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DATA FILE: NEW BEDFORD HARBOR,
MASSACHUSETTS

by

Jeffrey P. Ellis, Brian C. Kelley,
Peter Stoffers, Michael G. Fitzgerald,
and Colin P. Summerhayes

December 1977

TECHNICAL REPORT

*Prepared for the Department of Commerce,
National Oceanic and Atmospheric Administra-
tion, Office of Sea Grant under Contract
04-6-158-44016 and 04-6-158-44106.*

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Jeffrey P. Ellis¹, Brian C. Kelley², Peter Stoffers³,
Michael G. Fitzgerald⁴, and Colin P. Summerhayes⁵

¹ Woods Hole Oceanographic Institution, Woods Hole, MA 02543

² Biology Department, Southeastern Massachusetts University,
North Dartmouth, MA 02747

³ Laboratorium fur Sedimentforschung, University of Heidelberg,
West Germany

⁴ Woods Hole - M.I.T. Joint Education Program in Oceanography
Woods Hole Oceanographic Institution, Woods Hole, MA 02543

⁵ Present Address: Exxon Production Research Company, Houston
TX 77001

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Approved for Distribution



J.L. Ewing, Department Chairman
Department of Geology & Geophysics

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INTRODUCTION

The purpose of this data file, which has been modelled after Hathaway (1971), is to make available most of the basic data that was collected as part of Woods Hole Oceanographic Institution's study of New Bedford Harbor. The New Bedford Harbor project, which was jointly funded by the Office of Sea Grant and Woods Hole, was designed to examine the past and present patterns of dispersal and accumulation of fine-grained sediments and waste materials in New Bedford Harbor and its approaches (Figure 1). The detailed discussion of this program is presented elsewhere (Stoffers et. al., 1977; Summerhayes et. al., 1977).

A significant amount of additional information is available from sources such as the U.S. Army Corps of Engineers and the Massachusetts Division of Water Pollution Control. These supplementary data, which were used in our study, are not presented here, since they are available elsewhere.

This report will be divided into five sections, each dealing with one of the major aspects of this study. It should be noted that a zero appearing in computer printout indicates that the data are unavailable for that variable. Certain data collected during our work are not presented here, either because they do not lend themselves to such a work, or because of their doubtful value. Data not included are seismic and echo-sounding profiles (see Figure 2 for coverage), Coulter Counter and current meter data, which are covered in detail in Summerhayes and others (1977); x-ray diffraction data have been omitted, since there is little variation in clay mineral assemblages. Transmissometer information is of little value. All data not included in this data file, as well as subsamples of bottom sediments collected during this program, are available upon request.

It is hoped that this data file will be a useful supplement to our earlier work (Summerhayes et. al., 1977), and that presentation of this data is of value in and of itself.

ACKNOWLEDGEMENTS

Major funding for this work was provided by the Sea Grant Office of the National Oceanic and Atmospheric Administration, U.S. Department of Commerce, with additional support from the Woods Hole Oceanographic Institution's Ocean Industry Program. All of the heavy metal analyses were done at the University of Heidelberg, West Germany, with financial support from the German Science Foundation.

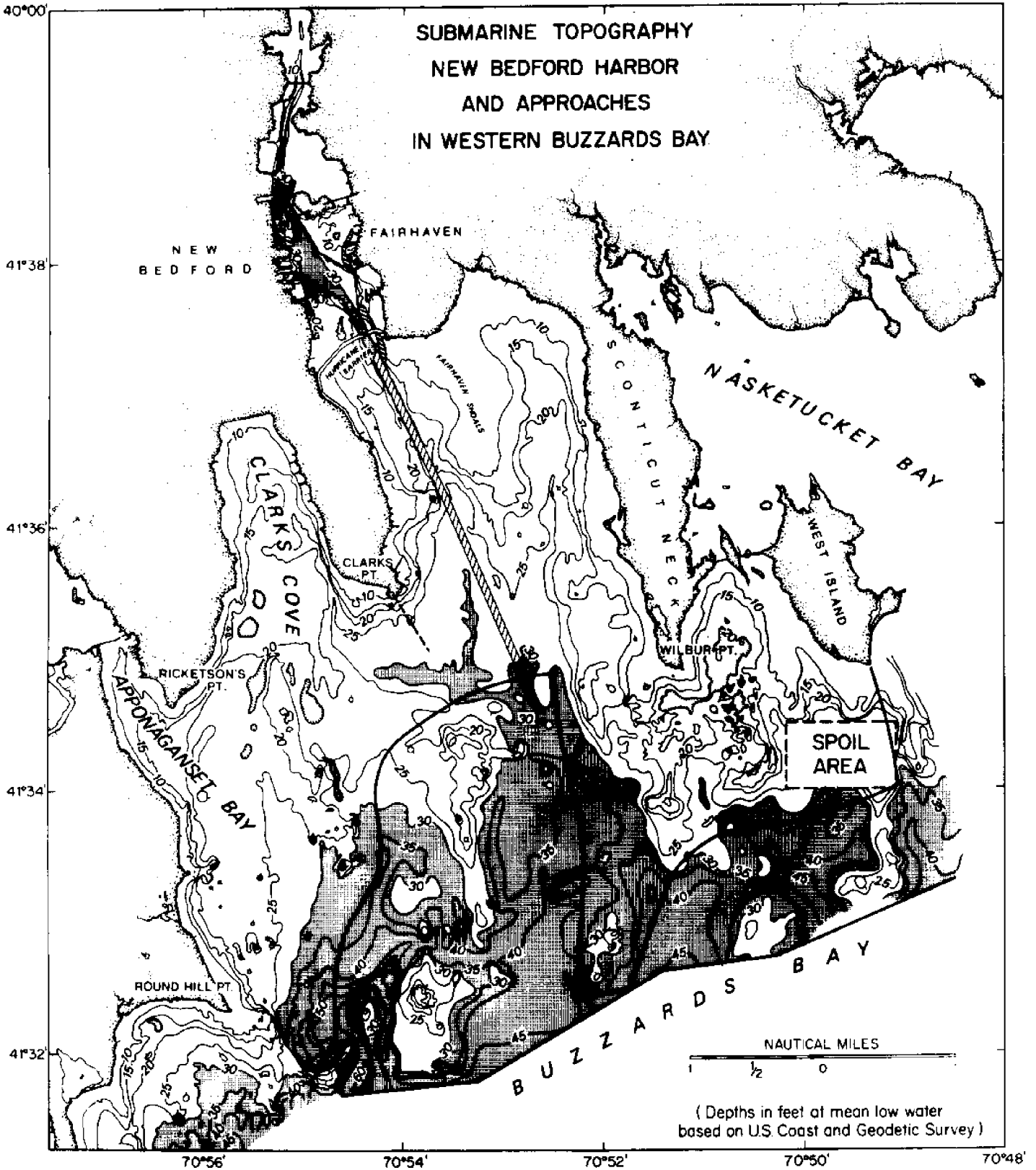


Figure 1. Topography contoured from 1935 USCGS surveys (No. 5880, 5881, 5882); except southern area (enclosed by black line), contoured from USCGS Chart No. 252. Stippling indicates depths over 30 ft. Dashed line indicates Clarks Pt. outfall.

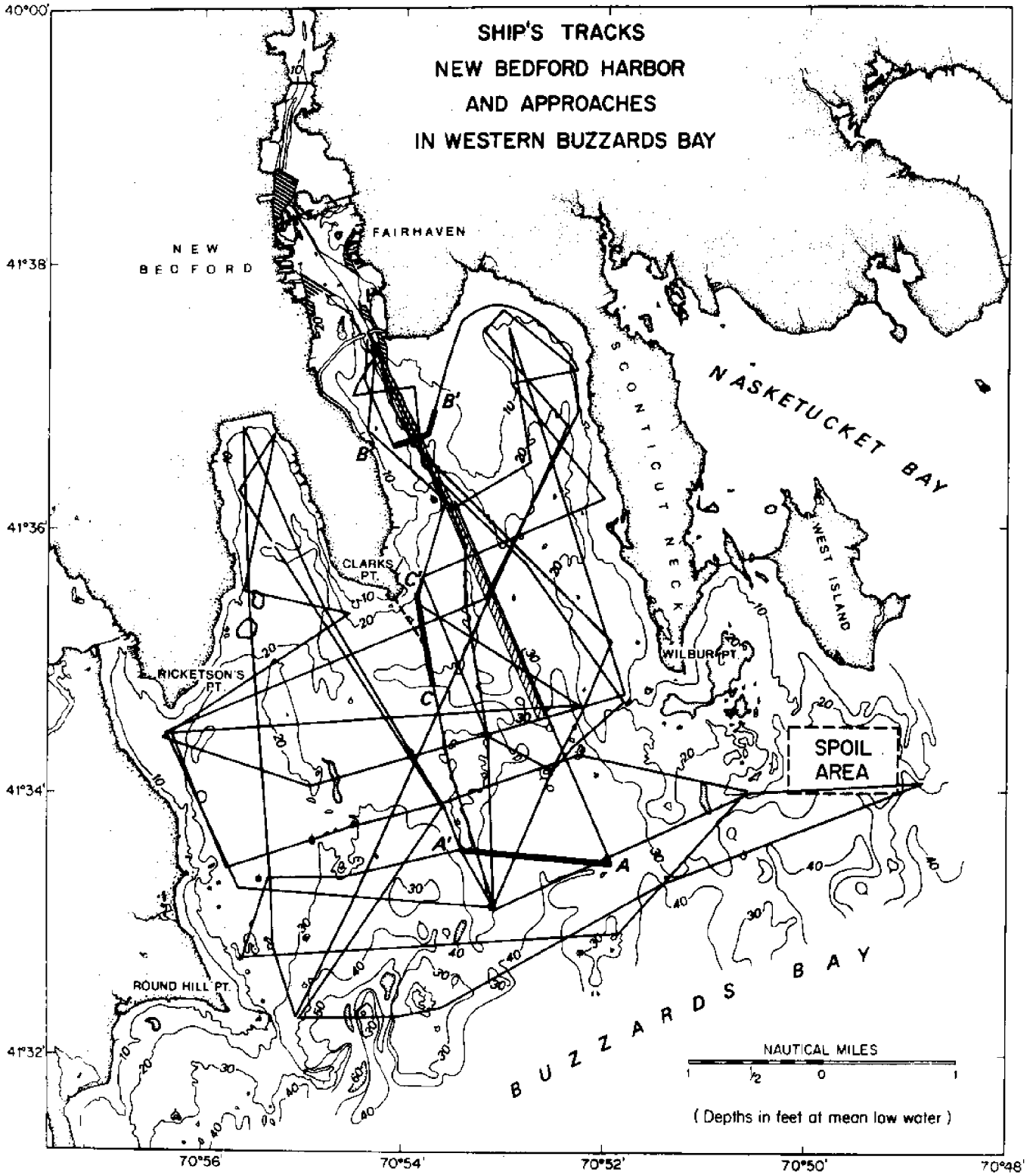


Figure 2. 3.5 kHz coverage (R/V CORSAIR, July, 1975). Heavy lines A - A', B - B' and C - C' indicate locations of profiles shown in Figure 3 in Summerhayes, et al., 1977. Hatching shows recently dredged areas.

We wish to thank Dick Colburn, Master of the R.V. ASTERIAS for his repeated help with sampling operations.

We also owe thanks to the following people for help with laboratory work: Lois Toner, Nancy Marks, Cathy Offinger-Scheer and Mark Flora. Help in compiling this data file was provided by Clara Pires and Leon Gove. Thanks is also due to a large number of people at Woods Hole, at Heidelberg, and at Southeastern Massachusetts University, who helped to put this study together. Finally, our thanks go to Dr. Dave Duane of the Sea Grant Office and to Dean Bumpus and Dave Ross of Woods Hole for their encouragement and assistance with funding.

Section I - Water Quality Data

Measurements of a number of water quality parameters, temperature, conductivity, dissolved oxygen, redox potential and pH, were made at some 65 stations in November, 1975, and in January, March and April, 1976. In addition, these same measurements were made at the New Bedford hurricane barrier and from I-195 in November and December, 1975, and March, 1976, as well as over a complete tidal cycle at two stations (H4 and H5) in the harbor in June, 1976. Key station locations are shown in Figure 3; locations of all stations are given in Table I.

Water quality parameters were measured with a Hydrolab Surveyor, Model 6D. The Hydrolab Surveyor is a portable, integrated instrument system. Inaccuracies of all measurements have been found to be generally less than $\pm 2\%$ of reading (National Oceanographic Instrument Center, 1974).

Data are presented in Table II in the following order:

Date.

Local Time.

Station Number.

Depth at which readings were made.

Temperature, °C.

Dissolved Oxygen, range in mg/L; uncorrected reading in mg/L; corrected reading in mg/L.

Conductivity, range of readings in $\mu\text{mho/cm}$, in-situ reading in $\mu\text{mho/cm}$, calculated salinity.

pH.

Oxidation reduction potential (O.R.P.) range of

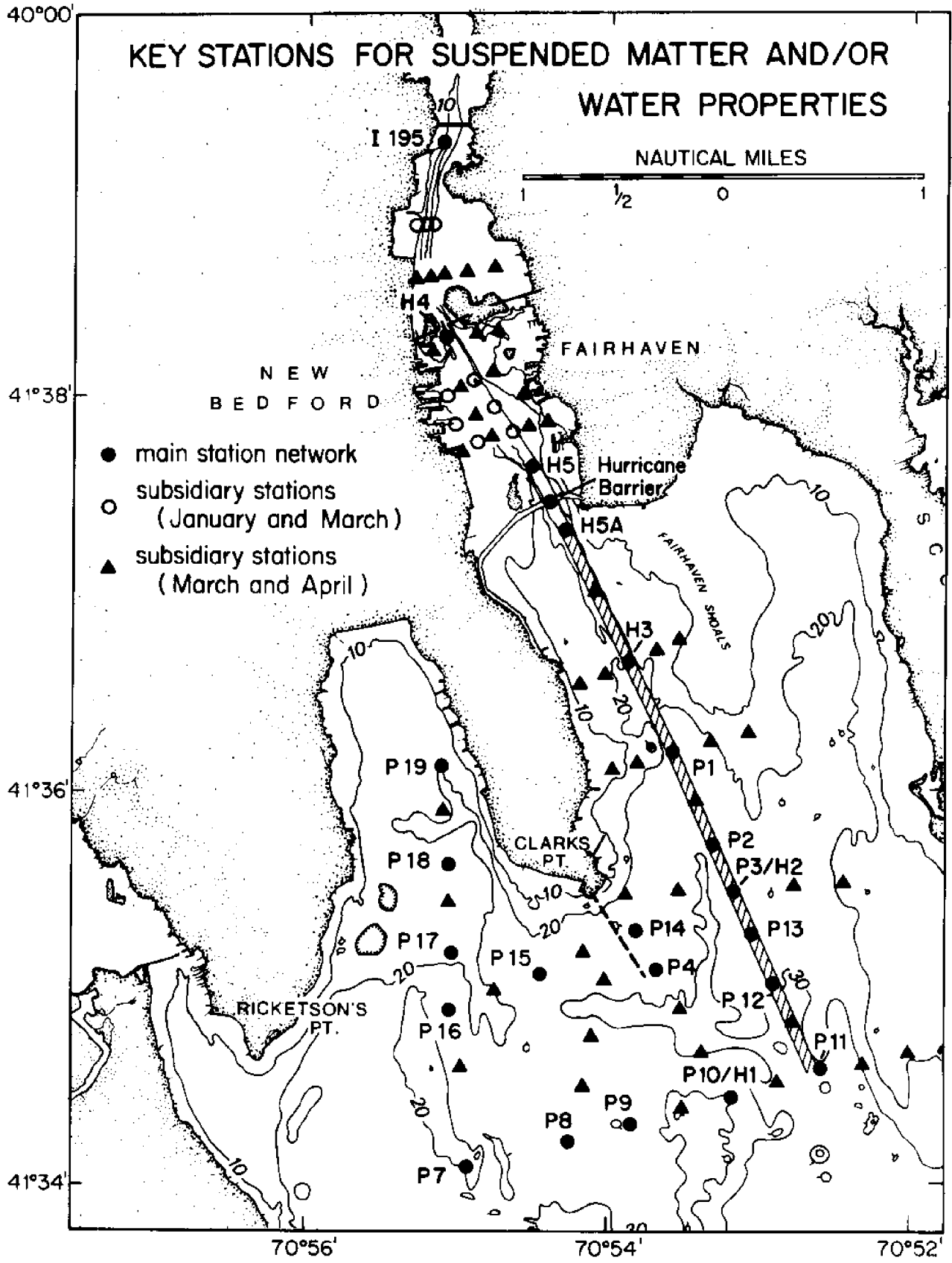


Figure 3. Oceanographic station locations. Main station network used during each seasonal survey.

readings in millivolts; in-situ reading in millivolts.

All data are listed in the order in which they were taken during survey operations.

TABLE I

NEW BEDFORD HARBOR HYDROGRAPHIC STATIONS

STATION NO.	LATITUDE		LONGITUDE	
	°	'N	°	'W
Original Harbor Sta.				
H-1 (P-10)	41°	34.42'	70°	53.17'
H-2 (P-3)	41°	35.48'	70°	53.15'
H-3	41°	36.65'	70°	53.85'
H-4	41°	38.29'	70°	55.09'
4A	41°	38.08'	70°	54.95'
4B	41°	37.94'	70°	54.76'
4C	41°	37.81'	70°	54.63'
4D	41°	37.75'	70°	54.85'
4E	41°	37.84'	70°	55.1'
4F	41°	37.98'	70°	55.6'
H-5	41°	37.65'	70°	54.5'
H-5A	41°	37.3'	70°	54.28'
Sewage Plume Sta.				
P-1	41°	36.2'	70°	53.58'
P-2	41°	35.75'	70°	53.3'
P-3 (H-2)	41°	35.48'	70°	53.15'
P-4	41°	35.08'	70°	53.65'
P-5	41°	34.70'	70°	54.15'
P-6	41°	34.45'	70°	54.44'
P-7	41°	34.06'	70°	54.9'
P-8	41°	34.21'	70°	54.25'
P-9	41°	34.3'	70°	53.83'
P-10 (H-1)	41°	34.43'	70°	53.17'
P-11	41°	34.58'	70°	52.53'
P-12	41°	35.0'	70°	52.9'
P-13	41°	35.25'	70°	53.05'
P-14	41°	35.28'	70°	53.81'
P-15	41°	35.08'	70°	54.44'
P-16	41°	34.86'	70°	55.08'
P-17	41°	35.1'	70°	55.0'
P-18	41°	35.63'	70°	55.05'
P-19	41°	36.14'	70°	55.12'
Hydro Lab/Transmissometer Sta.				
1	41°	39.11'	70°	55.15'
1A	41°	38.86'	70°	55.28'
2	41°	38.86'	70°	55.23'
3	41°	38.86'	70°	55.16'
4	41°	38.58'	70°	55.28'
5	41°	38.6'	70°	55.2'
6	41°	38.61'	70°	55.1'
7	41°	38.63'	70°	54.94'
8	41°	38.65'	70°	54.76'
9	41°	38.22'	70°	55.18'
10	41°	38.31'	70°	55.89'
11	41°	38.34'	70°	54.74'
12	41°	38.05'	70°	54.99'
13	41°	38.12'	70°	54.76'

TABLE (cont.) - 2 -

STATION NO.	LATITUDE		LONGITUDE	
	°	'N	°	'W
14	41°	37.89'	70°	54.88'
15	41°	38.0'	70°	54.51'
16	41°	37.7'	70°	54.98'
17	41°	37.76'	70°	54.78'
18	41°	37.84'	70°	54.53'
19	41°	37.85'	70°	54.4'
20	41°	37.1'	70°	54.1'
21	41°	36.58'	70°	54.2'
22	41°	36.6'	70°	54.03'
23	41°	36.73'	70°	53.68'
24	41°	36.78'	70°	53.53'
25	41°	36.3'	70°	53.05'
26	41°	36.25'	70°	53.3'
27	41°	36.14'	70°	53.79'
28	41°	36.1'	70°	53.95'
29	41°	35.94'	70°	53.42'
30	41°	35.53'	70°	52.43'
31	41°	35.5'	70°	52.76'
32	41°	35.48'	70°	53.51'
33	41°	35.45'	70°	53.86'
34	41°	35.15'	70°	54.15'
35	41°	34.94'	70°	54.75'
36	41°	35.42'	70°	55.04'
37	41°	35.63'	70°	55.05'
38	41°	35.88'	70°	55.1'
39	41°	34.58'	70°	54.95'
40	41°	34.48'	70°	54.15'
41	41°	34.74'	70°	54.1'
42	41°	35.01'	70°	54.0'
43	41°	34.88'	70°	53.5'
44	41°	34.65'	70°	53.35'
45	41°	34.38'	70°	53.48'
46	41°	34.5'	70°	52.85'
47	41°	34.81'	70°	52.75'
48	41°	34.59'	70°	52.28'
49	41°	34.65'	70°	52'
Other Stations				
I-195 Bridge, N. Bedford	41°	39.35'	70°	55.1'
Fairhaven Bridge	41°	38.48'	70°	54.65'
N. Bedford hurricane Barrier	41°	37.47'	70°	54.39'
Tarken Hill Road	41°	40.72'	70°	55.14'
Station 1	41°	38.35'	70°	55.2'
Station 2	41°	37.65'	70°	54.5'

TABLE II

WATER QUALITY DATA

Pages 9 - 35

DATE	TIME LOC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	OXYG READ	CORR	CONDUCTIV RANGE	READ	CALC SAL	PH	S.R.P. RANGE	READ
9 19	1025	PHJN	RX SURF	18.00	0-20	5	8.20	0-100	4.9	32.00	8.50	+1000	1.69
9 19	1025	PHJN	RX 5	18.00	0-20	5	8.20	0-100	4.9	32.00	8.50	+1000	1.69
9 19	1100	H - 2	SURF	18.00	0-20	5.05	8.28	0-100	4.75	31.00	8.50	+1000	1.69
9 19	1100	H - 2	5	18.50	0-20	4.95	8.12	0-100	4.9	32.00	.00		
9 19	1128	H - 3	SURF	18.50	0-20	4.9	8.04	0-100	4.6	30.00	8.45	+1000	1.69
9 19	1128	H - 3	5	18.25	0-20	4.95	8.12	0-100	4.85	31.50	8.40	+1000	1.69
9 19	1257	H - 4	SURF	18.50	0-20	4.8	7.88	0-100	4.95	32.50	8.35	+1000	1.59
9 19	1257	H - 4	5	18.25	0-20	4.4	7.22	0-100	4.9	32.00	8.30	+1000	1.59
9 19	1257	H - 4	7.5	18.00	0-20	4.3	7.03	0-100	4.95	32.50	8.30	+1000	1.3
9 19	1320	H - 5	SURF	18.50	0-20	5.1	8.36	0-100	4.85	31.50	8.40	+1000	1.59
9 19	1320	H - 5	5.5	18.40	0-20	5	8.20	0-100	4.85	31.50	8.40	+1000	1.59
9 19	1320	H - 5	8	18.00	0-20	4.6	7.54	0-100	4.9	32.00	8.40	+1000	1.59
11 24	1105	H - 4	SURF	10.00	0-20	5.75	9.60	0-100	4.5	29.00	.00	+1000	2
11 24	1106	H - 4	5	10.50	0-20	5.6	9.34	0-100	4.5	29.30	.00	+1000	1.99
11 24	1110	H - 4	9	11.50	0-20	5.35	8.88	0-100	4.6	29.90	.00	+1000	0.15
11 24	1315	H - 5	SURF	9.75	0-20	5.71	9.60	0-100	4.35	28.00	.00	+1000	1.65
11 24	1315	H - 5	5	10.25	0-20	5.61	9.40	0-100	4.41	28.50	.00	+1000	1.65
11 24	1315	H - 5	9	10.50	0-20	5.6	9.26	0-100	4.7	30.40	.00	+1000	1.68
11 25	1245	H BAR	SURF	8.90	0-20	5.8	9.68	0-100	4.49	29.00	.00	+1000	1.8
11 25	1245	H BAR	12.5	9.25	0-20	5.9	9.80	0-100	4.61	30.00	.00	+1000	1.75
11 25	1345	I-195	SURF	19.50	0-20	5.1	8.84	0-100	3.7	23.20	.00	+1000	0.7
11 25	1345	I-195	6	12.60	0-20	5.22	8.74	0-100	4.4	28.30	.00	+1000	0.99
11 25	1535	H BAR	SURF	9.10	0-20	5.75	9.64	0-100	4.4	28.30	.00	+1000	1.6
11 25	1535	H BAR	11.7	9.10	0-20	5.69	9.48	0-100	4.5	29.10	.00	+1000	1.6
11 25	1610	I-195	SURF	21.50	0-20	5	8.78	0-100	3.5	22.00	.00	+1000	0.95
11 25	1620	I-195	4.5	5.50	0-20	5	8.36	0-100	4.5	29.10	.00	+1000	1.25
11 26	1115	P - 1	SURF	8.90	0-20	6.22	10.28	0-100	4.69	30.40	10.05	+1000	1.95
11 26	1115	P - 1	9	9.80	0-20	5.8	9.56	0-100	4.75	31.00	10.09	+1000	1.79
11 26	1136	P - 3	SURF	8.90	0-20	6.3	10.44	0-100	4.65	30.00	10.08	+1000	1.9
11 26	1136	P - 3	9.9	9.25	0-20	6.05	10.00	0-100	4.71	30.60	10.10	+1000	1.71
11 26	1206	P - 7	SURF	9.10	0-20	6.29	10.40	0-100	4.7	30.50	10.05	+1000	1.49
11 26	1206	P - 7	6.1	9.40	0-20	6.09	10.08	0-100	4.71	30.60	10.05	+1000	1.61
11 26	1230	P - 9	SURF	9.10	0-20	6.29	10.40	0-100	4.7	30.50	10.10	+1000	1.79
11 26	1230	P - 9	7.2	9.50	0-20	6.09	10.04	0-100	4.75	31.00	10.10	+1000	1.8
11 26	1249	P -11	SURF	9.50	0-20	6.3	10.42	0-100	4.7	30.50	10.12	+1000	1.71
11 26	1249	P -11	10	9.50	0-20	6.2	10.26	0-100	4.71	30.60	10.10	+1000	1.78
11 26	1314	P - 3	SURF	9.50	0-20	6.2	10.30	0-100	4.59	29.80	10.15	+1000	1.85
11 26	1314	P - 3	10	9.50	0-20	6	9.96	0-100	4.7	30.50	10.10	+1000	1.25
11 26	1346	P -17	SURF	8.70	0-20	6.45	10.76	0-100	4.5	29.00	10.05	+1000	1.75
11 26	1346	P -17	6.5	8.90	0-20	6	9.92	0-100	4.69	30.40	10.04	+1000	1.79
11 26	1403	P -19	SURF	8.70	0-20	6.09	10.08	0-100	4.65	30.00	10.11	+1000	1.84
11 26	1403	P -19	5.9	8.60	0-20	6.15	10.18	0-100	4.69	30.40	10.10	+1000	1.65
11 26	1439	P - 1	SURF	8.90	0-20	6.2	10.34	0-100	4.5	29.10	10.20	+1000	1.82
11 26	1439	P - 1	10.1	9.60	0-20	5.85	9.64	0-100	4.75	31.00	10.19	+1000	1.6
12 29	1330	H BAR	SURF	1.40	0-20	7.2	12.24	0-100	3.69	23.20	7.80	+1000	2.7
12 29	1330	H BAR	12.5	2.90	0-20	7.05	11.50	0-100	4.7	30.50	7.91	+1000	2.6
12 29	1415	I-195	5.5	2.25	0-20	5.5	9.12	0-100	4.25	27.20	10.00	+1000	1.3
12 29	1425	I-195	SURF	3.00	0-20	4.25	7.06	0-100	4.25	27.20	10.10	+1000	1.8
12 29	1545	H BAR	SURF	1.50	0-20	7.4	12.44	0-100	3.9	24.80	7.95	+1000	2
12 29	1545	H BAR	13.5	2.80	0-20	7.1	11.58	0-100	4.7	30.50	8.00	+1000	2.05

DATE	TIME	STATION	DEPT	TEMP	DISSOLVED	OXYG	CONDUCTIV	CALC	PH	S.R.P.				
	LOC	NUMBER	READ	C	RANG	READ	RANGE	READ		RANGE				
										READ				
1	5	1415	I - 4	SURF	1.40	0-20	8.7	14.12	0-100	4.6	30.00	10.60	+1000	1.41
1	5	1415	I - 4	5	1.40	0-20	8.6	13.94	0-100	4.65	30.20	10.81	+1000	1.4
1	5	1415	I - 4	9	1.50	0-20	8.35	13.60	0-100	4.7	30.50	10.80	+1000	0.15
1	5	1435	I - 5	SURF	.50	0-20	8.85	14.45	0-100	4.5	29.10	9.60	+1000	1.1
1	5	1435	I - 5	5	1.00	0-20	8.71	14.26	0-100	4.5	29.10	9.60	+1000	1.11
1	5	1435	I - 5	9	1.20	0-20	8.55	13.94	0-100	4.7	30.50	9.55	+1000	1.19
1	5	1525	I - 4	SURF	1.25	0-20	8.8	14.30	0-100	4.6	30.00	9.20	+1000	1.35
1	5	1525	I - 4	5	1.20	0-20	8.6	13.96	0-100	4.6	30.00	9.50	+1000	1.38
1	5	1550	I - 5	9	1.00	0-20	8.6	14.02	0-100	4.7	30.50	9.40	+1000	1.5
1	5	1525	I - 4	7.5	1.10	0-20	8.45	13.68	0-100	4.69	30.40	9.70	+1000	1.4
1	5	1550	I - 5	SURF	.50	0-20	8.8	14.42	0-100	4.5	29.10	9.30	+1000	1.5
1	5	1550	I - 5	5	.80	0-20	8.7	14.24	0-100	4.5	29.10	9.60	+1000	1.6
1	6	0956	I - 4	SURF	.50	0-20	8.5	14.44	0-100	3.7	23.20	10.75	+1000	1.85
1	6	0956	I - 4	5	.60	0-20	8.5	14.44	0-100	3.7	23.20	10.80	+1000	1.8
1	6	0956	I - 4	10	.75	0-20	8.55	14.54	0-100	3.7	23.20	10.69	+1000	1.75
1	6	1015	I - 5	SURF	.20	0-20	8.51	14.28	0-100	4	25.50	11.20	+1000	2.01
1	6	1015	I - 5	5	.50	0-20	8.5	14.14	0-100	4.1	26.00	11.10	+1000	2
1	6	1015	I - 5	10	1.00	0-20	8.41	13.96	0-100	4.2	26.50	10.60	+1000	1.95
1	6	1102	I - 3	SURF	.40	0-20	8.71	14.43	0-100	4.2	26.80	8.85	+1000	1.9
1	6	1102	I - 3	5	.50	0-20	8.61	14.30	0-100	4.2	26.50	8.85	+1000	1.85
1	6	1102	I - 3	9.5	1.80	0-20	8.25	13.62	0-100	4.35	28.00	8.80	+1000	1.75
1	6	1110	P - 1	SURF	.10	0-20	8.75	14.52	0-100	4.19	26.70	8.75	+1000	2.1
1	6	1110	P - 1	5	.60	0-20	8.6	14.20	0-100	4.29	27.50	8.75	+1000	2.01
1	6	1110	P - 1	10	1.90	0-20	8.19	13.44	0-100	4.39	28.20	8.70	+1000	2
1	6	1133	P - 3	SURF	.50	0-20	8.4	13.94	0-100	4.2	26.87	8.70	+1000	2
1	6	1133	P - 3	5	1.50	0-20	8	13.22	0-100	4.31	27.70	8.70	+1000	2
1	6	1133	P - 3	10	2.00	0-20	7.91	12.98	0-100	4.39	28.20	8.65	+1000	2
1	6	1155	P - 11	10	2.00	0-20	8.2	13.46	0-100	4.4	28.30	8.60	+1000	2.1
1	6	1155	P - 11	SURF	.50	0-20	8.7	14.44	0-100	4.25	27.20	8.65	+1000	2.09
1	6	1155	P - 11	5	.50	0-20	8.6	14.28	0-100	4.25	27.20	8.65	+1000	2.05
1	6	1217	P - 9	SURF	1.00	0-20	8.61	14.30	0-100	4.2	26.80	8.70	+1000	2.1
1	6	1217	P - 9	5	1.70	0-20	8.3	13.78	0-100	4.25	27.20	8.69	+1000	2.1
1	6	1217	P - 9	7	2.00	0-20	8.3	13.72	0-100	4.3	27.70	8.70	+1000	2.1
1	6	1313	P - 7	SURF	1.50	0-20	8.39	13.92	0-100	4.25	27.20	8.60	+1000	2.12
1	6	1313	P - 7	5	1.70	0-20	8.3	13.72	0-100	4.3	27.70	8.60	+1000	2.1
1	6	1313	P - 7	6.5	1.60	0-20	8.41	13.96	0-100	4.25	27.20	8.69	+1000	2.11
1	6	1340	P - 17	SURF	.50	0-20	8.71	14.50	0-100	4.15	26.50	8.60	+1000	2.2
1	6	1340	P - 17	5	1.00	0-20	8.6	14.28	0-100	4.2	26.80	8.60	+1000	2.19
1	6	1340	P - 17	6	1.50	0-20	8.6	14.28	0-100	4.2	26.80	8.61	+1000	2.18
1	6	1405	P - 19	SURF	.50	0-20	8.95	14.90	0-100	4.1	26.20	8.70	+1000	2.21
1	6	1405	P - 19	5	1.00	0-20	8.75	14.56	0-100	4.15	26.30	8.71	+1000	2.2
1	6	1405	P - 19	5.5	1.50	0-20	8.72	14.48	0-100	4.25	27.20	8.81	+1000	2.2
1	6	1425	P - 15	SURF	.50	0-20	8.81	14.66	0-100	4.1	26.20	8.55	+1000	2.25
1	6	1425	P - 15	5	1.20	0-20	8.55	14.20	0-100	4.2	26.50	8.55	+1000	2.25
1	6	1425	P - 15	8.5	2.00	0-20	8.25	13.70	0-100	4.25	27.20	8.55	+1000	2.21
1	6	1448	P - 4	SURF	.60	0-20	8.75	14.46	0-100	4.3	27.70	8.55	+1000	2.3
1	6	1405	P - 19	5	1.00	0-20	8.75	14.56	0-100	4.15	26.30	8.71	+1000	2.2
1	6	1405	P - 19	5.5	1.50	0-20	8.72	14.48	0-100	4.25	27.20	8.81	+1000	2.2
1	6	1425	P - 15	SURF	.50	0-20	8.81	14.66	0-100	4.1	26.20	8.55	+1000	2.25
1	6	1425	P - 15	5	1.20	0-20	8.55	14.20	0-100	4.2	26.80	8.55	+1000	2.25

