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Sketch maps, sections and laboratory analyses of peat resources in deposits of southern and western Maine

by

Cornelia C. Cameron

and

Michael K. Mullen

Open-File Report 83-18

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ABSTRACT

Peat deposits in southern and western Maine were investigated for their estimated potential as peat resources suitable for energy, horticultural, and agricultural uses. Fifty-six sketch maps illustrate the areal extent, thickness, and amount of commercial-quality peat. The total yield is estimated at 27,736,400 short tons air-dried peat. Ash content is generally less than 11 percent and BTU ranges from 8,063 to 10,076.

INTRODUCTION

General nature and classifications of peat

Peat is light-brown to dark-brown or almost black residuum formed by the partial decay and disintegration of plants that grew in marshes and swamps or in damp places such as heaths. It may be (1) fibrous matted material composed of mosses, ferns, grasses, rushes, reeds, sedges, and woody material from trees and shrubs; (2) finely divided plants so decomposed that their biological identity has been lost; or (3) nonfibrous, plastic colloidal, and macerated material deposited at the bottom of lakes or other bodies of water. The U.S. Bureau of Mines classifies peat in three general types. Material derived from moss is moss peat; that from reed, sedge, shrub, and tree groups is classified as reed-sedge peat; and material so decomposed that its botanical identity has been obscured and its further oxidation impeded is classified as humus peat. The American Society for Testing and Materials (ASTM) refined these definitions in 1969 to include in commercial-quality peat only that having an ash content of not more than 25 percent. To avoid confusion with soil-science terminology, sphagnum moss peat in this report is equivalent to fibric peat, reed-sedge peat is equivalent to hemic herbaceous peat, and humus peat is equivalent to sapric peat (Olson and others, 1979).

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Uses of peat and outlook for peat industry

Virtually, all peat sold in the United States in 1979 was used for agricultural and horticultural purposes. It was marketed through nurseries, garden centers, and chain stores chiefly in suburban areas of the North-Central, Northeast, and Middle Atlantic States and Florida. Production during 1980 in the United States was estimated (Searles, 1981) at 790,000 short tons for agricultural use. Value of the 1980 production was about $17,000,000 f.o.b. (freight on board) mine, and the average value per ton was about $21.80. Apparent consumption of peat in the United States during 1980, however, was 1,115,000 short tons, of which imports composed 355,000 short tons.

Demand for peat in the production of food is expected to increase from the 1978 demand at an average annual rate of about 3 percent to 1.4 million short tons in 1985 (Searles, 1981). The demand for peat in the production of energy is also expected to begin. Experimental studies on the gasification of peat continue in the Midwest, and a large industrial corporation in North Carolina is investigating and promoting the possible commercial generation of electrical power from steam produced by direct burning of peat.

Scope of report

The purpose of this report is to make the 50 sketch maps immediately available for use in assessing peat resources in Maine. The complete study is an expansion of studies begun earlier in Washington, southeastern Aroostook, Hancock, and Penobscot Counties (Cameron, 1975; Cameron and Massey, 1978; Cameron and Anderson, 1979, 1980; Cameron and Mullen, 1981). The locations of the 56 peat deposits mapped for this report are shown in the index map (figure 1), and described in more detail in the captions of the individual deposit maps (figures 2-57). All estimates given in figures 2-57 are in short tons.

Method of study

Field studies consisted of pace and compass traverses for determining extent of deposits. Stratigraphy was examined in cores taken by use of Macaulay augers and Davis peat samplers, and ash content of peat was determined by simple field methods.

Estimates of commercial-quality resources were based on acre-feet of peat where it was 5 or more feet thick and had an ash content not greater than 25 percent; this definition of commercial-quality peat resources is in accord with ASTM (1969) standards. The formula for converting acre-feet of peat to short tons of air-dried peat was devised by E. S. Bastin and C. A. Davis (1909) of the U.S. Geological Survey during their study to determine the extent and value of Maine's peat deposits as sources of potential fuel and as raw materials for various other uses. Bastin and Davis (1909, p. 24) stated, "the quantity of peat in a deposit may readily be calculated, with enough accuracy for practical purposes, by obtaining its average depth and its area, and assuming that it will yield at least 200 tons of dry machine-made fuel per acre, for each foot in depth." This formula was based on the following figures (Bastin and Davis, 1909, p. 62):

> "The specific gravity of the dry peat substance is slightly but not much greater than that of water. A cubic foot of water weighs 62.5 pounds. It is probable that a cubic foot of wet peat as it comes from the bog will weigh more than this, probably somewhat over 65 pounds...many peats as they come from the bog contain 85 to 90 percent of water by weight. In others the water percentage is lower, but for purposes of a conservative estimate it may be assumed that the vegetable matter constitutes only 10 to 15 percent by weight of the wet peat. On this basis, a cubic foot of wet peat would contain only 10 to 15 percent of 65 pounds or 6.5 to 9.75 pounds of vegetable material.
>
> The water contained in air-dried machine peat will probably average about 25 percent by weight, but a conservative estimate may assume that it constitutes only 20 percent...Forty pounds may be taken as an average figure (for the weight of air-dried machine peat per cubic foot). Of this about 80 percent, or 32 pounds, would be vegetable material.
>
> As each cubic foot of peat as it comes from the bog contains 6.5 to 9.75 pounds of vegetable matter, it would take...5 to 3.2 cubic feet of wet peat to make 1 cubic foot of air-dried machine peat. If we assume 4 cubic feet of wet peat as an average figure, we have the following relations:

$$\frac{\text{Volume of wet peat in bog, in cubic feet}}{4} \times \frac{40 \text{ (average weight in pounds of 1 cubic foot of machine peat)}}{2{,}000} = \frac{\text{Volume of wet peat in bog, in cubic feet}}{200} = \text{Number of tons of air-dried machine peat which the bog can produce."}$$

(number of cubic feet of wet peat equal to 1 cubic foot of machine peat)

(pounds in short ton)

Acknowledgments

The Maine Geological Survey supported this study with assistance from the Maine Office of Energy Resources, Augusta, Maine. Appreciation is especially extended to Carolyn A. Lepage, Robert A. Johnston, Robert D. Tucker, and Bennett J. Wilson, Maine Geological Survey, for assistance in preparation of this report. The excellent field assistance by Vernon L. Shaw and Robert A. Johnston, also with the Maine Geological Survey is gratefully acknowledged.

RESOURCES

Peat resources having a minimum thickness of 5 feet and ash content of less than 16 percent occupy a total of 13,810 acres; potential yield is 27,736,400 short tons of peat on the dry basis (Table 1). Figures 2a-57a show that these resources are as much as 23 feet thick in some deposits. Laboratory analyses (Tables 2-52) show that of the 50 deposits of commerical quality peat that were analyzed 88 percent had ash content of less than 11 percent. BTU in all samples of commercial quality peat ranged from 8,063-10,076. Almost all the resources may be classed as moss (fibric) peat and reed-sedge (hemic) peat.

Table 1. Estimated peat resources in the 56 studied areas, Maine

INDEX MAP (Fig. 1) LOC. NUMBER	ACRES	SHORT TONS AIR-DRIED PEAT
1	27	37,800
2	370	742,000
3	250	680,000
4	280	720,000
5	540	1,730,000
6	128	128,000
7	Too thin and poor in quality to be a peat resource	
8	360	1,140,000
9	100	200,000
10	665	1,444,000
11	420	770,000
12	175	175,000
13	130	208,000
14	Too thin and poor in quality to be a peat resource	
15	340	625,000
16	330	396,000
17	605	1,864,000
18	100	300,000
19	125	200,000
20	385	891,000
21	180	396,000
22	110	154,000
23	495	983,000
24	Too thin and poor in quality to be a peat resource.	
25	170	355,000
26	200	400,000
27	135	243,000
28	595	602,000
29	435	1,044,000
30	220	352,000
31	320	512,000
32	170	170,000
33	687	925,800
34	240	614,000
35	111	163,800
36	325	558,000
37	115	225,000
38	77	147,000
39	113	288,200
40	110	264,000
41	117	187,200
42	60	100,000

Table 1.--continued

INDEX MAP (Fig. 1) LOC. NUMBER	ACRES	SHORT TONS AIR-DRIED PEAT
43	150	300,000
44	160	160,000
45	144	473,600
46	55	55,000
47	215	215,000
48	185	315,000
49	396	847,200
50	751	2,010,800
51	227	399,000
52	365	752,000
53	285	408,000
54	152	188,000
55	170	221,000
56	240	457,000
TOTAL	13,810	27,736,400

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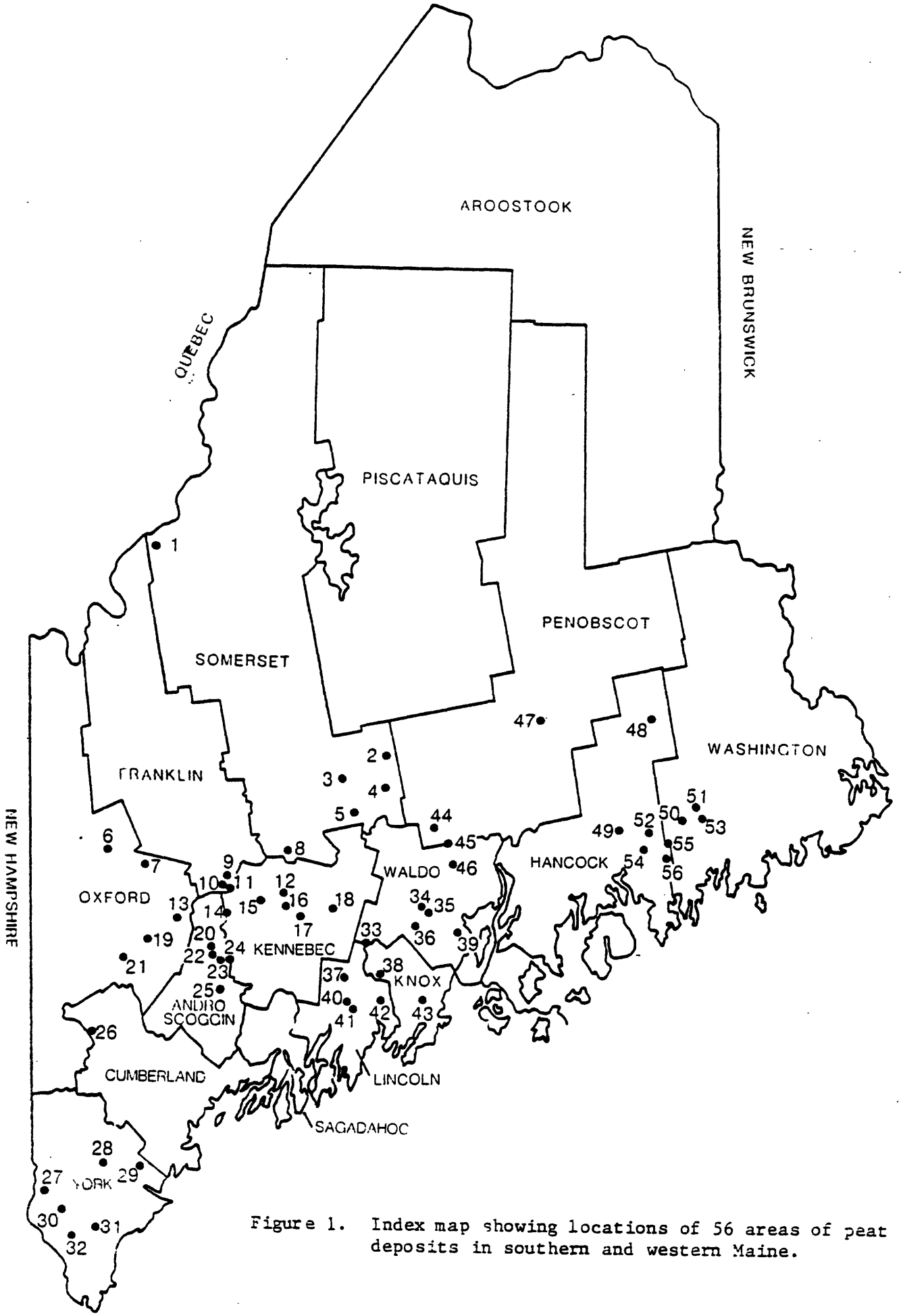


Figure 1. Index map showing locations of 56 areas of peat deposits in southern and western Maine.

Explanation of section shown in all figures.

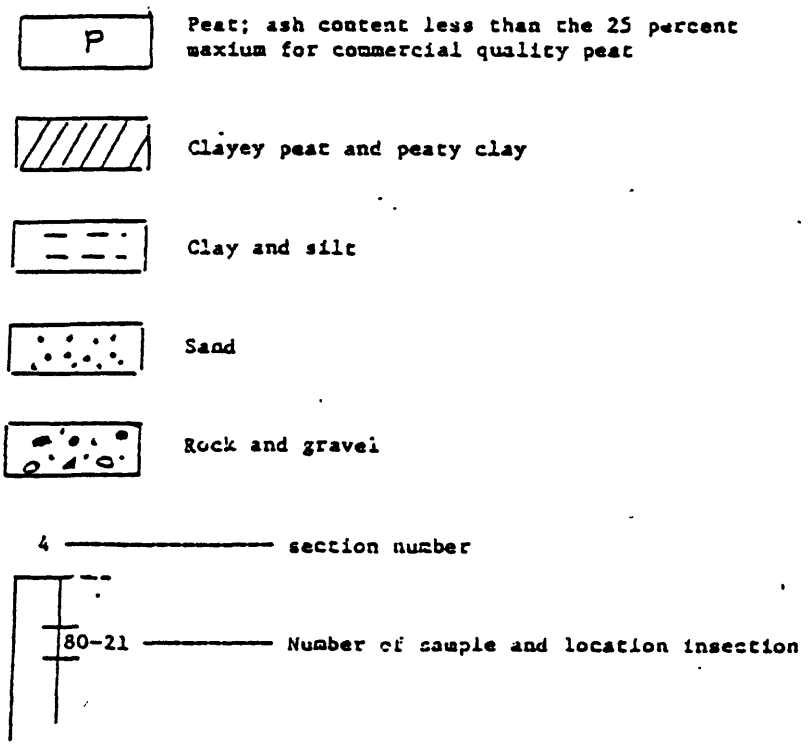


Figure 1a.

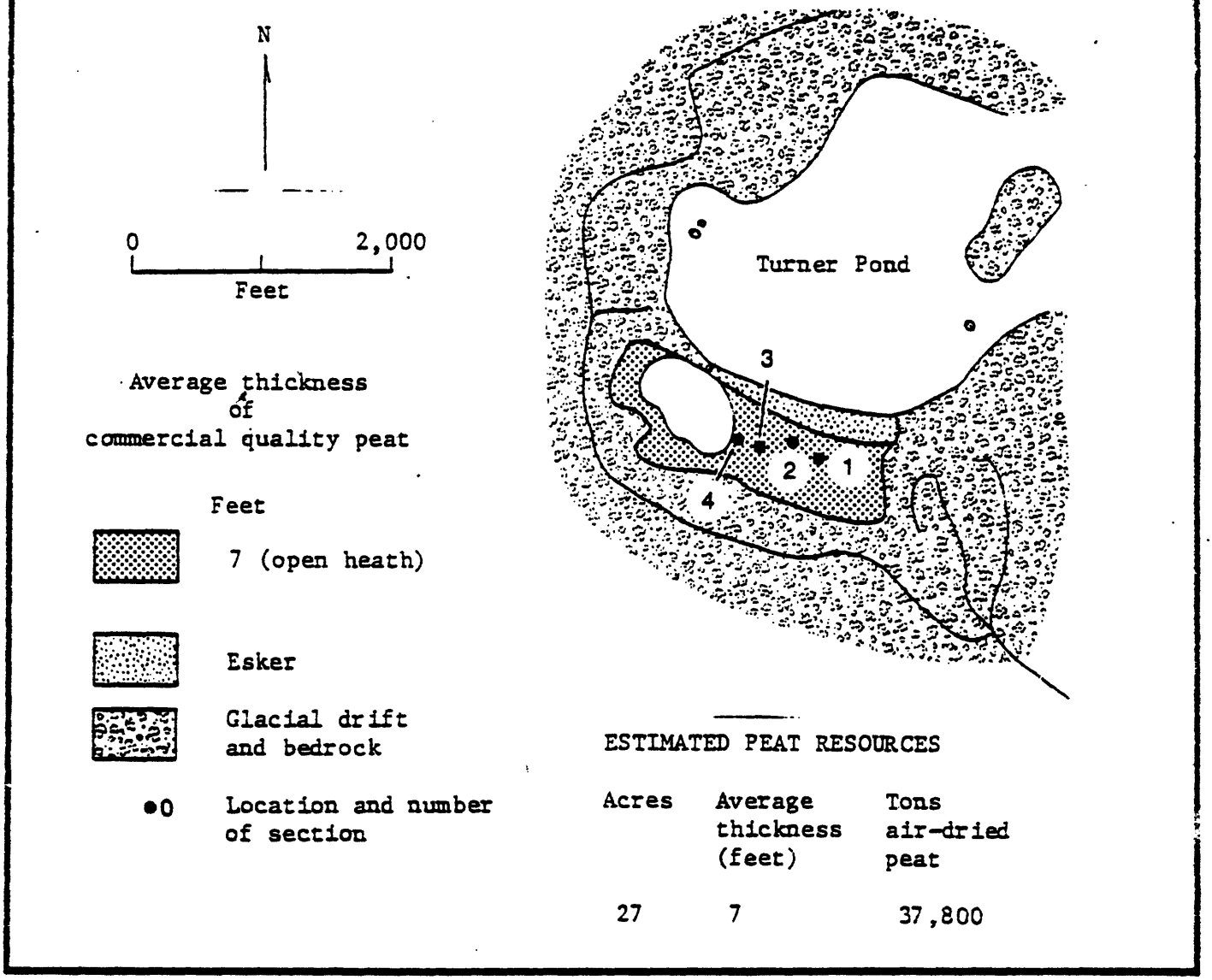


Figure 2. Sketch map of "Cow Pasture" bog at Turner Pond, T6 R2 NBKP (Forsythe Twp.), Attean 15 minute Quadrangle, Somerset County, Maine. (Number 1 on Index Map).

Figure2a.--Sections and sample locations.

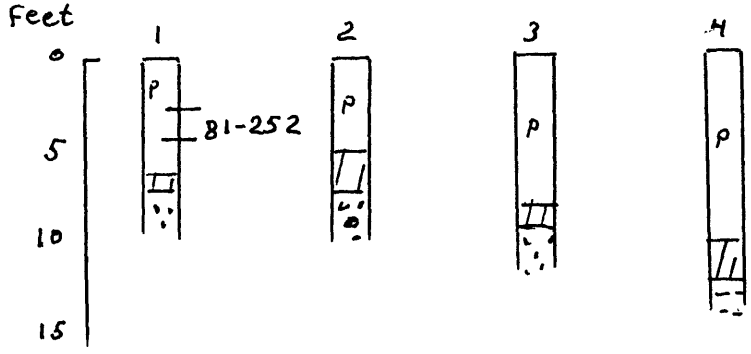
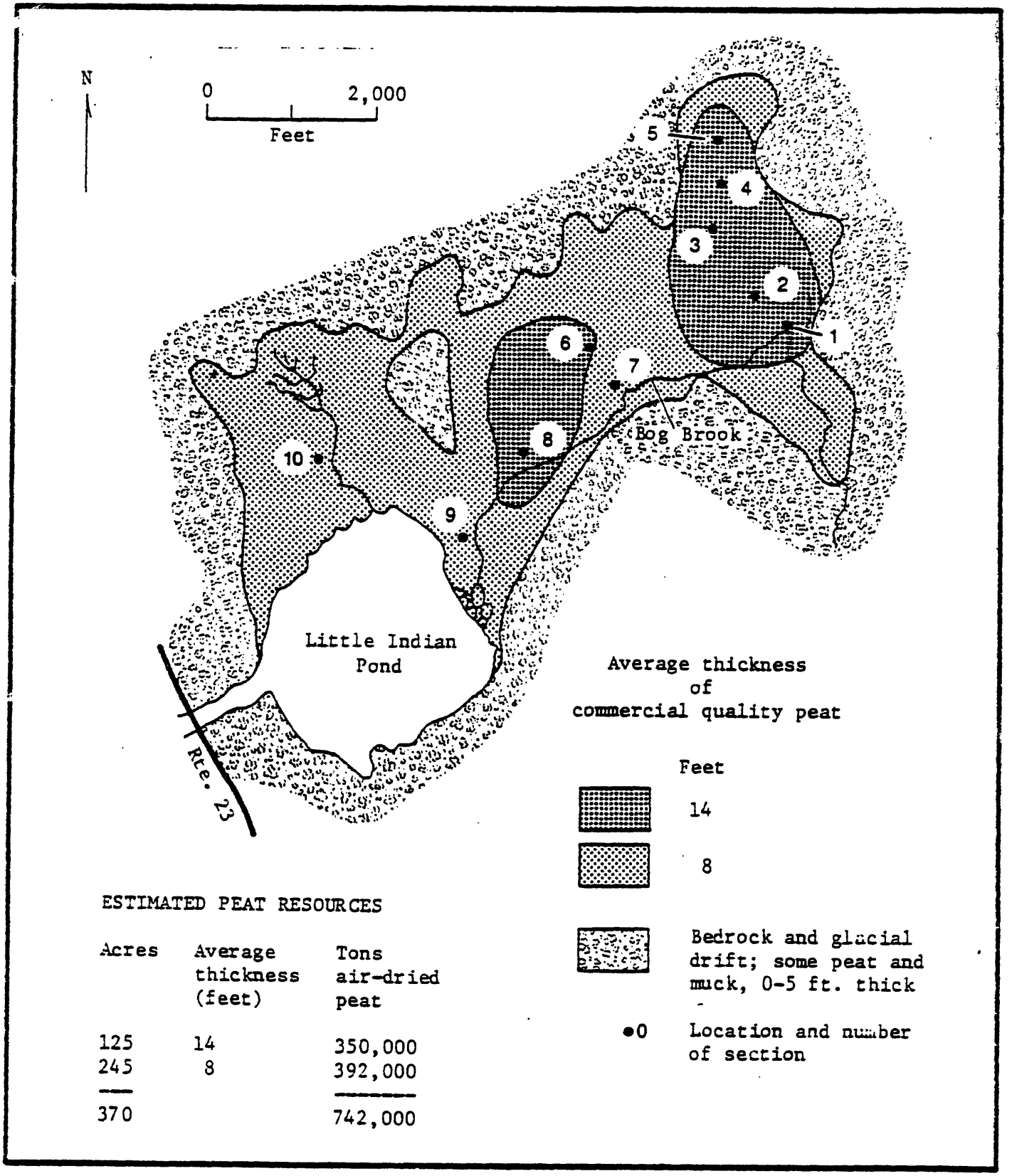


Table 2.--Analyses of samples in sections located in figure 2a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
252	58.74	4.88	1.65	0.17	2.2	89.9	63.7	10,076



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
125	14	350,000
245	8	392,000
370		742,000

Figure 3. Sketch map of bogs at Little Indian Pond and Bog Brook, St. Albans Twp., Pittsfield 15 minute Quadrangle, Somerset County, Maine. (Number 2 on Index map).

Figure 3a.--Sections and sample locations.

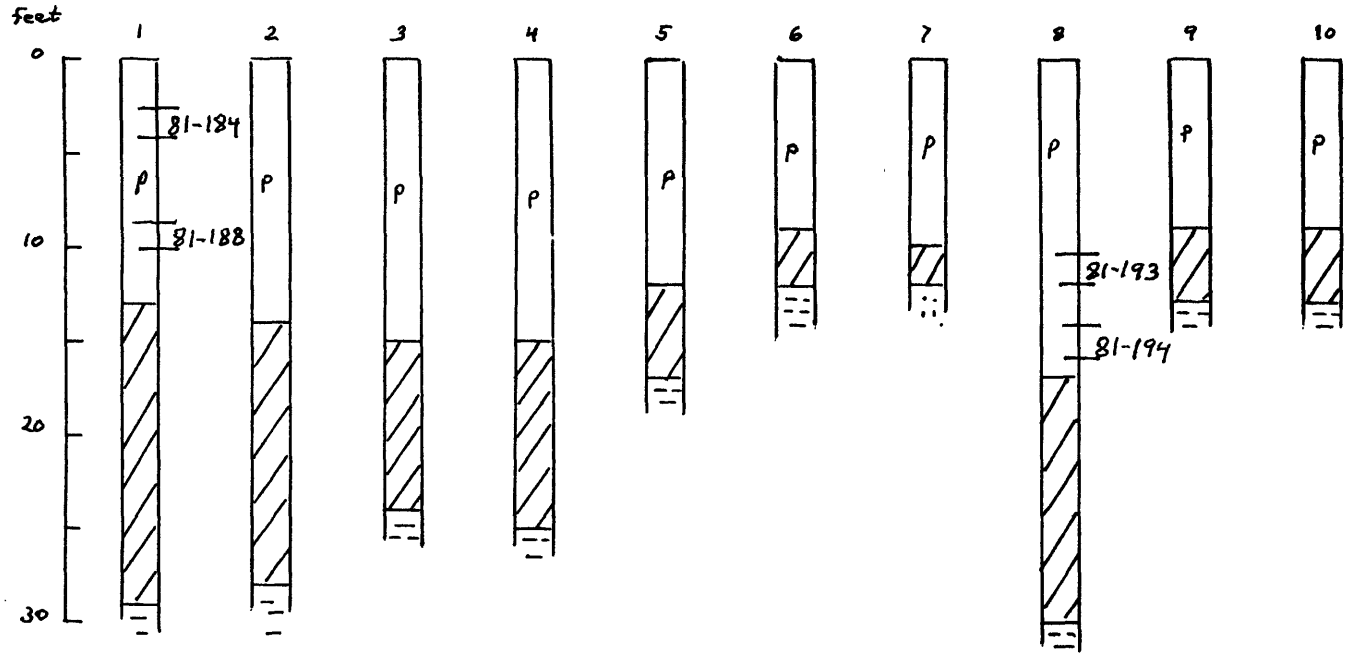
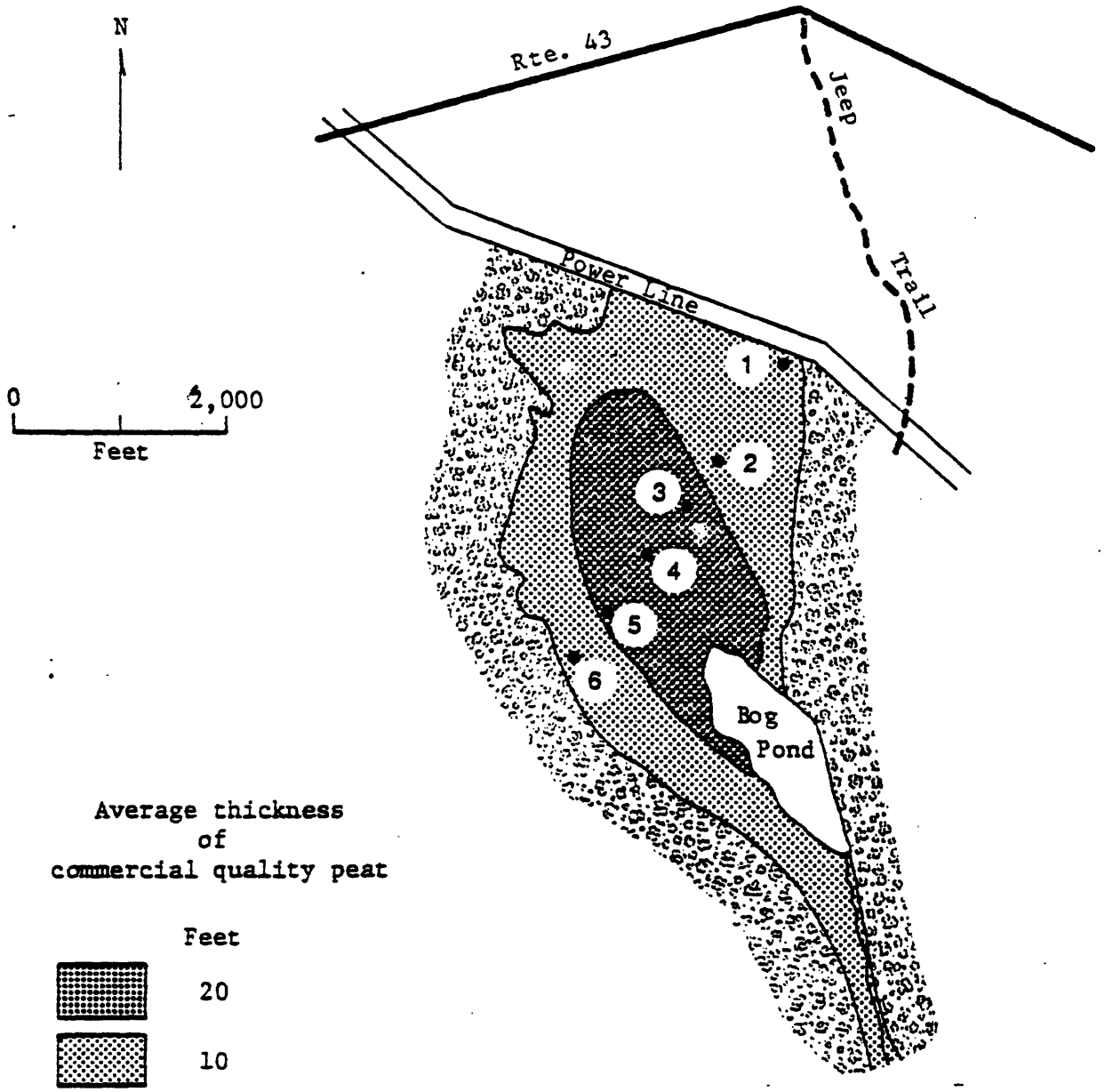


Table 3.--Analyses of samples located in sections in figure 3a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
184	52.12	4.89	1.13	0.11	1.8	88.8	71.9	8,765
188	48.35	4.57	3.02	0.94	15.5	---	60.1	8,388
193	52.74	4.33	0.74	0.10	2.0	92.0	68.0	8,817
194	55.78	4.55	1.95	0.57	3.3	90.8	62.9	9,434
Average commercial quality peat (ash content less than 25%)	52.25	4.58	1.71	0.43	5.65	90.53	65.7	8,851



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
90	20	360,000
160	10	320,000
250		680,000

Figure 4. Sketch map of bog at Bog Pond southeast of Corson Corner, Hartland Twp., Skowhegan 15 minute Quadrangle, Somerset County, Maine. (Number 3 on Index Map).

Figure 4a.--Sections and sample locations.

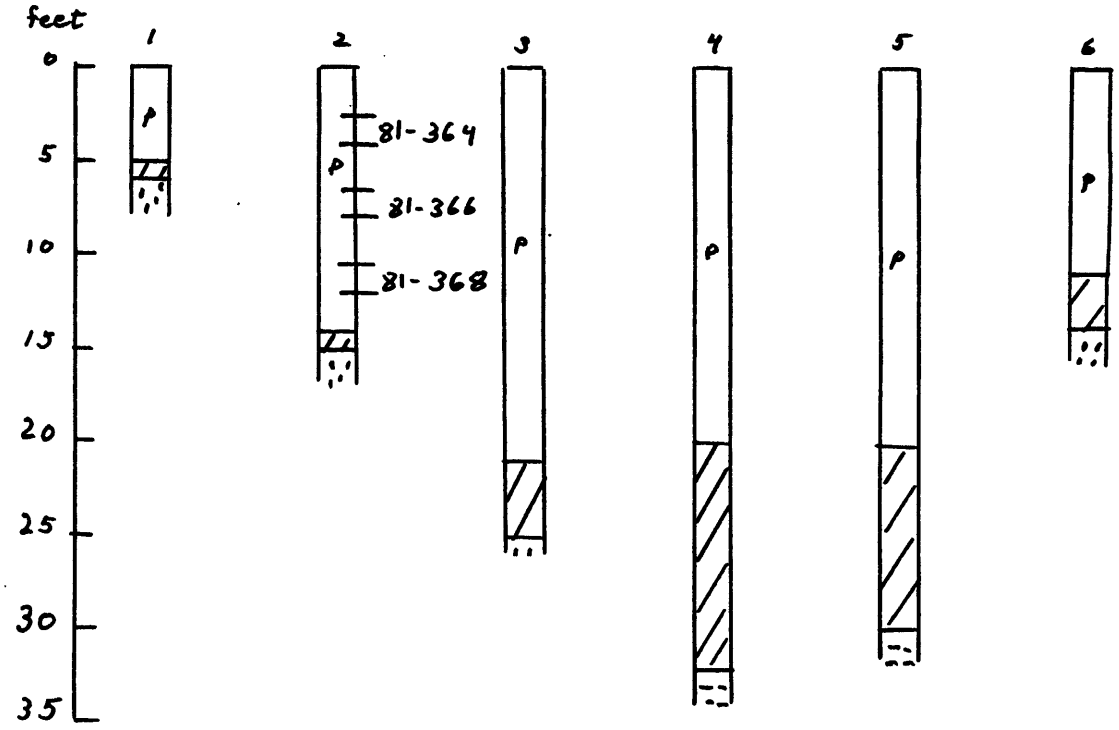


Table 4.--Analyses of samples located in sections in figure 4a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
364	54.31	5.00	0.85	0.11	1.0	91.4	67.5	9,085
366	59.13	5.10	1.52	0.13	2.0	91.0	64.8	10,081
368	55.95	4.37	1.63	0.31	4.6	90.5	62.1	9,459
Average commercial quality peat (ash content less than 25%)	56.46	4.82	1.33	0.17	2.5	90.9	64.8	9,542

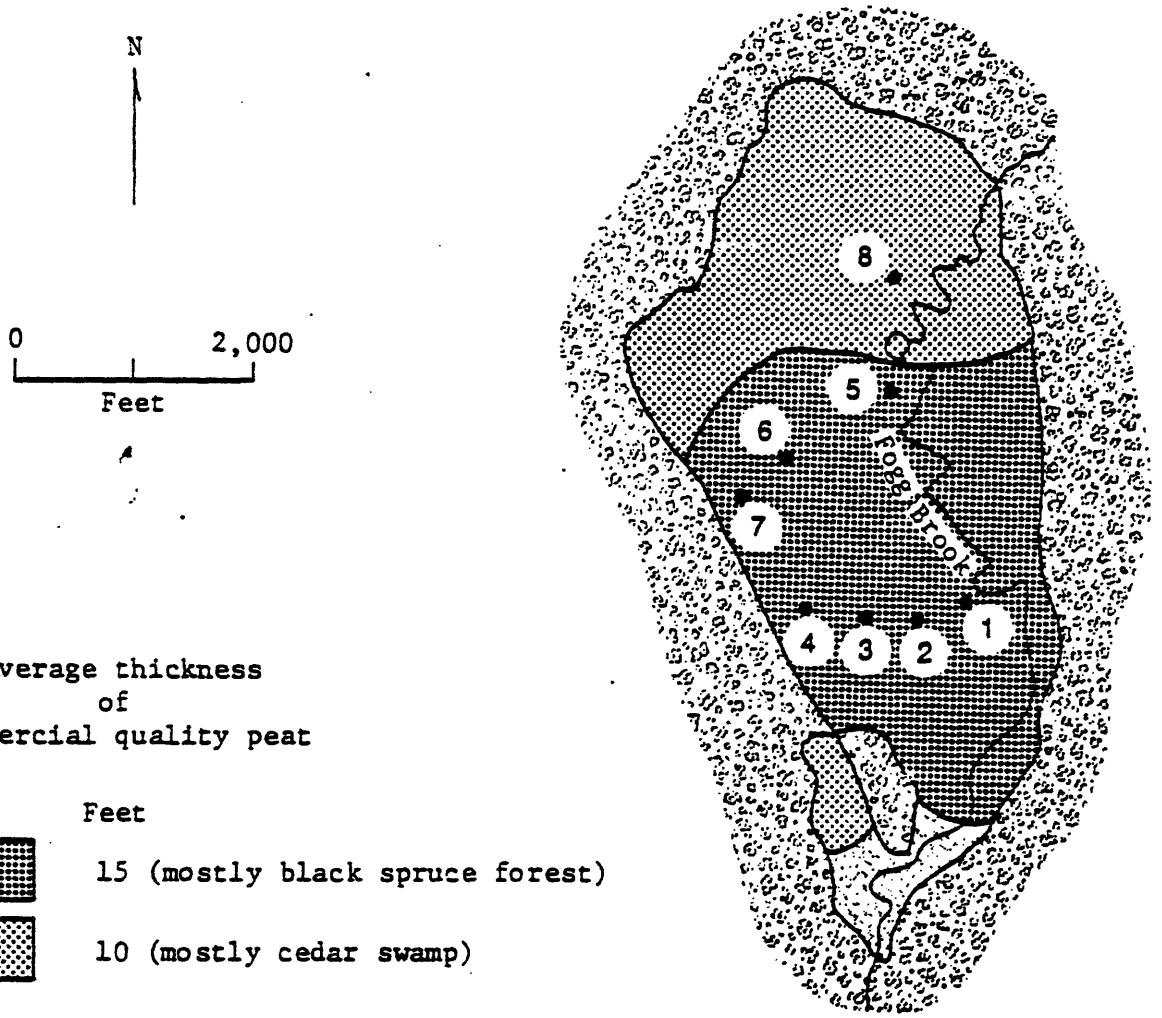


Figure 5. Sketch map of bog along Fogg Brook, Palmyra Twp., Pittsfield 15 minute Quadrangle, Somerset County, Maine. (Number 4 on Index Map).

Figure 5a.--Sections and sample locations.

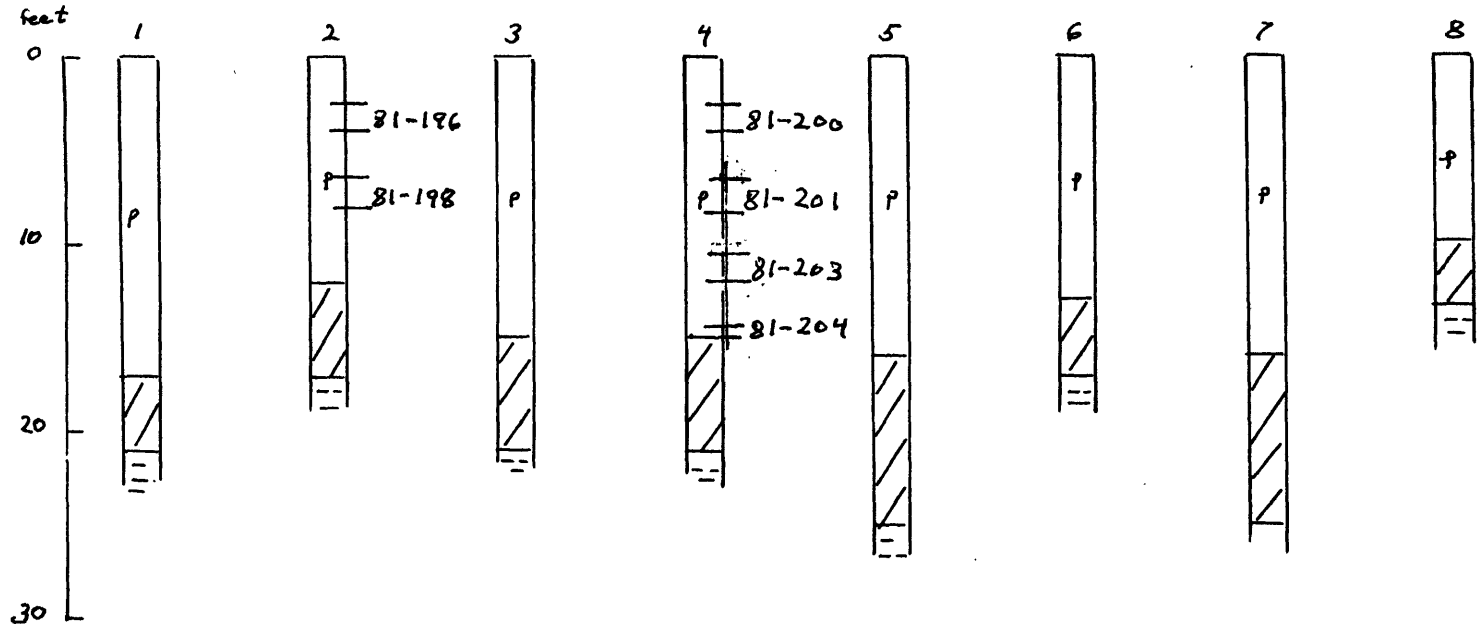
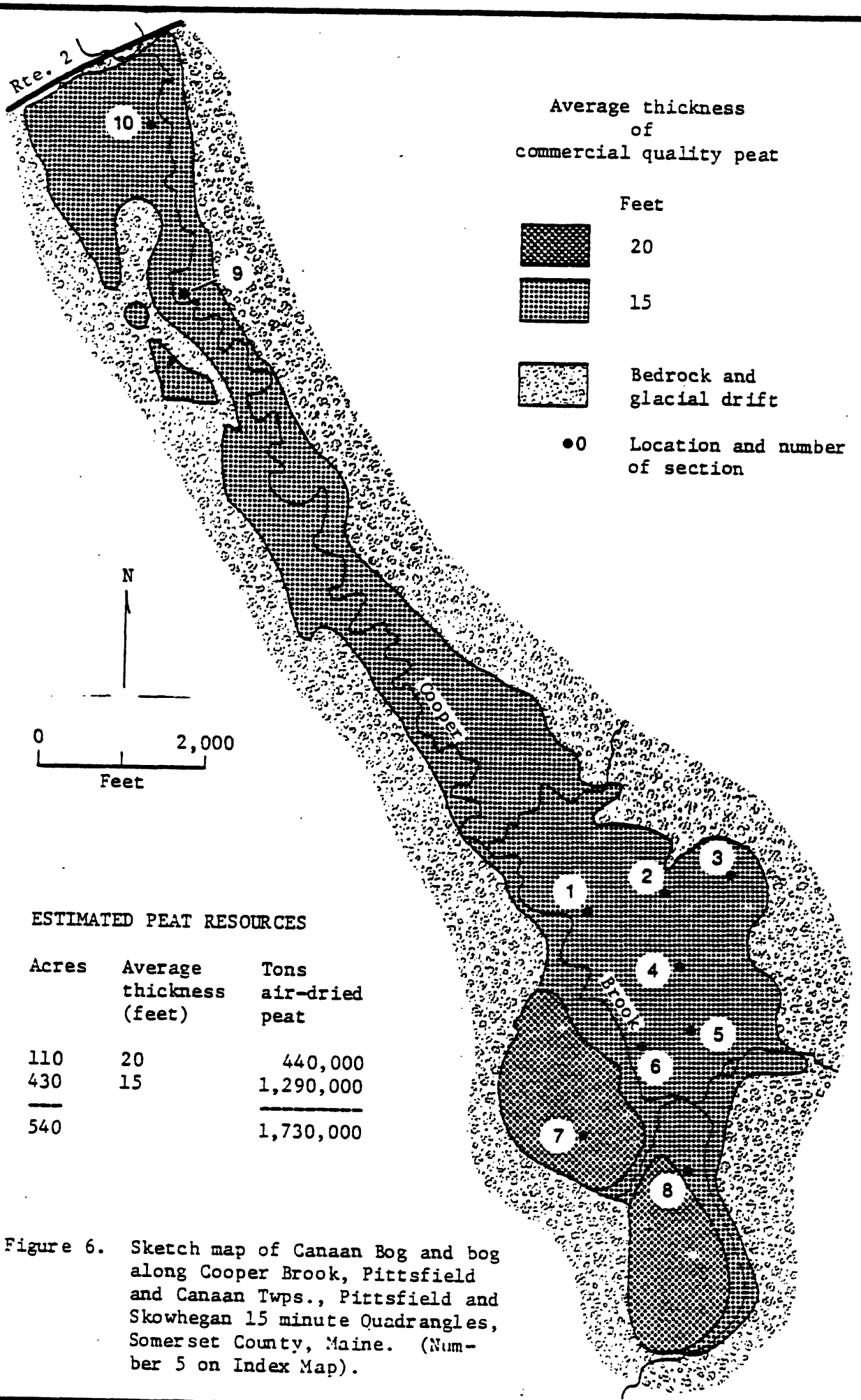


Table 5.--Analyses of samples located in sections in figure 5a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
196	55.83	4.73	0.82	0.14	0.9	---	67.1	9,270
198	55.07	5.15	1.43	0.15	1.6	91.2	68.2	9,437
200	58.75	4.34	1.32	0.17	2.3	93.0	65.6	9,670
201	56.01	4.58	1.80	0.29	3.4	88.9	64.7	9,515
203	57.07	4.54	2.53	0.67	3.8	89.2	64.4	9,819
204	42.67	4.45	3.42	1.35	21.3	92.5	61.1	7,773
Average commercial quality peat (ash content less than 25%)	54.23	4.63	1.88	0.46	5.55	90.96	65.2	9,247



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
110	20	440,000
430	15	1,290,000
540		1,730,000

Figure 6. Sketch map of Canaan Bog and bog along Cooper Brook, Pittsfield and Canaan Twps., Pittsfield and Skowhegan 15 minute Quadrangles, Somerset County, Maine. (Number 5 on Index Map).

Figure 6a.--Sections and sample locations.

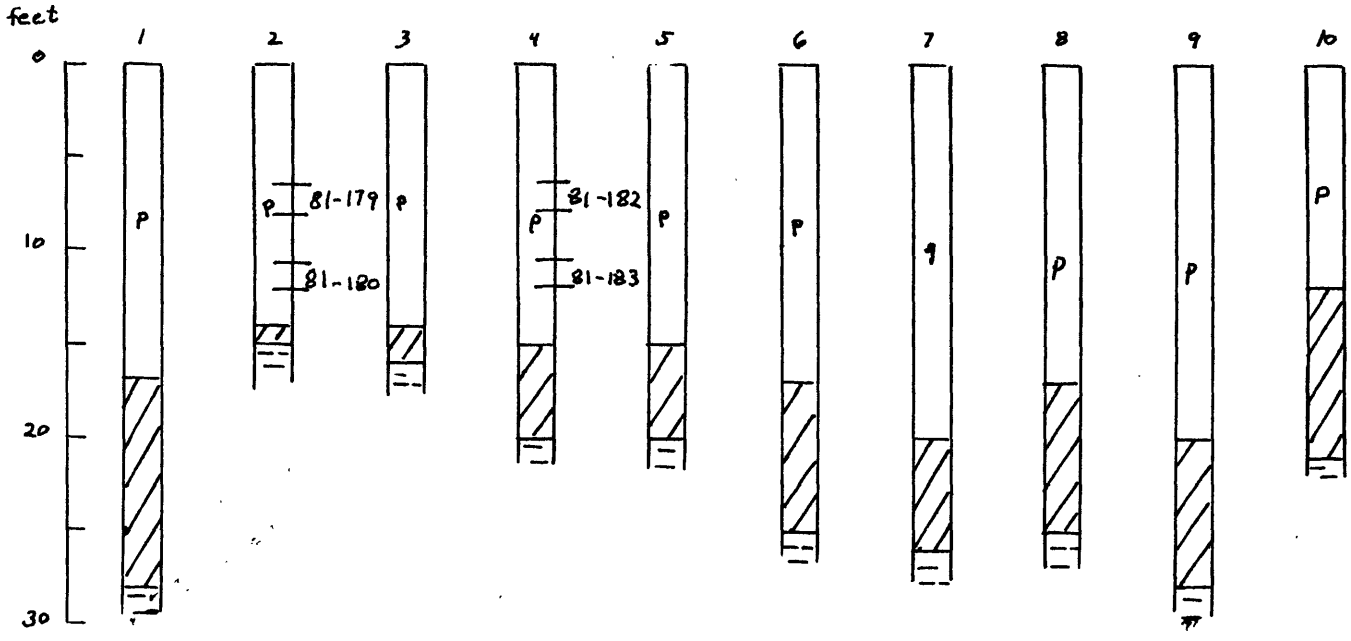
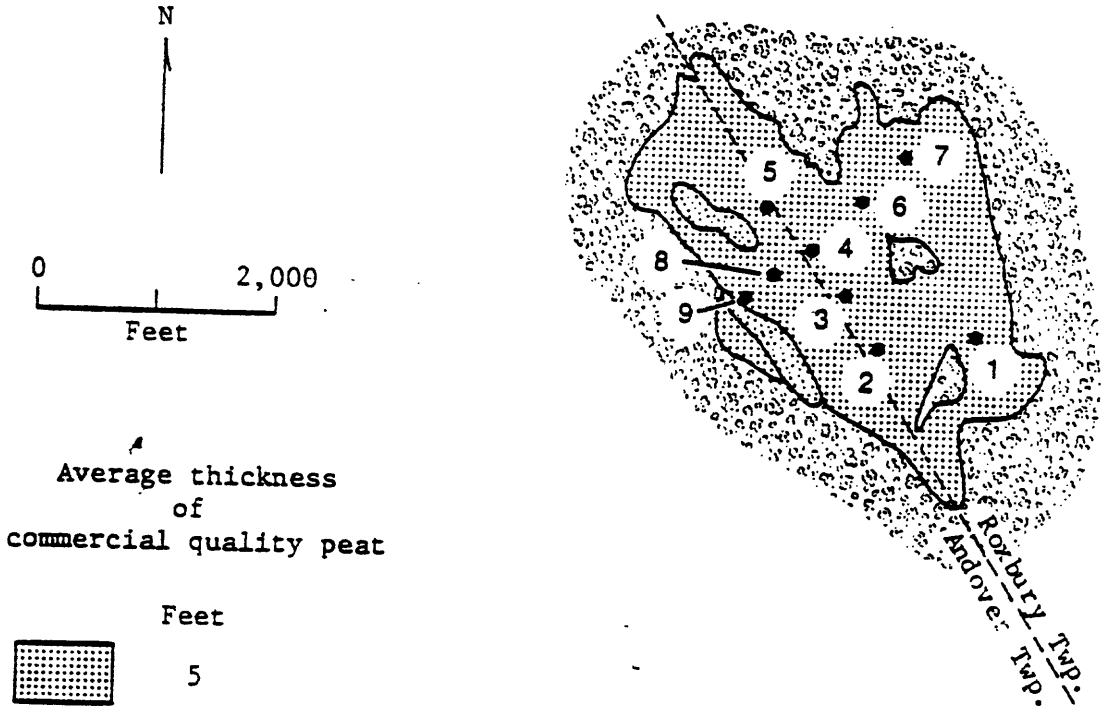


Table 6.--Analyses of samples located in sections in figure 6a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
179	56.86	4.59	1.11	0.24	2.0	---	63.3	9,462
180	56.60	4.71	2.16	0.55	3.3	89.8	63.2	9,633
182	55.25	4.15	2.12	0.87	4.7	---	61.7	9,045
183	52.12	4.89	1.13	0.11	1.8	88.8	71.9	8,765
Average commerical quality peat (ash content less than 25%)	55.20	4.59	4.59	0.44	2.95	89.3	65.0	9,226



Average thickness of commercial quality peat

Feet

5

Esker

Bedrock and undifferentiated glacial drift

•0 Location and number of section

ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
128	5	128,000

Figure 7. Sketch map of bog between Horseshoe Brook and Meadow Brook, Andover and Roxbury Twps., East Andover 7½ minute Quadrangle, Oxford County, Maine. (Number 6 on Index Map).

