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REPORT

ON

HELICOPTER ELECTROMAGNETIC & MAGNETIC SURVEYS

BY

AERODAT LTD

JAM CLAIMS
LOGTUNG PROJECT
(7004)

ATLIN MINING DISTRICT

BRITISH COLUMBIA

(NTS 104-0-13)

FOR

CANAMAX RESOURCES INC



August 31, 1984
J. Roth
STRATAGEX Ltd.

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ON
HELICOPTER, EM AND MAGNETOMETER SURVEY
JAM CLAIMS
LOGTUNG PROJECT
B.C.


## SUMMARY

A 135.1 km helicopter-borne electromagnetic and magnetic survey was flown by Aerodat Ltd. for Canamax Resources Inc. in June, 1984 over the five JAM claims that form part of the Logtung Project in northern B.C.

The Logtung district, underlain by NW-trending pelitic and carbonate sediments intruded by mafic and felsic stocks, contains a major Mo/W stockwork deposit associated with prevalent skarning and hornfelsing and Ag-Pb-Zn veins.

The survey successfully attained its objectives in terms of adherence to survey specifications, and produced significant exploration information in that:

The aeromagnetic data defined:

a) several N-trending belts of discrete, local anomalies that could reflect either base metal-pyrrhotite horizons, or skarning or skarn-related mineralization from a local intrusive.

b) the probable extent of a partially exposed Cretaceous quartz monzonite that may be important vis-a-vis skarn, stockwork or epigenetic mineralization;

c) a series of larger anomalies undoubtedly defining diorite intrusives;

d) a dominant pattern of E-W cross-faulting, with several N-S and NW-SE strike faults also interpreted;

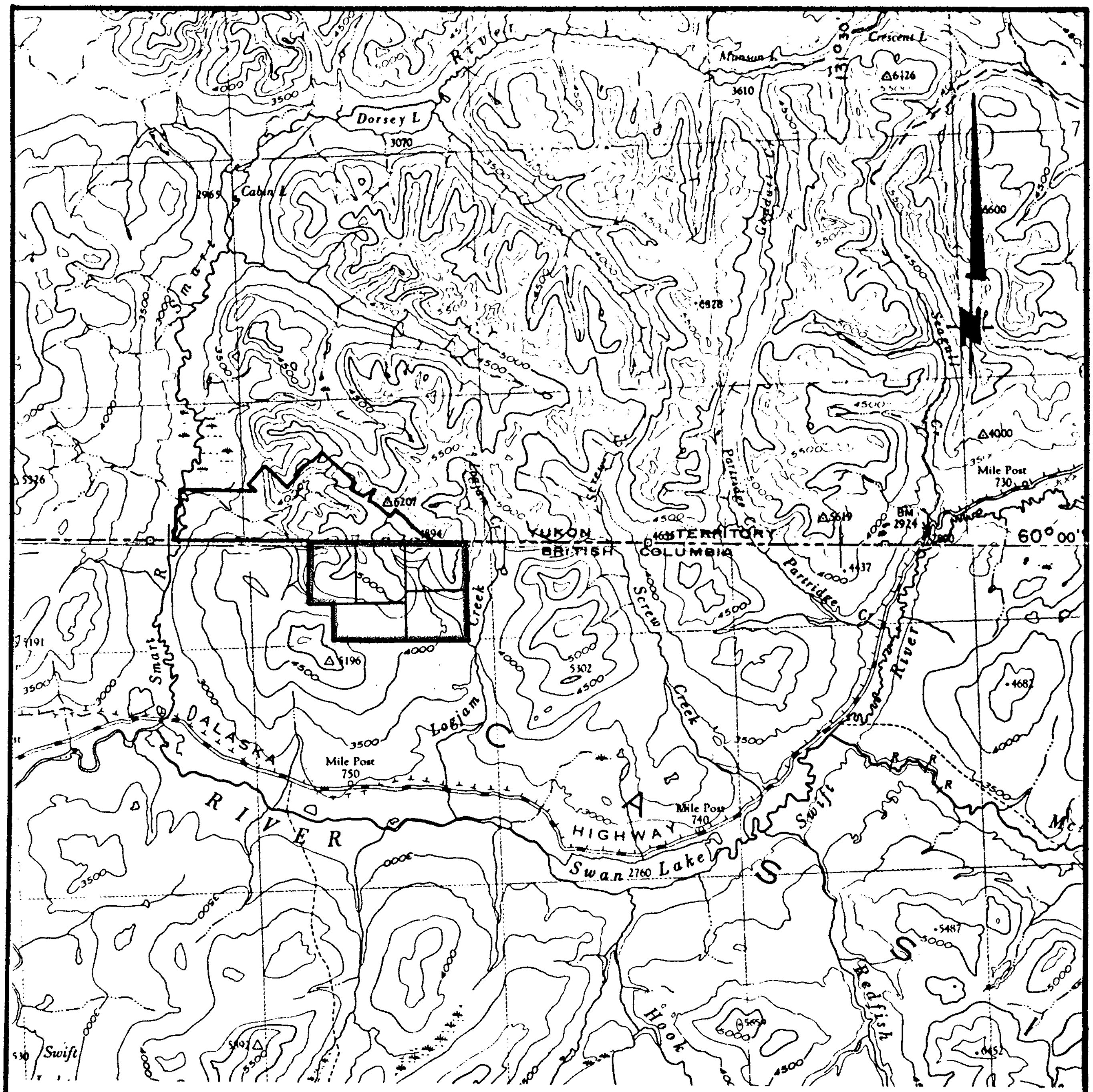
The electromagnetic data defined:

a) seven discrete conductive zones (B, D, E1, E2, F, G, HH), which could reflect conductive metallic sulphides, either skarn-related or of syngenetic origin, most with closely associated magnetic anomalies; these constitute first priority targets;

b) a number of multiple, extensive conductive zones likely graphitic in origin, which define stratigraphic trends;

c) within the stratigraphic conductive systems, five zones (A1, A2, AA, H2 & H3) with coincident magnetic anomalies which constitute second priority targets.

It is recommended that further exploration be carried out to determine the cause and economic potential of the priority targets, initially by prospecting and extending existing geochemical surveys, and subsequently, if warranted, by ground geophysics and drilling. Limited reconnaissance over the second priority targets is also recommended.




CANAMAX RESOURCES INC.

## LOGTUNG PROPERTY

LOG CLAIMS
WATSON LAKE MINING DISTRICT — YUKON TERRITORY

JAM CLAIMS
ATLIN MINING DIVISION — BRITISH COLUMBIA

## LOCATION MAP

SCALE 4 0 4 KILOMETRES
2 0 2 MILES

1 : 250,000

Vancouver — H. P.

N. T. S. Ref. 104 O 13, 105 B 4

FIG. 1

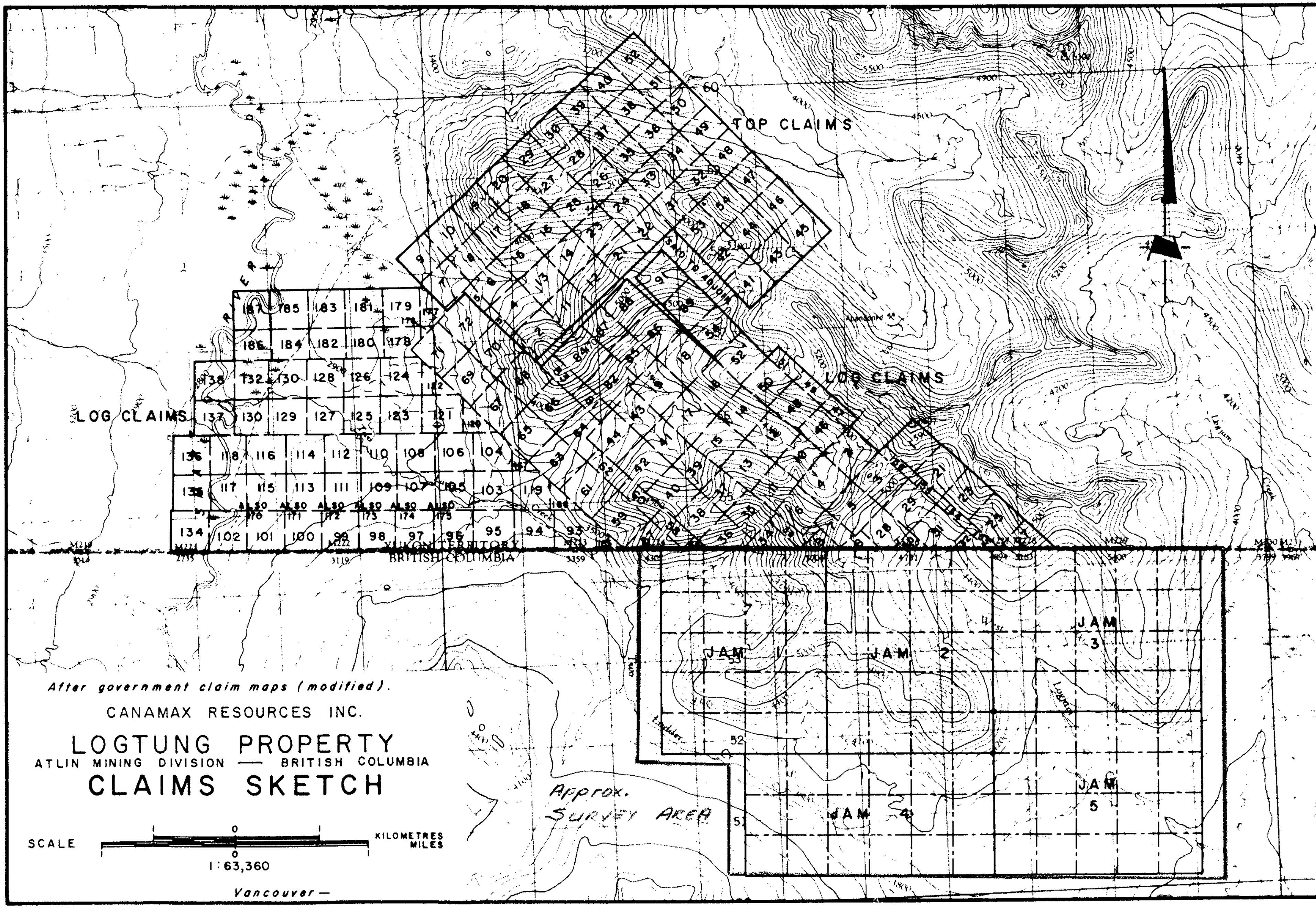

TOP CLAIMS
LOG CLAIMS
LOG CLAIMS
YUKON TERRITORY
BRITISH COLUMBIA
JAM 1
JAM 2
JAM 3
JAM 4
JAM 5
Approx. Survey Area
After government claim maps (modified).
CANAMAX RESOURCES INC.
LOGTUNG PROPERTY
ATLIN MINING DIVISION — BRITISH COLUMBIA
CLAIMS SKETCH
SCALE
KILOMETRES
MILES
1:63,360
Vancouver —

FIG. 1a

REPORT

ON

# AIRBORNE ELECTROMAGNETIC AND MAGNETIC SURVEYS

## JAM CLAIMS

## LOGTUNG PROPERTY, B.C.

## I. INTRODUCTION

This report discusses the results of an airborne geophysical survey carried out by Aerodat Ltd. over the JAM claims in the northern British Columbia. The property forms part of the larger Logtung property which hosts the Logtung W/Mo stockwork deposit.

The Logtung property lies on the B.C./Yukon border at longitude 131 36' W, 155km west of Watson Lake. The airborne survey was restricted to the 5 JAM claims (comprising 98 units) which lies entirely in B.C. within the Atlin Mining Division.

The property can be reached by a 13km four-wheel drive road from the Alaska Highway at km 1213. The terrain is moderately rugged with peaks rising to nearly 1900m from valley floors at 1100-1200m. The climate is typical of northern B.C. and the Yukon with patches of permafrost found on northern slopes.

## II. HISTORY AND PREVIOUS EXPLORATION

The earliest recorded exploration in the Logtung area dates from 1944 when Hudson Bay Mining and Smelting explored several silver-lead-zinc quartz veins on the Yukon side of the property. Subsequently, in 1965, Logjam Silver Mines drove an adit and completed substantial underground drilling pursuing these veins.

Further exploration of these veins was carried out in the latter part of the 1960s by Nilset Exploration, with more underground drifting and cross-cutting. Additionally, a second set of Ag-Zn-Pb veins was explored by W. MacKinnon in 1968.

Tungsten mineralization was first noted in the area by W.H. Poole, reported in his PhD thesis entitled "Geology of the Cassiar Mountains", Princeton University, 1956.

In 1975 Cordilleran Engineering Ltd., located tungsten anomalies in West Logjam Creek and in a tributary of Two-Ladder Creek and traced the anomaly to scheelite mineralization in veins and skarns in what is now known as the main Logtung deposit. Cordilleran staked the Log, Jam and Camp claims and carried out a limited program of geological mapping, prospecting, and stream sampling and rock chip sampling in the fall of 1976.

Amax Potash Limited, predecessor to Canamax Resources, optioned the property from a company affiliated with Cordilleran in 1977.

Since optioning the property, Canamax has carried out extensive surface exploration and underground evaluation which has defined a large stockwork tungsten/molybdenum system. Detailed geologic mapping and extensive drilling was carried out on the Yukon Zone followed by an underground adit and bulk sampling for metallurgical anaysis. This work has established a mineable reserve of 225 million tonnes of 0.10% $WO3$ and 0.05% $Mo.S_2$. On the B.C. Jam claims, exploration has defined what is known as the B.C. Zone. Tested by four drill holes, this zone has indicated low grade tungsten/molybdenum mineralization. In addition, the JAM claims were mapped on a reconnaissance basis and partially covered by a soil geochemical survey.

In the course of its overall exploration and evaluation of the main Yukon zone, Canamax also carried out limited IP and magnetometer surveys. These principally indicated that the nearby dioritic intrusives were strongly magnetic while the skarn- and stockwork-related mineralization was only weakly to moderately magnetic, quite resistive and only moderately responsive to IP.

## III. GEOLOGY

Regional: From a regional perspective, Logtung is situated in the northern portion of the Omineca tectonic belt on the SW limb of a large syncline on the SW flank of the Casssiar batholith. The axis of the syncline strikes NE.

The rocks within the syncline are shales of Cambrian to Mississipian age, and Devono-Mississipian pelitic and carbonate sediments and volcanics of the Sylvester and Dorsey groups.

The core of the syncline has been intruded by the NW-trending Seagull batholith dated at 59 million years. The limbs of the syncline have been intruded by small felsic stocks and plugs related either to the Seagull or Cassiar batholiths, as well as by NW-trending mafic to ultramafic sills of probable Triassic age.

