2012 Assessment Work Report

A Helicopter-Borne AeroTEM System

Electromagnetic & Magnetic Survey

performed on Winston Lake Property in

Pays Plat Lake & Rope Lake Area,

Thunder Bay Mining Division, Ontario

Prepared for

Silvore Fox Minerals Corp. (SFX)

(25 Adelaide St.East, Suite 1417 Toronto, ON M5C 3A1, Canada)

Submitted by Keystone Associates Inc. for SFX

January 11, 2012

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1. Introduction

This report describes an Airborne Survey performed on SFX' Winston Lake Property in 2011. The Property consists of 45 contiguous unpatented claims with a total area of approximately 97 km² (**Figure 1**) and were acquired or staked by SFX throughout the year of 2011. The claims are currently all in good standing and a schedule of claims with detailed information is attached in **Appendix 1**.

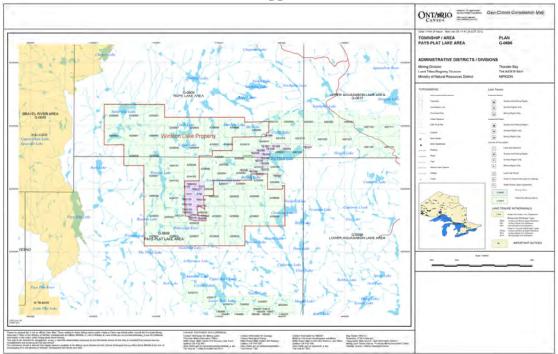


Figure 1: Claim Layout Map

In August, 2011, GeoTech Ltd. ("Geotech") carried out a helicopter-borne Versatile Time Domain Electromagnetic (VTEM) geophysical survey on behalf of SFX on this Property. A report provided by Geotech is attached as **Appendix 2**.

2. Property Location, Description and Access

The Winston Lake Property is location in the Thunder Bay Mining Division, approximately 200 km northeast of the city of Thunder Bay. The closed town is Schreiber, Ontario, approximately 20 km to the Southeast (**Figure 2**).

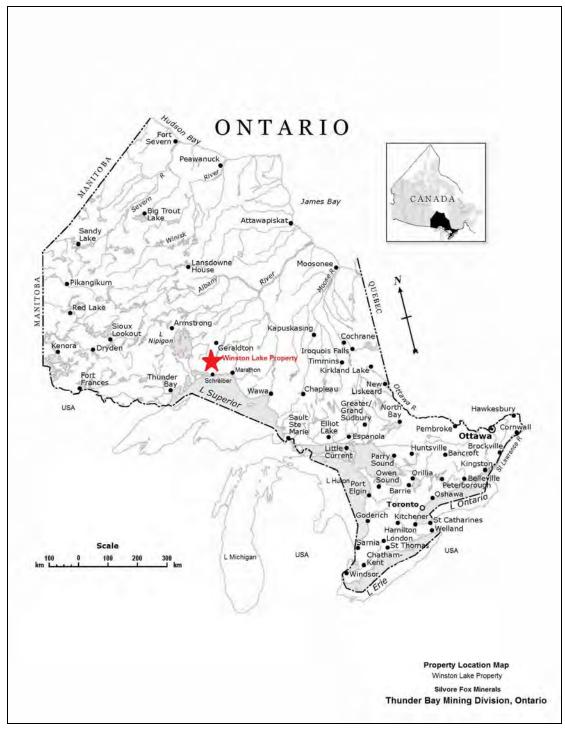


Figure 2: Property Location Map

Access to the Property is convenient. The Trans-Canada high way 17 runs W-E, approximately 15 km to the South of the Property and local trails lead directly to the Property. Accommodation and food service can be provided in the town of Schreiber (**Figure 3**). For services related to exploration, one has to visit the city of Thunder Bay, approximately 200 km to the Southwest.

Also due to the past mining activities, Winston Lake mine and Pick Lake mine within the area, extensive infrastructure is already in place.

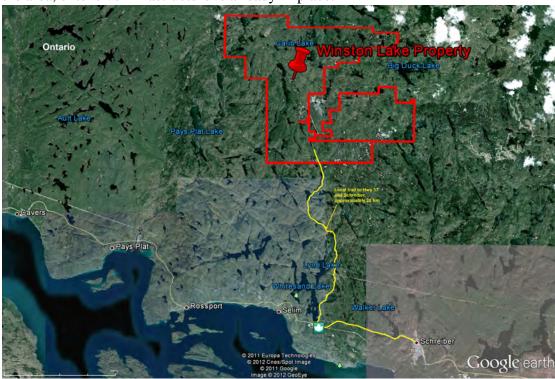


Figure 3: Property Access Map

3. Regional Geology

Topography of the area exhibits a shallow relief with an elevation between 300 and 550 metres. The area has various rivers and streams and lakes.

The regional geology for the whole area is shown in the following **Figure 4** (part of 1970 OGS map 2232, 1 inch=4 miles). Geologic units are:

- 1: intermediate to mafic volcanic
- 3: metasediments including slates and argillites
- 5: mafic and ultramafic rocks gabbro, serpentinite
- 6: felsic igneous and metamorphic rocks –granites, gneiss

The full version of the regional geology map is attached in **Appendix 3**.

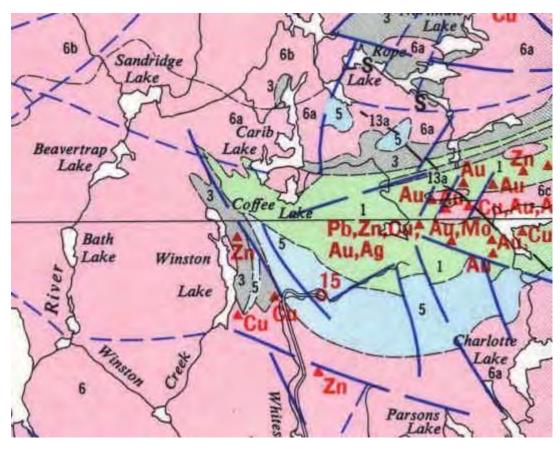


Figure 4: Regional Geology Map (Partial)

(Please see Appendix 3 for the full versions of this regional geology map)

In 1983, Noranda did an airborne Electromagnetic (Input) and magnetometer survey. The area covered in this survey quite well matches what is now Block A in Silvore Fox' Winston Lake (**Figure 5**). Noranda's report describes the geology of the area of their survey as "the survey area is underlain by Precambrian rocks. The oldest rocks in the area are interpreted as metavolcanics and medasediments in two main sequences, centered on and oriented parallel to Big Duck Lake and Cairngorm Lake, however they form a continous band through Block C and D. The western and northeastern portion of the survey area has been mapped as predominantly felsic intrusives with related migmatites and gneisses. Mafic intrusions (diabase) cut the area in northwest and north northwest trending dykes."

In 1964, E. G. Pye published Geological Report No. 27 (publication no.: R027), with the title "Mineral Depostis of the Big Duck Lake Area". This report intensively describes the geology of Block B, C, and D of Silvore Fox' Winston Lake (**Figure 5**).

4. Historical Work

The Property is around a small block of patent claims held by Inmet Mining and the site of the Winston Lake zinc mine, in operation from 1988 to 1998.

This area has a long history of mineral exploration, starting from 1879 with the discovery of what became the Zenith Zinc mine. The property includes the Pick Lake zinc deposit drill tested by Falconbridge in the 1980s.

List of some m	ajor historical work/activities in the area
1879	Massive zinc mineralization was found near Kenabic at what would become the Zenith mine.
1952	3 to 5% disseminated sulphides over an area of 10 x 75 m was found in at nearby Anderson showing
1966-1970	180 000 tons of 16.5% Zinc were extracted
1978	Geology, lithogeochemical, and geophysical surveys by Falconbridge
1981	HLEM, magnetic and VLF surveys over the Zenith mine and area by Falconbridge
1982	Drilling by Falconbridge
1983	Flown with INPUT by Falconbrdige
1983	8 blocks in the Winston Lake/Duck Lake area were flown with INPUT by Noranda
1984	Drilling by Falconbridge on the down dip extension of the Anderson showing intersected a thin, high grade sheet of massive sulphide mineralization. This is the Pick Lake deposit.
1988-1998	The Winston Lake mine in operation

5. Helicopter-Borne Survey 2011

5.1. General Introduction

Geotech Ltd. performed a helicopter-borne geophysical survey over the Winston Property. Based on different geological features within the property, the survey area was divided into 4 blocks with different flight directions and line spacing: Block A, Block B, Block C and Block D (**Figure 4, 5**) (**Table 1**). The blocks are situated approximately 26 kilometres, 17 kilometres, 23 kilometres and 17 kilometres northwest respectively of Schreiber, Ontario (**Figure 3**).

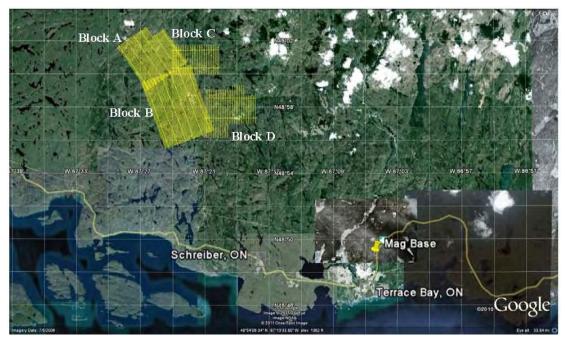


Figure 5: Flight blocks and pathes



Figure 6: Flight blocks and Paths Over Claims

The geophysical surveys consisted of helicopter borne EM using the versatile time-domainelectromagnetic (VTEM plus) system with Z and X component measurements and aeromagnetics using a caesium magnetometer. A total of 1060.8 line-km of geophysical data were acquired during the survey. For survey specification, please refer to the table below (**Table 1**).

Survey block	Traverse Line spacing (m)	Area (Km²)	Planned ¹ Line-km	Actual Line-km	Flight direction	Line numbers
Winston / Pick Lake	Traverse: 100	29.67	331.2	309.9	N 55° E / N 235° E	L1000 – L1590
Property - Block A	Tie: 1000		331.2	33.3	N 145° E / N 325° E	T1800 – T1850
Winston / Pick Lake	Traverse: 100	44.46	497.1	464.7	N 55° E / N 235° E	L2000 – L2780
Property - Block B	Tie: 1000		497.1	48	N 145° E / N 325° E	T2800 – T2850
Winston / Pick Lake	Traverse: 200	16.64	95.8	90.1	N 55° E / N 235° E	L3000 - L3260
Property - Block C	Tie: 2000			10.7	N 145° E / N 325° E	T3800 – T3810
Winston / Pick Lake	Traverse: 200	24.66	136.7	129.5	N 55° E / N 235° E	L4000 – L4280
Property - Block D	Tie: 2200		130.7	11.5	N 145° E / N 325° E	T4800 – T4810
TOTAL		115.43	1060.8	1097.7		

Table 1: Survey Specifications

Survey operations were based out of Terrace Bay, Ontario from August 13th to 28th, 2011. The following table shows the schedule of the survey (**Table 2**).

Date	Flight #	Flown km	Block	Crew location	Comments
8-13-11				Terrace Bay, ON	Crew Arrived
8-14-11				Terrace Bay, ON	System assembly
8-15-11				Terrace Bay, ON	Ground and air testing completed
8-16-11	1	25	Block D	Terrace Bay, ON	25km flown limited production due to weather
8-17-11				Terrace Bay, ON	No production due to the weather
8-18-11	2	17	Block D	Terrace Bay, ON	Flight aborted due to system technical issues
8-19-11	3	102	Block A,B,C	Terrace Bay, ON	Flight aborted due to system technical issues
8-20-11				Terrace Bay, ON	No production due to technical issues
8-21-11				Terrace Bay, ON	System troubleshooting continued
8-22-11	4,5	180	Block B,C	Terrace Bay, ON	180km flown
8-23-11	6,7	172	Block B	Terrace Bay, ON	171km flown
8-24-11	8	11	Block A	Terrace Bay, ON	10km flown limited production due to weather
8-25-11	9,10,11	402	Block A,B	Terrace Bay, ON	389km flown
8-26-11	12	89	Block A	Terrace Bay, ON	89km flown limited production due to weather
8-27-11				Terrace Bay, ON	No production due to crew change - pilot
8-28-11	13	72	Block B	Terrace Bay, ON	Remaining kms were flown – flying complete

Table 2: Flight Schedule

5.2. Survey Results

5.2.1. Survey Report

A survey report (**Appendix 2**) was produced by Geotech, describing the data acquisition, processing, and final presentation of the survey results.

