SILVER SABRE RESOURCES LTD.

TOTAL MAGNETIC FIELD AND VLF-EM SURVEYS AT THE HAECKEL HILL PROPERTY, WHITEHORSE, YUKON

Mike Power, M.Sc., P.Geoph.

CLAIMS

BEE 1-4	Y 91728 - Y 91731
BEE 5-12	Y 91732 - Y 91739
BEE 21-24	Y 91748 - Y 91751
BEE 25-27	YA03106 - YA03108
BEE 28-35	YA18302 - YA18309
BEE 60-63	YA92340 - YA92343
CEE 7-8	YA82530 - YA82531
CEE 10-13	YA82532 - YA82535
CEE 19	YA82581
CEE 20-21	YA85579 - YA85580
CEE 25-26	YA85584 - YA85585
CEE 24-26	YA86010 - YA86012

Location: 60° 47'N 135° 12'W
NTS: 105 D/14
Mining District: Whitehorse, YT
Date: January 16, 2001

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 $ 7,775.00.

M. R[illegible]

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

SUMMARY

Line cutting, total magnetic field and very low frequency electromagnetic (VLF-EM) surveys were conducted on the Haeckel Hill Property between December 24, 2000 and January 10, 2001. The Haeckel Hill Property consists of 45 Quartz Claims staked in the Whitehorse Mining District on NTS 105 D14. It is located 20 km north of Whitehorse.

The property is underlain by the Hancock and Mandana Members of the Upper Triassic Lewes River Group which consist of limestone and argillite, and greywacke, tuff and argillite respectively in this area. These formations are intruded by Paleocene Nisling Range Plutonic Suite (NRPS) granite, subvolcanic rhyolite and dacite. The known gold mineralization on the Haeckel Hill Property is located in or near the axial zone of a west plunging anticline within which intermittent shearing and vein mineralization occurs. A small NRPS stock intrudes the axial region of the anticline and is exposed in a 400 by 800 m area at lower elevations. Gold mineralization occurs in Pb-Ag-Zn veins within Hancock Member limestone at higher elevations and in small veins and stockworks within sheared rhyolite at lower elevations.

The total magnetic field survey was conducted over 13.83 line-km of flagged grid, reading stations at 5 m. The VLF-EM survey was conducted over 4.8 line-km of flagged grid, reading stations at 12.5 m. The grid base line is oriented at 90^0 and the transmitter at Cutler, Maine (apparent azimuth 95^0) was used in the survey. The total magnetic field survey was conducted using a synchronized base station cycling at 10 s during field acquisition and the field data was corrected for temporal geomagnetic variation.

The total magnetic field survey identified a NW striking, NE dipping regional gradient with a possible dipolar response, coincident with the rhyolite stock, superimposed on the regional gradient. The VLF-EM survey identified 4 anomalies, three of which appear to originate from tabular dipping conductors and one of which may originate at a nonconductive contact between two rock units with contrasting electrical resistivity.

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1.0 INTRODUCTION

Amerok Geosciences Ltd. was retained by Silver Sabre Resources Ltd. to conduct ground total magnetic field and very low frequency electromagnetic (VLF-EM) surveys on the Haeckel Hill Property, Whitehorse Mining District, Yukon. A total of 14.8 line-km of grid was re-established following which 13.83 line-km of magnetic field surveys and 4.7 line-km of VLF-EM surveys were conducted between December 24, 2000 and January 10, 2001 to map an intrusive contact and locate structures of potential economic interest. This report describes the surveys performed, data, results and an interpretation.

2.0 LOCATION AND ACCESS

The Haeckel Hill Property is located on the northwest boundary of the city Whitehorse, Yukon, on map sheet 105 D/14, at 60^{0} 47'N 135^{0} 12'W, southwest of the junction between the Alaska and North Klondike Highways (Figure 1). The route to the property is as follows:

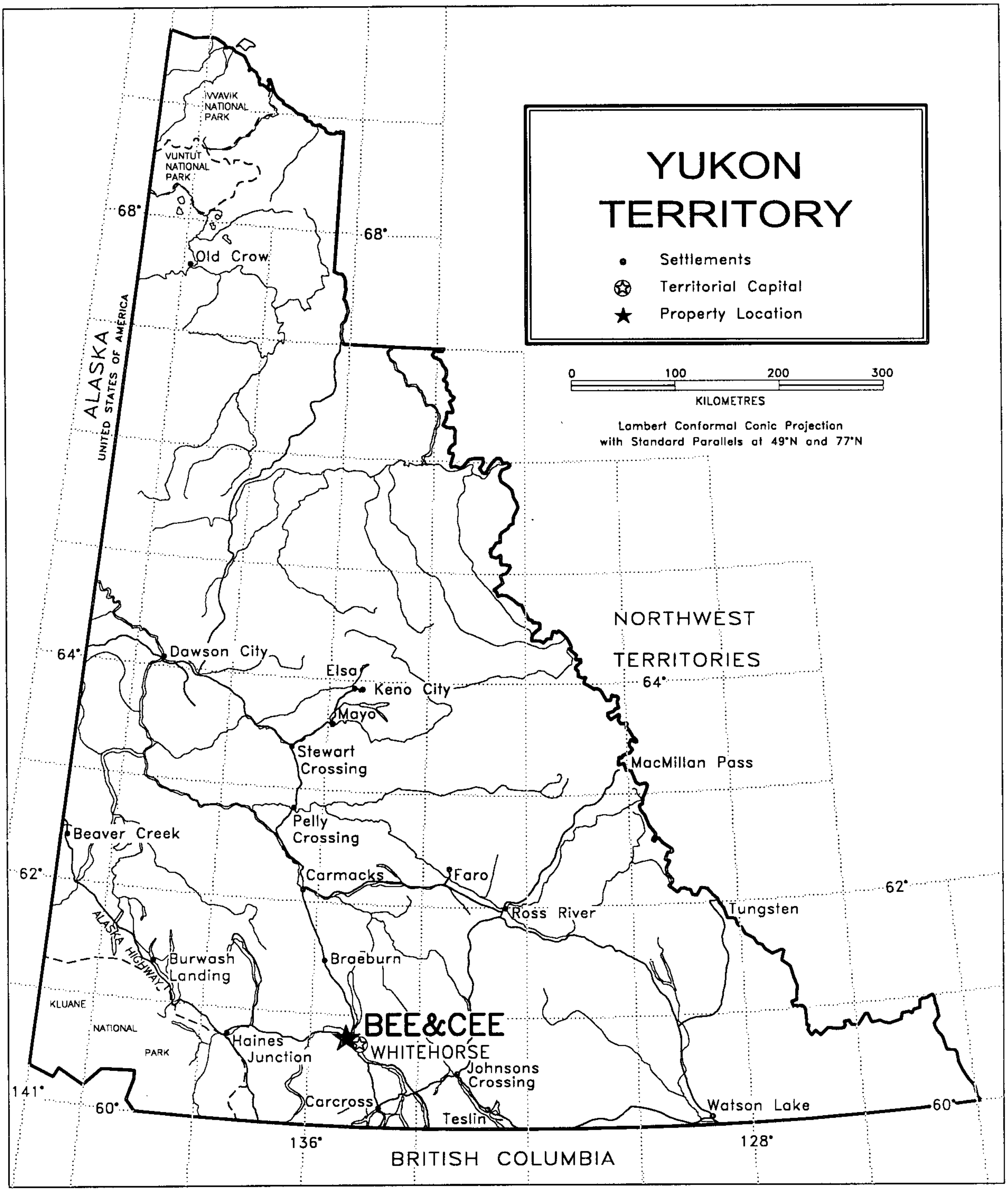
Section	Distance (km)	Remarks
Whitehorse to Old Gun Club Road	22.0	All weather paved highway
Alaska Highway to Old Gun Club	1.5	All weather gravel road
Old Gun Club to showings	0.5	CAT trail

3.0 PROPERTY

The Haeckel Hill Property consists of 45 un-surveyed Quartz Claims granted under the Yukon Quartz Mining Act in the Whitehorse Mining District. The claims are entirely within the municipal boundaries of the City of Whitehorse and are wholly owned by Silver Sabre Resources Ltd. of Whitehorse, Yukon. Claim locations are plotted in Figure 2 and claim data[1] is summarized below:

