2008 REPORT ON EXPLORATION ACTIVITIES
CHU CHUA PROPERTY

(CLAIMS: 529300, 529301, 508580, 508581, 508582, 508583, 508584, 508586, 508587, 508589, 508590, 517010, 517072, 523835, 523836, 523837, 523838, 523839, 523841, 523843, 523844, 526296, 526297, 528569, 528570, 528700, 529890, 530072, 526302, 530073, 530075, 530076, 530077, 533944, 539779, 588657-588664)

Kamloops Mining Division
NTS 92P/8E
Lat 51'22" Long 120'04 'W
UTM Zone 10: 704480E and 5696320N (NAD 83)

December 23, 2008
(BC 2008 ASSESSMENT)

By

Kris Raffle, P.Geo (BC)
APEX Geoscience Ltd.
#200, 9797 45 Ave
Edmonton, AB
T6E 5V8

TABLE of CONTENTS

LIST of FIGURES

LIST of TABLES

APPENDICES (AT END)

INTRODUCTION

The Chua Chua property comprises 43 contiguous mineral claims which total 11,712 hectares (ha) and encompass the Chu Chua Cyprus-type massive sulphide deposit in south-central British Columbia. The Chu Chua deposit contains a non-43-101 compliant mineral inventory of approximately 2.7 million tonnes grading 1.67% copper (Cu), 0.31% zinc (Zn), 7.4 g/T silver (Ag) and 0.31 g/T gold (Au) (Heberlein, 1990). Work at Chu Chua and the surrounding area has been conducted since its discovery in 1978 including a renewed interest in the areas prospectivity over the last few years.

The land package was assembled through online staking by Longview Capital Partners Inc. (Longview) and purchase agreements with Strongbow Exploration Inc (Strongbow)., Kenneth C. Ellerbeck (Ellerbeck) and Gerald T. Locke (Locke), and Gaye Richards (Richards). In 2008, Longview Capital Partners Inc. (Longview) initiated an airborne geophysical survey (839.7 line-km) to help refine the massive sulphide and epithermal vein potential of the land package. The results of this survey led Longview to acquire additional claims south of the already existing land package. A property visit was conducted by the author during which 5 samples were taken. Digital compilation of historic data was also carried out. Total expenditures detailed in this report total some $154,788.19.

Property Description and Location

The Chu Chua claims package is located 24 kilometres (km) northeast of Barriere, B.C., centred on the Chu Chua deposit (120^{o}3'42"W longitude and 56^{o}22'51"N latitude or 704480E and 5696320N NAD 83, Zone 10) (Table 1; Figures 1 and 2). The property is vehicle-accessible along the paved Barriere Lakes Road and either the North Barriere Lake or Birk Creek logging roads. The Chu Chua deposit can be accessed via 4x4 vehicle from the end of the Birk Creek logging road.

The climate varies seasonally with temperature ranging from -30 to +40^{o}C. Experiencing heavy snowfall in the winter, the work season lasts from late June to mid October. Elevation varies from 900 to over 2200 metres (m). Snow may still be present into July at higher elevations. Vegetation varies with elevation from alpine to sub alpine below 1800 m. Logging status has great effect on the area with clear cut, second growth, spruce pine and cedar forests all being present on the property.

Barriere (population 3450) is the closest town to the property; accommodations, RCMP and a health center can be found there. Lodging may be found at other communities between Barriere and Kamloops. Kamloops is the nearest major center, providing all services; located 64.1 km south of Barriere along Highway 5 (The Yellowhead). Kamloops has an airport that provides charters along with scheduled air service.

Claim Name	Claim No	Owner	Owner No	%	Area (acres)	Area (ha)	Expiry (d/m/y)	2008 Work		
								Airborne	Digital Compilation	Sampling
G & G	529302	GTL	115892	100	99.70	40.35	30-Sep-11	Yes	Yes	
GERRY AND GERRY	528569	GTL/KCE	107608	100	149.56	60.53	30-Sep-10	Yes	Yes	
INMETEAST	517072	GTL/KCE	107608	100	199.43	80.71	30-Sep-10	Yes	Yes	
KC GL1	523837	GTL/KCE	107608	100	946.95	383.22	30-Sep-11	Yes	Yes	
KEGL4	523839	GTL/KCE	107608	100	149.54	60.52	30-Sep-11	Yes	Yes	
KC GL5	523841	GTL/KCE	107608	100	49.85	20.17	30-Sep-11	Yes	Yes	
KC GK7	523843	GTL/KCE	107608	100	149.54	60.52	30-Sep-10	Yes	Yes	
KC GL2	523836	GTL/KCE	107608	100	847.24	342.87	30-Sep-10	Yes	Yes	
INMETINFILL	517010	GTL/KCE	107608	100	349.08	141.27	30-Sep-11	Yes	Yes	
CC FRACTION	528700	GTL/KCE	107608	100	49.84	20.17	30-Sep-10	Yes	Yes	
	508580	GTL/KCE	107608	100	1197.14	484.47	30-Sep-11	Yes	Yes	
Deposit1	508581	GTL/KCE	107608	100	997.31	403.60	30-Sep-10	Yes	Yes	
Deposit2	508582	GTL/KCE	107608	100	996.90	403.43	30-Sep-10	Yes	Yes	
South1	508583	GTL/KCE	107608	100	1247.34	504.78	30-Sep-11	Yes	Yes	
North1	508584	GTL/KCE	107608	100	797.22	322.62	30-Sep-10	Yes	Yes	
	508586	GTL/KCE	107608	100	1197.75	484.71	30-Sep-11	Yes	Yes	
Southpark	508587	GTL/KCE	107608	100	1248.01	505.05	30-Sep-11	Yes	Yes	
Insure	508589	GTL/KCE	107608	100	1148.39	464.74	30-Sep-11	Yes	Yes	
Ants	508590	GTL/KCE	107608	100	1197.60	484.65	30-Sep-11	Yes	Yes	
YES	530073	GTL	115892	100	49.89	20.19	30-Sep-10	Yes	Yes	
MORE TO GO	530075	GTL	115892	100	548.13	221.82	30-Sep-10	Yes	Yes	
AND MORE	530076	GTL	115892	100	1195.31	483.73	30-Sep-10		Yes	
AND MORE	530077	GTL	115892	100	299.37	121.15	30-Sep-10	Yes	Yes	
DIXIE 4	533944	GTL	115892	100	199.18	80.61	30-Sep-10		Yes	
ROCKNORTH	528570	GTL/KCE	107608	100	249.22	100.86	30-Sep-10	Yes	Yes	
CHUCHUAEAST	526296	KCE	107608	100	1047.49	423.91	30-Sep-11	Yes	Yes	
CHUSOUTHWEST	526297	KCE	107608	100	1197.43	484.58	30-Sep-10	Yes	Yes	
CHU CHUA 7777	523838	GTL/KCE	107608	100	99.70	40.35	30-Sep-10	Yes	Yes	
CHU CHUA 888	523844	GTL/KCE	107608	100	99.70	40.35	30-Sep-10	Yes	Yes	
CHU CHUA 777	523835	GTL/KCE	107608	100	1196.82	484.34	30-Sep-11	Yes	Yes	
CAVEATEMPTOR	529890	KCE	107608	100	49.90	20.19	30-Sep-11	Yes	Yes	
CARPEDIEM	530072	KCE	107608	100	49.86	20.18	30-Sep-10	Yes	Yes	
LVT08-CC1	588657	LCPI	216593	100	1198.70	485.10	21-Jul-09	Yes	Yes	
LVT08-CC2	588658	LCPI	216593	100	1198.98	485.21	21-Jul-09		Yes	
LVT08-CC3	588659	LCPI	216593	100	1249.09	505.49	21-Jul-09		Yes	
LVT08-CC4	588660	LCPI	216593	100	1199.20	485.30	21-Jul-09		Yes	
LVT08-CC5	588661	LCPI	216593	100	1149.31	465.11	21-Jul-09		Yes	
LVT08-CC6	588662	LCPI	216593	100	1199.40	485.38	21-Jul-09		Yes	
LVT08-CC7	588663	LCPI	216593	100	1148.86	464.93	21-Jul-09	Yes	Yes	
LVT08-CC8	588664	LCPI	216593	100	399.47	161.66	21-Jul-09		Yes	
CHU CHUA 27	529301	SBW	200995	100	299.19	121.08	30-Sep-11	Yes	Yes	
CHU CHUA 1	529300	SBW	200995	100	398.85	161.41	30-Sep-11	Yes	Yes	Yes
CHU CHUA 2	539779	GR	146268	100	199.44	80.71	30-Sep-11	Yes	Yes	Yes
				TOTAL	28,940.85	11,712.00				

Table 1. Claim information for the Chu Chua Property, BC (ownership acronyms as follows: GTL – Gerald T. Locke; KCE – Kenneth C. Ellerbeck; SBW – Strongbow Exploration Inc.; GR – Gaye Richards; LCPI – Longview Capital Partners Inc.)

ANGLO COLUMBIA MINES INC.

Chu Chua Property

PROPERTY LOCATION

British Columbia, Canada

0 100 200 300 Km

1:8,000,000

APEX Geoscience Ltd.

Edmonton, Alberta December, 2008

Legend

Chu Chua Property

Cities

Highways

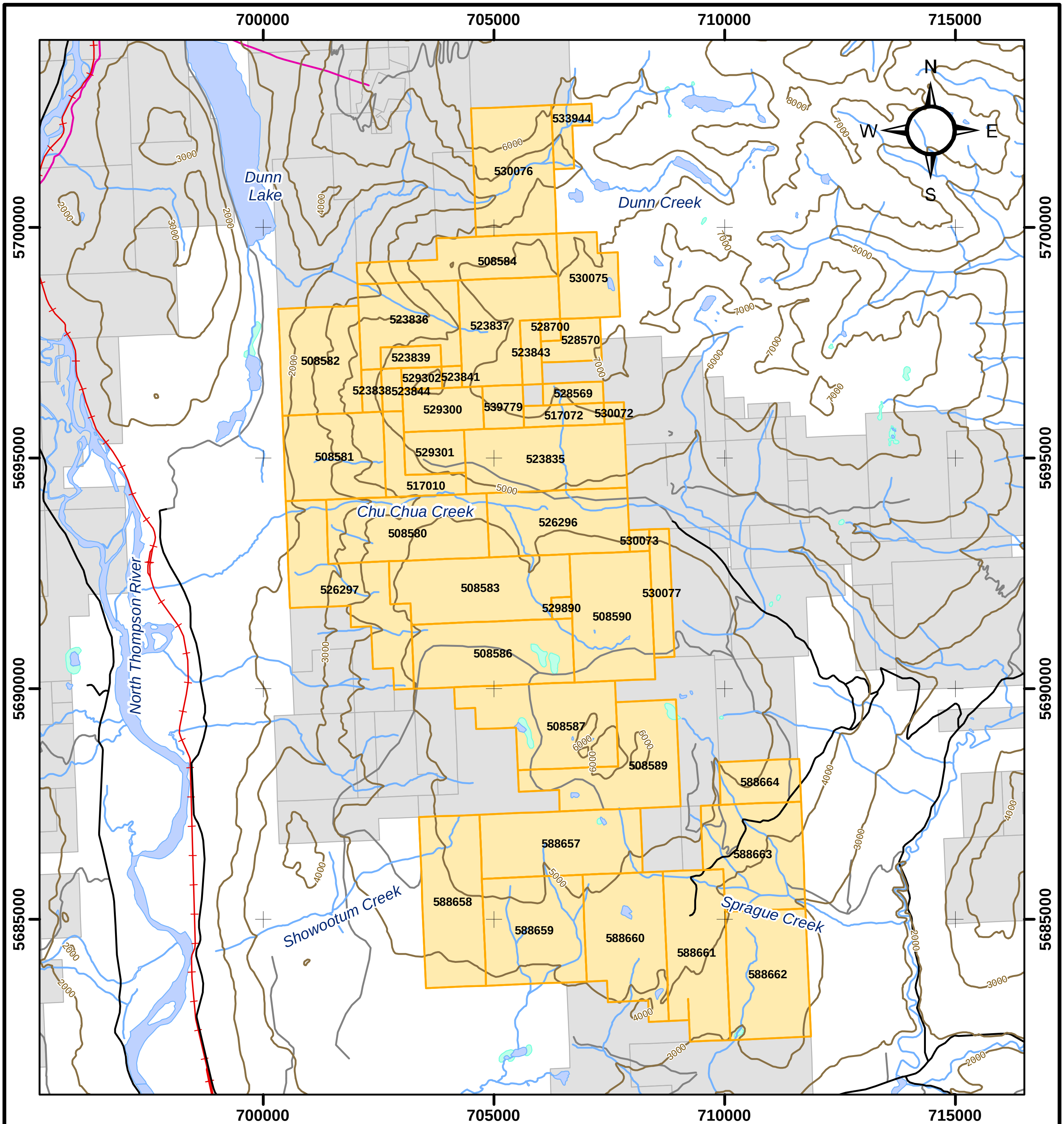
Provincial / National Boundaries

British Columbia

Canada

United States

FIGURE 1



Legend

- Chu Chua Claims
- Adjacent Claims
- Elevation Contours - 1000ft intervals
- Roads
- Railway
- Trails
- Watercourse
- Limited Use Roads
- Waterbodies
- Wetlands

ANGLO COLUMBIA MINES INC.

Chu Chua Property

CHU CHUA CLAIMS

British Columbia, Canada

0 0.5 1 2 3 4 5 Kilometers

1:120,000

NAD 1983 Zone 10

APEX Geoscience Ltd.

Edmonton, Alberta December, 2008

FIGURE 2

On the property electric power would be provided by a diesel generator and water may be sourced from numerous streams in the Chu Chua area.

History

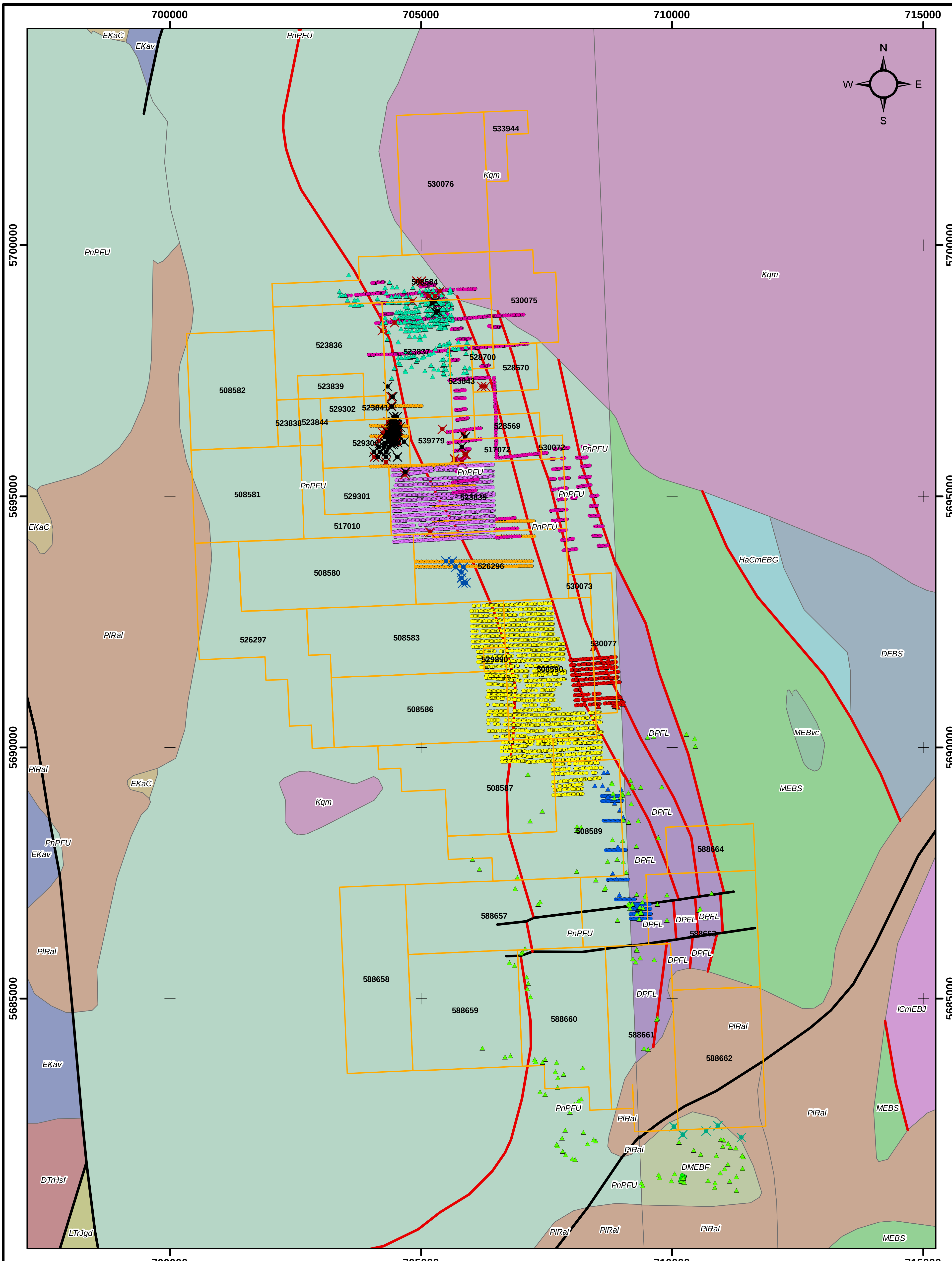
Vestor Explorations Ltd. conducted a stream survey in 1977, locating a $10m^2$ limonite gossan on the south slope of Chu Chua Mountain near a northerly striking massive magnetite body (Vollo, 1979). The property was optioned by Craigmont Mines Ltd. and subsequently drilled with a total of 2843 meters in 23 holes in 1978 (Figure 3). This outlined the Chu Chua massive sulphide body with thicknesses up to 15 m, a strike length of 300 m and a vertical depth of 200 m. Highlights from this early drilling included five metre sample 2436 from drill hole CC-6 which assayed 4.41% Cu, 0.69% Zn, 1.23 g/t Au and 15.09 g/t Ag, five metre sample 2305 from drill hole CC-16 which assayed 7.47% Cu, 0.75% Zn, 0.69 g/t Au and 22.6 g/t Ag and 4.2 metre sample 2313 from drill hole CC-17 which assayed 14.54% Cu, 0.93% Zn, 1.03 g/t Au and 9.3 g/t Ag.

Between April 5 and May 20, 1979, a Digital Helicopter Electromagnetic (DIGHEM) survey of 2274 line-km was flown in the North Thompson River Area including the Chu Chua deposit (Fraser and Dvorak, 1979). Following the survey 21 holes totaling 3329 meters were drilled, unfortunately the Chu Chua deposit was not significantly extended by this work. Nearby conductors proved to be graphitic cherts (Vollo, 1979).

In October 1980 a Horizontal Loop Electromagnetic (HLEM) survey was carried out on the Chu Chua claim group but did not reveal prospects of similar size and conductivity to the Chu Chua deposit (Hallof, Cartwright, and Adomaitis, 1981). Following the survey, tuffite with minor chalcopyrite was intersected in drill hole CC-45; a 319 m hole drilled to explore the Chu Chua sulphide zone down dip (Vollo, 1981).

In 1982, very low frequency-electromagnetic (VLF-EM) and magnetic surveys were conducted over a 35 km grid, 516 soil samples were collected and ten holes totaling 2934 m were drilled. Several electromagnetic conductors were identified including one with a correlative magnetic and geochemical response which was drilled with negative results. Two other holes (CC-46 and -48) intersected beds of massive, cupriferous pyrite, magnetite and talc in a siliceous tuffite unit. Hole CC-48 intersected 6.7 metres assaying 2.4% Cu, 0.34% Zn, 2.61 g/t Au and 13.8 g/t Ag from 445.7-452.4m. Three additional holes (CC-49, -54 and -55) tested the depth extent of the Chu Chua sulphide lens and intersected narrow zones of massive sulphides, tuffite and altered basalt (Vollo, 1982).

The Craigmont exploration program at Chu Chua was cancelled in 1983 due to the closure of the Craigmont Mine near Merritt, B.C. and difficult deep holes drilling conditions (Morganti, 1984). The property was returned to Vestor Explorations Ltd.



Legend

Chu Chua Claims

Faults

Type

- Fault
- Thrust Fault

Bedrock Geology

UNIT

- PlRal - PLEISTOCENE TO RECENT - unnamed alluvium, till
- EKaC - EOCENE - KAMLOOPS GROUP - CHU CHUA FORMATION undivided sedimentary rocks
- EKav - EOCENE - KAMLOOPS GROUP undivided volcanic rocks
- Kqm - CRETACEOUS - unnamed quartz monzonitic intrusive rocks
- LTrJgd - LATE TRIASSIC TO EARLY JURASSIC - unnamed granodioritic intrusive rocks
- DTrHsf - DEVONIAN TO TRIASSIC - HARPER RANCH AND(?) NICOLA GROUPS mudstone, siltstone, shale fine clastic sedimentary rocks
- PnPFU - PENNSYLVANIAN TO PERMIAN - FENNELL ASSEMBLAGE - UPPER STRUCTURAL DIVISION basaltic volcanic rocks
- DPFL - DEVONIAN TO PERMIAN - FENNELL ASSEMBLAGE - LOWER STRUCTURAL DIVISION marine sedimentary and volcanic rocks
- MEBS - MISSISSIPPIAN - EAGLE BAY ASSEMBLAGE - SLATE CREEK UNIT mudstone, siltstone, shale fine clastic sedimentary rocks
- MEBvc - MISSISSIPPIAN - EAGLE BAY ASSEMBLAGE volcaniclastic rocks
- DEBS - DEVONIAN - EAGLE BAY ASSEMBLAGE - SKWAAM BAY UNIT calc-alkaline volcanic rocks
- DMEBF - DEVONIAN TO MISSISSIPPIAN - EAGLE BAY ASSEMBLAGE - FOGHORN MOUNTAIN UNIT andesitic volcanic rocks
- lCmEBJ - LOWER CAMBRIAN - EAGLE BAY ASSEMBLAGE - JOHNSON LAKE UNIT greenstone, greenschist metamorphic rocks
- HaCmEBG - HADRYNIAN TO LOWER CAMBRIAN - EAGLE BAY ASSEMBLAGE - GRAFFUNDER LAKES UNIT quartzite, quartz arenite sedimentary rocks

Historic Drilling

- 1978 to 1982 Craigmont - CC - Drill Holes
- 1985 to 1989 - Minnova Inc. - CCF - Drill Holes
- 1990 - Minnova Inc. - MCC - Drill Holes
- 1991 - Minnova Inc. - BAR - Drill Holes

Historic Rock Samples

- 1985 - Falconbridge Copper - Rock Samples
- 1988 - Minnova Inc. - Rock Samples
- 1989 - Minnova Inc. - Rock Samples
- 1995 - Eighty-Eight Resources - Rock Samples

Historic Soil Samples

- 1900s - Minnova Inc. - Soils Samples
- 1982 - Craigmont Mines - Soil Samples
- 1985 - Falconbridge Copper - Soil Samples
- 1986 - Falconbridge Copper - Soil Samples
- 1988 - Minnova Inc. - Soil Samples
- 1995 - Eighty-Eight Resources - Soil Samples
- 2006 - Strongbow - Soil Samples

ANGLO COLUMBIA MINES INC.