5.3. Conclusion

Based on the geophysical results obtained, a number of TEM anomalies were identified across the property. They correspond to low to moderate conductive targets. The anomalies mainly lie in Block B and Block C. The conductive zones over Block C are confined by dyke similar magnetic features. In Block B near Winston Lake Mine there are a few low conductive anomalies which are also associated with magnetic sources. Calculated conductance for some targets on Block A can be underestimated because of depth of the targets and signal on the latest times is very low, sometimes lower of accepted TAU threshold. A detailed interpretation of the available geophysical data, resistivity depth imaging, modeling might be helpful prior to ground follow up and drill testing.

6. References

Noranda Exploration Company, Lilmited

Report of Work, Geophysical Survey, Cameron Lake, Charolotte Lake, Victoria Lake, Owl Lake, Second Lake, Cancer Lake, Sandridge Lake, Shy Lak

August, 1983

Afri Number: 42E03SE8284

E.G. Pye

Mineral Deposits of the Big Duck Lake Area OGS Report No.27



Claim Schedule

Winston Lake Property Silvore Fox Minerals Corp.

THUNDER BAY Mining Division - 409344 - SILVORE FOX MINERALS CORP.

Township/Area	Claim Number	Recording Date	Claim Due	Status	Percent	Work Required	Total Applied	Total Reserve	Claim Bank
PAYS PLAT LAKE AREA	3001231	2008-Sep-09	Date 2012-Sep-09	А	Option 100%	\$5,600		\$0	\$0
PAYS PLAT LAKE AREA	4244161	2008-Jul-22	2012-Jan-31	Α	100%	\$4,800	\$4,800	\$0	\$0
PAYS PLAT LAKE AREA	4244162	2008-Jul-22	2012-Jan-31	А	100%	\$4,800	\$4,800	\$0	\$0
PAYS PLAT LAKE AREA	4244163	2008-Jul-22	2012-Jan-31	А	100%	\$2,400	\$2,400	\$0	\$0
PAYS PLAT LAKE AREA	4244751	2008-Jun-09	2012-Jan-31	Α	100%	\$6,400	\$6,400	\$2,875	\$0
PAYS PLAT LAKE AREA	4256284	2011-Mar-16	2013-Mar-16	Α	100%	\$3,200	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258255	2011-Jun-10	2013-Jun-10	Α	100%	\$1,600	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258825	2011-Mar-29	2013-Mar-29	А	100%	\$5,600	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258826	2011-Mar-29	2013-Mar-29	А	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258827	2011-Mar-02	2013-Mar-02	А	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258828	2011-Mar-02	2013-Mar-02	А	100%	\$1,600	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258829	2011-Mar-29	2013-Mar-29	А	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258834	2011-Mar-29	2013-Mar-29	А	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258835	2011-Mar-02	2013-Mar-02	А	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258836	2011-Mar-02	2013-Mar-02	А	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258837	2011-Mar-02	2013-Mar-02	Α	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258891	2011-Mar-29	2013-Mar-29	А	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258892	2011-Mar-29	2013-Mar-29	Α	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258893	2011-Mar-29	2013-Mar-29	Α	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258894	2011-Mar-29	2013-Mar-29	Α	100%	\$1,600	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258895	2011-Mar-29	2013-Mar-29	Α	100%	\$2,800	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258896	2011-Mar-29	2013-Mar-29	А	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258897	2011-Mar-29	2013-Mar-29	А	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258898	2011-Mar-29	2013-Mar-29	Α	100%	\$5,200	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4258899	2011-Mar-29	2013-Mar-29	Α	100%	\$6,400	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4259020	2011-Mar-02	2013-Mar-02	А	100%	\$4,000	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4260537	2011-Mar-16	2013-Mar-16	А	100%	\$1,600	\$0	\$0	\$0
PAYS PLAT LAKE AREA	4260539	2011-Mar-16	2013-Mar-16	Α	100%	\$4,800	\$0	\$0	\$0
ROPE LAKE AREA	4258838	2011-Mar-02	2013-Mar-02	А	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	<u>4258839</u>	2011-Mar-02	2013-Mar-02	А	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258840	2011-Mar-02	2013-Mar-02	А	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258841	2011-Mar-02	2013-Mar-02	А	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258842	2011-Mar-02	2013-Mar-02	А	100%	\$6,400	\$0	\$0	\$0

ROPE LAKE AREA	4258843	2011-Mar-02	2013-Mar-02	А	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258844	2011-Mar-02	2013-Mar-02	Α	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258845	2011-Mar-02	2013-Mar-02	Α	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258846	2011-Mar-16	2013-Mar-16	Α	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258847	2011-Mar-16	2013-Mar-16	Α	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258848	2011-Mar-16	2013-Mar-16	А	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258849	2011-Mar-16	2013-Mar-16	А	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258886	2011-Mar-16	2013-Mar-16	А	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258887	2011-Mar-16	2013-Mar-16	Α	100%	\$5,600	\$0	\$0	\$0
ROPE LAKE AREA	4258888	2011-Mar-16	2013-Mar-16	А	100%	\$6,400	\$0	\$0	\$0
ROPE LAKE AREA	4258889	2011-Mar-16	2013-Mar-16	Α	100%	\$2,400	\$0	\$0	\$0
ROPE LAKE AREA	4258890	2011-Mar-29	2013-Mar-29	А	100%	\$6,000	\$0	\$0	\$0

Appendix 2 Airborne Survey Report by G	aentech
Appendix 2 Amborne Survey Report by C	

REPORT ON A HELICOPTER-BORN VERSATILE TIME DOMAIN ELECTROMACNETIC (YFEM plus) AND AEROMAGNETIC GEOPHYSICAL SURVEY

Winston / Pick Lake Property
Schreiber, Ontario

For:

Silvore Fox Minerals Corp.

By:

Geotech Ltd.

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Survey flown during August 2011

Project 11254

October, 2011

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APPENDICES

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REPORT ON A HELICOPTER-BORNE VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM plus) and AEROMAGNETIC SURVEY

Winston / Pick Lake Property Schreiber, Ontario

Executive Summary

During August 16th to August 28th, 2011 Geotech Ltd. carried out a helicopter-borne geophysical survey over the Winston / Pick Lake Property – Block A, Block B, Block C and Block D situated approximately 26 kilometres, 17 kilometres, 23 kilometres and 17 kilometres northwest respectively of Schreiber, Ontario.

Principal geophysical sensors included a versatile time domain electromagnetic (VTEM plus) system, and a caesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 1060.8 line-kilometres of geophysical data were acquired during the survey.

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 the following maps:

- Electromagnetic stacked profiles of the B-field Z Component,
- Electromagnetic stacked profiles of dB/dt Z Components,
- Colour grids of a B-Field Z Component Channel,
- Colour grids of a dB/dt X Component Fraser Filter Channel,
- Digital Elevation Model,
- Total Magnetic Intensity (TMI),
- Calculated Vertical Derivative of TMI and
- EM Time-constant dB/dt Z Component (Tau), are presented.

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 Winston/Pick Lake Property – Block A, Block B, Block C and Block D situated approximately 26 kilometres, 17 kilometres, 23 kilometres and 17 kilometres northwest respectively of Schreiber, Ontario (Figure 1 & Figure 2).

Ian Chisholm represented Silvore Fox Minerals 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 plus) system with Z and X component measurements and aeromagnetics using a caesium magnetometer. A total of 1060.8 line-km of geophysical data were acquired during the survey.

The crew was based out of Terrace Bay (Figure 2) in Ontario for the acquisition phase of the survey. Survey flying started on August 16th and was completed on August 28th, 2011.

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 October, 2011.

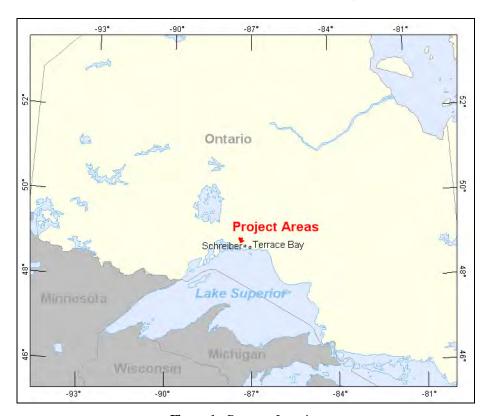


Figure 1 - Property Location



1.2 Survey and System Specifications

The Winston / Pick Lake Property – Block A, Block B, Block C and Block D are located approximately 26 kilometres, 17 kilometres, 23 kilometres and 17 kilometres northwest respectively of Schreiber, Ontario (Figure 2).



Figure 2 - Survey areas location on Google Earth

The survey block was flown in a southwest to northeast (N 55° E / N 235° E (Block A)), southwest to northeast (N 70° E / N 250° E (Block B)), north to south (N 0° E / N 180° E (Block C)) and north to south (N 0° E / N 180° E (Block D)) direction, with traverse line spacing of 100 (Blocks A and B) and 200 (Blocks C and D) meters as depicted in Figure 3, Figure 4, Figure 5 and Figure 6. Tie lines were flown perpendicular to the traverse lines at a spacing of 1000 (Blocks A and B), 2000 (Block C) and 2200 (Block D) meters. For more detailed information on the flight spacing and direction see Table 1.

1.3 Topographic Relief and Cultural Features

Topographically, the Winston / Pick Lake Property – Block A exhibits a shallow relief with an elevation ranging from 304 to 515 metres above mean sea level over an area of 29.67 square kilometres (Figure 3).

The survey block has various rivers and streams running through the survey area which connect various lakes. There are no visible signs of culture located throughout the survey area.



Figure 3 - Flight path over a Google Earth Image – Winston / Pick Lake Property – Block A

The Winston / Pick Lake Property – Block B exhibits a shallow relief with an elevation ranging from 351 to 546 metres above mean sea level over an area of 44.46 square kilometres (Figure 4).

The survey block has various rivers and streams running through the survey area which connect various lakes. There are visible signs of culture such as trail located in Block B of the survey area.



Figure 4 - Flight path over a Google Earth Image – Winston / Pick Lake Property – Block B

The Winston / Pick Lake Property – Block C exhibits a shallow relief with an elevation ranging from 441 to 552 metres above mean sea level over an area of 16.64 square kilometres (Figure 5).

The survey block has various rivers and streams running through the survey area which connect various lakes. There are no visible signs of culture located throughout the survey area.

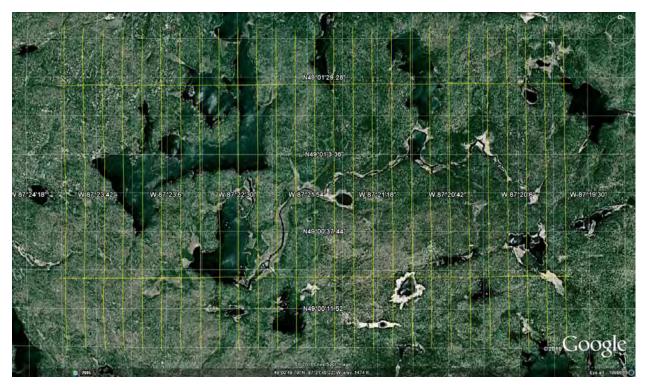


Figure 5 - Flight path over a Google Earth Image – Winston / Pick Lake Property – Block C

The Winston / Pick Lake Property – Block D exhibits a shallow relief with an elevation ranging from 367 to 589 metres above mean sea level over an area of 24.66 square kilometres (Figure 6).

The survey block has various rivers and streams running through the survey area which connect various lakes. There are visible signs of culture such as trail located in Block D of the survey area.



Figure 6 - Flight path over a Google Earth Image – Winston / Pick Lake Property – Block D

The survey areas 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 sheets 042D14 and 042E03.

