data is dumped via the RS232C interface to a microprocessor which writes data to the disk for storage and later processing. The solid state memory of this instrument and the microprocessor give rapid data gathering at some 5 - 10 kilometers per day at 12.5m station intervals. Seattle, Washington and Cutler Maine were used for the VLF EM portion of the survey. Some 115 kilometers were surveyed.

DISCUSSION OF RESULTS

Figures 4 to 9 depict the survey data. Figure 10 is a compilation map of the results. Reduced scale maps have been included in the report for facile reviewing.

GEOPHYSICS

The total field magnetic intensity data shows considerable variation, Figure 4, from a low of 57400 gammas to a high of over 64000 gammas. The dominant feature rather than the magnetic highs is a circular magnetic low in the north central area of the grid. The detail magnetic contours tend to suggest a pattern of magnetic lows radiating from this anomaly. Equally low magnetic values occur along the eastern flank of the property. The regional data, Figure 3, shows a steep magnetic gradient which strongly suggests a major structure and change in lithology. A probable rock change to diorite is interpreted since the Takomkane Batholith lies to the east.

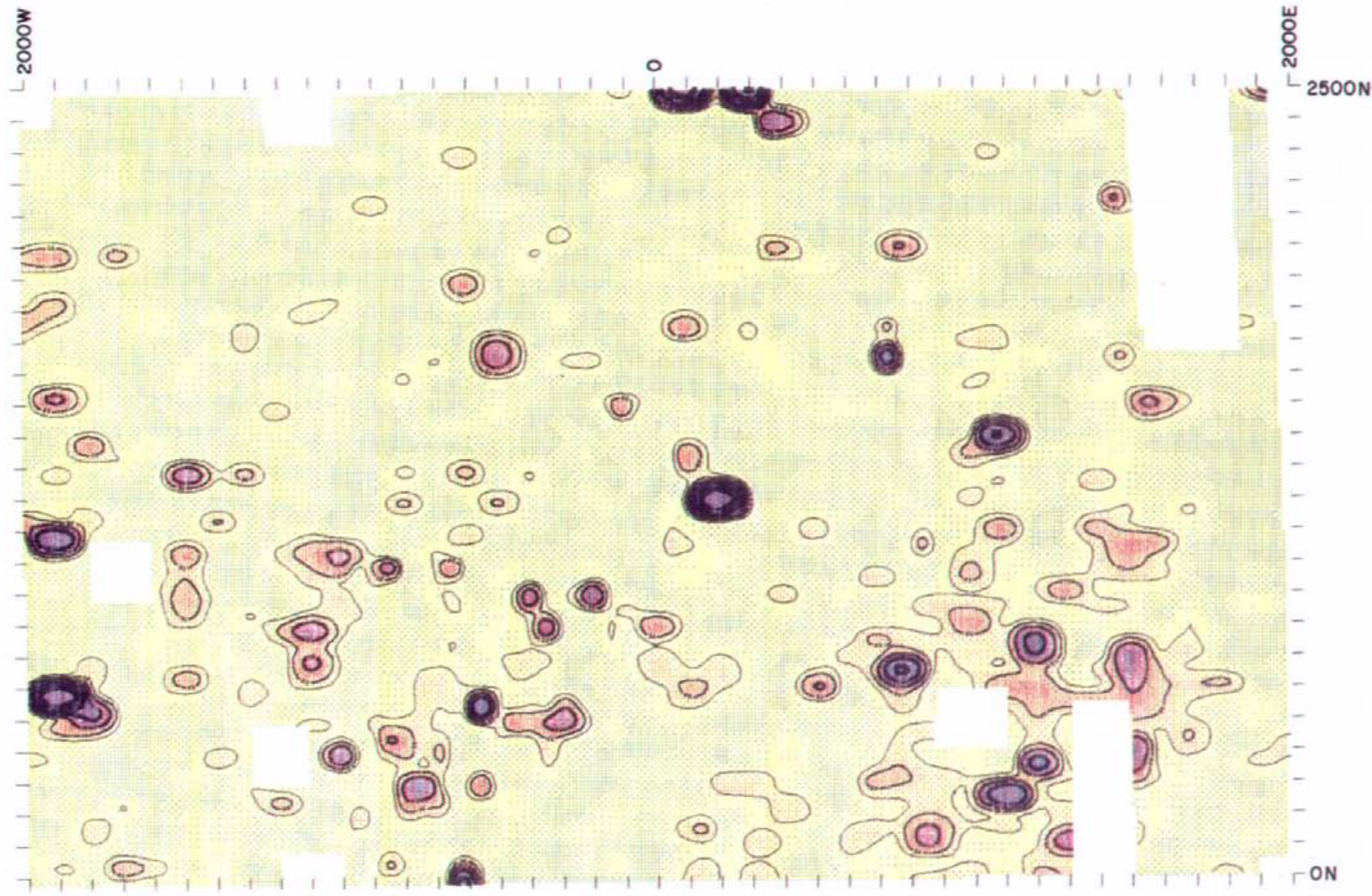


Contour interval: 0.6, 1.2, 2.4 ppm

0 200 400 600m

HEMINGSON GOLD INC.
ANN 1 & 2 CLAIMS
GEOCHEMISTRY - SILVER
N.T.S. 92P/14W

FIG. 12



Contour interval : 15,30,60,120,240,480,960ppb

HEMINGSON GOLD INC.
ANN 1 & 2 CLAIMS
GEOCHEMISTRY - GOLD
N.T.S. 92P/14W

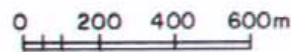
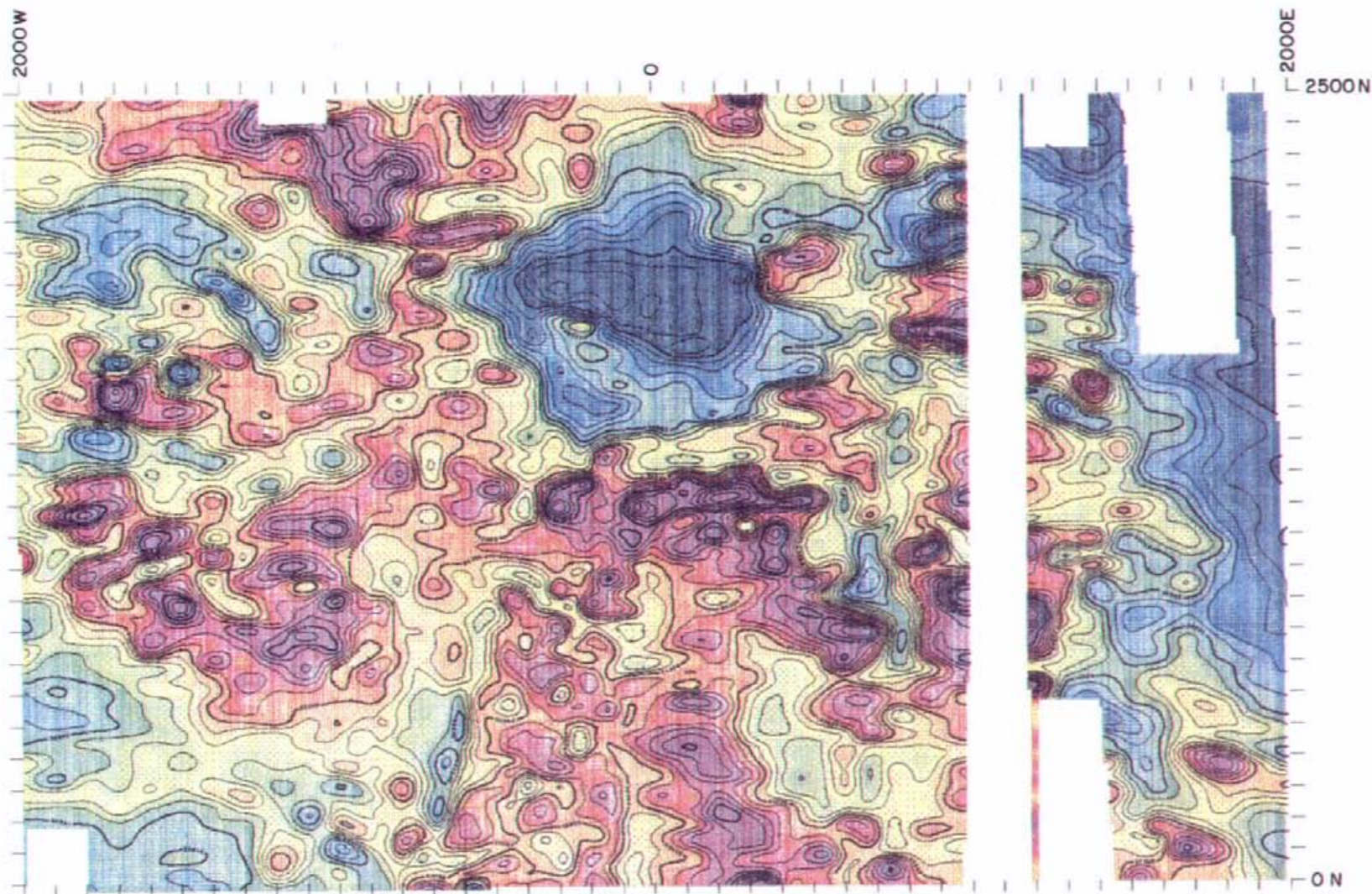


