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ASSESSMENT REPORT ON
2010/2011 HELICOPTER AIRBORNE GEOPHYSICAL SURVEY
BORDEN SOUTH PROJECT

GALLAGHER & MCNAUGHT TOWNSHIPS
PORCUPINE DISTRICT, ONTARIO

Submitted to:
Geoscience Assessment Office
Ministry of Northern Development and Mines
933 Ramsey Lake Road
Sudbury, Ontario
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Prepared by:
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For
Probe Mines Limited

Date: 25 November 2015

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INTRODUCTION

Between 27 December 2010 and 3 January 2011, Reliant Gold Corp. completed a helicopter airborne geophysical survey (VTEM and aeromagnetic) on its Borden South property. This report presents the results of this suvey.

In March 2012, as part of Probe's regional exploration initiative, Probe entered into an option agreement with Reliant Gold Corp. to acquire up to a 70% interest in Reliant's Borden South Project which ties onto the southern boundary of Probe's Borden Gold project and comprises of 20 claims (294 claim units). The terms of the agreement were renegotiated in 2014 and Probe Mines obtained 51% ownership of the property.

A surface gold showing was present on the Borden Gold Project and had been identified over an area 150 metres long by up to 45 metres wide, hosted by a highly altered and metamorphosed suite of rocks within the volcano-sedimentary horizon. Grab samples from selected outcrop returned values of up to 3.4 g/t gold. Limited exploration work investigating the base metal potential of the volcanic horizon was previously undertaken by Noranda. Sulphide mineralized felsic fragmental units were identified which returned anomalous base metal concentrations, suggesting good potential for hosting volcanogenic massive sulphide ("VMS") deposits.

In July 2010, an initial drill program on the Borden Gold Project was completed to test the extent of the surface showing. Results indicated that there was excellent potential to host a low-grade, bulk tonnage gold deposit on the property. Additional drilling on the property continued to illustrate this potential and in late 2012 a High Grade Zone (HGZ) was intersected in the southeastern area of the deposit. In June 2014, Probe released an updated NI 43-101 compliant Resource Estimate on the Borden Gold Deposit which outlined a High-grade Underground Resource as well as an Open pit-constrained Resource. The High-Grade U/G is estimated to contain a constrained Indicated Resource of 1.60 million ounces of gold averaging 5.39 g/t Au and an additional constrained Inferred Resource of 0.43 million ounces of gold averaging 4.37 g/t Au, at a 2.5 g/t Au cut-off grade. In addition, the deposit is estimated to contain an Open pit-constrained Resource of 2.32 million ounces of gold averaging 1.03 g/t Au, at a 0.5 g/t Au cut-off grade.

In March 2015, Goldcorp Inc purchased 100% of Probe Mines Limited.

The Borden South property is located in the Gallagher and McNaught Townships, approximately 9 km east-northeast of the town of Chapleau, Ontario.

All maps coordinates are UTM Nad 83, Zone 17. All costs are in Canadian dollars.

LOCATION AND ACCESS

The Borden South project is located in the Borden Lake area of the 1:50,000 NTS topographic sheet 41O/14, approximately 160 km southwest of the city of Timmins and 9 km east-northeast of the town of Chapleau, Ontario (Figure 1). Access to the property is via Highway 101.

The current report details work applicable to 19 claims located in Gallagher and McNaught Townships which are listed in Table 1.

In 2012, Probe Mines entered into an option agreement with Reliant Gold Corp on these claims. The agreement was renegotiated in 2014 and Probe Mines obtained 51% ownership of the property.

The amount of work completed as detailed in this report is $75,729, which is primarily 50% eligible work credits. These credits are being used towards keeping the project claims in good standing.

Table 1 – Mineral Claim Information

Mineral Claim	District	Claim Due Date	Township	G-Plan	NTS	Units	Assess Required by Due Date
4260695	POR	23/12/2016	MCNAUGHT	M-0823	41014	16	$6,400.00
4260696	POR	23/12/2016	MCNAUGHT	M-0823	41014	16	$6,400.00
4260701	POR	25/11/2016	GALLAGHER	G-1178	41014	14	$5,600.00
4260702	POR	25/11/2016	GALLAGHER	G-1178	41014	16	$6,400.00
4260703	POR	25/11/2016	GALLAGHER	G-1178	41014	16	$6,400.00
4260704	POR	25/11/2016	GALLAGHER	G-1178	41014	10	$4,000.00
4260705	POR	25/11/2016	MCNAUGHT	M-0823	41014	10	$4,000.00
4260708	POR	25/11/2016	GALLAGHER	G-1178	41014	14	$5,600.00
4260709	POR	25/11/2016	GALLAGHER	G-1178	41014	16	$6,400.00
4260710	POR	25/11/2016	GALLAGHER	G-1178	41014	16	$6,400.00
4260711	POR	25/11/2016	MCNAUGHT	M-0823	41014	16	$6,400.00
4260712	POR	25/11/2016	MCNAUGHT	M-0823	41014	16	$6,400.00
4260713	POR	25/11/2016	GALLAGHER	G-1178	41014	12	$4,800.00
4260714	POR	25/11/2016	GALLAGHER	G-1178	41014	16	$6,400.00
4260715	POR	25/11/2016	GALLAGHER	G-1178	41014	16	$6,400.00
4260716	POR	25/11/2016	MCNAUGHT	M-0823	41014	16	$6,400.00
4260718	POR	25/11/2016	GALLAGHER	G-1178	41014	16	$6,400.00
4260719	POR	25/11/2016	GALLAGHER	G-1178	41014	16	$6,400.00
4260720	POR	25/11/2016	GALLAGHER	G-1178	41014	16	$6,400.00

GEOLOGY

The Borden South Project is located in the Superior Province of Northern Ontario. The Superior Province is divided into numerous Subprovinces, bounded by linear faults and characterized by differing lithologies, structural/tectonic conditions, ages and metamorphic conditions. The Subprovinces are divided into 4 categories: Volcano-plutonic; Metasedimentary; Gneissic/plutonic; and High-grade gneissic (Thurston, 1991). The rocks range in age from 3.5Ga to less than 2.76 Ga and form an east-west trending pattern of alternating terranes.

Regionally (Figure 2), the Kapuskasing Structural Zone (KSZ), an elongate north to northeast trending structure, transects the Wawa Subprovince to the west, and the Abitibi Subprovince to the east. The KSZ is approximately 500km long, extending from James Bay at its northeast end to the east shore of Lake Superior at its southwest end. Typically the KSZ is represented by high metamorphic grade granulite and amphibolite facies paragneiss, tonalitic gneisses and anorthosite-suite gneisses occurring along a moderate northwest dipping crustal scale thrust fault believed to have resulted from an early Proterozoic event (Percival and McGrath 1986).

The Wawa and Abitibi Subprovinces, which abut the KSZ, are volcano-plutonic terranes comprising low metamorphic grade metavolcanic-metasedimentary belts. They contain lithologically diverse metavolcanic rocks with various intrusive suites and to a lesser extent chemical and clastic metasedimentary rocks. The individual greenstone belts within the subprovinces have been intruded, deformed and truncated by felsic batholiths. The east trending Abitibi and Swayze greenstone belts of the Abitibi subprovince have historically been explored and mined for a variety of commodities; while the Wawa subprovince hosts the east-trending Wawa greenstone belt and the Mishibishu greenstone belt where much exploration and mining has occurred.

Several alkalic rocks such as carbonatite complexes along with lamprohyric dykes intruded along the KSZ, approximately 1022 to 1141 Ma ago. The carbonatite occurrences appear to display close spatial relationships with major northeast-striking shear zones. Proximal to the project area, on the northern side of the KSZ, three (3) such complexes are known to occur. These include the Borden Township carbonatite complex, the Nemegosenda Lake alkalic complex; and the Lackner Lake alkalic complex.

LOCAL GEOLOGY

The Borden Lake greenstone belt is in Borden and Cochrane Townships. It is a west trending belt of supracrustal rocks, approximately 3 km wide, that includes mafic to ultramafic gneiss, pillow basalt, felsic metavolcanic rocks, felsic porphyries and tonalites which are overlain by a +30 m thick suite of Timiskaming-aged clastic metasediments (Moser 1989, Moser 1994, Moser 2008, Percival 2008). The metasediments comprise

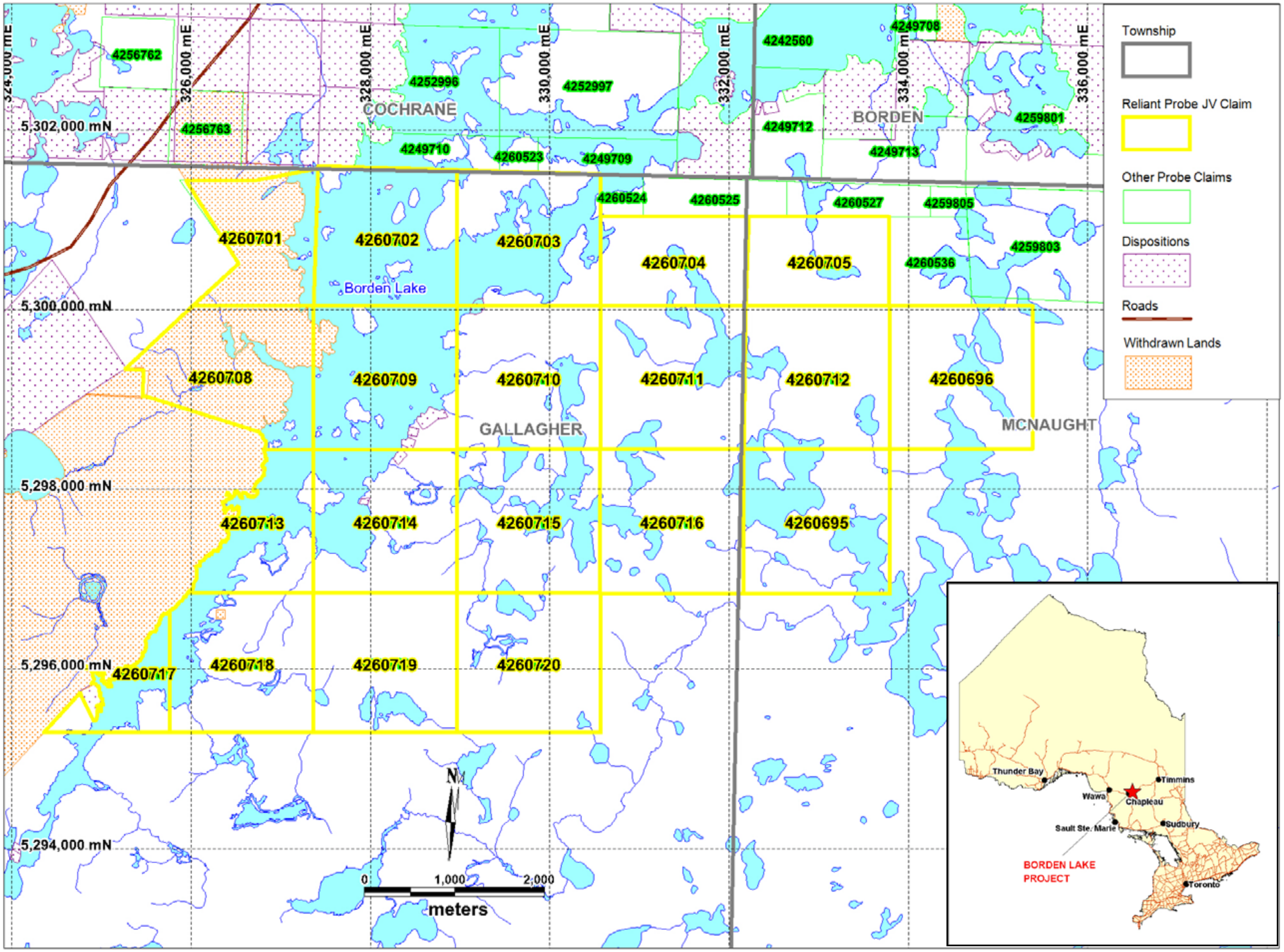

Figure 1- Location of the Borden South Project

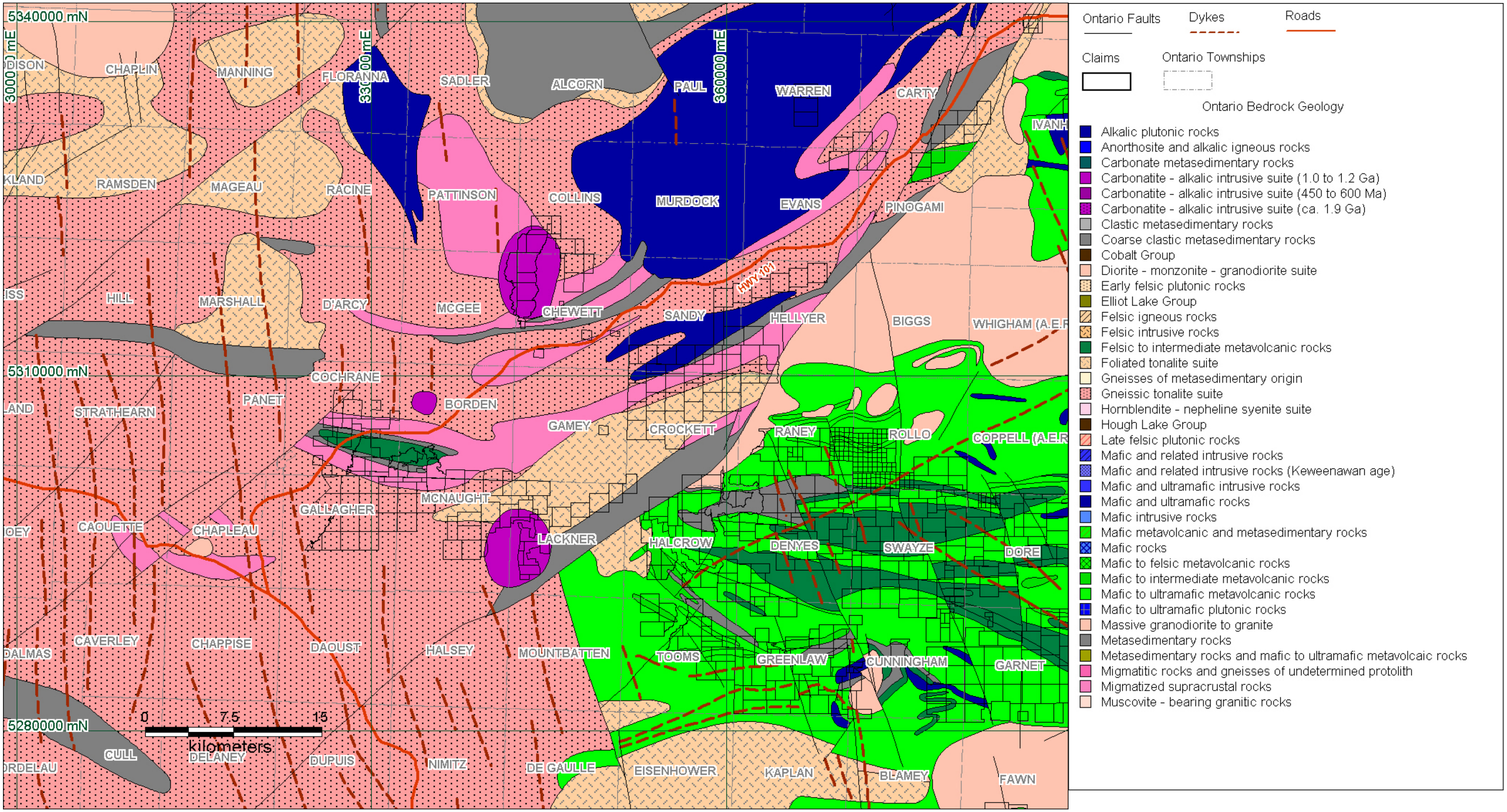

Figure 2 – General Geology of the Borden South Project

greywackes, arkose, arenite, quartz pebble conglomerate and polymictic cobble conglomerate, metamorphosed to upper amphibolite facies. Gneissic fabrics are evident and the rocks appear to have been affected by regional deformation. Several episodes of deformation are reflected in the structural imprint of the rocks, with the last deformation being related to the development of the KSZ.

PREVIOUS WORK

Prior to the discovery of the Borden Gold deposit, minimal work had been completed on the Borden South property. The airborne survey that is the subject of this report is the first work completed by Reliant Gold on the property. Probe Mines completed drilling on the property subsequent to entering into a JV agreement in March 2012.

HELICOPTER AIRBORNE GEOPHYSICAL SURVEY

Between 27 December 2010 and 3 January 2011, Geotech Ltd. carried out a helicopter-borne time domain electromagnetic and aeromagnetic survey for Reliant Gold Corporation over the Borden South Project situated near Chapleau, Ontario, Canada.

A total of 398.3 line-km of geophysical data were acquired during the survey. The area covered by the survey and the flight lines are shown in Figure 3. The survey coverage for the claims that are the subject of this report is detailed in Table 2.

A Geotech report detailing the specifics of the airborne survey is attached in Appendix I. Maps illustrating the results of the survey are contained in Appendix II.

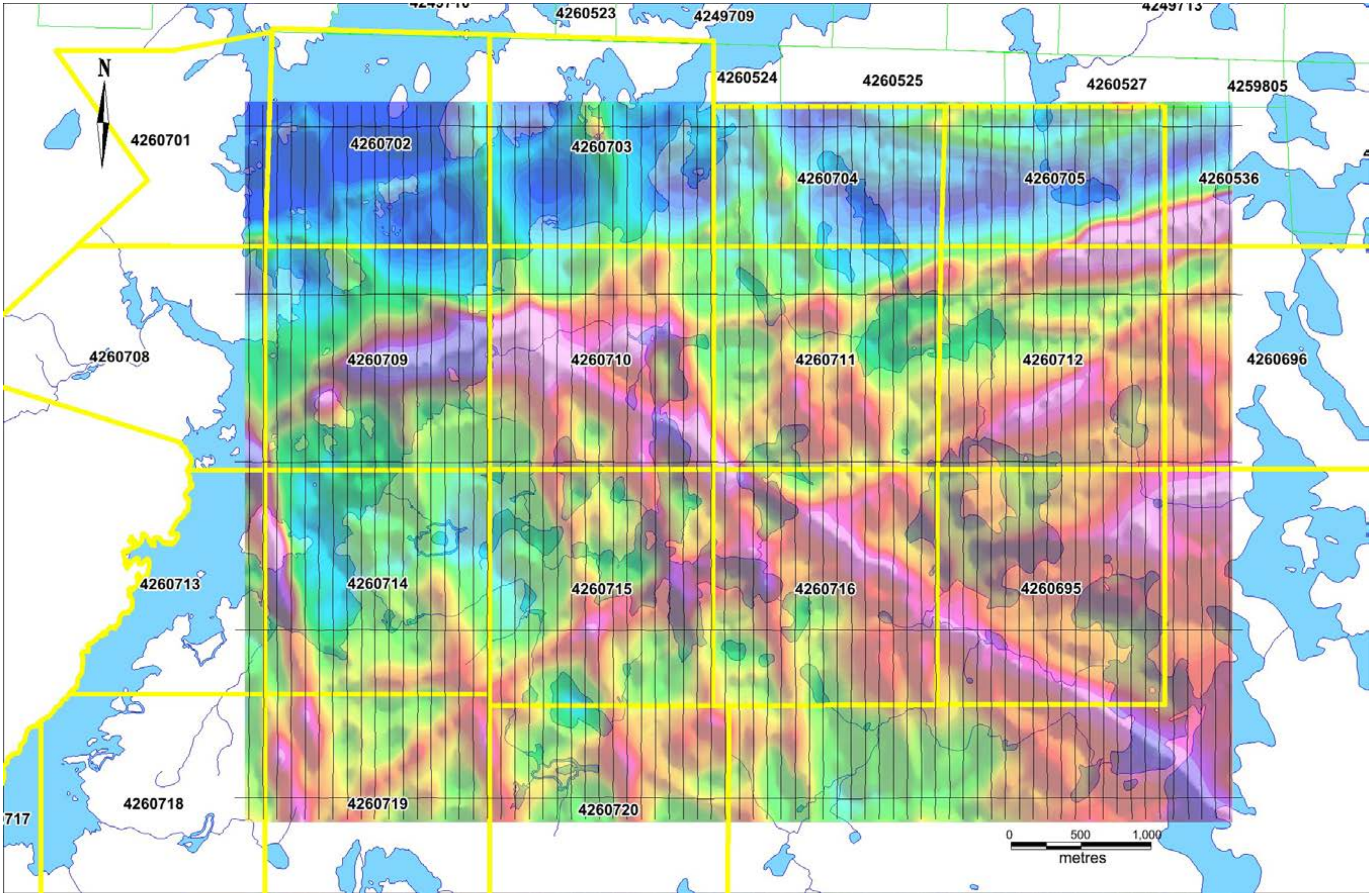

Figure 3 – Location of Helicopter Airborne Geophysical Survey over Borden South Claims

Table 2 – Survey Coverage of Claims

Claim	Total line km
4260701	2.23
4260702	17.6
4260703	17.6
4260704	17.6
4260705	17.6
4260708	3.66
4260709	28.8
4260710	28.8
4260711	28.8
4260712	28.8
4260713	3.43
4260714	27.2
4260715	28.64
4260716	28.64
4260718	1.83
4260719	16.48
4260720	15.2
4260695	28.64
4260696	9.08

CONCLUSIONS

The geophysical results indicate that there are anomalies present within the survey area, some of which were drill-tested in 2012. Assessment credits are being filed and will be used towards keeping the claims in good standing.