Chu Chua Property

REGIONAL GEOLOGY AND HISTORIC DRILLING AND SAMPLING

British Columbia, Canada

0 0.5 1 2 3 Kilometers

1:75,000

NAD 1983 Zone 10

APEX Geoscience Ltd.
Edmonton, Alberta December, 2008

FIGURE 3

During October of 1984, Vestor Explorations Ltd. contracted Glen E. White Geophysical Consulting and Services Ltd. to conduct a program of vector pulse electromagnetometer surveying. Nineteen kilometres were covered on the Chu Chua 5,6, and 7 claims. This survey detected four conductors of considerable strike length that correlated with magnetic highs and the target tuffite horizon (Candy and White, 1984).

In 1985 Corporation Falconbridge Copper concluded an exploration program on the SC, Anna and Bar claims (south of the Chu Chua deposit) which included geological mapping, and the collection of 184 rock and 28 soil samples.

In August 1985 Corporation Falconbridge Copper acquired the Chu Chua property; subsequently, 99.15 km of line cutting and 82.5 km of HLEM were carried out on 3 grids. Three holes totaling 617.5 m were drilled, testing HLEM anomalies and adjacent stratigraphy (Pirie 1985).

In 1986 the Chu Chua grid was extended 1.5 km south. Thirty kilometres of HLEM was completed and 1074 soil geochemical samples were collected. Six drill targets totaling 668.6 m found sulphide content to be generally quite low with graphitic argillites commonly explaining conductive anomalies (Pirie 1986).

Corporation Falconbridge Copper changed their name to Minnova Inc. in 1987 and conducted a 1:2500 scale geological mapping program as well as collecting 26 rock and 273 geochemical samples along with 3 days of HLEM surveys. Several weakly anomalous areas and interesting conductors were identified but no major geological, geophysical or geochemical targets were proven (Pirie 1988). The conductors were tested with 14 drill holes totaling 1681.5 m. Although no mass sulphide was encountered, Au values up to 1050 ppb were found in hole CCF-16 at a depth of 94.5 to 97.5 m within an altered quartz-feldspar porphyry (QFP) rhyolite dome (Gray, 1987).

The 1988 field season extended the HLEM coverage north over the Chu Chua Main Grid (Lear, 1989). Minnova's 1988 drill program tested the continuity of grade and thickness in the Chu Chua area by establishing drill intercepts at a 25 m spacing comprising 13 holes totaling 1152 m. Significant tonnage was added to the deposit as well as establishing the western margin of the main sulphide lens. Two zones of mineralization were identified in the main lens, termed the Footwall and Hanging Wall zones (Blackadar 1989).

During the 1989 field season, approximately 24.3 line-km of transient electromagnetic survey was conducted over a previous grid by Quantech Consulting Inc (Wild 1989). Additionally, 21 drill holes totaling 1662.5 m were completed in the deposit area, further delineating near surface ore reserves.

Between August 1 and November 10, 1990, eight holes totaling 1731.9 m were drilled, testing coincident EM and magnetic anomalies on the CC-11 claim and attempting to expand the Chu Chua deposit on the CC-1 claim. A sequence of wackes, graphitic argillites and cherts explained many of the EM anomalies on CC-11. Results from drill hole MCC-56 suggested a favourable massive sulphide environment due to alteration (sericitization and silicification) of the sediments and the presence of a bedded pyritic chert (Heberlein 1990).

Minnova completed their last work in the Chu Chua area from July 12 to October 24, 1991. Eight drill holes totaling 4240.5 m tested the Chu Chua sulphide horizon along strike and down-dip; these holes were also probed with Pulse EM surveys. Drill intersections of intense silicification north of the deposit were interpreted to be the result of hydrothermal fluids during mineralization. At a depth of 365 m a new hanging wall massive sulphide zone was intersected (CCF-69: 0.97% Cu, 0.84 g/T Au over 14.85 m and 0.75% Cu, 1.37 g/T AU over 4.65 m) (Wells 1991).

In 1995, Eighty Eight Resources conducted a soil and rock geochemical survey on their KB group of claims (south of the Chu Chua deposit), finding favourable geology and alteration associated with massive sulphide deposits (Belik, 1995). They did not follow up their findings.

Work on Chu Chua resumed in 2006, when Strongbow completed a soil sampling program on the central portion of the Chu Chua claims. This survey validated the position of historic work and found multi-element relationships between EM conductor and soil anomalies (Gale, 2007).

GEOLOGICAL SETTING

Regional Geology

Schiarizza and Preto (1987) mapped the Adams Plateau Clearwater-Vavenby area at 1:100,000 providing a concise regional geological picture for the Chu Chua property. The following regional geology section is taken from this work.

The Chu Chua area is on the western edge of the Omineca Belt and is underlain by the Fennell Formation of the Slide Mountain Assemblage to the west and by the Eagle Bay Assemblage to the east (Figure 3). The Early Cambrian to Mississippian Eagle Bay Assemblage is in the pericratonic Kootenay Terrane and consists of metasedimentary and metavolcanic rocks which are repeated in four Northwest-dipping thrust sheets. The assemblage is comprised of a Lower Palaeozoic succession of clastic metasediments, *carbonate* and mafic metavolcanic rocks, and an overlying Devono- Mississippian succession of felsic to intermediate melavolcanic rocks and metasediments. The Homestake and Rea VMS deposits are hosted by intermediate to felsic metavolcanic rocks of the Lower Devono-Mississippian succession.

The Slide Mountain Assemblage is part of Slide Mountain Terrane and consists of the Devonian to Middle Permian Fennell Formation. The formation is an oceanic sequence consisting of two major divisions. The structurally lower (eastern) division comprises a heterogeneous assemblage of bedded chert, gabbro, diabase, pillowed basalt, clastic metasediments, quartz-feldspar-pophyry rhyolite and intrafonnalional conglomerate. The upper (western) division consists almost entirely of pillowed and massive basalt with gabbro and minor bedded chert and argillite. Both intrusive and extrusive mafic igneous rocks are tholeiitic. Tops throughout the succession consistently face west.

The Fennell Formation and Eagle Bay Assemblage are intruded by mid-Cretaceous granodiorite and quartz-monzonite of the Raft and Baldy batholiths. The package is locally overlain by Eocene Kamloops Group volcanic and sedimentary rocks and Miocene lavas. The map area is dominated by easterly directed thrust faults, which imbricate the Fennell Formation and *separate* it from the underlying Eagle Bay Assemblage. Tectonic emplacement of the Fennell Formation over the Eagle Bay Assemblage was followed by southwesterly-directed folding and associated thrust faulting. Folding and fabrics associated with this event are evident in the Eagle Bay Assemblage, but are rarely seen in the Fennell Formation.

Local Geology

The following summary of the local geology is reprinted from Heberlein (1990). Detailed discussion of individual lithological units can be found in Wild (1989).

The Chu Chua property is underlain by rocks of the Mississippian to Permian Fennell Formation (Schiarizza and Preto, 1987). Two litho-structural packages make up the Fennell Fm. These are called the upper and lower divisions. The lower division forms a north-south belt that extends from the Barriere River fault in the south to Clearwater in the north. It is composed of a complexly interbedded and thrust imbricated sequence of massive basalt, clastic metasediments (greywackes and argillites), ribbon cherts, quartz-feldspar phyric rhyolite and intraformational conglomerate. The upper division underlies most of the property area and hosts the Chu Chua deposit. It consists of pillowed to massive basalt flows, diabase sills, argillite and rare chert. These rocks can be traced from Barriere as far north as Wells Grey Park. They are responsible for the rugged cliff exposures on either side of the North Thompson River Valley between Little Fort and Clearwater.

Both divisions of the Fennell Formation are intruded by the Cretaceous Baldy Batholith, which forms a prominent easterly trending mountain range to the northeast of Barriere.

Deformation in the Fennell formation is not intense. Units have been rotated into a vertically dipping west facing homocline that is interpreted to be the western limb of a thrust-dismembered anticline (Schiarizza and Preto, 1987). There is little evidence for mesoscopic folding and penetrative fabrics are mostly absent.

Late, north and east trending (Tertiary?) normal faults cause local offsets of the Upper Fennell stratigraphy. A west-dipping thrust fault is inferred to separate the upper and lower divisions of the Fennell Fm. This is based on conodont ages determined from chert beds in both divisions. The Lower Fennell sequence is also inferred to be thrust imbricated based on fossil data (Schiarizza and Preto, 1987).

Both Fennell Formation divisions are regionally metamorphosed to lower greenschist facies. Close to the contact of the Baldy Batholith (within approximately 500 m) the regional metamorphism is overprinted by a contact thermal aureole. Locally this reaches hornblende hornfels grade. Despite the metamorphism, primary textures are well preserved in both volcanic and sedimentary units.

Chu Chua Deposit Geology

The work of Wild (1989) offered an excellent description of Chu Chua mineralization; the proceeding three paragraphs are from this work.

The Chu Chua deposit consists of two major and several minor sulphide lenses hosted by massive and pillowed green basalt of the Upper Fennell Formation. The lenses are oriented along a north-south trend dipping from vertical to very steeply west. The principal axes of the lenses appear to plunge gently to the south. The strike extension of near surface mineralization is approximately 300 m and total thicknesses for the mineralized zones range up to 80 m. Massive sulphide has been intersected as far as 350 m below the surface.

Massive sulphides lie immediately below a very sharp contact with the hangingwall basalts. Pyrite makes up approximately 90% of the massive sulphide, often occurring as coarse anhedral grains displaying annealed textures. Chalcopyrite is the main ore mineral occurring as massive streaks up to 25 cm thick, as small inclusions in both pyrite and magnetite, and as fracture fillings and interstices in coarse granular pyrite. These textures suggest a large degree of remobilization. Thin section work (Manley, 1988 -unpublished paper), has shown good triple junctions in granular pyrite with chalcopyrite often occurring in the interstices, as tiny anhedral blebs (50-200 micrometres), and as inclusion trails inside pyrite grains. Megascopically, sections of massive sulphide show good rolled textures and brecciation, indicating either primary collapse structures or, more likely, tectonic activity.

Other economic minerals identified in drillcore include covellite, chalcocite, sphalerite and magnetite. Cubanite ($CuFe,S_3$) and stannite are also present (Aggarwal, 1982). Covellite occurs in chalcopyrite-rich sections as fracture fillings. Chalcocite occurs as discrete grains within either pyrite or chalcopyrite (Manley, 1988). Sphalerite and possibly trace amounts of galena occur as fine grained and massive blebs usually but not exclusively with copper mineralization.

Magnetite content increases toward the footwall occurring as subhedral grains possibly mixed with or replacing pyrite. The matrix is likely quartz and barite. Other metals present in the ore zone include gold (commonly 1 g/t), silver (commonly 15-30 g/t), cobalt (310-475 ppm), and trace amounts of tin (stannite), platinum, and palladium (Aggarwal, 1982).

SUMMARY OF 2008 WORK

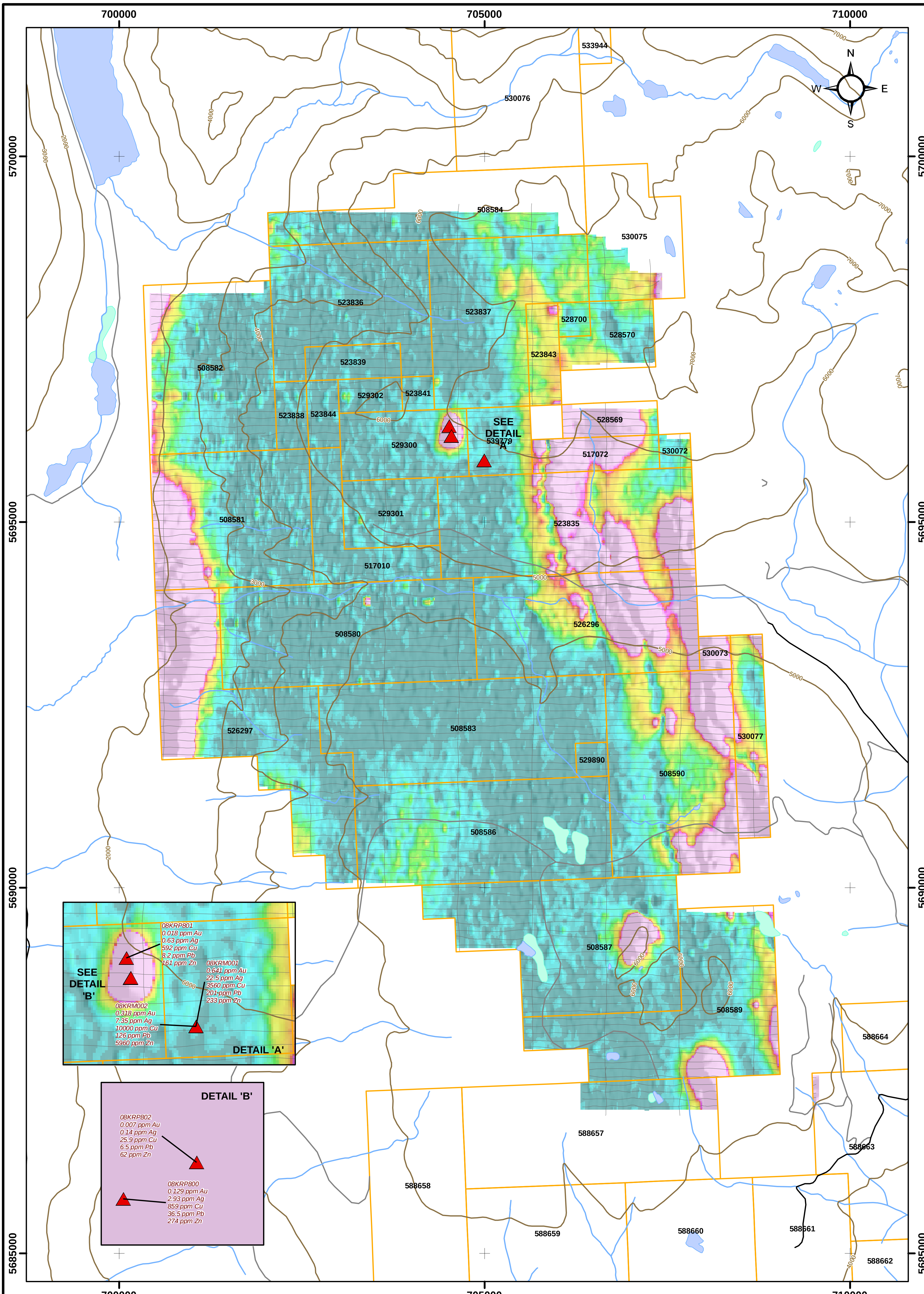
Exploration of the Chu Chua property in 2008 comprised an 839.7 line-km airborne geophysical survey, internet-based claim staking, and a property visit by the author during which five rock/core samples were collected; a partial data compilation of the Chu Chua property had also been conducted. The heli-borne AeroTEM III system of Aeroquest International provided excellent electromagnetic and magnetic data and revealed geophysically anomalous targets warranting the acquisition of additional claims. Sampling conducted by the author was limited by snowfall. Total expenditure for this work was $154,788.19 (Appendix 1).

Airborne Geophysical Survey

Aeroquest International was contracted by APEX to perform an airborne geophysical survey in the summer of 2008 over the Chu Chua land package. The AeroTEM III, time-domain electromagnetic system in conjunction with a cesium vapour magnetometer was flown east-west with 100m line spacing from June 29 to July 5, 2008 for a total of 839.7 line-km (Appendix 2). Several coincident magnetic-electromagnetic or solely magnetic anomalies were identified and represent promising metal targets (Figures 4 and 5). The electromagnetic data also shows north-striking, linear anomalies along the eastern boundary of the claims.

The Chu Chua deposit was easily identified by the survey as a magnetic anomaly accompanied by a slightly offset electromagnetic anomaly likely representing the juxtaposition of the massive sulphide body and magnetite alteration of the host rocks. Two other anomalies of this nature were identified in the southern portion of the claims. A discrete, EM anomaly in the east-central portion of claim 508587 matches the Chu Chua anomaly in size and is offset to the east from a prominent magnetic linear. A second, similar anomaly is present on the boundary of the 508589 mineral claim, cut-off by the extents of the survey. This anomaly strikes onto an adjacent property and formerly open ground, subsequently staked by LCPI.

Four magnetics-only anomalies transect the central portion of the airborne survey in an east-northeast direction through claims 526297, 508580 and 526296. These anomalies are discrete and of similar size to the Chu Chua deposit



Legend

- 2008 Samples
- Elevation Contours - 1000ft intervals
- Roads
- Railway
- Trails
- Watercourse
- Limited Use Roads
- Waterbodies
- Wetlands
- Chu Chua Claims
- Flight Lines

ANGLO COLUMBIA MINES INC.

Chu Chua Property

2008 SAMPLING AND AIRBORNE GEOPHYSICS - ZOFF

British Columbia, Canada

0 0.5 1 2 Kilometers

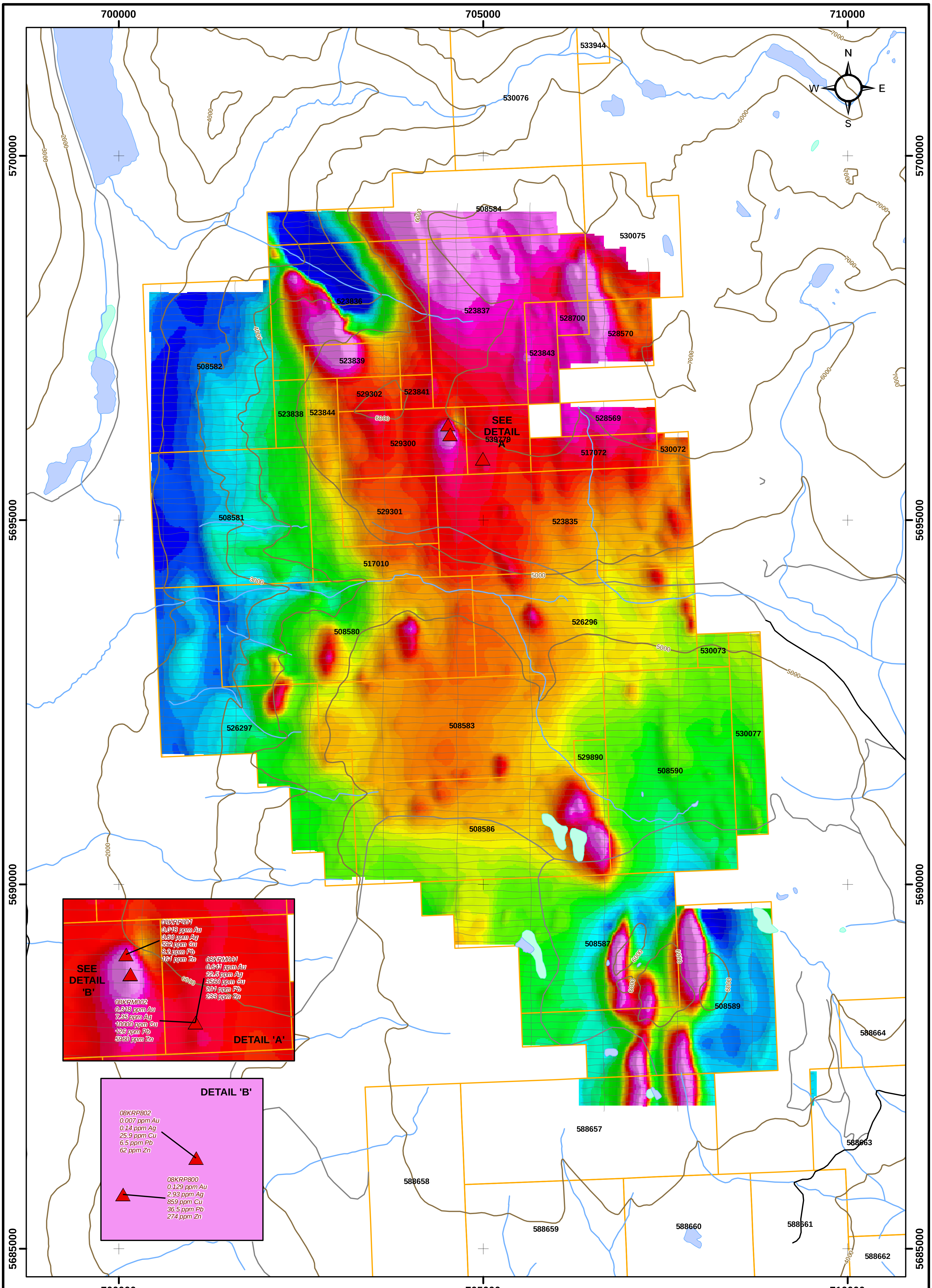
1:50,000

NAD 1983 Zone 10

APEX Geoscience Ltd.

Edmonton, Alberta December, 2008

FIGURE 4



Legend

- 2008 Samples
- Elevation Contours - 1000ft intervals
- Roads
- Railway
- Trails
- Watercourse
- Limited Use Roads
- Waterbodies
- Wetlands
- Chu Chua Claims
- Flight Lines

ANGLO COLUMBIA MINES INC.

Chu Chua Property

2008 SAMPLING AND AIRBORNE GEOPHYSICS - TMI

British Columbia, Canada

0 0.5 1 2 Kilometers

1:50,000

NAD 1983 Zone 10

APEX Geoscience Ltd.
Edmonton, Alberta December, 2008

FIGURE 5

magnetic anomaly. A larger, double-lobed magnetic anomaly is present on the eastern boundary of claim 508586 which will also require follow-up.

