

Report
On a Helicopter-Borne
Electromagnetic and Magnetic Survey

Carried out by

Aeroquest Ltd.

Under Contract to

Billiken Management

On behalf of Spider and KWG Resources Inc.
and Participating Companies

McFauld's Lake Area, James Bay Lowlands

Ontario, Canada



SCOTT HOGG & ASSOCIATES LTD

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TABLE OF CONTENTS

1	INTRODUCTION	2
2	SURVEY LOCATION	2
3	MINING CLAIMS	3
4	AIRBORNE SURVEY	7
4.1	AeroTem II Electromagnetic System	7
4.2	AeroTem II System Geometry and Response Shape	9
4.3	Magnetometers	10
5	COMPILATION and PRESENTATION	10
5.1	Magnetics	10
5.2	Electromagnetics	10
6	INTERPRETATION OVERVIEW	11
7	DISCUSSION AND RECOMMENDATIONS.....	12

Maps included with this report:

Total Magnetic Field Contours: For each of five surveys at 1:20,000 scale

HLEM Profiles: For each of five surveys at 1:20,000 scale

1 INTRODUCTION

In the mid 1990s, KWG Resources Inc. and Spider Resources Inc. discovered a group of five Precambrian kimberlites in the James Bay Lowlands of Ontario. The kimberlite group was known as the *Kyle Series* and were designated Kyle 1 through Kyle 5. The kimberlites were identified in a regional fixed-wing aeromagnetic survey, carried out by the partners between 1993 and 1995.

In late 2007, Noront Resources Ltd. wished to carry out a series of helicopter-borne magnetic and electromagnetic surveys over its properties in the McFauld's Lake Area, immediately west of the Kyle Kimberlites. Other companies with properties in the vicinity of Noront, wished to participate in the airborne geophysical program. KWG and Spider seized this opportunity to have the Kyle properties surveyed by helicopter-borne magnetics and electromagnetics. The partners wished to test if there was any conductivity associated with the kimberlites, and to perhaps identify other conductive bodies on the property that were not identifiable by magnetic contrast to the host rock.

To meet the objectives of a multi-partner program, Noront arranged for Billiken Management to manage the operation. Billiken contracted Aeroquest Ltd. to fly the survey using the AeroTem II helicopter transient electromagnetic system, on behalf of Spider, KWG and the other participants. Scott Hogg & Associates Ltd. were contracted to provide technical management, compilation and interpretation services.

The five small surveys flown on behalf of KWG and Spider were part of a campaign of 76 similar blocks. The survey was based out of Billiken's McFauld's Lake camp. Additional helicopter fuel was cached for more remote surveys. A total of 4242 line kilometers of data were collected, over the period February 25 to March 25, 2008. A total of 470 km were flown over the Kyle properties. This report provides the results of the five surveys and recommendations for any follow-up.

2 SURVEY LOCATION

The five surveys were located in the James Bay Lowlands of Ontario. See Figure 1.

