

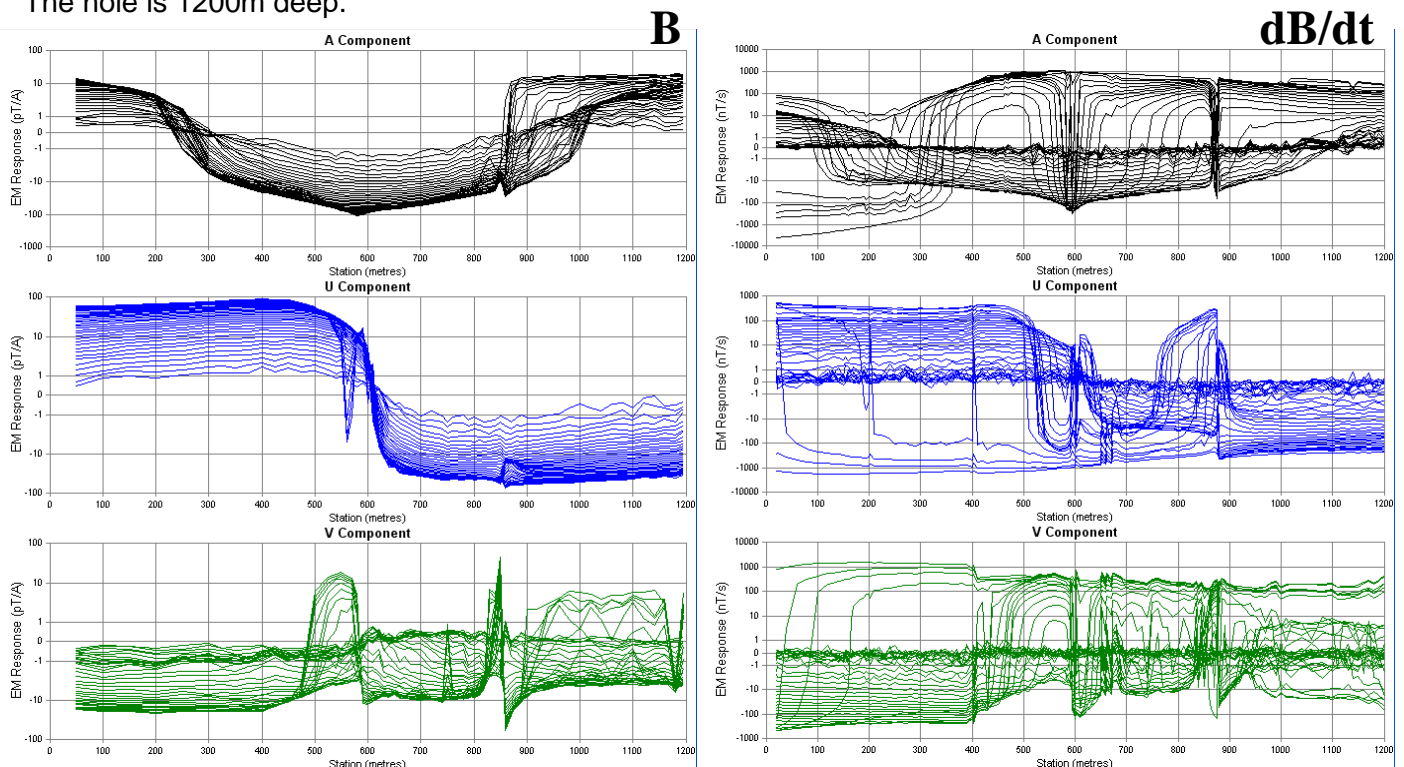
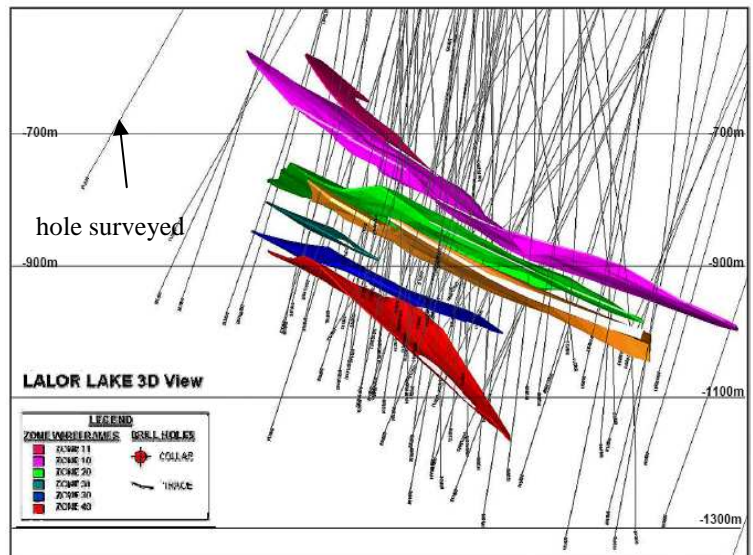
6 / 9 The Avenue, Midland,
 WA 6056 AUSTRALIA
 Ph: +61 8 9250 8100
 Fax: +61 8 9250 7100
 www.electromag.com.au
 info@electromag.com.au



