UAH Research Report No. 173

Final Report

Contract No. NAS8-30772

ENVIRONMENTAL PARAMETERS OF THE TENNESSEE RIVER IN ALABAMA:

I. THERMAL STRATIFICATION

by
Lorraine M. Rosing

Submitted to

National Aeronautics and Space Administration
George C. Marshall Space Flight Center
Marshall Space Flight Center, Alabama

Submitted by

The University of Alabama in Huntsville
School of Graduate Studies and Research

P. O. Box 1247
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SUMMARY

Thermal stratification data of a transect across Wheeler Reservoir is correlated with the climatological data at the time of sampling. This portion of the Tennessee River is used as a heat sink for the effluent from the three reactor Browns Ferry Nuclear Power Plant. The transect sampling line is 1.3 miles below this point of effluence. Data is presented by weekly samplings for one year prior to plant operations. Post-operational data is presented with one reactor in operation and with two reactors in partial operation. Data gathering was terminated when the plant ceased operations.

The results indicate that the effluent for partial plant operation were inconclusive. As a result, recommendations include continuing the sampling when the plant resumes operation at full capacity.

Recommendations also include developing math models with the presented thermal and climatological data to be used as predicting the effluent impact in the river with varying climatological conditions and also to predict the effectiveness of the cooling towers.

ACKNOWLEDGMENTS

This project could not have been undertaken without the extensive cooperation of many individuals and agencies. The onset of the task was initiated in June 1971 under research grant RC-NSF-7-71 received from The University of Alabama in Huntsville Research Committee and continued under NSF-7-71 to December 1971. For this initial funding and support I wish to thank all of the Research Committee members and Dr. John Porter, then Dean of the U.A.H. School of Graduate Studies and Research.

In December of 1971, funding was provided under NGL-01-008-001, the NASA Center-related research grant from the University Affairs Office, MSFC, directed by Mr. Marion Kent. This phase was performed in cooperation with Dr. George McDonough, Director of S&E Environmental Applications Office (EA) MSFC and the entire staff of the EA Office. Thanks are expressly extended to Mr. Rex Morton, Operations Officer of EA for his numerous efforts in keeping the field equipment operational and to Mr. Carl Craig, also of the EA Office for his handling of some of the field equipment. Thanks are also extended to Mr. Paul White and Mr. Joseph Herrin of MSFC's S&E-ASTR-IMT Office for their work in modifying existing equipment to serve our needs.

Funding for this phase was continued under the NASA Center-related research program to February 1974 under the supervision of Dr. Edwin Rush, Dean, U.A.H. School of Graduate Studies and Research.

In May of 1974, funding was provided under grant NAS8-30772 from the Environmental Applications Office for 10 months. This was continued to August, 1975 with the cooperation of the S&E Data Systems Laboratory, Earth Resources Office, MSFC, Dr. George McDonough with Mr. Rex Morton, Chief of Operations, as the COR. Special thanks are extended to Mr. Morton for his helpful suggestions, equipment modification and maintenance and friendship throughout the entire project. Without his help and concern, the task would have been impossible.

Appreciative thanks are expressed to numerous U.A.H. personnel for their help and support. Among these are Ms. Sylvia Heard, Supervisor of Digital Programming, and Mr. Michael Meyer and Mr. George Jennings, Programmer-Analyst, of the U.A.H. Computer Services Office for their help and ideas in developing the programs to handle and analyze the data.

To the numerous unpaid undergraduate students at U.A.H. who participated in both the field and laboratory phases of the project, thanks are extended. Among these were Barbara Murray, M. Gerri Vail Campbell, Barbara MacKay, Louise Varnedoe, Judith Wills, Woodie Muirhead, Annelise Dilworth, Paul Youngblood, Ronald Hykes, Jerry Wright, Charles Black, David Garton and Teresa Miller. Special thanks are extended to the two students who participated in the project the longest and upon whom I delegated numerous responsibilities. To Ms. Sandra Campbell Monfett, who started the project with me and continued for several years in the duties of field assistant, laboratory assistant, computer programmer and direct supervisor of the volunteer students, and Mr. J. Derek Collins who assumed these responsibilities when Sandy graduated, I am indebted as

the project could not have been completed without their close cooperation and assistance.

Other U.A.H. personnel who have earned my thanks are Mr. Glen Goodin, Contracts and Grants Administrator, and the COR for this project; Ms. Myla Alm, Contracts and Grants Assistant, who kept me informed of the time requirements in the various phases of the project; Ms. Lucy Case, Accountant of the Accounting and Financial Reporting Office, who was responsible for maintaining my budget and Ms. Emily Ayers, Assistant Purchasing Agent, who handled the purchases necessary to perform the task.

Dr. Richard C. Leonard, Chairman, U.A.H. Biology Department merits my thanks for arranging my teaching schedule to accommodate the field work schedule. Ms. Evelyn Lea and Ms. Dewy Wedell, departmental secretaries, are also extended my thanks for typing reports concerning this project.

Thanks are also extended to Mr. William Waldrop and Mr. Cris Ungate of the TVA Division of Water Control Planning Engineering Laboratory, Norris, Tennessee for their cooperation and supplying the river flow data necessary to complete the project.

The list of individuals and offices who have earned my deep appreciation and gratitude would not be complete without including my husband Steven who "volunteered" to handle and maintain much of the field equipment and who also served as a valuable consultant in all phases of the project.

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INTRODUCTION

Inland surface waters are characterized into two major groups - standing waters or lentic environments and running waters or lotic environments. These are characteristically different from one another in that lentic habitats are in a closed or semiclosed basin and are degenerative in nature while lotic habitats are in an open basin and are dynamic in that they are constantly changing. Numerous studies have been conducted on the environmental parameters involving lentic environments (lake, ponds, bogs, swamps, etc.) but relatively few in depth studies have been conducted in lotic environments (creeks, brooks, streams, rivers, etc.). Much of the research work published and unpublished to 1970 was amassed by Hynes[1] in one volume, The Ecology of Running Waters. Prior to this Leopold[2] reported a summary of the physical dynamics of rivers. Other works concerning rivers have been in the nature of river modifications to accommodate man and his uses of the waters.

The limited ecological basic research on rivers has been restricted in the past by technological problems. Some of the problems have been solved by modifying methods and techniques developed for oceanography. Other problems have yet to be solved because of the directional flow of the rivers. As most river waters represent the excess of precipitation[2] (rain, snow, sleet, etc.) over evaporation which fluctuates seasonally, river flow fluctuated in velocity and volume. Precipitation falling directly into the river is minimal to that falling on land. Land runoff is either directly from the surface or runoff from water which has percolated through the substrate and reached the river via indirect routes. Waters flowing over land or percolated water carries part of the substrate as dissolved or suspended matter. These enter the river and are transported to points downstream. As water volume in the open basin increases in velocity and the carrying capacity of the water is increased, the process is erosional. As water volume decreases, the velocity decreases and the carrying capacity is reduced so that the process is now depositional. The damming of rivers has resulted in reservoirs behind dams which fluctuate partially between lotic and lentic waters in that they are erosional at times and depositional at times.

This directional flow of water has been and remains one of the great problems. Materials introduced naturally or by man at any given point are immediately removed to a downstream location, eventually to reach the ocean unless deposited at some point in between.

Because water is a tremendous heat sink, river waters are frequently used to dump this waste product of industry. When water is heated, its capacity for dissolved substances is increased but the capacity for dissolved gasses is decreased. This is a compound problem for living organisms in water in that their metabolic rates are increased with the increase in temperature but the respiratory and photosynthetic gasses required for metabolic processes are decreased.

This phase of the study was primarily concerned with the natural seasonal fluctuation in river water temperature at specific locations in the Wheeler Reservoir portion of the Tennessee River. By using the same locations as sample sites after the Browns Ferry Nuclear Power Plant is fully operational, comparisons could be made as to the thermal impact effect of the cooling water from the plant.

All temperature recordings were in degrees (Fahrenheit) as TVA and NOAA data were in this measurement.

SITE SELECTION

Wheeler Reservoir Physical Characteristics. The Wheeler Reservoir portion of the Tennessee River extends from Wheeler Dam, at mile 275 above the mouth of the river, upstream to Guntersville Dam at mile 349 (74 miles long). The normal pool level is 556 feet above sea level although the draw-down level for flood control is 549 feet and flood stages are those above 562 feet (13 foot variation). The average water flow rate is 4410 cf/s although this varies with rainfall, contributions from the Flint and Elk River, and release from Guntersville Reservoir. The width of the reservoir varies greatly from dam to dam. From mile 275 to mile 288 the river is @1.5 miles wide and deep. From mile 288 upstream, the width greatly increases (to over 3 miles wide) and relatively shallow except for the dredged channels. This width varies throughout the Wheeler Wildlife Refuge to mile 314 where the river narrows to within .25 to .5 miles in width up to mile 349 (Guntersville Dam). The substrate varies with the width. The narrower, deeper portions of the river are hard packed or are bedrock. The wider, shallower portions have a number of soft sand and clay/silt sand bars as well as having extended shallow mud flats. These areas are above water during draw-down levels.

Browns Ferry Nuclear Power Plant Location. The Browns Ferry site is located on a 920 acre tract of land on the north shore of the Wheeler Reservoir at mile 294. The plant's three boiling water reactors are capable of each producing 1152 mega watts. The cooling water for these reactors is drawn in from the main river channel upstream from the plant. It is presently discharged from the plant at @ mile 294 via a system of diffuser pipes extending across the river bed in the 1800 foot wide 30 foot deep main channel (see Figure 1). A separate diffuser pipe discharges the cooling water from each reactor but the rate of discharge is constant (1450 cf/s for each reactor). The diffuser pipes are constructed of corrugated galvanized steel pipes perforated in 600 foot sections with perforations consisting of 2 inch diameter holes.[3] The three pipes are laid across the river channel side by side with the perforations opening on the down-stream side of the pipes. The 19 foot diameter pipe from reactor 1 diffuses into the river in the middle 600 feet of the channel. The 20.5 foot diameter pipe from reactor #2 discharges in the southern 600 feet of the channel and the 17 foot diameter pipe from reactor #3 empties into the northern one third of the channel. From the surface, because of these specific locations and the turbulance created by the flow, it can be determined which reactors are operational.

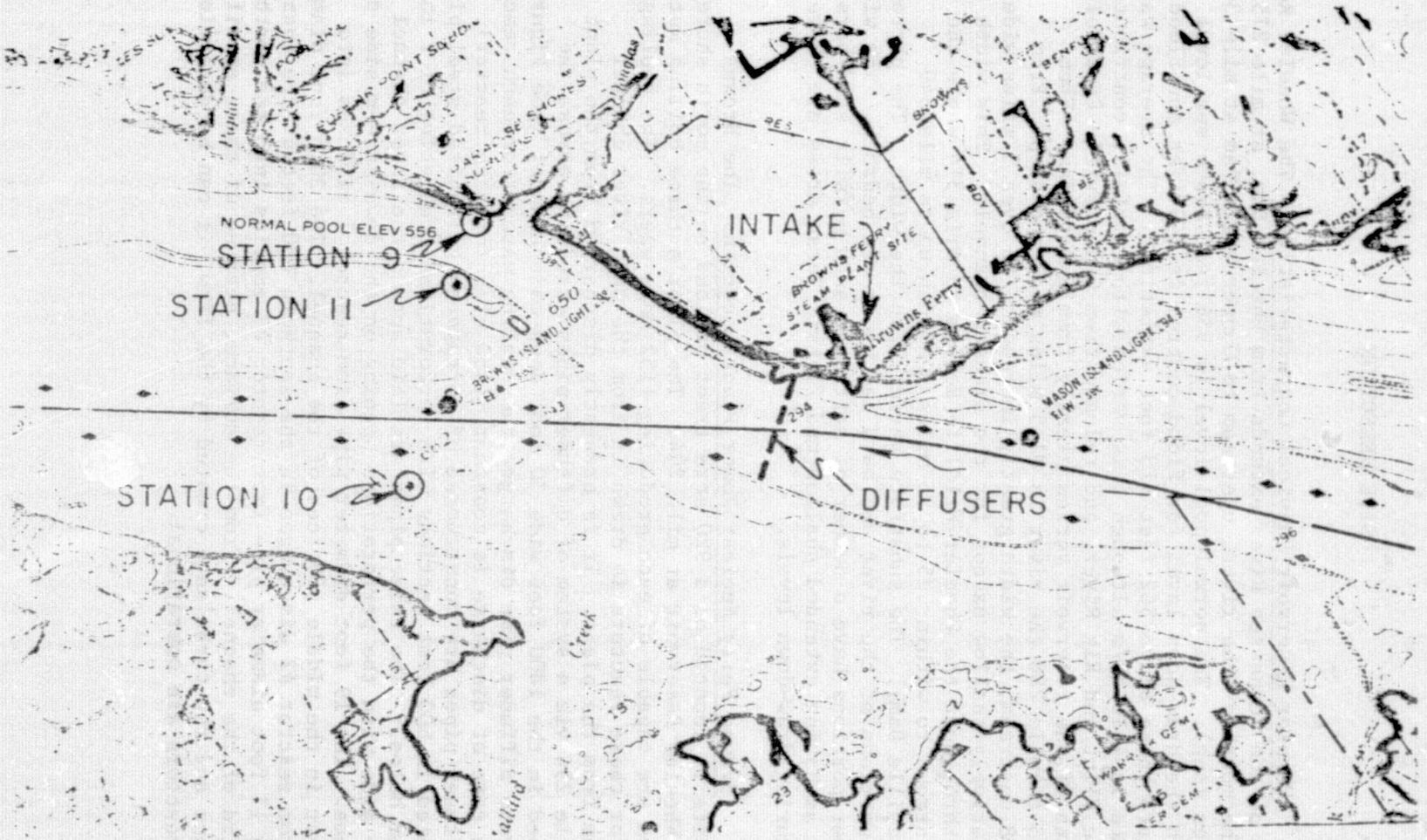

FIGURE 1. MAP OF BROWNS FERRY NUCLEAR POWER PLANT AND THE TVA THERMAL MONITORING SITES (MAP COURTESY OF TVA ENGINEERING LABORATORY, NORRIS, TENN.).

TVA Monitoring Stations. TVA presently monitors the plant thermal discharge dissipation by using three down-stream stations (stations 9, 10, and 11 in Figure 1). These monitor the water temperature average every 15 minutes at a five foot depth.[3,4] These also provide hourly thermal profiles of the entire depth of the water in the three locations.

Thermal Profile Stations. When the project started in 1967, one of the original biological sampling sites was the Douglas Branch river site adjoining the Paradise Shores Subdivision. This site was selected because it was the first extensive biological nursery area downstream from the proposed plant location. It was determined that a future profile of the heat distribution in the river between this site and the plant discharge point would be desirable. The problem at that time was to determine exactly where these sampling sites would be so as not to interfere with normal river flow and navigation. One-fourth of a mile upstream from the sampling site was a TVA 500 KV transmission line which crossed above the river to the south shore in a straight line. To support the line across the river, three islands had been constructed to provide a base for the steel framework pylon support for the lines. The 2060 foot (627.8 M) was labeled Span A; the second 1897 foot (578.17 M) span was labeled Span B. Span C, containing the main river channel (227 feet or 678.6 M) covered the distance between the second and third islands. Span D (2145 feet or 653.76 M) covered the distance between the third island and the south shore (see Figure 2).

Located along the transmission lines between the pylons are a series of evenly spaced dampers to reduce the vibrations and oscillations of the lines. After traversing the river running parallel to the lines and analysing the bottom profile reading from a recording depth scanner it was decided to use the dampers to identify the individual sampling stations. Initially, samplings were made at each damper, but, after analyses and to save time, alternate dampers were to serve as sites (see Figure 3). This enabled readings to be taken at 374 foot intervals in Span A, 345 foot intervals in Span B, 371 foot intervals in Span C and 357 foot intervals in Span D. These same sites would be used as sampling sites for determining the dissolved oxygen content of the water.

At each station, temperatures were to be taken at one meter intervals from the bottom to the surface. The thermocouple sensors were numbered with one being at the bottom attached to the cable next to the weight which was to hold the line straight in the water. At one meter intervals from the weight, the thermocouple ends of one of the lines was exposed. This entire bundle of thermocouple lines was attached to a cable for support. The lines were connected to a multi-channel recorder on the boat. Each series of readings at each site was replicated so that two complete sets of temperatures were recorded from each site in less than two minutes (see Figure 4).

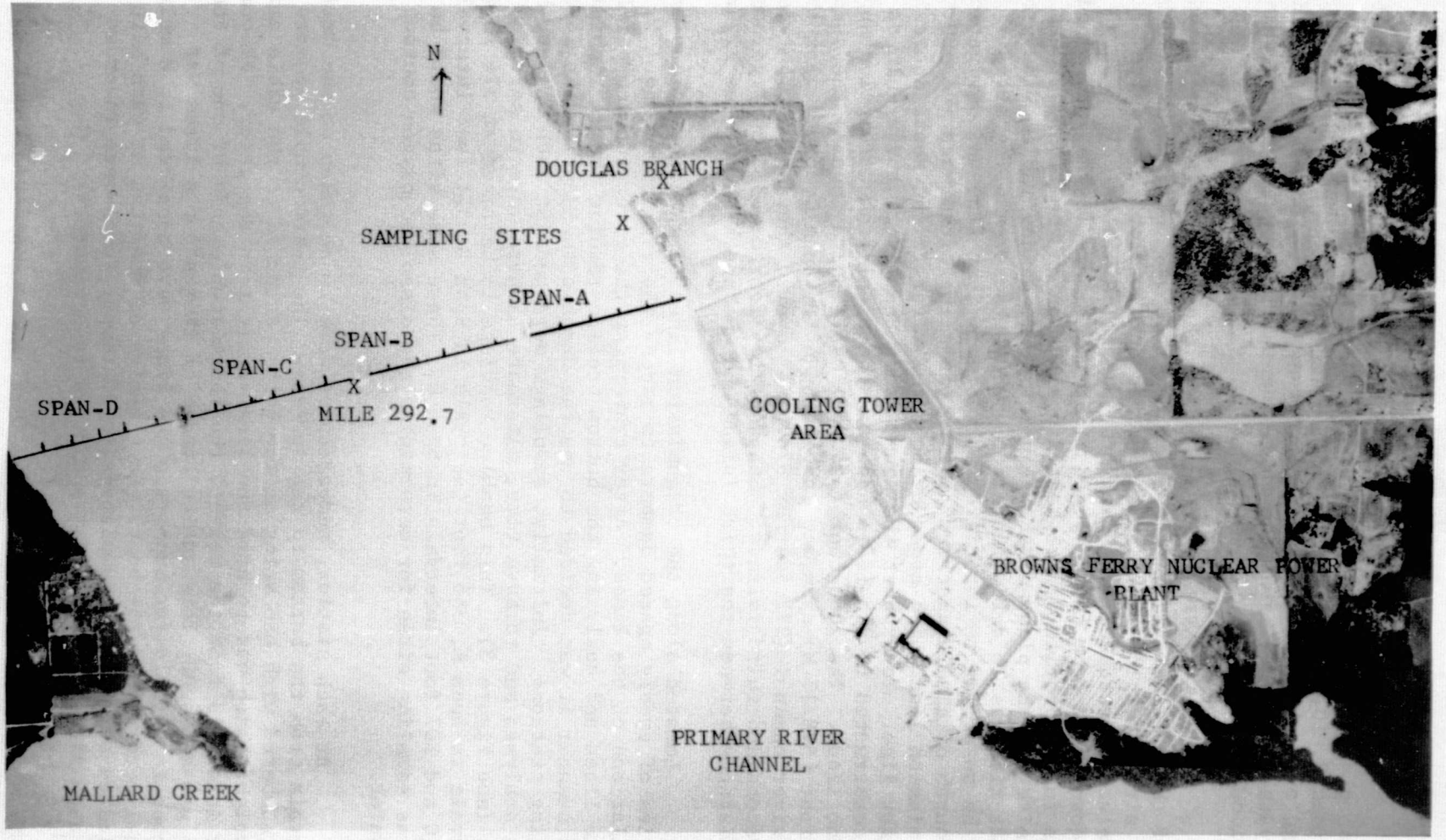

FIGURE 2. AERIAL VIEW THE TENNESSEE RIVER IN THE VICINITY OF THE BROWNS FERRY NUCLEAR POWER PLANT WITH THE INDICATED SAMPLING SITES.

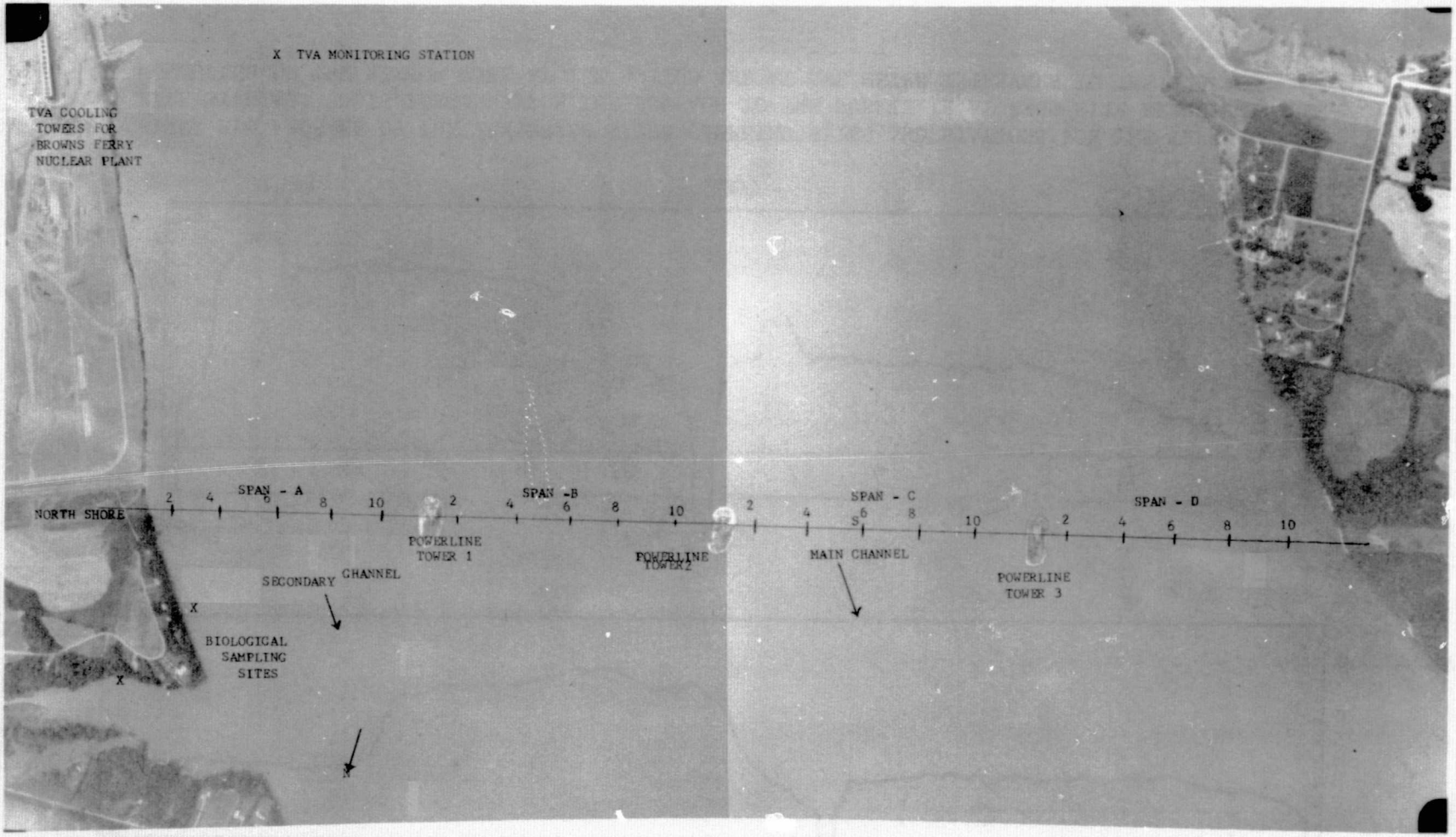

FIGURE 3. AERIAL VIEW OF THE TENNESSEE RIVER SAMPLING SITES AND STATIONS FOR THE THERMAL PROFILE STUDIES.

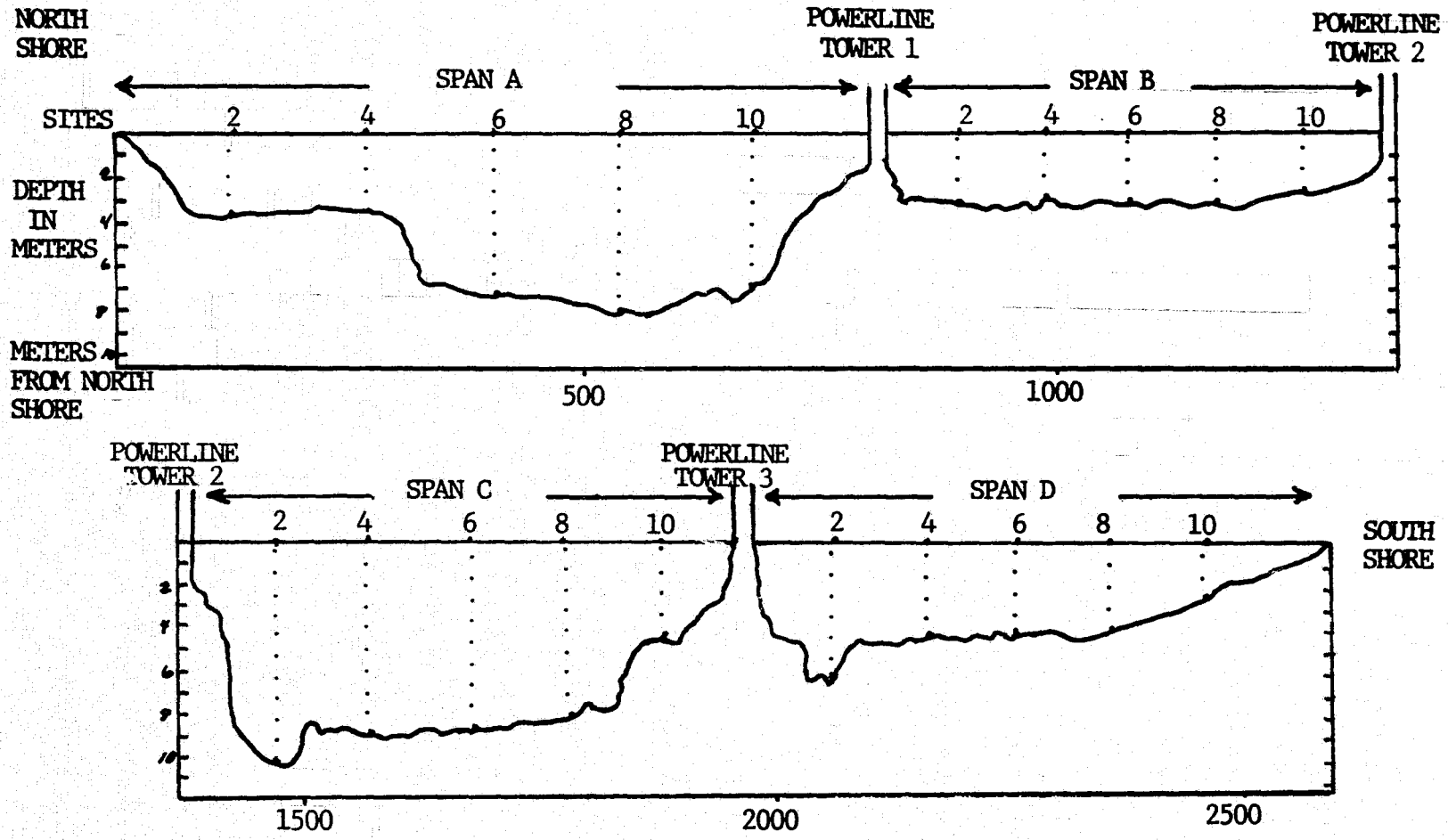

FIGURE 4. RIVER BED PROFILE OF THE TENNESSEE RIVER SAMPLING SITES AND STATIONS FOR THE THERMAL PROFILE STUDIES. DOTS RANGING FROM THE SURFACE TO THE SUBSTRATE AT EACH SITE REPRESENT THERMOCOUPLES ON THE SENSOR LINE AT THE BOTTOM AND AT ONE METER INTERVALS TO THE SURFACE.

Instrumentation and Sampling Techniques. The thermocouple sensor line was connected to an Easterline Angus multichannel strip-chart recorded calibrated to record in 0.5°F intervals. This unit was powered by a 500 W Honda generator. The units were mounted in a 22 foot Thunderbird outboard engine boat which was powered by twin 80 HP Johnson engines. These were transported weekly to the launch area by trailer.

When the boat was stationed under the damper site, the sensor line was dropped over the side of the boat until the weighted end of the line was on the bottom. The recorder was turned on and recorded the temperature of each sensor in order as the person handling the line had the task of keeping the line taut. When the recording was completed for that station, the line was retrieved in a hand-over-hand fashion. (A large reel was used for one time to try to eliminate wet hands during freezing weather but this proved to be too damaging to the thermocouples and the procedure was eliminated.) The boat was then maneuvered to the next station and the process was repeated for all twenty stations. During normal flow conditions, one engine was used for maneuvering but during fast flow both engines were required.

Dissolved oxygen readings were obtained by using a YSI 51A dissolved oxygen meter and membrane sensor held next to each thermocouple at the meter intervals.

Water Velocity. The river flow rate at the Browns Ferry transect will be determined by using the hourly flow rate from Wheeler and Guntersville Dams. TVA uses the formula:

$$Q_{BF} = 0.54\, Q_{G(t-4)} + 0.46\, Q_{W(t-1)}$$

where Q_{BF} = river flow at Browns Ferry

Q_G = discharge flow at Guntersville Dam

Q_W = discharge flow at Wheeler Dam

t = time in hours

Climatological Data. Local climatological data for rainfall, air temperature, cloud cover, etc. will be obtained from the NOAA Environmental Data Service stationed at the Huntsville-Madison County Jetport, 7 miles north of the river from mile 317. This atmosphere data gathering service is the nearest one covering the entire area of Wheeler Reservoir.

During the weekly visits to the sites for data collection, wind speed and direction were recorded.

RESULTS AND DISCUSSION

Sampling Site Substrate Changes. During the course of the project, the river bed profile (see Figure 4) changed at some of the locations. This was first noted after the main Spring flood of March 1973 and the minor flood of March 1975. Areas eroded during these flooding periods were A2, A4, B4 and B6. Depositional areas were A10, B8, B10, C8, C10, D2, D8 and D10. After the flood waters had receeded completely and after the following draw-down period, most of these areas were once again at their pre-flood levels. The exceptions were A2, C8, C10, D2 and D10.

At the A2 site, TVA attempted to curtail erosion by dumping numerous loads of rock and residents to the west of the TVA property (see Figure 3) on the steep north bank attempted to stop bank erosion by building retaining walls during low water periods. The tons of rocks halted the erosion of the bed but during the next high water cycle, the floodwaters seeped behind the retaining walls and destroyed them. This resulted in a further undercutting of the bank by about three feet. At the next heavy rainfall, this undercut bank stumped into the river. Repeated attempts at rebuilding these retaining walls were self-defeating as the construction of these walls was always accompanied by the cutting down of trees. With the next high water, the dead root systems of these trees were no longer able to retain the bank.

In the C8, C10 and D2 areas, the depositional area had been stabilized by sunken water-logged trees which had become entangled with the large boulders forming the island for power line tower three. The deflection of the water by the island partially slowed down the water and it dropped some of its transported load. The branches of the trees trapped some of this debris and further served as an area of deposition for this material.

The 20' x 20' depression in the substrate at the D2 site (see Figure 4) trapped such a large tree that subsequent samplings at this site had to be carefully executed because the sensor line was entangled frequently. During low water, branches of the tree were several feet above water level. All unretrieved equipment lost overboard during the course of the study is at the D2 site.

The substrate in the area of D8 and D10 was a wooded area prior to flooding after Wheeler Dam was constructed. The trees were cut but the stumps remain and are visible during extremely low water. These stumps serve to act as retainers for deposited materials. At the end of the study, site D10 was carefully approached as silt was always stirred up by the boat engines.

Temperature Range of Wheeler Reservoir From Guntersville Dam to Wheeler Dam. The problem of determining the temperature of the water as it entered and as it was discharged from Wheeler Reservoir was solved by inspecting TVA dam temperature data. On first inspection, it appeared that under natural conditions, solar heating increased the water temperature regardless of the flow rate (see Tables 1 and 2). This water was partially from upstream in the river proper and from water that had percolated through the warm soil and reached the river from the land surrounding the reservoir.

When the data was arranged by flow rate (see Table 2) and not by date (see Table 1), it was obvious that the water temperature varied closely with the average temperature of the air with a slight time delay. The time delay appeared to follow closely the amount of precipitation for the previous week. As the rainfall increased, the water reached the river in less time.

More careful inspection of the data early in the study indicated a drastic temperature range between dams. Furthermore, this range decreased drastically after October 11, 1972, and before November 3, 1972. As no climatological data could be found to explain this tremendous increase in the thermal loading at that time, TVA data was correlated with temperature data at the three sampling stations within the reservoir (see Table 3). The Whitesburg, Wheeler and Browns Ferry site temperatures were closely related to the Wheeler Dam temperature and the largest discrepancies were between Guntersville Dam and the Whitesburg site, 14.5 miles downstream from the dam. The only conclusion that could be reached because of the 15 degree differences between the two sites and no other data could be found to support any other reason is that the thermal sensor at Guntersville Dam was drifting out of calibration and was re-calibrated prior to November 3, 1972.

Inspection of the data after re-calibration indicates that the water temperatures are closely related to air temperatures and solar radiation. During periods of little cloud cover, thermal solar heating is associated more with the wide shallow parts of the river (Browns Ferry) than with the narrower deeper parts of the river. During cooler winter months, the wider shallower parts of the river are much shallower due to draw down of the water (November to February) and are much cooler than at the other sites. At these times, there is also an increase in the wind velocity so that during periods of high cold winds, the shallower parts of the river dissipate heat more rapidly because the wind action mixes the water to the depth of the substrate. Wind action does not have as great an effect in the deeper narrower parts of the river because some wind protection is afforded by the steep banked valleys and the trees along the shore act as wind deflectors.

Table 1. Physical and Climatological Factors Affecting the Wheeler Reservoir Portion of the Tennessee River.

Date	Flow Rate cf/s	G'ville Dam °F	Whlr Dam °F	Temp. Diff. °F	Air Temp. °F	Rain Prev. Week (in)	Reactor #1 output (MW)	Reactor #2 output (MW)
060672	43,764	74	75	1	79	.06		
061372	20,396	76	79	3	76	T		
062172	44,438	76	79	3	71	.58		
062772	15,516	76	77	1	73	.06		
070672	48,532	77	79	2	67	2.17		
071172	18,166	77	80	3	78	0		
071872	34,956	79	82	3	79	.57		
072572	17,518	81	83	2	81	1.24		
080172	30,958	79	84	5	76	2.59		
080872	28,450	80	83	3	73	1.79		
081572	43,764	79	83	4	76	.28		
082272	21,562	79	84	5	77	0		
082972	23,202	77	83	6	73	.18		
090572	15,032	74	81	7	69	.23		
091372	12,790	71	80	9	76	T		
092072	35,652	68	79	11	77	.99		
092772	21,124	66	79	13	73	.22		
100472	41,364	58	73	15	62	2.33		
101172	49,400	55	70	15	65	.38		
110372	66,878	62	63	1	61	1.73		
111072	62,140	60	61	1	56	.7		
111572	67,784	59	58	-1	38	.46		
120672	79,282	50	51	1	47	.15		
121372	172,404	50	50	0	49	3.34		
122172	143,006	46	47	1	51	1.7		
122972	107,144	46	46	0	52	.06		
011073	118,246	43	44	1	26	2.85		
011973	54,016	42	43	1	49	.45		
012473	85,934	44	45	1	41	2.08		
013173	66,418	43	44	1	42	1.35		

Table 1. (con't).

Date	Flow Rate cf/s	G'ville Dam °F	Whlr. Dam °F	Temp. Diff. °F	Air Temp. °F	Rain Prev. Week (in)	Reactor #1 output (MW)	Reactor #2 output (MW)
021673	118,454	40	42	2	30	2.75		
030173	49,944	44	46	2	51	0		
030973	38,634	52	55	3	66	1.43		
032873	113,214	55	55	0	59	1.4		
040673	59,702	57	58	1	50	2.22		
041373	55,490	55	55	0	49	1.19		
041873	50,142	57	57	0	66	.06		
042573	56,726	59	63	4	68	2.22		
050473	76,252	61	65	4	58	.3		
051173	75,008	64	68	4	72	.27		
051873	50,038	64	68	4	59	.23		
060573	100,130	72	74	2	77	.93		
061573	53,652	74	78	4	78	.31		
081773	REACTOR #1 CRITICAL							
101573	FIRST COMMERCIAL ELECTRICITY - REACTOR #1							
032774	90,506	53	54	1	57	2.14	415	
040374	77,904	59	59	0	72	2.29	719*	
041074	88,906	58	59	1	53	2.31	0	
041774	55,300	60	61	1	53	1.0	352**	
042474	46,602	63	63	0	53	.56	504**	
050174	49,654	66	65	-1	68	0	970	
050874	42,754	68	68	0	46	1.56		
052274	56,434	74	73	-1	64	1.75		
052974	65,664	73	74	1	61	2.58	10	
060574	64,924	75	75	0	72	.52	1082	
061274	28,900	76	75	-1	69	1.27	871	
061974	19,548	77	78	1	73	.01	578	
062674	18,360	77	77	0	64	1.53	1071	
071774	66,430	82	83	1	79	.02	1091	

*Off at 6:52 from tornado **Limited lines in service.

Table 1. (con't).

Date	Flow Rate cf/s	G'ville Dam °F	Whlr. Dam °F	Temp. Diff. °F	Air Temp. °F	Rain Prev. Week (in)	Reactor #1 output (MW)	Reactor #2 output (MW)
072474	18,846	82	82	0	83	.13	1098	
073174	28,270	82	82	0	75	4.02	1086	
080774	15,434	80	81	1	74	.36	1063	
081474	51,254	80	80	0	77	2.01	1074	
082174	39,258	82	81	-1	79	.42	459	
082874	62,516	82	84	2	82	T		
090474	41,554	79	80	1	63	1.12	997	188
091174	2,162	76	76	0	76	1.83	976	260
091874	38,866	77	76	-1	70	.96	1033	470
092574	36,070	73	74	1	58	T		626
100274	41,550	70	70	0	53	.35	140	
100974	55,414	66	67	1	58	0		
101674	52,362	LR	67		54	1.24	748	
102374	55,994	64	63	-1	54	.02	1046	
103074	34,686	63	63	0	71	.1	1089	292
110674	32,398	68	63	-5	50	.78	1030	430
111374	29,902	61	59	-2	47	.46	1068	305
120674	57,536	47	47	0	42	1.01	1070	
121174	58,022	46	46	0	42	.97	1077	610
121874	55,544	46	47	1	35	.2	1092	1045
011575	101,506	46	45	-1	37	2.61	1043	930
012975	116,834	47	48	1	62	.91	1080	345
020775	119,556	47	49	2	30	1.41		1061
021275	99,470	46	45	-1	49	.46	772	
021975	123,210	48	50	2	42	2.24	1027	870
022675	88,542	49	49	0	43	1.07	820	1106
040275	189,986	55	54	-1	62	.31	Both reactors out due to 3/22/75 fire	
040975	114,804	54	55	1	62	1.02		
041675	60,730	56	57	1	54	.67		

Table 2. Comparison of River Flow Rate with the Temperatures at Guntersville Dam, Wheeler Dam and Air Temperature

Flow Rate cf/s	G'ville Dam °F	Whlr Dam °F	Change °F	Air Temp. °F
172,404	50	50	0	49
143,006	46	47	1	51
118,450	40	42	2	30
118,246	43	44	1	26
113,214	55	55	0	59
107,144	46	46	0	52
100,130	72	74	2	77
85,934	44	45	1	41
79,282	50	51	1	47
76,252	61	65	4	58
75,008	64	68	4	72
67,784	49	58	-1	38
66,878	62	63	1	61
66,418	43	44	1	42
62,140	60	61	1	56
59,702	57	58	1	50
56,726	59	63	4	68
55,490	55	55	0	49
54,016	42	43	1	49
53,652	74	78	4	78
50,142	57	57	0	66
50,038	64	68	4	59
49,944	44	46	2	51
49,400	55	70	15	65
48,532	77	79	2	67
44,438	76	79	3	71
43,764	70	83	4	76
43,764	74	75	1	79
41,364	58	73	15	62

Table 2. (con't).

Flow Rate cf/s	G'ville Dam °F	Whlr Dam °F	Change °F	Air Temp. °F
38,634	52	55	3	66
35,652	68	79	11	77
34,956	79	82	3	79
30,958	79	84	5	76
28,450	80	83	3	73
25,202	77	83	6	73
21,562	79	84	5	77
21,124	66	79	13	73
20,396	76	79	3	76
18,166	77	80	3	78
17,518	81	83	2	81
15,516	76	77	1	73
15,032	74	81	7	69
12,790	71	80	9	76
FLOW RATE AFTER THE ONSET OF PLANT OPERATIONS				
189,986	55	54	-1	62
123,210	48	50	2	42 **
119,556	47	49	2	30 *
116,834	47	48	1	62 **
114,804	54	55	1	62
101,506	46	45	-1	37 **
99,470	46	45	-1	49 *
90,506	53	54	1	57 *
88,906	58	59	1	53
88,542	49	49	0	43 **
77,904	59	59	0	72 **
66,430	82	83	1	79 *

Table 2. (con't).

Flow Rate cf/s	G'ville Dam °F	Whlr Dam °F	Change °F	Air Temp. °F
65,664	73	74	1	61 *
64,924	75	75	0	72 *
62,516	82	84	2	82
60,730	56	57	1	54
58,022	46	46	0	42 **
57,536	47	47	0	42 *
56,434	74	73	-1	64 *
55,994	64	63	-1	54 *
55,544	46	47	1	35 **
55,414	66	67	1	58
55,300	60	61	1	53 *
52,362	LR	67		54
51,254	80	80	0	77 *
49,654	66	65	-1	68 *
46,602	63	63	0	53 *
42,754	68	68	0	46
41,554	79	80	1	63 **
41,550	70	70	0	53 *
39,258	82	81	-1	79 *
38,866	77	76	-1	70 **
36,070	73	74	1	58 *
34,686	63	63	0	71 **
32,398	68	63	-5	50 **
29,902	61	59	-2	47 **
28,900	76	75	-1	69 *
28,270	82	82	0	75 *
19,548	77	78	1	73 *
18,846	82	82	0	83 *
18,360	77	77	0	64 *

Table 2. (con't).

Flow Rate cf/s	G'ville Dam °F	Whlr Dam °F	Change °F	Air Temp. °F
15,434	80	81	1	74 *
2,162	76	76	0	76 **

* One reactor operational.

** Two reactors operational.

After the Browns Ferry Nuclear Power Plant was operating, there appeared to be no significant temperature differences in the river when the data was arranged chronologically (see Table 1), or by flow rate (see Table 2). When comparing the means and standard deviations of all of the sites after the onset of plant operations, (see Table 3) it is impossible to determine if any, one or two reactors were in operation. The only time during the sampling period when both reactors were operating at near maximum capacity (December 18, 1974) the flow rate was 55,544 cf/s, air temperature at 35° and a 1° difference between dams and a temperature standard deviation of 2.83 degrees among all sites. This is compared to the readings of August 14, 1974 with a flow rate of 51,254 cf/s, air temperature at 77°, a 0 temperature difference between dams and a higher standard deviation among all of the sites of 3.27 degrees when only one reactor was operating maximally (during hot weather) or when compared to 1 reactor operation during the cold weather of October 23, 1974 when the flow rate was 55,994 cf/s, air temperature at 56° and a difference between dams of -1 degree, the standard deviation was 1.75, it is obvious that the flow rate is not a prime factor in heat dispersal in this situation. This conclusion is reinforced when examining the lowest flow rate during the course of the study, 2,162 cf/s, occurred on September 11, 1974 with both reactors operating (not maximally but equivalent to slightly over one reactors maximal operation). At this time, the temperature differences between the two dams was 0 with water and air temperature being equal at 76°, there was a standard deviation of 2.44° between the sites. This is comparable to pre-operational data.

Temperature Ranges and Thermal Stratification Across Wheeler Reservoir. Although there was little significant differences among the thermal readings at the sampling sites along the river where all of the readings were at one meter in depth, there were considerable differences across the river at the wide Browns Ferry powerline transect where readings were taken at one meter intervals in depth. It is assumed there was no stratification of temperature at either dam as the water was thoroughly mixed and was flowing rapidly. It was also assumed that there was little stratification in areas where there were obstructions of water flow to any great extent where mixing would occur. To test this, a stratification test was performed 25 meters below the bridges in Decatur (see Table 4). At this point, the water is thoroughly mixed with very little stratification. By the time the water flows 12.3 miles downstream to the power line crossing the water is stratified (see Figure 67.)

To further support the mixing assumption, readings were taken on June 27, 1972 at the transect line immediately after the passage of a river tugboat which used river water to cool the engines (see Figure 8).

TABLE 3. COMPARISON OF TEMPERATURE READINGS AT VARIOUS LOCATIONS IN WHEELER RESERVOIR

DATE	G'VILLE DAM	WHTS	WHLR	BROWNS FERRY	WHEELER DAM	MEAN	SD
060672	74	76.1	71	79.7	75	75.16	3.17
061372	76	80.6	75	75.2	79	77.16	2.50
062172	76	73.9	76.1	79.7	79	76.94	2.38
062772	76	76.1	76.1	79.8	77	77.00	1.62
070672	77	77	78	80.9	79	78.38	1.63
071172	77	78.8	80.6	82.0	80	79.68	1.89
071872	79	80.9	80.6	82.9	82	81.08	1.48
072572	81	80.9	82	84.9	83	82.36	1.66
080172	79	80.2	80.9	81.3	84	81.08	1.85
080872	80	81.1	80.9	82.9	83	81.58	1.32
081572	79	82	81.1	80.9	83	81.20	1.48
082272	79	82	81.3	84	84	82.06	2.09
082972	77	82	82.9	82.9	83	81.56	2.58
090572	74	80.9	82.4	78.9	81	79.44	3.29
091372	71	79.3	78.8	78.9	80	77.60	3.72
092072	68	78.4	82.4	81.5	79	77.86	5.76
092772	66	81.5	78.9	78.9	79	76.86	6.17
100472	58	73.9	73	69.9	73	69.56	6.64
101172	55	70.8	69.4	69	70	66.84	6.65
110372	62	60.4	62.4	63.8	63	62.32	1.27
111072	60	62.6	59	59	61	60.32	1.52
111572	59	62.6	56.3	53.6	58	57.90	3.33
120672	50	50	50.9	51.8	51	50.74	0.76
121372	50	51.8	51.0	51.4	50	50.84	0.82
122172	46	45.8	47.1	48.2	47	46.82	0.97
122972	46	47.8	47.4	46.9	46	46.82	0.81
011073	43	41.9	42.4	39.9	44	42.24	1.52
011973	42	42.8	49.1	48.2	43	45.02	3.35
012473	44	48.2	-	46.4	45	45.90	1.82
013173	43	48.2	44.6	43.7	44	44.70	2.04
021673	40	42.8	44.9	39.2	42	41.78	2.27
030173	44	50.9	47.3	48.2	46	47.28	2.57
030973	52	59.0	55.4	57.2	55	55.72	2.62
032873	55	55.7	54.5	56.4	55	55.32	0.74
040673	57	58.1	56.3	58.1	58	57.50	0.82
041373	55	53.7	52.1	55.7	55	54.30	1.43
041873	57	56.4	57.7	58.6	57	57.34	0.84
042573	59	62.0	62.0	62.5	63	61.70	1.57
050473	61	62.0	64.0	64.5	65	63.30	1.72
051173	64	68.0	66.5	69.5	68	67.20	2.08
051873	64	68.0	67.5	68.5	68	67.20	1.82
060573	72	72.5	74.5	74.5	74	73.50	1.17
061573	74	76.2	75.0	78.0	78	76.24	1.79

TABLE 3. (Cont'd.)

DATE	G'VILLE DAM	WHTS	WHLR	BROWNS FERRY	WHEELER DAM	MEAN	SD
032774	53	-	52	52.7	54	52.93	0.83
040374	59	54	60.4	61.5	59	58.78	2.87
041074	58	-	56.2	56.1	59	57.33	1.42
041774	60	57.9	58.5	59.1	61	59.3	1.23
042474	63	62.0	61.5	63.9	63	62.68	0.94
050174	66	-	66	68.8	65	66.45	1.64
050874	68	66.9	66.7	65.5	68	67.02	1.04
052274	74	73.9	73	75	73	73.78	0.83
052974	73	73	71	73	74	72.80	1.10
060574	75	73	73	78	75	74.80	2.05
061274	76	72	75.5	80	75	75.70	2.86
061974	77	75.5	76.5	80	78	77.40	1.71
062674	77	75.9	75.9	75.5	77	76.26	0.69
071774	82	81	84	87	83	83.40	2.30
072474	82	82	84.9	87	82	83.58	2.29
073174	82	81	84	85.5	82	82.90	1.82
080774	80	78	82	84.5	81	81.10	2.41
081474	80	79	80	87	80	81.20	3.27
082174	82	84	84	84	81	83.00	1.41
082874	82	82.5	84.5	86	84	83.80	1.60
090474	79	78	78	79	80	78.80	0.84
091174	76	75	75.5	81	76	76.70	2.44
091874	77	76	76	80	76	77.00	1.73
092574	73	73	72	-	74	73.00	0.82
100274	70	71	69	69.5	70	69.90	0.74
100974	66	66	65	65.8	67	65.96	0.71
101674	-	66	65.5	66	67	66.13	0.63
102374	64	66.2	62	62	63	63.44	1.75
103074	63	-	61.5	67	63	63.63	2.36
110674	68	63.9	64	68	63	65.38	2.42
111374	61	-	57	59	59	59.00	1.63
120674	47	40	44.8	54.5	47	46.66	5.23
121174	46	41	42.8	41.5	46	43.40	2.43
121874	46	44	41.8	40.2	47	43.80	2.83
011575	46	50	41.5	42	45	44.90	3.44
012975	47	45	46	49.8	48	47.16	1.85
020775	47	-	44	46.2	49	46.55	2.07
021275	46	51	46.5	47.2	45	47.14	2.30
021975	48	50	50.1	51.3	50	49.88	1.19
022675	49	51	47.8	48	49	48.96	1.27
040275	55	56	54	55.5	54	54.90	0.89
040975	54	53.5	54.5	56	55	54.60	0.96
041675	56	54	55	56.5	57	55.70	1.20

G'Ville Dam = Guntersville Dam
Whts = Madison County Park and Boat Harbor
Whlr = Decatur Boat Harbor

TABLE 4. READINGS 25 METERS DOWNSTREAM BELOW DECATUR BRIDGE ON 8/21/74, FROM SOUTH SHORE TO NORTH SHORE TAKEN AT BRIDGE ABUTMENTS AND MID-SPAN.

DEPTH METER INTERV.		1ST SP.	1ST AB.	2ND SP.	2ND AB.	3RD SP.	3RD AB.	4TH SP.	4TH AB.	5TH SP.	5TH AB.
BOT.	1	81	82	83	81.5	82.5	82.5	82	82	82	81.9
	2	81	82	83	81	82.5	82.3	82.1	81.8	82	81.8
	3	81	82	83	81.5	81.9	82.3	82.2	81.9	82.1	82
	4	81	82	83	81.5	81.8	82.3	82.3	81.9	82.2	82.2
	5	81	82	82.7	81.5	81.7	82.2	82.3	81.8	82.2	82
SUR.	6	82.5	82	82.6	81.5	81.7	82.2	82.4	81.8	82.2	82
	7			82.5	81.5	81.7	82.2	82.3	81.9	82.2	82
	8			82.5	81.5	81.6	82.2	82.2	81.9	82.2	82
	9									82.2	

		6TH SP.	6TH AB.	7TH SP.	7TH AB.	8TH SP.	8TH AB.	9TH SP.	9TH AB.	10TH SP.	10TH AB.
BOT.	1	81.5	81.5	81.5	81.2	81.5	82	81.3	82.5	82.2	82.5
	2	81.6	81.6	81.7	81.1	81.5	82	81.4	82.5	81.9	82.3
	3	81.7	81.6	81.7	81.1	81.7	82.1	81.4	82.5	82	82.4
	4	81.9	81.6	81.9	81.4	81.6	82.1	81.4	82.4	82	82.4
	5	81.8	81.5	81.7	81.3	81.6	82.1	81.4	82.3	82	82.4
	6	81.9	81.5	81.7	81.5	81.6	82.2	81.5	82.3	82	82.5
	7	81.9	81.4	81.5	81.3	81.7	82.2	81.5	82.2	82	82.5
	8	81.8	81.4	81.5	81.3	81.7	82.2	81.5	82.1	82	82.5
SUR.	9	81.6	81.4	81.3	81.3	81.7	82.2	81.5	82	82	

		11TH SP.	11TH AB.	12TH SP.	12TH AB.	13TH SP.
BOT.	1	82.8	81.7	82.7	82	82.7
	2	82.2	81.6	82.6	82	82.5
	3	82.4	81.6	82.7	82.2	82.5
	4	82.4	81.6	82.7	82.2	82.4
	5	82.2	81.5	82.7	82	82.3
	6	82.3	81.4	82.6	82.4	82.6
	7	81.9	81.4	82.5	82.2	82.6
SUR.	8	81.9	81.4	82.5	82.2	

Average Temp. 81.95
1 S.D. $\pm$ 0.4476
Max. Temp. 83
Min. Temp. 81
Surface Average 81.94
Bottom Average 82.00

Wind speed and direction play a role in stratification. During the warmer months, the wind blows primarily from the south or south-west and in the colder months, blows mainly from the north or north-west. During the winter monsoon season, the winds blowing across the wide surface of the river and tend to move the less dense warmer surface water to the south bank of the river (see Figures 29 to 33 and Figures 81 to 85). The opposite pattern is noted during the warmer summer months.

There appears to be a correlation with air temperature, flow rate and wind in that there appears to be vertical stratification during high flow rate periods (see Figures 29 and 87) and horizontal stratification during low rainfall months (see Figures 8 and 70). Thermal stratification readings and thermal profiles for each of the sampling days are included in the Appendices (Figures 5 through 91). Climatological data is included for each date.

Dissolved Oxygen Stratification. Initial stratification readings for dissolved oxygen were taken at one meter in depth at each of the sites (see Table 5) on March 28, 1973. The wind speed on that day (7.5 MPH) and the current (113,214 cf/s) indicated that dissolved oxygen samples could only take place on days that had little wind and much less current. The twenty readings on that day required four additional hours. If complete oxygen profiles were to be safely taken, less time had to be taken in maneuvering from station to station.

Dissolved oxygen readings at one meter in depth on the initial sampling day indicated that the sites nearest to the banks were under-saturated in oxygen and that sites where the current was very turbid were super-saturated when corrections were made for the temperature of the water.

The next attempt at dissolved oxygen readings were attempted when the flow rate was at 100,130 cf/s on June 3, 1973. These readings indicated that the dissolved oxygen in parts per million was considerably less in the warmer water than the March quantity (see Table 6 and Figure 92) but was fairly close to saturation at that water temperature (see Figure 93). Here, again, the lower quantities were associated with the areas nearest shore and the highest quantities in the deeper, more turbid areas.

Subsequent readings at one-half the current velocity (53,652 cf/s) were taken on June 15, 1973 (see Table 7). Again the dissolved oxygen quantity was reduced and the temperature was an

TABLE 5. TEMPERATURE, DISSOLVED OXYGEN AND OXYGEN PERCENT OF SATURATION (one meter from the surface on March 28, 1973).

SITE	A2	A4	A6	A8	A10
TC	14	14	13.5	13	13
DO	8.9	8.9	11	11	11
%DO	85.5	85.5	104.7	103.7	103.7

SITE	B2	B4	B6	B8	B10
TC	13	13	13	13	13
DO	11.2	10.9	11.1	11.4	11.4
%DO	105.6	102.8	104.7	107.5	107.5

SITE	C2	C4	C6	C8	C10
TC	13	13	13	13	13
DO	11.6	11.6	11.2	11.4	11.4
%DO	109.4	109.4	105.6	107.5	107.5

SITE	D2	D4	D6	D8	D10
TC	13	13.5	13.4	13.4	13.5
DO	9.5	9.5	9.6	9.6	9.4
%DO	89.6	90.4	90.3	90.3	89

TABLE 6. TEMPERATURE, DISSOLVED OXYGEN AND OXYGEN PERCENT OF SATURATION (on June 5, 1973 at one meter intervals from one meter above bottom to surface).

A2	TC	23	23	23	23			
	DO	8.65	8.25	8.2	8.2			
	%DO	99.4	94.8	94.2	94.2			
A4	TC	23	23	23	23			
	DO	9.0	8.6	8.4	8.25			
	%DO	103.4	98.8	96.5	94.8			
A6	TC	22.2	22.2	22.5	22.5	22.5	22.8	23.0
	DO	8.0	8.0	8.1	8.1	8.1	8.1	8.0
	%DO	90.9	90.9	92.5	92.5	92.5	92.5	91.9
A8	TC	22.5	22.5	22.5	22.5	22.5	22.6	22.6	23.0
	DO	8.5	8.4	8.2	8.2	8.2	8.1	8.05	8.2
	%DO	97.1	96.0	93.7	93.7	93.7	92.6	92.1	94.2
A10	TC	22.5	22.5	22.5	22.5	22.5	22.5	22.8	23.2
	DO	8.6	8.3	8.22	8.2	8.2	8.01	8.0	8.03
	%DO	98.2	94.8	93.9	93.7	93.7	91.5	91.7	93.9
B2	TC	22.8	22.8	22.8				
	DO	8.6	8.4	8.22				
	%DO	97.9	96.3	94.2				
B4	TC	22.8	22.8	22.8				
	DO	8.6	8.4	8.3				
	%DO	97.9	96.3	95.1				
B6	TC	22.6	22.6	22.6				
	DO	8.6	8.2	8.2				
	%DO	98.3	93.8	93.8				
B8	TC	22.6	22.6	22.6				
	DO	8.4	8.2	8.2				
	%DO	95.8	93.8	93.8				
B10	TC	22.5	22.5	22.5				
	DO	8.4	8.3	8.25				
	%DO	96.0	94.8	94.2				

TABLE 6. (Cont'd)

C2	TC	22.4	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.5
	DO	8.5	8.35	8.4	8.38	8.42	8.4	8.4	8.38	8.4
	%DO	97.0	95.1	95.6	95.4	95.8	95.6	95.6	95.4	96.0
C4	TC	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.5	
	DO	8.8	8.62	8.5	8.5	8.42	8.4	8.38	8.3	
	%DO	100.1	98.0	96.7	96.1	95.7	95.5	95.3	94.8	
C6	TC	22.2	22.2	22.2	22.2	22.4	22.4	22.4	22.4	
	DO	8.5	8.46	8.4	8.42	8.24	8.3	8.4	8.3	
	%DO	96.8	96.3	95.6	95.8	94.0	94.7	95.8	94.7	
C8	TC	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.6	
	DO	8.2	8.2	8.23	8.26	8.24	8.29	8.30	8.22	
	%DO	93.7	93.7	94.0	94.4	94.1	94.7	94.8	93.9	
C10	TC	22.5	22.5	22.4	22.4	22.4	22.4	22.4		
	DO	8.4	8.26	8.22	8.2	8.2	8.2	8.2		
	%DO	96.0	94.4	93.8	93.6	93.6	93.6	93.6		
D2	TC	22.5	22.5	22.5	22.5	22.5	22.5			
	DO	8.42	8.22	8.22	8.2	8.22	8.22			
	%DO	96.2	93.9	93.9	93.7	93.9	93.9			
D4	TC	22.5	22.8	22.8	22.8					
	DO	8.6	8.39	8.4	8.42					
	%DO	98.2	96.2	96.3	96.5					
D6	TC	22.8	22.8	22.8	22.8					
	DO	8.58	8.5	8.48	8.46					
	%DO	98.3	97.4	97.2	97.0					
D8	TC	22.6	22.8	22.8	23.0					
	DO	8.62	8.42	8.58	8.5					
	%DO	98.6	96.5	98.3	97.7					
D10	TC	23.2	23.2							
	DO	8.22	8.2							
	%DO	94.7	94.6							

TABLE 7. TEMPERATURE, DISSOLVED OXYGEN AND OXYGEN PERCENT OF SATURATION (on June 15, 1973 at one meter intervals from one meter above bottom to surface).

A2	TC	25.0	25	25				
	DO	7.0	7.0	7.0				
	%DO	83.3	83.3	83.3				
A4	TC	25	25	25				
	DO	6.4	6.45	6.6				
	%DO	76.1	76.7	78.5				
A6	TC	25	25	25	25	25	25	25
	DO	6.5	6.4	6.4	6.4	6.45	6.55	6.8
	%DO	77.3	76.1	76.1	76.1	76.7	77.9	80.9
A8	TC	25	25	25	25	25	24.9	24.9	24.9
	DO	6.8	6.8	6.7	6.7	6.7	6.72	6.8	6.9
	%DO	80.9	80.9	79.7	79.7	79.7	79.8	80.7	81.9
A10	TC	25	25	25.5	25.5	25.5	25.5	25.5	25.5
	DO	6.8	6.8	6.8	6.8	6.8	6.9	6.95	7.2
	%DO	80.9	80.9	81.9	81.9	81.9	83.1	83.7	86.7
B2	TC	25	25	25.2				
	DO	7.2	7.2	7.4				
	%DO	85.7	85.7	88.3				
B4	TC	25	25	25.2				
	DO	7.2	7.0	8.0				
	%DO	85.7	83.3	95.4				
B6	TC	25	25	26.2				
	DO	7.2	7.2	8.2				
	%DO	85.7	85.7	100.2				
B8	TC	25	25	26				
	DO	7.2	7.25	7.82				
	%DO	85.2	86.3	95.3				
B10	TC	25.1	25.5	25.7				
	DO	7.2	7.55	8.0				
	%DO	85.9	90.9	96.8				

TABLE 7. (Cont'd)

C2	TC	25.1	25.1	25.5	25.5	25.5	25.5	25.5	25.5	25.7
	DO	8.0	8.0	8.2	8.0	8.2	6.8	7.1	7.3	7.2
	%DO	95.4	95.4	98.7	96.3	98.7	81.9	85.5	87.9	86.9
C4	TC	25	25	25	24.9	25	25	25	26.1	
	DO	7.6	7.4	7.6	7.5	7.7	7.7	6.8	7.6	
	%DO	90.4	88.0	90.4	89.1	91.6	91.6	80.9	92.7	
C6	TC	25	25	24.9	24.9	24.9	25	25	26	
	DO	6.5	6.6	6.4	6.4	6.5	6.6	6.8	7.81	
	%DO	77.3	78.5	76.0	76.0	77.2	78.5	80.9	95.2	
C8	TC	25	25	25	25	25	25	25.5		
	DO	6.1	6.1	6.05	6.1	6.2	6.4	6.95		
	%DO	72.6	72.6	72.0	72.6	73.8	76.1	83.7		
C10	TC	23	23.3	23.3	23.3	23.3	23.2	23.2	23.2	
	DO		6.1	6.1	6.05	6.1	6.2	6.4	6.95	
	%DO		70	70.5	69.9	70.5	71.7	74.2	80.5	
D2	TC	24.9	24.9	24.9	24.9	25				
	DO	6.0	6.0	6.1	6.2	6.6				
	%DO	71.3	71.3	72.5	73.7	78.5				
D4	TC	24.9	24.9	24.9	25					
	DO	6.6	6.8	6.9	7.0					
	%DO	78.4	80.8	82.0	83.3					
D6	TC	24.9	24.9	24.9	25					
	DO	6.9	7.3	6.4	6.5					
	%DO	82.0	86.3	76.4	77.3					
D8	TC	24.9	24.9	24.9	26.2					
	DO	6.0	6.05	6.2	6.9					
	%DO	71.3	71.9	73.7	84.3					
D10	TC	24.9	24.9							
	DO	6.1	6.2							
	%DO	72.5	73.7							

average of 3.5° higher (see Figure 94). The reduced turbidity associated with current reduced the saturation point at that temperature to around 75% of possible saturation. The pattern distribution of the dissolved oxygen was also different than at higher current rates. The lower current resulted in close stratification bands (see Figure 95).

Non-Parameter Observations. During the course of the weekly visits to the sampling site, several observations were noted but could not be quantified.

1. At no time after plant operations had commenced was there any evidence of dead or dying fish. Some were observed several miles upstream but each investigation of these dead fish revealed large lacerations on the body probably caused by propellers.

2. It could be easily determined when the plant was in operation as a riffle line was definitely noticeable on the surface in the channel slightly below the effluent pipes. Local fishermen were usually seen anchored in the channel below this pipe during good weather. River traffic which is restricted to the main channel had to slow down and stop on a number of occasions to wait for the anchored fishermen to make way for the traffic.

3. Profile samples indicated that the heated water discharged from the perforated effluent was almost completely mixed by 50 meters below the pipe.

CONCLUSIONS AND RECOMMENDATIONS

The data necessary to determine the thermal impact of the Browns Ferry Nuclear Power Plant is incomplete and the results are inconclusive. Data is presented under varying climatological and river flow conditions prior to plant operations and for one reactor at various levels of operation. Very little data is available with two of the three reactors in operation and none is available for three reactors or cooling towers in operation.

On the basis of this information, the following recommendations are presented.

1. Develop a math model of the river at this point with the present information.

2. Supplement these data with additional thermal samplings at the established sites when the plant has resumed operation and when the cooling towers are in operation.

3. Refine the math model with the additional data from the samplings and from the climatological data.

4. With the refined model, develop the capability of predicting the impact of plant operations under specific climatological conditions and at specified levels of plant operations.

APPENDIX A

```
FANTASTIC-DC*HOUSE.SSITE2
      1       C
      2       C
      3       C        PROGRAM SITES AUTHORED BY M. V. MEYER AT COMPUTER SERVICES,
      4       C     UNIVERSITY OF ALABAMA HUNTSVILLE.
      5       C
      6       C
      7       C        PROGRAM SITES GENERATES THE STATISTICS:
      8       C
      9       C     MAXIMUM, MINIMUM, AVERAGE, STANDARD DEVIATION, SURFACE AVERAGE,
     10       C
     11       C     AND BOTTOM AVERAGE FOR EACH SPAN OF TEMPERATURE READINGS
     12       C
     13       C     ENTERED.
     14       C
     15       C        FOR EVERY FOUR SPANS CALCULATED THE SAME STATISTICS ARE
     16       C
     17       C     GENERATED PLUS A CLIMATOLOGICAL DATA CARD IS READ FORMATTED
     18       C
     19       C     AND PRINTED.
     20       C
     21       C        PROGRAM OUTPUTS CONSIST OF TWO PRINT FILES AND A MASS STORAGE
     22       C
     23       C     FILE.  THE FIRST PRINT FILE CONSISTS OF THE INPUT DATA AS WELL AS
     24       C
     25       C     THE STATISTICS GENERATED. THE SECOND PRINT FILE CONTAINS ONLY THE
     26       C
     27       C     STATISTICS GENERATED.  THE MASS STORAGE FILE CONTAINS THE SAME
     28       C
     29       C     STATISTICS AS WERE GENERATED AT THE END OF THE FOURTH SPAN AND
     30       C
     31       C     ARE USED AS INPUT FOR GRAPHING PURPOSES.
     32       C
     33       C
     34       C     VARIABLES USED IN PROGRAM SITES ARE AS FOLLOWS:
     35       C
     36       C     A***DATA ARRAY USED TO HOLD ALL CARD IMAGES FOR A SPAN
     37       C
     38       C     ALMAX***HIGHEST TEMPERATURE IN THE FOUR SPANS
     39       C
     40       C     ALMEAN***AVERAGE TEMPERATURE OF THE FOUR SPANS
     41       C
     42       C     ALMIN***MINIMUM TEMPERATURE OF THE FOUR SPANS
     43       C
     44       C     ALMNCT***COUNTER USED TO CALCULATE ALMEAN
     45       C
     46       C     ALSAVG***AVERAGE SURFACE TEMPERATURE
     47       C
     48       C     BAVG***BOTTOM AVERAGE FOR A SPAN
     49       C
     50       C     BCT***COUNTER USED TO CALCULATE BAVG
     51       C
     52       C     DATE***DATE OF THE READINGS
     53       C
     54       C     HOLD***VARIABLE USED TO TEST FOR A CHANGE OF SPAN
     55       C
     56       C     I***GENERAL SERVICE DO LOOP INDEX


     57       C
     58       C     ICNT***NUMBER OF SPANS CALCULATED
     59       C
     60       C     I52 - I510***COUNTERS USED FOR THE NUMBER OF READINGS
     61       C                        PER SITE PER SPAN
     62       C
     63       C     J***COUNTER USED IN PRINT OUTPUT
     64       C
     65       C     K***COUNTER FOR THE NUMBER OF READINGS PER SPAN
     66       C
     67       C     M,N***COUNTERS USED TO PACK DATA ARRAYS TO CALCULATE STATISTICS
     68       C
     69       C     NAME1***SPAN NAME
     70       C
     71       C     SAVG***SURFACE AVERAGE
     72       C
     73       C     SCNT***NUMBER OF SAVG READINGS
     74       C
     75       C     SPNCT***NUMBER OF SPANS CALCULATED
     76       C
     77       C     S2 - S10***NUMBER OF READINGS PER SITE
     78       C
     79       C     S2MAX - S10MAX***MAXIMUM READING PER SITE
     80       C
     81       C     S2MIN - S10MIN***MINIMUM READING PER SITE
     82       C
     83       C     S2MN -S10MN***MEAN FOR EACH SITE
     84       C
     85       C     S2SD - S10SD***STANDARD DEVIATION FOR EACH SITE
     86       C
     87       C     TBAVG***MEAN OF BOTTOM AVERAGE FOR FOUR SPANS
     88       C
     89       C     TBCT***NUMBER OF BOTTOM READINGS PER SPAN
     90       C
     91       C     TEMP***HOLDING LOCATIONS FOR SINGLE DATA CARD IMAGE
     92       C
     93       C     TSAVG***MEAN OF SURFACE AVERAGES FOR FOUR SPANS
     94       C
     95       C     TSCT***NUMBER OF SURFACE READINGS PER SPAN
     96       C
     97       C     UNIT 3 ***ALTERNATE PRINT FILE
     98       C
     99       C     UNIT 5 ***CARD READER
    100       C
    101       C     UNIT 6 ***PRINTER
    102       C
    103       C     UNIT 7 STATISTICS FILE FOR GRAPHING
    104       C
    105       C
    106             DIMENSION S2(15),S4(15),S6(15),S8(15),S10(15),TEMP(7),A(15,7)
    107             ICNT=0
    108             ALMEAN=0.0
    109             ALBAVG=0.0
    110             ALSAVG=0.0
    111             SPNCNT=0.0
    112             TSCT=0.0
    113             TBCT=0.0
```

```
            ALMIN=200.00
            ALMAX=0.001
            ALMNCT=0.0
        100 READ(5,500,END=777) (TEMP(I),I=1,7)
        500 FORMAT(7A6)
            WRITE(6,613)
        613 FORMAT(58HITEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSS
           1NG)
            WRITE(3,700) TEMP(2)
         26 K=0
         22 HOLD=TEMP(1)
            K=K+1
         12 DO 50 I=1,7
         50 A(K,I)=TEMP(I)
            READ(30,501,ERR=27) NAME1,DATE,S2(K),S4(K),S6(K),S8(K),S10(K)
        501 FORMAT(2A6,5F6.2)
            READ(5,500,END=27) (TEMP(I),I=1,7)
            IF(TEMP(1) .GT. HOLD .OR. TEMP(1) .LT. HOLD)GO TO 11
            GO TO 22
         27 SPNCNT=10.0
         11 SPNCNT=SPNCNT+1.0
            WRITE(6,600)
            WRITE(3,701) HOLD
        701 FORMAT(' ',9X,A6,9X,'SITE 2',10X,'SITE 4',10X,'SITE 6',10X,
           1'SITE 8',10X,'SITE 10')
        600 FORMAT(' ',12X,12X,'SITE 2',10X,'SITE 4',10X,'SITE 6',10X,'SITE 8'
           1,10X,'SITE 10')
            DO 100 I=1,K
        100 WRITE(6,601 A(I,1),A(I,2),I,(A(I,J),J=3,7)
        601 FORMAT(' ',A6,3X,A6,5X,I2,'.',2X,5(A6,10X))
            I52=0
            I54=0
            I56=0
            I58=0
            I510=0
            BAVG=0.0
            SAVG=0.0
            BCT=0.0
            SCNT=0.0
C
C
C       TOTAL FOR BOTTOM AVERAGES AND KEEP COUNT OF HOW MANY
C
            IF(S2(I) .LT. 0.001)GO TO 1
            BAVG=BAVG+S2(I)
            BCT=BCT+1.0
          1 IF(S4(I) .LT. 0.001)GO TO 2
            BAVG=BAVG+S4(I)
            BCT=BCT+1.0
          2 IF(S6(I) .LT.0.001)GO TO 3
            BAVG=BAVG+S6(I)
            BCT=BCT+1.0
          3 IF(S8(I) .LT. 0.001)GO TO 4
            BAVG=BAVG+S8(I)
            BCT=BCT+1.0
          4 IF(S10(I) .LT. 0.001)GO TO 5
            BAVG=BAVG+S10(I)


            BCT=BCT+1.0
          5 CONTINUE
C
C
C       TOTAL BOTTOM COUNT FOR EACH SPAN
C       BOTTOM AVERAGE FOR FOUR SPANS
C        BOTTOM AVERAGE FOR THIS SPAN
C
            TBCT=TBCT+BCT
            ALBA.O=ALBAVG+BAVG
            BAVG=BAVG/BCT
C
C
C       FIND THE NUMBER OF DATA POINTS FOR EACH SITE
C
            DO 55 M=1,K
            IF(S2(M) .GT. 0.001)I52=I52+1
            IF(S4(M) .GT. 0.001)I54=I54+1
            IF(S6(M) .GT. 0.001)I56=I56+1
            IF(S8(M) .GT. 0.001)I58=I58+1
         55 IF(S10(M) .GT. 0.001)I510=I510+1
C
C
C       PACK DATA POINTS FOR USE IN STATISTICS AND SET OMITTED
C            READINGS TO -2.0
C
            N=K-1
            DO 60 I=1,K
            DO 65 M=1,N
            IF(S2(M) .GT. 0.001)GO TO 13
            S2(M)=S2(M+1)
            S2(M+1)=-2.0
         13 IF(S4(M) .GT. 0.001)GO TO 14
            S4(M)=S4(M+1)
            S4(M+1)=-2.0
         14 IF(S6(M) .GT. 0.001)GO TO 15
            S6(M)=S6(M+1)
            S6(M+1)=-2.0
         15 IF(S8(M) .GT. 0.001)GO TO 16
            S8(M)=S8(M+1)
            S8(M+1)=-2.0
         16 IF(S10(M) .GT. 0.001)GO TO 65
            S10(M)=S10(M+1)
            S10(M+1)=-2.0
         65 CONTINUE
         60 CONTINUE
C
C
C       TOTAL FOR SURFACE AVERAGES AND COUNT HOW MANY
C
            IF(S2(I52) .LT. 0.001)GO TO 6
            SAVG=SAVG+S2(I52)
            SCNT=SCNT+1.0
          6 IF(S4(I54) .LT. 0.001)GO TO 7
            SAVG=SAVG+S4(I54)
            SCNT=SCNT+1.0
          7 IF(S6(I56) .LT. 0.001)GO TO 8
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            SAVG=SAVG+S6(I56)
            SCNT=SCNT+1.0
          8 IF(S8(I58) .LT.0.001)GO TO 9
            SAVG=SAVG+S8(I58)
            SCNT=SCNT+1.0
          9 IF(S10(I510) .LT. 0.001)GO TO 10
            SAVG=SAVG+S10(I510)
            SCNT=SCNT+1.0
C
C
C     TOTAL SURFACE COUNT FOR EACH SPAN
C     SURFACE AVERAGE FOR FOUR SPANS
C     SURFACE AVERAGE FOR THIS SPAN
         10 CONTINUE
            TSCT=TSCT+SCNT
            ALSAVG=ALSAVG+SAVG
            SAVG=SAVG/SCNT
C
C
C     CALCULATE MEAN AND STANDARD DEVIATION FOR ALL SITES
C           IN THIS SPAN
            IF(I52 .EQ. 0)GO TO 17
            S2MN=-1.0
            ALMNCT=ALMNCT+1.0
            CALL STDEV(S2,I52,S2MN,S2SD)
         17 IF(I54 .EQ. 0)GO TO 18
            S4MN=-1.0
            ALMNCT=ALMNCT+1.0
            CALL STDEV(S4,I54,S4MN,S4SD)
         18 IF(I56 .EQ. 0)GO TO 19
            S6MN=-1.0
            ALMNCT=ALMNCT+1.0
            CALL STDEV(S6,I56,S6MN,S6SD)
         19 IF(I58 .EQ. 0)GO TO 20
            S8MN=-1.0
            ALMNCT=ALMNCT+1.0
            CALL STDEV(S8,I58,S8MN,S8SD)
         20 IF(I510 .EQ. 0)GO TO 21
            S10MN=-1.0
            ALMNCT=ALMNCT+1.0
            CALL STDEV(S10,I510,S10MN,S10SD)
         21 S2MAX=S2(1)
            S2MIN=S2(1)
C
C
C     FIND MIN AND MAX VALUES FOR EACH SITE
C
            DO 70 I=1,I52
            IF(S2MIN .GT. S2(I))S2MIN=S2(I)
         70 IF(S2MAX .LT. S2(I))S2MAX=S2(I)
            S4MAX=S4(1)
            S4MIN=S4(1)
            DO 75 I=1,I54
            IF(S4MIN .GT. S4(I))S4MIN=S4(I)
         75 IF(S4MAX .LT. S4(I))S4MAX=S4(I)
            S6MAX=S6(1)
            S6MIN=S6(1)


            DO 80 I=1,I56
            IF(S6MIN .GT. S6(I))S6MIN=S6(I)
         80 IF(S6MAX .LT. S6(I))S6MAX=S6(I)
            S8MAX=S8(1)
            S8MIN=S8(1)
            DO 85 I=1,I58
            IF(S8MIN .GT. S8(I))S8MIN=S8(I)
         85 IF(S8MAX .LT. S8(I))S8MAX=S8(I)
            S10MAX=S10(1)
            S10MIN=S10(1)
            DO 90 I=1,I510
            IF(S10MIN .GT. S10(I))S10MIN=S10(I)
         90 IF(S10MAX .LT. S10(I))S10MAX=S10(I)
C
C
C     CALCULATE MINIMUM VALUE PER FOUR SPANS
C
            IF(ALMIN .GT. S2MIN)ALMIN=S2MIN
            IF(ALMIN .GT. S4MIN)ALMIN=S4MIN
            IF(ALMIN .GT. S6MIN)ALMIN=S6MIN
            IF(ALMIN .GT. S8MIN)ALMIN=S8MIN
            IF(ALMIN .GT. S10MIN)ALMIN=S10MIN
C
C
C     CALCULATE MAXIMUM VALUE PER FOUR SPANS
C
            IF(ALMAX .LT. S2MAX)ALMAX=S2MAX
            IF(ALMAX .LT. S4MAX)ALMAX=S4MAX
            IF(ALMAX .LT. S6MAX)ALMAX=S6MAX
            IF(ALMAX .LT. S8MAX)ALMAX=S8MAX
            IF(ALMAX .LT. S10MAX)ALMAX=S10MAX
C
C
C     IF ALL READINGS THIS SITE OMITTED ZERO OUT STATISTICS
C
            IF(I52 .GE. 1)GO TO 105
            S2MIN=0.0
            S2MAX=0.0
            S2MN=0.0
            S2SD=0.0
        105 IF(I54 .GE. 1)GO TO 110
            S4MIN=0.0
            S4MAX=0.0
            S4MN=0.0
            S4SD=0.0
        110 IF(I56 .GE. 1)GO TO 115
            S6MIN=0.0
            S6MAX=0.0
            S6MN=0.0
            S6SD=0.0
        115 IF(I58 .GE. 1)GO TO 120
            S8MIN=0.0
            S8MAX=0.0
            S8MN=0.0
            S8SD=0.0
        120 IF(I510 .GE. 1)GO TO 125
            S10MIN=0.0
```

```
342             S10MAX=0.0
343             S10MN=0.0
344             S10SD=0.0
345       C
346       C
347       C     WRITE PRINT FILES FOR ONE SPAN CALCULATED
348       C
349         125 WRITE(6,602)S2MAX,S4MAX,S6MAX,S8MAX,S10MAX
350             WRITE(3,602)S2MAX,S4MAX,S6MAX,S8MAX,S10MAX
351         602 FORMAT('0',16X,'MAXIMUM',5(F6.2,10X))
352             WRITE(6,603)S2MIN,S4MIN,S6MIN,S8MIN,S10MIN
353             WRITE(3,603)S2MIN,S4MIN,S6MIN,S8MIN,S10MIN
354         603 FORMAT(' ',16X,'MINIMUM',5(F6.2,10X))
355             WRITE(6,604)S2MN,S4MN,S6MN,S8MN,S10MN
356             WRITE(3,604)S2MN,S4MN,S6MN,S8MN,S10MN
357         604 FORMAT(' ',16X,'AVERAGE',5(F6.2,10X))
358             WRITE(6,605)S2SD,S4SD,S6SD,S8SD,S10SD
359             WRITE(3,605)S2SD,S4SD,S6SD,S8SD,S10SD
360         605 FORMAT(' ',16X,'ST.DEV.',5(F6.2,10X))
361             WRITE(6,606)SAVG,BAVG
362             WRITE(3,606)SAVG,BAVG
363         606 FORMAT(' ',33X,'SURFACE AVG.',F6.2,5X,'BOTTOM AVG.',F6.2,/,/)
364             ALMEAN=ALMEAN+S2MN+S4MN+S6MN+S8MN+S10MN
365       C
366       C
367       C     ZERO OUT DATA LOCATIONS
368       C
369             DO 95 I=1,15
370             S2(I)=0.0
371             S4(I)=0.0
372             S6(I)=0.0
373             S8(I)=0.0
374          95 S10(I)=0.0
375             ICNT=ICNT+1
376       C
377       C
378       C     TEST IF FOUR SPANS CALCULATED IF NOT GET ANOTHER DATA CARD
379       C
380             IF(SPNCNT .LT. 4.0)GO TO 26
381       C
382       C
383       C     CALCULATE STATISTICS FOR FOUR SPANS
384       C
385             TBAVG=ALBAVG/TBCT
386             TSAVG=ALSAVG/TSCT
387             ALMEAN=ALMEAN/ALMNCT
388       C
389       C
390       C     WRITE PRINT FILE FOR FOUR SPANS CALCULATED
391       C
392             J=1
393             IF(ALMEAN .GT. 125.0)ALMEAN=0.0
394             WRITE(6,620)TEMP(1)
395             WRITE(3,620)TEMP(1)
396         620 FORMAT(' ',47X,'DATE',3X,A6)
397             WRITE(6,607)ICNT,J,ALMEAN
398             WRITE(3,607)ICNT,J,ALMEAN


399         607 FORMAT(' ',36X,II,' SPANS CALCULATED, THE RESULTS ARE:',/,' ',41X,
400            1II,')',1X,'AVERAGE TEMP.',2X,F6.2)
401             J=J+1
402             WRITE(6,609)J,ALMAX
403             WRITE(3,609)J,ALMAX
404         609 FORMAT(' ',41X,II,')',1X,'MAXIMUM VALUE',2X,F6.2)
405             J=J+1
406             IF(ALMIN .LT. 0.0)ALMIN=0.0
407             WRITE(6,608)J,ALMIN
408             WRITE(3,608)J,ALMIN
409         608 FORMAT(' ',41X,II,')',1X,'MINIMUM VALUE',2X,F6.2)
410             J=J+1
411             WRITE(6,610)J,TSAVG
412             WRITE(3,610)J,TSAVG
413         610 FORMAT(' ',41X,(I,')',1X,'SURFACE AVG.',3X,F6.2)
414             J=J+1
415             WRITE(6,611)J,TBAVG
416             WRITE(3,611)J,TBAVG
417         611 FORMAT(' ',41X,II,')',1X,'BOTTOM AVG.',4X,F6.2)
418             WRITE(6,621)TEMP(2)
419             WRITE(3,621)TEMP(2)
420         621 FORMAT(' ',44X,'AIR TEMP AVG.',2X,A6)
421             WRITE(6,622)TEMP(3)
422             WRITE(3,622)TEMP(3)
423         622 FORMAT(' ',44X,'WIND DIRECTION',1X,A6)
424             WRITE(6,615)TEMP(4)
425             WRITE(3,615)TEMP(4)
426         615 FORMAT(' ',44X,'WIND SPEED',5X,A6)
427             WRITE(6,616)TEMP(6)
428             WRITE(3,616)TEMP(5)
429         616 FORMAT(' ',44X,'CLOUD COVER',4X,A6)
430       C
431       C
432       C     IF STATISTIC OMITTED INTRODUCE DUMMY VALUE
433       C           TO TEST FOR IN GRAPHING PROGRAM
434       C
435             IF(ALMEAN .LT. 0.001)ALMEAN=999.99
436             IF(ALMAX .LT. 0.001)ALMAX=999.99
437             IF(ALMIN .LT. 0.001)ALMIN=999.99
438             IF(TSAVG .LT. 0.001)TSAVG=999.99
439             IF(TBAVG .LT. 0.001)TBAVG=999.99
440       C
441       C
442       C     WRITE GRAPHING DATA
443       C
444             WRITE(7,617)TEMP(1),TEMP(2),ALMEAN,ALMAX,ALMIN,TSAVG,TBAVG
445         617 FORMAT(2A6,5(F6.2),38X)
446       C
447       C
448       C     TEST FOR AN END OF FILE ON DATA
449       C
450             IF(SPNCNT .GT. 5.0) GO TO 777
451             ICNT=0
452             ALMEAN=0.0
453             ALBAVG=0.0
454             ALSAVG=0.0
455             SPNCNT=0.0
```

```
456             TSCT=0.0
457             ALMAX=0.001
458             ALMIN=200.0
459             TBCT=0.0
460             ALMNCT=0.0
461           700 FORMAT('1',06X,'STATISTICAL OUTPUT FROM TEMPERATURE READINGS AT @R
462              1OWNS FERRY POWERLINE CROSSING  DATE: ',A6)
463         C
464         C
465         C       FOUR SPANS PRINTED RETURN AND CHECK FOR MORE DATA
466         C
467             GO TO 130
468           777 WRITE(6,612)
469           612 FORMAT('0','END OF DATA ENCOUNTERED')
470             STOP
471             END


@END
@END IGNORED - IN CONTROL MODE


@PRT,S ROSE.SBUGS
FURPUR 0026-06/05-12:37
```

APPENDIX B

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	060672	1)	77.	74.8	74.5	74.5	74.
SPAN A	060672	2)	77.5	75.1	74.6	75.	74.2
SPAN A	060672	3)		75.5		75.	
SPAN A	060672	4)		75.6	74.5	75.1	73.5
SPAN A	060672	5)			75.	75.2	73.5
SPAN A	060672	6)			75.5	75.5	73.4
SPAN A	060672	7)			77.	76.5	74.5
SPAN A	060672	8)			78.1	77.5	75.5
SPAN A	060672	9)				78.2	76.7
		MAXIMUM	77.50	75.60	78.10	78.20	76.70
		MINIMUM	77.00	74.80	74.50	74.50	73.40
		AVERAGE	77.25	75.25	75.60	75.83	74.41
		ST.DEV.	.35	.37	1.41	1.28	1.15
				SURFACE AVG. 77.22	BOTTOM AVG. 74.96		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	060672	1)	74.2	74.6	74.5	74.3	74.8
SPAN B	060672	2)	74.5	74.8	74.6	74.6	75.
SPAN B	060672	3)			75.5		
SPAN B	060672	4)	76.2	76.	76.3	76.5	76.6
		MAXIMUM	76.20	76.00	76.30	76.50	76.60
		MINIMUM	74.20	74.60	74.50	74.30	74.80
		AVERAGE	74.97	75.13	75.22	75.13	75.47
		ST.DEV.	1.08	.76	.85	1.19	.99
				SURFACE AVG. 76.32	BOTTOM AVG. 74.48		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	060672	1)	75.	74.	74.	73.	73.5
SPAN C	060672	2)	75.3	74.2	74.2	73.5	73.8
SPAN C	060672	3)	75.5	75.2			
SPAN C	060672	4)	75.6	75.	74.2	74.1	74.2
SPAN C	060672	5)	75.7	75.	74.9	74.1	74.2
SPAN C	060672	6)	76.	75.3	75.	74.5	74.8
SPAN C	060672	7)		76.	75.5	75.5	77.5
SPAN C	060672	8)	76.8	78.	77.5	76.3	78.
SPAN C	060672	9)	76.8	78.	78.1	77.3	78.2
		MAXIMUM	76.80	78.00	78.10	77.30	78.20
		MINIMUM	75.00	74.00	74.00	73.00	73.50
		AVERAGE	75.84	75.63	75.42	74.79	75.52
		ST.DEV.	.66	1.46	1.56	1.46	2.01
				SURFACE AVG. 77.68	BOTTOM AVG. 73.90		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	060672	1)	75.	75.	74.5	74.5	74.
SPAN D	060672	2)	75.4	75.2	74.6	74.7	75.3
SPAN D	060672	3)	76.6	75.5			75.7
SPAN D	060672	4)	79.	79.5	78.5	79.5	78.
SPAN D	060672	5)	79.2	79.	78.8	79.5	
SPAN D	060672	6)	79.5				
		MAXIMUM	79.50	79.50	78.80	79.50	78.00
		MINIMUM	75.00	75.00	74.50	74.50	74.00
		AVERAGE	77.45	76.84	76.60	77.05	75.75
		ST.DEV.	2.03	2.21	2.37	2.83	1.67
				SURFACE AVG. 78.96	BOTTOM AVG. 74.60		

DATE 060672
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 75.76
2) MAXIMUM VALUE 79.50
3) MINIMUM VALUE 73.00
4) SURFACE AVG. 77.54
5) BOTTOM AVG. 74.48

AIR TEMP AVG. 79.
WIND DIRECTION 32.
WIND SPEED 7.8
CLOUD COVER 1.