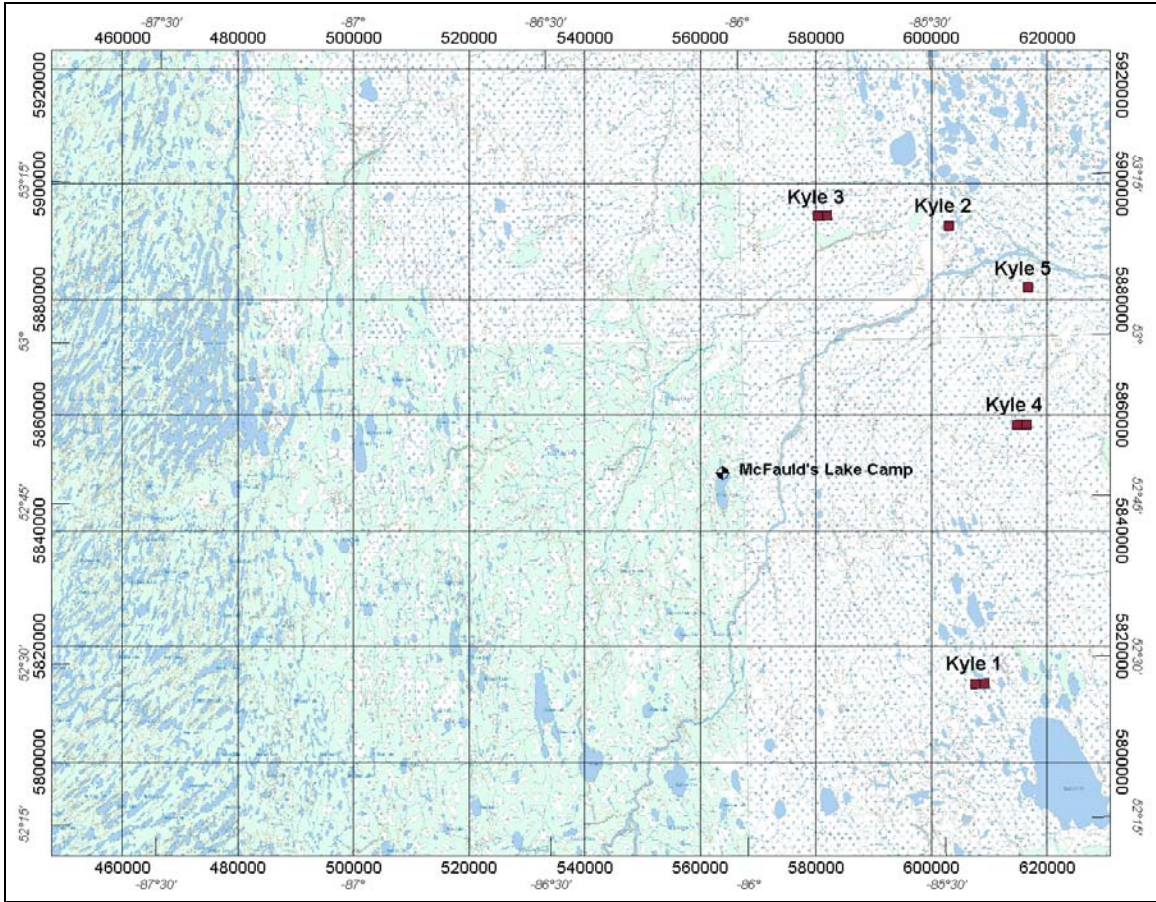


Figure 1 – Kyle Claim Series

3 MINING CLAIMS

Eight 16-unit mining claims, held by KWG and Spider were covered by the surveys. They are:

1160154, 1160155, 1160174, 1160175, 1207222, 1207223, 3008386 and 3008387

Individual sketches are presented below.

