

RECEIVED

SEP 17 1997

Gold Commissioner's Office
VANCOUVER, B.C.

GEOPHYSICAL REPORT

ON

MAGNETIC AND VLF-EM SURVEYS

OVER THE

NOME PROPERTY

POOLEY CREEK, CASSIAR AREA

LIARD MINING DIVISION, BRITISH COLUMBIA

PROPERTY LOCATION : Nome #1 is 7.6 km 194°E of McDame Lake
Nome #2 is 7.0 km 158°E of McDame Lake
Latitude: 59°10'N,
Longitude: 129° 36'W and 43'W
N.T.S. - 104P/4E

WRITTEN FOR : **TAKO RESOURCES LTD.**
814 - 938 Howe Street
Vancouver, British Columbia
V6Z 1N9

WRITTEN BY : David G. Mark, P.Geo.,
GEOTRONICS SURVEYS LTD.
#405 - 535 Howe Street
Vancouver, British Columbia V6C 2Z4

DATED : August, 20 1997

**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**

25,142



GEOTRONICS

TABLE OF CONTENTS

SUMMARY	<i>i</i>
CONCLUSIONS	<i>ii</i>
RECOMMENDATIONS	<i>iii</i>
INTRODUCTION	1
PROPERTY AND OWNERSHIP	1
LOCATION AND ACCESS	2
PHYSIOGRAPHY	2
HISTORY	3
GEOLOGY (from I. Borovic's , 1994 report).....	4
(a) <u>Regional</u>	4
(b) <u>Property</u>	4
(c) <u>Mineralization</u>	5
INSTRUMENTATION AND THEORY	6
(a) <u>Magnetic Survey</u>	6
(b) <u>Electromagnetic Surveys</u>	6
SURVEY PROCEDURE	7
COMPILATION OF DATA AND INTERPRETATION METHODS	8
(a) <u>Magnetic Data</u>	8
(b) <u>VLF-EM Data</u>	8
DISCUSSION OF RESULTS	8
(a) <u>Nome 1 Grid</u>	8
(b) <u>Nome 2 Grid</u>	9
SELECTED BIBLIOGRAPHY	11
GEOPHYSICIST'S CERTIFICATE	12
AFFIDAVIT OF EXPENSES	13

LIST OF ILLUSTRATIONS

<u>MAP - At Back of Report</u>	<u>Scale</u>	<u>MAP #</u>
Property Map	1:50,000	1

MAPS IN POCKET

Magnetic Survey - Nome-1 Claim

Contour Plan	1:2,500	GP-1
Profile Plan	1:2,500	GP-2

VLF-EM Survey - Nome-1 Claim

Contour Plan (Fraser-filter)	1:2,500	GP-3
Profile Plan (In-phase)	1:2,500	GP-4

Magnetic Survey - Nome-2 Claim

Contour Plan	1:2,500	GP-5
Profile Plan	1:2,500	GP-6

VLF-EM Survey - Nome-2 Claim

Contour Plan (Fraser-filter)	1:2,500	GP-7
Profile Plan (In-phase)	1:2,500	GP-8

SUMMARY

Ground VLF-EM and magnetic surveys were carried out during May 23 to June 5, 1997 over two grids within the Nome claims located on or adjacent to Pooley Creek within the Cassiar area within the northwest corner of British Columbia. The terrain of the property, which covers 86 claim units, is moderately-sloped to steep with a number of streams occurring throughout. Access can be gained by vehicle from the Cassiar Highway south of Vines Lake.

The two properties are underlain by volcanic and sedimentary units of the Sylvester Group which is of Devonian-Mississippian age. On the adjacent Cusac Mines property, gold and silver is being mined from quartz veins that are easterly to northeasterly trending and that are associated with gossan forming quartz-carbonate-pyrite alteration as well as other sulphides. Some of the mineralization occurs within shear zones. Two major zones of alteration and veining have been found on the Nome claims.

The main purpose of the magnetic and VLF-EM surveys was to map geological structure that may be associated with mineralization especially similar to that found on the adjacent Cusac property as well as to map lithology in order to aid in exploration on the property.

The VLF-EM surveys were carried out with a VLF-EM receiver by taking readings every 50 m on 50-m separated lines for the Nome-1 grid and every 25 meters on 50-meter separated lines on the Nome-2 grid. The Nome-1 grid consisted of 5,000 meters of survey and the Nome-2 grid consisted of 4,450 meters of survey for a total of 9,450 meters. For each grid, the raw data were profiled onto a 1:2,500 base map, and also Fraser-filtered and contoured onto a second 1:2,500 base map.

The magnetic surveys were carried out with a proton precession magnetometer by taking readings at the same stations as for the VLF-EM surveys on the two grids except that the two baselines were also done. The Nome-1 grid consisted of 5,500 meters of survey and the Nome-2 grid consisted of 5,100 meters of survey for a total of 10,600 meters. For each grid, the data were profiled onto a 1:2,500 base map, and also plotted and contoured onto a second 1:2,500 base map.

CONCLUSIONS

1. The Nome claims are underlain by geology similar to that occurring on the adjacent Cusac Mines property where gold and silver is being mined from quartz veins, some occurring within shear zones. The main strike directions are easterly and northeasterly. Two major zones of veining with associated alteration occur on the Nome claims.
2. The magnetic survey on the Nome-1 grid indicates the underlying rock-types over most of the grid area to be non-magnetic such as sediments or possibly andesite. The eastern part of the grid area may be underlain by a more magnetic rock-type such as basalt. Three lineations of magnetic lows were outlined, and these are suggestive of fault or shear zones.
3. The magnetic survey on the Nome-2 grid indicates the underlying rock-types over most of the grid area to be basalt. Six lineations of magnetic lows were outlined, and these are suggestive of fault or shear zones. One area of special interest is centered at (300S, 250E) which is an intersection of three lineations and is a strong magnetic low. It suggests the possibility that it is an area of mineralization.
4. The VLF-EM survey on the Nome-1 grid revealed several conductors striking in easterly to northeasterly directions with minimum strike lengths of up to 400 meters. The probable cause of the conductors is structure, more specifically, faulting or shearing. Three have been labeled by the lower case letters 'a', 'b', and 'c'. Conductor 'b' correlates with a magnetic low lineation conductor 'c' correlates with a magnetic low.
5. The VLF-EM survey on the Nome-2 grid also revealed several conductors with minimum strike lengths of up to 400 meters but striking in easterly and northerly directions. The probable cause of these conductors is also faulting or shearing. Four have been labeled by the lower case letters 'a' to 'd'.
6. Conductors 'c' and 'd' are of special exploration interest because of their easterly strike which is one of the strikes of the known mineralization on the adjacent Cusac property. It is also of exploration interest that an easterly-striking magnetic lineation occurs parallel to, and between these two conductors.
7. Sulphide mineralization may occur along any or all of the conductors/faults or be associated with them, especially in areas of possible cross-faulting.

RECOMMENDATIONS

1. The magnetic and VLF-EM surveys should be extended throughout the Nome claims if the terrain will permit it. The principle areas of focus should be the soil geochemistry anomalies and the alteration zones. VLF-EM surveying is particularly proficient at mapping geological structure and magnetic surveying, lithology. The line interval should be done at 100 meters and the reading interval, 25 meters.
2. Geological mapping and prospecting should be carried out over areas of prime interest, such as the stronger VLF-EM conductors and areas of possible cross-structure, especially any areas that correlate with soil geochemistry anomalies. If possible, these areas should be trenched, preferably by excavator.
3. IP and resistivity surveying is recommended since sulphides are known to occur with the gold mineralization and since it occurs within quartz. The IP should respond to the sulphides and the resistivity to the quartz. The IP/resistivity is a tool that would more accurately delineate the mineralization than the geochemistry surveys would. Also the depth penetration of soil geochemistry surveys is only 20 meters, or bedrock depth, whichever is shallower, whereas the depth penetration of the IP survey is greater. The dipole length/reading interval of the IP survey should be kept small, perhaps about 12.5 meters.

GEOPHYSICAL REPORT
ON
MAGNETIC AND VLF-EM SURVEYS
OVER THE
NOME PROPERTY
POOLEY CREEK, CASSIAR AREA
LIARD MINING DIVISION, BRITISH COLUMBIA

INTRODUCTION

This report discusses the survey procedure, compilation of data, interpretation methods, and the results of a magnetic survey and a very low frequency electromagnetic (VLF-EM) survey carried out over two grids within the Nome claims located on or adjacent to Pooley Creek within the Cassiar Area of British Columbia.

The magnetic and VLF-EM surveys were supervised and carried out by Gerry Diakow, geophysical technician, with the aid of two men, from May 23 to June 5, 1997.

The number of meters of magnetic survey and VLF-EM survey totaled 5,000 on the Nome 1 grid and 4,450 on the Nome 2 grid for a grand total of 9,450 meters.

The purpose of the VLF-EM survey was to map geological structure potentially carrying gold mineralization. That of the magnetic survey was to map geology, both lithology and structure, in order to aid in the exploration of gold mineralization.

Much of the description of the property was taken from I. Borovic's report written in 1994.

PROPERTY AND OWNERSHIP

The property consists of five claims totaling 86 units, as described below and as shown on Map #1. The Nome #1 occurs alone and the Nome #2, #3, #4, and #5 are contiguous.

CLAIM NAME	TAG NUMBER	RECORD NUMBER	NUMBER OF UNITS	EXPIRY DATE
Nome #1	228917	318281	16	June 8,1998
Nome #2	228918	318282	20	June 8,1998
Nome #3	228919	318283	20	June 8,1999
Nome #4	228920	318284	20	June 8,1999
Nome #5	228921	318285	10	June 8,1999
TOTAL			86	

The expiry dates shown assume that the work under discussion within this report will be accepted for assessment credits.

The registered owner of the property is Betty Lo of Vancouver, B.C., who is holding the property on behalf of Tako Resources Ltd. of Vancouver, British Columbia. Tako Resources is the operator of the property.

