UXO Surveys

For DGM, NOVA will typically utilize either the Geonics EM61-MK2 or the Geometrics G-858 vertical gradiometer. If the sites are open and of sufficient size, NOVA may elect to utilize a towed-array of geophysical sensors to perform the mapping as opposed to person-portable operations. The towed array will consist of two to three EM61-MK2s on a sled or wheeled platform. The determination as to which method to be used for mapping will be established after analyzing the specific instrument's detection capabilities at the GPO and/or after consideration of local site conditions.

In open areas free of tree cover, NOVA will utilize a Trimble Real Time Kinematic (RTK) Global Positioning System (GPS) to provide accurate, real-time data positioning. In areas of significant tree cover prohibiting the use of real-time GPS, a Trimble S6 Robotic Total Station (RTS) instrument or conventional survey techniques making use of strict survey controls within a local coordinate system will be utilized.

Geophysical instruments and techniques are constantly evolving in an attempt to achieve the best detection capabilities in the shortest amount of time. NOVA continually monitors emerging technologies and is always ready to implement them should they prove beneficial to that goal.

UXO Data Processing

NOVA processes and analyzes UXO data using SENSOFT's EKKO AND GSSI's software with the UX-Detect module. This software enables the application of data corrections to the raw data and generating corrected gridded data which is used to interpret anomaly locations.

Equipment Used

Geonics EM61-MK2 metal detector Geometrics G-858 Gradiometer

GSSI Profiler EM multi-channel metal detector

Geophex GEM-3 metal detector