



A gamma-ray spectrometric and aeromagnetic airborne geophysical survey of the Great Island and Seal River area, Manitoba, was completed by Sander Geophysics Limited. The survey was flown from September 15 to October 28, 2006 using a Cessna 208B Grand Caravan (C-441B). The primary traverse and control line energy were, respectively, 400 and 2400 m, and the control line at a nominal altitude of 125 m had an air speed of 200 km/h. Traverse lines were oriented 180° with orthogonal control lines. The flight path was recorded following post-flight differential corrections to raw data recorded by a Global Positioning System. The survey was flown on a pre-determined flight surface to minimize differences in magnetic values at the intersection of control and traverse lines.

Gamma-ray Spectrometric Data
The airborne gamma-ray measurements were made with an EpsilonMark GR-820 gamma-ray spectrometer using four 102 x 102 x 406 mm NaI(Tl) crystals. The main detector array consisted of twelve crystals (total volume 50.4 litres). Two crystals (total volume 8.4 litres), shielded by the main array, were used to detect violations in background radiation caused by atmospheric radon. The system assembled 256 channel spectra from the individual NaI(Tl) detectors with no loss of Poisson statistics. Spectra were collected by recording the recorded spectra with several channels gamma-ray peaks.

Planimetric Symbols / SYMBOLES PLANIMÉTRIQUES
Topographic contour Courbes de niveau
Drainage Drainage
Wetland Terrain inondé
Building Bâtiment
Cut Line Percée
Road Chemin
Trail Sentier
Flight Line Ligne de vol

MAP SHEET SUMMARY / SOMMAIRE DES FEUILLETS

GSC/MGS Sheet / Feuillelet CCGCLM	MAP / CARTE
1. Natural Air Absorbed Dose Rate / Taux d'absorption naturel des rayons gamma dans l'air	
2. Potassium	
3. Uranium	
4. Thorium	
5. Uranium / Thorium	
6. Uranium / Potassium	
7. Thorium / Potassium	
8. Ternary Radiation Map / Diagramme ternaire des radionucléides	
9. Residual Total Magnetic Field / Composante résiduelle du champ magnétique total	
10. First Vertical Derivative of the Magnetic Field / Dérivée première verticale du champ magnétique	

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GSC OPEN FILE 6070 / DOSSIER PUBLIC 6070 DE LA CGC
MGS OPEN FILE OF2009-6 / OPEN FILE OF2009-6 DES LGM

GEOLOGICAL SERIES / SÉRIE DES CARTES GÉOPHYSIQUES
NTS 64-1/4 / SNRC 64-1/4

AIRBORNE GEOPHYSICAL SURVEY OF THE GREAT ISLAND AND SEAL RIVER AREA, MANITOBA
LEVÉ GÉOPHYSIQUE AÉROPORTÉ DE LA RÉGION DE GREAT ISLAND ET SEAL RIVER, MANITOBA

URANIUM

Scale 1 : 50 000 - Échelle 1 / 50 000
Scale bar showing 0, 2, 4 km.

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Location Map - Carte de Localisation
Map of Manitoba showing the survey area.

Logos for Natural Resources Canada, GEM, and Canada.

Digital versions of this map and the corresponding digital line data, gridded geophysical data and anomaly listings by individual survey areas may be downloaded, at no charge, from Natural Resources Canada's Geoscience Data Repository for Geophysical and Geochemical Data at <http://gdr.nrcan.gc.ca/eng/>. The map and digital data are also available, for a fee, from the Geophysical Data Centre, Geological Survey of Canada, 615 Booth Street, Ottawa, Ontario, K1A 0E8, Telephone: (613) 993-5326, email: info@geog.mcg.gc.ca.

Les versions numériques de ces cartes ainsi que les données géophysiques en formats « profil » et « grille » et les listes d'anomalies peuvent être téléchargées gratuitement depuis le site de la Collection de données géophysiques et géochimiques de l'Entrepôt de données géoscientifiques de Ressources naturelles Canada <http://gdr.nrcan.gc.ca/eng/>. Le carte et les données numériques sont aussi disponibles, moyennant des frais, au Centre de données géophysiques de la Commission géologique du Canada au 615, rue Booth, Ottawa (Ontario) K1A 0E8, Téléphone: (613) 993-5326, courriel: info@geog.mcg.gc.ca.

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