The acquisition of modern geophysical data has proven to be a powerful tool in aiding the exploration of the Chu Chua property, in part due to the deeper penetration of these modern techniques. Several of the anomalies identified are very similar to the Chu Chua deposit and suggest the presence of additional massive sulphide deposits. These anomalies have not been covered with intensive prospecting or soil sampling but some historic soil sampling borders the recently-identified anomaly in claim 508587 and shows several samples to the north and east anomalous in Cu and Zn.

The discrete, magnetics-only anomalies could still represent massive sulphide targets or intrusion-related precious- and/or base-metal targets. Linear, electromagnetic anomalies along the eastern boundary of the claims likely represent graphitic sediments, but these can be prospective for epithermal vein or disseminated precious-metal mineralization.

Additional Claim Staking

Exceptional results from the airborne survey spoke to the overall prospectivity of the Chu Chua area stratigraphy and led to the staking of eight more claims (LVT08-CC1 to CC8; 3538.18 ha) along the southern boundary of the claim parcel.

Rock/Core Sampling

The author visited the property on November 25, 2008 to collect samples and attempt to ground truth several of the geophysical anomalies; this was made difficult due to the recent snowfall. Three rock samples of variably altered volcanic rocks were collected from around the Chu Chua deposit and two core samples were taken from drill hole CC-21 at approximate depths of 193 and 208 m, respectively. Pyrite and magnetite were associated with the rock samples, the best of which (08KRP800) assayed 0.086% Cu, 0.027% Zn, 0.129 g/t Au and 2.93 g/t Ag. The core samples comprised chalcopyrite-bearing volcanic rocks and massive sulphide, the latter of which (08KRM002) assayed 3.78% Cu, 0.6% Zn, 0.318 g/t Au and 7.35 g/t Ag. Analytical results and rock descriptions are included as Appendix 3.

The helicopter accessibility to ground check some airborne anomalies was restricted due to snow and tree cover.

Data Compilation

Basic digital data from the Chu Chua property was provided to APEX by Strongbow which served as the base for a geographic information systems (GIS) project, specifically an ArcGIS project built by APEX. Some drill, soil, rock and geophysical data along with infrastructure, topography and hydrography information were compiled by APEX for the purposes of property evaluation and writing this report. Some geochemical data from rock and soil analysis and historic drill data remains to be digitized.

SAMPLE PREPARATION, ANALYSES AND SECURITY

Rock samples were collected by the author (a Professional Geologist). Grab samples of at least fist size were put in a plastic bag along with a sample tag, and the bags were tied with flagging tape. GPS locations of each sample were recorded in the field. Samples were kept within the authors control until shipped to the laboratory; no additional security measures (numbered security tags, etc.) were taken. The author did not have control over the samples at all times and therefore cannot personally verify what happened to the samples from the time they left Kamloops to the time they were received in Vancouver. There was never a reason to believe that the security of the samples was compromised. No security breaches were suspected by APEX or the laboratory. Once the samples arrived at the lab they remained in the custody of the independent laboratory until final processing was completed.

Because of the paucity of samples collected, the author did not submit standards or blanks with the rock samples. Rock samples were sent to ALS Chemex Laboratories (ALS) in Vancouver, B.C. who carries an ISO 9001:2000 accreditation.

Prior to analysis, rock samples were dried (if necessary) and crushed to greater than 70% passing 2 mm. A representative split of the sample (1 kg) was then taken using a riffle splitter and pulverized to better than 85% passing 75 microns.

Multi-element geochemical analysis employed a combination of Inductively Coupled Plasma–Mass Spectroscopy (ICP-MS) and Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) on a 0.5 g sub-sample for trace elements following an aqua regia digestion.

Although gold concentrations were reported for this technique, the lower detection limit of 20 ppb was deemed inadequate for this survey. Therefore, gold concentrations were determined by Fire Assay (FA)/ ICP-AES on a 30 g charge weight. The detection limit for this technique is 1 ppb. A prepared sample was fused with lead oxide, sodium carbonate, borax and silica, inquarted with gold-free silver and cupelled to yield a precious metal bead. The bead was digested in 0.5 mL dilute nitric acid in a microwave oven, 0.5 mL of concentrated hydrochloric acid was then added and the bead was further digested in the microwave. The digested solution was cooled, diluted to a total volume of 4 mL with de-mineralized water and analyzed by ICP-AES.

DATA VERIFICATION

Sampling procedures used by the author followed standard industry practices for the collection, handling, shipping and analysis of samples. Well-established, accredited laboratories were used for all analytical work and the QA/QC procedures conducted by the lab performed well. Due to the limited nature and budget of the sampling program (i.e. prospecting), and the limited number of samples collected, a rigorous quality assurance and quality control (QA/QC) program was not warranted. No blank samples or standard samples were sent to the laboratory for analysis.

Airborne geophysical data was reviewed by independent geophysicist Christopher Campbell of Intrepid Geophysics Ltd. and determined to be of excellent quality.

STATEMENT OF QUALIFICATIONS

I, Kristopher J. Raffle, residing at 1277 Nelson Street, Vancouver, British Columbia, Canada do hereby certify that:

1. I am a Senior Geologist employed by APEX Geoscience Ltd. ("APEX"), Suite 200, 9797 – 45 Avenue, Edmonton, Alberta, Canada. I am the author of the report entitled: "2008 REPORT ON EXPLORATION ACTIVITIES CHU CHUA PROPERTY", dated December 23, 2008, and am responsible for the preparation of the entire report.

2. I am a graduate of the University of British Columbia, Vancouver, British Columbia with a B.Sc. in Geology (2000) and have practised my profession continuously since 2000.

3. I am a Professional Geologist registered with APEGBC (Association of Professional Engineers, Geologists and Geophysicists of British Columbia), and a 'Qualified Person' in relation to the subject matter of this report.

4. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Chu Chua Property and do not hold securities of Anglo Columbia Mines Inc. I did not have any prior involvement with the Property.

5. To the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

6. I supervised exploration at the Property that is the subject of this Report on behalf of Anglo Columbia Mines Inc.

Kristopher J. Raffle, B.Sc., P.Geol.

Edmonton, Alberta, Canada
December 23, 2008

REFERENCES

Blackadar, D.W. (1989). Drilling Report on the CC 1, CC 2 and CC 3 Claims, Kamloops Mining Division, 92P/8E, Lat. 51°22' N, Long. 120 °04' W, British Colombia Ministry of Energy and Mines, Assessment Report no. 18818.

Belik, G.S. (1995) Geological and Geochemical Report on the KB property, Kamloops Mining Division, 82M/5W and 92P/8E for Eighty- Eight Resources, British Colombia Ministry of Energy and Mines, Assessment Report no. 23816.

Candy, C., and White, G.E. (1984). Vestor Explorations Ltd. Geophysical Report on a Vector Pulse Electromagnetometer Survey on the CC 5, 6, 7 claims, Kamloops Mining Division, B.C. Lat 51°23' N, Long 120 °03' W, N.T.S. 92P/8, British Colombia Ministry of Energy and Mines, Assessment Report no. 12884.

Gale, D. F. (2007) 2006 Report on the Exploration Activities, Chu Chua Property, Kamloops Mining Division, NTS 92P/8E, Lat 51'22" Long 120'04 'W, UTM Zone 10: 704480E and 5696320N (NAD 83).

Gray, M.J. (1987). Minnova Inc. Diamond Drill Report, Chu Chua Option, Barriere Area, Kamloops Mining Division, B.C. 92P/8E, Lat. 51°21', Long. 120 °03', British Colombia Ministry of Energy and Mines, Assessment Report no. 16812.

Fraser, D.C. and Dvorak, Z. (1979) DIGHEM II Survey of North Thompson River, British Colombia for Craigmont Mines Limited by DIGHHEM Limited, Kamloops Mining Division, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 7659.

Hallof, P.G., Cartwright P.A., and Adomaitus, P.G. (1980). Report on the Horizontal Loop Electro-Magnetic Survey on the 92P/8 CC Group Mining Division, B.C. for Craigmont Mines Limited, British Colombia Ministry of Energy and Mines, Assessment Report no. 8496.

Heberlein, D. (1990). Assessment Report on the 1990 Diamond Drilling Program, Chu 1-3 (9019, 9110, 9112), CC 1-3, CC 10-11 (1154, 1373, 1374, 1459, 1460), Ch-1 (1461), Kamloops Mining Division, NTS 92P/8E, Lat. 51°22' N, Long. 120 °04' W, British Colombia Ministry of Energy and Mines, Assessment Report no. 20670.

Lear, S. (1989). Geophysical Report, Chu Chua Project, Green Mountain Group, Kamloops Mining Division, NTS 92P/8E, 82M/5W, Lat. 51°24' N, Long. 120 °00' W, British Colombia Ministry of Energy and Mines, Assessment Report no. 18275.

Morganti, J.M. (1983). Summary on the Chu Chua (CC) Deposit, Craigmont Mines Limited., Nov. 29, 1983.

Pirie, I.D. (1985). Diamond Drill Report, CCF 1, 2, and 3, Chu Chua Option, Kamloops Mining Division, NTS 82M/5W, 92P/8E, 51^{o}15’, 120 ^{o}00’, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 14186.

Pirie, I.D. (1985). Report on Linecutting and HLEM Survey, Bar and Chua Properties, Kamloops Mining Division, NTS 82M/5W, 92P/8E, 51^{o}15’, 120^{o}00’, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 14187 part 1.

Pirie, I.D. (1985). Report on Linecutting and HLEM Survey, Bar and Chua Properties, SC and CH Claims, Kamloops Mining Division, NTS 92P/8E, 51^{o}15’, 120^{o}00’, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 14187 part 2.

Pirie, I.D. (1985). Geology and Geochemistry of the Anna and SC Claim Groups, Bar Project, NTS 82M/5W, 92P/8E, Lat. 51^{o}20’, Long. 120 ^{o}00’, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 14243.

Pirie, I.D. (1986). Chu Chua Option, Report on the 1986 Work Progress, Kamloops Mining Division, NTS 82M/5W, 92P/8E, Lat. 51^{o}22.8’, Long. 120 ^{o}03.6’, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 15385.

Pirie, I.D. (1988). Geological and Geophysical Report, Bar Project, FY claim Group, Kamloops Mining Division, Lat. 51^{o}20’ N, Long. 120 ^{o}00’ W, British Colombia Ministry of Energy and Mines, Assessment Report no. 17264.

Pirie, I.D. (1988). Geology, Geochemistry, and Geophysics of the SC1 Claim, Bar Project, NTS 82M/5W, 92P/8E, Lat. 51^{o}20’ N, Long. 120 ^{o}00’ W, British Colombia Ministry of Energy and Mines, Assessment Report no. 17475.

Vollo, N.B. (1979). Diamond Drilling Report on CC 1 - 11 Claims, Kamloops Mining Division, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 7110.

Vollo, N.B. (1979). Diamond Drilling Report CC Group, Kamloops Mining Division, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 7443.

Vollo, N.B. (1979). Diamond Drilling Report on the 92P/8 CC Groups of Craigmont Mined Limited, On Chu Chua Mountain, Kamloops Mining Division, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 7499.

Vollo, N.B. (1981). Diamond Drilling Report, Kamloops Mining Division, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 9623.

Vollo, N.B. (1982). Diamond Drilling Report, Kamloops Mining Division, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 10940.

Vollo, N.B. (1982). Diamond Drilling Report, Kamloops Mining Division, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 10958.

Vollo, N.B. (1982). Geophysical, Geochemical and Diamond Drilling, Kamloops Mining Division, B.C. British Colombia Ministry of Energy and Mines, Assessment Report no. 10957.

Wells, G.S. (1991) Diamond Drilling and Geophysical Report, Chu Chua Property, Kamloops Mining Division, NTS 92P/8E, Lat. 51^{o}22' N, Long. 120 ^{o}04' W, British Colombia Ministry of Energy and Mines, Assessment Report no. 22039.

Wild, C. (1989). Geological Mapping, Lithogeochemical Sampling, Transient Electromagnetics, and Diamond Drilling Report, Chu Chua Project, Chu Chua Group A, Chu Chua Group B, Chu Chua Group C, Chu Chua Group D , Kamloops Mining Division, 92P/8E, Lat. 51^{o}22' N, Long. 120^{o}04' W, British Colombia Ministry of Energy and Mines, Assessment Report no. 19540.

APPENDIX 1

2008 EXPLORATION EXPENDITURES SUMMARY

2008 Expenditures Summary

Item / Description		Amount
Peter Whyte	Geo - Office	2,803.50
Sarah Arsenault	Reception	428.00
Kris Raffle	Geo - Field	1,000.00
Kris Raffle	Geo - Office	500.00
Matt Muskas	Geo - Office	2,400.00
Rob L'Heureux	Geo - Office	5,550.00
Michael Dufresne	Principal - Office	4,596.75
	Personnel Total	**17,278.25**
Airborne Geophysics		**124,338.00**
Analytical		**250.00**
Helicopter		**1,500.00**
Geophysical Consulting		**500.00**
Anglo Columbia Mines Inc. Expenditures		**10,000.00**
Miscellaneous		**921.94**
	Expenditures Total	**154,788.19**

APPENDIX 2

AIRBORNE GEOPHYSICAL REPORT – AEROQUEST INTERNATIONAL
(see accompanying disc)

Report on a Helicopter-Borne AeroTEM System Electromagnetic & Magnetic Survey

Aeroquest Job # 08107

Chua Chua
Little Fort, BC, Canada
NTS 082M05, 092P08

For

APEX Geoscience Ltd.

by

AEROQUEST

7687 Bath Road,
Mississauga, ON, L4T 3T1
Tel: (905) 672-9129
Fax: (905) 672-7083
www.aeroquest.ca

Report date: November 2008

Report on a Helicopter-Borne AeroTEM System Electromagnetic & Magnetic Survey

Aeroquest Job # 08107

Chua Chua
Little Fort, BC, Canada
NTS 082M05, 092P08

For

APEX Geoscience Ltd.

Suite 200 – 9797 45th Ave.
Edmonton, Alberta
T6E 5V8, Canada

by

AEROQUEST

7687 Bath Road,
Mississauga, ON, L4T 3T1
Tel: (905) 672-9129
Fax: (905) 672-7083
www.aeroquest.ca

Report date: November 2008

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF MAPS (1:20,000)

- TMI – Coloured Total Magnetic Intensity (TMI) with line contours and EM anomaly symbols.
- ZOFF1– AeroTEM Z1 Off-time with line contours, and EM anomaly symbols.
- EM – AeroTEM off-time profiles Z2 – Z12 and EM anomaly symbols.

1. INTRODUCTION

This report describes a helicopter-borne geophysical survey carried out on behalf of Apex Geoscience Ltd. for the Chua Chua Project, near Little Fort, British Columbia.

The principal geophysical sensor is Aeroquest's exclusive AeroTEM III (Mike) time domain helicopter electromagnetic system which is employed in conjunction with a high-sensitivity caesium vapour magnetometer. Ancillary equipment includes a real-time differential GPS navigation system, radar altimeter, video recorder, and a base station magnetometer. Full-waveform streaming EM data is recorded at 36,000 samples per second. The streaming data comprise the transmitted waveform, and the X component and Z component of the resultant field at the receivers. A secondary acquisition system (RMS) records the ancillary data.

The total survey coverage is 839.7 line-km, of which 816.7 line-km fell within the defined project area (Appendix 1). The survey was made up of one block, flown at 100 metre line spacing and at an azimuth of 90º/270º (Table 1). The survey flying described in this report took place from June 29th – July 5th, 2008. This report describes the survey logistics, the data processing, presentation, and provides the specifications of the survey.

2. SURVEY AREA

The Project area (Figure 1) is located in central British Columbia approximately 6.9 kms southeast and 34kms southwest of Little Fort. The survey consisted of a single block, Chua Chua (~73 km²), and can be located on NTS map sheets 082M05 and 092P08. There are 48 mining claims either wholly or partially covered by the survey lines. Full details are in Appendix 2. The base of survey operations was at Clearwater, BC.

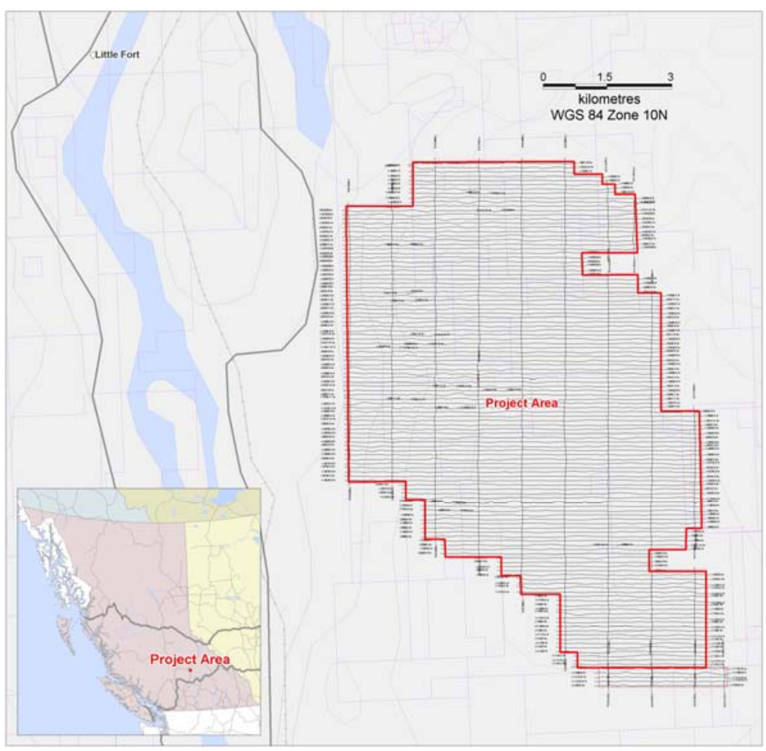


Figure 1. Project Area and extension with flight path.

3. SURVEY SPECIFICATIONS AND PROCEDURES

The survey specifications are summarised in the following table:

Project Name	Line Spacing (metres)	Line Direction	Survey Coverage (line-km)	Date flown
Chua Chua	100	90º/270º	839.7	June 29th – July 5th, 2008

Table 1. Survey specifications summary

The survey coverage was calculated by adding up the along-line distance of the survey lines and control (tie) lines as presented in the final Geosoft database. The survey was flown with a line spacing of 100 metres. The control (tie) lines were flown perpendicular to the survey lines with various tie line spacing.

The nominal EM bird terrain clearance is 30 metres, but can be higher in more rugged terrain due to safety considerations and the capabilities of the aircraft. The magnetometer sensor is mounted in a smaller bird connected to the tow rope 33 metres above the EM bird and 21 metres below the helicopter (Figure 2). Nominal survey speed over relatively flat terrain is 75 km/hr and is generally lower in rougher terrain. Scan rates for ancillary data acquisition is 0.1 second for the magnetometer and altimeter, and 0.2 second for the GPS determined position. The EM data is acquired as a data stream at a sampling rate of 36,000 samples per second and is processed to generate final data at 10 samples per second. The 10 samples per second translate to a geophysical reading about every 1.5 to 2.5 metres along the flight path.

3.1. NAVIGATION

Navigation is carried out using a GPS receiver, an AGNAV2 system for navigation control, and an RMS DGR-33 data acquisition system which records the GPS coordinates. The x-y-z position of the aircraft, as reported by the GPS, is recorded at 0.2 second intervals. The system has a published accuracy of less than 3 metres. A recent static ground test of the Mid-Tech WAAS GPS yielded a standard deviation in x and y of less than 0.6 metres and for z less than 1.5 metres over a two-hour period.

3.2. SYSTEM DRIFT

Unlike frequency domain electromagnetic systems, the AeroTEM III system has negligible drift due to thermal expansion. The operator is responsible for ensuring the instrument is properly warmed up prior to departure and that the instruments are operated properly throughout the flight. The operator maintains a detailed flight log during the survey noting the times of the flight and any unusual geophysical or topographic features. Each flight included at least two high elevation 'background' checks. During the high elevation checks, an internal 5 second wide calibration pulse in all EM channels was generated in order to ensure that the gain of the system remained constant and within specifications.

3.3. FIELD QA/QC PROCEDURES

On return of the pilot and operator to the base, usually after each flight, the AeroDAS streaming EM data and the RMS data are carried on removable hard drives and Flashcards, respectively and transferred to the data processing work station. At the end of each day, the base station magnetometer data on FlashCard is retrieved from the base station unit.

Data verification and quality control includes a comparison of the acquired GPS data with the flight plan; verification and conversion of the RMS data to an ASCII format XYZ data file; verification of the base station magnetometer data and conversion to ASCII format XYZ data; and loading, processing and conversion of the streaming EM data from the removable hard drive. All data is then merged to an ASCII XYZ format file which is then imported to an Oasis database for further QA/QC and for the production of preliminary EM, magnetic contour, and flight path maps.

Survey lines which show excessive deviation from the intended flight path are re-flown. Any line or portion of a line on which the data quality did not meet the contract specification was noted and reflown.

4. AIRCRAFT AND EQUIPMENT

4.1. AIRCRAFT

A Eurocopter (Aerospatiale) AS350B2 "A-Star" helicopter - registration C-GPHM was used as survey platform. The helicopter was owned and operated by VIH Helicopters. Installation of the geophysical and ancillary equipment was carried out by Aeroquest Limited personnel in conjunction with a licensed aircraft. The survey aircraft was flown at a nominal terrain clearance of 275 ft (83metres).

Figure 2. Helicopter of type Eurocopter (Aerospatiale) AS350B2 "A-Star".

4.2. MAGNETOMETER

The AeroTEM III airborne survey system employs the Geometrics G-823A caesium vapour magnetometer sensor installed in a two metre towed bird airfoil attached to the main tow line, 21 metres below the helicopter (Figure 2). The sensitivity of the magnetometer is 0.001 nanoTesla at a 0.1 second sampling rate. The nominal ground clearance of the magnetometer bird is 51 metres (170 ft.). The magnetic data is recorded at 10 Hz by the RMS DGR-33.

4.3. ELECTROMAGNETIC SYSTEM

The electromagnetic system is an Aeroquest AeroTEM III time domain towed-bird system (Figure 3). The current AeroTEM III transmitter dipole moment is 183 kNIA. The AeroTEM bird is towed 53 metres (175 ft) below the helicopter. More technical details of the system may be found in Appendix 6.

