

The
Midnight Pass



SOCIETY, INC.

"MIDNIGHT PASS - PASS IT ON!"

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THE MIDNIGHT PASS SOCIETY
WATER MONITORING PROGRAM

PURPOSE

The Midnight Pass Society is dedicated to the restoration of Midnight Pass and to the preservation and protection of Little Sarasota Bay. Our Water Monitoring Program was established to assess and to quantify the effects of the closure of this essential inlet upon its surrounding environs.

OPERATIONS

All monitoring programs are staffed by Society volunteers. The Society covers all out-of-pocket expenses relating to authorized research projects undertaken. All projects initiated are first reviewed by Dr. John B. Morrill and receive the benefit of his advice and guidance. Dr. Morrill provides assistance to ongoing assignments, coordinates all needed lab work and critiques all conclusions drawn.

We began our Program in June, 1988 by selecting six water testing sites around Little Sarasota Bay. Four stations are on Siesta Key ranging from just south of the Stickney Point Bridge to just above the Midnight Pass area. Of the two mainland stations, one is about two miles above Midnight Pass while the other is opposite the Pass' northern channel. In 1989 we added one additional mainland testing station situated just below the Blackburn Point Bridge.

All of our stations are "nearshore" stations... the readings they take are off of docks and seawalls. The convenience of shore readings affords us the opportunity of getting a substantial amount of data. Additionally, our nearshore readings tend to complement County data, much of which is obtained in mid-bay.

In 1989, nitrate and oxygen testing were added to our water testing program. These readings will be taken at various points throughout the Bay including, at times, our established testing station sites.

THE MIDNIGHT PASS SOCIETY

1988 RESEARCH PROGRAM

WATER TESTING.

1. SALINITY. Testing of the salt content of water. During the rainy season daily samples were taken. For the balance of the year weekly samples were taken.
2. SECCHI DISC READINGS. The secchi disc is used to measure water clarity...the extent to which light can penetrate water. Secchi disc readings were taken at the same time as salinity samples.
3. RAINFALL.

COLIFORM TESTING. The presence of elevated levels of coliform bacteria in the water indicates an unhealthy condition. During the rainy season we took approximately 75 samples from selected locations around Little Sarasota Bay and tested for the presence of coliform bacteria. Some samples were taken after "roiling" the bottom. Millipore "dipstick" samplers were used.

SEAGRASS INVENTORY. Several field trips were made during the year to assess the type, size and condition of the seagrass beds in Little Sarasota Bay. Our attentions centered around the Bird Islands.

CLAM RESEARCH. In August, 1988 a field trip was made to Little Sarasota Bay to assess the condition of the clam beds in the Midnight Pass vicinity. The team leader was Dr. John B. Morrill. The results of this fieldwork were released in a Society paper.

1989 RESEARCH PROGRAM

WATER TESTING.

1. SALINITY. Same as 1988.
2. SECCHI DISC READINGS. Same as 1988.
3. RAINFALL.
4. NITRATES. Measurement of the nutrients in the water using a comparator kit.
5. OXYGEN. Measurement of the levels of dissolved oxygen in the water. Samples will be taken late afternoon and just before the following dawn to obtain maximum/minimum oxygen levels. Readings will be taken at varying depths at selected Bay locations.
6. TEMPERATURE.
7. PH READINGS. PH readings will be taken at the same time a sample is taken for nitrate testing.

OUTFALL ANALYSIS. Using mounted aerial photographs, teams of volunteers in shallow-draft boats will reconnoiter the entire bay shoreline from the Stickney Point Bridge south to the Venice Jetties (the first phase goes down as far as South Creek). Every outfall

.....more

THE MIDNIGHT PASS SOCIETY
1989 RESEARCH PROGRAM
(CONTINUED)

OUTFALL ANALYSIS (cont'd.). will be inventoried as to location, size, position in relation to water level and understood purpose. Significant outfalls will be "back-tracked" by other volunteers to determine the area drained and/or the nature and scope of the material discharged through the outfall.