Property: The Logtung property itself is underlain by sediments of the Mississipian Dorsey group which have a gentle NE dip. These sediments comprise argillites, cherts, quartzites and to a lesser degree, limestones. They have been intruded by diorite, quartz monzonite and felsic dikes. A dominant NE structural fabric is indicated by the prevalent direction of faults, joints and larger veins.

Alteration is prevalent throughout the property, with the pelitic sediments predominantly converted to hornfels, and the carbonate rocks generally exhibiting a skarn character. This alteration has several possible overlapping sources: 1) regional metamorphic effects attendant on the intrusion of the Seagull and Casssiar batholiths; 2) intrusion of high-level cupolas related to one or another of the batholiths.

Within the JAM claims, rock exposure is mainly confined to the higher ridges, with scree and glacial debris largely concealing bedrock on the flanks and in the valleys.

While metasediments probably form the dominant lithology on the property, substantial exposures of diorite have been noted in the western part of the claims. A quartz monzonite intrusive, which is likely important in terms of potential for mineralization, forms part of the ridge in the north-central part of the property, and is apparently in fault contact with skarned sediments at its southern end.

Mineralization noted on the JAM claims is principally confined to the area of the B.C. Zone, where low-grade scheelite in sparse quartz veins has been noted in skarned sediments in surface exposures and in the four drill holes put down by Canamax.

# IV AIRCRAFT AND SURVEY EQUIPMENT

## 4.1 Aircraft

The helicopter used for the survey was an Aerospatiale Alouette owned and operated by Trans Northern Turbo Air of Whitehorse. Installation of the geophysical and ancillary equipment was carried out by Aerodat at Whitehorse. The survey aircraft was flown at a nominal altitude of 60 meters.

## 4.2 Survey Equipment

### 4.2.1 Electromagnetic System

The Aerodat electromagnetic system employed has 3 coil pairs with a 7m separation operated at 3 different frequencies installed in a rigid 8m long bird towed 30m below the helicopter. The two vertical coaxial coil pairs were operated at 945 and 4568 Hz with the third horizontal coplanar coil pair at 4175 Hz. These frequencies were utilized to optimize responses from and discrimination between good and poor conductors. After nulling, the secondary in-phase and quadrature signals were measured to + 0.1 ppm of the primary signal simultaneously for each of the 3 frequencies with a time-constant of 0.1 seconds. Each coil pair was separately calibrated with an internal Q coil.

### 4.2.2 VLF-EM System

The VLF-EM System was a Herz 1A Totem. This instrument measures the total field and vertical quadrature component of the selected frequency.

The sensor was installed in a small bird towed 12 meters below the helicopter. The VLF transmitting station used in this survey was NAA (Cutler, Me.).

4.2.3 Magnetometer

The magnetometer was a Geometrics G-803 proton precession instrument, with a sensitivity of 1 gamma at a 0.5 second sample rate. The sensor was installed in a small bird towed 12 meters below the helicopter.

4.2.4 Magnetic Base Station

An IFG proton precession magnetometer was operated at the flight base to record diurnal variations of the earth's magnetic field. The clock of the base station was synchronized with that of the airborne system. Variations were recorded in analog and digital form at intervals of 4 seconds with an accuracy of +1.0 gammas.

4.2.5 Radar Altimeter

A Hoffman HRA-100 radar altimeter was used to record terrain clearance. The output from their instrument is a linear function of altitude for maximum accuracy. Under optimal terrain conditions, the accuracy of the radar altimeter is + 3m. Calibration tests were performed to ensure instrument accuracy.

4.2.6 Tracking Camera

A Geocam tracking camera was used to record flight path on 35 mm film. The camera was operated in the frame mode and the fiducial numbers recorded by both the analog and digital data systems were also imprinted for cross-reference on the margin of the film.

4.2.7 Analog Recorder

An RMS dot-matrix recorder was used to display the data during the survey. In addition to manual and time fiducials, the following data were recorded:

| Channel | Input | Scale |
|---|---|---|
| 00 | Altimeter (500ft. at top of chart) | 10 ft./mm |
| | co-axial coils: 4568 Hz: | |
| 04 | quadrature | 2 ppm/mm |
| 03 | in-phase | 2 ppm/mm |
| | co-planar coils: 4175 Hz: | |
| 06 | quadrature | 4 ppm/mm |
| 05 | in-phase | 4 ppm/mm |
| | co-axial coils: 946 Hz | |
| 02 | quadrature | 2 ppm/mm |
| 01 | in-phase | 2 ppm/mm |
| 15 | magnetometer: coarse | 25 gamma/mm |
| 14 | magnetometer: fine | 2.5 gamma/mm |
| 07 | VLF-EM Total Field | 2.5%/mm |
| 08 | VLF-EM Quadrature | 2.5%/mm |

### 4.2.8 Digital Recorder

A Perle DAC/NAV data system recorded the survey data on magnetic tape. Information recorded was as follows:

| Equipment | Resolution | Interval |
|---|---|---|
| EM | 0.1 ppm | 0.1 second |
| VLF-EM | 1% | 0.5 second |
| magnetometer | 0.1 gamma | 0.5 second |
| altimeter | 1.0m | 1.0 second |
| fiducial (time) | 0.1 second | 1.0 second |
| fiducial (manual) | 0.1 second | variable |

## V SURVEY PROCEDURES

The base of operations for the survey was Teslin, B.C. Data acquisition was carried out on during June 6-8, 1984, when both weather and magnetic variations were favourable. A total of 135.1 km of survey were completed over the property.

Survey specifications called for a flight line spacing of 200m and an EM bird clearance of less than 45m. Flight line orientation was E-W. Despite moderate to severe terrain, excellent navigation was maintained. Due to pilot inexperience, bird height averaged higher (40-45m) than desired, but exceeded specifications only for short intervals over the narrow stream channels and on the descent traverses over the sharper ridges in the NW section of the survey.

Survey navigation utilized a 1:10,000 photomosaic base prepared by Aerodat. Good control was maintained, both along the flight path and laterally, due to reasonably abundant recognizable terrain features. Manual fiducials were entered by the operator in the course of the survey and annotated on the flight path map as a near-real-time record of the flight path. The photos recorded by the Geocam tracking camera were subsequently processed and utilized to check and adjust the originally picked fiducial points.

The EM and magnetic data recorded in analogue form on the RMS chart recorder were inspected at the end of each flight for adherence to noise specifications. All records exhibited acceptable noise characteristics, particularly those obtained on the early morning flights. Scattered bursts of spikes from sferic activity were occasionally observed but these were too sporadic and too weak to affect data quality and were, in any event, removed by post-survey processing.

The Aerodat survey crew consisted of Wally Boyko, operator and navigator, and Dave Wright, technician. The flight crew from TNTA consisted of George Howells, pilot and Bill Darling, engineer. The author provided on-site monitoring and evaluation of the survey results.

# VI DATA PROCESSING AND PRESENTATION

## 6.1 Base Map and Flight Path Recovery

Initially a photomosaic base map for flight line layout was prepared at a scale of 1:10000. Because of large distortion in the photomosaic caused by the severe terrain, a topographic base map at 1:10000 scale was subsequently adapted for data recovery.
Terrain features recognizable in the course of flying the survey were provisionally plotted on the photomosaic, with manual fiducials annotated. A 'red-ball' map of significant EM anomalies was prepared in the field using this provisional flight path map.

Subsequently, as part of the office compilation, these points were replotted on the topo base, and checked and supplemented and adjusted by inspection of the 35mm flight tracking film, by running speed checks of the individual traverses and by identifying distortions in the preliminary plots of the EM and magnetics.

## 6.2 Total Field Magnetic Contours

The aeromagnetic data was corrected for diurnal variations by subtraction of the digitally recorded base station magnetic profile. No correction for regional variations was applied.

The corrected profile data was interpolated onto a regular grid at a 25 m true scale interval using a cubic spline technique. The grid provided the basis for threading the contours

Plotted at 10 gamma intervals.

The contoured aeromagnetic data has been plotted on the base map together with electromagnetic anomaly information, comprising Figure 2 the magnetic interpretation, superimposed on the contoured data comprises Fig. 3.

## 6.3 Electromagnetics

In addition to the analog records, the electromagnetic data was recorded digitally at a sample rate of 10/second with a time constant of 0.1 second. A two stage digital filtering process was subsequently carried out to reject major sferic events, and to reduce system noise. The process is outlined below.

Local atmospheric activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with a valid geological response. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events.

The signal-to-noise ratio is further enhanced by the application of a low-pass digital filter. It has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 0.25 seconds. This short effective time constant permits maximum profile shape resolution.

Following the filtering processes, a base level correction is made to the EM traces. The correction applied is a linear function of time that ensures that the corrected amplitude of the various in-phase and quadrature components is zero when no conductive or (magnetically) permeable source is present. The filtered and levelled data are then plotted in profile form.

Utilizing the filtered EM profiles, individual EM anomalies representing bedrock and surficial conductors are then identified and compiled. This process employs both the computer-based digital data files on a line-by-line basis, as well as preliminary plan maps of stacked profiles.

The selected anomalies are then analyzed in terms of a conductive dike in free space, yielding diagnostic parameters of conductivity-thickness and conductor depth. Appendix II contains the listing of the anomalies so selected and compiled for the Ketza survey, for the 945 Hz co-axial coil pair.

Once the anomaly selection and compilation process is complete and checked, the anomalies are plotted on the flight path map with their pertinent characteristics (conductivity-thickness, in-phase amplitude, and bird height) shown graphically or numerically. The EM anomaly plan map comprises Fig. 4 .

In addition, the filtered in-phase and quadrature profiles have also been plotted in plan form along the flight lines, at a scale of 2 ppm = 1mm (Fig. 5), together with the compiled

EM anomalies. This format permits rapid appreciation of anomaly character and variations, albeit without a correction for variations in flight elevation. While output from the other coil pairs and frequencies could also be displayed in this fashion, the 945 Hz data has been selected for display because it is least affected by poorly conductive surficial features.

## 6.4 Apparent Resistivity

The electromagnetic information was also processed to yield a map of the apparent resistivity of the ground.

While there are several approaches to transforming the EM data into apparent resistivity, the approach taken here was to assume a model of a 10m thick conductive layer over a resistive bedrock. The computer then calculates, using a stored response table for this model, the resistivity that would be consistent with the bird elevation and recorded amplitude for the co-planar high-frequency coil pair (which is optimally coupled to flat lying conductors). The computer-derived resistivity in ohm-meters was then smoothed for local perturbations, plotted along the flight lines, and appropriately contoured (Fig. 6).

## 6.5 VLF-EM Total Field Contours

The VLF-EM data was not compiled on the base map, since it lacked significant information beyond that contained in the principal AEM data, and since the bird was often unstable in flight.

## 6.6 Interpretation

Magnetics: The magnetic anomalies have been analyzed in terms of causative magnetic sources, whose outlines are superimposed on the contoured magnetics plan (Fig. 3). Faults, where inferred, are also shown.

EM: Utilizing all the various EM data displays and tabulations, anomalies were appraised in terms of likelihood of being bedrock conductors, and conductor axes and trends were then interpreted. The resulting interpretation is shown in Figs. 4 & 5, superimposed on the EM anomaly and profile maps, respectively. Faulting, where recognized, is also shown.

Synthesis: All significant geophysical features interpreted from the AEM and aeromagnetic data were incorporated in a composite plan map comprising Figures 7.

## VII. SURVEY RESULTS

The airborne geophysical survey over the Jam claims at Logtung disclosed the following results:

### 7.1 Magnetics

Figure 3 portrays the contoured aeromagnetic data, with the approximate outline of the causative magnetic sources for each of the significant magnetic anomalies superimposed.

The resulting pattern of magnetic features shows two distinct domains of magnetic anomalies. In the first category are small, local anomalies. A number of these forming a quasi-linear, north-trending belt are observed in the NE corner of the survey area. A second cluster of narrow linear anomalies exhibiting a north to northwest trend is found in the south-central portion of the property, immediately south of the quartz monzonite intrusive, where skarning has been mapped. As will be discussed below, a number of these magnetic anomalies are associated with EM conductors, either directly coincident or immediately flanking.

The second category of magnetic anomaly consists of somewhat broad, areally extensive positive features which are dominantly found in the NW sector of the survey area. Their form and implied high susceptibility indicates that they are most likely of intrusive nature. With two exceptions, there are no conductors associated with these magnetic anomalies.

All the magnetic anomalies arise from sources that are either at surface or only a limited distance below the surface, with the possible exception of the broad, low amplitude anomalies in the SE sector.

As shown in Fig. 3, where magnetic features exhibit disruptions or pronounced linearity, faults have been inferred.

The dominant fault pattern discerned consists of E-W breaks, transverse to the principal strike direction. Local terrain linears or geologically mapped faults support some of the faults interpreted from magnetics.

Several persistent N-S faults have also been interpreted. There is support from the mapped geology for the N-S fault bounding the western margin of the quartz monzonite intrusive. A persistent NW trending fault following Logjam Creek is inferred, although this derives more from the strong topographic linear rather than from any strong evidence in the magnetic data. There is also a NNE-trending fault interpreted along the SW margin of the cluster of dioritic intrusives in the NW sector of the survey.

Notable by the general absence of any magnetic relief is the north-central portion of the survey area. The mapped exposure of quartz monzonite falls within the western portion of this featureless domain. This strong correlation readily supports a considerably larger extent to the quartz monzonite than that defined by surface exposures, with its eastern margin interpreted along Logjam Creek.

## 7.2 Electromagnetics

As seen in Figures 4 and 5, the survey disclosed a considerable number of definite and probable bedrock conductors. Inferred continuity of individual conductors from line to line is shown on both these Figures, and in Figure 7 as well. The significant conductive zones have been given an alpha-numeric designation and are discussed below.

The list of selected and analyzed anomalies comprising Appendix II shows that almost all the conductors arise from sources interpreted to be less than 10m below the surface. Note that in this survey bird height, while mainly within the survey specifications, tended to be somewhat higher than the optimal clearance of 30m, due to the inexperience of the survey pilot. Nonetheless, the survey provided effective coverage in view of the very limited amount of overburden in the area.

In the ensuing discussion of EM anomalies, the following hierarchy of terms has been adopted:

| | |
|---|---|
| conductor: | an valid distinct variation in earth resistivity, expressed on one or more flight lines; |
| conductive zone: | a group of closely spaced parallel conductors; |
| conductive system: | a group of conductors or conductive zones viewed as geologically related. |

Three zones of multiple conductors, identified as Zones A1, A2 and A3 lie along the western boundary of the property. These are viewed as segments of conductive System A, separated by faults and dioritic intrusives. Each segment has at least three individual narrow conductive horizons, all exhibiting good to excellent conductivity-thickness. The segments display strikes ranging from N-S to NW-SE. This conductor system persists to the north beyond the limit of survey coverage.