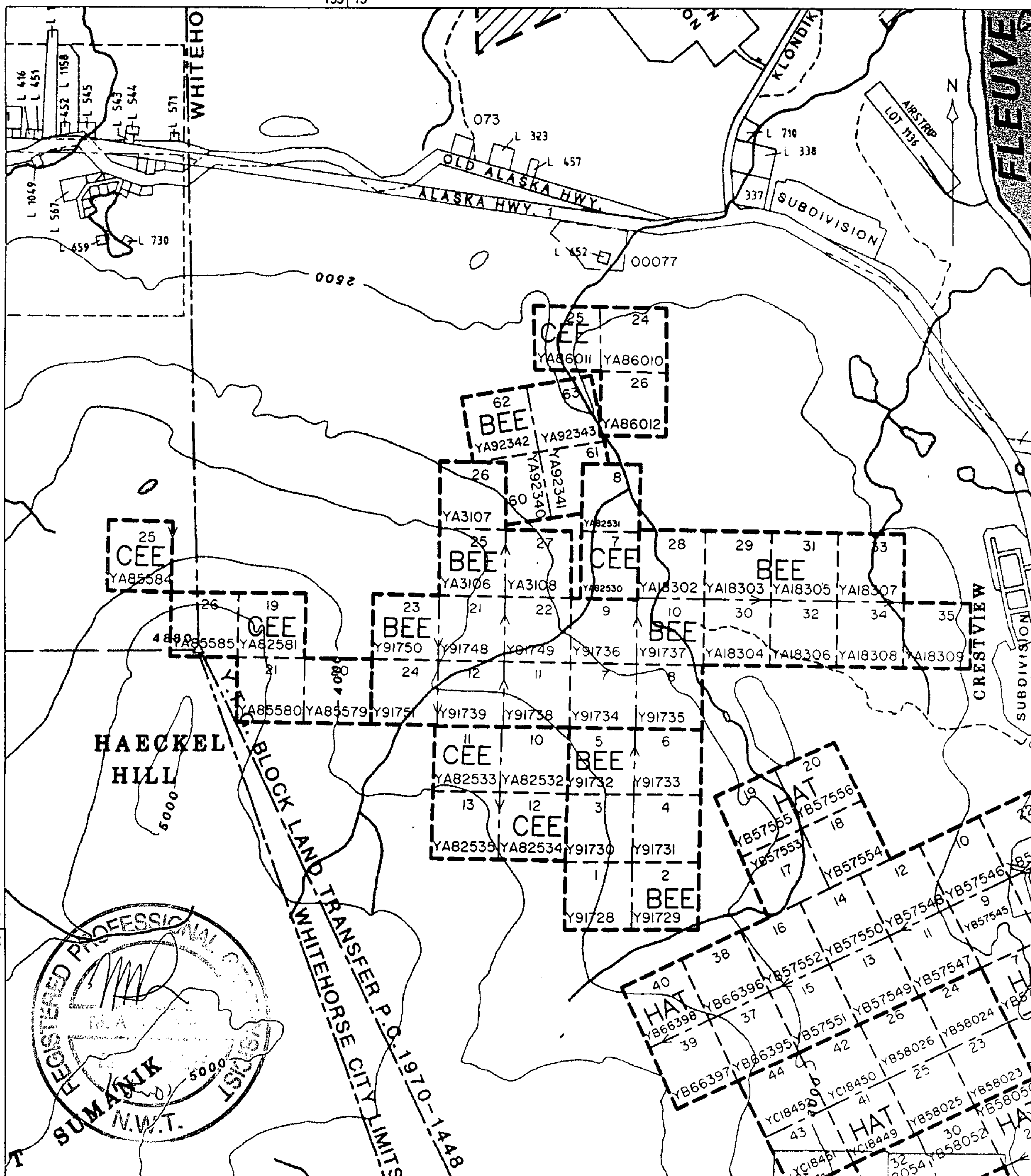
Claim	Record Number	Expiry Date
BEE 1-4	Y91728 - Y91731	December 6, 2006

[1]Claim data as reported by the Whitehorse Mining Recorder on December 13, 2000. The expiry dates account for work performed in 2000.



REGISTERED PROFESSIONAL GEOPHYSICIST
N.W.T.
16.5.01

SILVER SABER RESOURCES	BEE & CEE PROPERTY	
PROPERTY LOCATION	MINING DISTRICT: WHITEHORSE	
	NTS: 105 D\14	SCALE 1: 6 000 000
	DRAWN BY: HDS	
Amerok Geosciences Ltd.	DATE: 2000.10.16	FIGURE: 1



0 1000 2000 3000 4000 5000

FEET

SILVER SABRE RESOURCES

CLAIM LOCATION

Amerok Geosciences Ltd.

BEE & CEE PROPERTY

MINING DISTRICT: WHITEHORSE

NTS: 105 D/14 | SCALE 1: 125 000

DRAWN BY: HDS

DATE: 2000.12.19 | FIGURE: 2

BEE 5-8	Y91732 - Y91735	December 6, 2005
BEE 9-11	Y91736 - Y91738	December 6, 2006
BEE 12	Y91739	December 6, 2005
BEE 21-22	Y91748 - Y91749	December 6, 2006
BEE 23-24	Y91750 - Y91751	December 6, 2005
BEE 25-26	YA03106 - YA03107	July 29, 2007
BEE 27	YA03108	July 29, 2008
BEE 28	YA18302	September 17,2006
BEE 29 - 35	YA18303 - YA18309	September 17,2005
BEE 60	YA92340	July 2, 2007
BEE 61	YA92341	July 2, 2011
BEE 62	YA92342	July 2, 2007
BEE 63	YA92343	July 2, 2011
CEE 7 - 8	YA82530 - YA82531	July 3, 2011
CEE 10 - 13	YA82532 - YA82535	July 3, 2005
CEE 19	YA82581	July 4, 2009
CEE 20 -21	YA85579 - YA85580	October 9, 2005
CEE 24	YA86010	October 23, 2006
CEE 25	YA85584	October 9, 2005
CEE 25	YA86011	October 23, 2006
CEE 26	YA85585	October 9, 2005
CEE 26	YA86012	October 23, 2006

4.0 PHYSIOLOGY, GEOLOGY AND ECONOMIC MINERALIZATION

The Haeckel Hill Property is situated on the low lying rolling hills of the Yukon Plateau. Elevations in the area of the property vary from 2500 to 5100 feet. Tree line is at approximately 4500 feet. Below this level, black spruce with pine in sandy areas predominate. Above tree line, vegetation consists of dwarf birch, willow and alder. The area is subject to a northern continental climatic regime. Temperature averages vary from -12 degrees Celsius in the winter to 15 degrees Celsius in the summer. Precipitation in the area is generally light.

5.0 GEOLOGY

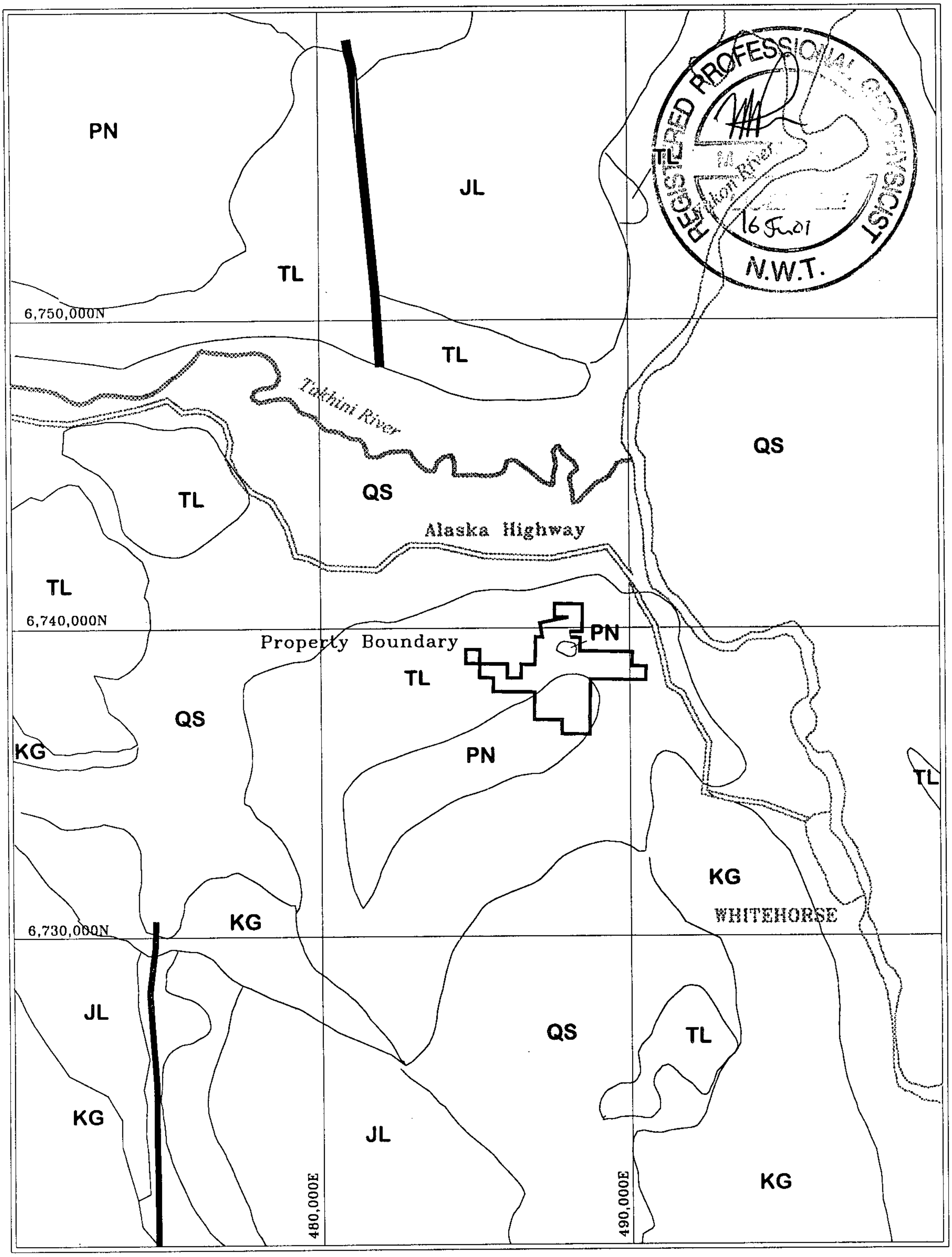
The area of the Haeckel Hill Property has been mapped by Wheeler (1961) and Hart (1997). The property is on the southwest flank of the Whitehorse Trough and is underlain by Mesozoic sedimentary rocks intruded by Mesozoic through Tertiary intrusive rocks. Formations in the area of the property are summarized in Table I and the regional geology is portrayed in Figure 3.