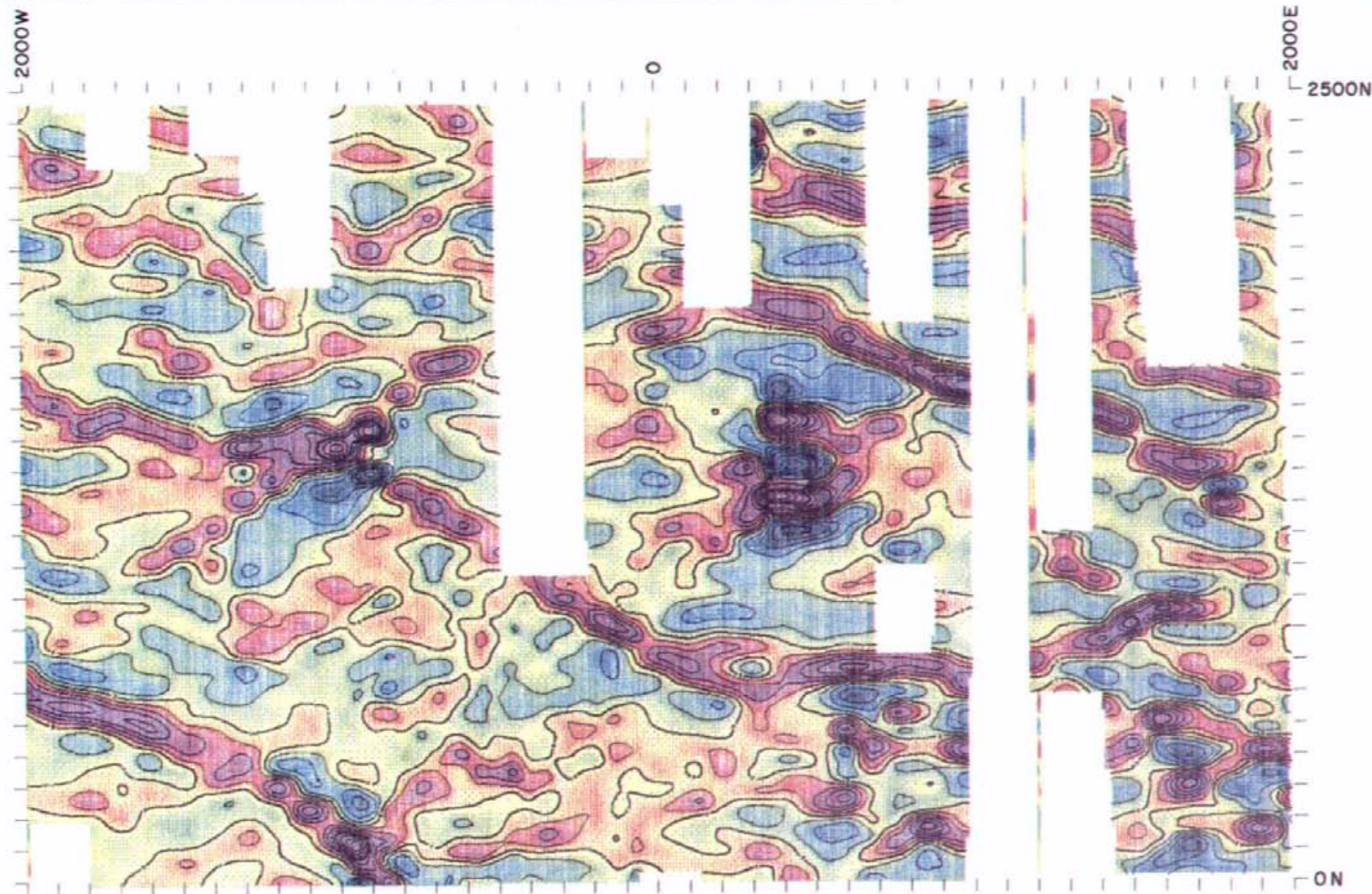
FIG. 13



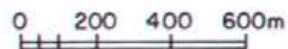
Contour interval : 200 nT

HEMINGSON GOLD INC.
ANN 1 & 2 CLAIMS
TOTAL FIELD MAGNETIC INTENSITY
N.T.S. 92P/14W

0 200 400 600m

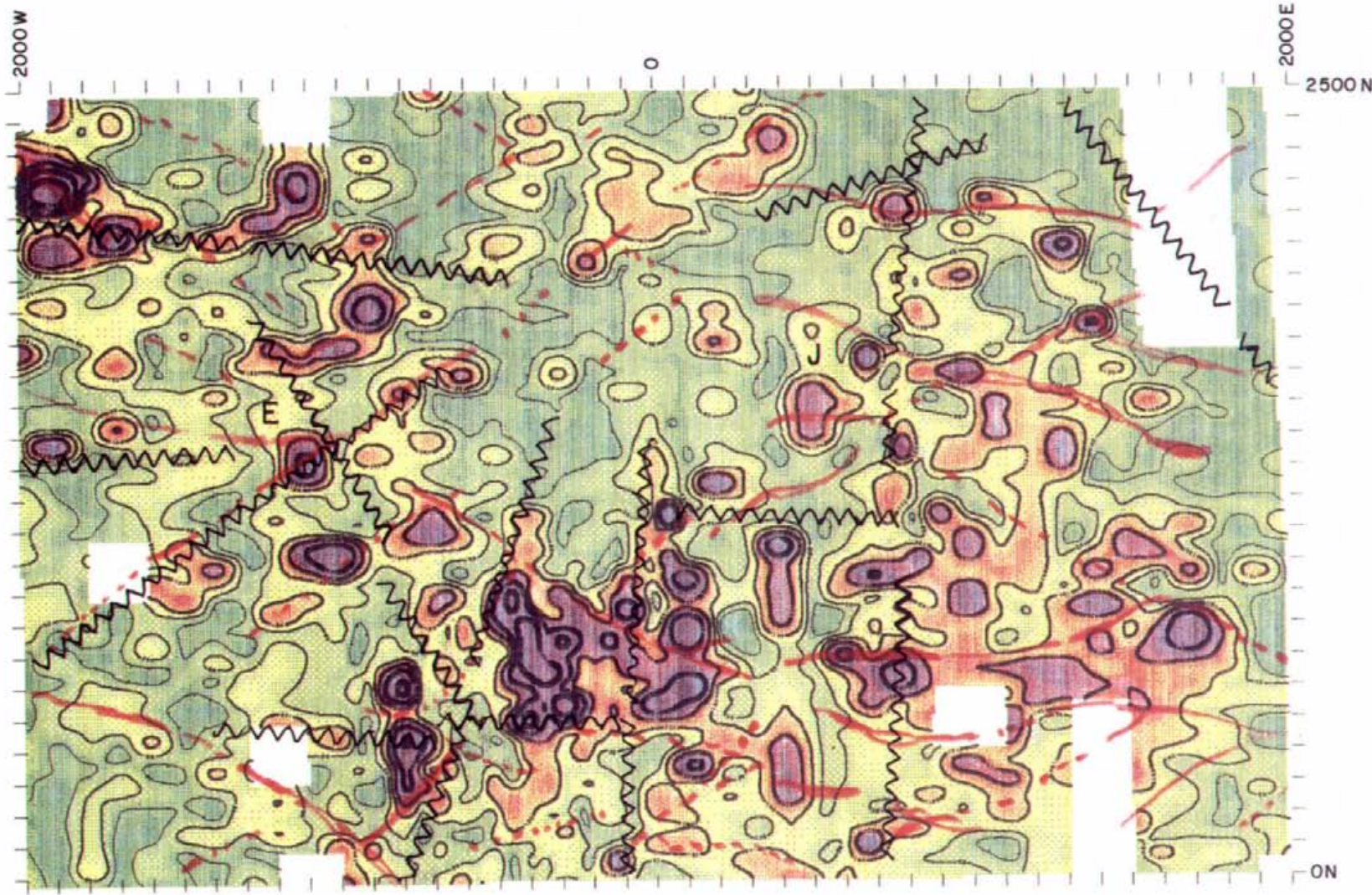


Contour interval = 10% x 10



HEMINGSON GOLD INC.
ANN 1 & 2 CLAIMS
CUTLER VLF - EM - FILTERED
N.T.S. 92P/14W

FIG. 15



Contour interval : 40, 80, 160, 320, 640, 1280, 2560ppm

HEMINGSON GOLD INC.
ANN 1 & 2 CLAIMS
GEOCHEMISTRY - COPPER
N.T.S. 92P/14W

VLF - EM CONDUCTORS

FAULTS

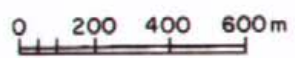
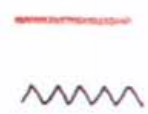


FIG. 16

The radial magnetic lows have been interpreted as felsic dikes whereas the magnetic highs are likely caused by augite flows, which on the Miracle claims to the south were highly magnetic. The disruption in the magnetic contours in a north south direction are part of the radial pattern and may be zones of weakness that have been occupied by later intrusive dikes.