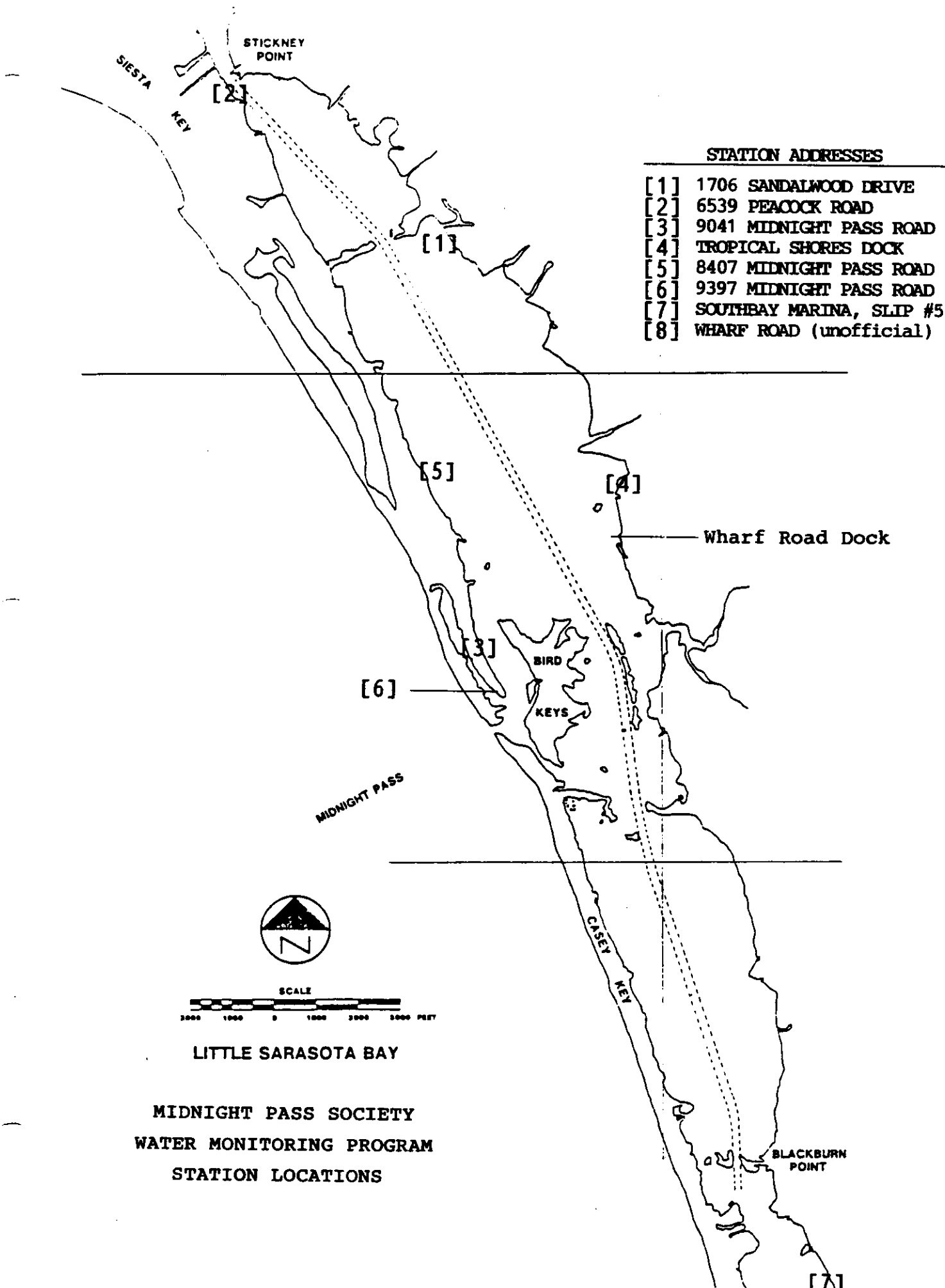
SHORELINE ANALYSIS. At the same time that the outfall analysis is conducted, the shoreline will be inventoried as well. The inspection teams will note on the aerial photos the condition of the shoreline. Hardened shoreline will be further broken down as to type... seawall, rip-rap, other. Vegetated shoreline will be broken down as to type of plantings. Bare shoreline will also be noted.

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THE WAECHTER STICK

In our first year of water testing Mr. Robert Waechter, one of our volunteers, designed and manufactured a novel tool to make our sample gathering much easier. It has, for obvious reasons, been dubbed the "Waechter Stick." The bottom of the stick has provision for accepting a standard water sample vial. This can be inserted, mouth down, in the water to the desired sample depth. You then turn the bottle over to load the sample. Above the sample collector is mounted a standard secchi disc. However, the gradations have been displayed on the side of the stick.

Our volunteers have found this tool to be easy to use. The salinity samples obtained are well below any surface fresh water, thus giving us truer readings of water salinity. And our volunteers find the "stick" much easier to obtain accurate secchi disc readings as compared to the more traditional disc attached to a knotted cord.



MIDNIGHT PASS SOCIETY WATER MONITORING PROGRAM JUNE, 1988

DAY OF MONTH	MOON PHASE	DAYLIGHT		TIDES LOW	L.S.B. RAINFALL	L.S.#1 SAL/SECMI	MONITORING STATIONS			
		TIME/N&T	TIME/N&T				#2 SAL/SECMI	#3 SAL/SECMI	#4 SAL/SECMI	
1		12:35M	2.9		0	31	31.5	31	31	
2		1:07M	2.7		0	31	31.5	31.5	31.5	
3		2:40M	2.7		0	31	31.5	31.5	31	
4		3:45M	2.7		0	31.5	31.5	31.5	31.5	
5		4:11M	2.4		0	32	32	32	31.5	
6		5:44M	2.1	12:37A 1.5	.25	32	31	31	30	
7		7:13M	2.1	2:33P 1.2	0	31.5	31.5	31.5	30.5	
8		8:47A	2.0	4:08A 0.8	0	31.5	31	31	31.0	
9		9:55A	2.3	5:45P 0.4	.05	31.0	31	31.5	31	
10		8:44A	2.5	6:14A 0.1	0	31	31	31	31	
11		10:12A	2.6	7:03A 0.2	0	31	31.5	31.5	32	
12		10:45A	2.7	7:51A 0.3	0	31	34	34	32	
13		11:00A	2.8		0		34	34	32	
14		11:51A	2.8		0		34	34	33	
15	NEW	12:42P	2.8		0		34	34	32	
16		1:24P	2.8		0		34.5	34	33	
17		2:10P	2.7		0		34	34	33	
18		2:52P	2.6		0		34	34	34	
19		3:55A	1.4	9:30A 1.3	0		34	34	34	
20		5:51A	1.7	11:13A 1.3	0		34	34	34	
21		7:52A	1.7	12:51A 1.2	0	33	34	34	34	
22		7:53A	1.7		0				34	
23		7:17A	1.7	2:21P 1.0	0				34	
24	FIRST QTR.	8:10A	2.0	3:37P 0.8	0		34	34	31	
25		8:27A	2.2	4:46P 0.5	0	34	34	34	34	
26		8:58A	2.2	5:51A 0.3	0		34	34	34	
27		9:32A	2.5	6:34A 0.1	0	34	34	34	34	
28		10:16A	2.7	7:26A 0.1	0		34	34	34	
29		10:52A	2.7		0		33.5	34	34	
30	FULL	11:41A	3.0		0	34	34	34	33	
31		12:34P	3.1		0		34	34	34	
TOTAL RAINFALL: L.S.B.					1.00					
HERALD-TRIBUNE RAINFALL					2.80					

