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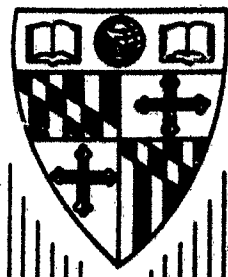
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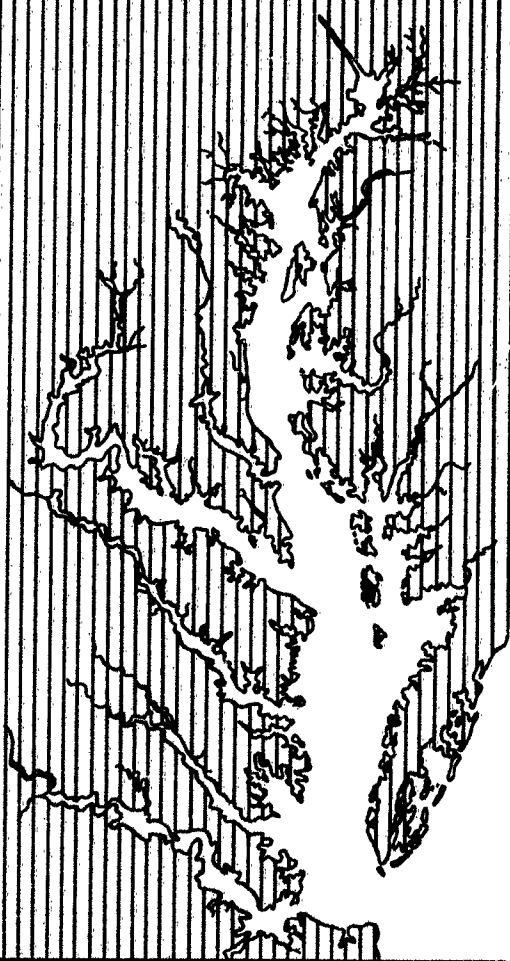
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THE CHESAPEAKE BAY INSTITUTE of The Johns Hopkins University



DATA REPORT 18

CRUISE XII

15 July - 6 August 1952

Reference 54-5

April 1954

CHESAPEAKE BAY INSTITUTE
THE JOHNS HOPKINS UNIVERSITY

DATA REPORT 18

Cruise XII
15 July - 6 August 1952

This report contains results of work carried out for: the Office of Naval Research of the Navy Department under research project NR 083-016, Contract Nonr 248(20), and research project NR 083-070, Contract Nonr 248(30); the State of Maryland (Department of Research and Education); and the Commonwealth of Virginia (Virginia Fisheries Laboratory).

April 1954
Reference 54-5

D. W. Pritchard
Director

The data contained in this report were collected in the Chesapeake Bay area during the period 15 July to 6 August 1952.

The purpose of this cruise was to continue the study of the physical and chemical structure of the area.

The presentation of data in this report does not constitute publication and the information may be subject to modification at a later date.

Location of Stations

The stations are designated by the numerical-alphabetical system described in Data Report 12, reference 52-21.

Observations

Current speed and direction were measured with the confined submerged drags described in Chesapeake Bay Institute Technical Report No. 1.

Temperature and salinity were determined by means of the Conductivity-Temperature-Indicator (CTI). (See Data Report 13, reference 53-4.)

Oxygen was determined by the modified Winkler titration method.

pH was determined with a Beckman pH meter.

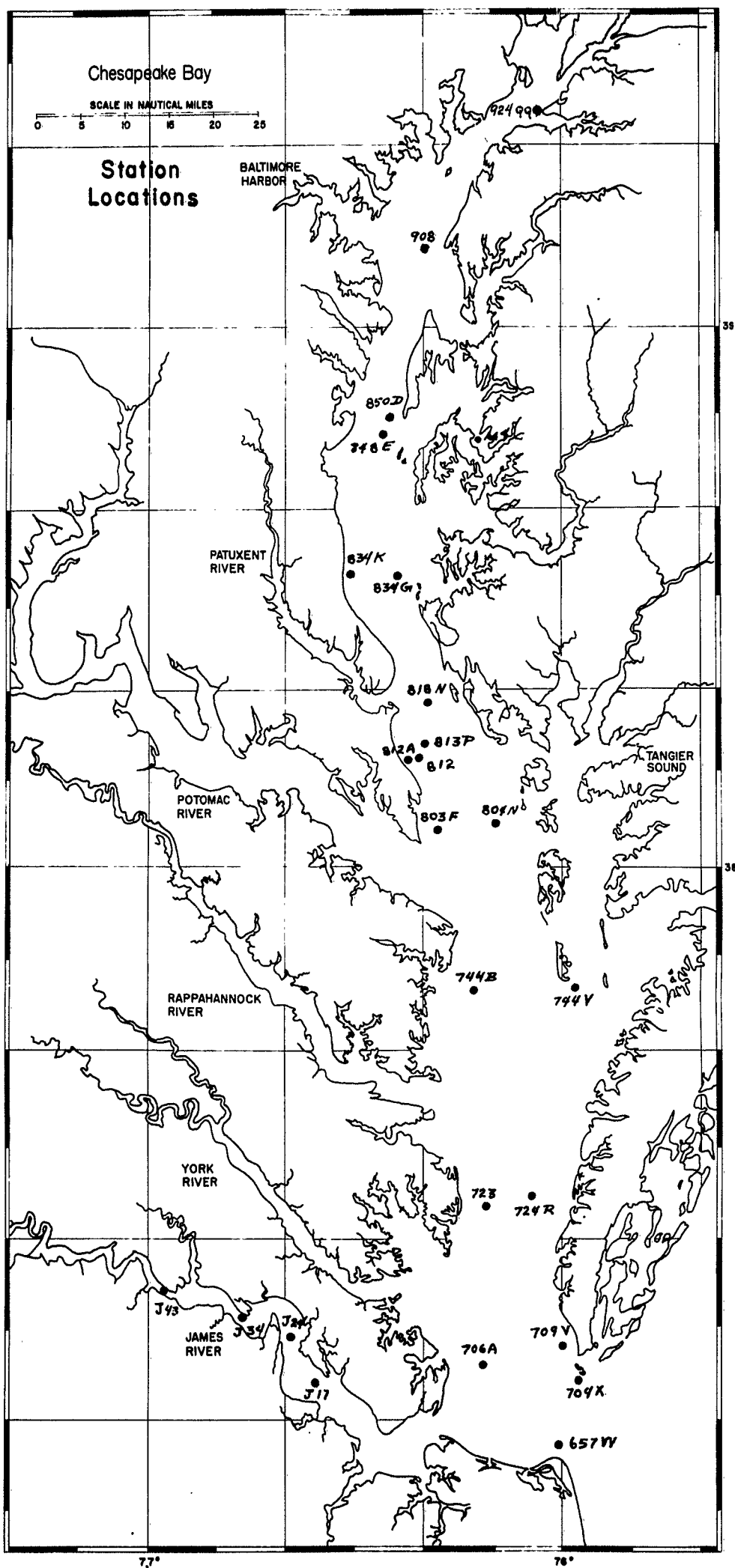
Turbidity, inorganic phosphate, and chlorophyll were determined by the methods outlined in Data Report 12, reference 52-21.

Alkalinity was determined by the method found in Industrial and Engineering Chemistry, Analytical Edition, Volume 18, No. 12, 1946.

Wind force is given in Beaufort scale units.

Weather is reported in the following code:

<u>Code</u>	<u>Description</u>
00	Cloudless (from no clouds up to 1/10 coverage)
01	Partly cloudy (from 1/10 to 5/10)
02	Cloudy (over 5/10 up to 9/10)
03	Overcast (over 9/10)
04	Low fog, on ground or at sea
05	Haze
07	Distant lightning
10	Precipitation within sight
11	Thunder, without precipitation
13	Ugly, threatening sky
14	Squally weather
16	Waterspout seen
19	Signs of tropical storm
40	Fog
49	Fog in patches
51	Intermittent drizzle
52	Continuous drizzle
57	Drizzle and fog
58	Drizzle and rain, mixed
61	Intermittent rain
62	Continuous rain
67	Rain and fog
69	Rain and snow, mixed
71	Intermittent snow (in flakes)
72	Continuous snow (in flakes)
77	Snow and fog
78	Frozen drizzle (grains of snow)
79	Ice crystals or frozen raindrops
81	Rain showers
83	Snow showers
88	Hail, or rain and hail showers
93	Thunderstorm, with rain (or snow) but without hail
94	Thunderstorm, with hail
97	Heavy thunderstorm



Section A

Salinity, Temperature, Current and Meteorological Data

657W 23 July 52		1000 EST Depth 58'	Weather 00 Wind W-1 Air 31.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	29.70	19.48	--	--
5	28.09	20.94	285	0.48
10	25.24	23.39	283	0.50
15	20.85	28.60	295	1.05
20	19.04	29.75	305	1.32
25	19.34	29.94	304	1.13
30	18.88	30.19	303	1.21
35	18.62	30.15	303	1.21
40	17.50	30.52	290	1.21
45	17.00	30.65	280	1.01
50	16.98	30.66	282	0.92
55	16.98	30.65	272	0.87