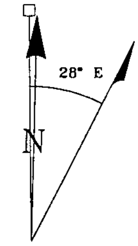
Table I. Regional Stratigraphy
(after Wheeler (1960) and Hart (1997))

Formation (Age)	Description
Overburden (Quaternary)	Till and colluvium
Nisling Range Plutonic Suite (Late Paleocene)	Medium to coarse grained horneblende-biotite granite and granodiorite.
Whitehorse Plutonic Suite (Mid-Cretaceous)	Biotite- and biotite-horneblende granodiorite
Laberge Group (Lower to Mid-Jurassic)	Greywacke, arkose, quartzite, conglomerate
Lewes River Group (Upper Triassic)	Greywacke, siltstone, argillite; limestone and limestone breccia; andesite, basalt and pyroclastic rocks.

The Haeckel Hill Property is underlain by Lewes River Group metasedimentary rocks. In the area of the property, these dip generally to the northeast although they are locally folded about northwest trending axes. Large scale northwest trending folds with wavelengths of up to 10 km are mapped north of the property. Intrusive bodies appear to have steeply-dipping discordant contacts with surrounding sedimentary rocks. The Haeckel Hill Pluton intrudes Lewes River Group rocks on and to the south of the Haeckel Hill Property. There is a small satellite stock north of the main pluton which has been a focus of exploration work on the Haeckel Hill Property.

Rock units mapped on the Haeckel Hill Property are summarized in Table II. The property is predominantly underlain by argillite, limestone, conglomerate and grit assigned to the Upper Triassic Aksala Formation of the Lewes River Group (Units 1 and 2). These include clastic rocks mapped as undifferentiated Aksala Formation or





QS

Quaternary Sediments - Till, sand, alluvium, volcanic ash, loess.

PN

Nisling Plutonic Suite (Paleocene) - Granite, sub-volcanic rhyolite, dacite.

KG

Coast Intrusions (Cretaceous) - Granodiorite, granite, quartz monzonite, quartz diorite

JL

Laberge Group (Jurassic) - Greywacke, arkose, argillite, conglomerate, quartzite.

TL

Lewes River Group (Triassic) - greywacke, siltstone, argillite, limestone, andesite, basalt, pyroclastics.

0 5000

metres

Scale: 1:200,000

- Fault or shear zone

Geology after Wheeler (1960), Hart (1997)

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	NTS: 105 D14 — Datum: NAD27
REGIONAL GEOLOGY FIGURE 3.	Mining District: Whitehorse
	Job: 00-06 — Date: 12 Dec 00
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the Mandana Member of the Aksala Formation, and limestones mapped as Hancock Member (Hart, 1997). The metasedimentary rocks are in turn intruded by granite, rhyolite and dacite assigned to the Nisling Range Plutonic Suite. Extensive colluvium, loess and till blankets the property and bedrock exposures are quite scarce.

Table II. Rock units - Haeckel Hill Property
(Regional classification following Hart (1997))

Property Scale Rock Unit (Regional Unit)	Description
Overburden	Tan to light brown till and grey-black colluvium
Unit 3 (Nisling Range Plutonic Suite) (NRPS)	Granite, rhyolite and dacite.
Unit 2 (Lewes River Group -Mandana Member)	Greywacke with lesser conglomerate and argillite
Unit 1 (Lewes River Group -Hancock Member)	Limestone and marble, limestone conglomerate and minor interbedded argillite.

Mineralization on the property occurs in two settings. The Main Showing occurs in Hancock Member limestone, west of the Unit 3 stock. The showing consists of sheeted galena-sphalerite-pyrite bearing quartz veins, and has returned assays of 6-20% lead-zinc, 144 gpt Ag and 5480 ppb Au (Schulze, 1995). Best assays reported in the Minfile are 8% Pb, 5% Zn and 171 g/t Ag from a selected specimen and a drill intersection of 34 g/t Ag, 0.34 g/t Au, 1.8% Pb and 1.6% Zn across 1.5 m. This style of mineralization is largely confined to the intersection of a shear zone and Unit 1 limestone approximately 400 m west of the margin of the Unit 3 stock. Individual veins extend for approximately 30 m and are exposed in several blast trenches over a distance of 60 m. In 1999, a 10 cm wide vein with similar mineralization was found 200 m east of the Main Showing along the base line.

The second style of mineralization is low grade gold within and adjacent to the Unit 3 rhyolite stock (East Showing). Exploration by Noranda in the 1980's focussed on the shear zone within the stock. Quartz veins containing pyrite with rare galena and sphalerite returned up to 2180 ppb Au from trench chip samples (Doherty and Clarke, 1997) and the best drill intersection was 280 ppb over 3.3 m in a drill hole beneath an anomalous trench sample (MacKay and Reid, 1986). Drilling during 1997 intersected the rhyolite at depths of 14 to 47 m, 500 m west of the exposed stock and returned 1206 ppb Au from a 1.52 m sample from 30.5 to 32.0 m. The results from this hole suggested that the rhyolite intrusion may contain significant low grade gold mineralization and merited additional investigation.

5.0 SURVEY GRID

The geophysical surveys were conducted on a flagged grid centred on the Unit 3 stock (Figure 2). The grid consists of 14 line-km of survey lines turned from a 1.0 km base line oriented at 90° . The base line was cut and slope corrected. Some of the survey lines were cut for an induced polarization survey in 1999 but most were not. None of the survey lines were slope corrected. The grid had been established during the summers of 1999 and 2000 but required re-establishment and chaining in many areas. Line 1000E was a new line cut prior to the survey through thick alders.

6.0 PERSONNEL AND EQUIPMENT

The surveys were conducted by the following personnel:

Gary Lee, P.Eng.	Technician

He was equipped with the following instruments and equipment:

<u>Field magnetometer:</u>	GEM Overhauser GSM-19 magnetometer
<u>Base magnetometer:</u>	GEM GSM-19T proton precession magnetometer
<u>VLF receiver:</u>	Geonics EM-16
<u>Data processing:</u>	P-200 laptop computer, HP340C printer. Data processing with Geopak software.
<u>Other equipment:</u>	F250 4x4 truck.

The technician spent a total of 12 man-days on the property. The work was conducted intermittently over the period described because of the short daylight hours. The geophysical survey log is attached as Appendix B.

