ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
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ASSESSMENT REPORT

describing

GEOPHYSICAL SURVEYS

at the

OBVIOUS PROPERTY

OB 1-12 YC47166-YC47177

NTS 105F/6
Latitude 61º24'N; Longitude 135º15'W

in the

Whitehorse Mining District,
Southern Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

STRATEGIC METALS LTD.

by

W. Douglas Eaton, B.Sc. Geology

April, 2008

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INTRODUCTION

The Obvious property consists of 12 mineral claims that cover skarn-hosted tungsten mineralization. The claims are located in southern Yukon Territory and are owned 100% by Strategic Metals Ltd.

This report describes helicopter-borne magnetic and versatile time domain electromagnetic (VTEM) surveys that were conducted over and adjacent to the property in summer 2007. The surveys were conducted by Geotech Ltd. of Aurora, Ontario under the author's supervision. Appendix I contains the author's Statement of Qualifications.

PROPERTY LOCATION, CLAIM DATA AND ACCESS

The property comprises 12 contiguous mineral claims located in southern Yukon at latitude 61°24′N and longitude 135°15′W on NTS map sheet 105F/6 (Figure 1). The claims are registered with the Whitehorse Mining Recorder in the name of Archer, Cathro & Associates (1981) Limited, which holds them in trust for Strategic Metals. Claim data are listed below while individual claim locations are shown in Figure 2.

Claim Number	Grant Number	Expiry Date*
OB 1-12	YC47166-YC47177	March 26, 2013

* Expiry date includes assessment credit for 2007 work, which has been filed but not yet accepted.

The Obvious property lies 125 km northeast of Whitehorse, the main supply centre and transportation hub for Yukon. Access is normally via helicopters based at the Whitehorse airport, but it may be possible via all-terrain vehicle using a bulldozer trail that extends 10 km eastward from the property to the seasonally maintained South Canol Road. The bulldozer trail was constructed in 1983 and its condition is unknown. The 2007 geophysical surveys were conducted from the Whitehorse airport with intraday refueling at a temporary staging area on the South Canol Road.

GEOMORPHOLOGY

The property lies within the Big Salmon Range of the Pelly Mountains. It is situated near the head of Cariboo Creek, part of the Yukon River watershed. Local topography is moderate to rugged, with elevation range between 1200 and 1700 m above sea level. Outcrop is mostly confined to ridge crests.

Treeline is at about 1500 m and much of the property is vegetated with buckbrush and/or black spruce. Soil development is generally poor. Bedrock is normally obscured by talus on hillsides or by glacial till at lower elevations.

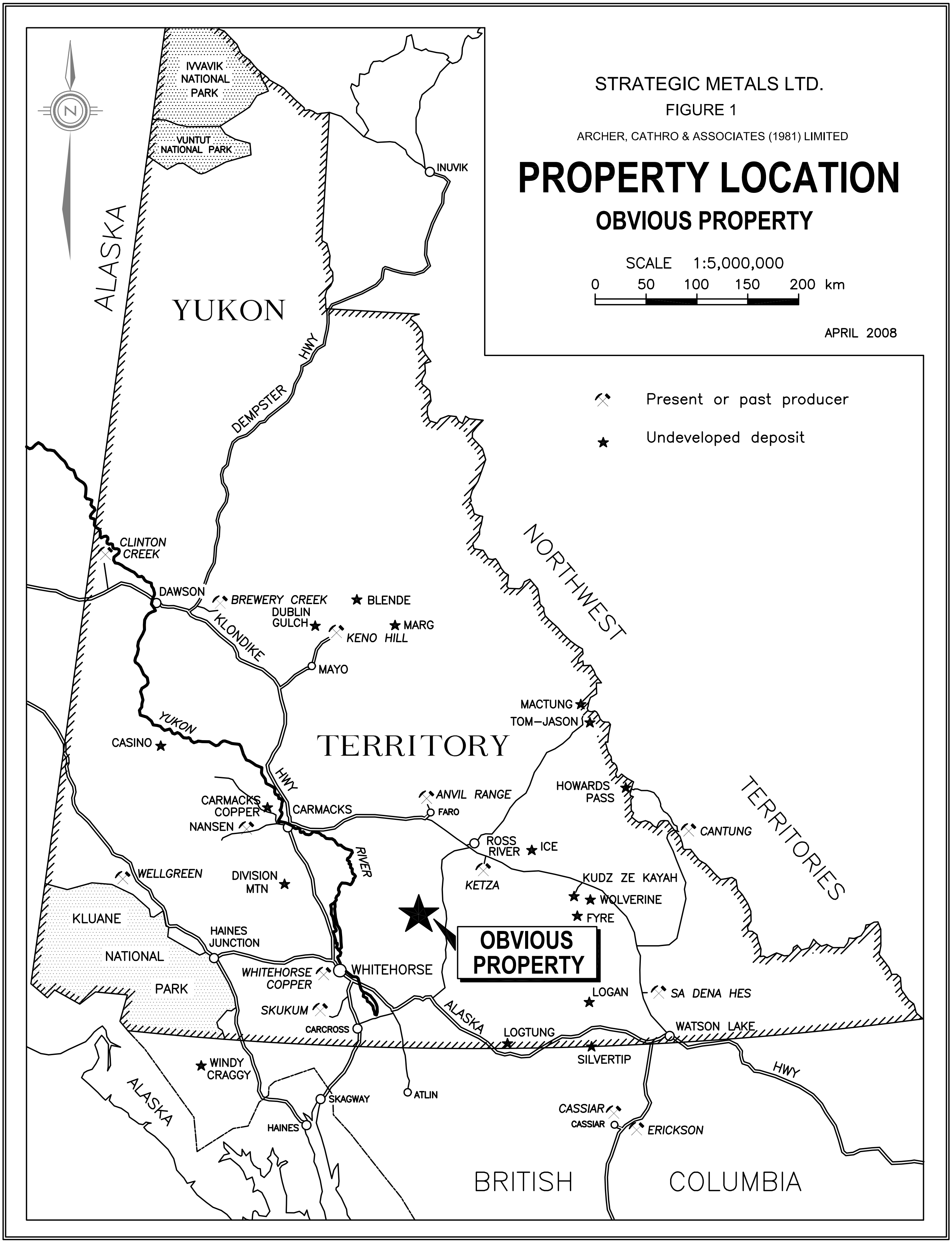

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FIGURE 1

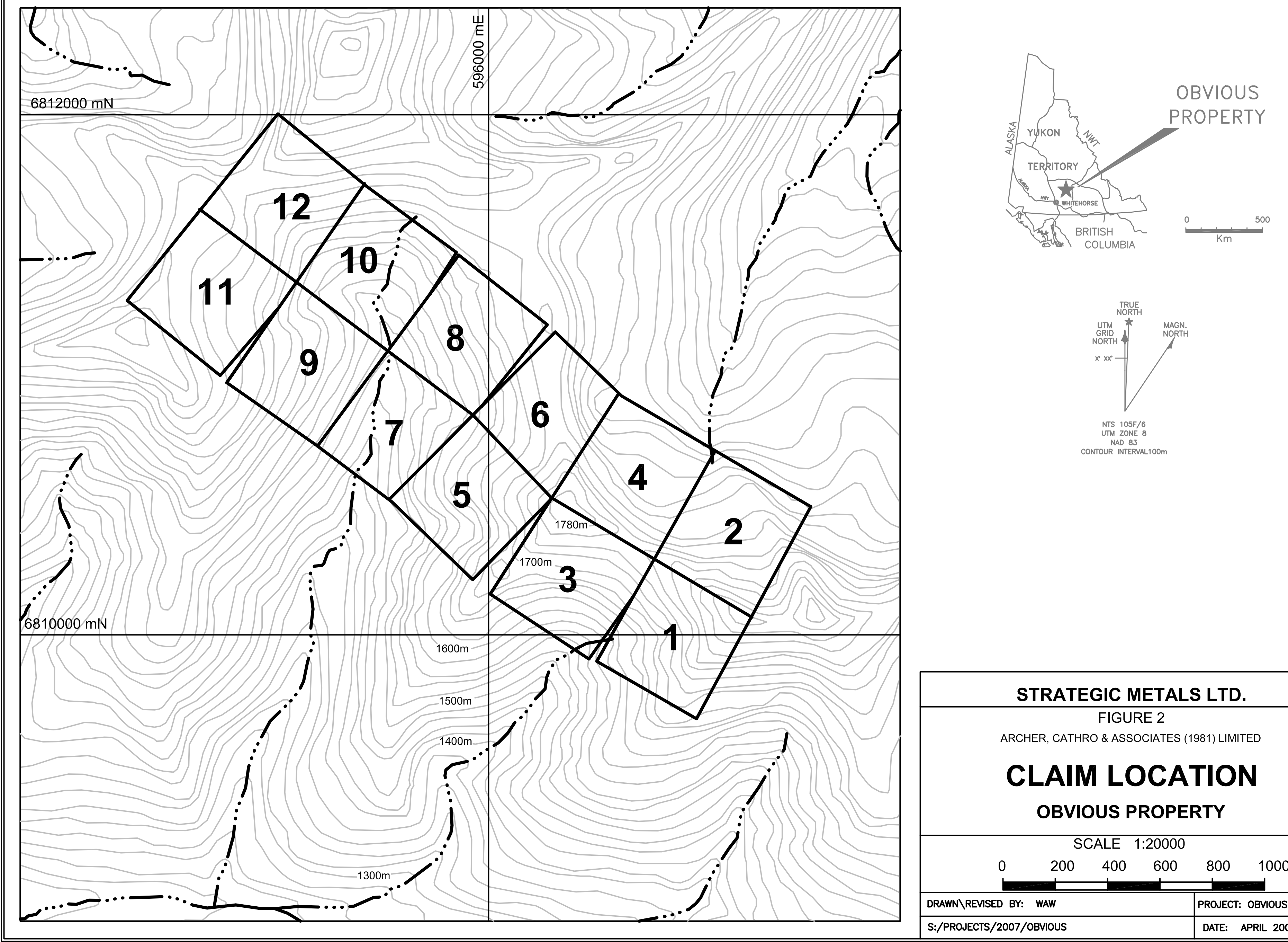
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

PROPERTY LOCATION

OBVIOUS PROPERTY

SCALE 1:5,000,000

APRIL 2008



NTS 105F/6
UTM ZONE 8
NAD 83
CONTOUR INTERVAL100m

STRATEGIC METALS LTD.

FIGURE 2

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

CLAIM LOCATION

OBVIOUS PROPERTY

SCALE 1:20000

0 200 400 600 800 1000m

DRAWN\REVISED BY: WAW

PROJECT: OBVIOUS

S:/PROJECTS/2007/OBVIOUS

DATE: APRIL 2008

GEOLOGY

Regional Geology

The Obvious property lies about 55 km southeast of the Tintina Fault in a strongly folded and faulted package of pericratonic metasediments that are assigned to the Yukon-Tanana Terrane (Figure 3). The metasediments range from Late Proterzoic to Mississippian in age (Wheeler, et al., 1960, Tempelman-Kluit, 1973, and Gordey and Makepeace, 1999). They are locally intruded by post-orogenic granitic plutons of the Mid-Cretaceous Cassiar Plutonic Suite (Mortensen etal, 2000). One of these plutons, the Nisutlin Batholith, underlines much of the property. The main lithologies in the vicinity of the property are summarized on Table I.

Table I - Regional Lithologies

CRETACEOUS AND/OR TERTIARY

KTqfp	Buff to light green, locally pyritic quartz-feldspar porphyry dykes.
KTmv	Dark green, aphanitic basic dykes.
Kqm	Biotite quartz monzonite.

UPPER DEVONIAN AND MISSISSIPPIAN

uDMs	Rusty and black recessive weathering, thin-bedded black siliceous slate with minor chert.

ORDOVICIAN, SILURIAN AND LOWER DEVONIAN

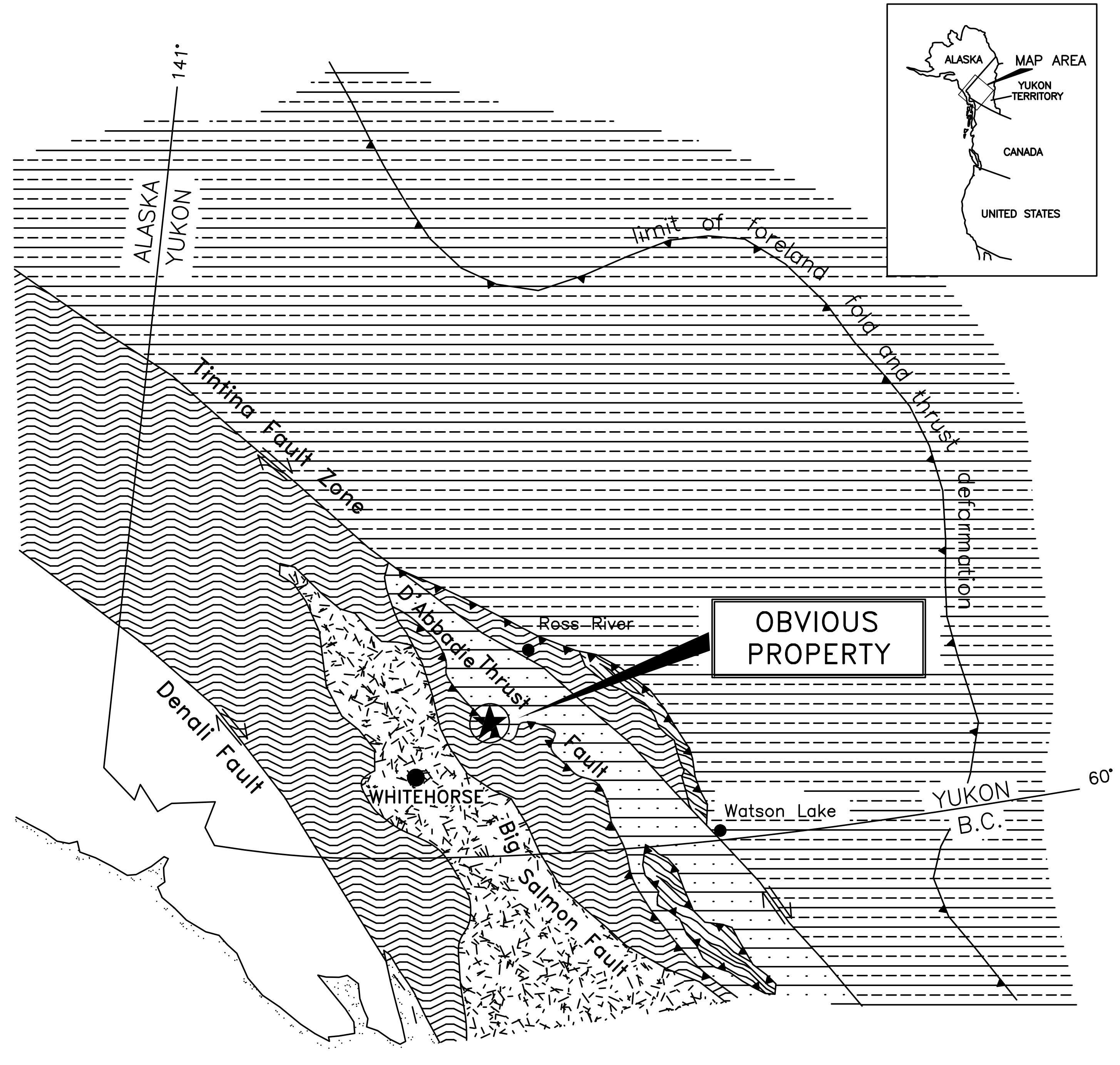
OSDqc	Recessive dark grey weathering; thin-bedded variably calcareous graphitic siltstone, gradational with metamorphosed equivalents: calcareous phyllite, hornfels and pelitic poorly developed skarn.

LOWER CAMBRIAN

l€c	White weathering, resistant marble: recrystallized lime mud and bioclastic limestone.

PROTEROZOIC AND/OR LOWER CAMBRIAN

Pl€s	Buff weathering muscovite-biotite schist, garnet-mica-quartz schist and micaceous quartzite with minor amphibolite and marble.



▲▲ Thrust fault

— Transcurrent fault

▨ Yukon–Tanana Terrane

▨ Slide Mountain Terrane

▨ Stikinia and other Terranes

▤ Cassiar Platform and other North American Miogeoclinal Strata

Modified after Mortensen and Jilson (1985), Mortensen (1992) and Johnston and Mortensen (1994).

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FIGURE 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

TECTONIC SETTING

OBVIOUS PROPERTY

0 100 200 300 400

KILOMETRES

DRAWN/REVISED BY: DJT

PROJECT: OBVIOUS

FILE: S:/PROJECTS/2007/OBVIOUS

DATE: APRIL 2008

Property Geology

The following geological description is based on work done by CUB Joint Venture in the late 1970s and early 1980s (Abbott and Cathro, 1979 and Main, 1983). The property straddles the contact between the Nisultin Batholith and sediments of Unit OSDqc (Figure 4). Both the batholith and the adjacent sediment are cut by porphyry dykes of Unit KTqfp. These dykes are part of a northwest trending system that is several kilometres long and more than half a kilometre wide. On the property, the porphyry dykes are up to 100 m wide and are subparallel to or coincide with recessive topographic linears. The sedimentary rocks are extensively hornfelsed and locally skarnified adjacent to intrusions. Bedding generally dips gently to the south-southwest away from the batholith. Various lithologies recognized on the property are described in more detail in the following paragraphs.

TERTIARY AND/OR CRETACEOUS

KTqfp and KTmv - Porphyry Dykes

This unit consists of locally pyritic, felsic and intermediate subvolcanic and volcanic rocks. Most dykes are composed of rusty weathering rhyolite with clear quartz and white albite phenocrysts (KTqfp). Dark weathering dacite (KTmv) dykes are also present but are much less common. The dacite features stubby hornblende phenocrysts in a dark green aphanitic groundmass.

CRETACEOUS

Kqm - Nisutlin Batholith

The batholith is about 70 km long and 20 km wide, and trends northwest. It mainly consists of resistant, blocky weathering, equigranular, medium grained homogeneous grey, biotite quartz monzonite. The Obvious property lies along the southern contact of the batholith where it invades unit OSDqc in an irregular, interfingering fashion. A large roof pendant (Zandu Pendant which is about 2200 m long and up to 200 m wide) lies within the batholith. It hosts the Kubla, Khan, Cooleridge and Zandu showings (see Mineralization section).

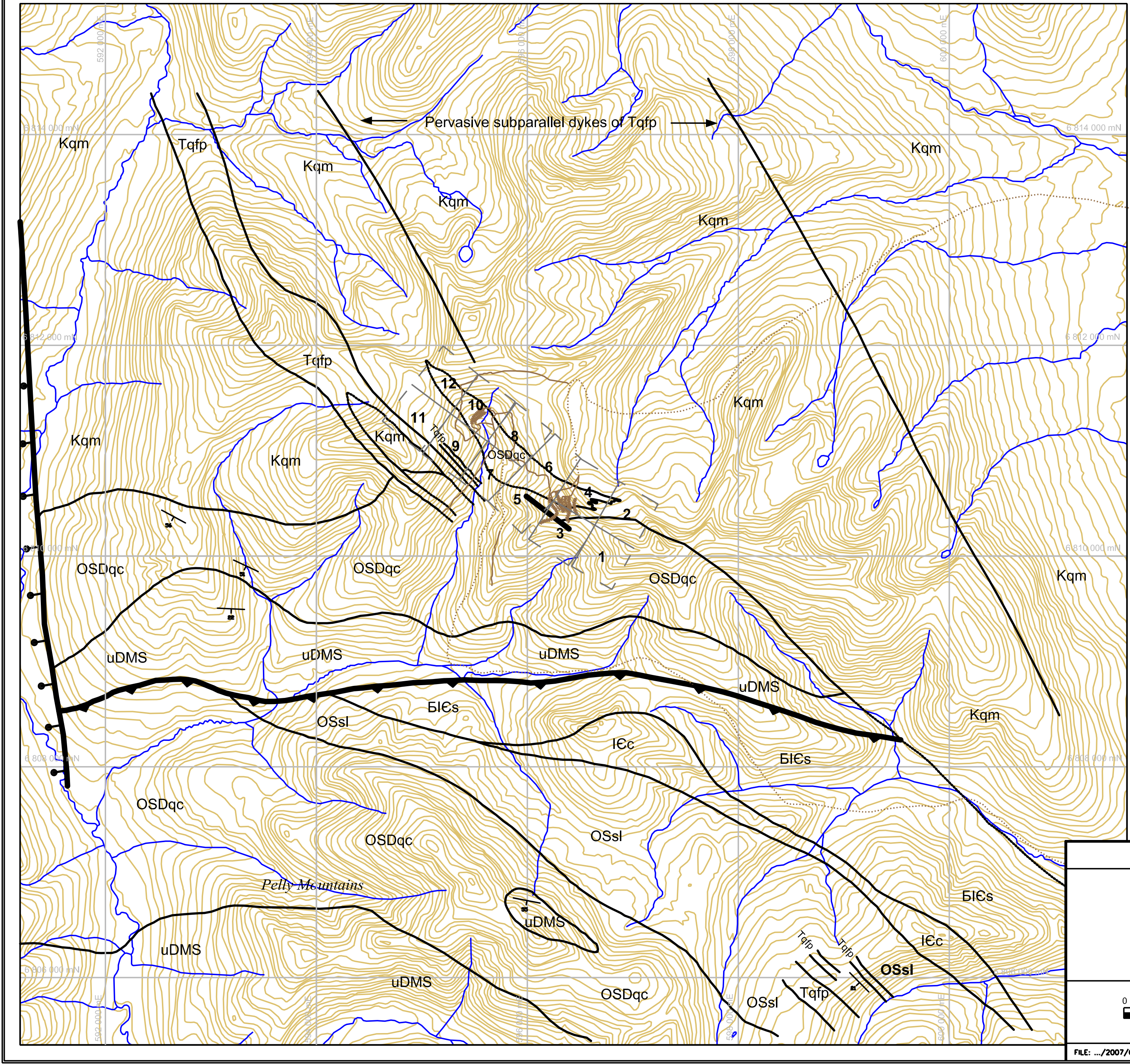
SILURIAN AND DEVONIAN

OSDqc - Metasediments

This unit mostly consists of recessive, dark grey or black weathering, thin bedded and platy, calcareous and dolomitic graphitic siltstone with minor black graphitic shale (OSDs). These rocks are gradational with, and contain lenses of:

OSDq - silvery white weathering, resistant, medium bedded, medium grained, mature orthoquartzite commonly with dolomitic cement, and minor interbedded sandy dolomite. The Zandu skarn showing is developed within this sub-unit where it comprises blocky, sucrosic quartzite that exhibits faint to well pronounced banding, irregular patches of tremolite and biotite, and veins of quartz-muscovite pegmatite.

OSD_d - resistant, light grey and white weathering, massive, medium grey, medium bedded,



TERTIARY AND/OR CRETACEOUS

KTqfp	Buff to light green, locally pyritic quartz - feldspar porphyry dykes. Weathers to blocky felsenmeer.
KTmv	Dark green aphanitic basic dykes.

CRETACEOUS

Kqm	NISUTLIN BATHOLITH: biotite quartz monzonite.

UPPER DEVONIAN AND MISSISSIPPIAN

uDMS	Rusty and black recessive weathering, thin bedded black siliceous slate with minor chert.

ORDOVICIAN, SILURIAN AND LOWER DEVONIAN

OSDqc	Recessive dark grey weathering; thin bedded variably calcareous graphitic slitstone, gradational with metamorphosed equivalents: calcareous phyllites, hornfels and pelitic poorly developed skarn.
OSDs	Recessive, locally pyritic, black graphitic shale to shaly dolomite.
OSDl	Cream to buff, coarsely crystalline limestone.
SK 1	- Rusty dark, scheelite-bearing, muscovite-magnetite-garnet-diopside and/or pyrrhotite-diopside skarn.
OSDd	Grey-green banded dolomite.
OSDq	White, resistant quartzite.
SK 2	- 'Zandu' skarn, leucocratic scheelite-bearing, sucrosic quartzite altered to diopside-plagioclase skarn with minor tremolite and biotite.
OSsl	Recessive, black, locally calcareous, fissile graptolitic slate; includes thin sills or flows of dark green basalt and rare lenses or large blocks of algal-laminated dolomite.

LOWER CAMBRIAN

IЄc	White weathering, resistant, marble; recrystallized lime mud and bioclastic limestone.

PROTEROZOIC AND/OR LOWER CAMBRIAN

ƂIЄs	Buff weathering muscovite-biotite schist; garnet-mica-quartz schist and micareous quartzite with minor amphibolite and marble.

Thrust fault

Major normal fault

Fault

Geological contact, defined, inferred

Bulldozer road, improved, unimproved

Bulldozer trench

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FIGURE 4

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

REGIONAL GEOLOGY
OBVIOUS PROPERTY

SCALE 1:20 000

0 0.5 1 2 3 km

NAD 83 ZONE 8

FILE: .../2007/OBVIOUS/FIGURES.DWG

DATE: APRIL 2008

laminated to sucrose dolomite and minor sandy dolomite.

OSD_l - white to grey weathering massive limestone, commonly marmorized.

On the Obvious property, unit OSDqc contains individual beds of quartzite, limestone, dolomite and shale in the order of tens of metres thick. These beds thin rapidly to the north toward the batholith. Near the intrusive contact and within the Zandu roof pendant individual sub-units rarely exceed 2 m in thickness. Although sub-units within OSDqc were classified dominantly as limestone, dolomite, shale or quartzite, the gradational nature of the beds means that intermediate varieties are also present (e.g. silty dolomite, limy quartzite, etc.). The entire section has been regionally metamorphosed and all sub-units contain variable assemblages of calc-silicate minerals.

MINERALIZATION

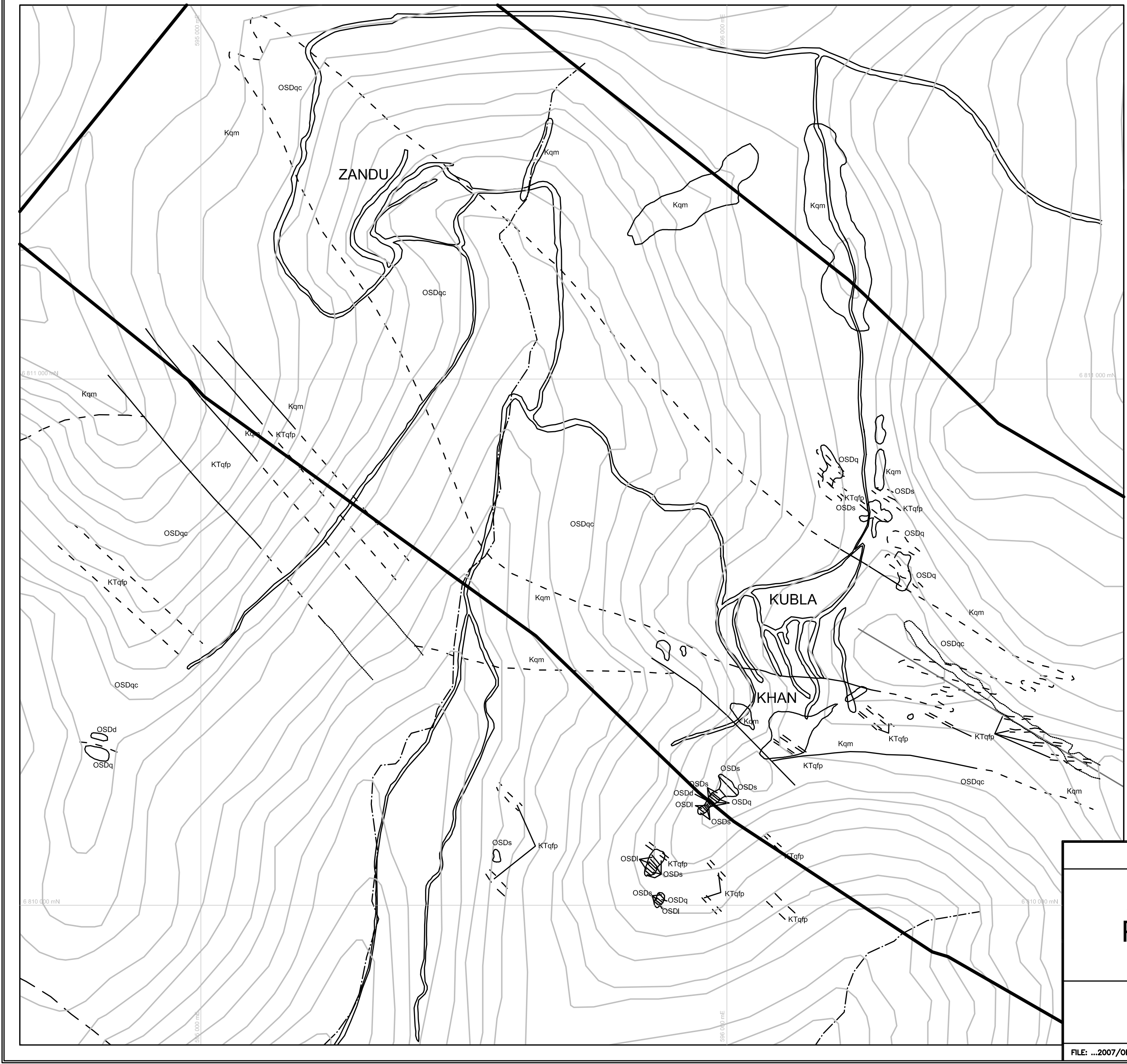
Tungsten is the only metal that has been recognized in potentially economic concentrations on the Obvious property. Four main showings have been identified, all of which are hosted by Unit OSDqc, mainly in skarns developed within OSD_l (limestone) or limy parts of OSD_q (quartzite), as shown on Figure 5. Skarn development appears to be mostly related to emplacement of the Nisutlin Batholith, but skarnification is also due to the porphyry dykes. Mineralized skarn is locally brecciated and often has sharp contacts with granitic rocks, which suggests that faulting has occurred along intrusive contacts, either during the mineralizing event or subsequently.

Three types of tungsten mineralization are present on the property:

(a) magnetite-muscovite skarn;
(b) diopside-garnet skarn; and,
(c) diopside-plagioclase skarn.

The highest scheelite content occurs in dark brown weathering, **magnetite-muscovite skarn** as conspicuous euhedral to subhedral grains up to 1.5 cm across. Reddish staining is common on these rocks, probably from hematite. These skarns are commonly brecciated with subangular fragments. Mineralization of this type has been found in float at three locations, called the Kubla, Khan and Cooleridge showings. This material has not been found in bedrock. Although it is considered to be skarn related, it could be sourcing from veins.

The Khan showing was discovered in 1979 and comprises a float train of magnetite skarn that extends for over 200 m down a steep talus slope. Mineralized float specimens typically grade between 1.5 and 6.0% WO_3, with one selected specimen assaying 24.8% WO_3. In 1983, seven bulldozer trenches were cut across this float train, but no bedrock was exposed that resembled the well mineralized float (Figure 6). Trenching in the main area of interest was frustrated by steep, unstable talus (slopes up to 37°) and an underlying frozen stream. Sufficient bedrock was exposed adjacent to the mineralized float train to ascertain that the source of the magnetite skarn must be thin and/or erratic. The best result came from Trench 83-5 where subcropping material at the granitic contact graded 0.74% WO_3 over a 2 m interval. Soil is also greatly enriched in scheelite at this locality, with one sample returning 0.62% WO_3.



TERTIARY AND/OR CRETACEOUS

KTqfp	Buff to light green locally pyritic quartz - feldspar porphyry dykes. Weathered to blocky felsenmeer.
KTmv	Dark green aphanitic basic dykes.

CRETACEOUS AND/OR TERTIARY

Kqm	NISUTLIN BATHOLITH: biotite quartz monzonite.

UPPER DEVONIAN MISSISSIPPIAN

uDMs	BLACK CLASTIC FACIES: rusty and black recessive weathering, thin bedded black siliceous slate with minor chert.

ORDOVICIAN, SILURIAN AND LOWER DEVONIAN

OSDqc	NASINA FACIES: recessive dark grey weathering; thin bedded variably calcareous graphitic slitstone, gradational with metamorphosed equivalents; calcareous phyllites, hornfels and pelitic poorly developed skarn.
OSDs	Recessive, locally pyritic, black graphitic shale to shaly dolomite.
OSDl	Cream to buff, coarsely crystalline limestone.
SK 1	- Rusty dark, scheelite-bearing, muscovite-magnetite-garnet-diopside and/or pyrrhotite-diopside skarn.
OSDd	Grey-green banded dolomite.
OSDq	White, resistant quartzite.
SK 2	- 'Zandu' skarn, leucocratic scheelite-bearing, sucrosic quartzite altered to diopside-plagioclase skarn with minor tremolite and biotite.
OSsl	Recessive, black, locally calcareous, fissile graptolitic slate; includes thin sills or flows of dark green, basalt undifferentiated; rarely includes lenses or large blocks of algal-laminated dolomite.

LOWER CAMBRIAN

lЄc	White weathering, resistant, marble; recrystallized lime mud and bioclastic limestone.

PROTEROZOIC AND/OR LOWER CAMBRIAN

БlЄs	Buff weathering muscovite biotite schist; garnet mica quartz schist and micareous quartzite with minor amphibolite; includes minor marble undifferentiated.