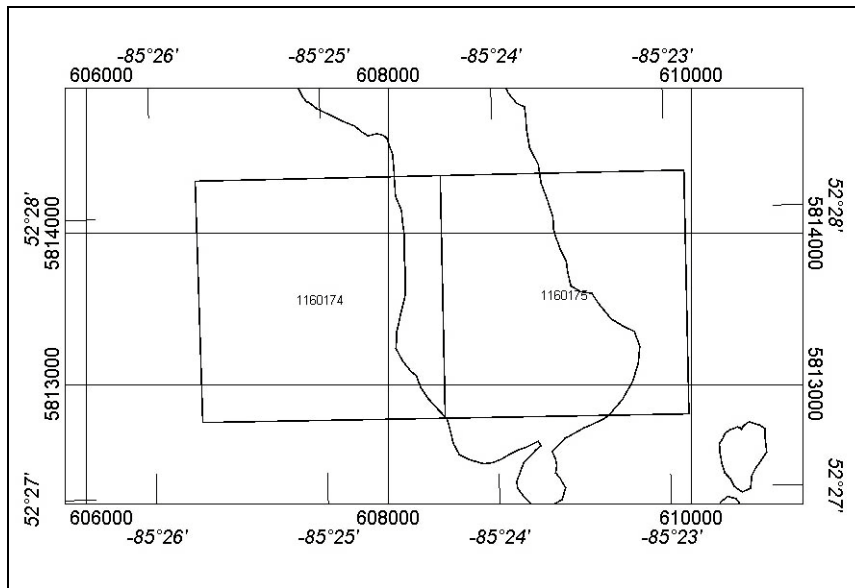


Figure 2a: Kyle 1 Claim Group

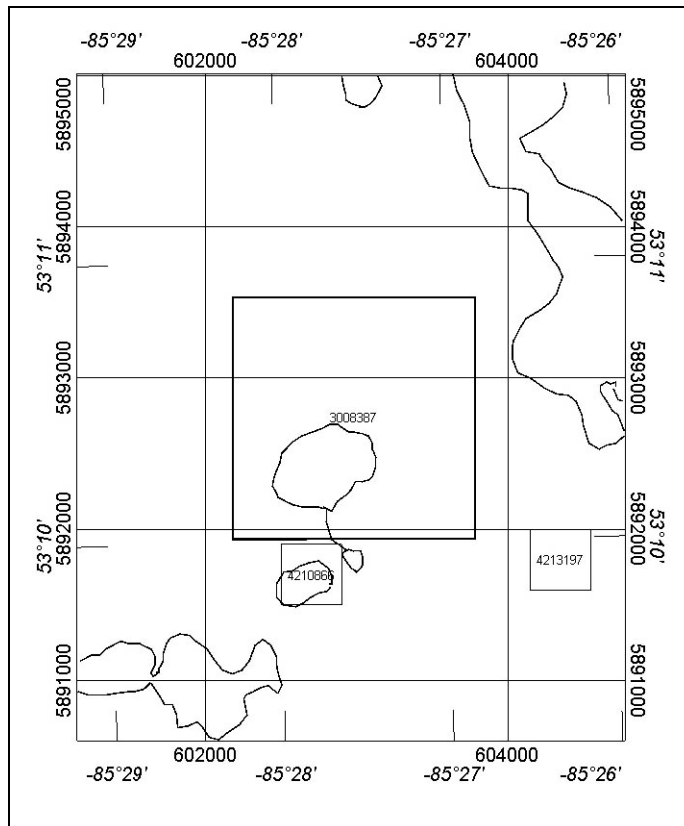


Figure 2b: Kyle 2 Claim

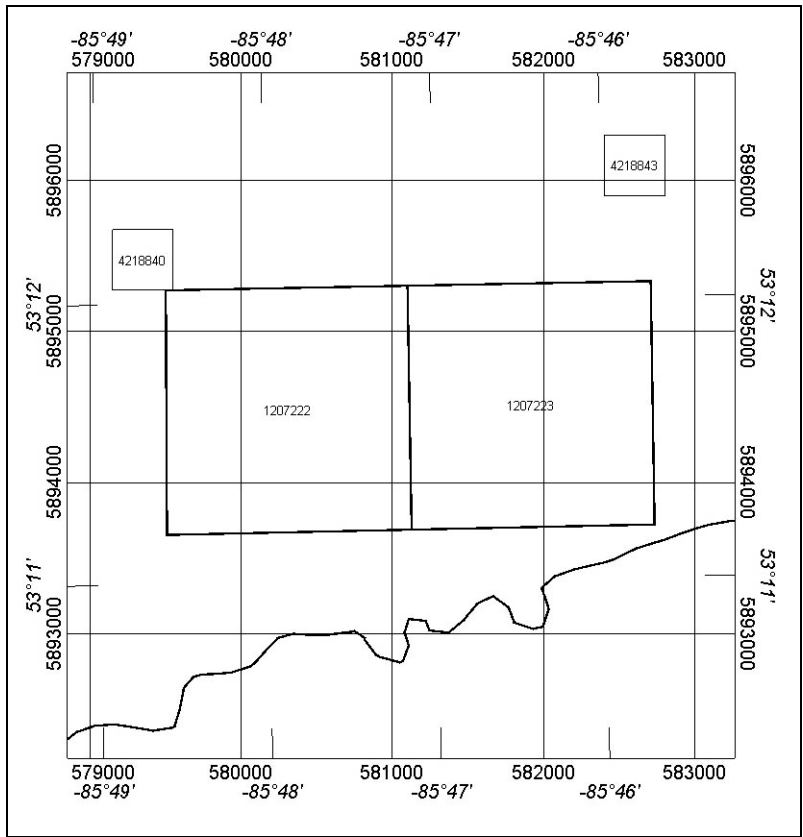


Figure 2c: Kyle 3 Claim Group

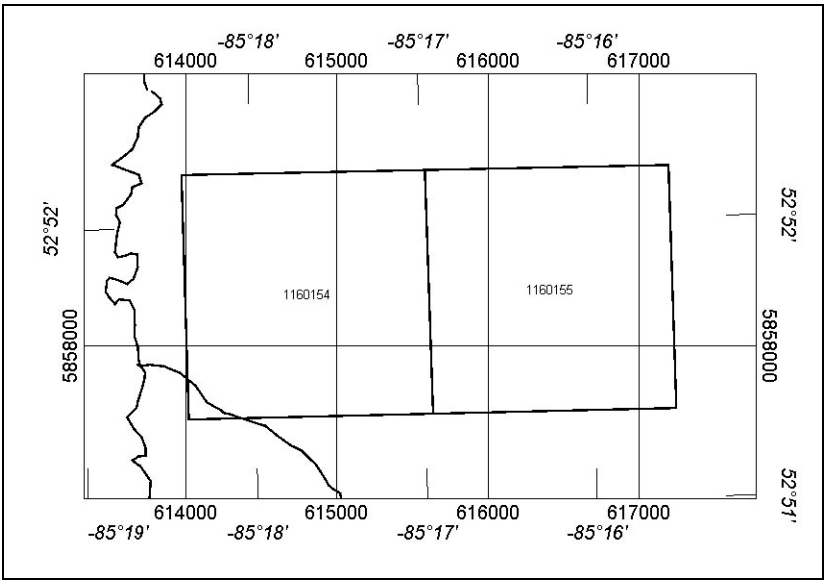


Figure 2d: Kyle 4 Claim Group

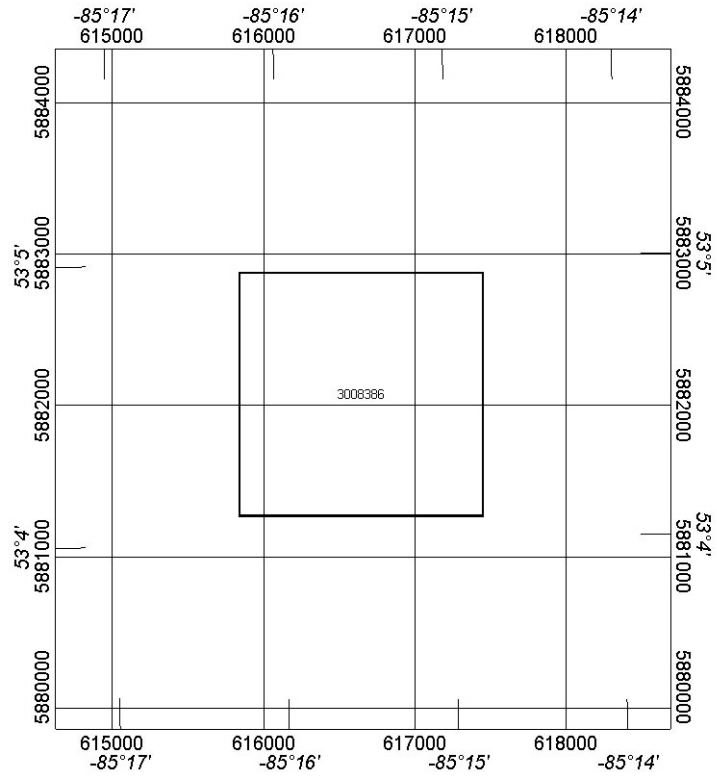


Figure 2e: Kyle 5 Claim

4 AIRBORNE SURVEY

4.1 AeroTem II Electromagnetic System

The AeroTem II system uses a superimposed dipole configuration with the receiver located within the transmitter loop. The transmitter axis is vertical (Z). The receiver has two independent axes; vertical Z and in the direction of flight X. The transmitter current waveform is a triangular ramp, repeated with reversing polarity at 150 Hz. The receiver measures the secondary field at intervals during and after the transmitter current pulse.