The wave-form is triangular with a symmetric transmitter on-time pulse of 1.10 ms and a base frequency of 90 Hz (Figure 4). The current alternates polarity every on-time pulse. During every Tx on-off cycle (180 per second), 200 contiguous channels of raw X and Z component (and a transmitter current monitor, itx) of the received waveform are measured. Each channel width is 27.78 microseconds starting at the beginning of the transmitter pulse. This 200 channel data is referred to as the raw streaming data. The AeroTEM system has two separate EM data recording streams, the conventional RMS DGR-33 and the AeroDAS system which records the full waveform (Figure 4).

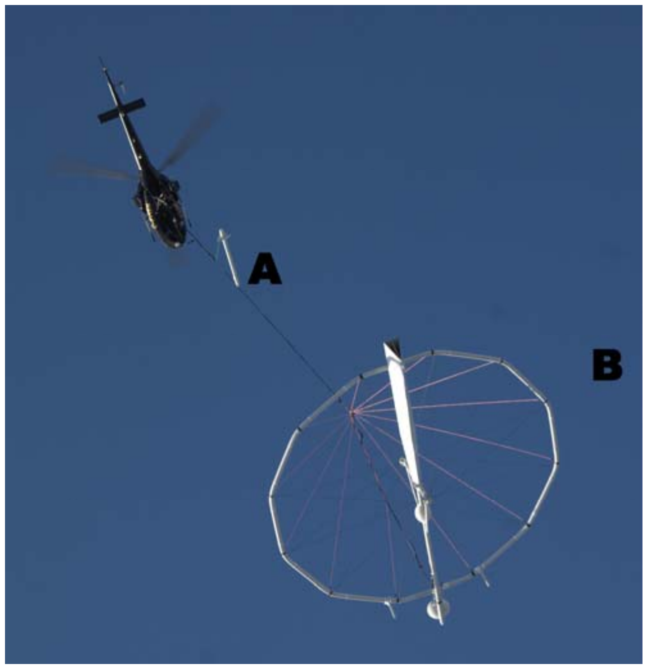


Figure 3. The magnetometer bird (A) and AeroTEM III EM bird (B)

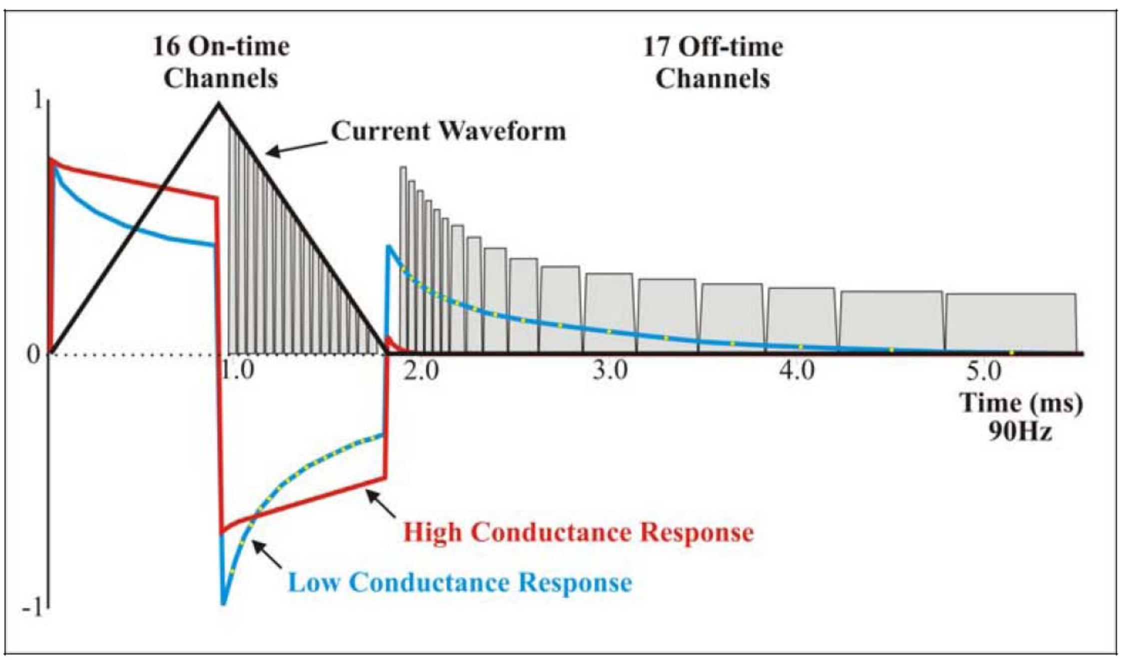


Figure 4. Schematic of Transmitter and Receiver waveforms

4.4. AERODAS ACQUISITION SYSTEM

The 200 channels of raw streaming data are recorded by the AeroDAS acquisition system (Figure 5) onto a removable hard drive. The streaming data are processed post-survey to yield 33 stacked and binned on-time and off-time channels at a 10 Hz sample rate. The timing of the final processed EM channels is described in the following table:

```
Average TxOn      -0.8484 us
Average TxSwitch  884.4345 us
Average TxOff     1699.7415 us
```

Channel	Sample Range	Time Width (us)	Time Center (us)	Time After TxOn (us)
On1	5 - 5	27.778	125.000	125.848
On2	6 - 6	27.778	152.778	153.626
On3	7 - 7	27.778	180.556	181.404
On4	8 - 8	27.778	208.333	209.182
On5	9 - 9	27.778	236.111	236.960
On6	10 - 10	27.778	263.889	264.737
On7	11 - 11	27.778	291.667	292.515
On8	12 - 12	27.778	319.444	320.293
On9	13 - 13	27.778	347.222	348.071
On10	14 - 14	27.778	375.000	375.848
On11	15 - 15	27.778	402.778	403.626
On12	16 - 16	27.778	430.556	431.404
On13	17 - 17	27.778	458.333	459.182
On14	18 - 18	27.778	486.111	486.960
On15	19 - 19	27.778	513.889	514.737
On16	20 - 20	27.778	541.667	542.515

Channel	Sample Range	Time Width (us)	Time Center (us)	Time After TxOff (us)
Off0	66 - 66	27.778	1819.444	119.703
Off1	67 - 67	27.778	1847.222	147.481
Off2	68 - 68	27.778	1875.000	175.259
Off3	69 - 69	27.778	1902.778	203.036
Off4	70 - 70	27.778	1930.556	230.814
Off5	71 - 71	27.778	1958.333	258.592
Off6	72 - 74	83.333	2013.889	314.147
Off7	75 - 77	83.333	2097.222	397.481
Off8	78 - 80	83.333	2180.556	480.814
Off9	81 - 83	83.333	2263.889	564.147
Off10	84 - 88	138.889	2375.000	675.259
Off11	89 - 93	138.889	2513.889	814.147
Off12	94 - 100	194.444	2680.556	980.814
Off13	101 - 110	277.778	2916.667	1216.925
Off14	111 - 125	416.667	3263.889	1564.147
Off15	126 - 148	638.889	3791.667	2091.925
Off16	149 - 185	1027.778	4625.000	2925.259

4.5. RMS DGR-33 ACQUISITION SYSTEM

In addition to the magnetics, altimeter and position data, six channels of real time processed off-time EM decay in the Z direction and one in the X direction are recorded by the RMS DGR-33 acquisition system at 10 samples per second and plotted real-time on the analogue chart recorder. These channels are derived by a binning, stacking and filtering procedure on the raw streaming data. The primary use of the RMS EM data (Z1 to Z6, X1) is to provide for real-time QA/QC on board the aircraft.

The channel window timing of the RMS DGR-33 6 channel system is described in the table below.

RMS Channel	Start time (µs)	End time (µs)	Width (µs)	Streaming Channels
Z1, X1	1269.8	1322.8	52.9	48-50
Z2	1322.8	1455.0	132.2	50-54
Z3	1428.6	1587.3	158.7	54-59
Z4	1587.3	1746.0	158.7	60-65
Z5	1746.0	2063.5	317.5	66-77
Z6	2063.5	2698.4	634.9	78-101

Figure 5. AeroTEM III Instrument Rack., including AeroDAS and RMS DGR-33 systems, AeroTEM power supply, data acquisition computer and AG-NAV2 navigation system.

4.6. MAGNETOMETER BASE STATION

The base magnetometer was a Geometrics G-859 caesium vapour magnetometer system with integrated GPS. Data logging and UTC time synchronisation was carried out within the magnetometer, with the GPS providing the timing signal. The data logging was configured to measure at 1.0 second intervals. Digital recording resolution was 0.001 nT. The sensor was placed on a tripod in an area of low magnetic gradient and free of cultural noise sources. A continuously updated display of the base station values was available for viewing and regularly monitored to ensure acceptable data quality and diurnal variation.

4.7. RADAR ALTIMETER

A Terra TRA 3500/TRI-30 radar altimeter is used to record terrain clearance. The antenna was mounted on the outside of the helicopter beneath the cockpit. Therefore, the recorded data reflect the height of the helicopter above the ground. The Terra altimeter has an altitude accuracy of +/- 1.5 metres.

4.8. VIDEO TRACKING AND RECORDING SYSTEM

A high resolution digital colour 8 mm video camera is used to record the helicopter ground flight path along the survey lines. The video is digitally annotated with GPS position and time and can be used to verify ground positioning information and cultural causes of anomalous geophysical responses.

Figure 6. Digital video camera typical mounting location.

4.9. GPS NAVIGATION SYSTEM

The navigation system consists of an Ag-Nav Incorporated AG-NAV2 GPS navigation system comprising a PC-based acquisition system, navigation software, a deviation indicator in front of the aircraft pilot to direct the flight, a full screen display with controls in front of the operator, a Mid-Tech RX400p WAAS-enabled GPS receiver mounted on the instrument rack and an antenna mounted on the magnetometer bird. WAAS (Wide Area Augmentation System) consists of approximately 25 ground reference stations positioned across the United States that monitor GPS satellite data. Two master stations located on the east and west coasts collect data from the reference stations and create a GPS correction message. This correction accounts for GPS satellite orbit and clock drift plus signal delays caused by the atmosphere and ionosphere. The corrected differential message is then broadcast through one of two geostationary satellites, or satellites with a fixed position over the equator. The corrected position has a published accuracy of less than 3 metres.

Survey co-ordinates are set up prior to the survey and the information is fed into the airborne navigation system. The co-ordinate system employed in the survey design was NAD83 [World] using the UTM zone 10 projection. The real-time differentially corrected GPS positional data was recorded by the RMS DGR-33 in geodetic coordinates (latitude and longitude using WGS84) at 0.2 s intervals.

4.10. DIGITAL ACQUISITION SYSTEM

The AeroTEM received waveform sampled during on and off-time at 200 channels per decay, 180 times per second, was logged by the proprietary AeroDAS data acquisition system. The streaming data was recorded on a removable hard-drive and was later backed-up onto DVD-ROM from the field-processing computer.

The RMS Instruments DGR33A data acquisition system was used to collect and record the analogue data stream, i.e. the positional and secondary geophysical data, including processed 6 channels EM, magnetics, radar altimeter, GPS position, and time. The data was recorded on 128 Mb capacities FlashCard. The RMS output was also directed to a thermal chart recorder.

5. PERSONNEL

The following Aeroquest personnel were involved in the project:

- Manager of Operations: Duncan Wilson
- Manager of Data Processing: Gord Smith
- Field Data Processor: Tim Moore , Thomas Wade
- Field Operator: Mark Andrews
- Data Interpretation and Reporting: Chris Kahue, Sandro Camilli

The survey pilot, Kerslake McLeod, was employed directly by the helicopter operator – VIH.

6. DELIVERABLES

6.1. Hardcopy Deliverables

The report includes a set of three 1:20,000 maps and the following three geophysical data products are delivered:

- TMI – Coloured Total Magnetic Intensity (TMI) with line contours and EM anomaly symbols.
- ZOFF1 – AeroTEM Z1 Off-time with line contours, and EM anomaly symbols.
- EM – AeroTEM off-time profiles Z2 – Z12 and EM anomaly symbols.

The coordinate/projection system for the maps is NAD83 – UTM Zone 10. For reference, the latitude and longitude in WGS84 are also noted on the maps.

All the maps show flight path trace, skeletal topography, and conductor picks represented by an anomaly symbol classified according to calculated off-time conductance. The anomaly symbol is accompanied by postings denoting the calculated off-time conductance, a thick or thin classification and an anomaly identifier label. The anomaly symbol legend and survey specifications are displayed on the left margin of the maps.

6.2. Digital Deliverables

6.2.1. Final Database of Survey Data (.GDB)

The geophysical profile data is archived digitally in a Geosoft GDB binary format database. A description of the contents of the individual channels in the database can be found in Appendix 3. A copy of this digital data is archived at the Aeroquest head office in Mississauga.

6.2.2. Geosoft Grid files (.GRD)

Levelled Grid products used to generate the geophysical map images. All grids have 20 m cell size.

- Total Magnetic Intensity from Mag sensor on the tow cable (maguf.grd)

- AeroTEM Z Offtime Channel 1 (zoff1.grd)

6.2.3. Digital Versions of Final Maps (.MAP, .PDF)

Map files in Geosoft .map and Adobe PDF format.

6.2.4. Google Earth Files (.kmz)

Flight navigation lines, EM Anomalies and geophysical grids in Google earth kmz format. Double click to view in Google Earth.

6.2.5. Free Viewing Software (.EXE)

- Geosoft Oasis Montaj Viewing Software
- Adobe Acrobat Reader
- Google Earth Viewer

6.2.6. Digital Copy of this Document (.PDF)

Adobe PDF format of this document.

7. DATA PROCESSING AND PRESENTATION

All in-field and post-field data processing was carried out using Aeroquest proprietary data processing software and Geosoft Oasis Montaj software. Maps were generated using 36-inch and 42-inch wide Hewlett Packard ink-jet plotters.

7.1. BASE MAP

The geophysical maps accompanying this report are based on positioning in the NAD83 datum. The survey geodetic GPS positions have been projected using the Universal Transverse Mercator projection in Zone 10 North. A summary of the map datum and projection specifications is given following:

- Ellipse: GRS 1980
- Ellipse major axis: 6378137m eccentricity: 0.081819191
- Datum: North American 1983 - Canada Mean
- Datum Shifts (x,y,z) : 0, 0, 0 metres
- Map Projection: Universal Transverse Mercator Zone 10 (Central Meridian 123ºW)
- Central Scale Factor: 0.9996
- False Easting, Northing: 500,000m, 0m

For reference, the latitude and longitude in WGS84 are also noted on the maps.

The background vector topography was sourced from Natural Resources Canada 1:250000 National Topographic Data Base data and the background shading were derived from NASA Shuttle Radar Topography Mission (SRTM) 90 metre resolution DEM data.

7.2. FLIGHT PATH & TERRAIN CLEARANCE

The position of the survey helicopter was directed by use of the Global Positioning System (GPS). Positions were updated five times per second (5 Hz) and expressed as WGS84 latitude and longitude calculated from the raw pseudo range derived from the C/A code signal. The instantaneous GPS flight path, after conversion to UTM co-ordinates, is drawn using linear interpolation between the x/y positions. The terrain clearance was maintained with reference to the radar altimeter. The raw Digital Terrain Model (DTM) was derived by taking the GPS survey elevation and subtracting the radar altimeter terrain clearance values. The calculated topography elevation values are relative and are not tied in to surveyed geodetic heights.

Each flight included at least two high elevation 'background' checks. These high elevation checks are to ensure that the gain of the system remained constant and within specifications.

7.3. Electromagnetic Data

The raw streaming data, sampled at a rate of 36,000 Hz (200 channels, 180 times per second) was reprocessed using a proprietary software algorithm developed and owned by Aeroquest Limited. Processing involves the compensation of the X and Z component data for the primary field waveform. Coefficients for this compensation for the system transient are determined and applied to the stream data. The stream data are then pre-filtered, stacked, binned to the 33 on and off-time channels and checked for the effectiveness of the compensation and stacking processes. The stacked data is then filtered, levelled and split up into the individual line segments. Further base level adjustments may be carried out at this stage. The filtering of the stacked data is designed to remove or minimize high frequency noise that cannot be sourced from the geology.

The final field processing step was to merge the processed EM data with the other data sets into a Geosoft GDB file. The EM fiducial is used to synchronize the two datasets. The processed channels are merged into 'array format; channels in the final Geosoft database as Zon, Zoff, Xon, and Xoff.

Apparent bedrock EM anomalies were interpreted with the aid of an auto-pick from positive peaks and troughs in the off-time Z channel responses correlated with X channel responses. The auto-picked anomalies were reviewed and edited by a geophysicist on a line by line basis to discriminate between thin and thick conductor types. Anomaly picks locations were migrated and removed as required. This process ensures the optimal representation of the conductor centres on the maps.

At each conductor pick, estimates of the off-time conductance have been generated based on a horizontal plate source model for those data points along the line where the response amplitude is sufficient to yield an acceptable estimate. Some of the EM anomaly picks do not display a Tau value; this is due to the inability to properly define the decay of the conductor usually because of low signal amplitudes. Each conductor pick was then classified according to a set of seven ranges of calculated off-time conductance values. For high conductance sources, the on-time conductance values may be used, since it provides a more accurate measure of high-conductance sources. Each symbol is also given an identification letter label, unique to each flight line. Conductor picks that did not yield an acceptable estimate of off-time conductance due to a low amplitude response were classified as a low conductance source. Please refer to the anomaly symbol legend located in the margin of the maps.

7.4. Magnetic Data

Prior to any levelling the magnetic data was subjected to a lag correction of -0.1 seconds and a spike removal filter. The filtered aeromagnetic data were then corrected for diurnal variations using the magnetic base station and the intersections of the tie lines. No corrections for the regional reference field (IGRF) were applied. The corrected profile data were interpolated on to a grid using a bi-directional grid technique with a grid cell size of 20 metres. The final levelled grid provided the basis for threading the presented contours which have a minimum contour interval of 10 nT.

8. GENERAL COMMENTS

The survey was successful in mapping the magnetic and conductive properties of the geology throughout the survey area. Below is a brief interpretation of the results. For a detailed interpretation please contact Aeroquest Limited.

8.1. MAGNETIC RESPONSE

The magnetic data provide a high resolution map of the distribution of the magnetic mineral content of the survey area. This data can be used to interpret the location of geological contacts and other structural features such as faults and zones of magnetic alteration. The sources for anomalous magnetic responses are generally thought to be predominantly magnetite because of the relative abundance and strength of response (high magnetic susceptibility) of magnetite over other magnetic minerals such as pyrrhotite.

8.2. EM ANOMALIES

The EM anomalies on the maps are classified by conductance (as described earlier in the report) and also by the thickness of the source. A thin, vertically orientated source produces a double peak anomaly in the z-component response and a positive to negative crossover in the x-component response (Figure 7). For a vertically orientated thick source (say, greater than 10 metres), the response is a single peak in the z-component response and a negative to positive crossover in the x-component response (Figure 8). Because of these differing responses, the AeroTEM system provides discrimination of thin and thick sources and this distinction is indicated on the EM anomaly symbols (N = thin and K = thick). Where multiple, closely spaced conductive sources occur, or where the source has a shallow dip, it can be difficult to uniquely determine the type (thick vs. thin) of the source (Figure 9). In these cases both possible source types may be indicated by picking both thick and thin response styles. For shallow dipping conductors the ‘thin’ pick will be located over the edge of the source, whereas the ‘thick’ pick will fall over the downdip ‘heart’ of the anomaly.

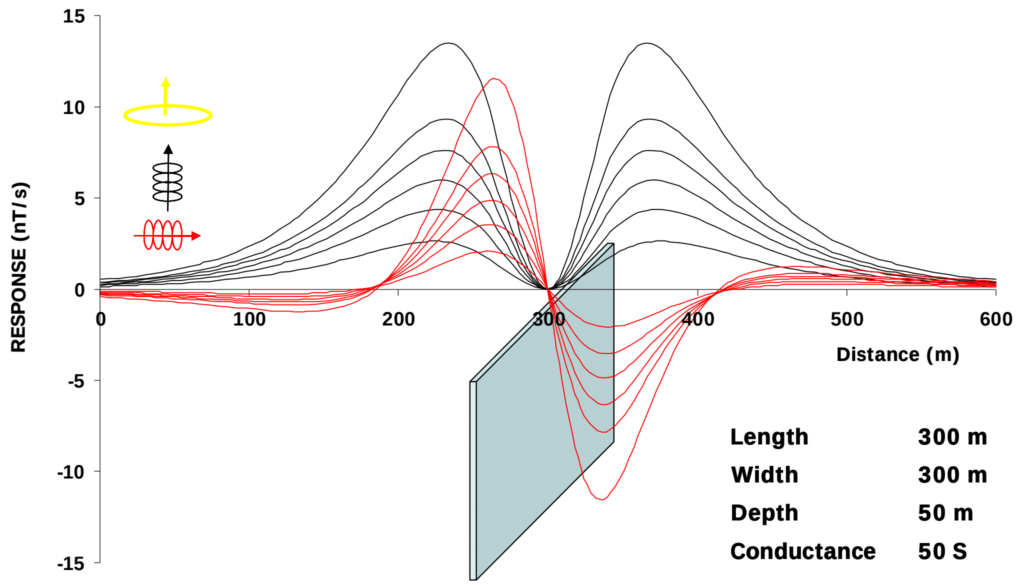


Figure 7. AeroTEM response to a 'thin' vertical conductor.