2. DATA ACQUISITION

2.1 Survey Area

The survey block (see Figure 3, Figure 4, Figure 5, Figure 6 and Appendix A) and general flight specifications are as follows:

Table 1 - Survey Specifications

Survey block	Traverse Line spacing (m)	Area (Km²)	Planned ¹ Line-km	Actual Line-km	Flight direction	Line numbers
Winston / Pick Lake	Traverse: 100	29.67	224.2	309.9	N 55° E / N 235° E	L1000 – L1590
Property - Block A	Tie: 1000		331.2	33.3	N 145° E / N 325° E	T1800 – T1850
Winston / Pick Lake	Traverse: 100	44.46	407.4	464.7	N 55° E / N 235° E	L2000 – L2780
Property - Block B	Tie: 1000		497.1	48	N 145° E / N 325° E	T2800 – T2850
Winston / Pick Lake	Traverse: 200	16.64	05.0	90.1	N 55° E / N 235° E	L3000 – L3260
Property - Block C	Tie: 2000		95.8	10.7	N 145° E / N 325° E	T3800 – T3810
Winston / Pick Lake	Traverse: 200	24.66	126.7	129.5	N 55° E / N 235° E	L4000 – L4280
Property - Block D	Tie: 2200		136.7	11.5	N 145° E / N 325° E	T4800 – T4810
-	TOTAL		1060.8	1097.7		

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

2.2 Survey Operations

Survey operations were based out of Terrace Bay, Ontario from August 13th to 28th, 2011. The following table shows the timing of the flying.

Table 2 - Survey schedule

Date	Flight #	Flown km	Block	Crew location	Comments
8-13-11				Terrace Bay, ON	Crew Arrived
8-14-11				Terrace Bay, ON	System assembly
8-15-11				Terrace Bay, ON	Ground and air testing completed
8-16-11	1	25	Block D	Terrace Bay, ON	25km flown limited production due to weather
8-17-11				Terrace Bay, ON	No production due to the weather
8-18-11	2	17	Block D	Terrace Bay, ON	Flight aborted due to system technical issues

¹ Note: Actual Line kilometres represent the total line kilometres in the final database. These line-km normally exceed the Planned line-km, as indicated in the survey NAV files.



7

Date	Flight #	Flown km	Block	Crew location	Comments
8-19-11	3	102	Block A,B,C	Terrace Bay, ON	Flight aborted due to system technical issues
8-20-11				Terrace Bay, ON	No production due to technical issues
8-21-11				Terrace Bay, ON	System troubleshooting continued
8-22-11	4,5	180	Block B,C	Terrace Bay, ON	180km flown
8-23-11	6,7	172	Block B	Terrace Bay, ON	171km flown
8-24-11	8	11	Block A	Terrace Bay, ON	10km flown limited production due to weather
8-25-11	9,10,11	402	Block A,B	Terrace Bay, ON	389km flown
8-26-11	12	89	Block A	Terrace Bay, ON	89km flown limited production due to weather
8-27-11				Terrace Bay, ON	No production due to crew change - pilot
8-28-11	13	72	Block B	Terrace Bay, ON	Remaining kms were flown – flying complete

2.3 Flight Specifications

During the survey the helicopter was maintained at a mean altitude of 80 metres above the ground with a nominal survey speed of 80 km/hour. This allowed for a nominal EM bird terrain clearance of 45 metres and a magnetic sensor clearance of 67 metres.

The on board operator was responsible for 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 features.

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 Eurocopter Aerospatiale (Astar) 350 B3 helicopter, registration C-FVTM. The helicopter is owned and operated by Geotech Aviation. Installation of the geophysical and ancillary equipment was carried out by a Geotech Ltd crew.

2.4.2 Electromagnetic System

The electromagnetic system was a Geotech Time Domain EM (VTEM plus) system. The configuration is as indicated in Figure 7.

The VTEM plus Receiver and transmitter coils were in concentric-coplanar and Z-direction oriented configuration. The receiver system for the project also included a coincident-coaxial X-direction coil to measure the in-line dB/dt and calculate B-Field responses. The EM bird was towed at a mean distance of 35 metres below the aircraft as shown in Figure 7 and Figure 9. The receiver decay recording scheme is shown in Figure 8.



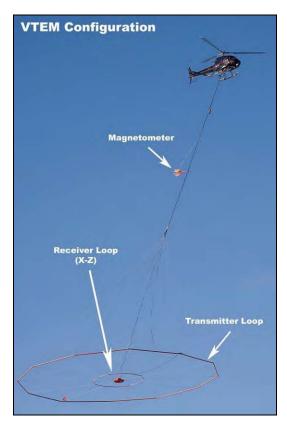


Figure 7 - VTEM plus Configuration, with magnetometer.

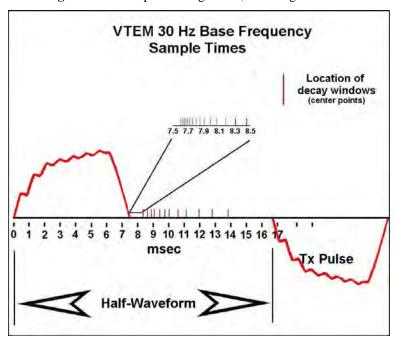


Figure 8 - VTEM plus Waveform & Sample Times

The VTEM plus 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 plus 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 plus system parameters:

Transmitter Section

- Transmitter coil diameter: 26.1 m

- Number of turns: 4

- Transmitter base frequency: 30 Hz

Peak current: 167 A
Pulse width: 7.118 ms
Duty cycle: 43 %

Wave form shape: trapezoid

- Peak dipole moment: 357,394.08 nIA

- Nominal EM Bird terrain clearance: 45 metres above the ground

- Effective coil area: 2123 m²

Receiver Section

X-Coil

- X Coil diameter: 0.32 m - Number of turns: 245

Effective coil area: 19.69 m²

Z-Coil

- Z-Coil coil diameter: 1.2 m - Number of turns: 100

- Effective coil area: 113.04 m²

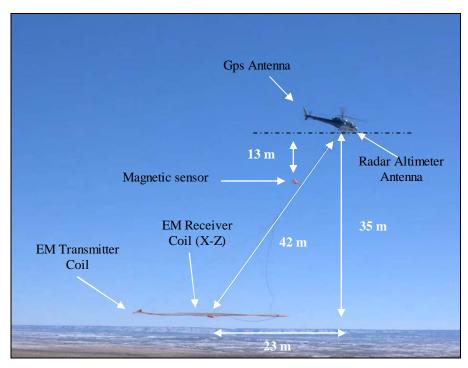


Figure 9 - VTEM plus System Configuration

2.4.3 Airborne magnetometer

The magnetic sensor utilized for the survey was Geometrics optically pumped caesium vapour magnetic field sensor mounted 13 metres below the helicopter, as shown in Figure 9. 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 9).

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 9). 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 Caesium 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 in an open field at the airport (48° 48.9918' N, 87° 05.2915' 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) Emilio Schein (Office) Data QC: Crew chief: Colin Lennox Operator: Mike Altman The survey pilot and the mechanical engineer were employed directly by the helicopter operator – Geotech Aviation. Pilot: D Mcmama Mechanical Engineer: Darren Paterson Office: ZiHao Han Preliminary Data Processing: Final Data Processing/Interpretation: ZiHao Han Alexander Prikhodko Final Data QA/QC:

Data acquisition phase was carried out under the supervision of Andrei Bagrianski, P. Geo, Chief Operating Officer. The processing and interpretation phase was under the supervision of Alexander Prikhodko, P. Geo. The customer relations were looked after by Jennifer Stefano.

Liz Johnson

Reporting/Mapping:

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 16 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 component. B-field Z component time channel recorded at 1.161 milliseconds after the termination of the impulse is also presented as contour colour images. Calculated Time Constant (TAU) with anomaly contours of Calculated Vertical Derivative of TMI is presented in Appendix D and F. Resistivity Depth Image (RDI) is also presented in Appendix D and G.

VTEM plus 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 ground and along the line-of-flight. This combined two coil configuration provides information on the position, depth, dip and thickness of a conductor. Generalized modeling results of VTEM plus data are shown in Appendix E.

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



The limits and change-over of "thin-thick" depends on dimensions of a TEM system.

Because of X component polarity is under line-of-flight, convolution Fraser filter (FF, Figure 10) 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.

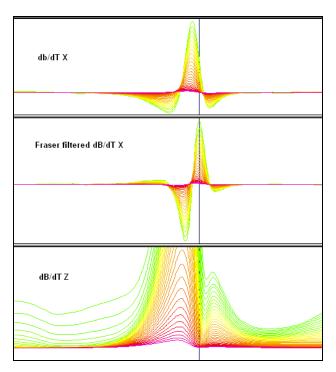


Figure 10 - Z, X and Fraser filtered X (FFx) components for "thin" target

Graphical representations of the VTEM plus 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.

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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 a scale of 1:20,000 for best representation of the survey size and line spacing. The coordinate/projection system used was NAD83 Datum, UTM Zone 16 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 over Geology.
- VTEM B-Field profiles Z Component, Time Gates 0.220 7.036 ms in linear logarithmic scale over Total Magnetic Intensity.
- VTEM B-field late time Z Component Channel 32, Time Gate 1.161 ms colour image.
- VTEM dB/dt Calculated Time Constant (TAU) over contours of anomaly areas of Calculated Vertical Derivative of TMI.
- Total Magnetic Intensity (TMI) colour image and contours.
- Calculated Vertical Derivative of TMI colour image over contours of amomaly areas.

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	Decarintion
X:		Description LITM Facting NAD92 7cm 16 North
Y:	metres	UTM Easting NAD83 Zone 16 North UTM Northing NAD83 Zone 16 North
Z:	metres	Č
·	metres	GPS antenna elevation (above Geoid)
Longitude:	Decimal Degrees	WGS 84 Logitude data
Latitude:	Decimal Degrees	WGS 84 Latitude data
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
CVG	nT	Calculated Vertical Derivative of TMI
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

Channel name	Units	Description
SFx[24]:	$pV/(A*m^4)$	X dB/dt 383 microsecond time channel
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	$(pV*ms)/(A*m^4)$	ZB-Field data for time channels 14 to 45
BFx	$(pV*ms)/(A*m^4)$	X B-Field data for time channels 20 to 45
SFxFF	$pV/(A*m^4)$	Fraser filtered X dB/dt
PLM:		60 Hz power line monitor
TauSF	milliseconds	Time Constant (Tau) calculated from dB/dt data
TauBF	milliseconds	Time Constant (Tau) calculated from B-Field data
NchanBF		Last channel where the Tau algorithm stops calculation, B-Field
NchanSF		Last channel where the Tau algorithm stops calculation, dB/dt

• Databases of selected anomalies in Geosoft GDB format, contains the channels described in Table 6.

Table 6 - Geosoft database for selected EM anomalies

Channel name	Units	Description
Line		Line number
Anom_ID:		Letter indicating the Anomaly ID
Anom_Labels:		Anomaly type (K: thick, N: thin)
X:	metres	NAD83 / UTM zone 16 north
Y:	metres	NAD83 / UTM zone 16 north
AnConSF:	Siemens	Estimated conductance calculated from dB/dt Z
		component data
AnConBF:	Siemens	Estimated conductance calculated from BFz data
AnTauSF:	milliseconds	Time constant (Tau), calculated from dB/dt Z component
		data
AnTauBF:	milliseconds	Time constant (Tau), calculated from B-field data
AnBF32m	$(pV*ms)/(A*m^4)$	B-Field Z Component response for time channel 32
Grade		Anomaly classification (1=weak; 6=strong).



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 "11254_waveform_final.gdb" in Geosoft GDB format, containing the following channels:

Time: Sampling rate interval, 5.2075 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)

TMI: Total Magnetic Intensity (nT)

CVG: Calculated Vertical Derivative of TMI (nT/m)

TauBF: B-Field Calculated Time Constant (ms)
TauSF: dB/dt Calculated Time Constant (ms)

SFxFF32: Fraser Filter X Component dB/dt Channel 32 (Time Gate 1.161 ms)

DEM: Digital Elevation Model (metres)
PLM: Power Line Monitor (60Hz)

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 1:20,000 in Geosoft MAP format, as follows:

11254_ 20k _dBdtz: dB/dt profiles Z Component, Time Gates 0.220 – 7.036

ms in linear – logarithmic scale over Geology.

11254_20k_Bfield: B-field profiles Z Component, Time Gates 0.220 – 7.036

ms in linear - logarithmic scale over total magnetic

intensity.

11254 20k BFz32: B-field late time Z Component Channel 32, Time Gate

1.161 ms color image.

11254_20k_SFxFF32: dB/dt late time X Component Fraser Filter Channel 32,

Time Gate 1.161 ms color image.

11254_20k_TMI: Total Magnetic Intensity (TMI) color image and contours.

11254_20k_DEM: Digital Elevation Model (DEM) color image with

contours of anomaly areas of the Calculated Vertical

Derivative of TMI

11254_ 20k _ TauSF: dB/dt Calculated Time Constant (TAU) over contours of

anomaly areas of the Total Magnetic Intensity

11254_20k_CVG: Calculated Vertical Derivative of TMI color image over

contours of anomaly areas.