A plot of the transmitted pulse, along with on-time and off-time channels is presented in Figure 4.

The system was towed 36 metres below the helicopter at a nominal terrain clearance of 30 metres.

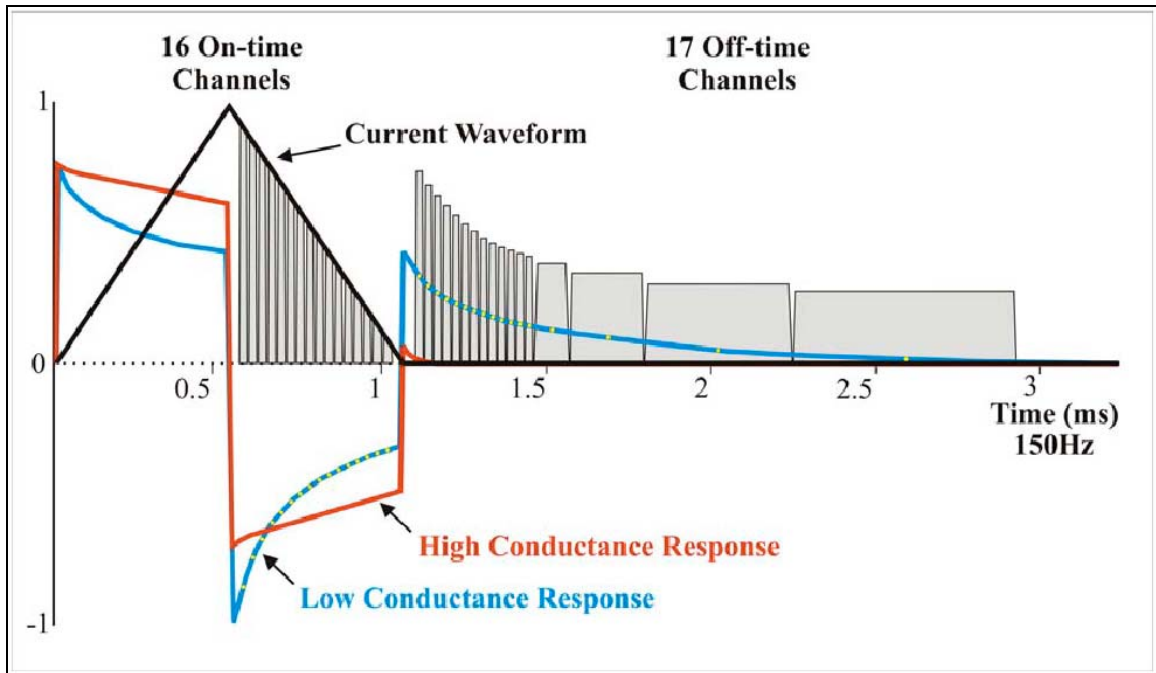


Figure 4 - AeroTem II System: The current waveform, or primary field B_p , is illustrated as black line together with the location of the On-time and Off-time channels. The receiver measures the derivative of the secondary field dB_s/dt , as illustrated by the red or blue profiles, for each of these channels. An anomaly from a high conductance source will decay more slowly than that of a low conductance source.

