

PEACH BOTTOM ATOMIC POWER STATION

MONTHLY REPORT NO. 72

for

JUNE 1979

THERMAL AND BIOLOGICAL  
MONITORING PROGRAMS

FOR

UNITS NO. 2 AND 3

PHILADELPHIA ELECTRIC COMPANY

98-328

7909050 499

ORIGINAL  
POOR

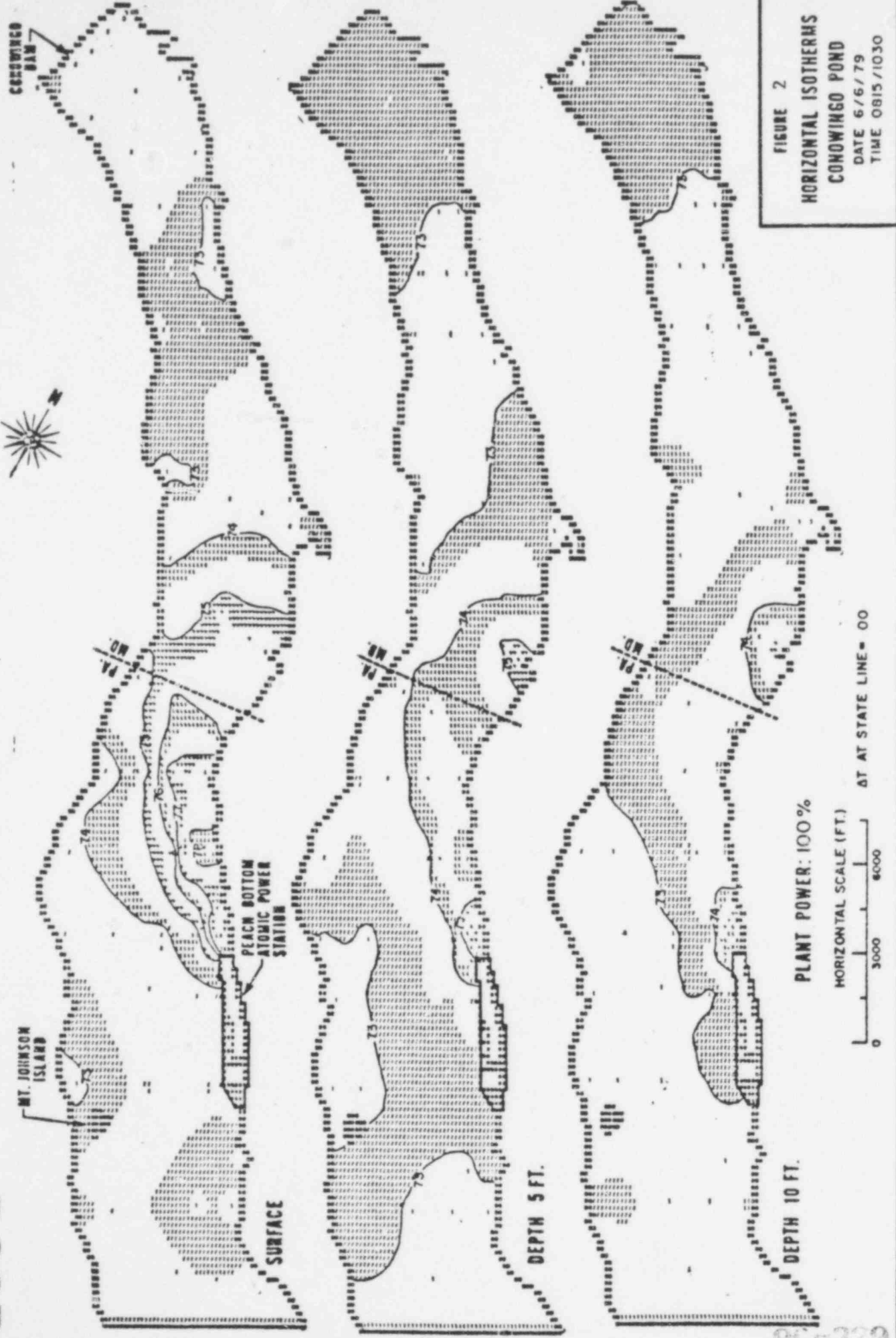


FIGURE 2  
HORIZONTAL ISOOTHERMS  
CONOWINGO POND  
DATE 6/6/79  
TIME 0815/1030

PLANT POWER: 100 %  
HORIZONTAL SCALE (FT.)  
0 3000 6000  
AT AT STATE LINE - 00

DEPTH 10 FT.

96-329

TABLE 1

HOLTWOOD DAILY FLOWS(CFS) AND DAILY THERMAL MEGAWATTS- JUN 1979

OBS	YEAR	MONTH	DAY	HW_FLOW	MW_THERM
1	79	6	1	69400	6145
2	79	6	2	60400	3347
3	79	6	3	53700	3280
4	79	6	4	48600	3275
5	79	6	5	45100	3288
6	79	6	6	40000	3287
7	79	6	7	37100	3285
8	79	6	8	33000	3235
9	79	6	9	30100	2797
10	79	6	10	26800	3259
11	79	6	11	27900	3511
12	79	6	12	26200	5225
13	79	6	13	25100	5061
14	79	6	14	23900	3287
15	79	6	15	22100	3286
16	79	6	16	20700	3524
17	79	6	17	19900	5292
18	79	6	18	18500	5964
19	79	6	19	16300	6506
20	79	6	20	15900	6553
21	79	6	21	13800	4767