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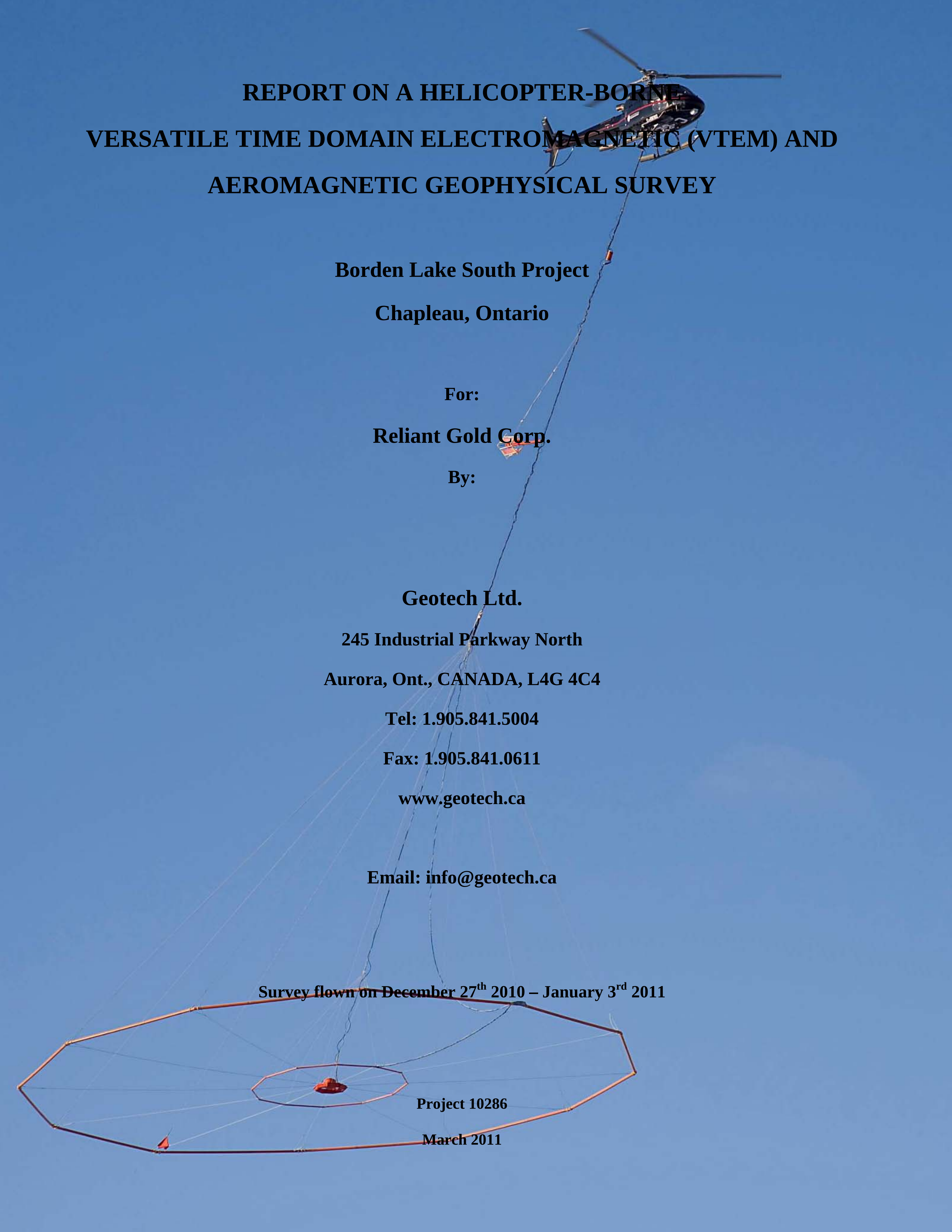
APPENDIX I

Helicopter Borne Time Domain

Electromagnetic and Aeromagetic Survey

by Geotech Ltd.



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

Borden Lake South Project

Chapleau, Ontario

For:

Reliant Gold Corp.

By:

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Survey flown on December 27th 2010 – January 3rd 2011

Project 10286

March 2011

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VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM) and
AEROMAGNETIC SURVEY

Borden Lake South Project
Reliant Gold Corp.

Executive Summary

On December 27th 2010 to January 3rd 2011, Geotech Ltd. carried out a helicopter-borne geophysical survey over the Borden Lake South Project, about 7 km Southeast of Chapleau, Ontario, 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 398.3 line-kilometres of geophysical data was acquired during the survey.

The survey operations were based out of Bridgeview Motel located in Chapleau, Ontario. In-field data quality assurance and preliminary processing were carried out on a daily basis during the acquisition phase. Preliminary and final data processing, including generation of final digital data and map products were undertaken from the office of Geotech Ltd. in Aurora, Ontario.

The processed survey results are presented as;

- Electromagnetic stacked profiles of the B-field Z and dB/dt Z Component
- Colour grids of a B-Field Z Component Channel
- Total Magnetic Intensity (TMI)
- Time Constant B-Field (TAU) with CVG contours

Digital data includes all electromagnetic and magnetic products, plus ancillary data including the waveform.

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

1. INTRODUCTION

1.1 General Considerations

Geotech Ltd. performed a helicopter-borne geophysical survey over the Borden Lake South Project located about 7 km Southeast of Chapleau, Ontario (Figure 1 & 2).

Trevor Boyd represented Reliant Gold Corp. during the data acquisition and data processing phases of this project.

The geophysical surveys consisted of helicopter borne EM using the versatile time-domain electromagnetic (VTEM) system with Z and X component measurements and aeromagnetics using a cesium magnetometer. A total of 398.3 line-km of geophysical data were acquired during the survey. The survey area is shown in Figure 2 and Figure 3.

The crew was based out of Bridgeview Motel in Chapleau Ontariofor the acquisition phase of the survey. Survey flying started October 9th to November 3rd 2010.

Data quality control and quality assurance, and preliminary data processing were carried out on a daily basis during the acquisition phase of the project. Final data processing followed immediately after the end of the survey. Final reporting, data presentation and archiving were completed from the Aurora office of Geotech Ltd. in March 2011

Figure 1 - Property Location

1.2 Survey and System Specifications

The Block is located about 7 kilometres Southeast of Chapleau, Ontario (Figure 2).

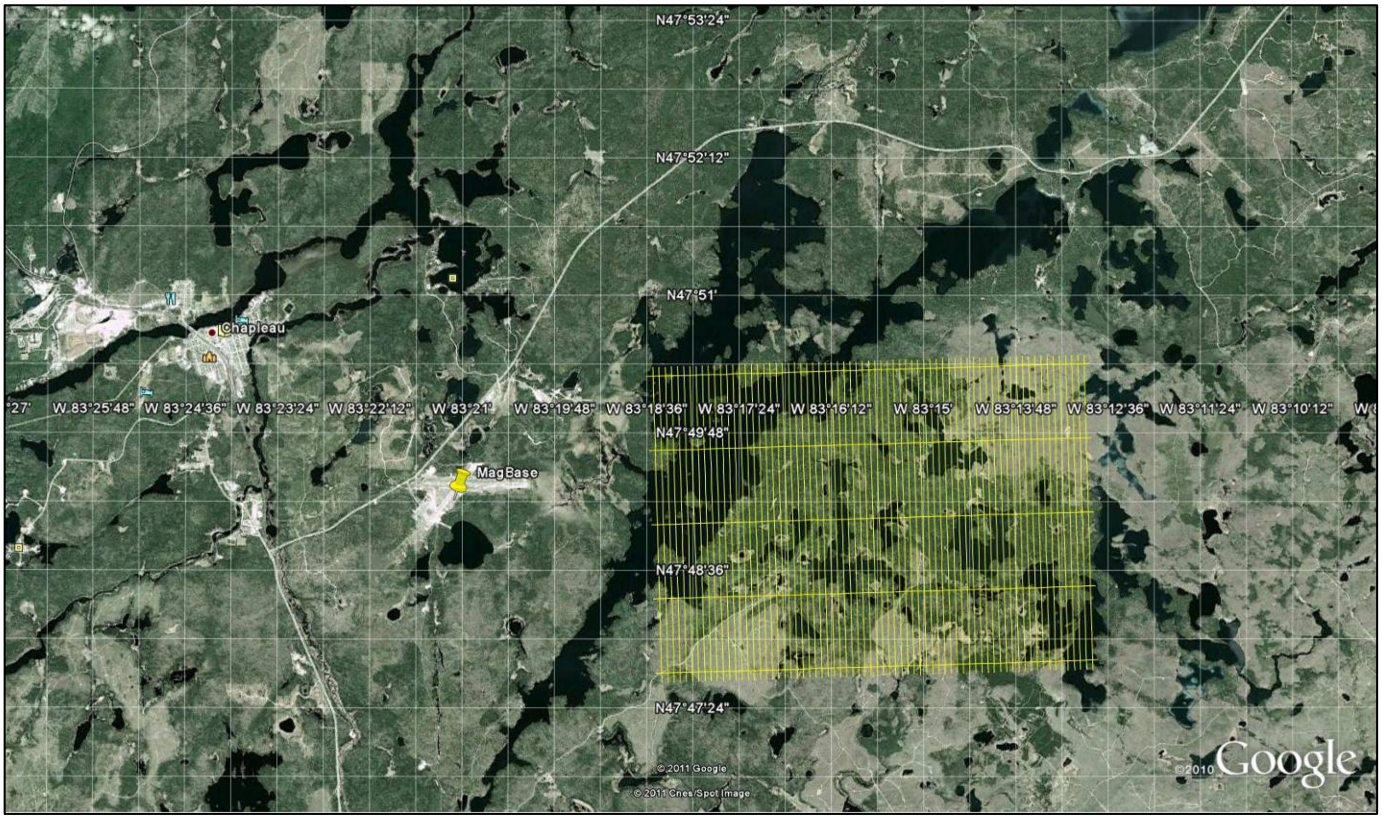


Figure 2 – The block, showing the magnetic base station location on Google Earth

The Borden Lake South Project was flown in a North to South (N 0° E / N 180° E) direction with traverse line spacing of 100 metres as depicted in Figure 3. Tie lines were flown perpendicular to the traverse lines at a spacing of 1200 (N 90° E / N 270° E. For more detailed information on the flight spacing and direction see Table 1.

1.3 Topographic Relief and Cultural Features

Topographically, the block exhibits a low relief with an elevation ranging from 428 to 473 metres above sea level over a total area of 36 square kilometres (Figure 3). There are various lakes and wetlands within the survey area. There are a few visible sign of culture such as roads; the closest populated area is Chapleau, Ontario located 7 kilometers northwest of the Block.

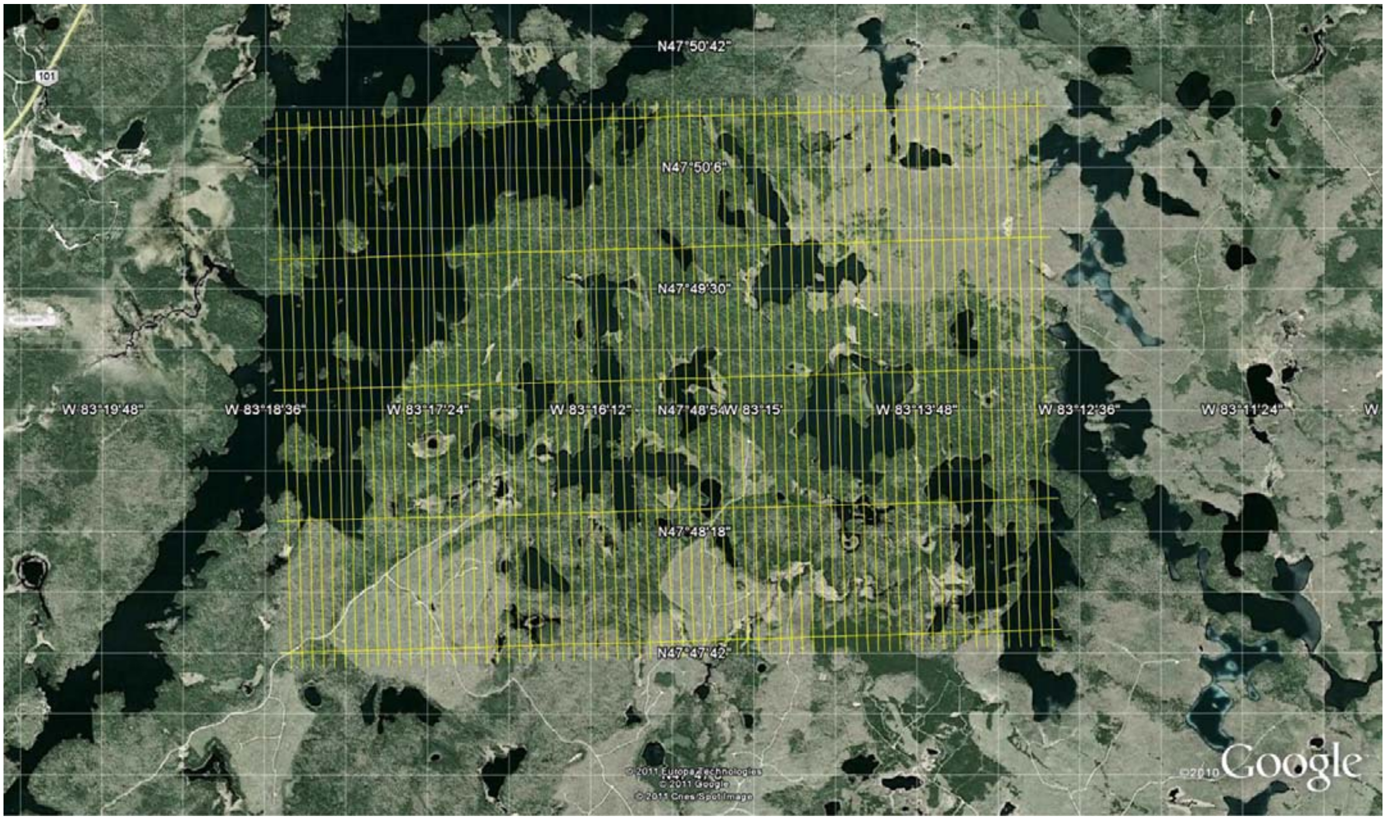


Figure 3 – The Flight path over a Google Earth Image.

The blocks are covered by numerous mining claims, which are shown in Appendix A, and are plotted on all maps. The survey area is covered by NTS (National Topographic Survey) of Canada sheet 041O14.

2. DATA ACQUISITION

2.1 Survey Area

The survey block (see Figure 3 and Appendix A) and general flight specifications are as follows:

Table 1 - Survey Specifications

Survey block	Traverse Line spacing (m)	Area (Km^2)	Planned Line-km	Line-km flown	Flight direction	Line numbers
Borden Lake	Traverse: 100	36	355	362.3	N 0/180° E	L1000– L1700
South Project	Tie: 1200		35.2	35	N 90/270° E	T1900 – T1940
TOTAL		**36**	**390.2**	393.3		

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

2.2 Survey Operations

Survey operations were based out of Bridgeview Motel for Decmember 27th 2010 to January 3rd 2011. The following table shows the timing of the flying.

Table 2 - Survey schedule

Date	Flight #	Block	Crew location	Comments
27-Dec-10			Chapleau,ON	Testing completed
28-Dec-10			Chapleau,ON	No production due to weather
29-Dec-10	1	Borden Lake	Chapleau,ON	83km flown
30-Dec-10			Chapleau,ON	No production due to weather
31-Dec-10			Chapleau,ON	No production due to weather
1-Jan-10			Chapleau,ON	No production due to weather
2-Jan-10			Chapleau,ON	No production due to weather
3-Jan-10	2,3	Borden Lake	Chapleau,ON	Remaining kms flown

2.3 Flight Specifications

During the survey of the block the helicopter was maintained at a mean altitude of 75 metres above the ground with a nominal survey speed of 80 km/hour. This allowed for a nominal EM bird terrain clearance of 40 metres and a magnetic sensor clearance of 62 metres.

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

On return of the aircrew to the base camp the survey data was transferred from a compact flash card (PCMCIA) to the data processing computer. The data were then uploaded via ftp to the Geotech office in Aurora for daily quality assurance and quality control by qualified personnel.

2.4 Aircraft and Equipment

2.4.1 Survey Aircraft

The survey was flown using a Geotech Aviation (Astar) 350 B3 helicopter, registration C-GEOJ. The helicopter is owned by Geotech Ltd. and operated by Geotech Aviation Ltd. out of North Bay, Ontario. Installation of the geophysical and ancillary equipment was carried out by Geotech Ltd crew.

2.4.2 Electromagnetic System

The electromagnetic system was a Geotech Time Domain EM (VTEM) system. The configuration is as indicated in Figure below.

The VTEM Receiver and transmitter coils are concentric-coplanar and Z-direction oriented. The receiver system for the project also included a coincident-coaxial X-direction sensor to measure the in-line dB/dt and calculate B-Field responses. All loops were towed at a mean distance of 35 metres below the aircraft as shown in Figure 4 and Figure 6. The receiver decay recording scheme is shown diagrammatically in Figure 5.

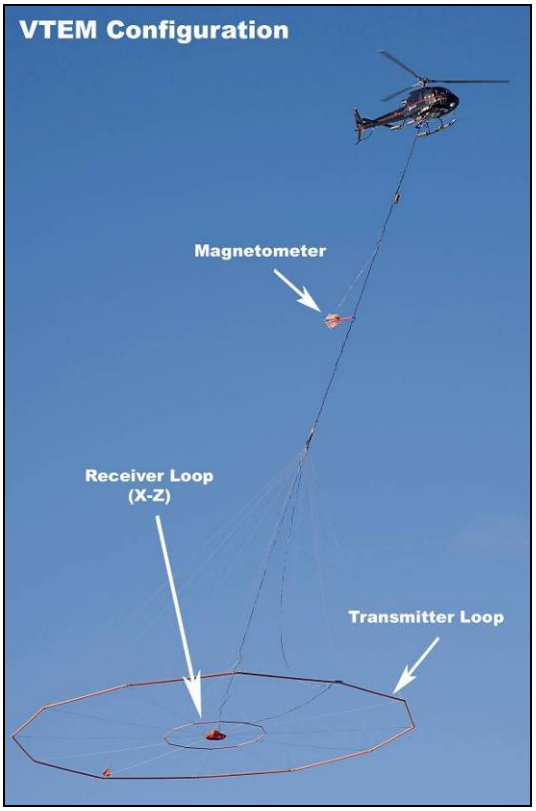


Figure 4 - VTEM Configuration, with magnetometer.