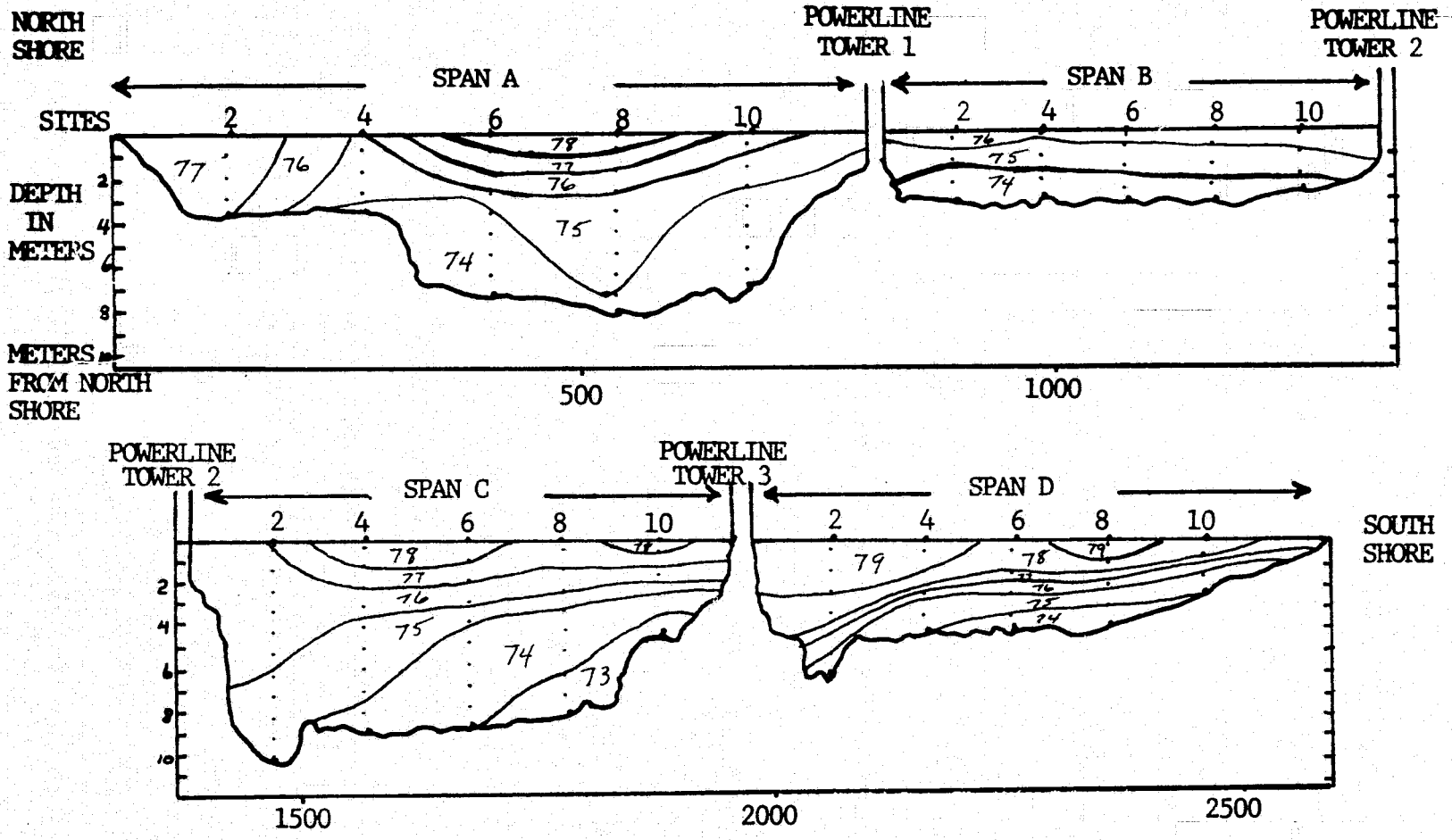

FIGURE 5. RIVER THERMAL PROFILE OF JUNE 6, 1972 WITH A FLOW RATE OF 45,764 cf/s, AIR TEMPERATURE OF 79°F AND 10% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	061372	1)	74.5	75.	76.	75.5	74.6
SPAN A	061372	2)	74.9	75.4	76.1	75.5	74.7
SPAN A	061372	3)	75.	75.5	76.	75.7	74.6
SPAN A	061372	4)	75.1	75.8	76.	75.6	74.6
SPAN A	061372	5)	76.6	76.	76.	75.6	74.6
SPAN A	061372	6)			76.	75.7	74.6
SPAN A	061372	7)			75.8	75.6	74.7
SPAN A	061372	8)			76.	75.6	74.7
SPAN A	061372	9)			75.5	75.7	
		MAXIMUM	76.60	76.00	76.10	75.70	74.70
		MINIMUM	74.50	75.00	75.50	75.50	74.60
		AVERAGE	75.22	75.54	75.93	75.61	74.64
		ST.DEV.	.80	.38	.18	.08	.05
				SURFACE AVG. 75.70	BOTTOM AVG. 75.12		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	061372	1)	74.5	74.5	74.2	74.2	75.
SPAN B	061372	2)	74.6	74.5	74.5	74.5	75.2
SPAN B	061372	3)	74.9	74.5	74.6	74.6	75.5
SPAN B	061372	4)	75.	74.5	74.5	74.8	
		MAXIMUM	75.00	74.50	74.60	74.80	75.50
		MINIMUM	74.50	74.50	74.20	74.20	75.00
		AVERAGE	74.75	74.50	74.45	74.52	75.23
		ST.DEV.	.24	.00	.17	.25	.25
				SURFACE AVG. 74.86	BOTTOM AVG. 74.48		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	061372	1)	75.3	75.	73.8	74.6	75.5
SPAN C	061372	2)	75.5	75.2	73.8	74.6	75.8
SPAN C	061372	3)	75.6	75.3	74.	75.	76.3
SPAN C	061372	4)	75.8	75.5	74.	74.7	76.4
SPAN C	061372	5)	75.8	75.5	74.	74.6	77.
SPAN C	061372	6)	75.8	75.5	74.	74.6	
SPAN C	061372	7)	75.6	75.5	74.1	74.8	
SPAN C	061372	8)	76.	75.5	74.	74.8	
SPAN C	061372	9)	76.	75.8			
		MAXIMUM	76.00	75.80	74.10	75.00	77.00
		MINIMUM	75.30	75.00	73.80	74.60	75.50
		AVERAGE	75.71	75.46	73.96	74.71	76.20
		ST.DEV.	.23	.26	.11	.15	.58
				SURFACE AVG. 75.52	BOTTOM AVG. 74.84		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	061372	1)	75.4	75.5	73.8	73.4	73.5
SPAN D	061372	2)	75.4	75.5	73.8	73.5	74.5
SPAN D	061372	3)	75.	74.8	73.5	73.8	
SPAN D	061372	4)	75.2	75.6	74.	74.	
SPAN D	061372	5)	75.2				
		MAXIMUM	75.40	75.60	74.00	74.00	74.50
		MINIMUM	75.00	74.80	73.50	73.40	73.50
		AVERAGE	75.24	75.35	73.77	73.67	74.00
		ST.DEV.	.17	.37	.21	.28	.71
				SURFACE AVG. 74.66	BOTTOM AVG. 74.32		

DATE 061372
4 SPANS CALCULATED, THE RESULTS ARE:

1)	AVERAGE TEMP.	74.92
2)	MAXIMUM VALUE	77.00
3)	MINIMUM VALUE	73.40
4)	SURFACE AVG.	75.18
5)	BOTTOM AVG.	74.69
	AIR TEMP AVG.	76.
	WIND DIRECTION	16.
	WIND SPEED	6.3
	CLOUD COVER	6.

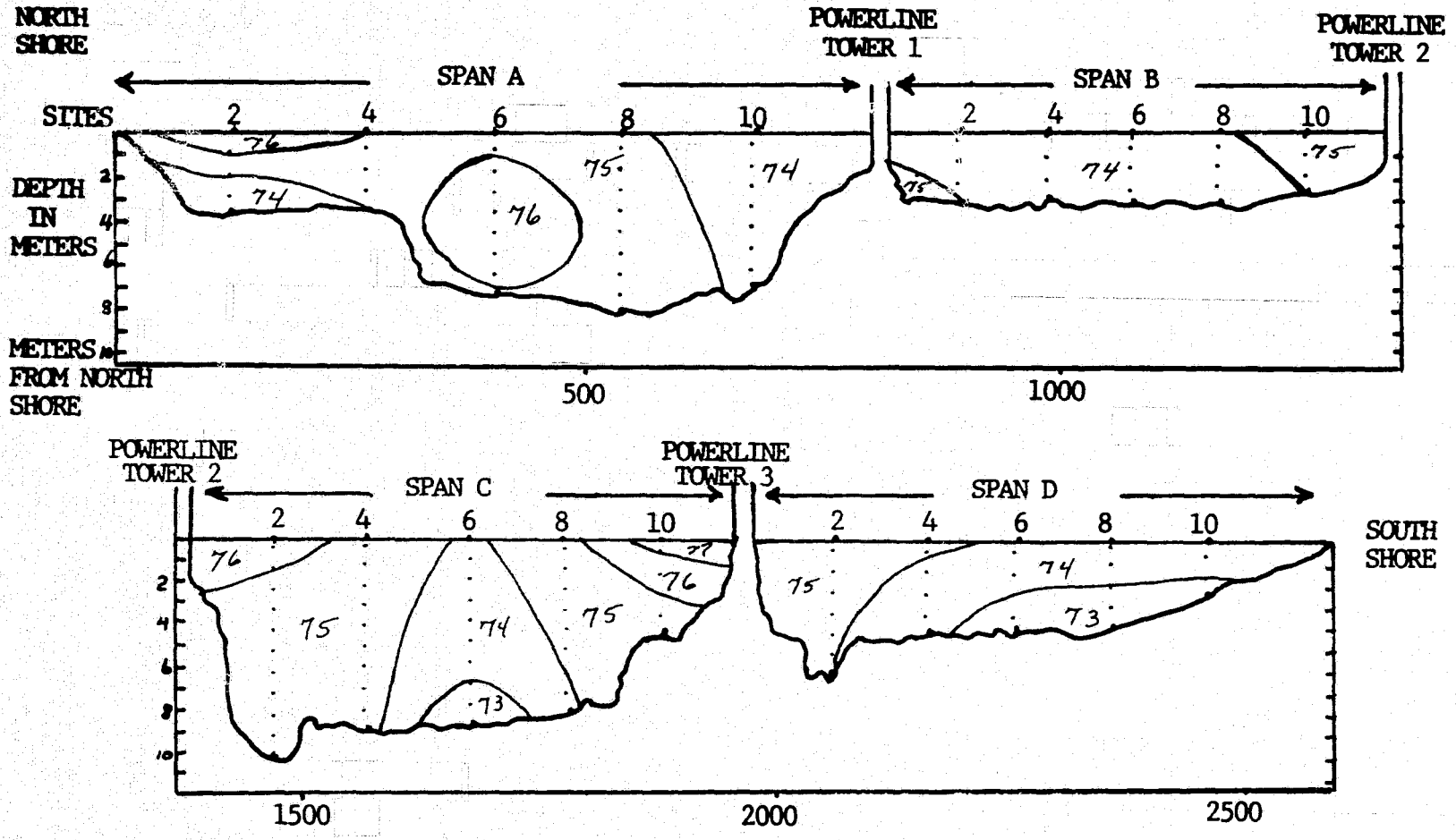

FIGURE 6. RIVER THERMAL PROFILE OF JUNE 13, 1972 WITH A FLOW RATE OF 20,396 cf/s, AIR TEMPERATURE OF 76°F AND 60% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	062172	1)	76.8	77.	76.8	77.6	78.
SPAN A	062172	2)	76.8	76.8	76.8	77.1	78.
SPAN A	062172	3)	77.	77.	77.		
SPAN A	062172	4)	76.8	77.	76.9	78.4	78.2
SPAN A	062172	5)		76.5	76.6	78.	77.8
SPAN A	062172	6)			76.6	77.5	77.6
SPAN A	062172	7)			76.7	77.5	77.5
SPAN A	062172	8)			76.7	77.5	77.5
SPAN A	062172	9)			76.7	77.5	77.2
SPAN A	062172	10)				77.	77.
		MAXIMUM	77.00	77.00	77.00	78.40	78.20
		MINIMUM	76.80	76.50	76.60	77.00	77.00
		AVERAGE	76.85	76.96	76.76	77.57	77.64
		ST.DEV.	.10	.22	.13	.42	.39
				SURFACE AVG. 76.80		BOTTOM AVG. 77.24	

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	062172	1)	77.5	77.5	77.5	77.5	76.5
SPAN B	062172	2)	77.6	77.5	77.6	77.5	77.
SPAN B	062172	3)	77.6	77.4	77.6	77.5	77.
SPAN B	062172	4)	77.6	77.3	77.8	77.5	77.
		MAXIMUM	77.60	77.50	77.80	77.50	77.00
		MINIMUM	77.50	77.30	77.50	77.50	76.50
		AVERAGE	77.57	77.42	77.62	77.50	76.87
		ST.DEV.	.05	.10	.13	.00	.25
				SURFACE AVG. 77.44		BOTTOM AVG. 77.30	

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	062172	1)	77.	76.1	76.5	75.5	75.5
SPAN C	062172	2)	77.	76.5	76.5	75.6	75.5
SPAN C	062172	3)	77.4	76.2	76.5	75.8	75.7
SPAN C	062172	4)	77.	76.3	76.5	76.	75.8
SPAN C	062172	5)	77.2	76.5	76.5	76.	75.8
SPAN C	062172	6)	77.3	76.6	76.7	76.	75.9
SPAN C	062172	7)	77.	76.5	76.5	76.	75.5
SPAN C	062172	8)	77.	76.7	76.5	76.1	76.
SPAN C	062172	9)	77.	76.7			
		MAXIMUM	77.40	76.70	76.70	76.10	76.00
		MINIMUM	77.00	76.10	76.50	75.50	75.50
		AVERAGE	77.10	76.46	76.52	75.87	75.71
		ST.DEV.	.16	.20	.07	.22	.20
				SURFACE AVG. 76.46		BOTTOM AVG. 76.12	

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	062172	1)	77.1	77.	76.4	76.	77.5
SPAN D	062172	2)	77.1	77.	76.2	76.2	77.8
SPAN D	062172	3)	77.5	76.8	76.5	76.	77.8
SPAN D	062172	4)	77.5	77.	77.	76.3	78.
		MAXIMUM	77.50	77.00	77.00	76.30	78.00
		MINIMUM	77.10	76.80	76.20	76.00	77.50
		AVERAGE	77.30	76.95	76.52	76.12	77.77
		ST.DEV.	.23	.10	.34	.15	.21
				SURFACE AVG. 77.16		BOTTOM AVG. 76.80	

DATE 062172
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 76.95
2) MAXIMUM VALUE 78.40
3) MINIMUM VALUE 75.50
4) SURFACE AVG. 76.96
5) BOTTOM AVG. 76.86
AIR TEMP AVG. 71.
WIND DIRECTION 32.
WIND SPEED 11.1
CLOUD COVER 1.

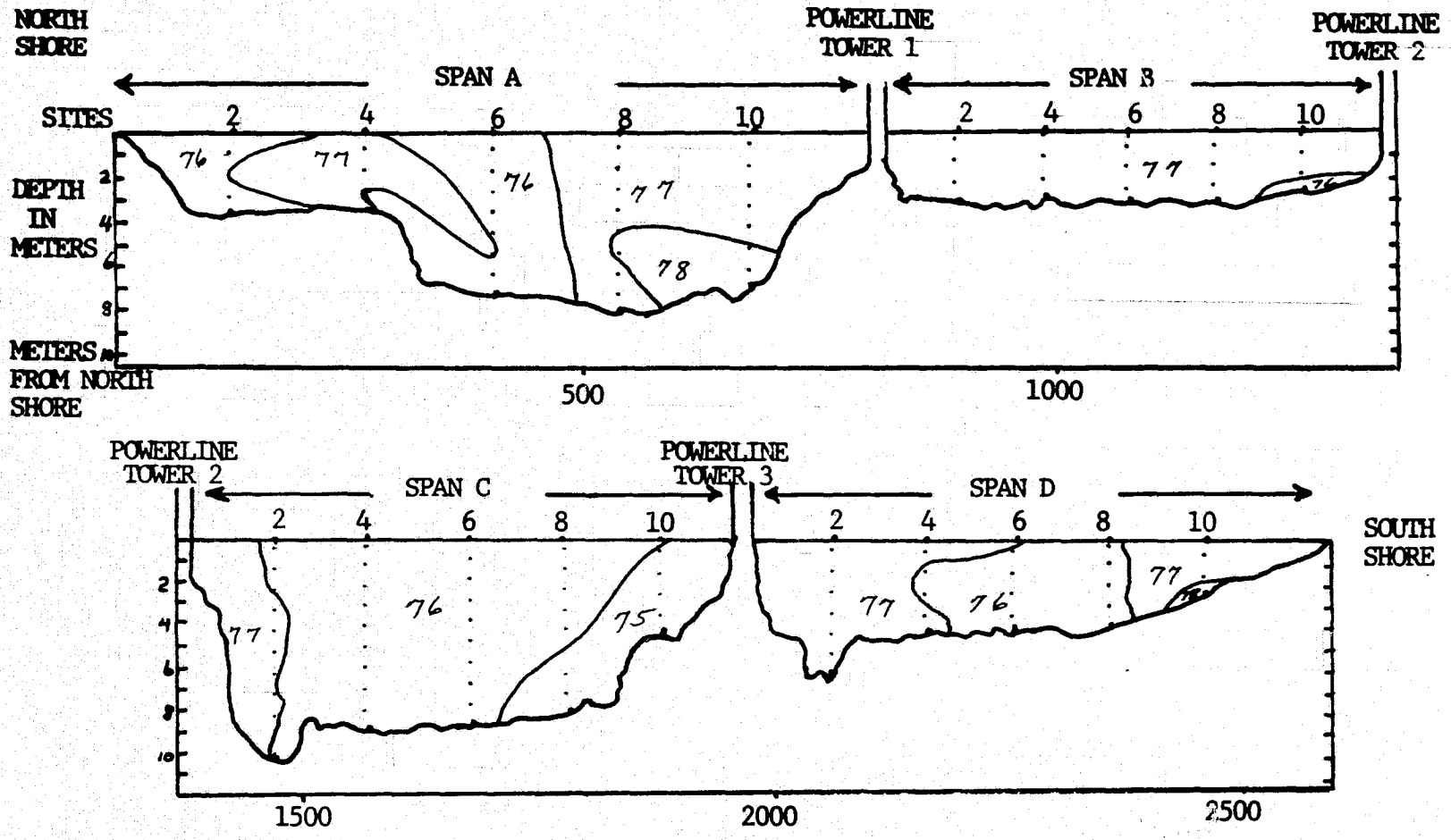

FIGURE 7. RIVER THERMAL PROFILE OF JUNE 21, 1972 WITH A FLOW RATE OF 44,438 cf/s, AIR TEMPERATURE OF 71°F AND 10% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	062772	1)	78.2	78.1	78.	77.9	77.9
SPAN A	062772	2)	78.2	78.1	78.	77.9	77.9
SPAN A	062772	3)	78.4	79.	78.	77.9	77.9
SPAN A	062772	4)	79.7	79.	78.1	77.9	77.9
SPAN A	062772	5)			78.1	78.	78.
SPAN A	062772	6)			78.1	78.	78.
SPAN A	062772	7)			78.4	78.1	78.1
SPAN A	062772	8)			79.	78.2	78.2
SPAN A	062772	9)				78.9	78.9
		MAXIMUM	79.70	79.00	79.00	78.90	78.90
		MINIMUM	78.20	78.10	78.00	77.90	77.90
		AVERAGE	78.62	78.55	78.21	78.09	78.09
		ST.DEV.	.72	.52	.34	.32	.32
				SURFACE AVG. 79.10	BOTTOM AVG. 78.02		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	062772	1)	77.9	77.8	77.8	77.8	77.9
SPAN B	062772	2)	78.	77.9	77.8	77.8	77.9
SPAN B	062772	3)	78.3	78.2	77.9	77.9	77.9
SPAN B	062772	4)	78.8	78.5	80.	80.	80.
		MAXIMUM	78.80	78.50	80.00	80.00	80.00
		MINIMUM	77.90	77.80	77.80	77.80	77.90
		AVERAGE	78.25	78.10	78.37	78.37	78.42
		ST.DEV.	.40	.32	1.08	1.08	1.06
				SURFACE AVG. 79.46	BOTTOM AVG. 77.84		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	062772	1)	77.9	77.9	77.8	77.8	77.8
SPAN C	062772	2)	77.9	77.9	77.8	77.8	77.8
SPAN C	062772	3)	77.9	77.9	77.9	77.8	77.8
SPAN C	062772	4)	77.9	77.9	77.9	77.8	77.8
SPAN C	062772	5)	77.9	77.9	77.9	77.9	77.8
SPAN C	062772	6)	77.9	80.	77.9	77.9	77.9
SPAN C	062772	7)	77.9	80.	78.	77.9	77.9
SPAN C	062772	8)	78.	78.	78.	77.9	78.8
SPAN C	062772	9)	78.1	78.1	79.5	78.8	
		MAXIMUM	78.10	80.00	79.50	78.80	78.80
		MINIMUM	77.90	77.90	77.80	77.80	77.80
		AVERAGE	77.93	78.40	78.08	77.96	77.95
		ST.DEV.	.07	.91	.54	.32	.36
				SURFACE AVG. 78.66	BOTTOM AVG. 77.84		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	062772	1)	77.8	77.8	77.6	77.2	77.2
SPAN D	062772	2)	77.9	77.8	77.5	77.5	77.5
SPAN D	062772	3)	77.9	77.8	77.5	77.5	77.9
SPAN D	062772	4)	77.9	77.9	78.5	78.	
SPAN D	062772	5)	77.9	78.2		78.	
SPAN D	062772	6)	78.9				
		MAXIMUM	78.90	78.20	78.50	78.00	77.90
		MINIMUM	77.80	77.80	77.50	77.20	77.20
		AVERAGE	78.05	77.90	77.77	77.64	77.53
		ST.DEV.	.42	.17	.49	.35	.35
				SURFACE AVG. 78.30	BOTTOM AVG. 77.52		

DATE 062772

4 SPANS CALCULATED, THE RESULTS ARE:

1)	AVERAGE TEMP.	78.12
2)	MAXIMUM VALUE	80.00
3)	MINIMUM VALUE	77.20
4)	SURFACE AVG.	78.88
5)	BOTTOM AVG.	77.80
	AIR TEMP AVG.	73.
	WIND DIRECTION	19.
	WIND SPEED	7.1
	CLOUD COVER	9.

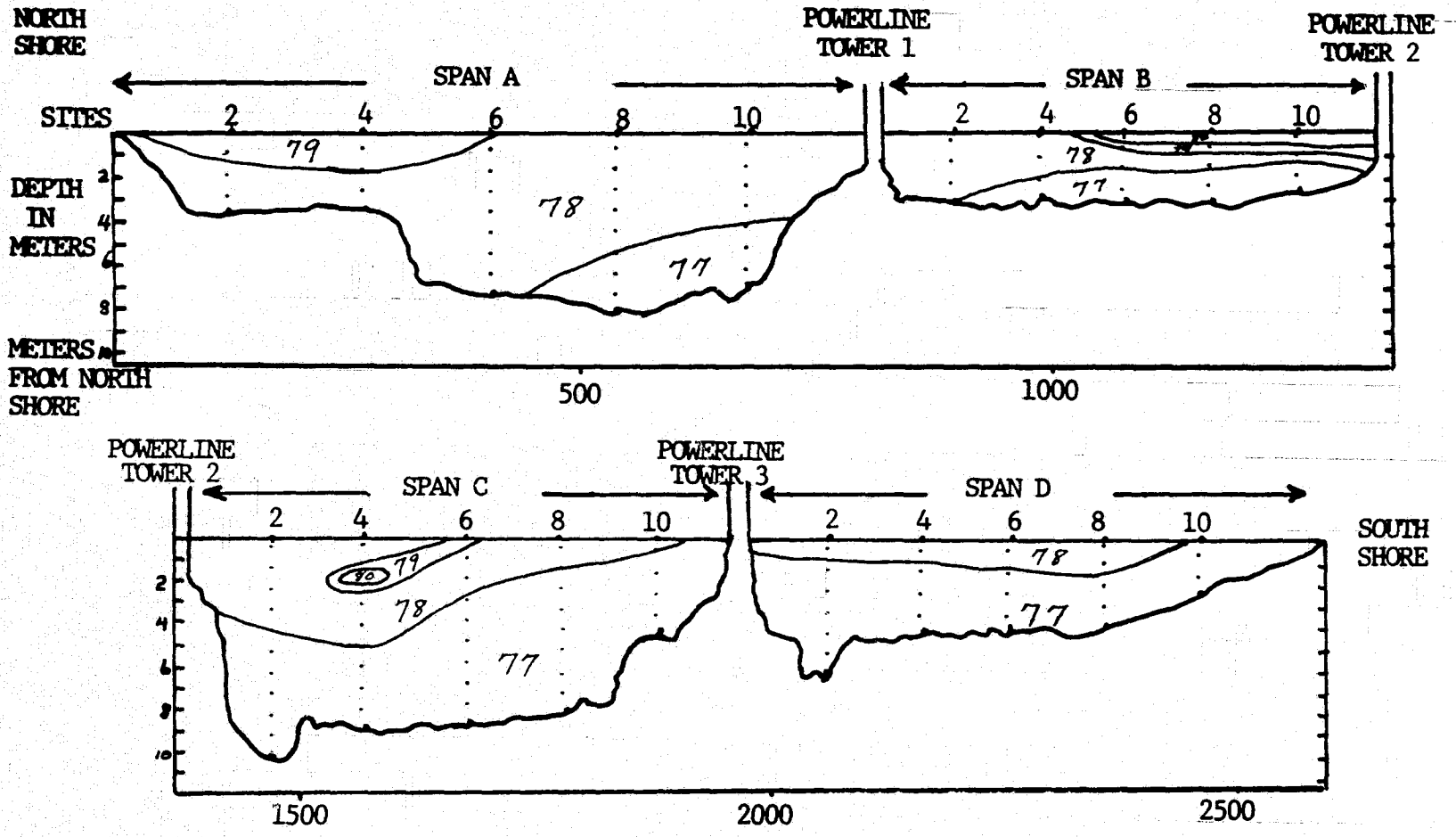

FIGURE 8. RIVER THERMAL PROFILE OF JUNE 27, 1972 WITH A FLOW RATE OF 15,516 cf/s, AIR TEMPERATURE OF 73°F AND 90% CLOUD COVER. NOTE THERMAL INFLUENCE IN SPAN C DUE TO THE RECENT PASSAGE OF A RIVER TUG AND BARGES.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	070672	1)	76.4	74.9	75.9	75.7	75.6
SPAN A	070672	2)	76.5	74.7	75.8	75.9	75.7
SPAN A	070672	3)					
SPAN A	070672	4)	76.7	75.7	75.9		76.8
SPAN A	070672	5)	76.7	75.7	75.9		76.8
SPAN A	070672	6)			76.3		76.2
SPAN A	070672	7)			76.4	76.3	76.1
SPAN A	070672	8)			75.9	76.2	76.
SPAN A	070672	9)			76.1	76.5	76.3
		MAXIMUM	76.70	75.70	76.40	76.50	76.80
		MINIMUM	76.40	74.70	75.80	75.70	75.60
		AVERAGE	76.57	75.25	76.02	76.12	76.19
		ST.DEV.	.15	.53	.22	.32	.45

SURFACE AVG. 76.26 BOTTOM AVG. 75.70

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	070672	1)	76.	75.	75.5	76.	75.1
SPAN B	070672	2)	76.2	75.2	75.6	75.9	74.9
SPAN B	070672	3)					75.1
SPAN B	070672	4)			76.7	77.4	
		MAXIMUM	76.20	75.20	76.70	77.40	75.10
		MINIMUM	76.00	75.00	75.50	75.90	74.90
		AVERAGE	76.10	75.10	75.93	76.43	75.03
		ST.DEV.	.14	.14	.67	.84	.12

SURFACE AVG. 76.12 BOTTOM AVG. 75.52

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	070672	1)	74.9	74.6	74.4	74.4	74.6
SPAN C	070672	2)	74.7	74.7	74.9	74.6	74.4
SPAN C	070672	3)					
SPAN C	070672	4)	75.3		74.8		75.5
SPAN C	070672	5)		74.6	74.9	75.1	75.6
SPAN C	070672	6)	75.5	74.8	74.7	75.3	76.1
SPAN C	070672	7)	75.1	74.5	74.5	75.1	75.3
SPAN C	070672	8)	75.1	74.8	75.	75.5	75.5
SPAN C	070672	9)	74.8	74.6			
		MAXIMUM	75.50	74.80	75.00	75.50	76.10
		MINIMUM	74.70	74.50	74.40	74.40	74.40
		AVERAGE	75.06	74.66	74.74	75.00	75.29
		ST.DEV.	.28	.11	.22	.42	.59

SURFACE AVG. 75.08 BOTTOM AVG. 74.58

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	070672	1)	74.5	74.7	75.	74.3	76.9
SPAN D	070672	2)	74.3	74.9	75.	74.3	77.1
SPAN D	070672	3)					
SPAN D	070672	4)	75.4	75.2	75.3	75.5	76.5
SPAN D	070672	5)	75.2				
		MAXIMUM	75.40	75.20	75.30	75.50	77.10
		MINIMUM	74.30	74.70	75.00	74.30	76.50
		AVERAGE	74.85	74.93	75.10	74.70	76.83
		ST.DEV.	.53	.25	.17	.69	.31

SURFACE AVG. 75.54 BOTTOM AVG. 75.08

DATE 070672
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	75.50
2) MAXIMUM VALUE	77.40
3) MINIMUM VALUE	74.30
4) SURFACE AVG.	75.75
5) BOTTOM AVG.	75.22
AIR TEMP AVG.	67.
WIND DIRECTION	35.
WIND SPEED	3.6
CLOUD COVER	3.

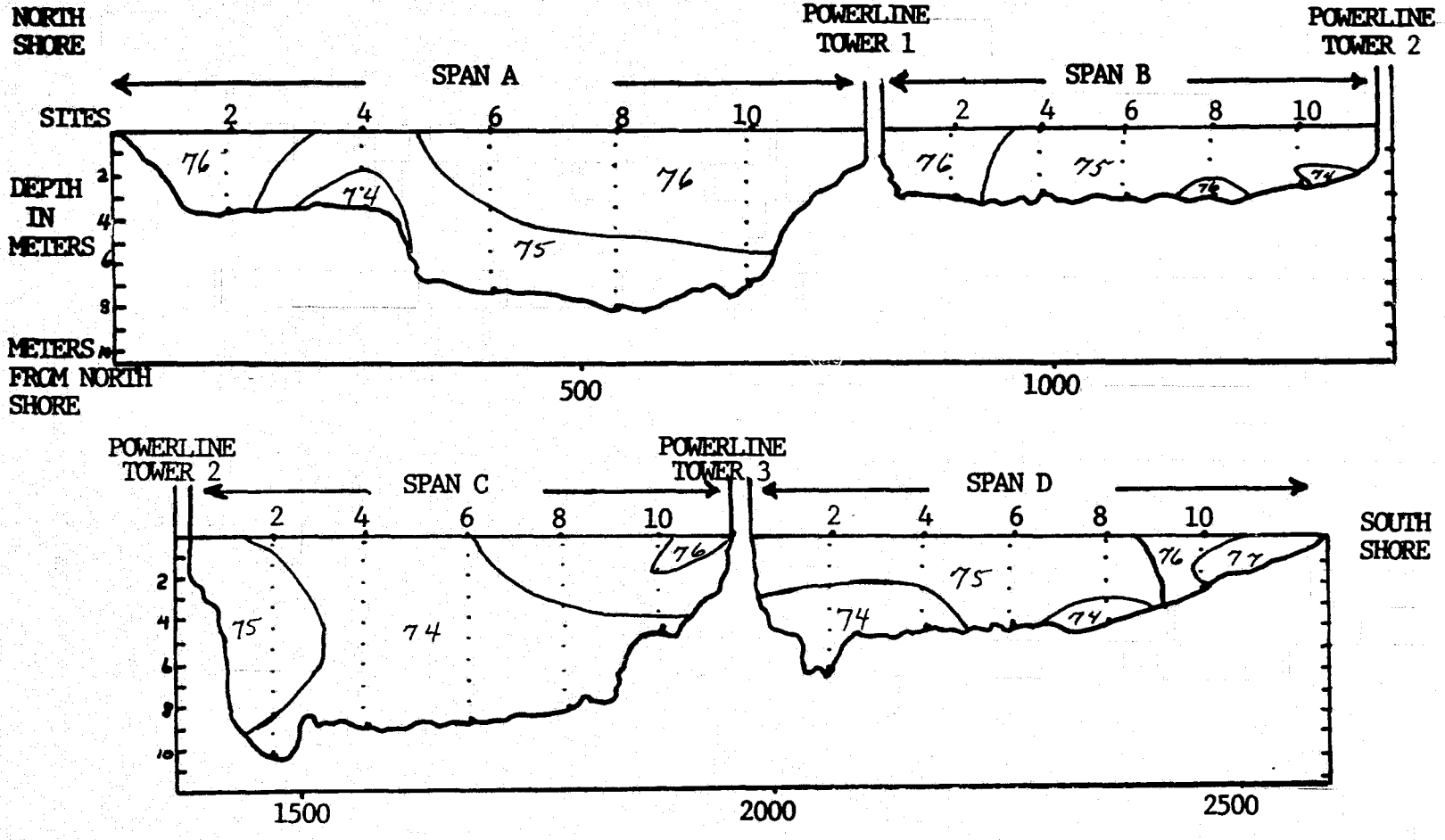

FIGURE 9. RIVER THERMAL PROFILE OF JULY 6, 1972 WITH A FLOW RATE OF 48,532 cf/s, AIR TEMPERATURE OF 67°F AND 30% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	071172	1)	78.1	79.3	79.	79.5	78.4
SPAN A	071172	2)	78.3	79.4	79.1	78.8	78.4
SPAN A	071172	3)				79.	78.2
SPAN A	071172	4)	80.	80.3	79.8	79.	78.8
SPAN A	071172	5)			79.3	79.	78.7
SPAN A	071172	6)			79.3	79.	78.7
SPAN A	071172	7)			79.3	79.	78.7
SPAN A	071172	8)			79.6	79.2	78.8
SPAN A	071172	9)				79.	
		MAXIMUM	80.00	80.30	79.80	79.50	78.80
		MINIMUM	78.10	79.30	79.00	78.80	78.20
		AVERAGE	78.80	79.67	79.34	79.06	78.59
		ST.DEV.	1.04	.55	.28	.19	.22
				SURFACE AVG. 79.54	BOTTOM AVG. 78.86		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	071172	1)	80.	78.6	79.6	78.6	79.4
SPAN B	071172	2)	80.	79.	79.6	78.5	79.4
SPAN B	071172	3)	80.	78.6	79.4	78.1	79.4
SPAN B	071172	4)				80.	
		MAXIMUM	80.00	79.00	79.60	80.00	79.40
		MINIMUM	80.00	78.60	79.40	78.10	79.40
		AVERAGE	80.00	78.73	79.53	78.80	79.40
		ST.DEV.	.00	.23	.12	.83	.00
				SURFACE AVG. 79.48	BOTTOM AVG. 79.24		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	071172	1)	80.1	79.1	78.5	79.5	79.1
SPAN C	071172	2)	80.2	79.	78.4	79.3	78.9
SPAN C	071172	3)			78.2		78.1
SPAN C	071172	4)	80.2				78.9
SPAN C	071172	5)	80.1	80.4	79.1		80.9
SPAN C	071172	6)	80.2			81.	79.5
SPAN C	071172	7)	80.1	79.5	78.4	80.3	79.2
SPAN C	071172	8)	80.3	79.4	78.5	80.1	81.5
SPAN C	071172	9)	80.1	78.3			
		MAXIMUM	80.30	80.40	79.10	81.00	81.50
		MINIMUM	80.10	78.30	78.20	79.30	78.10
		AVERAGE	80.16	79.28	78.52	80.04	79.51
		ST.DEV.	.07	.69	.31	.68	1.13
				SURFACE AVG. 79.70	BOTTOM AVG. 79.26		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	071172	1)	79.4	77.9		78.5	79.4
SPAN D	071172	2)	79.4	77.9		78.9	79.4
SPAN D	071172	3)	78.9	77.7	78.9		78.7
SPAN D	071172	4)	79.1	78.1	79.9	79.9	79.
		MAXIMUM	79.40	78.10	79.90	79.90	79.40
		MINIMUM	78.90	77.70	78.90	78.50	78.70
		AVERAGE	79.20	77.90	79.40	79.10	79.12
		ST.DEV.	.24	.16	.71	.72	.34
				SURFACE AVG. 79.20	BOTTOM AVG. 78.80		

DATE 071172

4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 79.21
2) MAXIMUM VALUE 81.50
3) MINIMUM VALUE 77.70
4) SURFACE AVG. 79.48
5) BOTTOM AVG. 79.05

AIR TEMP AVG. 78.
WIND DIRECTION 09.
WIND SPEED 3.6
CLOUD COVER 5.

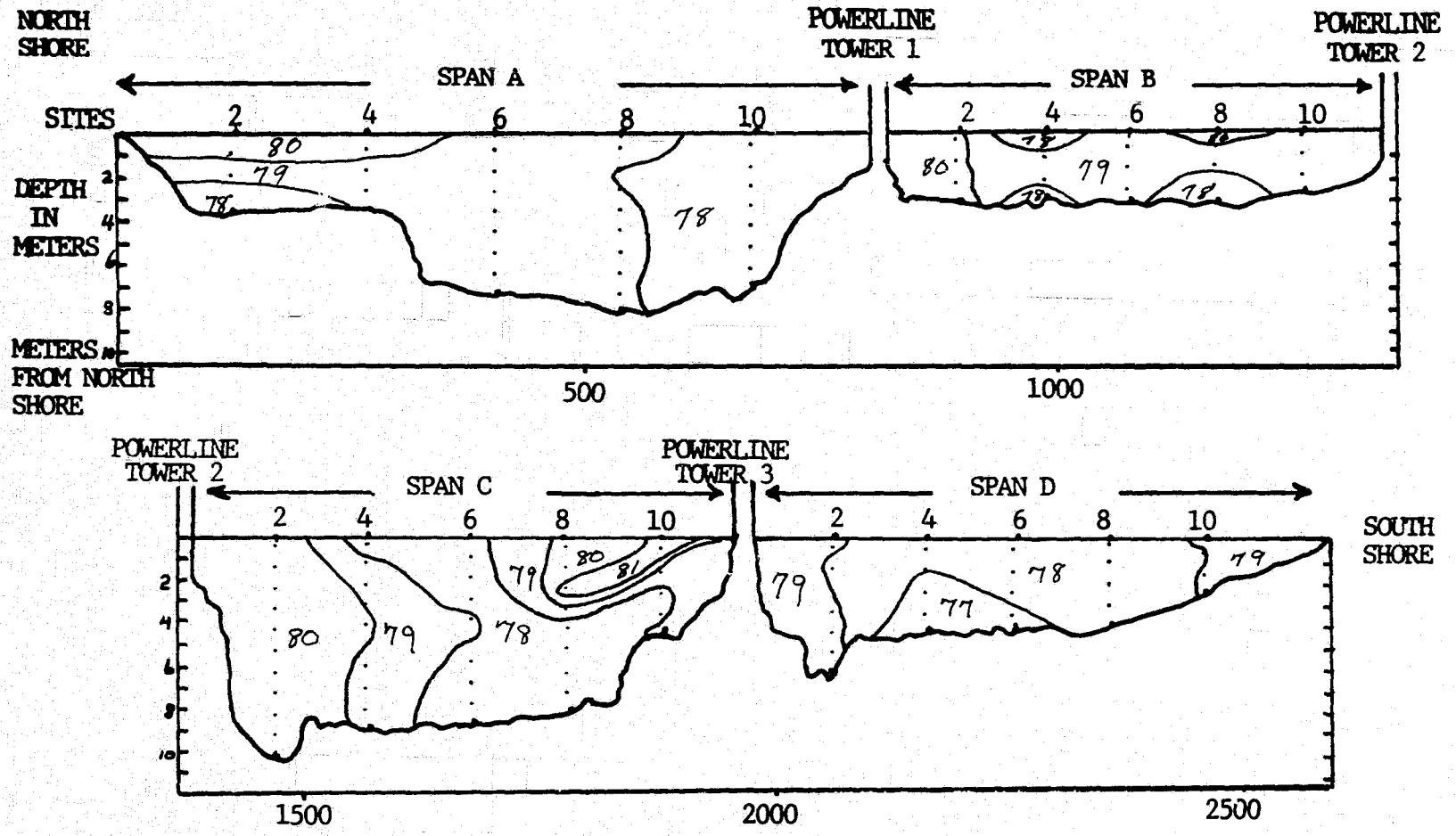

FIGURE 10. RIVER THERMAL PROFILE OF JULY 11, 1972 WITH A FLOW RATE OF 18,166 cf/s, AIR TEMPERATURE OF 78°F AND 50% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	071872	1)	80.6	80.2	80.1	80.	79.4
SPAN A	071872	2)	80.7	80.5	80.4	80.	79.7
SPAN A	071872	3)					
SPAN A	071872	4)	81.1	81.3	80.1	79.6	79.4
SPAN A	071872	5)			80.5	79.8	79.7
SPAN A	071872	6)			80.6	80.	80.
SPAN A	071872	7)			80.7	80.	80.
SPAN A	071872	8)			81.	80.	80.
SPAN A	071872	9)				80.	
		MAXIMUM	81.10	81.30	81.00	80.00	80.00
		MINIMUM	80.60	80.20	80.10	79.60	79.40
		AVERAGE	80.80	80.67	80.49	79.92	79.74
		ST.DEV.	.26	.57	.32	.15	.27
				SURFACE AVG. 80.68	BOTTOM AVG. 80.06		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	071872	1)	80.	80.5	81.	79.8	80.
SPAN B	071872	2)	80.	80.6	81.	79.9	80.5
SPAN B	071872	3)	78.4				79.
SPAN B	071872	4)			81.4	80.6	
		MAXIMUM	80.00	80.60	81.40	80.60	80.50
		MINIMUM	78.40	80.50	81.00	79.80	79.00
		AVERAGE	79.47	80.55	81.13	80.10	79.83
		ST.DEV.	.92	.07	.23	.44	.76
				SURFACE AVG. 80.00	BOTTOM AVG. 80.26		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	071872	1)	79.5	79.			78.4
SPAN C	071872	2)	79.6	79.	79.8	80.7	78.8
SPAN C	071872	3)					
SPAN C	071872	4)	79.5		80.	80.3	79.5
SPAN C	071872	5)	80.	79.5		80.4	79.4
SPAN C	071872	6)	80.	80.7	80.1	80.5	79.4
SPAN C	071872	7)	80.1	80.	80.4	81.	80.1
SPAN C	071872	8)	80.	80.	80.8	81.3	80.4
SPAN C	071872	9)	80.5	80.			
		MAXIMUM	80.50	80.70	80.80	81.30	80.40
		MINIMUM	79.50	79.00	79.80	80.30	78.40
		AVERAGE	79.90	79.74	80.22	80.70	79.43
		ST.DEV.	.35	.62	.39	.38	.69
				SURFACE AVG. 80.60	BOTTOM AVG. 78.97		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	071872	1)	79.5	80.5	80.1		80.9
SPAN D	071872	2)	79.8	80.6	80.2	80.	81.5
SPAN D	071872	3)					80.5
SPAN D	071872	4)	79.2	81.2	81.4	81.0	
SPAN D	071872	5)	79.5				
		MAXIMUM	79.80	81.20	81.40	81.00	81.50
		MINIMUM	79.20	80.60	80.10	80.00	80.50
		AVERAGE	79.50	80.77	80.57	80.50	80.97
		ST.DEV.	.24	.38	.72	.71	.50
				SURFACE AVG. 80.72	BOTTOM AVG. 80.25		

DATE 071872
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	80.25
2) MAXIMUM VALUE	81.50
3) MINIMUM VALUE	78.40
4) SURFACE AVG.	80.50
5) BOTTOM AVG.	79.97
AIR TEMP AVG.	79.
WIND DIRECTION	13.
WIND SPEED	7.1
CLOUD COVER	4.

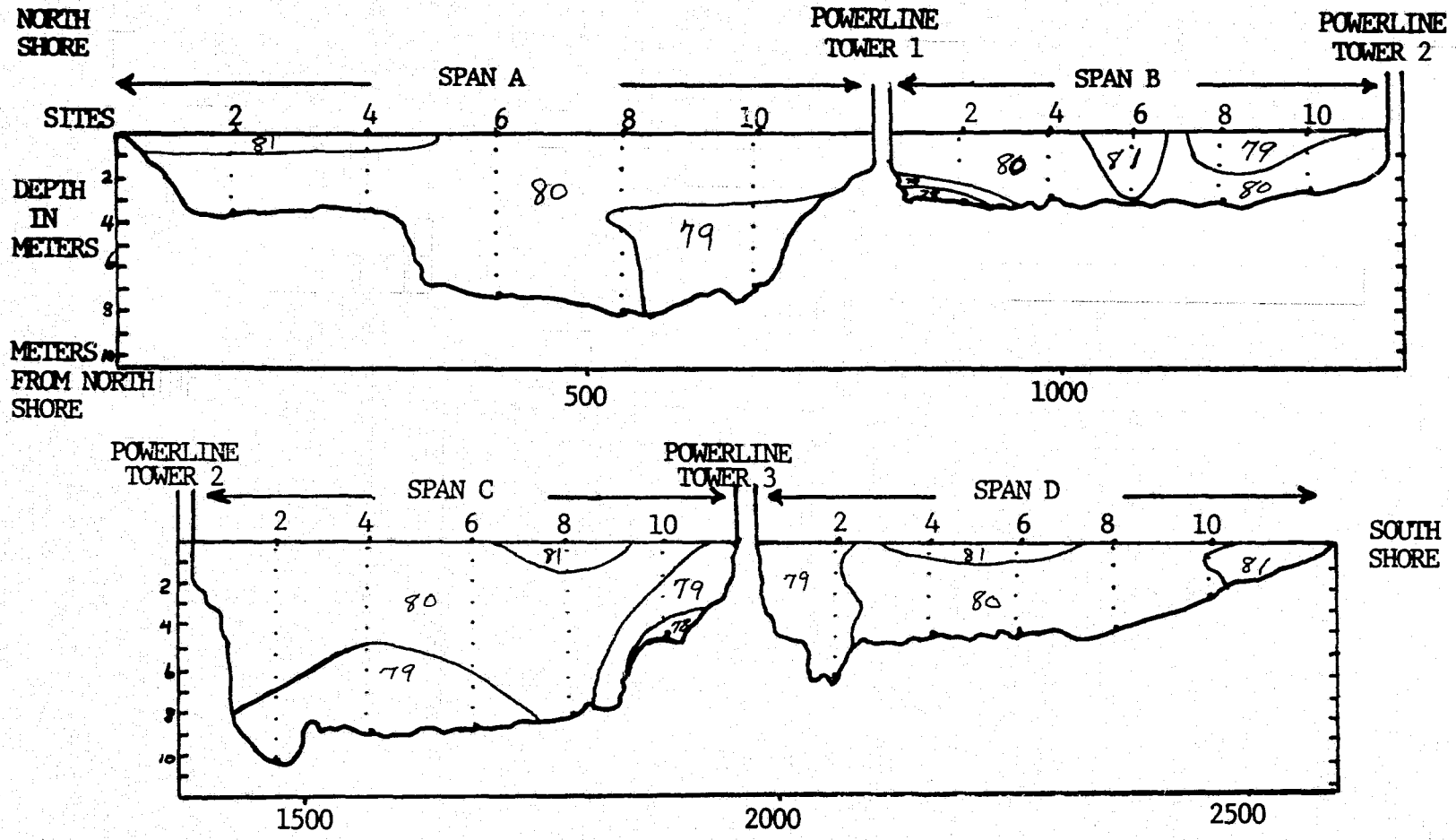

FIGURE 11. RIVER THERMAL PROFILE OF JULY 18,1972 WITH A 34,956 cf/s FLOW RATE, AIR TEMPERATURE OF 79°F AND 40% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	072572	1)	82.6	83.4	83.5	83.	82.7
SPAN A	072572	2)	82.6	83.4	83.5	82.8	82.7
SPAN A	072572	3)					
SPAN A	072572	4)	82.4	82.4	83.1	82.3	82.3
SPAN A	072572	5)			83.4	82.4	82.5
SPAN A	072572	6)			83.4	82.5	82.6
SPAN A	072572	7)			83.4	82.6	82.7
SPAN A	072572	8)			83.3	82.5	82.5
SPAN A	072572	9)				82.5	
		MAXIMUM	82.60	83.40	83.50	83.00	82.70
		MINIMUM	82.40	82.40	83.10	82.30	82.30
		AVERAGE	82.53	83.07	83.37	82.57	82.57
		ST.DEV.	.12	.58	.14	.23	.15
				SURFACE AVG. 82.62	BOTTOM AVG. 83.04		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	072572	1)	83.4	82.8	82.6	83.8	83.3
SPAN B	072572	2)	83.4	82.7	82.8	83.5	83.3
SPAN B	072572	3)					
SPAN B	072572	4)			81.9	82.7	
		MAXIMUM	83.40	82.80	82.80	83.80	83.30
		MINIMUM	83.40	82.70	81.90	82.70	83.30
		AVERAGE	83.40	82.75	82.43	83.33	83.30
		ST.DEV.	.00	.07	.47	.57	.00
				SURFACE AVG. 82.80	BOTTOM AVG. 83.16		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	072572	1)	83.9	82.8	82.9	83.1	82.9
SPAN C	072572	2)	83.8	83.1	83.1	83.4	83.
SPAN C	072572	3)					
SPAN C	072572	4)	82.8	82.7	82.7	82.7	82.
SPAN C	072572	5)	83.	82.9	82.6	83.1	82.4
SPAN C	072572	6)	83.3	83.	82.8	83.1	82.4
SPAN C	072572	7)	83.3	83.1	82.8	82.9	82.3
SPAN C	072572	8)	83.3	83.	82.9	82.8	82.3
SPAN C	072572	9)	83.5	82.9			
		MAXIMUM	83.90	83.10	83.10	83.40	83.00
		MINIMUM	82.80	82.70	82.60	82.70	82.00
		AVERAGE	83.36	82.94	82.83	83.01	82.47
		ST.DEV.	.37	.14	.16	.23	.35
				SURFACE AVG. 82.88	BOTTOM AVG. 83.12		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	072572	1)	83.1	84.	84.6	83.1	83.2
SPAN D	072572	2)	83.3	83.9	84.	83.1	83.1
SPAN D	072572	3)					
SPAN D	072572	4)	83.4	83.4	82.5	82.4	
SPAN D	072572	5)	83.6				
		MAXIMUM	83.60	84.00	84.60	83.10	83.20
		MINIMUM	83.10	83.40	82.50	82.40	83.10
		AVERAGE	83.35	83.77	83.70	82.87	83.15
		ST.DEV.	.21	.32	1.08	.40	.07
				SURFACE AVG. 83.00	BOTTOM AVG. 83.60		

DATE 072572
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	83.04
2) MAXIMUM VALUE	84.60
3) MINIMUM VALUE	81.90
4) SURFACE AVG.	82.82
5) BOTTOM AVG.	83.23
AIR TEMP AVG.	81.
WIND DIRECTION	29.
WIND SPEED	5.6
CLOUD COVER	7.

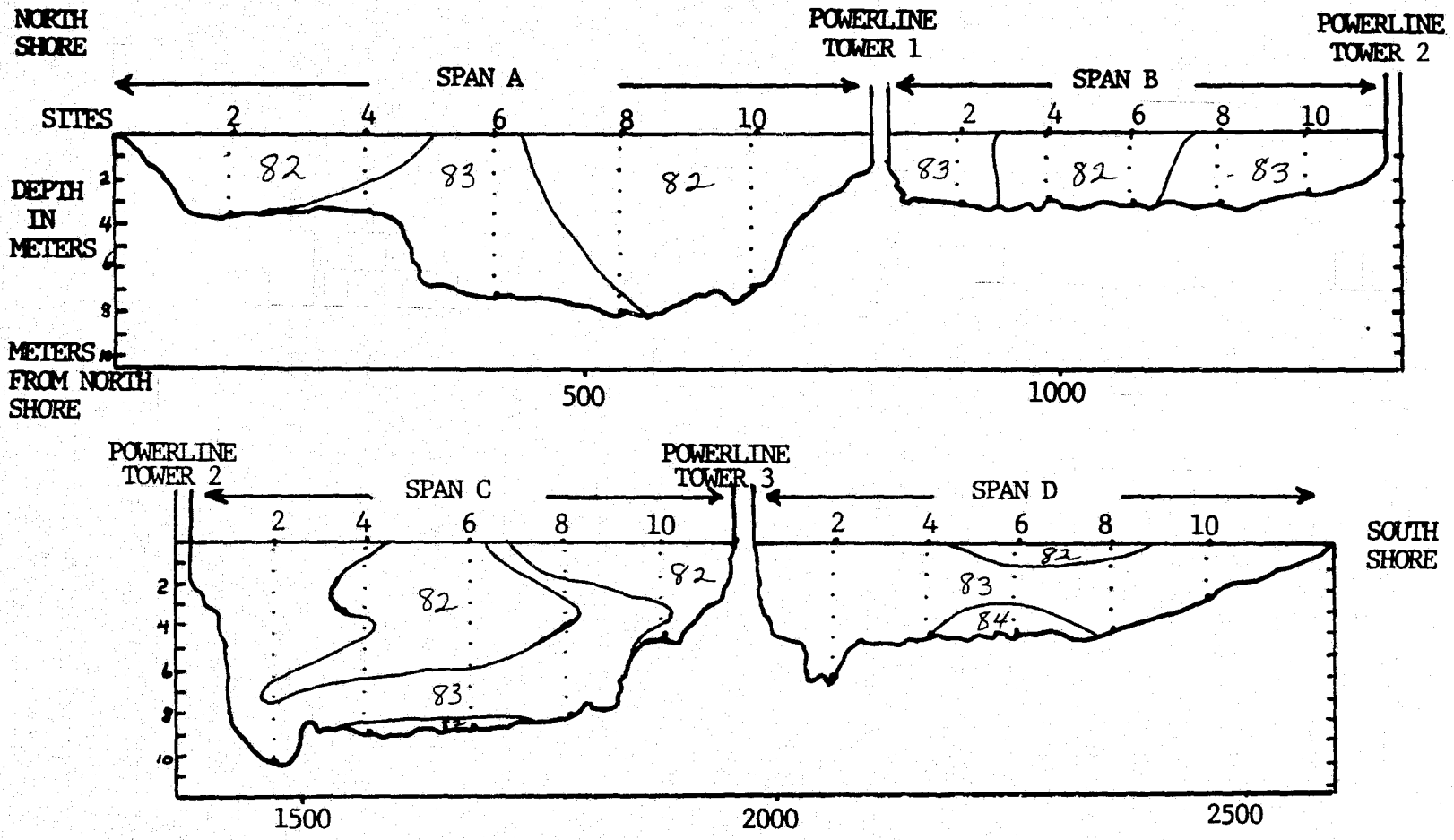

FIGURE 12. RIVER THERMAL PROFILE OF JULY 25, 1972 WITH A 17,518 cf/s flow rate, 81°F AIR TEMPERATURE AND 70° CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	080172	1)	81.5	80.9	82.2	81.7	80.9
SPAN A	080172	2)	81.6	81.1	82.3	82.8	81.
SPAN A	080172	3)	81.7	80.7	81.7	80.8	80.8
SPAN A	080172	4)	81.6	81.8	81.7	80.8	80.8
SPAN A	080172	5)			81.7	81.	81.1
SPAN A	080172	6)			81.7	80.6	81.3
SPAN A	080172	7)			81.5	80.9	81.1
SPAN A	080172	8)			81.7	80.9	81.1
SPAN A	080172	9)				80.9	
		MAXIMUM	81.80	81.80	82.30	82.80	81.30
		MINIMUM	81.50	80.70	81.50	80.80	80.80
		AVERAGE	81.65	81.12	81.81	81.18	81.01
		ST.DEV.	.13	.48	.28	.67	.17
				SURFACE AVG. 81.46	BOTTOM AVG. 81.44		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	080172	1)	81.7	81.9	81.8	81.4	80.7
SPAN B	080172	2)	81.8	81.7	81.9	81.5	80.7
SPAN B	080172	3)	81.6	81.3	81.5	81.1	80.7
SPAN B	080172	4)	81.7	81.9	81.6	81.5	
		MAXIMUM	81.80	81.90	81.90	81.50	80.70
		MINIMUM	81.60	81.30	81.50	81.10	80.70
		AVERAGE	81.70	81.70	81.75	81.37	80.70
		ST.DEV.	.08	.28	.17	.19	.00
				SURFACE AVG. 81.52	BOTTOM AVG. 81.50		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	080172	1)	80.9	81.6	80.7	81.5	80.8
SPAN C	080172	2)	81.	81.7	80.8	81.5	80.7
SPAN C	080172	3)	80.4	80.8	80.8	81.5	80.
SPAN C	080172	4)	80.5	81.	80.8	81.5	80.1
SPAN C	080172	5)	80.4	81.2	80.9	81.5	80.4
SPAN C	080172	6)	80.4	81.2	80.9	81.5	80.5
SPAN C	080172	7)	80.4	81.3	80.9	81.6	80.6
SPAN C	080172	8)	80.3	81.6	80.9	81.8	80.7
SPAN C	080172	9)	80.3	82.2	80.9	82.	
SPAN C	080172	10)	80.5				
		MAXIMUM	81.00	82.20	80.90	82.00	80.80
		MINIMUM	80.30	80.80	80.70	81.50	80.00
		AVERAGE	80.51	81.40	80.84	81.60	80.47
		ST.DEV.	.24	.42	.07	.18	.29
				SURFACE AVG. 81.26	BOTTOM AVG. 81.10		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	080172	1)	82.7	83.3	84.1	82.2	81.4
SPAN D	080172	2)	82.1	82.4	82.4	80.7	81.4
SPAN D	080172	3)	81.5	82.1			81.8
SPAN D	080172	4)	81.5	82.1	83.6	80.6	
SPAN D	080172	5)	81.5	82.9		82.	
SPAN D	080172	6)	81.5				
		MAXIMUM	82.70	83.30	84.10	82.20	81.80
		MINIMUM	81.50	82.10	82.40	80.60	81.40
		AVERAGE	81.80	82.56	83.37	81.37	81.53
		ST.DEV.	.50	.53	.87	.84	.23
				SURFACE AVG. 82.36	BOTTOM AVG. 82.74		

DATE 080172
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 81.47
2) MAXIMUM VALUE 84.10
3) MINIMUM VALUE 80.00
4) SURFACE AVG. 81.65
5) BOTTOM AVG. 81.69
AIR TEMP AVG. 76.
WIND DIRECTION 20.
WIND SPEED 5.5
CLOUD COVER 7.

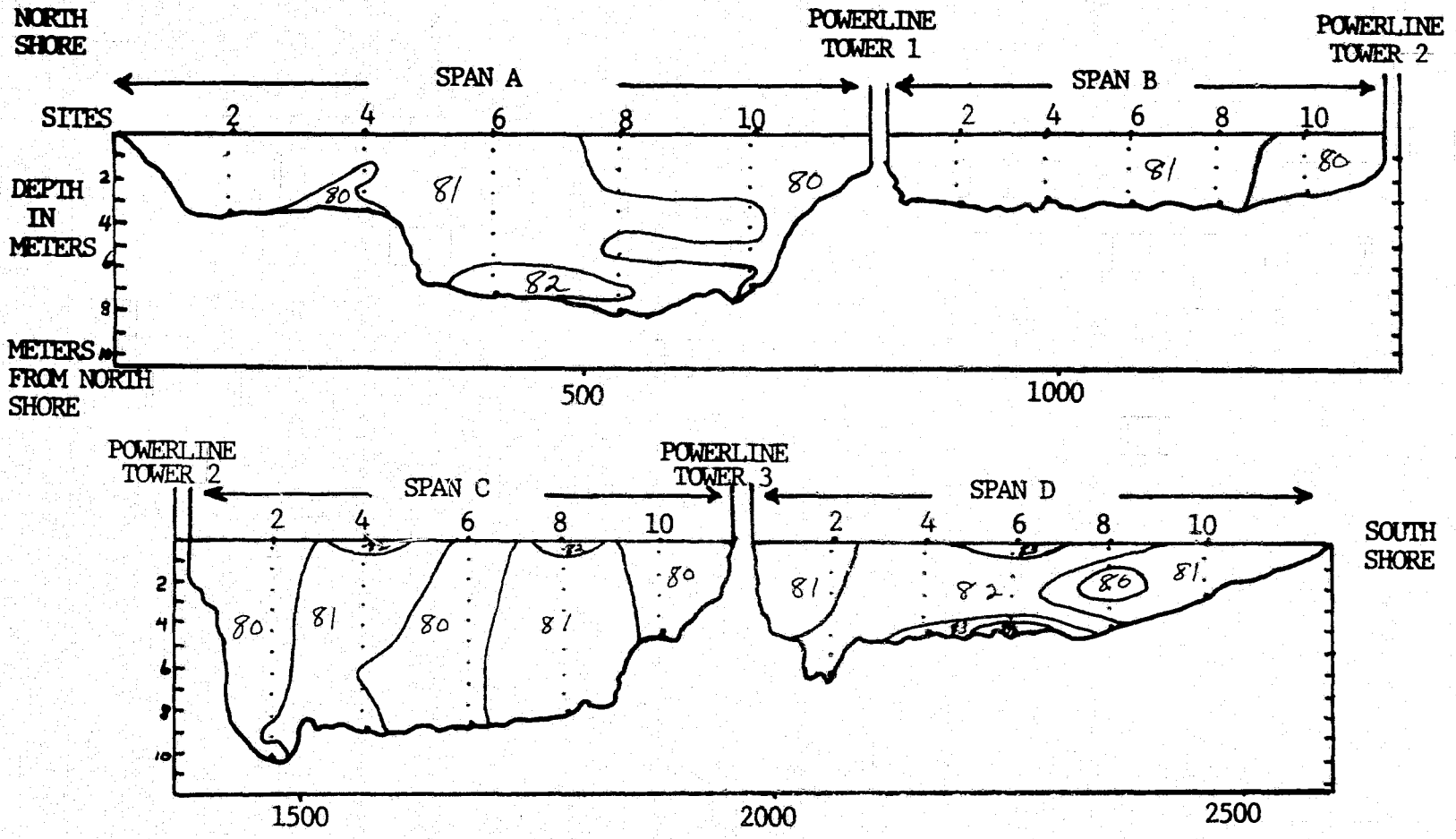

FIGURE 13. RIVER THERMAL PROFILE OF AUGUST 1, 1972 WITH A FLOW RATE OF 30,958 cf/s, AIR TEMPERATURE OF 76°F AND 70% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	080872	1)	84.	82.1	81.5	82.4	82.1
SPAN A	080872	2)	84.1	82.3	81.6	82.4	82.
SPAN A	080872	3)	84.1	82.1	81.4	82.4	82.
SPAN A	080872	4)	84.1	82.6	81.5	82.2	82.1
SPAN A	080872	5)			81.4	82.	82.
SPAN A	080872	6)			81.4	82.4	82.
SPAN A	080872	7)			81.4	82.2	82.
SPAN A	080872	8)			81.6	82.2	82.1
		MAXIMUM	84.10	82.60	81.60	82.40	82.10
		MINIMUM	84.00	82.10	81.40	82.00	82.00
		AVERAGE	84.07	82.27	81.47	82.27	82.04
		ST.DEV.	.05	.24	.09	.15	.05
				SURFACE AVG. 82.52	BOTTOM AVG. 82.42		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	080872	1)	82.2	82.1	83.1	81.4	82.6
SPAN B	080872	2)	82.1	82.3	83.2	81.6	82.8
SPAN B	080872	3)	82.	82.4	83.3	82.	
SPAN B	080872	4)				82.2	
		MAXIMUM	82.20	82.40	83.30	82.20	82.80
		MINIMUM	82.00	82.10	83.10	81.40	82.80
		AVERAGE	82.10	82.27	83.20	81.80	82.80
		ST.DEV.	.10	.15	.10	.37	.00
				SURFACE AVG. 82.54	BOTTOM AVG. 82.32		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	080872	1)	80.6	82.8	82.	81.6	81.5
SPAN C	080872	2)	80.6	82.8	82.2	81.4	81.6
SPAN C	080872	3)	80.6	82.5	82.3	80.	81.7
SPAN C	080872	4)	80.6	82.5	82.2	80.6	81.9
SPAN C	080872	5)	80.7	82.5	82.3	80.8	82.
SPAN C	080872	6)	81.1	82.5	82.4	81.1	82.
SPAN C	080872	7)	81.1	82.5	82.4	81.5	82.
SPAN C	080872	8)	81.1	82.9	82.8	81.8	82.3
SPAN C	080872	9)	81.4		82.9		
		MAXIMUM	81.40	82.90	82.95	81.80	82.30
		MINIMUM	80.60	82.50	82.00	80.00	81.50
		AVERAGE	80.87	82.62	82.39	81.10	81.87
		ST.DEV.	.31	.18	.29	.60	.26
				SURFACE AVG. 82.26	BOTTOM AVG. 81.70		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	080872	1)	81.8	80.9	80.	80.6	81.
SPAN D	080872	2)	81.9	81.	81.	81.	81.
SPAN D	080872	3)		81.	81.1	81.6	82.8
SPAN D	080872	4)	82.6	81.2	81.5	81.9	
SPAN D	080872	5)	82.6				
		MAXIMUM	82.60	81.20	81.50	81.90	82.80
		MINIMUM	81.80	80.90	80.00	80.60	81.00
		AVERAGE	82.22	81.02	80.90	81.27	81.60
		ST.DEV.	.43	.13	.64	.59	1.04
				SURFACE AVG. 82.00	BOTTOM AVG. 80.86		

DATE 080872

4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 82.01
2) MAXIMUM VALUE 84.10
3) MINIMUM VALUE 80.00
4) SURFACE AVG. 82.33
5) BOTTOM AVG. 81.82

AIR TEMP AVG. 73.
WIND DIRECTION 23.
WIND SPEED 5.3
CLOUD COVER 3.

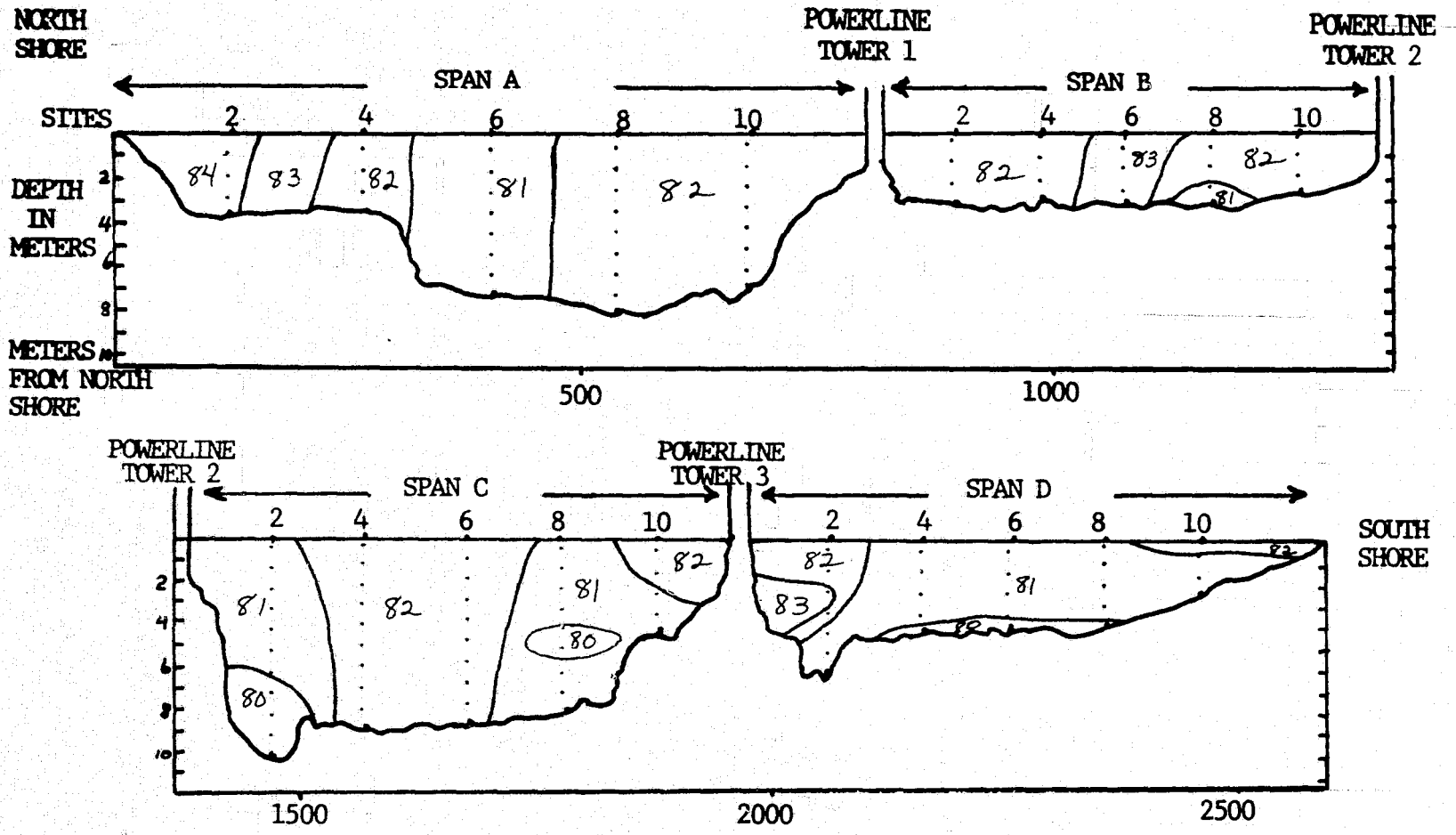

FIGURE 14. RIVER THERMAL PROFILE OF AUGUST 8, 1972 WITH A 28,450 cf/s FLOW RATE, 73°F AIR TEMPERATURE AND 30% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	081572	1)	81.4	83.	81.9	81.3	81.
SPAN A	081572	2)	81.4	83.1	82.1	81.3	81.1
SPAN A	081572	3)	81.5		82.2	81.3	81.3
SPAN A	081572	4)	81.7	84.5	82.4	81.5	81.3
SPAN A	081572	5)			82.4	81.5	81.3
SPAN A	081572	6)			82.5	81.5	81.4
SPAN A	081572	7)			82.7	81.5	81.4
SPAN A	081572	8)			82.9	81.5	81.4
SPAN A	081572	9)				82.	
		MAXIMUM	81.70	84.50	82.90	82.00	81.40
		MINIMUM	81.40	83.00	81.90	81.30	81.00
		AVERAGE	81.50	83.53	82.39	81.49	81.27
		ST.DEV.	.14	.84	.32	.21	.15
				SURFACE AVG. 82.50	BOTTOM AVG. 81.72		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	081572	1)	82.5	83.6	82.5	81.4	82.
SPAN B	081572	2)	82.5	83.6		81.5	82.1
SPAN B	081572	3)		83.6	82.5	81.8	82.2
SPAN B	081572	4)	83.2		82.6	81.9	
SPAN B	081572	5)			82.6		
		MAXIMUM	83.20	83.60	82.60	81.90	82.20
		MINIMUM	82.50	83.60	82.50	81.40	82.00
		AVERAGE	82.73	83.60	82.55	81.65	82.10
		ST.DEV.	.40	.00	.06	.24	.10
				SURFACE AVG. 82.70	BOTTOM AVG. 82.40		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	081572	1)	81.2	82.3	81.1	80.5	82.
SPAN C	081572	2)	81.3	82.3	81.1	80.5	82.
SPAN C	081572	3)	81.2	80.4	80.8		
SPAN C	081572	4)	81.3	80.9	81.	80.5	81.5
SPAN C	081572	5)	81.3	81.	81.	80.5	81.9
SPAN C	081572	6)	81.4	81.4	81.	80.5	82.2
SPAN C	081572	7)	81.4	81.6	81.	80.6	82.5
SPAN C	081572	8)	81.4	81.7	81.9	80.7	82.8
SPAN C	081572	9)	81.4	82.4	81.9		
SPAN C	081572	10)	81.6				
		MAXIMUM	81.60	82.40	81.90	80.70	82.80
		MINIMUM	81.20	80.40	80.80	80.50	81.50
		AVERAGE	81.35	81.56	81.20	80.54	82.13
		ST.DEV.	.12	.70	.41	.08	.42
				SURFACE AVG. 81.88	BOTTOM AVG. 81.42		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	081572	1)	82.6	82.	81.9	81.5	82.
SPAN D	081572	2)	82.5	82.1	82.	81.5	82.5
SPAN D	081572	3)		82.1	82.	81.8	82.7
SPAN D	081572	4)	82.6	82.2	82.	82.	
SPAN D	081572	5)	82.6				
		MAXIMUM	82.60	82.20	82.00	82.00	82.70
		MINIMUM	82.50	82.00	81.90	81.50	82.00
		AVERAGE	82.57	82.10	81.97	81.70	82.40
		ST.DEV.	.05	.08	.05	.24	.36
				SURFACE AVG. 82.30	BOTTOM AVG. 82.00		

DATE 081572
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 82.02
2) MAXIMUM VALUE 84.50
3) MINIMUM VALUE 80.40
4) SURFACE AVG. 82.34
5) BOTTOM AVG. 81.88
AIR TEMP AVG. 76.
WIND DIRECTION 06.
WIND SPEED 4.8
CLOUD COVER 5.

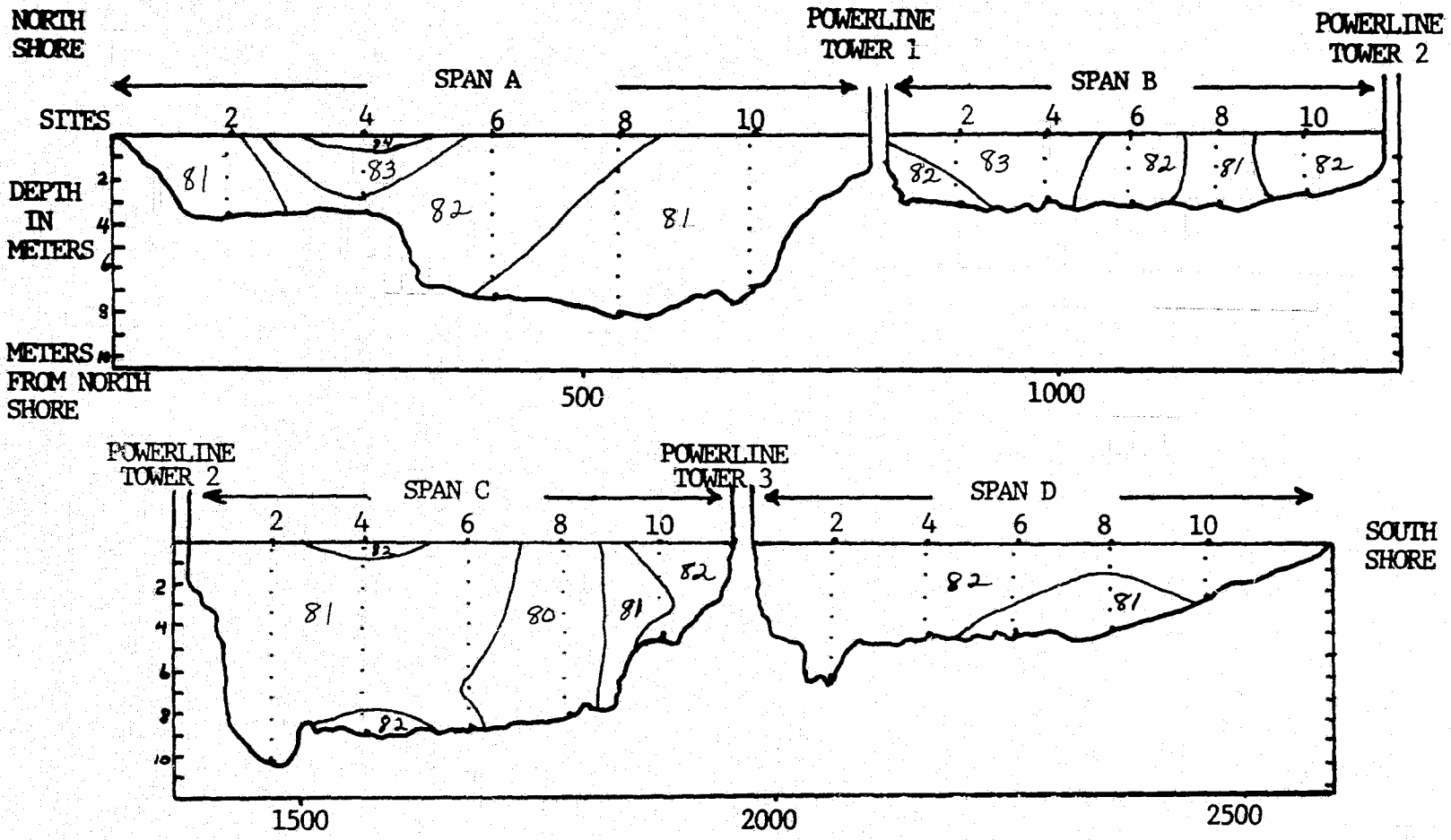

FIGURE 15. RIVER THERMAL PROFILE OF AUGUST 15, 1972 WITH A FLOW RATE OF 43,764 cf/s, AIR TEMPERATURE OF 76°F AND 50% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	082272	1)	83.3	84.5	82.7	82.4	82.3
SPAN A	082272	2)	82.6	84.5	83.	82.5	82.4
SPAN A	082272	3)			83.	82.5	82.3
SPAN A	082272	4)	82.2	83.9	83.1	82.5	82.4
SPAN A	082272	5)			82.9	82.5	82.3
SPAN A	082272	6)			82.9	82.6	82.3
SPAN A	082272	7)			82.9	82.7	82.4
SPAN A	082272	8)			82.8	82.9	82.7
		MAXIMUM	83.30	84.50	83.10	82.90	82.70
		MINIMUM	82.20	83.90	82.70	82.40	82.30
		AVERAGE	82.70	84.30	82.91	82.57	82.39
		ST.DEV.	.56	.35	.12	.16	.14
				SURFACE AVG. 82.90	BOTTOM AVG. 83.04		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	082272	1)	83.2	82.3	81.9	82.2	82.3
SPAN B	082272	2)	83.4	82.3	82.1	82.1	82.4
SPAN B	082272	3)	83.5	82.4	82.2	82.4	82.6
SPAN B	082272	4)			82.2	82.5	
		MAXIMUM	83.50	82.40	82.20	82.50	82.60
		MINIMUM	83.20	82.30	81.90	82.10	82.30
		AVERAGE	83.37	82.33	82.10	82.30	82.43
		ST.DEV.	.15	.06	.14	.18	.15
				SURFACE AVG. 82.64	BOTTOM AVG. 82.38		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	082272	1)	82.1	82.2	82.6	81.9	81.8
SPAN C	082272	2)	82.3	82.4	82.5	82.	81.9
SPAN C	082272	3)	82.4	82.4	82.5	82.	82.
SPAN C	082272	4)	82.5	82.4	82.5	82.	82.2
SPAN C	082272	5)	82.5	82.5	82.4	82.	
SPAN C	082272	6)	82.6	82.8	82.5	82.	
SPAN C	082272	7)	82.5		82.4		
SPAN C	082272	8)	82.7	83.1	82.5	82.8	
SPAN C	082272	9)	82.7	83.4			
		MAXIMUM	82.70	83.40	82.60	82.80	82.20
		MINIMUM	82.10	82.20	82.40	81.90	81.80
		AVERAGE	82.48	82.65	82.49	82.10	81.97
		ST.DEV.	.19	.41	.06	.31	.17
				SURFACE AVG. 82.72	BOTTOM AVG. 82.12		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	082272	1)	81.7	82.	81.7	82.3	83.2
SPAN D	082272	2)	82.	82.1	81.6	82.5	83.3
SPAN D	082272	3)	82.1	82.2	81.6	82.6	83.3
SPAN D	082272	4)	82.2	82.4	82.3	83.	83.3
SPAN D	082272	5)	82.2				
		MAXIMUM	82.20	82.40	82.30	83.00	83.30

		MINIMUM	81.70	82.00	81.60	82.30	83.20
		AVERAGE	82.04	82.17	81.80	82.60	83.27
		ST.DEV.	.21	.17	.34	.29	.05
				SURFACE AVG. 82.64	BOTTOM AVG. 82.18		

DATE 082272
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 82.55
2) MAXIMUM VALUE 84.50
3) MINIMUM VALUE 81.60
4) SURFACE AVG. 82.72
5) BOTTOM AVG. 82.43
AIR TEMP AVG. 77.
WIND DIRECTION 15.
WIND SPEED 7.8
CLOUD COVER 3.

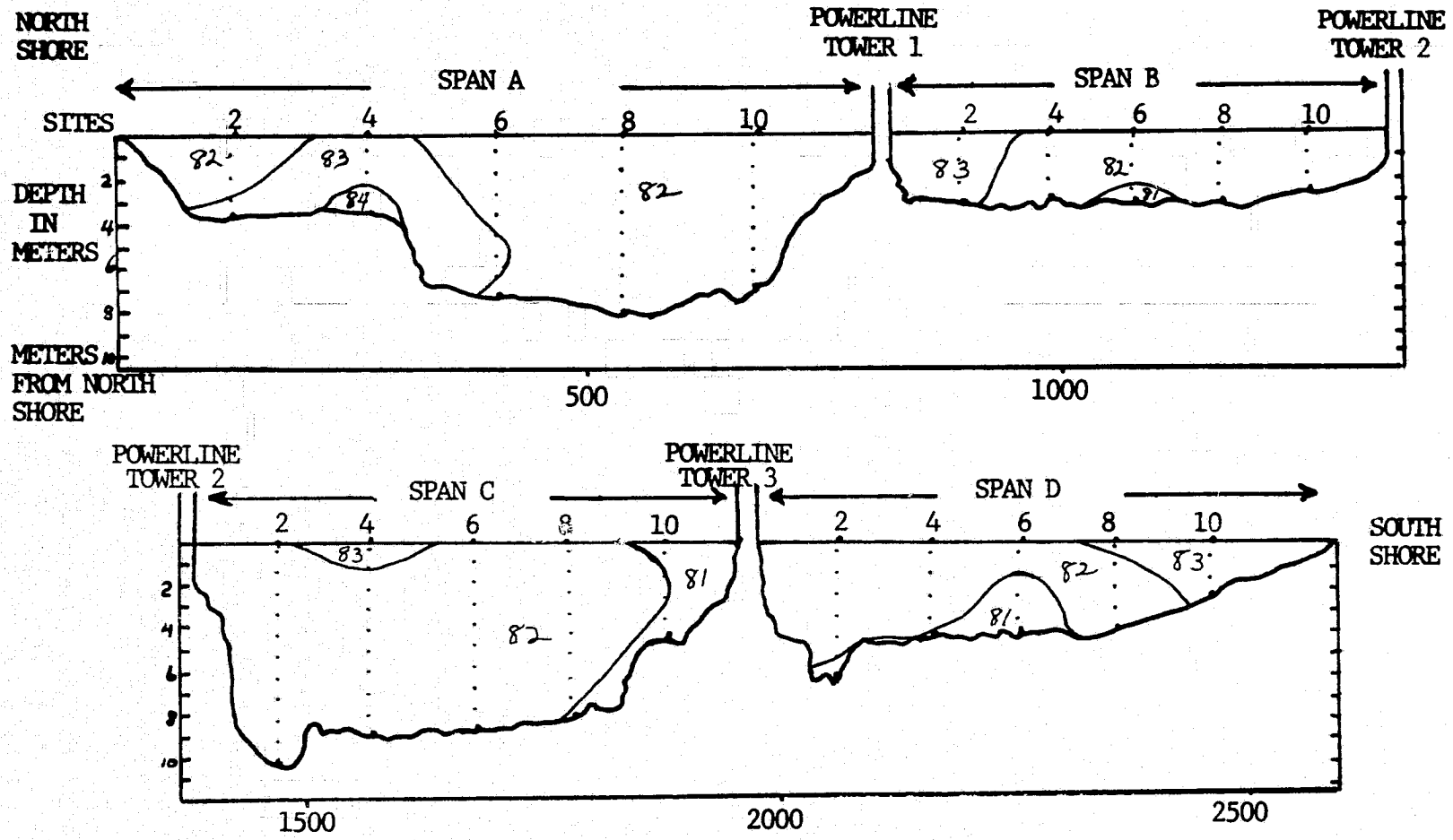

FIGURE 16. RIVER THERMAL PROFILE OF AUGUST 22, 1972 WITH A 21,562 cf/s FLOW RATE, 77°F AIR TEMPERATURE AND 30% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	082972	1)	81.6	81.5	81.7	81.3	81.6
SPAN A	082972	2)	81.5	81.7	81.9	81.3	81.7
SPAN A	082972	3)	81.7	82.3	82.2	81.4	82.
SPAN A	082972	4)	81.9	82.4	82.2	81.4	81.8
SPAN A	082972	5)			82.2	81.4	81.9
SPAN A	082972	6)			82.3	81.5	81.9
SPAN A	082972	7)			82.2	81.4	81.7
SPAN A	082972	8)			82.4	81.4	81.8
		MAXIMUM	81.90	[illegible]	82.40	81.50	82.00
		MINIMUM	81.50	[illegible]	81.70	81.30	81.60
		AVERAGE	81.67	81.97	82.14	81.39	81.80
		ST.DEV.	.17	.44	.23	.06	.13
				SURFACE AVG. 81.98	BOTTOM AVG. 81.54		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	082972	1)	81.	82.	81.9	81.9	82.
SPAN B	082972	2)	81.2	82.1	82.2	82.1	82.1
SPAN B	082972	3)	81.4	82.2	82.5	82.3	82.2
SPAN B	082972	4)				82.3	
		MAXIMUM	81.40	82.20	82.50	82.30	82.20
		MINIMUM	81.00	82.00	81.90	81.90	82.00
		AVERAGE	81.20	82.10	82.20	82.15	82.10
		ST.DEV.	.20	.10	.30	.19	.10
				SURFACE AVG. 82.12	BOTTOM AVG. 81.76		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	082972	1)	81.2	81.2	81.2	81.9	81.7
SPAN C	082972	2)	81.4	81.2	81.3	82.	81.9
SPAN C	082972	3)	81.6	81.4	81.5	82.1	81.9
SPAN C	082972	4)	81.6	81.4	81.4	82.2	81.9
SPAN C	082972	5)	81.6	81.4	81.3	82.2	81.8
SPAN C	082972	6)	81.7	81.4	81.4	82.2	81.9
SPAN C	082972	7)	81.7	81.4	81.3	82.1	81.9
SPAN C	082972	8)	81.9	81.5	81.2	82.2	82.3
SPAN C	082972	9)	82.1				
		MAXIMUM	82.10	81.50	81.50	82.20	82.30
		MINIMUM	81.20	81.20	81.20	81.90	81.70
		AVERAGE	81.84	81.36	81.32	82.11	81.91
		ST.DEV.	.26	.11	.10	.11	.17
				SURFACE AVG. 81.86	BOTTOM AVG. 81.44		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	082972	1)	80.2	80.6	81.1	80.1	81.8
SPAN D	082972	2)	80.5	80.7	81.3	80.4	82.2
SPAN D	082972	3)	80.7	80.9	81.5	80.5	
SPAN D	082972	4)	80.9	80.9	81.5	81.2	
SPAN D	082972	5)	81.				
SPAN D	082972	6)	81.3				
		MAXIMUM	81.30	80.90	81.50	81.20	82.20
		MINIMUM	80.20	80.60	81.10	80.10	81.80
		AVERAGE	80.77	80.77	81.35	80.55	82.00
		ST.DEV.	.39	.15	.19	.47	.28
				SURFACE AVG. 81.42	BOTTOM AVG. 80.76		

DATE 082972
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 81.63
2) MAXIMUM VALUE 82.50
3) MINIMUM VALUE 80.10
4) SURFACE AVG. 81.84
5) BOTTOM AVG. 81.37
AIR TEMP AVG. 73.
WIND DIRECTION 02.
WIND SPEED 7.2
CLOUD COVER 5.

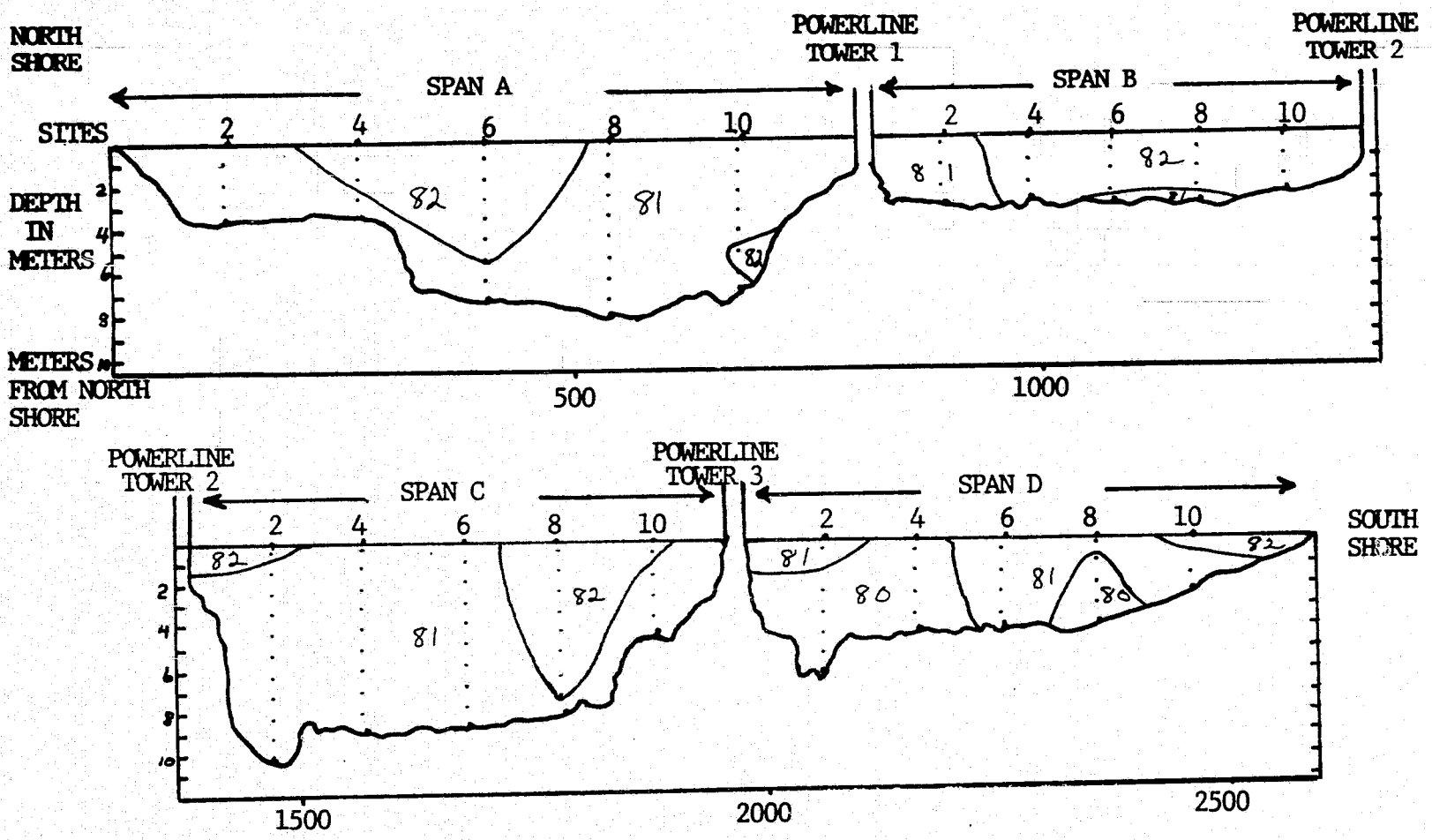

FIGURE 17. RIVER THERMAL PROFILE OF AUGUST 29, 1972 WITH A 23,202 cf/s FLOW RATE, 73°F AIR TEMPERATURE AND 50% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	090572	1)	81.	80.	80.2	80.5	80.6
SPAN A	090572	2)	81.	80.1	80.3	80.6	80.6
SPAN A	090572	3)	81.	80.5	80.5	80.7	80.7
SPAN A	090572	4)			80.5	80.7	80.6
SPAN A	090572	5)			80.3	80.7	80.6
SPAN A	090572	6)			80.4	80.8	80.7
SPAN A	090572	7)			80.3	80.7	80.7
SPAN A	090572	8)				80.8	80.8
		MAXIMUM	81.00	80.50	80.50	80.80	80.80
		MINIMUM	81.00	80.00	80.20	80.50	80.60
		AVERAGE	81.00	80.20	80.36	80.69	80.66
		ST.DEV.	.00	.26	.11	.10	.07
				SURFACE AVG. 80.68	BOTTOM AVG. 80.46		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	090572	1)	79.	79.1	79.4	78.8	79.9
SPAN B	090572	2)	79.3	79.2	79.5	78.8	80.
SPAN B	090572	3)	80.1	79.5	80.	78.7	80.1
		MAXIMUM	80.10	79.50	80.00	78.80	80.10
		MINIMUM	79.00	79.10	79.40	78.70	79.90
		AVERAGE	79.47	79.27	79.63	78.77	80.00
		ST.DEV.	.57	.21	.32	.06	.10
				SURFACE AVG. 79.68	BOTTOM AVG. 79.24		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	090572	1)	80.2	80.4	79.6	79.3	78.6
SPAN C	090572	2)	80.4	80.3	79.7	79.3	79.1
SPAN C	090572	3)	80.4	80.4	79.9	79.7	79.4
SPAN C	090572	4)	80.4	80.3	79.9	79.8	79.6
SPAN C	090572	5)	80.4	80.3	79.9	79.8	79.8
SPAN C	090572	6)	80.4	80.3	79.9	79.9	79.7
SPAN C	090572	7)	80.4	80.2	79.9	79.8	79.6
SPAN C	090572	8)	80.5	80.2	79.9	79.9	
SPAN C	090572	9)	80.5				
		MAXIMUM	80.50	80.40	79.90	79.90	79.70
		MINIMUM	80.20	80.20	79.60	79.30	78.80
		AVERAGE	80.40	80.30	79.84	79.69	79.40
		ST.DEV.	.09	.08	.12	.25	.33
				SURFACE AVG. 80.02	BOTTOM AVG. 79.66		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	090572	1)	79.5	80.1	78.5	80.1	79.
SPAN D	090572	2)	79.6	80.1	78.7	80.2	79.3
SPAN D	090572	3)	79.8	80.1	79.2	80.5	79.3
SPAN D	090572	4)	79.7	80.1	79.4	80.7	
SPAN D	090572	5)	79.9				
		MAXIMUM	79.90	80.10	79.40	80.70	79.30
		MINIMUM	79.50	80.10	78.50	80.10	79.00

		AVERAGE	79.70	80.10	78.95	80.37	79.20
		ST.DEV.	.16	.00	.42	.28	.17
				SURFACE AVG. 79.88	BOTTOM AVG. 79.44		

DATE 090572

4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 79.90
2) MAXIMUM VALUE 81.00
3) MINIMUM VALUE 78.50
4) SURFACE AVG. 80.06
5) BOTTOM AVG. 79.70

AIR TEMP AVG. 69.
WIND DIRECTION 01.
WIND SPEED 8.5
CLOUD COVER 9.

