

# GEOPHYSICAL DATA SET (GDS) 1084A METADATA

## GENERAL INFORMATION

**Official Name of the Data Set or Information Holding:** Ontario Airborne Geophysical Surveys, Magnetic Gradiometer and Gamma-Ray Spectrometric Data, Grid and Profile Data (ASCII Format) and Vector Data, Lac Seul East Area

**Acronyms are Used to Identify the Data Set or Information Holding:** GDS1084A

**Describe the Data Set or Information Holding:**

Ontario Geological Survey (author)

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Geophysical Data Set (GDS) 1084a comprises the results of an airborne magnetic and gamma-ray spectrometer survey, totalling 54,603 line-kilometres, flown over the eastern portion of Lac Seul and adjacent areas in northwestern Ontario. The survey covers an area approximately 9835 square kilometres and was flown by Terraquest Ltd. (Markham, Ontario).

This geophysical data set includes airborne magnetic and gamma-ray spectrometric profile data—both raw and processed—in ASCII (.xyz) file format; 20 m × 20 m grids (in ASCII (.gxf) file format) of the magnetic and gamma-ray spectrometric data; databases of Keating correlation coefficient anomalies in ASCII (.csv) file format; GeoTIFF (.tif) images of magnetic and gamma-ray spectrometric grids; vector (.dxf) files of flight path, Keating anomalies and contours of the residual magnetic field; and a survey report and supporting documents in portable document format (.pdf).

These data accompany geophysical Maps 82886 to 82918, which are available separately from the digital data set.

### **Survey Parameters:**

Survey type: magnetic and gamma-ray spectrometer

Date flown: July 28 to November 2, 2016

Survey conducted by: Terraquest Ltd., Markham, Ontario

Survey size: 54,603 line-kilometres

Survey area: 9835 square kilometres

Flight-line spacing: 200 m

Control-line spacing: 2000 m

Nominal aircraft terrain clearance: 100 m

Magnetic survey type: horizontal gradiometer

Magnetic sampling interval: 10 readings per second

EM survey type: N/A

EM domain: N/A

EM height: N/A

VLf-EM: none

Gamma-ray survey: gamma-ray spectrometric

Additional information and metadata are found within a readme file provided with the product.

**The Intended Use and Purpose for Collecting the Data Set or Information Holding:**

Airborne geophysics is an integral part and core function of the Ontario Geological Survey's (OGS) geoscience activities. This magnetic gradiometer and gamma-ray spectrometric survey was carried out as part of the Ontario Geological Survey's Precambrian bedrock mapping program to provide high-quality and high-resolution geophysical data to assist in mapping the bedrock geology of the area.

The objective of this product is to collect and disseminate geoscience information for Ontario.

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**Time Coverage Comments:** Date of Publication.

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Geophysical

Aeromagnetic

Airborne Gamma Ray

Airborne Magnetic (Total)

Airborne Magnetic (Residual)  
Airborne Magnetic (Gradient)

**Business Theme:**

Geological Survey  
Geology

**GEOGRAPHIC INFORMATION**

**Selected geographic type:** Bounding Box only

North Bounding Latitude: 50° 54'  
South Bounding Latitude: 49° 54'  
West Bounding Longitude: -92° 37'  
East Bounding Longitude: -90° 39'

**Geographic Completeness:** irregularly shaped study area - completeness not available

**MAPPING INFORMATION**

**Grid Coordinate System Used:** Universal Transverse Mercator

**Map Projection:** Transverse Mercator

**Horizontal Geodetic Datum:** NAD83

**Vertical Datum:** Not Applicable

**Horizontal Position Accuracy of Features:** +/- 10 m

**Vertical Position Accuracy of Features:** Not Applicable

**DATA SOURCE INFORMATION**

**Data Source Type:** Includes Bibliographic Information

**Describe for the Source Data Contribution:** Product includes references to other sources of information

**Data Source Type:** Direct Field Collection

**Source Data Set Description:** Survey flown from July 28 to November 2, 2016, by Terraquest Ltd. (Markham, Ontario)

**CONTACT INFORMATION**

**GENERAL CONTACT:**

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## **METADATA**

**Date of this Metadata Description/Update:** March 28, 2017

**Date when Metadata Should be Reviewed:** December 31, 2017

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