657W 23 July 52		1100 EST Depth 57'	Weather 05 Wind 0 Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	--	--	--	--
5	--	--	274	0.58
10	--	--	274	0.87
15	--	--	284	0.92
20	--	--	294	1.09
25	--	--	284	0.96
30	--	--	284	0.96
35	--	--	280	0.96
40	--	--	274	1.01
45	--	--	274	0.92
50	--	--	275	0.77
55	--	--	274	0.87

704X 23 July 52		1227 EST Depth 48'	Weather 05 Wind S-1 Air 32.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	29.40	22.76	081	1.63
5	22.62	28.50	094	1.05
10	22.14	29.10	113	0.73
15	21.68	29.41	155	0.73
20	21.34	29.43	164	0.81
25	21.14	29.47	160	0.73
30	20.96	29.51	115	0.45
35	20.26	29.57	116	0.34
40	20.16	29.58	118	0.36
45	20.06	29.60	107	0.34

704X 23 July 52		1329 EST Depth 48'	Weather 05 Wind S-2 Air 33.3°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	--	--	107	2.61
5	--	--	127	2.34
10	--	--	137	1.90
15	--	--	137	1.73
20	--	--	136	1.73
25	--	--	126	1.49
30	--	--	126	1.43
35	--	--	119	1.17
40	--	--	109	0.92
45	--	--	110	0.82

706A 23 July 52		1550 EST Depth 35'	Weather 02 Wind S-1 Air 34.4°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	31.06	17.82	150	1.51
5	30.46	17.82	151	1.49
10	27.50	19.43	145	1.39
15	25.24	22.28	159	1.32
20	20.48	28.08	150	0.59
25	20.42	28.16	151	0.44
30	20.40	28.17	151	0.44
33	20.40	28.16	150	0.39

706A 23 July 52		1650 EST Depth 35'	Weather 13 Wind SE-1 Air 34.4°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	--	--	169	1.28
5	--	--	164	1.46
10	--	--	159	1.69
15	--	--	151	1.43
20	--	--	151	1.05
25	--	--	151	0.70
30	--	--	160	0.58
34	--	--	161	0.58

709V 23 July 52		1814 EST Depth 23'		Weather 13 Wind W-4 Air 32.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	28.08	23.38	198	0.97	
5	25.94	25.45	282	0.29	
10	25.72	25.65	280	0.26	
15	25.70	25.69	289	0.22	
20	25.68	25.71	310	0.18	
23	25.68	26.99	309	0.22	

709V 23 July 52		1858 EST Depth 23'		Weather 13 Wind W-3 Air 31.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	--	--	--	--	
5	--	--	259	0.31	
10	--	--	307	0.41	
15	--	--	324	0.41	
20	--	--	324	0.43	
23	--	--	320	0.31	

723 24 July 52		0955 EST Depth 45'		Weather 01 Wind E-2 Air 27.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	--	--	--	--	
5	--	--	315	0.77	
10	--	--	328	0.87	
15	--	--	--	--	
20	--	--	025	0.90	
25	--	--	--	--	
30	--	--	027	0.97	
40	--	--	026	1.41	

723 25 July 52		0910 EST Depth 47'		Weather 01 Wind E-3 Air 27.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	27.54	16.04	201	0.28	
5	27.54	16.04	--	0.00	
10	27.50	16.20	--	0.00	
15	27.41	16.37	327	0.28	
20	26.90	18.53	077	0.44	
25	25.54	21.73	058	0.80	
30	24.78	23.09	030	0.77	
35	24.46	23.73	356	0.97	
40	24.19	24.50	005	1.06	
45	24.18	24.51	--	--	

724R		0716 EST	Weather 01	
25 July 52		Depth 73'	Wind E-4	
			Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.94	17.71	196	0.96
5	27.94	17.71	196	0.96
10	27.94	17.71	175	0.87
15	27.94	17.72	178	0.96
20	27.94	17.73	175	0.70
22½	27.86	17.97	--	--
25	23.54	25.38	174	0.50
30	23.70	25.65	--	0.00
35	23.70	25.68	--	0.00
40	23.62	25.81	179	0.28
45	23.46	25.99	167	0.34
50	23.38	26.00	168	0.34
55	23.30	26.05	159	0.28
60	23.22	26.14	173	0.28
65	23.12	26.21	--	0.00
70	22.98	26.32	--	0.00
72	22.90	26.38	--	--

724R 25 July 52		0808 EST Depth 74'		Weather 01 Wind E-4 Air 27.2°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	--	--	192	0.85	
5	--	--	191	0.74	
10	--	--	193	0.80	
15	--	--	193	0.62	
20	--	--	193	0.87	
25	--	--	202	0.44	
30	--	--	--	0.00	
35	--	--	--	0.00	
40	--	--	--	0.00	
45	--	--	--	0.00	
50	--	--	--	0.00	
55	--	--	--	0.00	
60	--	--	--	0.00	
65	--	--	--	0.00	
70	--	--	047	0.28	

744B 25 July 52		1512 EST Depth 56'	Weather 01 Wind NNE-1 Air 30.6°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	29.08	13.29	029	0.15
5	29.04	13.28	043	0.24
10	28.84	13.37	049	0.41
15	28.52	13.47	063	0.31
20	28.58	13.73	035	0.29
25	28.52	13.85	023	0.46
30	28.50	14.07	020	0.61
35	28.10	14.75	351	0.81
40	27.36	17.60	311	0.18
45	26.68	18.96	343	0.45
50	26.04	19.37	346	0.57
55	25.96	21.04	--	--
56	--	--	339	0.46

744B 25 July 52		1610 EST Depth 56'	Weather 01 Wind NNE-1 Air 36.7°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	--	--	--	0.00
5	--	--	--	0.00
10	--	--	--	0.00
15	--	--	--	0.00
20	--	--	--	0.00
25	--	--	009	0.29
30	--	--	018	0.31
35	--	--	338	0.43
40	--	--	319	0.50
45	--	--	329	0.57
50	--	--	331	0.52
55	--	--	029	0.34

744V		1220 EST	Weather 01	
24 July 52		Depth 28'	Wind E-1	
			Air 27.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	--	--	067	0.66
5	--	--	067	0.66
10	--	--	039	0.69
15	--	--	038	0.71
20	--	--	037	0.85
25	--	--	037	1.08
27	--	--	156	0.62

744V		1320 EST		Weather 01	
24 July 52		Depth 28'		Wind E-1	
				Air 27.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	--	--	--	--	
5	--	--	048	0.34	
10	--	--	041	0.52	
15	--	--	023	0.62	
20	--	--	003	0.77	
25	--	--	003	0.90	
27	--	--	349	0.95	

744V	1229 EST	Weather -		
25 July 52	Depth 28'	Wind -		
		Air -		
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.24	15.25	--	--
5	28.18	15.34	--	--
10	28.16	15.51	--	--
15	28.14	15.58	--	--
20	28.04	15.76	--	--
25	27.28	18.89	--	--
28	27.00	20.07	--	--

803F 26 July 52		0610 EST Depth -	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.60	12.08	--	--
5	27.56	12.09	--	--
10	27.53	12.09	--	--
15	27.53	12.11	--	--
20	27.54	12.12	--	--
25	27.58	12.19	--	--
30	27.42	12.22	--	--
35	26.71	15.20	--	--
40	25.95	17.59	--	--

812 4 Aug 52		1246 EST Depth -	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.62	12.46	--	--
5	27.61	12.46	--	--
10	27.48	12.47	--	--
15	27.28	12.48	--	--
20	27.18	12.52	--	--
25	26.87	13.12	--	--
30	26.53	14.40	--	--
35	25.74	15.63	--	--

804N 26 July 52		0718 EST Depth -	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.18	13.00	--	--
5	27.18	12.99	--	--
10	27.18	12.98	--	--
15	27.18	12.98	--	--
20	26.98	15.28	--	--

813P 4 Aug 52		1357 EST Depth -	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.60	12.32	--	--
5	27.58	12.33	--	--
10	27.58	12.33	--	--
15	27.56	12.34	--	--
20	27.44	12.38	--	--
25	27.40	13.20	--	--
30	26.67	15.09	--	--
35	25.60	18.20	--	--
40	25.62	18.48	--	--
45	25.62	18.48	--	--

818N 26 July 52		0908 EST Depth -	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.68	11.15	--	--
5	27.34	11.22	--	--
10	27.34	11.21	--	--
15	27.25	11.21	--	--
20	27.19	11.29	--	--
25	27.03	12.06	--	--
30	26.84	12.75	--	--
35	26.61	14.58	--	--
40	25.27	17.44	--	--
45	25.13	17.88	--	--
50	25.12	17.93	--	--

834G 26 July 52		1137 EST Depth -	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.77	10.20	--	--
5	27.74	10.20	--	--
10	27.01	10.23	--	--
15	27.01	10.22	--	--
20	26.68	10.94	--	--
25	26.91	11.77	--	--
30	25.86	14.85	--	--
35	25.26	16.55	--	--
40	24.96	17.34	--	--
45	24.40	17.39	--	--
50	24.32	17.59	--	--
55	24.27	17.65	--	--
60	24.25	17.68	--	--