Maps are also presented in 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 11254_Flight Path.kml, 11254_EM Anomalies.kml showing the flight path and EM Anomalies of the blocks 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 plus) geophysical survey has been completed over the Winston / Pick Lake Property – Block A, Block B, Block C and Block D located approximately 26 kilometres, 17 kilometres, 23 kilometres and 17 kilometres northwest respectively of Schreiber, Ontario.

The total area coverage for all properties is 115.43 km². Total survey line coverage is 1097.7 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 1:20,000.

The VTEM anomalies and calculated parameters are presented in Geosoft format database as per Table 6 and a Geosoft XYZ ASCII file. The identified time domain electromagnetic VTEM anomalies are listed in Appendix H. Time constants TAUs from dB/dt and B-field are calculated. The TAUs from dB/dt are presented as color image overlain with TMI contours.

6.2 Recommendations

Based on the geophysical results obtained, a number of TEM anomalies were identified across the property. They correspond to low to moderate conductive targets. The anomalies mainly lie in Block B and Block C. The conductive zones over Block C are confined by dyke similar magnetic features. In Block B near Winston Lake Mine there are a few low conductive anomalies which are also associated with magnetic sources. Calculated conductance for some targets on Block A can be underestimated because of depth of the targets and signal on the latest times is very low, sometimes lower of accepted TAU threshold. We recommend a detailed interpretation of the available geophysical data, resistivity depth imaging, modeling prior to ground follow up and drill testing.



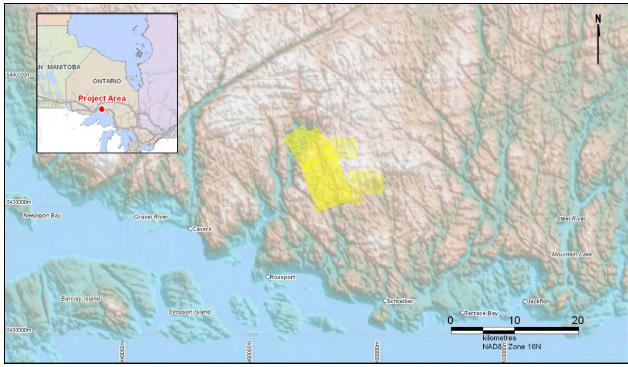
Respectfully submitted ⁵ ,	
ZiHao Han	Alexander Prikhodko, P.Geo
Geotech Ltd.	Geotech Ltd

October 2011

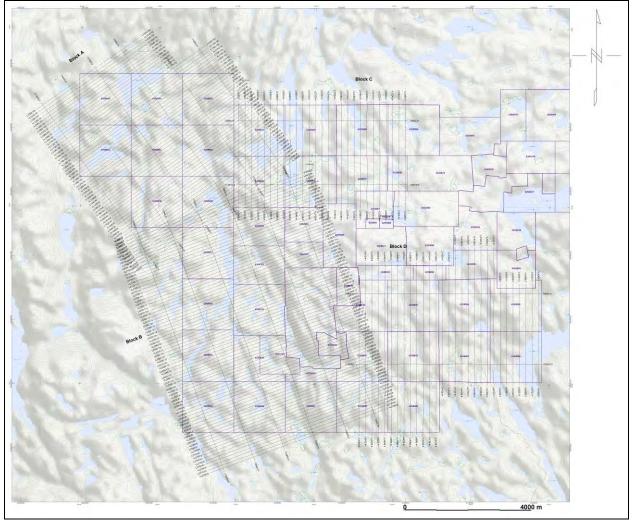
⁵Final data processing of the EM and magnetic data were carried out by ZiHao Han, from the office of Geotech Ltd. in Aurora, Ontario, under the supervision of Alexander Prikhodko, P.Geo., PhD, Senior Geophysicist, VTEM Interpretation Supervisor.

APPENDIX A

SURVEY BLOCK LOCATION MAP



Survey Overview of the Blocks



Mining claims - Winston / Pick Lake Property

A- 2



Flight path over EM Anomalies on Google Earth Image - Winston / Pick Lake Property

APPENDIX B

SURVEY BLOCK COORDINATES

(WGS 84, UTM Zone 16 North)

Winston / Pick Lake Property - Block A

	1 2
X	Υ
467996.7	5425700.8
464552.1	5430606.6
467663.6	5432788.5
468465.0	5431735.9
469678.7	5432526.0
472323.2	5428823.2

Winston / Pick Lake Property - Block B

X	Υ
467305.7	5426568.3
469973.5	5419238.7
475329.8	5421188.2
472662.0	5428517.9

Winston / Pick Lake Property - Block C

X	Υ
470793.8	5430702.7
470793.8	5427546.0
476064.0	5427546.0
476064.0	5430702.7

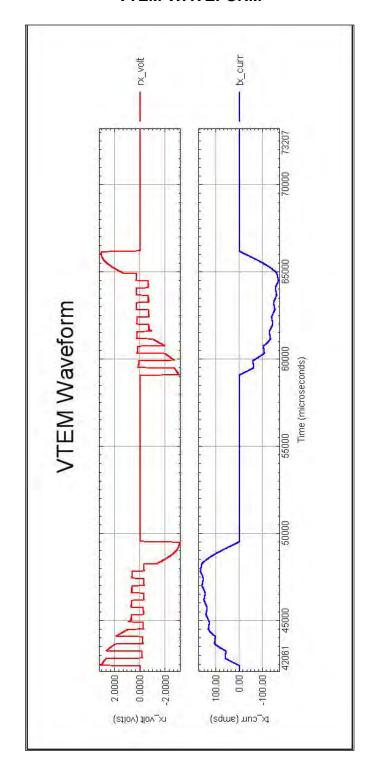
Winston / Pick Lake Property - Block D

	1 3
X	Υ
474510.1	5425682.5
474510.1	5420470.2
477044.6	5420470.2
477044.5	5422025.7
480235.0	5422025.7
480235.1	5425225.7
480000.0	5425225.7
480000.0	5425025.7
478847.2	5425025.7
478847.2	5426169.1
477499.1	5426169.1
477500.8	5425676.6



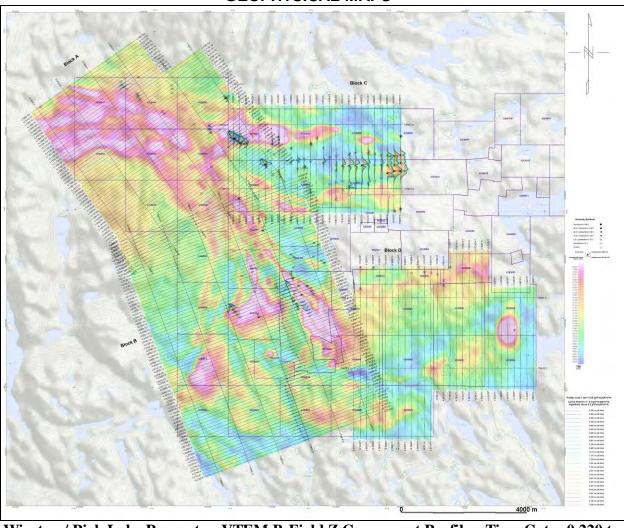
APPENDIX C

VTEM WAVEFORM



APPENDIX D

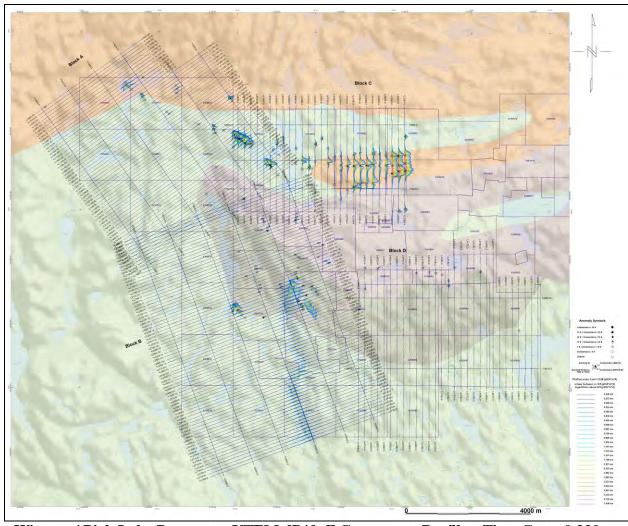
GEOPHYSICAL MAPS¹



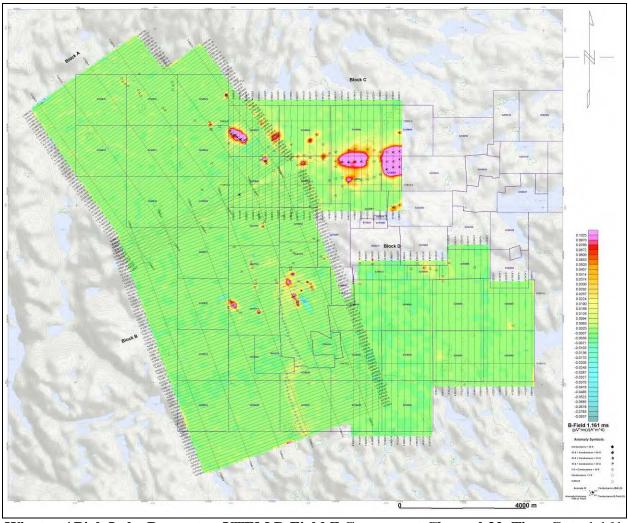
Winston / Pick Lake Property - VTEM B-Field Z Component Profiles, Time Gates 0.220 to 7.036 ms

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

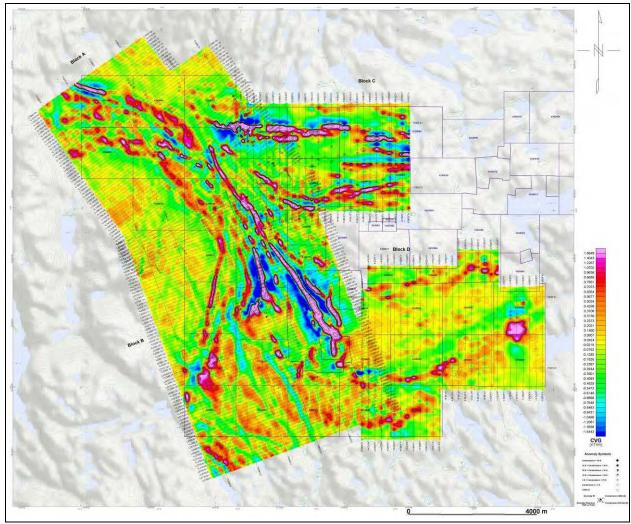




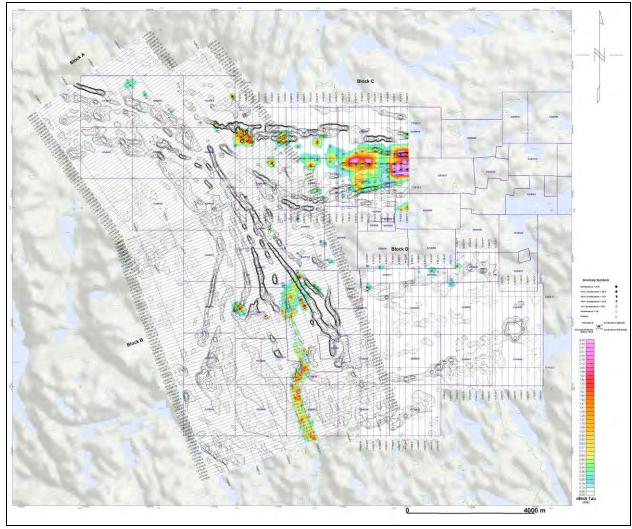
Winston / Pick Lake Property - VTEM dB/dt Z Component Profiles, Time Gates 0.220 to 7.036 ms



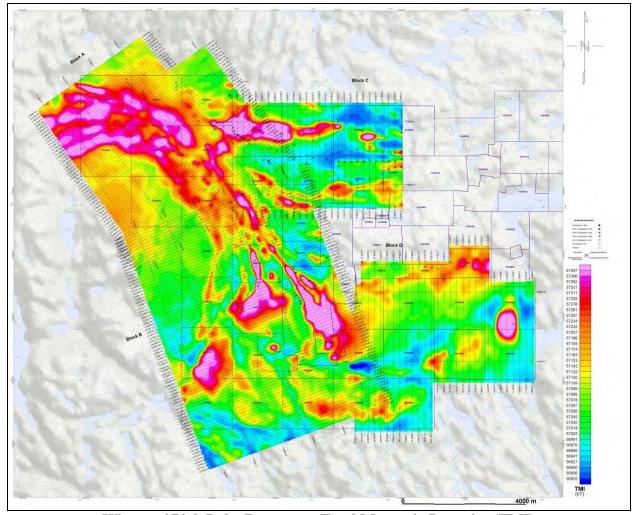
Winston / Pick Lake Property - VTEM B-Field Z Component Channel 32, Time Gate 1.161 ms