MIDNIGHT PASS SOCIETY WATER MONITORING PROGRAM JULY, 1988

DAY OF MONTH	MOON PHASE	DAYLIGHT TIDES		L.S.B. RAINFALL	L.S.B. #1 SAL./Secm	MONITORING STATIONS #2, #3, #4		
		HIGH TIME/HGT.	LOW TIME/HGT.			SAL./Secm	SAL./Secm	SAL./Secm
1		6:28P 3.0		0	34	34	34	34
2		7:20P 2.9		0	34	34	34	34
3		8:19P 2.6	9:22A 1.4	0	34	34	34	34
4		9:22P 2.3	11:00A 1.3	0	34	34	34	34
5		10:19P 1.9	12:30P 1.1	0	34	34	34	34
6		11:14P 1.7	1:21P 0.9	0	34	34	34	34
7		12:08P 1.6	3:17P 0.5	0	34	34	34	34
8		1:00P 1.5		0	34	34	34	34
9		1:55P 1.3		0	34	34	34	34
10		2:44P 1.1		0	34	34	34	34
11		3:28P 0.9		0	34	34	34	34
12		4:08P 0.7		0	34	34	34	34
13		4:85P 0.5		0	34	34	34	34
14		4:59P 0.3		0	34	34	34	34
15		5:49P 0.1		0	34	34	34	34
16		6:34P 0.0		0	34	34	34	34
17		7:14P 0.0		0	34	34	34	34
18		7:50P 0.0		0	34	34	34	34
19		8:22P 0.0		0	34	34	34	34
20		8:51P 0.0		0	34	34	34	34
21		9:17P 0.0		0	34	34	34	34
22		9:40P 0.0		0	34	34	34	34
23		10:00P 0.0		0	34	34	34	34
24		10:18P 0.0		0	34	34	34	34
25		10:33P 0.0		0	34	34	34	34
26		10:46P 0.0		0	34	34	34	34
27		10:57P 0.0		0	34	34	34	34
28		11:06P 0.0		0	34	34	34	34
29		11:14P 0.0		0	34	34	34	34
30		11:20P 0.0		0	34	34	34	34
31		11:25P 0.0		0	34	34	34	34
TOTAL RAINFALL: L.S.B.				4.07				
HERALD-TRIBUNE RAINFALL				5.50				

MIDNIGHT PASS SOCIETY
WATER MONITORING PROGRAM
OCTOBER, 1988

REPORT BY: _____ DATE: _____
APPROVED BY: _____

DAY OF MONTH	MOON PHASE	DAYLIGHT HIGH TIME/HGT	TIDES LOW TIME/HGT	L.S.B. RAINFALL	L.S.B. #1 SAL/SECUM	MONITORING #2 SAL/SECUM	MONITORING #3 SAL/SECUM	STATIONS #4 SAL/SECUM	#5 SAL/SECUM	#6 SAL/SECUM	
1			12:57P 0.1	0							
2	LAST QTR		2:20P 0.3	.50	25.5						
3			3:46P 0.3	.20	25						
4		7:45A 2.2	4:50P 0.3	0		29		24	25.5	22	
5		9:12A 2.2	5:35P 0.5	0							
6		9:20A 2.2	6:11P 0.6	0				30			
7		11:46A 2.2	6:56P 0.6	0				25			
8		12:57P 2.1	7:01P 0.8	0							
9		12:47P 2.1	6:56P 0.5	0				24.5			
10	NEW	1:25P 2.0	5:31A 0.3	0	25			25.5	25.5	25	
11		2:07P 1.9	5:03A 0.2	0				23			
12		2:46P 1.8	4:33A 0.2	0				26			
13		3:26P 1.7	4:04A 0.1	0							
14			3:55A 0.0	0							
15			4:24A 0.0	0							
16			4:53A 0.0	0	28						
17			5:22A 0.1	0							
18			5:51A 0.1	0							
19	FIRST QTR	6:20A 2.2	6:20A 0.1	0							
20		8:52A 2.1	5:49A 0.3	0							
21		10:02A 2.1	5:20P 0.4	0				27			
22		11:11A 2.0	6:04P 0.7	0	29						
23		12:08P 1.9	6:40P 0.3	0							
24		1:34P 1.9	7:25P 0.3	0							
25	FULL	2:46P 1.7	8:07P 0.3	0							
26		3:50P 1.6	8:53P 0.4	0							
27			9:42A 0.4	0							
28			10:30A 0.4	0							
29			11:26A 0.2	0	30						
30			11:50A 0.0	0							
31			12:37P 0.1	0							
				TOTAL RAINFALL: 4.5 B.							
				HERALD-TRIBUNE RAINFALL							
				2.28							

