



FINGER LAKES AREA GRAVITY DATA SET

NEW YORK STATE

EDCON-PRJ has acquired a high quality gravity data set in the Finger Lakes area of New York covering parts of Livingston, Steuben, Yates, and Ontario Counties. Specifications are summarized below.

- **Area:** Approximately 50 by 55 km as shown on the accompanying station location map
- **Survey Lay-out:** Along roads at 0.8 km (0.5 mile) station spacing. Road traverses are shown on the station location map.
- **Data Points:** 1,762 stations. An additional 592 public domain stations have been integrated into the data set for a total of 2,354 stations.
- **Cost:** Call for quotation.

Acquisition and Processing of Gravity Data

Area of Study and Determination of Traverse Location. The area of the study is shown on the attached index map and consists of a survey block approximately 50 by 55 kilometers. The survey location was selected to encompass areas of known production and gas well locations, obtained from the New York State Department of Environmental Conservation web site, over both relatively shallow and deeper basement configurations and includes locally anomalous existing gravity responses over these areas and correlating magnetic anomalies. Data acquisition was undertaken at 0.5-mile station interval along mostly N-S oriented roads separated by some 3 miles on average. In cases of satellite obstruction (for GPS locationing) due to vegetation coverage or topographic effects, some flexibility in traverse selection was exercised as a field procedure.

Data Acquisition. A total of approximately 1,100 kilometers of gravity traverses along roads was acquired, totaling 1,762 stations with the following instrumentation:

Gravity meter:	La Coste and Romberg G-meter
Accuracy:	0.01 mGal
Differential GPS system:	Trimble Model 4700 Dual Frequency GPS
Accuracy:	2 cm horizontal and vertical

An absolute gravity base was occupied at least twice per day. New bases were tied to the existing base network in the survey area.

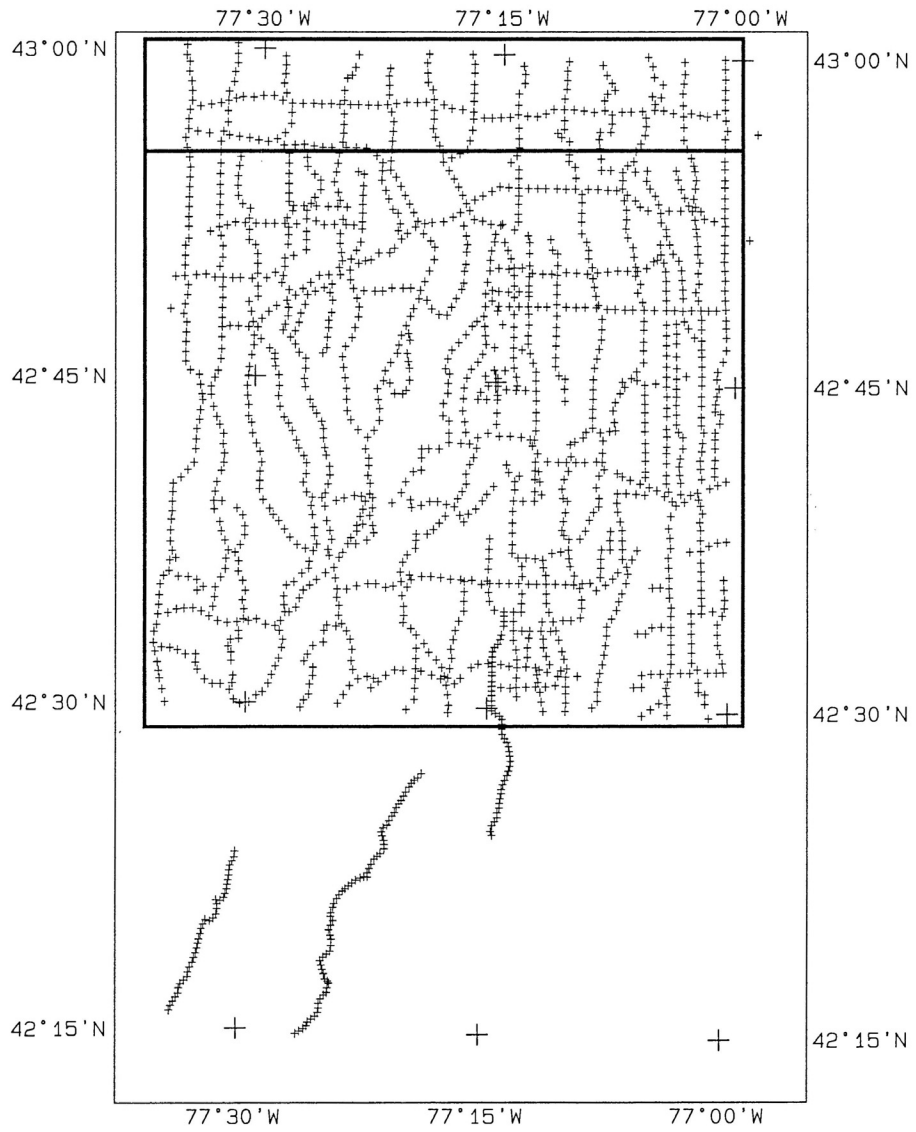
Data Processing. Instrument drift and tidal corrections and elevation (free air) were applied, and a full terrain correction procedure was undertaken with a density range varying from 2.4 to 2.67 g/cm³. A water column correction to compensate for the gravitational effects of the lakes located within the survey area was additionally included.

Deliverables

- Full digital gravity data set as principal facts listings on a CD-ROM
- Acquisition report
- Digital grids of
 - Complete Bouguer Gravity
 - Regional Bouguer Gravity
 - Residual Bouguer Gravity

Gravity Data Analysis

A full analysis of the gravity data set has been completed. Call for quotation.



Finger Lakes Gravity Survey
Showing Station Locations