DATE	TIME	STATION	DEPT	TEMP	DISSOLVED	OXYG	CONDUCTIV	CALC	PH	B.R.P.				
	LOC	NUMBER	READ	C	RANG	READ	RANGE	READ		RANGE				
								SAL		READ				
1	6	1425	P -15	8.5	2.00	0-20	8.25	13.70	0-100	4.25	27.20	8.55	+1000	2.21
1	6	1448	P - 4	SURF	.60	0-20	8.75	14.46	0-100	4.3	27.70	8.55	+1000	2.3
1	6	1448	P - 4	5	1.00	0-20	8.65	14.40	0-100	4.15	26.30	8.55	+1000	2.25
1	6	1448	P - 4	8	2.00	0-20	8.2	13.62	0-100	4.25	27.20	8.55	+1000	2.25
1	6	1510	SEWOF	SURF	4.50	0-20	8.6	14.62	0-100	3.9	24.80	8.50	+1000	3
1	6	1525	P - 1	SURF	.70	0-20	8.75	14.56	0-100	4.15	26.30	8.60	+1000	2.5
1	6	1525	P - 1	5	.75	0-20	8.7	14.44	0-100	4.2	26.80	8.60	+1000	2.5
1	6	1525	P - 1	10	1.50	0-20	8.3	13.78	0-100	4.25	27.20	8.60	+1000	2.5
1	7	1000	P -19	SURF	.00	0-20	8.9	14.80	0-100	4.15	26.80	7.60	+1000	2.4
1	7	1000	P -19	5	1.70	0-20	8.28	13.68	0-100	4.3	27.70	7.62	+1000	2.4
1	7	1000	P -19	6	1.60	0-20	8.28	13.78	0-100	4.15	26.30	7.60	+1000	2.4
1	7	1035	P -17	SURF	.90	0-20	8.59	14.26	0-100	4.24	27.20	7.85	+1000	2.38
1	7	1035	P -17	5	1.75	0-20	8.2	13.54	0-100	4.3	27.70	7.86	+1000	2.35
1	7	1035	P -17	6.5	2.00	0-20	8.2	13.54	0-100	4.31	27.80	7.90	+1000	2.33
1	7	1100	P - 7	SURF	1.40	0-20	8.52	14.08	0-100	4.32	27.90	8.05	+1000	2.4
1	7	1100	P - 7	5	1.40	0-20	8.38	13.84	0-100	4.32	27.90	8.05	+1000	2.38
1	7	1100	P - 7	7	1.50	0-20	8.25	13.52	0-100	4.35	28.00	8.10	+1000	2.4
1	7	1123	P - 9	SURF	1.00	0-20	8.3	13.52	0-100	4.55	29.50	8.02	+1000	2.38
1	7	1123	P - 9	5	1.30	0-20	8.2	13.32	0-100	4.6	30.00	8.03	+1000	2.38
1	7	1123	P - 9	8.8	1.60	0-20	8.1	13.16	0-100	4.62	30.00	8.05	+1000	2.38
1	7	1147	P -11	SURF	1.20	0-20	8.5	13.80	0-100	4.6	30.00	8.20	+1000	2.38
1	7	1147	P -11	5	1.30	0-20	8.2	13.32	0-100	4.6	30.00	8.23	+1000	2.37
1	7	1147	P -11	10.5	1.70	0-20	8.05	13.06	0-100	4.65	30.20	8.25	+1000	2.38
1	7	1206	P - 3	SURF	.75	0-20	8.68	14.14	0-100	4.55	29.50	8.28	+1000	2.35
1	7	1206	P - 3	5	1.00	0-20	8.45	13.72	0-100	4.58	29.80	8.30	+1000	2.35
1	7	1206	P - 3	10.5	1.80	0-20	8.22	13.34	0-100	4.62	30.00	8.32	+1000	2.35
1	7	1240	P -15	SURF	.70	0-20	8.65	14.16	0-100	4.52	29.20	8.10	+1000	2.4
1	7	1240	P -15	5	1.00	0-20	8.4	13.76	0-100	4.52	29.20	8.10	+1000	2.38
1	7	1240	P -15	9	1.50	0-20	8.18	13.28	0-100	4.6	30.00	8.12	+1000	2.35
1	7	1300	P -14	SURF	.70	0-20	8.65	14.18	0-100	4.45	28.70	8.10	+1000	2.5
1	7	1300	P -14	5	.70	0-20	8.5	13.92	0-100	4.52	29.20	8.10	+1000	2.4
1	7	1300	P -14	9	1.70	0-20	8.2	13.32	0-100	4.6	30.00	8.15	+1000	2.4
1	7	1322	SEWOF	SURF	2.60	0-20	8.2	13.52	0-100	4.35	28.00	8.13	+1000	3.3
1	7	1335	P - 1	SURF	.30	0-20	8.95	14.68	0-100	4.45	28.70	8.10	+1000	2.7
1	7	1335	P - 1	5	.40	0-20	8.8	14.42	0-100	4.5	29.00	8.12	+1000	2.75
1	7	1335	P - 1	10	1.80	0-20	8.1	13.16	0-100	4.6	30.00	8.15	+1000	2.72
1	7	1355	H - 3	SURF	.90	0-20	8.55	14.02	0-100	4.45	28.70	8.20	+1000	2.55
1	7	1355	H - 3	5	1.00	0-20	8.5	14.04	0-100	4.25	27.20	8.20	+1000	2.45
1	7	1355	H - 3	9.8	1.60	0-20	8.35	13.86	0-100	4.2	26.80	8.20	+1000	2.48
1	7	1415	H - 5	SURF	.80	0-20	8.78	14.48	0-100	4.35	28.00	8.00	+1000	2
1	7	1415	H - 5	5	.75	0-20	8.6	14.12	0-100	4.4	28.30	8.03	+1000	2
1	7	1415	H - 5	10	1.20	0-20	8.2	13.36	0-100	4.55	29.50	8.10	+1000	1.96
1	7	1435	H - 4	SURF	.80	0-20	8.5	14.01	0-100	4.35	28.00	7.95	+1000	0.8
1	7	1435	H - 4	5	.80	0-20	8.35	13.72	0-100	4.4	28.30	7.95	+1000	0.65
1	8	1035	HT- 1	SURF	1.00	0-20	8.25	13.84	0-100	4.05	25.80	7.70	+1000	2.5
1	8	1035	HT- 1	2	1.00	0-20	8.25	13.84	0-100	4.05	25.80	7.60	+1000	2.5
1	8	1035	HT- 1	3	1.00	0-20	8.1	13.38	0-100	4.25	27.20	7.82	+1000	2.5
1	8	1045	HT- 2	SURF	1.00	0-20	8.42	14.00	0-100	4.1	26.20	7.62	+1000	2.3
1	7	1435	H - 4	9.5	1.00	0-20	8.18	13.34	0-100	4.55	29.50	8.00	+1000	0.4
1	8	1045	HT- 2	2	1.50	0-20	8.3	13.62	0-100	4.45	28.70	7.65	+1000	2.3

DATE	TIME	STATION	DEPT	TEMP	DISSOLVED	DOXYG	CONDUCTIV	CALC	PH	S.R.P.				
	LBC	NUMBER	READ	C	RANG	READ	RANGE	SAL		RANGE				
							READ			READ				
1	8	1045	HT-2	3	1.00	0-20	8.4	13.78	0-100	4.45	28.70	7.65	+1000	2.3
1	8	1045	HT-2	4	1.20	0-20	8.3	13.62	0-100	4.45	28.70	7.65	+1000	2.3
1	8	1045	HT-2	5	1.00	0-20	8.3	13.60	0-100	4.5	29.00	7.70	+1000	2.3
1	8	1045	HT-2	6	1.25	0-20	8.2	13.44	0-100	4.5	29.00	7.70	+1000	2.3
1	8	1045	HT-2	7	1.25	0-20	8.1	13.26	0-100	4.5	29.00	7.70	+1000	2.3
1	8	1125	I-4	SURF	1.50	0-20	8.4	13.98	0-100	4.1	26.20	7.50	+1000	2.2
1	8	1125	I-4	2	1.00	0-20	8.4	13.80	0-100	4.4	28.20	7.50	+1000	2.25
1	8	1125	I-4	4	1.00	0-20	8.5	13.98	0-100	4.4	28.20	7.50	+1000	2.22
1	8	1125	I-4	5.5	.90	0-20	8.5	13.92	0-100	4.5	29.00	7.50	+1000	2.22
1	8	1125	I-4	6.5	.90	0-20	8.4	13.78	0-100	4.45	28.70	7.50	+1000	2.22
1	8	1125	I-4	7.8	1.00	0-20	8.38	13.72	0-100	4.5	29.00	7.50	+1000	2.22
1	8	1125	I-4	8.8	1.00	0-20	8.28	13.56	0-100	4.5	29.00	7.50	+1000	2.2
1	8	1125	I-4	9.8	1.25	0-20	7.98	13.08	0-100	4.5	29.00	7.50	+1000	2.2
1	8	1132	I-4A	SURF	1.00	0-20	8.48	14.12	0-100	4.1	26.20	7.58	+1000	2.18
1	8	1132	I-4A	3	1.00	0-20	8.45	13.96	0-100	4.3	27.60	7.60	+1000	2.18
1	8	1132	I-4A	5	1.25	0-20	8.4	13.80	0-100	4.42	28.50	7.58	+1000	2.2
1	8	1132	I-4A	6	1.25	0-20	8.4	13.78	0-100	4.45	28.70	7.55	+1000	2.18
1	8	1132	I-4A	7	1.25	0-20	8.38	13.74	0-100	4.45	28.70	7.58	+1000	2.18
1	8	1132	I-4A	8	1.20	0-20	8.3	13.60	0-100	4.48	28.90	7.58	+1000	2.15
1	8	1132	I-4A	9	1.20	0-20	8.28	13.56	0-100	4.5	29.00	7.59	+1000	2.15
1	8	1145	I-4B	SURF	1.20	0-20	8.32	13.96	0-100	4	25.50	7.60	+1000	2.15
1	8	1145	I-4B	2	1.20	0-20	8.35	14.02	0-100	4.06	26.00	7.62	+1000	2.15
1	8	1145	I-4B	4	2.25	0-20	8.35	13.80	0-100	4.3	27.60	7.70	+1000	2.1
1	8	1145	I-4B	6	1.20	0-20	8.3	13.62	0-100	4.42	28.50	7.60	+1000	2.12
1	8	1145	I-4B	8	1.20	0-20	8.2	13.44	0-100	4.45	28.70	7.65	+1000	2.1
1	8	1145	I-4B	10	1.25	0-20	8.1	13.26	0-100	4.5	29.00	7.64	+1000	2.1
1	8	1150	I-4C	SURF	1.00	0-20	8.42	14.12	0-100	4.02	25.70	7.60	+1000	2.1
1	8	1150	I-4C	2	1.00	0-20	8.4	13.98	0-100	4.15	26.50	7.60	+1000	2.1
1	8	1150	I-4C	4	1.00	0-20	8.4	13.88	0-100	4.3	27.60	7.60	+1000	2.1
1	8	1150	I-4C	6	1.20	0-20	8.35	13.70	0-100	4.45	28.70	7.62	+1000	2.1
1	8	1150	I-4C	8	1.25	0-20	8.3	13.60	0-100	4.5	29.00	7.65	+1000	2.1
1	8	1150	I-4C	10	1.40	0-20	8.3	13.60	0-100	4.5	29.00	7.65	+1000	2.06
1	8	1155	I-5	SURF	1.00	0-20	8.4	13.98	0-100	4.1	26.20	7.62	+1000	2.1
1	8	1155	I-5	2	1.00	0-20	8.4	13.98	0-100	4.1	26.20	7.60	+1000	2.1
1	8	1155	I-5	4	1.00	0-20	8.4	13.94	0-100	4.2	26.80	7.62	+1000	2.1
1	8	1155	I-5	6	1.15	0-20	8.4	13.80	0-100	4.4	28.20	7.63	+1000	2.1
1	8	1155	I-5	8	1.25	0-20	8.35	13.68	0-100	4.5	29.00	7.65	+1000	2.09
1	8	1155	I-5	10	1.30	0-20	8.3	13.60	0-100	4.5	29.00	7.65	+1000	2.08
1	8	1201	I-4D	SURF	1.20	0-20	8.35	14.02	0-100	3.95	25.40	7.60	+1000	2.06
1	8	1201	I-4D	2	1.00	0-20	8.4	14.10	0-100	3.98	25.50	7.60	+1000	2.04
1	8	1201	I-4D	4	1.00	0-20	8.4	13.88	0-100	4.3	27.60	7.60	+1000	2.05
1	8	1201	I-4D	6	1.10	0-20	8.35	13.70	0-100	4.45	28.70	7.60	+1000	2.05
1	8	1201	I-4D	8	1.10	0-20	8.28	13.56	0-100	4.5	29.00	7.60	+1000	2.01
1	8	1201	I-4D	9.8	1.20	0-20	8.3	13.60	0-100	4.5	29.00	7.60	+1000	2
1	8	1206	I-4E	SURF	1.80	0-20	8.35	14.02	0-100	4.04	25.30	7.67	+1000	2
1	8	1206	I-4E	2	2.00	0-20	8.4	13.98	0-100	4.1	26.20	7.68	+1000	2
1	8	1206	I-4E	4	2.50	0-20	8.35	13.72	0-100	4.4	28.20	7.68	+1000	2
1	8	1206	I-4E	6	1.00	0-20	8.4	13.80	0-100	4.4	28.20	7.62	+1000	2
1	8	1206	I-4E	8	1.00	0-20	8.3	13.62	0-100	4.45	28.70	7.64	+1000	1.98
1	8	1206	I-4E	10.4	1.25	0-20	8.3	13.60	0-100	4.5	29.00	7.65	+1000	1.95

DATE	TIME	STATION	DEPT	TEMP	DISSOLVED	OXYG	CONDUCTIV	CALC	PH	B.R.P.				
	LOC	NUMBER	READ	C	RANG	READ	RANGE	SAL		RANGE				
							READ			READ				
1	8	1212	I - 4F	SURF	1.00	0-20	8.42	14.12	0-100	4.05	25.90	7.60	+1000	1.62
1	8	1212	I - 4F	3	1.00	0-20	8.4	13.88	0-100	4.3	27.60	7.60	+1000	1.6
1	8	1212	I - 4F	5	1.00	0-20	8.4	13.80	0-100	4.42	28.50	7.62	+1000	1.6
1	8	1212	I - 4F	7	1.00	0-20	8.32	13.64	0-100	4.45	28.70	7.60	+1000	1.5
1	8	1355	I - 4	SURF	.90	0-20	8.42	13.98	0-100	4.2	26.80	7.50	+1000	0.6
1	8	1355	I - 4	2	.90	0-20	8.42	13.98	0-100	4.2	26.80	7.50	+1000	0.6
1	8	1355	I - 4	4	1.00	0-20	8.5	13.94	0-100	4.45	28.70	7.50	+1000	0.68
1	8	1355	I - 4	6	.80	0-20	8.38	13.72	0-100	4.48	28.90	7.50	+1000	0.6
1	8	1355	I - 4	8	1.00	0-20	8.1	13.26	0-100	4.5	29.00	7.50	+1000	0.46
1	8	1355	I - 4	9.4	1.00	0-20	8.22	13.46	0-100	4.5	29.00	7.48	+1000	0.35
3	8	1135	HT-1	SURF	4.50	0-20	7	11.56	0-100	4.5	29.00	6.35	+1000	2.75
3	8	1135	HT-1	4	4.25	0-20	6.35	10.38	0-100	4.55	29.50	6.55	+1000	2.81
3	8	1143	HT-1A	SURF	4.40	0-20	6.8	11.12	0-100	4.55	29.50	6.50	+1000	2.9
3	8	1150	HT-2	SURF	4.25	0-20	6.8	11.22	0-100	4.5	29.00	6.40	+1000	2.9
3	8	1150	HT-2	3	4.25	0-20	6.8	11.10	0-100	4.6	29.90	6.35	+1000	2.91
3	8	1155	HT-3	SURF	4.25	0-20	6.85	11.30	0-100	4.5	29.00	6.31	+1000	2.9
3	8	1215	HT-4	SURF	4.20	0-20	6.6	10.78	0-100	4.55	29.50	6.61	+1000	2.92
3	8	1215	HT-4	5	4.10	0-20	6.65	10.86	0-100	4.6	29.90	6.30	+1000	3
3	8	1215	HT-4	9	4.00	0-20	6.55	10.68	0-100	4.61	30.00	6.20	+1000	3
3	8	1230	HT-5	SURF	4.40	0-20	6.8	11.22	0-100	4.5	29.00	6.35	+1000	3
3	8	1230	HT-5	5	3.80	0-20	6.55	10.90	0-100	4.2	27.00	6.10	+1000	3
3	8	1230	HT-5	10	4.50	0-20	6	10.20	0-100	3.8	24.00	6.20	+1000	0.9
3	8	1245	HT-6	SURF	4.50	0-20	6.6	10.94	0-100	4.4	28.20	6.35	+1000	2.15
3	8	1245	HT-6	5	3.60	0-20	6.3	10.26	0-100	4.75	31.00	6.10	+1000	2.35
3	8	1245	HT-6	9	4.00	0-20	6.1	9.94	0-100	4.7	30.70	6.20	+1000	2.4
3	8	1255	HT-7	SURF	4.40	0-20	6.8	11.28	0-100	4.35	28.00	6.30	+1000	2.4
3	8	1303	HT-8	SURF	4.50	0-20	6.8	11.28	0-100	4.4	28.10	6.39	+1000	2.4
3	8	1325	HT-9	SURF	4.25	0-20	6.3	10.30	0-100	4.55	29.50	6.35	+1000	2.65
3	8	1325	HT-9	2.5	4.25	0-20	6.7	11.04	0-100	4.5	29.00	6.25	+1000	2.65
3	8	1344	I - 4	SURF	4.00	0-20	6.9	11.28	0-100	4.55	29.50	6.30	+1000	2.7
3	8	1344	I - 4	5	3.75	0-20	6.8	11.10	0-100	4.6	29.90	6.25	+1000	2.75
3	8	1344	I - 4	10	3.75	0-20	6.5	10.66	0-100	4.65	30.10	6.20	+1000	1.6
3	8	1352	HT-10	SURF	4.25	0-20	6.75	11.20	0-100	4.35	28.00	6.30	+1000	2.4
3	8	1352	HT-10	4	4.00	0-20	7	11.44	0-100	4.55	29.50	6.20	+1000	2.45
3	8	1401	HT-11	SURF	4.10	0-20	6.6	10.96	0-100	4.3	27.70	6.39	+1000	2.55
3	8	1411	HT-13	SURF	4.20	0-20	6.75	11.22	0-100	4.3	27.70	6.30	+1000	2.65
3	8	1411	HT-13	3	4.40	0-20	6.7	11.06	0-100	4.45	28.70	6.25	+1000	2.7
3	8	1417	I - 4A	SURF	4.20	0-20	6.8	11.22	0-100	4.45	28.70	6.40	+1000	2.7
3	8	1417	I - 4A	5	4.00	0-20	6.95	11.46	0-100	4.45	28.70	6.35	+1000	2.75
3	8	1417	I - 4A	10	3.50	0-20	6.65	10.86	0-100	4.55	29.50	6.29	+1000	2.79
3	8	1429	HT-12	SURF	4.00	0-20	6.7	11.06	0-100	4.5	29.00	6.50	+1000	2.74
3	8	1429	HT-12	5	3.75	0-20	6.45	10.52	0-100	4.6	29.90	6.31	+1000	2.81
3	8	1429	HT-12	10	3.50	0-20	6.5	10.60	0-100	4.6	29.90	6.31	+1000	2.8
3	8	1440	I - 4F	SURF	4.25	0-20	6.81	11.16	0-100	4.49	28.90	6.51	+1000	2.79
3	8	1440	I - 4F	5	4.25	0-20	6.9	11.38	0-100	4.5	29.00	6.40	+1000	2.8
3	8	1440	I - 4F	7	3.75	0-20	6.7	11.06	0-100	4.5	29.00	6.35	+1000	2.8
3	8	1449	I - 4E	SURF	5.40	0-20	6.9	11.44	0-100	4.4	28.10	6.50	+1000	2.75
3	8	1449	I - 4E	5	4.00	0-20	6.8	11.22	0-100	4.5	29.00	6.40	+1000	2.8
3	8	1449	I - 4E	9	3.60	0-20	6.7	11.06	0-100	4.5	29.00	6.40	+1000	2.8
3	8	1459	HT-14	SURF	4.90	0-20	6.8	11.22	0-100	4.5	29.00	6.50	+1000	2.79

DATE	TIME LBC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	OXYG READ	CONDUCTIV CORR	CALC SAL	PH	B.R.P. RANGE	READ
3	8	1459	HT-14	5	4.00	0-20 6.95	11.46	0-100 4.45	28.70	6.45	+1000 2.8
3	8	1459	HT-14	10	3.75	0-20 6.61	10.90	0-100 4.51	29.10	6.39	+1000 2.8
3	8	1510	H #48	SURF	4.00	0-20 6.9	11.46	0-100 4.3	27.70	6.50	+1000 2.7
3	8	1510	H #48	5	4.00	0-20 6.91	11.46	0-100 4.4	28.10	6.45	+1000 2.8
3	8	1510	H #48	8	3.50	0-20 6.8	11.22	0-100 4.5	29.00	6.40	+1000 2.8
3	8	1518	HT-15	SURF	4.00	0-20 6.9	11.46	0-100 4.35	28.00	6.50	+1000 2.8
3	8	1518	HT-15	5	4.00	0-20 6.85	11.30	0-100 4.45	28.70	6.45	+1000 2.8
3	8	1525	HT-19	SURF	4.10	0-20 6.7	11.14	0-100 4.3	27.70	6.50	+1000 2.8
3	8	1525	HT-19	4.5	4.00	0-20 6.9	11.44	0-100 4.4	28.10	6.50	+1000 2.8
3	8	1535	HT-18	SURF	4.25	0-20 6.8	11.28	0-100 4.35	28.00	6.55	+1000 2.81
3	8	1535	HT-18	5	4.25	0-20 6.9	11.44	0-100 4.41	28.20	6.50	+1000 2.85
3	8	1535	HT-18	7.5	4.00	0-20 6.35	10.48	0-100 4.49	28.90	6.45	+1000 2.9
3	8	1540	H #40	SURF	4.30	0-20 6.7	11.14	0-100 4.3	27.70	6.50	+1000 2.8
3	8	1540	H #40	5	4.10	0-20 6.9	11.48	0-100 4.4	28.10	6.50	+1000 2.8
3	8	1540	H #40	8	3.80	0-20 6.7	11.06	0-100 4.5	29.00	6.50	+1000 2.85
3	8	1550	HT-17	SURF	4.50	0-20 6.9	11.44	0-100 4.4	28.10	6.55	+1000 2.89
3	8	1550	HT-17	5	4.75	0-20 7.0	11.56	0-100 4.5	29.00	6.50	+1000 2.89
3	8	1550	HT-17	9	3.60	0-20 6.61	10.90	0-100 4.51	29.10	6.45	+1000 2.9
3	8	1556	H #40	SURF	4.50	0-20 6.95	11.46	0-100 4.45	28.70	6.52	+1000 2.8
3	8	1556	H #40	6	4.00	0-20 6.85	11.30	0-100 4.45	28.70	6.50	+1000 2.9
3	8	1556	H #40	9.5	3.60	0-20 6.7	11.06	0-100 4.5	29.00	6.45	+1000 2.9
3	8	1607	HT-16	SURF	4.00	0-20 6.75	11.20	0-100 4.4	28.10	6.55	+1000 2.8
3	8	1607	HT-16	5	4.00	0-20 6.95	11.52	0-100 4.41	28.20	6.50	+1000 2.81
3	8	1607	HT-16	8.5	3.75	0-20 6.6	10.88	0-100 4.51	29.10	6.45	+1000 2.85
3	8	1625	H #5	SURF	4.10	0-20 7.05	11.68	0-100 4.39	28.10	6.50	+1000 2.85
3	8	1625	H #5	5	4.30	0-20 7	11.56	0-100 4.45	28.70	6.50	+1000 2.85
3	8	1625	H #5	10	3.60	0-20 6.8	11.22	0-100 4.51	29.10	6.45	+1000 2.9
3	9	1010	HT-49	SURF	3.00	0-20 6.79	11.10	0-100 4.55	29.50	8.05	+1000 3.1
3	9	1010	HT-49	4	3.00	0-20 6.8	11.10	0-100 4.6	29.90	7.85	+1000 3.1
3	9	1020	HT-48	SURF	2.90	0-20 6.8	11.12	0-100 4.55	29.50	7.50	+1000 3.1
3	9	1020	HT-48	5	3.00	0-20 6.7	10.94	0-100 4.6	29.90	7.40	+1000 3.11
3	9	1020	HT-48	9	3.10	0-20 6.65	10.86	0-100 4.61	30.00	7.40	+1000 3.15
3	9	1037	P #11	SURF	3.00	0-20 6.85	11.30	0-100 4.5	29.00	7.20	+1000 3.15
3	9	1037	P #11	5	3.00	0-20 6.8	11.12	0-100 4.55	29.50	7.11	+1000 3.18
3	9	1037	P #11	10	3.25	0-20 6.7	10.94	0-100 4.6	29.90	7.10	+1000 3.15
3	9	1046	HT-46	SURF	3.00	0-20 6.85	11.20	0-100 4.55	29.50	7.09	+1000 3.15
3	9	1046	HT-46	5	3.00	0-20 6.8	11.12	0-100 4.55	29.50	7.00	+1000 3.15
3	9	1046	HT-46	10	3.00	0-20 6.8	11.10	0-100 4.6	29.90	7.00	+1000 3.15
3	9	1057	P #10	SURF	2.80	0-20 6.85	11.30	0-100 4.45	28.70	7.00	+1000 3.15
3	9	1057	P #10	5	2.90	0-20 6.81	11.12	0-100 4.55	29.50	6.95	+1000 3.2
3	9	1057	P #10	6.5	3.00	0-20 6.75	11.02	0-100 4.6	29.90	6.95	+1000 3.2
3	9	1110	HT-45	SURF	2.90	0-20 6.61	10.80	0-100 4.55	29.50	7.05	+1000 3.19
3	9	1110	HT-45	5	3.00	0-20 6.55	10.68	0-100 4.6	29.90	6.99	+1000 3.2
3	9	1127	P #9	SURF	2.90	0-20 6.8	11.22	0-100 4.51	29.10	7.10	+1000 3.2
3	9	1127	P #9	5	3.00	0-20 6.7	10.94	0-100 4.55	29.50	7.00	+1000 3.2
3	9	1127	P #9	8	3.10	0-20 6.59	10.76	0-100 4.6	29.90	7.00	+1000 3.15
3	9	1140	P #8	SURF	2.90	0-20 6.7	10.94	0-100 4.59	29.80	7.00	+1000 3.2
3	9	1140	P #8	5	3.00	0-20 6.65	10.86	0-100 4.6	29.90	6.95	+1000 3.19
3	9	1140	P #8	8	3.00	0-20 6.6	10.76	0-100 4.6	29.90	6.91	+1000 3.15
3	9	1151	P #7	SURF	2.80	0-20 6.9	11.38	0-100 4.5	29.00	7.00	+1000 3.15

DATE	TIME L6C	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	DOXYG READ	DOXYG CORR	CONDUCTIV RANGE	CALC READ	CALC SAL	PH	R.R.P. RANGE	R.R.P. READ	
3	9	1151	P - 7	5	3.00	0-20	6.8	11.10	0-100	4.6	29.90	6.91	+1000	3.15
3	9	1151	P - 7	6.5	3.00	0-20	6.8	11.10	0-100	4.6	29.90	6.85	+1000	3.2
3	9	1205	HT-39	SURF	2.90	0-20	6.85	11.20	0-100	4.55	29.50	7.00	+1000	3.2
3	9	1205	HT-39	5	2.90	0-20	6.85	11.18	0-100	4.6	29.90	6.90	+1000	3.2
3	9	1205	HT-39	7	3.00	0-20	6.85	11.10	0-100	4.6	29.90	6.85	+1000	3.2
3	9	1230	P -17	SURF	3.00	0-20	6.72	10.98	0-100	4.55	29.50	6.90	+1000	3.19
3	9	1230	P -17	5	3.10	0-20	6.75	11.02	0-100	4.6	29.90	6.85	+1000	3.2
3	9	1240	HT-36	SURF	2.90	0-20	6.9	11.28	0-100	4.55	29.50	6.95	+1000	3.19
3	9	1240	HT-36	5	3.10	0-20	6.81	11.12	0-100	4.55	29.50	6.91	+1000	3.21
3	9	1247	P -18	SURF	2.90	0-20	6.95	11.46	0-100	4.51	29.10	7.05	+1000	3.2
3	9	1247	P -18	5	3.00	0-20	6.9	11.28	0-100	4.55	29.50	6.95	+1000	3.21
3	9	1257	HT-38	SURF	2.90	0-20	6.7	11.06	0-100	4.5	29.00	7.05	+1000	3.2
3	9	1257	HT-38	5	3.00	0-20	6.55	10.70	0-100	4.55	29.50	6.99	+1000	3.2
3	9	1305	P -19	SURF	3.00	0-20	6.9	11.38	0-100	4.51	29.10	7.05	+1000	3.2
3	9	1305	P -19	5	3.00	0-20	6.9	11.28	0-100	4.55	29.50	6.98	+1000	3.2
3	9	1327	P -16	SURF	2.90	0-20	6.95	11.36	0-100	4.55	29.50	6.91	+1000	3.21
3	9	1327	P -16	5	3.00	0-20	6.9	11.26	0-100	4.6	29.90	6.90	+1000	3.2
3	9	1335	HT-35	SURF	3.00	0-20	6.9	11.28	0-100	4.55	29.50	7.00	+1000	3.2
3	9	1335	HT-35	5	3.00	0-20	6.9	11.26	0-100	4.6	29.90	7.00	+1000	3.25
3	9	1335	HT-35	6.5	3.00	0-20	6.85	11.20	0-100	4.55	29.50	7.00	+1000	3.25
3	9	1345	P -15	SURF	3.00	0-20	6.9	11.28	0-100	4.55	29.50	7.05	+1000	3.2
3	9	1345	P -15	5	3.00	0-20	6.9	11.26	0-100	4.6	29.90	7.00	+1000	3.2
3	9	1345	P -15	8.5	3.00	0-20	6.8	11.10	0-100	4.6	29.90	7.00	+1000	3.25
3	9	1355	HT-34	SURF	3.00	0-20	6.9	11.32	0-100	4.5	29.00	7.10	+1000	3.2
3	9	1355	HT-34	5	3.00	0-20	6.89	11.26	0-100	4.55	29.90	7.00	+1000	3.2
3	9	1355	HT-34	8	3.00	0-20	6.85	11.20	0-100	4.55	29.90	6.99	+1000	3.2
3	9	1405	P -14	SURF	3.00	0-20	6.7	11.06	0-100	4.5	29.00	7.00	+1000	3.25
3	9	1405	P -14	5	3.00	0-20	6.7	11.06	0-100	4.5	29.00	7.00	+1000	3.2
3	9	1405	P -14	8	3.00	0-20	6.7	10.94	0-100	4.55	29.50	7.00	+1000	3.2
3	9	1425	P - 3	SURF	3.00	0-20	6.7	11.06	0-100	4.5	29.00	7.10	+1000	3.2
3	9	1425	P - 3	5	3.00	0-20	6.7	10.94	0-100	4.55	29.50	7.00	+1000	3.25
3	9	1425	P - 3	10	3.25	0-20	6.6	10.88	0-100	.00	.00	7.00	+1000	3.21
3	9	1327	P -16	8	3.10	0-20	6.8	11.10	0-100	4.6	29.90	6.90	+1000	3.22
3	9	1440	HT-31	SURF	2.75	0-20	6.9	11.28	0-100	4.55	29.50	7.00	+1000	3.19
3	9	1440	HT-31	5	3.00	0-20	6.85	11.20	0-100	4.55	29.50	6.95	+1000	3.2
3	9	1440	HT-31	8	3.25	0-20	6.72	10.98	0-100	4.55	29.50	6.90	+1000	3.25
3	9	1450	HT-30	SURF	3.00	0-20	6.95	11.52	0-100	4.4	28.10	7.00	+1000	3.2
3	9	1450	HT-30	5	3.25	0-20	6.75	11.02	0-100	4.55	29.50	6.95	+1000	3.2
3	9	1510	HT-21	SURF	3.00	0-20	7.05	11.64	0-100	4.5	29.00	7.00	+1000	3.2
3	9	1510	HT-21	4	3.10	0-20	7.05	11.64	0-100	4.45	28.70	6.99	+1000	2.5
3	9	1515	HT-22	SURF	2.90	0-20	6.75	11.14	0-100	4.45	28.70	7.00	+1000	2.75
3	9	1515	HT-22	5	3.00	0-20	6.75	11.14	0-100	4.45	28.70	6.90	+1000	2.85
3	9	1522	H - 3	SURF	2.75	0-20	6.79	11.10	0-100	4.55	29.50	6.95	+1000	2.99
3	9	1522	H - 3	5	3.00	0-20	6.75	11.14	0-100	4.5	29.00	6.95	+1000	3
3	9	1522	H - 3	4	3.25	0-20	6.5	10.72	0-100	4.51	29.10	6.90	+1000	0.9
3	9	1537	HT-23	SURF	2.75	0-20	6.75	11.14	0-100	4.45	28.70	7.15	+1000	2.25
3	9	1537	HT-23	5	2.90	0-20	6.75	11.14	0-100	4.49	28.90	7.10	+1000	2.35
3	9	1537	HT-23	6.5	2.75	0-20	6.7	11.06	0-100	4.5	29.00	7.05	+1000	2.5
3	9	1547	HT-24	SURF	3.00	0-20	7	11.56	0-100	4.5	29.00	7.05	+1000	2.61
3	9	1547	HT-24	4	3.00	0-20	7	11.56	0-100	4.5	29.00	7.01	+1000	2.7