LOCATION AND ACCESS

The Nome Claims are located within the Cassiar area of northwestern British Columbia within the Liard Mining District. The Nome #1 Claim is located 7.6 km 194°E of McDame Lake on the east side of Needlepoint Mountain and to the immediate west of Pooley Creek. The Nome # 2 to 5 claims are located 7.0 km 158°E of McDame Lake to the east of Pooley Creek. The Nome #1 Claim occurs about 4.5 km west of the Nome #2 to 5 claim group.

The geophysical coordinates are 59°10' N latitude and 129°43'W longitude for the Nome #1 claim and 129°43'W longitude for the Nome #'s 2 to 5 claims.

Access is gained by traveling five km on the Cusac Mines road which leaves the Cassiar Highway at the south end of Vines Lake. At this point is a 'Y' in the road and one takes the south road to the Katherine Mine pit, a distance of about 0.5 km. From this area one walks for about one km along a cut line that runs to the northeast corner of the Nome #1 Claim. To the Nome 2 to 5 claims, one takes the north road of the 'Y' which means continuing along the main Cusac Mines road for about 3.5 km. At this point is a Cusac Mines exploration road that goes in a southerly direction. At about 2 km, the road passes within about 100 meters of the northwest corner of the Nome #2 claim.

PHYSIOGRAPHY

The Nome claims are found within the Stikine Mountains which occur within the Cassiar Mountains which is a physiographic subdivision of the Interior Plateau System. The Stikine Mountains are characterized by its peaks and ridges above 1800 meters being sharply

scalloped by cirque glaciers. Below this level the peaks and ridges are more rounded and less harsh.

On the Nome #1 claim, the terrain varies from near flat within the northern part of the claim to somewhat more steep within the southern part with some steep parts occurring throughout. The elevations range from 1,340 meters (4,400 feet) to 1,740 meters (5,700 feet) to give a range of 400 meters (1,300 feet).

On the Nome #2 to 5 group of claims, the terrain varies from moderately-sloped to very steep and rugged. The elevations vary from 1,060 meters (3,500 feet) within the southwest corner of the Nome #5 claim on Pooley Creek, to 1,980 meters (6,500 feet) within the southeast corner of the Nome #2 claim to give an overall relief of 910 meters (3,000 feet).

About 70% of the Nome #1 claim and 85% of the Nome #2 to 5 claims is above timberline with forest cover occurring mostly along Pooley Creek.

Mountainous streams occur throughout the Nome claims with the major drainage being the southeasterly-flowing Pooley Creek, which flows into Dease River; occurring largely between the two properties. The Nome #1 claim and the western part of the Nome #2 to 5 claims are drained by tributaries of Pooley Creek whereas the eastern part of the Nome #2 to 5 claims are drained by two easterly-flowing tributaries of the Huntergroup Creek.

HISTORY

The following is taken from I. Borovic's 1994 report where more detail is provided on the results.

1983	Nome Claims were staked.
1983 - 1984	Geological mapping, geochemical survey, and hand trenching by H. Copland. Samples collected were 128 soil, 3 stream, and 16 rock mostly from Nome #1 claim and some from Nome #2 to 5 claims - J.R. Poloni, 1984, and H. Copland, 1983
1987	Geological and geochemical work was carried out on Nome #1 and Nome #2 to 5 by Aurum Geological Consultants for Evergrow Resources. Nome #1 claim - 159 samples, 24 rock samples, and 4 hand trenches; Nome #2 to 5 claims - 251 soil samples and 40 rock samples - Tom Garagan, 1987
1988	Geological mapping and geochemical work by Sookochoff Consultants. Nome #1 claim - 46 soil and 8 rock samples; Nome #3 Claim - 311 soil and 24 rock samples - L. Sookochoff, 1988
1993	Geochemical soil sampling was done on the Nome #1 and #2 claims under supervision of Emil Leimanis. Nome #1 claim - 10 soil samples; Nome #3 Claim - 37 soil samples - I. Borovic, 1994

GEOLOGY (from I. Borovic's , 1994 report)

(a) **Regional**

The Nome Property is located within the Sylvester Allochthon, a fault-bounded assemblage of Upper Paleozoic cherts, greenstones, clastic and metamorphic rocks, thrust over rocks autochthonous to the North American craton in post-Triassic to early Cretaceous times.

The rocks underlying the area of and around the Nome property are Sylvester Group volcanic and sedimentary rocks of Late Devonian to early Mississippian age.

Sediments include siltstone, chert, sandstone, argillite, greywacke and minor limestone.

The volcanics include flow-type and pyroclastic rocks. Ultramafic rocks, subsequently altered to listwanite, were probably emplaced during the Mississippian Period.

During the Mid-Cretaceous Period the Cassiar Batholith intruded the western part of the allochthon. Tertiary diabase dykes occur throughout the area.

Characteristic structure of the area are low-angle layer-parallel slices within Sylvester Allochthon. Superimposed on that general structural pattern are north to northwest striking steep faults. The southeast slope of the Needlepoint Mountain is cut by north striking steep fault as is Table Mountain area to the north. It appears that gold/silver mineralized quartz veins are also associated with those shears and related alterations.

(b) **Property**

The Nome claims are underlain by intermediate to basic volcanic and fine-grained clastic rocks of the Sylvester Group. The Nome 1 claim is underlain by interlayered light and dark green andesites to basaltic andesite flows and lapilli to ash tuffs. These units are generally massive and are interbedded and interfingering with thin, dark green to black chert units. According to Diakow and Panteleyev (1981), these form part of the lowermost package within the Sylvester Group.

The Nome 2-5 claims are underlain by two distinct units within the Sylvester Group. The west side of the claims is underlain by a weathered interbedded argillite and siltstone with minor thin andesite flows. Argillites are the most dominant unit and are locally carbonaceous. The sediments are thinly bedded, trend northwesterly, and are generally steeply dipping.

Cliff forming basalt to basaltic andesite flows and lapilli and ash tuffs outcrop east of the sediments. The volcanics are dark green and massive and contain very thin (up to 50 m wide) massive to locally crinoidal limestones. Bedding within the limestone is often contorted and the limestone pinches and swells over short distances. The volcanics are cut by 1-3 m wide, very fine-grained basaltic andesite dykes, which apparently do not cut adjacent argillites. The volcanic and limestone package trends northwesterly with moderate northeasterly and southwesterly dips. According to

Diakow and Panteleyev (1981), basalt and basaltic andesite flows are the youngest members of the Sylvester Group in the Cassiar area.

The change in dips between the volcanics and sediments and the lack of mafic dykes within the sediments suggest that the contact between the two are faulted. This fault contact is offset 800 m by an east-west trending right lateral fault in the central part of the Nome 4 claim.

In the northwest corner of the Nome 4 claim, the volcanics are cut by 2-3 m wide chocolate brown weathering northwesterly trending lamprophyre dyke of possibly Jurassic to Cretaceous age.

(c) **Mineralization**

The Nome property is located within the so-called Erickson-Cusac vein system.

All the significant gold-bearing quartz veins in the area are hosted by Sylvester Group rocks. The veins are generally east-west to northeasterly trending and are usually associated with gossan forming quartz-carbonate-pyrite (occasionally mariposite) alteration. Veins vary between a few centimeters to five metres in width and may be up to several hundred metres in length. The gold-bearing veins usually contain free gold and up to 2%-3% sulphides.

In the Cusac's Eileen and Katherine veins, gold and silver mineralization occurs in listwanite zones bounding the upper contact of basalt-sediment sequence. Gold grades average 30 g/t. Cusac is about 1.4 km northeast of the Nome 1 claim.

Hunter shear zone is located about 0.8 km east of the Nome 2-5 claim group. Quartz vein within the shear is about 1 m wide and contains erratic gold values to 6.9 g/t.

Vollaug vein is located on Table Mountain about 3 km north of the Nome property. Gold occurs in an easterly striking quartz vein. The vein was mined and the average gold content of the ore was 10.5 g/t.

Erickson Mine (Jennie and Maura veins) are about 4 km to the north of the Nome property. Gold occurs in the steeply dipping quartz veins in sheared basalts. Some 490,000 t was mined and averaged 15.3 g/t gold and 11.3 g/t silver.

Two major zones of alteration and veining have been found on the Nome claims. A large gossan (25 m x 100 m) over carbonate-pyrite altered volcanics and associated quartz-ankerite veins is located on the west side of the Nome 1 claim. Boulders of massive quartz-ankerite and vuggy quartz-limonite vein material and quartz-ankerite stockwork within carbonate altered volcanics were found within the area. Vein boulders are up to 45 cm across, but veins found within a hand-dug trench (Trench #1) are only 1 to 3 cm wide. The area represents an east-west trending zone of quartz-ankerite veining and stockwork within carbonate-pyrite altered andesites, similar to those related to gold-bearing veins on Total Erickson's and Cusac's properties.

In the northeast corner of the Nome 3 claim, a 600 m long zone of carbonate-pyrite altered volcanics was located. Boulders of bull quartz-ankerite vein material and quartz-ankerite vein stockwork occur at the southeast corner of the gossan. Individual veins appear to be at least 40 cm wide. The zone is related to a northwest trending lineament (probably fault zone) and is very similar in appearance to the zone located on the Nome 1 claim.

Several 1 to 50 cm wide bull quartz veins (with minor siderite) were found on the west side of the Nome 2-5 claims. The veins trend east-west and dip steeply north. Alteration associated with these veins consists of narrow zones of bleached rocks within the volcanics.

A one-meter wide northwest trending quartz-limonite gouge zone within argillite occurs in the southeast corner of the Nome 4 claim. The vein contains trace chalcopyrite with malachite staining. The strike length of the zone is not known.

A quartz vein with visible gold is reported by M. Kreklo to occur in the southwest corner of Nome 1 (Copland, 1983). This could not be confirmed at the time of exploration because of snow cover in that area.

