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SILVER SABRE RESOURCES LTD.

GEOPHYSICAL SURVEYS, GEOLOGICAL MAPPING AND DIAMOND DRILLING ON THE BEE AND CEE CLAIMS, WHITEHORSE, YUKON TERRITORY

# AMEROK GEOSCIENCES LTD.

99-065

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#### SILVER SABRE RESOURCES LTD.

#### GEOPHYSICAL SURVEYS, GEOLOGICAL MAPPING AND DIAMOND DRILLING ON THE BEE AND CEE CLAIMS, WHITEHORSE, YUKON TERRITORY

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

Work performed: June 1 - September 15, 1999 <u>Mining District:</u> Whitehorse <u>NTS:</u> 105 D/14 <u>Location:</u> 60° 47'N 135° 12'W December 3, 1999 YUKON ENERGY, MINES & RESOURCES LIBRARY PO Box 2703 Whitehorse, Yukon Y1A 2C6

#### SUMMARY

A program of geological mapping, induced polarization and resistivity surveys, and diamond drilling was completed on the Bee and Cee Claims, Haeckel Hill area, Whitehorse Mining District during June to September 1999. The program was designed to investigate potential intrusive-hosted gold mineralization in a small stock of the Nisling Plutonic Suite.

The Bee and Cee Claims are located 20 km north of Whitehorse. The property is underlain by the Hancock and Mandana Members of the Laberge Group which consist of limestone and argillite, and greywacke, tuff and argillite respectively in this area. These formations are intruded by Paleocene Nisling Plutonic Suite (NPS) hypabyssal granitic rocks. The known gold mineralization is associated with a small NPS stock exposed in a 400 by 800 m area and centred in the core of a large west-trending anticline. The axial region of the fold containing the stock is cut by a shear zone of indeterminate displacement which localizes most of the known gold occurrences.

The IP and resistivity survey detected coincident chargeability highs and resistivity lows which weaken to the west, particularly at short separations. Subsequent diamond drilling confirmed that the source is a zone of extensive pyrite and pyrrhotite mineralization proximal to the shear and plunging to the west in the core of the anticline.

Three diamond drill holes were sited to test the strongest and shallowest IP responses on the east end of the survey grid at the western contact between the stock and metasediments. Two holes intersected the stock beneath a cupola of Mandana Member metasediments. The third hole (Bee 99-3) failed to intersect the stock but did intersect a quartz carbonate breccia zone in the apparent hanging wall of a steeply dipping fault. This hole also returned anomalous gold (70 ppb over 84 feet).

The exploration program demonstrated that the gold mineralization does not report with the sulphide mineralization on the property and that an additional vector will be required to locate the source of the gold mineralization.

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#### **1.0 INTRODUCTION**

This report describes a program of geological mapping, line cutting, induced polarization (IP) / resistivity surveys and diamond drilling conducted on the Bee and Cee Claims near Whitehorse, Yukon. The work was performed to evaluate the potential for intrusive hosted gold mineralization on the property.

#### 2.0 LOCATION AND ACCESS

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

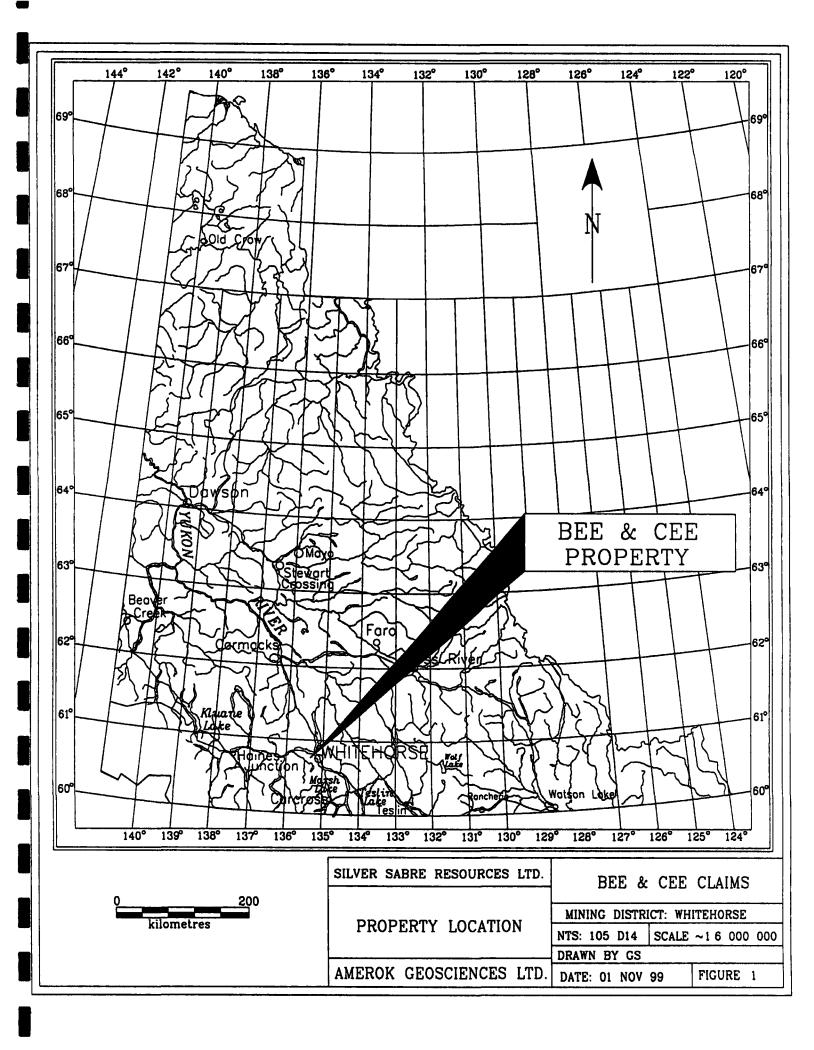
Section	Distance (km)	Remarks
Whitehorse to Old Gun Club Road	22.0	All weather paved highway
Alaska Highway to Old Gun Club	1.5	All weather gravel road
Old Gun Club to showings	0.5	CAT trail

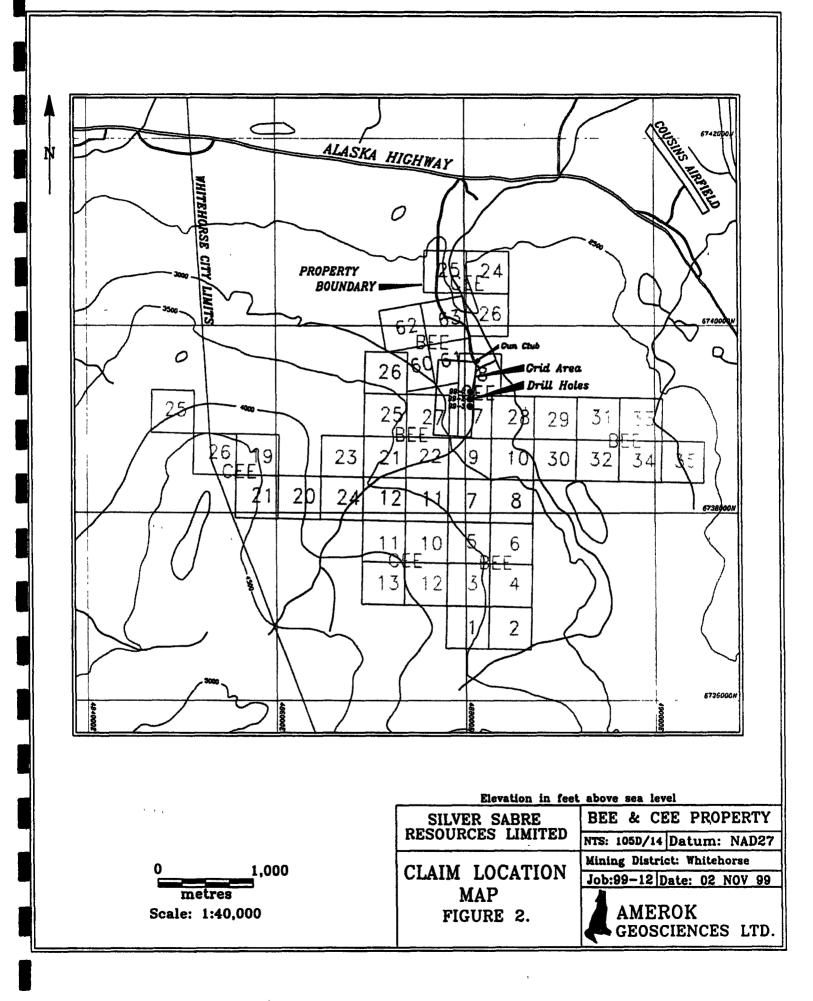
#### 3.0 PROPERTY DESCRIPTION AND TENURE

The Bee and Cee Property consists of 45 claims granted under the Yukon Quartz Mining Act in the Whitehorse Mining District. Claim data<sup>1</sup> is summarized below:

Claim	Record Number	Expiry Date
BEE 1-4	Y91728 - Y91731	December 6, 2002
BEE 5-8	Y91732 - Y91735	December 6, 2001
BEE 9-11	Y91736 - Y91738	December 6, 2002
BEE 12	Y91739	December 6, 2001

<sup>1</sup>Claim data as reported by the Whitehorse Mining Recorder on November 2, 1999. The expiry dates have not been adjusted for work performed in 1999.





BEE 21-22	Y91748 - Y91749	December 6, 2002
BEE 23-24	Y91750 - Y91751	December 6, 2001
BEE 25-26	YA03106 - YA03107	Juiy 29, 2003
BEE 27	YA03108	July 29, 2004
BEE 28	YA18302	September 17,2002
BEE 29 - 35	YA18303 - YA18309	September 17,2001
BEE 60 - 63	YA92340 - YA92343	July 2, 2003
CEE 7 - 8	YA82530 - YA82531	July 3, 2003
CEE 10 - 13	YA82532 - YA82535	July 3, 2001
CEE 19	YA82581	July 4, 2001
CEE 20 -21	YA85579 - YA85580	October 9, 2001
CEE 24	YA86010	October 23, 2002
CEE 25	YA85584	October 9, 2001
CEE 25	YA86011	October 23, 2002
CEE 26	YA85585	October 9, 2001
CEE 26	YA86012	October 23, 2002

Silver Sabre Resources Ltd. of Whitehorse, Yukon is the sole registered owner of the claims.

