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ASSESSMENT REPORT

describing

DIAMOND DRILLING

at the

MOR PROPERTY

MOR 1-4	YB89771-YB89774
5-8	YB91626-YB91629
9-12	YB91820-YB91823
3-52	YB92029-YB92068
53-106	YC71599-YC71652
107-224	YC72301-YC72310

NTS 105C1
Latitude 60º06'N; Longitude 132º05'W

in the

Watson Lake Mining District,
Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

TARSIS CAPITAL CORP.

by

W.A.Wengzynowski, P.Eng.
May 2008

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INTRODUCTION

The MOR property covers a volcanic hosted massive sulphide (VHMS) prospect located in southern Yukon. Tarsis Capital Corp. owns the property 100%.

This report describes the results of soil geochemical sampling and 686 m of diamond drilling completed in four holes. The soil sampling and drilling were conducted with daily helicopter support from a tent camp located on private land along the Morley River, 8 km south of the property. The drilling was completed between Jul 1 and 14. The program was funded by Tarsis and managed by Archer, Cathro & Associates (1981) Limited. The author participated in and supervised the work program. The author's Statement of Qualifications appear in Appendix I.

PROPERTY LOCATION, CLAIM DATA AND ACCESS

The MOR property consists of 224 contiguous mineral claims located in southern Yukon on NTS map sheets 105C1 at latitude 60°06'N and longitude 132°05'W (Figure 1). The claims are registered with the Watson Lake Mining Recorder in the name of Archer Cathro. The locations of individual claims are shown on Figure 2 while claim registration data are listed below.

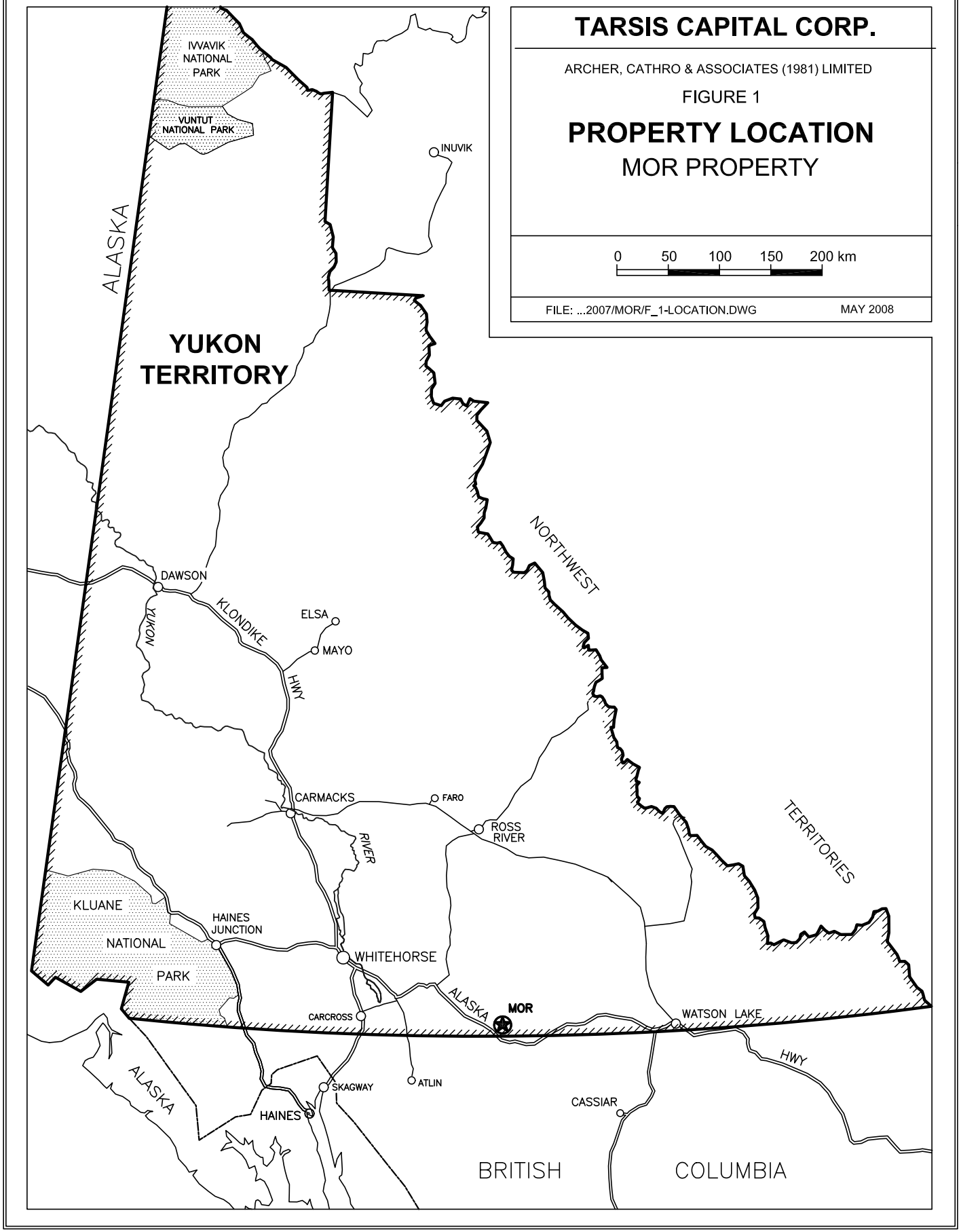
Claim Name	Grant Number	Expiry Date *
MOR 1-4	YB89771-YB89774	April 29, 2020
5-8	YB91626-YB91629	April 29, 2017
9-12	YB91820-YB91823	April 29, 2017
13-52	YB92029-YB92068	April 29, 2018
53-106	YC71599-YC71652	April 29, 2013
107-224	YC72301-YC72418	October 4, 2008

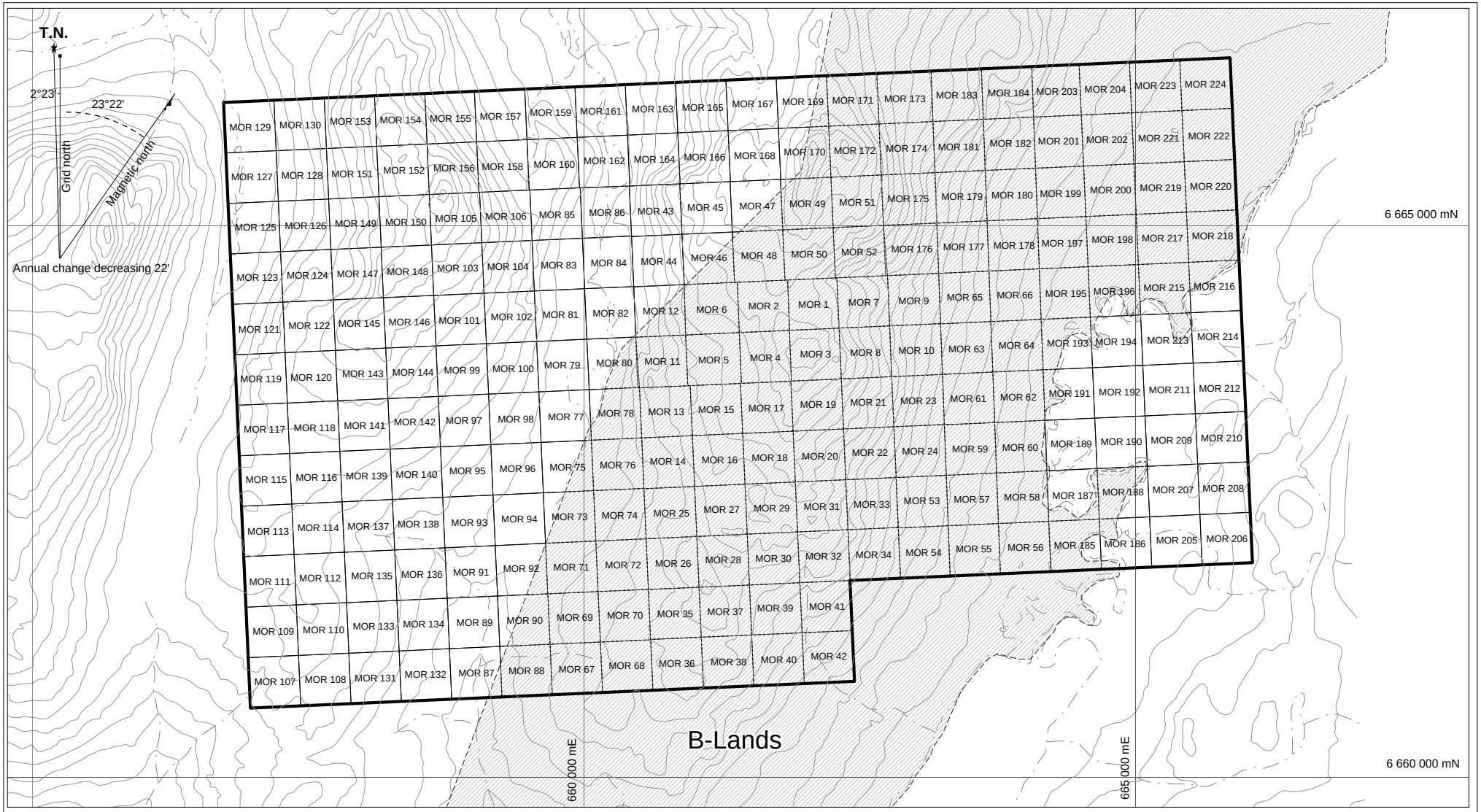
* Expiry dates include assessment credit for work done in 2007 but not yet accepted.

The MOR property is located 35 km east of Teslin, a village that lies alongside the Alaska Highway approximately 183 km by road southeast of Whitehorse. In 2007, the mobilization to and from the property and daily crew moves were performed with an AStar 350 BX operated by Kluane Helicopters Ltd. from the Morley River camp.

HISTORY

In 1980 Regional Resources Limited conducted regional scale stream sediment sampling in the MOR area and discovered a small zone of significant base and precious metal values in soil as well as a subcrop of gossanous schist (Discovery Showing), however, no claims were staked at this time. In 1997 Fairfield Minerals Ltd. revisited the area and staked four claims (MOR 1- 4) to cover the Discovery Showing. Exploration consisted of hand pitting and trenching followed by reconnaissance scale prospecting and silt, rock and soil sampling across the entire property.


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FIGURE 1
PROPERTY LOCATION
MOR PROPERTY
0 50 100 150 200 km
FILE: ...2007/MOR/F_1-LOCATION.DWG
MAY 2008
IVVAVIK NATIONAL PARK
VUNTUT NATIONAL PARK
INUVIK
ALASKA
YUKON TERRITORY
NORTHWEST
TERRITORIES
DAWSON
YUKON
KLONDIKE HWY
ELSA
MAYO
CARMACKS
FARO
ROSS RIVER
RIVER
KLUANE NATIONAL PARK
HAINES JUNCTION
WHITEHORSE
CARCROSS
ALASKA
MOR
WATSON LAKE
HWY
ALASKA
SKAGWAY
ATLIN
HAINES
CASSIAR
BRITISH COLUMBIA



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FIGURE 2

CLAIM LOCATION

MOR PROPERTY

0 0.5 2.5 km

UTM ZONE 8, NAD 83, 105C/01

FILE: ...2007/MOR/F_2-CLAIM.WOR | DATE: MAY 2008

In 1998 Fairfield staked an additional 8 claims (MOR 5-12) and carried out grid soil sampling, and ground magnetic and VLF-EM geophysical surveys. Limited blast trenching, prospecting and reconnaissance rock sampling were also conducted in the area of the Discovery Showing.

In 1999 the property was optioned to Brett Resources Inc. who staked an additional 40 claims (MOR 13-52). Exploration consisted of geochemical sampling (22 line km/442 samples), property wide geological mapping at 1:10,000 scale, and detailed geological mapping (1:1500) in areas of known mineralization. In December 1999 Brett relinquished its option due to a corporate merger and shift in exploration focus.

Field work by Fairfield in 2000 consisted of additional grid soil sampling and ground magnetic and VLF-EM surveys, in conjunction with detailed grid-based soil profile and bedrock sampling by portable power augur. The following summer, geochemically anomalous areas were followed up by a series of in-fill auger sampling lines and prospecting. A total of 1223 samples were collected for multi-element analysis. This work identified a linear east trending band of anomalous copper, lead and zinc-in-soil up to 2000 m long centered on the Discovery Showing.

In 2002 Fairfield was amalgamated with Almaden Resources Corporation to form Almaden Minerals Ltd. and the MOR mineral title was subsequently transferred.

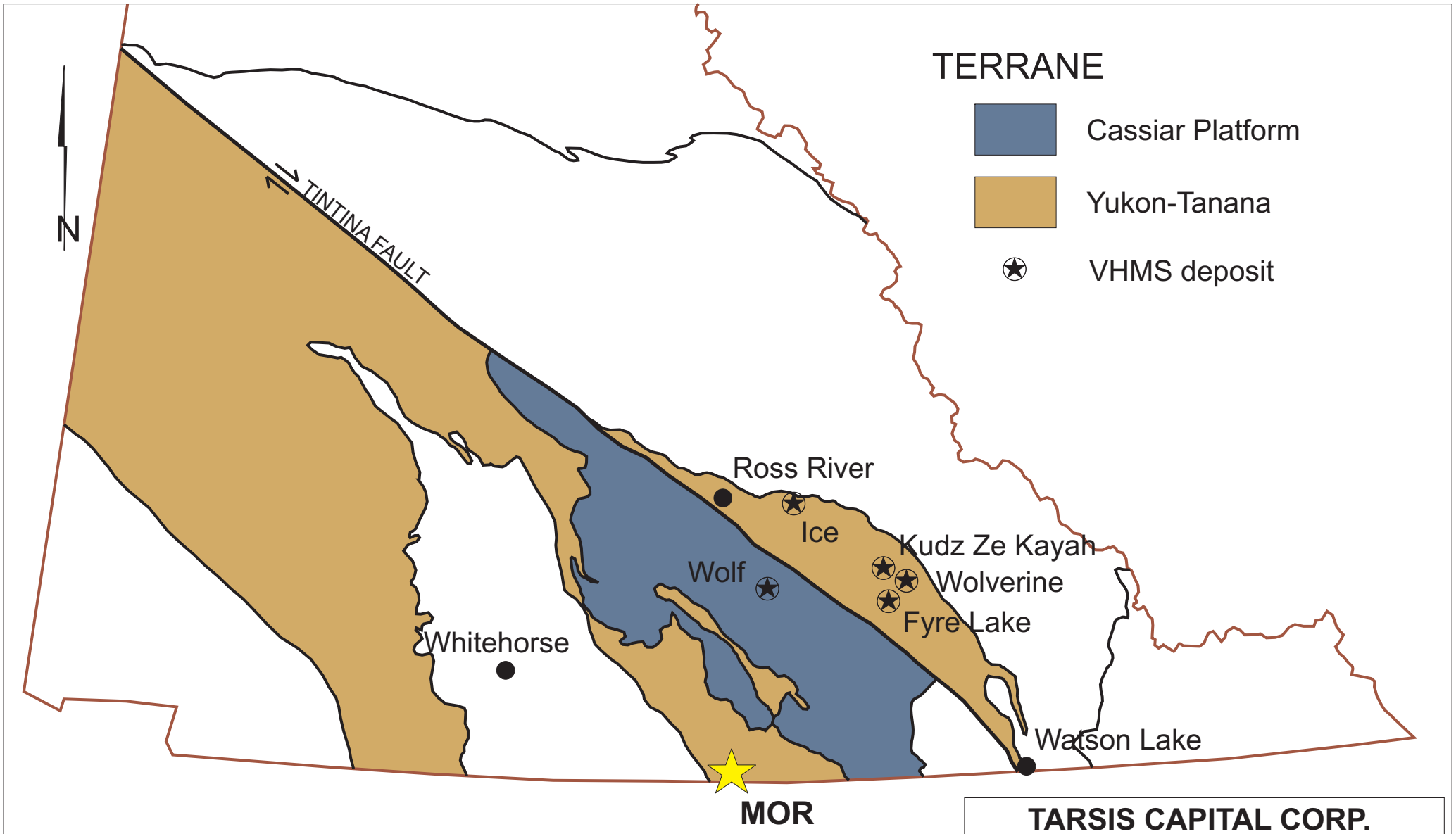
In 2003 Kobex Resources Ltd. acquired a 60 % interest in the MOR property and in 2004 conducted a two phase work program, consisting of an induced polarization (IP) geophysical survey followed by a two hole diamond drilling program. Results confirmed the presence of sub economic VMS style mineralization (Discovery Horizon), however, Kobex elected to return the property to Almaden in September 2005.

Tarsis has since purchased the property from Almaden in April 2007.

GEOMORPHOLOGY

The property lies along the northwestern flank of the Cassiar Mountains (Figure 3. It is mostly situated between Mount Morley to west and the Morley River Valley to the east and encompasses two moderately steep north trending ridges that are linked by a narrow upland valley. Local topography is subdued with local elevations ranging from 900 m in the valley bottom to 1400 m atop the westernmost ridge. The best exposures are on glacially scoured hummocks along the ridge crest and on oversteepened hillsides where soil has been washed away.

A small, unnamed lake surrounded by marshland is located in the centre of the property. This lake is fed by tributaries of Hassell Lake from the north and by numerous small creeks and streams that drain from the upper ridge crests that surround it. Creeks draining from the ridge on the eastern half of the property form tributaries of the Morley River which is part of the Yukon River watershed.



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FIGURE 3

TECTONIC SETTING

MOR PROPERTY

..FILE\: ...2007/MOR/F_3-TEC.CDR MAY 2008

Much of the claim block is well vegetated with spruce, balsam, pine, alder, and tamarack on hillsides with willow occurring along creeks and in marshes. Treeline in the vicinity of the MOR property occurs at 1450 m.

GEOLOGY

Regional Geology

The property lies within a belt of Yukon-Tanana Terrane rocks on the southwest side of the Tintina Fault Zone (Figure 4). This belt of rocks is part of an accreted island arc assemblage consisting of bimodal volcanics, coeval plutons and a variety of predominantly clastic sedimentary rocks (Mulligan, 1963). Yukon-Tanana Terrane rocks underlie much of west-central Yukon, including a displaced block immediately northeast of the Tintina Fault Zone referred to as the Finlayson Lake District, which hosts a number of VMS deposits and prospects.

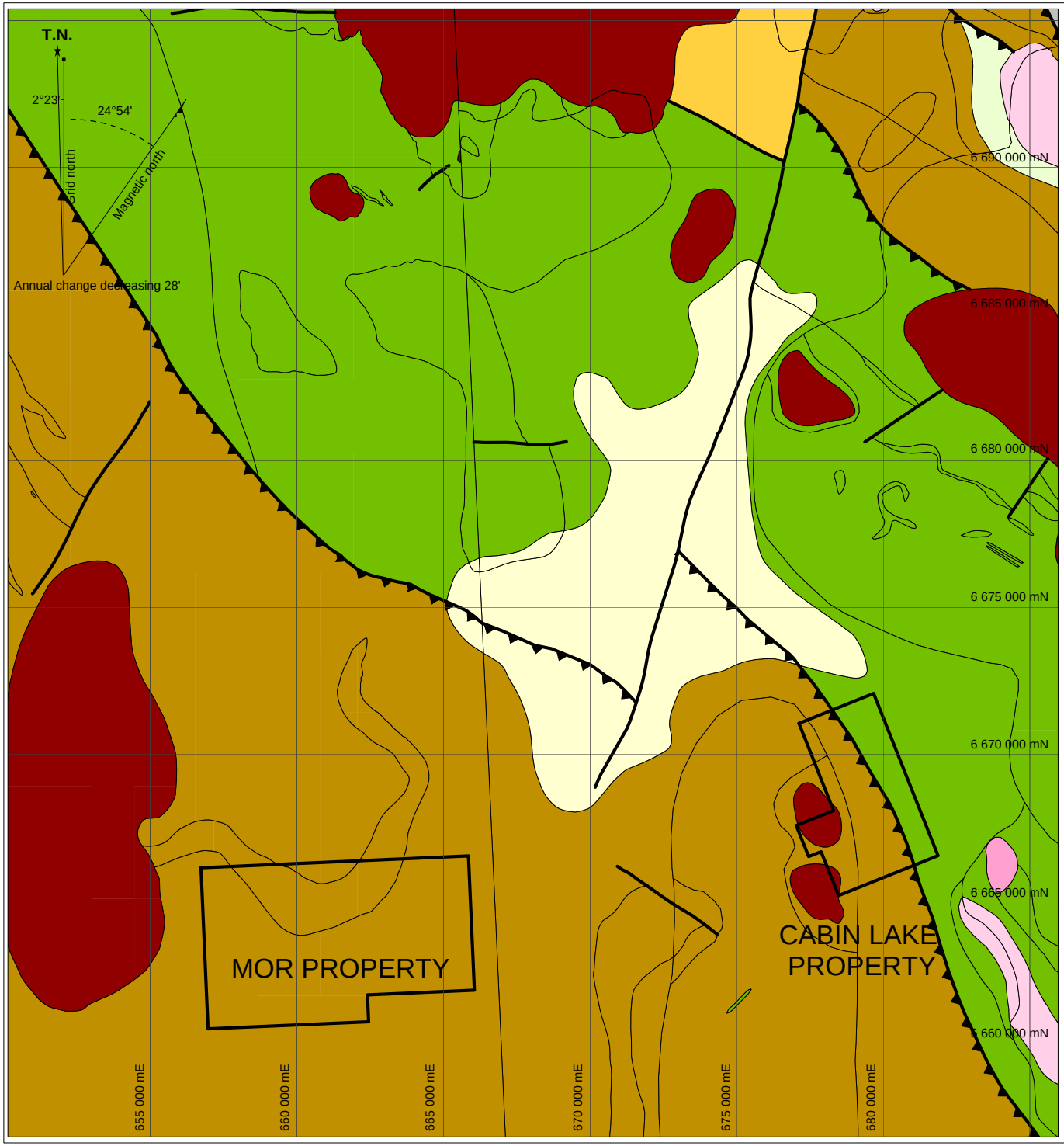
The area of Yukon-Tanana Terrane containing the MOR property is bound to the east by the D'Abbadie Thrust Fault, (Keijzer, et al., 1999). Rocks on the lower (eastern) plate of the thrust fault belong to the Cassiar Platform tectonic element, which consists of calcareous and non-calcareous sedimentary and metasedimentary units.

The following descriptions of the regional geological setting for the MOR area were taken from Downie, 2007.

The region is part of the Omineca Belt of the Canadian Cordillera, a widespread zone of uplifted metamorphic and intrusive rocks that extends from northern British Columbia through the south-central Yukon and into Alaska. In the MOR area, this belt is characterized by several deformed Paleozoic assemblages which include a portion of the pericratonic Kootenay or Yukon-Tanana Terrane lying between the Teslin Fault to the west and the continental Cassiar terrane to the east. This Devono-Mississipian (Yukon-Tanana) stratigraphy is also known as the Big Salmon Complex particularly in adjacent northern British Columbia (Mihalynuk et al., 1998 and 2000). Current studies by various workers of the Yukon Geology Program (INAC/EGSD, Murphy et al.) indicate that rocks of the Big Salmon Complex are at least partially equivalent to certain units (Nasina Assemblage) of the Yukon-Tanana Terrane which hosts Kudz Ze Kayah, Wolverine and Fyre Lake volcanogenic massive sulphide (VHMS) deposits in the Finlayson Lake District, 160 km northeast of the MOR claims.

An extensive manganiferous metachert ("crinkled chert") horizon occurs a few kilometres to the southeast of the MOR property and is suggested to be spatially related to VHMS style mineralization. This unit is considered to be of seafloor hydrothermal origin and may represent an exhalative horizon.

The main lithologies in the vicinity of the MOR property area are summarized on the following table.



QUATERNARY

Fluvial silt, sand and gravel

MID-CRETACEOUS

Cassiar Suite

EARLY JURASSIC

Aishihik Suite

Long Lake Suite

MIDDLE PERMIAN

Sulphur Creek Suite

CARBONIFEROUS

Klinkit Group

DEVONIAN AND MISSISSIPPIAN

Nasina Assemblage

UPPER PROTEROZOIC TO LOWER CAMBRIAN

Ingenika Group

Fault

Thrust fault

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FIGURE 4

REGIONAL GEOLOGY

MOR PROPERTY

0 2 10 km

UTM ZONE 8, NAD 83, 105B/04 & 105C/01

FILE: ...2007/MOR/F_4-REG.WOR

DATE: MAY 2008

ROCK TYPES

Devono-Mississippian Sequence in rough stratigraphic order

mch - Grey to black locally carbonaceous meta-chert
xph - Siliceous phyllite
Qgryw - Quartz Greywacke
QSsc - Quartz sericite schist
QMsc - Quartz Muscovite schist
fxtf - Felsic crystal tuff
mtf - Mafic tuff
Cgn - Chlorite Gneiss
CMsc - Green locally banded Chlorite Muscovite schist
Csc - Green locally banded Chlorite schist
mrbl - Grey - white thickly bedded medium - coarse grained marble

MINERAL ABBREVIATIONS

B - Biotite
C - Chlorite
Cp - Chalcopyrite
Ep - Epidote
M - Muscovite
Mn - Manganese
Mt - Magnetite
Py - Pyrite
Q - Quartz
S - Sericite

Csc
xph-QMsc-
Qgryw-mch
Csc
mrbl
mrbl
mrbl
4500
4000
3500
mrbl
mrbl-Csc
mrbl
4000
mrbl
mrbl-CSc
mrbl
mrbl-CMsc
mrbl-CMsc
Csc w QSsc clasts
DISCOVERY SHOWING AREA
1997-1998 TRENCHES
BHC Area
6 664 000 mN
Csc-QSsc-fxtf
Csc w Interbeds of QSsc, Py dlss 3-5%
QSsc
CMsc
SA Horizon
CMsc w Bull Qtz pod
mauve mch float
CQsc Ep Py 2%
CQsc
QCsc-QCgn
QCsc mt
QCsc-Csc
QCBsc Tr Py Mt
CQMsc Tr Py
QCsc-Csc
QCc-Csc
QCsc-QCgn
Qtz Vn 60cm
6 662 000 mN
Csc with thin Q,Mt Py horizon
3500
660 000 mE
662 000 mE

Strong to moderate VLF-EM conductor

Main Soil Geochemical Anomaly
(Cu±Pb±Zn+Ag+Au)

Geological Contact

Creek

Elevation Contour (Feet)

Bedrock Exposure

Strike and Dip of Bedding and Foliation

Rock Sample Location
Note: MOR99-R12, R13 not shown as they are outside the map area

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FIGURE 5

PROPERTY GEOLOGY

MOR PROPERTY

0 0.5 1.0 km

UTM ZONE 8, NAD83
105C01

FILE: ...2007/MOR/F_5-GEO.DWG | DATE: MAY 2008

Table I - Main Lithological Units

Quarternary Overburden	Glacial till, lateral and terminal moraines and glaciofluvial outwash.
Mid Cretaceous or Early Tertiary Cassiar Suite	Granodiorite and biotite-quartz monzonite porphyry.
Early Jurassic Aishihik Suite	Porphyritic granodiorite, monzonite, minor diorite and gabbro.
Upper Carboniferous to Permian Klinkit Group	Mafic volcanics, epicalstics, phyllites, and quartzites with distributed carbonate lenses.
Devonian to Mississippian Nasina Assemblage	Marble, quartzite, quartz ± muscovite ± biotite ± actinolite ± albite schist, and augen schist, metatuffs, and calcareous metavolcanics.

(Gordey and Makepeace, 1999)

The Klinkit Group is an over-lap sequence that straddles both the Yukon-Tanana Terrane and Cassiar Platform.

Property Geology

The MOR property is believed to be mostly underlain by siliceous metasediments and volcaniclastic rocks of the Devono-Mississippian Nasina assemblage (Figure 5). Much of the stratigraphic descriptions below are based on previous authors (Ritcey and Balon, 1998) descriptions.

The MOR property is underlain by a thick sequence of pale green-grey quartz-chlorite schist and chlorite schist of which protoliths are interpreted to be mafic to intermediate volcanic tuffs and minor flows. This assemblage is mainly composed of fine grained, bright to dark green, well-foliated chlorite schists/mafic tuff to lapilli tuff. The mafic rocks are interbedded with quartz chlorite schist and intermediate tuff on a centimetre to meter scale. These rocks contain varying amounts of layer parallel quartz and feldspar. Quartzite/chert is also observed locally as interbeds within the mafic dominated succession but never sufficiently thick to form a mappable unit. The rocks are strongly deformed and have a strong, nearly parallel to layering, schistosity which generally strikes east and dips moderately to the south. The sequence has been significantly thickened by tight high amplitude folds, which are observed in outcrop scale and drill core. Metamorphic grade is middle greenschist facies. This assemblage of dominantly mafic metavolcanic rocks is suggested to correlate with the “greenstone sequence” of the Big Salmon Complex mapped by Mihalynuk et al. (1998).

The northeast portion of the property is underlain by a grey-white, thickly bedded, medium- to coarse-grained limestone/marble. This unit is flat lying and appears to be conformable with and overlying the greenstone sequence described above. Bedding attitudes strike east and dip south 30°.

A single traverse to the north of the limestone (outside the northern MOR claim boundary) revealed a third mappable geological unit comprising a highly variable sequence of grey, siliceous, phyllitic meta-sediments with interbedded 1-10 m thick, dark grey to black, carbonaceous cherts. This unit strikes to the northeast and dips to the southeast.
An inferred stratigraphic column for the Teslin area is shown in Figure 6 based on observations by Nelson et al., 2000 and postulates the relative position of the MOR mineralization. This theory is partly supported by geochronological results from select MOR drill core which yielded a morphologically simple population of zircon, permissive of magmatic origin yielding Devono-Mississippian dates between 340 and 390 Ma (M. Colpron pers. comm., 2008).

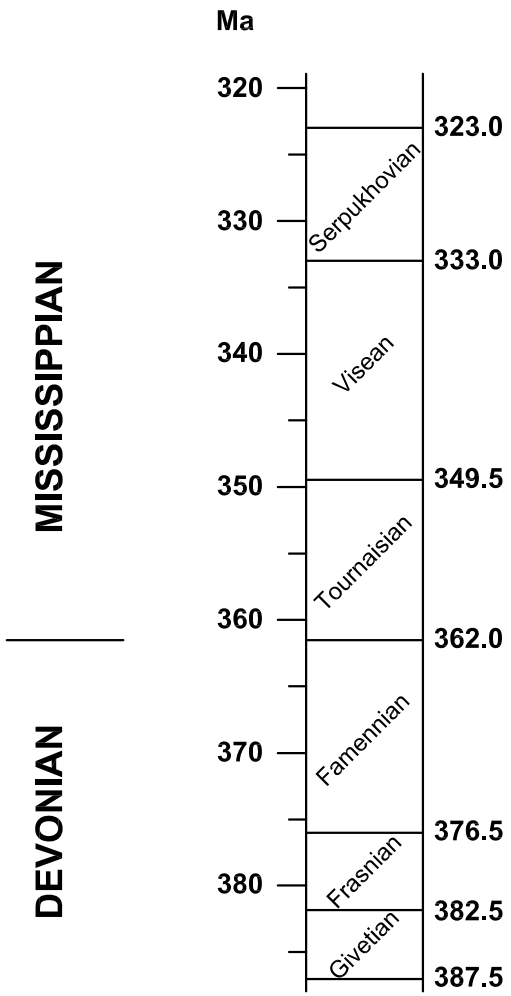
MINERALIZATION

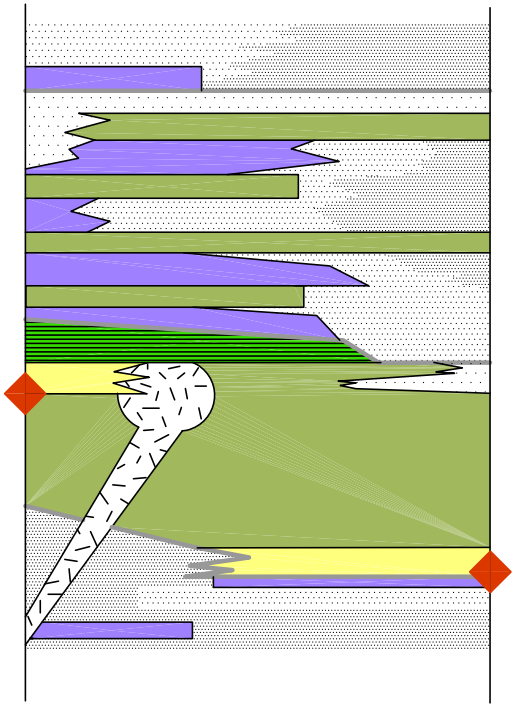
Fairfield Mineral's initial reconnaissance program in 1997 exposed the Discovery Showing described as quartz rich muscovite-sericite and chlorite-biotite schist hosting strongly disseminated to semi-massive pyrite, chalcopyrite and other minor sulphides. Follow-up grid soil sampling outlined a 2500 m long by 100 to 250 m wide lead-zinc-copper soil anomaly. Grab and chip samples collected from trenches blasted defining the Discovery Showing returned assays up to 1.05 % Cu, 0.51 % Pb, 0.55 % Zn, 82.2 g/t Ag and 0.89 g/t Au.

The Discovery Showing consists of at least four separate quartz sericite schist/rhyolitic tuff horizons within a dominantly mafic volcanic sequence. These horizons, where exposed, range from 20 centimetres to 1.75 meters thick, are strongly gossanous and contain pyrite with locally significant amounts of chalcopyrite and associated gold and silver. Mafic schists in contact with the mineralized quartz-sericite schist units are strongly pyritic and geochemically anomalous in copper. The quartz-sericite schist units have been traced over a strike length of 900 meters.

Grab samples from mineralized quartz-sericite schist at the Discovery Showing returned analyses up to 8910 ppb gold, 82.2 ppm silver, 10500 ppm copper, 5081 ppm lead and 5515 ppm zinc. Drilling beneath the Discovery Showing in 2004 and 2007 intersected two to three gently dipping sulphide horizons hosted within the succession of felsic to mafic volcaniclastic stratigraphy and tuffaceous metasediments. Mineralization within each of the horizons ranges from massive, to semi-massive to heavily disseminated. The primary sulphide is medium- to coarse-grained pyrite with lesser amounts of chalcopyrite, sphalerite and galena. Magnetite is also present in some of the sulphide intervals and adjacent volcaniclastic rocks. The sulphide horizons appear to be moderately to strongly folded, however, the lateral continuity is fairly consistent and the thicknesses of the horizons from the two outermost sections appear to be increasing with depth. Details of the sulphide intersections are discussed in the Diamond Drilling section.

Two other occurrences located 100 m southwest and 500 m east of the Discovery Showing were identified during the 2000 auger sampling program. The occurrence referred to as the SA horizon is located 100 m southwest of the Discovery Showing and the other, the BHC area, is located 500 m to the east. Samples collected from these sites returned up to 0.12 % Cu, 0.57 % Pb, 0.05 % Zn, 109.2 g/t Ag and 2.14 g/t Au.





	MAP UNIT
KLINKIT ASSEMBLAGE	CPK
FINLAYSON ASSEMBLAGE (clastic dominated)	DMFs
FINLAYSON ASSEMBLAGE (volcanic dominated)	DMFvi, DMFvf
SNOWCAP ASSEMBLAGE	Ds

- Lower Mississippian granite
- exhalite (manganiferous "crinkle" chert)
- felsic volcanic sequence
- mafic to intermediate volcanic sequence
- marble
- conglomerate
- quartzite
- psammite

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FIGURE 6

STRATIGRAPHIC COLUMN

YUKON TANANA TERRANE

TESLIN AREA

YUKON AND NORTHERN BRITISH COLUMBIA

after Mihalynuk et al (2000)

SOIL GEOCHEMISTRY

Pre 2007 Soil Sampling

Soil sampling carried out by Brett Resources in 1999 outlined a copper-in-soil anomaly in the central part of the property, east of the current drill grid. The widely spaced lines used in the survey, however, prevented the company from properly delineating the anomaly.
Power auger sampling conducted in 2000 refined the existing geochemical anomalies and better defined the signature in the vicinity of the Discovery Showing. Lead and zinc response from the combine data set form a narrow linear east trending anomaly that extends roughly 2500 m across the width of the grid. The thresholds defining most of the anomaly are weak to moderate but the contrast with the adjacent soils is excellent. Copper response is also coincidently elevated along this trend but forms numerous additional anomalies south of this main trend.

Silver and gold response is subdued across most of the grid but does form irregular spot highs mostly outside the main lead-zinc-copper geochemical trend. Figures 7 to 11 illustrate relief contoured thematic plots for copper, lead, zinc, silver and gold respectively.

Auger sampling also located mineralization at two additional locations within the main anomalous trend. Samples collected from these sites returned up to 0.12 % Cu, 0.57 % Pb, 0.05 % Zn, 109.2 g/t Ag and 2.14 g/t Au.

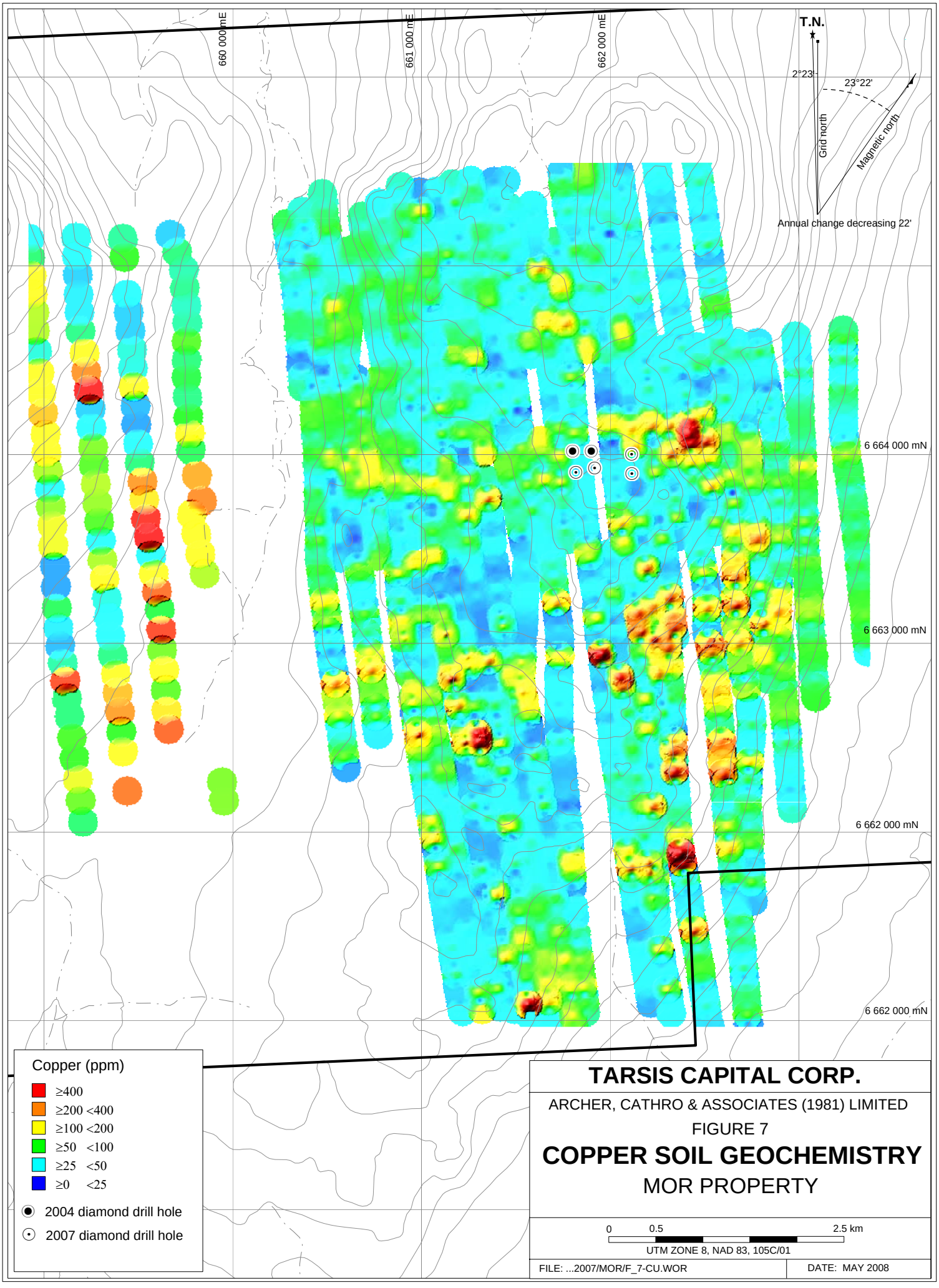
2007 Soil Sampling

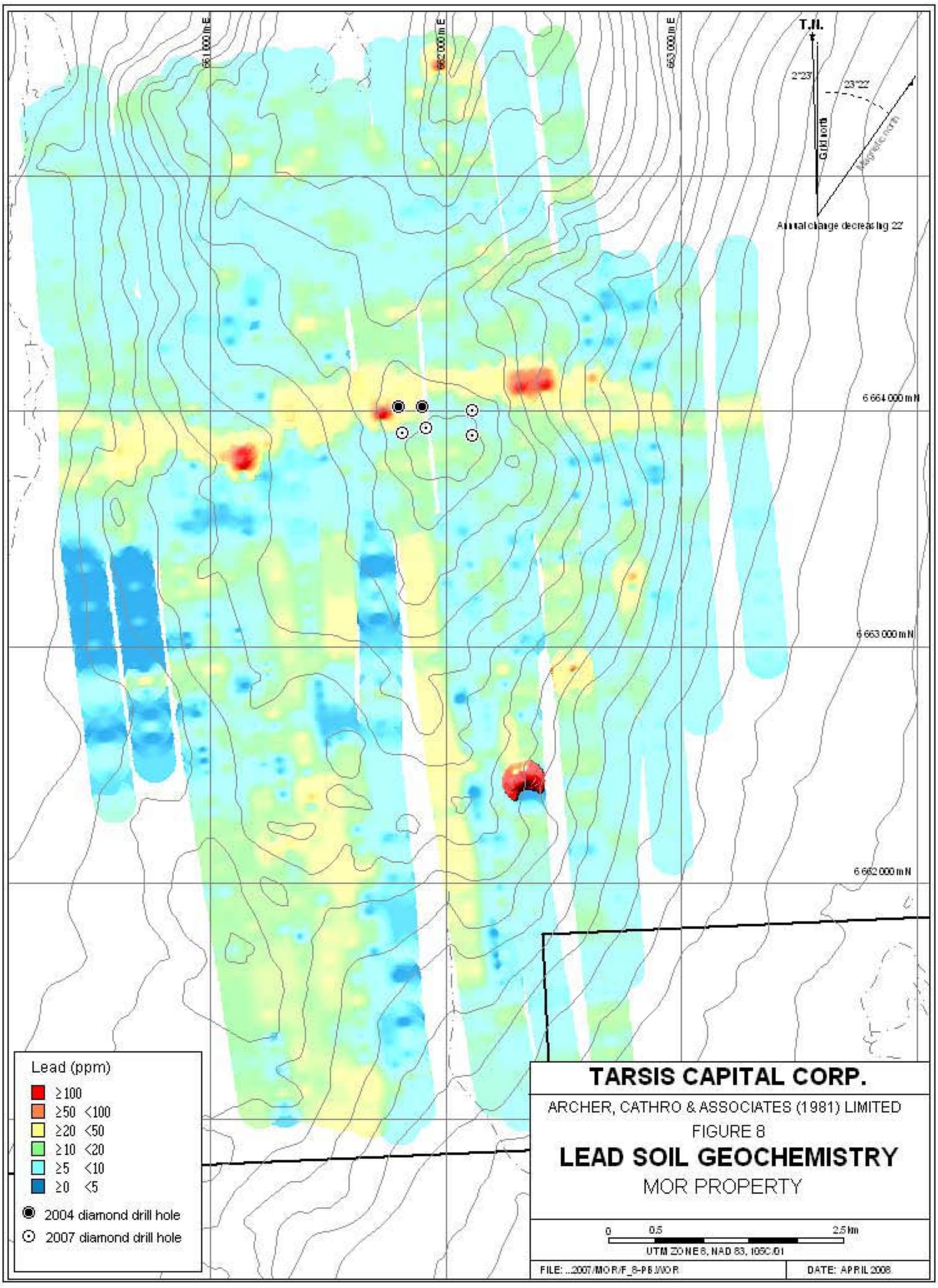
Four widely spaced soil geochemical lines were established along the west side of the lake valley, approximately 2 km west of the Discovery Showing. One hundred and seven soil samples were taken at 100 m intervals along lines spaced 250 m apart to test the inferred mineralized trend west of the Discovery Showing. Sample locations are shown on Figure 12 while a compilation of the copper values from all surveys on the property is illustrated on Figure 13.

