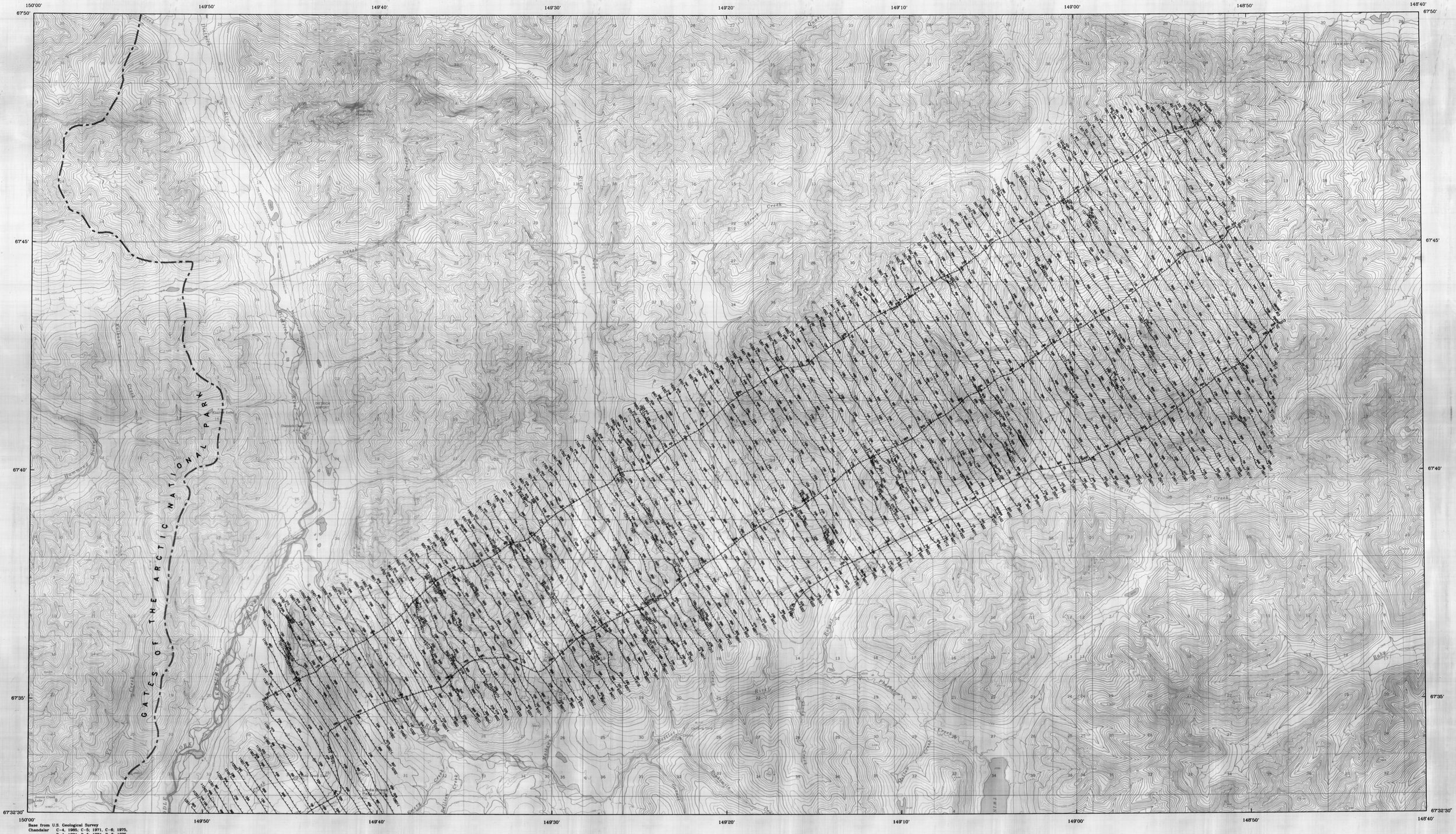


Base from U.S. Geological Survey
Chandalar C-4, 1965; C-5; 1971; C-6; 1975;
D-4, 1971; D-5; 1971; D-6; 1975
Quadrangles, Alaska.
Projected in UTM zone 6

ALASKA

KOYUKUK SURVEY AREA

SCALE 1:63 360

1 0 1 2 3 4 5 MILES

1 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 100 FEET
DATUM MEAN SEA LEVEL

TRUE NORTH
MAGNETIC NORTH
30°

APPROXIMATE MEAN DECLINATION, 1971

FLIGHT LINE PATH OF THE 1997 GEOPHYSICAL SURVEY FOR THE NORTHEASTERN PORTION OF THE KOYUKUK MINING DISTRICT, EASTERN BROOKS RANGE, ALASKA

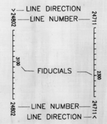
1998

DESCRIPTIVE NOTES

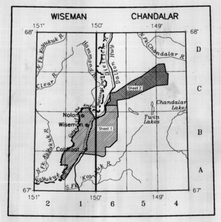
The geophysical data were acquired with a SIGHEM-5 Electromagnetic (EM) system, a Scintrex cesium CS2 magnetometer, and a Herz VLF system installed in a LAMA-N48087 Squirrel helicopter. In addition, the survey recorded data from a radar altimeter (TERRA), GPS navigation system, 50/60 Hz monitors, and video camera. Flights were performed at a mean terrain clearance of 200 ft along survey flight lines with a spacing of a quarter of a mile. Tie lines were flown perpendicular to the flight lines at intervals of approximately three miles.

Two Trimble-4000 SE Differential Post-processing Global Positioning Systems were used for both navigation and flight path recovery. The helicopter position was derived every one second to a relative accuracy of better than 10 m. Flight path positions were projected onto the Clarke 1866 (UTM) spheroid, 1927 North American datum using a Central Meridian (CM) of 147° W, a north constant of 0 and an east constant of 500,000. Positional accuracy of the presented data is better than 10 m with respect to the UTM grid.

FLIGHT PATH INFORMATION



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 On-Line Exploration Services, Inc. Airborne geophysical data for the area were acquired by Sial Geosciences, Inc., in 1997. Funding for the project was provided by the U.S. Department of Interior Bureau of Land Management (BLM).

This map and other products from this survey are available from the Alaska Division of Geological & Geophysical Surveys, 794 University Ave., Suite 200, Fairbanks, Alaska, 99709.