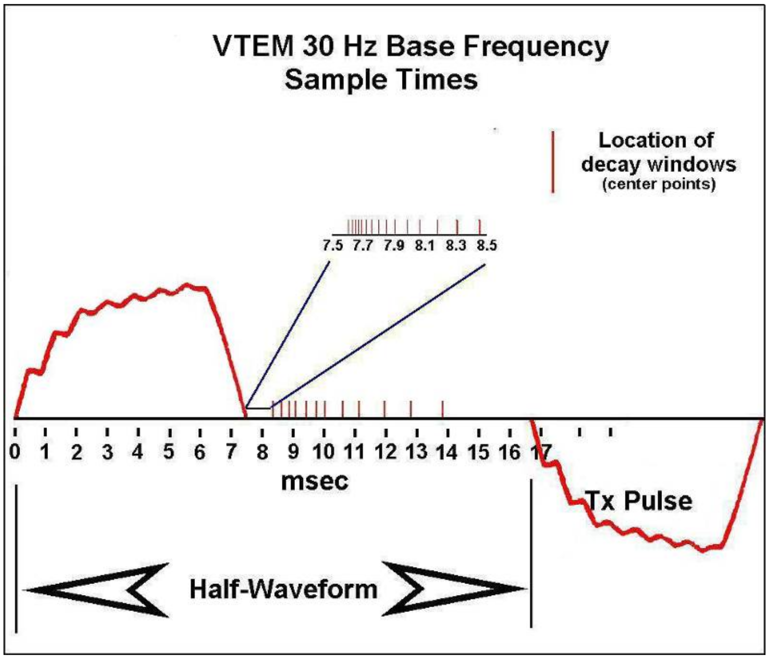


Figure 5 - VTEM Waveform & Sample Times

The VTEM decay sampling scheme is shown in Table 3 below. Thirty-two time measurement gates were used for the final data processing in the range from 96 to 7036 μ sec.

Table 3 - Decay Sampling Scheme

VTEM Decay Sampling Scheme				
Index	**Middle**	**Start**	**End**	**Window**
	Microseconds			
14	96	90	103	13
15	110	103	118	15
16	126	118	136	18
17	145	136	156	20
18	167	156	179	23
19	192	179	206	27
20	220	206	236	30
21	253	236	271	35
22	290	271	312	40
23	333	312	358	46
24	383	358	411	53
25	440	411	472	61
26	505	472	543	70
27	580	543	623	81
28	667	623	716	93
29	766	716	823	107
30	880	823	945	122
31	1,010	945	1,086	141
32	1,161	1,086	1,247	161
33	1,333	1,247	1,432	185
34	1,531	1,432	1,646	214
35	1,760	1,646	1,891	245
36	2,021	1,891	2,172	281
37	2,323	2,172	2,495	323
38	2,667	2,495	2,865	370
39	3,063	2,865	3,292	427
40	3,521	3,292	3,781	490
41	4,042	3,781	4,341	560
42	4,641	4,341	4,987	646
43	5,333	4,987	5,729	742
44	6,125	5,729	6,581	852
45	7,036	6,581	7,560	979

VTEM system parameters

Survey Helicopter	
Model	AS 350 – B3
Registration	C-GEOY
Operating Company	Geotech Aviation
Nominal survey speed (km/h)	80
Average terrain clearance (m)	75
VTEM Transmitter	
Coil diameter (m)	26
Number of turns	4
Pulse repetition rate (Hz)	30
Peak current (Amp)	180
Duty cycle (%)	42
Peak dipole moment (nIA)	382,268
Pulse width (ms)	7.13
Average terrain clearance (m)	40
Z-coil Receiver	
Coil diameter (m)	1.2
Number of turns	100
Effective area (m^2)	113.10
Sampling interval (s)	0.1
Average terrain clearance (m)	40
X-coil Receiver	
Coil diameter (m)	0.32
Number of turns	245
Effective area (m^2)	19.70
Sampling interval (s)	0.1
Average terrain clearance (m)	40
Magnetometer	
Type	Geometrics
Model	Optically pumped cesium vapour
Sensitivity (nT)	0.02
Sampling interval (s)	0.1
Cable length (m)	13
Average terrain clearance (m)	62

Radar Altimeter	
Type	Terra TRA 3000/TRI 40
Position	Beneath cockpit
Sampling interval (s)	0.2
GPS navigation system	
Type	NovAtel
Model	CDGPS enabled OEM4-G2-3151W
Antenna position	Helicopter tail
Sampling interval (s)	0.2
Base Station Magnetometer/GPS	
Type	Geometrics
Model	Cesium vapour
Sensitivity (nT)	0.001
Sampling interval (s)	1
Location	047º 49.1290 N, 83º21.625 W

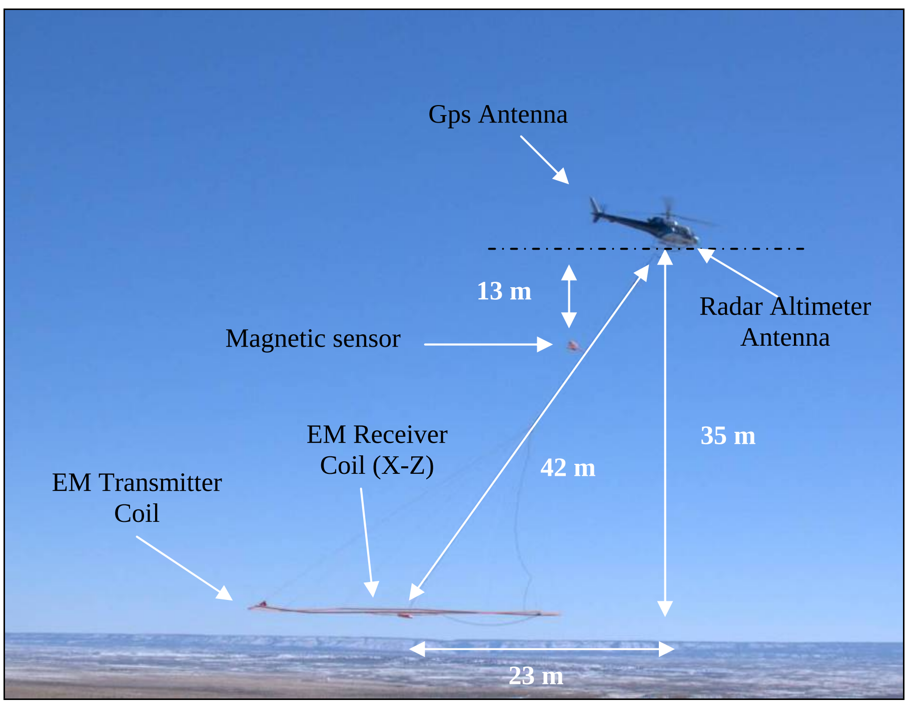


Figure 6 - VTEM System Configuration

2.4.3 Airborne magnetometer

The magnetic sensor utilized for the survey was Geometrics optically pumped cesium vapour magnetic field sensor mounted 13 metres below the helicopter, as shown in Figure 7. The sensitivity of the magnetic sensor is 0.02 nanoTesla (nT) at a sampling interval of 0.1 seconds.

2.4.4 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 (Figure 6).

2.4.5 GPS Navigation System

The navigation system used was a Geotech PC104 based navigation system utilizing a NovAtel's CDGPS (Canada-Wide Differential Global Positioning System Correction Service) 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 (Figure 6). As many as 11 GPS and two CDGPS satellites may be monitored at any one time. The positional accuracy or circular error probability (CEP) is 1.8 m, with CDGPS active, it is 1.0 m. The co-ordinates of the block were set-up prior to the survey and the information was fed into the airborne navigation system.

2.4.6 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.

Table 4 - Acquisition Sampling Rates

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

2.5 Base Station

A combined 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 behind the maintenance garage at the airport in Chapleau, Ontario (047º49.1290 N, 83º21.6425 W); away from electric transmission lines and moving ferrous objects such as motor vehicles. The base station data were 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:	Adrian Sarmasag (Office)
Data QC:	Nick Venter (Office)
Crew chief:	Jan Dabrowski
Operator:	Jan Dabrowski

The survey pilot and the mechanical engineer were employed directly by the helicopter operator – Geotech Aviation.

Pilot:	Sean Morley
Mechanical Engineer:	Nathan Shirey

Office:

Preliminary Data Processing:	Neil Fiset
Final Data Processing:	Neil Fiset
Final Data QA/QC:	Timothy Eadie
Reporting/Mapping:	Corrie Laver

Data acquisition phase was carried out under the supervision of Andrei Bagrianski, P. Geo, Chief Operating Officer. Processing phase was carried out under the supervision of Harish Kumar, P.Geo, Assistant Manager of Data Processing. Interpretation phase was carried out under the supervision of Alex Prikhodko P.Geo. The customer relations were looked after by Paolo Berardelli.

4. DATA PROCESSING AND PRESENTATION

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

4.1 Flight Path

The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the NAD83 Datum, UTM Zone 17 North coordinate system in Oasis Montaj.

The flight path was drawn using linear interpolation between x, y positions from the navigation system. Positions are updated every second and expressed as UTM easting's (x) and UTM northing's (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 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 15 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 the B-field Z component and dB/dt responses in the Z and X components. B-field Z component time channel recorded at 1.161 milliseconds after the termination of the impulse is also presented as contour color image.

VTEM has two receiver coil orientations. Z-axis coil is oriented parallel to the transmitter coil axis and both are horizontal to the ground. The X-axis coil is oriented parallel to the graund and along the line-of-flight. This combined two coil configuration provides information on the position, depth, dip and thickness of a conductor. The responses are free from a system geometric effect and can be easily compared to model type curves in most cases. Generalized modeling results of VTEM data, are shown in Appendix E.

In general X-component data produce cross-over type anomalies: from "+ to –" in direction of flight for "thin" subvertical targets and from "- to +" in direction of flight for "thick" targets.
Z component data produce double peak type anomalies for "thin" subvertical targets and single peak for "thick" targets.

The limits and change-over of “thin-tick” depends on footprint (diameter of a TEM system and bird height). For example, for VTEM-26 with nominal terrain clearance the change – over between “thin” and “thick” equal to 25-30 m thickness (Appendix E, Fig.E-16).

Because of X component polarity is under line-of-flight, convolution Fraser filter (FF, Figure7) is applied to X component data to represent axes of conductors in the form of grid map. In this case positive FF anomalies always correspond to “plus-to-minus” X data crossovers independently of direction of flight.

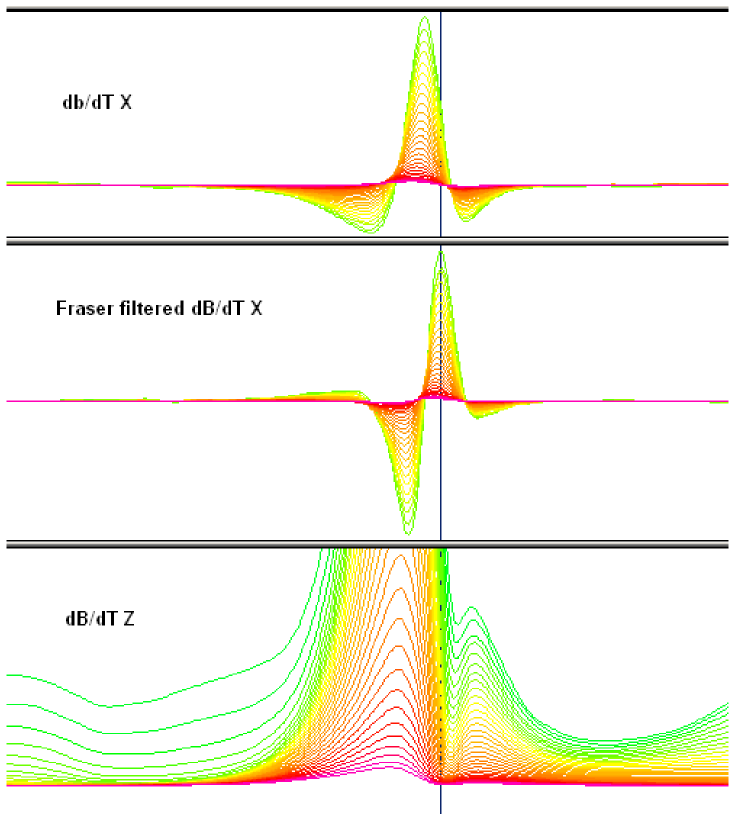


Figure 7 - Z,X and Fraser filtered X (FFx) components for “thin” target.

Graphical representations of the VTEM transmitter input current and the output voltage of the receiver coil are shown in Appendix C.

4.3 Magnetic Data

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

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

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

5. DELIVERABLES

5.1 Survey Report

The survey report describes the data acquisition, processing, and final presentation of the survey results. The survey report is provided in two paper copies and digitally in PDF format.

5.2 Maps

Final maps were produced at scale of 1:10,000 for best representation of the survey size and line spacing. The coordinate/projection system used was NAD83 Datum, UTM Zone 17 North. All maps show the mining claims, flight path trace and topographic data; latitude and longitude are also noted on maps.

The preliminary and final results of the survey are presented as EM profiles, a late-time gate gridded EM channel, and a color magnetic TMI contour map. The following maps are presented on paper;

- VTEM dB/dt profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
- VTEM B-field late time Z Component Channel 32Time Gate 1.161 ms color image.
- VTEM B-Field profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
- Total magnetic intensity (TMI) color image and contours.
- Latest time Gate (Tau) B-Field with CVG contours

5.3 Digital Data

- Two copies of the data and maps on DVD were prepared to accompany the report. Each DVD contains a digital file of the line data in GDB Geosoft Montaj format as well as the maps in Geosoft Montaj Map and PDF format.

- DVD structure.

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

Databases in Geosoft GDB format, containing the channels listed in Table 5.

Table 5 - Geosoft GDB Data Format

Channel name	Units	Description
X:	metres	UTM Easting NAD83 Zone 17 North
Y:	metres	UTM Northing NAD83 Zone 17 North
Longitude:	Decimal Degrees	WGS 84 Longitude data
Latitude:	Decimal Degrees	WGS 84 Latitude data
Z:	metres	GPS antenna elevation (above Geoid)
Radar:	metres	helicopter terrain clearance from radar altimeter
Radarb:	metres	Calculated EM bird terrain clearance from radar altimeter
DEM:	metres	Digital Elevation Model
Gtime:	Seconds of the day	GPS time
Mag1:	nT	Raw Total Magnetic field data
Basemag:	nT	Magnetic diurnal variation data
Mag2:	nT	Diurnal corrected Total Magnetic field data
Mag3:	nT	Levelled Total Magnetic field data
SFz[14]:	$pV/(A*m^4)$	Z dB/dt 96 microsecond time channel
SFz[15]:	$pV/(A*m^4)$	Z dB/dt 110 microsecond time channel
SFz[16]:	$pV/(A*m^4)$	Z dB/dt 126 microsecond time channel
SFz[17]:	$pV/(A*m^4)$	Z dB/dt 145 microsecond time channel
SFz[18]:	$pV/(A*m^4)$	Z dB/dt 167 microsecond time channel
SFz[19]:	$pV/(A*m^4)$	Z dB/dt 192 microsecond time channel
SFz[20]:	$pV/(A*m^4)$	Z dB/dt 220 microsecond time channel
SFz[21]:	$pV/(A*m^4)$	Z dB/dt 253 microsecond time channel
SFz[22]:	$pV/(A*m^4)$	Z dB/dt 290 microsecond time channel
SFz[23]:	$pV/(A*m^4)$	Z dB/dt 333 microsecond time channel
SFz[24]:	$pV/(A*m^4)$	Z dB/dt 383 microsecond time channel
SFz[25]:	$pV/(A*m^4)$	Z dB/dt 440 microsecond time channel
SFz[26]:	$pV/(A*m^4)$	Z dB/dt 505 microsecond time channel
SFz[27]:	$pV/(A*m^4)$	Z dB/dt 580 microsecond time channel
SFz[28]:	$pV/(A*m^4)$	Z dB/dt 667 microsecond time channel
SFz[29]:	$pV/(A*m^4)$	Z dB/dt 766 microsecond time channel
SFz[30]:	$pV/(A*m^4)$	Z dB/dt 880 microsecond time channel
SFz[31]:	$pV/(A*m^4)$	Z dB/dt 1010 microsecond time channel
SFz[32]:	$pV/(A*m^4)$	Z dB/dt 1161 microsecond time channel
SFz[33]:	$pV/(A*m^4)$	Z dB/dt 1333 microsecond time channel
SFz[34]:	$pV/(A*m^4)$	Z dB/dt 1531 microsecond time channel
SFz[35]:	$pV/(A*m^4)$	Z dB/dt 1760 microsecond time channel
SFz[36]:	$pV/(A*m^4)$	Z dB/dt 2021 microsecond time channel
SFz[37]:	$pV/(A*m^4)$	Z dB/dt 2323 microsecond time channel
SFz[38]:	$pV/(A*m^4)$	Z dB/dt 2667 microsecond time channel
SFz[39]:	$pV/(A*m^4)$	Z dB/dt 3063 microsecond time channel
SFz[40]:	$pV/(A*m^4)$	Z dB/dt 3521 microsecond time channel
SFz[41]:	$pV/(A*m^4)$	Z dB/dt 4042 microsecond time channel
SFz[42]:	$pV/(A*m^4)$	Z dB/dt 4641 microsecond time channel
SFz[43]:	$pV/(A*m^4)$	Z dB/dt 5333 microsecond time channel
SFz[44]:	$pV/(A*m^4)$	Z dB/dt 6125 microsecond time channel
SFz[45]:	$pV/(A*m^4)$	Z dB/dt 7036 microsecond time channel
SFx[20]:	$pV/(A*m^4)$	X dB/dt 220 microsecond time channel
SFx[21]:	$pV/(A*m^4)$	X dB/dt 253 microsecond time channel
SFx[22]:	$pV/(A*m^4)$	X dB/dt 290 microsecond time channel
SFx[23]:	$pV/(A*m^4)$	X dB/dt 333 microsecond time channel
SFx[24]:	$pV/(A*m^4)$	X dB/dt 383 microsecond time channel

Channel name	Units	Description
SFx[25]:	pV/(A*m^4)	X dB/dt 440 microsecond time channel
SFx[26]:	pV/(A*m^4)	X dB/dt 505 microsecond time channel
SFx[27]:	pV/(A*m^4)	X dB/dt 580 microsecond time channel
SFx[28]:	pV/(A*m^4)	X dB/dt 667 microsecond time channel
SFx[29]:	pV/(A*m^4)	X dB/dt 766 microsecond time channel
SFx[30]:	pV/(A*m^4)	X dB/dt 880 microsecond time channel
SFx[31]:	pV/(A*m^4)	X dB/dt 1010 microsecond time channel
SFx[32]:	pV/(A*m^4)	X dB/dt 1161 microsecond time channel
SFx[33]:	pV/(A*m^4)	X dB/dt 1333 microsecond time channel
SFx[34]:	pV/(A*m^4)	X dB/dt 1531 microsecond time channel
SFx[35]:	pV/(A*m^4)	X dB/dt 1760 microsecond time channel
SFx[36]:	pV/(A*m^4)	X dB/dt 2021 microsecond time channel
SFx[37]:	pV/(A*m^4)	X dB/dt 2323 microsecond time channel
SFx[38]:	pV/(A*m^4)	X dB/dt 2667 microsecond time channel
SFx[39]:	pV/(A*m^4)	X dB/dt 3063 microsecond time channel
SFx[40]:	pV/(A*m^4)	X dB/dt 3521 microsecond time channel
SFx[41]:	pV/(A*m^4)	X dB/dt 4042 microsecond time channel
SFx[42]:	pV/(A*m^4)	X dB/dt 4641 microsecond time channel
SFx[43]:	pV/(A*m^4)	X dB/dt 5333 microsecond time channel
SFx[44]:	pV/(A*m^4)	X dB/dt 6125 microsecond time channel
SFx[45]:	pV/(A*m^4)	X dB/dt 7036 microsecond time channel
BFz	(pV*ms)/(A*m^4)	Z B-Field data for time channels 14 to 45
PLM:		60 Hz power line monitor
TauSF	milliseconds	Time Constant (Tau) calculated from dB/dt data
CVG	nT/m	Calculated Magnetic Vertical Gradient
SFx_m5ff		Fraser Filtered dB/dt

Electromagnetic B-field and dB/dt Z component data is found in array channel format between indexes 14 – 45, and X component data from 20 – 45, as described above.