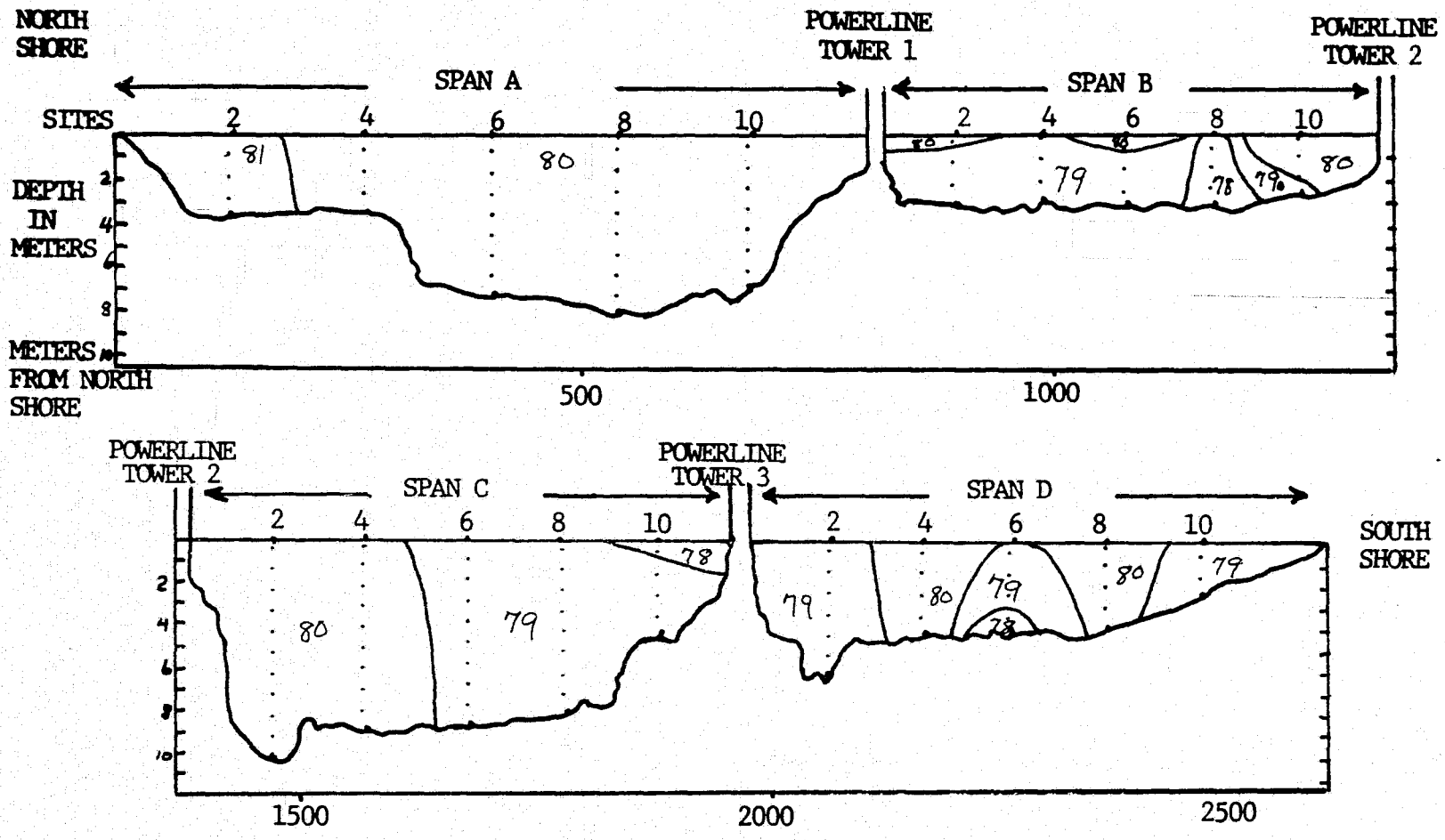

FIGURE 18. RIVER THERMAL PROFILE OF SEPTEMBER 5, 1972 WITH A 15,032 cf/s FLOW RATE, 69°F AIR TEMPERATURE AND 90% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	091372	1)	77.8	79.2	79.4	78.4	79.3
SPAN A	091372	2)	78.	79.4	79.6	78.6	79.4
SPAN A	091372	3)	78.	79.4	79.7	78.7	79.6
SPAN A	091372	4)	78.2		79.6	78.7	79.6
SPAN A	091372	5)			79.5	78.7	79.7
SPAN A	091372	6)			79.5	78.7	79.8
		MAXIMUM	78.20	79.40	79.70	78.70	79.80
		MINIMUM	77.80	79.20	79.40	78.40	79.30
		AVERAGE	78.00	79.33	79.55	78.63	79.57
		ST.DEV.	.16	.12	.10	.12	.19

SURFACE AVG. 79.12 BOTTOM AVG. 78.82

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	091372	1)	78.7	78.5	79.5	78.8	79.6
SPAN B	091372	2)	79.2	78.6	79.5	79.	79.8
SPAN B	091372	3)	79.3	78.7	79.6	79.2	79.9
		MAXIMUM	79.30	78.70	79.60	79.20	79.90
		MINIMUM	78.70	78.50	79.50	78.80	79.60
		AVERAGE	79.07	78.60	79.53	79.00	79.77
		ST.DEV.	.32	.10	.06	.20	.15

SURFACE AVG. 79.34 BOTTOM AVG. 79.02

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	091372	1)	78.6	79.4	79.	78.5	78.9
SPAN C	091372	2)	78.7	79.5	79.	78.8	78.9
SPAN C	091372	3)	78.7	79.5	79.1	79.2	78.9
SPAN C	091372	4)	78.7	79.5	79.2	79.	78.9
SPAN C	091372	5)	78.7	79.4	79.2	79.	78.9
SPAN C	091372	6)	78.5	79.4	79.2	79.1	78.9
SPAN C	091372	7)	78.4	79.3	79.1	78.9	78.8
SPAN C	091372	8)	78.4	79.4	79.2	78.6	
SPAN C	091372	9)	78.5				
		MAXIMUM	78.70	79.50	79.20	79.20	78.90
		MINIMUM	78.40	79.30	79.00	78.50	78.80
		AVERAGE	78.58	79.42	79.12	78.89	78.89
		ST.DEV.	.13	.07	.09	.24	.04

SURFACE AVG. 78.90 BOTTOM AVG. 78.88

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	091372	1)	78.6	79.2	78.9	78.	78.5
SPAN D	091372	2)	78.7	79.3	79.	77.9	79.1
SPAN D	091372	3)	78.8	79.4	79.2	78.3	
SPAN D	091372	4)	78.7	79.4	79.6	79.3	
SPAN D	091372	5)	78.7				
		MAXIMUM	78.80	79.40	79.60	79.30	79.10
		MINIMUM	78.60	79.20	78.90	77.90	78.50
		AVERAGE	78.70	79.32	79.17	78.37	78.80
		ST.DEV.	.07	.10	.31	.64	.42

SURFACE AVG. 79.22 BOTTOM AVG. 78.64

DATE 091372
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	79.02
2) MAXIMUM VALUE	79.90
3) MINIMUM VALUE	77.80
4) SURFACE AVG.	79.14
5) BOTTOM AVG.	78.84
AIR TEMP AVG.	76.
WIND DIRECTION	29.
WIND SPEED	6.5
CLOUD COVER	1.

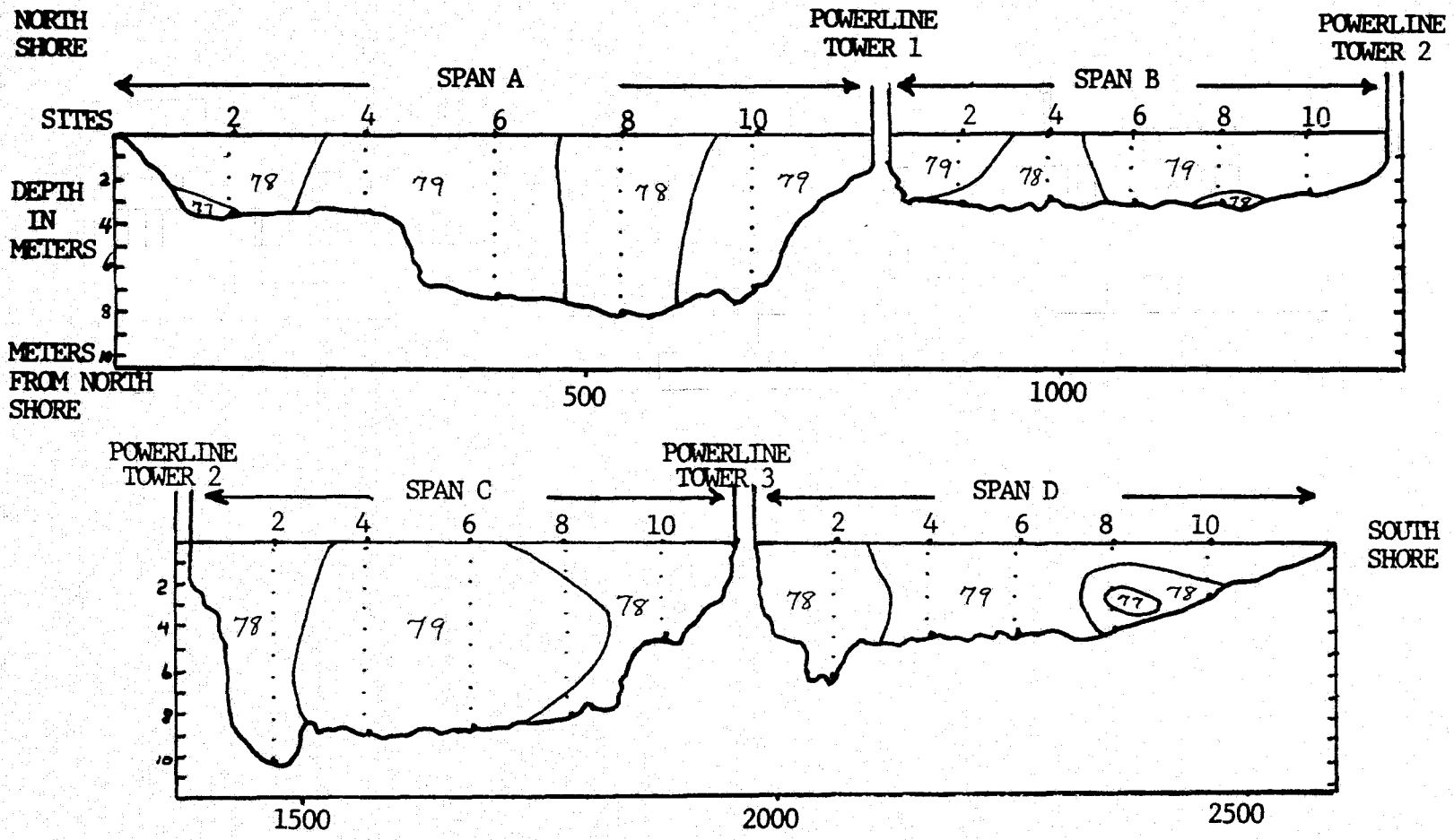

FIGURE 19. RIVER THERMAL PROFILE OF SEPTEMBER 13, 1972 WITH A FLOW RATE OF 12,790 cf/s, 76° AIR TEMPERATURE AND 10% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	092072	1)	80.9	79.9	80.9	80.9	80.
SPAN A	092072	2)	81.	80.	81.	81.2	80.1
SPAN A	092072	3)	81.2	80.1	81.	81.2	80.2
SPAN A	092072	4)	81.4		81.	81.4	80.3
SPAN A	092072	5)			81.1	81.2	80.2
SPAN A	092072	6)			81.1	81.3	80.4
SPAN A	092072	7)			81.	81.2	80.2
SPAN A	092072	8)			81.1	81.4	80.3
	MAXIMUM		81.40	80.10	81.10	81.40	80.40
	MINIMUM		80.90	79.90	80.90	80.90	80.00
	AVERAGE		81.12	80.00	81.02	81.22	80.21
	ST.DEV.		.22	.10	.07	.16	.12
				SURFACE AVG. 80.86	BOTTOM AVG. 80.52		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	092072	1)	80.4	79.6	80.3	79.9	79.5
SPAN B	092072	2)	80.8	79.7	80.4	80.	79.7
SPAN B	092072	3)	81.	79.9	80.6	80.1	79.7
	MAXIMUM		81.00	79.90	80.60	80.10	79.70
	MINIMUM		80.40	79.60	80.30	79.90	79.50
	AVERAGE		80.73	79.73	80.43	80.00	79.63
	ST.DEV.		.31	.15	.15	.10	.12
				SURFACE AVG. 80.26	BOTTOM AVG. 79.94		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	092072	1)	79.3	80.	79.2	79.4	79.6
SPAN C	092072	2)	79.5	80.	79.6	79.3	79.9
SPAN C	092072	3)	79.7	80.1	79.7	79.3	79.9
SPAN C	092072	4)	79.6	80.1	79.9	79.3	80.1
SPAN C	092072	5)	79.5	80.	79.7	79.3	79.9
SPAN C	092072	6)	79.6	80.1	79.9	79.5	80.1
SPAN C	092072	7)	79.4	80.	79.6	79.4	79.9
SPAN C	092072	8)	79.4	80.	79.7	79.6	79.9
SPAN C	092072	9)	79.4				
	MAXIMUM		79.70	80.10	79.90	79.60	80.10
	MINIMUM		79.30	80.00	79.20	79.30	79.60
	AVERAGE		79.49	80.04	79.66	79.39	79.91
	ST.DEV.		.13	.05	.22	.11	.16
				SURFACE AVG. 79.72	BOTTOM AVG. 79.50		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	092072	1)	79.9	79.2	80.1	79.6	79.2
SPAN D	092072	2)	80.	79.2	80.2	79.7	79.5
SPAN D	092072	3)	80.	79.5	80.4	79.9	
SPAN D	092072	4)	80.	79.4	80.5	80.	
SPAN D	092072	5)	80.				
SPAN D	092072	6)	80.				
	MAXIMUM		80.00	79.50	80.50	80.00	79.50
	MINIMUM		79.90	79.20	80.10	79.60	79.20
	AVERAGE		79.98	79.32	80.30	79.80	79.35
	ST.DEV.		.04	.15	.18	.18	.21
				SURFACE AVG. 79.88	BOTTOM AVG. 79.60		

DATE 092072
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 80.07
2) MAXIMUM VALUE 81.40
3) MINIMUM VALUE 79.20
4) SURFACE AVG. 80.18
5) BOTTOM AVG. 79.89

AIR TEMP AVG. 77.
WIND DIRECTION 10.
WIND SPEED 5.3
CLOUD COVER 1.

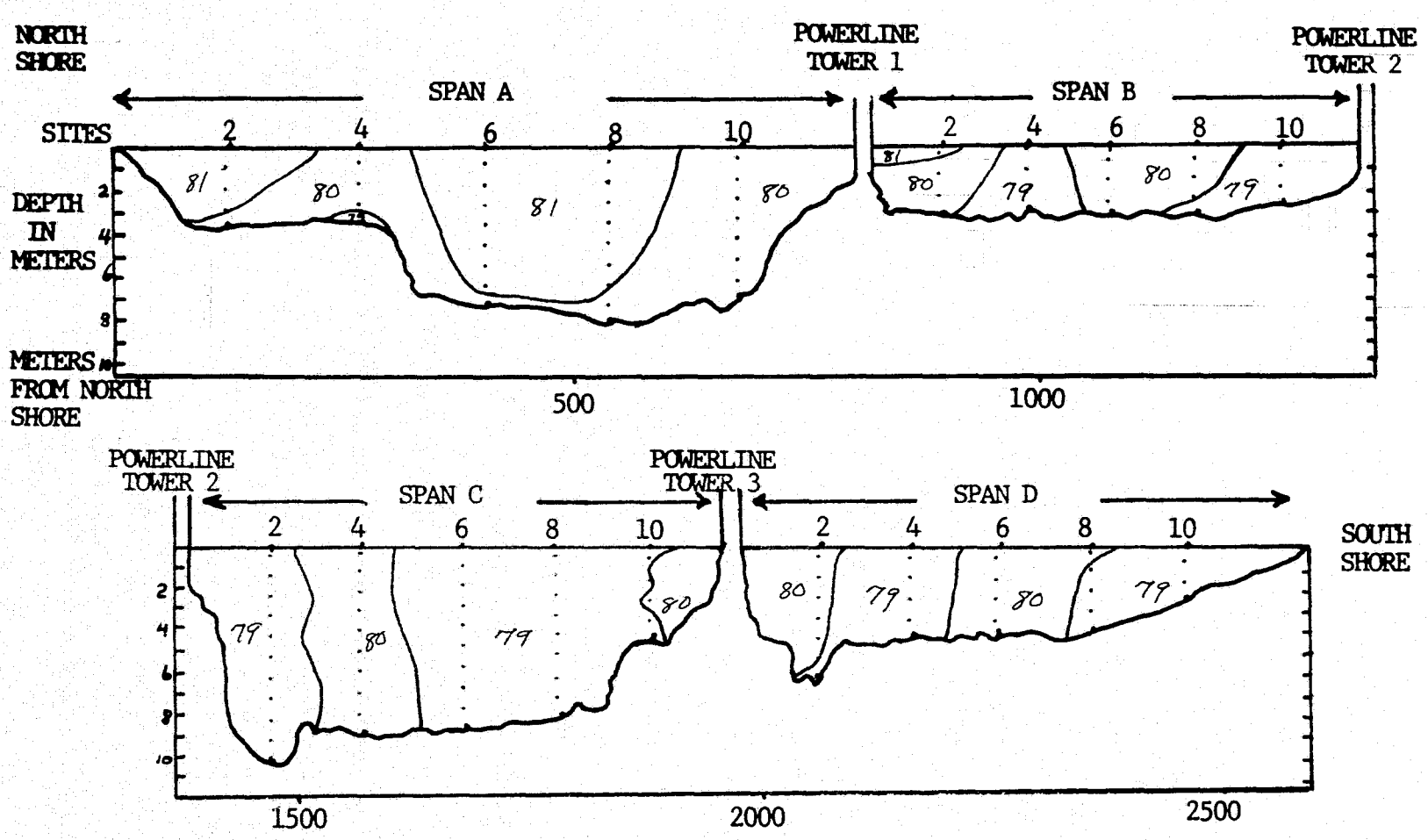

FIGURE 20. RIVER THERMAL PROFILE OF SEPTEMBER 20, 1972 WITH A 35,652 cf/s FLOW RATE, 77°F AIR TEMPERATURE AND 10% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	092772	1)	79.5	79.3	79.8	79.8	80.
SPAN A	092772	2)	79.5	79.5	79.8	79.8	80.
SPAN A	092772	3)	79.5	79.5	80.	79.8	80.
SPAN A	092772	4)	79.5		80.	79.8	80.
SPAN A	092772	5)			80.	80.	80.
SPAN A	092772	6)			80.	80.	80.
SPAN A	092772	7)					80.
SPAN A	092772	8)					80.
		MAXIMUM	79.50	79.50	80.00	80.00	80.00
		MINIMUM	79.50	79.30	79.80	79.80	80.00
		AVERAGE	79.50	79.43	79.93	79.87	80.00
		ST.DEV.	.00	.12	.10	.10	.00
				SURFACE AVG. 79.80	BOTTOM AVG. 79.68		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	092772	1)	80.	80.	80.	80.	80.
SPAN B	092772	2)	80.	80.	80.	80.	80.
SPAN B	092772	3)	80.	80.	80.	80.	80.
		MAXIMUM	80.00	80.00	80.00	80.00	80.00
		MINIMUM	80.00	80.00	80.00	80.00	80.00
		AVERAGE	80.00	80.00	80.00	80.00	80.00
		ST.DEV.	.00	.00	.00	.00	.00
				SURFACE AVG. 80.00	BOTTOM AVG. 80.00		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	092772	1)	79.7	79.7	79.8	79.7	79.8
SPAN C	092772	2)	79.8	79.7	79.8	79.8	79.8
SPAN C	092772	3)	79.9	79.8	79.8	79.8	79.8
SPAN C	092772	4)	79.9	79.8	79.9	79.8	79.8
SPAN C	092772	5)	80.	79.9	79.9	79.8	79.8
SPAN C	092772	6)	80.9	79.9	79.9	79.9	79.8
SPAN C	092772	7)	80.9	79.9	79.9	79.9	79.8
SPAN C	092772	8)	80.	80.	79.9	79.9	79.8
SPAN C	092772	9)	80.				
		MAXIMUM	80.90	80.00	79.90	79.90	79.80
		MINIMUM	79.70	79.70	79.80	79.70	79.80
		AVERAGE	80.12	79.84	79.86	79.82	79.80
		ST.DEV.	.45	.11	.05	.07	.00
				SURFACE AVG. 79.92	BOTTOM AVG. 79.74		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	092772	1)	79.5	79.5	79.5	79.5	79.2
SPAN D	092772	2)	79.5	79.5	79.5	79.5	79.2
SPAN D	092772	3)	79.5	79.5	79.5	79.5	
SPAN D	092772	4)	79.6	79.6	79.5	79.6	
SPAN D	092772	5)	79.7				
SPAN D	092772	6)	79.9				
		MAXIMUM	79.90	79.60	79.50	79.60	79.20
		MINIMUM	79.50	79.50	79.50	79.50	79.20
		AVERAGE	79.62	79.52	79.50	79.52	79.20
		ST.DEV.	.16	.05	.00	.05	.00
				SURFACE AVG. 79.56	BOTTOM AVG. 79.44		

DATE 092772

4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 79.78
2) MAXIMUM VALUE 80.90
3) MINIMUM VALUE 79.20
4) SURFACE AVG. 79.82
5) BOTTOM AVG. 79.71

AIR TEMP AVG. 73.
WIND DIRECTION 16.
WIND SPEED 3.5
CLOUD COVER 9.

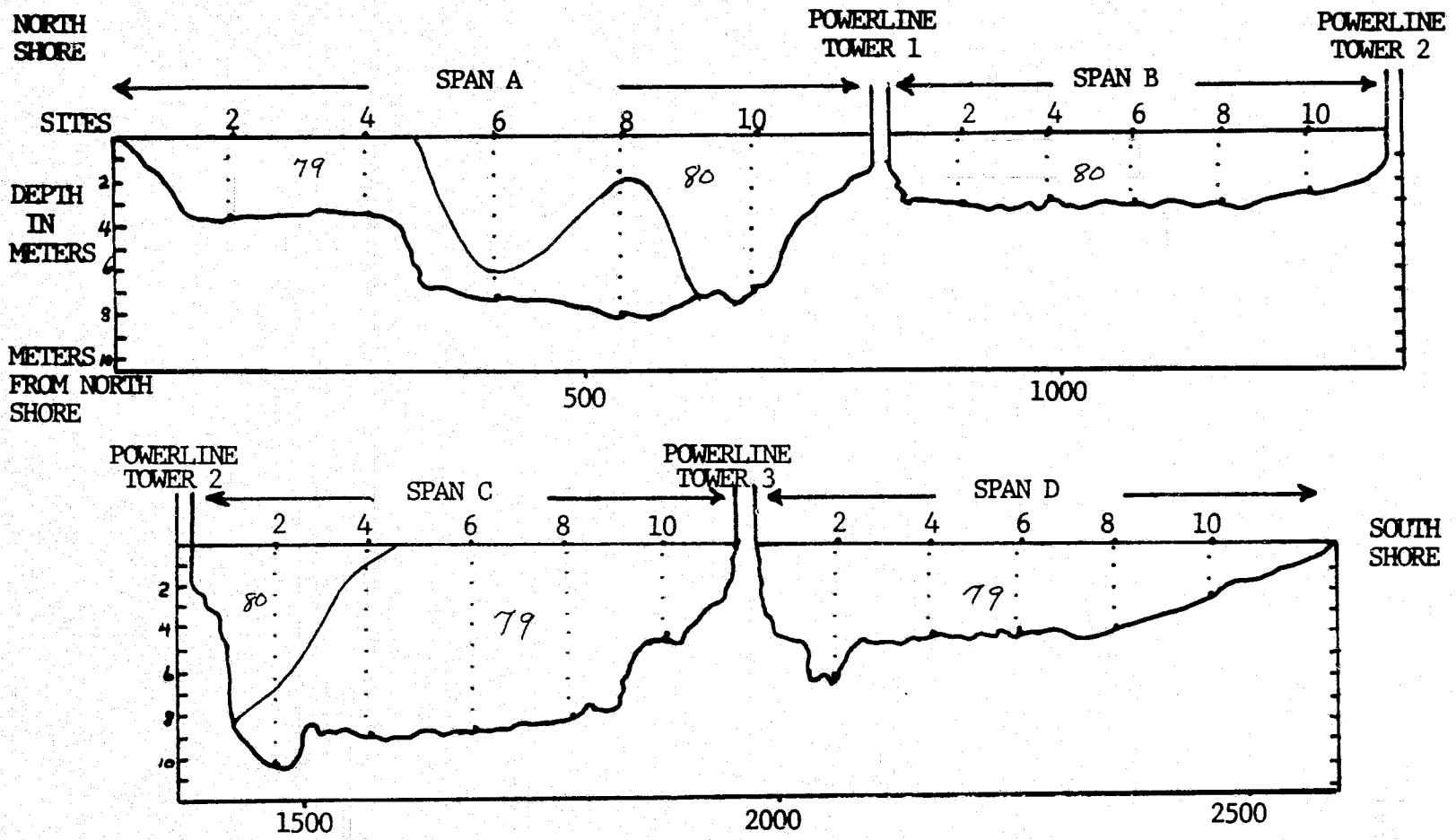

FIGURE 21. RIVER THERMAL PROFILE OF SEPTEMBER 27, 1972 WITH A 27,124 cf/s FLOW RATE, 73°F AIR TEMPERATURE AND 90% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	100472	1)	70.2	70.	71.9	70.1	71.9
SPAN A	100472	2)	70.3	70.	71.8	70.3	71.7
SPAN A	100472	3)	70.2	70.	71.8	70.4	71.7
SPAN A	100472	4)			71.7	70.5	71.7
SPAN A	100472	5)			71.4	70.5	71.7
SPAN A	100472	6)			71.1	70.6	71.7
SPAN A	100472	7)			70.9	70.5	71.5
SPAN A	100472	8)				70.5	
		MAXIMUM	70.30	70.00	71.90	70.60	71.90
		MINIMUM	70.20	70.00	70.90	70.10	71.50
		AVERAGE	70.23	70.00	71.51	70.42	71.70
		ST.DEV.	.06	.00	.39	.16	.12
				SURFACE AVG. 70.62	BOTTOM AVG. 70.82		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	100472	1)	70.2	72.	71.2	70.3	71.9
SPAN B	100472	2)	70.4	72.	71.2	70.5	72.
SPAN B	100472	3)	70.5	72.1	71.3	70.7	72.
		MAXIMUM	70.50	72.10	71.30	70.70	72.00
		MINIMUM	70.20	72.00	71.20	70.30	71.90
		AVERAGE	70.37	72.03	71.23	70.50	71.97
		ST.DEV.	.15	.06	.06	.20	.06
				SURFACE AVG. 71.32	BOTTOM AVG. 71.12		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	100472	1)	71.5	71.5	70.2	71.5	71.2
SPAN C	100472	2)	71.5	71.5	70.1	71.6	71.1
SPAN C	100472	3)	71.6	71.5	70.1	71.6	71.
SPAN C	100472	4)	71.6	71.5	70.1	71.6	70.9
SPAN C	100472	5)	71.6	71.5	70.	71.6	70.7
SPAN C	100472	6)	71.6	71.5	70.1	71.6	70.8
SPAN C	100472	7)	71.6	71.5	70.	71.5	70.7
SPAN C	100472	8)	71.6	71.5	70.1	71.6	
SPAN C	100472	9)	71.5				
		MAXIMUM	71.60	71.50	70.20	71.60	71.20
		MINIMUM	71.50	71.50	70.00	71.50	70.70
		AVERAGE	71.57	71.50	70.09	71.57	70.91
		ST.DEV.	.05	.00	.06	.05	.20
				SURFACE AVG. 71.08	BOTTOM AVG. 71.18		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	100472	1)	70.3	71.7	71.	71.3	70.
SPAN D	100472	2)	70.4	71.8	71.	71.4	70.2
SPAN D	100472	3)	70.4	71.8	71.2	71.4	
SPAN D	100472	4)	70.3	71.8		71.3	
SPAN D	100472	5)	70.3				
SPAN D	100472	6)	70.5				
		MAXIMUM	70.50	71.80	71.20	71.40	70.20
		MINIMUM	70.30	71.70	71.00	71.30	70.00
		AVERAGE	70.37	71.77	71.07	71.35	70.10
		ST.DEV.	.08	.05	.12	.06	.14
				SURFACE AVG. 71.00	BOTTOM AVG. 70.86		

DATE 100472
4 SPANS CALCULATED, THE RESULTS ARE:

1)	AVERAGE TEMP.	71.01
2)	MAXIMUM VALUE	72.10
3)	MINIMUM VALUE	70.00
4)	SURFACE AVG.	71.00
5)	BOTTOM AVG.	70.99
	AIR TEMP AVG.	62.
	WIND DIRECTION	11.
	WIND SPEED	8.5
	CLOUD COVER	10.

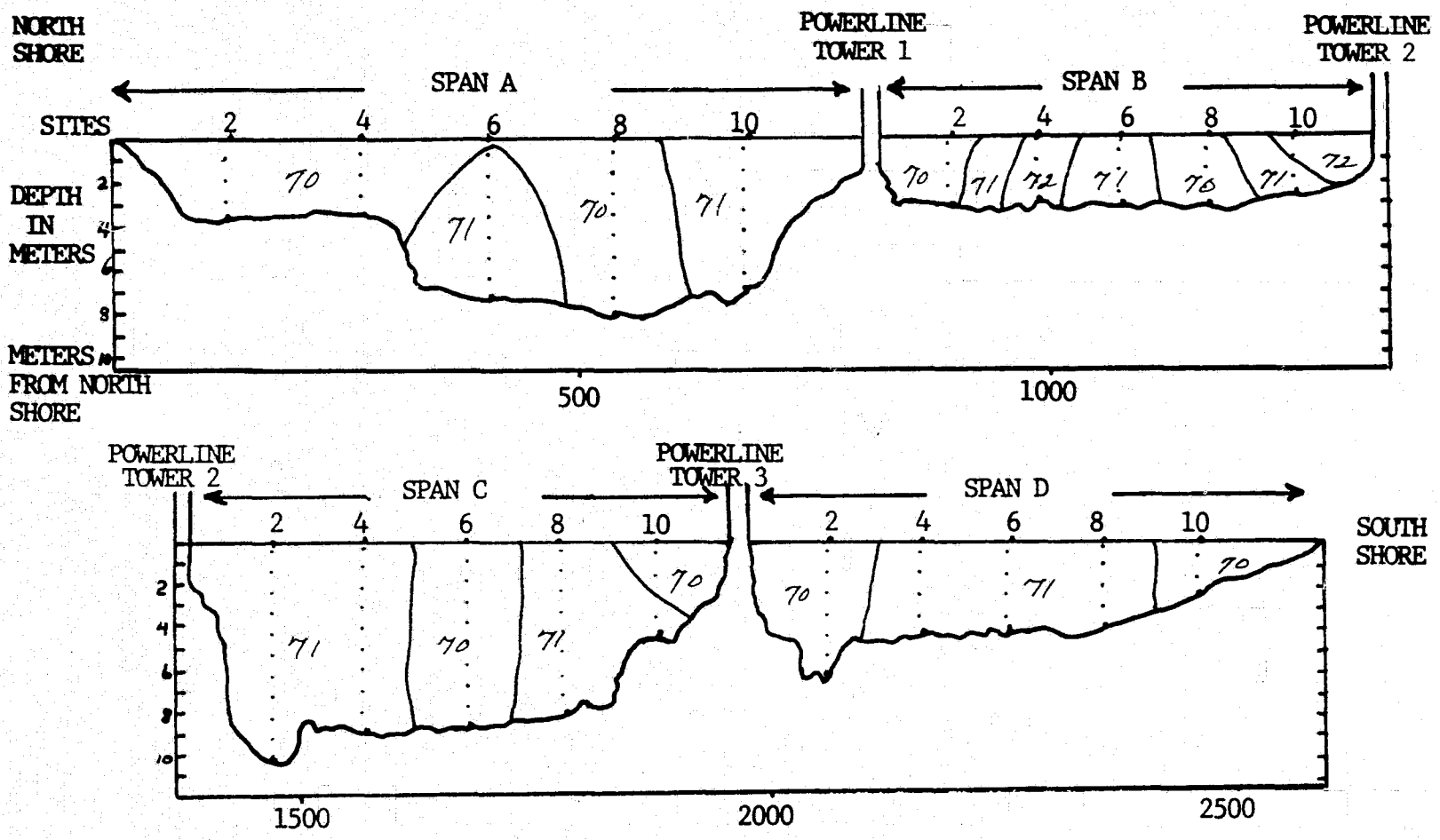

FIGURE 22. RIVER THERMAL PROFILE OF OCTOBER 4, 1972 WITH A 41,364 cf/s FLOW RATE, 62°F AIR TEMPERATURE AND 100% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	101172	1)	66.8	68.2	67.2	67.8	67.7
SPAN A	101172	2)	66.7	68.3	67.3	67.9	67.8
SPAN A	101172	3)	66.8	68.4	67.3	67.7	67.9
SPAN A	101172	4)	66.8		67.4	67.7	67.7
SPAN A	101172	5)			67.4	67.7	67.6
SPAN A	101172	6)			67.5	67.7	67.7
SPAN A	101172	7)			67.1	67.6	67.6
SPAN A	101172	8)				67.5	67.7
		MAXIMUM	66.80	68.40	67.60	67.90	67.90
		MINIMUM	66.70	68.20	67.10	67.50	67.60
		AVERAGE	66.77	68.30	67.31	67.70	67.71
		ST.DEV.	.05	.10	.13	.12	.10
				SURFACE AVG. 67.50	BOTTOM AVG. 67.54		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	101172	1)	67.4	67.1	67.1	67.8	69.1
SPAN B	101172	2)	67.4	67.4	67.2	67.9	69.1
SPAN B	101172	3)	67.5	67.5	67.2	67.9	69.
		MAXIMUM	67.50	67.60	67.20	67.90	69.10
		MINIMUM	67.40	67.10	67.10	67.80	69.00
		AVERAGE	67.43	67.33	67.17	67.87	69.07
		ST.DEV.	.06	.21	.06	.06	.06
				SURFACE AVG. 67.82	BOTTOM AVG. 67.70		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	101172	1)	66.9	67.	67.1	67.9	66.9
SPAN C	101172	2)	66.9	67.	67.1	68.	66.9
SPAN C	101172	3)	67.1	67.	67.1	68.	67.
SPAN C	101172	4)	67.1	67.1	67.1	68.	67.1
SPAN C	101172	5)	67.	67.1	66.9	68.	67.2
SPAN C	101172	6)	67.2	67.2	66.9	68.1	67.3
SPAN C	101172	7)	67.	67.3	66.7	68.	67.2
SPAN C	101172	8)	67.1	67.3	66.7	68.2	66.5
SPAN C	101172	9)	67.1				
		MAXIMUM	67.20	67.30	67.10	68.20	67.30
		MINIMUM	66.90	67.00	66.70	67.90	66.50
		AVERAGE	67.04	67.12	66.95	68.02	67.01
		ST.DEV.	.10	.13	.18	.09	.25
				SURFACE AVG. 67.16	BOTTOM AVG. 67.16		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	101172	1)	67.4	67.5	67.	66.5	67.1
SPAN D	101172	2)	67.5	67.5	67.2	66.5	67.1
SPAN D	101172	3)	67.6	67.5	67.4	66.3	
SPAN D	101172	4)	67.6	67.5	67.2	66.3	
SPAN D	101172	5)	67.5				
SPAN D	101172	6)	67.5				
		MAXIMUM	67.60	67.50	67.40	66.50	67.10
		MINIMUM	67.40	67.50	67.00	66.30	67.10
		AVERAGE	67.52	67.50	67.20	66.40	67.10
		ST.DEV.	.08	.00	.16	.12	.00
				SURFACE AVG. 67.12	BOTTOM AVG. 67.10		

DATE 101172
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 67.43
2) MAXIMUM VALUE 69.10
3) MINIMUM VALUE 66.30
4) SURFACE AVG. 67.40
5) BOTTOM AVG. 67.37
AIR TEMP AVG. 65.
WIND DIRECTION 13.
WIND SPEED 11.5
CLOUD COVER 5.

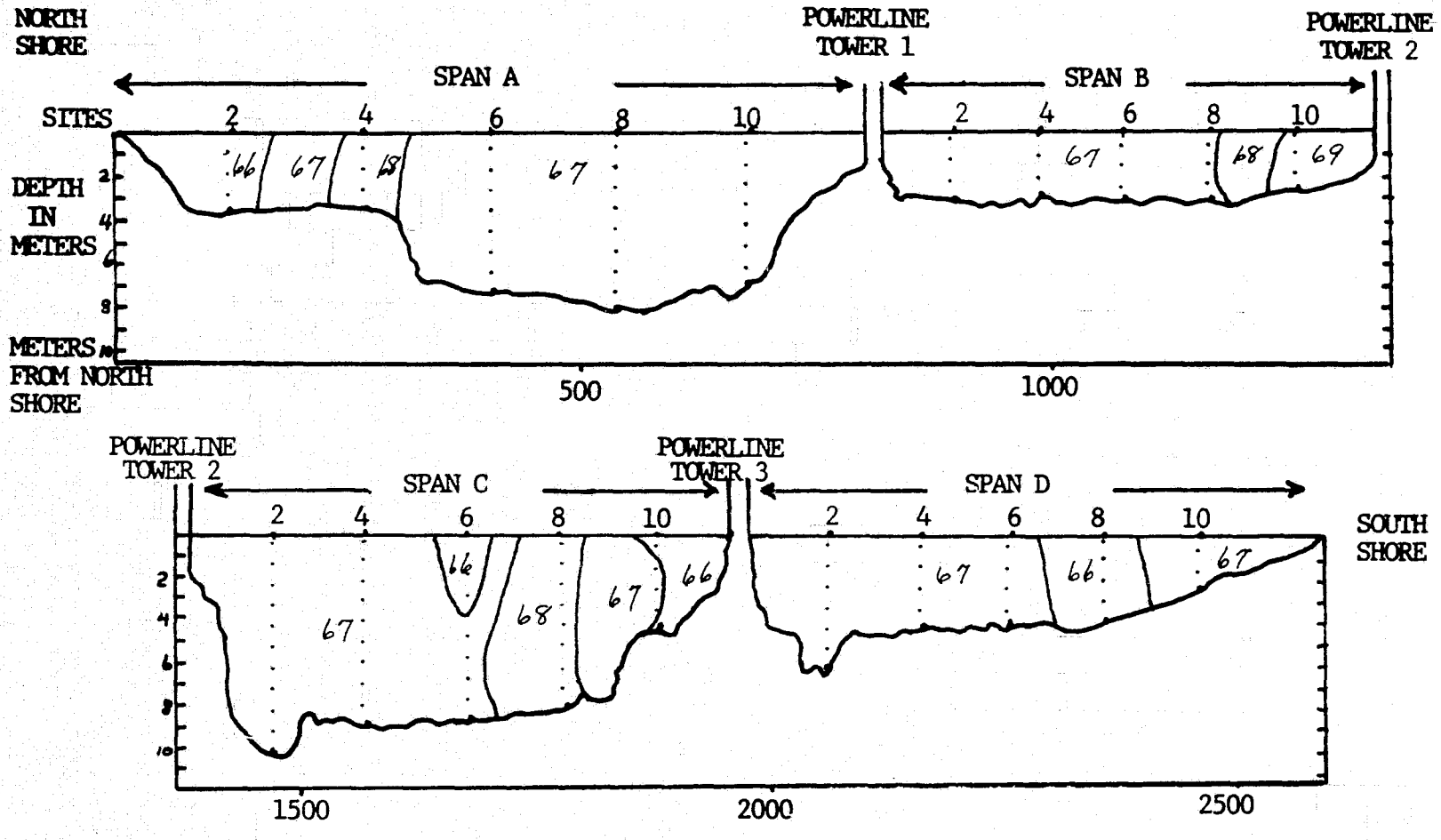

FIGURE 23. RIVER THERMAL PROFILE OF OCTOBER 11, 1972 WITH A 49,400 cf/s FLOW RATE, 65°F AIR TEMPERATURE AND 50% CLOUD COVER

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	110372	1)	62.8	62.5	62.4	61.2	61.9
SPAN A	110372	2)	62.5	62.3	62.5	61.4	62.1
SPAN A	110372	3)	63.	62.4	62.5	61.4	62.1
SPAN A	110372	4)			62.5	61.3	62.3
SPAN A	110372	5)			62.4	61.1	62.
SPAN A	110372	6)			62.4	61.4	62.
SPAN A	110372	7)			62.4		62.
SPAN A	110372	8)			62.4		
		MAXIMUM	63.00	62.50	62.50	61.40	62.30
		MINIMUM	62.50	62.30	62.40	61.10	61.90
		AVERAGE	62.77	62.40	62.44	61.30	62.06
		ST.DEV.	.25	.10	.05	.13	.13
				SURFACE AVG. 62.24	BOTTOM AVG. 62.16		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	110372	1)		62.1	62.1	62.4	61.8
SPAN B	110372	2)	62.4	62.2	62.2	62.3	61.7
SPAN B	110372	3)	62.2	62.3	62.3	62.4	
SPAN B	110372	4)	62.3			62.4	
		MAXIMUM	62.40	62.30	62.30	62.40	61.70
		MINIMUM	62.20	62.10	62.10	62.30	61.60
		AVERAGE	62.30	62.20	62.20	62.37	61.65
		ST.DEV.	.10	.10	.10	.05	.07
				SURFACE AVG. 62.20	BOTTOM AVG. 62.05		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	110372	1)	62.2	61.4	62.6	61.1	62.5
SPAN C	110372	2)	62.3	61.7	62.7	61.2	62.3
SPAN C	110372	3)	62.3	61.6	62.6	61.3	62.3
SPAN C	110372	4)	62.3	61.4	62.5	61.3	62.3
SPAN C	110372	5)	62.3	61.6	62.5	61.2	62.1
SPAN C	110372	6)	62.3	61.8	62.5	61.2	62.1
SPAN C	110372	7)	62.2	61.5	62.5	61.4	62.
SPAN C	110372	8)	62.	61.6	62.5		
		MAXIMUM	62.30	61.80	62.70	61.40	62.50
		MINIMUM	62.00	61.40	62.50	61.10	62.00
		AVERAGE	62.24	61.57	62.55	61.24	62.23
		ST.DEV.	.11	.14	.08	.10	.17
				SURFACE AVG. 61.90	BOTTOM AVG. 61.96		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	110372	1)	62.5	62.3	63.	61.8	63.8
SPAN D	110372	2)	62.5	62.4	62.9	61.9	63.6
SPAN D	110372	3)	62.6	62.1	62.9	61.9	
SPAN D	110372	4)	62.6	62.1			
SPAN D	110372	5)	62.6				
		MAXIMUM	62.60	62.40	63.00	61.90	63.80
		MINIMUM	62.50	62.10	62.90	61.80	63.60
		AVERAGE	62.56	62.22	62.93	61.87	63.70
		ST.DEV.	.05	.15	.06	.06	.14
				SURFACE AVG. 62.62	BOTTOM AVG. 62.68		

DATE 110372
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	62.24
2) MAXIMUM VALUE	63.80
3) MINIMUM VALUE	61.10
4) SURFACE AVG.	62.24
5) BOTTOM AVG.	62.22
AIR TEMP AVG.	61.
WIND DIRECTION	25.
WIND SPEED	3.5
CLOUD COVER	8.

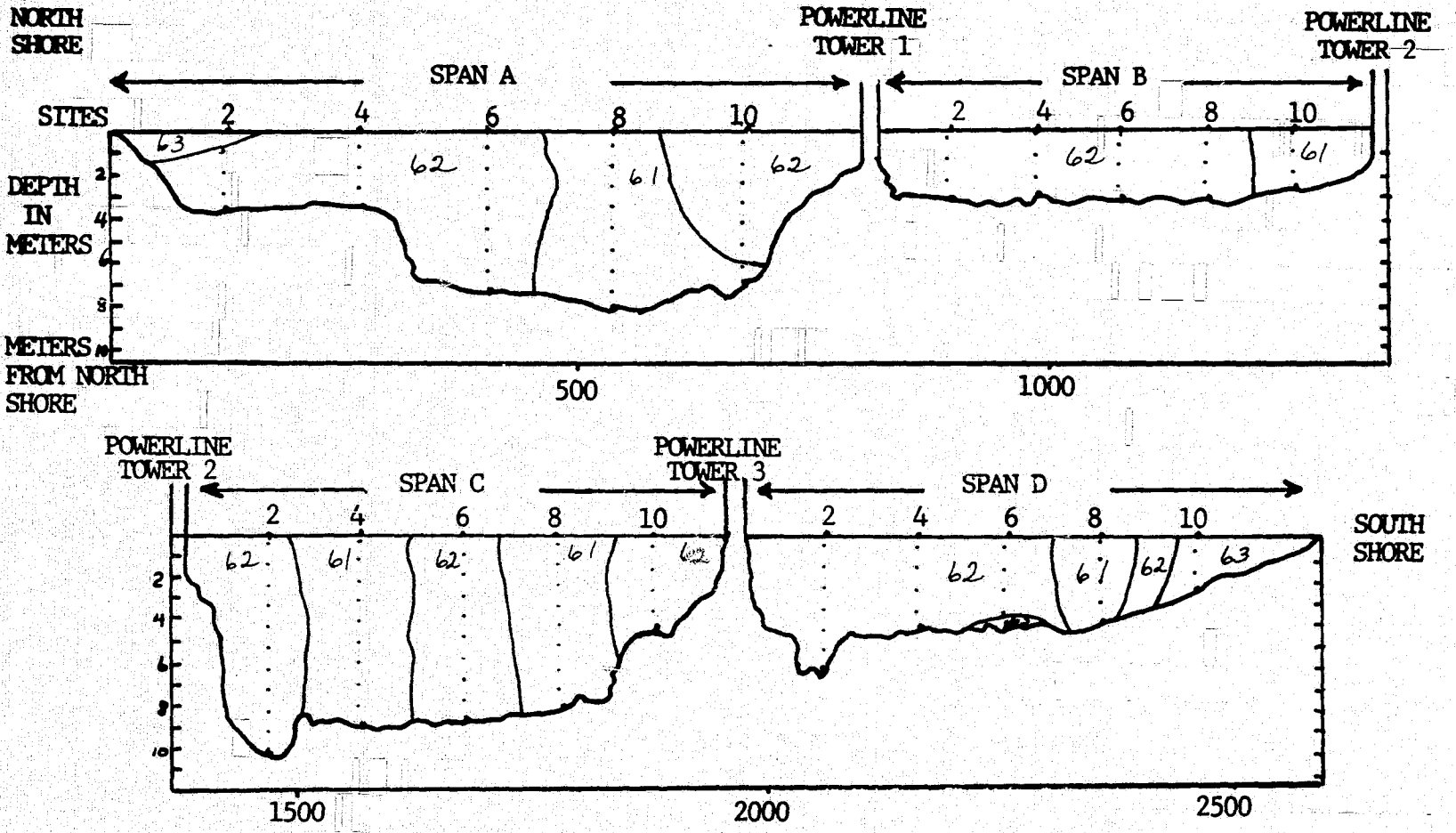

FIGURE 24. RIVER THERMAL PROFILE OF NOVEMBER 3, 1972 WITH A 66,878 cf/s FLOW RATE, 61°F AIR TEMPERATURE AND 80% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	111072	1)	58.4	58.4	58.4	59.1	59.4
SPAN A	111072	2)	58.4	58.4	58.4	59.2	59.3
SPAN A	111072	3)	58.4	58.3	58.6	59.2	59.1
SPAN A	111072	4)			58.5	59.2	59.
SPAN A	111072	5)			58.5	59.1	58.9
SPAN A	111072	6)			58.5	59.1	58.9
SPAN A	111072	7)			58.3	58.9	58.8
SPAN A	111072	8)				58.9	
		MAXIMUM	58.40	58.40	58.60	59.20	59.40
		MINIMUM	58.40	58.30	58.30	58.90	58.80
		AVERAGE	58.40	58.37	58.46	59.09	59.06
		ST.DEV.	.00	.06	.10	.12	.22

SURFACE AVG. 58.54 BOTTOM AVG. 58.74

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	111072	1)	58.9	60.	58.7	61.6	59.5
SPAN B	111072	2)	59.	59.7	58.6	61.2	59.5
SPAN B	111072	3)				61.6	59.3
		MAXIMUM	59.00	60.00	58.70	61.60	59.50
		MINIMUM	58.90	59.70	58.60	61.20	59.30
		AVERAGE	58.95	59.85	58.65	61.47	59.43
		ST.DEV.	.07	.21	.07	.23	.12

SURFACE AVG. 59.64 BOTTOM AVG. 59.74

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	111072	1)	59.1	59.6	59.5	59.2	59.
SPAN C	111072	2)	59.1	59.6	59.6	59.3	59.
SPAN C	111072	3)	59.2	59.7	59.6	59.4	59.1
SPAN C	111072	4)	59.3	59.7	59.6	59.3	59.
SPAN C	111072	5)	59.2	59.6	59.5	59.2	58.9
SPAN C	111072	6)	59.2	59.6	59.4	59.2	58.9
SPAN C	111072	7)	59.	59.5	59.4	59.	58.7
SPAN C	111072	8)	59.2	59.4	59.5		
		MAXIMUM	59.30	59.70	59.60	59.40	59.10
		MINIMUM	59.00	59.40	59.40	59.00	58.70
		AVERAGE	59.16	59.59	59.51	59.23	58.94
		ST.DEV.	.09	.10	.08	.13	.13

SURFACE AVG. 59.16 BOTTOM AVG. 59.26

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	111072	1)	59.4	59.4	59.1	57.9	57.6
SPAN D	111072	2)	59.4	59.2	59.1	58.	57.6
SPAN D	111072	3)	59.3	59.2	59.1	58.1	
SPAN D	111072	4)	59.3	59.4			
		MAXIMUM	59.40	59.40	59.10	58.10	57.60
		MINIMUM	59.30	59.20	59.10	57.90	57.60
		AVERAGE	59.35	59.30	59.10	58.00	57.60
		ST.DEV.	.06	.12	.00	.10	.00

SURFACE AVG. 58.70 BOTTOM AVG. 58.68

DATE 111072
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 59.08
2) MAXIMUM VALUE 61.60
3) MINIMUM VALUE 57.60
4) SURFACE AVG. 59.01
5) BOTTOM AVG. 59.11
AIR TEMP AVG. 56.
WIND DIRECTION 23.
WIND SPEED 9.6
CLOUD COVER 9.

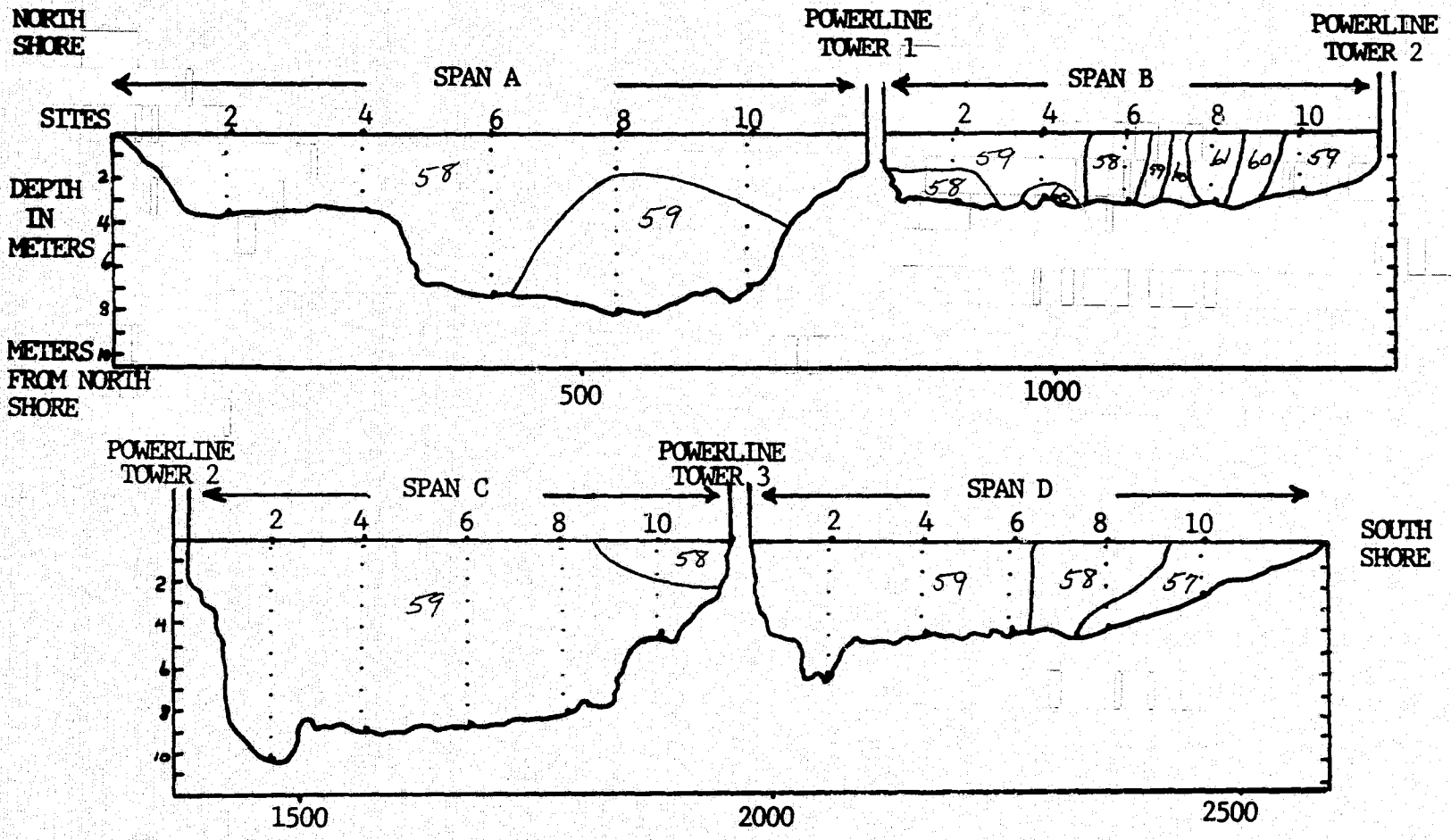

FIGURE 25. RIVER THERMAL PROFILE OF NOVEMBER 10, 1972 WITH A 62,140 cf/s FLOW RATE, 56% AIR TEMPERATURE AND 90% CLOUD COVER.

TEMPERATURE READINGS AT BROADUS FERRY POINT LIFE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	111572	1)	54.8	56.3	55.7	55.2	56.9
SPAN A	111572	2)	54.7	56.4	55.6	55.2	56.8
SPAN A	111572	3)		56.5	55.5	55.4	56.8
SPAN A	111572	4)			55.3	55.3	56.8
SPAN A	111572	5)			55.1	55.1	56.7
SPAN A	111572	6)			55.	55.2	56.7
SPAN A	111572	7)			55.	54.8	56.5
SPAN A	111572	8)				54.5	56.
		MAXIMUM	54.80	56.50	55.70	55.40	56.90
		MINIMUM	54.70	56.10	55.00	54.50	56.00
		AVERAGE	54.75	56.40	55.29	55.09	56.65
		ST.DEV.	.07	.10	.28	.29	.29
				SURFACE AVG. 55.34	BOTTOM AVG. 55.78		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	111572	1)	56.5	56.7	56.6	57.3	57.7
SPAN B	111572	2)	56.3	56.3	56.4	57.1	57.5
SPAN B	111572	3)	55.2	55.8	56.4	57.	
		MAXIMUM	56.60	56.70	56.60	57.30	57.70
		MINIMUM	55.20	56.80	56.40	57.00	57.50
		AVERAGE	56.00	56.27	56.47	57.13	57.60
		ST.DEV.	.70	.45	.12	.15	.14
				SURFACE AVG. 56.38	BOTTOM AVG. 56.96		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	111572	1)	56.2	57.2	57.1	56.2	55.2
SPAN C	111572	2)	56.	57.2	57.1	56.3	54.9
SPAN C	111572	3)	56.1	57.3	57.2	56.3	54.9
SPAN C	111572	4)	55.9	57.1	57.2	56.3	54.7
SPAN C	111572	5)	55.9	57.1	57.1	56.1	54.6
SPAN C	111572	6)	55.9	57.1	57.2	56.2	54.6
SPAN C	111572	7)	56.	56.8	57.1	56.	54.4
SPAN C	111572	8)	55.9	56.8	57.2	56.2	
SPAN C	111572	9)	56.				
		MAXIMUM	56.20	57.30	57.20	56.30	55.20
		MINIMUM	55.90	56.80	57.10	56.00	54.40
		AVERAGE	55.99	57.07	57.15	56.20	54.76
		ST.DEV.	.11	.18	.05	.11	.26
				SURFACE AVG. 56.12	BOTTOM AVG. 56.38		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	111572	1)	55.6	55.5	54.3	53.7	54.6
SPAN D	111572	2)	55.5	55.2	54.4	53.3	54.5
SPAN D	111572	3)	55.5	55.	54.5	53.	
SPAN D	111572	4)	55.4	55.		52.8	
SPAN D	111572	5)	55.2				
SPAN D	111572	6)	55.2				
		MAXIMUM	55.60	55.50	54.50	53.70	54.60
		MINIMUM	55.20	55.00	54.30	52.80	54.50
		AVERAGE	55.40	55.17	54.40	53.20	54.53
		ST.DEV.	.17	.24	.10	.39	.07
				SURFACE AVG. 54.40	BOTTOM AVG. 54.74		

DATE 111572
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	55.78
2) MAXIMUM VALUE	57.70
3) MINIMUM VALUE	52.80
4) SURFACE AVG.	55.56
5) BOTTOM AVG.	55.96
AIR TEMP AVG.	38.
WIND DIRECTION	36.
WIND SPEED	13.1
CLOUD COVER	7.

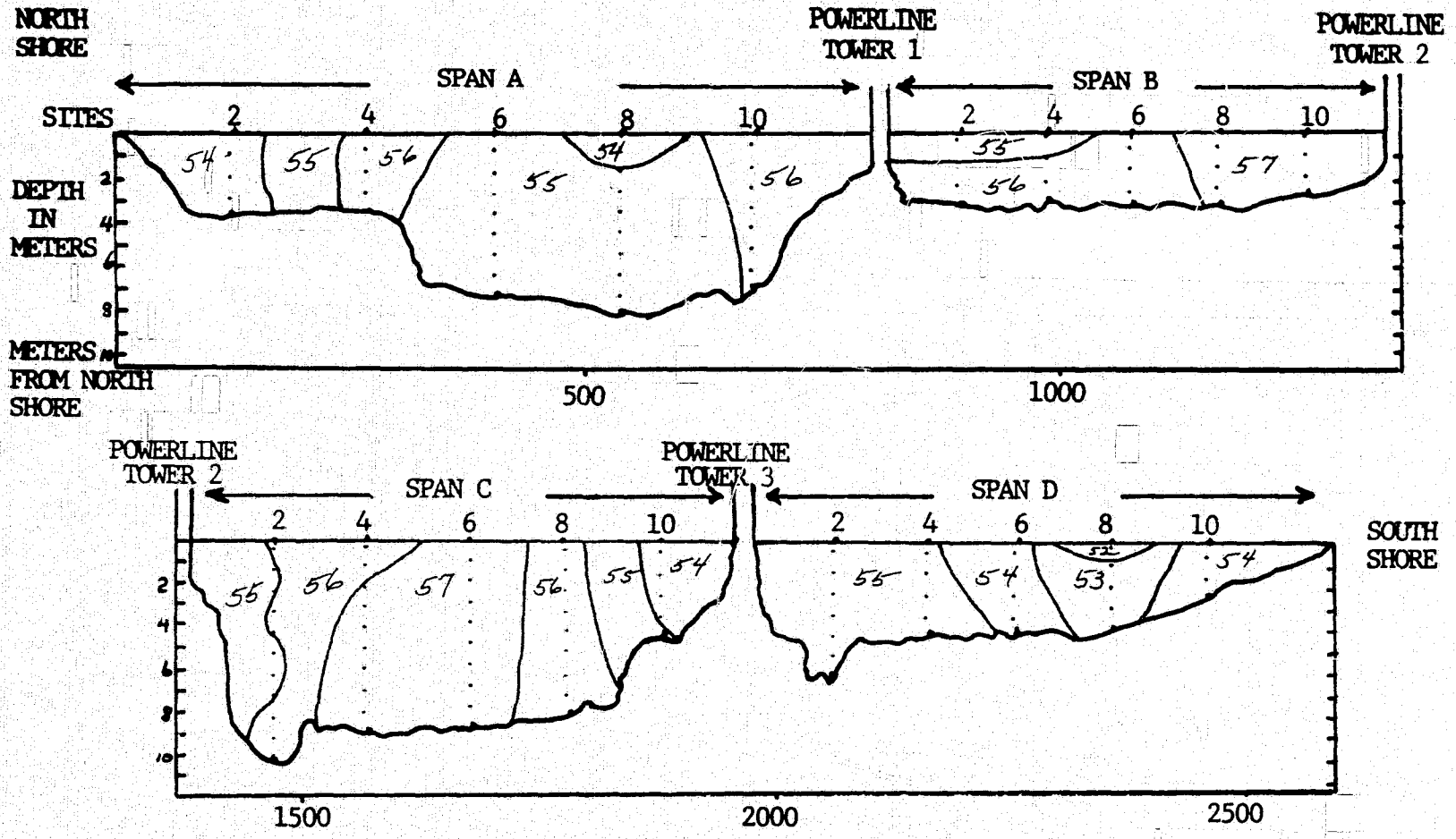

FIGURE 26. RIVER THERMAL PROFILE OF NOVEMBER 15, 1972 WITH A FLOW RATE OF 67,784 cf/s, 38°F AIR TEMPERATURE AND 70% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	112972	1)	48.4	48.6	47.1	48.	51.
SPAN A	112972	2)	48.	48.2	47.	48.	50.
SPAN A	112972	3)	47.9	48.2	46.9	47.9	49.8
SPAN A	112972	4)	47.9	48.2	46.7	47.9	49.7
SPAN A	112972	5)			46.7	47.8	49.6
SPAN A	112972	6)			46.7	47.8	49.6
SPAN A	112972	7)				47.7	49.3
SPAN A	112972	8)				47.6	49.2
		MAXIMUM	48.40	48.60	47.10	48.00	51.00
		MINIMUM	47.90	48.20	46.70	47.60	49.20
		AVERAGE	48.05	48.30	46.85	47.84	49.77
		ST.DEV.	.24	.20	.18	.14	.56
				SURFACE AVG. 47.92	BOTTOM AVG. 48.62		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	112972	1)	49.2	49.5	49.4	50.	48.8
SPAN B	112972	2)	48.7	49.5	49.3	49.7	48.9
SPAN B	112972	3)	48.7	49.5	49.3	49.7	
		MAXIMUM	49.20	49.50	49.40	50.00	48.90
		MINIMUM	48.70	49.50	49.30	49.70	48.80
		AVERAGE	48.87	49.50	49.33	49.80	48.85
		ST.DEV.	.29	.00	.06	.17	.07
				SURFACE AVG. 49.22	BOTTOM AVG. 49.38		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	112972	1)	49.4	49.1	48.4	50.1	49.
SPAN C	112972	2)	49.5	49.	48.1	49.8	48.8
SPAN C	112972	3)	49.3	48.8	47.8	49.7	48.5
SPAN C	112972	4)	49.3	48.8	47.6	49.7	48.6
SPAN C	112972	5)	49.2	48.7	47.7	49.6	48.5
SPAN C	112972	6)	49.2	48.7	47.7	49.6	48.4
SPAN C	112972	7)	48.7	48.7	47.4	49.3	48.4
SPAN C	112972	8)	48.8	48.7	47.5	49.4	48.5
SPAN C	112972	9)	48.7		47.5		
		MAXIMUM	49.50	49.10	48.40	50.10	49.00
		MINIMUM	48.70	48.70	47.40	49.30	48.40
		AVERAGE	49.12	48.81	47.74	49.65	48.57
		ST.DEV.	.31	.16	.32	.24	.21
				SURFACE AVG. 48.56	BOTTOM AVG. 49.20		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	112972	1)	48.	46.6	47.1	45.7	49.9
SPAN D	112972	2)	48.1	46.6	47.3	45.7	50.1
SPAN D	112972	3)	48.1	46.7	47.4	45.8	
SPAN D	112972	4)	48.2	46.7	47.4	45.9	
SPAN D	112972	5)	48.2				
SPAN D	112972	6)	48.4				
		MAXIMUM	48.40	46.70	47.40	45.90	50.10
		MINIMUM	48.00	46.60	47.10	45.70	49.90
		AVERAGE	48.17	46.65	47.30	45.77	50.00
		ST.DEV.	.14	.06	.14	.10	.14
				SURFACE AVG. 47.70	BOTTOM AVG. 47.46		

DATE 112972
4 SPANS CALCULATED, THE RESULTS ARE:

1)	AVERAGE TEMP.	48.45
2)	MAXIMUM VALUE	51.00
3)	MINIMUM VALUE	45.70
4)	SURFACE AVG.	48.35
5)	BOTTOM AVG.	48.66
	AIR TEMP AVG.	43.
	WIND DIRECTION	03.
	WIND SPEED	9.5
	CLOUD COVER	10.

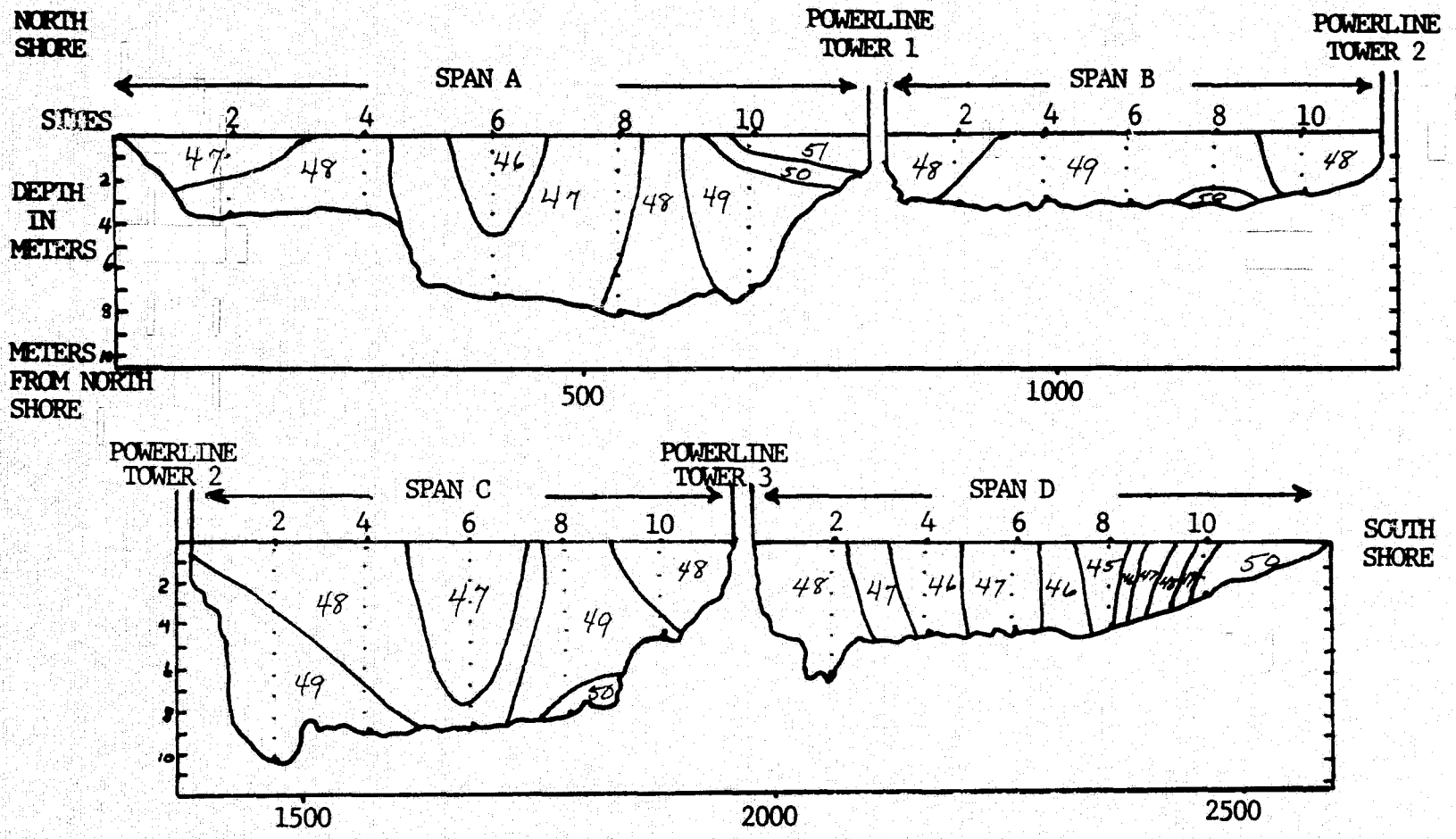

FIGURE 27. RIVER THERMAL PROFILE OF NOVEMBER 29, 1972, 43°F AIR TEMPERATURE AND 100% CLOUD COVER

TEMPERATURE READINGS AT BROWN'S FERRY POWER SITE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	120672	1)	53.3	53.7	51.6	50.3	50.4
SPAN A	120672	2)	53.2	53.6	51.4	50.2	50.2
SPAN A	120672	3)	53.3		51.3	50.4	50.
SPAN A	120672	4)			51.3	50.2	50.
SPAN A	120672	5)			51.2	50.2	49.9
SPAN A	120672	6)			51.2	50.3	49.9
SPAN A	120672	7)				49.9	49.8
		MAXIMUM	53.30	53.70	51.60	50.40	50.20
		MINIMUM	53.20	53.60	51.20	49.90	49.80
		AVERAGE	53.27	53.65	51.33	50.21	50.06
		ST.DEV.	.06	.07	.15	.16	.15
				SURFACE AVG. 51.56		BOTTOM AVG. 51.82	

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	120672	1)	50.	49.8	51.1	49.9	49.8
SPAN B	120672	2)	49.7	49.5	50.2	49.9	49.8
SPAN B	120672	3)	49.3	48.7	50.1	49.7	
		MAXIMUM	50.00	49.80	50.20	49.90	49.80
		MINIMUM	49.30	48.70	50.10	49.70	49.60
		AVERAGE	49.67	49.33	50.13	49.83	49.70
		ST.DEV.	.35	.57	.06	.12	.14
				SURFACE AVG. 49.48		BOTTOM AVG. 49.92	

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	120672	1)	48.6	49.9	50.7	49.	50.2
SPAN C	120672	2)	48.6	50.	50.4	49.6	50.2
SPAN C	120672	3)	49.	50.3	50.6	49.1	50.7
SPAN C	120672	4)	49.2	50.5	50.7	49.1	
SPAN C	120672	5)	49.	50.1	50.6	49.	
SPAN C	120672	6)	49.1	50.2	50.6	49.3	
SPAN C	120672	7)	49.5	50.4	50.8	49.5	
SPAN C	120672	8)	49.2	50.			
		MAXIMUM	49.50	50.50	50.80	49.60	50.70
		MINIMUM	48.60	49.90	50.40	49.00	50.20
		AVERAGE	49.02	50.17	50.63	49.23	50.37
		ST.DEV.	.31	.21	.13	.24	.29
				SURFACE AVG. 50.04		BOTTOM AVG. 49.68	

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	120672	1)	50.1	50.7	50.2	50.9	52.1
SPAN D	120672	2)	50.2	50.	50.1	51.7	
SPAN D	120672	3)	50.6	49.7	51.	51.6	
SPAN D	120672	4)	50.7				
SPAN D	120672	5)	50.5				
SPAN D	120672	6)	50.5				
		MAXIMUM	50.70	50.70	51.00	51.70	52.10
		MINIMUM	50.10	49.70	50.10	50.90	52.10
		AVERAGE	50.43	50.13	50.43	51.40	52.10
		ST.DEV.	.23	.51	.49	.44	.00
				SURFACE AVG. 50.98		BOTTOM AVG. 50.80	

DATE 120672
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 50.55
2) MAXIMUM VALUE 53.70
3) MINIMUM VALUE 48.60
4) SURFACE AVG. 50.51
5) BOTTOM AVG. 50.55
AIR TEMP AVG. 47.
WIND DIRECTION 35.
WIND SPEED 12.2
CLOUD COVER 9.

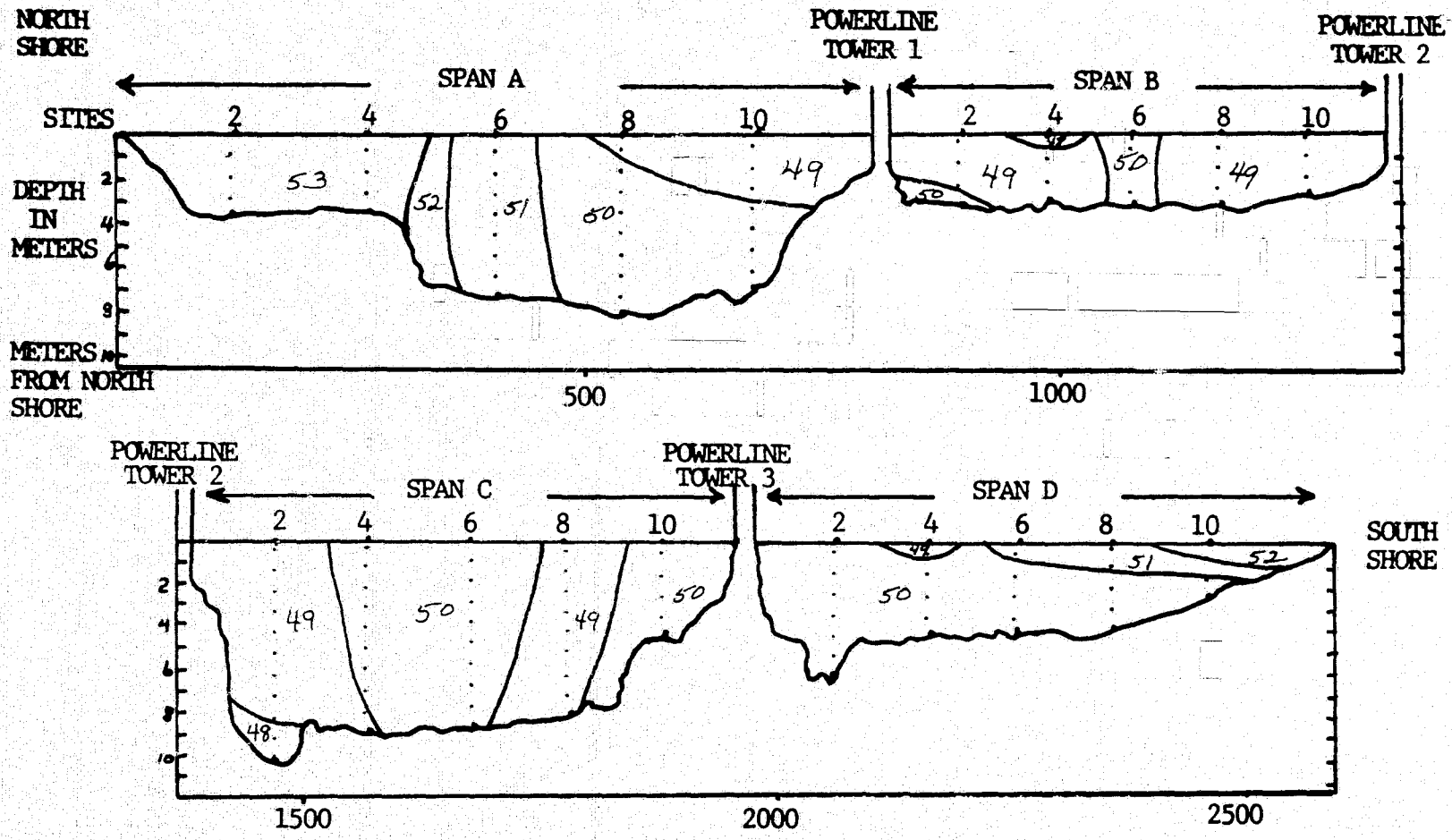

FIGURE 28. RIVER THERMAL PROFILE OF DECEMBER 6, 1972 WITH A 79,282 cf/s FLOW RATE, 47°F AIR TEMPERATURE AND 90% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	121372	1)	50.6	52.2	51.4	50.5	52.2
SPAN A	121372	2)	50.6	51.5	51.2	50.1	51.6
SPAN A	121372	3)	50.5	51.4	51.	49.8	51.4
SPAN A	121372	4)	50.5	51.2	51.	49.9	51.2
SPAN A	121372	5			50.9	49.9	51.1
SPAN A	121372	6)			50.8	49.8	51.
SPAN A	121372	7)			50.7	49.6	50.8
SPAN A	121372	8)			50.7	49.7	50.6
SPAN A	121372	9)				49.5	50.4
		MAXIMUM	50.60	52.20	51.40	50.50	52.20
		MINIMUM	50.50	51.20	50.70	49.50	50.40
		AVERAGE	50.55	51.57	50.96	49.87	51.14
		ST.DEV.	.06	.43	.24	.30	.55
				SURFACE AVG. 50.46	BOTTOM AVG. 51.38		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	121372	1)	50.3	49.5	49.4	49.9	50.1
SPAN B	121372	2)	50.3	49.5	49.1	49.5	49.9
SPAN B	121372	3)	50.5	49.5	49.3	49.5	50.
SPAN B	121372	4)	50.4	49.5	49.3	49.5	49.9
		MAXIMUM	50.50	49.50	49.40	49.90	50.10
		MINIMUM	50.30	49.50	49.10	49.50	49.90
		AVERAGE	50.37	49.50	49.27	49.60	49.97
		ST.DEV.	.10	.00	.13	.20	.10
				SURFACE AVG. 49.72	BOTTOM AVG. 49.84		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	121372	1)	50.3	50.4	50.	50.2	50.3
SPAN C	121372	2)	50.	50.3	49.7	50.3	50.2
SPAN C	121372	3)	50.	50.3	49.7	50.5	50.1
SPAN C	121372	4)	50.		49.5	50.5	50.2
SPAN C	121372	5)	49.7	50.1	49.4	50.5	50.1
SPAN C	121372	6)	49.8	50.1	49.4	50.5	50.
SPAN C	121372	7)	49.6	50.2	49.3	50.2	49.9
SPAN C	121372	8)	49.6	50.3	49.4	50.2	50.
SPAN C	121372	9)	49.5	50.2	49.4	50.	
SPAN C	121372	10)	49.5	50.4			
SPAN C	121372	11)	49.1				
		MAXIMUM	50.30	50.40	50.00	50.50	50.30
		MINIMUM	49.10	50.10	49.30	50.00	49.90
		AVERAGE	49.74	50.26	49.53	50.32	50.10
		ST.DEV.	.33	.11	.22	.19	.13
				SURFACE AVG. 49.78	BOTTOM AVG. 50.24		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	121372	1)	49.4	50.7	51.2	50.2	50.1
SPAN D	121372	2)	49.2	50.7	51.	50.	50.
SPAN D	121372	3)	49.2	50.8	50.8	50.1	49.9
SPAN D	121372	4)	49.1	50.6	50.8	50.3	
SPAN D	121372	5)	49.	50.5	50.7	50.	
SPAN D	121372	6)	49.				
SPAN D	121372	7)	49.1				
		MAXIMUM	49.40	50.80	51.20	50.30	50.10
		MINIMUM	49.00	50.50	50.70	50.00	49.90
		AVERAGE	49.14	50.66	50.90	50.12	50.00
		ST.DEV.	.14	.11	.20	.13	.10
				SURFACE AVG. 50.04	BOTTOM AVG. 50.32		

DATE 121372
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 50.18
2) MAXIMUM VALUE 52.20
3) MINIMUM VALUE 49.00
4) SURFACE AVG. 50.00
5) BOTTOM AVG. 50.44

AIR TEMP AVG. 49.
WIND DIRECTION 36.
WIND SPEED 10.6
CLOUD COVER 10.

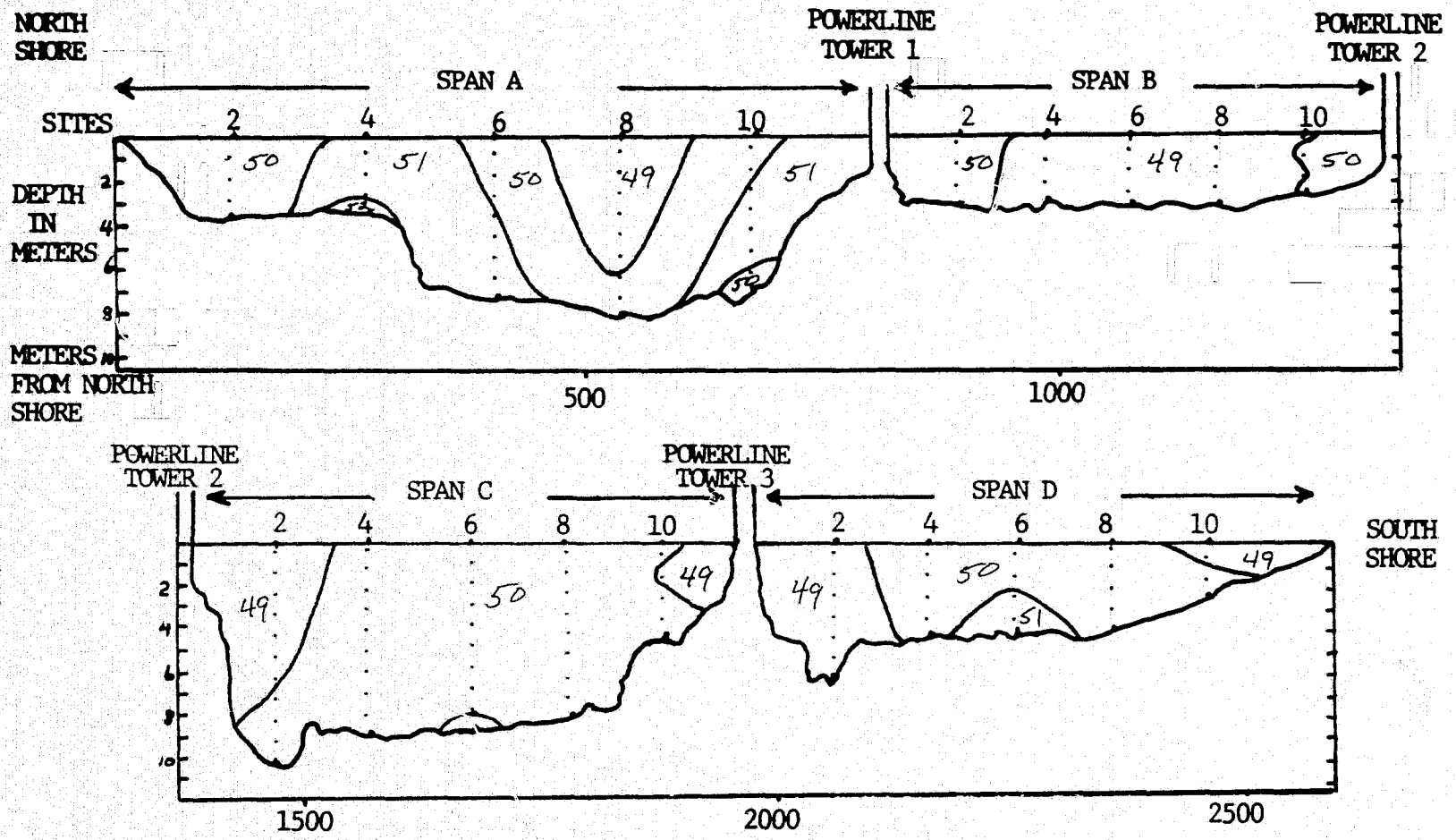

FIGURE 29. RIVER THERMAL PROFILE OF DECEMBER 13, 1972 WITH A 172,404 cf/s FLOW RATE, 49°F AIR TEMPERATURE AND 100% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	122172	1)	47.5	46.4	47.	46.7	46.9
SPAN A	122172	2)	47.6	46.2	47.1	46.8	47.2
SPAN A	122172	3)	47.6	46.2	47.2	47.	47.3
SPAN A	122172	4)					
SPAN A	122172	5)			47.3	46.6	47.1
SPAN A	122172	6)			47.2	46.8	47.3
SPAN A	122172	7)			47.	46.7	47.4
SPAN A	122172	8)				46.7	47.4
		MAXIMUM	47.60	46.40	47.30	47.00	47.40
		MINIMUM	47.50	46.20	47.00	46.60	46.90
		AVERAGE	47.57	46.27	47.13	46.76	47.23
		ST.DEV.	.06	.12	.12	.13	.18
				SURFACE AVG. 46.98	BOTTOM AVG. 46.90		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	122172	1)	45.7	47.5	46.7	46.1	47.
SPAN B	122172	2)	45.8	47.5	47.2	46.	47.
SPAN B	122172	3)	45.9	47.5	47.	46.	47.
		MAXIMUM	45.90	47.50	47.20	46.10	47.00
		MINIMUM	45.70	47.50	46.70	46.00	47.00
		AVERAGE	45.80	47.50	46.97	46.03	47.00
		ST.DEV.	.10	.00	.25	.06	.00
				SURFACE AVG. 46.68	BOTTOM AVG. 46.60		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	122172	1)	47.	46.5	46.4	47.5	47.2
SPAN C	122172	2)	47.1	46.4	46.2	47.4	47.
SPAN C	122172	3)	46.9	46.5	46.1	47.4	47.
SPAN C	122172	4)					
SPAN C	122172	5)	46.3	46.3	45.9	47.2	46.5
SPAN C	122172	6)	46.4	46.3	45.8	47.3	46.6
SPAN C	122172	7)	46.5	46.6	45.9	47.3	46.9
SPAN C	122172	8)		46.6	45.8	47.4	
		MAXIMUM	47.10	46.60	46.40	47.50	47.20
		MINIMUM	46.30	46.30	45.80	47.20	46.50
		AVERAGE	46.76	46.46	46.01	47.36	46.87
		ST.DEV.	.34	.13	.23	.10	.27
				SURFACE AVG. 46.84	BOTTOM AVG. 46.92		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	122172	1)	47.	46.4	47.4	47.9	47.4
SPAN D	122172	2)	47.	46.2	47.2	47.9	47.5
SPAN D	122172	3)	47.1	46.	47.3	47.8	50.2
SPAN D	122172	4)					
SPAN D	122172	5)	46.7				
		MAXIMUM	47.10	46.40	47.40	47.90	50.20
		MINIMUM	46.70	46.00	47.20	47.80	47.40
		AVERAGE	46.95	46.20	47.30	47.87	48.37

		ST.DEV.	.17	.20	.10	.06	1.54
				SURFACE AVG. 47.60	BOTTOM AVG. 47.22		

DATE 122172
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 46.92
2) MAXIMUM VALUE 50.20
3) MINIMUM VALUE 45.70
4) SURFACE AVG. 46.97
5) BOTTOM AVG. 46.91
AIR TEMP AVG. 51.
WIND DIRECTION 01.
WIND SPEED 10.5
CLOUD COVER 1P.

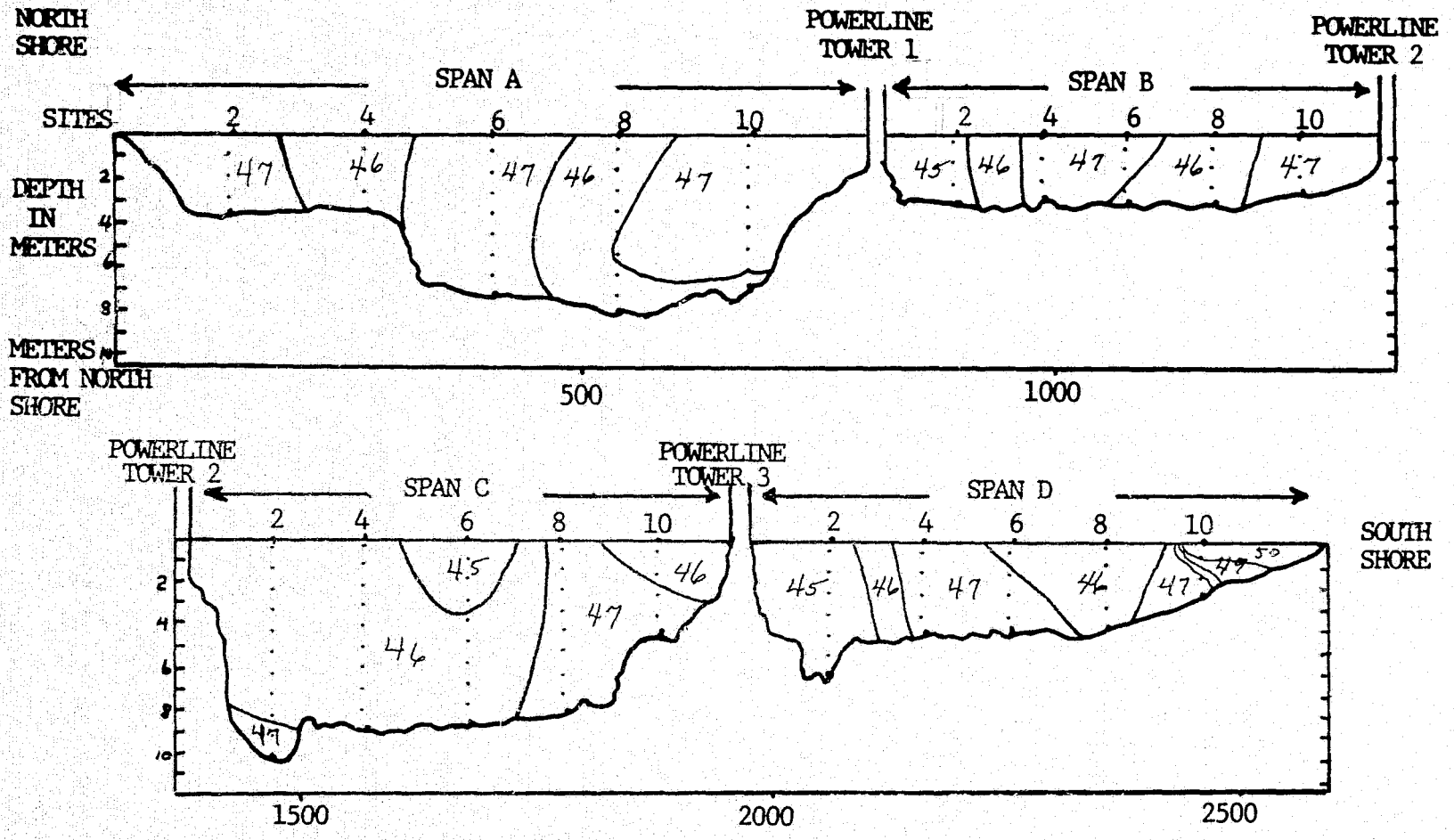

FIGURE 30. RIVER THERMAL PROFILE OF DECEMBER 21, 1972 WITH A 143,006 cf/s FLOW RATE, 51°F AIR TEMPERATURE AND 100% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	122972	1)	48.4	47.3	47.7	47.3	48.8
SPAN A	122972	2)	48.4	47.2	47.4	47.2	48.5
SPAN A	122972	3)	48.2	47.	47.3	47.	48.5
SPAN A	122972	4)				47.	
SPAN A	122972	5)				47.4	
SPAN A	122972	6)			47.7	46.9	48.2
SPAN A	122972	7)			47.4	46.7	48.9
SPAN A	122972	8)				46.3	
		MAXIMUM	48.40	47.30	47.70	47.40	49.20
		MINIMUM	48.20	47.00	47.30	46.30	48.50
		AVERAGE	48.33	47.17	47.50	46.97	48.78
		ST.DEV.	.12	.15	.19	.35	.29
				SURFACE AVG. 47.56	BOTTOM AVG. 47.90		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	122972	1)	48.1	46.6	47.4	47.8	48.8
SPAN B	122972	2)	48.	46.7	47.4	47.2	48.
SPAN B	122972	3)	47.8	46.8	47.4	47.	48.
		MAXIMUM	48.10	46.80	47.40	47.80	48.80
		MINIMUM	47.80	46.60	47.40	47.00	48.00
		AVERAGE	47.97	46.70	47.40	47.33	48.27
		ST.DEV.	.15	.10	.00	.42	.46
				SURFACE AVG. 47.40	BOTTOM AVG. 47.74		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	122972	1)	47.2	48.4	47.5	47.8	47.3
SPAN C	122972	2)	47.3	48.4	47.5	47.7	47.3
SPAN C	122972	3)	47.3	48.4	47.6	47.5	47.2
SPAN C	122972	4)					
SPAN C	122972	5)	47.5	47.7	48.2	47.9	47.6
SPAN C	122972	6)	47.8	47.6	47.8	47.5	47.6
SPAN C	122972	7)	47.6	47.5	47.7	47.4	47.5
SPAN C	122972	8)	47.4	47.3	47.7		
SPAN C	122972	9)	47.3				
		MAXIMUM	47.80	48.40	48.20	47.90	47.60
		MINIMUM	47.20	47.30	47.50	47.40	47.20
		AVERAGE	47.42	47.90	47.71	47.63	47.42
		ST.DEV.	.20	.48	.24	.20	.17
				SURFACE AVG. 47.44	BOTTOM AVG. 47.64		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	122972	1)	47.3	46.9	46.3	46.7	
SPAN D	122972	2)	47.4	46.5	46.3	46.6	
SPAN D	122972	3)	47.4	46.3	46.4	46.7	
SPAN D	122972	4)					
SPAN D	122972	5)	47.5				
		MAXIMUM	47.50	46.90	46.40	46.70	.00
		MINIMUM	47.30	46.30	46.30	46.60	.00
		AVERAGE	47.40	46.57	46.33	46.67	.00
		ST.DEV.	.08	.31	.06	.06	.00
				SURFACE AVG. 46.72	BOTTOM AVG. 46.80		

DATE 122972
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	47.45
2) MAXIMUM VALUE	49.20
3) MINIMUM VALUE	.00
4) SURFACE AVG.	47.31
5) BOTTOM AVG.	47.56
AIR TEMP AVG.	52.
WIND DIRECTION	13.
WIND SPEED	6.8
CLOUD COVER	10.