INSTRUMENTATION AND THEORY

(a) Magnetic Survey

The magnetic survey was carried out with a model G-856 proton precession memory magnetometer, manufactured by Geometrics Inc of Sunnyvale, California. This instrument reads out directly in nT (nanoTeslas, otherwise known as gammas) to a resolution of 0.1 nT and to an accuracy of ± 0.5 nT over a range of 20,000 - 100,000 nT. The operating temperature range is -20° to $+50^{\circ}$ C, and its gradient tolerance is up to 5,000 nT per meter. The memory is capable of storing over 1,400 readings with time of reading and station number in portable mode and over 2,500 readings with Julian date and time of reading in base station mode. With optional extended memory these two can be expanded to 5,700 readings and 12,000 readings, respectively.

Only two commonly occurring minerals are strongly magnetic, magnetite and pyrrhotite; magnetic surveys are therefore used to detect the presence of these minerals in varying concentrations. Magnetics is also useful as a reconnaissance tool for mapping geologic lithology and structure since different rock types have different background amounts of magnetite and/or pyrrhotite.

(b) Electromagnetic Surveys

The VLF-EM survey was carried out with a VLF-EM receiver, Model 27, manufactured by Sabre Electronics Ltd. of Burnaby, British Columbia. This instrument is designed to measure the electromagnetic component of the very low frequency field (VLF-EM) of naval radio transmitters set up at various sites around the world which for this survey was transmitted at 23.4 kHz from Lualualei, Hawaii.

The VLF-EM uses a frequency range from 13 to 30 kHz, whereas most EM instruments use frequencies ranging from a few hundred to a few thousand Hz. Because of its relatively high frequency, the VLF-EM can pick up bodies of a much lower conductivity and therefore is more susceptible to clay beds, electrolyte-filled fault or shear zones and porous horizons, graphite, carbonaceous sediments, lithological contacts as well as sulphide bodies of too low a conductivity for other EM methods to pick up. Consequently, the VLF-EM has additional uses in mapping structure and in picking up sulphide bodies of too low a conductivity for conventional EM methods and too small for induced polarization. (In places it can be used instead of IP). However, its susceptibility to lower conductive bodies results in a number of anomalies, many of them difficult to explain and, thus, VLF-EM preferably should not be interpreted without a good geological knowledge of the property and/or other geophysical and geochemical surveys.

SURVEY PROCEDURE

Two survey grids were established, one within the northeast corner of the Nome #1 Claim and the other within the northwest corner of the Nome #2 Claim. These are described as follows:

GRID	BASE LINE DIRECTION	SURVEY LINE DIRECTION	SURVEY LINE INTERVAL	STATION INTERVAL
NOME 1	west	south	50 meters	50 meters
NOME 2	130°E	40°E - 220°E	50 meters	25 meters

The stations were marked by blaze-orange flagging.

For the *magnetic survey*, readings of the earth's total magnetic field were taken at the 50-m stations along the survey lines on the Nome 1 grid, and at the or 25-m stations along the survey lines on the Nome 2 grid. On each grid, the baseline was also surveyed in.

The diurnal variation was monitored in the field by the closed loop method to enable the variation to be removed from the raw data prior to plotting.

The number of meters of magnetic survey totaled 5,500 on the Nome 1 grid and 5,100 on the Nome 2 grid for a grand total of 10,600 meters.

For the *VLF-EM survey*, the readings of the electromagnetic field from the transmitter station, Hawaii(Lualualei) at 23.4 kHz, were also taken at the same stations.

The number of meters of VLF-EM survey totaled 5,000 on the Nome 1 grid and 4,450 on the Nome 2 grid for a grand total of 9,250 meters.



COMPILATION OF DATA AND INTERPRETATION METHODS

(a) Magnetic Data

The data was first input into a computer, Then using Geosoft software, two maps for each grid were produced, each on a base map at a scale of 1:2,500 (1 cm = 25 m. The first was a contour plan map, GP-1(Nome 1) and GP-5 (Nome 2) , with a contour interval of 250 nT (gammas). The values were also plotted on this map with 56,000 nT subtracted from each value.

The second was a profile plan map, GP-2(Nome 1) and GP-6(Nome 2), with a vertical scale of 1 cm = 500 nT. No values were plotted on this map.

(b) VLF-EM Data

The VLF-EM tilt angle and quadrature data were also input into a computer. A profile map of the tilt angle data for each grid were profiled onto a base map, GP-3(Nome 1) and GP-7(Nome 2), at the same scale of 1:2,500. The tilt angle data were also 4-point Fraser-filtered and then plotted and contoured onto a third base map, GP-5(Nome 1) and GP-8(Nome 2), both maps at the same scale of 1:2,500.

DISCUSSION OF RESULTS

(a) Nome 1 Grid

The magnetic field over the Nome 1 grid reaches a low of 55,960 nT and a high of 58,360 nT for a range of 2,400 nT. However, the field is, for the most part, quiet with it varying from 56,800 to 57,000 nT, a range of only 200 nT. It would appear, therefore, that much of the grid area is underlain by the less magnetic rocks of the Sylvester Group such as cherts, tuffs, or, possibly andesites.

The most prominent features within the grid area are the magnetic lows with some associated highs occurring within the eastern part of the grid area. It is quite possible that the magnetic field within this area is reflecting basalts and/or andesites.

Three lineations of magnetic lows have been drawn on the magnetic contour plan. These are suggestive of reflecting faults or shear zones.

Several VLF-EM conductors have been identified as occurring throughout the Nome 1 grid. Some are strong but short in length, occurring on only one line, while others are weak but having definite continuity across several lines. The probable causative source in most cases is probably geologic structure such as faults, shears or lithological contacts. Gold mineralization within quartz veins may be associated with the VLF-EM conductors.

For ease of discussion, the conductors of interest have been labeled by the lower case letters 'a' to 'c'. There are other conductors throughout the grid area that are not labeled either because they are weak, because they occur on only one line, and/or because there is no other correlation.

Conductor 'a' is a westerly-striking VLF-EM anomaly that has a minimum strike length of 350 meters being open to the west. It reaches a Fraser-filter high of 11°.

Conductor 'b' is a northeasterly-trending VLF-EM anomaly that has a minimum strike length of 400 meters being open to the southwest and possibly to the northeast. It reaches a high of 16°. An interesting feature of this anomaly is that it correlates with a magnetic low lineation indicating the likelihood that the causative source is a fault and/or shear zone.

Conductor 'c' is only a one-value high of 10° since it occurs at the edge of the survey area. However, it is of interest because of its correlation with a magnetic low. The profile of the raw data indicates that this conductor is likely stronger than the Fraser-filtered map indicates. Like conductor 'b', this conductor could be caused by geologic structure and/or alteration associated with mineralization.

(b) **Nome 2 Grid**

The magnetic field over the Nome 2 grid reaches a low of 57,450 nT and a high of 58,272 nT for a range of 821 nT. Despite the low range, the field is fairly noisy, as is easily evidenced from the many thumb-print shaped anomalies. In general, the field strengths appear to be higher than on the Nome 1 grid which would suggest, therefore, that much of the grid area is underlain by the more magnetic rocks of the Sylvester Group such as basalt or possibly andesites.

Many lineations of magnetic lows may be inferred from this data, but only the six most prominent have been drawn on the magnetic contour plan. Three strike in a northeasterly direction, one northwesterly, one northerly, and one easterly. These are suggestive of reflecting faults or shear zones. Of particular interest is the magnetic low located at (L 300 E, 200 S) not only because it is the largest magnetic low, but also because three of the lineations intersect at this point. This would indicate an area of possible mineralization of economic interest.

Several VLF-EM conductors have been identified as occurring throughout the Nome 2 grid. In general these conductors trend to the east or to the north. Most are weaker than those in the Nome-1 grid, but they have fairly consistent coverage along their lengths. The probable causative source in most cases is probably geologic structure such as faults, shears or lithological contacts. Gold mineralization within quartz veins may be associated with the VLF-EM conductors.

For ease of discussion, the conductors of interest have been labeled by the lower case letters 'a' to 'd'.

Conductor 'a' is an northerly-striking VLF-EM anomaly that has a minimum strike length of 250 meters but possibly being open to the south. It reaches a Fraser-filter high of 9°.

Conductor 'b' is an northerly-trending VLF-EM anomaly that has a minimum strike length of 200 meters being open to the north and to the south. It reaches a high of 10°.

Conductors 'c' and 'd' are two parallel anomalous trends that strike due east, both with minimum strike lengths of 400 meters, open to the west as well as possibly to the east. These conductors are probably related to the magnetic lineation that occurs between the two, and thus the likely causative source is a fault or a shear zone. These two conductors are of particular exploration interest because of their easterly-strike which is the same as that of the mineralization on the adjacent Cusac property.

Conductors 'a' and 'b' appear to be part of a circular conductor which correlates with a circular magnetic high, that is, doughnut-shaped. The writer is unsure of what the correlation means but it is quite possible that it is coincidental.

Yours sincerely,
GEOTRONICS SURVEYS LTD.