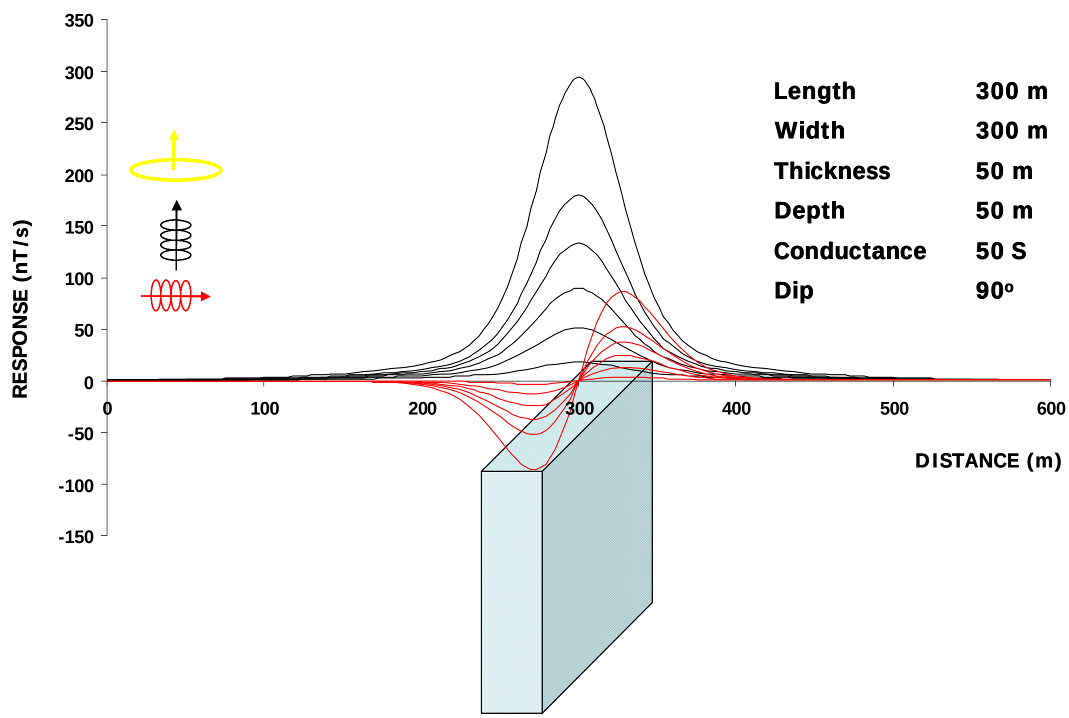


Figure 8. AeroTEM response for a 'thick' vertical conductor.

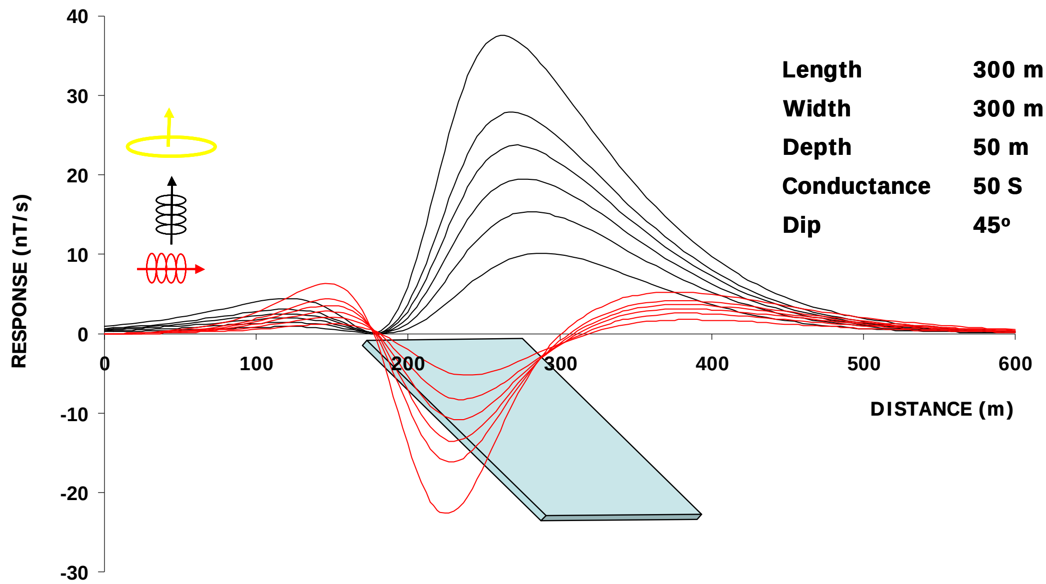


Figure 9. AeroTEM response over a 'thin' dipping conductor.

All cases should be considered when analyzing the interpreted picks and prioritizing for follow-up. Specific anomalous responses which remain as high priority should be subjected to numerical modeling prior to drill testing to determine the dip, depth and probable geometry of the source.

Respectfully submitted,

Chris Kahue
Aeroquest Limited
November 2008

Reviewed By:

Gord Smith
Aeroquest Limited
November 2008

APPENDIX 1: SURVEY BOUNDARIES

The following table presents the Extension block boundaries. All geophysical data presented in this report have been windowed to 100m outside of these boundaries. X and Y positions are in metres: NAD83 UTM Zone 10N.

X	Y
700532.3	5698215.3
702056.96	5698218.03
702086.03	5699235.55
705858.2	5699260.65
705858.88	5698959.45
706521.1	5698960.2
706521.05	5698724.11
706819.03	5698725.95
706812.8	5698492
707280.85	5698498.17
707339.4	5697123.7
706038.38	5697120.81
706053.7	5696607.4
707348.28	5696619.79
707345.3	5696191.9
707888.56	5696192.11
707890.6	5693436.9
708784.76	5693430.61
708843.09	5690722.11
708477.9	5690703.3
708465.1	5690209.5
707609.47	5690214.22
707611.59	5689703.28
708945.3	5689704.7
708934	5687443.3
709436.1	5687454.11
709435	5686984.2
706435.7	5686982.8
706436.4	5687454.11
705937.2	5687437.2
705936.6	5687801.9
705535.2	5687803.8
705539.7	5689165.2
704615.16	5689165.03
704602.1	5689593.4
704155.9	5689598
704159.78	5690035.88
702850.52	5690033.83
702832.8	5690446.9
702375.3	5690445.4
702379.27	5691358.84
701928.47	5691358.81
701920.62	5691799.13
700591.2	5691784.8

APPENDIX 2: MINING CLAIMS

TEN_NO_ID	TIMESTAMP	Tenure_Type	Claim_Name	Owner	Map_Number	Good_To_Date	Status
528700	20060221	Mineral	CC FRACTION	107608 (50%)	092P	2010/sep/30	GOOD
517072	20050712	Mineral	INMETEAST	115892 (50%)	092P	2010/sep/30	GOOD
539779	20060823	Mineral	CHU CHUA 2	146268 (100%)	092P	2008/dec/23	GOOD
530075	20060315	Mineral	MORE TO GO	115892 (100%)	092P	2010/sep/30	GOOD
530077	20060315	Mineral	AND MORE	115892 (100%)	092P	2010/sep/30	GOOD
530169	20060317	Mineral	MIDGE	202069 (100%)	092P	2011/nov/14	GOOD
529890	20060311	Mineral	CAVEATEMP TOR	107608 (100%)	092P	2011/sep/30	GOOD
526296	20060126	Mineral	CHUCHUAEA ST	107608 (100%)	092P	2011/sep/30	GOOD
526297	20060126	Mineral	CHUSOUTHW EST	107608 (100%)	092P	2010/sep/30	GOOD
529301	20060303	Mineral	CHU CHUA 27	200995 (100%)	092P	2011/sep/30	GOOD
529300	20060303	Mineral	CHU CHUA 1	200995 (100%)	092P	2011/sep/30	GOOD
529302	20060303	Mineral	G & G	115892 (100%)	092P	2011/sep/30	GOOD
528569	20060220	Mineral	GERRY AND GERRY	107608 (50%)	092P	2010/sep/30	GOOD
528570	20060220	Mineral	ROCKNORTH	115892 (50%)	092P	2010/sep/30	GOOD
528572	20060220	Mineral	CC-2	116233 (100%)	092P	2009/jan/01	GOOD
523835	20051213	Mineral	CHU CHUA 777	115892 (50%)	092P	2011/sep/30	GOOD
523836	20051213	Mineral	KCGL2	107608 (50%)	092P	2010/sep/30	GOOD
523837	20051213	Mineral	KCGL1	107608 (50%)	092P	2011/sep/30	GOOD
523838	20051213	Mineral	CHU CHUA 7777	115892 (50%)	092P	2010/sep/30	GOOD
523839	20051213	Mineral	KEGL4	107608 (50%)	092P	2011/sep/30	GOOD
523841	20051213	Mineral	KCGL5	107608 (50%)	092P	2011/sep/30	GOOD
523843	20051213	Mineral	KCGK7	107608 (50%)	092P	2010/sep/30	GOOD
523844	20051213	Mineral	CHU CHUA 888	115892 (50%)	092P	2010/sep/30	GOOD
530072	20060315	Mineral	CARPEDIEM	107608 (100%)	092P	2010/sep/30	GOOD
530073	20060315	Mineral	YES	115892 (100%)	092P	2010/sep/30	GOOD
543530	20061018	Mineral	CM E	145149 (100%)	092P	2009/may/30	GOOD
543577	20061018	Mineral	SC E	145149 (100%)	082M	2008/nov/18	GOOD
543626	20061019	Mineral	SC	145149 (100%)	092P	2008/nov/19	GOOD
395895	20050127	Mineral	GOLDCREEK2	144337 (100%)	082M031	2011/aug/16	GOOD
508580	20050310	Mineral		107608 (50%)	092P	2011/sep/30	GOOD
508581	20050310	Mineral	Deposit1	107608 (50%)	092P	2010/sep/30	GOOD

508582	20050310	Mineral	Deposit2	107608 (50%)	092P	2010/sep/30	GOOD
508583	20050310	Mineral	South1	107608 (50%)	092P	2011/sep/30	GOOD
508584	20050310	Mineral	North1	107608 (50%)	092P	2010/sep/30	GOOD
508586	20050310	Mineral		107608 (50%)	092P	2011/sep/30	GOOD
508587	20050310	Mineral	Southpark	107608 (50%)	092P	2011/sep/30	GOOD
508589	20050310	Mineral	Insure	107608 (50%)	092P	2011/sep/30	GOOD
508590	20050310	Mineral	Ants	107608 (50%)	092P	2011/sep/30	GOOD
517010	20050712	Mineral	INMETINFILL	115892 (50%)	092P	2011/sep/30	GOOD
510473	20050409	Mineral		136247 (100%)	092P	2009/mar/09	GOOD
578598	20080316	Mineral		213072 (100%)	092P	2009/mar/16	GOOD
578599	20080316	Mineral		146911 (100%)	082M	2009/mar/16	GOOD
553915	20070308	Mineral	FORGOT	115892 (50%)	082M	2009/jan/09	GOOD
580346	20080403	Mineral	CM-VMS NORTH	116233 (100%)	092P	2009/apr/03	GOOD
584007	20080512	Mineral	SOUTH EAST CM	145149 (100%)	092P	2009/may/11	GOOD
588657	20080721	Mineral	LVT08-CC1	216593 (100%)	092P	2009/jul/21	GOOD
588663	20080721	Mineral	LVT08-CC7	216593 (100%)	082M	2009/jul/21	GOOD
590370	20080825	Mineral	GOLDEN GOSSAN 1	146911 (100%)	082M	2009/aug/25	GOOD

APPENDIX 3: DESCRIPTION OF DATABASE FIELDS

The GDB file is a Geosoft binary database. In the database, the Survey lines and Tie Lines are prefixed with an "L" for "Line" and "T" for "Tie".

COLUMN	UNITS	DESCRIPTOR
line		Line number
flight		Flight #
emfid		AERODAS Fiducial
utctime	hh:mm:ss.ss	UTC time
x	m	UTM Easting (NAD83, Zone 10)
y	m	UTM Northing (NAD83, Zone 10)
galt	m	GPS elevation of magnetometer bird
ralt	m	Helicopter radar altimeter (height above terrain)
bheight	m	Terrain clearance of EM bird
Basemag	nT	Base station total magnetic intensity
MagU	nT	Final levelled total magnetic intensity from upper magnetometer sensor (installed on the tail of the EM bird).
dtm	m	Digital Terrain Model
Zon	nT/s	EM On-Time Z component Channels 1-16
Zoff	nT/s	EM Off-Time Z component Channels 0-16
Xon	nT/s	EM On-Time X component Channels 1-16
Xoff	nT/s	EM Off-Time X component Channels 0-16
pwrline		powerline monitor data channel
Grade		Classification from 1-7 based on conductance of conductor pick
Anom_Labels		Letter label of conductor pick (Unique per flight line)
Off_Con	S	Off-time conductance at conductor pick
Off_Tau	µs	Off-time decay constant at conductor pick
Anom_ID		EM Anomaly response style (K= thicK, N = thiN)
Off_AllCon	S	Off-time conductance
Off_AllTau	µs	Off-time decay constant
TranOff	s	Transmitter turn off time
TranOn	s	Transmitter turn on time
TranPeak	A	Transmitter peak current
TranSwitch	s	Transmitter peak current time
Off_Pick		Anomaly pick channel

APPENDIX 4: AEROTEM ANOMALY LISTING

Line	Anom	ID	Cond (S)	Tau (µs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10102	A	N	0.0	0.0	22	13:12:00	33.6	705426.8	5698308.6
10111	A	N	0.0	0.0	23	11:45:36	70.2	705447.0	5698217.3
10130	A	N	0.0	0.0	20	18:14:24	32.4	705966.0	5698014.6
10140	A	N	0.0	0.0	23	9:21:36	48.5	706103.2	5697907.7
10280	A	K	0.5	72.5	18	15:36:00	41.1	706787.9	5696505.1
10280	B	N	0.4	64.1	18	15:50:24	37.8	705799.5	5696512.9
10290	A	K	1.1	105.3	18	21:36:00	49.1	706836.3	5696414.5
10290	B	N	0.5	68.8	18	21:50:24	31.4	705842.5	5696400.7
10290	C	K	202.2	1421.9	18	22:04:48	41.3	704533.2	5696410.9
10300	A	K	100.2	1001.2	18	1:55:12	37.9	704545.2	5696309.3
10300	B	N	0.4	64.7	18	2:09:36	16.3	705873.0	5696320.8
10300	C	K	2.1	146.0	18	2:24:00	27.1	706781.3	5696313.1
10310	A	K	38.6	621.0	18	20:09:36	49.8	704543.7	5696209.3
10310	B	N	1.3	112.3	18	20:38:24	33.1	705883.9	5696218.1
10310	C	K	2.3	152.7	18	20:52:48	19.9	706707.9	5696208.3
10320	A	N	0.5	67.0	17	4:19:12	18.2	705857.6	5696116.7
10320	B	K	22.8	477.5	17	4:48:00	36.8	704515.3	5696117.9
10330	A	K	15.5	394.1	17	2:52:48	46.9	704484.7	5696022.6
10330	B	N	0.3	52.0	17	3:07:12	32.4	705880.7	5696014.9
10340	A	N	0.7	82.2	17	22:19:12	27.9	705822.9	5695909.8
10350	A	N	0.9	95.7	17	21:07:12	43.3	705850.3	5695813.3
10360	A	N	0.6	77.9	16	8:24:00	29.6	705789.8	5695721.8
10370	A	N	0.7	80.5	16	7:12:00	32.1	705823.1	5695623.8
1038	A	N	1.8	133.8	16	3:21:36	33.0	705768.	5695503.8

0								5	
1039 0	A	N	1.2	110.6	16	2:09:36	36.5	705814. 1	5695414.4
1040 0	A	N	0.6	79.2	16	21:36:00	39.7	705793. 7	5695314.5
1041 0	A	N	1.5	124.3	16	20:09:36	44.4	705862. 5	5695208.9
1041 0	B	N	2.0	141.5	16	20:38:24	46.4	707554. 3	5695206.4
1042 0	A	N	2.0	140.7	16	15:07:12	37.0	707555. 2	5695105.4
1042 0	B	N	0.8	89.3	16	15:36:00	35.8	705837. 0	5695130.7
1043 0	A	N	0.4	63.4	16	14:24:00	44.0	705903. 7	5695002.2
1043 0	B	N	2.3	152.3	16	14:38:24	40.5	707616. 8	5695017.7
1043 0	C	K	5.4	233.2	16	14:52:48	40.3	707698. 2	5695016.3
1044 0	A	K	4.0	199.5	15	10:48:00	44.4	707683. 4	5694893.1
1044 0	B	N	4.0	199.0	15	10:48:00	41.5	707631. 1	5694897.4
1044 0	C	N	0.4	60.2	15	11:16:48	34.5	705883. 2	5694920.5
1045 0	A	N	0.4	64.7	15	10:04:48	56.4	705910. 9	5694799.7
1045 0	B	K	14.9	385.7	15	10:19:12	37.1	707687. 2	5694806.0
1045 0	C	N	27.6	525.6	15	10:19:12	34.3	707769. 9	5694810.5
1046 0	A	N	13.4	366.6	15	5:16:48	39.7	707755. 6	5694699.3
1046 0	B	K	101.4	1007. 0	15	5:16:48	35.1	707648. 0	5694696.5
1046 0	C	N	3.3	182.5	15	5:31:12	24.7	706610. 6	5694711.9
1046 0	D	N	4.0	200.9	15	5:45:36	47.9	705924. 9	5694713.3
1047 0	A	N	2.0	140.2	15	4:33:36	46.8	706036. 8	5694589.7
1047 0	B	N	1.9	136.7	15	4:48:00	35.6	706708. 8	5694600.2
1047 0	C	K	59.4	770.5	15	4:48:00	37.7	707686. 1	5694595.6
1047 0	D	N	25.0	500.2	15	5:02:24	39.9	707792. 5	5694607.9
1048 0	A	K	14.9	386.1	14	16:19:12	48.5	707677. 1	5694500.4
1048 0	B	N	1.5	122.5	14	16:33:36	19.3	706717. 1	5694521.5
1048	C	N	0.8	90.9	14	16:48:00	31.4	706013.	5694518.4

0								8	
1049 0	A	K	15.0	386.9	14	13:55:12	33.7	700876. 0	5694427.3
1049 0	B	N	1.2	108.2	14	15:36:00	50.3	706056. 0	5694411.5
1049 0	C	N	2.6	160.6	14	15:36:00	47.3	706759. 5	5694391.8
1049 0	D	K	11.7	342.4	14	15:50:24	51.3	707760. 5	5694412.3
1050 0	A	K	69.9	836.2	14	11:31:12	37.3	707804. 9	5694298.0
1050 0	B	N	0.4	60.5	14	11:45:36	27.4	706721. 8	5694311.4
1050 0	C	N	1.5	120.8	14	12:00:00	39.6	706023. 4	5694335.8
1050 0	D	K	26.4	513.6	14	13:26:24	35.2	700766. 6	5694325.8
1051 0	A	K	28.6	534.6	14	8:24:00	50.8	700711. 9	5694221.5
1051 0	B	N	1.1	106.8	14	10:48:00	35.6	706214. 8	5694199.5
1051 0	C	N	0.4	61.0	14	10:48:00	42.9	706788. 8	5694213.3
1051 0	D	K	48.9	699.1	14	11:02:24	42.8	707877. 9	5694195.3
1052 0	A	K	63.0	793.8	14	5:02:24	43.0	707842. 9	5694116.8
1052 0	B	N	4.0	199.7	14	5:16:48	27.2	706835. 0	5694111.1
1052 0	C	N	2.3	151.1	14	5:31:12	38.6	706239. 6	5694113.4
1052 0	D	K	67.8	823.6	14	7:12:00	27.8	700675. 6	5694113.3
1053 0	A	K	70.8	841.5	14	17:02:24	49.1	700770. 1	5694029.0
1053 0	A	N	0.5	69.2	14	21:50:24	36.7	706392. 6	5694003.3
1053 0	B	N	1.2	107.2	14	21:50:24	37.8	706886. 0	5694020.1
1053 0	C	K	45.5	674.4	14	22:04:48	37.7	707894. 9	5694006.5
1054 0	A	N	38.4	619.9	23	1:26:24	73.2	707967. 3	5693906.9
1054 0	B	K	38.4	619.9	23	1:26:24	68.4	707885. 5	5693913.3
1054 0	C	N	0.6	75.5	23	1:40:48	31.3	706871. 1	5693922.5
1054 0	D	N	2.2	149.7	23	1:55:12	45.8	706421. 7	5693916.5
1054 0	A	K	72.6	852.3	24	10:48:00	34.3	700744. 7	5693920.4
1055	A	K	68.5	827.7	11	8:52:48	41.3	700892.	5693827.4

1								1	
10551	B	N	0.4	64.5	11	11:31:12	21.4	706456.9	5693804.5
10551	C	N	2.1	145.5	11	11:45:36	28.1	706949.0	5693801.1
10551	D	K	37.5	612.6	11	12:00:00	41.3	707935.5	5693812.2
10560	A	K	118.7	1089.6	11	1:55:12	25.6	700890.1	5693708.9
10560	A	N	0.1	34.8	11	5:31:12	30.7	706478.7	5693718.9
10560	B	N	2.6	162.2	11	5:45:36	23.4	706998.0	5693703.9
10560	C	K	33.3	577.3	11	6:00:00	31.5	707961.0	5693715.0
10570	A	K	11.1	333.1	11	6:28:48	12.8	707985.2	5693613.0
10570	B	N	1.3	114.9	11	6:43:12	27.5	707040.7	5693616.5
10570	C	K	49.0	700.0	11	8:24:00	32.9	700947.8	5693638.6
10580	A	K	21.1	459.7	13	23:02:24	33.6	701070.7	5693515.3
10580	A	K	9.9	313.9	11	12:14:24	28.9	707984.3	5693529.7
10580	B	N	0.2	45.6	11	12:28:48	16.9	707117.7	5693520.4
10590	A	K	12.8	357.3	13	2:52:48	38.8	708096.8	5693411.1
10590	B	N	3.3	181.7	13	3:07:12	21.1	707177.1	5693429.7
10590	C	K	111.0	1053.3	13	5:02:24	34.4	700944.4	5693414.9
10600	A	N	18.2	426.6	14	23:16:48	25.6	707969.4	5693315.4
10600	B	N	0.4	64.8	14	23:31:12	17.1	707188.5	5693317.2
10600	C	K	32.2	567.8	14	1:12:00	47.0	700950.6	5693320.8
10610	A	K	29.6	543.7	14	1:40:48	32.2	700970.0	5693224.1
10610	B	N	0.3	53.2	14	4:04:48	41.6	707220.4	5693213.2
10610	C	N	2.0	139.9	14	4:19:12	42.1	708001.7	5693212.6
10620	A	K	35.8	598.0	13	23:31:12	30.3	700967.6	5693113.0
10620	B	N	1.3	114.5	13	1:55:12	53.1	707234.1	5693105.1
10620	C	K	1.7	129.2	13	2:09:36	29.6	707993.9	5693115.7
1063	A	N	2.2	146.7	13	18:14:24	41.9	708146.	5693015.6