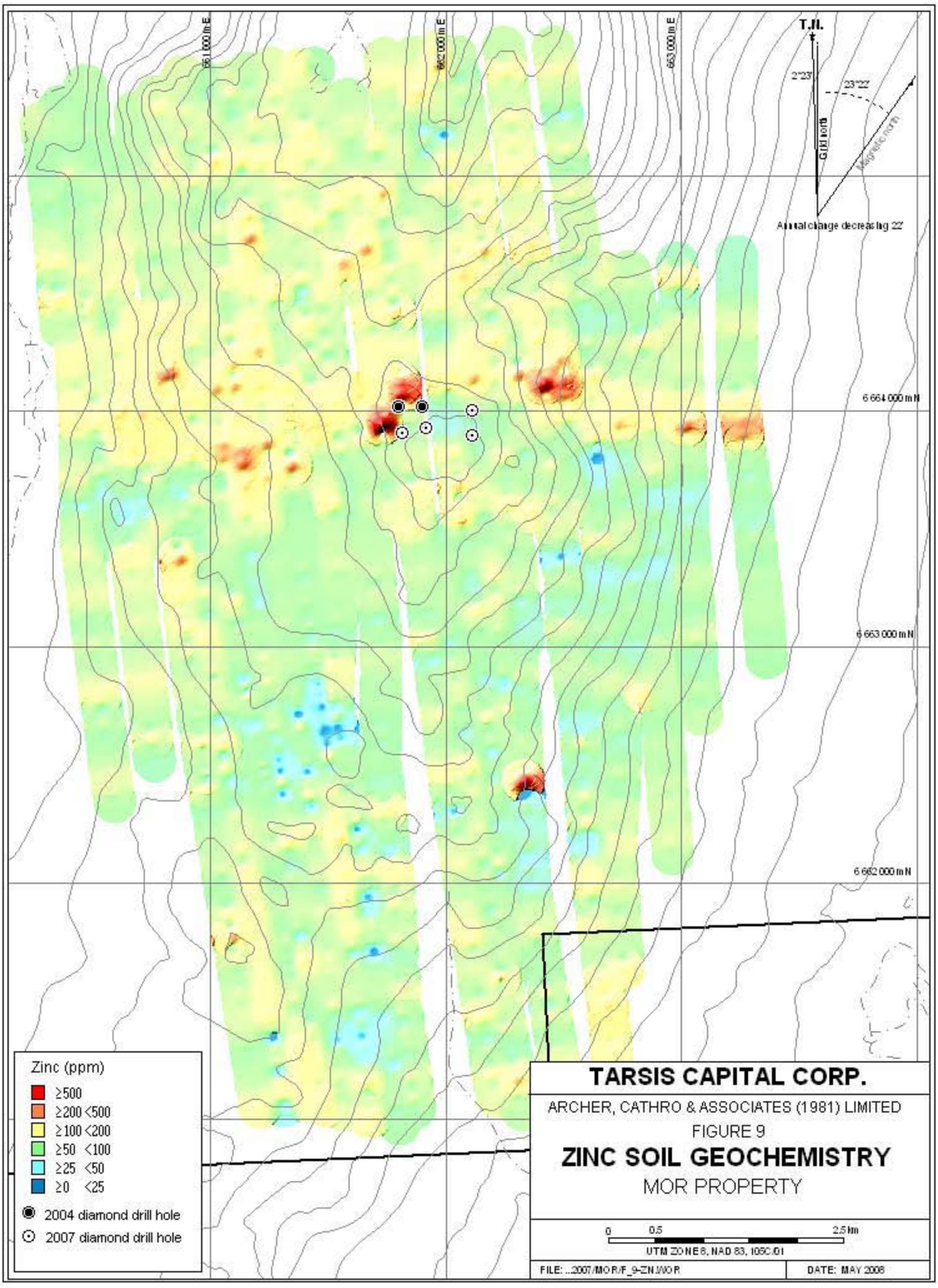
Soil samples were taken from B horizon material at depths ranging from 20-100 cm deep. Holes were dug with mattocks or soil augers and each soil sample was placed in a heavy kraft paper bag marked with the coordinates for the site. Sample sites were marked by 0.5 m wooden lath bearing metal tags inscribed with the grid co-ordinates and sample numbers.

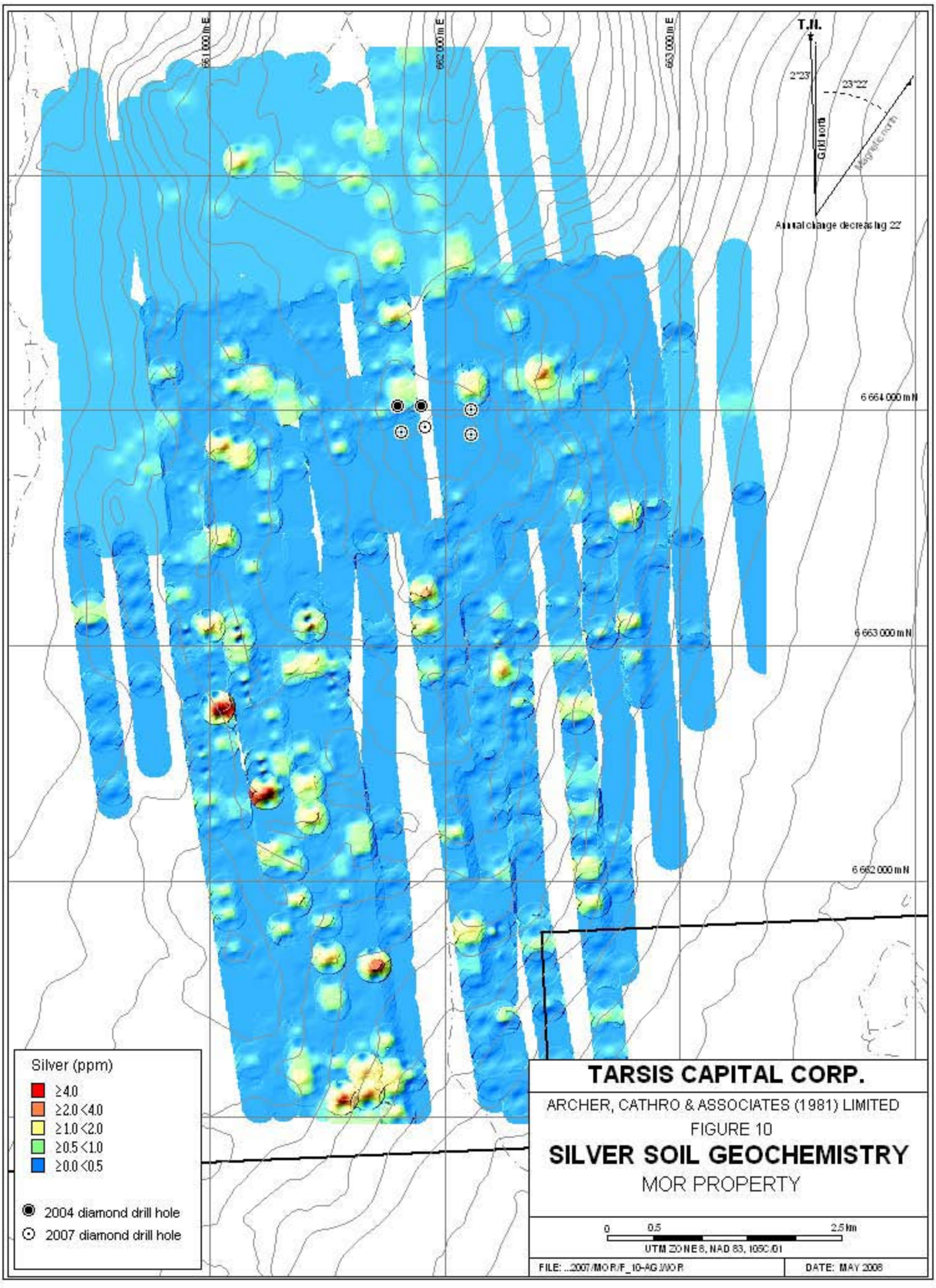
At the completion of the program, the crew transported the samples to Whitehorse where they were shipped to ALS Chemex in North Vancouver, British Columbia. At Chemex, the samples were dried, sieved to 180 microns (-80 mesh) and analysed for 34 elements using aqua-regia digestion followed by inductively coupled plasma with atomic emission spectroscopy (ME-ICP41). Appendix II contains the Certificates of Analysis.

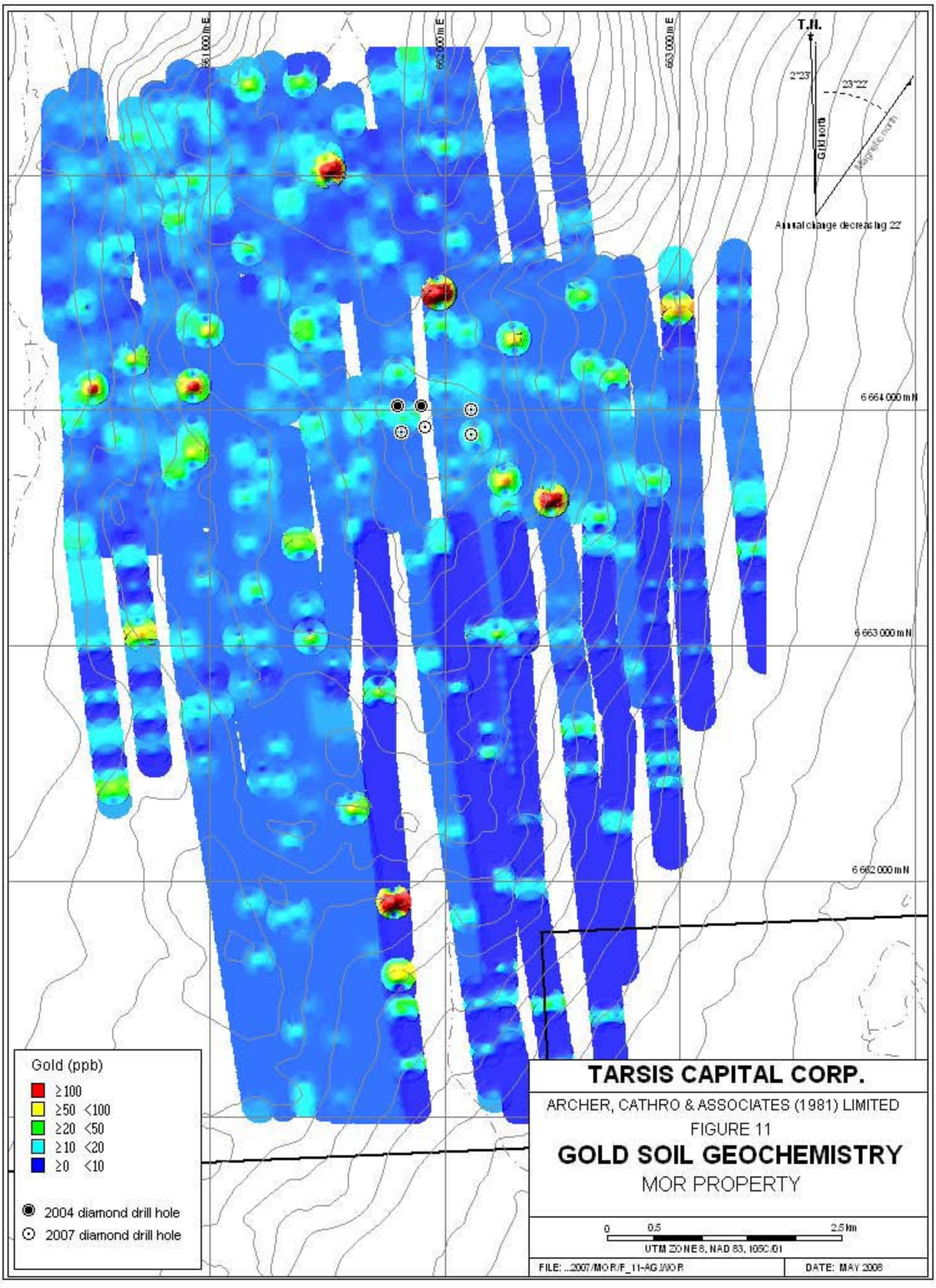
The results of the sampling identified new copper-in-soil geochemical anomalies with peak values up to 448 ppm copper contained within broad zones up 500 m wide and 750 m long. The highest values are centred adjacent to the lake and form a roughly northwesterly trend and a secondary cluster of strongly to moderately anomalous response occurs along the slope of the western ridge. The northernmost of the anomalies coincides with the projected surface trace of

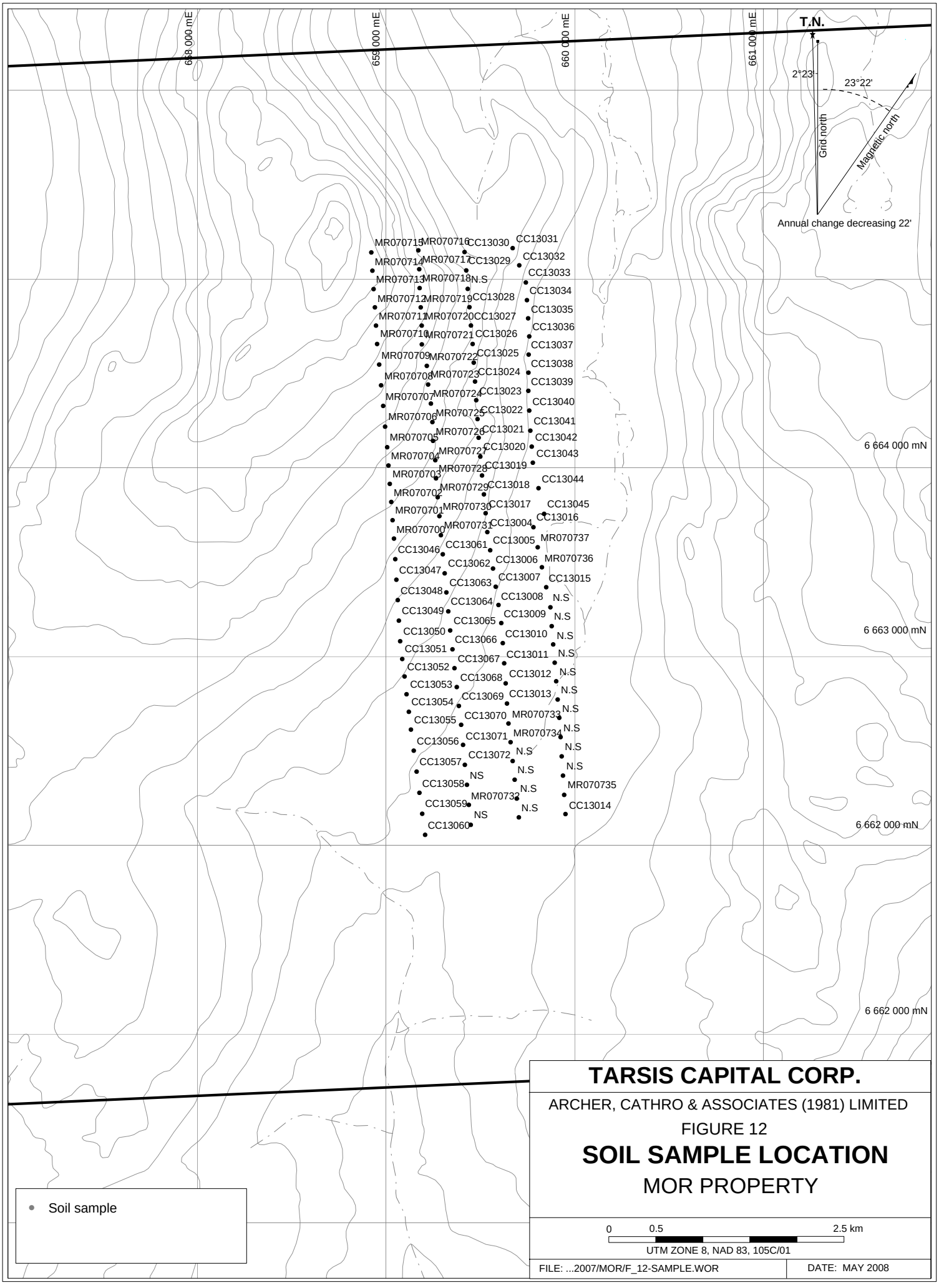

660 000mE
661 000 mE
662 000 mE
T.N.
2°23'
23°22'
Grid north
Magnetic north
Annual change decreasing 22'
6 664 000 mN
6 663 000 mN
6 662 000 mN
6 662 000 mN
Copper (ppm)
≥400
≥200 <400
≥100 <200
≥50 <100
≥25 <50
≥0 <25
2004 diamond drill hole
2007 diamond drill hole
TARSIS CAPITAL CORP.
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
FIGURE 7
COPPER SOIL GEOCHEMISTRY
MOR PROPERTY
0 0.5 2.5 km
UTM ZONE 8, NAD 83, 105C/01
FILE: ...2007/MOR/F_7-CU.WOR
DATE: MAY 2008

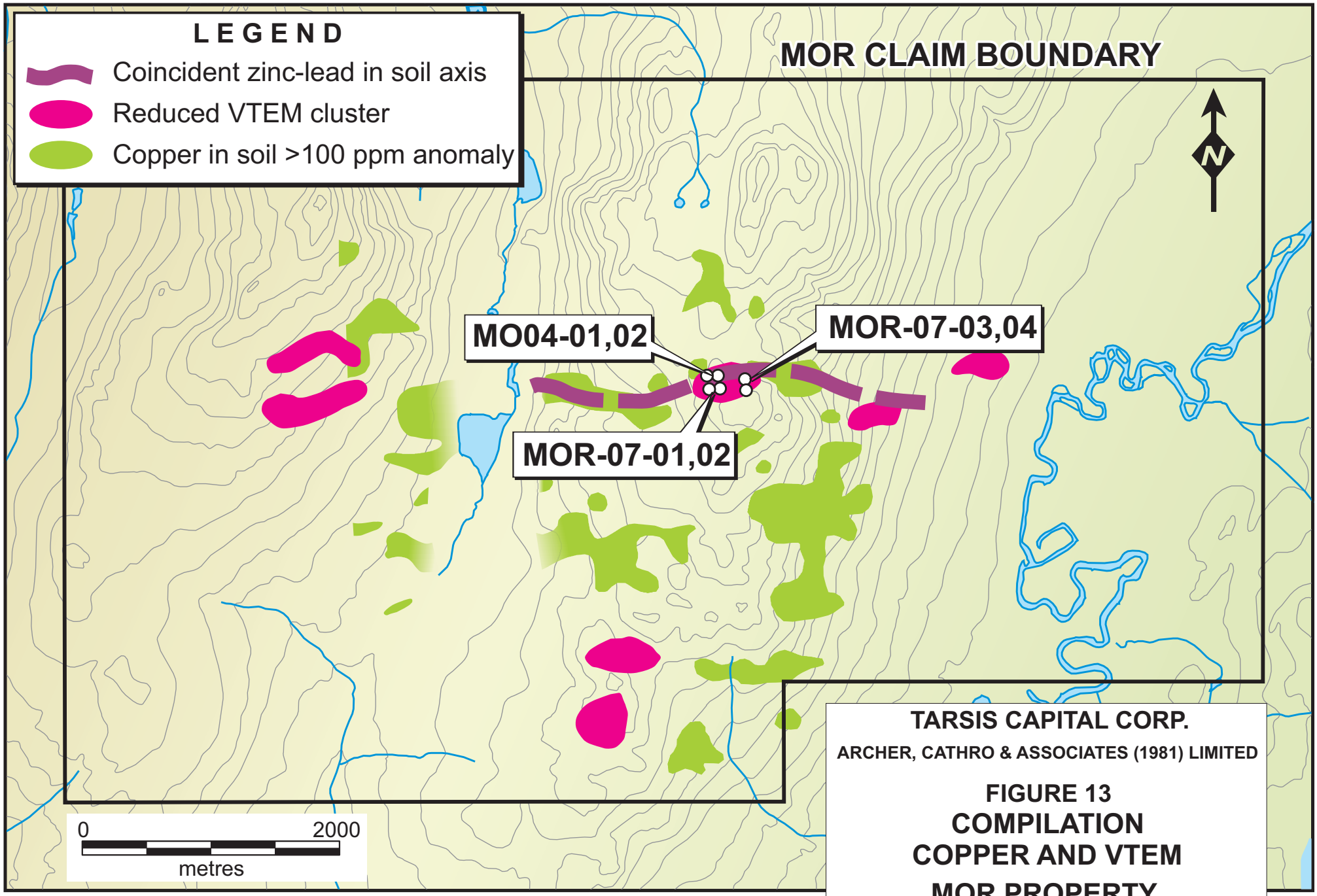

661 000 m E
662 000 m E
663 000 m E
T.N.
21°23'
23°22'
Grid north
Magnetic north
Annual change decreasing 22'
6 664 000 mN
6 663 000 mN
6 662 000 mN
Lead (ppm)
≥100
≥50 <100
≥20 <50
≥10 <20
≥5 <10
≥0 <5
2004 diamond drill hole
2007 diamond drill hole
TARSIS CAPITAL CORP.
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
FIGURE 8
LEAD SOIL GEOCHEMISTRY
MOR PROPERTY
0 0.5 2.5 km
UTM ZONE 8, NAD 83, 1050.01
FILE: ...2007/MOR/F_8-PB.WOR
DATE: APRIL 2008


661 000 m E
662 000 m E
663 000 m E
T.N.
21°23'
23°22'
Grid north
Magnetic north
Annual change decreasing 22'
6 664 000 mN
6 663 000 mN
6 662 000 mN
Zinc (ppm)
≥500
≥200 <500
≥100 <200
≥50 <100
≥25 <50
≥0 <25
2004 diamond drill hole
2007 diamond drill hole
TARSIS CAPITAL CORP.
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
FIGURE 9
ZINC SOIL GEOCHEMISTRY
MOR PROPERTY
0 0.5 2.5 km
UTM ZONE 8, NAD 83, 1050.01
FILE: ...2007/MOR/F_9-ZN.WOR
DATE: MAY 2008


661 000 m E
662 000 m E
663 000 m E
T.N.
21°23'
23°22'
Grid north
Magnetic north
Annual change decreasing 22'
6 664 000 mN
6 663 000 mN
6 662 000 mN
Silver (ppm)
≥4.0
≥2.0 <4.0
≥1.0 <2.0
≥0.5 <1.0
≥0.0 <0.5
2004 diamond drill hole
2007 diamond drill hole
TARSIS CAPITAL CORP.
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
FIGURE 10
SILVER SOIL GEOCHEMISTRY
MOR PROPERTY
0
0.5
2.5 km
UTM ZONE 8, NAD 83, 1050.01
FILE: ...2007/MOR/F_10-AG.WOR
DATE: MAY 2008


661 000 mE
662 000 mE
663 000 mE
T.N.
21°23'
23°22'
Grid north
Magnetic north
Annual change decreasing 22'
6 664 000 mN
6 663 000 mN
6 662 000 mN
Gold (ppb)
≥100
≥50 <100
≥20 <50
≥10 <20
≥0 <10
2004 diamond drill hole
2007 diamond drill hole
TARSIS CAPITAL CORP.
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
FIGURE 11
GOLD SOIL GEOCHEMISTRY
MOR PROPERTY
0 0.5 2.5 km
UTM ZONE 8, NAD 83, 1050.01
FILE: ..2007/MOR/F_11-AG.WOR
DATE: MAY 2008


658 000 mE
659 000 mE
660 000 mE
661 000 mE
T.N.
23°22'
Grid north
Magnetic north
Annual change decreasing 22'
6 664 000 mN
6 663 000 mN
6 662 000 mN
6 662 000 mN
MR070715 MR070716 CC13030 CC13031
MR070714 MR070717 CC13029 CC13032
MR070713 MR070718 N.S CC13033
MR070712 MR070719 CC13028 CC13034
MR070711 MR070720 CC13027 CC13035
MR070710 MR070721 CC13026 CC13036
MR070709 MR070722 CC13025 CC13037
MR070708 MR070723 CC13024 CC13038
MR070707 MR070724 CC13023 CC13039
MR070706 MR070725 CC13022 CC13040
MR070705 MR070726 CC13021 CC13041
MR070704 MR070727 CC13020 CC13042
MR070703 MR070728 CC13019 CC13043
MR070702 MR070729 CC13018 CC13044
MR070701 MR070730 CC13017 CC13045
MR070700 MR070731 CC13004 CC13016
CC13046 CC13061 CC13005 MR070737
CC13047 CC13062 CC13006 MR070736
CC13048 CC13063 CC13007 CC13015
CC13049 CC13064 CC13008 N.S
CC13050 CC13065 CC13009 N.S
CC13051 CC13066 CC13010 N.S
CC13052 CC13067 CC13011 N.S
CC13053 CC13068 CC13012 N.S
CC13054 CC13069 CC13013 N.S
CC13055 CC13070 MR070733 N.S
CC13056 CC13071 MR070734 N.S
CC13057 CC13072 N.S N.S
CC13058 NS N.S N.S
CC13059 MR070732 N.S MR070735
CC13060 NS N.S CC13014
Soil sample
TARSIS CAPITAL CORP.
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
FIGURE 12
SOIL SAMPLE LOCATION
MOR PROPERTY
0 0.5 2.5 km
UTM ZONE 8, NAD 83, 105C/01
FILE: ...2007/MOR/F_12-SAMPLE.WOR
DATE: MAY 2008



TARSIS CAPITAL CORP.

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

FIGURE 13
COMPILATION
COPPER AND VTEM
MOR PROPERTY

MAY 2008

the Discovery Horizon and also coincides with one of four EM conductors identified by the airborne VTEM survey. None of these anomalies have been fully delineated.

Another cluster of weak to moderate response occurs to the south west of the lake in a low-lying marshy area. Many of the sample sites in this region were not sampled due the absence of proper soil development and abundant organic material.

GEOPHYSICAL SURVEYS

Pre 2007 Surveys

The 2004 IP survey mapped a moderately to highly chargeable lenticular body traceable for approximately 600 m along the projected surface trace of the Discovery Showing. The anomaly dissipates to the west but is open to the east and the chargeable source is suggested to plunge gently to the east along strike. The horizon may be faulted near the eastern boundary of the surveyed area. The data was interpreted using the DCIP2D package developed by the University of British Columbia geophysical Inversion Facility.

2007 VTEM Survey

On September 18, 2007, a 285 line km airborne VTEM and magnetometer survey was flown by Geotech Ltd. of Aurora, Ontario. The survey was conducted using an AStar B3 helicopter operated by TRK Helicopters and maintained a mean terrain clearance of 85 m. Survey equipment and techniques are described in a report contained in Appendix III.

Four individual zones containing discrete EM anomalies were identified across the VTEM survey grid, which was flown at 100 m line spacing. Zones A, C and D are situated in the northern part of the grid and occur as clusters along the eastward trend defining the combine main soil geochemical anomaly and the projected surface trace of the Discovery Showing. Zone C corresponds directly to the EM anomaly over the current drill area.

Additional modelling by Condor Consulting Ltd. of Vancouver BC interpreted this series of anomalies to be associated with shallow near surface sulphide mineralization. All zones are suggested to have shallow dips to the south, which is consistent with current geological data. Surprisingly, however, Zone C is believed to lack the downdip extension that characterizes Zones A and D.

Zone B is located in the south central part of the survey grid approximately 2 km south of the Discovery Showing. Condor categorizes this zone as the only “classical” VHMS style feature of the four anomalies identified. Modelling suggests the presence of a number of complexly oriented plates, however, the most coherent anomalies (plates) appear to dip moderately to shallowly to the south. The area defined by Zone B is also spatially associated with moderate to strong magnetic response.

DIAMOND DRILLING

Pre-2007 Drilling

Diamond drilling at the MOR in 2004 intersected a series of near surface massive to semi-massive pyrite-chalcopyrite associated with strong chlorite to sericite altered and silicified volcaniclastic strata (Figure 14 and 15). Two drill holes were collared approximately 100 meters apart on the Discovery Showing. Each of the holes intersected two sulphide horizons that appear to be stratabound. Analytical results for select intervals reported from the 2004 diamond drill holes are detailed below:

MOR04-001 ANALYTICAL RESULTS

	From	To	Interval (m)	Zn (%)	Cu (%)	Au (g/t)	Ag (g/t)
	18.0	22.9	4.9	1.31	0.69	0.82	39.7
Including:	19.9	20.95	1.05	1.18	0.64	1.27	46.8
	41.9	42.6	0.7	0.18	0.69	0.50	11.8

MOR04-002 ANALYTICAL RESULTS

	From	To	Interval (m)	Zn (%)	Cu (%)	Au (g/t)	Ag (g/t)
	23.3	27.05	3.75	0.76	0.17	0.17	12.95
Including:	24.5	24.85	0.35	2.17	0.44	0.41	26.2
	66.12	68.0	1.88	0.21	0.97	0.35	19.78
Including:	67.3	68.0	0.7	0.37	1.23	0.50	37.65

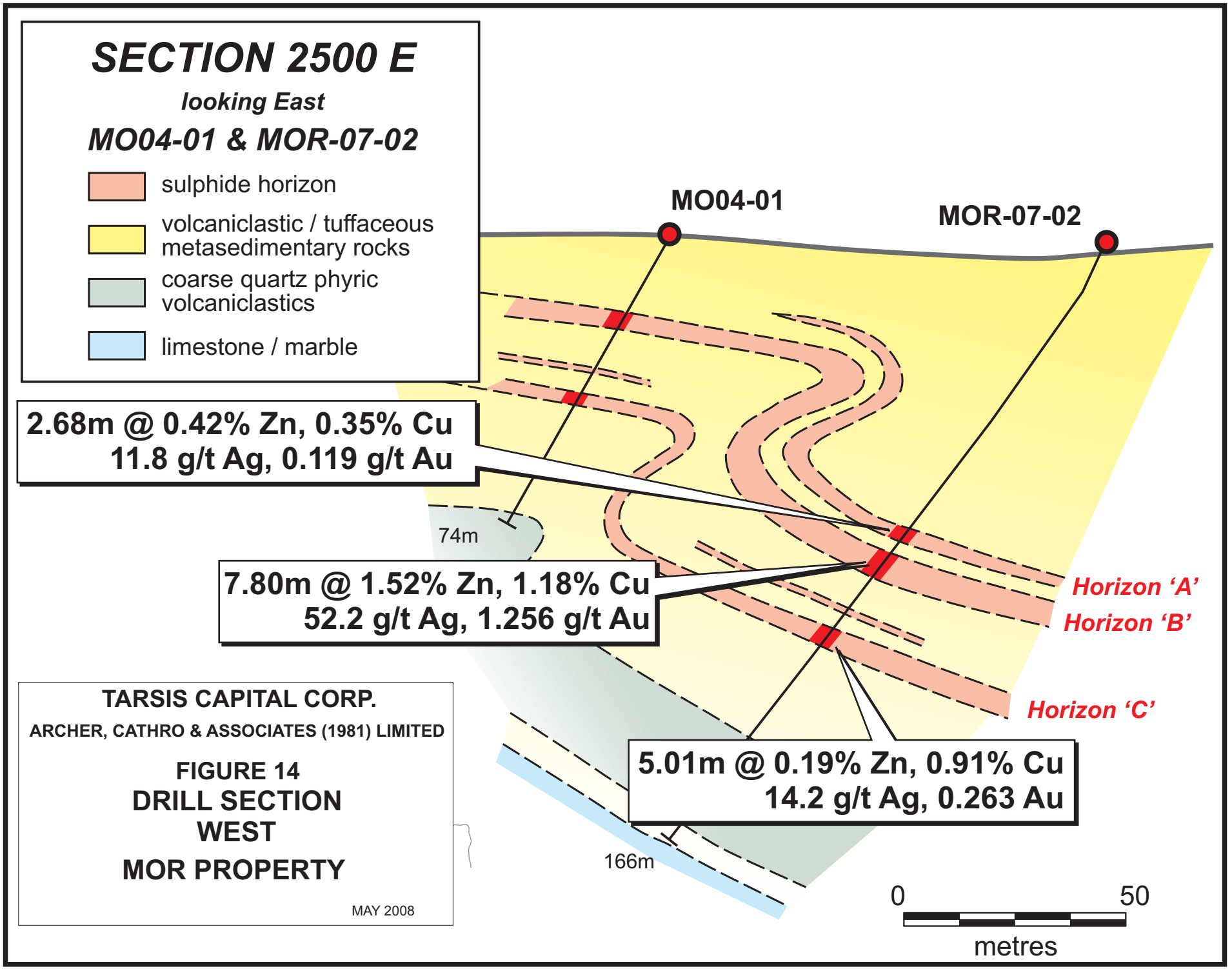
2007 Diamond Drilling

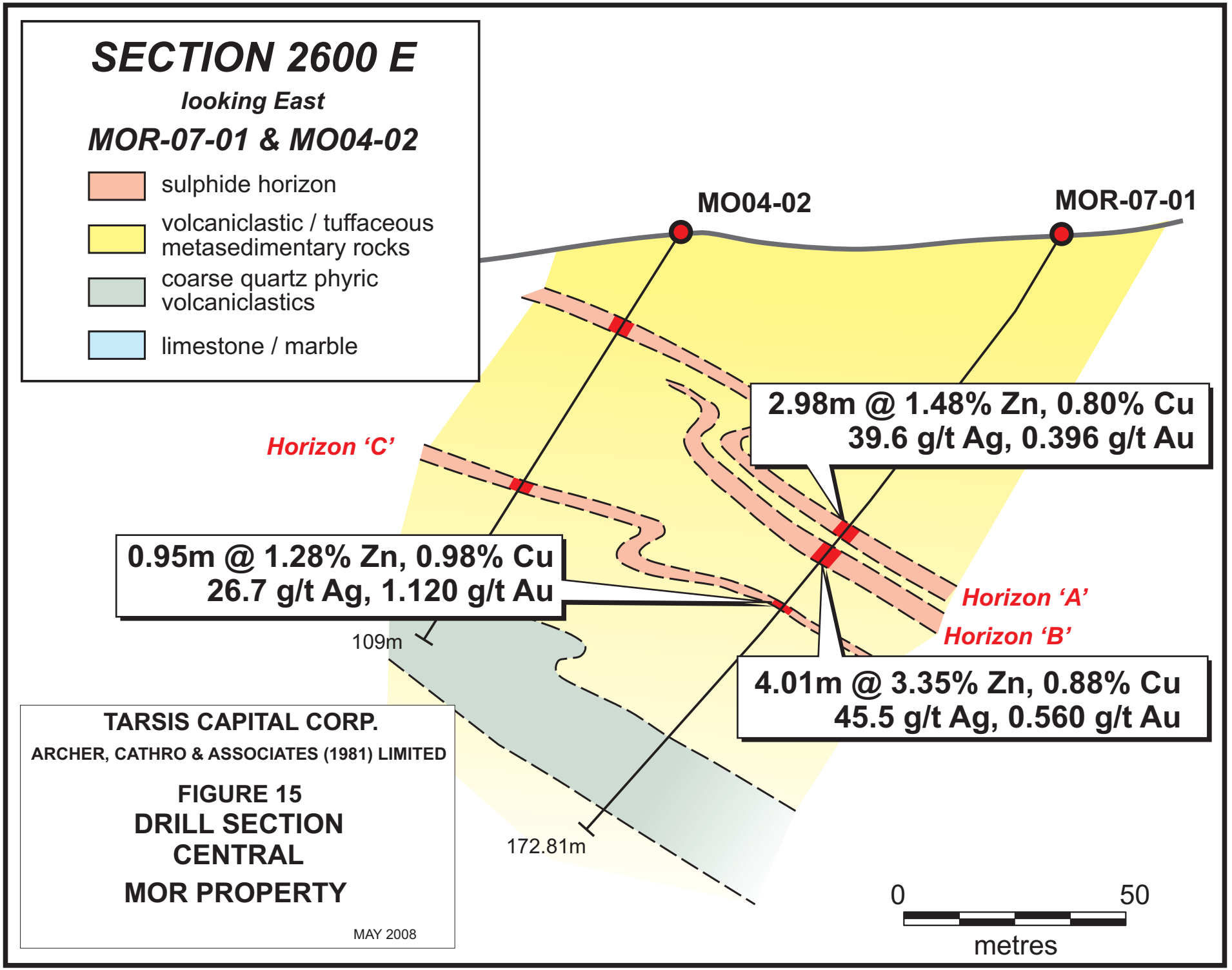
General

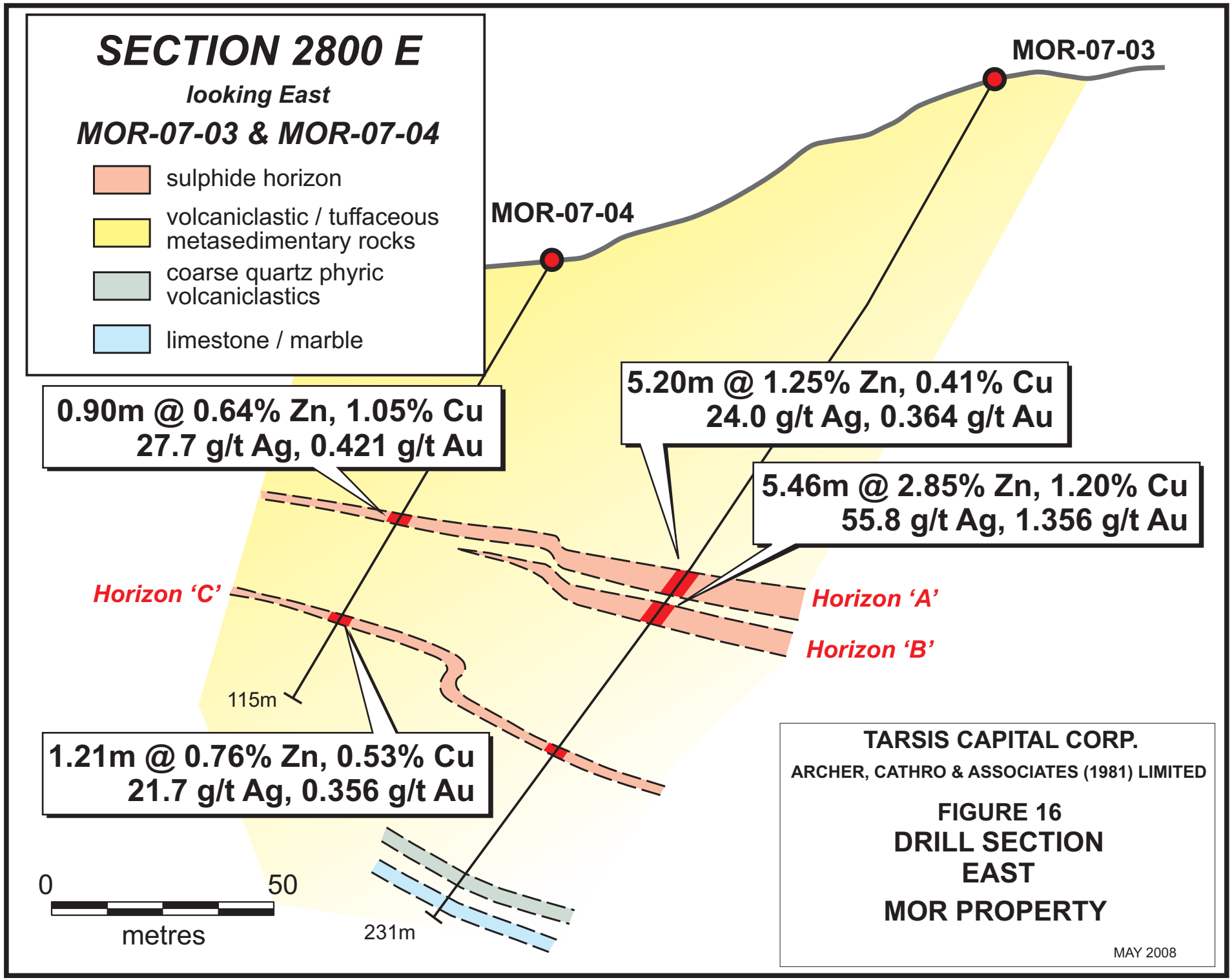
Diamond drilling was conducted at the MOR property between July 1 and 14 and was contracted to Top Rank Drilling Ltd. of St. Rose Du Lac, Manitoba. A total of 685 m was completed in four holes (Figures 14 to 16) using a helicopter portable, diesel powered JKS 300 with BTW equipment. The drill program was carried out on three section lines that tested the surface trace of the Discovery Showing for approximately 300 m along strike and 90 m downdip. Holes MOR 07-01 and MOR 07-02 tested mineralization downdip of the two holes drilled 100 m apart in 2004 while MOR 07-03 and MOR 07-04 were drilled on a section line 200 m to the east. Drill hole data are shown in Table II.

Table II - Drill Hole Data

Hole	Easting (m)	Northing (m)	Elevation (m)	Azimuth	Dip	Depth (m)
MOR-07-01	661918	6663933	1308	000º	60º	172.82
MOR-07-02	661819	6663911	1284	000º	60º	171.91
MOR-07-03	662116	6663904	1331	000º	60º	226.16
MOR-07-04	662115	6664007	1288	000º	60º	114.91


SECTION 2500 E
looking East
MO04-01 & MOR-07-02
sulphide horizon
volcaniclastic / tuffaceous metasedimentary rocks
coarse quartz phyric volcaniclastics
limestone / marble
MO04-01
MOR-07-02
2.68m @ 0.42% Zn, 0.35% Cu
11.8 g/t Ag, 0.119 g/t Au
74m
7.80m @ 1.52% Zn, 1.18% Cu
52.2 g/t Ag, 1.256 g/t Au
Horizon 'A'
Horizon 'B'
Horizon 'C'
5.01m @ 0.19% Zn, 0.91% Cu
14.2 g/t Ag, 0.263 Au
166m
0
50
metres
TARSIS CAPITAL CORP.
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
FIGURE 14
DRILL SECTION
WEST
MOR PROPERTY
MAY 2008


SECTION 2600 E
looking East
MOR-07-01 & MO04-02
sulphide horizon
volcaniclastic / tuffaceous metasedimentary rocks
coarse quartz phyric volcaniclastics
limestone / marble
MO04-02
MOR-07-01
2.98m @ 1.48% Zn, 0.80% Cu
39.6 g/t Ag, 0.396 g/t Au
Horizon 'C'
0.95m @ 1.28% Zn, 0.98% Cu
26.7 g/t Ag, 1.120 g/t Au
Horizon 'A'
Horizon 'B'
109m
4.01m @ 3.35% Zn, 0.88% Cu
45.5 g/t Ag, 0.560 g/t Au
172.81m
0
50
metres
TARSIS CAPITAL CORP.
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
FIGURE 15
DRILL SECTION
CENTRAL
MOR PROPERTY
MAY 2008


SECTION 2800 E
looking East
MOR-07-03 & MOR-07-04
sulphide horizon
volcaniclastic / tuffaceous metasedimentary rocks
coarse quartz phyric volcaniclastics
limestone / marble
MOR-07-03
MOR-07-04
0.90m @ 0.64% Zn, 1.05% Cu
27.7 g/t Ag, 0.421 g/t Au
5.20m @ 1.25% Zn, 0.41% Cu
24.0 g/t Ag, 0.364 g/t Au
5.46m @ 2.85% Zn, 1.20% Cu
55.8 g/t Ag, 1.356 g/t Au
Horizon 'C'
Horizon 'A'
Horizon 'B'
115m
1.21m @ 0.76% Zn, 0.53% Cu
21.7 g/t Ag, 0.356 g/t Au
0
50
metres
231m
TARSIS CAPITAL CORP.
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
FIGURE 16
DRILL SECTION
EAST
MOR PROPERTY
MAY 2008

The drill core was geotechnically and geologically logged on the property and then flown to the Morley River base camp and subsequently transported to the Archer Cathro's facility in Whitehorse. Mineralized intervals were split or sawn with one half returned to the box and the other half placed in plastic bags each containing a unique pre-numbered sample tag. All core was removed from the property and is currently stored in Archer Cathro's Whitehorse facility. All samples were further shipped to ALS Chemex of North Vancouver where they were dried and fine crushed to better than 70% passing 2 mm. A 250 g split of the crushed material was pulverized to better than 85% passing 75 microns. A split was then subjected to aqua-regia digestion and analyzed for 34 elements using the ME-ICP41 procedure. If a sample exceeded the detection limit for copper, lead, zinc or silver it was reanalyzed for total metal content using standard assay procedures. Certificates of Analysis are contained in Appendix II, geological and geotechnical logs are contained in Appendix IV.

Results

All four holes intersected massive to semi-massive sulphide mineralization with significant copper, zinc, silver and gold values including an intersection of 7.80 m grading 1.18% copper, 1.52 % zinc, 1.256 g/t gold and 52.2 g/t silver. Drilling to date indicates the presence of two to three gently to moderately dipping sulphide horizons hosted within an alternating succession of felsic to mafic volcaniclastic stratigraphy and tuffaceous metasedimentary rocks. Results for individual horizons from each of the four holes are tabulated below.

DDH Mor 07-01

Horizon	From (m)	To (m)	Interval (m)	Zn %	Cu %	Pb %	Ag (g/t)	Au (g/t)
A	80.41	83.39	2.98	1.48	0.80	0.40	39.6	0.396
B	87.84	91.85	4.01	3.35	0.88	0.56	45.5	0.560
including			2.59	4.25	0.70	0.60	43.8	0.518
			0.56	3.20	2.89	0.63	98.6	0.731
C	104.33	105.28	0.95	1.28	0.98	0.20	26.7	1.120

DDH Mor 07-02

Horizon	From (m)	To (m)	Interval (m)	Zn %	Cu %	Pb %	Ag (g/t)	Au (g/t)
A	73.51	76.19	2.68	0.42	0.35	0.01	11.8	0.119
B	80.52	88.32	7.80	1.52	1.18	0.27	52.2	1.256
including			2.54	1.43	2.02	0.23	70.3	2.47
C	102.80	107.81	5.01	0.19	0.91	0.05	14.2	0.263

DDH Mor 07-03

Horizon	From (m)	To (m)	Interval (m)	Zn %	Cu %	Pb %	Ag (g/t)	Au (g/t)
A	133.63	139.36	5.20	1.25	0.41	0.32	24.0	0.364
B	141.44	146.90	5.46	2.85	1.20	0.83	55.8	1.356
including			2.49	1.70	2.53	0.38	76.1	2.530
			2.25	4.19	0.21	1.10	30.3	0.270

DDH Mor 07-04

Horizon	From (m)	To (m)	Interval (m)	Zn %	Cu %	Pb %	Ag (g/t)	Au (g/t)
A	65.31	66.21	0.90	0.64	1.05	0.10	27.7	0.421
B	93.31	94.52	1.21	0.76	0.53	0.17	21.7	0.356

Mineralization within each of the horizons ranges from massive to semi-massive to heavily disseminated. The primary sulphide consists of medium- to coarse-grained pyrite with lesser amounts of chalcopyrite, sphalerite and galena. Magnetite is also present in some of the sulphide intervals and adjacent volcaniclastic rocks. While the sulphide horizons appears to be moderately to strongly deformed by folding the lateral continuity is excellent and the thicknesses of the horizons from the two outermost sections appear to be increasing substantially downdip. The sulphide bearing intervals were cut nearly perpendicular in drill core and are thus close to the true thicknesses.

DISCUSSION AND CONCLUSIONS

The MOR property covers a highly prospective Kuroko style VHMS target in southern Yukon, where remarkably little exploration has occurred during the 20th Century, despite a vast area of promising geology. Most of the known VHMS deposits in Yukon were discovered in the past decade within the evolving Finlayson Lake District, located in the southeastern part of the territory. These deposits are hosted within Yukon-Tanana Terrane (YTT), which comprises a composite collage of middle Paleozoic-age (Devonian to Carboniferous) bimodal metavolcanic, metasedimentary and meta-igneous units. Regional geological mapping initiatives by the Yukon Geology Program have designated a vast area of Yukon to be underlain by YTT including the area occupied by the MOR prospect. Recent geochronological work conducted on select felsic to intermediate horizons from the MOR drill core yielded similar ages to the volcanic rocks hosting Kuroko VHMS deposits in the Finlayson Lake District.

Exploration at the MOR property in the vicinity of the Discovery Showing has defined a series of stacked semi-massive to massive sulphide horizons along a 300 m strike length and 90 m downdip. Grades are sub economic at this particular locale but supplemental data from the soil geochemical and VTEM surveys suggest the mineralization continues both directions along strike. The projected surface trace of the Discovery Showing appears to coincide very well with

the main soil geochemical trend and VTEM anomalies as predicted with the use of structure contours. The supplemental data also indicates the presence of additional targets elsewhere on the property with "classic" VHMS features within 150 m of surface.

