

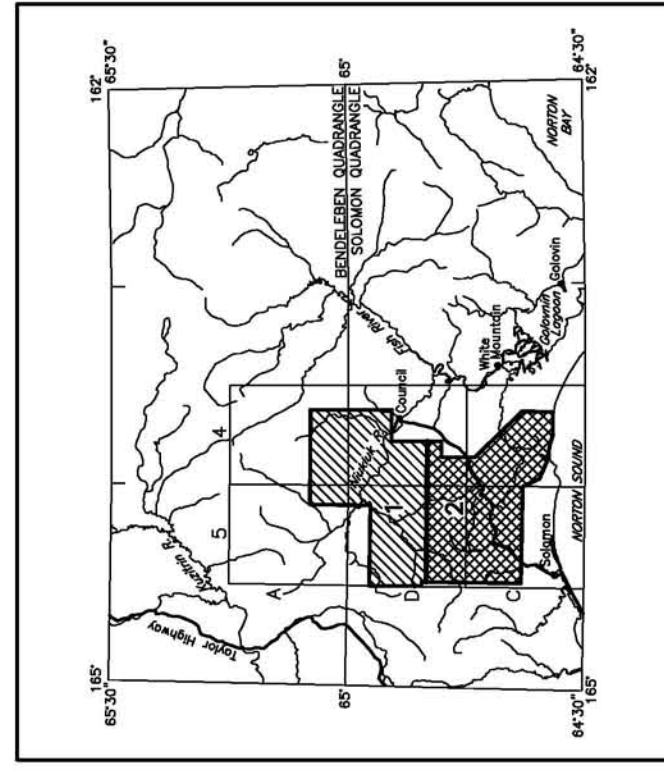


SCALE 1:65,360

0 1 2 3 4 MILES

0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 50 FEET



**900 Hz COPLANAR RESISTIVITY
OF THE COUNCIL AREA,
SEWARD PENINSULA, ALASKA
PARTS OF BENDELEBEN AND SOLOMON QUADRANGLES**

The geophysical data were acquired with a DIGHEX Electromagnetic (EM) system and a Sintrex cesium magnetometer. Both were flown at a height of 100 m above the ground surface. The EM system was a 60-m radial armeter. GPS navigation system, 50/60 Hz AC monitors and video camera. Flights were performed with a Cessna 441Q aircraft. The flight altitude was a clearance of 200 feet along North-South (ϕ) survey flight lines with a spacing of a quarter of a mile between flight lines. The flight interval of the flight lines at intervals of approximately 3 miles.

An Aethet G024 NAVSTAR / NOVATION Global Positioning System was used for navigation. The helicopter position was derived every 0.5 seconds during the flight. The horizontal accuracy was better than relative accuracy of better than 5 m. Flight path positions were projected onto the Clarke 1866 projection. The flight lines were oriented north-south using central meridian (CW) of 195° or constant of 0 and an east constant of 500,000. Positional accuracy of the recorded data is better than 10 m. The flight lines were oriented north-south

The DIGHEW EM system measured inphase and quadrature voltages from 1000 to 5500 Hz with three coil pairs operated at 1000 and 5500 Hz while three horizontal coplanar-coil pairs operated at 900, 7200, and 56,000 Hz. EM data were sampled at 0.1 second intervals. The EM system responds to bedrock conductors, conductive overburden, and cultural sources. Apparent resistivity is calculated from the EM data using the pseudo-layer half space model (Frasser 1978). The data were interpolated onto a regular 100 m grid using a modified Akima (1970) technique.

This map has been compiled and drawn under contract between the State of Alaska, Department of Natural Resources, Division of Geological & Geophysical Surveys (DGGS), and Stevens Exploration Management Corp. (DGGS) geophysical data for the area were acquired Airborne geophysical data for the area were acquired and processed by Fugro Airborne Surveys in 2002.

This map and other products from this survey are available by mail order or in person from DGS, 794 University Ave., Suite 200, Fairbanks, Alaska 99709.