David G. Mark, P.Gco.,
Geophysicist

August 20, 1997

SELECTED BIBLIOGRAPHY

- Beaton, Al, The Erikson Mine Story, Canadian Mining Journal, pp. 41 to 46, November, 1984
- Borovic, I., Report on the Geochemical Soil Survey of the Nome Property, NTS 104/PE, Liard M.D./ B.C., for Evergrow Resources Ltd., March, 1994
- Boyle, R.W. The Geochemistry of Gold and Its Deposits, GSC Bulletin 280, 1979
- Diakow, L.J., Cassiar Gold Deposits, McDame Map Area (104P/4,5), B.C. Dept. of Mines Geological Fieldwork, Paper 1981-1, pp 55 to 62, 1980
- Diakow, L.J., Cassiar Gold Deposits, McDame Map Area (104P/4,5), B.C. Dept. of Mines Geological Fieldwork, Paper 1982-1, pp 156 to 161, 1981
- Garagan, Tom, Geological and Geochemical Report on the Nome 1 to 5 Claims, Liard M.D., B.C., for Evergrow Resources Ltd., Assessment Report 16,186, 1987
- Gavrielse, H., Geology, McDame-Cassiar District, B.C.(104P), Map 1110A, with Mem. 319, 1954
- Gordey, S.P., Gavrielse, H., Orchard, M. J., Stratigraphy and Structure of Sylvester Allochthon, Southwest McDameMap-Area, Northern B.C., Current Research, Part B, GSC, Paper 82-1B, pp 101 to 106, 1982
- Hólcapek, F., Evaluation Report of the Mustng-Jackpine Claim Group, Cassiar Map-Area, NTS 104/P, Liard M.D., B.C., for Duke Minerals Ltd. Assessment Report 18,787, 1989
- G.S.C., Geology of Dease Lake (104J) Map-Area, G.S.C. Open File 707, 1977
- Poloni, J.R., Report on the Nome (1-5) Claims, Cassiar Area, Liard M.D., B.C., for Needle Point Resources Ltd., 1984
- Singhai, G.C., Report on 1 to 5 Nome Mineral Claims, Needlepoint Mtn Area, Cassiar, Liard M.D., B.C., NTS 104, for Evergrow Resources Ltd., 1980
- Skatchley, D.A., Sinclair, A.J., Multi-Element Litho-geochemistry of Alteration Associated with Gold-Quartz Veins of the Erickson Mine, Cassiar District, B.C. Dept. of Mines, Geol. Fieldwork 1986, Paper 1987-1, 1987
- Sookochoff, L. Geological and Geochemical Report on the Nome 1-5 Claims, for Evergrow Resources Ltd. Assess Report 17,666, 1988

GEOPHYSICIST'S CERTIFICATE

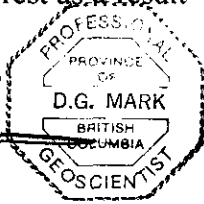
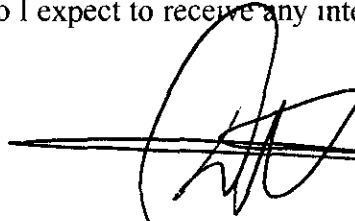
I, DAVID G. MARK, of the City of Vancouver, in the Province of British Columbia, do hereby certify that:

I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

I am a Consulting Geophysicist of Geotronics Surveys Ltd., with offices at #405 - 535 Howe Street, Vancouver, British Columbia.

I further certify that:

1. I am a graduate of the University of British Columbia (1968) and hold a B.Sc. degree in Geophysics.
2. I have been practicing my profession for the past 29 years, and have been active in the mining industry for the past 32 years.
3. This report is compiled from data obtained from two magnetic and VLF-EM surveys, one carried out within the northeast corner of the Nome #1 Claim, and the other carried out within the northwest corner of the Nome #2 Claim. The surveys were done from May 23 to June 25 under the supervision and field supervision of Gerry Diakow, geophysical technician.
4. I do not hold any interest in Tako Resources Ltd., nor in the properties discussed within this report, nor do I expect to receive any interest as a result of writing this report.



David G. Mark, P. Geo.,
Geophysicist

August 20, 1997

AFFIDAVIT OF EXPENSES

VLF-EM and magnetic surveys were carried out within the northeast corner of the Nome #1 claim and the northwest corner of the Nome #2 claim belonging to Tako Resources Ltd., from May 27 to June 12, 1997, located adjacent to Pooley Creek in the Cassiar area within the Liard Mining Division, British Columbia, to the value of the following:

Mob/Demob:

Wages, 1 man, 2 days @ \$300/day	\$ 600.00	
Airfare	1,200.00	
Airfreight	200.00	
Room and Board	200.00	
Truck Rental and fuel	375.00	2,575.00

Field

4 men, 2 instruments, 11 days @ \$1,050/day	\$11,550.00	
Room & board, 11 days @ \$300/day	3,300.00	
Truck rental and fuel, 11 days @ \$125/day	1,375.00	
Field supplies	450.00	
Ski-doo rental, 11 days @ \$100/day	1,100.00	17,775.00

Data Reduction & Report:

Senior geophysicist, 34.5 hr. @ \$50/hr.	\$1,750.00	
Computer-aided data reduction & drafting, 45 hr. @ \$40/hr.	1,800.00	
Printing, photocopying, compilation	250.00	<u>3,800.00</u>

GRAND TOTAL

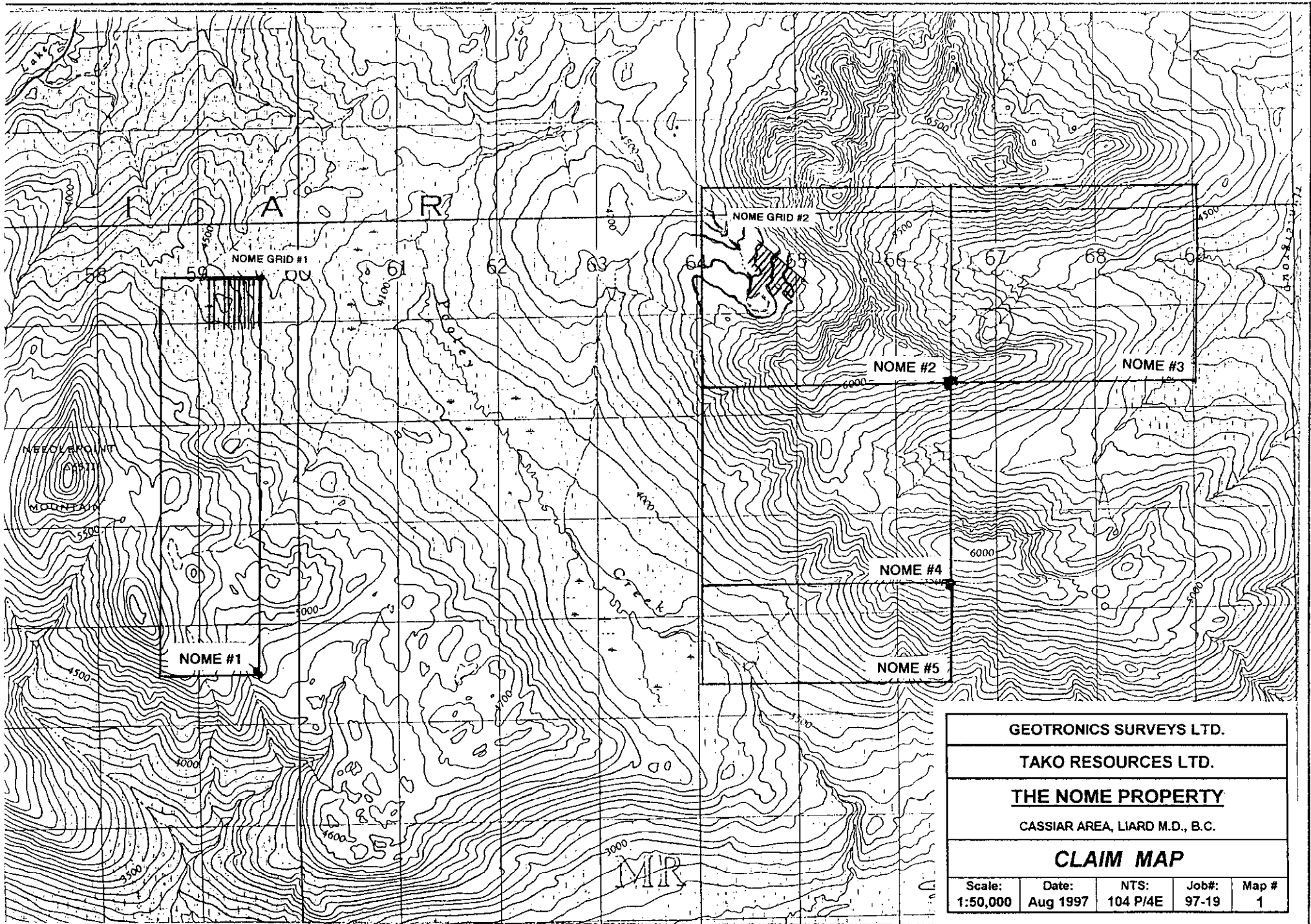
\$24,150.00

Note: About 15% of the work was done on the Nome #1 claim for amount of \$3,623.00
About 85% of the work was done on the Nome #2 claim for amount of \$20,527.00

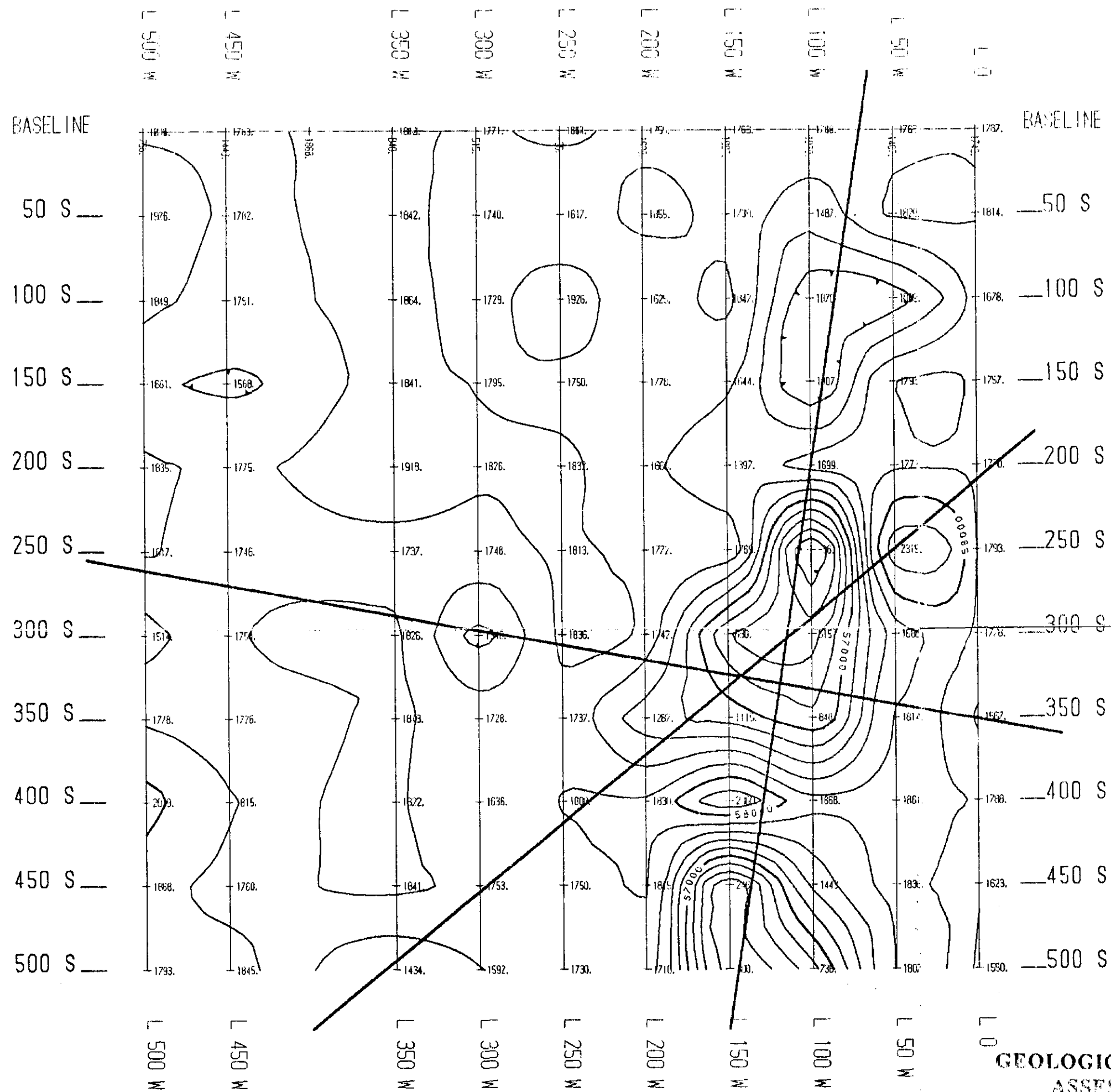
Respectfully submitted,
TAKO RESOURCES LTD.