22	79	6	22	13700	3896
23	79	6	23	13300	5685
24	79	6	24	12400	5997
25	79	6	25	12300	6531
26	79	6	26	12400	6363
27	79	6	27	10100	6538
28	79	6	28	10300	6571
29	79	6	29	11300	6569
30	79	6	30	13600	6566

TABLE 2

SUMMARY OF HOURLY CONOWINGO POND WATER TEMPERATURES JUNE, 1979

VARIABLE	N	MEAN	STANDARD DEVIATION	MINIMUM VALUE	MAXIMUM VALUE
HW_FLOW	720	26130.00	15636.53	10100.00	69400.00
MW_THERM	720	4763.00	1424.61	2797.00	6571.00
S2	713	22.34	1.96	16.50	24.70
S13	711	23.45	2.35	17.40	27.10
S13A	609	24.27	1.27	20.70	27.20
S30	717	22.07	1.85	16.70	24.10
S31	716	30.56	2.89	23.20	34.80
S22	716	27.91	2.57	22.80	32.00
D13_2	713	1.10	0.76	-0.80	3.10
D13_13A	606	-0.00	0.31	-1.60	1.00
D31_30	717	8.50	1.82	4.30	11.50
D32_30	717	5.85	1.60	2.40	8.70
D31_32	717	2.64	1.13	-2.90	5.70
S13S	714	23.43	2.36	17.40	27.10
LS13S_52	713	1.10	0.76	-0.80	3.10

POOR  
ORIGINAL

TABLE 3

PBAPS IMPACT HOURS ABOVE JUNE CONFIDENCE LIMIT

There were no pre-op hours above June Confidence Limits.

There were no hourly exceptions in June, 1979.