834G 21 July 52		1000 EST Depth -	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.46	10.53	--	--
5	27.78	10.60	--	--
10	27.28	10.82	--	--
15	27.16	10.87	--	--
20	26.61	11.14	--	--
25	25.63	11.65	--	--
30	24.93	13.35	--	--
35	24.32	15.50	--	--
40	23.86	16.83	--	--
45	23.80	17.50	--	--
50	23.56	18.00	--	--
55	23.50	18.11	--	--
60	23.40	18.27	--	--
63	23.24	18.47	--	--

834K 26 July 52		1235 EST Depth -	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.24	10.37	--	--
5	28.24	10.37	--	--
10	28.01	10.37	--	--
15	27.95	10.28	--	--
20	27.42	10.40	--	--
25	25.98	12.50	--	--
30	24.36	15.43	--	--

848E		1029 EST	Weather -	
5 Aug 52		Depth -	Wind -	
			Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.54	10.77	--	--
5	26.90	11.49	--	--
10	26.82	11.51	--	--
15	26.80	11.51	--	--
20	26.80	11.50	--	--
25	26.80	11.50	--	--
30	26.78	11.62	--	--
35	26.80	11.78	--	--
40	26.08	13.77	--	--
45	25.80	14.12	--	--
50	25.44	14.73	--	--
55	25.20	15.18	--	--
60	25.08	15.88	--	--
65	25.05	16.42	--	--
70	25.58	18.57	--	--
75	25.62	18.79	--	--
80	25.64	18.88	--	--
85	25.66	18.90	--	--
90	25.66	18.93	--	--
95	25.66	19.00	--	--
100	25.66	19.00	--	--
105	25.66	18.95	--	--
110	25.65	18.80	--	--

908 16 July 52		1716 EST Depth 32'	Weather 13 Wind NWE-1 Air 25.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.51	5.05	176	0.87
5	27.14	5.71	193	0.70
10	27.37	6.07	192	0.58
15	26.99	6.48	201	0.65
20	26.08	7.55	187	0.34
25	25.18	8.74	182	0.28
30	24.76	9.24	--	0.00

908 16 July 52		1921 EST Depth 32'	Weather 02 Wind ESE-1 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	26.87	4.36	208	1.13
5	26.91	4.46	207	1.02
10	26.88	4.92	202	0.80
15	26.98	5.48	196	0.67
20	26.96	6.18	195	0.41
25	26.06	6.76	193	0.29
30	24.96	8.52	187	0.13

908 16 July 52		1815 EST Depth 32'	Weather 14 Wind NNE-1 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.34	4.81	201	1.13
5	27.64	4.88	196	0.95
10	27.10	5.56	194	0.71
15	27.16	5.90	192	0.52
20	27.12	6.61	191	0.36
25	25.88	7.70	185	0.29
30	24.99	8.91	169	0.26

908 16 July 52		2008 EST Depth 32'	Weather 02 Wind ESE-1 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	26.98	4.23	216	0.71
5	27.00	4.25	212	0.77
10	27.01	4.35	206	0.77
15	26.77	5.46	184	0.47
20	26.78	6.14	172	0.34
25	26.19	6.58	--	0.00
30	24.55	8.90	--	0.00

908 16 July 52		2112 EST Depth 32'	Weather 07 Wind 0 Air 26.7°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.08	3.84	215	0.67
5	27.24	4.02	216	0.61
10	27.44	4.43	205	0.53
15	26.95	5.14	174	0.31
20	26.69	5.72	--	0.00
25	26.49	6.29	058	0.26
30	24.43	9.12	387	0.31

908 16 July 52		2312 EST Depth 32'	Weather 14 Wind SSW-3 Air 25.0°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	26.89	3.45	314	0.22
5	27.14	4.60	314	0.34
10	26.83	5.64	342	0.34
15	26.80	5.95	372	0.50
20	26.08	7.61	371	0.73
25	24.90	9.00	001	1.02
30	24.72	9.11	014	0.58

908 16 July 52		2213 EST Depth 32'	Weather 14 Wind NW-4 Air 25.6°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	26.86	3.53	192	0.43
5	26.98	3.99	247	0.41
10	26.91	5.34	--	0.00
15	26.80	5.55	069	0.18
20	26.55	5.95	052	0.29
25	25.01	8.67	000	0.45
30	24.41	9.34	002	0.50

908 17 July 52		0003 EST Depth 30'	Weather 14 Wind SW-3 Air 26.7°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	26.74	3.63	018	0.41
5	27.14	4.78	018	0.58
10	27.10	6.17	017	0.65
15	26.40	6.82	017	0.87
20	26.20	7.66	017	1.09
25	25.24	8.74	019	1.13
30	24.84	9.05	020	0.70

908 17 July 52		0101 EST Depth 30'	Weather 03 Wind WSW-3 Air 25.6°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	26.97	4.66	004	0.82
5	27.36	5.53	004	0.87
10	27.22	7.01	004	1.09
15	26.82	7.00	004	1.09
20	26.68	7.39	006	0.96
25	25.90	8.18	006	1.09
30	25.10	8.81	007	0.87

908 17 July 52		0301 EST Depth 30'	Weather 03 Wind W-2 Air 25.6°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.32	5.89	025	0.50
5	27.42	6.01	025	0.50
10	27.52	6.66	026	0.70
15	26.32	7.51	027	0.65
20	26.36	7.71	027	0.77
25	25.96	8.26	027	0.65
30	25.44	8.61	028	0.41

908 17 July 52		0200 EST Depth 30'	Weather 03 Wind SW-2 Air 25.6°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.45	6.12	032	0.77
5	27.58	6.36	033	0.92
10	27.56	6.93	034	1.05
15	27.28	7.00	032	0.87
20	25.98	7.98	033	0.96
25	25.90	8.27	033	0.87
30	25.24	8.66	032	0.65

908 17 July 52		0402 EST Depth 32'	Weather 03 Wind SW-2 Air 25.0°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.10	5.52	028	0.38
5	27.18	5.62	017	0.41
10	27.26	6.66	357	0.38
15	26.44	7.44	359	0.57
20	26.36	7.70	359	0.58
25	25.93	8.32	009	0.38
30	25.80	8.39	359	0.31

908 17 July 52		0500 EST Depth 32'	Weather 03 Wind N-2 Air 25.0°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	26.94	5.39	172	0.29
5	26.97	5.75	172	0.26
10	26.84	6.97	354	0.38
15	26.88	7.33	353	0.38
20	26.66	7.49	354	0.41
25	26.06	8.37	355	0.31
30	25.86	8.54	356	0.18

908		0704 EST	Weather 05	
17 July 52		Depth 32'	Wind NE-1	
			Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	26.68	5.04	176	0.92
5	26.85	6.27	179	0.70
10	26.86	7.47	225	0.43
15	26.85	7.61	223	0.50
20	26.50	7.80	203	0.55
25	25.65	8.37	179	0.45
30	25.73	8.30	167	0.45

908 17 July 52		0600 EST Depth 32'		Weather 03 Wind NNW-2 Air 25.0°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	26.75	5.32	177	0.43	
5	26.93	6.66	164	0.29	
10	27.02	7.19	203	0.41	
15	26.76	7.54	212	0.45	
20	26.20	8.00	247	0.22	
25	25.85	8.32	--	0.00	
30	25.82	8.35	251	0.26	

908		0800 EST		Weather 05	
17 July 52		Depth 32'		Wind 0	
				Air 27.8°C	
				Current	
Depth (ft)	Temp (°C)	Sal (o/oo)	Dir (°T)	Speed (kts)	
0	26.86	5.00	187	1.02	
5	26.82	5.90	183	0.90	
10	26.94	7.20	187	0.52	
15	26.91	7.28	198	0.56	
20	26.88	7.35	192	0.52	
25	26.44	7.82	182	0.56	
30	25.68	8.32	159	0.59	

908 0900 EST Weather 05
17 July 52 Depth 32' Wind S-1
Air 30.6°C

Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.34	5.16	208	1.02
5	26.96	5.34	207	0.95
10	26.93	5.90	197	0.90
15	27.03	7.06	172	0.52
20	26.96	7.24	172	0.39
25	26.43	7.80	168	0.56
30	25.74	8.24	144	0.56

908 1100 EST Weather 05
17 July 52 Depth 32' Wind S-1
Air 29.4°C

Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.97	3.85	238	0.80
5	27.02	5.38	230	0.34
10	26.97	5.66	209	0.47
15	26.63	6.50	168	0.56
20	25.80	7.92	124	0.39
25	25.51	8.31	--	0.00
30	25.38	8.42	--	0.00

908 1000 EST Weather 05
17 July 52 Depth 32' Wind S-1
Air 29.4°C

Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.50	4.23	209	1.08
5	27.08	5.52	209	0.69
10	27.04	5.92	204	0.74
15	26.87	6.76	181	0.66
20	26.70	7.61	182	0.39
25	25.02	8.17	147	0.44
30	25.64	8.30	141	0.34

908 1200 EST Weather 05
17 July 52 Depth 32' Wind WNW-1
Air 30.0°C

Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.32	4.27	219	0.35
5	27.21	4.99	219	0.09
10	26.94	5.47	--	0.00
15	26.72	6.03	210	0.12
20	26.11	7.08	322	0.19
25	25.53	8.15	077	0.16
30	25.39	8.33	066	0.15