DATE	TIME	STATION	DEPT	TEMP	DISSOLVED	OXYG	CONDUCTIV	CALC	PH	B.R.P.				
	LOC	NUMBER	READ	C	RANG	READ	RANGE	SAL		RANGE				
										READ				
3	9	1610	H = 5	SURF	3.25	0=20	7	11.64	0=100	4.3	28.70	6.95	+1000	2.7
3	9	1610	H = 5	5	3.50	0=20	6.7	11.06	0=100	4.45	28.75	6.95	+1000	2.75
3	9	1610	H = 5	10	3.25	0=20	6.65	10.98	0=100	4.5	29.00	7.00	+1000	2.8
3	10	1223	HT=9	SURF	2.75	0=20	6.4	10.64	0=100	4.2	27.00	5.40	+1000	2.8
3	10	1223	HT=9	3	2.70	0=20	6.5	10.82	0=100	4.2	27.00	5.55	+1000	2.9
3	10	1235	H = 4	SURF	2.50	0=20	6.4	10.64	0=100	4.3	27.80	5.90	+1000	2.45
3	10	1235	H = 4	5	2.50	0=20	6.55	10.80	0=100	4.45	28.75	5.90	+1000	2.62
3	10	1235	H = 4	10	3.00	0=20	6.65	11.02	0=100	4.4	28.20	5.90	+1000	1
3	10	1242	HT=10	SURF	2.70	0=20	6.6	10.96	0=100	4.35	28.00	6.10	+1000	2.25
3	10	1242	HT=10	3.5	2.80	0=20	6.6	10.96	0=100	4.32	27.75	6.02	+1000	2.46
3	10	1249	HT=11	SURF	2.80	0=20	6.65	11.04	0=100	4.35	28.00	6.12	+1000	2.5
3	10	1300	HT=4F	SURF	2.70	0=20	6.8	11.28	0=100	4.25	27.20	6.20	+1000	2.5
3	10	1300	HT=4F	5	2.80	0=20	6.85	11.36	0=100	4.4	28.20	6.15	+1000	2.6
3	10	1300	HT=4F	6.8	3.00	0=20	6.65	10.98	0=100	4.45	28.75	6.18	+1000	2.7
3	10	1304	HT=12	SURF	2.80	0=20	6.45	10.72	0=100	4.3	27.80	6.20	+1000	2.65
3	10	1304	HT=12	5	2.80	0=20	6.55	10.86	0=100	4.4	28.20	6.20	+1000	2.75
3	10	1304	HT=12	10	3.00	0=20	6.4	10.64	0=100	4.2	27.00	6.20	+1000	2.52
3	10	1312	H = 4A	10	3.00	0=20	6.5	10.72	0=100	4.45	28.75	6.30	+1000	2.8
3	10	1312	H = 4A	SURF	2.80	0=20	6.7	11.14	0=100	4.32	27.75	6.35	+1000	2.6
3	10	1312	H = 4A	5	2.50	0=20	6.6	10.94	0=100	4.4	28.20	6.30	+1000	2.7
3	10	1318	HT=13	SURF	2.75	0=20	6.5	10.80	0=100	4.3	27.80	6.30	+1000	2.65
3	10	1318	HT=13	4	2.80	0=20	6.6	10.94	0=100	4.4	28.20	6.30	+1000	2.25
3	10	1325	HT=15	SURF	2.60	0=20	6.4	10.62	0=100	4.35	28.00	6.35	+1000	2.65
3	10	1325	HT=15	5	2.75	0=20	6.4	10.60	0=100	4.4	28.20	6.30	+1000	2.7
3	10	1335	H = 4B	SURF	3.00	0=20	6.65	11.06	0=100	4.3	27.75	6.45	+1000	2.7
3	10	1335	H = 4B	5	2.60	0=20	6.65	11.04	0=100	4.35	28.00	6.40	+1000	2.75
3	10	1335	H = 4B	10	3.00	0=20	6.1	10.06	0=100	4.45	28.50	6.40	+1000	2.8
3	10	1345	HT=14	SURF	2.80	0=20	6.48	10.76	0=100	4.3	27.75	6.48	+1000	2.8
3	10	1345	HT=14	5	2.75	0=20	6.68	11.08	0=100	4.35	28.00	6.40	+1000	2.88
3	10	1345	HT=14	10	3.00	0=20	6.15	10.14	0=100	4.5	29.00	6.40	+1000	2.9
3	10	1352	H = 4E	SURF	3.25	0=20	6.8	11.28	0=100	4.25	27.25	6.50	+1000	2.85
3	10	1352	H = 4E	5	2.80	0=20	6.8	11.28	0=100	4.4	28.20	6.40	+1000	2.9
3	10	1352	H = 4E	10	3.30	0=20	6.1	10.06	0=100	4.5	29.00	6.40	+1000	2.95
3	10	1400	HT=11	SURF	3.75	0=20	6.8	11.36	0=100	4.25	27.25	6.58	+1000	2.82
3	10	1400	HT=11	5	3.25	0=20	6.65	11.02	0=100	4.4	28.20	6.42	+1000	2.9
3	10	1400	HT=11	9	3.00	0=20	6.65	10.98	0=100	4.45	28.50	6.40	+1000	2.95
3	10	1410	H = 4D	SURF	3.00	0=20	6.9	11.52	0=100	4.25	27.25	6.50	+1000	2.9
3	10	1410	H = 4D	5	2.75	0=20	6.8	11.28	0=100	4.4	28.20	6.45	+1000	2.95
3	10	1410	H = 4D	9	3.00	0=20	6.7	11.06	0=100	4.5	29.00	6.50	+1000	2.95
3	10	1413	HT=17	SURF	2.90	0=20	6.9	11.48	0=100	4.2	27.00	6.50	+1000	2.9
3	10	1413	HT=17	5	2.70	0=20	6.88	11.44	0=100	4.3	27.75	6.48	+1000	2.98
3	10	1413	HT=17	10	3.00	0=20	6.5	10.72	0=100	4.5	29.00	6.40	+1000	2.9
3	10	1420	H = 4C	SURF	3.00	0=20	6.9	11.46	0=100	4.3	27.75	6.50	+1000	2.9
3	10	1420	H = 4C	5	2.60	0=20	6.9	11.46	0=100	4.35	28.00	6.45	+1000	2.98
3	10	1424	HT=18	SURF	2.75	0=20	6.9	11.46	0=100	4.3	27.75	6.60	+1000	2.92
3	10	1424	HT=18	5	2.50	0=20	6.9	11.44	0=100	4.4	28.20	6.50	+1000	3
3	10	1424	HT=18	9	2.50	0=20	6.78	11.24	0=100	4.4	28.20	6.50	+1000	3
3	10	1430	HT=19	SURF	2.75	0=20	6.9	11.46	0=100	4.3	27.75	6.55	+1000	3
3	10	1430	HT=19	3	2.75	0=20	7	11.62	0=100	4.35	28.00	6.58	+1000	3
3	10	1441	H = 5	SURF	2.75	0=20	6.95	11.64	0=100	4.1	26.00	6.50	+1000	3

DATE	TIME LOC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	OXYG READ	CONDUCTIV CORR	CALC RANGE	PH	SAL	R.R.P. RANGE	READ
3 10	1441	H = 5	5	2.50	0-20	6.95	11.54	0-100	4.35	28.00	6.50	+1000 3.05
3 10	1441	H = 5	10	2.25	0-20	6.8	11.28	0-100	4.42	28.40	6.45	+1000 3.08
3 10	1454	H = 5A	SURF	2.50	0-20	6.92	11.50	0-100	4.3	27.75	6.62	+1000 3.05
3 10	1454	H = 5A	5	2.50	0-20	6.95	11.52	0-100	4.42	28.40	6.60	+1000 3.1
3 10	1454	H = 5A	10	2.50	0-20	6.8	11.22	0-100	4.5	29.00	6.50	+1000 3.1
3 10	1500	HT-20	SURF	2.50	0-20	6.95	11.46	0-100	4.45	28.50	6.65	+1000 3.1
3 10	1500	HT-20	5	2.25	0-20	6.95	11.46	0-100	4.45	28.50	6.60	+1000 3.1
3 10	1500	HT-20	10	2.50	0-20	6.8	11.22	0-100	4.5	29.00	6.55	+1000 3.12
3 10	1508	H = 3	SURF	2.00	0-20	6.9	11.44	0-100	4.4	28.20	6.70	+1000 3.12
3 10	1508	H = 3	5	2.25	0-20	6.92	11.42	0-100	4.5	29.00	6.60	+1000 3.15
3 10	1508	H = 3	10	2.50	0-20	6.95	11.46	0-100	4.5	29.00	6.60	+1000 3.15
3 10	1520	HT-28	SURF	2.50	0-20	7	11.56	0-100	4.45	28.50	6.62	+1000 3.1
3 10	1520	HT-28	5	2.50	0-20	7	11.56	0-100	4.45	28.50	6.60	+1000 3.15
3 10	1526	HT-27	SURF	2.50	0-20	6.9	11.32	0-100	4.5	29.00	6.70	+1000 3.15
3 10	1526	HT-27	5	2.50	0-20	6.9	11.32	0-100	4.5	29.00	6.65	+1000 3.15
3 10	1537	P = 1	SURF	2.50	0-20	6.85	11.24	0-100	4.5	29.00	6.70	+1000 3.15
3 10	1537	P = 1	5	2.50	0-20	6.85	11.24	0-100	4.5	29.00	6.68	+1000 3.15
3 10	1537	P = 1	10	2.50	0-20	6.8	11.16	0-100	4.5	29.00	6.65	+1000 3.15
3 10	1542	HT-26	SURF	2.50	0-20	6.85	11.24	0-100	4.48	29.00	6.65	+1000 3.15
3 10	1542	HT-26	5	2.50	0-20	6.8	11.16	0-100	4.5	29.00	6.65	+1000 3.18
3 10	1542	HT-26	9	2.52	0-20	6.8	11.16	0-100	4.5	29.00	6.60	+1000 3.18
3 10	1548	HT-25	SURF	2.50	0-20	6.95	11.40	0-100	4.5	29.00	6.68	+1000 3.2
3 10	1548	HT-25	5	2.50	0-20	6.9	11.32	0-100	4.5	29.00	6.60	+1000 3.2
3 10	1555	HT-29	SURF	2.50	0-20	6.9	11.32	0-100	4.5	29.00	6.58	+1000 3.2
3 10	1555	HT-29	5	2.50	0-20	6.9	11.32	0-100	4.5	29.00	6.55	+1000 3.2
3 10	1555	HT-29	10	2.50	0-20	6.78	11.12	0-100	4.5	29.00	6.55	+1000 3.22
3 10	1601	P = 2	SURF	2.50	0-20	6.85	11.24	0-100	4.5	29.00	6.58	+1000 3.2
3 10	1601	P = 2	5	2.50	0-20	6.82	11.18	0-100	4.5	29.00	6.55	+1000 3.2
3 10	1601	P = 2	10	2.50	0-20	6.75	11.08	0-100	4.52	29.10	6.52	+1000 3.22
3 10	1610	P = 3	SURF	2.50	0-20	6.9	11.32	0-100	4.5	29.00	6.55	+1000 3.23
3 10	1610	P = 3	5	2.50	0-20	6.9	11.32	0-100	4.52	29.10	6.55	+1000 3.25
3 10	1610	P = 3	10	2.50	0-20	6.82	11.18	0-100	4.53	29.20	6.52	+1000 3.25
3 11	1014	P = 3	SURF	2.50	0-20	6.75	11.02	0-100	4.55	29.50	5.60	+1000 3.1
3 11	1014	P = 3	5	2.50	0-20	6.8	11.12	0-100	4.55	29.50	5.90	+1000 3.1
3 11	1014	P = 3	9	2.50	0-20	6.8	11.10	0-100	4.6	29.90	5.95	+1000 2.2
3 11	1024	HT-32	SURF	2.50	0-20	6.85	11.24	0-100	4.5	29.00	6.10	+1000 2.4
3 11	1024	HT-32	5	2.50	0-20	6.85	11.20	0-100	4.55	29.50	6.20	+1000 2.5
3 11	1024	HT-32	8	2.60	0-20	6.85	11.18	0-100	4.6	29.90	6.20	+1000 2.55
3 11	1034	HT-33	SURF	2.50	0-20	6.85	11.24	0-100	4.5	29.00	6.20	+1000 2.5
3 11	1034	HT-33	5	2.50	0-20	6.8	11.16	0-100	4.5	29.00	6.20	+1000 2.6
3 11	1042	HT-42	SURF	2.50	0-20	6.9	11.32	0-100	4.5	29.00	6.35	+1000 2.6
3 11	1042	HT-42	5	2.55	0-20	6.9	11.32	0-100	4.5	29.00	6.30	+1000 2.6
3 11	1042	HT-42	8	2.50	0-20	6.8	11.12	0-100	4.55	29.50	6.30	+1000 2.7
3 11	1052	HT-41	SURF	2.50	0-20	6.9	11.28	0-100	4.55	29.50	6.50	+1000 2.7
3 11	1052	HT-41	5	2.50	0-20	6.85	11.18	0-100	4.6	29.90	6.45	+1000 2.7
3 11	1052	HT-41	7	2.50	0-20	6.8	11.10	0-100	4.6	29.90	6.45	+1000 2.75
3 11	1100	HT-40	SURF	2.55	0-20	6.85	11.18	0-100	4.6	29.90	6.60	+1000 2.75
3 11	1100	HT-40	5	2.75	0-20	6.8	11.12	0-100	4.55	29.50	6.50	+1000 2.8
3 11	1100	HT-40	8	2.70	0-20	6.7	10.94	0-100	4.6	29.90	6.50	+1000 2.8
3 11	1110	P = 8	SURF	2.70	0-20	6.8	11.10	0-100	4.6	29.90	6.60	+1000 2.8

DATE	TIME LBC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	OXYG READ	CORR	CONDUCTIV RANGE	READ	CALC SAL	PH	B.R.P. RANGE	READ
3 11	1110	P = 8	5	2.55	0-20	6.8	11.10	0-100	4.6	29.90	6.60	+1000	2.85
3 11	1110	P = 8	9	2.70	0-20	6.8	11.10	0-100	4.6	29.90	6.55	+1000	2.9
3 11	1124	P = 9	SURF	2.70	0-20	6.8	11.36	0-100	4.25	27.10	6.55	+1000	2.9
3 11	1124	P = 9	5	2.65	0-20	6.85	11.18	0-100	4.6	29.90	6.55	+1000	2.9
3 11	1124	P = 9	8	2.55	0-20	6.8	11.10	0-100	4.6	29.90	6.55	+1000	2.95
3 11	1130	HT-45	SURF	2.80	0-20	6.82	11.12	0-100	4.6	29.90	6.60	+1000	2.95
3 11	1130	HT-45	5	2.60	0-20	6.8	11.10	0-100	4.6	29.90	6.60	+1000	2.95
3 11	1137	P =10	SURF	2.80	0-20	6.85	11.18	0-100	4.6	29.90	6.75	+1000	3
3 11	1137	P =10	5	2.60	0-20	6.85	11.84	0-100	4.6	29.90	6.70	+1000	3
3 11	1137	P =10	7	2.55	0-20	6.9	11.26	0-100	4.6	29.90	6.65	+1000	3
3 11	1146	HT-44	SURF	2.75	0-20	6.8	11.18	0-100	4.45	28.75	6.70	+1000	2.95
3 11	1146	HT-44	5	2.60	0-20	6.85	11.18	0-100	4.6	29.90	6.70	+1000	3
3 11	1146	HT-44	9	2.60	0-20	6.8	11.10	0-100	4.6	29.90	6.70	+1000	3.05
3 11	1153	HT-43	SURF	3.00	0-20	6.8	11.22	0-100	4.45	28.75	6.60	+1000	3
3 11	1153	HT-43	5	2.60	0-20	6.9	11.26	0-100	4.6	29.90	6.70	+1000	3
3 11	1153	HT-43	9	2.60	0-20	6.8	11.10	0-100	4.6	29.90	6.70	+1000	3.05
3 11	1224	P = 4	SURF	3.10	0-20	6.7	11.14	0-100	4.3	27.75	6.70	+1000	3.05
3 11	1224	P = 4	5	2.50	0-20	6.8	11.10	0-100	4.6	29.90	6.70	+1000	3.05
3 11	1224	P = 4	9	2.60	0-20	6.75	11.02	0-100	4.6	29.90	6.70	+1000	3.1
3 11	1233	P =14	SURF	2.90	0-20	6.9	11.22	0-100	4.45	28.75	6.80	+1000	3.1
3 11	1233	P =14	5	2.50	0-20	6.85	11.20	0-100	4.55	29.50	6.75	+1000	3.1
3 11	1233	P =14	9	2.50	0-20	6.7	10.94	0-100	4.55	29.50	6.75	+1000	3.1
3 11	1242	HT-34	SURF	2.80	0-20	6.8	11.12	0-100	4.55	29.50	6.90	+1000	3.1
3 11	1242	HT-34	5	2.50	0-20	6.9	11.28	0-100	4.55	29.50	6.80	+1000	3.1
3 11	1242	HT-34	9	2.70	0-20	6.65	10.86	0-100	4.55	29.50	6.80	+1000	3.05
3 11	1250	P =15	SURF	3.00	0-20	6.9	11.28	0-100	4.55	29.50	7.00	+1000	3.15
3 11	1250	P =15	5	2.60	0-20	6.9	11.28	0-100	4.55	29.50	6.95	+1000	3.13
3 11	1250	P =15	7	2.50	0-20	6.9	11.32	0-100	4.5	29.00	6.90	+1000	3.1
3 11	1256	HT-35	SURF	3.00	0-20	6.85	11.36	0-100	4.4	28.20	6.90	+1000	3.14
3 11	1256	HT-35	5	2.60	0-20	6.88	11.24	0-100	4.55	29.50	6.85	+1000	3.15
3 11	1256	HT-35	7	2.50	0-20	6.75	11.02	0-100	4.6	29.90	6.85	+1000	3.15
3 11	1302	P =16	SURF	3.00	0-20	6.9	11.28	0-100	4.55	29.50	6.95	+1000	3.15
3 11	1302	P =16	5	2.65	0-20	6.9	11.26	0-100	4.6	29.90	6.90	+1000	3.15
3 11	1302	P =16	8	2.50	0-20	6.8	11.10	0-100	4.6	29.90	6.85	+1000	2.6
3 11	1318	P =17	SURF	2.90	0-20	6.9	11.38	0-100	4.45	28.75	6.85	+1000	2.9
3 11	1318	P =17	5	2.50	0-20	6.85	11.20	0-100	4.55	29.50	6.87	+1000	2.9
3 11	1318	P =17	7	2.50	0-20	6.75	11.02	0-100	4.6	29.90	6.85	+1000	2.95
3 11	1325	HT-36	SURF	2.75	0-20	6.9	11.28	0-100	4.55	29.50	6.90	+1000	2.95
3 11	1325	HT-36	5	2.50	0-20	6.9	11.28	0-100	4.55	29.50	6.90	+1000	3
3 11	1331	P =18	SURF	2.75	0-20	6.91	11.46	0-100	4.41	28.40	6.91	+1000	2.95
3 11	1331	P =18	5	2.50	0-20	7	11.48	0-100	4.5	29.00	6.91	+1000	3
3 11	1338	HT-38	SURF	2.80	0-20	6.95	11.40	0-100	4.5	29.00	6.90	+1000	3
3 11	1338	HT-38	5	2.50	0-20	6.95	11.40	0-100	4.5	29.00	6.90	+1000	3
3 11	1338	HT-38	7	2.50	0-20	6.98	11.44	0-100	4.5	29.00	6.92	+1000	3.05
3 11	1344	P =19	SURF	2.75	0-20	6.9	11.32	0-100	4.5	29.00	6.90	+1000	3.05
3 11	1344	P =19	5	2.75	0-20	6.98	11.44	0-100	4.5	29.00	6.90	+1000	3.05
3 11	1344	P =19	6	2.50	0-20	6.98	11.40	0-100	4.55	29.50	6.90	+1000	3.05
3 11	1409	P = 3	SURF	2.90	0-20	6.85	11.30	0-100	4.45	28.75	6.70	+1000	3.1
3 11	1409	P = 3	5	2.90	0-20	6.9	11.28	0-100	4.55	29.50	6.75	+1000	3.1
3 11	1409	P = 3	10	2.60	0-20	6.85	11.18	0-100	4.6	29.90	6.75	+1000	3.1

DATE	TIME LBC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	6XYG READ	CONDUCTIV CORR	CALC RANGE	PH	O.R.P. RANGE			
3 11	1425	HT-24	SURF	3.10	0-20	6.75	11.08	0-100	4.5	29.00	6.85	+1000	3.15
3 11	1425	HT-24	5	3.00	0-20	6.85	11.24	0-100	4.5	29.00	6.90	+1000	3.1
3 11	1430	HT-23	SURF	2.75	0-20	6.65	10.90	0-100	4.5	29.00	6.85	+1000	3.15
3 11	1430	HT-23	5	2.80	0-20	6.8	11.12	0-100	4.55	29.50	6.90	+1000	3.15
3 11	1430	HT-23	7	2.60	0-20	6.8	11.12	0-100	4.55	29.50	6.90	+1000	3.15
3 11	1436	H = 3	SURF	3.00	0-20	6.6	10.78	0-100	4.55	29.50	6.85	+1000	3.15
3 11	1436	H = 3	5	2.75	0-20	6.8	11.12	0-100	4.55	29.50	6.90	+1000	3.15
3 11	1436	H = 3	10	2.50	0-20	6.75	11.02	0-100	4.55	29.50	6.90	+1000	3.15
3 11	1442	HT-22	SURF	2.50	0-20	6.3	10.34	0-100	4.5	29.00	6.85	+1000	3.15
3 11	1442	HT-22	5	2.50	0-20	6.75	11.02	0-100	4.55	29.50	6.90	+1000	3.1
3 11	1442	HT-22	6	2.50	0-20	6.82	11.14	0-100	4.55	29.50	6.90	+1000	3.15
3 11	1448	HT-21	SURF	3.00	0-20	6.7	11.06	0-100	4.45	28.75	6.92	+1000	3.1
3 11	1448	HT-21	5	2.75	0-20	7.1	11.58	0-100	4.6	29.90	6.90	+1000	3.1
3 11	1507	H = 5	SURF	3.40	0-20	6.9	11.44	0-100	4.38	28.01	6.70	+1000	2.65
3 11	1507	H = 5	5	3.00	0-20	7	11.56	0-100	4.45	28.75	6.75	+1000	2.70
3 11	1507	H = 5	10	2.75	0-20	7	11.48	0-100	4.5	29.00	6.80	+1000	2.7
3 11	1518	H = 9	3	3.00	0-20	6.8	11.16	0-100	4.5	29.00	6.85	+1000	2.8
3 11	1518	H = 9	SURF	3.40	0-20	6.9	11.44	0-100	4.4	28.20	6.85	+1000	2.75
3 11	1526	H = 4	SURF	3.25	0-20	6.98	11.58	0-100	4.35	28.00	6.90	+1000	2.8
3 11	1526	H = 4	5	2.60	0-20	6.95	11.40	0-100	4.5	29.00	6.90	+1000	2.85
3 11	1526	H = 4	10	2.60	0-20	6.8	11.12	0-100	4.55	29.50	6.90	+1000	2.85
3 11	1530	HT-10	SURF	3.25	0-20	7	11.60	0-100	4.4	28.20	6.98	+1000	2.85
3 11	1530	HT-10	4	3.00	0-20	7	11.60	0-100	4.4	28.20	6.92	+1000	2.9
3 11	1536	HT-11	SURF	3.50	0-20	7	11.64	0-100	4.3	27.75	7.00	+1000	2.8
3 11	1536	HT-11	3	3.50	0-20	7.1	11.78	0-100	4.35	28.00	7.05	+1000	2.9
3 12	0930	HT- 9	SURF	2.90	0-20	6.9	11.46	0-100	4.35	28.00	5.70	+1000	3.15
3 12	0930	HT- 9	1.5	3.00	0-20	6.85	11.30	0-100	4.45	28.75	5.50	+1000	3.15
3 12	1001	H = 4	SURF	2.50	0-20	6.75	11.20	0-100	4.25	26.10	5.25	+1000	3.1
3 12	1001	H = 4	5	2.75	0-20	6.85	11.24	0-100	4.5	29.00	6.95	+1000	3.1
3 12	1001	H = 4	1.5	2.50	0-20	6.6	10.96	0-100	4.3	27.75	6.80	+1000	2.38
3 12	1010	HT-10	SURF	2.50	0-20	6.8	11.30	0-100	4.3	27.75	5.45	+1000	2.6
3 12	1010	HT-10	2	2.70	0-20	6.9	11.32	0-100	4.5	29.00	6.40	+1000	2.7
3 12	1018	HT-11	SURF	2.50	0-20	6.8	11.50	0-100	3.9	24.90	5.40	+1000	2.7
3 12	1018	HT-11	2	2.90	0-20	6.92	11.50	0-100	4.25	26.10	5.40	+1000	2.72
3 12	1026	HT-16	SURF	3.00	0-20	6.92	11.42	0-100	4.38	28.10	5.50	+1000	2.75
3 12	1026	HT-16	5	2.75	0-20	6.7	10.98	0-100	4.5	29.00	7.00	+1000	2.8
3 12	1026	HT-16	8	2.60	0-20	6.7	10.94	0-100	4.55	29.50	7.05	+1000	2.7
3 12	1035	H =40	SURF	2.90	0-20	6.9	11.46	0-100	4.35	28.00	5.60	+1000	2.5
3 12	1035	H =40	5	2.55	0-20	6.8	11.16	0-100	4.5	29.00	7.00	+1000	2.5
3 12	1035	H =40	8.5	2.55	0-20	6.7	10.98	0-100	4.5	29.00	7.00	+1000	2.6
3 12	1040	H =17	SURF	3.00	0-20	6.9	11.46	0-100	4.3	27.75	5.65	+1000	2.5
3 12	1040	H =17	5	2.75	0-20	6.75	11.08	0-100	4.5	29.00	7.00	+1000	2.5
3 12	1040	H =17	9	2.50	0-20	6.75	11.02	0-100	4.55	29.50	7.10	+1000	2.55
3 12	1048	H =4C	SURF	2.90	0-20	6.9	11.44	0-100	4.4	28.20	5.80	+1000	2.65
3 12	1048	H =4C	5	2.90	0-20	6.85	11.24	0-100	4.5	29.00	7.05	+1000	2.65
3 12	1048	H =4C	7.5	2.50	0-20	6.85	11.24	0-100	4.5	29.00	7.00	+1000	2.7
3 12	1057	H =19	SURF	3.00	0-20	6.9	11.46	0-100	4.35	28.00	5.80	+1000	2.7
3 12	1057	H =19	1.5	2.70	0-20	7	11.60	0-100	4.4	28.20	5.75	+1000	2.72
3 12	1107	H = 5	SURF	3.00	0-20	6.95	11.54	0-100	4.35	28.00	5.90	+1000	2.75
3 12	1107	H = 5	5	2.60	0-20	6.8	11.16	0-100	4.5	29.00	6.90	+1000	2.8

DATE	TIME LOC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	OXYG READ	CONDUCTIV CORR	CALC RANGE	PH	O.R.P. RANGE	READ
3 12	1107	H = 5	9	2.50	0-20	6.75	11.02	0-100	4.55	29.50	7.15 +1000 2.8
3 12	1131	HT-25	SURF	2.50	0-20	6.8	11.16	0-100	4.5	29.00	5.85 +1000 2.8
3 12	1131	HT-25	3.5	2.25	0-20	6.95	11.36	0-100	4.55	29.50	5.80 +1000 2.85
3 12	1138	HT-26	SURF	2.50	0-20	6.95	11.34	0-100	4.6	29.90	6.05 +1000 2.85
3 12	1138	HT-26	5	2.40	0-20	6.9	11.26	0-100	4.6	29.90	6.05 +1000 2.85
3 12	1138	HT-26	7.5	2.50	0-20	6.85	11.18	0-100	4.6	29.90	5.95 +1000 2.9
3 12	1145	P = 1	SURF	3.00	0-20	6.85	11.24	0-100	4.5	29.00	6.00 +1000 2.85
3 12	1145	P = 1	5	3.00	0-20	6.95	11.34	0-100	4.6	29.90	6.90 +1000 2.85
3 12	1145	P = 1	9	2.95	0-20	6.8	11.12	0-100	4.55	29.50	7.02 +1000 2.82
3 12	1153	HT-27	SURF	2.70	0-20	6.8	11.16	0-100	4.5	29.00	6.10 +1000 2.8
3 12	1153	HT-27	3	2.50	0-20	7.15	11.68	0-100	4.55	29.50	6.30 +1000 2.8
3 12	1158	HT-28	SURF	2.50	0-20	7	11.48	0-100	4.5	29.00	6.10 +1000 2.8
3 12	1158	HT-28	2	2.75	0-20	7.15	11.76	0-100	4.5	29.00	6.10 +1000 2.7
3 12	1219	P = 16	SURF	2.25	0-20	6.92	11.30	0-100	4.55	29.50	5.95 +1000 2.8
3 12	1219	P = 16	5	2.50	0-20	7	11.42	0-100	4.6	29.90	6.75 +1000 2.8
3 12	1219	P = 16	7	2.50	0-20	6.95	11.36	0-100	4.55	29.50	6.90 +1000 2.9
3 12	1225	HT-35	SURF	2.50	0-20	6.9	11.26	0-100	4.6	29.90	6.40 +1000 2.85
3 12	1225	HT-35	5	2.30	0-20	6.98	11.38	0-100	4.6	29.90	6.98 +1000 2.85
3 12	1230	P = 15	SURF	2.90	0-20	6.85	11.24	0-100	4.5	29.00	6.30 +1000 2.9
3 12	1230	P = 15	5	2.50	0-20	6.98	11.40	0-100	4.55	29.50	6.90 +1000 2.82
3 12	1230	P = 15	7.5	2.40	0-20	6.95	11.36	0-100	4.55	29.50	6.90 +1000 2.88
3 12	1236	HT-34	SURF	2.50	0-20	6.95	11.36	0-100	4.55	29.50	6.25 +1000 2.85
3 12	1236	HT-34	5	2.40	0-20	6.95	11.36	0-100	4.55	29.50	6.88 +1000 2.85
3 12	1236	HT-34	7.5	2.25	0-20	6.9	11.28	0-100	4.55	29.50	6.90 +1000 2.9
3 12	1243	P = 14	SURF	2.40	0-20	6.92	11.34	0-100	4.52	29.01	6.20 +1000 2.9
3 12	1243	P = 14	5	2.30	0-20	6.95	11.34	0-100	4.58	29.80	6.88 +1000 2.92
3 12	1243	P = 14	7	2.25	0-20	6.9	11.26	0-100	4.6	29.90	6.30 +1000 2.9
3 12	1252	P = 3	SURF	2.90	0-20	6.9	11.26	0-100	4.6	29.90	6.25 +1000 2.92
3 12	1252	P = 3	5	2.75	0-20	6.95	11.34	0-100	4.6	29.90	6.80 +1000 2.88
3 12	1252	P = 3	9	2.50	0-20	6.92	11.30	0-100	4.6	29.90	7.00 +1000 2.9
3 12	1300	HT-31	SURF	2.60	0-20	6.9	11.26	0-100	4.6	29.90	6.30 +1000 2.92
3 12	1300	HT-31	5	2.65	0-20	6.9	11.28	0-100	4.55	29.50	6.90 +1000 2.9
3 12	1300	HT-31	8	2.50	0-20	6.92	11.30	0-100	4.6	29.90	7.05 +1000 2.92
3 12	1306	HT-30	SURF	2.50	0-20	6.9	11.32	0-100	4.5	29.00	6.25 +1000 2.9
3 12	1306	HT-30	5	2.50	0-20	7	11.42	0-100	4.6	29.90	6.92 +1000 2.9
3 12	1332	H = 5	SURF	2.55	0-20	6.9	11.46	0-100	4.35	28.00	6.20 +1000 2.9
3 12	1332	H = 5	5	2.60	0-20	7	11.48	0-100	4.5	29.00	7.00 +1000 2.9
3 12	1332	H = 5	9	2.50	0-20	6.9	11.32	0-100	4.5	29.00	7.10 +1000 2.95
3 12	1341	HT = 9	SURF	3.30	0-20	6.8	11.30	0-100	4.3	27.75	6.25 +1000 2.9
3 12	1341	HT = 9	3	3.00	0-20	6.82	11.32	0-100	4.35	28.00	6.90 +1000 2.9
3 12	1345	H = 4	SURF	3.10	0-20	6.85	11.36	0-100	4.35	28.00	6.20 +1000 2.88
3 12	1345	H = 4	5	2.60	0-20	6.92	11.42	0-100	4.45	28.75	6.92 +1000 2.95
3 12	1345	H = 4	9	2.50	0-20	6.9	11.32	0-100	4.5	29.00	7.15 +1000 2.7
3 12	1350	HT-10	SURF	3.10	0-20	6.8	11.28	0-100	4.4	28.20	6.40 +1000 2.6
3 12	1350	HT-10	3	2.90	0-20	6.95	11.52	0-100	4.4	28.20	6.90 +1000 2.6
3 12	1356	HT-11	SURF	3.10	0-20	6.95	11.54	0-100	4.35	28.00	6.20 +1000 2.45
3 12	1356	HT-11	2	2.75	0-20	7.35	12.12	0-100	4.45	28.70	6.75 +1000 2.5
3 15	1200	H BAR	SURF	3.90	0-20	6.8	11.28	0-100	4.35	28.00	7.00 +1000 3.05
3 15	1200	H BAR	11.5	3.25	0-20	6.8	11.10	0-100	4.6	29.90	7.00 +1000 3.1
3 15	1252	I-195	SURF	5.50	0-20	5	8.56	0-100	3.7	24.00	8.30 +1000 1.6

DATE	TIME LBC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	OXYG READ	CORR	CONDUCTIV RANGE	READ	CALC SAL	PH	B.R.P. RANGE	READ
3 15	1252	I-195	4	4.50	0-20	5.7	9.34	0-100	4.5	29.00	7.60	+1000	2.15
3 15	1400	H BAR	SURF	4.50	0-20	7	11.84	0-100	3.9	24.90	7.20	+1000	3
3 15	1400	H BAR	11.5	3.10	0-20	6.69	10.96	0-100	4.65	29.00	7.10	+1000	3.09
3 15	1430	TAHRD	SURF	6.00	0-20	6.3	12.48	0-1	0.71	.20	8.35	+1000	3.01
3 15	1514	I-195	SURF	8.00	0-20	4.5	7.48	0-100	4.5	29.00	7.90	+1000	3.31
3 15	1514	I-195	2	5.50	0-20	5.85	9.42	0-100	5	32.99	7.20	+1000	3.3
3 16	1005	H BAR	SURF	3.00	0-20	6.7	11.06	0-100	4.45	28.75	7.12	+1000	3.2
3 16	1005	H BAR	10	3.50	0-20	6.65	10.90	0-100	4.5	29.00	7.25	+1000	3.2
3 16	1030	TAHRD	SURF	3.90	0-20	6.3	12.48	0-1	0.7	.20	8.72	+1000	2.75
3 16	1100	I-195	SURF	2.50	0-20	6.4	10.76	0-100	4	25.50	7.75	+1000	1.85
3 16	1100	I-195	2.9	5.00	0-20	6.15	10.14	0-100	4.5	29.00	7.45	+1000	2.25
3 16	1155	H BAR	SURF	3.50	0-20	6.9	11.38	0-100	4.45	28.75	7.35	+1000	3.3
3 16	1155	H BAR	9.5	3.50	0-20	6.7	11.04	0-100	4.5	29.00	7.30	+1000	3.32
4 26	1216	P -19	SURF	10.25	0-20	5.61	9.46	0-100	4.25	27.30	6.71	+1000	2.
4 26	1216	P -19	4.2	10.40	0-20	5.69	9.44	0-100	4.55	29.50	6.70	+1000	2.2
4 26	1233	HT-38	SURF	10.25	0-20	5.69	9.42	0-100	4.7	30.60	6.90	+1000	2
4 26	1233	HT-38	4	10.25	0-20	5.65	9.36	0-100	4.7	30.60	6.85	+1000	2.15
4 26	1250	HT-37	SURF	10.25	0-20	5.7	9.46	0-100	4.59	29.90	7.00	+1000	1.89
4 26	1250	HT-37	3.5	10.25	0-20	5.69	9.42	0-100	4.7	30.60	6.89	+1000	2.1
4 26	1300	HT-36	SURF	10.25	0-20	5.75	9.52	0-100	4.7	30.60	7.00	+1000	2.09
4 26	1300	HT-36	4	10.25	0-20	5.7	9.44	0-100	4.7	30.60	6.90	+1000	2.19
4 26	1310	P -17	SURF	10.10	0-20	5.8	9.60	0-100	4.7	30.60	7.00	+1000	2.1
4 26	1310	P -17	5	10.10	0-20	5.75	9.52	0-100	4.7	30.60	6.99	+1000	2.2
4 26	1310	P -17	6	10.00	0-20	5.69	9.42	0-100	4.7	30.60	6.90	+1000	2.29
4 26	1335	P -16	SURF	10.00	0-20	5.8	9.62	0-100	4.68	30.00	7.10	+1000	2
4 26	1335	P -16	5	10.00	0-20	5.8	9.60	0-100	4.7	30.60	7.00	+1000	2.11
4 26	1335	P -16	6	10.00	0-20	5.8	9.60	0-100	4.7	30.60	6.95	+1000	2.2
4 26	1340	HT-35	SURF	10.00	0-20	5.8	9.60	0-100	4.7	30.60	7.00	+1000	2.15
4 26	1340	HT-35	5	9.90	0-20	5.8	9.60	0-100	4.7	30.60	6.90	+1000	2.25
4 26	1340	HT-35	5.5	9.90	0-20	5.8	9.60	0-100	4.7	30.60	6.90	+1000	2.3
4 26	1350	P -15	SURF	9.80	0-20	5.8	9.60	0-100	4.7	30.60	7.10	+1000	2.29
4 26	1350	P -15	5	9.80	0-20	5.75	9.52	0-100	4.71	30.80	7.00	+1000	2.3
4 26	1350	P -15	7.1	9.70	0-20	5.75	9.52	0-100	4.71	30.80	6.95	+1000	2.35
4 26	1405	HT-34	SURF	9.75	0-20	5.9	9.76	0-100	4.7	30.60	7.00	+1000	2.35
4 26	1405	HT-34	5	9.60	0-20	5.8	9.60	0-100	4.7	30.60	6.95	+1000	2.4
4 26	1405	HT-34	7.1	9.40	0-20	5.85	9.68	0-100	4.7	30.60	6.90	+1000	2.41
4 26	1430	P -14	SURF	9.90	0-20	5.79	9.58	0-100	4.71	30.80	6.95	+1000	2.41
4 26	1430	P -14	5	9.25	0-20	5.85	9.68	0-100	4.7	30.60	6.89	+1000	2.45
4 26	1430	P -14	7.1	9.20	0-20	5.85	9.68	0-100	4.71	30.80	6.90	+1000	2.5
4 26	1450	P -3	SURF	9.50	0-20	5.85	9.68	0-100	4.7	30.60	6.90	+1000	2.5
4 26	1450	P -3	5	9.50	0-20	5.85	9.68	0-100	4.71	30.80	6.89	+1000	2.5
4 26	1450	P -3	9	9.00	0-20	5.85	9.68	0-100	4.71	30.80	6.90	+1000	2.5
4 26	1507	HT-31	SURF	9.50	0-20	5.8	9.60	0-100	4.71	30.80	6.90	+1000	2.49
4 26	1507	HT-31	5	9.50	0-20	5.81	9.62	0-100	4.7	30.60	6.90	+1000	2.55
4 26	1507	HT-31	7.5	9.25	0-20	5.85	9.68	0-100	4.75	30.90	6.85	+1000	2.59
4 26	1517	HT-30	SURF	9.50	0-20	5.9	9.76	0-100	4.71	30.80	6.95	+1000	2.5
4 26	1517	HT-30	5	9.50	0-20	5.9	9.76	0-100	4.75	30.90	6.95	+1000	2.51
4 26	1535	I -3	SURF	10.50	0-20	5.51	9.12	0-100	4.69	30.50	7.10	+1000	2.51
4 26	1535	I -3	5	9.75	0-20	5.7	9.44	0-100	4.7	30.60	6.99	+1000	2.55
4 26	1535	I -3	9	9.50	0-20	5.75	9.52	0-100	4.71	30.80	6.95	+1000	2.5