The sulphide intervals beneath the Discovery Showing are pyrite dominant and appear to have been coarsely recrystallized and folded. The host rocks are classified as metavolcaniclastic, which likely represents a distal part of the VHMS mineralizing system. Typical barite, silica or magnetite-rich exhalative sequences have not yet been documented above or below the sulphide horizons, however, disseminated magnetite is noted in the stratigraphy overlying the Discovery Showing mineralization and may represent the waning stages of a localized exhalative iron formation, which supports a distal VHMS environment.

Possible displacement from the origin of deposition is not known at this time but the presence of significant amounts of chalcopyrite in portions of the mineralized horizons suggests any displacement is likely to be minor.

The targets at the MOR property warrant an aggressive diamond drill campaign to define the bounds of mineralization associated with the Discovery Showing and assess the modeled VTEM anomalies. The first priority should consist of diamond drilling along strike and downdip from the existing mineralized horizons at the Discovery Showing to establish vent proximity vectors. The second priority should assess beneath the VTEM target modeled as a "classic" VHMS feature and continued drilling provided results are positive. Additional VTEM surveys should also be considered because this deposit type appears to respond well to this exploration technique.

Respectfully submitted,

Archer, Cathro & Associates (1981) Limited

W.A. Wengzynowski, P.Eng.

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APPENDIX I

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

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

1. I am President of Archer, Cathro & Associates (1981) Limited.

2. I graduated from the University of British Columbia in 1993 with a B.A.Sc in Geological Engineering, Option l, mineral and fuel exploration.

3. I registered as a Professional Engineer in the Province of British Columbia on December 12, 1998 (Licence Number 24119).

4. From 1983 to present, I have been actively engaged in mineral exploration in the Yukon Territory, Northwest Territories, northern British Columbia and Mexico.

5. I have personally participated in and supervised the fieldwork reported herein.

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

APPENDIX II

CERTIFICATES OF ANALYSIS

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

ARCHER, CATHRO AND ASSOCIATES (1981)
LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Finalized D 8-NOV-2007
Account: F

CERTIFICATE VA07115565

Project: MOR

P.O. No.:

This report is for 107 Soil samples submitted to our lab in Vancouver, BC, Canada on 4-OCT-2007.

The following have access to data associated with this certificate:

AL ARCHER VANCOUVER OFFICE	DOUG EATON BILL WENGZYNOWSKI	JOAN MARIACHER

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To: **ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED**
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

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

Signature: Lawrence Ng

Lawrence Ng, Laboratory Manager - Vancouver

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

LIMITED
1016-510 W HASTINGS ST
VANCOUVER BC V6B 1L8

Total # ... es: 4 (A - C)
Finalized L ... 8-NOV-2007
Account: F

Project: MOR

CERTIFICATE OF ANALYSIS VA07115565

Sample Description	Method	WEI-21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Recvd Wt.	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
MR 070700		0.22	<0.2	2.53	9	<10	220	0.5	2	0.98	0.8	17	47	88	3.73	10
MR 070701		0.28	0.3	2.10	8	<10	190	<0.5	2	0.54	<0.5	16	49	70	3.19	10
MR 070702		0.24	<0.2	1.84	<2	<10	110	<0.5	<2	0.37	<0.5	12	44	26	3.08	10
MR 070703		0.30	0.3	2.61	8	<10	260	0.7	<2	0.90	<0.5	17	55	75	3.81	10
MR 070704		0.16	0.2	2.18	4	<10	240	0.6	<2	1.72	0.9	15	46	133	3.09	<10
MR 070705		0.16	0.3	1.88	10	<10	190	0.5	3	2.12	0.8	12	37	122	2.69	<10
MR 070706		0.22	<0.2	2.17	10	<10	170	0.6	<2	0.65	<0.5	13	42	177	3.55	10
MR 070707		0.26	0.2	2.28	3	<10	210	0.5	<2	0.62	1.1	16	27	112	3.74	10
MR 070708		0.30	0.4	2.25	18	<10	310	0.7	<2	0.44	0.7	19	45	92	4.12	10
MR 070709		0.28	<0.2	2.08	48	<10	240	0.7	2	0.54	0.6	24	68	33	4.48	10
MR 070710		0.28	0.7	2.00	38	<10	390	0.6	<2	1.05	1.1	20	60	76	3.79	10
MR 070711		0.18	<0.2	1.07	28	<10	90	<0.5	<2	5.01	0.5	9	30	77	2.18	<10
MR 070712		0.20	<0.2	2.66	81	<10	170	0.8	<2	2.08	1.0	28	268	101	4.64	10
MR 070713		0.28	<0.2	2.66	90	<10	200	0.8	2	0.82	<0.5	25	134	123	4.69	10
MR 070714		0.36	<0.2	2.53	19	<10	110	0.6	<2	0.40	<0.5	22	74	43	4.09	10
MR 070715		0.18	0.2	2.20	3	<10	190	0.6	<2	0.50	<0.5	14	66	29	3.70	10
MR 070716		0.16	<0.2	2.50	8	<10	190	0.7	<2	1.84	<0.5	21	45	31	4.16	10
MR 070717		0.26	<0.2	1.95	6	<10	310	0.5	<2	3.25	<0.5	17	59	24	3.69	10
MR 070718		0.28	<0.2	2.59	5	<10	160	0.6	<2	0.36	0.5	23	83	16	4.82	10
MR 070719		0.32	<0.2	2.35	2	<10	150	0.6	<2	0.47	<0.5	17	48	19	4.13	10
MR 070720		0.30	<0.2	3.01	10	<10	240	0.8	<2	0.62	<0.5	22	80	19	4.70	10
MR 070721		0.18	0.2	1.64	3	<10	330	0.5	<2	2.25	1.6	17	44	41	2.85	10
MR 070722		0.20	0.2	2.03	84	<10	170	0.7	<2	1.32	1.1	15	51	118	3.34	10
MR 070723		0.20	1.0	1.93	42	<10	220	0.7	2	1.73	1.1	18	41	237	3.61	10
MR 070724		0.18	0.7	2.39	3	<10	310	0.5	<2	0.16	0.8	10	39	448	3.50	10
MR 070725		0.32	0.3	1.04	<2	<10	90	<0.5	<2	0.17	<0.5	5	21	16	1.86	10
MR 070726		0.32	<0.2	1.93	7	<10	90	<0.5	<2	0.24	<0.5	12	43	27	3.71	10
MR 070727		0.34	0.2	1.74	5	<10	120	<0.5	2	0.31	<0.5	13	39	67	2.95	10
MR 070728		0.28	<0.2	2.26	2	<10	190	<0.5	<2	0.96	<0.5	17	32	59	3.60	10
MR 070729		0.12	0.2	1.64	13	<10	190	0.5	<2	1.92	0.5	12	33	77	2.38	<10
MR 070730		0.22	<0.2	2.41	8	<10	270	0.5	2	1.04	<0.5	18	57	71	3.56	10
MR 070731		0.38	<0.2	2.30	7	<10	180	<0.5	2	0.69	<0.5	18	49	58	3.50	10
MR 070732		0.06	0.5	1.14	2	<10	200	0.7	<2	2.36	2.4	2	25	274	0.34	<10
MR 070733		0.04	<0.2	0.61	14	10	80	<0.5	<2	3.08	<0.5	8	37	152	3.21	<10
MR 070734		0.08	0.3	1.77	2	<10	280	0.5	<2	1.80	0.7	14	42	303	2.11	<10
MR 070735		0.14	<0.2	1.54	6	<10	270	<0.5	<2	1.54	0.8	11	54	66	2.17	<10
MR 070736		0.18	<0.2	1.92	8	<10	270	0.5	<2	0.97	0.7	16	46	113	2.54	10
MR 070737		0.12	0.4	1.64	12	<10	240	0.5	<2	0.95	<0.5	14	39	101	2.30	<10
CC 13004		0.22	0.2	1.65	<2	<10	180	0.8	<2	1.62	<0.5	16	37	382	2.68	<10
CC 13005		0.08	0.4	1.81	5	<10	310	1.0	<2	2.57	0.5	16	29	435	2.16	<10

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CERTIFICATE OF ANALYSIS VA07115565

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
MR 070700		<1	0.10	10	1.33	651	1	0.02	40	810	7	0.13	5	5	38	<20
MR 070701		<1	0.07	10	1.06	521	1	0.01	37	640	7	0.77	<2	4	24	<20
MR 070702		<1	0.06	10	0.91	342	1	0.01	24	330	8	0.05	4	3	19	<20
MR 070703		<1	0.09	10	1.15	715	2	0.01	38	970	8	0.05	4	4	35	<20
MR 070704		<1	0.09	10	0.96	695	1	0.01	39	1070	7	0.06	3	4	50	<20
MR 070705		<1	0.06	10	0.81	692	1	0.02	27	1180	8	0.09	5	2	67	<20
MR 070706		<1	0.07	10	0.81	580	2	0.01	26	540	11	<0.01	3	6	36	<20
MR 070707		<1	0.12	20	1.28	765	1	0.01	23	390	10	<0.01	5	6	28	<20
MR 070708		<1	0.08	20	0.79	900	3	0.01	32	520	26	0.01	5	4	33	<20
MR 070709		<1	0.17	10	1.07	1610	2	0.01	59	820	18	0.03	3	4	46	<20
MR 070710		<1	0.07	10	1.04	1025	1	0.01	77	1440	19	0.04	5	4	45	<20
MR 070711		<1	0.05	10	3.83	1465	<1	0.02	40	1380	13	0.09	5	2	89	<20
MR 070712		<1	0.10	10	2.14	1410	<1	0.02	166	1450	14	0.10	4	8	65	<20
MR 070713		<1	0.08	20	1.48	1585	1	0.01	111	1440	20	0.07	6	7	34	<20
MR 070714		<1	0.07	10	1.50	799	1	0.01	60	1180	15	0.02	6	4	20	<20
MR 070715		<1	0.06	10	1.01	535	<1	0.01	42	1440	10	0.06	2	2	24	<20
MR 070716		<1	0.07	10	2.20	994	<1	0.02	32	1490	9	0.08	4	5	25	<20
MR 070717		<1	0.07	10	2.58	765	<1	0.01	45	1840	9	0.05	5	4	34	<20
MR 070718		<1	0.10	10	1.22	1300	1	0.01	47	850	11	0.02	5	5	14	<20
MR 070719		<1	0.06	10	1.00	575	<1	0.01	34	630	13	0.03	4	4	17	<20
MR 070720		<1	0.07	10	1.71	976	1	0.01	59	540	13	0.05	7	7	16	<20
MR 070721		<1	0.05	10	0.65	995	1	0.02	41	1070	11	0.15	5	3	45	<20
MR 070722		<1	0.09	10	0.84	955	1	0.02	52	1000	15	0.13	5	4	66	<20
MR 070723		<1	0.06	20	0.60	1165	2	0.02	48	920	14	0.13	7	4	83	<20
MR 070724		<1	0.06	10	0.84	318	1	0.01	24	450	16	0.07	3	3	20	<20
MR 070725		<1	0.04	10	0.43	184	1	<0.01	7	220	10	0.04	4	2	10	<20
MR 070726		<1	0.06	10	0.99	443	1	0.01	23	400	9	0.02	4	4	14	<20
MR 070727		<1	0.05	10	1.05	451	1	<0.01	22	460	7	<0.01	4	3	18	<20
MR 070728		<1	0.06	10	1.26	483	1	0.01	24	420	5	0.01	6	4	36	<20
MR 070729		<1	0.05	10	0.64	603	1	0.01	27	1120	7	0.08	5	2	66	<20
MR 070730		<1	0.08	10	1.15	746	1	0.01	42	780	7	0.03	4	4	40	<20
MR 070731		<1	0.09	10	1.18	653	1	0.01	35	490	7	0.01	2	5	26	<20
MR 070732		<1	0.01	20	0.15	141	12	0.02	33	1540	<2	0.95	4	2	74	<20
MR 070733		<1	0.03	10	0.29	217	14	0.02	27	750	3	4.12	3	2	65	<20
MR 070734		<1	0.08	10	0.76	252	2	0.02	32	760	7	0.66	3	6	56	<20
MR 070735		<1	0.10	10	0.77	294	2	0.02	40	770	7	0.76	5	6	108	<20
MR 070736		<1	0.07	10	0.79	334	2	0.01	44	850	21	0.12	4	5	40	<20
MR 070737		<1	0.06	10	0.69	292	2	0.01	39	740	10	0.22	4	5	36	<20
CC 13004		<1	0.07	10	0.79	653	1	0.01	35	850	10	0.07	3	4	44	<20
CC 13005		<1	0.06	30	0.48	893	1	0.01	49	1170	8	0.11	3	3	76	<20

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CERTIFICATE OF ANALYSIS VA07115565

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Ti	Tl	U	V	W	Zn
	Units	%	ppm	ppm	ppm	ppm	ppm
	LOR	0.01	10	10	1	10	2
MR 070700		0.10	<10	<10	69	<10	96
MR 070701		0.09	<10	<10	65	<10	67
MR 070702		0.15	<10	<10	74	<10	63
MR 070703		0.10	<10	<10	77	<10	66
MR 070704		0.07	<10	<10	56	<10	105
MR 070705		0.07	<10	10	49	<10	65
MR 070706		0.21	<10	<10	66	<10	58
MR 070707		0.14	<10	<10	56	<10	123
MR 070708		0.16	<10	<10	70	<10	101
MR 070709		0.15	<10	<10	86	<10	125
MR 070710		0.11	<10	10	58	<10	155
MR 070711		0.05	<10	10	37	<10	82
MR 070712		0.17	<10	<10	107	<10	211
MR 070713		0.10	<10	<10	85	<10	99
MR 070714		0.11	<10	<10	76	<10	76
MR 070715		0.08	<10	<10	75	<10	84
MR 070716		0.09	<10	<10	95	<10	63
MR 070717		0.09	<10	<10	63	<10	67
MR 070718		0.22	<10	<10	96	<10	117
MR 070719		0.15	<10	<10	74	<10	72
MR 070720		0.15	<10	<10	104	<10	69
MR 070721		0.11	<10	<10	51	<10	221
MR 070722		0.11	<10	10	57	<10	191
MR 070723		0.15	<10	10	57	<10	94
MR 070724		0.12	<10	<10	75	<10	79
MR 070725		0.15	<10	<10	55	<10	30
MR 070726		0.17	<10	<10	87	<10	69
MR 070727		0.09	<10	<10	59	<10	63
MR 070728		0.19	<10	<10	97	<10	61
MR 070729		0.06	<10	10	47	<10	46
MR 070730		0.10	<10	<10	70	<10	60
MR 070731		0.10	<10	<10	69	<10	71
MR 070732		0.02	<10	10	20	<10	17
MR 070733		0.03	<10	10	35	<10	48
MR 070734		0.08	<10	<10	50	<10	72
MR 070735		0.11	<10	<10	50	<10	96
MR 070736		0.10	<10	<10	55	<10	61
MR 070737		0.09	<10	<10	49	<10	52
CC 13004		0.08	<10	<10	51	<10	38
CC 13005		0.05	<10	<10	41	<10	31

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CERTIFICATE OF ANALYSIS VA07115565

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10
CC 13006		0.28	<0.2	1.55	8	<10	110	<0.5	<2	0.33	<0.5	9	29	28	2.47	10
CC 13007		0.14	0.2	1.61	<2	<10	160	<0.5	<2	0.83	<0.5	10	32	101	2.43	<10
CC 13008		0.24	0.2	1.98	5	<10	170	0.5	<2	0.76	<0.5	20	42	291	3.08	10
CC 13009		0.28	<0.2	1.20	9	<10	110	<0.5	<2	0.49	<0.5	9	28	47	1.98	<10
CC 13010		0.16	0.6	2.40	2	<10	230	0.6	<2	1.43	<0.5	14	48	349	3.25	10
CC 13011		0.30	<0.2	2.22	3	<10	170	0.5	2	0.46	<0.5	14	46	65	3.20	10
CC 13012		0.06	0.2	0.80	2	<10	260	<0.5	<2	4.12	0.5	7	14	123	0.90	<10
CC 13013		0.36	<0.2	2.13	2	<10	270	0.6	<2	0.84	<0.5	17	43	60	3.66	10
CC 13014		0.10	0.2	1.80	<2	<10	430	0.6	<2	2.46	<0.5	14	42	67	2.68	<10
CC 13015		0.08	<0.2	0.98	<2	<10	150	<0.5	<2	0.76	<0.5	8	25	76	1.56	<10
CC 13016		0.20	0.3	1.97	3	<10	210	0.6	<2	0.78	<0.5	14	41	111	3.00	10
CC 13017		0.16	<0.2	2.40	3	<10	240	0.7	2	0.82	<0.5	18	66	150	3.74	10
CC 13018		0.08	0.3	2.00	9	<10	250	0.8	<2	2.64	<0.5	14	37	226	2.49	<10
CC 13019		0.28	<0.2	1.83	5	<10	150	<0.5	2	0.44	<0.5	13	39	42	3.08	10
CC 13020		0.24	<0.2	1.96	8	<10	100	<0.5	<2	0.19	<0.5	11	42	30	4.05	10
CC 13021		0.18	<0.2	1.66	5	<10	60	<0.5	<2	0.14	<0.5	9	42	12	4.08	10
CC 13022		0.16	<0.2	1.22	<2	<10	80	<0.5	<2	0.19	<0.5	7	29	14	2.27	<10
CC 13023		0.08	0.4	1.36	16	<10	140	<0.5	<2	1.71	0.6	12	32	112	2.26	<10
CC 13024		0.22	0.2	1.61	3	<10	140	<0.5	<2	0.40	<0.5	14	39	32	2.82	<10
CC 13025		0.20	<0.2	1.85	9	<10	270	0.5	<2	0.67	<0.5	14	47	33	3.10	10
CC 13026		0.16	<0.2	2.01	8	<10	180	<0.5	<2	0.54	0.9	16	46	16	3.88	10
CC 13027		0.18	<0.2	2.84	<2	<10	160	0.5	2	0.51	<0.5	21	97	16	4.54	10
CC 13028		0.18	<0.2	1.48	6	<10	140	<0.5	<2	0.82	<0.5	13	42	28	2.68	<10
CC 13029		0.12	<0.2	1.80	6	<10	180	0.5	<2	2.49	<0.5	15	42	52	3.06	10
CC 13030		0.06	<0.2	1.35	7	<10	160	<0.5	<2	2.21	<0.5	13	30	39	2.37	<10
CC 13031		0.28	<0.2	1.62	7	<10	100	<0.5	<2	0.22	<0.5	9	42	16	3.30	10
CC 13032		0.30	<0.2	1.59	4	<10	210	<0.5	<2	0.76	<0.5	14	46	42	2.94	<10
CC 13033		0.24	<0.2	1.44	3	<10	170	<0.5	<2	0.49	<0.5	13	40	37	2.90	<10
CC 13034		0.20	<0.2	1.56	7	<10	160	<0.5	<2	0.53	<0.5	15	44	40	3.05	<10
CC 13035		0.16	<0.2	1.48	7	<10	200	<0.5	2	0.77	<0.5	14	42	35	2.70	<10
CC 13036		0.18	<0.2	1.68	6	<10	180	<0.5	2	0.77	<0.5	17	46	38	3.05	<10
CC 13037		0.10	0.2	1.63	<2	<10	320	<0.5	2	2.05	<0.5	13	43	59	3.01	<10
CC 13038		0.20	<0.2	1.70	2	<10	290	<0.5	<2	1.21	<0.5	15	49	42	3.12	<10
CC 13039		0.14	0.3	1.66	14	<10	170	<0.5	<2	1.20	<0.5	13	46	47	2.94	<10
CC 13040		0.16	<0.2	1.58	4	<10	190	<0.5	<2	0.67	<0.5	13	39	41	2.83	<10
CC 13041		0.10	0.5	2.64	8	<10	350	0.6	<2	0.57	<0.5	15	57	50	3.76	10
CC 13042		0.14	0.4	2.23	6	<10	350	0.8	<2	0.42	<0.5	14	53	115	3.28	10
CC 13043		0.14	<0.2	1.77	6	<10	200	<0.5	<2	0.49	0.5	9	42	45	2.95	10
CC 13044		0.08	0.2	2.47	4	<10	260	0.9	<2	1.23	<0.5	18	51	198	3.75	10
CC 13045		0.08	0.4	1.31	2	<10	280	0.5	<2	3.74	<0.5	8	28	246	1.71	<10

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Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
CC 13006		<1	0.05	10	0.87	352	1	<0.01	17	350	8	<0.01	3	3	16	<20
CC 13007		<1	0.06	10	0.85	473	1	0.01	23	570	6	0.03	4	3	30	<20
CC 13008		<1	0.07	10	0.90	633	2	0.01	36	650	8	0.03	4	4	28	<20
CC 13009		<1	0.04	10	0.66	340	1	0.01	19	570	6	0.02	3	3	19	<20
CC 13010		<1	0.12	10	0.99	544	1	0.01	38	990	9	0.08	3	5	36	<20
CC 13011		<1	0.08	10	1.10	428	1	0.01	25	1060	6	0.05	5	4	23	<20
CC 13012		<1	0.04	10	0.27	940	2	0.02	17	1340	3	0.22	5	1	87	<20
CC 13013		<1	0.09	10	0.98	574	1	0.02	41	700	7	0.03	3	6	38	<20
CC 13014		<1	0.07	10	0.62	966	1	0.02	52	1360	9	0.20	4	4	118	<20
CC 13015		<1	0.06	10	0.52	534	<1	0.02	20	910	5	0.27	3	3	27	<20
CC 13016		<1	0.07	10	0.75	638	2	0.01	36	820	12	0.05	4	4	31	<20
CC 13017		<1	0.06	10	1.03	716	1	0.01	40	510	9	0.03	5	6	34	<20
CC 13018		<1	0.06	20	0.72	669	1	0.02	36	1140	6	0.12	4	3	75	<20
CC 13019		<1	0.06	10	0.94	418	<1	0.01	31	450	7	0.01	3	4	20	<20
CC 13020		<1	0.04	10	0.83	355	1	<0.01	24	180	6	0.01	4	3	11	<20
CC 13021		<1	0.04	<10	0.80	393	1	<0.01	16	280	8	0.01	5	3	10	<20
CC 13022		<1	0.05	10	0.63	258	1	0.01	16	270	6	<0.01	4	3	13	<20
CC 13023		<1	0.07	10	0.60	594	1	0.01	38	750	15	0.07	4	3	57	<20
CC 13024		<1	0.07	10	0.83	523	1	0.01	39	610	9	0.01	4	4	27	<20
CC 13025		<1	0.08	10	0.91	589	1	0.02	45	490	9	0.02	6	5	27	<20
CC 13026		<1	0.06	10	0.68	915	1	0.01	41	630	12	0.02	4	3	18	<20
CC 13027		<1	0.08	10	1.67	439	<1	0.01	60	450	12	0.01	8	6	15	<20
CC 13028		<1	0.08	10	0.80	428	1	0.01	44	810	8	0.03	3	3	24	<20
CC 13029		<1	0.15	10	1.37	870	<1	0.02	40	1180	8	0.07	3	4	44	<20
CC 13030		<1	0.09	10	0.84	874	1	0.01	27	1010	8	0.10	2	3	35	<20
CC 13031		<1	0.05	10	0.66	271	1	0.01	33	530	7	0.01	4	3	15	<20
CC 13032		<1	0.10	10	0.89	554	<1	0.02	48	670	10	0.01	3	5	26	<20
CC 13033		<1	0.10	10	0.79	478	1	0.01	33	590	9	0.01	6	4	25	<20
CC 13034		<1	0.16	10	0.86	546	1	0.01	43	850	9	0.01	5	5	24	<20
CC 13035		<1	0.11	10	0.83	859	1	0.01	40	700	10	0.03	4	4	28	<20
CC 13036		<1	0.13	10	0.96	576	1	0.02	47	690	10	0.02	6	5	30	<20
CC 13037		<1	0.13	10	1.07	923	1	0.02	47	860	13	0.08	4	4	54	<20
CC 13038		1	0.10	10	1.06	476	2	0.01	53	820	6	0.05	<2	5	38	<20
CC 13039		<1	0.08	10	0.87	593	1	0.01	47	710	8	0.06	2	4	41	<20
CC 13040		1	0.08	10	0.70	444	1	0.01	35	530	7	0.03	<2	4	28	<20
CC 13041		1	0.09	10	0.78	528	1	0.01	48	790	9	0.05	2	5	33	<20
CC 13042		<1	0.07	10	0.68	447	1	0.01	41	560	8	0.04	<2	4	28	<20
CC 13043		<1	0.08	10	0.60	318	1	0.01	27	300	23	0.02	2	4	25	<20
CC 13044		1	0.08	10	0.87	789	2	0.01	46	700	9	0.05	2	6	42	<20
CC 13045		1	0.05	10	0.46	464	1	0.01	33	1200	4	0.17	<2	2	90	<20

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CERTIFICATE OF ANALYSIS VA07115565

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Ti	Tl	U	V	W	Zn
	Units	%	ppm	ppm	ppm	ppm	ppm
	LOR	0.01	10	10	1	10	2
CC 13006		0.11	<10	<10	57	<10	47
CC 13007		0.08	<10	<10	46	<10	45
CC 13008		0.09	<10	<10	55	<10	48
CC 13009		0.07	<10	<10	41	<10	32
CC 13010		0.08	<10	<10	58	<10	54
CC 13011		0.08	<10	<10	60	<10	55
CC 13012		0.02	<10	<10	14	<10	40
CC 13013		0.19	<10	<10	69	<10	59
CC 13014		0.07	<10	10	53	<10	55
CC 13015		0.07	<10	<10	27	<10	44
CC 13016		0.10	<10	<10	59	<10	56
CC 13017		0.13	<10	<10	71	<10	53
CC 13018		0.05	<10	<10	47	<10	42
CC 13019		0.12	<10	<10	67	<10	57
CC 13020		0.19	<10	<10	81	<10	49
CC 13021		0.27	<10	<10	110	<10	50
CC 13022		0.12	<10	<10	50	<10	43
CC 13023		0.07	<10	20	37	<10	69
CC 13024		0.14	<10	<10	61	<10	55
CC 13025		0.12	<10	<10	61	<10	58
CC 13026		0.18	<10	<10	79	<10	87
CC 13027		0.21	<10	<10	98	<10	92
CC 13028		0.10	<10	<10	53	<10	73
CC 13029		0.10	<10	<10	59	<10	57
CC 13030		0.07	<10	<10	47	<10	63
CC 13031		0.14	<10	<10	64	<10	54
CC 13032		0.12	<10	<10	59	<10	54
CC 13033		0.12	<10	<10	60	<10	57
CC 13034		0.13	<10	<10	62	<10	68
CC 13035		0.11	<10	<10	53	<10	59
CC 13036		0.13	<10	<10	61	<10	69
CC 13037		0.10	<10	<10	51	<10	72
CC 13038		0.11	<10	<10	59	<10	64
CC 13039		0.09	<10	<10	52	<10	73
CC 13040		0.11	<10	<10	57	<10	59
CC 13041		0.10	<10	<10	75	<10	62
CC 13042		0.11	<10	<10	72	<10	56
CC 13043		0.19	<10	<10	74	<10	60
CC 13044		0.11	<10	<10	71	<10	58
CC 13045		0.04	<10	<10	34	<10	32

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CERTIFICATE OF ANALYSIS VA07115565

Sample Description	Method	WEI-21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Recvd Wt.	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
CC 13046		0.12	0.3	2.07	7	<10	210	0.5	<2	1.11	<0.5	15	39	88	3.18	10
CC 13047		0.24	<0.2	1.11	2	<10	50	<0.5	<2	0.11	<0.5	6	27	12	2.24	10
CC 13048		0.22	0.2	1.13	<2	<10	60	<0.5	<2	0.17	<0.5	7	28	12	2.61	10
CC 13049		0.22	0.2	2.00	3	<10	160	<0.5	<2	0.32	<0.5	13	40	45	3.01	<10
CC 13050		0.28	<0.2	2.05	<2	<10	110	<0.5	<2	0.28	<0.5	13	43	19	3.51	10
CC 13051		0.26	<0.2	1.70	<2	<10	60	<0.5	<2	0.25	<0.5	12	37	14	3.27	10
CC 13052		0.22	0.3	1.94	<2	<10	170	<0.5	<2	0.37	<0.5	12	38	38	3.47	10
CC 13053		0.08	0.5	1.68	<2	<10	240	0.7	<2	3.36	<0.5	11	22	339	1.99	<10
CC 13054		0.22	0.2	1.75	<2	<10	150	<0.5	<2	0.66	<0.5	12	32	42	2.70	<10
CC 13055		0.20	0.3	2.24	<2	<10	210	<0.5	<2	0.72	<0.5	11	40	42	3.03	10
CC 13056		0.24	0.3	1.83	6	<10	200	<0.5	<2	0.55	<0.5	14	36	56	2.82	10
CC 13057		0.20	0.3	2.41	3	<10	240	0.5	<2	0.63	<0.5	17	45	53	3.75	10
CC 13058		0.18	0.5	3.38	3	<10	360	0.8	<2	0.60	<0.5	15	60	87	4.67	10
CC 13059		0.32	0.2	1.82	6	<10	290	0.5	<2	1.46	<0.5	15	53	63	3.04	<10
CC 13060		0.12	0.8	2.22	<2	<10	350	0.5	<2	1.01	<0.5	12	36	43	2.65	10
CC 13061		0.34	0.2	1.89	3	<10	80	<0.5	<2	0.24	<0.5	10	30	28	3.46	10
CC 13062		0.30	<0.2	2.38	4	<10	200	0.5	<2	0.47	0.8	20	47	75	3.68	10
CC 13063		0.16	0.4	2.37	8	<10	280	0.6	<2	1.06	<0.5	21	46	127	3.32	10
CC 13064		0.32	<0.2	1.84	2	<10	90	<0.5	<2	0.28	<0.5	11	39	32	3.05	10
CC 13065		0.36	0.2	1.85	5	<10	120	<0.5	<2	0.35	<0.5	13	38	24	3.31	10
CC 13066		0.34	<0.2	1.58	3	<10	120	<0.5	<2	0.41	<0.5	12	37	30	2.75	10
CC 13067		0.26	<0.2	2.56	5	<10	190	<0.5	<2	0.76	<0.5	15	53	41	3.63	10
CC 13068		0.28	0.4	1.85	4	<10	180	<0.5	<2	0.91	<0.5	12	37	90	2.76	<10
CC 13069		0.12	0.4	2.18	8	<10	280	0.5	<2	1.93	<0.5	17	47	183	3.49	<10
CC 13070		0.10	0.4	1.46	<2	<10	300	0.5	<2	3.43	0.5	13	28	221	2.01	<10
CC 13071		0.16	0.3	1.67	<2	<10	220	<0.5	<2	1.61	<0.5	9	32	52	2.18	<10
CC 13072		0.08	0.4	2.82	<2	<10	370	0.5	<2	2.30	<0.5	8	45	99	2.54	<10

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CERTIFICATE OF ANALYSIS VA07115565

Sample Description	Method / Analyte / Units / LOR	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1	ME-ICP41 Th ppm 20
CC 13046		1	0.08	10	0.94	689	1	0.01	32	870	5	0.06	<2	3	35	<20
CC 13047		1	0.03	<10	0.38	151	1	<0.01	10	210	7	0.01	<2	2	8	<20
CC 13048		<1	0.05	10	0.50	260	1	<0.01	13	380	7	0.01	<2	3	11	<20
CC 13049		1	0.05	10	1.03	535	1	0.01	28	430	4	0.01	2	5	17	<20
CC 13050		<1	0.06	10	1.10	445	<1	<0.01	21	500	4	0.01	<2	4	16	<20
CC 13051		<1	0.06	<10	1.09	356	1	<0.01	18	360	3	0.01	2	3	14	<20
CC 13052		1	0.06	10	0.74	454	2	0.01	19	430	5	0.02	<2	4	18	<20
CC 13053		<1	0.04	10	0.49	968	1	0.01	17	1010	6	0.14	<2	3	56	<20
CC 13054		1	0.05	10	1.00	457	<1	0.01	24	570	5	0.03	<2	3	24	<20
CC 13055		1	0.11	10	0.92	379	1	0.01	28	600	8	0.03	<2	4	28	<20
CC 13056		<1	0.07	10	0.86	575	1	<0.01	21	320	7	0.02	<2	4	23	<20
CC 13057		1	0.12	10	0.95	708	1	0.01	26	920	8	0.04	<2	4	25	<20
CC 13058		1	0.20	10	0.84	406	1	0.01	40	990	12	0.03	2	7	31	<20
CC 13059		<1	0.12	10	0.97	582	2	0.02	43	880	5	0.07	<2	5	46	<20
CC 13060		1	0.12	10	0.57	673	1	0.02	33	1080	7	0.08	2	3	48	<20
CC 13061		<1	0.05	<10	0.95	335	1	0.01	19	150	5	0.02	<2	3	15	<20
CC 13062		<1	0.10	10	1.08	552	1	0.01	38	320	6	0.02	2	6	25	<20
CC 13063		1	0.09	10	0.85	1045	2	0.01	41	890	5	0.06	<2	4	33	<20
CC 13064		1	0.06	10	0.96	362	1	<0.01	19	330	5	0.02	<2	4	15	<20
CC 13065		<1	0.05	<10	1.16	435	<1	<0.01	20	380	3	0.01	<2	3	16	<20
CC 13066		<1	0.06	10	0.98	435	1	<0.01	21	270	3	0.01	2	3	17	<20
CC 13067		1	0.09	10	1.45	482	<1	0.01	31	500	4	0.03	<2	5	32	<20
CC 13068		<1	0.07	10	0.89	478	1	0.01	28	720	5	0.04	<2	4	28	<20
CC 13069		1	0.13	10	1.16	1865	3	0.01	43	880	5	0.12	2	6	41	<20
CC 13070		<1	0.07	10	0.61	1915	2	0.01	34	1040	5	0.19	<2	3	58	<20
CC 13071		1	0.08	10	0.72	423	1	0.01	27	1110	4	0.12	<2	3	49	<20
CC 13072		1	0.15	10	0.70	192	1	0.01	40	1390	3	0.33	2	4	62	<20

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Sample Description	Method / Analyte / Units / LOR	ME-ICP41 Ti % 0.01	ME-ICP41 Tl ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2
CC 13046		0.08	<10	<10	59	<10	72
CC 13047		0.17	<10	<10	68	<10	25
CC 13048		0.20	<10	<10	77	<10	44
CC 13049		0.12	<10	<10	65	<10	51
CC 13050		0.15	<10	<10	73	<10	59
CC 13051		0.14	<10	<10	70	<10	53
CC 13052		0.19	<10	<10	79	<10	57
CC 13053		0.05	<10	<10	34	<10	28
CC 13054		0.09	<10	<10	52	<10	44
CC 13055		0.10	<10	<10	58	<10	58
CC 13056		0.12	<10	<10	63	<10	49
CC 13057		0.10	<10	<10	78	<10	64
CC 13058		0.14	<10	<10	83	<10	78
CC 13059		0.10	<10	<10	57	<10	57
CC 13060		0.06	<10	<10	46	<10	39
CC 13061		0.16	<10	<10	74	<10	46
CC 13062		0.13	<10	<10	73	<10	86
CC 13063		0.08	<10	<10	60	<10	67
CC 13064		0.17	<10	<10	71	<10	55
CC 13065		0.14	<10	<10	73	<10	60
CC 13066		0.12	<10	<10	58	<10	48
CC 13067		0.10	<10	<10	71	<10	64
CC 13068		0.08	<10	<10	52	<10	49
CC 13069		0.07	<10	<10	55	<10	72
CC 13070		0.05	<10	<10	28	<10	58
CC 13071		0.06	<10	<10	38	<10	46
CC 13072		0.04	<10	<10	34	<10	59

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P.O. No.:

This report is for 25 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 15-AUG-2007.

The following have access to data associated with this certificate:

AL ARCHER VANCOUVER OFFICE	DOUG EATON BILL WENGZYNOWSKI	JOAN MARIACHER

SAMPLE PREPARATION

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Cu-OG46	Ore Grade Cu - Aqua Regia	VARIABLE
Zn-OG46	Ore Grade Zn - Aqua Regia	VARIABLE
Au-AA23	Au 30g FA-AA finish	AAS

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

Signature: Lawrence Ng

Lawrence Ng, Laboratory Manager - Vancouver

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Project: MOR (MOR-07-01)

CERTIFICATE OF ANALYSIS VA07089148

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-AA23 Au ppm 0.005	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01
C488601		4.27	<0.005	<0.2	2.74	11	<10	100	<0.5	<2	0.82	<0.5	17	8	29	5.41
C488602		5.41	0.009	0.2	3.75	7	<10	60	<0.5	2	0.65	<0.5	25	26	139	8.40
C488603		4.35	0.012	0.4	4.39	11	<10	60	<0.5	<2	0.57	<0.5	25	20	677	8.52
C488604		5.02	0.025	0.9	2.97	12	<10	80	<0.5	<2	0.92	0.5	18	13	616	5.83
C488605		2.54	0.588	32.2	1.67	63	<10	<10	<0.5	47	0.52	52.6	46	9	8720	18.3
C488606		2.94	0.251	45.3	0.56	297	<10	20	<0.5	29	0.35	33.8	13	3	7570	3.10
C488607		6.28	0.011	0.8	4.03	14	<10	890	<0.5	<2	1.93	<0.5	18	13	131	5.00
C488608		2.00	0.027	1.5	2.43	12	<10	680	<0.5	<2	1.33	<0.5	13	23	171	3.37
C488609		5.85	0.518	43.8	0.93	409	<10	10	<0.5	93	0.41	107.0	64	4	7020	21.2
C488610		1.49	0.572	16.0	1.29	365	<10	30	<0.5	10	0.85	24.8	12	11	1615	3.10
C488611		1.44	0.731	98.6	0.71	422	<10	<10	<0.5	138	0.18	100.0	132	12	>10000	24.8
C488612		1.56	<0.005	0.2	0.04	6	<10	140	<0.5	<2	20.6	<0.5	2	1	70	0.46
C488613		6.16	0.006	1.5	2.03	26	<10	950	<0.5	2	0.99	1.1	11	16	303	3.15
C488614		4.88	0.009	<0.2	3.80	<2	<10	220	<0.5	<2	1.57	<0.5	22	38	28	5.01
C488615		7.12	0.007	<0.2	2.47	3	<10	260	<0.5	<2	0.85	<0.5	13	19	31	3.40
C488616		5.94	0.022	1.4	1.61	7	<10	380	<0.5	<2	0.42	6.5	8	4	53	2.70
C488617		2.00	1.120	26.7	2.55	56	<10	20	<0.5	68	0.97	41.0	82	23	>10000	20.6
C488618		2.92	<0.005	<0.2	3.05	10	<10	280	<0.5	<2	1.45	0.5	19	11	47	4.51
C488619		1.81	0.089	3.6	3.20	12	<10	270	<0.5	<2	0.63	1.9	26	8	4260	7.45
C488620		5.29	<0.005	<0.2	3.33	6	<10	120	<0.5	<2	2.10	<0.5	19	16	55	5.00
C488621		0.96	0.016	2.0	3.71	3	<10	250	<0.5	<2	1.14	0.5	28	7	3250	6.97
C488622		4.00	<0.005	<0.2	2.11	<2	<10	130	<0.5	<2	0.67	<0.5	11	8	86	3.58
C488623		1.81	<0.005	<0.2	1.71	5	<10	70	<0.5	<2	1.22	<0.5	7	15	36	2.70
C488624		3.90	0.005	<0.2	3.13	<2	<10	80	<0.5	<2	0.55	<0.5	16	7	58	5.03
C488625		4.10	<0.005	<0.2	1.52	<2	<10	40	<0.5	<2	0.72	<0.5	4	4	11	2.61

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Project: MOR (MOR-07-01)

CERTIFICATE OF ANALYSIS VA07089148

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr
	Units	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm
	LOR	10	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1
C488601		10	<1	0.24	10	2.15	909	<1	0.03	7	860	8	1.00	2	6	15
C488602		10	<1	0.15	<10	2.94	1050	<1	0.02	15	800	11	2.46	2	5	11
C488603		10	<1	0.14	<10	3.56	1220	<1	0.02	10	550	6	2.05	2	5	11
C488604		10	<1	0.15	<10	2.49	996	<1	0.03	8	470	14	1.30	<2	7	17
C488605		<10	14	0.12	<10	1.41	583	4	0.01	9	290	3590	>10.0	19	4	26
C488606		<10	8	0.24	10	0.20	106	7	0.01	6	450	4340	3.76	199	1	38
C488607		10	<1	0.44	<10	3.90	1210	<1	0.01	8	650	53	0.25	4	13	33
C488608		10	<1	0.53	10	2.32	726	<1	0.01	7	410	46	0.40	<2	10	23
C488609		<10	37	0.19	<10	0.74	531	2	0.01	10	130	5980	>10.0	124	1	15
C488610		<10	8	0.33	10	1.05	511	5	0.01	13	400	3500	2.65	114	4	16
C488611		<10	31	0.10	<10	0.65	228	2	<0.01	12	100	6290	>10.0	258	2	23
C488612		<10	<1	0.02	<10	12.35	197	<1	<0.01	<1	200	38	<0.01	<2	<1	56
C488613		10	<1	0.42	10	1.86	623	<1	0.02	9	430	95	0.30	6	6	27
C488614		10	<1	0.80	<10	3.57	1090	<1	<0.01	16	550	10	0.02	5	13	30
C488615		10	<1	0.71	<10	2.27	673	<1	0.02	10	400	14	0.13	2	8	19
C488616		10	<1	0.46	<10	1.34	462	<1	0.02	<1	440	815	0.29	<2	4	11
C488617		10	7	0.14	<10	2.27	733	5	<0.01	17	360	1980	>10.0	20	8	24
C488618		10	<1	0.13	<10	2.78	925	<1	0.01	5	520	30	0.11	2	9	29
C488619		10	<1	0.21	<10	2.75	902	<1	<0.01	6	350	50	1.35	2	5	16
C488620		10	<1	0.14	<10	3.02	1100	<1	0.04	9	520	17	0.08	3	13	40
C488621		10	1	0.23	<10	3.18	987	1	<0.01	3	530	10	1.82	3	5	14
C488622		10	<1	0.11	<10	1.76	633	<1	0.02	2	440	6	0.45	<2	5	15
C488623		<10	<1	0.13	<10	1.28	737	<1	0.02	8	350	6	0.04	<2	4	18
C488624		10	<1	0.16	<10	2.44	858	1	<0.01	3	650	6	0.60	2	4	8
C488625		10	<1	0.05	10	0.97	499	1	0.03	<1	280	4	0.03	<2	6	16

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CERTIFICATE OF ANALYSIS VA07089148

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Cu-OG46	Zn-OG46
	Analyte	Th	Ti	Tl	U	V	W	Zn	Cu	Zn
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%	%
	LOR	20	0.01	10	10	1	10	2	0.01	0.01
C488601		<20	0.01	10	<10	42	<10	141		
C488602		<20	0.02	10	<10	57	<10	98		
C488603		<20	0.02	10	<10	56	<10	71		
C488604		<20	0.02	10	<10	49	<10	134		
C488605		<20	0.01	<10	<10	28	<10	>10000		2.19
C488606		<20	0.01	<10	<10	7	<10	9550		
C488607		<20	0.07	<10	<10	96	<10	416		
C488608		<20	0.06	<10	<10	71	<10	182		
C488609		<20	0.01	<10	<10	12	<10	>10000		4.25
C488610		<20	0.03	<10	<10	23	<10	7020		
C488611		<20	0.02	10	<10	16	10	>10000	2.89	3.20
C488612		<20	<0.01	<10	<10	7	<10	154		
C488613		<20	0.10	<10	<10	48	<10	361		
C488614		<20	0.18	<10	<10	148	<10	95		
C488615		<20	0.14	<10	<10	69	<10	105		
C488616		<20	0.09	<10	<10	32	<10	1620		
C488617		<20	0.03	<10	<10	78	10	>10000	0.98	1.28
C488618		<20	0.04	<10	<10	105	<10	219		
C488619		<20	0.03	<10	<10	77	<10	529		
C488620		<20	0.04	<10	<10	131	<10	300		
C488621		<20	0.02	<10	<10	55	<10	118		
C488622		<20	0.01	10	<10	36	<10	101		
C488623		<20	0.01	<10	<10	19	<10	70		
C488624		<20	0.01	<10	<10	36	<10	77		
C488625		<20	0.01	<10	<10	4	<10	40		

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Project: MOR (MOR-07-03)

P.O. No.:

This report is for 28 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 15-AUG-2007.