908 17 July 52		1300 EST Depth 32'	Weather 05 Wind W-1 Air 32.5°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.12	4.60	222	0.12
5	27.34	4.98	--	0.00
10	26.99	5.60	043	0.12
15	26.49	6.51	053	0.14
20	25.98	7.50	033	0.26
25	26.06	7.77	003	0.34
30	25.84	8.16	004	0.34

908 17 July 52		1500 EST Depth 32'	Weather 05 Wind S-1 Air 37.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.55	4.78	035	0.34
5	27.30	5.10	065	0.34
10	26.40	6.81	--	0.00
15	26.68	7.57	045	0.34
20	26.14	7.84	024	0.50
25	25.37	8.65	020	0.66
30	25.11	8.98	024	0.45

908 17 July 52		1400 EST Depth 32'	Weather 05 Wind S-1 Air 36.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.88	4.80	--	0.00
5	27.14	5.05	--	0.00
10	26.28	6.71	052	0.19
15	26.58	7.65	022	0.30
20	26.06	7.96	017	0.44
25	25.56	8.55	017	0.70
30	25.26	8.68	018	0.66

908 17 July 52		1600 EST Depth 32'	Weather 05 Wind 0 Air 38.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.47	4.96	--	0.00
5	27.46	5.08	--	0.00
10	26.84	6.02	--	0.00
15	26.11	7.22	042	0.19
20	25.84	8.34	028	0.33
25	25.64	8.61	033	0.27
30	25.12	8.93	044	0.16

918U 16 July 52		1445 EST Depth -	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.95	0.87	--	--
5	27.20	0.90	--	--
10	27.14	0.96	--	--
15	27.08	1.20	--	--
20	27.06	1.23	--	--

92400 15 July 52		1205 EST Depth 20'	Weather 05 Wind W-3 Air 31.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.12	0.26	065	0.15
5	28.00	0.26	055	0.12
10	27.62	0.28	274	0.11
15	27.46	0.29	--	0.00
18	27.24	0.28	--	0.00

92400 15 July 52		1408 EST Depth 20'	Weather 05 Wind SSW-3 Air 32.2°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.04	0.25	049	0.57
5	28.02	0.25	038	0.31
10	27.66	0.28	056	0.14
15	27.24	0.31	048	0.15
18	27.02	0.28	--	--
20	--	--	048	0.11

92400 15 July 52		1300 EST Depth 20'	Weather 05 Wind WSW-3 Air 32.2°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.12	0.28	059	0.29
5	28.08	0.28	063	0.29
10	27.70	0.29	061	0.19
15	27.32	0.29	063	0.14
18	--	--	062	0.14
20	27.12	0.28	--	--

92400 15 July 52		1502 EST Depth 20'	Weather 05 Wind ESE-3 Air 31.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.92	0.23	039	0.46
5	27.88	0.23	046	0.31
10	27.70	0.25	042	0.22
15	27.18	0.27	046	0.12
18	27.04	0.28	--	--
19	--	--	--	0.00

92400 15 July 52		1601 EST Depth 20'	Weather 05 Wind S-3 Air 31.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.96	0.36	047	0.17
5	27.88	0.36	045	0.11
10	27.70	0.37	--	0.00
15	27.60	0.37	225	0.11
18	--	--	227	0.11
20	27.33	0.40	--	--

92400 15 July 52		1803 EST Depth 20'	Weather 05 Wind SW-3 Air 30.0°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.33	0.25	237	0.24
5	28.33	0.25	238	0.27
10	28.33	0.25	239	0.26
15	28.28	0.26	237	0.30
18	--	--	236	0.26
20	28.25	0.26	--	--

92400 15 July 52		1700 EST Depth 20'	Weather 05 Wind S-3 Air 31.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.84	0.25	222	0.19
5	27.84	0.24	234	0.23
10	27.82	0.24	225	0.21
15	27.76	0.25	227	0.24
18	27.48	0.27	225	0.27

92400 15 July 52		1900 EST Depth 20'	Weather 05 Wind WSW-1 Air 29.4°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.25	0.29	268	0.85
5	28.25	0.29	243	0.95
10	28.24	0.29	238	0.87
15	28.24	0.28	223	0.82
18	28.23	0.28	223	0.77

92400 15 July 52		2000 EST Depth 20'	Weather 03 Wind S-2 Air 28.9°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.94	0.28	274	0.97
5	27.94	0.28	254	0.87
10	27.94	0.28	223	0.74
15	27.94	0.28	218	0.71
18	27.95	0.28	222	0.62

92400 15 July 52		2200 EST Depth 20'	Weather 01 Wind S-2 Air 27.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.09	0.30	--	0.00
5	28.11	0.31	267	0.11
10	28.11	0.32	222	0.19
15	28.11	0.33	103	0.20
18	28.11	0.33	103	0.17

92400 15 July 52		2100 EST Depth 20'	Weather 01 Wind S-2 Air 28.3°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.89	0.27	287	0.66
5	27.89	0.26	264	0.52
10	27.90	0.27	224	0.62
15	27.90	0.27	215	0.62
18	27.90	0.27	209	0.56

92400 15 July 52		2300 EST Depth 20'	Weather 01 Wind S-3 Air 27.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.11	0.33	032	0.14
5	28.11	0.33	042	0.14
10	28.13	0.33	042	0.11
15	28.13	0.33	042	0.11
18	28.13	0.34	052	0.15

92400 16 July 52		0000 EST Depth 20'	Weather 01 Wind SW-3 Air 27.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.68	0.31	038	0.52
5	27.98	0.31	042	0.47
10	27.98	0.31	037	0.56
15	27.97	0.35	030	0.56
18	27.97	0.35	032	0.59

92400 16 July 52		0200 EST Depth 20'	Weather 01 Wind S-2 Air 26.6°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.72	0.31	039	0.74
5	27.72	0.31	039	0.69
10	27.70	0.31	041	0.74
15	27.70	0.31	041	0.74
18	27.71	0.31	040	0.69

92400 16 July 52		0100 EST Depth 20'	Weather 01 Wind SW-3 Air 27.2°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.82	0.37	046	0.71
5	27.82	0.37	047	0.69
10	27.83	0.37	042	0.71
15	27.83	0.37	042	0.62
18	27.83	0.37	043	0.66

92400 16 July 52		0300 EST Depth 20'	Weather 01 Wind S-2 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.48	0.28	034	0.56
5	27.48	0.28	033	0.56
10	27.48	0.28	035	0.47
15	27.48	0.28	038	0.47
18	--	--	040	0.44
19	27.48	0.28	--	--

92400 16 July 52		0400 EST Depth 18'		Weather 01 Wind S-2 Air 25.6°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	27.38	0.25	039	0.38	
5	27.40	0.25	037	0.29	
10	27.39	0.25	033	0.36	
15	27.40	0.25	034	0.38	
18	27.39	0.25	036	0.36	

92400		0606 EST		Weather 01	
16 July 52		Depth 20'		Wind SSW-1	
				Air 27.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	27.35	0.26	252	0.45	
5	27.36	0.26	247	0.41	
10	27.36	0.26	242	0.41	
15	27.36	0.26	242	0.38	
18	27.36	0.26	251	0.29	

92400 16 July 52		0500 EST Depth 20'		Weather 01 Wind SSW-1 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	27.32	0.25	--	0.00	
5	27.32	0.25	--	0.00	
10	27.33	0.25	--	0.00	
15	27.33	0.25	--	0.00	
18	--	--	--	0.00	
19	27.34	0.26	--	--	

92400		0704 EST	Weather 01	
16 July 52		Depth 20'	Wind SSW-1	
			Air 26.7°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.36	0.27	270	0.87
5	27.36	0.27	260	0.87
10	27.34	0.27	258	0.70
15	27.32	0.27	260	0.65
18	27.32	0.27	261	0.58

924QQ 16 July 52		0808 EST Depth 20'	Weather 01 Wind WSW-2 Air 28.3°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.59	0.28	260	1.13
5	27.52	0.28	260	0.96
10	27.40	0.28	249	0.87
15	27.36	0.28	260	0.77
18	27.34	0.28	260	0.82

924QQ 16 July 52		1005 EST Depth 20'	Weather 01 Wind WSW-1 Air 31.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.26	0.30	257	0.92
5	28.15	0.30	259	0.92
10	27.90	0.33	258	0.87
15	27.81	0.34	258	0.77
18	27.80	0.34	258	0.58

924QQ 16 July 52		0900 EST Depth 20'	Weather 01 Wind SW-1 Air 28.9°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.83	0.32	264	1.09
5	27.67	0.32	260	0.92
10	27.62	0.32	260	0.87
15	27.59	0.32	260	0.70
18	27.58	0.32	260	0.70

924QQ 16 July 52		1100 EST Depth 20'	Weather 01 Wind WSW-3 Air 30.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.66	0.25	284	0.77
5	28.24	0.28	224	0.70
10	28.18	0.28	222	0.77
15	28.16	0.29	217	0.58
18	28.16	0.29	216	0.58