Figure 7a .--Sections and sample locations.

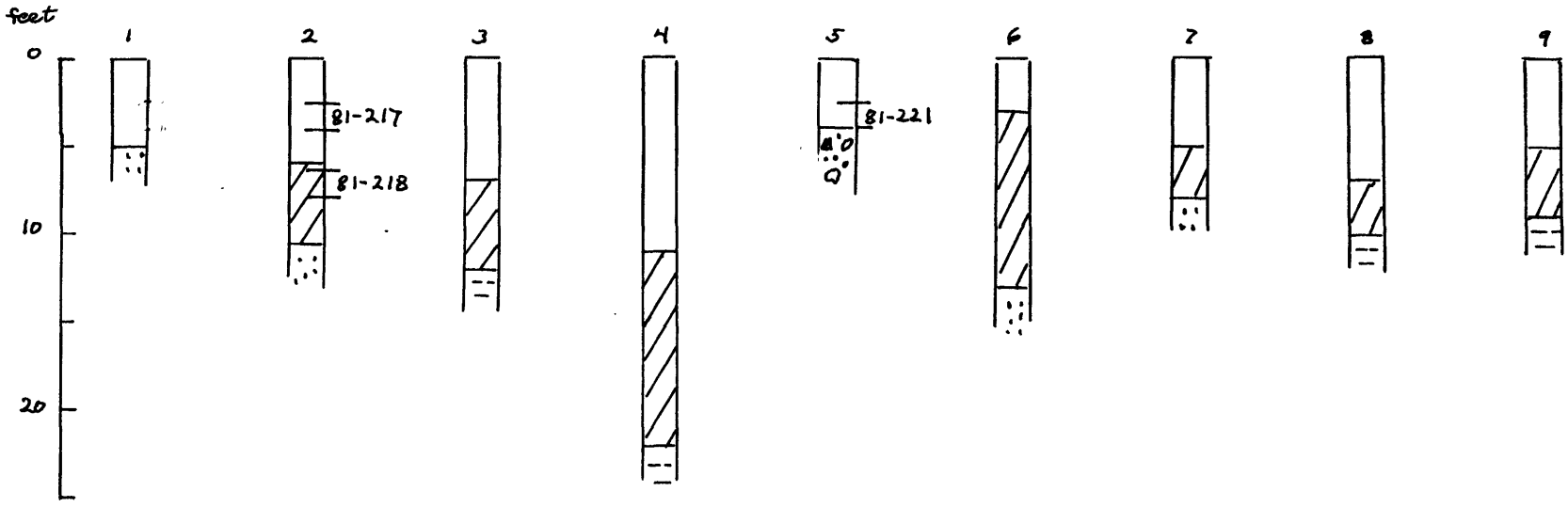


Table 7.--Analyses of samples located in sections in figure 7a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
217	59.26	5.62	1.46	0.17	1.3	---	67.3	10,270
218	43.73	3.84	2.62	0.34	28.0	89.9	51.0	7,892
221	55.68	4.72	1.69	0.40	7.2	89.6	61.5	9,693
Average commerical quality peat (ash content less than 25%)	57.44	5.17	1.57	0.29	4.25	89.6	64.4	9,982

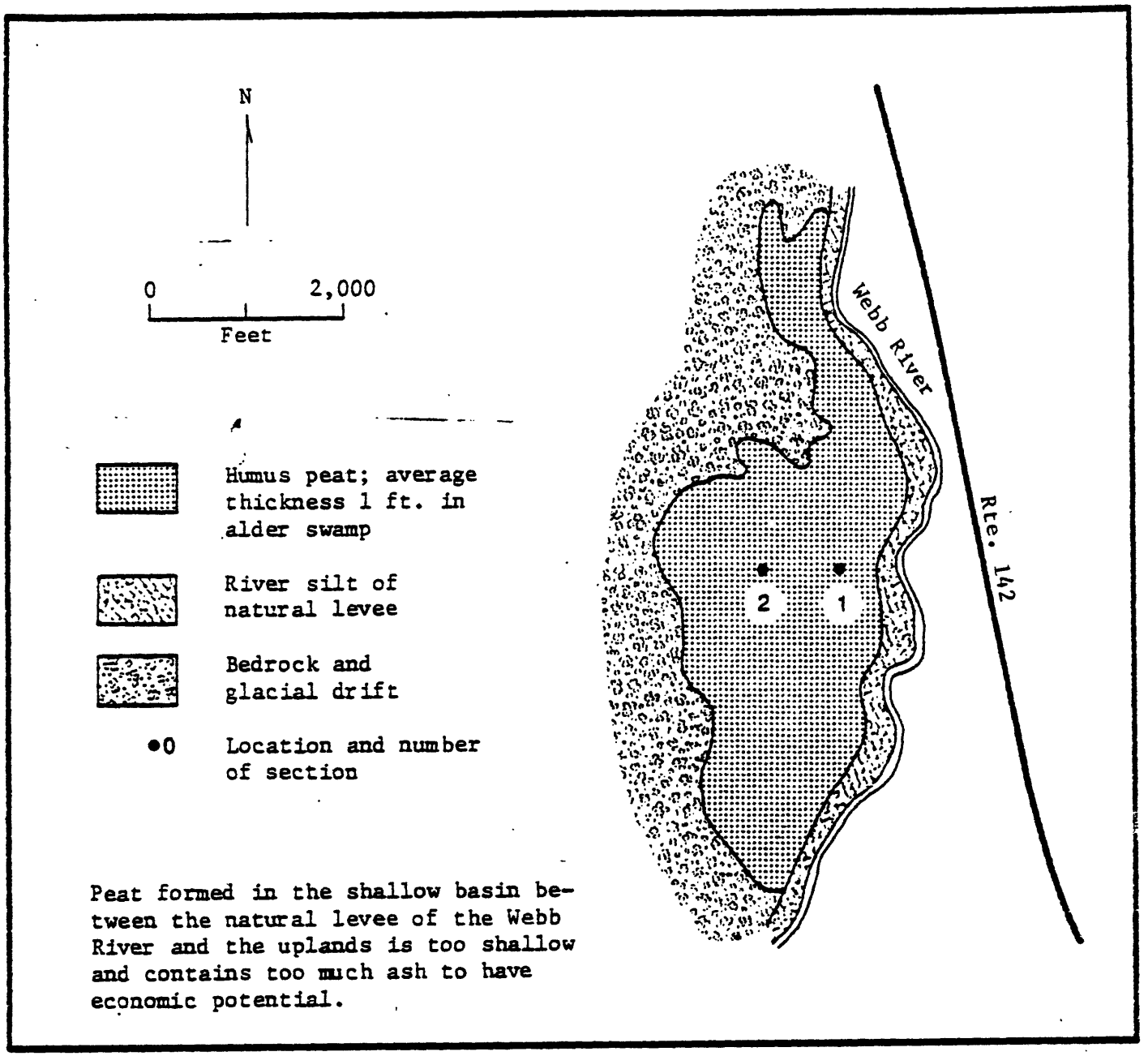


Figure 8. Sketch map of bog along Webb River north of Dixfield, Mexico Twp., Dixfield 15 minute Quadrangle, Oxford County, Maine (Number 7 on Index Map).

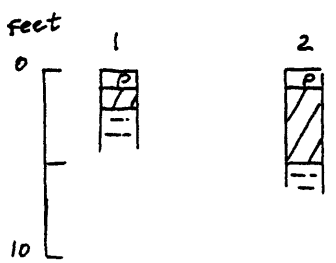
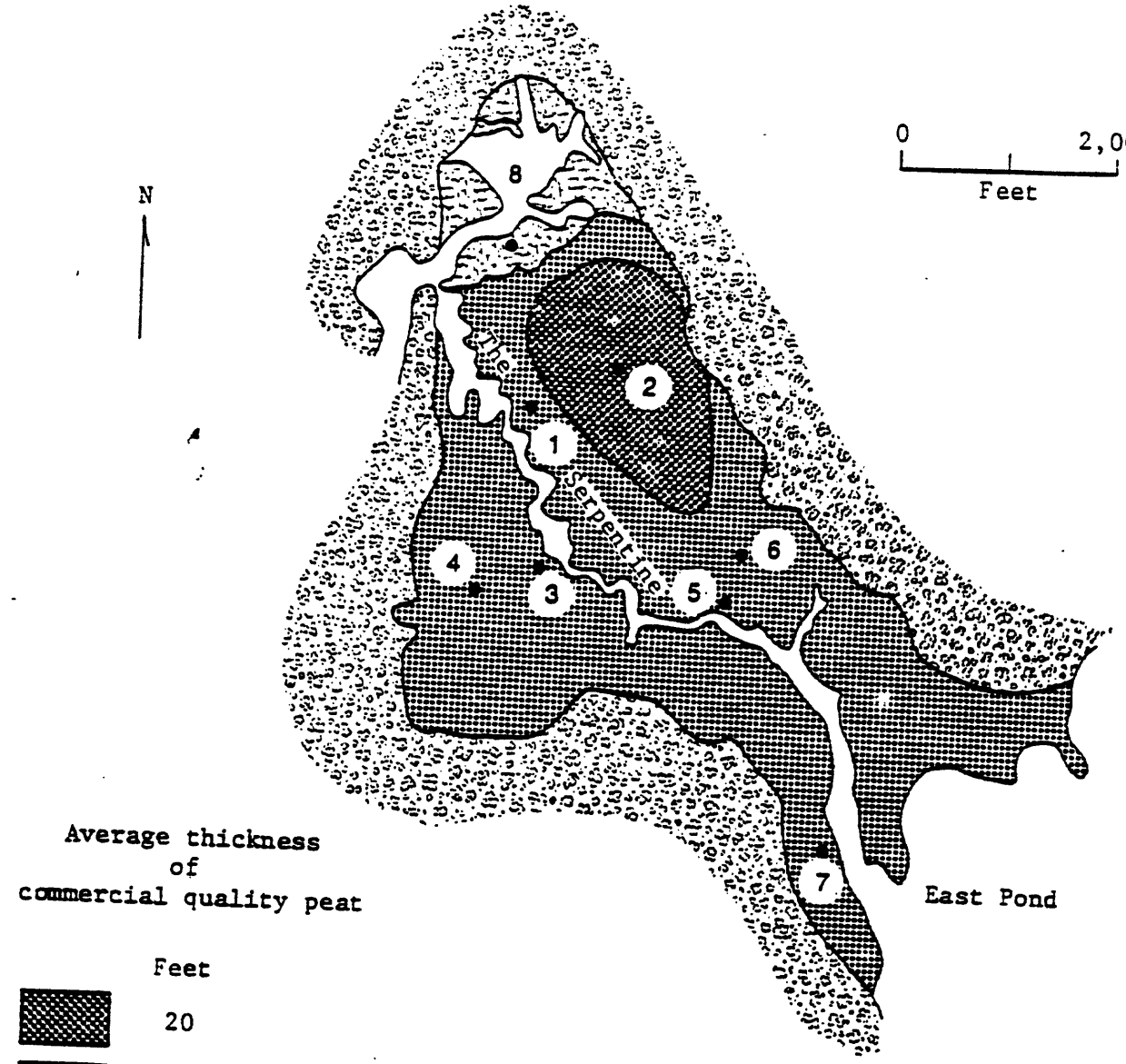


Figure 8a.--Sections and sample locations.



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
60	20	240,000
300	15	900,000
360		1,140,000

Figure 9. Sketch map of bog along The Serpentine, Smithfield Twp., Norridgewock 15 minute Quadrangle, Somerset County, Maine. (Number 8 on Index Map).

Figure 9a.--Sections and sample locations.

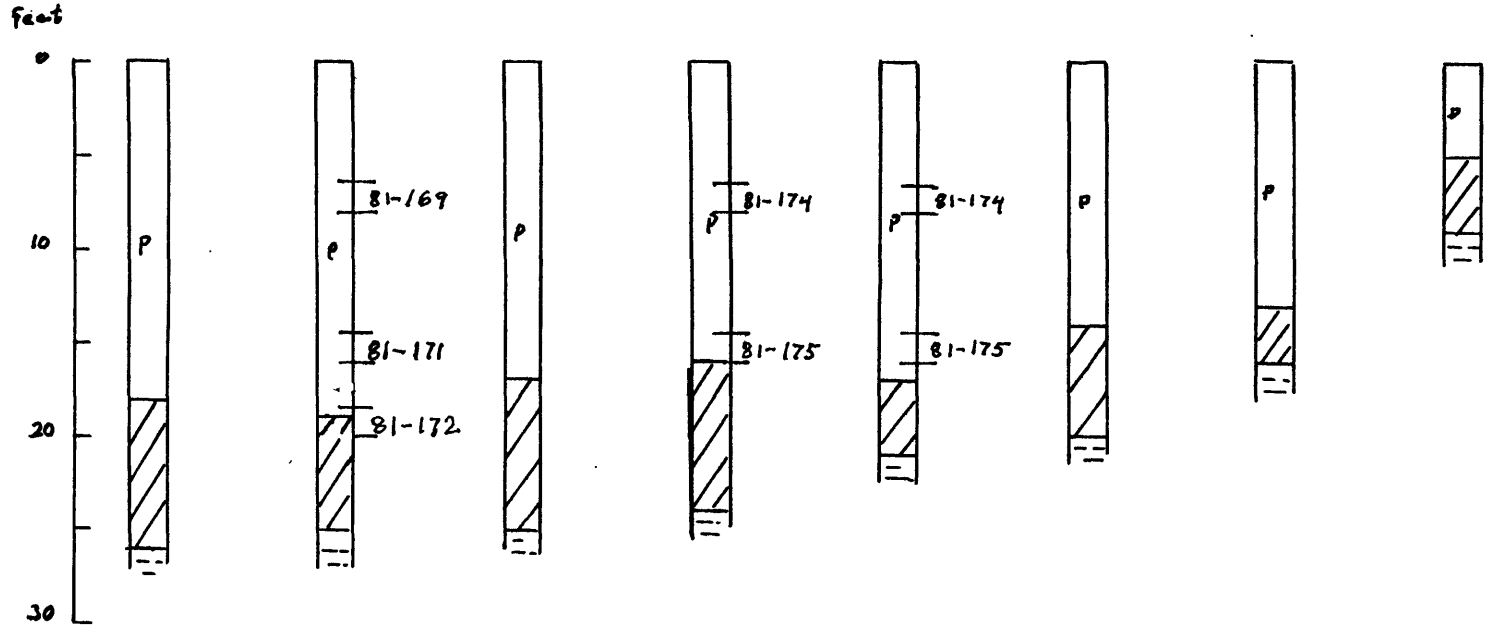


Table 8.--Analyses of samples located in sections in figure 9a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
169	55.60	4.85	1.37	0.17	5.7	---	63.1	9,396
171	51.43	4.14	1.86	0.65	12.5	---	56.0	8,465
172	24.82	2.63	1.96	0.64	54.2	89.9	35.5	4,446
174	55.35	4.63	0.68	0.11	0.9	90.7	66.3	9,228
175	46.12	4.51	2.64	0.82	22.6	---	55.1	8,002
176	56.64	5.16	1.56	0.14	0.9	91.4	68.4	9,808
177	57.46	4.99	1.63	0.23	1.9	91.2	66.3	9,728
Average commercial quality peat (ash content less than 25%)	53.77	4.71	1.63	0.35	7.4	91.1	62.5	9,105

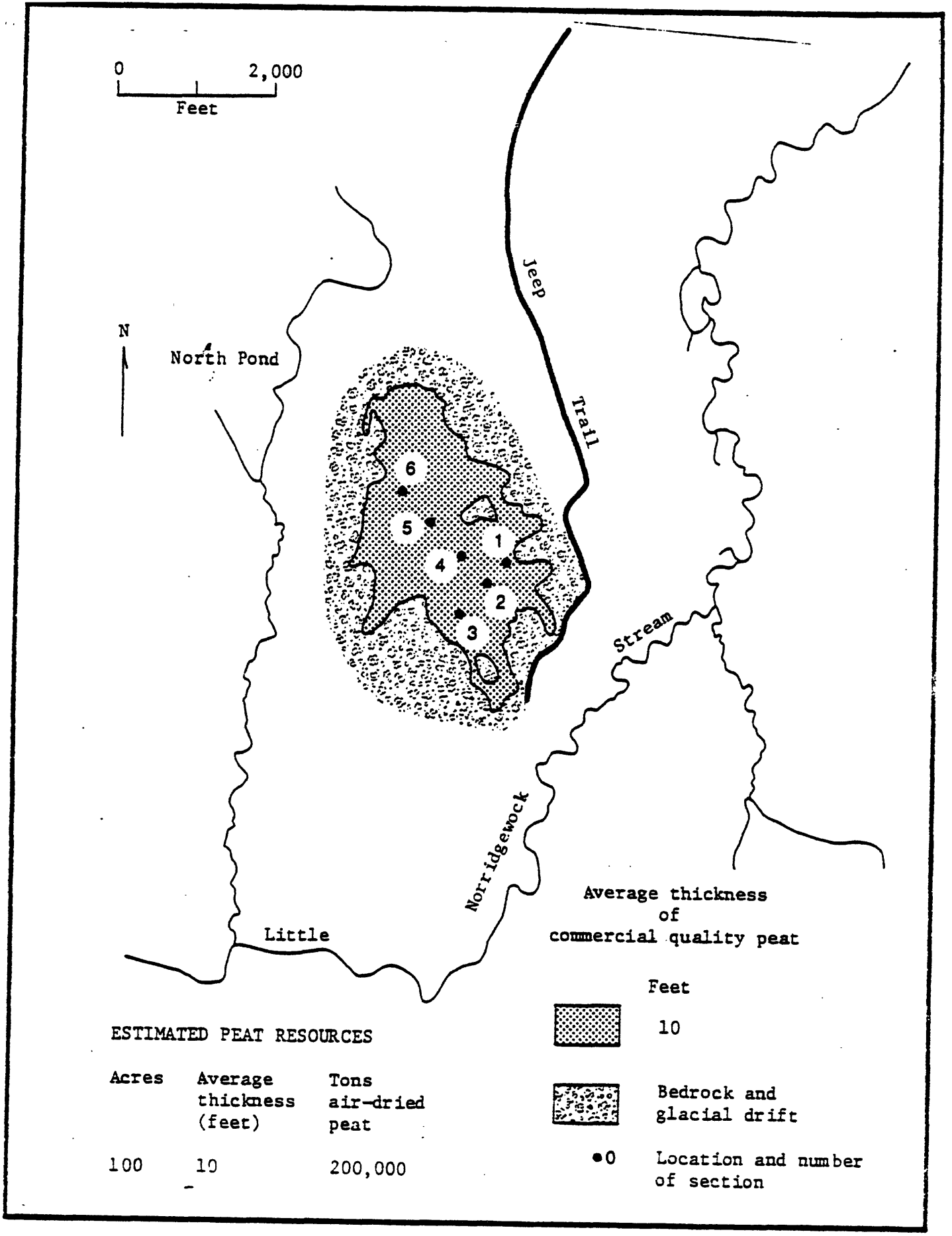


Figure 10. Sketch map of bog southeast of North Pond, Chesterville Twp., Farmington 15 minute Quadrangle, Franklin County, Maine. (Number 9 on Index Map).

Figure 10a.--Sections and sample locations.

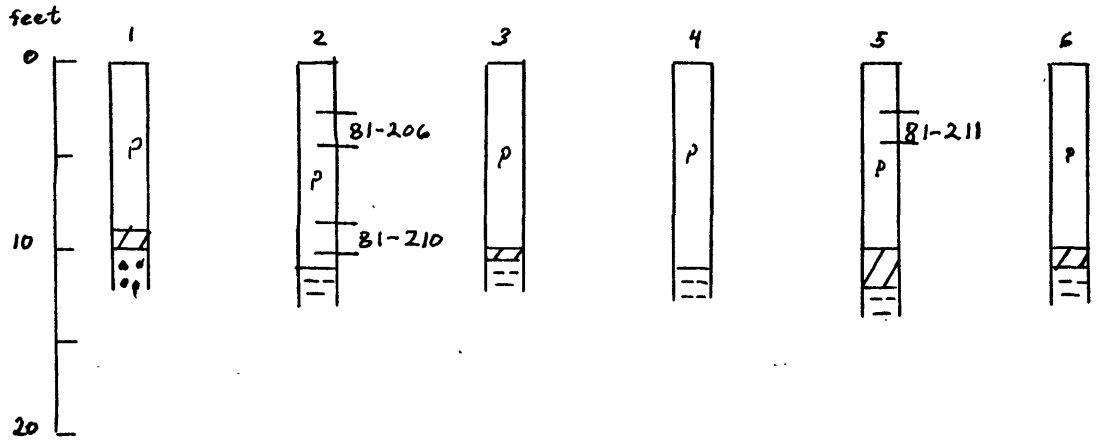


Table 9.--Analyses of samples located in sections in figure 10a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
206	57.24	4.84	1.72	0.21	2.4	---	65.3	9,517
210	49.09	3.91	2.28	1.25	17.3	85.8	58.8	8,533
211	57.59	5.39	1.68	0.18	1.1	---	67.4	9,843
Average commercial quality peat (ash content less than 25%)	54.64	4.71	1.89	0.55	6.9	85.8	63.8	9,298

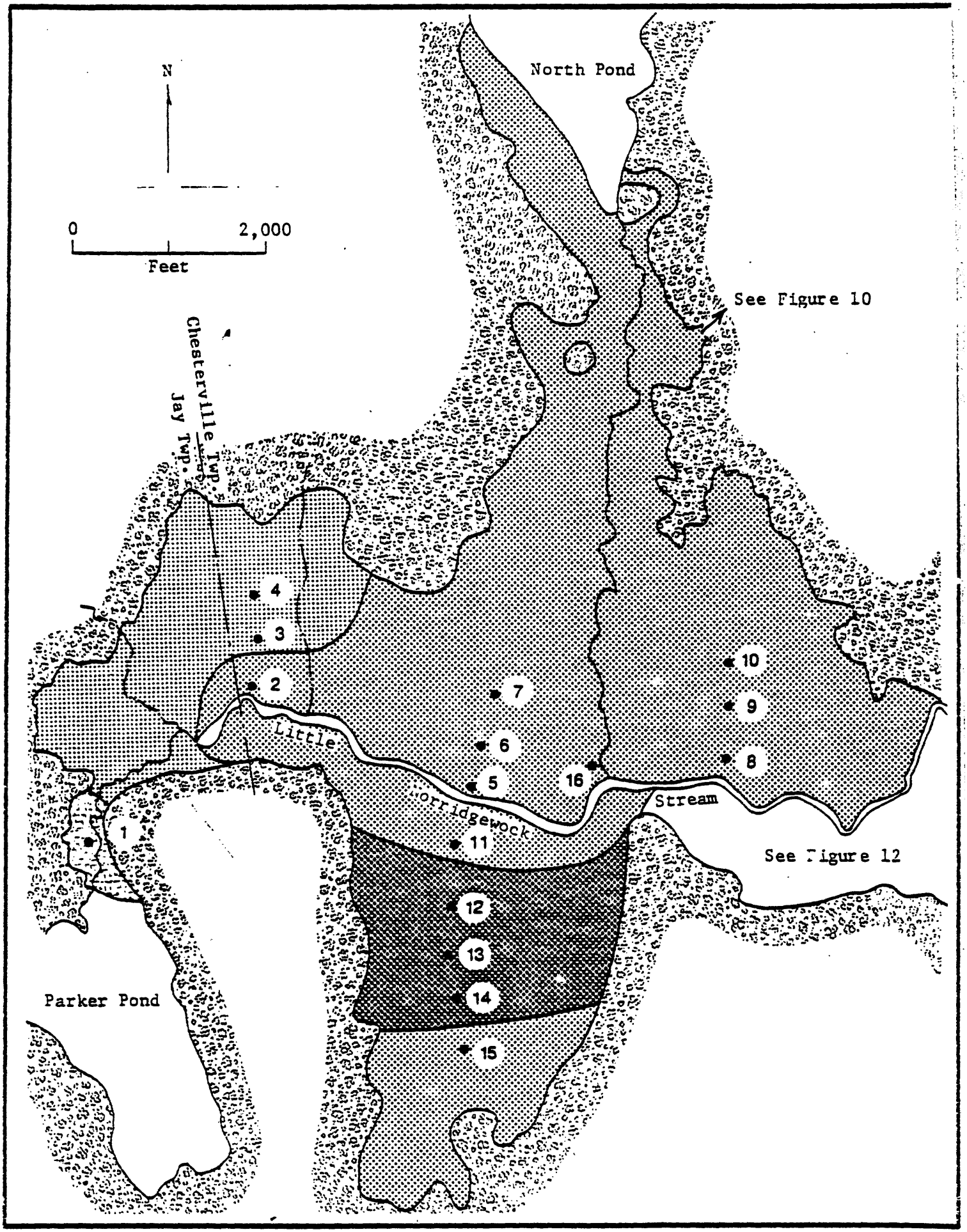


Figure 11. Sketch map of bog south of North Pond and along Little Norridgewock Stream, Jay and Chesterville Twps., Farmington 15 minute Quadrangle, Franklin County, Maine. (Number 10 on Index Map).

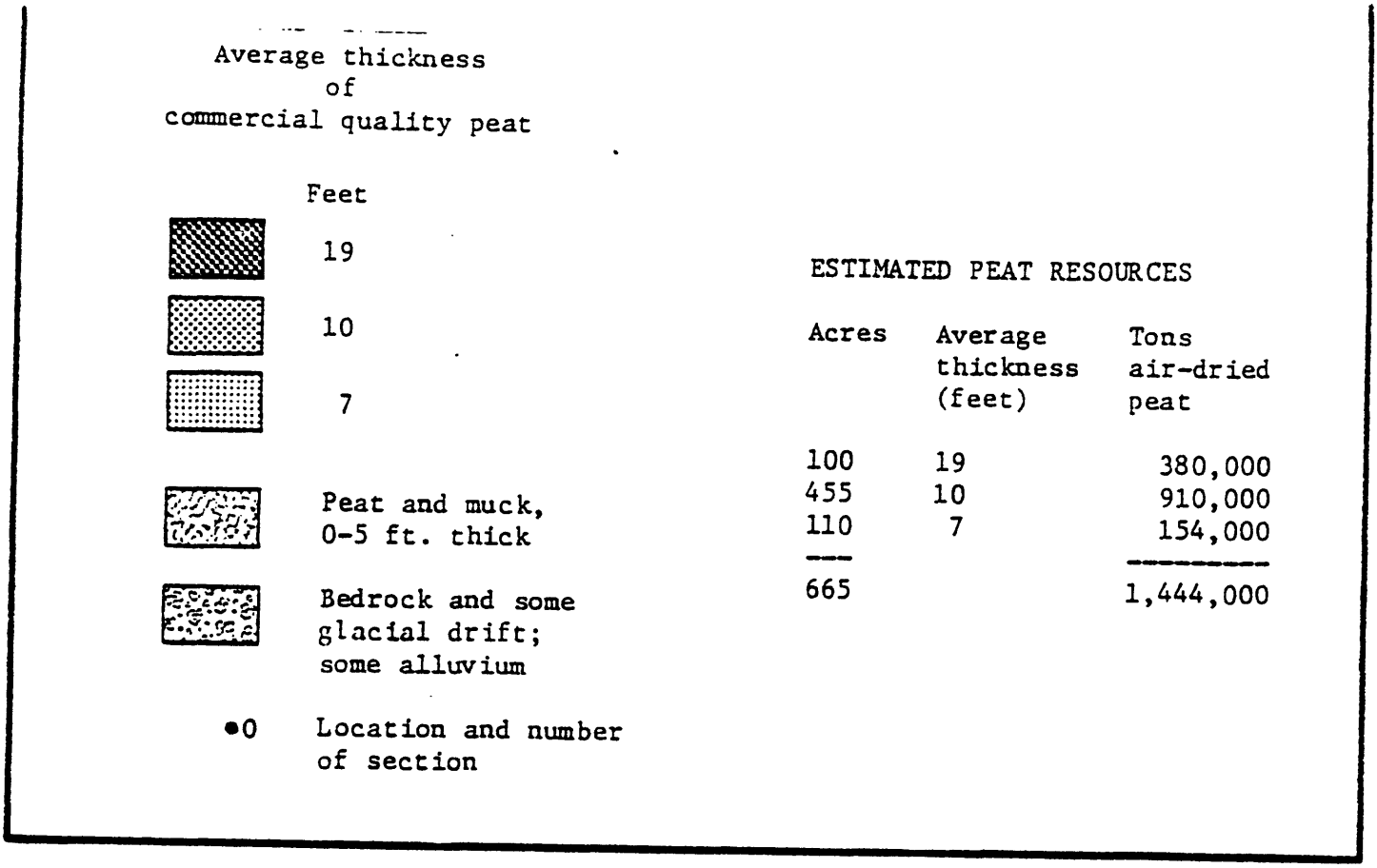


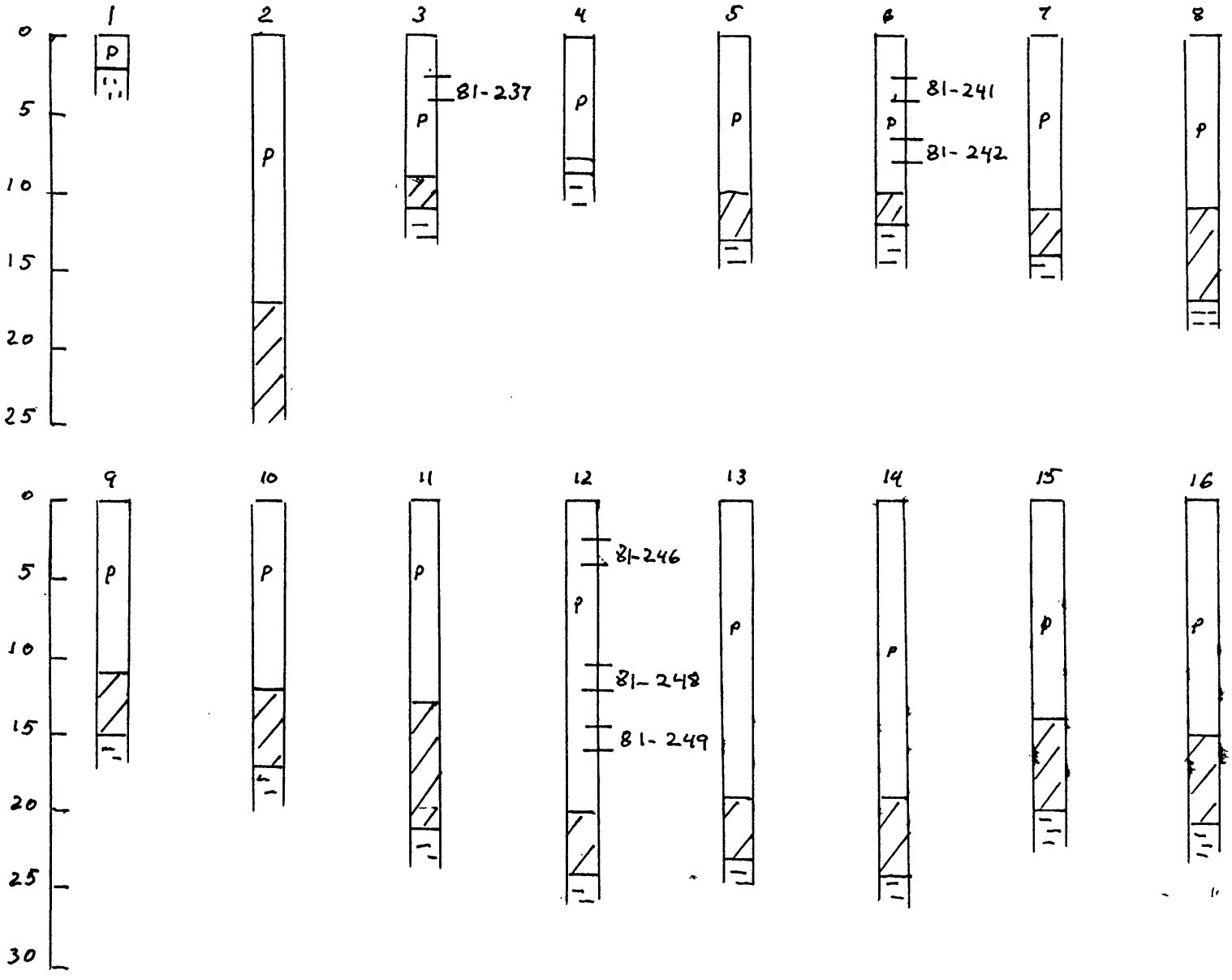
Figure 11. Continued.

Table 10.--Analyses of samples located in sections in figure 11a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
237	56.66	4.02	1.68	0.76	5.0	86.7	60.3	9,508
241	57.89	4.89	1.18	0.17	2.7	---	63.6	9,758
242	52.60	4.91	2.96	0.75	11.1	92.2	61.2	9,261
246	55.14	4.96	0.94	0.12	0.7	91.7	68.5	9,202
248	55.73	4.99	1.87	0.23	2.0	91.0	66.4	10,027
249	56.86	5.15	2.74	0.59	4.2	91.4	64.3	9,929
Average commercial quality peat (ash content less than 25%)	55.81	4.82	1.9	0.44	4.28	90.6	64.1	9,614

Figure 11a.--Sections and sample locations.



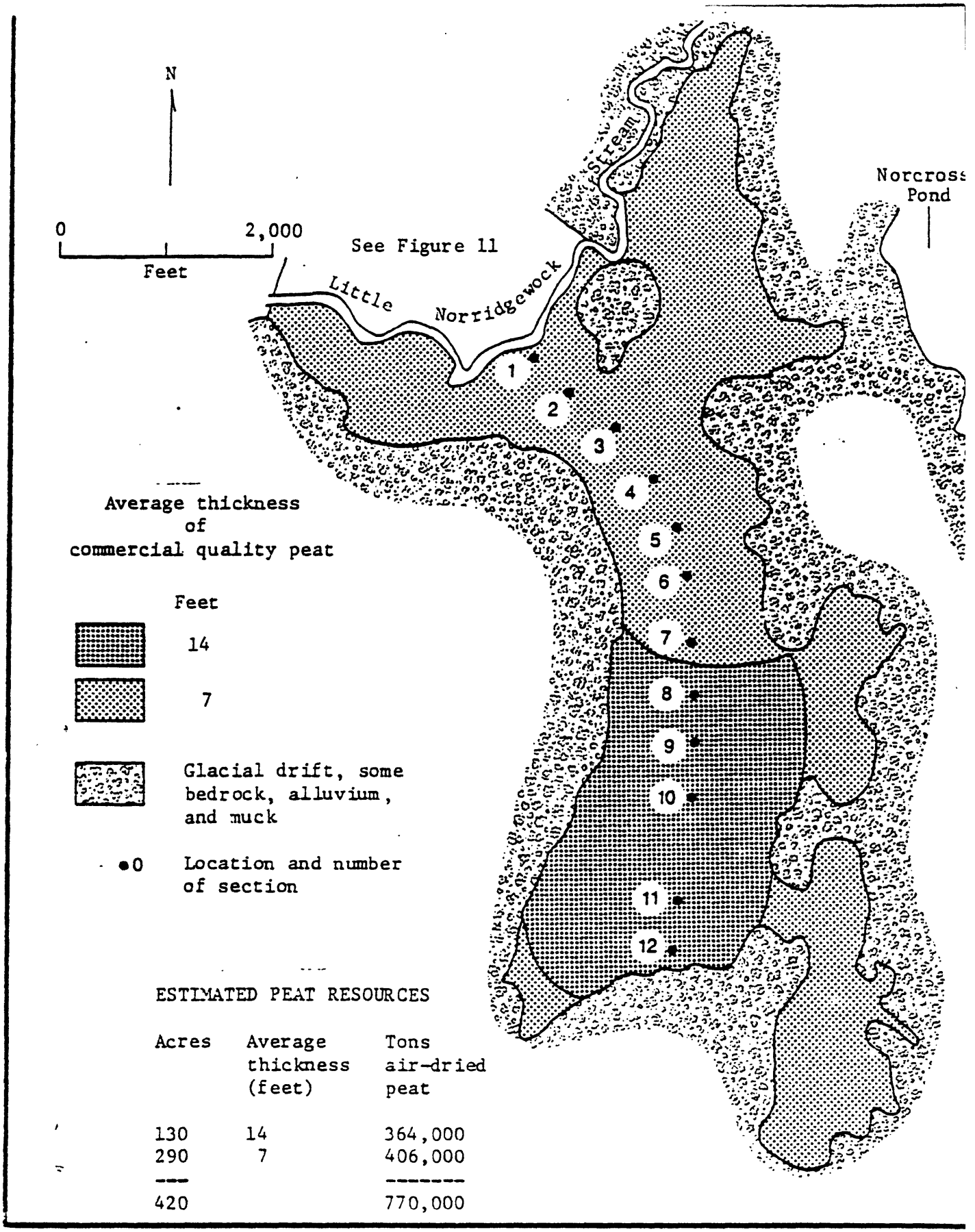
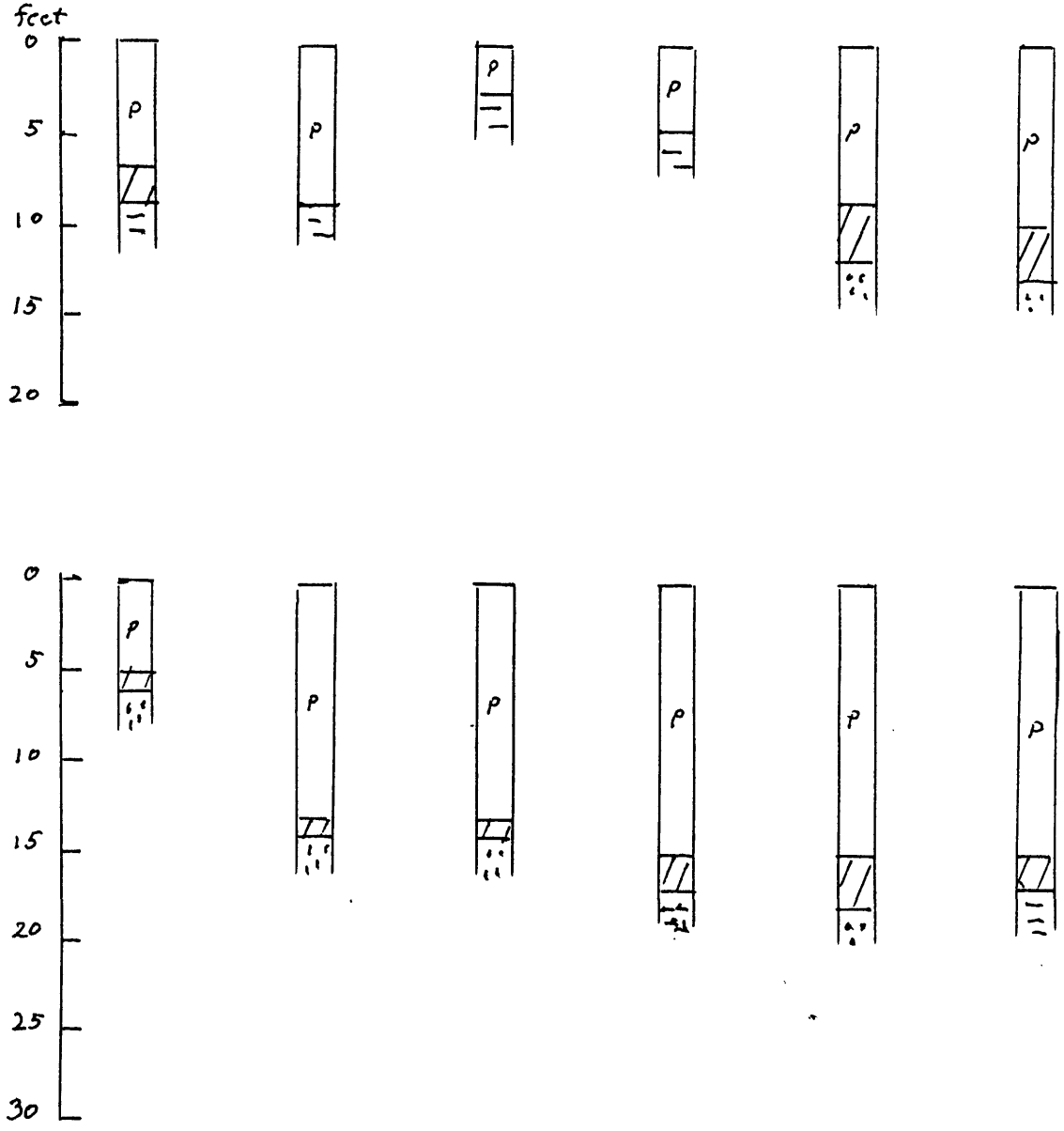


Figure 12. Sketch map of bog west of Norcross Pond and south of Little Norridgewock Stream, Chesterville Twp., Farmington 15 minute Quadrangle, Franklin County, Maine. (Number 11 on Index Map).

Figure 12.a.--Sections and sample locations.



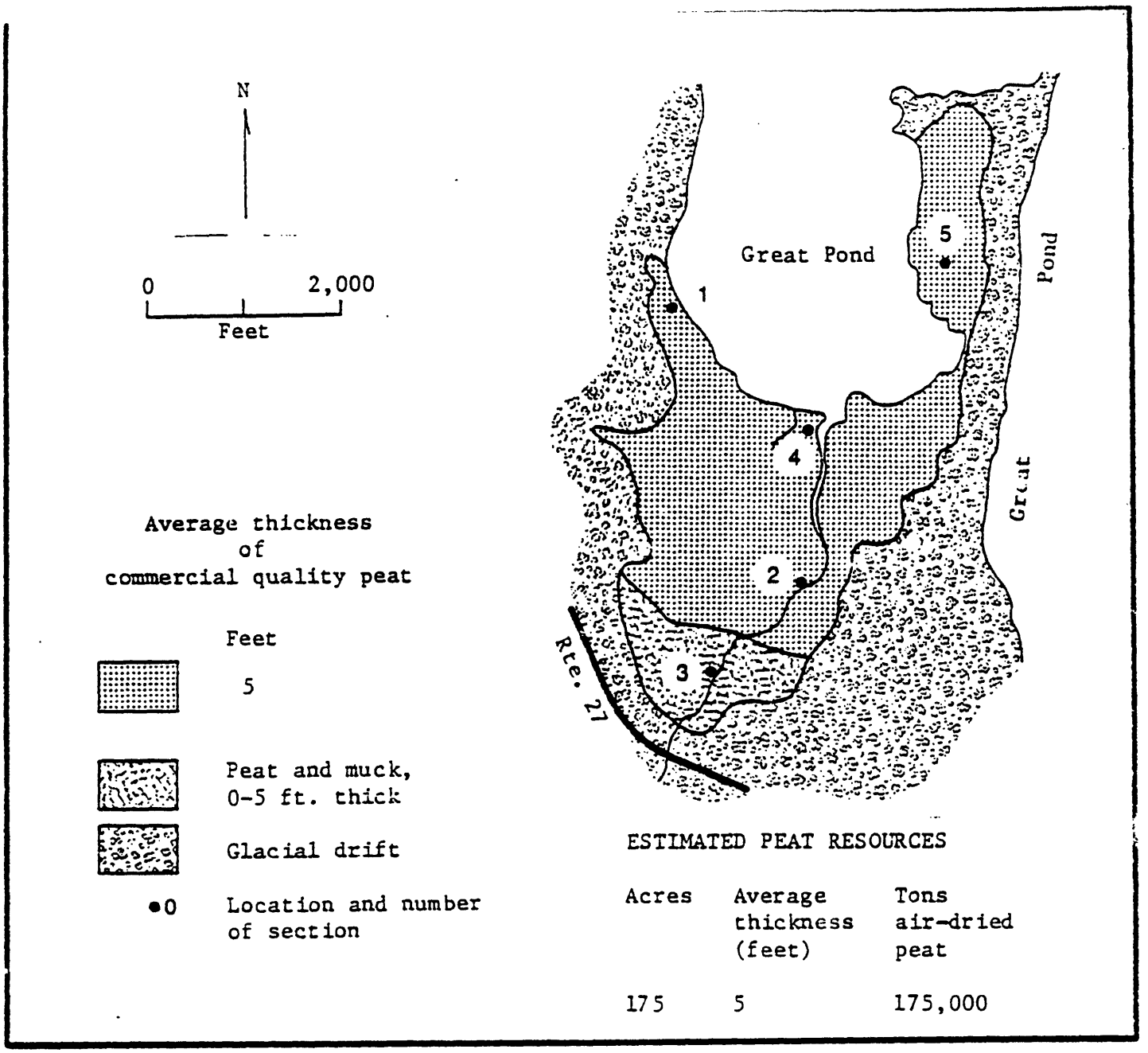


Figure 13. Sketch map of Austin Bog at south end of Great Pond, Belgrade Twp., Belgrade 7½ minute Quadrangle, Kennebec County, Maine. (Number 12 on Index Map).

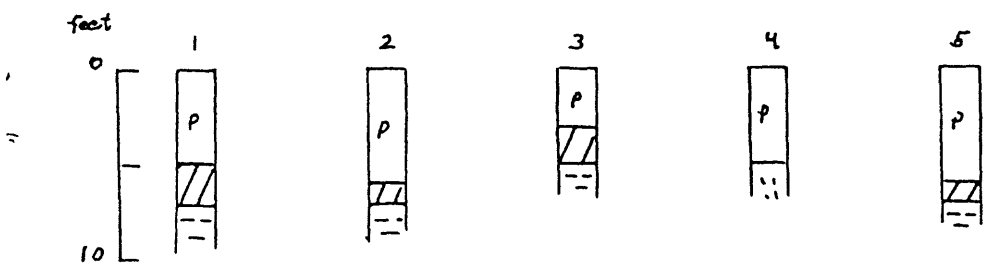


Figure 13a.--Sections and sample locations.