In general, the conductive zones comprising System A are non-magnetic; however, magnetic anomalies accompany several of the individual anomalies, viz:

anomaly 41C (in Zone A1:) is directly coincident with a local magnetic anomaly; both may well extend further to the north beyond the survey coverage;

anomalies 51C & 52Q (in Zone A3) are directly coincident with a local magnetic anomaly.

Zone AA in the west-central part of the survey area consists of at least 5 separate conductive bands with a trend of

NNW-SSE. Conductivity-thickness ranges from good to very good. While the conductor system as a whole does not have an overall magnetic association, the eastern portion is appparently partially coincident with a moderate amplitude magnetic anomaly, lending some intrigue to this part of the zone. It is possible that Zone AA is an extension of System A offset by faulting and intrusives.

Conductor B, in the NW corner of the survey area is a two-line feature with a NNW trend. While anomaly amplitudes are weak, conductivity-thickness is indicated to be moderate. It is coincident with or directly on the flank of a local magnetic anomaly which has the same trend.

Conductor C, in the west-central portion, is recorded only on one flight line and exhibits poor conductivity-thickness. However, its position on the flank of an extensive magnetic anomaly lends some additional interest. It may be part of the same stratigraphic horizon as Conductor B or an entirely separate feature.

Conductor D, at the northern edge of the survey, is basically a one-line anomaly, with good conductivity-thickness. While it has no correlating magnetic feature, its isolated aspect raises some intrigue.

Several short conductors that trend generally N-S in the eastern portion of the survey area are viewed as segments of a System E. Conductor E1 to the north has a strong response on one line and moderate conductivity-thickness. It is on the flank of a one-line magnetic anomaly.

Zone E2, further to the south, extends over three lines and is comprised of at least two separate conductive bands. Its trend is NNW. Zone E2, like Conductor E1, falls on the flank of a local magnetic anomaly.

Faults inferrable from the magnetic data apparently account for the broken-up character of System E.

Zone F, which lies along with a portion of Logjam Creek, is a weak, three-line response which exhibits good to very good conductivity-thickness. The weak amplitudes recorded are probably caused in part by the high terrain clearance of the bird over the stream valley together with the effect of the indicated 10-15m of concealing overburden. There is no associated magnetic anomaly.

Zone G in the central portion of the survey area is basically a two-line feature with two separate conductive bands. Conductivity-thickness on the flight line with the strongest response, Line 52, is quite high. The two conductive bands straddle a local magnetic anomaly, thereby increasing interest in this isolated conductor.

Occupying the south-central portion of the survey area is a complex swarm of medium to strong EM anomalies. The whole assemblage is designated System H. Given the multitude of individual EM responses, it is clearly a matter of some uncertainty to determine the continuity of individual conductive horizons. Nonetheless, the continuity shown (in Figures 4, 5, & 7) is defensible and plausible, It is noted, however, that some individual conductors of reasonable amplitude and conductivity-thickness have not been linked into continuous conductors.

The general trend of the conductors of the System H is southerly, swinging to southeast towards the southern boundary of the survey. This system in general lacks any overall associated magnetic anomaly; however, some of the components of System H do have correlating magnetic features, as noted in the discussion below.

Zone H1, along the western part of the H system, is fairly typical in its high conductivity-thickness and persistence, as well as the multiple conductive bands that make up the zone.

Zone H2, which may extend further to the south onto Lines 54 and 55, is somewhat notable for its close association with a local magnetic anomaly.

Zone H3, to the south, may represent a continuation of this trend. It too has a direct association with a local magnetic anomaly.

Zone H4, slightly further to the east, exhibits good amplitudes and conductivity-thicknesses, but has no magnetic association. It may well persist further than the its extent shown in Figures 4, 5, & 7.

Zone H5 extends over at least four lines and may persist further north than shown, onto Lines 53 and 52. A wider than usual gap between flight lines impedes the recognition of continuity here. A probable continuation of Zone H5 to the south, Zone H5' has similar attributes. H5' is slightly different in that its southern part has an apparent direct association with a magnetic anomaly.

Zone H6, which is the longest and most persistent part of the conductor system H, has at least two conductive horizons. It trends southeast and exhibits high conductivity-thickness. It may well continue further to the north onto Lines 53 and 52, although the wide gap between flight lines makes such an interpretation tenuous. Zone H6 overlies a broad bilobate magnetic anomaly, but the conductor trends and continuity are different from the magnetic anomalies. The source for the magnetic anomaly is inferred to be deeper than the conductors.

Note that it is probable that various portions of System H continue further to the south beyond the southern limit of the survey.

System H is disrupted by one or more faults, indicated by either or both of the EM or magnetic patterns. In particular, the northern end of the conductor system terminates against an E-W fault that is also supported by geological mapping.

Conductor HH, at the fault-disrupted northern end of the H system, is a weak, low conductivity feature detected on two lines. However, it is proximate to a short, local magnetic anomaly and falls within an area immediately south of the quartz monzonite where skarning has been mapped, and thus holds out some interest.

### 7.3 Apparent Resistivity

The apparent resistivity values computed using a model of a 10m layer over a resistive half-space using the 4175 hz coplanar coils shows values ranging from a low of several ohm to a high of several hundred ohm, as seen in Fig. 6.

These apparent resistivity variations dominantly reflect changes in bedrock resistivity. It is likely, however, that the true resistivities over resistive lithologies are probably several thousand ohm m values. The measurement system and computational model are largely insensitive to variations in resistivities above 300 ohm.

All the identified bedrock conductive zones discussed in the preceding section have an accompanying apparent resistivity low. Suffice it to say that because of the manner in which the apparent resistivity is computed and smoothed before contouring, the location and definition of individual conductors is best done from the profiles rather than from the contoured apparent resistivity.

However, in some cases the contoured apparent resistivity gives a better indication of trends for one-line discrete bedrock features than the profile data. For example, the individual responses of Zone A3 could be joined up in several different ways but the northwest trend of the apparent resistivity contours clearly supports an overall northwest trend to the individual conductive bands.

The most extensive resistivity low is found in the south-central portion of the survey area covering System H. Its general shape conforms to the discerned NW-SE trend of the individual conductive bands.

In the north-central part of the survey area resistivities are uniformly high, in excess of several hundred ohm-m. This portion corresponds to the exposed portion and presumed extension of the quartz monzonite and is entirely consistent with an intrusive. True resistivities may actually be considerably higher, for reasons discussed above.

In the northwest sector of the survey area, resistivities range from quite high down to moderately low. The highest resistivities tend to correspond to spurs with exposed bedrock, particularly intrusive diorite. The lower resistivity values, apart from those corresponding to discrete bedrock conductors, may reflect the combined effects of moderately resistive pelitic sediments plus a limited amount of overlying unconsolidated material.

There is a pronounced east-west linear in the middle of the survey area dividing the large area of high resistivity from the more conductive sedimentary rocks to the south. While this feature may be influenced by topography and degree of rock exposure, it also corresponds to east-west faults inferred from magnetics and from analysis of individual EM conductors and therefore is viewed as having a measure of reality.

While the most intense and/or areally extensive apparent resistivity features reflect changes in bedrock resistivity, some of the subtler, less pronounced variations may be influenced by conductive overburden. The trend of intermediate lows following Log Jam Creek is the best example.

## VIII DISCUSSION

As portrayed in the synthesis of geophysical features comprising Fig. 7, the combined airborne EM and aeromagnetic survey flown over the JAM claims at Logtung yielded more interesting results and more numerous conductors than were expected in view of the known absence of conductors in the immediate vicinity of the Logtung deposit. However, given a geologically complex area, with known skarn and stockwork mineralization, epigenetic precious and base metal occurrences, probable graphitic shales in the Dorsey group sediments, possible syngenetic base metal mineralization, as well as felsic and mafic intrusives, a certain measure of geophysical complexity might be anticipated.

### Magnetics

The larger, greater amplitude magnetic features are most probably diorite intrusives. This view is suppported by the fact that there are no conductors directly coincident with these magnetic bodies and by the outcrops of diorite mapped in the western portion of the survey. It is also supported by the results of limited ground magnetometer surveys over the main Logtung deposit.

The smaller local magnetic features, particularly those associated with conductors, could well be pyrrhotite-rich bands in a dominantly sedimentary regime. Alternatively they could be narow flows of mafic volcanics. A third possibility is that they reflect skarning and metamorphic effects attendant on intrusives, either from small cupolas or from the larger batholith to the east. The presence of an ovoid body of quartz monzonite exposed in the north-central part of the property lends considerable support to this latter interpretation, particularly for those anomalies near its margins.

Given the strong correlation of the exposed quartz monzonite with the featureless magnetic terrain in the north central portion of the survey, the eastern margin of this intrusive is inferred to extend as far as Logjam Creek.

Electromagnetics:

The EM responses can be divided into two categories: 1) those that have a persistence in character suggestive of stratigraphic units; and 2) those that are discrete and isolated that might represent distinct metalliferous targets.

In the former category are the conductors that comprise the System A along the western portion of the survey area and the complex assemblage that forms System H in the south-central portion. Graphitic sediments are the likely source of the multiple conductive horizons. While these are most likely stratigraphic features without much continuing exploration interest, the portions of these conductor systems that have directly coincident magnetic anomalies are probably worthy of some further attention, both for skarn and syngenetic mineralization.

In the second category are the discrete conductors or conductive zones such as B, D, E, F, G & HH. These clearly deserve some measure of examination to determine their geologic setting and likely cause. Potentially they could reflect base metal deposits accompanied by pyrrhotite, epigenetic Ag-Pb-Zn zones or skarn-related sulphide accumulations.

The calculated apparent resistivities predominantly reflect variations in bedrock lithologies. While the strongest lows correspond to zones or systems of individual conductors, subtler variations indicate the extent of lithologic units, such as the resistive quartz monzonite intrusive.

## IX CONCLUSIONS

The combined airborne EM/aeromagnetic survey conducted in June 1984 by Aerodat for Canamax Resources Inc. provided significant exploration information on the JAM claims at Logtung summarized below:

1) discrete magnetic features were delineated that could reflect zones of magnetic sulphides or skarn-related mineralization;

2) broader magnetic features were defined that undoubtedly reflect intrusive diorite bodies;

3) A large area lacking in magnetic anomalies correlates with a quartz monzonite intrusive whose eastern margin probably extends to Logjam Creek;

4) A dominantly E-W pattern of faulting that disrupts the magnetic terrain has been identified, along with several N-S and NW-SE strike faults;

5) several complex systems of multiple conductors trending NNW were delineated; these are interpreted to reflect stratigraphic conductors, most likely graphitic horizons, which have been disrupted by faulting.

6) certain portions of the above conductor systems, have directly coincident magnetic anomalies; these Zones (A1, A2, AA, $H_2$ & H3) are viewed as sufficiently interesting as to warrant limited follow-up;

7) a number of discrete conductive zones, most with closely associated magnetic anomalies, were detected; these zones (B, D, E1, E2, F, G & HH) could reflect conductive metallic sulphides, either skarn-related or syngenetic, and clearly merit further exploration.

## X. RECOMMENDATIONS:

In view of the encouraging results obtained by the airborne geophysical survey, it is recommended that efforts be conducted to ascertain the cause and setting of the high priority, discrete conductive zones (B, D, E1, E2, F and G and HH).

Limited efforts of a reconnaissance nature are recommended to pursue a further group of conductors rated as second priority targets. These are portions of the stratigraphic Zones A1, A3, AA (eastern portion), H2 and H3 that have directly coincident or closely associated magnetic features.

In view of the shallow depth of overburden indicated by the geophysical data, prospecting and geochemical surveys are recommended for an initial appraisal. It is also recommended that a Radem or equivalent VLF-EM instrument be used to attempt to define the conductors on the ground in conjunction with the prospecting and geochemistry, although more sophisticated ground EM surveys may ultimately be required. Given the proximity of the Logtung W-Mo deposit and its association with a high-level intrusive, such follow-up efforts should take into consideration as potential targets skarn- and stockwork-related W/Mo deposits as well as epigenetic and syngnetic base and precious metal deposits.

J. Roth
STRATAGEX LTD.

## STATEMENT OF QUALIFICATIONS

## JEREMY ROTH

1. I reside at 146 Dowling Avenue, Toronto, Ontario.

2. I hold a B.A. in Mathematics from Harvard College (1962) and an M.A. in Geophysics from Harvard University (1966).

3. I have been engaged in the practice of exploration geophysics since 1966.

4. I have personal knowledge of the surveys discussed in this report and have monitored their execution and compilation.

5. I have no direct or indirect interest in Canamax Resources Inc. or in the properties discussed in this report.

Jeremy Roth

J. Roth

# APPENDIX I

## GENERAL INTERPRETIVE CONSIDERATIONS

## APPENDIX I

## GENERAL INTERPRETIVE CONSIDERATIONS

### Electromagnetic

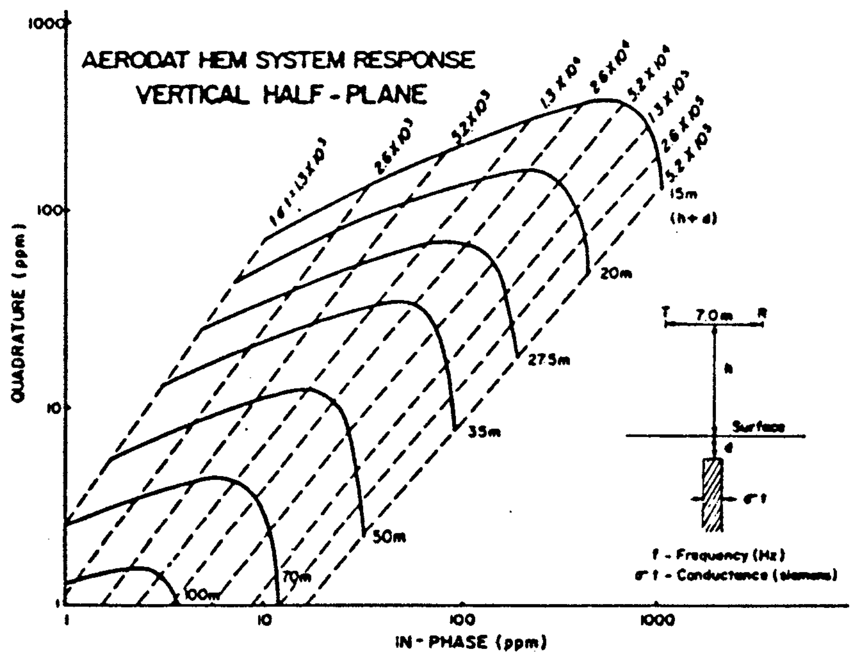
The Aerodat 3 frequency system utilizes 2 different transmitter-receiver coil geometries. The traditional coaxial coil configuration is operated at 2 widely separated frequencies and the horizontal coplanar coil pair is operated at a frequency approximately aligned with the higher frequency.