#### 4.0 PHYSIOGRAPHY

The Bee and Cee 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 REGIONAL GEOLOGY

The area of the Bee and Cee 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 through Tertiary sedimentary and intrusive rocks. Formations in the area of the property are summarized in Table I.

Overburden (Quaternary)	Till and colluvium
Nisling Range Plutonic Suite (Late Paleocene)	Medium to coarse grained horneblende-biotite granite and granodiorite
Aksala Formation (Upper Triassic)	Undifferentiated sedimentary rocks including in decreasing abundance lime siltstone, siltstone, shale, sandstone and conglomerate locally with limestone.
Mandana Member (Upper Triassic)	Undifferentiated green and maroon sandstone, mudstone, shale and tuff.
Hancock Member (Upper Triassic)	resistant light grey weathering massive and well bedded locally fossiliferous limestone.

# Table I. Regional Stratigraphy

(after Hart (1997))

Sedimentary rocks in the area of the property 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.

#### 6.0 PROPERTY HISTORY

The Whitehorse Trough hosts significant copper-gold skarn deposits in the Whitehorse area, just south of the Bee and Cee Property. First reports of copper in the area were made by prospectors on their way to the Klondike in 1897. The Copper King claim, staked in 1898 by Jack McIntyre, was the first recorded find in the district and by 1899 the area had been well prospected (Tenney, 1981). Between 1900 and 1921, small high grade shipments were made from the Copper King, Grafter, Valerie and Arctic Chief deposits and the Pueblo Mine went into production, yielding 126,000 tons of copper ore at 3.6% before being shut down after a calamitous rock fall which killed several men. Production resumed under New Imperial Mines Ltd. in 1967 and continued until 1982 when virtually all mines in the Yukon were shut down by a precipitous decline in metal prices. No production has occurred thence.

The Bee and Cee claims were staked in 1974 by Larry Patnode. Trenching, geophysical and geochemical surveys, and drilling was conducted on these and adjoining claims. Significant mineralization was encountered in a 1982 drill hole testing the contact between quartz vein and tuffaceous clastics. Assays returned 34g/t Ag, 0.34 g/t Au, 1.8% Pb, and 1.6% Zn (MacKay, 1995). In 1985, further geophysical surveying, soil and rock sampling, line cutting, mapping, prospecting, and trenching was conducted by Noranda. Best assays returned was 1.65 g/t Au (MacKay, 1995). Further trenching and sampling in 1989 and drilling in 1994 failed to locate additional mineralization. In 1995, sampling of the 1985 trenches produced gold values of 1000 to 5000 ppb within Tertiary rhyolites.

#### 7.0 PROPERTY GEOLOGY AND MINERALIZATION

The property geology has been described by MacKay and Reid (1986) and by MacKay (1995). In addition, the author spent several days mapping on the property during June 1999. The property is underlain by argillite, limestone, conglomerate and grit sedimentary rocks and is intruded by granite and rhyolite. Rock units mapped on the property by the author are summarized in Table II.

The property is predominantly underlain by the rocks of the Upper Triassic Aksala Formation (Units 1 and 2). These include clastic rocks mapped as undifferentiated Aksala Formation or Mandana Member and limestones mapped as Hancock Member (Hart, 1997).

Table II.	Rock units - Bee & Cee Property
(Cla	ssification follows Hart (1997))

Overburden	Tan to light brown till and grey- black colluvium
Unit 3 (Nisling)	Granite and rhyolite
Unit 2 (Mandana Member)	Greywacke with lesser conglomerate and argillite
Unit 1(Hancock Member)	Limestone and marble with minor argillite interbeds.

Greywackes with lesser conglomerate and argillite are the dominant rock type on the property. The greywacke is generally dark to medium grey weathering light grey, medium to fine grained with angular to subangular clasts of amphibole, quartz and plagioclase. The matrix is siliceous with locally calcareous beds. Resistant quartz and plagioclase clasts impart a speckled texture and colour to the rock. Bedding varies from 10 cm to massive and locally beds are graded. Jointing is common on planes spaced up to 1 m apart but more generally are around 30 cm.

Limestone conglomerate assigned to Unit 1 is found at one location approximately 150 m SW of the Old Gun Club. The conglomerate is dark grey weathering light grey to medium buff and brown and contains irregular subrounded clasts up to 20 cm in diameter in a cryptocrystalline matrix. Locally the rock bears a striking resemblance to agglomerate but it is highly calcareous.

Argillite is common near the contact with Unit 2 in the area of the main showings. This rock type is dark grey to black weathering medium to light grey, thin bedded with local thin interbedded siltstone layers. Calcite veining is common near the limestone contact.

Unit 2 rocks form a distinct unit within the predominantly clastic sequence. This unit consists of limestone described as medium grey weathering buff with white crusts, medium to cryptocrystalline and massive to thin (10 cm) bedded. Contact metamorphism extends to within 100 m of the contact with Unit 4. Near the contact, tremolite knots, iron staining and intense silicification are common together with epidote alteration along and adjacent to fractures.

Unit 3 granite is found in a large intrusion in southern portion of the claim block and in a small stock north of the main intrusion. This unit, part of the Paleocene Nisling Plutonic Suite, is described as white (felsic) and dark green (mafic) weathering white and brown,

anhedral with crystals to 3mm consisting of plagioclase (?albite) (50%), amphibole and biotite (30%) and quartz (10-20%). This rock unit is massive with widely spaced (1 to 2 m) joints. Marble and amphibolite inclusions up to several metres across are common near the contact with Unit 1.

The northern stock consists of rhyolite and granite in a shallow hypabyssal stock centred at 488250E 6739250N. This stock contains the Main Showing which has been drilled and trenched during 1985-1997. The dominant rock type within the stock appears to be a subvolcanic rhyolite or dacite. In the centre of the main showing it medium grey to buff weathering light grey and contains plagioclase phenocrysts to 3 mm in an aphanitic ground mass. Near the margins of the plug, the rhyolite is locally vesicular or contains quartz amygdules, is intensely silicified and contains 1 to 4% pyrite. Manganese stain, chlorite alteration and reddish iron stain are also common near the contact with Unit 1. Silicification is intense near the contact and especially proximal to a shear zone in the centre of the plug. Contacts with surrounding argillite and limestone are difficult to pinpoint because of the alteration on the western portion of the contact.

Structure on the property is dominated by a west plunging anticline whose core contains the Unit 4 hypabyssal stock. The fold is exposed in cross section in the east facing slope of Haeckel Hill and contains a shear zone in the axial region which cuts both the intrusion and the surrounding sediments. This structure evidently served as a conduit for ascending hydrothermal fluids as intense alteration and economic mineralization are found near and within it. The rhyolite intrusive extends at least 500 m west of the outcrop exposure, having been intersected at a depth of 14 m in a drill hole near the upper showing.

Mineralization on the property occurs in two settings. The upper showing consists of sheeted to subparallel galena-sphalerite-pyrite bearing quartz veins, and has returned assays of 6-20% lead-zinc, 144 gpt Ag and 5480 ppb Au (Schulze, 1995). This style of mineralization is confined to the intersection of a shear zone and Unit 2 limestone approximately 400 m west of the margin of the Unit 4 stock. The veins extend for approximately 30 m and are exposed in several blast trenches.

The second style of mineralization is low grade gold within the rhyolite stock (Main Showing). Exploration by Noranda in the 1980's focussed on the shear zone within the stock. Quartz veins containing pyrite, pyrrhotite, galena and sphalerite returned up to 2180 ppb Au from trench chip samples (Doherty, 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 merits additional investigation.

#### 8.0 INDUCED POLARIZATION SURVEYS

Induced polarization surveys were conducted to locate disseminated sulphides and to map alteration in the area between the upper showing and the main showing. This section describes survey specifications, results and an interpretation.

#### 8.1 Personnel and equipment.

The IP / resistivity survey was conducted by a 3 man crew consisting of the following personnel:

Person	Position
Mike Power	Crew chief
Gary Lee	Technician
Graeme Gibson	Technician

The crew was equipped with the following instruments and equipment:

Transmitter:	Phoenix IPT-1 transmitter and MG-2 2 KW motor generator
	equipped with spare regulator. A spare IPT-1 was provided
	as backup.

Receiver: IRIS IP-10 digital 6-channel IP receiver.

<u>Other equipment:</u> 4 km 16 gauge wire in good repair, breast reels and speedy winders, stainless steel electrodes, VHF radios, 50 m receiver cables, miscellaneous equipment, F350 2WD crew cab.

<u>Data processing:</u> 486DX66 or better laptop computer, colour printer. Plotting with Geopak IPSECT. Proprietary conversion software used to produce Geosoft format data.

#### 8.2 Survey specifications

The IP / resistivity survey was conducted according to the following specifications:

<u>Array:</u>	Dipole-dipole
Dipole spacing:	25 m
Separations read:	n=1 to 6
<u>Tx mode / signal:</u>	Standard time domain signal (2 s +on, 2 s off, 2 s -on, 2 s off)
Receiver sampling:	Logarithmic sampling of the decay curve, stacked minimum 15 times.
Parameters read:	$M_t$ - total chargeability (ms) $R_o$ - apparent resistivity $M_1$ to $M_{10}$ - 10 channel samples of decay curve $V_p$ - Primary voltage Sp - spontaneous potential E - error in chargeability (ms)
<u>Noise:</u>	Standard deviation of the chargeability was kept to 5 ms or less wherever possible.
<u>Other:</u>	Station-to-station terrain slopes were recorded with a clinometer.
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#### 8.3 Results

Digital data is appended to this report in Geosoft .dat format. Pseudosections of the apparent resistivity and chargeability are included in Appendix D. The location of significant chargeability and resistivity anomalies are indicated by thick bars centred over the apex of each source. These anomalies are discussed in the following section.

