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ASSESSMENT REPORT

describing

GEOPHYSICAL SURVEYS AND DIAMOND DRILLING

at the

CONVERT PROPERTY

Convert 1-128	YB60028-YB75165
133-154	YB75170-YB75191
159-186	YB75196-YB75223
191-208	YB75228-YB75245
315-320	YB75352-YB75357

NTS 105B/5
Latitude 60°20'N; Longitude 131°47'W

in the

Watson Lake Mining District
Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

STRATEGIC METALS LTD.

by

W.A. Wengzynowski, P.Eng.
March 2007

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INTRODUCTION

The Convert property is a volcanogenic massive sulphide (VMS) prospect located in southern Yukon Territory. It is owned 100% by Strategic Metals Ltd.

This report describes helicopter-borne magnetic and VTEM surveys that were conducted in May 2006 by Geotech Ltd. on behalf of Strategic. The author supervised this work and his Statement of Qualifications appears in Appendix I.

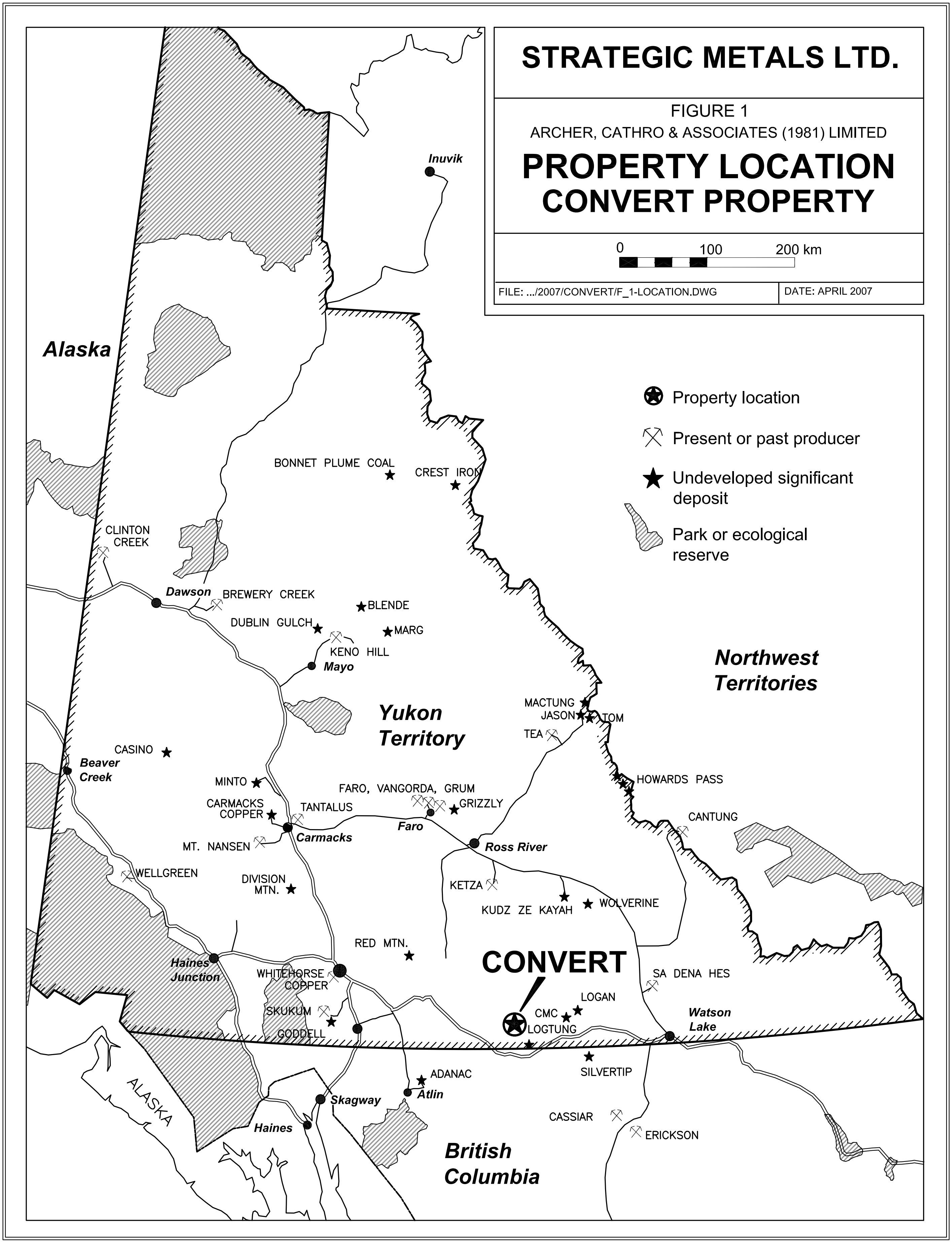
PROPERTY LOCATION, CLAIM DATA AND ACCESS

The Convert property consists of 202 mineral claims located in southern Yukon at latitude 60°20'N; longitude 131°47'W on NTS map sheet 105B/5 (Figure 1). The claims are registered with the Watson Lake Mining Recorder in the name of Archer, Cathro and Associates (1981) Limited, which holds them in trust for Strategic. The locations of individual claims are shown on Figure 2 while claim registration data are tabulated below.

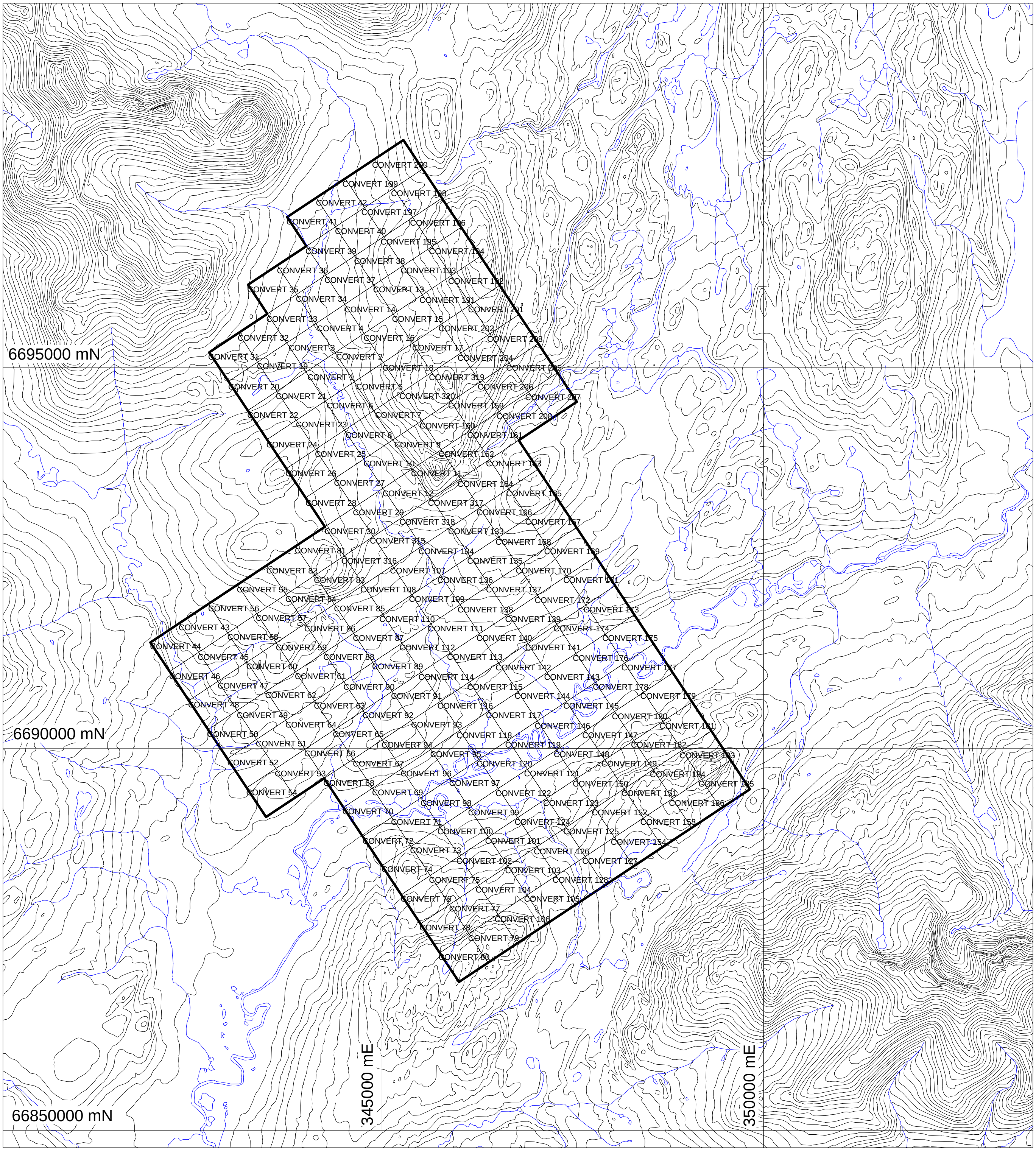
Claim Name	Grant Number	Expiry Date*
Convert 1-10	YB60028-YB60037	February 15, 2014
11-30	YB63774-YB63793	February 15, 2012
31-36	YB75068-YB75073	February 15, 2010
37-38	YB75074-YB75075	February 15, 2012
39-106	YB75076-YB75143	February 15, 2010
107-112	YB75144-YB75149	February 15, 2012
113-128	YB75150-YB75165	February 15, 2010
133-138	YB75170-YB75175	February 15, 2012
139-154	YB75176-YB75191	February 15, 2010
159-170	YB75196-YB75207	February 15, 2012
171-186	YB75208-YB75223	February 15, 2010
191-196	YB75228-YB75233	February 15, 2012
197-200	YB75234-YB75237	February 15, 2010
201-204	YB75238-YB75241	February 15, 2012
205-208	YN75242-YB75245	February 15, 2010
315-320	YB75352-YB75357	February 15, 2012

* Expiry dates include assessment credit for work done in 2006, which has been filed but not yet accepted.

The property is situated 58 km east of Teslin, a village that lies alongside the Alaska Highway approximately 183 km by road east-southeast of Whitehorse. The closest ground access to the Convert property is an old bulldozer trail that ends 17 km to the south. Access is normally by helicopter. The geophysical surveys that were done in 2006 were performed with an Astar 350 BX operated by Trans North Helicopters from a temporary base at the Teslin airport.



STRATEGIC METALS LTD.
FIGURE 1
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
PROPERTY LOCATION
CONVERT PROPERTY
0
100
200 km
FILE: .../2007/CONVERT/F_1-LOCATION.DWG
DATE: APRIL 2007
Property location
Present or past producer
Undeveloped significant deposit
Park or ecological reserve
Alaska
Inuvik
Northwest Territories
Yukon Territory
British Columbia
ALASKA
BONNET PLUME COAL
CREST IRON
CLINTON CREEK
Dawson
BREWERY CREEK
BLENDE
DUBLIN GULCH
MARG
KENO HILL
Mayo
MACTUNG
JASON
TOM
TEA
CASINO
Beaver Creek
MINTO
FARO, VANGORDA, GRUM
GRIZZLY
HOWARDS PASS
CARMACKS COPPER
TANTALUS
Faro
CANTUNG
MT. NANSEN
Carmacks
Ross River
WELLGREEN
DIVISION MTN.
KETZA
KUDZ ZE KAYAH
WOLVERINE
RED MTN.
CONVERT
Haines Junction
WHITEHORSE COPPER
SA DENA HES
LOGAN
SKUKUM
CMC
Watson Lake
GODDELL
LOGTUNG
SILVERTIP
ADANAC
Skagway
Atlin
Haines
CASSIAR
ERICKSON



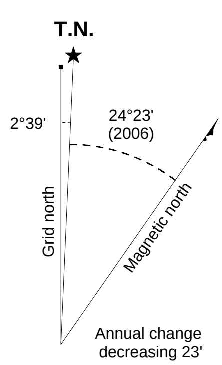


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FIGURE 2

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CLAIM LOCATION

CONVERT PROPERTY

0 3 6 km

UTM Zone 9, NAD83, NTS 105B/5

FILE:../2007/CONVERT/F2_CLAIM_LOC DATE: APRIL 2007

HISTORY

In 1971 Wolf Lake Joint Venture conducted regional scale exploration in the Convert area. Although this work identified soil geochemical anomalies and some mineralization, no claims were staked (Archer, 1971). In 1988 geologists from Archer Cathro revisited the area and discovered a prominent gossanous kill zone that yielded strongly anomalous, multi-element soil geochemical values, but again no claims were staked.

Nordac Resources Ltd. (the predecessor to Strategic Metals) staked the first 10 Convert claims in summer 1995 and later that year conducted grid soil sampling, prospecting and geological mapping (Carne, 1996). In early 1996, the claim block was expanded and airborne and ground, electromagnetic and magnetic surveys were performed. The following summer, geological mapping, prospecting and soil sampling were conducted at reconnaissance scale across the entire property and in more detail on four grids (Wengzynowski, 1997). In 1997 Strategic Metals did 993 m of diamond drilling in six holes (Wengzynowski, 1998). It also performed minor prospecting and hand trenching in 2005 (Wengzynowski, 2006).

Results of historical work are compiled on Figures 3 and 4.

GEOMORPHOLOGY

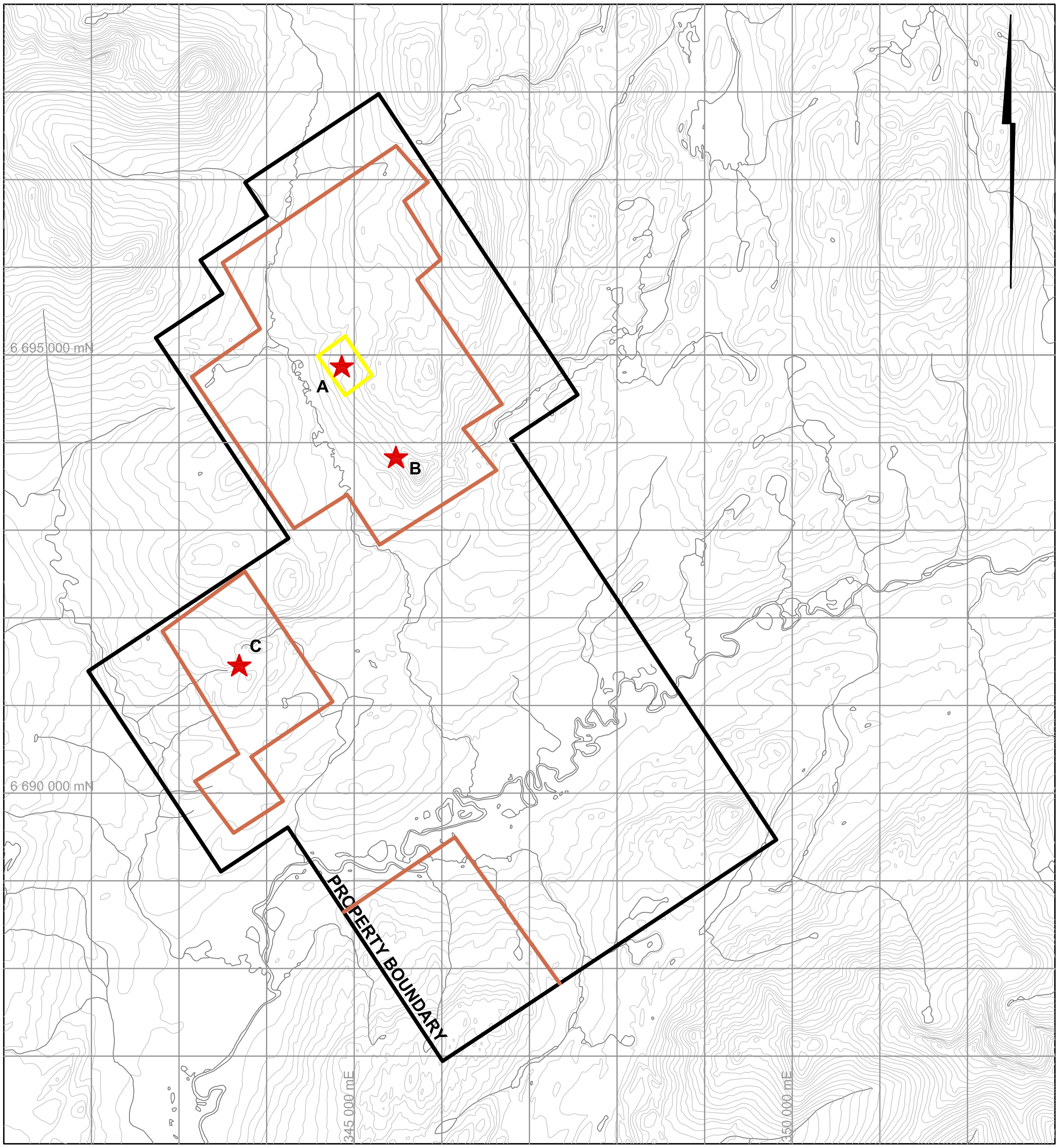
The property lies along the northwestern flank of the Cassiar Mountains. It is drained by creeks that are tributaries of the Morley River, which is part of the Yukon River watershed. Terrain on the property is gentle to moderate with elevations ranging from 900 m near the Morley River to 1500 m atop a ridge in the northern part of the claim block. The property is covered by Pleistocene ice sheets and glacial features are common. Outcrop is rare.

Treeline in the Convert area is at about 1450 m. Most of the property is well vegetated with black spruce, pine or alder on hillsides and thick willow along creeks and in marshes. Buckbrush predominates at higher elevations.

REGIONAL GEOLOGY

Geology on the Wolf Lake map sheet where the Convert property is located was mapped at 1:250,000 scale in the 1950s and 1970s by the Geological Survey of Canada (Poole et al., 1960, and Tempelman-Kluit, et al, 1976). More recent mapping has been done in the immediate vicinity of the property at 1:50,000 scale by the Yukon Geological Survey (Roots et al, 2004).

The Convert property is located on the southwestern side of the Tintina Fault within a package of rocks assigned to the Yukon-Tanana Terrane (Figures 5 and 6). These rocks represent continental margin sediments and island arc assemblages that were metamorphosed and deformed during their accretion to North America in early Mesozoic times. Following accretion they were extensively intruded by Early Jurassic and Early Tertiary intrusions that range up to batholith in size. The main lithologies in the vicinity of the property are summarized on the following table.



Soil geochemical grid

Area of diamond drilling and ground geophysical surveys

Showing referred to in text

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FIGURE 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