- Database of the VTEM Waveform “10286_waveform_final.gdb” in Geosoft GDB format, containing the following channels:

Time: Sampling rate interval, 5.2083 microseconds
Rx_Volt: Output voltage of the receiver coil (Volt)
Tx_Current: Output current of the transmitter (Amp)

- Grids in Geosoft GRD format, as follows:

BFz32: B-Field Z Component Channel 32 (Time Gate 1.161 ms)
MAG: Total magnetic intensity (nT)
TauBFz: B-Field Calculated Time Constant (TAU)
CVG: Calculated Vertical Gradient

A Geosoft .GRD file has a .GI metadata file associated with it, containing grid projection information. A grid cell size of 25 metres was used.

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

10286_10k_dBdtz:	dB/dt profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
10286_10k_bfield:	B-field profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
10286_10k_BFz32:	B-field late time Z Component Channel 32, Time Gate 1.161 ms color image.
10286_10k_TMI:	Total magnetic intensity (TMI) color image and contours.
10286_10k_TauBFz:	B-Field Time Constant (TAU) with CVG contours calculated from TMI

Where bb represents the block name.
Maps are also presented in 1:50,000 scale Geosoft maps & PDF format.

1:50,000 topographic vectors were taken from the NRCAN Geogratis database at; http://geogratis.gc.ca/geogratis/en/index.html.

- A Google Earth file *10286_Reliant.kml* showing the flight path of the block is included. Free versions of Google Earth software from: http://earth.google.com/download-earth.html

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

A helicopter-borne versatile time domain electromagnetic (VTEM) geophysical survey has been completed over the Borden Lake South Project.

The total area coverage is 36 km^2. Total survey line coverage is 398.3 line kilometres. The principal sensors included a Time Domain EM system and a magnetometer. Results have been presented as stacked profiles, and contour color images at a scale of 1:10,000. No formal Interpretation has been included.

6.2 Recommendations

Based on the geophysical results obtained, we recommend a detailed interpretation of the available geophysical data, in conjunction with the geology. It should include 2D - 3D inversion modeling analyses and magnetic derivative analysis prior to ground follow up and drill testing.

Respectfully submitted[6],

Neil Fiset
Geotech Ltd.

Alexander Prikhodko, P. Geo, Ph.D.
Geotech Ltd.

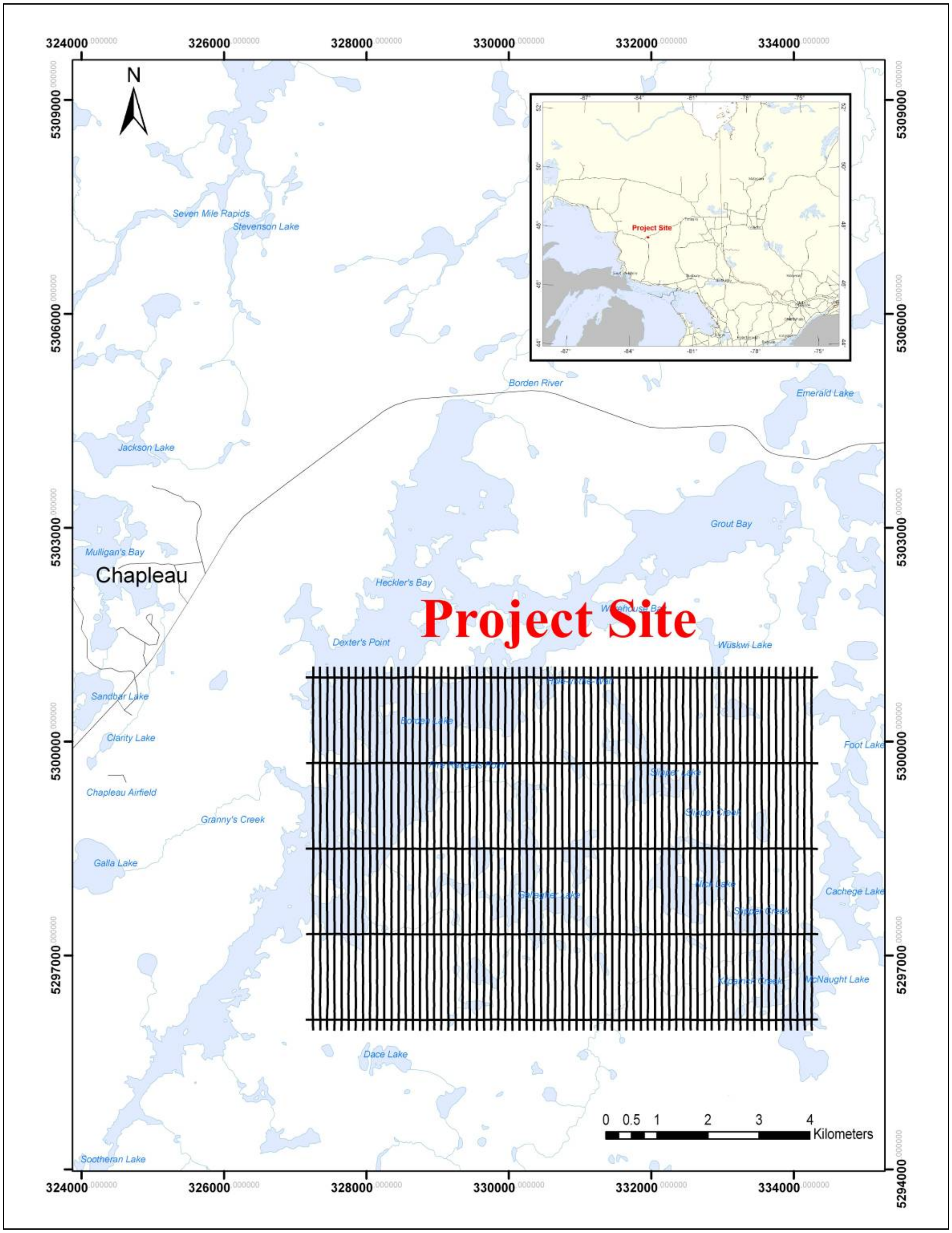
Harish Kumar P.Geo
Geotech Ltd.

March 2011

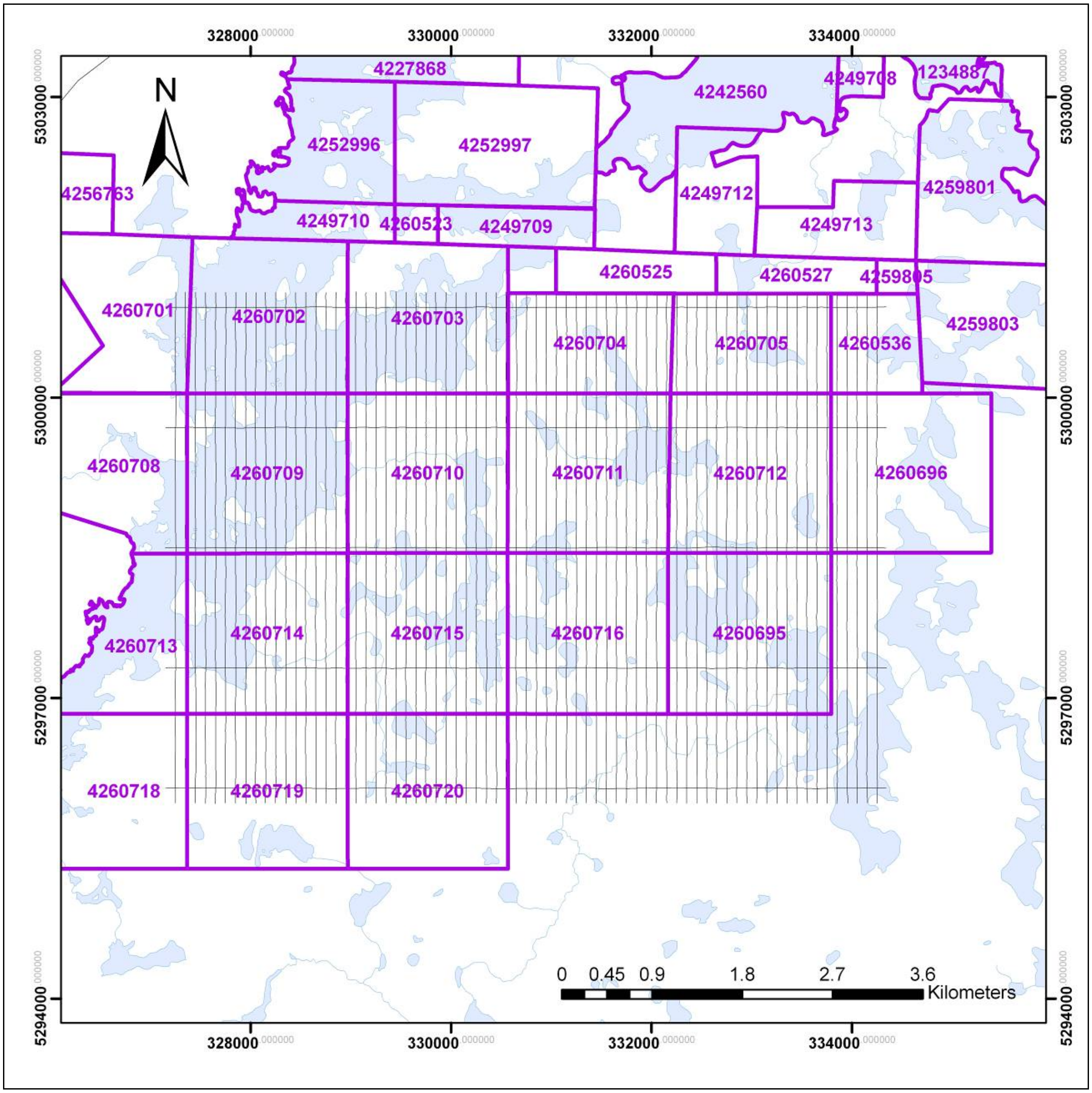
[6]Final data processing of the EM and magnetic data were carried out by Neil Fiset, from the office of Geotech Ltd. in Aurora, Ontario, under the supervision of Harish Kumar and Alex Prikhodko, P. Geo, PhD, Senior Geophysicist, VTEM interpretation supervisor.

APPENDIX A

SURVEY BLOCK LOCATION MAP



Survey Overview of the Block



Mining Claims for the Borden Lake South Project

APPENDIX B

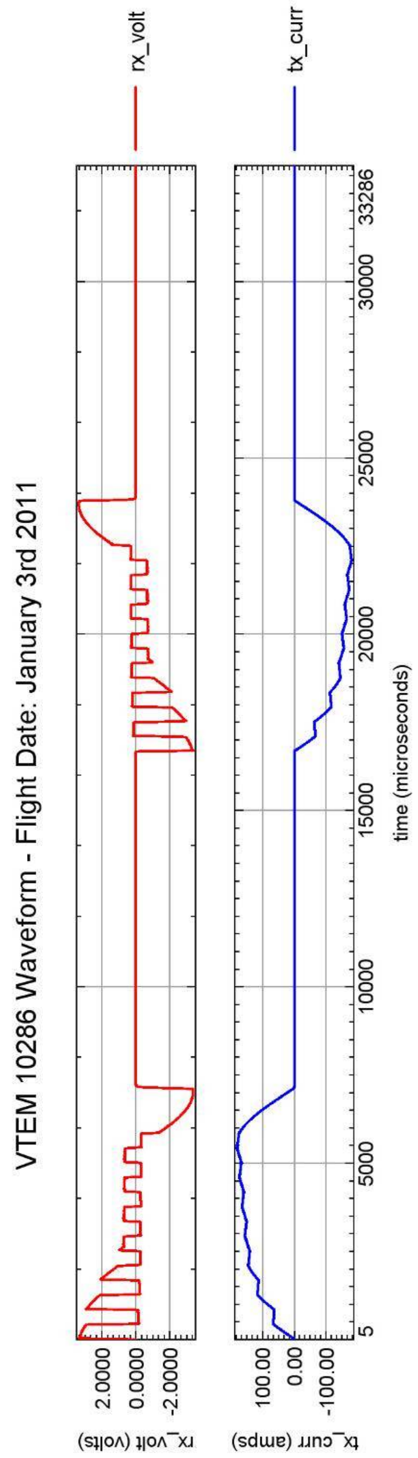
SURVEY BLOCK COORDINATES

(WGS 84, UTM Zone 17 North)

X	Y
327200	5296000
327200	5301000
334250	5301000
334250	5296000

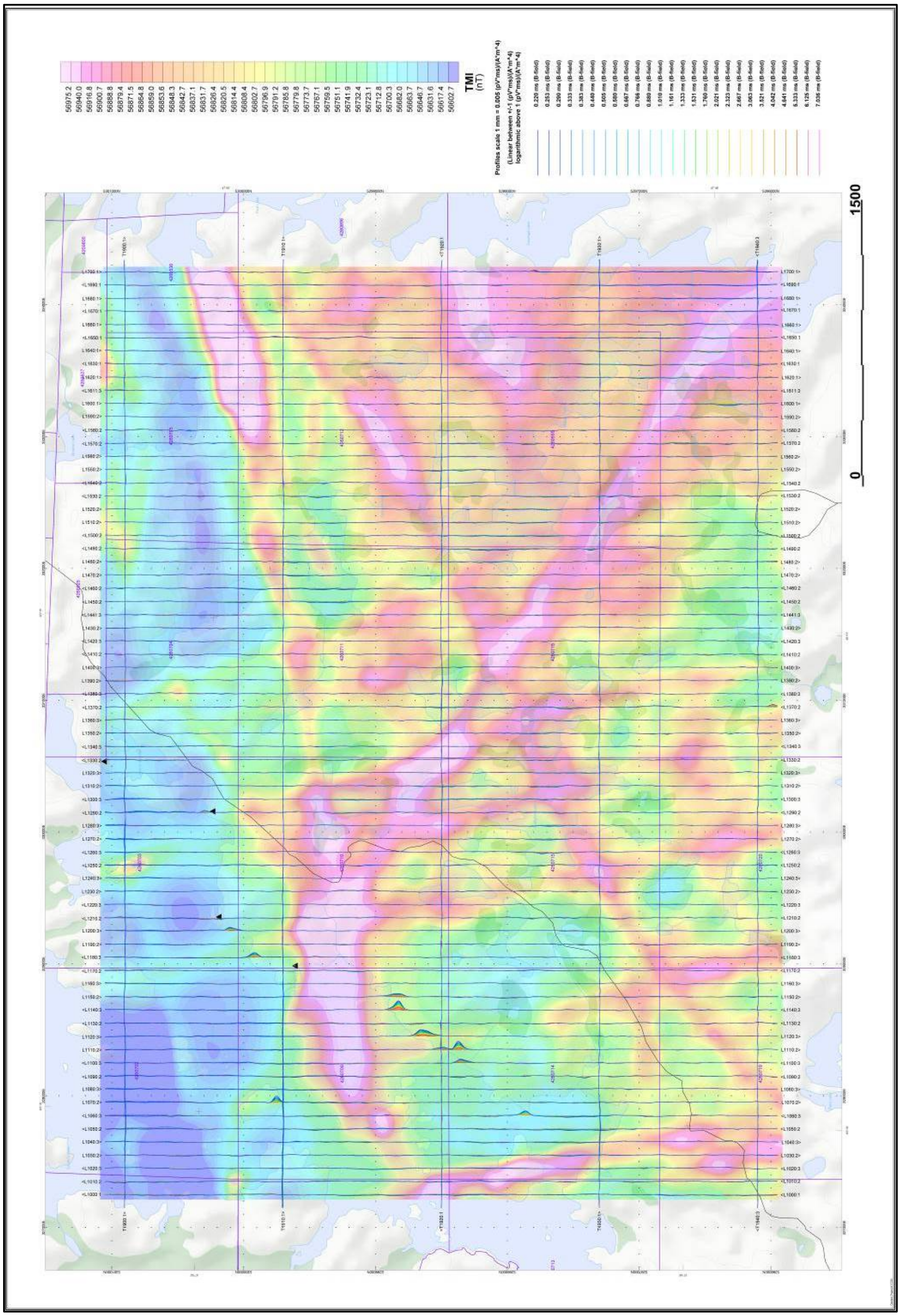
APPENDIX C

VTEM WAVEFORM



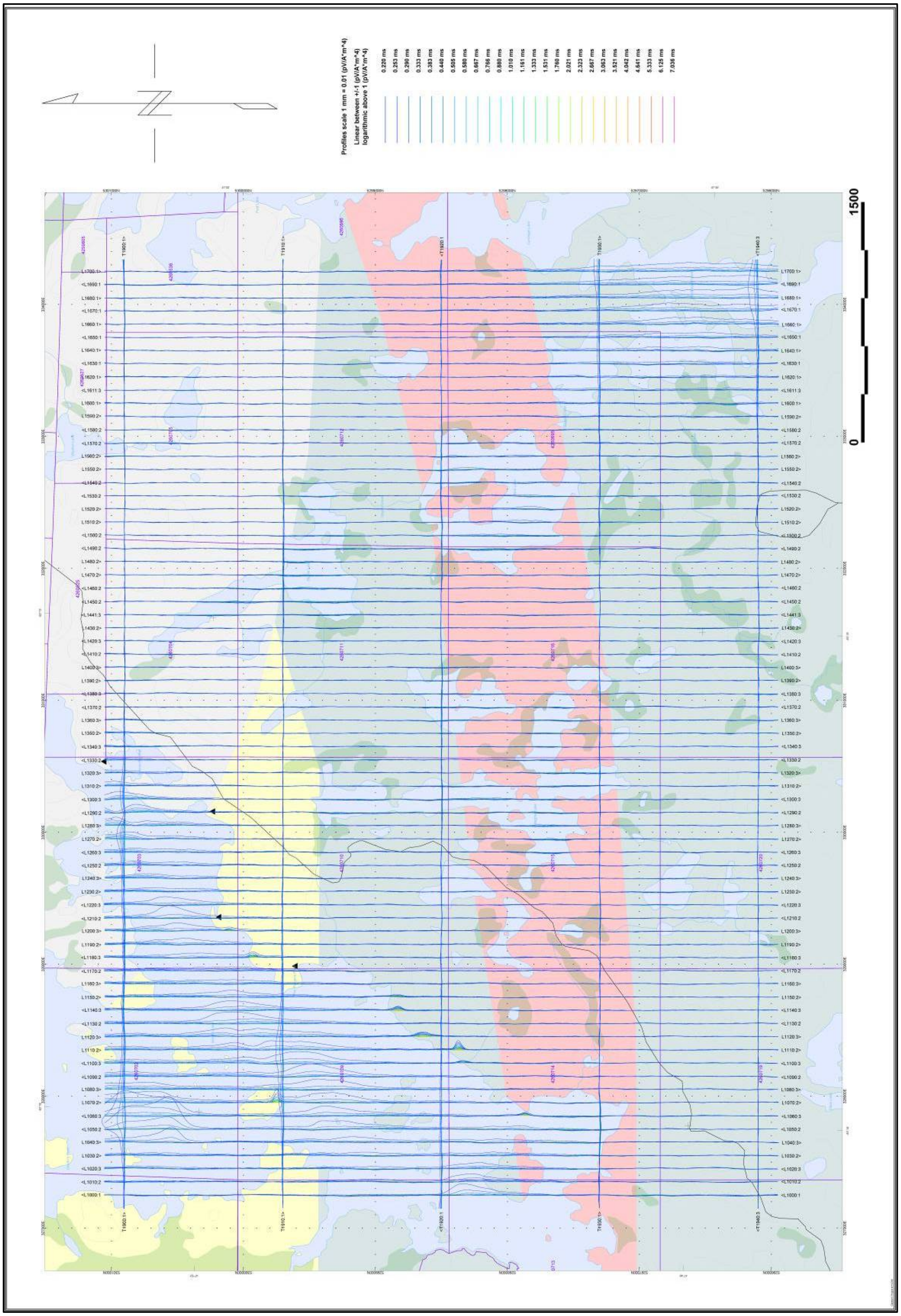
APPENDIX D

GEOPHYSICAL MAPS[1]