DATE	TIME LOC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	DOXYG READ	DOXYG CORR	CONDUCTIV RANGE	CONDUCTIV READ	CALC SAL	PH	0.R.P. RANGF	0.R.P. READ	
4	26	1605	H = 4	SURF	11:00	0-20	5.15	8.54	0-100	4.65	30.10	6.95	+1000	2.45
4	26	1605	H = 4	5	10:90	0-20	5	8.28	0-100	4.71	30.80	6.91	+1000	2.5
4	26	1605	H = 4	9	10:90	0-20	5.05	8.36	0-100	4.7	30.60	6.95	+1000	2.5
4	27	1020	HT= 9	SURF	10:60	0-20	5.2	8.72	0-100	4.41	28.30	6.99	+1000	1.25
4	27	1020	HT= 9	4	10:60	0-20	5.2	8.64	0-100	4.65	30.10	7.05	+1000	1.59
4	27	1030	H = 4	SURF	10:60	0-20	4.9	8.10	0-100	4.7	30.60	7.10	+1000	1.05
4	27	1030	H = 4	5	10:00	0-20	5.11	8.46	0-100	4.7	30.60	7.10	+1000	1.45
4	27	1030	H = 4	8.5	9:9R	0-20	5.2	8.64	0-100	4.6	29.90	7.19	+1000	0.1
4	27	1045	HT=10	SURF	10:40	0-20	4.91	8.24	0-100	4.3	27.80	7.25	+1000	0.8
4	27	1045	HT=10	2.5	10:50	0-20	5	8.30	0-100	4.55	29.50	7.30	+1000	1.2
4	27	1100	HT=11	SURF	10:11	0-20	5.1	8.46	0-100	4.55	29.50	7.35	+1000	0.75
4	27	1100	HT=11	2	10:60	0-20	5.05	8.38	0-100	4.55	29.50	7.35	+1000	1.05
4	27	1110	H =4F	SURF	10:50	0-20	5.15	8.52	0-100	4.69	30.40	7.60	+1000	1.1
4	27	1110	H =4F	5	10:0R	0-20	5.15	8.52	0-100	4.69	30.40	7.50	+1000	0.99
4	27	1120	HT=12	SURF	10:60	0-20	5.05	8.38	0-100	4.65	30.10	7.50	+1000	1.25
4	27	1120	HT=12	5	10:50	0-20	5.1	8.46	0-100	4.65	30.10	7.49	+1000	1.4
4	27	1120	HT=12	8	9:9R	0-20	5.2	8.60	0-100	4.7	30.60	7.49	+1000	1.21
4	27	1130	H =4A	SURF	10:50	0-20	4.8	7.98	0-100	4.61	30.00	7.45	+1000	1.61
4	27	1130	H =4A	5	10:50	0-20	5.1	8.46	0-100	4.65	30.10	7.45	+1000	1.7
4	27	1130	H =4A	8.5	9:50	0-20	5.25	8.66	0-100	4.75	30.90	7.40	+1000	1.7
4	27	1140	HT=13	SURF	10:60	0-20	4.82	8.00	0-100	4.59	29.90	7.52	+1000	1.49
4	27	1140	HT=13	2.1	10:60	0-20	4.9	8.14	0-100	4.59	29.90	7.51	+1000	0.65
4	27	1150	HT=15	SURF	10:40	0-20	4.99	8.30	0-100	4.51	29.10	7.61	+1000	1.65
4	27	1150	HT=15	4	10:30	0-20	5	8.30	0-100	4.6	29.90	7.55	+1000	1.7
4	27	1200	H =4B	SURF	10:60	0-20	5	8.32	0-100	4.5	29.00	7.51	+1000	1.88
4	27	1200	H =4B	5	10:40	0-20	5.1	8.46	0-100	4.6	29.90	7.50	+1000	1.9
4	27	1200	H =4B	8.5	9:90	0-20	5.1	8.44	0-100	4.69	30.40	7.49	+1000	1.61
4	27	1208	HT=14	SURF	10:50	0-20	5.1	8.46	0-100	4.6	29.90	7.49	+1000	1.7
4	27	1208	HT=14	5	10:50	0-20	5.1	8.46	0-100	4.65	30.10	7.45	+1000	1.79
4	27	1208	HT=14	8.5	9:75	0-20	5.12	8.48	0-100	4.7	30.60	7.45	+1000	0.8
4	27	1218	H =4E	SURF	10:70	0-20	5.01	8.32	0-100	4.65	30.10	7.49	+1000	1.01
4	27	1218	H =4E	5	10:50	0-20	4.69	8.20	0-100	4.95	30.40	7.49	+1000	1.2
4	27	1218	H =4E	9.1	9:75	0-20	5.15	8.66	0-100	4.3	27.80	7.48	+1000	0.75
4	27	1300	HT=11	SURF	10:50	0-20	4.7	7.88	0-100	4.4	28.20	7.49	+1000	1.49
4	27	1300	HT=11	5	10:50	0-20	4.91	8.16	0-100	4.6	29.90	7.50	+1000	1.31
4	27	1300	HT=11	9	10:00	0-20	5.1	8.44	0-100	4.7	30.60	7.50	+1000	0.9
4	27	1310	H =4D	SURF	10:50	0-20	4.7	7.80	0-100	4.6	29.90	7.59	+1000	0.8
4	27	1310	H =4D	5	10:50	0-20	5.05	8.38	0-100	4.65	30.10	7.55	+1000	1.15
4	27	1310	H =4D	8	10:00	0-20	5.09	8.42	0-100	4.7	30.60	7.55	+1000	1.31
4	27	1315	HT=17	SURF	10:50	0-20	5.15	8.66	0-100	4.3	27.80	7.60	+1000	1.09
4	27	1315	HT=17	5	10:50	0-20	5.1	8.46	0-100	4.61	30.00	7.60	+1000	1.39
4	27	1315	HT=17	8.1	9:9R	0-20	5.1	8.44	0-100	4.7	30.60	7.55	+1000	0.79
4	27	1325	H =4C	SURF	10:50	0-20	5.12	8.50	0-100	4.6	29.90	7.60	+1000	1
4	27	1325	H =4C	5	10:50	0-20	5.1	8.46	0-100	4.61	30.00	7.60	+1000	1.29
4	27	1325	H =4C	7	10:00	0-20	5.1	8.46	0-100	4.65	30.10	7.60	+1000	1.4
4	27	1330	HT=18	SURF	10:40	0-20	5.15	8.56	0-100	4.55	29.50	7.61	+1000	1.4
4	27	1330	HT=18	5	10:50	0-20	5.09	8.44	0-100	4.6	29.90	7.60	+1000	1.5
4	27	1335	HT=19	SURF	10:50	0-20	4.15	6.90	0-100	4.55	29.50	7.69	+1000	1.1
4	27	1335	HT=19	1	10:50	0-20	5.15	8.54	0-100	4.59	29.80	7.61	+1000	1.3
4	27	1342	H = 5	SURF	10:50	0-20	5.2	8.68	0-100	4.45	28.60	7.65	+1000	1.5

DATE	TIME LOC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	OXYG READ	OXYG CORR	CONDUCTIV RANGE	CALC READ	CALC SAL	PH	B.R.P. RANG	B.R.P. READ	
4	27	1342	H = 5	5	10.50	0.20	5.11	8.48	0.100	4.6	29.90	7.65	+1000	1.6
4	27	1342	H = 5	2.5	9.60	0.20	5.4	8.94	0.100	4.65	30.10	7.60	+1000	1.69
4	27	1356	H = 5A	SURF	10.10	0.20	5.3	8.84	0.100	4.45	28.60	7.55	+1000	1.55
4	27	1356	H = 5A	5	10.00	0.20	5.35	8.86	0.100	4.65	30.10	7.59	+1000	1.65
4	27	1356	H = 5A	9	9.50	0.20	5.52	9.14	0.100	4.7	30.50	7.60	+1000	1.7
4	27	1410	HT-21	SURF	9.50	0.20	5.6	9.26	0.100	4.69	30.40	7.59	+1000	1.89
4	27	1410	HT-21	3	9.50	0.20	5.68	9.40	0.100	4.71	30.80	7.55	+1000	1.91
4	27	1420	HT-22	SURF	9.60	0.20	5.52	9.18	0.100	4.55	29.50	7.59	+1000	1.71
4	27	1420	HT-22	5	9.40	0.20	5.65	9.36	0.100	4.7	30.50	7.59	+1000	1.8
4	27	1425	H = 3	SURF	9.50	0.20	5.61	9.28	0.100	4.7	30.50	7.61	+1000	1.69
4	27	1425	H = 3	5	9.40	0.20	5.7	9.44	0.100	4.71	30.80	7.60	+1000	1.79
4	27	1425	H = 3	8	9.50	0.20	5.71	9.44	0.100	4.71	30.80	7.59	+1000	1.75
4	27	1440	HT-23	SURF	9.50	0.20	5.5	9.10	0.100	4.69	30.40	7.61	+1000	1.59
4	27	1440	HT-23	5	9.50	0.20	5.51	9.12	0.100	4.71	30.80	7.60	+1000	1.7
4	27	1445	HT-24	SURF	9.40	0.20	5.55	9.18	0.100	4.7	30.50	7.61	+1000	1.9
4	27	1445	HT-24	2.5	9.50	0.20	5.61	9.28	0.100	4.71	30.80	7.60	+1000	1.95
4	27	1500	HT-25	SURF	9.40	0.20	5.8	9.56	0.100	4.75	30.90	7.60	+1000	2.05
4	27	1500	HT-25	3.5	9.40	0.20	5.85	9.66	0.100	4.75	30.90	7.59	+1000	2.11
4	27	1510	HT-26	SURF	9.30	0.20	5.8	9.60	0.100	4.65	30.10	7.61	+1000	2.05
4	27	1510	HT-26	5	9.30	0.20	5.75	9.48	0.100	4.75	30.90	7.60	+1000	2.1
4	27	1520	HT-27	SURF	9.40	0.20	5.55	9.18	0.100	4.7	30.50	7.61	+1000	2.11
4	27	1520	HT-27	2.5	9.20	0.20	5.7	9.40	0.100	4.75	30.80	7.61	+1000	2.15
4	27	1525	HT-28	SURF	9.50	0.20	5.6	9.24	0.100	4.75	30.80	7.65	+1000	2.11
4	27	1525	HT-28	1.5	9.50	0.20	5.7	9.40	0.100	4.75	30.80	7.65	+1000	2.15
4	27	1535	P = 1	SURF	9.40	0.20	5.79	9.56	0.100	4.75	30.80	7.65	+1000	2.1
4	27	1535	P = 1	5	9.20	0.20	5.75	9.48	0.100	4.75	30.80	7.60	+1000	2.15
4	27	1535	P = 1	9	9.50	0.20	5.55	9.16	0.100	4.75	30.90	7.61	+1000	2.1
4	27	1600	L = 5	SURF	10.00	0.20	5.59	9.26	0.100	4.7	30.50	7.60	+1000	2.1
4	27	1600	L = 5	5	9.80	0.20	5.5	9.10	0.100	4.7	30.50	7.60	+1000	2.1
4	27	1600	L = 5	9	9.70	0.20	5.49	9.08	0.100	4.7	30.50	7.60	+1000	2.1
4	27	1615	L = 4	SURF	10.50	0.20	5.15	8.52	0.100	4.65	30.10	7.50	+1000	2.05
4	27	1615	L = 4	5	10.50	0.20	5.1	8.44	0.100	4.65	30.10	7.51	+1000	2.1
4	27	1615	L = 4	9	10.00	0.20	5.09	8.42	0.100	4.7	30.50	7.55	+1000	1.3
4	28	1000	HT-10	SURF	12.00	0.20	4.9	8.22	0.100	4.4	28.20	9.05	+1000	1.6
4	28	1000	HT-10	5	11.10	0.20	5	8.28	0.100	4.7	30.50	9.25	+1000	1.8
4	28	1020	HT = 4	SURF	11.10	0.20	5.1	8.48	0.100	4.55	29.50	9.15	+1000	0.9
4	28	1020	HT = 4	5	10.20	0.20	5.2	8.60	0.100	4.7	30.50	9.55	+1000	1.3
4	28	1020	HT = 4	10	10.00	0.20	5.2	8.60	0.100	4.7	30.50	9.75	+1000	0.3
4	28	1025	HT = 5	SURF	10.50	0.20	5.4	8.94	0.100	4.7	30.50	9.55	+1000	0.65
4	28	1025	HT = 5	5	10.25	0.20	5.2	8.54	0.100	4.8	31.10	9.75	+1000	1
4	28	1025	HT = 5	11	10.00	0.20	5.25	8.68	0.100	4.7	30.50	9.95	+1000	0.45
4	28	1030	HT = 6	SURF	10.50	0.20	5.35	8.86	0.100	4.65	30.10	9.35	+1000	0.5
4	28	1030	HT = 6	5	10.00	0.20	5.3	8.78	0.100	4.7	30.50	9.75	+1000	0.9
4	28	1030	HT = 6	10	10.00	0.20	5.2	8.54	0.100	4.8	31.10	9.90	+1000	1
4	28	1030	HT = 6	13	10.00	0.20	5	8.28	0.100	4.7	30.50	10.10	+1000	2
4	28	1045	HT = 7	SURF	10.50	0.20	5	8.32	0.100	4.55	29.50	9.65	+1000	0.85
4	28	1045	HT = 7	2.5	10.50	0.20	5	8.30	0.100	4.6	29.90	9.93	+1000	0.85
4	28	1055	HT = 8	SURF	10.50	0.20	4.8	8.00	0.100	4.5	29.00	9.50	+1000	1.1
4	28	1055	HT = 8	2.3	10.25	0.20	4.85	8.06	0.100	4.55	29.50	9.90	+1000	1.1
4	28	1105	L = 4	SURF	10.00	0.20	5.2	8.64	0.100	4.6	29.90	9.95	+1000	1.68

DATE	TIME LBC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	READ	OXYG CORR	CONDUCTIV RANGE	READ	CALC SAL	PH	S.R.P. RANGE	READ
4 28	1105	H = 4	5	9.75	0-20	5.3	8.78	0-100	4.7	30.50	10.15	+1000	1.7
4 28	1105	H = 4	9.8	9.75	0-20	5.3	8.78	0-100	4.7	30.50	10.15	+1000	1.35
4 28	1125	H = 5	SURF	10.20	0-20	5.4	8.96	0-100	4.62	30.00	7.70	+1000	1.2
4 28	1125	H = 5	5	10.20	0-20	5.35	8.88	0-100	4.62	30.00	7.70	+1000	1.47
4 28	1125	H = 5	SURF	10.20	0-20	5.4	8.96	0-100	4.62	30.00	7.70	+1000	1.2
4 28	1125	H = 5	5	10.20	0-20	5.35	8.88	0-100	4.62	30.00	7.70	+1000	1.47
4 28	1125	H = 5	9.8	9.50	0-20	5.4	8.94	0-100	4.7	30.50	7.68	+1000	1.6
4 28	1150	HT-25	SURF	9.80	0-20	6.09	10.08	0-100	4.7	30.50	7.42	+1000	1.65
4 28	1150	HT-25	4.5	9.30	0-20	6.28	10.40	0-100	4.7	30.50	7.40	+1000	1.77
4 28	1155	HT-26	SURF	9.60	0-20	5.72	9.48	0-100	4.68	30.40	7.45	+1000	1.82
4 28	1155	HT-26	5	9.30	0-20	5.9	9.76	0-100	4.7	30.50	7.42	+1000	1.9
4 28	1155	HT-26	7.5	9.10	0-20	5.95	9.84	0-100	4.7	30.50	7.42	+1000	1.92
4 28	1205	HT-27	SURF	9.50	0-20	5.65	9.36	0-100	4.7	30.50	7.42	+1000	2
4 28	1205	HT-27	3.5	9.50	0-20	5.8	9.60	0-100	4.7	30.50	7.42	+1000	2.05
4 28	1207	HT-28	SURF	10.00	0-20	5.7	9.44	0-100	4.7	30.50	7.50	+1000	2.05
4 28	1207	HT-28	3	9.75	0-20	5.7	9.40	0-100	4.75	30.80	7.45	+1000	2.15
4 28	1211	P = 1	SURF	9.75	0-20	5.7	9.44	0-100	4.65	30.10	7.60	+1000	2.1
4 28	1211	P = 1	5	9.50	0-20	5.75	9.48	0-100	4.75	30.80	7.50	+1000	2.1
4 28	1211	P = 1	10	9.50	0-20	5.85	9.66	0-100	4.75	30.80	7.50	+1000	2.1
4 28	1237	HT-49	SURF	9.50	0-20	5.85	9.66	0-100	4.7	30.50	7.35	+1000	2.25
4 28	1237	HT-49	6	9.00	0-20	6.05	9.94	0-100	4.8	31.10	7.30	+1000	2.2
4 28	1242	HT-48	SURF	9.50	0-20	5.9	9.74	0-100	4.75	30.80	7.40	+1000	2.2
4 28	1242	HT-48	5	9.30	0-20	6	9.90	0-100	4.75	30.80	7.40	+1000	2.2
4 28	1242	HT-48	9	8.90	0-20	6.05	9.94	0-100	4.8	31.10	7.35	+1000	2.2
4 28	1250	P = 11	SURF	9.50	0-20	5.85	9.66	0-100	4.75	30.80	7.40	+1000	2.15
4 28	1250	P = 11	5	9.10	0-20	5.95	9.76	0-100	4.8	31.10	7.40	+1000	2.15
4 28	1250	P = 11	10	8.75	0-20	6	9.76	0-100	4.8	31.10	7.40	+1000	2.2
4 28	1258	HT-46	SURF	9.50	0-20	5.9	9.76	0-100	4.7	30.50	7.30	+1000	2.05
4 28	1258	HT-46	5	9.25	0-20	5.9	9.76	0-100	4.7	30.50	7.30	+1000	2.1
4 28	1258	HT-46	10	8.75	0-20	6	9.90	0-100	4.75	30.80	7.30	+1000	2.2
4 28	1302	P = 10	SURF	9.50	0-20	5.75	9.52	0-100	4.7	30.50	7.40	+1000	2.15
4 28	1302	P = 10	6.5	9.00	0-20	5.98	9.86	0-100	4.75	30.80	7.30	+1000	2.2
4 28	1308	HT-45	SURF	9.40	0-20	5.9	9.74	0-100	4.75	30.80	7.30	+1000	2.2
4 28	1308	HT-45	4.5	9.00	0-20	6	9.90	0-100	4.75	30.80	7.30	+1000	2.22
4 28	1314	P = 9	SURF	9.50	0-20	5.9	9.76	0-100	4.7	30.50	7.30	+1000	2.22
4 28	1314	P = 9	5	9.00	0-20	5.95	9.82	0-100	4.72	30.60	7.30	+1000	2.25
4 28	1314	P = 9	7.2	8.75	0-20	6	9.90	0-100	4.75	30.80	7.30	+1000	2.3
4 28	1320	P = 8	SURF	9.50	0-20	5.85	9.66	0-100	4.68	30.40	7.40	+1000	2.25
4 28	1320	P = 8	5	9.25	0-20	5.95	9.82	0-100	4.75	30.80	7.35	+1000	2.3
4 28	1320	P = 8	8	8.50	0-20	5.95	9.82	0-100	4.75	30.80	7.30	+1000	2.32
4 28	1330	P = 7	SURF	9.30	0-20	5.95	9.86	0-100	4.65	30.10	7.38	+1000	2.28
4 28	1330	P = 7	6	8.80	0-20	6.2	10.24	0-100	4.75	30.80	7.35	+1000	2.32
4 28	1343	HT-39	SURF	9.50	0-20	5.75	9.52	0-100	4.7	30.50	7.30	+1000	2.4
4 28	1343	HT-39	5	9.25	0-20	5.9	9.76	0-100	4.72	30.60	7.30	+1000	2.4
4 28	1343	HT-39	7	9.00	0-20	5.98	9.86	0-100	4.75	30.80	7.28	+1000	2.4
4 28	1350	P = 17	SURF	9.75	0-20	5.8	9.56	0-100	4.75	30.80	7.30	+1000	2.42
4 28	1350	P = 17	5	9.25	0-20	5.95	9.82	0-100	4.75	30.80	7.30	+1000	2.45
4 28	1350	P = 17	6	9.25	0-20	6.05	9.98	0-100	4.75	30.80	7.28	+1000	2.45
4 28	1400	HT-36	SURF	9.50	0-20	5.65	9.36	0-100	4.7	30.50	7.30	+1000	2.45
4 28	1400	HT-36	5	9.25	0-20	6.1	10.06	0-100	4.75	30.80	7.20	+1000	2.45

DATE	TIME LBC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	OXYG READ	CORR	CONDUCTIV RANGE	READ	CALC SAL	PH	R.R.P. RANGE	READ
4 28	1407	P -18	SURF	9.75	0-20	5.7	9.40	0-100	4.75	30.80	7.50	+1000	2.45
4 28	1407	P -18	4.5	9.25	0-20	6	9.90	0-100	4.75	30.80	7.30	+1000	2.4
4 28	1410	HT-38	SURF	9.75	0-20	5.71	9.44	0-100	4.7	30.50	7.35	+1000	2.45
4 28	1410	HT-38	5	9.25	0-20	6.05	9.98	0-100	4.75	30.50	7.35	+1000	2.5
4 28	1415	P -19	SURF	10.00	0-20	5.65	9.36	0-100	4.7	30.50	7.35	+1000	2.45
4 28	1415	P -19	5.5	9.50	0-20	6.9	11.38	0-100	4.75	30.80	7.35	+1000	2.45
4 28	1430	HT-35	SURF	9.75	0-20	5.85	9.72	0-100	4.6	29.90	7.35	+1000	2.4
4 28	1430	HT-35	6.5	9.25	0-20	6.25	10.32	0-100	4.75	30.80	7.40	+1000	2.5
4 28	1435	P -15	SURF	9.75	0-20	5.75	9.48	0-100	4.75	30.80	7.50	+1000	2.5
4 28	1435	P -15	5	9.25	0-20	5.7	9.36	0-100	4.8	31.10	7.40	+1000	2.45
4 28	1435	P -15	8.5	9.10	0-20	5.8	9.52	0-100	4.8	31.10	7.35	+1000	2.5
4 28	1440	HT-34	SURF	9.50	0-20	5.8	9.56	0-100	4.75	30.80	7.40	+1000	2.4
4 28	1440	HT-34	5	9.50	0-20	5.8	9.52	0-100	4.8	31.10	7.40	+1000	2.45
4 28	1440	HT-34	8	9.25	0-20	5.8	9.56	0-100	4.75	30.80	7.35	+1000	2.5
4 28	1445	SEWBF	SURF	10.90	0-20	5.65	9.46	0-100	4.4	28.40	7.40	+1000	2.5
4 28	1445	SEWBF	5	9.50	0-20	5.8	9.56	0-100	4.75	30.80	7.30	+1000	2.6
4 28	1445	SEWBF	8	10.50	0-20	5.7	9.44	0-100	4.7	30.50	7.30	+1000	2.5
4 28	1455	P -14	SURF	10.00	0-20	5.75	9.52	0-100	4.65	30.10	7.35	+1000	2.4
4 28	1455	P -14	5	9.50	0-20	5.92	9.76	0-100	4.75	30.80	7.35	+1000	2.45
4 28	1455	P -14	8	9.00	0-20	5.95	9.82	0-100	4.75	30.80	7.30	+1000	2.4
4 28	1505	P -3	SURF	9.40	0-20	5.85	9.68	0-100	4.7	30.50	7.20	+1000	2.4
4 28	1505	P -3	5	9.25	0-20	5.9	9.76	0-100	4.7	30.50	7.20	+1000	2.4
4 28	1505	P -3	9	9.00	0-20	5.9	9.74	0-100	4.75	30.80	7.20	+1000	2.32
4 28	1532	L -5	SURF	10.25	0-20	5.2	8.64	0-100	4.6	29.90	7.20	+1000	2.42
4 28	1532	L -5	5	10.20	0-20	5.25	8.70	0-100	4.65	30.10	7.20	+1000	2.42
4 28	1532	L -5	10.5	9.70	0-20	5.32	8.80	0-100	4.68	30.40	7.20	+1000	2.42
4 28	1543	HT-9	SURF	10.50	0-20	5.15	8.54	0-100	4.58	29.80	7.20	+1000	2.4
4 28	1543	HT-9	2	10.25	0-20	5.2	8.64	0-100	4.62	30.00	7.20	+1000	2.32
4 28	1546	L -4	SURF	10.50	0-20	5.3	8.80	0-100	4.6	29.90	7.30	+1000	2.3
4 28	1546	L -4	5	9.75	0-20	5.35	8.86	0-100	4.7	30.50	7.20	+1000	2.32
4 28	1546	L -4	9.5	9.50	0-20	5.3	8.78	0-100	4.7	30.50	7.20	+1000	0.35
4 28	1553	HT-10	SURF	10.50	0-20	5.2	8.64	0-100	4.6	29.90	7.25	+1000	1.3
4 28	1553	HT-10	3	10.00	0-20	5.35	8.86	0-100	4.65	30.10	7.25	+1000	1.45
4 28	1556	HT-11	SURF	10.50	0-20	5.18	8.62	0-100	4.52	29.20	7.30	+1000	1.45
4 28	1556	HT-11	2.5	10.25	0-20	5.3	8.80	0-100	4.6	29.90	7.28	+1000	1.38
4 29	1022	HT-10	SURF	10.75	0-20	5	8.32	0-100	4.55	29.50	7.00	+1000	0.95
4 29	1022	HT-10	5	10.25	0-20	5.8	9.60	0-100	4.65	30.10	7.02	+1000	1.19
4 29	1022	HT-10	8	10.25	0-20	4.9	8.10	0-100	4.7	30.50	7.02	+1000	1.3
4 29	1037	HT-4	SURF	10.50	0-20	5.75	9.54	0-100	4.6	29.90	7.20	+1000	0.7
4 29	1037	HT-4	5	10.00	0-20	5	8.28	0-100	4.65	30.10	7.15	+1000	0.95
4 29	1037	HT-4	10.5	10.00	0-20	5.08	8.40	0-100	4.7	30.50	7.25	+1000	0.25
4 29	1043	HT-5	SURF	10.75	0-20	5	8.36	0-100	4.45	28.60	7.45	+1000	0.35
4 29	1043	HT-5	5	10.20	0-20	5.15	8.54	0-100	4.6	29.90	7.40	+1000	0.55
4 29	1043	HT-5	11	10.10	0-20	5.1	8.44	0-100	4.7	30.50	7.40	+1000	0.35
4 29	1049	HT-6	SURF	11.00	0-20	5	8.30	0-100	4.6	29.90	7.52	+1000	0.35
4 29	1049	HT-6	5	10.50	0-20	5.15	8.52	0-100	4.65	30.10	7.50	+1000	0.6
4 29	1049	HT-6	12.5	10.50	0-20	5	8.28	0-100	4.7	30.50	7.60	+1000	0.8
4 29	1055	HT-7	SURF	10.50	0-20	5	8.34	0-100	4.5	29.00	7.60	+1000	0.3
4 29	1055	HT-7	3	10.25	0-20	5.1	8.46	0-100	4.6	29.90	7.55	+1000	0.55
4 29	1100	HT-8	SURF	10.75	0-20	5.1	8.50	0-100	4.5	29.00	7.65	+1000	0.65

DATE	TIME LOC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	0XYG READ	CONDUCTIV CORR	CONDUCTIV RANGE	READ	CALC SAL	PH	B.R.P. RANG	READ
4 29	1100	HT-8	2.5	10.50	0.20	5.1	8.46	0-100	4.6	29.90	7.60	+1000	0.75
4 29	1118	HT-9	SURF	10.40	0.20	5.4	8.98	0-100	4.55	29.50	7.55	+1000	1.3
4 29	1118	HT-9	2.5	10.50	0.20	5.2	8.64	0-100	4.6	29.90	7.55	+1000	1.35
4 29	1123	H-4	SURF	10.25	0.20	5.1	8.48	0-100	4.55	29.50	7.60	+1000	1.4
4 29	1123	H-4	5	9.75	0.20	5.05	8.36	0-100	4.7	30.50	7.60	+1000	1.45
4 29	1123	H-4	9.5	9.60	0.20	5.2	8.60	0-100	4.7	30.50	7.60	+1000	0.85
4 29	1132	HT-10	SURF	10.40	0.20	5.4	9.00	0-100	4.5	29.00	7.60	+1000	0.45
4 29	1132	HT-10	3.1	10.40	0.20	5.25	8.72	0-100	4.6	29.90	7.61	+1000	0.75
4 29	1138	HT-11	SURF	10.50	0.20	5.2	8.72	0-100	4.4	28.20	7.65	+1000	0.75
4 29	1138	HT-11	2.8	10.25	0.20	5.2	8.64	0-100	4.55	29.50	7.61	+1000	0.92
4 29	1149	HT-16	SURF	10.50	0.20	5.25	8.72	0-100	4.55	29.50	7.60	+1000	1.2
4 29	1149	HT-16	5	10.25	0.20	4.6	7.64	0-100	4.61	30.00	7.60	+1000	1.3
4 29	1149	HT-16	9	9.50	0.20	5.1	8.44	0-100	4.7	30.50	7.60	+1000	1.15
4 29	1155	H-4D	SURF	10.50	0.20	5.25	8.72	0-100	4.6	29.90	7.60	+1000	1.25
4 29	1155	H-4D	5	10.25	0.20	5.15	8.54	0-100	4.6	29.90	7.60	+1000	1.3
4 29	1155	H-4D	9	9.50	0.20	5.2	8.60	0-100	4.7	30.50	7.60	+1000	0.55
4 29	1203	HT-17	SURF	10.40	0.20	5.15	8.54	0-100	4.55	29.50	7.70	+1000	0.9
4 29	1203	HT-17	5	10.00	0.20	5.15	8.54	0-100	4.62	30.00	7.70	+1000	1.05
4 29	1203	HT-17	9	9.50	0.20	5.2	8.62	0-100	4.65	30.10	7.65	+1000	0.8
4 29	1208	H-4C	SURF	10.25	0.20	5.25	8.72	0-100	4.6	29.90	7.75	+1000	0.9
4 29	1208	H-4C	5	9.75	0.20	5.3	8.78	0-100	4.65	30.10	7.70	+1000	1
4 29	1208	H-4C	8.5	9.75	0.20	5.3	8.76	0-100	4.7	30.50	7.70	+1000	1.15
4 29	1213	HT-18	SURF	10.00	0.20	5.3	8.80	0-100	4.6	29.90	7.80	+1000	1.1
4 29	1213	HT-18	5	10.00	0.20	5.4	8.94	0-100	4.65	30.10	7.70	+1000	1.2
4 29	1213	HT-18	8	9.75	0.20	5.35	8.86	0-100	4.7	30.50	7.70	+1000	1.3
4 29	1220	HT-19	SURF	10.20	0.20	5.25	8.76	0-100	4.51	29.10	7.70	+1000	1.2
4 29	1220	HT-19	2.1	10.00	0.20	5.3	8.80	0-100	4.6	29.90	7.65	+1000	1.3
4 29	1227	H-5	SURF	10.25	0.20	5.25	8.72	0-100	4.6	29.90	7.70	+1000	1.5
4 29	1227	H-5	5	10.20	0.20	5.25	8.72	0-100	4.6	29.90	7.65	+1000	1.6
4 29	1227	H-5	10	9.60	0.20	5.25	8.68	0-100	4.7	30.50	7.65	+1000	1.6
4 29	1246	HT-28	SURF	10.00	0.20	5.5	9.10	0-100	4.65	30.10	7.60	+1000	1.8
4 29	1246	HT-28	2.5	10.00	0.20	5.5	9.10	0-100	4.69	30.40	7.60	+1000	1.89
4 29	1253	HT-27	SURF	10.00	0.20	5.5	9.10	0-100	4.65	30.10	7.65	+1000	1.85
4 29	1253	HT-27	5	9.50	0.20	5.7	9.44	0-100	4.7	30.50	7.60	+1000	1.9
4 29	1300	P-1	SURF	9.90	0.20	5.59	9.26	0-100	4.7	30.50	7.68	+1000	1.9
4 29	1300	P-1	5	9.25	0.20	5.7	9.44	0-100	4.71	30.60	7.65	+1000	1.95
4 29	1300	P-1	10	9.00	0.20	5.65	9.36	0-100	4.71	30.60	7.61	+1000	1.88
4 29	1307	HT-26	SURF	10.00	0.20	6.09	10.08	0-100	4.65	30.10	7.71	+1000	1.72
4 29	1307	HT-26	6	9.25	0.20	5.8	9.60	0-100	4.71	30.60	7.65	+1000	1.72
4 29	1314	HT-25	SURF	9.90	0.20	5.65	9.36	0-100	4.7	30.50	7.70	+1000	1.8
4 29	1314	HT-25	4	9.60	0.20	5.8	9.60	0-100	4.7	30.50	7.70	+1000	1.9
4 29	1335	HT-49	SURF	10.00	0.20	5.82	9.64	0-100	4.7	30.50	7.50	+1000	1.85
4 29	1335	HT-49	6	9.25	0.20	6.11	10.12	0-100	4.71	30.60	7.50	+1000	1.95
4 29	1341	HT-48	SURF	9.80	0.20	5.95	9.84	0-100	4.7	30.50	7.59	+1000	1.91
4 29	1341	HT-48	5	9.25	0.20	5.85	9.68	0-100	4.7	30.50	7.55	+1000	2
4 29	1341	HT-48	9.2	9.00	0.20	5.9	9.74	0-100	4.75	30.80	7.52	+1000	2.2
4 29	1348	P-11	SURF	9.75	0.20	5.65	9.36	0-100	4.7	30.50	7.61	+1000	2.05
4 29	1348	P-11	5	9.50	0.20	5.82	9.64	0-100	4.7	30.50	7.60	+1000	2.05
4 29	1348	P-11	10	8.75	0.20	5.8	9.56	0-100	4.75	30.80	7.55	+1000	2.1
4 29	1357	HT-46	SURF	9.80	0.20	5.85	9.68	0-100	4.7	30.50	7.71	+1000	2