Calculated Vertical Derivative of TMI over contours of anomaly areas



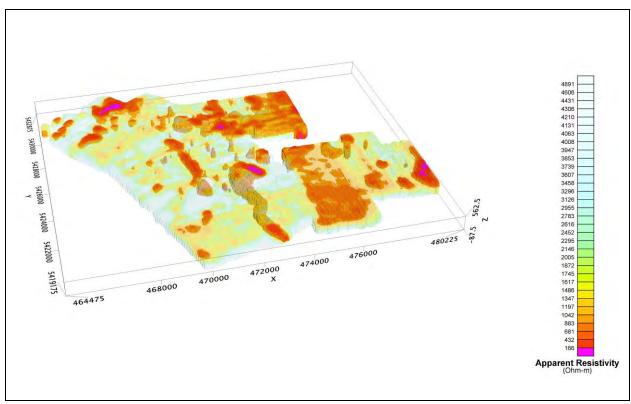
Winston / Pick Lake Property – dB/dt Calculated Time Constant (Tau) with contours of anomaly areas of the Calculated Vertical Derivative of TMI



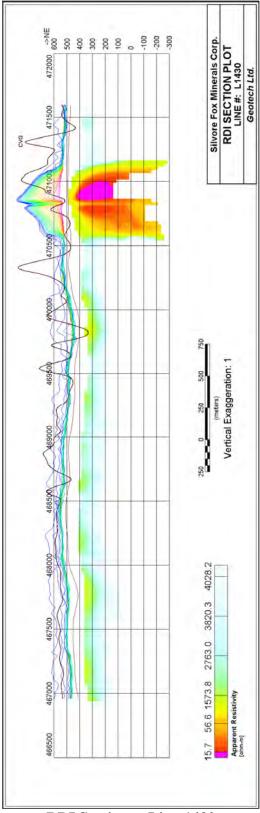
Winston / Pick Lake Property - Total Magnetic Intensity (TMI)

Resistivity Depth Image (RDI) MAPS

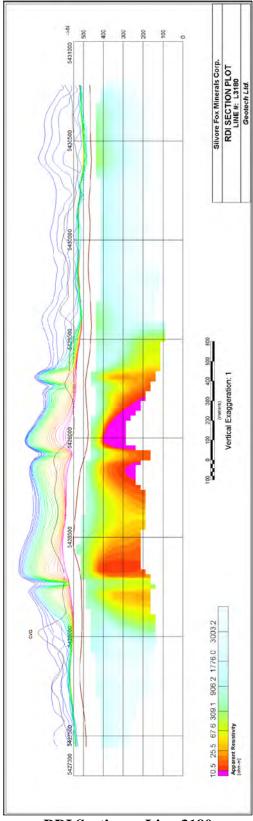
3D Resistivity Depth Images (RDI)



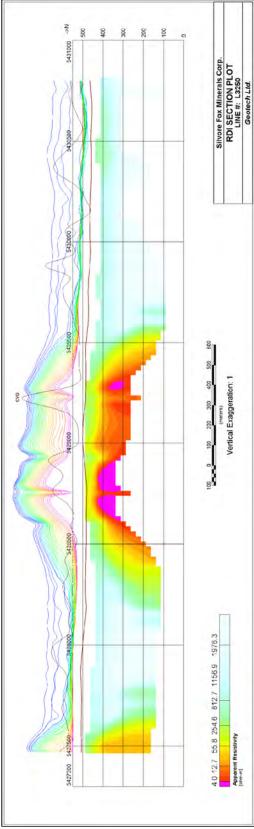
Winston / Pick Lake Property



RDI Sections - Line 1430



RDI Sections - Line 3180



RDI Sections - Line 3250

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 bipolar, 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.

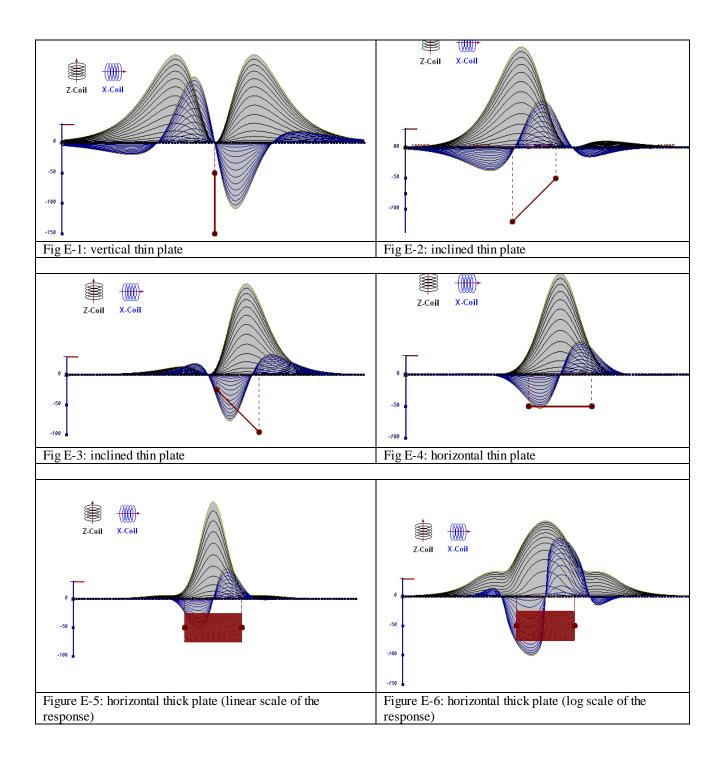
Efficient modeling of the results can be carried out on regularly shaped geometries, thus yielding close approximations to the parameters of the measured targets. The following is a description of a series of common models made for the purpose of promoting a general understanding of the measured results.

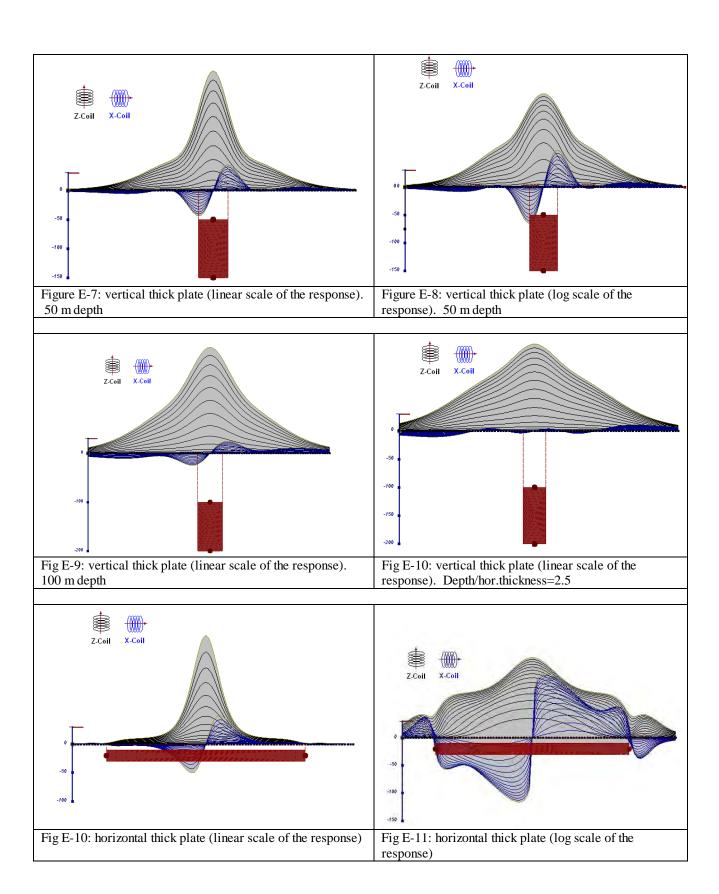
A set of models has been produced for the Geotech VTEM® system dB/dT Z and X components (see models E1 to E15). The Maxwell TM modeling program (EMIT Technology Pty. Ltd. Midland, WA, AU) used to generate the following responses assumes a resistive half-space. The reader is encouraged to review these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

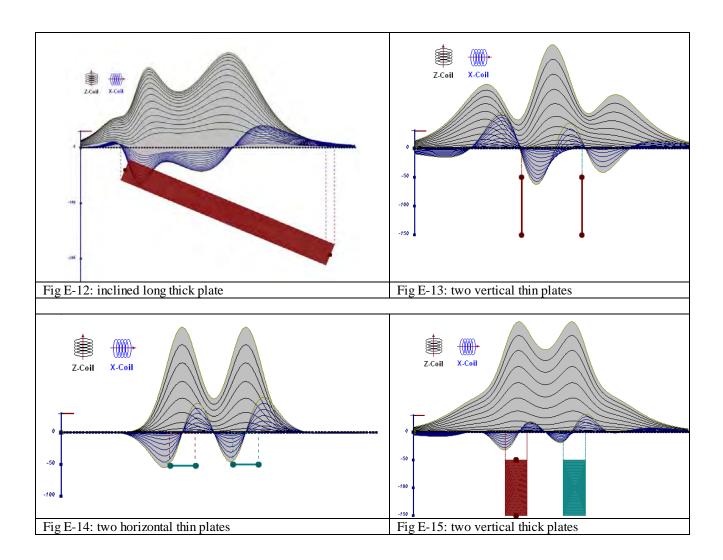
As the plate dips and departs from the vertical position, the peaks become asymmetrical.

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 90° to about 30°. The method is not sensitive enough where dips are less than about 30°.









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

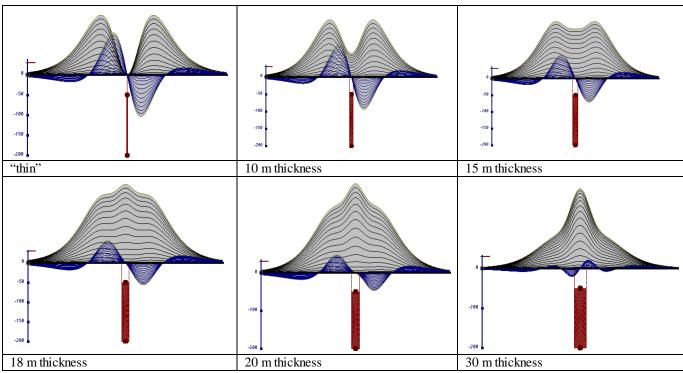


Fig.E-16 Conductive vertical plate, depth 50 m, strike length 200 m, depth extends 150 m.

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September 2010

APPENDIX F

EM TIME CONSTANT (TAU) ANALYSIS

Estimation of time constant parameter¹ in transient electromagnetic method is one of the steps toward the extraction of the information about conductance's 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,

 $\tau = L/R$ 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 time¹ (Fig. F1).

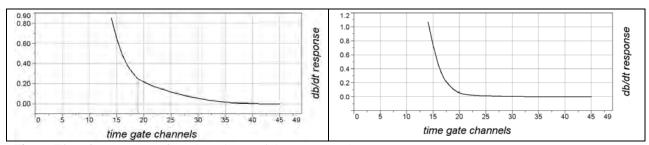


Figure F1 Left – presence of good conductor, right – poor conductor.

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



F- 1

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.

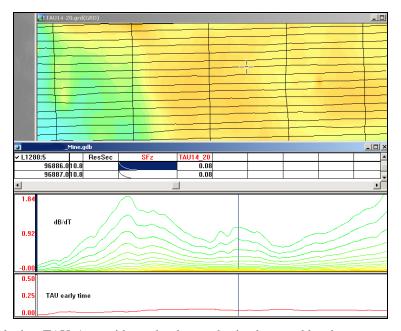


Figure F2 – Map of early time TAU. Area with overburden conductive layer and local sources.

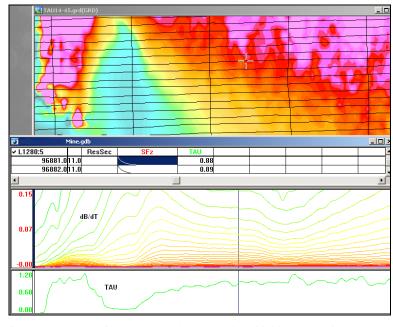


Figure F3 - Map of full time range TAU with EM anomaly due to deep highly conductive target.