A pronounced east west fault occurs between areas of interest A and E; this linear is mirrored 600 meters to the south between A and C. A second dominant bias to the magnetic contours are the northwest to northnorthwest breaks which parallel shear zones mapped in the Miracle trench.

The strong magnetic highs represent primary magnetite in the rock of some 10 to 20% by volume. Primary magnetite has been noted in association with pinkish felsic dikes containing chalcopyrite and bornite. The highly magnetized augite volcanics show metamorphism with blebs of epidote, which in some cases contain pyrite and chalcopyrite.

The VLF EM data, Figures 6, 7 and 15 depict some definite northwest conductors orientated near 320 degrees. A mylonite zone was mapped in the trench on the Miracle claims with this attitude. Map 15, on which the filtered inphase and quadrature responses have been combined, gives a very graphic presentation of the conductor trends. Both the northwest and northeast fault zones are clearly depicted. It is also possible that the conductors are following intervolcanic sedimentary units which have been preferentially sheared.

The strength of the VLF EM response is of sufficient magnitude in areas A, B, E and possibly D that semimassive to massive sulphide mineralization could be present. Anomaly J occurs at the intersection of two major trends and should be investigated in detail for that reason alone.

GEOCHEMISTRY

The overburden in the survey is largely of glacial origin, and thus is variable over the grid in both depth and physical characteristics. For the most part the soil has a high clay content and contains both angular and rounded rock fragments. Both sorted sand and gravel can occur which further impedes the migration of the metal ions. Typical of an alkalic area the increase in calcium lowers the pH of the soil and can cause the anomalies to appear spotty.

This description is appropriate for this property. With a background of some 40 ppm copper, high values appear as anomalous clusters. Some 2% of the values of copper are over 800 ppm and 1% over 1000 ppm. The highest value was 6129 ppm.

Silver gave very low order anomalous values, with a contour threshold of .3 ppm Figure 12, the highest assay was 2.4 ppm.

Gold was definitely anomalous with 3 values reading over 1000 ppb and a further 8 giving over 200. The highest value was 1300 ppb with a threshold contour level of 20 ppb. The highest values are supported by secondary readings on adjacent lines and stations for excellent anomaly credibility.

DATA CORRELATION

Copper and Silver show a close relationship as can be observed by the similarity of the contour patterns, Figures 11 and 12. Gold shows a close spatial relationship but does exhibit several independent anomalies, as at 1900W 600N. This is a particularly interesting area since it shows direct correlation to a strong northwest trending VLF EM conductor. See area of interest D, Figure 10.

Figure 10 outlines 11 areas of interest A to K. It is readily apparent that the copper values are closely associated with the northwesterly trending VLF EM conductors and magnetic linears. Areas A and B are also dissected by north-south and east-west breaks. Two of the radial lows cut area A whereas area B is enveloped between two parallel east-west conductors. The geochemical patterns appear to be offset to the southwest slightly from the conductors which would suggest that the glacier movement was southwest.

Good geochemical to conductor correlation is exhibited by anomalies F, G, I and J. F has two values of 800 ppm copper situate on a small conductor, whereas G contains the high copper value of 6129 on a good conductor; weakly anomalous golds of 10 ppb are present while the former has a value of 19 ppb. Area I has structure and a major conductor, with copper values up to 914 ppm and gold 280 ppb; J has weaker values but is on a strong northeast conductive radial which is intersected by an east-west conductor.

Area of interest C occurs as a strong copper geochemical anomaly with 5 values over 1000 ppm, the highest is 2074 ppm. Anomalous gold assays yield a high of 159 ppb. Several magnetic linears intersect in this region. D is a two line gold anomaly, 100 meters apart with values of 1210 and 199 ppb. The underlying VLF EM anomaly is well defined and can be traced on to the Miracle claims where it is a dominant conductor that has been interpreted as structure associated with interesting quartz carbonate alteration.

Zone E has the highest gold value of 1300 ppb; it is situated on a strong east-west magnetic ridge with a value of 826 ppm copper along the flank of one of the strongest VLF EM anomalies. A second strong gold anomaly is area H with 1160 ppb, however little can be said except that it also is an area of moderately anomalous copper results. A second value of 780 ppb occurs two lines west on the property boundary which also needs verification.

The crew noted old trenching in area K. This area has up to 1191 ppm copper with gold up to 128 ppb, this is likely the old trenching with 40 feet of .33% copper and up to .06 oz/ton gold across a smaller width.

The survey area contains a number of singular gold and copper anomalies which when routine geological mapping is undertaken should be further sampled.

CONCLUSIONS

The fall and winter program of 1987/88 successfully delineated a number of combined geophysical geochemical target areas for further investigation. These areas have been designated A to K.

The claims are underlain by Nicola volcanics and sediments which have been intruded by a series of alkalic stocks, dikes and sills. The country rock has been sheared and faulted by a dominant pattern of northwest structures near 320 degrees, and subdominant features in northeast and east-west directions. A circular magnetic low lies in the central north portion of the grid from which linear magnetic lows radiate. This feature has been tentatively interpreted as a volcanic vent with radiating structure and felsic dikes.

The intense geochemical anomalies of up to 1300 ppb gold and 6129 ppm copper each in different areas suggests that the structural fracturing and intrusive activity in the volcanic package may have lead to extensive hydrothermal alteration and mineral deposition.

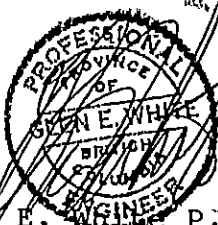
The close association of magnetic lows, VLF EM conductors and high geochemical values is strongly suggestive of hydrothermal activity and mineral deposition along structural conduits. The presence of argillic alteration and propylitization on the adjoining Miracle claims, and high gold values in clay rich detritus makes the presence of an epithermal gold system a real possibility.

RECOMMENDATIONS

The survey work completed to date forms an excellent base upon which detailed geological mapping and further sampling can be commenced. It is recommended that the areas of interest designated A to K be examined by a multiple spacing induced polarization survey to map chargeability and apparent resistivity contrasts.

A limited amount of deep penetrating pulse electromagnetometer work is advisable to test the VLF EM anomalies, in particularly in area B, for massive sulphide mineralization at depth. The Tim claims lie to the southeast and contain a 10 meter intersection of over 4% copper, which by all normal geophysical standards should be conductive.

RESPECTIVELY SUBMITTED,


Glen E. White P.Eng.

The seal is circular with the text "PROFESSIONAL ENGINEER" around the top and "BRITISH COLUMBIA" around the bottom. In the center, it says "OF" and "GLEN E. WHITE". There are handwritten scribbles over the seal.

BIBLIOGRAPHY

Campbell R.B., Tipper H.W., G.S.C. Memoir 363, 1972,
Geology Of The Bonaparte Lake Map Area.

Gamble D. Guichon Explorco Limited, Geochemical Survey
Core Claims, Clinton Mining Division, August 1983.

Butler P., Diamond Drilling Report On The Tim 2 Claim
Stallion Resources Ltd., Clinton M.D., April 27/84.

Gamble A.P.D., Hoffman Dr. S.J., Assessment Report Soil
Geochemical Survey On The Core 8 -13 Claims, Selco Divi-
sion BP Resources Canada Limited, October, 1984.

Vollo N.B., DIAMOND DRILLING REPORT WC Claims, May 29/75

Janes R.H., P.Eng., A Report on the Geochemistry of the
Peach North & South Groups, Clinton Mining Division,
Coranex Limited, August 1967.

Fox P.E., Cameron R.S., Hoffman S.J., Geology and Soil
Geochemistry Of the Quesnel River Gold Deposit, British
Columbia, GEOEXPO/86, The Association of Exploration
Geochemists.

White, Glen E. P.Eng. G.W.R. RESOURCES INC.
Geological, Geochemical And Geophysical Report
Miracle 2, 3, 4 and 5 mineral claims,
Timothy Mt. Area, B.C., N.T.S. 92P 14/W,
October 7, 1987.

STATEMENT OF QUALIFICATIONS

I, Glen E. White, with a business address of 11751 Bridgeport Road, Richmond B.C. do hereby certify that:

- 1) I am a consulting geophysicist registered with the Association of Professional Engineers of British Columbia since 1977.
- 2) I am an Associate Member of the Society of Exploration Geophysicists.
- 3) I hold a B.Sc. degree (1966) in geology and geophysics from the University of British Columbia.
- 4) I have been practising my profession as a geophysicist-geologist for over 20 years.
- 5) I have practical geological geophysical experience in all the geological provinces of Canada and the southwestern United States.
- 6) I have based this report on a review of available Geological publications and exploration reports.
- 7) A letter of consent is required before this report can be used in whole or in part for publication or any filing statement or Statement of Material Facts.
- 8) This report is for exploration and assessment credits only since the author owns an unspecified amount of Hemingson Gold Inc. securities.