Drill Hole TEM at Lalor Lake VMS Deposit, Manitoba

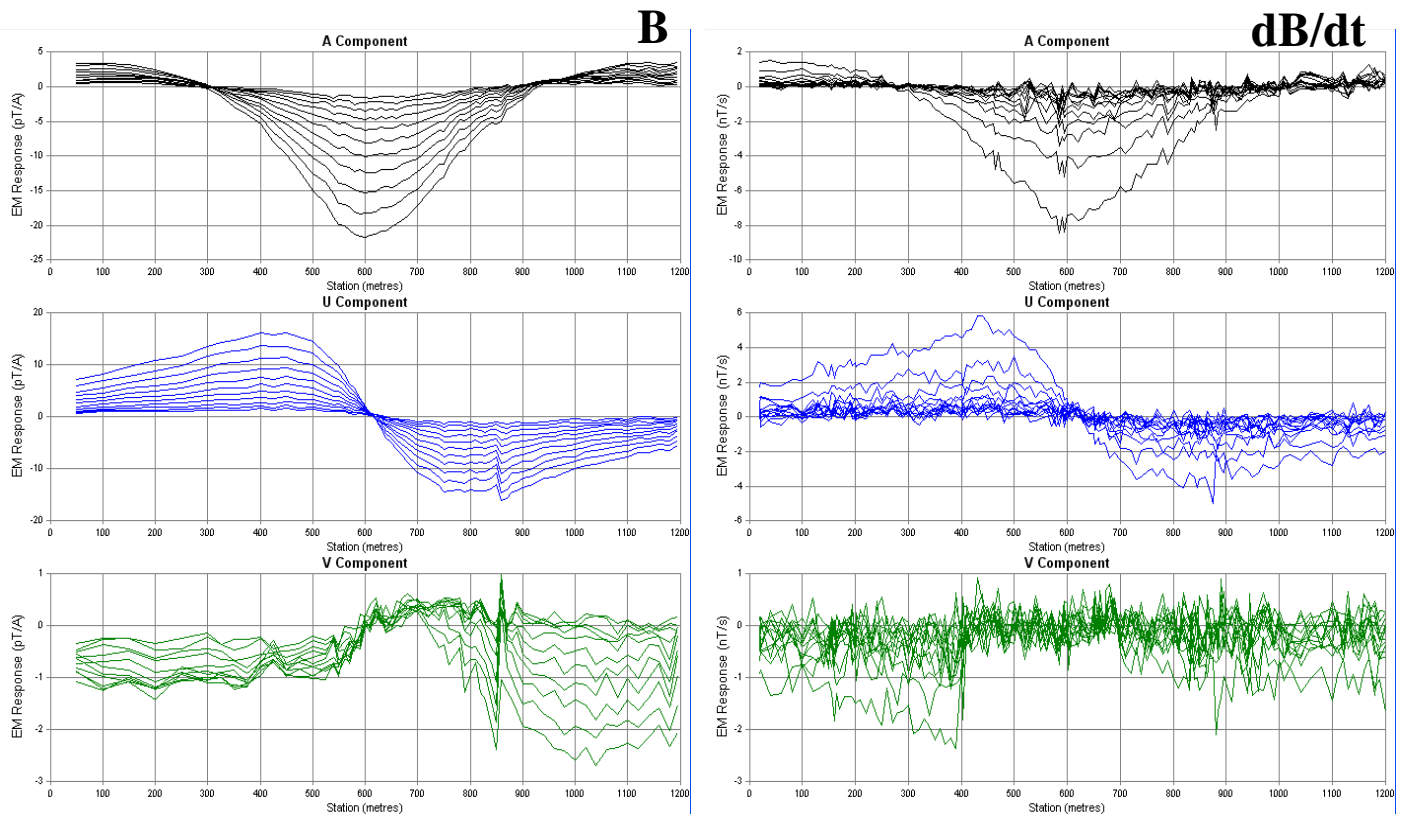
The Lalor Lake VMS Deposit near Snow Lake in Manitoba, Canada was discovered by HudBay Minerals Inc in 2007. As at May, 2010, it has an Indicated Mineral Resource over several zones including 13.3 Mt at 8.87% zinc and has considerable resources of gold, silver and copper. Depth to the top of the deposit is approximately 570m.