MIDNIGHT PASS SOCIETY WATER MONITORING PROGRAM JANUARY, 1989

DAY OF MONTH	MOON PHASE	DAYLIGHT TIDES		L.S.B. RAINFALL	MONITORING STATIONS										
		HIGH TIME/HGT.	LOW TIME/HGT.		#1 SAL/SEC/M	#2 SAL/SEC/M	#3 SAL/SEC/M	#4 SAL/SEC/M	#5 SAL/SEC/M	#6 SAL/SEC/M					
1		6:49A 1.9	12:21P 0.9	0											
2		7:29P 2.1		0											
3				0											
4				0											
5				0											
6				0											
7				0											
8				0											
9				0											
10				0											
11				0											
12				0											
13				0											
14				0											
15				0											
16				0											
17				0											
18				0											
19				0											
20				0											
21				0											
22				0											
23				0											
24				0											
25				0											
26				0											
27				0											
28				0											
29				0											
30				0											
31				0											
				TOTAL RAINFALL:	L.S.B.										
				HERALD-TRIBUNE	RAINFALL										
					2.00										
					2.45										

MIDNIGHT PASS SOCIETY WATER MONITORING PROGRAM FEBRUARY, 1989

Prepared by: _____
Approved by: _____

DAY OF MONTH	MOON PHASES	DAYLIGHT HIGH TIME/HGT	DAYLIGHT LOW TIME/HGT	L.S.B. RAINFALL	L.S.B. #1 SAL/SECUM	MONITORING STATION #2 SAL/SECUM	MONITORING STATION #3 SAL/SECUM	MONITORING STATION #4 SAL/SECUM	MONITORING STATION #5 SAL/SECUM	MONITORING STATION #6 SAL/SECUM
1		7:37P 2.1		0						
2			6:57A 0.8	0						
3			7:13A 0.8	0						
4		1:54P 1.1	7:57P 1.0	0	30					
5		1:56P 1.2	7:55A 0.7	0						
6		2:04P 1.3	8:15A 0.5	0						
7		2:08P 1.5	8:27A 0.6	0					30	
8		2:20P 1.7	8:59A 0.2	0						
9		2:31P 1.7	9:02A 0.1	0						
10		3:07P 2.0	9:19A 0.4	0						
11		3:39P 2.4	9:29A 0.6	0						
12	FIRST QTR	4:59P 2.2		0	31			30		
13		5:44P 2.2		0						
14		6:19P 2.1		0						
15		7:42P 2.1		0						
16				0						
17				0						
18		1:35P 1.2	6:59A 0.5	0						
19		1:38P 1.2	7:18A 1.0	0						
20		1:46P 1.2	7:39A 0.7	0						
21	FULL	1:51P 1.3	7:55A 0.5	0						
22		1:58P 1.4	8:14A 0.1	0						
23		1:57P 1.6	8:27A 0.3	0						
24		2:13P 1.7	8:44A 0.4	0						
25		2:36P 1.9	8:58A 0.6	0						
26		3:08P 1.9	9:03A 0.7	0						
27		3:42P 2.0	8:55A 0.8	0					33.5	
28	LAST QTR	4:33P 2.0		0						
TOTAL RAINFALL: L.S.B.				0.10						
HERALD-TRIBUNE RAINFALL				0.05						