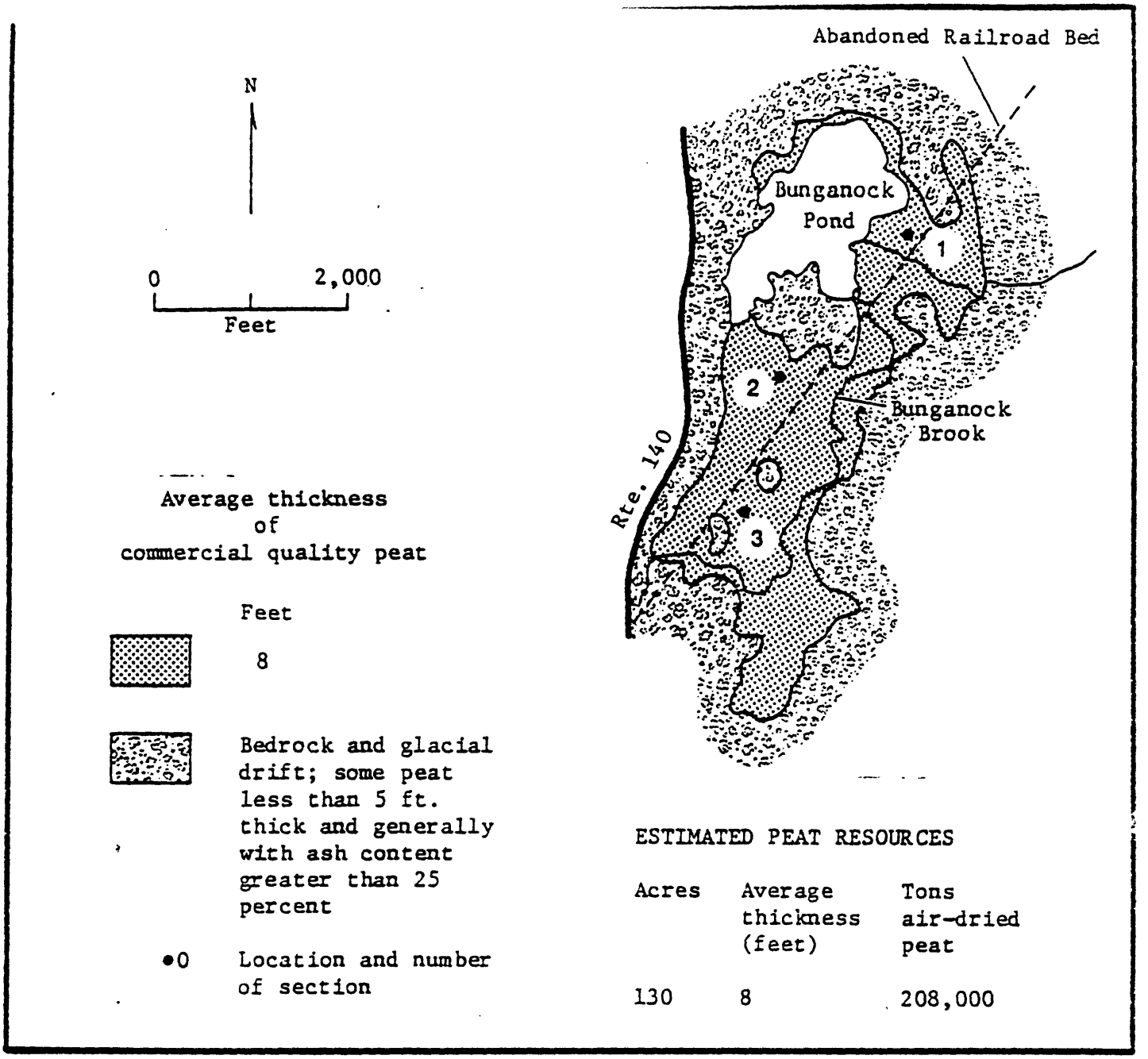


Figure 14. Sketch map of bog at Bunganock Pond and Bunganock Brook, Hartford Twp., Canton 7½ minute Quadrangle, Oxford County, Maine. (Number 13 on Index Map).

Figure 14a.--Sections and sample locations.

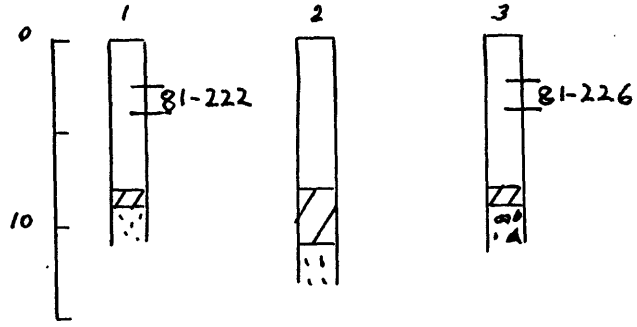


Table 11.--Analyses of samples located in sections in figure 14a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
222	57.59	4.72	1.12	0.24	3.5	87.9	64.0	9,669
226	60.36	5.00	2.51	0.37	2.3	89.8	66.3	10,388
Average commercial quality peat (ash content less than 25%)	58.99	4.86	1.81	0.31	2.9	88.9	65.2	10,029

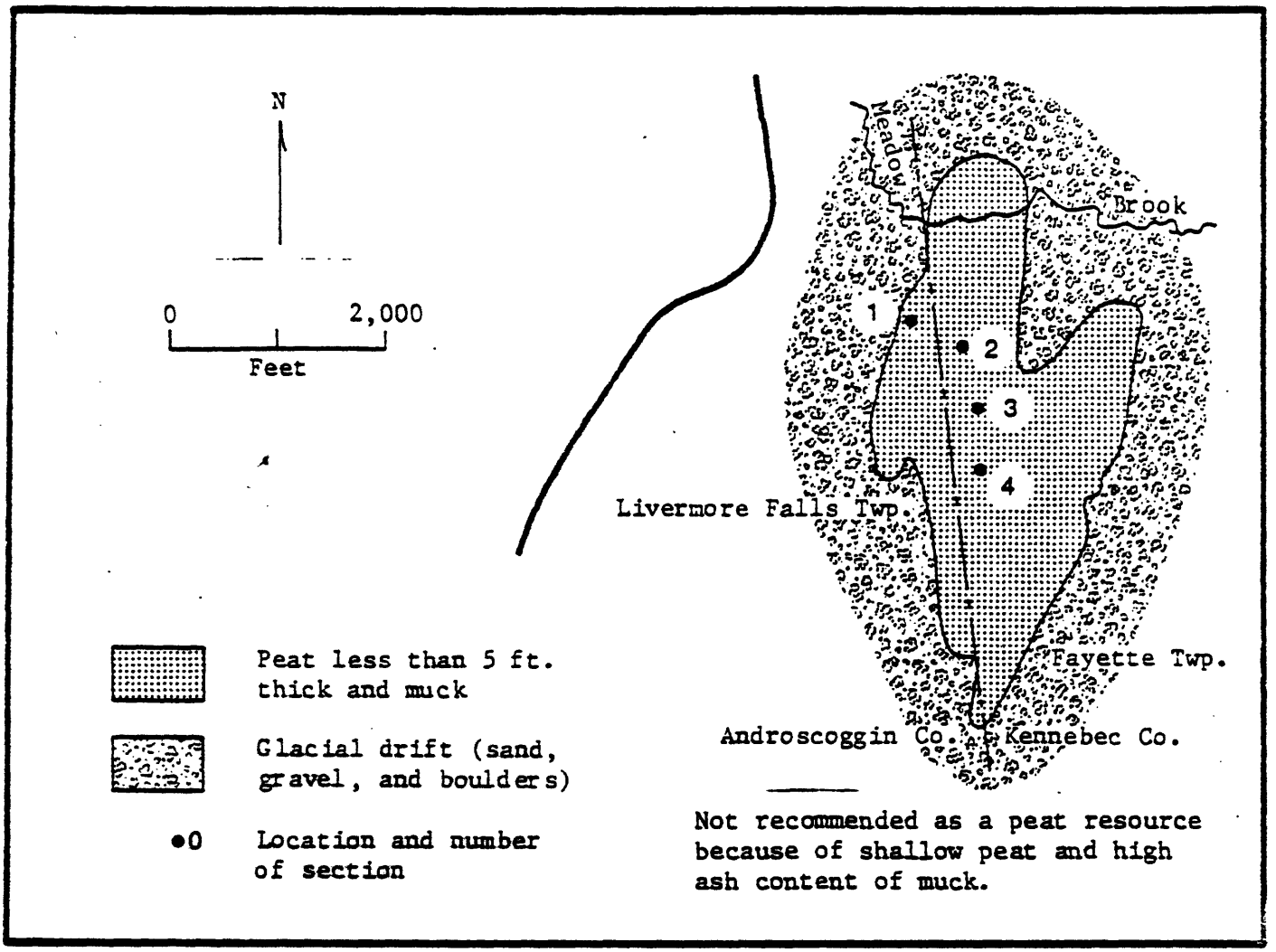


Figure 15. Sketch map of bog south of Meadow Brook on Kennebec-Androscoggin County line, Livermore Falls and Fayette Twps., Fayette 7½ minute Quadrangle, Maine. (Number 14 on Index Map).

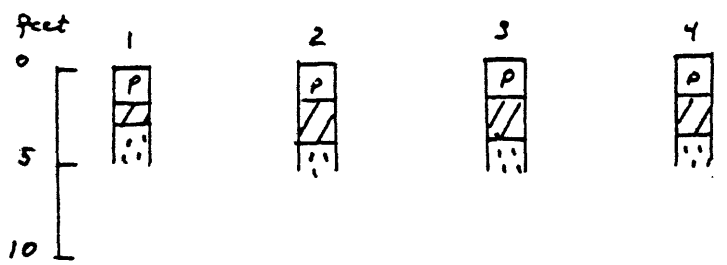
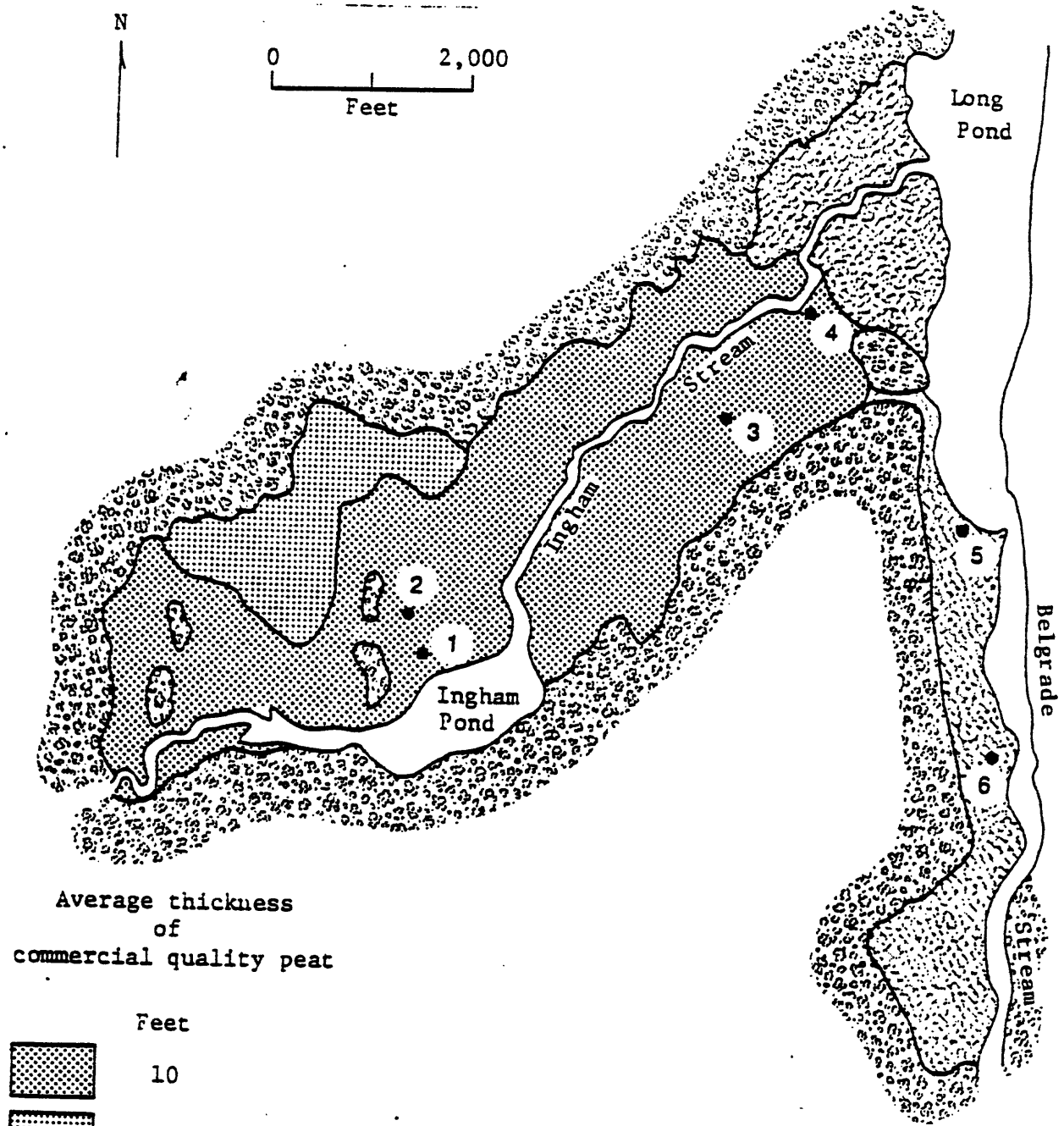


Figure 15a.--Sections and sample locations.



ESTIMATED PEAT RESOURCES

	Acres	Average thickness (feet)	Tons air-dried peat
	285	10	570,000
	55	5	55,000
	340		625,000

Figure 16. Sketch map of bogs along Ingham Stream and Belgrade Stream, Mount Vernon Twp., Augusta 15 minute Quadrangle, Kennebec County, Maine. (Number 15 on Index Map).

Figure 16a.--Sections and sample locations.

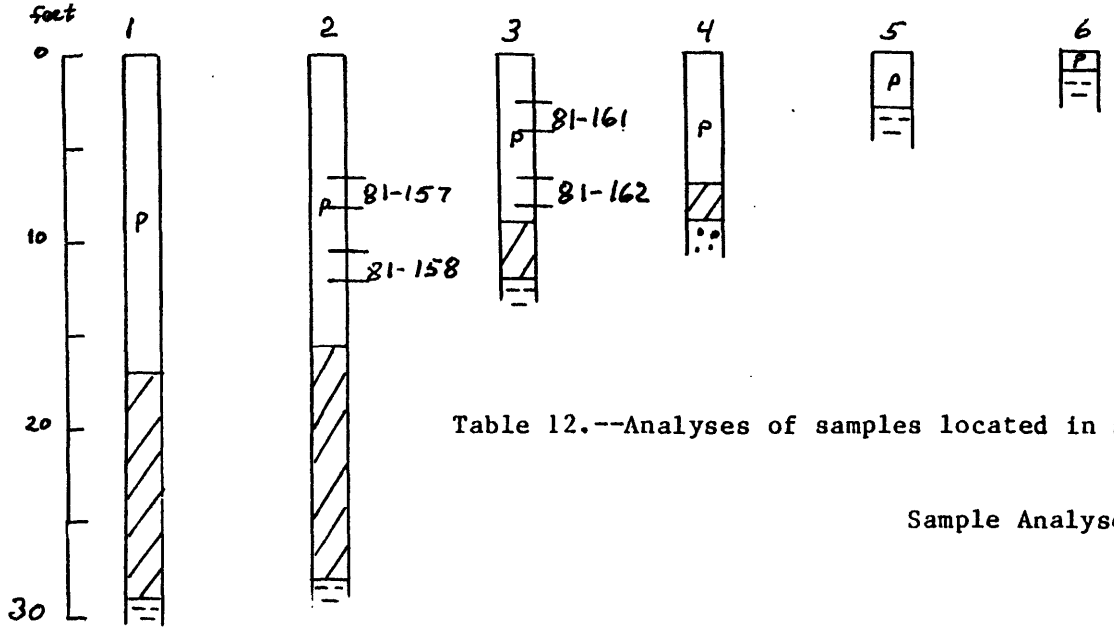


Table 12.--Analyses of samples located in sections in figure 16a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
157	55.88	4.84	0.79	0.15	0,9	---	66.8	9,226
158	57.47	5.35	2.42	0.30	2.2	91.1	66.5	10,079
161	56.36	4.55	1.65	0.64	5.2	---	60.8	9,475
162	53.76	5.12	3.25	0.67	8.4	91.8	63.1	9,833
Average commercial quality peat (ash content less than 25%)	55.86	4.96	2.03	0.44	4.18	91.5	64.3	9,653

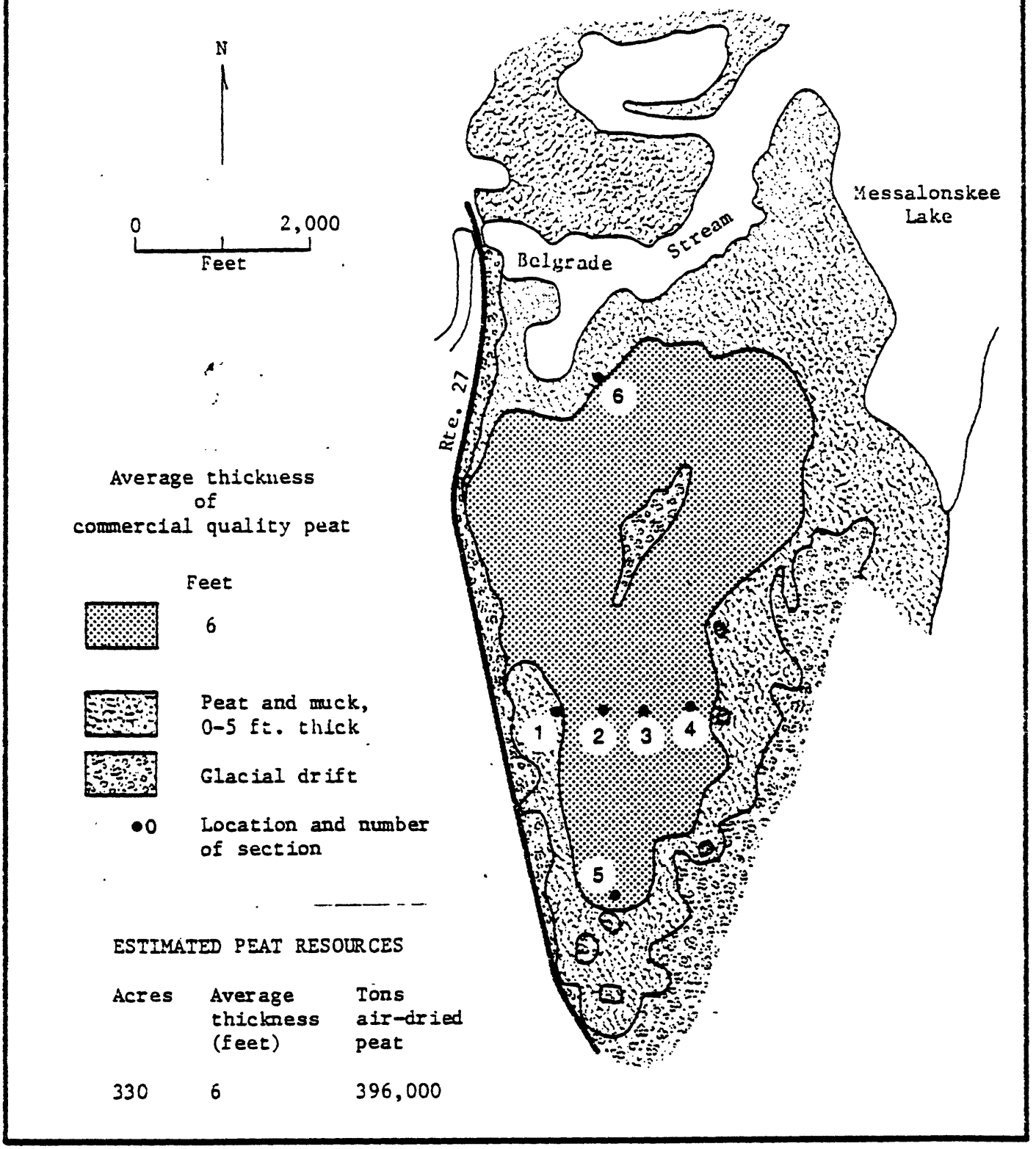


Figure 17. Sketch map of Belgrade Bog, Belgrade Twp., Belgrade 7½ minute Quadrangle, Kennebec County, Maine. (Number 16 on Index Map).

Figure 17a.--Sections and sample locations.

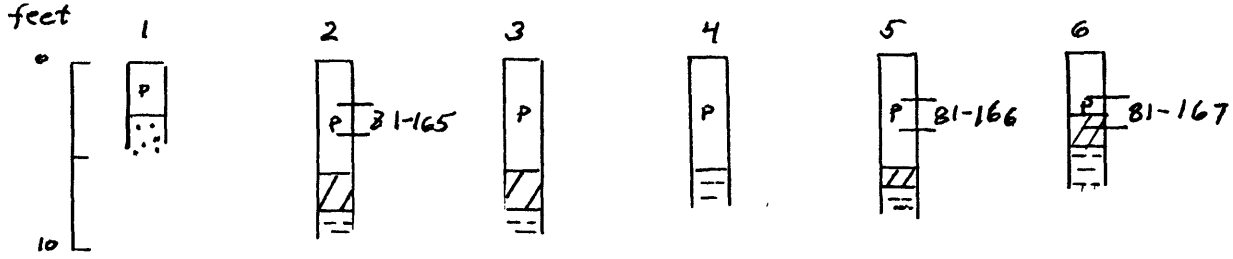


Table 13.--Analyses of samples located in sections in figure 17a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
165	56.24	4.28	1.91	0.49	8.3	86.0	61.6	9,673
166	55.69	5.12	2.48	0.62	6.5	86.1	65.9	9,785
167	42.93	4.04	1.43	0.40	31.3	---	49.0	7,652
Average commercial quality peat (ash content less than 25%)	55.96	4.7	2.19	0.55	7.4	86.1	63.7	9,729

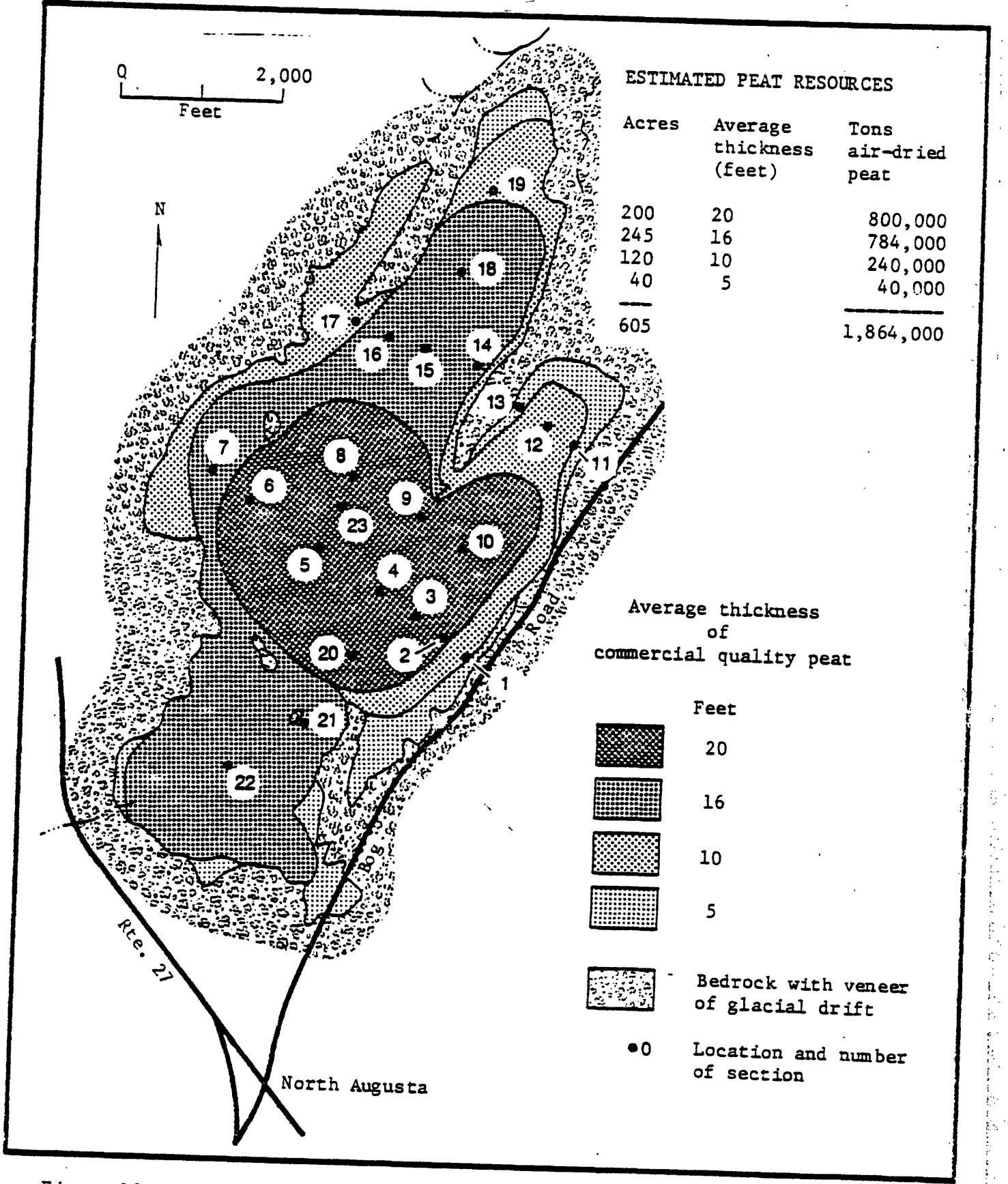


Figure 18. Sketch map of Great Sidney Bog, Sidney and Augusta Twps., Augusta 15 minute Quadrangle, Kennebec County, Maine. (Number 17 on Index Map).

Figure 18a.--Sections and sample locations.

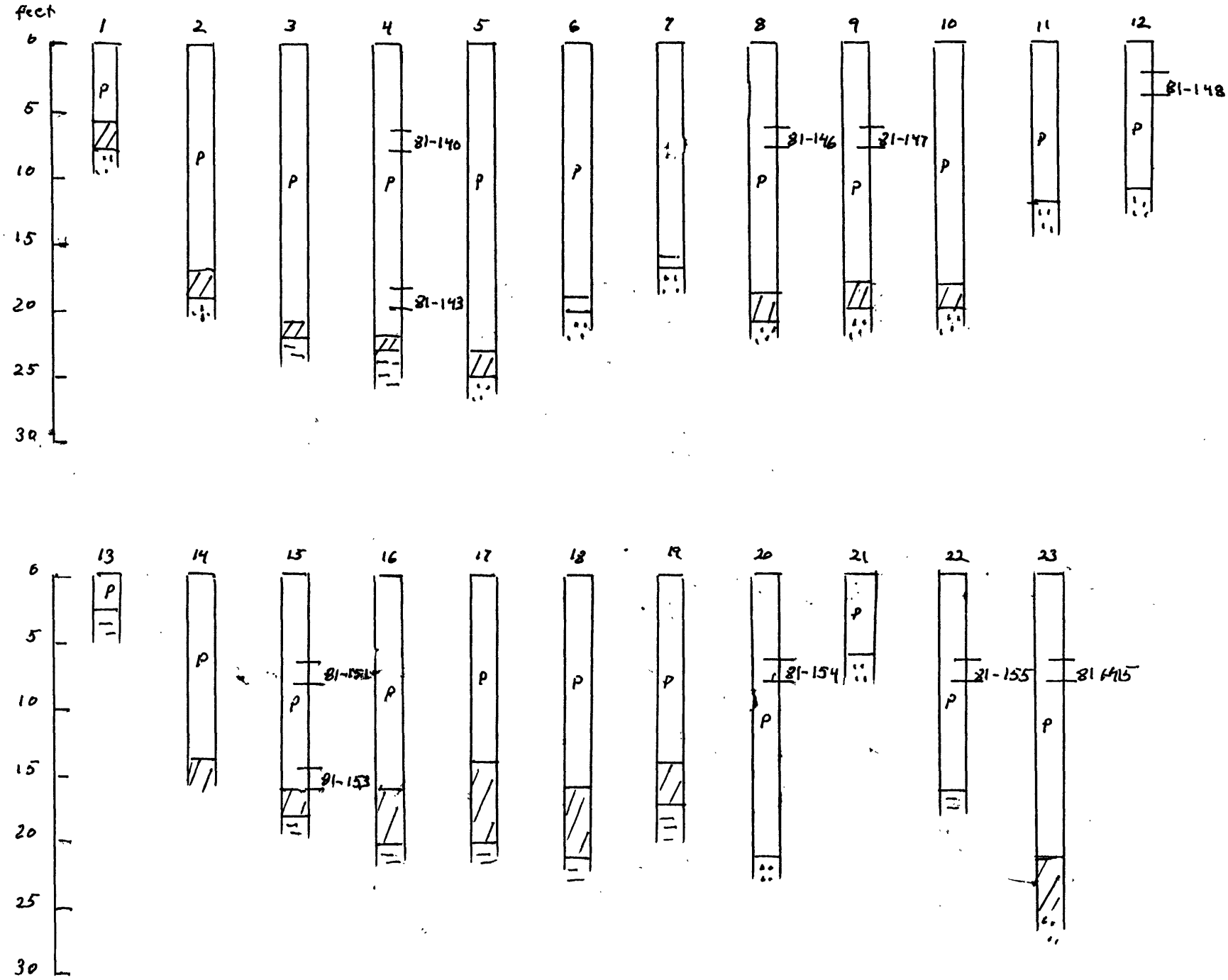


Table 14.--Analyses of samples located in sections in figure 18a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
140	56.53	4.90	1.06	0.11	0.7	90.5	67.9	9,508
143	58.12	5.08	1.12	0.62	1.9	---	65.5	9,900
145	56.05	4.48	0.53	0.10	0.8	92.6	67.9	8,988
146	53.23	4.76	0.60	0.13	0.6	---	68.5	8,886
147	54.70	4.77	0.60	0.10	1.0	90.4	68.3	9,075
148	59.99	4.73	1.33	0.14	1.3	89.3	65.7	10,026
151	53.08	4.61	1.23	0.05	7.1	---	62.1	8,941
153	34.45	3.94	2.72	0.93	36.1	---	49.6	5,484
154	55.21	4.73	0.64	0.14	0.7	91.2	68.4	9,184
155	57.82	5.02	0.99	0.18	0.7	---	66.4	9,788
Average commercial quality peat (ash content less than 25%)	56.08	4.79	0.83	0.17	1.5	90.8	66.7	9,366

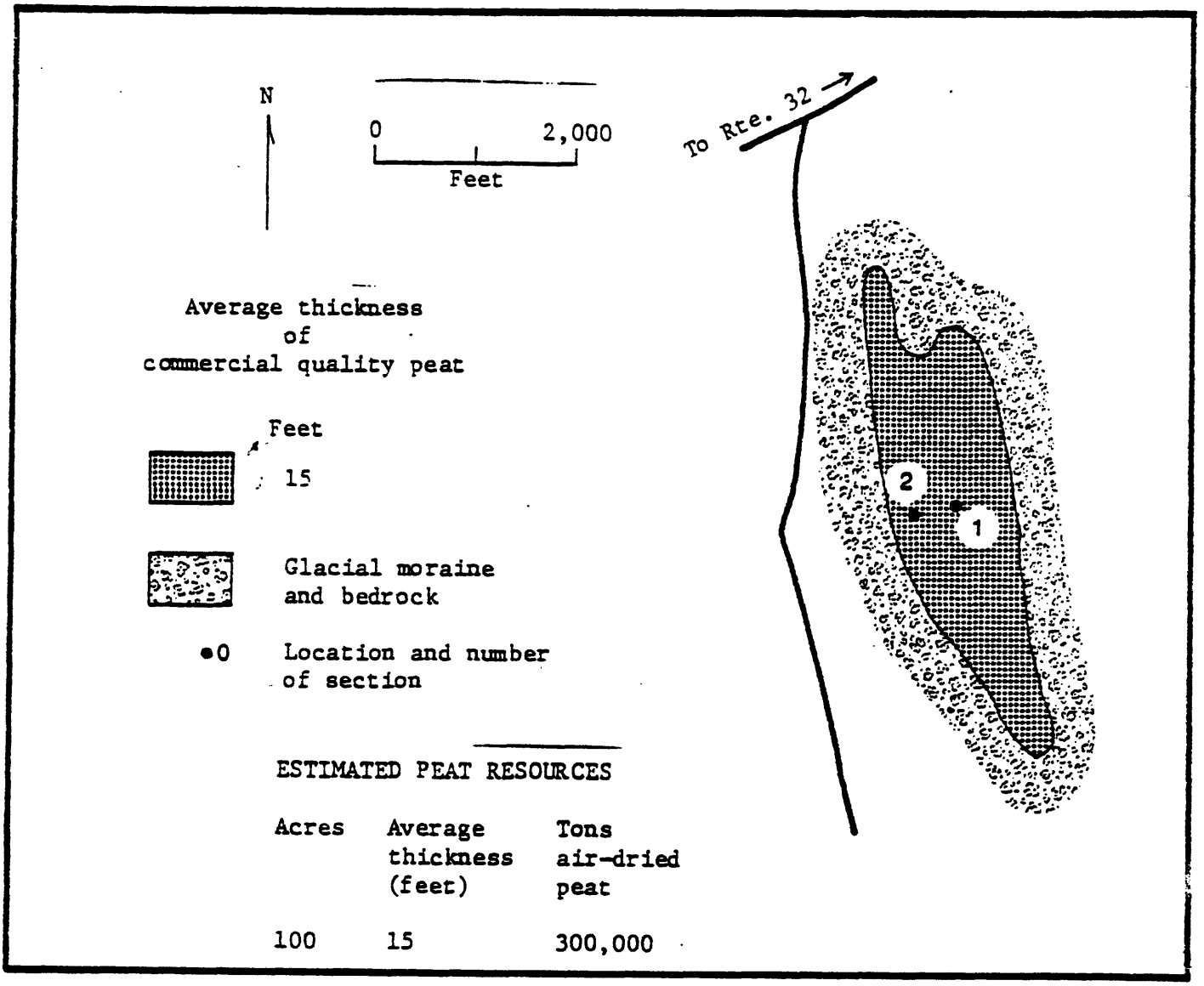


Figure 19. Sketch map of bog 1½ miles south of East Vassalboro, Vassalborough Twp., Vassalboro 15 minute Quadrangle, Kennebec County, Maine. (Number 18 on Index Map).

Figure 19a.--Sections and sample locations.

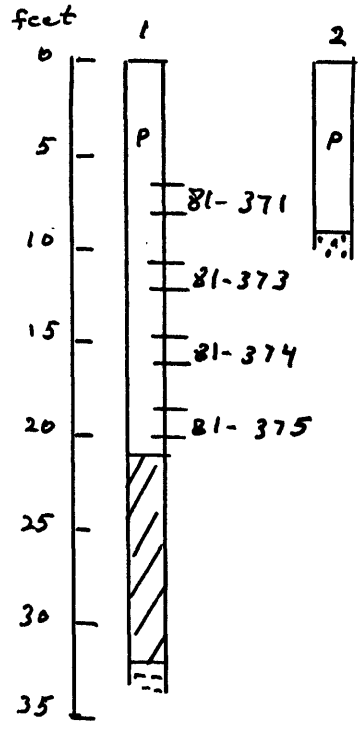


Table 15.--Analyses of samples located in sections in figure 19a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
371	54.23	4.70	0.72	0.09	0.8	91.5	68.0	9,084
373	57.24	4.91	1.46	0.16	2.2	91.1	66.1	9,921
374	57.19	5.36	2.03	0.18	2.0	92.2	67.5	9,960
375	48.41	5.48	3.85	0.99	10.0	95.9	69.2	8,500
Average commercial quality peat (ash content less than 25%)	54.26	5.11	2.02	0.36	3.8	92.7	67.7	9,366

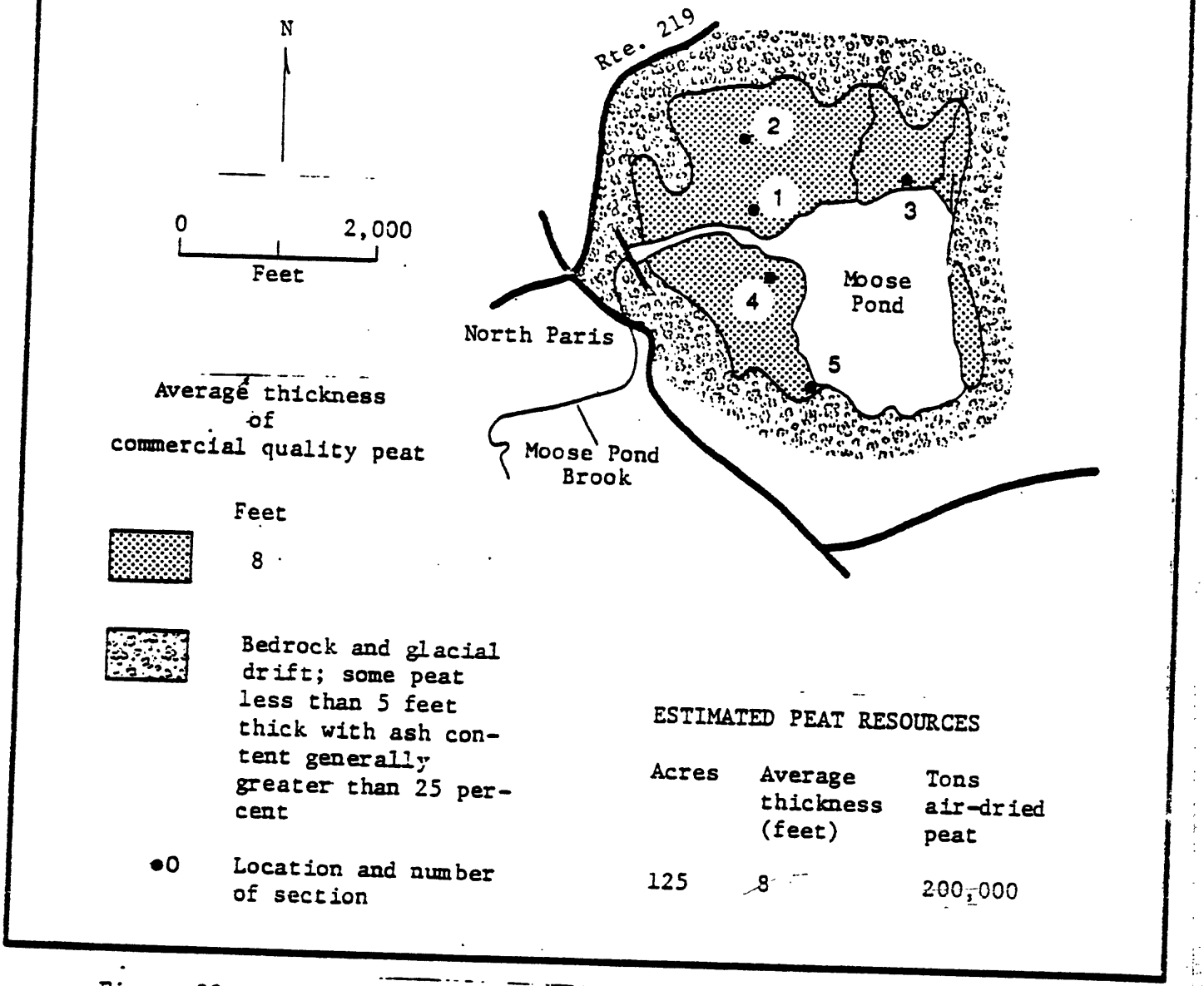
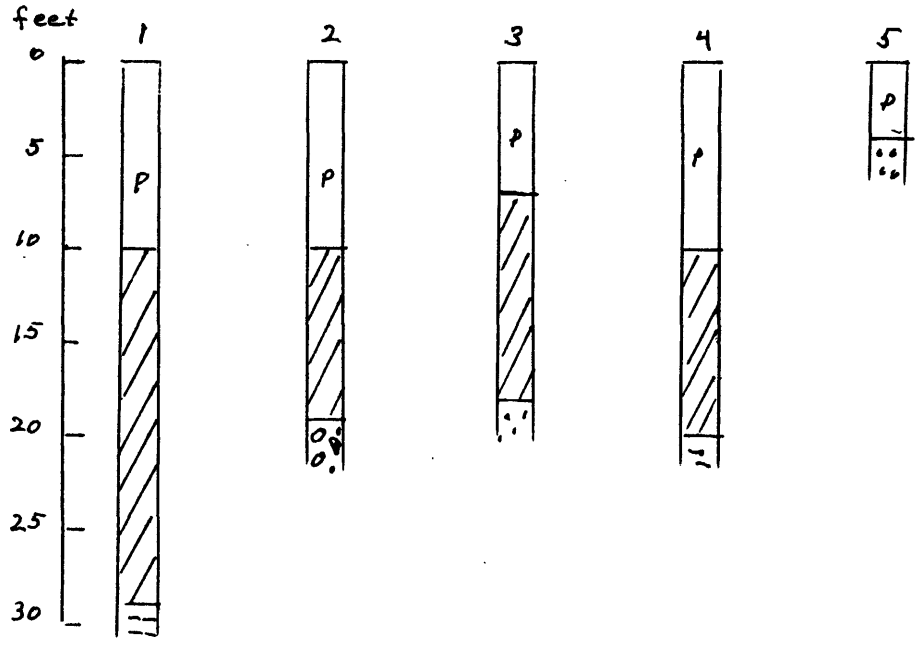
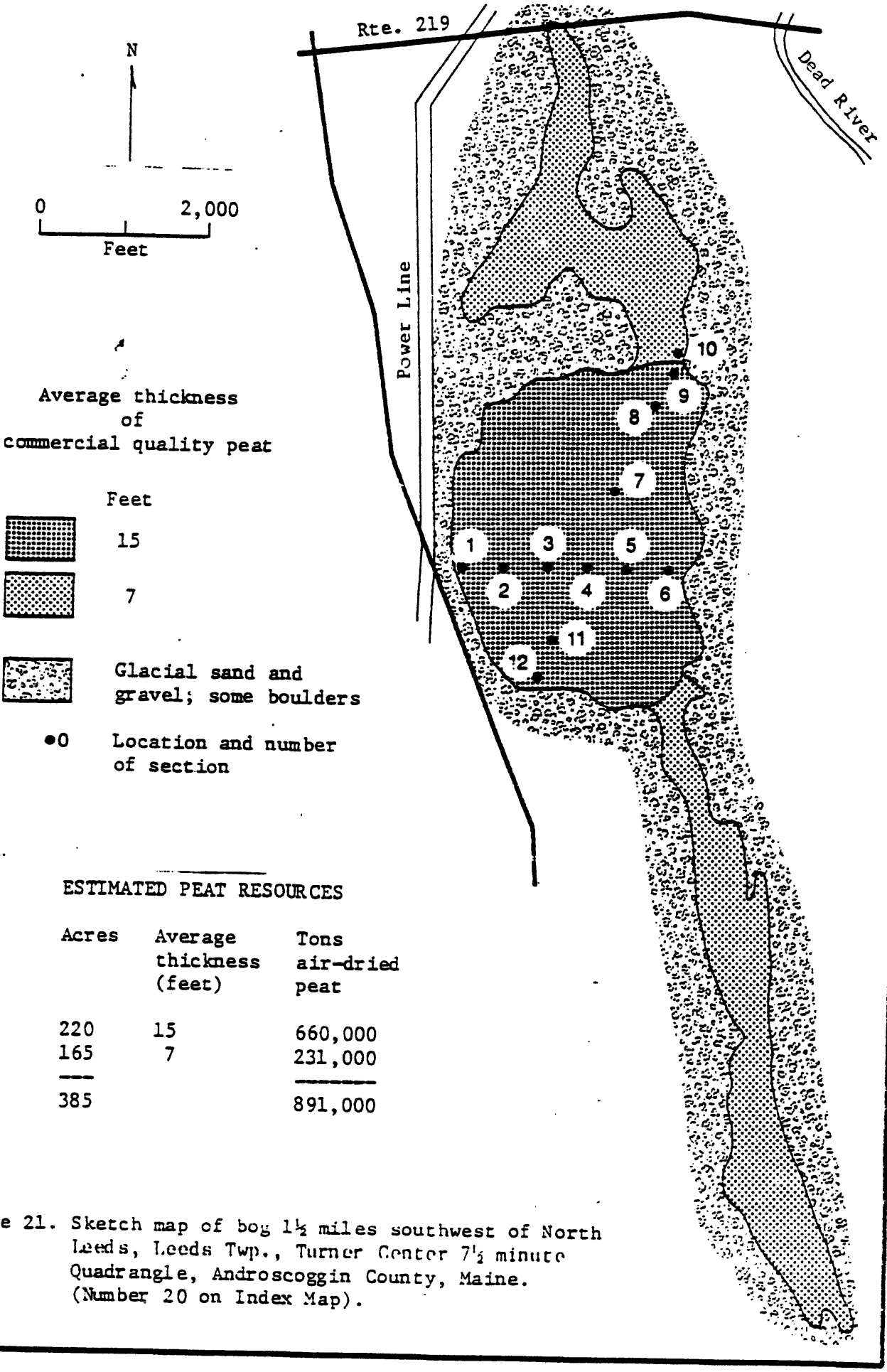


Figure 20. Sketch map of bog adjacent to Moose Pond at North Paris, West Paris Twp., West Paris 7½ minute Quadrangle, Oxford County, Maine. (Number 19 on Index Map).

Figure 20q.--Sections and sample locations.





ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
220	15	660,000
165	7	231,000
385		891,000

Figure 21. Sketch map of bog 1½ miles southwest of North Leeds, Leeds Twp., Turner Center 7½ minute Quadrangle, Androscoggin County, Maine. (Number 20 on Index Map).

Figure 21a.--Sections and sample locations.

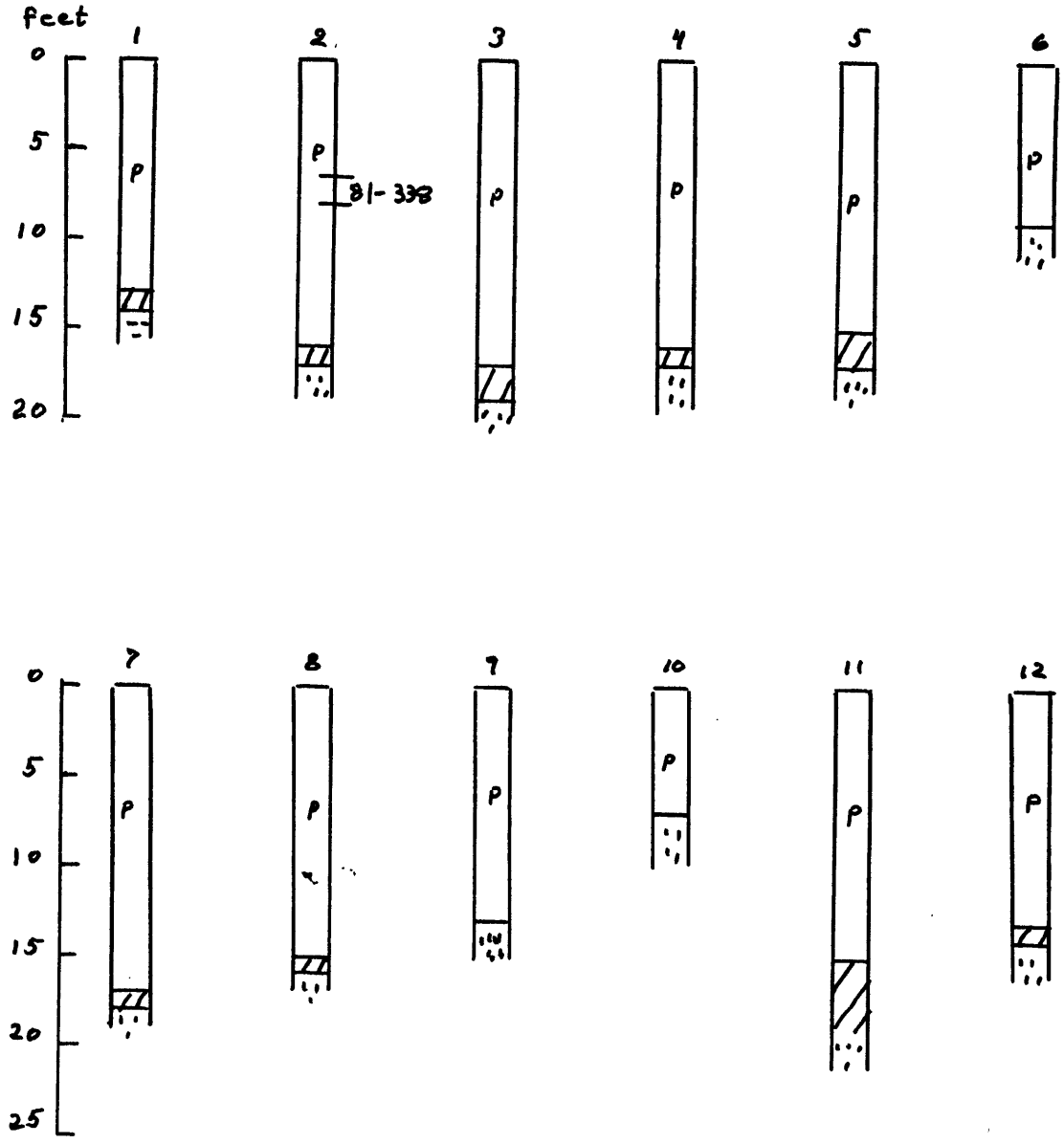


Table 16.--Analyses of samples located in sections in figure 21a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
338	57.33	5.12	1.12	0.10	0.8	91.2	65.3	9,781

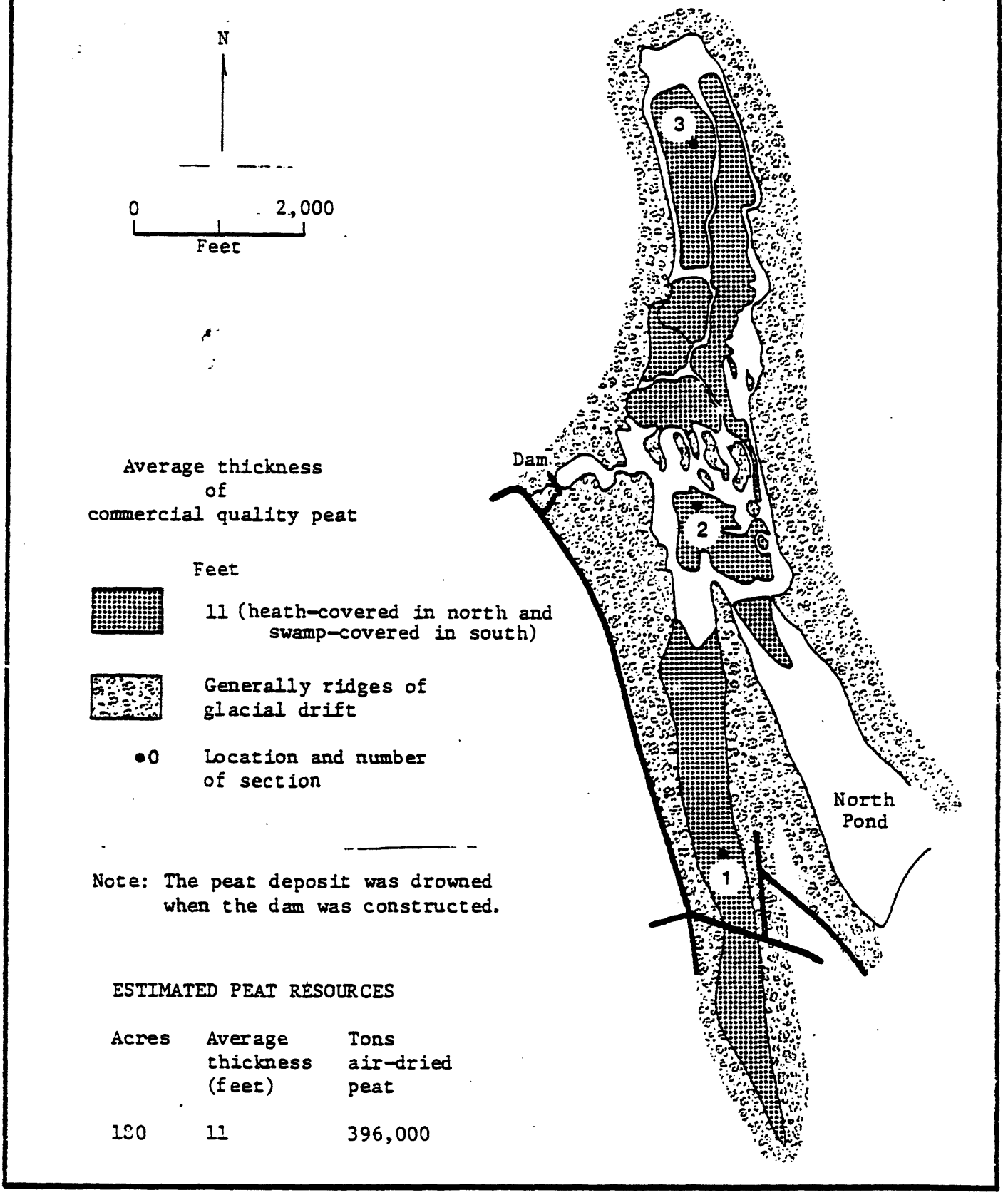


Figure 22. Sketch map of bog at North Pond, Norway Twp., West Paris 7½ minute Quadrangle, Oxford County, Maine. (Number 21 on Index Map).