Time Channels

Channel:	Start Gate	End Gate	Start (us)	Stop (us)	Mid (us)	Width (us)
1 ON	25	25	651.0	677.0	664.0	26.0
2 ON	26	26	677.0	703.1	690.1	26.0
3 ON	27	27	703.1	729.1	716.1	26.0
4 ON	28	28	729.1	755.2	742.1	26.0
5 ON	29	29	755.2	781.2	768.2	26.0
6 ON	30	30	781.2	807.2	794.2	26.0
7 ON	31	31	807.2	833.3	820.3	26.0
8 ON	32	32	833.3	859.3	846.3	26.0
9 ON	33	33	859.3	885.4	872.3	26.0
10 ON	34	34	885.4	911.4	898.4	26.0
11 ON	35	35	911.4	937.4	924.4	26.0
12 ON	36	36	937.4	963.5	950.5	26.0
13 ON	37	37	963.5	989.5	976.5	26.0
14 ON	38	38	989.5	1015.6	1002.5	26.0
15 ON	39	39	1015.6	1041.6	1028.6	26.0
16 ON	40	40	1041.6	1067.6	1054.6	26.0
1 OFF	45	45	1171.8	1197.8	1184.8	26.0
2 OFF	46	46	1197.8	1223.9	1210.9	26.0
3 OFF	47	47	1223.9	1249.9	1236.9	26.0
4 OFF	48	48	1249.9	1276.0	1262.9	26.0
5 OFF	49	49	1276.0	1302.0	1289.0	26.0
6 OFF	50	50	1302.0	1328.0	1315.0	26.0
7 OFF	51	51	1328.0	1354.1	1341.1	26.0
8 OFF	52	52	1354.1	1380.1	1367.1	26.0
9 OFF	53	53	1380.1	1406.2	1393.1	26.0
10 OFF	54	54	1406.2	1432.2	1419.2	26.0
11 OFF	55	55	1432.2	1458.2	1445.2	26.0
12 OFF	56	56	1458.2	1484.3	1471.3	26.0
13 OFF	57	60	1484.3	1588.4	1536.4	104.2
14 OFF	61	68	1588.4	1796.8	1692.6	208.3
15 OFF	69	84	1796.8	2213.4	2005.1	416.6
16 OFF	85	110	2213.4	2890.4	2551.9	677.0

AeroTem II Time Gates: The blue shading indicates measurements taken during the transmitted pulse, the On-Time. The yellow shading indicates those taken during the Off-Time, following the pulse.

4.2 AeroTem II System Geometry and Response Shape

The system geometry, as defined by the relative orientation and position of the transmitter and receiver, influences the shape of response for a given geologic conductor or target. This response shape is sensitive to the form of the target but is largely independent of the conductivity of the target. The figure below presents the response shape for a thin sheet conductor in various orientations for a generalized superimposed dipole system. In the case of the AeroTem II, only the Tz-Rz and Tz-Rx combinations are relevant.

