091735

1987 GEOPHYSICAL ASSESSMENT REPORT

TITLE:	Pass Peak Property
CLAIMS:	Mac 1-56 Bob 1-44
AUTHORS:	A.H. Watts G. Podolsky C.J. Hodgson
DATE:	July 31, 1987
COMMODITY:	Au
LOCATION:	
- Area	Central Yukon
- Mining District	Watson Lake
- Co-ordinates	Latitude 61°34' Longitude 132°45'
- NTS	105 F/10
OWNER:	Canamax Resources Inc.
OPERATOR:	Canamax Resources Inc.

RECEIVED
18 AUG 1987
MINING RECORDER
WATSON LAKE, Y.T.
I.A. & N.D.

CANAMAX VANCOUVER OFFICE

091735

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 16,900.00.

D.A. Emond

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

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REPORT ON COMBINED HELICOPTER-BORNE MAGNETIC, ELECTROMAGNETIC AND VLF SURVEY, PASS PEAK PROPERTY, YUKON BY G. PODOLSKY

(Under Separate Cover)

APPENDICES

SUMMARY

This report covers a helicopter-borne geophysical survey carried out by Aerodat Limited of Malton, Ontario for Canamax Resources Inc. during the month of March, 1987. VLF, electromagnetic and magnetic data were collected at a 200-metre line spacing, across the entire Pass Peak Property.

The 100-claim Pass Peak gold property, located 50 kilometres south southwest of Ross River, is 100% owned by Canamax. The property was staked in 1986 while doing reconnaissance work near the Ketza River gold property.

The claims lie at the western end of the Ketza-Seagull Arch, a domal feature in the Cassiar Carbonate Platform with which silver base metal veins and gold-bearing mantos are associated. Geologically, the claims are underlain by Cambro-Ordovician calcareous phyllite and marble strata that are intruded by a quartz monzonite stock.

The helicopter-borne geophysical survey delineated a zone of multiple northwest-trending electromagnetic conductors in the northeast corner of the claim group which are possibly skarn-related. Several isolated conductive features in the vicinity of Pass Peak bear massive sulphide potential. The aeromagnetic data suggests the presence of a weakly magnetic, buried intrusive, also in the vicinity of Pass Peak. A network of quartz veining in the center of the property occurs where the aeromagnetic contour pattern is relatively disjointed and significant faulting is indicated. A strong linear northwest-trending magnetic feature in the northeast corner of the claim group is coincident with electromagnetic response and is possibly massive sulphide skarn-related.

CONCLUSIONS AND RECOMMENDATIONS

Coincident magnetic and EM anomalies in the northeast and southwest corners of the property, in what has been mapped as predominantly limestone terrain, provide the foci of interest, geophysically, on this property.

Pyrrhotitic skarn carrying anomalous Au mineralization on the adjacent Cominco claims suggests that geophysical targets such as EM Zones I and II could relate to a similar type of source.

Portability and relative immunity to terrain effects make magnetics the desired method for initial ground geophysical follow-up on the property.

If this follow-up provides encouragement, detailed EM is recommended.

CANAMAX RESOURCES INC.

PASS PEAK PROPERTY
MAC AND BOB CLAIMS
WATSON LAKE MINING DISTRICT — YUKON TERRITORY

LOCATION MAP

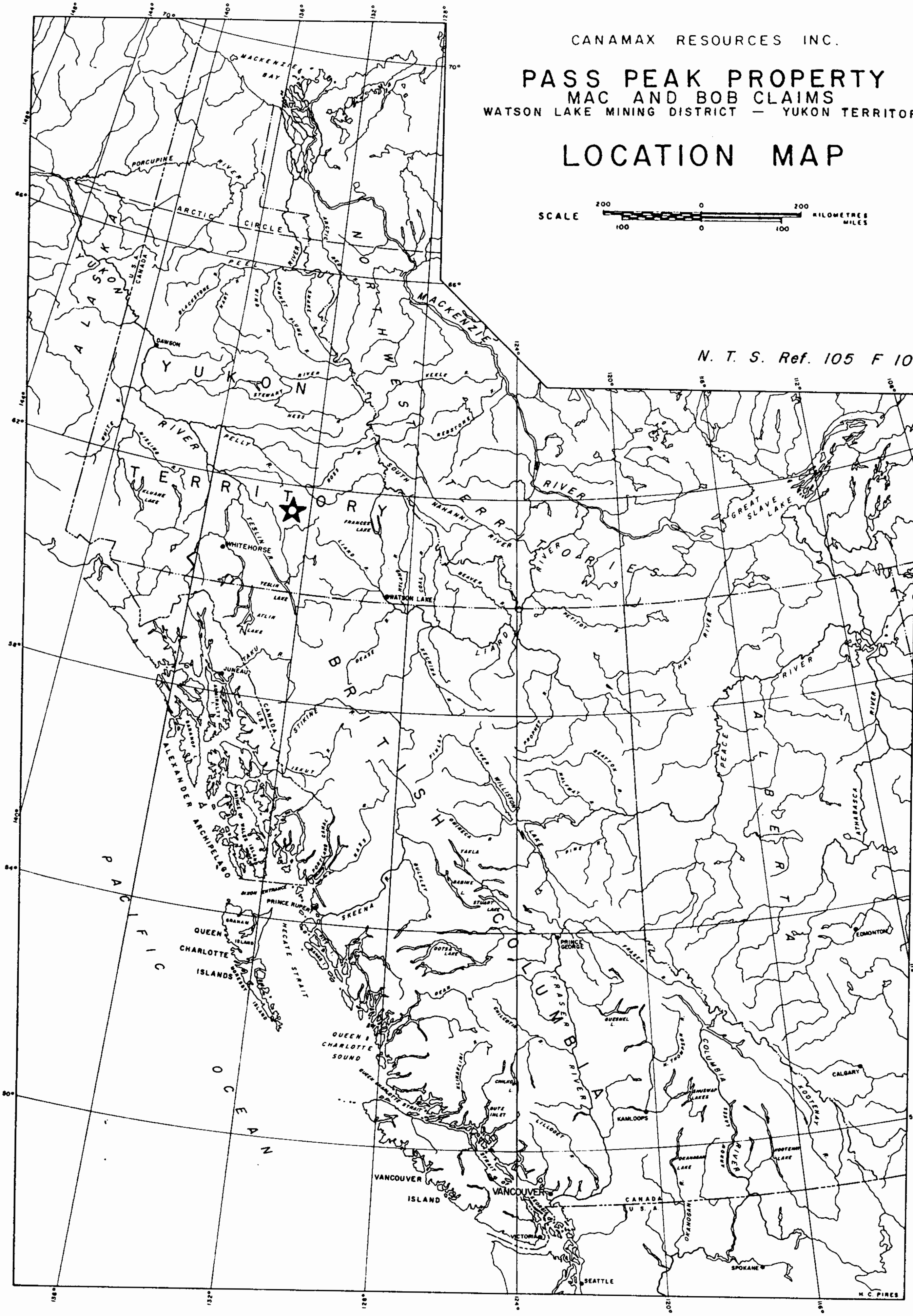
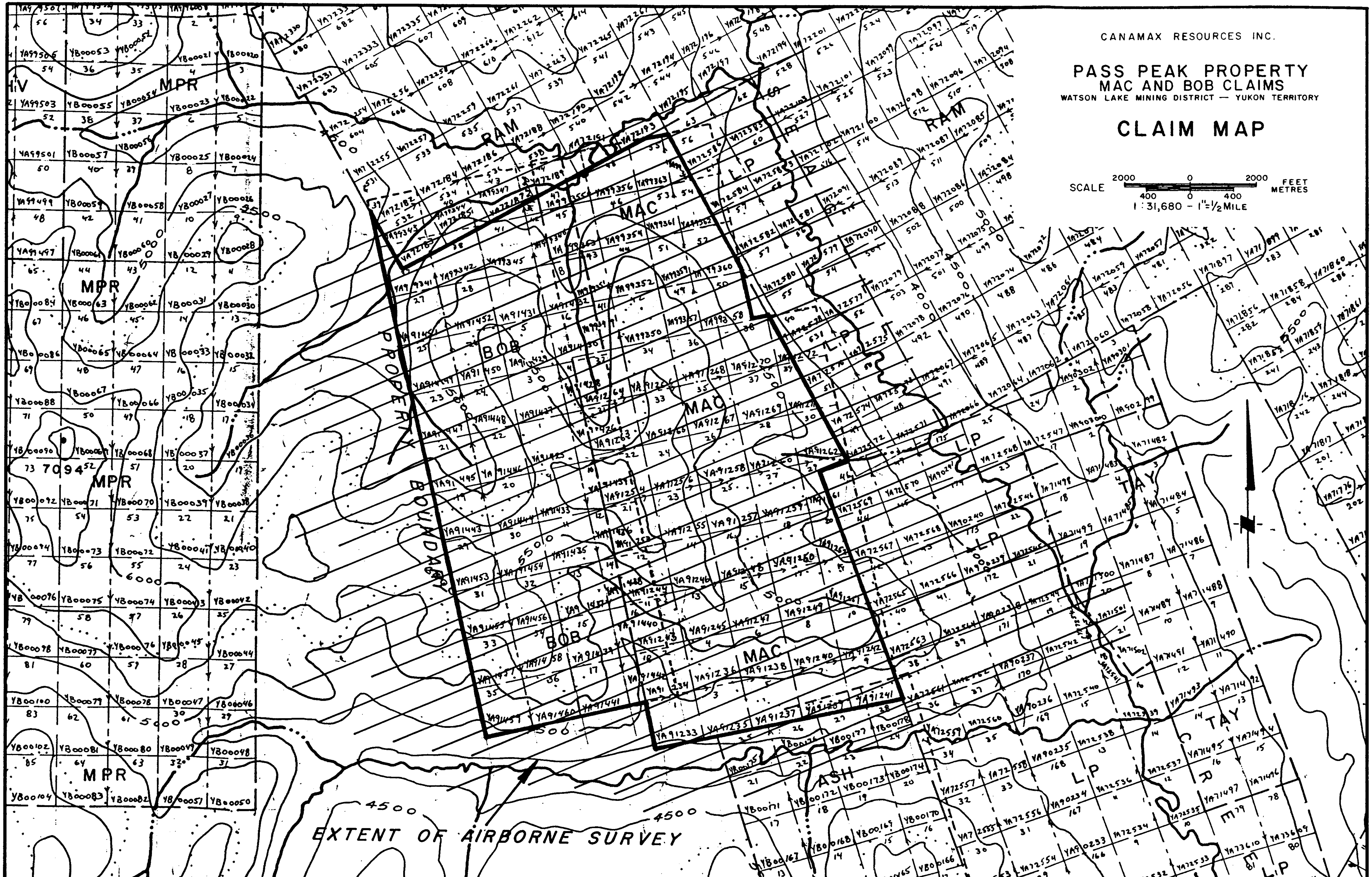


FIG. 1



N. T. S. Ref. 105 F 10

FIG. 2

INTRODUCTION

This report describes results of an airborne magnetic, electromagnetic and VLF survey conducted on behalf of Canamax by Aerodat Limited in March, 1987.