MIDNIGHT PASS SOCIETY WATER MONITORING PROGRAM APRIL, 1989

DAY OF MONTH	MOON PHASE	DAYLIGHT TIDES		L.S.B. RAINFALL	L.S.B. #1 SAL/Secm	MONITORING STATIONS			#6 SAL/Secm		
		HIGH TIME/HGT.	LOW TIME/HGT.			#2 SAL/Secm	#3 SAL/Secm	#4 SAL/Secm		#5 SAL/Secm	
1		4:32P 1.3	2:52P 1.2	0							
2		4:32P 1.3	2:52P 1.2	0							
3		4:32P 1.3	2:52P 1.2	0							
4		4:32P 1.3	2:52P 1.2	0							
5	NEW	4:32P 1.3	2:52P 1.2	0							
6		4:32P 1.3	2:52P 1.2	0							
7		4:32P 1.3	2:52P 1.2	0							
8		4:32P 1.3	2:52P 1.2	0							
9		4:32P 1.3	2:52P 1.2	0							
10		4:32P 1.3	2:52P 1.2	0							
11		4:32P 1.3	2:52P 1.2	0							
12	FIRST QTR	4:32P 1.3	2:52P 1.2	0							
13		4:32P 1.3	2:52P 1.2	0							
14		4:32P 1.3	2:52P 1.2	0							
15		4:32P 1.3	2:52P 1.2	0							
16		4:32P 1.3	2:52P 1.2	0							
17		4:32P 1.3	2:52P 1.2	0							
18		4:32P 1.3	2:52P 1.2	0							
19		4:32P 1.3	2:52P 1.2	0							
20	FULL	4:32P 1.3	2:52P 1.2	0							
21		4:32P 1.3	2:52P 1.2	0							
22		4:32P 1.3	2:52P 1.2	0							
23		4:32P 1.3	2:52P 1.2	0							
24		4:32P 1.3	2:52P 1.2	0							
25		4:32P 1.3	2:52P 1.2	0							
26		4:32P 1.3	2:52P 1.2	0							
27		4:32P 1.3	2:52P 1.2	0							
28		4:32P 1.3	2:52P 1.2	0							
29	LAST QTR	4:32P 1.3	2:52P 1.2	0							
30		4:32P 1.3	2:52P 1.2	0							
31		4:32P 1.3	2:52P 1.2	0							
32		4:32P 1.3	2:52P 1.2	0							
33		4:32P 1.3	2:52P 1.2	0							
34		4:32P 1.3	2:52P 1.2	0							
35		4:32P 1.3	2:52P 1.2	0							
36		4:32P 1.3	2:52P 1.2	0							
37		4:32P 1.3	2:52P 1.2	0							
38		4:32P 1.3	2:52P 1.2	0							
39		4:32P 1.3	2:52P 1.2	0							
40		4:32P 1.3	2:52P 1.2	0							
41		4:32P 1.3	2:52P 1.2	0							
42		4:32P 1.3	2:52P 1.2	0							
43		4:32P 1.3	2:52P 1.2	0							
44		4:32P 1.3	2:52P 1.2	0							
45		4:32P 1.3	2:52P 1.2	0							
46		4:32P 1.3	2:52P 1.2	0							
47		4:32P 1.3	2:52P 1.2	0							
48		4:32P 1.3	2:52P 1.2	0							
49		4:32P 1.3	2:52P 1.2	0							
50		4:32P 1.3	2:52P 1.2	0							
51		4:32P 1.3	2:52P 1.2	0							
52		4:32P 1.3	2:52P 1.2	0							
53		4:32P 1.3	2:52P 1.2	0							
54		4:32P 1.3	2:52P 1.2	0							
55		4:32P 1.3	2:52P 1.2	0							
56		4:32P 1.3	2:52P 1.2	0							
57		4:32P 1.3	2:52P 1.2	0							
58		4:32P 1.3	2:52P 1.2	0							
59		4:32P 1.3	2:52P 1.2	0							
60		4:32P 1.3	2:52P 1.2	0							
61		4:32P 1.3	2:52P 1.2	0							
62		4:32P 1.3	2:52P 1.2	0							
63		4:32P 1.3	2:52P 1.2	0							
64		4:32P 1.3	2:52P 1.2	0							
65		4:32P 1.3	2:52P 1.2	0							
66		4:32P 1.3	2:52P 1.2	0							
67		4:32P 1.3	2:52P 1.2	0							
68		4:32P 1.3	2:52P 1.2	0							
69		4:32P 1.3	2:52P 1.2	0							
70		4:32P 1.3	2:52P 1.2	0							
71		4:32P 1.3	2:52P 1.2	0							
72		4:32P 1.3	2:52P 1.2	0							
73		4:32P 1.3	2:52P 1.2	0							
74		4:32P 1.3	2:52P 1.2	0							
75		4:32P 1.3	2:52P 1.2	0							
76		4:32P 1.3	2:52P 1.2	0							
77		4:32P 1.3	2:52P 1.2	0							
78		4:32P 1.3	2:52P 1.2	0							
79		4:32P 1.3	2:52P 1.2	0							
80		4:32P 1.3	2:52P 1.2	0							
81		4:32P 1.3	2:52P 1.2	0							
82		4:32P 1.3	2:52P 1.2	0							
83		4:32P 1.3	2:52P 1.2	0							
84		4:32P 1.3	2:52P 1.2	0							
85		4:32P 1.3	2:52P 1.2	0							
86		4:32P 1.3	2:52P 1.2	0							
87		4:32P 1.3	2:52P 1.2	0							
88		4:32P 1.3	2:52P 1.2	0							
89		4:32P 1.3	2:52P 1.2	0							
90		4:32P 1.3	2:52P 1.2	0							
91		4:32P 1.3	2:52P 1.2	0							
92		4:32P 1.3	2:52P 1.2	0							
93		4:32P 1.3	2:52P 1.2	0							
94		4:32P 1.3	2:52P 1.2	0							
95		4:32P 1.3	2:52P 1.2	0							
96		4:32P 1.3	2:52P 1.2	0							
97		4:32P 1.3	2:52P 1.2	0							
98		4:32P 1.3	2:52P 1.2	0							
99		4:32P 1.3	2:52P 1.2	0							
100		4:32P 1.3	2:52P 1.2	0							
TOTAL RAINFALL: L.S.B.				0.95							
HERALD-TAIBUNE RAINFALL				2.20							