C-2

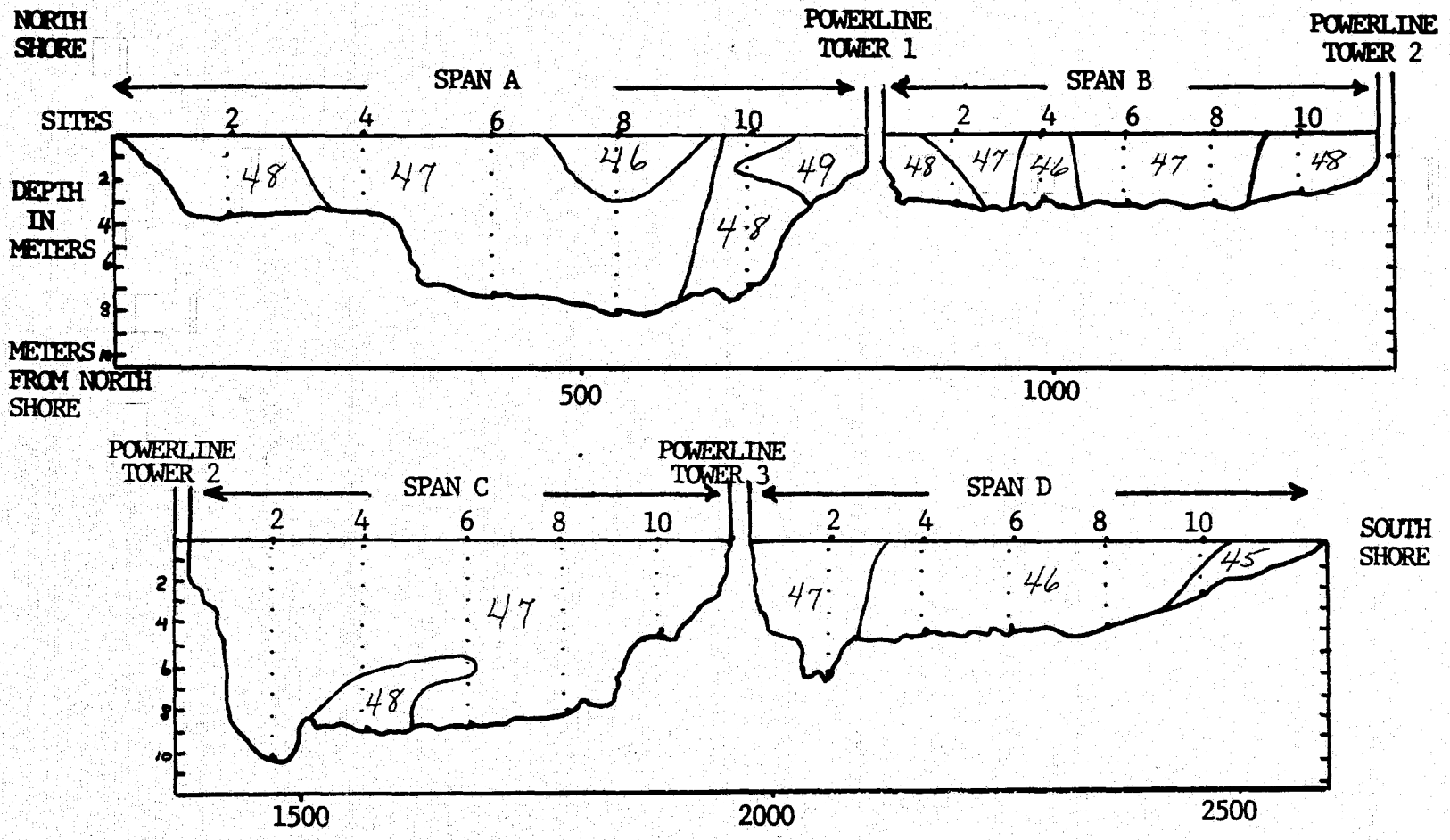

FIGURE 31. RIVER THERMAL PROFILE OF DECEMBER 29, 1972 WITH A FLOW RATE OF 107,144 cf/s, 52°F AIR TEMPERATURE AND 100% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	011073	1)	39.5	40.8	41.	43.1	46.4
SPAN A	011073	2)	39.5	40.6	41.	43.1	46.4
SPAN A	011073	3)	39.5	40.4	41.2	43.1	46.3
SPAN A	011073	4)			41.1	43.	46.
SPAN A	011073	5)			41.1	42.9	45.9
SPAN A	011073	6)			41.2	43.	45.8
SPAN A	011073	7)			40.8	42.9	45.7
SPAN A	011073	8)				42.9	45.6
		MAXIMUM	39.50	40.80	41.20	43.10	46.40
		MINIMUM	39.50	40.40	40.80	42.90	45.60
		AVERAGE	39.50	40.60	41.06	43.00	46.01
		ST.DEV.	.00	.20	.14	.09	.32
				SURFACE AVG. 41.84	BOTTOM AVG. 42.16		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	011073	1)	44.7		45.1	44.2	44.
SPAN B	011073	2)	44.7	47.7	45.	44.	44.
SPAN B	011073	3)	44.6	47.	44.9	44.	44.
		MAXIMUM	44.70	47.70	45.10	44.20	44.00
		MINIMUM	44.60	47.00	44.90	44.00	44.00
		AVERAGE	44.67	47.35	45.00	44.07	44.00
		ST.DEV.	.06	.49	.10	.12	.00
				SURFACE AVG. 44.90	BOTTOM AVG. 44.50		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	011073	1)	43.6	46.1	43.8	43.5	43.7
SPAN C	011073	2)	43.7	46.2	43.7	42.7	43.6
SPAN C	011073	3)	43.5	46.1	43.7	42.6	43.5
SPAN C	011073	4)	43.5	46.	43.7	42.6	43.4
SPAN C	011073	5)	43.5	45.6	43.6	42.5	43.2
SPAN C	011073	6)	43.5	45.6	43.6	42.4	43.3
SPAN C	011073	7)	43.4	45.5	43.5	42.4	42.8
SPAN C	011073	8)	43.4	45.4	43.6	42.3	
SPAN C	011073	9)	43.4	44.8	43.6	42.4	
		MAXIMUM	43.70	46.20	43.80	43.50	43.70
		MINIMUM	43.40	44.80	43.50	42.30	42.80
		AVERAGE	43.50	45.70	43.64	42.60	43.36
		ST.DEV.	.10	.45	.09	.36	.30
				SURFACE AVG. 43.40	BOTTOM AVG. 44.14		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	011073	1)	45.	42.	41.1	41.2	39.6
SPAN D	011073	2)	44.7	41.9	40.7	41.2	39.5
SPAN D	011073	3)	44.4	41.9	40.7	41.2	
SPAN D	011073	4)	44.4	41.8	40.7	41.2	
SPAN D	011073	5)	44.		39.5		
		MAXIMUM	45.00	42.00	41.10	41.20	39.50
		MINIMUM	44.00	41.80	39.50	41.20	39.50

		AVERAGE	44.50	41.90	40.54	41.20	39.50
		ST.DEV.	.37	.08	.61	.00	.00
				SURFACE AVG. 41.20	BOTTOM AVG. 41.76		

DATE 011073
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 43.08
2) MAXIMUM VALUE 47.70
3) MINIMUM VALUE 39.50
4) SURFACE AVG. 42.83
5) BOTTOM AVG. 43.07

AIR TEMP AVG. 26.
WIND DIRECTION 01.
WIND SPEED 8.6
CLOUD COVER 10.

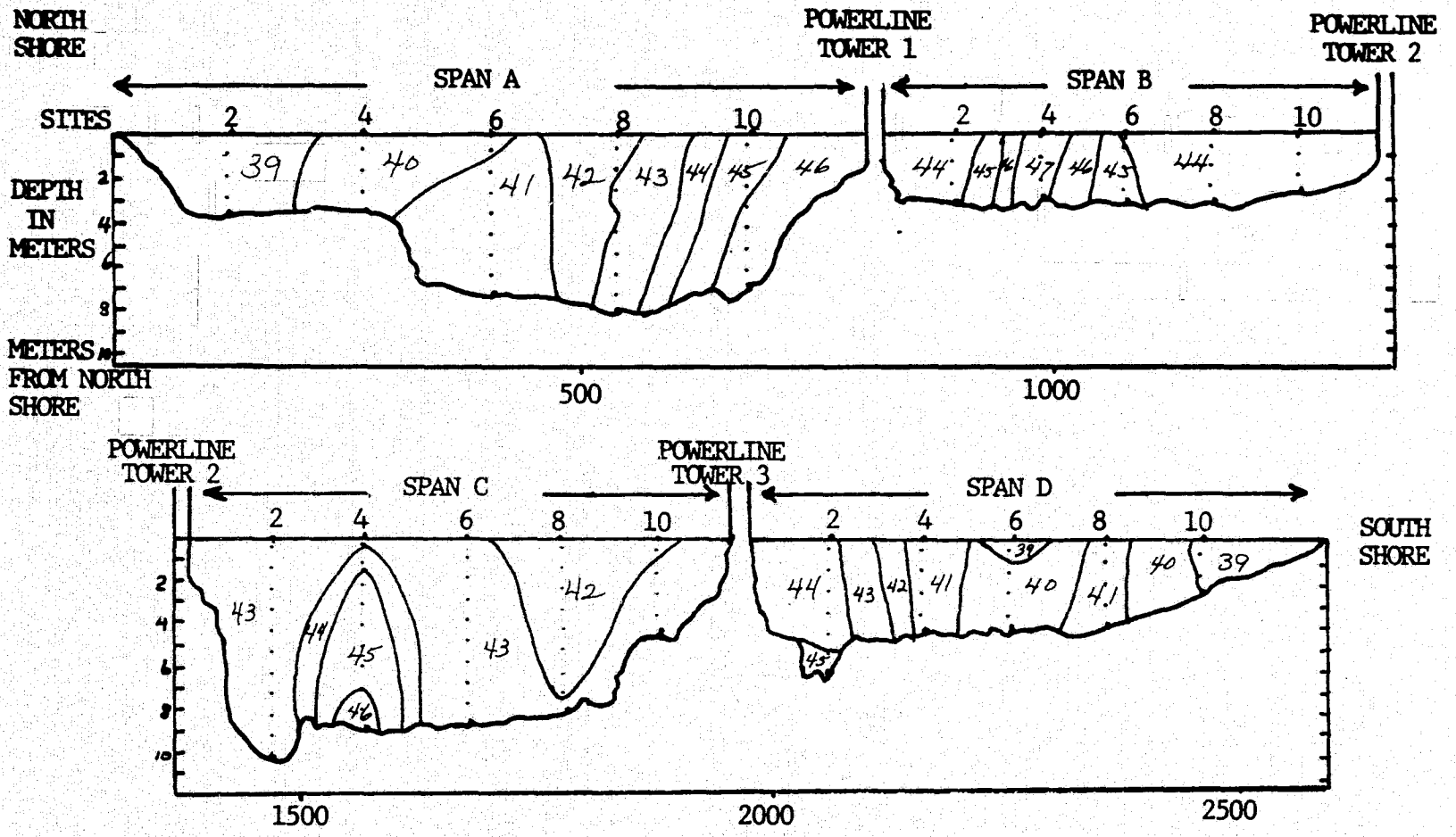

FIGURE 32. RIVER THERMAL PROFILE OF JANUARY 10, 1973 WITH A 118,246 cf/s flow rate, 26°F AIR TEMPERATURE AND 100% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	011973	1)	44.8	45.4	44.5	45.8	43.7
SPAN A	011973	2)	44.7	45.	44.4	45.8	43.5
SPAN A	011973	3)	44.2	44.7	44.5	45.6	43.3
SPAN A	011973	4)			44.4	45.6	43.3
SPAN A	011973	5)			44.4	45.5	43.1
SPAN A	011973	6)			44.5	45.4	43.
SPAN A	011973	7)				45.3	
		MAXIMUM	44.80	45.40	44.50	45.80	43.70
		MINIMUM	44.20	44.70	44.40	45.30	43.00
		AVERAGE	44.57	45.03	44.45	45.57	43.32
		ST.DEV.	.32	.35	.05	.19	.26

SURFACE AVG. 44.34 BOTTOM AVG. 44.84

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	011973	1)	45.1	44.7	43.3	45.5	44.3
SPAN B	011973	2)	45.	44.4	43.1	45.5	44.
SPAN B	011973	3)	44.8		43.3	45.2	45.2
		MAXIMUM	45.10	44.70	43.30	45.50	45.20
		MINIMUM	44.80	44.40	43.10	45.20	44.00
		AVERAGE	44.97	44.55	43.23	45.40	44.50
		ST.DEV.	.15	.21	.12	.17	.62

SURFACE AVG. 44.58 BOTTOM AVG. 44.58

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	011973	1)	44.	43.1	44.6	44.2	44.4
SPAN C	011973	2)	43.7	43.1	44.2	44.2	44.2
SPAN C	011973	3)	43.5	43.1	44.	43.7	44.
SPAN C	011973	4)	43.5	43.4	44.	44.	43.9
SPAN C	011973	5)	43.4	43.3	44.	43.7	43.7
SPAN C	011973	6)	43.3	43.3	43.9	43.7	43.7
SPAN C	011973	7)	43.3	43.7	43.9	43.7	43.7
SPAN C	011973	8)	43.3		43.8		
		MAXIMUM	44.00	43.70	44.60	44.20	44.40
		MINIMUM	43.30	43.10	43.80	43.70	43.70
		AVERAGE	43.50	43.29	44.05	43.89	43.94
		ST.DEV.	.24	.22	.25	.24	.28

SURFACE AVG. 43.64 BOTTOM AVG. 44.06

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	011973	1)	43.3	44.	43.5	45.9	46.6
SPAN D	011973	2)	44.3	43.6	43.2	45.6	46.7
SPAN D	011973	3)	44.1	43.5	42.9	45.7	46.8
SPAN D	011973	4)	44.2				
SPAN D	011973	5)	44.1				
		MAXIMUM	44.30	44.00	43.50	45.90	46.80
		MINIMUM	43.30	43.50	42.90	45.60	46.60
		AVERAGE	44.00	43.70	43.20	45.73	46.70
		ST.DEV.	.40	.26	.30	.15	.10

SURFACE AVG. 44.60 BOTTOM AVG. 44.66

DATE 011973
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 44.38
2) MAXIMUM VALUE 46.80
3) MINIMUM VALUE 42.90
4) SURFACE AVG. 44.29
5) BOTTOM AVG. 44.53
AIR TEMP AVG. 49.
WIND DIRECTION 27.
WIND SPEED 12.2
CLOUD COVER 00.

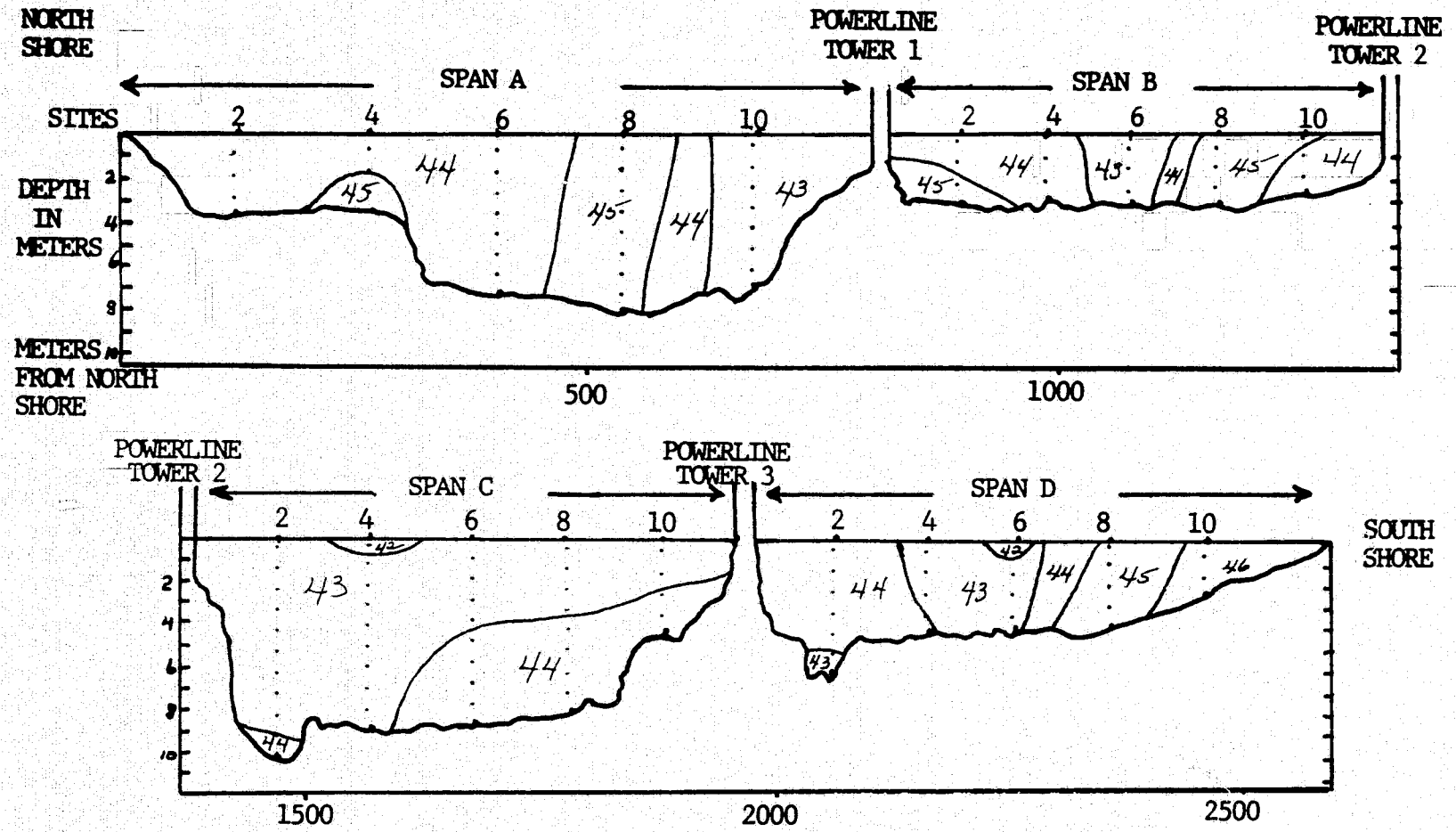

FIGURE 33. RIVER THERMAL PROFILE OF JANUARY 19, 1973 WITH A 54,016 cf/s FLOW RATE, 49°F AIR TEMPERATURE AND NO CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	012473	1)	44.5	44.9	43.6	45.6	44.7
SPAN A	012473	2)	44.4	44.8	43.4	45.1	44.8
SPAN A	012473	3)	45.4	44.7	43.5	45.1	45.
SPAN A	012473	4)		44.1	43.7	45.2	45.1
SPAN A	012473	5)			43.5	45.	44.8
SPAN A	012473	6)			43.6	45.	44.9
SPAN A	012473	7)			43.6	44.9	44.8
SPAN A	012473	8)				45.	
		MAXIMUM	45.40	44.90	43.70	45.60	45.10
		MINIMUM	44.40	44.10	43.40	44.90	44.70
		AVERAGE	44.77	44.62	43.56	45.11	44.87
		ST.DEV.	.55	.36	.10	.22	.14
				SURFACE AVG. 44.58	BOTTOM AVG. 44.66		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	012473	1)	44.5	45.1	45.2	43.8	44.5
SPAN B	012473	2)	44.5	44.8	45.3	44.	44.6
SPAN B	012473	3)	44.5	44.7	45.4	44.	
		MAXIMUM	44.50	45.10	45.40	44.00	44.60
		MINIMUM	44.50	44.70	45.20	43.80	44.50
		AVERAGE	44.50	44.87	45.30	43.93	44.55
		ST.DEV.	.00	.21	.10	.12	.07
				SURFACE AVG. 44.64	BOTTOM AVG. 44.62		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	012473	1)	44.7	45.3	45.2	44.1	44.5
SPAN C	012473	2)	44.7	45.4	45.2	44.1	44.8
SPAN C	012473	3)	44.7	45.4	45.2	44.1	45.2
SPAN C	012473	4)	44.9	45.5	45.2	44.2	45.4
SPAN C	012473	5)	44.8	45.4	45.1	44.1	45.3
SPAN C	012473	6)	44.8	45.4	45.1	44.1	45.4
SPAN C	012473	7)	44.6	45.4	45.1	44.1	45.4
SPAN C	012473	8)	44.7	45.3	45.2	44.1	
		MAXIMUM	44.90	45.50	45.20	44.20	45.40
		MINIMUM	44.60	45.30	45.10	44.10	44.50
		AVERAGE	44.74	45.39	45.16	44.11	45.14
		ST.DEV.	.09	.06	.05	.04	.36
				SURFACE AVG. 44.94	BOTTOM AVG. 44.76		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	012473	1)	44.4	44.2	44.9	43.8	45.1
SPAN D	012473	2)	44.3	44.5	44.7	43.8	45.2
SPAN D	012473	3)	44.3	44.6	44.8	43.9	
SPAN D	012473	4)	44.4	44.9			
SPAN D	012473	5)	44.4				
		MAXIMUM	44.46	44.90	44.90	43.90	45.20
		MINIMUM	44.30	44.20	44.70	43.80	45.10
		AVERAGE	44.36	44.55	44.80	43.83	45.15

		ST.DEV.	.05	.29	.10	.06	.07
				SURFACE AVG. 44.64	BOTTOM AVG. 44.48		

DATE 012473
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 44.67
2) MAXIMUM VALUE 45.40
3) MINIMUM VALUE 43.40
4) SURFACE AVG. 44.70
5) BOTTOM AVG. 44.63
AIR TEMP AVG. 41.
WIND DIRECTION 27.
WIND SPEED 5.3
CLOUD COVER 00.

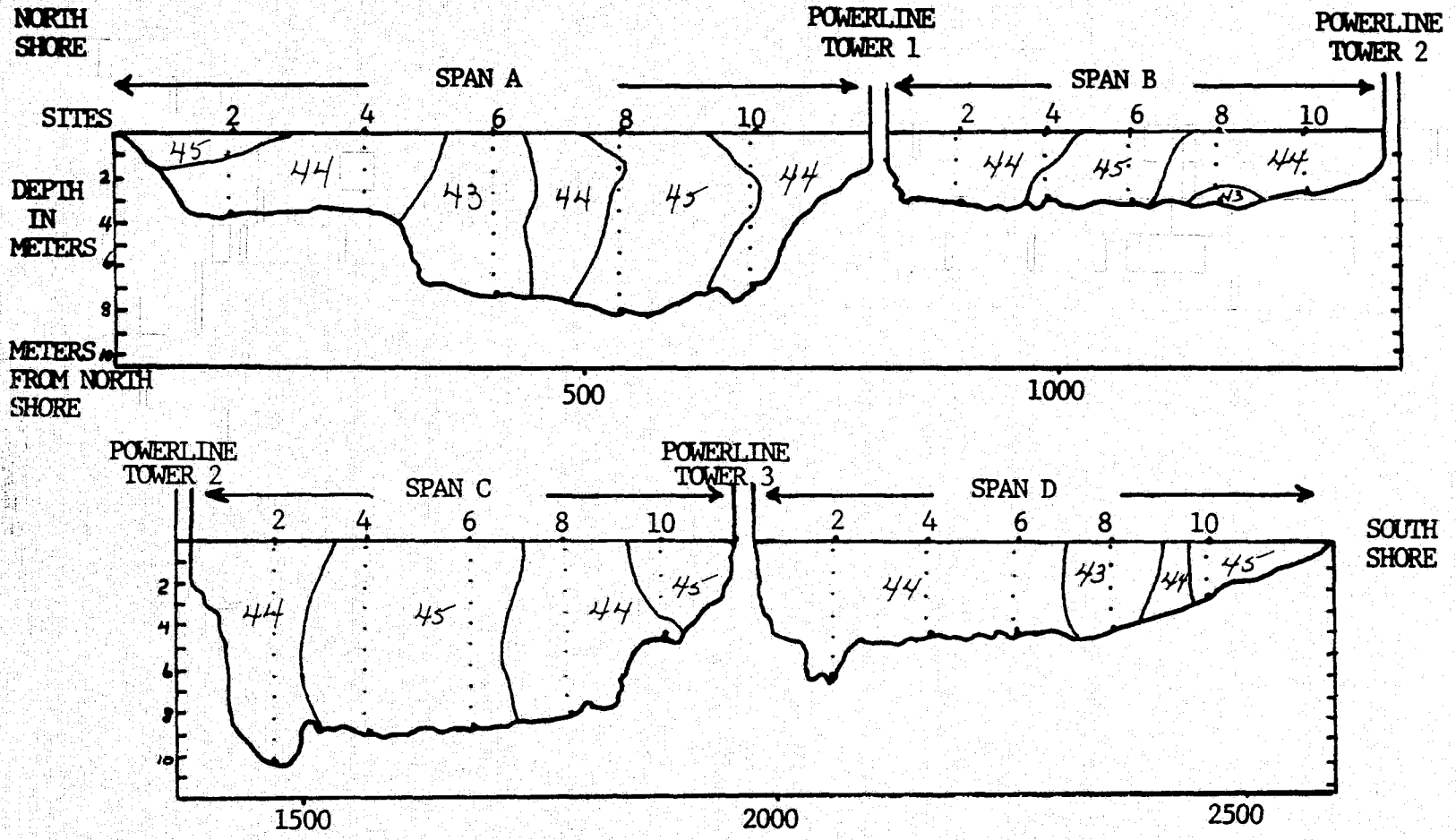

FIGURE 34. RIVER THERMAL PROFILE OF JANUARY 24, 1973 WITH A 85,934 cf/s FLOW RATE, 41°F AIR TEMPERATURE AND NO CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	013173	1)	42.4	42.9	45.	45.7	46.2
SPAN A	013173	2)	42.	42.9	44.7	45.6	46.2
SPAN A	013173	3)	42.	42.9	44.6	45.5	46.3
SPAN A	013173	4)			44.6	45.5	46.4
SPAN A	013173	5)			44.4	45.4	46.2
SPAN A	013173	6)					
SPAN A	013173	7)			43.6	44.6	45.7
		MAXIMUM	42.40	42.90	45.00	45.70	46.40
		MINIMUM	42.00	42.90	43.60	44.60	45.70
		AVERAGE	42.13	42.90	44.48	45.38	46.17
		ST.DEV.	.23	.00	.48	.40	.24

SURFACE AVG. 43.76 BOTTOM AVG. 44.44

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	013173	1)	44.	43.2	43.4	43.5	44.6
SPAN B	013173	2)	43.8	43.4	43.3	43.6	44.6
SPAN B	013173	3)	43.8	43.1	43.3	43.2	44.6
SPAN B	013173	4)	43.8	43.			
		MAXIMUM	44.00	43.40	43.40	43.60	44.60
		MINIMUM	43.80	43.00	43.30	43.20	44.60
		AVERAGE	43.85	43.17	43.33	43.43	44.60
		ST.DEV.	.10	.17	.06	.21	.00

SURFACE AVG. 43.58 BOTTOM AVG. 43.74

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	013173	1)	43.5	43.7	45.8	43.8	43.7
SPAN C	013173	2)	43.	43.7	45.6	43.7	43.4
SPAN C	013173	3)	43.	43.6	45.5	44.	43.3
SPAN C	013173	4)	43.2	43.9	45.5	44.3	43.3
SPAN C	013173	5)	43.	43.6	45.5	43.9	43.
SPAN C	013173	6)					
SPAN C	013173	7)	42.6	43.2		43.6	42.
SPAN C	013173	8)	42.7	43.		43.7	
		MAXIMUM	43.50	43.90	45.80	44.30	43.70
		MINIMUM	42.60	43.00	45.50	43.60	42.00
		AVERAGE	43.00	43.53	45.58	43.86	43.12
		ST.DEV.	.30	.31	.13	.24	.59

SURFACE AVG. 43.30 BOTTOM AVG. 44.10

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	013173	1)	44.3	44.8	43.8	43.2	39.7
SPAN D	013173	2)	44.2	44.6	43.6	42.7	39.4
SPAN D	013173	3)	44.2	44.6	43.6	42.7	
SPAN D	013173	4)	44.3				
		MAXIMUM	44.30	44.80	43.80	43.20	39.70
		MINIMUM	44.20	44.60	43.60	42.70	39.40
		AVERAGE	44.25	44.67	43.67	42.87	39.55
		ST.DEV.	.06	.12	.12	.29	.21

SURFACE AVG. 42.92 BOTTOM AVG. 43.16

DATE 013173
4 SPANS CALCULATED, THE RESULTS ARE:

1)	AVERAGE TEMP.	43.68
2)	MAXIMUM VALUE	46.40
3)	MINIMUM VALUE	39.40
4)	SURFACE AVG.	43.41
5)	BOTTOM AVG.	43.86
	AIR TEMP AVG.	42.
	WIND DIRECTION	13.
	WIND SPEED	8.5
	CLOUD COVER	10.

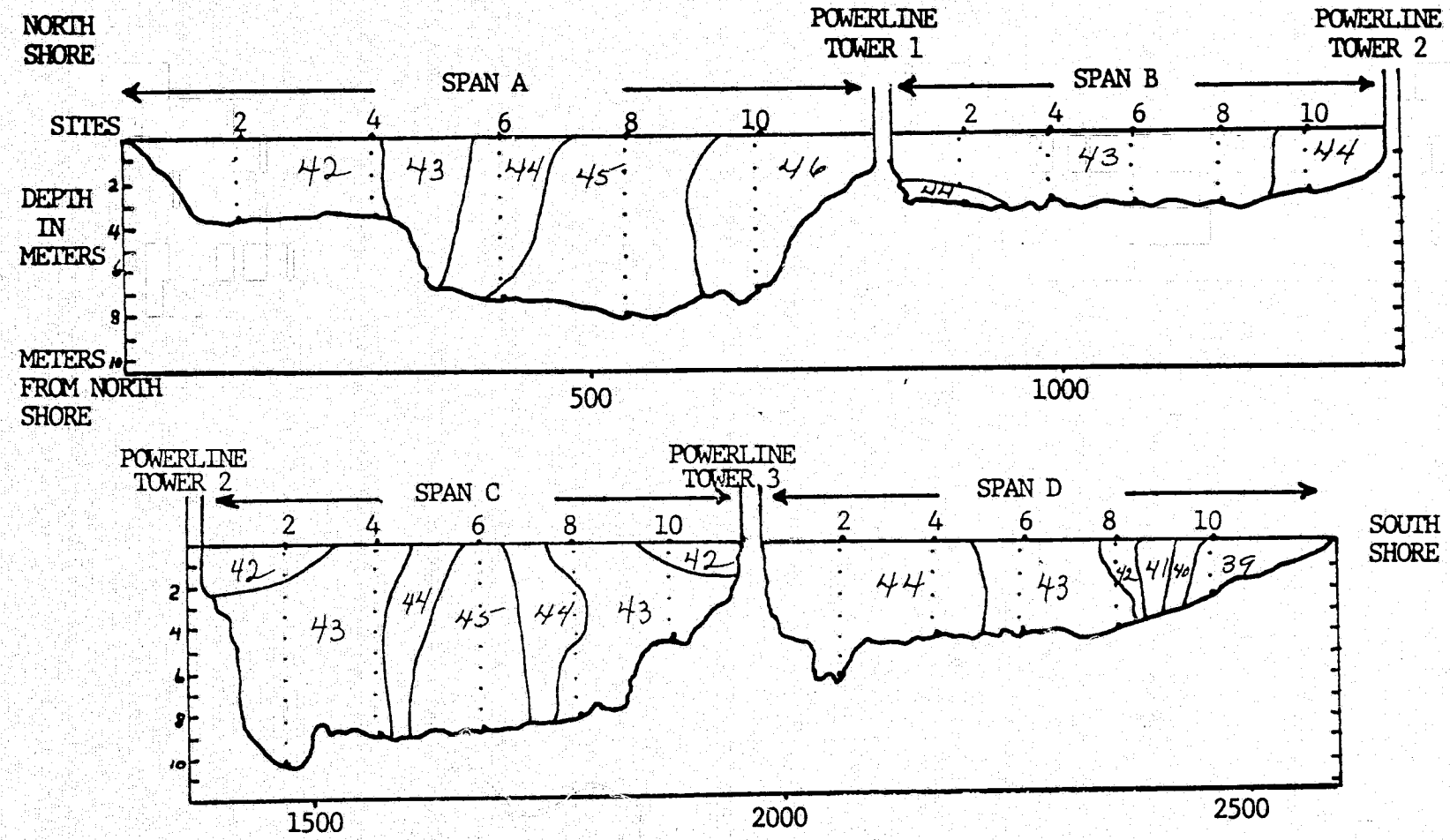

FIGURE 35. RIVER THERMAL PROFILE OF JANUARY 31, 1973 WITH A 66,418 cf/s FLOW RATE, 42°F AIR TEMPERATURE AND 10% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	021673	1)	39.	40.	40.6	40.7	40.4
SPAN A	021673	2)	39.3	40.	40.7	40.6	40.6
SPAN A	021673	3)	39.7	40.	40.7	40.6	40.8
SPAN A	021673	4)	39.5		40.7	40.6	40.8
SPAN A	021673	5)			40.6	40.5	40.7
SPAN A	021673	6)			40.6	40.5	40.7
SPAN A	021673	7)			40.3	40.4	40.6
SPAN A	021673	8)				40.4	40.7
		MAXIMUM	39.70	40.00	40.70	40.70	40.80
		MINIMUM	39.00	40.00	40.30	40.40	40.40
		AVERAGE	39.37	40.00	40.60	40.54	40.60
		ST.DEV.	.30	.00	.14	.11	.13
				SURFACE AVG. 40.18	BOTTOM AVG. 40.14		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	021673	1)	42.2	43.	42.9	43.	42.
SPAN B	021673	2)	42.3	43.	42.9	43.	42.
SPAN B	021673	3)	42.4	43.	43.	43.	42.
		MAXIMUM	42.40	43.00	43.00	43.00	42.00
		MINIMUM	42.20	43.00	42.90	43.00	42.00
		AVERAGE	42.30	43.00	42.93	43.00	42.00
		ST.DEV.	.10	.00	.06	.00	.00
				SURFACE AVG. 42.68	BOTTOM AVG. 42.62		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	021673	1)	44.6	41.3	42.		42.6
SPAN C	021673	2)	44.6	41.5	42.		42.6
SPAN C	021673	3)	44.5	41.5	42.		42.6
SPAN C	021673	4)	44.5		42.		42.5
SPAN C	021673	5)	44.4	41.8	42.1		42.
SPAN C	021673	6)	44.3	41.7	42.1		41.7
SPAN C	021673	7)	43.9	41.7	41.9		41.6
SPAN C	021673	8)	43.8	41.7	41.9		
SPAN C	021673	9)	43.6				
		MAXIMUM	44.60	41.80	42.10	.00	42.60
		MINIMUM	43.60	41.30	41.90	.00	41.70
		AVERAGE	44.24	41.60	42.00	.00	42.20
		ST.DEV.	.38	.17	.08	.00	.41
				SURFACE AVG. 42.25	BOTTOM AVG. 42.62		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	021673	1)	41.6	41.6	41.8	40.2	39.4
SPAN D	021673	2)	41.6	41.6	41.6	40.1	39.7
SPAN D	021673	3)	41.6	41.6	41.3	40.2	
SPAN D	021673	4)	41.6	41.6		40.1	
SPAN D	021673	5)	41.5				
		MAXIMUM	41.60	41.60	41.80	40.20	39.90
		MINIMUM	41.50	41.60	41.30	40.10	39.70

		AVERAGE	41.58	41.60	41.57	40.15	39.80
		ST.DEV.	.04	.00	.25	.06	.14
				SURFACE AVG. 40.84	BOTTOM AVG. 41.02		

DATE 021673
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	41.54
2) MAXIMUM VALUE	44.60
3) MINIMUM VALUE	39.00
4) SURFACE AVG.	41.45
5) BOTTOM AVG.	41.55
AIR TEMP AVG.	30.
WIND DIRECTION	33.
WIND SPEED	13.4
CLOUD COVER	8.

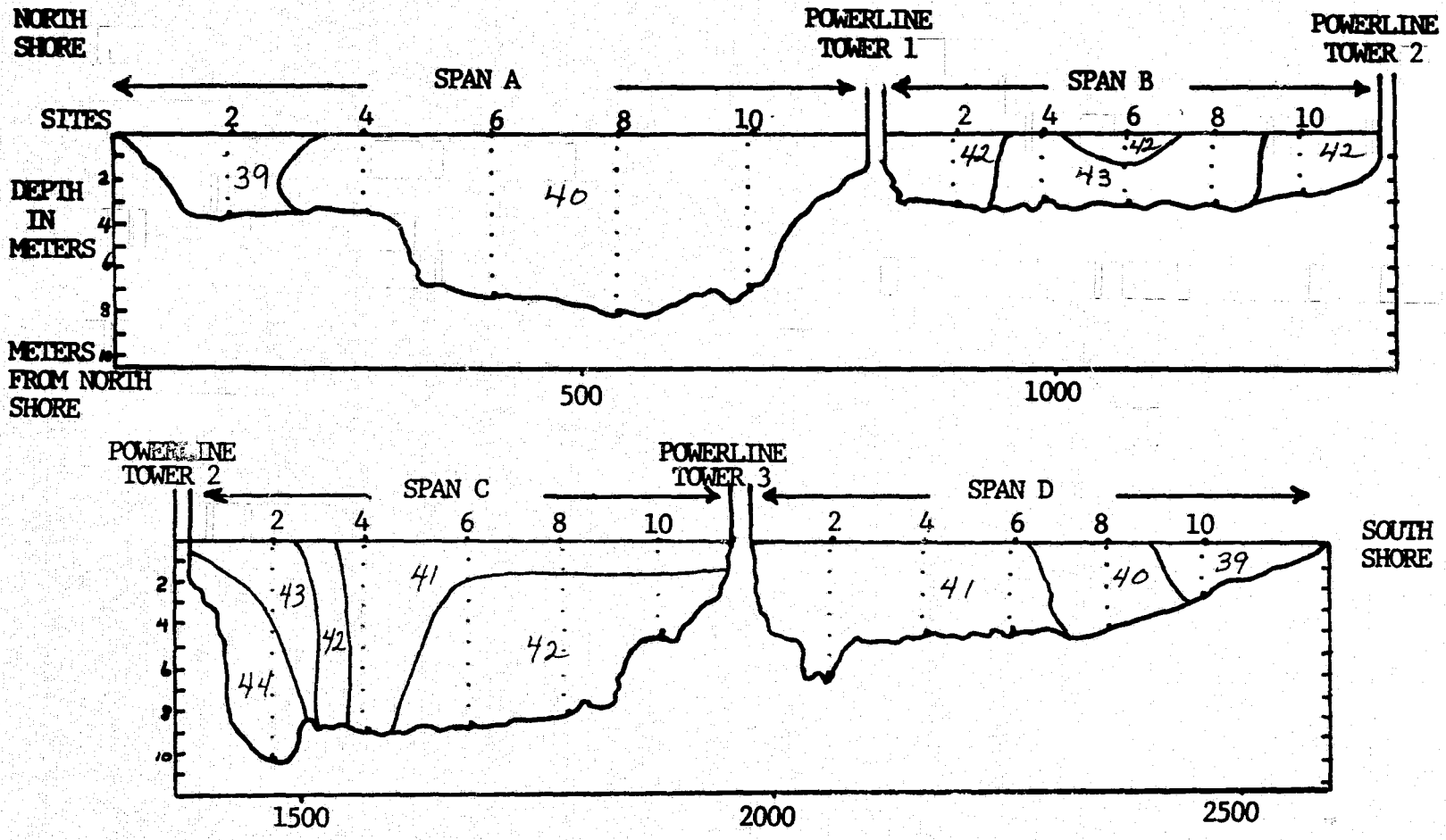

FIGURE 36. RIVER THERMAL PROFILE OF FEBRUARY 16, 1973 WITH A 118,454 cf/s FLOW RATE, 30°F AIR TEMPERATURE AND 80% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	030173	1)	45.5	46.7	46.5	45.2	45.2
SPAN A	030173	2)	45.5	46.7	46.5	45.2	45.1
SPAN A	030173	3)	45.5		46.5	45.3	45.1
SPAN A	030173	4)			47.2	45.4	45.1
SPAN A	030173	5)					
SPAN A	030173	6)			46.9	45.7	45.2
SPAN A	030173	7)			46.7	45.4	44.8
		MAXIMUM	45.50	46.70	47.20	45.70	45.20
		MINIMUM	45.50	46.70	46.50	45.20	44.80
		AVERAGE	45.50	46.70	46.72	45.37	45.08
		ST.DEV.	.00	.00	.29	.19	.15
				SURFACE AVG. 45.82	BOTTOM AVG. 45.82		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	030173	1)	46.3	45.3	45.4	45.2	44.9
SPAN B	030173	2)	46.4	45.2	45.4	45.2	45.
		MAXIMUM	46.40	45.30	45.40	45.20	45.00
		MINIMUM	46.30	45.20	45.40	45.20	44.90
		AVERAGE	46.35	45.25	45.40	45.20	44.95
		ST.DEV.	.07	.07	.00	.00	.07
				SURFACE AVG. 45.44	BOTTOM AVG. 45.42		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	030173	1)	45.4	44.5	46.	45.	45.3
SPAN C	030173	2)	45.4	44.5	45.9	44.9	46.2
SPAN C	030173	3)	45.5	44.6	45.9	44.9	45.5
SPAN C	030173	4)	45.5	44.6	45.9	45.	44.9
SPAN C	030173	5)	45.4	44.6	45.7	44.8	44.9
SPAN C	030173	6)	45.5	44.5	45.7	44.8	44.7
SPAN C	030173	7)	45.5	44.5	45.5	44.8	44.6
SPAN C	030173	8)	45.4	44.6	45.4		
SPAN C	030173	9)	45.4				
		MAXIMUM	45.50	44.60	46.00	45.00	45.50
		MINIMUM	45.40	44.50	45.40	44.80	44.50
		AVERAGE	45.44	44.55	45.75	44.89	45.00
		ST.DEV.	.05	.05	.21	.09	.35
				SURFACE AVG. 44.94	BOTTOM AVG. 45.24		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	030173	1)	44.9	44.9	46.3	46.5	48.6
SPAN D	030173	2)	45.	44.8	46.3	46.6	48.6
SPAN D	030173	3)	45.	44.8	46.2	46.7	
SPAN D	030173	4)	45.1				
SPAN D	030173	5)	44.9				
		MAXIMUM	45.10	44.90	46.30	46.70	48.60
		MINIMUM	44.90	44.80	46.20	46.50	48.60
		AVERAGE	44.98	44.83	46.27	46.60	48.60
		ST.DEV.	.08	.06	.06	.10	.00

SURFACE AVG. 46.24 BOTTOM AVG. 46.24

DATE 030173
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 45.67
2) MAXIMUM VALUE 48.60
3) MINIMUM VALUE 44.50
4) SURFACE AVG. 45.61
5) BOTTOM AVG. 45.68
AIR TEMP AVG. 51.
WIND DIRECTION 14.
WIND SPEED 9.9
CLOUD COVER 8.

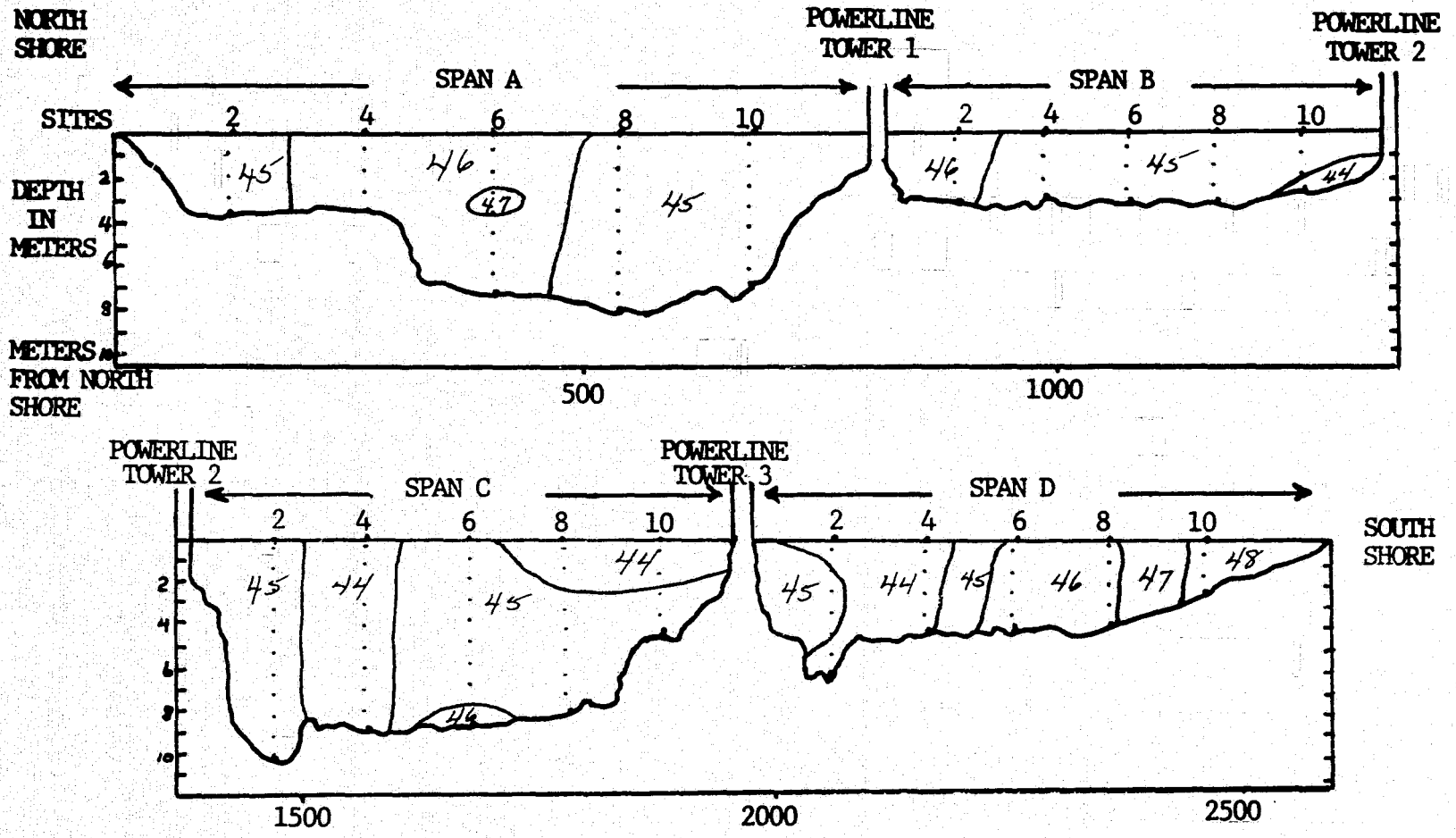

FIGURE 37. RIVER THERMAL PROFILE OF MARCH 1, 1973 WITH A 49,944 cf/s FLOW RATE, 51°F AIR TEMPERATURE AND 80% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	030973	1)	55.4	54.2	53.1	53.7	53.8
SPAN A	030973	2)	55.7	54.1	53.2	53.5	53.9
SPAN A	030973	3)	55.5	54.1	53.2	53.6	54.
SPAN A	030973	4)					
SPAN A	030973	5)			53.5	53.7	53.7
SPAN A	030973	6)			53.5	53.7	53.5
SPAN A	030973	7)			53.4	53.7	53.4
SPAN A	030973	8)				53.8	53.5
		MAXIMUM	55.70	54.20	53.50	53.80	54.00
		MINIMUM	55.40	54.10	53.10	53.50	53.40
		AVERAGE	55.53	54.13	53.32	53.66	53.69
		ST.DEV.	.15	.06	.17	.11	.23
				SURFACE AVG. 54.06	BOTTOM AVG. 54.04		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	030973	1)	55.2	55.1	56.7	56.7	56.8
SPAN B	030973	2)	55.1	55.	56.8	56.6	56.8
SPAN B	030973	3)	55.1	55.2	56.8	56.6	
		MAXIMUM	55.20	55.20	56.80	56.70	56.80
		MINIMUM	55.10	55.00	56.70	56.60	56.80
		AVERAGE	55.13	55.10	56.77	56.63	56.80
		ST.DEV.	.06	.10	.06	.06	.00
				SURFACE AVG. 55.90	BOTTOM AVG. 56.90		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	030973	1)	55.6	54.9	54.6	55.2	54.1
SPAN C	030973	2)	55.6	54.8	54.8	55.2	54.
SPAN C	030973	3)	55.7	54.8	55.	55.1	54.1
SPAN C	030973	4)					
SPAN C	030973	5)	56.1	56.1	55.6	56.9	55.1
SPAN C	030973	6)	56.1	56.1	55.6	56.5	55.3
SPAN C	030973	7)	55.8	55.8	55.7	56.1	55.1
SPAN C	030973	8)	55.7	55.9	55.7	56.5	
SPAN C	030973	9)	56.5				
		MAXIMUM	56.50	56.10	55.70	56.90	55.30
		MINIMUM	55.60	54.80	54.60	55.10	54.00
		AVERAGE	55.89	55.49	55.29	55.93	54.62
		ST.DEV.	.32	.62	.47	.75	.61
				SURFACE AVG. 55.94	BOTTOM AVG. 54.88		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	030973	1)	55.4	56.1	57.1	56.8	56.9
SPAN D	030973	2)	55.3	56.1	57.2	56.8	57.1
SPAN D	030973	3)	55.4	56.2	57.3	57.1	
SPAN D	030973	4)					
SPAN D	030973	5)	56.1				
SPAN D	030973	6)	56.1				
		MAXIMUM	56.10	56.20	57.30	57.10	57.10
		MINIMUM	55.30	56.10	57.10	56.80	56.90
		AVERAGE	55.66	56.13	57.20	56.90	57.00
		ST.DEV.	.40	.06	.10	.17	.14
				SURFACE AVG. 56.76	BOTTOM AVG. 56.46		

DATE 030973

4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 55.49
2) MAXIMUM VALUE 57.30
3) MINIMUM VALUE 53.10
4) SURFACE AVG 55.66
5) BOTTOM AVG. 55.32

AIR TEMP AVG. 66.
WIND DIRECTION 13.
WIND SPEED 10.1
CLOUD COVER 7.

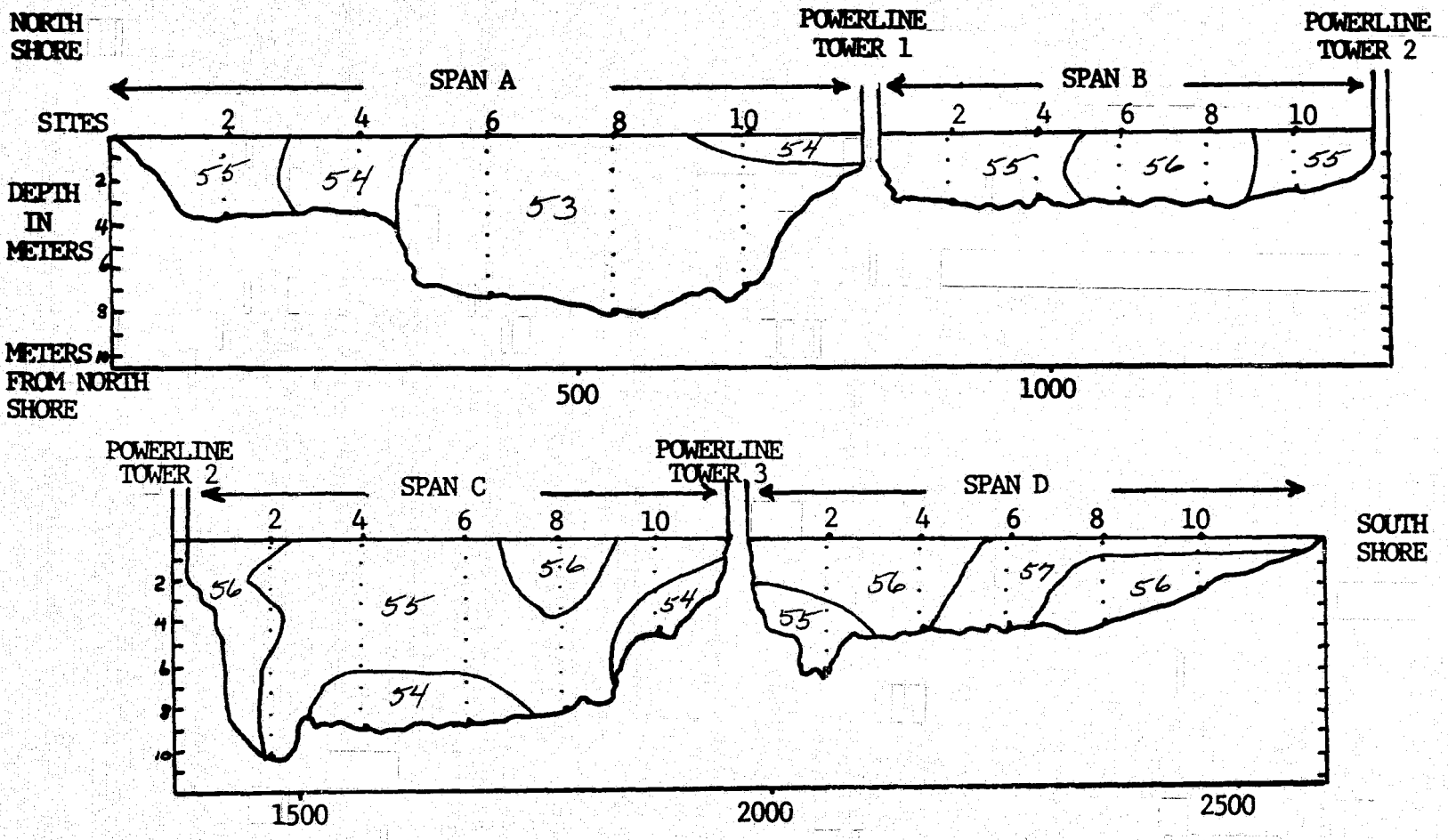

FIGURE 38. RIVER THERMAL PROFILE OF MARCH 9, 1973 WITH A 38,634 cf/s FLOW RATE, 66% AIR TEMPERATURE AND 77% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	032873	1)	55.8	55.5	55.	54.3	54.7
SPAN A	032873	2)	55.6	55.6	55.	54.2	54.6
SPAN A	032873	3)	55.6	55.4	55.	54.3	54.7
SPAN A	032873	4)	55.7				
SPAN A	032873	5)			55.	54.	54.3
SPAN A	032873	6)			55.	54.	54.3
SPAN A	032873	7)			55.	54.	54.1
SPAN A	032873	8)			55.3	53.8	54.1
		MAXIMUM	55.80	55.60	55.30	54.30	54.70
		MINIMUM	55.60	55.40	55.00	53.80	54.10
		AVERAGE	55.67	55.50	55.04	54.09	54.40
		ST.DEV.	.10	.10	.11	.19	.26
				SURFACE AVG. 54.86	BOTTOM AVG. 55.06		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	032873	1)	55.5	54.3	54.7	54.7	54.8
SPAN B	032873	2)	55.3	54.3	54.5	54.7	54.9
SPAN B	032873	3)	55.4	54.3	54.2	54.7	56.
		MAXIMUM	55.50	54.30	54.70	54.70	55.00
		MINIMUM	55.30	54.30	54.20	54.70	54.80
		AVERAGE	55.40	54.30	54.47	54.70	54.90
		ST.DEV.	.10	.00	.25	.00	.10
				SURFACE AVG. 54.72	BOTTOM AVG. 54.80		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	032873	1)	55.	53.9	54.8	55.4	56.3
SPAN C	032873	2)	55.4	53.9	54.8	55.5	55.4
SPAN C	032873	3)	55.4	53.9	54.8	55.5	55.4
SPAN C	032873	4)					
SPAN C	032873	5)	56.	54.4	55.2	55.7	56.4
SPAN C	032873	6)	55.7	54.3	55.1	55.7	55.5
SPAN C	032873	7)	55.4	54.2	54.9	55.5	55.4
SPAN C	032873	8)	55.4	54.1	54.9	55.5	
SPAN C	032873	9)	55.2	54.7			
SPAN C	032873	10)	55.1				
		MAXIMUM	56.00	54.70	55.20	55.70	55.50
		MINIMUM	55.00	53.90	54.80	55.40	55.30
		AVERAGE	55.40	54.17	54.93	55.54	55.40
		ST.DEV.	.30	.29	.16	.11	.06
				SURFACE AVG. 55.12	BOTTOM AVG. 54.88		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	032873	1)	54.7	55.5	55.9	56.5	56.
SPAN D	032873	2)	54.7	55.6	56.	56.6	56.1
SPAN D	032873	3)	54.7	55.6	55.9	56.5	56.5
SPAN D	032873	4)					
SPAN D	032873	5)	55.1				
SPAN D	032873	6)	54.9				
		MAXIMUM	55.10	55.60	56.00	56.60	56.50
		MINIMUM	54.70	55.50	55.90	56.50	56.00
		AVERAGE	54.82	55.57	55.93	56.53	56.20
		ST.DEV.	.18	.06	.06	.06	.26
				SURFACE AVG. 55.88	BOTTOM AVG. 55.72		

DATE 032873

4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 55.15
2) MAXIMUM VALUE 56.60
3) MINIMUM VALUE 53.80
4) SURFACE AVG. 55.14
5) BOTTOM AVG. 55.11

AIR TEMP AVG. 59.
WIND DIRECTION 15.
WIND SPEED 7.5
CLOUD COVER 8.

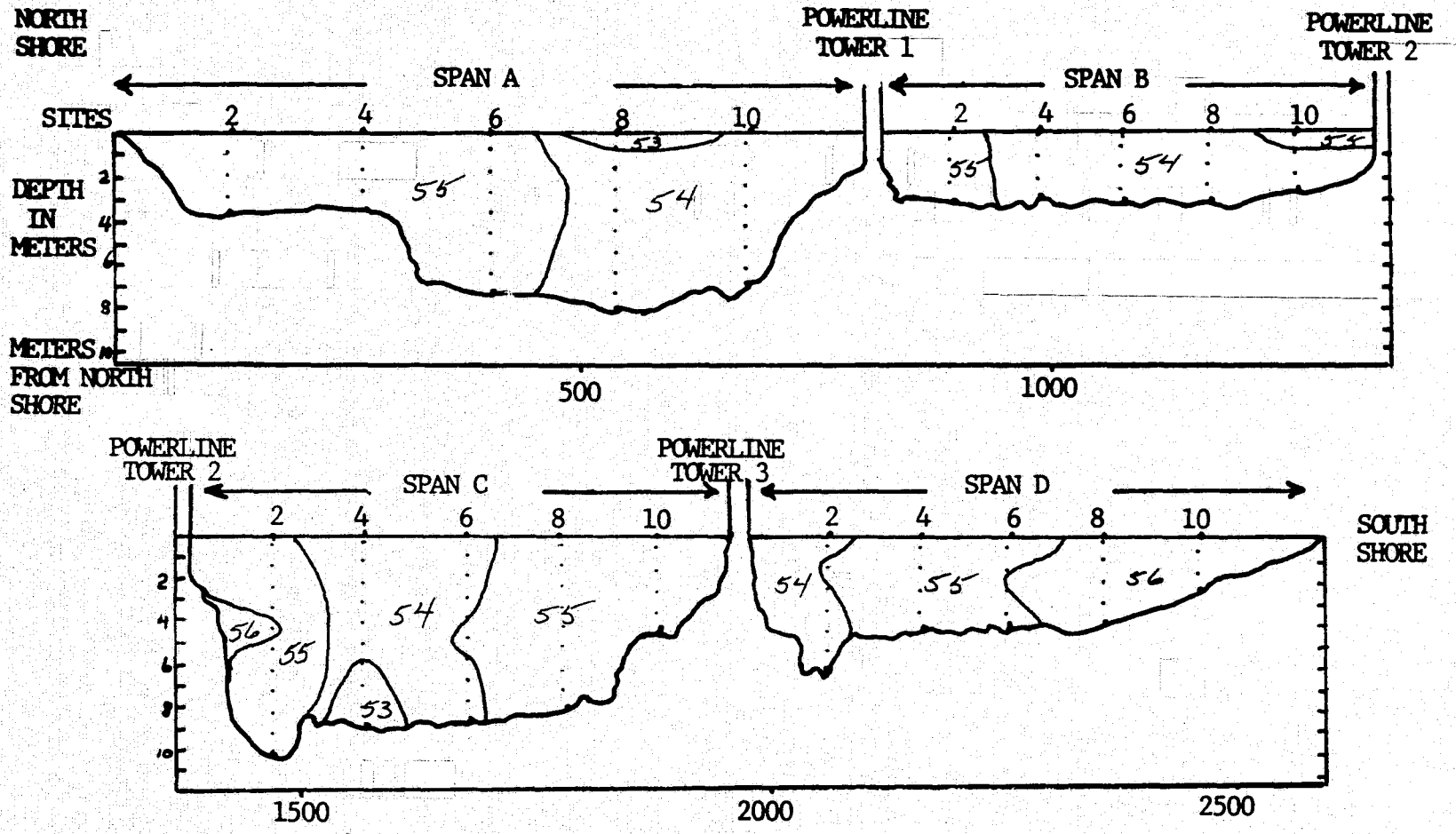

FIGURE 39. RIVER THERMAL PROFILE OF MARCH 28, 1973 WITH A 113,214 cf/s FLOW RATE, 59°F AIR TEMPERATURE AND 80% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	040673	1)	55.3	56.	55.5	55.1	56.3
SPAN A	040673	2)	55.2	56.2	55.4	54.9	56.3
SPAN A	040673	3)	55.3	56.2	55.4	54.9	56.4
SPAN A	040673	4)			55.4	54.8	56.5
SPAN A	040673	5)			55.4	54.7	56.5
SPAN A	040673	6)			55.6	54.8	56.6
SPAN A	040673	7)			55.7	54.6	56.9
SPAN A	040673	8)				54.9	57.2
		MAXIMUM	55.30	56.20	55.70	55.10	57.20
		MINIMUM	55.20	56.00	55.40	54.60	56.30
		AVERAGE	55.27	56.13	55.49	54.84	56.59
		ST.DEV.	.06	.12	.12	.15	.31
				SURFACE AVG. 55.86	BOTTOM AVG. 55.64		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	040673	1)	56.9	57.4	57.1	57.	57.1
SPAN B	040673	2)	56.8	57.3	56.9	57.2	57.2
SPAN B	040673	3)	57.	57.3	57.2	57.1	57.4
		MAXIMUM	57.00	57.40	57.20	57.20	57.40
		MINIMUM	56.80	57.30	56.90	57.00	57.10
		AVERAGE	56.90	57.33	57.07	57.10	57.23
		ST.DEV.	.10	.06	.15	.10	.15
				SURFACE AVG. 57.20	BOTTOM AVG. 57.10		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	040673	1)	56.6	56.8	56.3	56.7	56.
SPAN C	040673	2)	56.7	56.8	56.3	56.7	56.1
SPAN C	040673	3)	56.8	56.8	56.4	56.7	56.2
SPAN C	040673	4)	56.8	56.8	56.4	56.7	56.2
SPAN C	040673	5)	56.8	56.7	56.3	56.7	56.2
SPAN C	040673	6)	56.8	56.8	56.4	56.7	56.2
SPAN C	040673	7)	56.6	57.1	56.4	56.7	56.1
SPAN C	040673	8)	56.6	57.5	56.5	57.1	56.3
SPAN C	040673	9)	57.				
		MAXIMUM	57.00	57.50	56.50	57.10	56.30
		MINIMUM	56.60	56.70	56.30	56.70	56.00
		AVERAGE	56.74	56.91	56.37	56.75	56.16
		ST.DEV.	.13	.26	.07	.14	.09
				SURFACE AVG. 56.88	BOTTOM AVG. 56.48		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	040673	1)	56.2	56.6	57.	56.2	57.1
SPAN D	040673	2)	56.4	56.4	57.	56.4	57.3
SPAN D	040673	3)	56.6	56.3	57.1	56.4	
SPAN D	040673	4)	56.5	56.4	57.1	56.5	
		MAXIMUM	56.60	56.60	57.10	56.50	57.30
		MINIMUM	56.20	56.30	57.00	56.20	57.10
		AVERAGE	56.42	56.42	57.05	56.37	57.20
		ST.DEV.	.17	.13	.06	.13	.14
				SURFACE AVG. 56.76	BOTTOM AVG. 56.62		

DATE 040673
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 56.52
2) MAXIMUM VALUE 57.50
3) MINIMUM VALUE 54.60
4) SURFACE AVG. 56.67
5) BOTTOM AVG. 56.46
AIR TEMP AVG. 50.
WIND DIRECTION 14.
WIND SPEED 4.5
CLOUD COVER 7.

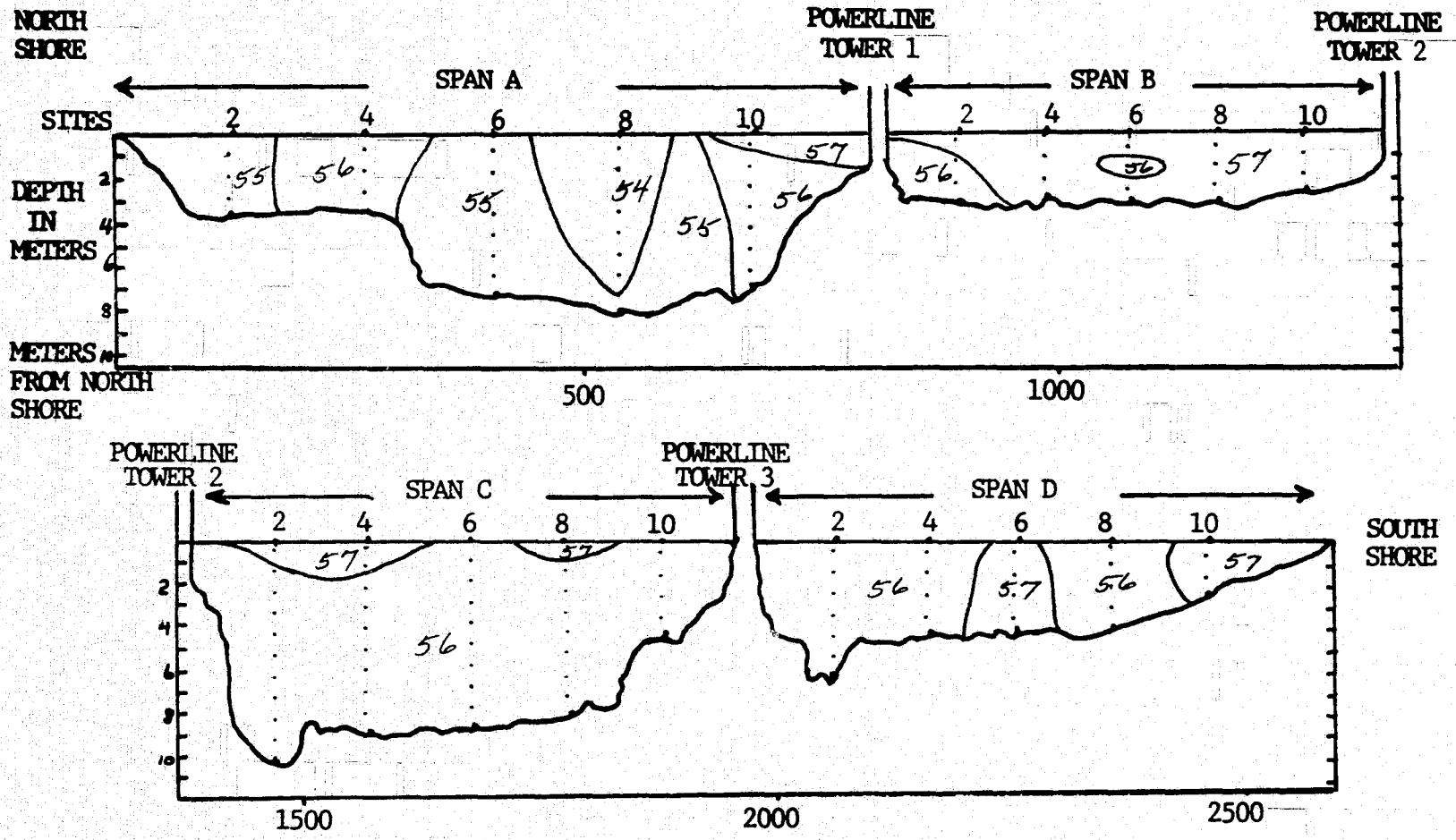

FIGURE 40. RIVER THERMAL PROFILE OF APRIL 6, 1973 WITH A 59,702 cf/s FLOW RATE, 50°F AIR TEMPERATURE AND 70% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	041373	1)	54.	54.2	55.4	54.5	53.9
SPAN A	041373	2)					
SPAN A	041373	3)	56.5	55.4	56.6	55.6	55.5
SPAN A	041373	4)	56.	55.1	55.6	55.2	54.5
SPAN A	041373	5)			55.3	54.9	54.3
SPAN A	041373	6)			55.2	54.9	54.2
SPAN A	041373	7)			55.1	54.8	54.1
SPAN A	041373	8)			54.9	54.6	54.1
		MAXIMUM	56.50	55.40	56.60	55.60	55.50
		MINIMUM	54.00	54.20	54.90	54.50	53.90
		AVERAGE	55.50	54.90	55.44	54.93	54.37
		ST.DEV.	1.32	.62	.56	.37	.53
				SURFACE AVG. 54.94	BOTTOM AVG. 54.40		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	041373	1)	54.5	54.7	54.8	55.	55.
SPAN B	041373	2)					
SPAN B	041373	3)	55.9			55.9	55.9
SPAN B	041373	4)				54.8	
		MAXIMUM	55.90	54.70	54.80	55.90	55.90
		MINIMUM	54.50	54.70	54.80	54.80	55.00
		AVERAGE	55.20	54.70	54.80	55.23	55.45
		ST.DEV.	.99	.00	.00	.59	.64
				SURFACE AVG. 55.22	BOTTOM AVG. 54.80		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	041373	1)	54.7	55.	54.2	54.1	54.4
SPAN C	041373	2)					
SPAN C	041373	3)	55.8	56.4	55.3	56.3	55.2
SPAN C	041373	4)	54.9	55.4	54.7	55.6	54.8
SPAN C	041373	5)	54.5	55.1	54.4	55.2	54.6
SPAN C	041373	6)	54.5	55.1	54.4	55.2	54.5
SPAN C	041373	7)	54.4	54.9	54.3	54.9	54.3
SPAN C	041373	8)	54.5	54.9	54.5	54.8	54.6
SPAN C	041373	9)	54.4		54.5		
		MAXIMUM	55.80	56.40	55.30	56.30	55.20
		MINIMUM	54.40	54.90	54.20	54.10	54.30
		AVERAGE	54.71	55.26	54.54	55.16	54.63
		ST.DEV.	.47	.53	.34	.69	.30
				SURFACE AVG. 54.64	BOTTOM AVG. 54.48		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	041373	1)	53.9	55.2	53.9	54.5	54.
SPAN D	041373	2)					
SPAN D	041373	3)	55.9	56.2	55.2	55.2	55.
SPAN D	041373	4)	55.1	55.6	54.6	55.1	
SPAN D	041373	5)	54.8				
SPAN D	041373	6)	54.8				

		MAXIMUM	55.90	56.20	55.20	55.20	55.00
		MINIMUM	53.90	55.20	53.90	54.50	54.00
		AVERAGE	54.90	55.67	54.57	54.93	54.50
		ST.DEV.	.72	.50	.65	.38	.71
				SURFACE AVG. 55.02	BOTTOM AVG. 54.30		

DATE 041373
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	54.97
2) MAXIMUM VALUE	56.60
3) MINIMUM VALUE	53.90
4) SURFACE AVG.	54.95
5) BOTTOM AVG.	54.49
AIR TEMP AVG.	49.
WIND DIRECTION	02.
WIND SPEED	8.3
CLOUD COVER	3.

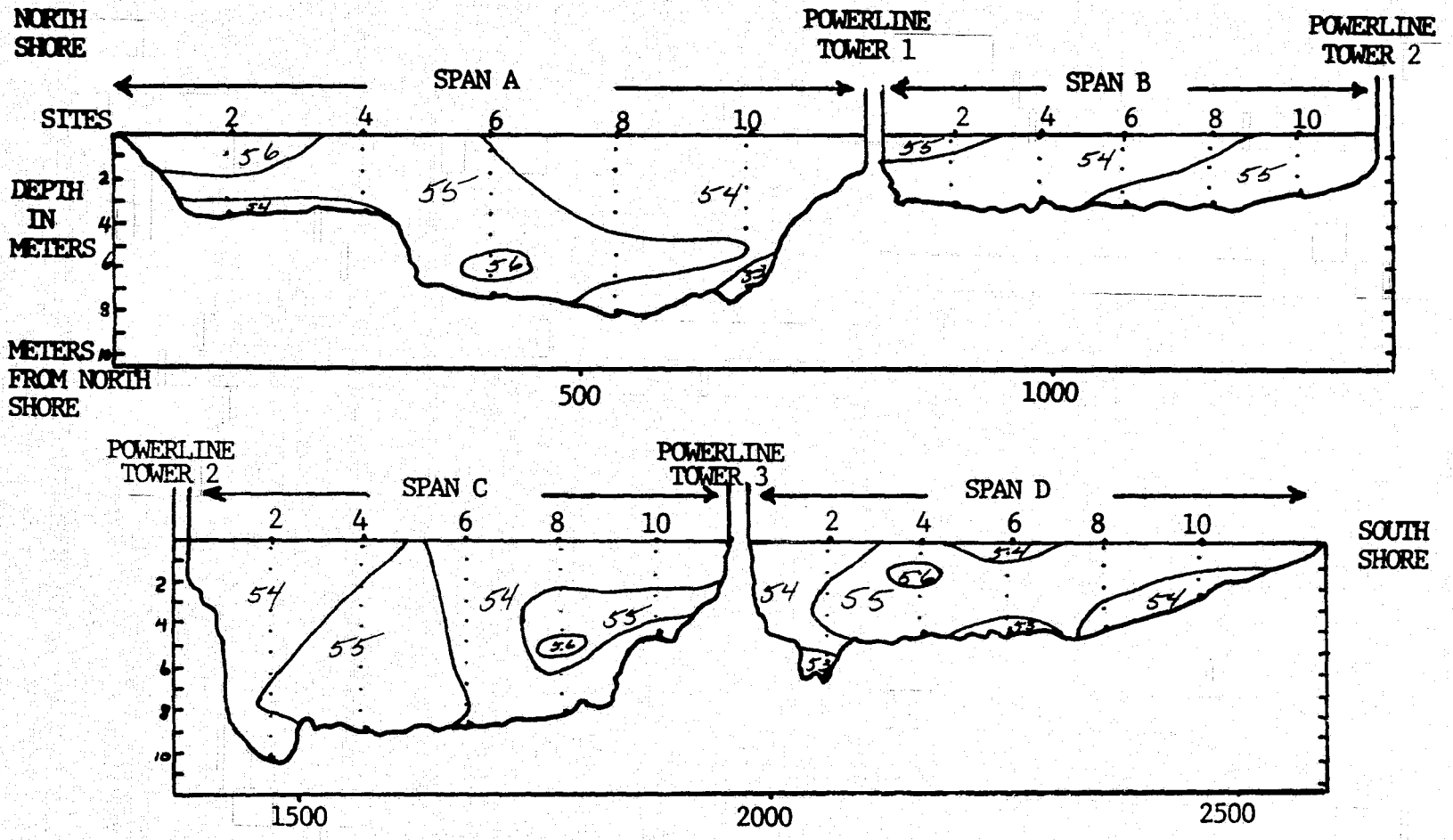

FIGURE 41. RIVER THERMAL PROFILE OF APRIL 13, 1973 WITH A 55,490 cf/s FLOW RATE, 49°F AIR TEMPERATURE AND 30% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	041873	1)	58.2	58.7	58.8	57.7	58.8
SPAN A	041873	2)	58.2	58.7	58.7	57.8	58.9
SPAN A	041873	3)	58.2	58.7	58.6	57.6	58.9
SPAN A	041873	4)	58.2	58.5	58.5	57.6	58.9
SPAN A	041873	5)					
SPAN A	041873	6)			59.	57.6	59.2
SPAN A	041873	7)			58.9	57.4	59.
SPAN A	041873	8)			58.8	57.4	59.
SPAN A	041873	9)				57.3	
		MAXIMUM	58.20	58.70	59.00	57.80	59.20
		MINIMUM	58.20	58.50	58.50	57.30	58.80
		AVERAGE	58.20	58.65	58.76	57.55	58.96
		ST.DEV.	.00	.10	.17	.17	.13
				SURFACE AVG. 58.36	BOTTOM AVG. 58.44		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	041873	1)	58.5	58.5	57.9	58.	58.1
SPAN B	041873	2)	58.5	58.5	57.9	58.	58.1
SPAN B	041873	3)	58.5	58.5	57.9	57.9	58.2
SPAN B	041873	4)	58.5	58.5	58.	57.7	
		MAXIMUM	58.50	58.50	58.00	58.00	58.20
		MINIMUM	58.50	58.50	57.90	57.70	58.10
		AVERAGE	58.50	58.50	57.92	57.90	58.13
		ST.DEV.	.00	.00	.05	.14	.06
				SURFACE AVG. 58.18	BOTTOM AVG. 58.20		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	041873	1)	57.1	58.5	58.1	58.5	58.2
SPAN C	041873	2)	57.1	58.5	58.2	58.4	58.3
SPAN C	041873	3)	57.1	58.7	58.3	58.4	58.4
SPAN C	041873	4)	57.1	58.6	58.3	58.5	58.4
SPAN C	041873	5)					
SPAN C	041873	6)	57.5	59.2	58.7	59.6	58.3
SPAN C	041873	7)	57.1	59.	58.4	59.4	58.
SPAN C	041873	8)	57.	59.	58.3	59.	57.8
SPAN C	041873	9)	57.	58.9	58.1	58.9	
		MAXIMUM	57.50	59.20	58.70	59.60	58.40
		MINIMUM	57.00	58.50	58.10	58.40	57.80
		AVERAGE	57.12	58.80	58.30	58.84	58.20
		ST.DEV.	.16	.26	.19	.47	.22
				SURFACE AVG. 58.14	BOTTOM AVG. 58.08		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	041873	1)	57.3	58.3	58.5	59.4	60.2
SPAN D	041873	2)	57.3	58.2	58.4	59.4	60.2
SPAN D	041873	3)	57.4	58.1	58.4	59.5	60.3
SPAN D	041873	4)	57.4	58.	58.3	59.3	60.4
		MAXIMUM	57.40	58.30	58.50	59.50	60.40
		MINIMUM	57.30	58.00	58.30	59.30	60.20
		AVERAGE	57.35	58.15	58.40	59.40	60.27
		ST.DEV.	.06	.13	.08	.08	.10
				SURFACE AVG. 58.68	BOTTOM AVG. 58.74		

DATE 041873
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 58.40
2) MAXIMUM VALUE 60.40
3) MINIMUM VALUE 57.00
4) SURFACE AVG. 58.34
5) BOTTOM AVG. 58.36
AIR TEMP AVG. 66.
WIND DIRECTION 14.
WIND SPEED 14.7
CLOUD COVER 9.

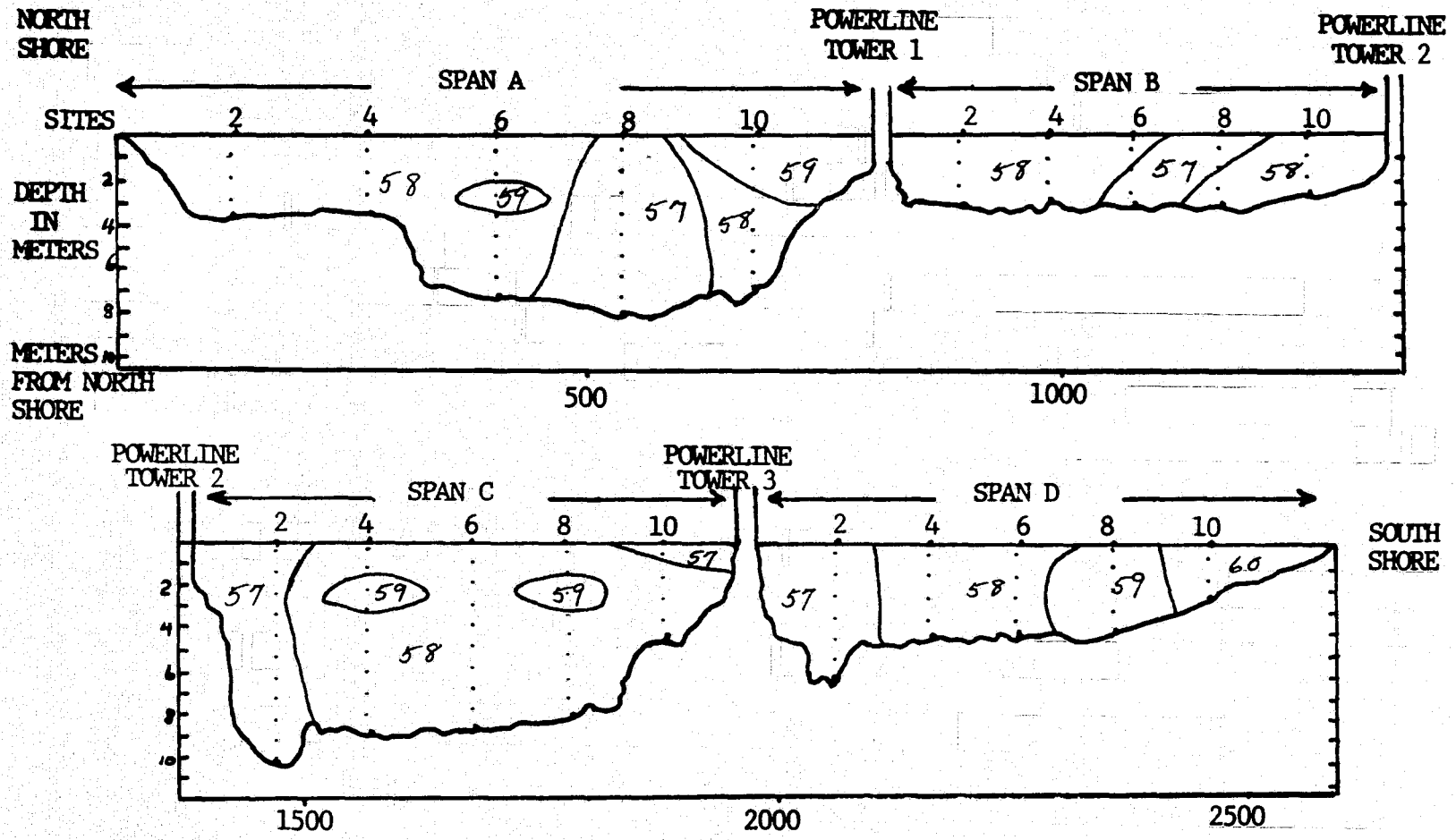

FIGURE 42. RIVER THERMAL PROFILE OF APRIL 18, 1973 WITH A 50,142 cf/s FLOW RATE, 66°F AIR TEMPERATURE AND 90% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	042573	1)	63.6	62.2	62.9	62.	63.
SPAN A	042573	2)	63.6	62.4	62.9	62.	63.1
SPAN A	042573	3)	63.7	62.5	63.	62.3	63.1
SPAN A	042573	4)	63.7	62.6	63.	62.2	63.1
SPAN A	042573	5)			62.9	62.1	63.
SPAN A	042573	6)			63.	62.2	63.
SPAN A	042573	7)			63.	62.1	63.
SPAN A	042573	8)			63.2	62.4	63.2
SPAN A	042573	9)				63.1	64.8
		MAXIMUM	63.70	62.60	63.20	63.10	64.80
		MINIMUM	63.60	62.20	62.90	62.00	63.00
		AVERAGE	63.65	62.42	62.99	62.27	63.26
		ST.DEV.	.06	.17	.10	.34	.58

SURFACE AVG. 63.48 BOTTOM AVG. 62.74

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	042573	1)	62.9	63.3	63.5	63.1	62.9
SPAN B	042573	2)	62.8	63.3	63.6	63.2	63.
SPAN B	042573	3)	63.2	63.4	63.8	63.3	63.3
SPAN B	042573	4)	63.	63.5	64.2	63.8	63.6
		MAXIMUM	63.20	63.50	64.20	63.80	63.60
		MINIMUM	62.80	63.30	63.50	63.10	62.90
		AVERAGE	62.97	63.37	63.77	63.35	63.20
		ST.DEV.	.17	.10	.31	.31	.32

SURFACE AVG. 63.62 BOTTOM AVG. 63.14

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	042573	1)		63.4	63.3	62.1	62.6
SPAN C	042573	2)	63.7	63.4	63.4	62.	62.7
SPAN C	042573	3)	63.8	63.5	63.4	62.1	63.
SPAN C	042573	4)	63.9	63.6	63.4	62.	63.
SPAN C	042573	5)	63.8	63.5	63.4	62.	63.
SPAN C	042573	6)	63.7	63.6	63.4	62.1	63.2
SPAN C	042573	7)	63.5	63.6	63.3	62.1	63.2
SPAN C	042573	8)	63.4	63.8	63.2	62.3	63.3
SPAN C	042573	9)	63.6	63.7	63.2	63.1	
SPAN C	042573	10)	63.7				
		MAXIMUM	63.90	63.80	63.40	63.10	63.30
		MINIMUM	63.40	63.40	63.20	62.00	62.60
		AVERAGE	63.68	63.57	63.33	62.20	63.00
		ST.DEV.	.16	.13	.09	.35	.24

SURFACE AVG. 63.40 BOTTOM AVG. 62.85

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	042573	1)	63.2	63.1	62.5	62.8	63.7
SPAN D	042573	2)	63.3	63.1	62.5	62.7	63.5
SPAN D	042573	3)	63.3	63.1	62.6	62.6	63.5
SPAN D	042573	4)	63.5	63.1	62.5	63.1	63.3
SPAN D	042573	5)	63.4	63.5	62.6	63.2	
SPAN D	042573	6)	63.4				
SPAN D	042573	7)	63.2				
		MAXIMUM	63.50	63.50	62.60	63.20	65.30
		MINIMUM	63.20	63.10	62.50	62.60	63.50
		AVERAGE	63.33	63.18	62.54	62.88	64.00
		ST.DEV.	.11	.18	.05	.26	.87

SURFACE AVG. 63.56 BOTTOM AVG. 63.06

DATE 042573
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 63.15
2) MAXIMUM VALUE 65.30
3) MINIMUM VALUE 62.00
4) SURFACE AVG. 63.51
5) BOTTOM AVG. 62.95
AIR TEMP AVG. 68.
WIND DIRECTION 19
WIND SPEED 8.2
CLOUD COVER 9.

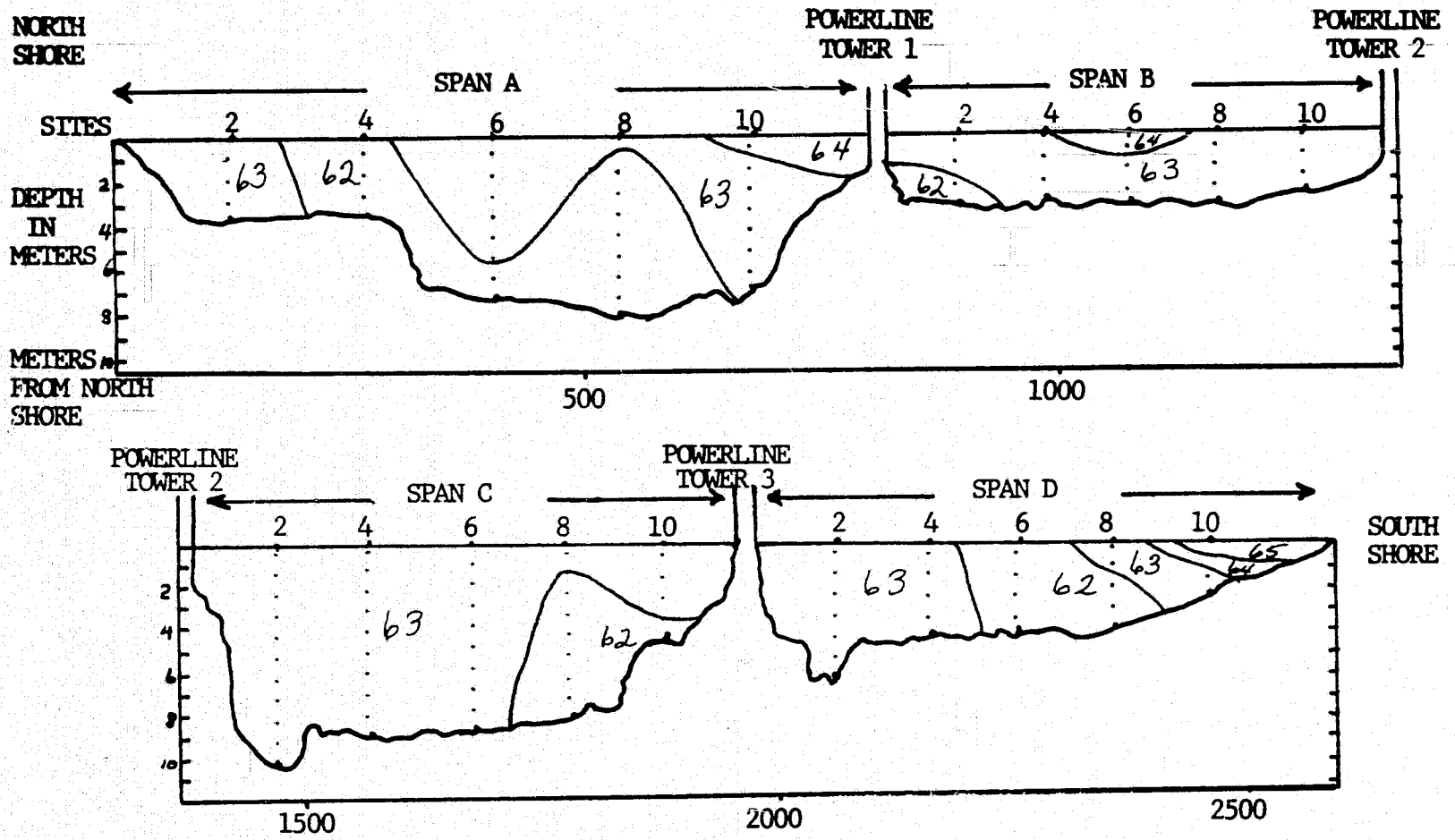

FIGURE 43. RIVER THERMAL PROFILE OF APRIL 25, 1973 WITH A 56,723 cf/s FLOW RATE, 68°F AIR TEMPERATURE AND 90% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	050473	1)					
SPAN A	050473	2)		63.7	64.	63.6	63.3
SPAN A	050473	3)					
SPAN A	050473	4)		63.9	64.4	63.6	63.1
SPAN A	050473	5)					
SPAN A	050473	6)			63.8	63.7	62.9
SPAN A	050473	7)			63.6	63.3	62.8
SPAN A	050473	8)			63.6	63.3	62.9
SPAN A	050473	9)				63.3	
		MAXIMUM	.00	63.90	64.40	63.70	63.30
		MINIMUM	.00	63.70	63.60	63.30	62.80
		AVERAGE	.00	63.80	63.88	63.47	63.00
		ST.DEV.	.00	.14	.33	.19	.20
				SURFACE AVG. 63.42	BOTTOM AVG.		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	050473	1)	65.				
SPAN B	050473	2)		64.1	63.2	65.5	63.5
SPAN B	050473	3)	65.5			65.2	63.3
SPAN B	050473	4)		64.1	63.4	64.7	63.2
		MAXIMUM	65.50	64.10	63.40	65.50	63.50
		MINIMUM	65.00	64.10	63.20	64.70	63.20
		AVERAGE	65.25	64.10	63.30	65.13	63.33
		ST.DEV.	.35	.00	.14	.40	.15
				SURFACE AVG. 64.18	BOTTOM AVG. 65.00		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	050473	1)					
SPAN C	050473	2)		63.8	65.7	64.5	63.8
SPAN C	050473	3)	64.6	63.3	64.7	63.4	63.2
SPAN C	050473	4)	64.3	63.3	64.5	63.3	63.1
SPAN C	050473	5)	64.1	63.3	64.2		
SPAN C	050473	6)	63.9	63.3	64.3	63.6	63.5
SPAN C	050473	7)	63.8	62.8	64.2	63.4	63.4
SPAN C	050473	8)	63.7	63.1	64.	63.1	63.4
SPAN C	050473	9)	63.6	63.1	63.9	62.9	
		MAXIMUM	64.60	63.80	65.70	64.50	63.80
		MINIMUM	63.60	62.80	63.90	62.90	63.10
		AVERAGE	64.00	63.25	64.44	63.46	63.40
		ST.DEV.	.36	.28	.57	.51	.24
				SURFACE AVG. 63.38	BOTTOM AVG.		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	050473	1)					
SPAN D	050473	2)		63.6		63.4	65.
SPAN D	050473	3)	64.2	63.3	64.9	63.2	65.
SPAN D	050473	4)	63.5	63.1	64.5	63.3	
SPAN D	050473	5)	65.	65.1	65.2	64.5	
SPAN D	050473	6)	63.9				
SPAN D	050473	7)	63.8				
		MAXIMUM	65.00	65.10	65.20	64.50	65.00
		MINIMUM	63.50	63.10	64.50	63.20	65.00
		AVERAGE	64.08	63.77	64.87	63.60	65.00
		ST.DEV.	.57	.91	.35	.61	.00
				SURFACE AVG. 64.72	BOTTOM AVG.		