Figure 22a.--Sections and sample locations.

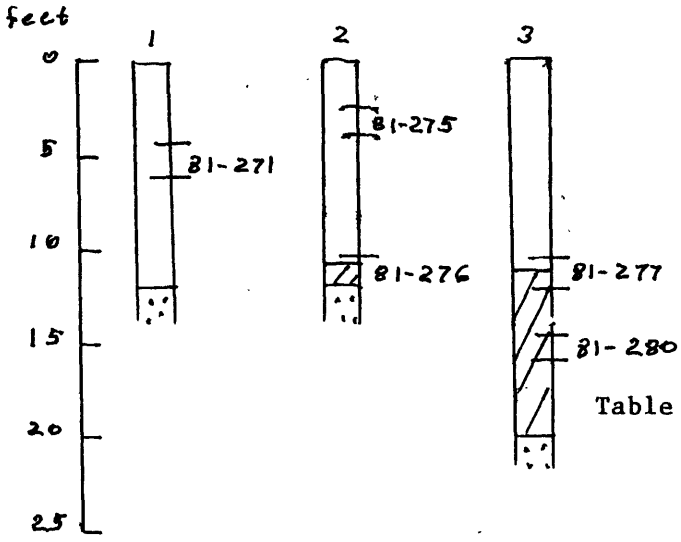


Table 17.--Analyses of samples located in sections in figure 22a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
271	54.34	3.75	1.86	0.46	6.5	---	57.9	8,758
275	54.54	4.85	1.27	0.14	1.9	90.7	68.1	9,216
276	12.82	1.31	0.99	0.78	74.4	87.8	20.3	2,278
277	32.30	3.23	2.29	0.92	42.4	86.3	42.5	5,762
280	26.93	2.68	2.63	1.10	47.1	93.2	42.0	4 879
Average commercial quality peat (ash content	54.44	4.3	1.57	0.3	4.2	90.7	63.0	8,987

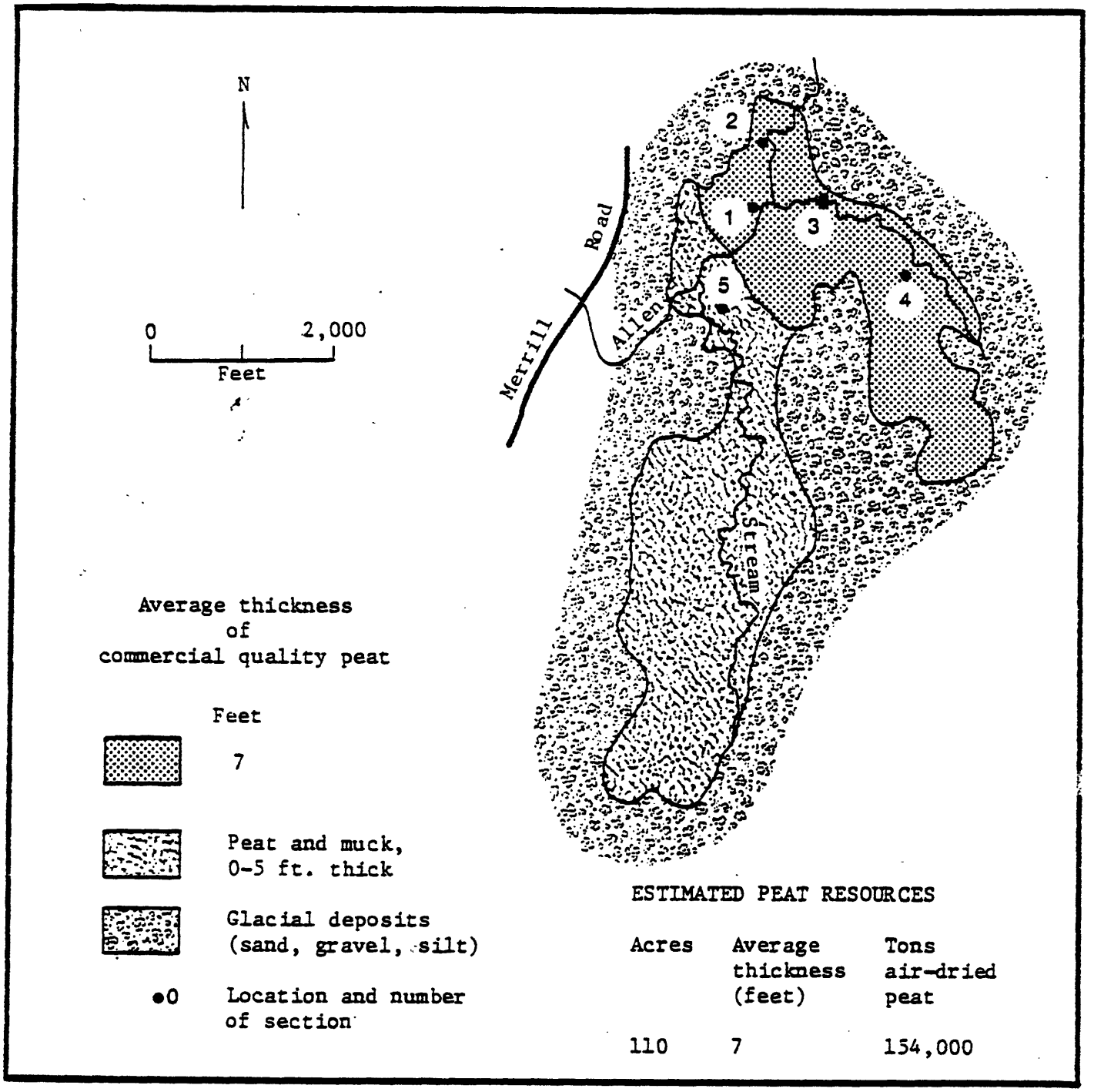


Figure 23. Sketch map of bog along Allen Stream, Leeds Twp., Turner Center 7½ minute Quadrangle, Androscoggin County, Maine. (Number 22 on Index Map).

Figure 23a.--Sections and sample locations.

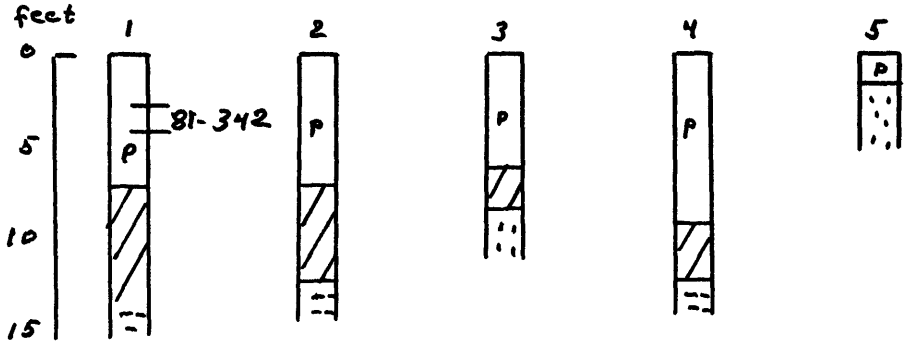


Table 18.--Analyses of samples located in sections in figure 23a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
342	56.47	4.90	1.69	0.36	6.0	89.2	62.9	9,672

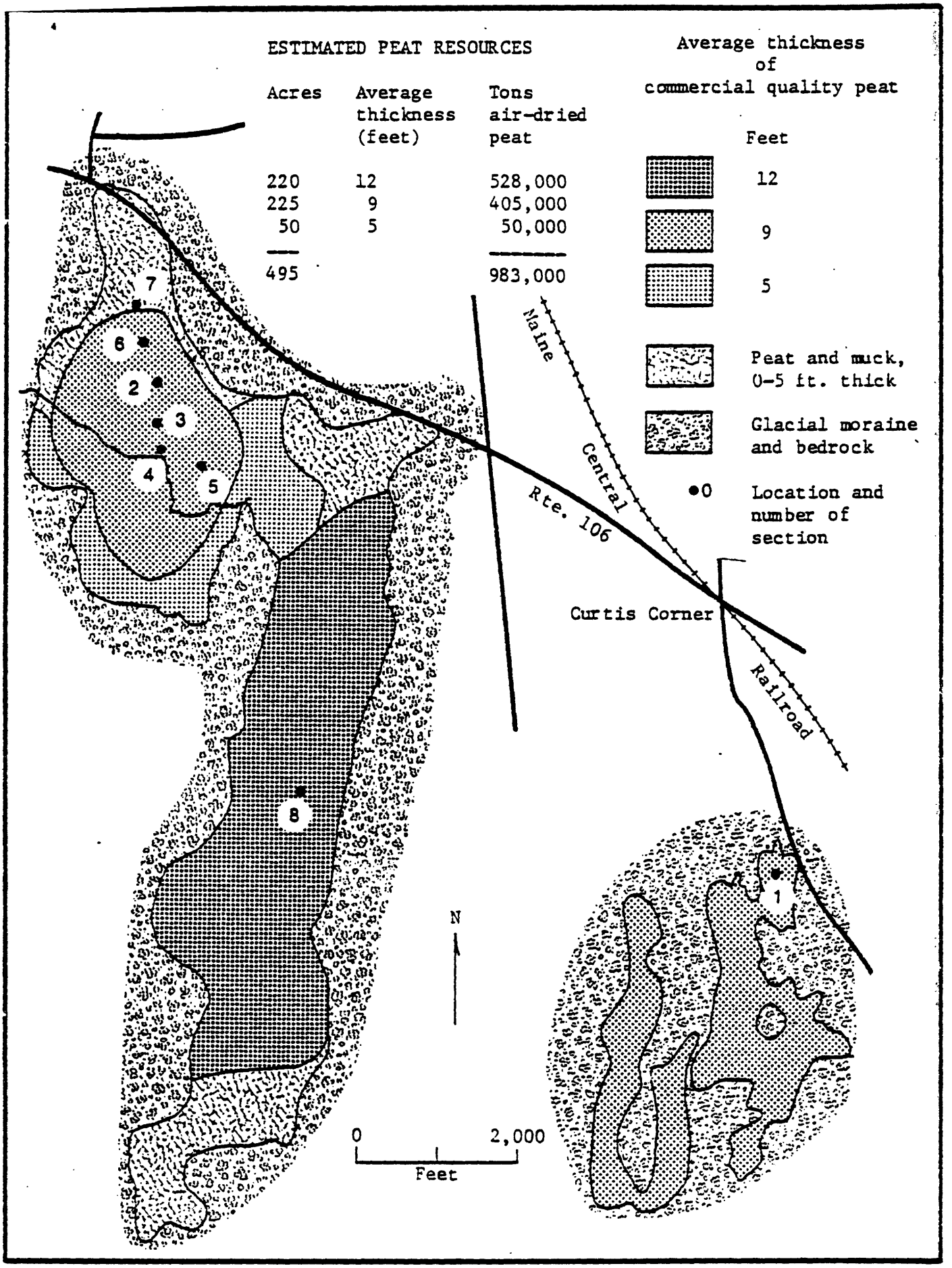


Figure 24. Sketch map of bogs west and south of Curtis Corner, Leeds Twp., Wayne 7½ minute Quadrangle, Androscoggin County, Maine. (Number 23 on Index Map).

Figure 24a.--Sections and sample locations.

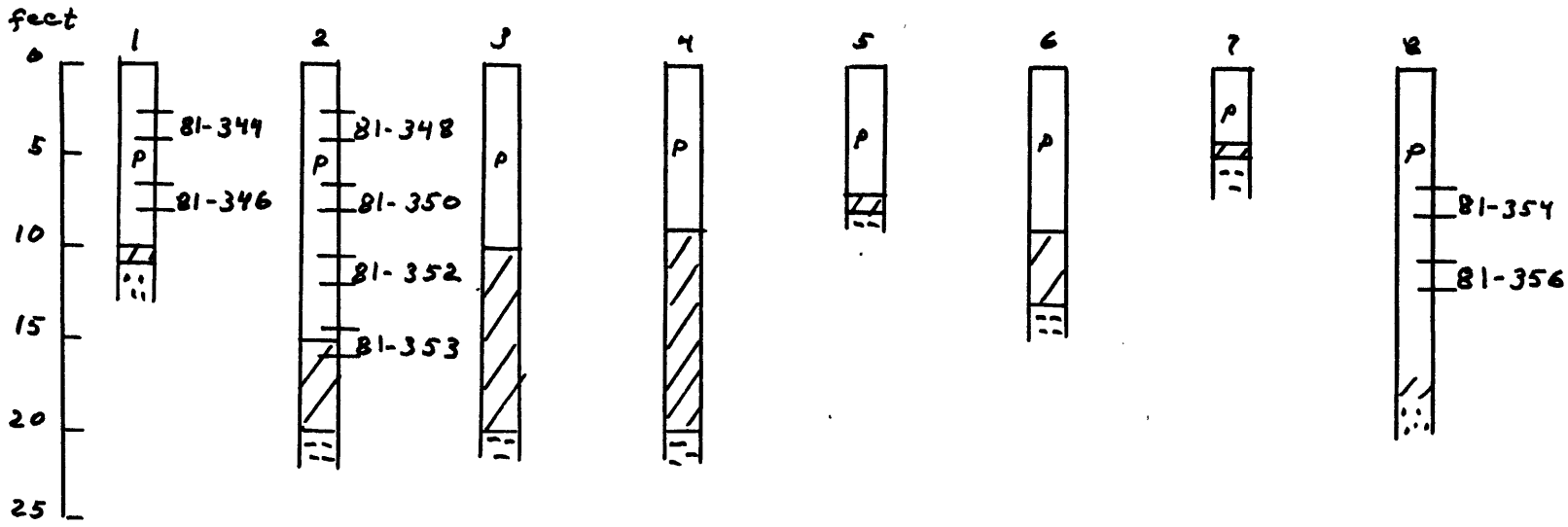


Table 19.--Analyses of samples located in sections in figure 24a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
344	57.61	4.53	1.14	0.14	1.9	89.4	63.6	9,683
346	55.95	4.97	1.55	0.28	3.1	90.0	66.2	9,567
348	57.78	4.96	1.38	0.18	2.5	90.2	66.0	10,026
350	59.15	5.09	1.17	0.23	2.3	---	64.0	10,017
352	57.10	4.95	1.13	0.26	2.6	89.9	65.2	9,762
353	27.81	3.02	2.03	1.13	48.9	---	38.4	5,002
354	56.61	4.58	1.36	0.55	4.1	---	61.8	9,457
356	46.97	4.76	3.19	1.13	18.9	---	58.1	8,377
Average commercial quality peat (ash content less than 25%)	55.88	4.83	1.56	0.4	5.1	89.9	63.6	9,556

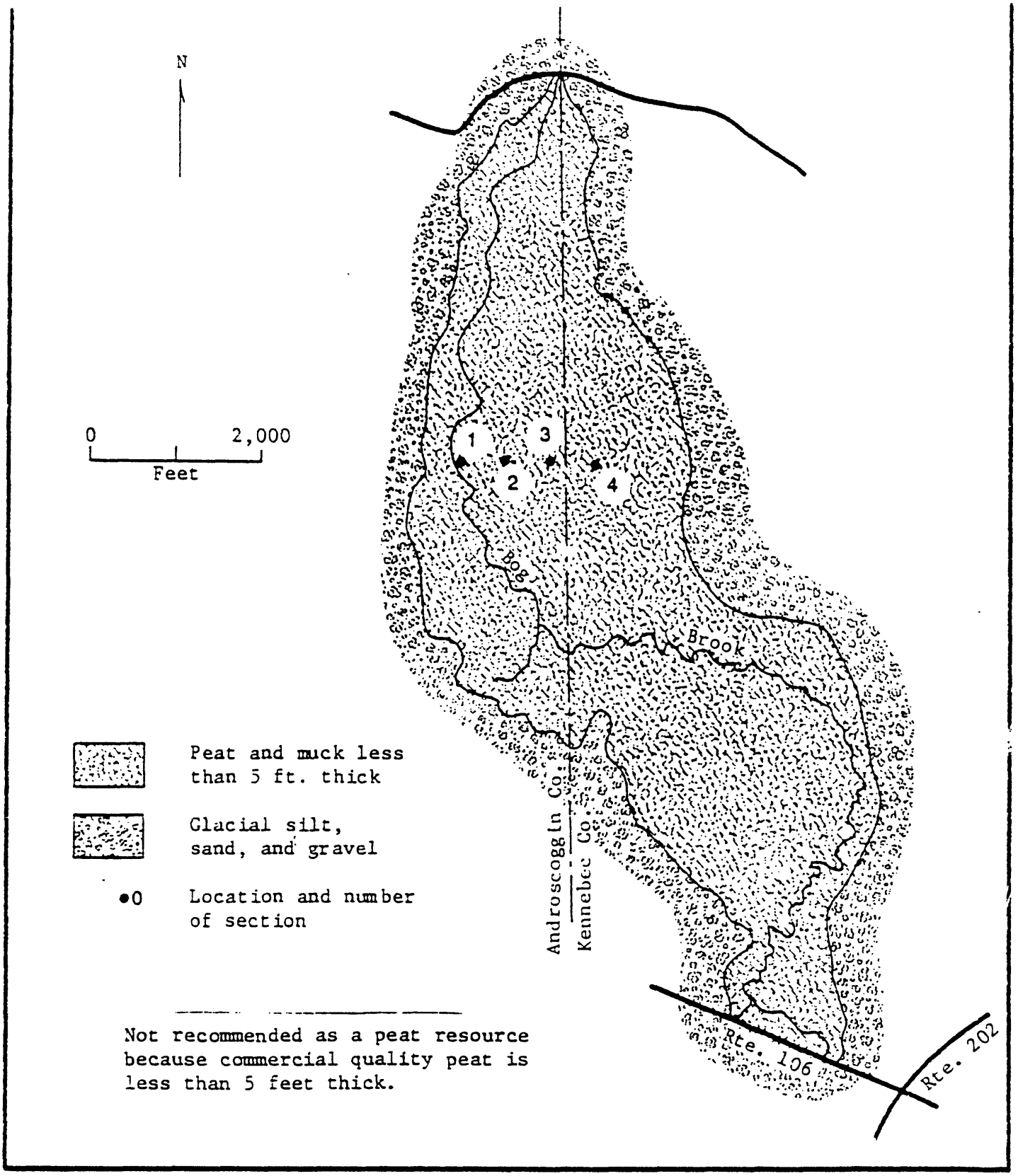


Figure 25. Sketch map of bog along Bog Brook south of Androscoggin Lake on the Androscoggin-Kennebec County Line, Leeds and Monmouth Twps., Wayne 7½ minute Quadrangle, Maine. (Number 24 on Index Map).

Figure 25a.--Sections and sample locations.

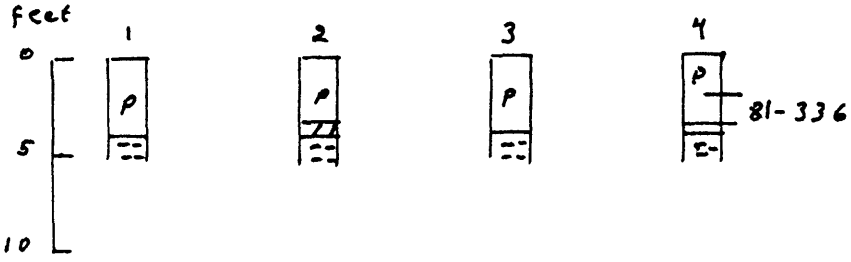
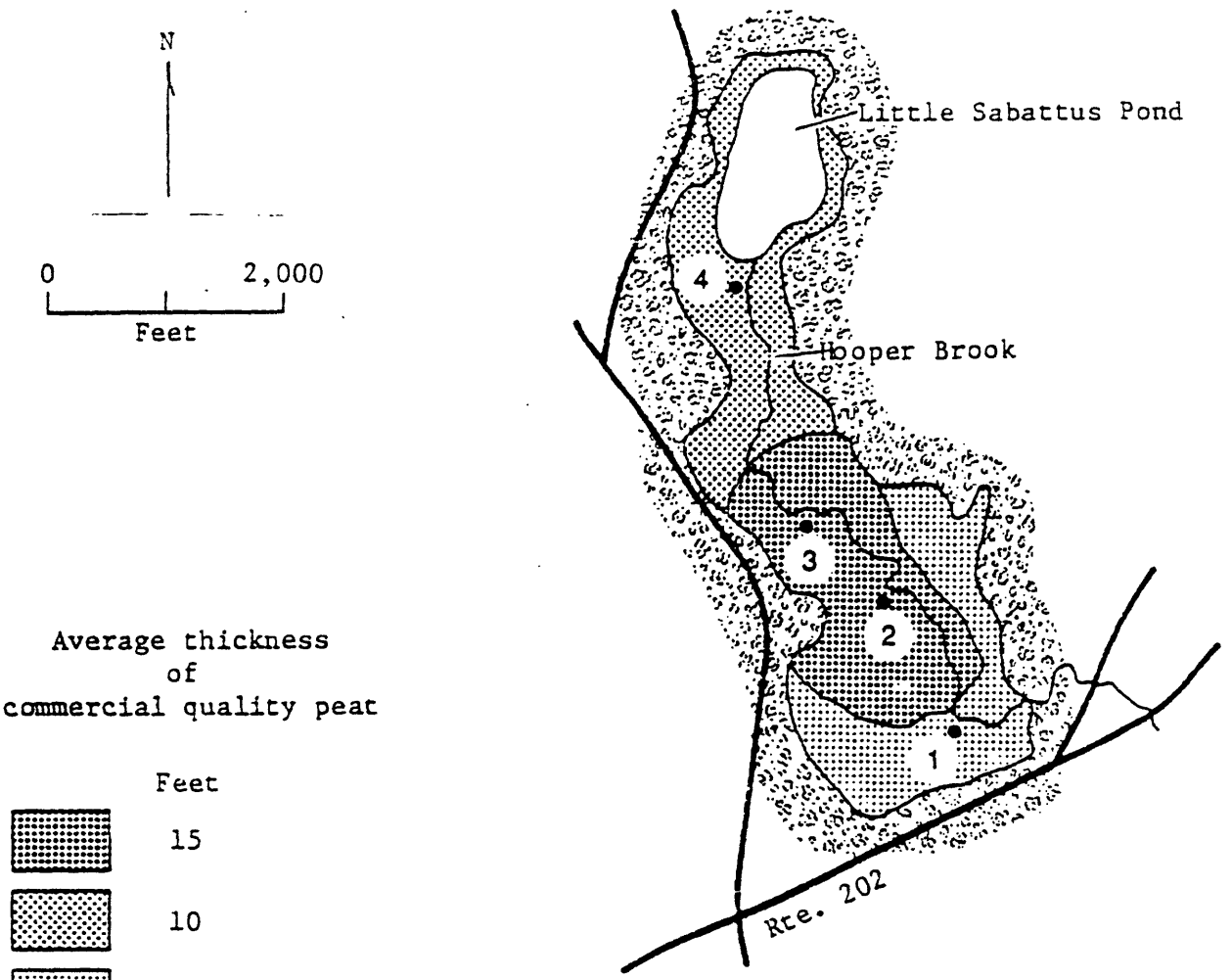


Table 20.--Analyses of samples located in sections in figure 25a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
336	52.77	4.90	1.87	0.37	11.9	86.9	58.8	9,091



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
65	15	195,000
55	10	110,000
50	5	50,000
170		355,000

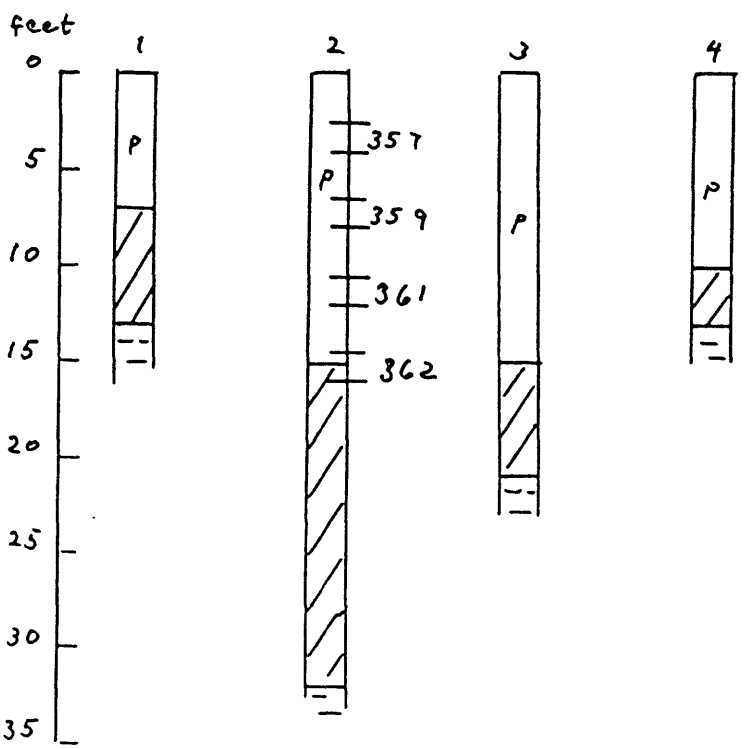
Figure 26. Sketch map of bog at Little Sabattus Pond, Greene Twp., Lewiston 15 minute Quadrangle, Androscoggin County, Maine. (Number 25 on Index Map).

Table 21.--Analyses of samples located in sections in figure 26a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
357	50.87	4.15	2.51	0.71	11.6	87.6	60.1	8,550
359	46.25	3.84	2.28	0.66	20.4	---	52.5	7,786
361	46.63	3.90	2.33	0.66	19.8	---	54.1	7,853
362	32.79	2.82	2.25	0.70	42.7	90.0	41.6	5,778
Average commercial quality peat (ash content less than 25%)	47.78	3.96	2.37	0.68	17.3	87.6	55.57	8,063

Figure 26a.--Sections and sample locations.



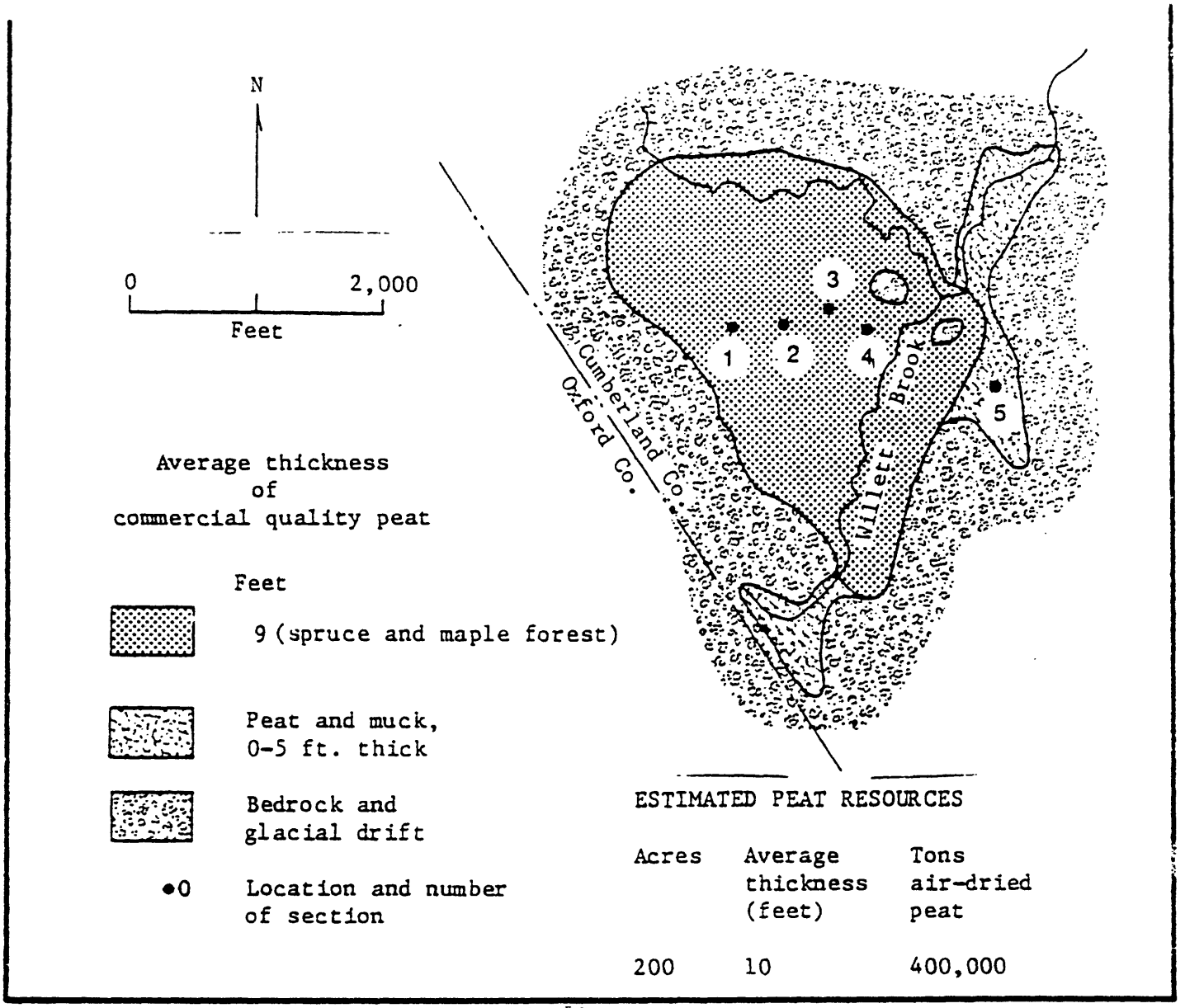


Figure 27. Sketch map of bog along Willett Brook, Bridgton Twp., Norway and Sebago Lake 15 minute Quadrangles, Cumberland County, Maine. (Number 26 on Index Map).

Figure 27a.--Sections and sample locations.

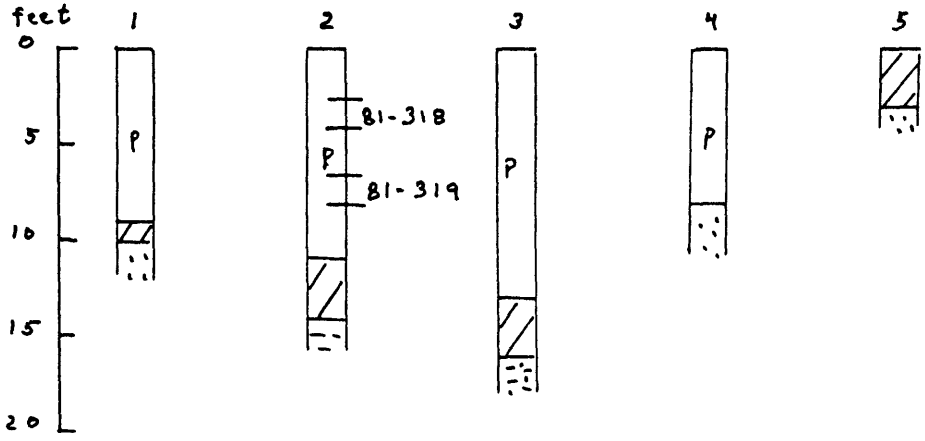
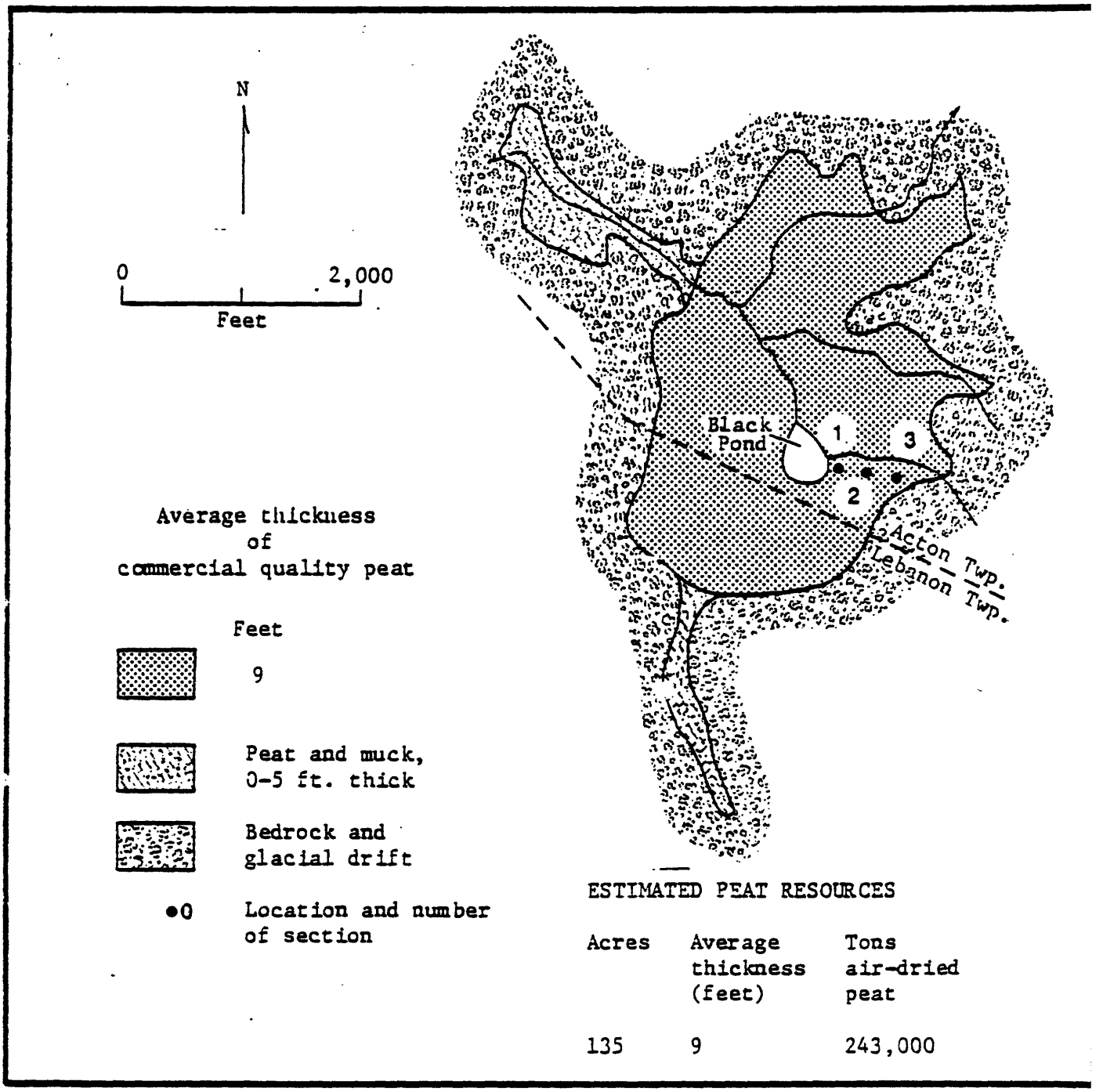


Table 22.--Analyses of samples located in sections in figure 27a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
318	58.01	4.97	1.29	0.17	3.0	89.5	65.3	9,964
319	55.15	4.99	2.68	0.50	6.9	91.0	62.9	9,649
Average commercial quality peat (ash content less than 25%)	56.58	4.93	1.99	0.34	5.0	90.3	64.1	9,807



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
135	9	243,000

Figure 28. Sketch map of bog at Black Pond, Acton and Lebanon Twps., Berwick 15 minute Quadrangle, York County, Maine. (Number 27 on Index Map).

Figure 28a.--Sections and sample locations.

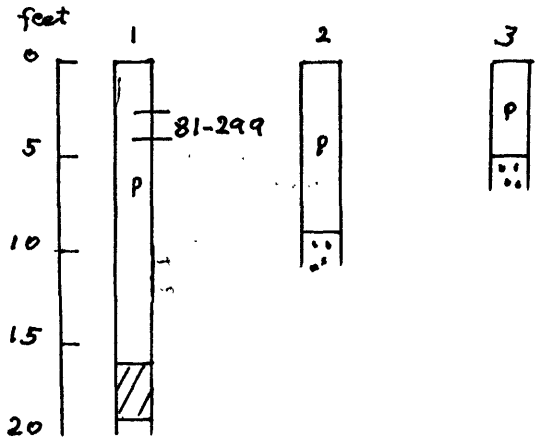


Table 23.--Analyses of samples located in sections in figure 28a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
299	55.36	4.62	1.91	0.64	6.1	---	61.2	9,359

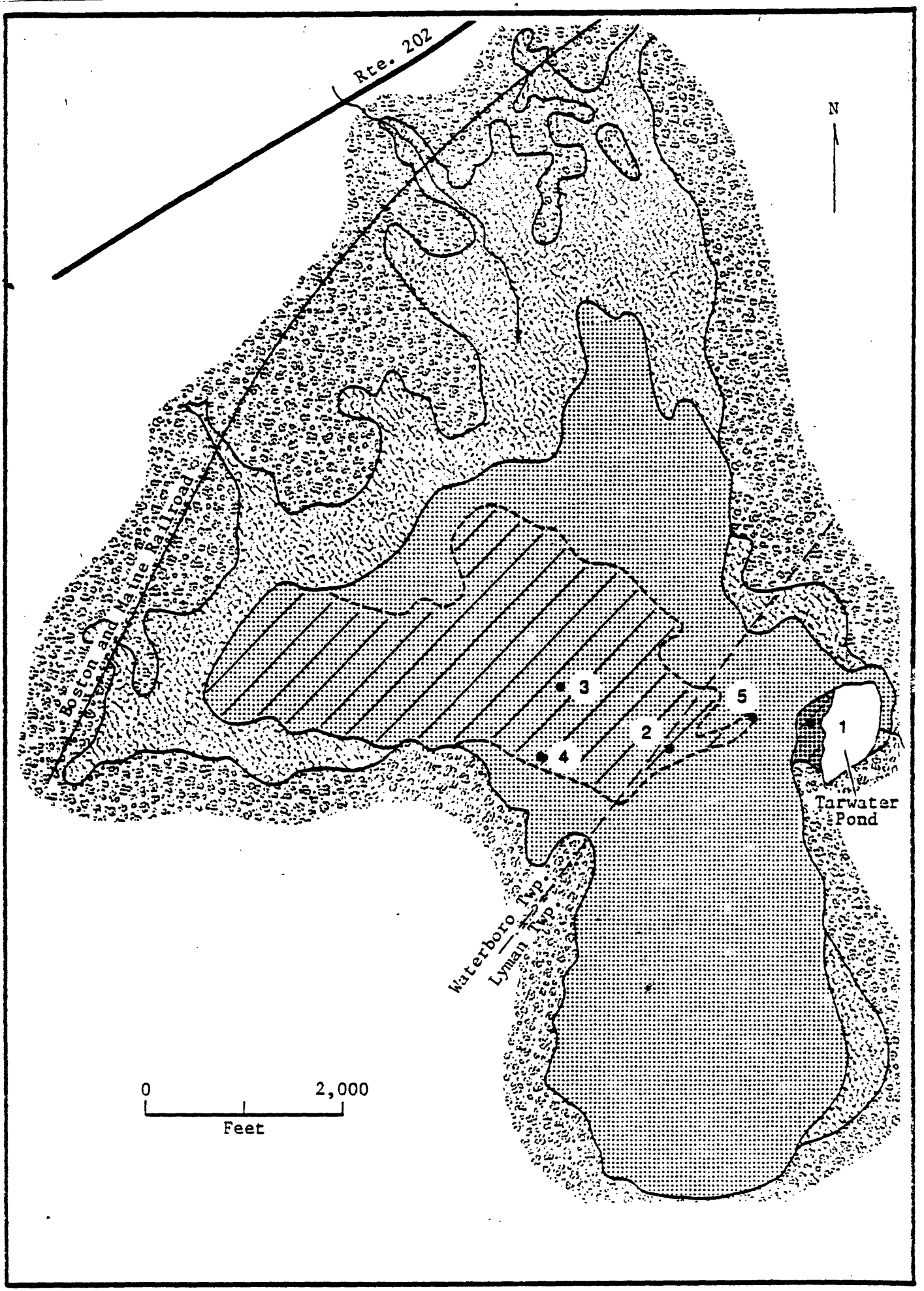
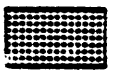
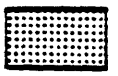


Figure 29. Sketch map of The Heath, Lyman and Waterboro Twps., Buxton 15 minute Quadrangle, York County, Maine. (Number 28 on Index Map).



12



5

Peat and muck, 0-5 ft. thick

Glacio-fluvial sand to north and east, undifferentiated glacial drift elsewhere

Open heath with burned black spruce trees

•0 Location and number of section

Average thickness of commercial quality peat

Feet

ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
5	12	12,000
590	5	590,000
595		602,000

Note: Charcoal prevalent in cores and in forest.

Figure 29. Continued.

Figure 29a.--Sections and sample locations.

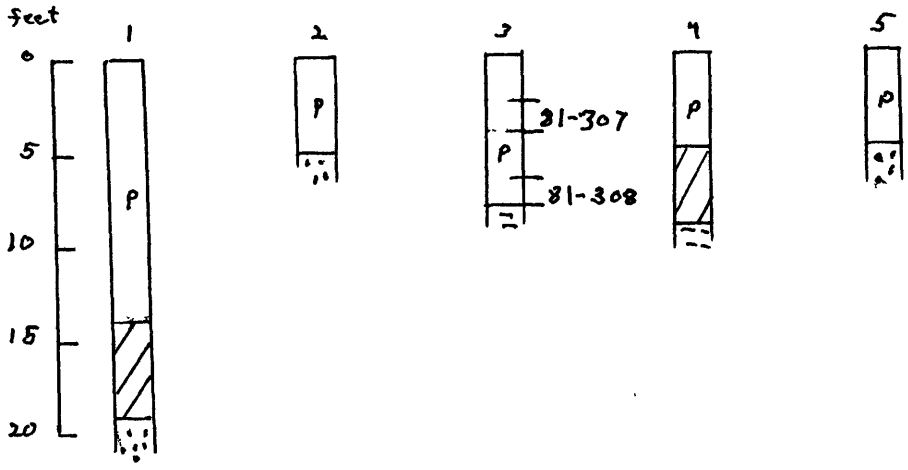


Table 24.--Analyses of samples located in sections in figure 29a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
307	61.75	5.66	1.58	0.32	3.2	---	65.8	10,923
308	51.42	4.41	1.56	0.52	18.8	84.2	54.4	8,921
Average commercial quality peat (ash content less than 25%)	56.59	5.03	1.57	0.42	11.0	84.2	60.1	9,922

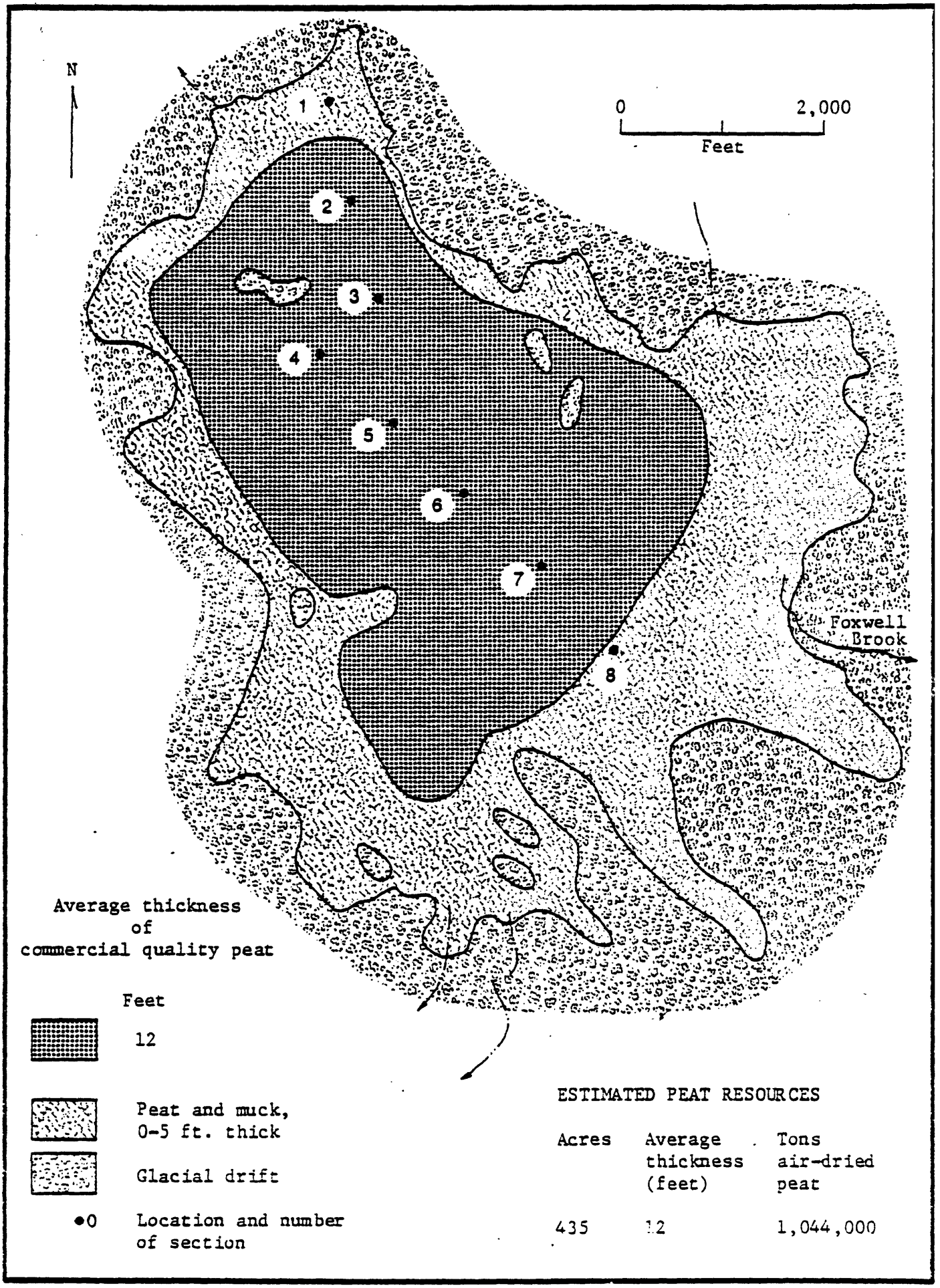


Figure 30. Sketch map of The Heath, Saco Twp., Portland 15 minute Quadrangle, York County, Maine. (Number 29 on Index Map).