MIDNIGHT PASS SOCIETY
WATER MONITORING PROGRAM
MAY, 1989

DAY OF MONTH	MOON PHASE	DAYLIGHT HIGH TIME/HRT	DAYLIGHT LOW TIME/HRT	L.S.B. RAINFALL	L.S.B. #1 SAL/SEC/M	MONITORING STATIONS #2 #3 #4 #5 #6 SAL/SEC/M SAL/SEC/M SAL/SEC/M SAL/SEC/M SAL/SEC/M
1		10:48 1.8	5:27 0.6	0		
2		10:58 2.0	6:40 0.5	0		
3		11:28 2.2	7:03 0.2	0		
4		11:58 2.4	7:52 0.14	0		
5	NEW	12:03 2.6		0		
6		12:50 2.8		0		
7		1:44 2.8		0		
8		1:56 2.7		0		
9		2:38 2.6		0		
10		3:48 2.4		0		
11		4:58 2.1		0		
12	FIRST QTR	6:23 1.9		0	34	
13		6:55 1.5	3:32 1.2	0		
14		6:58 1.7	4:28 0.9	0		
15		7:01 1.6	5:18 0.6	0		
16		7:04 1.8	6:00 0.4	0		
17		7:07 2.0	6:43 0.1	0		
18		7:10 2.3	7:08 0.0	10		
19		7:13 2.4	7:58 0.1	0		
20	FULL	7:16 2.5		0		
21		7:20 2.6		0		
22		7:24 2.7		0		
23		7:28 2.7		0		
24		7:32 2.6		0		
25		7:36 2.5		0		
26		7:40 2.3		0		
27		7:44 2.1	12:37 1.4	0		
28		7:48 1.8	2:59 1.2	50		
29		7:52 1.4	4:07 0.8	160		
30	LAST QTR	7:57 1.2	5:08 0.3	150		
31		7:58 1.1	6:10 0.0	110		
TOTAL RAINFALL: L.S.B.				1.80		
HERALO-TRIBUNE RAINFALL				2.80		

ARMORED DINOFLUPELLATE ATTACHED TO ORGANIC DEBRIS.
EXAMPLE DOMINATED BY SPECIES OF

MIDNIGHT PASS SOCIETY WATER MONITORING PROGRAM OCTOBER, 1989

DAY OF MONTH	MOON PHASE	DAYLIGHT TIDES		L.S.B. RAINFALL	L.S.B. #1 SAL/SEC/MI	MONITORING STATIONS									
		HIGH TIME/HGT.	LOW TIME/HGT.			#2 SAL/SEC/MI	#3 SAL/SEC/MI	#4 SAL/SEC/MI	#5 SAL/SEC/MI	#6 SAL/SEC/MI	#7 SAL/SEC/MI				
1				0	21 37"										
2		2:28 1.9	8:35 0.2	.30	22 32"										
3		3:22 1.8	9:10 0.1	0	22 32"										
4		4:08 1.7	9:49 0.1	0	23 32"										
5		5:08 1.6	10:34 0.2	0	24.5 35"										
6			11:30 0.2	.40											
7			12:45 0.3	0											
8			2:09 0.3	0											
9			4:26 0.3	0											
10			5:18 0.3	.40											
11			6:08 0.5	0											
12			6:58 0.7	0											
13			7:48 0.7	.10											
14			8:38 0.7	0											
15			9:28 0.7	0											
16			10:18 0.7	0											
17			11:08 0.7	0											
18			11:58 0.7	.30											
19			12:48 0.7	.20											
20			1:38 0.7	0											
21			2:28 0.7	0											
22			3:18 0.7	0											
23			4:08 0.7	0											
24			5:08 0.7	0											
25			6:08 0.7	0											
26			7:08 0.7	0											
27			8:08 0.7	.20											
28			9:08 0.7	0											
29			10:08 0.7	0											
30			11:08 0.7	0											
31			12:08 0.7	0											
				TOTAL RAINFALL: 4.5 B.	1.90										
				HERALD TRIBUNE RAINFALL	1.78										