7.0 SURVEY SPECIFICATIONS

The magnetometer and VLF-EM surveys were conducted according to the following specifications:

Station spacing:	5 m (magnetometer) 12.5 m (VLF)
Base station magnetometer:	Installed on the grid and cycled at 10 s throughout the survey
VLF facing direction:	Grid North
Primary VLF station:	NAA - Cutler, Maine - 24.0 KHz Apparent azimuth - 95^0

8.0 VLF-EM THEORY

The VLF-EM method is well described in standard texts (eg. Telford *et. al.* 1990) and by McNeill and Labson (1990). Modulated radio waves in the range of 15.0 to 25.0 KHz are used to communicate with submerged submarines and are useful in mineral exploration. The antennas from which the signals are radiated are vertical wires, commonly located in valleys or craters to permit longer wire length (Figure VLF-1(a)). This antenna configuration generates a wave with a vertical electrical field and a horizontal magnetic field propagating away from the source. The wave propagates between the ionosphere and the earth's surface, reflecting off both at a shallow angle (Figure VLF-1(b)). At a great distance, the radius of curvature is so large that it is effectively a plane wave.

A steeply-dipping conductor with a strike in the direction of the transmitter will be optimally coupled to the horizontal magnetic flux. This magnetic flux will induce a secondary field in the conductor ($\mathbf{H}_{s}$) which opposes the primary or source field. This is generated by circulating eddy currents which tend to concentrate at the top of the conductor (Figure VLF-2(a)). The current distribution can be considered to be a linear source located at the top of the conductor and consequently, the anomaly shape is relatively insensitive to the dip of conductor. The current at the top of the conductor produces a cylindrical magnetic field centred on the current axis. The primary horizontal magnetic field and the secondary field induced in the conductor add vectorially to produce a resultant magnetic field whose attitude traces out a sine wave or cross-over as shown in Figure VLF-2(a).

The Geonics VLF-EM receiver used in this survey was oriented facing grid north so that a normal in-phase component cross-over consists of a positive to negative response moving from grid south to north. The wavelength of the response in a general sense is proportional to the depth of the target. Deep targets tend to produce longer wavelength anomalies while shallow anomalies have a shorter wavelength. Half the distance between the peak and trough of the response is roughly equal to the depth to the current source except where the depth to the top of the target is much less than the skin depth. In this situation, the separation tends to

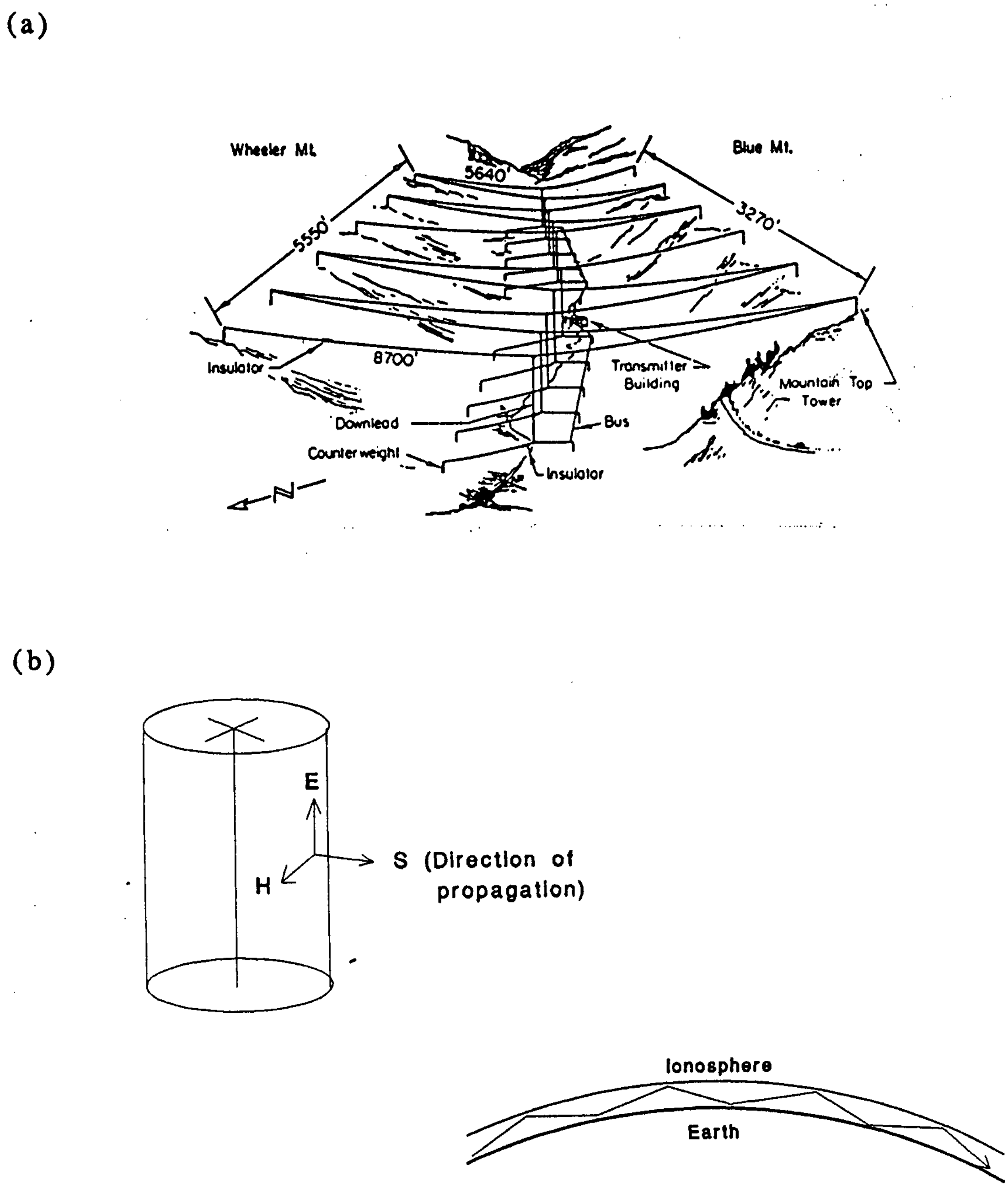

Figure VLF-1. VLF source fields and propagation. (a) Diagram showing Jim Creek, WA VLF transmitter (McNeill and Labson 1990). (b) Propagation of VLF field at a distance from the antenna. The VLF wave propagates between the earth's ionosphere and the surface with a vertical electrical field and horizontal magnetic field. At great distances the signal forms a plane wave.