HISTORICAL COMPILATION

CONVERT PROPERTY

0 1 5 km

NAD 83 / UTM ZONE 9

FILE: ...2007/CONVERT/F_3-CONV-HIST.DWG DATE: APRIL 2007

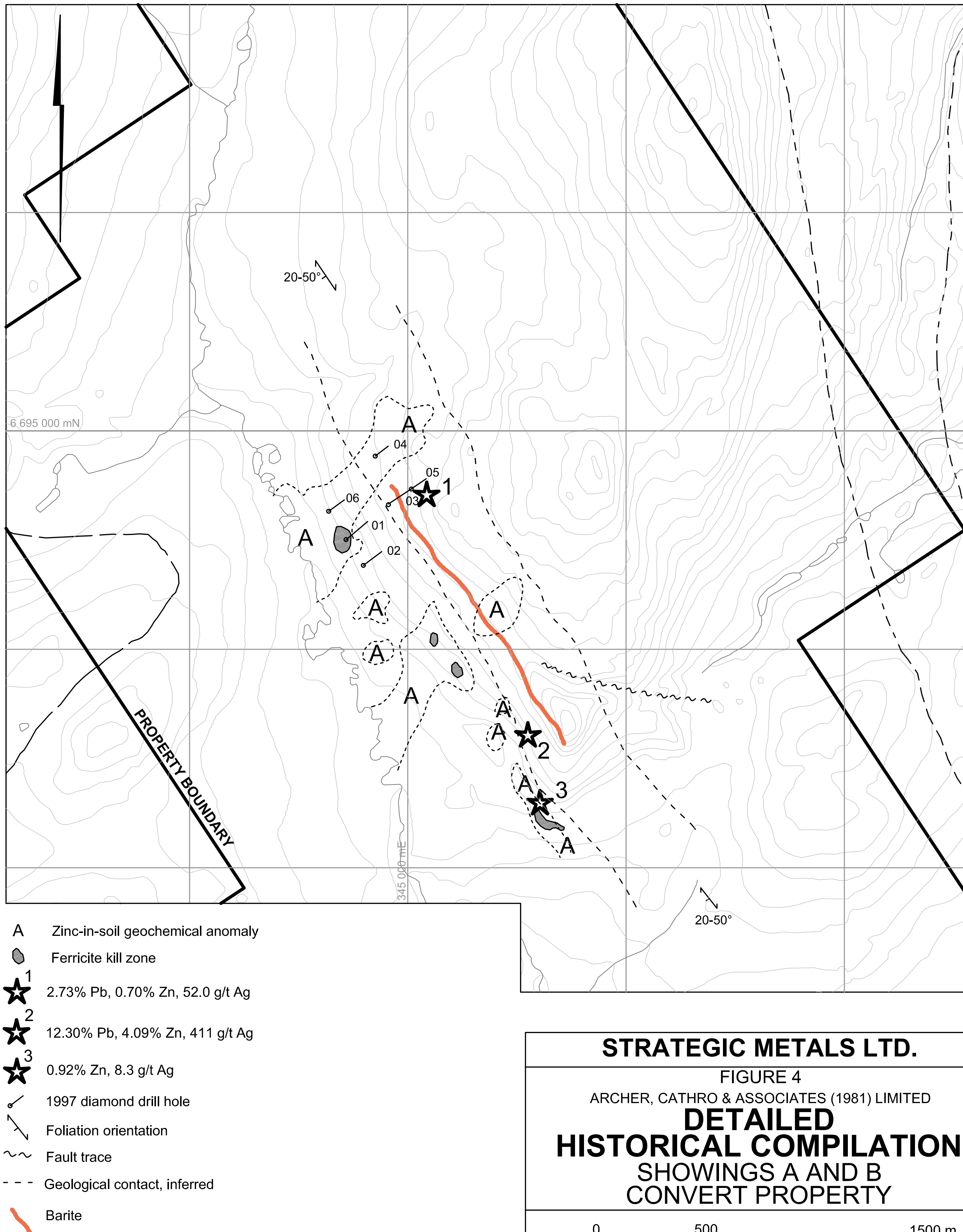

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FIGURE 4

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

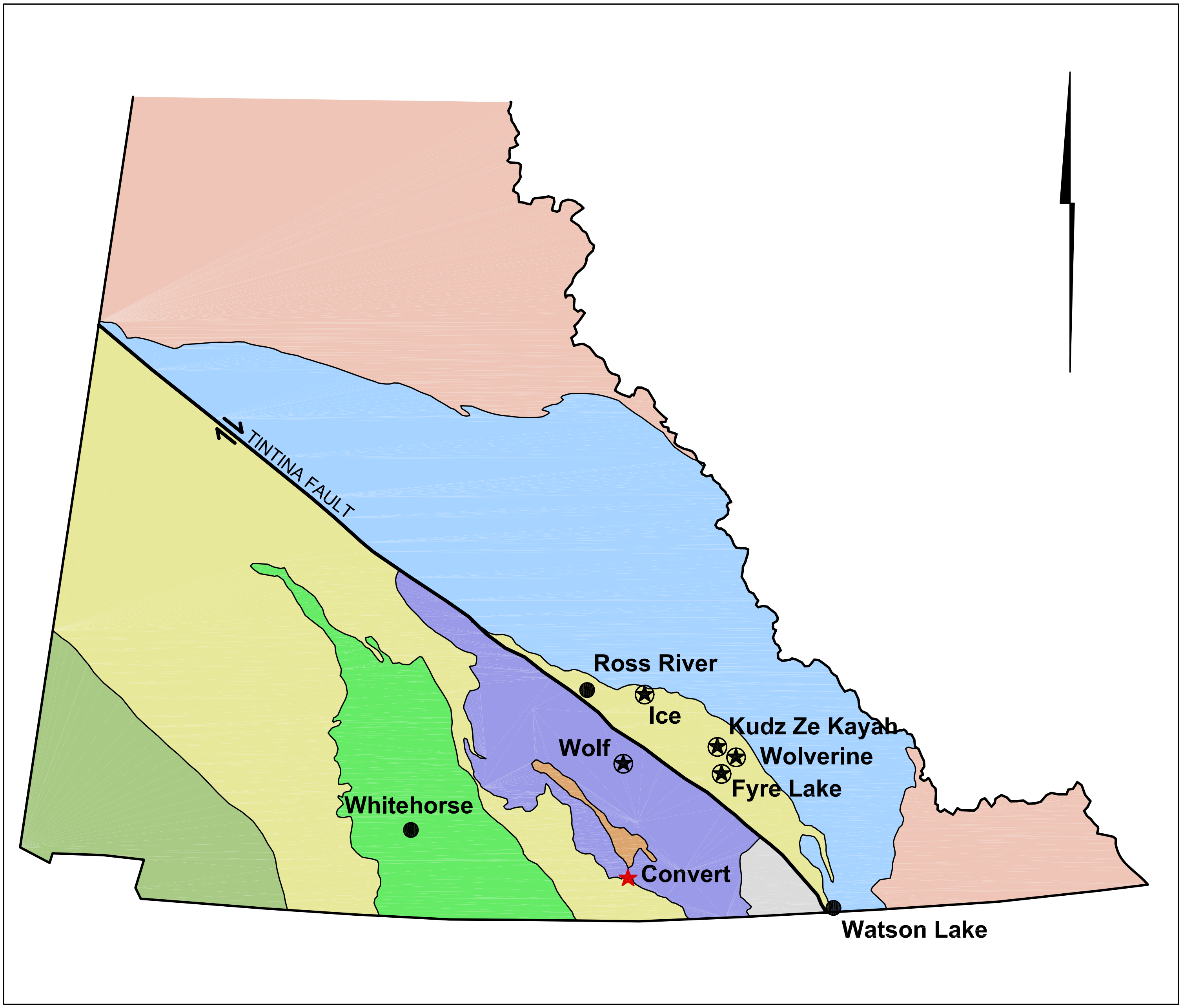
DETAILED HISTORICAL COMPILATION

SHOWINGS A AND B
CONVERT PROPERTY

0 500 1500 m

NAD 83 / UTM ZONE 9

FILE: ...2007/CONVERT/F_4-CONV-DET-HIST.DWG DATE: APRIL 2007



TERRANE

Quaternary

Mackenzie Platform

Selwyn Basin

Slide Mountain

Cassiar Platform

Yukon-Tanana

Intermontane

Insular

VMS deposit

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FIGURE 5

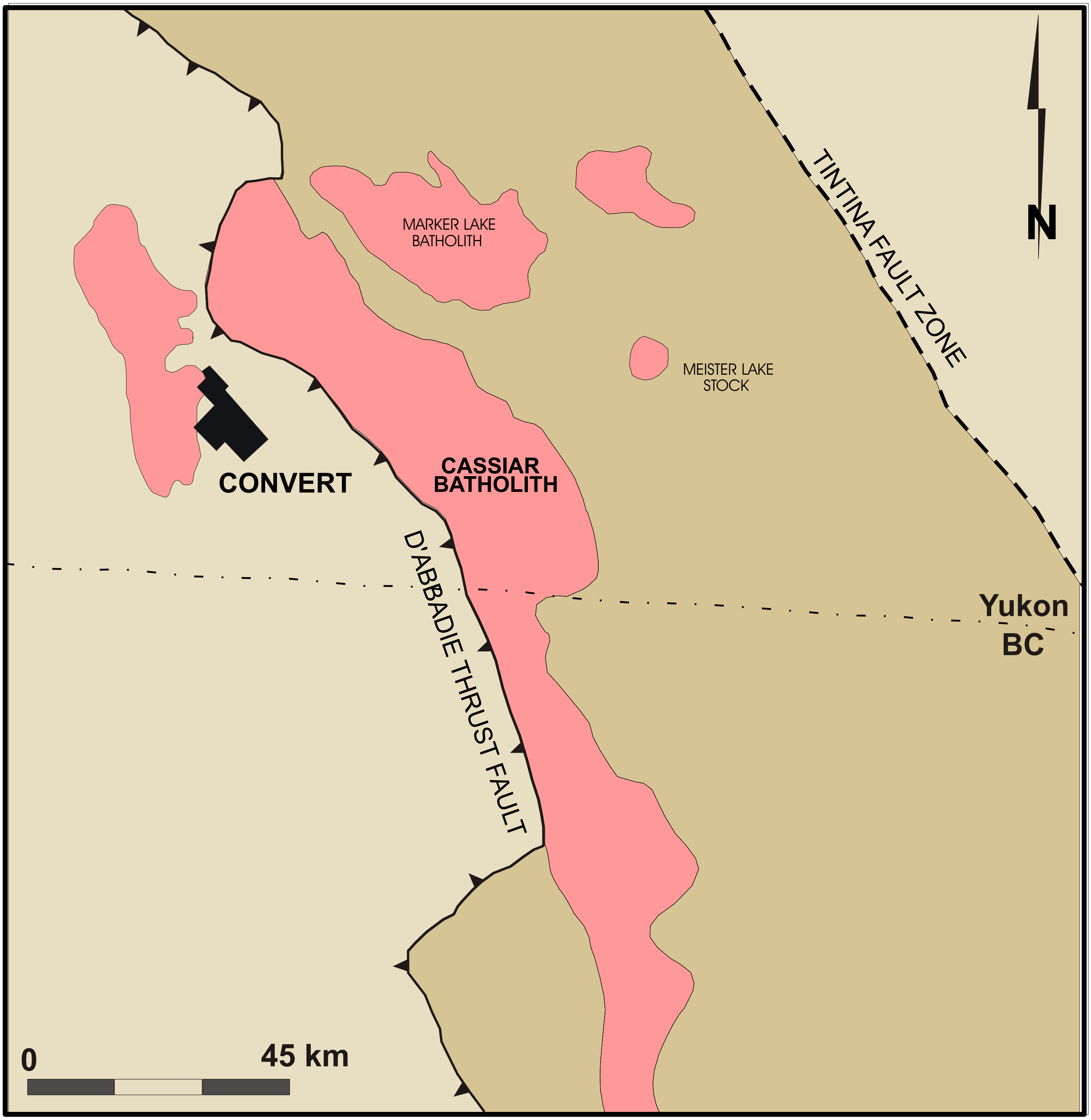
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

TECTONIC SETTING

CONVERT PROPERTY

0 150 350 km

FILE: ...2007/CONVERT/F_5-TECTONIC.DWG APRIL 2007



Mid Cretaceous Cassiar Plutonic Suite

Cassiar Platform

Yukon-Tanana Terrane

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FIGURE 6

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

REGIONAL GEOLOGY

CONVERT PROPERTY

FILE: .../2007/CONVERT/F_6-REG_GEO.CDR DATE: APRIL 2007

Table II - Main Lithological Units

Recent Overburden	Glacial till, lateral and terminal moraines and glaciofluvial outwash
Late Cretaceous or Early Tertiary	Quartz monzonite and quartz-feldspar porphyry
Early Cretaceous	Biotite granite, granodiorite, leuco-quartz monzonite and alaskite
Early Jurassic	Porphyritic granodiorite, monzonite, minor diorite and gabbro
Upper Carboniferous to Permian Klinkit Group	Marble, meta-tuff and volcanic breccia of intermediate composition and limestone
Lower Carboniferous to Upper Silurian Swift River Group	Quartz-plagioclase grit, meta-sandstone, argillite, limestone, chloritic meta-tuff and andesitic intrusions, breccias and tuff.
Carboniferous or older Dorsey Complex	Biotite±garnet schist, quartz meta-grit, hornblende schist and gneiss

PROPERTY GEOLOGY

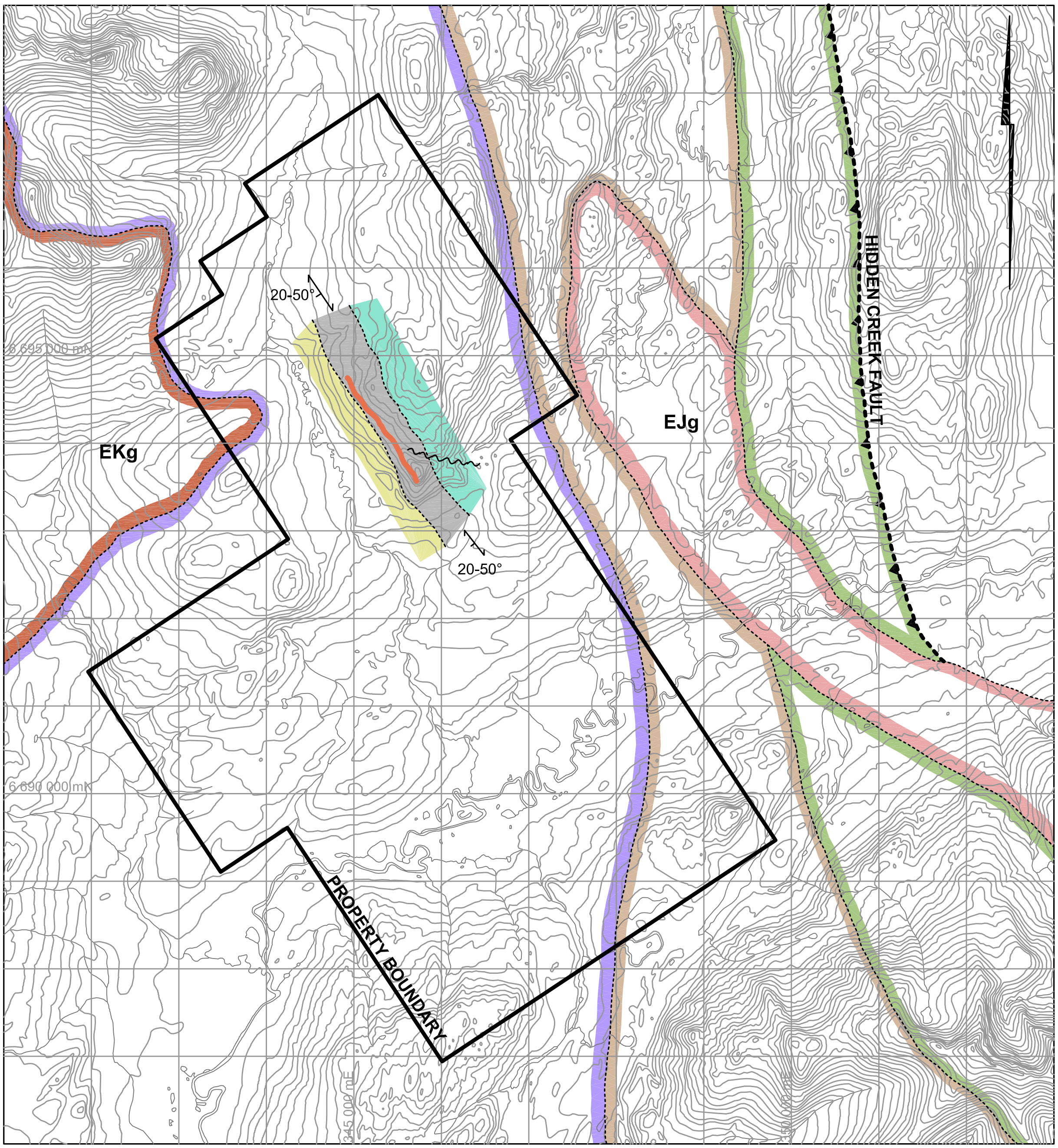
The Convert property is mostly underlain by metasedimentary and metavolcanic rocks, which belong to the Swift River Group and Dorsey Complex of the Yukon-Tanana Terrane (Figure 7). An unnamed batholith of Early Cretaceous granite lies along the northwest edge of the property while an elongate stock of Early Jurassic porphyritic granodiorite is situated along to the eastern boundary. Smaller Early Cretaceous granitic plutons are located two to three kilometres to the south.

Outcrop exposure on the Convert property is poor, ranging from less than 1% at lower elevations to about 2% near ridge tops. Ten lithological units have been identified by previous detailed mapping: the first four units described below are likely part of the Swift River Group, the next three are probably part of the Dorsey Complex and the last three are undated dykes related to one or more of the Mesozoic intrusive suites.

Lithologies

Quartz-feldspar-muscovite±biotite grit is found south of the Morley River. It is tan to yellow and weakly to moderately foliated. Quartz forms between 20 and 40% of the rock and typically exhibits sucrosic textures. Pitting is common, likely resulting from feldspar weathering to clay.

Quartz-muscovite±biotite±chlorite schist is well foliated and varies from tan to pale green to green with white bands. This unit is most abundant in the north-central part of the property and is common in drill core. Quartz is the main mineral (≥30%) and commonly forms eyes up to 2 mm across. Muscovite, biotite and chlorite define well developed foliation. Individual horizons within this unit vary from non-calcareous to moderately calcareous and occasionally contain minor graphite. This unit is probably a metamorphosed felsic volcanic.



Swift River Group

- Undifferentiated
- Felsic metavolcanic
  quartz-muscovite-sericite schist, chlorite schist, muscovite phyllite
- Silica exhalite
  chert-rhyolite, muscovite-quartz phyllite
- Felsic metavolcanic-metasedimentary
  quartz-muscovite-sericite schist, muscovite phyllite, chert-quartzite
- Barite

Dorsey Complex

Upper Dorsey
- Biotite +/- garnet schist, quartz meta grit

Lower Dorsey
- Hornblende schist and gneiss

Cassiar Plutonic Suite

- EKg Biotite granite, granodiorite, leuco-quartz monzonite, alaskite
- EJg Non-foliated, k-feldspar porphyritic granodiorite and monzonite

- Foliation orrientation
- Normal fault trace
- Geological contact, inferred
- Normal fault trace

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FIGURE 7

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

PROPERTY GEOLOGY

CONVERT PROPERTY

0 1 5 km

NAD 83 / UTM ZONE 9

FILE: ...2007/CONVERT/F_7-CONV-GEO.DWG

DATE: APRIL 2007

Chert is also most abundant in the north-central part of the property where it is interbedded with quartz-muscovite±biotite±chlorite schist. The chert is moderately banded; white, grey or tan; and, thickly to thinly laminated. Muscovite content varies from 0 to 20% and in places this unit grades to quartz-muscovite schist. Minor pyrite and hematite parallel foliation in several areas while magnetite and graphite laminae are observed in float boulders and drill core. This unit is interpreted to be a silica-rich exhalite.

Phyllite has only been identified in the north-central part of the property and is the dominant unit in drill core. This unit is closely associated with the chert and quartz-muscovite±biotite±chlorite schist, and if often interbedded with these units. Outcrops are well foliated, dark grey and in places contain thin quartz and/or graphite laminae. In drill core, phyllite is normally dark grey or black but becomes grey to pale green where it is sericite-or chlorite-altered. Crenulations are common and minor disseminated pyrite is often present.

Limestone is grey to white, buff weathering and thinly bedded. Disseminated pyrite is present in minor quantities. This unit is exposed in the northeastern part of the property.

Andesite is grey to orange weathering, green on fresh surfaces, aphanitic and moderately foliated. It is generally strongly fractured and contains foliaform quartz-carbonate sweats and crosscutting veinlets. Trace pyrite is present in some outcrops. This unit is found in the western part of the property. It is either part of the andesitic intrusion, breccia and tuff unit of the Swift River Group or is a folded layer of volcanic fragmental belonging to the Klinkit Group.

Peridotite outcrops near the southeastern edge of the property. It is greenish black, moderately to strongly serpentinized and weakly to moderately magnetic. Narrow discontinuous bands of chrysotile ($\geq$ 1 mm) are present in some float boulders. This unit probably belongs to the hornblende schist and gneiss at the base of the Dorsey Complex.

Greenstone is medium grained, olive green and strongly calcareous. It is dominantly composed of chlorite, quartz and carbonate with 2 to 3 mm wide carbonate veinlets. This unit is only seen in the drill area where it appears to form <1 m wide dykes with sharp but irregular contacts.

Granodiorite is tan, grey to white, generally blocky weathering and non-foliated. It locally weathers to fine, uniformly pebble-sized rubble where feldspar is dominant. Composition is variable ranging from granite to hornblende diorite. The two largest exposures are found along the eastern and western edges of the claim block while smaller dykes and sills outcrop in the southeastern part of the property. Based on the recent regional mapping, the eastern pluton is considered to be Early Jurassic and the western pluton to be Early Cretaceous.

Structure

Property scale faults are observed both subparallel and parallel to foliation. Displacement on the faults is not known. Characteristic features include brecciation and slickensides at surface and gouge zones in drill core. At least some of the property scale faults are likely related to the Hidden Creek Fault and the Ram Creek Fault, which are regional scale thrusts located 3 and 6 km to the east of the claims, respectively.

Outcrop scale folds occur throughout the property. These are generally high amplitude structures. Deformation fabrics are well developed in outcrops and drill core. Phase 1 deformation is indicated by foliation which strikes northwesterly and usually dips moderately to the southwest. Phase 2 deformation is defined by slaty cleavage that is only observed in drill core. Angles between the two planar features range from 0 to 40°. Relict bedding is rarely preserved and where present is roughly parallel to foliation. Quartz±carbonate sweats, veins and veinlets are common in all units, except the granodiorite and quartz-feldspar porphyry.

MINERALIZATION AND GEOCHEMISTRY

Mineralization has been discovered at three main showings on the Convert property, only one of which has been partially tested by diamond drilling. The showings contain VMS and skarn mineralization. The locations of Showings A, B and C are shown on Figure 3 and 5. In 1995 and 1996, grid- and reconnaissance-scale soil sampling was performed in various parts of the property. This work outlined three main areas of anomalous lead-zinc-copper-silver response coincident with the areas where mineralization has been discovered. The following table lists peak soil geochemical values for key VMS indicator elements, which were obtained in the vicinity of the main showings.

Table III- Peak Values (ppm)

Showing	Lead	Zinc	Copper	Silver
A	682	9720	306	10.6
B	348	>10000	1345	10.6
C	4050	5320	499	21.0

Showing A is located in the north-central part of the property. It occurs within a section of metamorphosed felsic volcanic rocks that are capped by a thick silica exhalite horizon containing narrow intermittent bands of nearly massive barite (Figures 3 and 4). This showing was the focus of the 1997 drill program (see Diamond Drilling section). It is centred on the discovery kill zone, a 75 by 50 m unvegetated area where the ground is covered by a thick layer of rusty transported iron oxide. The area around the kill zone is heavily vegetated and outcrop is rare. Prospecting found scattered barite float and a 30 cm diameter boulder of silica-muscovite exhalite that contains fine laminations of galena, honey sphalerite and lesser pyrite. A rock sample from this boulder returned 0.70% zinc, 2.73% lead and 52 g/t silver (Wengzynowski, 2005). Showing A is marked by a 900 by 250 m area exhibiting multi-element soil geochemical response. The highest zinc values occur within and immediately downhill from the discovery kill zone. Lead and silver response crosscuts the zinc trend and are best developed uphill from the kill zone. Copper values are highest within the kill zone.

Showing B lies one kilometre south of Showing A and is within the same stratigraphic section. It is marked by a 1000 by 300 m area of weak to strong lead-zinc soil geochemical response with sporadic copper and silver support. The anomaly trends northwesterly approximately parallel to topography and stratigraphy. It contains another ferricrete kill zone at its southern end. Again the area is well vegetated and outcrop is sparse. Detailed prospecting and hand pitting exposed wispy foliaform galena and sphalerite in locally derived talus, a chip sample from which yielded 12.3% lead, 4.09% zinc and 411 g/t silver across 10 cm (Wengzynowski, 2006). Numerous blocks of silica exhalite containing clots and disseminations of sphalerite were found nearby and bands of massive barite were discovered about 75 m up section. The ferricrete kill zone, which is located downhill and along strike to the south from the showing, is enriched in iron, zinc, cobalt, nickel, manganese and barium.

Showing C is located about 3.5 km west-southwest of Showing A. The soil geochemical anomaly associated with the showing consists of a 2300 by 300 m northerly trending cluster of coincident lead-zinc response within which are scattered copper and silver values. The anomaly roughly parallels foliation and is open to the south. Rocks in the vicinity of the anomaly are foliated andesite with minor limestone, which hosts the mineralized float and outcrop occurrences that comprise Showing C. The showing consists of calc-silicate skarn float with magnetite and/or sulphide minerals. A specimen of skarn found in 1996 returned 5.37% lead, 4.83% zinc and 69 g/t silver (Wengzynowski, 1997) while fragments of strongly oxidized material collected in 1971 from the bottom of a soil sample pit reportedly assayed 21.3% zinc (Archer, 1971).

PRE-2006 GEOPHYSICAL SURVEY

In early 1996, helicopter-borne electromagnetic, resistivity and magnetic surveys were flown over the entire Convert property. These surveys were immediately followed by ground magnetic and electromagnetic surveys in the vicinity of the discovery kill zone.

The helicopter-borne surveys were done by Dighem Power of Ontario and consisted of 349 line kilometres flown at an average airspeed of 100 km/hr with an EM bird height of approximately 30 m. Equipment used consisted of:

- Dighem^{V} electromagnetic system which had a symmetric dipole configuration and coil separation of 8 m for 900 Hz, 5500 Hz and 7200 Hz and 6-3 m for 56,000 Hz;
- Picodas 3340 airborne magnetometer which was flown 20 m below the helicopter with a sample rate of 10 per second;
- Scintrex MEP-710 base system magnetometer with a sample rate of 1 per second;
- Honeywell/Sperry radar altimeter;
- RMS Instruments analog altimeter; and,
- RMS Instruments digital data acquisition system.

Three strong EM conductors were identified, the best of which overlies the geochemical anomaly and mineralization at Showing B and extends approximately 600 m south beyond the area of geochemical coverage. A strong 900 m long, northerly trending magnetic high coincides with the area of anomalous geochemistry at Showing C. This magnetic anomaly is likely due to skarn alteration.

The 1996 ground geophysical surveys were conducted by Amerok Geosciences Ltd. of Whitehorse. They consisted of 15.1 line kilometres of magnetometer and VLF surveys done on cut lines using: a Maximum 1-10 and MMC; two Omni Plus magnetometer/VLF receivers; and, an Omni IV base station magnetometer. The ground surveys were conducted in the vicinity of Showings A and B. The VLF survey identified a conjugate set of conductors, one of which passes directly through the discovery ferricrete kill zone. Magnetic response was relatively flat, which confirmed results of the airborne survey in that area.