Location and Access

The property is located 50 kilometres south southwest of Ross River, just west of Seagull Creek and 5 kilometres east of Pass Peak (Figure 1). A 4-wheel-drive road from the South Canal Road comes to within 1.5 kilometres of the property.

Claims

All claims were staked in 1986 and are recorded in the name of Canamax Resources Inc. All are located in the Watson Lake Mining District. Claims data are tabulated below:

Claim	Record Number	Expiry Date*
Mac 1-40	YA91233-YA91272	August 5, 1987
Mac 41-56	YA9934 -YA9136	September 22, 1987
Bob 1-36	YA91425-YA91460	August 19, 1987
Bob 37-44	YA9934 -YA9934	September 22, 1987

* Prior to application of assessment work described in this report.

GEOLOGY

Regional Geology

The Pass Peak property lies within the Cassiar carbonate Platform at the western end of the Ketza-Seagull Arch. The Ketza-Seagull Arch is an area of domal uplift 45 kilometres long and 15 kilometres wide, and underlain by Late Proterozoic to Triassic clastic, carbonate and volcanic rocks. The arch is probably related to one or more Cretaceous intrusions. The Ketza-Seagull Arch contains numerous occurrences of base metals, arsenic, silver and gold which form two clusters - one at the headwaters of the Ketza River and one at Seagull Creek.

Property Geology

The Mac and Bob claims are underlain by a sequence of grey to green, commonly calcareous phyllite interbanded with marble and minor amounts of quartzite. In the southeastern corner of the property, the sedimentary rocks are intruded by a stock of medium-grained quartz monzonite. The stock has domed up the sediments so that they dip -20° to -26° away from the stock. Carbonate units within the sequence are recrystallized and up to 250 metres thick; they tend to pinch out abruptly along strike.

Phyllitic rocks are hornfelsed 300 to 400 metres from the quartz monzonite stock. Carbonates are converted to light green garnet skarn within 25 metres of the quartz monzonite contact or at carbonate-hornfels contacts.

A small outcrop of greisenized quartz monzonite, comprising quartz, muscovite, pyrite and tourmaline, was located 100 metres south of Discovery Creek. This is probably a dyke associated with the main stock.

MINERALIZATION

Mineralization encountered to date consists of quartz veins in outcrop and talus at the headwaters of Discovery and Mac Creeks. The veins contain one or more of the following sulphides: pyrite, pyrrhotite, galena, sphalerite and arsenopyrite or their oxides. Of eight quartz veins found in place, six strike north to northeast, two strike east and all are steeply dipping.

Unmineralized light green garnet skarn is developed in carbonate beds near the quartz monzonite contact.

INTERPRETATION OF AIRBORNE SURVEY

Aeromagnetics

The two dominant magnetic features on the Pass Peak property are located in the northeast and southwest corners of the claim group respectively.

The 2-kilometre-long northwest linear trend in the northeast corner is, with an amplitude of 80 nT above background, the strongest magnetic feature on the property. The well-defined leading-edge negative on the east side of this feature suggests a shallow dip to the west. Steep gradients along the east edge of this trend indicate a source within 50 metres of surface. Noting that Cominco are drilling a skarn-related zone on the adjacent property to the east, a similar source is suggested for this anomaly. The magnetic pattern in the southwest corner of the property indicates, for the most part, a significantly deeper source. This source, though exhibiting an overall northwest trend, is quite irregularly shaped. A buried granite intrusive is the postulated source of this response.

The quartz-veining mapped in the center of the property occurs in an area where the magnetic pattern is significantly disrupted, suggesting a zone of intense faulting.

Electromagnetics

The dominant EM feature on the property is a zone of multiple northwest-trending conductors, Zone PII, approximately coincident with the linear magnetic anomaly mentioned above. Dips appear to be near horizontal and it is probable that Zone PIV to the west, though much weaker in amplitude than Zone PII, is caused by the same source as it locates at a similar elevation and is also coincident with anomalous magnetic response.

Electromagnetics (cont'd)

Another zone of interest is the collection of weak EM responses located over the south end of the postulated granitic intrusive in the southwest corner of the property. Relative isolation and associated localized magnetic response point to a massive sulphide source.

C.J. Hodgson

STATEMENT OF COSTS

165 kilometre combined helicopter-borne Magnetic Electromagnetic and ULF Survey by: Aerodat Limited 3883 Nashua Drive Mississauga, Ontario March 1-30, 1987 - 165 Km x $75.00	$12,375.00
Mobilization	2,280.00
Base Map preparation: Nadir Mapping Corp. 310 Water Street Vancouver, B.C. June 1-26, 1987	3,955.00
Supervision and Report Preparation: A.H. Watts, Geophysicist 27 Glen Crescent Thornhill, Ontario - 6 days x $250/day	1,500.00
	$20,110.00

APPLICATION OF ASSESSMENT WORK

MAC 1-40	1-3/4 years common-dated March 5, 1989
MAC 41-56	1-1/2 years common-dated March 5, 1989
BOB 1-36	1-3/4 years common-dated March 5, 1989
BOB 37-44	1-1/2 years common-dated March 5, 1989

C J Hodge

AERODAT LIMITED

3883 NASHUA DRIVE • MISSISSAUGA • ONTARIO • CANADA • L4V 1R3
Telephone: (416) 671-2446 Telex: 06-968872 Cable: Canaerodat Toronto

Invoice No: 18-8651-0333
Date: July 8, 1987

Canamax Resources Inc.
601 - 535 Thurlow Street
Vancouver, B. C.
V6E 3I6

In Account with:

Aerodat Limited
3883 Nashua Drive
Mississauga, Ontario
L4V 1R3

RE: Airborne Geophysical Survey - Yukon, Northwest Territories

Pursuant to paragraph 15 (c) Schedule A of the Agreement between Canamax Resources Inc. and Aerodat Limited dated November 19, 1987.

Mobilization/demobilization (Yukon & Northwest Territories	$12,000.00
Total survey charges 866 km @ $75.00/line km	$64,950.00
Recompilation of previous acquired data	$ 4,500.00
	$81,450.00
Previously billed and paid	$54,190.00
Amount Now Due	$27,260.00

CANAMAX RESOURCES J8651

Pass Peak	165 km
Ketza Area	430 km
Mosher Lake	135 km
Clan Lake	136 km
	866 km

Please fax copy — Tony Watts Toronto

AERODAT LIMITED

3883 NASHUA DRIVE • MISSISSAUGA • ONTARIO • CANADA • L4V 1R3
Telephone: (416) 671-2446 Telex: 06-968872 Cable: Canaerodat Toronto

CANAMAX 0333

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FEB 3 1987
VANCOUVER OFFICE

Invoice No:18-8651-0047
Date: January 28, 1987

CANAMAX RESOURCES INC.
601-535 THURLOW STREET
VANCOUVER, B.C.
V6E 3I6

In Account With:

Aerodat Limited
3883 Nashua Drive
Mississauga, Ontario
L4V 1R3

RE; AIRBORNE GEOPHYSICAL SURVEY - YUKON, NORTHWEST TERRITORIES
Payment of 35% of total fee for Yukon surveys on commencement of surveys, plus mobilization charges --

$25,000.00

AMOUNT NOW DUE $25,000.00

OK to pay on February 5/87
Hyl River/Quill. $15,000
Slide Lake $5,000
Pass Peak $5,000
CJH

APPROVED DUE 2/05
INV. NBR. 1886510047 DATE 1/28

PROJECT NUMBER	ACCOUNT CODE	SUB CODE	AMOUNT
7084	8078		15000.00
7086	8078		5000.00
7087	8078		5000.00

25000.00

POSTED
FEB 4 1987

CK. 2240003 870205

Nadir Mapping Corporation

310 WATER STREET,
'COUVER, B.C. V6B 1B6
...EPHONE: (604) 683-3282

PHOTOGRAMMETRIC &
PHOTOGRAPHIC SERVICES

CANAMAX RECEIVED JUN 25 1987

SOLD TO

CANAMAX RESOURCES INC.
601 - 535 Thurlow Street
Vancouver, B. C.
V6E 3L6

SHIP TO

ATTENTION: HERMANO PIRES

JOB NUMBER	DATE	PURCHASE ORDER No.	ORDER DATE	SHIPPED VIA	Progress	FINAL
87-390	26 JUNE 87		01 JUNE 87	Courier		XX

Re: PASS PEAK

Photogrammetric Compilation $3,955.00

POSTED

JUL 2 1987

7/23
1063 6/26
70086 153 3955.00

as quoted OK

510001		PROV. EXEMPT No.	345000	
510002			250000	
510003		FEDERAL EXEMPT No.		
510004				
515059				

INVOICE NUMBER
1063

TOTAL FEE	$3,955.00
FEDERAL SALES TAX	-
B.C. SALES TAX	-
TOTAL INVOICE	$3,955.00

CK. 2510021 870723

STATEMENT OF QUALIFICATIONS

I, Anthony Haywood Watts, certify that:

1. I reside at 27 Glen Crescent, Thornhill, Ontario

2. I hold a B.Sc., majoring in Geology and Chemistry, from Rhodes University, Grahamstown, South Africa, where I graduated in 1972.

3. I have been continuously employed as a geophysicist since 1973 and have worked for Canamax Resources Inc. (previously Amax Minerals Exploration) since 1978.

4. I have been an active member of the Society of Exploration Geophysicists since 1975, and sit on the Society's Geophysical Activity Committee as a representative of the mineral industry.