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.

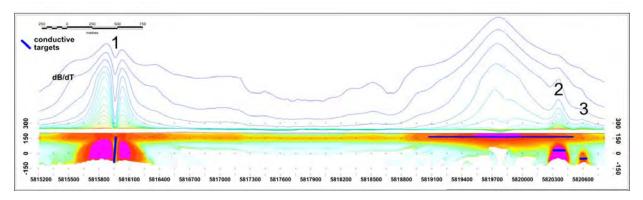


Figure F4 – dB/dt profile and RDI with different depths of targets.

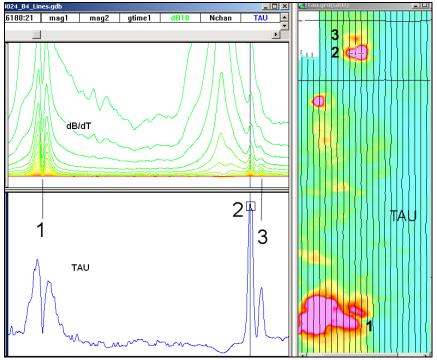


Figure F5 – Map of total TAU and dB/dt profile.



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.

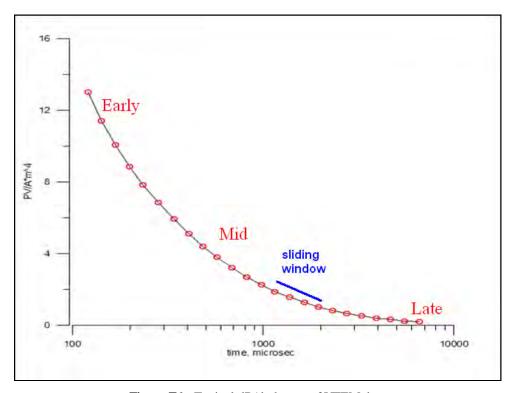


Figure F6 - Typical dB/dt decays of VTEM data

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September 2010

² by A.Prikhodko



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APPENDIX G

TEM Resistivity Depth Imaging (RDI)

Resistivity depth imaging (RDI) is technique used to rapidly convert EM profile decay data into an equivalent resistivity versus depth cross-section, by deconvolving the measured TEM data. The used RDI algorithm of Resistivity-Depth transformation is based on scheme of the apparent resistivity transform of Maxwell A.Meju (1998)¹ and TEM response from conductive half-space. The program is developed by Alexander Prikhodko and depth calibrated based on forward plate modeling for VTEM system configuration (Fig. 1-10).

RDIs provide reasonable indications of conductor relative depth and vertical extent, as well as accurate 1D layered-earth apparent conductivity/resistivity structure across VTEM flight lines. Approximate depth of investigation of a TEM system, image of secondary field distribution in half space, effective resistivity, initial geometry and position of conductive targets is the information obtained on base of the RDIs.

Maxwell forward modeling with RDI sections from the synthetic responses (VTEM system)

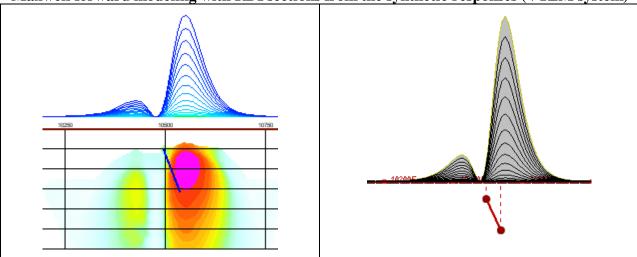


Fig. 1 Maxwell plate model and RDI from the calculated response for conductive "thin" plate (depth 50 m, dip 65 degree, depth extend 100 m).

¹ Maxwell A.Meju, 1998, Short Note: A simple method of transient electromagnetic data analysis, Geophysics, **63**, 405–410.



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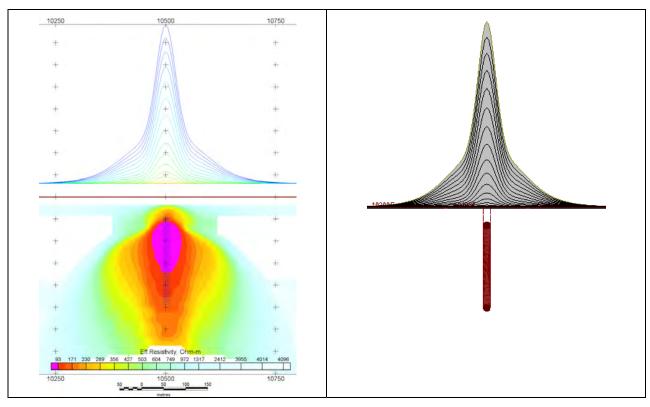


Fig. 2 Maxwell plate model and RDI from the calculated response for "thick" plate 18 m thickness, depth 50 m, depth extend 200 m).

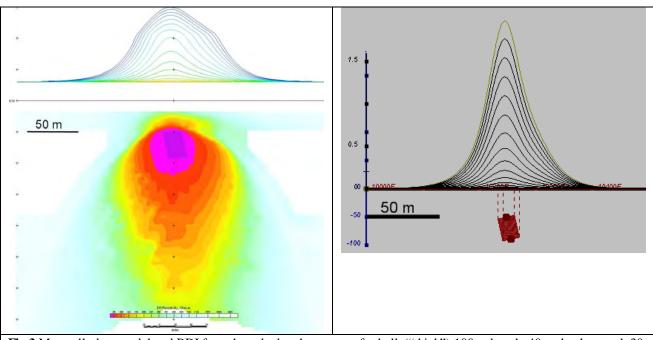


Fig.3 Maxwell plate model and RDI from the calculated response for bulk ("thick") 100 m length, 40 m depth extend, 30 m thickness

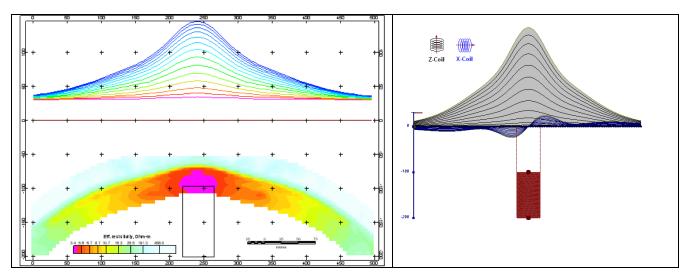


Fig. 4 Maxwell plate model and RDI from the calculated response for "thick" vertical target (depth 100 m, depth extend 100 m). 19-44 chan.

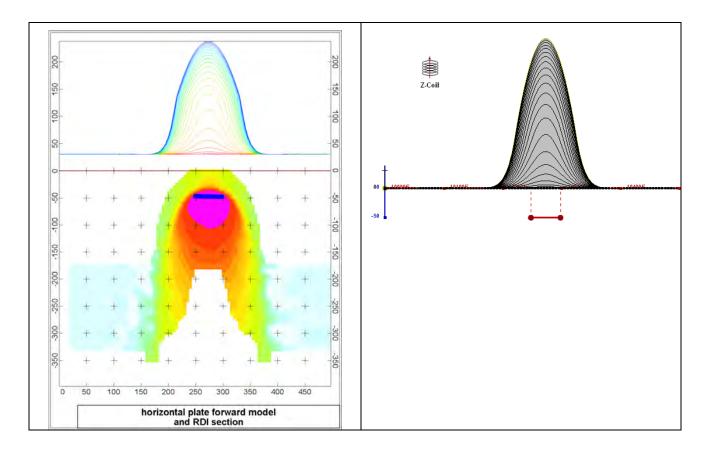


Fig. 5 Maxwell plate model and RDI from the calculated response for horizontal thin plate (depth 50 m, dim 50x100 m). 15-44 chan.

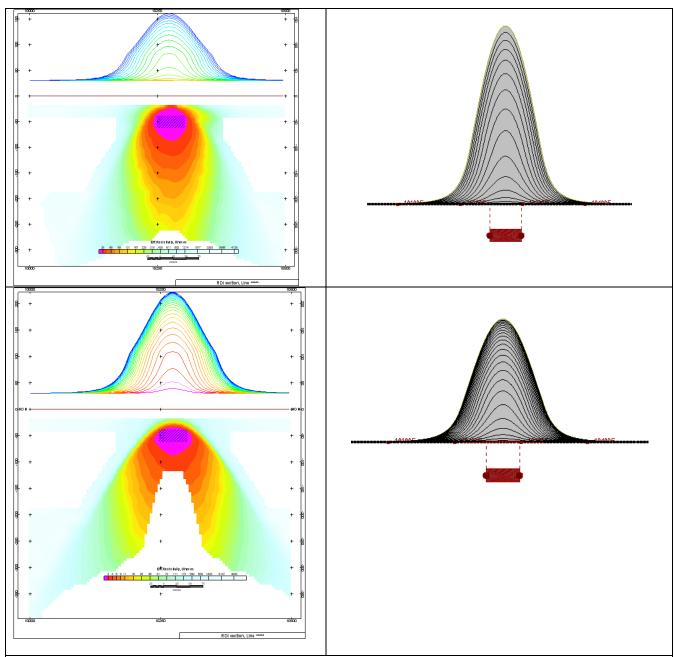


Fig.6 Maxwell plate model and RDI from the calculated response for horizontal thick (20m) plate – less conductive (on the top), more conductive (below)

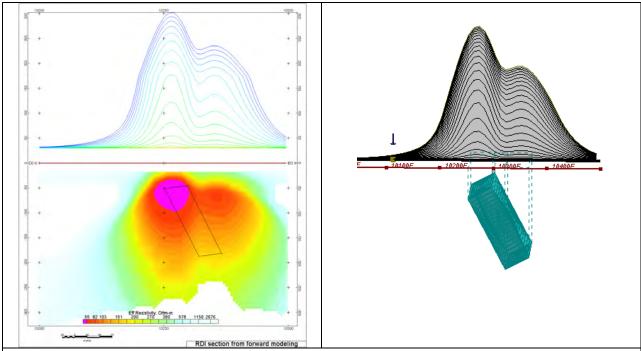


Fig.7 Maxwell plate model and RDI from the calculated response for inclined thick (50m) plate. Depth extend 150 m, depth to the target 50 m.

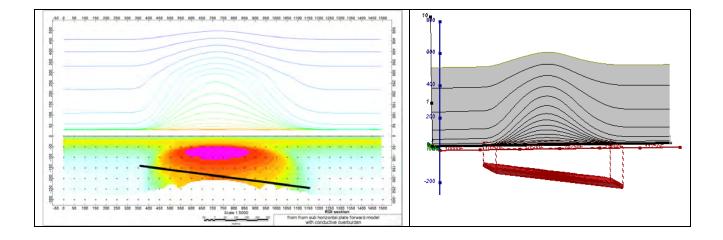


Fig.8 Maxwell plate model and RDI from the calculated response for the long, wide and deep sub horizontal plate (depth 140 m, dim 25x500x800 m) with conductive overburden.

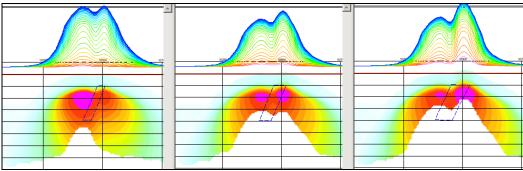


Fig.9 Maxwell plate models and RDIs from the calculated response for "thick" dipping plates (35, 50, 75 m thickness), depth 50 m, conductivity 2.5 S/m.

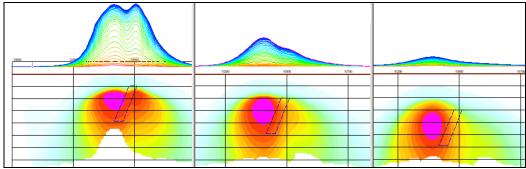


Fig.10 Maxwell plate models and RDIs from the calculated response for "thick" (35 m thickness) dipping plate on different depth (50, 100, 150 m), conductivity 2.5 S/m.