DATE 050473
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 63.95
2) MAXIMUM VALUE 65.70
3) MINIMUM VALUE 62.80
4) SURFACE AVG. 63.95
5) BOTTOM AVG. 65.00

AIR TEMP AVG. 58.
WIND DIRECTION 34.
WIND SPEED 7.2
CLOUD COVER 00.

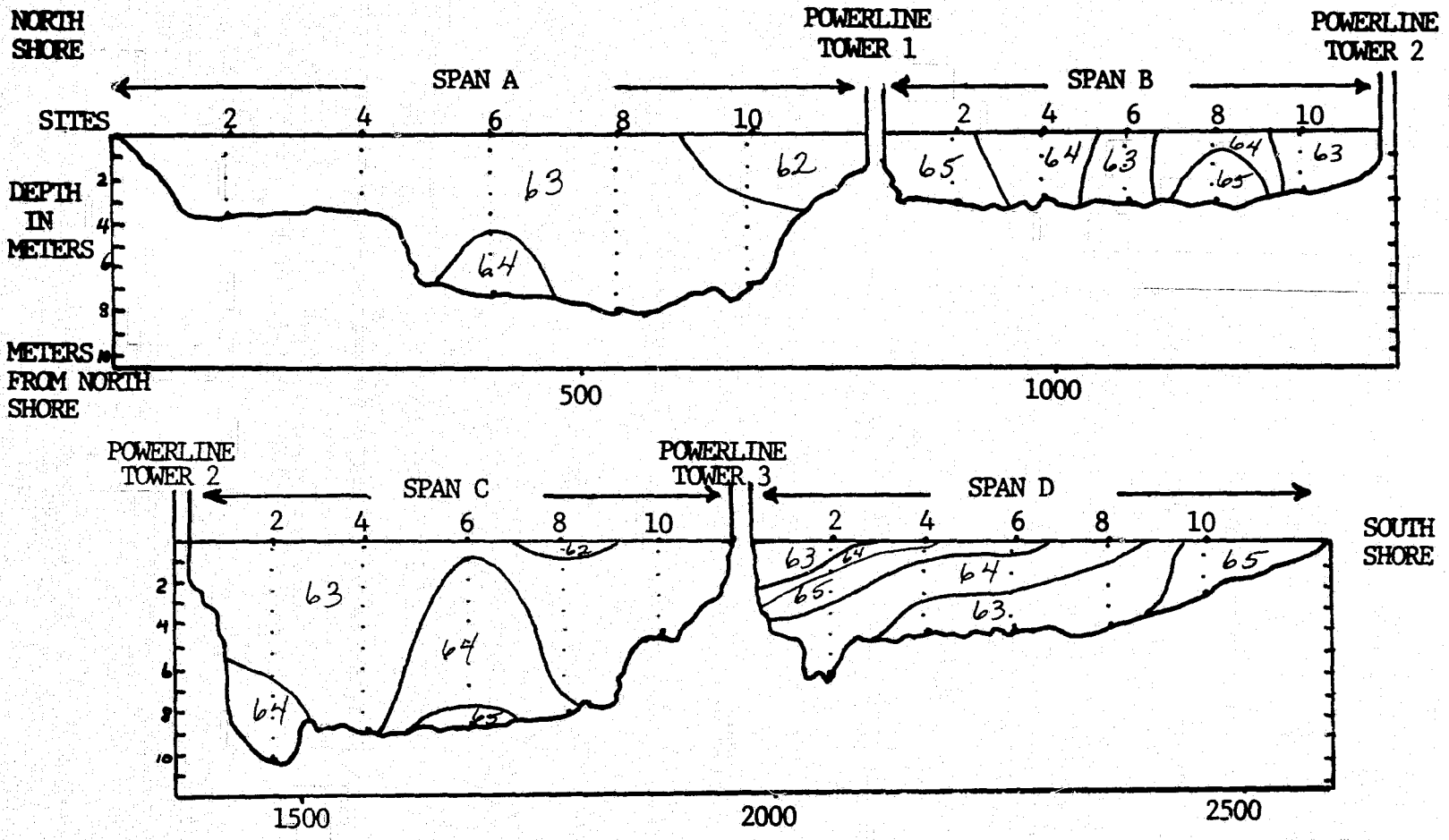

FIGURE 44. RIVER THERMAL PROFILE OF MAY 4, 1973 WITH A 76,252 cf/s FLOW RATE, 58°F AIR TEMPERATURE AND NO CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	051173	1)	66.5	65.7	65.6	66.5	68.6
SPAN A	051173	2)					
SPAN A	051173	3)					
SPAN A	051173	4)	69.2	67.5	66.	66.7	66.
SPAN A	051173	5)			65.8	66.6	66.
SPAN A	051173	6)					
SPAN A	051173	7)			65.7	66.2	65.8
SPAN A	051173	8)			66.2	66.6	65.8
SPAN A	051173	9)					67.7
		MAXIMUM	69.20	67.50	66.20	66.70	67.70
		MINIMUM	66.50	65.70	65.60	66.20	65.60
		AVERAGE	67.85	66.60	65.86	66.52	66.15
		ST.DEV.	1.91	1.27	.24	.19	.77
				SURFACE AVG. 67.44	BOTTOM AVG. 65.98		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	051173	1)	65.5	66.8	66.1	66.3	67.4
SPAN B	051173	2)					
SPAN B	051173	3)					
SPAN B	051173	4)	68.4	69.4	68.	66.6	70.
		MAXIMUM	68.40	69.40	68.00	66.60	70.00
		MINIMUM	65.50	66.80	66.10	66.30	67.40
		AVERAGE	66.95	68.10	67.05	66.45	68.70
		ST.DEV.	2.05	1.84	1.34	.21	1.84
				SURFACE AVG. 68.48	BOTTOM AVG. 66.42		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	051173	1)	66.9	65.1	66.1	65.3	66.9
SPAN C	051173	2)					
SPAN C	051173	3)					
SPAN C	051173	4)	67.2	66.	66.4	65.5	66.4
SPAN C	051173	5)	67.3	66.	66.6	65.6	66.2
SPAN C	051173	6)	67.4	66.	66.6	65.9	66.1
SPAN C	051173	7)	67.3	65.8	66.6	66.2	66.1
SPAN C	051173	8)	67.6	65.9	66.7	66.9	66.8
SPAN C	051173	9)	68.4	69.6	67.1	68.2	.
		MAXIMUM	68.40	69.60	67.10	68.20	66.80
		MINIMUM	66.90	65.10	66.10	65.30	65.90
		AVERAGE	67.44	66.34	66.59	66.23	66.25
		ST.DEV.	.47	1.47	.30	1.02	.31
				SURFACE AVG. 68.02	BOTTOM AVG. 65.86		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	051173	1)	66.1	66.2	66.7	66.6	66.8
SPAN D	051173	2)					
SPAN D	051173	3)					
SPAN D	051173	4)	66.7	66.3	67.9	66.7	69.1
SPAN D	051173	5)	66.6	66.6	68.1	67.4	
		MAXIMUM	66.70	66.60	68.10	67.40	69.10
		MINIMUM	66.10	66.20	66.70	66.60	65.80
		AVERAGE	66.47	66.37	67.57	66.90	67.45
		ST.DEV.	.32	.21	.76	.44	2.33
				SURFACE AVG. 67.56	BOTTOM AVG. 66.28		

DATE 051173
4 SPANS CALCULATED, THE RESULTS ARE:

1)	AVERAGE TEMP.	66.89
2)	MAXIMUM VALUE	70.00
3)	MINIMUM VALUE	65.10
4)	SURFACE AVG.	67.87
5)	BOTTOM AVG.	66.13
	AIR TEMP AVG.	72.
	WIND DIRECTION	02.
	WIND SPEED	6.9
	CLOUD COVER	6.

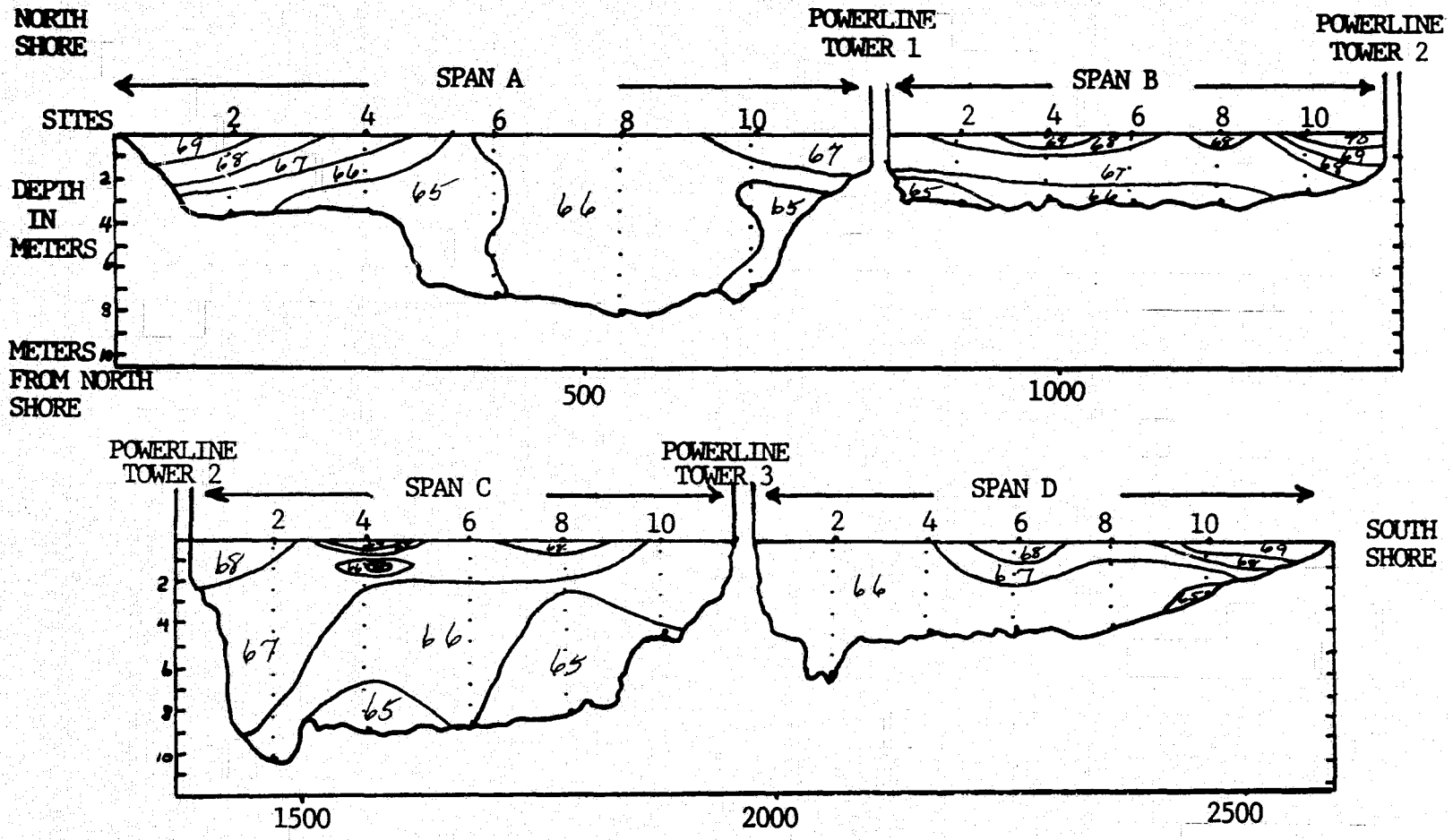

FIGURE 45. RIVER THERMAL PROFILE OF MAY 11, 1973 WITH A 75,008 cf/s FLOW RATE, 72°F AIR TEMPERATURE AND 60% CLOUD COVER. NOTE RECENT TUG PASSAGE IN SPAN C.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	051873	1)	63.6	62.2	66.3	65.1	62.6
SPAN A	051873	2)					
SPAN A	051873	3)	64.1	64.5	67.3	66.3	65.3
SPAN A	051873	4)	64.1	64.4	67.2	66.1	65.1
SPAN A	051873	5)			67.	65.9	64.8
SPAN A	051873	6)			67.	65.9	64.7
SPAN A	051873	7)			66.8	65.7	64.6
SPAN A	051873	8)			66.7	65.7	64.5
SPAN A	051873	9)				65.6	64.5
		MAXIMUM	64.10	64.50	67.30	66.30	65.30
		MINIMUM	63.60	62.20	66.30	65.10	62.60
		AVERAGE	63.93	63.70	66.90	65.79	64.51
		ST.DEV.	.29	1.30	.34	.36	.82
				SURFACE AVG. 65.06	BOTTOM AVG. 63.96		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	051873	1)	62.1	65.	62.3	63.9	66.9
SPAN B	051873	2)					
SPAN B	051873	3)	66.8	65.7	64.7	64.4	67.4
SPAN B	051873	4)	66.4	65.7	64.4	64.	67.2
		MAXIMUM	66.80	65.70	64.70	64.40	67.40
		MINIMUM	62.10	65.00	62.30	63.90	66.90
		AVERAGE	65.10	65.47	63.80	64.10	67.17
		ST.DEV.	2.61	.40	1.31	.26	.25
				SURFACE AVG. 65.54	BOTTOM AVG. 64.04		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	051873	1)	63.9	63.4	64.2	63.	64.2
SPAN C	051873	2)					
SPAN C	051873	3)	65.4	64.3	65.4	64.1	65.
SPAN C	051873	4)	65.4	64.1	65.3	63.8	64.9
SPAN C	051873	5)	65.2	63.9	65.1	63.7	64.7
SPAN C	051873	6)	65.2	63.7	65.1	63.6	64.7
SPAN C	051873	7)	65.1	63.5	64.9	63.5	64.5
SPAN C	051873	8)	65.1	63.5	64.9	63.5	64.5
SPAN C	051873	9)	64.8	63.3	64.8	63.5	
SPAN C	051873	10)	64.8				
		MAXIMUM	65.40	64.30	65.40	64.10	65.00
		MINIMUM	63.90	63.30	64.20	63.00	64.20
		AVERAGE	64.99	63.71	64.96	63.59	64.64
		ST.DEV.	.46	.36	.37	.31	.27
				SURFACE AVG. 64.18	BOTTOM AVG. 63.74		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	051873	1)	63.5	66.1	64.7	63.	65.
SPAN D	051873	2)		66.2	65.4	63.1	
SPAN D	051873	3)	64.3	66.3	65.9	63.5	66.5
SPAN D	051873	4)	64.	66.1	65.8	63.4	
SPAN D	051873	5)	63.7	65.6	65.6	63.2	
SPAN D	051873	6)	63.7				
		MAXIMUM	64.30	66.30	65.90	63.50	66.50
		MINIMUM	63.50	65.60	64.70	63.00	65.00
		AVERAGE	63.84	66.06	65.48	63.24	65.75
		ST.DEV.	.31	.27	.48	.21	1.06
				SURFACE AVG. 64.92	BOTTOM AVG. 64.46		

DATE 051873
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 64.84
2) MAXIMUM VALUE 67.40
3) MINIMUM VALUE 62.10
4) SURFACE AVG. 64.92
5) BOTTOM AVG. 64.05
AIR TEMP AVG. 59.
WIND DIRECTION 19.
WIND SPEED 5.2
CLOUD COVER 4.

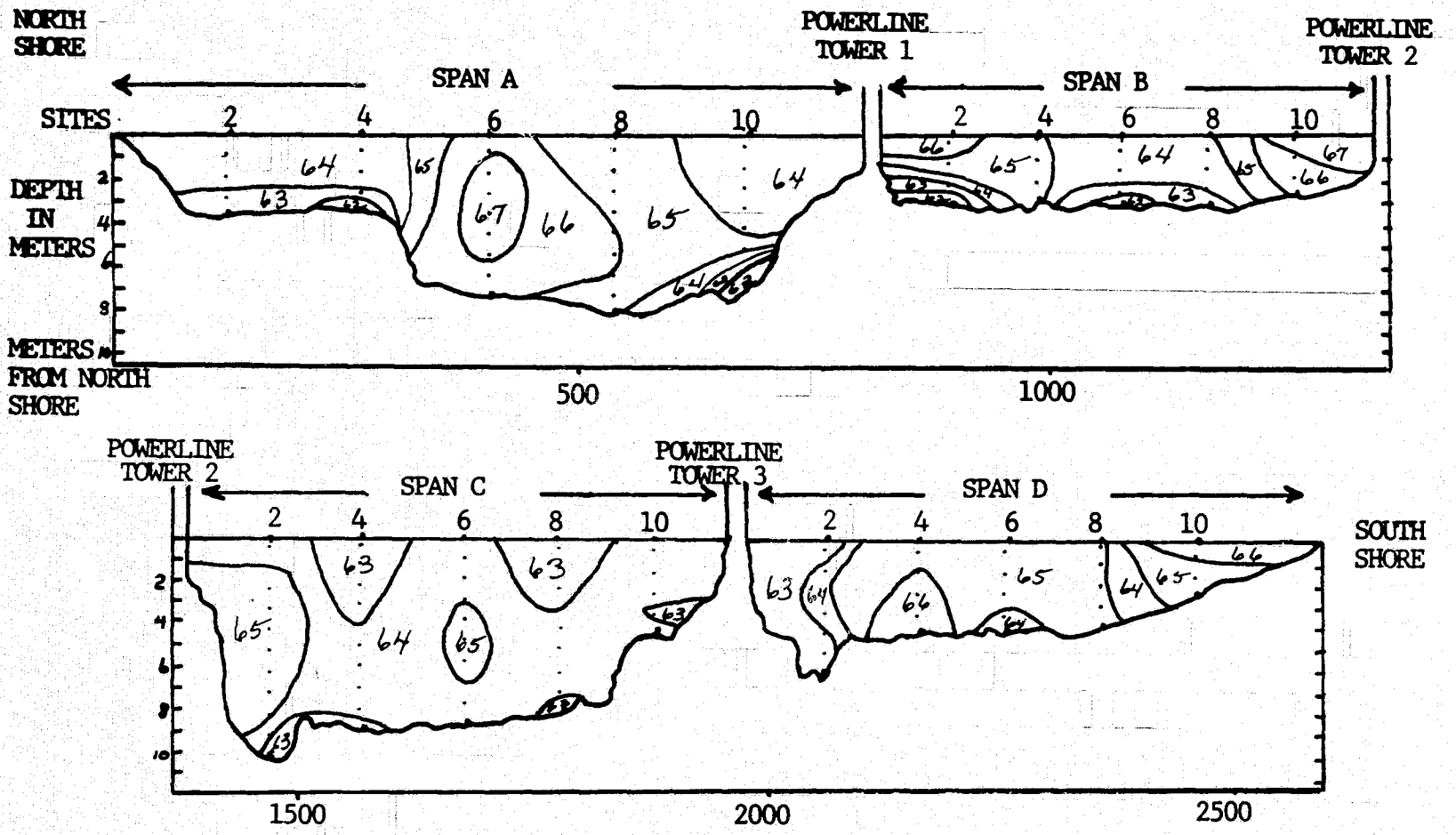

FIGURE 46. RIVER THERMAL PROFILE OF MAY 18, 1973 WITH A 50,038 cf/s FLOW RATE, 59°F AIR TEMPERATURE AND 40% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	060573	1)	68.8	70.3	67.6	69.4	68.7
SPAN A	060573	2)					
SPAN A	060573	3)	70.5	72.2	69.2	71.7	70.2
SPAN A	060573	4)	70.4	72.1	69.1	71.6	70.1
SPAN A	060573	5)			68.9	71.4	70.0
SPAN A	060573	6)			68.8	71.0	70.
SPAN A	060573	7)			68.6	71.	69.8
SPAN A	060573	8)			68.7	71.	69.9
SPAN A	060573	9)				70.8	69.9
		MAXIMUM	70.50	72.20	69.20	71.70	70.20
		MINIMUM	68.80	70.30	67.60	69.40	68.70
		AVERAGE	69.90	71.53	68.70	70.99	69.82
		ST.DEV.	.95	1.07	.53	.72	.47
				SURFACE AVG. 70.38	BOTTOM AVG. 68.96		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	060573	1)	68.6	69.2	68.4	68.5	70.3
SPAN B	060573	2)					
SPAN B	060573	3)	68.7	69.4	70.7	69.8	72.2
SPAN B	060573	4)	68.7	69.4	70.5	69.7	72.2
		MAXIMUM	68.70	69.40	70.70	69.80	72.20
		MINIMUM	68.60	69.20	68.40	68.50	70.30
		AVERAGE	68.67	69.33	69.87	69.33	71.57
		ST.DEV.	.06	.12	1.27	.72	1.10
				SURFACE AVG. 70.10	BOTTOM AVG. 69.00		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	060573	1)	68.4	69.	71.	69.2	68.9
SPAN C	060573	2)					
SPAN C	060573	3)	70.4	70.	72.3	70.8	70.2
SPAN C	060573	4)	70.3	69.9	72.1	70.8	70.1
SPAN C	060573	5)	70.2		71.7	70.7	70.
SPAN C	060573	6)	70.2	69.3		70.7	70.
SPAN C	060573	7)	70.	69.2	71.3	70.5	69.8
SPAN C	060573	8)	70.	69.2	71.3	70.5	69.7
SPAN C	060573	9)	69.9	69.1	71.2	70.4	
		MAXIMUM	70.40	70.00	72.30	70.80	70.20
		MINIMUM	68.40	69.00	71.00	69.20	68.90
		AVERAGE	69.92	69.39	71.56	70.45	69.81
		ST.DEV.	.64	.40	.49	.53	.44
				SURFACE AVG. 70.06	BOTTOM AVG. 69.30		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	060573	1)	72.3	68.8	70.6	71.5	71.1
SPAN D	060573	2)					
SPAN D	060573	3)	73.	69.3	72.	73.5	72.1
SPAN D	060573	4)	72.8	69.3	72.	73.4	72.
SPAN D	060573	5)	72.6	69.	71.8	73.2	
SPAN D	060573	6)	72.7				
SPAN D	060573	7)	72.5				
		MAXIMUM	73.00	69.30	72.00	73.50	72.10
		MINIMUM	72.30	68.80	70.60	71.50	71.10
		AVERAGE	72.65	69.10	71.60	72.90	71.73
		ST.DEV.	.24	.24	.67	.94	.55
				SURFACE AVG. 71.70	BOTTOM AVG. 70.86		

DATE 060573

4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 70.44
2) MAXIMUM VALUE 73.50
3) MINIMUM VALUE 67.60
4) SURFACE AVG. 70.56
5) BOTTOM AVG. 69.53

AIR TEMP AVG. 77.
WIND DIRECTION 20.
WIND SPEED 8.9
CLOUD COVER 8.

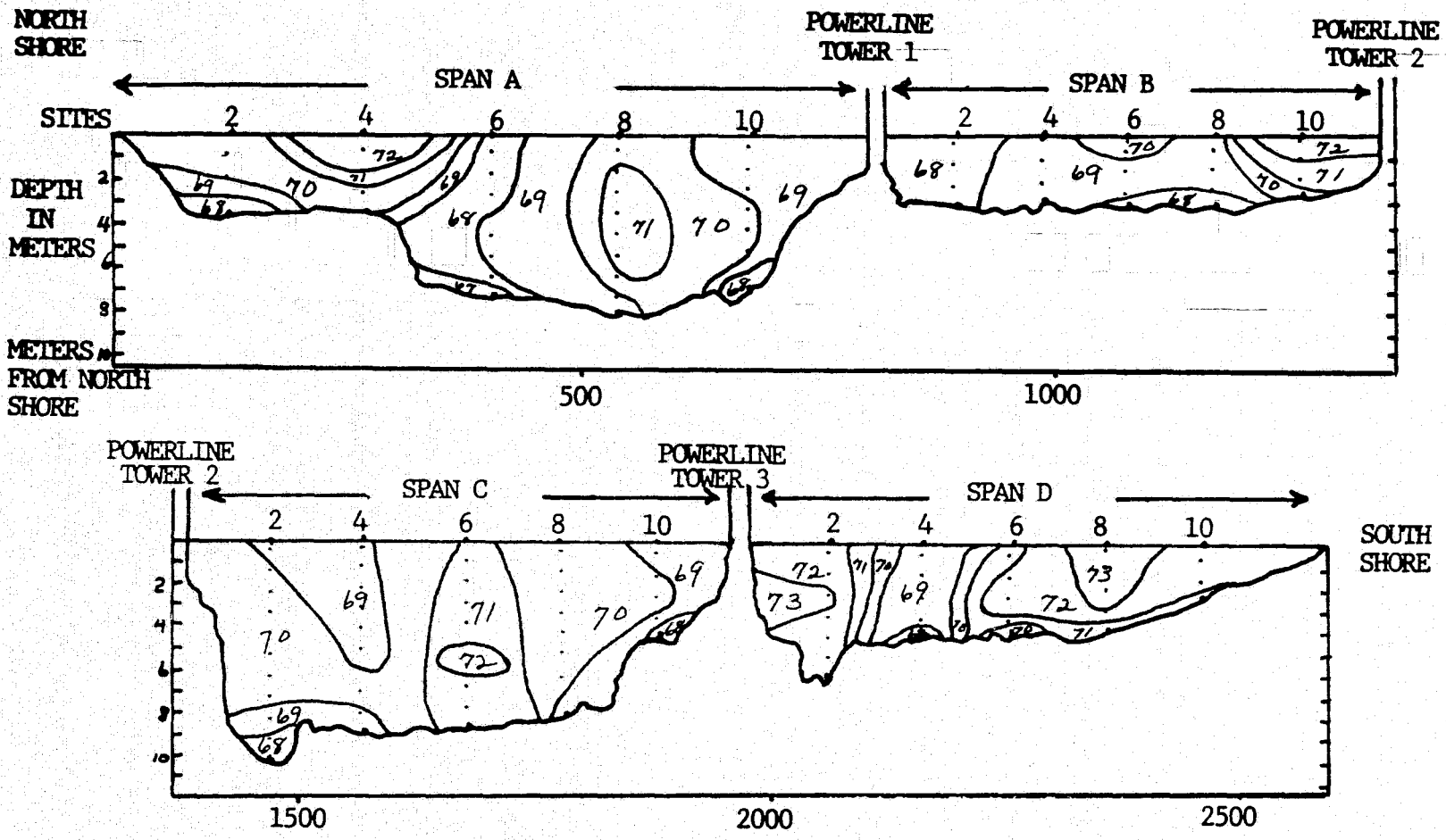

FIGURE 47. RIVER THERMAL PROFILE OF JUNE 5, 1973 WITH A 100,130 cf/s FLOW RATE, 77°F AIR TEMPERATURE AND 80% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	061573	1)	71.6	75.	71.5	74.3	74.
SPAN A	061573	2)					
SPAN A	061573	3)	72.9	76.6	71.8	74.5	74.3
SPAN A	061573	4)	72.9	76.5	71.7	74.4	74.3
SPAN A	061573	5)			71.7	74.4	74.2
SPAN A	061573	6)			71.8	74.4	74.3
SPAN A	061573	7)			71.5	74.4	74.2
SPAN A	061573	8)			71.6	74.4	74.2
SPAN A	061573	9)				74.3	74.3
		MAXIMUM	72.90	76.60	71.80	74.50	74.30
		MINIMUM	71.60	75.00	71.50	74.30	74.00
		AVERAGE	72.47	76.03	71.66	74.39	74.22
		ST.DEV.	.75	.90	.13	.06	.10
				SURFACE AVG. 73.92	BOTTOM AVG. 73.28		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	061573	1)	70.	72.3	72.8	75.7	71.8
SPAN B	061573	2)					
SPAN B	061573	3)		75.9	74.4	77.	72.8
SPAN B	061573	4)	72.8	75.6	74.5	77.	73.
		MAXIMUM	72.80	75.90	74.50	77.00	73.00
		MINIMUM	70.00	72.30	72.80	75.70	71.80
		AVERAGE	71.40	74.60	73.90	76.57	72.53
		ST.DEV.	1.98	2.00	.95	.75	.64
				SURFACE AVG. 74.58	BOTTOM AVG. 72.52		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	061573	1)	73.2	72.5	73.6	72.5	73.4
SPAN C	061573	2)			72.9		73.9
SPAN C	061573	3)	75.8	73.	73.	73.5	73.9
SPAN C	061573	4)	75.7	73.8	73.	73.4	73.9
SPAN C	061573	5)	75.6	73.7	73.	73.2	73.9
SPAN C	061573	6)	75.5	73.6	73.1	73.2	73.8
SPAN C	061573	7)	75.1	73.5	72.9	73.1	73.8
SPAN C	061573	8)	75.	73.6	72.8	73.2	73.8
SPAN C	061573	9)	74.8	73.6	72.9	73.4	
		MAXIMUM	75.80	73.80	73.60	73.50	73.90
		MINIMUM	73.20	72.50	72.80	72.50	73.40
		AVERAGE	75.09	73.41	73.02	73.19	73.80
		ST.DEV.	.84	.44	.23	.31	.17
				SURFACE AVG. 73.70	BOTTOM AVG. 73.04		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	061573	1)	74.2	71.9	73.4	72.5	73.3
SPAN D	061573	2)		71.6	72.		
SPAN D	061573	3)	75.2	71.2	72.1	73.3	72.9
SPAN D	061573	4)	75.	71.6	72.1	73.1	
SPAN D	061573	5)	74.9	71.6	72.3	73.5	
SPAN D	061573	6)	74.9				
SPAN D	061573	7)	74.9				
		MAXIMUM	75.20	71.90	73.40	73.50	73.30
		MINIMUM	74.20	71.20	72.00	72.50	72.90
		AVERAGE	74.85	71.58	72.38	73.10	73.10
		ST.DEV.	.34	.25	.58	.43	.28
				SURFACE AVG. 73.04	BOTTOM AVG. 73.06		

DATE 061573
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 73.56
2) MAXIMUM VALUE 77.00
3) MINIMUM VALUE 70.00
4) SURFACE AVG. 73.81
5) BOTTOM AVG. 72.97
AIR TEMP AVG. 78.
WIND DIRECTION 20.
WIND SPEED 6.2
CLOUD COVER 8.

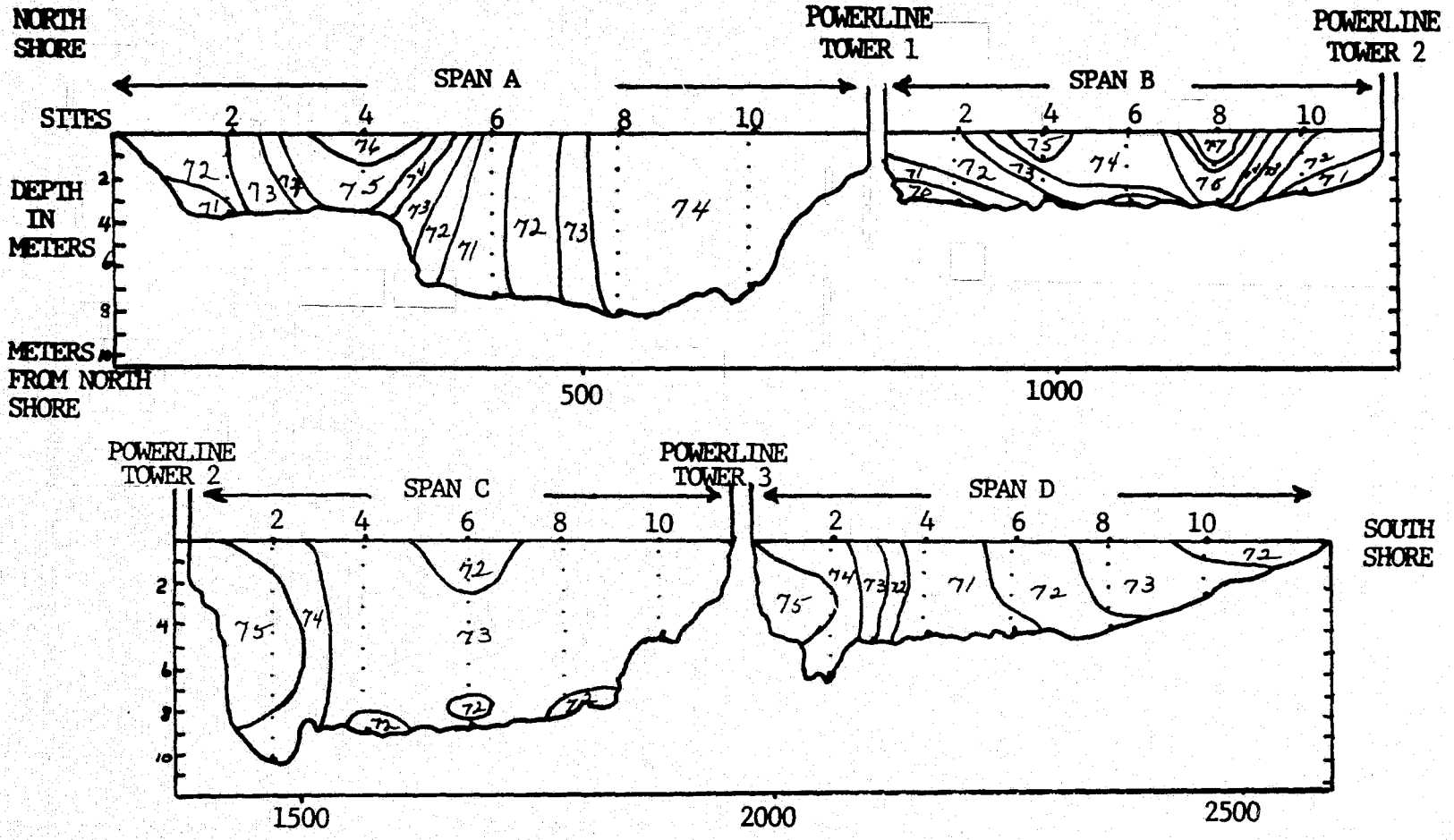

FIGURE 48. RIVER THERMAL PROFILE OF JUNE 15, 1973 WITH A 53,652 cf/s FLOW RATE, 78°F AIR TEMPERATURE AND 80% CLOUD COVER.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	032774	1)	50.7	52.9	51.6	53.5	52.5
SPAN A	032774	2)	51.4	52.9	51.3	53.4	52.1
SPAN A	032774	3)	51.4	52.9	51.1	53.4	52.
SPAN A	032774	4)			51.	53.3	51.9
SPAN A	032774	5)					
SPAN A	032774	6)			51.5	53.8	52.8
SPAN A	032774	7)			51.1	53.6	52.3
SPAN A	032774	8)			51.1	53.5	52.4
		MAXIMUM	51.40	52.90	51.60	53.80	52.80
		MINIMUM	50.70	52.90	51.00	53.30	51.90
		AVERAGE	51.17	52.90	51.24	53.50	52.29
		ST.DEV.	.40	.00	.23	.16	.31
				SURFACE AVG. 52.26	BOTTOM AVG. 52.24		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	032774	1)	50.	51.2	52.	51.3	51.7
SPAN B	032774	2)	50.	51.	51.8	51.4	51.8
SPAN B	032774	3)	50.	51.	51.7	51.3	51.7
		MAXIMUM	50.00	51.20	52.00	51.40	51.80
		MINIMUM	50.00	51.00	51.70	51.30	51.70
		AVERAGE	50.00	51.07	51.83	51.33	51.73
		ST.DEV.	.00	.12	.15	.06	.06
				SURFACE AVG. 51.14	BOTTOM AVG. 51.24		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	032774	1)	50.	51.	56.2	51.7	51.7
SPAN C	032774	2)	49.9	51.1	54.8	51.3	51.7
SPAN C	032774	3)	50.	51.2	54.7	51.2	51.6
SPAN C	032774	4)	50.	51.3	54.6	51.1	51.6
SPAN C	032774	5)					
SPAN C	032774	6)	51.1	53.3	54.7	51.2	53.1
SPAN C	032774	7)	50.9	53.	54.3	50.9	53.2
SPAN C	032774	8)	50.9	52.9	54.2	50.9	52.3
SPAN C	032774	9)	50.2	52.6	53.7	50.7	52.2
SPAN C	032774	10)		52.4		50.8	
		MAXIMUM	51.10	53.30	56.20	51.70	53.20
		MINIMUM	49.90	51.00	53.70	50.70	51.60
		AVERAGE	50.37	52.09	54.65	51.09	52.17
		ST.DEV.	.56	.93	.72	.31	.66
				SURFACE AVG. 51.86	BOTTOM AVG. 52.12		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	032774	1)	49.9	52.6	53.6	51.9	53.1
SPAN D	032774	2)	49.9	52.4	53.4	51.9	52.7
SPAN D	032774	3)	50.	52.4	53.5	51.8	52.7
SPAN D	032774	4)	50.	52.	53.5	51.8	52.4
		MAXIMUM	50.00	52.60	53.60	51.90	53.10
		MINIMUM	49.90	52.00	53.40	51.80	52.40

		AVERAGE	49.95	52.35	53.50	51.85	52.72
		ST.DEV.	.06	.25	.08	.06	.29
				SURFACE AVG. 51.94	BOTTOM AVG. 52.22		

DATE 032774
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 51.89
2) MAXIMUM VALUE 56.20
3) MINIMUM VALUE 49.90
4) SURFACE AVG. 51.80
5) BOTTOM AVG. 51.95
AIR TEMP AVG. 57.
WIND DIRECTION 16.
WIND SPEED 8.5
CLOUD COVER 10.

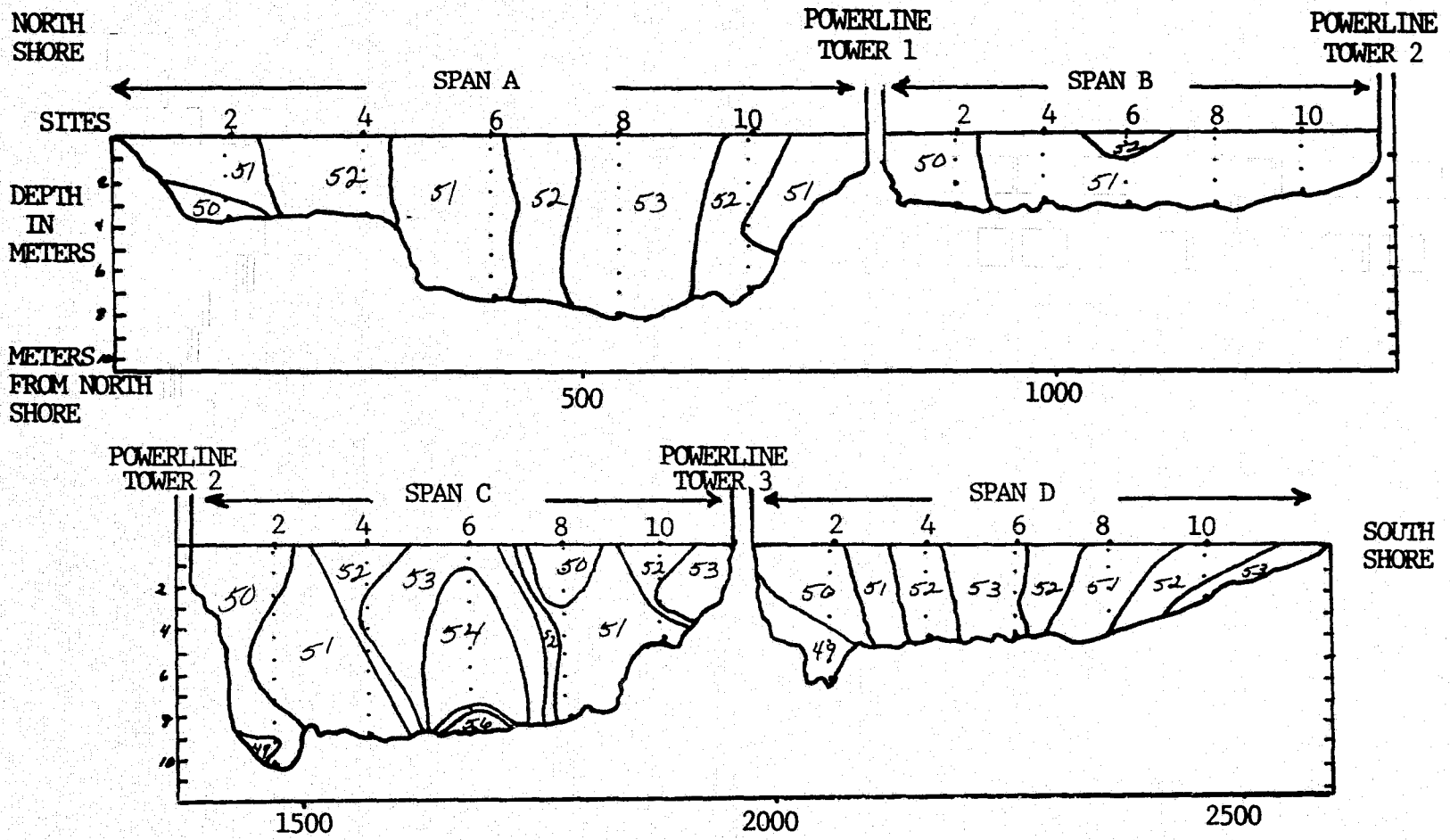

FIGURE 49. RIVER THERMAL PROFILE OF MARCH 27, 1974 WITH A 90506 cf/s FLOW RATE, 57°F AIR TEMPERATURE AND 100% CLOUD COVER. BF REACTOR #1 OPERATING AT 415 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	040374	1)	58.9	59.5	59.9	58.9	60.
SPAN A	040374	2)	58.9	59.5	59.8	59.	60.
SPAN A	040374	3)	58.7	59.5	59.8	59.1	60.1
SPAN A	040374	4)	58.8	59.7	59.7	59.1	60.1
SPAN A	040374	5)					
SPAN A	040374	6)			60.7	60.1	61.1
SPAN A	040374	7)			60.4	59.8	61.
SPAN A	040374	8)			60.4	59.9	61.
		MAXIMUM	58.90	59.70	60.70	60.10	61.10
		MINIMUM	58.70	59.50	59.70	58.90	60.00
		AVERAGE	58.82	59.55	60.10	59.41	60.47
		ST.DEV.	.10	.10	.39	.50	.53
				SURFACE AVG. 59.96	BOTTOM AVG. 59.44		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	040374	1)	57.5	59.6	57.7	58.5	59.1
SPAN B	040374	2)	57.6	59.7	57.8	58.5	59.1
SPAN B	040374	3)	57.7	59.9	57.7	58.6	59.2
		MAXIMUM	57.70	59.90	57.80	58.60	59.20
		MINIMUM	57.50	59.60	57.70	58.50	59.10
		AVERAGE	57.60	59.73	57.73	58.53	59.13
		ST.DEV.	.10	.15	.06	.06	.06
				SURFACE AVG. 58.62	BOTTOM AVG. 58.48		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	040374	1)	57.5	58.6	57.5	56.4	56.9
SPAN C	040374	2)	57.5	58.6	57.5	56.4	57.
SPAN C	040374	3)	57.5	58.6	57.5	56.5	57.
SPAN C	040374	4)	57.5	58.5	57.6	56.6	57.
SPAN C	040374	5)					
SPAN C	040374	6)	59.1	59.2	59.9	58.6	58.4
SPAN C	040374	7)	59.1	59.	59.5	58.5	58.2
SPAN C	040374	8)	59.	58.9	59.4	58.5	58.1
SPAN C	040374	9)	59.		59.1		
		MAXIMUM	59.10	59.20	59.90	58.60	58.40
		MINIMUM	57.50	58.50	57.50	56.40	56.90
		AVERAGE	58.27	58.77	58.50	57.36	57.51
		ST.DEV.	.83	.26	1.07	1.10	.68
				SURFACE AVG. 58.72	BOTTOM AVG. 57.38		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	040374	1)	57.5	58.8	58.3	59.4	61.4
SPAN D	040374	2)	57.5	58.9	58.3	59.5	61.3
SPAN D	040374	3)	57.6	58.9	58.4	59.5	61.5
SPAN D	040374	4)	57.7	58.9	58.3	59.4	
		MAXIMUM	57.70	58.90	58.40	59.50	61.50
		MINIMUM	57.50	58.80	58.30	59.40	61.30
		AVERAGE	57.57	58.87	58.32	59.45	61.40

		ST.DEV.	.10	.05	.05	.06	.10
				SURFACE AVG. 59.16	BOTTOM AVG. 59.08		

DATE 040374
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 58.86
2) MAXIMUM VALUE 61.50
3) MINIMUM VALUE 56.40
4) SURFACE AVG. 59.11
5) BOTTOM AVG. 58.59
AIR TEMP AVG. 72.
WIND DIRECTION 18.
WIND SPEED 18.4
CLOUD COVER 8.

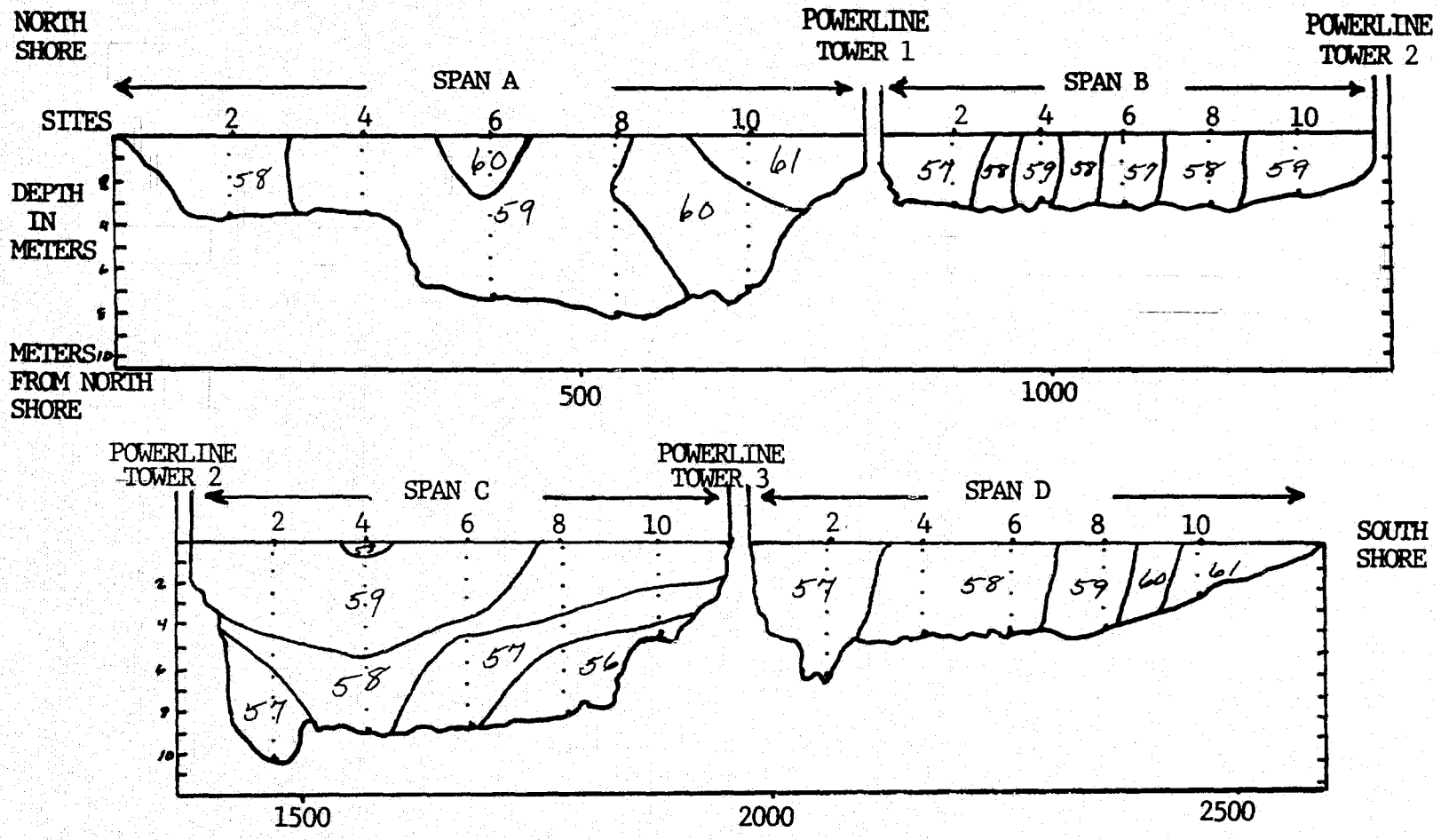

FIGURE 50. RIVER THERMAL PROFILE OF APRIL 3, 1974 WITH A 77,904 cf/s FLOW RATE 72°F AIR TEMPERATURE AND 80% CLOUD COVER. REACTOR #1 IS OPERATING AT 719 MW AT 11 A.M. TORNADOES IN THE EVENING CAUSED PLANT SHUT-DOWN.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	041074	1)	57.1	54.	56.4	55.	56.
SPAN A	041074	2)	56.9	54.	56.4	55.	56.
SPAN A	041074	3)	57.	54.	56.4	55.	55.9
SPAN A	041074	4)	56.9	54.	56.4	54.9	56.
SPAN A	041074	5)					
SPAN A	041074	6)			57.1	55.8	56.4
SPAN A	041074	7)			57.8	55.2	56.2
SPAN A	041074	8)			57.9	55.1	56.2
SPAN A	041074	9)				55.	56.1
		MAXIMUM	57.10	54.00	57.90	55.80	56.40
		MINIMUM	56.90	54.00	56.40	54.90	55.90
		AVERAGE	56.97	54.00	56.91	55.12	56.10
		ST.DEV.	.10	.00	.49	.29	.16
				SURFACE AVG. 55.98	BOTTOM AVG. 55.70		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	041074	1)	56.6	58.1	56.9	56.5	56.9
SPAN B	041074	2)	56.6	57.9	56.8	56.4	57.
SPAN B	041074	3)	56.7	57.9	56.8	56.5	57.
SPAN B	041074	4)	56.6	57.8	56.8	56.4	
		MAXIMUM	56.70	58.10	56.90	56.50	57.00
		MINIMUM	56.60	57.80	56.80	56.40	56.90
		AVERAGE	56.62	57.92	56.82	56.45	56.97
		ST.DEV.	.05	.13	.05	.06	.06
				SURFACE AVG. 56.92	BOTTOM AVG. 57.00		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	041074	1)	57.7	55.8	58.	60.	56.1
SPAN C	041074	2)	57.6	55.9	58.	58.6	56.1
SPAN C	041074	3)	57.5	56.	58.	56.2	56.2
SPAN C	041074	4)	57.4	56.1	58.1	58.2	56.1
SPAN C	041074	5)					
SPAN C	041074	6)	57.6	58.5	58.5	58.2	58.9
SPAN C	041074	7)	57.4	58.3	58.1	57.8	58.8
SPAN C	041074	8)	57.4	58.3	58.	57.6	58.7
SPAN C	041074	9)	57.4	58.3			
SPAN C	041074	10)	57.4	58.1			
		MAXIMUM	57.70	58.50	58.50	60.00	58.90
		MINIMUM	57.40	55.80	58.00	56.20	56.10
		AVERAGE	57.49	57.26	58.10	58.09	57.27
		ST.DEV.	.12	1.25	.18	1.14	1.43
				SURFACE AVG. 57.96	BOTTOM AVG. 57.52		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	041074	1)	58.4	56.5	56.3	56.7	54.8
SPAN D	041074	2)	58.4	56.5	56.3	56.8	54.7
SPAN D	041074	3)	58.3	56.5	56.	56.8	54.8
SPAN D	041074	4)	58.3	56.5	55.9	56.8	
		MAXIMUM	58.40	56.50	56.30	56.80	54.80
		MINIMUM	58.30	56.50	55.90	56.70	54.70
		AVERAGE	58.35	56.50	56.12	56.77	54.77
		ST.DEV.	.06	.00	.21	.05	.06
				SURFACE AVG. 56.46	BOTTOM AVG. 56.54		

DATE 041074
4 SPANS CALCULATED. THE RESULTS ARE:

1) AVERAGE TEMP.	56.73
2) MAXIMUM VALUE	60.00
3) MINIMUM VALUE	54.00
4) SURFACE AVG.	56.83
5) BOTTOM AVG.	56.69
AIR TEMP AVG.	53.
WIND DIRECTION	12.
WIND SPEED	7.8
CLOUD COVER	5.

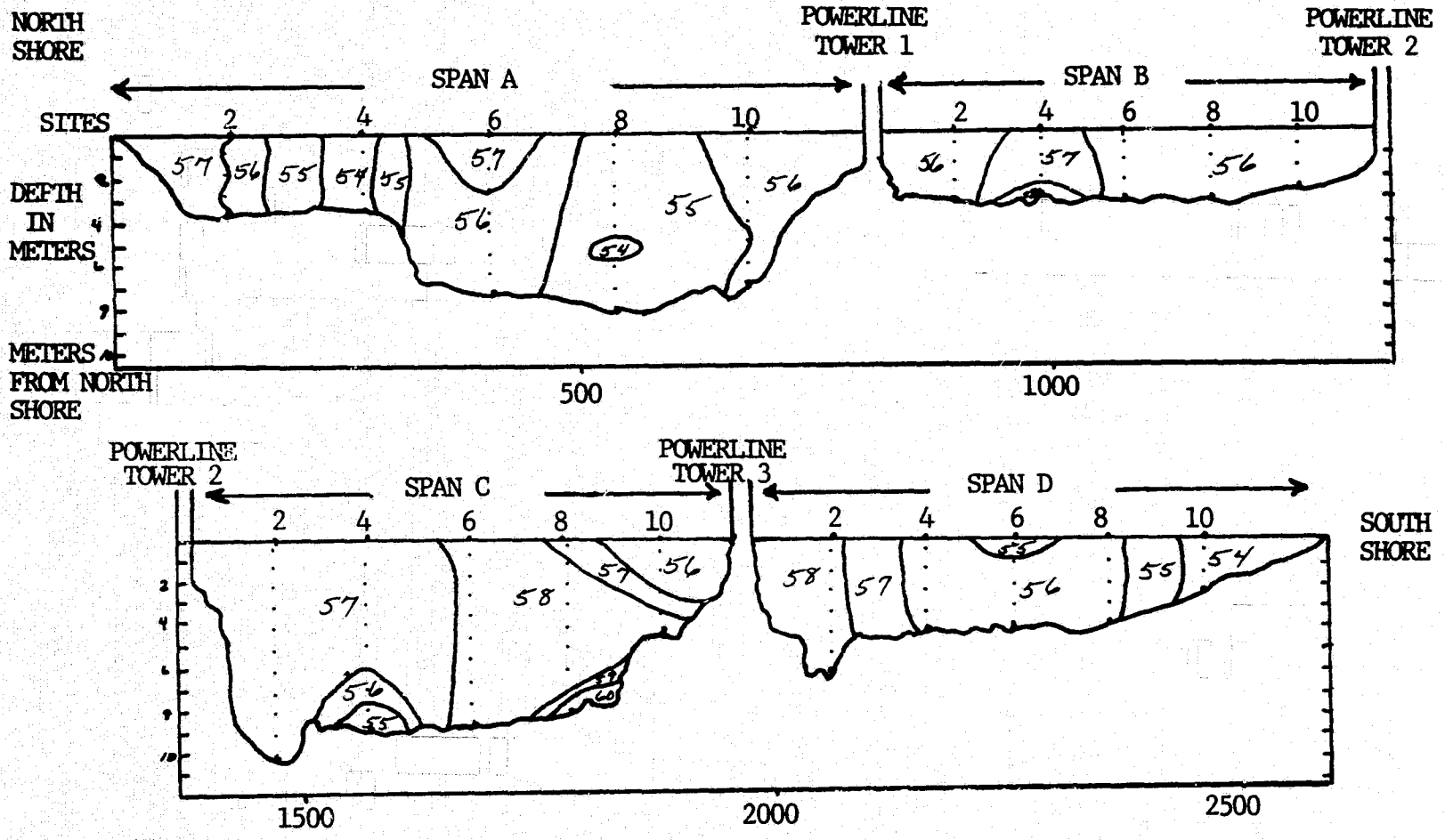

FIGURE 51. RIVER THERMAL PROFILE OF APRIL 10, 1974 WITH A 88,906 FLOW RATE, 53°F AIR TEMPERATURE AND 50% CLOUD COVER. NO POWER PRODUCTION, POWER LINES DOWN FROM TORNADOES OF PREVIOUS WEEK.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	041774	1)	57.4	56.9	57.9	60.	58.7
SPAN A	041774	2)	57.3	57.	57.8	60.	58.7
SPAN A	041774	3)	57.8	57.2	58.	60.	58.8
SPAN A	041774	4)	57.9	57.3	58.2	60.	58.7
SPAN A	041774	5)					
SPAN A	041774	6)				60.2	60.
SPAN A	041774	7)				60.1	59.6
SPAN A	041774	8)				60.2	59.5
		MAXIMUM	57.90	57.30	58.20	60.20	60.00
		MINIMUM	57.30	56.90	57.80	60.00	58.70
		AVERAGE	57.60	57.10	57.97	60.07	59.14
		ST.DEV.	.29	.18	.17	.10	.54

SURFACE AVG. 58.62 BOTTOM AVG. 58.18

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	041774	1)	58.7	60.3	59.8	59.4	59.2
SPAN B	041774	2)	58.7	60.2	59.9	59.5	59.3
SPAN B	041774	3)	58.8	60.3	60.	59.6	59.4
SPAN B	041774	4)			60.	59.7	59.5
		MAXIMUM	58.80	60.30	60.00	59.70	59.50
		MINIMUM	58.70	60.20	59.80	59.40	59.20
		AVERAGE	58.73	60.27	59.92	59.55	59.35
		ST.DEV.	.06	.06	.10	.13	.13

SURFACE AVG. 59.66 BOTTOM AVG. 59.46

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	041774	1)	60.2	58.8	58.7	58.6	58.3
SPAN C	041774	2)	60.	58.8	58.8	58.7	58.3
SPAN C	041774	3)	60.1	58.8	58.8	58.8	58.2
SPAN C	041774	4)	60.1	58.7	58.9	58.8	58.2
SPAN C	041774	5)					
SPAN C	041774	6)	60.8	60.1	59.7	59.5	59.3
SPAN C	041774	7)	60.6	59.9	59.3	59.4	59.2
SPAN C	041774	8)	60.6	59.9	59.3	59.3	59.2
SPAN E	041774	9)	60.6	59.7	59.3	59.2	
		MAXIMUM	60.80	60.10	59.70	59.50	59.30
		MINIMUM	60.00	58.70	58.70	58.60	58.20
		AVERAGE	60.37	59.34	59.10	59.04	58.67
		ST.DEV.	.31	.61	.35	.35	.53

SURFACE AVG. 59.60 BOTTOM AVG. 58.92

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	041774	1)	59.8	58.8	60.3	59.2	59.
SPAN D	041774	2)	59.9	58.6	60.3	59.2	60.
SPAN D	041774	3)	59.9	58.7	60.4	59.2	60.
SPAN D	041774	4)	60.	58.7	60.3	59.2	
		MAXIMUM	60.00	58.80	60.40	59.20	60.00
		MINIMUM	59.80	58.60	60.30	59.20	59.00
		AVERAGE	59.90	58.70	60.32	59.20	59.67
		ST.DEV.	.08	.08	.05	.00	.58

SURFACE AVG. 59.64 BOTTOM AVG. 59.42

DATE 041774
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 59.20
2) MAXIMUM VALUE 60.80
3) MINIMUM VALUE 56.90
4) SURFACE AVG. 59.38
5) BOTTOM AVG. 59.00
AIR TEMP AVG. 53.
WIND DIRECTION 36.
WIND SPEED 7.6
CLOUD COVER 2.

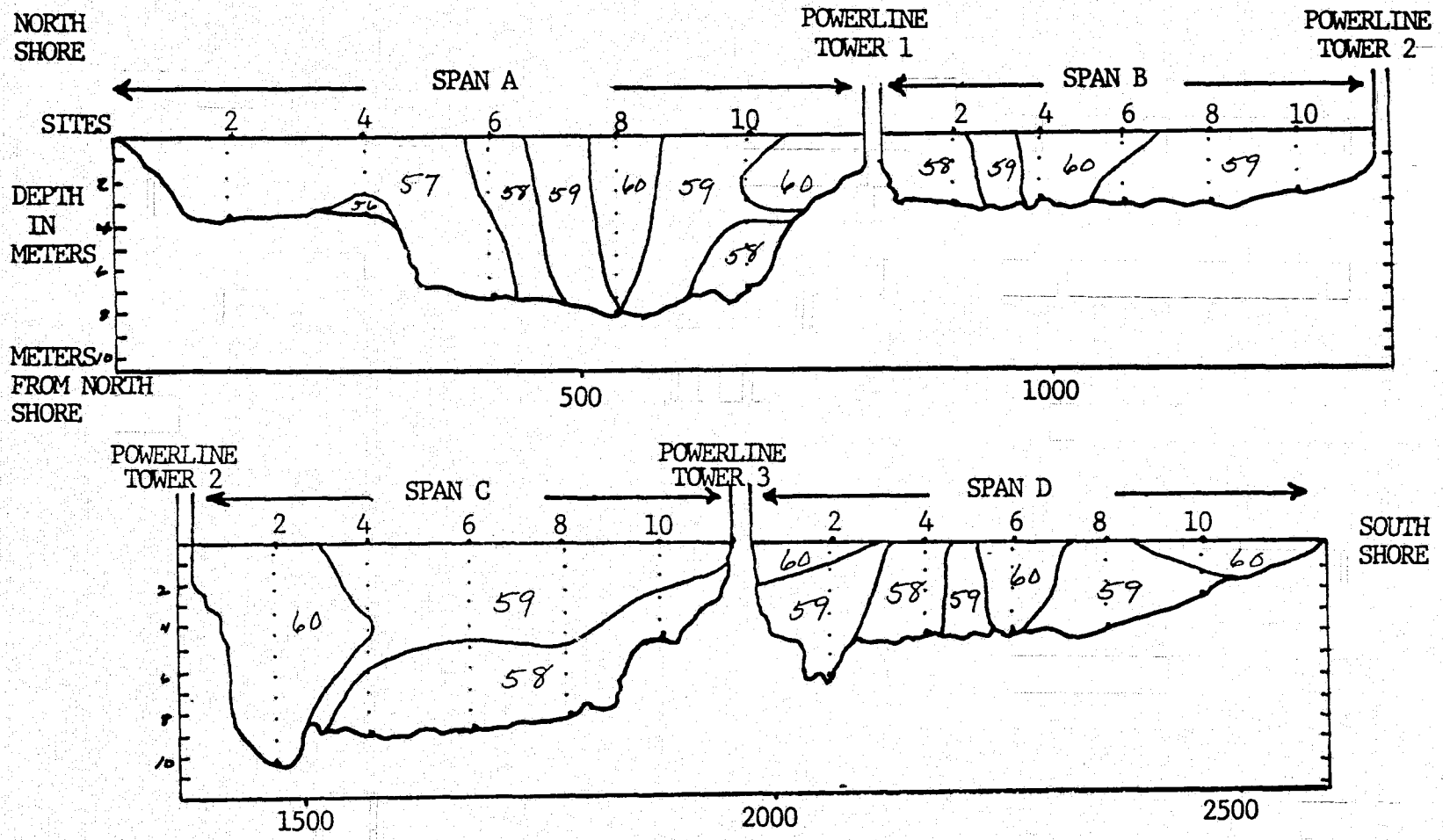

FIGURE 52. RIVER THERMAL PROFILE OF APRIL 17,1974 WITH A FLOW RATE OF 55,300 cf/s, 53% AIR TEMPERATURE AND 20% CLOUD COVER. REACTOR #1 IS OPERATING AT 352 MW. POWER LINES ONLY PARTIALLY RESTORED TO SERVICE.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	042474	1)	61.3	62.5	62.6	62.	63.2
SPAN A	042474	2)	61.3	62.6	62.7	62.	63.3
SPAN A	042474	3)	61.4	63.1	62.6	62.3	63.2
SPAN A	042474	4)		63.2	62.6	62.2	63.3
SPAN A	042474	5)			62.6	61.8	63.1
SPAN A	042474	6)			62.7	62.	63.3
SPAN A	042474	7)			62.6	61.8	63.2
SPAN A	042474	8)			62.8	62.2	63.4
SPAN A	042474	9)				62.3	63.1
		MAXIMUM	61.40	63.20	62.80	62.30	63.40
		MINIMUM	61.30	62.50	62.60	61.80	63.10
		AVERAGE	61.33	62.85	62.65	62.07	63.23
		ST.DEV.	.06	.35	.08	.19	.10
				SURFACE AVG. 62.56	BOTTOM AVG. 62.32		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	042474	1)	63.3	62.2	62.5	63.5	62.6
SPAN B	042474	2)	63.4	62.2	62.5	63.4	62.7
SPAN B	042474	3)	63.5	62.3	62.5	63.4	62.7
SPAN B	042474	4)	63.9	62.5	62.6	63.5	
SPAN B	042474	5)	62.9		62.5		
		MAXIMUM	63.90	62.50	62.60	63.50	62.70
		MINIMUM	62.90	62.20	62.50	63.40	62.60
		AVERAGE	63.40	62.30	62.52	63.45	62.67
		ST.DEV.	.36	.14	.04	.06	.06
				SURFACE AVG. 62.82	BOTTOM AVG. 62.82		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	042474	1)	64.4	62.2	62.5	62.1	63.6
SPAN C	042474	2)	64.4	62.2	62.6	62.	63.5
SPAN C	042474	3)	64.3	62.	62.6	62.1	63.5
SPAN C	042474	4)	64.1	62.1	62.6	62.4	63.6
SPAN C	042474	5)	63.9	62.	62.1	62.1	63.6
SPAN C	042474	6)	63.8	62.1	62.4	62.5	63.8
SPAN C	042474	7)	63.8	62.3	62.1	62.6	63.8
SPAN C	042474	8)	63.9	62.4	62.1	63.1	64.1
SPAN C	042474	9)	64.1		62.3		
		MAXIMUM	64.40	62.40	62.60	63.10	64.10
		MINIMUM	63.80	62.00	62.10	62.00	63.50
		AVERAGE	64.08	62.16	62.37	62.36	63.69
		ST.DEV.	.24	.14	.22	.37	.20
				SURFACE AVG. 63.20	BOTTOM AVG. 62.96		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	042474	1)	63.6	63.3	63.2	62.2	63.
SPAN D	042474	2)	63.5	63.3	63.4	62.4	63.
SPAN D	042474	3)	63.7	63.3	63.8	62.4	63.
SPAN D	042474	4)	63.6	63.4	64.1	62.9	
SPAN D	042474	5)	63.4	62.5			
SPAN D	042474	6)	63.9				
		MAXIMUM	63.90	63.40	64.10	62.90	63.00
		MINIMUM	63.40	62.50	63.20	62.20	63.00
		AVERAGE	63.65	63.16	63.62	62.47	63.00
		ST.DEV.	.19	.37	.40	.30	.00
				SURFACE AVG. 63.28	BOTTOM AVG. 63.06		

DATE 042474
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 62.85
2) MAXIMUM VALUE 64.40
3) MINIMUM VALUE 61.30
4) SURFACE AVG. 62.96
5) BOTTOM AVG. 62.79
AIR TEMP AVG. 53.
WIND DIRECTION 01.
WIND SPEED 14.8
CLOUD COVER 1.

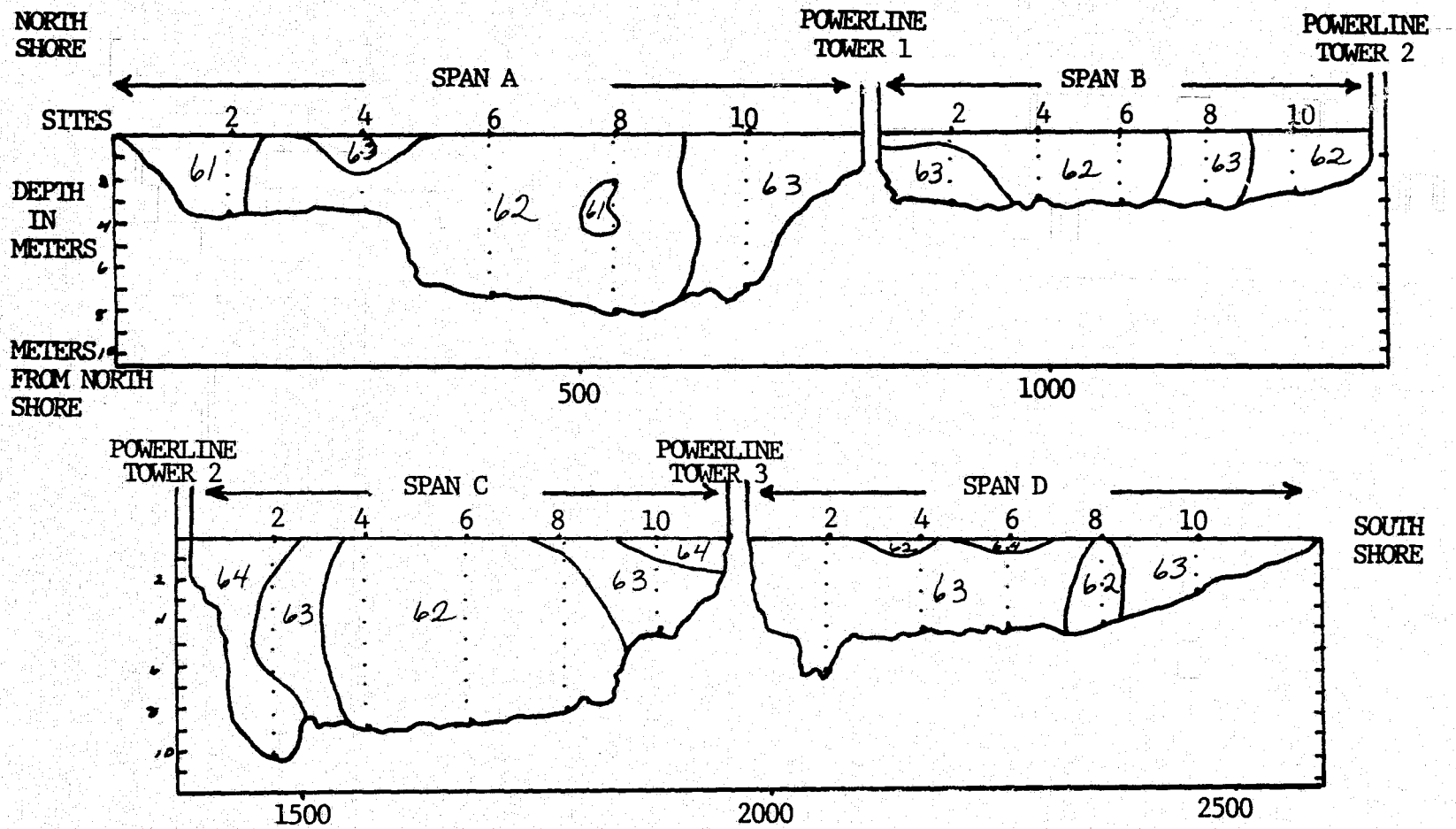

FIGURE 53. RIVER THERMAL PROFILE OF APRIL 24, 1974 WITH A 46,602 cf/s FLOW RATE, 53°F AIR TEMPERATURE AND 10% CLOUD COVER. REACTOR #1 IS OPERATING AT 504 MW, SOME POWER LINES OUT OF SERVICE.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	050174	1)	63.8	64.7	66.4	67.	65.2
SPAN A	050174	2)	64.	65.	66.4	67.	65.1
SPAN A	050174	3)	64.	65.	66.5	67.2	65.
SPAN A	050174	4)	64.	65.	66.5	67.1	65.
SPAN A	050174	5)			67.7	67.5	65.6
SPAN A	050174	6)			67.6	67.5	65.5
SPAN A	050174	7)			67.5	67.4	65.4
SPAN A	050174	8)			67.5	67.4	65.4
SPAN A	050174	9)				67.4	
		MAXIMUM	64.00	65.00	67.70	67.50	65.60
		MINIMUM	63.80	64.70	66.40	67.00	65.00
		AVERAGE	63.95	64.92	67.01	67.28	65.27
		ST.DEV.	.10	.15	.61	.20	.23
				SURFACE AVG. 65.86	BOTTOM AVG. 65.42		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	050174	1)	63.3	65.4	64.1	65.1	64.
SPAN B	050174	2)	63.4	65.5	64.2	65.3	65.9
SPAN B	050174	3)	63.4	65.5	64.3	65.4	65.9
SPAN B	050174	4)	63.4	65.5	64.3	65.4	
		MAXIMUM	63.40	65.50	64.30	65.40	66.00
		MINIMUM	63.30	65.40	64.10	65.10	65.90
		AVERAGE	63.37	65.47	64.22	65.30	65.93
		ST.DEV.	.05	.05	.10	.14	.06
				SURFACE AVG. 64.90	BOTTOM AVG. 64.78		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	050174	1)	65.6	67.	63.	64.1	65.
SPAN C	050174	2)	65.6	67.1	63.1	64.1	65.
SPAN C	050174	3)	65.6	67.1	63.2	64.2	65.
SPAN C	050174	4)	65.6	67.2	63.2	64.2	65.
SPAN C	050174	5)	66.7	67.6	65.	64.4	65.3
SPAN C	050174	6)	66.6	67.6	64.7	64.4	65.3
SPAN C	050174	7)	66.5	67.6	64.7	64.4	65.2
SPAN C	050174	8)	66.5	67.6	64.7	64.4	65.1
SPAN C	050174	9)	66.5	67.6	64.7	64.3	.
		MAXIMUM	66.70	67.60	65.00	64.40	65.30
		MINIMUM	65.60	67.00	63.00	64.10	65.00
		AVERAGE	66.13	67.38	64.03	64.28	65.11
		ST.DEV.	.51	.27	.87	.13	.14
				SURFACE AVG. 65.64	BOTTOM AVG. 64.94		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	050174	1)	66.5	64.4	65.4	66.6	67.5
SPAN D	050174	2)	66.6	64.5	65.4	66.6	67.5
SPAN D	050174	3)	66.6	64.5	65.4	66.6	67.7
SPAN D	050174	4)	66.6	64.5		66.6	67.7
SPAN D	050174	5)	68.2	65.		66.8	
SPAN D	050174	6)	67.9				
SPAN D	050174	7)	67.7				
		MAXIMUM	68.20	65.00	65.40	66.80	67.70
		MINIMUM	66.50	64.40	65.40	66.60	67.50
		AVERAGE	67.16	64.58	65.40	66.64	67.60
		ST.DEV.	.74	.24	.00	.09	.12
				SURFACE AVG. 66.52	BOTTOM AVG. 66.08		

DATE 050174

4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 65.55
2) MAXIMUM VALUE 68.20
3) MINIMUM VALUE 63.00
4) SURFACE AVG. 65.73
5) BOTTOM AVG. 65.30

AIR TEMP AVG. 68.
WIND DIRECTION 03.
WIND SPEED 4.9
CLOUD COVER 10.

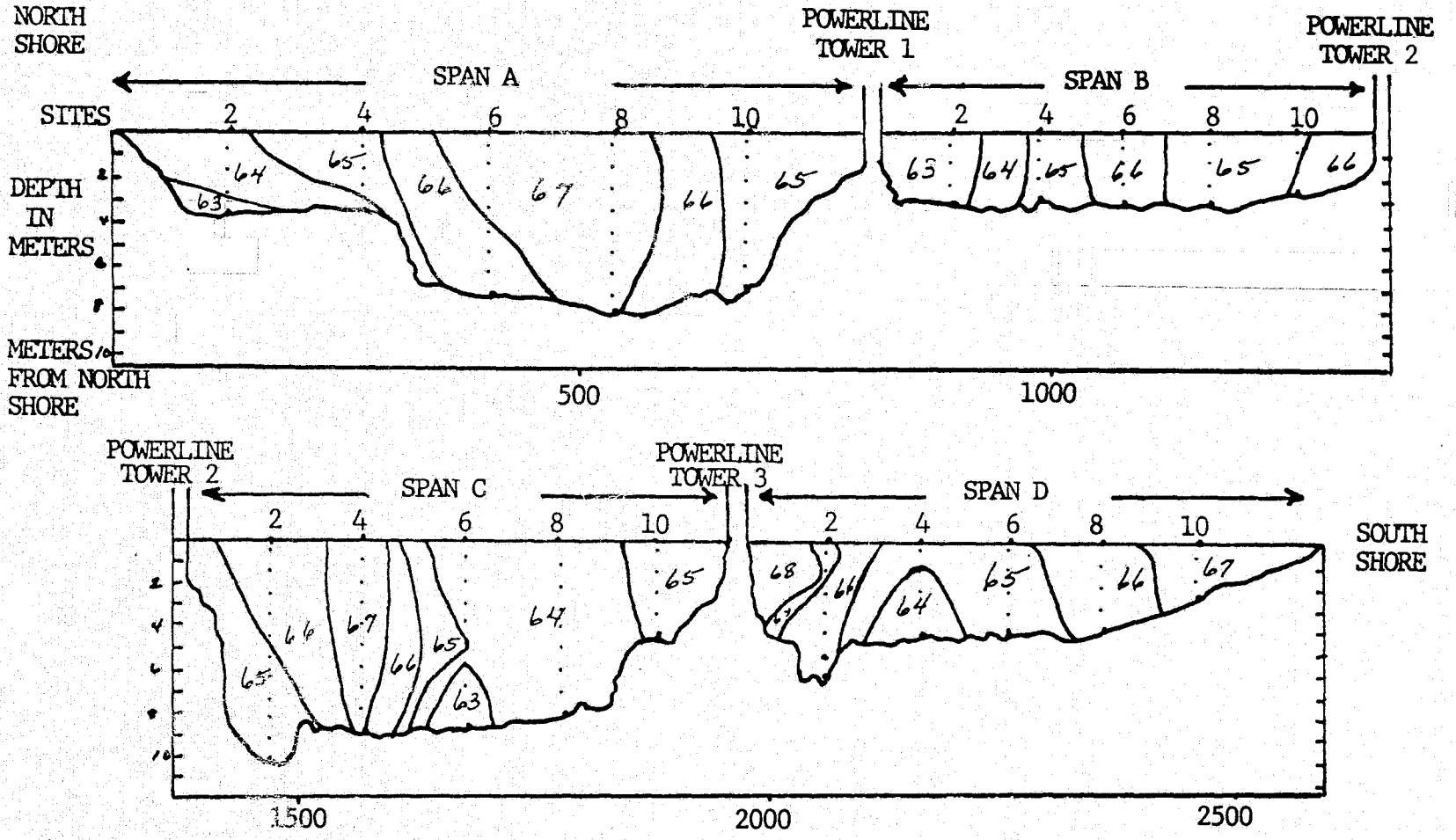

FIGURE 54. RIVER THERMAL PROFILE OF MAY 1, 1974 WITH A 49,654 cf/s FLOW RATE, 68°F AIR TEMPERATURE AND 100% CLOUD COVER. REACTOR #1 IS OPERATING AT 970 MW, MOST POWER LINES BACK IN SERVICE.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	050874	1)	68.	63.7	65.3	68.	64.1
SPAN A	050874	2)	68.2	63.6	65.4	68.	64.1
SPAN A	050874	3)	68.2	63.6	65.5	68.	64.2
SPAN A	050874	4)	68.2	63.6	65.5	68.	64.2
SPAN A	050874	5)			67.5	68.	66.9
SPAN A	050874	6)			67.	68.	65.7
SPAN A	050874	7)			66.7	67.9	65.6
SPAN A	050874	8)			66.6	67.9	65.5
		MAXIMUM	68.20	63.70	67.50	68.00	66.90
		MINIMUM	68.00	63.60	65.30	67.90	64.10
		AVERAGE	68.15	63.62	66.19	67.97	65.04
		ST.DEV.	.10	.05	.86	.05	1.04
				SURFACE AVG. 66.36	BOTTOM AVG. 65.82		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	050874	1)	67.1	68.8	67.1	65.7	65.1
SPAN B	050874	2)	67.1	68.7	66.8	65.6	65.2
SPAN B	050874	3)	67.1	68.6	66.8	65.6	65.3
SPAN B	050874	4)	67.2	68.5	66.8	65.6	65.3
SPAN B	050874	5)			66.9		
		MAXIMUM	67.20	68.80	67.10	65.70	65.30
		MINIMUM	67.10	68.50	66.80	65.60	65.10
		AVERAGE	67.12	68.65	66.88	65.63	65.22
		ST.DEV.	.05	.13	.13	.05	.10
				SURFACE AVG. 66.70	BOTTOM AVG. 66.76		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	050874	1)	65.3	65.3	66.6	65.9	66.3
SPAN C	050874	2)	65.3	65.4	66.6	65.7	66.3
SPAN C	050874	3)	65.4	65.5	66.7	65.6	66.3
SPAN C	050874	4)	65.4	65.5	66.7	65.6	66.3
SPAN C	050874	5)	66.4		67.2	66.5	67.5
SPAN C	050874	6)	66.4	66.7	67.1	66.3	67.3
SPAN C	050874	7)	66.1	66.7	66.7	65.9	67.
SPAN C	050874	8)	66.	66.5	66.7	65.9	66.8
SPAN C	050874	9)	66.	66.3	66.7		66.7
		MAXIMUM	66.40	66.70	67.20	66.50	67.50
		MINIMUM	65.30	65.30	66.60	65.60	66.30
		AVERAGE	65.81	65.99	66.78	65.92	66.72
		ST.DEV.	.46	.62	.22	.32	.47
				SURFACE AVG. 66.32	BOTTOM AVG. 65.08		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	050874	1)	67.6	64.3	65.	67.1	68.3
SPAN D	050874	2)	67.6	64.2	65.	67.1	68.1
SPAN D	050874	3)	67.7	64.3	65.	67.2	68.1
SPAN D	050874	4)	67.7	64.3	65.	67.2	67.6
SPAN D	050874	5)	68.				
SPAN D	050874	6)	68.				
SPAN D	050874	7)	67.8				
		MAXIMUM	68.00	64.30	65.00	67.20	68.30
		MINIMUM	67.60	64.20	65.00	67.10	67.60
		AVERAGE	67.77	64.27	65.00	67.15	68.02
		ST.DEV.	.17	.05	.00	.06	.30
				SURFACE AVG. 66.38	BOTTOM AVG. 66.46		

DATE 050874
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 66.40
2) MAXIMUM VALUE 68.80
3) MINIMUM VALUE 63.60
4) SURFACE AVG. 66.44
5) BOTTOM AVG. 66.23

AIR TEMP AVG. 46.
WIND DIRECTION 17.
WIND SPEED 8.3
CLOUD COVER— 10.

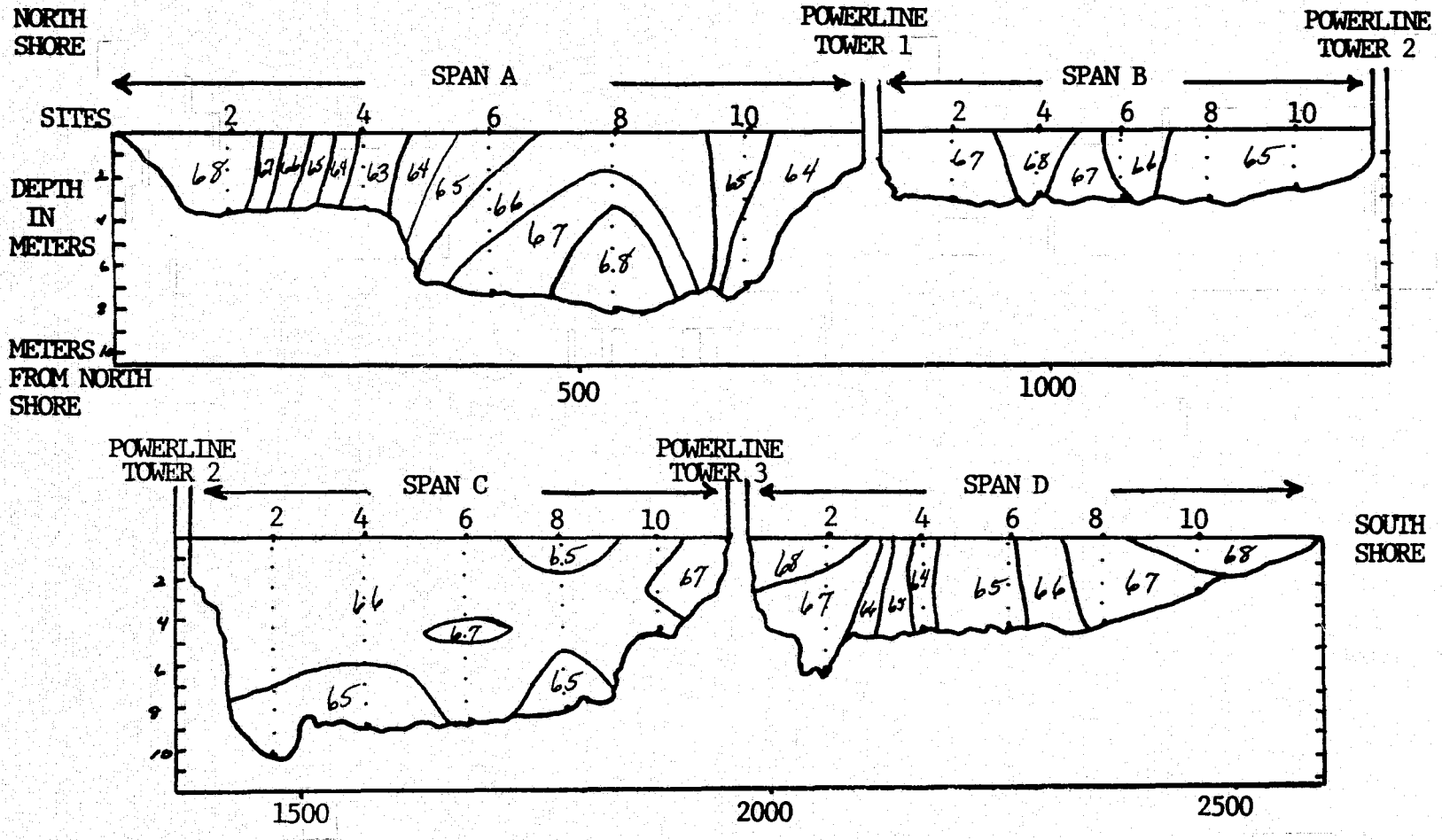

FIGURE 55. RIVER THERMAL PROFILE OF MAY 8, 1974 WITH A 42,754 cf/s FLOW RATE, 46°F AIR TEMPERATURE AND 100% CLOUD COVER. PLANT SHUT-DOWN FOR STEAM PIPE CHECKING.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	052274	1)	75.1	74.3	74.	73.1	75.3
SPAN A	052274	2)	75.1	74.4	74.1	73.2	75.2
SPAN A	052274	3)	75.1	74.4	74.1	73.3	75.2
SPAN A	052274	4)		74.4	74.2	73.3	75.3
SPAN A	052274	5)			74.2	73.3	75.3
SPAN A	052274	6)			74.1	73.3	75.3
SPAN A	052274	7)			74.1	73.3	75.2
SPAN A	052274	8)			74.1	73.3	75.1
SPAN A	052274	9)				73.3	75.
		MAXIMUM	75.10	74.40	74.20	73.30	75.30
		MINIMUM	75.10	74.30	74.00	73.10	75.00
		AVERAGE	75.10	74.37	74.11	73.27	75.21
		ST.DEV.	.00	.05	.06	.07	.11

SURFACE AVG. 74.38 BOTTOM AVG. 74.36

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	052274	1)	74.8	74.4	73.8	74.4	73.2
SPAN B	052274	2)	74.9	74.4	73.8	74.4	73.2
SPAN B	052274	3)	74.9	74.4	73.9	74.3	73.3
SPAN B	052274	4)	74.9	74.4	73.9	74.3	73.3
SPAN B	052274	5)					73.3
		MAXIMUM	74.90	74.40	73.90	74.40	73.30
		MINIMUM	74.80	74.40	73.80	74.30	73.20
		AVERAGE	74.87	74.40	73.85	74.35	73.26
		ST.DEV.	.05	.00	.06	.06	.05

SURFACE AVG. 74.16 BOTTOM AVG. 74.12

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	052274	1)	72.9	72.6	72.7	72.5	74.1
SPAN C	052274	2)	72.9	72.6	72.7	72.5	73.9
SPAN C	052274	3)	72.9	72.7	72.7	72.4	73.
SPAN C	052274	4)	72.9	72.7	72.7	72.3	73.
SPAN C	052274	5)	72.9	72.7	73.		
SPAN C	052274	6)	72.9	72.7	72.5	73.	74.1
SPAN C	052274	7)	72.8	72.6	72.4	72.9	74.
SPAN C	052274	8)	72.7	72.5	72.2	72.7	73.8
SPAN C	052274	9)	72.7	72.5	72.1	72.5	
SPAN C	052274	10)	72.7				
		MAXIMUM	72.90	72.70	73.00	73.00	74.10
		MINIMUM	72.70	72.50	72.10	72.30	73.00
		AVERAGE	72.83	72.62	72.56	72.60	73.70
		ST.DEV.	.09	.08	.28	.24	.49

SURFACE AVG. 72.72 BOTTOM AVG. 72.96

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	052274	1)	70.4	70.3	71.5	74.5	70.9
SPAN D	052274	2)	70.5	70.4	71.6	74.6	71.
SPAN D	052274	3)	70.7	70.3	71.7	74.6	71.1
SPAN D	052274	4)	70.7	70.3	71.7	74.6	
		MAXIMUM	70.70	70.40	71.70	74.60	71.10
		MINIMUM	70.40	70.30	71.50	74.50	70.90
		AVERAGE	70.57	70.32	71.62	74.57	71.00
		ST.DEV.	.15	.05	.10	.05	.10

SURFACE AVG. 71.68 BOTTOM AVG. 71.52

DATE 052274

4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 73.26
2) MAXIMUM VALUE 75.30
3) MINIMUM VALUE 70.30
4) SURFACE AVG. 73.23
5) BOTTOM AVG. 73.24

AIR TEMP AVG. 64.
WIND DIRECTION 11.
WIND SPEED 10.4
CLOUD COVER 10.

