

**EXPLANATION**

The gamma-ray anomalies and their related geological settings shown on this map are a compilation from the National Uranium Resource Evaluation (NURE) reconnaissance surveys (Aero Service Div., 1981; L&R Resources Inc., 1978a, 1978b, 1978c, 1979; Texas Instruments Inc. 1971, 1978; U.S. Research and Development, 1978; Western Geophysical Company, 1980). The number in the lower left hand corner of each quadrangle is the publication number. For additional information on geologic settings please refer to these publications. This report is a revision of an earlier report by Dickinson and Roberts (1983).

The number in the upper right hand corner of each quadrangle lists the number of preferred anomalies (to the left) and the total number of significant anomalies (to the right), or a single number is shown for total anomalies when preferred anomalies were not listed for. Selection of significant anomalies was based on one or more of the following criteria:

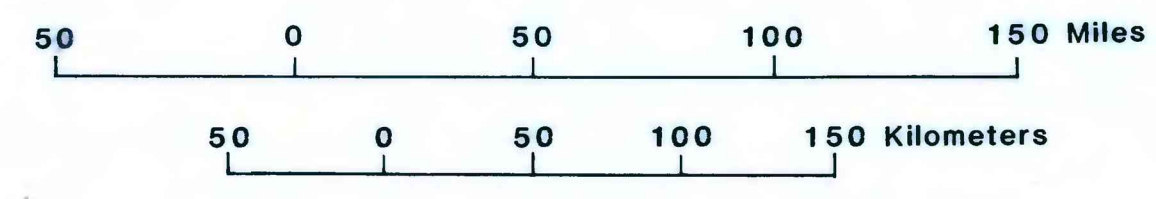
- 1) One (averaged) data point 3 or more standard deviations (sigma) above the mean.
- 2) Two adjacent (averaged) data points between 2 and 3 sigma above the mean.
- 3) Three adjacent (averaged) data points where two are between 1 and 2 sigma, and one is between 2 and 3 sigma above the mean.
- 4) Four adjacent (averaged) points between 1 and 2 sigma above the mean.

In cases where an anomaly is assigned to more than one rock type only the proportion of the anomaly is recorded for that rock type. For instance, if an anomaly is registered over granite, metamorphic rock, and ice only one third of an anomaly is credited to each. Preferred anomalies were usually selected because they show enrichment of all over  $\text{eH}$  and K. The geologic setting is listed only for preferred anomalies, except in those quadrangles where preferred anomalies were not selected (indicated by an asterisk). In the later case, the geologic setting for all anomalies is listed.

References cited  
Aero Service Division, Western Geophysical Company of America, 1981, NURE Airborne Gamma-Ray Spectrometer and Magnetometer Surveys, Barrow, Wainwright, Meade River, Teshepuk, Harrison Bay, Beechy Point, Point Lay, Utukok River, Lookout Ridge, Ikpikpuk River, Umiat, and Sagavanirktok Quadrangles, Alaska: U.S. Department of Energy Open-File Report GUBX-298 through 306 (81), v. 1, Final Reports.  
Dickinson, K.A., and Roberts, M.E., 1980, Summary of Radiometric Anomalies in Alaska: U.S. Geological Survey Open-File Report 83-428.  
L&R Resources, Inc., 1978a, NURE aerial gamma-ray and magnetic reconnaissance survey, eastern Alaska area, Tanacross-Nabesna-McCarthy quadrangles: U.S. Department of Energy, Open-File Report GUBX-81 (78), v. 1, Narrative Report, p. 6.1 - 6.45, 7.12 - 7.26.  
\_\_\_\_\_, 1978b, NURE aerial gamma-ray and magnetic reconnaissance survey, Cook Inlet Alaska area, Tyonek, Anchorage, Kenai, Seward, Selkovia, and Hilying Sound Quadrangles: U.S. Department of Energy, Open-File Report GUBX-108 (78), v. 1, Narrative Report, p. 6.1 - 6.8, 7.1 - 7.29.  
\_\_\_\_\_, 1978c, NURE aerial gamma-ray and magnetic reconnaissance survey, Chukchi/Yakutat area, Alaska, Bering Glacier, Icy Bay, Valdez, Cordova, Slet St. Elias, and Yakutat Quadrangles: U.S. Department of Energy, Open-File Report GUBX-127 (78), v. 1, Narrative Report, p. 6.1 - 6.8, 7.1 - 7.29.  
\_\_\_\_\_, 1979 NURE, aerial gamma-ray and magnetic reconnaissance survey, southeastern Alaska area, Alaska, Skagway, Mt. Fairweather, Juneau, Taku River, Sitka, Seward, Port Alexander, Petersburg, Iradfield Canal Crater, Katchikan, Dixon Entrance, and Prince Rupert Quadrangles: U.S. Department of Energy, Open-File Report GUBX-48 (79), v. 1, Narrative Report, p. 6.3 - 6.50, 7.13 - 7.42.  
Texas Instruments, Inc., 1971, Aerial gamma-ray and magnetic survey of Bethel and Nakavik areas, Alaska: U.S. Department of Energy Open-File Report GUBX-5 (71), v. 1, Final Report, p. 5.1 - 5.90.  
\_\_\_\_\_, 1978, Aerial Radiometric and magnetic reconnaissance survey of the Eagle-Billingham area, Alaska: U.S. Department of Energy Open-File Report GUBX-113 (78), v. 2, 8 - 76, sec. 8 and 9.  
U.S. Energy Research and Development Co., 1978, Airborne geophysical survey, Copper River and Seward and Selkovia areas, Alaska: Administrative Report GUB 1653, p. 9.5 - 9.82.  
Western Geophysical Company of America, 1980, Airborne gamma-ray spectrometer and magnetometer surveys, Norton Bay, Nulato, Unalakleet, Ruby, Neofra, McGrath, Ophir, Sleetsmute, Itard, and Kantishna River Quadrangles, Alaska: U.S. Department of Energy Open-File Reports GUBX-72 through 80, and 94, v. 1, Final Reports, Appendices A and B.

**SUMMARY OF RADIOMETRIC ANOMALIES IN ALASKA**

Compiled by  
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1983



This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.