DIAMOND DRILLING

Only one drill program has been conducted at the Convert property. It was done in 1997 by Strategic's predecessor Nordac Resources. A total of 993 m was completed in six holes by E. Caron Diamond Drilling Ltd. of Whitehorse using NQ equipment.

The holes were all drilled at Showing A near the discovery kill zone. They intersected cyclical metavolcanic and metasedimentary rocks that exhibit alteration consistent within a distal VMS setting.

The metavolcanic sequence consists of white to grey phyric and aphyric rhyolite, quartz-feldspar augen schist and barite-silica exhalite. These rocks have been subjected to strain that is reflected by flattened lapilli textures and high augen ratios. Unit contacts are sharp and are often quartz veined.

The metasedimentary sequence comprises graphitic and non-graphitic phyllite and white to grey ribbon chert. Metasedimentary contacts are more gradational than those between volcanic rocks. The most common sulphide mineral in the core is pyrite, which occurs as coarsely disseminated recrystallized grains and lesser fine grained foliaform wisps. Only minor base metal sulphides were intersected. The best grades are from a 4.92 m interval of chloritized felsic tuff that averaged 1.71% zinc and 5.74 g/t silver, including a 0.60 m section that assayed 9.14% zinc and 25.6 g/t silver. In this interval, sphalerite occurs as irregular bands, patches and disseminations. Sphalerite was also observed as thin wisps and bands in rhyolite within narrow intervals in other holes. Only traces of galena and chalcopyrite were recognized in core.

Magnetite occurs as fine grained disseminations within the silica exhalite horizon. This mineralization is situated about 450 m stratigraphically above the barite horizon.

Sericite alteration is pervasive throughout the metavolcanic sequence. It is also observed within metasedimentary rocks adjacent to metavolcanics but the intensity is much lower. Chlorite alteration is rare and is localized along vein selvages.

2006 GEOPHYSICAL SURVEYS

On May 26 and 27, 2006 helicopter-borne VTEM and magnetic surveys were conducted across select portions of the Convert claim block. This work was carried out by Geotech Ltd. Appendix II contains Geotech's report on the surveys.

The VTEM system allows for deep penetration while maintaining high spatial resolution and resistivity discrimination. Principle geophysical sensors include VTEM system and cesium magnetometer. Ancillary equipment including a Global Positioning System (GPS) navigational system and a radar altimeter. Data compilation and processing were carried out using Geosoft OASIS Montaj and programs proprietary to Geotech.

Twenty-six measurement gates were used to record receiver decay in a range from 130 to 7540 micro seconds. A three stage filtering process was used to reject major sferic events and to reduce system noise. The signal to noise ratio was further improved by the application of a low pass linear digital filter. The sensitivity of the magnetic sensor is 0.02 nano Tesla at a sampling interval of 0.1 seconds. Processing the magnetic data involved the corrections for diurnal variation and tie line levelling.

A total of 205 line km was flown across the northern portion of the Convert property. The block was flown at 100 m line spacing with four perpendicular tie lines spaced approximately 1000 m apart. Where possible, the apparatus maintained a terrain clearance of 50 m.

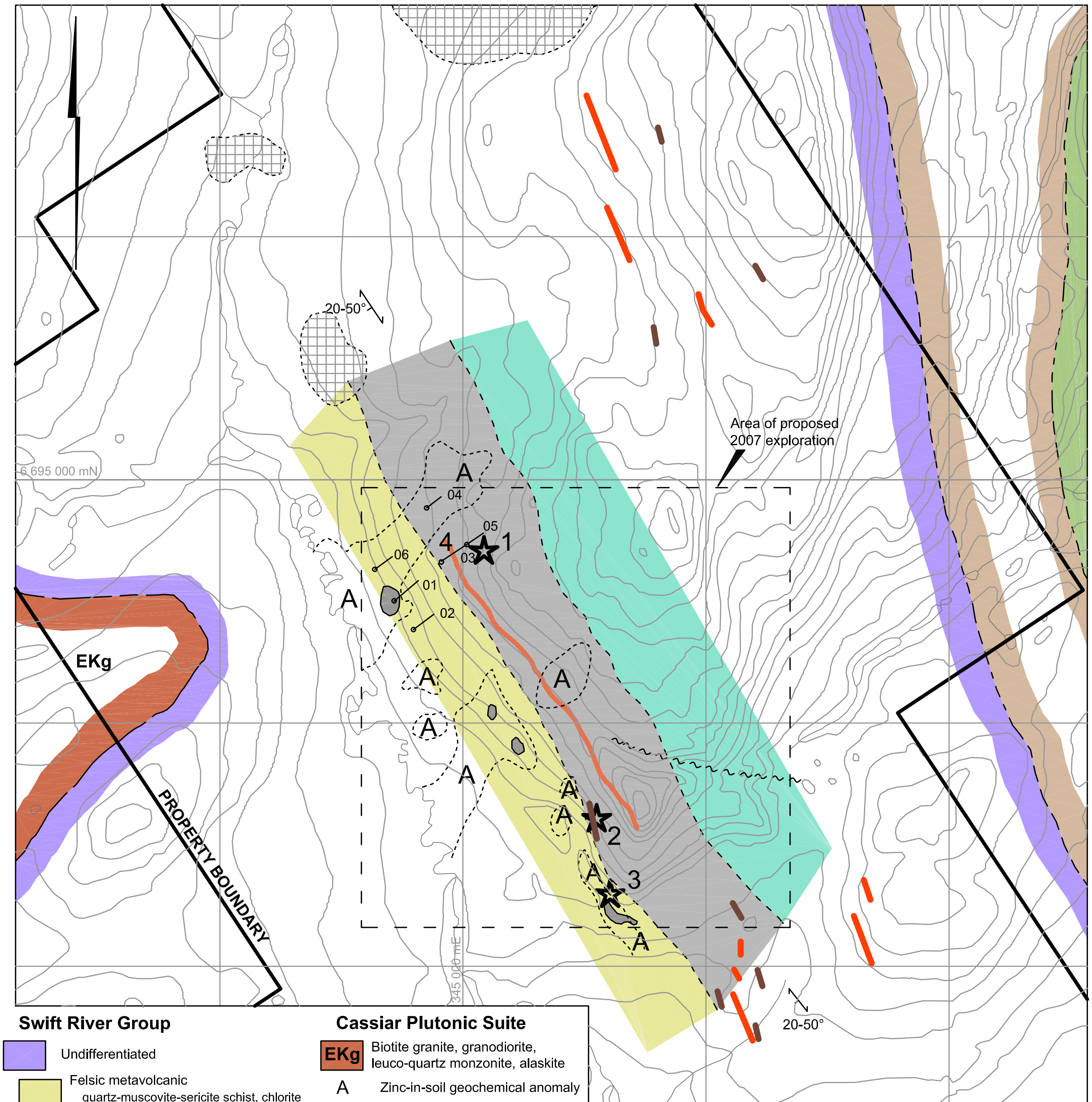
The magnetic field data over the survey area is generally weak with the strongest response in the northern and western parts of the property (Figure 8). Euler deconvolution inversion of the magnetic data identified numerous shallow arcuate to circular anomalies and lesser north to northwest trending linear features.

VTEM response is subdued across most of the property but four areas of weak to moderate conductivity are present (Figure 8). All conductors are believed to be associated with steeply dipping thick plates and are directly coincident with Euler magnetic features.

CONCLUSIONS AND RECOMMENDATIONS

The Convert property is located within the Yukon-Tanana Terrane, a geological package containing known VMS deposits. Previous work on the property identified a thick, laterally extensive exhalite horizon within a stratigraphic section that includes metamorphosed volcanic rocks. Skarn mineralization has also been discovered in limy rocks. Prospective VMS target areas are marked by strong soil geochemical response, previous drill intersections and geophysical anomalies. The presence of large transported gossans, that are enriched in several metals besides iron suggest that sulphide rich mineralization is being leached by oxygenated groundwater. These types of metal rich gossans are developed near known VMS deposits but are not common elsewhere in Yukon-Tanana Terrane.

Although previous diamond drilling has not intersected 'ore' grade mineralization, some of the holes have cut horizons that could represent the distal facies of a VMS deposit. Additional drilling is definitely warranted to test Showings A and B. The first stage program should consist of five holes totalling 750 m. One of the holes should fill an important gap in a previous section of drill holes that tested beneath the discovery kill zone at Showing A. The other holes should explore downdip from the mineralization, high soil geochemical values and geophysical anomalies that define Showing B.



Swift River Group

Undifferentiated

Felsic metavolcanic
quartz-muscovite-sericite schist, chlorite schist, muscovite phyllite

Silica exhalite
chert-rhyolite, muscovite-quartz phyllite

Felsic metavolcanic-metasedimentary
quartz-muscovite-sericite schist, muscovite phyllite, chert-quartzite

Barite

Dorsey Complex

Upper Dorsey

Biotite +/- garnet schist, quartz meta grit

Lower Dorsey

Hornblende schist and gneiss

Geological contact, inferred

Cassiar Plutonic Suite

EKg Biotite granite, granodiorite, leuco-quartz monzonite, alaskite

A Zinc-in-soil geochemical anomaly

Ferricite kill zone

1 2.73% Pb, 0.70% Zn, 52.0 g/t Ag

2 12.30% Pb, 4.09% Zn, 411 g/t Ag

3 0.92% Zn, 8.3 g/t Ag

1997 diamond drill hole

Foliation orientation

Fault trace

VTEM conductor

DIGEM conductor

Magnetic anomaly

STRATEGIC METALS LTD.

FIGURE 8

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

VTEM COMPILATION

CONVERT PROPERTY

0 500 1500 m

NAD 83 / UTM ZONE 9

FILE: ...2007/CONVERT/F_8-CONV-VTEM.DWG

DATE: APRIL 2007

Respectfully Submitted

Archer, Cathro & Associates (1981) Limited

W.A. Wengzynowski, P.Eng.

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1998 Assessment Report describing Prospecting, Soil Geochemistry and Diamond Drilling on the Convert Property, Watson Lake Mining District, Yukon Territory; assessment report for Nordac Resources Ltd.

2000 Re-evaluation of 1997 Diamond Drilling on the Convert Property; private report to Nordac Resources Ltd.

2006 Assessment Report describing Prospecting and Hand Pitting on the Convert Property; assessment report for Strategic Metals Ltd.

APPENDIX I

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

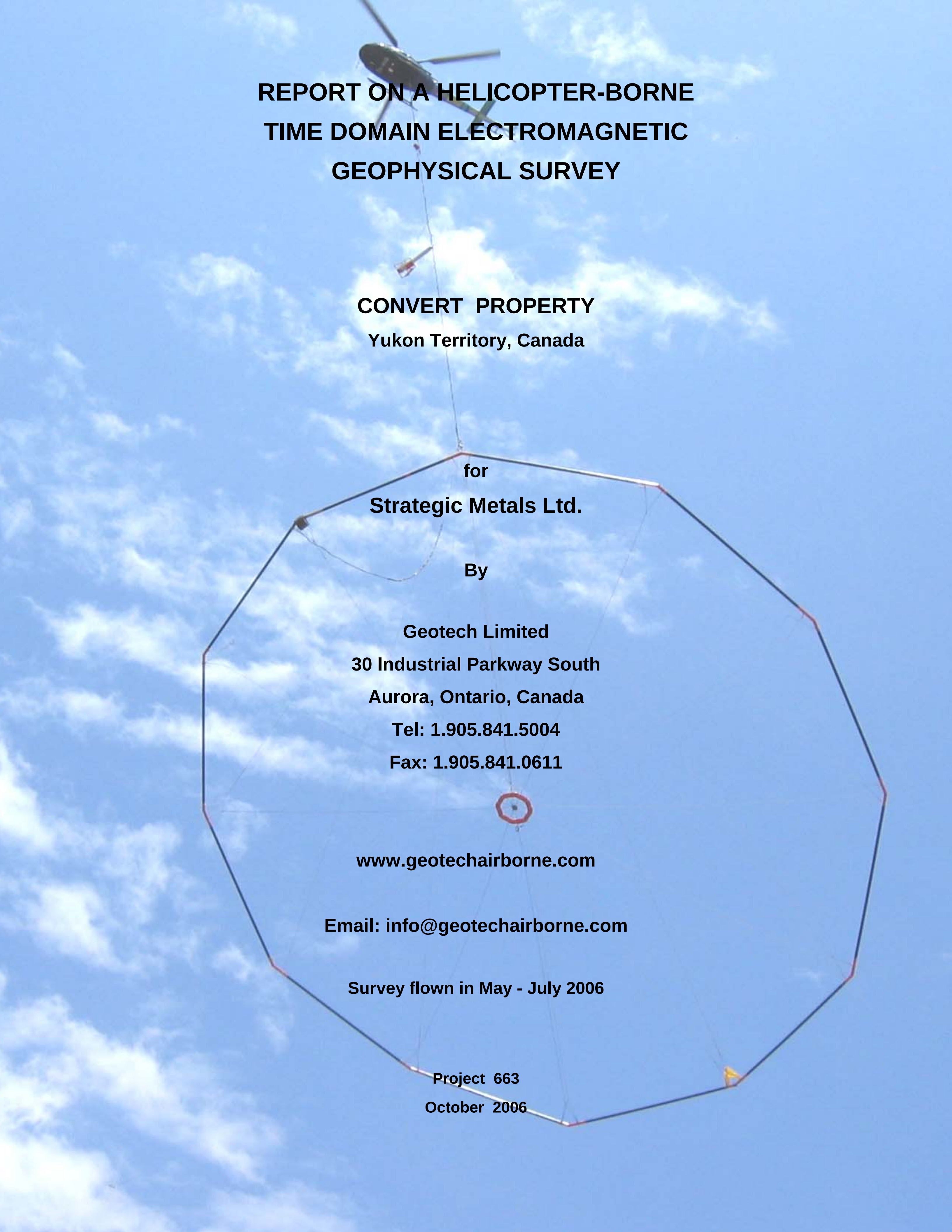
I, William A. Wengzynowski, geological engineer, with business addresses in Vancouver, British Columbia and Whitehorse, Yukon Territory and residential address at 301 Fairway Drive, North Vancouver, British Columbia, V7G 1L4 do hereby certify that:

1. I am President of Archer, Cathro & Associates (1981) Limited.
2. I graduated from the University of British Columbia in 1993 with a B.A.Sc in Geological Engineering, Option l, mineral and fuel exploration.
3. I registered as a Professional Engineer in the Province of British Columbia on December 12, 1998 (Licence Number 24119).
4. From 1983 to present, I have been actively engaged in mineral exploration in the Yukon Territory, Northwest Territories, northern British Columbia and Mexico.
5. I have personally participated in and supervised the fieldwork reported herein.

William A. Wengzynowski, B.A.Sc., P. Eng.

APPENDIX II

GEOPHYSICAL REPORT BY GEOTECH LTD.



REPORT ON A HELICOPTER-BORNE TIME DOMAIN ELECTROMAGNETIC GEOPHYSICAL SURVEY

CONVERT PROPERTY

Yukon Territory, Canada

for

Strategic Metals Ltd.

By

Geotech Limited

30 Industrial Parkway South

Aurora, Ontario, Canada

Tel: 1.905.841.5004

Fax: 1.905.841.0611

www.geotechairborne.com

Email: info@geotechairborne.com

Survey flown in May - July 2006

Project 663

October 2006

TABLE OF CONTENTS

APPENDICES

REPORT ON A HELICOPTER-BORNE

TIME DOMAIN ELECTROMAGNETIC SURVEY

Convert Property, Yukon Territory, Canada

Executive Summary

During the period of May 20th to July 8th, 2006, Geotech Limited carried out a helicopter-borne geophysical survey for Strategic Metals Ltd. over ten blocks located in the Yukon Territory, Canada, including **Convert Property**.

Principal geophysical sensors included a versatile time domain electromagnetic system (VTEM) and a cesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 2750.77 line-km. were flown, including 205 line-km. for **Convert Property**.

In-field data processing involved quality control and compilation of data collected during the acquisition stage, using the in-field processing centre established at survey bases. Preliminary and final data processing, including generation of final digital data products was done at the office of Geotech Limited in Aurora, Ontario.

The processed survey results are presented as total magnetic field grid and electromagnetic stacked profiles.

Digital data includes all electromagnetic and magnetic products plus positional, altitude and raw data.

1. INTRODUCTION

1.1. General Considerations

These services are the result of the Agreement made between Geotech Limited and Strategic Metals Ltd., to perform a helicopter-borne geophysical survey over the multiple blocks, located in Yukon Territory, Canada, including **Convert Property.**

2750.77 line-km of geophysical data were acquired during the survey.

The survey coordinates for **Convert Property** are as shown in Appendix A.

The crew was based in various locations in Yukon Territory for the acquisition phase of the survey, as shown in Section 2 of this report.

The helicopter was obtained from TransNorth Helicopters for the duration of the survey. Multiple fuel caches were arranged.
Survey flying was completed on July 8th, 2006. Preliminary data processing was carried out daily during the acquisition phase of the project. Final data presentation and data archiving was completed in the Aurora office of Geotech Limited in November 2006.

1.2. Survey and System Specifications

The **Convert Property** survey block was flown at a nominal traverse line spacing of 100 metres.
Tie lines were flown perpendicular to traverse lines at approximately 1000 metres, as shown in Section 2 of this report.
Where suitable, survey lines were extended beyond original block boundary to reach the minimum length of 3 km.

Where possible, the helicopter maintained a mean terrain clearance of 80 metres, which translated into an average height of 45 meteres above ground for the bird-mounted VTEM system and 45 metres for the magnetic sensor.

The survey was flown using an Astar B2 helicopter, registration C-GTNU, operated by TransNorth Helicopters Limited. Details of the survey specifications may be found in Section 2 of this report.

1.3. Data Processing and Final Products

Data compilation and processing were carried out by the application of Geosoft OASIS Montaj and programs proprietary to Geotech Limited.

Database, grid and maps of final products were presented to Strategic Metals Ltd.

The survey report describes the procedures for data acquisition, processing, final image presentation and the specifications for the digital data set.

1.4. Topographic Relief

The **Convert Property** survey block location is shown on the location map (Appendix A).
The block is located approximately 25 km. SW of Wolf Lake.

Topographically, the block exhibits a rugged mountainous relief, with an elevation range of 970 metres to 1470 metres above sea level.

2. DATA ACQUISITION

2.1. Survey Area

The survey block (see location map, Appendix A) and general flight specifications are as follows:

Survey areas	Line /Tie spacing (m)	Line /Tie - km	Line / Tie direction	Line number	Line KM
Convert	100	182.7	N56E	2010 - 2560	205.1
	1000	22.4	N34W	2910 - 2940	

Table 1 - Survey block

The survey block boundary is shown in Appendix B.

2.2. Survey Operations

Survey operations were based in several locations in the Yukon Territory for the acquisition phase of the survey, including Teslin for the **Convert Property.**
The following table shows the timing of the various flights.

Convert Property was flown along with other blocks in the same vicinity.

Date	Flights	Production	Block	Crew location	REMARK
20-May		0		Whitehorse	Mobilization to Whitehorse
21-May		0		Whitehorse	Assembly of system
22-May		0		Whitehorse	Helicopter installation, test flight
23-May		0		Teslin	Mobilization to Teslin - no production
24-May		0		Teslin	No production due to weather
25-May	1,2,3	109.5	BAR	Teslin	
26-May	4, 1, 2	161.09	BAR, CONVERT	Teslin	
27-May	7,8	95.62	CONVERT	Teslin	flying aborted – due to weather
28-May	9	18.83	BAR	Teslin	flying aborted – due to weather
29-May		0		Watson Lake	move to Watson lake, prepare fuel cache
30-May	10, 11, 12	118.74	SIM	Watson Lake	
31-May	13, 14, 15	109.46	SIM, 4C	Watson Lake	
01-Jun	16, 17, 18	87.97	4C	Watson Lake	flying aborted – due to rough terrain
02-Jun	19	5.38	SIM	Ross River	Re-flight
03-Jun	20	91.37	TIDD	Ross River	flying aborted – due to weather
04-Jun		0		Ross River	No production due to weather
05-Jun	21, 22, 23	270.54	TIDD	Ross River	
06-Jun	24, 25, 26	194.78	TIDD	Ross River	flying aborted – due to weather
07-Jun	27, 28, 29	269.91	TIDD	Ross River	
08-Jun	30,31	92.81	TIDD	Ross River	rough terrain
09-Jun		0		Ross River	
21-Jun		0		Mayo	Ferry flights, move fuel to MARG
22-Jun		0		Mayo	No production due to weather
23-Jun	1, 2	84.68	MARG	Mayo	flying aborted – due to weather
24-Jun	3,4,5	158.36	MARG	Mayo	
25-Jun	6,7	123.1	MARG	Mayo	
26-Jun		0		Dawson City	No production due to weather
27-Jun		0		Dawson City	No production due to weather
28-Jun	1,2,3	111	MIC	Dawson City	flying aborted – due to weather
29-Jun	3,4	139.51	MIC, MAG	Dawson City	
30-Jun	5,6,7	115.74	MAG	Dawson City	flying aborted – due to weather
01-Jul	7,8	101.59	CN	Dawson City	
02-Jul	9	76.63	CN	Dawson City	flying aborted – due to weather
03-Jul	10, 11	121.16	CN	Dawson City	
04-Jul	1,2	66	PAN	Dawson City	
05-Jul	3	3	PAN	Dawson City	Test flights
06-Jul	4	24	PAN	Dawson City	
07-Jul		0			helicopter inspection
08-Jul		0		Burwash	Burwash Block cancelled due to rough topo

Table 2 - Survey schedule

2.3. Flight Specifications

The nominal EM sensor terrain clearance was 45 m (EM bird height above ground, i.e. helicopter is maintained 80 m above ground). Nominal survey speed was 80 km/hour. The data recording rates of the data acquisition was 0.1 second for electromagnetics and magnetometer, 0.2 second for altimeter and GPS. This translates to a geophysical reading about every 2 metres along flight track. Navigation was assisted by a GPS receiver and data acquisition system, which reports GPS co-ordinates as latitude/longitude and directs the pilot over a pre-programmed survey grid.

The operator was responsible for the monitoring of the system integrity. He also maintained a detailed flight log during the survey, tracking the times of the flight as well as any unusual geophysical or topographic feature.

On return of the aircrew to the base camp the survey data was transferred from a compact flash card (PCMCIA) to the data processing computer.

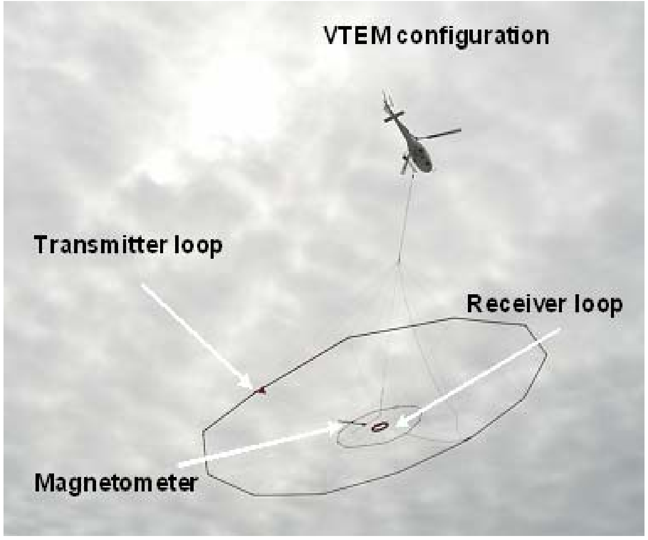
2.4. *Aircraft and Equipment*

2.4.1. Survey Aircraft

An Astar B2 helicopter, registration C-GTNU - owned and operated by TransNorth Helicopters Ltd. was used for the survey. Installation of the geophysical and ancillary equipment was carried out by Geotech Ltd.