0								9	
10630	B	K	2.9	169.6	13	18:14:24	52.2	708003.6	5693022.8
10630	C	N	0.3	58.6	13	18:28:48	40.1	707224.5	5693023.8
10630	D	K	17.5	418.4	13	20:09:36	48.6	700941.6	5693020.8
10640	A	N	12.6	354.3	10	3:07:12	36.4	708188.6	5692914.7
10640	B	N	1.3	115.1	10	3:21:36	46.3	707265.6	5692913.7
10640	C	K	21.5	464.0	10	4:48:00	38.8	700887.5	5692914.4
10650	A	K	36.7	606.2	10	23:45:36	40.8	700877.3	5692812.4
10650	B	N	0.3	58.1	10	2:09:36	41.6	707272.4	5692815.0
10650	C	K	8.0	282.9	10	2:24:00	42.3	708163.2	5692821.2
10660	A	N	6.2	249.4	10	21:21:36	43.2	707989.8	5692718.2
10660	B	N	6.2	249.4	10	21:36:00	56.2	707331.1	5692714.7
10660	C	K	14.3	378.6	10	23:16:48	47.6	700823.8	5692710.1
10670	A	K	20.2	449.8	13	14:09:36	40.2	700789.6	5692622.9
10670	B	N	0.3	51.1	13	17:31:12	42.7	707348.4	5692607.7
10670	C	N	1.7	131.1	13	17:31:12	46.6	708029.8	5692615.8
10670	D	K	4.0	199.1	13	17:31:12	49.3	708146.5	5692609.1
10680	A	K	7.9	281.9	13	11:45:36	45.6	708145.4	5692516.9
10680	B	N	2.3	150.4	13	11:45:36	42.1	708016.7	5692521.9
10680	C	N	0.6	74.9	13	12:00:00	42.4	707332.5	5692520.1
10680	D	K	14.5	381.2	13	13:55:12	41.3	700815.2	5692519.4
10690	A	K	12.9	359.0	12	7:12:00	45.4	708133.8	5692415.1
10690	B	N	2.2	146.7	12	7:12:00	44.1	708041.1	5692416.6
10690	C	N	1.0	99.2	12	7:26:24	39.4	707341.1	5692406.6
10690	D	K	7.8	278.8	12	9:07:12	42.5	700820.4	5692417.9
10700	A	K	8.6	292.9	12	4:04:48	44.6	700839.2	5692299.7
1070	B	N	0.3	50.2	12	6:28:48	31.2	707430.	5692301.5

0								6	
10700	C	N	2.8	166.2	12	6:43:12	38.0	708081.1	5692304.1
10700	D	K	14.6	381.5	12	6:43:12	40.0	708191.4	5692298.1
10710	A	K	7.2	267.4	12	1:40:48	51.1	708284.7	5692192.2
10710	B	N	7.2	269.1	12	1:40:48	48.8	708170.0	5692193.6
10710	C	N	0.2	43.8	12	1:55:12	38.0	707421.1	5692217.3
10710	D	K	8.0	283.3	12	3:36:00	37.9	700825.4	5692204.8
10720	A	K	15.5	393.5	12	22:33:36	33.7	700797.1	5692116.6
10720	B	N	1.2	109.5	12	0:57:36	33.8	707396.4	5692114.0
10720	C	N	3.4	183.1	12	1:12:00	45.4	708274.4	5692099.0
10730	A	N	3.4	183.8	12	18:57:36	52.9	708333.0	5692008.3
10730	B	N	0.6	78.1	12	19:12:00	40.8	707329.3	5692017.6
10730	C	K	13.0	361.0	12	20:52:48	62.6	700797.7	5692022.2
10740	A	K	15.8	397.2	12	15:07:12	52.8	700818.6	5691916.1
10740	B	N	3.0	174.0	12	18:14:24	49.5	707325.6	5691903.6
10740	C	N	1.9	138.5	12	18:28:48	35.2	708418.3	5691904.9
10750	A	N	2.3	152.1	12	12:57:36	45.4	708565.9	5691786.8
10750	B	K	15.5	393.7	12	14:38:24	69.1	700788.1	5691824.9
10750	A	N	0.8	86.8	12	12:28:48	37.9	708637.8	5691714.7
10770	A	N	3.5	187.7	12	9:07:12	47.4	708666.4	5691601.2
10780	A	N	2.4	154.3	12	8:38:24	43.3	708732.1	5691519.5
10790	A	N	10.1	317.5	5	22:19:12	22.5	708742.4	5691402.1
10800	A	N	7.8	279.1	5	21:50:24	33.6	708764.3	5691310.5
10810	A	N	5.0	222.9	5	16:48:00	28.9	708751.2	5691211.0
10820	A	N	7.4	271.1	5	16:19:12	32.1	708870.2	5691095.7
10830	A	N	2.2	148.2	5	10:48:00	27.6	708835.8	5691022.5
1084	A	N	0.4	59.8	5	10:04:48	30.9	707444.	5690920.4

0								0	
10840	B	K	4.1	201.5	5	10:19:12	17.7	708931.6	5690925.2
10850	A	K	16.6	407.5	5	6:28:48	24.1	708915.0	5690839.4
10850	B	N	1.6	127.7	5	6:43:12	22.7	707429.2	5690821.9
10860	A	N	0.3	49.5	5	5:45:36	28.2	707472.2	5690708.4
10860	B	K	3.3	181.3	5	6:00:00	24.6	708416.7	5690713.0
10870	A	N	0.2	44.4	5	2:38:24	4.7	707467.7	5690630.5
10880	A	N	0.2	46.1	5	1:40:48	18.3	707537.0	5690506.3
10890	A	N	1.0	97.9	4	5:02:24	7.9	707894.0	5690414.7
10890	B	N	0.3	50.4	4	5:02:24	6.2	707540.7	5690411.5
10890	C	N	0.3	50.4	4	6:00:00	19.6	703888.4	5690421.9
10900	A	N	0.2	42.4	4	3:21:36	28.2	703902.3	5690303.1
10900	A	N	0.5	66.8	23	23:02:24	43.8	707599.9	5690312.2
10900	B	N	0.8	87.6	23	23:02:24	53.4	707947.9	5690314.3
10910	A	K	0.8	88.8	4	1:26:24	14.6	708050.5	5690210.3
10910	B	N	0.7	80.6	4	1:26:24	17.6	707947.7	5690217.7
10910	C	N	0.7	83.2	4	1:26:24	12.0	707599.4	5690213.9
10970	A	K	0.3	50.1	4	15:07:12	8.2	708353.8	5689623.0
10970	B	K	0.1	23.1	4	15:36:00	6.4	707096.9	5689608.1
10980	A	K	0.2	40.5	4	14:09:36	3.7	707131.1	5689526.3
10990	A	N	3.0	172.2	4	12:28:48	19.2	707308.3	5689411.2
10990	B	K	0.2	44.8	4	12:28:48	8.0	707125.1	5689408.5
11000	A	N	0.5	72.7	4	11:16:48	15.0	707089.7	5689321.8
11000	B	K	2.2	147.8	4	11:31:12	30.2	707267.0	5689315.3
11010	A	K	8.4	289.4	4	9:50:24	5.7	707056.9	5689207.3
11010	B	N	2.9	168.8	4	9:50:24	7.2	707018.1	5689209.0
1102	A	K	8.9	297.9	4	8:38:24	29.3	707062.	5689123.7

0								9	
11020	B	N	1.3	115.4	4	9:07:12	30.9	708967.9	5689110.7
11030	A	N	1.6	127.6	3	23:45:36	28.6	707052.7	5689012.3
11030	B	K	3.4	183.4	3	23:45:36	19.9	706982.2	5689016.1
11090	A	N	5.1	224.8	3	15:36:00	29.2	708774.9	5688393.2
11100	A	N	3.5	187.4	3	15:07:12	21.0	708805.3	5688313.0
11160	A	K	84.8	920.9	3	8:09:36	13.3	708032.9	5687734.6
11170	A	K	30.7	554.5	3	6:57:36	19.0	707967.4	5687619.4
11180	A	K	22.7	476.6	3	6:14:24	10.7	707984.7	5687530.1
11190	A	K	22.1	470.0	25	4:04:48	30.0	708062.6	5687421.5
11200	A	K	4.5	211.0	25	5:31:12	47.7	708127.8	5687312.5
11210	A	K	1.6	124.8	25	7:12:00	35.6	708143.0	5687219.0
11220	A	K	2.4	155.8	25	8:52:48	38.8	708196.0	5687106.5
11230	A	K	2.1	146.3	25	11:02:24	47.0	708188.7	5687017.7
19010	A	K	24.0	490.1	18	22:33:36	33.1	700606.2	5694327.7
19040	A		*	*	9	1:40:48	56.2	703629.2	5693991.7
19040	A		*	*	9	4:33:36	51.7	703639.9	5698465.8
19050	A	K	34.1	584.0	10	2:52:48	24.2	704630.8	5696177.9
19080	A	K	61.0	781.0	10	13:55:12	31.4	707660.3	5694632.0
19080	B	K	2.4	156.3	10	14:09:36	45.7	707670.3	5695154.7
19090	A	N	0.3	55.6	10	18:28:48	35.2	708673.3	5691662.1
19090	A	K	9.8	312.5	10	19:12:00	37.2	708677.8	5688381.8

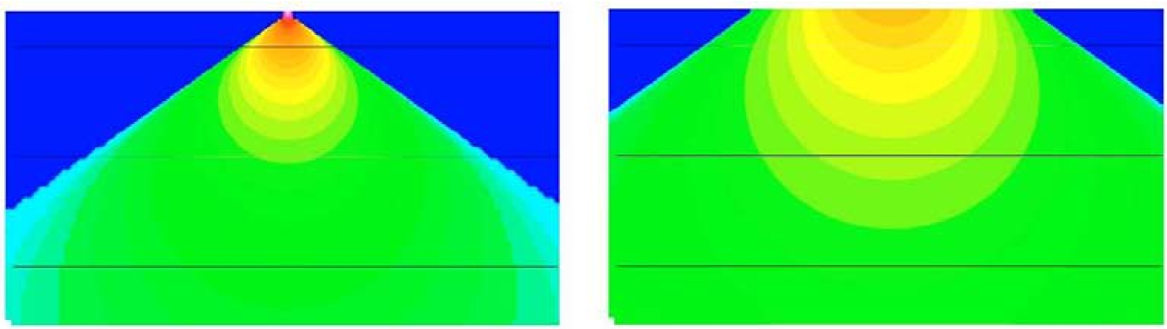
APPENDIX 5: AEROTEM DESIGN CONSIDERATIONS

Helicopter-borne EM systems offer an advantage that cannot be matched from a fixed-wing platform. The ability to fly at slower speed and collect dat

3a with high spatial resolution, and with great accuracy, means the helicopter EM systems provide more detail than any other EM configuration, airborne or ground-based. Spatial resolution is especially important in areas of complex geology and in the search for discrete conductors. With the advent of helicopter-borne high-moment time domain EM systems the fixed wing platforms are losing their *only* advantage – depth penetration.

Advantage 1 – Spatial Resolution

The AeroTEM system is specifically designed to have a small footprint. This is accomplished through the use of concentric transmitter-receiver coils and a relatively small diameter transmitter coil (5 m). The result is a highly focused exploration footprint, which allows for more accurate “mapping” of discrete conductors. Consider the transmitter primary field images shown in Figure 1, for AeroTEM versus a fixed-wing transmitter.



The footprint of AeroTEM at the earth’s surface is roughly 50m on either side of transmitter

The footprint of a fixed-wing system is roughly 150 m on either side of the transmitter

Figure 1. A comparison of the footprint between AeroTEM and a fixed-wing system, highlights the greater resolution that is achievable with a transmitter located closer to the earth’s surface. The AeroTEM footprint is one third that of a fixed-wing system and is symmetric, while the fixed-wing system has even lower spatial resolution along the flight line because of the separated transmitter and receiver configuration.

At first glance one may want to believe that a transmitter footprint that is distributed more evenly over a larger area is of benefit in mineral exploration. In fact, the opposite is true; by energizing a larger surface area, the ability to energize and detect discrete conductors is reduced. Consider, for example, a comparison between AeroTEM and a fixed-wing system over the Mesamax Deposit (1,450,000 tonnes of 2.1% Ni, 2.7% Cu, 5.2 g/t Pt/Pd). In a test survey over three flight lines spaced 100 m apart, AeroTEM detected the Deposit on all three flight lines. The fixed-wing system detected the Deposit only on two flight lines. In exploration programs that seek to expand the flight line spacing in an effort to reduce the cost of the airborne survey, discrete conductors such as the Mesamax Deposit can go undetected. The argument often put forward in favour of using fixed-wing systems is that because of their larger footprint, the flight line spacing can indeed be widened. Many fixed-wing surveys are flown at 200 m or 400 m. Much of the survey work performed by Aeroquest has been to survey in areas that were previously flown at these wider line spacings. One of the reasons for AeroTEM’s impressive discovery record has been the strategy of flying closely spaced lines and finding all the discrete near-surface conductors. These higher resolution surveys are being flown within existing mining camps, areas that improve the chances of discovery.

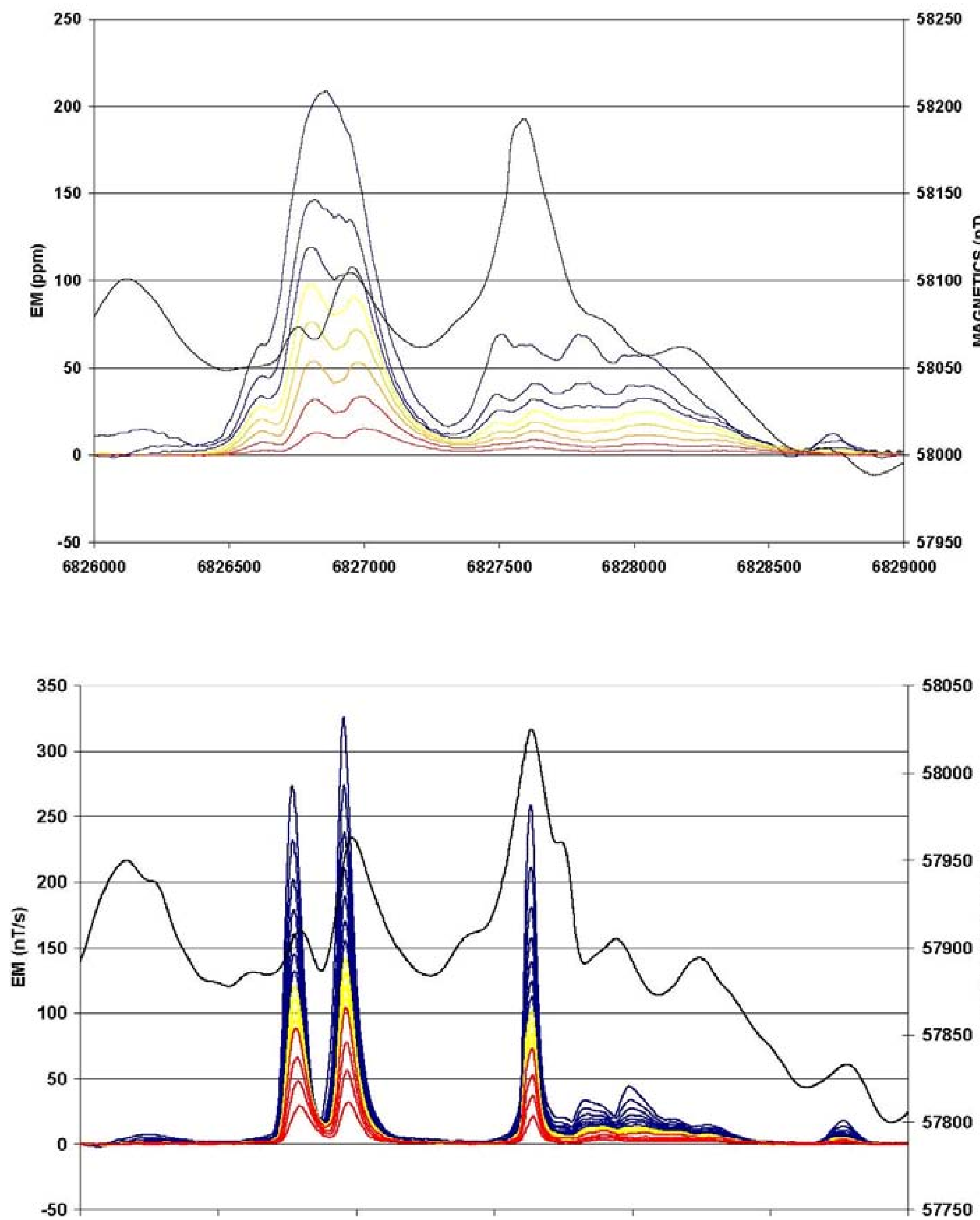


Figure 2. Fixed-wing (upper) and AeroTEM (lower) comparison over the eastern limit of the Mesamax Deposit, a Ni-Cu-PGE zone located in the Raglan nickel belt and owned by Canadian Royalties. Both systems detected the Deposit further to the west where it is closer to surface.

The small footprint of AeroTEM combined with the high signal to noise ratio (S/N) makes the system more suitable to surveying in areas where local infrastructure produces electromagnetic noise, such as power lines and railways. In 2002 Aeroquest flew four exploration properties in the Sudbury Basin that were under option by FNX Mining Company Inc. from Inco Limited. One such property, the Victoria Property, contained three major power line corridors.

The resulting AeroTEM survey identified all the known zones of Ni-Cu-PGE mineralization, and detected a response between two of the major power line corridors but in an area of favourable geology. Three boreholes were drilled to test the anomaly, and all three intersected sulphide. The third borehole encountered 1.3% Ni, 6.7% Cu, and 13.3 g/t TPMs over 42.3 ft. The mineralization was subsequently named the Powerline Deposit.

The success of AeroTEM in Sudbury highlights the advantage of having a system with a small footprint, but also one with a high S/N. This latter advantage is achieved through a combination of a high-moment (high signal) transmitter and a rigid geometry (low noise). Figure 3 shows the Powerline Deposit response and the response from the power line corridor at full scale. The width of power line response is less than 75 m.

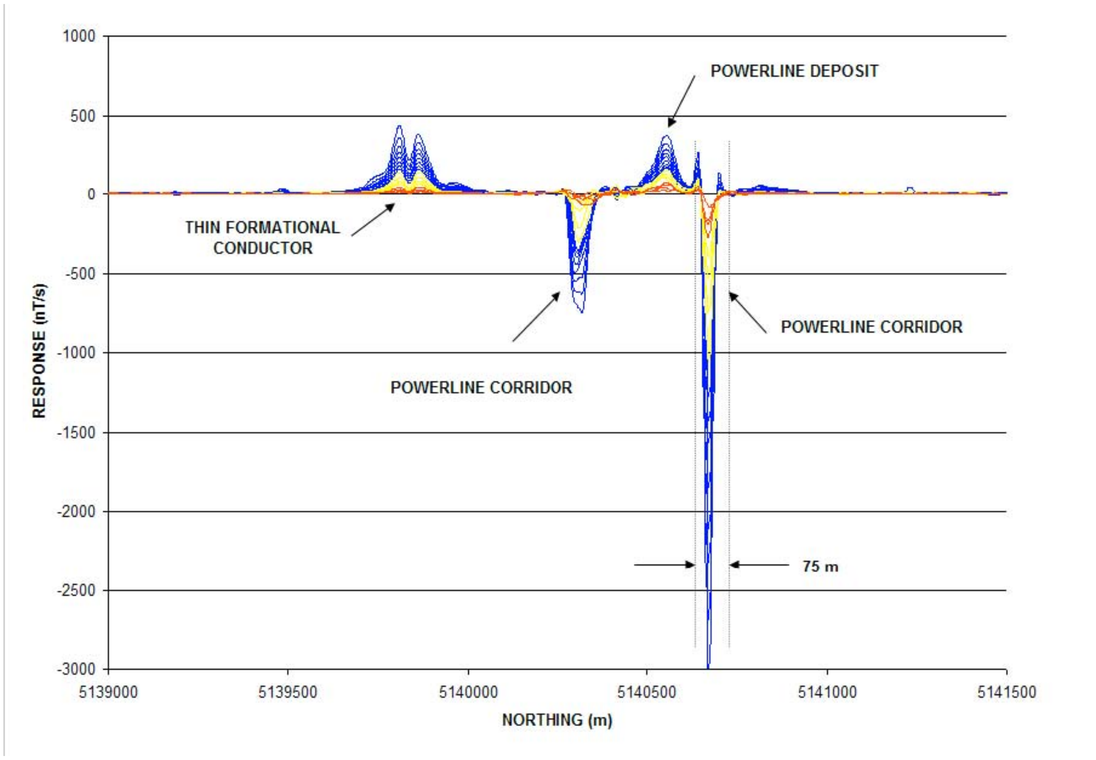


Figure 3. The Powerline Deposit is located between two major power line corridors, which make EM surveying problematic. Despite the strong response from the power line, the anomaly from the Deposit is clearly detected. Note the thin formational conductor located to the south. The only way to distinguish this response from that of two closely spaced conductors is by interpreting the X-axis coil response.

Advantage 2 – Conductance Discrimination

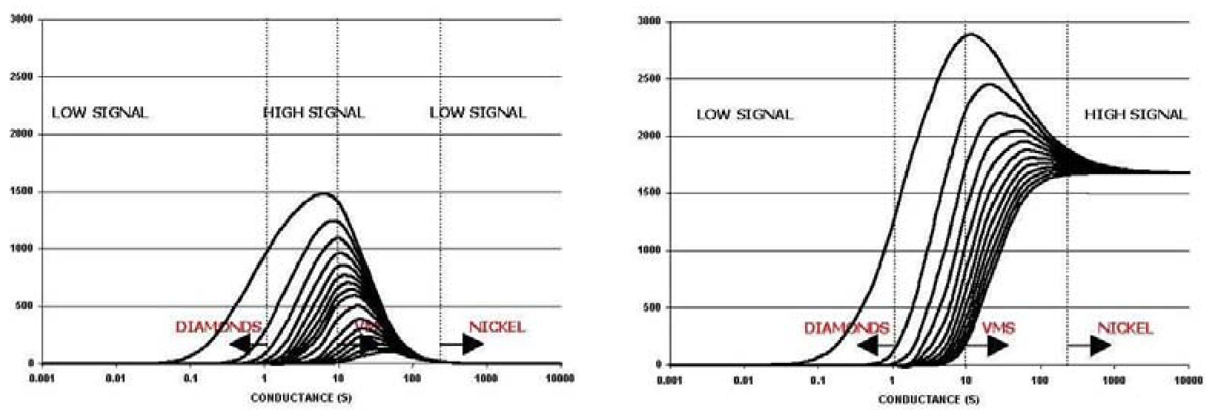
The AeroTEM system features full waveform recording and as such is able to measure the on-time response due to high conductance targets. Due to the processing method (primary field removal), there is attenuation of the response with increasing conductance, but the AeroTEM on-time measurement is still superior to systems that rely on lower base frequencies to detect high conductance targets, but do not measure in the on-time.