5. The accompanying report was prepared from an intimate knowledge of the project.

091735

N. T. S. Ref. 105 F 10

FIG. 3

REPORT ON
COMBINED HELICOPTER BORNE
MAGNETIC, ELECTROMAGNETIC AND VLF
SURVEY
PASS PEAK PROPERTY
YUKON TERRITORY

for
CANAMAX RESOURCES INC.
by
AERODAT LIMITED

June 29, 1987

J8651.PP

G. Podolsky
P. Eng.

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LIST OF MAPS

(Scale 1:10,000)

MAPS: (As described under Section 13.I. of the Agreement)

I. BASE MAP;
showing topography and registration marks to co-ordinate system used.

II. FLIGHT PATH MAP;
showing flight lines, time marks, camera fiducials and manual fiducials.

III. AIRBORNE ELECTROMAGNETIC SURVEY INTERPRETATION MAP;
showing flight lines, fiducials conductor axes and anomaly peaks along with inphase amplitudes and conductivity thickness ranges for the 4600 Hz coaxial coil system.

IV. TOTAL FIELD MAGNETIC CONTOURS;
showing magnetic values contoured at 5 nanoTesla intervals, flight lines, fiducials and anomaly peaks.

V. APPARENT RESISTIVITY CONTOURS;
showing contoured resistivity values, flight lines, fiducials and anomaly peaks.

VI. AIRBORNE ELECTROMAGNETIC SURVEY PROFILES;
showing flight lines, fiducials, Inphase and Quadrature response:

(a) Two colour overlay of the High Frequency (4600 Hz) coaxial system and Mid Frequency (4175 Hz) coplanar system
(b) Low Frequency (935 Hz) coaxial system

VII. VLF-EM TOTAL FIELD CONTOURS;
showing relative contours of the VLF Total Field response, flight lines, fiducials and anomaly peaks.

1. INTRODUCTION

This report describes an airborne geophysical survey carried out on behalf of Canamax Resources Inc. by Aerodat Limited. Equipment operated included a four frequency electromagnetic system, a high sensitivity cesium vapour magnetometer, a two frequency VLF-EM system, a video tape tracking camera and an altimeter. Electromagnetic, magnetic and altimeter data were recorded both in digital and analog form. Positioning data were recorded on tape as well as being marked on the flight path map by the operator while in flight.

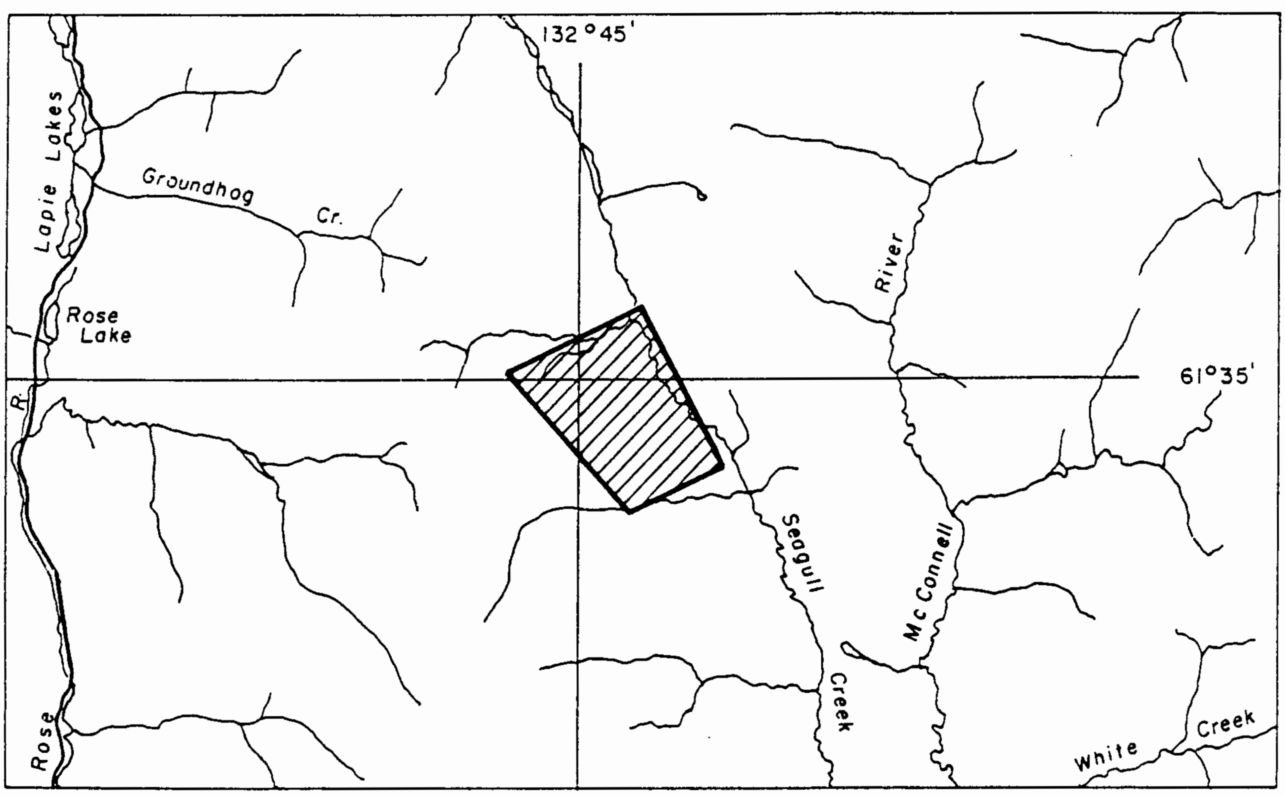
The survey area, comprising a block of ground in the Yukon Territory and situated about 45 kilometres south of Ross River, was flown on March 13th, 1987. Two flights were required to complete the survey with flight lines oriented at an Azimuth of 060-240 degrees and flown at a nominal spacing of 200 metres. Coverage and data quality were considered to be well within the specifications described in the contract.

The purpose of the survey was to record airborne geophysical data over ground that is of interest to Canamax Resources Inc.

A total of 165 kilometres of the recorded data were compiled in map form and are presented as part of this report according to specifications outlined by Canamax Resources Inc.

2. SURVEY AREA LOCATION

The survey area is depicted on the index map shown below. It is centred at Latitude 61 degrees 33 minutes north, Longitude 132 degrees 40 minutes west, situated in the St. Cyr Range of the Pelly Mountains, approximately 45 kilometres south of Ross River, Yukon Territory (NTS Reference Map Nos. 105 F/10). The area is accessed by helicopter from Ross River.



3. AIRCRAFT AND EQUIPMENT

3.1 Aircraft

An Aerospatiale A-Star 350D helicopter, (C-GNSM), owned and operated by Lakeland Helicopters Limited, was used for the survey. Installation of the geophysical and ancillary equipment was carried out by Aerodat. The survey aircraft was flown at a mean terrain clearance of 75 metres.

3.2 Equipment

3.2.1 Electromagnetic System

The electromagnetic system was an Aerodat 4-frequency system. Two vertical coaxial coil pairs were operated at 935 Hz and 4600 Hz and two horizontal coplanar coil pairs at 4175 Hz and 33.9 kHz. The transmitter-receiver separation was 7 metres. Inphase and quadrature signals were measured simultaneously for the four frequencies with a time constant of 0.1 seconds. The electromagnetic bird was towed 45 metres below the transmitter.

3.2.2 VLF-EM System

The VLF-EM System was a Herz Totem 2A. This instrument measures the total field and quadrature components of two selected transmitters, preferably oriented at right angles to one another. The sensor was towed in a bird 12 metres below the helicopter. The transmitters monitored were Jim Creek, Washington broadcasting at 24.8 kHz for the Line station and Annapolis, Maryland broadcasting at 21.4 kHz for the Orthogonal station.

3.2.3 Magnetometer

The magnetometer employed a Scintrex Model VIW-2321 H8 cesium, optically pumped magnetometer sensor. The sensitivity of this instrument was 0.1 nanoTeslas at a 0.2 second sampling rate. The sensor was towed in a bird 27 metres below the helicopter.

3.2.4 Magnetic Base Station

An IFG-2 proton precession magnetometer was operated at the base of operations to record diurnal variations of the earth's magnetic field. The clock of the base station was synchronized with that of the airborne system to facilitate later correlation.

3.2.5 Radar Altimeter

A Hoffman HRA-100 radar altimeter was used to record terrain clearance. The output from the instrument is a linear function of altitude for maximum accuracy.

3.2.6 Tracking Camera

A Panasonic video tracking camera was used to record flight path on VHS video tape. The camera was operated in continuous mode and the fiducial numbers and time marks for cross reference to the analog and digital data were encoded on the video tape.

3.2.7 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
ALT	Altimeter (150 m at top of chart)	3 m/mm
CXI1	Low Frequency Inphase	2.5 ppm/mm
CXQ1	Low Frequency Quadrature	2.5 ppm/mm
CXI2	High Frequency Inphase	2.5 ppm/mm
CXQ2	High Frequency Quadrature	2.5 ppm/mm
CPI1	Mid Frequency Inphase	10 ppm/mm
CPQ1	Mid Frequency Quadrature	10 ppm/mm

Channel	Input	Scale
CPI2	33 kiloHerz Inphase	20 ppm/mm
CPQ2	33 kiloHerz Quadrature	20 ppm/mm
VLT	VLF-EM Total Field, Line	2.5 %/mm
VLQ	VLF-EM Quadrature, Line	2.5 %/mm
VOT	VLF-EM Total Field, Ortho	2.5 %/mm
VOQ	VLF-EM Quadrature, Ortho	2.5 %/mm
MAGF	Magnetometer, fine	2.5 nT/mm
MAGC	Magnetometer, coarse	25 nT/mm
PWRL	Power Line Indicator	

3.2.8 Digital Recorder

A DGR33 data system recorded the survey on magnetic tape. Information recorded was as follows:

Equipment	Recording Interval
EM system	0.1 seconds
VLF-EM	0.5 seconds
Magnetometer	0.25 seconds
Altimeter	0.5 seconds
Power Line Monitor	0.5 seconds

4. DATA PRESENTATION

4.1 Base Map

A topographic base at a scale of 1:10,000 was prepared from a topographic map, on an unscreened mylar base, with registration marks corresponding to major latitudes and longitudes in degrees and minutes.

4.2 Flight Path Map

The flight path was derived from a combination of the navigators manual "picks" that were marked on the topographic flight line map and points picked from the record of the flight path taken by the video tracking camera. In rugged or mountainous terrain where line-of-sight electronic navigation and flight path recovery systems are not practical, this method is the only means available to establish flight path. Depending on the quality of the air photos and the photomosaic, the degree and density to which points can be recovered, the rugged nature of the terrain and the quality of the navigation, this method may show errors of greater than 30 metres in the location of anomalies on the topographic map with respect to their true position on the ground. The flight path is presented on a mylar overlay of the base map, with camera time marks and navigator's manual fiducials for cross reference to both the analog and digital data.