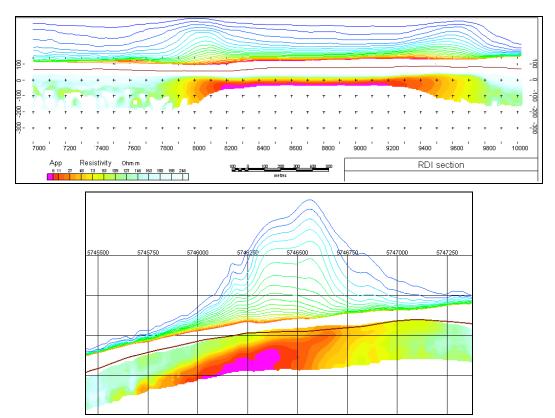
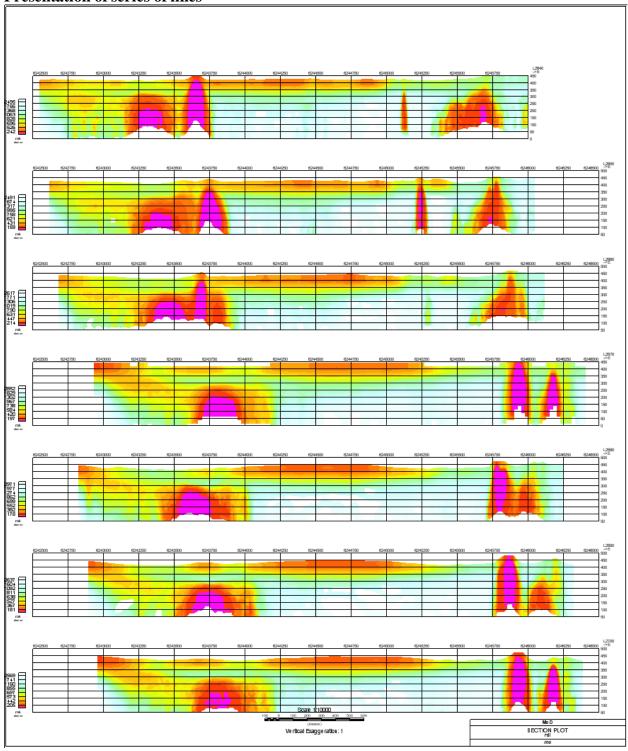


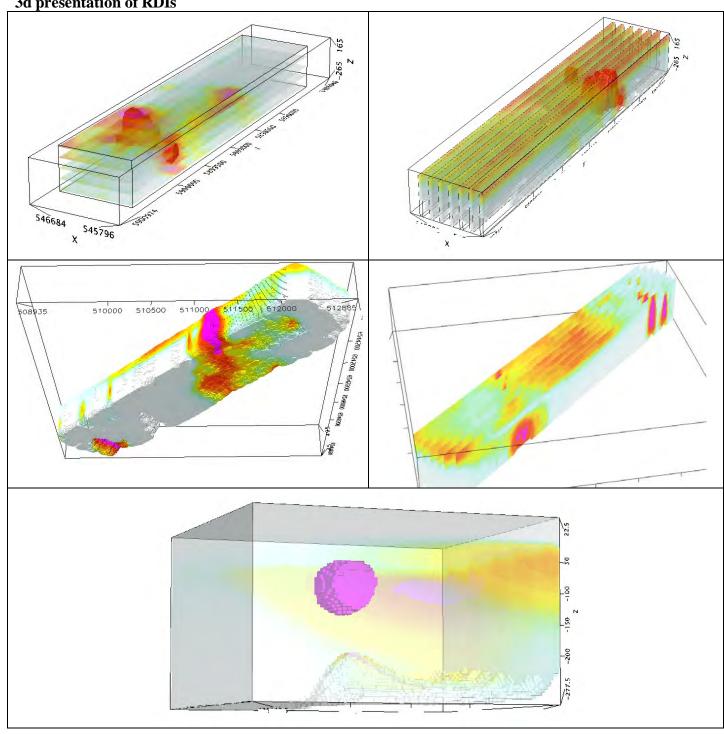
Fig.11 RDI section for the real horizontal and slightly dipping conductive layers

Forms of RDI presentation

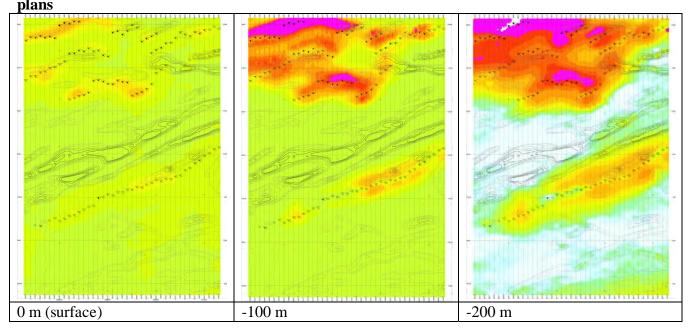
Presentation of series of lines

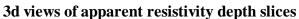


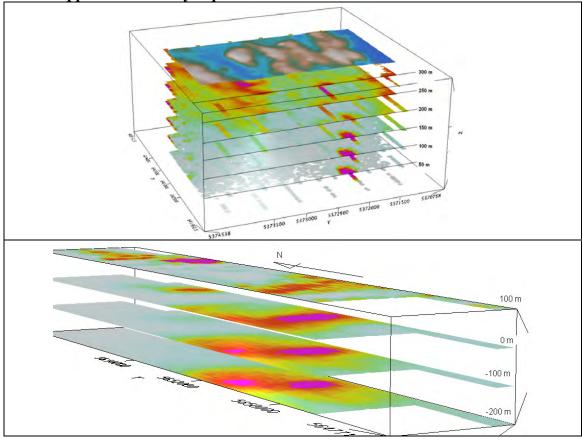
3d presentation of RDIs



Apparent Resistivity Depth Slices plans

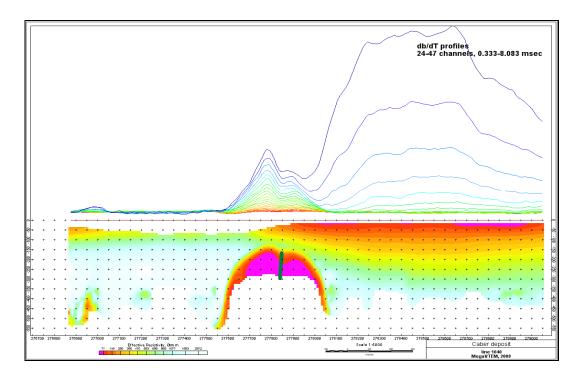




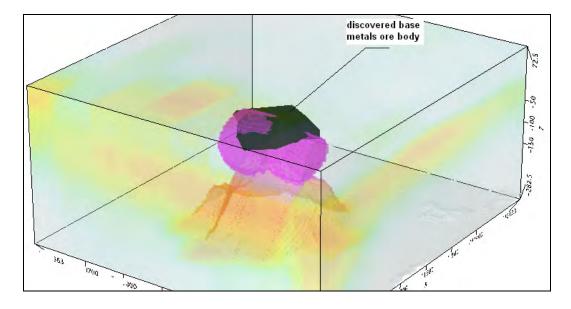


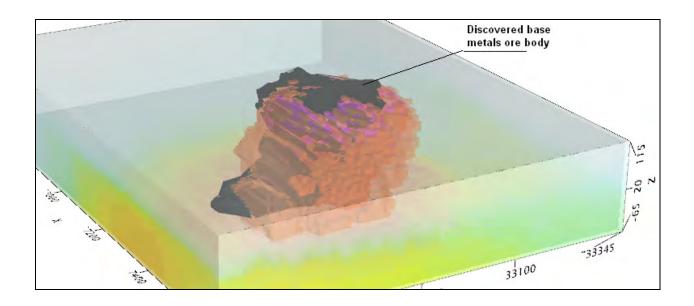
Real base metal targets in comparison with RDIs:

RDI section of the line over Caber deposit ("thin" sub vertical plate target and conductive overburden.



3d RDI voxels with base metals ore bodies (Middle East):





Alexander Prikhodko, PhD, P.Geo **Geotech Ltd.** April 2011

APPENDIX H

ELECTROMAGNETIC ANOMALY LISTING

х	У	Line	An	An	An	An	Anom	Anom_	An	Grad
			ConS	ConBF	TAUSF	TAUBF	_	Labels	BF32m	е
			F				ID			
464769	5430760	L1000:10	1.97	0.00	0.11	0.00	K	Α	0.00	1
467279	5431544	L1080:10	1.69	0.00	0.09	0.00	K	Α	0.28	1
467313	5431440	L1090:10	7.30	4.12	0.39	0.22	K	Α	0.96	2
467382	5431370	L1100:10	7.20	4.43	0.39	0.24	K	Α	0.71	2
467827	5431684	L1100:10	0.57	0.00	0.03	0.00	K	В	0.70	1
467469	5431305	L1110:10	1.03	0.00	0.06	0.00	K	Α	0.07	1
467797	5431170	L1140:10	0.00	0.00	0.00	0.00	K	Α	0.36	1
467831	5431073	L1150:10	9.48	9.28	0.51	0.50	K	Α	3.96	2
467876	5430984	L1160:10	0.00	0.00	0.00	0.00	K	Α	0.30	1
468857	5431430	L1180:10	1.35	0.00	0.07	0.00	K	Α	-0.12	1
468887	5431321	L1190:10	2.10	0.00	0.11	0.00	K	Α	0.07	1
468874	5431191	L1200:10	1.07	0.00	0.06	0.00	K	Α	-0.08	1
468564	5430609	L1230:10	2.48	0.00	0.13	0.00	K	Α	0.11	1
468637	5430540	L1240:10	5.16	0.00	0.28	0.00	K	Α	0.41	2
470552	5431024	L1310:9	40.93	64.23	2.20	3.45	K	Α	25.16	5
469572	5430219	L1320:9	4.53	0.00	0.24	0.00	K	Α	0.32	1
470596	5430934	L1320:9	0.00	0.00	0.00	0.00	K	В	0.72	1
470034	5430175	L1350:9	13.13	0.00	0.71	0.00	K	Α	1.38	3
470050	5430067	L1360:9	13.44	13.50	0.72	0.73	N	Α	11.60	3
470058	5429948	L1370:9	0.00	0.00	0.00	0.00	N	Α	0.14	1
470349	5430032	L1380:9	2.02	0.00	0.11	0.00	K	Α	0.00	1
470663	5430006	L1400:9	8.36	0.00	0.45	0.00	K	Α	1.25	2
470683	5429893	L1410:9	20.58	21.83	1.11	1.17	N	Α	13.10	4
470710	5429800	L1420:9	23.59	24.79	1.27	1.33	N	Α	53.74	4
470838	5429763	L1430:9	24.60	26.01	1.32	1.40	N	Α	28.74	4
470637	5429501	L1440:9	9.97	0.00	0.54	0.00	K	Α	1.94	2
470908	5429690	L1440:9	24.27	26.79	1.30	1.44	N	В	30.93	4
471005	5429634	L1450:9	37.51	52.49	2.02	2.82	N	Α	43.16	5
470102	5428880	L1460:9	1.96	0.00	0.11	0.00	N	Α	0.33	1
471125	5429598	L1460:9	22.10	26.04	1.19	1.40	N	В	13.47	4
471164	5429499	L1470:9	7.82	0.00	0.42	0.00	N	Α	1.39	2
469796	5428053	L1510:9	0.00	0.00	0.00	0.00	K	Α	0.36	1
471873	5429383	L1520:9	4.33	2.74	0.23	0.15	N	Α	0.00	1
471668	5429120	L1530:9	0.00	0.00	0.00	0.00	K	Α	0.30	1
471639	5428978	L1540:9	18.67	18.37	1.00	0.99	N	Α	17.32	3



