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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 (#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 $2,062 \times 10^3$ and 4.0×10^{15} , respectively; total quads is 0.040.
 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 $8,061 \times 10^3$ and 15.7×10^{15} , respectively; total quads is 0.157.

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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 Samples

Core ID	Depth (ft.)	Wt. % ash, moisture free	BTU/lb., moisture free	BTU/lb., moisture and ash free
193B	3'	46	4,992	9,185
193C	3'	21	8,445	10,735
232A	3'	25	7,346	9,799
232B	3'	25	7,242	9,712
232C	3'	30	6,674	9,598

Estimated Peat Resources

- 7 lb. peat/ft.², moisture and ash free (MAF)
- 9,732 BTU/lb., mean moisture and ash free BTU determined from analyzed cores of this study
- 6.1 ft. mean peat depth determined from cores on Alaska Open-File Reports 1501-M

	R6W		R5W		R4W	
	Acres	Tons $\times 10^3$	Acres	Tons $\times 10^3$	Acres	Tons $\times 10^3$
T22N	4,471	4,158.2	3,503	3,258.0	381	354.7
T21N	721	670.5	2,010	1,869.7	2,915	2,710.8
T20N	1,927	1,792.0	964	896.8	3,265	3,036.7
T19N						

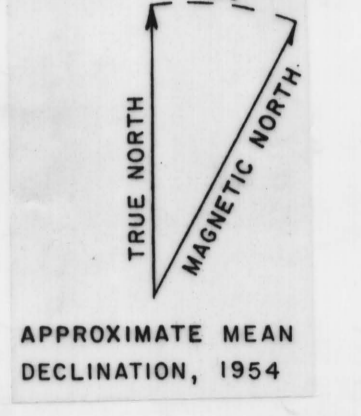
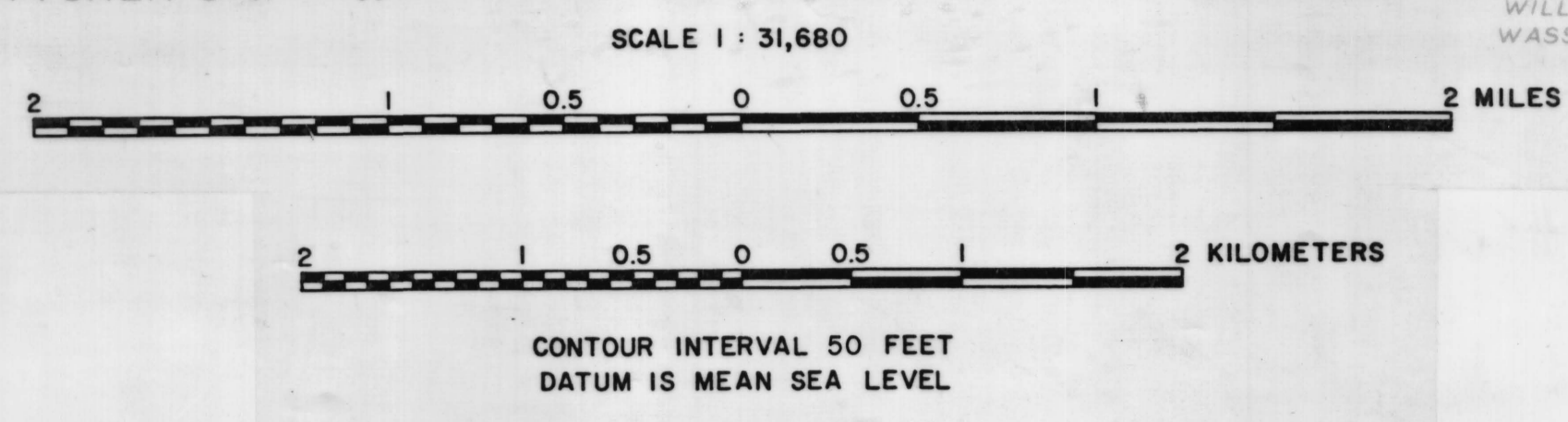
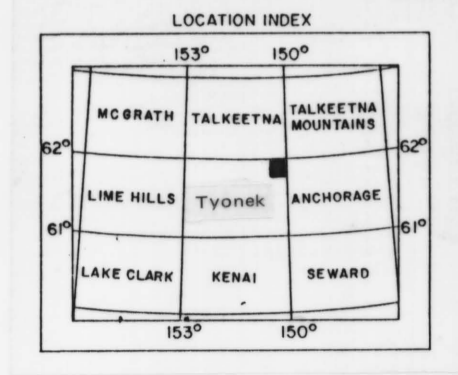
Total Acres Peat 20,158
 Total Tons Peat, MAF $18,747.4 \times 10^3$
 Total Quads*, MAF 0.365
 * 1 Quad = 10^{15} BTU

Symbols

 Peatland

 Core site and number

Base from U.S. Geological Survey Tyonek D-1 Quadrangle, Alaska, 1954
 Based on aerial photograph interpretation (1979 NASA U-2, lines 100-102) September 1981 through November 1981. Coring by Northern Technical Services (NORTEC), Anchorage, Alaska, July 1981 through September 1981. Analysis for NORTEC by Dr. Rouse Fernham, consultant, Hibbing, Minnesota, and Mineral Industry Research Laboratory, University of Alaska, Fairbanks, Alaska.



PEAT RESOURCE MAP, TYONEK D-1 QUADRANGLE, ALASKA

by
 Rawlinson, S.E., Huck, R.W., and Hardy, S.B.

1982

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 author will appreciate candid comments on the accuracy of the data, and welcome suggestions that will improve the report.