TABLE 4

BOAT SURVEY INFORMATION

SURVEY DATE	6/6/79	6/13/79	6/20/79	6/27/79
TIME:				
Survey Start (EST)	0815	0820	0940	0815
State Line (EST)	0910	0950	1100	0917
Survey Finish (EST)	1030	1115	1410	1125
HYDRAULIC DATA:				
Pond Elevation Start (Ft.)	108.67	108.17	108.20	108.95
Pond Elevation Finish (Ft.)	108.18	107.85	107.55	107.99
Natural Flow (24 hour ave., CFS)	37,300	23,700	15,000	9,000
Conowingo Inflow (24 hrs. ave., CFS)	43,550	23,875	14,925	11,425
Conowingo Dam Draft (24 hr. ave., CFS)	41,600	25,375	18,750	15,250
PBAPS Power Output:				
Unit 2: Thermal (MW)	3287	3291	3280	3286
Electrical (MW)	1064	1064	1061	1068
Unit 3: Thermal (MW)	0	1770	3273	3252
Electrical (MW)	-15	558	1027	1034
METEOROLOGICAL DATA:				
Time (EST)	0800	0805	0925	0800
Air Temperature (°F)	63	66	74	62
Relative Humidity (%)	78	49	72	72
Precipitation (24 hour total, in)	0	0	0	0
Wind Speed (mph)	1	6-8	7	4-6
Cloud Over	Sunny	Clear	Sunny	Sunny
Location:	7	7	7	7
Wind Direction	North	NW	SE	SW
WATER TEMPERATURE (THERMOGRAPH)				
Daily Mean: Sta. #2, °C, (°F)	20.6(69.1)	23.2(73.8)	24.0(75.2)	23.4(74.1)
Mid Survey: Sta. #2, °C, (°F)	20.6(69.1)	23.1(73.6)	23.7(74.7)	23.2(73.8)
WATER TEMPERATURE (SURVEY)				
PBAPS Discharge °C, (°F)	24.7(76.5)	28.5(83.3)	30.8(87.4)	29.5(85.1)
Intake °C, (°F)	21.3(70.3)	23.0(73.4)	24.5(76.1)	23.2(73.8)
T °C, (°F)	3.4(6.2)	5.5(9.9)	6.3(11.3)	6.3(11.3)
Pond Surface Max. °C, (°F)	24.8(76.6)	28.6(83.5)	30.6(87.1)	29.1(84.4)
Min. °C, (°F)	19.8(67.6)	22.5(72.5)	24.1(75.4)	23.0(73.4)
Pond Bottom Max. °C, (°F)	24.6(76.3)	28.4(83.1)	30.9(87.6)	29.9(85.8)
Min. °C, (°F)	18.5(65.3)	22.1(71.8)	22.7(72.9)	22.1(71.8)
No. of C.W. Pumps Operating	4	6	6	6
No. of Cooling Towers Operating	3	3	3	3