———	Fault
——— - - -	Geological contact, defined, inferred
	Bulldozer roads and trenches

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FIGURE 5

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

PROPERTY GEOLOGY

OBVIOUS PROPERTY

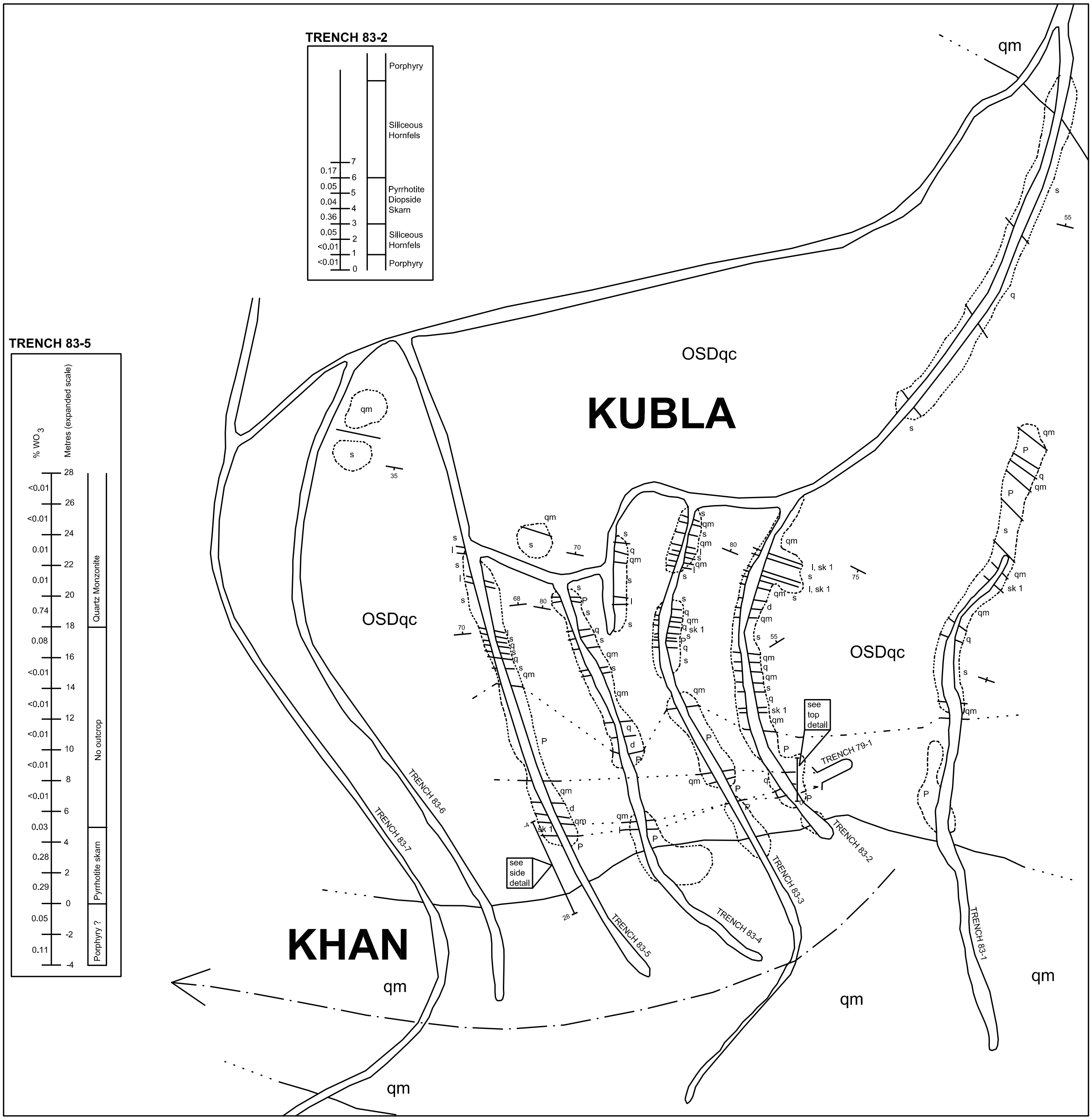
SCALE 1:5000

0 50 100 200 300 400 500 m

NAD 83 ZONE 8

FILE: ...2007/OBVIOUS/FIGURES.DWG

DATE: APRIL 2008



P - KTqfp
qm - Kqm

Nasina Series (OSDqc)

q - OSDq (quartzite)
l - OSDl (limestone)
s - OSDs (shale, principally hornfels)
d - OSDd (dolomite)

sk 1 - mainly pyrrhotite skarn
sk 2 - mainly magnetite skarn

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FIGURE 6

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

KUBLA KAHN TRENCH DETAIL

OBVIOUS PROPERTY

SCALE 1:2000

0 50 100 200 m

NAD 83 ZONE 8

PATH:.../2007/OBVIOUS/FIGURES

APRIL 2008

The Kubla showing, which was discovered on a scree slope in 1981 by night lamping, is a mineralized float train about 50 m long. A poorly mineralized magnetite skarn developed in Unit OSD_l was found at the top of the float train. Specimens of mineralized float assayed up to 6.30% WO_3 but the average grade is probably 1 to 2% WO_3. In 1983, the top part of the float train was trenched without encountering mineralized bedrock (Figure 6). A road cut 60 m downhill did not expose bedrock due to permafrost. No mineralized float was found in the road cut.

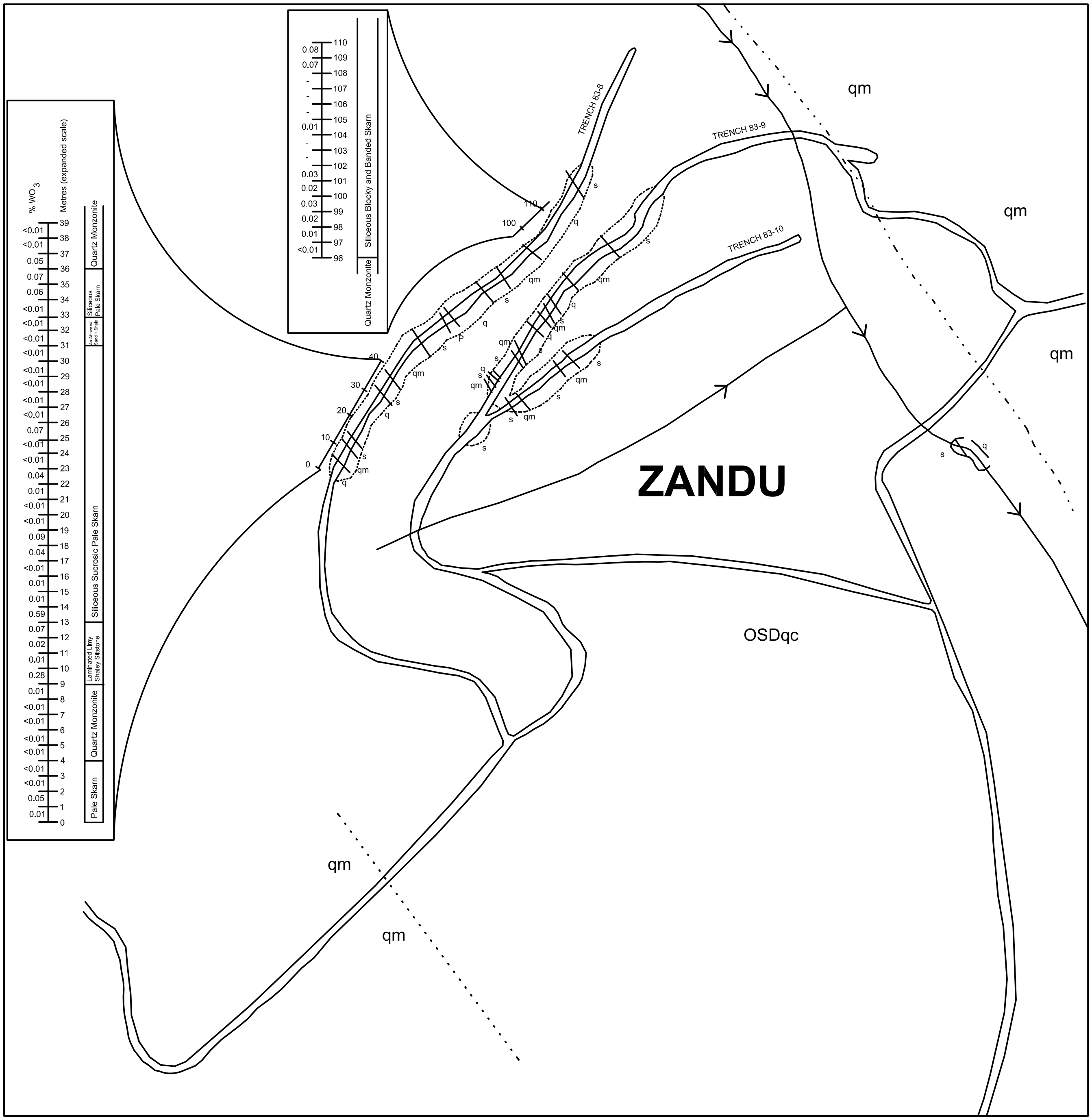
The Cooleridge showing is similar in character to the Khan showing and may be developed in the same sedimentary horizon. It occurs in a thin (1.2 m) lens of skarn within the batholith. The best specimen assayed 2.4% WO_3. Bedrock exposure is reasonably good at this site and there is little tonnage potential.

The second type of mineralization is limonitic, dark green **diopside-garnet skarn** containing disseminated pyrrhotite and scheelite. This type is developed in Unit OSD_1, the cleanest limestone member of Unit OSDqc. The best exposure was found in 1979 at the head of the Khan float train, where a chip sample from the floor of Trench 79-1 assayed 1.3% WO_3 over 2 m (Figure 6). In 1983, Trench 83-2 was cut 5 m downhill from Trench 79-1 and intersected 3 m of similar skarn that is much lower grade. The best 1.0 m interval in this trench assayed 0.36% WO_3. A sample comprising a collection of chips from random skarn float between the two trenches returned 0.82% WO_3. Diopside-garnet skarn has only been seen in one other trench (83-5), where it assayed 0.29% WO_3 over 4 m. Ground magnetic surveys produced slightly elevated response over Trenches 83-2 and 83-5, but yielded background response over nearby trenches suggesting that the zone pinches out or is erratically developed along strike.

Similar garnet-diopside skarn is found in small lenses at several locations along the batholith's margin. Most of these showings are only a few metres long and probably average about 2% WO_3 over widths of 0.5 m or less.

The third type of mineralization is **diopside-plagioclase skarn**, which has only been seen at the Zandu showing . This showing consists of over 100 specimens of white to pale green calc-silicate, found by night lamping in 1981 within a float train at the head of Alph Creek. Typical specimens grade over 1% WO_3 and several selected specimens assayed over 3% WO_3. This leucocratic skarn exhibits variable textures, including both gneissic and massive appearance. Scheelite content is highly erratic. It occurs as anhedral grains from 0.5 to 2 mm in diameter, commonly concentrated in pseudo-sedimentary layers. Mineralized float becomes increasingly abundant toward the head of Alph Creek.

In 1983, a number of trenches were cut to the west, uphill from the Zandu showing (Figure 7). Although night lamping did not reveal any mineralized float on the hillside prior to removal of overburden, a number of well mineralized specimens were encountered in trenches that were cut low on the hillside. Unfortunately these trenches did not penetrate the thick frozen overburden. Trench 83-8, higher on the hill, encountered shallower overburden and successfully exposed mineralized and unmineralized sedimentary bedrock for a total length of 130 m. This exposure appears to be part of a large roof pendant within the batholith. Overburden is deeper elsewhere in the trench and contacts with batholith were not exposed.



P - KTqfp
qm - Kqm

Nasina Series (OSDqc)

q - OSDq (quartzite)
l - OSDl (limestone)
s - OSDs (shale, principally hornfels)
d - OSDd (dolomite)

sk 1 - mainly pyrrhotite skarn

sk 2 - mainly magnetite skarn

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FIGURE 7

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

ZANDU TRENCH DETAIL

OBVIOUS PROPERTY

SCALE 1:2000

0 50 100 200 m

NAD 83 ZONE 8

PATH:.../2007/OBVIOUS/FIGURES

APRIL 2008

The Zandu Pendant consists of pale calc-silicate and/or quartzite beds interlayered with pelitic rocks that are variably altered to hornfels. A number of granitic and porphyritic dykes irregularly invade the metasediments. The pale skarns are often hard and appear siliceous, with a sucrosic to banded texture. Thin section examination of scheelite-bearing metasediment from Trench 83-8, which resembles the mineralized float in Alph Creek, showed that the rock is largely composed of diopside and plagioclase. Although one specimen contained a cluster of broken scheelite crystals over 10 cm in diameter, most of the mineralization exposed in the trench is low grade. Of the 54 m that were chip sampled, the best interval graded 0.59% WO_3 over 1 m. The next best interval, which lies 3 m away, assayed 0.28% WO_3 over 1 m. Only eight samples yielded over 0.05% WO_3. A number of better mineralized specimens were assayed, with the best sample yielding 4.11% WO_3.

2007 GEOLOGICAL SURVEYS

On September 8, 2007 helicopter-borne magnetic and versatile time domain electromagnetic (VTEM) surveys were flown across the Obvious property and surrounding area. The surveys were conducted by Geotech Ltd. of Aurora, Ontario using an Astar B3 helicopter operated by TRK Helicopters Ltd. from a temporary base at the Whitehorse airport. Appendix II contains Geotech's reports describing methodology and equipment used to conduct the survey and interpreted results.

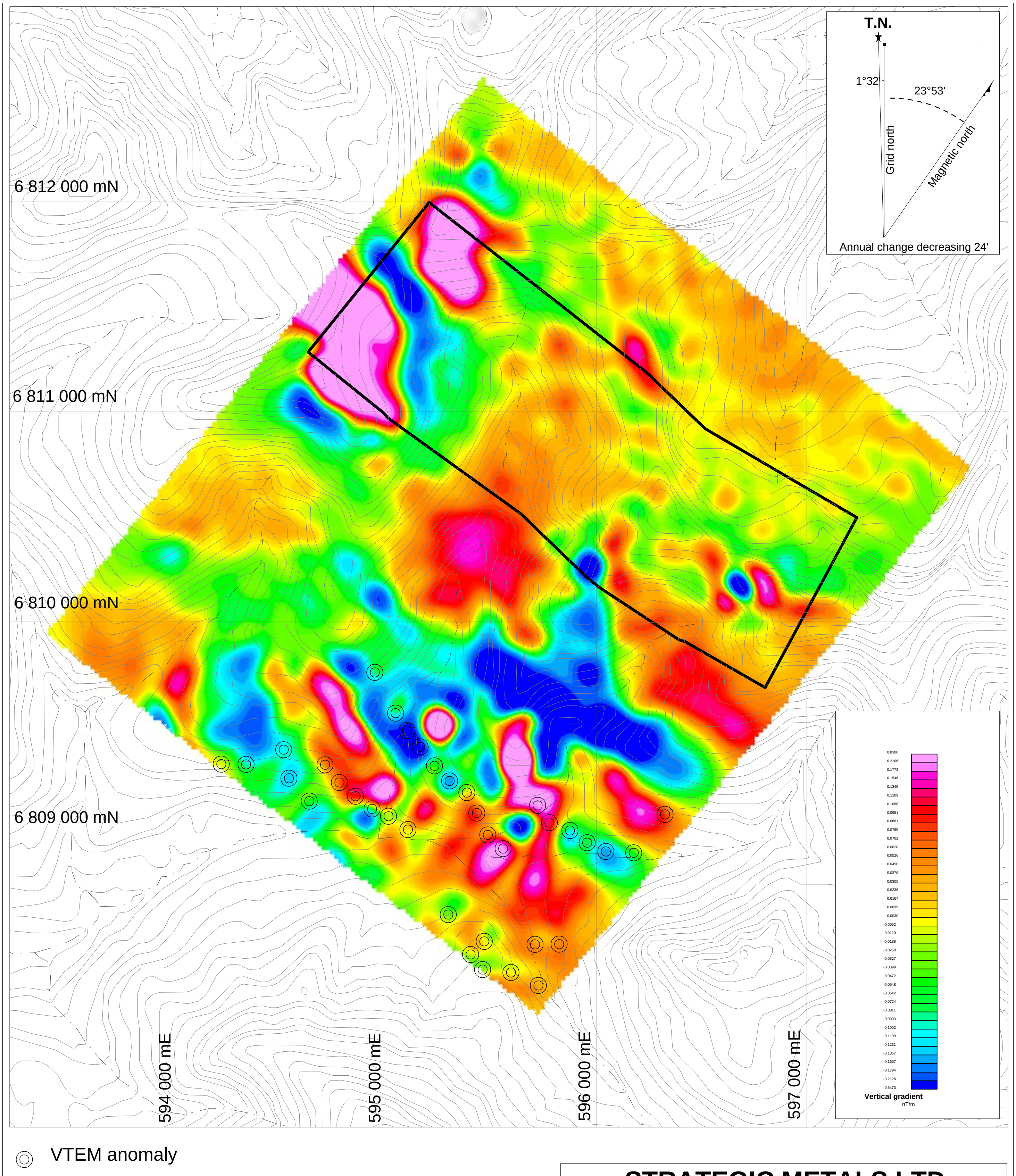
The survey lines were spaced 100 m apart and covered an area 3.4 km long by 2.7 km wide. They were flown at 040° or 220° with a constant speed of 80 km/hr and an average ground clearance of 140 m. The ties lines are spaced 1000 m apart and are aligned at 310°.

The total magnetic field values range from 57550 nT to 57800 nT. They are magnetic highs in the northern part of the survey area where geological mapping has identified Kqm quartz monzonite that is intruded by large KTqfp dykes (Figure 8). Two of these highs are in the northwestern corner of the property near the Zandu showing. A smaller, weaker high was identified directly over the Kubla and Kahn showings and a cluster of similar highs extends to the east. Geology in this area is quite complex, but some of the highs appear to be underlain by favourable OSDqc lithology.

The VTEM surveys identified a series of weak conductors in units uDMs and OSDqc about 1500 m south of the batholith (well off the property). They dip shallowly to moderately toward the southwest (away from the claim block but subparallel to a nearby thrust fault). No conductors were identified on the property (Figure 9).

DISCUSSION AND CONCLUSIONS

Surface prospecting and night lamping have identified three showings of relatively narrow, sporadically high-grade tungsten mineralization associated with skarn zones developed in a large roof pendant. Bulldozer trenching by a previous owner locally exposed the mineralization skarns, but the trenching was largely ineffective due to extensive permafrost.



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ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

FIGURE 8

VERTICAL GRADIENT
MAGNETIC DATA

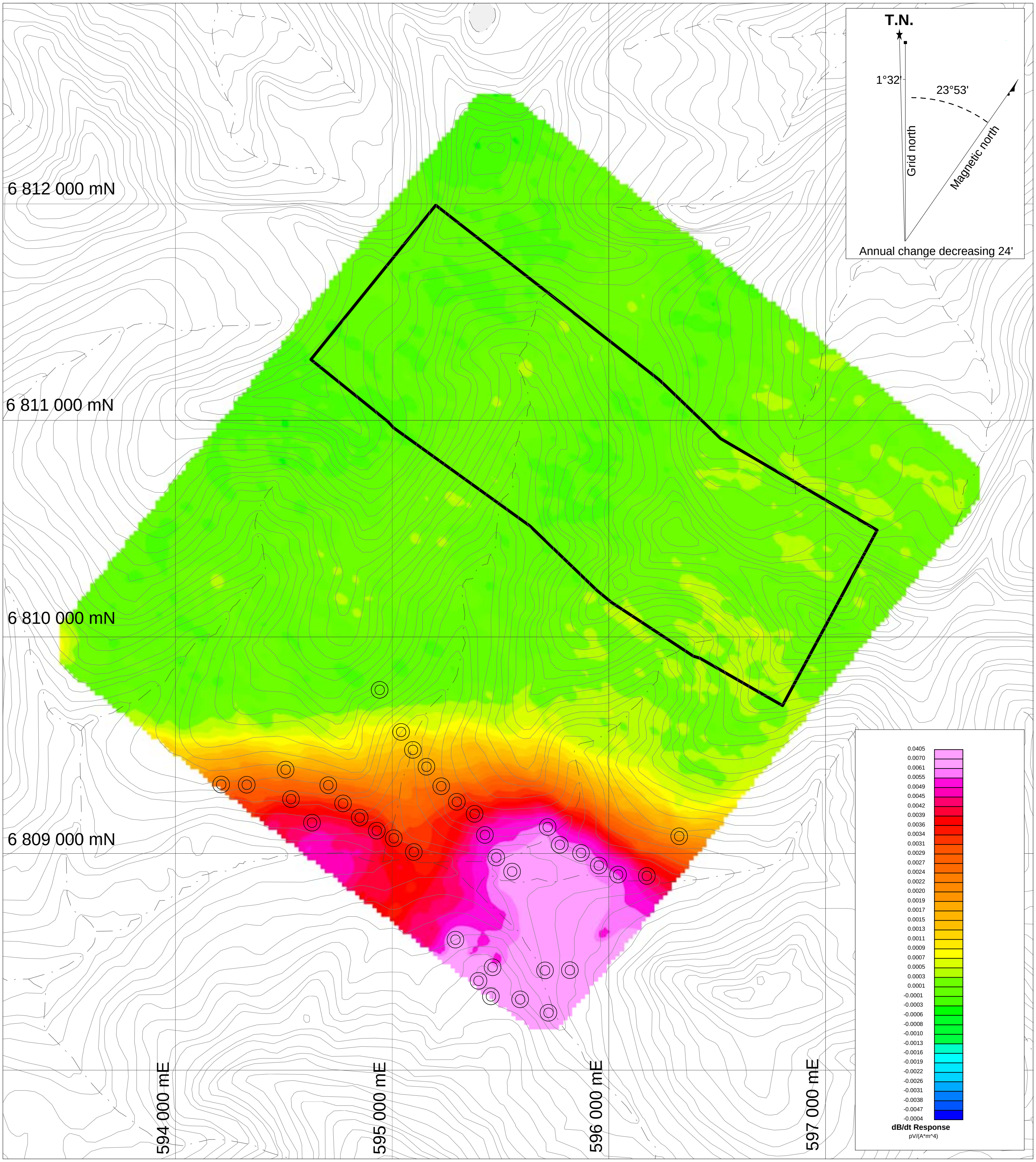
OBVIOUS PROPERTY

0 0.25 1.5 km

UTM ZONE 8, NAD 83, 105F/06

FILE: ...2007/OBVIOUS/F_8-MAG.WOR

DATE: APRIL 2008



◎ VTEM anomaly

STRATEGIC METALS LTD.

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

FIGURE 9

PICKED EM ANOMALIES
LATE TIME dB/dT CHANNEL IMAGE
OBVIOUS PROPERTY

0 0.25 1.5 km

UTM ZONE 8, NAD 83, 105F/06

FILE: ...2007/OBVIOUS/F_9-EM.WOR

DATE: APRIL 2008

The 2007 VTEM survey did not detect any conductors in the vicinity of the showings. The magnetic survey identified large magnetic highs near the Zandu showing and a series of smaller highs directly over and to the east of the Kubla and Kahn showings. Given the presence of magnetic and/or pyrrhotite in some of the skarn showing, these highs could be significant.

Prospecting should be done in the vicinity of magnetic highs to determine if mineralized skarns are present. Excavator trenching or hand trenching should be done where tungsten-bearing float was found in the old bulldozer trenches because the permafrost should by now have melted. Drilling should only be done if trenching exposes skarn zones with good lateral continuity and grades exceeding 1% WO_3

Respectfully Submitted

ARCHER, CATHRO & ASSOCIATES (1981) LIMTED

Doug Eaton

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APPENDIX I

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, W. Douglas Eaton, geologist, with business address in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in North Vancouver, British Columbia, hereby declare that:

1. I graduated from the University of British Columbia in 1980 with a B.Sc. majoring in Geological Sciences.

2. From 1971 to present, I have been actively engaged in mineral exploration in British Columbia and Yukon Territory and on June 1, 1981, became a partner in Archer, Cathro & Associates (1981) Limited.

4. I supervised the field work reported herein and have interpreted all data resulting from this work.

W. Douglas Eaton, B.Sc. Geology

APPENDIX II

GEOPHYSICAL REPORTS BY GEOTECH LTD., INCLUDING CD'S WITH THE DIGITAL SURVEY DATA

REPORT ON A HELICOPTER-BORNE TIME DOMAIN ELECTROMAGNETIC GEOPHYSICAL INTERPRETATION

OBVIOUS PROPERTY

Yukon Territory, Canada

For

Strategic Metals Ltd.

By

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Survey flown in September 2007

Project 7067
March, 2008

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REPORT ON A HELICOPTER-BORNE
TIME DOMAIN ELECTROMAGNETIC INTERPRETATION

OBVIOUS Property, Yukon Territory, Canada

1. INTRODUCTION

In September 2007, a helicopter-borne electromagnetic survey was carried out by Geotech Ltd. for Atac Resources Ltd. over the OBVIOUS Property located in Yukon Territory, Canada.

This report includes the results of the geophysical interpretation, over this Property. The Property is located at approximately 120 km north-east from Whitehorse, in the Yukon Territory. The geographic coordinates of the block extents are: longitudes, 133º 14’48” W and 133º 10’18” W, and latitudes, 61º 23’48” N and 61º 25’59” N. The surveyed area is 9 km^2, and the total line kilometers flown are 105 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 map of the OBVIOUS Property on the satellite image.

2. SURVEY DESCRIPTION

In September 2007, Geotech Ltd. carried out a helicopter-borne geophysical survey over the OBVIOUS property located in Yukon. Geotech Ltd. utilized a Versatile Time Domain Electromagnetic System to measure the electromagnetic induction field (B-field) and the vertical component of its time derivative (dB/dt). The electromagnetic measurements were made at the off-time mode. The concentric in-loop system was towed at a distance of 42 m from the helicopter. The VTEM Transmitter uses a trapezoid waveform shape with 7.2 ms duration operating at a base frequency of 30Hz. The dipole moment was approximately 425 000 NIA. The half-waveform was 16.7 ms.

A towed cesium and high resolution magnetometer was used to measure the Earth's magnetic field intensity. Data positioning and navigation were assured by a Novatel WAA GPS with accuracy less then 3 m.

A Terra TRA radar altimeter was used to measure the terrain clearance. The helicopter was flying at a constant speed of 80 km/h and an average ground clearance of 140 m. The traverse lines direction was N40°E and the tie lines direction was N50°W. The distance between the traverse lines and the tie lines was 100 m and 1000 m, respectively. A more detailed description of the survey parameters is provided in the logistics/processing report.

3. *GEOLOGICAL CONSIDERATIONS*

3.1 Topography

The terrain is mountainous and very rugged with alternating valleys and streams. The absolute altitudes range from 1200 m to 1900 m approximately. Due to the terrain roughness of this area, it was difficult to keep a constant ground clearance while surveying this area.

Fig.2 Topographic relief map of the OBVIOUS Property with flight path.

3.2 Regional geological context

The Yukon Territory is situated in the northern part of the large geologic (and physiographic) belt known as the Cordillera. It is composed of relatively young mountain belts that range from Alaska to Mexico. The Yukon Territory is composed of a diverse type of rocks recording more than a billion years of geological history. Most of them have been affected by folding, faulting, metamorphism and uplift during various tectono-metamorphic events over at least the last 190 million years. This deformation has resulted in a complex arrangement of rock units and the mountainous terrain that has shaped today's geology. Geologically, Yukon is divided into two main components which are largely separated by the Tintina Trench. Formations northeast of the Tintina Fault consist of a thick, older sequence of sedimentary rocks which was deposited upon a stable geological basement. Rocks southwest of the Tintina Trench are composed of a younger, complex mosaic of igneous and metamorphic, representing numerous accreted terranes (Fig. 3).

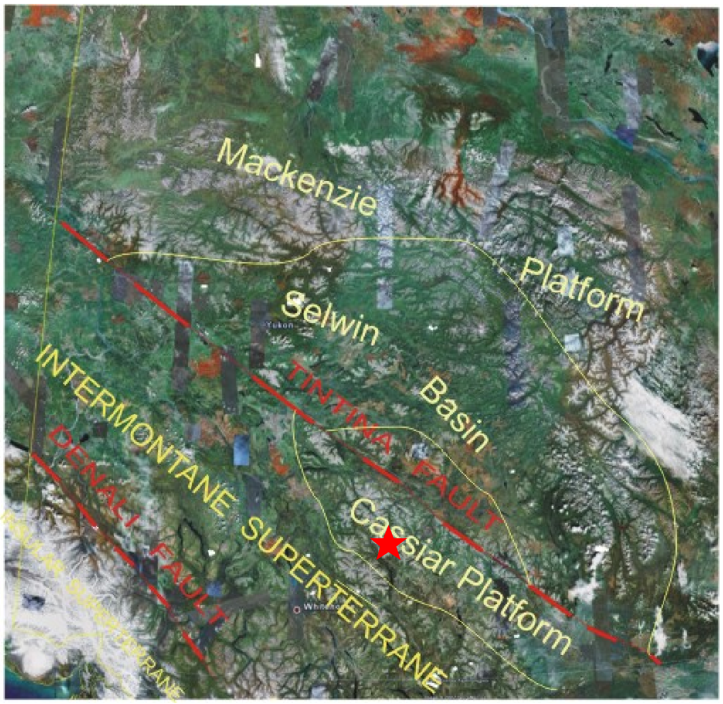

Fig.3. The major tectonic elements of Yukon superimposed on the satellite image. The figure indicates that the territory is composed of two dominant rock packages separated by the Tintina Fault: thick packages of sediments (northeast) and accreted Terranes (Southwest). The star indicates the location of the OBVIOUS property.

3.3 Geological context of the OBVIOUS Property

The Obvious property lies about 55 km southeast of the Tintina Fault in a strongly folded and faulted package of pericratonal metasediments that are assigned to the Cassiar Platform tectonic element. These metasediments range from Late Proterozoic to Mississippian in age. They are extremely intruded by post-orogenic granitic plutons of the Mid-Cretaceous Cassiar Platform Suite. One of these plutons, the Nisutlin Batholith, underlines much of the property. The main lithological units in the vicinity of the property are the following:

- Tertiary and/or cretaceous porphyry dykes; the unit consists of locally pyretic felsic and intermediate subvolcanic and volcanic rocks, primarily rusty weathering rhyolite with clear quartz and white albite phenocrysts.
- Cretaceous and/or tertiary ; The batholith is up to 70 km long and 20 km wide and trends northwest. It consists of resistant, blocky weathering biotite quartz monzonite and lesser granodiorite, which is locally porphritic with white K-feldspar phenocrysts. .
- Silurian and Devonian metasediments; This unit consists mainly of recessive, dark grey or black weathering, thin bedded and platy, calcareous and dolomitic graphitic siltstone with minor black graphitic shale.

3.4 Mineralization

Tungsten is the only metal that has been recognized in potentially economic concentrations on the Obvious Property. Four main showings have been identified all of which hosted in Unit OSDqc, mainly are in skarn developed within limestone or limy parts quartzite. Skarn development appears to be related to the Nisutlin Batholith, but some development is also due to the porphyry dykes. Mineralized skarn at the Khan showing is brecciated and often has a sharp contact with granitic material, which suggests that faulting has occurred along the intrusive contact, either during the mineralizing or subsequently. Three types of tungsten mineralization are present on the property: (a) magnetite-muscovite skarn; (b) diopside-garnet skarn: and, (c) diopside-plagioclase skarn.

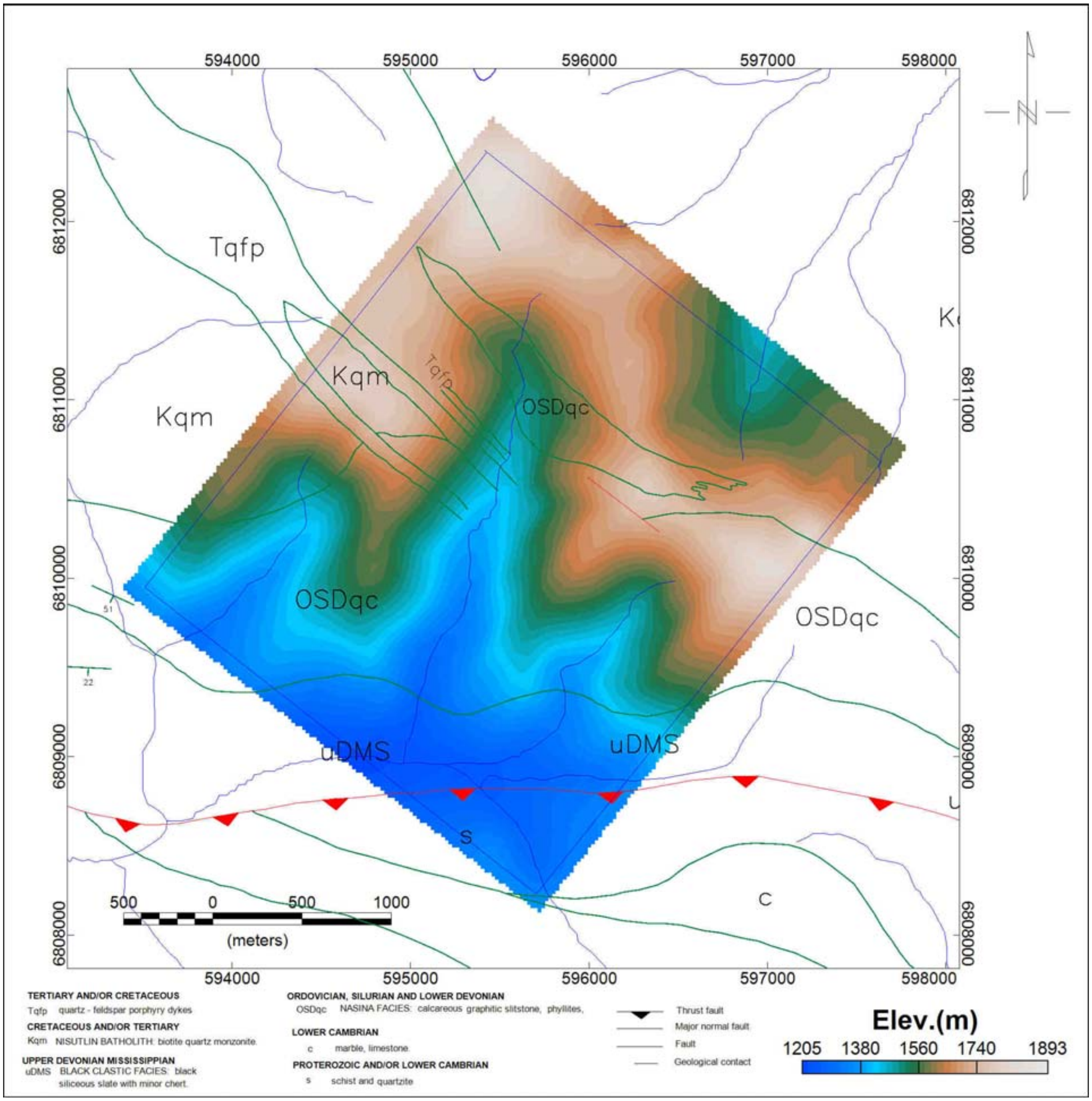

Fig. 4 Simplified Geological map of the OBVIOUS Property.

4. INTERPRETATION OF THE MAGNETIC DATA

4.1 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).

