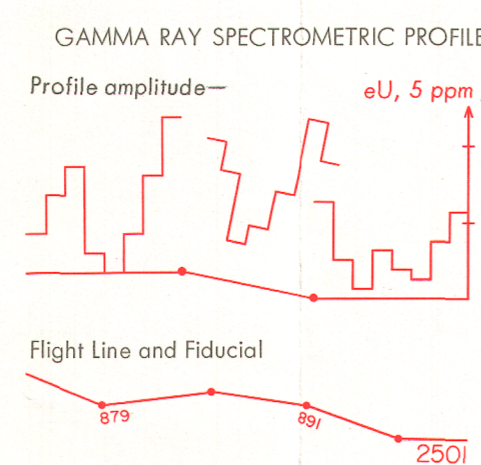
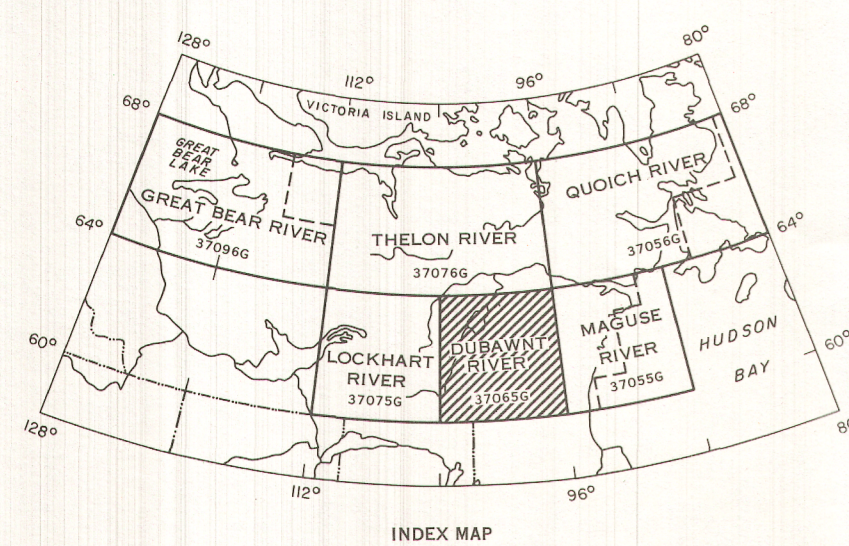
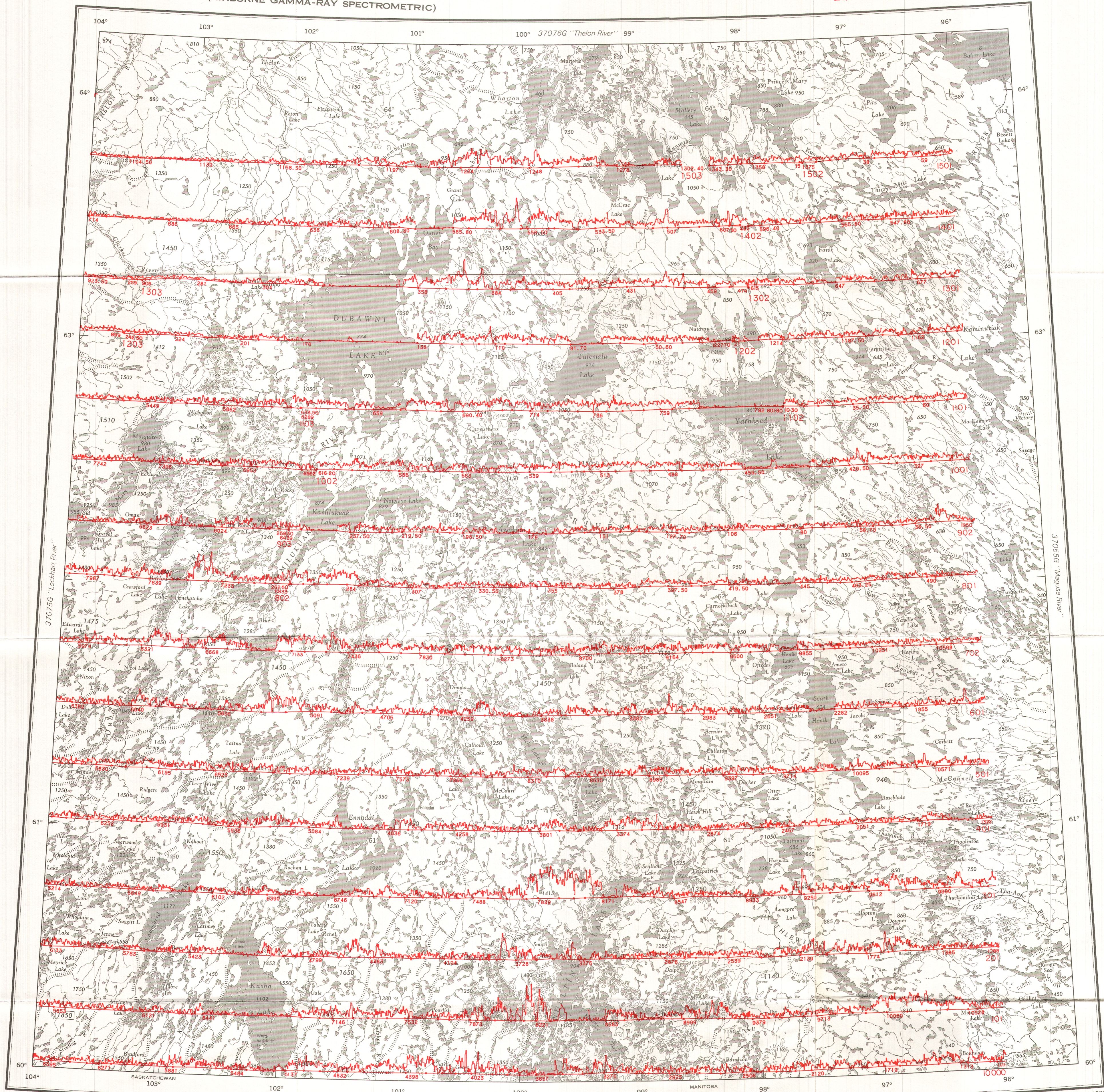