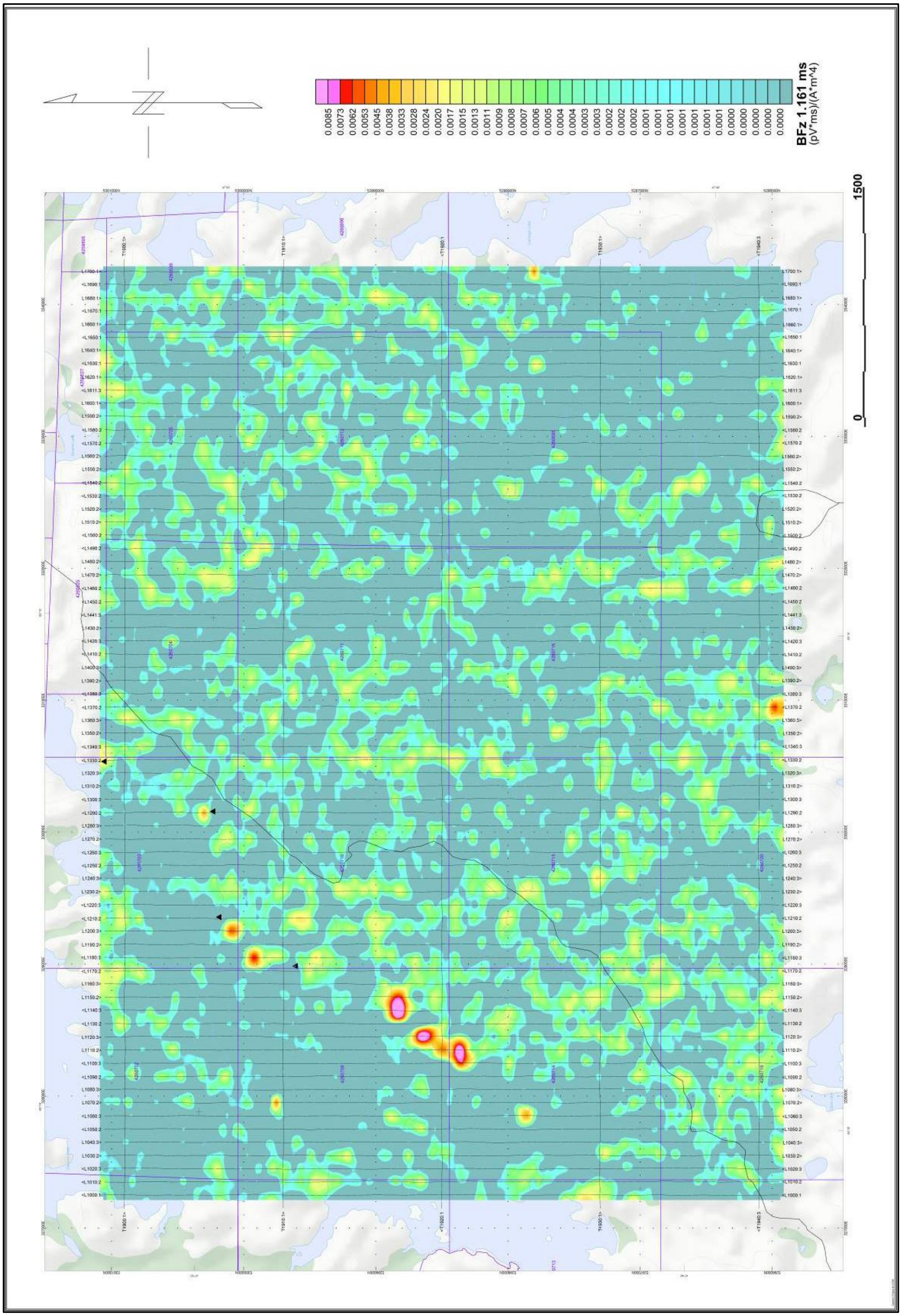


VTEM B-Field Z Component Profiles, Time Gates 0.220 to 7.036 ms

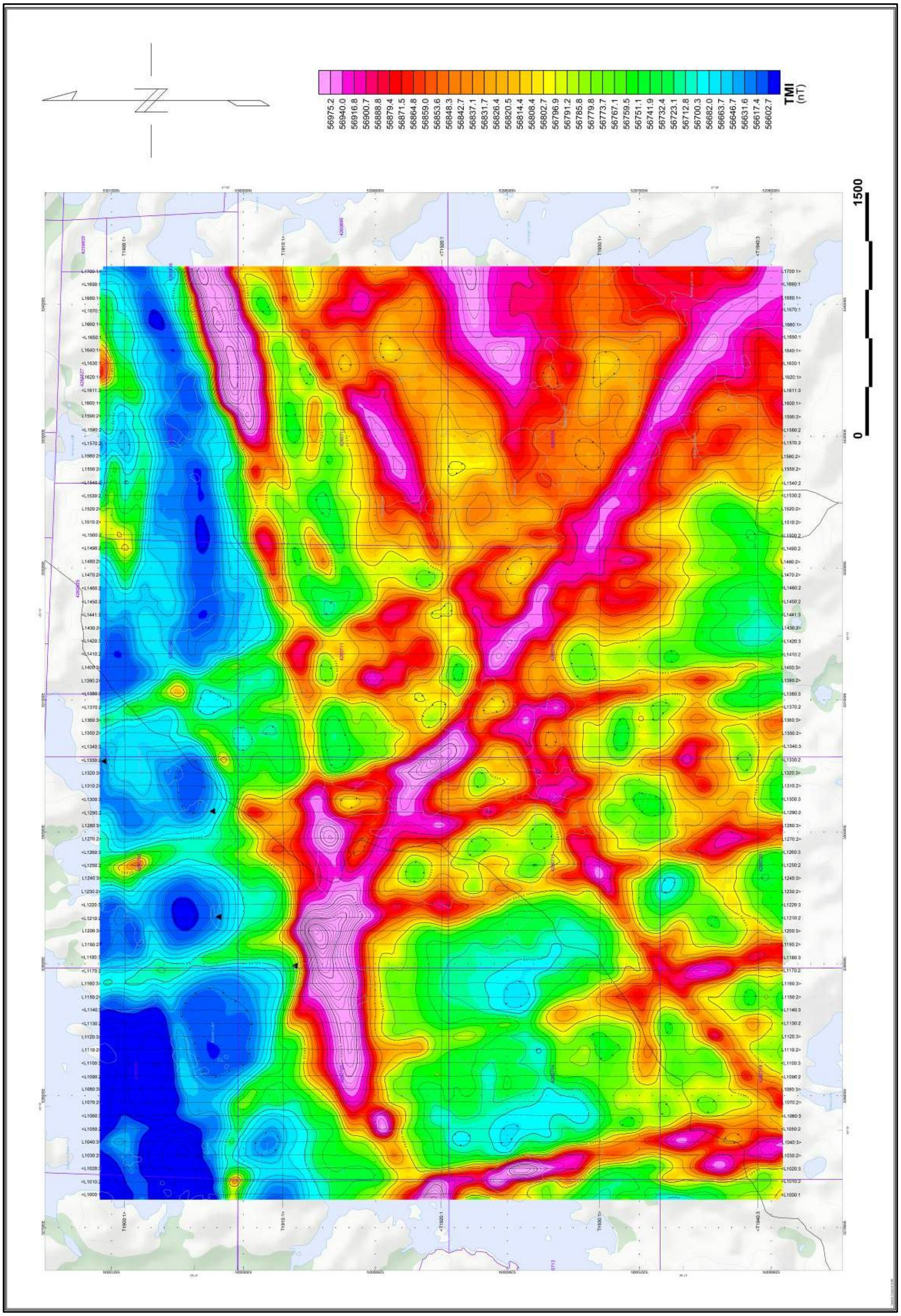
[1] Full size geophysical maps are also available in PDF format on the final DVD



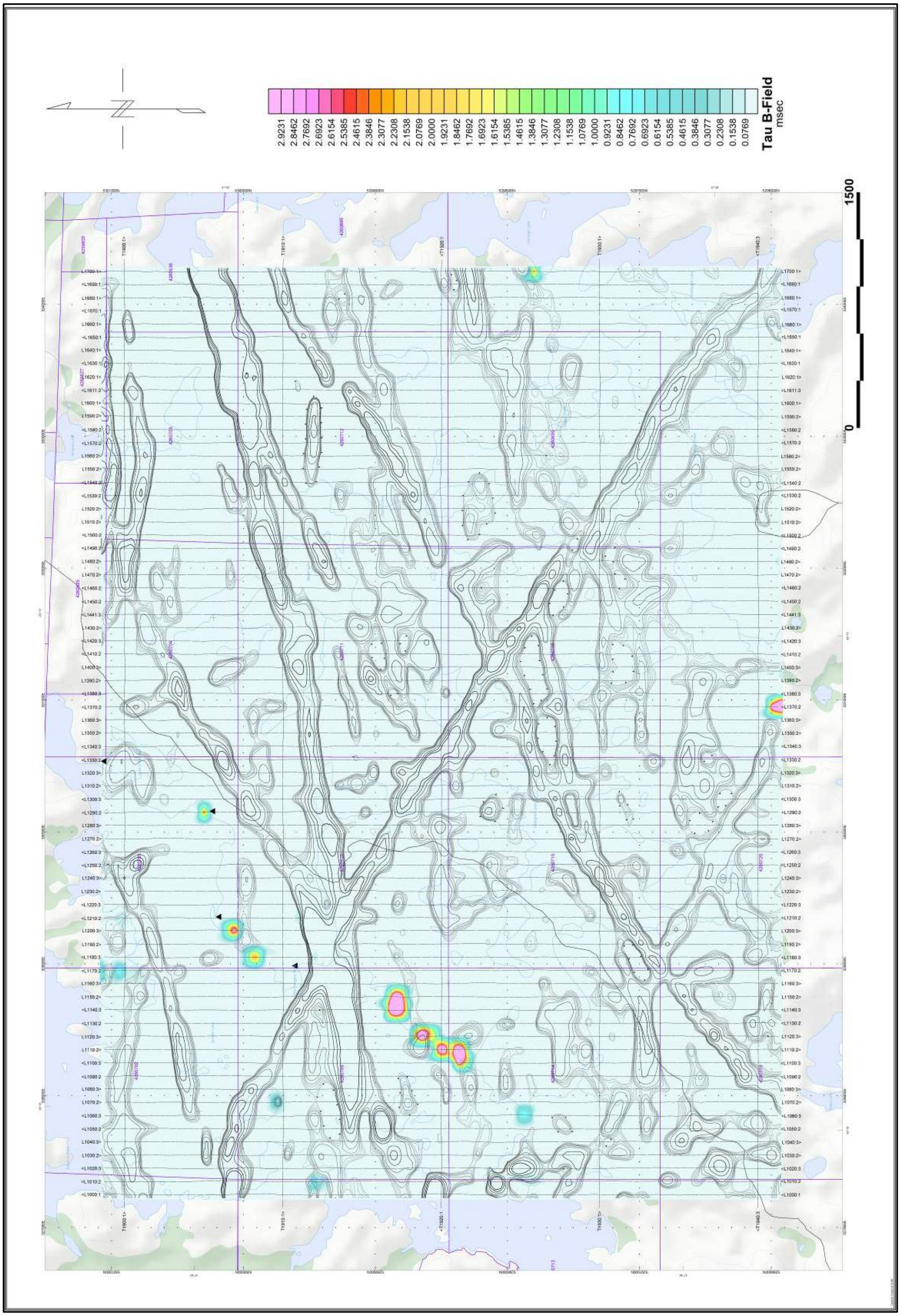
VTEM dB/dt Z Component Profiles, Time Gates 0.220 to 7.036 ms



VTEM B-Field Z Component Channel 32, Time Gate 1.161ms



Total Magnetic Intensity (TMI)



Time Constant B-Field (Tau) with CVG contours

APPENDIX E

GENERALIZED MODELING RESULTS OF THE VTEM SYSTEM

Introduction

The VTEM system is based on a concentric or central loop design, whereby, the receiver is positioned at the centre of a transmitter loop that produces a primary field. The wave form is a bi-polar, modified square wave with a turn-on and turn-off at each end.

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.

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.

A set of models has been produced for the Geotech VTEM® system dB/dT Z and X components (see models E1 to E15). The Maxwell ™ modeling program (EMIT Technology Pty. Ltd. Midland, WA, AU) used to generate the following responses assumes a resistive half-space. 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.

As the plate dips and departs from the vertical position, the peaks become asymmetrical.

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.

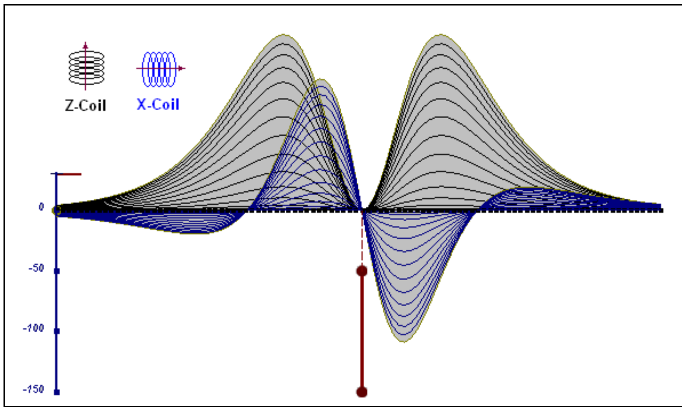


Fig E-1: vertical thin plate

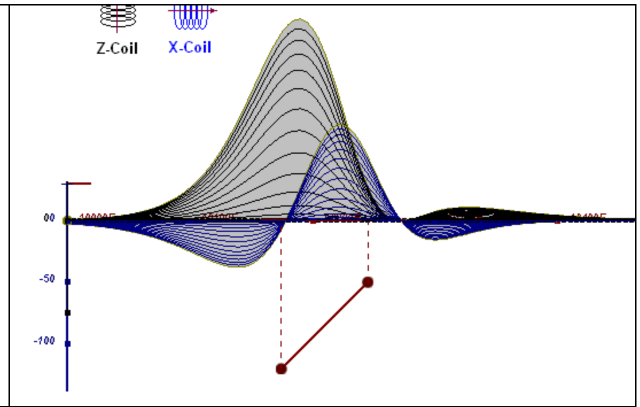


Fig E-2: inclined thin plate

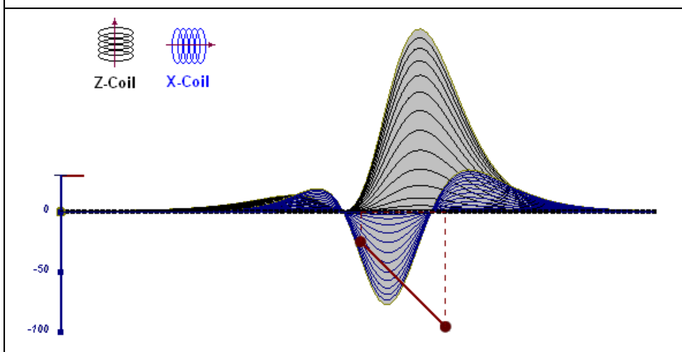


Fig E-3: inclined thin plate

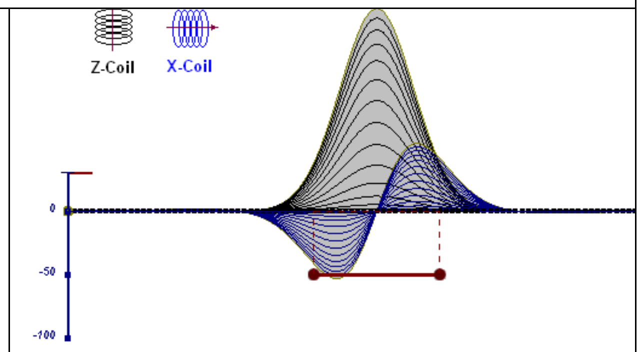


Fig E-4: horizontal thin plate

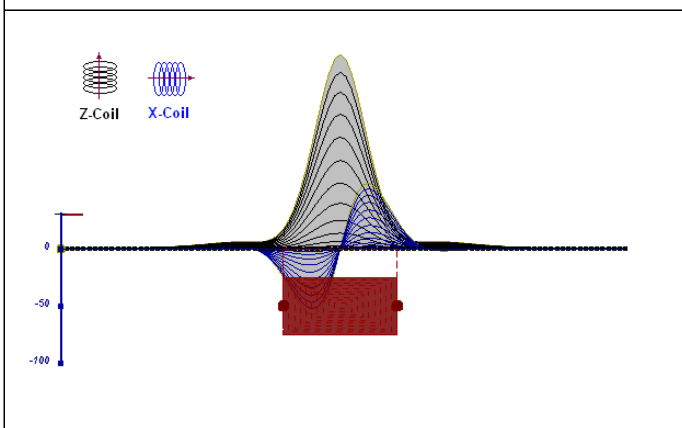


Figure E-5: horizontal thick plate (linear scale of the response)

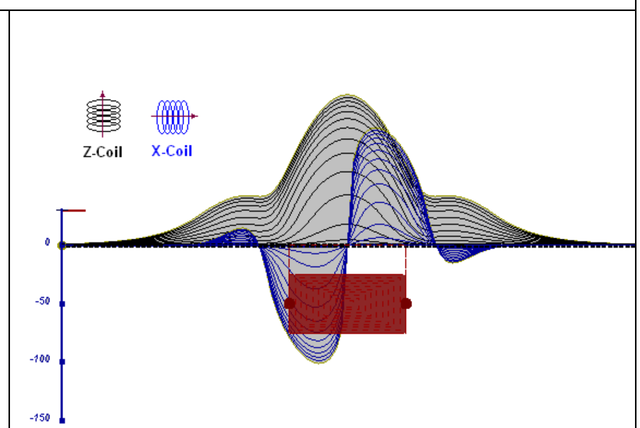


Figure E-6: horizontal thick plate (log scale of the response)