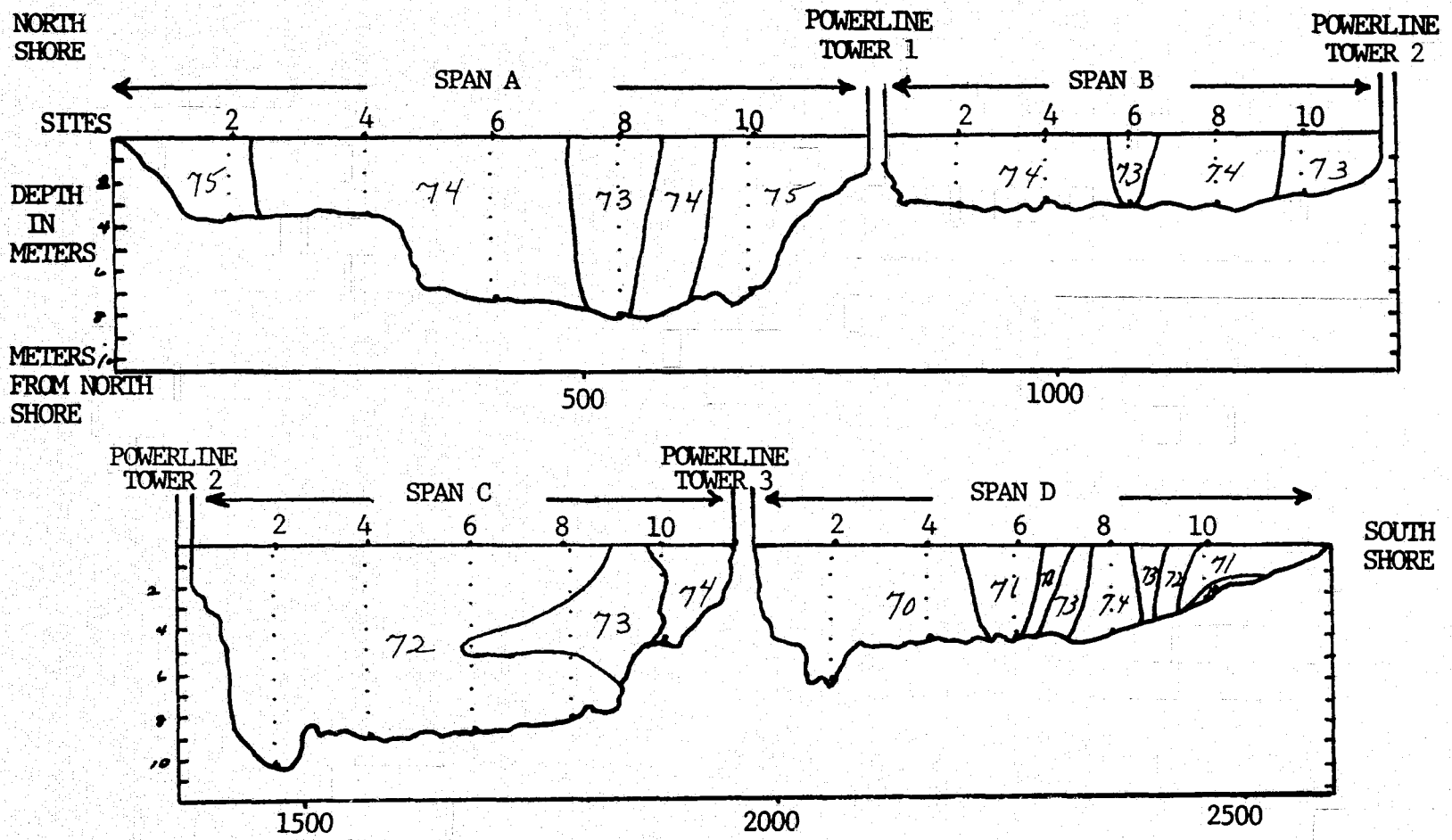

FIGURE 56. RIVER THERMAL PROFILE OF MAY 22, 1974 WITH A 56,434 cf/s FLOW RATE, 64°F AIR TEMPERATURE AND 100% CLOUD COVER. NO PLANT POWER PRODUCTION.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	052974	1)	71.3	71.8	71.6	70.9	74.6
SPAN A	052974	2)	71.4	71.9	71.6	71.	74.5
SPAN A	052974	3)	71.4	71.9	71.6	71.1	74.5
SPAN A	052974	4)	71.4	71.9	71.6	71.1	74.5
SPAN A	052974	5)					
SPAN A	052974	6)			71.9	71.7	
SPAN A	052974	7)			71.5	71.6	74.9
SPAN A	052974	8)			71.5	71.6	74.7
SPAN A	052974	9)				71.5	74.6
		MAXIMUM	71.40	71.90	71.90	71.70	74.90
		MINIMUM	71.30	71.80	71.50	70.90	74.50
		AVERAGE	71.37	71.87	71.61	71.31	74.61
		ST.DEV.	.05	.05	.13	.32	.15
				SURFACE AVG. 72.18	BOTTOM AVG. 72.04		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	052974	1)	69.1	71.4	71.3	74.4	70.3
SPAN B	052974	2)	69.2	71.5	71.4	73.8	70.4
SPAN B	052974	3)	69.3	71.5	71.4	73.9	70.5
SPAN B	052974	4)	69.3	71.6	71.4	73.7	70.5
		MAXIMUM	69.30	71.60	71.40	74.40	70.50
		MINIMUM	69.10	71.40	71.30	73.70	70.30
		AVERAGE	69.27	71.50	71.37	73.95	70.42
		ST.DEV.	.10	.08	.05	.31	.10
				SURFACE AVG. 71.[illegible]	BOTTOM AVG. 71.30		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	052974	1)		72.5	68.3	69.1	72.2
SPAN C	052974	2)	72.3	72.5	68.4	69.2	72.2
SPAN C	052974	3)	72.3	72.5	68.4	69.3	72.3
SPAN C	052974	4)	72.3	72.4	68.4	69.3	72.3
SPAN C	052974	5)					
SPAN C	052974	6)	71.7	73.4	69.4	70.2	72.6
SPAN C	052974	7)	71.6	73.3	69.4	70.1	72.5
SPAN C	052974	8)	71.6	73.2	69.4	70.2	72.5
SPAN C	052974	9)	71.5	72.9	69.3	70.1	72.5
SPAN C	052974	10)			69.1		
		MAXIMUM	72.30	73.40	69.40	70.20	72.60
		MINIMUM	71.50	72.40	68.30	69.10	72.20
		AVERAGE	71.90	72.84	68.90	69.69	72.39
		ST.DEV.	.34	.41	.51	.50	.16
				SURFACE AVG. 71.22	BOTTOM AVG. 70.52		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	052974	1)	69.1	69.9	72.8	71.	71.3
SPAN D	052974	2)	69.2	70.	72.9	71.2	71.3
SPAN D	052974	3)	69.3	70.	73.	71.3	71.4
SPAN D	052974	4)	69.3	70.	73.	71.3	71.4
		MAXIMUM	69.30	70.00	73.00	71.30	71.40
		MINIMUM	69.10	69.90	72.80	71.00	71.30
		AVERAGE	69.22	69.97	72.92	71.20	71.35
		ST.DEV.	.10	.05	.10	.14	.06
				SURFACE AVG. 71.00	BOTTOM AVG. 70.82		

DATE 052974
4 SPANS CALCULATED, THE RESULTS ARE:

1)	AVERAGE TEMP.	71.38
2)	MAXIMUM VALUE	74.90
3)	MINIMUM VALUE	68.30
4)	SURFACE AVG.	71.42
5)	BOTTOM AVG.	71.21
	AIR TEMP AVG.	61.
	WIND DIRECTION	21.
	WIND SPEED	9.9
	CLOUD COVER	8.

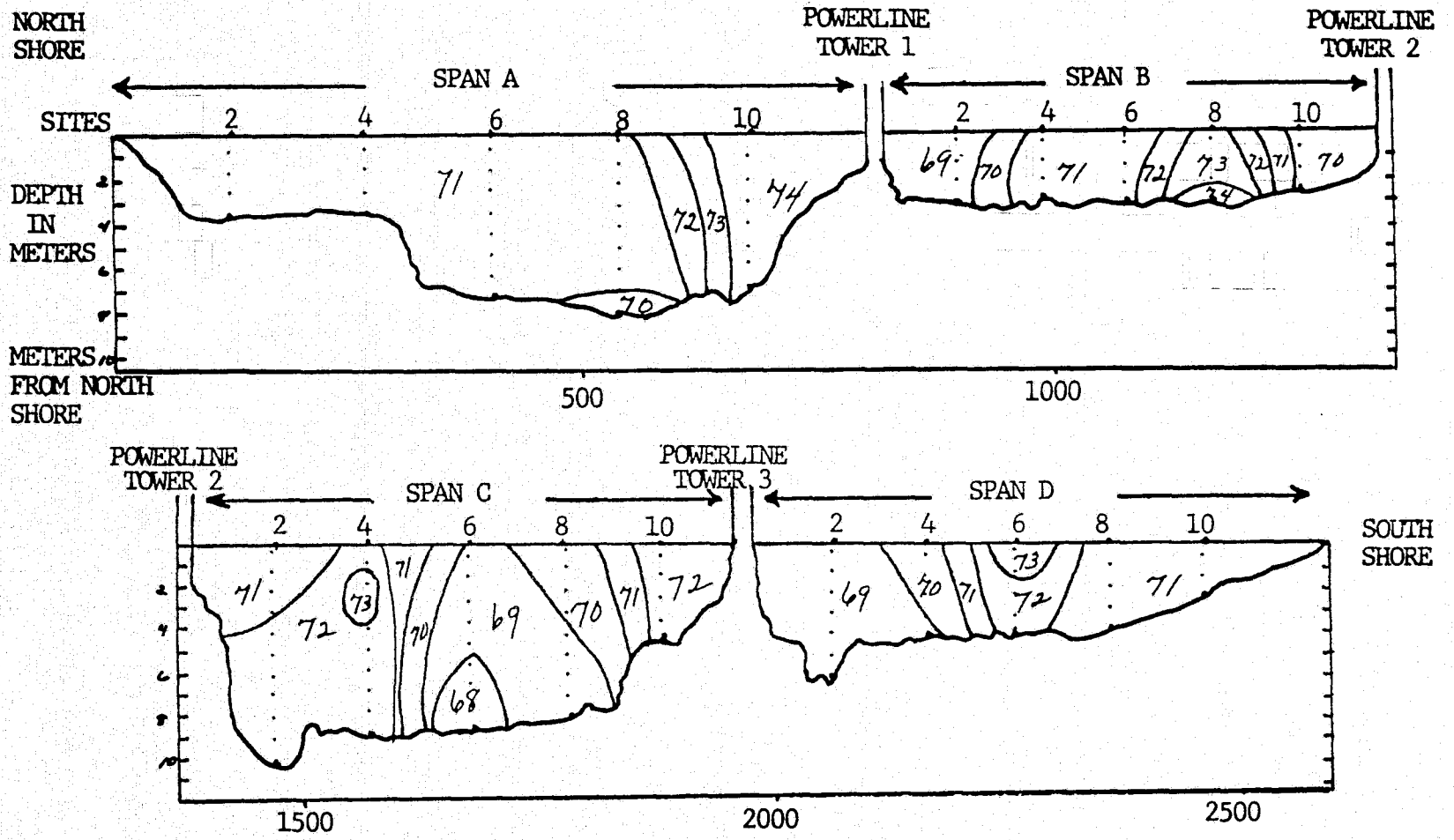

FIGURE 57. RIVER THERMAL PROFILE OF MAY 29, 1974 WITH A 65,664 cf/s FLOW RATE, 61°F AIR TEMPERATURE AND 80% CLOUD COVER. PLANT RESUMING POWER PRODUCTION FROM REACTOR #1 AT 10 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	060574	1)	76.8	76.2	75.7	72.	72.3
SPAN A	060574	2)	76.9	76.1	75.8	72.5	72.3
SPAN A	060574	3)	77.	76.1	75.9	72.7	72.4
SPAN A	060574	4)	77.	76.2	75.9	72.7	72.4
SPAN A	060574	5)			75.9	72.8	72.4
SPAN A	060574	6)			75.9	73.	72.5
SPAN A	060574	7)			75.9	73.1	72.5
SPAN A	060574	8)			75.9	73.2	72.5
SPAN A	060574	9)				73.4	72.5
		MAXIMUM	77.00	76.20	75.90	73.40	72.50
		MINIMUM	76.80	76.10	75.70	72.00	72.30
		AVERAGE	76.92	76.15	75.86	72.82	72.42
		ST.DEV.	.10	.06	.07	.42	.08
				SURFACE AVG. 75.00	BOTTOM AVG. 74.60		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	060574	1)	78.1	78.2		76.2	76.3
SPAN B	060574	2)	78.2	78.2	76.7	76.2	76.3
SPAN B	060574	3)	78.2	78.3	76.7	76.2	76.3
SPAN B	060574	4)	78.2	78.3	76.7	76.2	76.3
		MAXIMUM	78.20	78.30	76.70	76.20	76.30
		MINIMUM	78.10	78.20	76.70	76.20	76.30
		AVERAGE	78.17	78.25	76.70	76.20	76.30
		ST.DEV.	.05	.06	.00	.00	.00
				SURFACE AVG. 77.14	BOTTOM AVG. 77.20		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	060574	1)	73.6	73.	73.9		76.4
SPAN C	060574	2)	73.6	73.	73.9	76.2	76.4
SPAN C	060574	3)	73.6	73.	73.9	76.1	76.3
SPAN C	060574	4)	73.6	73.	74.	76.	76.2
SPAN C	060574	5)	73.6	73.	74.	76.	76.1
SPAN C	060574	6)	73.6	73.	74.	76.	76.1
SPAN C	060574	7)	73.7	73.	73.7	75.9	76.
SPAN C	060574	8)	73.8	73.	73.7	75.9	76.
SPAN C	060574	9)	73.9	73.	73.7	75.8	76.
		MAXIMUM	73.90	73.00	74.00	76.20	76.40
		MINIMUM	73.60	73.00	73.70	75.80	76.00
		AVERAGE	73.67	73.00	73.87	75.99	76.17
		ST.DEV.	.11	.00	.13	.12	.17
				SURFACE AVG. 74.48	BOTTOM AVG. 74.22		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	060574	1)	71.2	71.	70.3	73.	69.3
SPAN D	060574	2)	71.1	71.	70.3	73.	69.3
SPAN D	060574	3)	71.1	71.	70.4	73.	69.3
SPAN D	060574	4)	71.	71.	70.5	72.9	69.3
SPAN D	060574	5)	70.9	71.	70.5	72.7	
SPAN D	060574	6)	70.7				
SPAN D	060574	7)	70.6				
SPAN D	060574	8)	70.6				
		MAXIMUM	71.20	71.00	70.50	73.00	69.30
		MINIMUM	70.60	71.00	70.30	72.70	69.30
		AVERAGE	70.90	71.00	70.40	72.92	69.30
		ST.DEV.	.24	.00	.10	.13	.00
				SURFACE AVG. 70.82	BOTTOM AVG. 70.96		

DATE 060574
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 74.35
2) MAXIMUM VALUE 78.30
3) MINIMUM VALUE 69.30
4) SURFACE AVG. 74.36
5) BOTTOM AVG. 74.08
AIR TEMP AVG. 72.
WIND DIRECTION 13.
WIND SPEED 11.8
CLOUD COVER 10.

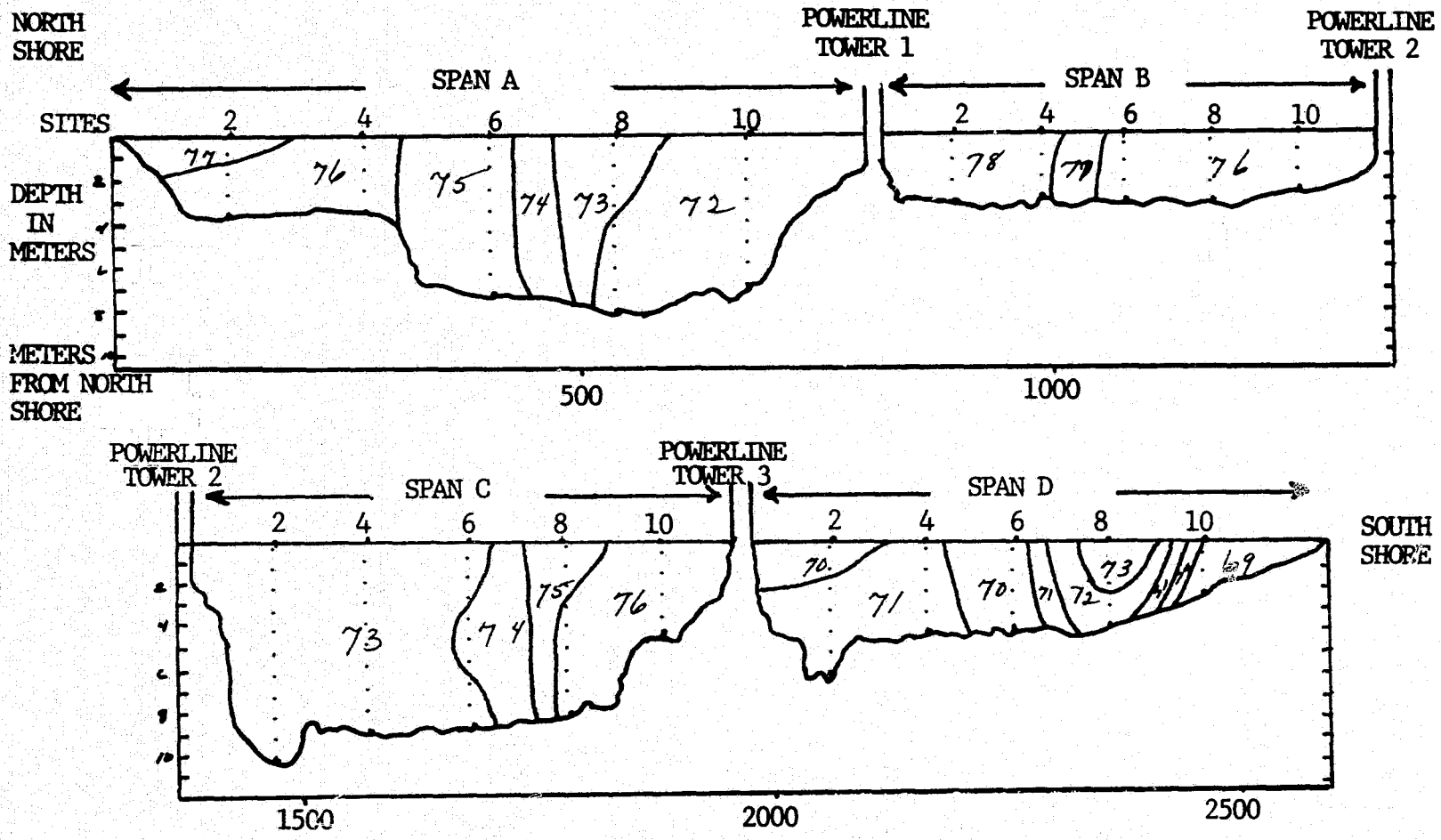

FIGURE 58. RIVER THERMAL PROFILE OF JUNE 5, 1974 WITH A 64,924 cf/s FLOW RATE, 72°F AIR TEMPERATURE AND 100% CLOUD COVER. REACTOR #1 IS OPERATING AT 1082 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	061274	1)	79.4			75.1	76.1
SPAN A	061274	2)	79.4	75.3	76.2	75.1	76.1
SPAN A	061274	3)	79.5	75.3	76.1	75.1	76.2
SPAN A	061274	4)	79.5	75.3	76.1	75.1	76.2
SPAN A	061274	5)			76.1	75.1	76.2
SPAN A	061274	6)			76.1	75.1	76.2
SPAN A	061274	7)			76.	75.1	76.1
SPAN A	061274	8)			76.	75.2	76.2
SPAN A	061274	9)				75.2	76.2
		MAXIMUM	79.50	75.30	76.20	75.20	76.20
		MINIMUM	79.40	75.30	76.00	75.10	76.10
		AVERAGE	79.45	75.30	76.09	75.12	76.17
		ST.DEV.	.06	.00	.07	.04	.05
				SURFACE AVG. 76.44	BOTTOM AVG. 76.87		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	061274	1)	75.9	77.	74.	76.4	76.4
SPAN B	061274	2)	76.	76.9	74.1	76.4	76.3
SPAN B	061274	3)	76.	76.9	74.1	76.4	76.2
SPAN B	061274	4)	76.1	76.9	74.1	76.4	76.2
		MAXIMUM	76.10	77.00	74.10	76.40	76.40
		MINIMUM	75.90	76.90	74.00	76.40	76.20
		AVERAGE	76.00	76.92	74.07	76.40	76.27
		ST.DEV.	.08	.05	.05	.00	.10
				SURFACE AVG. 75.94	BOTTOM AVG. 75.94		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	061274	1)	75.5	74.8	73.3	74.3	75.1
SPAN C	061274	2)	75.6	74.9	73.4	74.3	75.2
SPAN C	061274	3)	75.7	75.	73.5	74.4	75.6
SPAN C	061274	4)	75.7	75.	73.5	74.4	75.6
SPAN C	061274	5)	75.7	75.1	73.5	74.5	75.9
SPAN C	061274	6)	75.8	75.1	73.7	74.6	76.
SPAN C	061274	7)	75.7	75.1	73.8	74.6	76.3
SPAN C	061274	8)	75.8	75.3	74.1	75.4	77.
SPAN C	061274	9)	75.9	75.6	74.5	76.9	
SPAN C	061274	10)	76.3				
		MAXIMUM	76.30	75.60	74.50	76.90	77.00
		MINIMUM	75.50	74.80	73.30	74.30	75.10
		AVERAGE	75.77	75.10	73.70	74.82	75.84
		ST.DEV.	.22	.23	.38	.85	.62
				SURFACE AVG. 76.06	BOTTOM AVG. 74.60		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	061274	1)	74.7	75.5	74.1	74.4	74.9
SPAN D	061274	2)	74.7	75.4	74.1	74.4	76.
SPAN D	061274	3)	75.5	75.7	74.3	75.	77.8
SPAN D	061274	4)	76.6	76.1	74.4	75.3	78.7
		MAXIMUM	76.60	76.10	74.40	75.30	78.70
		MINIMUM	74.70	75.40	74.10	74.40	74.90
		AVERAGE	75.37	75.67	74.22	74.77	76.85
		ST.DEV.	.90	.31	.15	.45	1.72
				SURFACE AVG. 76.22	BOTTOM AVG. 74.72		

DATE 061274
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 75.70
2) MAXIMUM VALUE 79.50
3) MINIMUM VALUE 73.30
4) SURFACE AVG. 76.16
5) BOTTOM AVG. 75.38
AIR TEMP AVG. 69.
WIND DIRECTION 30.
WIND SPEED 4.5
CLOUD COVER 9.

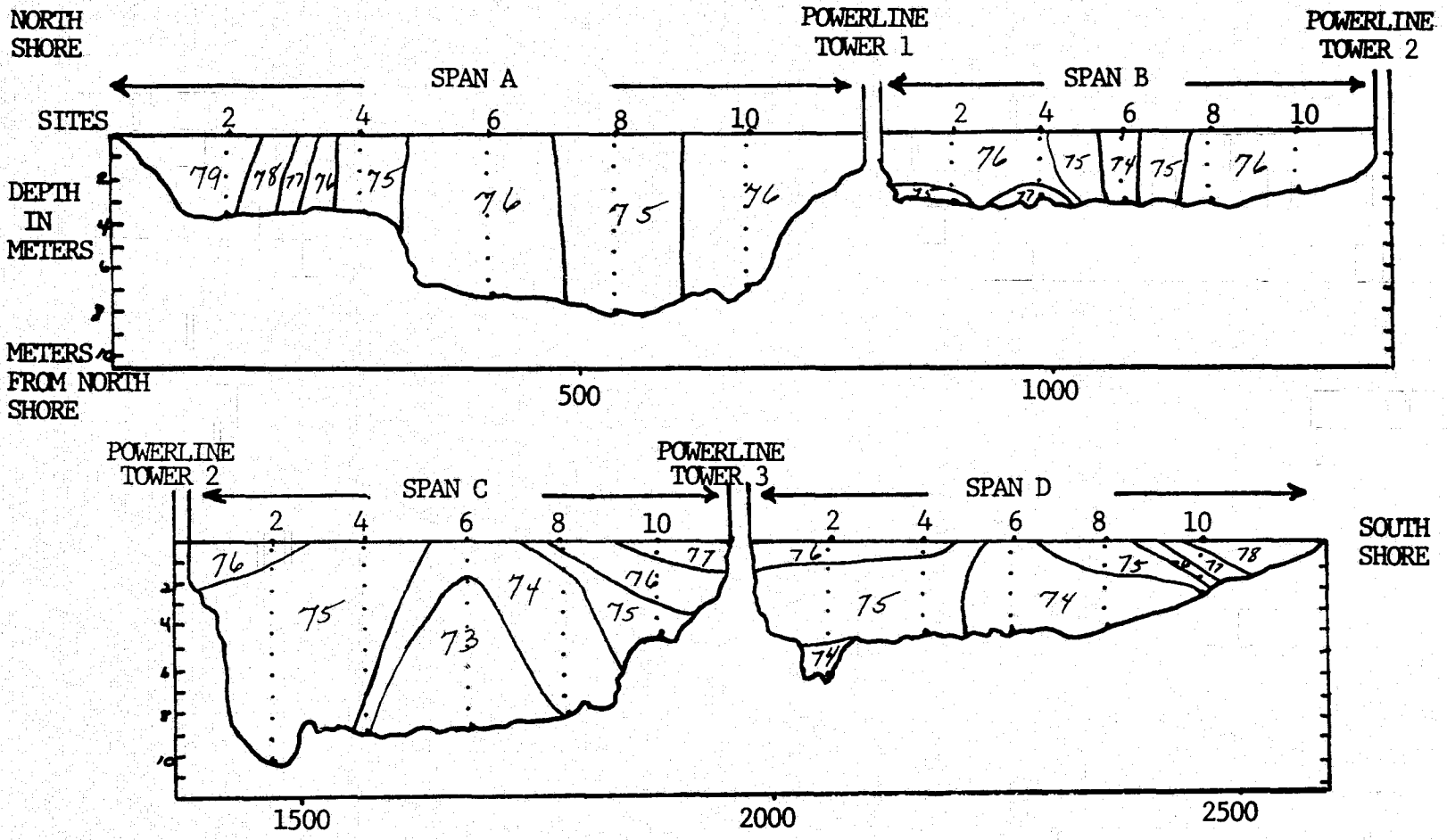

FIGURE 59. RIVER THERMAL PROFILE OF JUNE 12, 1974 WITH A 28,900 cf/s FLOW RATE, 69°F AIR TEMPERATURE AND 90% CLOUD COVER. REACTOR #1 IS OPERATING AT 871 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	061974	1)	77.2	77.3	75.9	75.7	75.7
SPAN A	061974	2)	77.9	77.7	75.9	75.6	76.2
SPAN A	061974	3)	77.9	78.3	76.3	75.7	76.3
SPAN A	061974	4)		78.9	77.2	76.3	76.5
SPAN A	061974	5)			77.4	77.	77.
SPAN A	061974	6)			77.4	77.4	77.5
SPAN A	061974	7)			77.6	77.3	77.4
SPAN A	061974	8)			78.3	77.9	77.9
SPAN A	061974	9)				78.4	79.1
		MAXIMUM	77.90	78.90	78.30	78.40	79.10
		MINIMUM	77.20	77.30	75.90	75.60	75.70
		AVERAGE	77.67	78.05	77.00	76.81	77.07
		ST.DEV.	.40	.70	.87	1.03	1.04
				SURFACE AVG. 78.52	BOTTOM AVG. 76.36		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	061974	1)	78.9	77.6	76.1	76.1	77.5
SPAN B	061974	2)	79.	77.7	76.9	76.2	77.7
SPAN B	061974	3)	79.1	78.3	77.7	76.9	78.2
SPAN B	061974	4)	79.6	79.4	78.	77.4	78.6
		MAXIMUM	79.60	79.40	78.00	77.40	78.60
		MINIMUM	78.90	77.60	76.10	76.10	77.50
		AVERAGE	79.15	78.25	77.17	76.65	78.00
		ST.DEV.	.31	.83	.85	.61	.50
				SURFACE AVG. 78.60	BOTTOM AVG. 77.24		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	061974	1)	76.	75.9	74.1	75.	75.1
SPAN C	061974	2)	76.	75.9	74.4	75.	75.4
SPAN C	061974	3)	76.1	76.	75.	75.2	75.7
SPAN C	061974	4)	76.	76.	74.9	75.2	75.6
SPAN C	061974	5)	76.	76.2	74.9	75.3	75.6
SPAN C	061974	6)		76.4	75.	75.3	76.6
SPAN C	061974	7)	77.1	76.3	75.	75.4	76.4
SPAN C	061974	8)	78.	76.4	75.4	75.6	76.4
SPAN C	061974	9)	78.3	76.6	75.7		
		MAXIMUM	78.30	76.60	75.70	75.60	76.60
		MINIMUM	76.00	75.90	74.10	75.00	75.10
		AVERAGE	76.69	76.19	74.93	75.25	75.85
		ST.DEV.	.98	.25	.47	.20	.55
				SURFACE AVG. 76.52	BOTTOM AVG. 75.22		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	061974	1)	75.	73.8	74.4	74.4	75.
SPAN D	061974	2)	75.3	73.9	74.8	74.7	75.1
SPAN D	061974	3)	75.7	74.3	75.	74.7	76.
SPAN D	061974	4)	75.7	75.1	75.1	75.3	
SPAN D	061974	5)	76.				
SPAN D	061974	6)	76.9				
		MAXIMUM	76.90	75.10	75.10	75.30	75.10
		MINIMUM	75.00	73.80	74.40	74.40	75.00
		AVERAGE	75.77	74.27	74.82	74.77	75.03
		ST.DEV.	.66	.59	.31	.36	.06
				SURFACE AVG. 75.48	BOTTOM AVG. 74.52		

DATE 061974
4 SPANS CALCULATED, THE RESULTS ARE:

1)	AVERAGE TEMP.	76.47
2)	MAXIMUM VALUE	79.60
3)	MINIMUM VALUE	73.80
4)	SURFACE AVG.	77.28
5)	BOTTOM AVG.	75.83
	AIR TEMP AVG.	73.
	WIND DIRECTION	22.
	WIND SPEED	5.6
	CLOUD COVER	4.

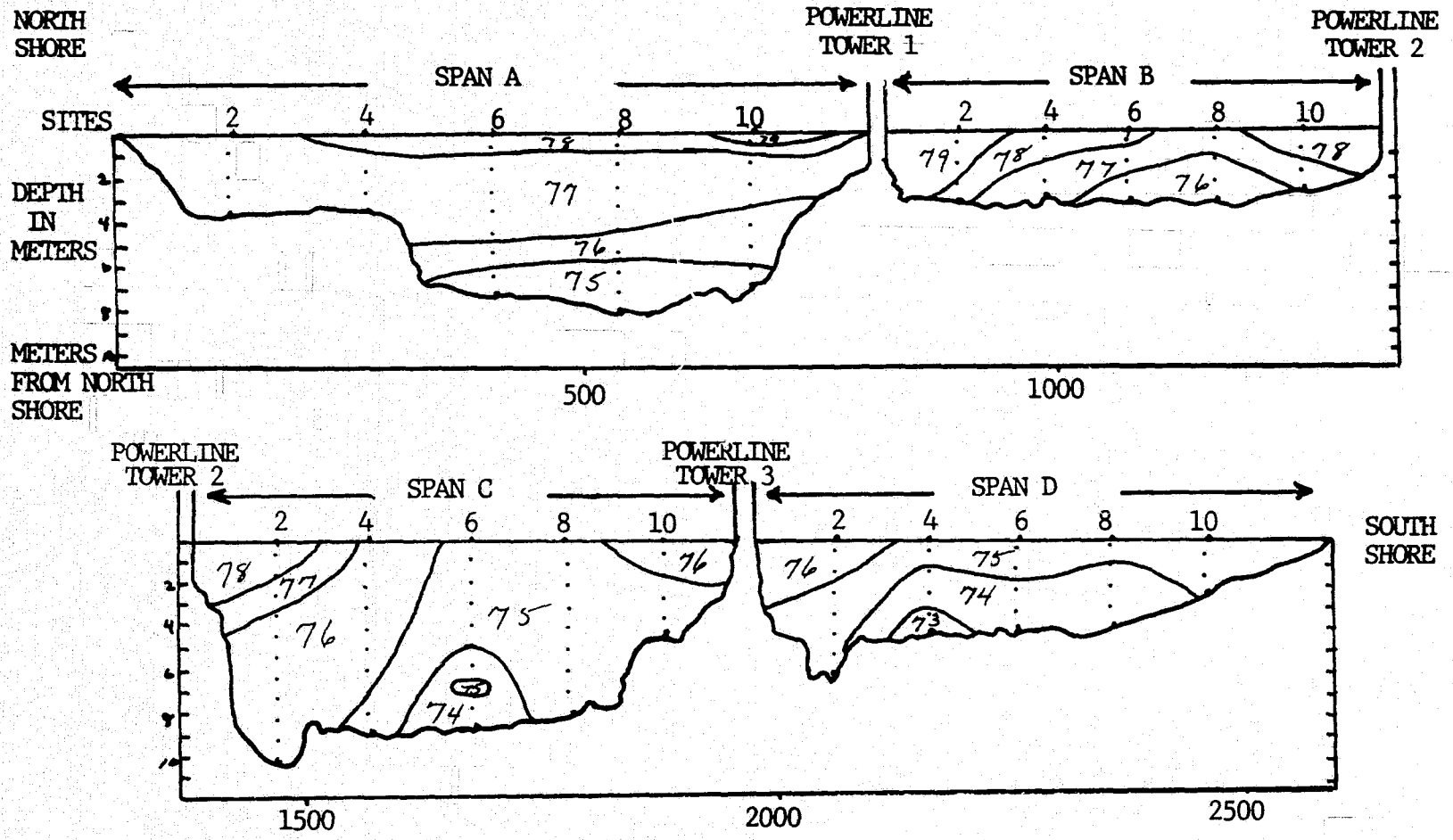

FIGURE 60. RIVER THERMAL PROFILE OF JUNE 19, 1974 WITH A FLOW RATE OF 19,548 cf/s, 73°F AIR TEMPERATURE AND 40% CLOUD COVER. REACTOR #1 IS OPERATING AT 578 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	062674	1)	71.5	73.6	74.6	75.9	76.
SPAN A	062674	2)	72.1	74.3	74.7	76.1	76.1
SPAN A	062674	3)	72.4	74.6	74.7	76.1	76.
SPAN A	062674	4)	74.	75.7	75.5	76.9	76.1
SPAN A	062674	5)			75.6	76.5	75.7
SPAN A	062674	6)			75.7	76.5	75.7
SPAN A	062674	7)			75.6	76.4	75.6
SPAN A	062674	8)			75.6	76.5	75.6
SPAN A	062674	9)				76.3	75.6
		MAXIMUM	74.00	75.70	75.70	76.90	76.10
		MINIMUM	71.50	73.60	74.60	75.90	75.00
		AVERAGE	72.50	74.55	75.25	76.36	75.49
		ST.DEV.	1.07	.87	.49	.30	.38
				SURFACE AVG. 75.44	BOTTOM AVG. 74.12		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	062674	1)	75.3	75.	74.8	74.4	73.8
SPAN B	062674	2)	75.6	75.1	74.9	74.5	73.9
SPAN B	062674	3)	75.6	75.5	75.3	74.6	74.1
SPAN B	062674	4)	75.6	75.5	75.6	75.1	74.4
		MAXIMUM	75.60	75.50	75.60	75.10	74.40
		MINIMUM	75.30	75.00	74.80	74.40	73.80
		AVERAGE	75.52	75.27	75.15	74.65	74.05
		ST.DEV.	.15	.26	.37	.31	.26
				SURFACE AVG. 75.24	BOTTOM AVG. 74.66		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	062674	1)	74.4	74.5	73.6	74.4	75.2
SPAN C	062674	2)	74.3	74.6	73.7	74.4	75.4
SPAN C	062674	3)	74.4	74.8	73.9	74.6	75.5
SPAN C	062674	4)	74.5	74.8	73.9	74.7	75.6
SPAN C	062674	5)	74.5	75.	73.9	74.6	75.6
SPAN C	062674	6)	74.5	75.1	74.	74.7	75.7
SPAN C	062674	7)	74.4	75.3	74.	74.6	75.6
SPAN C	062674	8)	74.3	75.5	74.2	74.6	75.6
SPAN C	062674	9)	74.3	75.5	74.2	74.6	
		MAXIMUM	74.50	75.50	74.20	74.70	75.70
		MINIMUM	74.30	74.50	73.60	74.40	75.20
		AVERAGE	74.40	75.01	73.93	74.58	75.50
		ST.DEV.	.09	.37	.21	.11	.15
				SURFACE AVG. 74.84	BOTTOM AVG. 74.42		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	062674	1)	73.7	74.	73.2	73.8	74.
SPAN D	062674	2)	73.4	74.5	73.6	74.3	74.2
SPAN D	062674	3)	73.6	74.6	74.	74.7	74.5
SPAN D	062674	4)	73.8	75.1	74.1	74.8	
SPAN D	062674	5)		75.3			
		MAXIMUM	73.80	75.30	74.10	74.80	74.50
		MINIMUM	73.40	74.00	73.20	73.80	74.00
		AVERAGE	73.62	74.70	73.72	74.40	74.23
		ST.DEV.	.17	.51	.41	.45	.25
				SURFACE AVG. 74.50	BOTTOM AVG. 73.74		

DATE 062674
4 SPANS CALCULATED, THE RESULTS ARE:

1)	AVERAGE TEMP.	74.64
2)	MAXIMUM VALUE	76.90
3)	MINIMUM VALUE	71.50
4)	SURFACE AVG.	75.00
5)	BOTTOM AVG.	74.23
	AIR TEMP AVG.	64.
	WIND DIRECTION	01.
	WIND SPEED	7.2
	CLOUD COVER	2.

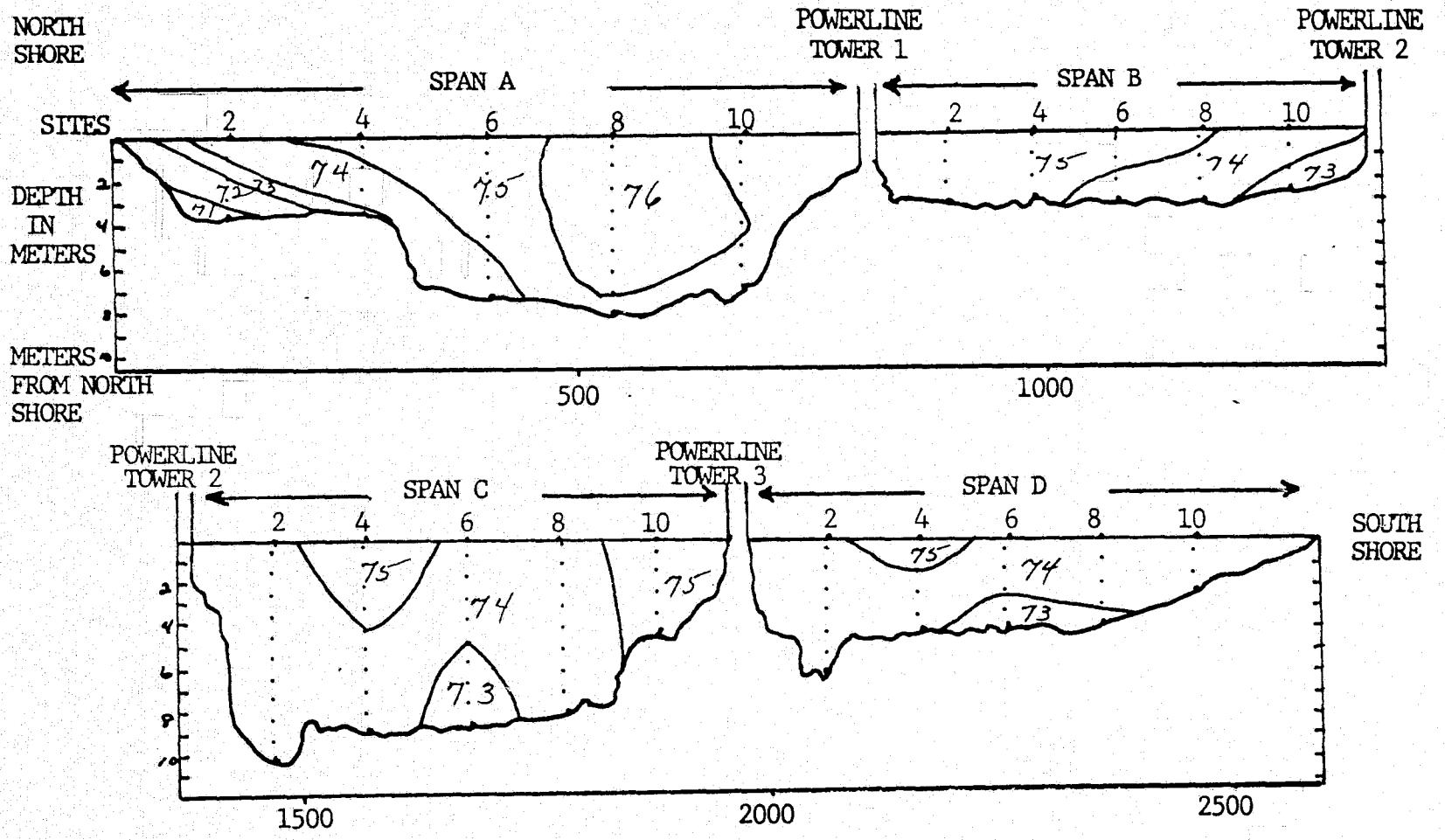

FIGURE 61. RIVER THERMAL PROFILE OF JUNE 26, 1974 WITH A FLOW RATE OF 18,360 cf/s FLOW RATE, 64°F AIR TEMPERATURE AND 20% CLOUD COVER. REACTOR #1 IS OPERATING AT 1071 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	071774	1)	83.5	82.3	83.4	82.1	82.2
SPAN A	071774	2)	84.	82.8	83.5	82.2	82.2
SPAN A	071774	3)	85.	84.3	83.5	82.7	82.4
SPAN A	071774	4)			85.3	82.7	84.7
SPAN A	071774	5)			84.5	83.4	83.3
SPAN A	071774	6)			84.5	83.5	83.3
SPAN A	071774	7)			84.5	83.5	83.3
SPAN A	071774	8)				84.5	84.4
		MAXIMUM	85.00	84.30	85.30	84.50	84.70
		MINIMUM	83.50	82.30	83.40	82.10	82.20
		AVERAGE	84.17	83.13	84.17	83.07	83.24
		ST.DEV.	.76	1.04	.72	.80	.95
				SURFACE AVG. 84.54	BOTTOM AVG. 82.70		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	071774	1)	84.3	83.6	84.5	83.2	83.4
SPAN B	071774	2)	84.3	83.7	84.5	83.4	83.8
SPAN B	071774	3)	85.	83.8	84.5	83.5	83.8
SPAN B	071774	4)	85.1	83.9	85.	83.8	
		MAXIMUM	85.10	83.90	85.00	83.80	83.80
		MINIMUM	84.30	83.60	84.50	83.20	83.40
		AVERAGE	84.68	83.75	84.62	83.47	83.67
		ST.DEV.	.43	.13	.25	.25	.23
				SURFACE AVG. 84.32	BOTTOM AVG. 83.80		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	071774	1)	82.8	83.3	82.1	83.1	82.
SPAN C	071774	2)	82.9	83.3	82.1	83.1	82.
SPAN C	071774	3)	83.1	83.3	82.1	83.2	82.3
SPAN C	071774	4)	83.3	83.4	82.3	83.4	82.3
SPAN C	071774	5)	83.3	83.3	82.3	83.4	82.3
SPAN C	071774	6)	83.3	83.6	82.5	83.4	82.5
SPAN C	071774	7)	83.1	83.7	82.5	83.4	82.4
SPAN C	071774	8)	83.5	84.4	83.	83.6	82.5
SPAN C	071774	9)	83.6	85.3	83.3	83.8	82.5
		MAXIMUM	83.60	85.30	83.30	83.80	82.50
		MINIMUM	82.80	83.30	82.10	83.10	82.00
		AVERAGE	83.21	83.73	82.47	83.38	82.31
		ST.DEV.	.24	.69	.42	.23	.20
				SURFACE AVG. 83.70	BOTTOM AVG. 82.66		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	071774	1)	83.5	82.5	83.	84.	82.3
SPAN D	071774	2)	83.5	82.6	83.1	84.1	82.4
SPAN D	071774	3)	84.	82.7	83.4	84.2	82.7
SPAN D	071774	4)	84.	82.6	83.6	84.	
SPAN D	071774	5)	84.	82.6			
SPAN D	071774	6)	84.	82.6			
SPAN D	071774	7)	84.				

SPAN D 071774 8) 83.

	MAXIMUM	84.00	82.70	83.60	84.20	82.70
	MINIMUM	83.00	82.50	83.00	84.00	82.30
	AVERAGE	83.75	82.60	83.27	84.07	82.47
	ST.DEV.	.38	.06	.28	.10	.21
			SURFACE AVG. 83.18	BOTTOM AVG. 83.06		

DATE 071774
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 83.46
2) MAXIMUM VALUE 85.30
3) MINIMUM VALUE 82.00
4) SURFACE AVG. 83.93
5) BOTTOM AVG. 83.05
AIR TEMP AVG. 79.
WIND DIRECTION 08.
WIND SPEED 4.6
CLOUD COVER 2.

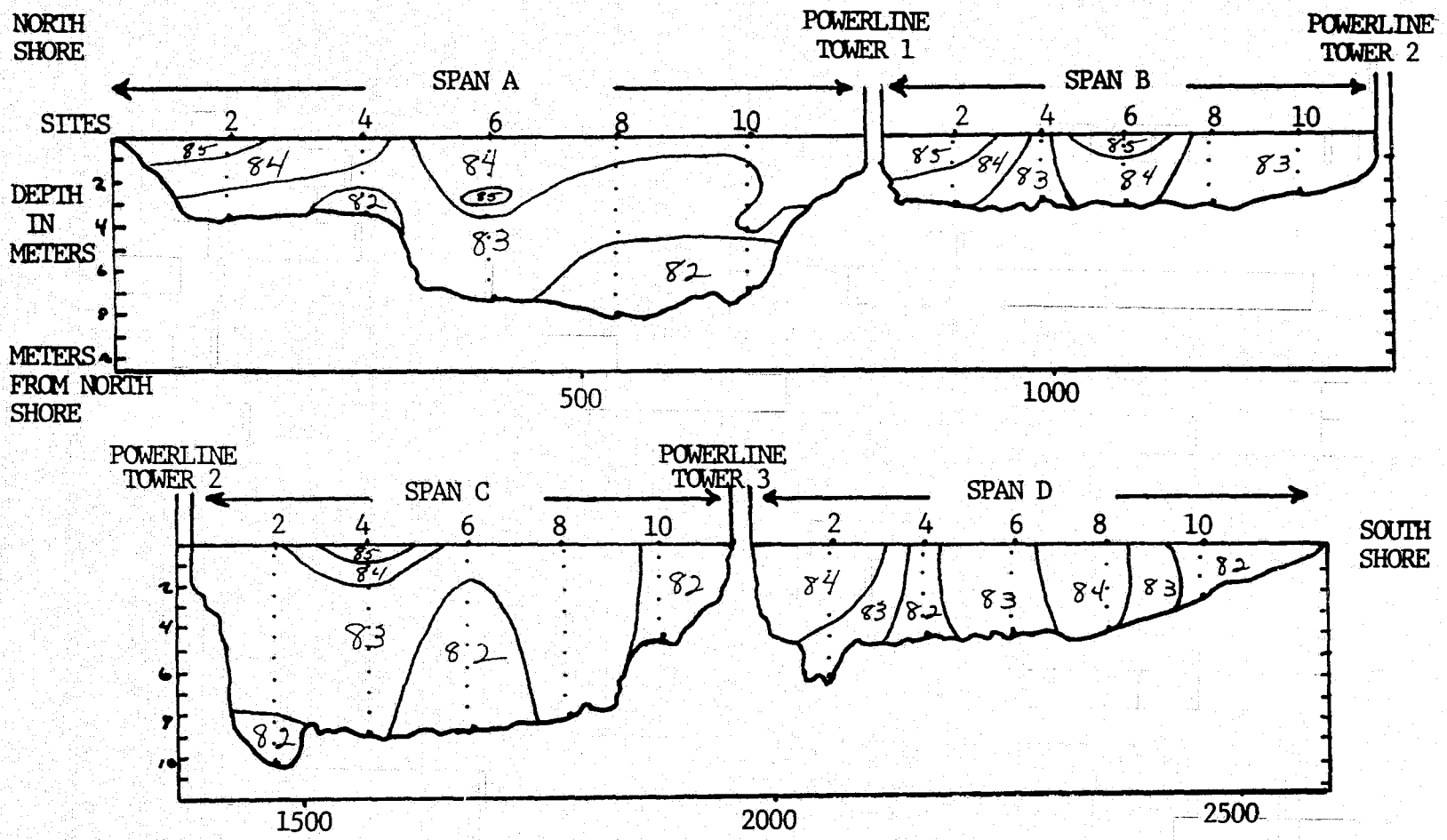

FIGURE 62. RIVER THERMAL PROFILE OF JULY 17, 1974 WITH A FLOW RATE OF 66,430 cf/s, 79°F AIR TEMPERATURE AND 20% CLOUD COVER. REACTOR #1 IS OPERATING AT 1091 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	072474	1)	82.1	81.6	82.7	82.2	82.
SPAN A	072474	2)	83.5	83.3	82.4	81.5	82.
SPAN A	072474	3)	85.	83.7	82.4	81.6	82.
SPAN A	072474	4)	85.1	84.2	82.4	81.6	82.1
SPAN A	072474	5)			82.4	81.6	82.4
SPAN A	072474	6)			84.6	82.	83.
SPAN A	072474	7)			85.	83.1	83.6
SPAN A	072474	8)				84.3	85.1
		MAXIMUM	85.10	84.20	85.00	84.30	85.10
		MINIMUM	82.10	81.60	82.40	81.50	82.00
		AVERAGE	83.93	83.20	83.13	82.24	82.77
		ST.DEV.	1.42	1.13	1.15	.99	1.10
				SURFACE AVG. 84.74	BOTTOM AVG. 82.12		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	072474	1)	84.	82.6	83.	82.4	83.9
SPAN B	072474	2)	84.6	83.9	84.	82.5	84.6
SPAN B	072474	3)	86.2	84.	84.7	83.7	
		MAXIMUM	86.20	84.00	84.70	83.70	84.60
		MINIMUM	84.00	82.60	83.00	82.40	83.90
		AVERAGE	84.93	83.50	83.90	82.87	84.25
		ST.DEV.	1.14	.78	.85	.72	.49
				SURFACE AVG. 84.64	BOTTOM AVG. 83.18		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	072474	1)	81.2	82.1	81.5	81.6	82.4
SPAN C	072474	2)	81.2	82.4	82.	81.6	82.6
SPAN C	072474	3)	81.3	82.4	82.1	82.1	83.
SPAN C	072474	4)	81.5	82.6	82.	82.1	83.
SPAN C	072474	5)	81.4	82.6	82.1	82.1	83.
SPAN C	072474	6)	81.6	82.7	82.2	82.1	83.1
SPAN C	072474	7)	81.5	82.9	82.1	82.	83.3
SPAN C	072474	8)	82.	84.	82.3	83.4	86.5
SPAN C	072474	9)	83.7	86.3	83.7	84.8	
		MAXIMUM	83.70	86.30	83.70	84.80	86.50
		MINIMUM	81.20	82.10	81.50	81.60	82.40
		AVERAGE	81.71	83.11	82.22	82.42	83.36
		ST.DEV.	.78	1.31	.69	1.03	1.30
				SURFACE AVG. 85.00	BOTTOM AVG. 81.76		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	072474	1)	81.	81.7	82.1	82.3	83.5
SPAN D	072474	2)	81.1	81.7	82.5	82.5	84.3
SPAN D	072474	3)	81.3	82.1	82.5	82.8	85.7
SPAN D	072474	4)	81.2	82.4	82.7	83.2	
SPAN D	072474	5)	81.2				
SPAN D	072474	6)	81.4				
		MAXIMUM	81.40	82.40	82.70	83.20	85.70

		MINIMUM	81.00	81.70	82.10	82.30	83.50
		AVERAGE	81.20	81.97	82.45	82.70	84.50
		ST.DEV.	.14	.34	.25	.39	1.11
				SURFACE AVG. 83.08	BOTTOM AVG. 82.12		

DATE 072474
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 83.02
2) MAXIMUM VALUE 86.50
3) MINIMUM VALUE 81.00
4) SURFACE AVG. 84.36
5) BOTTOM AVG. 82.29
AIR TEMP AVG. 83.
WIND DIRECTION 25.
WIND SPEED 5.3
CLOUD COVER 5.

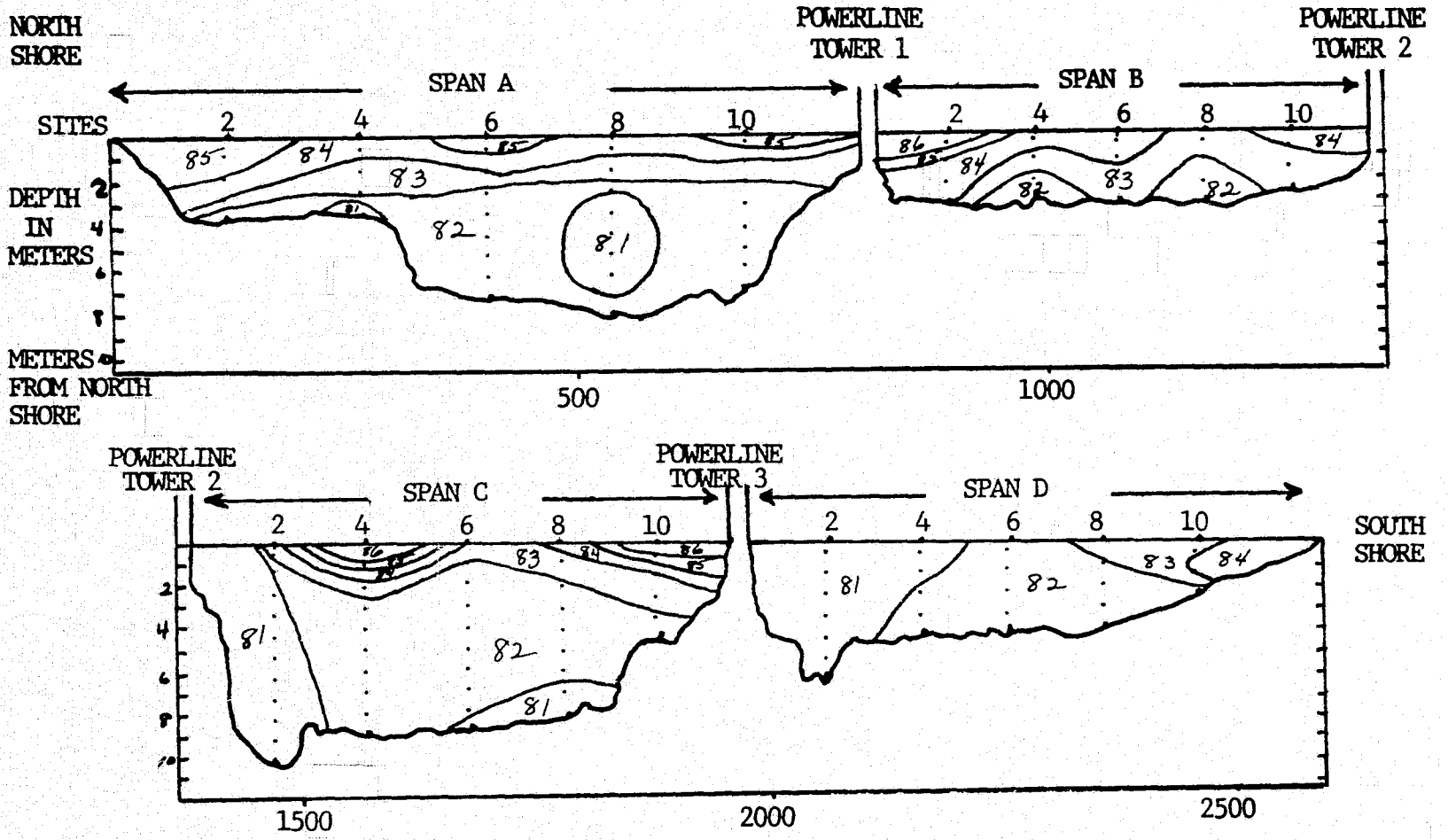

FIGURE 63. RIVER THERMAL PROFILE OF JULY 24, 1974 WITH A FLOW RATE OF 18,846 cf/s, 83°F AIR TEMPERATURE AND 50% CLOUD COVER. REACTOR #1 IS OPERATING AT 1098 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	073174	1)	83.2	83.7	82.	82.8	82.4
SPAN A	073174	2)	84.1	84.	82.	82.9	82.4
SPAN A	073174	3)	85.	85.2	82.	83.	82.5
SPAN A	073174	4)	85.4	86.	82.2	83.3	82.7
SPAN A	073174	5)			82.7	83.2	84.6
SPAN A	073174	6)			83.5	83.9	84.7
SPAN A	073174	7)			83.9	84.1	83.
SPAN A	073174	8)			85.3	85.4	85.4
SPAN A	073174	9)				86.2	85.4
		MAXIMUM	85.40	86.00	85.30	86.20	85.40
		MINIMUM	83.20	83.70	82.00	82.80	82.40
		AVERAGE	84.42	84.72	82.95	83.87	83.23
		ST.DEV.	.98	1.07	1.20	1.20	1.24
				SURFACE AVG. 85.66	BOTTOM AVG. 82.82		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	073174	1)	82.6	82.7	83.	82.5	82.3
SPAN B	073174	2)	83.2	83.	83.1	82.5	82.2
SPAN B	073174	3)	84.7	83.8	85.1	83.8	83.6
SPAN B	073174	4)	85.	85.	85.6	84.7	84.8
		MAXIMUM	85.00	85.00	85.60	84.70	84.80
		MINIMUM	82.60	82.70	83.00	82.50	82.20
		AVERAGE	83.87	83.62	84.20	83.37	83.22
		ST.DEV.	1.16	1.03	1.34	1.08	1.23
				SURFACE AVG. 85.02	BOTTOM AVG. 82.62		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	073174	1)	83.	82.3	83.6	82.6	83.1
SPAN C	073174	2)	83.	82.3	83.5	82.5	83.2
SPAN C	073174	3)	83.3	82.4	83.5	82.6	83.3
SPAN C	073174	4)	83.3	82.5	83.5	82.7	83.4
SPAN C	073174	5)	83.6	82.5	83.5	82.8	83.4
SPAN C	073174	6)	84.	82.9	83.5	82.8	83.4
SPAN C	073174	7)	83.9	83.2	83.9	83.1	83.3
SPAN C	073174	8)	83.9	84.2	84.9	83.8	83.6
SPAN C	073174	9)	84.7	84.9	84.9	84.4	
		MAXIMUM	84.70	84.90	84.90	84.40	83.60
		MINIMUM	83.00	82.30	83.50	82.50	83.10
		AVERAGE	83.63	83.02	83.87	83.03	83.34
		ST.DEV.	.55	.93	.60	.65	.15
				SURFACE AVG. 84.50	BOTTOM AVG. 82.92		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	073174	1)	82.4	82.2	81.4	82.4	84.
SPAN D	073174	2)	82.3	82.3	81.2	82.4	84.3
SPAN D	073174	3)	82.4	82.9	81.4	82.7	84.5
SPAN D	073174	4)	82.5	83.3	83.3	83.4	
SPAN D	073174	5)	83.5	84.6		84.	
SPAN D	073174	6)	84.7				
		MAXIMUM	84.70	84.60	83.30	84.00	84.50
		MINIMUM	82.30	82.20	81.20	82.40	84.00
		AVERAGE	82.97	83.06	81.82	82.98	84.27
		ST.DEV.	.96	.97	.99	.70	.25
				SURFACE AVG. 84.22	BOTTOM AVG. 82.48		

DATE 073174
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 83.47
2) MAXIMUM VALUE 86.20
3) MINIMUM VALUE 81.20
4) SURFACE AVG. 84.85
5) BOTTOM AVG. 82.71
AIR TEMP AVG. 75.
WIND DIRECTION 03.
WIND SPEED 4.
CLOUD COVER 6.

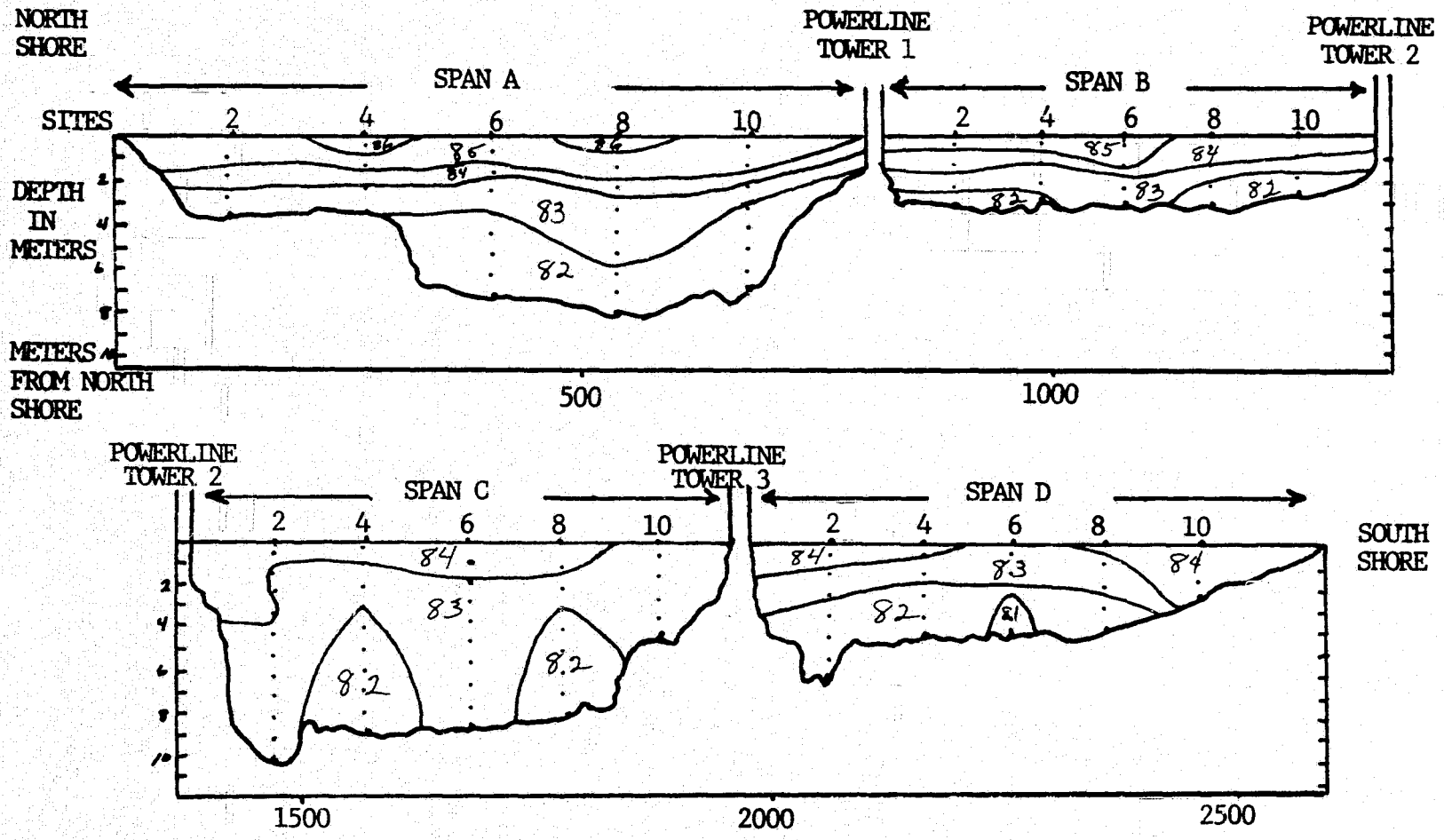

FIGURE 64. RIVER THERMAL PROFILE OF JULY 31, 1974 WITH A 28,270 cf/s FLOW RATE, 75°F AIR TEMPERATURE AND 60% CLOUD COVER. REACTOR #1 IS OPERATING AT 1086 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	080774	1)	82.8	81.1	81.1	82.1	80.9
SPAN A	080774	2)	83.5	82.1	81.	82.	80.7
SPAN A	080774	3)	84.	82.5	81.6	82.2	80.9
SPAN A	080774	4)	84.	82.5	82.3	82.4	81.6
SPAN A	080774	5)			82.3	83.1	81.9
SPAN A	080774	6)			82.9	83.7	82.3
SPAN A	080774	7)			83.3	84.	82.5
SPAN A	080774	8)			83.6	84.3	82.6
SPAN A	080774	9)				84.4	82.7
		MAXIMUM	84.00	82.50	83.60	84.40	82.70
		MINIMUM	82.80	81.10	81.00	82.00	80.70
		AVERAGE	83.57	82.05	82.26	83.13	81.79
		ST.DEV.	.57	.66	.98	.99	.80
				SURFACE AVG. 83.44	BOTTOM AVG. 81.60		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	080774	1)	84.	82.1	83.7	83.	82.6
SPAN B	080774	2)	83.7	82.	83.4	82.7	82.3
SPAN B	080774	3)	84.1	82.2	83.4	83.	82.2
SPAN B	080774	4)	83.7	82.4	83.6	83.1	
		MAXIMUM	84.10	82.40	83.70	83.10	82.60
		MINIMUM	83.70	82.00	83.40	82.70	82.20
		AVERAGE	83.87	82.17	83.52	82.95	82.37
		ST.DEV.	.21	.17	.15	.17	.21
				SURFACE AVG. 83.00	BOTTOM AVG. 83.08		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	080774	1)	83.1	81.	82.2	80.6	82.
SPAN C	080774	2)	83.3	81.4	82.2	80.7	82.
SPAN C	080774	3)	83.7	81.8	82.8	81.3	82.3
SPAN C	080774	4)	83.7	81.9	83.	81.5	82.3
SPAN C	080774	5)	83.7	81.9	83.	81.7	82.3
SPAN C	080774	6)	84.	81.9	83.2	81.7	82.3
SPAN C	080774	7)	83.6	82.	83.2	81.8	82.2
SPAN C	080774	8)	83.6	82.4	83.6	82.2	82.3
SPAN C	080774	9)		82.3	83.6	82.4	
		MAXIMUM	84.00	82.40	83.60	82.40	82.30
		MINIMUM	83.10	81.00	82.20	80.60	82.00
		AVERAGE	83.59	81.84	82.98	81.54	82.21
		ST.DEV.	.27	.43	.51	.61	.14
				SURFACE AVG. 82.84	BOTTOM AVG. 81.78		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	080774	1)	79.8	80.2	80.9	79.3	80.3
SPAN D	080774	2)	79.9	80.1	80.8	79.2	80.2
SPAN D	080774	3)	80.2	80.2	81.	79.2	80.2
SPAN D	080774	4)	80.1	80.2	81.	79.2	
SPAN D	080774	5)		80.2			
		MAXIMUM	80.20	80.20	81.00	79.30	80.30
		MINIMUM	79.80	80.10	80.80	79.20	80.20
		AVERAGE	80.00	80.18	80.92	79.22	80.23
		ST.DEV.	.18	.04	.10	.05	.06
				SURFACE AVG. 80.14	BOTTOM AVG. 80.10		

DATE 080774
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	82.02
2) MAXIMUM VALUE	84.40
3) MINIMUM VALUE	79.20
4) SURFACE AVG.	82.35
5) BOTTOM AVG.	81.64
AIR TEMP AVG.	74.
WIND DIRECTION	12.
WIND SPEED	9.5
CLOUD COVER	10.

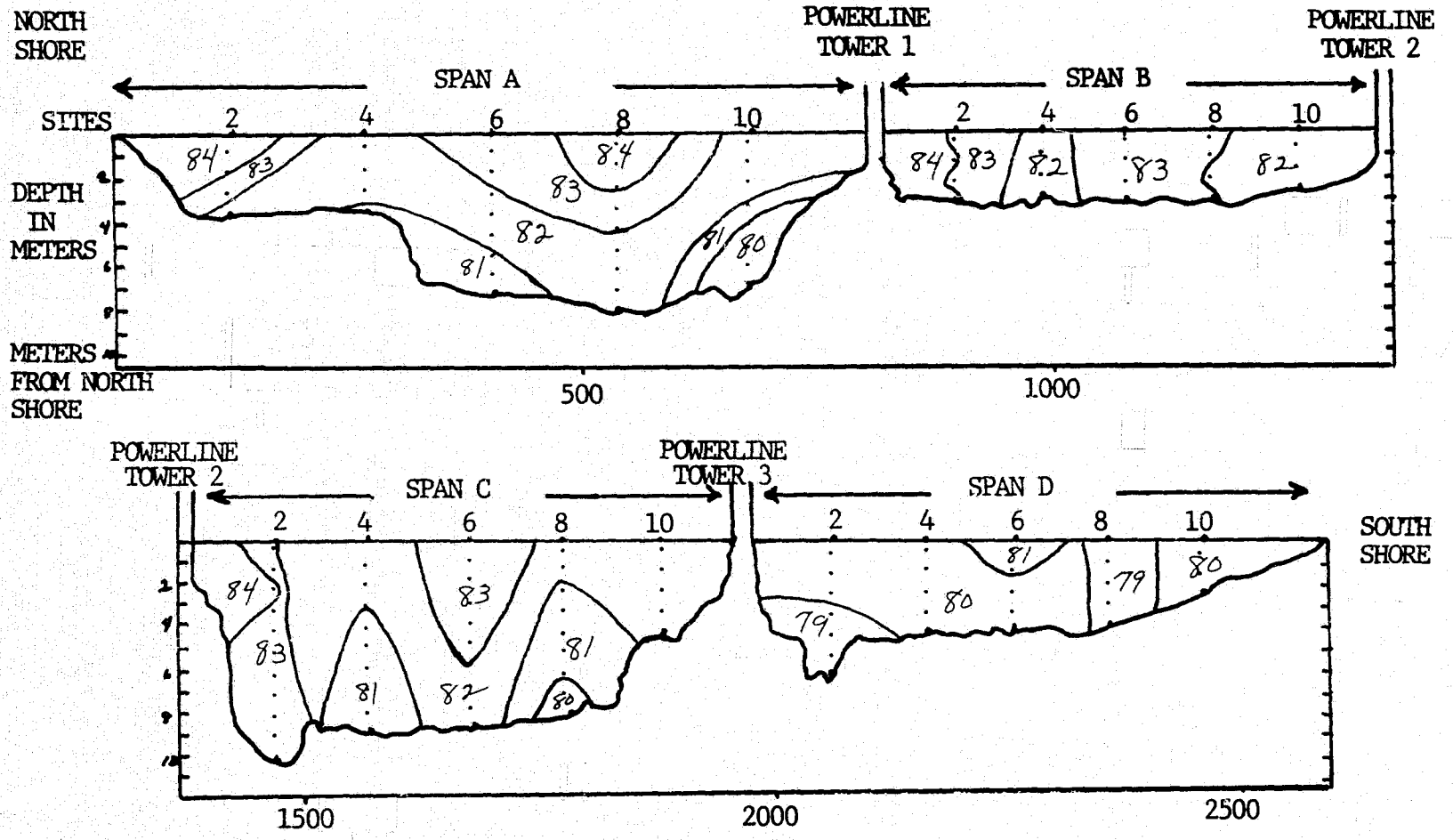

FIGURE 65. RIVER THERMAL PROFILE OF AUGUST 7, 1974 WITH A 15,434 cf/s FLOW RATE, 74°F AIR TEMPERATURE AND 100% CLOUD COVER. REACTOR #1 IS OPERATING AT 1063 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	081474	1)	81.1	82.2	80.7	80.5	81.8
SPAN A	081474	2)	82.5	83.	80.6	80.9	81.8
SPAN A	081474	3)	82.9	83.4	80.7	80.9	81.9
SPAN A	081474	4)	83.7	83.8	81.5	81.	81.9
SPAN A	081474	5)			81.2	80.9	82.
SPAN A	081474	6)			81.4	81.2	82.4
SPAN A	081474	7)			82.4	80.9	82.6
SPAN A	081474	8)			82.5	82.2	82.2
SPAN A	081474	9)				80.	82.4
		MAXIMUM	83.70	83.80	82.50	82.20	82.60
		MINIMUM	81.10	82.20	80.60	80.00	81.80
		AVERAGE	82.55	83.10	81.37	80.94	82.11
		ST.DEV.	1.09	.68	.74	.59	.30
				SURFACE AVG. 82.48	BOTTOM AVG. 81.26		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	081474	1)	83.1	81.5	81.8	81.6	81.2
SPAN B	081474	2)	83.1	81.5	81.9	81.7	81.5
SPAN B	081474	3)	83.5	82.	82.4	81.8	82.5
SPAN B	081474	4)	83.8	82.5	83.	83.	
		MAXIMUM	83.80	82.50	83.00	83.00	82.50
		MINIMUM	83.10	81.50	81.80	81.60	81.20
		AVERAGE	83.37	81.87	82.27	82.02	81.73
		ST.DEV.	.34	.48	.55	.46	.68
				SURFACE AVG. 82.96	BOTTOM AVG. 81.84		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	081474	1)	81.3	80.6	80.6	80.	80.6
SPAN C	081474	2)	81.6	80.7	80.5	80.1	80.4
SPAN C	081474	3)	81.9	80.9	80.7	80.2	80.5
SPAN C	081474	4)	82.2	81.	80.9	80.4	80.5
SPAN C	081474	5)	82.2	81.	80.9	80.4	80.6
SPAN C	081474	6)	82.6	81.	80.9	80.6	80.7
SPAN C	081474	7)		80.9	80.9	80.6	80.7
SPAN C	081474	8)	82.8	81.2	81.4	80.7	81.5
SPAN C	081474	9)	82.9	81.6	81.6	80.8	
SPAN C	081474	10)	83.3				
		MAXIMUM	83.30	81.60	81.60	80.80	81.50
		MINIMUM	81.30	80.60	80.50	80.00	80.40
		AVERAGE	82.31	80.99	80.93	80.42	80.74
		ST.DEV.	.65	.29	.36	.28	.36
				SURFACE AVG. 81.76	BOTTOM AVG. 80.62		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	081474	1)	80.4	81.	80.5	80.7	80.
SPAN D	081474	2)	80.4	80.8	80.5	81.	80.2
SPAN D	081474	3)	80.2	80.8	80.7	81.1	80.3
SPAN D	081474	4)	80.2	80.9	80.7	81.	
SPAN D	081474	5)	80.1	80.8		81.	
SPAN D	081474	6)	80.1				
SPAN D	081474	7)	80.				
		MAXIMUM	80.40	81.00	80.70	81.10	80.30
		MINIMUM	80.00	80.80	80.50	80.70	80.00
		AVERAGE	80.20	80.86	80.60	80.98	80.17
		ST.DEV.	.15	.09	.12	.15	.15
				SURFACE AVG. 80.56	BOTTOM AVG. 80.52		

DATE 081474
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 81.48
2) MAXIMUM VALUE 83.80
3) MINIMUM VALUE 80.00
4) SURFACE AVG. 81.94
5) BOTTOM AVG. 81.06
AIR TEMP AVG. 77.
WIND DIRECTION 15.
WIND SPEED 3.2
CLOUD COVER 10.

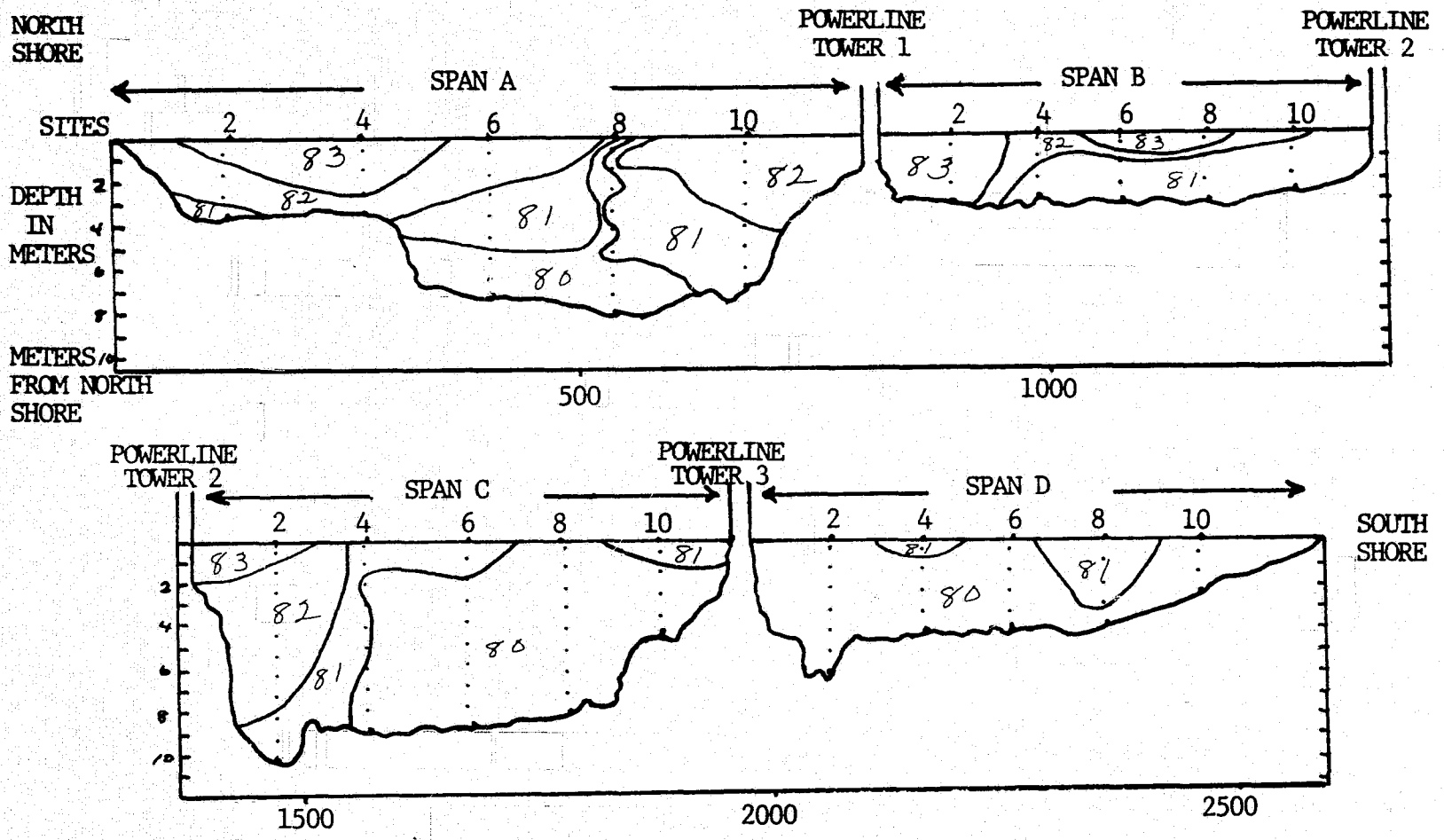

FIGURE 66. RIVER THERMAL PROFILE OF AUGUST 14, 1974 WITH A 51,254 cf/s FLOW RATE, 77°F AIR TEMPERATURE AND 100% CLOUD COVER. REACTOR #1 IS OPERATING AT 1074 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	082174	1)	79.5	80.8	81.9	81.9	82.8
SPAN A	082174	2)	79.9	81.2	82.1	81.3	82.4
SPAN A	082174	3)	79.9	82.	82.5	81.9	82.5
SPAN A	082174	4)	80.3	82.2	82.6	81.8	83.1
SPAN A	082174	5)			82.7	81.9	83.1
SPAN A	082174	6)			83.	81.9	83.4
SPAN A	082174	7)			82.9	82.	83.3
SPAN A	082174	8)			82.8	82.1	83.4
SPAN A	082174	9)				82.2	
		MAXIMUM	80.30	82.20	83.00	82.20	83.40
		MINIMUM	79.50	80.80	81.90	81.30	82.60
		AVERAGE	79.90	81.55	82.56	81.89	83.11
		ST.DEV.	.33	.66	.39	.25	.24
				SURFACE AVG. 82.18	BOTTOM AVG. 81.38		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	082174	1)	83.	83.5	82.7	83.5	83.1
SPAN B	082174	2)	83.	83.9	82.7	83.6	83.3
SPAN B	082174	3)	83.1	84.	83.	83.8	83.4
SPAN B	082174	4)		83.5	83.2	83.9	
		MAXIMUM	83.10	84.00	83.20	83.90	83.40
		MINIMUM	83.00	83.50	82.70	83.50	83.10
		AVERAGE	83.03	83.72	82.90	83.70	83.27
		ST.DEV.	.06	.26	.24	.18	.15
				SURFACE AVG. 83.42	BOTTOM AVG. 83.16		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	082174	1)	81.5	82.	81.	81.7	80.5
SPAN C	082174	2)	81.3	82.1	81.3	82.	80.6
SPAN C	082174	3)	81.6	82.2	81.3	82.8	80.7
SPAN C	082174	4)	81.6	82.3	81.4	82.3	80.9
SPAN C	082174	5)	81.8	82.4	81.5	82.3	80.7
SPAN C	082174	6)	82.6	82.6	81.8	82.5	81.
SPAN C	082174	7)	82.5	82.8	81.9	82.7	80.8
SPAN C	082174	8)	82.5	83.	82.1	82.8	
SPAN C	082174	9)	82.6	83.1	82.3		
SPAN C	082174	10)	82.6				
		MAXIMUM	82.60	83.10	82.30	82.80	81.00
		MINIMUM	81.30	82.00	81.00	81.70	80.50
		AVERAGE	82.06	82.50	81.62	82.39	80.77
		ST.DEV.	.54	.40	.43	.39	.16
				SURFACE AVG. 82.32	BOTTOM AVG. 81.34		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	082174	1)	81.8	81.4	82.3	82.2	82.6
SPAN D	082174	2)	81.9	81.6	82.6	82.3	82.8
SPAN D	082174	3)	82.1	81.8	82.7	82.6	83.
SPAN D	082174	4)	82.2	81.9	82.9	82.7	
SPAN D	082174	5)	82.2				
SPAN D	082174	6)	82.2				
		MAXIMUM	82.20	81.90	82.90	82.70	83.00
		MINIMUM	81.80	81.40	82.30	82.20	82.60
		AVERAGE	82.07	81.67	82.62	82.45	82.80
		ST.DEV.	.18	.22	.25	.24	.20
				SURFACE AVG. 82.54	BOTTOM AVG. 82.06		

DATE 082174
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 82.33
2) MAXIMUM VALUE 84.00
3) MINIMUM VALUE 79.50
4) SURFACE AVG. 82.61
5) BOTTOM AVG. 81.98
AIR TEMP AVG. 79.
WIND DIRECTION 12.
WIND SPEED 7.3
CLOUD COVER 3.

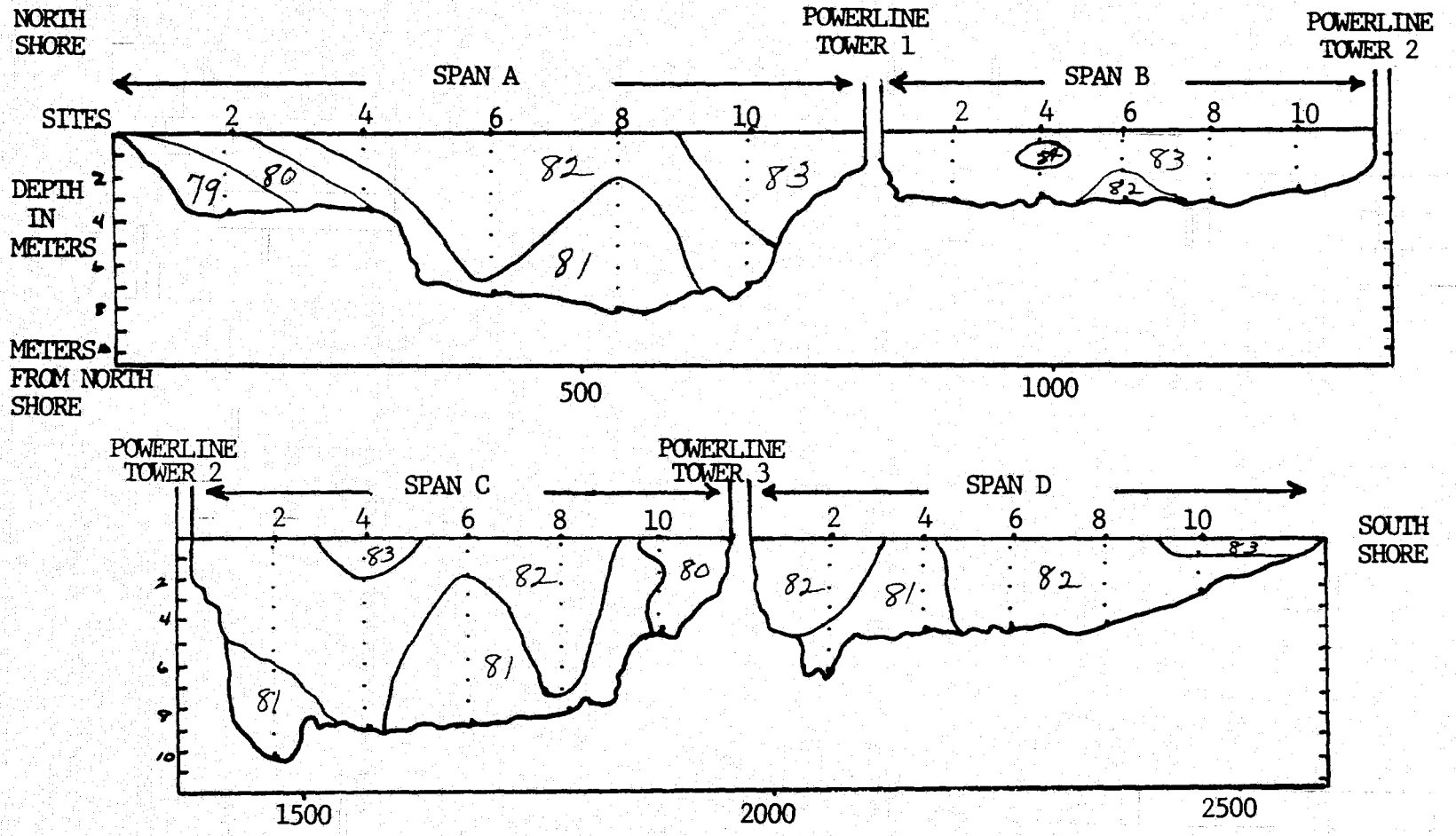

FIGURE 67. RIVER THERMAL PROFILE OF AUGUST 21, 1974 WITH A 39,258 cf/s FLOW RATE, 79°F AIR TEMPERATURE AND 30% CLOUD COVER. REACTOR #1 IS OPERATING AT 459 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	082874	1)	85.6	85.6	84.6	83.6	83.9
SPAN A	082874	2)	85.7	85.7	84.4	83.4	83.8
SPAN A	082874	3)	85.8	85.7	84.3	83.3	83.7
SPAN A	082874	4)		85.8	84.2	83.2	84.
SPAN A	082874	5)			84.2	83.1	83.7
SPAN A	082874	6)			84.5	83.	83.6
SPAN A	082874	7)			85.	82.9	83.8
SPAN A	082874	8)				83.5	84.5
		MAXIMUM	85.80	85.80	85.00	83.60	84.50
		MINIMUM	85.60	85.60	84.20	82.90	83.60
		AVERAGE	85.70	85.70	84.46	83.25	83.87
		ST.DEV.	.10	.08	.28	.24	.28
				SURFACE AVG. 84.92	BOTTOM AVG. 84.66		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	082874	1)	83.6	84.3	84.7	84.	84.3
SPAN B	082874	2)	83.3	84.2	84.6	83.5	84.3
SPAN B	082874	3)	83.3	84.3	84.7	83.7	84.3
		MAXIMUM	83.60	84.30	84.70	84.00	84.30
		MINIMUM	83.30	84.20	84.60	83.50	84.30
		AVERAGE	83.40	84.27	84.67	83.73	84.30
		ST.DEV.	.17	.06	.06	.25	.00
				SURFACE AVG. 84.06	BOTTOM AVG. 84.18		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	082874	1)	84.1	84.1	83.1	83.5	83.4
SPAN C	082874	2)	83.8	84.	83.3	83.3	83.4
SPAN C	082874	3)	83.8	84.	83.3	83.3	83.4
SPAN C	082874	4)	83.8	83.8	83.3	83.4	83.4
SPAN C	082874	5)	83.8	83.8	83.2	83.4	83.4
SPAN C	082874	6)	83.8	84.	83.3	83.5	83.3
SPAN C	082874	7)	83.5	83.7	83.1	83.6	83.2
SPAN C	082874	8)	83.4	84.3	83.5	83.7	
SPAN C	082874	9)	83.4				
		MAXIMUM	84.10	84.30	83.50	83.70	83.40
		MINIMUM	83.40	83.70	83.10	83.30	83.20
		AVERAGE	83.71	83.96	83.26	83.46	83.36
		ST.DEV.	.23	.19	.13	.14	.08
				SURFACE AVG. 83.62	BOTTOM AVG. 83.64		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	082874	1)	84.	83.1	83.5	84.2	84.6
SPAN D	082874	2)	83.8	83.1	83.5	84.1	84.5
SPAN D	082874	3)	83.7	83.2	83.4	84.3	84.7
SPAN D	082874	4)	83.8	83.2	83.4	84.2	
		MAXIMUM	84.00	83.20	83.50	84.30	84.70
		MINIMUM	83.70	83.10	83.40	84.10	84.50
		AVERAGE	83.82	83.15	83.45	84.20	84.60

		ST.DEV.	.13	.06	.06	.08	.10
				SURFACE AVG. 83.86	BOTTOM AVG. 83.88		

DATE 082874
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 84.02
2) MAXIMUM VALUE 85.80
3) MINIMUM VALUE 82.90
4) SURFACE AVG. 84.11
5) BOTTOM AVG. 84.09
AIR TEMP AVG. 82.
WIND DIRECTION 19.
WIND SPEED 9.4
CLOUD COVER 7.