The peak response of a conductive target to an EM system is a function of the target conductance and the EM system base frequency. For time domain EM systems that measure only in the off-time, there is a drop in the peak response of a target as the base frequency is lowered for all conductance values below the peak system response. For example, the AeroTEM peak response occurs for a 10 S conductor in the early off-time and 100 S in the late off-time for a 150 Hz base frequency. Because base frequency and conductance form a linear relationship when considering the peak response of any EM system, a drop in base frequency of 50% will double the conductance at which an EM system shows its peak response. If the base frequency were lowered from 150 Hz to 30 Hz there would be a fivefold increase in conductance at which the peak response of an EM occurred.

However, in the search for highly conductive targets, such as pyrrhotite-related Ni-Cu-PGM deposits, a fivefold increase in conductance range is a high price to pay because the signal level to lower conductance targets is reduced by the same factor of five. For this reason, EM systems that operate with low base frequencies are not suitable for general exploration unless the target conductance is more than 100 S, or the target is covered by conductive overburden.

Despite the excellent progress that has been made in modeling software over the past two decades, there has been little work done on determining the optimum form of an EM system for mineral exploration. For example, the optimum configuration in terms of geometry, base frequency and so remain unknown. Many geophysicists would argue that there is no single ideal configuration, and that each system has its advantages and disadvantages. We disagree.

When it comes to detecting and discriminating high-conductance targets, it is necessary to measure the pure in phase response of the target conductor. This measurement requires that the measured primary field from the transmitter be subtracted from the total measured response such that the secondary field from the target conductor can be determined. Because this secondary field is in-phase with the transmitter primary field, it must be made while the transmitter is turned on and the transmitter current is changing. The transmitted primary field is several orders of magnitude larger than the secondary field. AeroTEM uses a bucking coil to reduce the primary field at the receiver coils. The only practical way of removing the primary field is to maintain a rigid geometry between the transmitter, bucking and receiver coils. This is the main design consideration of the AeroTEM airframe and it is the only time domain airborne system to have this configuration.



The off-time AeroTEM response for the 16 channel configuration.

The on-time response assuming 100% removal of the measured primary field.

Figure 4. The off-time and on-time response nomogram of AeroTEM for a base frequency of 150 Hz. The on-time response is much stronger for higher conductance targets and this is why on-time measurements are more important than lower frequencies when considering high conductance targets in a resistive environment.

Advantage 3 – Multiple Receiver Coils

AeroTEM employs two receiver coil orientations. The Z-axis coil is oriented parallel to the transmitter coil and both are horizontal to the ground. This is known as a maximum coupled configuration and is optimal for detection. The X-axis coil is oriented at right angles to the transmitter coil and is oriented along the line-of-flight.

This is known as a minimum coupled configuration, and provides information on conductor orientation and thickness. These two coil configurations combined provide important information on the position, orientation, depth, and thickness of a conductor that cannot be matched by the traditional geometries of the HEM or fixed-wing systems. The responses are free from a system geometric effect and can be easily compared to model type curves in most cases. In other words, AeroTEM data is very easy to interpret. Consider, for example, the following modeled profile:

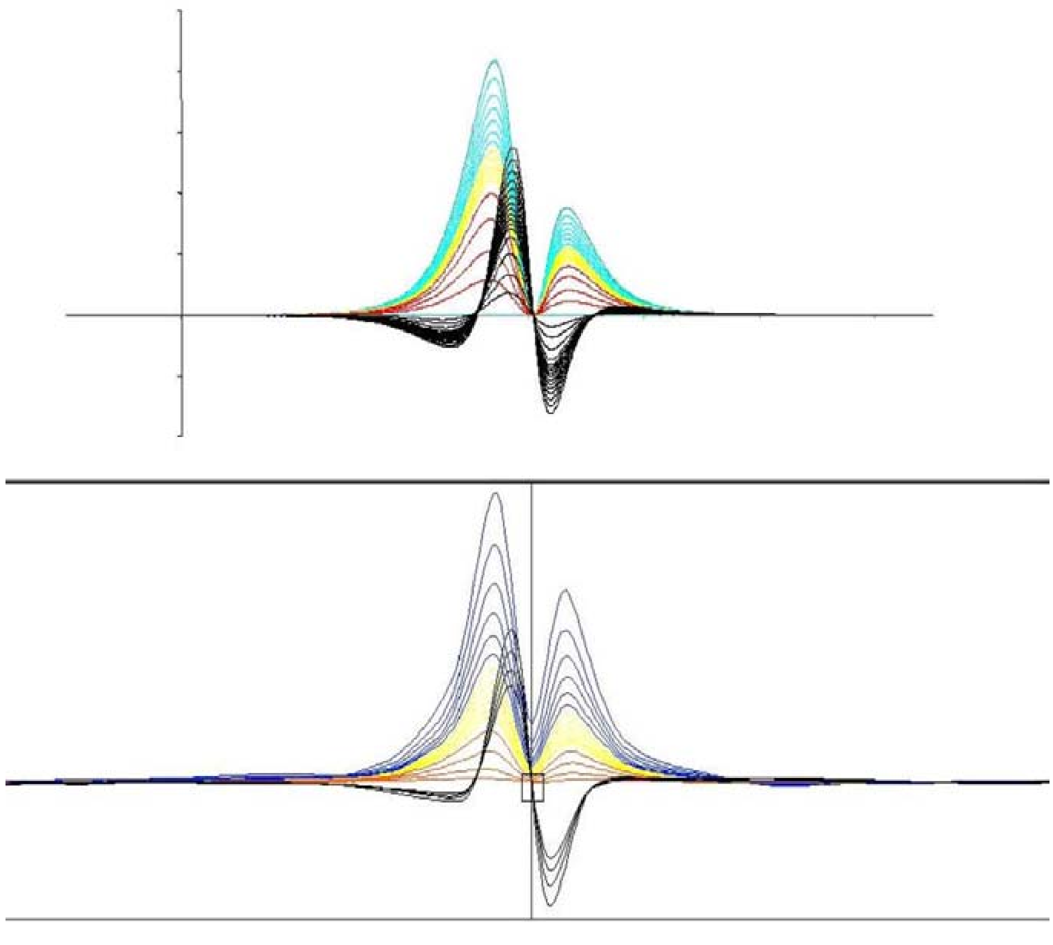


Figure 5. Measured (lower) and modeled (upper) AeroTEM responses are compared for a thin steeply dipping conductor. The response is characterized by two peaks in the Z-axis coil, and a cross-over in the X-axis coil that is centered between the two Z-axis peaks. The conductor dips toward the higher amplitude Z-axis peak. Using the X-axis cross-over is the only way of differentiating the Z-axis response from being two closely spaced conductors.

HEM versus AeroTEM

Traditional helicopter EM systems operate in the frequency domain and benefit from the fact that they use narrowband as opposed to wide-band transmitters. Thus all of the energy from the transmitter is concentrated in a few discrete frequencies. This allows the systems to achieve excellent depth penetration (up to 100 m) from a transmitter of modest power. The Aeroquest Impulse system is one implementation of this technology.

The AeroTEM system uses a wide-band transmitter and delivers more power over a wide frequency range. This frequency range is then captured into 16 time channels, the early channels containing the high frequency information and the late time channels containing the low frequency information down to the system base frequency. Because frequency domain HEM systems employ two coil configurations (coplanar and coaxial) there are only a maximum of three comparable frequencies per configuration, compared to 16 AeroTEM off-time and 12 AeroTEM on-time channels.

Figure 6 shows a comparison between the Dighem HEM system (900 Hz and 7200 Hz coplanar) and AeroTEM (Z-axis) from surveys flown in Raglan, in search of highly conductive Ni-Cu-PGM sulphide. In general, the AeroTEM peaks are sharper and better defined, in part due to the greater S/N ratio of the AeroTEM system over HEM, and also due to the modestly filtered AeroTEM data compared to HEM. The base levels are also better defined in the AeroTEM data. AeroTEM filtering is limited to spike removal and a 5-point smoothing filter. Clients are also given copies of the raw, unfiltered data.

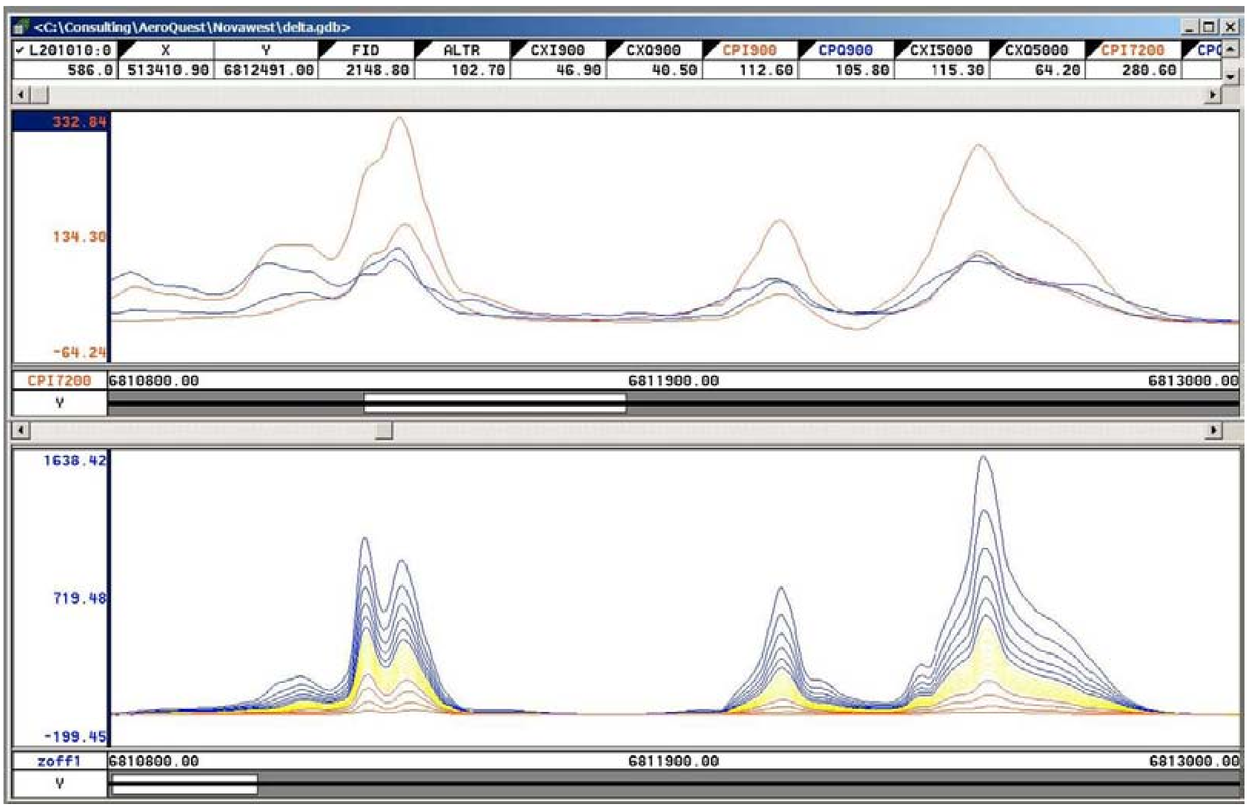


Figure 6. Comparison between Dighem HEM (upper) and AeroTEM (lower) surveys flown in the Raglan area. The AeroTEM responses appear to be more discrete, suggesting that the data is not as heavily filtered as the HEM data. The S/N advantage of AeroTEM over HEM is about 5:1.

Aeroquest Limited is grateful to the following companies for permission to publish some of the data from their respective surveys: Wolfden Resources, FNX Mining Company Inc, Canadian Royalties, Nova West Resources, Aurogin Resources, Spectrem Air. Permission does not imply an endorsement of the AeroTEM system by these companies.

APPENDIX 6: AEROTEM INSTRUMENTATION SPECIFICATION SHEET

AEROTEM Helicopter Electromagnetic System

System Characteristics

- Transmitter: Triangular Pulse Shape Base Frequency 90 Hz
- Tx On Time – 1,833 (90 Hz) µs
- Tx Off Time – 3,667 (90 Hz) µs
- Loop Diameter - 10 m
- Peak Current - 455 A
- Peak Moment – 183,131 NIA
- Typical Z Axis Noise at Survey Speed = 5 nT/s peak to peak
- Sling Weight: 1000 lb
- Length of Tow Cable: 53 m
- Bird Survey Height: 30 m nominal

Receiver

- Two Axis Receiver Coils (x, z) positioned at centre of transmitter loop
- Selectable Time Delay to start of first channel 21.3 , 42.7, or 64.0 ms

Display & Acquisition

- AERODAS Digital recording at 200 samples per decay curve at a maximum of 180 curves per second (27.778 µs channel width)
- RMS Channel Widths: 52.9,132.3, 158.7, 158.7, 317.5, 634.9 µs
- Recording & Display Rate = 10 readings per second.
- On-board display - six channels Z-component and 1 X-component

System Considerations

Comparing a fixed-wing time domain transmitter with a typical moment of 500,000 NIA flying at an altitude of 120 m with a Helicopter TDEM at 30 m, notwithstanding the substantial moment loss in the airframe of the fixed wing, the same penetration by the lower flying helicopter system would only require a sixty-fourth of the moment. Clearly the AeroTEM system with nearly 183.131 NIA has more than sufficient moment. The airframe of the fixed wing presents a response to the towed bird, which requires dynamic compensation. This problem is non-existent for AeroTEM since transmitter and receiver positions are fixed. The AeroTEM system is completely portable, and can be assembled at the survey site within half a day.

APPENDIX 3

ANALYTICAL CERTIFICATES AND ROCK DESCRIPTIONS

Sample	Easting NAD 83 Zone 10	Northing NAD 83 Zone 10	Showing	Date	Sampler	Grain Size	alt int	alt type	veining	py percent	cpy percent	Magnetism	Material	Relief	Lithology	Comments
08KRP800	704540	5696177	Chu Chua	25-Nov-08	KR	fine	str	arg	low	2		none	outcrop	low	grey altered volcanic	pale grey strongly altered fine grained volcanic rock (basalt?), very fine grioaned disseminated pyrite, east side Chu Chua deposit near middle
08KRP801	704514	5696314	Chu Chua	25-Nov-08	KR	fine						strong	outcrop	low	magnetitie breccia	limonite, magnetite altered volcanic breccia, possible subcrop ferricrete(?), pervasive alteration, west side of Chu Chua deposit near middle
08KRP802	704542	5696178	Chu Chua	25-Nov-08	KR	fine	str	si		tr		none	float	low	volcanic breccia	sub-cm white silicified angular breccia clasts, within a grey-brown py (+/-biotite?) bearing matrix
08KRM001	704989	5695845	Chu Chua	25-Nov-08	KR	fine	str	arg	high	5	5	none	core	low	grey altered volcanic	pale grey altered basalt(?) + stringer cpy, DDH CC21, box 190-195m, sample from approx 193m, BQ core(?)
08KRM002	704989	5695845	Chu Chua	25-Nov-08	KR	fine					80	none	core	low	massive sulphide	massive cpy+py, DDH CC21, box 205-210m, sample from approx 208m, BQ core(?)

Sample Number	Certificate Number	Au ppm ICP	Ag ppm ME	Al pc ME	As ppm ME	Au ppm ME	B ppm ME	Ba ppm ME	Be ppm ME	Bi ppm ME
08KRP800	VA08169981	0.129	2.930	2.440	24.900	-0.200	-10.000	70.000	0.110	4.000
08KRP801	VA08169981	0.018	0.630	0.110	54.900	-0.200	-10.000	660.000	0.260	0.360
08KRP802	VA08169981	0.007	0.140	1.070	14.700	-0.200	-10.000	600.000	0.450	0.110
08KRM001	VA08169981	0.641	22.500	0.020	230.000	-0.200	-10.000	10.000	-0.050	13.950
08KRM002	VA08169981	0.318	7.350	0.030	125.500	-0.200	-10.000	10.000	-0.050	11.500

Sample Number	Ca pc ME	Cd ppm ME	Ce ppm ME	Co ppm ME	Cr ppm ME	Cs ppm ME	Cu ppm ME	Fe pc ME	Ga ppm ME	Ge ppm ME	Hf ppm ME
08KRP800	0.200	0.350	17.750	11.600	67.000	0.200	859.000	6.260	9.290	0.120	0.110
08KRP801	0.120	1.190	5.050	23.300	-1.000	0.160	592.000	48.300	22.000	2.740	-0.020
08KRP802	0.170	0.270	23.100	13.200	17.000	2.240	25.900	2.100	3.510	0.080	0.080
08KRM001	0.670	2.100	0.850	492.000	1.000	-0.050	3560.000	25.700	3.160	0.970	-0.020
08KRM002	0.710	6.060	2.850	391.000	3.000	0.110	10000.000	25.900	27.500	0.840	-0.020

Sample Number	Hg ppm ME	In ppm ME	K pc ME	La ppm ME	Li ppm ME	Mg pc ME	Mn ppm ME	Mo ppm ME	Na pc ME	Nb ppm ME	Ni ppm ME
08KRP800	0.240	0.638	0.110	9.300	12.400	1.480	1855.000	0.510	-0.010	0.050	52.900
08KRP801	0.200	0.070	0.010	2.700	0.100	0.390	-5.000	514.000	-0.010	0.180	13.300
08KRP802	-0.010	0.011	0.370	11.500	9.300	0.250	173.000	4.510	0.010	0.300	34.200
08KRM001	0.880	0.468	0.010	0.500	0.300	0.050	24.000	27.300	-0.010	0.240	55.500
08KRM002	3.300	1.540	0.010	1.500	0.700	0.380	24.000	30.800	-0.010	0.260	21.900

Sample Number	P ppm ME	Pb ppm ME	Rb ppm ME	Re ppm ME	S pc ME	Sb ppm ME	Sc ppm ME	Se ppm ME	Sn ppm ME	Sr ppm ME	Ta ppm ME
08KRP800	1270.000	36.500	4.900	0.001	2.220	0.810	3.700	2.000	0.600	4.200	-0.010
08KRP801	80.000	8.200	0.200	0.012	0.050	2.950	0.400	54.900	13.000	3.500	-0.010
08KRP802	820.000	6.500	25.200	0.002	0.130	0.620	2.000	1.000	0.400	7.700	-0.010
08KRM001	100.000	201.000	0.500	0.113	10.000	476.000	0.200	165.500	7.600	21.700	-0.010
08KRM002	-10.000	126.000	0.700	0.062	10.000	19.700	0.200	123.000	16.400	18.700	-0.010

Sample Number	Te ppm ME	Th ppm ME	Ti pc ME	Tl ppm ME	U ppm ME	V ppm ME	W ppm ME	Y ppm ME	Zn ppm ME	Zr ppm ME	Cu pc OG
08KRP800	1.230	2.200	0.006	0.140	0.340	63.000	0.110	5.900	274.000	5.600	
08KRP801	0.510	0.200	-0.005	0.030	2.190	18.000	4.900	0.900	161.000	-0.500	
08KRP802	0.020	3.400	0.064	0.260	1.470	18.000	0.230	4.150	62.000	3.800	
08KRM001	12.500	-0.200	-0.005	0.330	0.210	4.000	1.240	0.680	233.000	0.700	
08KRM002	5.750	-0.200	-0.005	0.610	1.790	18.000	0.630	1.090	5960.000	-0.500	3.780

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: APEX GEOSCIENCE LTD.
200-9797 45 AVE
EDMONTON AB T6E 5V8

Finalized Date: 14-DEC-2008
This copy reported on 15-DEC-2008
Account: TTB

CERTIFICATE VA08169981

Project: 99144
P.O. No.:
This report is for 5 Rock samples submitted to our lab in Vancouver, BC, Canada on 28-NOV-2008.
The following have access to data associated with this certificate:

MIKE DUFRESNE	KRIS RAFFLE	CHERRY WILLIAMS

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME-MS41	51 anal. aqua regia ICPMS	
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Cu-OG46	Ore Grade Cu - Aqua Regia	VARIABLE
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES

To: APEX GEOSCIENCE LTD.
ATTN: CHERRY WILLIAMS
200-9797 45 AVE
EDMONTON AB T6E 5V8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: APEX GEOSCIENCE LTD.
200-9797 45 AVE
EDMONTON AB T6E 5V8

Finalized Date: 14-DEC-2008
Account: TTB

Project: 99144

CERTIFICATE OF ANALYSIS VA08169981

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	ME-MS41 Ag ppm 0.01	ME-MS41 Al % 0.01	ME-MS41 As ppm 0.1	ME-MS41 Au ppm 0.2	ME-MS41 B ppm 10	ME-MS41 Ba ppm 10	ME-MS41 Be ppm 0.05	ME-MS41 Bi ppm 0.01	ME-MS41 Ca % 0.01	ME-MS41 Cd ppm 0.01	ME-MS41 Ce ppm 0.02	ME-MS41 Co ppm 0.1	ME-MS41 Cr ppm 1
08KRP800		0.54	0.129	2.93	2.44	24.9	<0.2	<10	70	0.11	4	0.2	0.35	17.75	11.6	67
08KRP801		1.16	0.018	0.63	0.11	54.9	<0.2	<10	660	0.26	0.36	0.12	1.19	5.05	23.3	<1
08KRP802		0.44	0.007	0.14	1.07	14.7	<0.2	<10	600	0.45	0.11	0.17	0.27	23.1	13.2	17
08KRM001		0.42	0.641	22.5	0.02	230	<0.2	<10	10	<0.05	13.95	0.67	2.1	0.85	492	1
08KRM002		0.42	0.318	7.35	0.03	125.5	<0.2	<10	10	<0.05	11.5	0.71	6.06	2.85	391	3