Figure 30 a.--Sections and sample locations.

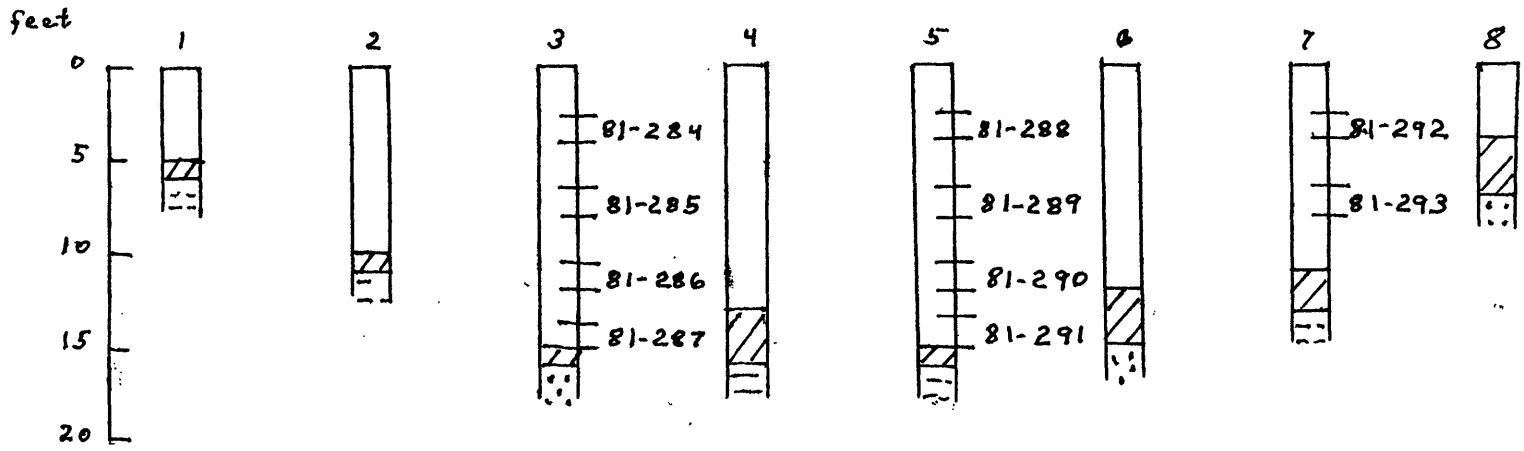


Table 25.--Analyses of samples located in sections in figure 30a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
284	53.53	4.30	0.92	0.18	0.8	90.6	67.8	8,916
285	55.19	4.68	1.01	0.14	0.7	90.9	67.7	9,326
286	58.66	4.70	1.02	0.21	1.1	91.3	65.2	10,076
287	53.04	4.98	1.97	0.30	15.6	87.2	58.5	9,188
288	52.42	4.80	0.58	0.19	0.8	91.0	70.8	8,787
289	52.23	4.89	0.38	0.12	0.8	90.0	70.9	8,659
290	59.23	5.01	0.88	0.11	1.1	90.9	66.0	10,187
291	57.81	5.21	1.89	0.18	3.5	87.9	65.9	10,133
292	53.31	4.52	0.93	0.12	0.8	89.8	68.4	8,984
293	55.55	5.06	0.77	0.06	0.6	90.4	68.7	9,175
Average commercial quality peat (ash content less than 25%)	55.20	4.91	1.04	0.16	2.6	90.0	66.98	9,323

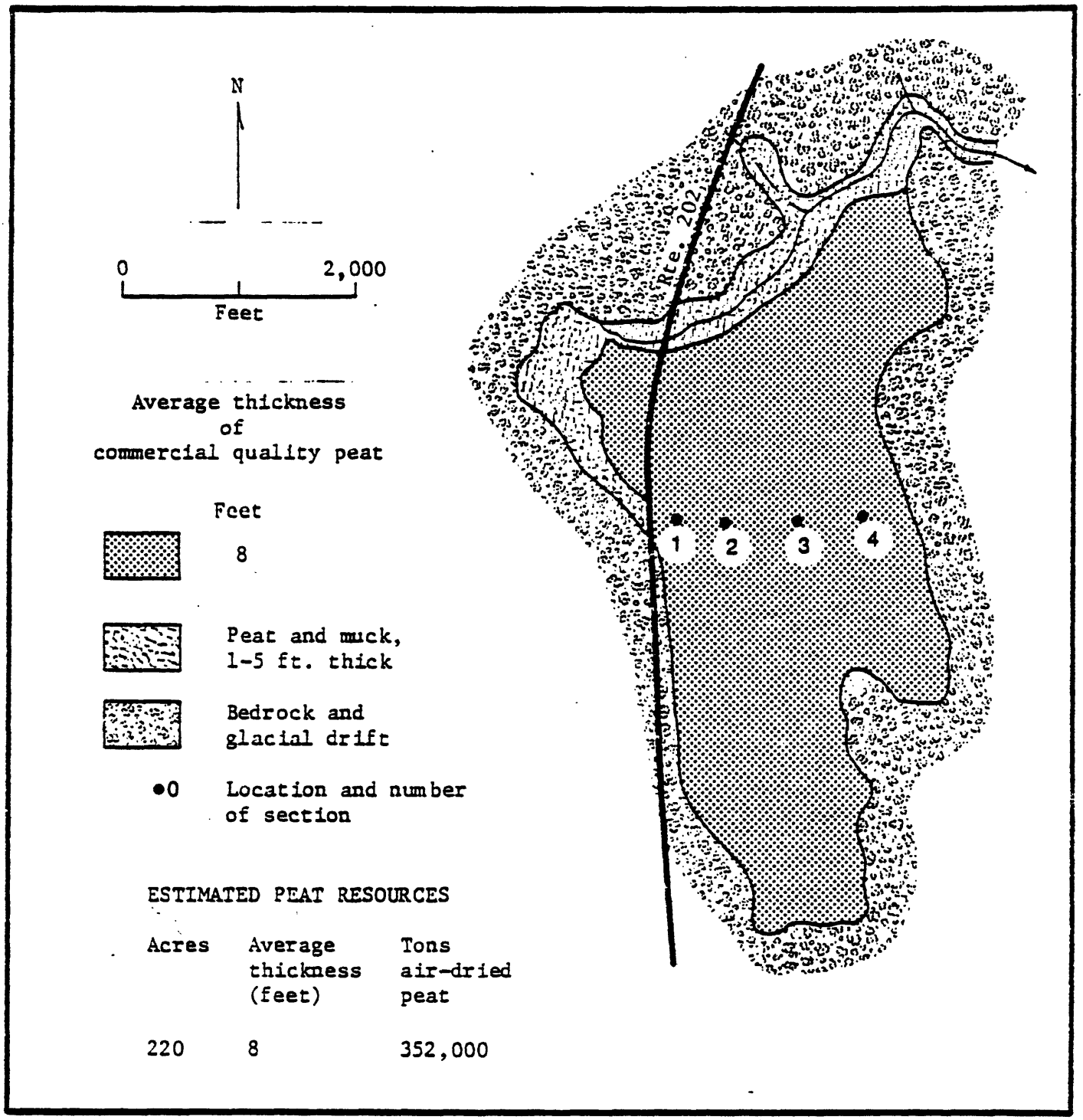


Figure 31. Sketch map of bog south of East Lebanon along Route 202, Lebanon Twp., Berwick 15 minute Quadrangle, York County, Maine. (Number 30 on Index Map).

Figure 31a.--Sections and sample locations.

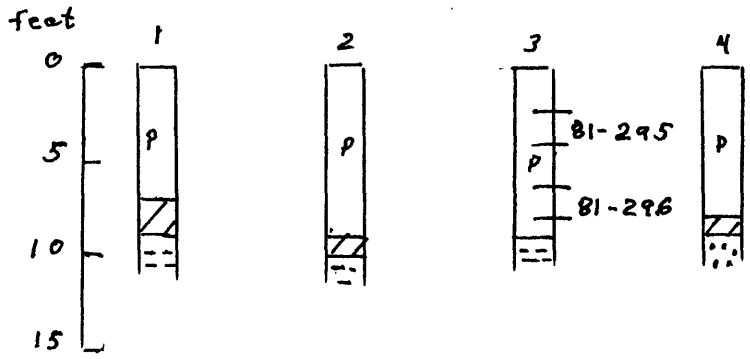


Table 26.--Analyses of samples located in sections in figure 31a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
295	59.24	5.06	1.05	0.28	1.4	---	64.8	9,990
296	58.76	4.94	1.06	0.57	2.6	---	64.4	9,899
Average commercial quality peat (ash content less than 25%)	59.0	5.0	1.06	0.43	2.0	---	64.5	9,945

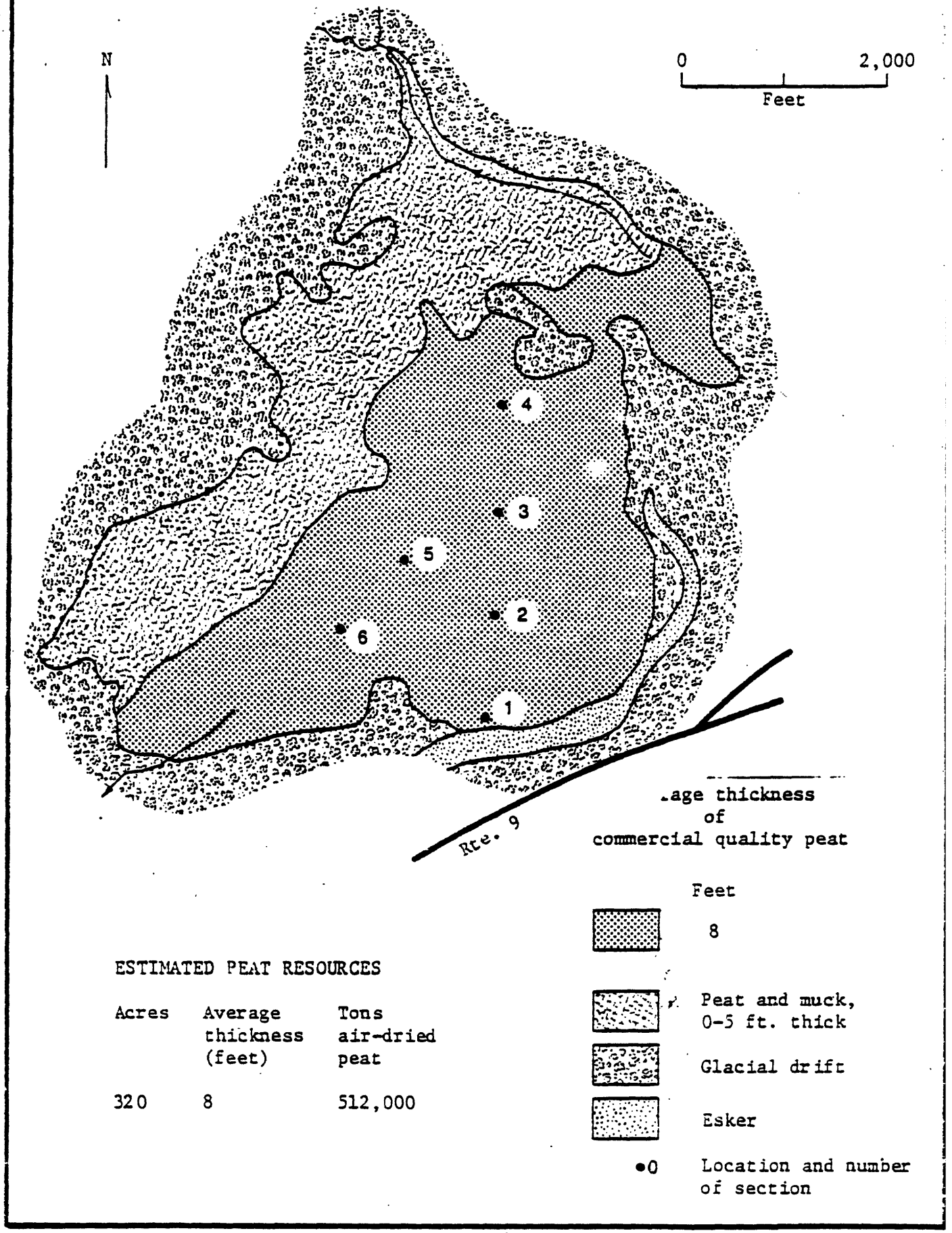


Figure 32. Sketch map of The Heath north of Merriland Ridge, Wells Twp., Kennebunk 15 minute Quadrangle, York County, Maine. (Number 31 on Index Map).

Figure 32a.--Sections and sample locations.

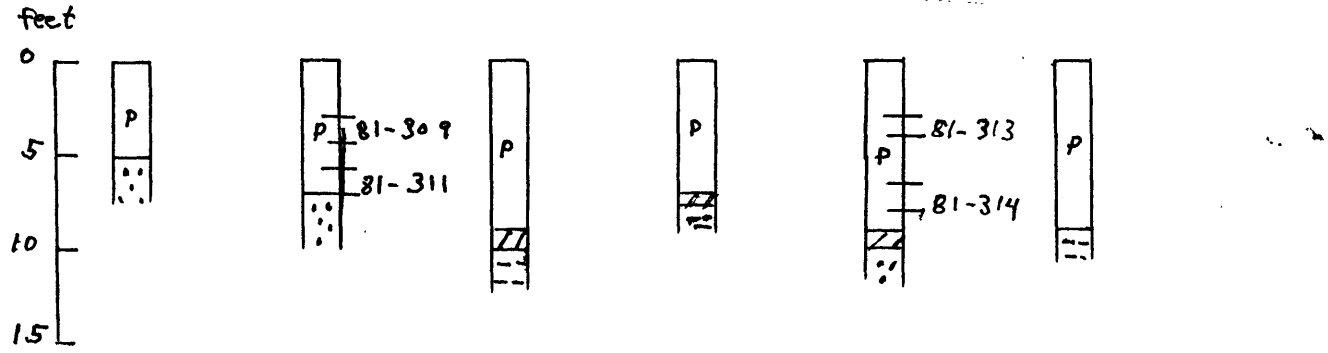


Table 27.--Analyses of samples located in sections in figure 32a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
309	53.21	4.48	0.48	0.12	0.9	90.3	69.9	8,836
311	55.63	4.25	1.46	0.34	3.3	90.3	63.3	9,303
313	51.88	4.86	0.55	0.14	0.8	88.7	73.0	8,628
314	56.13	3.99	1.05	0.24	2.3	88.3	63.7	9,290
Average commercial quality peat (ash content less than 25%)	54.21	4.39	0.89	0.21	1.83	89.4	67.5	9,014

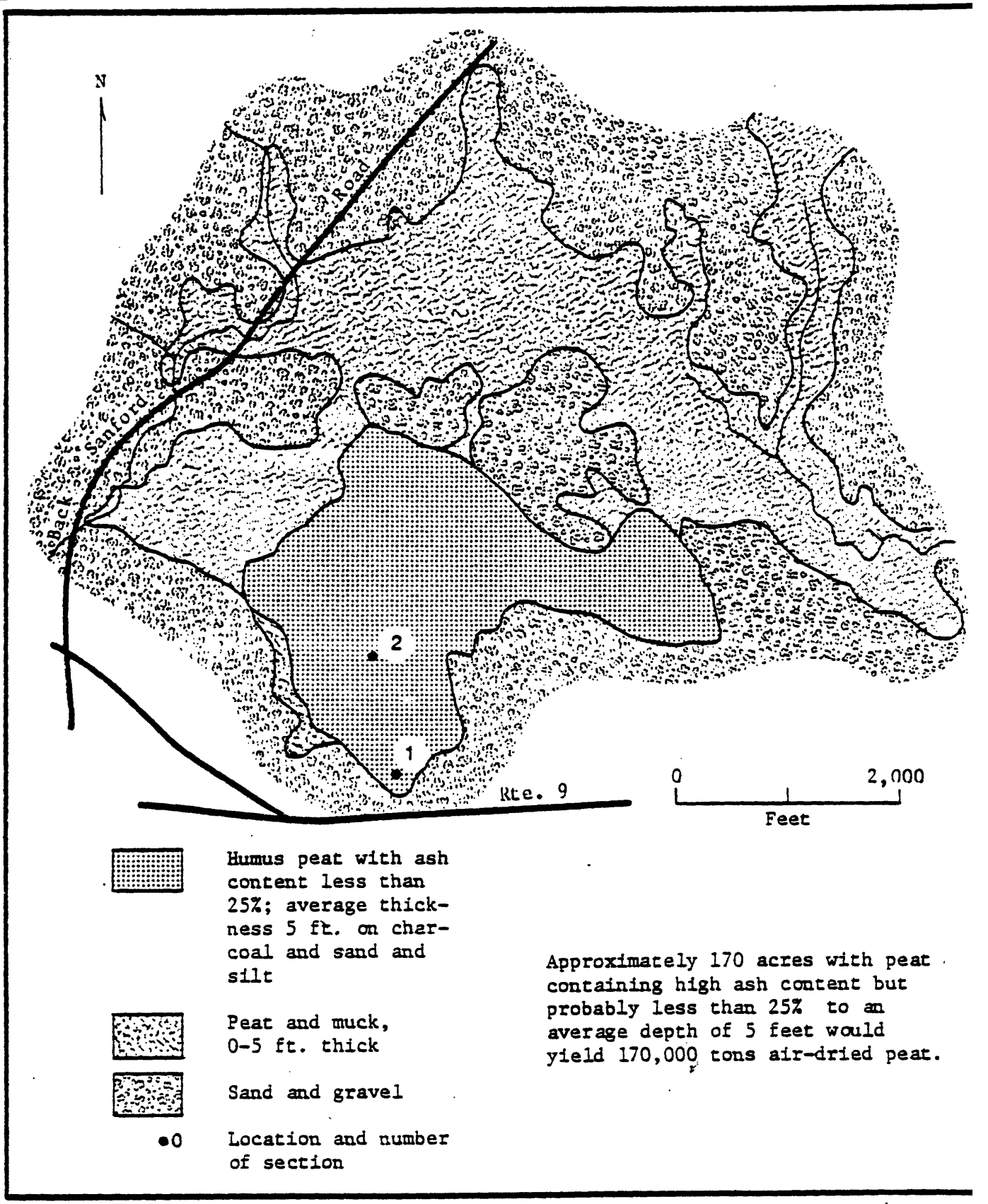


Figure 33. Sketch map of Beaver Dam Heath, Berwick Twp., Berwick 15 minute Quadrangle, York County, Maine. (Number 32 on Index Map).

Figure 33a.--Sections and sample locations.

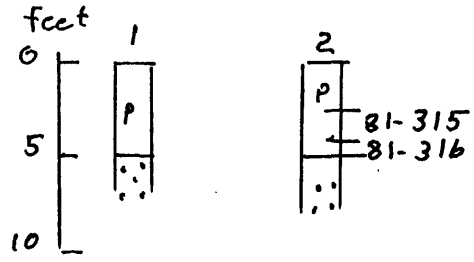
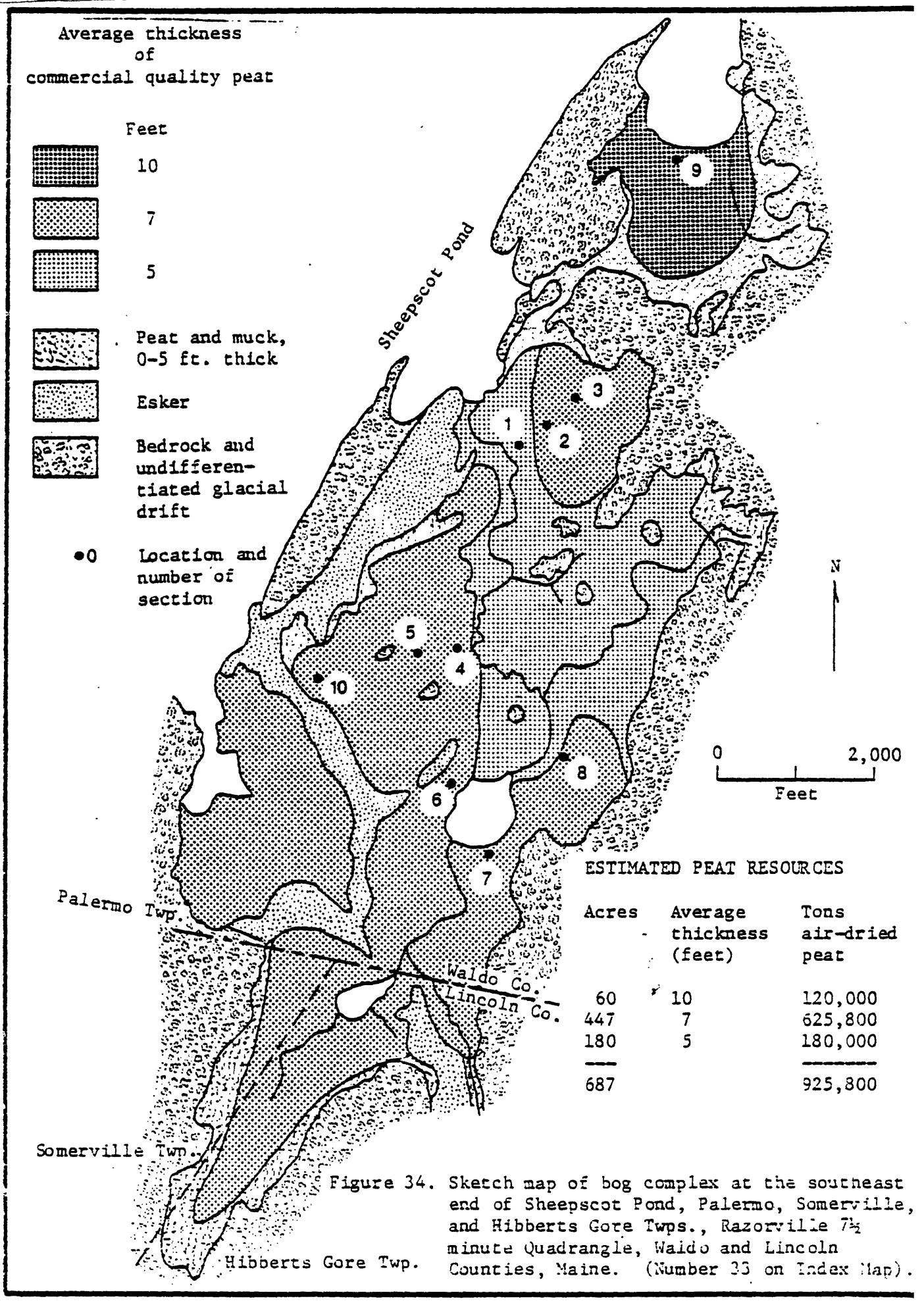


Table 28.--Analyses of samples located in sections in figure 33a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
315	60.54	5.15	1.22	0.59	3.5	---	64.6	10,463
316	53.74	4.52	2.22	1.11	14.4	88.0	57.9	9,543
Average commercial quality peat (ash content less than 25%)	57.14	4.7	1.72	0.85	8.95	88.0	61.3	10,003



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
60	10	120,000
447	7	625,800
180	5	180,000
687		925,800

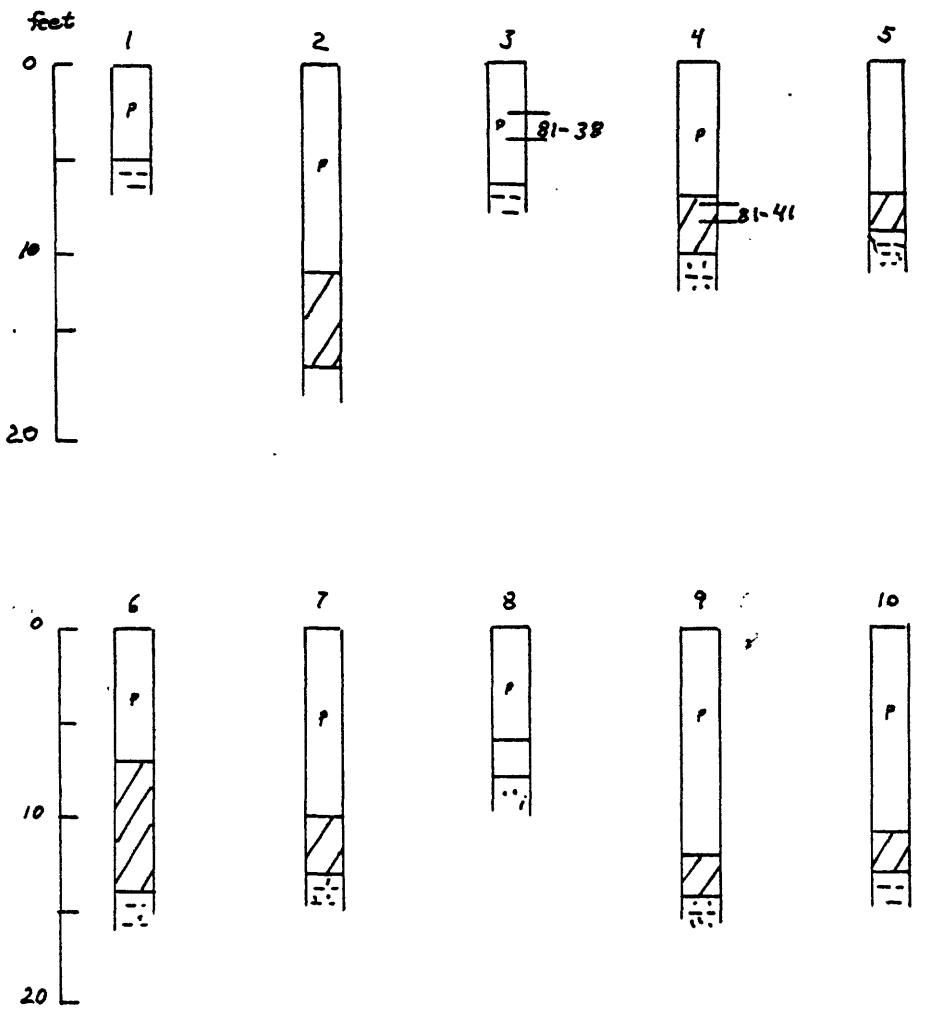
Figure 34. Sketch map of bog complex at the southeast end of Sheepscot Pond, Palermo, Somerville, and Hibberts Gore Twps., Razorville 7½ minute Quadrangle, Waldo and Lincoln Counties, Maine. (Number 33 on Index Map).

Table 29.--Analyses of samples located in sections in figure 34a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
38	55.52	4.71	2.19	0.50	7.3	89.3	60.8	9,258
41	38.42	3.51	2.18	0.52	34.0	91.1	46.8	6,720

Figure 34a.--Sections and sample locations.



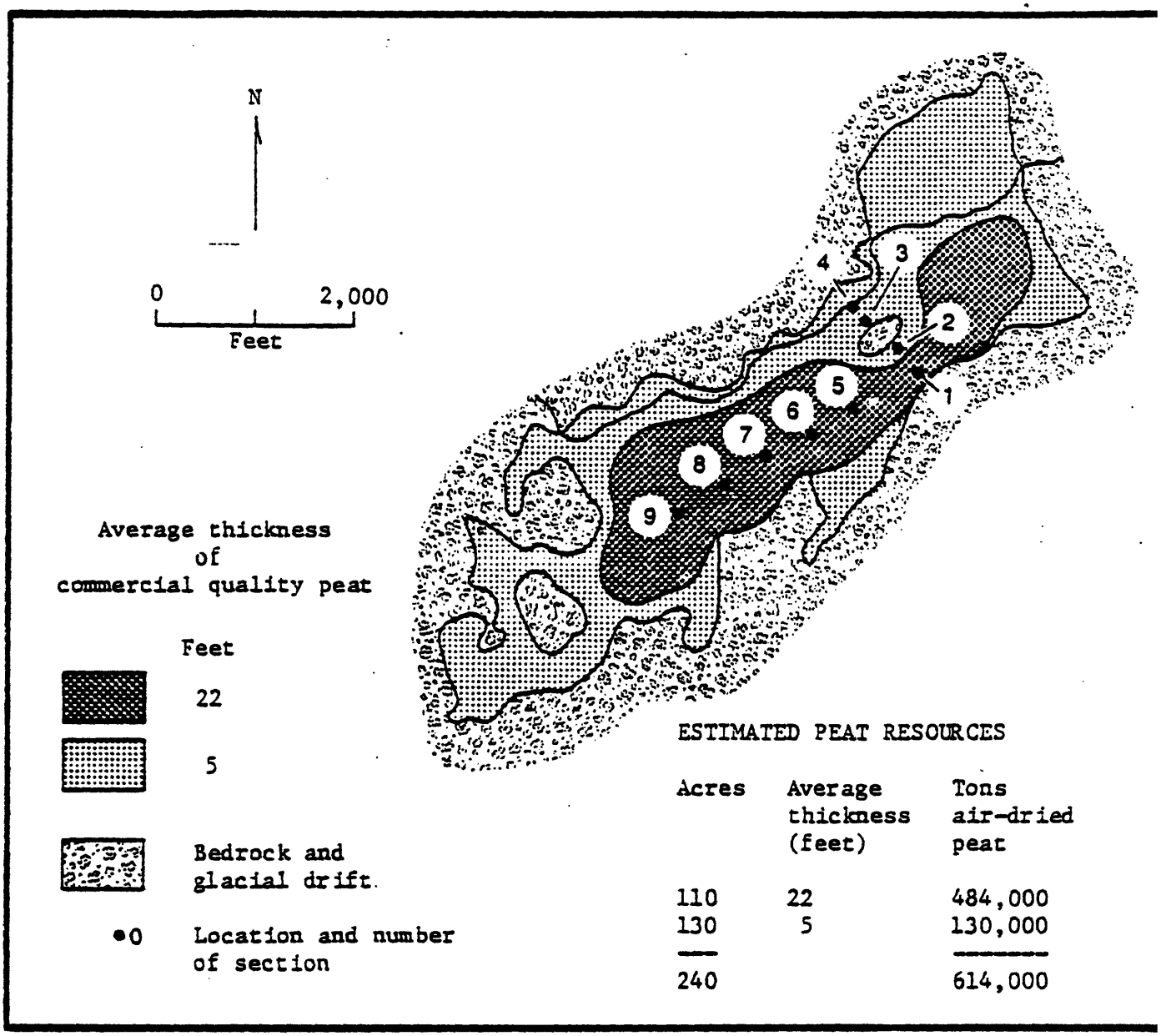


Figure 35. Sketch map of Smiths Millpond Bog, Morrill Twp., Morrill 7½ minute Quadrangle, Waldo County, Maine. (Number 34 on Index Map).

Figure 35a.--Sections and sample locations.

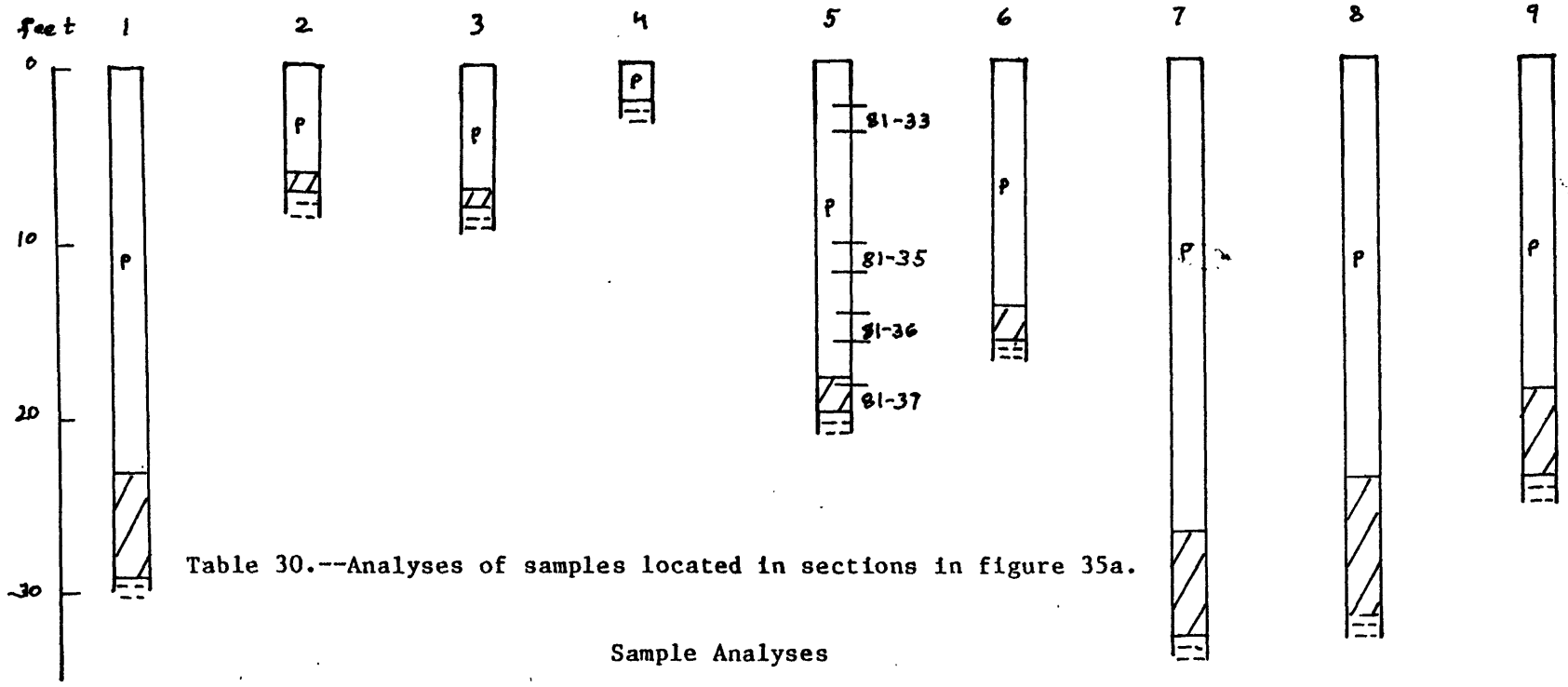
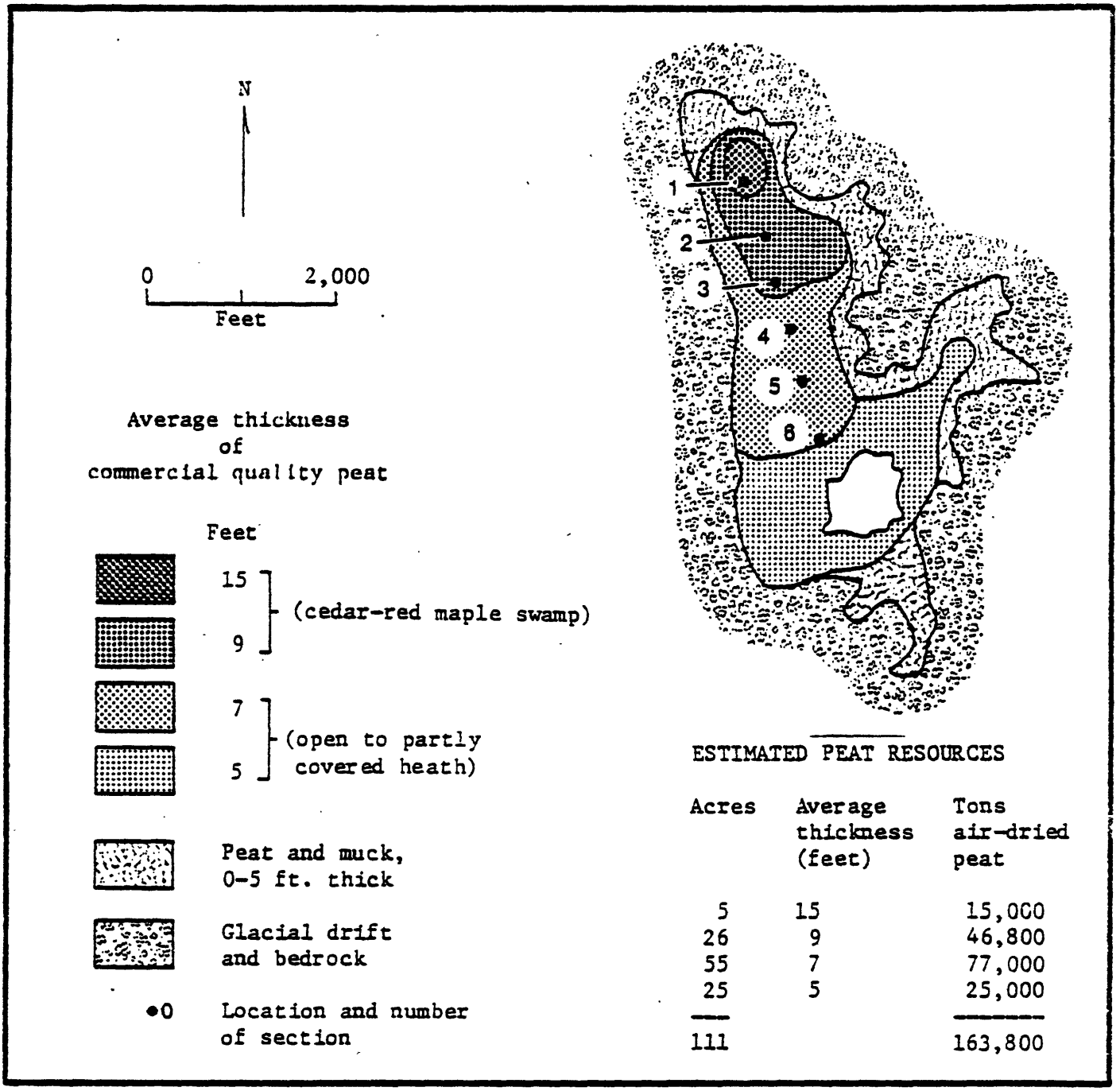


Table 30.--Analyses of samples located in sections in figure 35a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
33	57.37	4.28	1.10	0.16	2.3	88.3	64.0	9,460
35	57.31	4.62	1.24	0.53	4.3	---	61.7	9,562
36	55.77	4.79	2.46	0.81	5.1	90.7	63.4	9,608
37	27.34	2.89	2.05	1.19	49.2	88.9	39.6	4,778
Average commercial quality peat (ash content less than 25%)	56.8	4.56	1.6	0.5	3.9	89.5	63.0	9,543



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
5	15	15,000
26	9	46,800
55	7	77,000
25	5	25,000
111		163,800

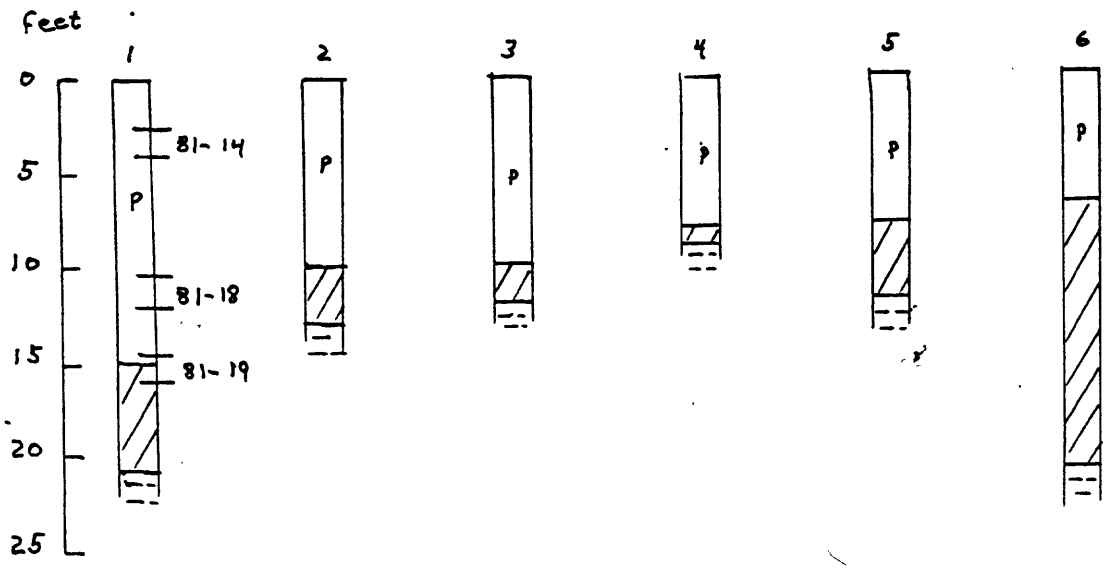
Figure 36. Sketch map of Greers Bog, Morrill Twp., Morrill 7½ minute Quadrangle, Waldo County, Maine. (Number 35 on Index Map).

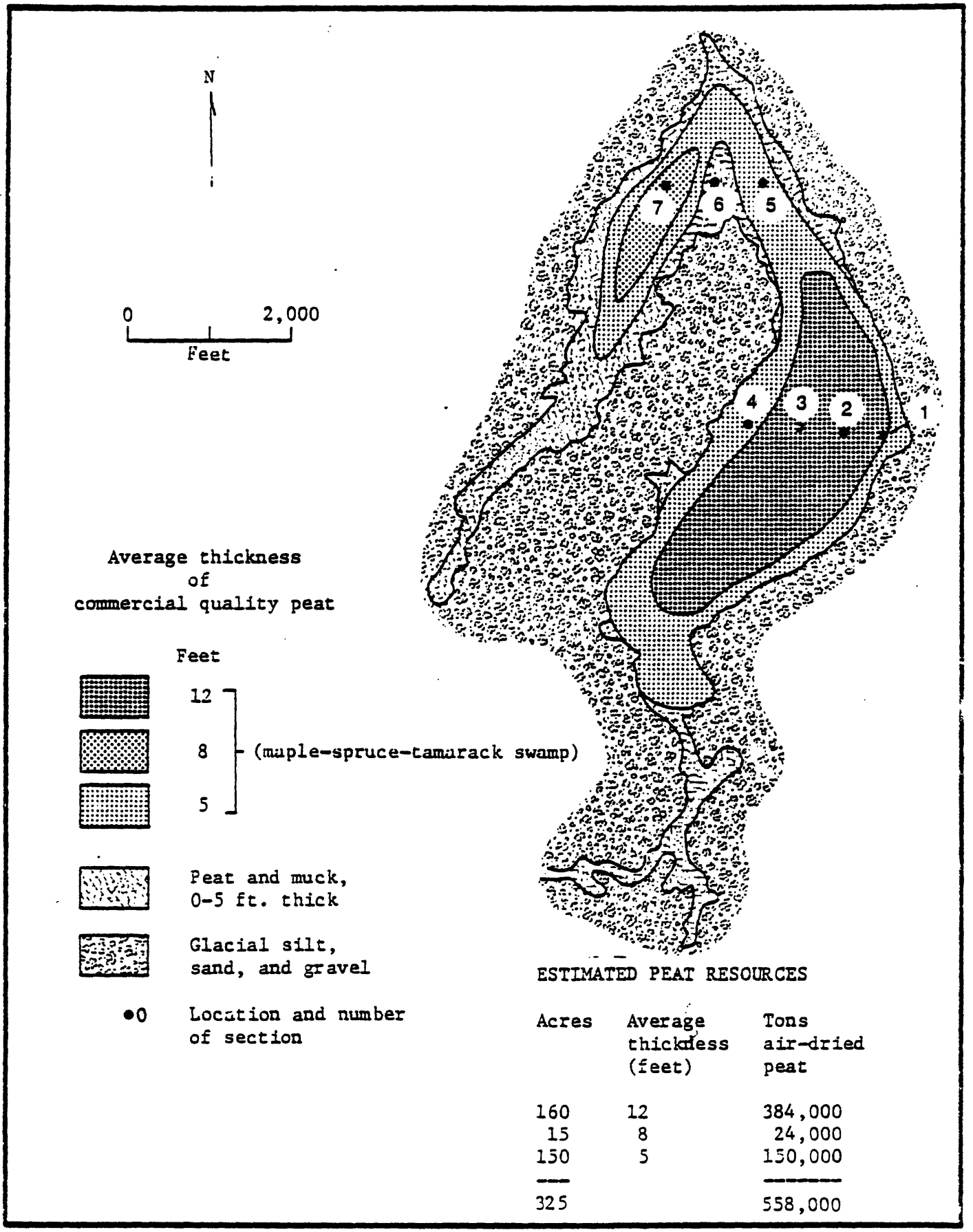
Table 31.--Analyses of samples located in sections in figure 36a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
81-14	56.23	4.08	1.72	0.62	6.1	87.2	60.6	9,393
81-18	54.29	4.09	1.56	0.78	6.6	89.9	61.6	9,053
81-19	40.69	3.71	2.29	1.07	29.4	90.6	51.0	7,236
Average commercial quality peat (ash content less than 25%)	55.26	4.09	1.64	0.7	6.35	88.6	61.1	9,223

Figure 36a.--Sections and sample locations.





ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
160	12	384,000
15	8	24,000
150	5	150,000
325		558,000

Figure 37. Sketch map of Witcher Swamp, Searsmont Twp., Morrill and Searsmont 7½ minute Quadrangles, Waldo County, Maine. (Number 36 on Index Map).

Figure 37a.--Sections and sample locations.