GEOPHYSICAL SERIES (AIRBORNE GAMMA-RAY SPECTROMETRIC)

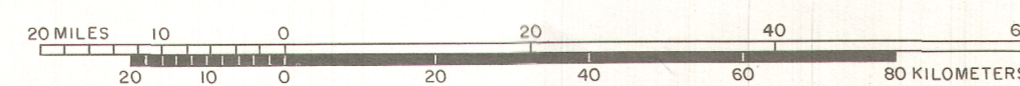


MAP 37065G

DUBAWNT RIVER

DISTRICT OF MACKENZIE - DISTRICT OF KEEWATIN
NORTHWEST TERRITORIES

SCALE 1:1,000,000



COPIES OF THIS MAP MAY BE OBTAINED FROM THE DIRECTOR GENERAL,
GEOLOGICAL SURVEY OF CANADA, OTTAWA.

Airborne Gamma-Ray Spectrometer Survey, July 1975 to August 1975 flown by Kenting Earth Sciences Ltd., and Terra Surveys Ltd. Data reduction and map compilation by Northway Survey Corporation Ltd.

The topography for this series of maps was reproduced from (1:250,000 or 1:1,000,000) topographical map sheets published by the Department of Energy, Mines and Resources, Ottawa.

The data presented on this map were compiled into profiles from gamma-ray spectrometer and radar-altimeter information recorded digitally along the lines shown. The four channel gamma-ray spectrometer with 32 litres of sodium iodide detector (NaI(Tl)) measured gamma radiation in the following energy ranges:

- Channel 1 2.42 Mev - 2.62 Mev
- Channel 2 1.66 Mev - 1.86 Mev
- Channel 3 1.38 Mev - 1.58 Mev
- Channel 4 0.40 Mev - 0.60 Mev

Channels 1, 2 and 3 respectively, were centered on the 2.62 Mev ²³²Th photo peak, on the 1.76 Mev ²³⁵U photo peak and on the 1.46 Mev ⁴⁰K photo peak. Counts were accumulated into five second intervals by averaging, and plotted as profiles along the flight lines. Corrected count rates from channels 1, 2 and 3 were converted to average surface concentrations of equivalent thorium, equivalent uranium and potassium, respectively, using factors determined for each gamma-ray spectrometer used in the survey. These conversion factors are approximately the following:

- 1 ppm eTh = 4 cps
- 1 ppm eU = 11 cps
- 1% K = 60 cps

Each value shown on the map represents the average surface concentration over an area of several tens of thousands of square meters. This area generally includes some outcrop, overburden and water in swamps, ponds and streams. Consequently, the concentrations indicated on the map are usually lower than concentrations in the bedrock.

EQUIVALENT URANIUM (eU)

DUBAWNT RIVER
MAP 37065G
NORTHWEST TERRITORIES