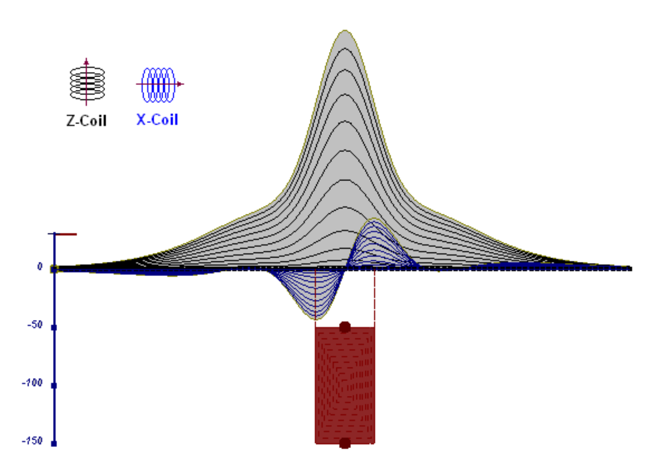


Figure E-7: vertical thick plate (linear scale of the response). 50 m depth

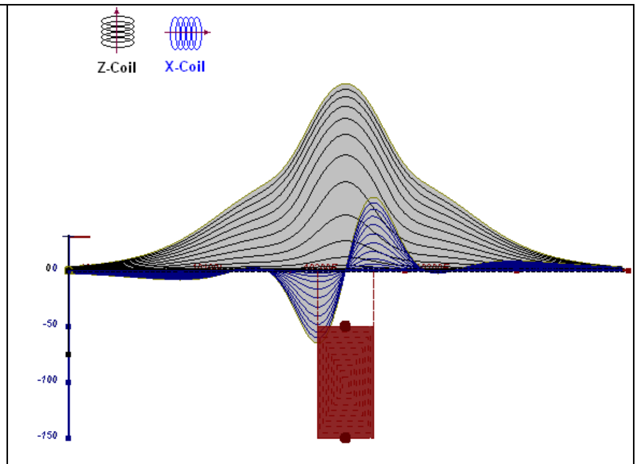


Figure E-8: vertical thick plate (log scale of the response). 50 m depth

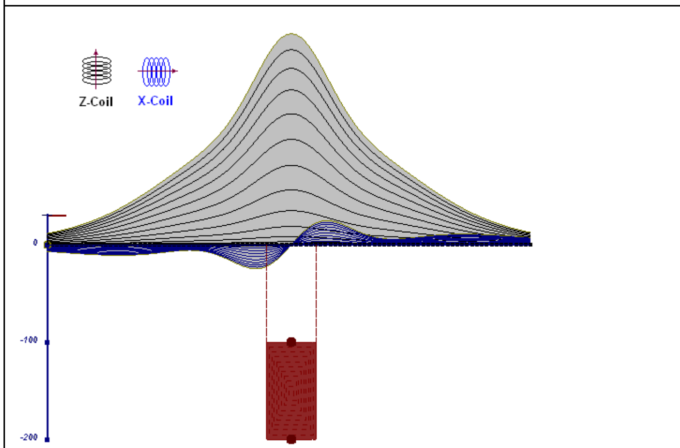


Fig E-9: vertical thick plate (linear scale of the response). 100 m depth

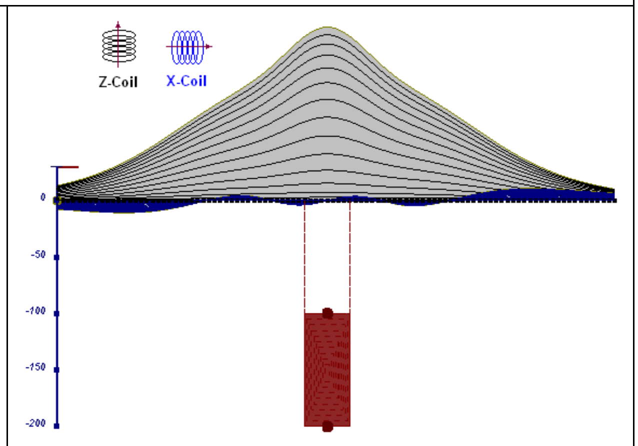


Fig E-10: vertical thick plate (linear scale of the response). Depth/hor.thickness=2.5

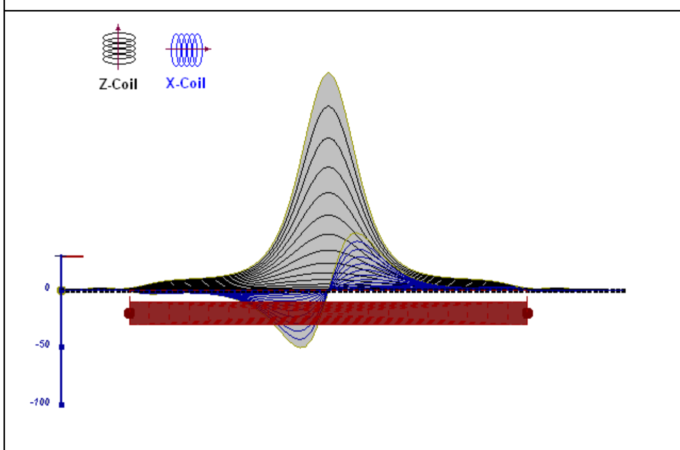


Fig E-10: horizontal thick plate (linear scale of the response)

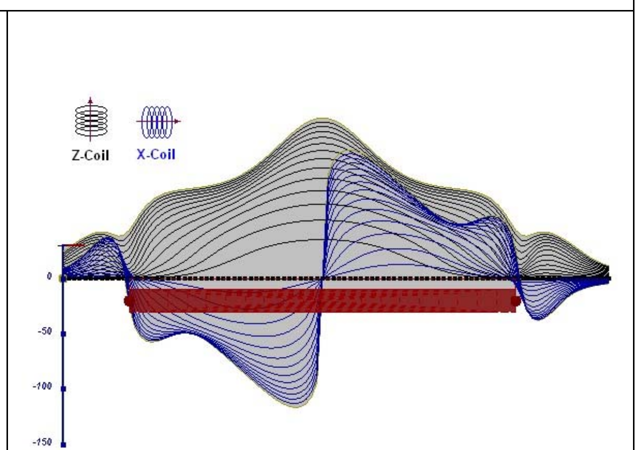


Fig E-11: horizontal thick plate (log scale of the response)

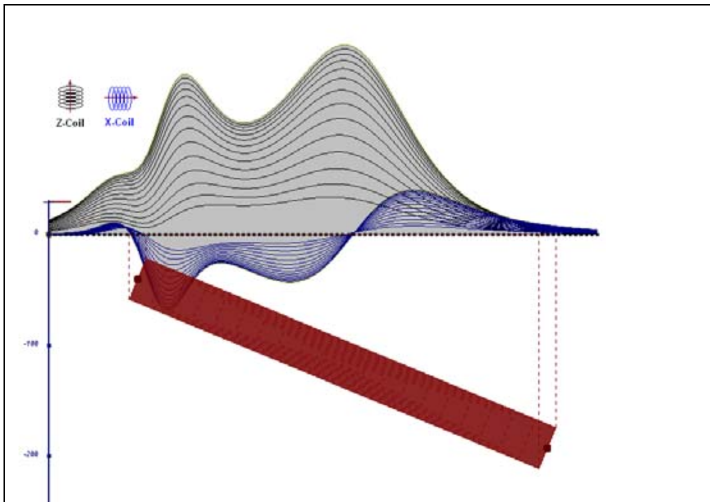


Fig E-12: inclined long thick plate

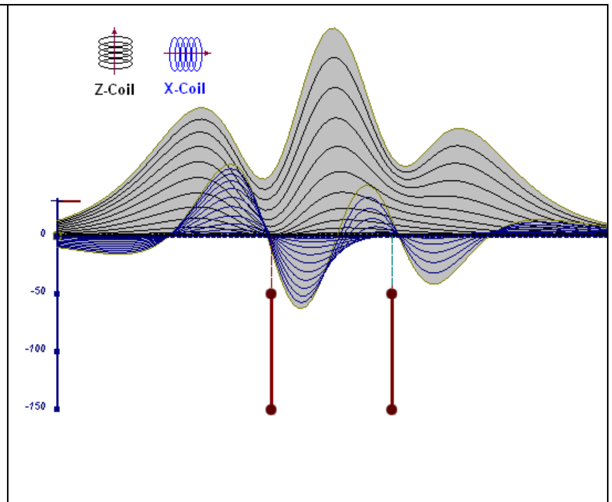


Fig E-13: two vertical thin plates

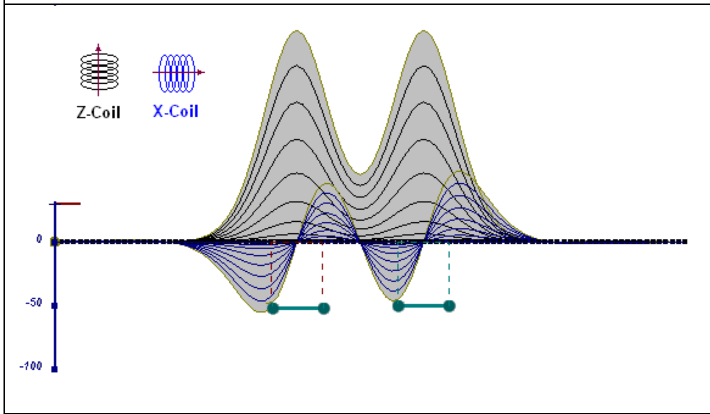


Fig E-14: two horizontal thin plates

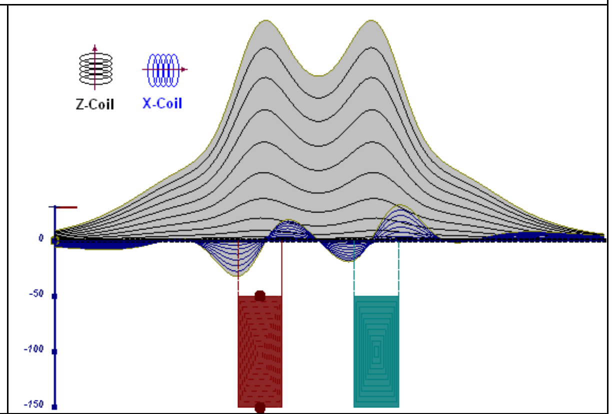


Fig E-15: two vertical thick plates

The same type of target but with different thickness, for example, creates different form of the response:

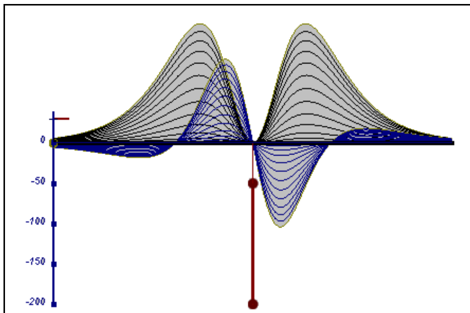
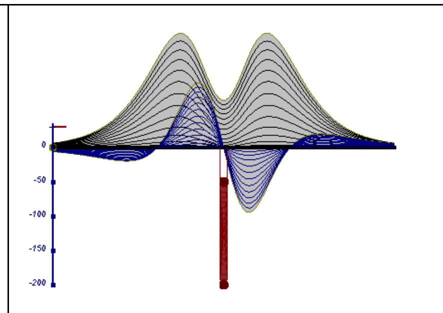
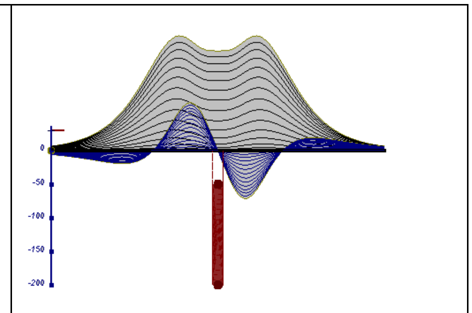
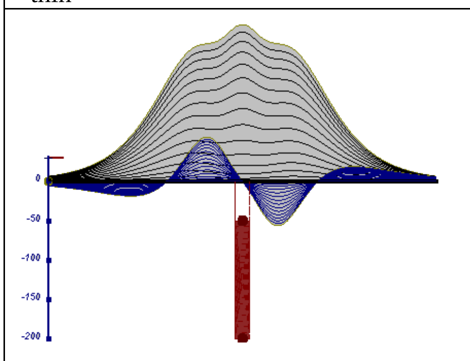
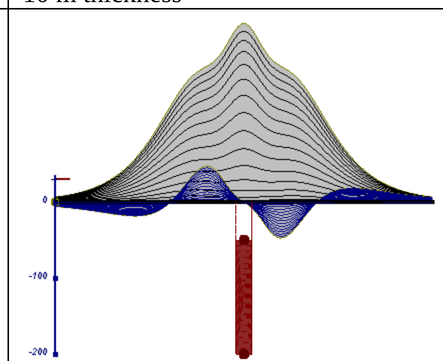
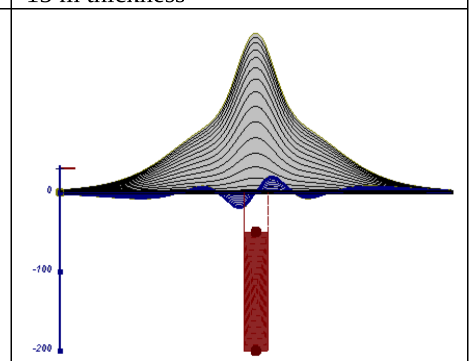
		
“thin”	10 m thickness	15 m thickness
		
18 m thickness	20 m thickness	30 m thickness

Fig.E-16 Conductive vertical plate, depth 50 m, strike length 200 m, depth extend 150 m.

Alexander Prikhodko, PhD, P.Geo
Geotech Ltd.

September 2010

APPENDIX F

EM TIME CONSTANT (TAU) ANALYSIS

Estimation of time constant parameter[1] in transient electromagnetic method is one of the steps toward the extraction of the information about conductances beneath the surface from TEM measurements.

The most reliable method to discriminate or rank conductors from overburden, background or one and other is by calculating the EM field decay time constant (TAU parameter), which directly depends on conductance despite their depth and accordingly amplitude of the response.

Theory

As established in electromagnetic theory, the magnitude of the electro-motive force (emf) induced is proportional to the time rate of change of primary magnetic field at the conductor. This emf causes eddy currents to flow in the conductor with a characteristic transient decay, whose Time Constant (Tau) is a function of the conductance of the survey target or conductivity and geometry (including dimensions) of the target. The decaying currents generate a proportional secondary magnetic field, the time rate of change of which is measured by the receiver coil as induced voltage during the Off time.

The receiver coil output voltage (**e_0**) is proportional to the time rate of change of the secondary magnetic field and has the form,

$$e_0 \; \alpha \; (1 / \tau) \; e^{-(t / \tau)}$$

Where,
τ = L/R is the characteristic time constant of the target (TAU)
R = resistance
L = inductance

From the expression, conductive targets that have small value of resistance and hence large value of τ yield signals with small initial amplitude that decays relatively slowly with progress of time. Conversely, signals from poorly conducting targets that have large resistance value and small τ, have high initial amplitude but decay rapidly with time[1] (Fig. F1).

[1] McNeill, JD, 1980, "Applications of Transient Electromagnetic Techniques", Technical Note TN-7 page 5, Geonics Limited, Mississauga, Ontario.

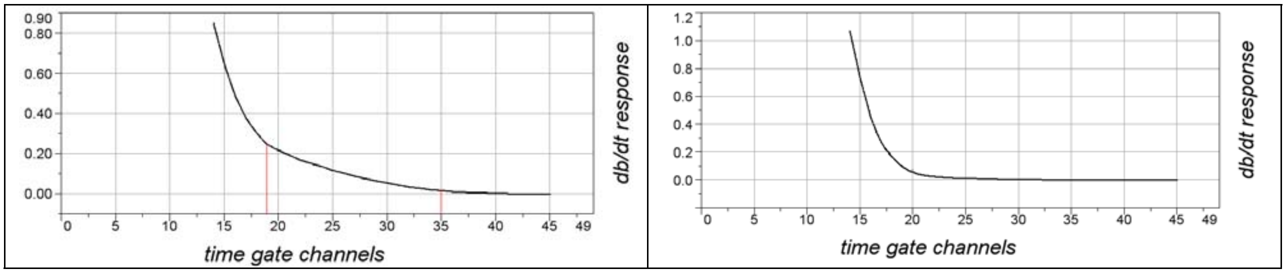


Figure F1 Left – presence of good conductor, right – poor conductor.

EM Time Constant (Tau) Calculation

The EM Time-Constant (TAU) is a general measure of the speed of decay of the electromagnetic response and indicates the presence of eddy currents in conductive sources as well as reflecting the "conductance quality" of a source. Although TAU can be calculated using either the measured dB/dt decay or the calculated B-field decay, dB/dt is commonly preferred due to better stability (S/N) relating to signal noise. Generally, TAU calculated on base of early time response reflects both near surface overburden and poor conductors whereas, in the late ranges of time, deep and more conductive sources, respectively. For example early time TAU distribution in an area that indicates conductive overburden is shown in Figure 2.

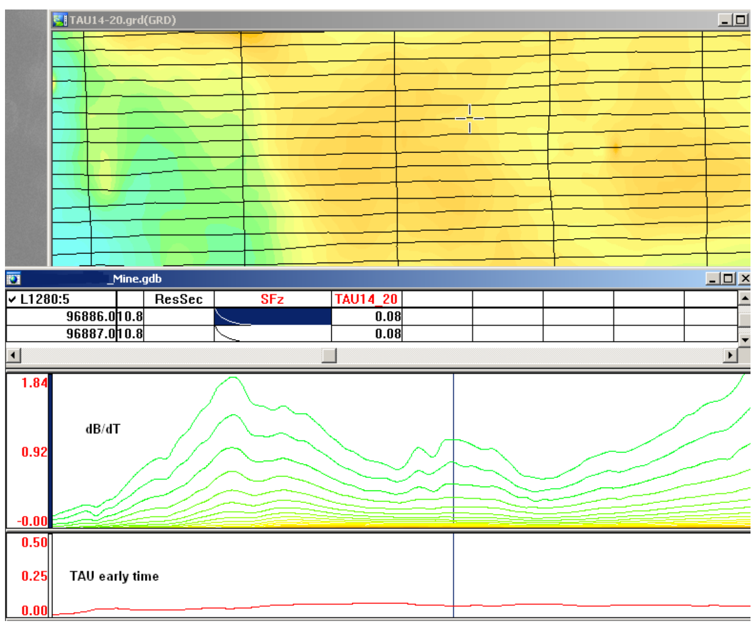


Figure F2 – Map of early time TAU. Area with overburden conductive layer and local sources.

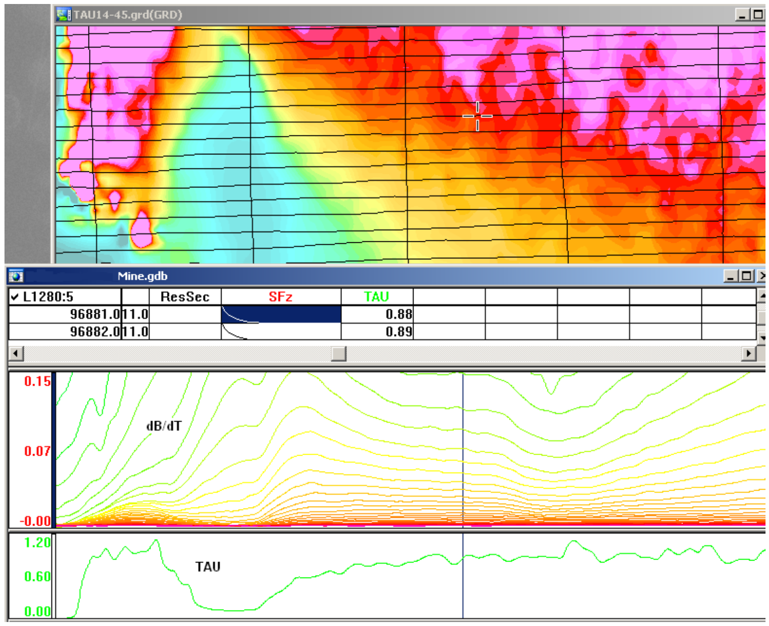


Figure F3 – Map of full time range TAU with EM anomaly due to deep highly conductive target.