S. G. Diakow,
Project Manager



GEOTRONICS SURVEYS LTD.				
TAKO RESOURCES LTD.				
<u>THE NOME PROPERTY</u>				
CASSIAR AREA, LIARD M.D., B.C.				
CLAIM MAP				
Scale:	Date:	NTS:	Job#:	Map #
1:50,000	Aug 1997	104 P/4E	97-19	1



SURVEY LEGEND

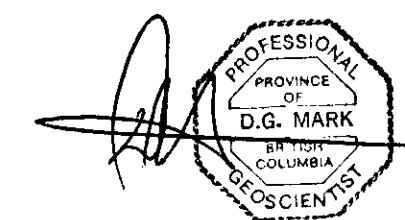
Instrumentation:
Proton Precession Memory Magnetometer
Model G/856

Survey Date: May 1997

Surveyed by: Gerry Diakow


Note:
56,000 nT (gammas) has been
deducted from each posted value.

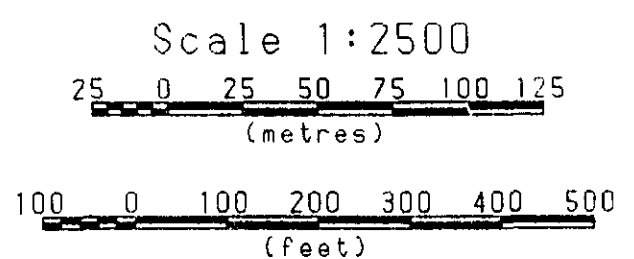
Contour Interval: 50 nT (gammas)
— Lineations of magnetic lows
suggestive of geologic structure



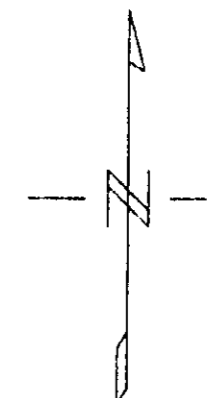
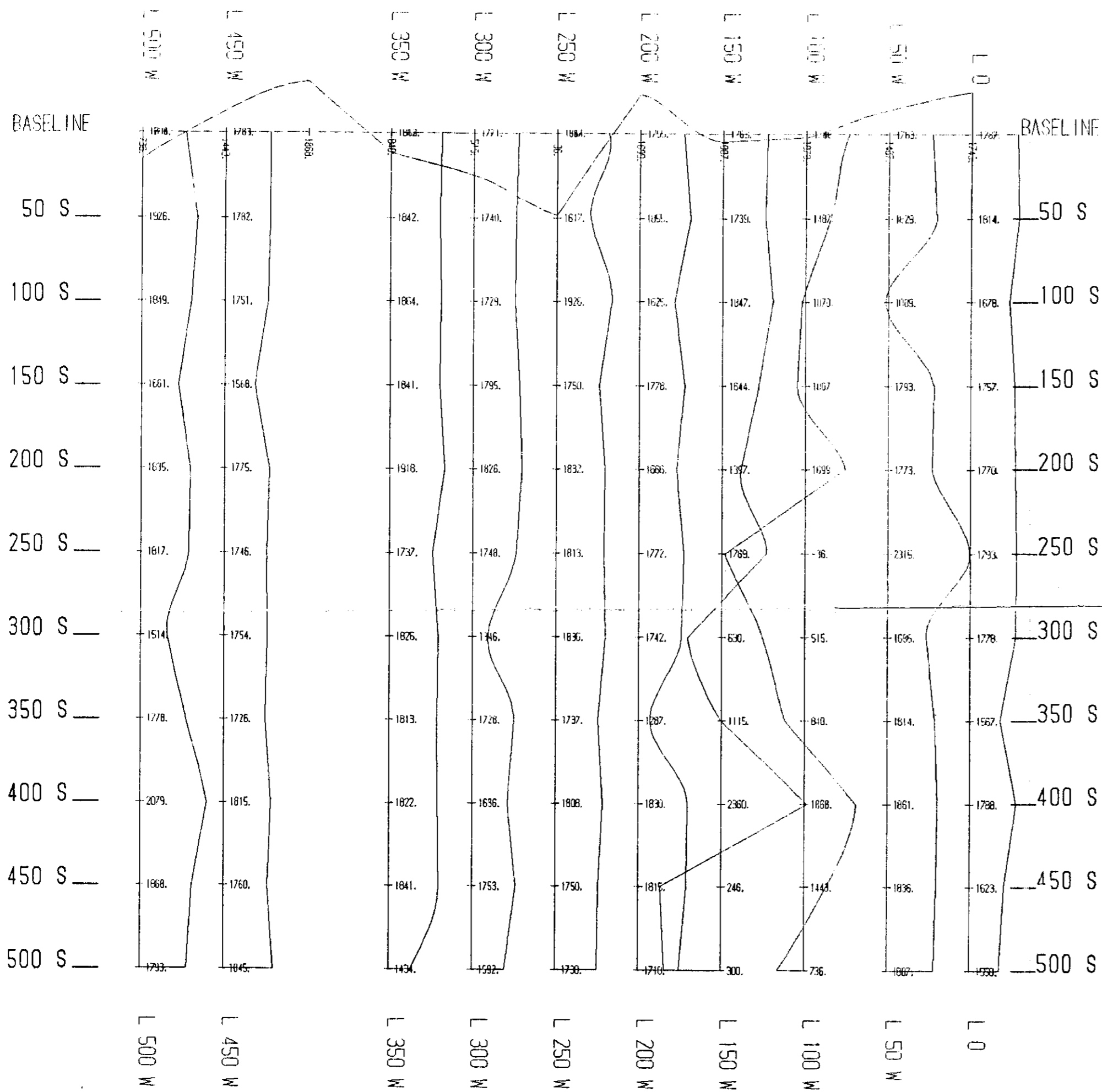
**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**

25,142 ①

 Data Reduction by:
GEOTRONICS SURVEYS LTD.
VANCOUVER B.C.



Geotronics Surveys Ltd				
TAKO RESOURCES LTD				
NOME-1 CLAIM Pooley Creek, Cassiar Area Liard Mining Division, B.C.				
MAGNETIC SURVEY CONTOUR PLAN				
Drawn by: RTM	Job No. 97-19	NTS 104P/4	Date July 97	Map No. GP-1



SURVEY LEGEND

Instrumentation:

Proton Precession Memory Magnetometer
Model G/856

Survey Date: May 1997

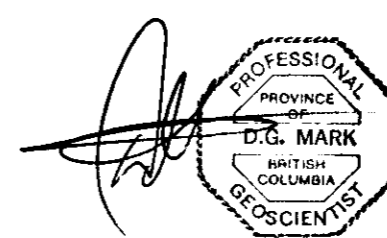
Surveyed by: Gerry Diakow

Vertical Scale: 600 nT per cm

NOTE:

56000 nT (gammas) has been deducted
from each posted value

**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**

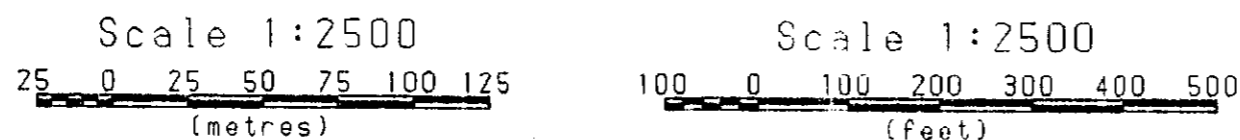


25,142

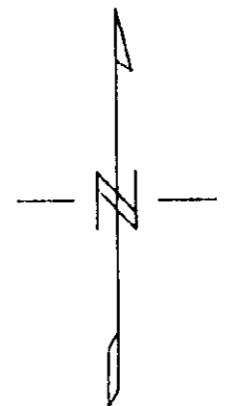
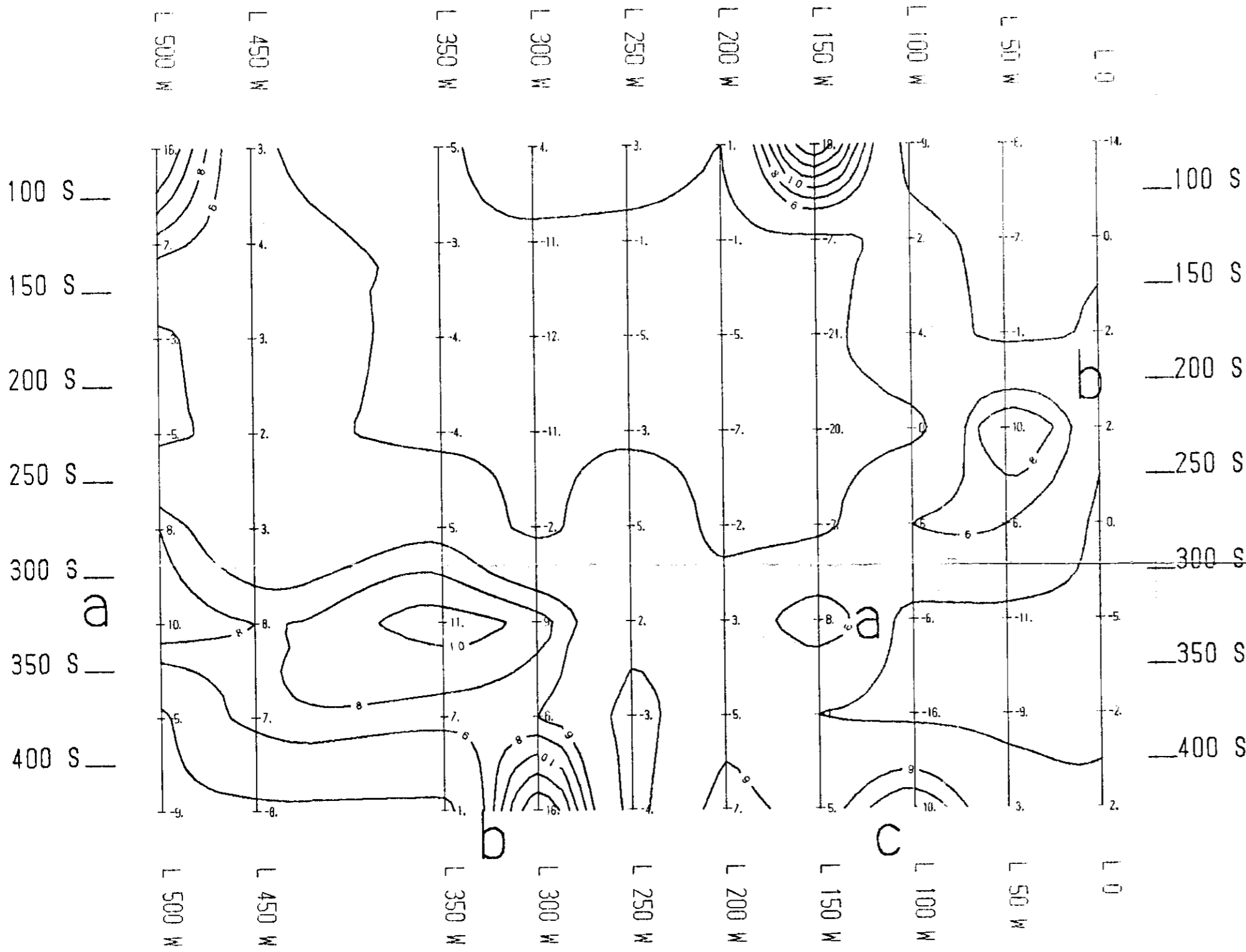
2



Data Reduction by:
GEOTRONICS SURVEYS LTD.
VANCOUVER B.C.

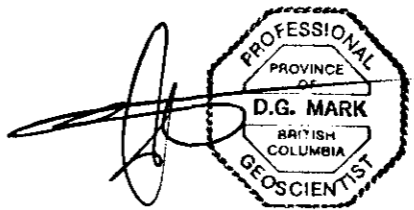


Geotronics Surveys Ltd				
TAKO RESOURCES LTD				
NOME-1 CLAIM Pooley Creek, Cassiar Area Liard Mining Division, B.C.				
MAGNETIC SURVEY STACKED PROFILE PLAN				
Drawn by: RTM	Job No. 97-19	NTS 104P/4	Date July 97	Map No. GP-2



Instrumentation:
 Sabre Electronics
 Model 27 VLF-EM receiver
 Survey Date: June 1997
 Transmitter:
 Lualualei, Hawaii (23.4 kHz)
 Bearing: SW
 Contour Interval: 5°
 a-a : VLF-EM anomalies


**GEOLOGICAL SURVEY BRANCH
 ASSESSMENT REPORT**

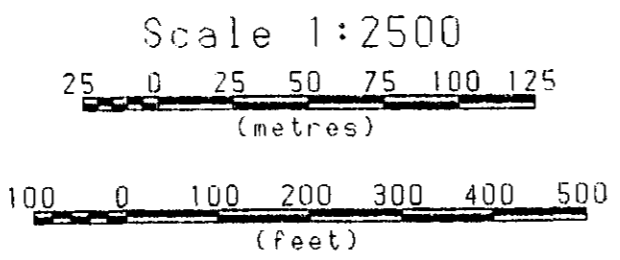


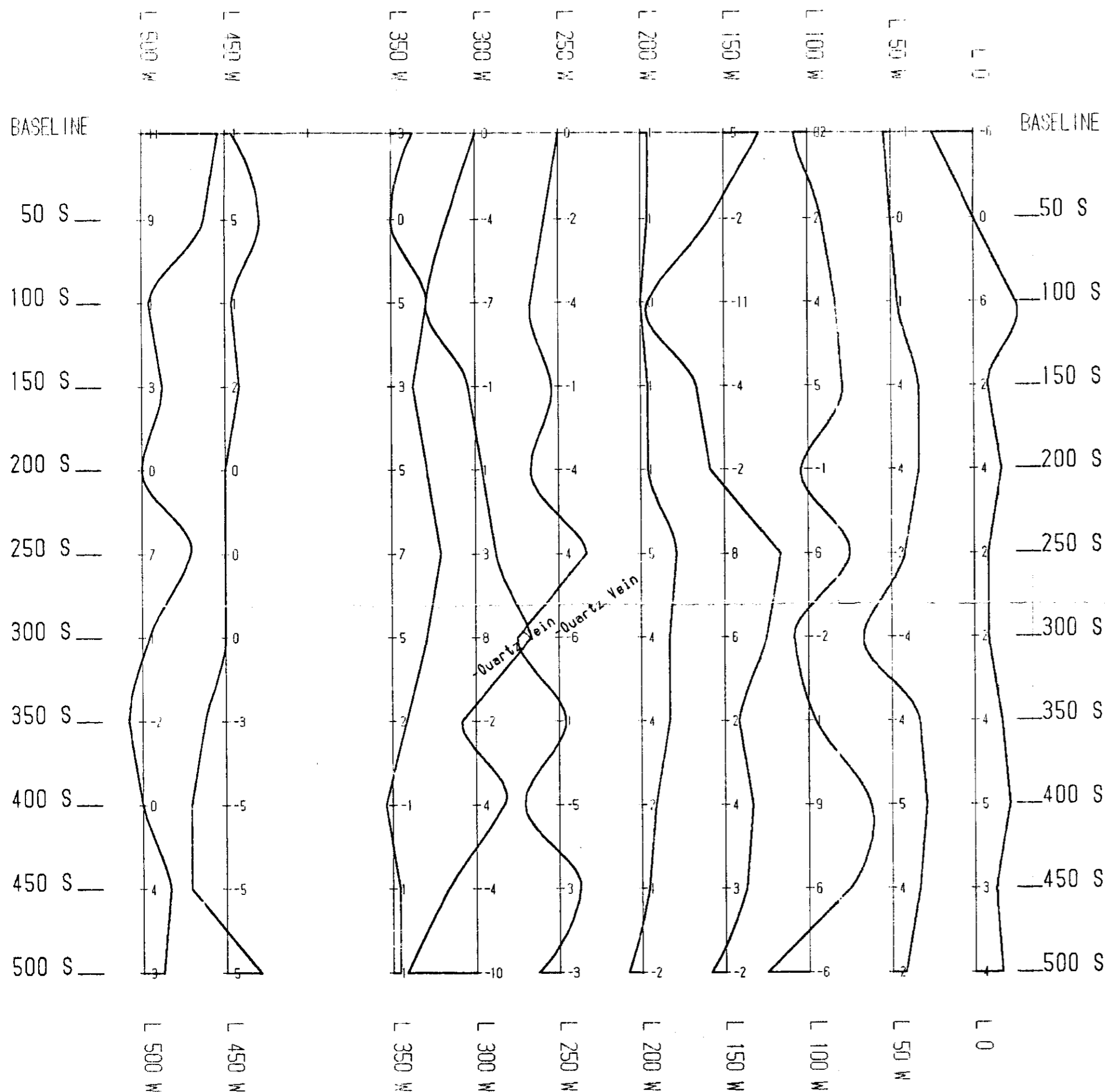
25,142

3

Geotronics Surveys Ltd				
TAKO RESOURCES LTD				
NOME-1 CLAIM Pooley Creek, Cassiar Area Liard Mining Division, B.C.				
VLF-EM SURVEY FRASER-FILTERED PLAN				
Drawn by: RTM	Job No. 97-19	NTS 104P/4	Date July 97	Map No. GP-3

 Data Reduction by:
GEOTRONICS SURVEYS LTD.
 VANCOUVER B.C.





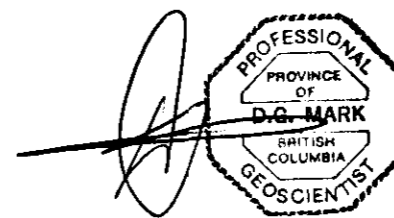
Instrumentation:
 Sabre Electronics
 Model 27 VLF-EM receiver

Survey Date: June 1997

Transmitter:
 Lualualei, Hawaii (23.4 kHz)
 Bearing: S.W.