2.4.2. Electromagnetic System

The electromagnetic system was a Geotech Versatile Time Domain EM (VTEM) system. The layout of the configuration used for this survey is as indicated in Figure 1 below.



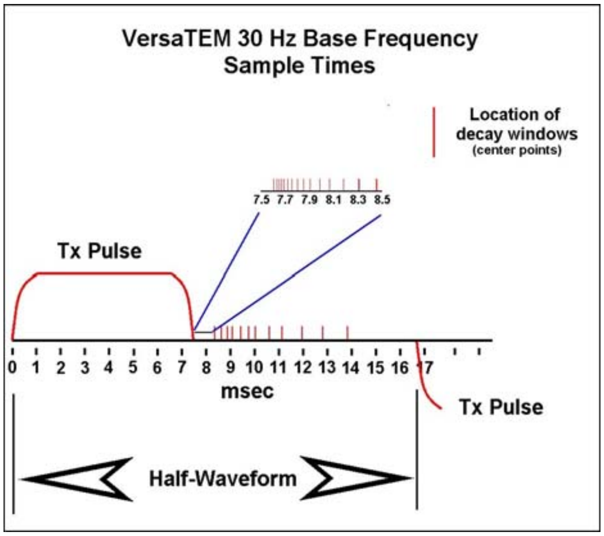


Figure 1 - VTEM Configuration

Figure 2 - VTEM sample times

Receiver and transmitter coils are concentric and Z-direction oriented.

The receiver decay recording scheme is shown diagrammatically in Figure 2.

Twenty-six measurement gates were used in the range from 130 μs to 7540 μs, as shown in the following table.

VTEM Decay Sampling scheme (Microseconds)			
Time gate	**Start**	**End**	**Width**
130	120	140	20
150	140	160	20
170	160	180	20
190	180	205	25
220	205	240	35
260	240	280	40
300	280	325	45
350	325	380	55
410	380	445	65
480	445	525	80
570	525	625	100
680	625	745	120
810	745	885	140
960	885	1045	160
1130	1045	1235	190
1340	1235	1470	235
1600	1470	1750	280
1900	1750	2070	320
2240	2070	2450	380
2660	2450	2920	470
3180	2920	3480	560
3780	3480	4120	640
4460	4120	4880	760
5300	4880	5820	940
6340	5820	6860	1040
7540	6860	8220	1360

Table 3 - VTEM decay sampling scheme

Transmitter coil diameter was 26 metres, the number of turns was 4.
Transmitter pulse repetition rate was 30 Hz.
Peak current was 167 A.
Duty cycle was 37%.
Peak dipole moment was 355,000 NIA.

Receiver coil diameter was 1.2 metre, the number of turns was 100.
Receiver effective area was 113 m^2
Wave form – trapezoid.
Recording sampling rate was 10 samples per second.

The EM bird was towed 35 m below the helicopter.

2.4.3. Airborne magnetometer

The magnetic sensor utilized for the survey was a Geometrics optically pumped cesium vapour magnetic field sensor, mounted in a separate bird towed at the same altitude as the EM sensor. The sensitivity of the magnetic sensor is 0.02 nanoTesla (nT) at a sampling interval of 0.1 seconds. The magnetometer sends the measured magnetic field strength as nanoTeslas to the data acquisition system via the RS-232 port.

2.4.4. Ancillary Systems

2.4.4.1. Radar Altimeter

A Terra TRA 3000/TRI 40 radar altimeter was used to record terrain clearance. The antenna was mounted beneath the bubble of the helicopter cockpit.

2.4.4.2. GPS Navigation System

The navigation system used was a Geotech PC based navigation system utilizing a NovAtel's WAAS enable OEM4-G2-3151W GPS receiver, Geotech navigate software, a full screen display with controls in front of the pilot to direct the flight and an NovAtel GPS antenna mounted on the helicopter tail.
The co-ordinates of the block were set-up prior to the survey and the information was fed into the airborne navigation system.

2.4.4.3. Digital Acquisition System

A Geotech data acquisition system recorded the digital survey data on an internal compact flash card. Data is displayed on an LCD screen as traces to allow the operator to monitor the integrity of the system. Contents and update rates were as follows:

DATA TYPE	SAMPLING
TDEM	0.1 sec
Magnetometer	0.1 sec
GPS Position	0.2 sec
Radar Altimeter	0.2 sec

Table 4 - Sampling Rates

2.4.5. Base Station

A combine magnetometer/GPS base station was utilized on this project. A Geometrics Cesium vapour magnetometer was used as a magnetic sensor with a bench sensitivity of 0.002 nT. The base station records the magnetic field together with the GPS time at 1 Hz on a base station computer. The base station magnetometer sensor was installed away from electric transmission lines and moving ferrous objects such as motor vehicles. The magnetometer base station's data was backed-up to the data processing computer at the end of each survey day.

3. PERSONNEL

The following Geotech Ltd. personnel were involved in the project.

Field

Crew chiefs / Operators:	Graeme Lille, Calin Cosma, Brad Marsh

The survey pilot and the mechanic engineer were employed directly by the helicopter operator – TransNorth Helicopters.

Pilots:	Stephen Soubliere,
Mechanical Engineer:	Margo Hager

Office

Data Processing:	Harish Kumar
Data Processing / Reporting:	George Lev
Data Technician:	Maria Jagodkin

Final data processing at the office of Geotech Limited in Aurora, Ontario was carried out under the supervision of Andrei Bagrianski, Data Processing Manager.

Overall management of the survey was carried out from the Aurora office of Geotech Ltd. by Edward Morrison, President.

4. DATA PROCESSING AND PRESENTATION

4.1. Flight Path

The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the UTM coordinate system in Oasis Montaj.

The flight path was drawn using linear interpolation between x,y positions from the navigation system. Positions are updated every second and expressed as UTM eastings (x) and UTM northings (y).

4.2. Electromagnetic Data

A three stage digital filtering process was used to reject major sferic events and to reduce system noise. Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events. The filter used was a 16 point non-linear filter.

The signal to noise ratio was further improved by the application of a low pass linear digital filter. This filter has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 1 second or 20 metres. This filter is a symmetrical 1 sec. linear filter.

The results are presented as stacked profiles of EM voltages for the gate times, in logarithmic scale.

Generalized modeling results of the VTEM system, written by Geophysicist Roger Barlow, are shown in Appendix C.

The VTEM output voltage of the receiver coil is shown in Appendix D.

4.3. Magnetic Data

The processing of the magnetic data involved the correction for diurnal variations by using the digitally recorded ground base station magnetic values. The base station magnetometer data was edited and merged into the Geosoft GDB database on a daily basis. The aeromagnetic data was corrected for diurnal variations by subtracting the observed magnetic base station deviations.

Tie line levelling was carried out by adjusting intersection points along the traverse lines. A micro-levelling procedure was then applied. This technique is designed to remove persistent low-amplitude components of flight-line noise remaining after tie line levelling.

The corrected magnetic data was interpolated between survey lines using a random point gridding method to yield x-y grid values for a standard grid cell size of approximately 0.2 cm. at the mapping scale. The Minimum Curvature algorithm was used to interpolate values onto a rectangular regular spaced grid.

5. DELIVERABLES

5.1. Survey Report

The survey report describes the data acquisition, processing, and final presentation of the survey results.

The survey report is provided in two paper copies and digitally in WORD format.

5.2. Maps

Final maps were produced at a scale of 1:10,000 for the **Convert Property**. The coordinate/projection system used was the WGS84, UTM zone 9 north. All maps show the flight path trace. Latitude and longitude are also noted on maps.

The following maps are presented to Strategic Metals Ltd. on paper as results of the helicopter-borne geophysical survey carried out over the **Convert Property.**

- Total Magnetic Field contours and colour images
- Logarithmic scale VTEM profiles, Time Gates 0.22 - 6.34 ms

5.3. Gridded Data

Total Magnetic Field grid is provided to Strategic Metals Ltd. in Geosoft GRD format. Grid cell size was adjusted to suit the parameters of the individual block.

For traverse line spacing of 100 metres, 10 m grid cell size was used.

5.4. Digital Data

There are three (3) main directories,

Data	contains a database, grid and maps, as described below.
Report	contains a copy of the report in WORD format and appendices in PDF format.
VTEM_fp_GoogleEarth	contains kmz file containing flightpath of the Convert Property. Free version of Google Earth software can be downloaded from, http://earth.google.com/download-earth.html

- Database in Geosoft GDB format, containing the following channels:

X:	X positional data (metres – WGS84, utm zone 9 north)
Y:	Y positional data (metres – WGS84, utm zone 9 north)
Z:	GPS antenna elevation (metres - ASL) (on the tail of the helicopter)
Gtime1:	GPS time (seconds of the day)
Radar:	Helicopter terrain clearance from radar altimeter (metres - AGL)
DEM:	Digital elevation model (metres)
Mag1:	Raw Total Magnetic field data (nT)
Basemag:	Base station magnetic data (nT)
Mag2:	Total Magnetic field base station corrected data (nT)
Mag3:	Levelled Total Magnetic field data (nT)
C130f:	Raw 130 microsecond time channel ($pV/A/m^4$)
C150f:	Raw 150 microsecond time channel ($pV/A/m^4$)
C170f:	Raw 170 microsecond time channel ($pV/A/m^4$)
C190f:	Raw 190 microsecond time channel ($pV/A/m^4$)
C220f:	Raw 220 microsecond time channel ($pV/A/m^4$)
C260f:	Raw 260 microsecond time channel ($pV/A/m^4$)
C300f:	Raw 300 microsecond time channel ($pV/A/m^4$)
C350f:	Raw 350 microsecond time channel ($pV/A/m^4$)
C410f:	Raw 410 microsecond time channel ($pV/A/m^4$)
C480f:	Raw 480 microsecond time channel ($pV/A/m^4$)
C570f:	Raw 570 microsecond time channel ($pV/A/m^4$)
C680f:	Raw 680 microsecond time channel ($pV/A/m^4$)

C810f:	Raw 810 microsecond time channel ($pV/A/m^4$)
C960f:	Raw 960 microsecond time channel ($pV/A/m^4$)
C1130f:	Raw 1130 microsecond time channel ($pV/A/m^4$)
C1340f:	Raw 1340 microsecond time channel ($pV/A/m^4$)
C1600f:	Raw 1600 microsecond time channel ($pV/A/m^4$)
C1900f:	Raw 1900 microsecond time channel ($pV/A/m^4$)
C2240f:	Raw 2240 microsecond time channel ($pV/A/m^4$)
C2660f:	Raw 2660 microsecond time channel ($pV/A/m^4$)
C3180f:	Raw 3180 microsecond time channel ($pV/A/m^4$)
C3780f:	Raw 3780 microsecond time channel ($pV/A/m^4$)
C4460f:	Raw 4460 microsecond time channel ($pV/A/m^4$)
C5300f:	Raw 5300 microsecond time channel ($pV/A/m^4$)
C6340f:	Raw 6340 microsecond time channel ($pV/A/m^4$)
C7540f:	Raw 7540 microsecond time channel ($pV/A/m^4$)
PLinef:	Power line monitor (linear trend removed)

- Grids in Geosoft GRD format, as follow,

  convert_magfin: Total Magnetic field (nT)

  A Geosoft .GRD file has a .GI metadata file associated with it, containing grid projection information.

- Maps at 1:10,000 scale in Geosoft MAP format, as follow,

  convert_magfin: Total Magnetic Field image and contours

  Convert_EM_LP: Logarithmic scale profiles, Time Gates 0.22 – 6.34 ms

- ASCII file VTEM WaveForm.xyz in Geosoft format containing the following channel:

  Volt: output voltage of the receiver coil
  (volts, sampling rate 20 microseconds)

- A *readme.txt* file describing the content of digital data, as described above.

6. CONCLUSIONS

A versatile time domain electromagnetic helicopter-borne geophysical survey has been completed over 10 blocks located in the Yukon Territory, Canada, including **Convert Property.**

Total survey line coverage is 2750.77 line kilometres, including 205 line-km. for the **Convert Property.** The principal sensors included a Time Domain EM system and a magnetometer. Results have been presented as colour contour maps and stacked profiles.

Final data processing at the office of Geotech Limited in Aurora, Ontario was carried out under the supervision of Andrei Bagrianski, Data Processing Manager.

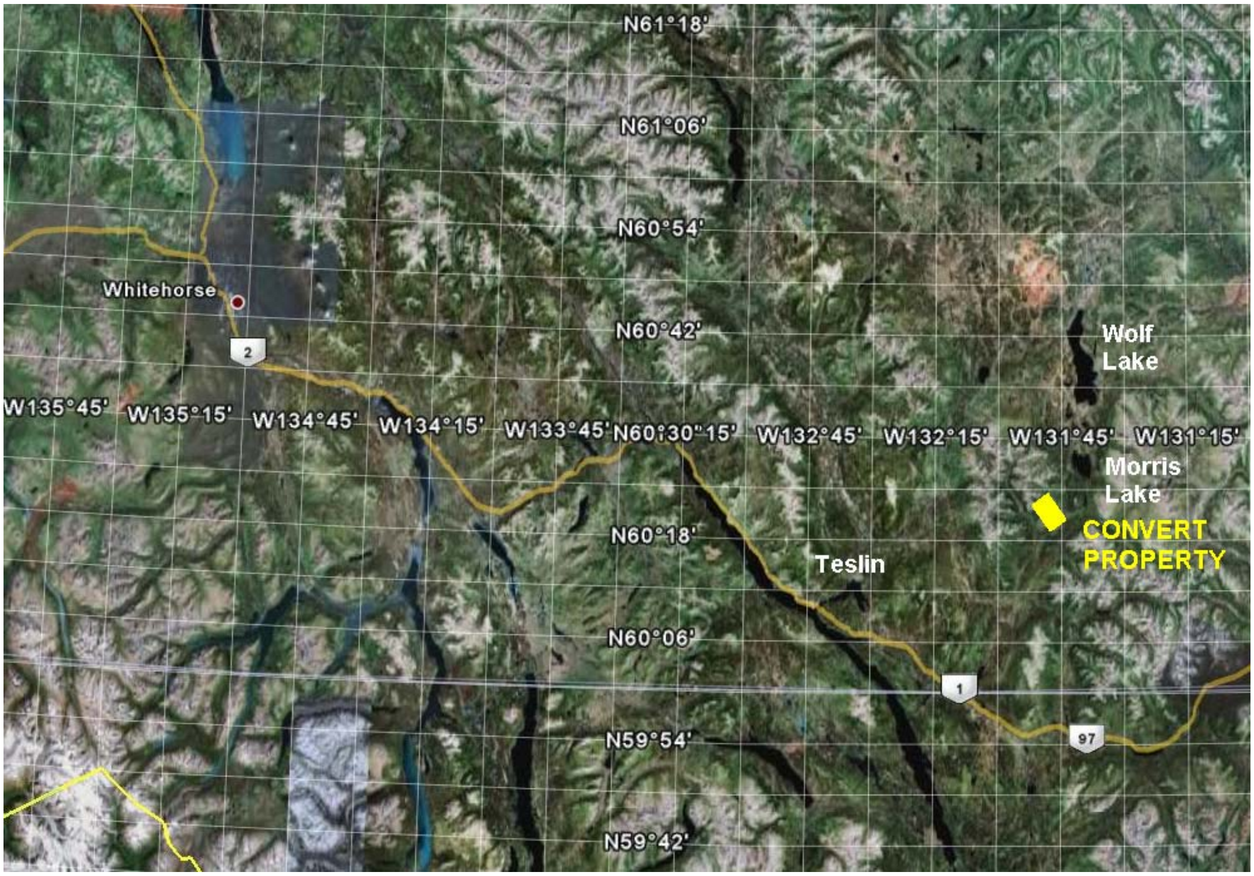
Respectfully submitted,

Marta Orta
on behalf of

George Lev
Geotech Limited
November 8, 2006

APPENDIX A

SURVEY BLOCK LOCATION MAP



APPENDIX B

SURVEY BLOCK COORDINATES

(WGS 84, UTM zone 9N)

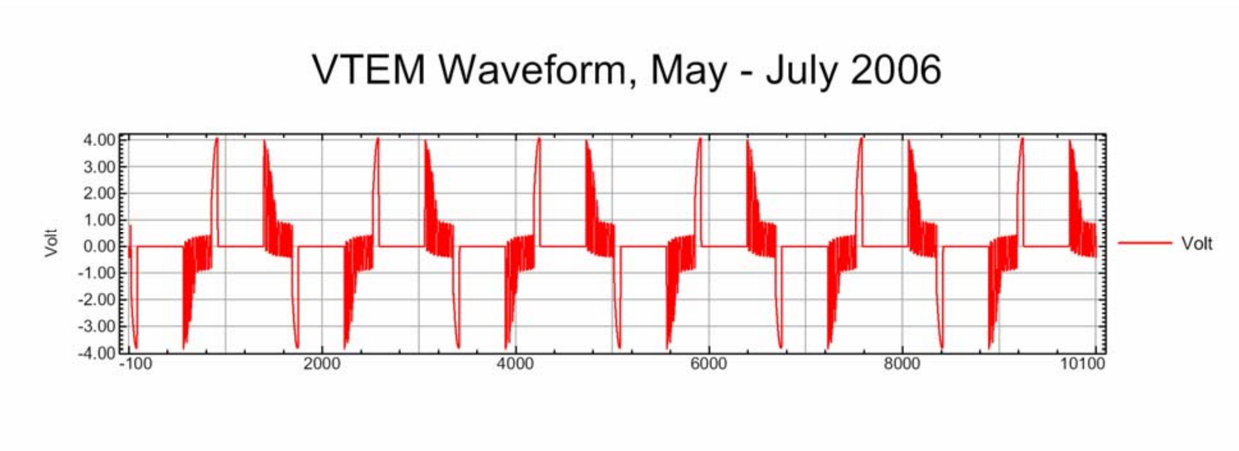
CONVERT	
345304.0	6697431.0
342751.0	6695708.0
345650.0	6690917.0
348408.0	6692768.0

APPENDIX C

General Modeling Results of the VTEM Stysem

APPENDIX D

VTEM WAVE FORM



GENERALIZED MODELING RESULTS OF THE VTEM SYSTEM

Introduction

The VTEM system is based on a concentric or central loop design, whereby, the receiver is positioned at the centre of a 26.1 metres diameter transmitter loop that produces a dipole moment up to 625,000 NIA at peak current. The wave form is a bi-polar, modified square wave with a turn-on and turn-off at each end. With a base frequency of 30 Hz, the duration of each pulse is approximately 7.5 milliseconds followed by an off time where no primary field is present.

During turn-on and turn-off, a time varying field is produced (dB/dt) and an electro-motive force (emf) is created as a finite impulse response. A current ring around the transmitter loop moves outward and downward as time progresses. When conductive rocks and mineralization are encountered, a secondary field is created by mutual induction and measured by the receiver at the centre of the transmitter loop.

Measurements are made during the off-time, when only the secondary field (representing the conductive targets encountered in the ground) is present.

Efficient modeling of the results can be carried out on regularly shaped geometries, thus yielding close approximations to the parameters of the measured targets. The following is a description of a series of common models made for the purpose of promoting a general understanding of the measured results.

Variation of Plate Depth

Geometries represented by plates of different strike length, depth extent, dip, plunge and depth below surface can be varied with characteristic parameters like conductance of the target, conductance of the host and conductivity/thickness and thickness of the overburden layer.

Diagrammatic models for a vertical plate are shown in figures A and G at two different depths, all other parameters remaining constant. With this transmitter-receiver geometry, the classic **M** shaped response is generated. Figure A shows a plate where the top is near surface. Here, amplitudes of the duel peaks are higher and symmetrical with the zero centre positioned directly above the plate. Most important is the separation distance of the peaks. This distance is small when the plate is near surface and widens with a linear relationship as the plate (depth to top) increases. Figure G shows a much deeper plate where the separation distance of the peaks is much wider and the amplitudes of the channels have decreased.

Variation of Plate Dip

As the plate dips and departs from the vertical position, the peaks become asymmetrical. Figure B shows a near surface plate dipping 80º. Note that the direction of dip is toward the high shoulder of the response and the top of the plate remains under the centre minimum.

As the dip increases, the aspect ratio (Min/Max) decreases and this aspect ratio can be used as an empirical guide to dip angles from near 90º to about 30º. The method is not sensitive enough where dips are less than about 30º. Figure E shows a plate dipping 45º and, at this angle, the minimum shoulder starts to vanish. In Figure D, a flat lying plate is shown, relatively near surface. Note that the twin peak anomaly has been replaced by a symmetrical shape with large, bell shaped, channel amplitudes which decay relative to the conductance of the plate.

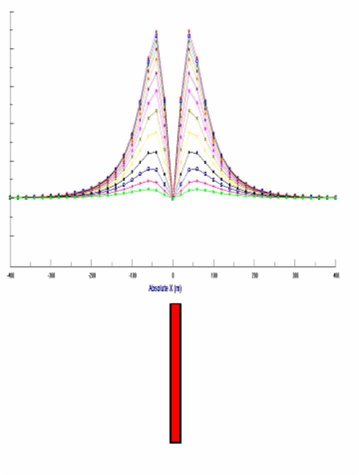
Figure H shows a special case where two plates are positioned to represent a synclinal structure. Note that the main characteristic to remember is the centre amplitudes are higher (approximately double) compared to the high shoulder of a single plate. This model is very representative of tightly folded formations where the conductors were once flat lying.

Variation of Prism Depth

Finally, with prism models, another algorithm is required to represent current on the plate. A plate model is considered to be infinitely thin with respect to thickness and incapable of representing the current in the thickness dimension. A prism model is constructed to deal with this problem, thereby, representing the thickness of the body more accurately.

Figures C, F and I show the same prism at increasing depths. Aside from an expected decrease in amplitude, the side lobes of the anomaly show a widening with deeper prism depths of the bell shaped early time channels.