The electromagnetic response measured by the helicopter system is a function of the "electrical" and "geometrical" properties of the conductor. The "electrical" property of a conductor is determined largely by its conductivity and its size and shape; the "geometrical" property of the response is largely a function of the conductors shape and orientation with respect to the measuring transmitter and receiver.

### Electrical Considerations

For a given conductive body the measure of its conductivity or conductance is closely related to the measured phase shift between the received and transmitted electromagnetic field. A small phase shift indicates a relatively high conductance, a large phase shift lower conductance. A small phase shift results in a large in-phase to quadrature ratio and a large phase shift a low ratio. This relationship is shown quantitatively for a vertical half-plane model on the phasor diagram. Other physical models will show the same trend but different quantitative relationships.

The conductance and depth values as determined are correct only as far as the model approximates the real geological situation. The actual geological source may be of limited length, have significant dip, its conductivity and thickness may vary with depth and/or strike and adjacent bodies and overburden may have modified the response. In general the conductance estimate is less affected by these limitations than the depth estimate but both should be considered a relative rather than absolute guide to the anomalies' properties.



Conductance in mhos is the reciprocal of resistance in ohms and in the case of narrow slab-like bodies is the product of electrical conductivity and thickness.

Most overburden will have an indicated conductance of less than 2 mhos; however, more conductive clays may have an apparent conductance of say 2 to 4 mhos. Also in the low conductance range will be electrolytic conductors in faults and shears.

The higher ranges of conductance, greater than 4 mhos, indicate that a significant fraction of the electrical conduction is electronic rather than electrolytic in nature. Materials that conduct electronically are limited to certain metallic sulphides and to graphite. High conductance anomalies, roughly 10 mhos or greater, are generally limited to sulphide or graphite bearing rocks.

Sulphide minerals with the exception of sphalerite, cinnabar and stibnite are good conductors; however, they may occur in a disseminated manner that inhibits electrical conduction through the rock mass. In this case the apparent conductance can seriously underrate the quality of the conductor in geological terms. In a similar sense the relatively non-conducting sulphide minerals noted above may be present in significant concentration in association with minor conductive sulphides, and the electromagnetic response only relate to the minor associated mineralization. Indicated conductance is also of little direct significance for the identification of gold mineralization. Although gold is highly conductive it would not be expected to exist in sufficient quantity to create a recognizable anomaly, but minor accessory sulphide mineralization could provide a useful indirect indication.

In summary, the estimated conductance of a conductor can provide a relatively positive identification of significant sulphide or graphite mineralization; however, a moderate to low conductance value does not rule out the possibility of significant economic mineralization.

## Geometrical Considerations

Geometrical information about the geologic conductor can often be interpreted from the profile shape of the anomaly. The change in shape is primarily related to the change in inductive coupling among the transmitter, the target, and the receiver.

In the case of a thin, steeply dipping, sheet-like conductor, the coaxial coil pair will yield a near symmetric peak over the conductor. On the other hand the coplanar coil pair will pass through a null couple relationship and yield a minimum over the conductor, flanked by positive side lobes. As the dip of the conductor decreases from vertical, the coaxial anomaly shape changes only slightly, but in the case of the coplanar coil pair the side lobe on the down dip side strengthens relative to that on the up dip side.

As the thickness of the conductor increases, induced current flow across the thickness of the conductor becomes relatively significant and complete null coupling with the coplanar coils is no longer possible. As a result, the apparent minimum of the coplanar response over the conductor diminishes with increasing thickness, and in the limiting case of a fully 3 dimensional body or a horizontal layer or half-space, the minimum disappears completely.

A horizontal conducting layer such as overburden will produce a response in the coaxial and coplanar coils that is a function of altitude (and conductivity if not uniform). The profile shape will be similar in both coil configurations with an amplitude ratio (coplanar/coaxial) of about 4/1.*

In the case of a spherical conductor, the induced currents are confined to the volume of the sphere, but not relatively restricted to any arbitrary plane as in the case of a sheet-like form. The response of the coplanar coil pair directly over the sphere may be up to 8* times greater than that of the coaxial coil pair.

In summary a steeply dipping, sheet-like conductor will display a decrease in the coplanar response coincident with the peak of the coaxial response. The relative strength of this coplanar null is related inversely to the thickness of the conductor; a pronounced null indicates a relatively thin conductor. The dip of such a conductor can be inferred from the relative amplitudes of the side-lobes.

Massive conductors that could be approximated by a conducting sphere will display a simple single peak profile form on both coaxial and coplanar coils, with a ratio between the coplanar to coaxial response amplitudes as high as 8.*

Occasionally if the edge of an overburden zone is sharply defined with some significant depth extent, an edge effect will occur in the coaxial coils. In the case of a horizontal conductive ring or ribbon, the coaxial response will consist of two peaks, one over each edge; whereas the coplanar coil will yield a single peak.

* It should be noted at this point that Aerodat's definition of the measured ppm unit is related to the primary field sensed in the receiving coil without normalization to the maximum coupled (coaxial configuration). If such normalization were applied to the Aerodat units, the amplitude of the coplanar coil pair would be halved.

## Magnetics

The Total Field Magnetic Map shows contours of the total magnetic field, uncorrected for regional variation. Whether an EM anomaly with a magnetic correlation is more likely to be caused by a sulphide deposit than one without depends on the type of mineralization. An apparent coincidence between an EM and a magnetic anomaly may be caused by a conductor which is also magnetic, or by a conductor which lies in close proximity to a magnetic body. The majority of conductors which are also magnetic are sulphides containing pyrrhotite and/or magnetite. Conductive and magnetic bodies in close association can be, and often are, graphite and magnetite. It is often very difficult to distinguish between these cases. If the conductor is also magnetic, it will usually produce an EM anomaly whose general pattern resembles that of the magnetics. Depending on the magnetic permeability of the conducting body, the amplitude of the inphase EM anomaly will be weakened, and if the conductivity is also weak, the inphase EM anomaly may even be reversed in sign.

## VLF Electromagnetics

The VLF-EM method employs the radiation from powerful military radio transmitters as the primary signals. The magnetic field associated with the primary field is elliptically polarized in the vicinity of electrical conductors. The Herz Totem uses three orthogonal coils to measure the total field and vertical quadrature component of the polarization ellipse.

The relatively high frequency of VLF 15-25 kHz provides high response factors for bodies of low conductance. Relatively "disconnected" sulphide ores have been found to produce measurable VLF signals. For the same reason, poor conductors such as sheared contacts, breccia zones, narrow faults, alteration zones and porous flow tops normally produce VLF anomalies. The method can therefore be used effectively for geological mapping. The only relative disadvantage of the method lies in its sensitivity to conductive overburden. In conductive ground the depth of exploration is severely limited.

The effect of strike direction is important in the sense of the relation of the conductor axis relative to the energizing electromagnetic field. A conductor aligned along a radius drawn from a transmitting station will be in a maximum coupled orientation and thereby produce a stronger response than a similar conductor at a different strike angle. Theoretically it would be possible for a conductor, oriented tangentially to the transmitter to produce no signal. The most obvious effect of the strike angle consideration is that conductors favourably oriented with respect to the transmitter location and also near perpendicular to the flight direction are most clearly rendered and usually dominate the map presentation.

The total field response is an indicator of the existence and position of a conductivity anomaly. The response will be a maximum over the conductor, without any special filtering, and strongly favour the upper edge of the conductor even in the case of a relatively shallow dip.

The vertical quadrature component over steeply dipping sheet like conductor will be a cross-over type response with the cross-over closely associated with the upper edge of the conductor.

The response is a cross-over type due to the fact that it is the vertical rather than total field quadrature component that is measured. The response shape is due largely to geometrical rather than conductivity considerations and the distance between the maximum and minimum on either side of the cross-over is related to target depth. For a given target geometry, the larger this distance the greater the depth.

The amplitude of the quadrature response, as opposed to shape, is a function of target conductance and depth as well as the conductivity of the overburden and host rock. As the primary field travels down to the conductor through conductive material, it is both attenuated and phase shifted in a negative sense. The secondary field produced by this altered field at the target also has an associated phase shift. This phase shift is positive and is larger for relatively poor conductors. This secondary field is attenuated and phase shifted in a negative sense during return travel to the surface. The net effect of these 3 phase shifts determine the phase of the secondary field sensed at the receiver.

A relatively poor conductor in resistive ground will yield a net positive phase shift. A relatively good conductor in more conductive ground will yield a net negative phase shift. A combination is possible whereby the net phase shift is zero and the response is purely in-phase with no quadrature component.

A net positive phase shift combined with the geometrical cross-over shape will lead to a positive quadrature response on the side of approach and a negative on the side of departure. A net negative phase shift would produce the reverse. A further sign reversal occurs with a 180 degree change in instrument orientation as occurs on reciprocal line headings. During digital processing of the quadrature data for map presentation this is corrected for by normalizing the sign to one of the flight line headings.

# APPENDIX II

## ANOMALY LIST

## LOGTUNG

Co-axial Coils, 945 Hz

Anomaly Classification:

| Category | Conductivity-Thickness |
|---|---|
| 0 | 0 - 1 |
| 1 | 1 - 2 |
| 2 | 2 - 4 |
| 3 | 4 - 8 |
| 4 | 8 - 15 |
| 5 | 15 - 30 |
| 6 | 30 - 60 |
| 7 | 60 -120 mhos |

```
*****************************************************************
*          11:12:26     Program : ANLIST       10-AUG-84        *
*     User : DRA0:[J8425]                    Mode : BATCH       *
*     Control file : LOGTUNG.IAL                                *
*****************************************************************
```

```
 LDI filename                 : [J8425]J8425.LDI
Number of line names          :   148

 Input filename               : LOGTUNG.ANC

 Code and Frequency           :      1   945.0

 All lines being processed.

 Page title...
 ANOMALY LIST, LOGTUNG

 Starting page number         :      1

 PROCESSING SUMMARY

 Number of anomalies read     :   234
 Number of anomalies kept     :   234
 Number rejected              :     0

 Category                     :NUMBER  PERCENT
   0                          :    41       17
   1                          :    22        9
   2                          :    27       11
   3                          :    52       22
   4                          :    58       24
   5                          :    32       13
   6                          :     2        0
   7                          :     0        0
   8                          :     0        0
   9                          :     0        0
```

ANOMALY LIST, LOGTUNG

| FLIGHT | LINE | ANOMALY | CATEGORY | FREQUENCY 945 INPHASE | QUAD. | CONDUCTOR CTP MHOS | DEPTH MTRS | BIRD HEIGHT MTRS |
|---|---|---|---|---|---|---|---|---|
| 3 | 410 | A | 2 | 16.3 | 24.4 | 3.4 | 4 | 32 |
| 3 | 410 | B | 2 | 10.4 | 18.2 | 2.3 | 3 | 35 |
| 3 | 410 | C | 2 | 11.2 | 17.1 | 2.8 | 0 | 41 |
| 3 | 410 | D | 2 | 7.1 | 10.3 | 2.5 | 7 | 42 |
| 3 | 410 | E | 0 | 0.8 | 6.9 | 0.0 | 0 | 43 |
| 3 | 410 | F | 0 | 1.9 | 4.0 | 0.7 | 0 | 63 |
| 3 | 410 | G | 0 | -1.5 | 2.2 | 0.0 | 0 | 21 |
| 3 | 410 | H | 0 | -1.3 | 0.7 | 0.0 | 0 | 31 |
| 3 | 410 | J | 1 | 4.5 | 6.7 | 1.9 | 4 | 52 |
| 3 | 410 | K | 0 | 1.5 | 6.6 | 0.1 | 4 | 37 |
| 3 | 410 | M | 0 | 2.1 | 8.4 | 0.2 | 0 | 41 |
| 3 | 410 | N | 0 | 1.7 | 5.4 | 0.3 | 9 | 41 |
| 3 | 410 | O | 0 | 2.0 | 4.8 | 0.6 | 8 | 47 |
| 3 | 410 | P | 0 | -0.1 | 3.6 | 0.0 | 0 | 26 |
| 3 | 420 | A | 2 | 24.3 | 42.8 | 3.2 | 0 | 37 |
| 3 | 420 | B | 3 | 29.0 | 27.9 | 7.7 | 4 | 32 |
| 3 | 420 | C | 0 | 0.0 | 0.7 | 0.0 | 0 | 49 |
| 3 | 420 | D | 3 | 5.8 | 5.6 | 4.1 | 0 | 71 |
| 3 | 420 | E | 3 | 10.2 | 11.4 | 4.2 | 0 | 52 |
| 3 | 420 | F | 2 | 11.9 | 22.0 | 2.2 | 0 | 42 |
| 3 | 420 | G | 2 | 13.3 | 24.3 | 2.4 | 0 | 43 |
| 3 | 430 | A | 1 | 9.9 | 29.8 | 1.0 | 0 | 33 |
| 3 | 430 | B | 2 | 17.3 | 28.0 | 3.2 | 0 | 43 |
| 3 | 430 | C | 2 | 17.8 | 34.1 | 2.5 | 0 | 34 |
| 3 | 430 | D | 2 | 15.8 | 25.8 | 3.0 | 0 | 34 |
| 3 | 430 | E | 1 | 14.1 | 31.5 | 1.9 | 0 | 32 |
| 3 | 430 | F | 0 | 5.2 | 15.5 | 0.7 | 8 | 26 |
| 3 | 430 | G | 3 | 11.2 | 13.0 | 4.2 | 10 | 36 |
| 3 | 430 | H | 0 | 2.8 | 7.6 | 0.6 | 7 | 39 |
| 3 | 430 | J | 0 | 2.4 | 5.0 | 0.8 | 15 | 43 |
| 3 | 430 | K | 1 | 3.4 | 6.3 | 1.2 | 13 | 41 |
| 3 | 430 | M | 1 | 4.9 | 8.9 | 1.5 | 3 | 46 |
| 3 | 430 | N | 0 | 2.6 | 7.3 | 0.5 | 15 | 31 |
| 3 | 440 | A | 0 | 1.8 | 4.8 | 0.5 | 4 | 51 |
| 3 | 440 | B | 2 | 3.8 | 5.2 | 2.0 | 0 | 62 |
| 3 | 440 | C | 0 | 0.4 | 3.4 | 0.0 | 4 | 38 |
| 3 | 440 | D | 0 | 1.2 | 5.2 | 0.1 | 10 | 36 |
| 3 | 440 | E | 1 | 3.5 | 6.9 | 1.1 | 6 | 46 |
| 3 | 440 | F | 0 | 1.1 | 10.9 | 0.0 | 0 | 31 |
| 3 | 440 | G | 0 | 6.5 | 19.5 | 0.8 | 5 | 26 |
| 3 | 450 | A | 0 | 1.1 | 5.2 | 0.1 | 0 | 48 |