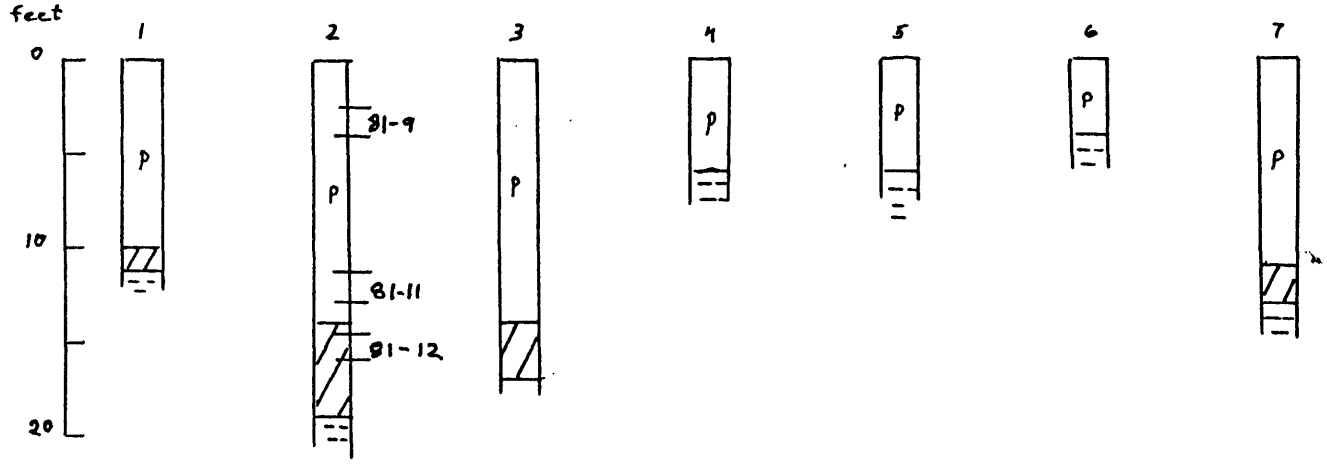
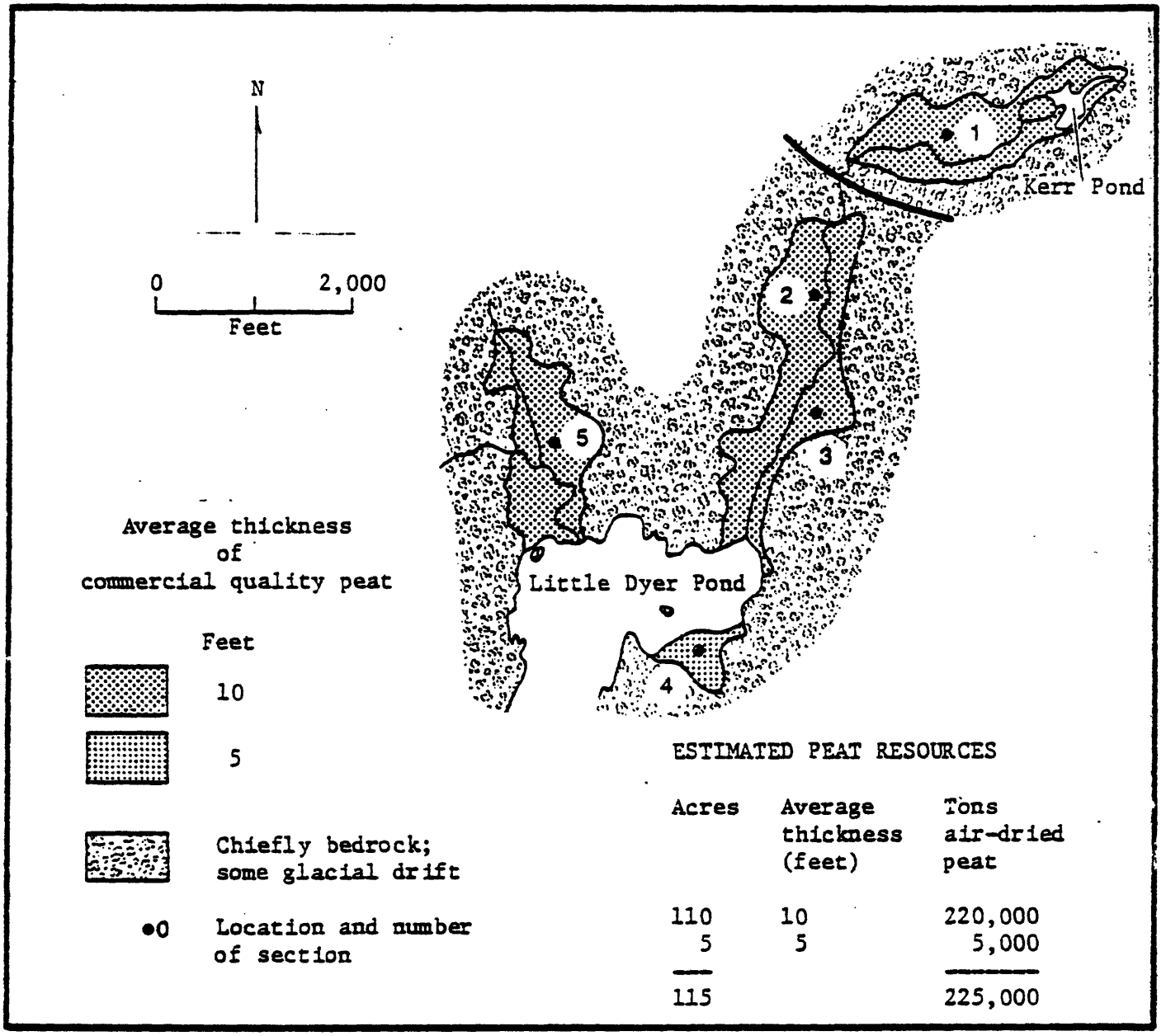


Table 32.--Analyses of samples located in sections in figure 37a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
81-9	57.19	5.03	1.90	0.41	4.9	91.8	66.0	10,019
81-11	56.12	4.51	1.70	0.49	5.2	90.3	61.9	9,603
81-12	28.62	2.36	1.63	0.53	50.5	88.3	35.6	4,963
Average commercial quality peat (ash content less than 25%)	56.66	4.77	1.8	0.45	5.1	91.0	63.9	9,811



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
110	10	220,000
5	5	5,000
115		225,000

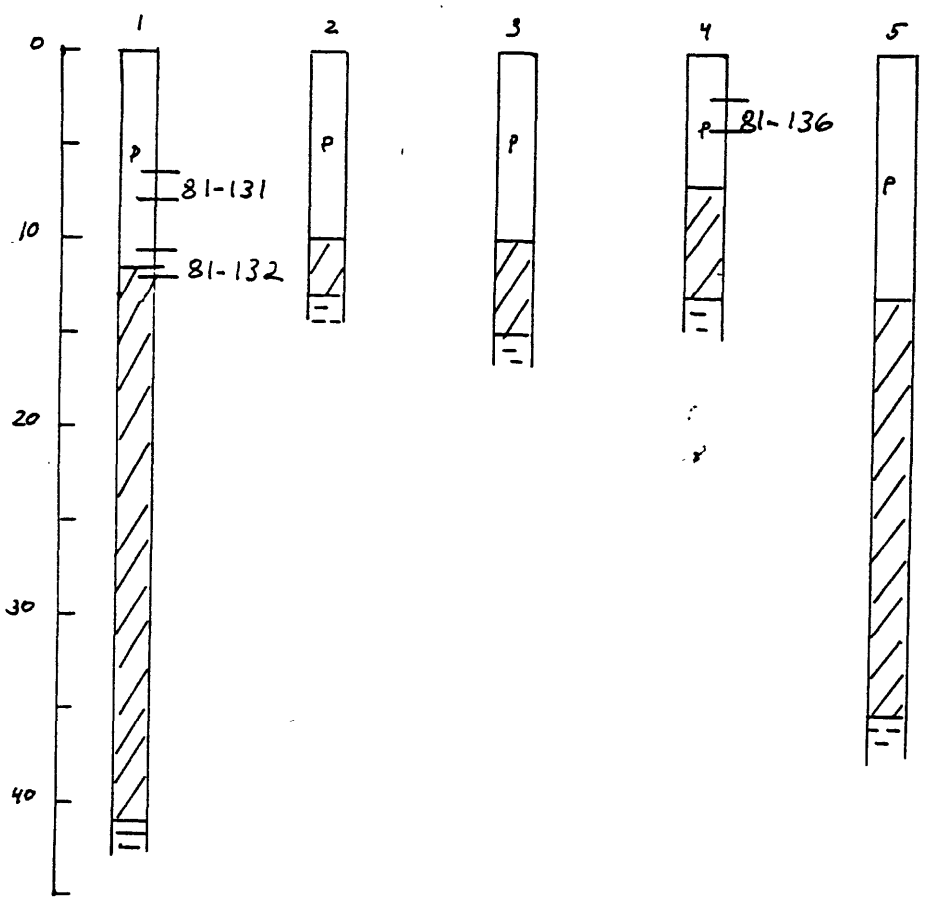
Figure 38. Sketch map of bogs north of Little Dyer Pond and south of Kerr Pond, Jefferson Twp., Wiscasset 15 minute Quadrangle, Lincoln County, Maine. (Number 37 on Index Map).

Table 33.--Analyses of samples located in sections in figure 38a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
131	48.26	4.36	1.99	0.50	15.2	---	57.7	8,147
132	31.24	2.83	2.08	0.52	44.3	---	39.7	5,447
136	57.10	5.11	1.14	0.23	1.7	---	65.7	9,644
Average commercial quality peat (ash content less than 25%)	52.68	4.74	1.57	0.37	8.45	---	61.7	8,896

Figure 38a.--Sections and sample locations.



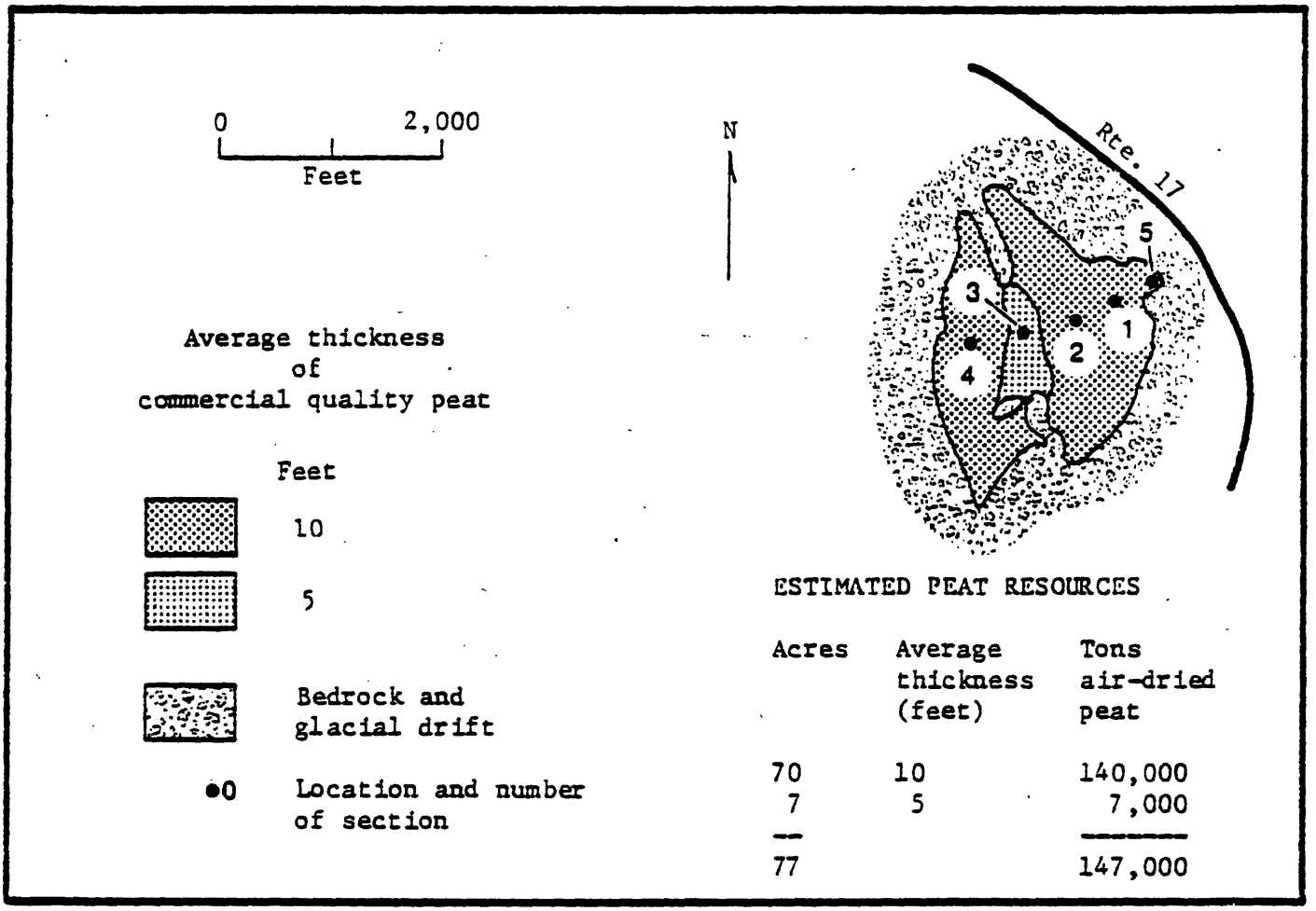


Figure 39. Sketch map of Rice Heath, Washington Twp., Union 7½ minute Quadrangle, Knox County, Maine. (Number 38 on Index Map).

Figure 39a.--Sections and sample locations.

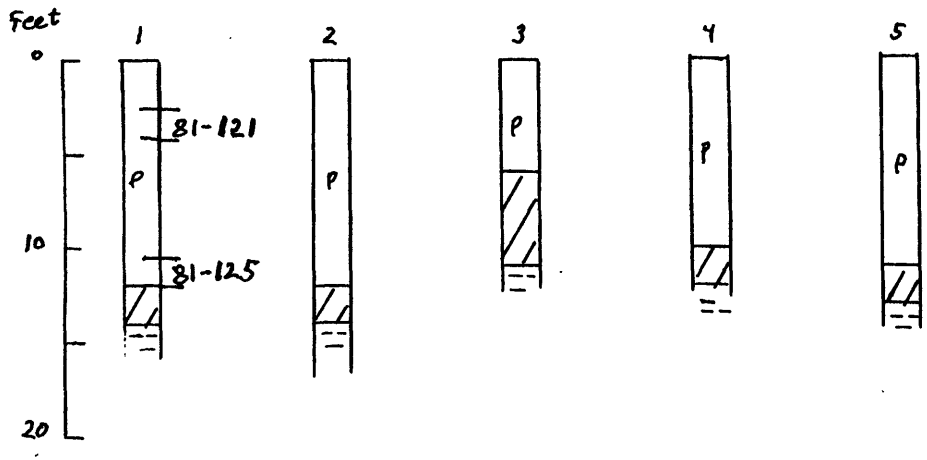
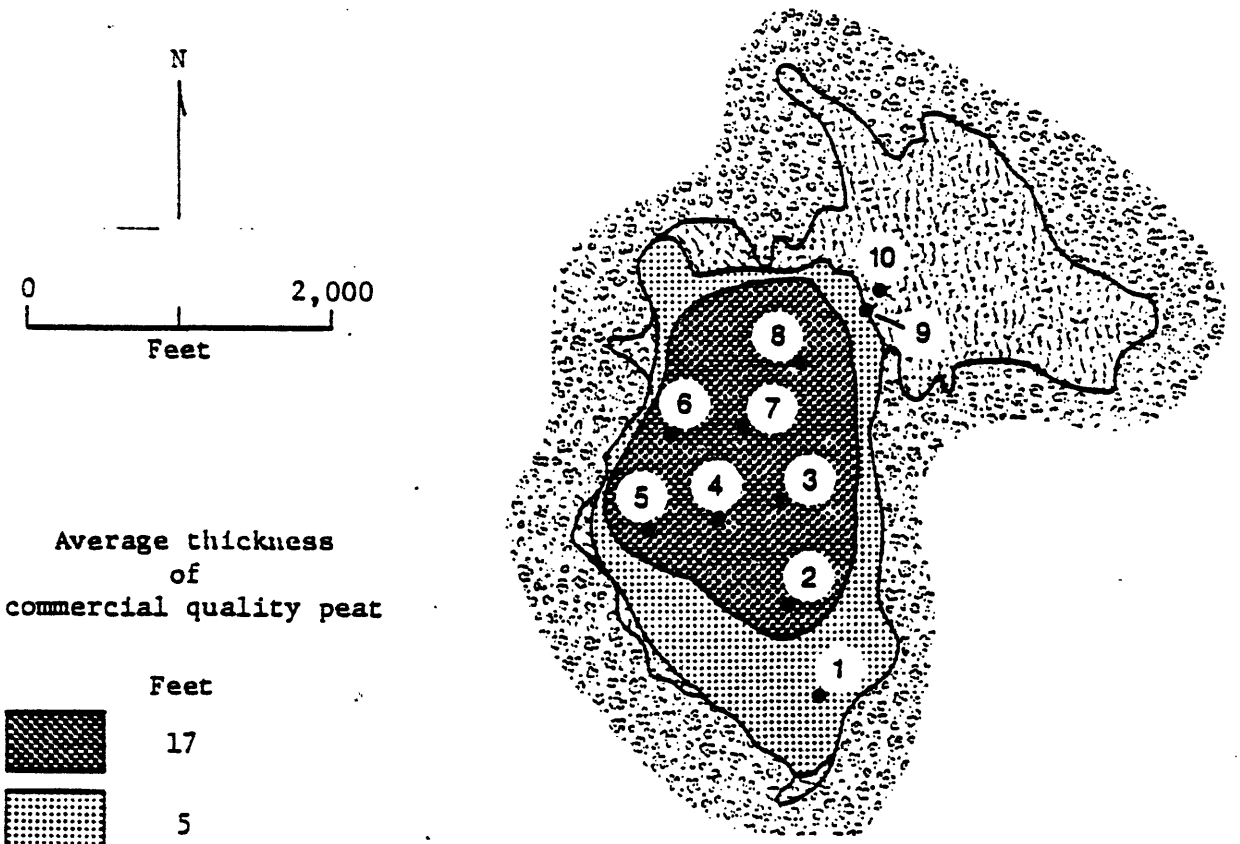


Table 34.--Analyses of samples located in sections in figure 39a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
126	56.72	4.19	1.28	0.19	3.3	87.3	62.3	9,316
129	51.64	4.97	2.86	0.64	12.4	91.1	60.6	9,160
Average commercial quality peat (ash content less than 25%)	54.18	4.58	2.07	0.77	7.9	89.2	61.5	9,238



Average thickness of commercial quality peat

Feet

17

5

Peat and muck, 0-5 ft. thick

Glacial drift

•0 Location and number of section

ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
73	17	248,200
40	5	40,000
113		288,200

Figure 40. Sketch map of Herricks Bog, Northport Twp., Lincolnville 7½ minute Quadrangle, Waldo County, Maine. (Number 39 on Index Map).

Figure 40a.--Sections and sample locations.

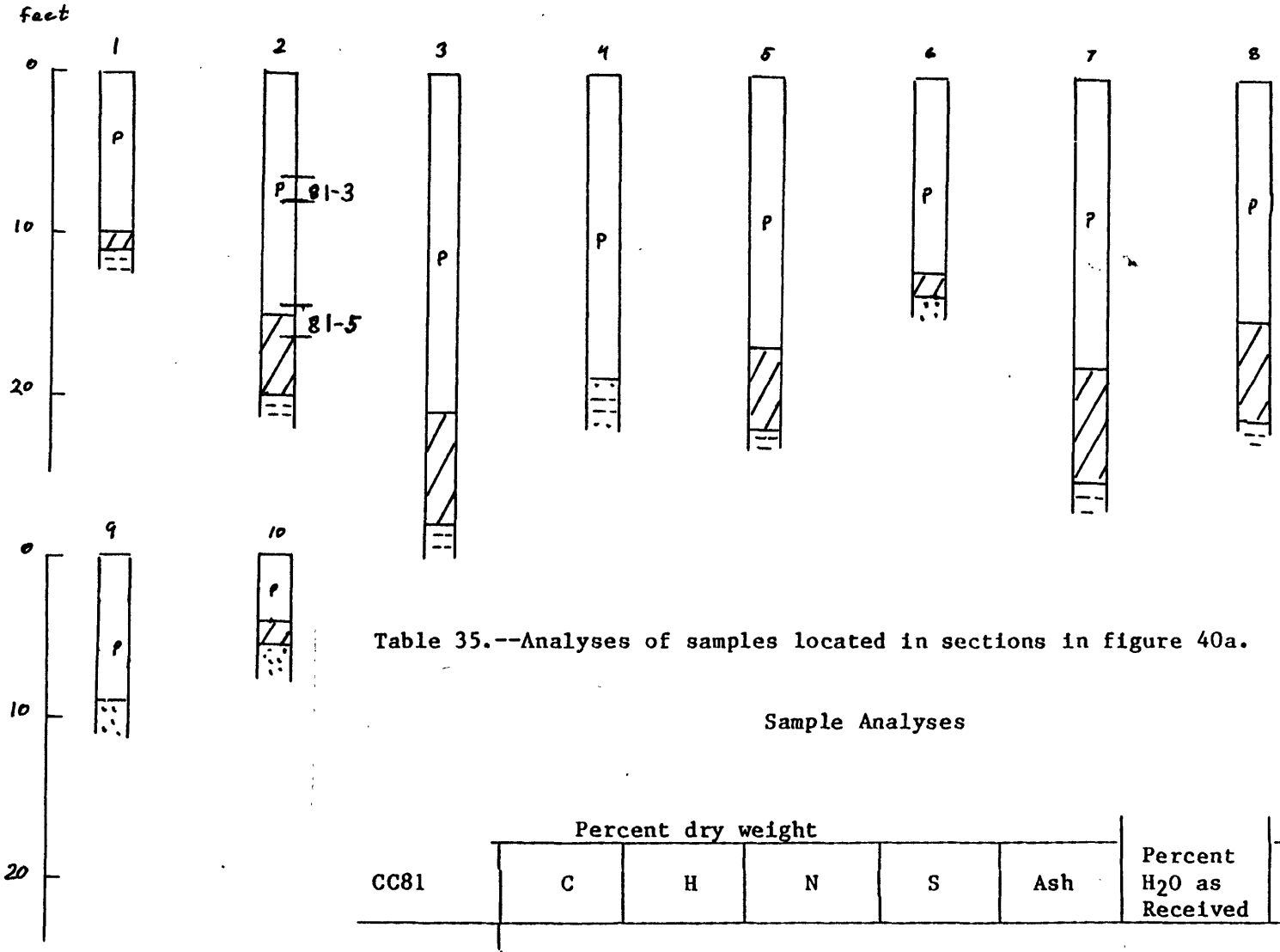


Table 35.--Analyses of samples located in sections in figure 40a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
3	57.92	4.71	1.03	0.18	1.8	---	63.1	9,778
5	37.77	3.68	2.54	0.74	33.8	---	48.3	6,761
Average commercial quality peat (ash content less than 25%)	57.92	4.71	1.03	0.18	1.8	---	63.1	9,778

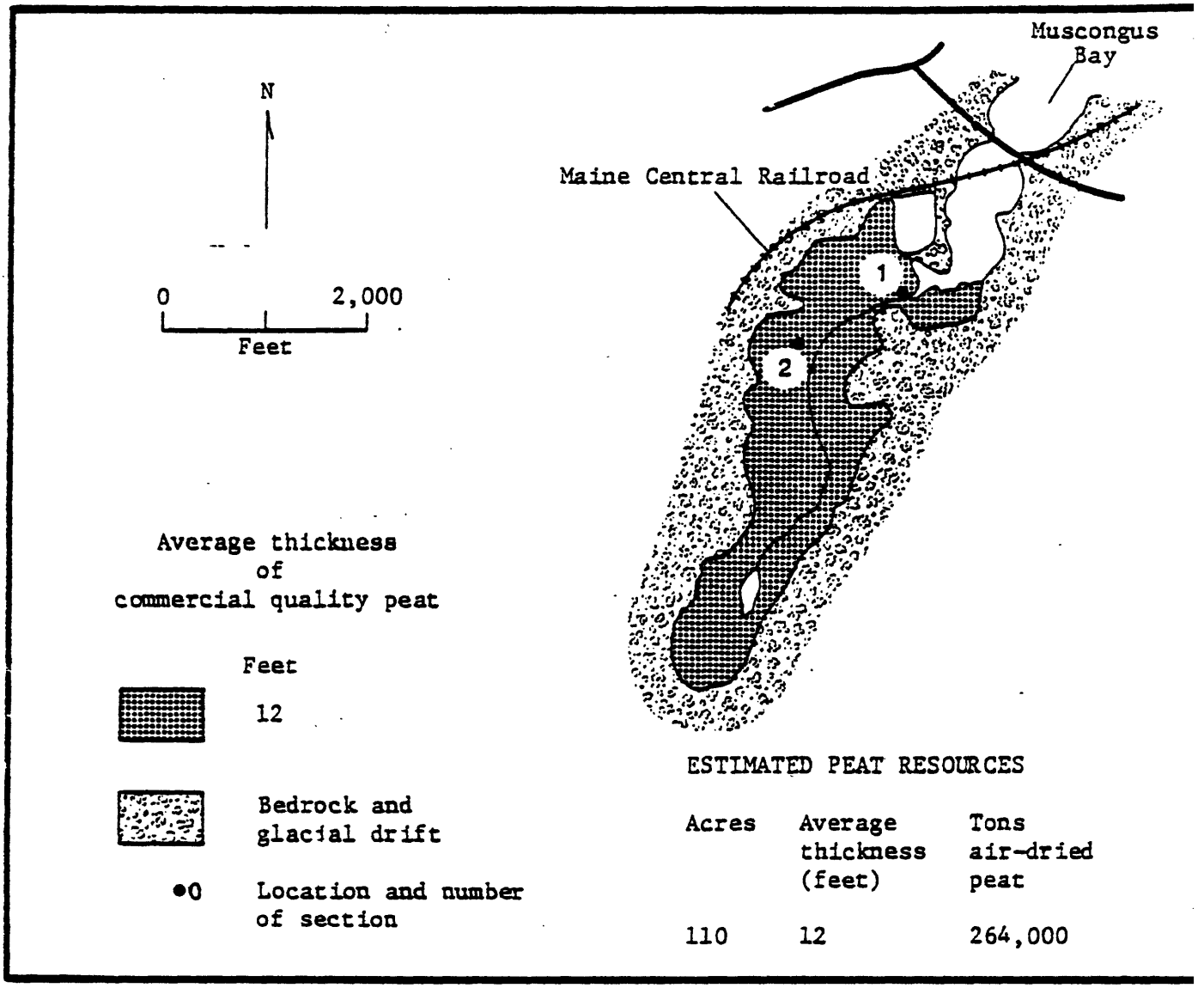


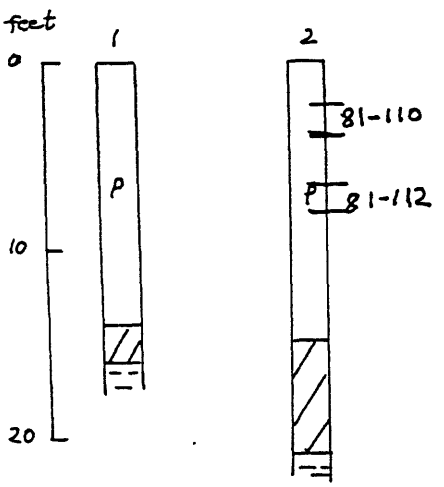
Figure 41. Sketch map of bog at south end of Muscongus Bay, Nobleboro Twp., Waldoboro West 7½ minute Quadrangle, Lincoln County, Maine. (Number 40 on Index Map).

Table 36.--Analyses of samples located in sections in figure 41a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
110	54.56	4.24	1.65	0.49	4.3	90.2	64.1	9,117
112	55.03	4.51	1.81	0.55	5.1	91.1	63.3	9,281
Average commercial quality peat (ash content less than 25%)	54.79	4.38	1.73	0.52	4.7	90.7	63.7	9,199

Figure 41e.--Sections and sample locations.



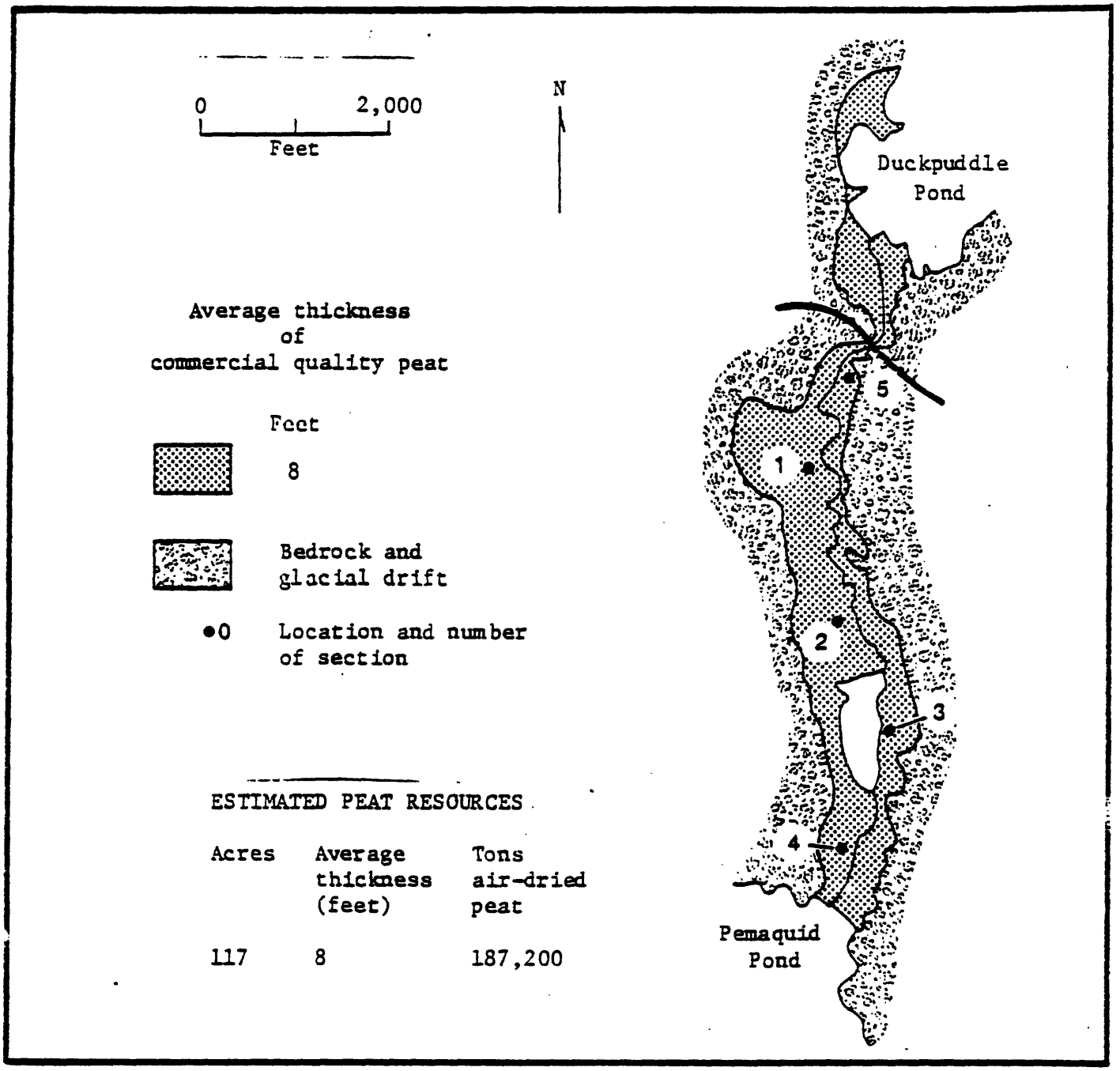


Figure 42. Sketch map of bog between Duckpuddle Pond and Pemaquid Pond, Nobleboro and Waldoboro Twps., Waldoboro West 7½ minute Quadrangle, Lincoln County, Maine. (Number 41 on Index Map).

Figure 42a.--Sections and sample locations.

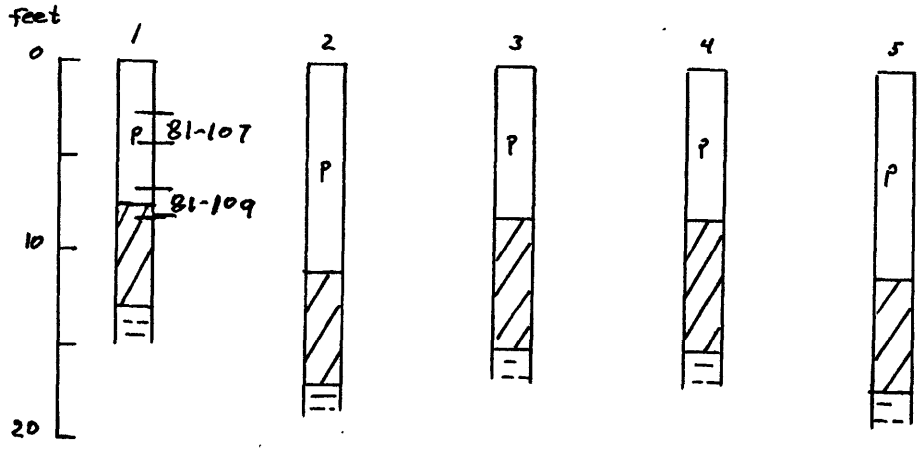
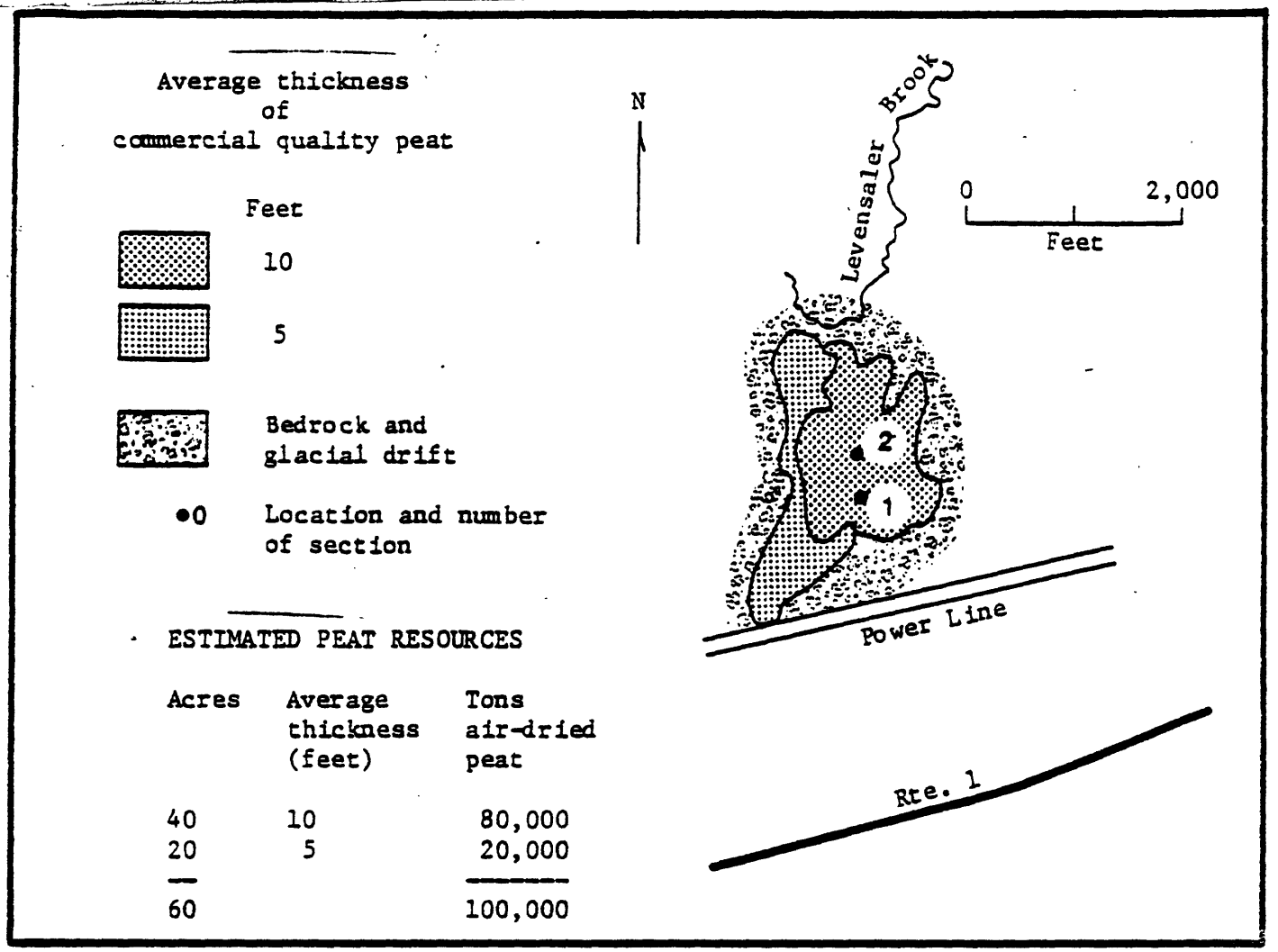


Table 37.--Analyses of samples located in sections in figure 42a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
107	53.37	4.47	2.07	1.03	10.8	---	59.5	9,095
109	35.25	3.15	2.20	0.88	39.2	---	42.3	3,385
Average commercial quality peat (ash content less than 25%)	53.37	4.47	2.07	1.03	10.8	---	59.5	9,095



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
40	10	80,000
20	5	20,000
60		100,000

Figure 43. Sketch map of bog north of Rte. 1 and east of Rte. 235, Waldoboro Twp., Waldoboro East 7½ minute Quadrangle, Lincoln County, Maine. (Number 42 on Index Map).

Figure 43.--Sections and sample locations.

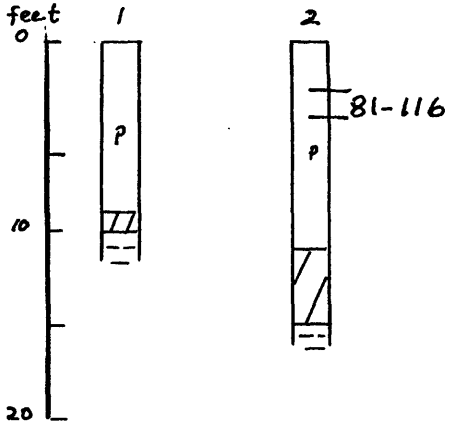


Table 38.--Analyses of samples located in sections in figure 43a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
116	56.29	4.46	0.93	0.16	1.0	90.0	67.0	9,357

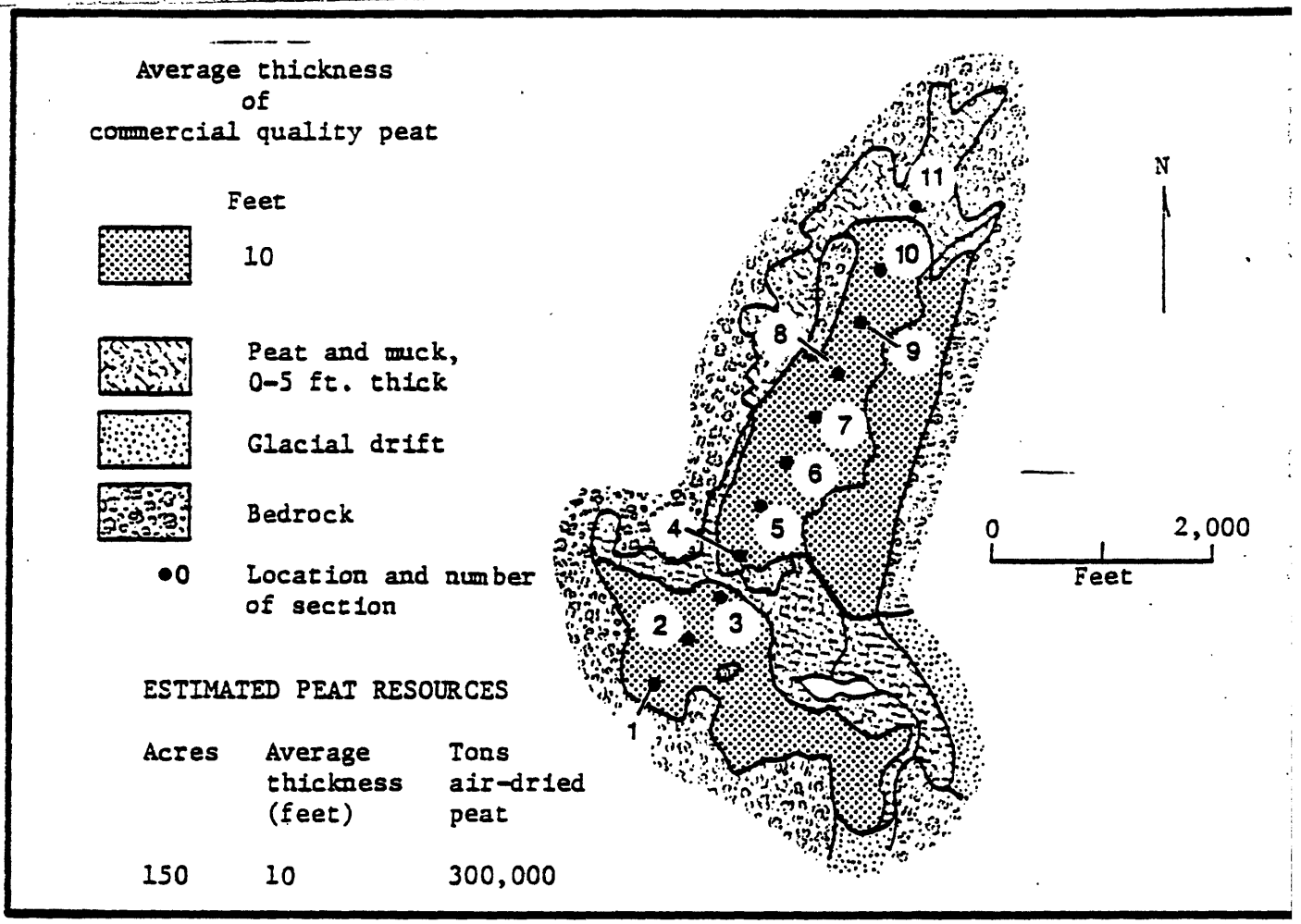


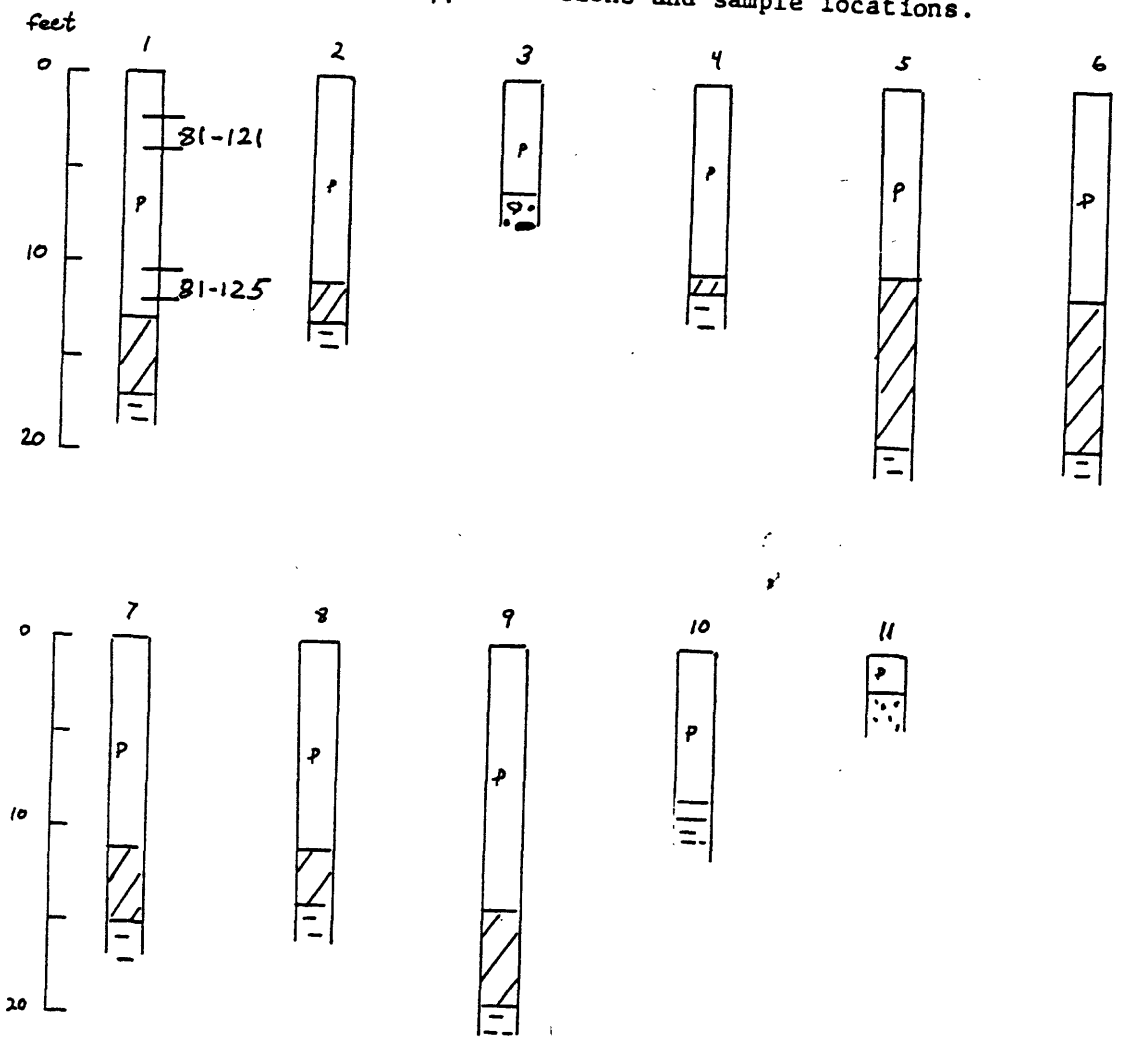
Figure 44. Sketch map of The Bog, Rockland Twp., West Rockport 7½ minute Quadrangle, Knox County, Maine. (Number 43 on Index Map).

Table 39.--Analyses of samples located in sections in figure 44a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
121	56.62	4.82	1.14	0.17	1.4	88.7	68.1	9,637
125	45.03	4.14	2.28	0.85	23.8	90.5	52.5	7,889
Average commercial quality peat (ash content less than 25%)	50.82	4.48	12.6	0.51	12.6	89.6	60.3	8,763

Figure 44c.--Sections and sample locations.



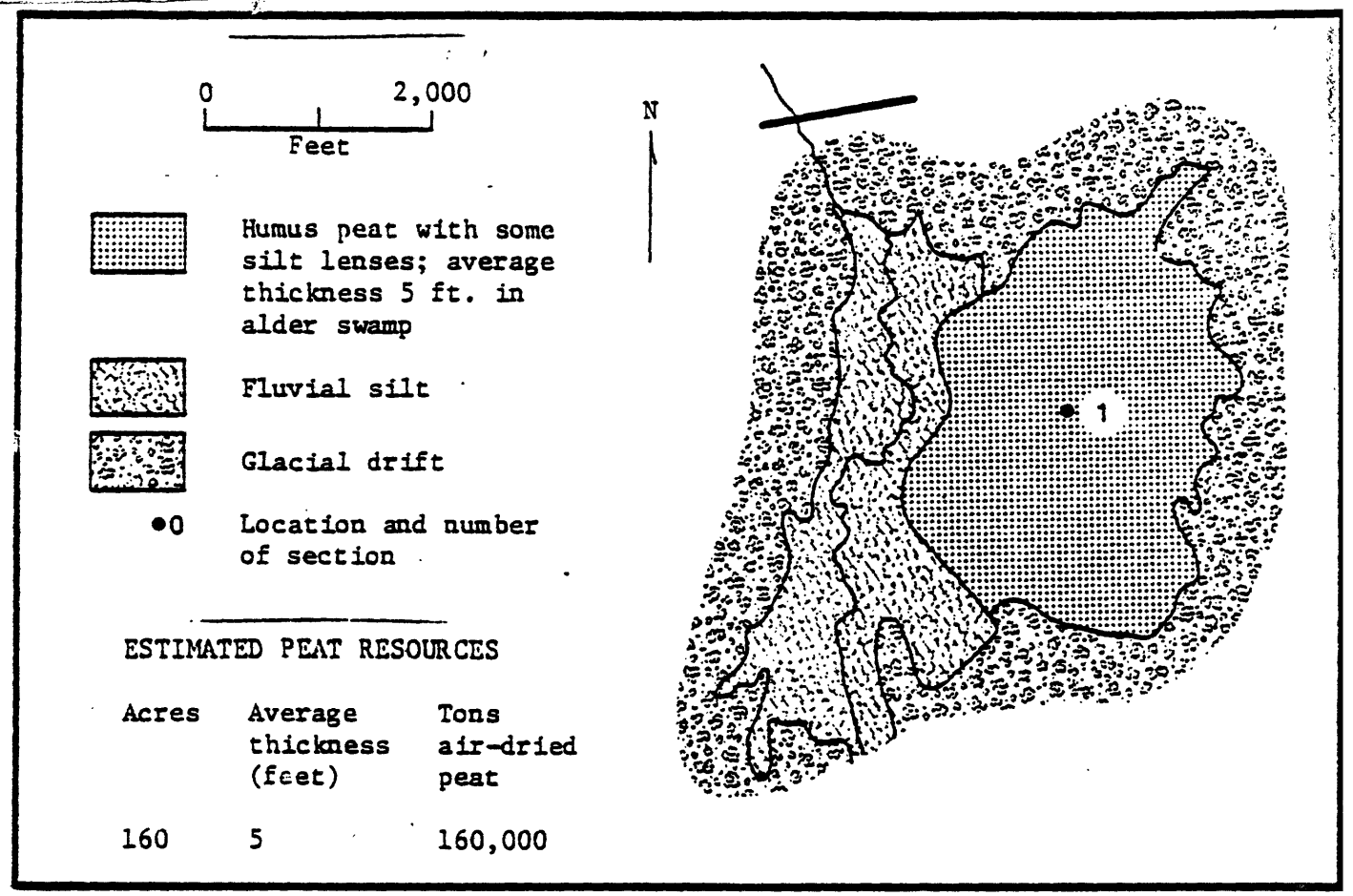


Figure 45. Sketch map of Skinner Bog, Dixmont Twp., Brooks 15 minute Quadrangle, Penobscot County, Maine. (Number 44 on Index Map).

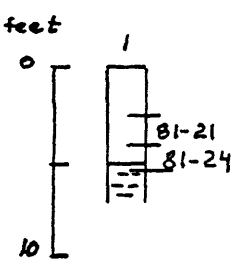


Figure 45a--Sections and sample locations.