J-17 22 July 52		1332 EST Depth 31'	Weather 01 Wind W-1 Air 35.0°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	30.04	14.66	--	--
5	28.58	16.28	128	0.52
10	28.26	17.15	115	0.56
15	28.00	17.72	116	0.52
20	27.88	17.95	120	0.44
25	27.74	18.23	148	0.34
27	27.74	18.23	--	--

J-34 22 July 52		0920 EST Depth -	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	30.39	0.83	--	--

J-43 22 July 52		1035 EST Depth 27'	Weather 01 Wind 0 Air 37.2°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	30.02	0.14	286	0.66
5	29.82	0.15	292	0.62
10	29.80	0.15	298	0.69
15	29.78	0.16	298	0.71
20	29.77	0.16	298	0.74
25	29.76	0.17	298	0.69
27	--	--	296	0.56
30	29.76	0.17	--	--

J-24 22 July 52		0740 EST Depth 81'	Weather 01 Wind NW-1 Air 30.6°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	31.04	4.98	--	0.00
5	31.02	5.01	326	0.34
10	31.02	5.32	324	0.34
15	31.02	6.67	--	0.00
20	30.97	7.00	--	0.00
25	30.96	7.12	--	0.00
30	30.90	7.61	054	0.39
35	30.88	7.90	053	0.44
40	30.84	8.17	052	0.34
45	30.81	8.39	052	0.28
50	30.80	8.44	050	0.31
55	30.80	8.46	050	0.34
60	30.79	8.55	050	0.31
65	30.74	8.89	050	0.34
70	30.72	8.93	049	0.34
75	30.72	8.91	048	0.34
80	30.68	9.24	047	0.28
81	30.68	9.27	--	--
83	--	--	047	0.28

850D 17 July 52		2000 EST Depth 168'		Weather 01 Wind SW-1 Air 30.0°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	28.64	9.26	181	0.46	
5	27.52	9.30	180	0.69	
10	26.80	9.60	180	0.58	
15	25.64	9.68	175	0.48	
20	25.48	9.70	174	0.50	
25	25.60	9.88	170	0.45	
30	25.37	9.91	171	0.34	
35	25.32	10.01	170	0.36	
40	25.28	10.57	170	0.34	
45	24.20	11.78	137	0.22	
47½	23.55	12.76	--	--	
50	22.92	14.42	137	0.22	
55	22.42	16.30	--	0.00	
60	22.36	16.79	--	0.00	
65	22.32	17.40	019	0.26	
70	22.30	17.53	009	0.38	
75	22.30	17.57	004	0.31	
80	22.30	17.57	009	0.26	
85	22.30	17.60	--	--	
90	22.30	17.63	--	--	
95	22.30	17.66	--	--	
100	22.30	17.69	343	0.29	
105	22.30	17.69	--	--	
110	22.30	17.70	--	--	
115	22.31	17.73	--	--	
120	22.31	17.77	334	0.22	
125	22.31	17.80	--	--	
130	22.31	17.84	--	--	
135	22.32	17.87	--	--	
140	22.32	17.91	354	0.26	
145	22.32	17.93	--	--	
150	22.33	18.03	--	--	
155	22.34	18.07	--	--	
160	22.34	18.07	338	0.34	
168	--	--	340	0.36	

850D		2200 EST	Weather 01	
17 July 52		Depth 168'	Wind SW-1	
			Air 29.4°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.46	9.22	187	0.26
5	26.63	9.32	186	0.36
10	26.14	9.42	179	0.43
15	25.82	9.53	179	0.36
20	25.64	9.62	176	0.34
25	25.48	9.85	126	0.26
30	25.28	10.40	115	0.18
35	24.00	11.79	--	0.00
40	23.69	12.52	--	0.00
45	23.66	12.70	--	0.00
50	22.82	14.45	036	0.18
55	22.54	15.33	337	0.29
60	22.39	15.21	340	0.36
65	--	--	350	0.43
70	--	--	356	0.48
75	--	--	355	0.50
80	22.28	17.32	354	0.45
100	22.29	17.50	354	0.38
120	22.29	17.63	354	0.34
140	22.29	17.80	355	0.34
160	22.32	18.07	--	--
165	--	--	356	0.38

850D 17 July 52		2300 EST Depth 168'	Weather 01 Wind SW-1 Air 30.0°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	--	--	017	0.34
5	--	--	009	0.36
10	--	--	008	0.34
15	--	--	357	0.38
20	--	--	359	0.46
25	--	--	000	0.46
30	--	--	019	0.57
35	--	--	017	0.66
40	--	--	009	0.73
45	--	--	350	0.89
50	--	--	358	1.01
55	--	--	004	1.03
60	--	--	000	0.99
80	--	--	335	0.85
100	--	--	325	0.89
120	--	--	328	0.73
140	--	--	323	0.81

850D 18 July 52		0023 EST Depth 168'	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.66	9.31	--	--
5	27.26	9.45	--	--
10	26.02	9.69	--	--
15	25.94	9.90	--	--
20	25.84	9.99	--	--
25	25.59	10.12	--	--
30	25.06	10.56	--	--
35	24.97	10.74	--	--
40	23.66	12.78	--	--
45	23.06	13.72	--	--
50	22.90	14.14	--	--
55	22.76	14.52	--	--
60	22.57	15.07	--	--
80	22.44	15.93	--	--
100	22.35	17.43	--	--
120	22.35	17.76	--	--

850D 18 July 52		0100 EST Depth 168'		Weather 02 Wind WSW-2 Air 28.3°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	--	--	345	1.53	
5	--	--	345	1.39	
10	--	--	345	1.39	
15	--	--	344	1.39	
20	--	--	348	1.32	
25	--	--	348	1.25	
30	--	--	348	1.32	
35	--	--	349	1.17	
40	--	--	355	1.09	
45	--	--	355	1.17	
50	--	--	350	1.28	
55	--	--	350	1.28	
60	--	--	356	1.36	
80	--	--	352	1.32	
100	--	--	352	1.66	
120	--	--	354	1.63	
140	--	--	354	1.59	
153	--	--	354	1.56	

850D 18 July 52		0200 EST Depth 168'		Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	27.15	9.60	--	--	
5	27.06	9.72	--	--	
10	27.52	9.67	--	--	
15	27.49	9.67	--	--	
20	27.49	9.67	--	--	
25	26.56	10.17	--	--	
30	24.63	11.30	--	--	
35	24.06	12.09	--	--	
40	23.77	12.71	--	--	
45	23.60	13.00	--	--	
50	23.20	13.88	--	--	
55	23.10	14.12	--	--	
60	23.02	14.38	--	--	
80	22.63	15.60	--	--	
100	22.52	16.77	--	--	
120	22.52	16.98	--	--	

850D 18 July 52		0300 EST Depth 163'	Weather 02 Wind 0 Air 27.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	--	--	358	0.96
5	--	--	358	0.87
10	--	--	358	0.87
15	--	--	352	0.87
20	--	--	352	0.96
25	--	--	353	0.87
30	--	--	353	0.92
35	--	--	358	0.92
40	--	--	358	0.96
45	--	--	358	1.05
50	--	--	358	1.05
55	--	--	358	1.09
60	--	--	359	1.09
80	--	--	353	1.13
100	--	--	348	1.25
120	--	--	348	1.36
140	--	--	348	1.05
160	--	--	357	1.09

850D 18 July 52		0400 EST Depth 168'	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.38	9.80	--	--
5	26.96	9.84	--	--
10	26.94	9.84	--	--
15	26.92	9.84	--	--
20	26.90	9.84	--	--
25	25.70	10.42	--	--
30	25.31	10.70	--	--
35	24.54	11.13	--	--
40	23.74	12.54	--	--
45	23.36	13.26	--	--
50	23.26	13.42	--	--
55	23.18	13.59	--	--
60	23.13	13.80	--	--
80	22.76	15.08	--	--
100	22.56	16.32	--	--
120	22.54	16.88	--	--
140	22.51	17.36	--	--
160	22.51	17.75	--	--

850D		0500 EST		Weather 01	
18 July 52		Depth 168'		Wind 0	
				Air 27.8°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	--	--	--	0.00	
5	--	--	--	0.00	
10	--	--	--	0.00	
15	--	--	--	0.00	
20	--	--	--	0.00	
25	--	--	--	0.00	
30	--	--	--	0.00	
35	--	--	--	0.00	
40	--	--	--	0.00	
45	--	--	--	0.00	
50	--	--	--	0.00	
55	--	--	--	0.00	
60	--	--	329	0.28	
80	--	--	329	0.44	
100	--	--	331	0.39	
120	--	--	--	0.00	
140	--	--	--	0.00	
160	--	--	192	0.34	
165	--	--	191	0.39	

850D		0600 EST	Weather 01	
18 July 52		Depth 169'	Wind S-1	
			Air 31.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.76	9.67	149	0.29
5	27.74	9.67	148	0.26
10	27.56	9.68	162	0.38
15	26.84	9.83	177	0.41
20	26.46	10.02	171	0.43
25	26.06	10.18	161	0.41
30	25.54	10.33	140	0.36
35	25.20	10.47	160	0.35
40	24.43	11.37	174	0.41
45	24.40	11.46	157	0.43
50	24.08	12.04	162	0.43
55	23.74	12.66	147	0.18
60	23.00	13.09	148	0.18
80	22.58	16.83	--	0.00
100	22.56	17.11	--	0.00
120	22.56	17.32	--	0.00
140	22.54	17.42	--	0.00
160	22.54	17.51	--	0.00
165	22.54	17.47	--	--
169	22.52	17.47	--	--