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

ANOMALY LIST, LOGTUNG

| FLIGHT | LINE | ANOMALY | CATEGORY | FREQUENCY INPHASE | 945 QUAD. | CONDUCTOR CTP MHOS | DEPTH MTRS | BIRD HEIGHT MTRS |
|---|---|---|---|---|---|---|---|---|
| 3 | 450 | B | 0 | 3.6 | 8.0 | 0.9 | 0 | 51 |
| 3 | 450 | C | 0 | 1.6 | 4.6 | 0.4 | 7 | 47 |
| 3 | 450 | D | 0 | 0.5 | 2.3 | 0.0 | 24 | 36 |
| 2 | 470 | A | 3 | 9.8 | 9.4 | 5.1 | 0 | 65 |
| 2 | 470 | B | 3 | 8.7 | 9.0 | 4.4 | 0 | 63 |
| 2 | 470 | C | 3 | 19.3 | 22.3 | 5.2 | 0 | 41 |
| 2 | 470 | D | 3 | 21.3 | 27.0 | 4.7 | 0 | 35 |
| 2 | 470 | E | 2 | 22.6 | 35.2 | 3.7 | 0 | 31 |
| 2 | 470 | F | 3 | 32.7 | 44.1 | 5.1 | 0 | 32 |
| 2 | 470 | G | 3 | 10.2 | 10.2 | 4.9 | 16 | 36 |
| 2 | 470 | H | 1 | 4.5 | 8.6 | 1.3 | 0 | 50 |
| 2 | 470 | J | 0 | 5.2 | 17.4 | 0.6 | 0 | 36 |
| 2 | 470 | K | 0 | 2.0 | 4.4 | 0.7 | 27 | 32 |
| 2 | 470 | M | 1 | 2.4 | 4.1 | 1.1 | 15 | 50 |
| 2 | 470 | N | 1 | 2.4 | 3.5 | 1.5 | 13 | 58 |
| 2 | 470 | O | 0 | 0.0 | 6.9 | 0.0 | 0 | 32 |
| 2 | 480 | A | 0 | 1.4 | 4.9 | 0.2 | 16 | 33 |
| 2 | 480 | B | 3 | 6.7 | 4.4 | 7.5 | 21 | 48 |
| 2 | 480 | C | 0 | 0.0 | 1.6 | 0.0 | 0 | 49 |
| 2 | 480 | D | 0 | 0.1 | 1.0 | 0.0 | 0 | 44 |
| 2 | 480 | E | 0 | 1.6 | 5.3 | 0.3 | 9 | 40 |
| 2 | 480 | F | 0 | 3.4 | 9.6 | 0.6 | 4 | 38 |
| 2 | 480 | G | 3 | 9.7 | 10.3 | 4.4 | 0 | 55 |
| 2 | 480 | H | 3 | 18.2 | 17.3 | 6.6 | 0 | 72 |
| 2 | 480 | J | 4 | 25.9 | 16.1 | 13.1 | 0 | 74 |
| 2 | 480 | K | 3 | 16.1 | 15.1 | 6.4 | 0 | 72 |
| 2 | 480 | M | 3 | 12.4 | 11.4 | 6.0 | 0 | 66 |
| 2 | 480 | N | 3 | 12.8 | 11.6 | 6.1 | 0 | 52 |
| 2 | 480 | O | 4 | 12.9 | 9.4 | 8.3 | 0 | 55 |
| 2 | 490 | A | 3 | 7.0 | 5.6 | 5.8 | 0 | 73 |
| 2 | 490 | B | 2 | 5.7 | 7.9 | 2.4 | 11 | 43 |
| 2 | 490 | C | 2 | 8.0 | 10.5 | 3.0 | 13 | 35 |
| 2 | 490 | D | 1 | 5.1 | 8.4 | 1.8 | 23 | 27 |
| 2 | 490 | E | 0 | 0.7 | 2.3 | 0.1 | 39 | 27 |
| 2 | 490 | F | 2 | 5.3 | 8.1 | 2.0 | 11 | 41 |
| 2 | 490 | G | 3 | 7.9 | 6.6 | 5.7 | 21 | 39 |
| 2 | 490 | H | 0 | 2.5 | 7.2 | 0.5 | 10 | 36 |
| 2 | 490 | J | 3 | 9.7 | 6.8 | 7.9 | 0 | 61 |
| 2 | 490 | K | 3 | 9.3 | 9.3 | 4.7 | 0 | 56 |
| 2 | 490 | M | 1 | 3.5 | 6.3 | 1.3 | 16 | 39 |
| 2 | 490 | N | 1 | 3.1 | 6.5 | 1.0 | 26 | 26 |
| 2 | 500 | A | 3 | 5.4 | 5.2 | 4.0 | 0 | 66 |

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

ANOMALY LIST, LOGTUNG

| FLIGHT | LINE | ANOMALY | CATEGORY | FREQUENCY INPHASE | 945 QUAD. | CONDUCTOR CTP MHOS | DEPTH MTRS | BIRD HEIGHT MTRS |
|---|---|---|---|---|---|---|---|---|
| 2 | 500 | B | 1 | 4.2 | 6.2 | 1.9 | 25 | 32 |
| 2 | 500 | C | 3 | 8.4 | 7.4 | 5.4 | 0 | 67 |
| 2 | 500 | D | 4 | 10.1 | 6.1 | 9.8 | 0 | 87 |
| 2 | 500 | E | 2 | 5.8 | 7.5 | 2.7 | 14 | 41 |
| 2 | 500 | F | 2 | 5.2 | 7.1 | 2.4 | 20 | 36 |
| 2 | 500 | G | 4 | 10.5 | 6.2 | 10.3 | 14 | 47 |
| 2 | 500 | H | 2 | 7.1 | 10.1 | 2.6 | 11 | 37 |
| 2 | 500 | J | 1 | 9.6 | 24.8 | 1.3 | 0 | 41 |
| 2 | 500 | K | 0 | 5.0 | 15.5 | 0.7 | 1 | 33 |
| 2 | 500 | M | 0 | 4.7 | 15.1 | 0.6 | 3 | 31 |
| 2 | 500 | N | 1 | 4.1 | 7.1 | 1.5 | 13 | 40 |
| 2 | 510 | A | 4 | 15.5 | 12.2 | 8.0 | 11 | 38 |
| 2 | 510 | B | 4 | 34.8 | 23.7 | 12.8 | 0 | 47 |
| 2 | 510 | C | 4 | 28.1 | 19.3 | 11.8 | 3 | 38 |
| 2 | 510 | D | 1 | 5.5 | 12.2 | 1.2 | 8 | 33 |
| 2 | 510 | E | 2 | 3.7 | 4.6 | 2.3 | 24 | 42 |
| 2 | 510 | F | 0 | 4.5 | 11.1 | 0.9 | 9 | 32 |
| 2 | 510 | G | 0 | 3.9 | 10.7 | 0.7 | 12 | 28 |
| 2 | 510 | H | 2 | 7.3 | 11.8 | 2.2 | 0 | 58 |
| 2 | 510 | J | 3 | 10.8 | 12.5 | 4.1 | 0 | 49 |
| 2 | 510 | K | 1 | 9.2 | 18.8 | 1.7 | 1 | 35 |
| 2 | 510 | M | 0 | 8.9 | 33.9 | 0.7 | 0 | 34 |
| 2 | 510 | N | 1 | 8.9 | 23.6 | 1.2 | 0 | 44 |
| 2 | 510 | O | 3 | 7.8 | 5.7 | 6.8 | 4 | 60 |
| 2 | 510 | P | 2 | 8.9 | 11.0 | 3.5 | 14 | 34 |
| 2 | 510 | Q | 3 | 16.0 | 13.7 | 7.2 | 5 | 42 |
| 2 | 510 | R | 3 | 14.8 | 14.8 | 5.7 | 8 | 37 |
| 2 | 510 | S | 2 | 7.1 | 9.4 | 2.9 | 4 | 47 |
| 2 | 510 | T | 1 | 6.9 | 13.2 | 1.7 | 5 | 37 |
| 2 | 520 | A | 1 | 4.8 | 7.4 | 1.9 | 13 | 40 |
| 2 | 520 | B | 5 | 17.1 | 8.6 | 15.1 | 1 | 52 |
| 2 | 520 | C | 4 | 22.9 | 19.0 | 8.6 | 2 | 39 |
| 2 | 520 | D | 4 | 23.5 | 17.7 | 9.8 | 0 | 48 |
| 2 | 520 | E | 3 | 23.4 | 26.9 | 5.6 | 0 | 40 |
| 2 | 520 | F | 3 | 16.6 | 17.8 | 5.4 | 0 | 46 |
| 2 | 520 | G | 5 | 20.2 | 10.3 | 15.7 | 0 | 62 |
| 2 | 520 | H | 3 | 12.8 | 10.3 | 7.2 | 0 | 69 |
| 2 | 520 | J | 2 | 7.8 | 12.2 | 2.3 | 14 | 31 |
| 2 | 520 | K | 1 | 8.4 | 16.4 | 1.8 | 4 | 34 |
| 2 | 520 | M | 3 | 10.2 | 11.5 | 4.2 | 0 | 49 |
| 2 | 520 | N | 3 | 12.4 | 15.0 | 4.1 | 1 | 43 |
| 2 | 520 | O | 3 | 19.3 | 23.1 | 4.9 | 6 | 31 |
| 2 | 520 | P | 3 | 13.6 | 10.9 | 7.4 | 4 | 46 |

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

## ANOMALY LIST, LOGTUNG

| FLIGHT | LINE | ANOMALY | CATEGORY | FREQUENCY INPHASE | 945 QUAD. | CONDUCTOR CTP MHOS | DEPTH MTRS | BIRD HEIGHT MTRS |
|---|---|---|---|---|---|---|---|---|
| 2 | 520 | Q | 5 | 48.1 | 26.1 | 19.1 | 0 | 39 |
| 2 | 520 | R | 4 | 33.1 | 20.4 | 14.4 | 7 | 33 |
| 2 | 520 | S | 4 | 16.8 | 10.9 | 10.7 | 7 | 43 |
| 2 | 530 | A | 4 | 21.5 | 13.3 | 12.4 | 12 | 35 |
| 2 | 530 | B | 5 | 63.5 | 43.8 | 15.3 | 6 | 25 |
| 2 | 530 | C | 3 | 22.3 | 20.7 | 7.3 | 7 | 34 |
| 2 | 530 | D | 3 | 14.0 | 13.7 | 5.7 | 8 | 39 |
| 2 | 530 | E | 4 | 21.7 | 15.4 | 10.3 | 3 | 41 |
| 2 | 530 | F | 4 | 21.8 | 18.2 | 8.3 | 6 | 37 |
| 2 | 530 | G | 4 | 45.2 | 44.1 | 8.8 | 0 | 30 |
| 2 | 530 | H | 4 | 69.3 | 51.0 | 14.5 | 0 | 32 |
| 2 | 530 | J | 3 | 24.6 | 31.1 | 5.0 | 0 | 36 |
| 2 | 530 | K | 3 | 19.4 | 21.1 | 5.6 | 3 | 36 |
| 2 | 530 | M | 3 | 26.0 | 23.8 | 7.9 | 1 | 37 |
| 2 | 530 | N | 3 | 19.7 | 20.0 | 6.2 | 11 | 29 |
| 2 | 530 | O | 4 | 16.4 | 9.8 | 11.8 | 5 | 47 |
| 2 | 540 | A | 1 | 5.8 | 12.0 | 1.4 | 6 | 36 |
| 2 | 540 | B | 2 | 6.0 | 6.6 | 3.5 | 23 | 36 |
| 2 | 540 | C | 4 | 16.2 | 10.2 | 11.0 | 7 | 44 |
| 2 | 540 | D | 5 | 30.7 | 14.5 | 19.9 | 0 | 44 |
| 2 | 540 | E | 4 | 41.8 | 36.5 | 9.9 | 0 | 36 |
| 2 | 540 | F | 4 | 46.2 | 41.9 | 9.7 | 0 | 34 |
| 2 | 540 | G | 4 | 30.6 | 26.5 | 9.0 | 0 | 43 |
| 2 | 540 | H | 4 | 29.5 | 21.0 | 11.4 | 0 | 54 |
| 2 | 540 | J | 4 | 19.9 | 11.9 | 12.6 | 0 | 49 |
| 2 | 540 | K | 3 | 15.6 | 15.0 | 6.1 | 9 | 36 |
| 2 | 540 | M | 3 | 19.0 | 17.2 | 7.1 | 5 | 38 |
| 2 | 540 | N | 5 | 44.6 | 22.9 | 20.0 | 0 | 39 |
| 2 | 540 | O | 4 | 22.6 | 13.1 | 13.7 | 0 | 48 |
| 2 | 540 | P | 4 | 13.2 | 8.8 | 9.4 | 7 | 47 |
| 2 | 550 | A | 4 | 16.7 | 11.8 | 9.5 | 15 | 34 |
| 2 | 550 | B | 4 | 15.4 | 10.8 | 9.3 | 14 | 37 |
| 2 | 550 | C | 4 | 22.1 | 15.0 | 11.0 | 16 | 30 |
| 2 | 550 | D | 4 | 37.9 | 24.3 | 14.2 | 9 | 28 |
| 2 | 550 | E | 3 | 41.6 | 45.4 | 7.4 | 0 | 31 |
| 2 | 550 | F | 4 | 27.6 | 23.9 | 8.6 | 0 | 41 |
| 2 | 550 | G | 4 | 46.9 | 39.4 | 10.8 | 0 | 38 |
| 2 | 550 | H | 4 | 32.8 | 28.6 | 9.1 | 0 | 37 |
| 2 | 550 | J | 5 | 44.4 | 25.2 | 17.6 | 0 | 37 |
| 2 | 550 | K | 5 | 43.7 | 21.7 | 20.8 | 1 | 37 |
| 2 | 550 | M | 5 | 25.3 | 11.1 | 20.6 | 0 | 48 |
| 2 | 550 | N | 5 | 24.3 | 11.6 | 18.2 | 9 | 38 |