There are many advantages of TAU maps:

- TAU depends only on one parameter (conductance) in contrast to response magnitude;
- TAU is integral parameter, which covers time range and all conductive zones and targets are displayed independently of their depth and conductivity on a single map.
- Very good differential resolution in complex conductive places with many sources with different conductivity.
- Signs of the presence of good conductive targets are amplified and emphasized independently of their depth and level of response accordingly.

In the example shown in Figure 4 and 5, three local targets are defined, each of them with a different depth of burial, as indicated on the resistivity depth image (RDI). All are very good conductors but the deeper target (number 2) has a relatively weak dB/dt signal yet also features the strongest total TAU (Figure 4). This example highlights the benefit of TAU analysis in terms of an additional target discrimination tool.

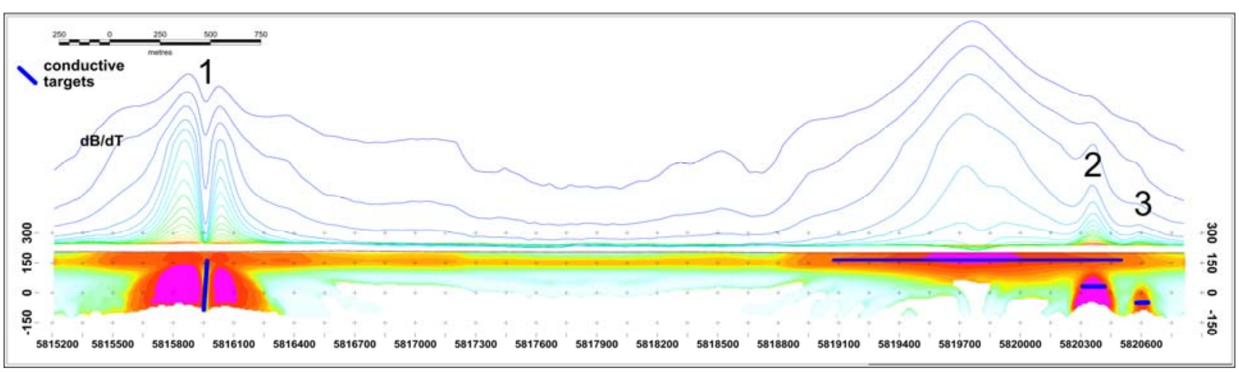


Figure F4 – dB/dt profile and RDI with different depths of targets.

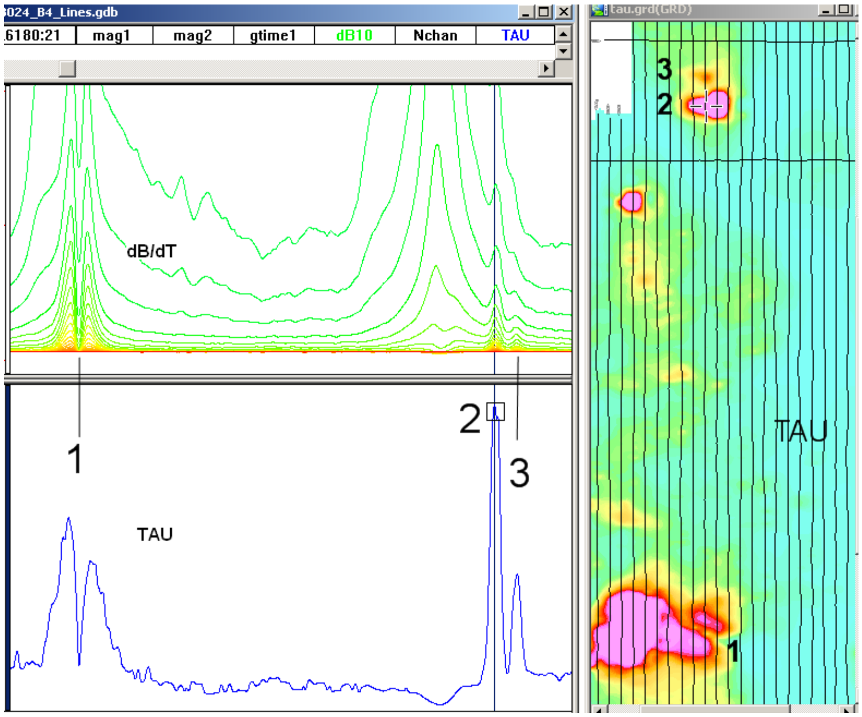


Figure F5 – Map of total TAU and dB/dt profile.

The EM Time Constants for dB/dt and B-field were calculated using the "sliding Tau" in-house program developed at Geotech2. The principle of the calculation is based on using of time window (4 time channels) which is sliding along the curve decay and looking for latest time channels which have a response above the level of noise and decay. The EM decays are obtained from all available decay channels, starting at the latest channel. Time constants are taken from a least square fit of a straight-line (log/linear space) over the last 4 gates above a pre-set signal threshold level (Figure F6). Threshold settings are pointed in the "label" property of TAU database channels. The sliding Tau method determines that, as the amplitudes increase, the time-constant is taken at progressively later times in the EM decay. Conversely, as the amplitudes decrease, Tau is taken at progressively earlier times in the decay. If the maximum signal amplitude falls below the threshold, or becomes negative for any of the 4 time gates, then Tau is not calculated and is assigned a value of "dummy" by default.

[2] by A.Prikhodko

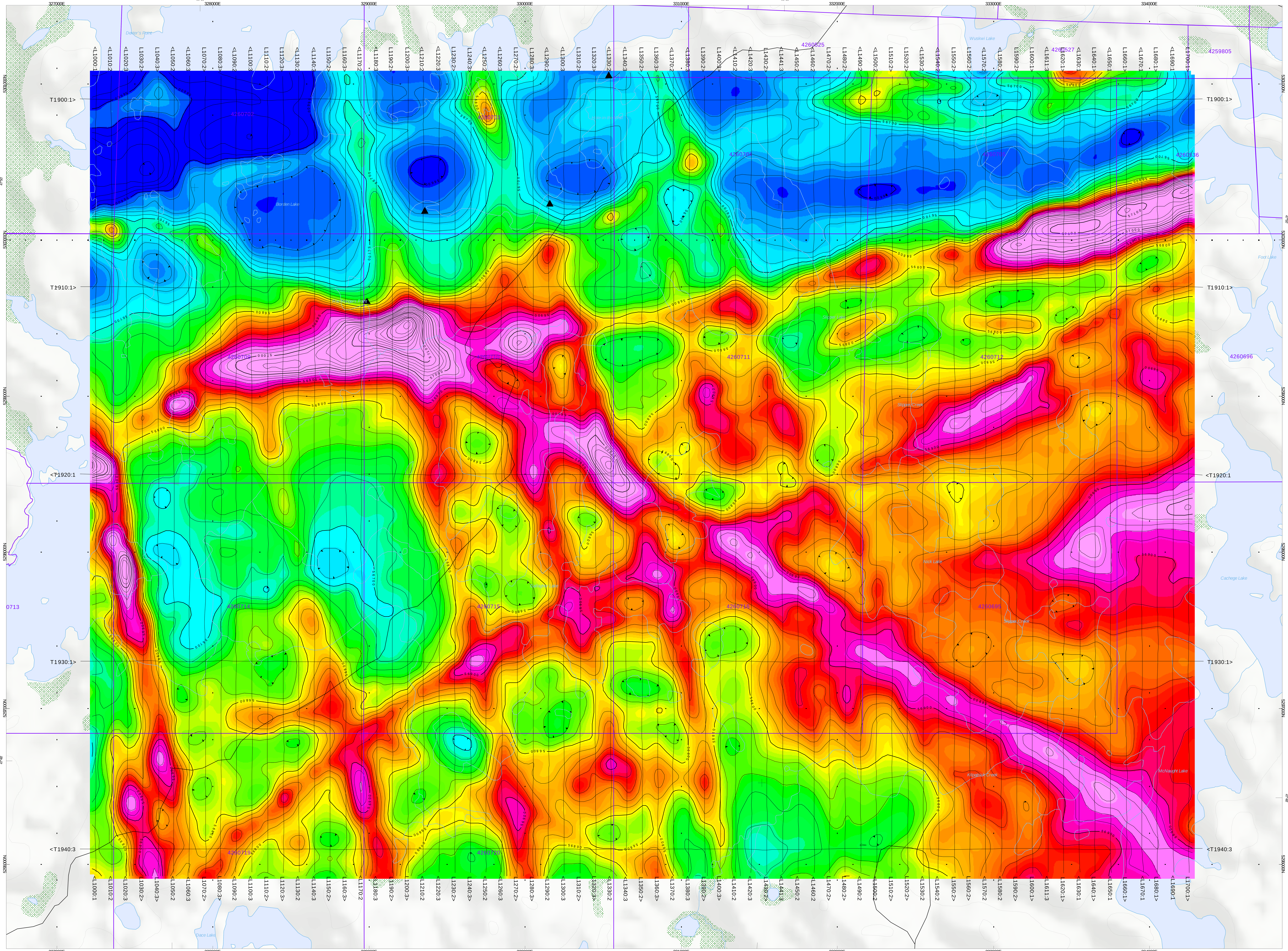
APPENDIX II

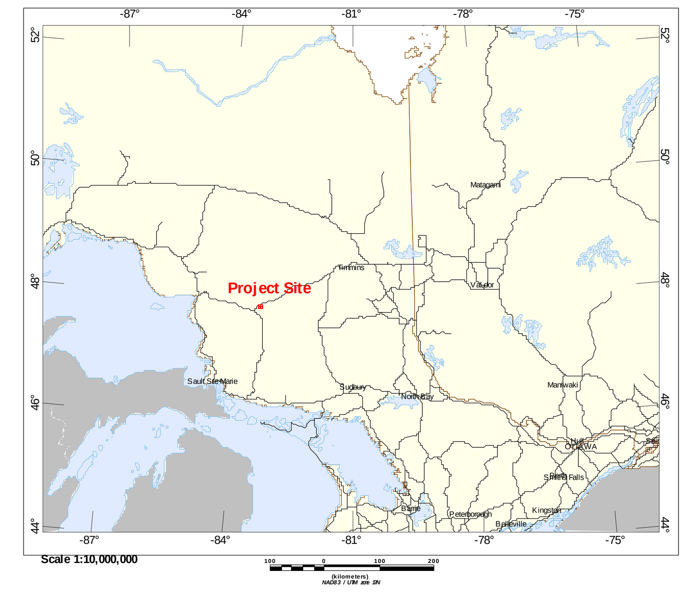
Helicopter Borne Time Domain

Electromagnetic and Aeromagetic Survey

Results Maps

GEOTECH LTD.





SURVEY SPECIFICATIONS:
Survey Date: December 27th 2010 - January 3rd 2011
Survey Base: Chapleau, Ontario
Aircraft: Geotech Aviation A-Star 350 B3 (C-GEOY)
Nominal Survey Line Spacing: 100 Meters
Nominal Survey Line Direction: N 0° E / N 180° E
Nominal Tie Line Spacing: 1200 Meters
Nominal Tie Line Direction: N 180° E / N 270° E
Nominal Terrain Clearance: 75 Meters
EM Loop: Towed at a mean distance of 35 meters below the Helicopter
Magnetic Sensor: Towed at a mean distance of 13 meters below the Helicopter

INSTRUMENTS
Geotech Time Domain Electromagnetic System (VTEM)
Concentric Rx/Tx Geometry
Transmitter Loop: Diameter 26 Meters,Base Frequency 30 Hz
Dipole Moment: 382,268 nIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.13 ms.
Geometrics High Sensitivity Cesium Magnetometer
Mag Resolution: 0.02 nT at 10 samples/sec

MAP PROJECTION
Datum: NAD 83
Projection: Universal Transverse Mercator
Central Meridian: 81°W (Zone 17N)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m
Major Axis: 6378137.000
Eccentricity: 0.081819191
NTS: 041O14

56975.2
56940.0
56916.8
56900.7
56888.8
56879.4
56871.5
56864.8
56859.0
56853.6
56848.3
56842.7
56837.1
56831.7
56826.4
56820.5
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56808.4
56802.7
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56712.8
56700.3
56682.0
56663.7
56646.7
56631.6
56617.4
56602.7

TMI
(nT)

TOPOGRAPHIC LEGEND:

Buildings
Roads
Contours
Rivers
Lakes
Wetlands
Mining Claims

TMI Contour Intervals:
10 nT
50 nT
100 nT

Scale 1:10000
100 0 100 200 300 400 500
(meters)
NAD83 / UTM zone 17N

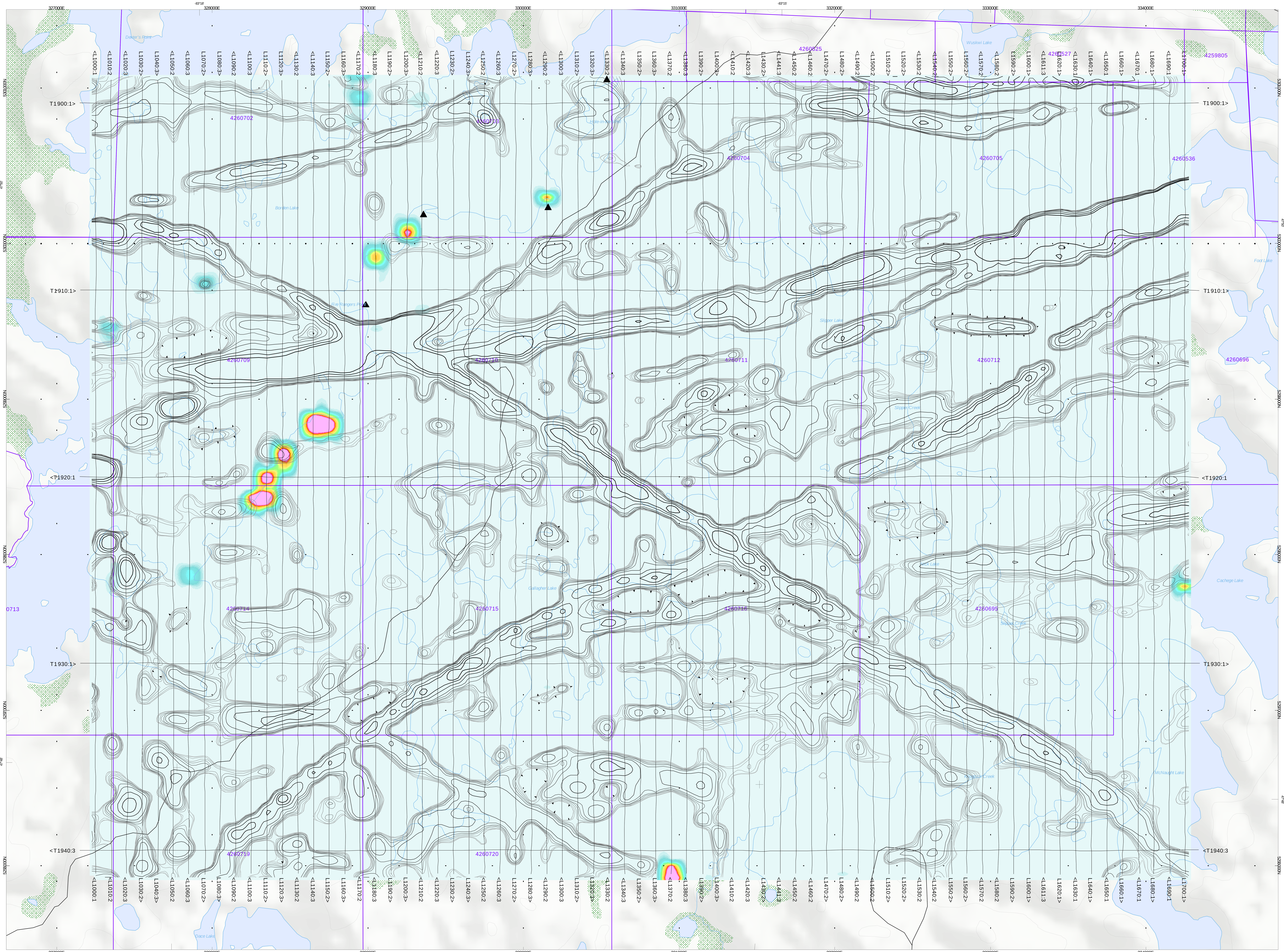
The topographic data base was derived from 1:50000 NRC (Natural Resources Canada) NTDB data
Background shading is derived from NASA SRTM (Shuttle Radar Topography Mission) data
Inset data derived from Geocommunities 1:250,000 Canadian National Topographic database
Mining Claims are derived from the Ontario Ministry of Northern Development and Mines
(www.geocomm.com)(www.geogratis.ca)(http://www.mndm.gov.on.ca)

Reliant Gold Corp.
Borden Lake South Project
Chapleau, Ontario

Geotech VTEM System
Total Magnetic Intensity (TMI)

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

March 2011



GEOTECH LTD.

