Department of Natural Resources
Division of Geological & Geophysical Surveys
Geologic Data Modeling System

Section outlines from U.S. Geological Survey topographic bases: Kantishna River D-1, D-2, D-3 (1952); Livengood A-6 (1953); B-5, B-6, C-5, C-6 (1956); Tanana A-1, A-2, A-3 (1952); B-1, B-2, B-3, C-1 (1956) Quadrangles, Alaska.

SURVEY HISTORY

This map has been compiled and drawn under contract between the State of Alaska, Department of Natural Resources, Division of Geological & Geophysical Surveys, and WGM, Mining and Geological Consultants, Inc. Airborne geophysical data for the area was acquired by DIGHEM, a division of CGG Canada Ltd., in 1995 and 1996. Other products from this survey are available from the Alaska Division of Geological & Geophysical Surveys, 794 University Ave., Suite 200, Fairbanks, Alaska, 99709. Phone: (907) 451-5020. FAX: (907) 451-5050.

1952 magnetic declination varies along the south side of the map from approximately 27 to 28 1/2 degrees east.

SCALE 1:63 360

1 1/2 0 1 2 3 4 MILES

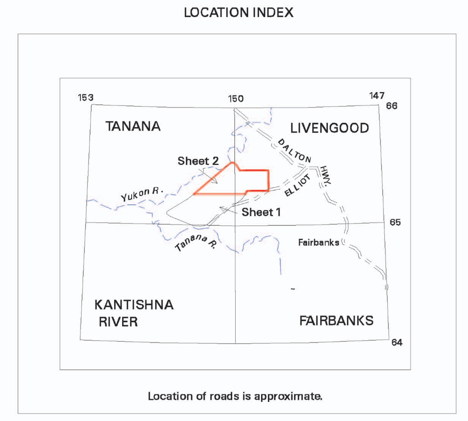
3000 0 3000 6000 9000 12000 15000 18000 21000 FEET

1 .5 0 1 2 3 4 5 KILOMETERS

EXTENDED COVERAGE OF THE 7200 Hz RESISTIVITY CONTOURS OF THE RAMPART - MANLEY MINING DISTRICT, ALASKA

1997

LOCATION INDEX



Location of roads is approximate.

RESISTIVITY

The DIGHEM-V EM system measured inphase and quadrature components at five frequencies. Two vertical coaxial coil-pairs operated at 900 and 5000 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. Resistivity is generated from the inphase and quadrature component of the coplanar 7200 Hz using the pseudo-layer half space model. The data were interpolated onto a regular 25 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.