A



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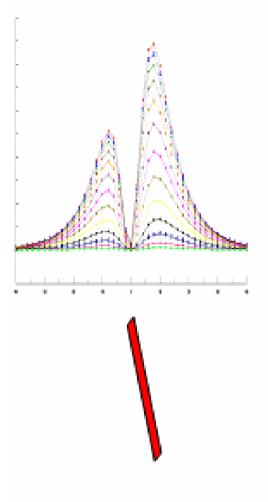

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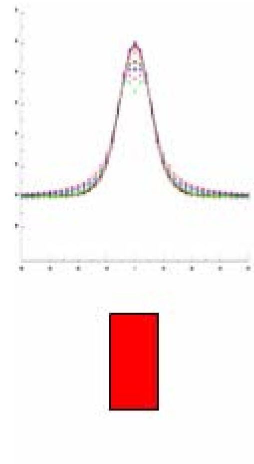

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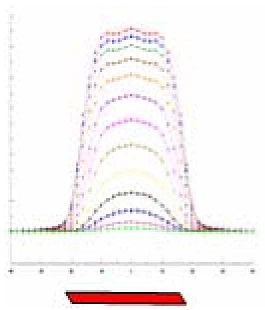

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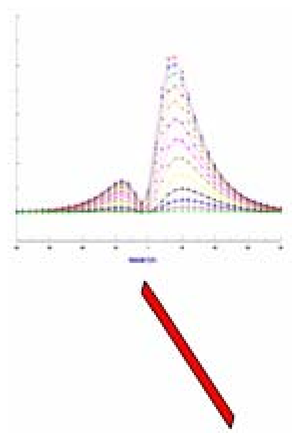

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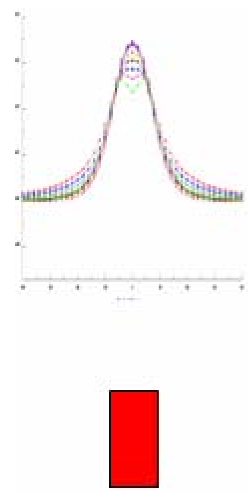

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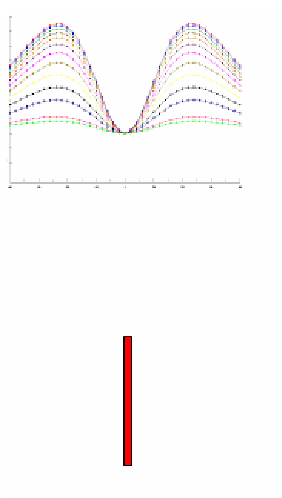

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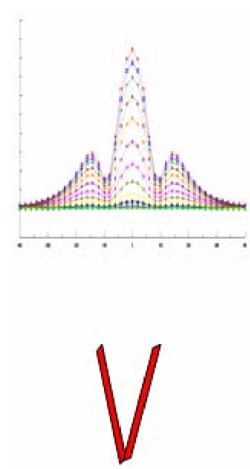

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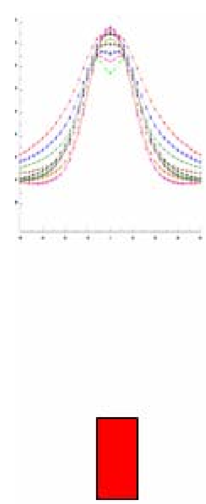


General Modeling Concepts

A set of models has been produced for the Geotech VTEM® system with explanation notes (see models A to I above). The reader is encouraged to review these models, so as to get a general understanding of the responses as they apply to survey results. While these models do not begin to cover all possibilities, they give a general perspective on the simple and most commonly encountered anomalies.

When producing these models, a few key points were observed and are worth noting as follows:

- For near vertical and vertical plate models, the top of the conductor is always located directly under the centre low point between the two shoulders in the classic **M** shaped response.

- As the plate is positioned at an increasing depth to the top, the shoulders of the **M** shaped response, have a greater separation distance.

- When faced with choosing between a flat lying plate and a prism model to represent the target (broad response) some ambiguity is present and caution should be exercised.

- With the concentric loop system and Z-component receiver coil, virtually all types of conductors and most geometries are most always well coupled and a response is generated (see model H). Only concentric loop systems can map this type of target.

The modelling program used to generate the responses was prepared by PetRos Eikon Inc. and is one of a very few that can model a wide range of targets in a conductive half space.

General Interpretation Principals

Magnetics

The total magnetic intensity responses reflect major changes in the magnetite and/or other magnetic minerals content in the underlying rocks and unconsolidated overburden. Precambrian rocks have often been subjected to intense heat and pressure during structural and metamorphic events in their history. Original signatures imprinted on these rocks at the time of formation have, in most cases, been modified, resulting in low magnetic susceptibility values.

The amplitude of magnetic anomalies, relative to the regional background, helps to assist in identifying specific magnetic and non-magnetic rock units (and conductors) related to, for example, mafic flows, mafic to ultramafic intrusives, felsic intrusives, felsic volcanics and/or sediments etc. Obviously, several geological sources can produce the same magnetic response. These ambiguities can be reduced considerably if basic geological information on the area is available to the geophysical interpreter.

In addition to simple amplitude variations, the shape of the response expressed in the wave length and the symmetry or asymmetry, is used to estimate the depth, geometric parameters and magnetization of the anomaly. For example, long narrow magnetic linears usually reflect mafic flows or intrusive dyke features. Large areas with complex magnetic patterns may be produced by intrusive bodies with significant magnetization, flat lying magnetic sills or sedimentary iron formation. Local isolated circular magnetic patterns often represent plug-like igneous intrusives such as kimberlites, pegmatites or volcanic vent areas.

Because the total magnetic intensity (TMI) responses may represent two or more closely spaced bodies within a response, the second derivative of the TMI response may be helpful for distinguishing these complexities. The second derivative is most useful in mapping near surface linears and other subtle magnetic structures that are partially masked by nearby higher amplitude magnetic features. The broad zones of higher magnetic amplitude, however, are severely attenuated in the vertical derivative results. These higher amplitude zones reflect rock units having strong magnetic susceptibility signatures. For this reason, both the TMI and the second derivative maps should be evaluated together.

Theoretically, the second derivative, zero contour or colour delineates the contacts or limits of large sources with near vertical dip and shallow depth to the top. The vertical gradient map also aids in determining contact zones between rocks with a susceptibility contrast, however, different, more complicated rules of thumb apply.

Concentric Loop EM Systems

Concentric systems with horizontal transmitter and receiver antennae produce much larger responses for flat lying conductors as contrasted with vertical plate-like conductors. The amount of current developing on the flat upper surface of targets having a substantial area in this dimension, are the direct result of the effective coupling angle, between the primary magnetic field and the flat surface area. One therefore, must not compare the amplitude/conductance of responses generated from flat lying bodies with those derived from near vertical plates; their ratios will be quite different for similar conductances.

Determining dip angle is very accurate for plates with dip angles greater than 30º. For angles less than 30º to 0º, the sensitivity is low and dips can not be distinguished accurately in the presence of normal survey noise levels.

A plate like body that has near vertical position will display a two shoulder, classic **M** shaped response with a distinctive separation distance between peaks for a given depth to top.

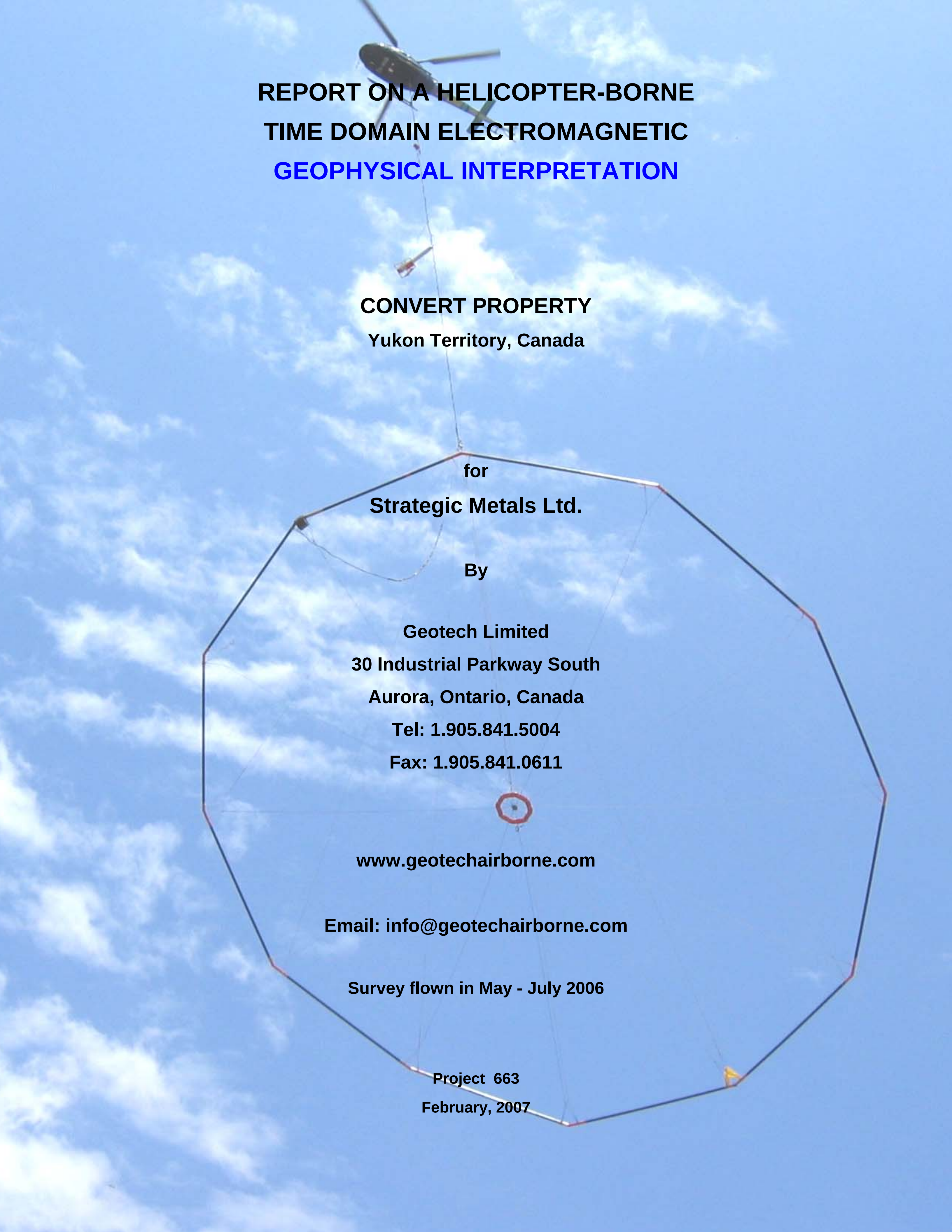
It is sometimes difficult to distinguish between responses associated with the edge effects of flat lying conductors and poorly conductive bedrock conductors. Poorly conductive bedrock conductors having low dip angles will also exhibit responses that may be interpreted as surfacial overburden conductors. In some situations, the conductive response has line to line continuity and some magnetic correlation providing possible evidence that the response is related to an actual bedrock source.

The EM interpretation process used, places considerable emphasis on determining an understanding of the general conductive patterns in the area of interest. Each area has different characteristics and these can effectively guide the detailed process used.

The first stage is to determine which time gates are most descriptive of the overall conductance patterns. Maps of the time gates that represent the range of responses can be very informative.

Next, stacking the relevant channels as profiles on the flight path together with the second vertical derivative of the TMI is very helpful in revealing correlations between the EM and Magnetics.

Next, key lines can be profiled as single lines to emphasize specific characteristics of a conductor or the relationship of one conductor to another on the same line. Resistivity Depth sections can be constructed to show the relationship of conductive overburden or conductive bedrock with the conductive anomaly.



REPORT ON A HELICOPTER-BORNE TIME DOMAIN ELECTROMAGNETIC GEOPHYSICAL INTERPRETATION

CONVERT PROPERTY

Yukon Territory, Canada

for

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Survey flown in May - July 2006

Project 663

February, 2007

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REPORT ON A HELICOPTER-BORNE
TIME DOMAIN ELECTROMAGNETIC INTERPRETATION

Convert Property, Yukon Territory, Canada

1. INTRODUCTION

During the period of May 20th to July 8th, 2006 a helicopter-borne electromagnetic survey was carried out by Geotech Ltd. for Strategic Metals Ltd. over eight Properties located in Yukon Territory, Canada.

This report includes the results of the geophysical interpretation, over the Convert Property, located at approximately 150 km south-east from Whitehorse, in the Yukon Territory. The geographic coordinates of the block extents are: longitudes, 131º 45’ W and 131º 51’ W, and latitudes, 60º 20’ N and 60º 23’ N. The surveyed area is 26 km^2, and the total line kilometers flown are 205 km (Fig. 1).

The survey was conducted using Geotech Ltd VTEM system. Principal geophysical sensors included a versatile time domain electromagnetic system and a high resolution cesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter.

Data processing and map compilation, including generation of final digital data products were achieved at the office of Geotech Ltd in Aurora, Ontario.

The present report describes the results of the geophysical interpretation of this Property.

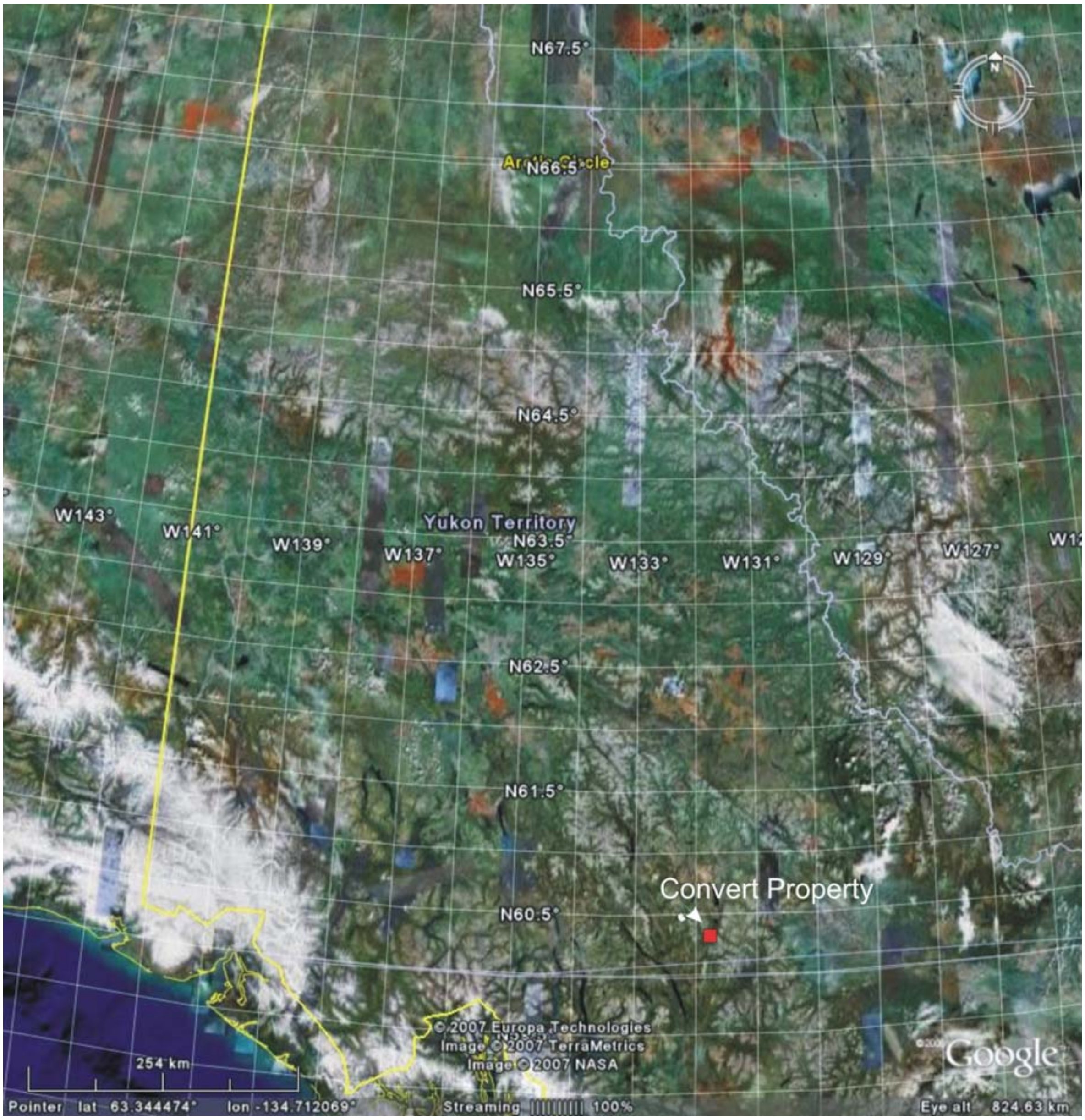


Fig. 1 Location of the Convert Property on the satellite image.

2. Topographic relief

The Convert Property is located on a rugged mountainous relief, with elevations ranging from 970 metres to 1470 metres above sea level.

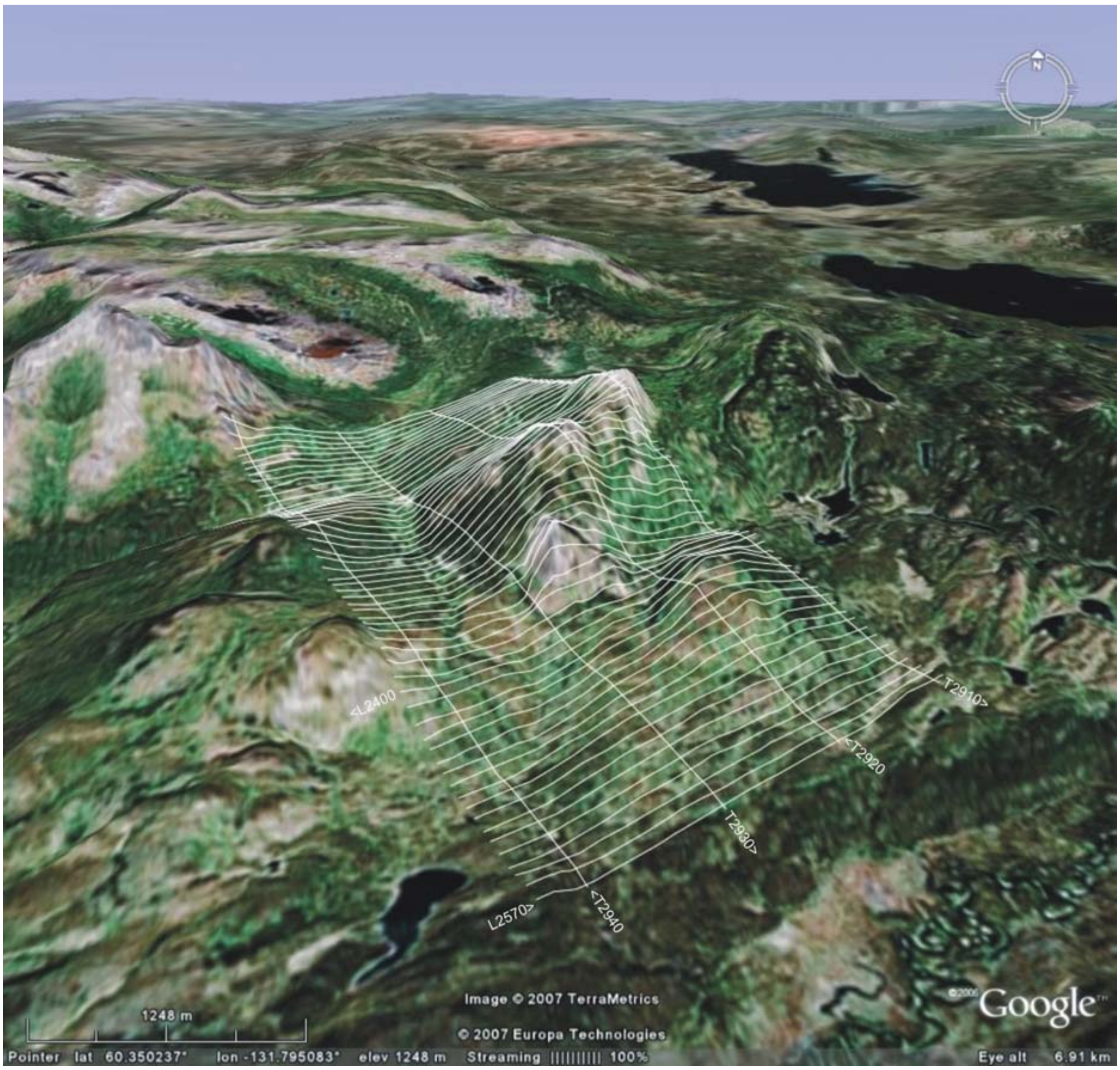


Fig. 2 Flight path showing Lines and Tie-lines superimposed on the satellite image relief.

3. Flight specifications

Flight path orientation, total flown line-km and other specifications are summarized in the following tables.

Property name	Line /Tie spacing (m)	Line /Tie km	Sensor Altitude, m (AGL)	Line / Tie direction	Line number	Line KM
Convert	100	182.7	50	N56ºE	L2010 - L2560	205
	1000	22.3		N34ºW	T2910 -T2940	

Table 1. Flight specifications of the surveyed block.

Convert Property Utm zone 9N	
Easting (m)	Nothing (m)
345304	6697431
342751	6695708
345650	6690917
348408	6692768

Table 2 Coordinates of the survey block.

3.1 Helicopter and equipment

3.1.1 Survey Aircraft

An Astar B2 helicopter, registration C-GTNU - owned and operated by TransNorth Helicopters Ltd. was used for the survey. Installation of the geophysical and ancillary equipment was carried out by Geotech Ltd.

3.1.2 Electromagnetic System

The electromagnetic system was a Geotech Versatile Time Domain EM (VTEM) system. The layout of the configuration used for this survey is as indicated in Figure 3 below.

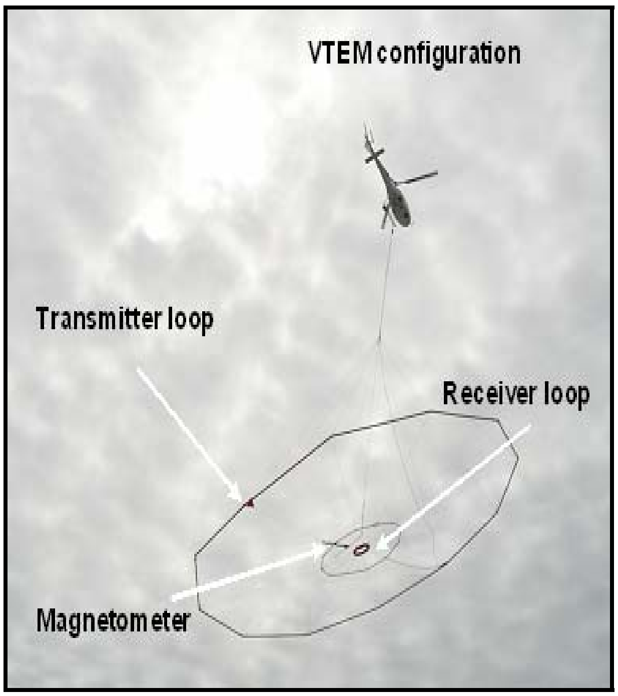


Figure 3 - VTEM Configuration

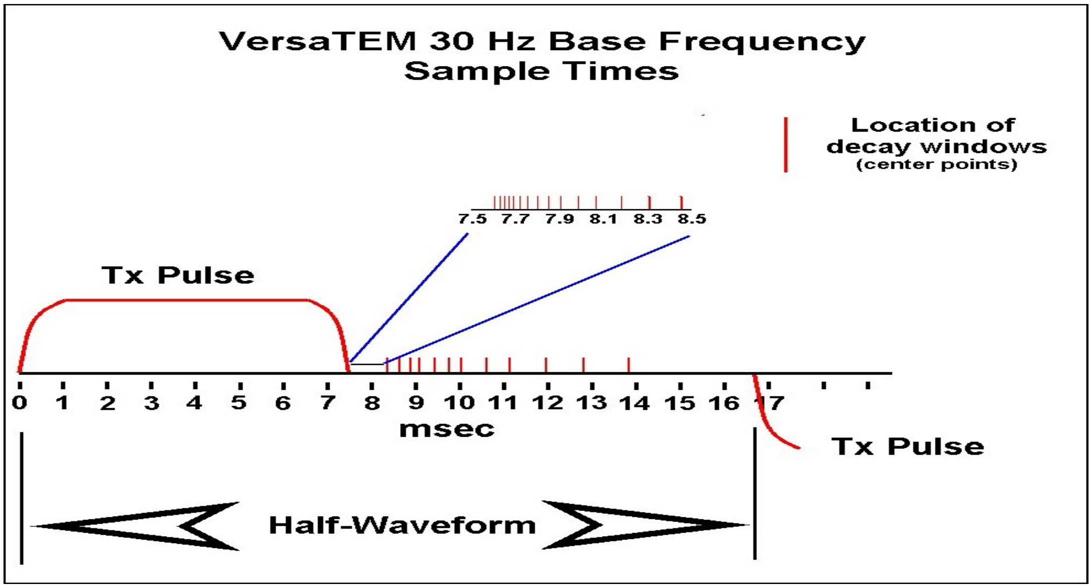


Figure 4 - VTEM Transmitter waveform schematized shape and sampling gates.