VLF Profile & Vertical Scale:
 Tilt angle (6° per cm)

**GEOLOGICAL SURVEY BRANCH
 ASSESSMENT REPORT**



25,142

4

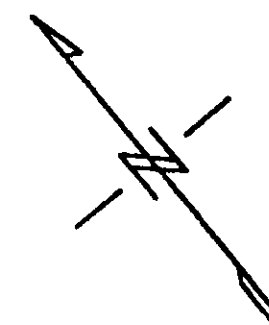


Data Reduction by:
GEOTRONICS SURVEYS LTD.
 VANCOUVER B.C.

Scale 1:2500
 25 0 25 50 75 100 125
 (metres)

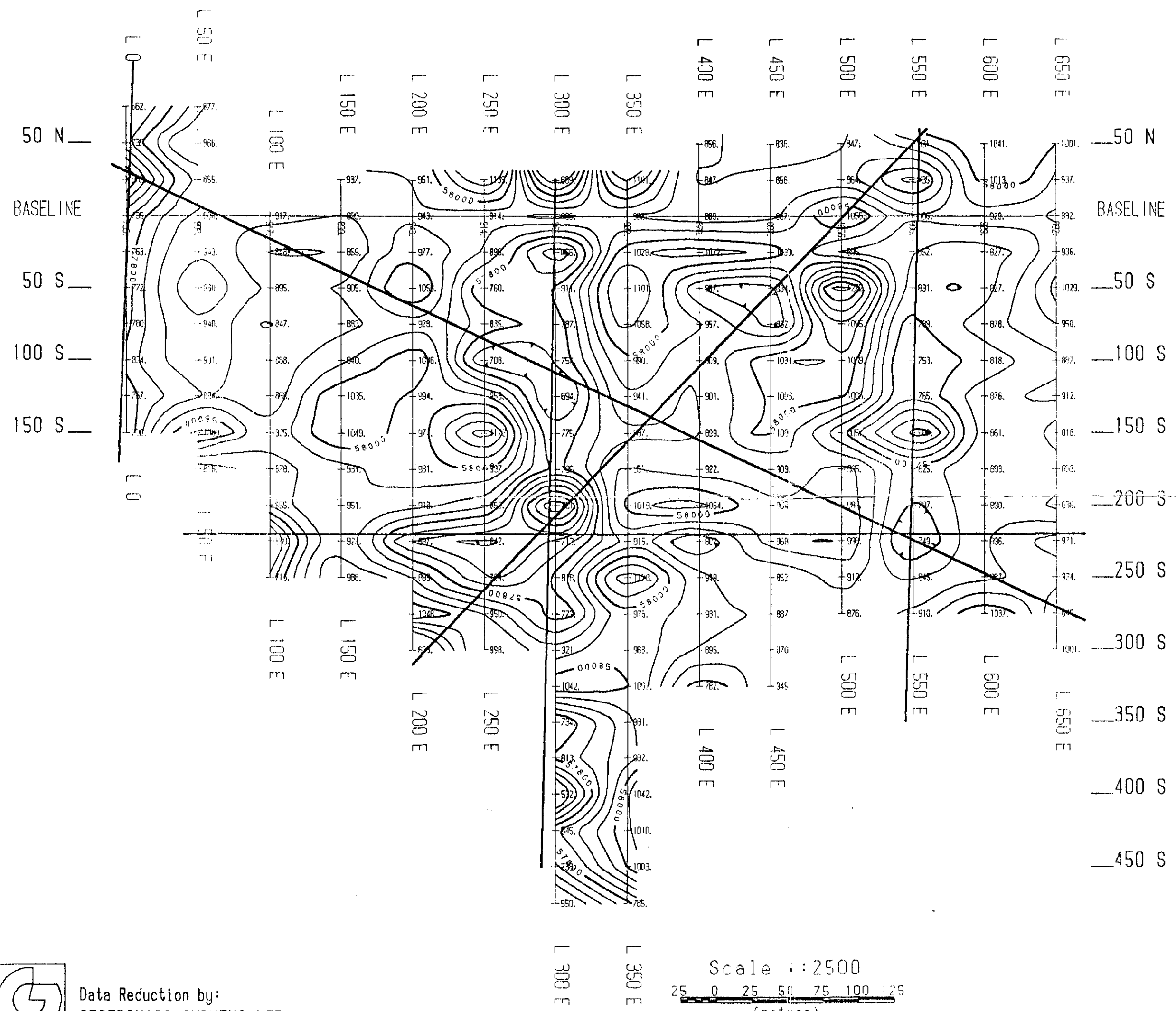
Scale 1:2500
 100 0 100 200 300 400 500
 (feet)

Geotronics Surveys Ltd				
TAKO RESOURCES LTD				
NOME-1 CLAIM Poolley Creek, Cassiar Area Liard Mining Division, B.C.				
VLF-EM SURVEY STACKED PROFILE PLAN				
Drawn by: RTM	Job No. 97-19	NTS 104P/4	Date July 97	Map No. GP-4



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,142 (3)



SURVEY LEGEND

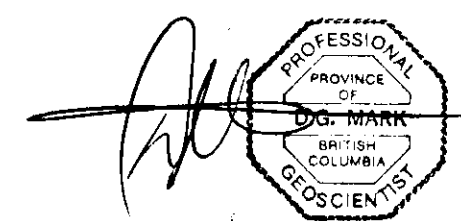
Instrumentation:
Proton Precession Memory Magnetometer
Model G/856

Survey Date: May 1997


Surveyed by: Gerry Diakow

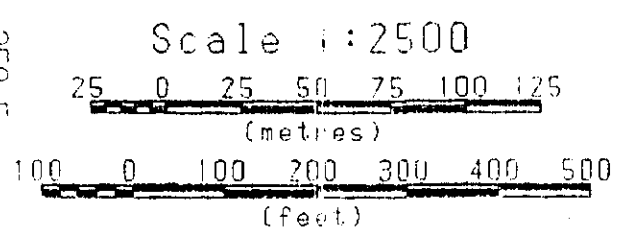
Note:
57,000 nT (gammas) has been
deducted from each posted value.

Contour Interval: 50 nT (gammas)
— Lineations of magnetic lows
suggestive of geologic structure



Geotronics Surveys Ltd			
TAKO RESOURCES LTD			
NOME-2 CLAIM Pooley Creek, Cassiar Area Liard Mining Division, B.C.			
MAGNETIC SURVEY CONTOUR PLAN			
Drawn by: RTM	Job No. 97-19	NTS 104P/4	Date July 97
Map No. GP-5			

 Data Reduction by:
GEOTRONICS SURVEYS LTD.
VANCOUVER B.C.



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,142⁶

SURVEY LEGEND

Instrumentation:
Proton Precession Memory Magnetometer
Model G/856

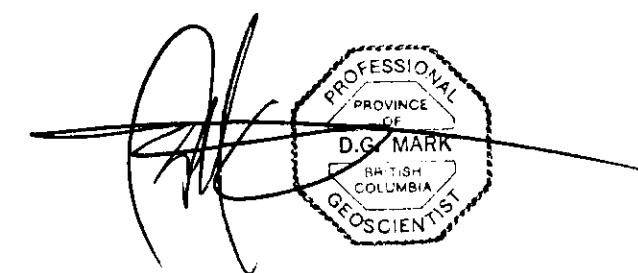
Survey Date: May 1997

Surveyed by: Gerry Diakow

Vertical Scale: 250 nT per cm

NOTE:

58000 nT (gammas) has been deducted
from each posted value



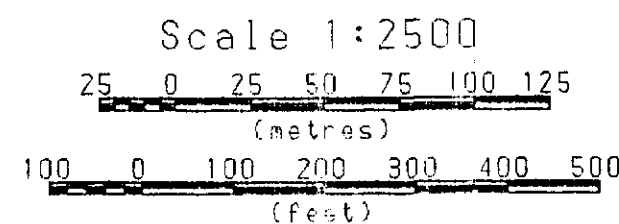
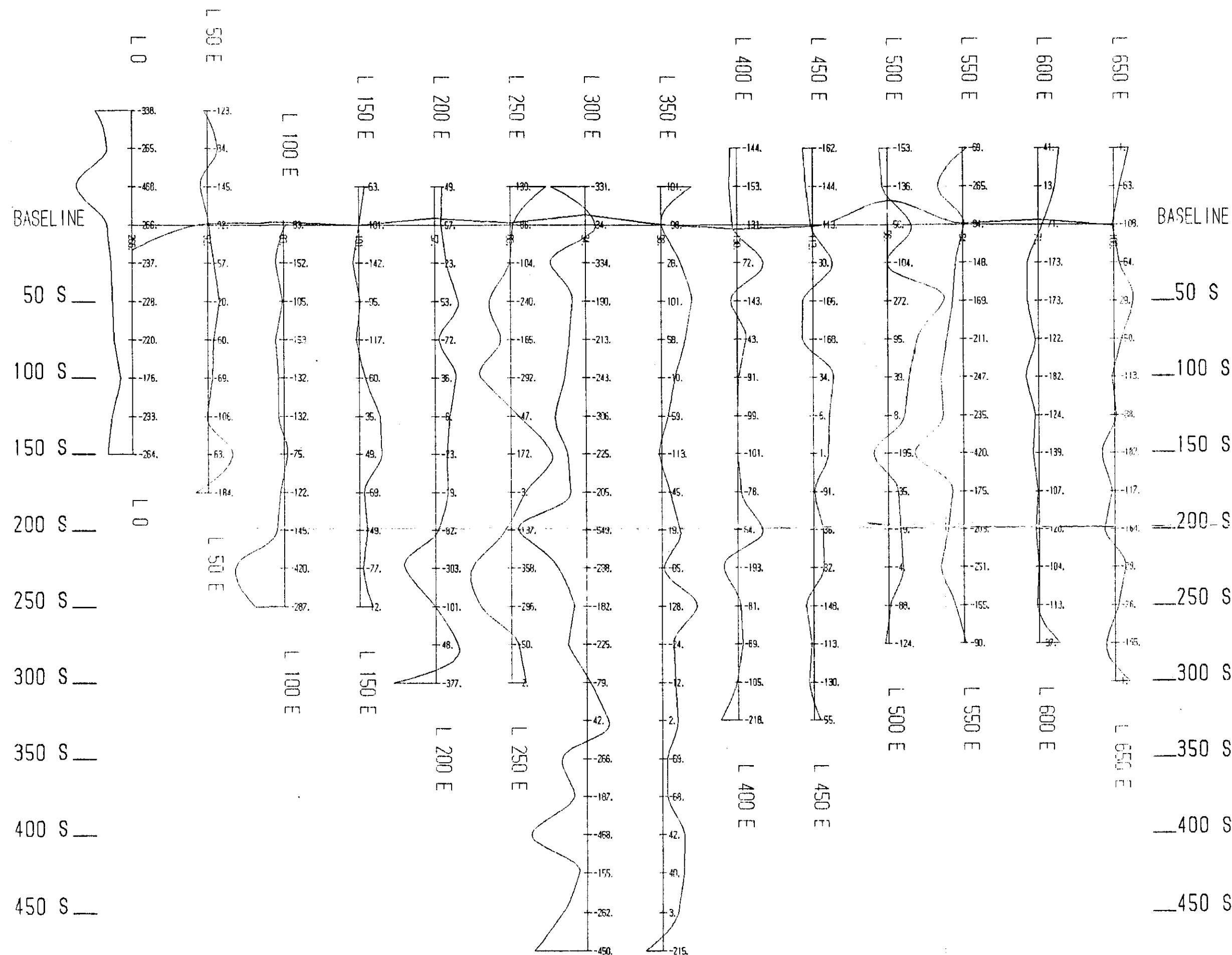
Geotronics Surveys Ltd

