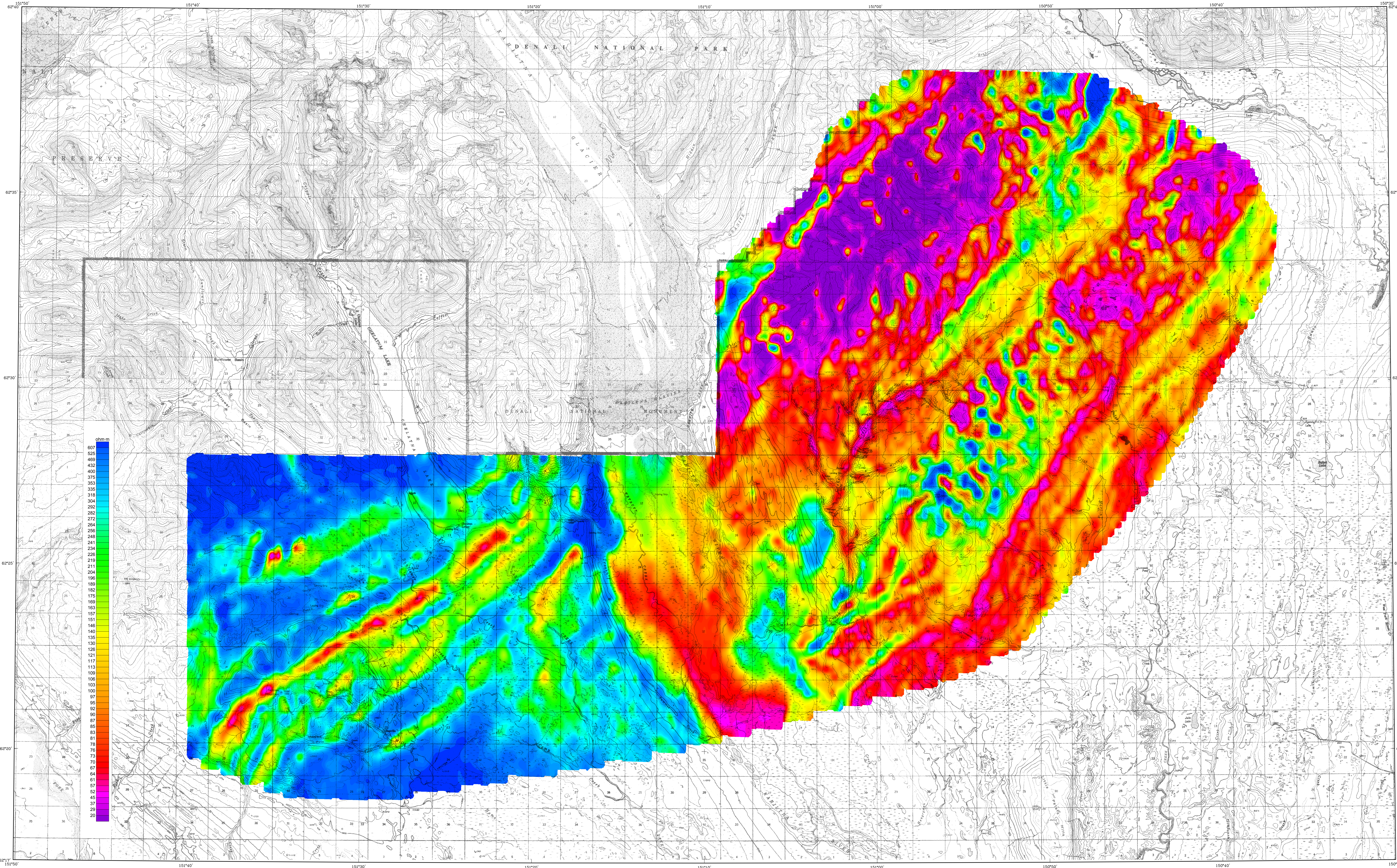


DESCRIPTIVE NOTES

The geophysical data were acquired with a DIGHEM[®] Electromagnetic (EM) system, a Sinterex cesium CS2 magnetometer, and a Herz HLF system installed in an AS550B-1 Squirrel helicopter. In addition, the survey recorded data from a radar altimeter, GPS navigation system, 50/60 Hz monitors and video camera. Flights were performed at a mean terrain clearance of 200 feet along survey flight lines with a spacing of a quarter of a mile. The lines were flown perpendicular to the flight lines at intervals of approximately 3 miles.

A Seracel Real-Time Differential Global Positioning System (RT-DGPS) was used for both navigation and flight path recovery. The helicopter position was recorded every 0.5 seconds using the RT-DGPS system, positioning to a relative accuracy of better than 10 m. Flight path positions were entered onto the Clark 1986 (UTM) sphereid, 1927 North American datum using a central meridian (CM) of 152°W. Positional accuracy of the presented data is better than 10 m with respect to the UTM grid.

RESISTIVITY

The DIGHEM[®] EM system measured inphase and quadrature components at five frequencies: two vertical coplanar coil-pairs operated at 900 and 5000 Hz while three horizontal coplanar coil-pairs operated at 900, 2000 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 generated from the inphase and quadrature component of the coplanar 2000 Hz using the pseudo-layer half space 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 based on local procedures, Journal of the Association of Computing Machinery, v. 17, no.4, p.589-602.

**7200 Hz COPLANAR APPARENT RESISTIVITY
OF THE PETERSVILLE MINING DISTRICT,
ALASKA**

PARTS OF TALLEKNA QUADRANGLE

by
Laurel E. Burns, Fugro Airborne Surveys Corp., and Stevens Exploration Management Corp.
2004

SURVEY HISTORY

The map has been compiled and drawn under contract between the State of Alaska, Department of Natural Resources, Division of Geological & Geophysical Surveys, and Stevens Exploration Management Corp. The map was produced by Fugro Airborne Surveys and supercedes the earlier full color version released by DGG in 1997. Airborne geophysical data for the area were acquired and processed in 1996 under contract between DGG and W&A Mining, a division of CGC Canada Ltd. Other products from this survey are available from DGG, 3354 College Road, Fairbanks, Alaska, 99709-3707.