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

ANOMALY LIST, LOGTUNG

| FLIGHT | LINE | ANOMALY | CATEGORY | FREQUENCY 945 INPHASE | QUAD. | CONDUCTOR CTP MHOS | DEPTH MTRS | BIRD HEIGHT MTRS |
|---|---|---|---|---|---|---|---|---|
| 2 | 550 | O | 5 | 36.2 | 16.4 | 22.1 | 7 | 34 |
| 2 | 550 | P | 5 | 26.3 | 14.1 | 16.0 | 5 | 40 |
| 2 | 560 | A | 5 | 18.3 | 7.2 | 21.5 | 8 | 46 |
| 2 | 560 | B | 5 | 39.4 | 22.3 | 17.0 | 6 | 33 |
| 2 | 560 | C | 4 | 35.9 | 22.2 | 14.7 | 0 | 42 |
| 2 | 560 | D | 4 | 26.9 | 21.0 | 9.8 | 0 | 42 |
| 2 | 560 | E | 4 | 27.2 | 19.7 | 10.9 | 0 | 45 |
| 2 | 560 | F | 5 | 26.9 | 14.2 | 16.4 | 5 | 39 |
| 2 | 560 | G | 4 | 23.0 | 13.7 | 13.3 | 0 | 46 |
| 2 | 560 | H | 4 | 19.3 | 13.7 | 9.9 | 1 | 45 |
| 2 | 560 | J | 4 | 29.0 | 17.9 | 13.7 | 0 | 42 |
| 2 | 560 | K | 4 | 28.1 | 18.3 | 12.6 | 0 | 42 |
| 2 | 560 | M | 5 | 27.6 | 15.2 | 15.7 | 0 | 47 |
| 2 | 560 | N | 5 | 30.2 | 12.7 | 23.1 | 0 | 45 |
| 2 | 560 | O | 5 | 21.3 | 6.8 | 29.8 | 9 | 44 |
| 2 | 560 | P | 2 | 9.3 | 11.1 | 3.7 | 24 | 25 |
| 2 | 570 | A | 0 | 0.5 | 1.9 | 0.0 | 15 | 53 |
| 2 | 570 | B | 2 | 7.3 | 9.6 | 2.9 | 6 | 44 |
| 2 | 570 | C | 6 | 28.1 | 8.0 | 37.8 | 8 | 40 |
| 2 | 570 | D | 6 | 40.6 | 11.1 | 44.5 | 7 | 35 |
| 2 | 570 | E | 5 | 37.8 | 18.3 | 20.6 | 8 | 33 |
| 2 | 570 | F | 5 | 30.6 | 13.1 | 22.6 | 4 | 40 |
| 2 | 570 | G | 4 | 23.6 | 15.7 | 11.6 | 6 | 38 |
| 2 | 570 | H | 4 | 26.6 | 19.1 | 10.9 | 7 | 35 |
| 2 | 570 | J | 4 | 31.3 | 20.2 | 13.3 | 5 | 36 |
| 2 | 570 | K | 5 | 26.5 | 14.5 | 15.6 | 0 | 45 |
| 2 | 570 | M | 4 | 28.4 | 19.4 | 11.9 | 0 | 44 |
| 2 | 570 | N | 5 | 33.4 | 20.0 | 15.0 | 4 | 36 |
| 2 | 570 | O | 5 | 35.0 | 19.0 | 17.3 | 5 | 36 |
| 2 | 570 | P | 5 | 17.8 | 7.5 | 19.4 | 16 | 38 |
| 2 | 580 | A | 4 | 27.7 | 17.0 | 13.6 | 0 | 45 |
| 2 | 580 | B | 5 | 58.7 | 38.6 | 15.9 | 0 | 39 |
| 2 | 580 | C | 2 | 11.8 | 19.3 | 2.6 | 5 | 33 |
| 2 | 580 | D | 3 | 15.6 | 13.9 | 6.8 | 2 | 44 |
| 2 | 580 | E | 4 | 19.6 | 11.9 | 12.3 | 0 | 50 |
| 2 | 580 | F | 5 | 19.4 | 7.9 | 20.9 | 0 | 52 |
| 2 | 580 | G | 5 | 22.2 | 11.2 | 16.4 | 11 | 37 |
| 2 | 580 | H | 5 | 19.2 | 8.0 | 20.2 | 15 | 37 |
| 2 | 580 | J | 0 | 0.1 | 1.9 | 0.0 | 0 | 41 |
| 2 | 590 | A | 0 | 1.0 | 2.6 | 0.3 | 33 | 35 |
| 2 | 590 | B | 5 | 22.3 | 11.0 | 16.9 | 7 | 41 |

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

ANOMALY LIST, LOGTUNG

| FLIGHT | LINE | ANOMALY | CATEGORY | FREQUENCY INPHASE | 945 QUAD. | CONDUCTOR CTP MHOS | DEPTH MTRS | BIRD HEIGHT MTRS |
|---|---|---|---|---|---|---|---|---|
| 2 | 590 | C | 5 | 30.1 | 14.1 | 20.0 | 2 | 42 |
| 2 | 590 | D | 4 | 33.3 | 22.1 | 13.1 | 0 | 40 |
| 2 | 590 | E | 3 | 26.3 | 25.8 | 7.2 | 4 | 33 |
| 2 | 590 | F | 3 | 23.1 | 23.8 | 6.4 | 0 | 44 |
| 2 | 590 | G | 4 | 37.5 | 24.6 | 13.8 | 8 | 30 |
| 2 | 590 | H | 4 | 9.3 | 6.3 | 8.1 | 15 | 46 |
| 2 | 600 | A | 3 | 15.7 | 13.0 | 7.5 | 0 | 48 |
| 2 | 600 | B | 3 | 16.2 | 14.1 | 7.1 | 0 | 47 |
| 2 | 600 | C | 3 | 13.8 | 15.4 | 4.8 | 1 | 43 |
| 2 | 600 | D | 4 | 31.4 | 26.1 | 9.5 | 0 | 39 |
| 2 | 600 | E | 4 | 31.1 | 21.0 | 12.5 | 0 | 41 |
| 2 | 600 | F | 4 | 36.6 | 25.6 | 12.6 | 0 | 42 |
| 2 | 610 | A | 5 | 19.6 | 10.0 | 15.5 | 11 | 40 |
| 2 | 610 | B | 5 | 29.5 | 16.5 | 15.7 | 1 | 41 |
| 2 | 610 | C | 4 | 41.0 | 29.9 | 12.4 | 0 | 37 |
| 2 | 610 | D | 4 | 48.3 | 34.7 | 13.3 | 0 | 35 |
| 2 | 610 | E | 4 | 51.0 | 39.6 | 12.3 | 0 | 35 |
| 2 | 610 | F | 4 | 33.0 | 22.0 | 12.9 | 0 | 42 |
| 2 | 610 | G | 4 | 28.8 | 20.1 | 11.6 | 0 | 42 |
| 2 | 610 | H | 4 | 26.6 | 21.6 | 9.3 | 6 | 33 |
| 2 | 610 | J | 3 | 20.1 | 17.4 | 7.7 | 5 | 38 |
| 2 | 610 | K | 3 | 18.2 | 15.1 | 7.9 | 2 | 43 |
| 2 | 610 | M | 3 | 14.8 | 12.2 | 7.4 | 3 | 46 |
| 2 | 610 | N | 4 | 17.2 | 11.8 | 10.0 | 7 | 42 |
| 2 | 610 | O | 3 | 14.6 | 11.5 | 7.8 | 9 | 41 |

Estimated depth may be unreliable because the stronger part of the conductor may be deeper or to one side of the flight line, or because of a shallow dip or overburden effects.

## APPENDIX III

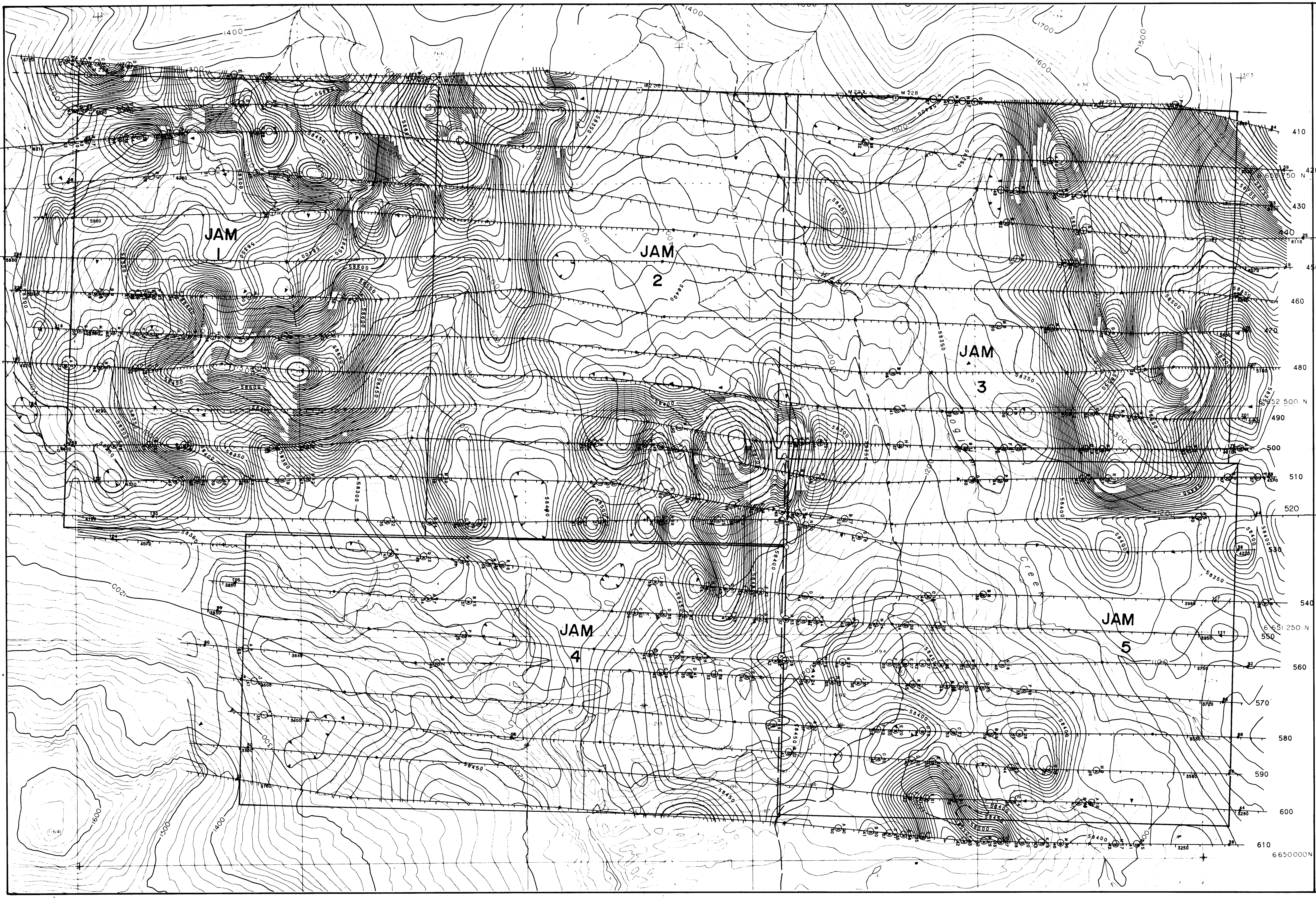
LOGTUNG PROPERTY - B.C. CLAIMS - ATLIN M.D.

| CLAIM NAME | RECORD NO. | NO. OF UNITS | EXPIRY DATE |
|---|---|---|---|
| JAM 1 | 122 | 20 | Sept. 17/85* |
| JAM 2 | 123 | 20 | Sept. 17/85* |
| JAM 3 | 124 | 20 | Sept. 17/85* |
| JAM 4 | 153 | 18 | Oct. 7/85* |
| JAM 5 | 154 | 20 | Oct. 7/85* |

*After application of assessment work.

## STATEMENT OF COSTS

| | |
|---|---|
| 135.1 line Km Airborne EM & Magnetic Survey by Aerodat Limited | |
| 3883 Nashua Drive, Mississauga, Ont. @ $71.00/line Km | $9,592.00 |
| Mobilization & Demobilization | 3,000.00 |
| June 6th & June 7th 1984 | |
| J.R. Roth - Consulting Geophysicist - 181 University Ave. | |
| Toronto, Ont. June 6,7, Aug. 11,12 4 days @ $275/day | 1,100.00 |
| | 13,962.00 |

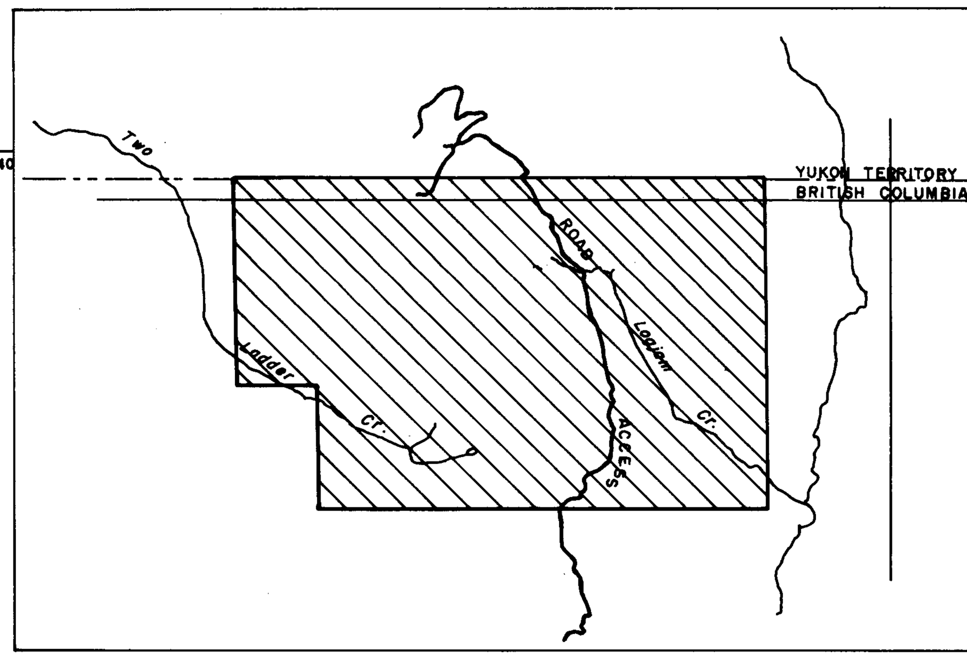



N

GEOLOGICAL BRANCH
ASSESSMENT REPORT

# 12,715

250 gammas
50 gammas
10 gammas
contour interval 10 gammas




CANAMAX RESOURCES INC.