The following have access to data associated with this certificate:

AL ARCHER VANCOUVER OFFICE	DOUG EATON BILL WENGZYNOWSKI	JOAN MARIACHER

SAMPLE PREPARATION

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Cu-OG46	Ore Grade Cu - Aqua Regia	VARIABLE
Pb-OG46	Ore Grade Pb - Aqua Regia	VARIABLE
Zn-OG46	Ore Grade Zn - Aqua Regia	VARIABLE
Au-AA23	Au 30g FA-AA finish	AAS
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES

To: **ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED**
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Lawrence Ng

Lawrence Ng, Laboratory Manager - Vancouver

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Project: MOR (MOR-07-03)

CERTIFICATE OF ANALYSIS VA07089147

Sample Description	Method	WEI-21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Recvd Wt.	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
C448626		2.25	0.2	3.51	4	<10	80	<0.5	<2	1.71	<0.5	21	24	83	5.80	10
C448627		2.99	<0.2	2.73	5	<10	40	<0.5	<2	1.59	<0.5	16	20	29	4.30	10
C448628		6.34	0.9	3.32	16	<10	70	<0.5	3	0.33	<0.5	19	6	1070	7.81	10
C448629		7.32	0.2	1.40	6	<10	140	<0.5	<2	0.78	<0.5	5	6	45	2.03	<10
C448630		7.23	22.9	2.31	31	<10	20	<0.5	26	0.85	38.5	32	14	3710	10.70	10
C448631		2.68	26.5	2.36	70	<10	30	<0.5	24	0.86	28.8	16	16	5050	5.05	10
C448632		2.29	<0.2	2.25	14	<10	2290	<0.5	<2	0.86	0.5	11	21	58	3.46	10
C448633		2.06	0.2	4.17	6	<10	950	<0.5	<2	1.76	<0.5	24	47	30	5.52	10
C448634		2.01	65.0	0.62	274	<10	20	<0.5	4	0.23	89.2	7	4	2760	2.63	<10
C448635		5.79	76.1	1.21	381	<10	10	<0.5	94	0.43	50.7	113	2	>10000	24.7	10
C448636		4.24	30.3	2.58	65	<10	10	<0.5	18	0.71	102.0	19	4	2090	20.4	10
C448637		1.66	0.3	0.04	5	<10	260	<0.5	<2	20.4	<0.5	1	1	18	0.45	<10
C448638		7.02	4.8	3.60	22	<10	40	<0.5	2	1.30	1.7	26	5	965	7.38	10
C448639		2.96	0.7	3.33	11	<10	220	<0.5	<2	1.00	1.1	20	24	133	5.65	10
C448640		1.04	1.8	1.26	10	<10	190	<0.5	5	0.37	0.7	10	5	628	3.14	<10
C448641		3.11	2.0	2.52	34	<10	40	<0.5	11	0.37	1.3	50	25	2230	9.34	10
C448642		5.60	0.3	4.02	10	<10	110	<0.5	<2	0.96	<0.5	21	18	64	6.56	10
C448643		6.67	<0.2	1.54	3	<10	110	<0.5	<2	1.21	<0.5	7	5	18	2.86	<10
C448644		6.89	0.9	2.13	<2	<10	230	<0.5	<2	0.66	4.5	10	9	101	3.00	10
C448645		6.58	0.3	2.43	9	<10	290	<0.5	<2	1.64	0.9	14	12	56	3.53	10
C448646		4.99	2.4	3.31	27	<10	30	<0.5	6	0.46	<0.5	35	13	2610	10.00	10
C448647		1.75	<0.2	0.05	2	<10	10	<0.5	<2	20.7	<0.5	1	1	13	0.48	<10
C448648		1.05	0.3	3.22	<2	<10	20	<0.5	<2	2.76	<0.5	18	22	69	4.98	10
C448649		1.64	1.9	4.01	9	<10	50	<0.5	<2	1.40	<0.5	33	20	5550	7.46	10
C448650		6.93	0.3	4.19	4	<10	80	<0.5	<2	0.39	<0.5	19	10	267	7.07	10
C448572		6.11	<0.2	3.74	4	<10	120	<0.5	<2	0.62	<0.5	19	11	94	6.24	10
C448573		6.16	<0.2	1.78	2	<10	60	<0.5	<2	0.76	<0.5	6	4	41	3.31	10
C106192		0.35	0.5	2.35	3	<10	80	<0.5	<2	1.09	0.9	30	18	89	5.68	10

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CERTIFICATE OF ANALYSIS VA07089147

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
C448626		<1	0.26	<10	3.20	1040	1	0.02	12	590	8	1.02	<2	7	27	<20
C448627		<1	0.13	10	2.45	953	<1	0.05	11	720	7	0.19	3	8	26	<20
C448628		1	0.18	<10	2.67	1050	1	0.02	3	530	10	2.32	2	3	6	<20
C448629		<1	0.20	10	1.19	446	<1	0.04	1	350	15	0.10	<2	2	13	<20
C448630		10	0.31	<10	2.11	694	3	0.03	10	340	2490	9.93	18	6	32	<20
C448631		7	0.36	<10	2.12	722	5	0.03	12	390	4940	2.93	42	6	68	<20
C448632		<1	0.27	10	2.15	719	<1	0.04	9	470	23	0.12	2	9	51	<20
C448633		<1	0.33	10	4.12	1390	<1	0.03	22	640	12	0.09	3	20	25	<20
C448634		21	0.24	10	0.32	117	8	0.03	3	210	>10000	3.77	165	1	51	<20
C448635		15	0.15	<10	0.97	401	1	0.02	5	190	3820	>10.0	160	3	15	<20
C448636		18	0.09	<10	2.28	900	7	0.02	7	350	>10000	>10.0	52	7	21	<20
C448637		<1	0.02	<10	12.60	197	<1	0.02	<1	180	56	<0.01	<2	<1	56	<20
C448638		<1	0.12	<10	3.24	1090	1	0.02	2	580	484	1.87	9	9	24	<20
C448639		1	0.17	<10	3.13	879	<1	0.02	14	450	165	0.75	<2	8	18	<20
C448640		<1	0.15	10	0.97	360	2	0.08	<1	290	127	0.90	3	3	11	<20
C448641		<1	0.22	<10	2.14	619	<1	0.03	9	320	48	5.46	<2	5	8	<20
C448642		1	0.28	<10	3.56	1160	<1	0.03	8	650	9	1.00	3	9	16	<20
C448643		<1	0.27	10	1.27	704	<1	0.05	1	360	8	0.15	3	4	27	<20
C448644		<1	0.90	10	1.91	821	2	0.05	4	470	530	0.66	3	6	15	<20
C448645		1	0.78	10	2.15	1100	<1	0.04	8	470	135	0.38	<2	8	30	<20
C448646		<1	0.18	<10	2.87	789	1	0.03	4	390	31	5.55	<2	5	9	<20
C448647		<1	0.02	<10	12.60	207	<1	0.02	<1	190	8	<0.01	<2	<1	56	<20
C448648		1	0.03	<10	3.06	1320	<1	0.04	9	550	19	0.17	<2	15	47	<20
C448649		<1	0.11	<10	3.72	1200	<1	0.03	10	630	13	1.97	<2	13	27	<20
C448650		<1	0.16	<10	3.69	1100	<1	0.02	6	790	3	1.08	<2	6	9	<20
C448572		1	0.24	<10	3.07	978	1	0.03	5	640	3	1.04	<2	6	11	<20
C448573		<1	0.09	<10	1.25	692	<1	0.05	<1	510	4	0.11	<2	4	18	<20
C106192		<1	0.04	<10	2.06	1060	1	0.08	9	630	17	0.37	<2	17	11	<20

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Project: MOR (MOR-07-03)

CERTIFICATE OF ANALYSIS VA07089147

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Cu-OG46	Pb-OG46	Zn-OG46	Au-AA23
	Analyte	Ti	Tl	U	V	W	Zn	Cu	Pb	Zn	Au
	Units	%	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm
	LOR	0.01	10	10	1	10	2	0.01	0.01	0.01	0.005
C448626		0.02	10	<10	56	<10	92				0.006
C448627		0.01	10	<10	70	<10	83				0.006
C448628		0.02	<10	<10	29	<10	202				0.029
C448629		0.02	<10	<10	14	<10	112				0.005
C448630		0.04	<10	<10	45	10	>10000			1.43	0.399
C448631		0.06	<10	<10	50	<10	8350				0.281
C448632		0.06	10	<10	64	<10	282				0.008
C448633		0.09	<10	<10	130	<10	349				<0.005
C448634		0.01	<10	<10	8	<10	>10000		1.62	2.57	0.689
C448635		0.01	20	<10	23	30	>10000	2.35		1.70	2.53
C448636		0.01	20	<10	70	10	>10000		1.10	4.19	0.270
C448637		<0.01	<10	<10	7	<10	110				<0.005
C448638		0.02	10	<10	107	<10	819				0.073
C448639		0.02	<10	<10	77	<10	505				0.009
C448640		0.04	10	<10	14	<10	210				0.012
C448641		0.02	10	<10	43	<10	378				0.047
C448642		0.03	10	<10	81	<10	120				0.011
C448643		0.07	<10	<10	31	<10	61				<0.005
C448644		0.10	<10	<10	39	<10	1010				0.008
C448645		0.08	<10	<10	48	<10	348				0.013
C448646		0.02	10	<10	31	<10	250				0.050
C448647		<0.01	10	<10	7	<10	17				<0.005
C448648		0.02	<10	<10	113	<10	85				<0.005
C448649		0.02	<10	<10	100	<10	93				0.022
C448650		0.02	<10	<10	57	<10	91				0.007
C448572		0.01	10	<10	53	<10	78				<0.005
C448573		0.02	<10	<10	12	<10	60				<0.005
C106192		0.03	<10	<10	205	<10	70				<0.005

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CERTIFICATE VA07089146

Project: MOR (MOR-07-02)

P.O. No.:

This report is for 21 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 15-AUG-2007.

The following have access to data associated with this certificate:

AL ARCHER VANCOUVER OFFICE	DOUG EATON BILL WENGZYNOWSKI	JOAN MARIACHER

SAMPLE PREPARATION

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Cu-OG46	Ore Grade Cu - Aqua Regia	VARIABLE
Zn-OG46	Ore Grade Zn - Aqua Regia	VARIABLE
Au-AA23	Au 30g FA-AA finish	AAS
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES

To: **ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED**
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Lawrence Ng

Lawrence Ng, Laboratory Manager - Vancouver

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Project: MOR (MOR-07-02)

CERTIFICATE OF ANALYSIS VA07089146

Sample Description	Method	WEI-21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Recvd Wt.	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.02	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
C488551		4.56	<0.2	1.34	2	<10	40	<0.5	<2	1.61	<0.5	10	13	27	2.56	<10
C488552		2.64	<0.2	3.19	<2	<10	30	<0.5	<2	3.20	<0.5	19	28	9	5.25	10
C488553		6.36	11.8	3.32	23	<10	10	<0.5	22	0.51	16.2	40	9	3490	10.20	10
C488554		3.74	2.7	3.14	18	<10	120	<0.5	5	2.25	0.7	30	7	1420	6.71	10
C488555		4.96	0.2	3.28	11	<10	940	<0.5	<2	1.48	<0.5	23	3	64	5.66	10
C488556		2.69	22.2	2.40	22	<10	10	<0.5	35	1.09	28.6	30	3	2530	9.93	10
C488557		5.73	46.9	1.04	556	<10	<10	<0.5	99	0.51	52.4	56	2	8640	24.2	<10
C488558		5.51	70.3	1.25	436	<10	10	<0.5	125	0.62	42.7	137	4	>10000	25.5	10
C488559		2.41	53.6	1.13	241	<10	10	<0.5	107	0.28	29.6	74	2	>10000	12.80	<10
C488560		1.28	0.2	0.04	2	<10	90	<0.5	<2	19.6	<0.5	1	<1	52	0.45	<10
C488561		5.52	2.9	3.33	15	<10	80	<0.5	4	2.10	3.9	23	48	477	5.32	10
C488562		1.27	0.8	1.36	15	<10	1280	<0.5	<2	0.86	<0.5	6	6	81	2.34	10
C488563		6.36	0.5	3.00	15	<10	650	0.6	<2	1.12	<0.5	18	30	88	4.31	10
C488564		5.72	<0.2	1.13	4	<10	370	<0.5	<2	0.55	<0.5	5	4	28	1.83	<10
C488565		1.94	7.8	2.47	21	<10	10	<0.5	18	1.26	12.7	39	11	4450	10.25	10
C488566		8.83	<0.2	1.10	4	<10	100	<0.5	<2	0.99	<0.5	5	5	37	2.38	<10
C488567		4.93	9.8	2.01	36	<10	10	<0.5	29	0.80	4.9	51	5	7480	10.95	10
C488568		4.01	21.3	1.20	43	<10	10	<0.5	59	0.34	10.9	82	6	>10000	16.0	<10
C488569		5.00	0.3	3.40	2	<10	50	<0.5	<2	1.89	<0.5	19	17	105	5.23	10
C488570		6.86	0.3	3.55	<2	<10	180	<0.5	<2	0.72	<0.5	18	14	103	5.99	10
C488571		3.18	0.2	1.61	5	<10	50	<0.5	<2	0.65	<0.5	6	6	35	3.08	10

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Project: MOR (MOR-07-02)

CERTIFICATE OF ANALYSIS VA07089146

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	20
C488551		<1	0.15	10	1.30	599	<1	0.02	7	400	8	0.18	2	3	23	<20
C488552		1	0.13	<10	3.26	1650	1	0.02	9	450	8	0.38	<2	8	55	<20
C488553		5	0.10	<10	2.63	1100	1	0.01	6	670	592	5.71	<2	3	16	<20
C488554		<1	0.06	<10	2.83	1200	<1	0.02	7	660	41	1.81	<2	10	27	<20
C488555		1	0.07	<10	3.00	923	<1	0.03	1	600	27	0.21	4	9	28	<20
C488556		10	0.09	<10	2.17	699	3	0.03	5	650	4350	7.68	5	6	51	<20
C488557		13	0.10	<10	0.86	453	4	0.02	5	200	2170	>10.0	214	3	15	<20
C488558		13	0.09	<10	1.15	544	2	0.02	5	160	2320	>10.0	130	4	12	<20
C488559		7	0.20	<10	0.98	285	4	0.02	6	260	2820	>10.0	95	2	22	<20
C488560		<1	0.02	<10	11.90	193	<1	0.02	<1	180	18	<0.01	<2	<1	51	<20
C488561		<1	0.39	<10	3.40	1060	<1	0.03	21	530	319	1.18	6	16	43	<20
C488562		<1	0.29	10	1.35	418	<1	0.04	2	360	42	0.08	3	5	25	<20
C488563		1	1.05	<10	2.94	868	<1	0.03	15	520	21	0.23	5	9	20	<20
C488564		1	0.39	<10	1.03	427	<1	0.03	3	310	13	0.22	<2	2	13	<20
C488565		1	0.20	<10	2.32	783	2	0.02	11	400	513	8.41	<2	6	21	<20
C488566		1	0.13	10	0.97	443	<1	0.03	1	350	12	0.19	<2	4	22	<20
C488567		1	0.15	<10	1.77	615	1	0.02	4	340	275	8.53	<2	5	19	<20
C488568		2	0.13	<10	0.97	318	4	0.02	5	200	821	>10.0	2	3	8	<20
C488569		1	0.07	<10	3.18	1280	<1	0.03	8	630	17	0.14	<2	14	28	<20
C488570		1	0.14	<10	3.20	1010	<1	0.02	6	720	11	1.34	3	6	14	<20
C488571		<1	0.07	10	1.30	560	1	0.04	2	340	5	0.49	<2	4	14	<20

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Project: MOR (MOR-07-02)

CERTIFICATE OF ANALYSIS VA07089146

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Cu-OG46	Zn-OG46	Au-AA23
	Analyte	Ti	Tl	U	V	W	Zn	Cu	Zn	Au
	Units	%	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	LOR	0.01	10	10	1	10	2	0.01	0.01	0.005
C488551		0.01	<10	<10	20	<10	54			0.005
C488552		0.01	<10	<10	53	<10	86			<0.005
C488553		0.01	10	<10	37	<10	4150			0.119
C488554		0.01	<10	<10	102	<10	708			0.039
C488555		0.03	10	<10	149	<10	616			<0.005
C488556		0.02	10	<10	85	10	>10000		1.20	0.138
C488557		<0.01	20	<10	20	10	>10000		1.98	0.955
C488558		0.01	20	<10	29	20	>10000	2.02	1.43	2.47
C488559		0.02	10	<10	13	<10	9820	1.01		0.520
C488560		<0.01	<10	<10	7	<10	57			0.016
C488561		0.12	<10	<10	128	<10	1420			0.042
C488562		0.10	<10	<10	55	<10	93			0.008
C488563		0.17	<10	<10	105	<10	188			0.010
C488564		0.06	<10	<10	13	<10	72			<0.005
C488565		0.03	<10	<10	60	<10	3660			0.233
C488566		0.02	<10	<10	24	<10	56			<0.005
C488567		0.02	10	<10	53	<10	1110			0.187
C488568		0.01	10	<10	26	<10	2970	1.17		0.382
C488569		0.01	<10	<10	107	<10	500			<0.005
C488570		0.01	10	<10	48	<10	98			0.007
C488571		0.01	<10	<10	13	<10	47			0.005

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CERTIFICATE VA07088782

Project: MOR-07-04

P.O. No.:

This report is for 19 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 13-AUG-2007.

The following have access to data associated with this certificate:

AL ARCHER VANCOUVER OFFICE	DOUG EATON BILL WENGZYNOWSKI	JOAN MARIACHER

SAMPLE PREPARATION

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

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
ME-OG46	Ore Grade Elements - AquaRegia	ICP-AES
Cu-OG46	Ore Grade Cu - Aqua Regia	VARIABLE
Au-AA23	Au 30g FA-AA finish	AAS

To: **ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED**
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: Lawrence Ng

Lawrence Ng, Laboratory Manager - Vancouver

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Project: MOR-07-04

CERTIFICATE OF ANALYSIS VA07088782

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-AA23 Au ppm 0.005	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01
CC488574		2.60	0.006	0.2	3.11	<2	<10	50	<0.5	<2	2.44	<0.5	19	19	100	4.58
CC488575		3.99	0.011	<0.2	4.02	<2	<10	90	<0.5	<2	0.75	<0.5	21	19	23	6.71
CC488576		7.33	<0.005	<0.2	1.05	<2	<10	200	<0.5	<2	1.06	<0.5	5	5	9	2.14
CC488577		0.76	0.008	0.3	4.63	3	<10	60	<0.5	<2	0.66	<0.5	20	24	46	8.04
CC488578		5.69	<0.005	<0.2	2.30	3	<10	80	<0.5	<2	1.64	<0.5	13	4	11	4.26
CC488579		1.92	0.421	27.7	2.57	33	<10	10	<0.5	59	1.15	22.0	74	17	>10000	18.8
CC488580		1.86	<0.005	<0.2	0.03	<2	<10	20	<0.5	<2	20.3	<0.5	1	<1	16	0.47
CC488581		3.74	0.009	0.5	1.64	2	<10	300	<0.5	<2	1.26	2.4	9	14	130	2.73
CC488582		4.89	0.010	0.3	2.76	2	<10	410	<0.5	<2	1.45	0.5	15	19	96	4.05
CC488583		5.50	<0.005	<0.2	1.29	4	<10	240	<0.5	<2	0.40	<0.5	4	3	16	2.35
CC488584		2.96	0.065	2.6	1.95	16	<10	50	<0.5	<2	1.67	0.8	11	26	619	3.85
CC488585		2.34	0.356	21.7	2.42	36	<10	10	<0.5	43	0.40	23.8	62	5	5340	16.9
CC488586		3.84	<0.005	<0.2	0.05	<2	<10	20	<0.5	<2	20.9	<0.5	2	<1	18	0.47
CC488587		3.06	0.021	0.8	3.03	3	<10	100	<0.5	2	0.70	0.5	20	9	284	6.32
CC488588		7.50	0.006	<0.2	3.31	5	<10	100	<0.5	<2	0.68	<0.5	15	8	94	5.74
CC488589		2.20	<0.005	<0.2	2.43	<2	<10	90	<0.5	<2	0.69	<0.5	12	5	15	4.06
CC488590		4.18	<0.005	<0.2	3.73	6	<10	70	<0.5	<2	0.58	<0.5	18	6	21	5.93
CC488591		0.73	<0.005	<0.2	3.37	5	<10	60	<0.5	<2	1.65	<0.5	17	6	17	5.47
CC488592		2.27	0.005	<0.2	2.33	3	<10	60	<0.5	<2	2.41	<0.5	8	<1	4	4.74

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Project: MOR-07-04

CERTIFICATE OF ANALYSIS VA07088782

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr
	Units	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm
	LOR	10	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1
CC488574		10	1	0.17	<10	2.92	1100	<1	0.04	15	500	8	0.10	<2	13	38
CC488575		10	2	0.31	<10	3.64	1200	1	0.02	7	710	5	1.00	<2	8	11
CC488576		<10	<1	0.58	10	0.71	588	<1	0.05	1	230	7	0.11	<2	4	27
CC488577		10	1	0.30	<10	4.20	1290	<1	0.02	7	770	6	1.60	3	6	12
CC488578		10	<1	0.22	<10	2.05	938	<1	0.06	1	640	7	0.11	<2	11	27
CC488579		10	6	0.27	<10	2.32	741	4	0.02	14	320	1030	>10.0	5	9	27
CC488580		<10	<1	0.02	<10	12.30	200	<1	0.02	1	160	8	<0.01	<2	<1	52
CC488581		<10	1	0.70	10	1.49	771	<1	0.03	8	470	126	0.83	<2	5	29
CC488582		10	<1	0.86	<10	2.66	974	<1	0.03	8	490	55	0.37	3	11	36
CC488583		10	<1	0.72	10	0.98	413	<1	0.06	<1	460	19	0.14	<2	3	17
CC488584		10	1	0.50	10	1.83	715	3	0.04	13	410	140	1.72	<2	7	28
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CC488591		10	<1	0.14	10	2.65	1030	1	0.02	1	660	7	1.21	<2	5	49
CC488592		10	<1	0.09	10	1.67	1140	<1	0.07	1	600	3	0.79	<2	7	46

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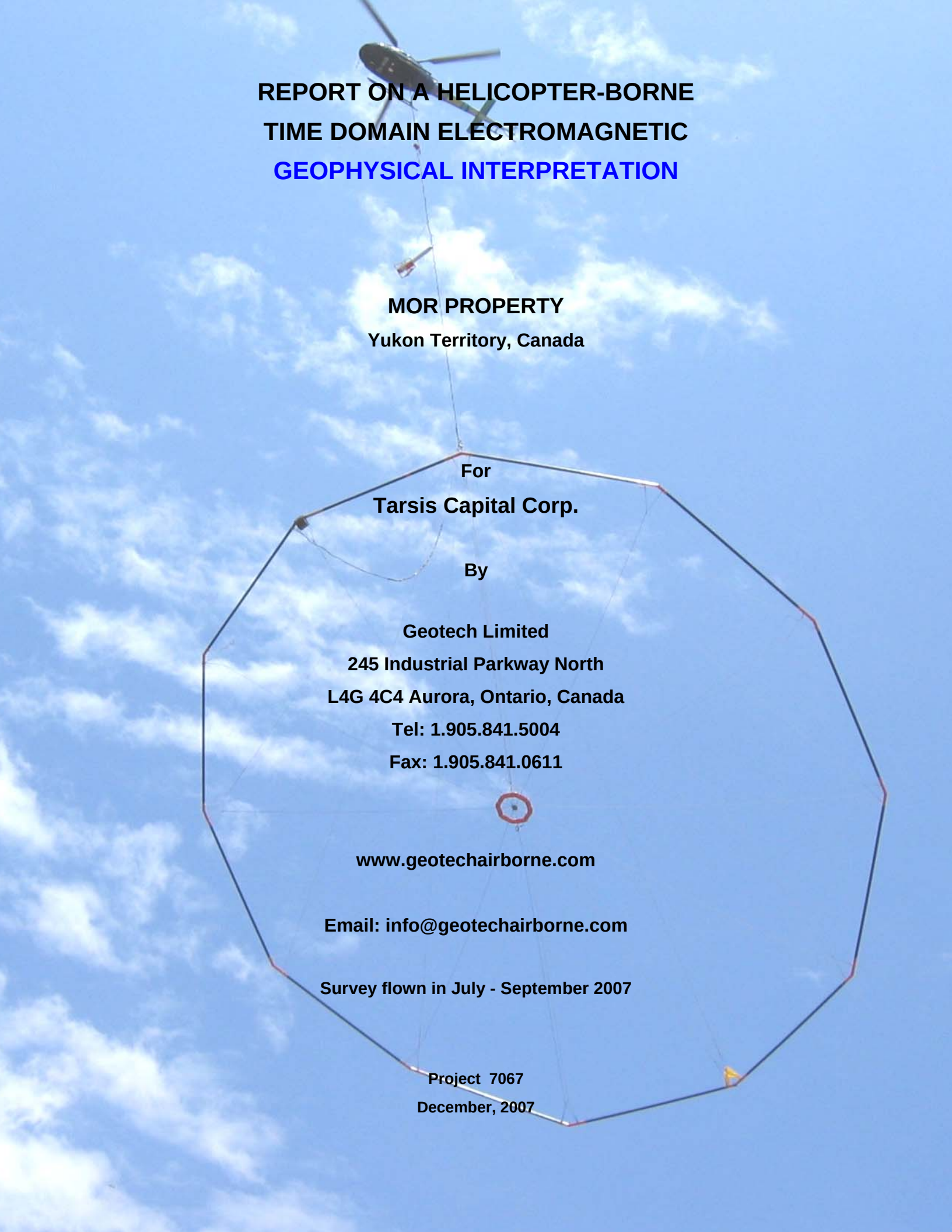
Project: MOR-07-04

CERTIFICATE OF ANALYSIS VA07088782

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Cu-OG46
	Analyte	Th	Ti	Tl	U	V	W	Zn	Cu
	Units	ppm	%	ppm	ppm	ppm	ppm	ppm	%
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CC488582		<20	0.13	10	<10	84	<10	342	
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CC488591		<20	<0.01	<10	<10	40	<10	63	
CC488592		<20	0.01	<10	<10	24	<10	113	

APPENDIX III

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



REPORT ON A HELICOPTER-BORNE TIME DOMAIN ELECTROMAGNETIC GEOPHYSICAL INTERPRETATION

MOR PROPERTY

Yukon Territory, Canada

For

Tarsis Capital Corp.

By

Geotech Limited

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Survey flown in July - September 2007

Project 7067

December, 2007

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REPORT ON A HELICOPTER-BORNE
TIME DOMAIN ELECTROMAGNETIC INTERPRETATION

MOR Property, Yukon Territory, Canada

1. INTRODUCTION

In July and September, 2007 a helicopter-borne electromagnetic survey was carried out by Geotech Ltd. for Tarsis Capital Corp. over the MOR Property located in Yukon Territory, Canada.

This report includes the results of the geophysical interpretation, over this Property. The Property is located at approximately 180 km south-east from Whitehorse, in the Yukon Territory. The geographic coordinates of the block extents are: longitudes, 132º 09'21" W and 132º 02'48" W, and latitudes, 60º 03'02" N and 60º 05'42" N. The surveyed area is 28 km^2, and the total line kilometers flown are 305 km (Fig. 1).

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

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

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

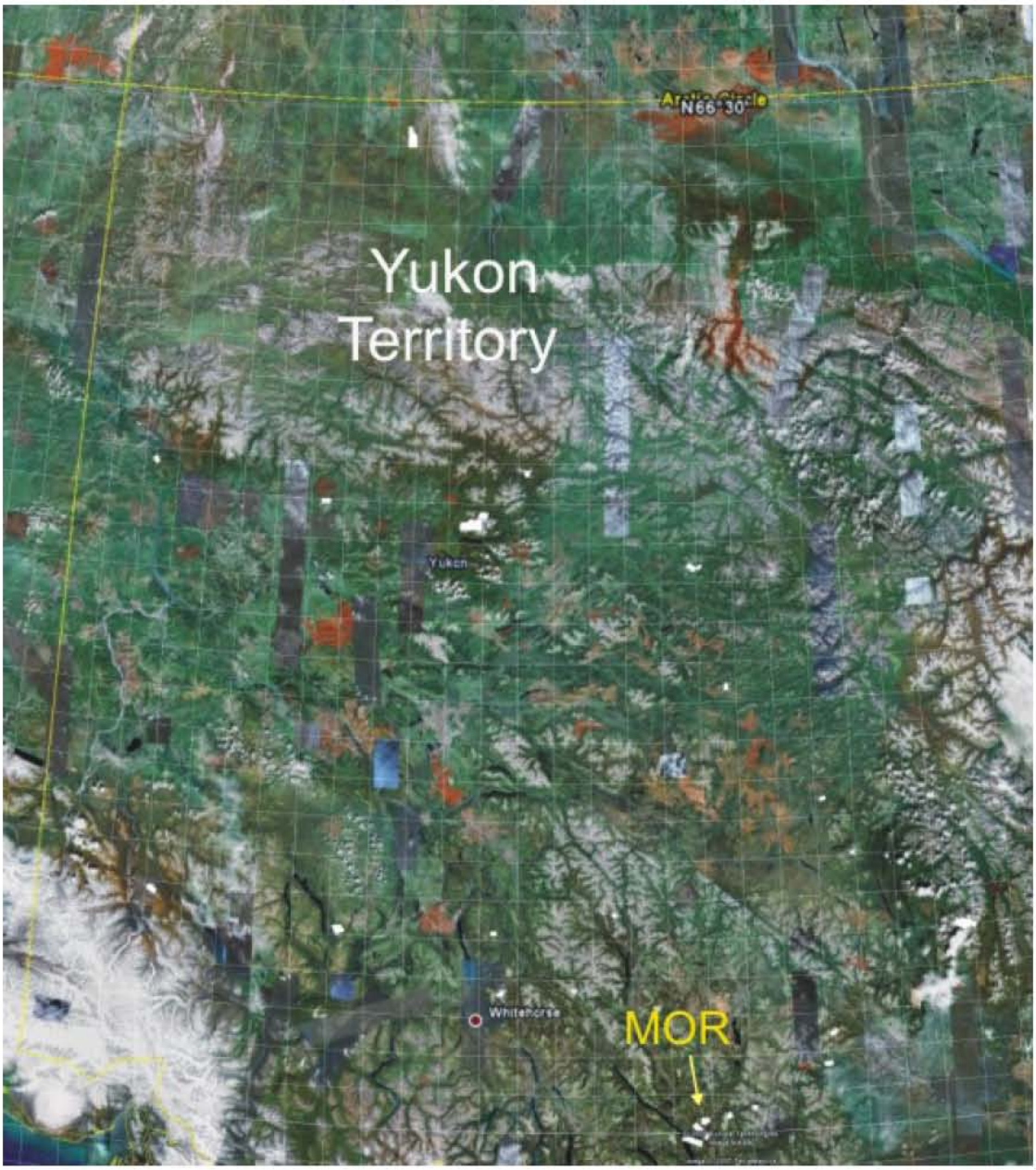


Fig. 1 Location of the MOR Property on the satellite image.

2. SURVEY DESCRIPTION

In July and September 2007, Geotech Ltd. carried out a helicopter-borne geophysical survey over the MOR 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 was keeping a constant ground clearance of 85 m when the terrain allowed it. The traverse lines direction was NS and the tie lines direction was EW. 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 very rugged with high mountain belts trending in the NS direction. The absolute altitude ranges from 800 m to 1500 m approximately. Due to the terrain roughness, it was difficult to keep a constant ground clearance while surveying this area.

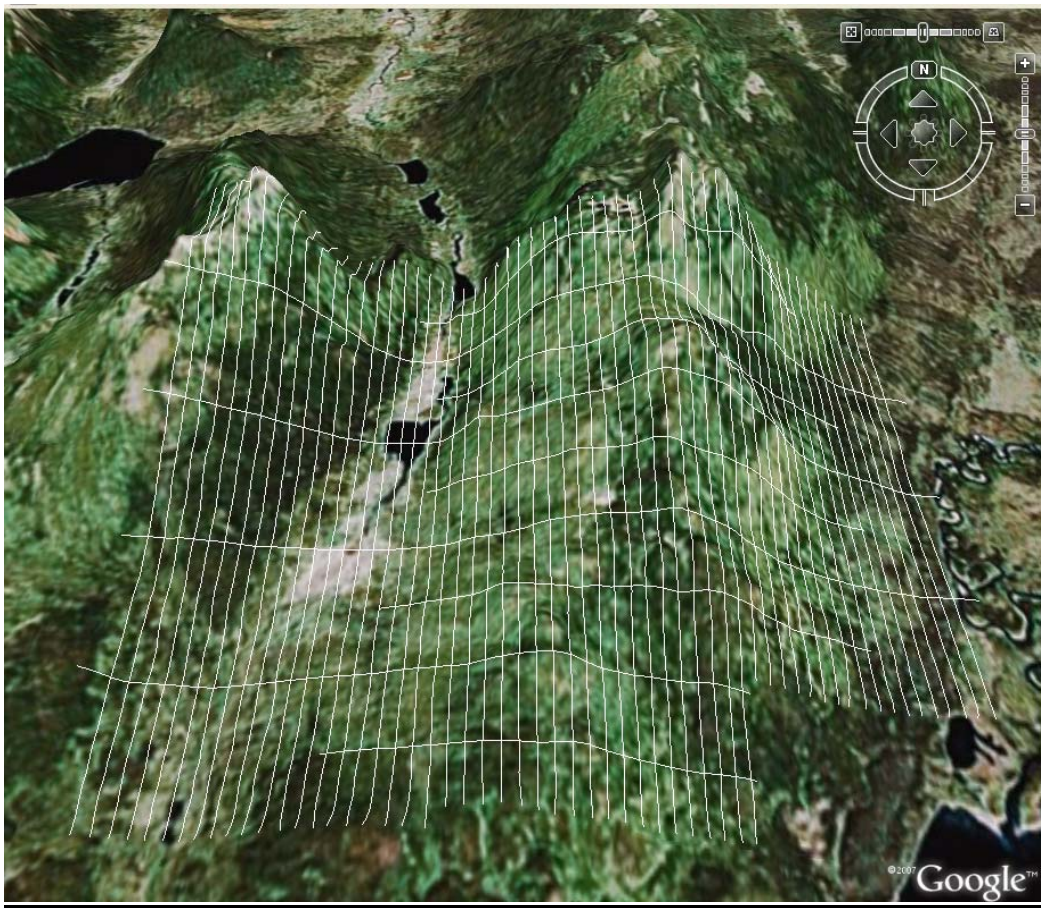


Fig.2 Topography of the MOR Property with the flight path.

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).

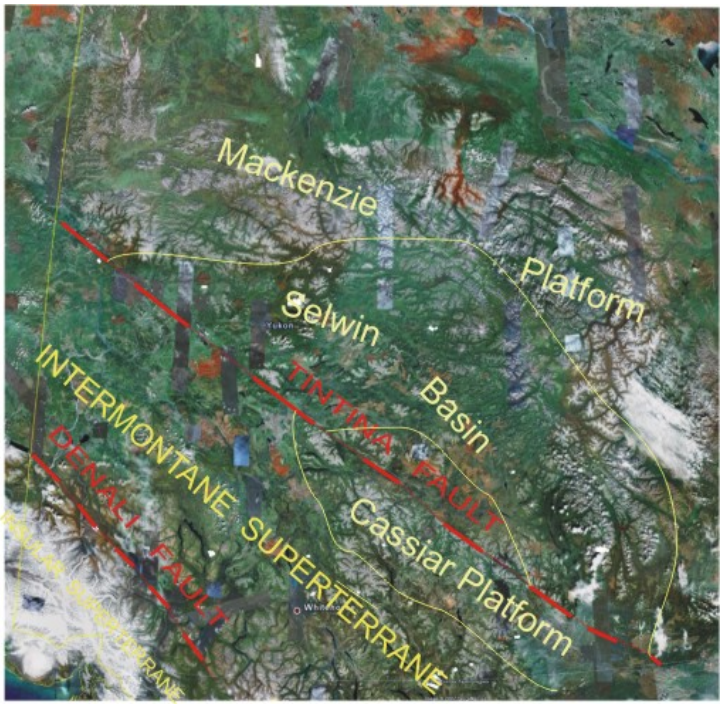


Fig.3. The major tectonic elements of Yukon superimposed on the satellite image. The figure indicates that the territory is composed of two dominant rock packages separated by the Tintina Fault: thick packages of sediments (northeast) and accreted Terranes (Southwest).

3.3 Geological context of the MOR Property

The MOR property is mostly underlain by a gently to moderately southward dipping sequence of quartz chlorite schist with mafic to intermediate volcanic/ volcanoclastic origin. These rocks are strongly deformed and easterly trending dipping in the southern direction (Fig.4).

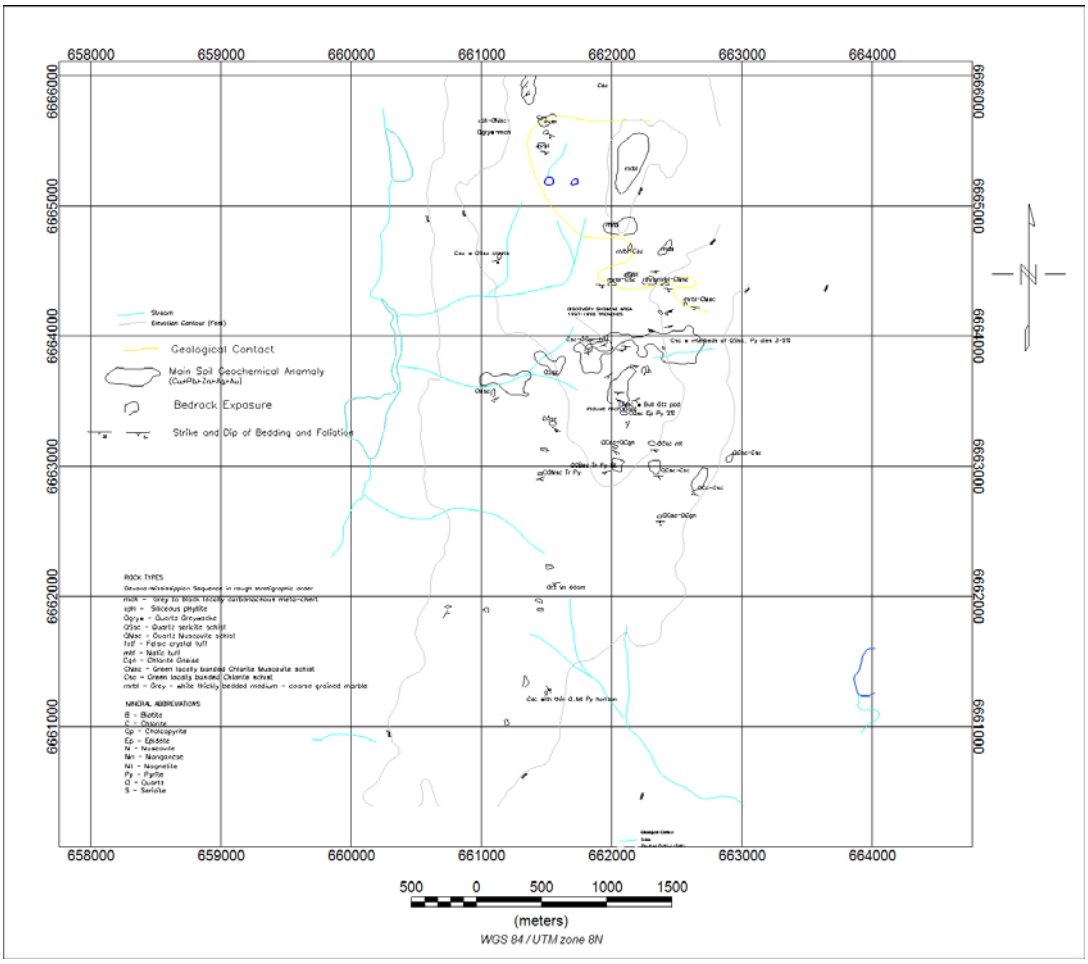


Fig. 4 Geological scheme of the MOR Property.

3.4 Mineralization

Disseminated, semi-massive and massive sulphide mineralization hosted within a cyclical mafic and felsic volcanic stratigraphic section, had been identified in this area. The sulphide mineralization is dominated by coarse pyrite with irregular accumulations of chalcopyrite and sphalerite.

During the year of 2004, drill holes located roughly 100 m apart tested a surface showing referred to as the "Discovery Horizon" exposed by previous hand and blast trenching. The position and projected trace of the Discovery Horizon is marked by a linear zinc-lead-copper soil geochemical anomaly outlined for some 2.5 km. A stronger area of copper, lead and silver response, located one kilometer south of the drill holes was not tested in 2004. Work in 2007 confirmed the interpreted gently dipping geometry of the Discovery Horizon tested the continuity of the mineralization down dip and laterally along strike.

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 MOR Property is shown in Fig.5. The amplitude difference in the magnetic field intensity is approximately 300 nT. A large negative anomaly is observed in the eastern part of the area. This anomaly is related to non-magnetic metasediments existing in this area (schist and marble). Elsewhere, the area is dominated by positive anomalies with different shape. A banding anomaly composed of short wavelength lineaments trending in the NW direction is clearly indicated in the TMI map. Another system of magnetic lineaments with a NE direction is observed. The indicated lineaments are probably associated with mafic dykes and/or faults with magnetite contents.

Figure 6 shows the reduced to the pole magnetic field map, upward continued to 100m. The RTP map does not differ too much from the original map; however it better highlights the NW trending banding anomaly.

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. The Fig. 7 illustrates the vertical gradient of the TMI. The vertical gradient map shows the enhancement of magnetic signals caused by shallow sources and related to faults and contacts. The tilt derivative map illustrated in Fig. 8 yields another example of amplifying weak signals generated by 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 several shallow magnetic structures can be identified in this area. Most of them are probably associated with faults or hidden mafic dykes.

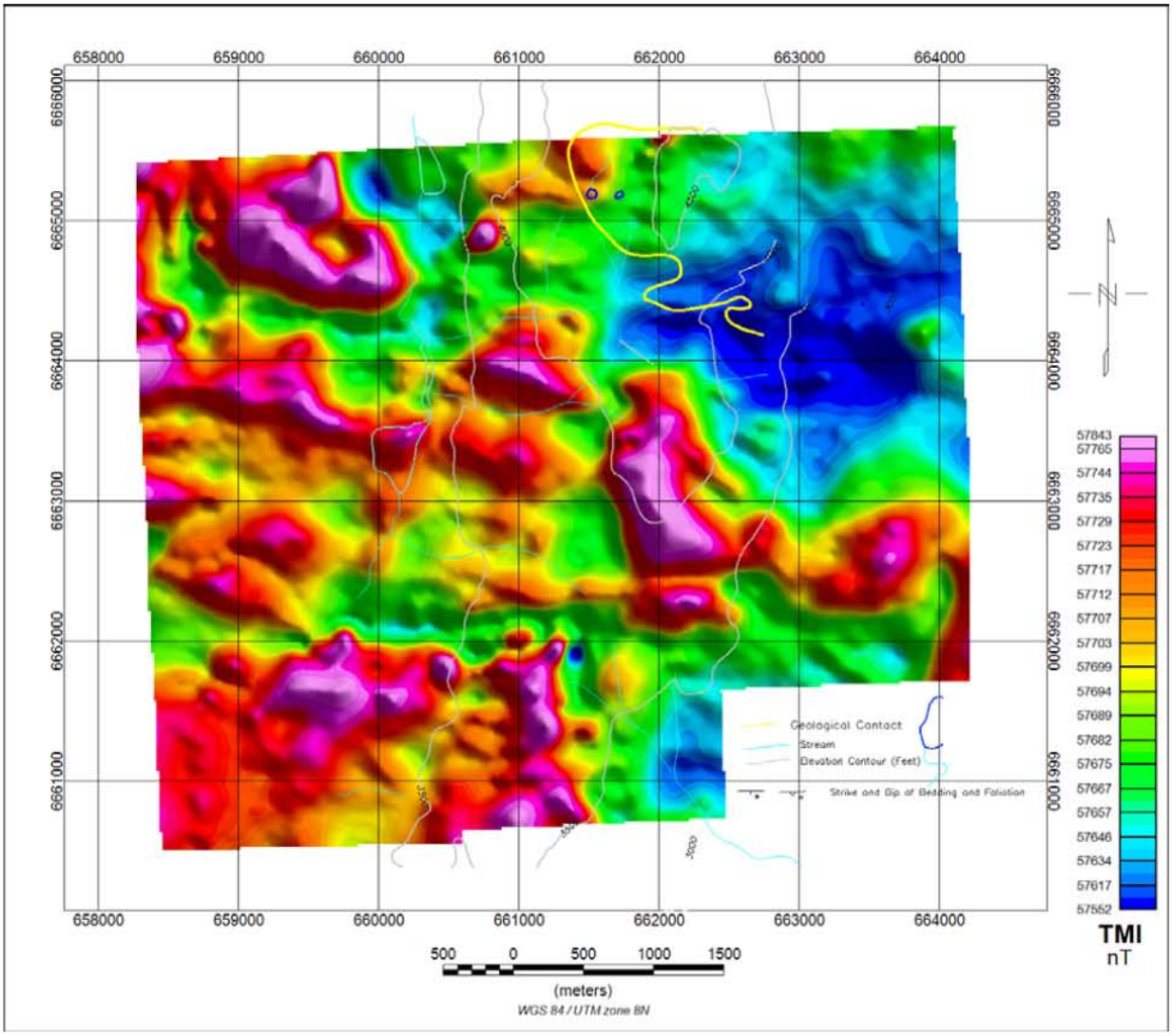


Fig. 5 TMI image of the MOR Property.

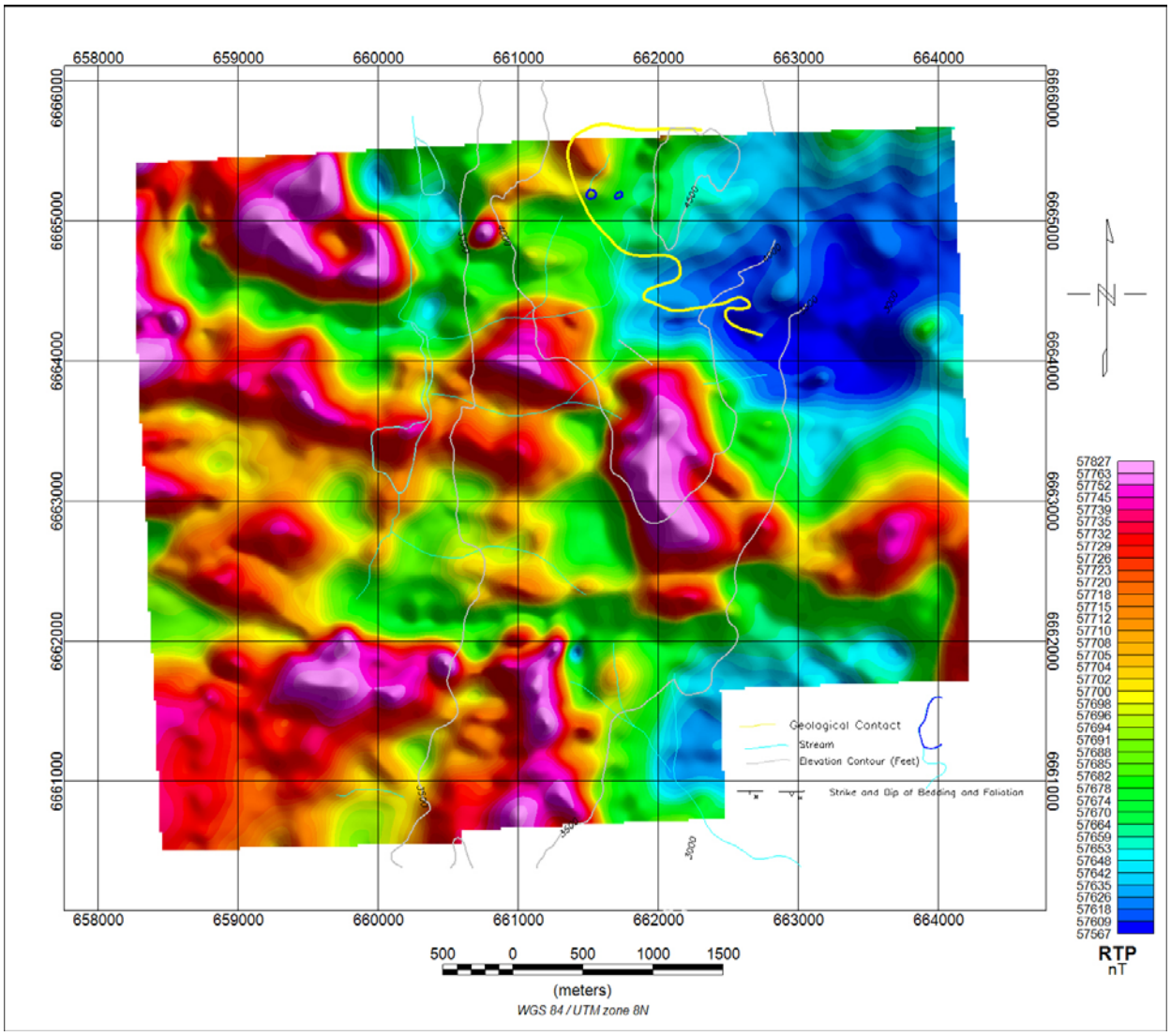


Fig.6 Color shaded relief of reduced to the pole TMI.