DATE	TIME LRC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	OXYG READ	OXYG CORR	CONDUCTIV RANGE	CALC READ	CALC SAL	PH	B.R.P. RANGE	B.R.P. READ
4 29	1357	HT-46	5	9.50	0.20	5.85	9.66	0.100	4.75	30.80	7.65	+1000	2
4 29	1357	HT-46	10	8.90	0.20	5.8	9.56	0.100	4.75	30.80	7.60	+1000	2
4 29	1403	P -10	SURF	9.75	0.20	5.65	9.36	0.100	4.71	30.60	7.65	+1000	2
4 29	1403	P -10	6	9.00	0.20	5.63	9.32	0.100	4.7	30.50	7.60	+1000	2.08
4 29	1409	HT-45	SURF	10.00	0.20	5.63	9.32	0.100	4.73	30.70	7.70	+1000	2.05
4 29	1409	HT-45	4.5	9.10	0.20	5.58	9.24	0.100	4.71	30.60	7.63	+1000	2.13
4 29	1416	P - 9	SURF	9.90	0.20	5.62	9.30	0.100	4.71	30.60	7.65	+1000	2.1
4 29	1416	P - 9	5	9.00	0.20	5.7	9.46	0.100	4.75	30.80	7.60	+1000	2.12
4 29	1416	P - 9	7	9.00	0.20	5.72	9.52	0.100	4.71	30.60	7.60	+1000	2.15
4 29	1425	P - 8	SURF	9.75	0.20	5.75	9.68	0.100	4.7	30.50	7.58	+1000	2.15
4 29	1425	P - 8	5	9.25	0.20	5.85	9.68	0.100	4.71	30.60	7.67	+1000	2.15
4 29	1425	P - 8	8	9.00	0.20	5.9	9.74	0.100	4.75	30.80	7.55	+1000	2.15
4 29	1434	P - 7	SURF	9.75	0.20	5.8	9.60	0.100	4.7	30.50	7.60	+1000	2.2
4 29	1434	P - 7	6	9.00	0.20	6.09	10.04	0.100	4.75	30.80	7.59	+1000	2.2
4 29	1445	P -16	SURF	10.00	0.20	5.75	9.52	0.100	4.7	30.50	7.60	+1000	2.15
4 29	1445	P -16	5	9.75	0.20	5.8	9.60	0.100	4.71	30.60	7.55	+1000	2.15
4 29	1445	P -16	7	9.10	0.20	5.9	9.76	0.100	4.71	30.60	7.55	+1000	2.2
4 29	1452	HT-35	SURF	10.00	0.20	5.7	9.74	0.100	4.6	29.90	7.65	+1000	2.12
4 29	1452	HT-35	6	9.25	0.20	5.9	9.74	0.100	4.75	30.80	7.60	+1000	2.15
4 29	1458	P -15	SURF	10.00	0.20	5.7	9.44	0.100	4.7	30.50	7.65	+1000	2.15
4 29	1458	P -15	5	9.35	0.20	5.8	9.56	0.100	4.75	30.80	7.60	+1000	2.15
4 29	1458	P -15	8.5	9.10	0.20	5.7	9.36	0.100	4.8	31.10	7.60	+1000	2.2
4 29	1505	HT-34	SURF	10.00	0.20	5.65	9.36	0.100	4.7	30.50	7.70	+1000	2.2
4 29	1505	HT-34	5	9.60	0.20	5.8	9.56	0.100	4.75	30.80	7.60	+1000	2.2
4 29	1505	HT-34	8	9.00	0.20	5.75	9.48	0.100	4.75	30.80	7.60	+1000	2.2
4 29	1512	P -14	SURF	10.25	0.20	5.7	9.44	0.100	4.65	30.10	7.70	+1000	2.17
4 29	1512	P -14	5	9.75	0.20	5.8	9.60	0.100	4.7	30.50	7.65	+1000	2.2
4 29	1512	P -14	7	9.00	0.20	5.75	9.48	0.100	4.75	30.80	7.65	+1000	2.22
4 29	1521	P - 3	SURF	10.00	0.20	5.8	9.60	0.100	4.7	30.50	7.70	+1000	2.2
4 29	1521	P - 3	5	9.50	0.20	5.85	9.68	0.100	4.71	30.60	7.63	+1000	2.21
4 29	1521	P - 3	9.5	9.00	0.20	5.79	9.58	0.100	4.7	30.50	7.60	+1000	2.25
4 29	1536	HT-28	SURF	10.10	0.20	5.65	9.38	0.100	4.61	30.00	7.50	+1000	2.21
4 29	1536	HT-28	2.5	10.25	0.20	5.8	9.60	0.100	4.69	30.40	7.50	+1000	2.21
4 29	1541	HT-27	SURF	10.00	0.20	5.7	9.44	0.100	4.7	30.50	7.59	+1000	2.25
4 29	1541	HT-27	5	9.50	0.20	5.8	9.60	0.100	4.7	30.50	7.50	+1000	2.3
4 29	1545	P - 1	SURF	10.00	0.20	5.65	9.36	0.100	4.7	30.50	7.60	+1000	2.25
4 29	1545	P - 1	5	9.50	0.20	5.65	9.36	0.100	4.7	30.50	7.60	+1000	2.25
4 29	1545	P - 1	10	9.00	0.20	5.71	9.42	0.100	4.75	30.80	7.55	+1000	2.3
4 29	1557	HT-26	SURF	10.10	0.20	5.75	9.52	0.100	4.7	30.50	7.60	+1000	2.1
4 29	1557	HT-26	5.5	10.00	0.20	5.8	9.60	0.100	4.71	30.60	7.59	+1000	2.15
4 29	1602	HT-25	SURF	10.25	0.20	5.75	9.52	0.100	4.7	30.50	7.65	+1000	2.15
4 29	1602	HT-25	4.5	10.00	0.20	5.95	9.84	0.100	4.7	30.50	7.60	+1000	2.2
4 29	1630	H - 4	SURF	11.10	0.20	5.25	8.72	0.100	4.55	29.50	7.41	+1000	1.91
4 29	1630	H - 4	5	10.00	0.20	5.31	8.80	0.100	4.65	30.10	7.45	+1000	2.01
4 29	1630	H - 4	9.5	9.75	0.20	5.2	8.60	0.100	4.65	30.10	7.30	+1000	0.5
4 30	0945	HT- 9	SURF	10.50	0.20	5.7	9.46	0.100	4.6	29.90	6.40	+1000	2.1
4 30	0945	HT- 9	3	10.40	0.20	5.8	9.60	0.100	4.65	30.10	6.50	+1000	2
4 30	0945	H - 4	SURF	10.40	0.20	5.32	8.84	0.100	4.61	30.00	6.75	+1000	1.39
4 30	0945	H - 4	5	10.10	0.20	5.8	9.60	0.100	4.69	30.40	6.75	+1000	1.65
4 30	0945	H - 4	10	10.00	0.20	5.6	9.26	0.100	4.7	30.50	7.00	+1000	1.52

DATE	TIME LBC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	DOXYG READ	DOXYG CORR	CONDUCTIV RANGE	CONDUCTIV READ	CALC SAL	PH	B.R.P. RANGE	B.R.P. READ
4 30	1000	HT-10	SURF	10.50	0.20	5.7	9.44	0.100	4.65	30.10	6.92	+1000	1.5
4 30	1000	HT-10	3.9	10.10	0.20	5.8	9.52	0.100	4.8	31.10	6.91	+1000	1.79
4 30	1004	HT-11	SURF	10.75	0.20	5.6	9.30	0.100	4.55	29.50	7.08	+1000	1.8
4 30	1004	HT-11	3.5	10.50	0.20	5.7	9.46	0.100	4.6	29.90	7.05	+1000	1.75
4 30	1015	H = 5	SURF	10.50	0.20	5.95	9.88	0.100	4.61	30.70	7.00	+1000	2.09
4 30	1015	H = 5	5	10.25	0.20	5.88	9.74	0.100	4.65	30.10	7.02	+1000	2.12
4 30	1015	H = 5	10.5	9.90	0.20	5.85	9.68	0.100	4.69	30.40	7.10	+1000	2.2
4 30	1055	HT-49	SURF	10.00	0.20	6.35	10.50	0.100	4.7	30.50	7.05	+1000	2.55
4 30	1055	HT-49	5	10.00	0.20	6.35	10.50	0.100	4.7	30.50	7.05	+1000	2.5
4 30	1055	HT-49	7	9.25	0.20	6.4	10.60	0.100	4.7	30.50	7.20	+1000	2.55
4 30	1100	HT-48	SURF	9.80	0.20	6.35	10.48	0.100	4.75	30.80	7.15	+1000	2.5
4 30	1100	HT-48	5	9.60	0.20	6.35	1.05	0.100	4.71	30.60	7.10	+1000	2.55
4 30	1100	HT-48	11	9.40	0.20	6.4	10.56	0.100	4.75	30.80	7.20	+1000	2.6
4 30	1106	P -11	SURF	10.00	0.20	6.15	10.14	0.100	4.75	30.80	7.21	+1000	2.55
4 30	1106	P -11	5	9.75	0.20	6.3	10.40	0.100	4.75	30.80	7.20	+1000	2.6
4 30	1106	P -11	11	9.00	0.20	6.35	10.48	0.100	4.75	30.80	7.20	+1000	1.5
4 30	1121	HT-46	SURF	10.00	0.20	5.95	9.88	0.100	4.55	29.50	7.15	+1000	2.32
4 30	1121	HT-46	5	10.00	0.20	6.35	10.48	0.100	4.75	30.80	7.19	+1000	2.45
4 30	1121	HT-46	10.5	9.00	0.20	6.35	10.48	0.100	4.75	30.80	7.15	+1000	2.4
4 30	1128	P -10	SURF	10.00	0.20	6.25	10.34	0.100	4.7	30.50	7.23	+1000	2.1
4 30	1128	P -10	5	9.50	0.20	6.3	10.42	0.100	4.72	30.70	7.22	+1000	2.2
4 30	1128	P -10	8	9.00	0.20	6.35	10.48	0.100	4.75	30.80	7.20	+1000	2.3
4 30	1133	HT-45	SURF	9.80	0.20	6.1	10.10	0.100	4.7	30.50	7.20	+1000	2.4
4 30	1133	HT-45	5.5	9.25	0.20	6.35	10.48	0.100	4.75	30.80	7.20	+1000	2.45
4 30	1140	P = 9	SURF	10.00	0.20	6.28	.40	0.100	4.7	30.50	7.25	+1000	2.4
4 30	1140	P = 9	5	9.50	0.20	6.3	10.40	0.100	4.75	30.80	7.25	+1000	2.45
4 30	1140	P = 9	8	9.25	0.20	6.3	10.40	0.100	4.75	30.80	7.20	+1000	2.45
4 30	1146	P = 8	SURF	10.00	0.20	6.3	10.42	0.100	4.7	30.50	7.25	+1000	2.4
4 30	1146	P = 8	5	9.50	0.20	6.3	10.40	0.100	4.75	30.80	7.21	+1000	2.45
4 30	1146	P = 8	8	9.25	0.20	6.4	10.56	0.100	4.75	30.80	7.20	+1000	2.51
4 30	1153	P = 7	SURF	10.00	0.20	6.1	10.10	0.100	4.72	30.70	7.20	+1000	2.55
4 30	1153	P = 7	6	9.40	0.20	6.3	10.40	0.100	4.75	30.80	7.30	+1000	2.6
4 30	1205	P -16	SURF	9.90	0.20	6.25	10.32	0.100	4.75	30.80	7.15	+1000	2.6
4 30	1205	P -16	5	9.75	0.20	6.32	10.42	0.100	4.75	30.80	7.19	+1000	2.6
4 30	1205	P -16	7.5	9.25	0.20	6.15	10.14	0.100	4.75	30.80	7.15	+1000	1.2
4 30	1212	HT-35	SURF	10.00	0.20	6.1	10.10	0.100	4.71	30.60	7.25	+1000	2.1
4 30	1212	HT-35	6.5	9.00	0.20	6	9.90	0.100	4.75	30.80	7.20	+1000	2.25
4 30	1219	P -15	SURF	10.00	0.20	6.25	10.34	0.100	4.7	30.50	7.30	+1000	2.4
4 30	1219	P -15	5	9.50	0.20	6.3	10.40	0.100	4.75	30.80	7.25	+1000	2.45
4 30	1219	P -15	8	9.00	0.20	6.25	10.32	0.100	4.75	30.80	7.20	+1000	2.5
4 30	1225	HT-34	SURF	10.00	0.20	6.05	10.02	0.100	4.7	30.50	7.30	+1000	2.4
4 30	1225	HT-34	5	10.00	0.20	6.2	10.24	0.100	4.75	30.80	7.30	+1000	2.5
4 30	1225	HT-34	7.5	9.40	0.20	6.1	10.06	0.100	4.75	30.80	7.25	+1000	2.6
4 30	1230	P -14	SURF	10.00	0.20	6.25	10.34	0.100	4.71	30.60	7.30	+1000	2.6
4 30	1230	P -14	5	9.25	0.20	6.3	10.42	0.100	4.71	30.60	7.25	+1000	2.6
4 30	1230	P -14	8	9.10	0.20	6.25	10.32	0.100	4.75	30.80	7.25	+1000	2.65
4 30	1242	P = 3	SURF	9.90	0.20	6.35	10.50	0.100	4.7	30.50	7.30	+1000	2.65
4 30	1242	P = 3	5	9.75	0.20	6.35	10.50	0.100	4.7	30.50	7.25	+1000	2.7
4 30	1242	P = 3	10	9.50	0.20	6.31	10.40	0.100	4.75	30.80	7.25	+1000	2.7
4 30	1252	HT-31	SURF	10.00	0.20	6.1	10.10	0.100	4.7	30.50	7.20	+1000	2.65

DATE	TIME LOC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	TEMP READ	OXYG CORR	CONDUCTIV RANGE	READ	CALC SAL	PH	S.R.P. RANGE	READ
4 30	1252	HT-31	5	10.00	0-20	6.3	10.42	0-100	4.7	30.50	7.25	+1000	2.2
4 30	1252	HT-31	8	9.50	0-20	6.35	10.50	0-100	4.67	30.30	7.20	+1000	2.65
4 30	1258	HT-30	SURF	10.25	0-20	6.4	10.60	0-100	4.7	30.50	7.25	+1000	2.7
4 30	1258	HT-30	4.5	10.25	0-20	6.55	10.84	0-100	4.7	30.50	7.25	+1000	2.72
4 30	1313	HT-28	SURF	10.50	0-20	6.55	10.84	0-100	4.7	30.50	7.15	+1000	2.71
4 30	1313	HT-28	2	10.50	0-20	6.75	11.16	0-100	4.71	30.60	7.25	+1000	2.71
4 30	1318	HT-27	SURF	10.40	0-20	6.15	10.18	0-100	4.7	30.50	7.29	+1000	2.7
4 30	1318	HT-27	4	9.75	0-20	6.4	10.56	0-100	4.75	30.80	7.25	+1000	2.75
4 30	1323	P = 1	SURF	10.40	0-20	6.2	10.26	0-100	4.7	30.30	7.35	+1000	2.69
4 30	1323	P = 1	5	10.20	0-20	6.25	10.34	0-100	4.72	30.40	7.31	+1000	2.7
4 30	1323	P = 1	10	9.50	0-20	6.2	10.24	0-100	4.75	30.50	7.30	+1000	2.65
4 30	1335	HT-26	SURF	10.25	0-20	6.3	10.40	0-100	4.75	30.50	7.25	+1000	2.65
4 30	1335	HT-26	5.5	10.25	0-20	6.4	10.56	0-100	4.75	30.80	7.25	+1000	2.65
4 30	1340	HT-25	SURF	10.60	0-20	6.65	11.00	0-100	4.7	30.50	7.32	+1000	2.7
4 30	1340	HT-25	4	10.25	0-20	6.9	11.42	0-100	4.7	30.50	7.30	+1000	2.7
6 8	1215	I = 4	SURF	18.50	0-20	3.5	5.88	0-100	4.55	29.50	6.60	+1000	2.3
6 8	1215	I = 4	1	18.40	0-20	4	6.70	0-100	4.55	29.50	6.60	+1000	2.4
6 8	1215	I = 4	2	17.50	0-20	3.85	6.46	0-100	4.6	29.90	6.60	+1000	2.4
6 8	1215	I = 4	3	17.50	0-20	3.8	6.34	0-100	4.68	30.20	6.60	+1000	2.42
6 8	1215	I = 4	4	17.40	0-20	3.78	6.32	0-100	4.65	30.10	6.60	+1000	2.45
6 8	1215	I = 4	5	17.20	0-20	3.87	6.46	0-100	4.68	30.20	6.60	+1000	2.45
6 8	1215	I = 4	6	17.00	0-20	3.98	6.64	0-100	4.68	30.20	6.60	+1000	2.45
6 8	1215	I = 4	7	17.00	0-20	3.93	6.56	0-100	4.68	30.20	6.60	+1000	2.49
6 8	1215	I = 4	8	17.00	0-20	3.91	6.52	0-100	4.69	30.30	6.65	+1000	2.49
6 8	1215	I = 4	9	17.20	0-20	3.58	5.98	0-100	4.72	30.70	6.65	+1000	2.2
6 8	1302	I = 4	SURF	18.30	0-20	3.85	6.46	0-100	4.55	29.50	6.70	+1000	1.22
6 8	1302	I = 4	1	18.00	0-20	3.72	6.24	0-100	4.6	29.90	6.70	+1000	1.35
6 8	1302	I = 4	2	17.90	0-20	3.85	6.44	0-100	4.65	30.10	6.70	+1000	1.42
6 8	1302	I = 4	3	17.40	0-20	3.82	6.38	0-100	4.7	30.50	6.70	+1000	1.55
6 8	1302	I = 4	4	17.30	0-20	3.82	6.38	0-100	4.7	30.50	6.70	+1000	1.59
6 8	1302	I = 4	5	17.20	0-20	3.78	6.34	0-100	4.62	30.00	6.60	+1000	1.62
6 8	1302	I = 4	6	16.90	0-20	3.9	6.54	0-100	4.65	30.10	6.60	+1000	1.7
6 8	1302	I = 4	7	17.10	0-20	3.72	6.22	0-100	4.68	30.20	6.60	+1000	1.71
6 8	1302	I = 4	8	17.10	0-20	3.3	5.50	0-100	4.75	30.80	6.60	+1000	1.21
6 8	1302	I = 4	8.5	17.10	0-20	3.05	5.24	0-100	4.05	25.60	6.60	+1000	3.65
6 8	1405	I = 4	SURF	19.10	0-20	4.32	7.26	0-100	4.5	29.00	6.80	+1000	1.1
6 8	1405	I = 4	1	19.00	0-20	4.13	6.92	0-100	4.58	29.60	6.70	+1000	1.12
6 8	1405	I = 4	2	18.30	0-20	4.1	6.88	0-100	4.58	29.60	6.70	+1000	1.15
6 8	1405	I = 4	3	17.60	0-20	3.62	6.08	0-100	4.63	30.00	6.70	+1000	1.12
6 8	1405	I = 4	4	17.40	0-20	3.7	6.20	0-100	4.64	30.10	6.70	+1000	1.13
6 8	1405	I = 4	5	17.30	0-20	3.72	6.24	0-100	4.65	30.10	6.60	+1000	1.14
6 8	1405	I = 4	6	17.20	0-20	3.78	6.32	0-100	4.68	30.20	6.60	+1000	1.18
6 8	1405	I = 4	7	17.00	0-20	3.19	5.46	0-100	4.14	26.40	6.60	+1000	1.12
6 8	1405	I = 4	8	16.80	0-20	2.86	4.78	0-100	4.7	30.50	6.60	+1000	0.52
6 8	1500	I = 4	SURF	19.30	0-20	4.45	7.48	0-100	4.48	28.90	6.70	+1000	0.78
6 8	1500	I = 4	1	19.10	0-20	4.45	7.48	0-100	4.51	29.10	6.70	+1000	0.9
6 8	1500	I = 4	2	19.00	0-20	4.61	7.74	0-100	4.58	29.70	6.80	+1000	0.95
6 8	1500	I = 4	3	17.60	0-20	4.3	7.22	0-100	4.61	30.00	6.70	+1000	1.05
6 8	1500	I = 4	4	17.40	0-20	4.2	7.04	0-100	4.61	30.00	6.60	+1000	1.08
6 8	1500	I = 4	5	17.20	0-20	4.05	6.80	0-100	4.62	30.00	6.60	+1000	1.1

DATE	TIME LOC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG READ	OXYG CORR	CONDUCTIV RANGE READ	CALC SAL	PH	S.R.P. RANGE READ
6	8	1500	I - 4	6	17.20	0-20 3.92	6.56 0-100 4.65	30.10	6.60	+1000 1.12
6	8	1500	I - 4	7	17.20	0-20 3.75	6.30 0-100 4.64	30.10	6.60	+1000 1.07
6	8	1500	I - 4	8	17.00	0-20 2.45	4.12 0-100 4.63	30.00	6.60	+1000 0.32
6	8	1610	I - 4	SURF	19.00	0-20 4.68	7.86 0-100 4.59	30.00	6.50	+1000 1.02
6	8	1610	I - 4	1	18.70	0-20 4.62	7.76 0-100 4.61	30.00	6.60	+1000 1.1
6	8	1610	I - 4	2	18.90	0-20 4.68	7.86 0-100 4.6	29.90	6.60	+1000 1.13
6	8	1610	I - 4	3	17.70	0-20 4.48	7.48 0-100 4.68	30.40	6.60	+1000 1.2
6	8	1610	I - 4	4	17.40	0-20 4.29	7.20 0-100 4.64	30.30	6.60	+1000 1.22
6	8	1610	I - 4	5	17.30	0-20 4.08	6.84 0-100 4.62	30.00	6.60	+1000 1.27
6	8	1610	I - 4	6	17.10	0-20 3.95	6.60 0-100 4.67	30.40	6.60	+1000 1.29
6	8	1610	I - 4	7	17.00	0-20 4.01	6.70 0-100 4.68	30.40	6.60	+1000 1.31
6	8	1610	I - 4	8	17.00	0-20 3.99	6.66 0-100 4.68	30.40	6.50	+1000 1.32
6	8	1610	I - 4	9	17.20	0-20 3.92	6.54 0-100 4.71	30.60	6.60	+1000 1.32
6	8	1610	I - 4	9.5	17.00	0-20 3.6	6.02 0-100 4.68	30.40	6.50	+1000 1.05
6	8	1710	I - 4	SURF	18.80	0-20 5.1	8.56 0-100 4.62	30.00	6.50	+1000 1.42
6	8	1710	I - 4	1	18.70	0-20 4.98	8.36 0-100 4.62	30.00	6.60	+1000 1.43
6	8	1710	I - 4	2	18.20	0-20 4.94	8.28 0-100 4.62	30.00	6.60	+1000 1.44
6	8	1710	I - 4	3	18.20	0-20 4.91	8.24 0-100 4.62	30.00	6.60	+1000 1.45
6	8	1710	I - 4	4	18.30	0-20 4.82	8.08 0-100 4.62	30.00	6.60	+1000 1.46
6	8	1710	I - 4	5	18.00	0-20 4.76	7.98 0-100 4.67	30.40	6.60	+1000 1.48
6	8	1710	I - 4	6	17.90	0-20 4.41	7.38 0-100 4.67	30.40	6.60	+1000 1.49
6	8	1710	I - 4	7	17.50	0-20 4.28	7.16 0-100 4.65	30.10	6.60	+1000 1.50
6	8	1710	I - 4	8	17.10	0-20 4.05	6.78 0-100 4.67	30.40	6.50	+1000 1.51
6	8	1710	I - 4	9	17.20	0-20 3.97	6.64 0-100 4.67	30.40	6.60	+1000 1.50
6	8	1710	I - 4	9.5	17.30	0-20 3.46	5.80 0-100 4.64	30.30	6.50	+1000 0.47
6	8	1800	I - 4	SURF	18.00	0-20 4.92	8.24 0-100 4.65	30.10	6.60	+1000 1.53
6	8	1800	I - 4	1	18.20	0-20 4.77	7.98 0-100 4.67	30.40	6.60	+1000 1.53
6	8	1800	I - 4	2	18.40	0-20 4.72	7.90 0-100 4.66	30.30	6.60	+1000 1.55
6	8	1800	I - 4	3	18.30	0-20 4.65	7.66 0-100 4.70	30.50	6.60	+1000 1.57
6	8	1800	I - 4	4	18.20	0-20 4.65	7.76 0-100 4.68	30.40	6.60	+1000 1.56
6	8	1800	I - 4	5	18.20	0-20 4.48	7.48 0-100 4.71	30.60	6.60	+1000 1.57
6	8	1805	I - 4	6	17.90	0-20 4.49	7.50 0-100 4.7	30.50	6.60	+1000 1.58
6	8	1805	I - 4	7	17.40	0-20 4.28	7.14 0-100 4.68	30.40	6.60	+1000 1.59
6	8	1805	I - 4	8	17.40	0-20 4.02	6.72 0-100 4.72	30.70	6.60	+1000 1.6
6	8	1805	I - 4	9	17.20	0-20 3.8	6.36 0-100 4.67	30.40	6.60	+1000 1.42
6	8	1805	I - 4	9.5	17.40	0-20 3.62	6.04 0-100 4.72	30.70	6.60	+1000 0.73
6	8	1900	I - 4	SURF	18.30	0-20 4.86	8.14 0-100 4.65	30.10	6.60	+1000 1.52
6	8	1900	I - 4	1	18.10	0-20 4.69	7.84 0-100 4.68	30.40	6.60	+1000 1.55
6	8	1900	I - 4	2	18.00	0-20 4.71	7.88 0-100 4.65	30.10	6.60	+1000 1.56
6	8	1900	I - 4	3	18.30	0-20 4.58	7.64 0-100 4.68	30.40	6.70	+1000 1.57
6	8	1900	I - 4	4	18.30	0-20 4.61	7.74 0-100 4.64	30.60	6.60	+1000 1.58
6	8	1900	I - 4	5	17.80	0-20 4.37	7.30 0-100 4.68	30.40	6.60	+1000 1.58
6	8	1900	I - 4	6	17.50	0-20 3.97	6.62 0-100 4.68	30.40	6.60	+1000 1.59
6	8	1900	I - 4	7	17.40	0-20 3.73	6.22 0-100 4.68	30.40	6.60	+1000 1.61
6	8	1900	I - 4	8	17.20	0-20 3.4	5.70 0-100 4.67	30.40	6.50	+1000 1.6
6	8	1900	I - 4	9	17.20	0-20 3.28	5.48 0-100 4.71	30.60	6.50	+1000 1.34
6	8	1900	I - 4	9.5	17.30	0-20 3.28	5.50 0-100 4.65	30.10	6.60	+1000 2.63
6	8	2000	I - 4	SURF	18.20	0-20 4.4	7.38 0-100 4.6	29.90	6.50	+1000 1.12
6	8	2000	I - 4	1	18.20	0-20 4.39	7.36 0-100 4.62	30.00	6.60	+1000 1.14
6	8	2000	I - 4	2	18.10	0-20 4.37	7.34 0-100 4.63	29.90	6.60	+1000 1.12

DATE	TIME LBC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG READ	OXYG CORR	CONDUCTIV RANGE READ	CALC SAL	PH	O.R.P. RANGE READ
6	R	2000	H 4	3	18.30	0-20 4.37	7.34 0-100 4.64	30.00	6.60	+1000 1.12
6	R	2000	H 4	4	18.20	0-20 4.28	7.16 0-100 4.66	30.20	6.60	+1000 1.13
6	R	2000	H 4	5	18.10	0-20 4.31	7.20 0-100 4.69	30.40	6.60	+1000 1.14
6	R	2000	H 4	6	17.80	0-20 3.96	6.62 0-100 4.69	30.40	6.60	+1000 1.14
6	R	2000	H 4	7	17.70	0-20 3.75	6.26 0-100 4.68	30.40	6.60	+1000 1.15
6	R	2000	H 4	8	17.40	0-20 3.54	5.92 0-100 4.69	30.40	6.60	+1000 1.16
6	R	2000	H 4	9	17.20	0-20 3.32	5.56 0-100 4.66	30.20	6.60	+1000 0.92
6	R	2000	H 4	9.2	17.10	0-20 3.25	5.42 0-100 4.68	30.40	6.50	+1000 0.72
6	R	2100	H 4	SURF	18.60	0-20 4.39	7.36 0-100 4.62	30.00	6.50	+1000 1.36
6	R	2100	H 4	1	18.60	0-20 4.36	7.32 0-100 4.58	29.80	6.50	+1000 1.36
6	R	2100	H 4	2	18.60	0-20 4.3	7.22 0-100 4.59	29.80	6.60	+1000 1.36
6	R	2100	H 4	3	18.50	0-20 4.3	7.22 0-100 4.61	29.90	6.60	+1000 1.37
6	R	2100	H 4	4	18.40	0-20 4.27	7.16 0-100 4.62	30.00	6.60	+1000 1.37
6	R	2100	H 4	5	17.70	0-20 4.06	6.82 0-100 4.62	30.00	6.50	+1000 1.37
6	R	2100	H 4	6	17.70	0-20 3.75	6.28 0-100 4.65	30.10	6.60	+1000 1.36
6	R	2100	H 4	7	17.60	0-20 3.58	5.98 0-100 4.68	30.40	6.60	+1000 1.37
6	R	2100	H 4	8	17.50	0-20 3.48	5.80 0-100 4.68	30.40	6.60	+1000 1.24
6	R	2100	H 4	8.5	17.40	0-20 3.41	5.70 0-100 4.68	30.40	6.60	+1000 0.77
6	R	2200	H 4	SURF	19.50	0-20 4.54	7.62 0-100 4.63	30.00	6.70	+1000 1.35
6	R	2200	H 4	1	19.40	0-20 4.5	7.56 0-100 4.63	30.00	6.70	+1000 1.37
6	R	2200	H 4	2	19.20	0-20 4.43	7.42 0-100 4.65	30.10	6.70	+1000 1.38
6	R	2200	H 4	3	19.00	0-20 4.27	7.16 0-100 4.66	30.10	6.70	+1000 1.4
6	R	2200	H 4	4	18.60	0-20 4.21	7.04 0-100 4.67	30.20	6.70	+1000 1.4
6	R	2200	H 4	5	18.40	0-20 4.22	7.06 0-100 4.67	30.20	6.70	+1000 1.41
6	R	2200	H 4	6	17.90	0-20 3.85	6.42 0-100 4.68	30.30	6.70	+1000 1.42
6	R	2200	H 4	7	17.70	0-20 3.63	6.08 0-100 4.67	30.20	6.60	+1000 1.38
6	R	2200	H 4	8	17.60	0-20 3.38	5.66 0-100 4.67	30.20	6.60	+1000 0.75
6	R	2300	H 4	SURF	19.20	0-20 4.05	6.80 0-100 4.56	29.50	6.70	+1000 1.39
6	R	2300	H 4	1	19.20	0-20 4.21	7.08 0-100 4.57	29.60	6.70	+1000 1.43
6	R	2300	H 4	2	19.20	0-20 4.4	7.38 0-100 4.59	29.80	6.70	+1000 1.42
6	R	2300	H 4	3	18.40	0-20 3.86	6.48 0-100 4.62	30.00	6.70	+1000 1.46
6	R	2300	H 4	4	18.30	0-20 3.9	6.54 0-100 4.65	30.10	6.70	+1000 1.46
6	R	2300	H 4	5	18.10	0-20 3.75	6.30 0-100 4.64	30.10	6.70	+1000 1.47
6	R	2300	H 4	6	17.70	0-20 3.47	5.82 0-100 4.64	30.10	6.60	+1000 1.43
6	R	2300	H 4	7	17.60	0-20 3.3	5.52 0-100 4.65	30.10	6.60	+1000 1.38
6	R	2300	H 4	8	17.50	0-20 2.79	4.68 0-100 4.65	30.10	6.60	+1000 0.4
6	R	0000	H 4	SURF	18.80	0-20 4.01	6.74 0-100 4.52	29.10	6.60	+1000 1.38
6	R	0000	H 4	1	18.70	0-20 4.08	6.86 0-100 4.56	29.50	6.60	+1000 1.42
6	R	0000	H 4	2	17.90	0-20 3.93	6.60 0-100 4.58	29.70	6.60	+1000 1.43
6	R	0000	H 4	3	17.60	0-20 3.98	6.68 0-100 4.62	30.00	6.60	+1000 1.47
6	R	0000	H 4	4	17.80	0-20 4.25	7.12 0-100 4.62	30.00	6.70	+1000 1.45
6	R	0000	H 4	5	17.80	0-20 3.93	6.60 0-100 4.61	29.90	6.70	+1000 1.48
6	R	0000	H 4	6	17.60	0-20 3.69	6.20 0-100 4.62	30.00	6.70	+1000 1.48
6	R	0000	H 4	7	17.40	0-20 3.5	5.88 0-100 4.62	30.00	6.60	+1000 1.49
6	R	0000	H 4	8	17.20	0-20 2.67	4.48 0-100 4.63	30.00	6.60	+1000 0.65
6	R	0105	H 5	SURF	18.40	0-20 4.71	7.90 0-100 4.63	30.00	6.70	+1000 1.48
6	R	0105	H 5	1	18.40	0-20 4.68	7.82 0-100 4.64	30.10	6.70	+1000 1.48
6	R	0105	H 5	2	18.50	0-20 4.68	7.84 0-100 4.65	30.10	6.80	+1000 1.48
6	R	0105	H 5	3	18.40	0-20 4.55	7.62 0-100 4.67	30.40	6.70	+1000 1.5
6	R	0105	H 5	4	18.20	0-20 4.48	7.48 0-100 4.69	30.60	6.70	+1000 1.5