4.3 Airborne Electromagnetic Survey Interpretation Map

An interpretation map was prepared showing peak locations of anomalies and conductivity thickness ranges along with the Inphase amplitudes (computed from the 4600 Hz coaxial response) and conductor axes. The data are presented on a mylar copy of the topographic base map.

4.4 Electromagnetic Profile Maps

The electromagnetic data were recorded digitally at a sample rate of 10 per second with a time constant of 0.1 seconds. A two stage digital filtering process was carried out to reject major sferic events and to reduce system noise.

Local sferic 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 geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events. The signal to noise ratio was 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 low effective time constant permits maximum profile shape resolution.

Following the filtering process, a base level correction was made. The correction applied is a linear function of time that ensures the corrected amplitude of the various inphase and quadrature components is zero when no conductive or permeable source is present. The filtered and levelled data were used in the interpretation of the electromagnetics and are presented in profile map form.

The anomalous responses of the 4600, 945, and 4175 Hz coaxial and coplanar coil configurations were plotted on mylar overlays of the topographic base map.

4.5 Total Field Magnetic Contours

The aeromagnetic data were corrected for diurnal variations by adjustment with the digitally recorded base station magnetic values. No correction for regional variation was applied. The corrected profile data were interpolated onto a regular grid at a 25 metre true scale interval using a cubic spline technique. The grid provided the basis for threading the presented contours at a 5 nanoTesla interval.

The contoured aeromagnetic data have been presented on a mylar copy of the topographic base map.

4.6 Apparent Resistivity Contours

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

The approach taken in computing apparent resistivity was to assume a model of a 200 metre thick conductive layer (i.e., effectively a half space) over a resistive bedrock. The computer then generated, from nomograms for this model, the resistivity that would be consistent with the bird elevation and recorded amplitude for the coaxial frequency pair used. The apparent resistivity profile data were interpolated onto a regular grid at a 25 metres true scale interval using a cubic spline technique.

The contoured apparent resistivity data were presented on a mylar copy of the topographic base map with the flight path and electromagnetic anomaly information.

4.7 VLF-EM Total Field Contours

The VLF-EM signals from NLK, Jim Creek, Washington, and NSS, Annapolis, Maryland, broadcasting at 24.8 and 21.4 kHz respectively, were compiled in contour map form and presented on mylar copies of the topographic base map.

5. INTERPRETATION

5.1 Geology

No geologic data were supplied to Aerodat by Canamax Resources Inc. and no other source of published data was available to the writer. Also, types of targets sought have not been discussed or identified by Canamax although it is generally assumed that the primary interest is in gold mineralization.

5.2 Magnetics

The magnetic data from the high sensitivity cesium magnetometer provided virtually a continuous magnetic reading when recording at two-tenth second intervals. The system is also noise free for all practical purposes.

The sensitivity of 0.1 nT allows for the mapping of very small inflections in the magnetic field, resulting in a contour map that is comparable in quality to ground data. Both the fine and coarse magnetic traces were recorded on the magnetic charts.

Two minor, north westerly magnetic trends were mapped within this survey area. One of these trends, along the north east boundary, appears to extend the length of the survey; the other, about 1400 metres to the south west, is quite short. A few smaller, lower amplitude anomalies are scattered throughout the area but none of the latter present any coherent pattern to the magnetic picture.

The shorter of the two minor trends recorded the maximum amplitude anomaly of approximately 100 nanoTeslas (nT) above an average background of roughly 58185 nT. Maximum magnetic relief is of the order of 190 nt whereas the average relief is probably less than 30 nT.

Due to this rather low magnetic relief and general lack of detail, structures are not well defined. However, two near east-west fault trends may be interpreted from the data. Only the more southerly of the two conforms with any features (i.e., a stream) on the topographic map.

5.3 Electromagnetics

The electromagnetic data was first checked by a line-by-line examination of the analog records. Record quality was good with little or no sferic interference. Instrument and system noise levels were well within specifications and any such noise was readily removed by an appropriate smoothing filter. Geologic noise, in the form of surficial conductors, may be present on the higher frequency responses but overburden conductance is much too low for this to be a significant factor except along the wider creek beds.

Anomalies were picked off the analog traces of the low and high frequency coaxial responses and then validated on the coplanar profile data. These selections were then checked with a proprietary computerized selection program which can be adjusted for ambient and instrumental noise. The data were then edited and re-plotted on a copy of the profile map. This procedure ensured that every anomalous response spotted on the analog data was plotted on the final map and allowed for the rejection - or inclusion if warranted - of obvious surficial conductors.

Each conductor or group of conductors was evaluated on the bases of magnetic (and lithologic, where applicable) correlations apparent on the analog data and man made or surficial features not obvious on the analog charts.

RESULTS: Over ten separate conductors, conductive zones and conductive areas were mapped within the survey area. Although several of the conductors correlate with creeks or stream beds, the apparent resistivities are much too low for conductance to be an entirely surficial phenomenon in every case. The broad responses from creeks along the north and south boundaries are exceptions in that they are surficial.

Surprisingly, at least to the writer, there is a definite and consistent correlation between the conductive and magnetic trends. This is true not only for the conductors along the north eastern third of the survey but for virtually all the (weak) bedrock conductors throughout the area. This apparent correlation with the magnetics has led to some rather intere-sting correlations between the various conductors and conductive zones.

Conductances tend to be in the moderate to high range. Profile shapes from both the coaxial and coplanar systems indicate flat, sheet like conductors.

CONDUCTOR P-I - (Lines 10010 to 10111):

Conductor P-I appears to be from a narrow, flat dipping sheet that outcrops on the mountainside at roughly the 4400 foot level. It correlates with a weak (i.e., 20 - 25 nT) magnetic trend. Conductance varies from moderate to high (Line 10070). Weaker conductors parallel this zone about 300 to 400 metres to the east.

CONDUCTIVE ZONE P-II - (Lines 10010 to 10150):

This appears to be a broad, dual banded conductive zone that conforms to a north-south ridge at the east end of Pass Peak. It may represent the up-dip extension of zone I but is more likely to be a separate conductive sheet about 300 feet vertically above Conductor I. Conductance is in the moderate range. Conductive Zone II shows very good correlation with the strongest of the north-south magnetic trends.

CONDUCTIVE ZONE P-III - (Lines 10100 to 10200):

This conductor appears to be an up dip continuation of P-II with an erosional gap separating the two zones. This implies a pronounced easterly dip to the sheet containing these conductors but dips cannot be estimated from the EM data. Certainly the correlative magnetic anomaly extends to the west of Conductor P-III. The south end of this zone takes a sharp turn to the east along the south shoulder of the stream cut and appears to extend to Seagull Creek as Conductor P-IIIa.

CONDUCTIVE ZONE P-IV - (Lines 10010 to 10121):

Conductive Zone P-IV is another wide zone along a mountain stream cut parallel to zone P-II. It may represent the outcrop edge of the sheet containing Conductor P-I or even both P-I and P-II. The magnetic data, though weak, is consistent with this interpretation. A similar though much weaker conductor appears along another stream cut about 1200 metres to the south west but no magnetic correlation is evident.

CONDUCTIVE ZONES P-V, P-VII, P-VIII - (Lines 10010 to 10300):
These zones appear to constitute a single wide band of parallel to sub-parallel conductors, generally along Seagull Creek and more or less coincident with the magnetic trend along the north east boundary of the survey. Conductance varies, usually moderate but is high at Lines 10100 and 10270 to 10300. This zone (or zones) is probably the down dip continuation of Conductor P-I or, more likely, Zone P-II.

CONDUCTOR P-VI - (Lines 10180 to 10200):
This is a fairly nondescript conductor except for the single response peak on Line 10200 which also coincides with a fairly sharp 30 nT magnetic peak. Both the magnetics and the resistivity data present a fairly coherent picture, indicating that Conductor P-VI may be only the near surface expression of an east-west trending sheet that extends from the conductive zone along the west boundary (i.e., P-X).

CONDUCTORS P-IX, P-X - (Lines 10060 to 10290):
Conductor P-IX is believed to represent the western most edge of the conductive sheet system, at least as far as these data take it. More information is required to the west of this survey to complete the picture if this zone proves to be of interest. Conductor P-X, at a much lower elevation and along a tributary to Seagull Creek, may be an extension of P-IX but it is more likely to be part of the P-VI conductive system. A number of other minor anomalies occur within the area. Their relationship to the main zones are more clearly detailed on the resistivity map.

5.4 Apparent Resistivity

The Apparent Resistivity map gives the best representation of, in the writer's opinion, the distribution of the outcropping and near subsurface conductive sheets or strata within the survey area. It also shows the relationship between conductance and topography very well.

Most if not all of the conductive zones discussed above appear to be within the 100 ohm-metre contour interval and the interpreted subsurface sheet edges are probably included within the 250 ohm-metre contour. The surficial conductors are well above this value.

5.5 VLF-EM Total Field

The VLF data show that VLF field strengths pick up over mountain peaks and are negative over the stream cuts. There is little or no discernible correlation with either the magnetic or electromagnetic data sets. The VLF was regarded as not very diagnostic or helpful to this interpretation.

5.6 Conclusions

The magnetic, resistivity and electromagnetic profile data together with the topography suggest to the writer that the conductivity is confined to one or more stratigraphic horizons that dip gently to the north east. From a high point of roughly 5650 feet at the west boundary, the elevations at which conductive responses were recorded decrease steadily to the east edge of the area to less than 4000 feet. Conductances over this so-called 'sheet' (or sheets) are far from uniform.

The most coherent representation of the conductive zones or areas is given by a combination of the Apparent Resistivity and the Magnetic contour maps. The resistivity map is particularly good in that it is relatively elevation independent.

5.7 Recommendations

Lacking any details on the client's mineralization criteria and exploration objectives in this area, the writer is unable to make specific recommendations on exploration targets. All known geologic information should be compiled together with the magnetic data and the Apparent Resistivity, particularly the areas within the 250 ohm-metre contour. Magnetic anomalies may mark additional areas of mineralization (sulphide or graphite?) not evident from the resistivity map.

Ground follow-up could be restricted to magnetics and possibly pulse EM or induced polarization for penetration and definition of the stratabound conductors.

George Podolsky

for

AERODAT LIMITED

REGISTERED PROFESSIONAL ENGINEER
G. PODOLSKY
PROVINCE OF ONTARIO

J8651.PP

June 29, 1987

APPENDIX I

GENERAL INTERPRETIVE CONSIDERATIONS

Electromagnetic

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

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 electrical conductivity, magnetic susceptibility and its size and shape; the "geometrical" property of the response is largely a function of the conductor's 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 inphase to quadrature ratio and a large phase shift a low ratio. This relationship is shown quantitatively for a non-magnetic vertical half-plane model on the accompanying phasor diagram. Other physical models will show the same trend but different quantitative relationships.