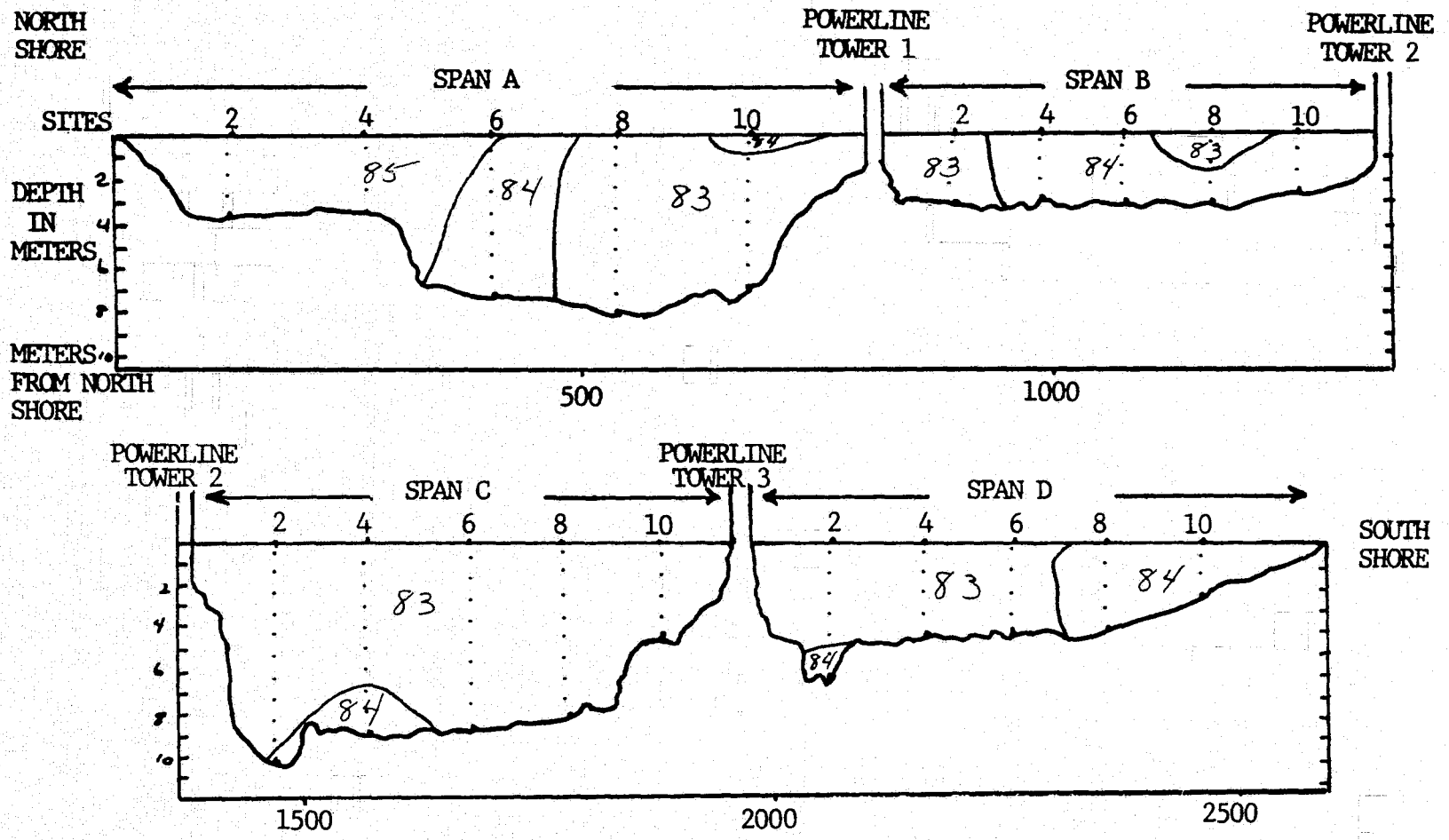

FIGURE 68. RIVER THERMAL PROFILE OF AUGUST 28, 1974 WITH A 62,516 cf/s FLOW RATE, 82°F AIR TEMPERATURE AND 70% CLOUD COVER. PLANT IS NOT IN OPERATION.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	090474	1)	79.2	79.2	78.	78.6	78.2
SPAN A	090474	2)	79.4	79.3	78.1	78.7	78.2
SPAN A	090474	3)	79.6	79.4	78.1	78.7	78.3
SPAN A	090474	4)	79.7	79.4	78.2	79.	78.3
SPAN A	090474	5)			78.2	78.9	78.3
SPAN A	090474	6)			78.8	79.	78.3
SPAN A	090474	7)			78.8	79.	78.3
SPAN A	090474	8)				79.1	78.7
		MAXIMUM	79.70	79.40	78.80	79.10	78.70
		MINIMUM	79.20	79.20	78.00	78.60	78.20
		AVERAGE	79.47	79.32	78.31	78.87	78.32
		ST.DEV.	.22	.10	.34	.18	.16
				SURFACE AVG. 79.14	BOTTOM AVG. 78.64		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	090474	1)	78.9	78.8	78.9	79.4	79.4
SPAN B	090474	2)	78.9	78.7	78.9	79.2	79.3
SPAN B	090474	3)	79.	78.8	79.	79.2	79.2
		MAXIMUM	79.00	78.80	79.00	79.40	79.40
		MINIMUM	78.90	78.70	78.90	79.20	79.20
		AVERAGE	78.93	78.77	78.93	79.27	79.30
		ST.DEV.	.06	.06	.06	.12	.10
				SURFACE AVG. 79.04	BOTTOM AVG. 79.08		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	090474	1)	77.5	78.6	77.9	78.	78.4
SPAN C	090474	2)	77.7	78.5	77.8	77.9	78.4
SPAN C	090474	3)	77.7	78.5	77.9	78.	78.4
SPAN C	090474	4)	77.7	78.6	77.9	78.1	78.5
SPAN C	090474	5)	77.7	78.6	77.9	78.1	78.5
SPAN C	090474	6)	77.7	78.6		78.2	78.5
SPAN C	090474	7)	77.6	78.6	77.9	78.2	78.4
SPAN C	090474	8)	77.5	78.6	78.	78.4	78.4
SPAN C	090474	9)	77.5	78.7	77.7		
		MAXIMUM	77.70	78.70	78.00	78.40	78.50
		MINIMUM	77.50	78.50	77.70	77.90	78.40
		AVERAGE	77.62	78.59	77.87	78.11	78.44
		ST.DEV.	.10	.06	.09	.16	.05
				SURFACE AVG. 78.14	BOTTOM AVG. 78.06		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	090474	1)	78.7	77.6	77.	76.9	75.9
SPAN D	090474	2)	78.6	77.5	77.	76.9	76.9
SPAN D	090474	3)	78.7	77.5	77.	76.9	76.
SPAN D	090474	4)	78.7	77.5	77.	76.9	
SPAN D	090474	5)	78.5				
SPAN D	090474	6)	78.5				
		MAXIMUM	78.70	77.60	77.00	76.90	76.00
		MINIMUM	78.50	77.50	77.00	76.90	75.90
		AVERAGE	78.62	77.52	77.00	76.90	75.93
		ST.DEV.	.10	.05	.00	.00	.06
				SURFACE AVG. 77.18	BOTTOM AVG. 77.22		

DATE 090474
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 78.31
2) MAXIMUM VALUE 79.70
3) MINIMUM VALUE 75.90
4) SURFACE AVG. 78.37
5) BOTTOM AVG. 78.25
AIR TEMP AVG. 63.
WIND DIRECTION 01.
WIND SPEED 11.9
CLOUD COVER 10.

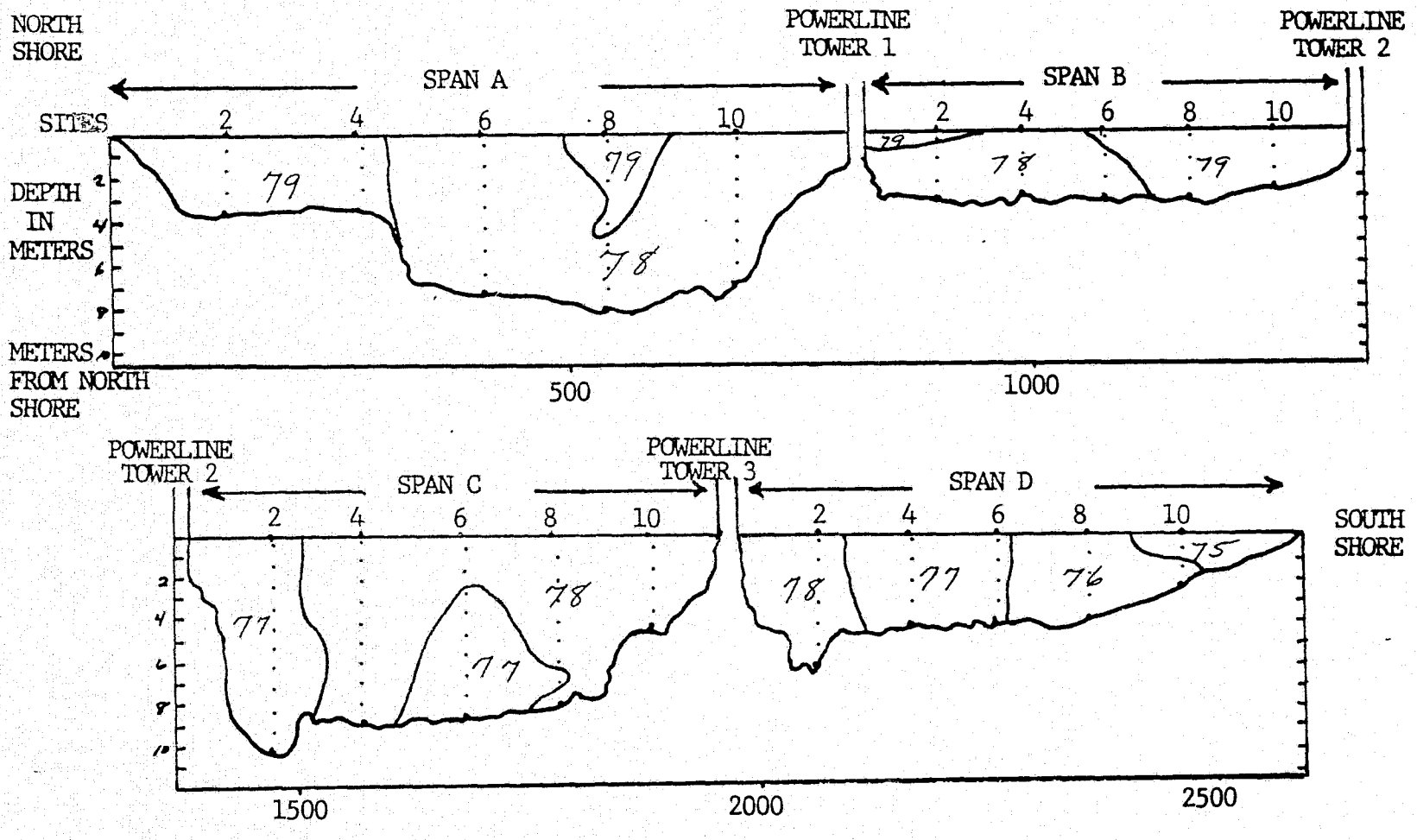

FIGURE 69. RIVER THERMAL PROFILE OF SEPTEMBER 4, 1974 WITH A 41,554 cf/s FLOW RATE, 63°F AIR TEMPERATURE AND 100% CLOUD COVER. REACTOR #1 IS OPERATING AT 997 MW AND REACTOR #2 AT 188 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	091174	1)	80.3	78.6	75.9	76.9	78.7
SPAN A	091174	2)	80.6	80.6	76.2	76.9	78.7
SPAN A	091174	3)		81.4	76.6	77.2	76.9
SPAN A	091174	4)			77.3	77.6	77.
SPAN A	091174	5)			78.5	78.3	77.5
SPAN A	091174	6)			79.9	78.9	78.3
SPAN A	091174	7)			80.3	81.	80.4
SPAN A	091174	8)				81.2	81.
SPAN A	091174	9)				81.5	
		MAXIMUM	80.60	81.40	80.30	81.50	81.00
		MINIMUM	80.30	78.60	75.90	76.90	76.70
		AVERAGE	80.45	80.20	77.81	78.83	78.06
		ST.DEV.	.21	1.44	1.78	1.92	1.72
				SURFACE AVG. 80.96	BOTTOM AVG. 77.68		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	091174	1)	78.9	78.5	77.8	77.7	79.9
SPAN B	091174	2)	78.3	79.	78.3	78.7	80.
SPAN B	091174	3)	78.6	80.7	79.6	79.	81.1
		MAXIMUM	78.90	80.70	79.60	79.00	81.10
		MINIMUM	78.30	78.50	77.80	77.70	79.90
		AVERAGE	78.60	79.40	78.57	78.47	80.33
		ST.DEV.	.30	1.15	.93	.68	.67
				SURFACE AVG. 79.80	BOTTOM AVG. 78.56		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	091174	1)	76.7	75.9	77.	76.4	77.1
SPAN C	091174	2)	76.5	76.	77.	76.6	77.1
SPAN C	091174	3)	76.8	76.1	77.1	76.6	77.2
SPAN C	091174	4)	77.1	76.	77.1	77.1	77.1
SPAN C	091174	5)	77.2	76.	77.7	77.6	77.1
SPAN C	091174	6)		77.3	79.3	79.1	78.5
SPAN C	091174	7)	80.1	79.1	79.2	79.1	79.1
SPAN C	091174	8)	80.3	79.4	79.5	79.9	
SPAN C	091174	9)		79.7			
		MAXIMUM	80.30	79.70	79.50	79.90	79.10
		MINIMUM	76.50	75.90	77.00	76.40	77.10
		AVERAGE	77.81	77.28	77.99	77.80	77.60
		ST.DEV.	1.65	1.65	1.14	1.37	.84
				SURFACE AVG. 79.70	BOTTOM AVG. 76.62		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	091174	1)	76.3	76.7	76.7	76.2	77.6
SPAN D	091174	2)	76.4	76.9	76.6	76.2	78.1
SPAN D	091174	3)	77.	78.	77.7	77.1	
SPAN D	091174	4)	77.2	78.6	78.	77.5	
SPAN D	091174	5)	77.3				
SPAN D	091174	6)	78.3				
SPAN D	091174	7)	78.4				
		MAXIMUM	78.40	78.60	78.00	77.50	78.10
		MINIMUM	76.30	76.70	76.60	76.20	77.60
		AVERAGE	77.27	77.55	77.25	76.75	77.85
		ST.DEV.	.83	.90	.70	.66	.35
				SURFACE AVG. 78.12	BOTTOM AVG. 76.70		

DATE 091174
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	78.29
2) MAXIMUM VALUE	81.50
3) MINIMUM VALUE	75.90
4) SURFACE AVG.	79.64
5) BOTTOM AVG.	77.39
AIR TEMP AVG.	76.
WIND DIRECTION	16.
WIND SPEED	6.5
CLOUD COVER	4.

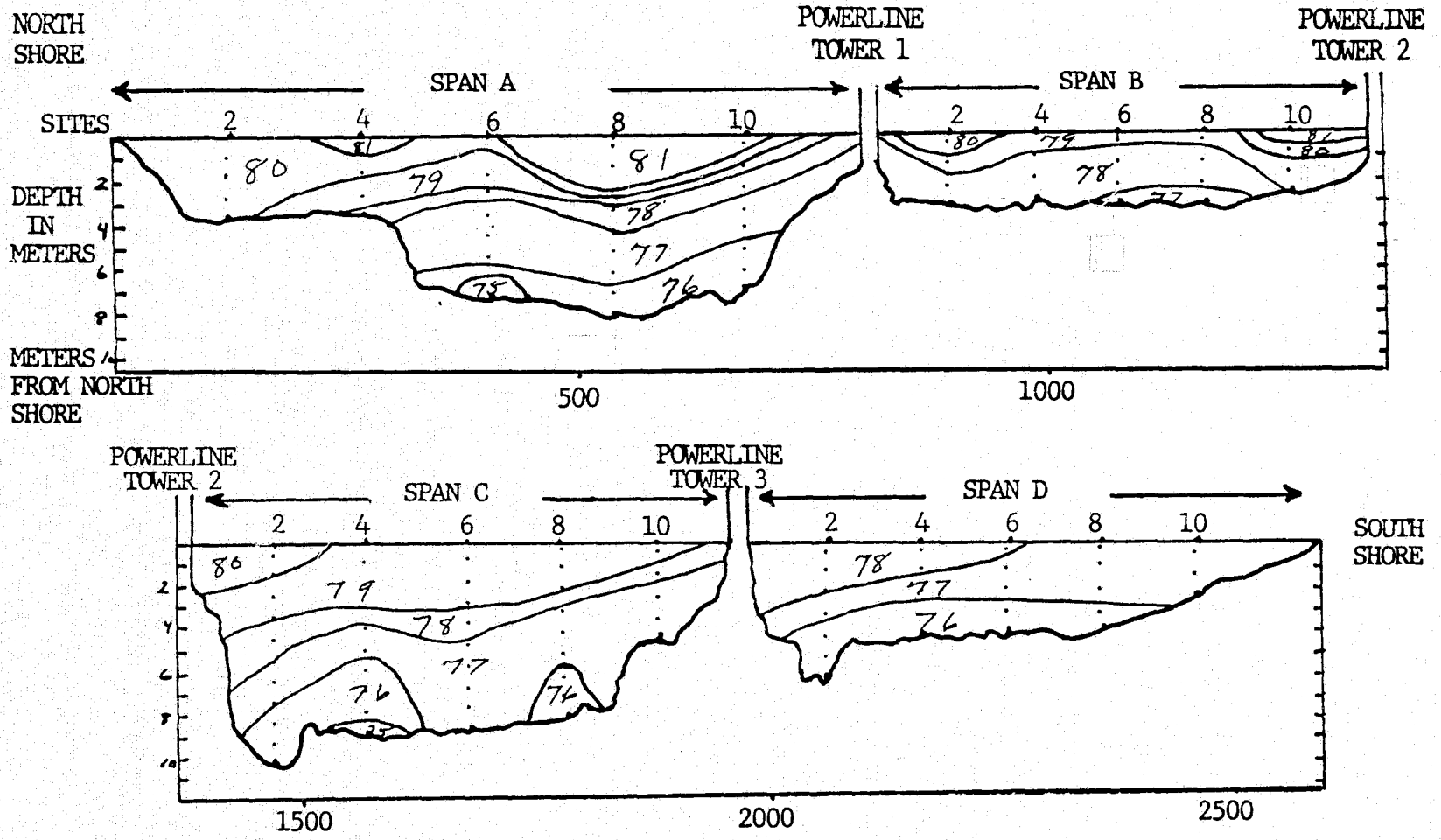

FIGURE 70. RIVER THERMAL PROFILE OF SEPTEMBER 11, 1974 WITH A 2,162 cf/s FLOW RATE, 76°F AIR TEMPERATURE AND 40% CLOUD COVER. REACTOR # 1 IS OPERATING AT 976 MW AND REACTOR # 2 AT 260 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	091874	1)	78.4	77.3	76.6	75.4	75.7
SPAN A	091874	2)	78.9	77.7	76.5	75.3	75.8
SPAN A	091874	3)	79.3	78.5	76.7	75.4	76.
SPAN A	091874	4)			77.	75.4	76.2
SPAN A	091874	5)			77.4	76.	76.3
SPAN A	091874	6)			78.2	76.1	76.9
SPAN A	091874	7)			79.1	76.5	77.6
SPAN A	091874	8)				77.5	79.1
		MAXIMUM	79.30	78.50	79.10	77.50	79.10
		MINIMUM	78.40	77.30	76.50	75.30	75.70
		AVERAGE	78.87	77.83	77.36	75.95	76.70
		ST.DEV.	.45	.61	.97	.76	1.15
				SURFACE AVG. 78.70	BOTTOM AVG. 76.68		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	091874	1)	77.8	78.	78.3	76.9	77.2
SPAN B	091874	2)	77.8	78.1	78.3	76.8	77.2
SPAN B	091874	3)	78.1	78.5	78.5	76.7	77.5
		MAXIMUM	78.10	78.50	78.50	76.90	77.50
		MINIMUM	77.80	78.00	78.30	76.70	77.20
		AVERAGE	77.90	78.20	78.37	76.80	77.30
		ST.DEV.	.17	.26	.12	.10	.17
				SURFACE AVG. 77.86	BOTTOM AVG. 77.64		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	091874	1)	75.1	75.9	75.6	76.1	76.3
SPAN C	091874	2)	75.2	76.1	75.6	76.3	76.4
SPAN C	091874	3)	75.4	76.1	76.5	76.3	76.6
SPAN C	091874	4)	75.5	76.2	75.4	76.3	76.7
SPAN C	091874	5)	75.5	76.4	75.5	76.4	76.7
SPAN C	091874	6)	75.6	76.6	75.7	76.4	76.6
SPAN C	091874	7)	75.7	77.4	75.9	76.5	76.9
SPAN C	091874	8)	75.9	78.3	77.9	77.7	77.6
SPAN C	091874	9)	76.3				
		MAXIMUM	76.30	78.30	77.90	77.70	77.60
		MINIMUM	75.10	75.90	75.40	76.10	76.30
		AVERAGE	75.58	76.62	76.01	76.50	76.72
		ST.DEV.	.36	.82	.84	.50	.40
				SURFACE AVG. 77.56	BOTTOM AVG. 75.80		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	091874	1)	75.4	75.1	76.5	75.5	76.6
SPAN D	091874	2)	75.4	75.4	76.6	75.5	77.
SPAN D	091874	3)	75.4	75.6	76.6	75.7	
SPAN D	091874	4)	75.4	77.	77.1	76.	
SPAN D	091874	5)	75.5				
SPAN D	091874	6)	76.1				
		MAXIMUM	76.10	77.00	77.10	76.00	77.00
		MINIMUM	75.40	75.10	76.50	75.50	76.60
		AVERAGE	75.53	75.77	76.70	75.67	76.80
		ST.DEV.	.26	.84	.27	.24	.28
				SURFACE AVG. 76.64	BOTTOM AVG. 75.82		

DATE 091874
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	76.86
2) MAXIMUM VALUE	79.30
3) MINIMUM VALUE	75.10
4) SURFACE AVG.	77.69
5) BOTTOM AVG.	76.48
AIR TEMP AVG.	70.
WIND DIRECTION	01.
WIND SPEED	5.6
CLOUD COVER	2.

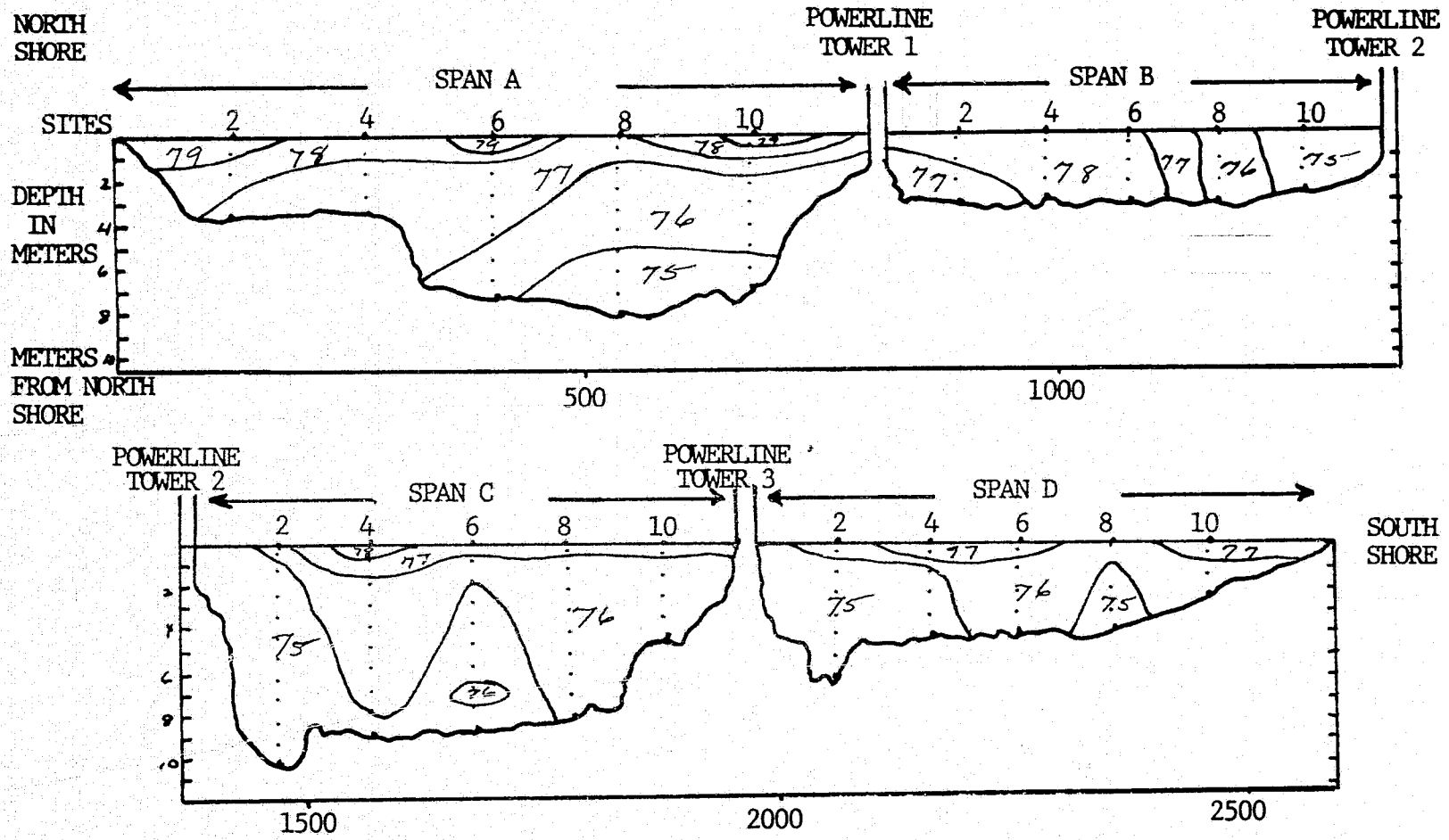

FIGURE 71. RIVER THERMAL PROFILE OF SEPTEMBER 18, 1974 WITH A 38,866 cf/s FLOW RATE, 70°F AIR TEMPEATURE AND 20% CLOUD COVER. REACTOR #1 IS OPERATING AT 1033 MW AND REACTOR #2 AT 470 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	092574	1)	66.5	68.2	70.2	69.1	69.4
SPAN A	092574	2)	66.6	68.1	70.4	69.3	69.8
SPAN A	092574	3)	66.7	68.1	70.5	69.5	70.
SPAN A	092574	4)			70.6	69.6	70.
SPAN A	092574	5)			70.7	69.8	70.2
SPAN A	092574	6)			70.9	70.	70.4
SPAN A	092574	7)			71.	70.	70.3
SPAN A	092574	8)				70.2	70.3
		MAXIMUM	66.70	68.20	71.00	70.20	70.40
		MINIMUM	66.50	68.10	70.20	69.10	69.40
		AVERAGE	66.60	68.13	70.61	69.69	70.05
		ST.DEV.	.10	.06	.28	.38	.33
				SURFACE AVG. 69.26	BOTTOM AVG. 68.68		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	092574	1)	70.3	70.6	70.	70.	70.7
SPAN B	092574	2)	70.2	70.7	70.1	70.1	70.6
SPAN B	092574	3)	70.3	70.7	70.2	70.2	70.7
		MAXIMUM	70.30	70.70	70.20	70.20	70.70
		MINIMUM	70.20	70.60	70.00	70.00	70.60
		AVERAGE	70.27	70.67	70.10	70.10	70.67
		ST.DEV.	.06	.06	.10	.10	.06
				SURFACE AVG. 70.42	BOTTOM AVG. 70.32		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	092574	1)	70.4	70.5	69.3	69.9	70.9
SPAN C	092574	2)	70.4	70.6	69.4	69.9	70.9
SPAN C	092574	3)	70.5	70.7	69.4	70.2	71.
SPAN C	092574	4)	70.4	70.7	69.5	70.	70.9
SPAN C	092574	5)	70.4	70.7	69.5	70.1	70.9
SPAN C	092574	6)	70.4	70.7	69.5	70.1	70.9
SPAN C	092574	7)	70.3	70.6	69.4	70.	70.8
SPAN C	092574	8)	70.2	70.6	69.5	70.	
SPAN C	092574	9)	70.1				
SPAN C	092574	10)	70.				
		MAXIMUM	70.50	70.70	69.50	70.20	71.00
		MINIMUM	70.00	70.50	69.30	69.90	70.80
		AVERAGE	70.31	70.64	69.44	70.02	70.90
		ST.DEV.	.16	.07	.07	.10	.06
				SURFACE AVG. 70.18	BOTTOM AVG. 70.20		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	092574	1)	69.5	70.6	69.7	68.5	68.7
SPAN D	092574	2)	69.5	70.6	69.7	68.5	68.8
SPAN D	092574	3)	69.5	70.6	69.7	68.5	68.9
SPAN D	092574	4)	69.5	70.6	69.8	68.5	
SPAN D	092574	5)	69.5				
SPAN D	092574	6)	69.5				
		MAXIMUM	69.50	70.60	69.80	68.50	68.90
		MINIMUM	69.50	70.60	69.70	68.50	68.70
		AVERAGE	69.50	70.60	69.72	68.50	68.80
		ST.DEV.	.00	.00	.05	.00	.10
				SURFACE AVG. 69.46	BOTTOM AVG. 69.40		

DATE 092574

4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 69.77
2) MAXIMUM VALUE 71.00
3) MINIMUM VALUE 66.50
4) SURFACE AVG. 69.83
5) BOTTOM AVG. 69.65

AIR TEMP AVG. 58.
WIND DIRECTION 13.
WIND SPEED 3.6
CLOUD COVER 10.

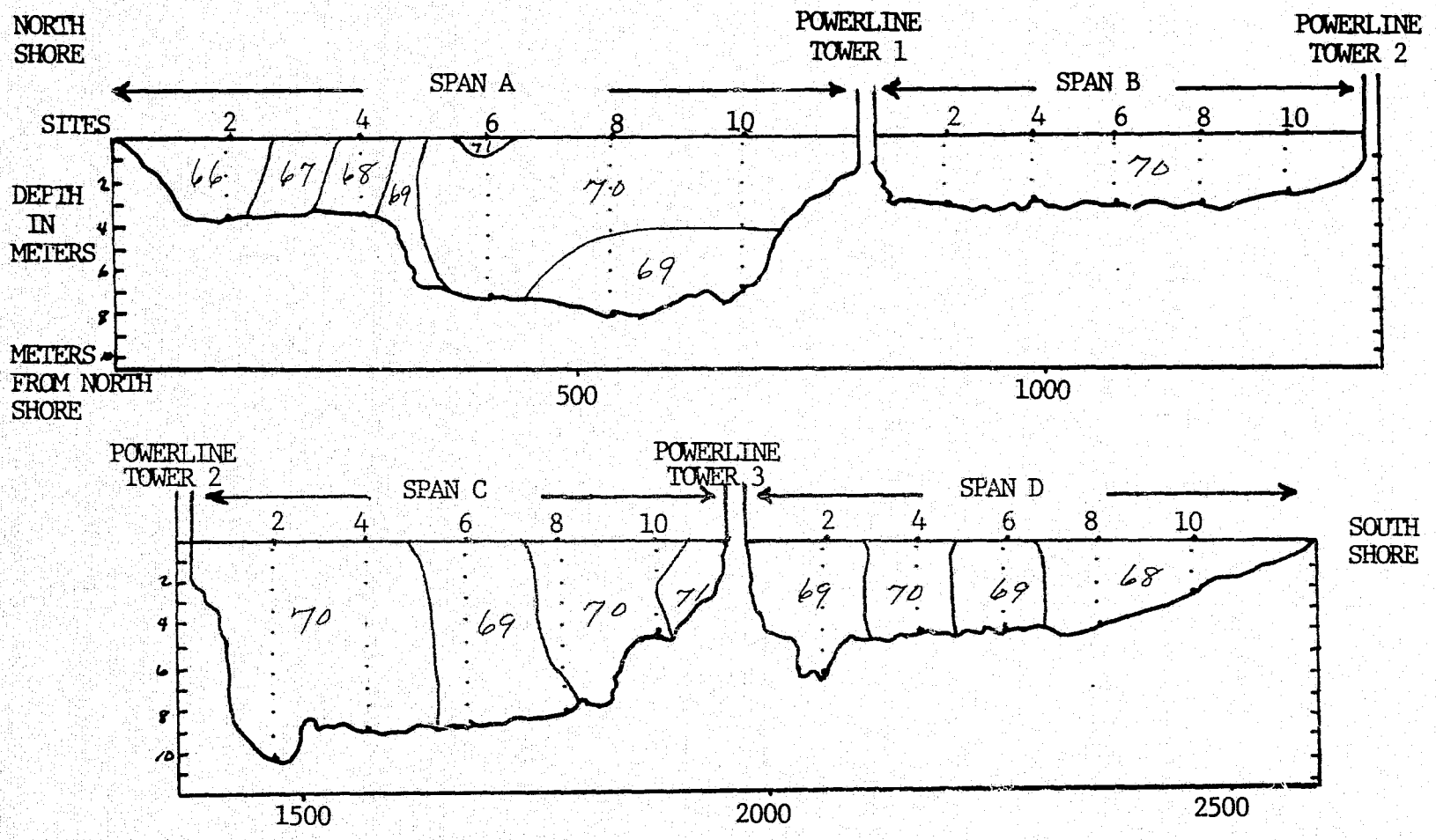

FIGURE 72. RIVER THERMAL PROFILE OF SEPTEMBER 25, 1974 WITH A 36,070 cf/s FLOW RATE, 58°F AIR TEMPERATURE AND 100% CLOUD COVER. REACTOR #1 NOT IN OPERATION AND REACTOR #2 OPERATING AT 626 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	100274	1)	67.6	68.5	68.1	68.6	68.6
SPAN A	100274	2)	67.7	69.	68.	68.7	68.6
SPAN A	100274	3)	67.8	69.	68.	68.7	68.7
SPAN A	100274	4)			67.9	68.7	68.7
SPAN A	100274	5)			67.9	68.8	68.7
SPAN A	100274	6)			67.9	68.8	68.7
SPAN A	100274	7)			67.9	68.8	68.6
SPAN A	100274	8)				68.8	68.7
		MAXIMUM	67.80	69.00	68.10	68.80	68.70
		MINIMUM	67.60	68.50	67.90	68.60	68.60
		AVERAGE	67.70	68.83	67.96	68.74	68.66
		ST.DEV.	.10	.29	.08	.07	.05
				SURFACE AVG. 68.44	BOTTOM AVG. 68.28		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	100274	1)	68.5	69.	68.5	69.3	69.2
SPAN B	100274	2)	68.5	69.2	68.5	69.4	69.3
SPAN B	100274	3)	68.5	69.3	68.5	69.4	69.4
		MAXIMUM	68.50	69.30	68.50	69.40	69.40
		MINIMUM	68.50	69.00	68.50	69.30	69.20
		AVERAGE	68.50	69.17	68.50	69.37	69.30
		ST.DEV.	.00	.15	.00	.06	.10
				SURFACE AVG. 69.02	BOTTOM AVG. 68.90		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	100274	1)	68.9	70.	68.4	68.8	68.8
SPAN C	100274	2)	68.9	70.1	68.5	68.9	69.1
SPAN C	100274	3)	68.9	70.3	68.5	69.	69.4
SPAN C	100274	4)	68.9	70.2	68.7	69.	69.6
SPAN C	100274	5)	68.8	70.1	68.7	69.	69.7
SPAN C	100274	6)	68.7	70.2	69.	69.1	69.9
SPAN C	100274	7)	68.6	70.1	68.9	69.	69.8
SPAN C	100274	8)	68.6	70.	69.	69.1	
SPAN C	100274	9)	68.6				
		MAXIMUM	68.90	70.30	69.00	69.10	69.90
		MINIMUM	68.60	70.00	68.40	68.80	68.80
		AVERAGE	68.77	70.12	68.71	68.99	69.47
		ST.DEV.	.14	.10	.24	.10	.40
				SURFACE AVG. 69.30	BOTTOM AVG. 68.98		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	100274	1)	67.4	68.9	66.7	67.1	66.1
SPAN D	100274	2)	67.4	68.9	66.6	67.2	66.2
SPAN D	100274	3)	67.4	69.	66.9	67.3	
SPAN D	100274	4)	67.7	69.	67.	67.3	
		MAXIMUM	67.70	69.00	67.00	67.30	66.20
		MINIMUM	67.40	68.90	66.60	67.10	66.10
		AVERAGE	67.47	68.95	66.80	67.22	66.15

		ST.DEV.	.15	.06	.18	.10	.07
				SURFACE AVG. 67.44	BOTTOM AVG. 67.24		

DATE - 100274
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 68.47
2) MAXIMUM VALUE 70.30
3) MINIMUM VALUE 66.10
4) SURFACE AVG. 68.55
5) BOTTOM AVG. 68.35
AIR TEMP AVG. 53.
WIND DIRECTION 02.
WIND SPEED 8.8
CLOUD COVER 3.

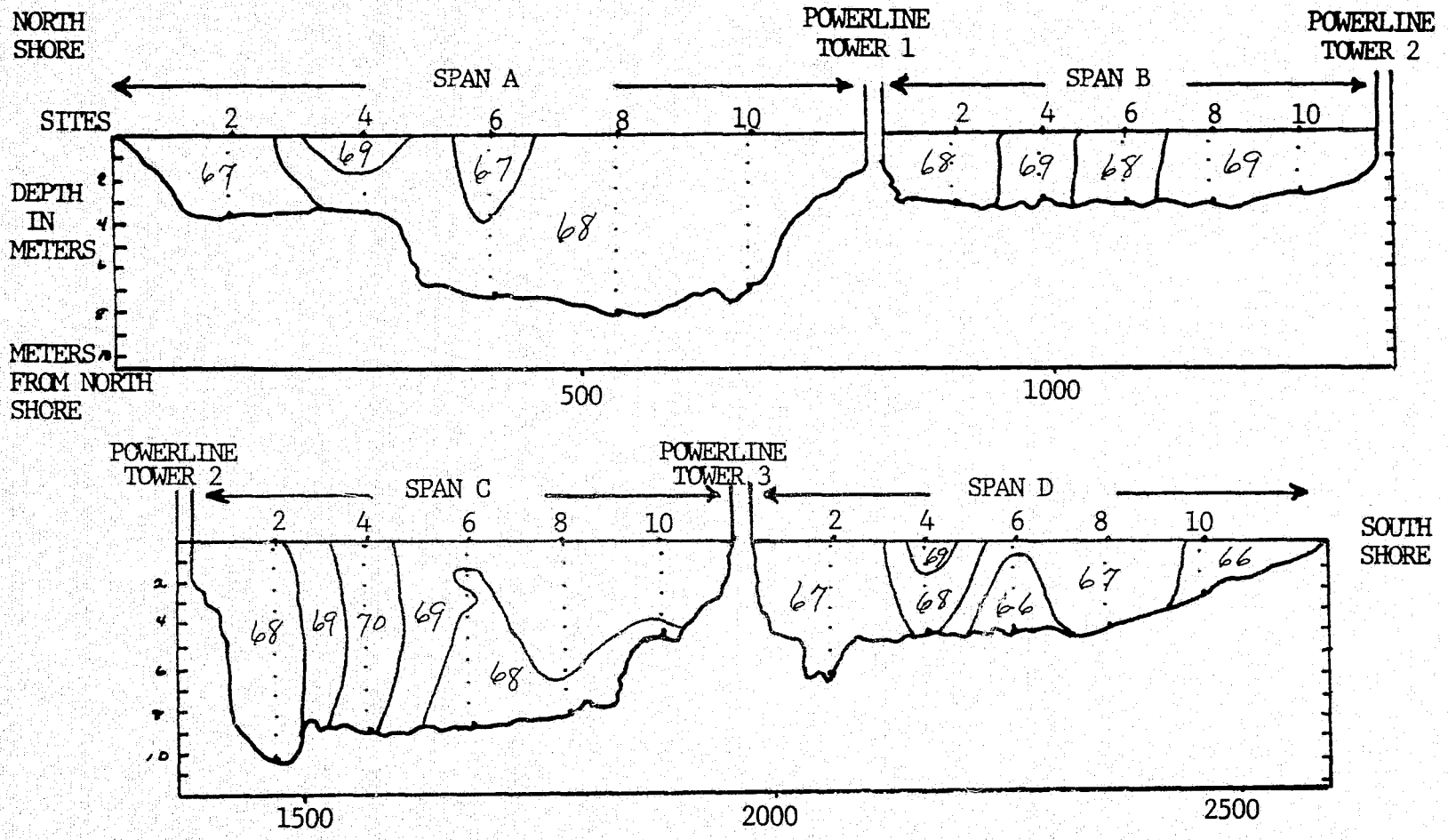

FIGURE 73. RIVER THERMAL PROFILE OF OCTOBER 2, 1974 WITH A FLOW RATE OF 41,550 cf/s, 53°F AIR TEMPERATURE AND 30% CLOUD COVER. REACTOR #1 NOT OPERATING, REACTOR #2 OPERATING AT 140 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	100974	1)	63.3	65.	66.	65.6	65.1
SPAN A	100974	2)	63.4	65.1	66.	65.5	65.2
SPAN A	100974	3)	63.5	65.2	66.	65.6	65.3
SPAN A	100974	4)			66.	65.6	65.2
SPAN A	100974	5)			66.	65.5	65.3
SPAN A	100974	6)			66.	65.5	65.3
SPAN A	100974	7)			66.	65.5	65.3
SPAN A	100974	8)				65.5	65.2
		MAXIMUM	63.50	65.20	66.00	65.60	65.30
		MINIMUM	63.30	65.00	66.00	65.50	65.10
		AVERAGE	63.40	65.10	66.00	65.54	65.24
		ST.DEV.	.10	.10	.00	.05	.07
				SURFACE AVG. 65.08	BOTTOM AVG. 65.00		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	100974	1)	66.2	65.1	66.	66.	66.3
SPAN B	100974	2)	66.3	65.2	66.1	66.	66.4
SPAN B	100974	3)	66.3	65.3	66.1	66.	66.5
		MAXIMUM	66.30	65.30	66.10	66.00	66.50
		MINIMUM	66.20	65.10	66.00	66.00	66.30
		AVERAGE	66.27	65.20	66.07	66.00	66.40
		ST.DEV.	.06	.10	.06	.00	.10
				SURFACE AVG. 66.04	BOTTOM AVG. 65.92		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	100974	1)	65.9	65.3	65.6	65.3	65.6
SPAN C	100974	2)	65.8	65.4	65.6	65.4	65.7
SPAN C	100974	3)	65.7	65.5	65.6	65.6	65.8
SPAN C	100974	4)	65.8	65.5	65.6	65.6	65.7
SPAN C	100974	5)	65.8	65.4	65.6	65.5	
SPAN C	100974	6)	65.9	65.5	65.7	65.6	
SPAN C	100974	7)	65.9	65.4	65.7	65.6	
SPAN C	100974	8)	65.9	65.5	66.	65.8	
		MAXIMUM	65.90	65.50	66.00	65.80	65.80
		MINIMUM	65.70	65.30	65.40	65.30	65.60
		AVERAGE	65.84	65.44	65.67	65.55	65.70
		ST.DEV.	.07	.07	.14	.15	.08
				SURFACE AVG. 65.78	BOTTOM AVG. 65.54		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	100974	1)	65.8	66.	65.	64.4	65.5
SPAN D	100974	2)	65.7	66.	65.	64.4	65.4
SPAN D	100974	3)	65.9	66.	65.	64.5	
SPAN D	100974	4)	65.7	66.	65.	65.	
SPAN D	100974	5)	65.7				
SPAN D	100974	6)	65.7				
		MAXIMUM	65.90	66.00	65.00	65.00	65.50
		MINIMUM	65.70	66.00	65.00	64.40	65.40

		AVERAGE	65.75	66.00	65.00	64.57	65.45
		ST.DEV.	.08	.00	.00	.29	.07
				SURFACE AVG. 65.42	BOTTOM AVG. 65.34		

DATE 100974
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	65.51
2) MAXIMUM VALUE	66.50
3) MINIMUM VALUE	63.30
4) SURFACE AVG.	65.58
5) BOTTOM AVG.	65.45
AIR TEMP AVG.	58.
WIND DIRECTION	31.
WIND SPEED	3.2
CLOUD COVER	3.

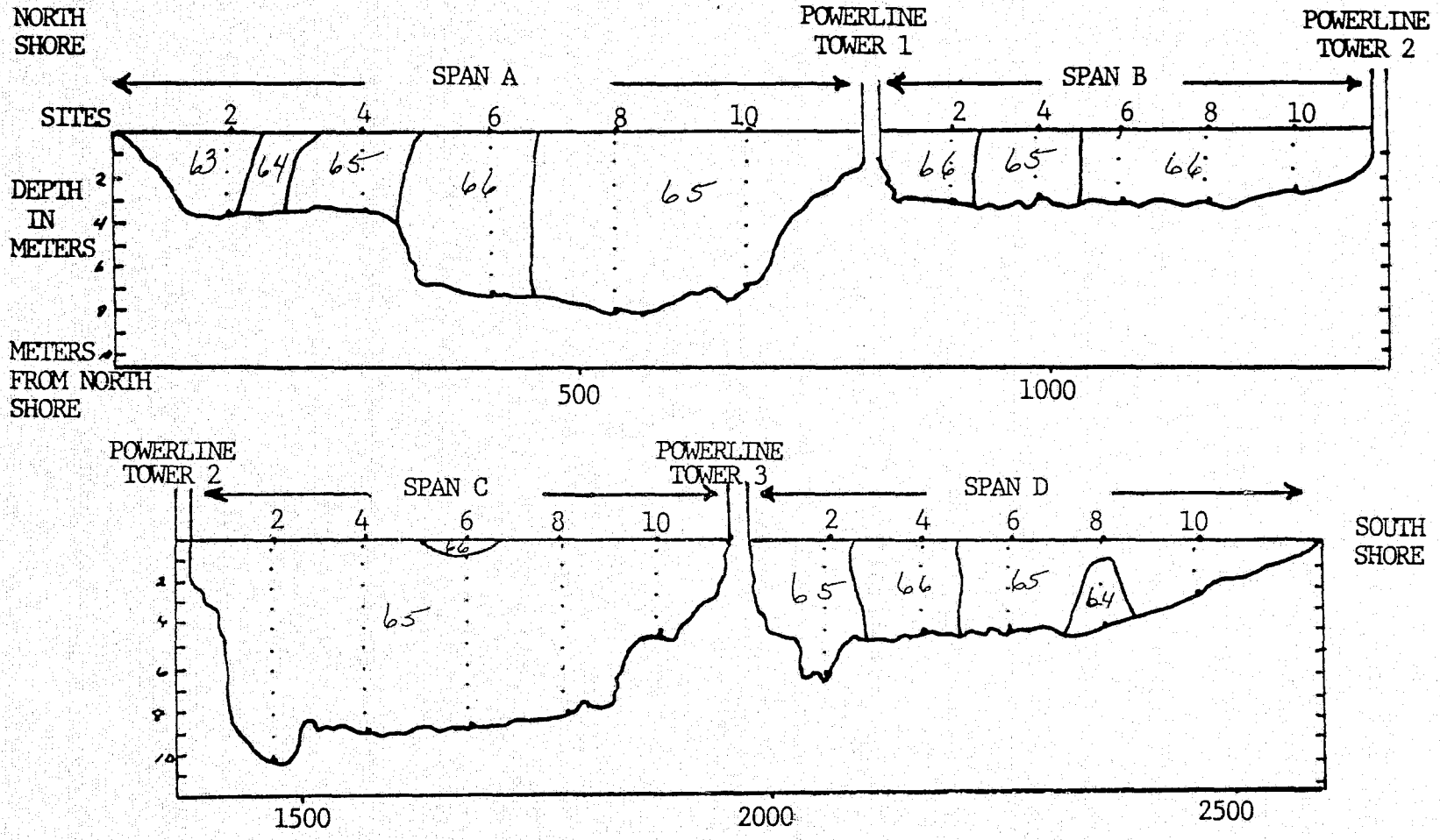

FIGURE 74. RIVER THERMAL PROFILE OF OCTOBER 9, 1974 WITH A 55,414 cf/s FLOW RATE, 58°F AIR TEMPERATURE AND 30% CLOUD COVER. PLANT NOT OPERATING.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	101674	1)	64.3	65.5	66.3	66.3	65.6
SPAN A	101674	2)	64.3	65.7	66.4	66.4	66.6
SPAN A	101674	3)	64.3	65.7	66.6	66.4	66.7
SPAN A	101674	4)			66.6	66.6	65.7
SPAN A	101674	5)			66.5	66.5	66.7
SPAN A	101674	6)			66.6	66.5	66.7
SPAN A	101674	7)			66.4	66.5	66.6
SPAN A	101674	8)				66.5	
		MAXIMUM	64.30	65.70	66.60	66.60	65.70
		MINIMUM	64.30	65.50	66.30	66.30	65.60
		AVERAGE	64.30	65.63	66.49	66.46	65.66
		ST.DEV.	.00	.12	.12	.09	.05
				SURFACE AVG. 65.70	BOTTOM AVG. 65.60		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	101674	1)	65.6	67.	66.	65.7	66.6
SPAN B	101674	2)	65.7	67.	66.	65.8	66.7
SPAN B	101674	3)	65.9	67.1	66.1	65.8	66.9
		MAXIMUM	65.90	67.10	66.10	65.80	66.90
		MINIMUM	65.60	67.00	66.00	65.70	66.60
		AVERAGE	65.73	67.03	66.03	65.77	66.73
		ST.DEV.	.15	.06	.06	.06	.15
				SURFACE AVG. 66.36	BOTTOM AVG. 66.18		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	101674	1)	66.6	66.6	65.4	66.3	66.
SPAN C	101674	2)	66.8	66.7	65.5	66.4	66.
SPAN C	101674	3)	66.8	66.9	65.5	66.4	66.2
SPAN C	101674	4)	66.9	66.9	65.4	66.4	66.2
SPAN C	101674	5)	66.9	66.8	65.4	66.5	66.2
SPAN C	101674	6)	67.1	66.9	65.5	66.5	66.2
SPAN C	101674	7)	66.9	66.9	65.5	66.5	66.1
SPAN C	101674	8)	66.9	67.1	65.5	66.5	
		MAXIMUM	67.10	67.10	65.50	66.50	66.20
		MINIMUM	66.60	66.60	65.40	66.30	66.00
		AVERAGE	66.86	66.85	65.46	66.44	66.13
		ST.DEV.	.14	.15	.05	.07	.10
				SURFACE AVG. 66.42	BOTTOM AVG. 66.18		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	101674	1)	66.6	65.5	65.9	65.3	64.9
SPAN D	101674	2)	66.7	65.5	65.9	65.9	65.1
SPAN D	101674	3)	66.8	65.6	65.9	65.6	
SPAN D	101674	4)	66.8	65.5	65.9	65.6	
SPAN D	101674	5)	66.8				
SPAN D	101674	6)	66.8				
		MAXIMUM	66.80	65.60	65.90	65.60	65.10
		MINIMUM	66.60	65.50	65.90	65.30	64.90

		AVERAGE	66.75	65.52	65.90	65.47	65.00
		ST.DEV.	.08	.05	.00	.15	.14
				SURFACE AVG. 65.78	BOTTOM AVG. 65.69		

DATE 101674
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 66.01
2) MAXIMUM VALUE 67.10
3) MINIMUM VALUE 64.30
4) SURFACE AVG. 66.06
5) BOTTOM AVG. 65.90
AIR TEMP AVG. 54.
WIND DIRECTION 32.
WIND SPEED 8.2
CLOUD COVER 7.

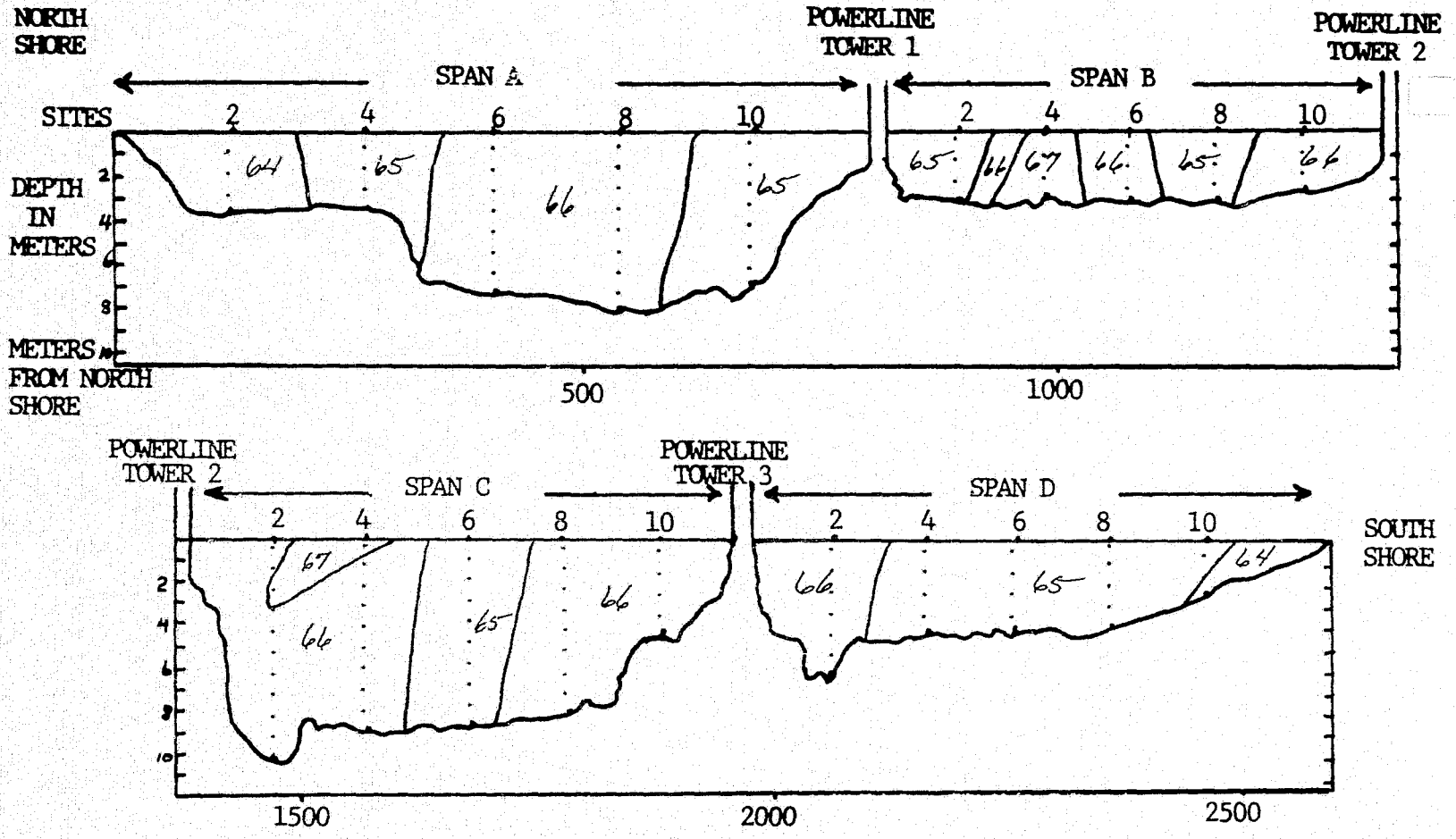

FIGURE 75. RIVER THERMAL PROFILE OF OCTOBER 16, 1974 WITH A 52,362 cf/s FLOW RATE, 54°F AIR TEMPERATURE AND 70% CLOUD COVER. REACTOR #1 IS OPERATING AT 748 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	102374	1)	61.	62.6	62.	62.6	62.5
SPAN A	102374	2)	61.	62.6	62.	62.5	62.5
SPAN A	102374	3)	61.8	62.8	62.	62.5	62.5
SPAN A	102374	4)	61.4		62.	62.4	62.5
SPAN A	102374	5)			62.2	62.3	62.4
SPAN A	102374	6)			62.4	62.2	62.5
SPAN A	102374	7)			62.5	62.7	62.3
		MAXIMUM	61.80	62.80	62.50	62.70	62.50
		MINIMUM	61.00	62.60	62.00	62.20	62.30
		AVERAGE	61.30	62.67	62.16	62.46	62.46
		ST.DEV.	.38	.12	.21	.17	.08
				SURFACE AVG. 62.34	BOTTOM AVG. 62.14		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	102374	1)	64.3	63.	63.3	62.	62.5
SPAN B	102374	2)	64.3	63.	63.3	62.	62.5
SPAN B	102374	3)	64.3	63.	63.3	62.	
		MAXIMUM	64.30	63.00	63.30	62.00	62.50
		MINIMUM	64.30	63.00	63.30	62.00	62.50
		AVERAGE	64.30	63.00	63.30	62.00	62.50
		ST.DEV.	.00	.00	.00	.00	.00
				SURFACE AVG. 63.02	BOTTOM AVG. 63.02		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	102374	1)	62.5	62.5	60.5	62.9	62.5
SPAN C	102374	2)	62.5	62.5	60.5	62.7	62.5
SPAN C	102374	3)	62.5	62.6	60.4	62.6	62.5
SPAN C	102374	4)	62.5	62.6	60.4	62.5	62.5
SPAN C	102374	5)	62.5	62.6	60.5	62.4	62.4
SPAN C	102374	6)	62.3	62.7	60.6	62.5	62.1
SPAN C	102374	7)	62.1	62.9	60.7	62.4	62.4
SPAN C	102374	8)	62.4				
SPAN C	102374	9)	62.5				
		MAXIMUM	62.50	62.90	60.70	62.90	62.50
		MINIMUM	62.10	62.50	60.40	62.40	62.40
		AVERAGE	62.42	62.63	60.51	62.57	62.47
		ST.DEV.	.14	.14	.11	.18	.05
				SURFACE AVG. 62.18	BOTTOM AVG. 62.18		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	102374	1)	61.	62.9	60.7	61.1	59.3
SPAN D	102374	2)	61.	62.8	60.7	61.1	60.6
SPAN D	102374	3)	61.	62.8	61.1	61.3	
SPAN D	102374	4)	61.1	62.8			
SPAN D	102374	5)	62.				
		MAXIMUM	62.00	62.90	61.10	61.30	60.60
		MINIMUM	61.00	62.80	60.70	61.10	59.30
		AVERAGE	61.22	62.82	60.83	61.17	59.95

		ST.DEV.	.44	.05	.23	.12	.92
				SURFACE AVG. 61.56	BOTTOM AVG. 61.00		

DATE 102374

4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 62.14
2) MAXIMUM VALUE 64.30
3) MINIMUM VALUE 59.30
4) SURFACE AVG. 62.27
5) BOTTOM AVG. 62.08

AIR TEMP AVG. 54.
WIND DIRECTION 02.
WIND SPEED 4.8
CLOUD COVER 0.0

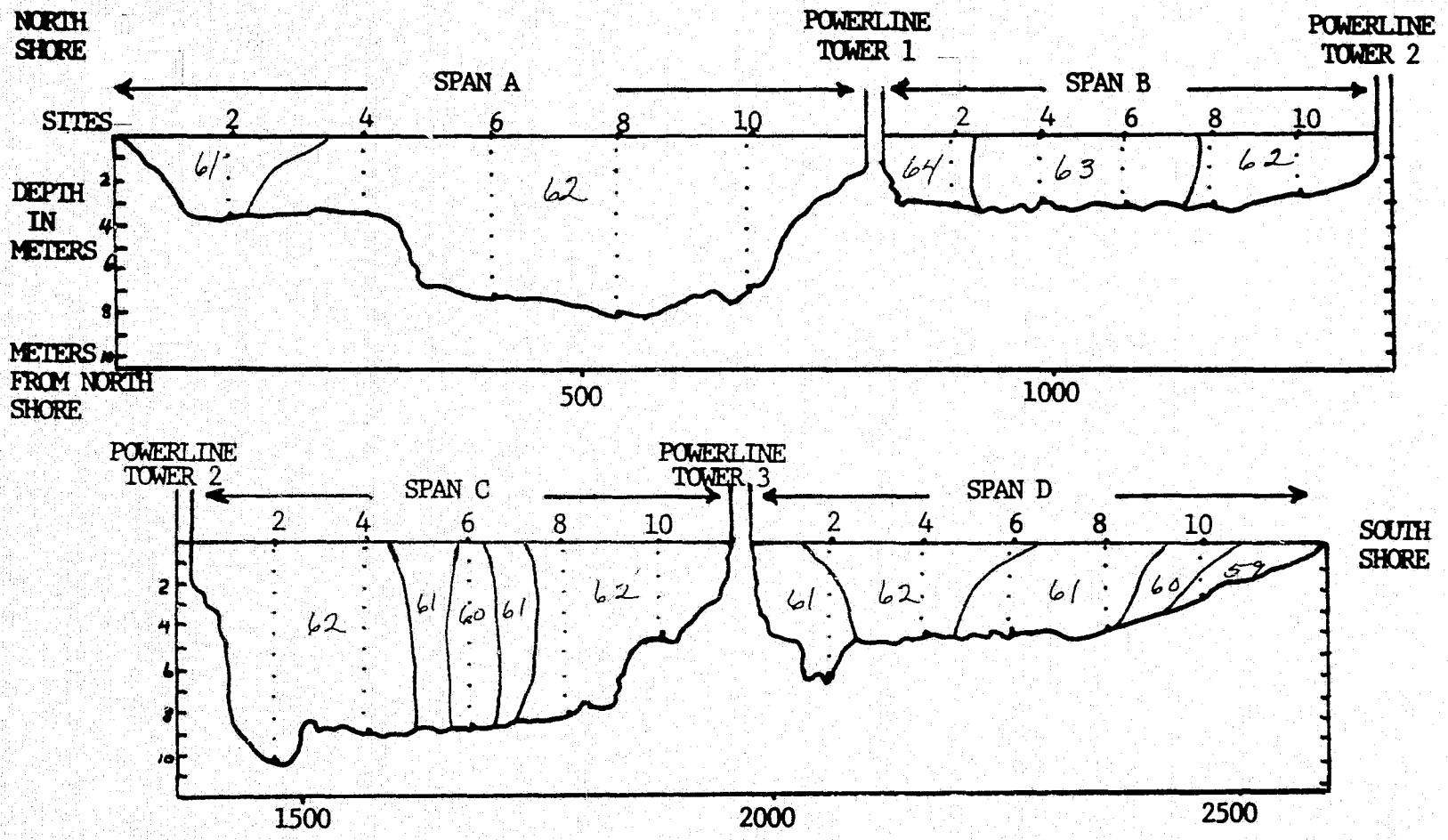

FIGURE 76. RIVER THERMAL PROFILE OF OCTOBER 23, 1974 WITH A 55,994 cf/s FLOW RATE, 54°F AIR TEMPERATURE AND NO CLOUD COVER. REACTOR #1 IS OPERATING AT 1046 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	103074	1)	64.3	64.8	64.9	63.8	64.5
SPAN A	103074	2)	64.6	64.8	65.	63.9	64.7
SPAN A	103074	3)		65.1	65.3	64.4	65.
SPAN A	103074	4)			65.5	64.5	65.3
SPAN A	103074	5)			65.6	64.5	65.4
SPAN A	103074	6)			66.	64.6	65.6
SPAN A	103074	7)			64.9	65.2	64.3
SPAN A	103074	8)				65.9	64.9
		MAXIMUM	64.60	65.10	66.90	65.90	66.90
		MINIMUM	64.30	64.80	64.90	63.80	64.60
		AVERAGE	64.45	64.90	65.60	64.60	65.46
		ST.DEV.	.21	.17	.68	.68	.81
				SURFACE AVG. 65.88	BOTTOM AVG. 64.46		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	103074	1)	66.5	68.6	66.6	66.9	66.1
SPAN B	103074	2)	66.6	68.6	66.9	67.	66.4
SPAN B	103074	3)	66.6	68.6	67.1	67.1	66.5
		MAXIMUM	66.60	68.60	67.10	67.10	66.50
		MINIMUM	66.50	68.60	66.60	66.90	66.10
		AVERAGE	66.57	68.60	66.87	67.00	66.33
		ST.DEV.	.06	.00	.25	.10	.21
				SURFACE AVG. 67.18	BOTTOM AVG. 66.94		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	103074	1)	65.5	64.2	66.7	64.6	64.7
SPAN C	103074	2)	65.6	64.5	66.6	64.6	64.6
SPAN C	103074	3)	3.6	64.6	66.5	64.6	65.1
SPAN C	103074	4)	65.8	64.6	66.5	65.1	65.
SPAN C	103074	5)	66.5	64.7	66.4	65.1	64.9
SPAN C	103074	6)	66.6	64.8	66.4	65.1	64.
SPAN C	103074	7)	66.6	65.4	66.3	65.1	64.
SPAN C	103074	8)	66.6	65.5	66.4	65.2	
SPAN C	103074	9)	66.6				
		MAXIMUM	66.60	65.50	66.70	65.20	65.10
		MINIMUM	65.50	64.20	66.30	64.60	64.00
		AVERAGE	66.16	64.79	66.47	64.92	64.61
		ST.DEV.	.51	.45	.13	.27	.45
				SURFACF AVG. 65.54	BOTTOM AVG. 65.14		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	103074	1)	64.9	65.5	63.9	64.6	63.6
SPAN D	103074	2)	64.8	65.5	63.8	64.6	64.4
SPAN D	103074	3)	64.8	65.5	63.8	64.7	
SPAN D	103074	4)	64.7	65.5	63.8	64.7	
SPAN D	103074	5)	64.6				
SPAN D	103074	6)	64.7				
		MAXIMUM	64.90	65.50	63.90	64.70	64.40
		MINIMUM	64.60	65.50	63.80	64.60	63.60
		AVERAGE	64.75	65.50	63.82	64.65	64.00
		ST.DEV.	.10	.00	.05	.06	.57
				SURFACF AVG. 64.62	BOTTOM AVG. 64.50		

DATE 103074
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 65.50
2) MAXIMUM VALUE 68.60
3) MINIMUM VALUE 63.60
4) SURFACE AVG. 65.80
5) BOTTOM AVG. 65.26

AIR TEMP AVG. 71.
WIND DIRECTION 15.
WIND SPEED 6.3
CLOUD COVER 3.

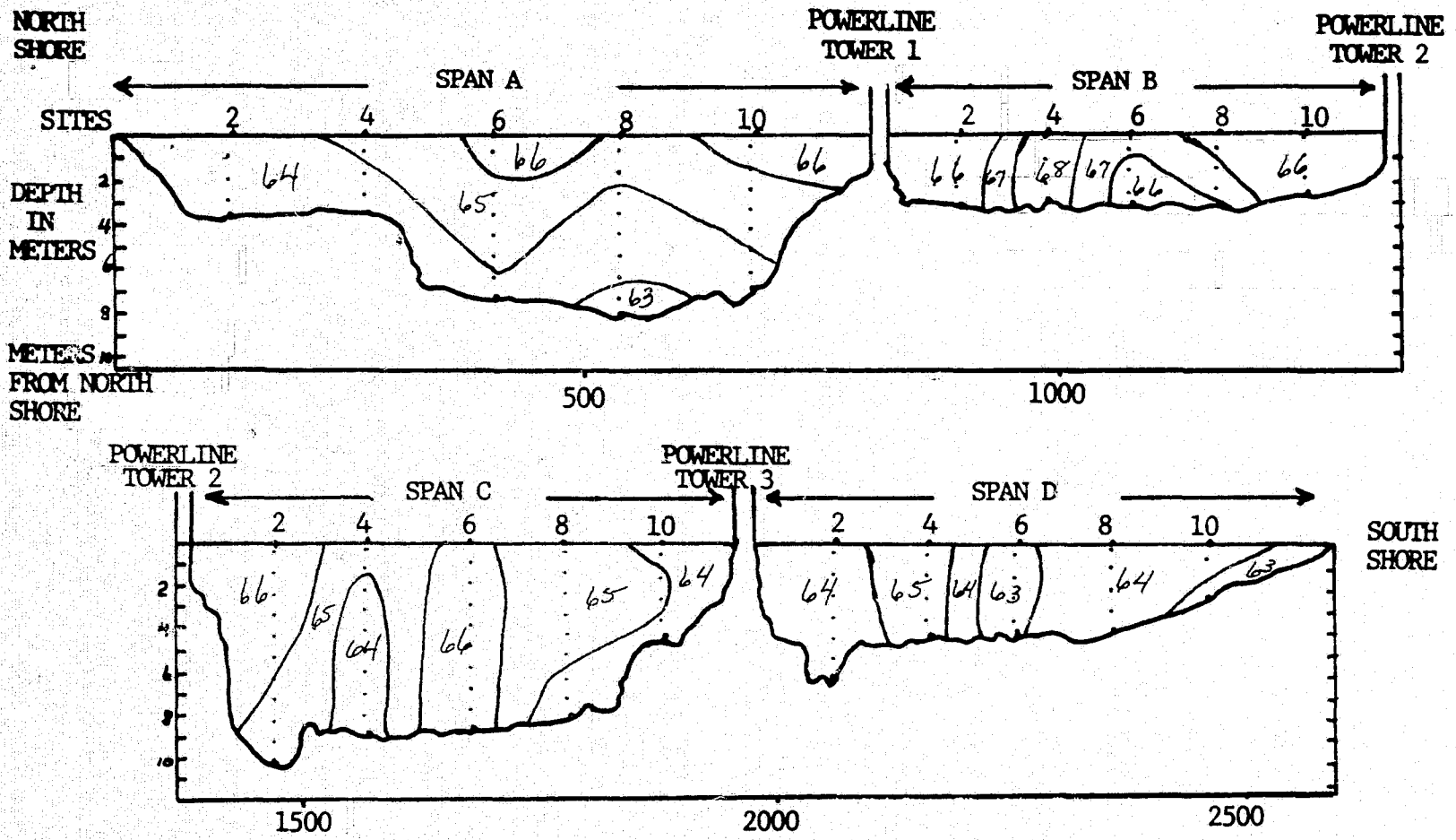

FIGURE 77. RIVER THERMAL PROFILE OF OCTOBER 30, 1974 WITH A 34,686 cf/s FLOW RATE, 71°F AIR TEMPERATURE AND 30% CLOUD COVER. REACTOR #1 IS OPERATING AT 1089 MW. AND REACTOR #2 AT 292 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	110674	1)	67.	65.6	65.8	65.	63.8
SPAN A	110674	2)	67.	65.6	65.7	64.9	63.6
SPAN A	110674	3)	67.7	66.1	65.6	64.8	63.6
SPAN A	110674	4)			65.5	64.7	63.5
SPAN A	110674	5)			65.5	64.7	63.5
SPAN A	110674	6)			65.9	64.8	63.5
SPAN A	110674	7)			67.6	65.4	
SPAN A	110674	8)				66.4	
		MAXIMUM	67.70	66.10	67.60	66.40	63.80
		MINIMUM	67.00	65.60	65.50	64.70	63.50
		AVERAGE	67.23	65.77	65.94	65.09	63.58
		ST.DEV.	.40	.29	.75	.58	.12
				SURFACE AVG. 66.26	BOTTOM AVG. 65.44		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	110674	1)	65.5	65.5	65.3	65.	65.9
SPAN B	110674	2)	65.4	65.5	65.3	65.	66.8
SPAN B	110674	3)	65.4	65.5	65.3	65.	66.3
		MAXIMUM	65.50	65.50	65.30	65.00	66.30
		MINIMUM	65.40	65.50	65.30	65.00	65.80
		AVERAGE	65.43	65.50	65.30	65.00	66.00
		ST.DEV.	.06	.00	.00	.00	.26
				SURFACE AVG. 65.50	BOTTOM AVG. 65.44		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	110674	1)			64.1	63.9	66.3
SPAN C	110674	2)	65.8	65.	64.1	63.7	65.1
SPAN C	110674	3)	65.8	65.	64.1	63.7	66.1
SPAN C	110674	4)	65.7	64.9	64.	63.7	65.1
SPAN C	110674	5)	65.5	64.9	64.	63.5	65.
SPAN C	110674	6)	65.4	64.9	64.	63.5	66.
SPAN C	110674	7)	65.2	64.8	64.2	63.5	65.7
SPAN C	110674	8)	65.2	64.9	65.	64.8	
SPAN C	110674	9)	65.1				
		MAXIMUM	65.80	65.00	65.00	64.80	65.70
		MINIMUM	65.10	64.80	64.00	63.50	65.00
		AVERAGE	65.46	64.91	64.19	63.79	65.19
		ST.DEV.	.28	.07	.34	.43	.25
				SURFACE AVG. 65.18	BOTTOM AVG. 64.43		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	110674	1)	63.2	63.3	62.4	63.7	63.
SPAN D	110674	2)	63.2	63.2	62.3	63.6	63.
SPAN D	110674	3)	63.3	63.4	62.4	63.6	
SPAN D	110674	4)	63.2	63.6		63.6	
SPAN D	110674	5)	63.2				
SPAN D	110674	6)	63.3				
		MAXIMUM	63.30	63.60	62.40	63.70	63.00
		MINIMUM	63.20	63.20	62.30	63.60	63.00
		AVERAGE	63.23	63.37	62.37	63.62	63.00
		ST.DEV.	.05	.17	.06	.05	.00
				SURFACE AVG. 63.18	BOTTOM AVG. 63.12		

DATE 110674
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 64.70
2) MAXIMUM VALUE 67.70
3) MINIMUM VALUE 62.30
4) SURFACE AVG. 65.01
5) BOTTOM AVG. 64.63

AIR TEMP AVG. 50.
WIND DIRECTION 33.
WIND SPEED 6.8
CLOUD COVER 1.

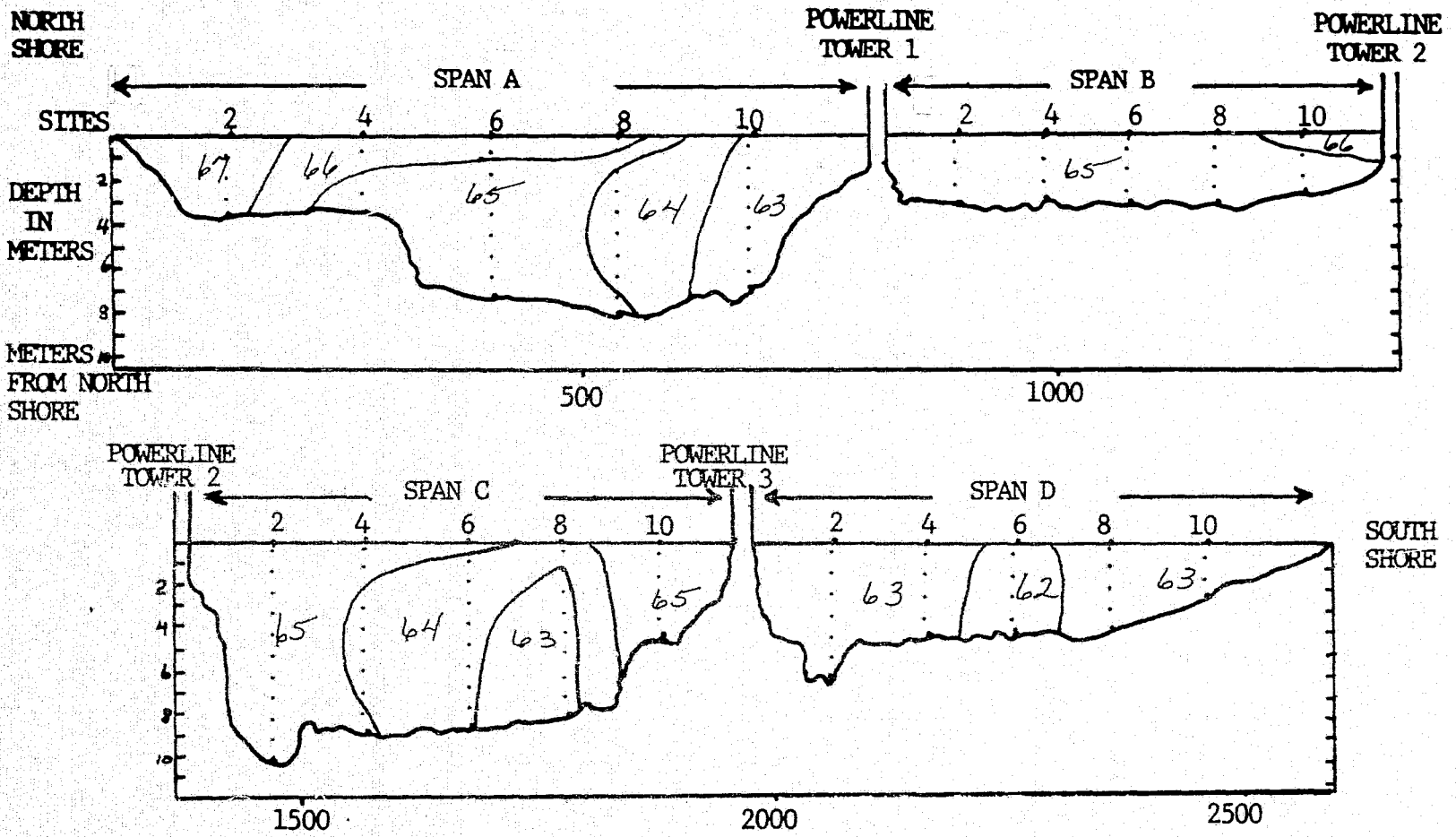

FIGURE 78. RIVER THERMAL PROFILE OF NOVEMBER 6, 1974 WITH A 32,398 cf/s FLOW RATE, 50°F AIR TEMPERATURE AND 10% CLOUD COVER. REACTOR #1 IS OPERATING AT 1030 MW and REACTOR #3 at 430 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	111374	1)	58.7	60.5	59.5	59.2	58.9
SPAN A	111374	2)	58.6	60.4	59.5	59.1	58.9
SPAN A	111374	3)	58.5	60.4	59.5	59.1	58.9
SPAN A	111374	4)			59.5	59.1	58.9
SPAN A	111374	5)			59.5	59.	58.9
SPAN A	111374	6)			59.5	58.9	58.9
SPAN A	111374	7)			59.5	58.9	58.7
SPAN A	111374	8)				58.9	
		MAXIMUM	58.70	60.50	59.50	59.20	58.90
		MINIMUM	58.50	60.40	59.50	58.90	58.70
		AVERAGE	58.60	60.43	59.50	59.02	58.87
		ST.DEV.	.10	.06	.00	.12	.08

SURFACE AVG. 59.20 BOTTOM AVG. 59.36

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	111374	1)	59.1	59.	59.7	59.1	58.8
SPAN B	111374	2)	59.1	59.	59.6	59.	58.8
SPAN B	111374	3)	59.1	59.1	59.6	59.	
		MAXIMUM	59.10	59.10	59.70	59.10	58.80
		MINIMUM	59.10	59.00	59.60	59.00	58.80
		AVERAGE	59.10	59.03	59.63	59.03	58.80
		ST.DEV.	.00	.06	.06	.06	.00

SURFACE AVG. 59.12 BOTTOM AVG. 59.14

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	111374	1)	59.8	56.9	58.3	57.5	57.2
SPAN C	111374	2)	59.7	57.	58.2	57.5	57.1
SPAN C	111374	3)	59.7	57.1	58.3	57.5	57.1
SPAN C	111374	4)	59.6	57.6	58.4	57.5	57.1
SPAN C	111374	5)	59.5	57.9	58.6	57.7	57.
SPAN C	111374	6)	59.5	57.9	58.8	58.2	57.1
SPAN C	111374	7)	59.4	58.	58.9	58.3	57.1
SPAN C	111374	8)	59.4	58.1	59.	58.4	
		MAXIMUM	59.80	58.10	59.00	58.40	57.20
		MINIMUM	59.40	56.90	58.20	57.50	57.00
		AVERAGE	59.57	57.56	58.56	57.82	57.10
		ST.DEV.	.15	.49	.31	.40	.06

SURFACE AVG. 58.46 BOTTOM AVG. 57.94

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	111374	1)	57.3	57.2	56.4	54.7	54.3
SPAN D	111374	2)	57.2	57.2	56.3	54.9	54.4
SPAN D	111374	3)	57.2	57.2	56.4	55.3	
SPAN D	111374	4)	57.2			55.3	
SPAN D	111374	5)	57.1				
SPAN D	111374	6)	57.1				
		MAXIMUM	57.30	57.20	56.40	55.30	54.40
		MINIMUM	57.10	57.20	56.30	54.70	54.30

	AVERAGE	57.18	57.20	56.37	55.05	54.35
	ST.DEV.	.08	.00	.06	.30	.07

SURFACE AVG. 56.08 BOTTOM AVG. 55.98

DATE 111374
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 58.14
2) MAXIMUM VALUE 60.50
3) MINIMUM VALUE 54.30
4) SURFACE AVG. 58.20
5) BOTTOM AVG. 58.10
AIR TEMP AVG. 47.
WIND DIRECTION 20.
WIND SPEED 8.6
CLOUD COVER 5.

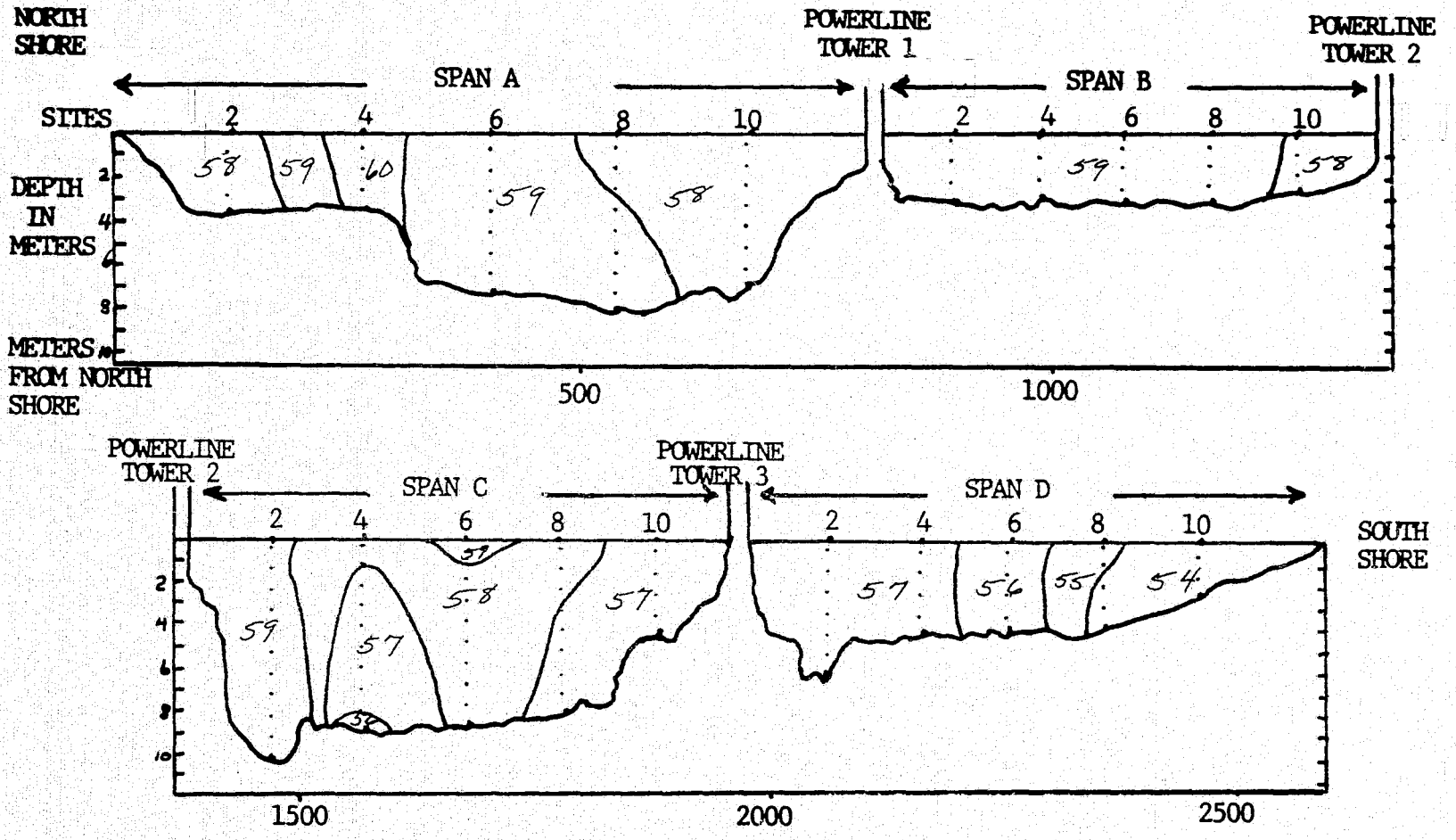

FIGURE 79. RIVER THERMAL PROFILE OF NOVEMBER 13, 1974 WITH A 32,398 cf/s FLOW RATE, 50°F AIR TEMPERATURE AND 10% CLOUD COVER. REACTOR #1 OPERATING AT 1030 MW, REACTOR #2 AT 430 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	120674	1)	46.	47.3	46.8	47.8	48.6
SPAN A	120674	2)	45.8	47.2	46.7	47.8	48.6
SPAN A	120674	3)		47.3	46.7	47.8	48.5
SPAN A	120674	4)			46.7	47.7	48.6
SPAN A	120674	5)			46.6	47.6	48.5
SPAN A	120674	6)			46.5	47.6	48.5
SPAN A	120674	7)			46.4	47.5	48.4
SPAN A	120674	8)				47.4	
		MAXIMUM	46.00	47.30	46.80	47.80	48.60
		MINIMUM	45.80	47.20	46.40	47.40	48.40
		AVERAGE	45.90	47.27	46.63	47.65	48.53
		ST.DEV.	.14	.06	.14	.15	.08
				SURFACE AVG. 47.06	BOTTOM AVG. 47.30		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	120674	1)	49.1	48.4	49.	48.3	49.1
SPAN B	120674	2)	49.1	48.3	49.1	48.2	49.
SPAN B	120674	3)	49.2		49.2	48.1	
		MAXIMUM	49.20	48.40	49.20	48.30	49.10
		MINIMUM	49.10	48.30	49.00	48.10	49.00
		AVERAGE	49.13	48.35	49.10	48.20	49.05
		ST.DEV.	.06	.07	.10	.10	.07
				SURFACE AVG. 48.76	BOTTOM AVG. 48.78		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	120674	1)	48.7	47.5	47.6	48.4	46.6
SPAN C	120674	2)	48.7	47.8	47.7	48.4	46.8
SPAN C	120674	3)	48.8	47.8	47.8	48.4	46.9
SPAN C	120674	4)	48.8	47.8	47.9	48.5	47.
SPAN C	120674	5)	48.8	47.8	47.9	48.5	
SPAN C	120674	6)	48.7	47.8	48.	48.5	
SPAN C	120674	7)	48.7	47.7	47.8	48.5	
SPAN C	120674	8)	48.7	47.7	47.9	48.1	
SPAN C	120674	9)	48.7				
		MAXIMUM	48.80	47.80	48.00	48.50	47.00
		MINIMUM	48.70	47.50	47.60	48.10	46.60
		AVERAGE	48.73	47.74	47.82	48.41	46.82
		ST.DEV.	.05	.11	.13	.14	.17
				SURFACE AVG. 47.88	BOTTOM AVG. 47.76		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	120674	1)	46.8	48.	47.	46.2	44.
SPAN D	120674	2)	46.9	48.	47.	46.4	44.
SPAN D	120674	3)	46.9	48.	47.	46.5	
SPAN D	120674	4)	46.9	48.			
SPAN D	120674	5)	46.9				
		MAXIMUM	46.90	48.00	47.00	46.50	44.00
		MINIMUM	46.80	48.00	47.00	46.20	44.00
		AVERAGE	46.88	48.00	47.00	46.37	44.00
		ST.DEV.	.04	.00	.00	.15	.00
				SURFACE AVG. 46.48	BOTTOM AVG. 46.40		

DATE 120674
4 SPANS CALCULATED, THE RESULTS ARE:

1)	AVERAGE TEMP.	47.58
2)	MAXIMUM VALUE	49.20
3)	MINIMUM VALUE	44.00
4)	SURFACE AVG.	47.54
5)	BOTTOM AVG.	47.56
	AIR TEMP AVG.	42.
	WIND DIRECTION	12.
	WIND SPEED	9.1
	CLOUD COVER	10.

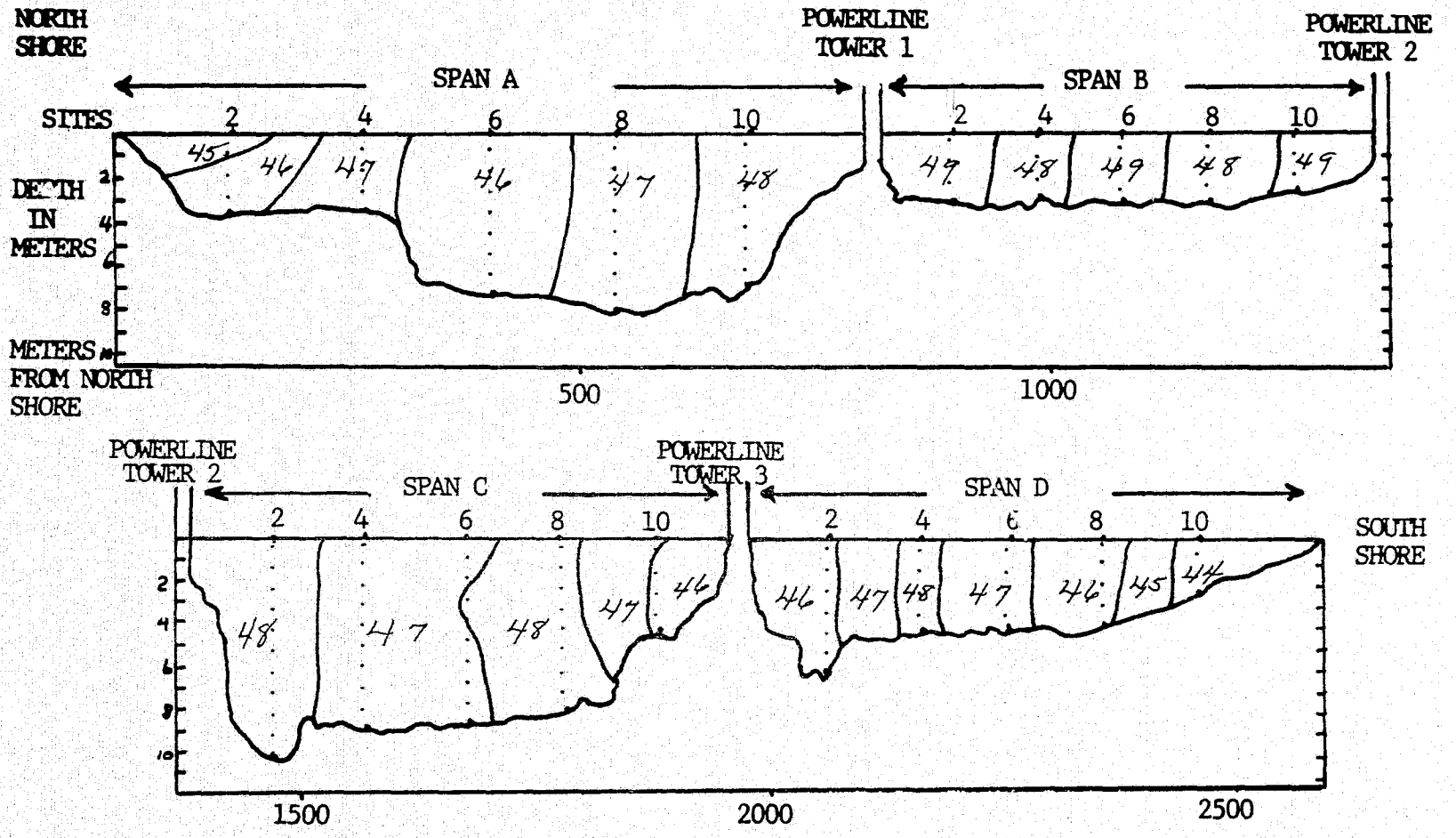

FIGURE 80. RIVER TEMPERATURE PROFILE OF DECEMBER 6, 1974 WITH A 57,536 cf/s FLOW RATE, 42°F AIR TEMPERATURE AND 100% CLOUD COVER. REACTOR #1 IS OPERATING AT 1070 MW, REACTOR #2 IS NOT OPERATIONAL.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	121174	1)	43.9	46.9	46.3	45.8	47.4
SPAN A	121174	2)	43.7	46.8	46.2	45.8	47.3
SPAN A	121174	3)		46.7	46.2	45.7	47.3
SPAN A	121174	4)			46.	45.7	47.3
SPAN A	121174	5)			45.9	45.6	47.2
SPAN A	121174	6)			45.7	45.6	47.2
SPAN A	121174	7)			45.6	45.5	47.1
SPAN A	121174	8)				45.5	47.
		MAXIMUM	43.90	46.90	46.30	45.80	47.40
		MINIMUM	43.70	46.70	45.60	45.50	47.00
		AVERAGE	43.80	46.80	45.99	45.65	47.22
		ST.DEV.	.14	.10	.27	.12	.13

SURFACE AVG. 45.70 BOTTOM AVG. 46.06

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	121174	1)	47.6	48.2	47.5	48.6	47.
SPAN B	121174	2)	47.6	48.3	47.6	48.7	47.
SPAN B	121174	3)		48.1	47.4	48.8	
		MAXIMUM	47.60	48.30	47.60	48.80	47.00
		MINIMUM	47.60	48.10	47.40	48.60	47.00
		AVERAGE	47.60	48.20	47.50	48.70	47.00
		ST.DEV.	.00	.10	.10	.10	.00

SURFACE AVG. 47.78 BOTTOM AVG. 47.78

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	121174	1)	48.1	47.6	46.3	46.9	46.5
SPAN C	121174	2)	48.2	47.6	46.3	46.8	46.4
SPAN C	121174	3)	48.2	47.5	46.3	46.8	46.5
SPAN C	121174	4)	48.2	47.5	46.3	46.7	46.5
SPAN C	121174	5)	48.2	47.4	46.3	46.7	46.4
SPAN C	121174	6)	48.2	47.4	46.3	46.6	46.4
SPAN C	121174	7)	47.9	47.3	46.1	46.5	46.4
SPAN C	121174	8)	47.8	47.3	46.2	46.2	
		MAXIMUM	48.20	47.60	46.30	46.90	46.50
		MINIMUM	47.80	47.30	46.10	46.20	46.40
		AVERAGE	48.10	47.45	46.26	46.65	46.44
		ST.DEV.	.16	.12	.07	.22	.05

SURFACE AVG. 46.76 BOTTOM AVG. 47.08

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	121174	1)	46.6	44.6	46.	44.6	44.6
SPAN D	121174	2)	46.6	44.6	46.1	44.6	44.5
SPAN D	121174	3)	46.6	44.6	46.1	44.6	
SPAN D	121174	4)	46.7				
		MAXIMUM	46.70	44.60	46.10	44.60	44.60
		MINIMUM	46.60	44.60	46.00	44.60	44.50
		AVERAGE	46.62	44.60	46.07	44.60	44.55
		ST.DEV.	.05	.00	.06	.00	.07

SURFACE AVG. 45.30 BOTTOM AVG. 45.28

DATE 121174
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	46.49
2) MAXIMUM VALUE	48.80
3) MINIMUM VALUE	43.70
4) SURFACE AVG.	46.39
5) BOTTOM AVG.	46.55
AIR TEMP AVG.	42.
WIND DIRECTION	14.
WIND SPEED	7.2
CLOUD COVER	10.