#### 8.4 Interpretation

#### Line 1200E

Chargeability anomaly A has a target apex located at 1350N. The target is thin and steeply dipping. Depth to top is approximately 0 to 25 metres. The target is approximately 50 metres wide, extending over the line interval 1337N to 1375N, and

extends off line. The response is seen over the intervals n=1 to n=6. Intrinsic chargeability is estimated to be 90 -130 milli-seconds.

Anomaly **A** is found in a zone of low resistivity that is bounded to the south by a sharp contact with more resistive rocks. This is annotated as resistivity anomaly **A** on the resistivity pseudosection. The width of the source cannot be determined.

Chargeability anomaly **B** is centred at 938N. The response is weak and appears to be from a thin, shallow, steeply dipping source. Target width appears to be no greater than one dipole spacing (i.e. 25 metres or less). Depth to top is less than 25 metres. The response is visible over the intervals n=1 to n=2. Intrinsic chargeability is estimated to be in the order of 60 - 80 ms.

Chargeability anomaly **C** has a target apex located at 837.5N. The response is seen at separations n=2 to n=6. Target geometry appears to be thin and steeply dipping. The source is likely three-dimensional (strike limited). Width is no greater than 50 metres. Depth to top is approximately 50-75 metres and intrinsic chargeability is estimated to be 60 - 70 ms.

Chargeability anomaly D is a weak response seen over the line intervals 737.5N to 787.5N and at separations n=3 to n=6. The depth to top is therefore approximately 50 to 75 metres. This anomaly may be a response from the same target that creates the response seen in anomaly C located 75 metres to the north.

Anomalies **B**, **C** and **D** are likely related to the westward dipping intrusion located in the central portion of the grid. Moving eastwards across the grid from L1200E to L1600E, the chargeable response from this target increases considerably.

Resistivity anomaly A has a target apex located at 1350N. The anomaly corresponds to a resistivity low as well as a chargeable high over roughly the same line interval. The response suggests a thin. Steeply dipping body that is three-dimensional and approximately 50 to 75 metres wide. Although the exact width is difficult to determine as the response extends past the end of the line.

Resistivity anomaly **B** is located at 1062.5N. The target appears to be steeply-dipping and corresponds to a sharply defined resistivity low seen on the pseudosection. The anomaly is located in an area of anomalously low chargeability. Depth to top of the source is 25 metres or less. The target is approximately 50 metres wide. The response is visible over separations n=1 to n=6.

Resistivity anomaly **C** is a small, moderately low response with an apex located at 962N. The target appears to be two-dimensional and depth limited. The response

indicates a moderate to steeply-dipping body that has a depth to top of 50 to 75 metres. Target width extends over the line interval 950N to 975N. This anomaly roughly corresponds to a moderately high chargeability response in the same interval.

Resistivity anomaly **D** has a target apex situated at 787.5N. The response appears to be from a very thin source about one dipole spacing wide. The target is steeply dipping. Depth to top is 25 to 50 metres. The response extends over the line interval 775N to 800N and is seen at separations n=1 to n=6. This resistivity anomaly seems to correspond to the deep chargeable source on L1200E over the same interval.

#### Line 1300E

Anomaly **A** is a high chargeable response that has an apex located at 1350N. The response suggests a three-dimensional, steeply dipping source that has a depth to top of 0 to 25 metres. The target width is approximately 75 metres extending from 1300N to 1375N and continuing past the northern end of the line. Intrinsic chargeability for the body is estimated to be in the order of 90 - 130 ms. This anomaly corresponds to a sharply defined contact between rocks of low resistivity and those of higher resistivity to the south.

Chargeability anomaly **B** has a target apex situated at 1025N. The source appears to be steeply dipping and thin. Depth to top is 25 metres or less and target width is approximately 25 to 50 metres. Intrinsic chargeability is estimated to be 60 - 90 ms.

Anomaly **C** is a moderate chargeability response that may be associated with anomaly **B**. The target apex is located at 975N. The source is most likely a steeply dipping body approximately 50 metres wide. The target appears to have a depth to top of 25 metres or less. Intrinsic chargeability is approximately 50 - 80 ms.

Anomalies **B** and **C** appear to be related to the same source, which is most likely the westward plunging pluton that extends roughly east-west across the central part of the property.

Resistivity anomaly A has a target apex situated at 1362.5N. The source is threedimensional and appears to be steeply dipping and extends off line. The anomaly is defined by a strong resistivity low corresponding to a chargeability high over the same interval. Depth to top for this source is 25 metres or less.

Resistivity anomaly **B** is a resistivity low that has a target apex located at 987.5N and appears to be caused by a narrow relatively deep source. Target width is in the order of 25 to 50 metres. Apparent dip is difficult to estimate. The source appears to be three-dimensional. Depth to top is 75 metres or greater. The target appears to broaden at

#### depth.

Resistivity anomaly **C** is a strong resistivity low response centred at 887N. The target is steeply dipping and three-dimensional. Depth to top is 25 metres or less. The width of the response indicates a relatively narrow source less than 50 metres wide.

Resistivity anomalies **B** and **C** lie within a zone defined by moderate to high chargeability response.

#### Line 1400E

Anomaly **A** is a strong, positive chargeability response centered at 1375N. The target is three-dimensional, narrow and steeply dipping. The target extends from 1350N to 1375N and beyond the end of the line. It has a depth to top of 25 metres or less. The intrinsic chargeability is estimated to be about 60 - 90 ms.

Chargeability anomaly **B** is a moderate chargeability high that has a target apex situated at 1012.5N. The response is from a shallow thin source with an intrinsic chargeability of roughly 50 - 70 ms.

Chargeability anomaly **C** is a moderate response centred at 950N. The source steeply dipping and at least 50 metres wide, becoming stronger at depth. The response is visible at separations from n=2 to n=6. The depth to the top is approximately 50 to 75 metres. Intrinsic chargeability is in the order of 50 - 70 ms.

Anomalies **B** and **C** appear to be related to the same source and are most likely caused by the east-west trending intrusive body found on the central portion of the property.

Resistivity anomaly **A** is a strong resistivity low with apex at 1362.5N. The target dips steeply, is three-dimensional and narrow. The target width is approximately 25 to 50 metres and the depth to top is 25 metres or less. This anomaly corresponds to a chargeable source over the same line interval.

Resistivity anomaly **B** is a thin and strong low signature centred at 937.5N. The target is three-dimensional and appears to be steeply dipping. The target is about 25 to 50 metres wide extending over the line interval 900N to 950N. Depth to top is 0 to 25 metres and the response is visible at all separations.

Resistivity anomaly **B** is likely a response from the highly chargeable target in the centre of the grid, although the response pattern differs considerably in width with that of the chargeability target.

#### Line 1500E

Anomaly **A** is a strong, positive chargeable response centred on 1037.5N. The source is steeply dipping. Strong response is visible at all separations from n=1 to n=6. The depth to top is 25 metres or less and target width is 50 to 75 metres. The source body appears to broaden at depth. Intrinsic chargeability for this anomaly is estimated to be approximately 100 - 150 ms.

Anomaly **A** is a caused by a large, chargeable target that corresponds to the location of the intrusive body in the center of the grid.

Resistivity anomaly A is a strong resistivity low centred at 1000N. The response is indicates a three-dimensional source dipping steeply. The response is seen at n=1 to n=6, extending over the line interval 950N to 1050N. This anomaly corresponds to the large chargeability high seen over the same interval on L1500E.

#### Line 1600E

Chargeability anomaly **A** is a strong, positive response having an apex located at 950N. The nature of the response suggests a broad, steeply dipping source. Depth to top is 25 metres or less and target width is about 150 to 175 metres extending from 925N to 1100N. Intrinsic chargeability is estimated to be 130 to 200 ms.

Chargeability anomaly **B** is a high response that is likely caused by the same source body creating anomaly **A**. The target apex is at 875N and the width of the response is estimated to be 50 metres. The response is strongest at separations n=3 and n=4. Intrinsic chargeability is in the order of 60 to 90 milli-seconds.

Resistivity anomaly **A** is a large, broad resistivity low centred at 1012.5N. The anomaly corresponds to the large chargeability high located on L1600E.

The anomalies on both pseudosections of L1600E are thought to be the result of a large, chargeable intrusive body that plunges westward across the centre of the grid. Response from this target appears on all the lines surveyed with the strongest response seen on L1600E.