The phasor diagram for the vertical half-plane model, as presented, is for the coaxial coil configuration with the amplitudes in parts per million (ppm) of the primary field as measured at the response peak over the conductor. To assist the interpretation of the survey results the computer is used to identify the apparent conductance and depth at selected anomalies. The results of this calculation are presented in table form in Appendix II and the conductance and inphase amplitude are presented in symbolized form on the map presentation.

The conductance and depth values as presented 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, may be strongly magnetic, 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 is the depth estimate, but both should be considered as relative rather than absolute guides to the anomaly's 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 such ore minerals as sphalerite, cinnabar and stibnite, are good conductors; sulphides 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 consideration 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 decreased 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 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*.

Overburden anomalies often produce broad poorly defined anomaly profiles. In most cases, the response of the coplanar coils closely follows that of the coaxial coils with a relative amplitude ratio of 4*.

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 coils in the X, Y, Z configuration 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 measureable 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 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

J8651 PASS PEAK

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM) INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
11	10010	A	0	12.9	14.2	0.9	19	27
11	10010	B	1	14.3	12.1	1.4	19	30
11	10010	C	0	12.7	14.5	0.9	14	31
11	10010	D	1	12.5	11.0	1.3	20	31
11	10010	E	1	12.5	10.2	1.4	7	46
11	10010	F	3	12.3	3.2	6.8	41	24
11	10010	G	3	28.2	10.8	5.2	12	35
11	10010	H	3	30.9	10.5	6.3	9	37
11	10020	A	0	11.0	11.8	0.9	16	33
11	10020	B	3	8.0	2.5	4.6	47	28
11	10020	C	0	9.8	13.8	0.6	15	30
11	10020	D	1	13.1	12.7	1.1	19	29
11	10020	E	2	15.6	10.4	2.0	18	33
11	10020	F	2	13.9	8.9	2.0	21	34
11	10030	A	0	12.0	14.8	0.8	9	35
11	10030	B	1	20.6	15.7	1.9	9	36
11	10030	C	2	14.8	8.4	2.5	20	35
11	10030	D	2	25.5	13.6	3.2	12	34
11	10030	E	2	28.5	18.9	2.5	9	33
11	10030	F	2	9.0	4.7	2.3	15	52
11	10040	A	2	7.9	4.3	2.1	31	39
11	10040	B	2	20.7	13.3	2.3	10	37
11	10040	C	2	26.4	14.4	3.2	9	36
11	10040	D	1	18.1	14.1	1.7	15	32
11	10040	E	2	9.4	4.1	3.0	10	58
11	10040	F	1	9.8	6.3	1.8	11	51
11	10050	A	2	8.4	4.7	2.1	19	49
11	10050	B	2	22.4	10.7	3.6	12	37
11	10050	C	1	15.5	11.2	1.8	9	42
11	10050	D	2	7.4	4.1	2.0	39	31
11	10050	E	1	8.1	4.9	1.8	23	44
12	10060	A	1	7.8	6.3	1.2	6	56
12	10060	B	1	8.1	4.9	1.8	21	46
12	10060	C	3	18.5	6.9	4.7	14	41
12	10060	D	2	17.3	11.4	2.1	22	28
12	10060	E	3	42.9	20.3	4.5	12	27
12	10060	F	2	24.0	11.7	3.6	14	34
12	10060	G	1	8.3	5.5	1.6	14	51
12	10060	H	1	7.9	5.6	1.4	15	50

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.

J8651 PASS PEAK

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM) INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
12	10070	A	2	22.8	13.3	2.8	24	23
12	10070	B	1	9.0	5.4	1.9	33	32
12	10070	C	2	18.1	9.8	2.8	23	29
12	10070	D	2	17.9	9.0	3.1	19	33
12	10070	E	4	19.6	4.5	9.3	18	38
12	10070	F	3	9.4	3.3	4.1	37	32
12	10070	G	1	8.0	5.8	1.4	17	47
12	10080	A	2	6.9	2.4	3.7	50	28
12	10080	B	1	7.1	4.5	1.6	36	33
12	10080	C	1	7.2	6.3	1.0	20	42
12	10080	D	1	7.0	5.1	1.3	28	39
12	10080	E	2	13.1	5.8	3.3	28	32
12	10080	F	2	11.5	7.2	2.0	29	29
12	10080	G	3	22.9	8.9	4.8	19	31
12	10080	H	3	26.9	9.5	5.7	17	31
12	10080	J	1	9.3	6.1	1.7	25	37
12	10080	K	2	18.2	10.2	2.7	6	45
12	10090	A	2	14.0	8.2	2.3	15	40
12	10090	B	2	17.5	9.1	3.0	20	33
12	10090	C	2	24.4	12.1	3.5	13	35
12	10090	D	3	13.7	5.0	4.4	10	51
12	10090	E	0	5.9	5.9	0.8	22	41
12	10090	F	4	11.5	1.8	13.3	30	39
12	10100	A	4	22.7	3.9	14.3	12	42
12	10100	B	0	11.1	12.5	0.8	15	33
12	10100	C	2	15.5	7.2	3.3	14	43
12	10100	D	2	23.7	14.5	2.6	15	31
12	10100	E	1	8.8	6.2	1.5	27	35
12	10100	F	2	7.6	3.7	2.4	0	72
12	10111	A	0	10.1	12.6	0.7	9	38
12	10111	B	2	16.3	11.1	2.0	14	36
12	10111	C	2	12.7	5.7	3.2	13	48
12	10111	D	2	10.4	6.3	2.0	10	51
12	10111	E	3	18.6	6.7	5.0	21	34
12	10111	F	1	8.1	5.9	1.4	13	50
12	10111	G	3	13.4	4.3	5.2	0	62
12	10111	H	4	16.8	3.3	10.9	7	52
12	10121	A	2	12.9	5.8	3.2	27	33
12	10121	B	1	9.1	6.0	1.7	29	34

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.

J8651 PASS PEAK

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM) INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
12	10121	C	3	16.7	5.2	5.8	21	37
12	10121	D	3	11.2	3.9	4.4	17	49
12	10121	E	2	13.2	6.0	3.2	30	30
12	10121	F	2	17.1	9.6	2.6	6	47
11	10130	A	1	15.0	10.7	1.8	8	43
11	10130	B	2	7.8	3.9	2.3	31	39
11	10140	A	1	7.0	5.0	1.4	28	40
11	10140	B	1	8.5	7.2	1.1	31	28
11	10140	C	1	17.6	14.7	1.5	17	29
11	10150	A	2	14.4	7.1	3.0	16	41
11	10150	B	0	6.6	6.5	0.8	23	38
11	10150	C	3	12.5	4.6	4.2	34	28
11	10150	D	2	11.4	6.2	2.4	11	50
11	10160	A	2	9.2	3.8	3.3	10	59
11	10160	B	2	24.0	12.7	3.2	15	32
11	10160	C	0	10.1	10.6	0.9	2	49
11	10160	D	2	11.1	5.6	2.6	23	40
11	10160	E	2	29.4	19.1	2.6	14	27
11	10160	F	1	23.7	19.8	1.7	19	22
11	10160	G	2	17.9	8.5	3.4	11	42
11	10170	A	1	17.8	13.0	1.9	18	30
11	10170	B	2	14.2	8.1	2.4	10	46
11	10170	C	2	19.7	11.7	2.6	21	28
11	10170	D	2	21.9	12.9	2.7	17	31
11	10170	E	2	17.6	9.3	2.9	17	35
11	10170	F	1	15.0	12.6	1.4	18	30
11	10170	G	1	7.3	4.4	1.8	12	57
11	10180	A	2	12.7	5.6	3.3	16	44
11	10180	B	0	8.3	10.0	0.7	25	26
11	10180	C	1	19.6	23.1	1.0	12	26
11	10190	A	1	12.0	11.3	1.1	15	35
11	10190	B	1	11.6	10.9	1.1	16	35
11	10190	C	0	12.2	15.4	0.7	13	30
11	10190	D	0	5.2	6.0	0.6	33	29
11	10200	A	1	29.6	24.7	1.9	10	28
11	10200	B	0	7.0	7.2	0.8	23	36
11	10200	C	1	13.4	14.0	1.0	11	35

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.

J8651 PASS PEAK

FLIGHT	LINE	ANOMALY	CATEGORY	AMPLITUDE (PPM) INPHASE	QUAD.	CONDUCTOR CTP MHOS	DEPTH MTRS	BIRD HEIGHT MTRS
11	10200	D	0	10.2	12.2	0.7	12	35
11	10200	E	1	19.2	14.1	1.9	15	31
11	10200	F	1	15.8	11.6	1.8	12	38
11	10210	A	1	14.3	15.9	1.0	13	30
11	10210	B	0	8.5	11.5	0.6	10	37
11	10211	A	2	9.6	5.7	2.0	24	39
11	10220	A	2	15.4	8.0	2.8	27	28
11	10220	B	0	8.6	14.3	0.4	3	39
11	10220	C	0	11.7	16.0	0.7	3	39
11	10230	A	0	6.2	11.3	0.3	11	34
11	10230	B	0	7.2	11.3	0.4	14	32
11	10230	C	0	5.6	7.3	0.5	22	34
11	10230	D	2	17.8	10.5	2.5	16	35
11	10240	A	2	36.8	19.2	3.8	24	17
11	10241	A	0	3.3	7.3	0.1	9	41
11	10260	A	2	14.0	9.1	2.0	13	41
11	10270	A	3	25.0	8.0	6.4	17	33
11	10270	B	1	13.4	9.4	1.8	24	30
11	10280	A	2	17.4	7.4	3.9	16	39
11	10280	B	4	32.5	6.2	13.8	10	37
11	10290	A	3	16.8	5.2	5.9	22	36
11	10290	B	3	21.5	9.4	4.0	18	32
11	10300	A	3	24.0	10.3	4.2	10	39
11	10300	B	3	26.9	10.5	5.0	8	40
11	10300	C	3	27.0	9.3	5.9	10	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.

APPENDIX III

CERTIFICATE OF QUALIFICATIONS

I, GEORGE PODOLSKY, certify that: -

1. I am registered as a Professional Engineer in the Province of Ontario and work as a Professional Geophysicist.

2. I reside at 172 Dunwoody Drive in the town of Oakville, Ontario.

3. I hold a B. Sc. in Engineering Physics from Queen's University, having graduated in 1954.

4. I have been continuously engaged in both professional and managerial roles in the minerals industry in Canada and abroad for the past thirty two years.