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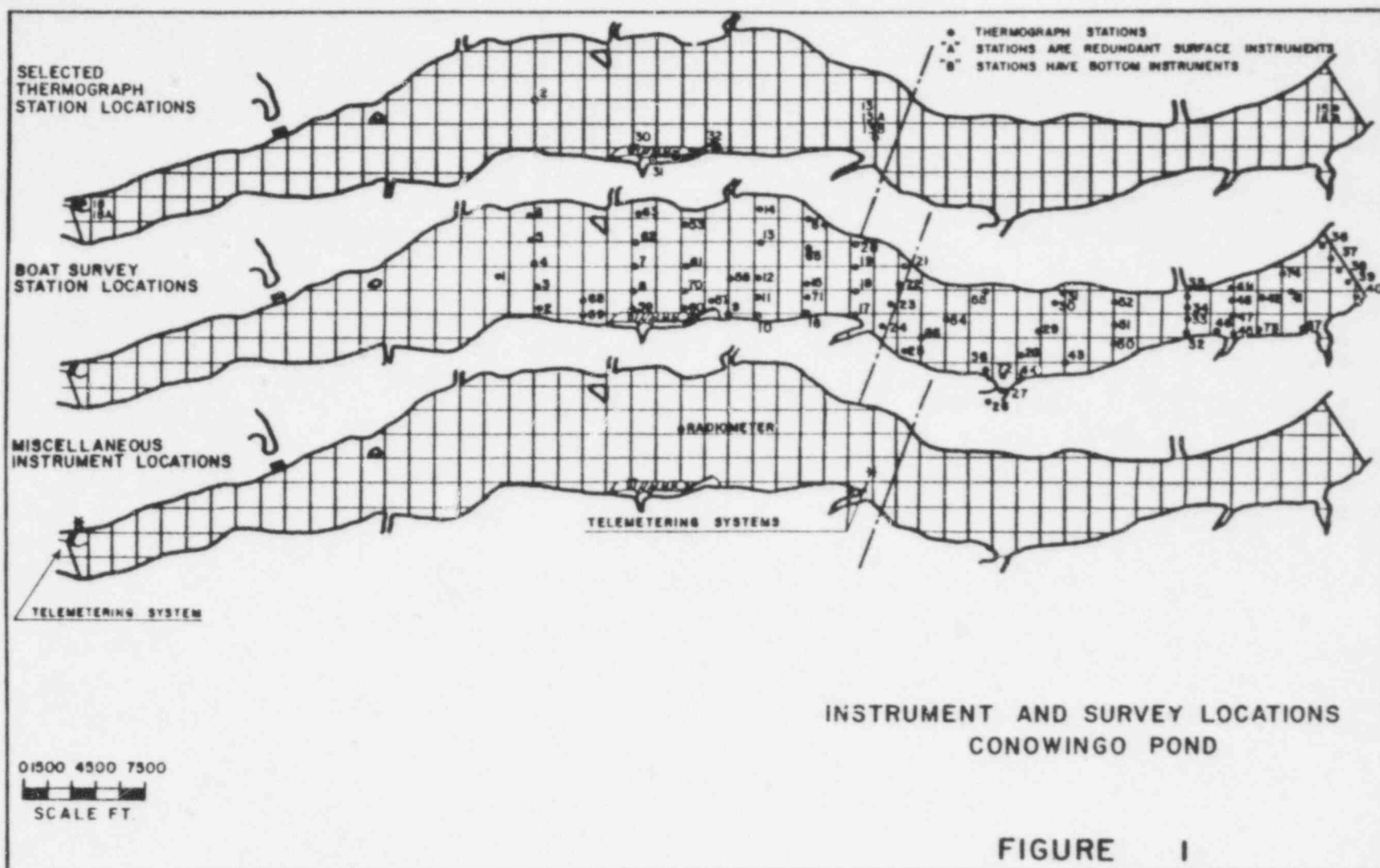


FIGURE 1

POOR  
ORIGINAL

90-0351

ORIGINAL

POOR



MT. JOHNSON ISLAND

PEACH BOTTOM  
ATOMIC POWER  
STATION

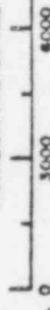
SURFACE

DEPTH 5 FT.

DEPTH 10 FT.

PLANT POWER: 190.4 %

HORIZONTAL SCALE (FT.)