4.2 Analysis of the Magnetic data

The observed magnetic field over the OBVIOUS Property is shown in Figs. 5a-5b. The total magnetic field values are ranging from 57550 nT to 57800 nT approximately, yielding an amplitude difference of 250 nT. The TMI map shows a weak magnetic high in the northern part of the block associated with the plutonic batholith, which apparently expresses a higher magnetic susceptibility that the surrounding sediments. Local positive anomalies are observed in the west of the block. They are possibly related to magnetic structures included into the batholith. The southern part of the block is characterized by magnetic low associated with the Silurian-Devonian sediments and meta-sediments composed mainly of graphic siltstone and calcareous phyllite. The observed NW negative low located north the trust fault may be related to a major fault.

Since the contents of the observed magnetic maps include the response of shallow and deep magnetic sources, it is difficult to analyze the maps containing various wavelength anomalies. Distinguishing shallow features from deeper ones can be performed via several methods of field separation and filtering.

Figure 6 shows the reduced to the pole magnetic field map, upward continued to 100m. The map shows smoother anomalies with reduced intensities. The map clearly expresses a relatively higher magnetic relief in the north related to the granitic batholith than in the south of the block. The EW trending gradient area indicates possibly a structural contact between the batholith and the host rocks.

Figure 7 illustrates the vertical gradient of the TMI. The vertical gradient is used to enhance magnetic signals caused by shallow sources and related to faults, dykes and contacts.

The map highlights several local anomalies in the south of the block trending roughly in the NW direction. These anomalies are probably related to a fault containing disseminated magnetite. A possible relationship of these anomalies with the magnetite-rich skarnified zone may be indicated. The tilt derivative map illustrated in Fig. 8 yields another example of amplifying signals associated with shallow sources. The tilt derivative known as being the local phase is computed from the vertical and horizontal gradients. As illustrated in the Tilt derivative map, the peaks provide a clearer outline of magnetic structures observed in the southern portion of the block. The vertical gradient and tilt derivative maps are very useful for helping to understand the structural patterns of the area.

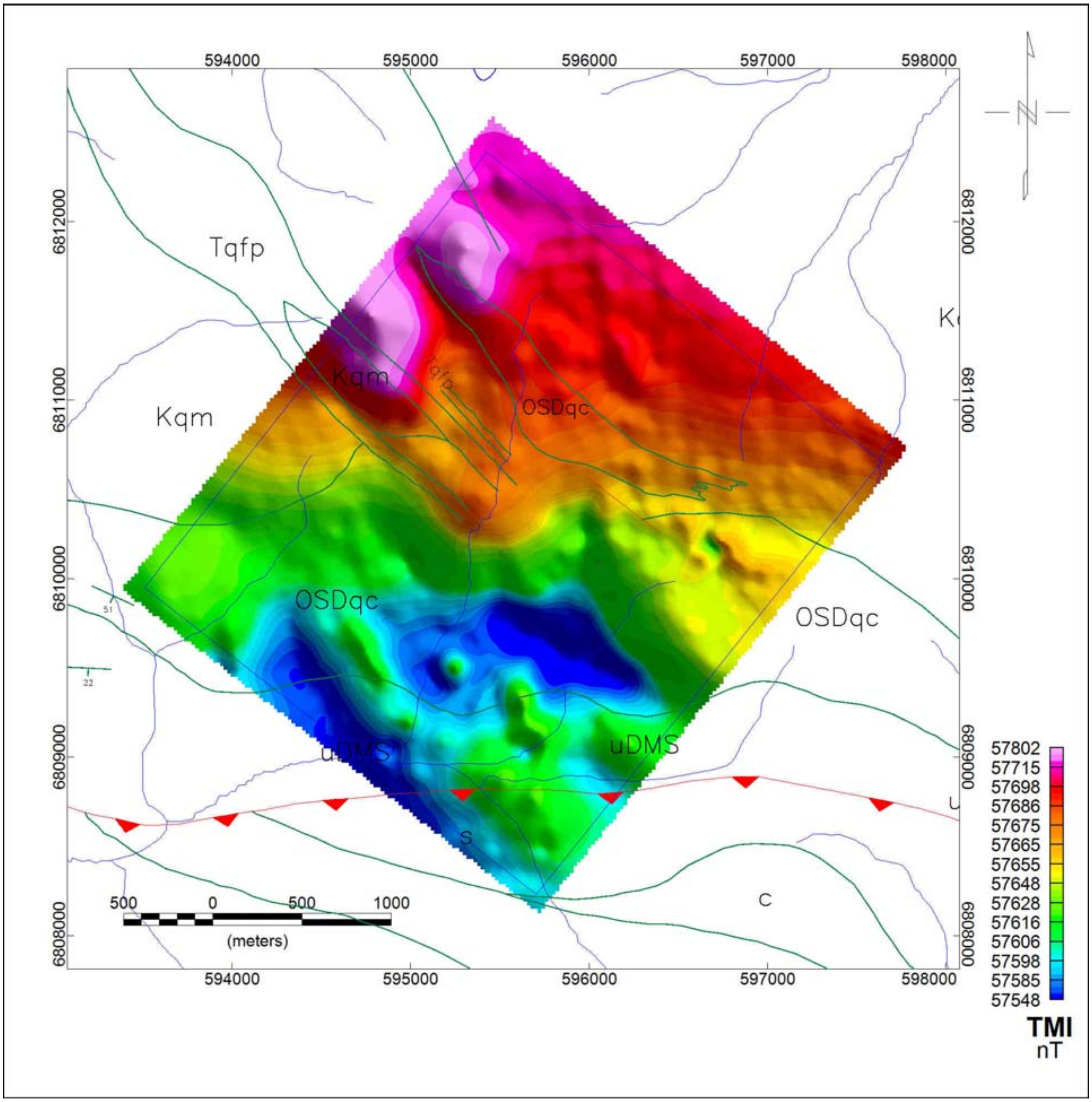

Fig. 5a TMI image of the OBVIOUS Property.

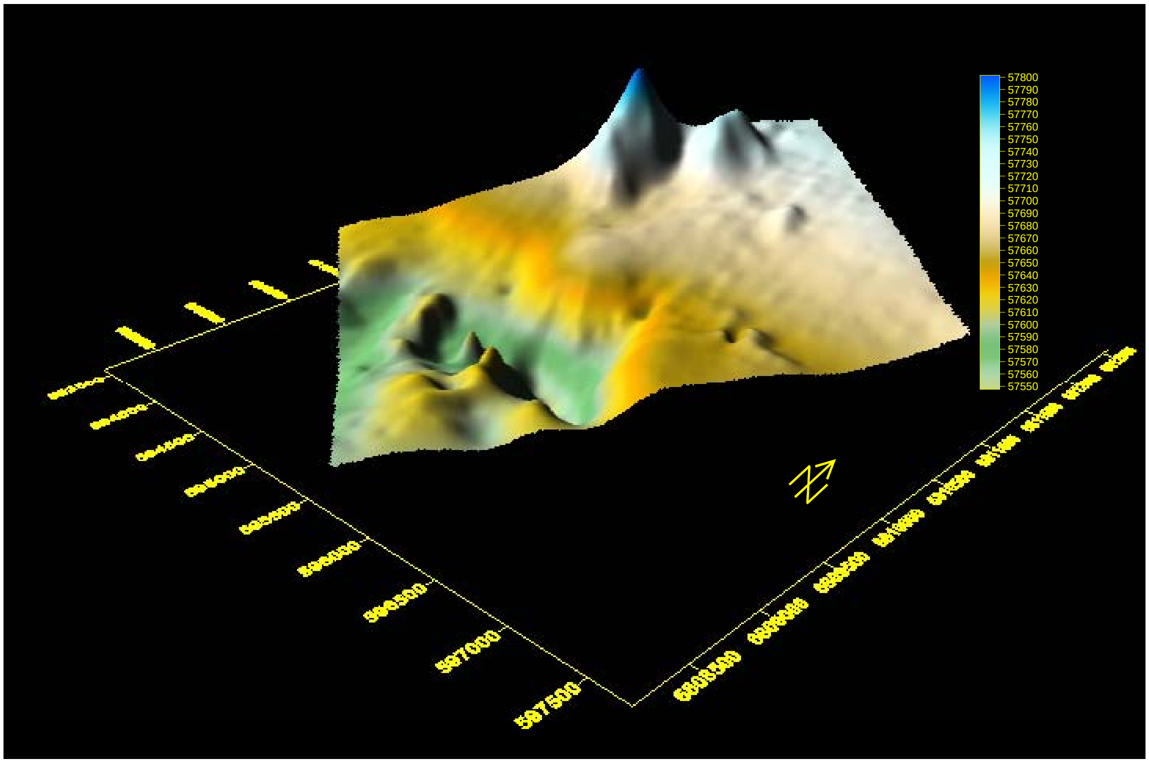

Fig. 5b Perspective view of the magnetic relief of the OBVIOUS Property. The map clearly shows NW banding magnetic highs related with intrusive rocks.

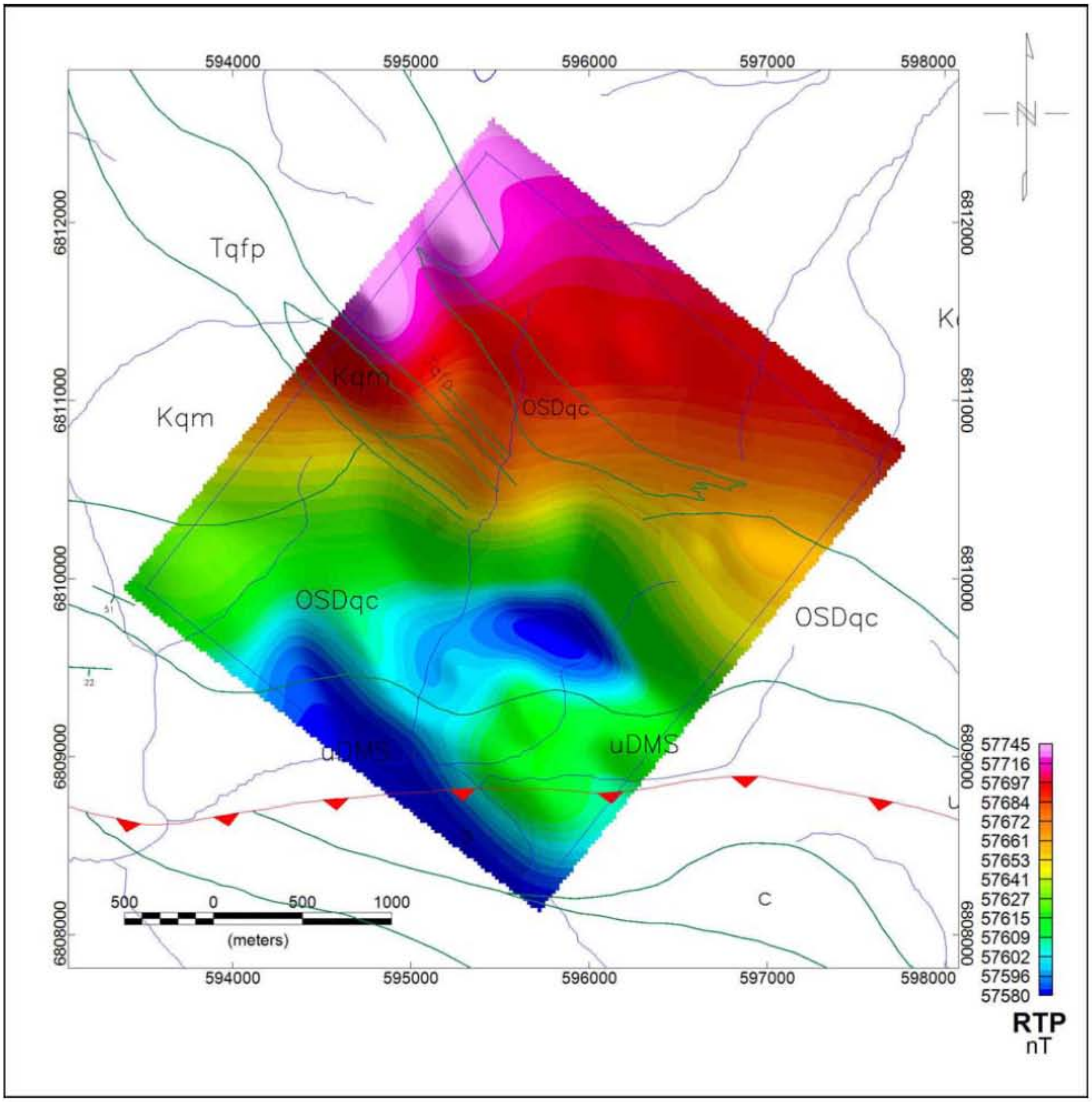

Fig.6 Color shaded relief of reduced to the pole TMI (upward continued to 100m).

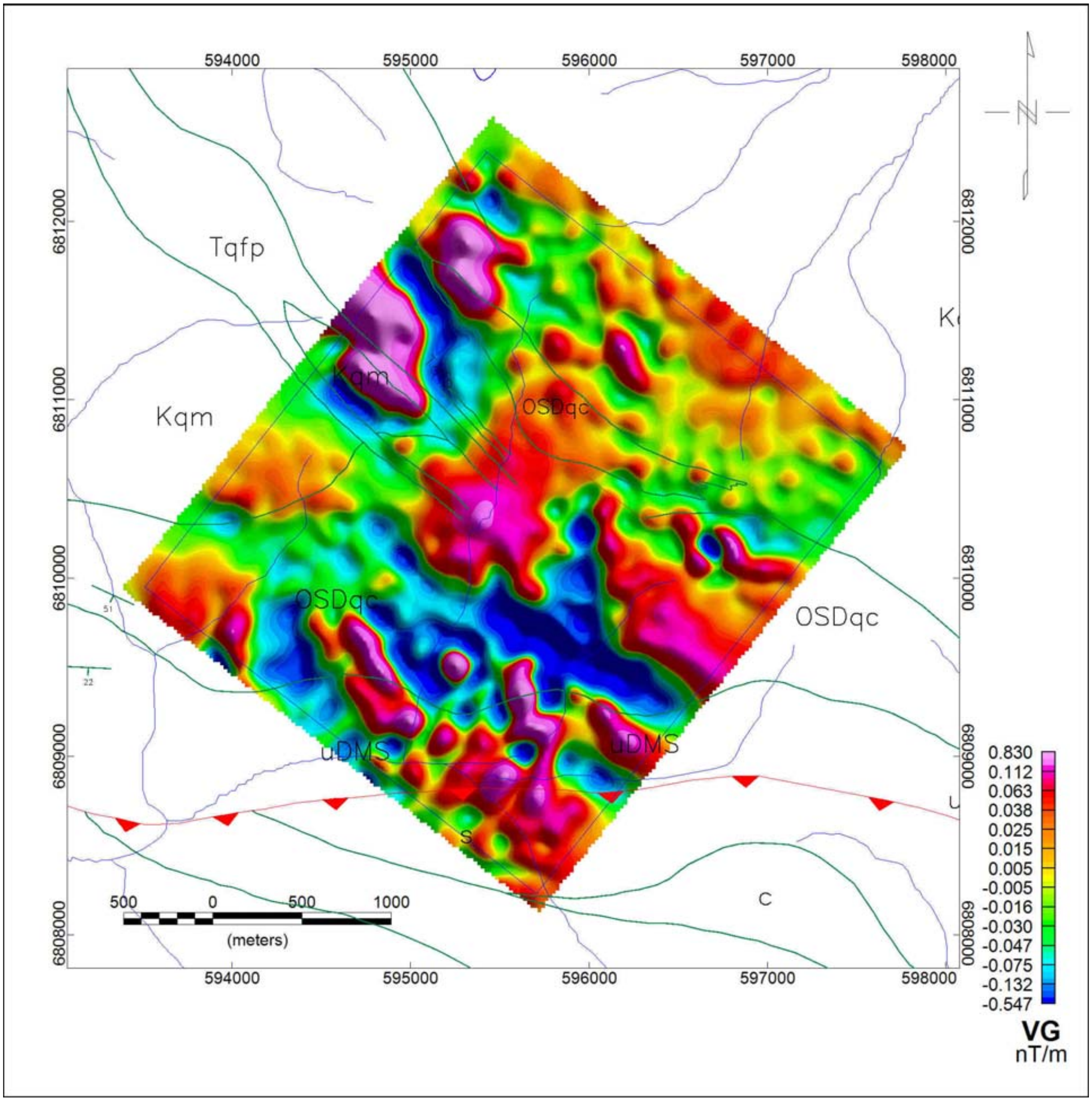

Fig.7 Color shaded relief of the vertical gradient of the magnetic field.

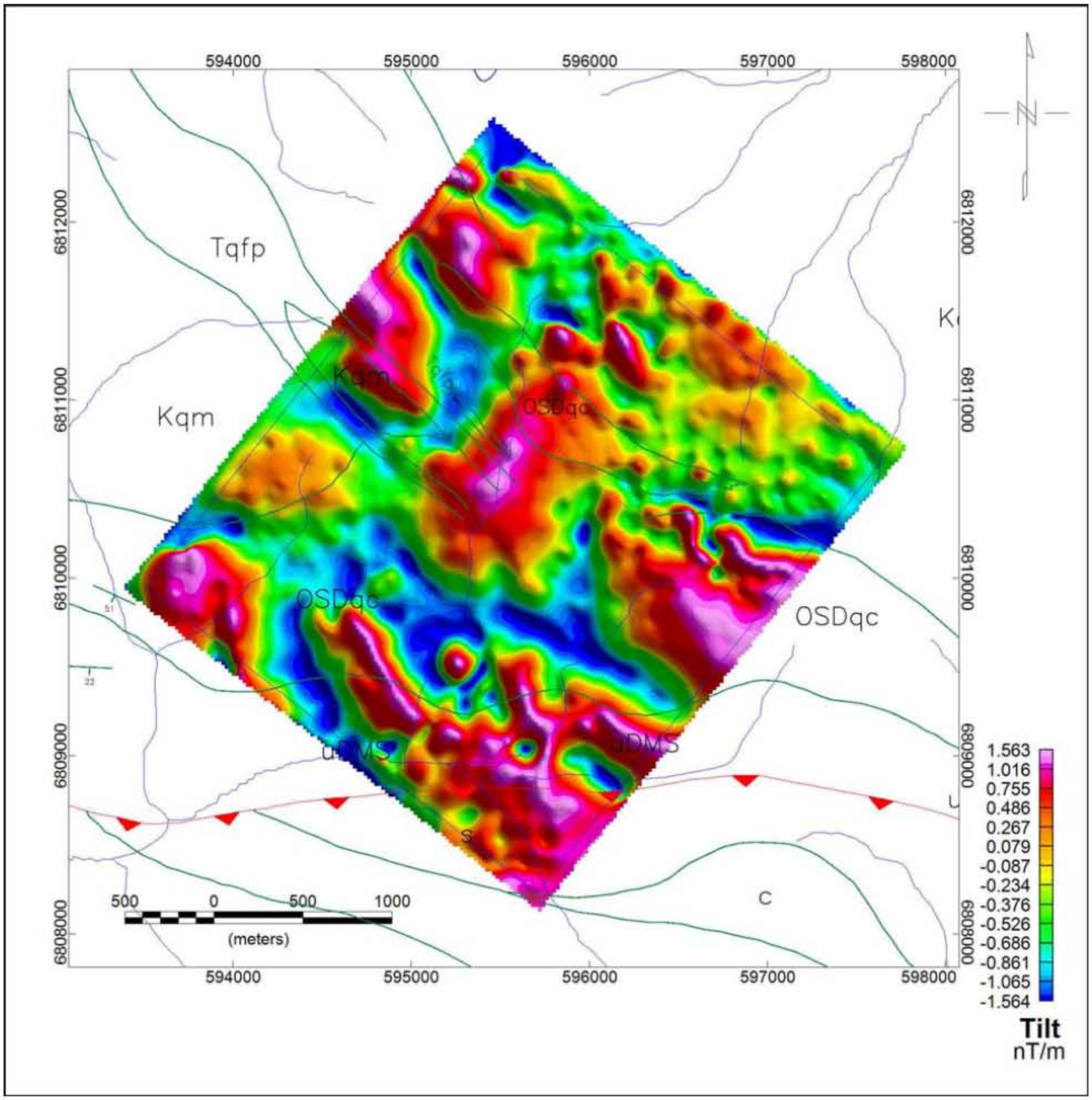

Fig. 8 Color shaded relief of the tilt derivative.

4.3 Inversion of the 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. 9 shows the results obtained with the Euler deconvolution inversion using a structural index of 1, a depth tolerance of 10% and a square deconvolution window with a size of 400 × 400 metres. Euler solutions have been plotted on the total gradient (analytic signal) map for a better illustration. The peaks of the total gradient are also used to locate and delineate magnetic sources boundaries. The advantage of the total gradient (analytic signal) is that the location and delineation of magnetic bodies is independent of the magnetization and the inducing magnetic field direction.

The map shows that Euler solutions are mostly aligned in the NW direction indicating the major trend of the magnetic structures. The solutions are directly located on the peaks of the total gradient (Fig. 9) and are associated with magnetic formations and magnetite- rich faults. The obtained solutions are mostly shallow (<100m) and are observed in the south and northwest of the block. The observed solutions in the south are probably related to NW trending faults and magnetite-rich skarnified zones. Results obtained with the Euler deconvolution confirm the qualitative analysis conducted with the reduced maps and can be efficiently used for the structural mapping of the area.

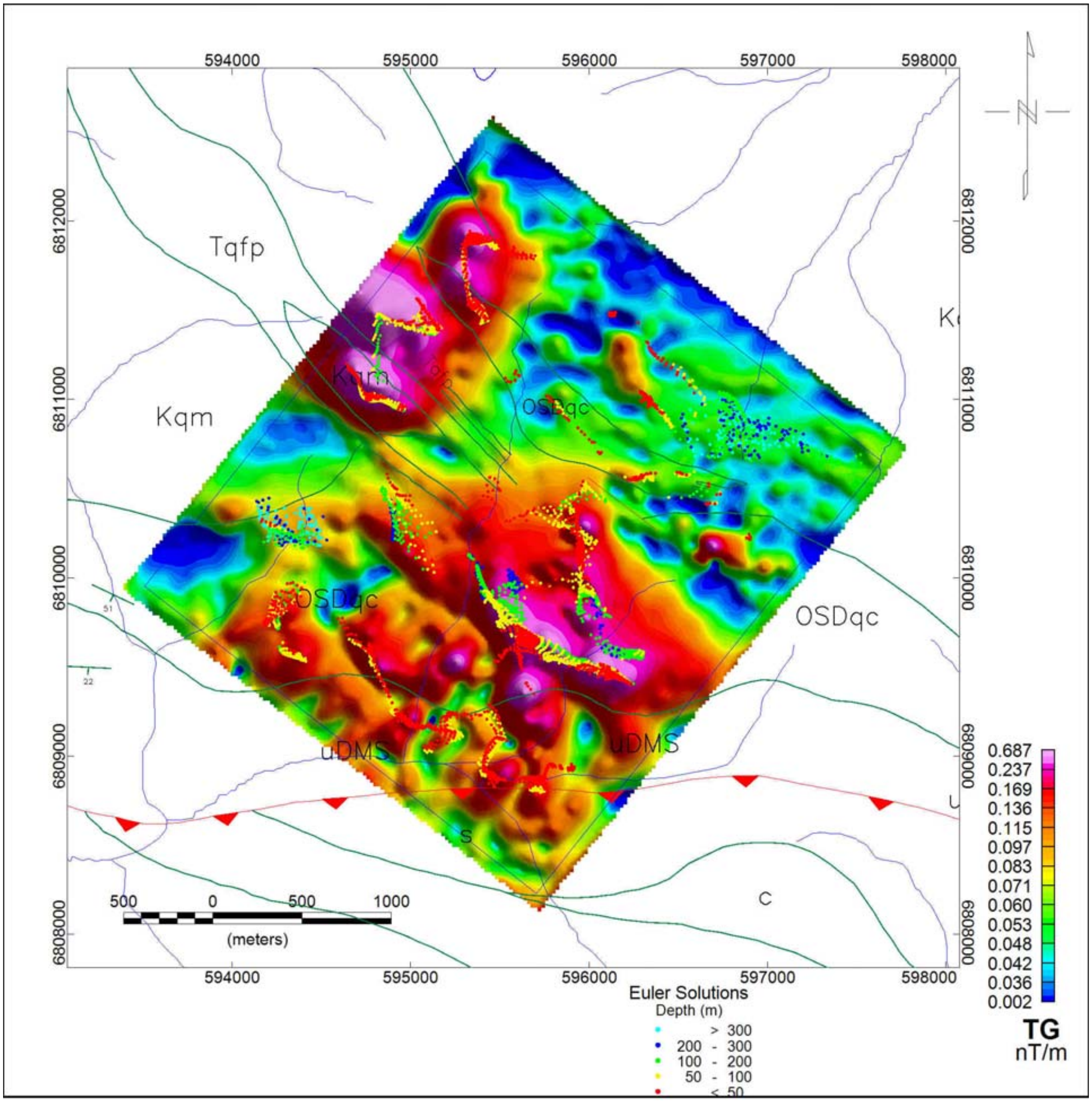

Fig. 9 Euler deconvolution solutions plotted on the total gradient image. 2D modeling was performed for the lines shown in white.

5. INTERPRETATION of the VTEM DATA

5.1 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 actual VTEM systems measure both the electromagnetic induction field B and its time derivative dB/dt. This system specificity has a lot of advantages, as the dB/dt better resolves the shallow conductive sources while the B-field exhibits a better resolution for deep conductors.

5.2 VTEM anomalies shape

For concentric-loop geometry systems when both loops are oriented in the Z-axis (VTEM system) thick dipping or horizontal conductors exhibit a characteristic single peak, while steeply dipping and 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. Synthetic models anomalies were generated for the plate type conductors are provided in the Appendix A to better understand the shape of the VTEM anomalies

5.3 Analysis of the EM results

Figures 14 and 15 show the stacked profiles in pseudo-logarithmic scale of the dB/dt and B-field decays, respectively. Both maps indicate the existence of NW trending large anomalous zone in the south of the property.

The zone is observed over the Upper Devonian Mississippian weathering siliceous slate and the Ordovician-Silurian and Lower Devonian calcareous graphitic siltstone and calcareous phyllite. The observed decays are broad and moderate, however there are mostly associated with shallowly to moderately dipping conductive bedrocks (Figs. 10-11) in the SW and steeply dipping conductors in the South of the property (Figs. 12-13). The anomalous zone is possibly associated with weathering and conductive skarnified zone controlled by the existing contact and the trust fault. The interpretation of the EM profiles was performed using in-house built software for automatically picking the anomalies along the profiles and yielding estimates of the conductance and the decay constant (tau) of isolated anomalies. The picked EM anomalies were posted on the late time EM channel. Figures 16 and 17 illustrate the results of the picked anomalies superimposed on the dB/dt, and B-field late time channel (6.578 ms after the current shut off), respectively.

Several anomalies were identified in the south of the property, among which at least two linear and parallel conductive bedrocks (B1 and B2) can be distinguished.

Both bedrocks are characterized by relatively low conductance values ranging between 5 S and 10 S approximately and low decay constants (around 3 ms). The bedrocks are probably associated with a conductive fault or conductive skarnified zone controlled by the EW trending trust. The shape of the decays indicates that the bedrocks are mostly dipping in the SW direction.

Moreover, it is worth mentioning that detected conductive bedrocks are controlled by NNW trending magnetic lineaments indicating possibly an association with fault as illustrated in Fig. 18.

The interpretation map (Fig. 19) shows the results of the magnetic and electromagnetic analysis superimposed on the total gradient image. The magnetic interpretation suggests the existence of NS and EW trending crosscutting faults. Euler solutions indicate the possible existence of NW trending major fault in the south of the block. The map shows that the detected bedrocks are located close to the trust fault and are controlled by a magnetic structure associated with local faults and /or magnetite-rich skarnified zone.

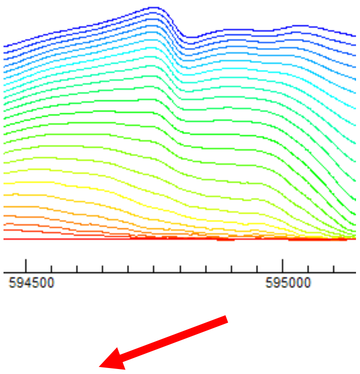

Fig. 10 EM decays over for the western portion of the line 6130 (SW of the block). The shape of the decays suggests steeply dipping thick conductive bedrock as indicated by the red arrow.

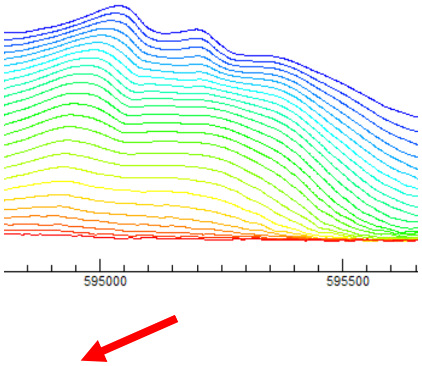

Fig. 11 EM decays for the northern western of the Line 6170 (SW of the block) indicating a shallowly dipping (SW) conductive conductor as indicated by the red arrow.

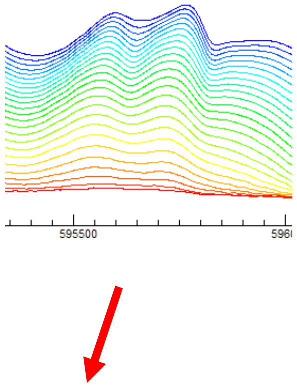

Fig. 12 EM decays for the western portion of the Line 6230 (South of the block) indicating a shallowly dipping (SW) conductive conductor as indicated by the red arrow.

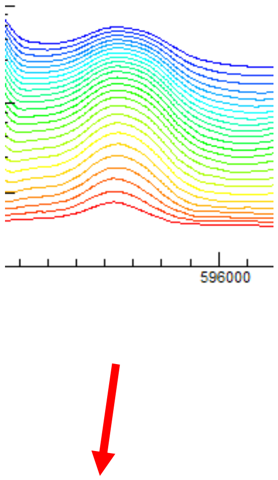

Fig. 13 EM decays for the western portion of the Line 6280 (South of the block) indicating a shallowly dipping (SW) conductive conductor as indicated by the red arrow.

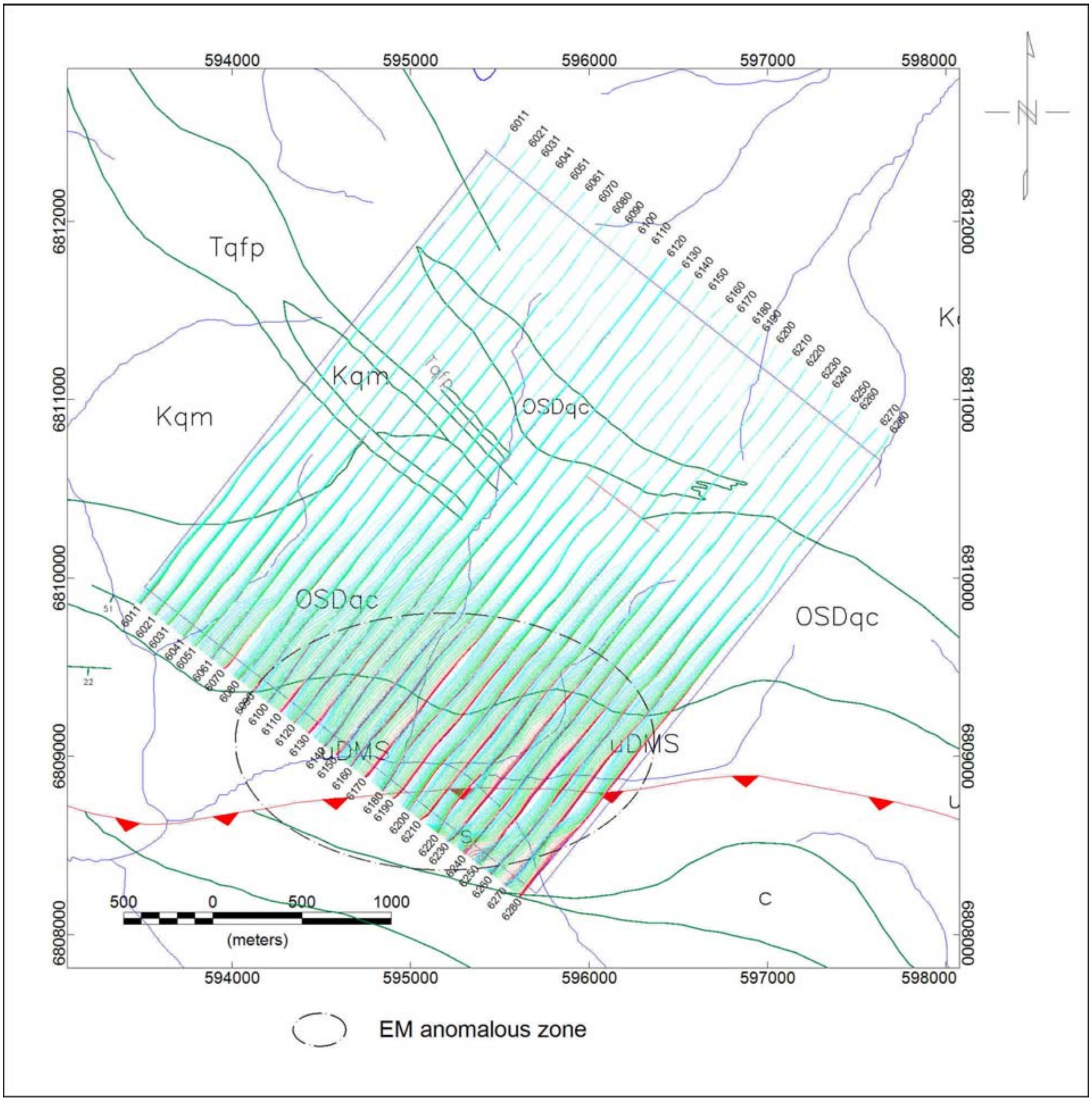

Fig. 14 EM dB/dt stacked profiles at log-linear scale. Early time decays are in green and late time in red. The map depicts a large anomalous zone in the south of the block.