***** See Appendix Page for comments regarding this certificate *****

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: APEX GEOSCIENCE LTD.
200-9797 45 AVE
EDMONTON AB T6E 5V8

Finalized Date: 14-DEC-2008
Account: TTB

Project: 99144

CERTIFICATE OF ANALYSIS VA08169981

Sample Description	Method / Analyte / Units / LOR	ME-MS41 Cs ppm 0.05	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01
08KRP800		0.2	859	6.26	9.29	0.12	0.11	0.24	0.638	0.11	9.3	12.4	1.48	1855	0.51	<0.01
08KRP801		0.16	592	48.3	22	2.74	<0.02	0.2	0.07	0.01	2.7	0.1	0.39	<5	514	<0.01
08KRP802		2.24	25.9	2.1	3.51	0.08	0.08	<0.01	0.011	0.37	11.5	9.3	0.25	173	4.51	0.01
08KRM001		<0.05	3560	25.7	3.16	0.97	<0.02	0.88	0.468	0.01	0.5	0.3	0.05	24	27.3	<0.01
08KRM002		0.11	>10000	25.9	27.5	0.84	<0.02	3.3	1.54	0.01	1.5	0.7	0.38	24	30.8	<0.01

***** See Appendix Page for comments regarding this certificate *****

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: APEX GEOSCIENCE LTD.
200-9797 45 AVE
EDMONTON AB T6E 5V8

Finalized Date: 14-DEC-2008
Account: TTB

Project: 99144

CERTIFICATE OF ANALYSIS VA08169981

Sample Description	Method / Analyte / Units / LOR	ME-MS41 Nb ppm 0.05	ME-MS41 Ni ppm 0.2	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2
08KRP800		0.05	52.9	1270	36.5	4.9	0.001	2.22	0.81	3.7	2	0.6	4.2	<0.01	1.23	2.2
08KRP801		0.18	13.3	80	8.2	0.2	0.012	0.05	2.95	0.4	54.9	13	3.5	<0.01	0.51	0.2
08KRP802		0.3	34.2	820	6.5	25.2	0.002	0.13	0.62	2	1	0.4	7.7	<0.01	0.02	3.4
08KRM001		0.24	55.5	100	201	0.5	0.113	>10.0	476	0.2	165.5	7.6	21.7	<0.01	12.5	<0.2
08KRM002		0.26	21.9	<10	126	0.7	0.062	>10.0	19.7	0.2	123	16.4	18.7	<0.01	5.75	<0.2

***** See Appendix Page for comments regarding this certificate *****

ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: APEX GEOSCIENCE LTD.
200-9797 45 AVE
EDMONTON AB T6E 5V8

Finalized Date: 14-DEC-2008
Account: TTB

Project: 99144

CERTIFICATE OF ANALYSIS VA08169981

Sample Description	Method	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	Cu-OG46
	Analyte	Ti	Tl	U	V	W	Y	Zn	Zr	Cu
	Units	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.005	0.02	0.05	1	0.05	0.05	2	0.5	0.01
08KRP800		0.006	0.14	0.34	63	0.11	5.9	274	5.6	
08KRP801		<0.005	0.03	2.19	18	4.9	0.9	161	<0.5	
08KRP802		0.064	0.26	1.47	18	0.23	4.15	62	3.8	
08KRM001		<0.005	0.33	0.21	4	1.24	0.68	233	0.7	
08KRM002		<0.005	0.61	1.79	18	0.63	1.09	5960	<0.5	3.78

***** See Appendix Page for comments regarding this certificate *****

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

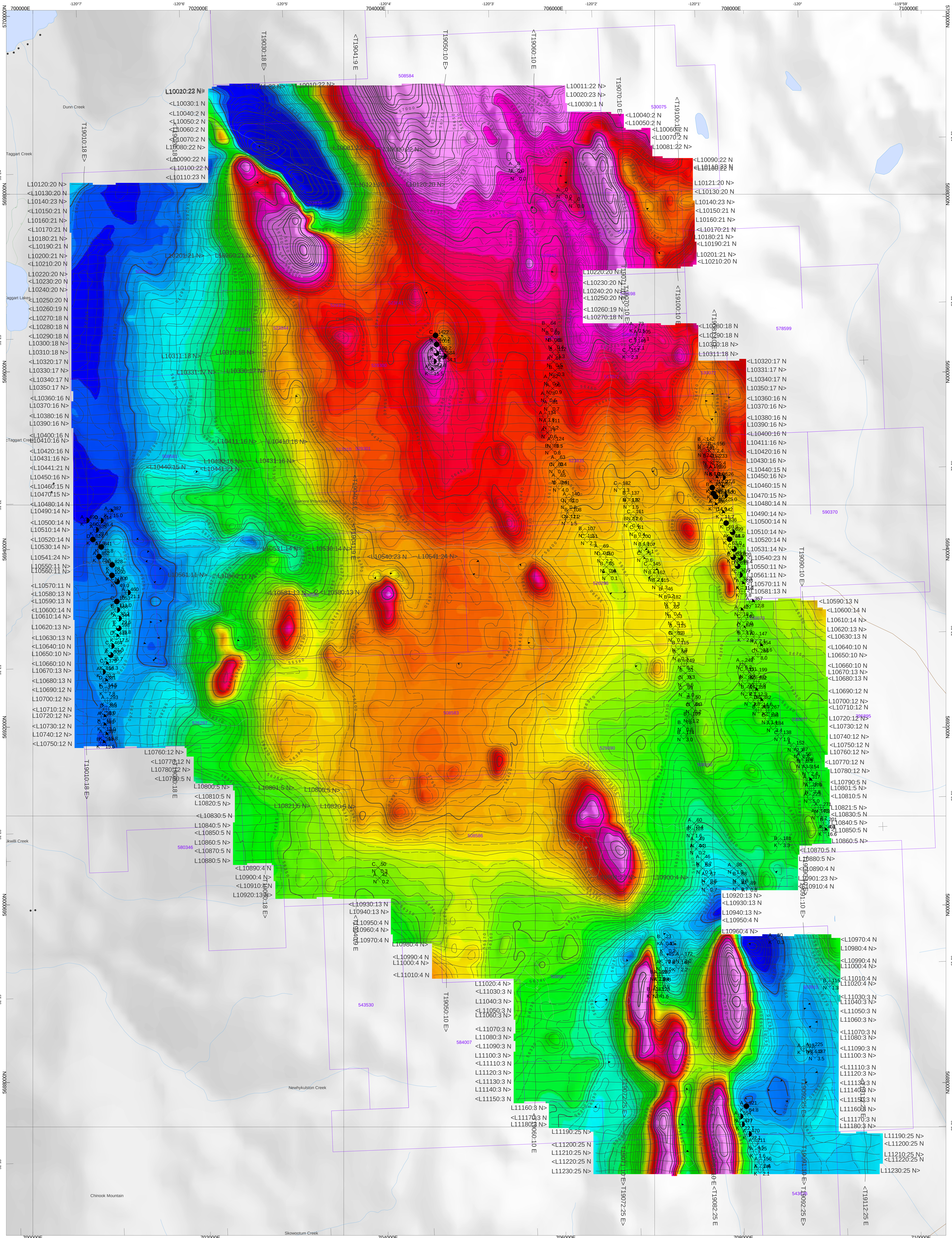
To: APEX GEOSCIENCE LTD.
200-9797 45 AVE
EDMONTON AB T6E 5V8

Finalized Date: 14-DEC-2008
Account: TTB

Project: 99144

CERTIFICATE OF ANALYSIS VA08169981

Method	CERTIFICATE COMMENTS
ME-MS41	Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g).
ME-MS41	Interference: Mo>400ppm on ICP-MS Cd,ICP-AES results shown.



Grid North
NAD83-Zone10

The topographic data base was derived from 1:50000 NRC (Natural Resources Canada) NTDB data
Topo contours derived from NASA SRTM (Shuttle Radar Topography Mission) data
Inset data derived from Natural Resources Canada 'Atlas of Canada Base Maps'

This map accompanies the technical report entitled 'Report on a Helicopter-Borne Magnetic and Electromagnetic Survey, Chua Chua', by Aeroquest Limited, November 2008

TMI Contour Interval
5nT
10nT
50nT
250nT

SURVEY SPECIFICATIONS:
Survey flown: June 29 - July 5, 2008
Traverse line spacing: 100 metres
Traverse line direction: 90º/270º
Nominal EM bird height: 30 metres
Aircraft: Aerospatiale A-Star 350B2 (C-GPHM)

INSTRUMENTATION:
Data acquisition: ADAS & RMS DGR-33
Magnetometer: Geometrics G-823A caesium vapour
Installation: Towed bird 31 m above EM bird
Sensitivity: .001 nanoTesla
Electromagnetics: AeroTEM III System (MIKE)
Configuration: Towed bird

NAVIGATION:
Navigation: Differential Global Positioning System (DGPS)
Navigation equipment: AGNAV with MID-TECH RX400p receiver
Radar Altimeter: Terra TRA3000/TRI-30

POSITIONING
Datum: NAD83
Major Axis: 6378137.000
Eccentricity: 0.081819191

MAP PROJECTION
Projection: Universal Transverse Mercator
Central Meridian: 123°W (Zone 10)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m

scale 1:20,000
(meters)
NAD83 / UTM zone 10N

Apex Geoscience Ltd.
Little Fort, BC, Canada

TOTAL MAGNETIC INTENSITY

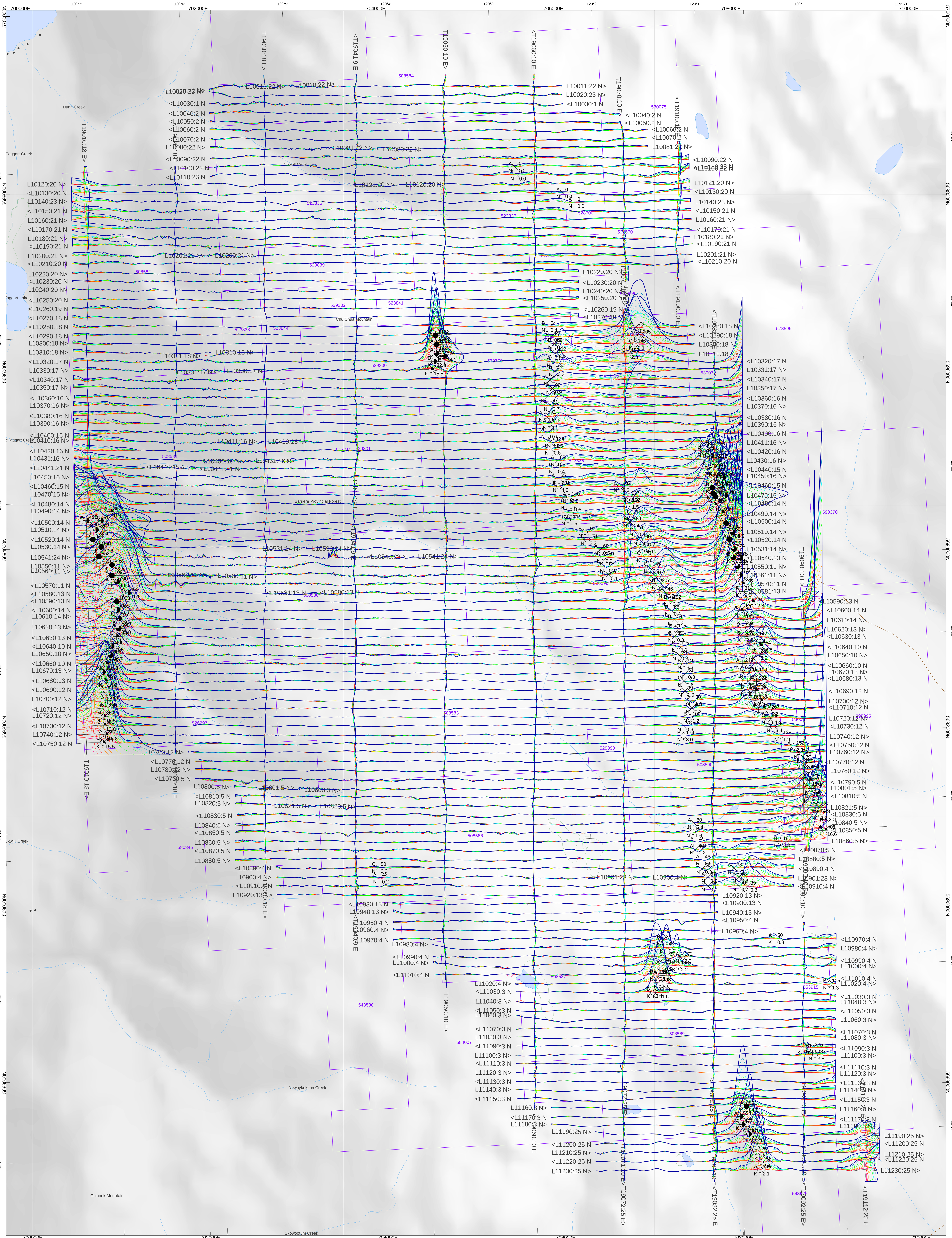
Chua Chua

NTS 082M05, 092P08

7687 Bath Road, Mississauga, ON, Canada, L4T 3T1
Tel: (905) 672-9129 Fax: (905) 672-7083
www.aeroquest.ca

November 2008

TMI



Grid North
NAD83-Zone10

The topographic data base was derived from 1:50000 NRC (Natural Resources Canada) NTDB data
Topo contours derived from NASA SRTM (Shuttle Radar Topography Mission) data
Inset data derived from Natural Resources Canada 'Atlas of Canada Base Maps'

This map accompanies the technical report entitled 'Report on a Helicopter-Borne Magnetic and Electromagnetic Survey, Chua Chua', by Aeroquest Limited, November 2008

Scale 1:10,000,000
(kilometers)
NAD83 / UTM zone 10N

Building
Rail
Roads / Trails
Pipeline
Transmission Line
Sand
Built Up Area
Mining Area
Mining Claims
Wetland
Lake

AeroTEM Profiles
positive excursion to top and right, 1mm=15nT/s

Z2 Off-Time Channel
Z3 Off-Time Channel
Z4 Off-Time Channel
Z5 Off-Time Channel
Z6 Off-Time Channel
Z7 Off-Time Channel
Z8 Off-Time Channel
Z9 Off-Time Channel
Z10 Off-Time Channel
Z11 Off-Time Channel
Z12 Off-Time Channel

Off-Time Anomaly Symbols
>50S
35-50S
20-35S
10-20S
5-10S
1-5S
<1S
Cultural Sources

anomaly label A 125 decay constant (µs)
thicK/thiN source K 36 off-time conductance (S)

SURVEY SPECIFICATIONS:
Survey flown: June 29 - July 5, 2008
Traverse line spacing: 100 metres
Traverse line direction: 90º/270º
Nominal EM bird height: 30 metres
Aircraft: Aerospatiale A-Star 350B2 (C-GPHM)
INSTRUMENTATION:
Data acquisition: ADAS & RMS DGR-33
Magnetometer: Geometrics G-823A caesium vapour
Installation: Towed bird 31 m above EM bird
Sensitivity: .001 nanoTesla
Electromagnetics: AeroTEM III System (MIKE)
Configuration: Towed bird
NAVIGATION:
Navigation: Differential Global Positioning System (DGPS)
Navigation equipment: AGNAV with MID-TECH RX400p receiver
Radar Altimeter: Terra TRA3000/TRI-30
POSITIONING
Datum: NAD83
Major Axis: 6378137.000
Eccentricity: 0.081819191
MAP PROJECTION
Projection: Universal Transverse Mercator
Central Meridian: 123°W (Zone 10)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m

scale 1:20,000
250 0 250 500 750 1000 1250 1500
(meters)
NAD83 / UTM zone 10N

Apex Geoscience Ltd.
Little Fort, BC, Canada

AEROTEM OFF-TIME PROFILES

Chua Chua

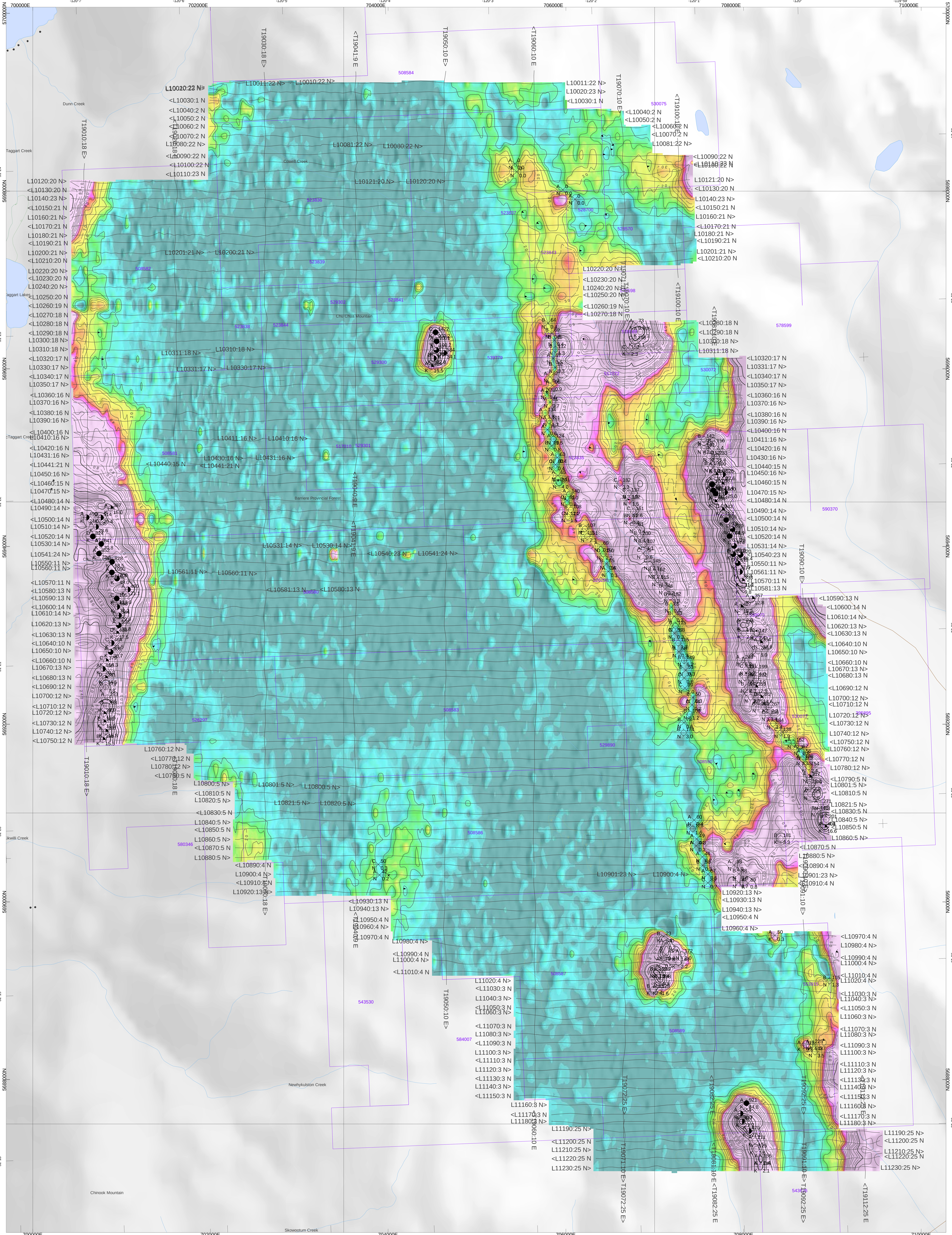
NTS 082M05, 092P08

AEROQUEST
7687 Bath Road, Mississauga, ON, Canada, L4T 3T1
Tel: (905) 672-9129 Fax: (905) 672-7083
www.aeroquest.ca

November 2008

EM

EM_20k.map, AQL Job no. 08107



Grid North
NAD83-Zone10

The topographic data base was derived from 1:50000 NRC (Natural Resources Canada) NTDB data
Topo contours derived from NASA SRTM (Shuttle Radar Topography Mission) data
Inset data derived from Natural Resources Canada 'Atlas of Canada Base Maps'

This map accompanies the technical report entitled 'Report on a Helicopter-Borne Magnetic and Electromagnetic Survey, Chua Chua', by Aeroquest Limited, November 2008

Scale 1:10,000,000
100 0 100 200
(kilometers)
NAD83 / UTM zone 10N

Building
Rail
Roads / Trails
Pipeline
Transmission Line
Sand
Built Up Area
Mining Area
Mining Claims
Wetland
Lake

ZOFF Contour Interval
5nT/s
10nT/s
20nT/s
100nT/s

Off-Time Anomaly Symbols
>50S
35-50S
20-35S
10-20S
5-10S
1-5S
<1S
Cultural Sources

anomaly label A, 125 decay constant (µs)
thicK/thiN source K, 36 off-time conductance (S)

SURVEY SPECIFICATIONS:
Survey flown: June 29 - July 5, 2008
Traverse line spacing: 100 metres
Traverse line direction: 90º/270º
Nominal EM bird height: 30 metres
Aircraft: Aerospatiale A-Star 350B2 (C-GPHM)
INSTRUMENTATION:
Data acquisition: ADAS & RMS DGR-33
Magnetometer: Geometrics G-823A caesium vapour
Installation: Towed bird 31 m above EM bird
Sensitivity: .001 nanoTesla
Electromagnetics: AeroTEM III System (MIKE)
Configuration: Towed bird
NAVIGATION:
Navigation: Differential Global Positioning System (DGPS)
Navigation equipment: AGNAV with MID-TECH RX400p receiver
Radar Altimeter: Terra TRA3000/TRI-30
POSITIONING
Datum: NAD83
Major Axis: 6378137.000
Eccentricity: 0.081819191
MAP PROJECTION
Projection: Universal Transverse Mercator
Central Meridian: 123°W (Zone 10)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m

scale 1:20,000
250 0 250 500 750 1000 1250 1500
(meters)
NAD83 / UTM zone 10N

Apex Geoscience Ltd.
Little Fort, BC, Canada

AEROTEM Z1 OFF-TIME

Chua Chua

NTS 082M05, 092P08

AEROQUEST
7687 Bath Road, Mississauga, ON, Canada, L4T 3T1
Tel: (905) 672-9129 Fax: (905) 672-7083
www.aeroquest.ca

November 2008

ZOFF

ZOFF_20k.map, AQL Job no. 08107