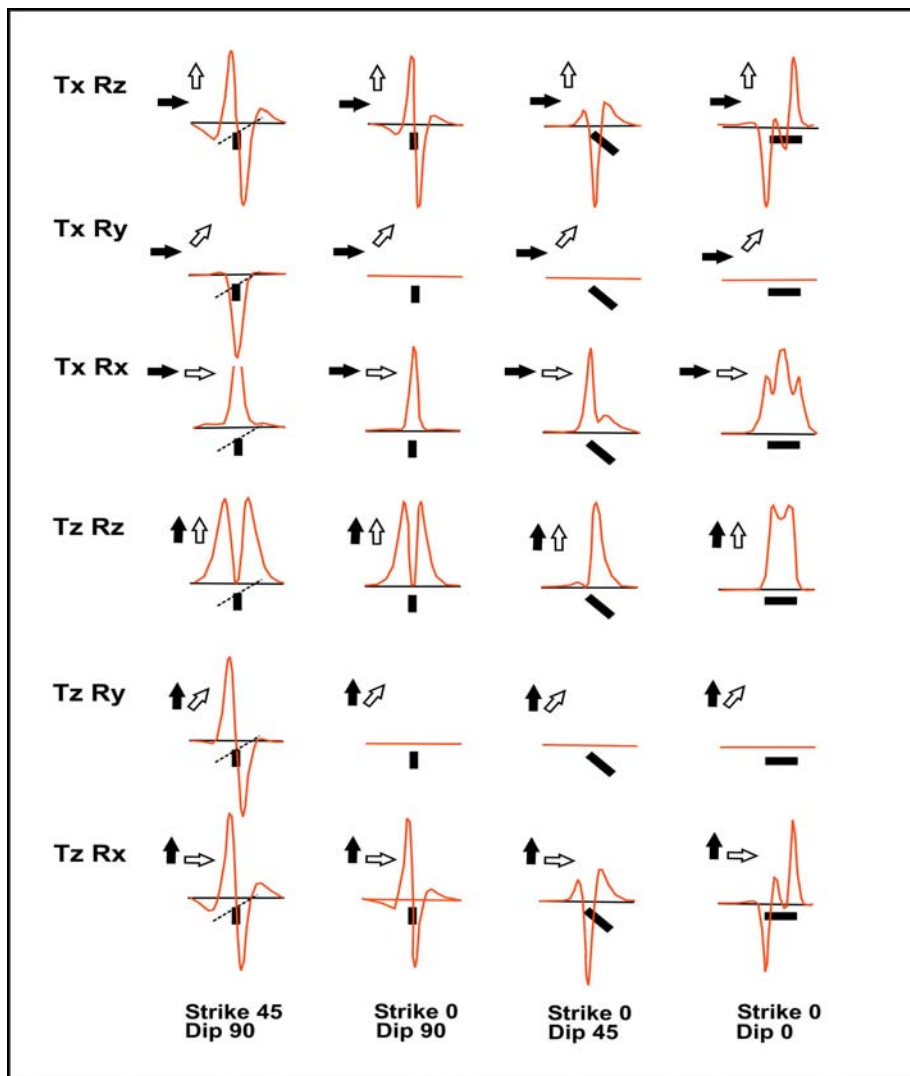


Figure 5 - Response shapes for a superimposed dipole electromagnetic system. A thin rectangular plate, 300 m in strike extent, 150 m in depth extent, 50 m below sensor with a conductance of 60 S was modelled with the University of Toronto Plate program. Strike and dip are indicated as are the axis of the transmitter and receiver antennae dipoles. The response amplitude has been normalized.

The Tz-Rz configuration is minimum coupled with a vertical thin sheet when the system is directly overhead. This results in an "M" shaped response. As the horizontal thickness of the conductor increases, induced currents can flow across the sheet and the central null is reduced. When the width is of the same order as the other dimensions, like a sphere, the null disappears completely and a simple broad peak over the conductor results. As the dip of the sheet decreases an asymmetry of the side lobes becomes evident with the greater amplitude on the down dip side. This asymmetry is most notable between about 60 and 30 degrees. With shallower dip the smaller lobe is relatively very weak and a slightly asymmetric single peak is the dominant signature. In the case of near horizontal conducting layers the response amplitude stabilizes within the unit but if the edges are sharply defined, edge effects will be noted.

4.3 Magnetometers

Two Geometrics optically pumped cesium sensors recorded the total magnetic field. One was located on the electromagnetic bird, the second sensor was towed 17 metres below the helicopter at a nominal terrain clearance of 47 metres. A magnetic base station was located at the base of operations and recorded variations were used for diurnal correction

5 COMPILATION AND PRESENTATION

5.1 Magnetics

The upper magnetometer, located above the electromagnetic bird was used for map compilation. Variations recorded by the magnetic base station were subtracted to remove diurnal magnetic variation. The corrected profile was gridded using at 25 metre cell size.

5.2 Electromagnetics

The electromagnetic data for Off-Time Z channels 4 through 15 were selected for map presentation. The early range of these profile responses will respond to both low and high conductance features, while the later channels will tend to favour the higher conductance features.

6 INTERPRETATION OVERVIEW

At the present time the electromagnetic data is available only in its raw form, as collected in the field. Most anomalies are identifiable at this stage but the reliable identification of weaker responses and reliable estimates of time-constants, conductivity and depth must await fully levelled and calibrated data.