850D 18 July 52		0700 EST Depth 168'	Weather 01 Wind SW-1 Air 28.9°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	--	--	172	0.87
5	--	--	177	0.80
10	--	--	177	0.74
15	--	--	173	0.74
20	--	--	175	0.87
25	--	--	170	0.59
30	--	--	169	0.59
35	--	--	174	0.59
40	--	--	174	0.59
45	--	--	174	0.56
50	--	--	173	0.59
55	--	--	172	0.44
60	--	--	178	0.39
80	--	--	174	0.34
100	--	--	176	0.44
120	--	--	172	0.59
140	--	--	172	0.59
160	--	--	173	0.62

850D 18 July 52		0800 EST Depth 168'	Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.44	9.54	--	--
5	27.44	9.57	--	--
10	27.35	9.66	--	--
15	27.32	9.73	--	--
20	26.91	9.86	--	--
25	26.80	9.92	--	--
30	26.00	10.27	--	--
35	25.25	10.77	--	--
40	25.15	10.87	--	--
45	23.72	12.45	--	--
50	23.04	13.58	--	--
55	22.56	15.33	--	--
60	22.52	15.85	--	--
80	22.36	17.14	--	--
100	22.35	17.27	--	--
120	22.34	17.35	--	--
140	22.32	17.50	--	--
160	22.31	17.63	--	--

850D 18 July 52		0900 EST Depth 168'		Weather 05 Wind SW-1 Air 28.3°C		850D 18 July 52		1000 EST Depth 168'		Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current			Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)					Dir (°T)	Speed (kts)	
0	--	--	175	0.80		0	27.75	9.52	--	--	
5	--	--	175	0.74		5	27.18	9.76	--	--	
10	--	--	174	0.77		10	27.04	9.90	--	--	
15	--	--	174	0.77		15	26.86	9.97	--	--	
20	--	--	174	0.66		20	26.24	10.05	--	--	
25	--	--	169	0.74		25	25.96	10.15	--	--	
30	--	--	164	0.69		30	25.44	10.43	--	--	
35	--	--	164	0.69		35	24.94	10.84	--	--	
40	--	--	164	0.74		40	24.48	11.54	--	--	
45	--	--	164	0.52		45	23.10	13.73	--	--	
50	--	--	174	0.62		50	22.94	14.32	--	--	
55	--	--	174	0.59		55	22.52	16.23	--	--	
60	--	--	174	0.56		60	22.48	16.54	--	--	
80	--	--	166	0.71		80	22.42	17.17	--	--	
100	--	--	166	0.87		100	22.40	17.52	--	--	
120	--	--	156	0.97		120	22.40	17.65	--	--	
145	--	--	156	0.97		140	22.39	17.80	--	--	
165	--	--	156	1.08		160	22.39	17.78	--	--	

850D 1100 EST
18 July 52 Depth 168' Weather 05
Wind 0
Air 33.9°C

Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	--	--	194	0.29
5	--	--	199	0.45
10	--	--	198	0.38
15	--	--	188	0.29
20	--	--	179	0.29
25	--	--	169	0.29
30	--	--	158	0.29
35	--	--	160	0.29
40	--	--	161	0.38
45	--	--	166	0.50
50	--	--	170	0.53
55	--	--	180	0.18
60	--	--	180	0.29
80	--	--	171	0.53
100	--	--	181	0.41
120	--	--	180	0.61
140	--	--	170	0.58
165	--	--	172	0.58

850D 1200 EST
18 July 52 Depth 168' Weather -
Wind -
Air -

Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	29.07	9.49	--	--
5	28.10	9.55	--	--
10	26.94	9.89	--	--
15	26.56	10.00	--	--
20	26.16	10.02	--	--
25	26.15	10.16	--	--
30	25.50	10.42	--	--
35	24.95	10.76	--	--
40	24.50	11.65	--	--
45	23.63	13.04	--	--
50	22.65	15.90	--	--
55	22.52	16.73	--	--
60	22.50	17.07	--	--
80	22.47	17.32	--	--
100	22.46	17.49	--	--
120	22.44	17.71	--	--
140	22.44	17.69	--	--
160	22.44	17.69	--	--

850D		1300 EST	Weather 05	
18 July 52		Depth 165'	Wind SSE-1	
			Air 34.4°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	--	--	--	0.00
5	--	--	--	0.00
10	--	--	028	0.18
15	--	--	027	0.18
20	--	--	--	0.00
25	--	--	359	0.22
30	--	--	349	0.34
35	--	--	--	0.00
40	--	--	348	0.22
45	--	--	--	0.00
50	--	--	350	0.31
55	--	--	--	0.00
60	--	--	--	0.00
80	--	--	--	0.00
100	--	--	150	0.18
120	--	--	132	0.22
140	--	--	--	0.00
165	--	--	--	0.00

850D		1400 EST	Weather -	
18 July 52		Depth 168'	Wind -	
			Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	29.90	9.51	--	--
5	27.33	9.83	--	--
10	26.80	9.90	--	--
15	26.24	10.00	--	--
20	25.95	10.34	--	--
25	25.40	10.67	--	--
30	25.21	10.72	--	--
35	24.63	11.37	--	--
40	24.25	11.87	--	--
45	23.74	12.88	--	--
50	22.82	15.28	--	--
55	22.61	16.10	--	--
60	22.52	16.62	--	--
80	22.44	17.52	--	--
100	22.43	17.75	--	--
120	22.43	17.75	--	--
140	22.43	17.75	--	--
160	22.43	17.75	--	--

850D 18 July 52		1500 EST Depth 162'	Weather 02 Wind S-1 Air 33.3°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	--	--	--	--
5	--	--	356	0.34
10	--	--	356	0.29
15	--	--	015	0.38
20	--	--	015	0.38
25	--	--	345	0.52
30	--	--	345	0.50
35	--	--	341	0.50
40	--	--	346	0.48
45	--	--	346	0.45
50	--	--	349	0.41
55	--	--	350	0.31
60	--	--	350	0.26
80	--	--	345	0.29
100	--	--	345	0.31
120	--	--	345	0.36
140	--	--	345	0.38
160	--	--	346	0.34

850D 18 July 52		1605 EST Depth 163'	Weather 02 Wind SW-1 Air 33.9°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.97	9.74	--	0.00
5	27.04	9.93	--	0.00
10	26.62	10.12	--	0.00
15	26.46	10.14	--	0.00
20	26.24	10.19	--	0.00
25	25.60	10.47	--	0.00
30	25.48	10.55	--	0.00
35	25.26	10.73	--	0.00
40	24.30	11.83	075	0.18
45	22.90	14.28	074	0.22
50	22.62	16.11	079	0.22
55	22.50	16.45	--	0.00
60	22.48	16.55	--	0.00
80	22.39	17.53	--	0.00
100	22.38	17.74	--	0.00
120	22.38	17.87	--	0.00
140	22.38	18.02	--	0.00
160	22.38	18.00	--	0.00

850D 18 July 52		1800 EST Depth 168'		Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	27.94	9.88	--	--	
5	27.94	9.87	--	--	
10	27.00	9.88	--	--	
15	26.77	10.02	--	--	
20	26.64	10.09	--	--	
25	26.62	10.12	--	--	
30	25.36	10.77	--	--	
35	24.32	11.90	--	--	
40	23.60	13.22	--	--	
45	23.37	13.76	--	--	
50	22.92	14.94	--	--	
55	22.70	15.86	--	--	
60	22.63	16.55	--	--	
80	22.54	17.35	--	--	
100	22.54	17.65	--	--	
120	22.54	17.77	--	--	
140	22.54	17.90	--	--	
160	22.54	17.95	--	--	

858D 17 July 52		1813 EST Depth -		Weather - Wind - Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	28.72	7.15	--	--	
5	26.96	7.61	--	--	
10	26.14	8.03	--	--	
15	26.06	8.28	--	--	
20	26.06	8.32	--	--	
25	26.22	8.56	--	--	
30	25.06	10.03	--	--	
35	24.68	10.62	--	--	
40	24.50	10.97	--	--	
44	23.84	12.15	--	--	

M-4 1305 EST Weather 13
5 Aug 52 Depth 47' Wind SWW-1
Air 34.4°C

Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.18	11.05	204	0.57
5	27.94	11.09	195	0.61
10	27.92	11.09	165	0.57
15	27.75	11.20	195	0.52
20	26.76	11.75	185	0.34
25	25.92	12.86	185	0.38
30	25.48	13.57	195	0.22
35	25.16	13.55	--	0.00
40	25.14	13.61	--	0.00
45	25.12	13.70	--	0.00

M-4 1505 EST Weather 13
5 Aug 52 Depth 47' Wind SSE-2
Air 31.7°C

Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.44	11.10	167	0.15
5	27.86	10.95	167	0.24
10	27.65	11.22	170	0.12
15	27.57	11.35	--	0.00
20	26.56	12.19	167	0.12
25	26.16	12.50	273	0.14
30	25.56	13.23	334	0.21
35	25.48	13.30	335	0.20
40	25.36	13.44	346	0.14
45	25.22	13.53	166	0.12