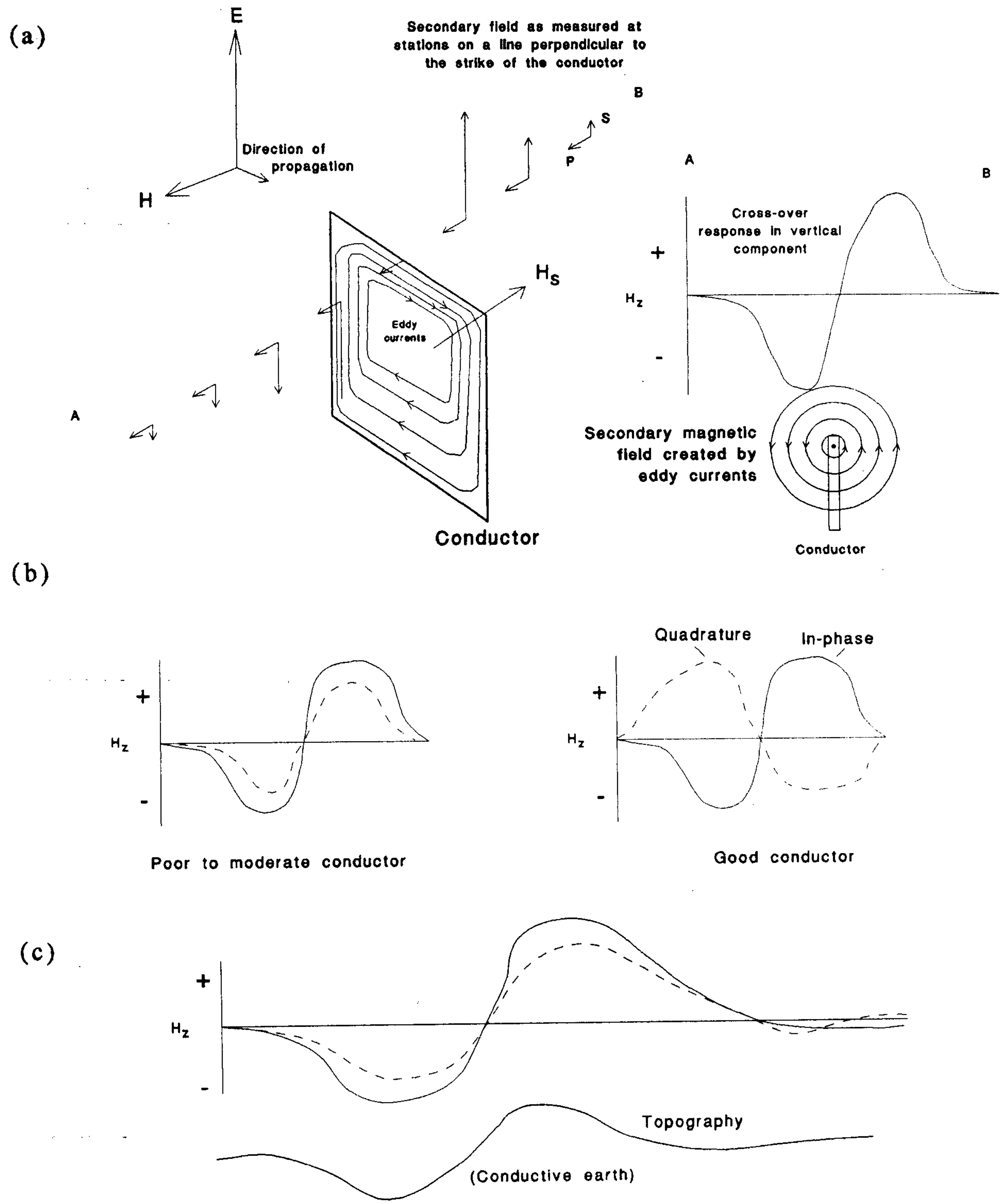

Figure VLF-2. VLF responses. (a) The horizontal magnetic flux from a VLF signal induces a secondary field in a conductor. This, together with the primary field, produces a cross-over response. (b) Quadrature sign can be determined by target conductance. (c) If the ground is conductive, topography can induce VLF responses similar to those expected from bedrock conductors.

be in the order of the skin depth.

Using the horizontal component as a phase reference, it is possible to partition the secondary vertical field into in-phase and quadrature components. If the conductor is a poor to moderate conductor, the sign of the quadrature will follow that of the in-phase component. If the target conductance is high, the quadrature will display a sign opposite that of the in-phase component (Figure VLF-2(b)).

Cross-over responses may also be induced by interfering responses from nearby conductors, sometimes producing reverse-crossovers with senses opposite to that normally occurring over a discrete conductor. In addition, topography can generate false cross-over responses resembling those from bedrock conductors. VLF-EM waves follow the surface topography to some extent with the degree of correlation determined by the conductivity of the local earth. In very conductive ground, the VLF wave follows topography quite closely and cross-over responses similar to those expected from a bedrock conductor can be generated by undulating topography with suitable spatial wavelengths (Figure VLF-2(c)). In poorly conductive ground, the wavelength of the topographic effect is much longer, reflecting the greater depth of penetration by the VLF-EM wave. In these situations, it is relatively easy to discriminate between bedrock conductors and topographic anomalies.

Rough estimates of target conductances or conductivity-thickness products (σt) can be made if the host rock resistivity can be measured or estimated. Saydam (1981) developed an algorithm based on characteristic curves employing measurements of the tilt angle and ellipticity. The tilt angle can be calculated from the percent vertical tilt measured by the Omni Plus system using:

$$\alpha = \operatorname{atan}\left(\frac{H_z}{100}\right) \qquad (1)$$

The resultant field, traced out by the interference of the primary horizontal field and the variably oriented secondary field, is an ellipse with its principal axis parallel to the field tilt and the secondary axis perpendicular to the primary. The ellipticity is the ratio of the secondary to the primary axis length. It can be calculated from the vertical quadrature component and the tilt angle:

$$\varepsilon = H_z^Q \bullet \cos(\alpha) \qquad (2)$$

Additional inputs to the algorithm are the distance between tilt and ellipticity cross-over peaks (ie. peak to trough distance in metres). Using the cross over distances, ellipticity and tilt values, estimates of the target σt can be made. These should be treated with great caution given the assumptions in the algorithms but are nonetheless useful as a preliminary estimate of target conductance. In cases where the survey lines are not roughly orthogonal to the target, where the bedrock resistivity cannot be reliably estimated or where the response if from a shallow dipping target, the results of this algorithm will be in error.

Olsson (1983) analysed the quadrature and in-phase relations in some detail. The response of an inductively thin steeply dipping dyke in a medium with finite conductance can be examined in terms of the inductive characteristics of the target. It is useful to calculate an induction number L for a thin target:

$$L = \frac{\sigma_1 t_1}{\sqrt{\frac{2\sigma_2}{\mu_0 \omega}}} \qquad (3)$$

where ω is the signal radial frequency, μ_0 is the magnetic susceptibility of free space, t is the thickness of the dyke and σ_1 and σ_2 are the electrical conductivity of the dyke and host respectively. For induction numbers up to L=3, the quadrature response has the same phase as the in-phase response; for L>3, the quadrature has the opposite sense to the in-phase response. This criteria can be used to establish a method of estimating the σt at which the sense of the quadrature is likely to invert from positive to negative with respect to the in-phase response. By substituting L=3 into the previous equation, the inversion point occurs when:

$$\sigma t = \frac{10.7}{\sqrt{\rho_2}} \qquad (4)$$

This threshold σt can be used to differentiate between "good" and "poor" VLF conductors, within the limited sensitivity of the VLF method. Full saturation occurs when the σt is 16.8 times this value. The central problem with conductivity estimates using VLF is that the method operates at the inductive limit - a frequency so high that most conductors of geological interest have saturated responses which cannot be used to quantitatively determine the target conductance.

9.0 RESULTS

Digital data is appended to this report on disk. The magnetic field data is in the following format:

Line   Station   UTM_E   UTM_N   Corr_field

where Corr_field is the corrected magnetic field. The VLF-EM data is in the following format:

Line Station UTM_E UTM_N IP Q Slope

where IP and Q are the in-phase and quadrature components in percent and slope is the terrain slope in percent.

The following plots at 1:2500 are appended to this report in the back pockets:

Figure 4. Total magnetic contour map

Figure 5. Total magnetic first vertical derivative

Figure 6. VLF-EM stacked profiles - Cutler

These plots show the location of survey lines in nominal grid coordinates.

The general trend of the total magnetic field consists of a NE sloping field with a gradient of approximately 1000 nT / km. The Unit 3 rhyolite stock is expressed as a dipolar southern high / northern low superimposed on the regional gradient. The magnetic field data appears to be of little use in directly mapping the intrusion.

The VLF-EM data was interpreted by examining the stacked profiles to identify responses which appeared to arise from bedrock conductors. The conductors were classified as being either “poor” or “good” based on the criteria described in equation 4. Using an estimated host conductance of 500 ohm-m, the threshold for the inversion of the quadrature response sign with respect to the in-phase occurs when σt =0.48 S and full saturation would occur when σt=8S. The conductors are described in terms of peak-to-trough in-phase response and the sense of the quadrature response. Positive quadrature refers to a quadrature response following the same sign as the in-phase response. Negative quadrature is the inverse. All of the anomalies show positive quadrature responses and are presumed to originate from very weak conductors with $\sigma t \leq 0.48$ S. Four conductors labelled **A-1** to **A-4** are identified in Figure 6 and anomaly locations are tabulated in Appendix E. The conductors are discussed in turn.

Conductor **A-1** extends from L1600E 1038N to L1950E 1075N and consists of a 10% to 24% in-phase peak response. The shape of the in-phase response is that expected near or over a fault or contact separating two rock units with different electrical conductivity. The quadrature response is weak and generally has a shape similar to the phase response. On L1650E and L1750E, the quadrature response crosses over at the in-phase peak suggesting that the boundary may be locally very weakly conductive. There is no associated magnetic field response.

Conductor **A-2** extends from L1750E 1000N to L1950E 988N and consists of a 12% to 40% in-phase cross-over response with an associated 0 to 6% positive quadrature response. The quadrature response on L1900E is -8% but this may be caused by a nearby interfering response. This is a very poor conductor (>0.5S) and has no associated magnetic field response.

Conductor **A-3** extends from L1600E 920N to L1650E 925N and consists of an 8% to 20% in-phase cross-over response with an associated 8 to 11% positive quadrature response. This is a very poor conductor (>0.5S) and is associated with a magnetic field high containing both this conductor and **A-4**.

Conductor **A-4** extends from L1750E 850N to L1900E 890N and consists of a 4 to 21% in-phase cross-over response and a 8% to 16% positive quadrature response. The source appears to be a very poor conductor (>0.5S) and the conductor is coincident with a magnetic field high.