**TOTAL FIELD MAGNETIC MAP**

LOGTUNG PROJECT

BRITISH COLUMBIA

SCALE 1/10,000

0 330 660 1320 1/2 mile

0 100 200 500 1 Kilometre

AERODAT LIMITED

DATE: June 1984

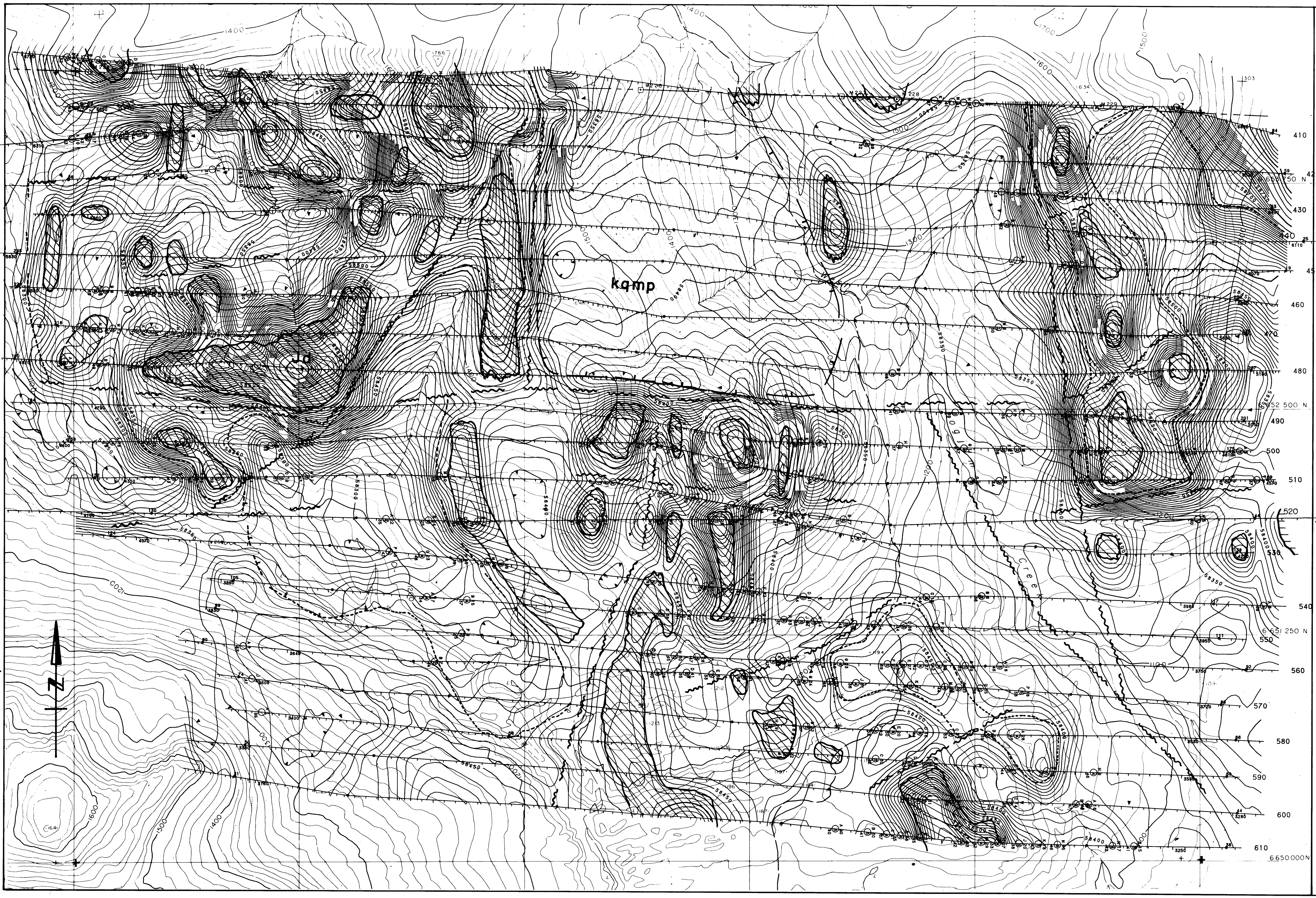
N.T.S. No: 105 B

MAP No: 3

J8425

GEOLOGICAL BRANCH
ASSESSMENT REPORT

# 12,715



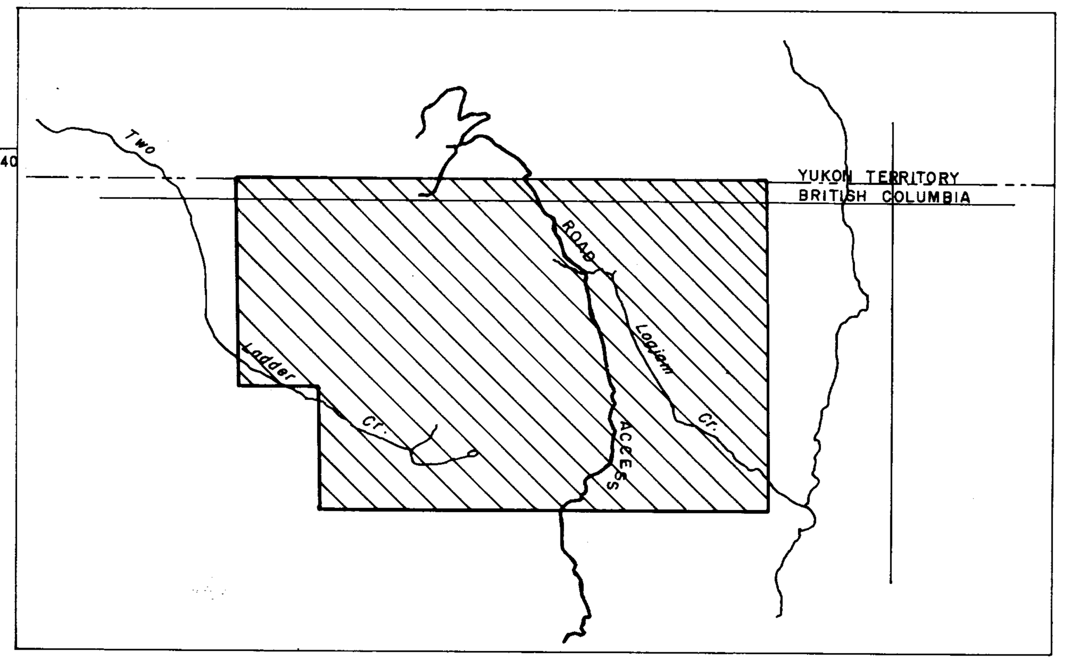

## AEROMAGNETIC INTERPRETATION

LOCAL MAGNETIC FEATURES :

LARGER MAGNETIC DOMAINS :

FAULT :

250 gammas
50 gammas
10 gammas
contour interval 10 gammas




CANAMAX RESOURCES INC.

**TOTAL FIELD MAGNETIC MAP**

LOGTUNG PROJECT

BRITISH COLUMBIA

SCALE 1/10,000

0 330 660 1320 1/2 mile

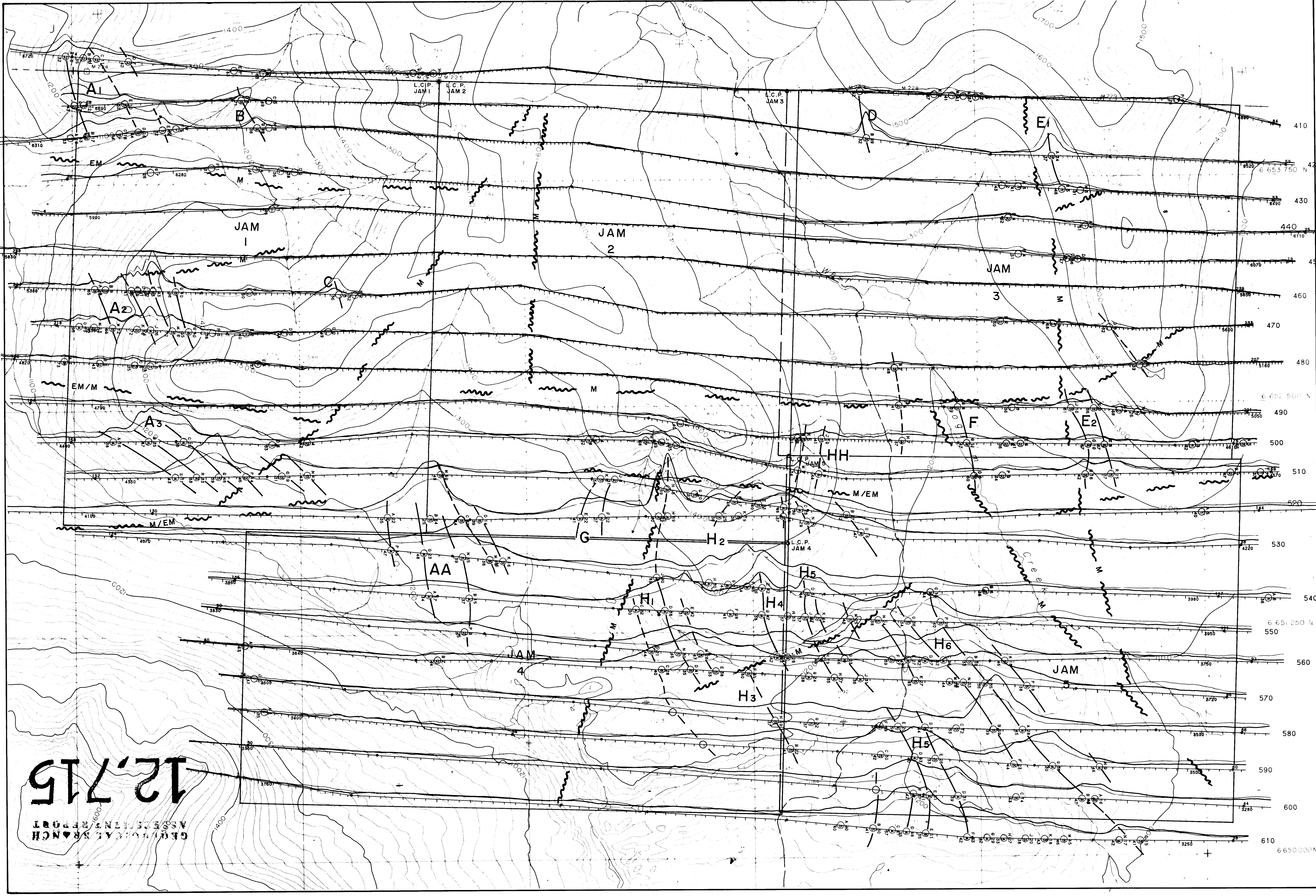
0 100 200 500 1 Kilometre

**▼AERODAT LIMITED**

| | |
|---|---|
| DATE: | June 1984 |
| N.T.S. No: | 105 B |
| MAP No: | 3 |

J8425

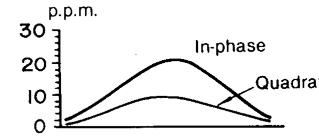
CANAMAX RESOURCES INC.
AIRBORNE ELECTROMAGNETIC SURVEY
INTERPRETATION MAP
LOGTUNG PROJECT
BRITISH COLUMBIA
SCALE 1/10,000
AERODAT LIMITED
DATE: June 1984
N.T.S. No: 105 B
MAP No: 4
J8425
Average bird height ........ 30 metres
Line spacing ............ 200 metres
EM Anomaly A, in-phase amplitude 7 p.p.m.
Conductivity thickness range 2 (see code)
Bird elevation 31 metres
Interpreted bedrock conductor axis
Probable bedrock conductor axis
EM RESPONSE
Conductivity thickness in mhos
60 – 120
30 – 60
15 – 30
8 – 15
4 – 8
2 – 4
1 – 2
0 – 1
AERODAT HEM SYSTEM RESPONSE
VERTICAL HALF - PLANE
QUADRATURE (ppm)
IN-PHASE (ppm)
YUKON TERRITORY
BRITISH COLUMBIA
JAM 1
JAM 2
JAM 3
JAM 4
JAM 5
L.C.P. JAM 1
L.C.P. JAM 2
L.C.P. JAM 3
L.C.P. JAM 4
L.C.P. JAM 5
6 653 750 N
6 652 500 N
6 651 250 N
6 650 000 N

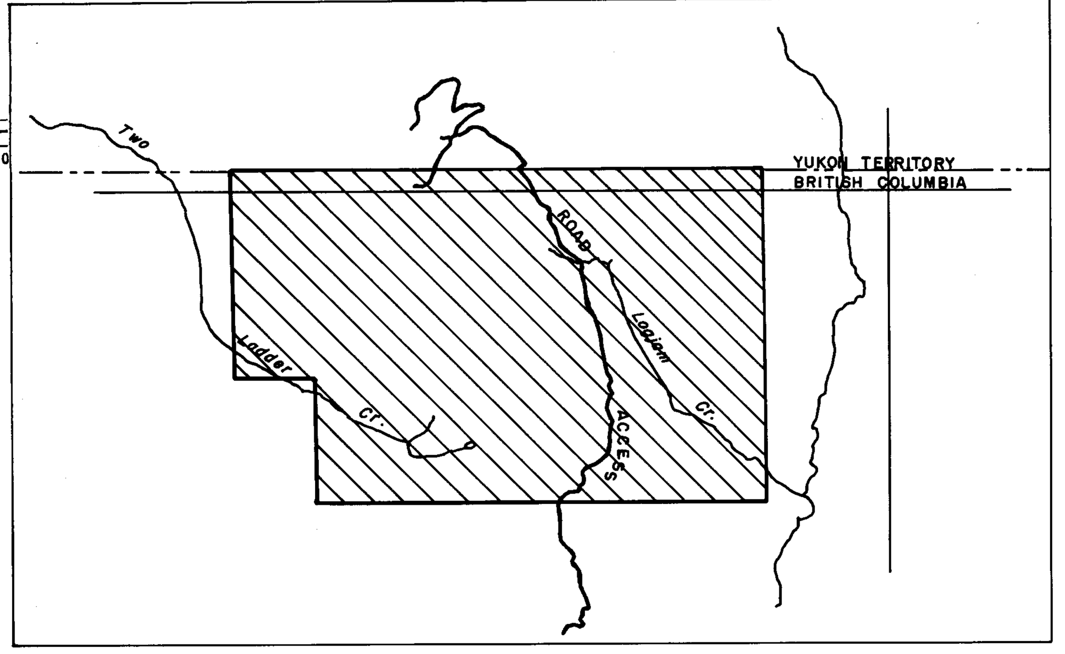



EM Anomaly A, in-phase amplitude 7 p.p.m.
Conductivity thickness range 2 (see code)
Bird elevation 31 metres

Interpreted bedrock conductor axis

Probable bedrock conductor axis




CANAMAX RESOURCES INC.