5. I have been an active member of the Society of Exploration Geophysicists since 1960 and hold memberships on other professional societies involved in the minerals extraction and exploration industry.

6. The accompanying report was prepared from information published by government agencies, materials supplied by Canamax Resources Inc. and from a review of the proprietary airborne geophysical survey flown by Aerodat Limited for Canamax Resources Inc. Although I have worked in the general area on several occasions, I have not personally visited the property.

7. I have no interest, direct or indirect, in the property described nor do I hold securities in Canamax Resources Inc.

8. I hereby consent to the use of this report in a Statement of Material Facts of the Company and for the preparation of a prospectus for submission to the British Columbia Securities Commission and/or other regulatory authorities.

Signed,

Oakville, Ontario

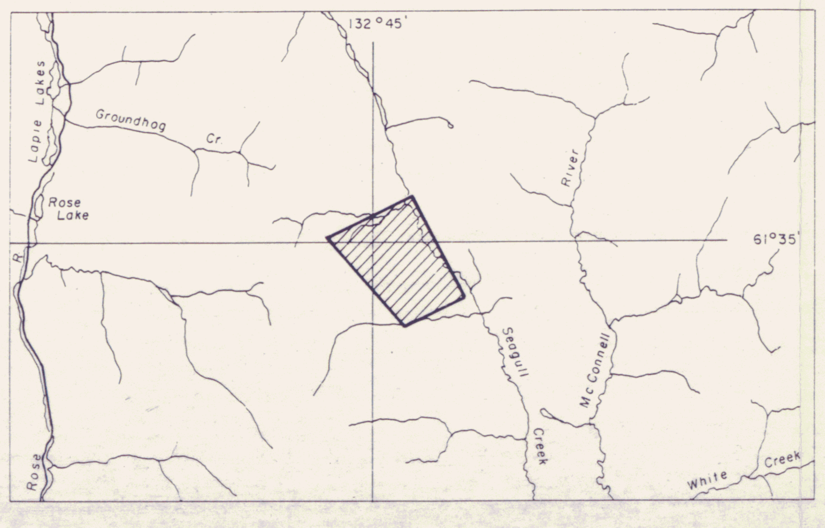
June 29, 1987

REGISTERED PROFESSIONAL ENGINEER
G. PODOLSKY
PROVINCE OF ONTARIO

George Podolsky, P. Eng.

GEOPOD ASSOCIATES INC.

Positioning .... 35 mm TRACKING FILM
Mean flight line spacing .... 200 metres



CANAMAX RESOURCES INC.

091735

PASS PEAK
YUKON TERRITORY

(1249)

SCALE 1/10,000

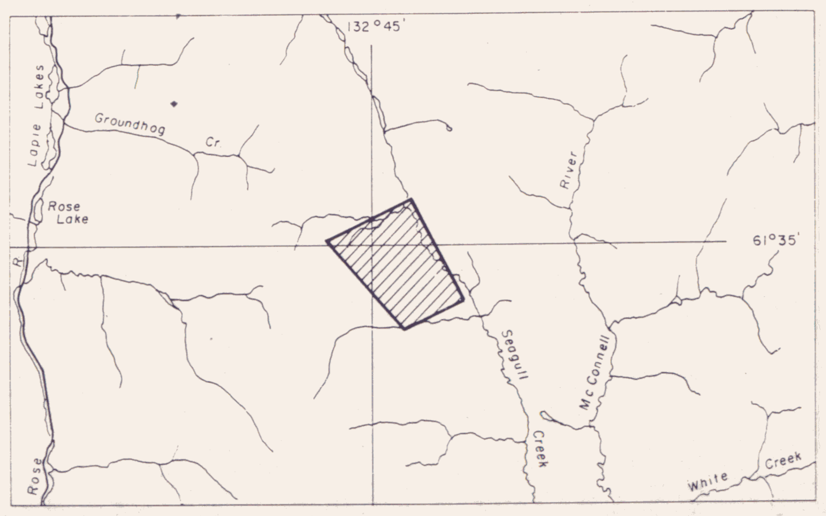
0 330 660 1320 1/2 mile
0 100 200 500 1 Kilometre

AERODAT LIMITED

DATE: March, 1987
N.T.S. No: 105/F
MAP No: 1

J 8651

Positioning .... 35 mm TRACKING FILM
Mean flight line spacing .... 200 metres



CANAMAX RESOURCES INC.

091735

FLIGHT PATH

PASS PEAK
YUKON TERRITORY

(1250)

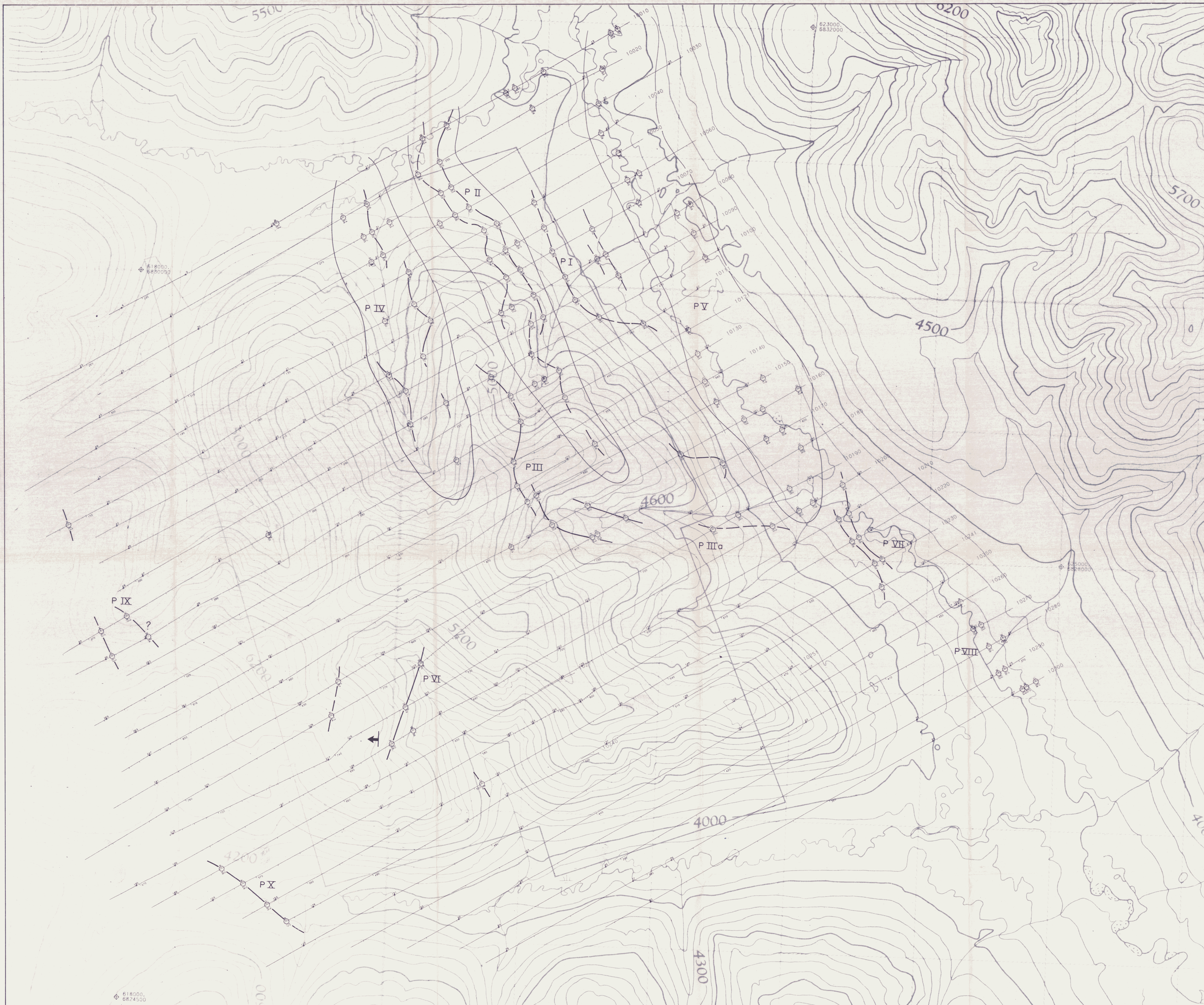
SCALE 1/10,000

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

AERODAT LIMITED

DATE:	March, 1987
N.T.S. No:	105/F
MAP No:	2

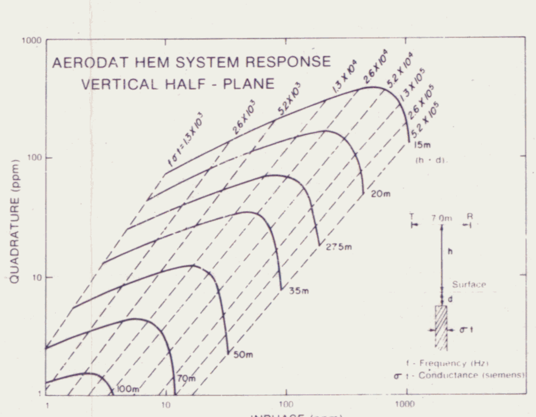
J 8651



EM RESPONSE

Conductivity thickness in mhos

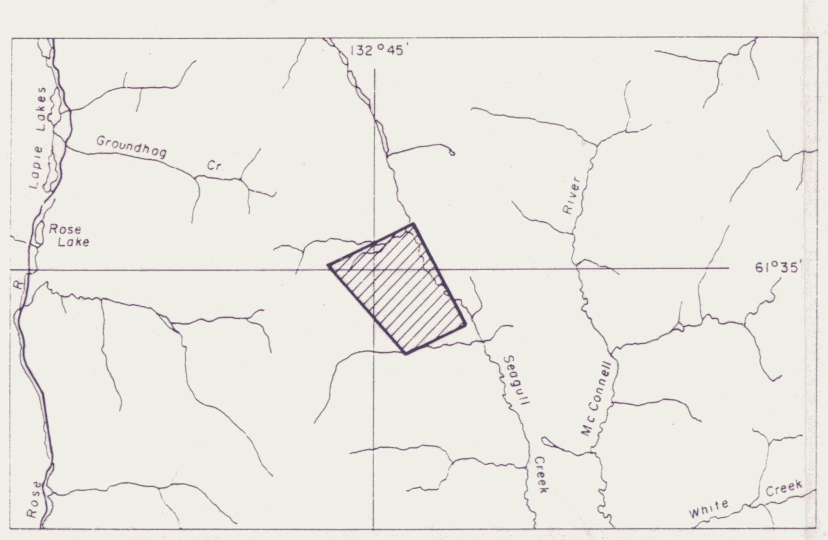
7	60 - 120
6	30 - 60
5	15 - 30
4	8 - 15
3	4 - 8
2	2 - 4
1	1 - 2
○	0 - 1



Positioning .... 35 mm TRACKING FILM
Mean flight line spacing .... 200 metres

INTERPRETATION LEGEND

- EM Anomaly A, in-phase amplitude 7 ppm. Conductivity thickness range 2 (see code)
- Interpreted bedrock conductor axis
- Possible bedrock conductor axis
- Conductive Zone



CANAMAX RESOURCES INC.