M-4 1400 EST Weather 13
5 Aug 52 Depth 47' Wind W-1
Air 36.1°C

Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.35	11.16	205	0.36
5	27.88	11.17	200	0.38
10	27.78	11.18	197	0.58
15	27.68	11.29	193	0.45
20	26.50	12.35	198	0.34
25	26.12	12.67	119	0.15
30	25.30	13.47	013	0.11
35	25.26	13.55	316	0.20
40	25.18	13.56	303	0.24
45	25.13	13.67	340	0.12

M-4 1600 EST Weather 13
5 Aug 52 Depth 45' Wind SE-4
Air 26.7°C

Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.44	11.08	--	0.27
5	28.50	11.10	330	0.20
10	28.18	11.10	342	0.21
15	27.76	11.24	--	0.00
20	27.26	11.52	--	0.00
25	26.32	12.43	--	0.00
30	26.04	12.77	--	0.00
35	25.70	13.05	--	0.00
40	25.36	13.40	001	0.11
45	25.40	13.36	--	0.00

M-4 5 Aug 52		1705 EST Depth 47'	Weather 14 Wind SE-7 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.42	11.09	002	0.12
5	28.50	11.13	092	0.19
10	27.96	11.15	174	0.23
15	27.46	11.40	184	0.19
20	27.20	11.65	184	0.14
25	26.54	12.17	--	0.00
30	26.02	12.68	--	0.00
35	25.64	13.04	--	0.00
40	25.28	13.45	--	0.00
45	25.26	13.49	--	0.00

M-4 5 Aug 52		1905 EST Depth 44'	Weather 03 Wind S-3 Air -	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.04	11.12	000	0.34
5	28.06	11.11	330	0.36
10	28.00	11.10	329	0.53
15	27.86	11.12	319	0.53
20	27.64	11.22	318	0.43
25	27.22	11.47	329	0.35
30	26.88	11.85	328	0.33
35	26.22	12.42	336	0.27
40	26.02	12.65	002	0.25
44	25.71	12.93	003	0.23

M-4 5 Aug 52		1806 EST Depth 44'	Weather 03 Wind SE-3 Air 26.7°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.14	11.11	357	0.16
5	28.20	11.10	355	0.19
10	28.14	11.11	010	0.14
15	27.92	11.21	--	0.00
20	27.36	11.65	328	0.11
25	26.45	12.15	323	0.09
30	25.84	12.97	337	0.12
35	25.70	12.95	343	0.09
40	25.36	13.34	--	0.00
43	--	--	--	0.00
45	25.38	13.32	--	--

M-4 5 Aug 52		2000 EST Depth 43'	Weather 03 Wind S-2 Air 26.7°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.24	11.05	357	0.31
5	27.96	11.13	337	0.38
10	28.06	11.11	337	0.38
15	27.98	11.13	337	0.38
20	27.96	11.13	337	0.38
25	27.94	11.15	337	0.41
30	27.64	11.27	337	0.34
35	27.00	11.75	337	0.31
40	26.26	12.46	--	0.00
43	25.86	12.80	--	--

M-4 5 Aug 52		2100 EST Depth 43'	Weather 03 Wind SSE-2 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.16	11.01	351	0.27
5	28.16	11.08	351	0.20
10	28.11	11.10	002	0.16
15	28.06	11.11	002	0.14
20	27.86	11.20	--	0.00
25	27.92	11.18	--	0.00
30	26.14	12.58	185	0.22
35	26.52	12.19	185	0.22
40	25.84	12.85	185	0.22
45	25.80	12.90	--	--

M-4 5 Aug 52		2300 EST Depth 44'	Weather 03 Wind SE-2 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.92	11.12	209	0.12
5	27.92	11.12	190	0.20
10	27.88	11.17	172	0.27
15	27.80	11.22	182	0.24
20	26.98	11.78	183	0.23
25	26.44	12.25	184	0.22
30	26.05	12.64	192	0.24
35	25.80	12.87	190	0.21
40	25.62	13.03	186	0.20
44	25.48	13.17	196	0.15

M-4 5 Aug 52		2200 EST Depth 43'	Weather 51 Wind SE-2 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	28.12	10.96	355	0.19
5	28.13	11.02	356	0.12
10	27.84	11.15	--	0.00
15	27.89	11.18	187	0.11
20	27.62	11.43	188	0.12
25	27.08	12.02	189	0.17
30	26.12	11.91	188	0.20
35	26.00	12.66	187	0.24
40	25.66	13.02	187	0.16
43	25.48	13.20	187	0.16

M-4 6 Aug 52		0000 EST Depth 45'	Weather 03 Wind S-2 Air 25.6°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.78	11.10	240	0.45
5	27.89	11.07	190	0.29
10	27.75	11.14	170	0.58
15	27.73	11.20	180	0.67
20	27.46	11.45	172	0.53
25	26.56	12.18	161	0.50
30	25.96	12.69	162	0.41
35	25.92	12.76	169	0.29
40	25.66	12.97	179	0.26
45	25.48	13.11	178	0.18

M-4 6 Aug 52		0100 EST Depth 45'	Weather 03 Wind SW-2 Air 26.7°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.48	11.22	215	0.79
5	27.50	11.15	196	0.73
10	27.39	11.29	193	0.57
15	27.31	11.27	193	0.41
20	27.07	11.60	194	0.45
25	26.37	12.30	186	0.34
30	25.87	12.80	175	0.41
35	25.67	12.95	164	0.22
40	25.49	13.11	--	0.00
44	25.47	13.12	--	0.00

M-4 6 Aug 52		0300 EST Depth 45'	Weather 03 Wind S-1 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.70	11.07	189	0.41
5	27.76	11.09	178	0.48
10	27.74	11.10	186	0.45
15	27.60	11.25	189	0.34
20	26.98	11.72	188	0.22
25	26.65	12.00	183	0.18
30	26.06	12.54	000	0.00
35	25.95	12.63	321	0.26
40	25.78	12.82	342	0.31
45	25.72	12.86	343	0.26

M-4 6 Aug 52		0200 EST Depth 45'	Weather 03 Wind SW-2 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.78	11.09	216	0.76
5	27.67	11.20	191	0.58
10	27.66	11.20	176	0.58
15	27.26	11.49	176	0.50
20	26.96	11.83	176	0.31
25	26.67	12.05	186	0.22
30	26.37	12.30	166	0.18
35	25.86	12.72	--	0.00
40	25.58	13.02	356	0.18
45	25.44	13.15	356	0.34

M-4 6 Aug 52		0400 EST Depth 45'	Weather 03 Wind S-1 Air 26.7°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.63	11.10	184	0.31
5	27.66	11.14	213	0.26
10	27.55	11.25	214	0.22
15	27.52	11.30	194	0.18
20	27.01	11.68	--	0.00
25	26.42	12.25	--	0.00
30	26.10	12.52	--	0.00
35	25.90	12.72	--	0.00
40	25.83	12.81	324	0.18
45	25.68	12.91	324	0.26

M-4 6 Aug 52		0500 EST Depth 45'	Weather 03 Wind S-1 Air 26.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.50	11.16	--	0.00
5	27.60	11.17	--	0.00
10	27.50	11.25	--	0.00
15	27.46	11.33	--	0.00
20	27.00	11.72	--	0.00
25	26.39	12.25	--	0.00
30	26.18	12.45	337	0.18
35	26.01	12.59	337	0.18
40	25.82	12.80	337	0.18
45	25.67	12.92	338	0.29

M-4 6 Aug 52		0700 EST Depth 45'	Weather 03 Wind W-1 Air 30.6°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.24	11.27	357	0.26
5	27.35	11.27	359	0.26
10	27.39	11.30	330	0.29
15	27.34	11.32	330	0.34
20	27.14	11.50	329	0.38
25	27.04	11.61	330	0.38
30	26.74	11.85	329	0.34
35	26.38	12.16	328	0.31
40	25.98	12.57	307	0.31
45	25.68	12.75	--	0.00

M-4 6 Aug 52		0605 EST Depth 44'	Weather 02 Wind S-1 Air 27.2°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.49	11.15	205	0.22
5	27.46	11.15	195	0.36
10	27.49	11.25	340	0.31
15	27.51	11.27	335	0.26
20	27.23	11.48	340	0.26
25	27.03	11.73	305	0.34
30	26.39	12.29	349	0.34
35	26.04	12.57	359	0.36
40	25.90	12.70	354	0.34
45	25.78	12.80	333	0.22

M-4 6 Aug 52		0800 EST Depth 45'	Weather 03 Wind W-1 Air 30.6°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.44	11.28	307	0.34
5	27.42	11.29	319	0.48
10	27.29	11.35	325	0.64
15	27.31	11.37	294	0.29
20	27.24	11.41	312	0.41
25	27.22	11.47	317	0.38
30	27.14	11.54	318	0.31
35	26.92	11.83	302	0.36
40	26.36	12.31	299	0.31
45	25.58	12.94	290	0.26

