

Combined SkyTEM and AIRGrav Survey in Hope Bay, Nunavut

[Sander Geophysics](#) is pleased to report that data acquisition on [TMAC Resources'](#) Hope Bay and Elu gold mining projects in Nunavut has begun. [Sander Geophysics](#) and [SkyTEM](#) have teamed to acquire over 15,000 line kilometres of combined electromagnetic, magnetic and gravity data over TMAC's properties. The airborne data will be used to supplement previous exploration carried out on the Greenstone belt, helping TMAC create Canada's next major gold mining camp.

The Hope Bay airborne exploration program includes:

- A SkyTEM516 electromagnetic and magnetic survey over the Hope Bay and Elu properties. SkyTEM516, a dual moment system, is capable of delivering a dipole moment of more than 1,000,000 NIA. A uniquely engineered receiver design reduces the noise level by a factor of 20 for the collection of accurate high resolution data from the near surface to depths of several hundred metres. In early 2015 SkyTEM516 demonstrated its depth and resolution capabilities by mapping the deep and weakly contrasting Caber Deposit in Québec, Canada. Caber results can be seen [here](#).
- A Sander AIRGrav purpose built airborne gravimeter to acquire high resolution helicopter gravity data over the Elu North and South survey blocks. This unique gravimeter is mounted on a three-axis inertially stabilized platform, combined with extremely accurate Differential GPS (DGPS) to correct for aircraft movement and vibrations. AIRGrav offers a number of advantages over competing systems, including: 1) significantly better resolution and accuracy; 2) ability to operate under turbulent flying conditions; 3) ability to provide high quality gravity data while flying in drape mode; 4) significant operational efficiencies; and 5) shorter time required for data acquisition and processing.
- 24/7 data acquisition. SkyTEM is managing the surveys and together with Sander Geophysics has mobilized a team of 7 professionals, including helicopter pilots, to Hope Bay to take advantage of available daylight hours in Nunavut and maximize daily data acquisition. TMAC's infrastructure contributes to survey efficiency with the availability of three camps, air strips, roads, fuel storage, a port and power plants. Preliminary data and 1D EM inversions are being delivered every 48 hours throughout the project.

Along with Gravity/Mag/EM data, post processing of Airborne IP signatures will also be completed. If unique geophysical indicators can be defined for the various styles of mineralization at Hope Bay it will significantly improve future exploration targeting and reduce future exploration expenditures and timelines to success. SkyTEM and Sander are both proud to play a part in this important Canadian gold mining project.