Table 40.--Analyses of samples located in sections in figure 45a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
21	50.74	4.20	2.24	1.47	15.1	86.9	57.4	8,704
24	40.94	4.43	3.02	2.04	25.6	88.8	---	7,282
Average commercial quality peat (ash content less than 25%)	50.74	4.20	2.24	1.47	15.1	86.9	57.4	8,704

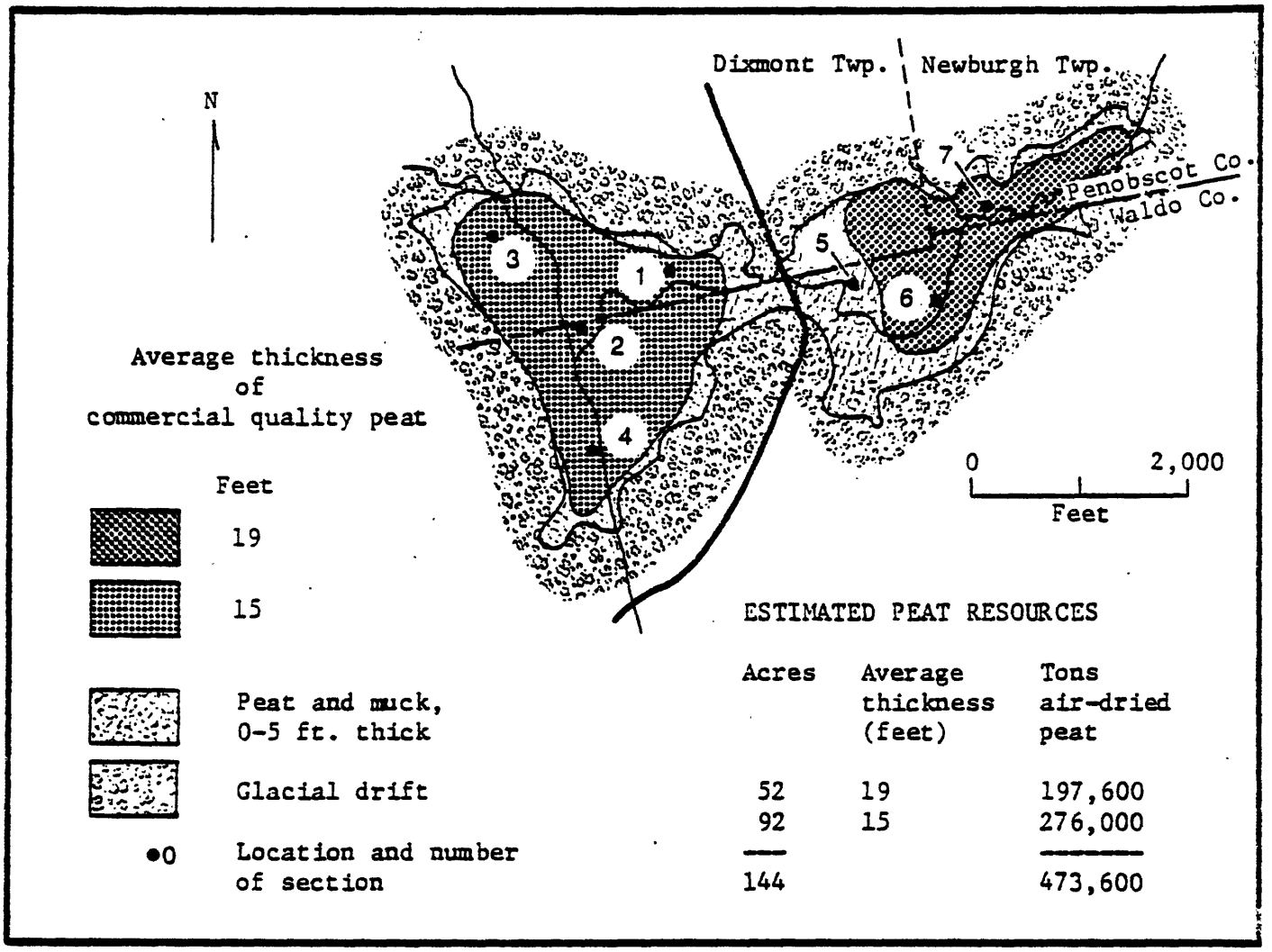


Figure 46. Sketch map of Chase Bog, Dixmont, Newburgh and Monroe Twps., Brooks 15 minute Quadrangle, Penobscot and Waldo Counties, Maine. (Number 45 on Index Map).

Figure 46a.--Sections and sample locations.

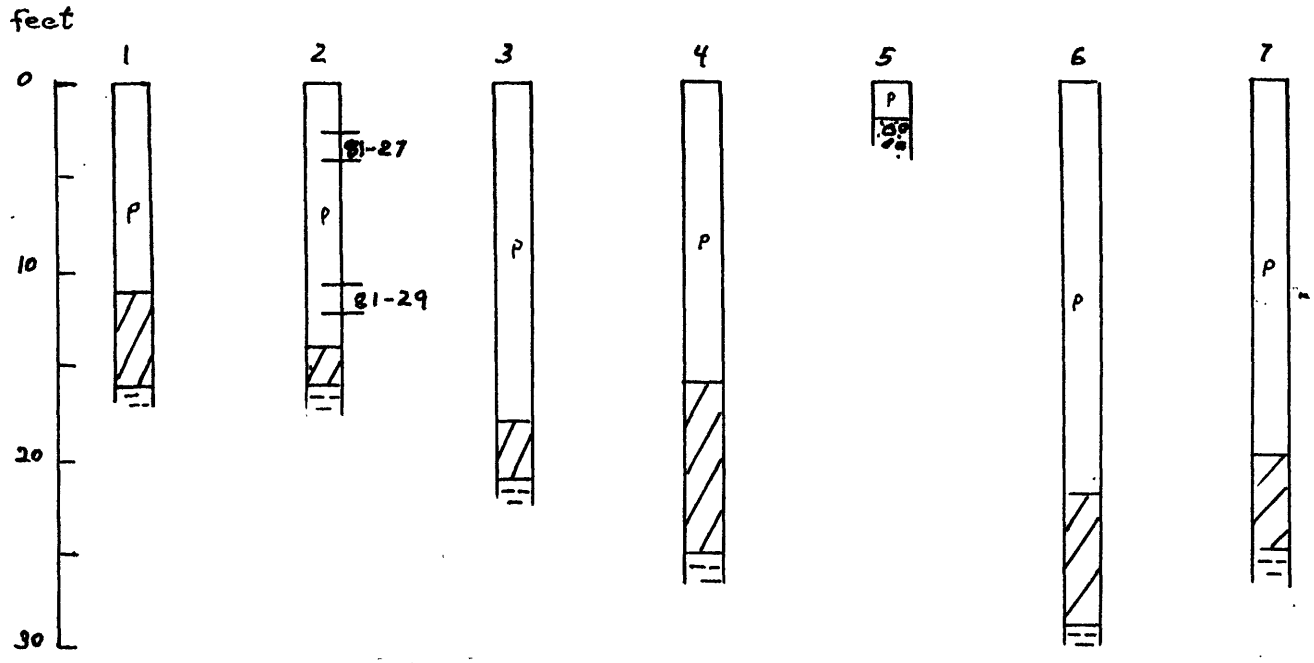


Table 41.--Analyses of samples located in sections in figure 46a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
27	43.95	3.17	2.12	0.88	23.9	84.9	52.2	7,441
29	46.11	5.10	3.34	1.63	18.3	---	61.9	8,233
Average commercial quality peat (ash content less than 25%)	45.03	4.14	2.73	1.26	21.1	84.9	57.05	7,837

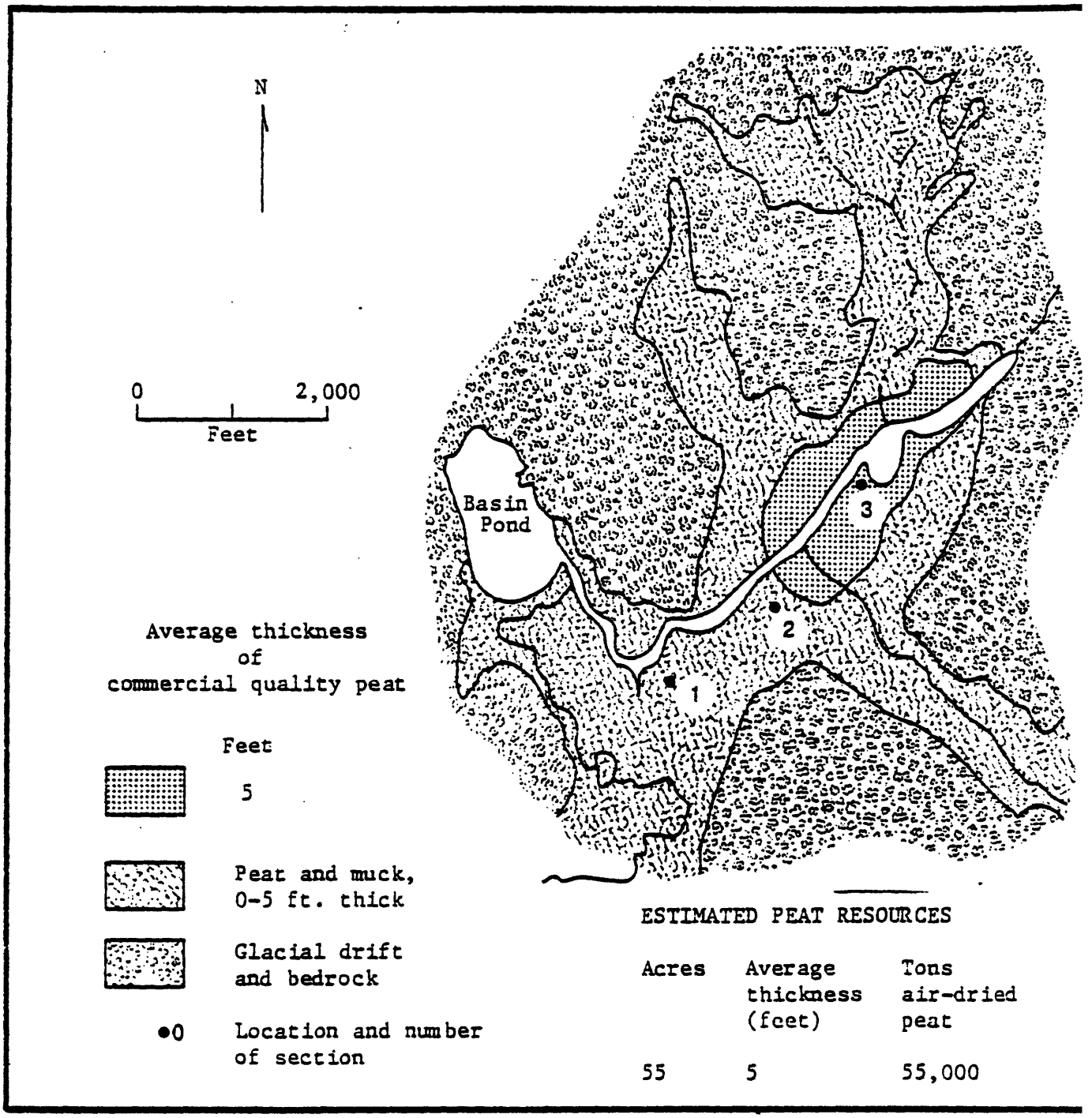


Figure 47. Sketch map of Jones Bog, Monroe Twp., Brooks 15 minute Quadrangle, Waldo County, Maine. (Number 46 on Index Map).

Figure 47a--Sections and sample locations.

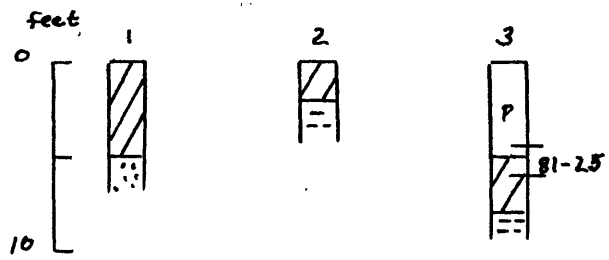


Table 42.--Analyses of samples located in sections in figure 47a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
25	34.20	2.77	1.98	0.57	41.2	85.8	41.2	5,855

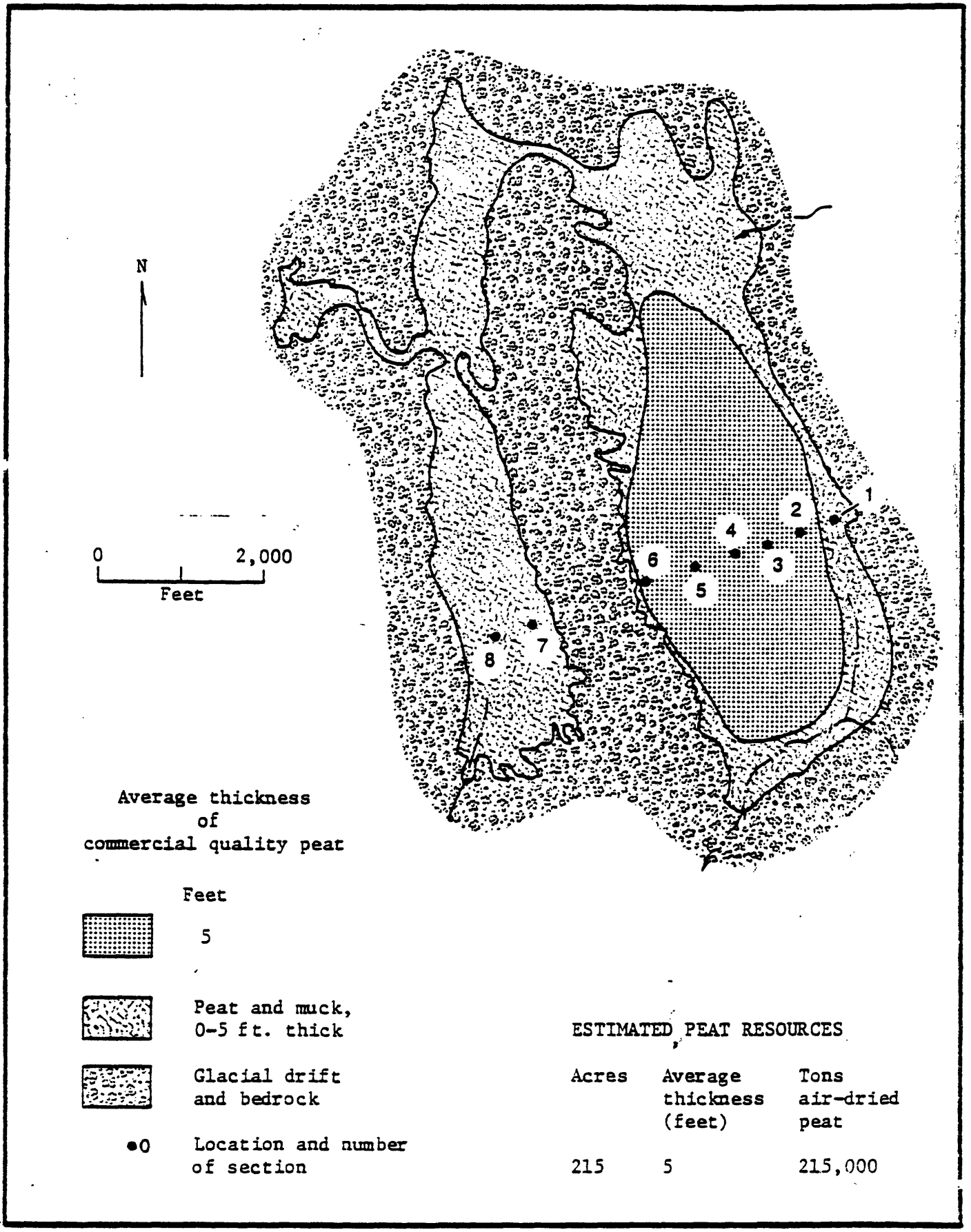


Figure 48. Sketch map of bogs southeast of Greenbush, Greenbush Twp., Passadumkeag 15 minute Quadrangle, Penobscot County, Maine. (Number 47 on Index Map).

Figure 48a--Sections and sample locations.

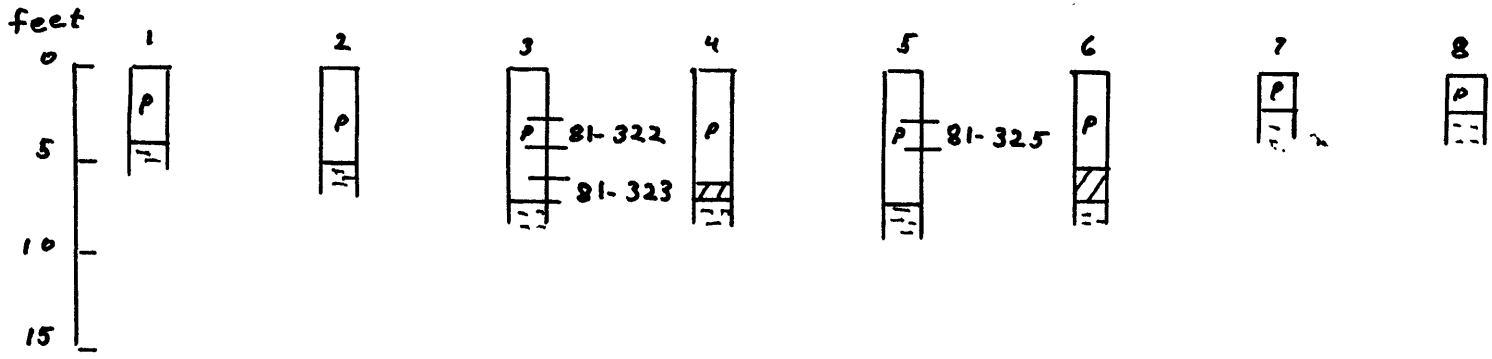


Table 43.--Analyses of samples located in sections in figure 48a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
322	58.33	5.51	1.78	0.21	2.4	---	67.5	10,048
323	55.97	4.71	1.91	0.40	9.1	85.0	60.9	9,780
325	54.65	5.05	1.38	0.14	1.6	90.6	70.3	9,395
Average commercial quality peat (ash content less than 25%)	56.32	5.09	1.69	0.25	4.3	87.8	66.2	9,741

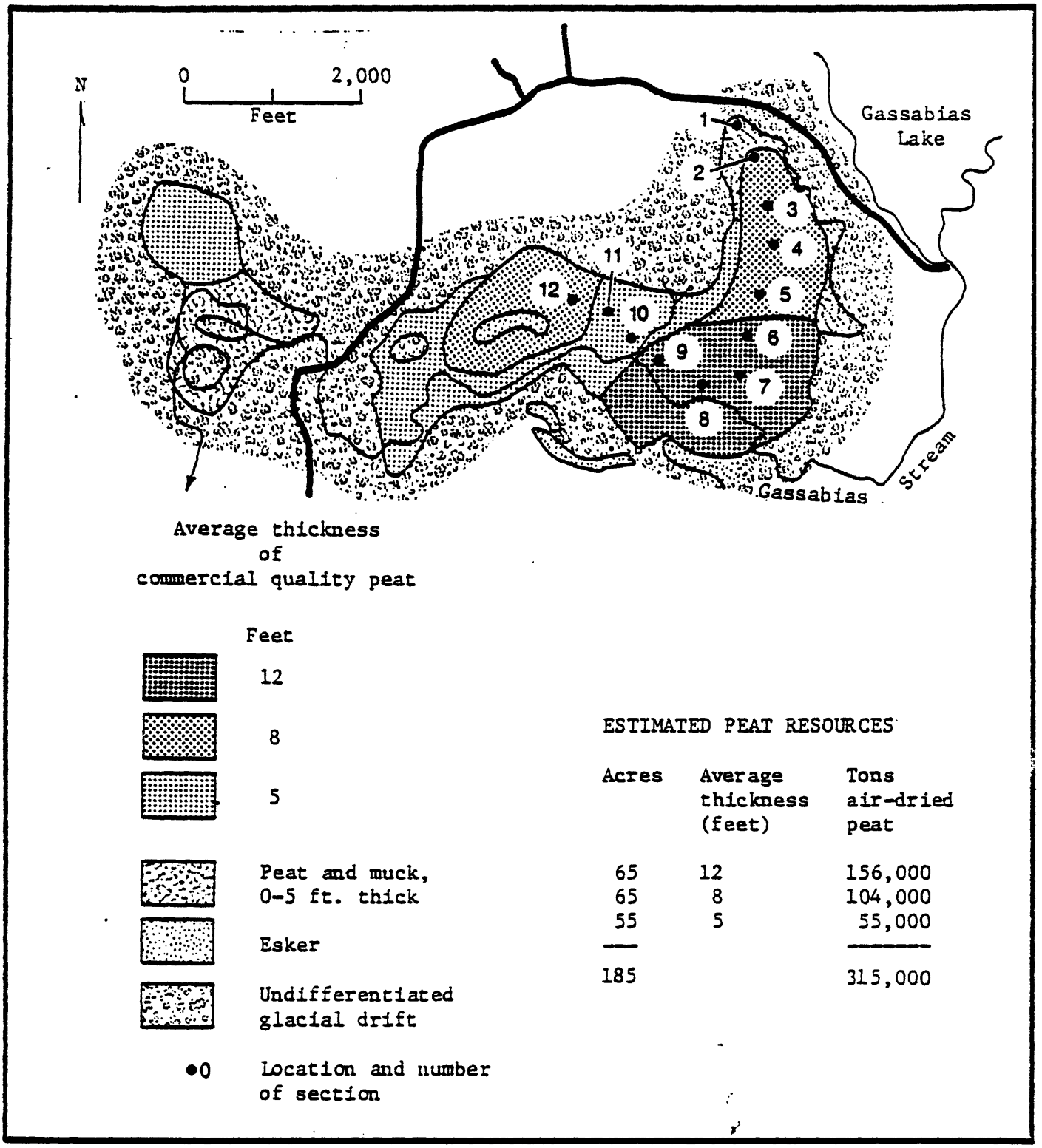


Figure 49. Sketch map of bogs along Gassabias Stream, T41 MD, Nicatous Lake 15 minute Quadrangle, Hancock County, Maine. (Number 48 on Index Map).

Figure 49a.--Sections and sample locations.

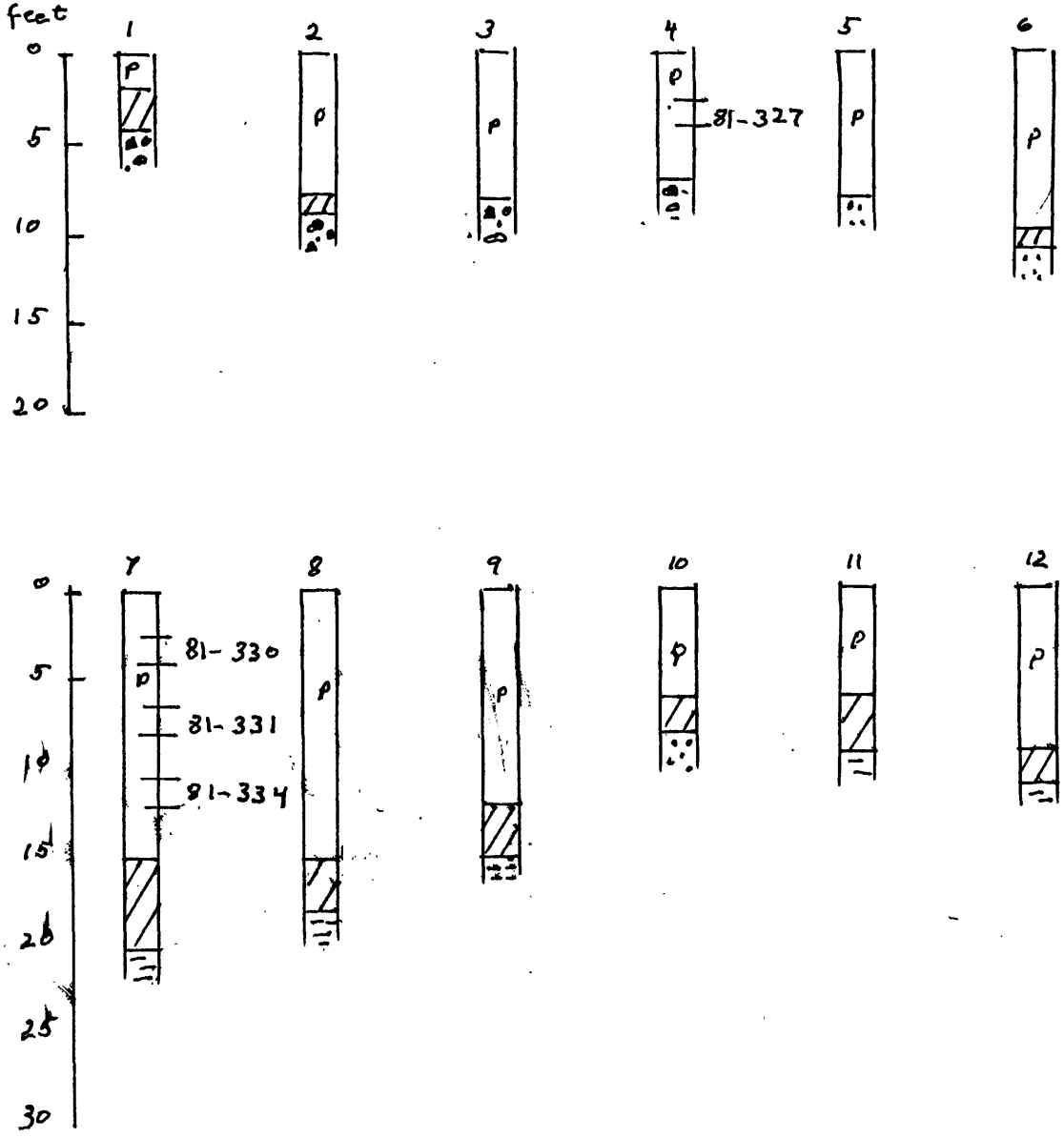
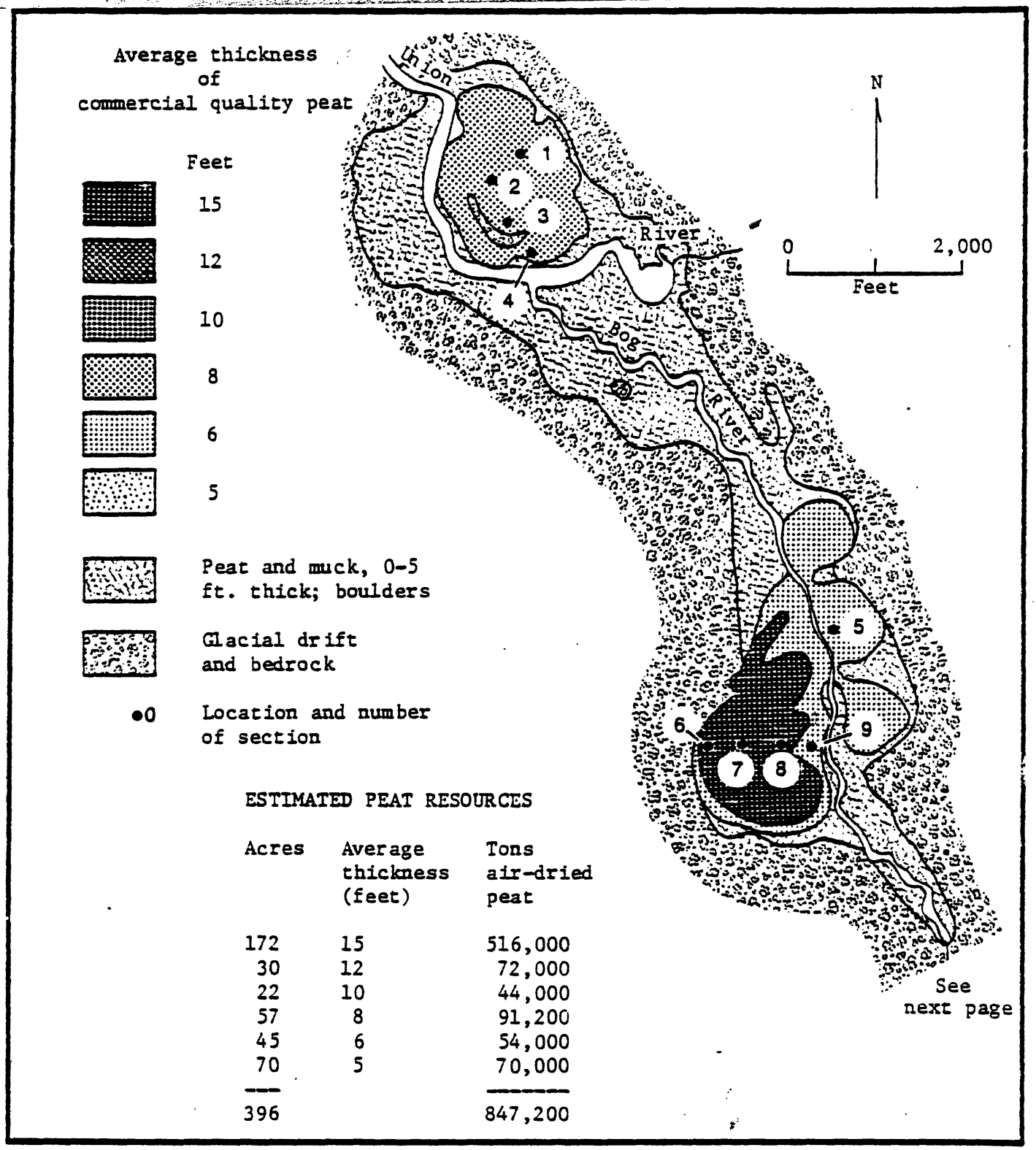


Table 44.--Analyses of samples located in sections in figure 49a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
327	57.67	5.52	1.12	0.14	1.1	89.8	63.7	9,927
330	54.48	4.85	0.66	0.14	0.6	91.3	69.0	8,983
331	55.66	4.97	0.82	0.11	0.9	91.2	66.6	9,341
334	55.39	4.78	1.15	0.21	6.2	87.3	64.8	9 464
Average commercial quality peat (ash content less than 25%)	55.8	5.03	0.94	0.15	2.2	89.9	66.0	9,428



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
172	15	516,000
30	12	72,000
22	10	44,000
57	8	91,200
45	6	54,000
70	5	70,000
396		847,200

Figure 50. Sketch map of bogs along Union and Bog Rivers between Ledge Falls, Osborn Twp. and trail crossing southwest of Little Bull Hill, Eastport and Osborn Twps., Great Pond, Ellsworth, and Tunk Lake 15 minute Quadrangles, Hancock County, Maine. (Number 49 on Index Map).

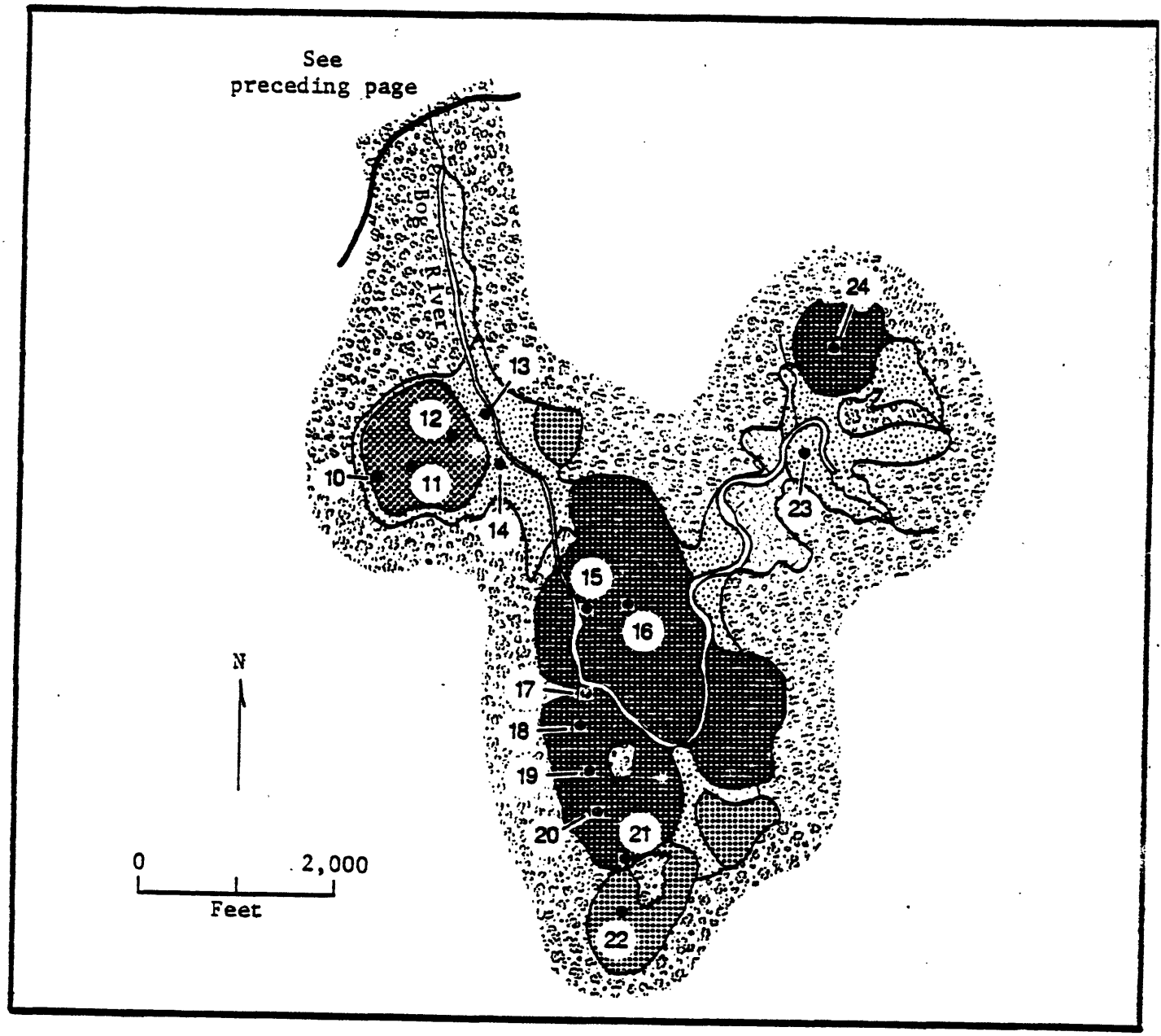


Figure 50. Continued.

Figures 5a.--Sections and sample locations.

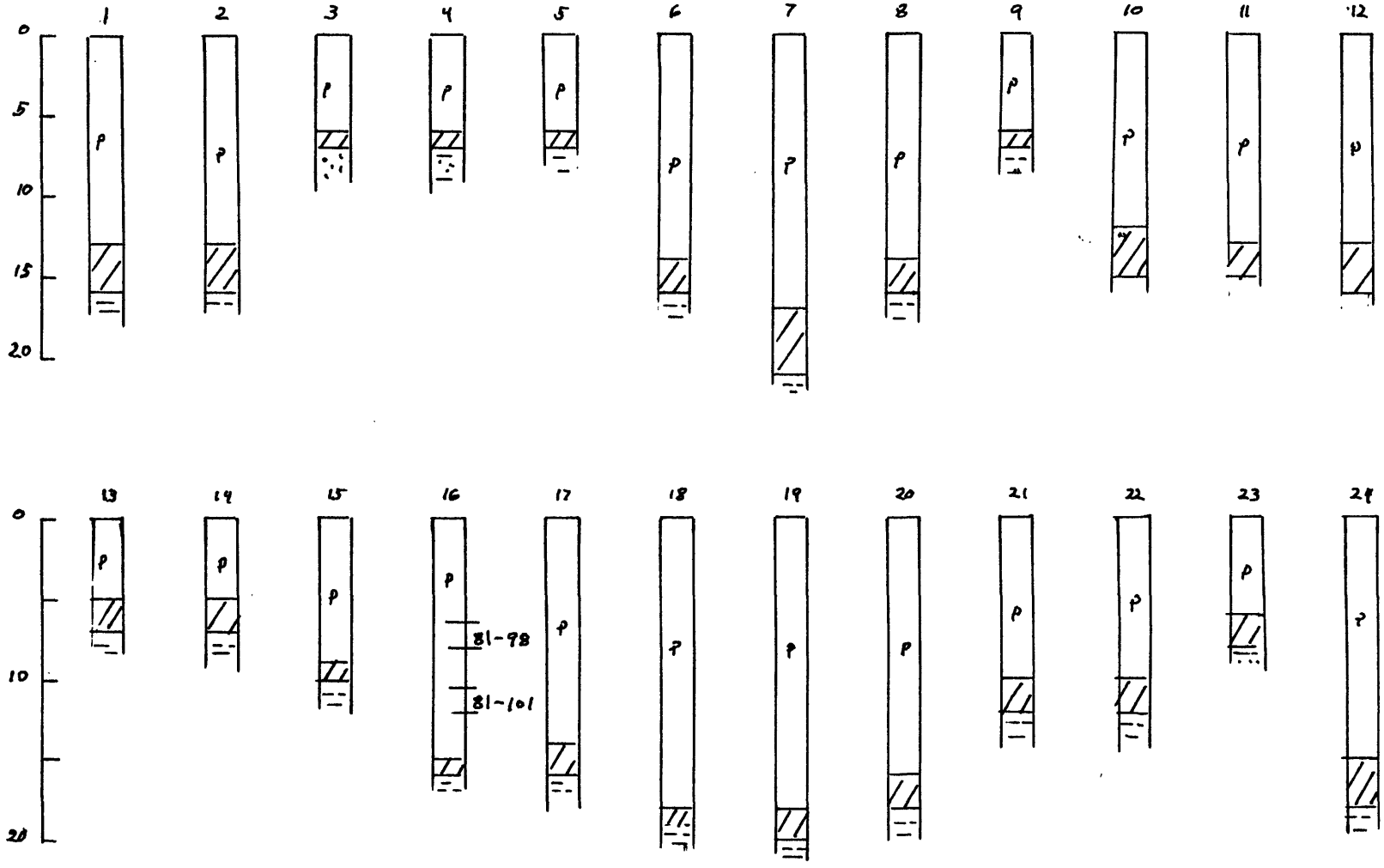


Table 45.--Analyses of samples located in sections in figure 50a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
98	53.67	4.39	1.90	0.32	9.9	90.9	60.1	9,159
101	57.55	4.81	1.00	0.16	1.6	89.2	66.9	9,637
Average commercial quality peat (ash content less than 25%)	55.6	4.6	1.45	0.24	5.8	90.1	63.5	9,398

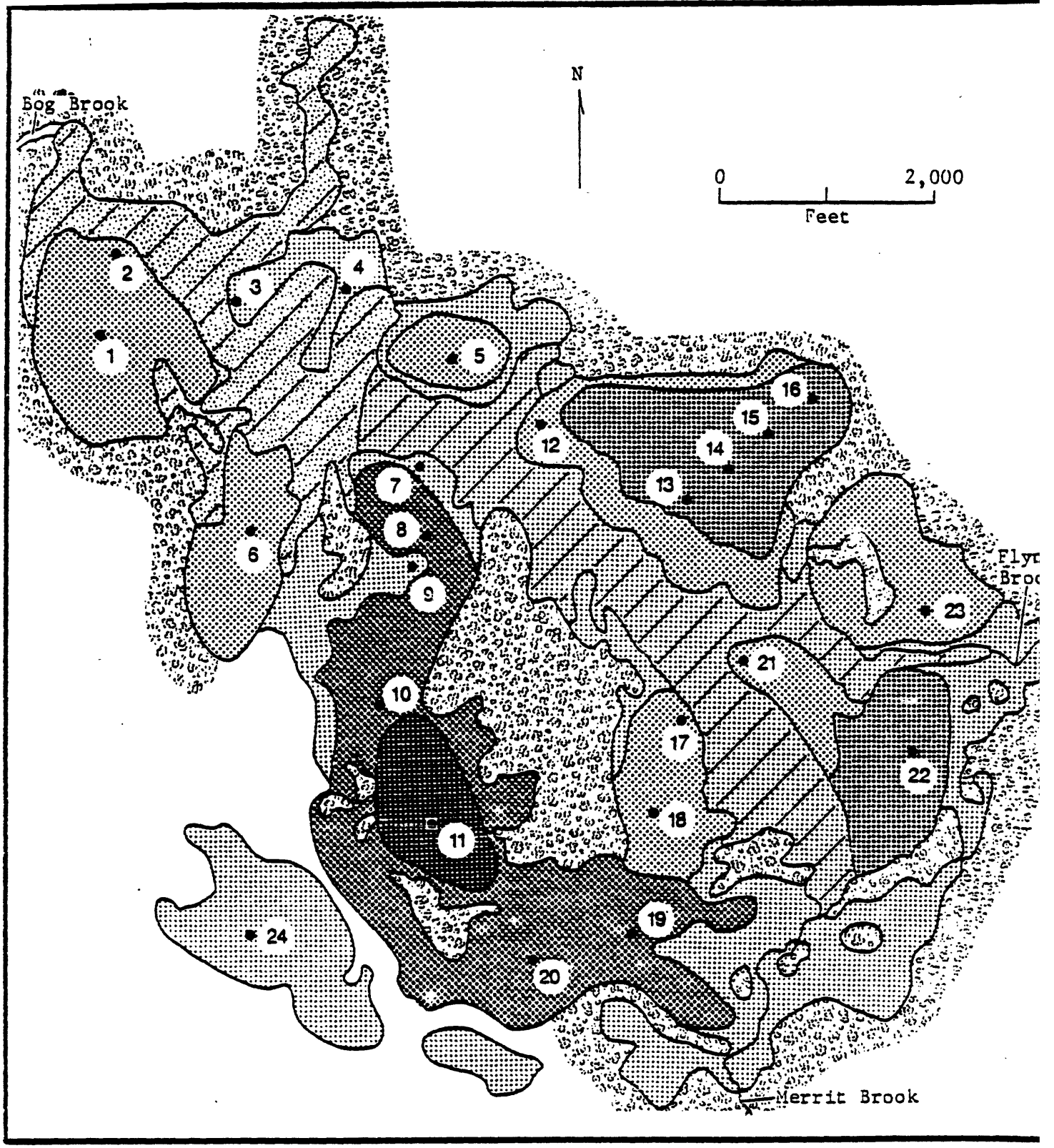


Figure 51. Sketch map of bog along Bog Brook, Beddington and Deblois Twps., Tug Mountain 15 minute Quadrangle, Washington County, Maine. (Number 50 on Index Map).

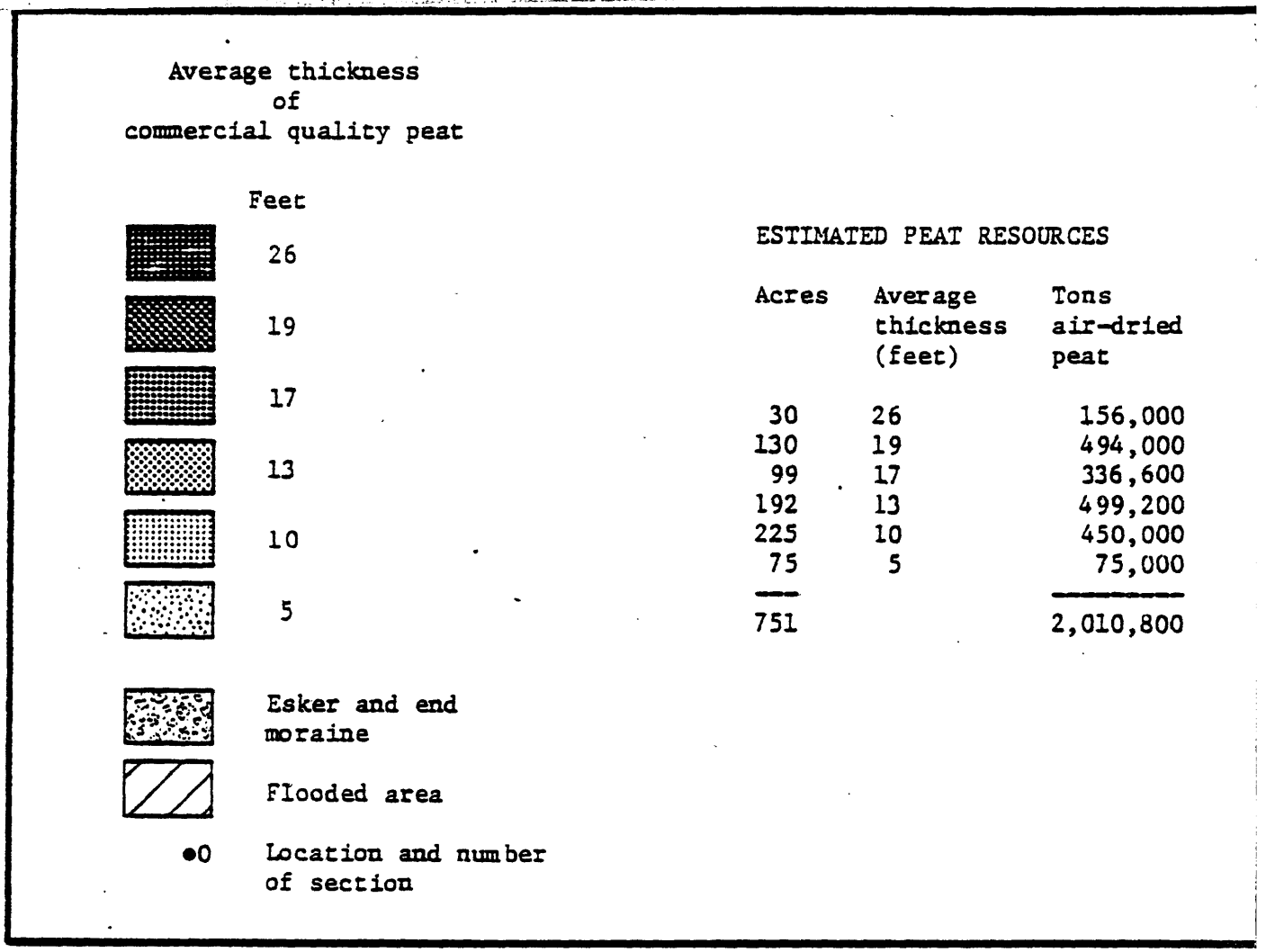


Figure 51. Continued.

Figure 51a.--Sections and sample locations.