In July, 2010, DigiAtlantis TEM data was collected in several drill holes at the Lalor Lake Deposit. The example presented here is from a hole drilled some distance to the west of the deposit and is roughly 180m from the top edge of the deposit. The hole is 1200m deep.



Logarithmic scale profiles of all windows of DigiAtlantis B-field 1 Hz (left) and coil dB/dt data 1.67 Hz (right).

B-field data from the DigiAtlantis survey is compared above with 3-component coil (dB/dt) data collected previously in the same drill hole using the same transmitter loop. The transmitter loop is of size 2500m x 2000m and couples well with the deposit, which dips at about 30 degrees. The two surveys do not use the same transmitter current and do not contain the same number of stations. The DigiAtlantis survey was carried out by Discovery Int'l Geophysics and used a Phoenix TXU-30 transmitter.



Linear scale profiles of windows 22 msec delay and later - **DigiAtlantis B-field (left)** and **coil dB/dt data (right)**.

In the above profiles, B-field and dB/dt data for delays of 22 msec and beyond are compared on linear vertical scales. The long-wavelength TEM response observed in both data sets is from the Lalor Lake Deposit. The deposit responds as an off-hole anomaly - a broad negative response on the axial component, peaking at 600m down the hole, along with cross-overs on the transverse components. B-field data are elevated above noise at the latest time - 250 msec. Signals on the dB/dt data are below the noise level of the coil system at late-time on all components due to the slowly-changing secondary fields of the good conductors at Lalor Lake. Data presented here is representative of the quality of data typically acquired in borehole TEM surveys by DigiAtlantis systems and by conventional coil sensors.

DigiAtlantis collects 3 components of the magnetic field simultaneously. Each 3-component DigiAtlantis reading is completed with 128 seconds of data recording in this example. Each 3-component reading in the dB/dt data set in this example took a total of 460.8 seconds of data recording over two probe runs.

The B-field measurement and lower base frequency allows a more accurate analysis of the important late-time behavior of fields from the Lalor Lake Deposit than the dB/dt measurement. The DigiAtlantis survey is far more efficient and has resulted in information of significantly higher value.

<u>Survey Specifications</u>	DigiAtlantis B-Field	Coil dB/dt
Transmitter Current	18 amps	9 amps
Transmitter Frequency	1 Hz (250 msec off-time)	1.67 Hz (150 msec off-time)
Number of Stacks	256	512
Number of Probe Runs	1	2
Data Recording Per 3-Comp Reading	128 sec	460.8 sec
Total Number of Stations	63 stations surveyed	129 stations surveyed
Maximum Tau Estimate	approx 100 msec	approx 50 msec

DigiAtlantis data collected by Discovery Int'l Geophysics — www.discogeo.com 3D View courtesy of HudBay Minerals public presentation. All data published with the consent of HudBay Minerals Limited, Flin Flon, Manitoba — www.hudbayminerals.com Opinions expressed are those of EMIT.