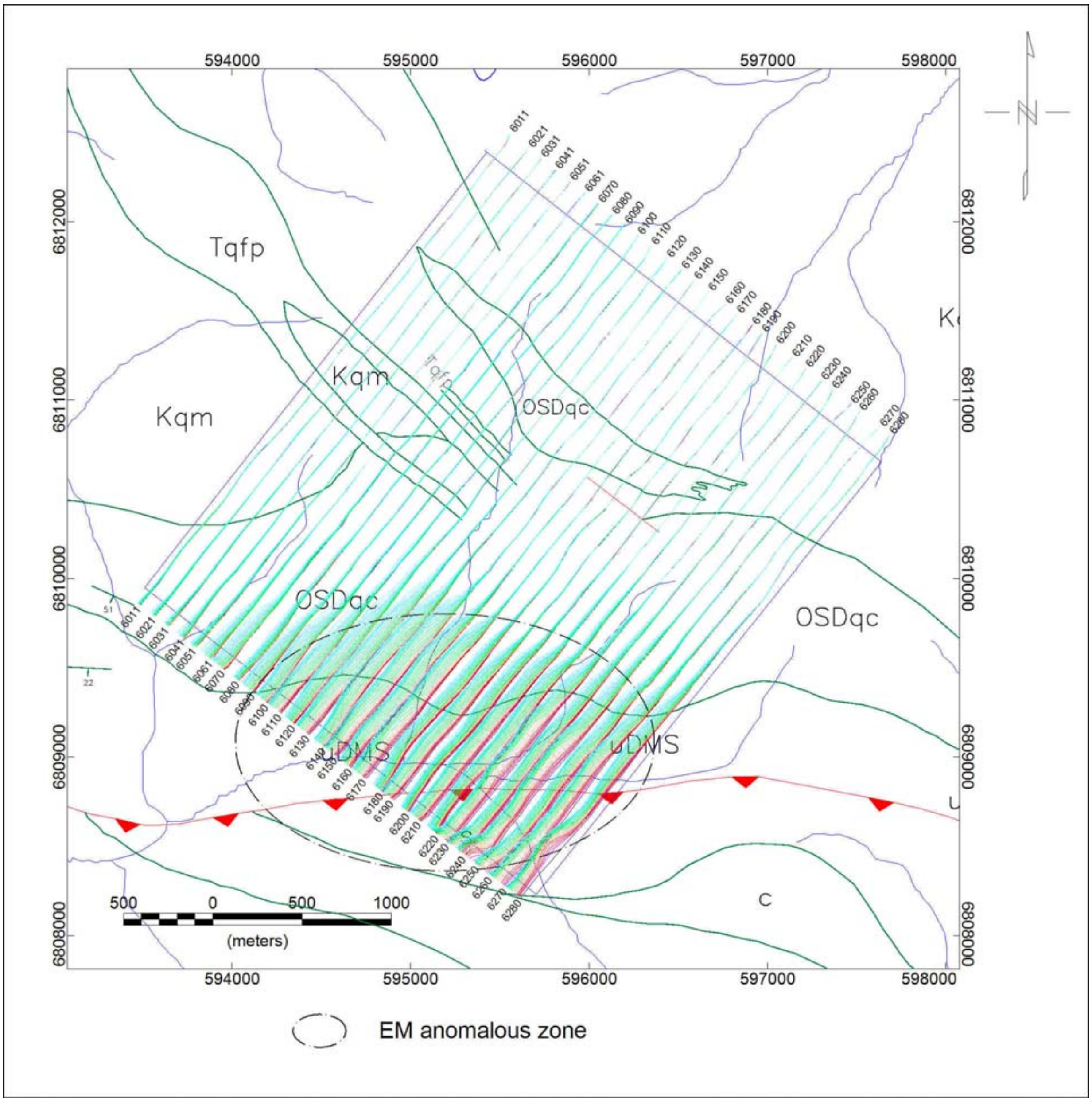

Fig. 15 EM B-Field stacked profiles at log-linear scale. Early time decays are in green and late time in red. The map depicts a large anomalous zone in the south of the block.

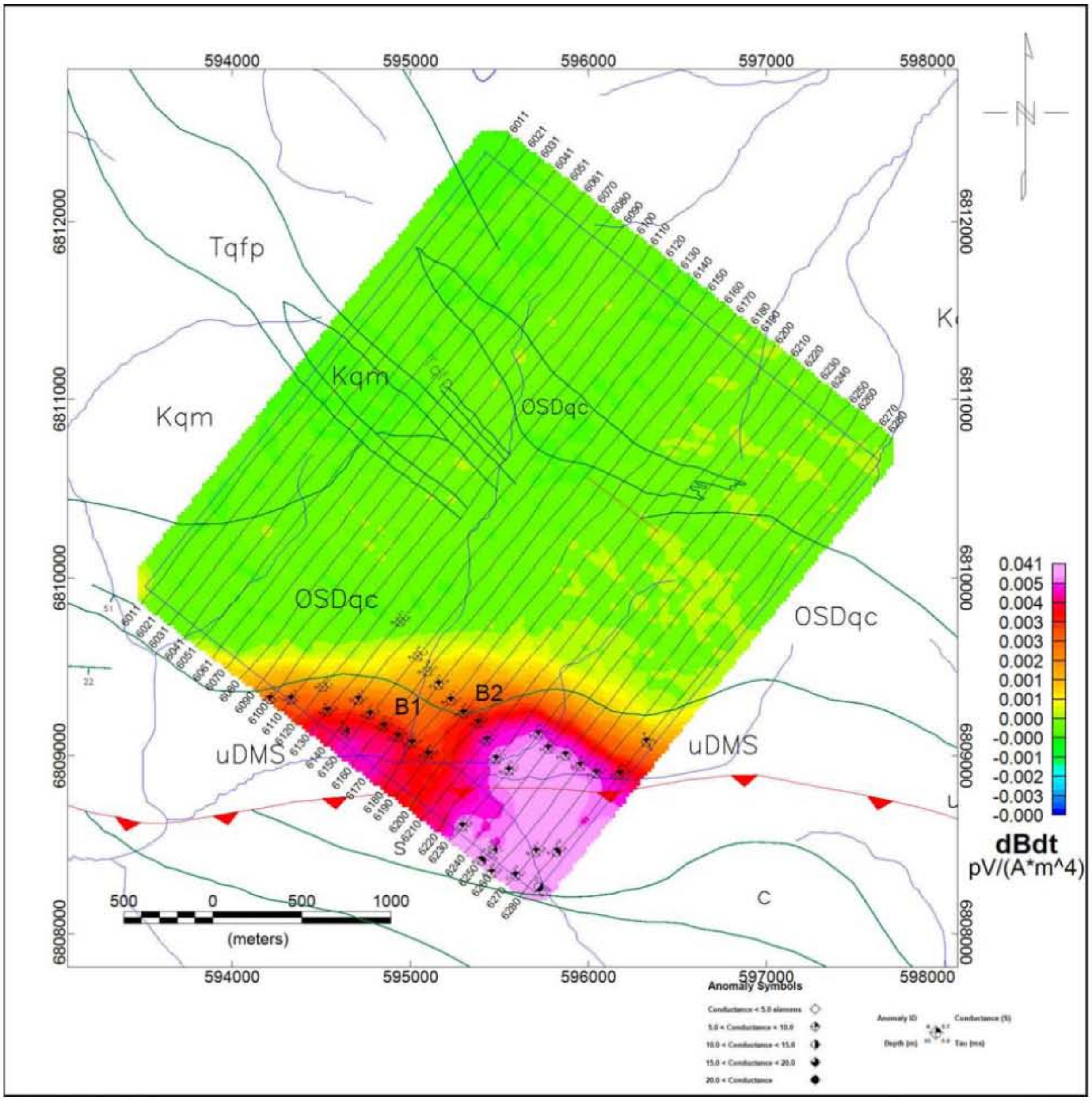

Fig. 16 EM picked anomalies plotted on the late time dB/dt channel image (6.578 ms after current shut off). The map depicts the existence of mainly two NW trending conductive bedrocks in the south of the block.

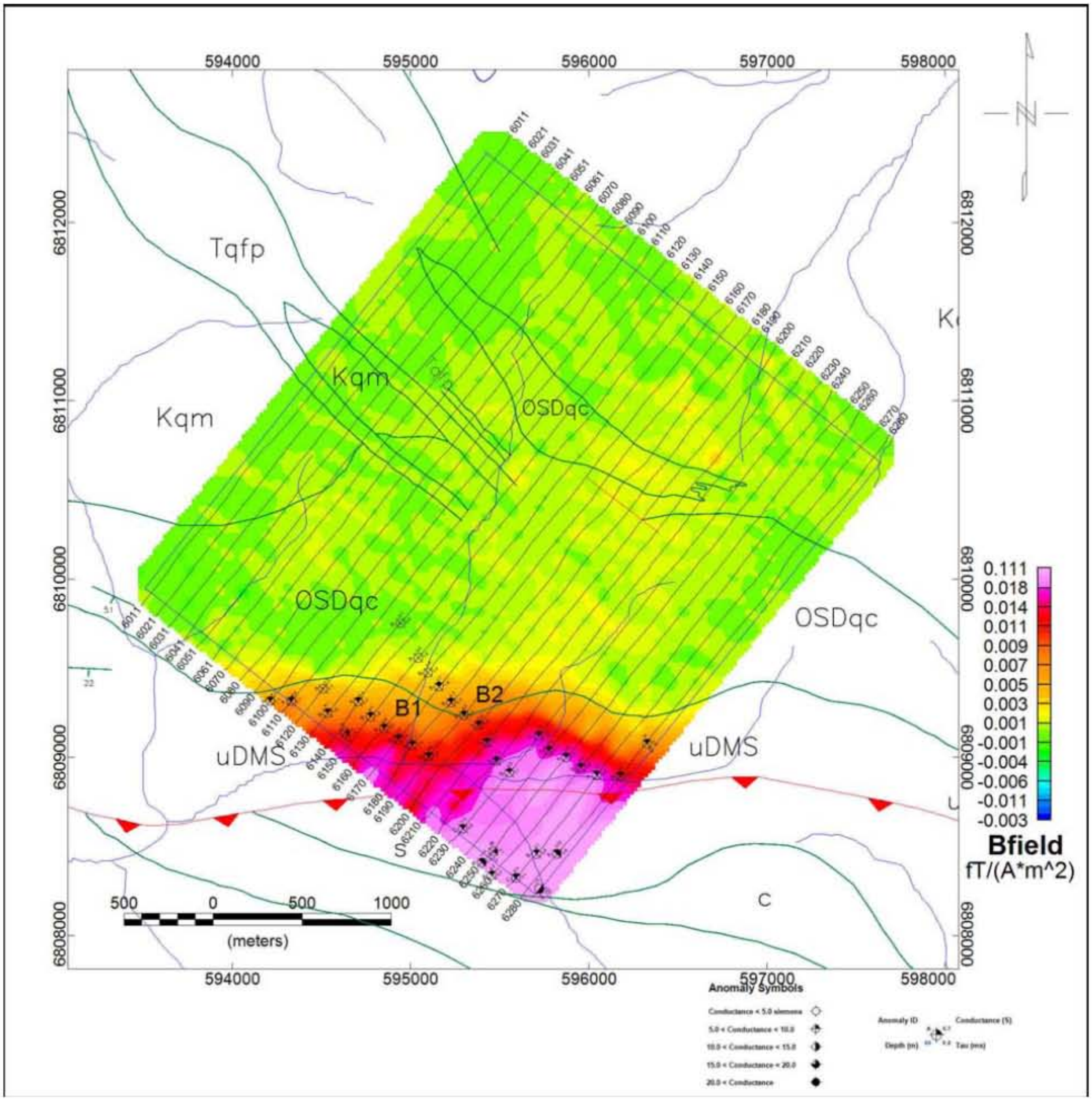

Fig. 17 EM picked anomalies plotted on the late time dB/dt channel image (6.578 ms after current shut off). The map depicts the existence of mainly two NW trending conductive bedrocks in the south of the block.

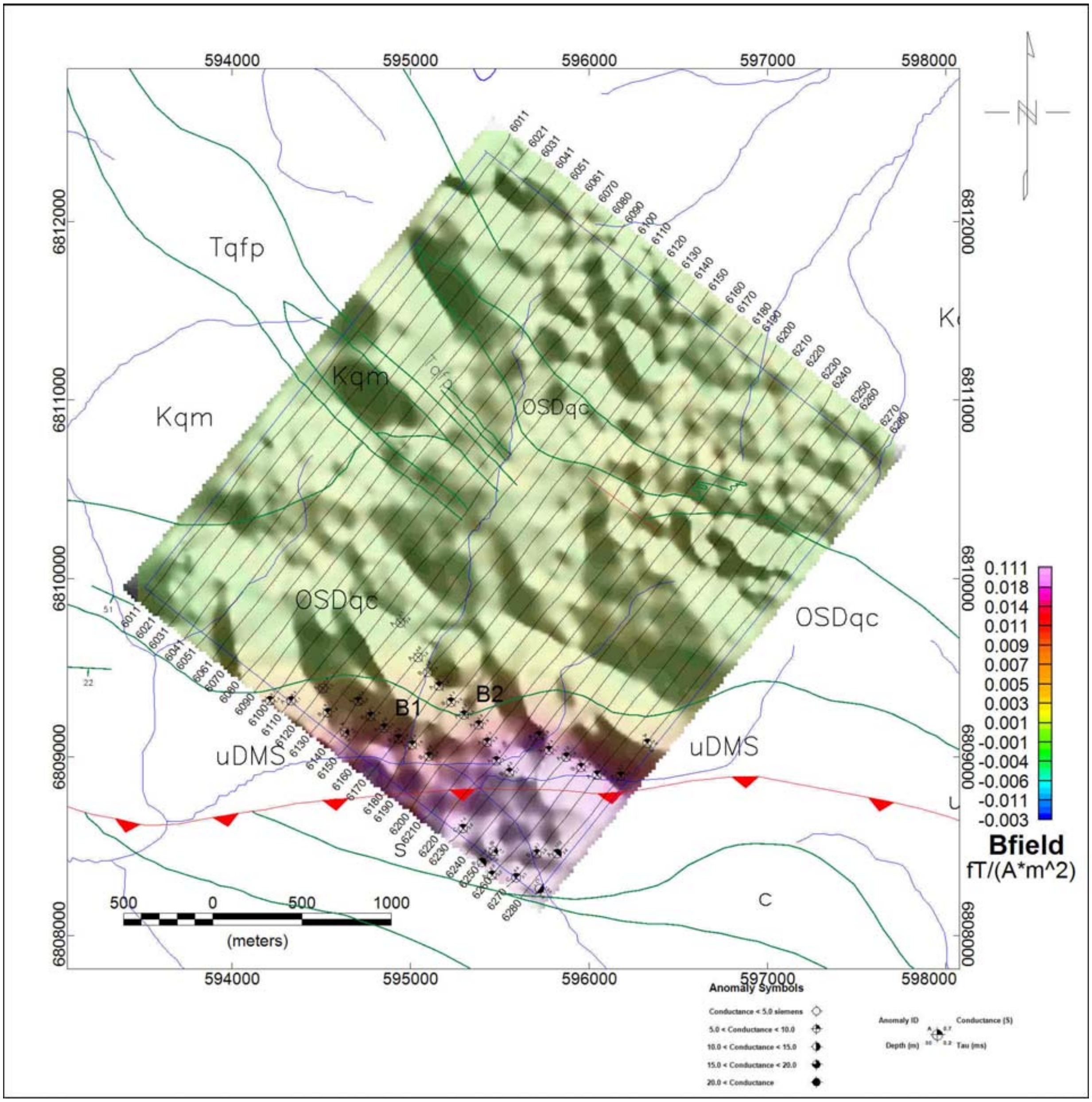

Fig. 18 Late time B-Field channel image superimposed on the shaded relief of the tilt derivative. The map clearly shows a good correlation of the picked anomalies (bedrock B1) with the NW trending magnetic lineament.

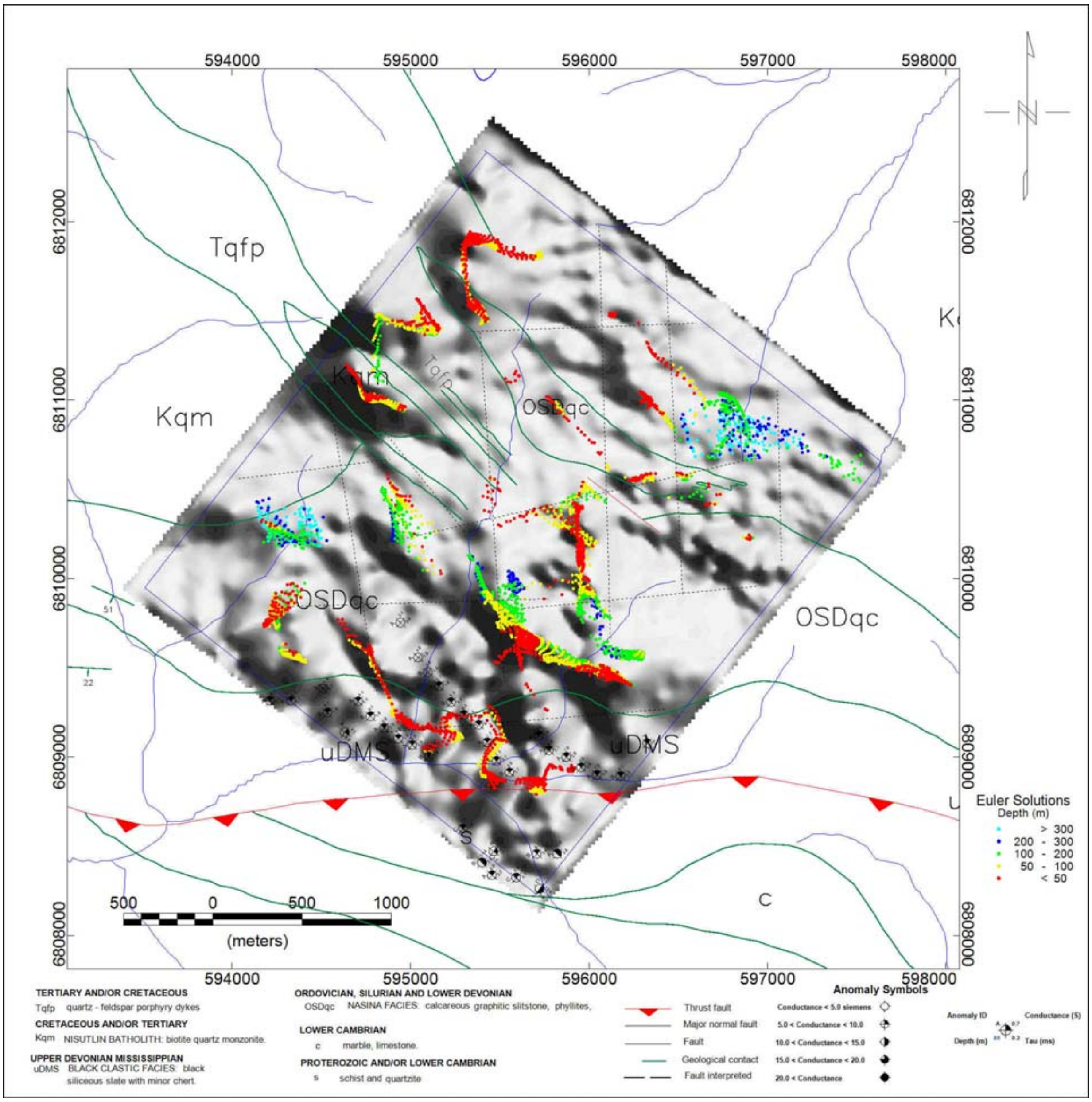

Fig. 19 Interpretation map showing the results of the magnetic and electromagnetic data analysis. The detected conductive bedrock B1 is associated with deep magnetic sources.

5.4 Selected Anomalies

Several individual anomalies extracted from the described above anomalous zone of interest have been selected for modeling by converting the EM decays into CDIs. The anomalies are located on the following lines: L6110, L6150, L6170, L6230, L6250, and L6280. The summarized characteristics of the selected anomalies are given in the following table.

Bedrock /Line	**Anomaly ID**	**Anomaly Type description**	**Conductor geometry**	**X- location m**	**Y- location m**	**Conductance S**	**Dip**	**Dip Azimut**	**Tau msec**
B1/L6110	A	Anti-symmetric broad Single peak	Shallowly dipping plate	594330	6809316	5.5	SW	NW	2.1
B1/L6150	B	Anti-symmetric broad Single peak	Shallowly dipping plate	594774	6809230	6.1	SW	NW	1.8
B2/L6150	A	Anti-symmetric broad Single peak	Shallowly dipping plate	595042	6809562	4.6	SW	NW	1.3
B1/L6170	B	Anti-symmetric broad Single peak	Shallowly dipping plate	594930	6809104	7.0	SW	NW	2.5
B2/L6230	A	Anti-symmetric broad Single peak	Shallowly dipping plate	595718	6809121	7.9	SW	NW	2.6
B2/L6230	B	Anti-symmetric broad Single peak	Shallowly dipping plate	595554	6808915	8.4	SW	NW	2.7
B2/L6250	A	Anti-symmetric broad Single peak	Shallowly dipping plate	595872	6809001	7.9	SW	NW	2.9
B2/L6250	B	Anti-symmetric broad Single peak	Shallowly dipping plate	595399	6808411	14.4	SW	NW	2.3
B2/L6280	A	Anti-symmetric broad Single peak	Shallowly dipping plate	595821	6808460	10.9	SW	NW	3.8
B2/L6280	B	Anti-symmetric broad Single peak	Shallowly dipping plate	596176	6808895	6.2	SW	NW	3.2

Table 1. Summarized results of selected anomalies.

5.5 Conductivity Depth Sections

Conductivity depth imaging is considered as one of the important steps in the analysis and interpretation of electromagnetic data. CDI allows providing useful information of the conductivity distribution of the considered cross section. CDIs were performed for the selected lines using the EMflow software (Figs.20a-25b).

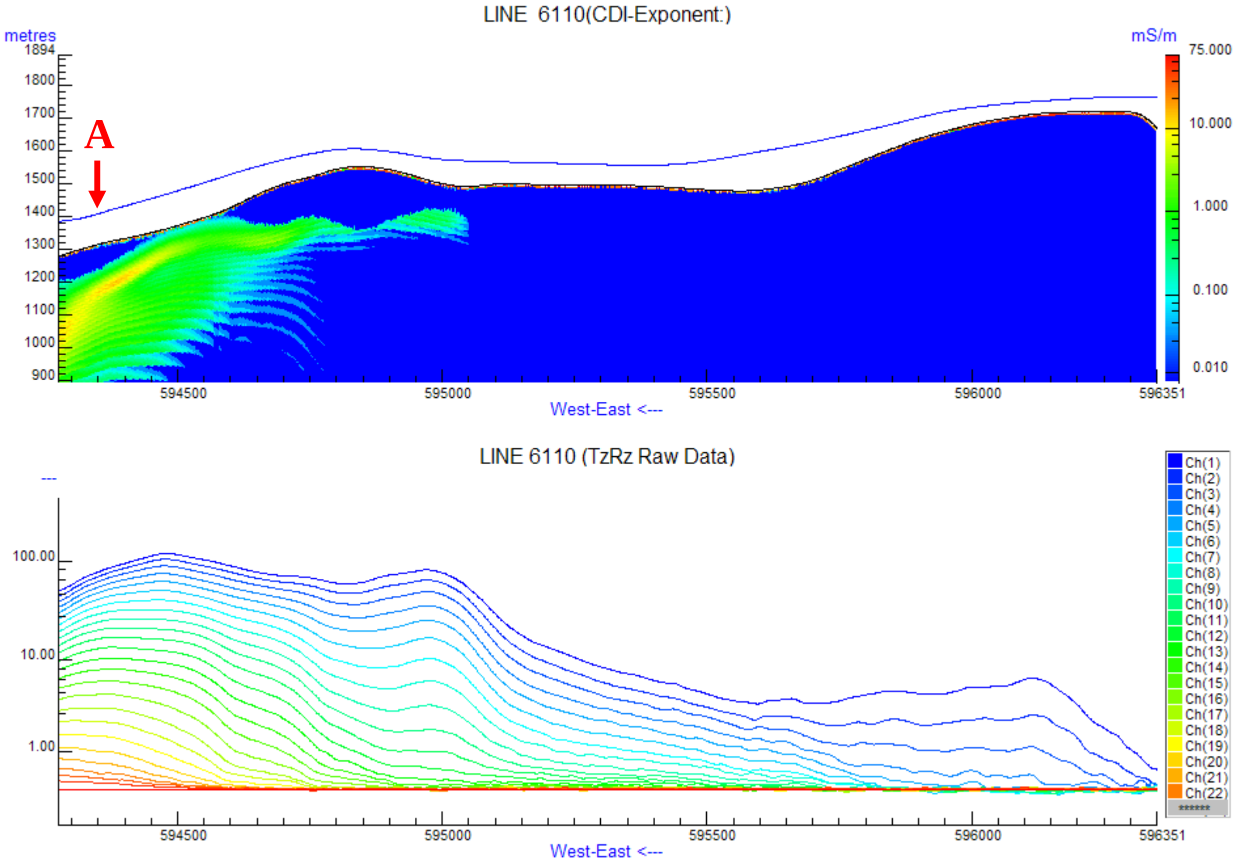

Fig. 20a shows the CDI section for the line L6110 (dB/dt data). The section indicates the existence of moderately dipping conductive bedrock at shallow depth (<100m) in the left side of the section. Letter A indicates the location of the anomalies on the map.

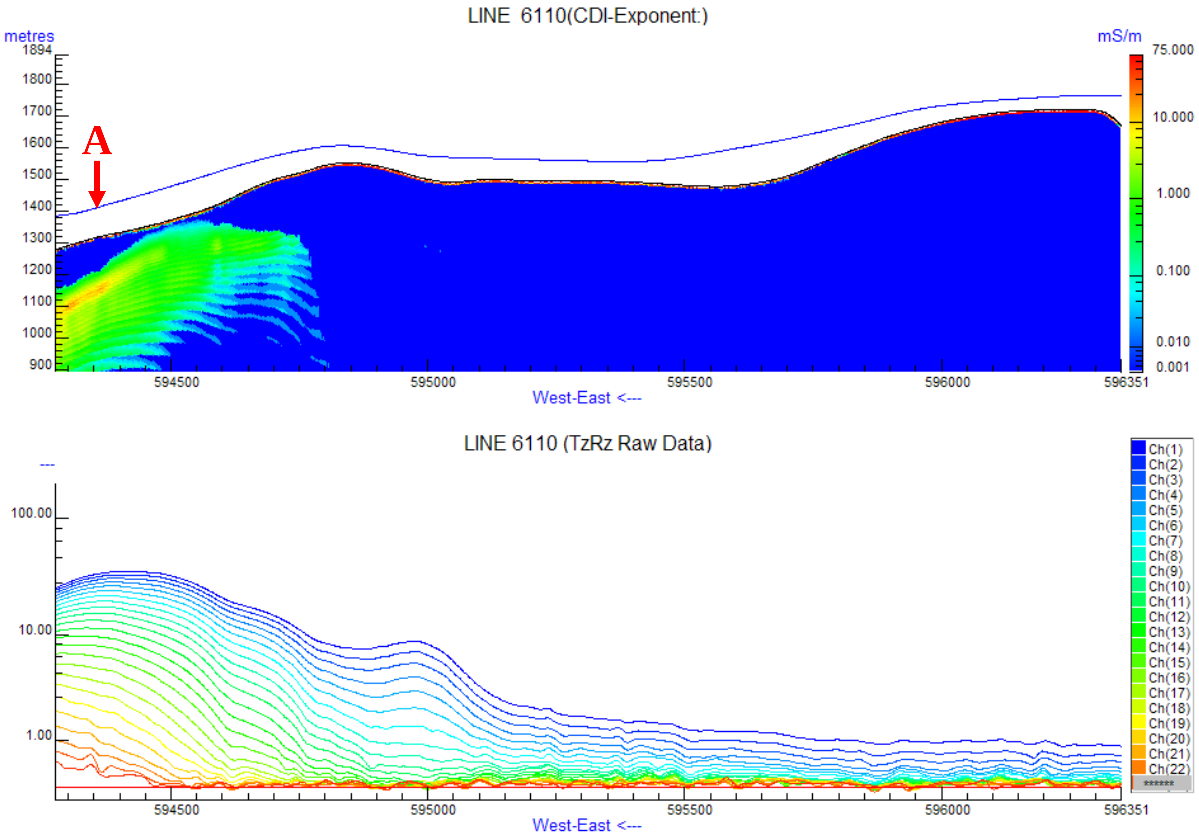

Fig. 20b shows the CDI section for the line L6110 (B-Field data). The section indicates the existence of moderately dipping conductive bedrock at shallow depth (<100m) in the left side of the section. Letter A indicates the location of the anomalies on the map.

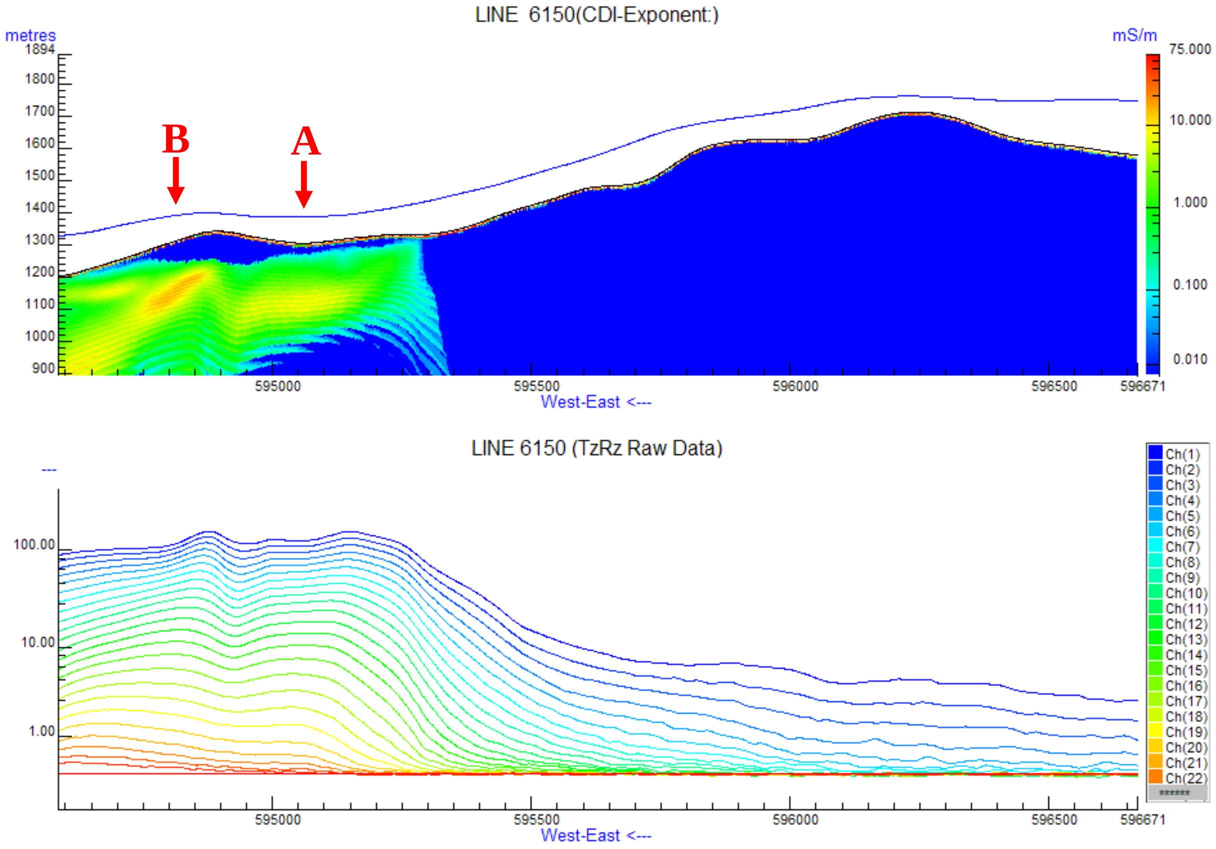

Fig. 21a shows the CDI section for the line L6150 (dB/dt data). The section depicts the existence of two shallowly dipping conductive bedrocks in the left side of the section. Letters A and B indicate the location of the anomalies on the map.

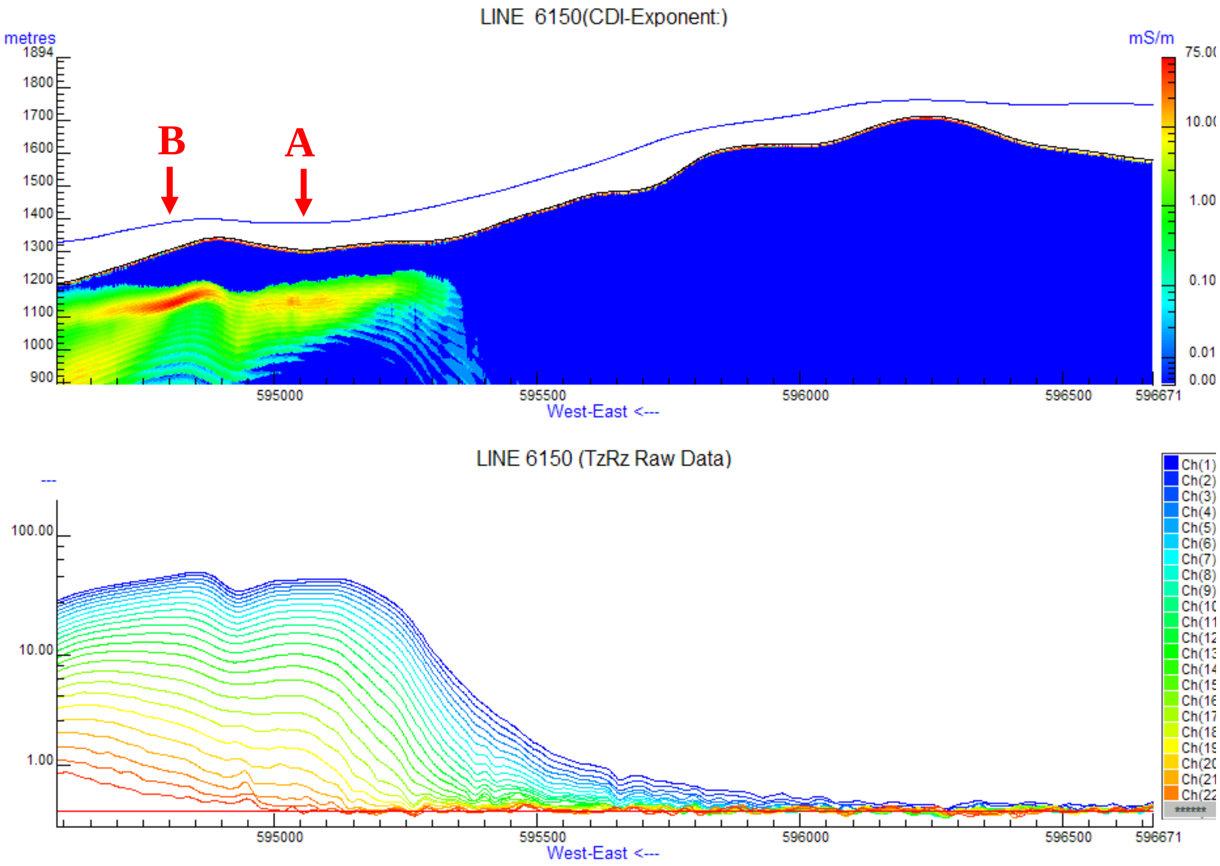

Fig. 21b shows the CDI section for the line L6150 (B-Field data). The section depicts the existence of two shallowly dipping conductive bedrocks in the left side of the section. A better definition of the bedrocks is provided by the B-Field data. Letters A and B indicate the location of the anomalies on the map.