10.0 DISCUSSION

The magnetic field survey failed to define a definite signature associated with the rhyolite intrusive (Unit 3). There is a relative total magnetic field strength high imposed on the regional gradient in the southern portion of the area in which the rhyolite plug outcrops. North of this anomaly is a region of anomalously low magnetic field response. The magnetic field data could be interpreted as arising from weak horizontal field remnant magnetism within the intrusive or the magnetic field pattern might be caused by magnetite skarn in hornfels adjacent to the intrusion. In the vertical gradient map, there is a narrow northwest trending high which appears to cut through the intrusion as mapped and is coincident with VLF-EM conductors **A-3** and **A-4**.

There is no known bedrock feature associated with the contact anomaly **A-1**. It is possible that this may be of surficial origin as it occurs near the toe of a north-facing slope defined by the levelling off of the terrain slope curve north of the low associated with the hill side.

Anomaly **A-2** is roughly coincident with the trend of the anticlinal fold axis and with the intermittent shearing exposed in the trenches at the East Showing. The East Showing produced no discernible VLF-EM response suggesting that the intense silicification found in the centre of the shear zone has suppressed any conductivity response.

None of the features identified by the VLF-EM and total magnetic field surveys are directly associated with the known mineralization. Also, unfortunately, the tenor of the known bedrock gold mineralization is low and the geophysical results failed to point to any obvious nearby targets.

11.0 CONCLUSIONS

The results of the magnetometer and VLF-EM surveys conducted on the Haeckel Hill Property suggest the following conclusions:

a. There is no obvious total magnetic field response associated with the Nisling Range Plutonic Suite intrusion hosting gold mineralization in the East Showing.

b. The VLF-EM survey identified 4 anomalies of which 3 appear to arise from very weak (<0.5 S) tabular dipping conductors and one anomaly appears to originate at a non-conductive contact. None of the anomalies are associated directly with known gold mineralization and none of the anomalies directly indicate the presence of additional mineralization.

c. Gold mineralization in the East Showing has no electromagnetic or total magnetic field response.

12.0 RECOMMENDATIONS

The following recommendations are made based on the conclusions of this work:

a. No further geophysical work is required or warranted in the area of the East Showing.

Respectfully submitted,
AMEROK GEOSCIENCES LTD.

Michael A. Power, M.Sc. P.Geoph.
Geophysicist N.W.T.

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APPENDIX A. CERTIFICATE

I, Michael Allan Power, with residence and business address in Whitehorse, Yukon Territory do hereby certify that:

1. I hold a B.Sc. (Honours) in Geology granted in 1986 and M.Sc. in Geophysics granted in 1988, both from the University of Alberta.

2. I have been actively involved in mineral exploration in the northern Cordillera and in the Northwest Territories since 1988. I am a professional geoscientist registered with the Association of Professional Engineers and Geoscientists of British Columbia (Registration number 21131) and a professional geophysicist registered with the Northwest Territories Association of Professional Engineers, Geologists and Geophysicists (L942).

3. I supervised the geophysical surveys described in this report, interpreted the data collected and prepared this report.

4. I have no interest, direct or indirect, nor do I hope to receive any interest, direct or indirect, in Silver Sabre Resources Ltd. or any of its properties.

5. I hereby authorize Silver Sabre Resources Ltd. to use this report or extracts therefrom in connection with any filing submitted to the Vancouver Stock Exchange and the British Columbia Securities Commission.

Dated this 16th day of January 2001 in Whitehorse, Yukon Territory.

Michael A. Power, M.Sc. P.Geoph.
Geophysicist

APPENDIX B. SURVEY LOG

JOB 2000-021 Haeckel Hill Mag/VLF Survey

Period: December 24, 2000 to January 10, 2001

Personnel: Crew: Gary Lee, P.Eng. (Technician) (GL)

24 Dec 00
to
03 Jan 01 Grid re-establishment and magnetometer survey. Working from grid E to W, rechained lines, conducted survey, put in L1000E, 1550E, L1900E (south) and conducted magnetometer surveys.

Production: 14.8 line-km gridding
13.8 line-km magnetometer surveys

07 Jan 01
to
08 Jan 01 VLF Survey over eastern portion of the grid.

Production: 4.8 line-km VLF

Summary:

Line cutting and gridding:	14.8 line-km
Total magnetic field:	13.8 line-km
VLF-EM survey:	4.8line-km
Mag / linecutting:	10 days
VLF survey:	2 days

Personnel:

Gary Lee
Box 5348
Whitehorse YT
Y1A 4Z2

APPENDIX C. STATEMENT OF EXPENDITURES

Line cutting and total magnetic field survey	
Magnetometer & gridding crew: 12 days @ $450	$5,400
VLF-EM surveys	
VLF-EM crew: 2 days @ $380	$760
Final report	
Assessment report in 6 copies	$1,700
Total project expenses	***$7,860***

I certify that these expenses are correct to the best of my knowledge.

Michael A. Power, M.Sc., P.Geoph.
Geophysicist

APPENDIX D. INSTRUMENT SPECIFICATIONS

INSTRUMENT SPECIFICATIONS

MAGNETOMETER / GRADIOMETER

Resolution:	0.01nT (gamma), magnetic field and gradient.
Accuracy:	0.2nT over operating range.
Range:	20,000 to 120,000nT.
Gradient Tolerance:	Over 10, 000nT/m
Operating Interval:	3 seconds minimum, faster optional. Readings initiated from keyboard, external trigger, or carriage return via RS-232C.
Input / Output:	6 pin weatherproof connector, RS-232C, and (optional) analog output.
Power Requirements:	12V, 200mA peak (during polarization), 30mA standby. 300mA peak in gradiometer mode.
Power Source:	Internal 12V, 2.6Ah sealed lead-acid battery standard, others optional. An External 12V power source can also be used.
Battery Charger:	**Input:** 110 VAC, 60Hz. Optional 110 / 220 VAC, 50 / 60Hz. **Output:** dual level charging.
Operating Ranges:	Temperature: - 40°C to +60°C. Battery Voltage: **10.0V minimum to 15V maximum.** Humidity: **up to 90% relative, non condensing.**
Storage Temperature:	-50°C to +65°C.
Display:	LCD: 240 X 64 pixels, OR 8 X 30 characters. Built in heater for operation below -20°C.
Dimensions:	**Console:** 223 x 69 x 240mm. **Sensor Staff:** 4 x 450mm sections. **Sensor:** 170 x 71mm dia. **Weight:** console 2.1kg, Staff 0.9kg, Sensors 1.1kg each.

VLF

Frequency Range:	15 - 30.0 kHz plus 57.9 kHz (Alaskan station)
Parameters Measured:	Vertical in-phase and out-of-phase components as percentage of total field. 2 relative components of horizontal field. Absolute amplitude of total field.
Resolution:	0.1%.
Number of Stations:	Up to 3 at a time.
Storage:	Automatic with: time, coordinates, magnetic field / gradient, slope, EM field, frequency, in- and out-of-phase vertical, and both horizontal components for each selected station.
Terrain Slope Range:	0° - 90° (entered manually).
Sensor Dimensions:	140 x 150 x 90 mm. (5.5 x 6 x 3 inches).
Sensor Weight:	1.0 kg (2.2 lb).