ΔT AT STATE LINE = .86 °F

FIGURE 3  
HORIZONTAL ISOTHERMS  
CONOWINGO POND  
DATE 6/13/79  
TIME 0820/1115

90-335



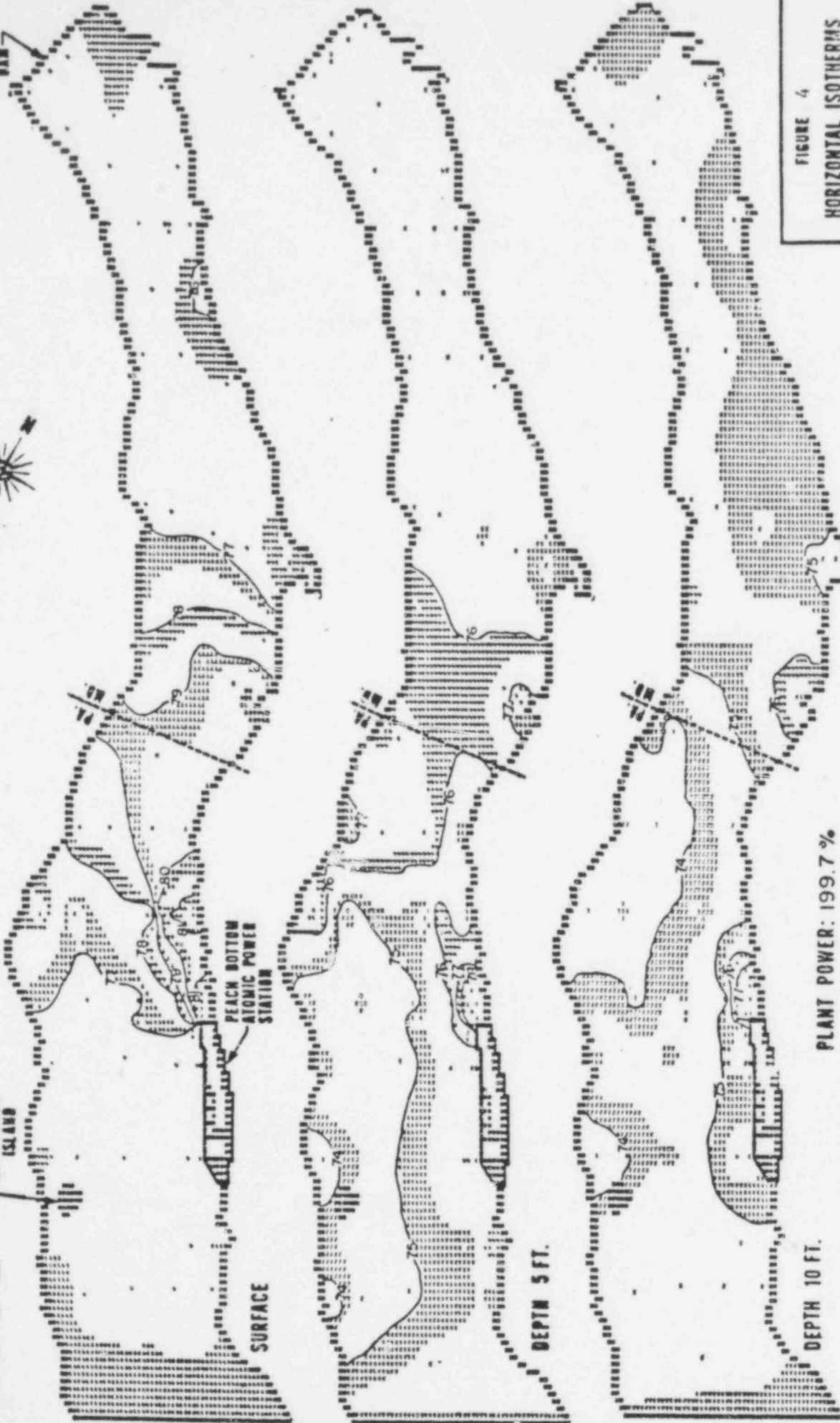
ORIGINAL

POOR

Mt. Johnson Island



CONOWINGO POND



PEACH BOTTOM  
ATOMIC  
STATION

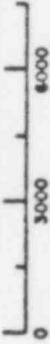
SURFACE

DEPTH 10 FT.

DEPTH 10 FT.

PLANT POWER: 199.7 %

HORIZONTAL SCALE (FT.)



