

**Sn, Ta, U AND W IN HEAVY MINERAL CONCENTRATES,
 LIME PEAK-MT PRINDLE AREA, EAST-CENTRAL ALASKA**

compiled by
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EXPLANATION

- | | |
|-------------------------|----------------------------------|
| ANOMALOUS SAMPLE | PROBABLE ANOMALOUS SAMPLE |
| ◇ | ◇ |
| ▽ | ▽ |
| ○ | ○ |
| □ | □ |
| | ○ |
- ◇ **TIN**
 ▽ **TANTALUM**
 ○ **URANIUM**
 □ **TUNGSTEN**
 ○ sample collected, not anomalous

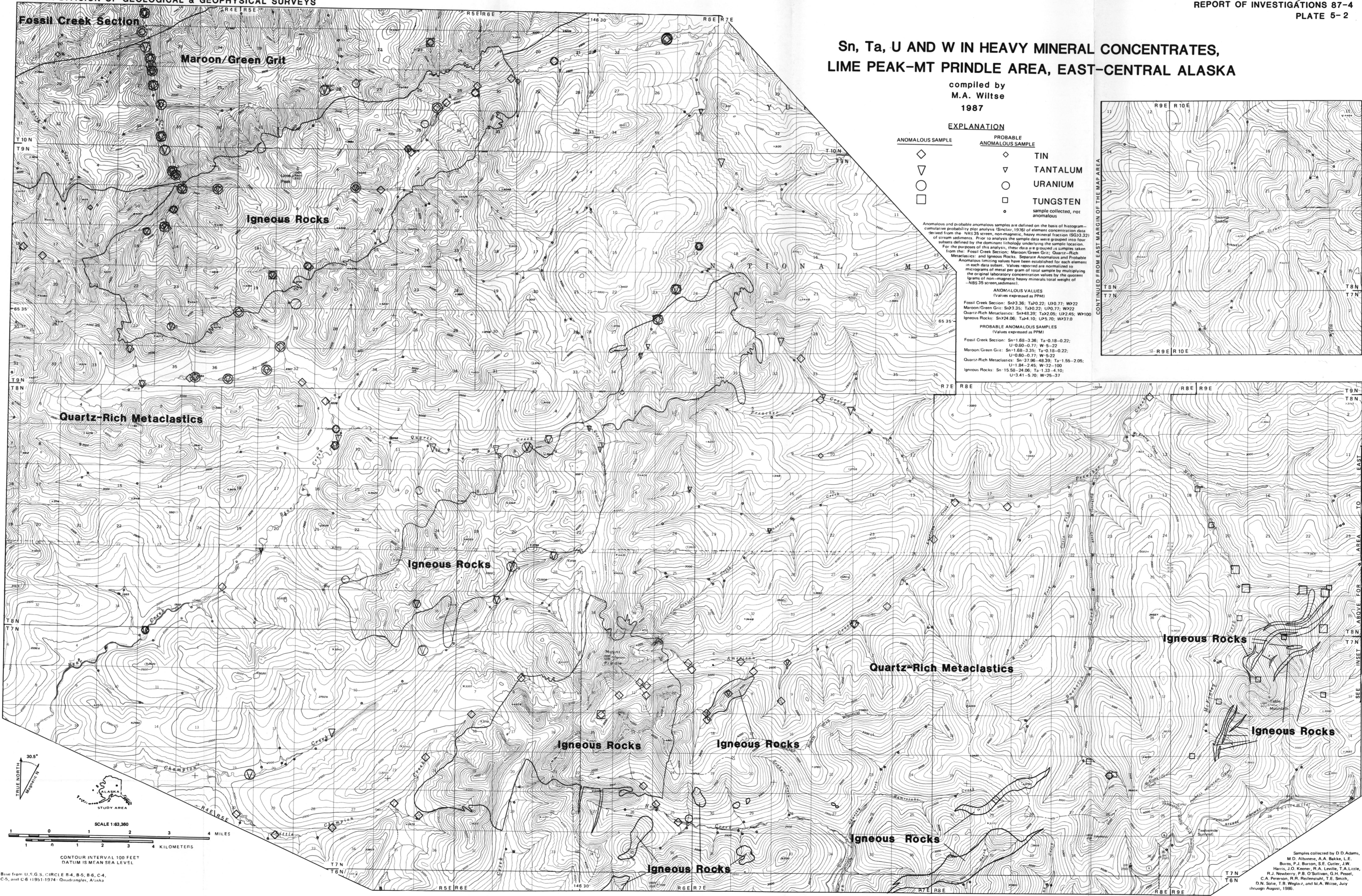
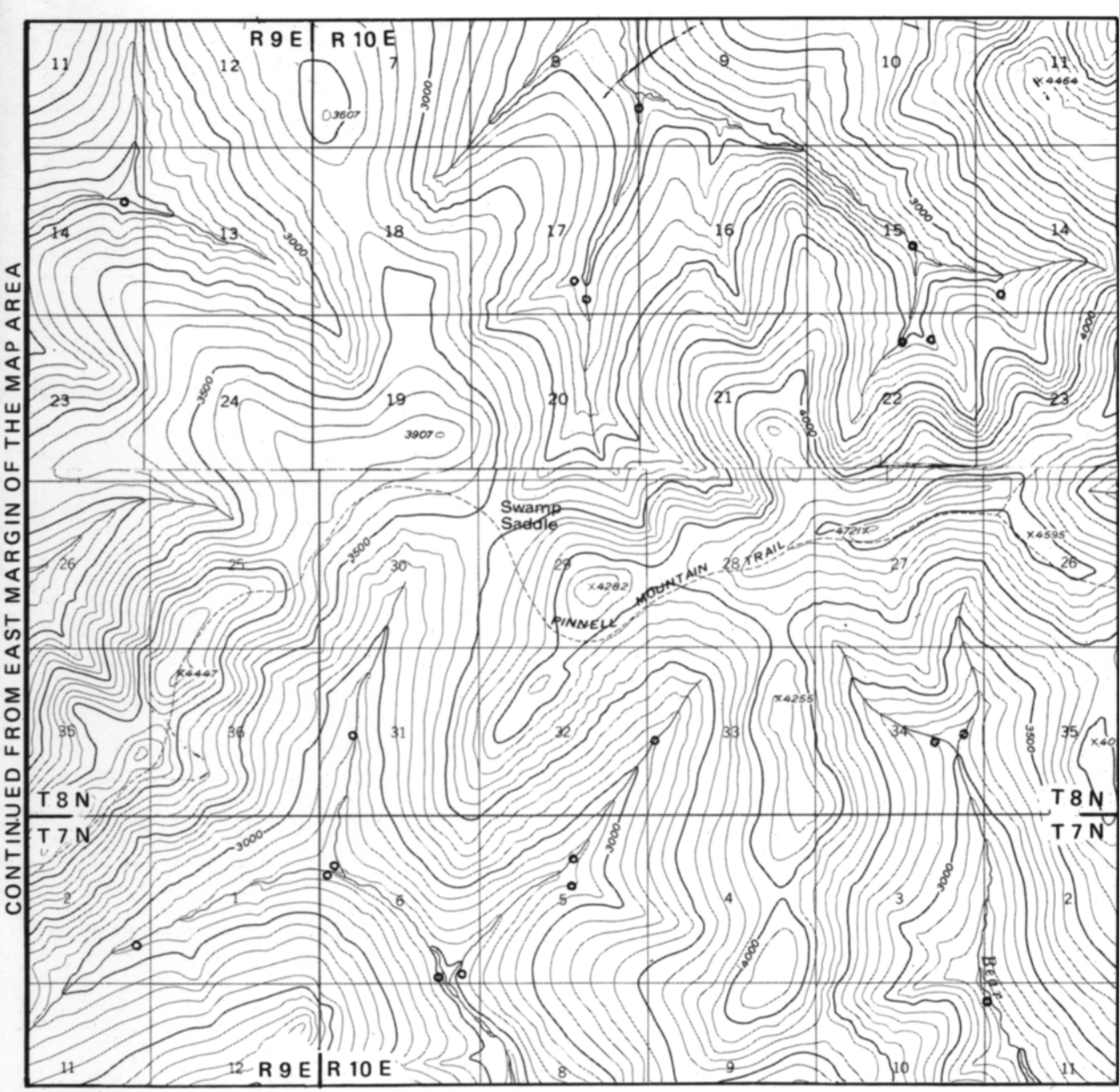
Anomalous and probable anomalous samples are defined on the basis of histogram-cumulative probability plot analysis (Spectral, 1976) of element concentration data derived from the NBS 35 screen, non-magnetic, heavy mineral fraction (S33.32) of stream sediments. Prior to analysis the sample data were grouped into four subsets defined by the dominant lithology underlying the sample location. For the purposes of this analysis, these data are grouped as samples taken from the: Fossil Creek Section; Maroon/Green Grit; Quartz-Rich Metaclastics; and Igneous Rocks. Separate Anomalous and Probable Anomalous limiting values have been established for each element micrograms of metal per gram of total sample by multiplying the original laboratory concentration values by the quotient (grams of non-magnetic heavy minerals/total weight of NBS 35 screen, sediment).