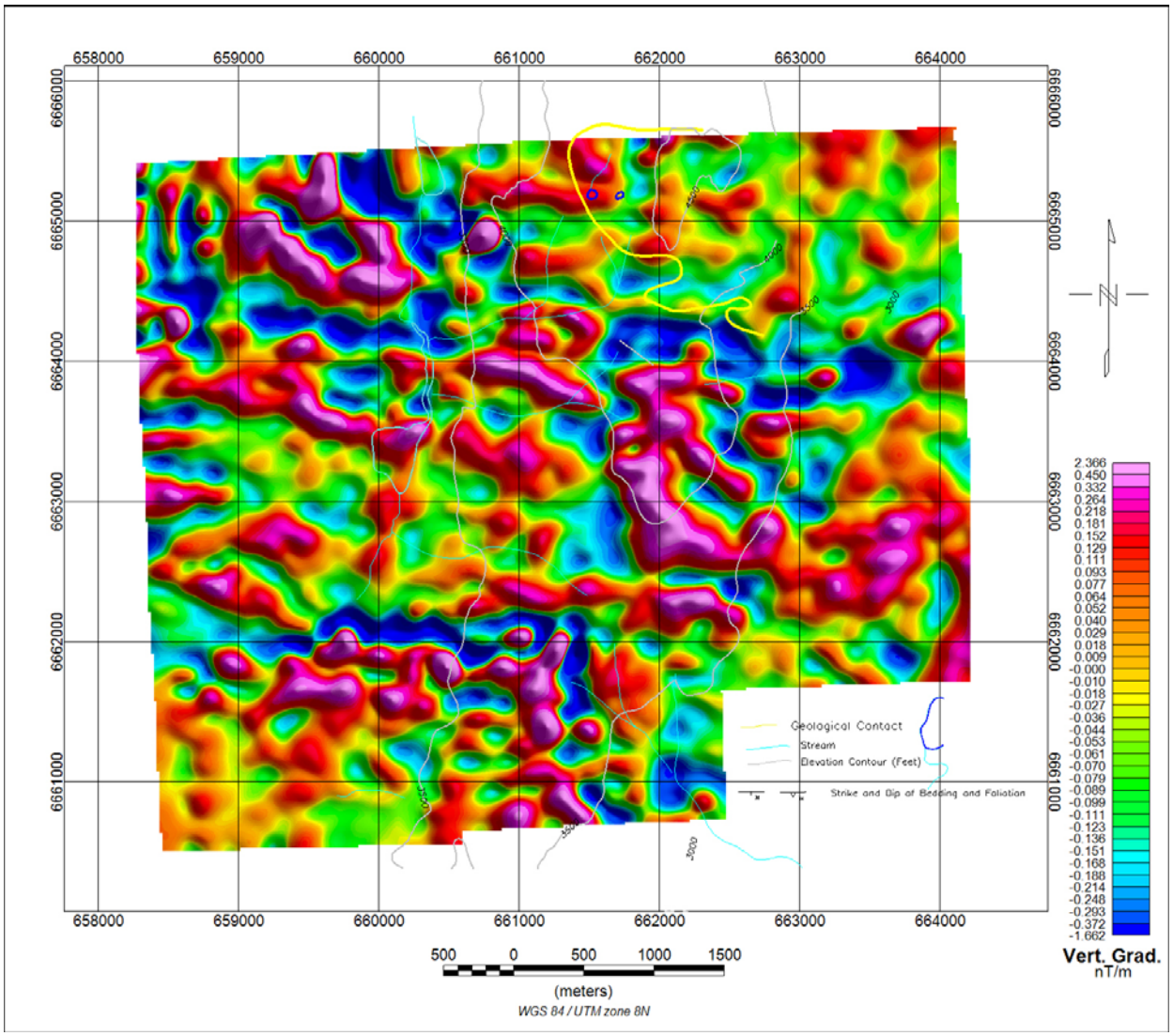


Fig.7 Color shaded relief of the vertical gradient of the magnetic field.

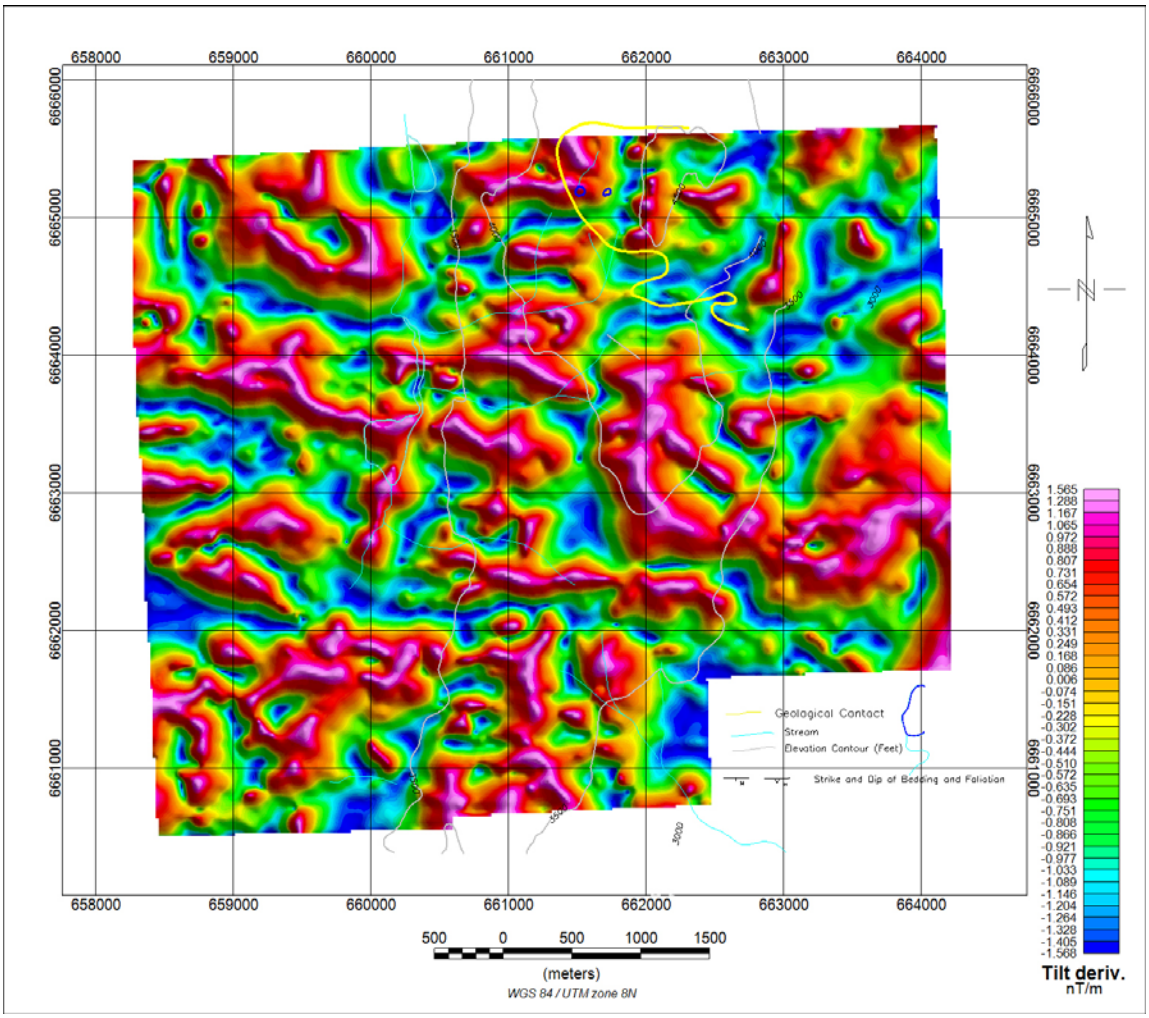


Fig. 8 Color shaded relief of the Tilt derivative.

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 having a size of 400 × 400 metres. Euler solutions have been plotted on the total gradient (analytic signal) map for better illustration. The picks of the total gradient are used to located and delineate the magnetic sources boundaries. Euler solutions are mostly related to shallow sources (<100 m). Most of them are related to linear magnetic structures tending in the NW. Results obtained with the Euler deconvolution confirm the qualitative analysis of the reduced maps. Another lineament trending in the EW direction has also been identified and confirmed in the southwestern part of the area.

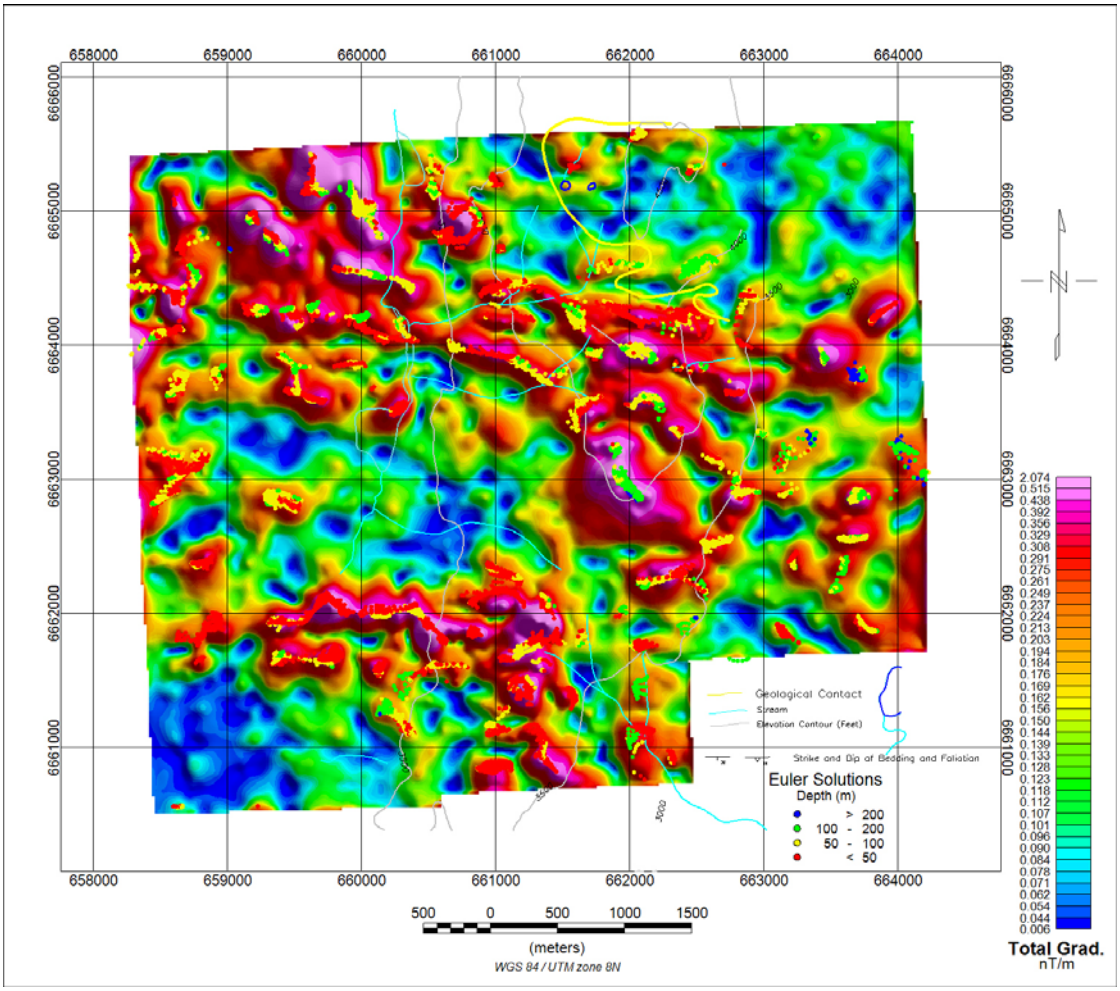


Fig. 9 Euler deconvolution solutions plotted on the total gradient image.

5. INTERPRETATION of 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 12 and 13 show the stacked profiles in pseudo-logarithmic scale of the dB/dt and B-field channels, respectively. Both maps show the existence of 4 anomalous zones (A, B, C, and D). Zone B, located in the southern part of the area contains the strongest anomalies (Fig. 11). Zones A, C, and D are characterized by weaker EM response, however the observed anomalies in these zones exhibit negative late time decays. The cause of the existence of negative decays at late time is explained by the polarization effect that is commonly observed over electrically polarizable areas containing metallic disseminated minerals. Fig. 10 shows the EM decays above the Discovery Showing area with heavily disseminated sulfide mineralization (pyrite and chalcopyrite).

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 14 and 15 illustrate the results of the picked anomalies superimposed on the dB/dt, and B-field late time channel (3.911 ms after shut off), respectively.

The interpretation indicates the presence of poor linear conductors in the central and southern parts of the map and trending in the east-western direction. The estimated conductance values do not exceed 5 ms except for the anomalous zone B, where one value of 12 S was obtained. The estimated decay constants are low (less than 3 ms) except for the anomalous zone B, where higher decay constants where obtained.

It is worth mentioning that the observed EM anomalies are in very good spatial correlation with the observed magnetic signal (Fig. 16).

The interpretation map (Fig. 17) shows the results of the magnetic and electromagnetic analysis superimposed on the magnetic total gradient image. The magnetic interpretation suggests the existence of two cross cutting faulting systems trending in the NW and in NE, respectively. It also shows that the detected EM anomalies are in very good correlation with magnetic and VLF signals. The anomalies detected in the southern area (Zone B) are probably related to deep conductive bedrock containing a possible massive sulfide mineralization. However, the anomalies detected in the northern part of the block (A, C, and D) are more likely to be associated with a shallow poor conductor containing disseminated sulfide mineralization.

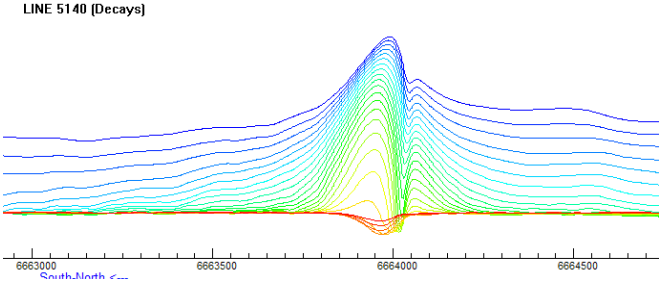


Fig. 10 EM profiles showing positive early time, and negative late time decays over the Discovery Showing area. Zone C, Line 5140.

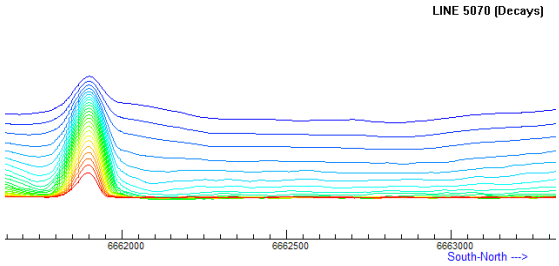


Fig. 11 EM profiles showing positive decays over the anomalous Zone B, Line 5070.

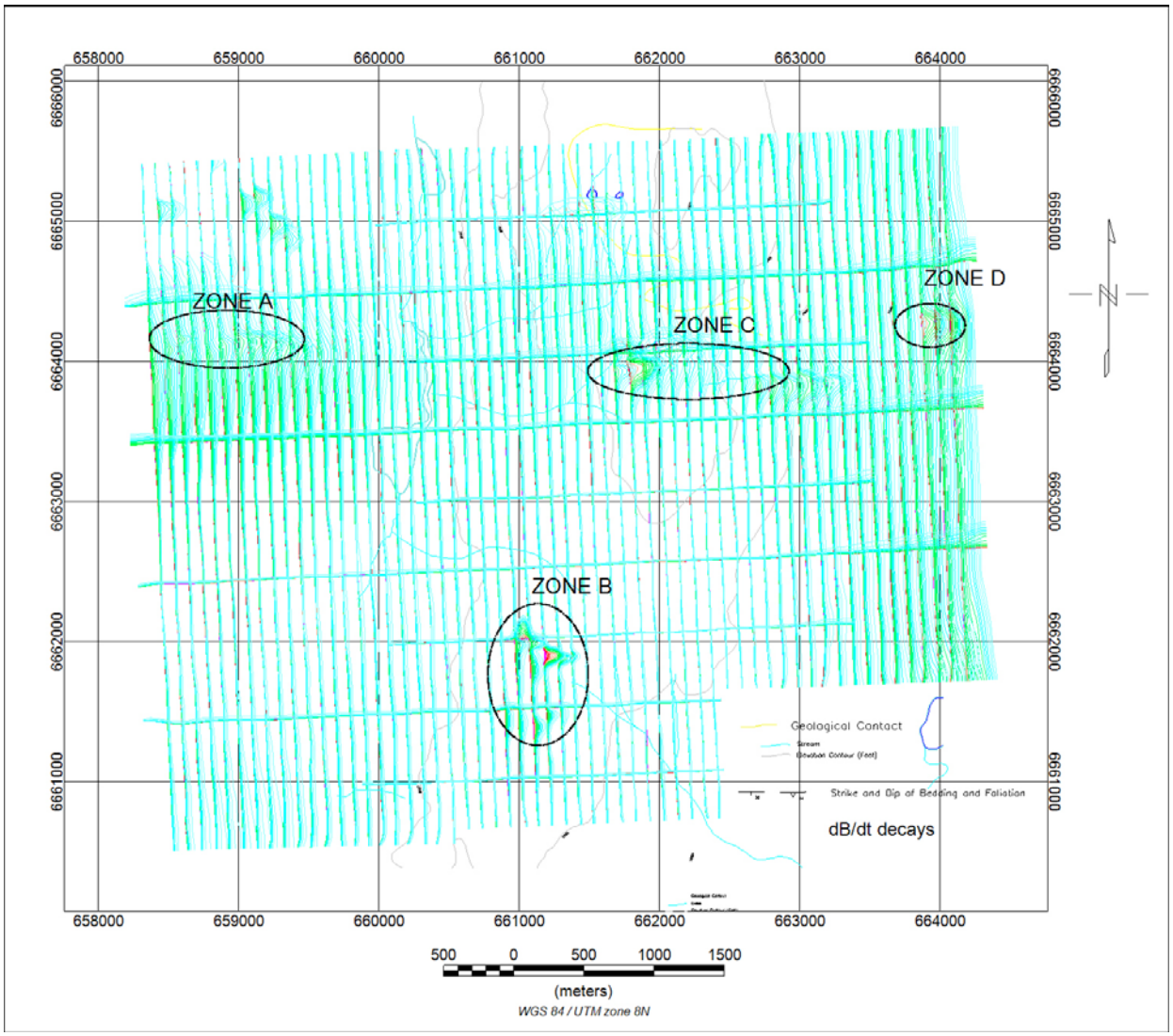


Fig. 12 Stacked EM dB/dt profiles at log-linear scale. Early time decays are in green and late time in red.

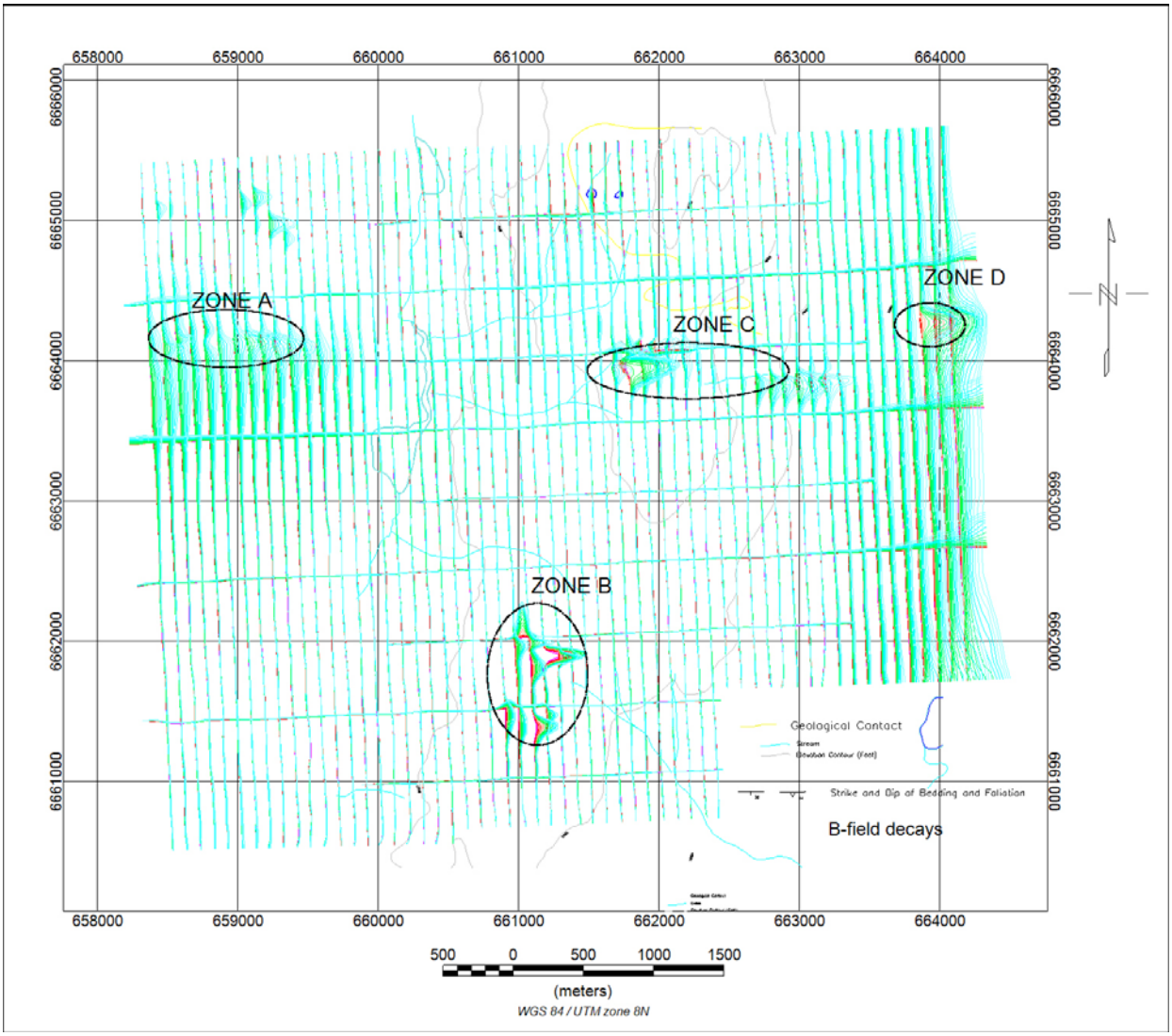


Fig. 13 Stacked EM B-Field profiles at log-linear scale. Early time decays are in green and late time in red.

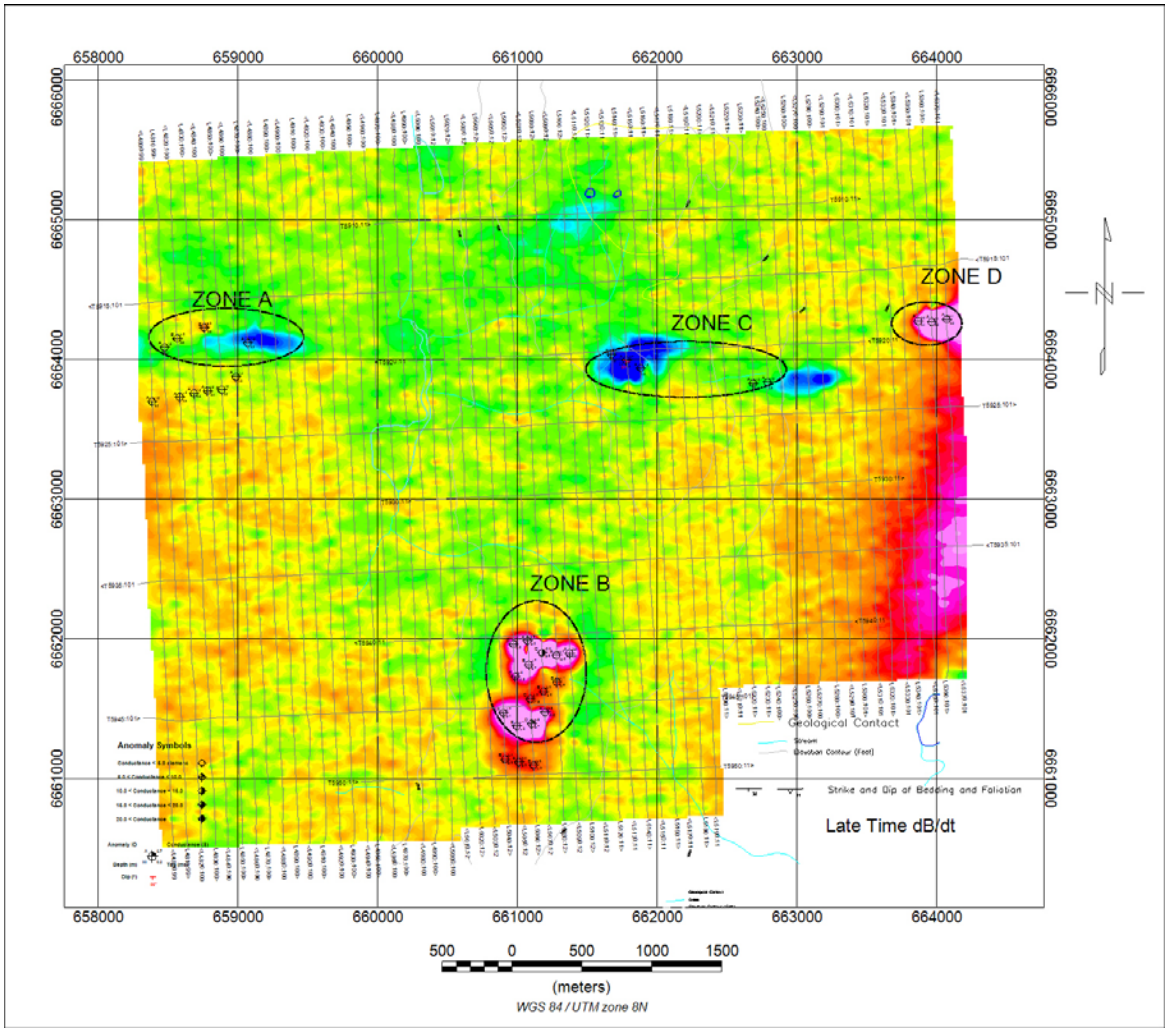


Fig. 14 EM picked anomalies plotted on the late time dB/dt channel image. Negative anomalies are indicated in blue, positive, in red and purple.

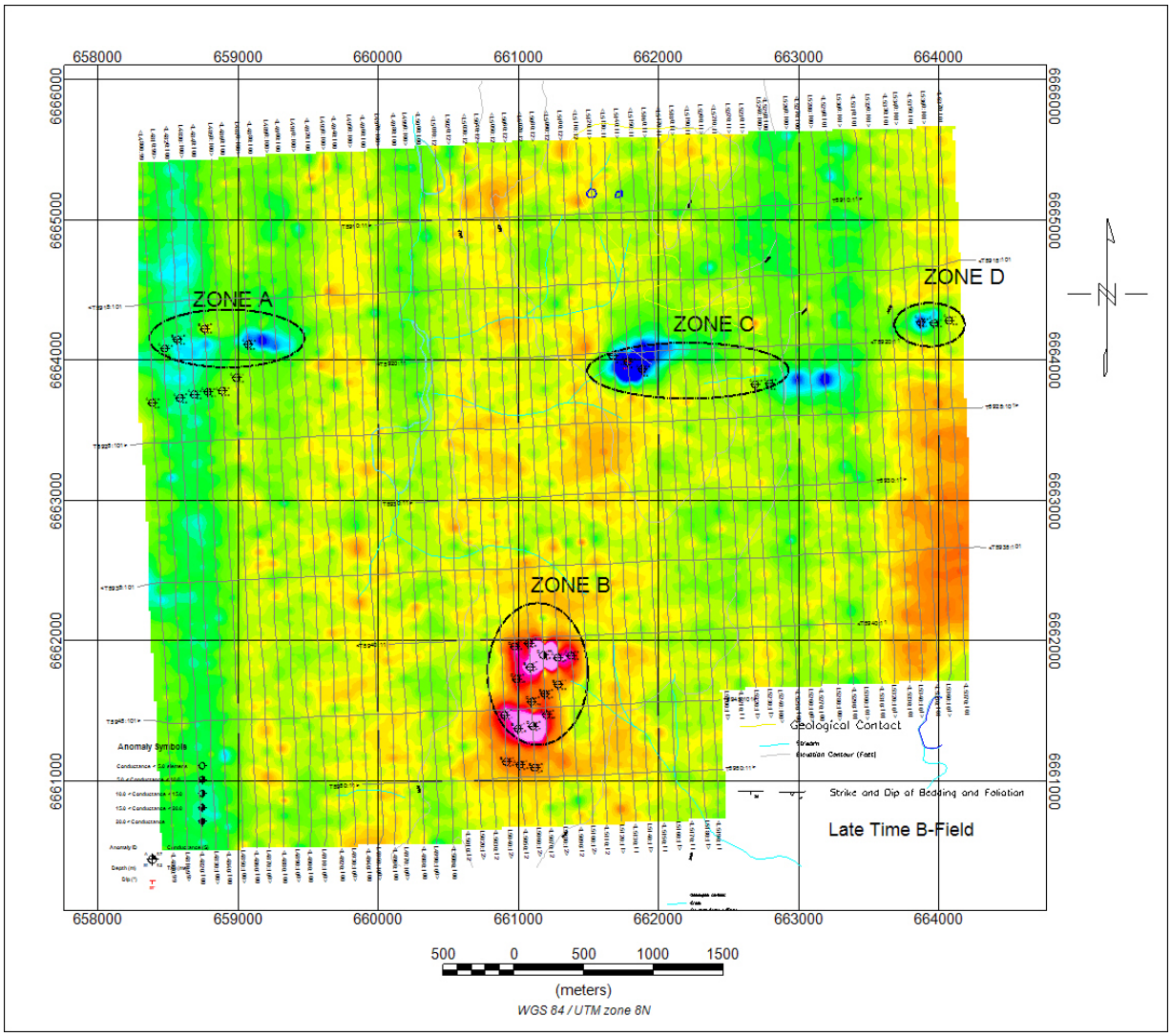


Fig. 15 EM picked anomalies plotted on the late time B-Field channel image. Negative anomalies are indicated in blue, positive, in red and purple.

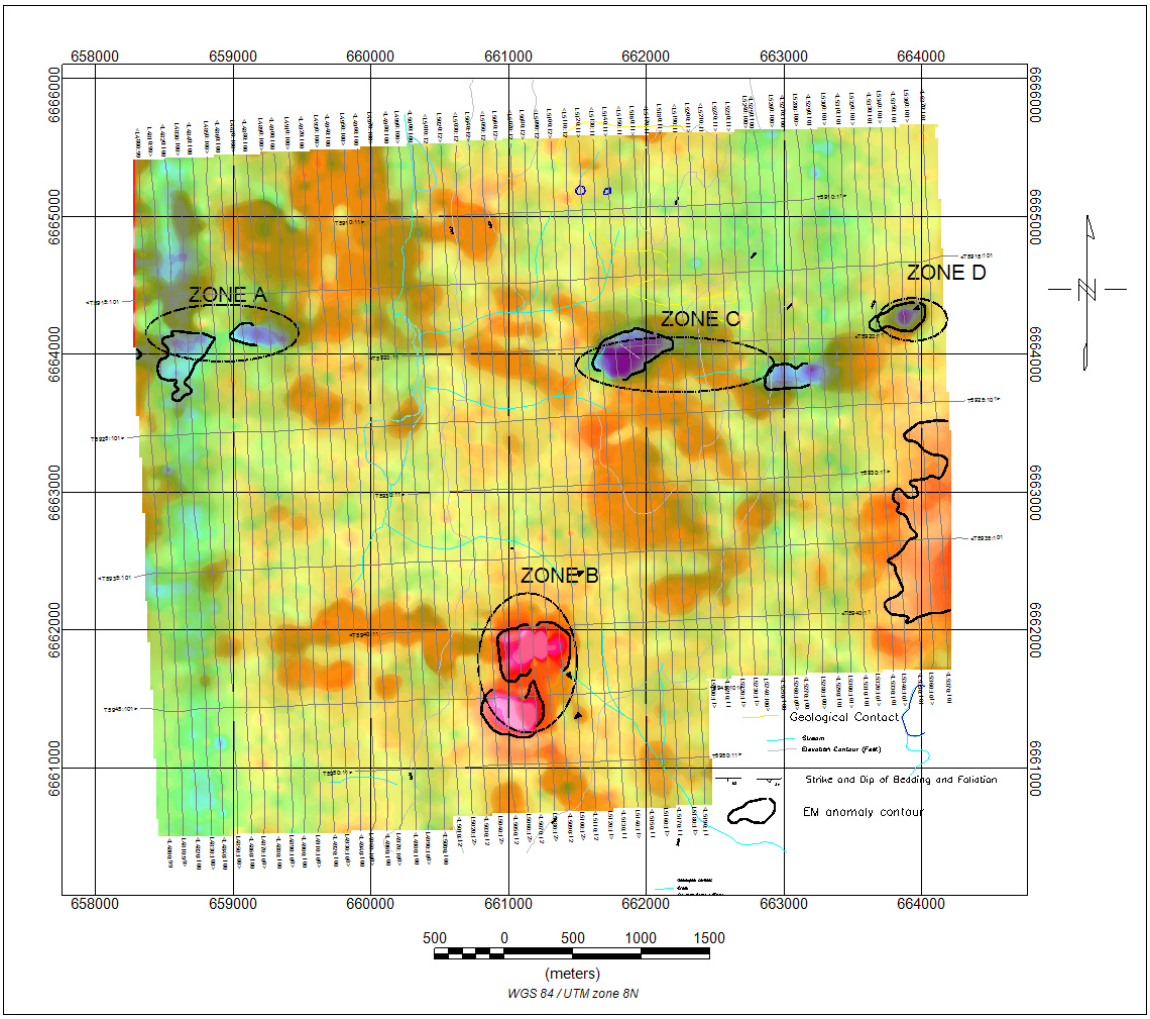


Fig. 16 Late time B-Field channel image superimposed on the magnetic total gradient. The dark spots indicate high values of the total gradient. The map shows a very good correlation of the EM anomalies with the magnetic signal.

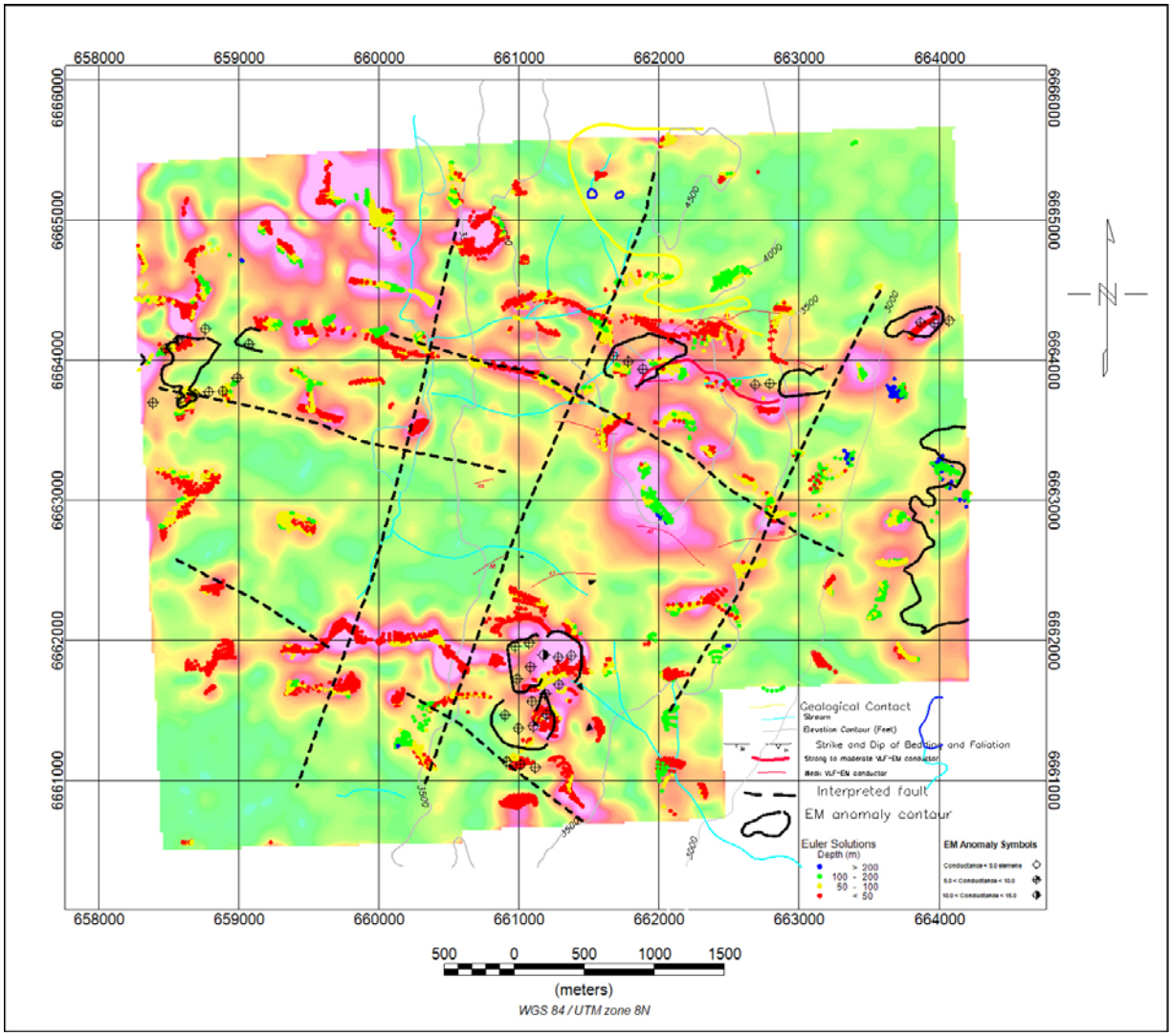


Fig. 17 Interpretation map showing the results of the magnetic and electromagnetic data analysis.

5.4 Selected Anomalies

Four individual anomalies extracted from the described above anomalous zones have been selected for modeling by converting the EM decays into CDIs. The anomalies are located on the following lines: L4840, L5070, L5140, and L5360. The summarized characteristics of the selected anomalies are given in the following table:

Line	Anomaly ID	Anomaly Type description	Conductor geometry	X- location m	Y- location m	Conductance S	Dip	Dip Azimut	Tau msec
L4840	B	One broad anti-symmetric peak	Thick shallow dipping plate	658758	6664225	3		S	3.6
L5070	C	One symmetric peak	Thick steeply dipping plate	661175	6661898	12			3.9
L5140	A	Double peak anti-symmetric	Thin shallow dipping plate	661778	6663992	2.7	24°	SW	0.2
L5360	B	One broad anti-symmetric peak	Thick shallow dipping plate	663964	6664266	4.4		S	0.5

Table 1. Summarized results of the 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. CDI were performed for the selected lines using the EMflow software. The obtained results are shown in Figures18-21.

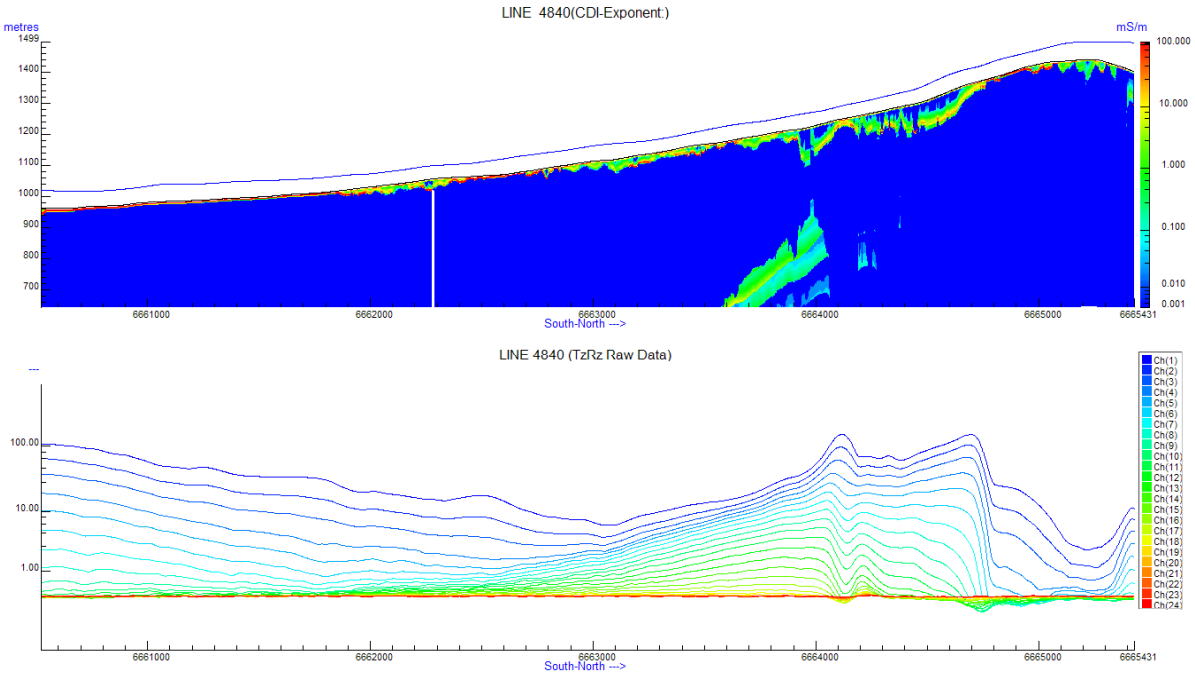


Figure18 shows the CDI section for the line L4840. The section indicates the presence of a poor conductor at a depth more than 200 m dipping in the southern direction.

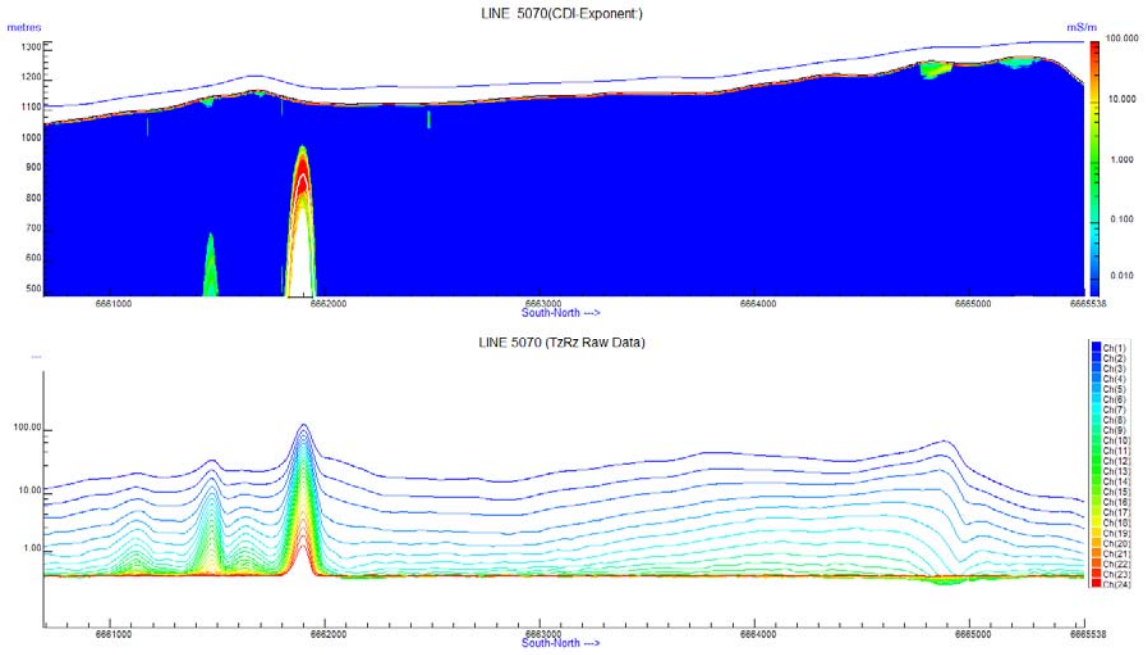


Figure 19 shows the CDI section for the line L5070. The section indicates the existence of good conductive bedrock at the approximate depth of 150m. A possible massive sulfide mineralization is associated with the conductive body.

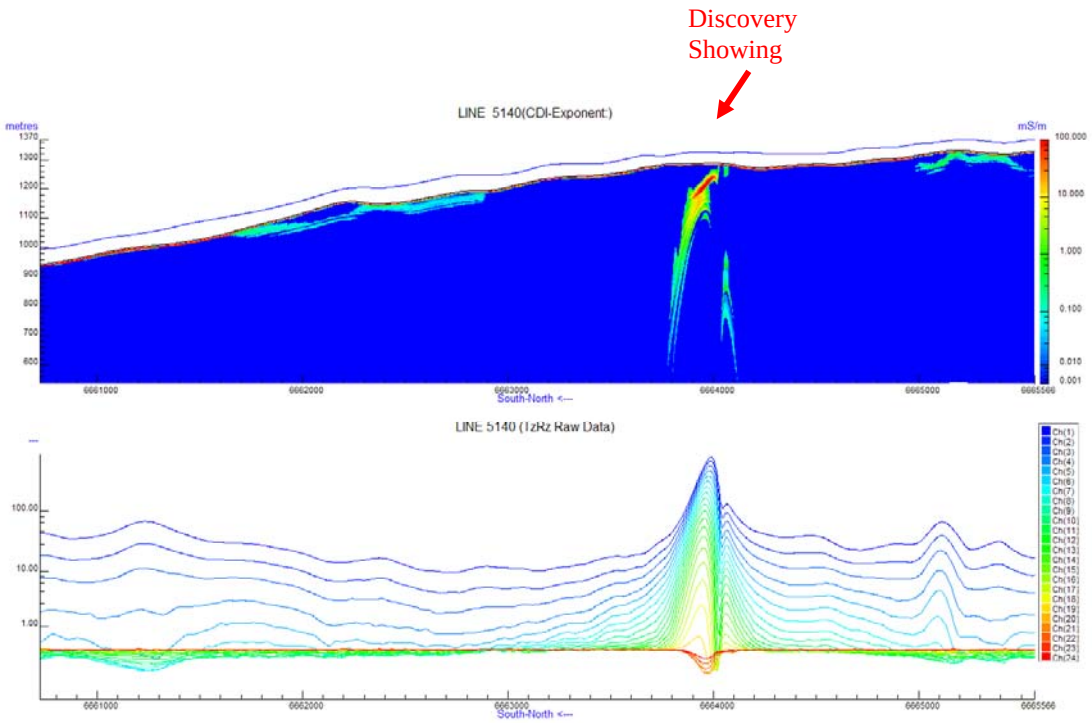


Figure 20 shows the CDI section for the line L5140. The section highlights the existence of surfacial shallow dipping thin conductor. It also shows that the conductor has a limited depth extension. The anomy is observed over the Discovery showing with disseminated sulfide mineralization.