Transmitter coil diameter was 26 metres (area= 531 m^2), the number of turns was 4.
Transmitter pulse frequency - 30 Hz.
Peak current - 167 A.
Duty cycle - 37%.
Peak dipole moment - 355,000 A×m^2
Receiver coil diameter was 1.2 metre (area= 1.13 m^2), the number of turns was 100.
Wave form – trapezoid.
Recording sampling rate - samples per second.
The EM bird was towed 42 m below the helicopter.

VTEM Decay Sampling scheme (Microsecond)			
Time gate	**Start**	**End**	**Width**
130	120	140	20
150	140	160	20
170	160	180	20
190	180	205	25
220	205	240	35
260	240	280	40
300	280	325	45
350	325	380	55
410	380	445	65
480	445	525	80
570	525	625	100
680	625	745	120
810	745	885	140
960	885	1045	160
1130	1045	1235	190
1340	1235	1470	235
1600	1470	1750	280
1900	1750	2070	320
2240	2070	2450	380
2660	2450	2920	470
3180	2920	3480	560
3780	3480	4120	640
4460	4120	4880	760
5300	4880	5820	940
6340	5820	6860	1040
7540	6860	8220	1360

Table 3 - Time Gate Delays of VTEM channels.

3.1.3 Airborne magnetometer

The magnetic sensor used for the survey was a Geometrics optically pumped high resolution cesium total magnetic field sensor. It was mounted in a separate bird towed at the same altitude as the EM receiver loop (i.e. 42 m below the helicopter). The sensitivity of the magnetic sensor is 0.02 nanoTesla (nT) and the sampling interval was 0.1 seconds. The magnetic field strength measurements in nanoTesla (nT) were transmitted and recorded in the acquisition system via the RS-232 port.

3.1.4 Ancillary Systems

3.1.4.1 Radar Altimeter

A Terra TRA 3000/TRI 40 radar altimeter was used to record terrain clearance. The antenna was mounted beneath the bubble of the helicopter cockpit.

3.1.4.2 GPS Navigation System

The navigation system was a Geotech PC based navigation system using a NovAtel's WAAS enable OEM4-G2-3151W GPS receiver, Geotech navigate software, a full screen display with controls in front of the pilot to direct the flight and an NovAtel GPS antenna mounted on the helicopter tail.
The co-ordinates of the block were set-up prior to the survey and the information was introduced into the airborne navigation system.

3.1.4.3 Digital Acquisition System

A Geotech data acquisition system recorded the digital survey data on an internal compact flash card. Data is displayed on an LCD screen as traces to allow the operator to monitor the integrity of the system. Contents and update rates were as follows:

DATA TYPE	SAMPLING, sec
TDEM	0.1
Magnetometer	0.1
GPS Position	0.2
Radar Altimeter	0.2

Table 4 - Sampling Rates

3.1.4.4 Magnetic Base Station

A combine magnetometer/GPS base station was utilized on this project. A Geometrics cesium vapour magnetometer was used as a magnetic sensor with a sensitivity of 0.001 nT. The base station was recording the magnetic field together with the GPS time at 1 Hz on a base station computer. The base station magnetometer sensor was installed away from electric transmission lines and moving ferrous objects such as vehicles. The data recorded by the base station magnetometer were backed-up to the data processing computer at the end of each survey day.

4 DATA PROCESSING AND PRESENTATION

4.1. Flight Path

The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the WGS84/UTM zone 9N coordinate system in Oasis Montaj.

The flight path was drawn using linear interpolation between x,y positions from the navigation system. Positions are updated every second and expressed as UTM easting (x) and UTM northing (y).

4.2. Electromagnetic Data

A digital filtering process was used to reject major atmospheric noise known as sferic events and to reduce system noise. Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferics. The filter used was a 16 points non-linear filter.

The signal to noise ratio was further improved by the application of a low pass linear digital filter. This filter has zero-phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 1 second or 20 metres. This filter is a symmetrical 1 sec linear filter.

Because of the presence of the drift phenomena in the electromagnetic channels, a levelling procedure based on a polynomial approximation was used to level the EM channels.
Filtered and levelled EM channels are presented as stacked profiles for the time gates, using adequate linear-logarithmic scale.

4.3. Magnetic Data

The processing of the magnetic data involved the correction for diurnal variations by using the digitally recorded ground base station magnetic values. The base station magnetometer data were edited and merged into the Geosoft GDB database on a daily basis. The aeromagnetic data were corrected for diurnal variations by subtracting the observed magnetic base station variations.

1D non-linear filtering procedure was applied to magnetic data to remove spikes and drop off in the data, and then a 1D low-pass filtering operation was applied to refine magnetic profiles.

Tie line levelling was carried out by adjusting intersection points along the traverse lines using polynomial approximation method. Microlevelling procedure, using decorrugation filtering in the frequency domain was performed to remove any remaining line oriented noise.

The corrected and filtered magnetic data were interpolated between survey lines using a random point gridding method to yield x-y grid values for a standard grid cell size of approximately 0.2 cm at the mapping scale. The Minimum Curvature algorithm was used to interpolate values onto a square regular spaced grid.

5 DATA INTERPRETATION

5.1 Geological Considerations

The Yukon Territory occupies the northern portion of a large geologic (and physiographic) province known as the Cordillera. This province is composed of relatively young mountain belts that range from Alaska to Mexico. Like most of the Cordillera, Yukon is composed of a diverse array of rock types that record more than a billion years of geological history. Most of the rocks have been affected by folding, faulting, metamorphism and uplift during various deformation events over at least the last 190 million years. This deformation has resulted in a complex arrangement of rock units and the mountainous terrain we see today. In Yukon, there are two main geological components which are largely separated by a major, northwest-trending fault (the Tintina): 1) the northeastern region is composed of a thick, older sequence of sedimentary rocks which was deposited upon a stable geological basement; and 2) the southwestern region is composed of a younger, complex mosaic of varying rock types that amalgamated and accreted to the stable sedimentary package.

Yukon's geology divides into two essential components that are, for the most part, separated by the Tintina Trench (fig. 5). Rocks northeast of the Tintina Trench are mainly sedimentary and represent the *Ancient North American* margin. Rocks southwest of the Tintina Trench are mostly igneous and metamorphic, and represent numerous crustal fragments called *accreted terranes.*

The Convert Property is located in the Intermontane Superterrane, formed of several terranes and composed of sedimentary and volcanic rocks.

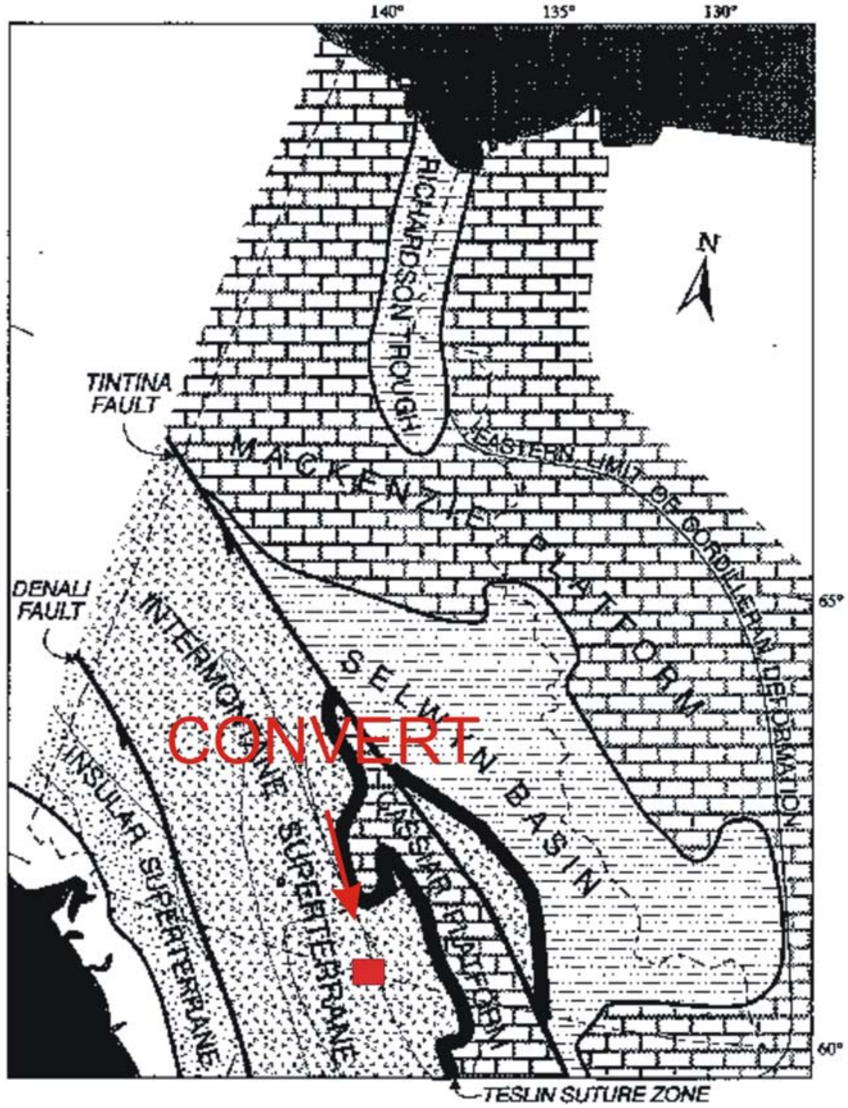


Fig. 5 shows the Yukon's major tectonic elements indicating that the territory is underlain by two dominant rock packages. Northeast of the Tintina Fault are a thick assemblage of sedimentary rocks that belong to the Ancient North American continental margin. They are platformal (mainly limestones) and basinal (mainly shale) in origin. Southwest of the Tintina Fault are numerous dissimilar crustal fragments called Terranes. The terranes were amalgamated into the Insular and Intermontane Superterranes prior to their accretion to the Ancient North American margin. The zone of deformation between the accreted terranes and Ancient North America is represented by the Teslin Suture Zone.

5.2 Magnetic Interpretation

5.2.1 Introduction

Aeromagnetic surveys are routinely used as a powerful tool at different stages in mining exploration and in geological mapping. Because geological formations have different concentrations of magnetic minerals, they exhibit different magnetic signatures in the magnetic field, depending on the susceptibility contrast of rocks and the characteristics of the magnetic field. Thus, observed magnetic field over an area, can provide useful information that can assist the lithological and the structural mapping. It can be used to detect iron-rich mineral deposits, and/or mineral deposits associated with highly magnetic rocks (mafic and ultramafic formations).

5.2.2 Analysis of the Magnetic data

The observed magnetic field over the Convert Property (Fig 6) shows values ranging from 57500 to 57710 nT. This yields a difference in the magnetic field intensity of 210 nT. No noticeable magnetic activity can be illustrated in the magnetic map. The observed field expresses a quiet character over the central and southern parts of the map. This is very specific to this area, which is composed mainly of sedimentary rocks and/or non magnetic metamorphic and magmatic rocks that do not give any significant magnetic response. The most significant peaks are observed in the north western part of the area and are probably related to some deep and moderately magnetized rocks.

A better illustration of the magnetic filed of the area is provided by the color shaded relief maps as shown in figs. 7 and 8. Theses images show the original magnetic field and the field reduced to the pole. Areas of magnetic lows and highs can easily be distinguished and delineated in the shaded images. One can remark, that the reduced to the map image does not differ too much from the original map because this area is located at high geographical latitude.

Since the contents of the observed magnetic maps include the response of shallow and deep and/or large magnetic sources, it is difficult to analyze the maps with a large band of wavelength contents. Distinguishing shallow feature from deeper ones can be performed via several methods of field separation and filtering. The fig. 9 shows the tilt derivative of the magnetic field. The tilt derivative known as the local phase is computed from the vertical and horizontal gradients. The tilt map highlights the short wavelength anomalies related with shallow sources. As illustrated in fig. 9, the boundaries of the magnetic structures located on the western part of the block are clearly defined. Several shallow circular magnetic bodies can be identified as well.
By contrast to the tilt derivative map, the magnetic field upward continued attenuates the short wavelength anomalies and shows the response of deep sources with large extents. Figure 10, illustrated the magnetic field upward continued to 100 m. The map indicates that all the short wavelength anomalies observed in the central and southern areas have been suppressed. Only the anomalies situated on the western part and related with deeply embedded structures persist after the

upward continuation transformation.

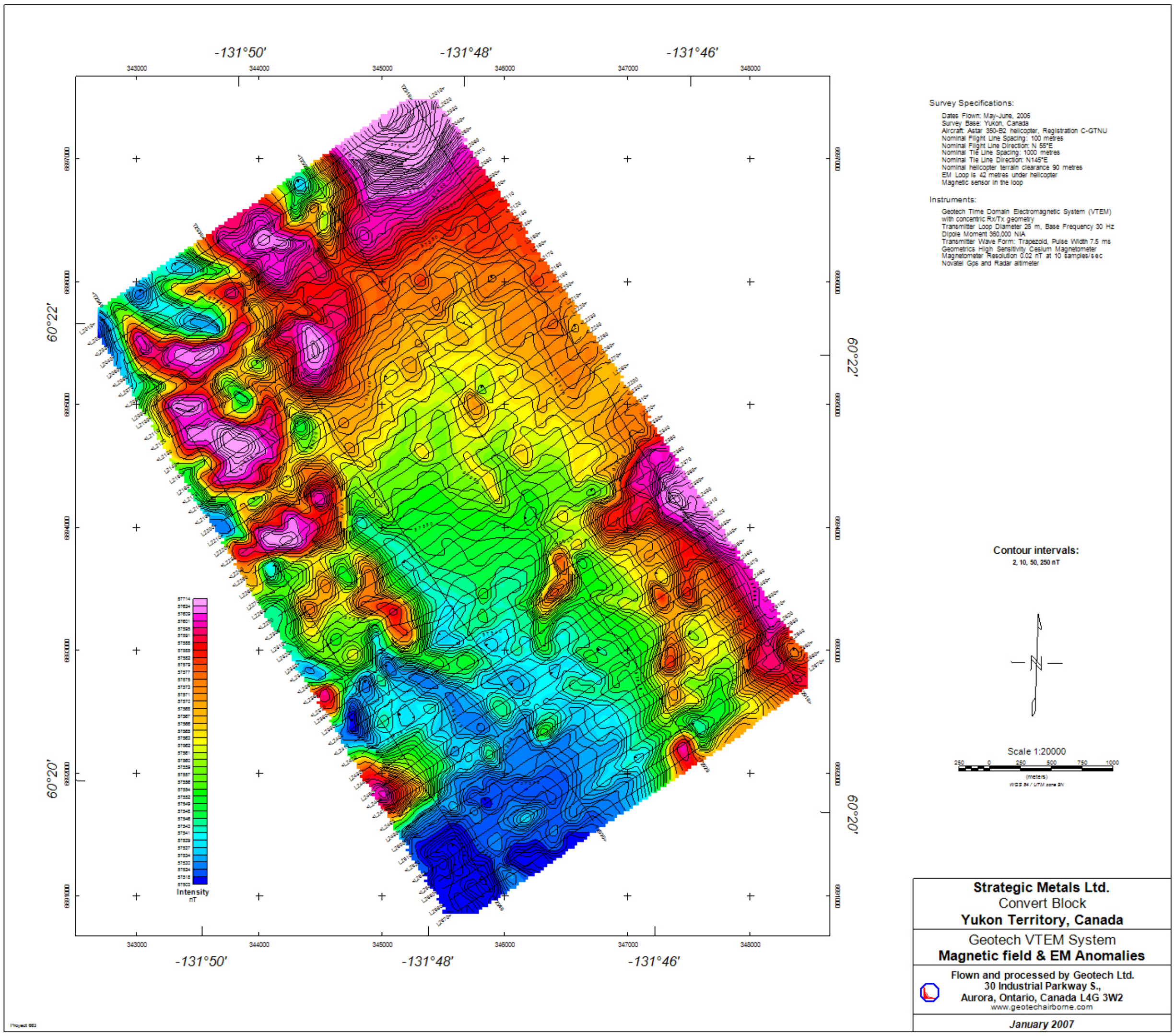


Fig. 6 Magnetic field image with contours of the Convert Property.

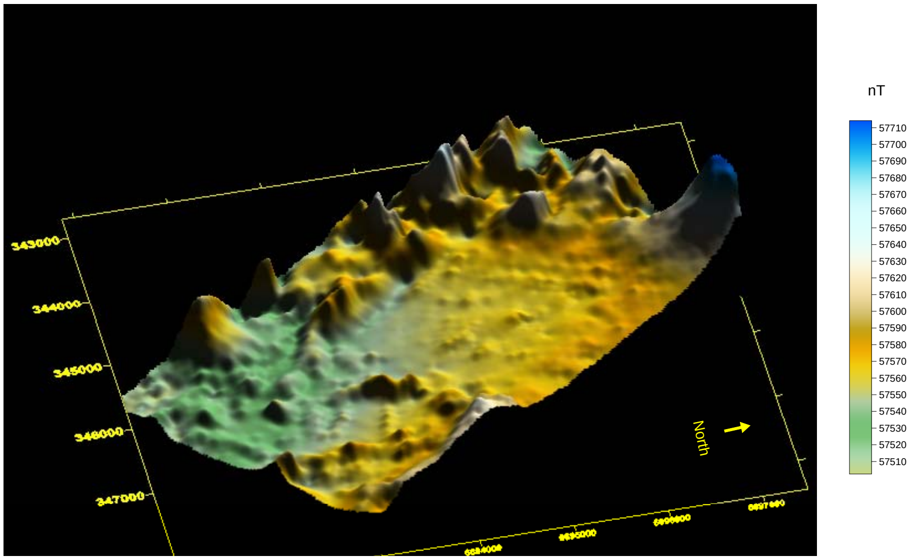


Fig. 7 color shaded relief of the magnetic field map.

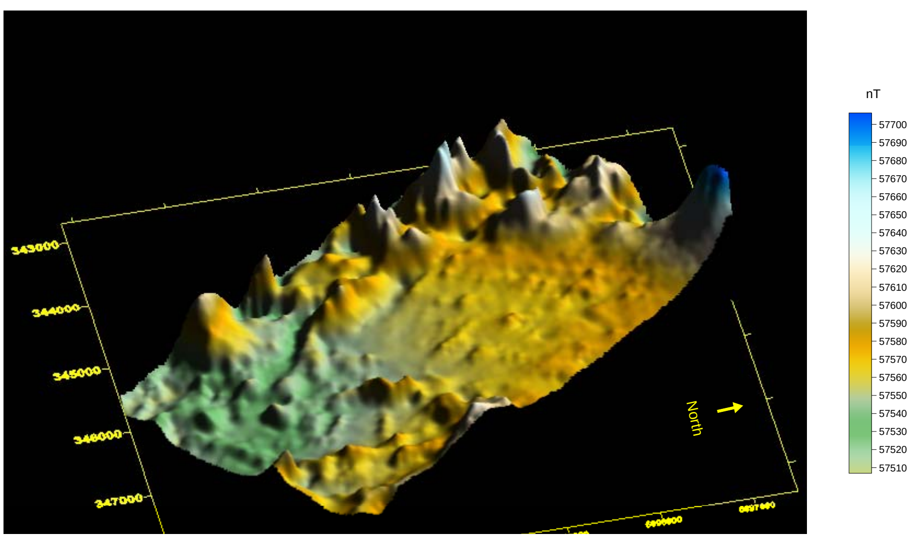


Fig.8 Color shaded relief of the magnetic field reduced to the pole.

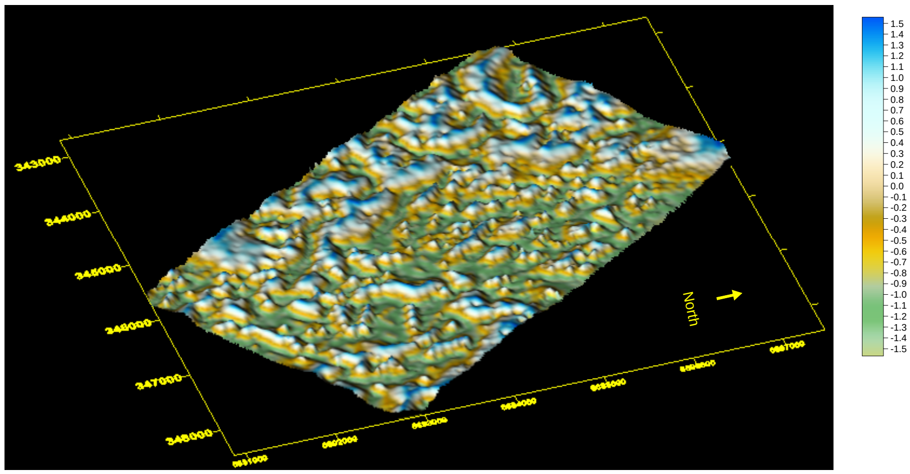


Fig. 9 Tilt derivative map showing short wavelength anomalies.

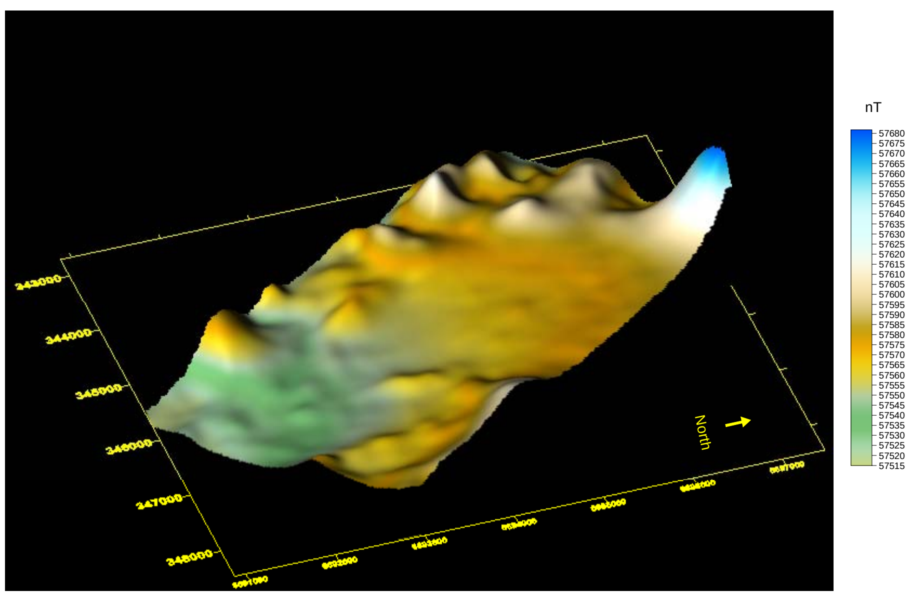


Fig. 10 Magnetic field reduced to the pole and upward continued (+100 metres)

5.2.3 Inversion of magnetic data

Several computer-based techniques can be used to automatically detect magnetic sources and yield estimations of their geometrical and physical parameters. These techniques can be either used to gridded data (3D methods) or to profiles (2D methods). Euler deconvolution is a well established technique, allowing a rapid interpretation of a large amount of magnetic data. This method is mainly aimed to delineate magnetic sources boundaries and to estimate their depths. Fig. 11 shows the results obtained with the Euler deconvolution inversion using a structural index of 0.5, a depth tolerance of 10% and a square deconvolution window with a size of 250 × 250 metres.