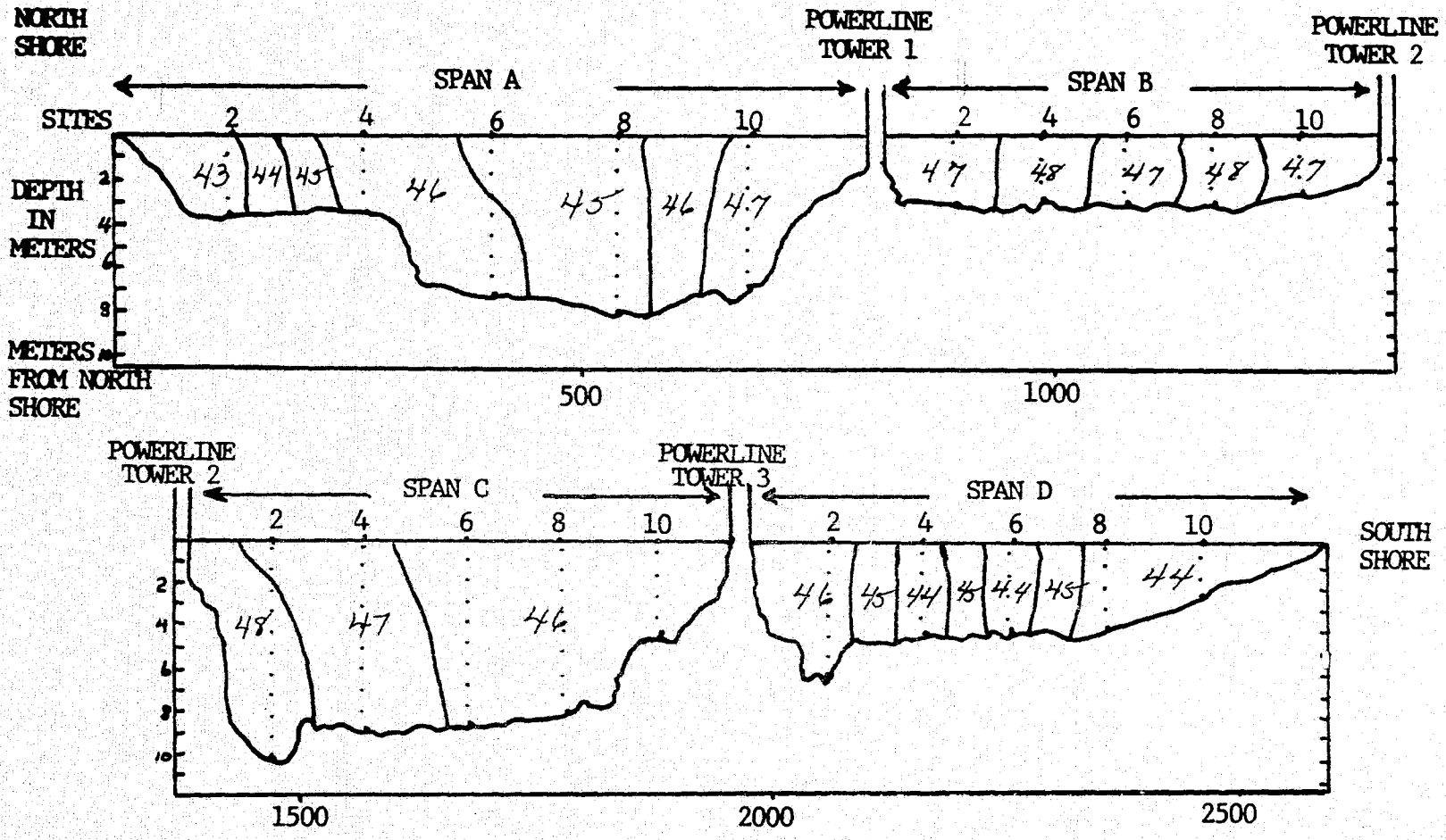

FIGURE 81. RIVER THERMAL PROFILE OF DECEMBER 11, 1974 WITH A 58,022 cf/s FLOW RATE, 42°F AIR TEMPERATURE AND 100% CLOUD COVER. REACTOR #1 IS OPERATING AT 1077 MW AND REACTOR #2 AT 610 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	121874	1)	42.5	43.2	42.4	44.	46.4
SPAN A	121874	2)	42.5	43.1	42.4	44.1	46.3
SPAN A	121874	3)	42.3	43.6	42.4	44.1	46.4
SPAN A	121874	4)			42.4	44.	46.3
SPAN A	121874	5)			42.4	44.	46.3
SPAN A	121874	6)			42.4	44.	46.3
SPAN A	121874	7)			42.3	43.9	46.3
SPAN A	121874	8)			42.4	43.9	
		MAXIMUM	42.50	43.60	42.40	44.10	46.40
		MINIMUM	42.30	43.10	42.30	43.90	46.30
		AVERAGE	42.43	43.30	42.39	44.00	46.33
		ST.DEV.	.12	.26	.04	.08	.05
				SURFACE AVG. 43.70	BOTTOM AVG. 43.70		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	121874	1)	47.5	46.9	48.1	47.9	47.2
SPAN B	121874	2)	47.5	46.9	48.1	47.8	47.2
		MAXIMUM	47.50	46.90	48.10	47.90	47.20
		MINIMUM	47.50	46.90	48.10	47.80	47.20
		AVERAGE	47.50	46.90	48.10	47.85	47.20
		ST.DEV.	.00	.00	.00	.07	.00
				SURFACE AVG. 47.50	BOTTOM AVG. 47.52		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	121874	1)	46.7	46.9	47.4	44.7	46.
SPAN C	121874	2)	46.8	47.2	47.5	44.7	46.
SPAN C	121874	3)	46.8	47.4	47.5	45.	46.
SPAN C	121874	4)	46.8	47.3	47.5	45.	45.9
SPAN C	121874	5)	46.8	47.4	47.5	45.2	45.7
SPAN C	121874	6)	46.9	47.5	47.5	45.3	45.7
SPAN C	121874	7)	46.8	47.5	47.5	45.4	45.5
SPAN C	121874	8)	46.8				
		MAXIMUM	46.90	47.50	47.50	45.40	46.00
		MINIMUM	46.70	46.90	47.40	44.70	45.50
		AVERAGE	46.80	47.31	47.49	45.04	45.83
		ST.DEV.	.05	.21	.04	.28	.20
				SURFACE AVG. 46.54	BOTTOM AVG. 46.34		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	121874	1)	43.8	43.7	43.2	42.	43.6
SPAN D	121874	2)	43.7	43.6	43.3	42.	43.6
SPAN D	121874	3)	43.7	43.6	43.3	42.	43.6
		MAXIMUM	43.80	43.70	43.30	42.00	43.60
		MINIMUM	43.70	43.60	43.20	42.00	43.60
		AVERAGE	43.73	43.63	43.27	42.00	43.60
		ST.DEV.	.06	.06	.06	.00	.00
				SURFACE AVG. 43.24	BOTTOM AVG. 43.26		

DATE 121874
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	45.24
2) MAXIMUM VALUE	48.10
3) MINIMUM VALUE	42.00
4) SURFACE AVG.	45.24
5) BOTTOM AVG.	45.20
AIR TEMP AVG.	35.
WIND DIRECTION	15.
WIND SPEED	8.6
CLOUD COVER	5.

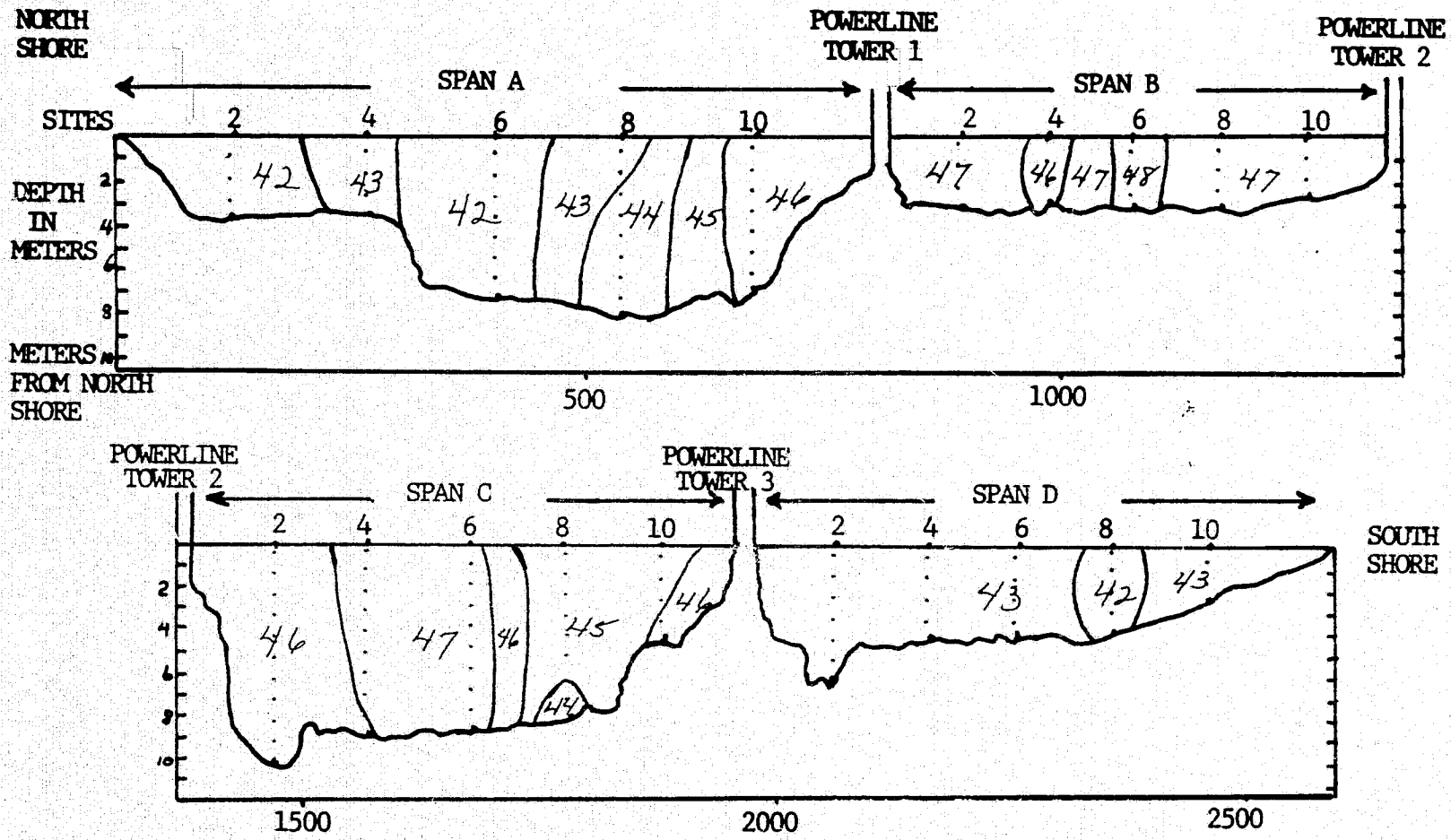

FIGURE 82. RIVER THERMAL PROFILE OF DECEMBER 18, 1974 WITH A FLOW RATE OF 55,544 cf/s, 35°F AIR TEMPERATURE AND 50% CLOUD COVER. REACTOR #1 IS OPERATING AT 1092 MW AND REACTOR #2 AT 1045 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	011575	1)	43.3	44.1	44.1	45.1	46.8
SPAN A	011575	2)	43.3	43.9	44.1	45.2	46.7
SPAN A	011575	3)		43.9	44.2	45.2	46.7
SPAN A	011575	4)			44.2	45.1	46.7
SPAN A	011575	5)			44.1	45.	46.7
SPAN A	011575	6)			44.2	45.	46.5
SPAN A	011575	7)			44.1	44.8	46.5
SPAN A	011575	8)				44.8	
		MAXIMUM	43.30	44.10	44.20	45.20	46.80
		MINIMUM	43.30	43.90	44.10	44.80	46.50
		AVERAGE	43.30	43.97	44.14	45.02	46.66
		ST.DEV.	.00	.12	.05	.16	.11
				SURFACE AVG. 44.52	BOTTOM AVG. 44.68		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	011575	1)	46.3	47.4	47.2	46.5	47.5
SPAN B	011575	2)	46.2	47.4	47.2	46.4	47.5
SPAN B	011575	3)	46.1	47.4	47.3	46.5	47.5
		MAXIMUM	46.30	47.40	47.30	46.50	47.50
		MINIMUM	46.10	47.40	47.20	46.40	47.50
		AVERAGE	46.20	47.40	47.23	46.47	47.50
		ST.DEV.	.10	.00	.06	.06	.00
				SURFACE AVG. 46.96	BOTTOM AVG. 46.98		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	011575	1)	46.6	48.5	46.	46.7	45.4
SPAN C	011575	2)	46.6	48.1	46.1	46.3	45.4
SPAN C	011575	3)	46.6	48.1	46.2	46.3	45.4
SPAN C	011575	4)	46.4	47.9	46.3	46.3	45.4
SPAN C	011575	5)	46.3	47.7	46.3	46.	45.2
SPAN C	011575	6)	46.2	47.7	46.1	45.3	45.2
SPAN C	011575	7)	45.9	47.5	46.2	45.3	45.
SPAN C	011575	8)	45.7	47.5		45.3	
SPAN C	011575	9)	45.6				
SPAN C	011575	10)	45.7				
		MAXIMUM	46.60	48.50	46.30	46.70	45.40
		MINIMUM	45.60	47.50	46.00	45.30	45.00
		AVERAGE	46.16	47.87	46.17	45.94	45.29
		ST.DEV.	.40	.35	.11	.56	.16
				SURFACE AVG. 45.94	BOTTOM AVG. 46.64		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	011575	1)	45.1	45.4	44.5	43.9	43.8
SPAN D	011575	2)	45.2	45.5	44.4	43.9	43.8
SPAN D	011575	3)	45.2	45.5	44.4	43.9	43.8
SPAN D	011575	4)	45.2	45.5	44.4	43.9	
SPAN D	011575	5)	45.1				
SPAN D	011575	6)	45.1				
		MAXIMUM	45.20	45.50	44.50	43.90	43.80
		MINIMUM	45.10	45.40	44.40	43.90	43.80
		AVERAGE	45.15	45.47	44.42	43.90	43.80
		ST.DEV.	.05	.05	.05	.00	.00
				SURFACE AVG. 44.54	BOTTOM AVG. 44.54		

DATE 011575
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 45.60
2) MAXIMUM VALUE 48.50
3) MINIMUM VALUE 43.30
4) SURFACE AVG. 45.49
5) BOTTOM AVG. 45.71
AIR TEMP AVG. 37.
WIND DIRECTION 11.
WIND SPEED 5.8
CLOUD COVER 3.

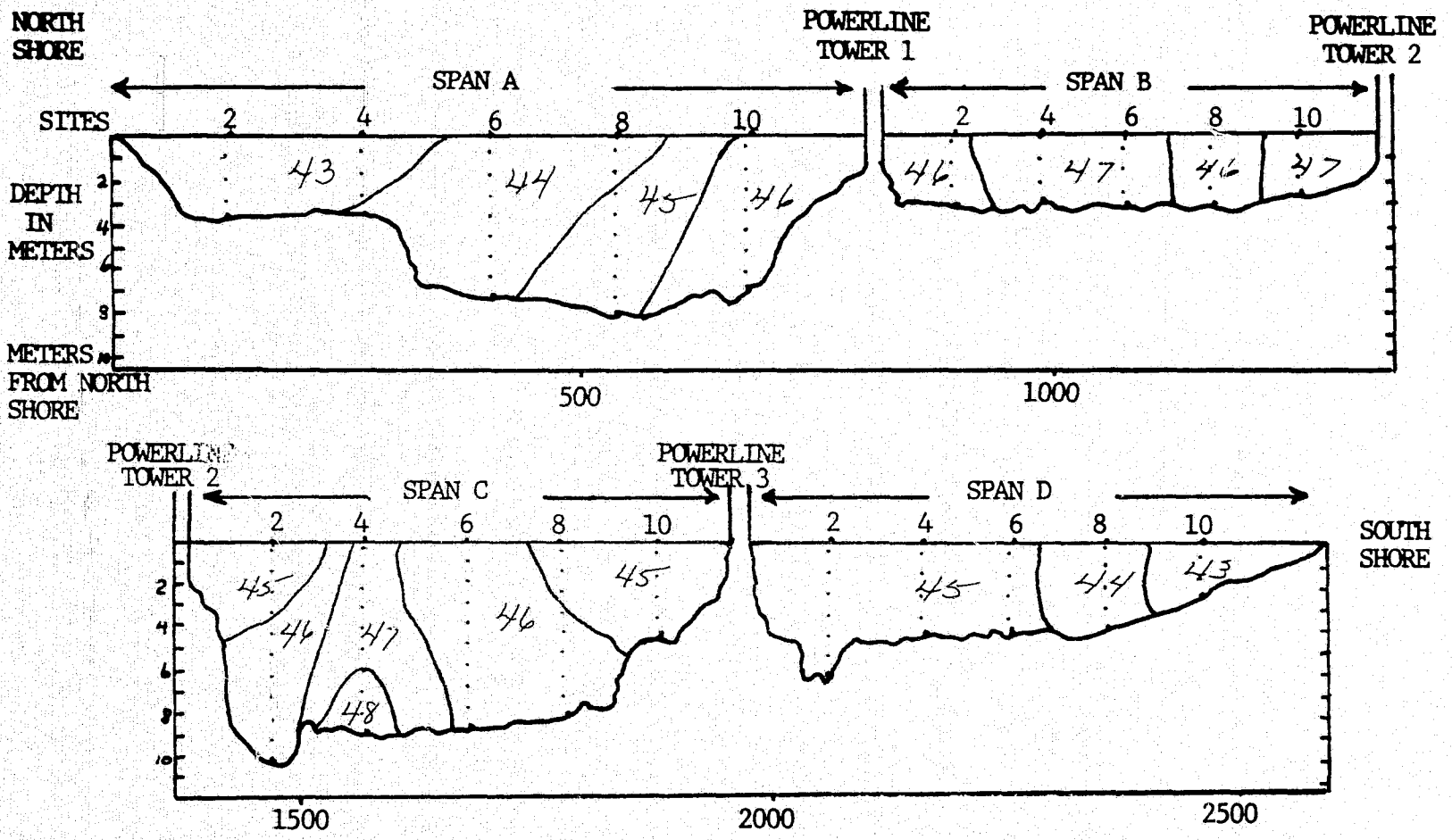

FIGURE 83. RIVER THERMAL PROFILE OF JANUARY 15, 1975 WITH A 101,506 cf/s FLOW RATE, 37°F AIR TEMPERATURE AND 30% CLOUD COVER. REACTOR #1 IS OPERATING AT 1043 MW AND REACTOR #2 AT 930 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	012975	1)	50.5	50.3	49.6	48.7	48.3
SPAN A	012975	2)	50.5	50.3	49.7	48.8	48.2
SPAN A	012975	3)		50.4	49.6	48.8	48.3
SPAN A	012975	4)			49.6	48.9	48.3
SPAN A	012975	5)			49.6	48.9	48.
SPAN A	012975	6)			49.6	48.6	48.
SPAN A	012975	7)			49.4	48.9	48.
SPAN A	012975	8)				49.	
		MAXIMUM	50.50	50.40	49.70	49.00	48.30
		MINIMUM	50.50	50.30	49.40	48.60	48.00
		AVERAGE	50.50	50.33	49.59	48.82	48.16
		ST.DEV.	.00	.06	.09	.13	.15
				SURFACE AVG. 49.46	BOTTOM AVG. 49.48		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	012975	1)	50.	48.5	49.6	48.9	49.
SPAN B	012975	2)	49.8	48.7	49.7	48.7	49.3
SPAN B	012975	3)	50.	48.6	49.8	48.7	
		MAXIMUM	50.00	48.70	49.80	48.90	49.30
		MINIMUM	49.80	48.50	49.60	48.70	49.00
		AVERAGE	49.93	48.60	49.70	48.77	49.15
		ST.DEV.	.12	.10	.10	.12	.21
				SURFACE AVG. 49.28	BOTTOM AVG. 49.20		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	012975	1)	48.9	49.	47.7	46.3	48.6
SPAN C	012975	2)	49.1	48.9	47.9	48.2	48.6
SPAN C	012975	3)	49.1	48.8	48.	48.2	48.9
SPAN C	012975	4)	49.2	48.9	48.	46.1	48.9
SPAN C	012975	5)	49.3	48.9	48.	48.	48.8
SPAN C	012975	6)	49.3	49.	48.	48.1	48.8
SPAN C	012975	7)	49.2	48.8	47.8	48.	48.7
SPAN C	012975	8)	49.2	48.6	47.8	46.1	
SPAN C	012975	9)	49.1		48.		
		MAXIMUM	49.30	49.00	48.00	48.30	48.90
		MINIMUM	48.90	48.80	47.70	48.00	48.60
		AVERAGE	49.16	48.89	47.91	48.12	48.76
		ST.DEV.	.12	.08	.12	.10	.13
				SURFACE AVG. 48.54	BOTTOM AVG. 48.50		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	012975	1)	49.3	48.3	49.6	50.2	52.7
SPAN D	012975	2)	49.4	48.4	49.8	50.1	52.7
SPAN D	012975	3)	49.3	48.4	49.7	50.1	
SPAN D	012975	4)	49.2	48.4			
SPAN D	012975	5)	49.4				
SPAN D	012975	6)	49.4				
		MAXIMUM	49.40	48.40	49.80	50.20	52.70
		MINIMUM	49.20	48.30	49.60	50.10	52.70
		AVERAGE	49.33	48.37	49.70	50.13	52.70
		ST.DEV.	.08	.05	.10	.06	.00
				SURFACE AVG. 50.06	BOTTOM AVG. 50.02		

DATE 012975
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 49.33
2) MAXIMUM VALUE 52.70
3) MINIMUM VALUE 47.70
4) SURFACE AVG. 49.33
5) BOTTOM AVG. 49.30
AIR TEMP AVG. 62.
WIND DIRECTION 23.
WIND SPEED 11.8
CLOUD COVER 6.

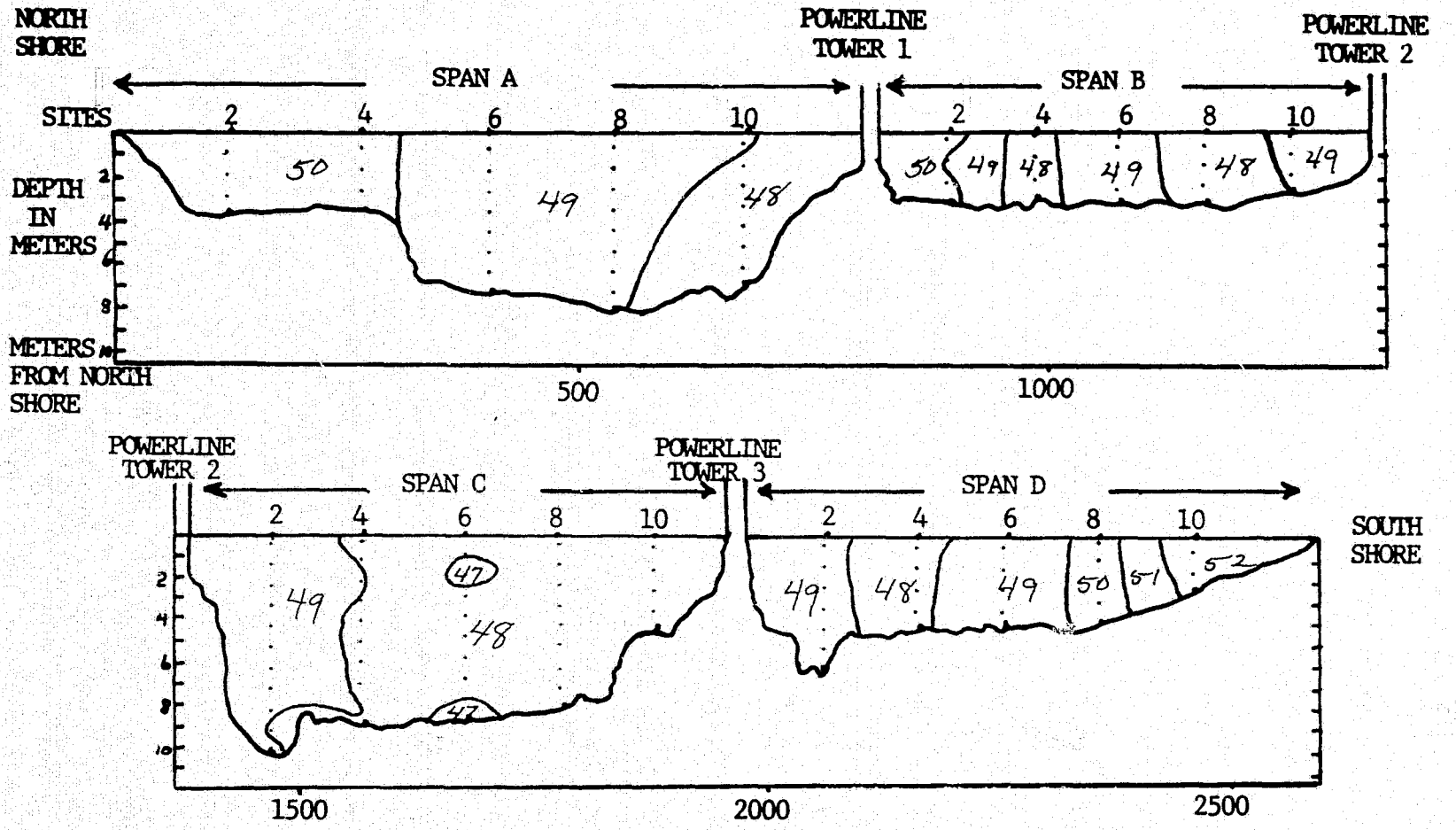

FIGURE 84. RIVER THERMAL PROFILE OF JANUARY 29, 1975 WITH A 116,834 cf/s FLOW RATE, 62°F AIR TEMPERATURE AND 60% CLOUD COVER. REACTOR #1 IS OPERATING AT 1080 MW AND REACTOR #2 AT 345 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	020775	1)	42.	44.2	43.5	44.9	46.9
SPAN A	020775	2)	42.2	44.2	43.7	45.	46.
SPAN A	020775	3)		44.3	44.	45.	46.2
SPAN A	020775	4)			44.	45.	46.2
SPAN A	020775	5)			44.3	44.9	46.1
SPAN A	020775	6)			44.3	44.9	46.1
SPAN A	020775	7)			44.1	44.7	46.
SPAN A	020775	8)				44.8	46.9
		MAXIMUM	42.20	44.30	44.30	45.00	46.20
		MINIMUM	42.00	44.20	43.50	44.70	45.90
		AVERAGE	42.10	44.23	43.99	44.90	46.05
		ST.DEV.	.14	.06	.30	.11	.12
				SURFACE AVG. 44.26	BOTTOM AVG. 44.10		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	020775	1)	47.	46.6	46.6	47.3	47.
SPAN B	020775	2)	47.	46.9	46.5	47.2	47.2
SPAN B	020775	3)	47.	47.	46.6	47.3	
		MAXIMUM	47.00	47.00	46.60	47.30	47.20
		MINIMUM	47.00	46.60	46.50	47.20	47.00
		AVERAGE	47.00	46.83	46.57	47.27	47.10
		ST.DEV.	.00	.21	.06	.06	.14
				SURFACE AVG. 47.02	BOTTOM AVG. 46.90		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	020775	1)	46.3	47.3	46.	45.8	45.5
SPAN C	020775	2)	46.3	47.3	46.	45.9	45.5
SPAN C	020775	3)	46.3	47.3	45.9	45.9	45.6
SPAN C	020775	4)	46.4	47.3	45.8	46.	45.6
SPAN C	020775	5)	46.3	47.2	45.7	45.9	
SPAN C	020775	6)	46.3	47.2	45.7	45.9	
SPAN C	020775	7)	46.2	47.2	45.5	45.8	
SPAN C	020775	8)	46.2	47.3	45.5		
		MAXIMUM	46.40	47.30	46.00	46.00	45.60
		MINIMUM	46.20	47.20	45.50	45.80	45.50
		AVERAGE	46.29	47.26	45.76	45.89	45.55
		ST.DEV.	.06	.05	.20	.07	.06
				SURFACE AVG. 46.08	BOTTOM AVG. 46.18		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	020775	1)	44.2	44.6	44.7	43.6	43.9
SPAN D	020775	2)	44.3	44.4	44.8	43.7	43.9
SPAN D	020775	3)	44.4	44.5	44.8	43.9	
SPAN D	020775	4)	44.4	44.4	44.8	44.	
SPAN D	020775	5)	44.4				
		MAXIMUM	44.40	44.60	44.80	44.00	43.90
		MINIMUM	44.20	44.40	44.70	43.60	43.90
		AVERAGE	44.34	44.47	44.77	43.80	43.90
		ST.DEV.	.09	.10	.05	.18	.00
				SURFACE AVG. 44.30	BOTTOM AVG. 44.20		

DATE 020775
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 45.40
2) MAXIMUM VALUE 47.30
3) MINIMUM VALUE 42.00
4) SURFACE AVG. 45.41
5) BOTTOM AVG. 45.34
AIR TEMP AVG. 30.
WIND DIRECTION 31.
WIND SPEED 10.2
CLOUD COVER 5.

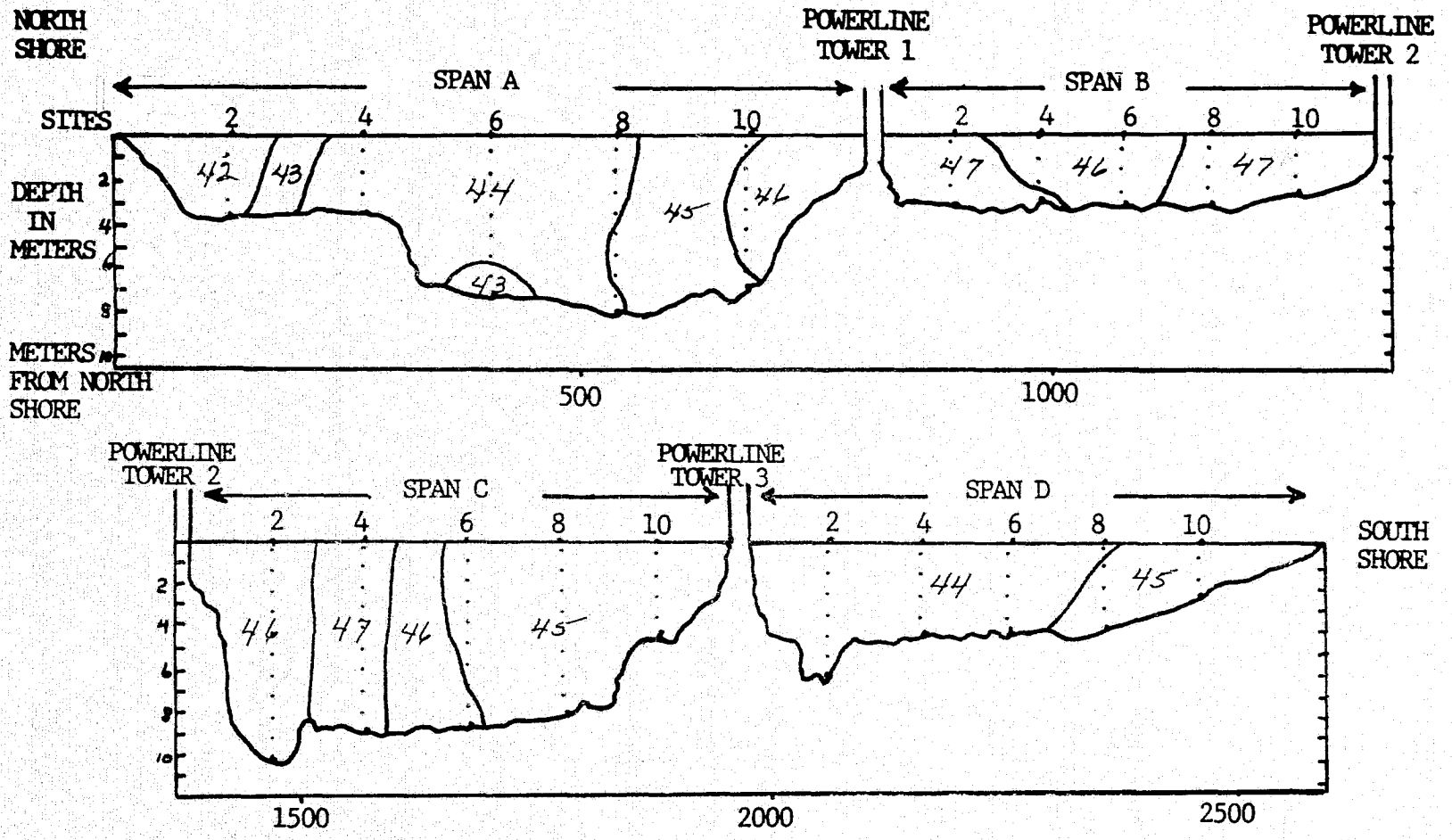

FIGURE 85. RIVER THERMAL PROFILE OF FEBRUARY 7, 1975 WITH A 119,556 cf/s FLOW RATE, 30°F AIR TEMPERATURE AND 50% CLOUD COVER. REACTOR #1 IS NOT OPERATIONAL AND REACTOR #2 IS OPERATING AT 1061 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	021275	1)	48.6	48.2	49.3	47.1	47.9
SPAN A	021275	2)	48.5	48.1	48.5	46.9	47.8
SPAN A	021275	3)	48.4	48.	48.2	47.	47.8
SPAN A	021275	4)			48.1	46.8	47.8
SPAN A	021275	5)			47.7	46.8	47.9
SPAN A	021275	6)			47.7	46.7	48.
SPAN A	021275	7)			47.2	46.7	47.9
SPAN A	021275	8)				46.4	47.9
		MAXIMUM	48.60	48.20	49.30	47.10	48.00
		MINIMUM	48.40	48.00	47.20	46.40	47.80
		AVERAGE	48.50	48.10	48.10	46.80	47.87
		ST.DEV.	.10	.10	.68	.21	.07
				SURFACE AVG. 47.58	BOTTOM AVG. 48.22		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	021275	1)	47.9	47.	48.7	46.8	46.8
SPAN B	021275	2)	48.	46.9	48.4	46.4	46.6
SPAN B	021275	3)	48.	46.9	48.3	46.5	
		MAXIMUM	48.00	47.00	48.70	46.80	46.80
		MINIMUM	47.90	46.90	48.30	46.40	46.60
		AVERAGE	47.97	46.93	48.47	46.57	46.70
		ST.DEV.	.06	.06	.21	.21	.14
				SURFACE AVG. 47.26	BOTTOM AVG. 47.44		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	021275	1)	46.8	46.6	48.3	45.7	47.7
SPAN C	021275	2)	46.5	46.5	47.9	45.7	47.2
SPAN C	021275	3)	46.5	46.2	47.6	45.7	47.2
SPAN C	021275	4)	46.3	46.2	47.6	45.6	47.1
SPAN C	021275	5)	46.3	45.7	47.3	45.4	46.9
SPAN C	021275	6)	45.9	45.7	46.9	45.4	46.3
SPAN C	021275	7)	45.8	45.3	46.5	45.3	45.9
SPAN C	021275	8)	45.8	45.3	46.3	45.3	
SPAN C	021275	9)	45.7				
SPAN C	021275	10)	45.6				
SPAN C	021275	11)	45.4				
		MAXIMUM	46.80	46.60	48.30	45.70	47.70
		MINIMUM	45.40	45.30	46.30	45.30	45.90
		AVERAGE	46.05	45.94	47.30	45.51	46.83
		ST.DEV.	.45	.51	.69	.18	.64
				SURFACE AVG. 45.64	BOTTOM AVG. 47.02		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	021275	1)	46.4	48.4	46.6	48.7	48.6
SPAN D	021275	2)	45.9	47.9	46.3	48.5	47.8
SPAN D	021275	3)	46.	47.7	46.2	48.4	
SPAN D	021275	4)	45.7	47.6		48.2	
		MAXIMUM	46.40	48.40	46.60	48.70	48.60
		MINIMUM	45.70	47.60	46.20	48.20	47.80
		AVERAGE	46.00	47.90	46.37	48.45	48.20
		ST.DEV.	.29	.36	.21	.21	.57
				SURFACE AVG. 47.10	BOTTOM AVG. 47.74		

DATE 021275
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 47.23
2) MAXIMUM VALUE 49.30
3) MINIMUM VALUE 45.30
4) SURFACE AVG. 46.89
5) BOTTOM AVG. 47.60
AIR TEMP AVG. 49.
WIND DIRECTION 34.
WIND SPEED 12.4
CLOUD COVER 40.

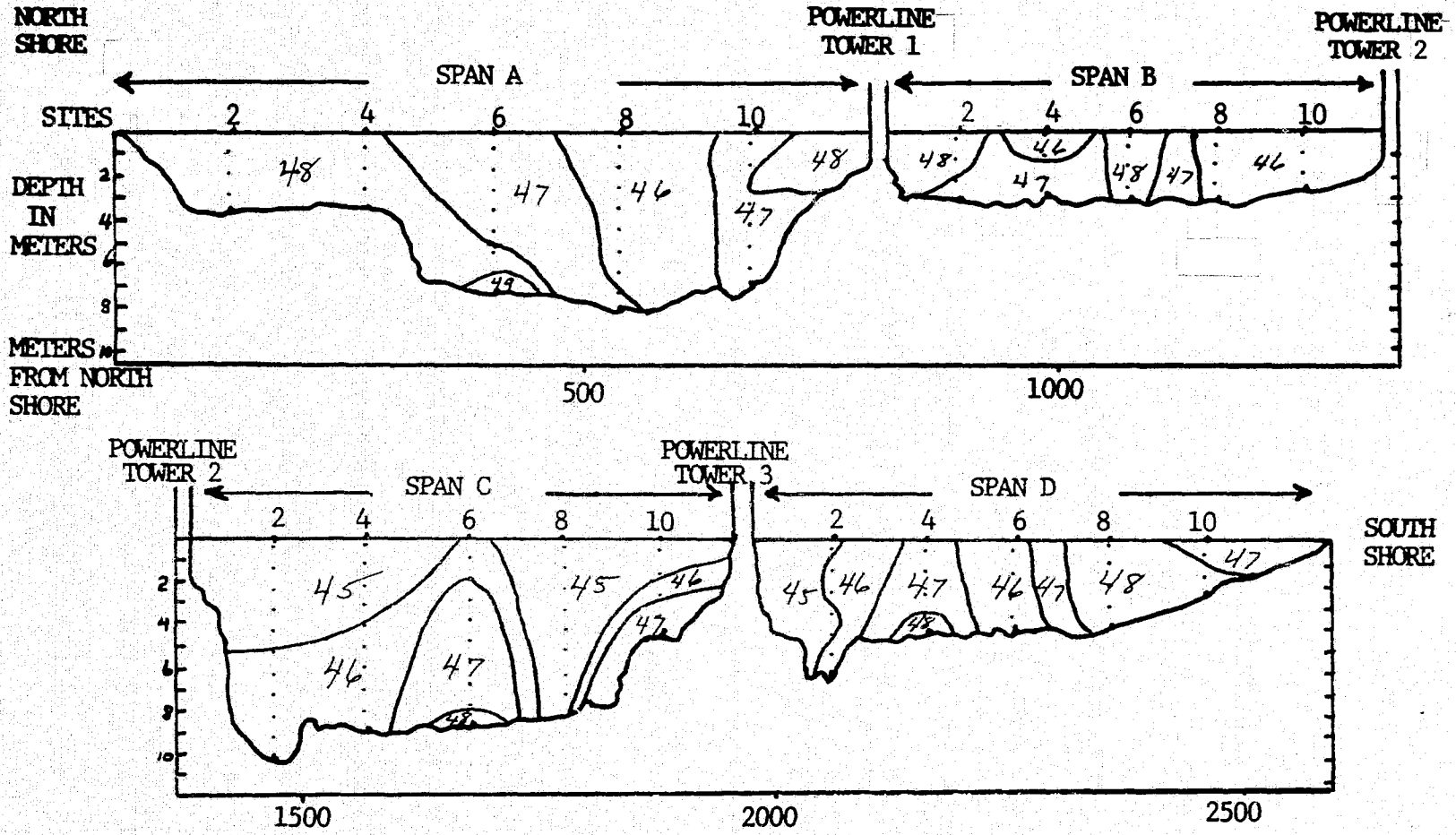

FIGURE 86. RIVER THERMAL PROFILE OF FEBRUARY 12, 1975 WITH A 99,470 cf/s FLOW RATE, 49°F AIR TEMPERATURE AND 40 % CLOUD COVER. REACTOR #1 IS OPERATING AT 772 MW, REACTOR #2 IS NOT OPERATIONAL.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	021975	1)	51.7	51.2	49.6	51.4	51.
SPAN A	021975	2)	51.6	51.	49.5	51.2	51.
SPAN A	021975	3)	51.6	51.	49.5	51.1	51.
SPAN A	021975	4)	51.6		49.5	51.	51.
SPAN A	021975	5)			49.4	51.	50.9
SPAN A	021975	6)			49.4	50.9	50.9
SPAN A	021975	7)			49.3	50.7	50.8
SPAN A	021975	8)				50.7	50.8
		MAXIMUM	51.70	51.20	49.60	51.40	51.00
		MINIMUM	51.60	51.00	49.30	50.70	50.80
		AVERAGE	51.62	51.07	49.46	51.00	50.92
		ST.DEV.	.05	.12	.10	.24	.09
				SURFACE AVG. 50.68	BOTTOM AVG. 50.98		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	021975	1)	52.	49.6	50.3	49.9	50.2
SPAN B	021975	2)	51.5	49.6	50.4	50.	50.3
SPAN B	021975	3)	51.5	49.6	50.5	50.1	50.3
		MAXIMUM	52.00	49.60	50.50	50.10	50.30
		MINIMUM	51.50	49.60	50.30	49.90	50.20
		AVERAGE	51.67	49.60	50.40	50.00	50.27
		ST.DEV.	.29	.00	.10	.10	.06
				SURFACE AVG. 50.40	BOTTOM AVG. 50.40		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	021975	1)	49.9	49.4	50.6	49.4	48.8
SPAN C	021975	2)	50.	49.6	50.5	49.4	48.9
SPAN C	021975	3)	50.	49.6	50.4	49.5	49.1
SPAN C	021975	4)	50.	49.6	50.3	49.5	49.1
SPAN C	021975	5)	49.8	49.7	50.2	49.5	49.3
SPAN C	021975	6)	49.9	49.7	50.2	49.4	49.2
SPAN C	021975	7)	49.7	49.9	50.1	49.4	49.2
SPAN C	021975	8)	49.7	50.	50.	49.4	
SPAN C	021975	9)	49.7				
		MAXIMUM	50.00	50.00	50.60	49.50	49.30
		MINIMUM	49.70	49.40	50.00	49.40	48.80
		AVERAGE	49.86	49.69	50.29	49.44	49.09
		ST.DEV.	.13	.19	.20	.05	.18
				SURFACE AVG. 49.66	BOTTOM AVG. 49.62		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	021975	1)	50.	49.2	51.5	51.6	49.5
SPAN D	021975	2)	50.	49.3	51.5	51.4	49.6
SPAN D	021975	3)	50.	49.4	51.5	51.2	49.8
SPAN D	021975	4)	50.	49.3	51.5	50.9	
SPAN D	021975	5)	50.				
SPAN D	021975	6)	50.1				
		MAXIMUM	50.10	49.40	51.50	51.60	49.80
		MINIMUM	50.00	49.20	51.50	50.90	49.50
		AVERAGE	50.02	49.30	51.50	51.27	49.70
		ST.DEV.	.04	.08	.00	.30	.17
				SURFACE AVG. 50.32	BOTTOM AVG. 50.36		

DATE 021975
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP.	50.31
2) MAXIMUM VALUE	52.00
3) MINIMUM VALUE	48.80
4) SURFACE AVG.	50.26
5) BOTTOM AVG.	50.34
AIR TEMP AVG.	42.
WIND DIRECTION	33.
WIND SPEED	7.6
CLOUD COVER	9.

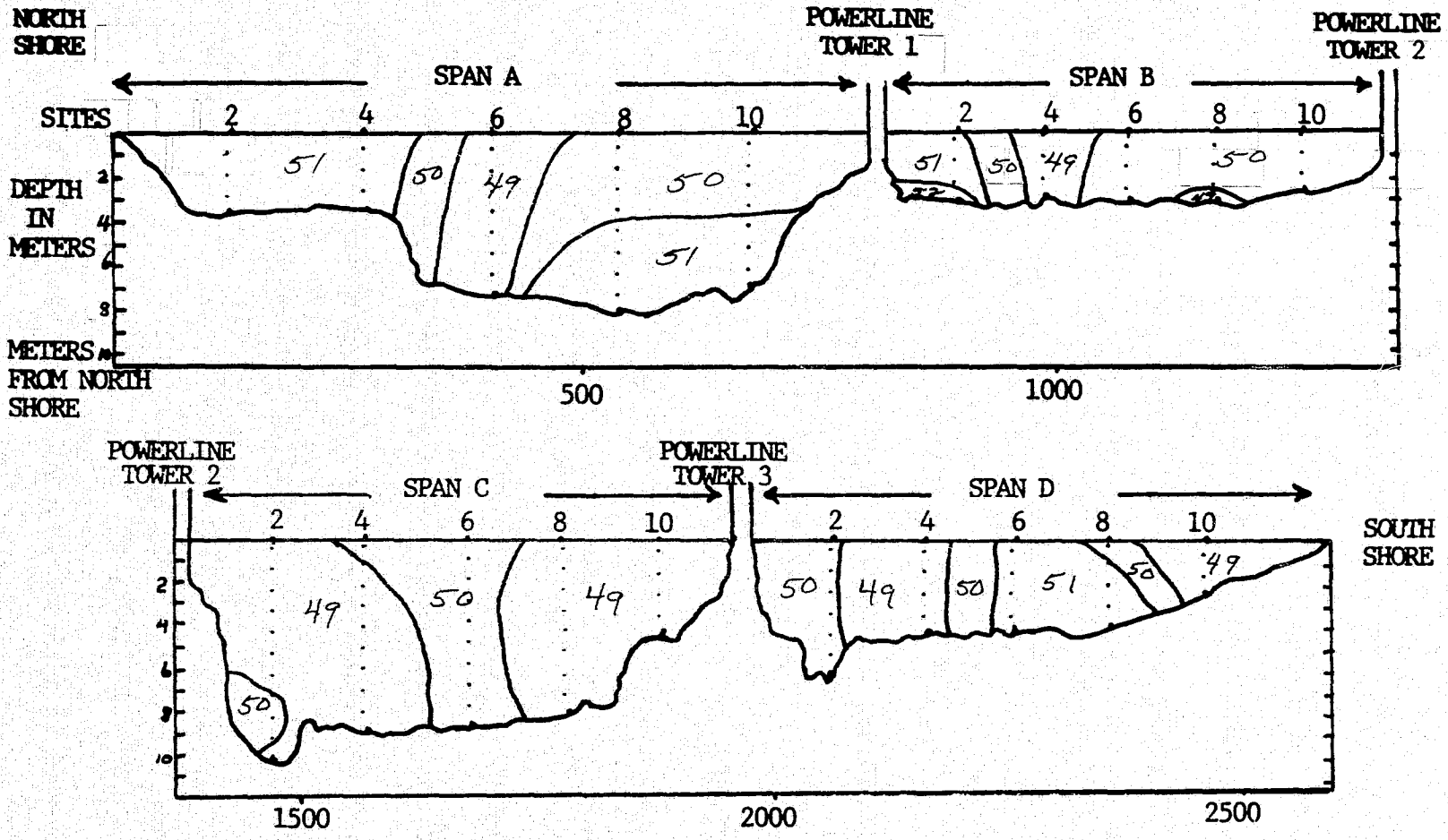

FIGURE 87. RIVER THERMAL PROFILE OF FEBRUARY 19, 1975 WITH A FLOW RATE OF 123,210 cf/s, 42°F AIR TEMPERATURE AND 90% CLOUD COVER. REACTOR #1 OPERATING AT 1027 MW, REACTOR #2 AT 870 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	022675	1)	47.5	49.7	48.8	47.7	47.7
SPAN A	022675	2)	47.6	49.7	48.8	47.8	47.8
SPAN A	022675	3)	47.6	49.6	48.8	47.9	47.9
SPAN A	022675	4)			48.8	47.8	47.9
SPAN A	022675	5)			48.8	47.7	47.9
SPAN A	022675	6)			48.8	47.7	47.9
SPAN A	022675	7)			48.7	47.6	47.8
		MAXIMUM	47.60	49.70	48.80	47.90	47.90
		MINIMUM	47.50	49.50	48.70	47.60	47.70
		AVERAGE	47.57	49.63	48.79	47.74	47.84
		ST.DEV.	.06	.12	.04	.10	.08
				SURFACE AVG. 48.24	BOTTOM AVG. 48.28		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	022675	1)	48.	48.8	49.4	49.	48.3
SPAN B	022675	2)	48.1	48.9	49.4	49.3	48.5
SPAN B	022675	3)	48.		49.5	49.2	
		MAXIMUM	48.10	48.90	49.50	49.30	48.50
		MINIMUM	48.00	48.80	49.40	49.00	48.30
		AVERAGE	48.03	48.85	49.43	49.17	48.40
		ST.DEV.	.06	.07	.06	.15	.14
				SURFACE AVG. 48.42	BOTTOM AVG. 48.70		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	022675	1)	51.1	51.5	49.6	50.7	49.4
SPAN C	022675	2)	50.8	51.4	49.5	50.7	49.5
SPAN C	022675	3)	50.7	51.3	49.5	50.4	49.5
SPAN C	022675	4)	50.7	51.1	49.4	50.3	49.5
SPAN C	022675	5)	50.6	50.9	49.3	50.2	49.5
SPAN C	022675	6)	50.5	50.8	49.2	50.2	49.5
SPAN C	022675	7)	50.4	50.6	49.1	49.8	49.5
SPAN C	022675	8)	50.4				49.
		MAXIMUM	51.10	51.50	49.60	50.70	49.50
		MINIMUM	50.40	50.60	49.10	49.80	49.00
		AVERAGE	50.65	51.09	49.37	50.33	49.42
		ST.DEV.	.23	.33	.18	.31	.18
				SURFACE AVG. 49.78	BOTTOM AVG. 50.46		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	022675	1)	48.5	48.9	48.2	48.	49.
SPAN D	022675	2)	48.3	49.	48.3	48.1	49.
SPAN D	022675	3)	48.3	49.	48.4	48.2	
SPAN D	022675	4)		49.			
		MAXIMUM	48.50	49.00	48.40	48.20	49.00
		MINIMUM	48.30	48.90	48.20	48.00	49.00
		AVERAGE	48.37	48.97	48.30	48.10	49.00
		ST.DEV.	.12	.05	.10	.10	.00
				SURFACE AVG. 48.58	BOTTOM AVG. 48.52		

DATE 022675
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 48.95
2) MAXIMUM VALUE 51.50
3) MINIMUM VALUE 47.50
4) SURFACE AVG. 48.85
5) BOTTOM AVG. 48.99
AIR TEMP AVG. 43.
WIND DIRECTION 04.
WIND SPEED 6.8
CLOUD COVER 6.

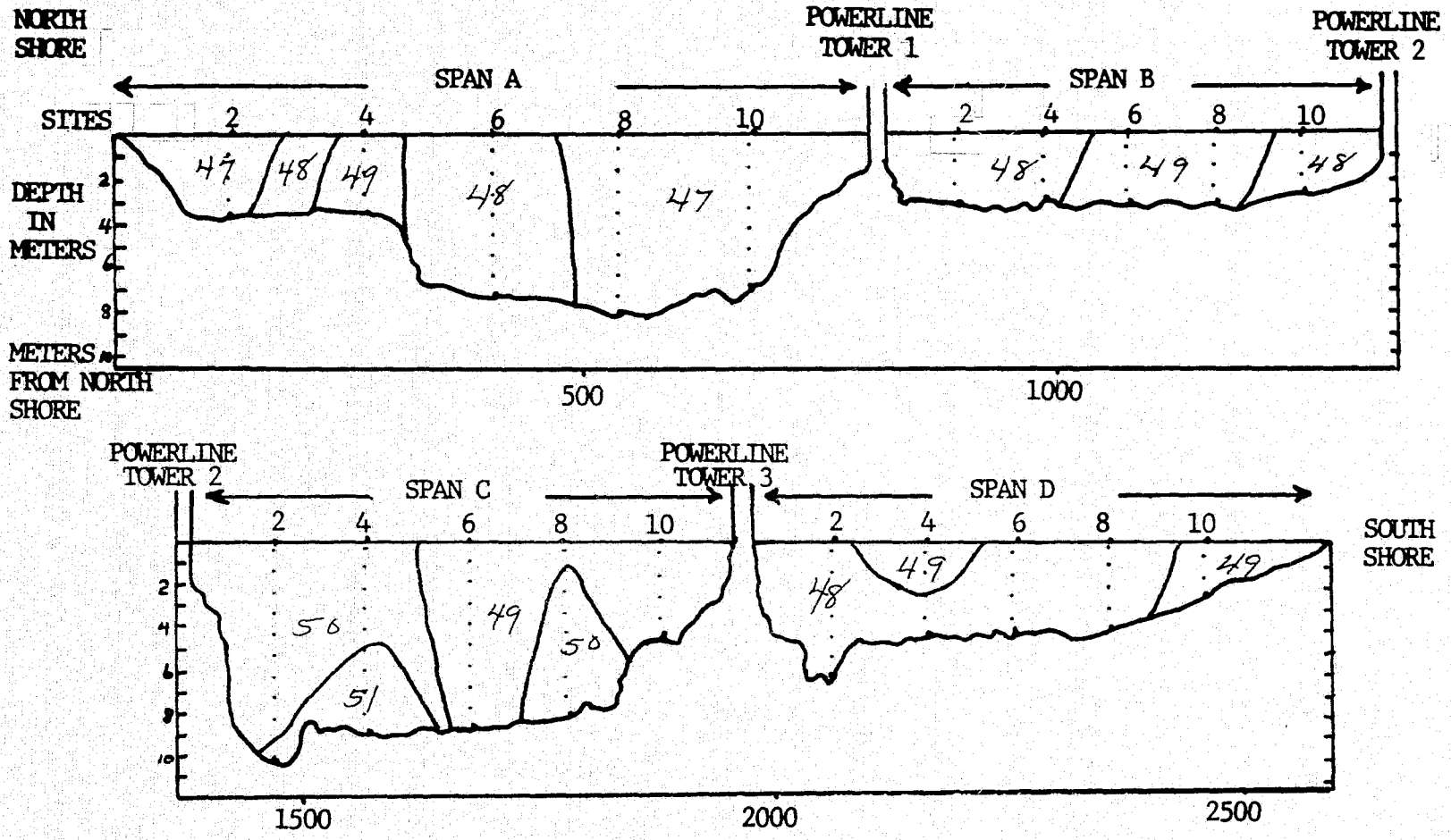

FIGURE 88. RIVER THERMAL PROFILE OF FEBRUARY 26, 1975 WITH A 88,542 cf/s FLOW RATE, 43°F AIR TEMPERATURE AND 60% CLOUD COVER. REACTOR #1 IS OPERATING AT 820 MW and REACTOR #2 AT 1106 MW.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	040275	1)	53.8	54.5	54.4	54.6	54.
SPAN A	040275	2)	53.7	54.5	54.5	54.6	54.
SPAN A	040275	3)	53.7	54.3	54.6	54.6	54.
SPAN A	040275	4)	53.7	54.3	54.6	54.6	54.
SPAN A	040275	5)			54.6	54.6	54.
SPAN A	040275	6)			54.7	54.7	54.
SPAN A	040275	7)			54.6	54.6	53.9
SPAN A	040275	8)			54.6	54.5	53.9
SPAN A	040275	9)			54.4	54.5	53.9
		MAXIMUM	53.80	54.50	54.70	54.70	54.00
		MINIMUM	53.70	54.30	54.40	54.50	53.90
		AVERAGE	53.72	54.40	54.56	54.59	53.97
		ST.DEV.	.05	.12	.10	.06	.05
				SURFACE AVG. 54.16	BOTTOM AVG. 54.26		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	040275	1)	53.5	53.3	53.3	53.8	53.5
SPAN B	040275	2)	53.6	53.3	53.4	53.9	53.5
SPAN B	040275	3)	53.6	53.3	53.4	54.	53.5
SPAN B	040275	4)	53.6	53.3	53.5	54.1	53.5
		MAXIMUM	53.60	53.30	53.50	54.10	53.50
		MINIMUM	53.50	53.30	53.30	53.80	53.50
		AVERAGE	53.57	53.30	53.40	53.95	53.50
		ST.DEV.	.05	.00	.08	.13	.00
				SURFACE AVG. 53.60	BOTTOM AVG. 53.48		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	040275	1)	53.7	53.4	53.8	53.9	53.4
SPAN C	040275	2)	53.8	53.4	53.9	53.9	53.5
SPAN C	040275	3)	53.8	53.4	54.	53.9	53.5
SPAN C	040275	4)	53.9	53.3	54.	53.9	53.5
SPAN C	040275	5)	53.9	53.2	53.9	53.8	53.5
SPAN C	040275	6)	53.9	53.2	53.8	53.8	53.5
SPAN C	040275	7)	53.7	53.1	53.7	53.8	53.3
SPAN C	040275	8)	54.	53.	53.7	53.7	53.3
SPAN C	040275	9)	54.	52.9	53.7	53.7	
SPAN C	040275	10)	54.				
		MAXIMUM	54.00	53.40	54.00	53.90	53.50
		MINIMUM	53.70	52.90	53.70	53.70	53.30
		AVERAGE	53.87	53.21	53.83	53.82	53.44
		ST.DEV.	.12	.18	.12	.08	.09
				SURFACE AVG. 53.52	BOTTOM AVG. 53.64		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	040275	1)	55.1	55.	53.7	54.9	55.3
SPAN D	040275	2)	55.1	55.	53.8	54.8	55.3
SPAN D	040275	3)	55.1	55.	53.9	54.8	55.4
SPAN D	040275	4)	55.1				
SPAN D	040275	5)	55.	55.2	54.5	54.1	
		MAXIMUM	55.10	55.20	54.50	54.90	55.40
		MINIMUM	55.00	55.00	53.70	54.10	55.30
		AVERAGE	55.08	55.05	53.97	54.65	55.33
		ST.DEV.	.04	.10	.36	.37	.06
				SURFACE AVG. 54.84	BOTTOM AVG. 54.80		

DATE 040275
4 SPANS CALCULATED. THE RESULTS ARE:
1) AVERAGE TEMP. 54.06
2) MAXIMUM VALUE 55.40
3) MINIMUM VALUE 52.90
4) SURFACE AVG. 54.03
5) BOTTOM AVG. 54.04
AIR TEMP AVG. 62.
WIND DIRECTION 29.
WIND SPEED 12.7
CLOUD COVER 8.

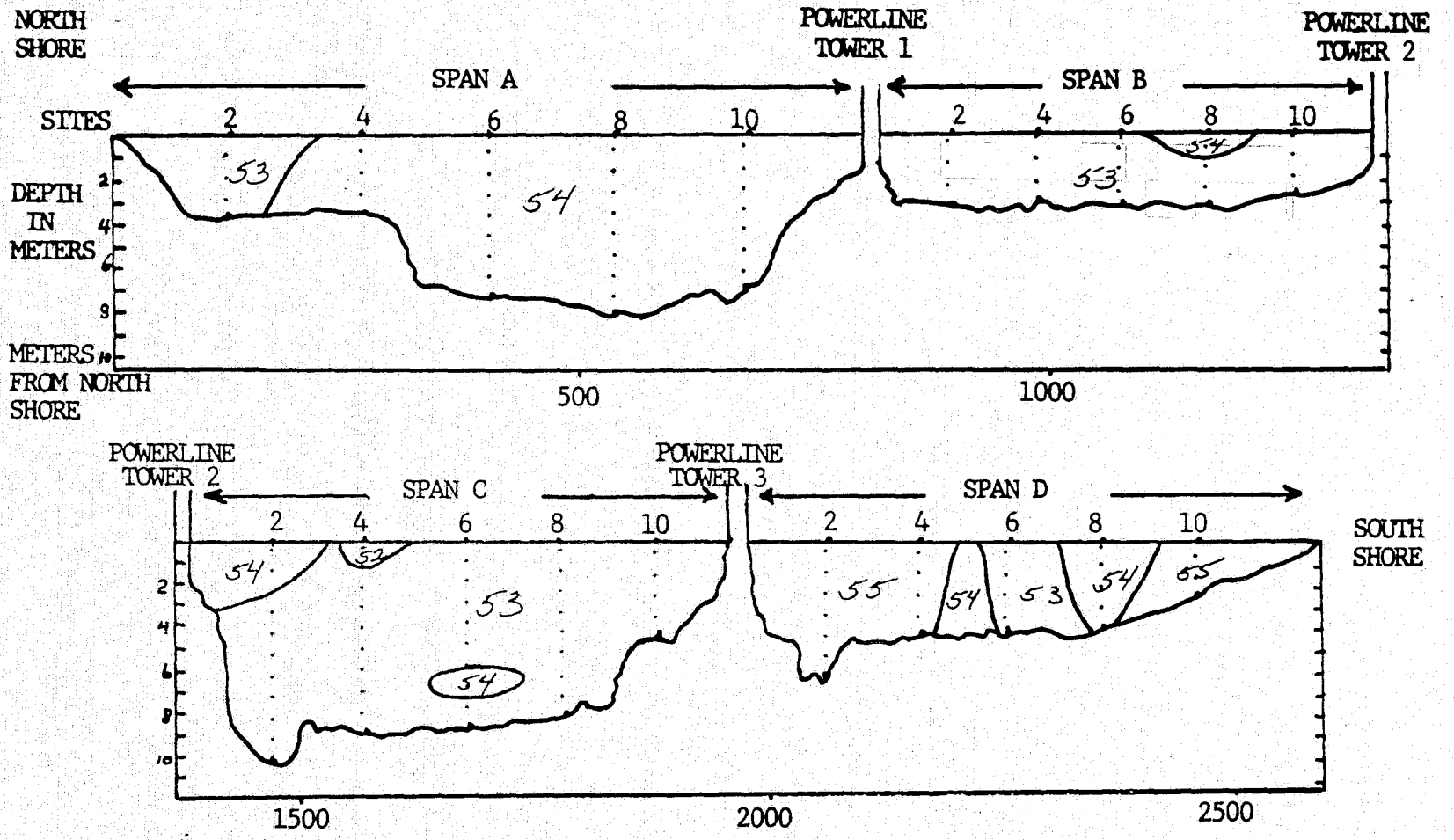

FIGURE 89. RIVER THERMAL PROFILE OF APRIL 2, 1975 WITH A 189,986 cf/s FLOW RATE, 62°F AIR TEMPERATURE AND 80% CLOUD COVER. ENTIRE PLANT IS NOT OPERATIONAL DUE TO MARCH 22, 1975 FIRE.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	040975	1)	53.	53.5	55.1	53.8	52.5
SPAN A	040975	2)	53.1	53.4	55.1	53.8	52.7
SPAN A	040975	3)	53.1	53.5	55.1	54.	52.7
SPAN A	040975	4)	53.1	53.5	55.	54.	52.8
SPAN A	040975	5)			54.8	53.9	52.7
SPAN A	040975	6)			54.7	53.9	52.7
SPAN A	040975	7)			54.6	53.9	52.7
SPAN A	040975	8)			54.4	54.1	52.7
		MAXIMUM	53.10	53.50	55.10	54.10	52.80
		MINIMUM	53.00	53.40	54.40	53.80	52.50
		AVERAGE	53.07	53.47	54.85	53.92	52.69
		ST.DEV.	.05	.05	.27	.10	.08
				SURFACE AVG. 53.56	BOTTOM AVG. 53.58		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	040975	1)	52.6	53.8	53.	53.6	53.1
SPAN B	040975	2)	52.8	53.8	53.1	53.7	53.1
SPAN B	040975	3)	52.7	53.9	53.1	53.7	53.1
		MAXIMUM	52.80	53.90	53.10	53.70	53.10
		MINIMUM	52.60	53.80	53.00	53.60	53.10
		AVERAGE	52.70	53.83	53.07	53.67	53.10
		ST.DEV.	.10	.06	.06	.06	.00
				SURFACE AVG. 53.30	BOTTOM AVG. 53.22		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	040975	1)	52.6	53.6	53.5	53.3	53.7
SPAN C	040975	2)	52.6	53.6	53.5	53.2	53.7
SPAN C	040975	3)	52.6	53.7	53.5	53.3	53.6
SPAN C	040975	4)	52.6	53.7	53.5	53.2	53.7
SPAN C	040975	5)	52.7	53.6	53.5	53.2	53.6
SPAN C	040975	6)	52.7	53.7	53.5	53.1	53.7
SPAN C	040975	7)	52.6	53.5	53.5	53.	53.7
SPAN C	040975	8)	52.7	53.5	53.5	53.	53.6
SPAN C	040975	9)	52.6				
		MAXIMUM	52.70	53.70	53.50	53.30	53.70
		MINIMUM	52.60	53.50	53.50	53.00	53.60
		AVERAGE	52.63	53.61	53.50	53.16	53.66
		ST.DEV.	.05	.08	.00	.12	.05
				SURFACE AVG. 53.24	BOTTOM AVG. 53.34		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	040975	1)	53.	54.2	53.2	54.	54.1
SPAN D	040975	2)	53.1	54.2	53.1	54.1	54.2
SPAN D	040975	3)	53.1	54.2	53.1	54.	54.3
SPAN D	040975	4)	53.1	54.2	53.2	54.1	
SPAN D	040975	5)	53.1				
SPAN D	040975	6)	53.1				
		MAXIMUM	53.10	54.20	53.20	54.10	54.30
		MINIMUM	53.00	54.20	53.10	54.00	54.10
		AVERAGE	53.08	54.20	53.15	54.05	54.20
		ST.DEV.	.04	.00	.06	.06	.10
				SURFACE AVG. 53.78	BOTTOM AVG. 53.70		

DATE 040975
4 SPANS CALCULATED, THE RESULTS ARE:
1) AVERAGE TEMP. 53.48
2) MAXIMUM VALUE 55.10
3) MINIMUM VALUE 52.50
4) SURFACE AVG. 53.47
5) BOTTOM AVG. 53.46
AIR TEMP AVG. 62.
WIND DIRECTION 9.
WIND SPEED 5.6
CLOUD COVER 10.

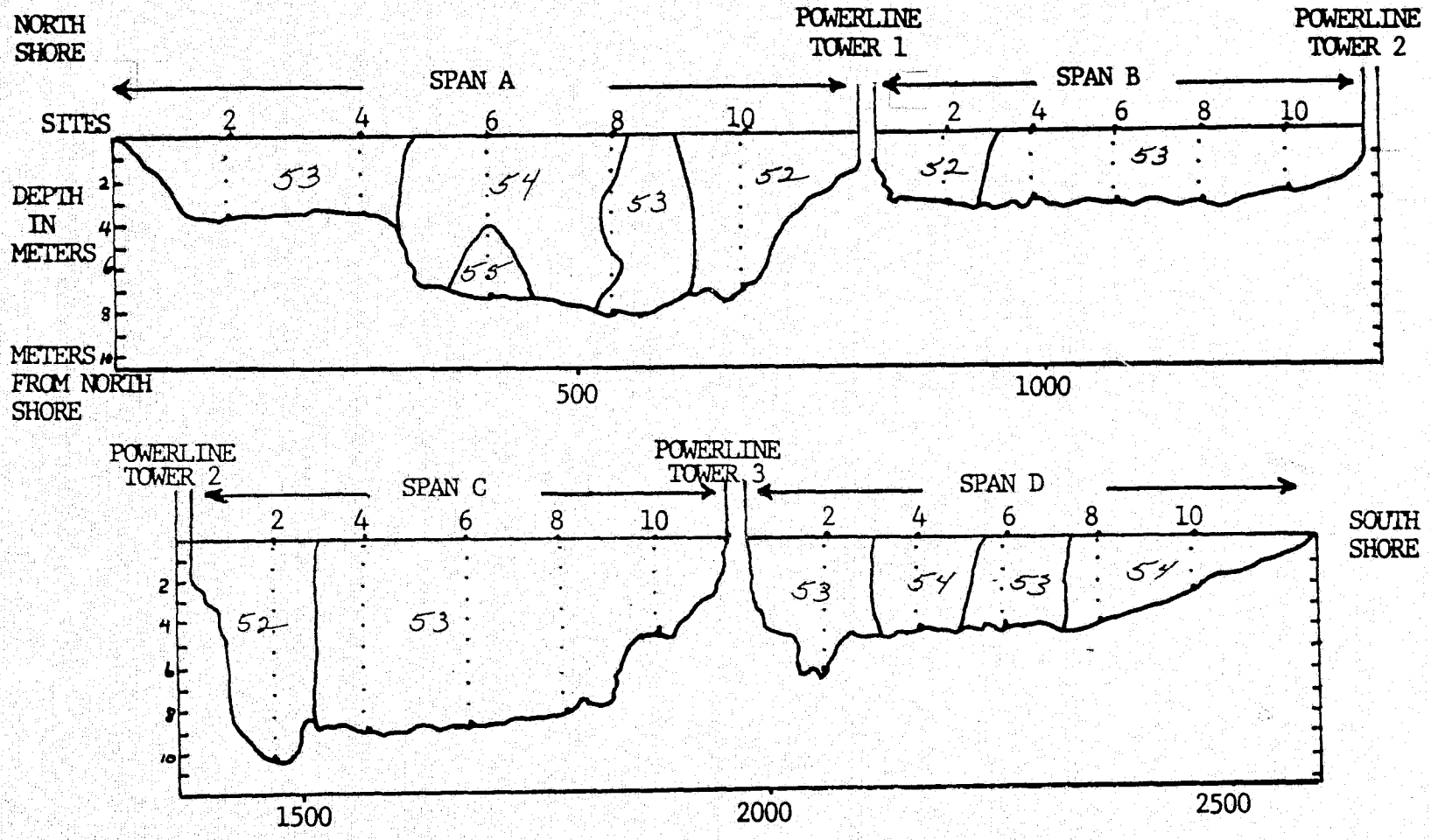

FIGURE 90. RIVER THERMAL PROFILE OF APRIL 9, 1975 WITH A FLOW RATE OF 114,304 cf/s, 62°F AIR TEMPERATURE AND 100% CLOUD COVER. PLANT IS NOT OPERATIONAL.

TEMPERATURE READINGS AT BROWN'S FERRY POWER LINE CROSSING

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN A	041675	1)	53.	55.	55.3	54.7	54.5
SPAN A	041675	2)	53.2	55.	55.3	54.7	54.5
SPAN A	041675	3)	53.3	55.	55.3	54.8	54.6
SPAN A	041675	4)	53.5	55.	55.3	54.9	54.5
SPAN A	041675	5)			55.3	54.9	54.4
SPAN A	041675	6)			55.3	54.9	54.4
SPAN A	041675	7)			55.3	54.9	54.3
SPAN A	041675	8)			55.5	55.	54.3
SPAN A	041675	9)				55.	
		MAXIMUM	53.50	55.00	55.50	55.00	54.50
		MINIMUM	53.00	55.00	55.30	54.70	54.30
		AVERAGE	53.25	55.00	55.32	54.87	54.42
		ST.DEV.	.21	.00	.07	.11	.09
				SURFACE AVG. 54.66	BOTTOM AVG. 54.50		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN B	041675	1)	55.2	54.2	55.	54.2	56.4
SPAN B	041675	2)	55.2	54.4	55.	54.3	56.2
SPAN B	041675	3)	55.4	54.4	55.2	54.4	55.2
SPAN B	041675	4)			55.4	54.4	
		MAXIMUM	55.40	54.40	55.40	54.40	55.40
		MINIMUM	55.20	54.20	55.00	54.20	55.20
		AVERAGE	55.27	54.33	55.15	54.32	55.27
		ST.DEV.	.12	.12	.19	.10	.12
				SURFACE AVG. 54.96	BOTTOM AVG. 54.80		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN C	041675	1)	54.5	55.6	54.4	55.7	54.5
SPAN C	041675	2)	54.6	55.6	54.4	55.7	54.5
SPAN C	041675	3)	54.7	55.	54.4	55.8	54.5
SPAN C	041675	4)	54.8	55.7	54.4	56.8	54.6
SPAN C	041675	5)	54.8	55.6	54.4	55.9	54.6
SPAN C	041675	6)	54.8	55.6	54.5	56.1	54.7
SPAN C	041675	7)	54.7	55.7	54.7	56.1	54.8
SPAN C	041675	8)	54.8	56.2	54.7	56.2	54.9
SPAN C	041675	9)	55.2	56.3			
		MAXIMUM	55.20	56.30	54.70	56.20	54.90
		MINIMUM	54.50	55.00	54.40	55.70	54.50
		AVERAGE	54.77	55.70	54.49	55.91	54.64
		ST.DEV.	.19	.38	.14	.20	.15
				SURFACE AVG. 55.46	BOTTOM AVG. 54.94		

			SITE 2	SITE 4	SITE 6	SITE 8	SITE 10
SPAN D	041675	1)	55.3	55.5	55.7	55.7	56.4
SPAN D	041675	2)	55.3	55.5	55.7	55.9	56.6
SPAN D	041675	3)	55.4	55.5	55.8	55.9	55.1
SPAN D	041675	4)	55.4	55.5	55.9	56.1	
		MAXIMUM	55.40	55.50	55.90	56.10	55.60
		MINIMUM	55.30	55.50	55.70	55.70	55.10
		AVERAGE	55.35	55.50	55.77	55.90	55.37
		ST.DEV.	.06	.00	.10	.16	.25
				SURFACE AVG. 55.60	BOTTOM AVG. 55.52		

DATE 041675
4 SPANS CALCULATED, THE RESULTS ARE:

1) AVERAGE TEMP. 55.03
2) MAXIMUM VALUE 56.30
3) MINIMUM VALUE 53.00
4) SURFACE AVG. 55.17
5) BOTTOM AVG. 54.94

AIR TEMP AVG. 54.
WIND DIRECTION 15.
WIND SPEED 4.5
CLOUD COVER 0.0

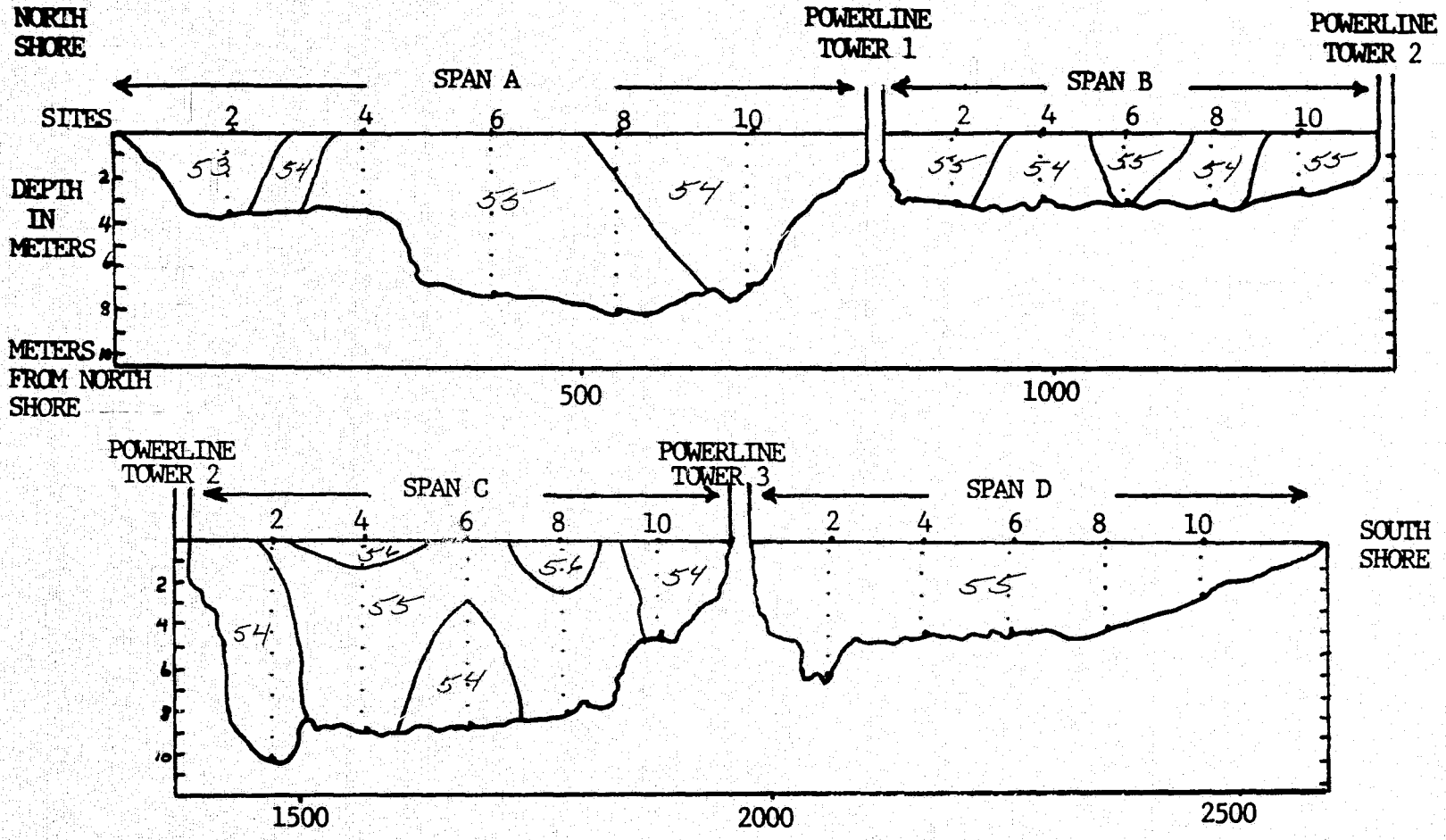

FIGURE 91. RIVER THERMAL PROFILE OF APRIL 16, 1975 WITH A 60,730 cf/s FLOW RATE, 54°F AIR TEMPERATURE AND NO CLOUD COVER. PLANT IS NOT OPERATIONAL.

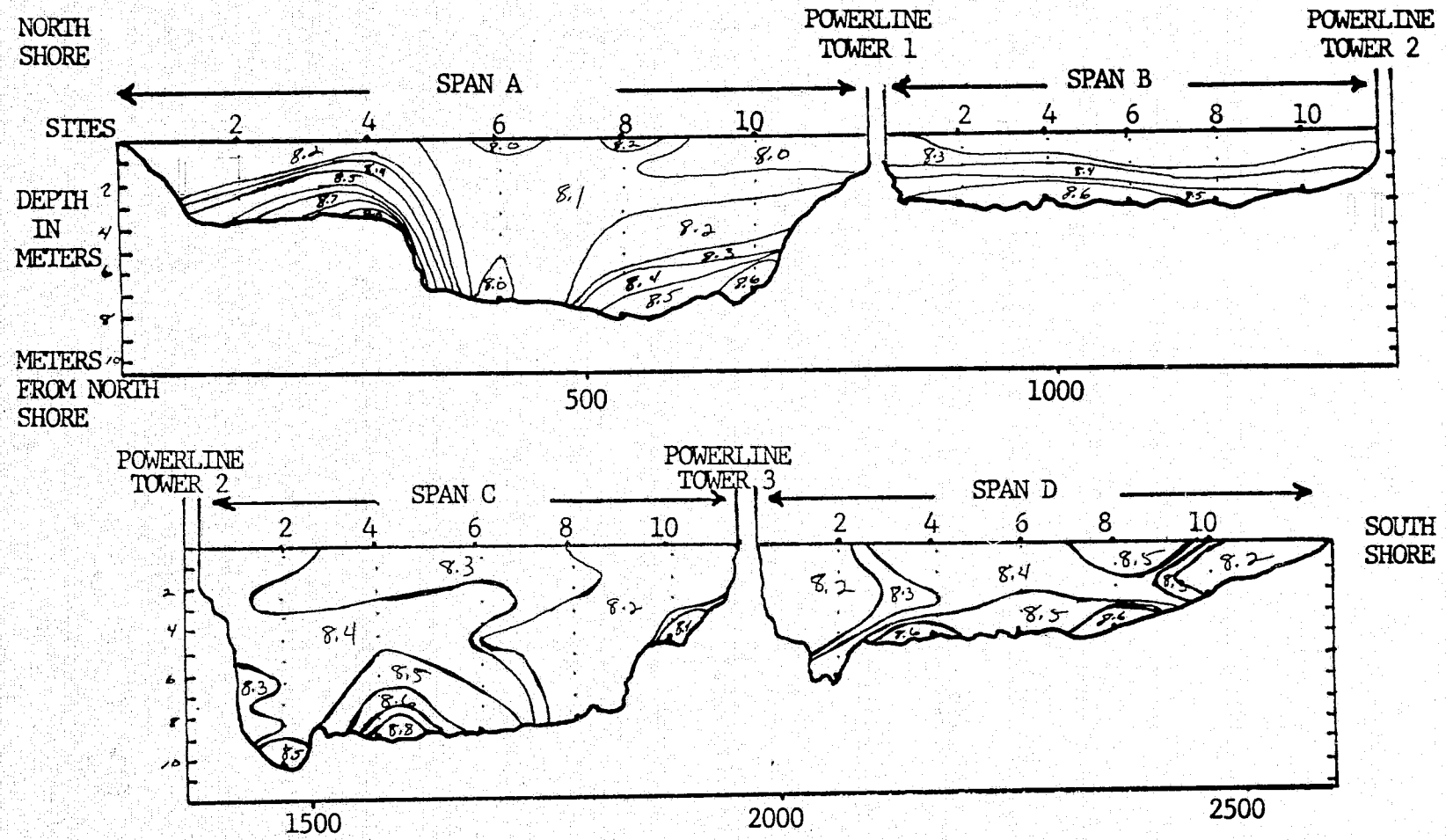

FIGURE 92. DISSOLVED OXYGEN CONCENTRATION PROFILE IN PARTS PER MILLION (mg/1) FOR JUNE 5, 1973.

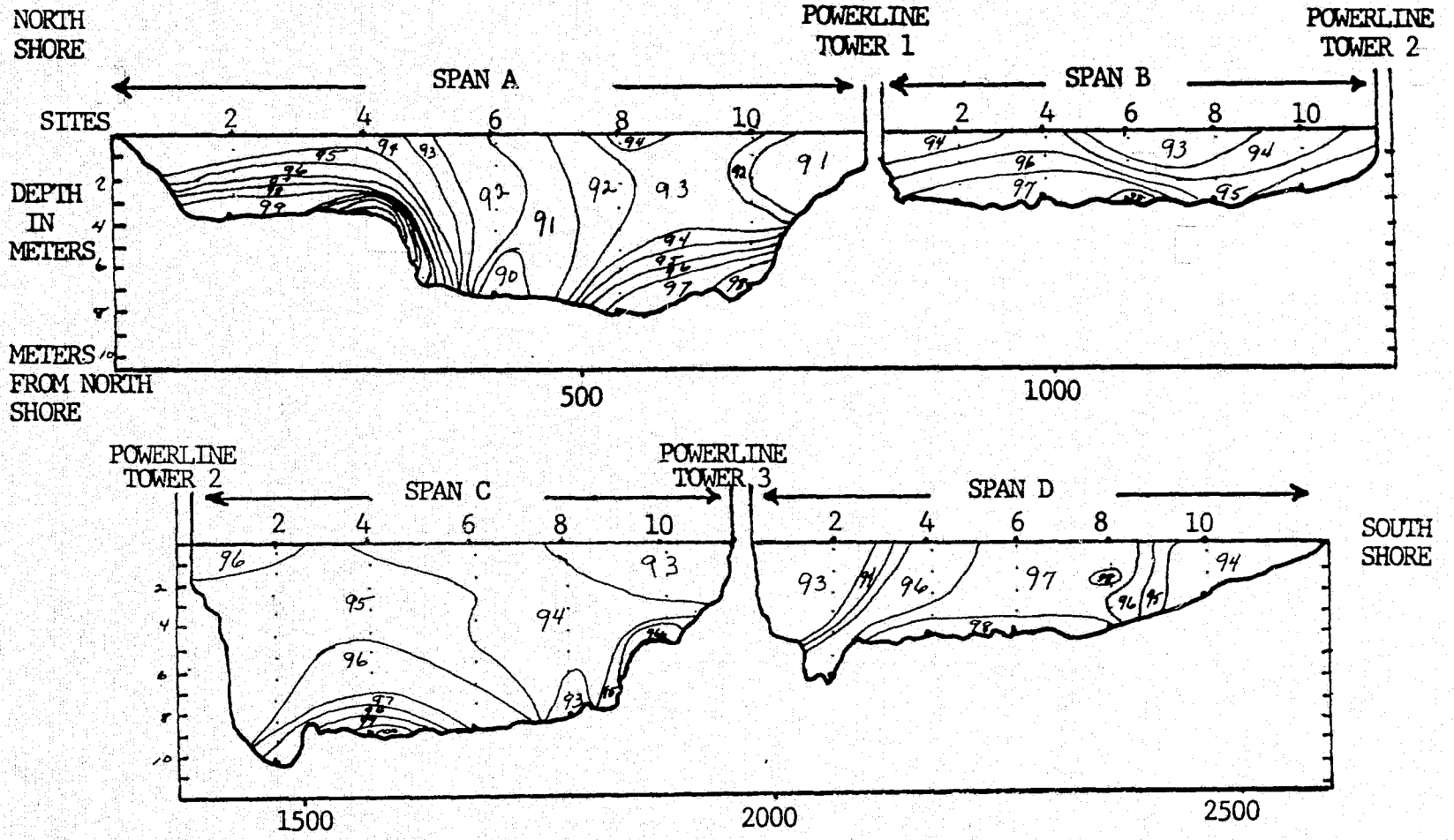

FIGURE 93. DISSOLVED OXYGEN CONCENTRATION PROFILE IN PERCENT OF SATURATION FOR WATER TEMPERATURE FOR JUNE 5, 1973.

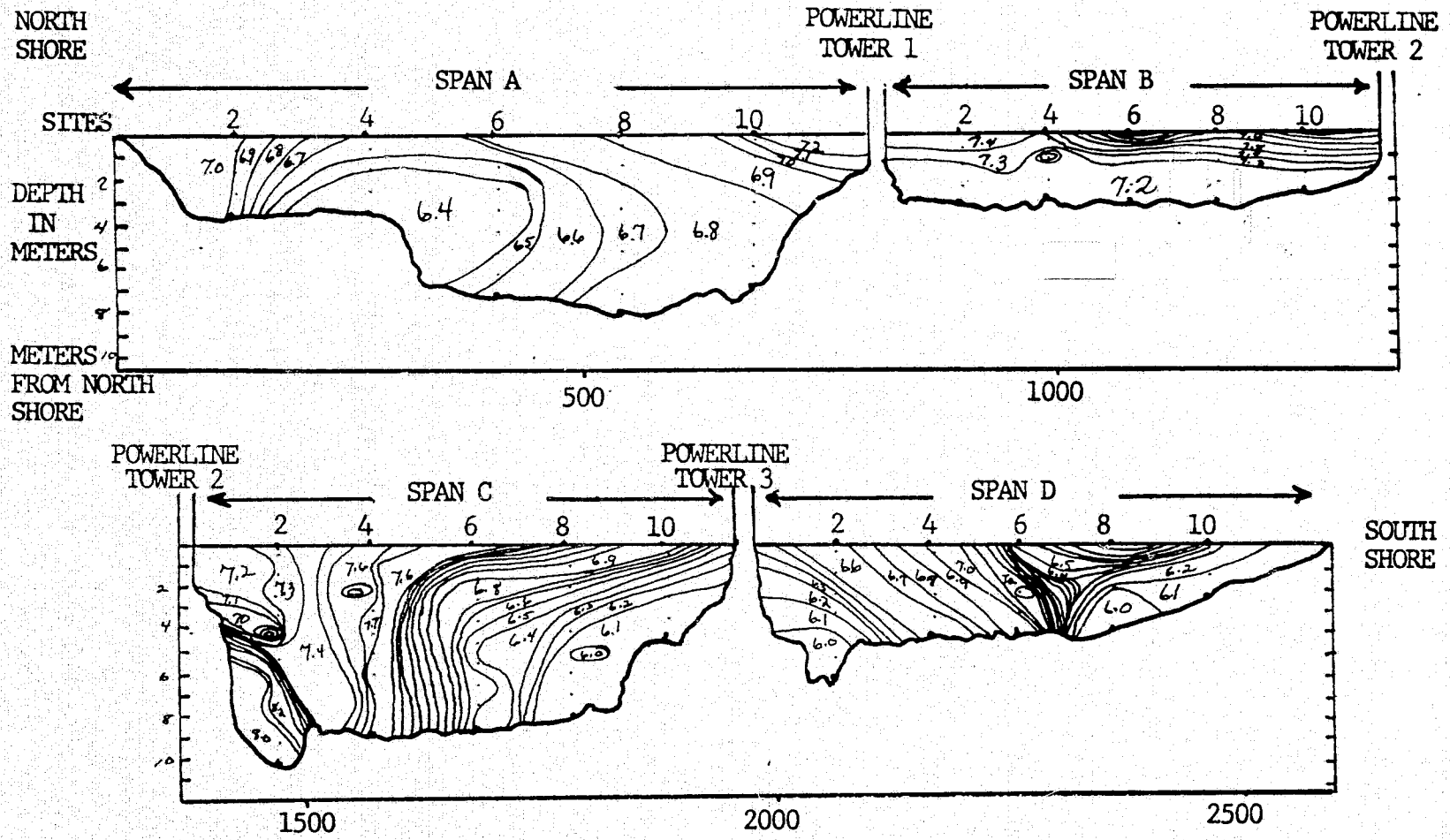

FIGURE 94. DISSOLVED OXYGEN CONCENTRATION PROFILE IN PARTS PER MILLION (mg/1) FOR JUNE 15, 1973.

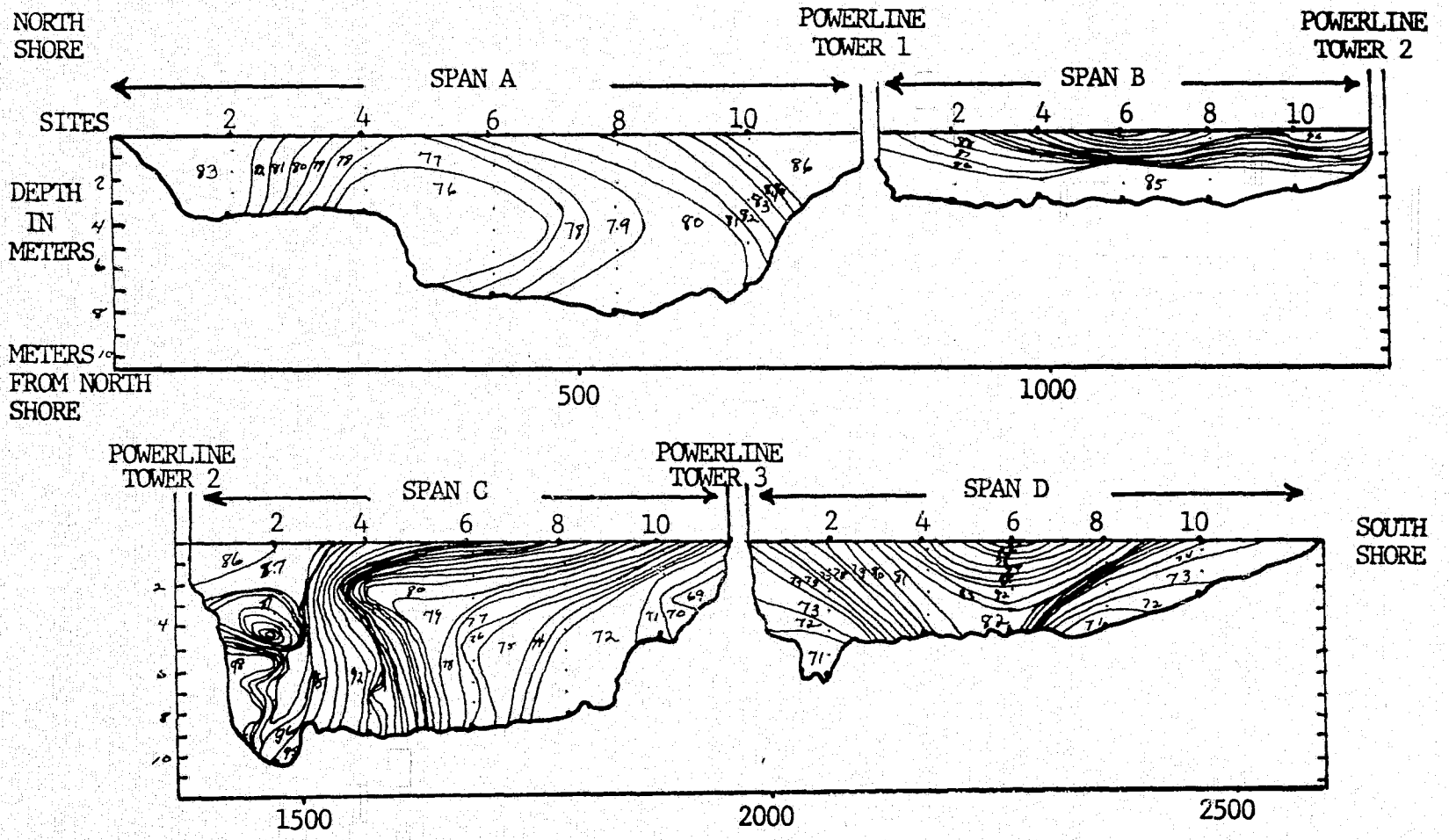

FIGURE 95. DISSOLVED OXYGEN CONCENTRATION PROFILE IN PERCENT OF SATURATION FOR WATER TEMPERATURE FOR JUNE 15, 1973.

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