GLEN E. WHITE, B.Sc. P.Eng.,

COST BREAKDOWN

| <u>PERSONNEL</u> | <u>DATE</u> | <u>TOTAL</u> |
|------------------|---------------------|--------------|
| B. Robinson | November 6 - 11 | |
| G. Hemmingsley | November 5 - 22 | |
| L. Rodrique | November 5 - 19 | |
| P. Judson | November 6 - 19 | |
| F. Jiggins | November 6 - 19 | |
| L. Torherdan | November 6 - 14 | |
| | February 23 - 29/88 | |
| G. Hagguist | November 5 - 19 | |
| A. Kriberg | November 6 - 27 | |
| B. Robertson | November 5 - 29 | |

The grid preparation and surveying was conducted on a contract basis and includes vehicles snow mobiles and instruments as follows:

| | |
|--|-----------|
| Grid preparation 120km @ \$245/km | \$29,400 |
| Magnetometer survey 115km @ \$135/km | \$15,525 |
| Electromagnetometer survey 115km @ \$135/km | \$15,525 |
| Sample analysis 2200 @ \$10 | \$22,000 |
| Materials @ \$10/km | \$1,200 |
| Computer processing and plotting 6 maps 115km each at \$10/km | \$6,900 |
| Drafting | \$2,500 |
| Glen E. White P. Eng. Supervision | \$1,500 |
| Interpretation and reports | \$5,500 |
| TOTAL | \$100,050 |

OMNI-PLUS MAGNETOMETER/VLF SPECIFICATIONS

| Physical Dimensions | Wt(kg): | w x h x d(mm) |
|-------------------------|---------|-----------------|
| Instrument console only | 3.8: | 122 x 246 x 210 |
| Battery belt | 1.8: | 540 x 100 x 40 |
| Battery cartidge | 1.8: | 138 x 95 x 75 |

Sensors

| | | |
|------------------------------|------|----------------|
| Magnetometer remote sensor | 1.2: | 56 dia x 220 |
| Magnetometer gradient sensor | 2.1: | 56 dia x 790 |
| VLF sensor module | 2.6: | 280 x 190 x 60 |

Environment**Electronics**

| | |
|-----------------------------|---------------------------|
| Operating temperature range | -40 C to +55 C |
| Relative humidity | 0 to 100% (weather-proof) |

Magnetometer Sensors

| | |
|-------------------|---------------------------|
| Temperature range | -45 C to +55 C |
| Relative humidity | 0 to 100% (weather-proof) |

VLF Sensor

| | |
|-------------------|---------------------------|
| Temperature range | -45 C to +55 C |
| Relative humidity | 0 to 100% (weather-proof) |

Standard Memory Capacity

| | |
|-----------------|-----------------------|
| Field unit | 1300 sets of readings |
| Tie-line points | 100 sets of readings |
| Base stations | 5500 sets of readings |

Electronics

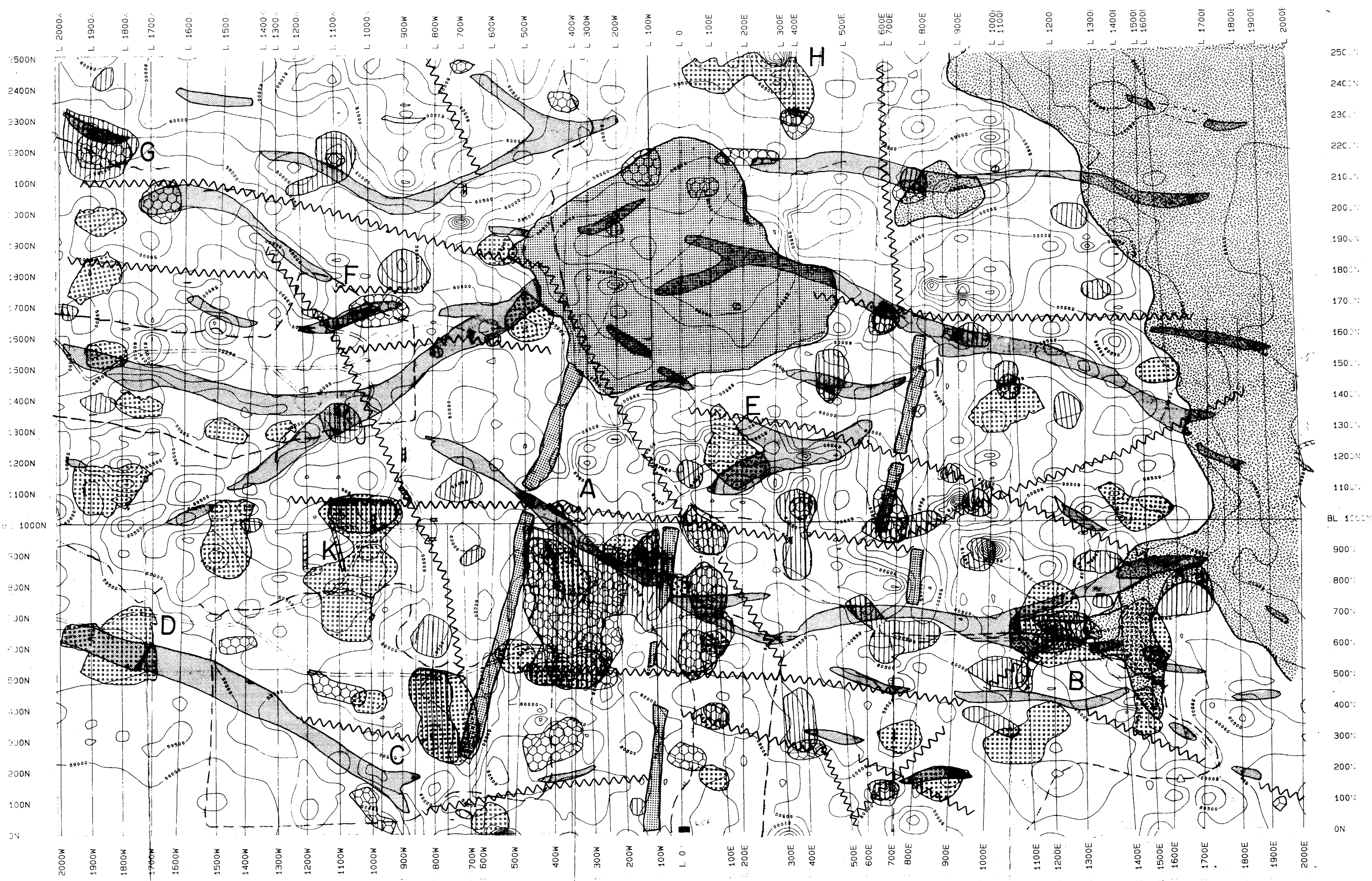
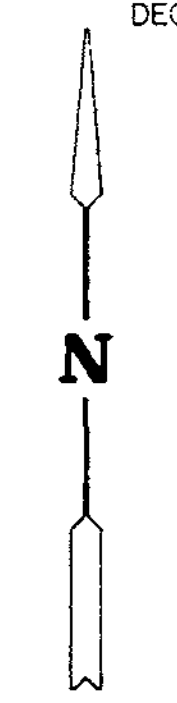
| | |
|--------------------|--|
| RS-232C serial I/O | 300 to 9600 baud(programmable); 8 data bits, 2 stop bits; no parity |
|--------------------|--|

Electronics consoleEnclosure contains electronics and battery pack (if not contained in separate belt). Front panel includes liquid crystal display (LCD), and keypad.

Power SupplyInternal battery pack or external battery belt; or 12V car battery (base station).

OMNI-PLUS MAGNETOMETER/VLF SPECIFICATIONS

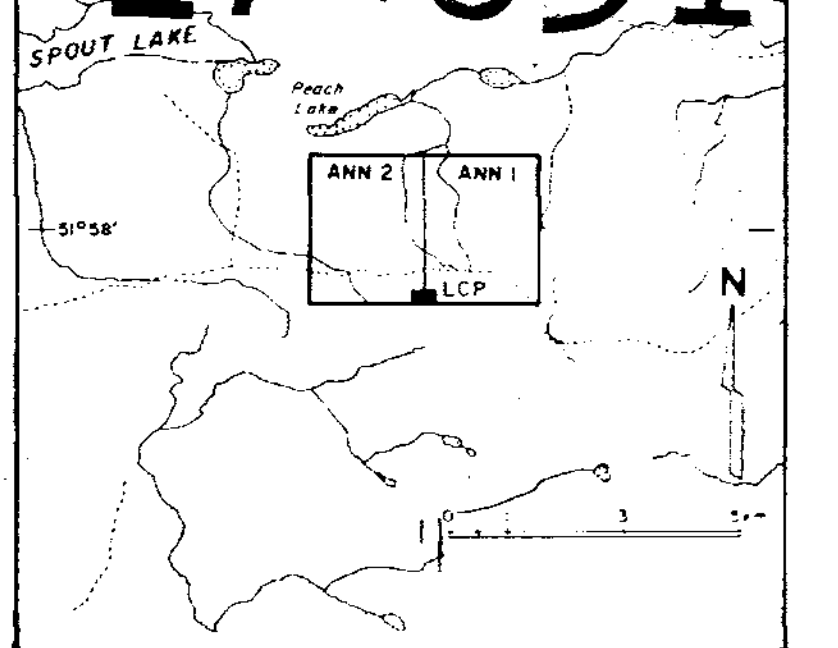
| | |
|------------------------------|--|
| Dynamic Range | 18,000 to 110,000 gammas. Roll over display feature suppresses first significant digit upon exceeding 100,000 gammas. |
| Tuning Method | Tuning value is calculated accurately utilizing a specially developed tuning algorithm |
| Automatic Fine Tuning | + 15% relative to ambient field strength of last stored value |
| Display Resolution | 0.1 gamma |
| Processing Sensitivity | + 0.02 gamma |
| Statistical Error Resolution | 0.01 gamma |
| Absolute Accuracy | + 1 gamma at 50,000 gammas at 23°C + 2 gamma over total temperature range |
| Standard Memory Capacity | |
| Total Field or Gradient .. | 1,200 data blocks or sets or readings |
| Tie-Line Points | 100 data blocks or sets or readings |
| Base Station | 5,000 data blocks or sets or readings |
| Display | Custom-designed, ruggedized liquid crystal display with an operating temp. range from -40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal decay rate and signal amplitude monitor and function descriptors. |
| RS 232 Serial I/O interface | 2400 baud, 8 data bits, 2 stop bits, no parity |