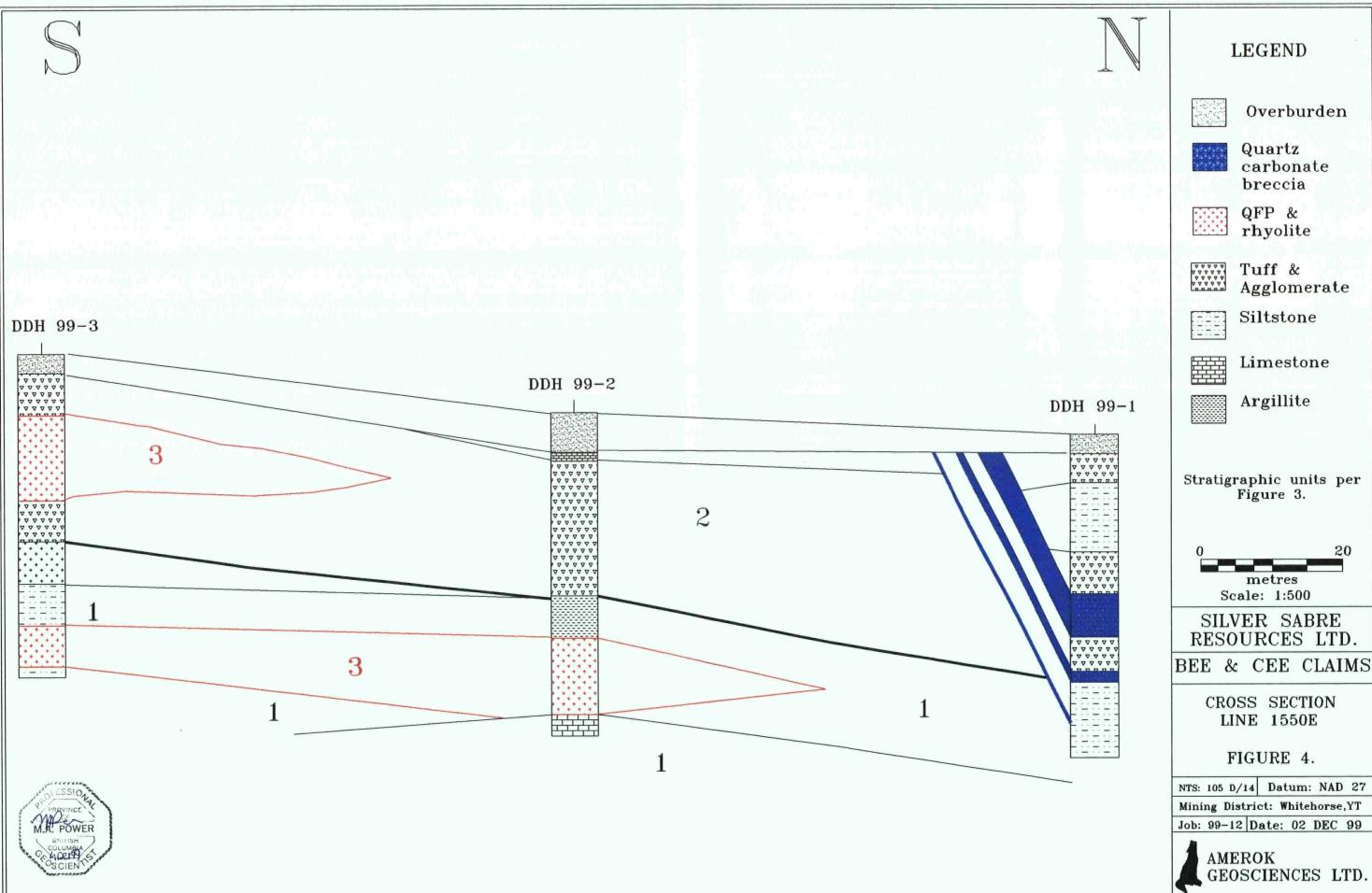
#### 9.0 DRILLING

Midnight Sun Drilling Co. Ltd. drilled three diamond drill holes on the property in August 1999. Drill hole data is summarized below:

Drill hole	Location	Azimuth	Inclination	Total depth
Bee 99-1	L1550E 1075N 488038E 6739205N	270°	-85 <sup>0</sup>	149'
Bee 99-2	L1550E 1000N 488081E 6738971N	270°	-90°	154'
Bee 99-3	L1550E 925N 488052E 6738943N	270°	-85 <sup>0</sup>	152'

The drill holes were sited to test the source of the IP anomalies on L1600E and L1500E. The drilling was supervised by Jim McFaull, FGAC who also logged and sampled the drill core. Samples of the split core were taken over 10 foot intervals and sent for analysis to Northern Analytical Laboratories Ltd. in Whitehorse. Samples were crushed to -10 mesh, split to 200 g and pulverized to -100 mesh before assaying. The samples were analysed for gold by fire assay (1 assay-ton with an atomic absorption spectrophotometry finish) and for 30 other elements by induced coupled plasma analysis at International Plasma Laboratories Ltd. Drill logs are attached in Appendix E and assay certificates are attached in Appendix F.

Drill hole locations are shown in Figure 3 and a cross section along L1550E is shown in Figure 4. The drill holes encountered disseminated and stringer pyrrhotite and pyrite in chloritized, silicified and locally sericitized granodiorite, rhyolite and metasediments. The volume of sulphides encountered adequately explains the observed chargeability and resistivity anomalies. No significant concentrations of base metal sulphides were encountered but hole 99-1 encountered anomalous gold intersections averaging 70 ppb over 84 feet. This hole was entirely within altered metasediments and did not encounter the rhyolite porphyry.



#### **10.0 CONCLUSIONS**

The results of the work conducted on the Bee and Cee Claims during 1999 lead to the following conclusions:

- a. A small stock of granite and rhyolite occurs in the centre of a large, west plunging anticline. The axial region of the stock and fold is also sheared and silicified.
- b. Pyrite and pyrrhotite in disseminations and stringers is concentrated in the axial region of the fold at and surrounding the intrusive contact. Chlorite and sericite alteration together with locally intense silicification is found with the sulphide minerals.
- c. The sulphide bearing alteration zone at the intrusive contact locally contains anomalous sub-economic gold in drill holes.

#### **11.0 RECOMMENDATIONS**

The following recommendation is made for further work on the claims:

- 1: Additional geological mapping, geophysical surveys and hand trenching should be conducted in the area of the contact between the rhyolite and metasediments. In particular, the area on the eastern side of the stock remains relatively unexplored.
- 2: Careful sampling should be conducted of all observed phases of the intrusive and country rocks to determine if a geochemical vector to improved mineralization can be found.
- 3: If trenching results are favourable, additional short holes should be drilled over surface anomalies.

Respectfully submitted, AMEROK GEOSCIENCES LTD. MARCHAR M.A. Power, M.Scort. Geo. Geophysicist

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#### **APPENDIX A. STATEMENT OF QUALIFICATIONS**

I, Michael Allan Power, M.Sc. P.Geo., P.Geoph., with business and residence in Whitehorse, Yukon Territory do hereby certify that:

- 1. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (registration number 21131) and a professional geophysicist registered by the Northwest Territories Association of Professional Engineers, Geologists and Geophysicists (licensee L942).
- 2. I am a graduate of the University of Alberta with a B.Sc. (Honours) degree in Geology obtained in 1986 and a M.Sc. in Geophysics obtained in 1988.
- 3. I have been actively involved in mineral exploration the Northern Cordillera since 1988.
- 4. I have no interest, direct or indirect, nor do I expect to receive any interest, direct or indirect, in Silver Sabre Resources Ltd. or any of its properties.
- 5. The foregoing report is based on publically available data, reports and maps, on geological mapping and geophysical surveys conducted by the author and on diamond drilling supervised by Jim McFaull, FGAC with the assistance of the author.

Dated this 3<sup>nd</sup> day of December 1999 in Whitehorse, Yukon Territory.



Michael A. Power Sc. P. Geo. Geophysicist

## **APPENDIX B. PROJECT LOG**

Date	Activity
10 Jun 99	M. Power, G. Gibson conduct geological mapping. G. Lee relocates base line and begins cutting
11 Jun 99	Geological mapping, base line cutting
12 Jun 99	Geological mapping, line cutting
13 Jun 99	Line cutting - G. Gibson & G. Lee
14 Jun 99	Line cutting - G. Gibson, G. Lee and M. Power
15 Jun 99	IP survey - L1600E - L1500E
16 Jun 99	IP survey - L1400E - L1300E
17 Jun 99	IP survey - L1200E - L1100E
12 Jul 99	Site drill holes - J. McFauli / M. Power
19 Aug 99	Mobilize diamond drill to property. J. McFaull supervising and logging.
20 Aug 99	Bee 99-1 drilling
21 Aug 99	Bee 99-1 completed
22 Aug 99	Bee 99-2 drilling
23 Aug 99	Bee 99-2 drilling
24 Aug 99	Bee 99-2 completed
25 Aug 99	Bee 99-3 drilling
26 Aug 99	Bee 99-3 drilling
27 Aug 99	Bee 99-3 completed
02 Sep 99 - 10 Sep 99	Logging in Whitehorse - J. McFaull

#### Personnel:

Jim McFaull	Gary Lee	Graeme Gibson	Mike Power
#5 - 100 Lewes Blvd.	Box 5348	c/o Box 5808	Box 5808
Whitehorse YT	Whitehorse YT	Whitehorse YT	Whitehorse YT
Y1A 3W1	Y1A 4Z2	Y1A 5L6	Y1A 5L6

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#### APPENDIX C. STATEMENT OF EXPENSES

Geological mapping: Geologist and helper w/truck 3.0 days @ \$600 per diem	\$1,800.00
Line cutting: 4.5 line-km @ \$500 / line-km	\$2,250.00
IP survey: 4.0 line km @ \$2,000 / line-km	\$8,000.00
Drill supervision: 8.0 days @ \$350 per diem	\$2,800.00
Drilling: 138 m in 3 holes @ \$149.40 per metre all-in	\$20,617.00
Assays (net of coupons): 42 analyses	\$580.00
Final report	<u>\$3,000.00</u>
Total project expenditures	\$ 39,047.00

I certify that these expenditures are true and correct to the best of my knowledge.