091735

ELECTROMAGNETIC SURVEY INTERPRETATION

PASS PEAK
YUKON TERRITORY

(1251)

SCALE 1/10,000

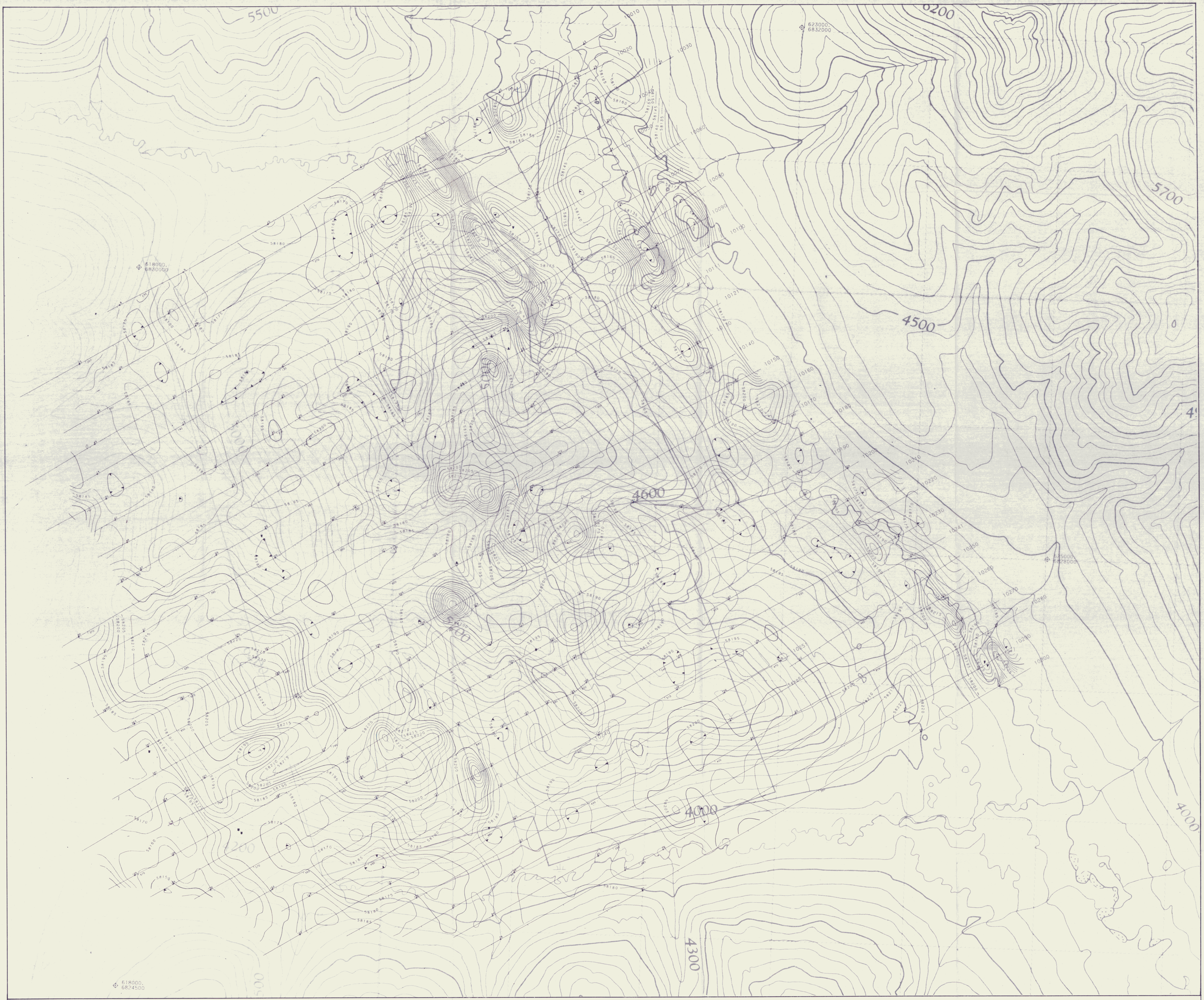
0 330 660 1320 1/2 mile

0 100 200 500 1 Kilometre

AERODAT LIMITED

DATE:	March, 1987
N.T.S. No:	105/F
MAP No:	3

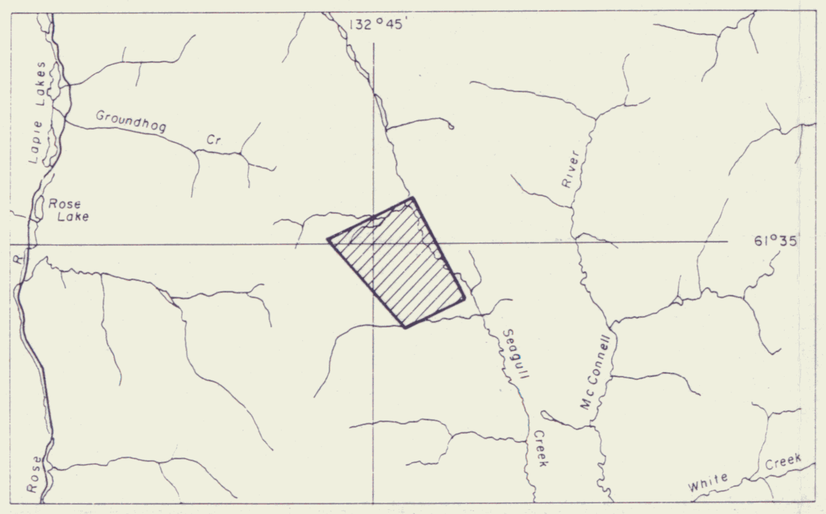
J 8651



Positioning .... 35 mm TRACKING FILM
Mean flight line spacing .... 200 metres

LEGEND

50 ....
25 ....
5 ....



CANAMAX RESOURCES INC.

TOTAL FIELD MAGNETIC CONTOURS

091735

PASS PEAK
YUKON TERRITORY

(1252)

