ALASKA DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

ALASKA OPEN-FILE REPORT 150G

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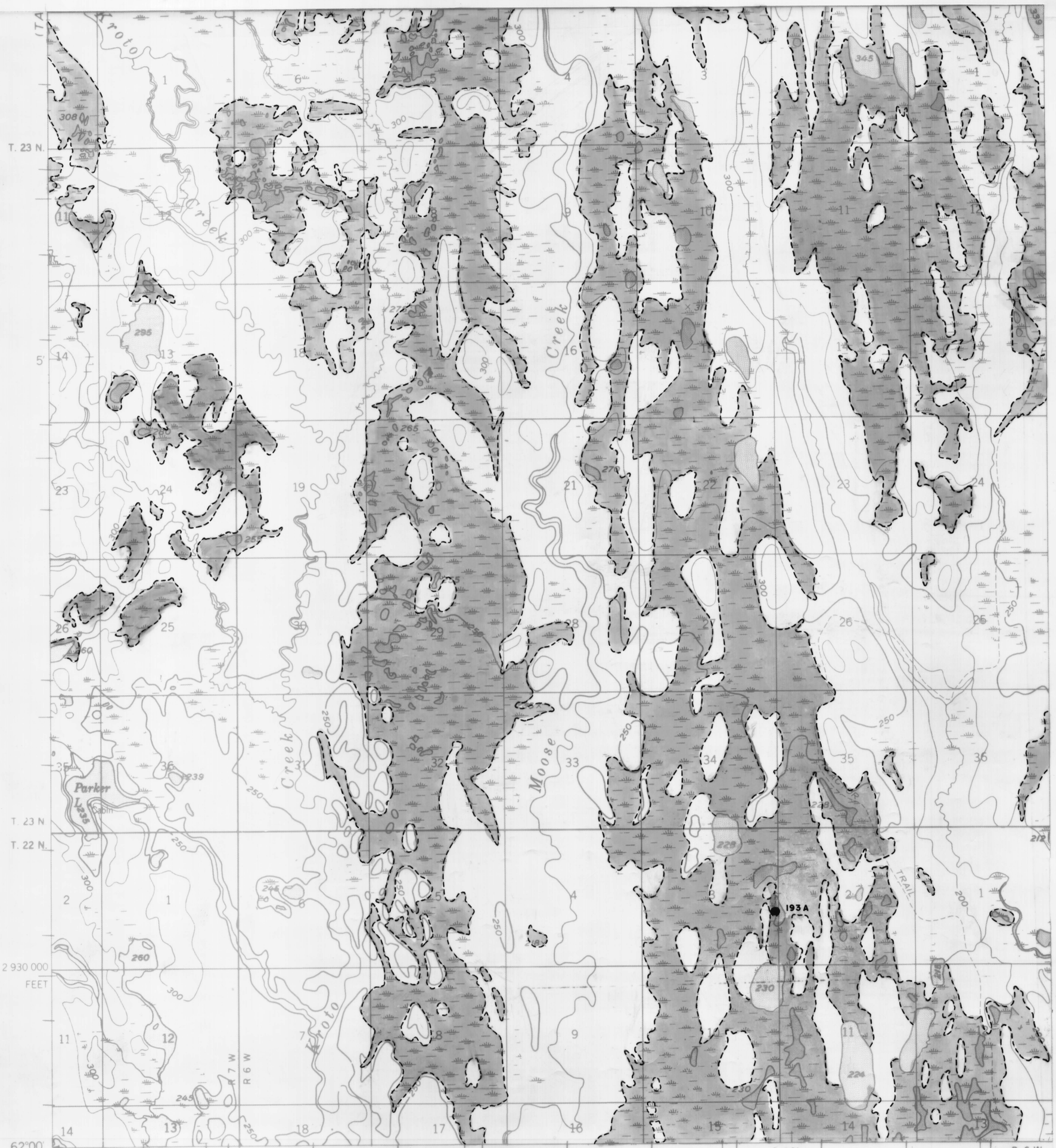


EXPLANATION

Core Explanation

OOA-1 — Core site number keyed to map

Depth (ft.) — 3 — Wt. % ash, moisture free
-25, 8300 - BTU/lb., moisture free
9200 - BTU/lb., moisture and ash free

Core Sample

193 A
3 - -32, 6,944
10,198

Estimated Peat Resources

Bases

- 7 lb. peat/ft.^{3}, moisture and ash free (MAF)
- 9,732 BTU/lb., mean moisture and ash free BTU determined from analyzed cores of this study
- 8.3 ft. mean peat depth determined from cores on Alaska Open-File Reports 150 A-H

Total Acres Peat	13,247
Total Tons Peat, MAF	16,762.6 x 10^3
Total Quads*, MAF	0.326

*1 Quad = 10^{15} BTU

In this report, total tons and total Btu values are for moisture- and ash-free peat. U.S. Department of Energy fuel-grade-peat criteria include a minimum of 8,300 Btu/lb (dry) and a maximum of 25 percent ash. However, 8,300 Btu/lb corresponds to an ash content of about 17 percent, which is considered critical for fuel-grade peat. Twenty-seven percent of all samples (n=511) analyzed for ash has less than 25 percent ash and 11 percent has less than 17 percent ash. Thus, values for total tons and total Btu's of in-situ fuel-grade peat are approximately 11 percent of those values shown, or 1,844 x 10^3 and 3.6 x 10^{13}, respectively; total quads is 0.036.

If peat processing reduces the ash content by 50 percent, the maximum allowable in-situ ash content is 34 percent. Forty-three percent of all samples analyzed for ash has less than 34 percent ash; 43 percent of the total tons and total Btu's is 7,208 x 10^3 and 14.0 x 10^{13}, respectively; total quads is 0.140.

Based on aerial photograph interpretation (1979 NASA U-2, lines 99-100) September 1981 through November 1981. Coring by Northern Technical Services (NORTEC), Anchorage, Alaska, July 1981 through September 1981. Analysis for NORTEC by Dr. Rouse Farnham, consultant, Hibbing, Minnesota, and Mineral Industry Research Laboratory, University of Alaska, Fairbanks, Alaska.

Base from U.S. Geological Survey
Talkeetna A-1 Quadrangle, Alaska, 1958

SCALE 1 : 31,680

2 1 0.5 0 0.5 1 2 MILES

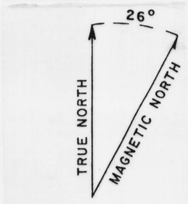
2 1 0.5 0 0.5 1 2 KILOMETERS

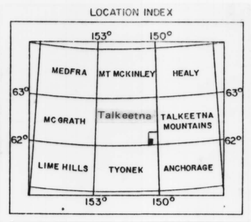
CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL

Symbols

Peatland

OOA-1 — Core site and number





PEAT RESOURCE MAP, SOUTHWESTERN TALKEETNA A-1 QUADRANGLE, ALASKA

by

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1982

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This is a preliminary publication of the Alaska Division of Geological and Geophysical Surveys and as such has not received final editing and review. The authors will appreciate candid comments on the accuracy of the data, and welcome suggestions that will improve the report.