M-4	0900 EST	Weather 03		
6 Aug 52	Depth 45'	Wind SW-2		
		Air 32.2°C		
Depth (ft)	Temp (°C)	Sal (o/oo)	Current	
			Dir (°T)	Speed (kts)
0	27.56	11.22	353	0.24
5	27.46	11.27	312	0.21
10	27.48	11.28	330	0.29
15	27.38	11.30	339	0.26
20	27.28	11.39	338	0.20
25	27.14	11.54	347	0.19
30	27.08	11.58	346	0.14
35	26.76	11.84	346	0.12
40	25.72	12.80	--	0.00
45	25.57	12.92	--	0.00

M-4 6 Aug 52		1100 EST Depth 45'		Weather 03 Wind SW-2 Air 30.0°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	27.50	11.29	--	0.00	
5	27.62	11.25	--	0.00	
10	27.35	11.34	283	0.09	
15	27.28	11.35	284	0.12	
20	27.14	11.47	--	0.00	
25	26.98	11.54	192	0.11	
30	26.31	12.22	250	0.16	
35	25.98	12.58	222	0.15	
40	25.52	13.03	221	0.15	
45	25.42	13.09	221	0.14	

M-4 6 Aug 52		1000 EST Depth 45'		Weather 03 Wind S-2 Air 31.1°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	27.72	11.24	340	0.30	
5	27.55	11.30	318	0.17	
10	27.54	11.31	320	0.14	
15	27.47	11.33	315	0.24	
20	27.28	11.42	302	0.28	
25	27.12	11.00	272	0.23	
30	26.80	11.94	258	0.17	
35	26.16	12.41	175	0.12	
40	25.74	12.85	177	0.12	
45	25.70	12.88	--	0.00	

M-4 6 Aug 52		1200 EST Depth 45'		Weather 03 Wind SSW-2 Air 28.9°C	
Depth (ft)	Temp (°C)	Sal (o/oo)	Current		
			Dir (°T)	Speed (kts)	
0	27.58	11.27	--	0.00	
5	27.54	11.28	--	0.00	
10	27.42	11.32	219	0.11	
15	27.38	11.34	220	0.12	
20	27.04	11.58	221	0.11	
25	26.96	11.69	135	0.19	
30	26.40	12.22	134	0.26	
35	25.88	12.71	138	0.24	
40	25.64	12.94	124	0.24	
45	25.60	12.97	118	0.19	

Section B

Chemical Data

Station	Date	Depth (ft)	O ₂ (ml/L)	pH	Chloro. (μg/L)	PO ₄ (μg at/L)	Alk. (mg at/L)	Turbidity	
								410mμ	650mμ
657N	23 July 52	10	3.65	8.00	--	--	1.88	--	--
		30	3.26	8.06	--	--	2.30	--	--
		50	3.65	8.06	--	--	2.38	--	--
704X	23 July 52	10	3.66	8.03	--	--	2.30	0.066	0.037
		30	3.49	8.10	--	--	2.34	0.067	0.037
		50	3.62	8.07	--	--	2.34	--	--
706	23 July 52	10	4.16	8.22	--	--	1.73	0.160	0.078
		30	2.96	7.88	--	--	2.20	0.260	0.169
709V	23 July 52	5	4.33	8.12	--	--	2.06	0.131	0.067
		20	2.79	8.06	--	--	2.10	0.143	0.084
723	25 July 52	10	4.35	--	--	--	--	0.166	0.080
		30	2.06	--	--	--	--	0.168	0.086
724R	25 July 52	10	4.14	8.62	--	--	2.01	0.175	0.076
		30	3.14	7.85	--	--	2.15	0.142	0.085
		50	2.91	7.99	--	--	2.15	0.157	0.096
		70	2.59	8.02	--	--	2.18	0.290	0.193
744N	25 July 52	10	4.71	--	--	--	--	0.180	0.093
		30	3.99	--	--	--	--	0.155	0.078
		50	3.92	--	--	--	--	0.224	0.143
744V	25 July 52	10	3.87	--	--	--	--	0.061	0.083
		30	1.86	--	--	--	--	0.126	0.072
703F	26 July 52	10	3.83	--	--	--	--	0.155	0.069
		30	3.70	--	--	--	--	0.144	0.070
		40	3.36	--	--	--	--	0.213	0.112

Station	Date	Depth (ft)	O ₂ (ml/L)	pH	Chloro. (μg/L)	PO ₄ (μg at/L)	Alk. (mg at/L)	Turbidity	
								410mμ	650mμ
904N	26 July 52	0	3.05	--	--	--	--	0.162	0.076
		10	3.79	--	--	--	--	0.160	0.077
		19	3.19	--	--	--	--	0.160	0.077
812J	4 Aug 52	20	3.96	--	--	--	--	--	--
		30	0.72	--	--	--	6.99	--	--
		35	0.50	--	--	--	7.00	--	--
812K	4 Aug 52	21	2.24	--	--	--	--	--	--
813G	4 Aug 52	30	0.24	--	--	--	7.30	--	--
		40	0.00	--	--	--	7.30	--	--
818N	26 July 52	10	4.15	--	--	--	--	0.191	0.098
		30	3.28	--	--	--	--	0.167	0.077
		50	0.00	--	--	--	--	0.251	0.132
934G	20 July 52	0	4.37	8.37	--	--	1.28	0.142	0.066
		20	3.06	7.99	--	--	1.40	0.130	0.060
		40	0.00	7.63	--	--	1.80	0.120	0.056
		60	0.00	7.59	--	--	1.74	0.180	0.076
934G	26 July 52	10	3.96	--	--	--	--	0.191	0.107
		30	0.97	--	--	--	--	0.162	0.076
		50	0.00	--	--	--	--	0.126	0.060
934K	26 July 52	10	4.41	--	--	--	--	0.201	0.109
		20	3.46	--	--	--	--	0.169	0.085
		30	--	--	--	--	--	0.601	0.423

Station	Date	Depth (ft)	O ₂ (ml/L)	pH	Chloro. (μg/L)	PO ₄ (μg at/L)	Alk. (mg at/L)	Turbidity		
								400mμ	600mμ	800mμ
850D	18 July 52	0	5.02	8.12	2.096	0.030	1.47	0.225	0.086	0.068
		20	3.86	7.98	1.008	0.065	1.52	0.190	0.086	0.070
		40	1.39	7.37	0.650	0.055	1.54	0.340	0.181	0.131
		70	0.00	7.42	0.520	0.120	1.76	0.104	0.048	0.038
		100	0.00	7.38	0.872	0.144	1.76	0.209	0.087	0.067
		132	0.00	7.38	0.958	0.142	1.80	0.202	0.124	0.108
		160	0.00	7.38	0.808	0.128	1.79	0.205	0.081	0.066
858D		0	--	8.04	--	--	--	410mμ	650mμ	
		10	--	7.90	--	--	--	0.204	0.115	
		20	--	7.82	--	--	--	--	--	
		30	--	7.82	--	--	--	--	--	
		40	--	7.62	--	--	--	0.169	0.093	
908	17 June 52	0	4.18	7.88	1.692	0.043	1.51	0.205	0.130	0.102
		10	4.50	8.10	1.587	0.041	1.55	0.222	0.138	0.109
		20	4.08	8.00	2.089	0.041	1.53	0.208	0.125	0.096
		30	3.13	7.58	1.517	0.047	1.51	0.277	0.185	0.155
								410mμ	650mμ	
918U	16 June 52	0	--	8.22	--	--	1.48	0.347	0.214	
		10	--	8.12	--	--	1.56	0.422	0.283	
		20	--	7.92	--	--	1.57	0.481	0.321	
92400	15 June 52							400mμ	600mμ	800mμ
		0	5.40	8.48	0.403	0.067	1.26	0.301	0.156	0.115
		10	5.59	8.57	0.595	0.034	1.34	0.317	0.172	0.131
		20	4.55	8.23	0.527	0.060	1.48	0.368	0.221	0.181
J-17	22 July 52							410mμ	650mμ	
		0	4.39	7.99	--	--	1.50	0.206	0.109	
		10	3.63	7.80	--	--	1.55	0.195	0.101	
		25	3.22	7.79	--	--	1.59	0.436	0.250	

Station	Date	Depth (ft)	O ₂ (ml/L)	pH	Chloro. (μg/L)	PO ₄ (μg at/L)	Alk. (mg at/L)	Turbidity	
								410mμ	650mμ
J-24	22 July 52	0	4.15	7.81	--	--	1.15	--	--
		20	3.75	7.50	--	--	1.15	--	--
		40	3.29	7.48	--	--	1.10	--	--
		60	3.28	7.49	--	--	1.13	--	--
		80	3.58	7.71	--	--	1.16	--	--
J43	20 July 52	0	4.26	8.23	--	--	1.08	0.492	0.270
		10	3.54	7.68	--	--	1.04	0.620	0.377
		30	3.11	7.48	--	--	1.00	1.149	0.717
M4	5 Aug 52	0	4.24	8.21	.521	0.11	1.57	0.250	0.123
		10	3.76	8.09	1.708	0.10	1.56	0.207	0.119
		20	3.00	7.96	.495	0.15	1.59	0.250	0.119
		40	2.00	7.63	.548	--	1.71	0.224	0.130

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