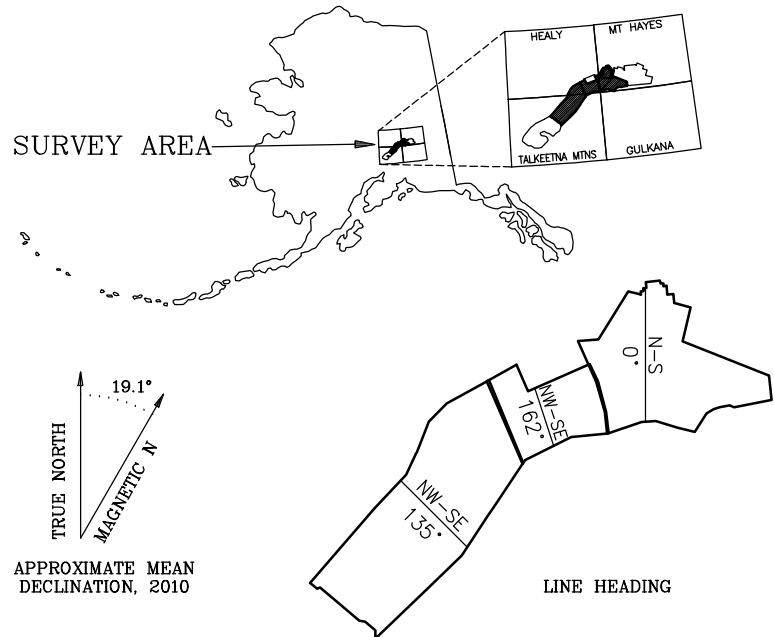


Base from U.S. Geological Survey Topographic Maps C-2, 1963; C-3, 1977; C-4, 1985; D-2, 1968; D-3, 1969; D-4, 1969. Quadrangles, Alaska.



RESIDUAL MAGNETIC FIELD WITH TOPOGRAPHY, WRANGELLIA SURVEY AREA, SOUTH-CENTRAL ALASKA

PARTS OF THE TALKEETNA MTNS, HEALY, AND MT HAYES QUADRANGLES

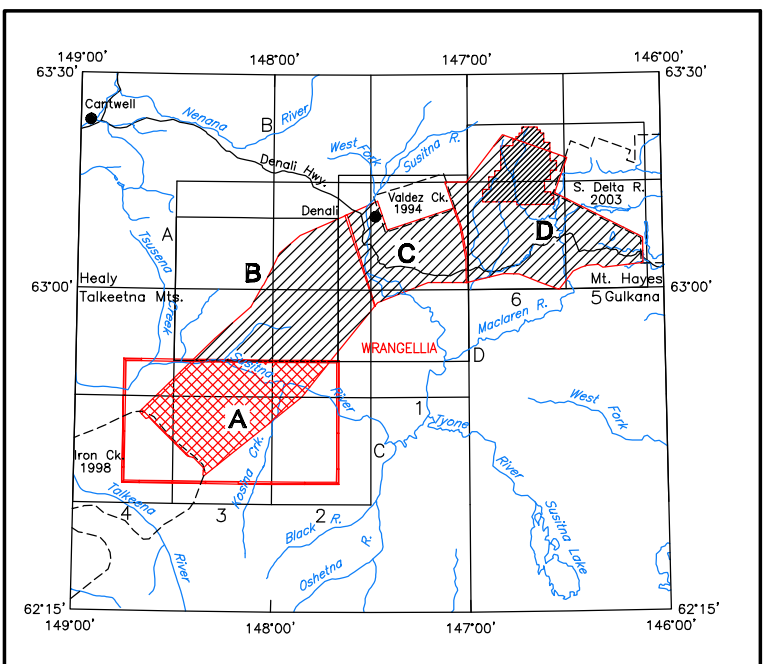
by
Laurel E. Burns, CGG, and Fugro GeoServices, Inc.
2014

RESIDUAL MAGNETIC FIELD

The magnetic total field data were processed using digitally recorded data from a Fugro D1344 magnetometer with a Scintrex CS3 cesium sensor. Data were collected at a sampling interval of 0.1 seconds. The magnetic data were: (1) corrected for diurnal variations by subtraction of the digitally recorded base station magnetic data, (2) IGRF corrected (IGRF model 2010, updated for date of flight and altimeter variations), (3) leveled to the tie line data, and (4) interpolated onto a regular 80 m grid using a modified Akima (1970) technique. All grids were then resampled from the 80 m cell size down to a 25 m cell size to produce the maps and final grids contained in this publication.

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.

LOCATION INDEX FOR 1:63,360-SCALE MAPS



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 (DGGs), and Fugro GeoServices, Inc. Airborne geophysical data for the area were acquired and processed by CGG in 2013 and 2014. Previously flown DGGs surveys adjacent to the current survey are shown in the location map by dashed lines, survey name, and date of publication. The project was funded by the Alaska State Legislature as part of the Alaska Strategic and Critical Minerals Assessment project, which is part of the Alaska Airborne Geophysical and Geological Mineral Inventory Program. Millrock Exploration Corporation contributed infill data for a portion of the area shown above as denser hatching. All data and maps produced to date from this survey are available in digital format on DVD for a nominal fee through DGGs, 3354 College Road, Fairbanks, Alaska, 99709-3707, and are downloadable for free from the DGGs website (www.dggs.alaska.gov/pub). Maps are also available on paper through the DGGs office, and are viewable online at the website in Adobe Acrobat .PDF file format.