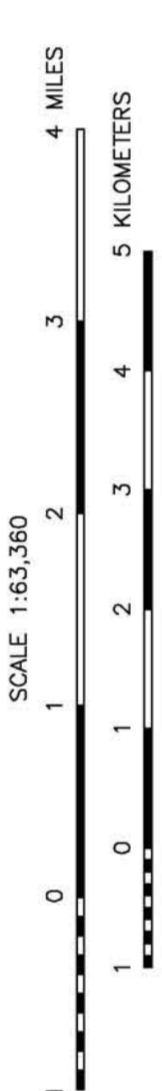
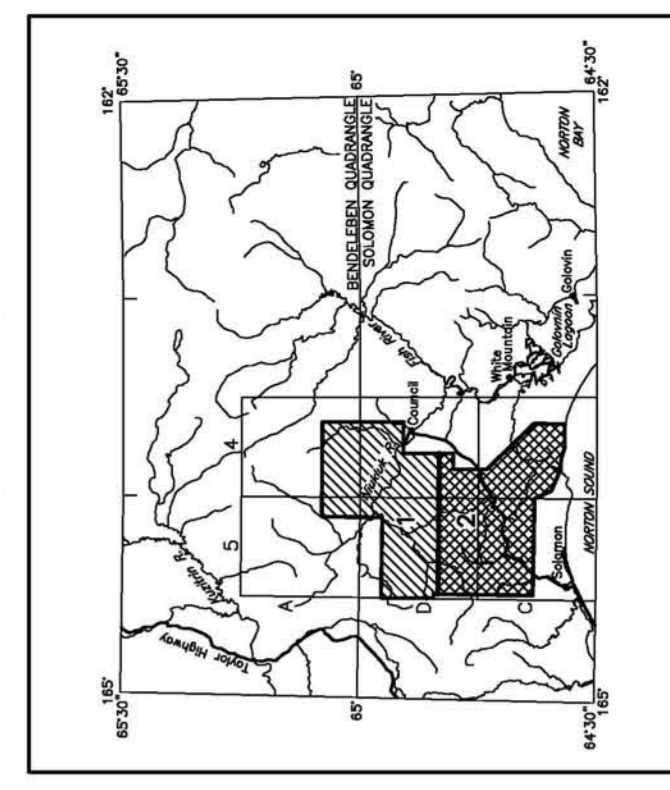


Section outlines from U.S. Geological Survey Sections C-4, 1985; C-5, 1978; Sections D-4, 1973; D-5, 1973; Westward Point, Alaska



LOCATION INDEX



900 HZ COPLANAR RESISTIVITY OF THE COUNCIL AREA, SEWARD PENINSULA, ALASKA PARTS OF BENDELEBEN AND SOLOMON QUADRANGLES 2003

RESISTIVITY CONTOURS

1000
800
600
500
400
300
250
200
150
125
100
75
50
25
13.0

Contours in ohm-m at 10 intervals per decade
..... resistivity low

DESCRIPTIVE NOTES

The geophysical data were acquired with a DICH-EM Electromagnetic (EM) system and a Schrirek cesium magnetometer. Both were flown at a height of 100 meters. The EM system was a DICH-EM 50/50 Hz radar altimeter, GPS navigation system, 50/50 Hz magnetometer, and video camera. Flights were performed with a survey flight lines with a spacing of a quarter of a mile. The flight lines were oriented North-South (N-S) with a spacing of approximately 3 miles.

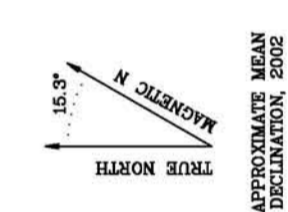
An AshTech GQ24 NAVSTAR / GLOMSS Global Positioning System was used for navigation. The helicopter position was derived every 0.5 seconds. The relative accuracy of the Clarke 1866 positions were projected onto the Clarke 1866 using a central meridian (CM) of 165°, a north constant of 0 and an east constant of 500,000. The accuracy of the positions is better than 10 m with respect to the UTM grid.

RESISTIVITY

The DICH-EM EM system measured inphase and quadrature coil pairs operated at 1000 and 2500 Hz while three horizontal coplanar-coil pairs operated at 900, 7200, and 5000 Hz. The EM system responses to bedrock conductor conductivity overburden, and cultural sources. Apparent resistivity is the ratio of the inphase and quadrature components of the coplanar 900 Hz using the Fraser 1978 model. The data were interpolated onto a regular 100 m grid using a modified Akima (1970) technique.

Akima, H., 1970. A new method of interpolation and smooth curve fitting. *Proceedings of the International Association of Computing Machinery*, v. 17, no. 4, p. 589-602.

Fraser, R. G., 1978. A new method of interpolation and smooth curve fitting. *Proceedings of the International Association of Geomagnetism and Aeronomy*, v. 23, p. 44-172.



SURVEY HISTORY

This map has been compiled and drawn under contract between the State of Alaska, Department of Natural Resources, Division of Geological and Geophysical Surveys (DGGS), and Stevens Exploration Management Corp. Airborne geophysical data for the area were acquired in 2003. The map was compiled by Laurel Burns. Laurel Burns was the contract manager for DGGS.

This map and other products from this survey are available from the Alaska Division of Geological and Geophysical Surveys, 200, Fairbanks, Alaska, 99709.