- LEGEND:
- SILVER —
 - COPPER —
 - GOLD —
 - VLF EM CONDUCTORS —
 - INTRUSIVE —
 - DIORITE —
 - FAULTS —

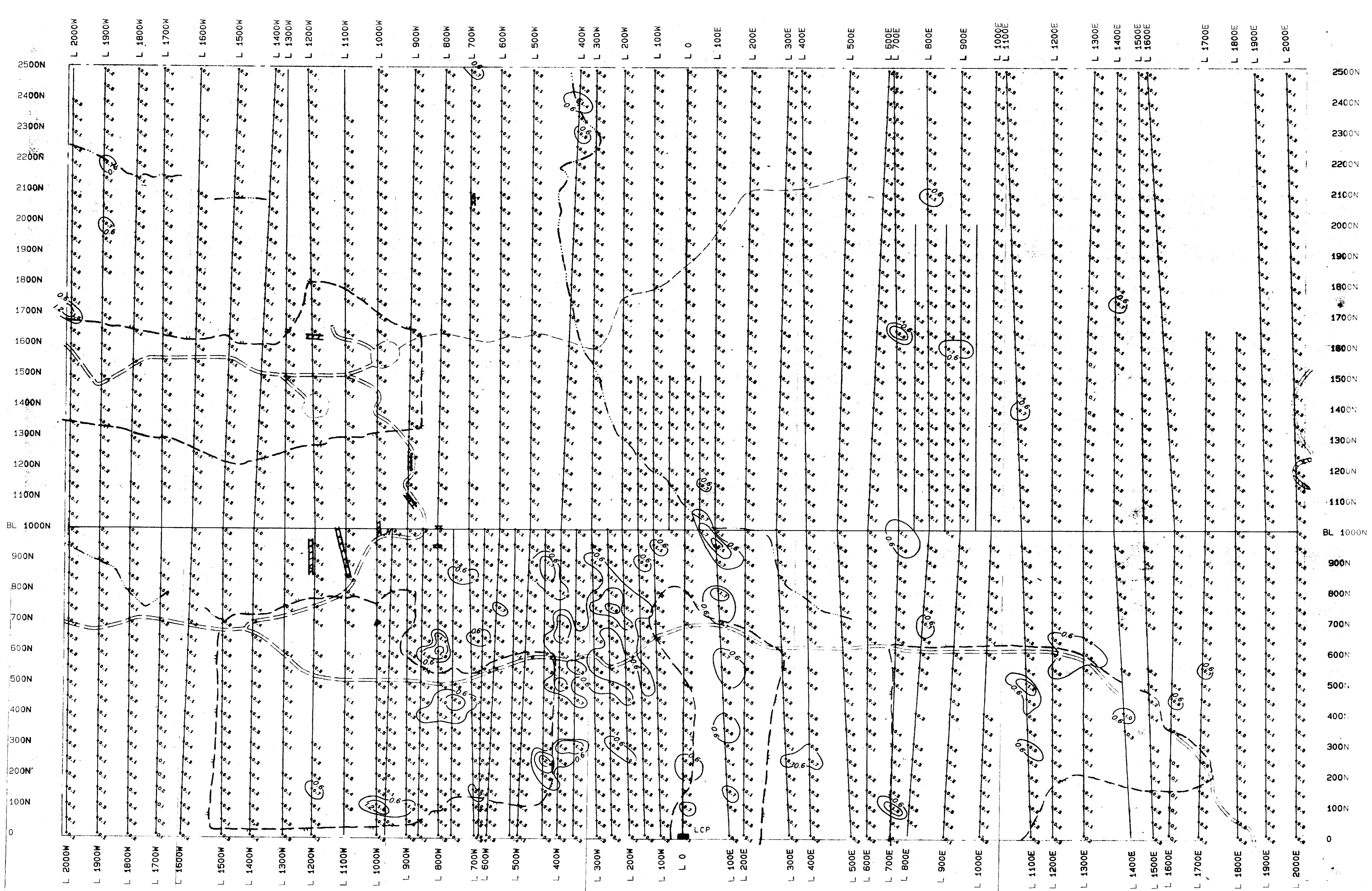
GEOLOGICAL BRANCH
ASSESSMENT REPORT

17-831



HEMINGSON GOLD INC
LAC LA HACHE PROJECT
GEOLOGICAL GEOCHEMICAL
INTERPRETATION MAP
Scale 1:50000

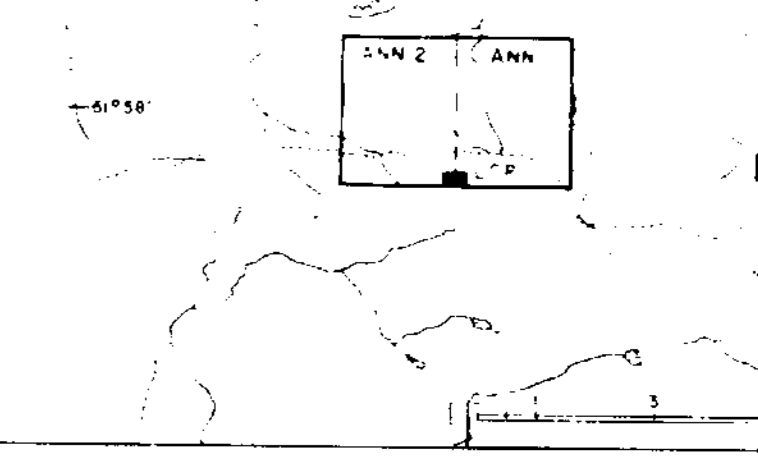
Date: 15 MARCH 88
White Geophysical, Inc.



DECCL 22°E

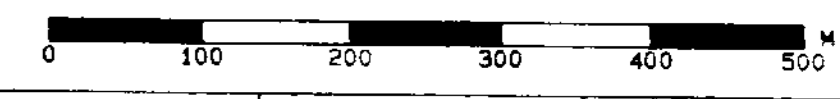
NTS 20/11/84
GEOLOGICAL BRANCH
ASSESSMENT REPORT

17-831



HEMINGSON GOLD INC.

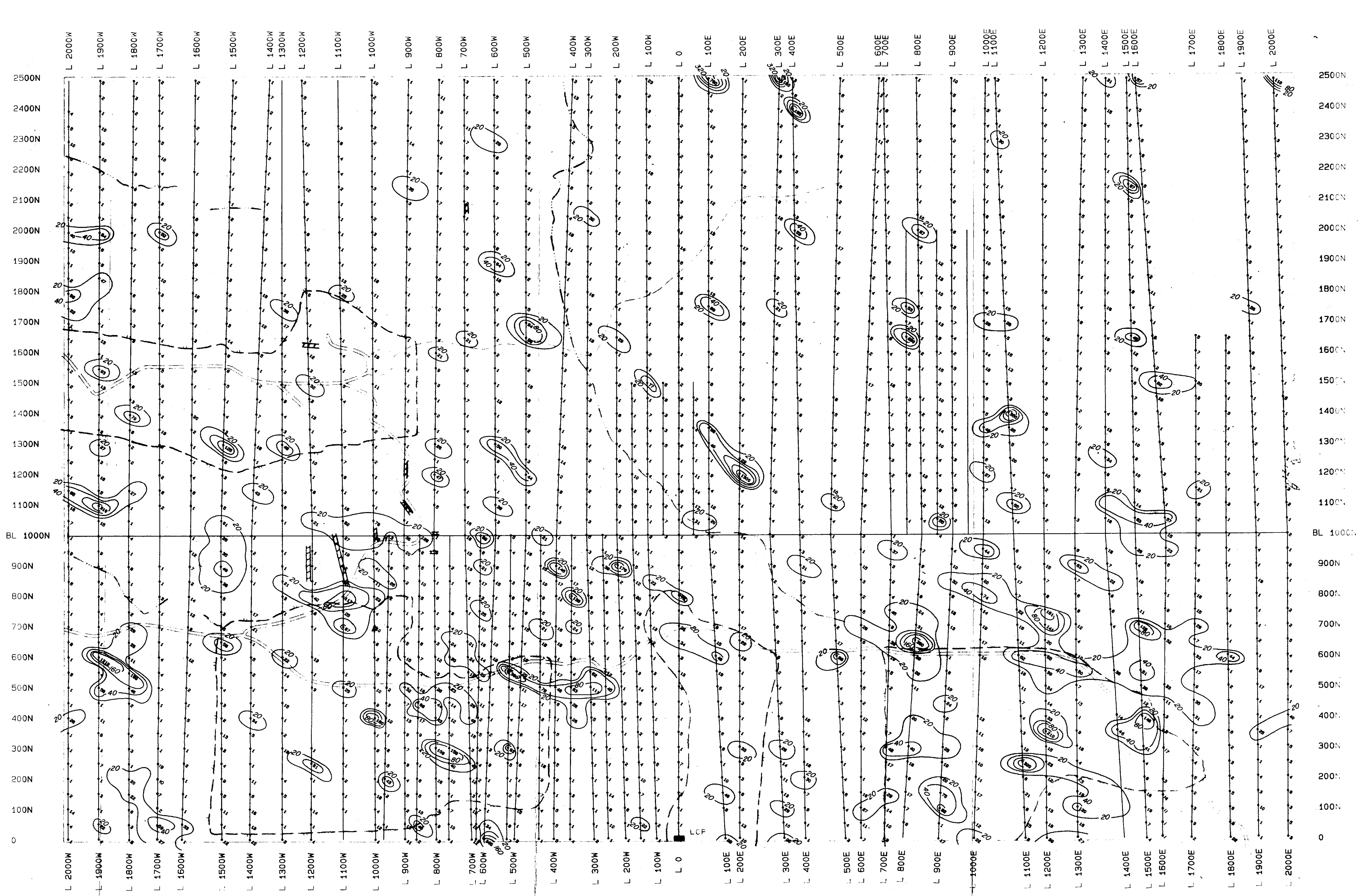
GEOCHEMICAL SURVEY
SILVER ppm
Scale 1: 5000.0