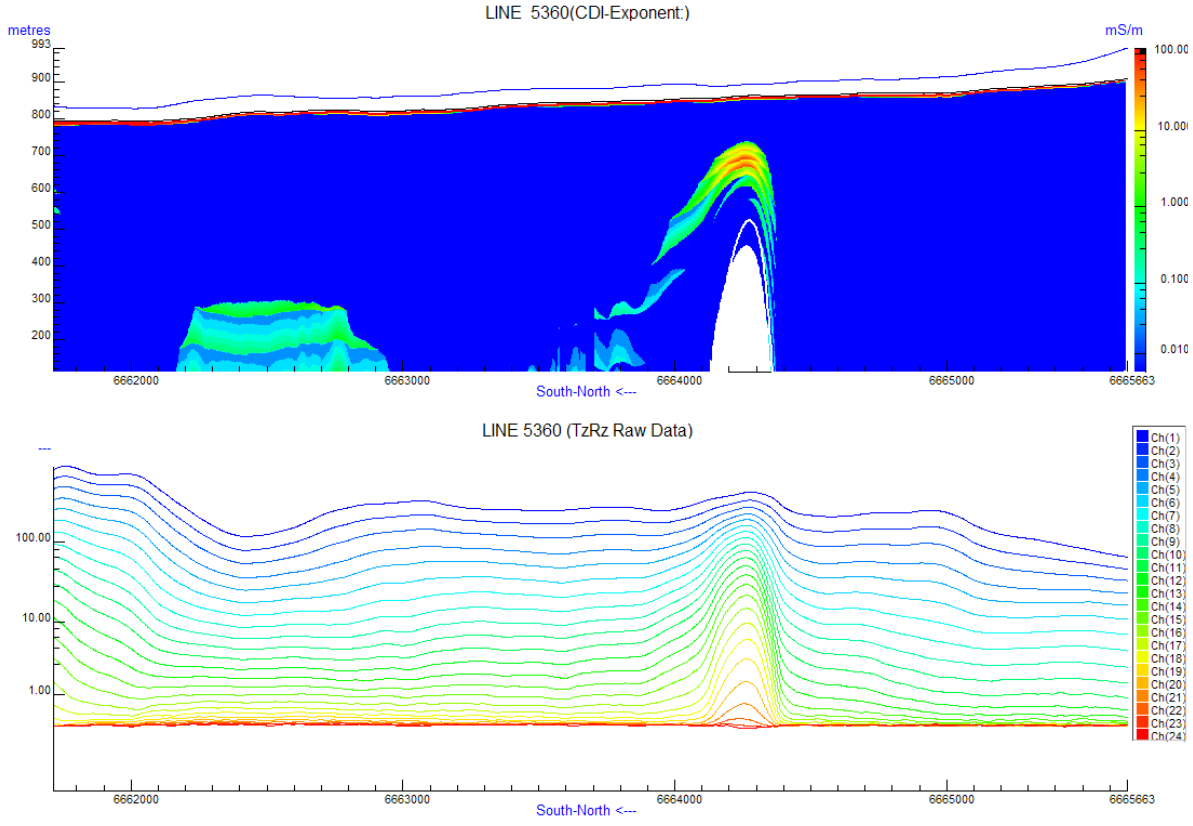


Figure 21 shows the CDI section for the line 5360 (Anomalous Zone D). The section shows the existence of a southerly dipping poor conductor.

6. CONCLUSIONS AND RECOMMANDATIONS

The analysis of the magnetic map of the MOR property revealed the existence of several lineaments related to shallow structures. The Euler deconvolution inversion method has shown that most of the detected magnetic sources are situated at depth less than100 m. The magnetic interpretation using different reduced maps suggests the presence of a two cross cutting faulting systems trending in the NNW and NNE directions.
The VTEM survey reveals the existence of 4 anomalous zones in very good correlation with the magnetic filed and VLF signal as well (Zone C). Three zones situated in the northern part are trending more or less in the east west direction and are related to highly disseminated sulfide mineralization. The detected anomalous zone in the southern part (Zone B) is associated with conductive bedrock suggesting the possible presence of massive sulfide mineralization at an approximate depth of 150 m.
The recommendation is to conduct some drilling tests on the anomalous zone B (Line L5070), which is possibly related to massive sulfide mineralization.

Respectfully submitted,

Dr. Nasreddine Bournas
Geotech Ltd.
December, 2007

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

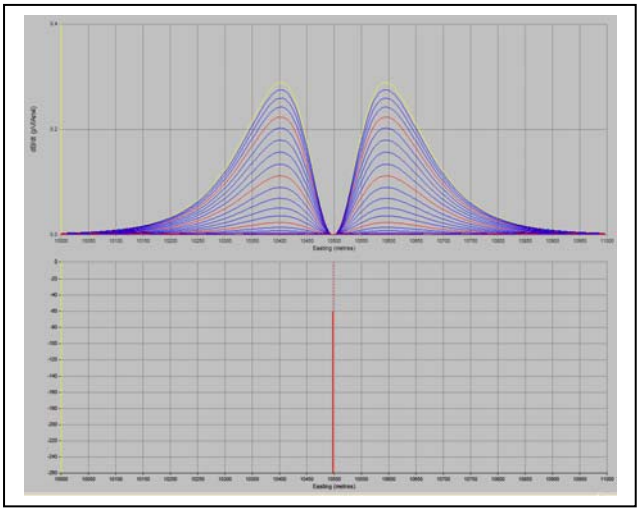


Figure A-1: dB/dt response of a shallow vertical thin plate. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

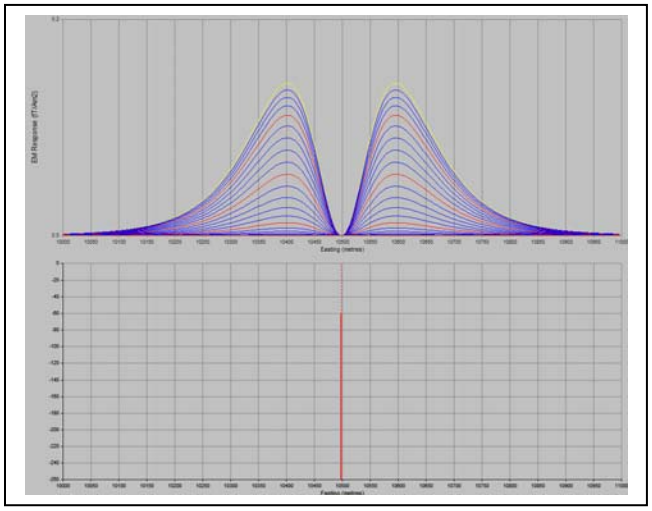


Figure A-2: B-field response of a shallow vertical thin plate. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment.

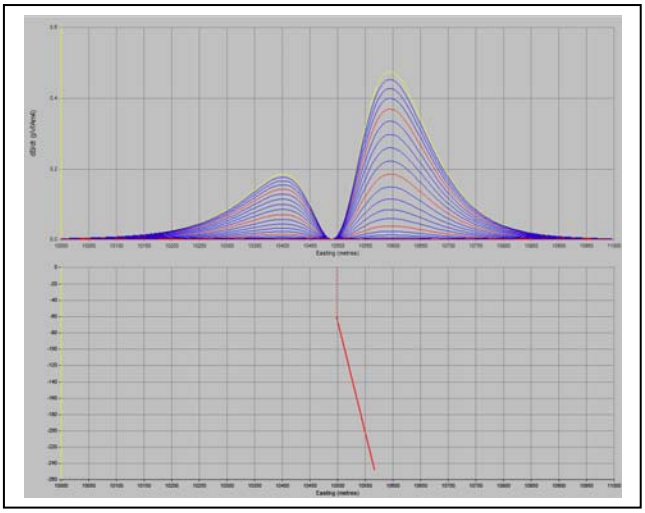


Figure A-3: dB/dt response of a shallow skewed thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

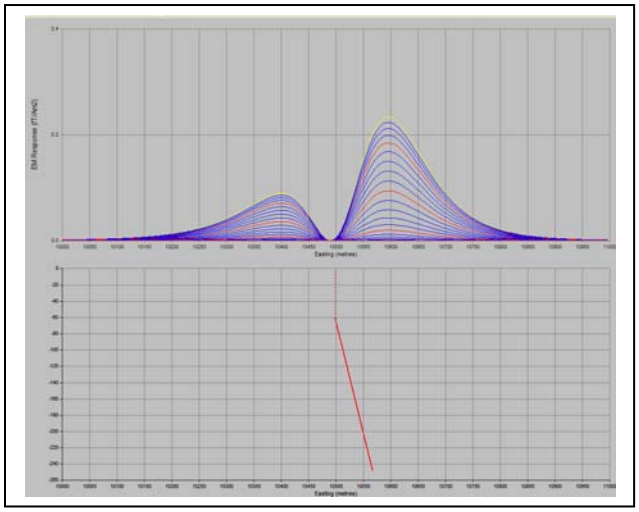


Figure A-4: B-field response of a shallow skewed thin plate. Depth=100 m, CT=20 S.The EM response is normalized by the dipole moment.

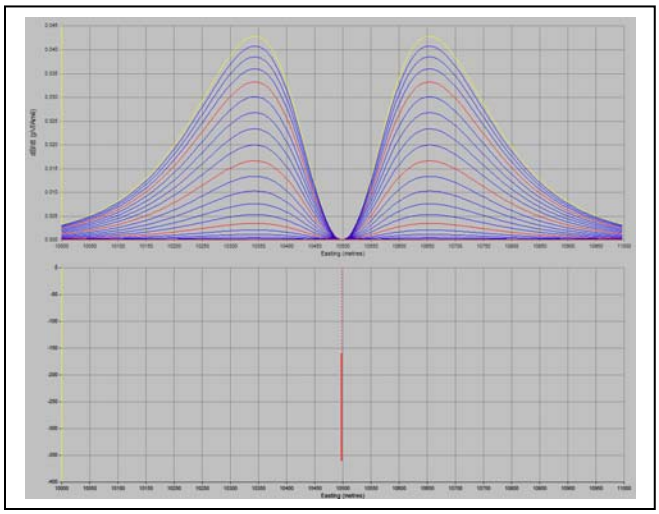


Figure A-5: dB/dt response of a deep vertical thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

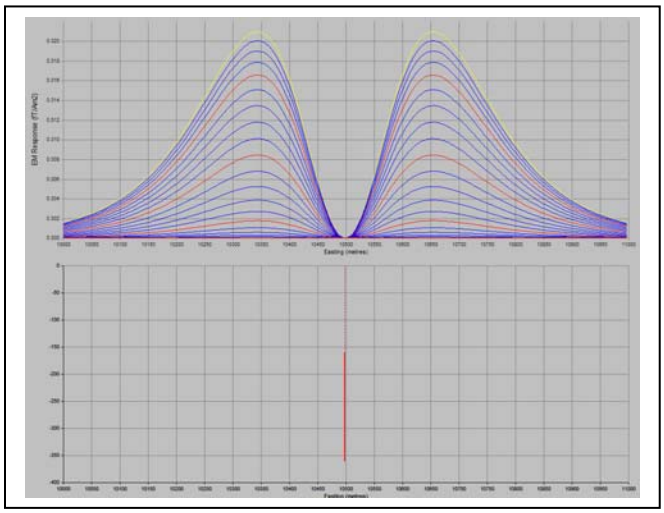


Figure A-6: B-Field response of a deep vertical thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment.

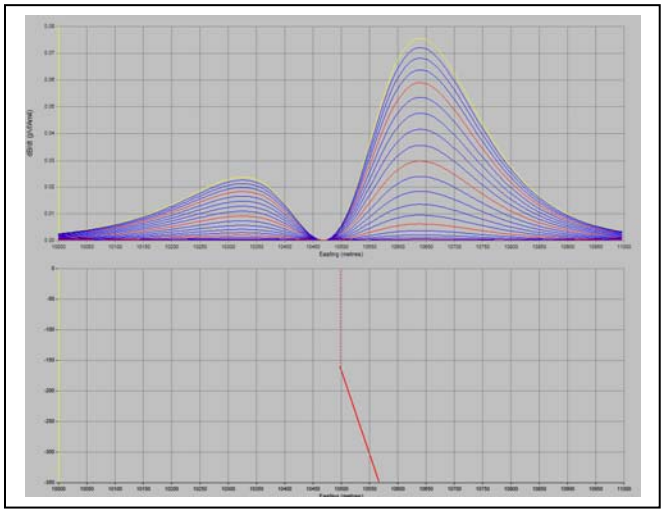


Figure A-7: dB/dt response of a deep skewed thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

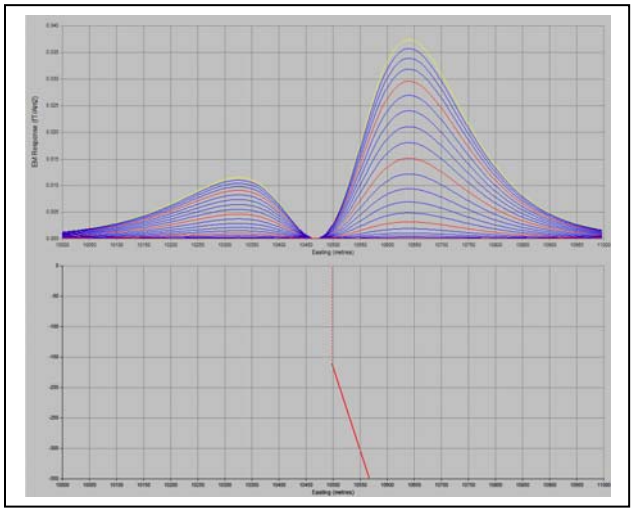


Figure A-8: B-field response of a deep skewed thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment.

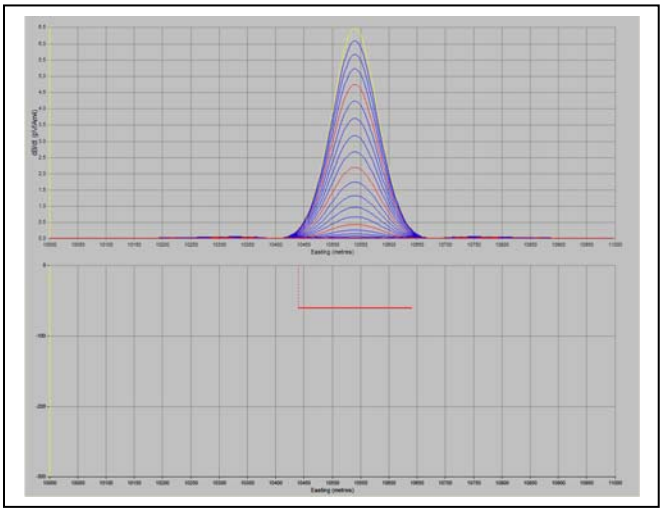


Figure A-9: dB/dt response of a shallow horizontal thin plate. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

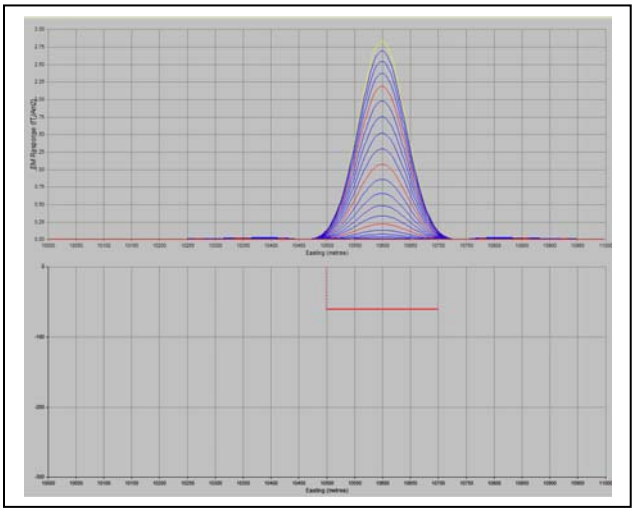


Figure A-10: B-Field response of a shallow horizontal thin plate. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment.

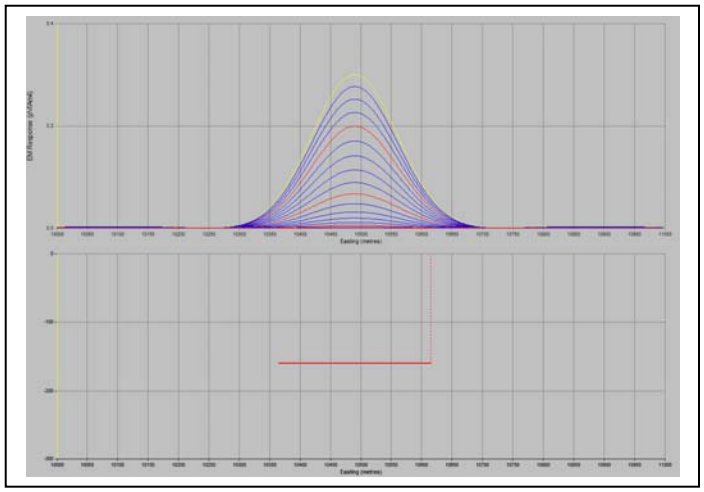


Figure A-11: dB/dt response of a deep horizontal thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

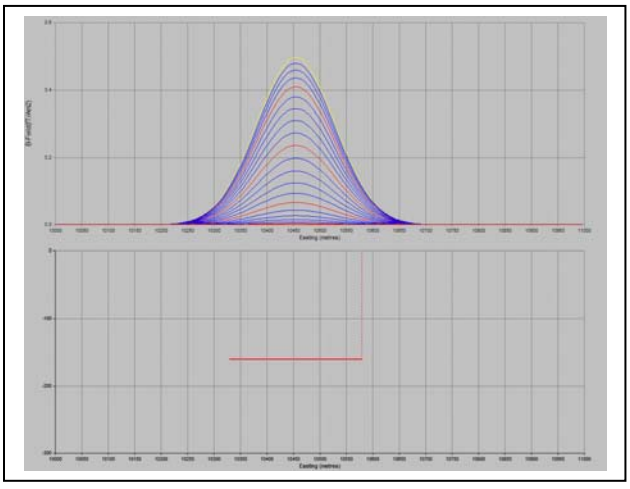


Figure A-12: B-Field response of a deep horizontal thin plate. Depth=200 m, CT=20 S. The EM response is normalized by the dipole moment.

II. THICK PLATE

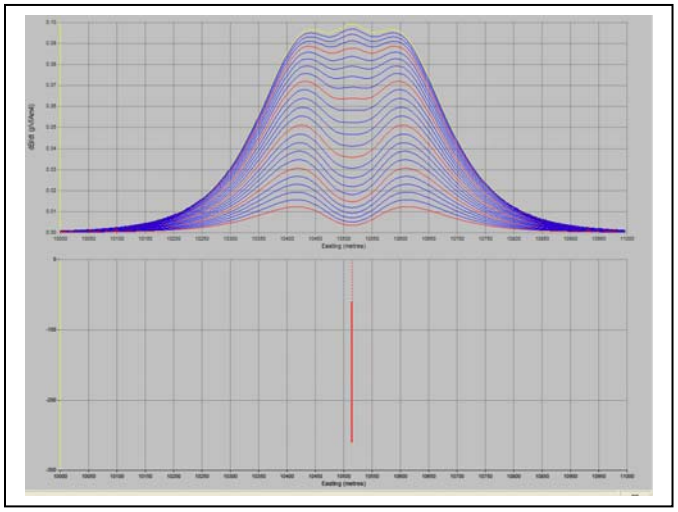


Figure A-13: dB/dt response of a shallow vertical thick plate. Depth=100 m, C=12 S/m, thickness=20 m. The EM response is normalized by the dipole moment and the Rx area.

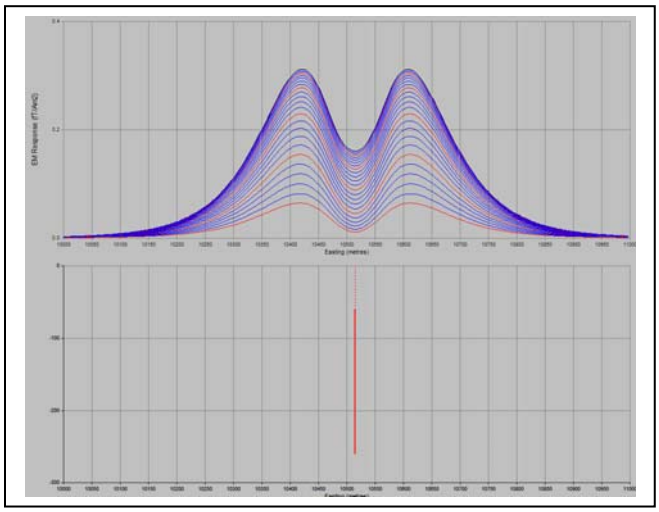


Figure A-14: B-Field response of a shallow vertical thick plate. Depth=100 m, C=12 S/m, thickness= 20 m. The EM response is normalized by the dipole moment.

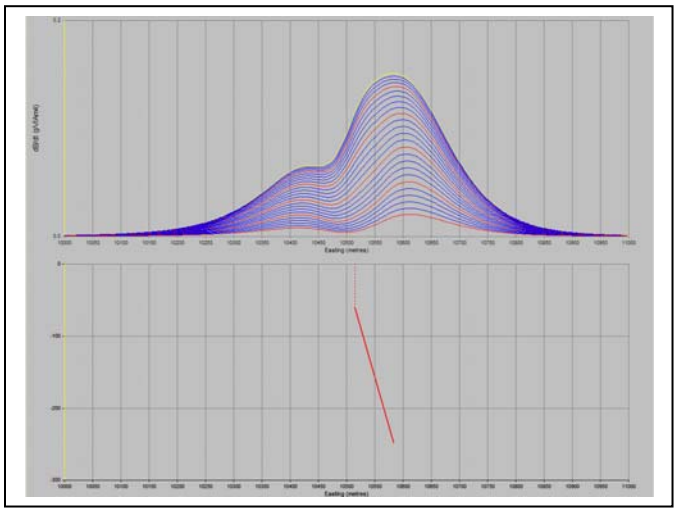


Figure A-15: dB/dt response of a shallow skewed thick plate. Depth=100 m, C=12 S/m, thickness=20 m. The EM response is normalized by the dipole moment and the Rx area.

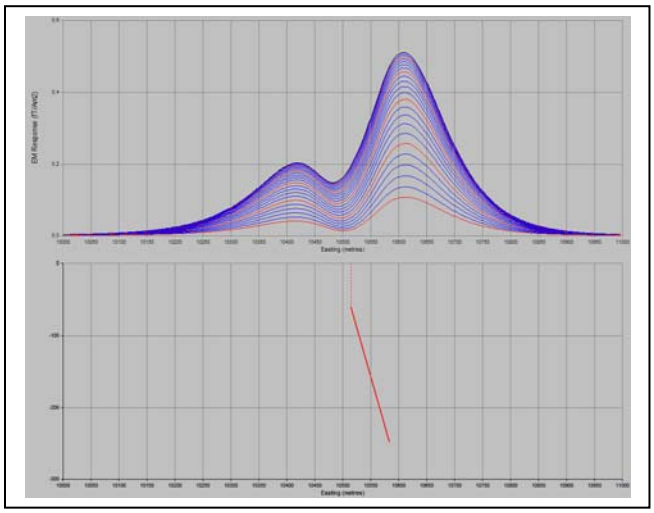


Figure A-16: B-Field response of a shallow skewed thick plate. Depth=100 m, C=12 S/m, thickness=20 m. The EM response is normalized by the dipole moment.

III. MULTIPLE THIN PLATES

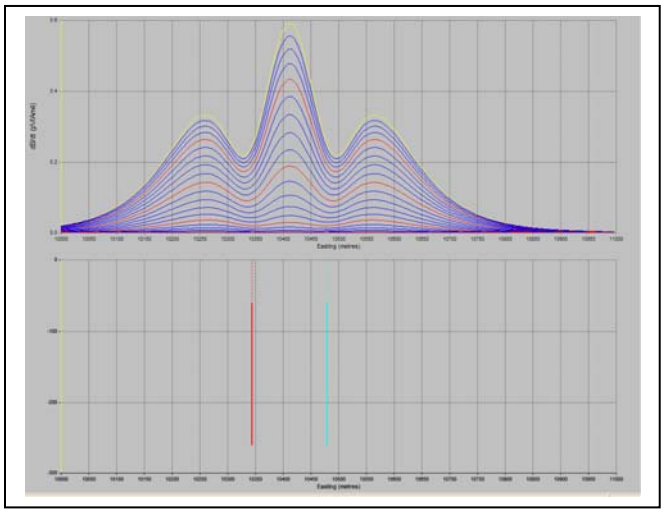


Figure A-17: dB/dt response of two vertical thin plates. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment and the Rx area.

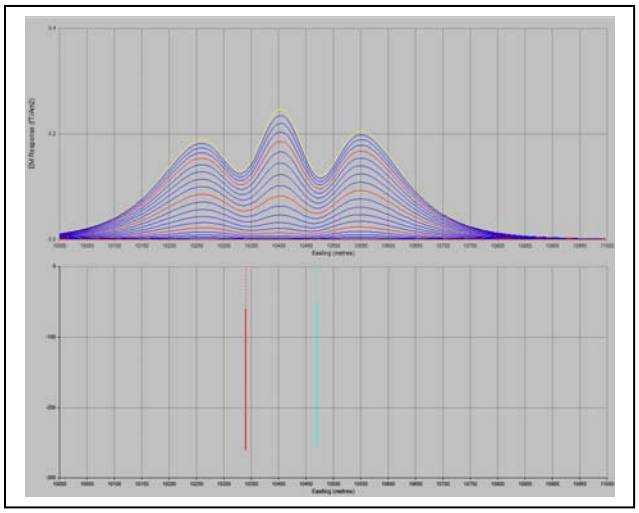
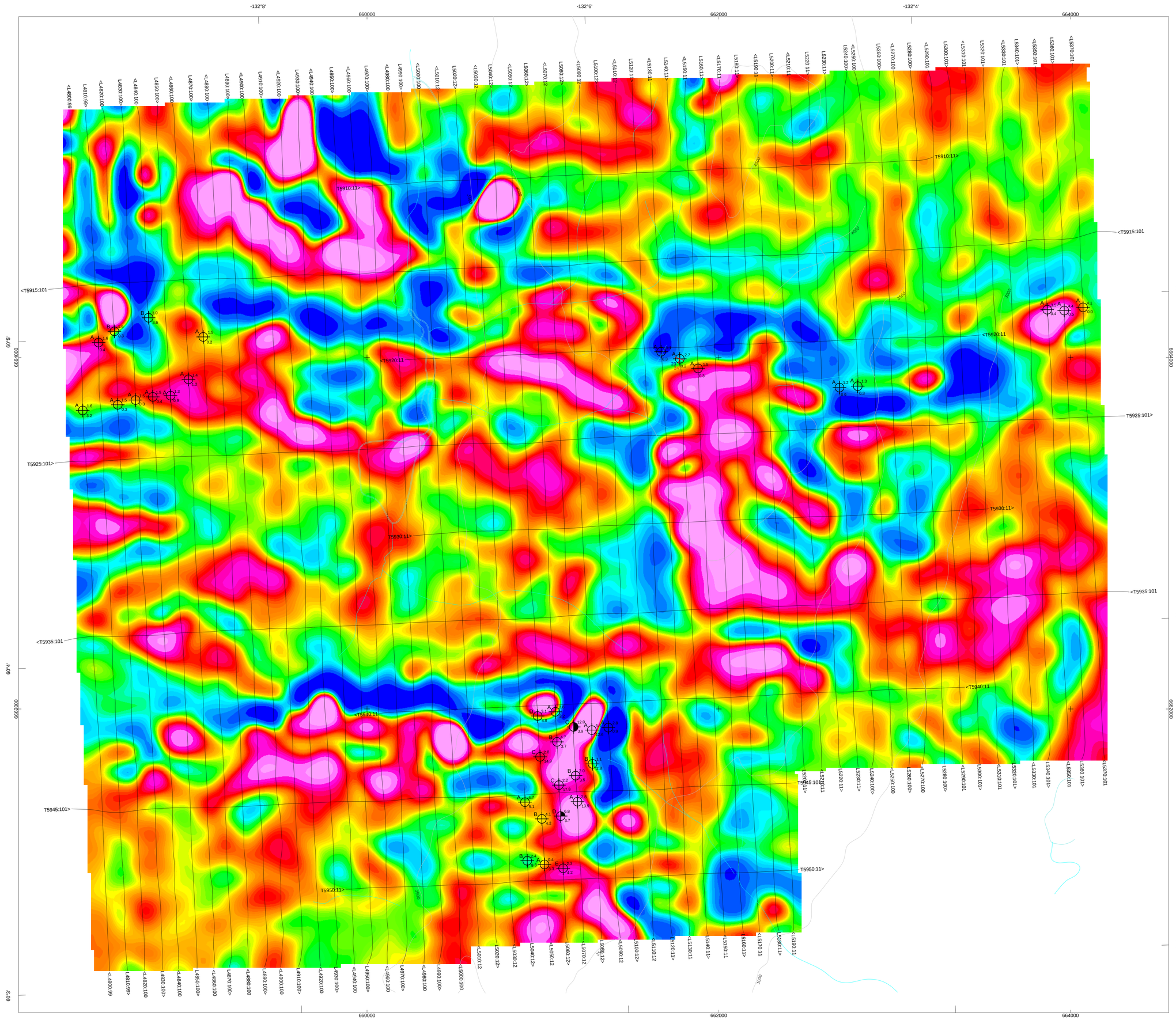


Figure A-18: B-Field response of two vertical thin plates. Depth=100 m, CT=20 S. The EM response is normalized by the dipole moment.



GEOTECH LTD.

Survey Specifications:

Dates Flown: July and September 2007
Survey Base: Mayo, YT
Aircraft: Astar B3 helicopter, Registration C-GTFX
Nominal Flight Line Spacing: 100 metres
Nominal Flight Line Direction: NS
Nominal Tie Line Spacing: 1000 metres
Nominal Tie Line Direction: EW
Nominal helicopter terrain clearance 86 metres
EM Loop is 35 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 425,000 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

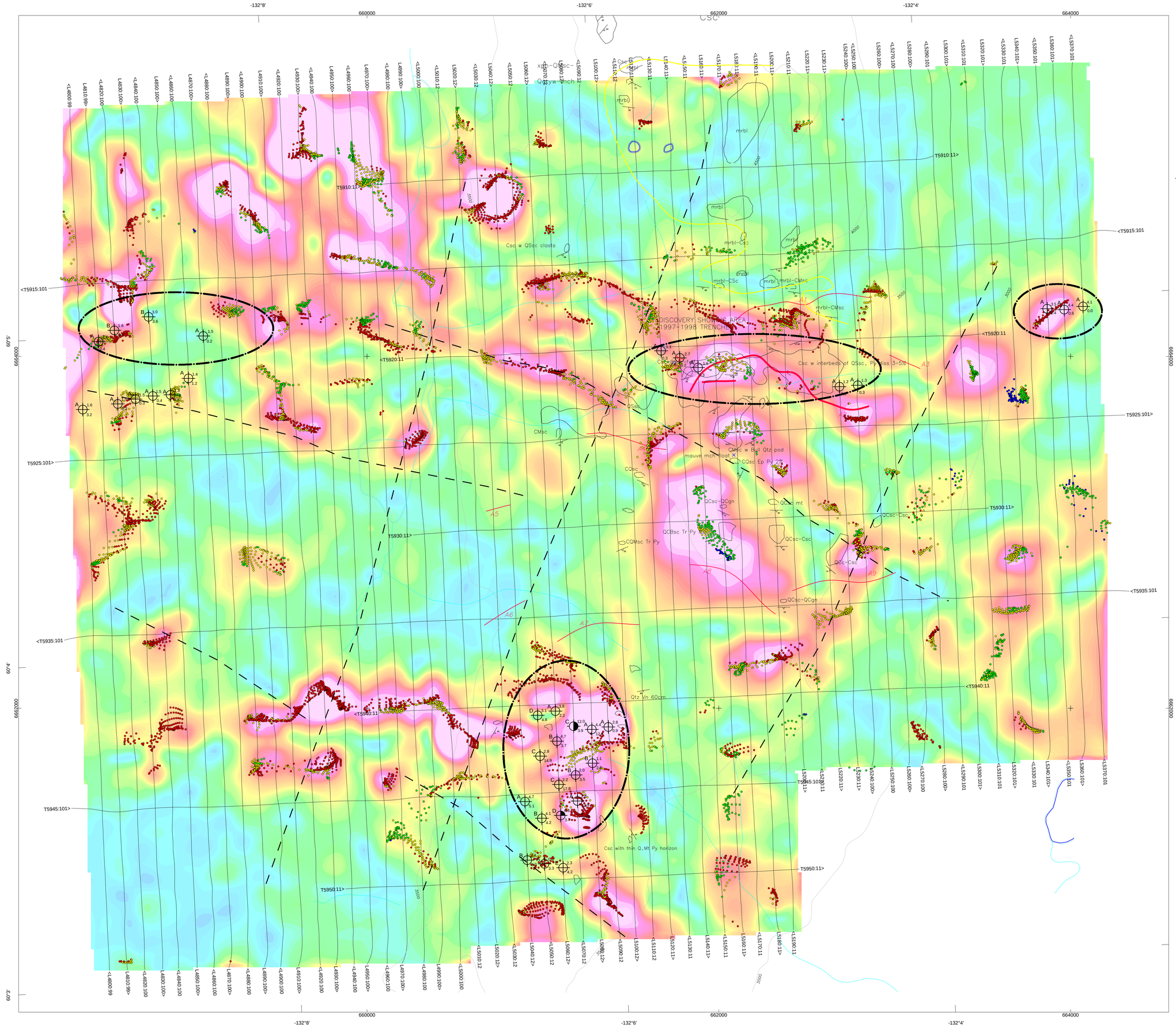
Tarsis Capital Corp.
MOR Property
Yukon, Canada

Geotech VTEM System
Vertical Gradient of TMI

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30 Industrial Parkway S.,
Aurora, Ontario, Canada L4G 3W2
www.geotechairborne.com

November 2007

Project 7067



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Survey Specifications:

Dates Flown: July and September 2007
Survey Base: Mayo, YT
Aircraft: Astar B3 helicopter, Registration C-GTFX
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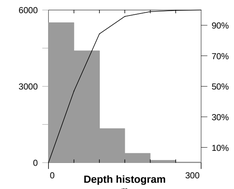
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Dipole Moment 425,000 NIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.2 ms
Geometrics Optically-pumped,
High Sensitivity Cesium Magnetometer
Magnetometer Resolution 0.02 nT at 10 samples/sec

EULER SOLUTIONS

Depth,m

- > 200
- 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 — Conductance (S)
Depth (m) — Tau (ms)
Dip (°)

- Stream
- Elevation Contour (Feet)
- Strong to moderate VLF-EM conductor
- Weak VLF-EM conductor
- Strike and Dip of Bedding and Foliation
- Bedrock Exposure
- Main Soil Geochemical Anomaly (Cu+Pb+Zn+Ag+Au)
- Geological Contact
- Interpreted fault
- EM Anomalous zone

Total gradient nT/m

ROCK TYPES

Devono-Mississippian Sequence in rough stratigraphic order
mch – Grey to black locally carbonaceous meta-chert
xph – Siliceous phyllite
Qgrywk – Quartz Greywacke
QSsc – Quartz sericite schist
QMsc – Quartz Muscovite schist
fxtf – Felsic crystal tuff
mtf – Mafic tuff
Cgn – Chlorite Gneiss
CMsc – Green locally banded Chlorite Muscovite schist
Csc – Green locally banded Chlorite schist
mrbl – Grey – white thickly bedded medium – coarse grained marble

MINERAL ABBREVIATIONS

B – Biotite
C – Chlorite
Cp – Chalcopyrite
Ep – Epidote
M – Muscovite
Mn – Manganese
Mt – Magnetite
Py – Pyrite
Q – Quartz
S – Sericite

Scale 1:10000

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

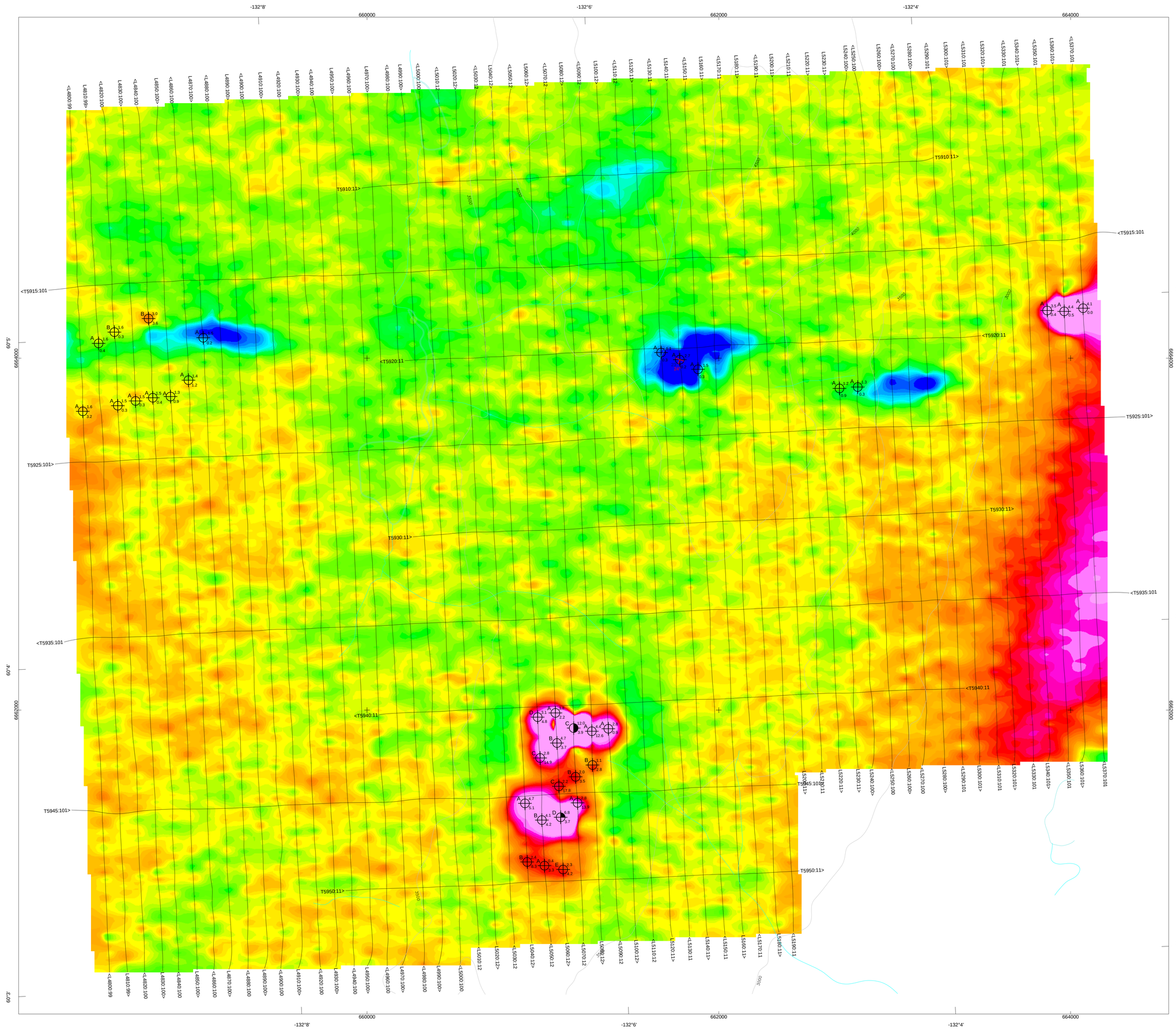
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Yukon, Canada

Geotech VTEM System
Interpretation Map

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November 2007

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GEOTECH LTD.

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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

Anomaly ID — Conductance (S)
Depth (m) — Tau (ms)
Dip (°)

dB/dt response
pV/(A*m^4)

0.002 0.002 0.002 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.000 0.000 0.000 0.000 0.000 0.000 0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.001 -0.001 -0.001 -0.001 -0.001 -0.001 -0.001 -0.001 -0.002 -0.002 -0.002

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

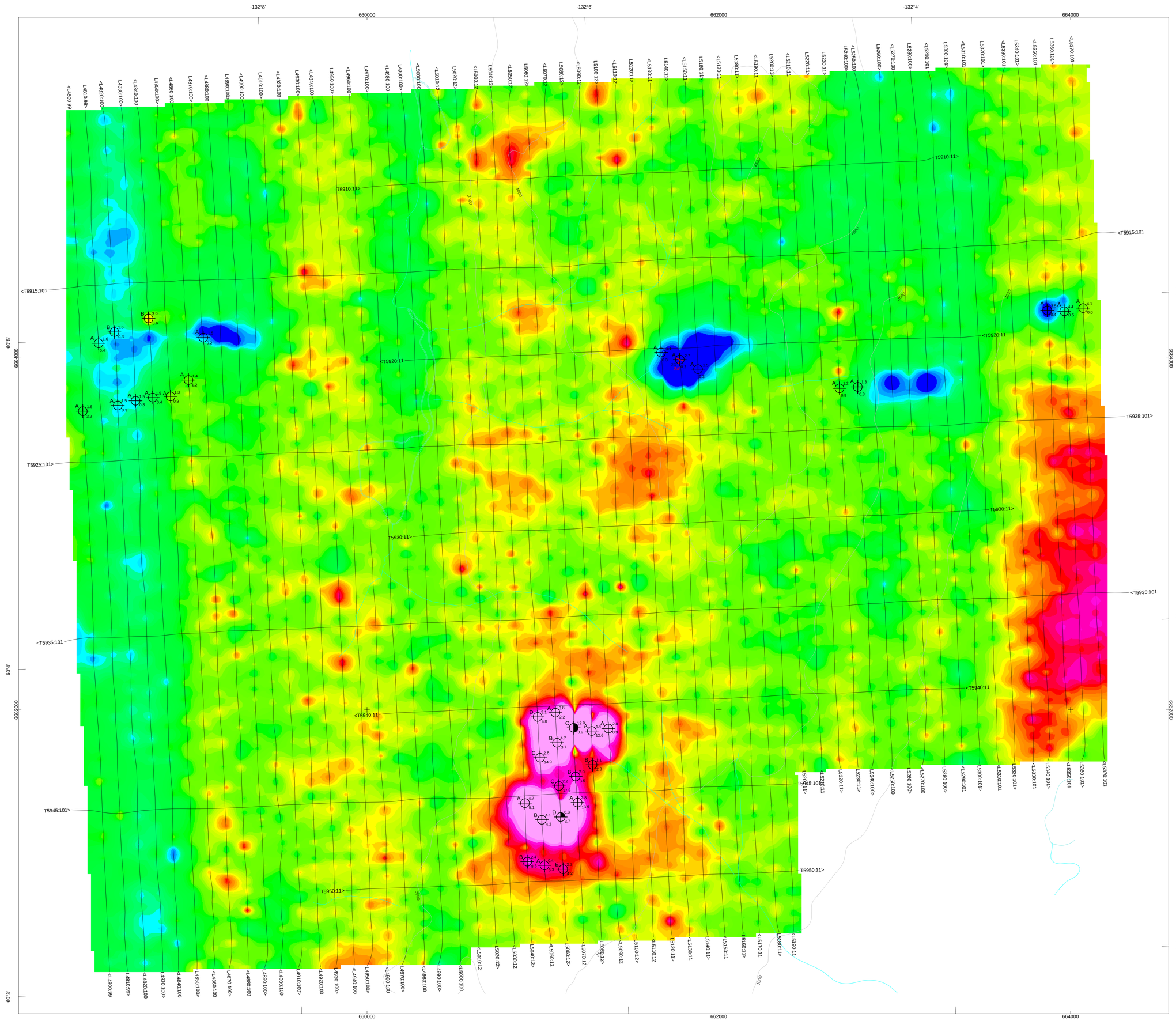
Tarsis Capital Corp.
MOR Property
Yukon, Canada

Geotech VTEM System
EM pickes anomalies & late time dB/dt Channel (3.911 ms)

Flown and processed by Geotech Ltd.
30 Industrial Parkway S.,
Aurora, Ontario, Canada L4G 3W2
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November 2007

Project 7067



GEOTECH LTD.