Estimated depths for the Convert area are ranging from 0 to 200 metres and greater. Most of the interpreted structures have depth estimates less than 50 m. These shallow magnetic sources are formed by circular structures identified mainly in the western part of the Block. Two magnetic lineaments trending in the Northeastern direction have been identified. They may be caused by a fault or dyke system affecting this area.

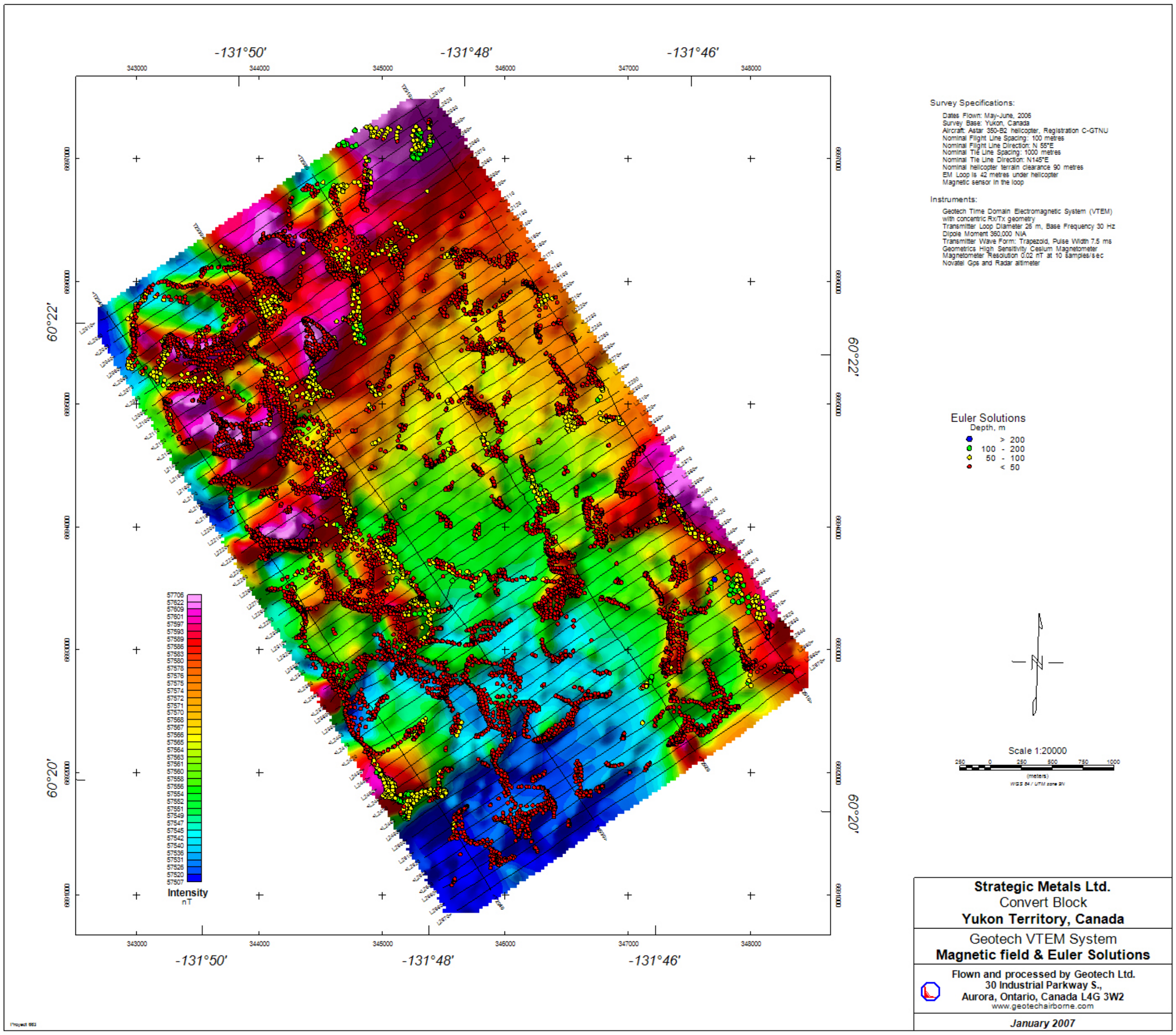


Fig. 11 Euler deconvolution solutions superimposed on the RTP magnetic image.

5.3 VTEM Interpretation

5.3.1 Introduction

Transient electromagnetic surveys have proven to be a very efficient tool in mineral exploration by detecting hidden deposits characterized by higher conductivities than the medium in which they are embedded. Because Time domain systems have a much greater depth penetration compared to the Frequency domain systems, these systems are considered as a tool of choice in the mining exploration. The Geotech Helicopter VTEM system, operating in the Time domain, uses concentric-loop geometry with the receiver mounted in the centre of a larger transmitter loop. Both loops are oriented in the vertical plane. This configuration has a number of advantages, as a maximum coupling, sharper anomalies by comparison to airborne fixed wing systems, and the shape of the anomalies in independent of the flight path orientation. Furthermore, the high moment transmitter combined with the lower terrain clearance yields stronger secondary field signals in most conductors when compared to other systems.
The Vtem Transmitter uses a trapezoid waveform shape with about 5.8 ms duration operating at a base frequency of 30Hz. The dipole moment was about 350 000 A×m^2. The used half-waveform was about 16.7 ms. All the decay windows are located on the off-time portion of the waveform (Fig. 12).

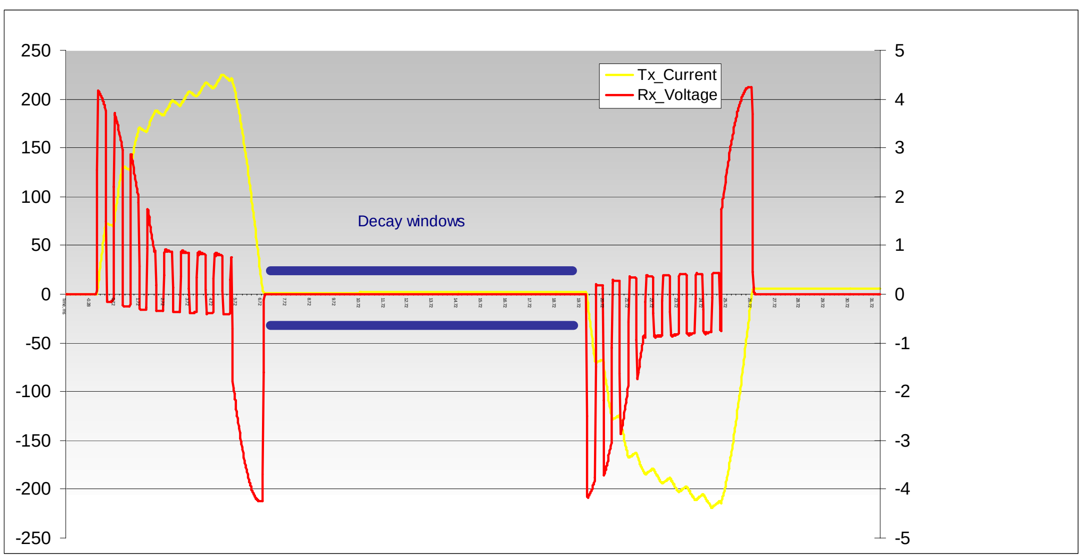


Fig. 12 VTEM waveform and decay windows.

5.3.1 EM anomalies shape

For concentric-loop geometry systems when both loops are oriented in the Z-axis (VTEM system) thick dipping conductors exhibit a characteristic single peak, while steeply dipping thin conductors manifest a double peak. The minimum indicates the location of the top of the thin conductor, and the major peak indicates the side towards which the conductor is dipping. In the case of X-axis oriented receiver, cross-over are observed above conductors. The figure13 below illustrates the response of two dipping conductive plates for both cases. At early times induced eddy currents circulate at the surface de the conductive bodies while at late times they penetrate into the conductor.

This fact can be translated by the presence of a response in the receiver at early times and late times of conductors with depth extension, while conductive overburden shows a response at early times solely. Analysis of early times and late times responses can be used as a visual criterion for discriminating conductive overburden.

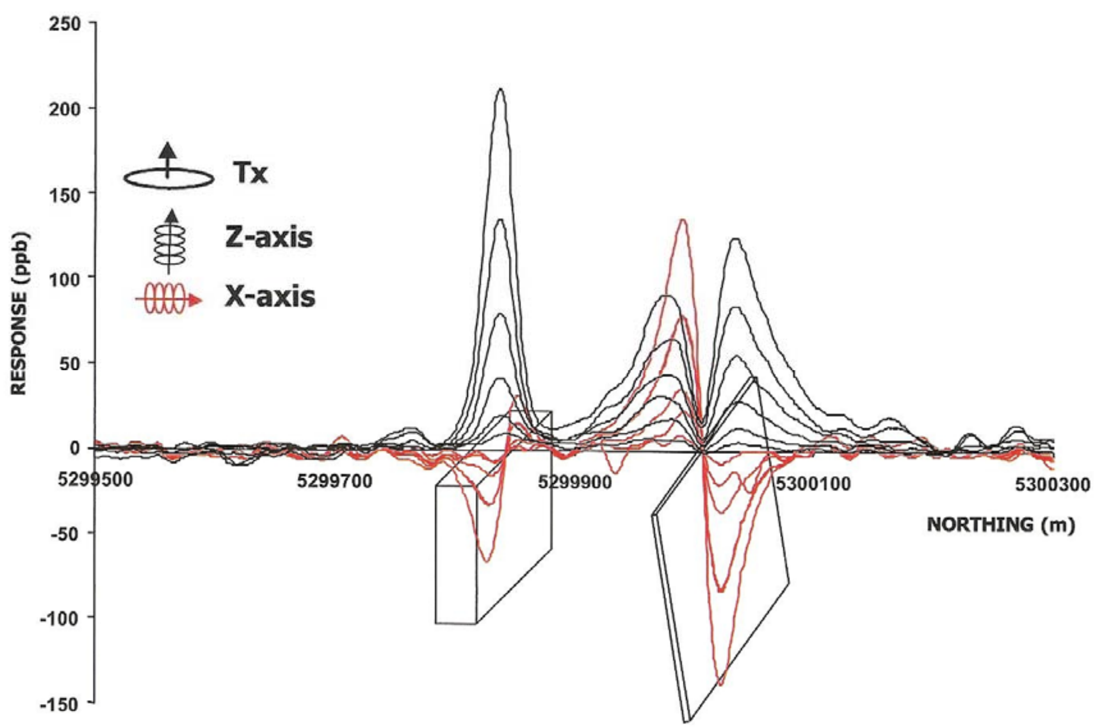


Fig. 13 Response of a vertical thick conductor, and a steeply dipping thin conductor. In black, response in the Z-axis loop (VTEM case) and in red in X-axis loop.

5.3.2 Analysis of the EM results

Fig. 14 shows the stacked profiles in log-linear scale of the early time channels (130 µsec- 680 µsec). The map shows several broad anomalies trending in the north southern and north western directions. The map does not reveal the existence of any shallow thin conductors (M shape anomalies). Mostly the anomalies are related with thick conductive zones located near the surface. The early time channels anomalies emphasizes the effects of conductive overburden existing in the western part of the Block. Middle time channels (810 µsec -3180 µsec) and late time channels (3780 µsec -7540 µsec) stacked profiles map (figs. 15 and 16) allow to distinguish several anomalous zones (A, B, B' and C) caused by some conductors of interest .

Interpretation of the Em profiles was performed using an in-house built software allowing the picking of the anomalies along the profiles and yielding estimates of the conductance and decay constant (tau) of isolated anomalies. Results of the interpretation are illustrated on Figures 17 and 18.

The estimates conductance values are less than 20 S suggesting the absence of good conductors in this area. However, some fairly good conductors are detected in the northern area (A) and three others in the southern part of the Block (B, B' and C).

It is worth mentioning that the interpreted EM anomalies A, B and C are located on Euler solutions indicating the existence of a relationship between the conductors and the magnetic field (fig. 20). However this correlation is not established from the magnetic field map directly (Fig. 19).

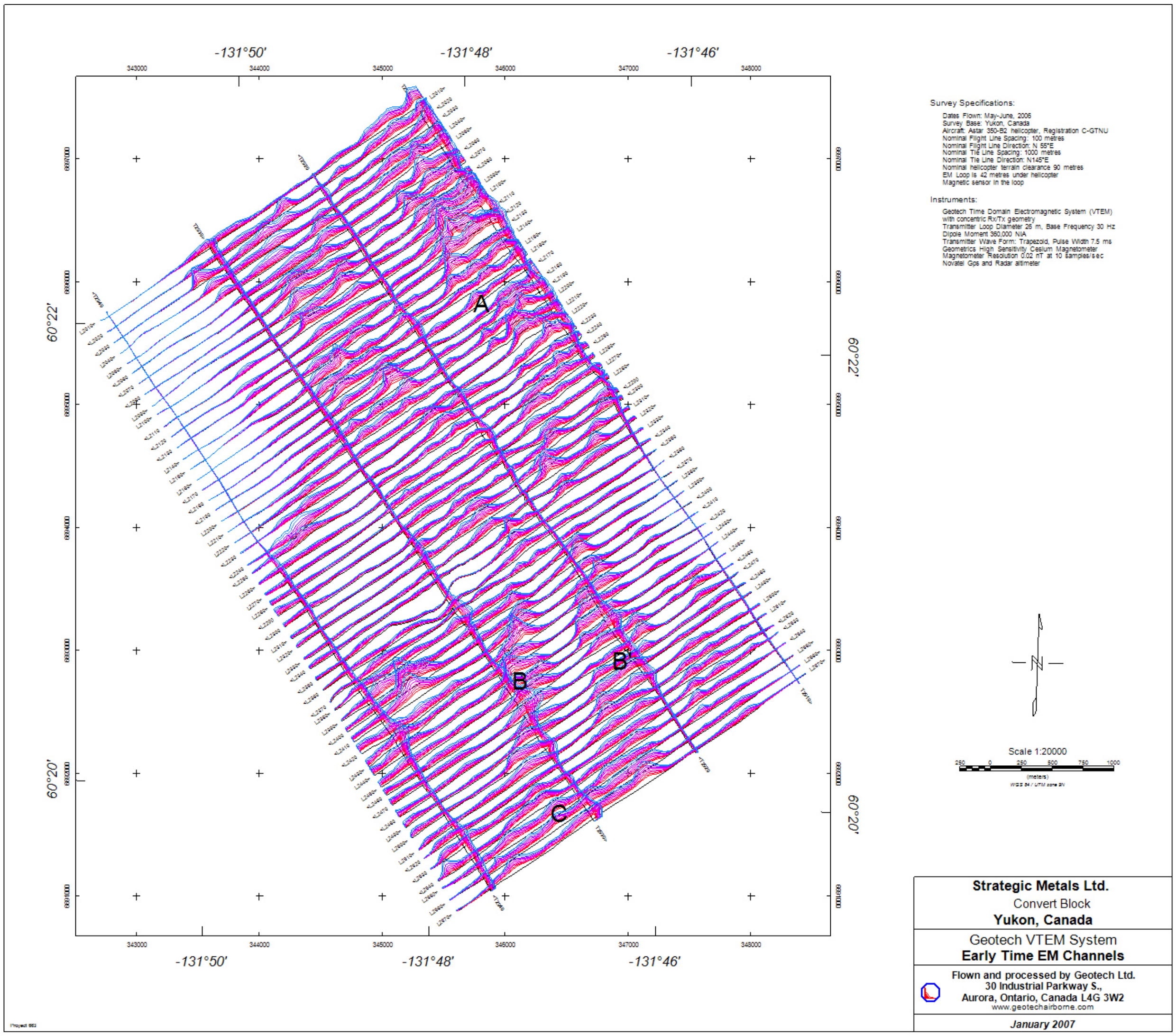


Fig. 14 Stacked EM profiles (Early Time Channels) plotted at log-linear scale.

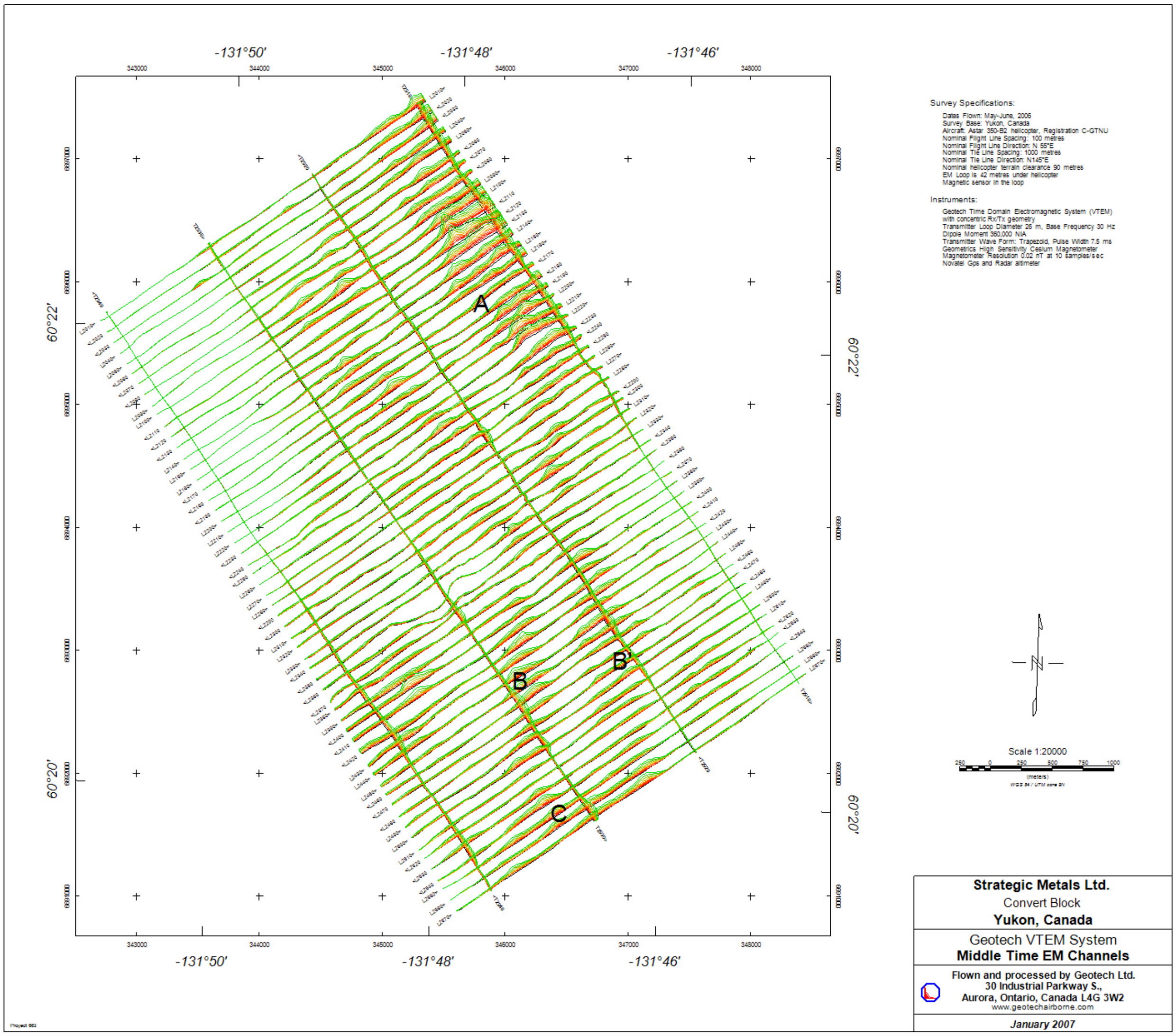


Fig. 15 Stacked EM profiles (Middle Time Channels) plotted at log-linear scale.

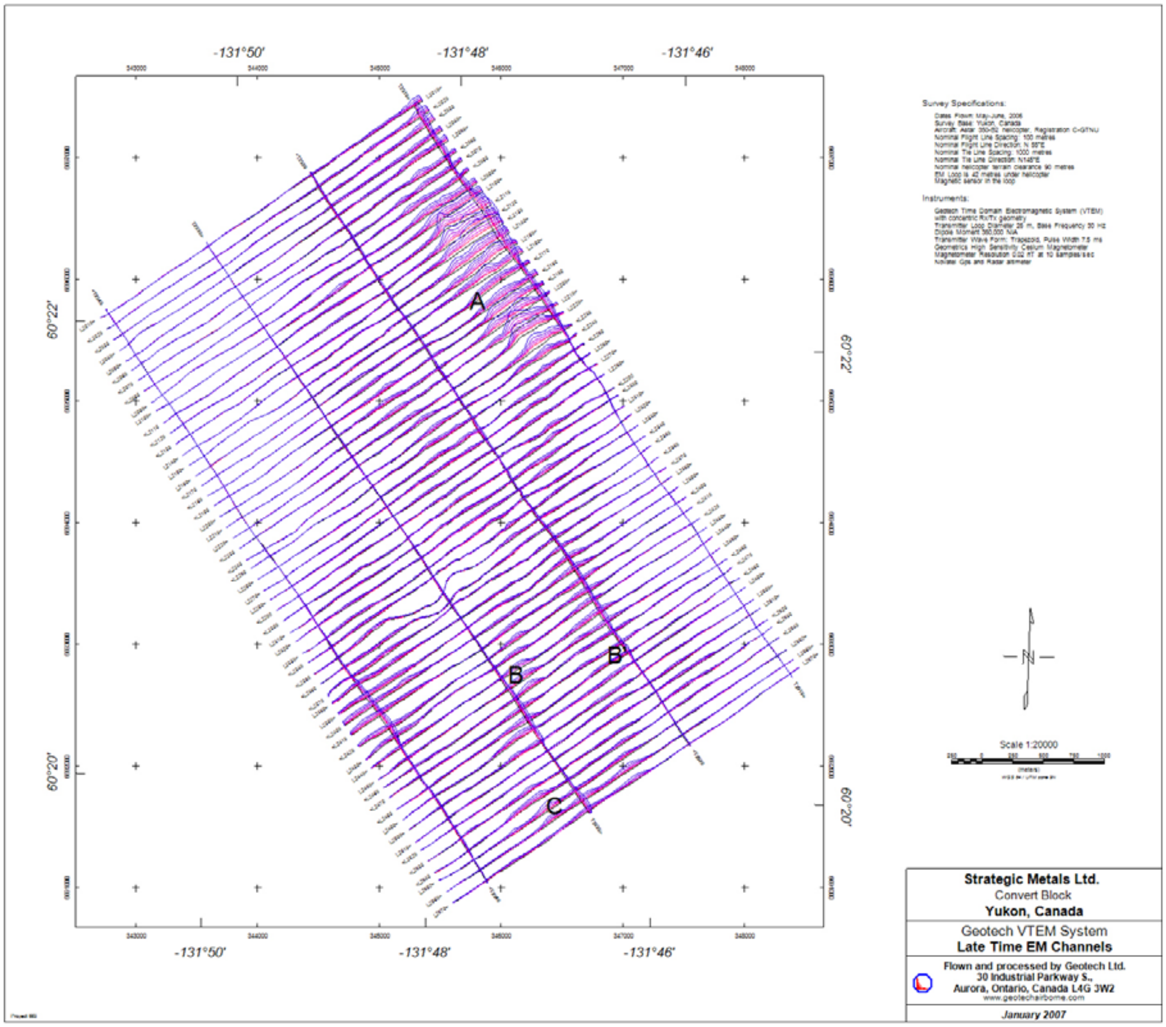


Fig. 16 Stacked EM profiles (Late Time Channels) plotted at log-linear scale.