Date: DECEMBER, 1987

FIGURE 9

WHITE GEOPHYSICAL INC.

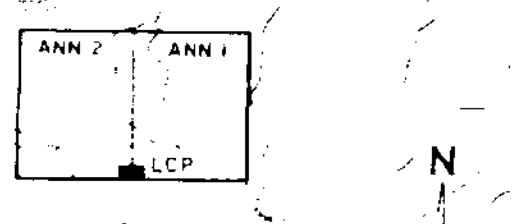


DECCL 22°E



GEOLOGICAL BRANCH
ASSESSMENT REPORT

17-831



HEMINGSON GOLD INC.

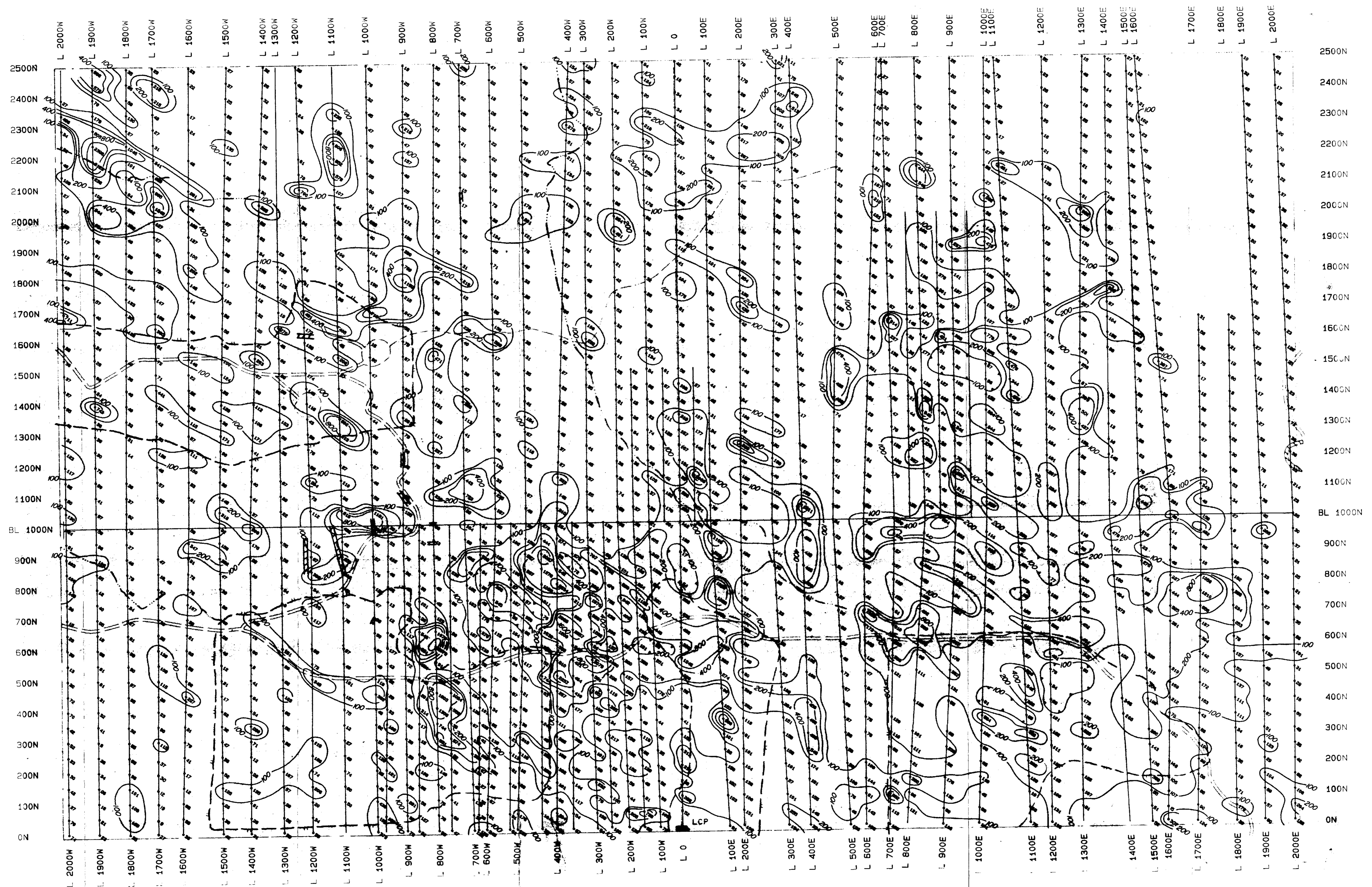
GEOCHEMICAL SURVEY
GOLD ppb
Scale 1: 5000.0



DATE: DECEMBER, 1987

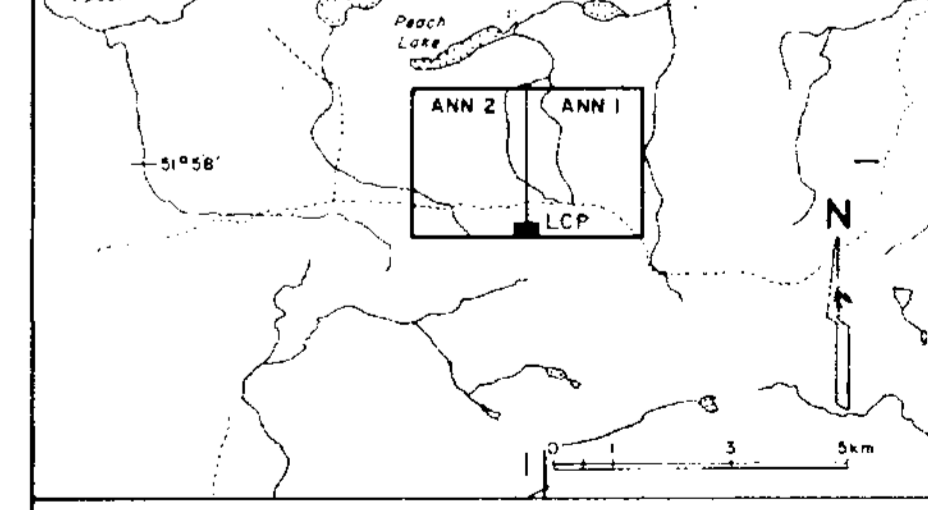
WHITE GEOPHYSICAL INC.

FIGURE 6



NTS 92P/ GEOLOGICAL BRANCH
ASSESSMENT REPORT

17-831



HEMINGSON GOLD INC.