Survey Specifications:

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High Sensitivity Cesium Magnetometer
Magnetometer Resolution 0.02 nT at 10 samples/sec

Anomaly Symbols

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- 5.0 < Conductance < 10.0
- 10.0 < Conductance < 15.0
- 15.0 < Conductance < 20.0
- 20.0 < Conductance

Anomaly ID — Conductance (S)
Depth (m) — Tau (ms)
Dip (°)

0.007
0.006
0.006
0.005
0.005
0.004
0.004
0.004
0.004
0.003
0.003
0.003
0.003
0.002
0.002
0.002
0.002
0.002
0.001
0.001
0.001
0.001
0.001
0.000
0.000
0.000
-0.000
-0.000
-0.001
-0.001
-0.001
-0.001
-0.002
-0.002
-0.002
-0.003
-0.004
-0.004

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

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

Tarsis Capital Corp.
MOR Property
Yukon, Canada

Geotech VTEM System
EM pickes anomalies & late time B-Field Channel (3.911 ms)

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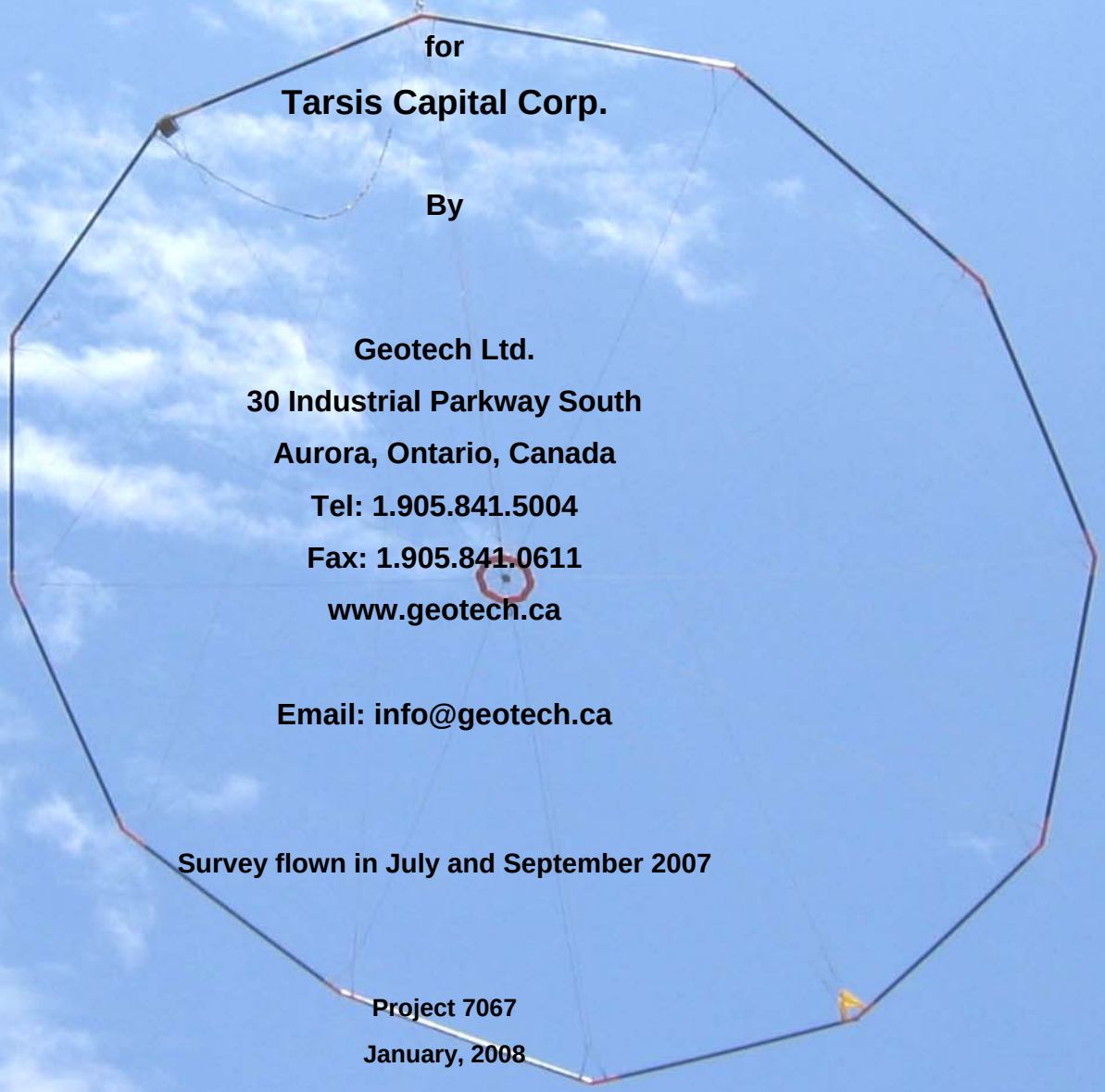
November 2007

Project 7067

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

MOR property

Yukon, Canada



for

Tarsis Capital Corp.

By

Geotech Ltd.

30 Industrial Parkway South

Aurora, Ontario, Canada

Tel: 1.905.841.5004

Fax: 1.905.841.0611

www.geotech.ca

Email: info@geotech.ca

Survey flown in July and September 2007

Project 7067

January, 2008

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REPORT ON A HELICOPTER-BORNE
VERSATILE TIME DOMAIN ELECTROMAGNETIC SURVEY

MOR property, Yukon, Canada

Executive Summary

This report describes the Helicopter-borne geophysical survey carried out on behalf of Tarsis Capital Corp. 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 285.14 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 Teslin, 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.

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

Bill Wengzynowski, acted on behalf of Tarsis Capital Corp. during data acquisition and data processing phases of this project.

The survey block is as shown in Appendix A.

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

The helicopter was based at the Teslin airport for the duration of the survey. Survey flying was completed on September 18th, 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 N177°E / N357°E direction. Tie lines were flown perpendicular to traverse lines.

Where possible, the helicopter maintained a mean terrain clearance of 85 metres, which translated into an average height of 45 metres above ground for the bird-mounted VTEM system and 70 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 Tarsis Capital Corp.

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 35 kilometers east-south-east of the town of Teslin.

Topographically, the survey area exhibits a hilly terrain, with elevation range from 810 metres to 1440 metres above sea level.

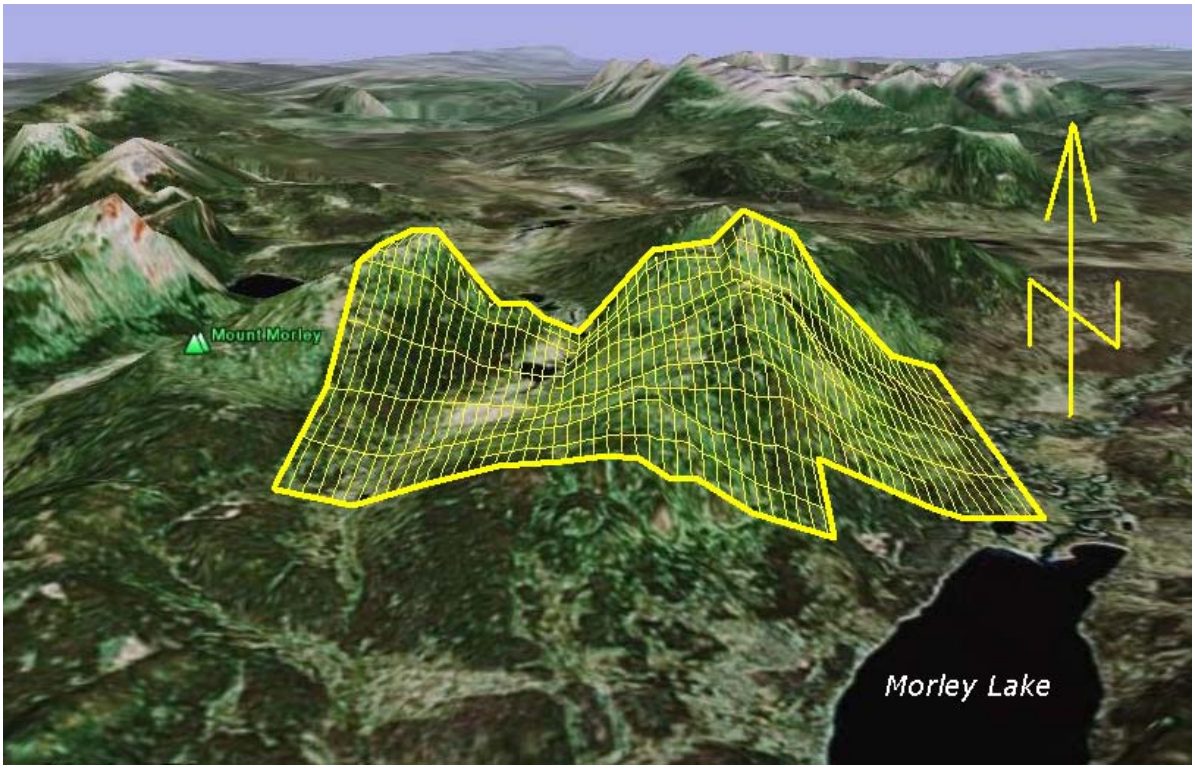


Figure 1. – Projection of flight path on topography.

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
MOR	100	24.77	248.86	N177E / N3570E	L22010 - L22510
	500		36.28	N87E / N267E	T22910 - T22930

Table 1 - Survey block

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

2.2. Survey Operations

Survey operations were based in Teslin, 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
26-Jul-07	11,12	131.56	MOR	Teslin, Yukon	MOR block (orig) complete
18-Sep-07	99,100,101	153.58	MOR	Teslin, Yukon	Extension complete

Table 2 - Survey schedule

2.3. Flight Specifications

The nominal EM sensor terrain clearance was 45 m (EM bird height above ground, i.e. helicopter is maintained 85 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.

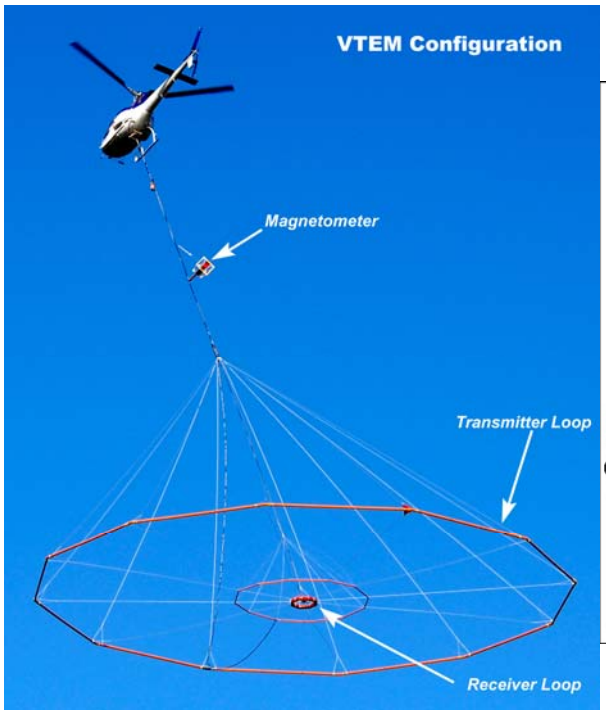


Figure 2 – VTEM configuration

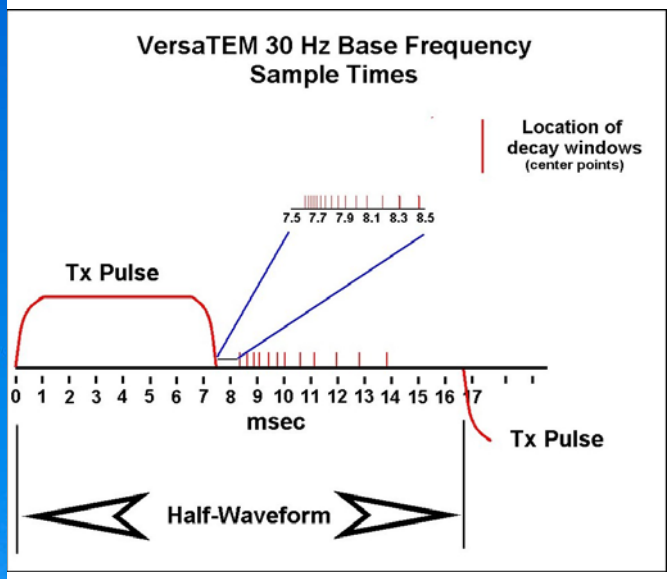


Figure 3 – Sample times

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

Twenty-five measurement gates were used in the range from 120 μs to 7828 μs, as shown in Table 3.

VTEM Decay Sampling scheme				
Array Index	(Microseconds)			
	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
34	7828	7203	8537	1334

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 201 Amp.
Pulse width was 7.2 ms
Duty cycle was 43%.
Peak dipole moment was 427400 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 Teslin, 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
QC Geophysicist:	Sean Hayes
Crew Chief:	Keith Lavelley
Operator:	Ioan Serbu Paul Taylor

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

Pilot:	Roy Stevenson Randy Marks
Engineer:	Darren Shipman 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 57848 nT are observed in the NW quadrant of the block.. Average of 57696 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 1:20,000. 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 maps.

The following maps are presented on paper,

- dB/dt profiles, Time Gates 0.234 – 7.828 ms in linear - logarithmic scale
- B-field profiles, Time Gates 0.234 – 7.828 ms in linear - logarithmic scale
- Total Magnetic intensity contours and colour image

5.3. Digital Data

Two copies of CDs 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 MOR 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)
SF[34]:	dB/dt 7388 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 (pVms)/(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)
BF[17]: B-field 406 microsecond time channel (pV*ms)/(A*m^4)
BF[18]: B-field 484 microsecond time channel (pV*ms)/(A*m^4)
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)
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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)
BF[34]: B-field 7828 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 – 34, as described above.

- Database 7067mor_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,

  Mor_magfin: Total magnetic intensity (nT)
  Mor_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 1:20,000 scale in Geosoft MAP format, as follow,

  Mor_Magfin: Total magnetic intensity contours and colour image
  Mor_dBdt: VTEM dB/dt profiles, Time Gates 0.234 – 7.828 ms in linear - logarithmic scale
  Mor_EMLP: VTEM B-field profiles, Time Gates 0.234 – 7.828 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 MOR property, located in Yukon, Canada.

The total area coverage is 24.77 km^2. Total survey line coverage is 285.14 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 1:20,000.

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

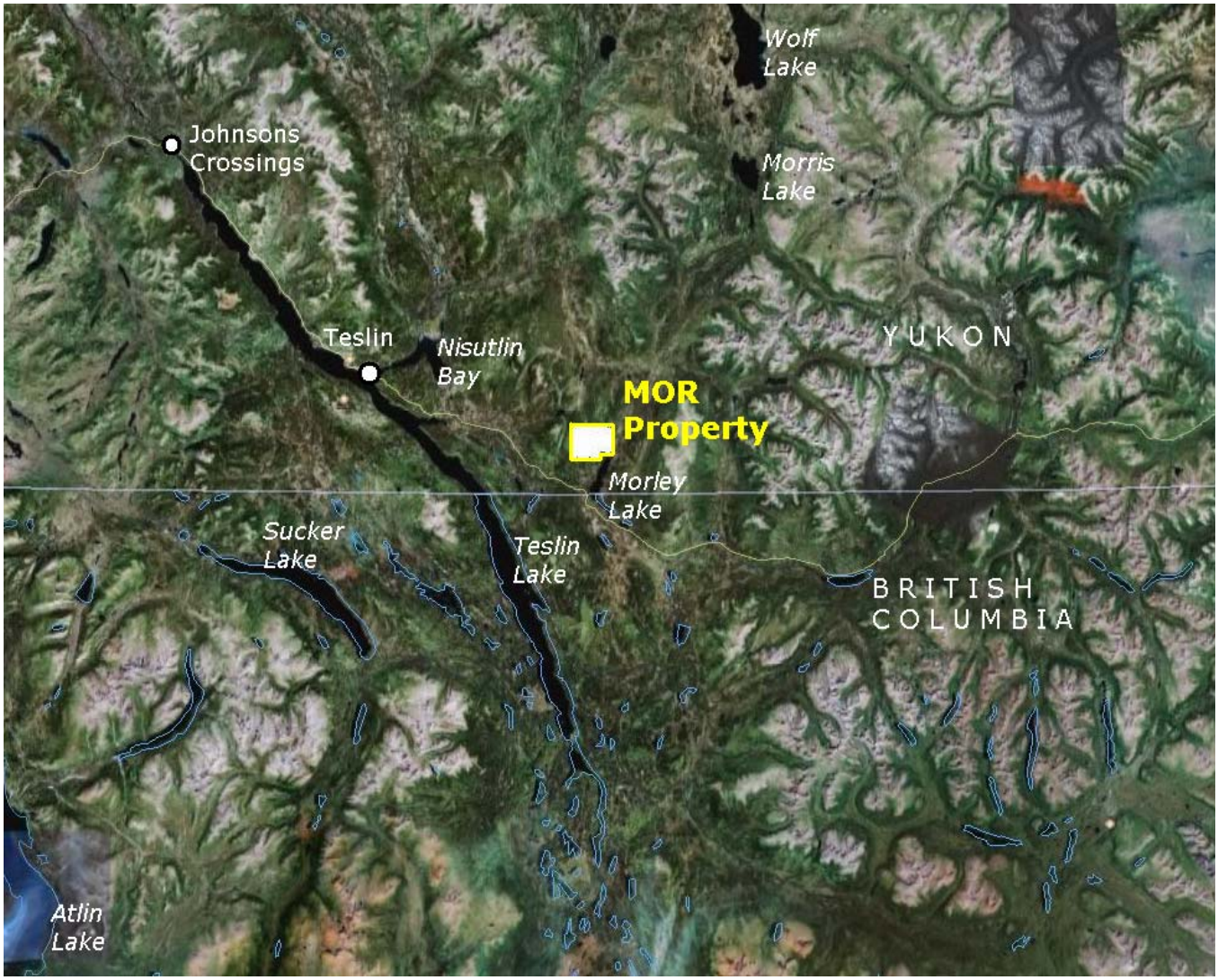
A number of EM anomaly groupings were identified. Ground follow-up of those anomalies should be carried out if favourably supported by other geoscientific data.

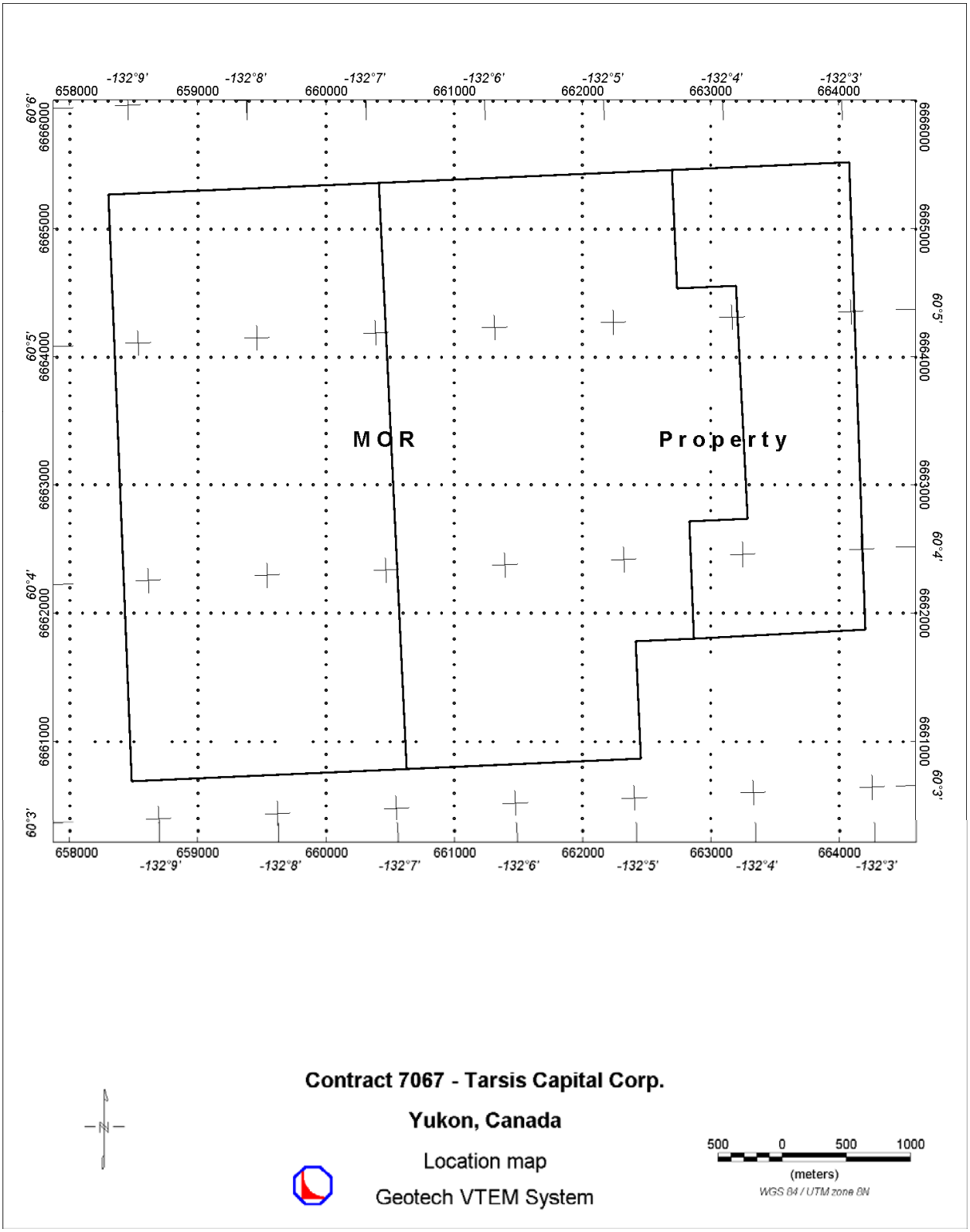
Respectfully submitted,

George Lev
Geotech Ltd.
January, 2008

APPENDIX A

SURVEY BLOCK LOCATION MAP




-132°9'
-132°8'
-132°7'
-132°6'
-132°5'
-132°4'
-132°3'
658000
659000
660000
661000
662000
663000
664000
60°6'
60°5'
60°4'
60°3'
6666000
6665000
6664000
6663000
6662000
6661000
MOR
Property
Contract 7067 - Tarsis Capital Corp.
Yukon, Canada
Location map
Geotech VTEM System
N
500 0 500 1000
(meters)
WGS 84 / UTM zone 8N

APPENDIX B

SURVEY BLOCK COORDINATES
(WGS 84, UTM zone 8 north)

MOR property

MOR	
Easting	**Northing**
658 300	6 665 270
664 080	6 665 519
664 207	6 661 873
662 414	6 661 783
662 453	6 660 869
658 485	6 660 692
658 300	6 665 270

APPENDIX C

MODELING VTEM DATA

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.

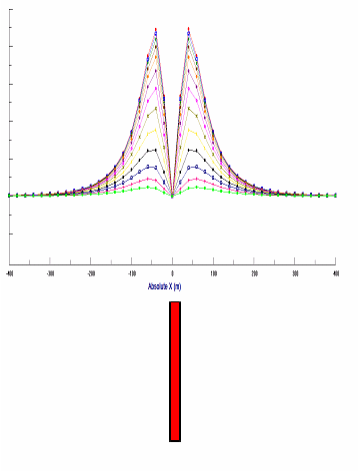
Figure H shows a special case where two plates are positioned to represent a synclinal structure. Note that the main characteristic to remember is the centre amplitudes are higher (approximately double) compared to the high shoulder of a single plate. This model is very representative of tightly folded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

Variation of Prism Depth

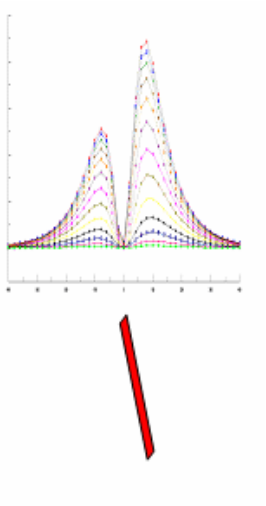
Finally, with prism models, another algorithm is required to represent current on the plate. A plate model is considered to be infinitely thin with respect to thickness and incapable of representing the current in the thickness dimension. A prism model is constructed to deal with this problem, thereby,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

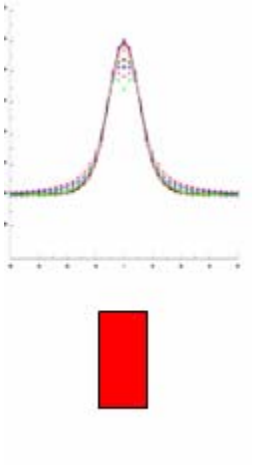
A



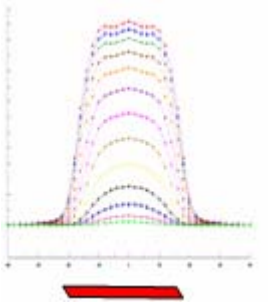
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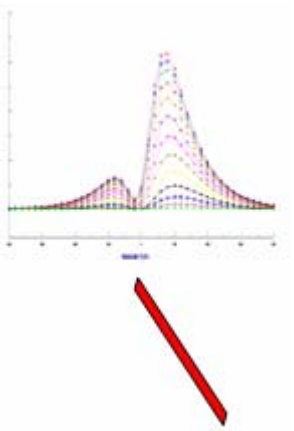
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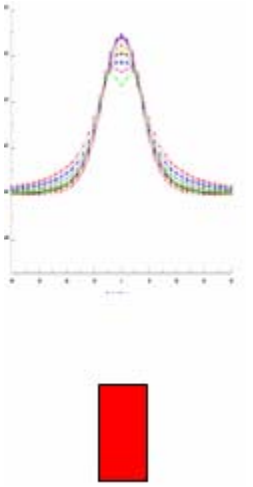
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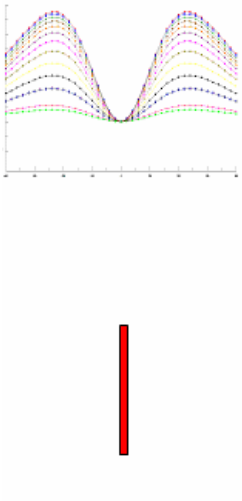
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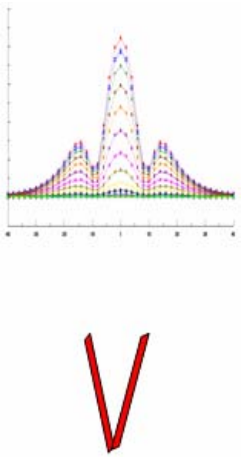
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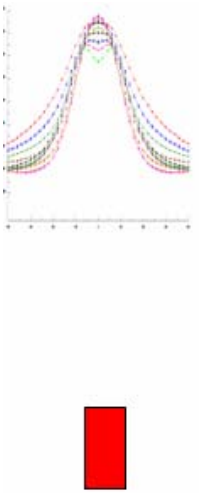
G



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.

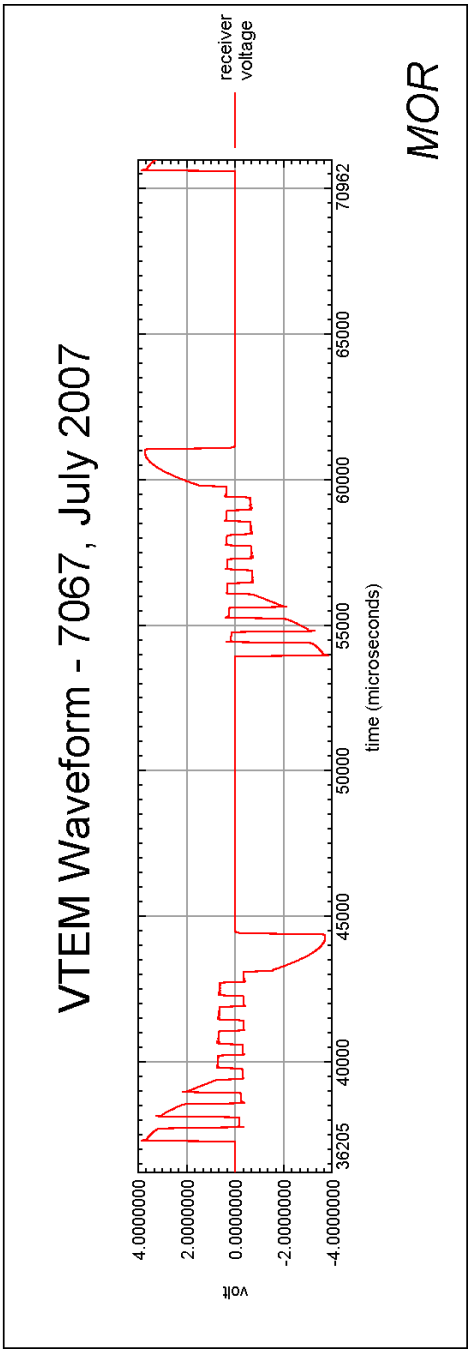
The first stage is to determine which time gates are most descriptive of the overall conductance patterns. Maps of the time gates that represent the range of responses can be very informative.

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.

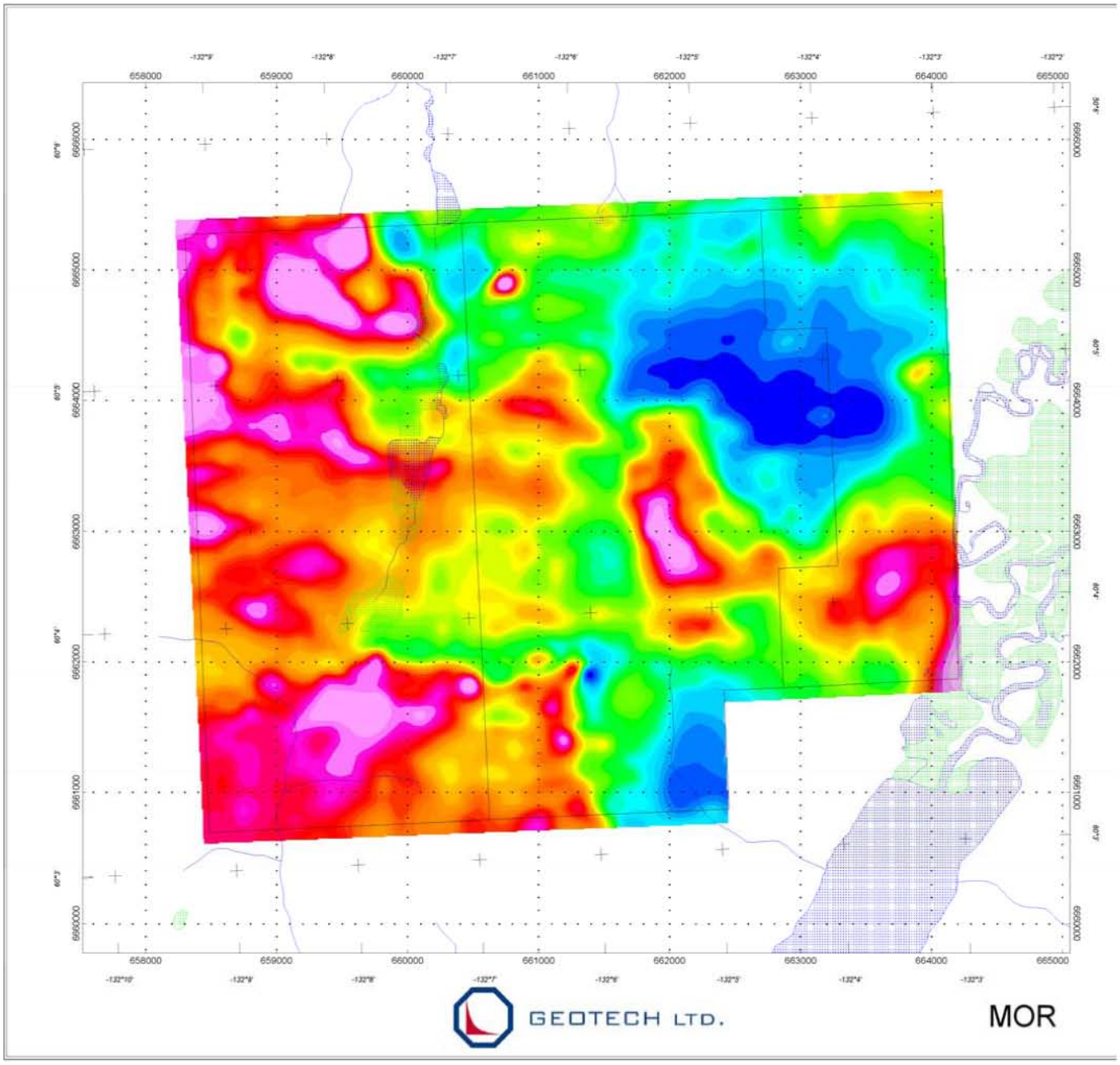
APPENDIX D

VTEM WAVEFORM



APPENDIX E

GEOPHYSICAL MAP



GEOTECH LTD.

Survey Specifications:
Dates Flown: July 26, 2007
Survey Base: Teslin, YT
Aircraft: Astar B3 helicopter, Registration C-GTFX
Nominal Flight Line Spacing: 100 metres
Nominal Flight Line Directions: N177°E/N357°E
Nominal Tie Line Spacing: 500 metres
Nominal Tie Line Directions: N87°E/N267°E
Nominal helicopter terrain clearance 85 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 427,400 NIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.22 ms
Geometrics Optically-pumped,
High Sensitivity Cesium Magnetometer
Magnetometer Resolution 0.02 nT at 10 samples/sec



Profiles scale 1 mm = 0.1 pV/A/m^4
(Linear between +/-0.2 pV/A/m^4
logarithmic above 0.2 pV/A/m^4)

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

Legend:
Roads
Lakes, Rivers
Swamps
Topographic contours

Scale 1:20000
250 0 250 500 750 1000
(meters)
WGS 84 / UTM zone 8N

Tarsis Capital Corp.
Block MOR
Yukon, Canada

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

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

January 2008

Project 7067

GEOTECH LTD.

Survey Specifications:

Dates Flown: July 26, 2007
Survey Base: Teslin, YT
Aircraft: Astar B3 helicopter, Registration C-GTFX
Nominal Flight Line Spacing: 100 metres
Nominal Flight Line Directions: N177°E/N357°E
Nominal Tie Line Spacing: 500 metres
Nominal Tie Line Directions: N87°E/N267°E
Nominal helicopter terrain clearance 85 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 427,400 NIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.22 ms
Geometrics Optically-pumped,
High Sensitivity Cesium Magnetometer
Magnetometer Resolution 0.02 nT at 10 samples/sec



Legend:
- Boundary Yukon - BC
- Roads
- Lakes, Rivers
- Swamps
- Topographic contours

Contour intervals:
- 2 nT
- 10 nT
- 50 nT

Magnetic field (nT)
57772, 57762, 57756, 57752, 57749, 57744, 57740, 57736, 57732, 57730, 57726, 57722, 57720, 57716, 57714, 57710, 57706, 57704, 57700, 57696, 57692, 57690, 57686, 57682, 57678, 57674, 57672, 57668, 57666, 57662, 57658, 57654, 57650, 57644, 57636, 57626, 57616, 57602

Scale 1:20000
250 0 250 500 750 1000
(meters)
WGS 84 / UTM zone 8N

Tarsis Capital Corp.
Block MOR
Yukon, Canada

Geotech VTEM System
Total Magnetic Field Map

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

January 2008

Project 7067

GEOTECH LTD.

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Transmitter Wave Form: Trapezoid, Pulse Width 7.22 ms
Geometrics Optically-pumped,
High Sensitivity Cesium Magnetometer
Magnetometer Resolution 0.02 nT at 10 samples/sec



Profiles scale 1 mm = 0.1 (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 1:20000

250 0 250 500 750 1000

(meters)

WGS 84 / UTM zone 8N

Tarsis Capital Corp.
Block MOR
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.geotech.ca

January 2008

Project 7067

APPENDIX IV

GEOLOGICAL AND GEOTECHNICAL LOGS

PROJECT MOR

PROPERTY: MOR

HOLE: MR-07-01

Easting	Northing	Elev.	Depth (m)
661918	6663933	1308	172.82

Contractor: TOP Rank Diamond Drilling Ltd.
Drill: JKS-300

SURVEY

Depth (m)	Azimuth	Dip	Method	Depth (m)	Azimuth	Dip	Method
collar	358	60	Brunton				
63.1	358	53	Acid				
124.05	358	51	Acid				
172.82	358	49	Acid				

Core size: BTW
Casing depth: (m) in/out

Drilling dates: July 1 - July 3, 2007

Logged by: Martin Nunez

Target: Collared on Section 2600E 100m south of MOR-04-02

SUMMARY

From (m)	To (m)	Interval	Unit	Coments
0	80.41	80.41	GNE	Mixed gnessic meta sediments
80.41	83.39	2.98	MXSX	Horizon A
83.39	87.84	4.45	QCS	Quartz chlorite schist
87.84	91.85	4.01	MXSX	Horizon B
91.85	104.33	12.48	QCS/GNE	Interbedded meta seds and volcanics
104.33	105.28	0.95	MXSX	Horizon C
105.28	172.82	67.54	MIXED	Interbedded meta seds and volcanics

SAMPLES

Numbers: C448601-C448625

Total: 25
Date sent: July 17, 2007

COMMENTS

PROPERTY: MOR **HOLE:** MR-07-01

Struct.		LITHOLOGY								ALT.			MINERALS			SAMPLES							Blocks			GEOTECHNICAL						JOINTS					
																										REC		RQD									
Type	Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:							From (m)	To (m)	Interval (m)	Sample				From (m)	To (m)	Intvl. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling
		0.00	17.96	17.96		AND			Gn interbedded AND with stretched Hb														0.00	3.05	3.05	1.49	49	0.00	0							
									and local sections of interbanded Chl														3.05	5.18	2.13	1.65	77	0.26	12							
FO	72								Gneiss; unit is competent and CAL														5.18	6.87	1.69	1.64	97	0.95	56							
																							6.87	8.23	1.36	1.32	97	0.93	68							
									8.23-8.86														8.23	11.28	3.05	3.04	100	1.76	58							
									Crenulated QChl MSCA with BLEBs of Cal														11.28	12.56	1.28	1.26	98	0.86	67							
									Occ. Trace inter LA rhombs of PY														12.56	14.33	1.77	1.74	98	1.09	62							
C	70								Local 4cm badns of WH RHYCHT with sharp HWFW contacts.														14.33	17.37	3.04	3.02	99	2.15	71							
									Unit is speckeled with CY alted FD spars														17.37	17.54	0.57	0.56	98	0.48	84							
																							17.94	20.42	2.48	2.46	99	2.30	93							
FO	65	17.96	19.61	1.65		GNE			Chl alt pale Gn Gy GNE with 200m interbanded and unit bears trace rhombs of PY.														20.42	23.47	3.05	2.70	89	2.13	70							
																							23.47	24.01	0.54	0.49	91	0.43	80							
FO	63	19.61	23.78	4.17		AND			GN Calcareous Chl ALT with local thinly interbanded Qz.														24.01	26.52	2.51	2.28	91	2.05	82							
																							26.52	29.57	3.05	3.05	100	2.76	90							
FO	68	23.78	30.91	7.13		GNE			W Chl ALT speckeled with scw ALT Fd spars; GY Gn Va tuff?														29.57	29.87	0.30	0.30	100	0.20	67							
																							29.87	32.61	2.74	2.74	100	1.87	68							
		30.91	32.61	1.70		AND			AND; lighter Gn Chl ALT no sx; closely interbanded with GNE.														32.61	35.56	2.95	2.95	100	2.17	74							
																							35.56	35.66	0.10	0.10	100	0.10	100							
FO	66	32.61	35.08	2.47		AND			Gn; becoming more LA and schistose? Possible trans from GNE to AND; calcareous bands still common; V.F.G. contact FW and HW gradational														35.66	38.71	3.05	3.05	100	2.98	98							
																							38.71	41.30	2.59	2.59	100	2.36	91							
		35.08	49.76	14.68		TUFF		GN	Gn GY fel. Vol tuff; matrix Gy + Mu; lapilli of ChlALT Mu; unit grades into and out of Qmcs; fait to mod. Cal; occ. Bl of Py assoc. with cal filled Fr ; Pys C +recrystallized AND also oocurs as coarse grains with Chl Py is t-tw														41.30	41.76	0.46	0.46	100	0.46	100							
FO	72																						41.76	44.81	3.05	3.05	100	2.88	94							
																							44.81	47.25	2.44	2.44	100	2.31	95							
		49.76	52.63	2.87		TUFF			Gy Ma sedimentary cycle? TUFF; well LA with sharp contacts; occ. D. Gy MS + LA ; occ interbedded bands of GNE.														47.25	47.85	0.60	0.60	100	0.56	93							
LA	67																						47.85	50.90	3.05	3.05	100	2.79	91							
FO	52																						50.90	53.11	2.21	2.21	100	2.11	95							
																							53.11	53.95	0.84	0.84	100	0.84	100							
C	85	52.63	57.18	4.55		TUFF		GN	Interbedded TUFF and GNE Gy Chl Gne and Gy DR GY or TUFF; sharp contacts; GNE Fo bear thin flecks of t-Py														53.95	57.00	3.05	3.03	99	2.76	90							
FO	76																						57.00	59.11	2.11	2.06	98	0.72	34							
																							59.11	60.05	0.94	0.92	98	0.78	83							
		52.18	58.61	6.43		QMBC	SC	PK	QMBC schist ; DK Gy ; Fo bear flecks of Py in trace to tW amounts; wear Chl/ser ALT														60.05	63.09	3.04	3.04	100	2.27	75							
								GN															63.09	64.84	1.75	1.75	100	0.99	57							

PROPERTY: MOR **HOLE:** MR-07-01

Struct. Type	Struct. Attitude	LITHOLOGY From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:	ALT.			MINERALS			SAMPLES From (m)	To (m)	Interval (m)	Sample				Blocks From (m)	To (m)	Intvl. (m)	GEOTECHNICAL REC (m)	REC Percent	RQD (m)	RQD Percent	Weathering	Hardness	JOINTS Frequency	Attitude	Shape	Roughness	Infilling
FO	75																						64.84	66.14	1.30	1.30	100	1.30	100								
																							66.14	69.19	3.05	3.05	100	2.61	86								
C	80	58.61	62.80	4.19		GNE			contact zone from 57.93-59.11 oxided + Fr but contact sharp from frags; oxided drags bear LGST Bl of PY; Fo 40 to c/a Gy felsic TUFF and Chl + SER + Mu + Bl bands														69.19	70.59	1.40	1.40	100	1.22	87								
																							70.59	72.24	1.65	1.65	100	1.39	84								
FO	40																						72.24	75.29	3.05	3.05	100	2.59	85								
																							75.29	76.48	1.19	1.18	99	0.99	83								
FO	75	62.80	70.59	7.79		QMBC			TUFF - QMBC schist ; DR Gy closely FO QMBC schist + GNBy unit orhdes in + out with occ. FR. Fillings of cal. ; coarse Py on FO tw-w ; banded TUFF is W calcereous; schist calcereous only along FR fill														76.48	78.33	1.85	1.84	99	1.65	90								
									69.83-70.59														78.33	81.38	3.05	3.05	100	3.05	100								
									banded Gy TUFF ICHt SER +- Qz														81.38	82.36	0.98	0.98	100	0.94	96								
																							82.36	84.43	2.07	2.07	100	1.73	84								
LA	73	70.59	72.24	1.65		QMBC			70.59-							70.41	72.56		C448601				84.43	87.48	3.05	3.03	99	2.68	88								
									unit is DR GN Chl Mu schist with no change in inlet unit is fairly amorphous														87.48	88.22	0.74	0.74	100	0.51	69								
									72.24														88.22	90.53	2.31	2.31	100	1.92	83								
									unit is f-m with rhombs of Py occurring with dariler GN Chl bands occ. Minor Bl of PO assoc. with Py														90.53	93.57	3.04	3.04	100	2.53	83								
																							93.57	94.10	0.53	0.53	100	0.33	62								
		72.24	81.70	9.46					80.40 - 81.70							72.56	75.27		C448602				94.10	96.62	2.51	2.49	99	1.98	79								
									semi massive to intense coarse Py occurring within interbanded TUFF ; 65 Py 20 PO 15CP Py is coarse ; CP is 2nd alter PO ; with occ VTS of cal														96.62	99.67	3.05	3.05	100	2.34	77								
																75.27	77.58		C448603				99.67	99.97	0.30	0.30	100	0.12	40								
		81.70	83.46	1.76		TUFF			Gy SER + Chl banded fel. TUFF with BL of CP occurring of SER La							77.58	80.41		C448604				99.97	102.72	2.75	2.75	100	2.52	92								
LA	80															80.41	81.69		C448605				102.72	105.65	2.93	2.93	100	2.46	84								
																81.69	83.39		C448606				105.65	105.77	0.12	0.12	100	0.00	0								
C	63	83.46	85.99	2.53		QMBC			Folded intensely; interbedded with AM BL of Cal							83.39	86.69		C448607				105.77	108.81	3.04	3.04	100	2.69	88								
																							108.81	111.18	2.37	2.37	100	1.99	84								
		85.99	87.83	1.84		TUFF		GN	Banded Gneissic felsic TUFF with Chl ALT Cy occurring on parting surfaces ; unit occ. Strongly folded near Cy partings							86.69	87.84		C448608				111.18	111.86	0.68	0.68	100	0.00	0								
FO	60																						111.86	114.91	3.05	3.05	100	2.13	70								
																							114.91	116.53	1.62	1.65	102	1.12	69								
		87.83	89.27	1.44		TUF			MxSx 30% F.G. CP 70% Py. Py occurs as coarse clasts with CP is F.G. occurring with PY as amorphous BL ; host is F.G. (SERTUF) banded with clasts of SU Qz.							87.84	90.43		C448609				116.53	117.96	1.43	1.46	102	0.17	12								
						MXSX																	117.96	121.01	3.05	3.12	102	0.35	11								
BD	82																						121.01	122.21	1.20	1.20	100	0.49	41								
																							122.21	124.05	1.84	1.83	99	1.46	79								

PROPERTY: MOR **HOLE:** MR-07-01

Struct. Type	Struct. Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:
		89.27	95.58	6.31		TUF		GN	Felsic vol. TUFF + W. Chl ALT lapilli occ. Qz vts + occ. T grains of Py
								NE	
FO	85							LP	
		95.58	98.06	2.48		QMBC			DR GN Ma Chl QMB sc ; very calcareous
		98.06	104.13	6.07		TUF		GN	felsic lapilli TUF with runs of DU GN Chl ALT ; occ. Partings where TUFF has been gouged
BD	85								
		104.13	105.13	1.00		QCS			semi MxSx Py/Po/Cp 50/30/20 Py is same above ; host is TUF with in QCS (contact transition)
FO	74								
		105.13	110.87	5.74		QCS			speckled QCS with diss flecks of magnetite; Mu on parting surfaces
FO	75								
		110.87	113.95	3.08		GNE			F.G. banded GNE (GNTUFF?) unit gradesinto Dk GN QCS
FO	80								
FO	75	113.95	115.18	1.23		QCS			DK GN with weak flecks of Py; Py is coarse.
		115.18	133.76	18.58		GNE			Gy with Cy on parting surfaces and SPAL? ; red min ; Mu cal on fleck in Gy felsic matrix ; hem ALT ; unit has miloly pinic tinge.
									127.10 -
FO	78								unit undergoes yellow SAU alteration and becomes locally Qz flooded with bull Qz ; Fw contact CY ALT
C	65								
		133.78	144.91	11.13		QCS			intermixed QCS + meta sediments
						M.SED			
BD	60								
		144.91	166.41	21.50					Intermixed Qtz phyric schist DK Gy to BK calcareous Chl Qtz schist
CO	78								148.19-152.01
									unit bears 40% opalescent Qz eyes
									unit bears vol. Fragm. Appearance.
									152.01 - 152.21 20cm Qz Id with 15% CPY occurring H to interstices . Tarer closer
		166.41							HW contact chalt with gorge but sharp 75degrees