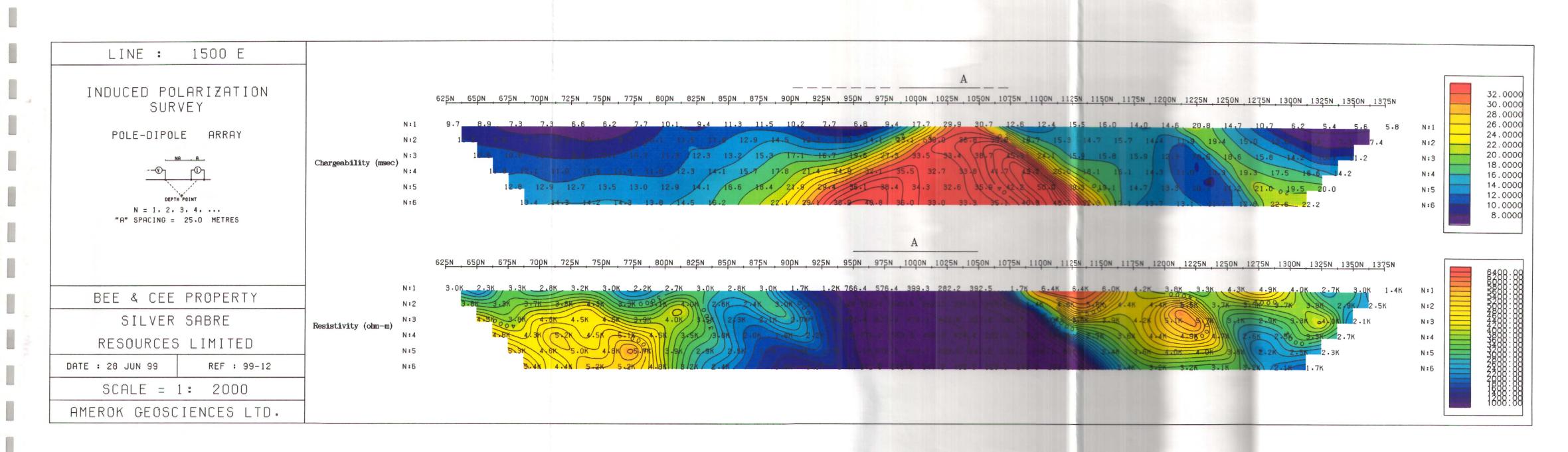


Geophysicist

December 5, 1999

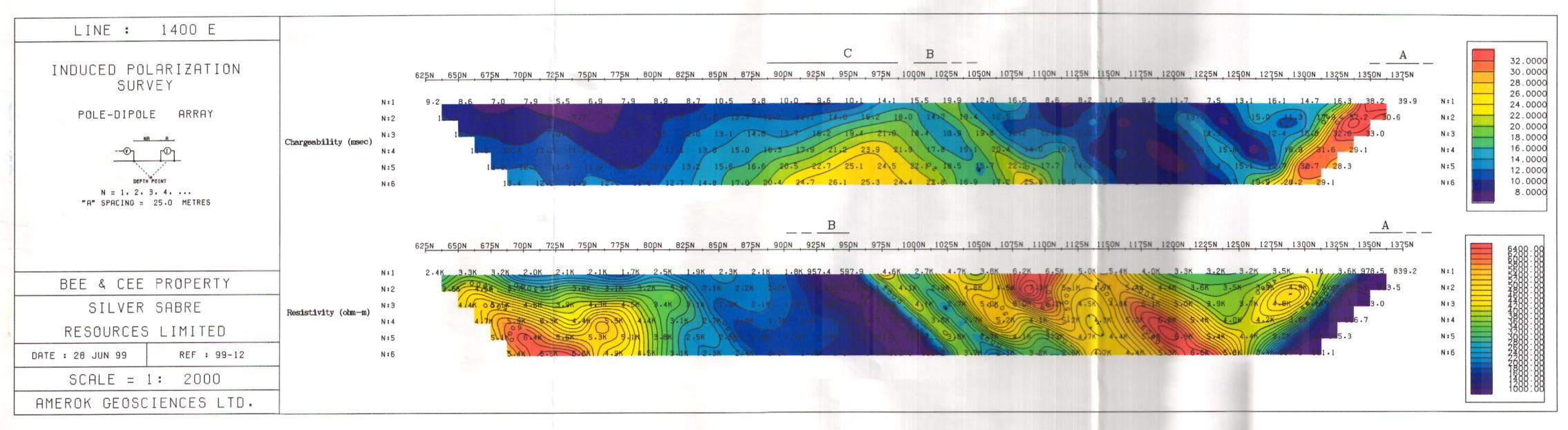
# APPENDIX D. PSEUDOSECTIONS

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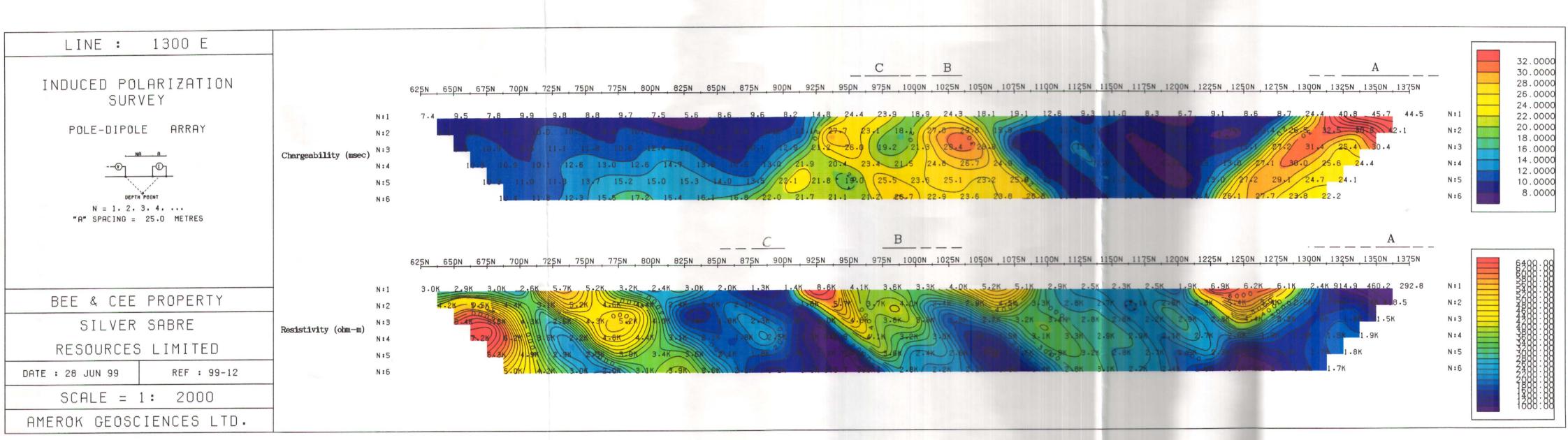