ANOMALOUS VALUES
 (Values expressed as PPM)

Fossil Creek Section: Sn>3.36; Ta>0.22; U>0.77; W>2.2
 Maroon/Green Grit: Sn>3.35; Ta>0.22; U>0.77; W>2.2
 Quartz-Rich Metaclastics: Sn>4.83; Ta>2.05; U>2.45; W>10.0
 Igneous Rocks: Sn>24.06; Ta>4.10; U>5.70; W>37.0

PROBABLE ANOMALOUS SAMPLES
 (Values expressed as PPM)

Fossil Creek Section: Sn=1.68-3.36; Ta=0.18-0.22;
 U=0.60-0.77; W=5-22
 Maroon/Green Grit: Sn=1.68-3.35; Ta=0.18-0.22;
 U=0.60-0.77; W=5-22
 Quartz-Rich Metaclastics: Sn=3.796-4.839; Ta=1.55-2.05;
 U=1.84-2.45; W=32-100
 Igneous Rocks: Sn=15.58-24.06; Ta=1.33-4.10;
 U=3.41-5.70; W=25-37



SCALE 1:63,360
 1 2 3 4 MILES
 1 2 3 4 KILOMETERS

CONTOUR INTERVAL 100 FEET
 DATUM IS MEAN SEA LEVEL

Base from U.S.G.S. CIRCLE B-4, B-5, B-6, C-4, C-5, and C-6 1:50,000 1974 Quadrangles, Alaska

Samples collected by D.D. Adams, M.D. Ahrens, A.A. Bakke, L.E. Burns, P.J. Burton, S.E. Cutler, J.W. Harris, J.O. Keener, R.A. Levitt, T.A. Little, R.J. Newberry, P.B. O'Sullivan, G.H. Pessel, C.A. Peterson, R.R. Reinhardt, T.E. Smith, D.N. Solie, T.B. Weigler, and M.A. Wiltse, July through August, 1986.