**AIRBORNE ELECTROMAGNETIC SURVEY PROFILES** - 945 Hz (coaxial)

LOGTUNG PROJECT
BRITISH COLUMBIA

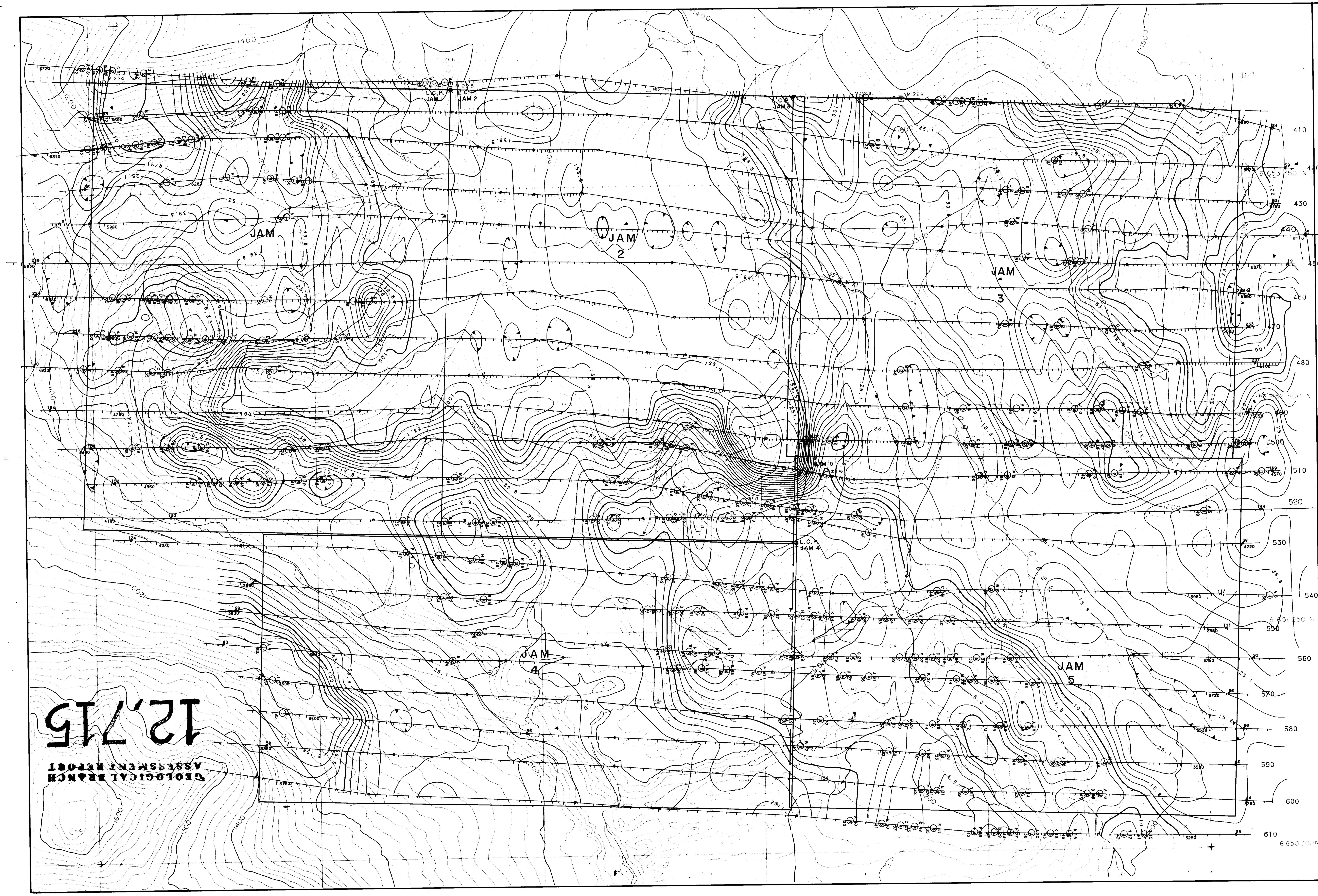
SCALE 1/10,000

0 330 660 1320 1/2 mile
0 100 200 500 1 Kilometre

**AERODAT LIMITED**

| | |
|---|---|
| DATE: | June 1984 |
| N.T.S. No: | 105 B |
| MAP No: | 5 |

J8425

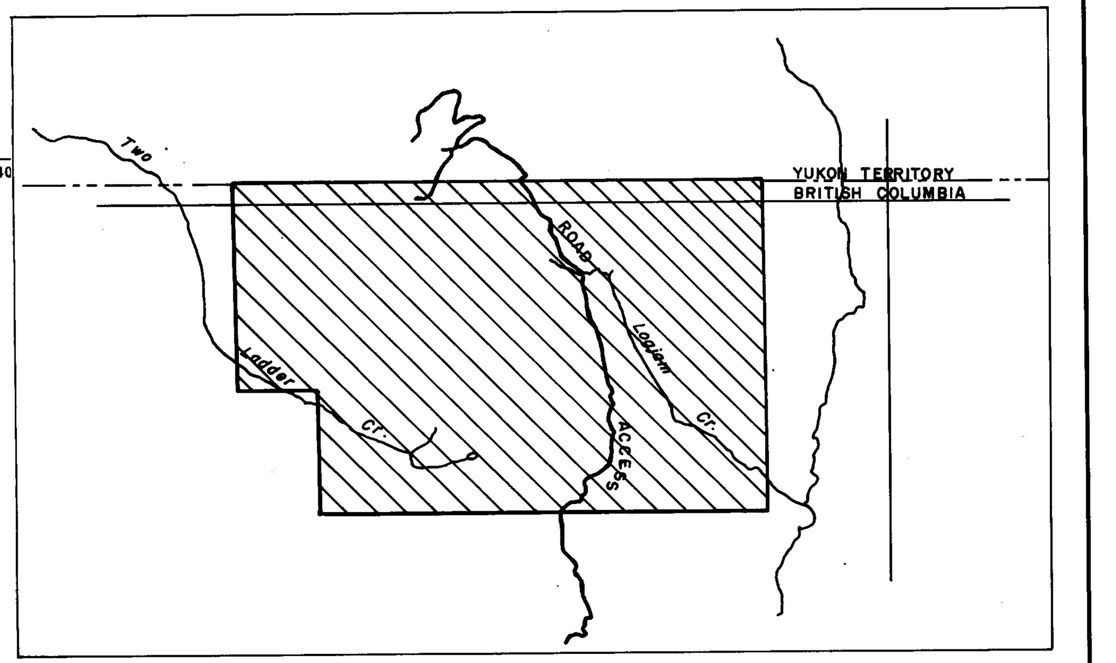





LOGARITHMIC CONTOUR INTERVAL

Units = ohm-m

(calculation based on 4175 Hz coplanar response)




CANAMAX RESOURCES INC.

**APPARENT RESISTIVITY CONTOURS**

LOGTUNG PROJECT

BRITISH COLUMBIA

SCALE 1/10,000

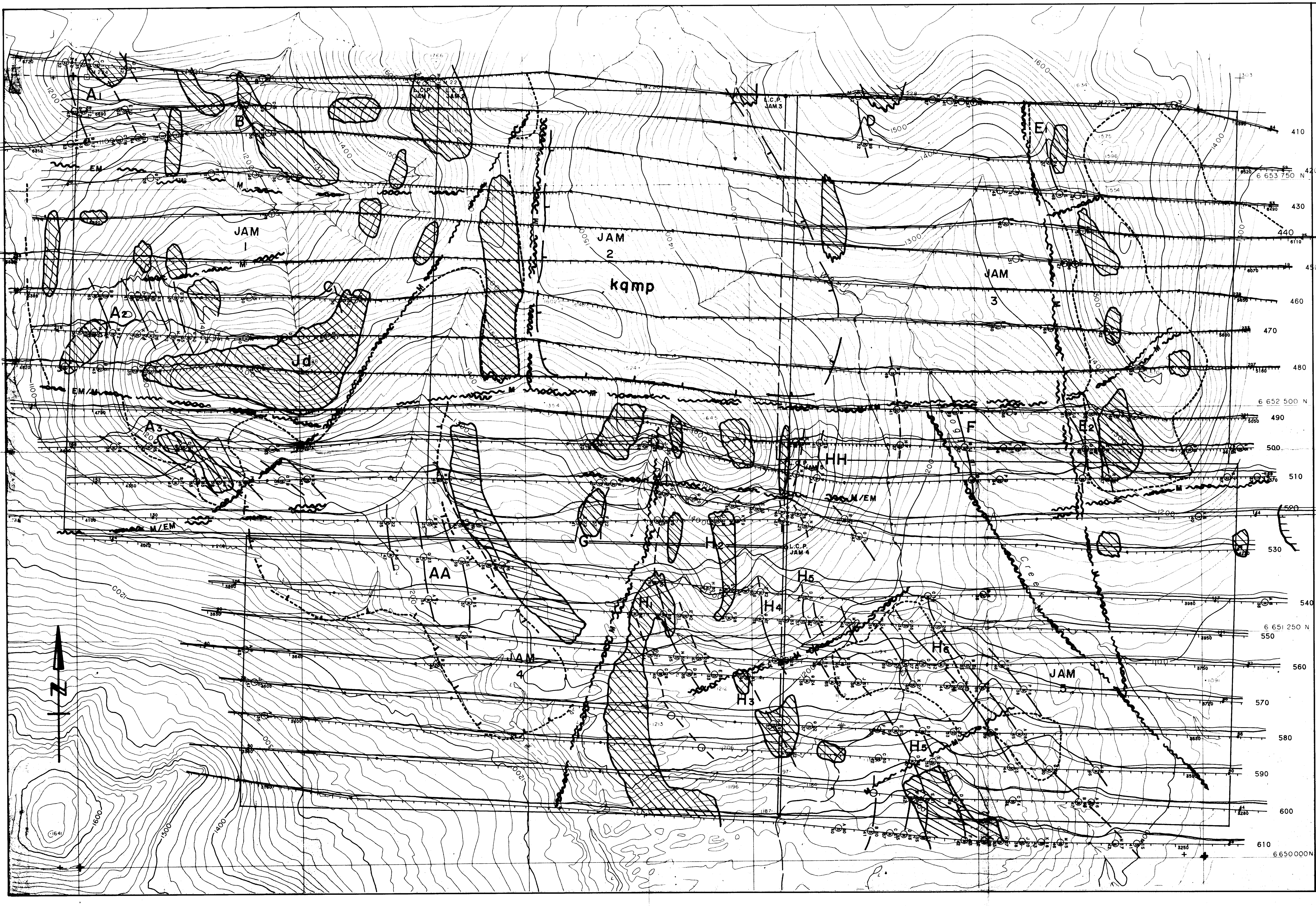
0 330 660 1320 1/2 mile

0 100 200 500 1 Kilometre

AERODAT LIMITED

| | |
|---|---|
| DATE: | June 1984 |
| N.T.S. No: | 105 B |
| MAP No: | 6 |

J8425




GEOLOGICAL BRANCH
ASSESSMENT REPORT

# 12,715

## EM INTERPRETATION

EM Anomaly A. in-phase amplitude 7 p.p.m. Conductivity thickness range 2 (see code) Bird elevation 31 metres

Interpreted bedrock conductor axis

Probable bedrock conductor axis

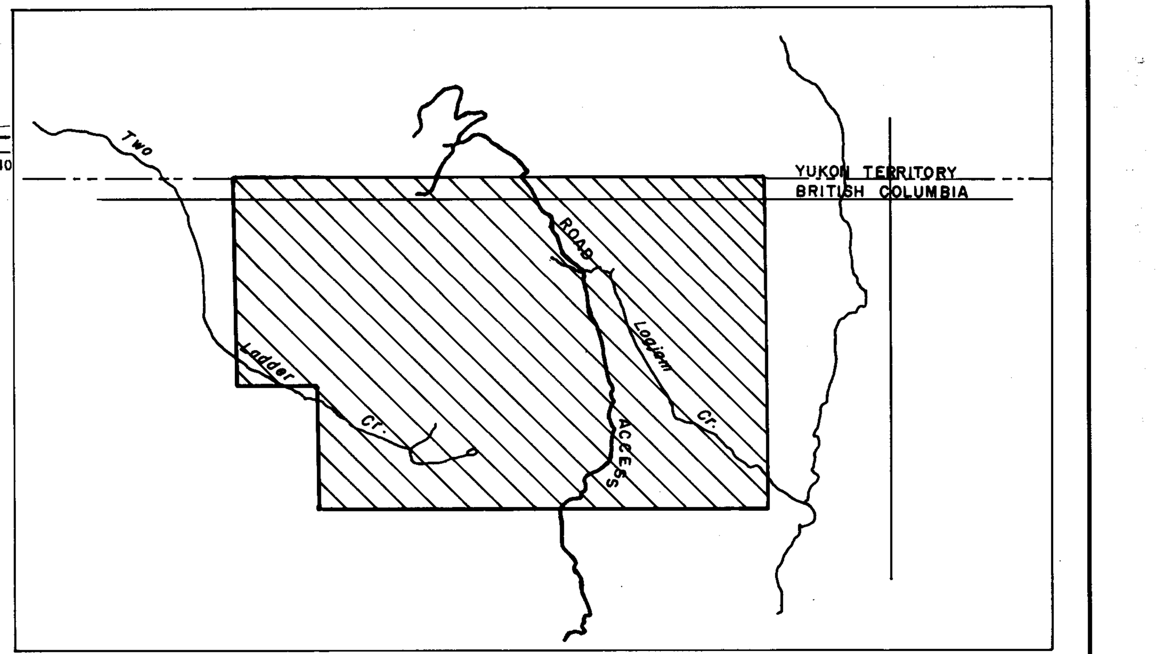
EM Fault

## MAGNETIC INTERPRETATION

Local Magnetic Features

Larger Magnetic Domains

M Fault




CANAMAX RESOURCES INC.

## GEOPHYSICAL SYNTHESIS

HELICOPTER EM & MAGNETIC SURVEY

LOGTUNG PROJECT

BRITISH COLUMBIA

SCALE 1/10,000

▼ AERODAT LIMITED

| | |
|---|---|
| DATE: | June 1984 |
| N.T.S. No: | 105 B |
| MAP No: | 7 |

J8425