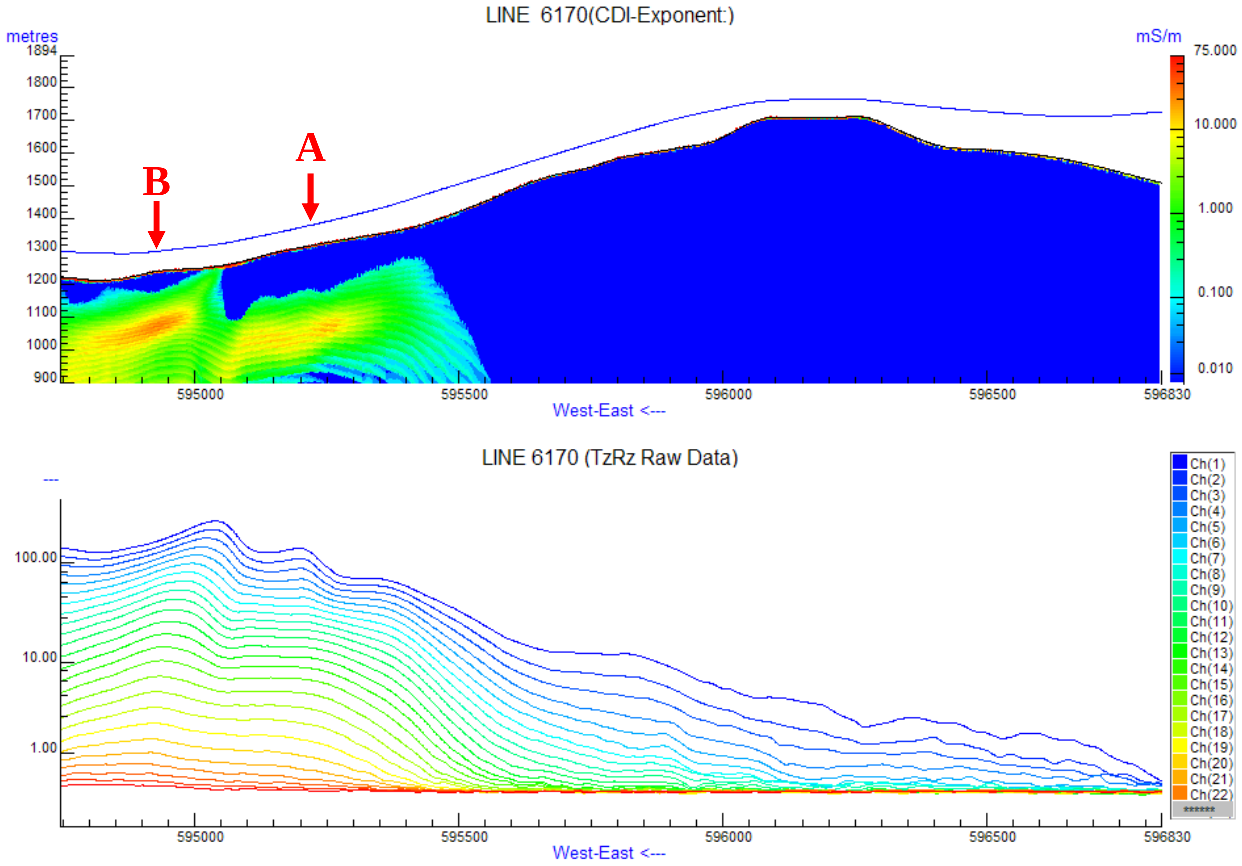

Fig. 22a shows the CDI section for the line L6170 (dB/dt data). The section highlights the existence of two shallowly dipping conductive bedrocks at variable depths (100-200m). Letters A and B indicate the location of the anomaly on the map. The location of the showing is also indicated.

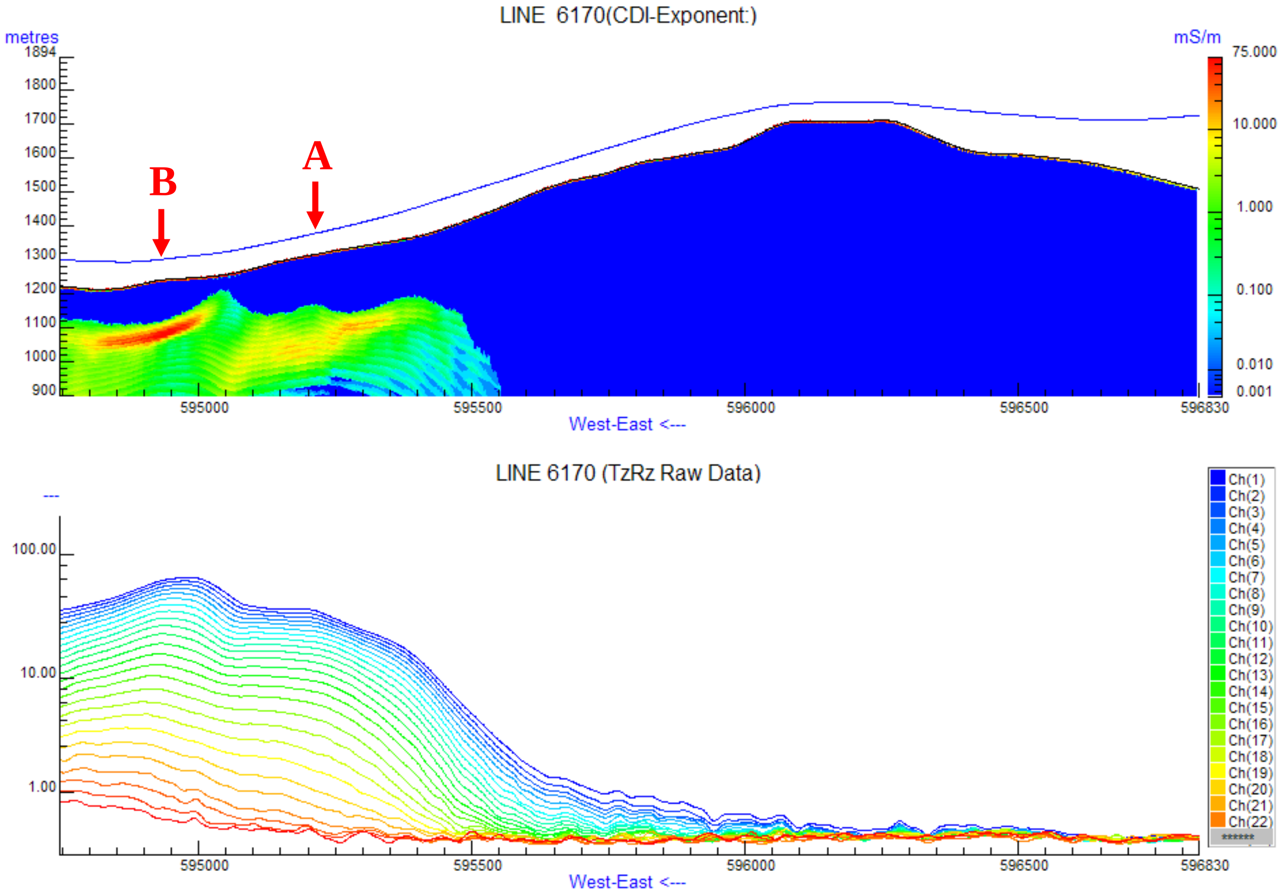

Fig. 22b shows the CDI section for the line L6170 (B-Field data). The section highlights the existence of two shallowly dipping conductive bedrocks at variable depths (100-200m). Note that the left most conductor is better defined in the section obtained from B-field data. Letters A and B indicate the location of the anomaly on the map. The location of the showing is also indicated

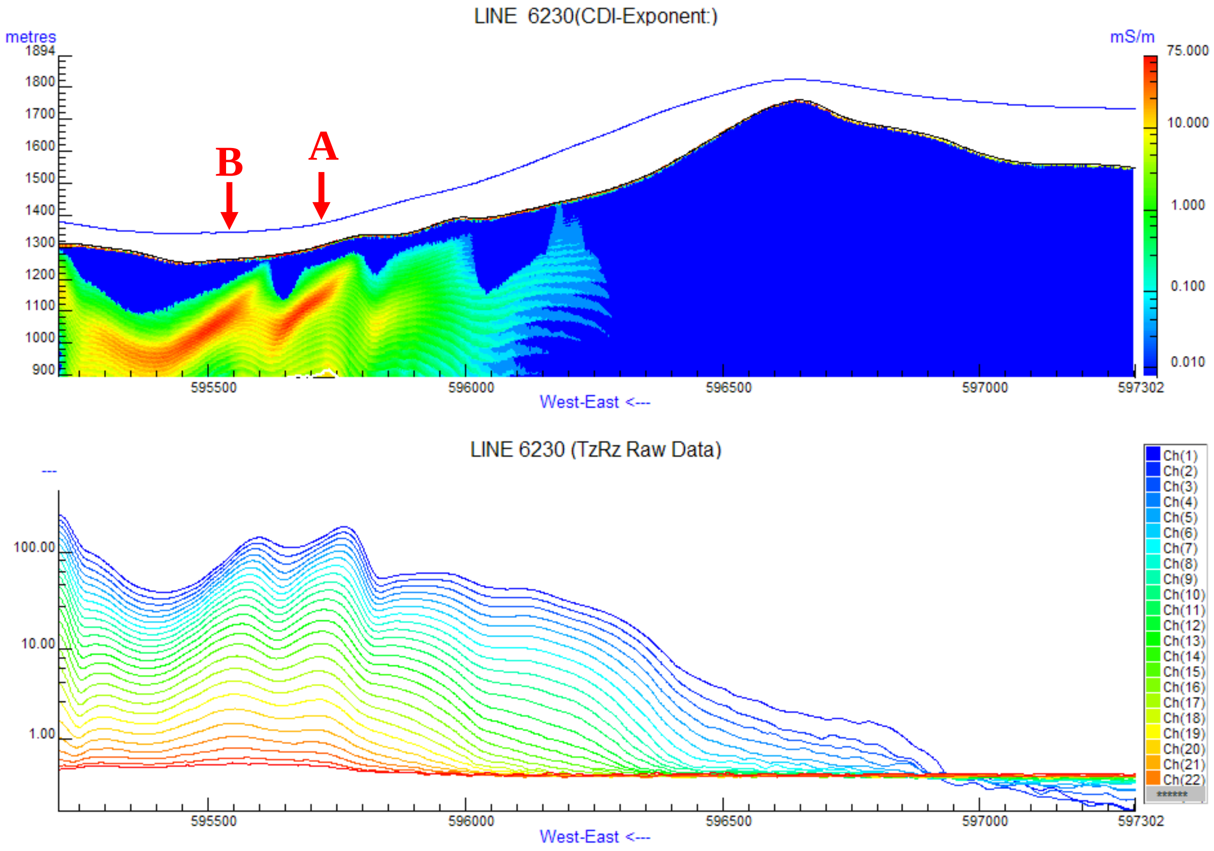

Fig. 23b shows the CDI section for the line L6230 (dB/dt data). Two moderately dipping (SW) conductive bedrock are indicated in the left side of the section. The top of the bedrocks is located at approximate depth of 100m. Letters A and B indicate the location of the anomalies on the map.

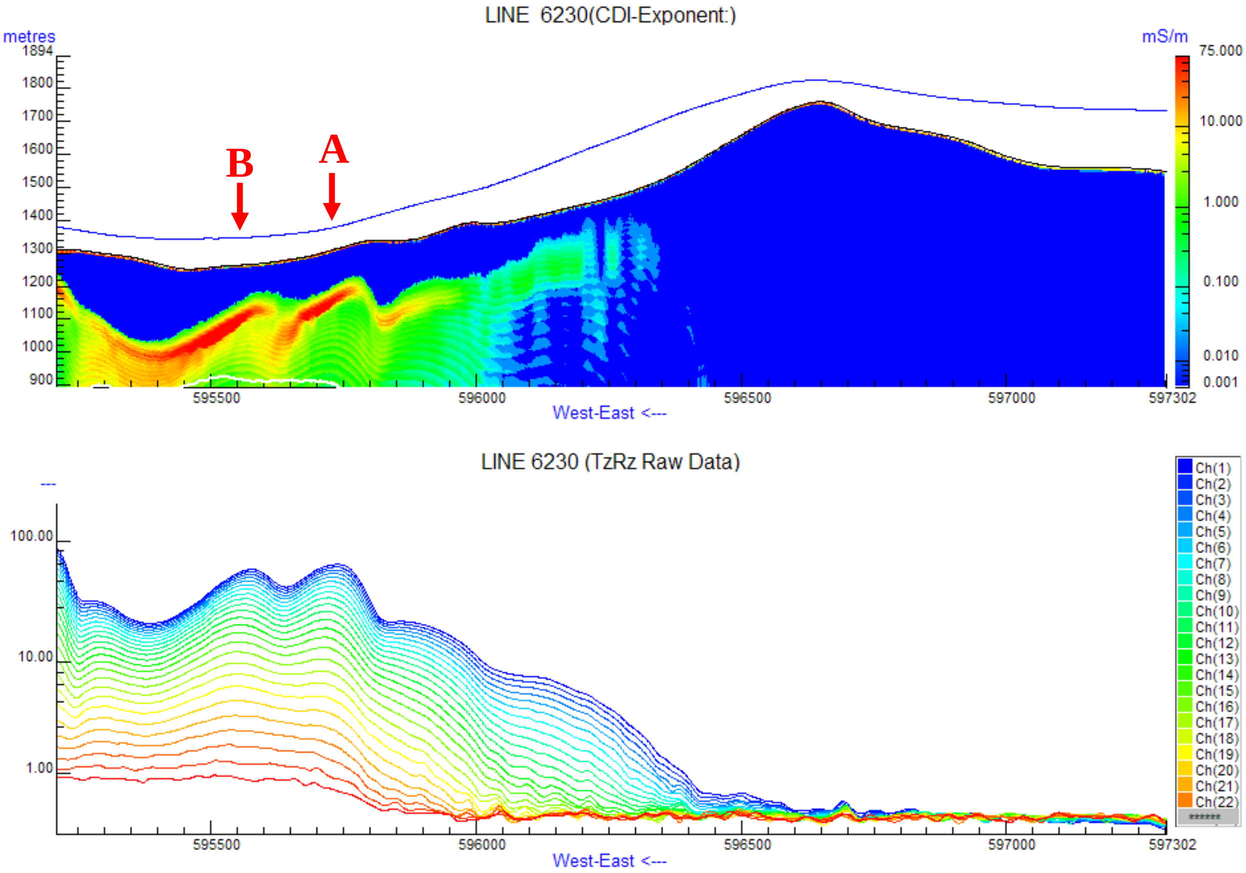

Fig. 24a shows the CDI section for the line L6230 (B-Field data). Two moderately dipping (SW) conductive bedrock are indicated in the left side of the section. The top of the bedrocks is located at approximate depth of 100m. Letters A and B indicate the location of the anomalies on the map.

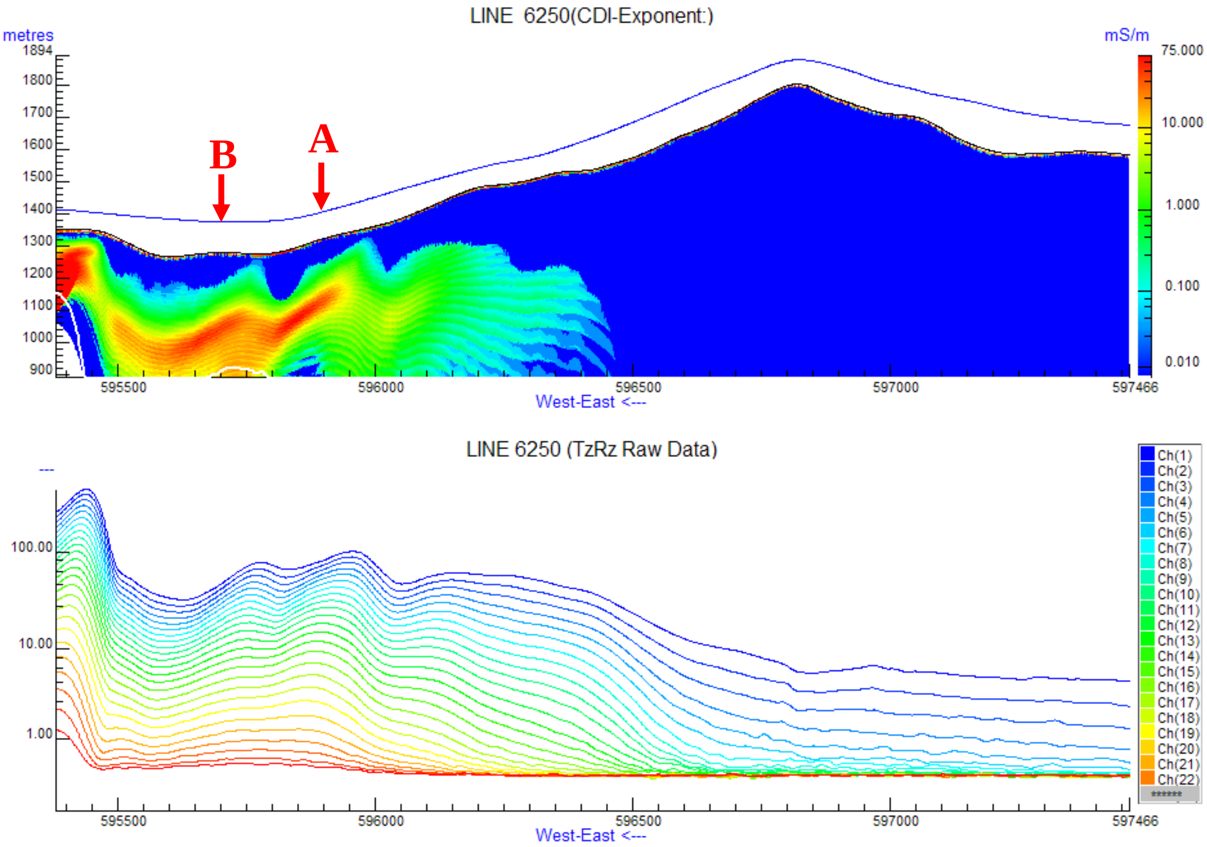

Fig. 24b shows the CDI section for the line L6250 (dB/dt data). The map depicts two westerly dipping conductive bedrocks, indicated by letters A and B. Note the existence of shallow conductor (<100m) in the left most portion of the section.

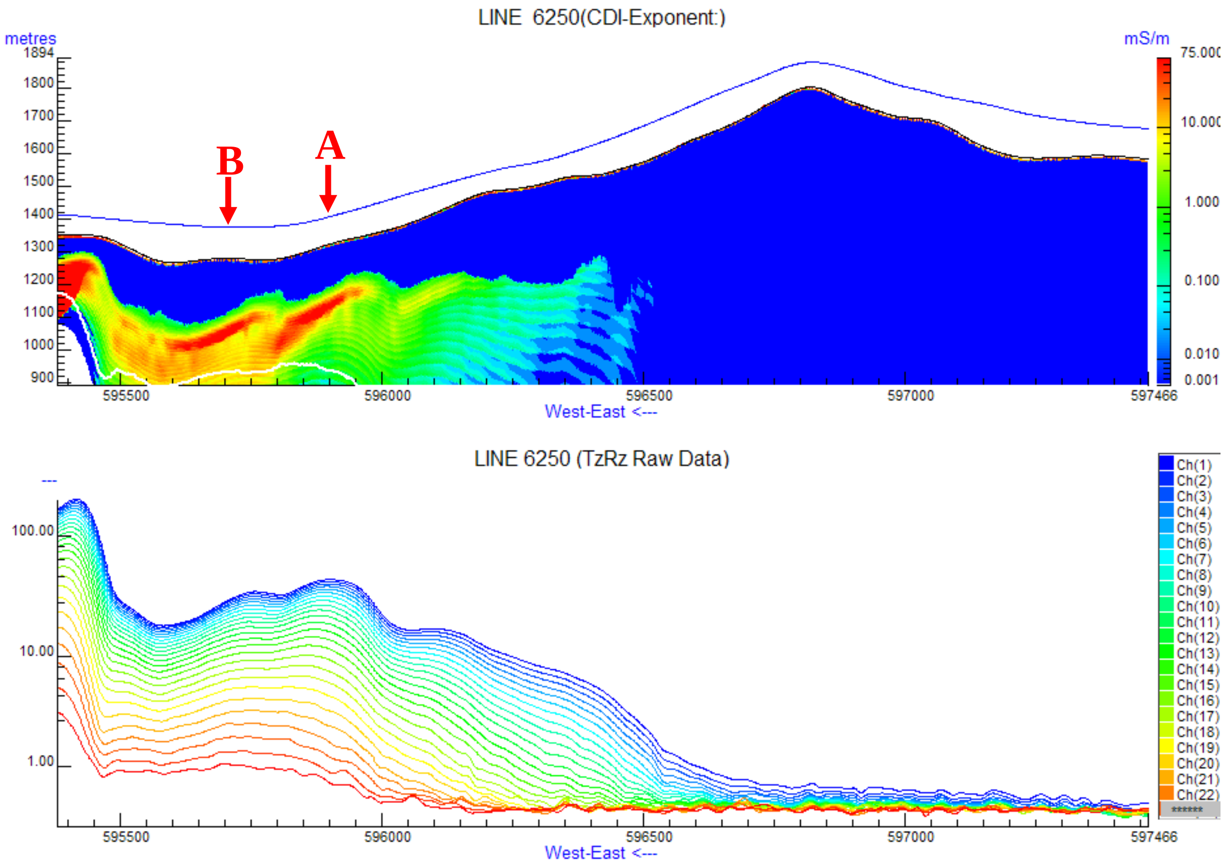

Fig. 25a shows the CDI section for the line L6250 (B-Field data). The map depicts two westerly dipping conductive bedrocks, indicated by letters A and B. Note the existence of shallow conductor (<100m) in the left most portion of the section.

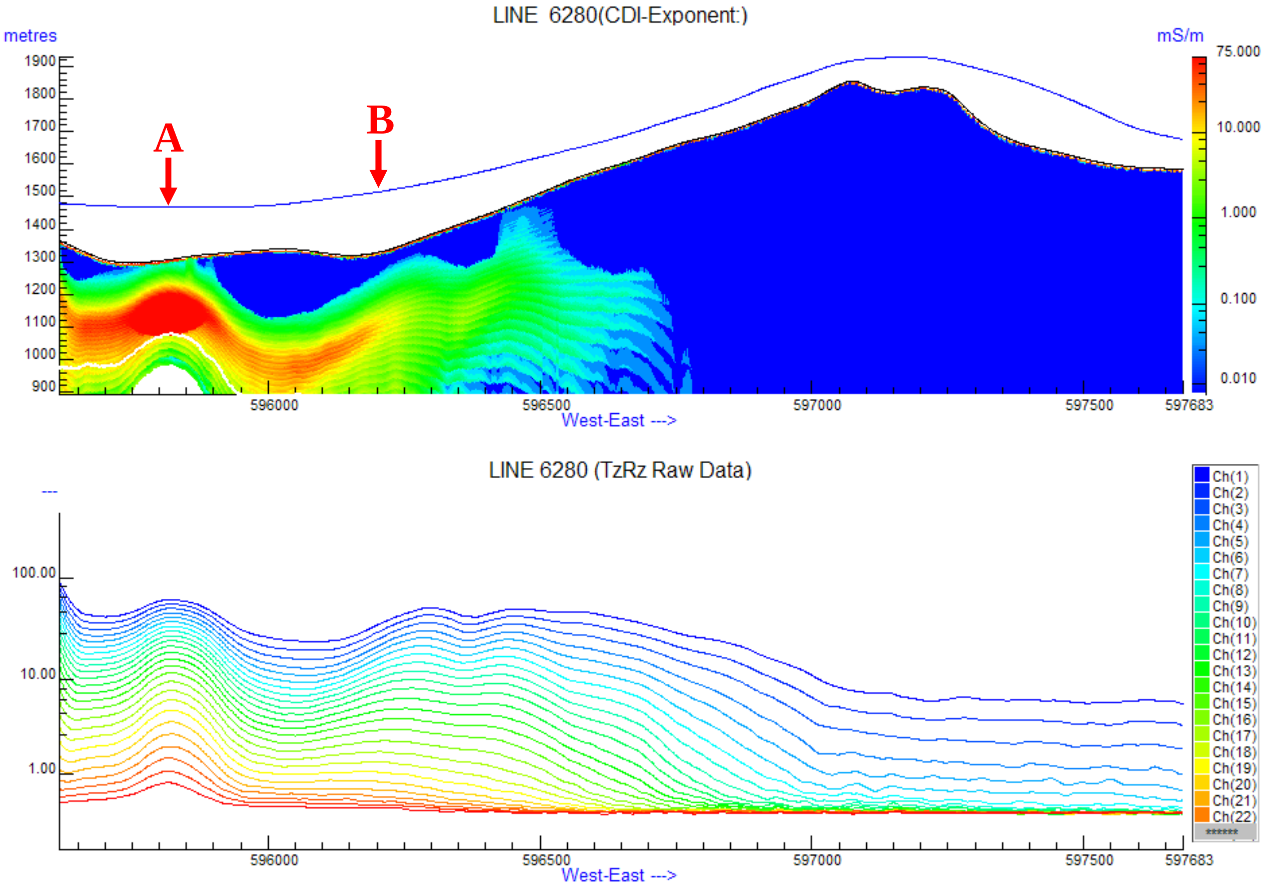

Fig. 25b shows the CDI section for the line L6280 (dB/dt data). The section highlights the existence of steeply dipping conductive bedrock in the left side of the section indicated by letter A.

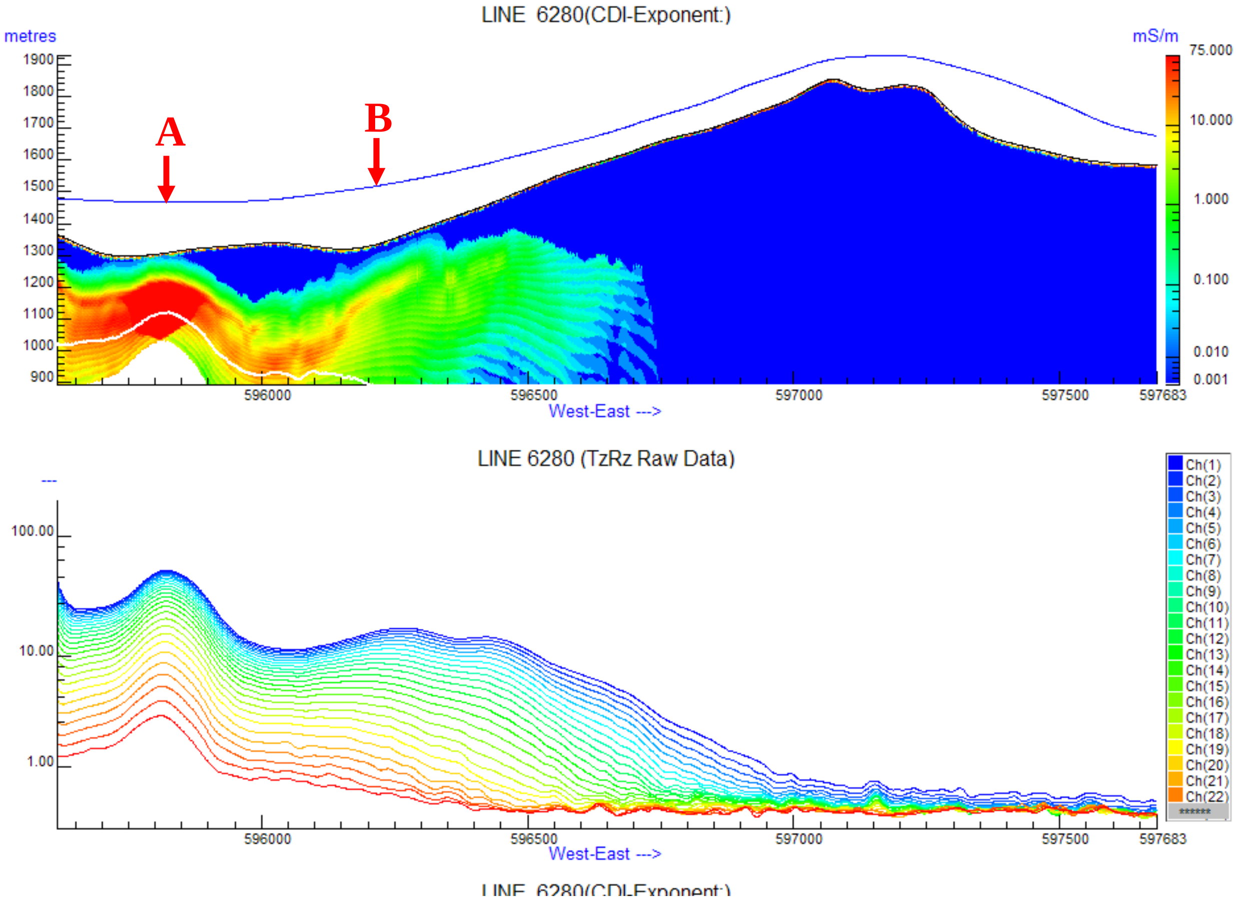

Fig. 23a shows the CDI section for the line L6280 (B-Field data). The section highlights the existence of steeply dipping conductive bedrock in the left side of the section indicated by letter A.

6. CONCLUSIONS AND RECOMMANDATIONS

The analysis of the magnetic showed that the northern part of the block is characterized by relatively magnetic high attributed to the plutonic batholith, which apparently exhibits higher magnetic susceptibility that the metasediments, which are well developed in the south of the block. The map indicates in the south of the block an EW trending magnetic low attributed possibly to a major fault and located north to the trust fault. The estimated depths from the Euler deconvolution are mostly ranging from 0 to 200m. The detected solutions in the south of the block are probably associated with faults and / or magnetite-rich skarnified zone trending in the EW direction. Shallow solutions are observed in the NW of the block and are possibly associated with mafic rocks included in the granitic batholith. The magnetic interpretation using different reduced maps suggests the presence of several crosscutting (NS and EW) faulting systems affecting this block.

The VTEM survey reveals the existence of one anomalous zone located in the southwest of the property over the metasediments and controlled by the EW trending trust fault. Mainly two NW trending conductive bedrocks in good correlation with linear magnetic structures are identified in the south of the Property. CDI sections performed for several lines suggest the existing of shallowly to moderately dipping (Southwesterly) good conductive bedrock, the tops of which are located at relatively shallow depths (100-200m). It seems from the analysis of data that the bedrocks are possibly associated with conductive faults and / or conductive skarnified zones. However, no EM response has been revealed over the known tungsten mineralized zones associated with skarn developed within the limestone and quartzite of the OSDq unit. This can be explained by the fact that the identified tungsten mineralization is not controlled by conductive structures.

If disseminated metallic minerals such sulfides are included in the mineralized zones, then it is highly recommended to conduct a ground IP survey to map the disseminated zones. Moreover, it is recommended to conduct some drilling tests on the detected anomalies in the south of the block to determine the nature of the identified conductive bedrocks.

Respectfully submitted,

Nasreddine Bournas, PhD, PGeo.
Geotech Ltd.
March, 2008

7. REFERENCES

1. J. CHEN, A. RAICHE, AND J. MACNAE, 2000, Inversion of airborne EM data using thin-plate models, SEG 2000 expanded abstracts.

2. STOLZ, E.M.G. AND MACNAE, J.C., 1991 Evaluating EM waveforms by singular-value decomposition of exponential functions. Geophysics, 63, 64-74

3. A.B. REID, J.M. ALLSOP, H. GRANSER, A.J. MILLETT AND I.W. SOMERTON, 1990, Magnetic interpretation in three dimensions using Euler deconvolution, , G*eophysics, 55, 80-91*.

4. Yukon Geological Survey, www.geology.gov.yk.ca

APPENDIX A

VTEM ANOMALY MODELING

I. THIN PLATE

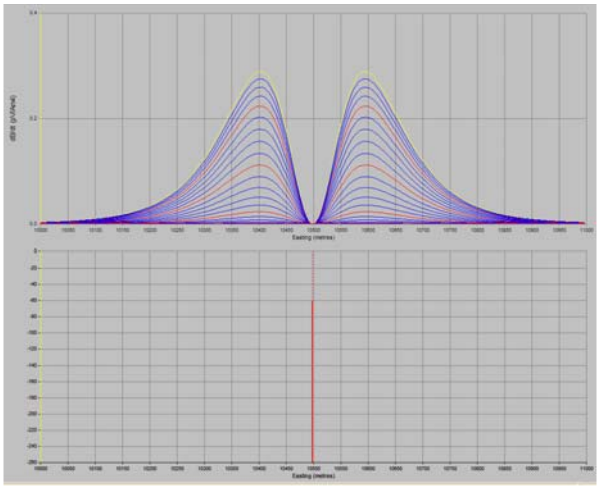

Figure A-1: dB/dt response of a shallow vertical thin plate. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

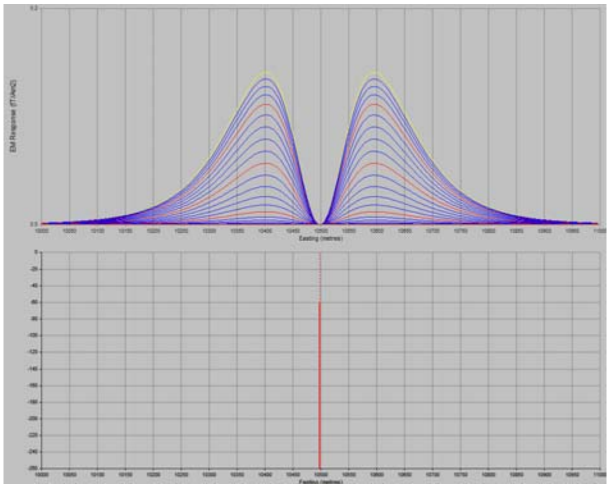

Figure A-2: B-field response of a shallow vertical thin plate. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment.