х	У	Line	An	An	An	An	Anom	Anom_	An	Grad
			ConS	ConBF	TAUSF	TAUBF	_	Labels	BF32m	е
			F				ID	_		
472057	5429273	L1540:9	0.00	0.00	0.00	0.00	K	В	0.17	1
471769	5428947	L1550:9	27.63	28.18	1.49	1.52	N	Α	47.79	4
471824	5428869	L1560:9	13.87	0.00	0.75	0.00	K	Α	1.76	3
472035	5428649	L1590:8	1.78	0.00	0.10	0.00	N	Α	0.16	1
470961	5427895	L1590:8	13.63	0.00	0.73	0.00	K	В	0.17	3
470967	5427900	L2000:5	7.46	0.00	0.40	0.00	K	Α	0.52	2
471550	5427262	L2080:10	2.87	0.00	0.15	0.00	K	Α	-0.12	1
471618	5427180	L2090:10	2.51	0.00	0.13	0.00	K	Α	-0.03	1
472614	5427434	L2100:11	1.45	0.00	0.08	0.00	K	Α	0.04	1
471703	5426995	L2110:11	0.00	0.00	0.00	0.00	K	Α	0.88	1
472312	5427222	L2110:11	0.00	0.00	0.00	0.00	K	В	0.41	1
472622	5427331	L2110:11	0.00	0.00	0.00	0.00	K	С	0.06	1
472576	5427211	L2120:11	9.35	6.13	0.50	0.33	K	Α	1.77	2
471709	5426894	L2120:11	23.03	25.59	1.24	1.38	K	В	6.67	4
470812	5426249	L2150:11	3.02	0.00	0.16	0.00	K	Α	0.16	1
471332	5425797	L2210:11	0.00	0.00	0.00	0.00	K	Α	0.94	1
473304	5426515	L2210:11	5.69	0.00	0.31	0.00	K	В	0.37	2
473435	5426458	L2220:11	6.08	0.00	0.33	0.00	K	Α	0.49	2
472587	5426150	L2220:11	7.33	0.00	0.39	0.00	K	В	0.45	2
471362	5425702	L2220:11	0.00	0.00	0.00	0.00	K	С	0.82	1
471047	5425481	L2230:11	6.96	0.00	0.37	0.00	K	Α	0.42	2
471377	5425602	L2230:11	0.00	0.00	0.00	0.00	K	В	0.78	1
472672	5426075	L2230:11	2.14	0.00	0.11	0.00	K	С	0.07	1
473279	5426079	L2250:12	0.00	0.00	0.00	0.00	K	Α	0.61	1
472657	5425746	L2260:12	4.59	0.00	0.25	0.00	K	Α	0.30	1
473532	5425961	L2270:12	4.14	0.00	0.22	0.00	N	Α	0.18	1
472575	5425616	L2270:12	0.00	0.00	0.00	0.00	K	В	0.27	1
471472	5425211	L2270:12	0.00	0.00	0.00	0.00	K	С	0.63	1
471480	5425105	L2280:12	0.00	0.00	0.00	0.00	K	Α	0.95	1
472572	5425539	L2280:12	9.56	0.00	0.51	0.00	K	В	0.44	2
473626	5425888	L2280:12	11.04	0.00	0.59	0.00	K	С	1.95	3
472648	5425401	L2290:12	52.58	57.73	2.83	3.10	K	Α	35.57	6
472105	5425227	L2290:12	2.36	0.00	0.13	0.00	K	В	-0.03	1
471454	5424992	L2290:12	0.00	0.00	0.00	0.00	K	С	0.89	1
470659	5424594	L2300:12	6.59	0.00	0.35	0.00	K	Α	1.34	2
472138	5425133	L2300:12	5.80	0.00	0.31	0.00	K	В	0.83	2
470735	5424519	L2310:12	11.09	10.17	0.60	0.55	N	Α	5.80	3
470776	5424424	L2320:12	32.52	36.86	1.75	1.98	K	A	46.47	4
472824	5425172	L2320:12	12.54	10.80	0.67	0.58	K	В	2.89	3



H--2

х	У	Line	An	An	An	An	Anom	Anom_	An	Grad
			ConS	ConBF	TAUSF	TAUBF	_	Labels	BF32m	е
			F				ID			_
473095	5425161	L2330:12	23.74	50.01	1.28	2.69	K	Α	8.71	4
470849	5424344	L2330:12	8.35	7.81	0.45	0.42	K	В	2.54	2
470905	5424262	L2340:12	5.72	0.00	0.31	0.00	K	Α	0.70	2
473211	5425101	L2340:12	8.14	0.00	0.44	0.00	K	В	2.70	2
473227	5424996	L2350:12	17.20	17.08	0.92	0.92	K	Α	4.53	3
472916	5424885	L2350:12	22.14	24.11	1.19	1.30	K	В	5.83	4
471004	5424188	L2350:12	0.00	0.00	0.00	0.00	K	С	0.49	1
473269	5424907	L2360:12	0.00	0.00	0.00	0.00	K	В	1.67	1
472737	5424607	L2370:12	9.54	0.00	0.51	0.00	K	Α	1.51	2
472794	5424520	L2380:12	44.35	67.99	2.38	3.66	K	Α	29.81	5
472807	5424432	L2390:13	19.66	25.97	1.06	1.40	K	Α	6.54	3
470792	5429770	L3000:5	24.96	25.30	1.34	1.36	N	Α	59.81	4
470992	5429622	L3010:5	21.20	23.92	1.14	1.29	N	Α	18.49	4
471194	5429618	L3020:5	26.87	36.09	1.44	1.94	N	Α	15.62	4
471791	5428943	L3050:5	28.80	29.00	1.55	1.56	N	Α	70.50	4
471995	5429604	L3060:5	20.03	23.97	1.08	1.29	N	Α	6.89	4
472190	5429819	L3070:5	23.66	32.20	1.27	1.73	N	Α	9.13	4
472593	5429465	L3090:4	10.95	0.00	0.59	0.00	K	Α	1.61	3
472591	5428991	L3090:4	4.09	0.00	0.22	0.00	K	В	0.36	1
472790	5428825	L3100:4	0.00	0.00	0.00	0.00	K	Α	1.11	1
472791	5429093	L3100:4	9.42	9.46	0.51	0.51	N	В	5.62	2
472991	5429127	L3110:4	3.48	0.00	0.19	0.00	N	Α	0.40	1
472993	5428876	L3110:4	29.37	38.03	1.58	2.04	K	В	14.87	4
473194	5428106	L3120:4	8.81	0.00	0.47	0.00	K	Α	0.87	2
473193	5429055	L3120:4	10.63	0.00	0.57	0.00	N	В	2.58	3
473192	5429604	L3120:4	30.81	37.60	1.66	2.02	N	С	13.45	4
473392	5429775	L3130:4	17.29	21.15	0.93	1.14	N	Α	6.31	3
473593	5429000	L3140:4	17.41	17.43	0.94	0.94	N	Α	10.57	3
473594	5429470	L3140:4	5.17	0.00	0.28	0.00	N	В	1.30	2
473794	5429189	L3150:4	10.14	0.00	0.55	0.00	N	Α	2.22	3
473792	5428344	L3150:4	2.24	0.00	0.12	0.00	N	В	0.28	1
473992	5427866	L3160:4	6.74	2.56	0.36	0.14	N	Α	0.76	2
473993	5428404	L3160:4	2.46	0.00	0.13	0.00	N	В	0.25	1
473993	5428773	L3160:4	13.37	9.93	0.72	0.53	N	С	3.70	3
473992	5428942	L3160:4	12.53	12.93	0.67	0.69	N	D	4.38	3
473995	5429230	L3160:4	6.82	0.00	0.37	0.00	N	E	0.99	2
474194	5428921	L3170:4	39.06	56.71	2.10	3.05	N	Α	24.78	5
474194	5428434	L3170:4	3.33	0.00	0.18	0.00	N	В	0.67	1
474195	5428166	L3170:4	3.13	0.00	0.17	0.00	K	С	0.52	1



х	У	Line	An	An	An	An	Anom	Anom_	An	Grad
			ConS	ConBF	TAUSF	TAUBF	_	Labels	BF32m	е
			F				ID			
474393	5428273	L3180:4	22.20	23.29	1.19	1.25	N	Α	17.17	4
474395	5428920	L3180:4	48.67	90.30	2.62	4.85	N	В	47.94	5
474395	5429266	L3180:4	15.47	16.92	0.83	0.91	N	С	7.90	3
474591	5429316	L3190:4	12.76	11.08	0.69	0.60	N	Α	4.27	3
474592	5428931	L3190:4	27.30	42.23	1.47	2.27	N	В	27.27	4
474592	5428333	L3190:4	18.90	17.89	1.02	0.96	N	С	5.99	3
474796	5428353	L3200:4	8.12	6.31	0.44	0.34	N	Α	1.49	2
474796	5428932	L3200:4	60.63	106.81	3.26	5.74	N	В	79.35	6
474991	5429312	L3210:4	11.61	11.21	0.62	0.60	Ν	Α	4.98	3
474993	5428951	L3210:4	17.77	19.70	0.96	1.06	N	В	9.97	3
474992	5428371	L3210:4	8.88	8.71	0.48	0.47	N	С	4.96	2
475193	5428441	L3220:4	3.02	0.00	0.16	0.00	N	Α	0.54	1
475196	5428940	L3220:4	7.19	5.39	0.39	0.29	N	В	1.43	2
475196	5429289	L3220:4	8.36	4.34	0.45	0.23	N	С	2.12	2
475395	5429242	L3230:4	7.02	0.00	0.38	0.00	N	Α	2.22	2
475393	5428938	L3230:4	10.76	10.75	0.58	0.58	N	В	7.19	3
475394	5428530	L3230:4	6.02	0.00	0.32	0.00	N	С	1.12	2
475591	5428685	L3240:4	60.67	79.70	3.26	4.29	N	Α	185.03	6
475593	5428932	L3240:4	20.63	35.29	1.11	1.90	N	В	20.57	4
475591	5429233	L3240:4	17.80	19.59	0.96	1.05	N	С	30.06	3
475792	5429226	L3250:4	69.20	103.34	3.72	5.56	N	Α	69.35	6
475796	5428936	L3250:4	29.50	70.70	1.59	3.80	N	В	31.33	4
475796	5428754	L3250:4	54.21	74.20	2.91	3.99	N	С	311.47	6
475794	5427494	L3250:4	16.41	16.06	0.88	0.86	K	D	8.54	3
475991	5427566	L3260:4	14.41	14.58	0.77	0.78	K	Α	5.24	3
475994	5428762	L3260:4	45.60	59.56	2.45	3.20	N	В	266.96	5
475993	5429002	L3260:4	34.89	76.12	1.88	4.09	N	С	54.51	4
475992	5429253	L3260:4	32.13	55.66	1.73	2.99	N	D	37.34	4
475994	5429838	L3260:4	27.00	34.43	1.45	1.85	K	Е	12.16	4
474750	5425746	L4010:4	5.88	0.00	0.32	0.00	K	Α	0.60	2
474749	5425092	L4010:4	9.11	0.00	0.49	0.00	K	В	1.27	2
475149	5425717	L4030:4	9.83	8.19	0.53	0.44	N	Α	2.15	2
476348	5425574	L4090:4	2.85	0.00	0.15	0.00	K	Α	0.25	1
476554	5425743	L4100:4	3.18	0.00	0.17	0.00	K	Α	0.19	1
476748	5425601	L4110:4	10.82	0.00	0.58	0.00	K	Α	2.59	3
476952	5425576	L4120:4	0.00	0.00	0.00	0.00	K	Α	0.61	1
477150	5425526	L4130:4	0.00	0.00	0.00	0.00	K	Α	0.23	1
477349	5425183	L4140:4	7.28	4.86	0.39	0.26	K	Α	1.17	2
477349	5425339	L4140:4	3.29	0.00	0.18	0.00	K	В	0.32	1



Х	У	Line	An	An	An	An	Anom	Anom_	An	Grad
			ConS	ConBF	TAUSF	TAUBF	_	Labels	BF32m	е
			F				ID			
477548	5425751	L4150:4	17.11	0.00	0.92	0.00	K	Α	1.85	3
478348	5425611	L4190:2	2.83	0.00	0.15	0.00	K	Α	0.07	1
479549	5423787	L4250:1	0.00	0.00	0.00	0.00	K	Α	1.52	1
470097	5429944	T1840:3	9.78	0.00	0.53	0.00	N	Α	0.92	2
470560	5431029	T1850:3	47.27	69.83	2.54	3.75	K	Α	33.88	5
471766	5427058	T2810:3	2.01	0.00	0.11	0.00	K	Α	0.47	1
470624	5424353	T2830:3	5.80	0.00	0.31	0.00	N	Α	0.89	2
473174	5428202	T3810:3	0.00	0.00	0.00	0.00	K	Α	0.64	1





Scale 1 inch to 4 miles

Cook Lake mine (McKenna-McCann) (Jb9a)

listed and indicated separately on the map.

THE MAP INDEX

208,000 lbs.

Empress mine (Ka9a)

was as follows:

the Schreiber area.

periodic News Releases of these departments.


Energy, Mines and Resources, Ottawa.

C Reconnaissance mapping; 1" to 4 miles, or smaller.

SECTION A-B

D Unmapped.

and Resources, Ottawa.



Scale 1:253,440 or 1 Inch to 4 Miles

KNOWN AND INFERRED AGE

RELATIONS OF THE PRECAMBRIAN ROCKS