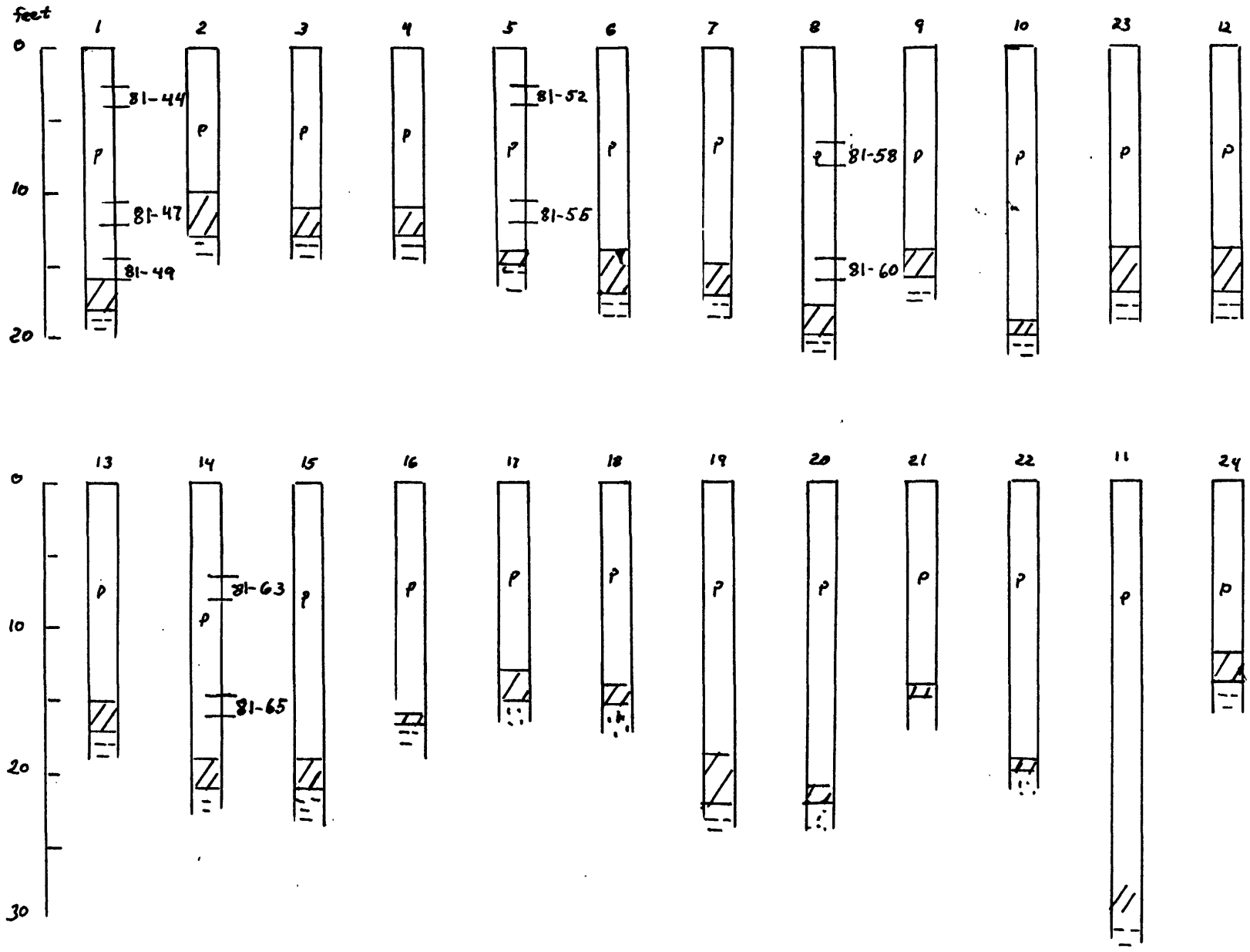


Table 46.--Analyses of samples located in sections in figure 51a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
44	53.73	4.74	0.77	0.13	0.8	91.0	68.9	8,983
47	54.97	4.72	0.40	0.13	0.8	92.0	69.0	9,009
49	56.94	4.63	2.09	1.11	5.1	87.0	62.0	9,813
52	54.24	4.73	0.87	0.14	0.9	91.2	68.6	9,057
55	56.59	5.03	1.41	0.35	2.3	90.3	66.2	9,587
58	53.27	4.61	0.56	0.16	0.8	92.6	68.2	8,865
60	57.22	5.29	2.10	0.43	2.6	90.7	66.6	9,929
63	54.46	4.58	0.76	0.13	0.8	92.5	69.1	9,141
65	55.66	4.71	0.71	0.17	1.8	91.1	65.7	9,391
Average commercial quality peat (ash content less than 25%)	55.23	4.78	1.07	0.31	1.8	90.93	66.8	9,308

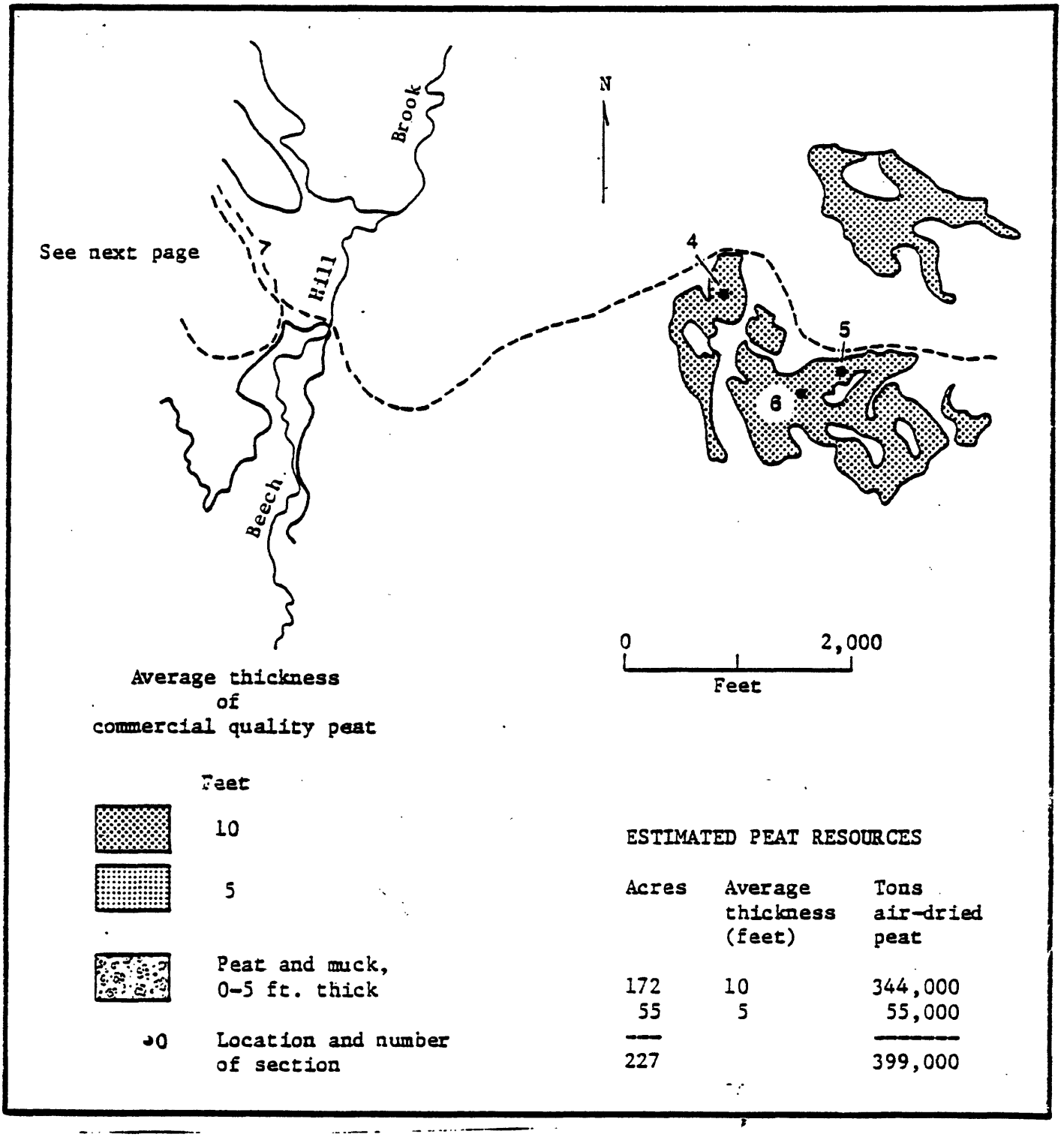


Figure 52. Sketch map of the northwestern Beech Hill Heath area and of Allen Heath, T24 MD, Tug Mountain 15 minute Quadrangle, Washington County, Maine. (Number 51 on Index Map).

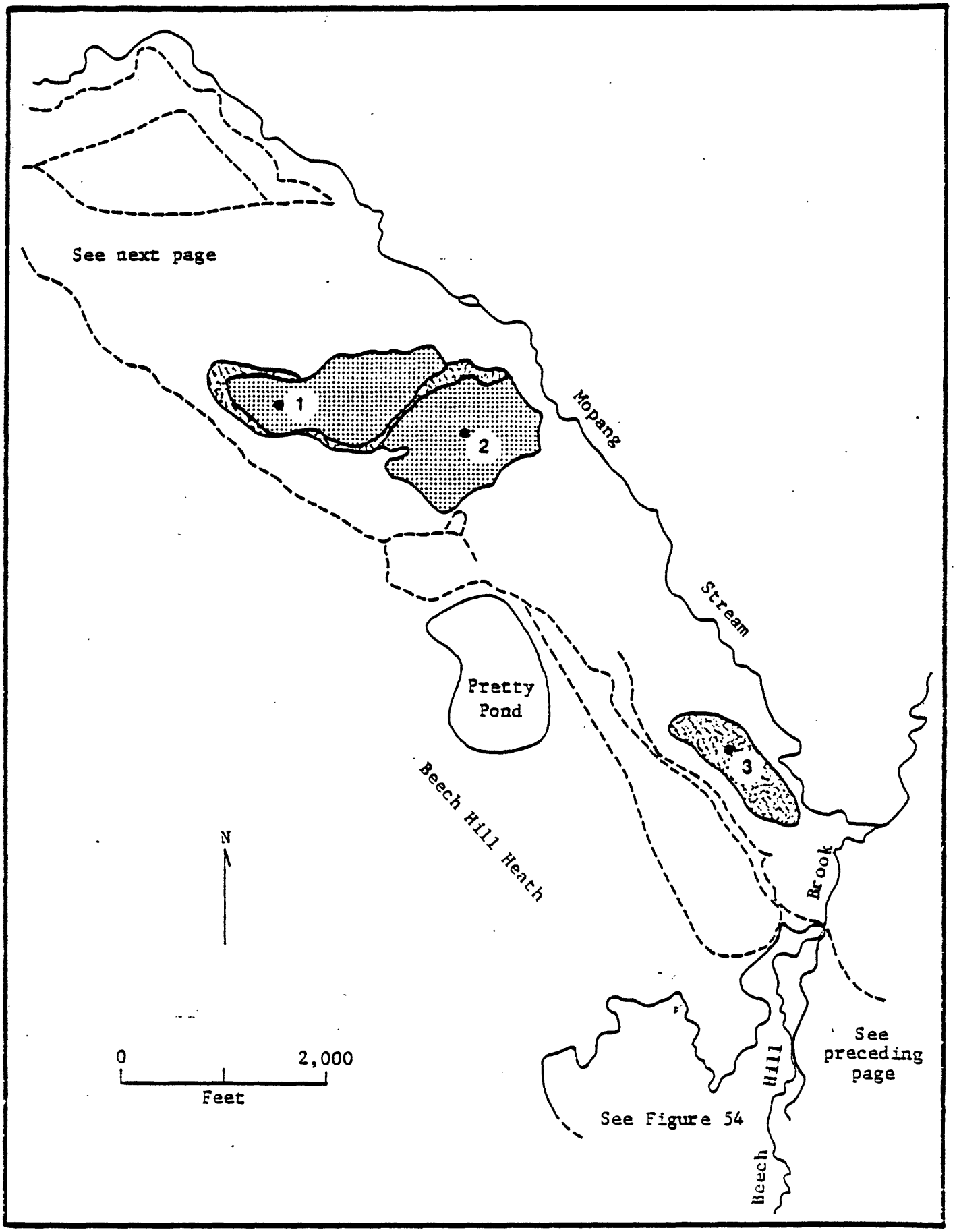


Figure 52. Continued.

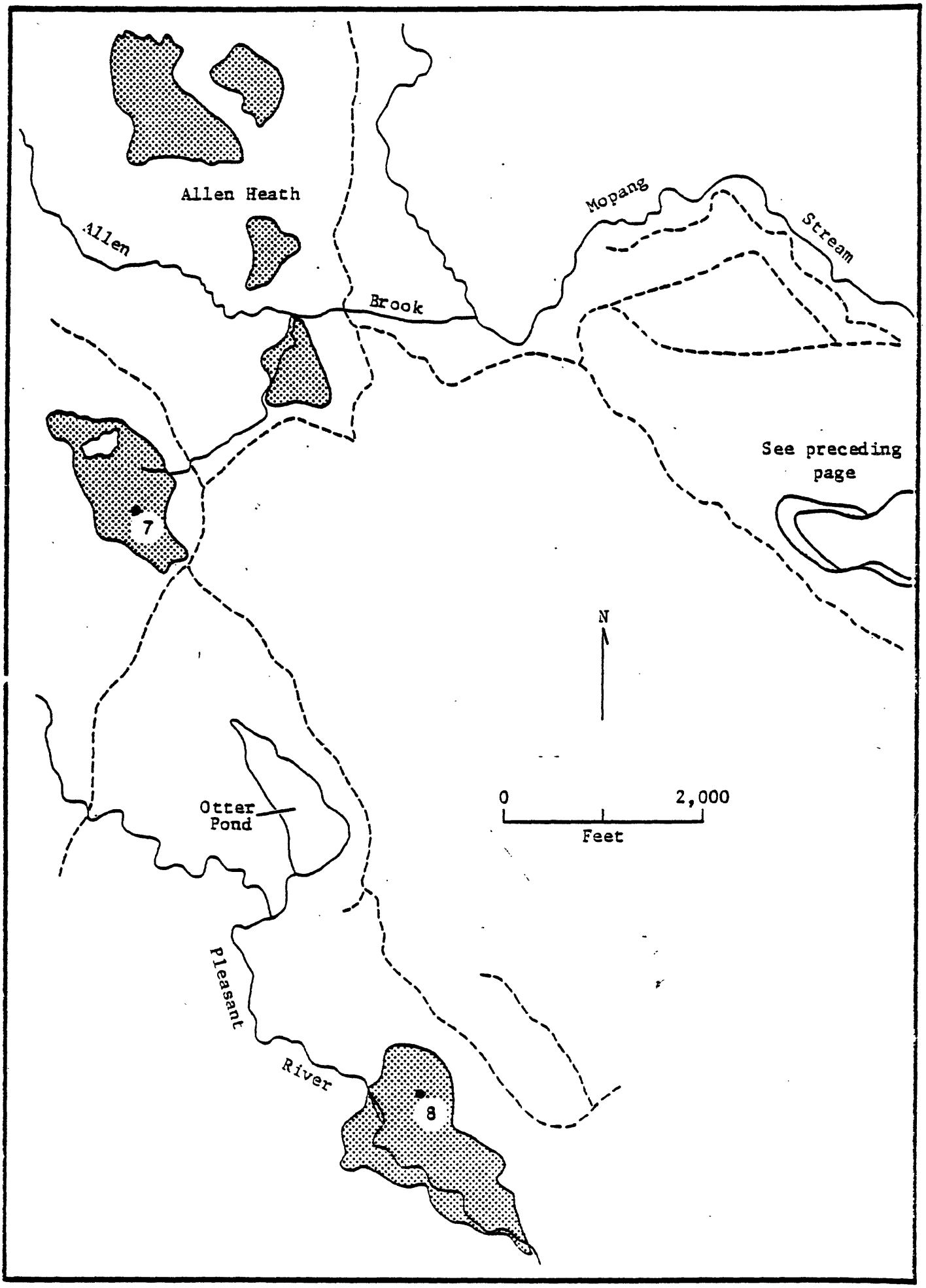


Figure 52. Continued.

Figure 52a--Sections and sample locations.

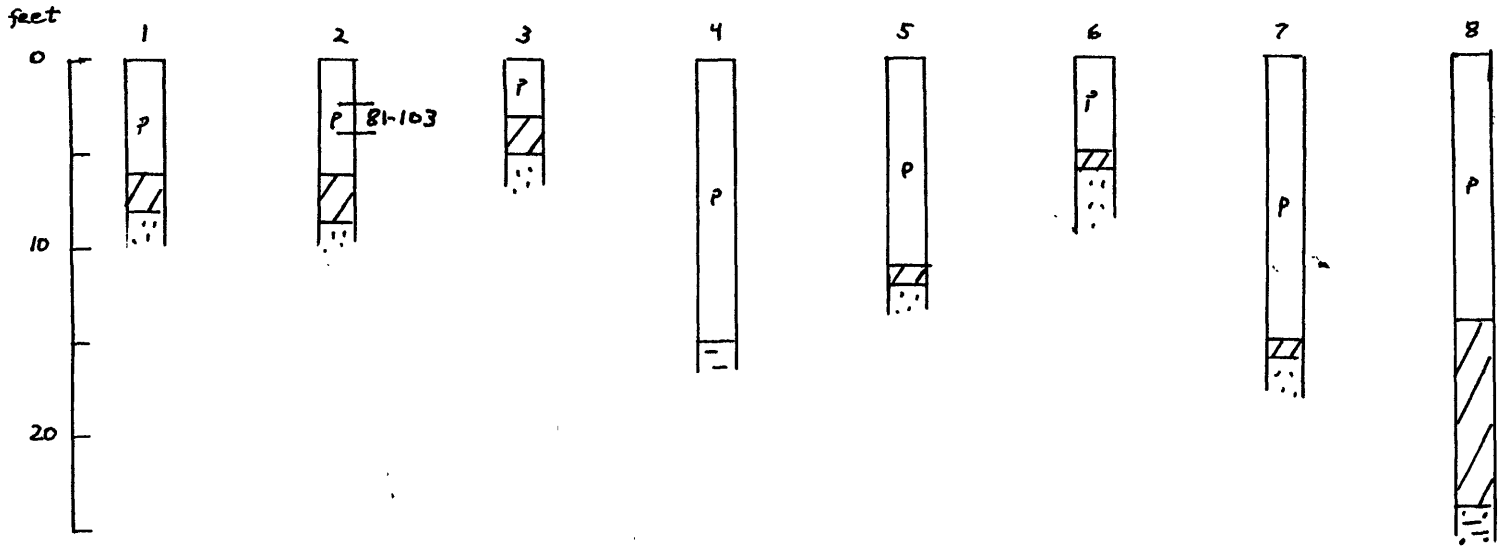
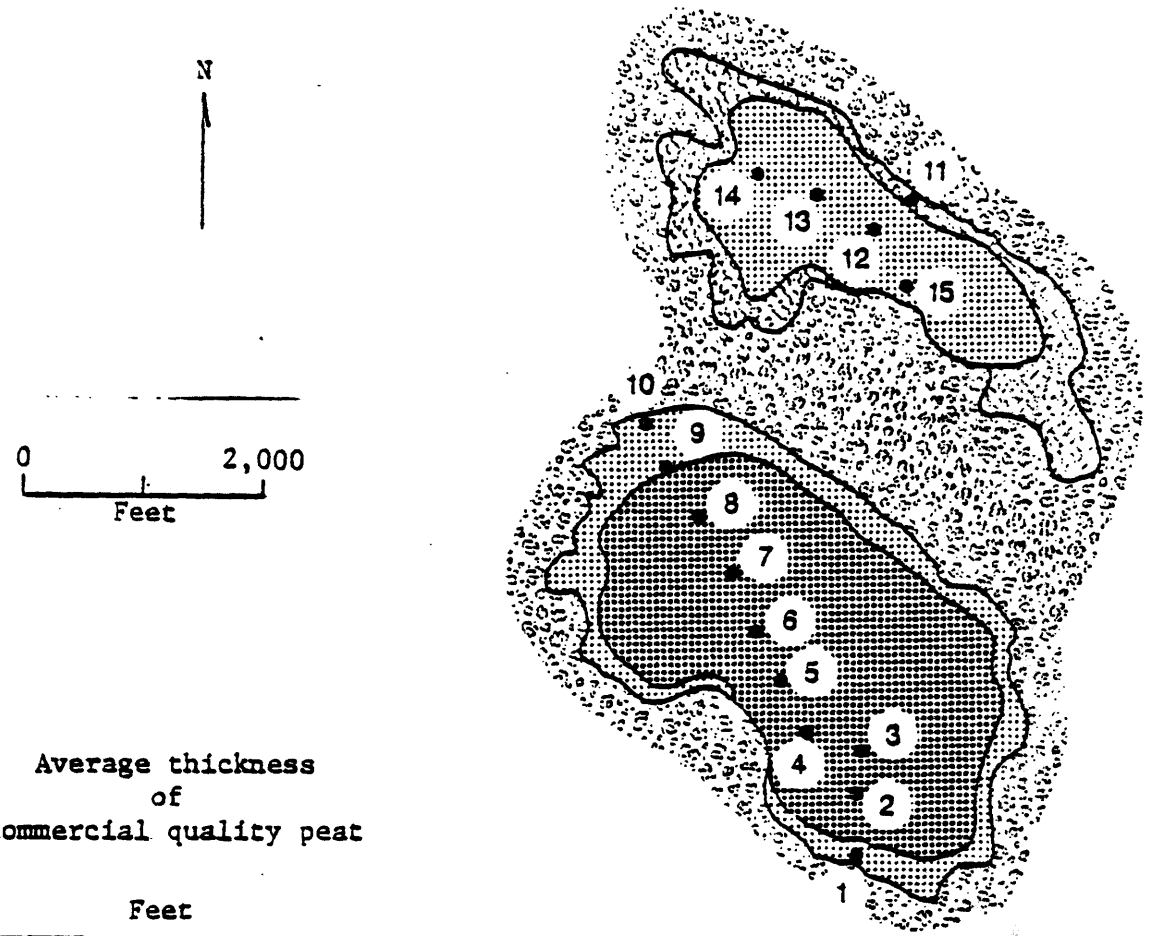


Table 47.--Analyses of samples located in sections in figure 52a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
103	53.47	4.72	0.76	0.10	0.5	91.7	71.5	8,730



Average thickness of commercial quality peat

	Feet
	14
	5

Peat and muck, 0-5 ft. thick

Bedrock and glacial drift

●0 Location and number of section

ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
215	14	602,000
150	5	150,000
365		752,000

Figure 53. Sketch map of Rock Dam Heath bogs, T16 MD, Tunk Lake 15 minute Quadrangle, Hancock County, Maine. (Number 52 on Index Map).

Figure 3-3a--Sections and sample locations.

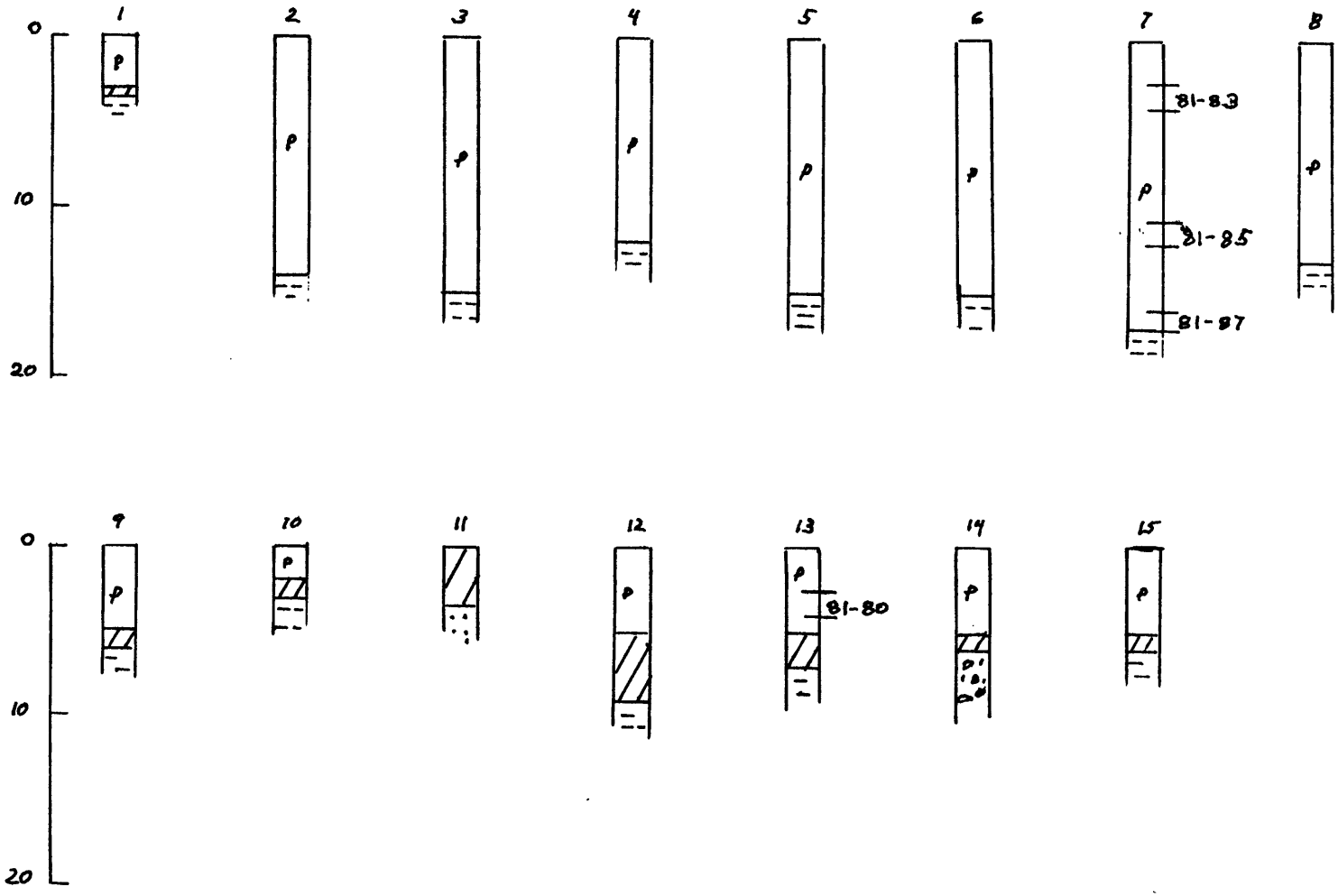


Table 48.--Analyses of samples located in sections in figure 53a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
80	56.25	5.22	1.79	0.16	2.6	89.5	67.8	9,645
83	53.87	4.51	0.71	0.12	0.7	91.3	68.4	8,916
85	53.88	4.78	0.61	0.17	1.1	92.4	68.7	9,007
87	57.27	5.06	2.08	0.29	4.9	89.1	63.1	9,822
Average commercial quality peat (ash content less than 25%)	55.32	4.89	1.3	0.19	2.3	90.6	67.0	9,348

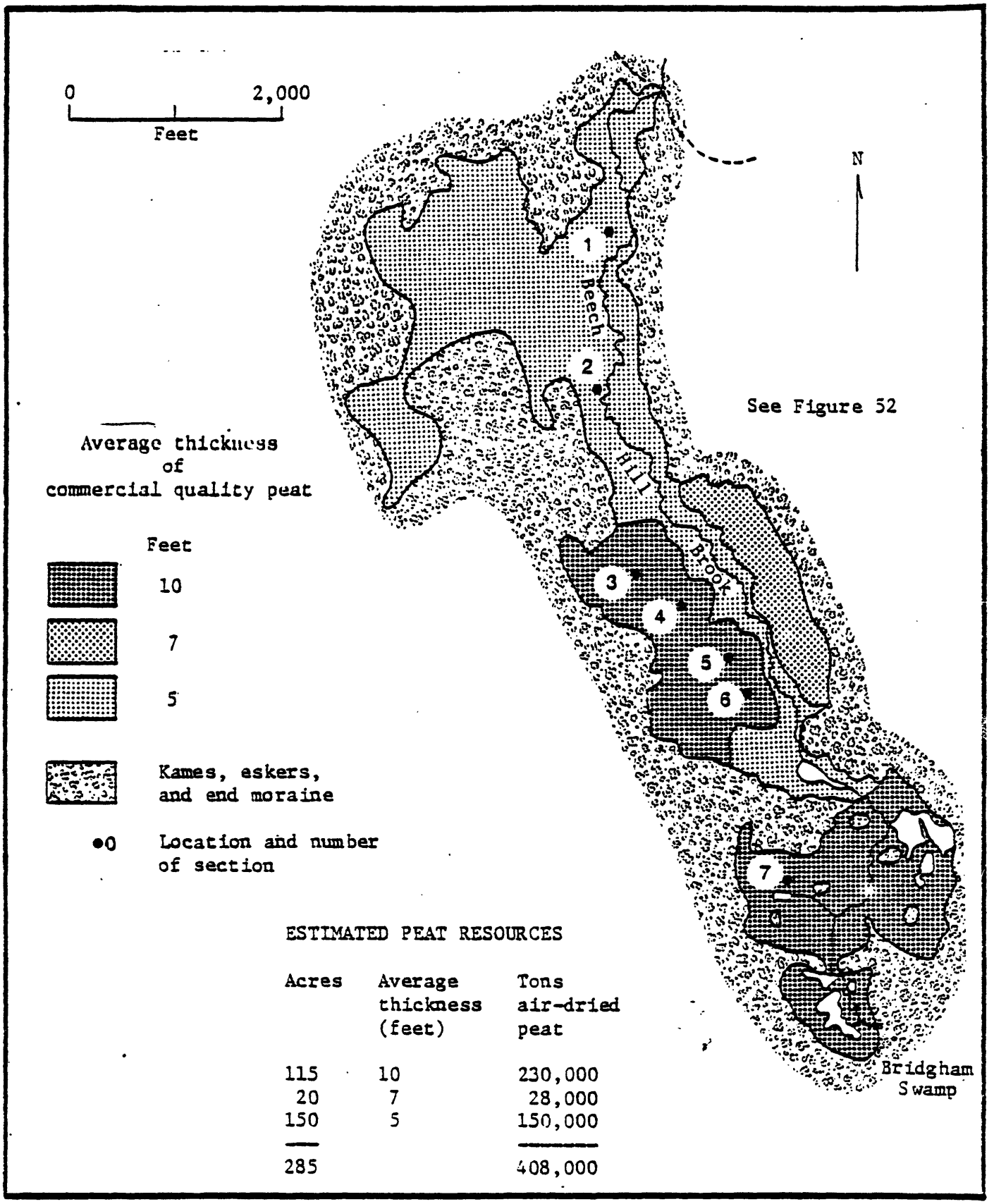


Figure 54. Sketch map of bog in Beech Hill Heath adjacent to Beech Hill Brook between road crossing and Bridgham Swamp, T24 MD, Tug Mountain 15 minute Quadrangle, Washington County, Maine. (Number 53 on Index Map).

Figure 54--Sections and sample locations.

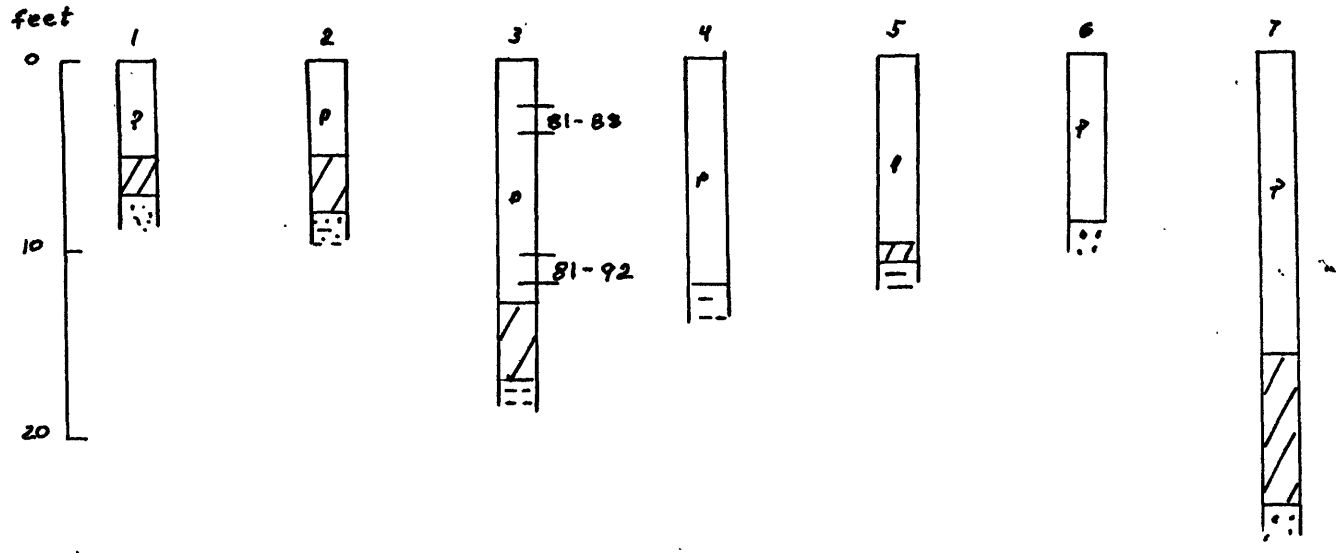
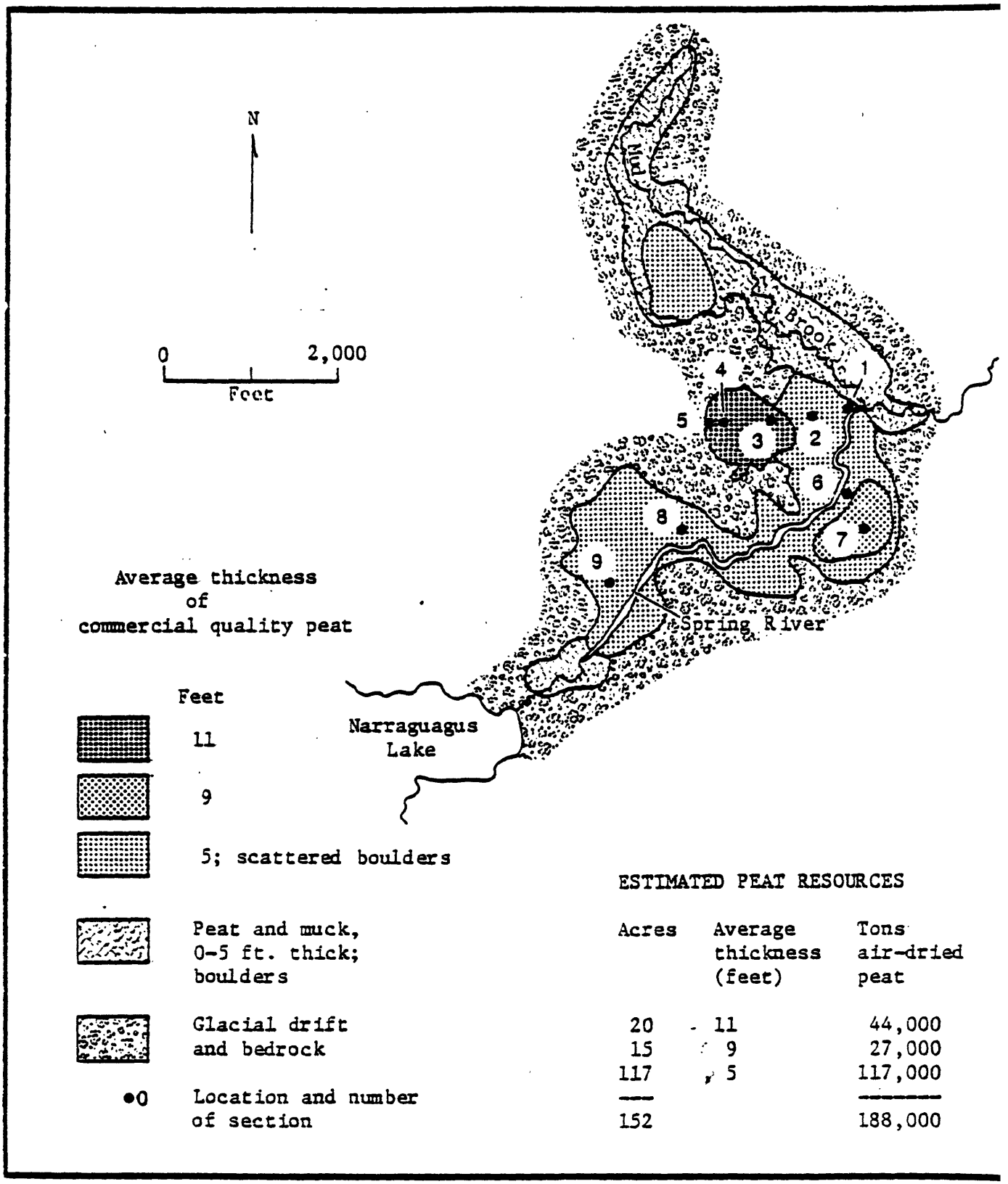


Table 49.--Analyses of samples located in sections in figure 54a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
88	54.48	4.77	0.77	0.15	0.9	91.0	68.8	9,033
92	46.91	4.08	1.63	0.31	18.8	89.2	56.2	8,157
Average commercial quality peat (ash content less than 25%)	50.69	4.43	1.20	0.23	9.9	90.1	62.5	8,595



ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
20	11	44,000
15	9	27,000
117	5	117,000
152		188,000

Figure 55. Sketch map of bog along Spring River, T16 MD, Tunk Lake 15 minute Quadrangle, Hancock County, Maine. (Number 54 on Index Map).

Figure 55a.--Sections and sample locations.

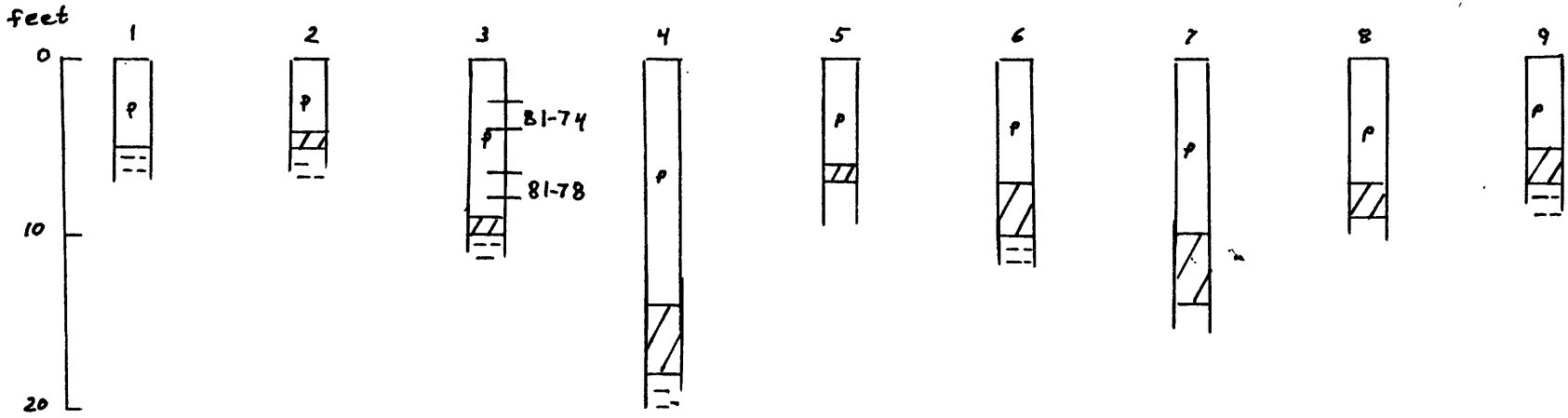


Table 50.--Analyses of samples located in sections in figure 55a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
74	53.08	4.92	0.73	0.15	0.8	91.1	68.8	8,855
78	57.44	4.89	0.85	0.21	1.8	87.4	---	9,716
Average commercial quality peat (ash content less than 25%)	55.26	4.90	0.79	2.0	1.3	89.3	68.8	9,286

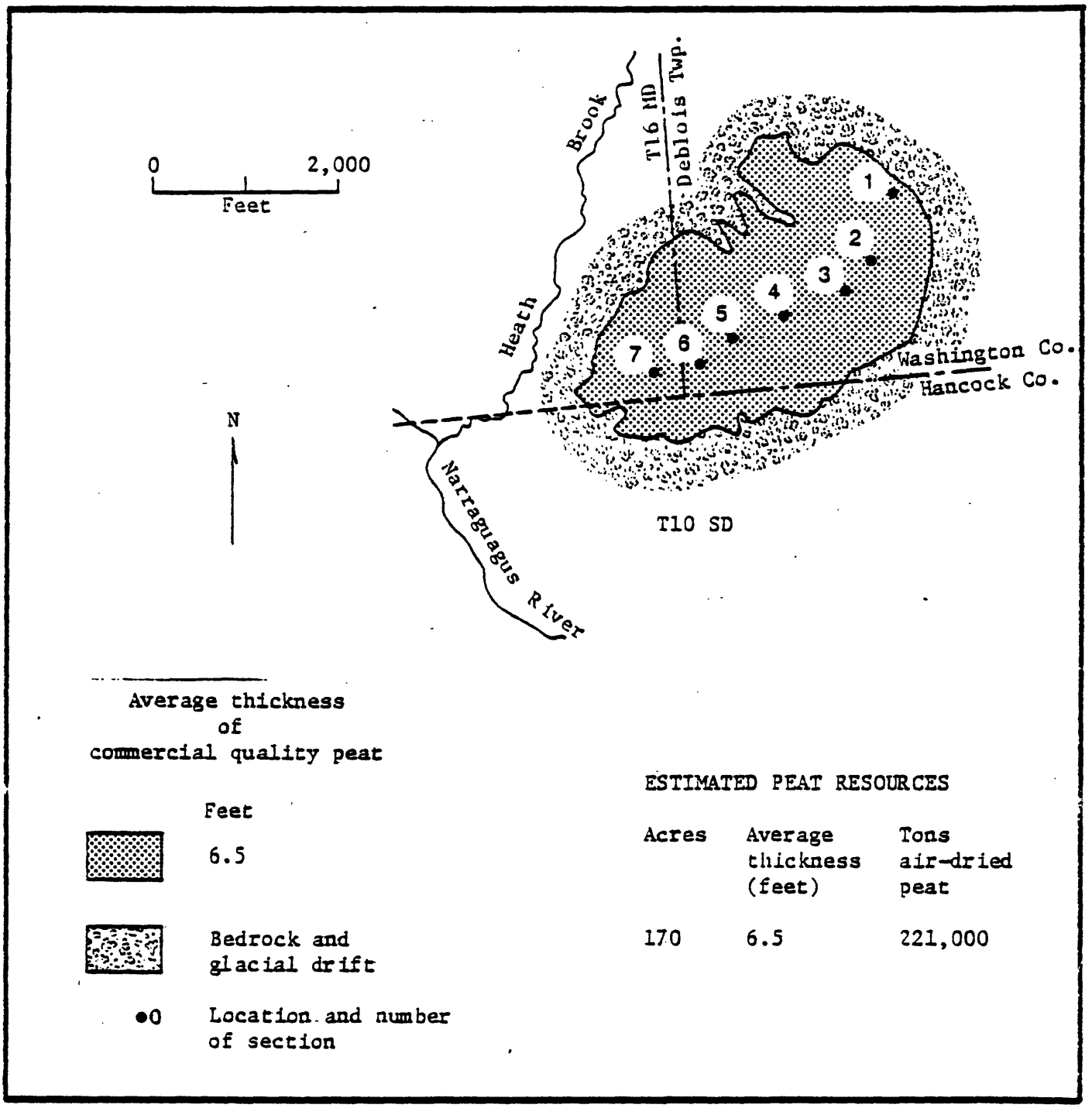


Figure 56. Sketch map of bog between Heath Brook and Fremont Peak, Deblois Twp., T16 MD, and T10 SD, Tunk Lake 15 minute Quadrangle, Washington and Hancock Counties, Maine. (Number 55 on Index Map).

Figure 56--Sections and sample locations.

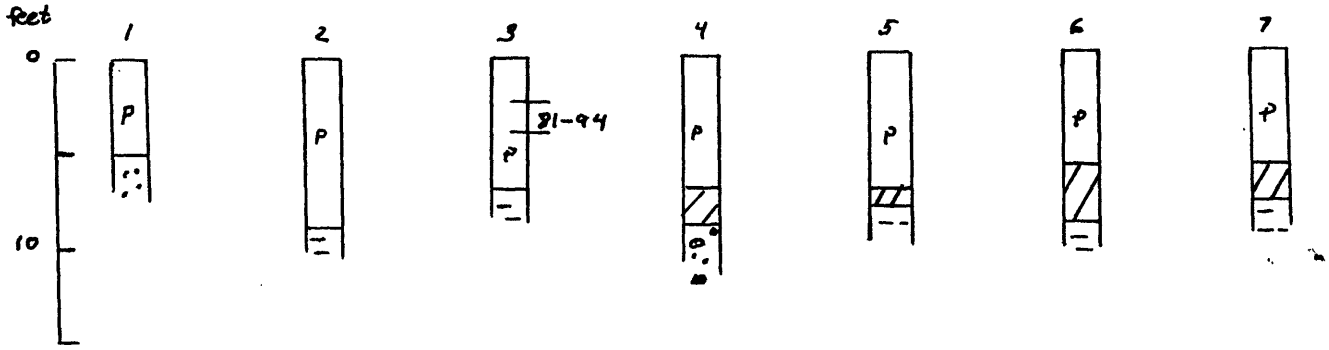
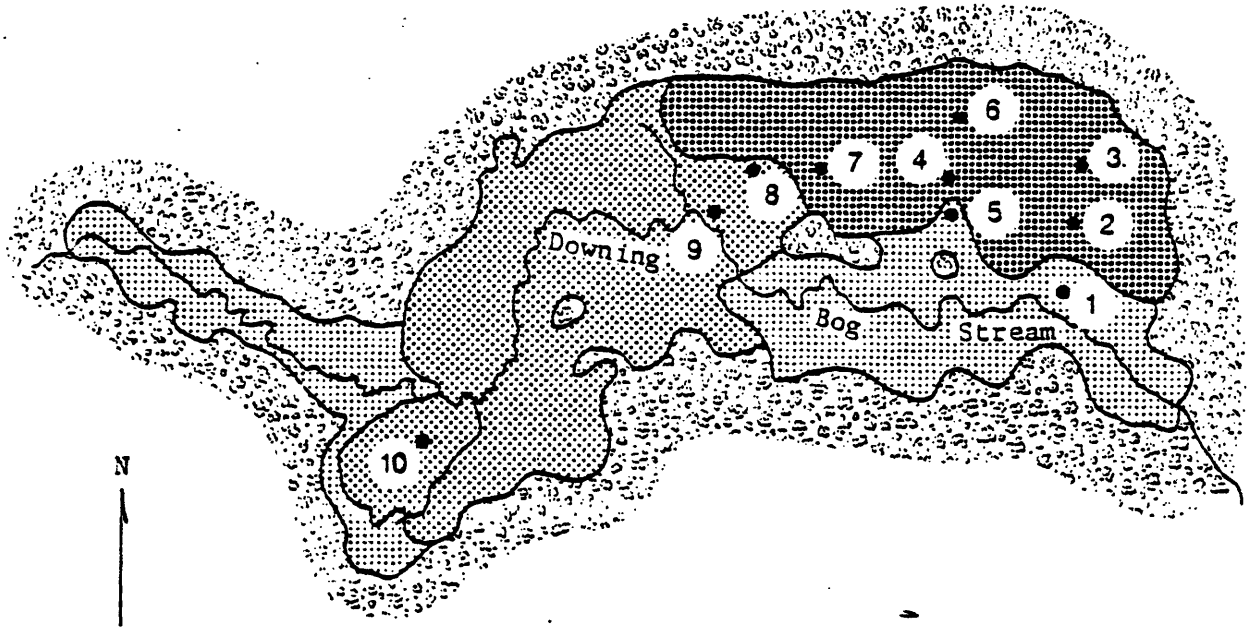


Table 51.--Analyses of samples located in sections in figure 56a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
94	54.27	5.02	1.46	0.14	1.6	90.6	69.8	9,180



Average thickness of commercial quality peat

0 2,000
Feet

Feet	
14	
10	
5	
	Bedrock and glacial drift
•0	Location and number of section

ESTIMATED PEAT RESOURCES

Acres	Average thickness (feet)	Tons air-dried peat
65	14	182,000
100	10	200,000
75	5	75,000
240		457,000

Figure 57. Sketch map of bog along Downing Bog Stream, T10 SD, Tunk Lake 15 minute Quadrangle, Hancock County, Maine. (Number 56 on Index Map).

Figure 57a.--Sections and sample locations.

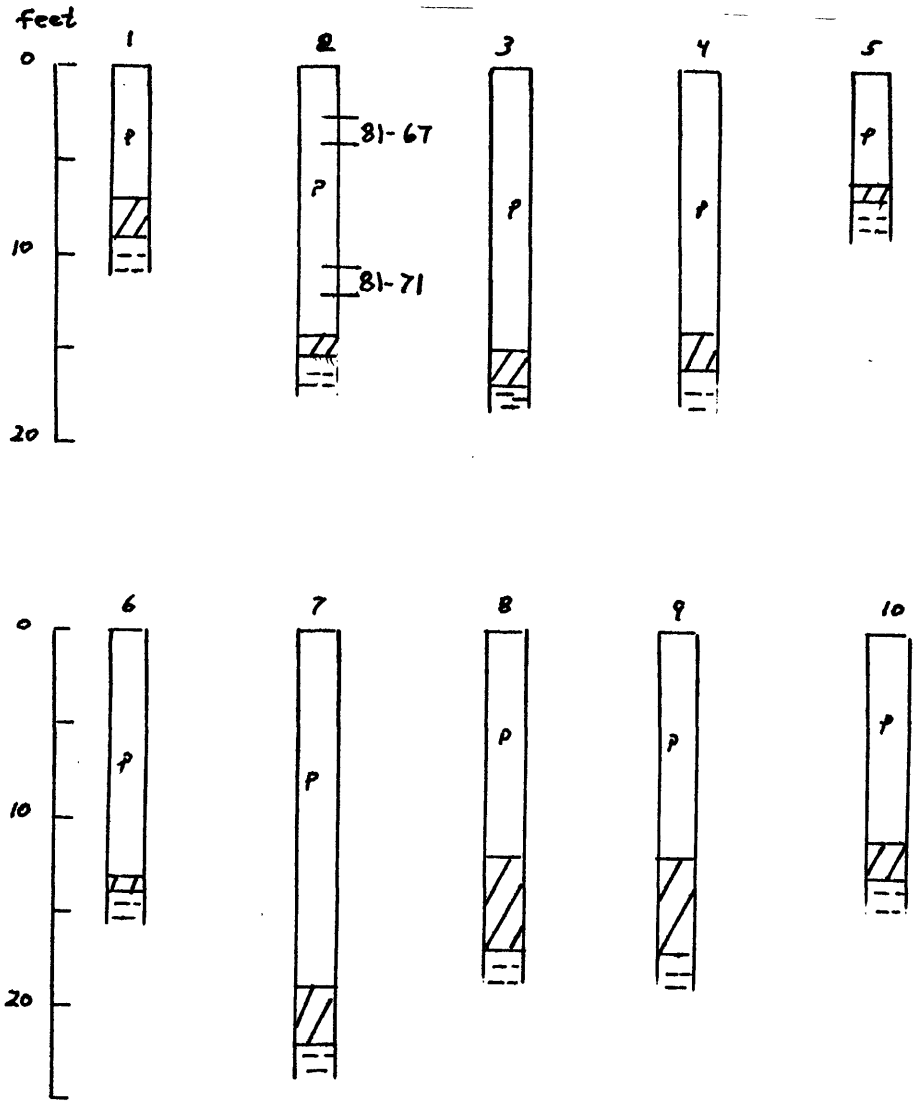


Table 52.--Analyses of samples located in sections in figure 57a.

Sample Analyses

CC81	Percent dry weight					Percent H_2O as Received	Dry weight	
	C	H	N	S	Ash		Percent Volatile Matter	BTU
67	55.86	4.72	0.93	0.20	0.8	90.6	65.6	9,341
71	57.40	4.75	0.83	0.21	2.1	90.1	65.9	9,605
Average commercial quality peat (ash content less than 25%)	56.63	4.74	0.88	0.205	1.5	90.4	65.8	9,473