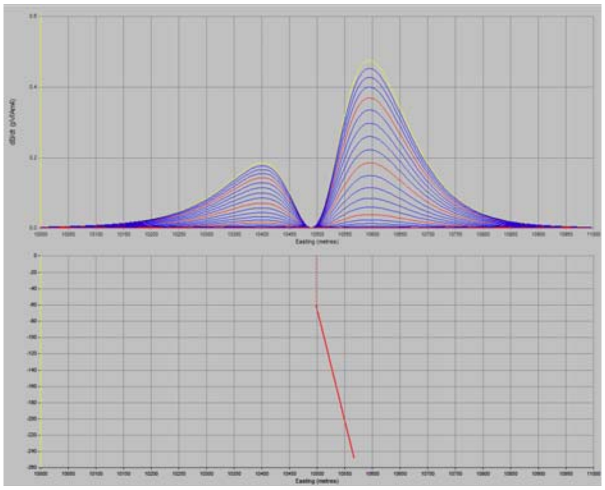

Figure A-3: dB/dt response of a shallow skewed thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

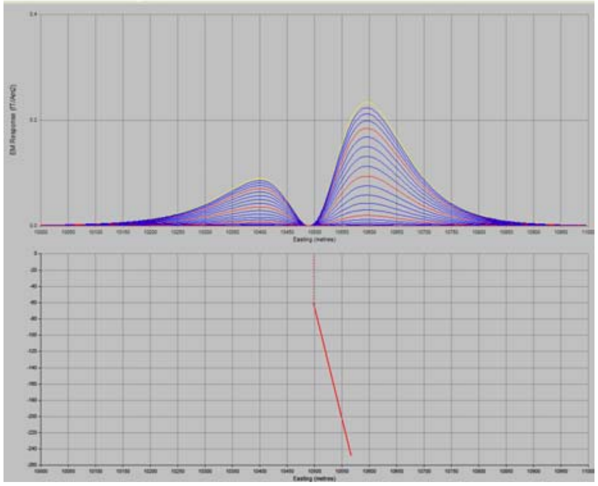

Figure A-4: B-field response of a shallow skewed thin plate. Depth=100 m, CT=20 S.The EM response is normalized by the dipole moment.

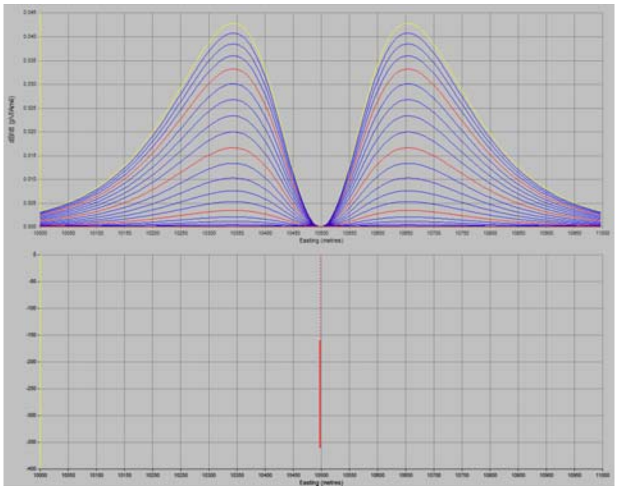

Figure A-5: dB/dt response of a deep vertical thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

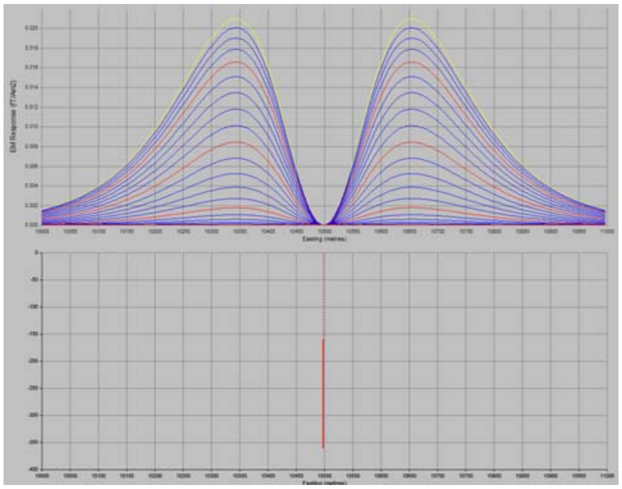

Figure A-6: B-Field response of a deep vertical thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment.

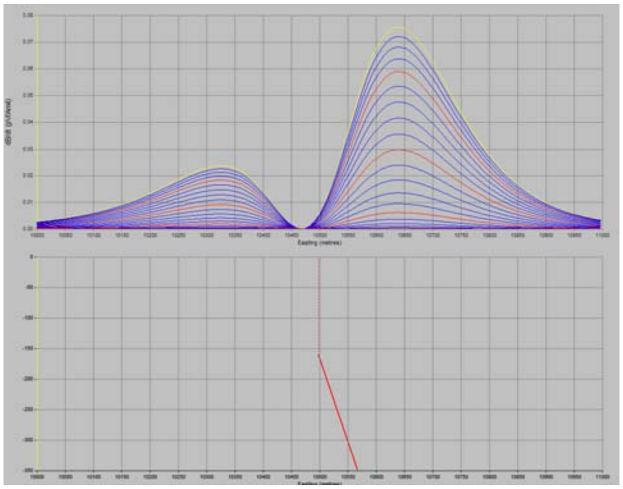

Figure A-7: dB/dt response of a deep skewed thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

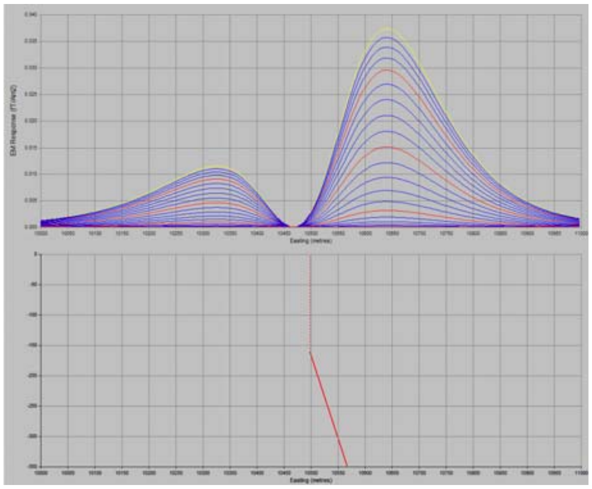

Figure A-8: B-field response of a deep skewed thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment.

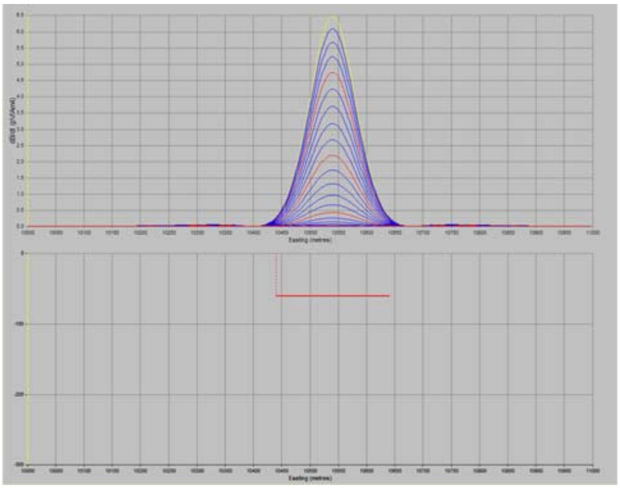

Figure A-9: dB/dt response of a shallow horizontal thin plate. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

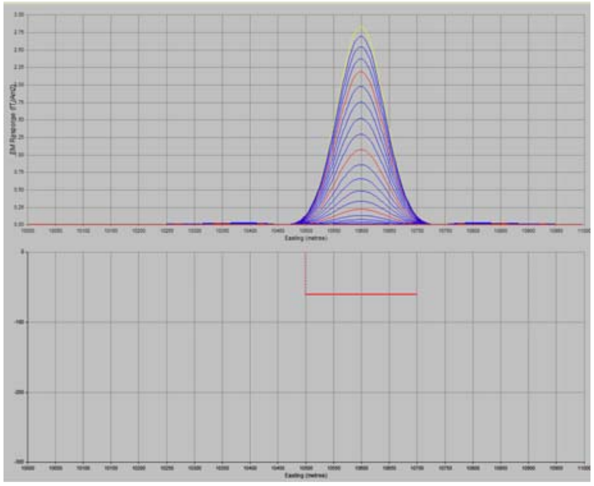

Figure A-10: B-Field response of a shallow horizontal thin plate. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment.

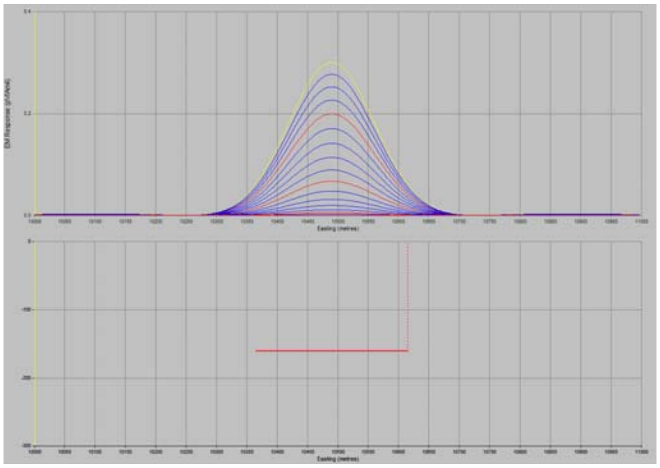

Figure A-11: dB/dt response of a deep horizontal thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

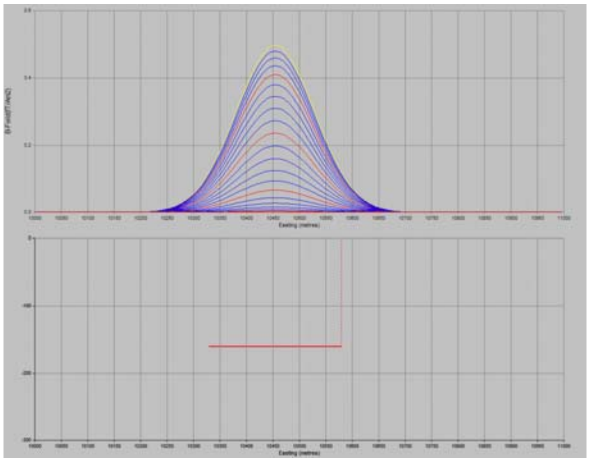

Figure A-12: B-Field response of a deep horizontal thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment.

II. THICK PLATE

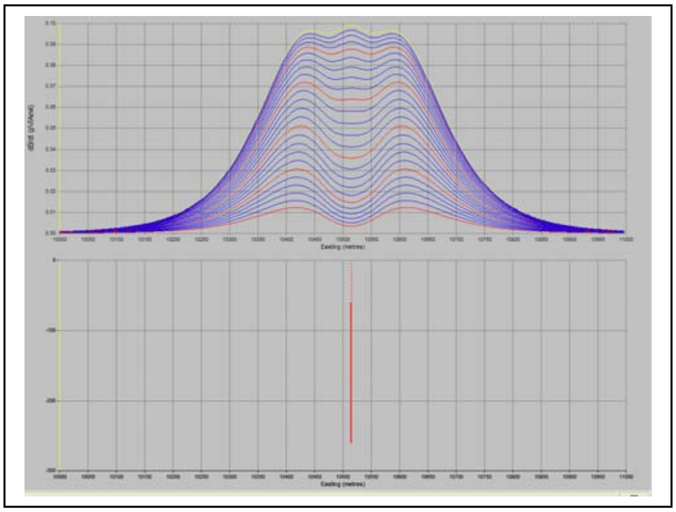

Figure A-13: dB/dt response of a shallow vertical thick plate. Depth=100 m, C=12 S/m, thickness=20 m. The EM response is normalized by the dipole moment and the Rx area.

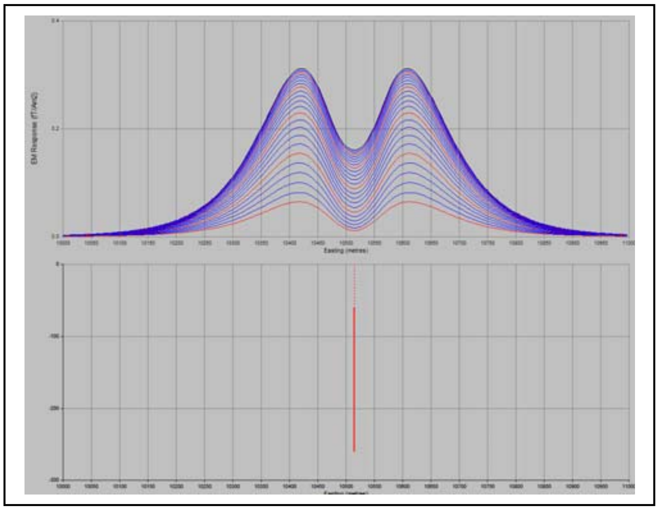

Figure A-14: B-Field response of a shallow vertical thick plate. Depth=100 m, C=12 S/m, thickness= 20 m. The EM response is normalized by the dipole moment.

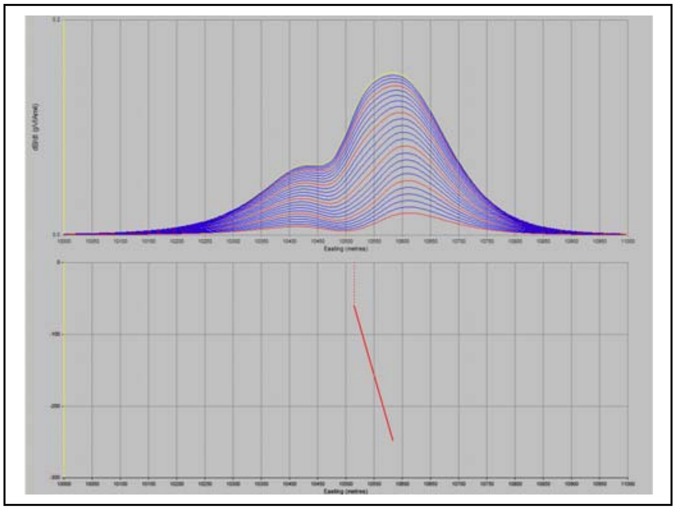

Figure A-15: dB/dt response of a shallow skewed thick plate. Depth=100 m, C=12 S/m, thickness=20 m. The EM response is normalized by the dipole moment and the Rx area.

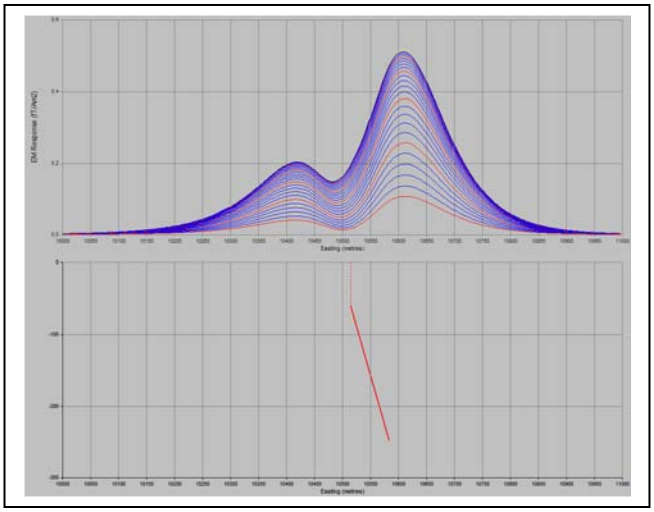

Figure A-16: B-Field response of a shallow skewed thick plate. Depth=100 m, C=12 S/m, thickness=20 m. The EM response is normalized by the dipole moment.

III. MULTIPLE THIN PLATES

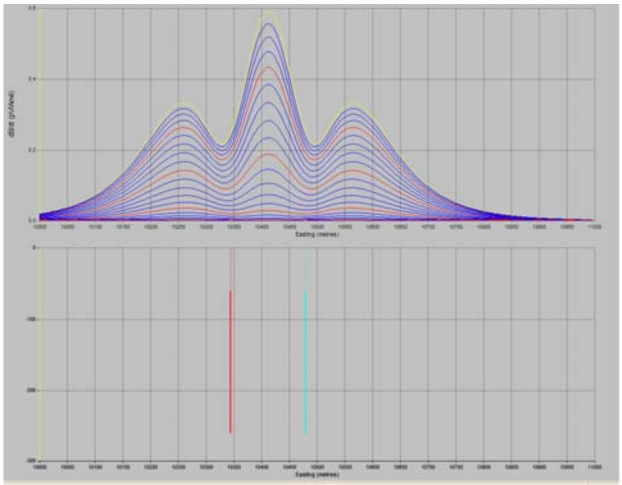

Figure A-17: dB/dt response of two vertical thin plates. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

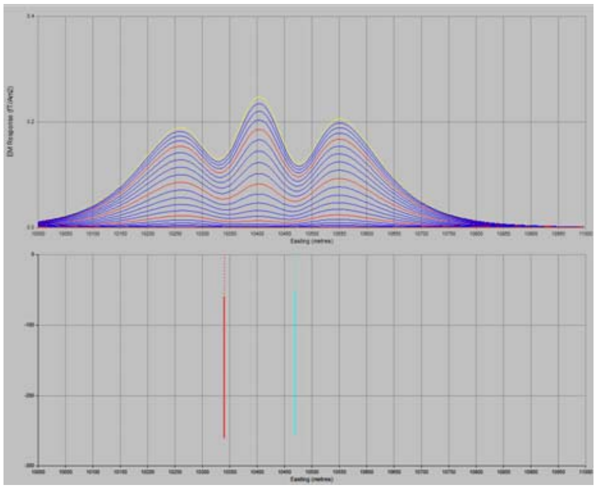

Figure A-18: B-Field response of two vertical thin plates. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment.

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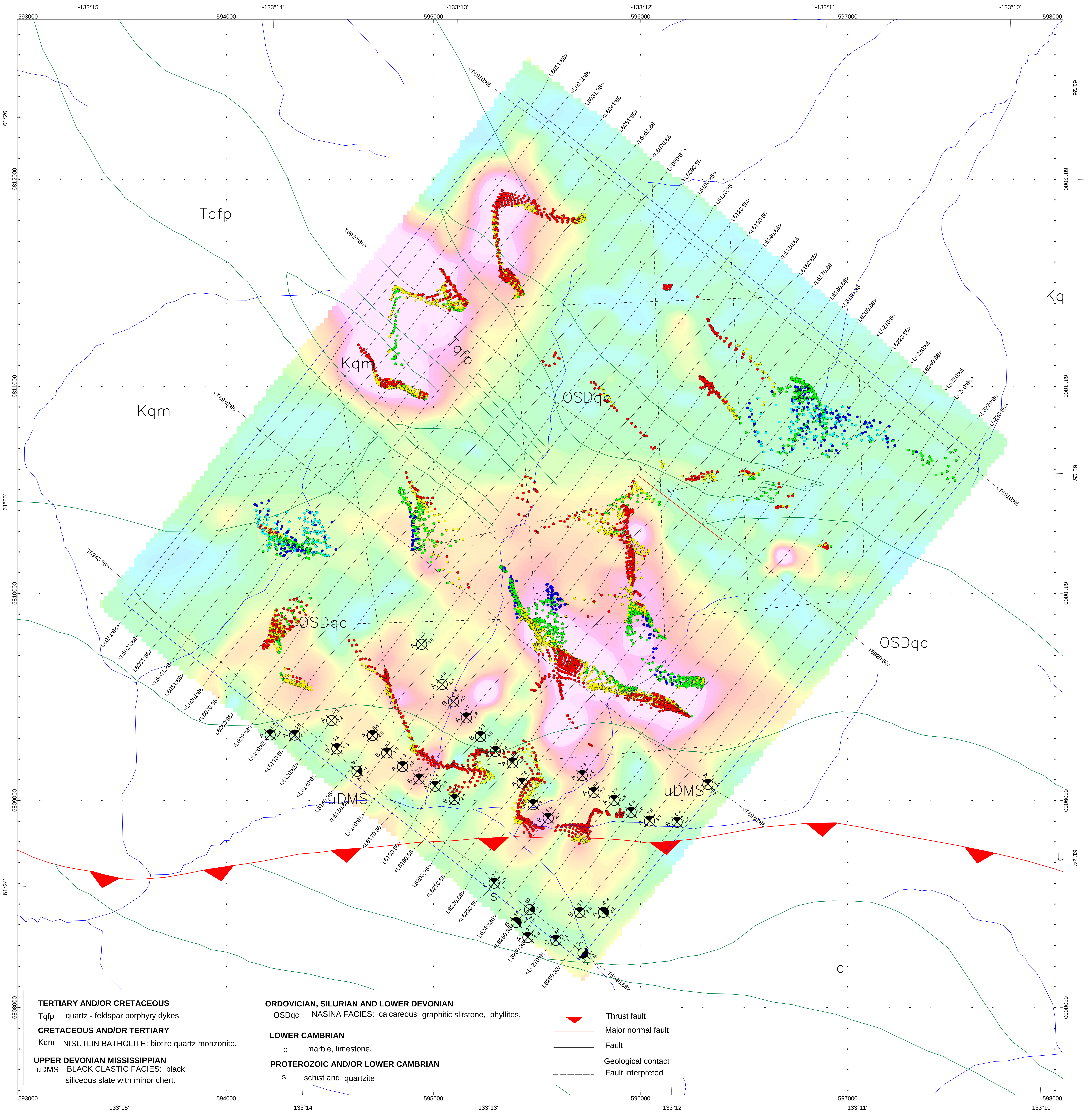


Survey Specifications:

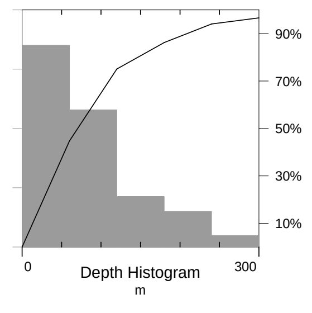
Date Flown: September , 2007
Aircraft: Astar B3 helicopter, Registration C-GTFX
Nominal Flight Line Spacing: 100 metres
Nominal Flight Line Direction: N40°E
Nominal Tie Line Spacing: 1000 metres
Nominal Tie Line Direction: N50°W
Nominal helicopter terrain clearance 140 metres
EM Loop is 40 metres under helicopter
Magnetic sensor is 15 metres under helicopter

Instruments:

Geotech Time Domain Electromagnetic System (VTEM)
with concentric Rx/Tx geometry
Transmitter Loop Diameter 26 m, Base Frequency 30 Hz
Dipole Moment 400,000 NIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.2 ms
Geometrics Optically-pumped,
High Sensitivity Cesium Magnetometer
Magnetometer Resolution 0.02 nT at 10 samples/sec

Euler Solutions
Depth (m)

🔵	> 300
●	200 - 300
●	100 - 200
●	50 - 100
●	< 50



EM Anomaly Symbols

Conductance < 5.0 siemens ○
5.0 < Conductance < 10.0 ◔
10.0 < Conductance < 15.0 ◑
15.0 < Conductance < 20.0 ◕
20.0 < Conductance ●

Anomaly ID — A
Conductance (S) — 0.7
Depth (m) — 80
Tau (ms) — 0.2
Dip (°) — 80°

0.687
0.237
0.169
0.136
0.115
0.097
0.083
0.071
0.060
0.053
0.048
0.042
0.036
0.002

TG
nT/m

TERTIARY AND/OR CRETACEOUS

Tqfp quartz - feldspar porphyry dykes

CRETACEOUS AND/OR TERTIARY

Kqm NISUTLIN BATHOLITH: biotite quartz monzonite.

UPPER DEVONIAN MISSISSIPPIAN

uDMS BLACK CLASTIC FACIES: black siliceous slate with minor chert.

ORDOVICIAN, SILURIAN AND LOWER DEVONIAN

OSDqc NASINA FACIES: calcareous graphitic slitstone, phyllites,

LOWER CAMBRIAN

c marble, limestone.

PROTEROZOIC AND/OR LOWER CAMBRIAN

s schist and quartzite

Thrust fault
Major normal fault
Fault
Geological contact
Fault interpreted

Scale 1:10000
100 0 100 200 300 400 500
(meters)
WGS 84 / UTM zone 8N

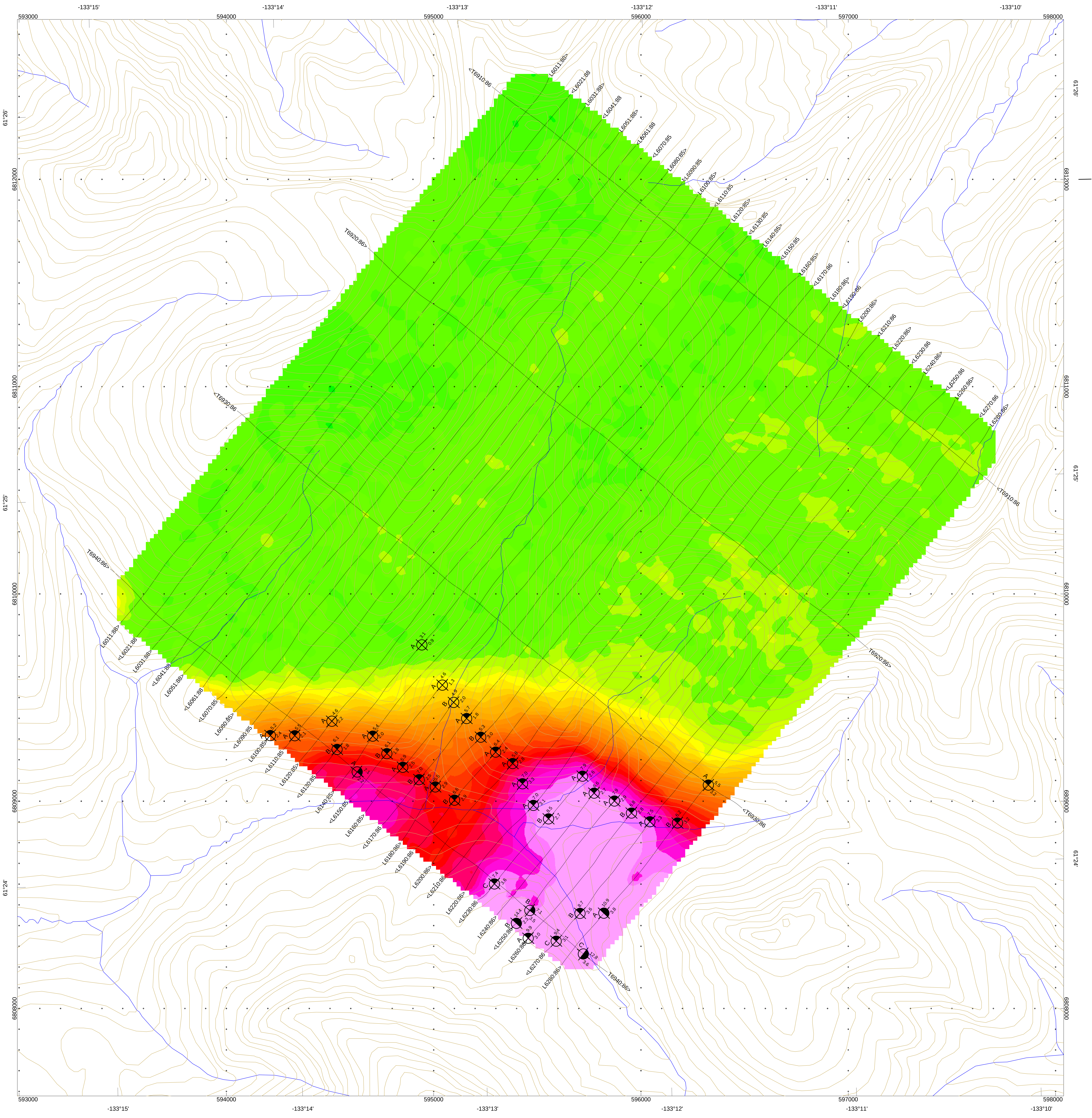
Strategic Metals Ltd.
Obvious Property
Yukon, Canada

Geotech VTEM System
INTERPRETATION MAP

Flown and processed by Geotech Ltd.
245 Industrial Parkway N.,
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

March 2008

Project 7067



GEOTECH LTD.

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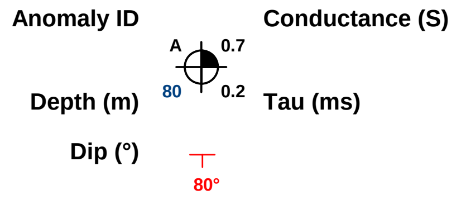
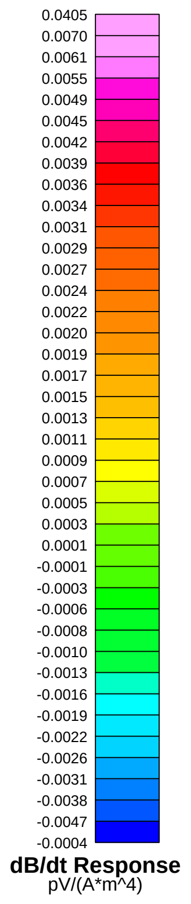
Transmitter Wave Form: Trapezoid, Pulse Width 7.2 ms
Geometrics Optically-pumped,
High Sensitivity Cesium Magnetometer
Magnetometer Resolution 0.02 nT at 10 samples/sec

Anomaly Symbols

Conductance < 5.0 siemens	○
5.0 < Conductance < 10.0	◔
10.0 < Conductance < 15.0	◑
15.0 < Conductance < 20.0	◕
20.0 < Conductance	●





Scale 1:10000

(meters)

WGS 84 / UTM zone 8N

Strategic Metals Ltd.
Obvious Property
Yukon, Canada

Geotech VTEM System
EM Picked Anomalies & late time dB/dt Channel (6.578 ms)

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GEOTECH LTD.