AT AT STATE LINE - 38°F

FIGURE 4  
HORIZONTAL ISOTHERMS  
CONOWINGO POND

DATE 6/20/79  
TIME 0942 /1410

ORIGINAL  
POOR

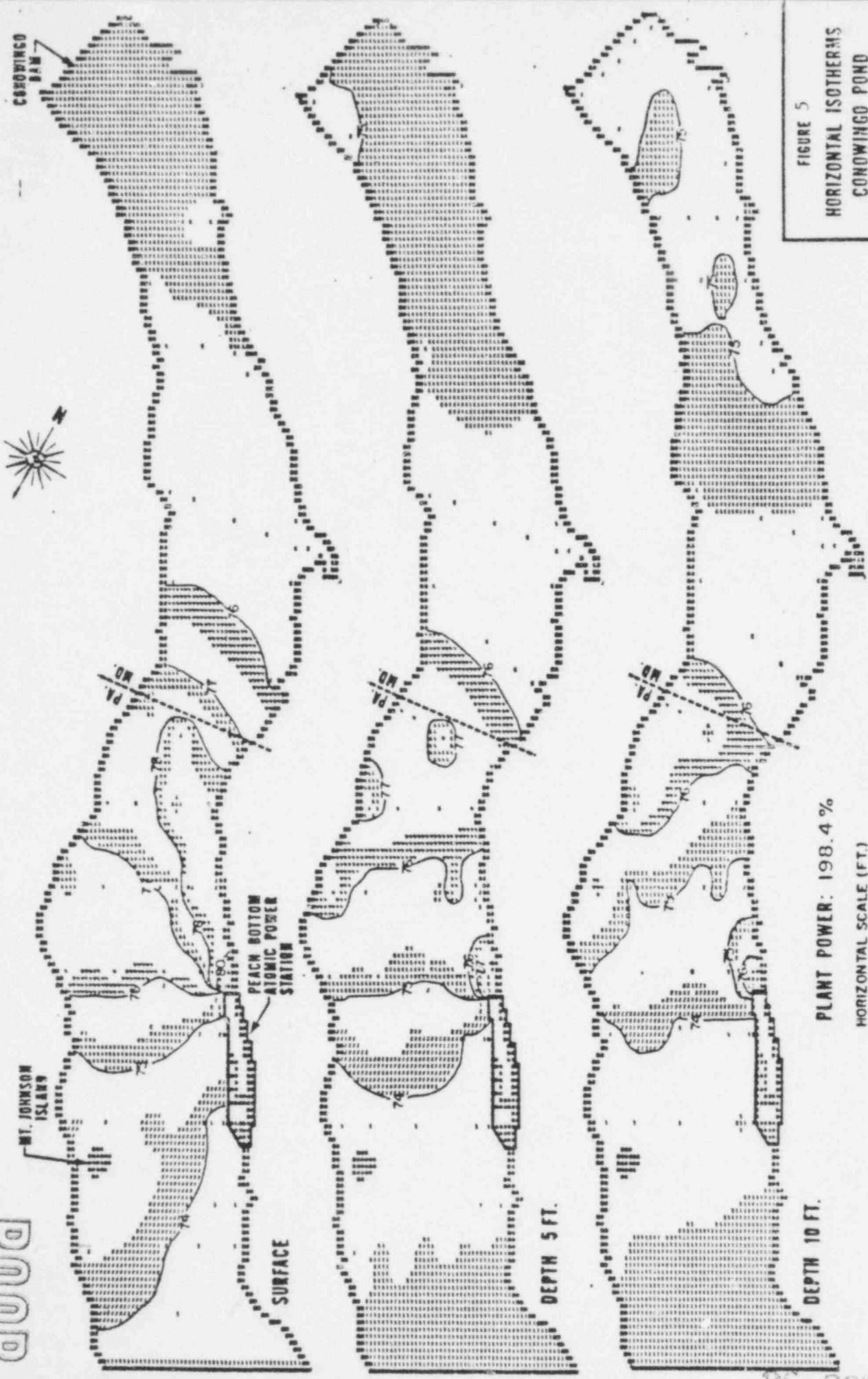


FIGURE 5  
HORIZONTAL ISOTHERMS  
CONOWINGO POND  
DATE 06/27/79  
TIME 0815/1125

PLANT POWER: 198.4 %  
HORIZONTAL SCALE (FT.)

0 3000 4000  
AT AT STATE LINE = 3.52°F

30-337