DATE	TIME LBC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	BYG CORR	CONDUCTIV RANGE	CALC SAL	PH	B.R.P. RANGE	READ
6	9	0105	I I . 5	5	18.20	0-20 4.4	7.36	0-100 4.65	30.10	6.70	+1000 1.5
6	9	0105	I I . 5	6	18.00	0-20 4.3	7.18	0-100 4.68	30.20	6.70	+1000 1.5
6	9	0105	I I . 5	7	18.00	0-20 4.11	6.86	0-100 4.69	30.40	6.70	+1000 1.51
6	9	0105	I I . 5	8	17.80	0-20 3.92	7.54	0-100 4.69	30.40	6.70	+1000 1.51
6	9	0105	I I . 5	8.5	17.80	0-20 3.82	6.38	0-100 4.68	30.20	6.70	+1000 1.51
6	9	0200	I I . 5	SURF	18.40	0-20 4.62	7.72	0-100 4.69	30.40	6.80	+1000 1.52
6	9	0200	I I . 5	1	18.40	0-20 4.6	7.68	0-100 4.7	30.50	6.80	+1000 1.52
6	9	0200	I I . 5	2	18.40	0-20 4.58	7.64	0-100 4.7	30.50	6.80	+1000 1.54
6	9	0200	I I . 5	3	18.10	0-20 4.28	7.14	0-100 4.7	30.50	6.80	+1000 1.55
6	9	0200	I I . 5	4	18.10	0-20 4.3	7.18	0-100 4.69	30.40	6.80	+1000 1.56
6	9	0200	I I . 5	5	18.10	0-20 4.39	7.32	0-100 4.68	30.30	6.80	+1000 1.54
6	9	0200	I I . 5	6	18.00	0-20 4.41	7.36	0-100 4.7	30.50	6.80	+1000 1.54
6	9	0200	I I . 5	7	17.90	0-20 4.48	7.48	0-100 4.72	30.70	6.80	+1000 1.55
6	9	0200	I I . 5	8	19.90	0-20 4.49	7.50	0-100 4.72	30.70	6.80	+1000 1.55
6	9	0200	I I . 5	8.8	17.90	0-20 4.49	7.50	0-100 4.73	30.80	6.80	+1000 1.54
6	9	0300	I I . 5	SURF	17.80	0-20 4.52	7.58	0-100 4.63	30.10	6.80	+1000 1.55
6	9	0300	I I . 5	1	17.80	0-20 4.45	7.46	0-100 4.66	30.20	6.80	+1000 1.55
6	9	0300	I I . 5	2	17.80	0-20 4.45	7.46	0-100 4.67	30.30	6.80	+1000 1.55
6	9	0300	I I . 5	3	17.90	0-20 4.45	7.44	0-100 4.68	30.40	6.80	+1000 1.54
6	9	0300	I I . 5	4	17.90	0-20 4.45	7.44	0-100 4.71	30.60	6.80	+1000 1.57
6	9	0300	I I . 5	5	18.00	0-20 4.43	7.40	0-100 4.73	30.80	6.80	+1000 1.56
6	9	0300	I I . 5	6	17.90	0-20 4.44	7.42	0-100 4.72	30.70	6.80	+1000 1.56
6	9	0300	I I . 5	7	17.90	0-20 4.43	7.40	0-100 4.72	30.70	6.80	+1000 1.56
6	9	0300	I I . 5	8	17.90	0-20 4.44	7.42	0-100 4.72	30.70	6.80	+1000 1.56
6	9	0300	I I . 5	9	17.90	0-20 4.43	7.40	0-100 4.7	30.50	6.80	+1000 1.54
6	9	0300	I I . 5	9.5	17.90	0-20 4.43	7.40	0-100 4.72	30.70	6.80	+1000 1.54
6	9	0400	I I . 5	SURF	17.80	0-20 4.49	7.54	0-100 4.62	29.90	6.80	+1000 1.57
6	9	0400	I I . 5	1	17.80	0-20 4.42	7.42	0-100 4.64	30.00	6.70	+1000 1.59
6	9	0400	I I . 5	2	17.80	0-20 4.39	7.36	0-100 4.65	30.10	6.70	+1000 1.6
6	9	0400	I I . 5	3	17.80	0-20 4.39	7.32	0-100 4.68	30.40	6.80	+1000 1.6
6	9	0400	I I . 5	4	17.80	0-20 4.38	7.32	0-100 4.68	30.40	6.80	+1000 1.6
6	9	0400	I I . 5	5	17.80	0-20 4.34	7.24	0-100 4.69	30.40	6.80	+1000 1.6
6	9	0400	I I . 5	6	17.80	0-20 4.37	7.30	0-100 4.69	30.40	6.80	+1000 1.6
6	9	0400	I I . 5	7	17.80	0-20 4.37	7.30	0-100 4.69	30.40	6.80	+1000 1.6
6	9	0400	I I . 5	8	17.70	0-20 4.33	7.24	0-100 4.7	30.50	6.80	+1000 1.6
6	9	0400	I I . 5	9	17.70	0-20 4.36	7.28	0-100 4.7	30.50	6.80	+1000 1.6
6	9	0400	I I . 5	9.8	17.70	0-20 4.33	7.24	0-100 4.69	30.40	6.80	+1000 1.6
6	9	0500	I I . 5	SURF	18.20	0-20 4.48	7.44	0-100 4.69	30.40	6.80	+1000 1.65
6	9	0500	I I . 5	1	17.90	0-20 4.34	7.24	0-100 4.69	30.40	6.80	+1000 1.64
6	9	0500	I I . 5	2	17.90	0-20 4.34	7.24	0-100 4.7	30.50	6.80	+1000 1.64
6	9	0500	I I . 5	3	17.80	0-20 4.32	7.22	0-100 4.7	30.50	6.80	+1000 1.64
6	9	0500	I I . 5	4	17.80	0-20 4.34	7.24	0-100 4.7	30.50	6.80	+1000 1.65
6	9	0500	I I . 5	5	17.80	0-20 4.34	7.24	0-100 4.71	30.60	6.80	+1000 1.64
6	9	0500	I I . 5	6	17.70	0-20 4.33	7.24	0-100 4.7	30.50	6.80	+1000 1.65
6	9	0500	I I . 5	7	17.60	0-20 4.18	7.00	0-100 4.65	30.10	6.80	+1000 1.65
6	9	0500	I I . 5	8	17.60	0-20 4.25	7.10	0-100 4.7	30.50	6.80	+1000 1.65
6	9	0500	I I . 5	9	17.70	0-20 4.25	7.10	0-100 4.7	30.50	6.80	+1000 1.65
6	9	0500	I I . 5	9.8	17.70	0-20 4.3	7.18	0-100 4.7	30.50	6.80	+1000 1.65
6	9	0600	I I . 5	SURF	17.90	0-20 4.28	7.14	0-100 4.68	30.30	6.80	+1000 1.68
6	9	0600	I I . 5	1	18.20	0-20 4.28	7.14	0-100 4.68	30.30	6.80	+1000 1.65

DATE	TIME LBC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	DOXYG READ	DOXYG CORR	CONDUCTIV RANGE	CALC READ	PH	S.R.P. RANGE	S.R.P. READ
6	9	0600	H 5	2	18.20	0.20	4.27	7.12	0-100	4.68	30.30	6.80 +1000 1.65
6	9	0600	H 5	3	18.00	0.20	4.27	7.12	0-100	4.7	30.50	6.80 +1000 1.65
6	9	0600	H 5	4	18.00	0.20	4.25	7.10	0-100	4.68	30.30	6.80 +1000 1.65
6	9	0600	H 5	5	18.00	0.20	4.25	7.10	0-100	4.68	30.30	6.80 +1000 1.65
6	9	0600	H 5	6	18.00	0.20	4.25	7.10	0-100	4.68	30.30	6.80 +1000 1.65
6	9	0600	H 5	7	17.80	0.20	4.25	7.10	0-100	4.68	30.30	6.80 +1000 1.65
6	9	0600	H 5	8	17.80	0.20	4.23	7.06	0-100	4.68	30.30	6.80 +1000 1.65
6	9	0600	H 5	9	17.70	0.20	4.25	7.10	0-100	4.68	30.30	6.80 +1000 1.65
6	9	0600	H 5	10	17.60	0.20	4.25	7.10	0-100	4.72	30.70	6.85 +1000 1.65
6	9	0700	H SURF		18.10	0.20	4.4	7.34	0-100	4.68	30.30	6.85 +1000 1.65
6	9	0700	H 5	1	18.10	0.20	4.3	7.18	0-100	4.68	30.30	6.82 +1000 1.65
6	9	0700	H 5	2	18.10	0.20	4.25	7.10	0-100	4.68	30.30	6.82 +1000 1.65
6	9	0700	H 5	3	18.10	0.20	4.21	7.04	0-100	4.68	30.30	6.82 +1000 1.65
6	9	0700	H 5	4	18.00	0.20	4.18	6.98	0-100	4.68	30.30	6.82 +1000 1.65
6	9	0700	H 5	5	17.90	0.20	4.17	6.96	0-100	4.68	30.30	6.82 +1000 1.65
6	9	0700	H 5	6	17.90	0.20	4.16	6.94	0-100	4.68	30.30	6.80 +1000 1.68
6	9	0700	H 5	7	18.00	0.20	4.2	7.02	0-100	4.68	30.30	6.82 +1000 1.7
6	9	0700	H 5	8	18.00	0.20	4.22	7.04	0-100	4.71	30.60	6.82 +1000 1.72
6	9	0700	H 5	9	17.80	0.20	4.22	7.04	0-100	4.72	30.70	6.82 +1000 1.68
6	9	0700	H 5	9.5	17.80	0.20	4.22	7.04	0-100	4.72	30.70	6.82 +1000 1.7
6	9	0800	H SURF		18.30	0.20	3.91	6.52	0-100	4.68	30.30	6.81 +1000 1.7
6	9	0800	H 5	1	18.10	0.20	3.92	6.56	0-100	4.67	30.30	6.81 +1000 1.71
6	9	0800	H 5	2	18.00	0.20	3.8	6.34	0-100	4.68	30.30	6.81 +1000 1.71
6	9	0800	H 5	3	18.00	0.20	3.78	6.32	0-100	4.68	30.30	6.81 +1000 1.72
6	9	0800	H 5	4	17.90	0.20	3.91	7.52	0-100	4.68	30.30	6.81 +1000 1.71
6	9	0800	H 5	5	17.90	0.20	3.8	6.34	0-100	4.68	30.30	6.81 +1000 1.72
6	9	0800	H 5	6	18.00	0.20	3.8	6.34	0-100	4.69	30.40	6.81 +1000 1.72
6	9	0800	H 5	7	17.90	0.20	3.79	6.32	0-100	4.69	30.40	6.82 +1000 1.73
6	9	0800	H 5	8	17.90	0.20	3.85	6.42	0-100	4.68	30.30	6.82 +1000 1.72
6	9	0800	H 5	9	17.90	0.20	3.79	6.32	0-100	4.68	30.30	6.85 +1000 1.73
6	9	0800	H 5	9.5	17.90	0.20	3.71	6.20	0-100	4.69	30.40	6.85 +1000 1.73
6	9	0900	H SURF		18.30	0.20	4.33	7.26	0-100	4.64	30.00	6.80 +1000 1.71
6	9	0900	H 5	1	18.40	0.20	4.33	7.26	0-100	4.66	30.10	6.80 +1000 1.72
6	9	0900	H 5	2	18.30	0.20	4.29	7.08	0-100	4.67	30.30	6.80 +1000 1.72
6	9	0900	H 5	3	18.10	0.20	4.19	7.02	0-100	4.66	30.10	6.80 +1000 1.73
6	9	0900	H 5	4	18.00	0.20	4.18	6.98	0-100	4.68	30.30	6.80 +1000 1.73
6	9	0900	H 5	5	18.00	0.20	4.13	6.90	0-100	4.69	30.40	6.80 +1000 1.73
6	9	0900	H 5	6	17.90	0.20	4.12	6.88	0-100	4.69	30.40	6.80 +1000 1.73
6	9	0900	H 5	7	17.80	0.20	4.11	6.86	0-100	4.69	30.40	6.80 +1000 1.73
6	9	0900	H 5	8	17.80	0.20	4.08	6.82	0-100	4.7	30.50	6.80 +1000 1.73
6	9	0900	H 5	9	17.80	0.20	4.03	6.72	0-100	4.71	30.50	6.80 +1000 1.73
6	9	1000	H SURF		18.60	0.20	4.6	7.70	0-100	4.65	30.10	6.75 +1000 1.82
6	9	1000	H 5	1	18.80	0.20	4.56	7.56	0-100	4.65	30.10	6.75 +1000 1.72
6	9	1000	H 5	2	18.30	0.20	4.32	7.22	0-100	4.68	30.30	6.75 +1000 1.72
6	9	1000	H 5	3	18.30	0.20	4.32	7.22	0-100	4.7	30.50	6.75 +1000 1.72
6	9	1000	H 5	4	18.00	0.20	4.22	7.04	0-100	4.71	30.50	6.73 +1000 1.72
6	9	1000	H 5	5	18.00	0.20	4.13	6.90	0-100	4.71	30.50	6.72 +1000 1.72
6	9	1000	H 5	6	18.00	0.20	4.1	6.84	0-100	4.72	30.70	6.73 +1000 1.75
6	9	1000	H 5	7	18.00	0.20	4.02	6.72	0-100	4.72	30.70	6.73 +1000 1.75
6	9	1000	H 5	8	17.80	0.20	4	6.68	0-100	4.72	30.70	6.75 +1000 1.75

DATE	TIME LRC	STATION NUMBER	DEPT READ	TEMP C	DISSOLVED RANG	DOXYG READ	CONDUCTIV RANGE	CALC SAL	PH	B.R.P. RANGE	READ
6	9	1000	I - 5	9	17.80	0-20 3.98	6.64 0-100 4.72	30.70	6.76	+1000	1.75
6	9	1100	I - 5	SURF	19.30	0-20 4.9	8.20 0-100 4.65	30.10	6.75	+1000	1.7
6	9	1100	I - 5	1	19.20	0-20 4.75	7.96 0-100 4.65	30.10	6.75	+1000	1.7
6	9	1100	I - 5	2	18.80	0-20 4.55	7.62 0-100 4.67	30.30	6.75	+1000	1.7
6	9	1100	I - 5	3	18.60	0-20 4.48	7.48 0-100 4.68	30.30	6.75	+1000	1.72
6	9	1100	I - 5	4	18.40	0-20 4.38	7.32 0-100 4.72	30.70	6.73	+1000	1.72
6	9	1100	I - 5	5	18.20	0-20 4.2	7.02 0-100 4.71	30.50	6.72	+1000	1.75
6	9	1100	I - 5	6	18.10	0-20 4.12	6.88 0-100 4.7	30.50	6.72	+1000	1.75
6	9	1100	I - 5	7	18.00	0-20 4.08	6.76 0-100 4.72	30.70	6.72	+1000	1.75
6	9	1100	I - 5	8	17.80	0-20 4.02	6.72 0-100 4.72	30.70	6.72	+1000	1.75
6	9	1100	I - 5	9	17.80	0-20 3.98	6.64 0-100 4.72	30.70	6.72	+1000	1.75
6	9	1200	I - 5	SURF	19.40	0-20 5.02	8.44 0-100 4.55	29.50	6.74	+1000	1.7
6	9	1200	I - 5	1	19.00	0-20 4.85	8.14 0-100 4.62	29.90	6.75	+1000	1.7
6	9	1200	I - 5	2	18.70	0-20 4.55	7.62 0-100 4.65	30.10	6.73	+1000	1.72
6	9	1200	I - 5	3	18.40	0-20 4.47	7.46 0-100 4.68	30.30	6.72	+1000	1.75
6	9	1200	I - 5	4	18.20	0-20 4.15	6.92 0-100 4.7	30.50	6.72	+1000	1.75
6	9	1200	I - 5	5	18.00	0-20 4.07	6.80 0-100 4.71	30.50	6.71	+1000	1.76
6	9	1200	I - 5	6	18.00	0-20 4.03	6.72 0-100 4.72	30.70	6.72	+1000	1.77
6	9	1200	I - 5	7	17.80	0-20 3.98	6.64 0-100 4.72	30.70	6.72	+1000	1.78
6	9	1200	I - 5	8	17.80	0-20 3.88	6.48 0-100 4.72	30.70	6.72	+1000	1.77
6	9	1200	I - 5	9	17.70	0-20 3.88	6.46 0-100 4.75	31.00	6.72	+1000	1.78
6	9	1300	I - 5	SURF	19.40	0-20 4.36	7.28 0-100 4.68	30.30	6.86	+1000	1.75
6	9	1300	I - 5	1	18.90	0-20 4.38	7.34 0-100 4.66	30.20	6.72	+1000	1.75
6	9	1300	I - 5	2	18.60	0-20 4.02	6.72 0-100 4.7	30.50	6.70	+1000	1.78
6	9	1300	I - 5	3	18.50	0-20 4.22	7.04 0-100 4.7	30.50	6.72	+1000	1.8
6	9	1300	I - 5	4	18.30	0-20 4.22	7.04 0-100 4.71	30.50	6.72	+1000	1.82
6	9	1300	I - 5	5	18.30	0-20 3.85	6.42 0-100 4.72	30.70	6.72	+1000	1.8
6	9	1300	I - 5	6	18.10	0-20 3.78	6.32 0-100 4.72	30.70	6.72	+1000	1.8
6	9	1300	I - 5	7	18.10	0-20 3.75	6.26 0-100 4.72	30.70	6.72	+1000	1.82
6	9	1300	I - 5	8	18.00	0-20 3.68	6.14 0-100 4.72	30.70	6.72	+1000	1.82
6	9	1300	I - 5	9	17.80	0-20 3.5	5.82 0-100 4.73	30.80	6.72	+1000	1.83
7	6	1145	P - 19	4.5	20.50	0-20 3.3	5.52 0-100 4.7	30.60	7.50	+1000	1.11
7	6	1305	P - 17	5	20.25	0-20 2.95	4.93 0-100 4.75	30.90	7.35	+1000	1.8
7	6	1400	P - 3	9.5	19.50	0-20 2.4	4.00 0-100 4.75	30.90	7.40	+1000	1.65
7	6	1450	I - 5	10.2	22.75	0-20 4	6.68 0-100 4.75	30.90	7.60	+1000	1.79

Section II - Suspended Matter

Water samples used for the determination of suspended matter were collected from the surface and subsurface at most sites where water quality parameters were measured (Figure 3; Table II). A clean, polyethylene bucket was used to collect surface samples and 10-l Niskin bottles for subsurface samples. One-liter subsamples were stored in clean polyethylene bottles, and filtered, as soon as possible, through weighed pairs of 0.45 micron millipore filters. The total weight of the suspensates and the weight remaining after combustion at 550°C to remove non-skeletal organic matter were then obtained. The method used for suspended matter determinations has been described by Manheim and others (1970) and Summerhayes and others (1976).

Suspended matter data in Table III is presented in the following manner;

Date.

Local time.

Station Number.

Sample depth in meters.

Water depth in meters.

Total amount of material deposited on the filter.

Volume of water filtered.

Total amount of suspended matter per unit volume in mg/L.

The amount of organic material present [i.e. total (mg/L) minus inorganic (mg/L) in mg/L].

Percent organic.

The amount of inorganic material present (i.e. non-combustible material) in mg/L.

The number of the filter used for the analysis.

All data is presented in the order in which the samples were taken during the course of the study.

TABLE III

SUSPENDED MATTER DATA

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DATE	TIME	STATION	SAMP	WATER	AMOUNT	VOLUME	TOTAL	ORGANIC	%	INORGAN	FILTER
	LOC	NUMBER	DEPT	DEPTH	SUSPEN	FILTER	MG/L	MG/L	ORGAN	MG/L	NUMBER
9 19	1009	H - 1	SURF	6.4	.88	1020	.863	.398	46.1	.465	3585
9 19	1009	H - 1	3.9	6.4	1.87	1600	1.169	.640	54.8	.529	3586
9 19	1009	H - 1	5.2	6.4	3.85	2000	1.925	.500	25.9	1.425	3587
9 19	1009	H - 1	5.8	6.4	3.92	2000	1.960	.375	19.1	1.585	3588
9 19	1049	H - 2	SURF	6.7	2.02	1060	1.906	.562	29.5	1.344	3589
9 19	1049	H - 2	4.2	6.7	2.85	1900	1.500	.558	37.2	.942	3590
9 19	1049	H - 2	5.4	6.7	5.26	2060	2.550	.667	26.2	1.883	3591
9 19	1049	H - 2	6.0	6.7	2.13	1235	1.720	.817	47.5	.903	3592
9 19	1049	H - 2	6.0	6.7	4.72	835	5.650	1.730	30.7	3.920	3593
9 19	1120	H - 3	SURF	6.0	1.44	1080	1.330	.812	61.1	.518	3594
9 19	1120	H - 3	3.6	6.0	2.95	2000	1.475	.442	29.9	1.033	3595
9 19	1120	H - 3	4.8	6.0	2.21	2090	1.060	.577	54.3	.482	3596
9 19	1120	H - 3	5.5	6.0	2.33	2000	1.170	.592	50.6	.578	3597
9 19	1245	H - 4	SURF	8.5	1.73	1060	1.630	1.114	68.3	.516	3598
9 19	1245	H - 4	6.0	8.5	2.70	2000	1.350	.572	42.4	.778	3599
9 19	1245	H - 4	7.3	8.5	2.96	1725	1.720	.744	43.2	.976	3600
9 19	1245	H - 4	7.9	8.5	11.59	1275	9.090	2.216	24.0	6.874	2838
9 19	1315	H - 5	SURF	9.1	1.16	1060	1.090	.662	61.0	.432	2839
9 19	1315	H - 5	6.7	9.1	.68	1000	.680	.000	.0	.000	2840
9 19	1315	H - 5	6.7	9.1	.44	1085	.405	.011	3.0	.394	2841
9 19	1315	H - 5	7.9	9.1	2.19	2000	1.095	.538	51.0	.557	2842
9 19	1315	H - 5	8.5	9.1	2.62	2100	1.248	.341	27.0	.907	2843
11 24	1145	1	SURF	9.1	2.33	938	2.480	1.440	58.1	1.040	2900
11 24	1145	1	4.6	9.1	2.17	935	2.320	1.260	54.3	1.060	2482
11 24	1145	1	7.6	9.1	1.51	959	1.570	.750	47.8	.820	2484
11 24	1145	1	8.8	9.1	2.38	850	4.670	1.865	39.9	2.800	2485
11 24	1320	2	SURF	10.0	2.28	950	2.400	1.110	46.1	1.290	2492
11 24	1320	2	5.5	10.0	3.10	930	3.100	1.080	32.5	2.020	2493
11 24	1320	2	8.5	10.0	2.09	959	2.180	.943	43.3	1.237	2494
11 24	1320	2	9.7	10.0	1.86	810	2.300	1.190	51.7	1.110	2495
11 24	1400	1	SURF	8.5	1.18	980	1.200	.890	74.7	.310	2486
11 24	1400	1	6.7	8.5	1.38	960	1.440	.631	43.8	.809	2487
11 24	1400	1	7.9	8.5	2.28	850	2.680	1.060	39.6	1.620	2488
11 24	1420	2	SURF	9.1	1.55	942	1.650	1.150	69.5	.500	2496
11 24	1420	2	7.6	9.1	1.45	950	1.530	.699	45.6	.831	2497
11 24	1420	2	8.8	9.1	1.43	840	2.600	.895	37.4	1.705	2498
11 24	1442	1	SURF	8.8	1.11	905	1.230	.609	49.5	.609	2489
11 24	1442	1	7.3	8.8	1.39	920	1.510	.820	54.1	.690	2490
11 24	1442	1	8.5	8.8	2.11	819	2.580	1.100	42.6	1.480	2491
11 24	1454	2	SURF	10.0	1.54	955	1.610	.587	36.5	1.023	2499
11 24	1454	2	8.5	10.0	1.84	925	1.990	.919	46.2	1.071	2500
11 24	1454	2	9.7	10.0	2.12	805	2.630	1.568	59.5	1.066	2866
11 25	1215	H BAR	SURF	12.2	1.81	947	1.911	1.421	74.4	.490	2890
11 25	1230	H BAR	12.2	12.2	3.06	1000	3.060	1.234	40.3	1.826	2891
11 25	1315	I-195	SURF	5.8	2.18	1000	2.180	1.436	65.9	.744	2896
11 25	1330	I-195	5.8	5.8	2.40	1000	2.400	.890	37.0	1.510	2897
11 25	1415	F BDG	SURF	1.5	1.62	1000	1.620	.000	.0	.000	2894
11 25	1430	F BDG	1.5	1.5	7.28	1000	7.280	2.330	32.0	4.950	2895
11 25	1500	H BAR	SURF	11.5	2.00	1000	2.000	.860	43.0	1.140	2892
11 25	1520	H BAR	11.5	11.5	1.78	1000	1.780	1.780	.0	.000	2893

DATE	TIME	STATION	SAMP	WATER	AMOUNT	VOLUME	TOTAL	ORGANIC	%	INORGAN	FILTER
	L0C	NUMBER	DEPT	DEPTH	SUSPEN	FILTER	MG/L	MG/L	ORGAN	MG/L	NUMBER
11 25	1555	I-195	SURF	4.2	2.15	833	2.580	1.520	59.0	1.060	2898
11 25	1600	I-195		4.2	1.98	1000	1.980	1.050	53.0	.930	2899
11 26	1105	P - 1	SURF	9.7	1.76	950	1.853	1.238	67.0	.615	2844
11 26	1105	P - 1		5.2	1.75	955	1.832	1.116	61.0	.716	2845
11 26	1105	P - 1		8.2	2.31	935	2.471	1.103	45.0	1.367	2846
11 26	1105	P - 1		9.4	49.48	1000	49.480	12.420	25.0	37.060	2847
11 26	1123	P - 2	SURF	.0	1.43	950	1.510	.869	58.0	.636	2852
11 26	1132	P - 3	SURF	9.7	1.89	955	1.980	1.144	58.0	.836	2853
11 26	1132	P - 3		5.2	1.53	955	1.600	.751	47.0	.843	2854
11 26	1132	P - 3		8.5	1.54	960	1.600	.917	57.0	.687	2855
11 26	1132	P - 3		9.4	6.80	1500	4.530	1.548	24.0	2.985	2856
11 26	1147	P - 4	SURF	.0	2.30	420	5.476	3.895	71.1	1.581	2862
11 26	1151	P - 5	SURF	.0	1.42	865	1.642	1.129	68.7	.513	2863
11 26	1155	P - 6	SURF	.0	1.56	945	1.651	.623	37.6	1.028	2864
11 26	1202	P - 7	SURF	6.4	1.60	950	1.680	.886	52.6	.792	2865
11 26	1202	P - 7		4.8	2.10	970	2.160	1.047	48.5	1.113	2867
11 26	1202	P - 7		6.1	2.95	1380	2.137	.872	40.8	1.265	2868
11 26	1219	P - 8	SURF	.0	2.21	835	2.647	1.691	63.9	.956	2869
11 26	1225	P - 9	SURF	7.3	1.17	940	1.245	.474	38.1	.771	2870
11 26	1225	P - 9		5.7	.99	830	1.193	.074	6.2	1.119	2871
11 26	1225	P - 9		7.0	2.78	1500	1.853	.721	38.9	1.132	2872
11 26	1238	P - 10	SURF	.0	1.44	945	1.524	.756	49.6	.768	2873
11 26	1246	P - 11	SURF	10.0	1.76	950	1.853	1.160	62.6	.693	2874
11 26	1246	P - 11		5.5	2.72	955	2.848	1.698	59.6	1.150	2875
11 26	1246	P - 11		8.5	1.56	965	1.616	.000	.0	.000	2876
11 26	1246	P - 11		9.7	2.21	1500	1.473	.611	41.5	.862	2877
11 26	1303	P - 12	SURF	.0	1.41	1000	1.410	.832	59.0	.578	2878
11 26	1305	P - 13	SURF	.0	1.68	890	1.880	1.309	69.6	.573	2879
11 26	1308	P - 3	SURF	9.7	2.07	840	2.460	1.617	65.0	.843	2857
11 26	1308	P - 3		7.7	.76	580	1.310	.968	73.9	.342	2859
11 26	1308	P - 3		8.2	1.49	930	1.600	.524	32.7	1.078	2860
11 26	1308	P - 3		9.4	2.09	940	2.220	.979	44.1	1.241	2861
11 26	1326	P - 14	SURF	.0	1.18	580	2.030	1.940	95.6	.090	2880
11 26	1330	P - 15	SURF	.0	1.47	950	1.540	.750	48.7	.790	2881
11 26	1335	P - 16	SURF	.0	.98	960	1.020	.750	73.5	.271	2882
11 26	1343	P - 17	SURF	6.4	.84	935	.900	.333	37.1	.565	2883
11 26	1343	P - 17		4.8	2.02	975	2.070	1.120	54.1	.950	2884
11 26	1343	P - 17		6.1	6.61	1000	6.610	1.810	27.4	4.800	2885
11 26	1354	P - 18	SURF	.0	.88	947	.929	.698	75.2	.231	2886
11 26	1400	P - 19	SURF	5.4	1.88	1500	1.253	.742	59.2	.511	2887
11 26	1400	P - 19		3.9	1.02	925	1.103	.593	53.7	.510	2888
11 26	1400	P - 19		5.1	1.81	1500	1.207	.752	62.3	.455	2889
11 26	1433	P - 1	SURF	###	1.67	1500	1.113	.335	30.0	.778	2848
11 26	1433	P - 1		5.4	1.35	920	1.467	.995	68.0	.472	2849
11 26	1433	P - 1		8.5	2.10	950	2.210	1.467	66.0	.743	2850
11 26	1433	P - 1		9.4	3.35	1500	2.230	.958	43.0	1.275	2851
12 29	1305	H BAR	SURF	12.4	1.16	1050	1.105	.615	55.6	.490	4417
12 29	1305	H BAR	SURF	12.4	.83	1030	.806	.509	63.1	.297	4418
12 29	1325	H BAR	12.2	12.4	1.70	990	1.717	.719	41.9	.988	4416
12 29	1325	H BAR	12.2	12.4	.85	1034	.822	.505	61.4	.317	4419

DATE	TIME	STATION	SAMP	WATER	AMOUNT	VOLUME	TOTAL	ORGANIC	%	INORGAN	FILTER
	LBC	NUMBER	DEPT	DEPTH	SUSPEN	FILTER	MG/L	MG/L	ORGAN	MG/L	NUMBER
12 29	1400	I-195	SURF	5.4	.83	1050	.790	.000	.0	.000	4420
12 29	1400	I-195	SURF	5.4	1.65	1060	1.557	.619	39.8	.938	4421
12 29	1405	I-195	4.8	5.4	1.86	945	1.968	.509	25.8	1.459	4422
12 29	1405	I-195	4.8	5.4	1.49	960	1.552	.600	38.7	.952	4423
12 29	1530	H BAR	SURF	12.4	1.30	1058	1.229	.559	45.5	.670	4425
12 29	1530	H BAR	SURF	12.4	1.19	1057	1.126	.384	34.1	.742	4426
12 29	1535	H BAR	12.2	12.4	1.00	930	1.075	.478	44.4	.597	4424
1 5	1425	H - 4	SURF	9.4	1.87	1040	1.798	.687	38.2	1.111	4445
1 5	1425	H - 4	4.8	9.4	.00	1030	.000	.000	.0	.000	4459
1 5	1425	H - 4	7.9	9.4	4.40	935	4.710	1.880	40.0	2.830	4507
1 5	1425	H - 4	9.1	9.4	16.81	940	17.880	1.610	9.0	16.270	4508
1 5	1450	H - 5	SURF	9.7	2.53	1000	2.530	1.226	48.4	1.304	4444
1 5	1450	H - 5	5.2	9.7	2.17	1018	2.132	.550	25.8	1.582	4457
1 5	1450	H - 5	8.2	9.7	3.62	885	4.090	.930	22.7	3.160	4512
1 5	1450	H - 5	9.4	9.7	4.29	9050	4.740	1.170	24.7	3.570	4513
1 5	1540	H - 4	SURF	9.4	3.60	1030	3.590	.181	5.0	3.409	4443
1 5	1540	H - 4	7.6	9.4	1.68	1000	1.680	.692	41.2	.692	4434
1 5	1540	H - 4	9.1	9.4	8.80	1020	8.627	2.399	27.8	6.228	4433
1 5	950	H - 4	SURF	9.4	1.43	1057	1.353	.607	44.8	.746	4409
1 5	950	H - 4	4.8	9.4	1.39	1010	1.376	.706	51.3	.670	4406
1 5	950	H - 4	7.9	9.4	4.80	1000	4.800	1.660	34.5	3.140	4509
1 5	950	H - 4	9.1	9.4	14.48	1030	14.050	2.360	16.8	11.690	4510
1 5	1035	H - 5	SURF	9.7	.91	1060	.858	.139	16.3	.719	4414
1 5	1035	H - 5	5.1	9.7	.20	1015	.197	.000	.0	.000	4404
1 5	1035	H - 5	8.2	9.7	3.50	935	3.740	1.070	28.7	2.670	4514
1 5	1035	H - 5	9.4	9.7	3.76	1000	3.760	1.260	33.5	2.500	4515
1 5	1102	H - 3	SURF	9.4	1.64	1066	1.538	.473	30.7	1.065	4411
1 5	1102	H - 3	4.8	9.4	1.11	1023	1.085	.528	48.6	.557	4407
1 5	1102	H - 3	7.9	9.4	3.71	1010	3.670	1.130	30.7	2.540	4504
1 5	1102	H - 3	9.1	9.4	4.41	960	4.590	1.390	30.4	3.200	4505
1 5	1122	P - 1	SURF	10.0	1.17	1065	1.098	.066	60.0	1.032	4401
1 5	1122	P - 1	5.5	10.0	1.82	1035	1.758	.448	25.4	1.310	4405
1 5	1122	P - 1	8.5	10.0	3.75	1015	3.695	1.139	30.8	2.556	4473
1 5	1122	P - 1	9.7	10.0	5.24	1030	5.087	1.763	34.7	3.324	4474
1 5	1143	P - 3	SURF	10.0	1.05	1060	.991	.387	39.0	.604	4402
1 5	1143	P - 3	5.4	10.0	.81	1010	.802	.529	65.9	.273	4403
1 5	1143	P - 3	8.5	10.0	3.40	965	3.523	1.911	54.2	1.612	4472
1 5	1143	P - 3	9.7	10.0	3.97	955	4.157	1.805	43.4	2.352	4479
1 5	1200	P - 11	SURF	10.0	1.44	1062	1.356	.588	43.3	.768	4408
1 5	1200	P - 11	5.4	10.0	.36	1000	.360	.116	32.2	.244	4410
1 5	1205	P - 11	8.5	10.0	3.33	1010	3.297	.000	.0	.000	4491
1 5	1205	P - 11	9.7	10.0	4.22	1005	4.199	.000	.0	.000	4492
1 5	1227	P - 9	SURF	6.7	.66	1060	.623	.162	26.1	.461	4413
1 5	1227	P - 9	2.1	6.7	1.11	1015	1.094	.156	14.3	.938	4454
1 5	1227	P - 9	5.1	6.7	2.42	1000	2.420	1.036	42.8	1.384	4490
1 5	1227	P - 9	6.4	6.7	3.00	1020	2.941	.902	30.7	2.039	4485
1 5	1325	P - 7	SURF	5.5	2.07	1056	1.940	.610	31.1	1.350	4449
1 5	1325	P - 7	3.9	5.5	5.56	1005	5.532	1.562	28.2	3.970	4489
1 5	1325	P - 7	5.2	5.5	7.06	935	7.551	1.087	14.4	6.463	4483
1 5	1346	P - 17	SURF	5.2	.45	1050	.429	.236	55.1	.193	4415