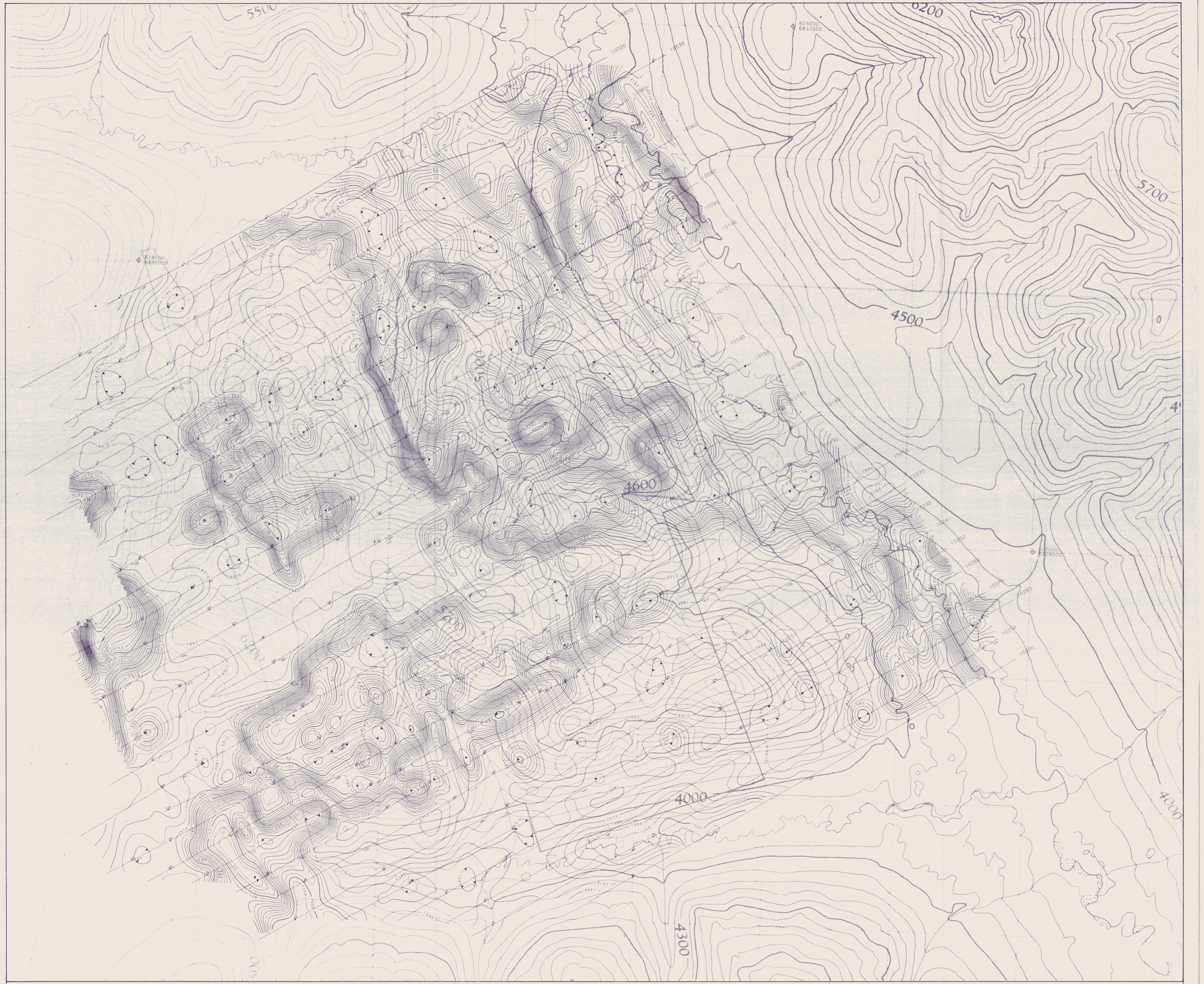
SCALE 1/10,000

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

AERODAT LIMITED

DATE: March, 1987
N.T.S. No: 105/F
MAP No: 4

J 8651

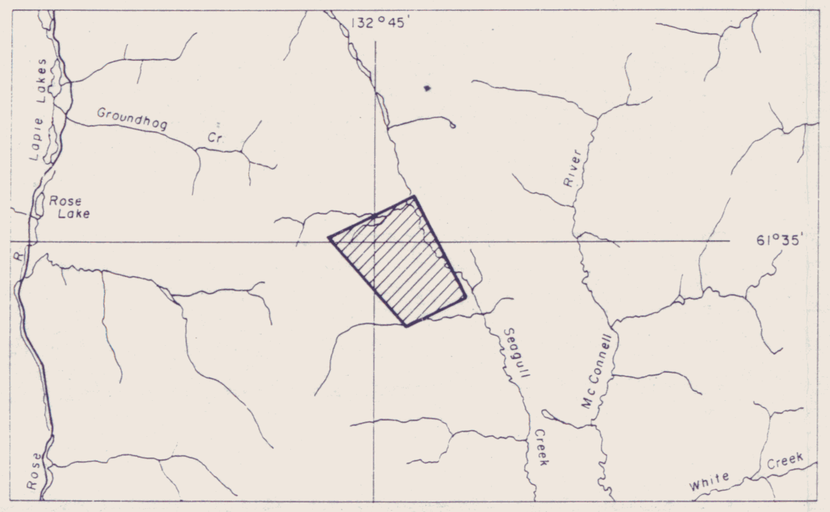


Positioning .... 35 mm TRACKING FILM
Mean flight line spacing .... 200 metres

APPARENT RESISTIVITY CONTOURS

Calculated assuming 200 m conductive layer
(using 4600 Hz coaxial data)

(thick line)	$10^{N.0}$ OHM-M	N 1 2 3 9
(thin line)	$10^{N.M}$ OHM-M	M 1 2 3 9



CANAMAX RESOURCES INC.

APPARENT RESISTIVITY CONTOURS

091735

PASS PEAK
YUKON TERRITORY

1253

SCALE 1/10,000

0 330 660 1320 1/2 mile

0 100 200 500 1 Kilometre

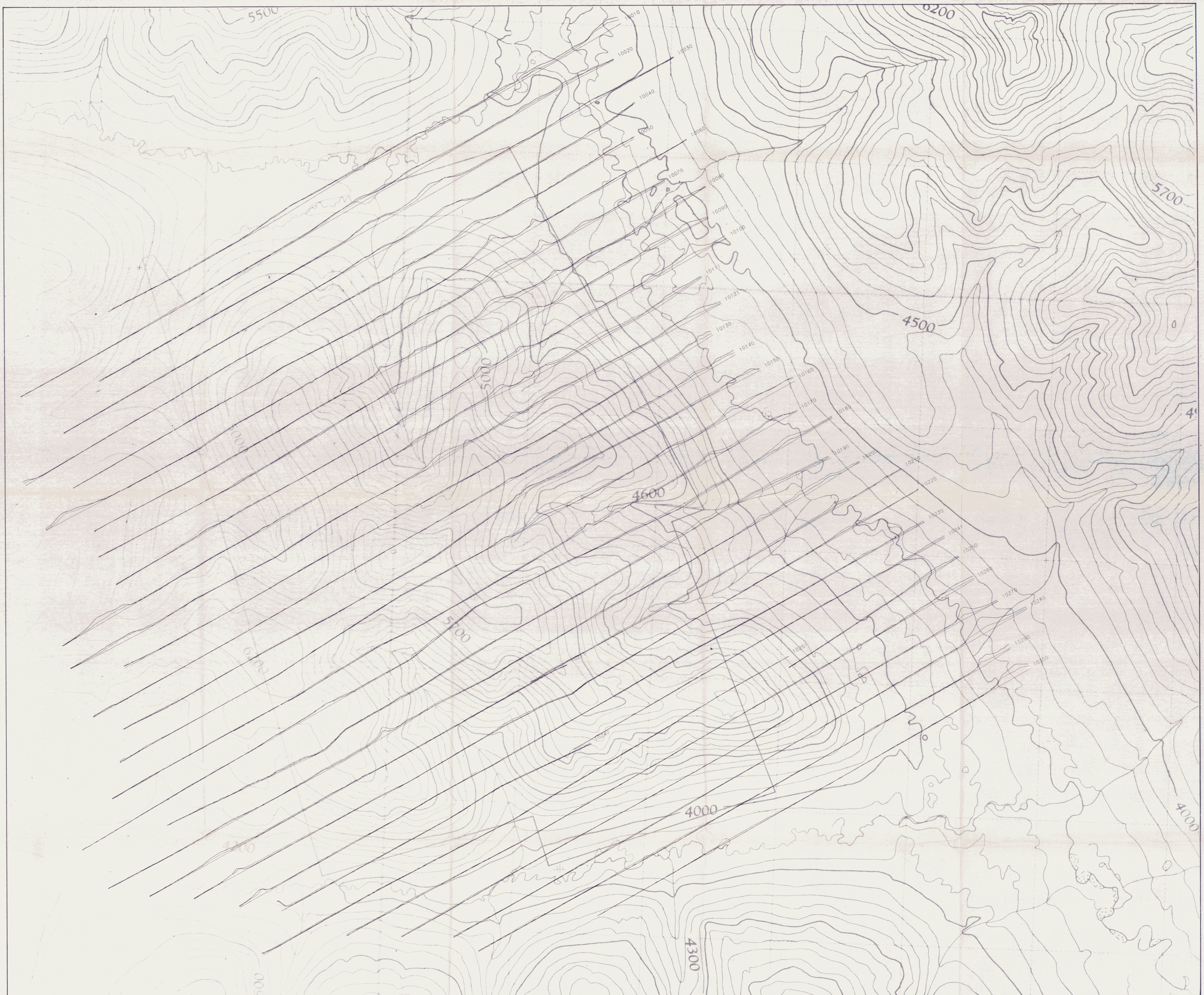
AERODAT LIMITED

DATE: March, 1987

N.T.S. No: 105/F

MAP No: 5

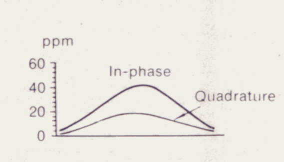
J 8651

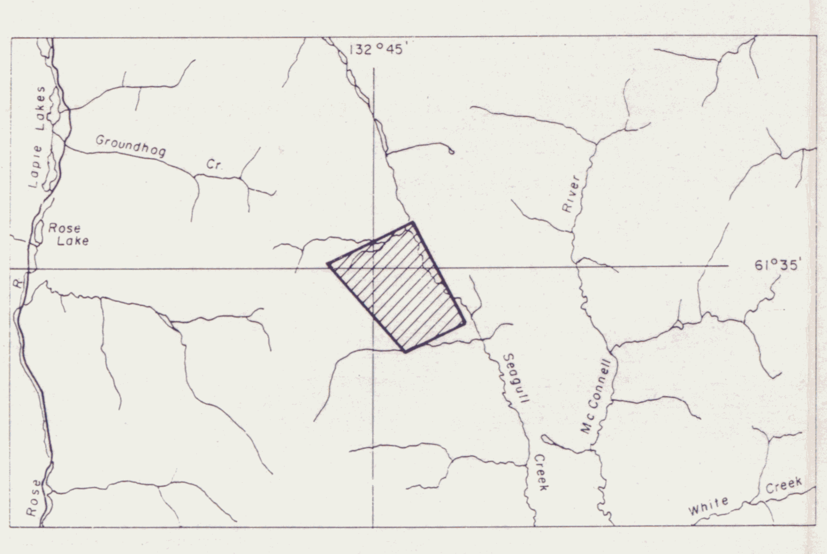


Positioning .... 35 mm TRACKING FILM
Mean flight line spacing .... 200 metres

ELECTROMAGNETIC PROFILES-COAXIAL

Coil Separation	7 metres
Frequency	935 Hz
Sensor Elevation	30 metres
Vertical Scale	4 ppm/mm





CANAMAX RESOURCES INC.

ELECTROMAGNETIC SURVEY PROFILES

091735

PASS PEAK
YUKON TERRITORY

(1254)

SCALE 1/ 10,000

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

AERODAT LIMITED

DATE:	March, 1987
N.T.S. No:	105/F
MAP No:	6b

J 8651

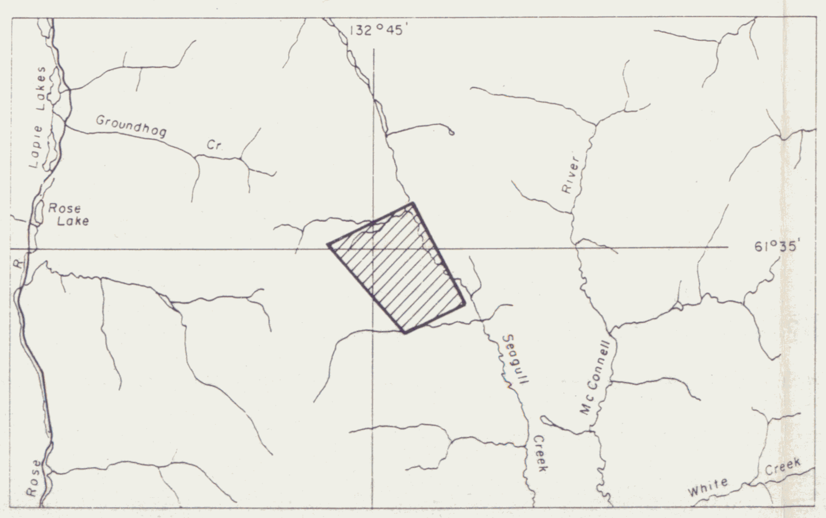
Positioning .... 35 mm TRACKING FILM
Mean flight line spacing .... 200 metres

VLF STATIONS:
NLK Jim Creek, Wash.-24·8 kHz.
NSS Annapolis, Me. -21·4 kHz.

VLF-EM TOTAL FIELD CONTOURS

MEAN VLF-EM SENSOR ELEVATION: 48 metres

CONTOUR INTERVAL:
50% ....
10% ....
2% ....



CANAMAX RESOURCES INC.

VLF-EM TOTAL FIELD CONTOURS

091735

PASS PEAK
YUKON TERRITORY

SCALE 1/10,000

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

AERODAT LIMITED

DATE: March, 1987
N.T.S. No: 105/F
MAP No: 7

J 8651