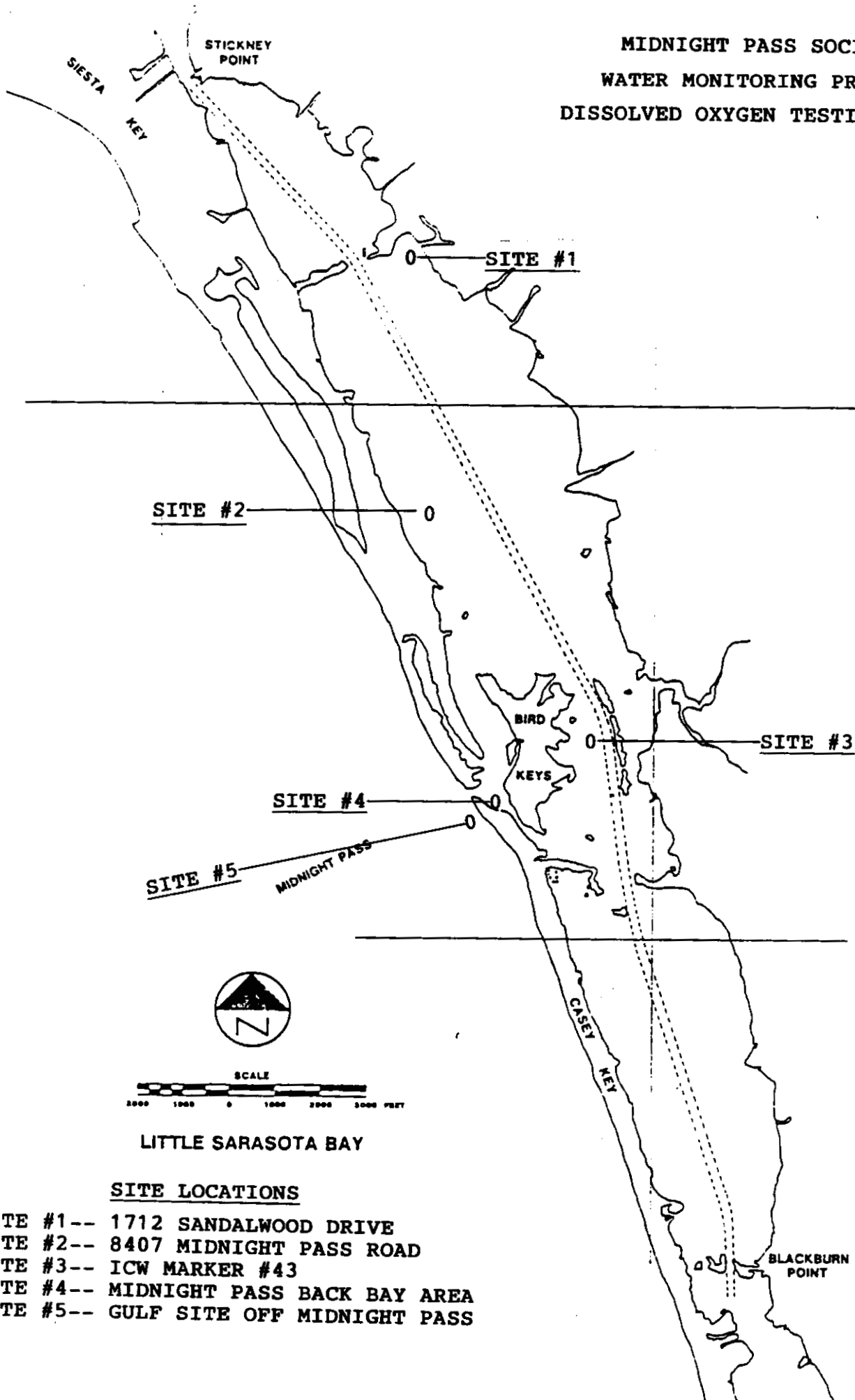
Prepared By: []
Approved By: []

MIDNIGHT PASS SOCIETY WATER MONITORING PROGRAM DECEMBER, 1989

Prepared by: []
Approved by: []

DAY OF MONTH	MOON PHASE	DAYLIGHT HIGH TIME/HGT.	TIDES LOW TIME/HGT.	L.S.B. RAINFALL	L.S.B. #1 SAL/SEC/MI	MONITORING #2 SAL/SEC/MI	MONITORING #3 SAL/SEC/MI	MONITORING #4 SAL/SEC/MI	MONITORING #5 SAL/SEC/MI	MONITORING #6 SAL/SEC/MI	MONITORING #7 SAL/SEC/MI
1			9:22A 0.4	0							32
2			10:07A 0.3	0							32
3			10:53A 0.2	0						30	
4			11:35A 0.1	0				30.5	33°		
5	FIRST QTR	6:47P 1.7	12:49P 0.1	0			28		32°	30.5	36°
6		7:16P 1.9	1:00P 0.4	0							
7		7:47P 1.3	7:37P 0.7	0							
8		8:13P 2.1		1.50	31						
9		8:43A 1.2	2:05P 1.0	0	30						
10				0	30	50"					
11		9:17A 2.6		0	30						
12		10:03A 2.7	6:31A 0.8	0							
13	FULL	10:49P 2.7	7:21A 0.9	.15					34°		
14		11:35A 2.7	8:11A 0.9	0	30						
15			8:57A 0.7	0							
16			9:41A 0.6	.15							
17			10:22A 0.4	0							
18			11:01A 0.2	.05							
19		5:56P 1.4	11:33A 0.1	0							
20	LAST QTR	6:18P 1.6	12:09P 0.3	0							
21		6:43P 1.7	12:30P 0.6	0							
22		7:07A 1.4	1:06P 0.8	0							
23		7:37P 1.9		1.60	29.5						
24		8:07A 2.0	1:28P 1.0	.05							
25				0							
26			6:44A 0.5	.15							
27			7:20A 0.5	0							
28	NEW		7:56A 0.6	0							
29			8:32A 0.6	0							
30		3:51P 1.2	9:07A 0.5	0							
31		4:10P 1.3	9:39A 0.4	0							
TOTAL RAINFALL: L.S.B.				3.65							
HERALD-TRIBUNE RAINFALL				4.54							

MIDNIGHT PASS SOCIETY
WATER MONITORING PROGRAM
DISSOLVED OXYGEN TESTING SITES



LITTLE SARASOTA BAY

SITE LOCATIONS

- SITE #1-- 1712 SANDALWOOD DRIVE
- SITE #2-- 8407 MIDNIGHT PASS ROAD
- SITE #3-- ICW MARKER #43
- SITE #4-- MIDNIGHT PASS BACK BAY AREA
- SITE #5-- GULF SITE OFF MIDNIGHT PASS