DATE	TIME	STATION	SAMP	WATER	AMOUNT	VOLUME	TOTAL	ORGANIC	%	INORGAN	FILTER	
	LOC	NUMBER	DEPT	DEPTH	SUSPEN	FILTER	MG/L	MG/L	ORGAN	MG/L	NUMBER	
1	6	1346	P -17	3.6	5.2	2.24	955	2.346	.000	.0	.000	4498
1	6	1346	P -17	4.8	5.2	3.25	1040	3.125	.000	.0	.000	4499
1	6	1410	P -19	SURF	4.8	1.48	1094	1.353	.446	33.0	.907	4412
1	6	1410	P -19	3.3	4.8	3.93	995	3.950	1.500	38.1	2.450	4501
1	6	1410	P -19	4.5	4.8	4.55	990	4.600	1.930	42.0	2.670	4502
1	6	1435	P -15	SURF	7.3	.99	1028	.963	.385	40.0	.573	4455
1	6	1435	P -15	2.7	7.3	1.05	1015	1.024	.455	44.0	.579	4450
1	6	1435	P -15	5.8	7.3	3.34	1030	3.243	.000	.0	.000	4495
1	6	1435	P -15	7.0	7.3	5.38	1005	5.353	.000	.0	.000	4496
1	6	1500	P - 4	SURF	7.6	.75	1024	.732	.349	47.7	.383	4452
1	6	1500	P - 4	3.0	7.6	.33	1011	.326	.166	50.9	.160	4451
1	6	1500	P - 4	6.1	7.6	2.71	1000	2.710	.762	28.1	1.948	4481
1	6	1500	P - 4	7.3	7.6	3.08	995	3.095	.647	20.9	2.448	4482
1	6	1510	SEWRF	SURF	8.8	6.55	505	12.970	8.806	67.9	4.164	4458
1	6	1545	P - 1	SURF	8.8	.65	1009	.644	.436	67.6	.208	4453
1	6	1545	P - 1	4.2	8.8	.86	1022	.841	.618	73.5	.223	4456
1	6	1545	P - 1	7.3	8.8	6.00	1000	6.000	1.148	19.1	4.852	4475
1	6	1545	P - 1	3.5	8.8	7.30	1000	7.300	1.938	26.5	5.362	4476
1	7	1020	P -19	SURF	4.8	1.91	1020	1.870	.753	40.2	1.120	4471
1	7	1020	P -19	3.3	4.8	.98	1040	.942	.607	64.5	.335	4472
1	7	1020	P -19	4.5	4.8	10.84	920	11.750	1.310	11.2	10.470	4503
1	7	1047	P -17	SURF	5.4	1.29	1035	1.250	.802	64.1	.448	4469
1	7	1047	P -17	3.9	5.4	1.09	1000	1.090	.510	46.8	.580	4470
1	7	1047	P -17	5.2	5.4	4.84	910	5.319	.000	.0	.000	4500
1	7	1111	P - 7	SURF	6.1	1.71	1040	1.640	.685	41.6	.959	4461
1	7	1111	P - 7	4.4	6.1	1.96	985	1.990	.597	30.0	1.392	4462
1	7	1111	P - 7	5.8	6.1	4.71	880	5.352	.904	15.9	4.448	4484
1	7	1132	P - 9	SURF	7.6	1.02	1030	.990	.000	.0	.000	4463
1	7	1132	P - 9	3.0	7.6	.85	1015	.837	.382	45.6	.455	4464
1	7	1132	P - 9	7.6	7.6	5.27	995	5.296	1.628	30.7	3.668	4486
1	7	1153	P -11	SURF	9.4	1.29	1035	1.250	.478	38.3	.772	4465
1	7	1153	P -11	4.8	9.4	1.04	1000	1.040	.479	46.1	.561	4466
1	7	1153	P -11	9.1	9.4	4.29	890	4.820	.000	.0	.000	4493
1	7	1213	P - 3	SURF	9.7	2.21	850	2.600	2.497	96.0	.104	4460
1	7	1213	P - 3	4.8	9.7	.48	1015	.473	.278	58.7	.195	4435
1	7	1213	P - 3	9.7	9.7	4.01	910	4.407	1.567	35.5	2.840	4480
1	7	1240	P -15	SURF	7.9	1.73	1065	1.620	.512	31.5	1.112	4467
1	7	1240	P -15	3.3	7.9	1.33	1000	1.330	.492	37.1	.838	4468
1	7	1240	P -15	7.6	7.9	6.97	910	7.650	.000	.0	.000	4497
1	7	1305	P -14	SURF	8.2	1.05	1037	1.013	.000	.0	.000	4437
1	7	1305	P -14	3.3	8.2	.60	1013	.592	.487	82.3	.105	4436
1	7	1305	P -14	7.9	8.2	7.38	875	8.434	.000	.0	.000	4494
1	7	1322	SEWRF	SURF	8.8	6.10	270	22.593	14.111	62.5	8.492	4487
1	7	1322	SEWRF	SURF	8.8	6.48	295	21.966	12.563	57.2	9.403	4488
1	7	1340	P - 1	SURF	9.4	1.33	1060	1.255	.309	24.7	.946	4428
1	7	1340	P - 1	4.8	9.4	.55	1070	.514	.387	75.3	.127	4427
1	7	1340	P - 1	9.1	9.4	6.69	990	6.757	1.917	28.4	4.840	4477
1	7	1400	H - 3	SURF	8.8	1.18	1050	1.124	.495	44.1	.629	4430
1	7	1400	H - 3	4.2	8.8	.52	1010	.514	.340	66.2	.174	4432
1	7	1400	H - 3	8.5	8.8	3.18	960	3.310	.840	25.5	2.470	4506

DATE	TIME	STATION	SAMP	WATER	AMOUNT	VOLUME	TOTAL	ORGANIC	%	INORGANIC	FILTER			
	LBC	NUMBER	DEPT	DEPTH	SUSPEN	FILTER	MG/L	MG/L	ORGAN	MG/L	NUMBER			
1	7	1420	H	5	SURF	9.4	.97	917	1.058	.591	55.9	.467	4440	
1	7	1420	H	5		4.8	9.4	2.93	1023	2.864	1.601	55.9	1.262	4431
1	7	1420	H	5		9.1	9.4	4.32	925	4.670	1.050	22.5	3.620	4516
1	7	1440	H	4	SURF	8.8	1.17	1053	1.111	.593	53.3	.518	4438	
1	7	1440	H	4		3.9	8.8	1.19	1015	1.172	.532	45.4	.640	4439
1	7	1440	H	4		3.5	8.8	22.39	850	26.340	2.650	10.1	23.690	4511
3	8	1335	H	4	SURF	9.4	3.81	921	4.140	3.900	94.2	.240	4145	
3	8	1335	H	4		7.9	9.4	4.88	940	5.190	1.890	36.5	3.300	4141
3	8	1335	H	4		9.1	9.4	11.49	959	11.920	3.160	26.4	8.820	4144
3	8	1620	H	5	SURF	9.7	3.22	901	3.570	1.490	41.6	2.080	4142	
3	8	1620	H	5		3.2	9.7	3.61	968	3.730	.000	.0	.000	4143
3	8	1620	H	5		9.4	9.7	5.80	932	6.220	1.800	29.0	4.420	4140
3	9	1030	P	11	SURF	10.0	5.70	1020	5.590	2.020	36.1	3.570	4127	
3	9	1030	P	11		3.2	10.0	4.72	980	4.820	1.880	39.0	2.940	4128
3	9	1030	P	11		9.7	10.0	6.26	1030	6.080	1.590	26.2	4.490	4129
3	9	1120	P	9	SURF	7.6	4.91	1005	4.890	1.350	27.7	1.350	4595	
3	9	1120	P	9		6.1	7.6	4.95	1010	4.900	1.360	27.7	3.540	4596
3	9	1120	P	9		7.3	7.6	10.34	1000	10.340	1.080	10.4	9.260	4597
3	9	1225	P	17		3.6	5.2	4.88	1005	4.860	1.210	25.0	3.650	4135
3	9	1225	P	17	SURF	5.2	5.04	950	5.310	1.290	24.2	4.020	4134	
3	9	1225	P	17		4.9	5.2	6.09	990	6.150	1.240	20.2	4.910	4136
3	9	1415	P	3	SURF	10.0	4.55	1010	4.510	1.530	34.1	2.980	4577	
3	9	1415	P	3		3.5	10.0	4.48	1005	4.460	1.000	22.3	3.460	4578
3	9	1415	P	3		9.7	10.0	12.02	910	19.800	3.740	18.9	16.060	4579
3	9	1605	H	5	SURF	9.4	2.74	800	4.675	2.380	50.9	2.300	4556	
3	9	1605	H	5		7.9	9.4	.00	850	.000	.000	.0	.000	4557
3	9	1605	H	5		9.1	9.4	3.79	755	3.790	1.380	27.4	3.640	4558
3	10	1230	H	4	SURF	10.0	2.85	750	3.800	1.590	41.8	2.210	4542	
3	10	1230	H	4		3.5	10.0	3.39	805	4.210	1.440	34.2	2.770	4543
3	10	1230	H	4		9.7	10.0	13.62	780	17.460	4.110	23.6	13.350	4544
3	10	1330	H	48	SURF	10.0	2.90	905	3.200	1.490	46.6	1.710	4553	
3	10	1330	H	48		3.8	10.0	4.10	895	4.520	1.610	35.1	2.970	4554
3	10	1330	H	48	10	10.0	6.11	905	6.750	2.570	38.1	4.180	4555	
3	10	1440	H	5	SURF	10.0	3.20	900	3.560	1.800	50.6	1.760	4559	
3	10	1440	H	5		3.5	10.0	3.50	880	3.980	1.630	41.1	2.350	4560
3	10	1440	H	5		9.7	10.0	4.50	800	5.620	1.410	25.1	4.210	4561
3	10	1530	P	1	SURF	10.1	4.23	855	4.950	2.000	40.4	2.950	4571	
3	10	1530	P	1		9.1	10.1	3.85	940	4.100	1.510	36.9	2.590	4572
3	10	1530	P	1	10	10.1	4.25	825	5.150	.870	16.9	4.280	4573	
3	10	1608	P	3	SURF	10.1	3.79	870	4.360	1.390	31.9	2.970	4580	
3	10	1608	P	3		9.1	10.1	3.55	795	4.470	1.490	33.2	2.980	4581
3	10	1608	P	3	10	10.1	3.87	805	4.810	1.170	24.3	3.640	4582	
3	11	1007	P	3	SURF	9.7	3.31	840	3.940	1.350	34.1	2.590	4583	
3	11	1007	P	3		3.2	9.7	3.70	785	4.710	1.540	32.7	3.170	4584
3	11	1007	P	3		9.4	9.7	15.32	820	18.680	3.520	18.9	15.160	4585
3	11	1119	P	9	SURF	7.3	4.17	840	4.960	1.800	36.2	3.160	4592	
3	11	1119	P	9		5.7	7.3	4.14	860	4.810	1.240	25.9	3.570	4599
3	11	1119	P	9		7.0	7.3	3.31	855	5.050	1.180	23.4	3.870	4600
3	11	1217	P	4	SURF	8.8	3.21	760	4.220	1.330	31.5	2.890	4592	
3	11	1217	P	4		7.3	8.8	3.74	835	4.480	1.430	31.8	3.050	4593

DATE	TIME	STATION	SAMP	WATER	AMOUNT	VOLUME	TOTAL	ORGANIC	%	INORGANIC	FILTER	
	L0C	NUMBER	DEPT	DEPTH	SUSPEN	FILTER	MG/L	MG/L	ORGAN	MG/L	NUMBER	
3	11	1217	P - 4	8.5	8.8	5.54	810	6.840	2.150	31.4	4.690	4594
3	11	1313	P -17	SURF	6.4	4.72	905	5.220	1.330	25.4	3.890	4137
3	11	1313	P -17	4.8	6.4	4.28	885	4.840	1.490	30.8	3.350	4138
3	11	1313	P -17	6.1	6.4	6.82	940	7.240	2.110	29.0	5.150	4139
3	11	1405	P - 3	SURF	10.1	3.82	870	4.390	1.770	40.3	2.620	4586
3	11	1405	P - 3	9.1	10.1	4.12	915	4.500	1.230	27.4	3.270	4587
3	11	1405	P - 3	10	10.1	6.10	875	6.970	1.660	23.7	5.310	4588
3	11	1502	H - 5	SURF	10.1	2.95	705	4.180	1.960	46.8	2.220	4562
3	11	1502	H - 5	9.1	10.1	4.00	865	4.620	1.690	36.5	2.930	4563
3	11	1502	H - 5	10	10.1	5.20	795	6.540	1.920	29.4	4.620	4564
3	11	1524	H - 4	SURF	10.1	3.10	780	3.970	1.990	50.0	1.980	4545
3	11	1524	H - 4	9.1	10.1	3.52	810	4.350	2.390	54.8	1.960	4546
3	11	1524	H - 4	10	10.1	3.19	760	4.200	1.880	44.8	2.320	4547
3	12	955	H - 4	SURF	9.4	2.96	840	3.520	1.780	50.7	1.740	4548
3	12	955	H - 4	7.9	9.4	3.42	870	3.930	1.770	45.0	2.160	4549
3	12	955	H - 4	9.1	9.4	6.84	805	8.500	3.190	37.6	5.310	4550
3	12	1100	H - 5	SURF	8.8	2.72	805	4.620	2.050	44.4	2.570	4565
3	12	1100	H - 5	7.3	8.8	3.10	705	4.400	2.170	49.4	2.230	4566
3	12	1100	H - 5	8.5	8.8	4.91	770	6.380	2.210	34.6	4.170	4567
3	12	1130	HT-25	SURF	3.3	3.44	910	3.780	1.340	35.5	3.440	4534
3	12	1130	HT-25	3.0	3.3	4.62	1025	4.580	1.040	22.8	3.540	4535
3	12	1141	P - 1	SURF	8.8	4.00	830	4.820	1.410	29.3	3.410	4574
3	12	1141	P - 1	7.3	8.8	4.90	850	5.760	2.120	36.7	3.640	4575
3	12	1141	P - 1	8.5	8.8	4.72	815	5.790	2.840	49.2	2.950	4576
3	12	1155	HT-28	SURF	1.5	4.54	975	4.660	.950	20.5	3.710	4536
3	12	1155	HT-28	1.5	1.5	11.09	950	11.670	1.590	13.6	10.080	4537
3	12	1216	P -16	SURF	6.4	3.97	1070	3.710	.720	19.4	2.990	4132
3	12	1216	P -16	6.1	6.4	3.73	1030	3.620	.490	13.7	3.130	4133
3	12	1235	HT-34	SURF	7.6	5.52	1050	5.260	.560	17.6	4.340	4540
3	12	1235	HT-34	7.3	7.6	9.70	1065	9.110	.750	8.3	8.360	4541
3	12	1241	P -14	SURF	7.3	5.01	1060	4.730	1.270	27.0	3.460	4130
3	12	1241	P -14	7.0	7.3	6.85	1030	6.650	1.720	25.8	4.930	4131
3	12	1248	P - 3	SURF	9.1	3.65	790	4.620	2.080	44.9	2.540	4589
3	12	1248	P - 3	7.6	9.1	4.02	860	4.670	1.310	28.1	3.360	4590
3	12	1248	P - 3	8.8	9.1	4.91	855	5.740	1.160	20.2	4.580	4591
3	12	1305	HT-30	SURF	4.5	3.28	890	3.690	.530	14.3	3.160	4538
3	12	1305	HT-30	4.2	4.5	6.63	1090	6.080	.920	9.2	5.520	4539
3	12	1330	H - 5	SURF	8.8	3.51	905	3.820	1.960	49.0	1.980	4568
3	12	1330	H - 5	7.3	8.8	8.43	865	9.750	3.630	37.3	6.120	4569
3	12	1330	H - 5	8.5	8.8	4.15	825	5.030	2.160	43.1	2.870	4570
3	12	1344	H - 4	SURF	9.1	2.69	975	2.760	1.140	41.3	1.620	4551
3	12	1344	H - 4	8.8	9.1	27.35	840	32.560	3.870	11.9	28.690	4552
3	12	1353	HT-11	SURF	2.1	3.21	950	3.380	.980	29.0	2.400	4532
3	12	1353	HT-11	2.1	2.1	4.54	915	4.960	1.730	34.8	3.230	4533
3	15	1200	H BAR	SURF	11.5	3.08	600	5.130	2.320	45.1	2.810	4517
3	15	1200	H BAR	11.5	11.5	3.96	555	7.140	1.590	22.2	5.550	4518
3	15	1240	I-195	SURF	4.0	3.07	570	5.390	4.670	86.5	.720	4525
3	15	1240	I-195	3.9	4.0	5.93	895	6.620	1.450	21.9	5.180	4526
3	15	1345	H BAR	SURF	11.5	3.75	630	5.950	2.320	38.9	3.630	4519
3	15	1345	H BAR	11.5	11.5	2.88	595	14.920	2.250	15.1	12.670	4520

DATE	TIME	STATION	SAMP	WATER	AMOUNT	VOLUME	TOTAL	ORGANIC	%	INORGAN	FILTER	
	LRC	NUMBER	DEPT	DEPTH	SUSPEN	FILTER	MG/L	MG/L	ORGAN	MG/L	NUMBER	
3 15	1425	TAHRD	SURF	1.0	1.20	550	2.180	2.180	72.5	.600	4530	
3 15	1500	I-195	SURF	2.2	2.83	660	4.290	1.550	36.0	2.740	4527	
3 15	1500	I-195		2.2	2.2	6.24	925	6.750	1.300	19.2	5.450	4528
3 16	955	I BAR	SURF	10.0	4.01	605	9.930	2.380	24.0	7.550	4521	
3 16	955	I BAR	10	10.0	8.04	610	13.180	1.360	10.3	11.820	4522	
3 16	1030	TAHRD	SURF	1.0	1.72	560	3.070	1.540	50.0	1.530	4531	
3 16	1050	I-195	SURF	3.0	4.05	1050	5.760	1.470	25.5	4.290	4529	
3 16	1140	I BAR	SURF	9.4	5.07	695	7.290	1.380	18.9	5.910	4523	
3 16	1140	I BAR		9.4	9.4	6.01	755	7.860	1.500	19.1	6.360	4524
4 26	1320	P -17	SURF	5.8	1.62	1030	1.570	.640	40.7	.930	4155	
4 26	1320	P -17		5.4	5.8	1.58	1020	1.550	.0	.000	4154	
4 26	1510	P - 3	SURF	9.1	1.51	1035	1.460	1.440	98.7	.020	4156	
4 26	1500	P - 3		7.6	9.1	1.39	1015	1.370	.760	55.4	.610	4153
4 26	1500	P - 3		3.8	9.1	2.12	1050	2.020	.780	38.7	1.240	4152
4 26	1545	I - 3	SURF	9.7	2.01	941	2.140	1.200	56.2	.940	4150	
4 26	1545	I - 3		8.2	9.7	1.81	1020	1.770	1.030	58.0	.740	4149
4 26	1545	I - 3		9.4	9.7	3.77	1041	3.620	1.550	42.7	2.070	4151
4 26	1610	I - 4	SURF	9.1	2.09	725	2.880	2.880	.0	.000	4147	
4 26	1610	I - 4		7.6	9.1	2.78	873	3.180	.920	28.8	2.260	4146
4 26	1610	I - 4		3.8	9.1	4.29	1050	4.090	1.650	40.3	2.440	4148
4 27	1030	I - 4	SURF	7.6	2.02	925	2.180	.860	39.6	1.320	4196	
4 27	1030	I - 4		6.1	7.6	4.08	1010	4.040	.990	24.5	3.050	4197
4 27	1040	I - 4		7	7.6	5.39	1005	5.360	1.700	31.7	3.660	4198
4 27	1345	I - 5	SURF	9.4	2.11	1035	2.030	.720	35.5	1.310	4258	
4 27	1345	I - 5		7.9	9.4	2.31	905	2.550	1.310	51.5	1.240	4259
4 27	1345	I - 5		9.1	9.4	3.18	1010	3.150	1.650	52.5	1.500	4260
4 27	1410	HT-21	SURF	3.6	3.61	1050	3.440	.900	26.0	2.540	4603	
4 27	1420	I - 3	SURF	9.4	2.85	1025	2.780	1.760	63.1	1.020	4265	
4 27	1420	I - 3		7.9	9.4	3.05	1030	2.980	1.820	61.6	1.140	4269
4 27	1430	I - 3		9.1	9.4	3.54	1045	3.390	1.700	50.0	1.700	4270
4 27	1445	HT-24	SURF	3.6	1.68	1015	1.650	.740	44.6	.910	4610	
4 27	1500	HT-25	SURF	3.9	1.57	1070	1.470	.720	49.0	.750	4611	
4 27	1525	HT-28	SURF	2.4	2.21	1038	2.130	.630	29.4	1.500	4614	
4 27	1540	P - 1	SURF	9.7	3.29	1065	3.090	2.260	73.3	.830	4271	
4 27	1540	P - 1		3.2	9.7	2.14	1045	2.050	.880	43.0	1.170	4158
4 27	1540	P - 1		9.4	9.7	2.00	1035	1.930	1.790	93.0	.140	4157
4 27	1605	I - 5	SURF	9.4	3.09	1005	3.070	1.700	55.3	1.370	4261	
4 27	1605	I - 5		7.9	9.4	2.69	1015	2.650	1.210	45.8	1.440	4262
4 27	1605	I - 5		9.1	9.4	7.48	1045	7.160	1.210	16.9	5.950	4263
4 27	1620	I - 4	SURF	9.8	3.47	1010	3.440	1.850	46.1	1.590	4199	
4 27	1620	I - 4		3.2	9.8	1.88	915	2.050	1.420	69.2	.830	4200
4 27	1620	I - 4		9.4	9.8	3.25	1000	3.250	.890	27.4	2.360	4250
4 28	1005	HT-10	SURF	6.7	2.79	1030	2.710	1.470	54.1	1.240	4160	
4 28	1025	HT-10		5.1	6.7	2.10	1020	2.060	2.060	.0	.000	4159
4 28	1005	HT-10		6.4	6.7	2.42	1030	2.350	.840	36.0	1.510	4608
4 28	1035	HT- 6	SURF	12.4	2.01	1030	1.950	.540	27.9	1.410	4604	
4 28	1035	HT- 6		10.9	12.4	2.20	1045	2.100	.910	43.4	1.190	4605
4 28	1035	HT- 6		12.1	12.4	3.76	1055	3.560	1.220	34.3	2.340	4606
4 28	1110	I - 4	SURF	8.8	2.60	840	3.090	2.200	71.3	.890	4251	
4 28	1110	I - 4		7.3	8.8	2.35	940	2.500	1.050	42.2	1.450	4252

DATE	TIME	STATION	SAMP	WATER	AMOUNT	VOLUME	TOTAL	ORGANIC	%	INORGAN	FILTER	
	LBC	NUMBER	DEPT	DEPTH	SUSPEN	FILTER	MG/L	MG/L	ORGAN	MG/L	NUMBER	
4 28	1110	H - 4		8.5	8.8	1.75	865	2.020	.000	.0	.000	4253
4 28	1130	H - 5	SURF	9.4	2.47	1050	2.350	1.810	76.9	.540	.540	4264
4 28	1130	H - 5		7.9	9.4	2.34	1060	2.270	1.500	65.9	.770	4265
4 28	1130	H - 5		9.1	9.4	.00	1032	.000	.000	.0	.000	4161
4 28	1150	HT-25	SURF	3.9	1.93	1020	1.890	.880	46.6	1.010	.010	4612
4 28	1208	HT-28	SURF	1.5	2.16	1050	2.060	.540	26.4	1.520	.520	4615
4 28	1215	P - 1	SURF	10.0	3.19	1055	3.020	2.400	78.3	.620	.620	4272
4 28	1215	P - 1		8.5	10.0	3.32	1030	3.220	2.510	78.1	.710	4273
4 28	1215	P - 1		9.1	10.0	4.56	1095	4.160	2.800	67.3	1.360	4274
4 28	1237	HT-49	SURF	8.2	1.06	1035	1.020	.370	35.9	.650	.650	4616
4 28	1250	P -11	SURF	9.4	2.65	1040	2.540	1.610	63.4	.930	.930	4289
4 28	1250	P -11		7.9	9.4	2.25	1040	2.160	1.590	73.6	.570	4290
4 28	1250	P -11		9.1	9.4	1.87	1040	1.800	.620	34.2	1.180	4291
4 28	1302	P -10	SURF	5.1	2.22	1065	2.080	.000	.0	.000	.000	4288
4 28	1314	P - 9	SURF	9.4	3.33	1000	3.330	2.670	80.3	.660	.660	4285
4 28	1330	P - 7	SURF	4.6	1.64	1045	1.570	.910	57.8	.660	.660	4281
4 28	1330	P - 7		3.0	4.6	1.83	1050	1.740	1.190	67.9	.550	4282
4 28	1330	P - 7		4.2	4.6	1.51	1035	1.460	.670	44.6	.790	4283
4 28	1350	P -17	SURF	5.2	2.20	1040	2.110	1.350	64.0	.760	.760	4299
4 28	1350	P -17		3.6	5.2	1.39	1025	1.360	1.200	88.5	.160	4601
4 28	1350	P -17		4.8	5.2	1.45	1025	1.410	.480	34.6	.930	4602
4 28	1415	P -19	SURF	5.2	2.05	1025	2.000	.590	29.3	1.410	.410	4603
4 28	1435	P -15	SURF	7.0	2.06	1020	2.010	1.160	57.5	.850	.850	4294
4 28	1445	SEWER	SURF	6.4	8.94	395	22.630	18.630	82.3	4.000	.000	4195
4 28	1455	P -14	SURF	7.0	3.34	1060	3.150	2.410	76.5	.740	.740	4295
4 28	1505	P - 3	SURF	9.7	1.46	983	1.490	.940	63.0	.550	.550	4162
4 28	1505	P - 3		9.4	9.7	.00	950	.000	.000	.0	.000	4163
4 28	1545	H - 4	SURF	7.9	1.50	775	1.940	1.420	73.3	.520	.520	4164
4 29	1022	HT-10	SURF	6.7	1.89	1055	1.790	.560	31.2	1.230	.230	4186
4 29	1125	H - 4	SURF	8.2	1.42	800	1.780	1.070	60.5	.710	.710	4254
4 29	1125	H - 4		7.9	8.2	2.01	925	2.170	.670	30.9	1.500	4255
4 29	1230	H - 5	SURF	9.4	3.19	1045	3.050	2.060	67.4	1.010	.010	4266
4 29	1230	H - 5		9.1	9.4	2.85	1075	2.650	1.170	44.2	1.480	4267
4 29	1246	HT-28	SURF	2.1	1.71	1020	1.680	.400	24.0	1.280	.280	4190
4 29	1300	P - 1	SURF	9.4	2.67	1000	2.670	1.840	69.0	.830	.830	4275
4 29	1300	P - 1		9.1	9.4	3.48	1050	3.310	2.130	64.3	1.180	4276
4 29	1314	HT-25	SURF	3.6	.77	915	.840	.350	45.4	.490	.490	4188
4 29	1335	HT-49	SURF	4.5	.93	1040	.890	.370	41.9	.520	.520	4193
4 29	1348	P -11	SURF	9.4	1.21	1040	1.160	.540	55.4	.520	.520	4292
4 29	1348	P -11		9.1	9.4	2.78	1005	2.770	1.910	69.0	.860	4293
4 29	1403	P -10	SURF	5.2	.87	1030	.840	.380	44.8	.460	.460	4179
4 29	1416	P - 9	SURF	5.8	2.51	1040	2.410	1.890	78.3	.520	.520	4286
4 29	1416	P - 9		5.4	5.8	2.19	1060	2.070	1.140	45.1	.930	4287
4 29	1434	P - 7	SURF	4.8	2.55	1005	2.520	1.860	73.8	.660	.660	4284
4 29	1445	P -16	SURF	5.8	1.28	1010	1.270	.750	59.3	.750	.750	4298
4 29	1458	P -15	SURF	7.0	2.33	1025	2.250	1.620	72.1	.630	.630	4297
4 29	1512	P -14	SURF	8.8	4.73	1040	4.550	3.620	79.7	.930	.930	4296
4 29	1521	P - 3	SURF	8.8	1.74	1075	1.620	1.060	65.6	.560	.560	4279
4 29	1521	P - 3		8.5	8.8	2.90	1030	2.810	1.820	65.0	.990	4280
4 29	1536	HT-28	SURF	2.4	1.54	1045	1.470	.520	35.7	.950	.950	4617

DATE	TIME	STATION	SAMP	WATER	AMOUNT	VOLUME	TOTAL	ORGANIC	%	INORGAN	FILTER	
	LBC	NUMBER	DEPT	DEPTH	SUSPEN	FILTER	MG/L	MG/L	ORGAN	MG/L	NUMBER	
4 29	1545	P - 1	SURF	9.4	2.11	1050	2.010	1.380	68.7	.630	4277	
4 29	1545	P - 1		9.1	9.4	4.51	1025	4.400	3.200	72.7	4278	
4 29	1602	HT-25	SURF	4.2	1.28	1040	1.230	.540	43.8	.690	4613	
4 29	1630	H - 4	SURF	9.4	1.50	850	1.760	1.130	64.3	.630	4256	
4 29	1630	H - 4		9.1	9.4	12.50	1010	12.380	3.710	30.0	4257	
4 30	950	H - 4	SURF	9.1	1.93	1040	1.860	.920	49.2	.940	4165	
4 30	950	H - 4		7.6	9.1	2.05	930	2.200	.910	41.5	4166	
4 30	950	H - 4		8.8	9.1	7.86	1035	7.590	2.380	31.3	4167	
4 30	1015	H - 5	SURF	10.3	1.69	1050	1.610	.770	47.9	.840	4168	
4 30	1015	H - 5		8.8	10.3	2.11	1020	2.070	1.090	52.6	4169	
4 30	1015	H - 5	10	10.3	6.73	900	7.480	2.370	31.6	5.110	4170	
4 30	1055	HT-49	SURF	6.1	1.14	1070	1.070	.320	29.8	.750	4194	
4 30	1106	P - 11	SURF	10.3	.89	1040	.860	.380	44.8	.460	4180	
4 30	1106	P - 11		8.8	10.3	.84	1020	.820	.370	45.2	4181	
4 30	1106	P - 11		8.8	10.3	1.38	1010	1.370	.620	44.9	4182	
4 30	1140	P - 9	SURF	6.7	1.16	1060	1.090	.600	55.2	.490	4178	
4 30	1153	P - 7	SURF	5.2	.80	1000	.750	.340	45.0	.410	4177	
4 30	1205	P - 16	SURF	6.4	.72	1055	.680	.280	41.7	.400	4185	
4 30	1214	P - 15	SURF	7.3	1.07	1065	1.000	.380	38.3	.620	4184	
4 30	1242	P - 3	SURF	8.2	1.22	1070	1.140	.670	59.0	.470	4174	
4 30	1230	P - 14	SURF	7.0	1.12	1030	1.090	.510	46.4	.580	4183	
4 30	1242	P - 3		6.7	8.2	1.06	1010	1.050	.650	62.3	4175	
4 30	1242	P - 3		7.9	8.2	1.75	1035	1.690	.530	30.9	1.160	4176
4 30	1258	HT-30	SURF	4.2	.71	1040	.680	.180	26.8	.500	4192	
4 30	1313	HT-28	SURF	1.8	1.36	1070	1.270	.370	29.4	.900	4191	
4 30	1323	P - 1	SURF	8.8	1.85	1045	1.770	1.020	57.8	.750	4171	
4 30	1323	P - 1		7.3	8.8	1.23	1000	1.230	.690	56.1	4172	
4 30	1323	P - 1		8.5	8.8	5.77	1000	5.770	1.630	28.2	4.140	4173
4 30	1340	HT-25	SURF	3.9	1.03	1055	.980	.290	30.1	.690	4189	
6 8	1200	H - 4	SURF	8.2	2.43	1060	2.290	1.090	47.7	1.200	4618	
6 8	1210	H - 4		6.6	8.2	4.52	1000	4.520	1.310	29.0	3.210	4619
6 8	1210	H - 4		7.9	8.2	8.83	1045	8.450	.930	11.0	7.520	4620
6 8	1305	H - 4	SURF	7.9	1.97	1060	1.850	.790	42.6	1.060	4621	
6 8	1315	H - 4		6.4	7.9	2.75	1015	2.710	.860	31.6	1.850	4622
6 8	1315	H - 4		7.6	7.9	5.41	1015	5.330	1.970	37.0	3.360	4623
6 8	1415	H - 4	SURF	7.9	2.34	1030	2.270	1.120	49.1	1.150	4624	
6 8	1415	H - 4		6.4	7.9	3.71	1030	3.600	1.340	37.2	2.260	4625
6 8	1415	H - 4		7.6	7.9	6.46	1055	6.120	1.860	30.3	4.260	4626
6 8	1500	H - 4	SURF	8.2	2.44	865	2.820	1.540	54.5	1.280	4627	
6 8	1515	H - 4		6.8	8.2	3.90	1035	3.770	1.260	33.6	2.510	4628
6 8	1515	H - 4		7.9	8.2	12.25	1025	11.950	2.440	20.4	9.510	4629
6 8	1615	H - 4	SURF	8.2	3.04	1065	2.850	1.230	43.1	1.620	4630	
6 8	1615	H - 4		6.4	8.2	3.58	1000	3.580	1.200	33.5	2.380	4631
6 8	1615	H - 4		7.9	8.2	5.09	1000	5.090	1.190	23.4	3.900	4632
6 8	1715	H - 4	SURF	8.5	2.73	1040	2.630	1.120	42.5	1.510	4633	
6 8	1715	H - 4		7.0	8.5	6.05	1040	5.820	1.610	27.7	4.210	4634
6 8	1715	H - 4		8.2	8.5	5.97	1040	5.740	2.200	38.4	3.540	4635
6 8	1815	H - 4	SURF	8.5	3.77	1040	3.630	1.050	28.9	2.580	4636	
6 8	1815	H - 4		7.0	8.5	4.39	1025	4.280	1.360	31.7	2.920	4637
6 8	1815	H - 4		8.2	8.5	6.69	1025	6.530	1.910	29.3	4.620	4638