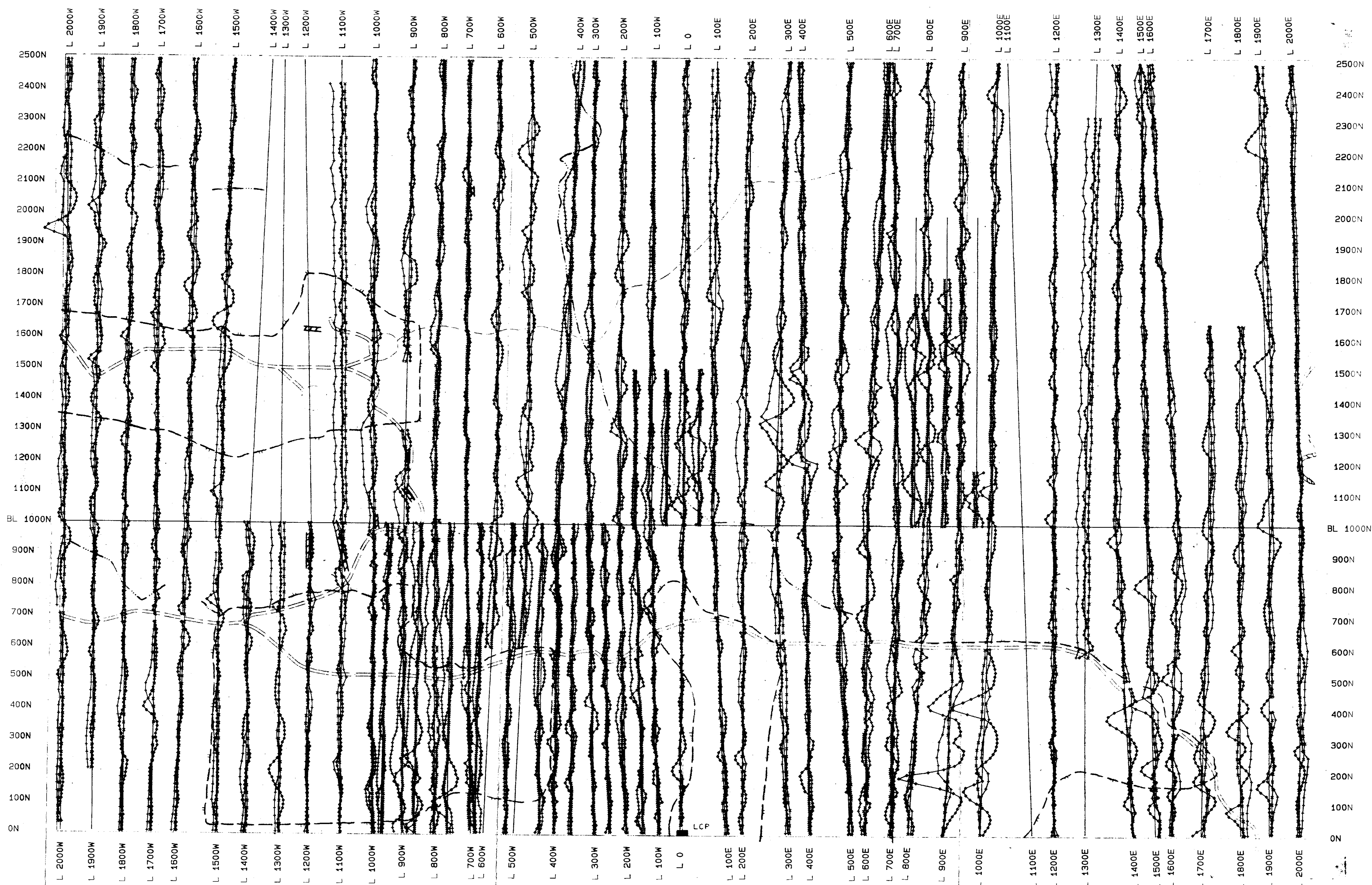
GEOCHEMICAL SURVEY
COPPER ppm
Scale 1: 5000.0



Date: DECEMBER, 1987

FIGURE 7

WHITE GEOPHYSICAL INC.