TAKO RESOURCES LTD

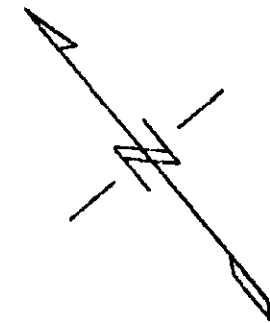
NOME-2 CLAIM
Pooley Creek, Cassiar Area
Liard Mining Division, B.C.

MAGNETIC SURVEY
STACKED PROFILE PLAN

Drawn by: RTM	Job No. 97-19	NTS 104P/4	Date July 97	Map No. GP-6
------------------	------------------	---------------	-----------------	-----------------

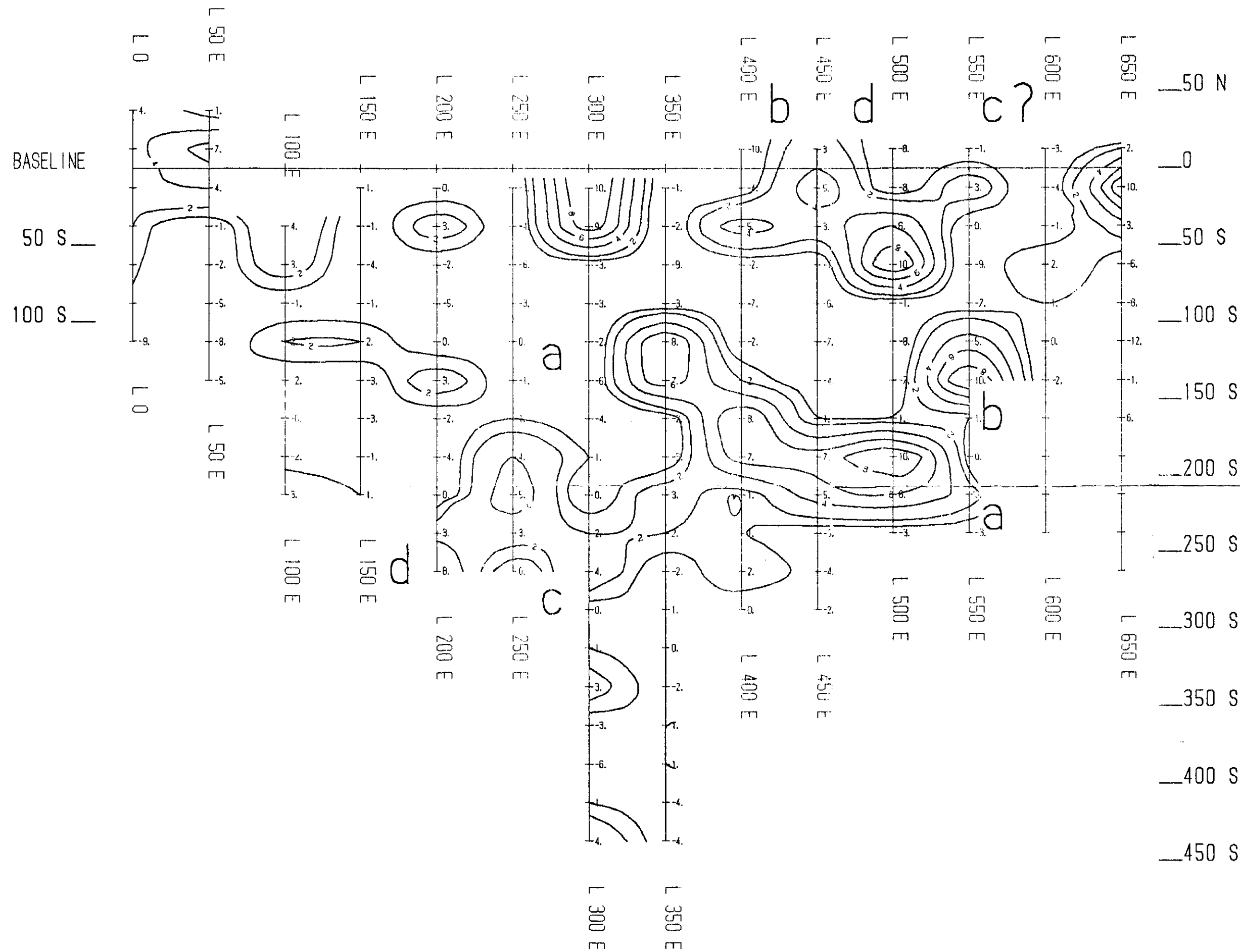


Data Reduction by:
GEOTRONICS SURVEYS LTD.
VANCOUVER B.C.



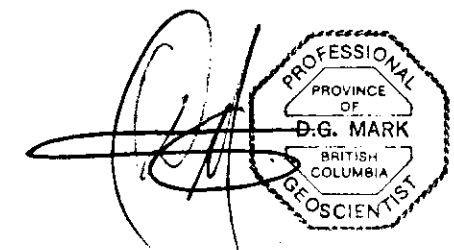
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,142 (7)

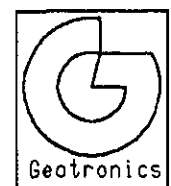


Instrumentation:
Sabre Electronics
Model 27 VLF-EM receiver
Survey Date: June 1997
Transmitter:
Lualualei, Hawaii (23.4 kHz)
Bearing: S.W.
Contour Interval: 5°

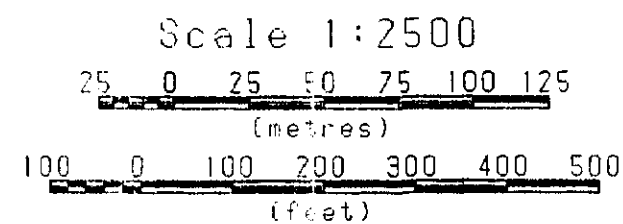
a-a : VLF-EM anomalies

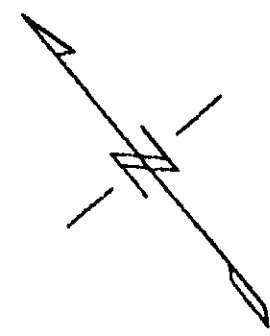


Geotronics Surveys Ltd				
TAKO RESOURCES LTD				
NOME-2 CLAIM Pooley Creek, Cassiar Area Liard Mining Division, B.C.				
VLF-EM SURVEY FRASER-FILTERED PLAN				
Drawn by: RTM	Job No. 97-19	NTS 104P/4	Date July 97	Map No. GP-7



Data Reduction by:
GEOTRONICS SURVEYS LTD.
VANCOUVER B.C.



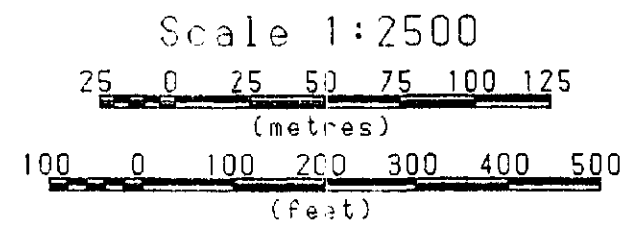
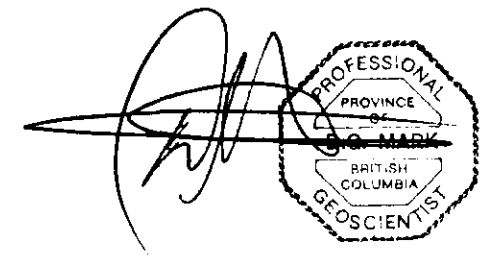


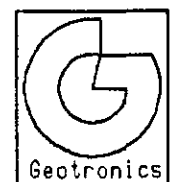
**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**

25,142 (8)



Instrumentation:
Sabre Electronics
Model 27 VLF-EM receiver
Survey Date: June 1997
Transmitter:
Lualualei, Hawaii (23.4 kHz)
Bearing: S.W.
VLF Profile & Vertical Scale:
Tilt angle (5° per cm)



 Data Reduction by:
GEOTRONICS SURVEYS LTD.
VANCOUVER B.C.

Geotronics Surveys Ltd				
TAKO RESOURCES LTD				
NOME-2 CLAIM Pooley Creek, Cassiar Area Liard Mining Division, B.C.				
VLF-EM SURVEY STACKED PROFILE PLAN				
Drawn by: RTM	Job No. 97-19	NTS 104P/4	Date July 97	Map No. GP-B