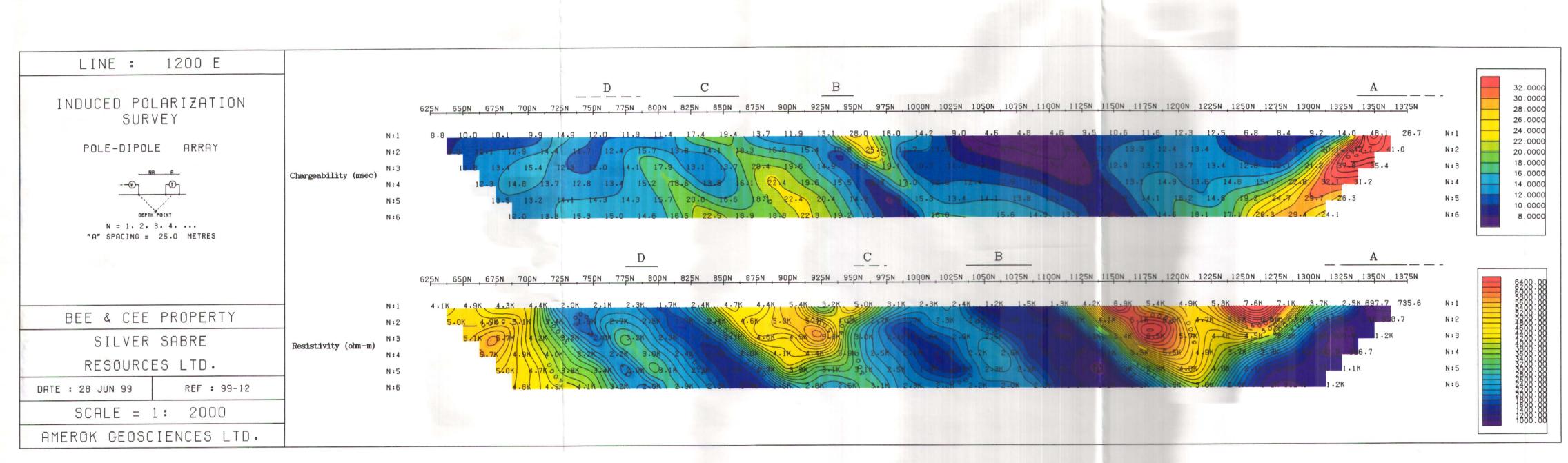






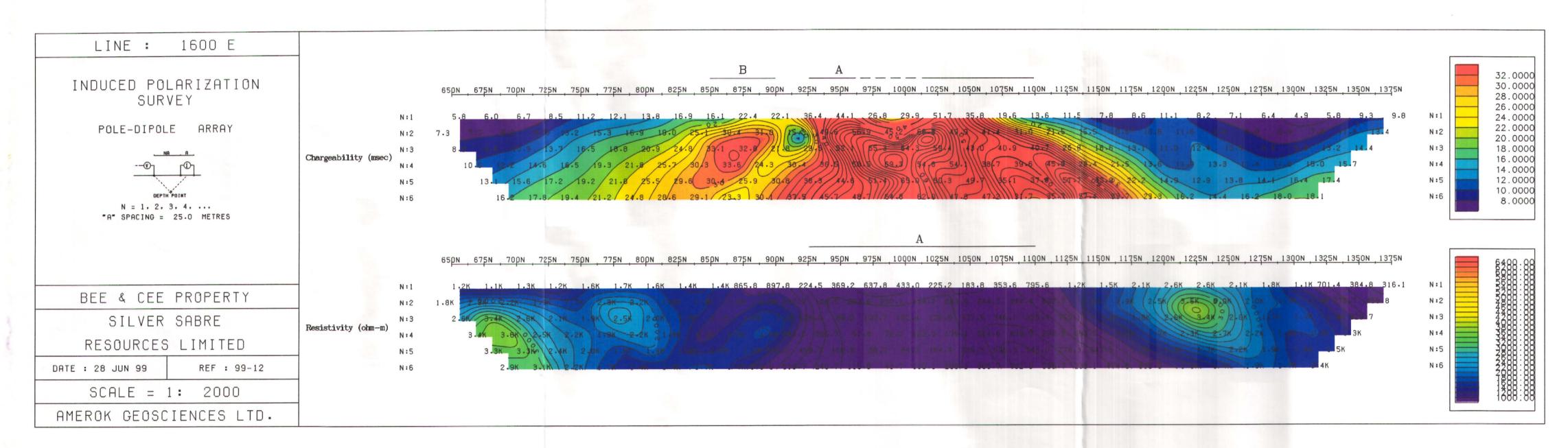














# APPENDIX E. DRILL LOGS

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				AMEROK GEOSCIENCE DIAMOND DRILL LO					_					
Location: Bee Claims, Haeckel Hill NTS: 105 D/14 Lat. 60°47'24" Long. 135°13'11" UTM 08 488038E 6739205N Hole #: Bee 99-1 Azimuth: 270° Dip: -85° Depth O/B: 9' Depth: 149' Casing: 10' Core Size: NQ Mining District: Whitehorse Logged By: J. McFaull Date Drilled: August 30-31, 1999														
Footage From Box 1	То	Interval	RCY%	Geological Description	Assays interval	Sample#	Au OPT	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Bi ppm	Hg ppm	As ppm
0	9	9	0	Overburden										
9 9	34.5 22.5	25.5 13.5	78 100	Very hard, silicified pale gray, mottled-looking volcaniclastic agg- lomerate. No HCI reaction on pale gray rock, a moderate HCI re- action on darker gray fragments. Minor fragments of dark gray,	9'-19.5'	1251	0.001	0.3	82	210	37	<	<	77
				calcareous siltstone @ 11.5'-12'. Some rusty fractures @ various angles to core axis from $10^{\circ}$ to $80^{\circ}$ . Trace very fine grained	19.5'-33.5'	1252	0.003	2	1045	877	97	<	<	127
22.5	34.5	12	58	disseminated pyrite. Dark gray, moderately hard, highly calcareous, fine grained silt- stone. One white calcite vein @ 23'-24' and occassional white, narrow veinlets throughout. Core is broken and rubbly from 24.5' to 34.5' with a core loss of 5.5'. Fractures are very rusty through this section. Trace very fine grained disseminated pyrite to 33.5'. 2% fine grained pyrite as disseminations and fracture fillings @	33.5'-43.5' 43.5'-54.5'	1253 1254	0.002 0.001	0.7 0.4	54 33	84 66	29 20	<	<	141 24
Box 2				33.5'-34.5'.										
34.5	54.5	20	100	Contact @ 34.5' between siltstone above and pale greenish-gray very hard, siliceous, altered(?) and mottled volcaniclastic tuff(?) well fractured and micro-fractured. Core is quite rubbly. 5% fine grained disseminated pyrite and pyrrhotite Fracture fillings of	54.5'-64'	1255	0:001	0.3	33	70	16	<	<	75
				white calcite also carry 1%-5% pyrite. In places core has a "freckled" appearance from disseminated sulphides. Strong HCI reaction on calcite veinlets & stringers, no HCI reaction on tuff.	64'-74'	1256	0.004	0.3	19	37	10	<	<	59
Box 3														
54.5	74	19.5	98	"Freckled", very hard, siliceous, altered volcaniclastic tuff with 5% very fine grained disseminated pyrite and pyrrhotite giving the core "freckled" appearance. Mottled in places with dark greenish -black "patches" of chlorite(?) with some replacement by pyrrho- tite Numerous hairline veinlets of pyrite. At 61' - 74' a very strong brecciated, white & gray, quartz-carbonate, vein-fault breccia cuts the tuff. The vein-fault carries 1% very fine grained disseminated pyrite	74'-84'	1257	0.001	0.1	43	69	9	<	<	56

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				AMEROK GEOSCIENCE DIAMOND DRILL LO										
Hole #:	: Bee Claim Bee 99-1 District: Wh	Azimuth:		NTS: 105 D/14 Lat. 60°47'24'' Long. 135°13' Dip: -85° Depth O/B: 9' Depth: 149' Logged By: J. McFaull Date D	'11" UTM Casing Prilled: Aug	: 10'		205N Size: N	Q					
Footage				Geological Description	Assays									
From Box 4	То	Interval	RCY%		Interval	Sample#	Au OPT	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Bi ppm	Hg ppm	As ppm
74 Box 5	94	20	100	Moderately hard, strongly brecciated white & gray, quartz- carbonate vein-fault breccia with 1% very fine grained dissem- inated pyrite. The wall rock of volcaniclastic tuff becomes more whitish or "bleached" looking from 77' to 94' possibly due to seri- citization along the fault. Occassional stringers of pynte through- out the section. No HCI reaction on the tuff wall rocks, a weak reaction on some of the narrow white veinlets. The number of veinlets decreases down section. Brecciation of the tuff decreases slightly down section.	84'-94'	1258	0.001	<	18	25	6	<	<	89
94	125	31	71		0414041	4050	0.005			50	-			05
94	105	11	100	Slightly brecclated volcaniclastic tuff with minor white quartz- calcite veinlets to 105'. 2% very fine grained disseminated pyrite.	94'-104'	1259	0.005	<	41	58	7	<	<	65
105	115	10	60	Vein-fault. Strongly faulted & gouged with 4' core loss. 1% very fine grained disseminated pyrite.	104'-125'	1260	0.001	0.2	22	36	50	<	<	108
115	125	10	50	Dark greenish/gray siliceous moderately hard aphanitic siltstone. 5-10% pyrite in calcite veins & fracture fillings & disseminated. @ 115'-117' strong HCI reaction in calcite stockwork. Heavy sulphides as clots in the larger veins.										
Box 6														
125	147	22	86	Dark greenish/gray aphanitic siliceous moderately hard siltstone with 5-10% pyrite in calcite stockworks & fracture fillings & diss- eminations. No HCI reaction. From 125'-134' a stockwork of hair- line sulphide stringers with heavy pyrite in larger veins. At 134' the siltstone changes to a dark gray aphanitic siltstone with 2%	125'-135.	5 1261	0.001	0.2	26	61	75	<	<	190
Box 7				pyrite as fracture fillings and disseminations. No HCl reaction. Core is rubbly @ 144'-146', possible fault. 1' core loss @ 125'- 135' and 2' core loss @ 135'-145'.	135.5'-149	9 1262	<0.001	0.1	28	79	50	<	<	275
147	149	2	75	Dark gray aphanitic siltstone with 2% pyrite as fracture fillings and disseminations. No HCI reaction. END OF HOLE TOTAL RECOVERY = 121' OF 140' = 86.4%										

#### AMEROK GEOSCIENCES LTD. DIAMOND DRILL LOG

Location: Bee Claims,	Haeckel Hill NTS:	105 D/14	Lat. 60°47'16"	Long. 135°13'08"	UTM 08 48808	81E 6738971N
Hole #: Bee 99-2	Azimuth: N/A	Dip: -90°	Depth O/B: 18.5'	Depth: 154'	Casing: 20'	Core Size: NQ
Mining District: Whiteh	orse Logged By	: J. McFaull		Date Drilled:	August 21-24, 199	9

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Footage From Box 1	То	Interva	I RCY	Geological Description %	Assays Interval	Sample#	Au OPT	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Bi ppm	Hg ppm	As ppm
(		18.5	18.5	0 Overburden				F.1					F F	FF
18.5	5	31.5	13	100										
18.5	5	22.5	4	100 Medium to dark gray, very hard, siliceous argillite with black bands of highly calcareous bedded limestone. Very strong HCl reaction. 1-2% very fine grained disseminated pyrrhotite and pyrite plus very thin stringers of pyrrhotite both parallel to foliation and cross-cutting it at steep angles. Disseminated sulphides favour more mafic zones and clots within the argillite. Possible small fault zone of rusty clay gouge @ 22.25'-22.5' and oriented @ 70°-90° to core axis. This fault may be associated with the contact @ 22.5'.	19'-27'	1263	<.001	0.4	71	170	39	<	<	54
22.5		31.5	9	<ul> <li>100 @ 22.5' the argillite is in contact with a very hard, siliceous, pale greenish/gray, altered(?) volcaniclastic agglomerate with a tuff-aceous matrix of feldspar(?) with fragments of gray quartz to 1-2mm. The tuff is "mottled" in appearence with clots of dark green mafic (chlorite?) to 25mm. The agglomerate also has fragments of white rock of 1-4cm size and sub-angular in habit.</li> </ul>	27'-35'	1264	<0.001	0.1	67	44	18	<	<	37
Box 2 31.5		47	15.5	100 Hard, siliceous, mottled pale greenish/gray to medium greenish/ gray volcaniclastic agglomerate / tuff. Mottled appearance from clots of dark green (chlorite?). Broken core-steep fractures @										
				15° to core axis with strong HCI reaction = carbonate veining on the fractures @ 31'-33'. Trace sulphides starting @ 35' as very	35'-44'	1265	<0.001	0.2	154	78	28	<	<	29
				fine grained disseminated pyrite, in narrow fractures & favouring the chlontic blotches. Numerous fractures parallel to core axis	44'-52'	1266	<0.001	0.3	217	41	34	<	<	23
				with white carbonate veinlets carrying trace pyrite and pyrrhotite Amount of disseminated pyrrhotite increases to 1-5% @ 45'	52'-61'	1267	0.001	<	47	35	35	<	<	38
	I	Box 3			61'-70.5'	1268	<0.001	<	17	34	32	<	<	46

				AMEROK GEOSCIENCES L DIAMOND DRILL LOG	.TD.								· · · · ·	
Hole #:	Bee 99-2	laims, Haeck 2 Whitehorse	el Hill Azimuth:	· · · ·	th: 1 <b>54'</b>	UTM 08 48 Casing: August 21	20'	738971N Core Size	: NQ					
Footage From	То	Interval	RCY%	Geological Description	Assays Interval	Sample#	Au OPT	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Bi ppm	Hg ppm	As ppm
47	66	19	100	Volcaniclastic agglomerate / tuff as above. Trace very fine grained disseminated pyrrhotite throughout section. @ 48'-48.5' white calcite vein with trace disseminated galena & pyrite. @ 57' -58.5' white calcareous veinlets. @ 61'-63' very leached, moder- ately broken core, numerous narrow rusty veinlets @ 10° to core axis. Veinlets are calcite.										
Box 4														
66	84.5	18.5	100	Volcaniclastic agglomerate / tuff as above. Trace very fine grained disseminated pyrrhotite throughout the section.	70.5'-80'	1269	<0.001	<	15	24	32	<	<	15
81	84			@ 81' tuff is in contact with black to gray silicified argillite. Contact is approximately parallel to foliation @ 75° to core axis. Argillite is barren of sulphides.	80'-89.5'	1270	<0.001	<	22	157	56	<	<	22
84	84.5			Pale gray limestone with trace disseminated pyrite Very strong HCI reaction.	00-00.0	1210	-0.001	•	LL	107	00			LL
Box 5														
84.5	104.5	20	100	<ul> <li>@ 84.5'-85.5' black to gray silicified argillite. No sulphides visible.</li> <li>@ 85.5'-95.5' hard, silicified gray to dark gray limestone, virtually barren of sulphides except for a thin folia of pyrrhotite @ 88.25'</li> <li>@ 95.5'-101' argillite as above. @ 101'-101.6' black silicified quartz feldspar porphyry rhyolite sill. Hanging wall contact is sharp &amp; parallel to bedding @ 70° to core axis. @ 101.6'-102.25' limey siltstone / limestone with strong folia and clots of pyrrhotite.</li> </ul>	89.5'-99.5	5 1271	<0.001	0.1	20	167	45	<	<	16
				tite. @ 102.25'-104.5' black silicified quartz feldspar porphyry rhyolite with 5% very fine grained disseminated pyrrhotite & pyrite The phenocrysts are faint & possibly altered.	99.5'-108	' 1272	<0.001	0.1	18	187	47	<	<	70