March 2008

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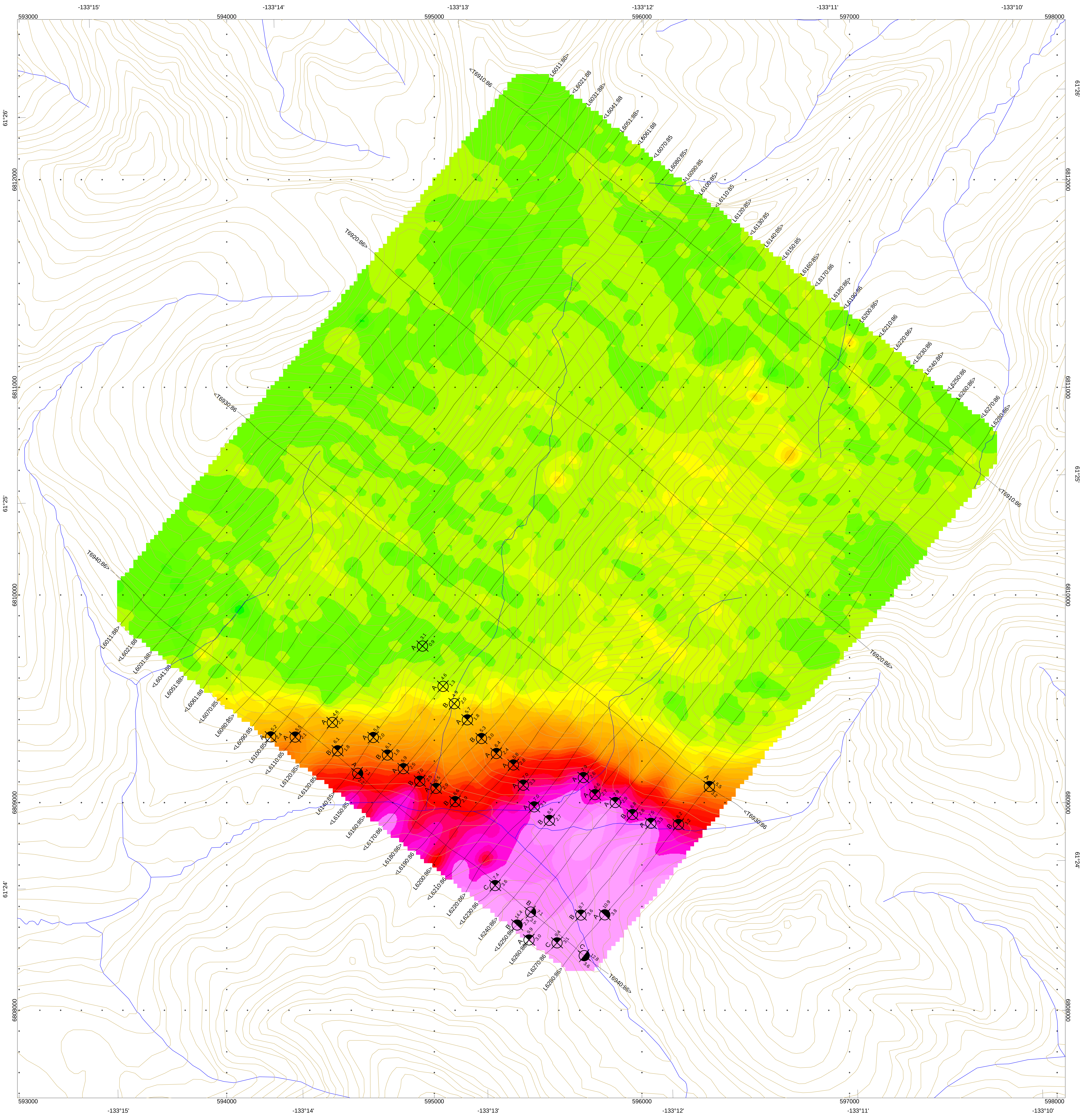

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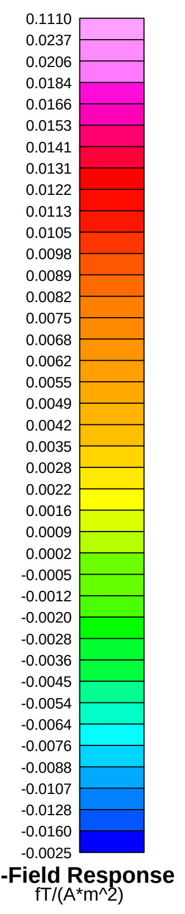
Anomaly Symbols

Conductance < 5.0 siemens	○
5.0 < Conductance < 10.0	◔
10.0 < Conductance < 15.0	◑
15.0 < Conductance < 20.0	◕
20.0 < Conductance	●

Anomaly ID A 0.7 **Conductance (S)**
Depth (m) 80 0.2 **Tau (ms)**
Dip (°) 80°



B-Field Response
fT/(A*m^2)

Scale 1:10000

100 0 100 200 300 400 500

(meters)

WGS 84 / UTM zone 8N

Strategic Metals Ltd.
Obvious Property
Yukon, Canada

Geotech VTEM System

EM Picked Anomalies & late time B-Field Channel (6.578 ms)

Flown and processed by Geotech Ltd.
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Aurora, Ontario, Canada L4G 4C4
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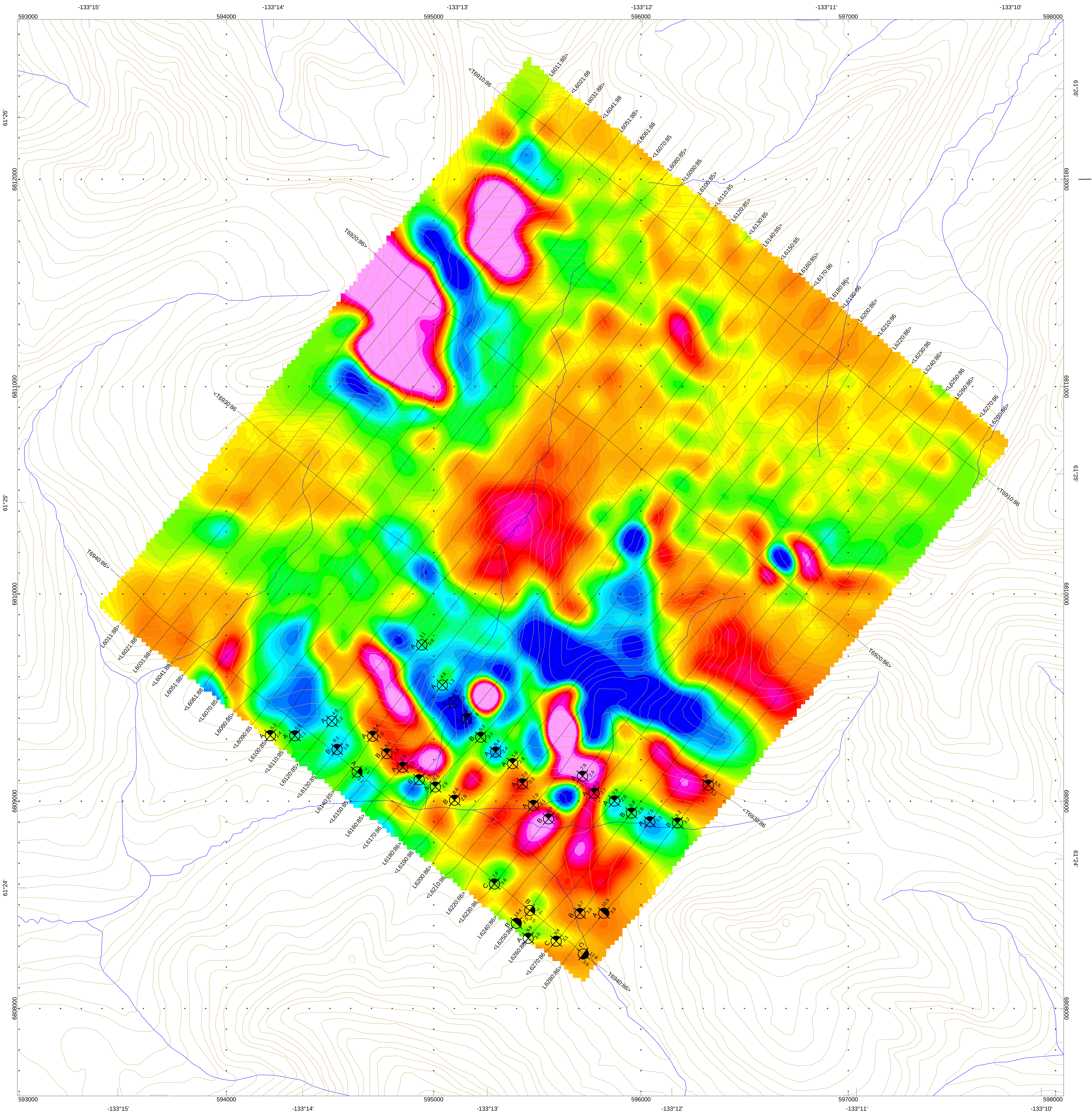
March 2008

Project 7067



GEOTECH LTD.

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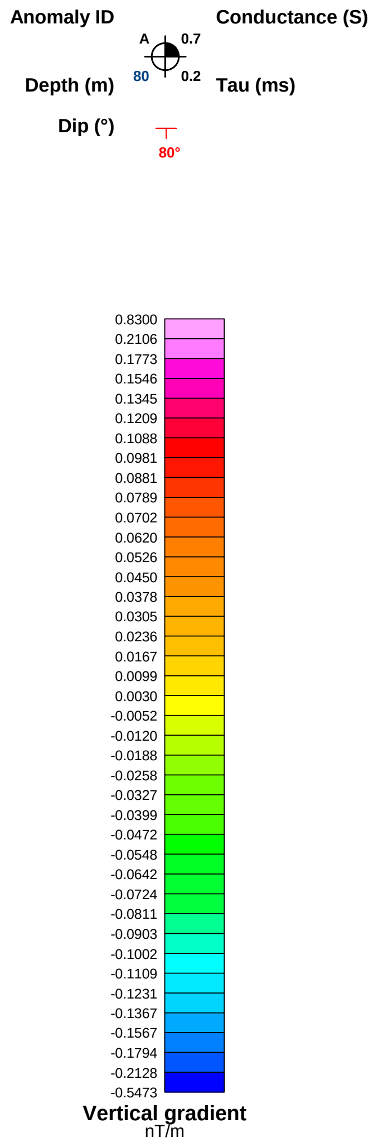
10.0 < Conductance < 15.0	◑
15.0 < Conductance < 20.0	◕
20.0 < Conductance	●



Scale 1:10000

100 0 100 200 300 400 500

(meters)

WGS 84 / UTM zone 8N

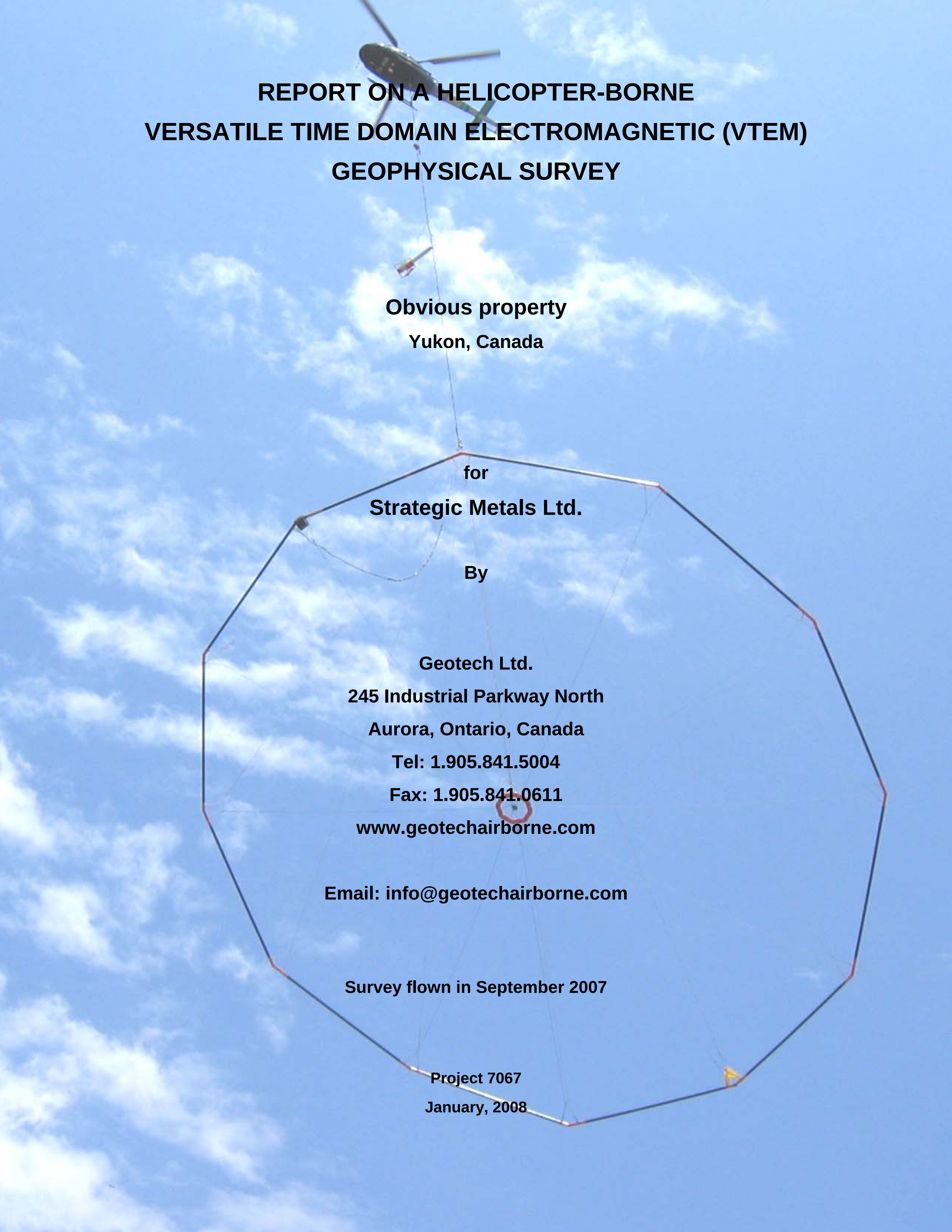
Strategic Metals Ltd.
Obvious Property
Yukon, Canada

Geotech VTEM System
Vertical gradient of TMI

Flown and processed by Geotech Ltd.
245 Industrial Parkway N.,
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

March 2008

Project 7067



REPORT ON A HELICOPTER-BORNE VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM) GEOPHYSICAL SURVEY

Obvious property

Yukon, Canada

for

Strategic Metals Ltd.

By

Geotech Ltd.
245 Industrial Parkway North
Aurora, Ontario, Canada
Tel: 1.905.841.5004
Fax: 1.905.841.0611
www.geotechairborne.com

Email: info@geotechairborne.com

Survey flown in September 2007

Project 7067
January, 2008

TABLE OF CONTENTS

APPENDICES

REPORT ON A HELICOPTER-BORNE
VERSATILE TIME DOMAIN ELECTROMAGNETIC SURVEY

Obvious property, Yukon, Canada

Executive Summary

This report describes the Helicopter-borne geophysical survey carried out on behalf of Strategic Metals Ltd. by Geotech Ltd. over one block in Yukon, Canada.

Principal geophysical sensors included a versatile time domain electromagnetic (VTEM) system and a cesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 96.05 line-km were flown.

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

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

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 Ltd. and Archer Cathro & Associates to perform a helicopter-borne geophysical survey over one block located in Yukon, Canada.

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

Bill Wengzynowski, acted on behalf of Strategic Metals Ltd. during data acquisition and data processing phases of this project.

The survey block is as shown in Appendix A.

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

The helicopter was based at the Whitehorse airport for the duration of the survey. Survey flying was completed on September 11th, 2007. 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 Ltd. in January, 2008.

1.2. Survey and System Specifications

The survey block was flown at nominal traverse line spacing of 100 metres, at N38E / N218E direction. Tie lines were flown perpendicular to traverse lines.

Where possible, the helicopter maintained a mean terrain clearance of 130 metres, which translated into an average height of 95 metres above ground for the bird-mounted VTEM system and 115 metres for the magnetic sensor.

The survey was flown using an Astar B3 helicopter, registration C-GTFX. The helicopter was operated by TRK helicopters. 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 Ltd.

A database, grids 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 and cultural features

The survey block is located in Yukon, approximately 125 kilometers north east of the town of Whitehorse.

Topographically, the survey area exhibits a challenging mountainous terrain, with elevation range from 1200 metres to 1890 metres above sea level.

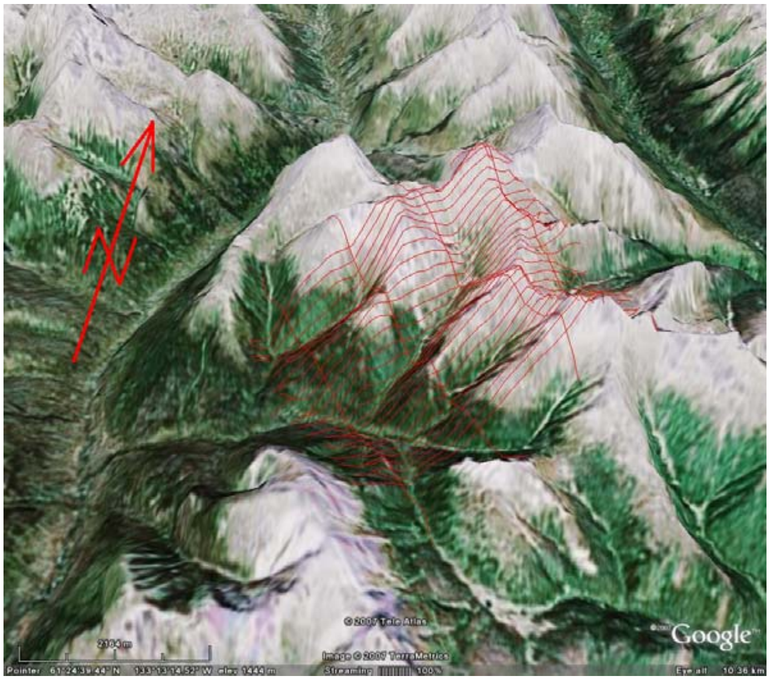


Figure 1 – Projection of flight path on topography.

2. DATA ACQUISITION

2.1. *Survey Area*

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

Survey block	Line spacing (m)	Area (Km2)	Line-km	Flight direction	Line number
OBVIOUS	100	8.12	84.05	N38E / N218E	L6010 - L6280
	1000		12.00	N128E / N308E	T6910 - T6940

Table 1 - Survey block

Survey block boundaries co-ordinates are provided in Appendix B.

2.2. *Survey Operations*

Survey operations were based in Whitehorse, Yukon for the acquisition phase of the survey.

The following table shows the timing of the flying.

Date	Flight #	Flown KM	Block	Crew Location	Comments
09-Sept-07	85, 86	77.7	OBVIOUS	Whitehorse, Yukon	Production
10-Sept-07			OBVIOUS	Whitehorse, Yukon	Technical issues and weather delay
11-Sept-07	88	18.35	OBVIOUS	Whitehorse, Yukon	Other blocks flown

Table 2 - Survey schedule

2.3. Flight Specifications

The nominal EM sensor terrain clearance was 95 m (EM bird height above ground, i.e. helicopter is maintained 130 m above ground) due to rough terrain and helicopter crew safety. 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 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 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 B3 helicopter, registration C-GTFX - owned and operated by TRK 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 Time Domain EM (VTEM) system. The configuration is as indicated in Figure 2 below.

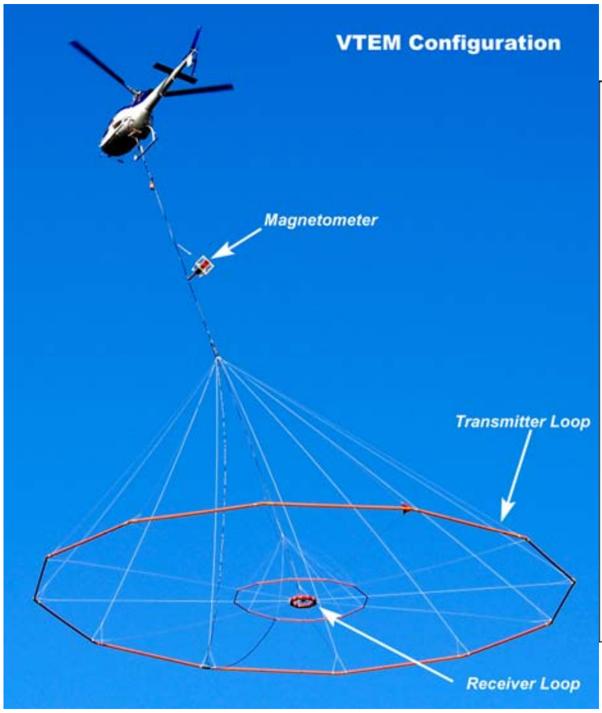


Figure 2 – VTEM configuration

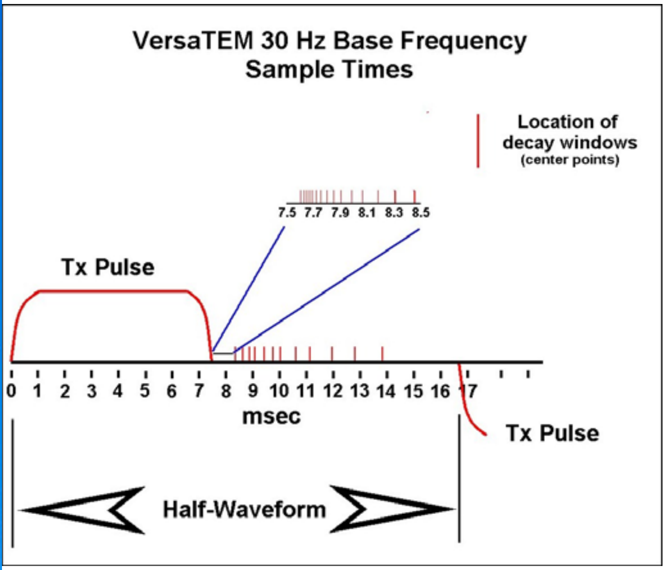


Figure 3 – Sample times

Receiver and transmitter coils are concentric and Z-direction oriented.
The receiver decay recording scheme is shown diagrammatically in Figure 3.

Twenty-four measurement gates were used in the range from 120 μs to 6578 μs, as shown in Table 3.

VTEM Decay Sampling scheme				
Array	**(Microseconds)**			
Index	**Time Gate**	**Start**	**End**	**Width**
10	120	110	131	21
11	141	131	154	24
12	167	154	183	29
13	198	183	216	34
14	234	216	258	42
15	281	258	310	53
16	339	310	373	63
17	406	373	445	73
18	484	445	529	84
19	573	529	628	99
20	682	628	750	123
21	818	750	896	146
22	974	896	1063	167
23	1151	1063	1261	198
24	1370	1261	1506	245
25	1641	1506	1797	292
26	1953	1797	2130	333
27	2307	2130	2526	396
28	2745	2526	3016	490
29	3286	3016	3599	583
30	3911	3599	4266	667
31	4620	4266	5058	792
32	5495	5058	6037	979
33	6578	6037	7203	1167

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 192 Amp.
Pulse width was 7.36 ms
Duty cycle was 43%.
Peak dipole moment was 407,600 NIA.

Receiver coil diameter was 1.2 metre, the number of turns was 100.
Receiver effective area was 113.1 m^2
Wave form – trapezoid.
Recording sampling rate was 10 samples per second.

The EM bird was towed 42 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 separated bird, towed 15 metres below the helicopter, as shown on figure 1. 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. The data type and sampling interval as provided in table 4.

DATA TYPE	SAMPLING
TDEM	0.1 sec
Magnetometer	0.1 sec
GPS Position	0.2 sec
RadarAltimeter	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 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 100 metres from the airport in Whitehorse, 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

Project Manager:	Harish Kumar
Crew chief:	Keith Lavelley
Operator:	Paul Taylor

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

Pilot:	Randy Marks
Engineer:	Chris Ward

Office

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

Data acquisition and processing phases were carried out under the supervision of Andrei Bagrianski, Surveys Manager. Overall management of the project was undertaken by Edward Morrison, President, Geotech Ltd.

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 time gates, in linear - logarithmic scale for both B-field and dB/dt response.

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

Graphical representation of the VTEM output voltage of the receiver coil and the transmitter current 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.

A micro-levelling procedure was applied to remove persistent low-amplitude components of flight-line noise remaining in the data. Where Tie lines were available, Tie line levelling was carried out by adjusting intersection points along the traverse lines.

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 0.1 cm at the mapping scale. The Minimum Curvature algorithm was used to interpolate values onto a rectangular regular spaced grid.

The survey area shows an average magnetic activity. Maximum values of 57995 nT are observed along the NE boundary of the block. Average of 57646 nT is detected in the survey area.

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 PDF format.

5.2. *Maps*

Final maps were produced at a scale of 1:10,000. The coordinate/projection system used was the WGS84, UTM zone 8N. All maps show the flight path trace and topographic data. Latitude and longitude are also noted on the maps.

The following maps are presented on paper,

- dB/dt profiles, Time Gates 0.234 – 6.578 ms in linear - logarithmic scale
- B-field profiles, Time Gates 0.234 – 6.578 ms in linear - logarithmic scale
- Total Magnetic intensity contours and colour image

5.3. *Digital Data*

Two copies of DVDs were prepared.

There are two (2) main directories,

Data	contains a database, grids and maps, as described below.
Report	contains a copy of the report and appendices in PDF format.

a kml file containing flightpath of the OBVIOUS property.
A 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 8 north)
Y:	Y positional data (metres – WGS84, utm zone 8 north)
Z:	GPS antenna elevation (metres - ASL)
Radar:	Helicopter terrain clearance from radar altimeter (metres - AGL)
Radarb:	EM Loop terrain clearance from radar altimeter (metres - AGL)
DEM:	Digital elevation model (metres)
Gtime1:	GPS time (seconds of the day)
Mag1:	Raw Total Magnetic field data (nT)
Basemag:	Magnetic diurnal variation data (nT)
Mag2:	Total Magnetic field diurnal variation corrected data (nT)
Mag3:	Leveled Total Magnetic field data (nT)
SF[10]:	dB/dt 120 microsecond time channel (pV/A/m^4)
SF[11]:	dB/dt 141 microsecond time channel (pV/A/m^4)
SF[12]:	dB/dt 167 microsecond time channel (pV/A/m^4)
SF[13]:	dB/dt 198 microsecond time channel (pV/A/m^4)
SF[14]:	dB/dt 234 microsecond time channel (pV/A/m^4)
SF[15]:	dB/dt 281 microsecond time channel (pV/A/m^4)
SF[16]:	dB/dt 339 microsecond time channel (pV/A/m^4)
SF[17]:	dB/dt 406 microsecond time channel (pV/A/m^4)
SF[18]:	dB/dt 484 microsecond time channel (pV/A/m^4)
SF[19]:	dB/dt 573 microsecond time channel (pV/A/m^4)
SF[20]:	dB/dt 682 microsecond time channel (pV/A/m^4)
SF[21]:	dB/dt 818 microsecond time channel (pV/A/m^4)
SF[22]:	dB/dt 974 microsecond time channel (pV/A/m^4)
SF[23]:	dB/dt 1151 microsecond time channel (pV/A/m^4)
SF[24]:	dB/dt 1370 microsecond time channel (pV/A/m^4)
SF[25]:	dB/dt 1641 microsecond time channel (pV/A/m^4)
SF[26]:	dB/dt 1953 microsecond time channel (pV/A/m^4)
SF[27]:	dB/dt 2307 microsecond time channel (pV/A/m^4)
SF[28]:	dB/dt 2745 microsecond time channel (pV/A/m^4)
SF[29]:	dB/dt 3286 microsecond time channel (pV/A/m^4)
SF[30]:	dB/dt 3911 microsecond time channel (pV/A/m^4)
SF[31]:	dB/dt 4620 microsecond time channel (pV/A/m^4)
SF[32]:	dB/dt 5495 microsecond time channel (pV/A/m^4)
SF[33]:	dB/dt 6578 microsecond time channel (pV/A/m^4)
BF[10]:	B-field 120 microsecond time channel (pV*ms)/(A*m^4)
BF[11]:	B-field 141 microsecond time channel (pV*ms)/(A*m^4)
BF[12]:	B-field 167 microsecond time channel (pV*ms)/(A*m^4)
BF[13]:	B-field 198 microsecond time channel (pV*ms)/(A*m^4)
BF[14]:	B-field 234 microsecond time channel (pV*ms)/(A*m^4)

BF[15]: B-field 281 microsecond time channel (pV*ms)/(A*m^4)
BF[16]: B-field 339 microsecond time channel (pV*ms)/(A*m^4)
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BF[19]: B-field 573 microsecond time channel (pV*ms)/(A*m^4)
BF[20]: B-field 682 microsecond time channel (pV*ms)/(A*m^4)
BF[21]: B-field 818 microsecond time channel (pV*ms)/(A*m^4)
BF[22]: B-field 974 microsecond time channel (pV*ms)/(A*m^4)
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BF[31]: B-field 4620 microsecond time channel (pV*ms)/(A*m^4)
BF[32]: B-field 5495 microsecond time channel (pV*ms)/(A*m^4)
BF[33]: B-field 6578 microsecond time channel (pV*ms)/(A*m^4)
PLM: Power line monitor

Electromagnetic B-field and dB/dt data is found in array channel format between indexes 10 – 33, as described above.

- Database 7067obv_wform.gdb in Geosoft GDB format, containing the following channels:

Time:	Sampling rate interval, 10.416 microseconds
Volt:	output voltage of the receiver coil (volt)

- Grids in Geosoft GRD format, as follow,

Obvious_magfin:	Total magnetic intensity (nT)
Obvious_DEM:	Digital elevation model (m)

A Geosoft .GRD file has a .GI metadata file associated with it, containing grid projection information.
Grid cell size of 10 metres was used.

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

Obvious_Magfin:	Total magnetic intensity contours and colour image
Obvious_dBdt:	VTEM dB/dt profiles, Time Gates 0.234 – 6.578 ms in linear - logarithmic scale
Obvious_EMLP:	VTEM B-field profiles, Time Gates 0.234 – 6.578 ms in linear - logarithmic scale

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

6. CONCLUSIONS

A helicopter-borne versatile time domain electromagnetic (VTEM) geophysical survey has been completed over the Obvious property, located in Yukon, Canada.

The total area coverage is 8.12 km^2. Total survey line coverage is 96.05 line kilometres. The principal sensors included a Time Domain EM system and a magnetometer. Results have been presented as stacked profiles and contour colour images at a scale of 1:10,000.

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

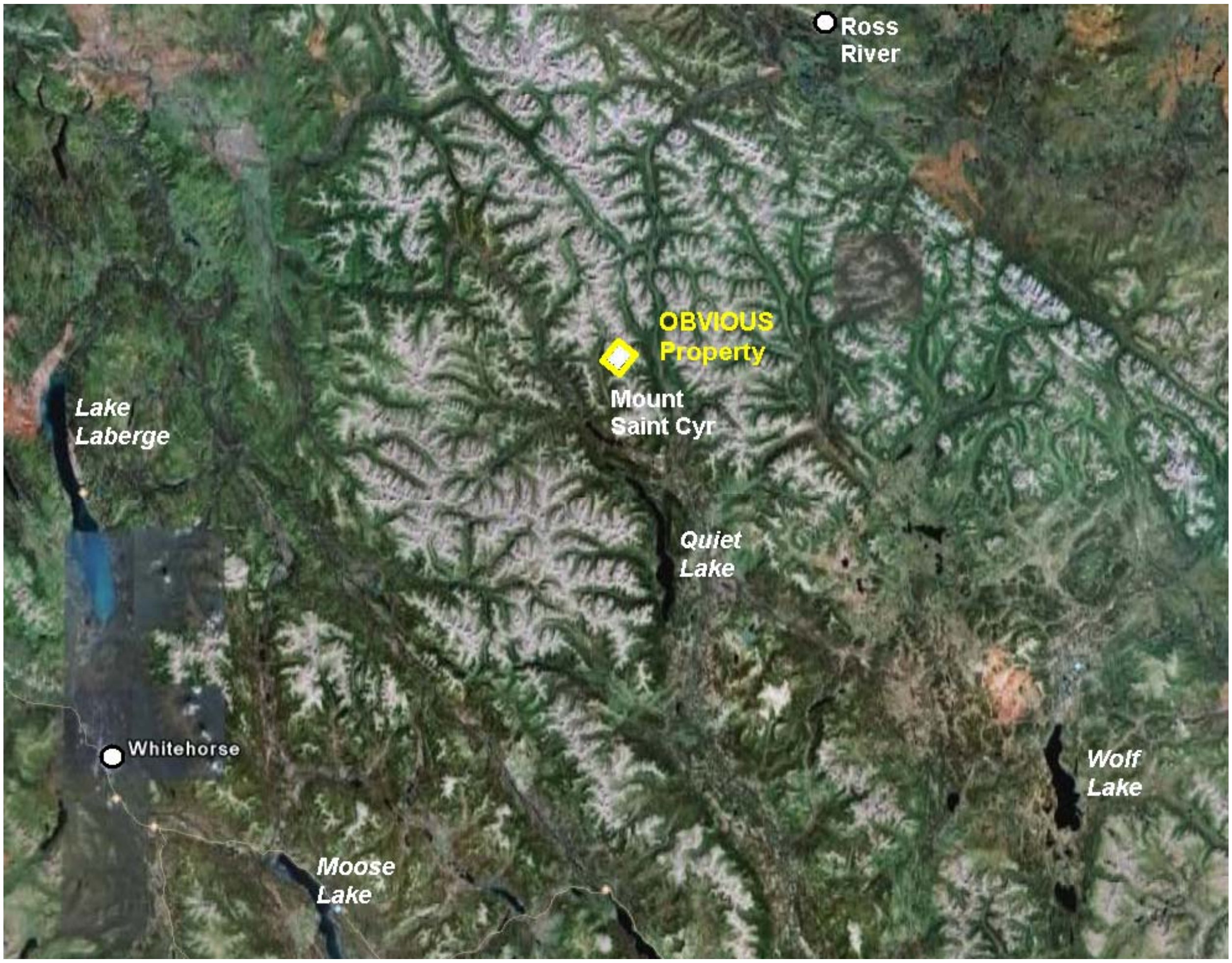
A number of EM anomaly groupings were identified. Ground follow-up of those anomalies should be carried out if favourably supported by other geoscientific data.

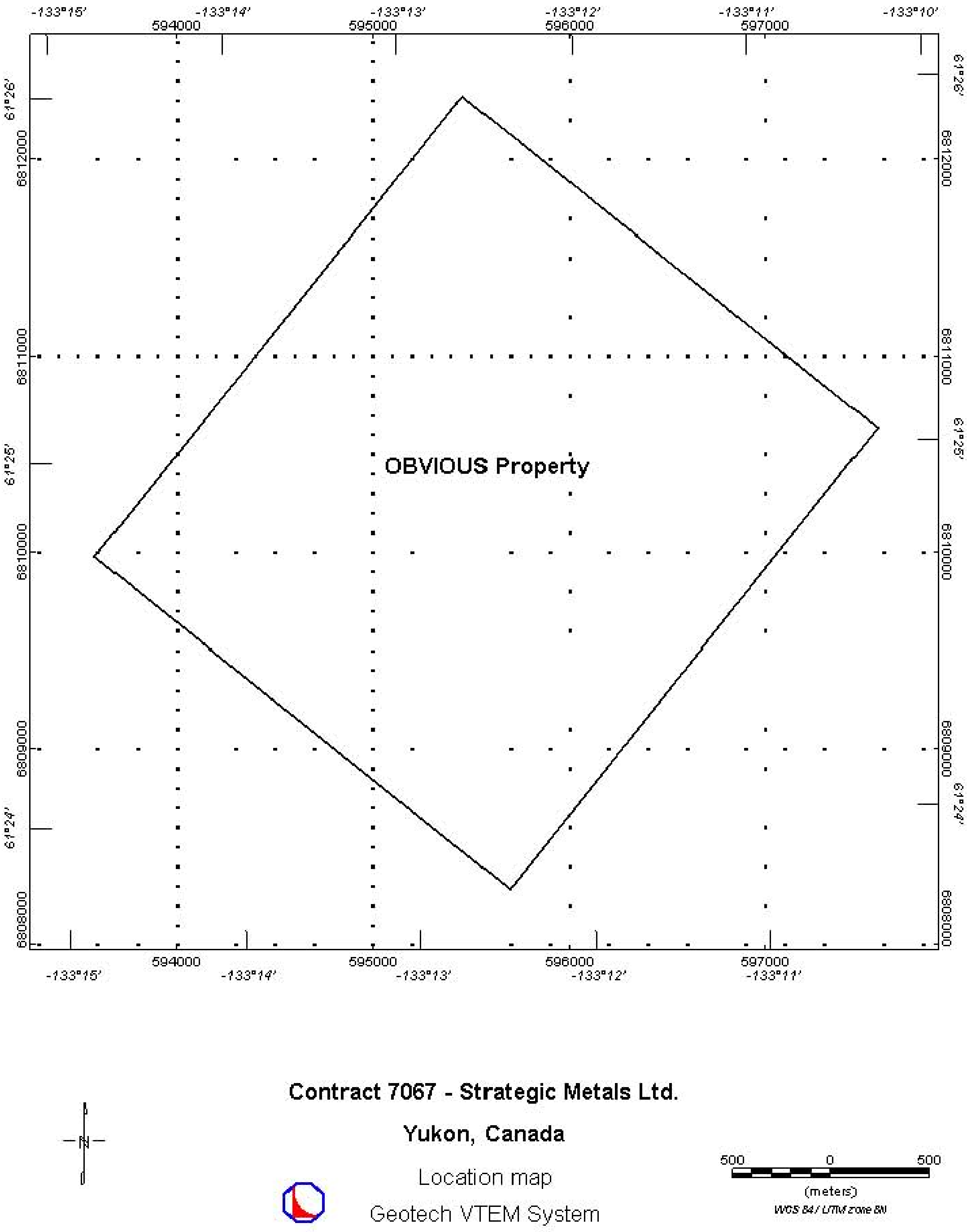
Respectfully submitted,

George Lev
Geotech Ltd.
January, 2008

APPENDIX A

SURVEY BLOCK LOCATION MAP





Contract 7067 - Strategic Metals Ltd.

