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Original Photographs: Data provided by Great Lakes Ice Data, National Ice Data Center



In 2004 and 2005, Fugro Airborne Surveys completed nine multi-sensor airborne geophysics surveys in the central region of British Columbia for the Geological Survey of Canada, the I

Potassium is measured directly from the 1460 keV gamma-ray photons emitted by  $^{40}\text{K}$ , while uranium and thorium are measured indirectly from gamma-ray photons emitted by daughter products ( $^{214}\text{Pb}$  for uranium and  $^{214}\text{Pb}$  for thorium). Although these daughters are far down respective decay chains, they are assumed to be in equilibrium with their parents; thus gamma-spectrometric measurements of uranium and thorium are referred to as equivalent uranium/equivalent thorium, i.e. eU and eTh. The energy windows used to measure potassium, uranium, and thorium are:

Gamma-ray spectra were recorded at one-second intervals at a planned terrain clearance of 60 m depending on the survey area and an air speed of 150 km/h. The total potassium, ura-

Potassium 57.3 cps/% (2004) 58.9 cps/% (2005)  
 Uranium 5.7 cps/ppm (2004) 5.4 cps/ppm (2005)  
 Thorium 3.6 cps/ppm (2004) 3.7 cps/ppm (2005)

**Magnetic Data**  
The helicopter was equipped with a Sinterix CS-2 cesium vapour magnetic sensor mounted on a high-resolution single sensor stringer mounted system. The system recorded readings at 0.1 seconds with a noise level of less than 0.01 nT. Magnetic interferences caused by aircraft maneuvers were compensated using an RMS ADCII Magnetic compensator. Diurnal variations in GPS fluctuations were recorded using a Fugro CP1 base station.

**Positional Data**  
Line spacing and direction for survey and control lines were selected for each block to ensure complete intersection of local geological features. Terrain clearance was monitored by radar altimetry. Positional data were recorded using a dual frequency Novatel Millennium system. GPS ground data were combined with airborne GPS data to produce differentially corrected positional data with an accuracy of 2 to 5 m.

**Planimetric Symbols**

Topographic Contour .....	—
Drainage .....	—
Roads .....	—
Culture .....	—
Railway .....	—
Flight lines, fiducial .....	—

10100 ←

inches

NATIONAL TOPOGRAPHICAL EXTERIOR DIFFERENCE AND GEOPHYSICAL MAP INDEX

Scale 150-900.

FIRST VERTICAL DERIVATIVE OF THE MAGNETIC FIELD

02N/8, 02Q/5

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