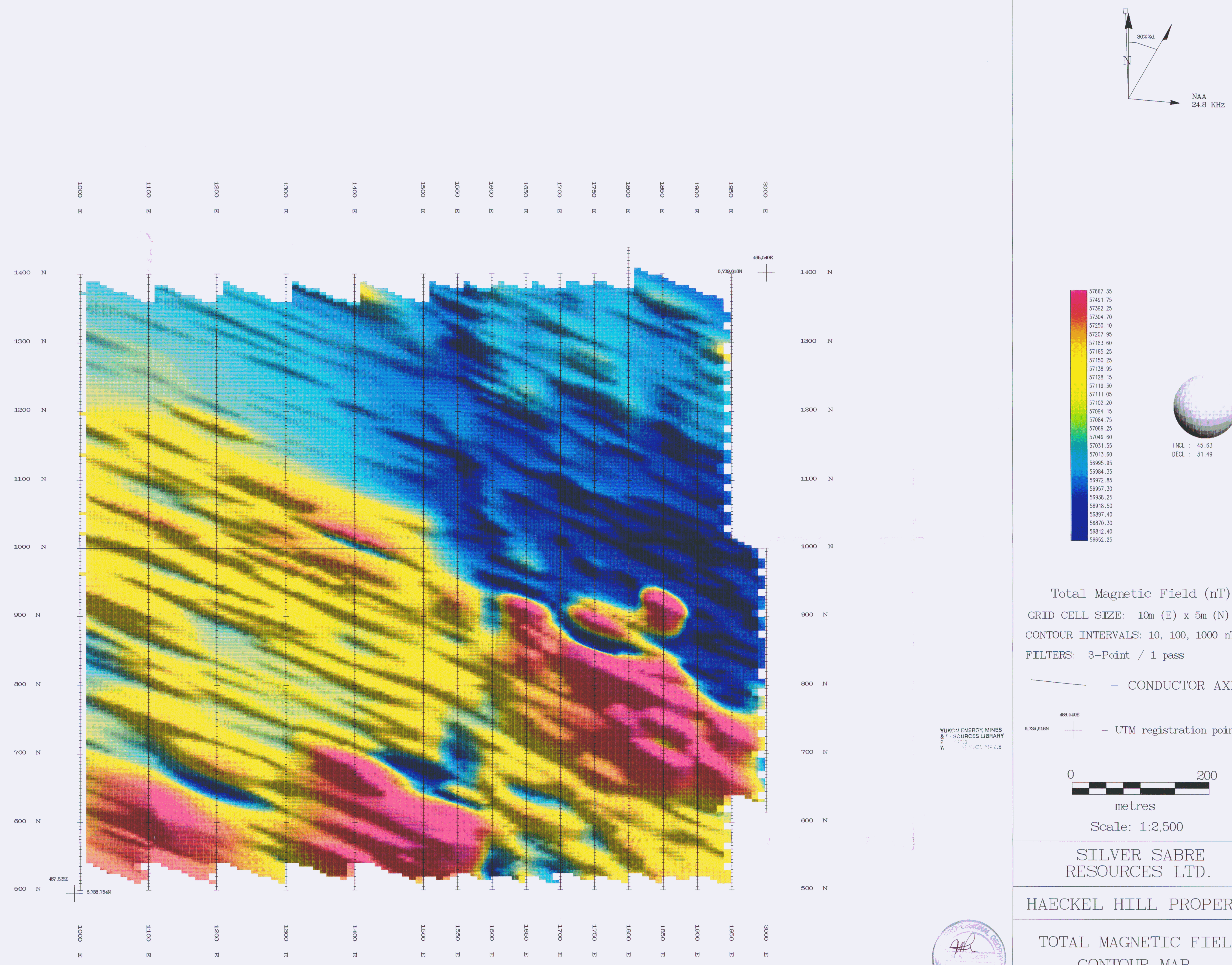
9 V 1997

APPENDIX E. ANOMALY LISTING

Anomaly	Line	Station	IP	Q	Type
A-1	1600	1038	10	n/a	Contact
A-1	1650	1050	10	n/a	Contact / Q
A-1	1700	1075	15	n/a	Contact
A-1	1750	1075	20	n/a	Contact / Q
A-1	1800	1080	18	n/a	Contact
A-1	1850	1095	24	n/a	Contact
A-1	1900	1090	20	n/a	Contact
A-1	1950	1075	10	n/a	Contact
A-2	1750	1000	18	6	DTC
A-2	1800	990	12	4	DTC
A-2	1850	963	40	6	DTC
A-2	1900	988	40	-8	DTC
A-2	1950	988	32	0	DTC
A-3	1600	920	8	8	DTC
A-3	1650	925	20	11	DTC
A-4	1750	850	20	16	DTC
A-4	1800	838	21	14	DTC
A-4	1850	790	16	13	DTC
A-4	1900	890	4	8	DTC

Notes:

DTC - dipping tabular conductor (sheet)
Contact - non conductive contact anomaly
Contact / Q - contact with a weak quadrature crossover.



Total Magnetic Field (nT)

GRID CELL SIZE: 10m (E) x 5m (N)

CONTOUR INTERVALS: 10, 100, 1000 nT

FILTERS: 3-Point / 1 pass

– CONDUCTOR AXIS

– UTM registration point

0 200
metres

Scale: 1:2,500

SILVER SABRE RESOURCES LTD.

HAECKEL HILL PROPERTY

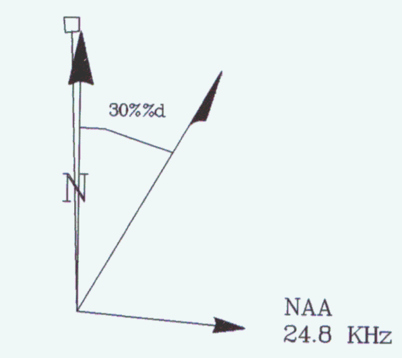
TOTAL MAGNETIC FIELD CONTOUR MAP

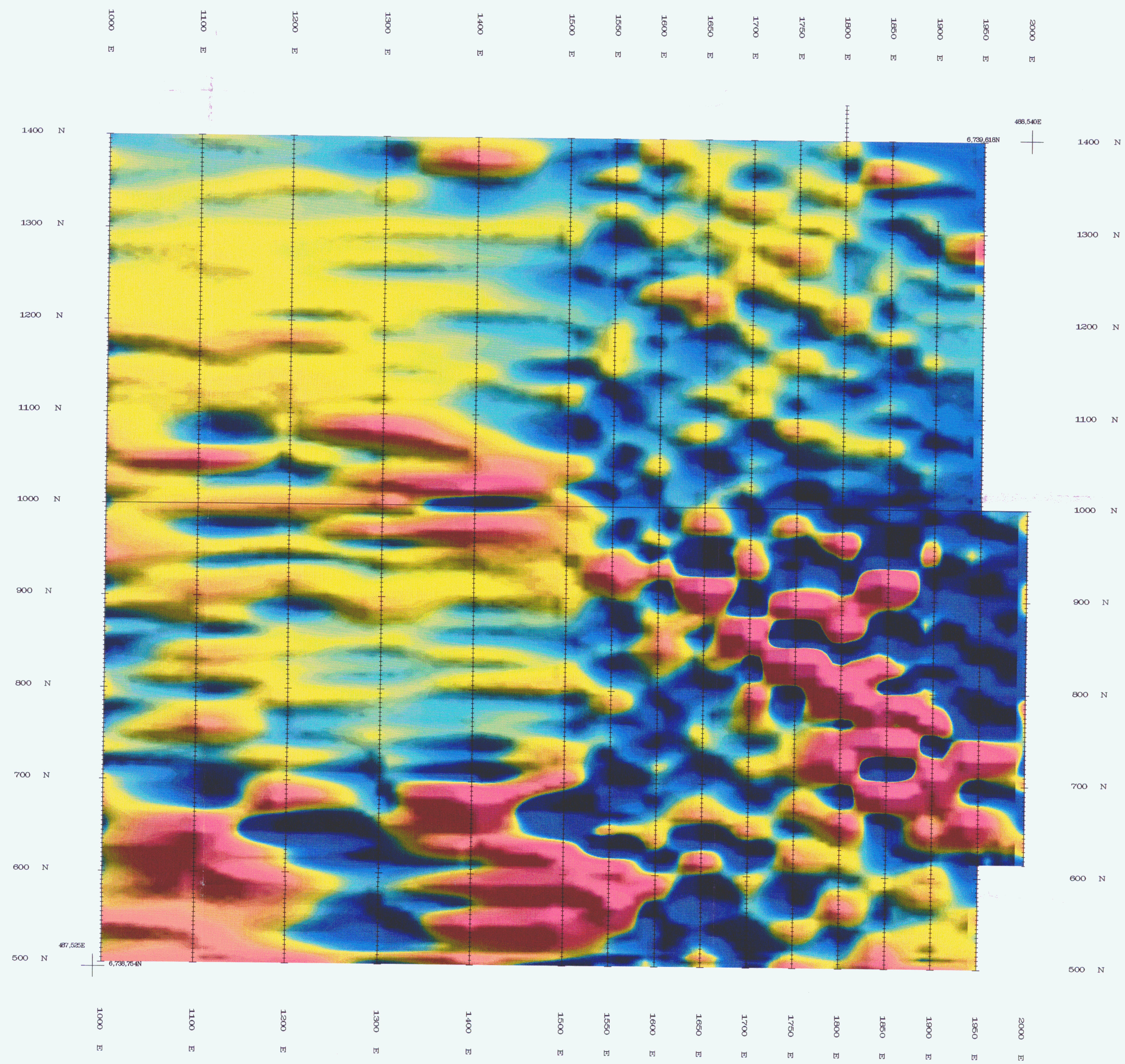
Figure 4.

