



NAPATUK CREEK WELL
TD: 14918'

MANY SHALLOW
MAGNETIC
SOLUTIONS
PRESENT

Section outlines from U.S. Geological Survey topographic bases:
Baird (1954), Bethel (1954), Marshall (1954),
Russian Mission (1954), Oodroogaa, Alaska.

DESCRIPTIVE NOTES

The aeromagnetic data were acquired using a Scintrex HB cesium vapor magnetometer and an RMS ADC-4 automatic compensator installed in a 650 Aero Commander fixed wing aircraft. In addition, the RMS DAS-8 digital acquisition system recorded data from both radar and barometric altimeters, from the GPS navigation/positioning system, the 60 Hz monitor and a video camera. Differential post-processing of the GPS data resulted in a relative positional accuracy of 10 meters or better.

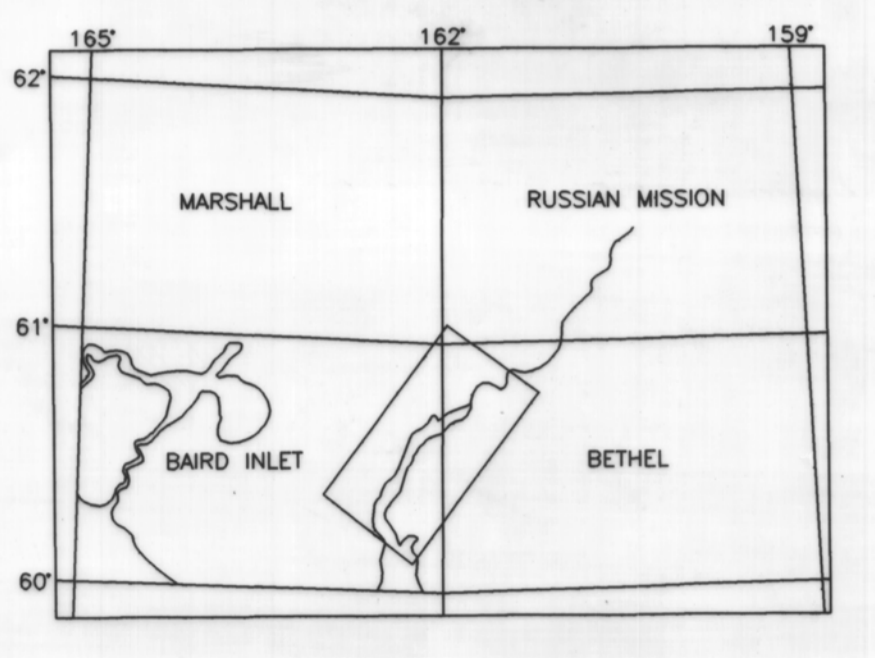


SURVEYED AVERAGE SENSOR ELEVATION 300 FEET ABOVE TERRAIN
CLARKE 1866 SPHEROID UTM PROJECTION ZONE 4
INCLINATION 71.9 DEGREES NORTH
DECLINATION 17.3 DEGREES EAST
INTENSITY 53875 nT
TRAVERSE INTERVAL 0.5 MILE
LINE INTERVAL 5.0 MILES

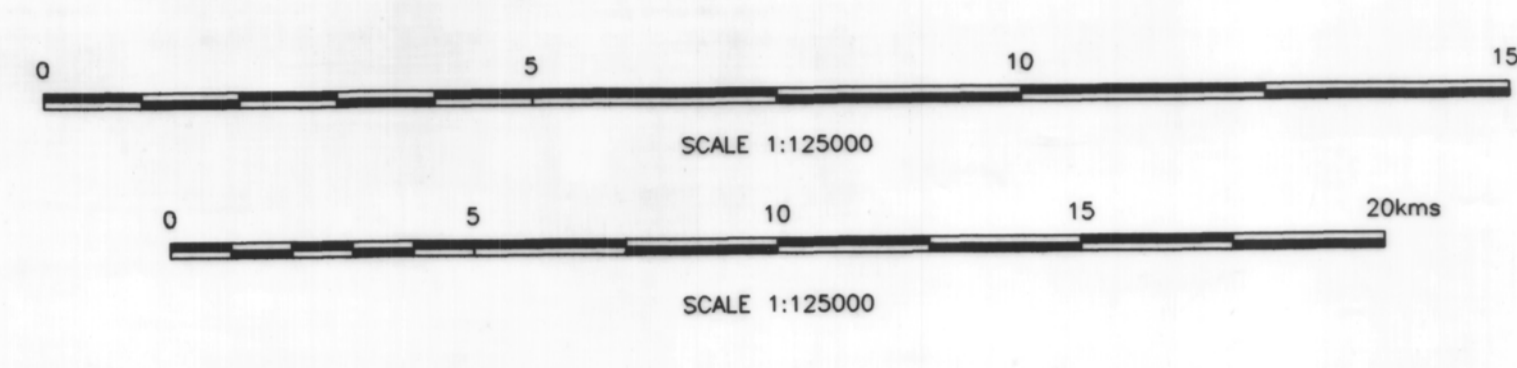
EXPLANATION

- 20, 20, 20? GRATED DEPTH CALCULATIONS TO INTERPRETED MAGNETIC BASEMENT IN HUNDREDS OF FEET BELOW SEA LEVEL. UNDERLINED WHERE DETERMINE, QUESTIONED WHERE UNCERTAIN. ONLY THESE DEPTHS ARE USED IN CONTOURING MAGNETIC BASEMENT SURFACE.
- (5), (5), (5)? GRATED DEPTH CALCULATIONS TO MAGNETIC SOURCES IN HUNDREDS OF FEET MORE SHALLOW THAN INTERPRETED BASEMENT SURFACE.
- (10), (10), (10)? GRATED DEPTH CALCULATIONS TO MAGNETIC SOURCES IN HUNDREDS OF FEET WHICH ARE BELIEVED TO ORIGINATE FROM VOLCANIC HORIZON.
- Anticlinal axis, dashed where inferred.
- Synclinal axis, dashed where inferred.
- Fault, sense of displacement unknown or lithologic contact, dashed where inferred. Displacements where shown do not necessarily imply normal faulting.
- Contours on magnetic basement surface in feet below sea level, dashed where inferred.
- Structural disturbance.
- Magnetic source at or near surface.
- Cultural source.
- Normally polarized intrusive body.
- Reversely polarized intrusive body.
- Dike.
- Susceptibility contrast values in micro G.S. units, estimated from AMAP-3M solutions.
- Test well total depth: 14910' below the surface.
- Boundary of volcanics/intrusives horizon (towards shaded side).

LOCATION INDEX



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 Zonge Engineering & Research Organization. The airborne magnetic data were acquired by Zonge Aero Service in August, 1994. This and other products from this survey are available from the Alaska Division of Geological & Geophysical Surveys, 794 University Ave., Suite 200, Fairbanks, Alaska, 99709.



GEOPHYSICAL INTERPRETATION OF THE AEROMAGNETIC SURVEY OF THE SOUTHEASTERN BETHEL BASIN, ALASKA