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ILLUMINATING GEOLOGY WITH ADVANCED TECHNOLOGY – LESSONS FROM THE JUNIORS

With time and resources at a premium, exploration geologists are looking to advanced technologies for efficiency. Ground magnetic methods are known for their ability to rapidly illuminate structure, lithology, and prospective targets. As well, ground magnetic data yield results for integration with other data, advanced geophysical modeling, and/or preparation of illuminating JV / investor presentations.

This overview shows how some junior exploration companies are effectively applying ground magnetics for gold, diamond and base metal exploration.

Read on to see the value of magnetics to their programs, and how you may be able to apply their approaches to your project. As you read, remember that at GEM, "Our World is Magnetic". We are here to help you address your exploration needs and illuminate your geology with the latest in advanced magnetometer technology.

Examples shown here are from:

[Spider Resources. Diamond Exploration. Ontario.](#) Spider is using ground magnetics to identify near surface, ovoid anomalies that are possibly representative of near surface kimberlites.

[Entre Gold Inc. Gold. Mongolia.](#) Entre is using ground magnetics 1) to further delineate known gold using magnetic signatures (highs) and identify possible new zones of mineralization; 2) to extend projects through definition of extensions of known mineralization (Hugo Dummett Deposit of Ivanhoe Mines); and 3) to identify structural systems using IP, magnetics, and gravity.

[Amera Resources Corporation. Gold-Copper. Argentina.](#) Amera is using ground magnetics and IP to estimate the approximate areal and depth extents of Au-Co mineralization (i.e. over a broad area and to a depth of at least 250m). They are also using magnetics as a precursor method to IP surveys (i.e. to guide placement of IP lines for effective surveying and cost control). Another application is identifying additional prospective areas. Correlation of magnetics with surface geochemical anomalies is considered to be highly significant and a priority for further exploration.

[Micrex Development Corp. Magnetite-Titanium. Quebec.](#) Tightly spaced ground magnetic surveys have been used to give a detailed picture of the deposit to be used to assist drill planning.

Note: Examples were selected to illustrate examples of ground magnetic applications and may or may not reflect use of GEM magnetometers. Information has been obtained from company press releases and GEM does not assume any responsibility for their accuracy or adequacy.