ALT.			MINERALS			SAMPLES							Blocks			GEOTECHNICAL						JOINTS					
						From (m)	To (m)	Interval (m)	Sample				From (m)	To (m)	Intvl. (m)	REC (m)	REC Percent	RQD (m)	RQD Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling
						90.43	91.29		C448610				124.05	127.10	3.05	3.05	100	2.24	73							
						91.29	91.85		C448611				127.10	127.76	0.66	0.65	98	0.30	45							
							BLANK		C448612				127.76	130.15	2.39	2.34	98	1.94	81							
						91.85	95.60		C448613				130.15	133.20	3.05	3.02	99	2.40	79							
						95.60	98.20		C448614				133.20	133.26	0.06	0.06	100	0.00	0							
													133.26	136.25	2.99	2.99	100	0.90	30							
						98.20	101.52		C448615				136.25	138.69	2.44	2.44	100	2.31	95							
						101.52	104.33		C448616				138.69	139.29	0.60	0.60	100	0.58	97							
						104.33	105.28		C448617				139.29	142.34	3.05	3.03	99	2.56	84							
													142.34	144.36	2.02	2.00	99	2.00	99							
													144.36	145.39	1.03	1.03	100	0.90	87							
													145.39	148.44	3.05	3.05	100	3.05	100							
						105.28	106.57		C448618				148.44	149.94	1.50	1.50	100	1.50	100							
						106.57	107.61		C448619				149.94	151.49	1.55	1.55	100	1.48	95							
						107.61	110.26		C448620				151.49	154.53	3.04	3.04	100	2.94	97							
						110.26	110.82		C448621				154.53	155.81	1.28	1.28	100	1.28	100							
						110.82	113.06		C448622				155.81	157.58	1.77	1.77	100	1.77	100							
						113.06	113.93		C448623				157.58	160.63	3.05	3.02	99	2.61	86							
						113.93	115.97		C448624				160.63	161.67	1.04	1.03	99	0.76	73							
													161.67	163.68	2.01	1.98	99	1.83	91							
						115.97	117.96		C448625				163.68	166.73	3.05	2.96	97	2.23	73							
													166.73	167.44	0.71	0.70	99	0.70	99							
													167.44	169.77	2.33	2.30	99	2.18	94							
													169.77	172.82	3.05	2.62	86	2.62	86							
													EOH													

PROPERTY: MOR **HOLE:** MR-07-01

Struct.		LITHOLOGY								ALT.			MINERALS			SAMPLES							Blocks			GEOTECHNICAL						JOINTS					
																										REC		RQD									
Type	Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:							From (m)	To (m)	Interval (m)	Sample				From (m)	To (m)	Intvl. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling	
		166.41	EOH - 567 '						opalescent seds 64 degrees to C/A																												

PROJECT MOR

PROPERTY: MOR

HOLE: MR-07-02

Easting	Northing	Elev.	Depth (m)
661819	6663911	1284	166.72

Contractor: TOP Rank Diamond Drilling Ltd.
Drill: JKS-300

Core size: BTW
Casing depth: (m) in/out

Drilling dates: July 3 - July 9, 2007

Logged by: Martin Nunez

SURVEY

Depth (m)	Azimuth	Dip	Method	Depth (m)	Azimuth	Dip	Method
collar	358	60	Brunton				
75.3	358	53	Acid				
166.72	358	51	Acid				

Target: Collared on Section 2500E 100m south of MOR-04-01

SUMMARY

From (m)	To (m)	Interval	Unit	Coments
0.00	73.51	73.51	MIXED	Interbedded meta sed and volcanics
73.51	76.19	2.68	MXSX	Horizon A
76.19	80.52	4.33	MIXED	Interbedded meta sed and volcanics
80.52	88.32	7.8	MXSX	Horizon B
88.32	102.80	14.48	MIXED	Interbedded meta sed and volcanics
102.8	107.81	5.01	MXSX	Horizon C
107.81	134.15	26.34	MIXED	Interbedded meta sed and volcanics
134.15	163.88	29.73	QE Schist	Qtz Phyric Biotite Schist
163.68	166.73	3.05	LST	White limestone

SAMPLES

Numbers: C488551-C488571

Total: 21
Date sent: July 17, 2007

COMMENTS

PROPERTY: Mor **HOLE:** MR-07-02

Struct. Type	Struct. Attitude	LITHOLOGY From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:	ALT.			MINERALS				SAMPLES From (m)	To (m)	Interval (m)	Sample				Blocks From (m)	To (m)	Intvl. (m)	GEOTECHNICAL REC (m)	REC Percent	RQD (m)	RQD Percent	Weathering	Hardness	JOINTS Frequency	Attitude	Shape	Roughness	Infilling
		0.00	2.82	2.82	AND	VOL			DK GN QCS w. folded car LA f-m Cal occuring as wisps + BL															0.00	3.05	3.05	1.97	65	0.27	9								
																								3.05	5.18	2.13	1.52	71	0.57	27								
																								5.18	6.92	1.74	1.69	97	0.92	53								
		2.82	4.94	2.12	QCS	SED	GNE		Speckled GN+WH GNE Qz chl Ep: Schist															6.92	8.23	1.31	1.27	97	0.95	73								
																								8.23	11.28	3.05	2.94	96	2.27	74								
C	65	4.94	7.10	2.16	AND	VOL			Same as previous															11.28	12.64	1.36	1.35	99	1.28	95								
C	75	7.10	11.64	4.54	QCS	SED	GNE		Speckled QCS w. local short runs of															12.64	14.33	1.69	1.68	99	1.63	96								
FO	62								AND f-m BL of Py															14.33	17.37	3.04	3.04	100	2.45	80								
C	53	11.64	25.14	13.50	QCS	SED-VOL			Intermediate blended QCS + AND															17.37	18.37	1.00	0.96	96	0.87	87								
FO	62				AND				occuring as mixed speckled QCS + bands															18.37	20.42	2.05	1.97	96	1.80	88								
Fd	90								of AND, QCS, GNE + bands of car AND;															20.42	23.47	3.05	3.02	99	2.67	88								
FO	64								36cm of Hb car AND w. Qz FD FW @															23.47	24.42	0.95	0.88	93	0.79	83								
									14.35m; HW always sharp, FW allways															24.42	26.52	2.10	1.94	92	0.88	42								
									Qz FD. QCS is w. Epi alt.															26.52	29.57	3.05	3.02	99	2.54	83								
																								29.57	30.31	0.74	0.74	100	0.45	61								
C	63	25.14	29.70	4.56	AND	VOL																		30.31	32.61	2.30	2.29	100	0.79	34								
B	80	29.70	42.35	12.65	QCS				Dom speckled QCS w. local bands of															32.61	35.66	3.05	3.05	100	2.60	85								
					AND				GNE mixed AND + QTE															35.66	36.05	0.39	0.33	85	0.24	62								
LA	72	42.35	43.03	0.68	QTE	SED			Banded DKGY + GY QTE w. interLA chl +															36.05	38.71	2.66	2.24	84	1.20	45								
									speckled QMchl SCH															38.71	41.76	3.05	3.09	101	2.98	98								
																								41.76	42.17	0.41	0.42	102	0.35	85								
C	85	43.03	43.67	0.64	QBSch			GNE	Speckled chl Bi Qz Schist w. interLA car;															42.17	44.81	2.64	2.68	102	2.28	86								
FO	80								minor blebs of Py assoc w. Qz blebs (VOL?);															44.81	47.75	2.94	2.94	100	2.53	86								
									w. Ep alteration; w-m interLA wisps of Magnetite.															47.75	47.85	0.10	0.10	100	0.10	100								
																								57.00	58.57	1.57	1.55	99	1.55	99								
		43.67	44.30	0.63	QTE	SED			DK GY QTE															58.57	60.05	1.48	1.47	99	0.91	62								
																								60.05	63.09	3.04	3.00	99	2.61	86								
									Hi MgChl Mu Qz Sch ; Dk Gn - Bk ; very																													
		44.30	44.81	0.51	QMBSch	Inter			rinely LA; w. interla car ; weak minor blof Py + PO? Mg?															63.09	64.06	0.97	0.95	98	0.95	98								
																								64.06	66.14	2.08	2.05	99	1.85	89								
									Speckeled GY GN EP. ALT Qz Chl Bl																													
FO	78	44.81	45.96	1.15	QBsch	SED		GNE	Schist.															66.14	69.19	3.05	3.05	100	2.80	92								
																								69.19	69.78	0.59	0.59	100	0.56	95								
									Hi Mg Chl Mu Qz sch ; Dk Gn-Bk with thinly																													
		45.96	47.24	1.28	QMBSch	Vol			LA w Py occurring along Fo planes ; w occ. Po/Mg?															69.78	72.24	2.46	2.46	100	2.13	87								
FO	81																							72.24	75.29	3.05	3.05	100	2.59	85								
																								75.29	78.33	3.04	3.04	100	3.04	100								
									DR GN + WW folded + flow banded Chl Qz																													
		47.24	47.85	0.61	GNE				GNE															78.33	80.86	2.53	2.55	101	2.55	101								
																								80.86	81.38	0.52	0.53	102	0.53	102								
									Hi Mg DK Gn w Py Chl Mu Bl Qz Sch ; M-W																													
		47.85	54.31	6.46	QMBSch	Vol			interla car occ. Flecks of coarse Po on Fo plants assoc. with Qz La + Chl ALT FO															81.38	84.43	3.05	3.00	98	2.75	90								
FO	57								52.84 unit becomes interbedded with Dk GN															84.43	86.63	2.20	2.20	100	2.20	100								
FO	70								+ with GNE to FW															86.63	87.48	0.85	0.85	100	0.77	91								
																								87.48	90.53	3.05	3.05	100	3.00	98								
									Pale WH GN + YW ; folded GNE ; Sch are																													
		54.31	57.10	2.79	GNE	SED			aligned 22 ; EP + weakly HEM ALT.															90.53	92.33	1.80	1.75	97	1.70	94								
																								92.33	93.57	1.25	1.21	98	1.21	98								

PROPERTY: Mor **HOLE:** MR-07-02

LITHOLOGY										ALT.			MINERALS				SAMPLES							Blocks			GEOTECHNICAL						JOINTS					
Struct.																												REC		RQD									
Type	Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:								From (m)	To (m)	Interval (m)	Sample				From (m)	To (m)	Intvl. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling	
		57.10	59.87	2.77					Chl Mu B. Qz Sch ; strongly MAG with w. wisps of Mg occ BLS and local bull Qz floods; t-tw Py ; Chl bands are fine wispy and folded.															93.57	96.62	3.05	3.05	100	2.89	95							
FO	46																							96.62	98.19	1.57	1.51	96	1.40	89							
		59.87	62.90	3.03					Chl Mu Bi Qz Sch with interbanded QTE + speckeled GY GNE QBSch ; M car ; car becomes folded towards FW near parallel to C/A															98.19	99.67	1.48	1.43	97	1.41	95							
LA	60																							99.67	102.72	3.05	3.05	100	2.33	76							
																								102.72	104.20	1.48	1.40	95	1.31	88							
		62.90	63.86	0.96					Chl Mu Bi Qz Sch ; M CAR ; w. Mag with minor wisps + BL of Mg ; unit is la w chl ; trace w. PY															104.20	105.77	1.57	1.49	95	1.04	66							
LA	51																							105.77	108.81	3.04	3.04	100	2.49	82							
																								108.81	109.84	1.03	1.03	100	0.44	43							
		63.86	64.66	0.80				GNE	Speckled Qz Chl Bi Sch ; with W-F Py ; Qz near HW appears almost RHY ; unit is EP ALT towards FW ; unit includes 30 cm section of Chl Mu Bi Sch															109.84	111.86	2.02	2.02	100	0.44	43							
FO	46																							111.86	114.91	3.05	3.03	99	2.71	89							
																								114.91	115.71	0.80	0.79	99	0.78	98							
		64.66	71.94	7.28					Intermixed QZ Chl Bi Mu Sch with local sections of GNE speckeled QMBC + short runs of Rhy occurs as 5 cm interval with W-F interla PY followed by 31 cm of LAPILI TUF dirty Rhy? With W-F Py ; local sections of folded GNE that have been occ. CY ALT ; Folds occurs as nose folds ; contacts + LA are sharp ; intermixed volcanics + seds ; occ bands of LA QZ ; w. to M. CAR										69.78	72.22	2.44	C488551				115.71	117.96	2.25	2.21	98	1.90	84							
LA	74																72.22	73.51	1.29	C488552				117.96	121.01	3.05	3.05	100	2.44	80							
BAI	58																73.51	76.19	2.68	C488553				121.01	121.67	0.66	0.66	100	0.45	68							
																	76.19	78.33	2.14	C488554				121.67	124.05	2.38	2.38	100	1.89	79							
		71.94	75.42	3.48					Hi Mg DR -BK GN Chl Qz Bi/Hb? Sch with F PY ; volcanic unit AND? ; local 2 cm sections of gouge ; minor flecks of PO assoc PY ; local strongly Mag. Sections due to wisps or BK Mg.										78.33	80.52	2.19	C488555				124.05	127.10	3.05	3.01	99	1.45	48							
FO	80																80.52	81.64	1.12	C488556				127.10	127.53	0.43	0.43	100	0.43	100							
																								127.53	130.15	2.62	2.62	100	2.09	80							
		75.42	83.19	7.77		MxSx			Gritty Qz Mu Car Sch with Smx to Ms Py, Po, CPY ; Sx with Gy vitreous Mu Qz (RH?) beds															130.15	133.20	3.05	3.04	100	2.73	90							
LA	70																							133.20	133.38	0.18	0.18	100	0.18	100							
									75.42-76.26															133.38	136.25	2.87	2.86	100	2.70	94							
									Smx PY/PO/CPY 60/30/20 Incl. 7cm Mx section, Sx															136.25	139.29	3.04	3.03	100	3.00	99							
																								139.29	142.34	3.05	3.05	100	2.87	94							
									80.53-80.92															142.34	145.18	2.84	2.84	100	2.27	80							
									Smx with a 5 cm + 7cm Mx section primarily Py with 20 Po and 5 CPY															145.18	145.39	0.21	0.21	100	0.14	67							
																								145.39	148.44	3.05	3.05	100	1.99	65							
									81.59-82.63															148.44	151.07	2.63	2.49	95	2.22	84							

PROPERTY: Mor **HOLE:** MR-07-02

Struct. Type	Struct. Attitude	LITHOLOGY From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:	ALT.			MINERALS				SAMPLES From (m)	To (m)	Interval (m)	Sample				Blocks From (m)	To (m)	Intvl. (m)	GEOTECHNICAL REC (m)	REC Percent	RQD (m)	RQD Percent	Weathering	Hardness	JOINTS Frequency	Attitude	Shape	Roughness	Infilling
									Smx with 37cm Ma sections of 90% Py 7% CP 3% Mu?															151.07	151.49	0.42	0.40	95	0.40	95								
																								151.49	154.53	3.04	3.02	99	2.09	69								
									82.62-83.19															154.53	156.90	2.37	2.37	100	1.50	63								
									Ma 90% Py with folded Qz RHY Mu LA + BDS at interface and between Sx runs.															156.90	157.58	0.68	0.68	100	0.60	88								
																								157.58	160.63	3.05	2.99	98	2.14	70								
		83.19	83.72	0.53		RHY			Gy Mu SER RHY ; 10-15% min with Py ; Py is fine grained and recrystallized occurring between + along SER LA								81.64	84.43	2.79	C488557				160.63	162.58	1.95	1.95	100	1.91	98								
LA	70																84.43	86.97	2.54	C488558				162.58	163.68	1.10	1.10	100	1.04	95								
																	86.97	88.32	1.35	C488559				163.68	166.73	3.05	3.05	100	2.94	96								
		83.72	86.92	3.20		MxSx			Mx Py with local sections or folded GNE + QzChl Mu Bi Schist Sx occurs 60% PY 30% CPY 10% por PO occurs as FR fill inGS while PY + CCPY are intermixed local CM sections of RHY + GNE QBC schist.									BLANK		C488560																		
																	88.32	91.02	2.70	C488561																	
																	91.02	91.65	0.63	C488562																	
		86.92	88.33	1.41					GN GY mixed RHY schist + QMBCh schist ; unit is SED, RHY vol mixed zone W with Smx +MxSx sections; RHY sections are folded and bear SER LA ; appears as GY QZ with SER CAL LA; unit is 30% min with Py ; Py occ. Hosts FR's of PO.								91.65	94.43	2.78	C488563																	
FO	70																94.43	97.15	2.72	C488564																	
																	97.15	98.23	1.08	C488565																	
		88.33	91.02	2.69					Dk GN LA QZ Bi Chl (HiMg) CAR schist with intermixed GNE Mx + Gy Qz La								98.23	102.80	4.57	C488566																	
									89.00-89.30								102.80	105.87	3.07	C488567																	
FO	70								Mixed + folded GNE QMBC schist ; with speckeled								105.87	107.81	1.94	C488568																	
FA	68								89.70-89.78 MuPy								107.81	110.49	2.68	C488569																	
C	77								89.78-89.90 GNE								110.49	114.03	3.54	C488570																	
																	114.03	115.71	1.68	C488571																	
C	35	91.02	91.77	0.75		GNE			Chl Mu Qz GNE ; WA + DR GN																													
		91.77	92.53	0.76		Mvol			Dk GN AND? Hi Mg Chl Mu schist ; with Fx ALT to CY gives spotted appearance.																													
		92.53	94.42	1.89		Mixed			Intermixed folded CAL SER GNE + QMuBi schist - CM ; F-M interstitial PY assoc with interla Mu																													
FO	50																																				
		94.42	97.24	2.82		Chl-GNE			QZ Chl SER folded GNE ; Gy Gn + Wa ; F interla flecks or PY																													
FO	63																																				
		97.24	98.23	0.99	QMBSch				DK Gn gritty car hi mg chl Mu schist with smx PY 25% occurring as coarse clasts																													
FO	65																																				

PROPERTY: Mor **HOLE:** MR-07-02

LITHOLOGY										ALT.			MINERALS				SAMPLES							Blocks			GEOTECHNICAL						JOINTS					
Struct.																											REC		RQD								
Type	Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:								From (m)	To (m)	Interval (m)	Sample				From (m)	To (m)	Intvl. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling
		98.23	103.12	4.89		GNE			DK GN + WH folded GNE with sports of DK GN Chl + F-M interbanded PY ; unit is strongly MAG + bears red HEM alt on FR. Surfaces																													
FO	47																																				
C	60	103.12	104.91	1.79		MxSx			Dk GN - BK + WH wispy GY frag? Qz rhy schist? Unit is smx with PY + MOD Mag. with wisps of Mg PY occurs along 80 degrees fabric ; dirty RHY TUFF? Unit is Chl alter with CY on surfaces ; SMX Py																												
									103.12-104.48																												
		104.91	105.59	0.68					GY schist Chl gouge with strong flecks of PY ; GY color due to Sx cutting ; unit is MED DK GN Chl alt schist gouge																													
		105.59	107.84	2.25					same as previous RHY TUFF unit.																												
		107.84	113.98	6.14					Chl Dk GN Q Mu schist with local GNE sections +QZ lenses + local 5 cm sections of SER PY TUFF RHY ; unit is W-F interla PY ; GNE sections are II + sinusoidally folded																												
FO	48																																				
FO	80																																				
FO	66	113.98	125.02	11.04		GNE			BK + WH REG. foliated GNE with occ. Parallel bands of Qz ; unit is weakly Chl ALT; LA interbanded CAR occurring 80 to C/A																													
FO	75																																				
		125.02	134.15	9.13					Interbedded sediments ; sed cycle regularly bedded with alternating speckeled QMBC schist QTE + SLT ; tw-w interbedded PY ; Last 77cm unit becomes BK thinly LA Qz Bi Mu schist with interbedded Qz lenses.																													
BD	80																																				
		134.15	158.88	24.73		GNE			BK + WH Qz Bi Chl CAR SCH with Phyric Qz eyes + lenses; occ. Contact + Fr. Filling gouge ; unit is M.S. carbonaceous; unit becomes w inter FO with SER at FW																													
		158.88	163.68	4.80					Folded GNE ; purple GN + WH with local bands of folded Qz + local Chl.																													
LA	60																																				
		163.68	164.79	1.11					LST GNE transition																													
		164.79	166.73	1.94					LST - massive WH + CAR ; contact marked by Chl.																													
C	60																																				
		EOH	166.73																																			

PROPERTY: Mor **HOLE:** MR-07-02

Struct.		LITHOLOGY								ALT.			MINERALS				SAMPLES							Blocks			GEOTECHNICAL						JOINTS					
																											REC		RQD									
Type	Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:								From (m)	To (m)	Interval (m)	Sample				From (m)	To (m)	Intvl. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling	

PROJECT MOR

PROPERTY: MOR

HOLE: MR-07-03

Easting	Northing	Elev.	Depth (m)
662116	6663904	1331	230.73

Contractor: TOP RANK DRILLING CO.
Drill: JKS-300

Core size: BTW
Casing depth: (m) out

Drilling dates: July 9- July12, 2007

Logged by: Martin Nunez

Target: _____

SURVEY

Depth (m)	Azimuth	Dip	Method	Depth (m)	Azimuth	Dip	Method
collar	000	60	Brunton				
124.05	000	56	Acid				
231	000	53	Acid				

SUMMARY

From (m)	To (m)	Interval	Unit	Coments
0	133.63	133.63	MIXED	Interbedded meta sed and volcanics
133.63	139.36	5.73	MXSX	Horizon A
139.36	141.44	2.08	MIXED	Interbedded meta sed and volcanics
141.44	146.9	5.46	MXSX	Horizon B
146.9	218.68	71.78	MIXED	Interbedded meta sed and volcanics
218.68	221.59	2.91	QE Schist	Qtz Phyric Biotite Schist
221.59	224.44	2.85	MIXED	Interbedded meta sed and volcanics
224.44	227.69	3.25	LST	White limestone
227.69	230.73	3.04	MIXED	Interbedded meta sed and volcanics

SAMPLES

Numbers: C448626-C448650
C488572-C488573
Total: 27
Date sent: July 17, 2007

COMMENTS

5m west of picket 2325N 2800E

PROPERTY: Mor **HOLE:** MR-07-03

Struct.		LITHOLOGY								ALT.			MINERALS				SAMPLES							Blocks			GEOTECHNICAL						JOINTS					
																											REC		RQD									
Type	Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:								From (m)	To (m)	Interval (m)	Sample				From (m)	To (m)	Intvl. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling	
		0.00	8.03	8.03	QCMS	(SED)		GNE	GN chl +Ep ALT speckled Qz chl +/- ser															0.00	2.13	2.13	0.82	38	0.00	0								
FO	77								Mu Schist															2.13	5.18	3.05	2.90	95	1.24	41								
																								5.18	7.14	1.96	1.94	99	1.48	76								
		8.03	9.52	1.49	AND	VOL			GN, chl, Hb AND; Ma AND Strongly car															7.14	8.23	1.09	1.08	99	0.74	68								
FO	73								w. Hb oriented 73º to C/A; Fw ,marked															8.23	11.28	3.05	3.00	98	2.45	80								
									by 4.5cm of BULL Qz															11.28	13.09	1.81	1.66	92	1.47	81								
																								13.09	14.33	1.24	1.14	92	0.50	40								
		9.52	16.29	6.77	QCMS	SED			GN Qtz chl Mu Schist w. interLA lenses +															14.33	17.37	3.04	3.04	100	2.46	81								
LA	67								bands of Ma Qz. Unit mod interLA w.															17.37	18.86	1.49	1.49	100	1.01	68								
									car. Local sections of speckled QCMS;															18.86	20.42	1.56	1.56	100	1.14	73								
									Unit grades into speckled Ep alt. QCMS															20.42	23.47	3.05	3.02	99	2.14	70								
									from 13.09-16.29; 25cm															23.47	24.70	1.23	1.22	99	1.14	93								
									Cy Fc Fr zone around 14.37															24.70	26.52	1.82	1.81	99	1.69	93								
																								26.52	29.57	3.05	3.09	101	2.89	95								
		16.29	22.36	6.07	AND	VOL			GN chl Hb AND Schist, strongly interLA															29.57	30.51	0.94	0.94	100	0.90	96								
LA	44								car; unit bears occ Ep alt GNE QCMS;															30.51	32.61	2.10	2.10	100	2.05	98								
									minor occ nose folds.															32.61	35.66	3.05	3.02	99	2.62	86								
																								35.66	36.17	0.51	0.51	100	0.46	90								
FO	60	22.36	28.49	6.13	QCMS	SED		GNE	Speckled GN Ep alt Qz chl Mu schist;															36.17	38.71	2.54	2.52	99	2.45	96								
									local Qz floods + fold noses.															38.71	41.76	3.05	3.04	100	3.04	100								
																								41.76	41.96	0.20	0.20	100	0.20	100								
		28.49	42.89	14.40	AND	VOL			GN chl alt Hb AND w. local interLA car;															41.96	44.81	2.85	2.93	103	2.84	100								
LA	75								local 10cm of Qcs @ 31.09															44.81	47.75	2.94	2.94	100	2.87	98								
C	57								35.66															47.75	47.85	0.10	0.10	100	0.10	100								
									InterLA car Am + Ep alt Fx; occ Fr															47.85	50.90	3.05	3.02	99	3.00	98								
									w. LI alt; FW contact sharp.															50.90	53.50	2.60	2.60	100	2.22	85								
																								53.50	53.95	0.45	0.45	100	0.45	100								
		42.89	47.85	4.96	QCMS	SED		GNE	Speckled Ep-alt YW-GN Qz Mu chl schist															53.95	57.00	3.05	3.05	100	2.86	94								
LA	70								with bands of car + pale green alt FR's;															57.00	59.20	2.20	2.19	100	1.48	67								
									unit is interLA w. flecks of YW-GN Fx															59.20	60.05	0.85	0.84	99	0.72	85								
									+ Hb? Trace interstial car															60.05	63.09	3.04	3.04	100	3.04	100								
																								63.09	65.03	1.94	1.91	98	1.91	98								
		47.85	54.98	7.13	AND	VOL			MD GN chl car AND w. local sections of															65.03	66.14	1.11	1.10	99	1.10	99								
LA	79								CHTY lapill tuff and 5cm of Ep alt GNE															66.14	69.19	3.05	2.95	97	2.95	97								
									w. a single mm seam of Py; m car and															69.19	70.64	1.45	1.46	101	1.46	101								
									thin LA of Hb? Bi?															70.64	72.24	1.60	1.61	101	1.61	101								
																								72.24	75.29	3.05	3.04	100	3.00	98								
		54.98	56.45	1.47	QCS	SED		GNE	Speckled Ep + chl alt Qz chl schist unit															75.29	76.47	1.18	1.17	99	1.17	99								
FO	72								is weakly GNE + interbedded w. AND															76.47	78.33	1.86	1.85	99	1.85	99								
																								78.33	81.38	3.05	3.05	100	2.92	96								
		56.45	58.10	1.65	QCS	SED			Ma GN chl Qz SCH w. w Bi + occ Mu															81.38	82.32	0.94	0.94	100	0.94	100								
FO	69								on FR surfaces. Unit bears w-trace pale															82.32	84.43	2.11	2.10	100	2.10	100								
									yellow tuff? material															84.43	87.48	3.05	3.03	99	2.98	98								
																								87.48	88.06	0.58	0.58	100	0.58	100								
		58.10	67.38	9.28	QMCS	SED			GNE speckled Ep alt GN+YW Q c															88.06	90.53	2.47	2.47	100	2.40	97								
FO	70								schist; flecks occur as Fx alt giving															90.53	93.57	3.04	3.04	100	3.04	100								
									spotted appearance; weak Mu on FR .															93.57	94.05	0.48	0.48	100	0.48	100								
									surfaces; occ. Interbedded sections of															94.05	96.62	2.57	2.57	100	2.57	100								
									BULL Qz															96.62	99.67	3.05	3.05	100	3.01	99								
																								99.89	102.72	2.83	2.81	99	2.81	99								
LA	74	67.38	68.52	1.14	AND	VOL			Ma DK-MD GN chl schist															102.72	105.66	2.94	2.94	100	2.86	97								
																								105.66	105.77	0.11	0.11	100	0.11	100								
LA	56	68.52	69.48	0.96	QCS	SED			speckled pale GN Ep alt Qz chl schist															105.77	108.81	3.04	3.04	100	2.88	95								
																								108.81	111.16	2.35	2.30	98	2.17	92								
LA	67	69.48	70.70	1.22	AND	VOL			Ma DK GN LA chlor SCH w. cal AM															111.16	111.86	0.70	0.69	99	0.66	94								
																								111.86	114.91	3.05	2.99	98	2.21	72								

PROPERTY: Mor **HOLE:** MR-07-03

| Struct. | | LITHOLOGY | | |

PROPERTY: Mor **HOLE:** MR-07-03

Struct. Type	Struct. Attitude	LITHOLOGY From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:	ALT.	MINERALS	SAMPLES From (m)	To (m)	Interval (m)	Sample	Blocks From (m)	To (m)	Intvl. (m)	GEOTECHNICAL REC (m)	REC Percent	RQD (m)	RQD Percent	Weathering	Hardness	JOINTS Frequency	Attitude	Shape	Roughness	Infilling
																227.69	230.55	2.86											
		124.48	128.87	4.39					DK GN chl Hb car AND; unit is Ma w.interLA			123.55	125.38	1.83	C448626	230.55	230.73												
FO	78								Mu Qz + w-m car occuring as w. flecks +			125.38	126.86	1.48	C448627														
									FR infill; FW contact is sharp: 62º + marked by crushed CY alt GNE			126.86	129.85	2.99	C448628	EOH	230.73												
												129.85	133.63	3.78	C448629														
		128.87	129.82	0.95	QSS	VOL			DK GN Hi Mg Chl Ser Schist; Unit 7-10%																				
FO	55								min with Py with 25cm of 25% Py; Pyritic																				
C	57								sections with Mag.; FW 13cm Qz flood with																				
									fr. Filling CPY																				
		129.82	133.63	3.81	QBS	VOL		GNE	GY + felted DK GN Qz Chl Biotite Schist;			133.63	137.28	3.65	C448630														
FO	65								Unit is Felsic and felted with Ser + Dom. Ma			137.28	137.81	0.53	n.s														
									GY Qz grading in and out of GNE; t-tw			137.81	139.36	1.55	C448631														
									interstitial Py																				
		133.63	138.00	4.37				GNE	GN+GY folded GNE + SER GNE with inter																				
FO	65								LA chl occ. Qz floods + Semi Ma to Ma																				
									Py/Cpy with occ. BL of Gn assoc. with Qz																				
									flooding; unit is approx. 40% min. with Ma																				
									sections @ 134.65-135.60 and 136.18-																				
									137.25 consisting of 50% Py 30% CPY																				
									15% Sph and 5% Gn.																				
		138.00	139.03	1.03					LA GY Ser Schist with 10% diss. Py along			139.36	140.48	1.12	C448632														
FO	72								Ser alt LA;Unit is partially Qz flooded;BL of			140.48	141.44	0.96	C448633														
FO	70								PY and CPoccuring along flood boundary			141.44	142.16	0.72	C448634														
LA	75											142.16	144.65	2.49	C448635														
		139.03	141.26	2.23					Interbanded Qz Chl car Schist and Ser																				
									GNE Schist																				
		141.26	145.05	3.79					Laminated GNE Ser Schist with Qz flooded																				
									HW contact bearing flecks of Gn; Unit																				
									hosts Semi Ma and Ma SX; 20% min. with																				
									Py to 142.34; 142.34-144.62 60% Py 40%																				
									CPY; Semi Ma btwn 144.62 and 145.05																				
		145.05	145.35	0.30					Chl alt Ser Musc Schist with Semi Ma /			144.65	146.90	2.25	C448636														
									AND?				blank		C448637														
		145.35	146.90	1.55					Chl Alt Ser Musc Schist with Semi Ma - Ma			146.90	150.55	3.65	C448638														
LA	63								sections; Ma Sx 145.45-146.27; FW ends			150.55	152.26	1.71	C448639														

PROPERTY: Mor **HOLE:** MR-07-03

Struct. Type	Struct. Attitude	LITHOLOGY From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:	ALT.	MINERALS	SAMPLES From (m)	To (m)	Interval (m)	Sample	Blocks From (m)	To (m)	Intvl. (m)	GEOTECHNICAL REC (m)	REC Percent	RQD (m)	RQD Percent	Weathering	Hardness	JOINTS Frequency	Attitude	Shape	Roughness	Infilling
									in 8cm of Mx Py; Unit is 20% min. with diss.			152.26	152.73	0.47	C448640														
									interla Py assoc with Ser La; Sx 80% Py			152.73	154.53	1.80	C448641														
									and 20% CPY			154.53	157.24	2.71	C448642														
		146.90	157.25	10.35					MD GN Hi Mg Chl alt car Qx Ser Mu Schist			157.24	160.49	3.25	C448643														
FO	75								with moderate F.G Py and weak CPY																				
FO	70								occuring along La; Local sections of BLK +																				
									GY GNE Qz Ser Schist																				
									151.03-151.22																				
									Andesite																				
									152.30-152.78																				
									M.D Grained Semi Ma Py occuring along																				
									contacts with Ser Schist for 2 cm on either																				
									side																				
		157.25	163.51	6.26					Speckled GY folded GNE Qz Ser±Chl±Mu																				
FO	63								Schist with interla sections of Qz and Qte ;																				
									Ser alt Schist?; Unit appears Sedimentary;																				
		163.51	179.50	15.99					Qz Ser Bi ± Mu Schist with 2 local 5cm			173.50	176.85	3.35	C448644														
FO	65								sections of Qz Phyric Schist; Schist is occ.			176.85	180.18	3.33	C448645														
FO	75								speckled + interla with Qte and weakly																				
FO	62								interla with Py																				
									172.82-179.50																				
									Unit becomes Interla with folded GNE +																				
									weak local sections of Lapilli Tuff.																				
		179.50	180.17	0.67					La BLk and Wh GNE with t Py and weak			180.18	183.10	2.92	C448646														
FO	60								Chl Alt.				blank		C448647														
												183.10	183.64	0.54	C448648														
		180.17	191.30	11.13					F.G Hi Mg Chl alt Qz Ser Sch with approx			183.64	184.54	0.90	C448649														
FO	65								15-20% coarse interla Py occuring along			184.54	188.06	3.52	C448650														
									Ser La; Unit is M.D GN with interla Qz eyes			188.06	191.05	2.99	C448572														
									; Occ. Sections of Ser+Chl alt GNE with			191.05	194.16	3.11	C448573														
									4cm of Ma Py																				
									184.47-191.30																				
FO	70								Unit becomes is fairly min. with Py and occ.																				
									Flecks of Po; FW contact marked by Qz																				
									flooding; Unit becomes mod Car alt																				
									towards FW																				
		191.30	206.00	14.70		GNE			Thinnly La+Occ. Epidote Alt GNE;Dk GY																				
FO	62								Pale GN;Qz Bi Chl GNE unit ressembles																				
FO	60								lapilli tuff																				

PROPERTY: Mor **HOLE:** MR-07-03

LITHOLOGY										ALT.			MINERALS				SAMPLES							Blocks			GEOTECHNICAL						JOINTS					
Struct.																											REC		RQD								
Type	Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:								From (m)	To (m)	Interval (m)	Sample				From (m)	To (m)	Intvl. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling	
FO	63																																				
		206.00	210.49	4.49					DK GY Chl Bi Ser Schist; Unit is unmin. +																												
FO	60								weakly folded with occ. Interla Hem. alt La																												
									assoc. with BL of Qz																												
		210.49	218.68	8.19					Banded Qz Chl Ser Schist with approx 15%																												
FO	60								F.G Py with interbanded QTE; Vol Alt Sed?																												
									Sed La are styolitic and occ.folded																												
		218.68	221.59	2.91					QTZ phyric lapilli (frag?) schist; DKGY to																												
									BLK Qtz Bi±Ser Car Schist																												
BD	80	221.59	224.44	2.85					Interbanded QTE Seds																												
C	77	224.44	227.69	3.25					Ma White LST																												
C	50	227.69	228.37	0.68					GY Chl alt lapilli tuff																												
		228.37	230.73	2.36					Car AND																												
		EOH	230.73																																		

PROPERTY: Mor **HOLE:** MR-07-03

Struct.		LITHOLOGY								ALT.			MINERALS				SAMPLES							Blocks			GEOTECHNICAL						JOINTS					
																											REC		RQD									
Type	Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:								From (m)	To (m)	Interval (m)	Sample				From (m)	To (m)	Intvl. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling	

PROJECT MOR

PROPERTY: MOR

HOLE: MR-07-04

Easting	Northing	Elev.	Depth (m)
662115	6664007	1288	114.91

Contractor: TOP Rank Diamond Drilling Ltd.
Drill: JKS-300

SURVEY

Depth (m)	Azimuth	Dip	Method	Depth (m)	Azimuth	Dip	Method
collar	000	60	Brunton				
115	000	59	Acid				

Core size: BTW
Cassing depth: (m) in/out

Drilling dates: July 13 - July 14, 2007

Logged by: Martin Nunez

Target: Collared on Section 2800E 8m north of picket 2425N 2800E and 100m north of MR-07-03

SUMMARY

From (m)	To (m)	Interval	Unit	Coments
0	65.31	65.31	MIXED	Interbedded meta sed and volcanics
65.31	72.99	7.68	MXSX	Horizon A
72.99	93.31	20.32	MIXED	Interbedded meta sed and volcanics
93.31	104.01	10.7	MXSX	Horizon B
104.01	114.91	10.9	MIXED	Interbedded meta sed and volcanics

SAMPLES

Numbers: C448574-C448592

Total: 18
Date sent: July 17, 2007

COMMENTS

PROPERTY: Mor **HOLE:** MR-07-04

Struct. Type	Struct. Attitude	LITHOLOGY From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:	ALT.		MINERALS			SAMPLES From (m)	To (m)	Interval (m)	Sample					Blocks From (m)	To (m)	Intvl. (m)	GEOTECHNICAL REC (m)	REC Percent	RQD (m)	RQD Percent	Weathering	Hardness	JOINTS Frequency	Attitude	Shape	Roughness	Infilling
		0.00	10.74	10.74					speckled GNE EP alt QCM Schist+GNE;														0.00	2.13	2.13	0.32	15	0.00	0							
FO	45								unit is locally interbedded with dark														2.13	5.18	3.05	1.57	51	0.88	29							
									green CAR and CHL alt AND Schist														5.18	8.23	3.05	2.95	97	2.18	71							
																							8.23	8.83	0.60	0.60	100	0.24	40							
		10.74	14.33	3.59					Interbedded GNE + Hi Mg CHL CAR														8.83	11.28	2.45	2.45	100	1.89	77							
C	67								alt AND; GNE is weakly EP alt														11.28	14.33	3.05	3.01	99	2.60	85							
																							14.33	14.57	0.24	0.24	100	0.22	92							
		14.33	19.20	4.87					Interbedded QTE, GNE, Q CHL Schist														14.57	17.37	2.80	2.80	100	2.60	93							
									and CAR BI?HB? Sch (AND?); CHL is														17.37	20.42	3.05	3.01	99	2.56	84							
									Hi Mg														20.42	23.47	3.05	3.05	100	2.88	94							
																							23.47	26.52	3.05	2.96	97	2.28	75							
		19.20	32.17	12.97					LT GN DKGY QZ CHL MUSC/SER CAR														26.52	29.57	3.05	3.05	100	2.75	90							
C	68								Schist with occ. Nose folds of GNE; unit														29.57	32.31	2.74	2.73	100	2.55	93							
									is occ.Interbedded with DK GY speckled														32.31	32.61	0.30	0.30	100	0.30	100							
FO	60								GNE QZ CHL Schist 10 cm of																											
									Interbedded QTZ ; weak Py assoc with																											
									speckled SER sections; towards FW																											
									unit becomes interbedded with CAR																											
									folded QTZ CHL Schist; occ.DK GN Hb																											
									Bi Hi Mg CHL CAR Schist; with local																											
									sections of interbedded GNE																											
		32.17	33.55	1.38					GY QTZ SER Schist with weak														32.61	35.66	3.05	3.05	100	2.27	74							
C	66								interbedded La of PY on SER surfaces														35.66	38.09	2.43	2.43	100	1.71	70							
									weak QTE														38.09	38.71	0.62	0.62	100	0.38	61							
																							38.71	41.76	3.05	3.04	100	2.91	95							
		33.55	35.88	2.33					GN CAR HI Mg CHL alt. AND														41.76	43.80	2.04	2.04	100	1.63	80							
FO	65																						43.80	44.81	1.01	1.01	100	0.69	68							
																							44.81	47.85	3.04	2.94	97	2.09	69							
		35.88	54.91	19.03					Interbedded GNE and QTZ CHL Schist														47.85	49.62	1.77	1.77	100	1.60	90							
																							49.62	50.90	1.28	1.28	100	1.06	83							
		54.91	58.51	3.60					GN + WH VOL. CAR CHL QTZ Schist						55.40	56.58	1.18	CC488574					50.90	53.95	3.05	3.10	102	2.61	86							
FO	68								3 cm Ma PY @ 55.95						56.58	58.50	1.92	CC488575					53.95	55.32	1.37	1.37	100	1.37	100							
															58.50	62.29	3.79	CC488576					55.32	57.00	1.68	1.68	100	1.63	97							
		58.51	62.00	3.49					GY speckled GNE QTZ MU SER Schist						62.29	62.66	0.37	CC488577					57.00	60.05	3.05	3.04	100	2.91	95							
FO	69								unit is mod mag.due to PO? MAG?						62.66	65.31	2.65	CC488578					60.05	61.15	1.10	1.10	100	1.10	100							
															65.31	66.21	0.90	CC488579					61.15	63.09	1.94	1.94	100	1.85	95							
C	70	62.00	65.39	3.39					Interla QTZ +CHL+CAR Schist; 1m from							BLANK		CC488580					63.09	66.14	3.05	3.03	99	2.90	95							
LA	72								FW CAR becomes folded						66.21	68.05	1.84	CC488581					66.14	66.89	0.75	0.77	103	0.77	103							
															68.05	70.34	2.29	CC488582					66.89	69.19	2.30	2.30	100	2.31	100							
		65.39	66.22	0.83					Deep GN Hi Mg CHL alt CAR Schist						70.34	72.99	2.65	CC488583					69.19	72.24	3.05	3.02	99	2.74	90							
C	65								hosting 38cm of Ma PY+CP in														72.24	72.39	0.15	0.15	100	0.15	100							
									2 sections ; 60PY/40 CP;Ma SX occuring														72.39	75.29	2.90	2.95	102	2.95	102							
									44o to C/A														75.29	78.18	2.89	2.89	100	2.89	100							
																							78.18	78.33	0.15	0.15	100	0.15	100							
		66.22	84.38	18.16					GY MAG GNE QTZ MU Schist La are very														78.33	81.38	3.05	3.01	99	3.01	99							
LA	75								fine + host 3-5% Po?; unit is mod-weak														81.38	83.80	2.42	2.48	102	2.48	102							
									magnetic; local sections of Chl alt; occ.														83.80	84.43	0.63	0.64	102	0.61	97							
									seams of CAR and thinnly interla SER;																											
									21cm of AND @ 81.17m																											
		84.38	86.85	2.47					resembles braincoral; WH with interla														84.43	87.48	3.05	3.05	100	3.01	99							
									CHL with weak interla flecks of PY; unit																											
									is folded intensely with c/a angles																											
									shallowing to 0; unit is dom. QTZ																											

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Struct. Type	Struct. Attitude	LITHOLOGY From (m)	LITHOLOGY To (m)	LITHOLOGY Interval (m)	LITHOLOGY Type	LITHOLOGY Unit	LITHOLOGY Texture	LITHOLOGY Modifier	Notes:	ALT.		MINERALS			SAMPLES From (m)	SAMPLES To (m)	SAMPLES Interval (m)	SAMPLES Sample					Blocks From (m)	Blocks To (m)	Blocks Intvl. (m)	GEOTECHNICAL REC (m)	GEOTECHNICAL REC Percent	GEOTECHNICAL RQD (m)	GEOTECHNICAL RQD Percent	GEOTECHNICAL Weathering	GEOTECHNICAL Hardness	JOINTS Frequency	JOINTS Attitude	JOINTS Shape	JOINTS Roughness	JOINTS Infilling
SC	50	86.85	92.55	5.70					Folded brain GNE with mod. Interstitial						91.89	93.31	1.42	CC488584					87.48	89.42	1.94	1.91	98	1.91	98								
C	63								CHL+SER						93.31	94.52	1.21	CC488585					89.42	90.53	1.11	1.09	98	1.09	98								
																BLANK		CC488586					90.53	93.57	3.04	3.04	100	2.90	95								
		92.55	93.31	0.76					GY QTZ SER Schist with 10% interla PY						94.52	96.19	1.67	CC488587																			
FO	70								FW becomes transitional with incr CHL						96.19	100.16	3.97	CC488588																			
									alt.						100.16	101.22	1.06	CC488589																			
															101.22	103.29	2.07	CC488590																			
		93.31	95.01	1.70					GN CHL SER CAR Schist with 15-20%						103.29	104.01	0.72	CC488591					93.57	95.01	1.44	1.44	100	1.44	100								
FO	76								min. and 2 sections of MASX totalling						110.35	111.71	1.36	CC488592																			
									0.5m @ 93.31-93.62 and 94.32-94.60																													
		95.01	103.28	8.27					GY GN QTZ SER Schist unit is 10% min.														95.01	96.62	1.61	1.61	100	1.57	98								
FO	75								88cm from FW														96.62	99.67	3.05	3.05	100	3.02	99								
																							99.67	100.73	1.06	1.06	100	1.06	100								
		103.28	104.25	0.97					CHL CY alt GNE Gouge														100.73	102.72	1.99	1.98	99	1.96	98								
																							102.72	105.77	3.05	2.81	92	1.49	49								
		104.25	114.91						Interbedded GNE, QTZ CHL Schist and																													
SC	67								LMST																												
		EOH	114.91																																		

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Struct.		LITHOLOGY								ALT.		MINERALS			SAMPLES							Blocks			GEOTECHNICAL						JOINTS				
																									REC		RQD								
Type	Attitude	From (m)	To (m)	Interval (m)	Type	Unit	Texture	Modifier	Notes:						From (m)	To (m)	Interval (m)	Sample				From (m)	To (m)	Intvl. (m)	(m)	Percent	(m)	Percent	Weathering	Hardness	Frequency	Attitude	Shape	Roughness	Infilling