#### AMEROK GEOSCIENCES LTD. DIAMOND DRILL LOG

Location: Bee Claims, Haeckel HillNTS: 105 D/14Lat. 60°47'16"Long. 135°13'08"UTM 08488081E6738971NHole #: Bee 99-2Azimuth: N/ADip: -90°Depth O/B: 18.5'Depth: 154'Casing: 20'Core Size: NQMining District:WhitehorseLogged By: J. McFaullDate Drilled: August 21-24, 1999

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Footage				Geological Description	Assays									
From	То	Interval	RCY%	- ·	Interval	Sample#	Au OPT	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Bi ppm	Hg ppm	As ppm
Box 6								#- # <sup>5</sup>				• •	E. 1	1. <b>1</b>
104.5	122.5	18	100	Gray altered quartz feldspar porphyry rhyolite. 5-10% very fine										
				grained disseminated pyrrhotite giving the core a "freckled"	108'-118'	1273	<0.001	0.1	24	53	7	<	<	32
				appearance. Section is cut by numerous calcite / quartz stringers.										
Box 7					118'-127'	1274	<0.001	<	20	109	11	<	<	36
122.5	140	17.5	100	Siliceous quartz feldspar porphyry rhyolite as above, with minor										
				white / black granodiorite sills and occassional narrow white										
				quartz veins throughout the section. 5-10% very fine grained										
				disseminated pyrrhotite throughout the section. Trace narrow	127'-135.5	' 1275	<0.001	<	14	67	2	<	<	77
				fracture fillings of pyrite. @ 139.5' contact with black / gray silt-										
				stone.										
Box 8					135'-145'	1276	<0.001	<	20	131	18	<	<	89
140	154	14	100	@ 140' the above siltstone grades into a light gray limestone. @										
				141.5' the limestone grades into a black limey argillite. Strong HCI	145'-154'	1277	<0.001	0.2	24	550	39	<	<	10
				reaction. Trace fine grained disseminated pyrite & pyrite in foli-										

#### END OF HOLE

TOTAL RECOVERY = 135.5' OF 135.5' = 100%

ation. Minor white calcite and quartz veinlets throughout section.

				AMEROK GEOSCIENC DIAMOND DRILL L										
Hole #: B	3ee 99-3	ms, Haecko A /hitehorse	zimuth: 2	•		UTM Casing: 10' e Drilled: A	08 4880 ugust 25	Core	Size: N	Ð				
F <b>ootage</b> F <b>rom</b> Box 1	То	Interval	RCY%	Geological Description	Assays Interval	Sample#	Au OPT	Ag .ppm	Pb ppm	Zn ppm	Cu ppm	Bi ppm	Hg ppm	As ppm
0 9	9 28.5	9 19.5	0 100	Overburden @ 9'-10' dark gray, hard siliceous volcaniclastic tuff with trace very fine grained disseminated pyrrhotite. @ 10'-19' pale greenish / gray altered (?) hard, siliceous tuff with trace to 2% very fine grained disseminated pyrrhotite. Possible volcaniclastic (?) frag- ments to 2" diameter. @ 19'-28.5' dark gray quartz feldspar por- phyry rhyolite hard, siliceous and with 5-10% very fine grained disseminated pyrrhotite & trace very fine grained disseminated pyrite. Moderately fractured @ 20-80° to core axis with strong limonite stain.	9'-19' 19'-29'	1278 1279	<0.001	<	23 16	42 41	8 23	<	<	266 54
Box 2 28.5	48.5	20	95	Dark gray hard, siliceous quartz feldspar porphyry rhyolite with 5-10% very fine grained disseminated pyrrhotite and trace pyrite. Weak HCI reaction on carbonate vein stockwork @ 46'-48 5' 1' core loss @ 35'-45'.	29'-39' 39'-49'	1280 1281	<0.001 0.005	< <	17 20	47 42	8 19	<	< <	58 <
Box 3 48.5	68	19.5	100	@ 48.5'-51' dark gray hard siliceous quartz feldpsar porphyry rhyolite with 5% very fine grained disseminated pyrrhotite which decreases down section to 51'. @ 51' contact with pale greenish / gray hard, siliceous, altered(?) volcaniclastic agglomerate / tuff. Tuff matrix has quartz grains to 2mm and agglomerate has frag- ments to 2". Occassional clots of pyrrhotite to 2" plus narrow stringers & veinlets of pyrrhotite. HCI reaction on white calcite stringers.	49'-59' 59'-69'	1282 1283	0.001 <0.001	<	16 12	37 14	26 7	<	< <	137 238

-				AMEROK GEOSCIENC DIAMOND DRILL I		<u> </u>								
Hole #:	Bee 99-3	aims, Haec Azimuth Whitehorse	: 270°	NTS: 105 D/14 Lat. 60°47'15" Long. 135 Dip: -85° Depth O/B: 9' Depth: 152' ed By: J. McFaull	°13'10" Casing: 10	)' Core	08 4880 Size: NG 'illed: Au	2		)				
ootage rom Box 4	То	Interval	RCY%	Geological Description	Assays Interval	Sample#	Au OPT	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Bi ppm	Hg ppm	As ppm
8	87	19	100	@ 68'-78.5' pale greenish / gray hard, siliceous altered(?) volcan- iclastic agglomerate / tuff. Clots of pyrrhotite to 2" diameter, some appear to replace (?) mafic fragments. @ 78 5' contact with dark gray, hard, siliceous quartz feldspar porphyry rhyolite with contact @ $30^{\circ}$ to core axis. 1-5% very fine grained disseminated pyrrhotite.	69'-79' 79'-89'	1284 1285	0.001 0.001	<	13 41	18 58	47 47	<	<	248 7
Box 5 7	106.5	19.5	100	@ 87'-93' dark gray, hard, siliceous quartz feldspar porphyry rhyolite. 1-5% very fine grained disseminated pyrrhotite Minor fractures with trace limonite. @ 93'-101' contact with pale greenish/gray hard limestone. Strong HCI reaction. Contact appears gradational over 4-6". 1-2% disseminated pyrrhotite some clots of pyrrhotite to 2" diameter. @ 101'-104' gradational contact into pale greenish/gray tuff as above. @ 104'-106.5' gradational contact into dark gray hard, siliceous siltstone with trace very fine grained disseminated pyrite	89'-99' 99'-109'	1286 1287	<0.001 0.001	< 0.1	29 42	45 42	27 23	<	<	1888 523
Box 6 06.5	126	19.5	<b>100</b>	<ul> <li>@ 106.5'-112' dark gray hard siliceous siltstone with trace pyrrhotite.</li> <li>@ 112'-119' hard siliceous white/gray/black limestone.</li> <li>Strong HCI reaction. 1-2% very fine grained disseminated pyrite.</li> <li>@ 119'-126' dark gray hard siliceous quartz feldspar porphyry rhyolite with 2% very fine grained disseminated pyrrhotite.</li> </ul>	109'-119' 119'-129'	1288 1289	0.001 <0.001	0.1 0.1	27 12	77 33	21 7	< <	<	532 216

# AMEROK GEOSCIENCES LTD. DIAMOND DRILL LOG Location: Bee Claims, Haeckel Hill NTS: 105 D/14 Lat. 60°47'15" Long. 135°13'10" UTM 08 488052E 6738943N Hole #: Bee 99-3 Azimuth: 270° Dip: -85° Depth O/B: 9' Depth: 152' Casing: 10' Core Size: NQ Mining District: Whitehorse Logged By: J. McFaull Date Drilled: August 25-27, 1999

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Footage	_	• · •		Geological Description	Assays					_				_	
From	То	Interval	RCY%		Interval	Sample#	Au OPT	Ag ppm	Pb ppm	Zn ppm	Cu ppm	Bi ppm	Hg ppm	As ppm	
Box 7								I- I	PP····	PP	FF	<b>b b</b>	PP	FF	
126	145	19	100	@ 126'-128' quartz feldspar porphyry rhyolite as above. @ 128'- 136' rhyolite grades in & out of fine grained "salt & pepper" quartz feldspar porphyry biotite granodiorite with 5% very fine grained disseminated pyrite. @ 136'-144' contact with pale greenish/gray siltstone with alternating beds of medium brown siltstone. @ 144'-145' a sill of "salt & pepper" granodiorite with 5% very fine	129'-139'	1290	<0.001	<	14	64	32	<	<	337	
Box-8		·		grained disseminated pyrite. Sill is @ $30^{\circ}$ to core axis. Footwall contact to brown siltstone @ 144.8'.	139'-149'	1291	<0.001	<	16	114	59	<	<	251	
145	152	7	100	Interbedded hard siliceous medium brown & pale greenish/gray aphanitic siltstone with trace very fine grained disseminated pyrite.	149'-152'	1292	0.001	<	13	89	42	<	<	273	
				END OF HOLE											

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TOTAL RECOVERY = 141' OF 143' = 98.6%

AMEROK GEOSCIENCES LTD.