SITE #1

LOCATION: MR. SELF DOCK. MAINLAND SIDE OF LITTLE SARASOTA BAY-EAST OF ICW #51

DATE	TIME	D.O.	P.H.	SALINITY	WATER TEMP	TIDE	CONDITIONS
8/26/89	5:00 PM	4.8	8.4	32.5	31C 86F	Mid	Cloudy and Rainy
8/27/89	6:00 AM	4.6	7.6	30.8	30C 79F	Rising	Clear
9/09/89	3:15 PM	8.0	8.1	24.0	31C 88F	Mid	Sunny
9/10/89	6:05 AM	5.1	7.6	23.5	29C 85F	Rising	Dark
9/15/89	2:04 PM	6.2	7.4	32.5	31C 85F	High	Bright but Cloudy
9/16/89	6:05 AM	3.0	6.7	18.7	30C 84F	Low	Full Moon
10/01/89	5:00 PM	7.0	6.9	28.1	30C 88F	High	Sunny
10/02/89	6:15 AM	4.4	7.0	23.7	29C 85F	Low	Dark

SITE # 2

LOCATION: MR. HARRIS DOCK. SIESTA KEY SIDE OF LITTLE SARASOTA BAY-WEST OF ICW #49A

DATE	TIME	D.O.	P.H.	SALINITY	WATER TEMP	TIDE	CONDITIONS
8/26/89	5:10 PM	6.1	8.5	32.1	30C 83F	Mid	Cloudy and Rainy
8/27/89	6:15 AM	4.2	7.7	31.8	29C 82F	Rising	Clear
9/09/89	3:25 PM	7.4	8.1	23.5	30C 87F	Mid	Sunny
9/10/89	6:15 AM	5.0	7.6	22.5	29C 85F	Rising	Dark
9/15/89	2:50 PM	6.2	7.7	28.1	30C 85F	High	Bright but Cloudy
9/16/89	6:20 AM	4.0	6.6	19.6	29C 81F	Low	Full Moon
10/01/89	5:15 PM	7.2	7.4	32.1	30C 88F	High	Sunny
10/02/89	6:20 AM	3.15	7.0	23.7	29C 84F	Low	Dark

SITE # 3

LOCATION: ICW #43 - LITTLE SARASOTA BAY

DATE	TIME	D.O.	P.H.	SALINITY	WATER TEMP	TIDE	CONDITIONS
8/26/89	5:30 PM	5.2	8.1	32.1	30C 84F	Mid	Cloudy and Rainy
8/27/89	6:30 AM	3.8	7.9	32.0	29.5C 80F	Rising	Clear
9/09/89	3:40 PM	7.1	8.0	22.5	31C 88F	Mid	Sunny
9/10/89	6:30 AM	4.3	7.7	22.0	29C 84F	Rising	Dark
9/15/89	3:10 PM	6.1	6.2	30.8	30C 84F	High	Bright but Cloudy
9/16/89	6:35 AM	3.2	6.7	18.3	29C 84F	Low	Full Moon
10/01/89	5:20 PM	8.0	7.3	25.5	30C 88F	High	Sunny
10/02/89	6:35 AM	5.2	7.1	23.7	29C 85F	Low	Dark

SITE # 4

LOCATION: MIDNIGHT PASS - BACK BAY

DATE	TIME	D.O.	P.H.	SALINITY	WATER TEMP	TIDE	CONDITIONS
8/26/89	5:40 PM	6.4	8.6	36.2	30C 83F	Mid	Cloudy and Rainy
8/27/89	6:40 AM	2.0	7.8	32.7	28C 75F	Rising	Clear
9/09/89	3:50 PM	9.0	8.4	23.0	31C 88F	Mid	Sunny
9/10/89	6:50 AM	3.3	7.8	20.0	27C 81F	Rising	Dark
9/15/89	3:25 PM	6.4	6.3	28.1	30C 82F	High	Bright but Cloudy
9/16/89	6:45 AM	2.4	6.5	17.9	28C 81F	Low	Full Moon
10/01/89	5:45 PM	8.6	7.5	25.9	31C 89F	High	Sunny
10/02/89	6:50 AM	3.8	7.1	26.4	29C 85F	Low	Dark

SITE # 5

LOCATION: GULF OF MEXICO AT MIDNIGHT PASS

DATE	TIME	D.O.	P.H.	SALINITY	WATER TEMP	TIDE	CONDITIONS
8/26/89	5:50 PM	5.5	8.4	40.2	30C 83F	Mid	Cloudy and Rainy
8/27/89	6:55 AM	5.2	8.0	31.8	29C 84F	Rising	Clear
9/09/89	4:00 PM	6.3	8.4	36.0	31C 86F	Mid	Sunny
9/10/89	7:00 AM	5.4	8.0	36.0	28C 85F	Rising	Dark
9/15/89	3:35 PM	5.4	6.5	41.5	31C 85F	High	Bright but Cloudy
9/16/89	6:55 AM	5.4	6.8	39.8	29C 82F	Low	Full Moon
10/01/89	5:55 PM	5.8	7.2	FULL STRENGTH	29C 86F	High	Sunny
10/02/89	MECHANICAL DIFFICULTIES - BOAT BREAKDOWN A.M. PORTION OF TEST NOT CONDUCTED.					Low	Dark