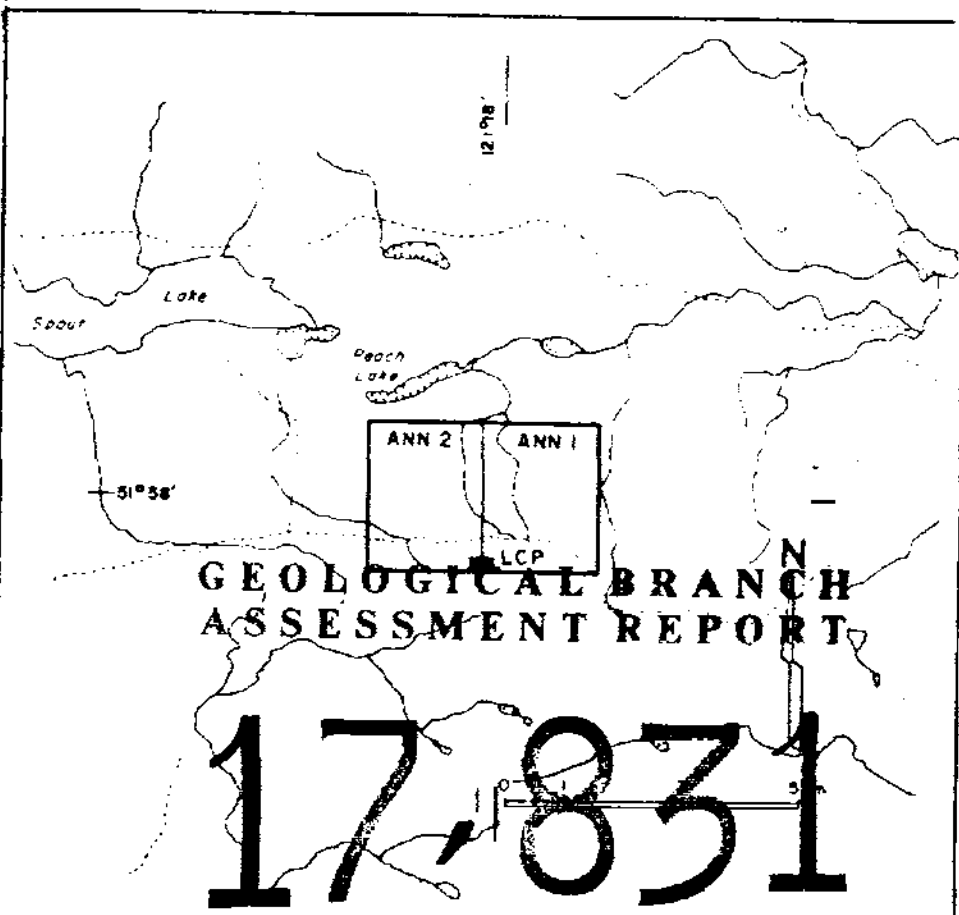


DECL. 22°E



- FILTERED TOTAL FIELD 200/cm
- PLOTTING BASE = 0
- x QUADRATURE 5%/cm
- + INPHASE 5%/cm

NTS 92P/14W



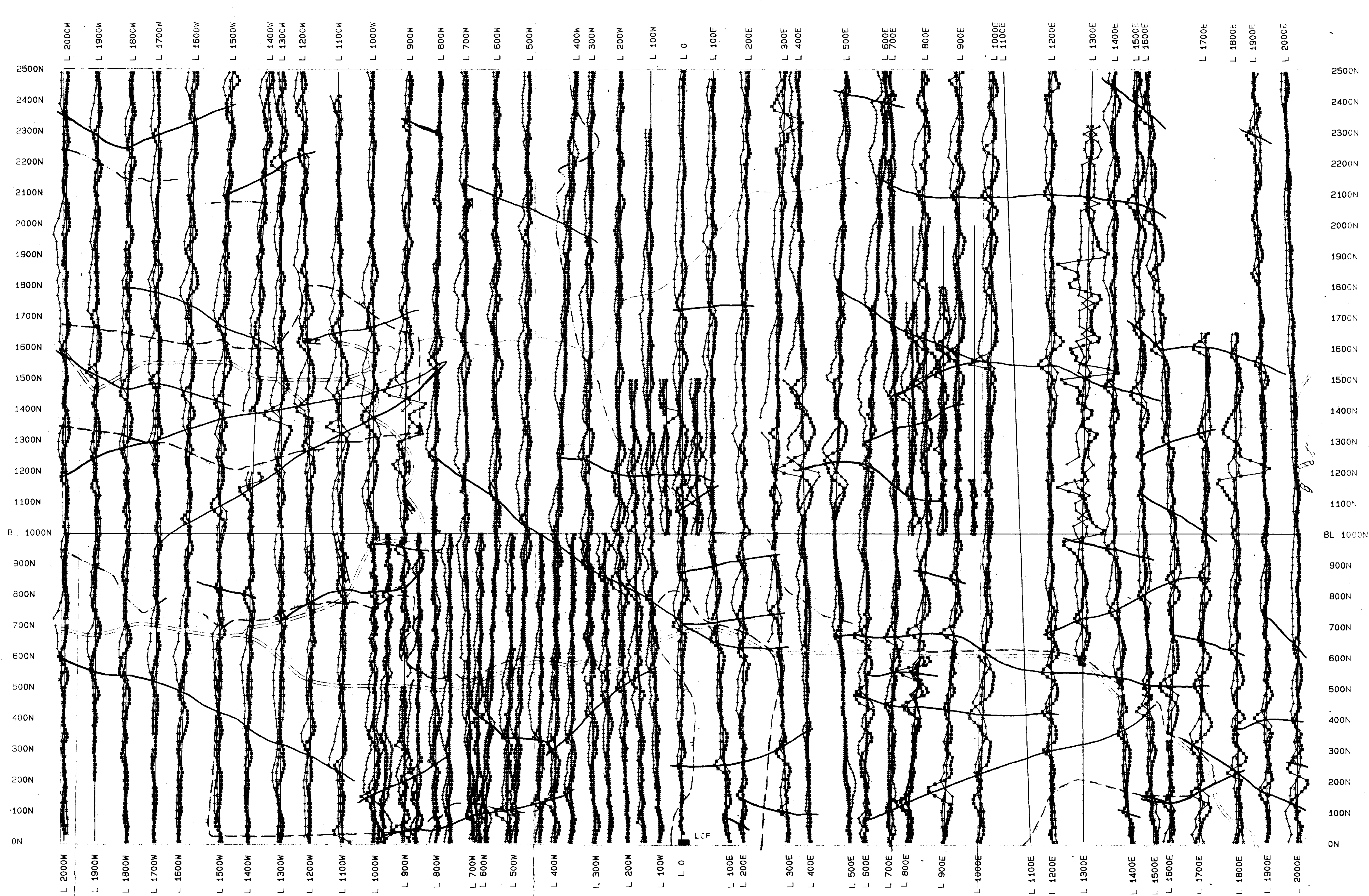
GEOLOGICAL BRANCH
ASSESSMENT REPORT

17-831

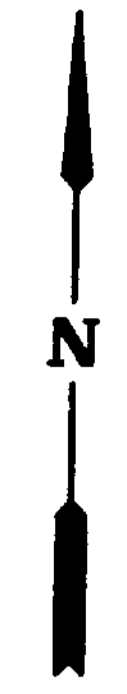
HEMINGSON GOLD INC.
LAC LA HACHE PROJECT
VLF-EM SURVEY
TRANSMITTER: SEATTLE
Scale 1: 5000.0



Date: NOVEMBER, 1987 FIG. 6

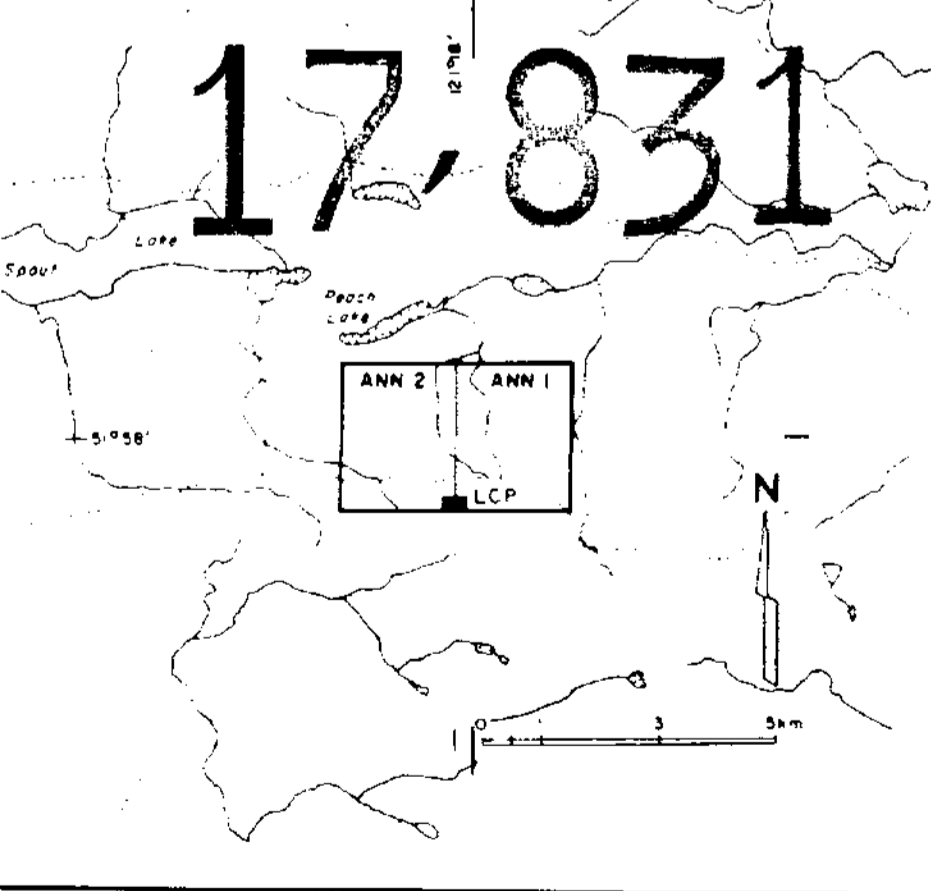


DECL. 22° E

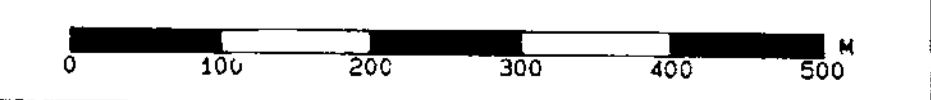


- ▣ FILTERED TOTAL FIELD 20/cm
BASE = 0
- × QUADRATURE 5%/cm
- + INPHASE 5%/cm

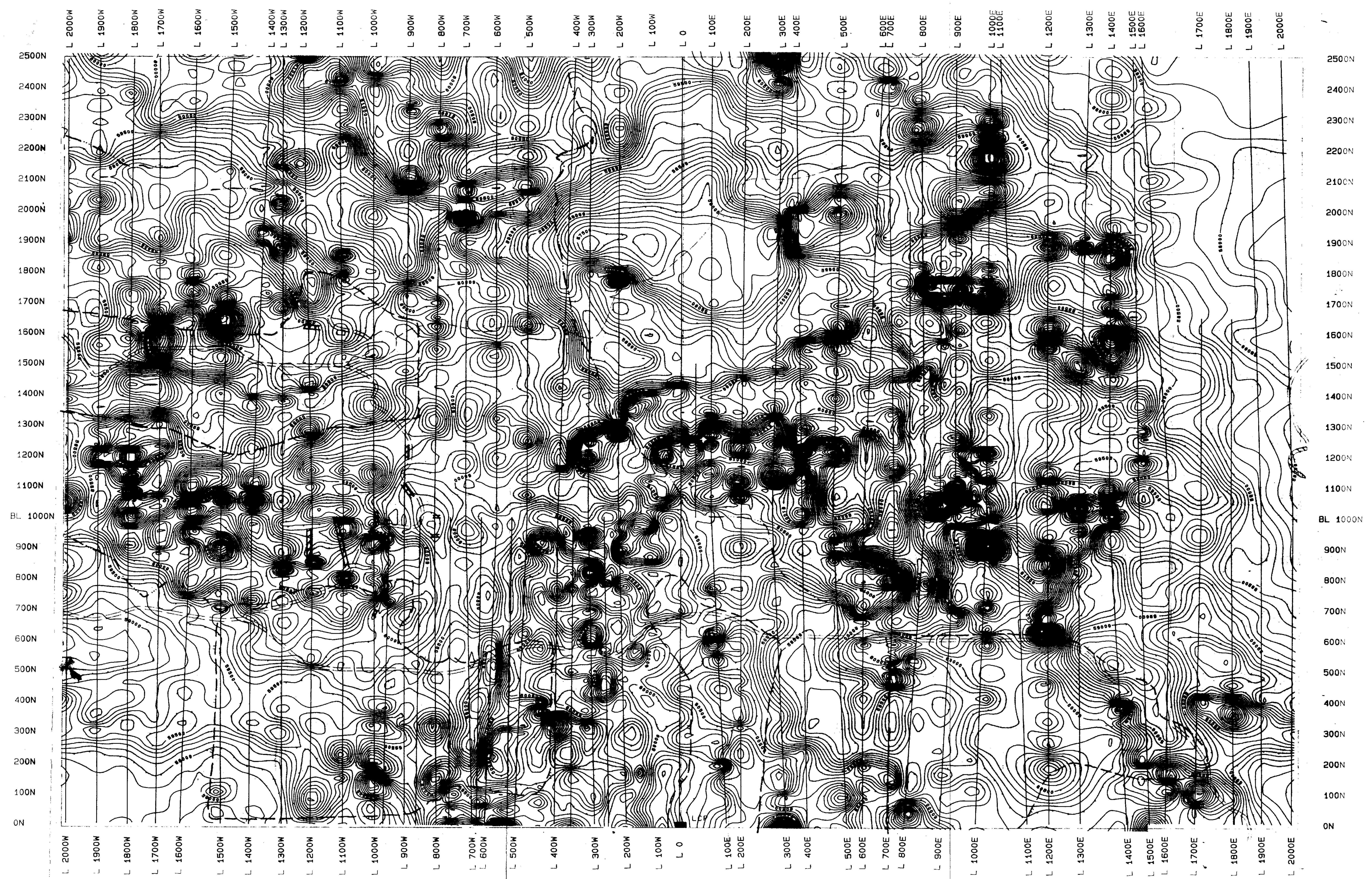
NTS GEOLOGICAL BRANCH
ASSESSMENT REPORT



HEMINGSON GOLD INC.
LAC LA HACHE PROJECT
VLF-EM SURVEY
TRANSMITTER: CUTLER
Scale 1: 5000.0



Date: NOVEMBER, 1987 FIG. 5



NTS 92P/14W

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17-831

HEMINGSON GOLD INC.
LAC LA HACHE PROJECT
TOTAL FIELD MAGNETIC SURVEY

Scale 1: 5000.0

Date: 15 MARCH 88

FIGURE 4

White Geophysical Inc.