Yukon, Canada

Location map

Geotech VTEM System

APPENDIX B

SURVEY BLOCK COORDINATES

(WGS 84, UTM zone 8 north)

Obvious property

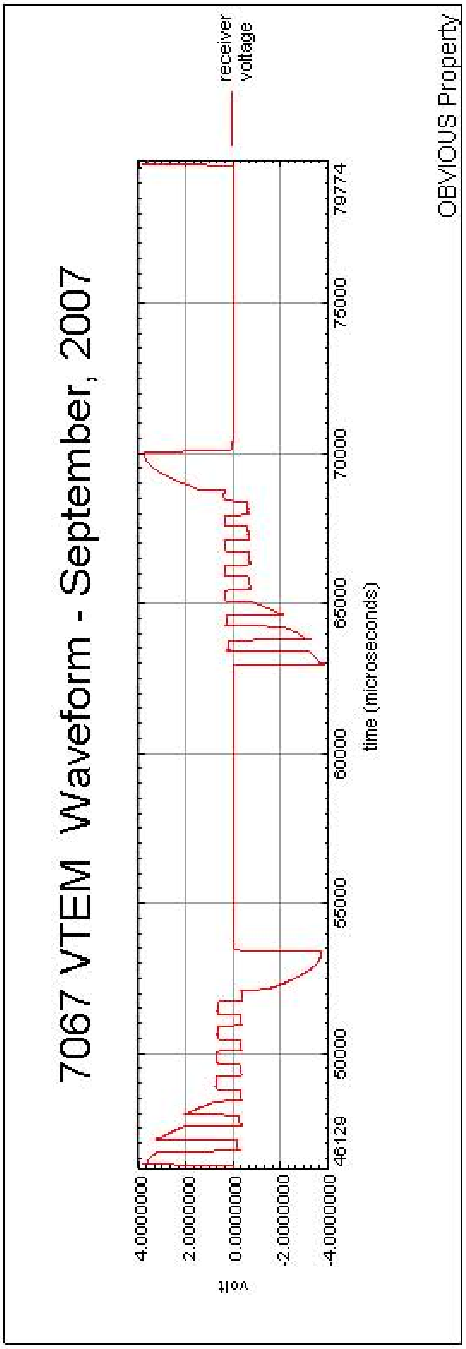
OBVIOUS	
Easting	**Northing**
597568	6810633
595694	6808288
593581	6809976
595455	6812321

APPENDIX C

MODELING VTEM DATA

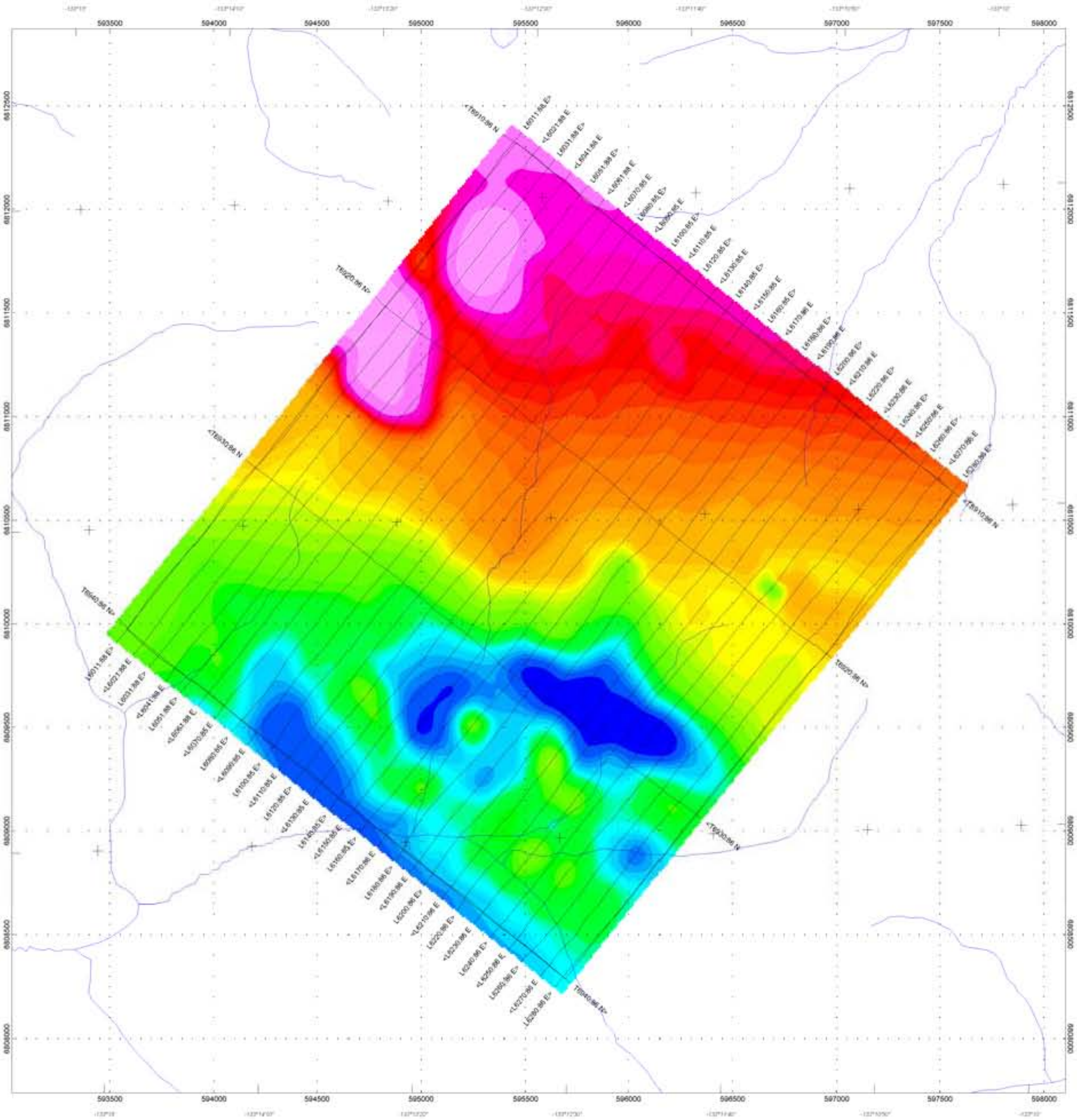
APPENDIX D

VTEM WAVEFORM



APPENDIX E

GEOPHYSICAL MAP



MODELING VTEM DATA

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 meters 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.

Late in 2006, Geotech Ltd. incorporated a B-Field measurement in the VTEM system. The B-Field measurements have the advantage of containing more spectral energy at low spectral frequencies than the dB/dt measurements; hence, greater amplitudes and accuracies when encountering targets with higher conductances (> 500 Siemens). The converse is true at higher spectral frequencies where dB/dt measurements are best applied. The B-field is most widely used in nickel exploration where a small percentage of targets are extremely conductive (> 2500 Siemens) and less resolvable or invisible (below the noise threshold) using dB/dt measurements.

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.

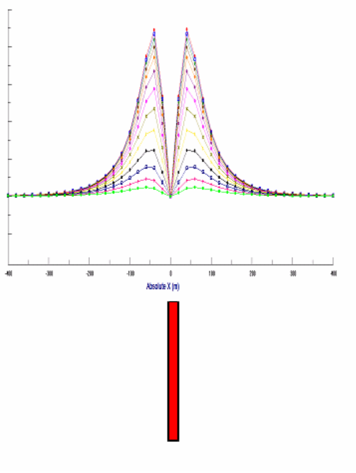
Figure H shows a special case where two plates are positioned to represent a synclinal structure. Note that the main characteristic to remember is the centre amplitudes are higher (approximately double) compared to the high shoulder of a single plate. This model is very representative of tightly folded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

Variation of Prism Depth

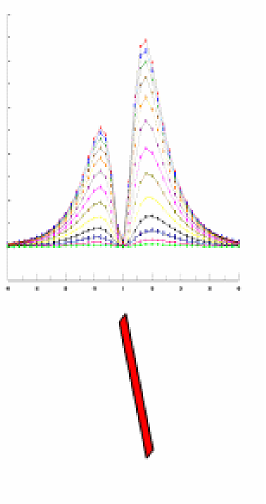
Finally, with prism models, another algorithm is required to represent current on the plate. A plate model is considered to be infinitely thin with respect to thickness and incapable of representing the current in the thickness dimension. A prism model is constructed to deal with this problem, thereby,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

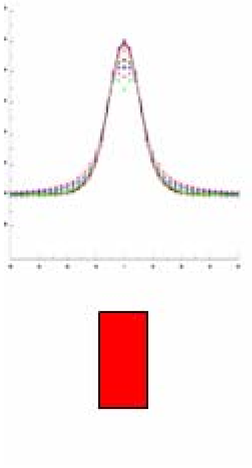
A



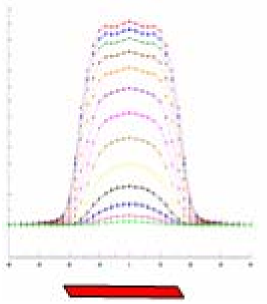
B



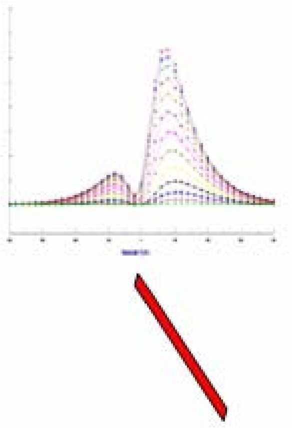
C



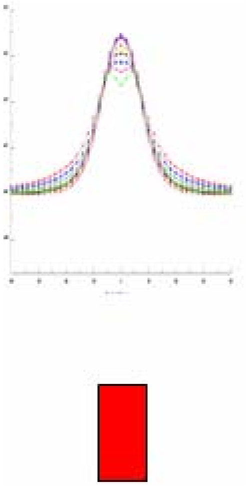
D



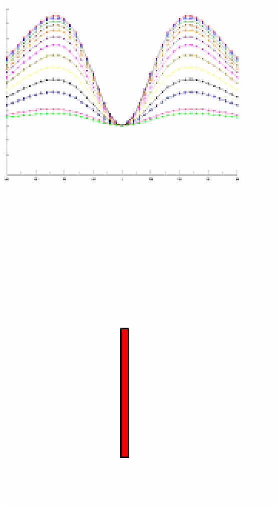
E



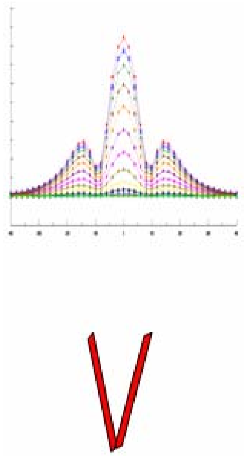
F



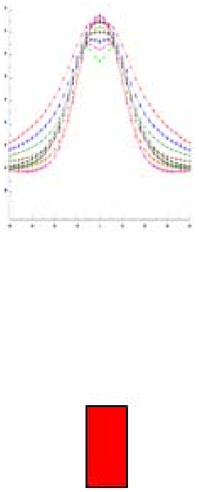
G



H



I



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, it 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.

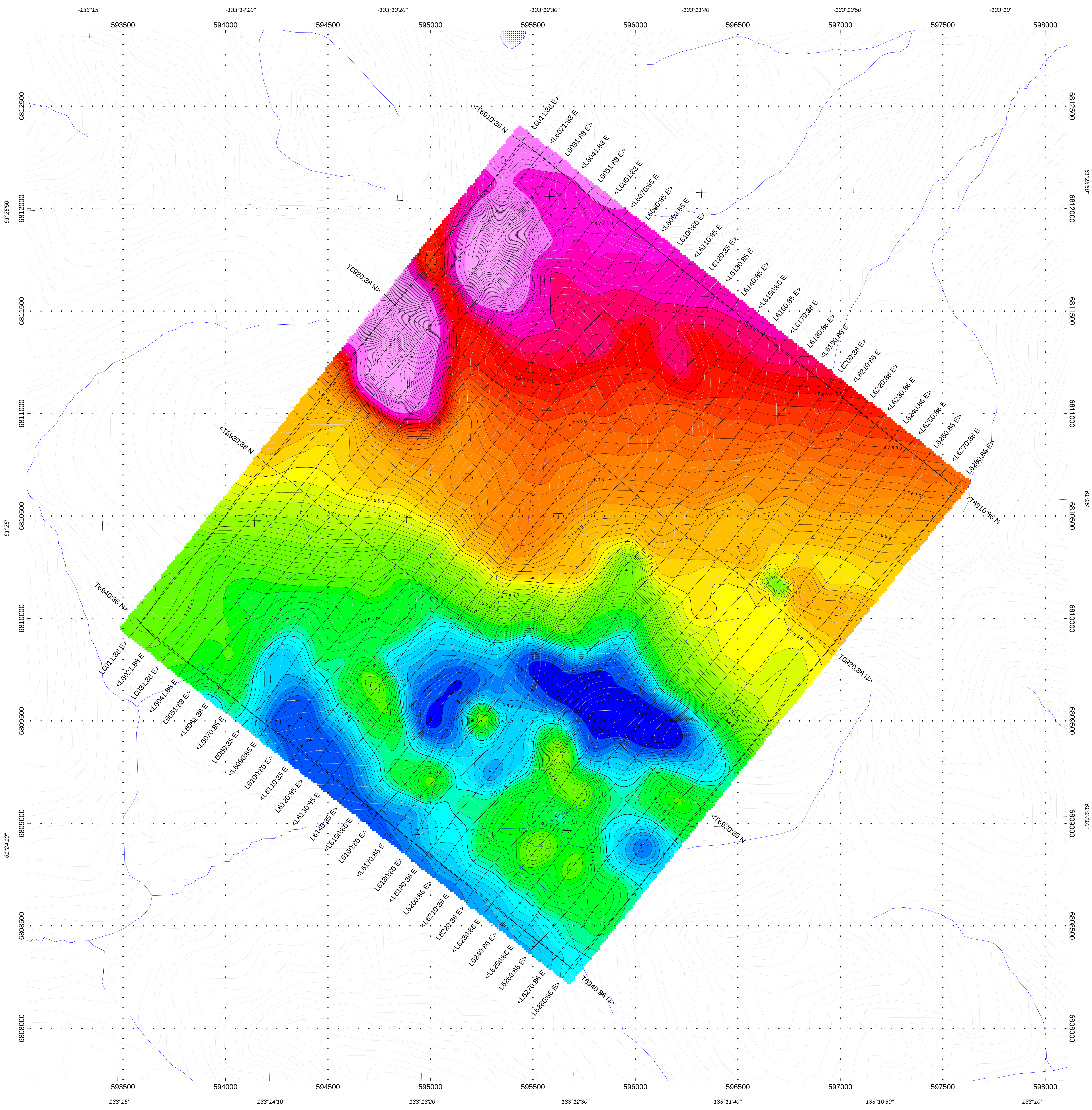
It is sometimes difficult to distinguish between responses associated with the edge effects of flat lying conductors and poorly conductive bedrock conductors. Poorly conductive bedrock conductors having low dip angles will also exhibit responses that may be interpreted as surfacial overburden conductors. 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.

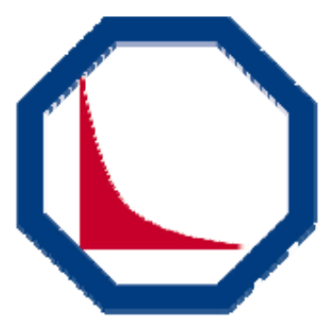
The EM interpretation process used, places considerable emphasis on determining an understanding of the general conductive patterns in the area of interest. Each area has different characteristics and these can effectively guide the detailed process used.

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.

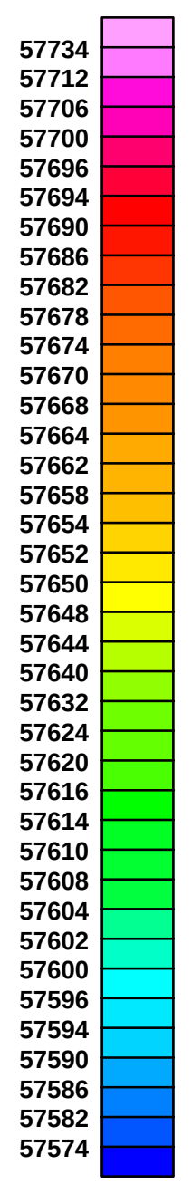




GEOTECH LTD.

Survey Specifications:
Dates Flown: September 9-11, 2007
Survey Base: Whitehorse, YT
Aircraft: Astar B3 helicopter, Registration C-GTFX
Nominal Flight Line Spacing: 100 metres
Nominal Flight Line Directions: N38°E/N218°W
Nominal Tie Line Spacing: 1000 metres
Nominal Tie Line Directions: N128°E/N308°W
Nominal helicopter terrain clearance 130 metres
EM Loop is towed 42 metres under helicopter
Magnetic sensor is 15 metres under helicopter

Instruments:
Geotech Time Domain Electromagnetic System (VTEM)
with concentric Rx/Tx geometry
Transmitter Loop Diameter 26 m, Base Frequency 30 Hz
Dipole Moment approx. 410,000 NIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.36 ms
Geometrics Optically-pumped,
High Sensitivity Cesium Magnetometer
Magnetometer Resolution 0.02 nT at 10 samples/sec



Magnetic field
(nT)

Contour intervals:
2 nT
10 nT
50 nT

Legend:

Roads
Lakes, Rivers

Swamps
Topographic contours

Scale 1:10000
100 0 100 200 300 400 500
(meters)
WGS 84 / UTM zone 8N

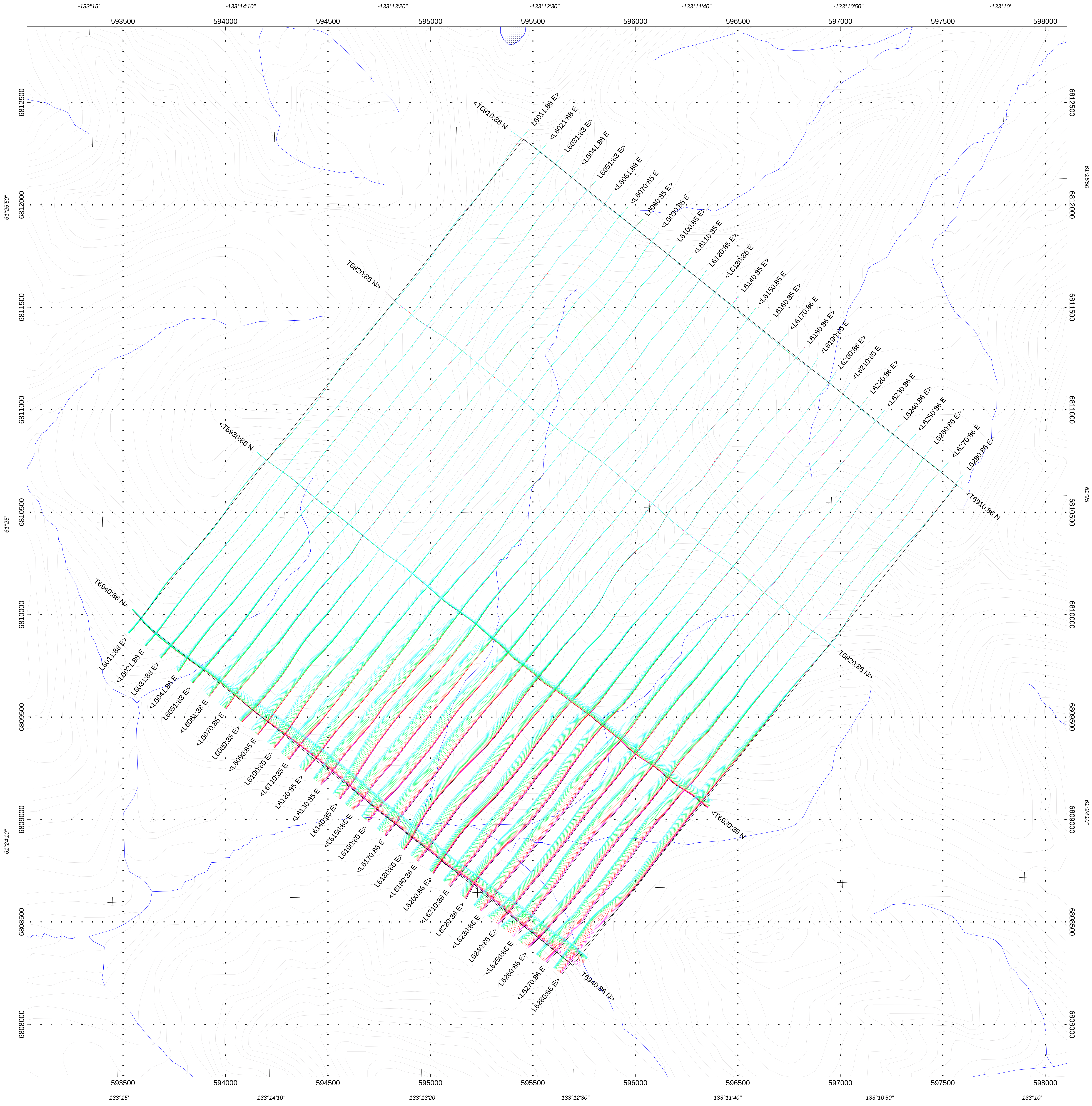
Strategic Metals Ltd.
Block OBVIOUS
Yukon, Canada

Geotech VTEM System
Total Magnetic Field Map

Flown and processed by Geotech Ltd.
245 Industrial Parkway North,
Aurora, Ontario, Canada L4G 4C4
www.geotechairborne.com

December 2007

Project 7067



GEOTECH LTD.

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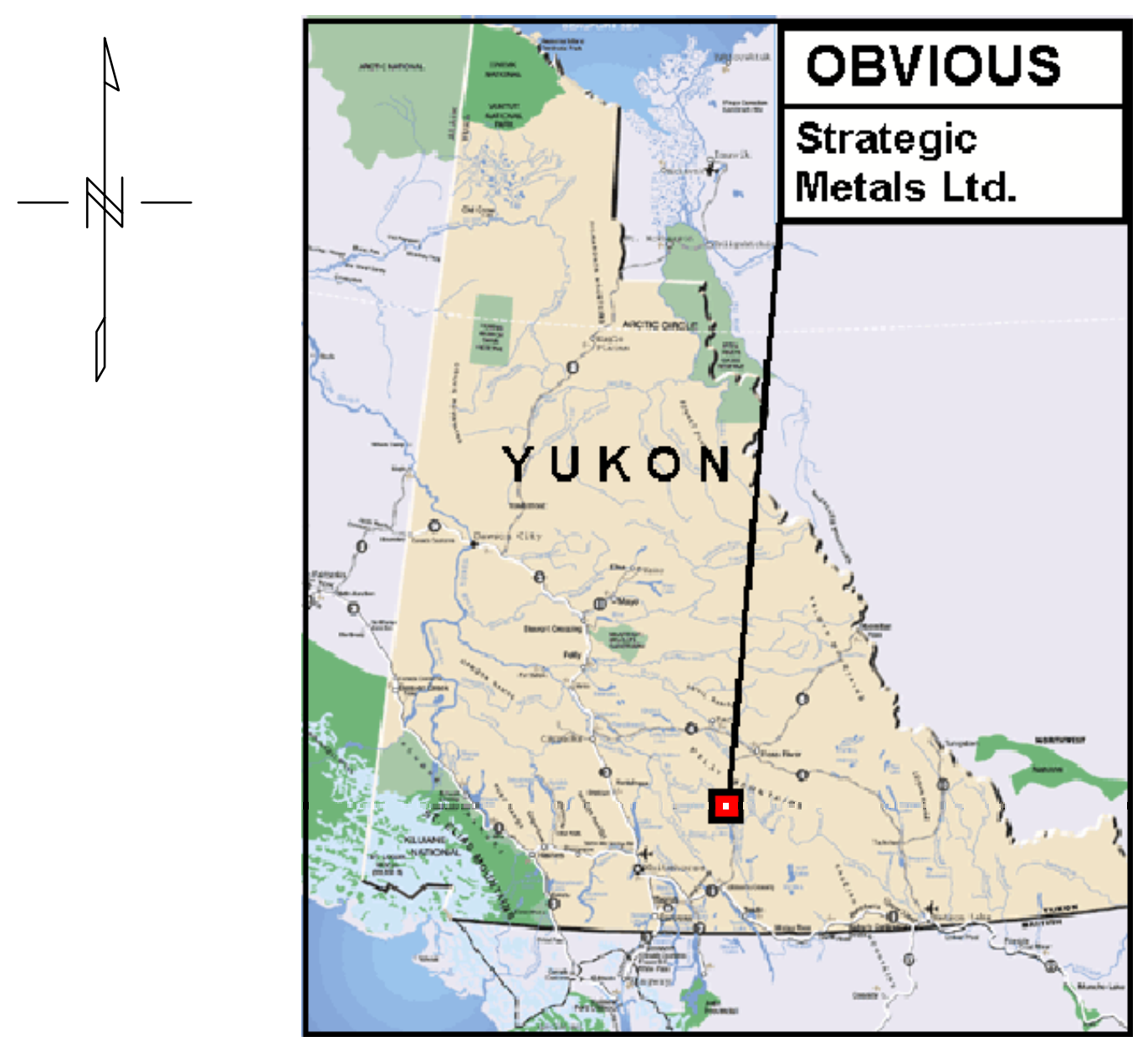


Profiles scale 1 mm = 0.05 (pV*ms)/A/m^4
(Linear between +/-0.2 (pV*ms)/A/m^4
logarithmic above 0.2 (pV*ms)/A/m^4)

0.234 ms (B-field)
0.281 ms (B-field)
0.339 ms (B-field)
0.406 ms (B-field)
0.484 ms (B-field)
0.573 ms (B-field)
0.682 ms (B-field)
0.818 ms (B-field)
0.974 ms (B-field)
1.151 ms (B-field)
1.370 ms (B-field)
1.641 ms (B-field)
1.953 ms (B-field)
2.307 ms (B-field)
2.745 ms (B-field)
3.286 ms (B-field)
3.911 ms (B-field)
4.620 ms (B-field)
5.495 ms (B-field)
6.578 ms (B-field)
7.828 ms (B-field)

Legend:

Roads
Lakes, Rivers

Swamps
Topographic contours

Scale 1:10000
100 0 100 200 300 400 500
(meters)
WGS 84 / UTM zone 8N

Strategic Metals Ltd.
Block OBVIOUS
Yukon, Canada

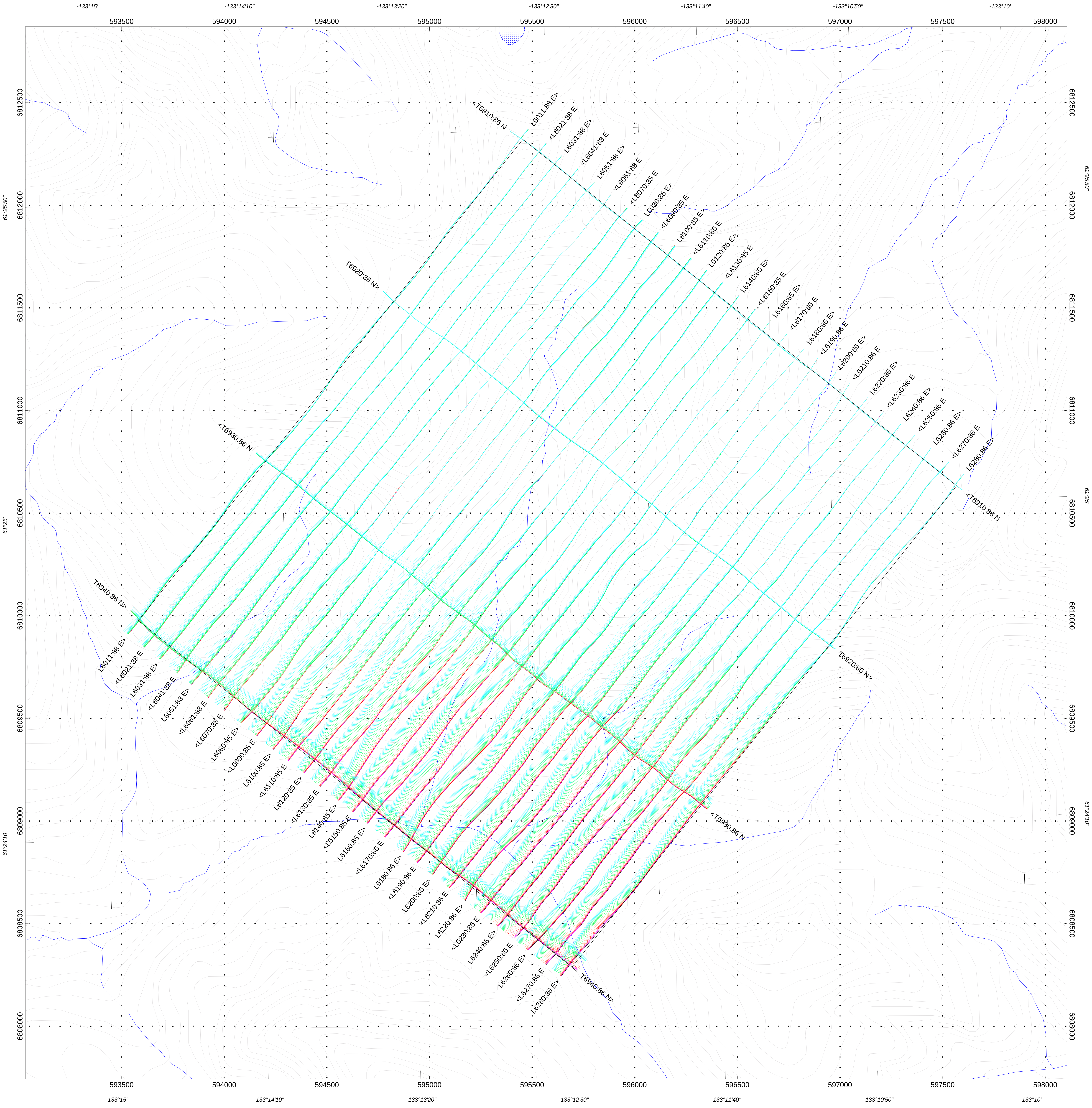
Geotech VTEM System
B-Field Profiles
Time Gates 0.234 - 7.828 ms

Flown and processed by Geotech Ltd.
245 Industrial Parkway North.,
Aurora, Ontario, Canada L4G 4C4
www.geotechairborne.com

December 2007

Project 7067

GEOTECH LTD.



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Geotech VTEM System
dB/dt Profiles
Time Gates 0.234 - 7.828 ms

Flown and processed by Geotech Ltd.
245 Industrial Parkway North,
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www.geotechairborne.com

December 2007

Project 7067

YW28153

oARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016 – 510 West Hastings Street
Vancouver, B.C. V6B 1L8
Telephone: 604-688-2568 Fax: 604-688-2578

AFFIDAVIT

I, Joan Mariacher, of Vancouver, B.C. make oath and say:

That to the best of my knowledge the attached Statement of Expenditures for exploration work on Ob 1-12 mineral claims on Claim Sheet 105F/6 is accurate.

Joan Mariacher

Sworn before me at Vancouver, B.C.

this 4th day of December, 2007.

C. R. G

Notary Public, Yukon Territory

QW28153

Statement of Expenditures
OB 1-12 Mineral Claims
November 27, 2007

Contract VTEM Survey

Geotech Ltd.	$21,455.15

QW28153

Geotech Ltd.

30 Industrial Parkway South, Aurora ON L4G 3W2

BILL TO:
Archer, Cathro & Associates (1981) Limite 1016-510 West Hastings Street Vancouver, BC Canada V6B 1L8

DATE:	INVOICE:
10/12/2007	991107

OBVIOUS - $ 20240.71 + $ 1214.44
= $ 21455.15

TERMS:	Project
Due on receipt	7067

Description		Amount
Helicopter-borne time domain electromagnetic geophysical survey with VTEM system Interm Billing - 90% of the estimated total charge plus any additional charges, including but not limited to additional line km, standby days, plus GST is payable completion of flying.		665,651.00
Contract (Yukon and northern BC.)		
Estimated 5690 line km @ $70.00	$398,300.00	
29 blocks @ $2,000.00 per block	$58,000.00	
65 days @ $6,000.00 per day	$390,000.00	
Helicopter time charges for 227.3 hours @ $1,800.00 per hour	$409,140.00	
Helicopter mob/demob	$10,000.00	
Crew and equipment mob/demob	$7,000.00	
Minimum survey charge	$1,272,440.00	
90% of $1,278,440.00	$1,145,196.00	
Less Previous Billing		
Invoice 991034	($289,040.00)	
Invoice 991078	($190,505.00)	
Total Billable Amount	$665,651.00	
Business Number: 110859469		

✓ Ale - 15740.54
✓ Burwash - 12218.54
✓ Cabin - 33955.98
✓ Dorsey - 21969.52
✓ GK - <10408.48>
✓ Fairweather - 26560.49
✓ Gram - 54432.85
(Mt Hinton)
✓ Hart - 32515.80
✓ Hidden - 8081.37
✓ Highway - 64498.40
✓ Hopeful - 42331.13
✓ Hopper - 18530.28
✓ Hy - 33868.92
✓ Jake - 2308.40
✓ Mars - 28500.60
✓ Mor - 42190.87

✓ Ranchria (QB) 17057.54
✓ Rosy - 18204.54
✓ Tart - <26958.33>
✓ Tes - 64498.40
✓ Tag - 35089.32
✓ Dune - 8273.46
✓ Uno - 9441.72
✓ Mt Hinton - 20434042
✓ Nimo (Rich) - 58082.57
✓ Nimo (Nich) - <55523.83>
✓ Obvious - 20240.71
✓ Plata - 61361.67
✓ Rau - 12552.70
unallocated - 1800.00

856156

Subtotal	Can$665,651.00
GST	Can$39,939.06
TOTAL	Can$705,590.06

Please Remit By Bank Transfer To:
TD CANADA TRUST
16655 YONGE ST., UNIT 1
NEWMARKET, ONTARIO L3X 1V6
TRANSIT # 3102
ACCOUNT #5217874