## **APPENDIX F. ASSAY CERTIFICATES**

Bee and Cee Report - page 21



	9		Certificate of	Analysis		
Amerok	Geoscienc	ces	# (	of pages (not including		2 # 00009
Jim McF			John R	Certified by	AV.	2
Date R	Received: 1	3/09/99			Ú	
SAMPL	E PREPAR # of	ATION:				
Code dc	Samples 42	Type drill core	Preparation Descrip	tion (All wet samples a riffle split 200g; pulveri	are dried fir ze to -100	st.) mesh
ANALY	TICAL MET	HODS SUM			Lower	Upper
ANALY Symbol		HODS SUM	IMARY: Method (A:assay) (G:geochem)	Fusion/Digestion	Lower Limit	Upper Limit
			Method (A:assay)	Fusion/Digestion 1AT FA / aqua regia		

FA = fire assay

1000ppb = 1ppm = 1g/mt = 0.0001% = 0.029166oz/ton



105 Copper Road Whitehorse, Yukon Y1A 2Z7 Ph: (867) 668-4968 Fax: (867) 668-4890 E-mail: NAL@hypertech yk ca

28/09/99		Certificate of	Analysis	Pa
	Amero	k Geosciences	WO#0	0009
	Jim Mo	Faull	Certified by	2
0	1 - 11	Au	0	
Samp	le #	oz/ton		
dc	1251	0.001		
dc	1252	0.003		
dc	1253	0.002		
dc	1254	0.001		
dc	1255	0.001		
dc	1256	0.004		
dc	1257	0.001		
dc	1258	0.001		
dc	1259	0.005		
dc	1260	0.001		
dc	1261	0.001		
dc	1262	<0.001		
dc	1263	<0.001		
dc	1264	<0.001		
dc	1265	<0.001		
dc	1266	<0.001		
dc	1267	0.001		
dc	1268	<0.001		
dc	1269	<0.001		
dc	1270	<0.001		
dc	1271	<0.001		
dc	1272	<0.001		
dc	1273	<0.001		
dc	1274	<0.001		
dc	1275	<0.001		
dc	1276	<0.001		
dc	1277	<0.001		
dc	1278	<0.001		
dc	1279	<0.001		
dc	1280	<0.001		



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WO#00009

28/09/99

Certificate of Analysis

Page 2

### Amerok Geosciences

	Jim Mo	cFaull	Certified by
Sa	mple #	Au oz/ton	
dc	1281	0.005	
dc	1282	0.001	
dc	1283	<0.001	
dc	1284	0.001	
dc	1285	0.001	
dc	1286	<0.001	
dc	1287	0.001	
dc	1288	0.001	
dc	1289	<0.001	
dc	1290	<0.001	
dc	1291	<0.001	
dc	1292	0.001	

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10-03	1. P. Y.	
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## CERTIFICATE OF ANALTSIS

Vencouver BC

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	INTERNATION	IAL PI	LASMA LAE	ORATORY	LTD																						-				9-7890 9-7890		
Client Project	: North : WO# 0	ieri 100(	n Anal 09	ytica	1 Labo	ratori	es	4	2 Sa 42=	a <b>mpl</b> Pulp	es								[0	93415	6 44.2	27.991	00199	)]			1. 19 7. 19	99		Pag	ge	1 of 1 1 of	2
Sample	Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm			Mo T ppm pp					Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	۲۱ لا					g X	К Х	Na X	P X	
1251 1252 1253 1254 1255		P P P	0.3 2.0 0.7 0.4 0.3	37 97 29 20 16	82 1045 54 33 33	210 877 84 66 70	77 127 141 24 75	< < < < <	~ ~ ~ ~ ~	8 4 2	< < <	< 2.7 < 2.7 < <	16 31 24		84 44 64 35 62	~ ~ ~ ~ ~	41 108 230 151 102	66 63 31	183 870 1095 687 628	5	212 1087 1047 687 473	3 5 3 2 7	3 5 1	0.05	1.76 4.16 4 47	12 9.34 5.11	0 8	) 0 7 7 1 4 ) 0 7	'9 0.:  4 0.! '9 0.!	36 0 58 0 08 0	.11	0.09 0.18 0.19	
1256 1257 1258 1259 1260		P P P	03 0.1 < 0.2	10 9 6 7 50	19 43 18 41 22	37 69 25 58 36	59 56 89 65 108	< < < 5	< < < < < <	2 2 1	< < <		5 5 5	48 6 3 4 96	50 82 74 73 35	~ ~ ~ ~ ~	92 41 39 36 223	27 13 13 15 68	977 681 557 533 567	8 9 10 8 7	216 131 141 212 243	11 11 18 20 10	1 1 1	0.05 0.04 0.04	2.63 1.57 1.73	5.68 2.94 3.11	2.38 1 69 1.61 1 73 3.10	505 10.3 304	0 0. 9 0. 8 0.	14 0 15 0 13 0	.04 .05 .07	0 04 0.05 0.04	
1261 1262 1263 1264 1265		P P P	0 2 0.1 0.4 0.1 0.2	75 50 39 18 28	26 28 71 67 154	61 79 170 44 78	190 275 54 37 29	8 6 < < <	< < < < <	2 21 2	< · < <	< 3.5 < 3.5 < 0.2	26 9 9	136 38 18	44 77 28 46 43	~ ~ ~ ~ ~	279 282 26 43 43	68 81 15 18 20	341 379 334 159 166	4 5 3 4	402 616 191 197 227	3 4 5 3 4	3 1 1	0.11 0.07 0.09	4.07	2.67 11 3.57	3 66 2.93 \$ 0.90 0 49 0.57	320 000 302	6 0.0 9 0.0 5 0.1	62 0 05 0 11 0	.29	0.17 0.07 0.07	
1266 1267 1268 1269 1270		P P P P	0.3 < < <	34 35 32 32 56	217 47 17 15 22	41 35 34 24 157	23 38 46 15 22	< < < < <	< < < < <	2 2 2	< < <	<	11 12 13	21 25 30 34 50	50 58 48 46 61	νννγ	50 55 56 46 55	19 27 29 18 54	115 158 176 109 208	4 4 3 3	171 200 221 258 437	3 4 4 4 6	2 2 1	0.12 0.11 0.09	1.61	3.46 3.37 3.44	0.77 1.08 1.34 1.43 2.56	3 0 4 1 0.4 3 0.3	7 0.1	12 0 09 0 08 0	.22	0.07 0.07 0.07	
1271 1272 1273 1274 1275		P	0.1 0.1 0.1 <	45 47 7 11 2	20 18 24 20 14	167 187 53 109 67	16 70 32 36 77	~ ~ ~ ~ ~	< < < < <	10 5 3	<	< 2.4 < 2.4 < <	5 8 8	48 17 1 1 1	21 92 66 79 78	~ ~ ~ ~ ~	23 37 27 29 40	29 23 34 40 5	276 313 387 596 381	3 10 10 11 20	519 336 226 189 109	5 12 12 11 21	1 2 3	0.06 0.08 0.09	2.46	6.66 2.12 2.10	* 1.83 1.53 1.90 2.04 2.43	8 0.3 0.5 0.6	2 0.1 7 0.1 6 0.1	12 0 11 0 18 0	.16 .11 ( .14 (	0.05 0.05 0.05	
1276 1277 1278 1279 1280		P P P P	<pre></pre>	18 39 8 23 8	20 24 23 16 17	131 550 42 41 47	89 10 266 54 58	~ ~ ~ ~ ~	~ ~ ~ ~ ~	35 2 4	< ·	< 2.1 < 16.6 < <	7 11 3	27 59 30 < 2	89 31 28 93 87	~ ~ ~ ~ ~	35 23 31 35 46	19 78 10 4 3	280 201 296 266 300	12 4 8 24 22	330 752 122 94 52	12 6 3 18 12	< 1 2	0.06	0.44	22 2.80	2.20	/ 0.09 0.10 0 10	9 0.0 0 0.0 6 0.1	04 0 07 0 10 0	.13 ( .22 ( .06 (	0.07 0.06 0.03	
1281 1282 1283 1284 1285		P P P P	< < < < <	19 26 7 47 47	20 16 12 13 41	42 37 14 18 58	 137 238 248 7	< < < < <	< < < < <	2 1 2	<pre>&lt; · </pre>		9 10 13	2 17 20 27 2	76 36 25 27 52	~ ~ ~ ~ ~	38 37 27 32 41	5 10 10 13 3	331 136 69 113 123	20 7 4 5 21	65 71 67 75 55	12 5 4 4 15	1 1 1	0.07 0.08 0.08	0.49 0.74 0.78		0.79	0.12	20.0 600 30.0	05 0. 06 0. 04 0.	.10 ( .10 ( .14 (	0.06 0.07 0.07	
1286 1287 1288 1289		Р	< 0.1 0.1 0.1	27 23 21 7	29 42 27 12	42 77	1888 523 532 216	< < < <	< < < <	3 4	< ·		18 12	36 58 41 4	30 21 22 73	~ ~ ~ ~	26 89 44 30	31 24	224 198 325 216	3	151 83 220 65	6 3 5 17	1 1	0.11 0.08	2.00 1.54	3,38 9.88	1.38 2.23 1.54 2.11	0.44	4 0.0 4 0.0	070. 050.	.10 C	D.06 D.06	
Min Lin Max Rep Method		9	ICP	ICP		ICP	9999 ICP	ICP	9999 ICP	ICP IC	9 9999 P ICI	P ICP	9999 ICP	9999 1CP	9999 ICP	ICP	ICP	ICP	ICP	ICP			9999	1.00	9.99	9.99		9 99	9 9.9	99 5	00 5	5 00	

ient		ther	n Anal	ytical	ne Labor	ratori	es	4	12 S 42=	amj Pulp	oles									[0	93415	:44:2	7:991	 0019	9]	Out: In :	Oct Sep	01. 27.	Fa 199	іх 9	-	879 Page	-7898 e		F
ample	. Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm		Sb ppm	Hg ppm	Mo ppm	T1 ppm	Bi ppm	Cd ppm	Co ppn	Nı ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm				Ca ¥	Fe X	Mg X	K X		la X	P *	
290 291 292		P P P	< < <	32 59 42	14 16 13	64 114 89	337 251 273	< 6 <	< < <	6 5 9	< < <	¥	< < <	9 16 14	19 49 46	68 118 59	<	29 63 43	29 67 35	251 190 183	16 6 6	57 139 192	4 2 6	2 3 1	0.09 0.15 0.10	1.35 1.83 1.90	5 1.6 3 1.5 ) 3.6	58 2 52 2 55 1	.17 ( .66 ] .17 (	).49 L.10 ).47	0.15 0.47 0.29	0.0 0.1 0.3	15 D.1 5 D.1 14 D.1	)5 )9 )9	
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