SURVEY SPECIFICATIONS:

Survey Date: December 27th 2010 - January 3rd 2011
Survey Base: Chapleau, Ontario
Aircraft: Geotech Aviation A-Star 350 B3 (C-GEOY)
Nominal Survey Line Spacing: 100 Meters
Nominal Survey Line Direction: N 0° E / N 180° E
Nominal Tie Line Spacing: 1200 Meters
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Nominal Terrain Clearance: 75 Meters
EM Loop: Towed at a mean distance of 35 meters below the Helicopter
Magnetic Sensor: Towed at a mean distance of 13 meters below the Helicopter

INSTRUMENTS

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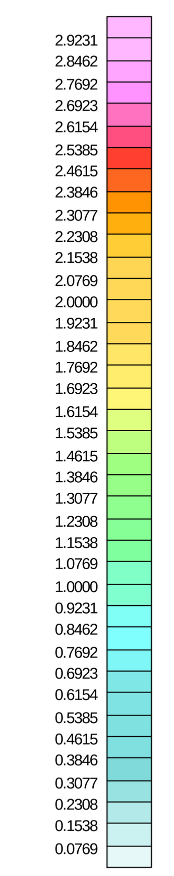
Concentric Rx/Tx Geometry
Transmitter Loop: Diameter 26 Meters,Base Frequency 30 Hz
Dipole Moment: 382,268 nIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.13 ms.
Geometrics High Sensitivity Cesium Magnetometer
Mag Resolution: 0.02 nT at 10 samples/sec

MAP PROJECTION

Datum: NAD 83
Projection: Universal Transverse Mercator
Central Meridian: 81°W (Zone 17N)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m
Major Axis: 6378137.000
Eccentricity: 0.081819191
NTS: 041O14



Tau B-Field
msec

CVG Contour Intervals:

0.0075 nT/m
0.0500 nT/m
0.2500 nT/m

TOPOGRAPHIC LEGEND:

Buildings
Roads
Contours
Rivers
Lakes
Wetlands
Mining Claims

Scale 1:10000

100 0 100 200 300 400 500
(meters)
NAD83 / UTM zone 17N

The topographic data base was derived from 1:50000 NRC (Natural Resources Canada) NTDB data
Background shading is derived from NASA SRTM(Shuttle Radar Topography Mission) data
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Mining Claims are derived from the Ontario Ministry of Northern Development and Mines
(www.geocomm.com)(www.geogratis.ca)(http://www.mndm.gov.on.ca)

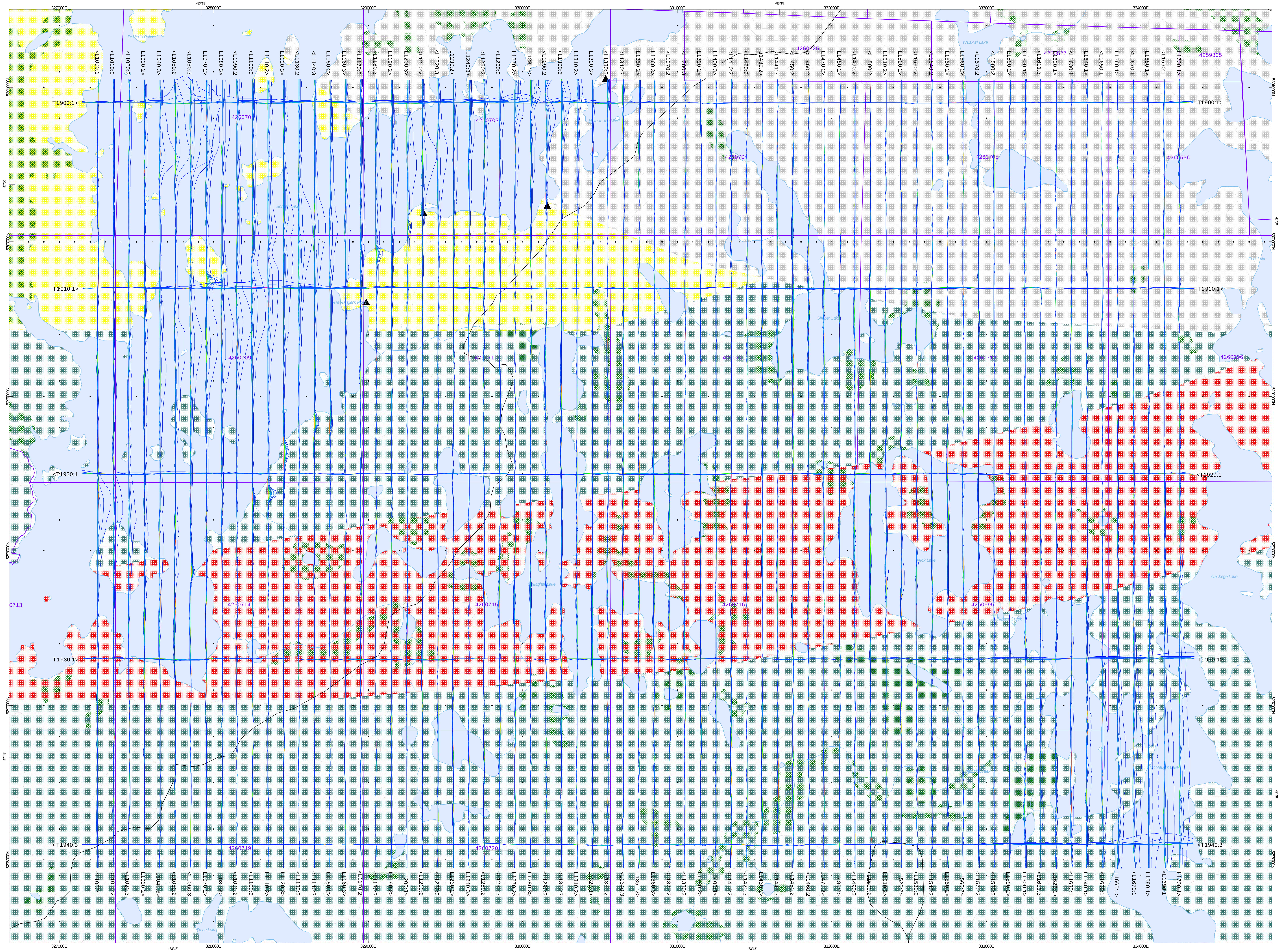
Reliant Gold Corp.
Borden Lake South Project
Chapleau, Ontario

Geotech VTEM System

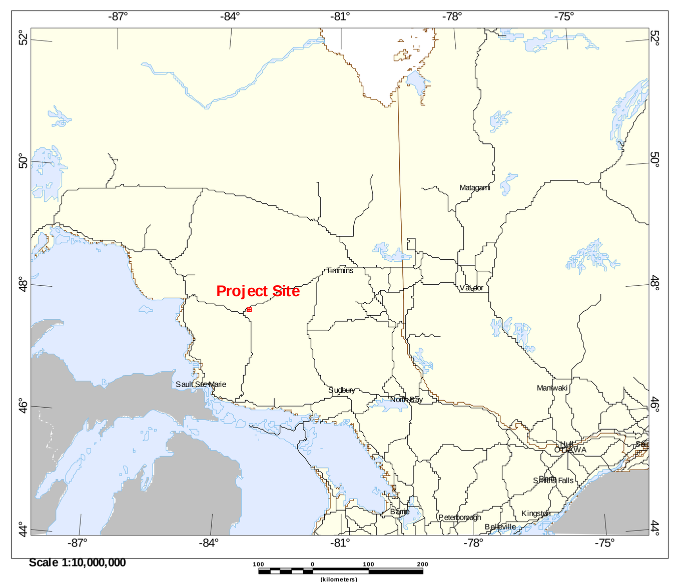
Time Constant Tau (B-Field) with CVG contours calculated from TMI

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

March 2011



GEOTECH LTD.



Scale 1:10,000,000

(kilometers)
NAD83 / UTM zone 17N

SURVEY SPECIFICATIONS:

- Survey Date: December 27th 2010 - January 3rd 2011
- Survey Base: Chapleau, Ontario
- Aircraft: Geotech Aviation A-Star 350 B3 (C-GEOY)
- Nominal Survey Line Spacing: 100 Meters
- Nominal Survey Line Direction: N 0° E / N 180° E
- Nominal Tie Line Spacing: 1200 Meters
- Nominal Tie Line Direction: N 180° E / N 270° E
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INSTRUMENTS

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- Concentric Rx/Tx Geometry
- Transmitter Loop: Diameter 26 Meters,Base Frequency 30 Hz
- Dipole Moment: 382,268 nIA
- Transmitter Wave Form: Trapezoid, Pulse Width 7.13 ms.
- Geometrics High Sensitivity Cesium Magnetometer
- Mag Resolution: 0.02 nT at 10 samples/sec

MAP PROJECTION

- Datum: NAD 83
- Projection: Universal Transverse Mercator
- Central Meridian: 81°W (Zone 17N)
- Central Scale Factor: 0.9996
- False Easting/Northing: 500,000m/0m
- Major Axis: 6378137.000
- Eccentricity: 0.081819191
- NTS: 041O14

Profiles scale 1 mm = 0.01 (pV/A*m^4)

Linear between +/-1 (pV/A*m^4)
logarithmic above 1 (pV/A*m^4)

0.220 ms
0.253 ms
0.290 ms
0.333 ms
0.383 ms
0.440 ms
0.505 ms
0.580 ms
0.667 ms
0.766 ms
0.880 ms
1.010 ms
1.161 ms
1.333 ms
1.531 ms
1.760 ms
2.021 ms
2.323 ms
2.667 ms
3.063 ms
3.521 ms
4.042 ms
4.641 ms
5.333 ms
6.125 ms
7.036 ms

GEOLOGY LEGEND:

- Massive Granodiorite to Granite
- Migmatized Supracrustal Rocks
- Gneissic Tonalite Suite
- Metasedimentary Rocks

TOPOGRAPHIC LEGEND:

- Buildings
- Roads
- Contours
- Rivers
- Lakes
- Wetlands
- Mining Claims

Scale 1:10000

100 0 100 200 300 400 500

(meters)
NAD83 / UTM zone 17N

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Reliant Gold Corp.
Borden Lake South Project
Chapleau, Ontario

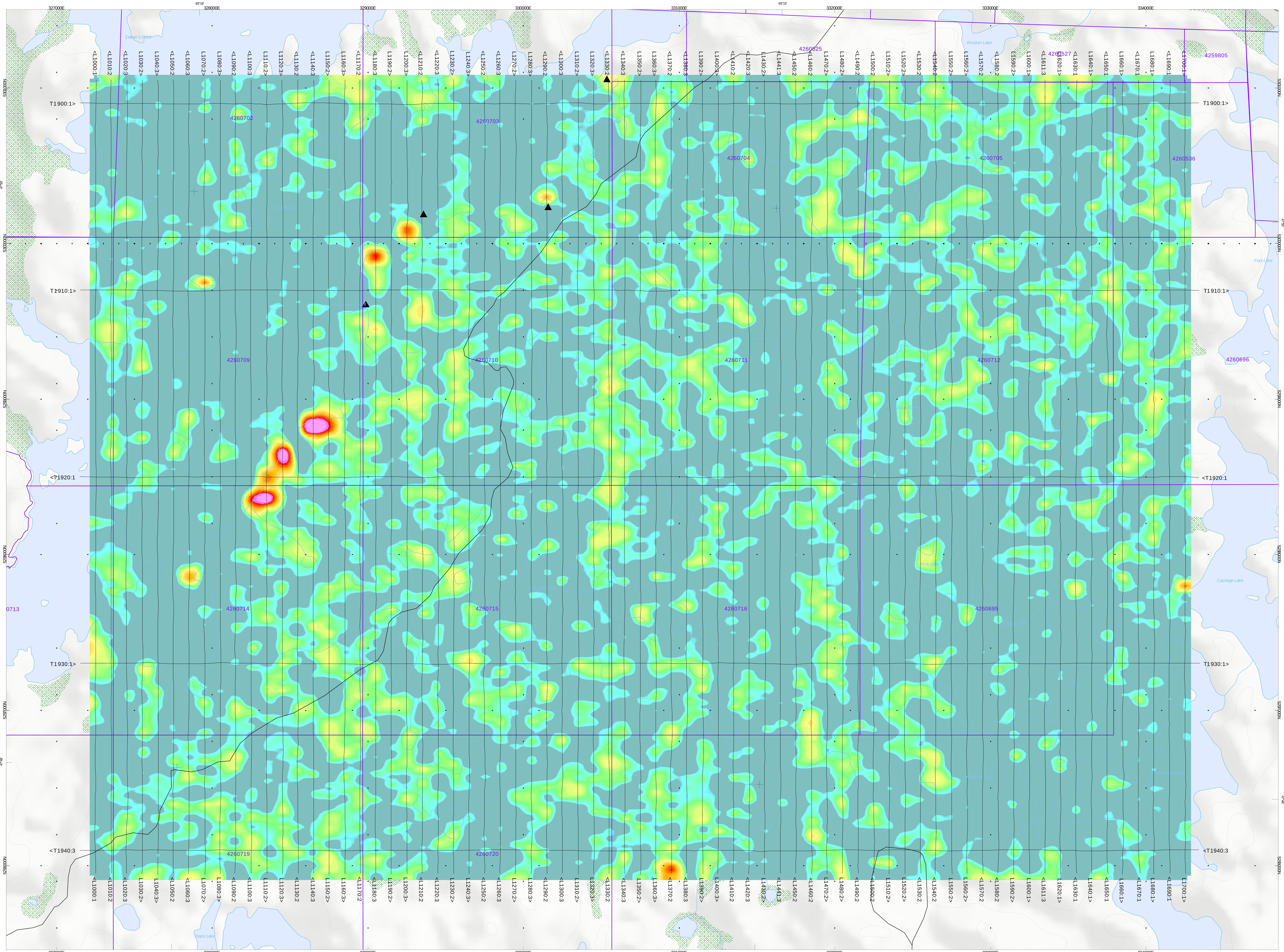
Geotech VTEM System

VTEM dB/dt Z Component Profiles
Time Gates 0.220 - 7.036 ms

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

March 2011

Geotech Project# 10296



GEOTECH LTD.

Scale 1:10,000,000

SURVEY SPECIFICATIONS:

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- Geometrics High Sensitivity Cesium Magnetometer
- Mag Resolution: 0.02 nT at 10 samples/sec

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- Central Scale Factor: 0.9996
- False Easting/Northing: 500,000m/0m
- Major Axis: 6378137.000
- Eccentricity: 0.081819191
- NTS: 041O14

BFz 1.161 ms
(pV*ms)/(A*m^4)

TOPOGRAPHIC LEGEND:

- Buildings
- Roads
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- Rivers
- Lakes
- Wetlands
- Mining Claims

Scale 1:10000

(meters)
NAD83 / UTM zone 17N

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Reliant Gold Corp.
Borden Lake South Project
Chapleau, Ontario

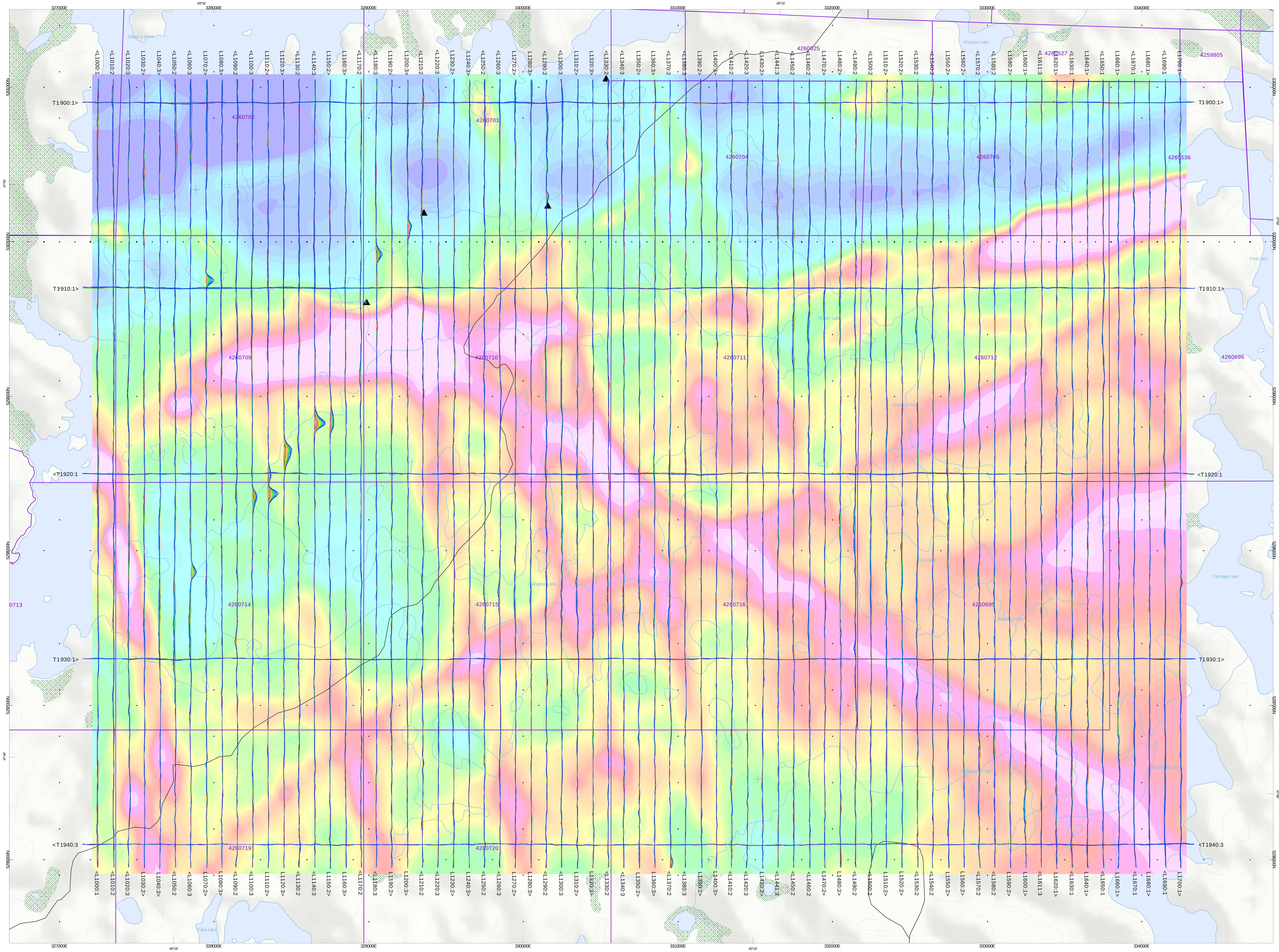
Geotech VTEM System

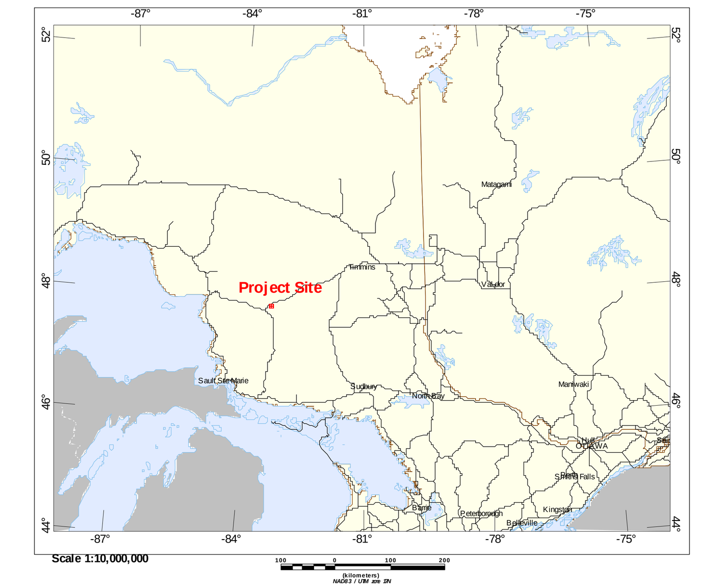
VTEM B-Field Z Component
Channel 32, Time Gate 1.161 ms

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

March 2011

GEOTECH LTD.





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- Major Axis: 6378137.000
- Eccentricity: 0.081819191
- NTS: 041O14

Profiles scale 1 mm = 0.005 (pV*ms)/(A*m^4)

(Linear between +/-1 (pV*ms)/(A*m^4) logarithmic above 1 (pV*ms)/(A*m^4)

0.220 ms (B-field)
0.253 ms (B-field)
0.290 ms (B-field)
0.333 ms (B-field)
0.383 ms (B-field)
0.440 ms (B-field)
0.505 ms (B-field)
0.580 ms (B-field)
0.667 ms (B-field)
0.766 ms (B-field)
0.880 ms (B-field)
1.010 ms (B-field)
1.161 ms (B-field)
1.333 ms (B-field)
1.531 ms (B-field)
1.760 ms (B-field)
2.021 ms (B-field)
2.323 ms (B-field)
2.667 ms (B-field)
3.063 ms (B-field)
3.521 ms (B-field)
4.042 ms (B-field)
4.641 ms (B-field)
5.333 ms (B-field)
6.125 ms (B-field)
7.036 ms (B-field)

56975.2
56940.0
56916.8
56900.7
56888.8
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56864.8
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56700.3
56682.0
56663.7
56646.7
56631.6
56617.4
56602.7

TMI
(nT)

TOPOGRAPHIC LEGEND:
- **Buildings**
- **Roads**
- **Contours**
- **Rivers**
- **Lakes**
- **Wetlands**
- **Mining Claims**

Scale 1:10000

100 0 100 200 300 400 500

(meters)

NAD83 / UTM zone 17N

The topographic data base was derived from 1:50000 NRC (Natural Resources Canada) NTDB data
Background shading is derived from NASA SRTM(Shuttle Radar Topography Mission) data
Inset data derived from Geocommunities 1:250,000 Canadian National Topographic database
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Reliant Gold Corp.
Borden Lake South Project
Chapleau, Ontario

Geotech VTEM System

VTEM B-Field Z Component Profiles
Time Gates 0.220 - 7.036 ms
Over Total Magnetic Intensity

Flown and processed by Geotech Ltd.
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Aurora, Ontario, Canada L4G 4C4
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March 2011