The McFaulds VMS deposits discovered by Spider-KWG are copper-zinc bearing and have been compared to those in the Matagami area of Quebec. An electromagnetic signature has been identified at the sites, initially by the fixed-wing GeoTem system, as well as the VTEM and AeroTem helicopter systems. In addition to a conductivity anomaly the deposits tend to have an associated magnetic signature.

The conductivity expectations for a zinc rich VMS deposit are tempered by the fact that zinc sulphide is not a notable conductor as illustrated in table 1, below. Due to the usually associated presence of chalcopyrite and pyrrhotite, copper-zinc VMS deposits are often moderately conductive. It might be speculated that very rich zinc deposits may exist but remain undetected since the primary exploration method, electromagnetics, would be ineffective for a pure sphalerite deposit.

The Noront Eagle One is a copper-nickel MMS deposit. It also provided an electromagnetic signature on the fixed-wing and helicopter electromagnetic systems and has an associated magnetic anomaly. Nickel deposits can have very high associated conductivity.

A third deposit type in the area is the Spider, KWG, Freewest chrome-platinum-palladium discovery in a peridotite host. Conductivity expectations for such mineralization are variable; chromite is not a notable conductor but other sulphides in the formation may create a significant electromagnetic anomaly. The peridotite host is a notable magnetic rock.

Mineral		Conductivity (mhos/m)	Resistivity (ohm-m)
Millerite	NiS	3333333.33	3.00E-07
Niccolite	NiAs	50000.00	2.00E-05
Pyrrhotite	FeS	10000.00	1.00E-04
Arsenopyrite	FeAsS	1000.00	1.00E-03
Galena	PbS	500.00	2.00E-03
Chalcopyrite	CuFeS ₂	250.00	4.00E-03
Graphite	C	100.00	1.00E-02
Cassiterite	SnO ₂	5.00	2.00E-01
Pyrite	FeS ₂	3.33	3.00E-01
Magnetite	Fe ₃ O ₄	3.33	3.00E-01
Hematite	Fe ₂ O ₃	0.10	1.00E+01
Sphalerite	ZnS	0.01	1.00E+02

In the McFaulds Lake environment, a higher conductivity may be encouraging but is not considered a prerequisite for a significant deposit. Higher conductances might be considered more typical of the copper and nickel bearing mineralization while low to moderate conductances might be considered more typical of the copper-zinc or the chromitite-platinum group mineralization.

The conductivity anomalies of the known VMS deposits in the area are of limited size. This attribute of limited strike length is typical for VMS deposits in general. An isolated response, limited to a few flight lines is a normal expectation. A coincident or adjacent magnetic signature is also a common VMS and MMS attribute. A similar scale magnetic anomaly might be considered an encouraging factor but it should not be considered a prerequisite.

7 DISCUSSION AND RECOMMENDATIONS

Naturally, the five kimberlites are all mapped very well in the total magnetic field maps of the five surveys. The following discussion will be limited to the electromagnetic results.

Kyle 1: There is no observed EM response relating to the kimberlite body. The Kyle 1 body lies beneath 120m of Paleozoic cover and overburden, which includes a shallow lake. There is broad EM response across the survey, especially in the early channels. This is undoubtedly due to surface conductivity associated with the lake and surrounding overburden. No conductivity associated with bedrock features was noted.

Kyle 2: There is no observed EM response relating to the kimberlite body. No conductivity associated with bedrock features was noted.

Kyle 3: There is no observed EM response relating to the kimberlite body. No conductivity associated with bedrock features was noted.

Kyle 4: There is no observed EM response relating to the kimberlite body. As with Kyle 1, there is a broad response that is associated with overburden conductivity. No conductivity associated with bedrock features was noted.

Kyle 5: There is no observed EM response relating to the kimberlite body. No conductivity associated with bedrock features was noted.

Respectfully submitted,

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Toronto, Canada
April 29, 2008