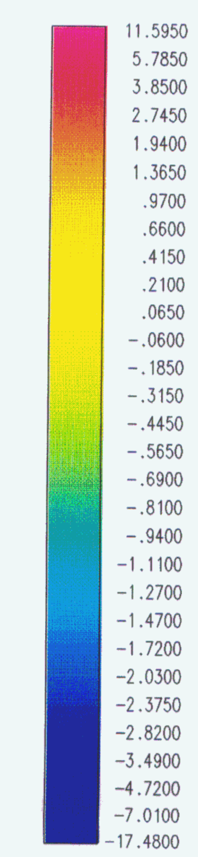
094219

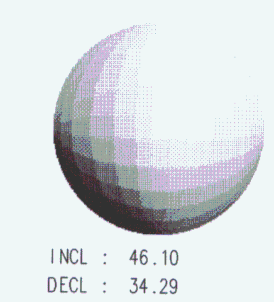
NTS: 105 D/12	Datum: NAD27
Mining District: Whitehorse, YT	
Job: 2000-006	Date: 10 JAN 00

AMEROK GEOSCIENCES LTD.









Total Magnetic Field
First Vertical Derivative (nT/m)

GRID CELL SIZE: 10m (E) x 5m (N)

CONTOUR INTERVALS: 10, 100, 1000 nT

FILTERS: 3-Point/1 pass, column
FFT (vertical gradient)

– CONDUCTOR AXIS

488,540E
6,739,618N
– UTM registration point

0 200
metres
Scale: 1:2,500

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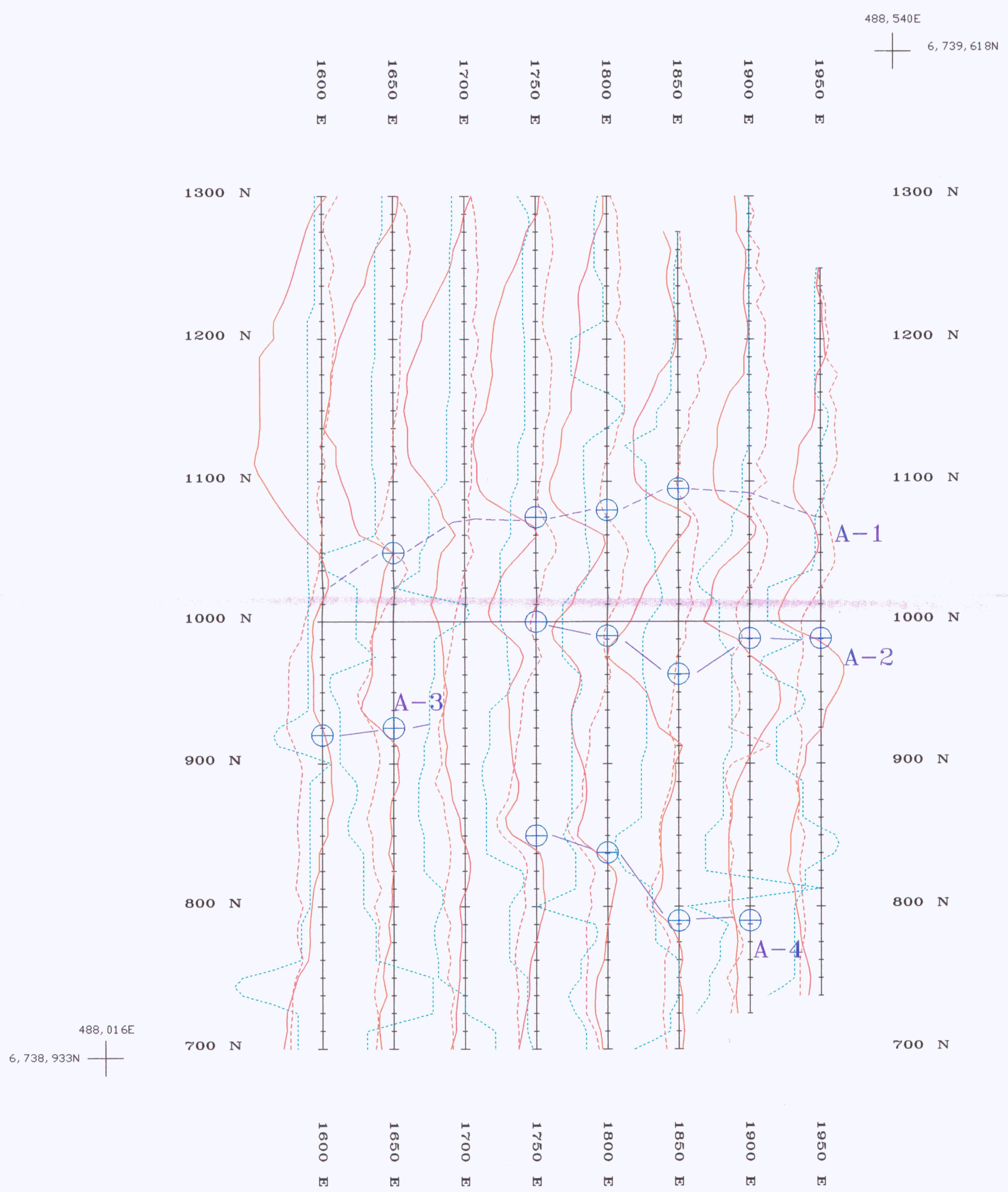
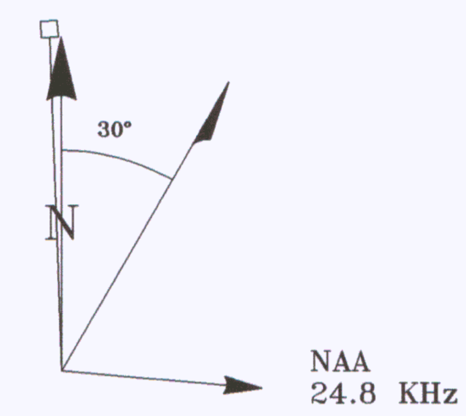
HAECKEL HILL PROPERTY

TOTAL MAGNETIC FIELD
FIRST VERTICAL DERIVATIVE
FIGURE 5.

NTS: 105 D/12	Datum: NAD27
Mining District: Whitehorse, YT	
Job: 2000-006	Date: 10 JAN 00

AMEROK GEOSCIENCES LTD.



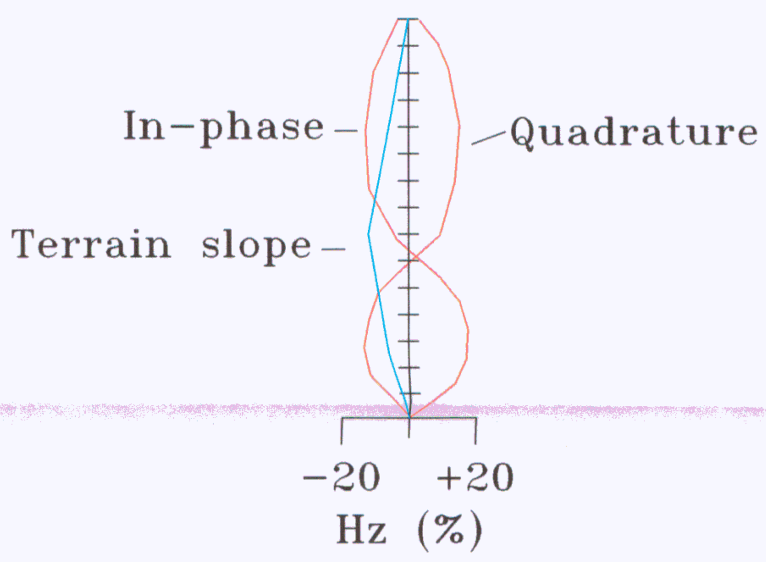


EM ANOMALY SYMBOLS

- Unknown
- <1 S
- 1-5 S
- 5-10 S
- 10-40 S
- >40 S

Depth (m)

Excess width (m)



Total Magnetic Field (nT)

GRID CELL SIZE: 10m (E) x 5m (N)

CONTOUR INTERVALS: 10, 100, 1000 nT

A-1 - CONDUCTOR AXIS

- UTM registration point

0 200

metres

Scale: 1:2,500

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HAECKEL HILL PROPERTY

VLF-EM SURVEY STACKED PROFILES

FIGURE 6.

094219

NTS: 105 D/14	Datum: NAD27
Mining District: Whitehorse, YT	
Job: 2000-021	Date: 10 JAN 00

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