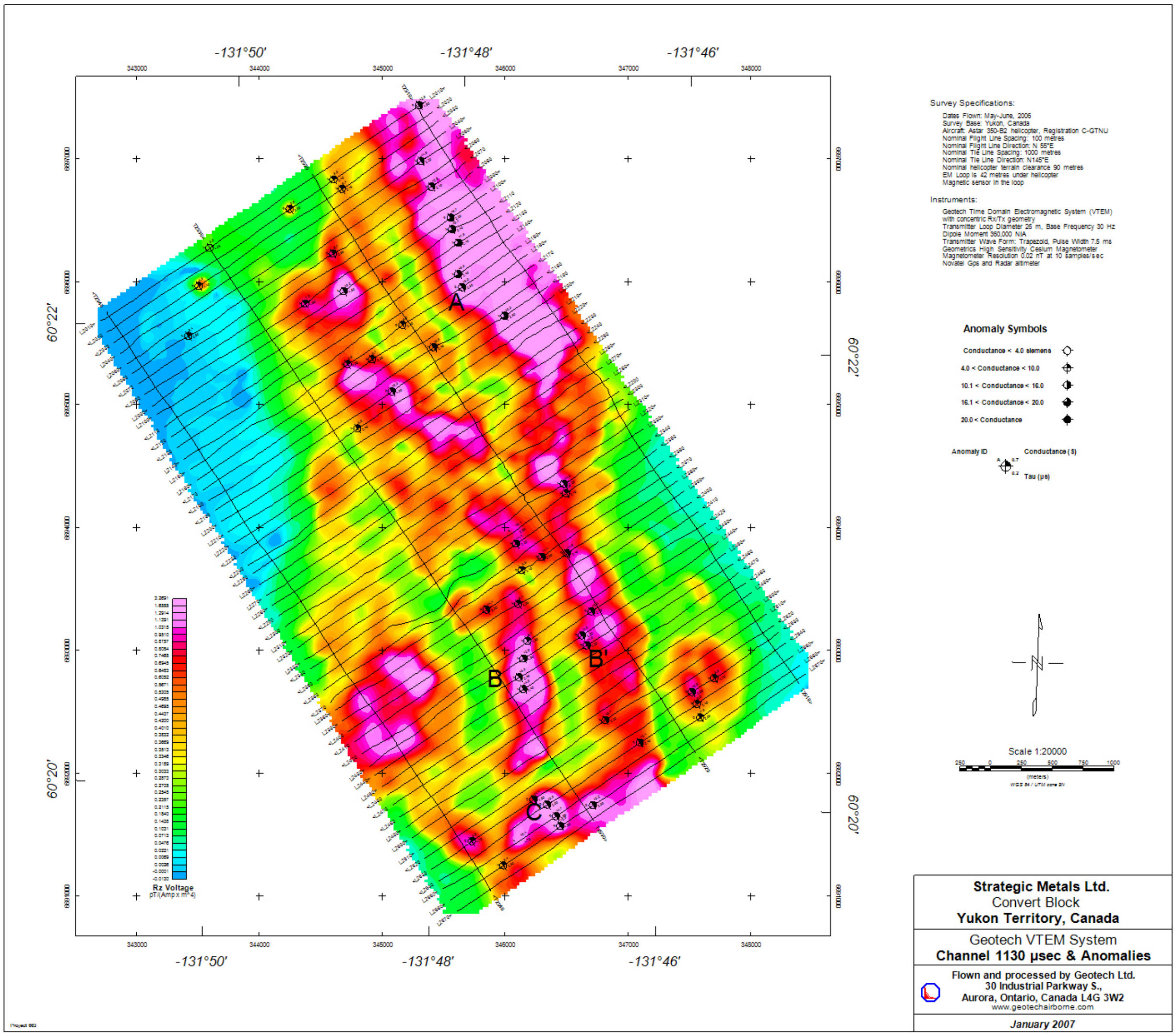


Fig. 17 Picked EM anomalies superimposed on the 1130 µsec Channel.

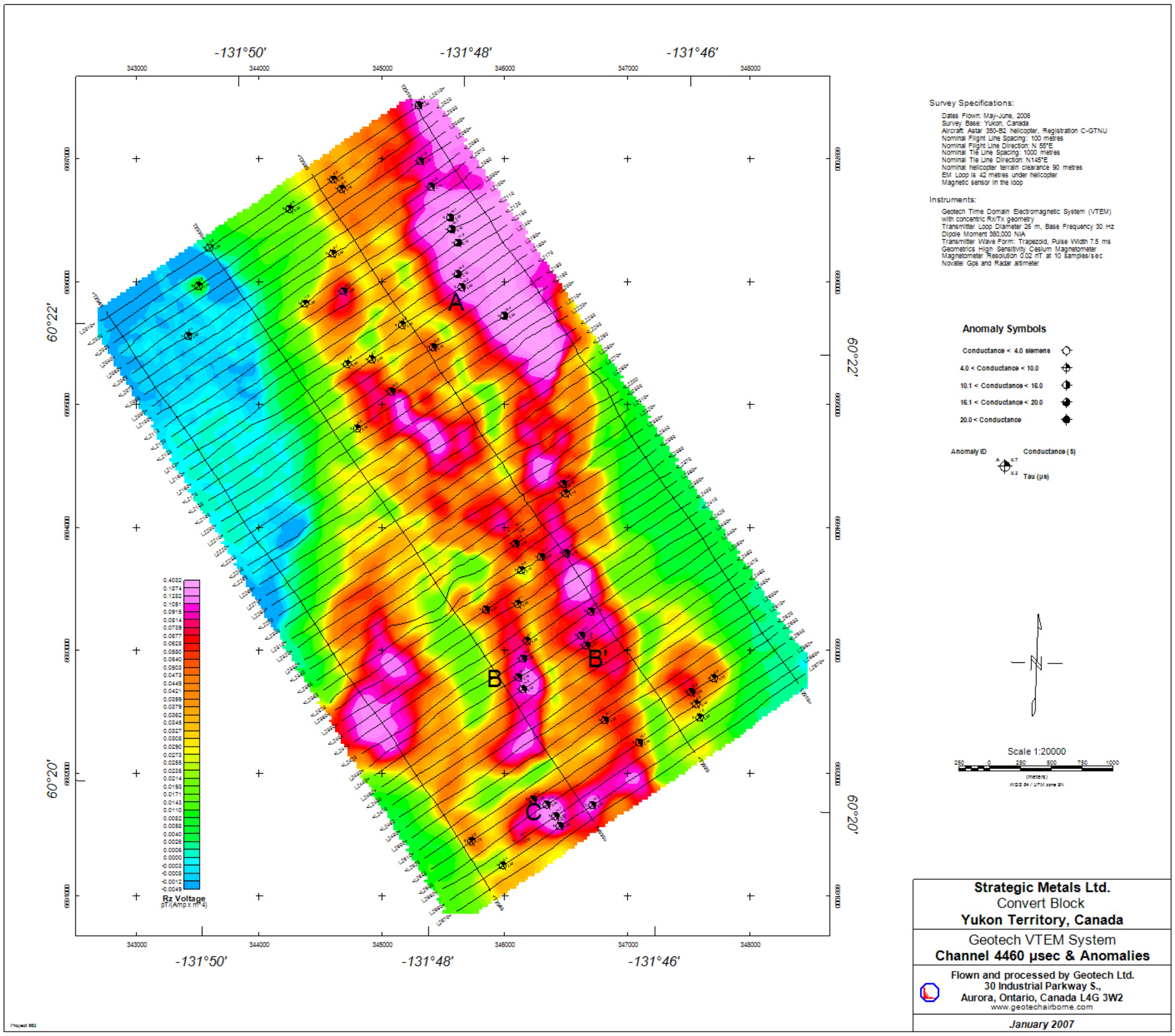


Fig. 18 Picked EM anomalies superimposed on the 4460 µsec Channel.

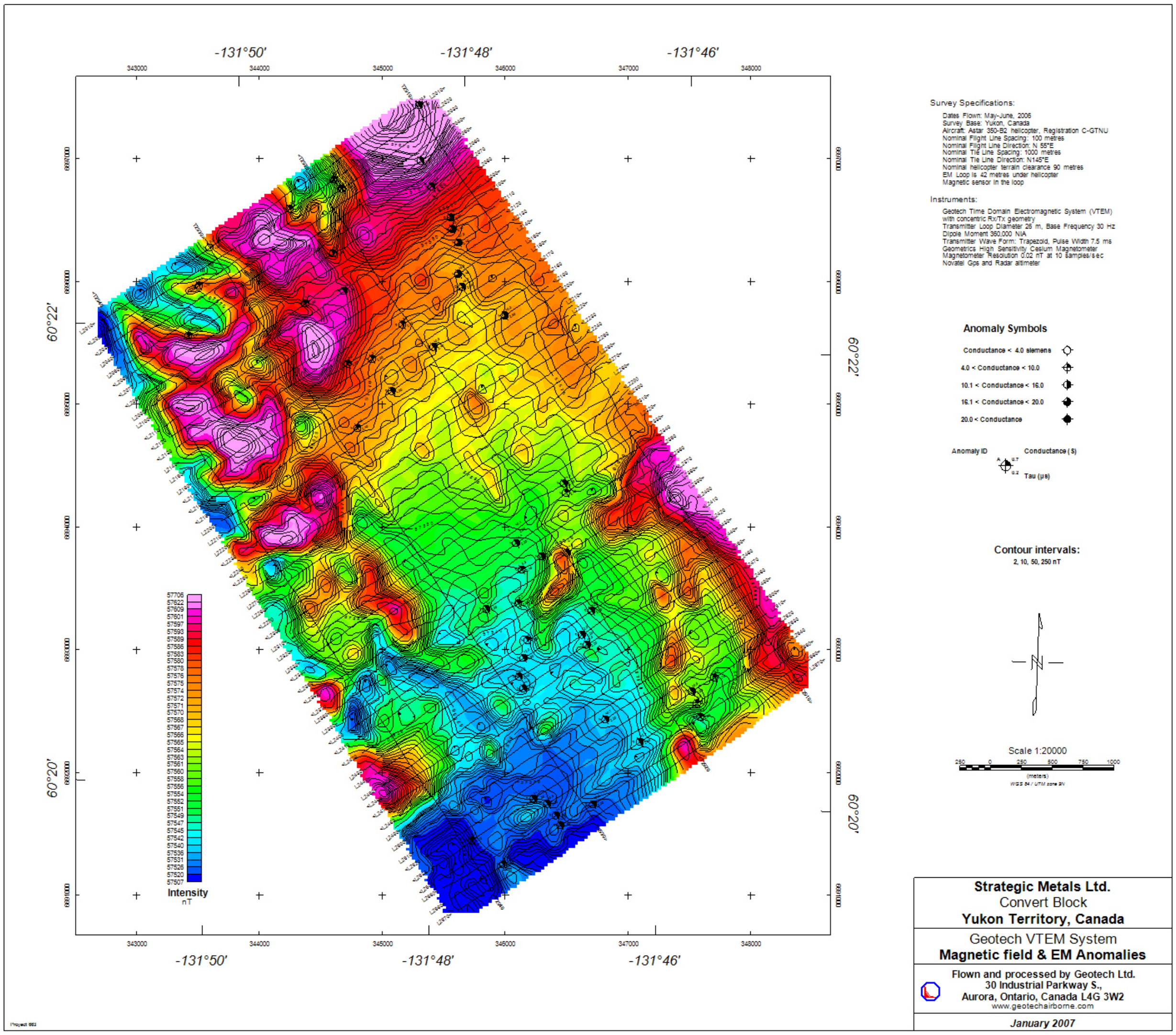


Fig. 19 Picked EM anomalies superimposed on the RTP magnetic field image.

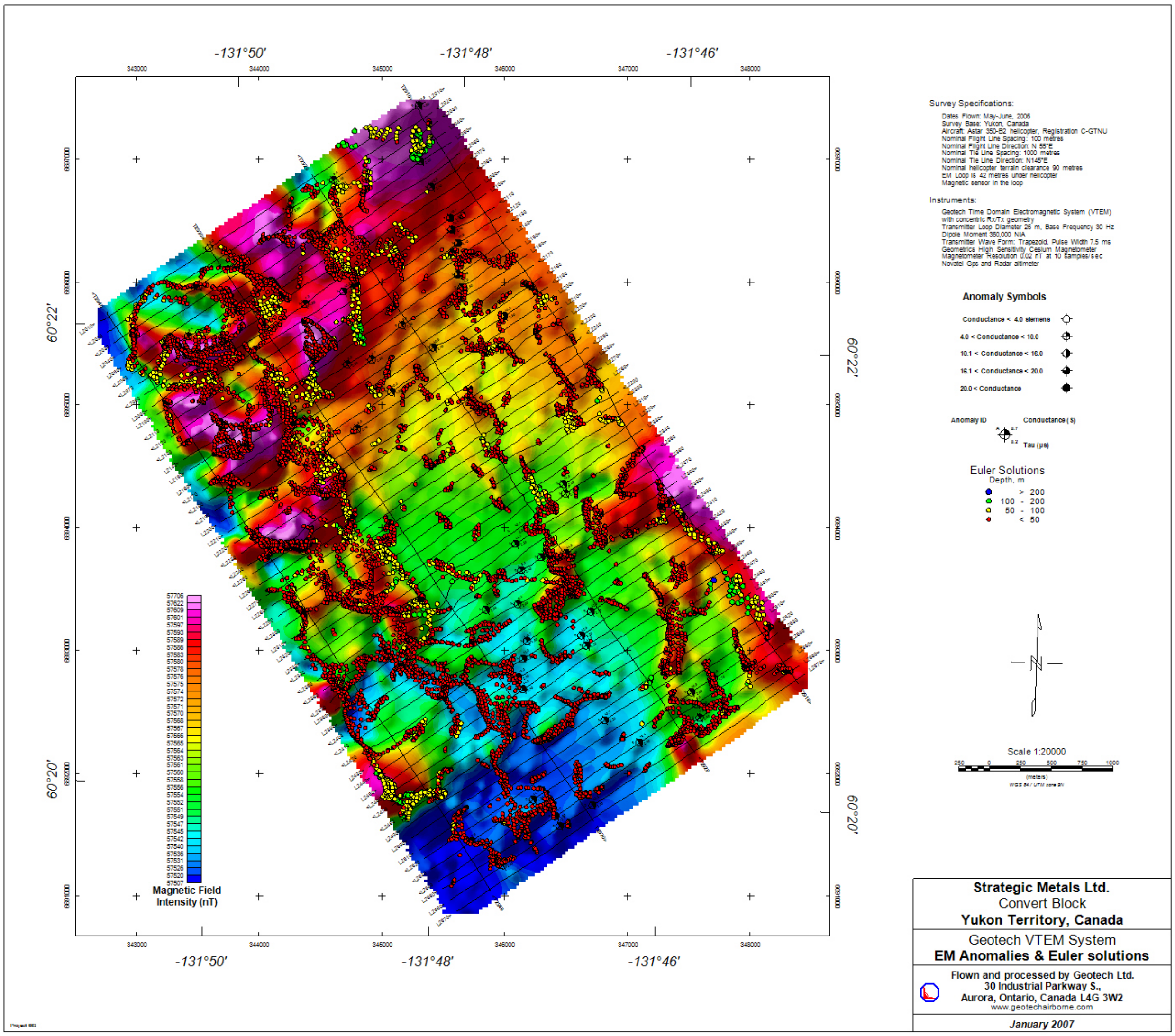


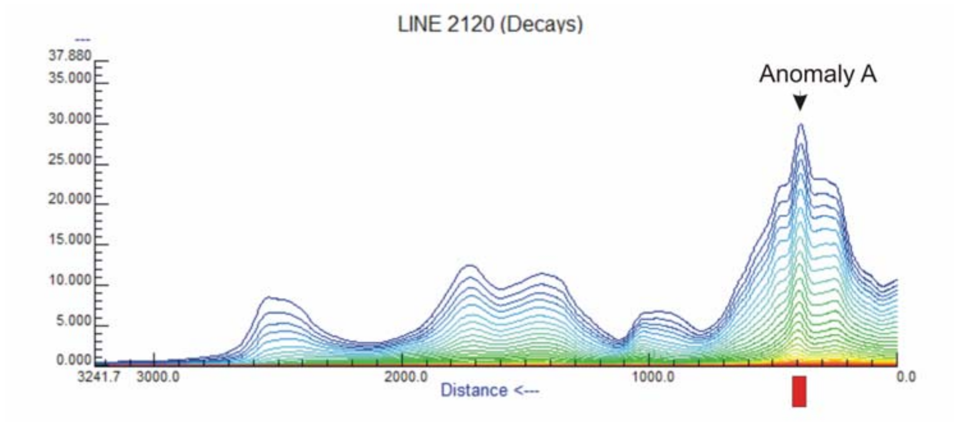
Fig. 20 Picked EM anomalies and Euler solutions superimposed on the 2240 µsec Channel.

5.3.3 Selected anomalies

04 anomalies situated on lines: L2120, L2440 and L2550 have been selected for detailed ground fellow up and for drilling tests (Figs. 21 and 22)
The detected anomalies are large peak type and are caused by steeply dipping thick conductors and/or horizontal plate. Anomaly C is a large peak type and may be caused by a conductor with large horizontal extents. Table 5 gives the summarized results of the EM interpretation.

Line	**Anomaly ID**	**Anomaly Type**	**Conductor geometry**	**X- location m**	**Y-location m**	**Conductance S**	**Tau msec**
L2120	A	One peak	Thick plate and/ or Horizontal plate	345620	6696315	17.9	2.1
L2440	B	One peak	Steeply dipping thick plate	346113	6692699	13.3	2.4
L2440	B’	One large peak	Horizontal plate	346663	6692702	12.6	2.2
L2550	C	One peak	Steeply dipping thick plate	346413	6691651	14.7	1.9

Table 5. Summarized results of the EM interpretation on selected anomalies.



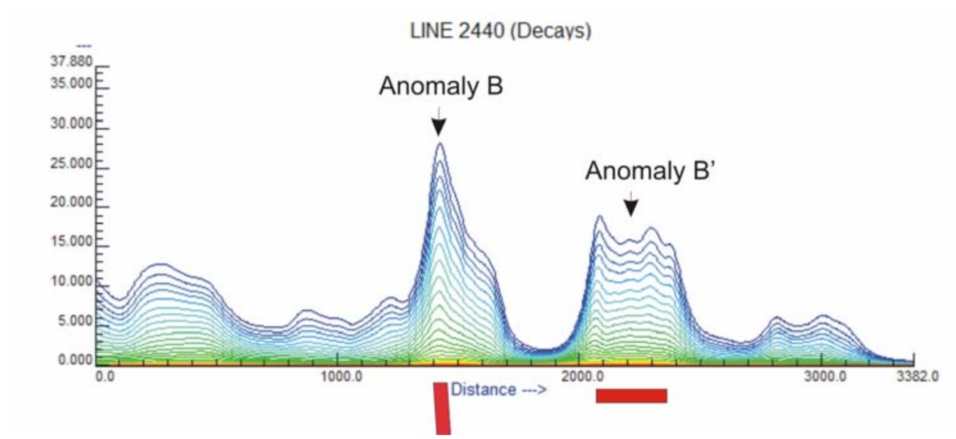


Figure 21 shows anomalies of interest A and B and the location of the conductors.

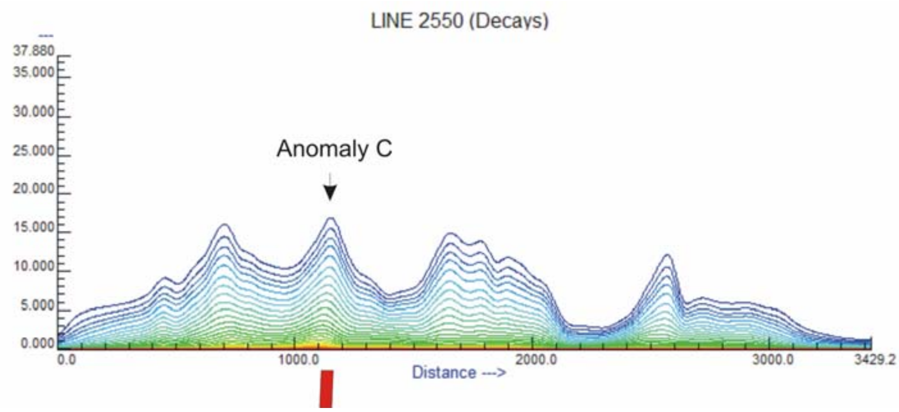


Figure 22 shows anomalies of interest C and the location of the conductor.

6 Conclusions and recommendations

The analysis of the magnetic map of the Convert property reveals the existence of quiet field with low values in the central and southern parts of the area. However, some weak and broad peaks are observed on the western and south eastern parts of the Block. The quiet activity of the field may be explained by the presence of non magnetic rocks (sedimentary and /or metamorphic and acidic formations). The high magnetic field consisting is probably the response of some slightly magnetic rocks surrounding the non magnetic rocks.
Inversion performed with Euler deconvolution yielded the magnetic sources boundaries and the estimates of their depths. The calculated depths of the magnetic structures are mostly less than 50 m suggesting that they are near the surface.
The Vtem survey reveals the existence of some linear conductors trending in the north southe direction. Only one conductor situated in the north exhibits a conductance between 16 and 20 S. The estimates of the conductance of the other revealed conductors do not exceed 16 S. On the other hand, the calculated decay constants (tau) are less than 4 ms.
The selected EM anomalies are precisely located on the Euler solutions obtained from the magnetic inversion. The obtained results suggest that the detected EM anomalies are mostly related with thick and steeply dipping or horizontal poor conductors.
The recommendation is to conduct some ground profiles on the selected anomalies with the Induced Polarization method to confirm the existence of disseminated metallic occurrences. It is also recommended to perform some drilling tests on the selected anomalies to determine the nature of the conductors yielding the EM anomalies.

Respectfully submitted,

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