DATE	TIME	STATION	SAMP	WATER	AMOUNT	VOLUME	TOTAL	ORGANIC	%	INORGAN	FILTER		
	LOC	NUMBER	DEPT	DEPTH	SUSPEN	FILTER	MG/L	MG/L	ORGAN	MG/L	NUMBER		
6	3	1915	H	4	SURF	8.2	3.09	1035	2.990	1.050	35.1	1.940	4639
6	3	1915	H	4	6.2	8.2	3.81	1060	3.590	.970	27.0	2.620	4640
6	3	1915	H	4	7.9	8.2	5.58	1000	5.580	2.070	37.1	3.510	4641
6	3	2015	H	4	SURF	7.9	3.07	1040	2.950	1.110	37.8	1.840	4642
6	3	2015	H	4	6.4	7.9	3.57	920	3.880	1.360	35.0	2.520	4643
6	3	2015	H	4	7.6	7.6	3.19	925	3.450	1.330	38.6	2.120	4644
6	3	2115	H	4	SURF	7.4	2.86	1040	2.750	1.510	54.9	1.240	4645
6	3	2115	H	4	5.8	7.4	3.64	1030	3.530	1.230	34.9	2.100	4646
6	3	2115	H	4	7.0	7.4	4.72	1045	4.520	1.300	28.8	3.220	4647
6	3	2215	H	4	SURF	7.4	1.88	1130	1.660	.550	33.0	1.110	4648
6	3	2215	H	4	5.8	7.4	4.99	1045	4.780	1.720	36.1	3.060	4649
6	3	2215	H	4	7.0	7.4	5.48	1055	5.190	1.700	32.9	3.490	4650
6	3	2315	H	4	SURF	7.3	1.35	1055	1.280	.620	48.1	.660	4651
6	3	2315	H	4	5.5	7.3	3.62	1055	3.430	.900	26.2	2.530	4652
6	3	2315	H	4	7.0	7.3	4.20	1055	3.980	.880	22.1	3.100	4653
6	3	15	H	4	SURF	7.3	3.09	1060	2.920	1.130	38.8	1.790	4654
6	3	15	H	4	5.5	7.3	4.37	1040	4.200	1.660	39.6	2.540	4655
6	3	15	H	4	7.0	7.3	4.51	1055	4.270	1.030	24.2	3.240	4656
6	3	115	H	5	SURF	7.3	1.28	460	2.780	1.390	50.0	1.390	4657
6	3	115	H	5	SURF	7.3	2.47	600	4.120	2.140	51.8	1.980	4659
6	3	115	H	5	5.8	7.3	4.37	1050	4.160	1.580	37.9	2.580	4658
6	3	115	H	5	7.0	7.3	4.97	1055	4.710	1.470	31.0	3.250	4660
6	3	215	H	5	SURF	7.6	2.59	1045	2.480	1.640	66.0	.840	4661
6	3	215	H	5	5.8	7.6	5.17	1060	4.880	1.510	31.0	3.370	4662
6	3	215	H	5	7.3	7.6	4.79	1025	4.670	1.650	35.3	3.020	4663
6	3	315	H	5	SURF	8.2	4.82	1000	4.820	1.230	25.5	3.590	4664
6	3	315	H	5	6.7	8.2	5.73	1050	5.460	1.690	30.9	3.770	4665
6	3	315	H	5	7.9	8.2	6.67	1050	6.350	1.510	23.8	4.840	4666
6	3	415	H	5	SURF	8.2	6.35	1070	5.930	1.270	21.4	4.660	4667
6	3	415	H	5	6.7	8.2	7.53	1045	7.210	1.510	21.0	5.700	4668
6	3	415	H	5	7.9	8.2	7.84	1055	7.430	1.650	22.2	5.780	4669
6	3	515	H	5	SURF	8.8	3.81	1045	3.650	1.650	45.1	2.000	4670
6	3	515	H	5	7.3	8.8	7.13	1050	6.790	1.870	27.5	4.920	4671
6	3	515	H	5	8.5	8.8	6.80	1045	6.510	1.210	18.5	5.300	4672
6	3	615	H	5	SURF	8.8	3.29	1060	3.100	1.080	35.0	2.020	4673
6	3	615	H	5	7.3	8.8	3.95	1050	3.760	1.070	28.4	2.690	4674
6	3	615	H	5	8.5	8.8	5.01	1065	4.700	1.160	24.8	3.540	4675
6	3	715	H	5	SURF	9.1	2.87	775	3.700	2.240	60.6	1.460	4676
6	3	715	H	5	7.6	9.1	5.65	1030	5.490	1.570	28.7	3.920	4677
6	3	715	H	5	8.8	9.1	5.51	1040	5.300	1.560	29.4	3.740	4678
6	3	815	H	5	SURF	7.9	3.39	1060	3.200	1.670	52.2	1.530	4679
6	3	815	H	5	6.7	7.9	5.11	1070	4.780	1.390	29.2	3.390	4680
6	3	815	H	5	7.6	7.9	3.80	1075	3.540	1.230	34.7	2.310	4681
6	3	915	H	5	SURF	8.2	2.25	1040	2.160	1.070	49.3	1.090	4682
6	3	915	H	5	6.7	8.2	4.10	1075	3.030	.900	29.3	2.130	4683
6	3	915	H	5	7.9	8.2	3.92	880	4.450	1.540	34.6	2.910	4684
6	3	1015	H	5	SURF	7.6	1.60	1040	1.540	.450	29.4	1.090	4685
6	3	1015	H	5	6.1	7.6	3.19	1020	3.130	1.210	38.6	1.920	4686
6	3	1015	H	5	7.3	7.6	3.39	800	4.240	1.780	41.9	2.460	4687
6	3	1115	H	5	SURF	7.6	2.84	1065	2.670	1.040	39.1	1.630	4688

DATE	TIME	STATION	SAMP	WATER	AMOUNT	VOLUME	TOTAL	ORGANIC	%	INORGAN	FILTER	
	LOC	NUMBER	DEPT	DEPTH	SUSPEN	FILTER	MG/L	MG/L	ORGAN	MG/L	NUMBER	
6	9	1115	H - 5	6.1	7.6	4.98	1050	4.740	0.660	13.9	4.080	4689
6	9	1115	H - 5	7.3	7.6	5.02	1050	4.780	3.030	63.4	1.750	4690
6	9	1215	H - 5	SURF	7.9	2.15	1070	2.010	0.930	46.0	1.080	4691
6	9	1215	H - 5	6.4	7.9	3.90	1050	3.710	1.430	38.5	2.280	4692
6	9	1215	H - 5	7.6	7.9	2.71	1030	3.810	1.180	30.9	2.630	4693
6	9	1315	H - 5	SURF	8.2	2.26	910	2.480	1.470	59.2	1.010	4694
6	9	1315	H - 5	6.7	8.2	2.41	1050	2.300	1.020	44.4	1.280	4695
6	9	1315	H - 5	7.9	8.2	2.84	1045	2.720	0.960	35.2	1.760	4696
8	10	1550	H BAR	SURF	11.5	11.18	845	13.230	4.170	31.5	9.060	4697
8	10	1602	H BAR	11	11.5	15.95	855	18.650	5.620	30.2	13.030	4698
8	10	1630	1-195	SURF	4.0	15.76	500	31.520	12.680	40.3	18.840	4699
8	10	1633	1-195	3.5	4.0	5.01	750	6.680	1.640	24.6	5.040	4700

Section III - Bottom sample locations and size analyses data

For purposes of this investigation, 92 grab samples and 28 cores were collected from 116 stations in New Bedford Harbor and its approaches (Figure 4). Grab samples were obtained with a Smith-MacIntyre Grab and cores with a 2-meter, 6.5 cm. internal diameter gravity core. Subsamples of grabs were taken from the top 10 cm, except where pronounced differences between surface and subsurface layers within the grab existed. In these cases, subsamples of individual lithologic units were collected. Cores were sampled at 20 cm intervals and at obvious lithologic breaks. All sediment samples collected during this project are stored at Woods Hole's Data and Earth Samples Center (D.E.S.C.). Subsamples are available upon request.

Standard techniques were used to determine the size components and other physical and chemical parameters of all samples (Milliman and Barretto, 1975). Size analyses were limited to the determination of the percent gravel, sand, silt and clay. The sand and gravel fraction of selected samples were examined by binocular microscope to determine their gross character. The clay fractions of a large number of samples were examined using standard x-ray diffraction techniques.

Sand and gravel fractions were found to consist of varying amounts of shell fragments, rock fragments and sometimes coal. Rock fragments are granitic in nature. Sands tended to be quartzose with varying amounts of shell and rock fragments. Subangular grains of feldspar and some coal can also be found in the sand fraction. Variations within both the sand and gravel fractions tend to be those of degree and not of kind. Useable x-ray diffraction patterns were obtained from only those samples having a high percentage of clay. The clay mineral fraction of New Bedford Harbor sediments was found to contain only chlorite, mica and minor amounts of quartz. Since the variations in the relative amounts of these minerals present is small, data for individual samples will not be presented.

The data contained in this section are presented in the following manner:

Station number.

Station location; latitude, degrees and minutes N.; longitude, degrees and minutes W.

Uncorrected water depth in meters.

Percent gravel, sand, silt and clay in the sample.

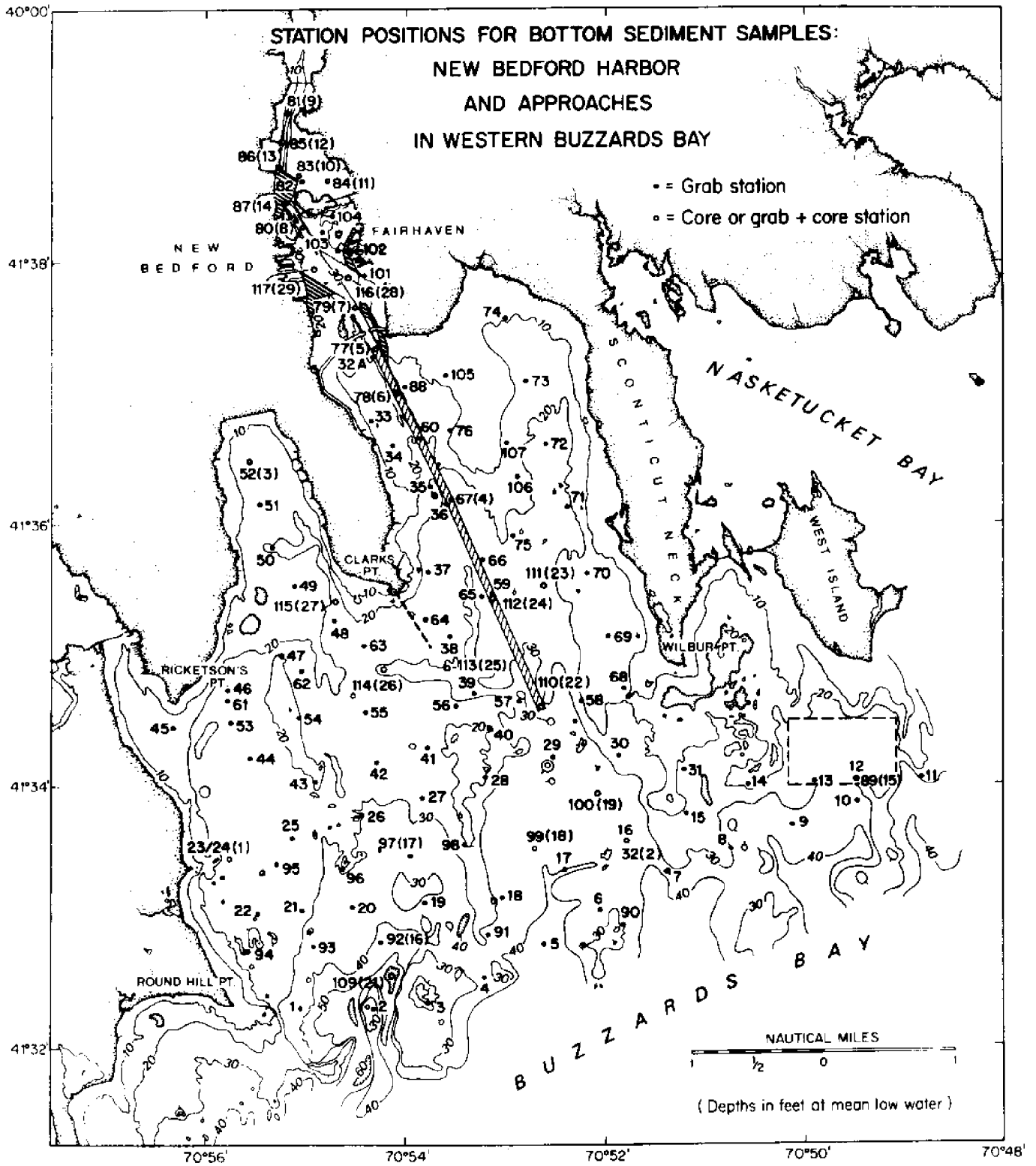


Figure 4. Core and grab sample locations

Brief description of the sample and other comments relating to the sample.

Certain abbreviations were used to facilitate the inclusion of sample descriptions in the format used for this data file. These abbreviations are as follows:

BLK - Black
BRN, BR - Brown
CR - Coarse
FN - Fine
FR - Fragments
GR - Green
GRAV - Gravel
GRY - Gray
MD - Medium
MD - Mud
OLV - Olive
SHL, SH - Shell
SHLY - Shelly
SLT - Silt, silty
SND - Sand, sandy

All data are presented as consecutively-numbered stations.

TABLE IV

BOTTOM SAMPLE LOCATIONS AND SIZE ANALYSES DATA

STATION NUMBER	LATITUDE DEG	MIN	LONGITUDE DEG	MIN	DEPTH UNCOR	PERCENT GRAVEL	IN SAND	FRACTION SILT	CLAY	LITHOLOGY & COMMENTS
1 51	41	32.31	70	55.02	11.0	5	84	6	5	BLV GRY SLT SND W SH FR
2 52	41	32.31	70	54.32	7.6	24	67	6	3	BLV GRY CR SND
3 53	41	32.35	70	53.78	4.8	0	0	0	0	GRAVEL BOTTOM
4 54	41	32.54	70	53.78	10.9	13	82	3	2	CR TO MD SND W SH FR
5 55	41	32.80	70	52.51	12.7	0	20	65	15	BLV GRY TO BLK MD
6 56	41	33.07	70	52.05	9.7	6	89	3	2	BLV GRY TO BLK SND W SH
7 57	41	33.35	70	51.40	10.6	5	86	5	4	BLV GRY MD SND
8 58	41	33.51	70	50.78	8.2	3	90	4	3	BLV BR MD SND W SH FR
9 59	41	33.70	70	50.14	9.7	7	68	18	7	BLV BR MD SND W SH FR
10 610	41	33.87	70	49.49	9.7	2	85	8	5	MD SND W SH FR
11 611	41	34.06	70	48.85	7.6	0	0	0	0	HARD BOTTOM
12 612	41	34.04	70	49.50	9.1	7	78	10	4	MD SND W SH FR
13 613	41	34.02	70	49.91	6.1	11	83	4	2	GR SND BLK TO BR W SH FR
13 A	0	.00	0	.00	.0	19	75	2	4	BOTTOM OF GRAB- GRAVEL
14 614	41	34.01	70	50.59	5.2	55	41	2	2	CR SND BRN TO GRY W GRAV
14 B	0	.00	0	.00	.0	35	60	3	2	SAND FROM BOTTOM OF GRAB
15 615	41	33.78	70	51.20	7.0	21	72	5	2	BR TO GRY GR SND W SH FR
16 616	41	33.59	70	51.79	9.7	4	66	20	9	BLV TO BLK FN SND W SH F
17 617	41	33.36	70	52.42	10.9	0	16	62	22	BRN TO GRY MD W SH FR
18 618	41	33.15	70	53.04	10.3	0	35	45	20	BLK MD
19 619	41	33.12	70	53.80	8.5	48	37	10	5	SHLY MD BLK
19 A	0	.00	0	.00	.0	62	8	23	7	MD BLK SND SUBSURFACE
20 620	41	33.09	70	54.55	9.1	0	25	55	20	GR BR TO GRY SLT
21 621	41	33.07	70	55.05	8.5	0	26	53	21	SLTY MD W SH FR
22 622	41	33.04	70	55.48	6.1	0	20	59	21	BLV GRY TO BLK SLTY MD
23 623	41	33.45	70	55.76	6.4	0	12	61	27	BLV GRY TO BLK CLY MD
24 C 1	41	33.45	70	55.76	6.4	0	0	0	0	
24 C 2	0	.00	0	.00	.0	0	15	66	19	MUD DARK OLIVE GRAY
24 C 22	0	.00	0	.00	.0	0	10	72	18	SY 3/2 SHELLS + SHELL
24 C 42	0	.00	0	.00	.0	0	10	61	26	FRAGMENTS
24 C 62	0	.00	0	.00	.0	0	7	70	23	47CM SHELL HORIZON
24 C 82	0	.00	0	.00	.0	0	10	65	24	LENGTH 129 CM
100-112	0	.00	0	.00	.0	0	8	70	23	
CATCHER	0	.00	0	.00	.0	0	9	69	22	
CUTTER	0	.00	0	.00	.0	0	11	68	21	
WT TRP	0	.00	0	.00	.0	0	4	75	21	
25 624	41	33.61	70	55.14	7.9	0	29	53	18	BLV GRN TO BLK MD W SHLS
26 625	41	33.78	70	54.44	9.1	0	31	52	17	BRN TO BLK SLTY MD
27 626	41	33.92	70	53.85	8.2	0	96	2	2	CR SND BLV GRY W SH FR
28 627	41	34.07	70	53.20	6.1	0	0	0	0	GR W SHLS
28 A	0	.00	0	.00	.0	37	58	3	2	SND FROM GRAB BOTTOM
29 628	41	34.21	70	52.55	11.0	5	23	52	21	BLV TO BLK MD AND SND
30 629	41	34.22	70	51.87	7.9	9	79	8	4	SND SHLS AND G
31 630	41	34.11	70	51.21	7.9	0	98	1	1	BRN TO BLV GRN SND
32 C 2	41	33.58	70	51.79	9.7	0	0	0	0	ROCKY BOTTOM COVERED W
32 C	0	.00	0	.00	.0	0	0	0	0	FINE SAND NO CORE
32A 631	41	37.29	70	54.34	8.5	41	44	9	7	BLV GRN MD SHLS + SNAILS
33 632	41	36.80	70	54.35	3.6	0	45	37	18	BLV GRY TO BLK SND MD
34 633	41	36.60	70	54.14	4.5	3	19	60	19	BLV GRY TO BLK MD
35 634	41	36.28	70	53.75	4.8	0	0	0	0	BLK MD TO SND MD W SHLS

STATION NUMBER	LATITUDE		LONGITUDE		DEPTH UNCOR	PERCENT IN FRACTION				LITHOLOGY - COMMENTS
	DEG	MIN	DEG	MIN		GRAVFL	SAND	SILT	CLAY	
36 335	41	36.15	70	53.59	7.9	0	0	0	0	BLV GRN SND MD TA MD SHL
37 336	41	35.64	70	53.76	6.7	6	13	59	22	BLV GRN TA BLK MD W SHLS
38 337	41	35.15	70	53.55	7.6	1	24	56	18	BLV GRY SLT MD W SHL FR
39 338	41	34.71	70	53.31	8.2	3	26	46	25	BLV GRY SLT MD W SHL FR
40 339	41	34.43	70	53.15	6.1	22	72	3	3	GRN TA BLK SND W SHL FR
41 340	41	34.29	70	53.78	6.7	16	81	1	2	BLV GRN TA GRY SND W SHL
42 341	41	34.18	70	54.30	7.0	39	53	5	3	BLV GRN MD SND W SHLS
43 342	41	34.04	70	54.91	5.2	9	87	3	1	GRN TA BRN SND W GR + SH
44 343	41	34.21	70	55.55	6.4	0	63	27	10	BLV GRY TA BLK SLTY MD
45 344	41	34.45	70	56.34	5.2	6	23	47	24	BLV TA GRY MDY SND
46 345	41	34.74	70	55.78	6.1	0	8	71	21	BLV TA BLK SLTY MD SHL F
47 346	41	35.00	70	55.25	5.4	32	60	5	3	BLV GRN TA BLK SND SHL F
48 347	41	35.26	70	54.72	7.0	5	70	17	9	BLV GRY TA BLK SND MD
49 348	41	35.52	70	55.13	4.2	14	79	4	3	BLV TA BLK CR MD SND SHL
50 349	41	35.81	70	55.36	5.2	29	62	6	3	BLV GRN TA BLK SND MD SH
51 350	41	36.15	70	55.48	3.6	37	58	3	2	BLV GRN TA GRY MD SND SH
52 351	41	36.48	70	55.58	3.6	0	32	51	17	BLV GRN SLTY MD W SHL FR
52A 0 3	41	36.48	70	55.57	3.6	0	0	0	0	BLV GRY SY 4/2
0- 2		.00	0	.00	.0	14	53	28	5	SILTY SAND THROUGHOUT
20- 22		.00	0	.00	.0	5	62	21	12	LENGTH 51 CM
CATCHER		.00	0	.00	.0	14	70	11	5	CATCHER/CUTTER COMBINED
53 352	41	34.49	70	55.75	6.4	0	21	56	23	BLV GRN SLTY MD
54 353	41	34.52	70	55.08	5.2	2	91	4	3	BLV GRN TA GRY SLTY SND
55 354	41	34.56	70	54.41	6.1	20	75	3	2	BLV GRN TA BRN SND SHL F
56 355	41	34.60	70	53.50	7.9	12	62	16	10	BLV GRY TA BLK MD SHL FR
57 356	41	34.64	70	52.87	9.4	3	24	46	27	BLV GRY TA BLK MD SHL FR
58 357	41	34.65	70	52.25	6.1	2	83	10	5	BLV BR TA BLK MD SND SHL
59 358	41	35.48	70	53.14	9.1	1	11	61	27	BLV GRY TA BLK SLTY MD
60 359	41	36.64	70	53.55	9.1	7	43	38	12	BLV GRN TA BLK MD SND SH
61 360	41	34.65	70	55.79	6.1	1	16	56	26	BLV GRN TA BLK MD SHL FR
62 361	41	34.87	70	55.05	6.7	1	17	56	25	SLTY TA SND MD W SHL FR
63 362	41	35.07	70	54.42	7.6	2	47	34	14	BLV GRN TA BLK MD SHL FR
64 363	41	35.26	70	53.30	7.3	13	43	20	11	BLV GRN SLTY MD W SHL FR
65 364	41	35.45	70	53.24	7.9	15	5	45	20	TAP MD SLT
		.00	0	.00	.0	23	20	28	29	BOTTOM MD SLT W GR SHL F
66 365	41	35.72	70	53.25	6.7	0	0	0	0	MD W GR SHL
67 0 4	41	36.19	70	53.55	8.8	0	0	0	0	BLV GRY SY 3/2-4/2
0- 2		.00	0	.00	.0	5	39	45	11	SILTY MUD WITH SOME LARG
20- 22		.00	0	.00	.0	3	18	65	14	SHELL FRAGMENTS
40- 42		.00	0	.00	.0	0	20	67	13	LENGTH 104 CM
60- 62		.00	0	.00	.0	8	64	21	8	
80- 82		.00	0	.00	.0	2	65	24	9	
CATCHER		.00	0	.00	.0	2	53	34	11	
CUTTER		.00	0	.00	.0	3	53	33	11	
68 366	41	34.74	70	51.81	4.5	13	72	1	14	SND W GR + SHL FR
69 367	41	35.14	70	51.98	5.2	2	91	2	4	BLV GRN SND SHL FR
70 368	41	35.61	70	52.20	4.8	1	94	2	2	SLTY SND SHL FR
71 369	41	36.13	70	52.38	7.6	7	40	31	22	SNDY SLT BLV GRN SHL FR
72 370	41	36.61	70	52.60	6.1	10	55	15	20	SNDY SLT BLV GRN SHL FR
73 371	41	37.10	70	52.80	3.6	13	63	5	18	BLV GRN TA BLK SLTY SND

STATION NUMBER	LATITUDE DEG	MIN	LONGITUDE DEG	MIN	DEPTH UNCOR	PERCENT GRAVEL	IN SAND	FRACTION SILT	CLAY	LITHOLOGY + COMMENTS
74 672	41	37.59	70	53.00	2.7	27	38	4	30	BLV GRN SLT SND
75 673	41	35.91	70	52.95	6.7	8	49	21	22	BLV GRN MD TOP 8F GRAB
	0	.00	0	.00	.0	10	58	13	19	GRY SLTY MD SHL FR
76 674	41	36.72	70	53.56	30.0	6	84	1	9	BLV GRN SND W SHL FR
77 675	41	37.35	70	54.30	9.1	0	0	0	0	SAND AND GRAVEL WITH
CATCHER	0	.00	0	.00	.0	2	65	21	12	SHELL FRAGMENTS CONTAINS
CUTTER	0	.00	0	.00	.0	6	82	8	4	COAL
78 676	41	37.02	70	54.08	9.1	0	0	0	0	OLIVE GRAY 5Y 3/2
0- 2	0	.00	0	.00	.0	9	44	37	9	SANDY MUD
20- 22	0	.00	0	.00	.0	0	28	56	15	SHELL CONCENTRATIONS AT
40- 42	0	.00	0	.00	.0	0	58	35	7	0-3,11-12,26-32 CM
60- 62	0	.00	0	.00	.0	1	50	38	11	LENGTH 86 CM
CATCHER	0	.00	0	.00	.0	0	31	44	25	
CUTTER	0	.00	0	.00	.0	1	42	46	12	UPPER SECTION
CUTTER	0	.00	0	.00	.0	0	86	11	3	LOWER 4 CM
79 677	41	37.66	70	54.50	9.1	0	0	0	0	COARSE TERRIGENOUS SAND
CATCHER	0	.00	0	.00	.0	21	77	0	2	WITH SHELL FRAGMENTS
CUTTER	0	.00	0	.00	.0	14	82	3	0	TOP
CUTTER	0	.00	0	.00	.0	6	86	5	2	BOTTOM
80 678	41	38.27	70	55.05	7.9	0	0	0	0	OLIVE TO BLACK 5Y 4/3
0- 4	0	.00	0	.00	.0	0	8	76	16	LAMINATED MUD WITH SOME
20- 22	0	.00	0	.00	.0	0	14	70	16	SHELL FRAGMENTS IN THE
40- 42	0	.00	0	.00	.0	0	9	74	16	LOWERMOST PORTION
60- 62	0	.00	0	.00	.0	10	47	34	9	LENGTH 84 CM
CATCHER	0	.00	0	.00	.0	0	31	56	12	
CUTTER	0	.00	0	.00	.0	2	38	50	10	
81 679	41	39.23	70	55.20	5.2	0	0	0	0	
0- 2	0	.00	0	.00	.0	0	64	29	6	BLK TO BLV 5Y4/3 SLTY SN
20- 22	0	.00	0	.00	.0	4	22	60	14	BLK TO BLV 5Y 3/2 MUD
40- 42	0	.00	0	.00	.0	0	27	59	14	BLACK TO OLIVE 5Y 3/2
60- 62	0	.00	0	.00	.0	0	10	71	19	MUDDY SAND LENGTH 135 CM
77- 79	0	.00	0	.00	.0	0	0	0	0	SHL C14 DATE 205 + 85 YR
100-102	0	.00	0	.00	.0	14	65	14	7	BLK TO BLV SLTY SND W
CUTTER	0	.00	0	.00	.0	11	69	15	5	LARGE ISOLATED SHELLS
82 675	41	38.63	70	55.05	2.7	32	28	28	13	BLACK FLUID MUD
83 676	41	38.66	70	55.08	2.7	0	0	0	0	OLIVE GRAY 5Y 4/2 SAND
0- 2	0	.00	0	.00	.0	3	69	21	7	GRAVEL AND SHELL
20- 22	0	.00	0	.00	.0	19	63	12	6	FRAGMENTS
CUTTER	0	.00	0	.00	.0	33	57	7	3	LENGTH 40 CM
84 677	41	38.63	70	54.79	2.7	0	0	0	0	VERY DARK GRAY 5Y 3/1 TO
0- 2	0	.00	0	.00	.0	2	26	61	12	DARK OLIVE GRAY 5Y 3/2
20- 22	0	.00	0	.00	.0	1	22	62	15	MUD TO MUDDY SAND WITH
40- 42	0	.00	0	.00	.0	13	27	47	13	SHELLS
60- 62	0	.00	0	.00	.0	1	42	44	13	LENGTH 140 CM
80- 82	0	.00	0	.00	.0	14	26	45	15	
100-102	0	.00	0	.00	.0	1	39	46	13	
120-122	0	.00	0	.00	.0	7	55	28	10	
CUTTER	0	.00	0	.00	.0	1	44	39	16	
84A 676	41	38.63	70	54.79	2.7	0	17	70	13	BLV GRN FLUID MUD
85 678	41	38.92	70	55.24	5.2	0	0	0	0	

STATION NUMBER	LATITUDE DEG	LONGITUDE MIN DEG	DEPTH UNCER	PERCENT GRAVEL	IN FRACTION SAND	LITHOLOGY - COMMENTS
0- 2	0	00 0	00	0	14 72 14	DARK OLIVE GREEN SY 3/2
20- 22	0	00 0	00	0	12 35 39 14	MUD
38- 40	0	00 0	00	0	0 12 60 28	LENGTH 56 CM
CUTTER	0	00 0	00	0	4 35 44 17	
85A 377	41	38.92 70	55.24	5.2	0 20 70 10	BLV GRY TO BLK FLUID MD
86 C13	41	38.73 70	55.28	10.9	0 0 0 0	
0- 2	0	00 0	00	0	2 11 74 14	BLACK SY 4/2 TO OLIVE
20- 22	0	00 0	00	0	0 80 13 7	GRAY MUD
27- 29	0	00 0	00	0	1 27 58 14	
31- 33	0	00 0	00	0	0 23 63 13	GRAY SY 6/1 AND OLIVE
40- 42	0	00 0	00	0	0 65 29 5	BROWN 2.5Y 5/4 SANDY MUD
60- 62	0	00 0	00	0	5 60 30 6	
CUTTER	0	00 0	00	0	40 28 21 11	LENGTH 79 CM
87 C14	41	38.52 70	55.21	10.0	0 0 0 0	
0- 2	0	00 0	00	0	0 12 71 16	VERY DARK GRAY SY 3/1
20- 22	0	00 0	00	0	0 14 69 17	MUD LENGTH 68.5 CM
40- 42	0	00 0	00	0	0 76 19 5	DARK GRAY SY 4/1 - SY 3/
CUTTER	0	00 0	00	0	8 73 14 4	SILTY SAND
88 375	41	37.06 70	54.02	3.3	5 87 6 3	BLV GRN TO GRY SND MD SH
89 C15	41	34.04 70	49.50	8.2	0 0 0 0	
CUTTER	0	00 0	00	0	43 46 8 3	BLV GRN MD SND/GRAY COAL
CUTTER	0	00 0	00	0	0 61 33 5	LOWER PORTION OF CUTTER
90A 379A	41	32.96 70	51.82	7.0	0 0 0 0	COARSE GRAVEL
90B 379B	41	32.96 70	51.82	11.2	1 61 28 11	BLV GRN TO BLK MD/SND MD
91 380	41	32.82 70	53.19	10.6	9 80 7 4	MD SHL SND
92 C16	41	32.81 70	54.26	13.0	0 0 0 0	
0- 2	0	00 0	00	0	1 61 29 9	VERY DARK GRAY SY 3/1
20- 22	0	00 0	00	0	0 53 35 12	MUD GRADING TO SANDY
40- 42	0	00 0	00	0	0 59 29 12	MUD
60- 62	0	00 0	00	0	0 67 24 9	
77- 79	0	00 0	00	0	13 57 21 9	SHELL LAYER 1CM THICK
CUTTER	0	00 0	00	0	16 70 10 4	LENGTH 95 CM
93 381	41	32.79 70	54.93	10.3	0 22 59 19	BLV GRN MD W SHL FR
94 382	41	32.75 70	55.57	7.6	0 30 55 15	BLV GRN TO GRY SLT MD
95 383	41	33.42 70	55.30	8.2	0 17 68 14	BLV GRN TO BLK MD
96 384	41	33.35 70	54.65	10.3	0 14 67 19	SLTY SND MD
97 C17	41	33.48 70	53.97	13.0	0 0 0 0	
0- 2	0	00 0	00	0	0 50 38 12	DARK OLIVE GRAY SY 3/2
20- 22	0	00 0	00	0	0 55 32 13	MUD WITH SCATTERED SHELL
40- 42	0	00 0	00	0	0 50 34 16	FRAGMENTS
60- 62	0	00 0	00	0	0 47 36 17	
80- 82	0	00 0	00	0	1 38 41 20	
CUTTER	0	00 0	00	0	18 38 31 13	LENGTH 102 CM
WT. TRP	0	00 0	00	0	0 55 34 11	
98 395	41	33.56 70	53.41	7.3	0 0 0 0	COARSE GRAVEL
99 C18	41	33.52 70	52.72	11.5	0 0 0 0	
0- 2	0	00 0	00	0	1 26 51 23	DARK OLIVE GRAY SY 3/2
20- 22	0	00 0	00	0	4 19 54 23	MUD WITH PATCHES OF SHELL
40- 42	0	00 0	00	0	1 20 55 24	FRAGMENTS
60- 62	0	00 0	00	0	1 27 50 22	

STATION NUMBER	LATITUDE DEG	LONGITUDE MIN DEG	DEPTH MIN	PERCENT UNCOR	GRAVEL	FRACTION SAND	SILT	CLAY	LITHOLOGY - COMMENTS	
80- 32	0	•00	0	•00	•0	1	26	48	25	
100-102	0	•00	0	•00	•0	0	26	51	23	
120-122	0	•00	0	•00	•0	4	31	45	19	
CUTTER	0	•00	0	•00	•0	0	22	62	16	LENGTH 151 CM
WT TAP	0	•00	0	•00	•0	0	22	65	13	
WT TAP	0	•00	0	•00	•0	1	21	63	15	
100 017	41	33.94	70	52.08	11.5	0	0	0	0	
0- 2	0	•00	0	•00	•0	1	56	31	12	DARK OLIVE GRAY SY 3/2
20- 22	0	•00	0	•00	•0	0	57	26	17	MUD GRADING TO SAND
40- 42	0	•00	0	•00	•0	0	48	33	19	WITH A FEW ISOLATED SHELL
60- 62	0	•00	0	•00	•0	1	71	19	9	FRAGMENTS
80- 82	0	•00	0	•00	•0	9	68	16	7	
CUTTER	0	•00	0	•00	•0	4	73	19	5	LENGTH 110 CM
101 085	41	37.90	70	54.42	5.0	0	25	62	13	BLACK SILTY MUD
102 087	41	38.09	70	54.49	3.0	1	32	54	13	BLACK FLUID MUD
103 088	41	38.23	70	54.83	3.0	0	16	72	12	BLK TO GRN FLUID MUD
104 089	41	38.34	70	54.73	2.5	2	11	74	13	BLK TO GRN MUD W/ SHELLS
105 090	41	37.15	70	53.60	3.0	10	85	3	2	BRN TO BLK SAND W/ SHELL
106 091	41	36.36	70	52.88	5.0	33	60	3	4	BRN TO GRY GRAVEL
107 092	41	36.63	70	53.00	4.5	3	93	2	2	BROWN COARSE SAND
108 020	41	32.00	70	46.25	14.5	0	0	0	0	
0- 2	0	•00	0	•00	•0	0	4	63	33	DARK GRAY SY 4/1
10- 12	0	•00	0	•00	•0	0	6	61	33	SILTY CLAY WITH SANDY
20- 22	0	•00	0	•00	•0	0	6	66	28	LAMINATIONS AND
40- 42	0	•00	0	•00	•0	0	22	49	29	OCCASIONAL SMALL PEBBLES
60- 62	0	•00	0	•00	•0	0	12	69	20	
80- 82	0	•00	0	•00	•0	0	8	60	31	
100-102	0	•00	0	•00	•0	1	24	48	27	
120-122	0	•00	0	•00	•0	1	12	57	31	
138-140	0	•00	0	•00	•0	0	9	63	28	
CUTTER	0	•00	0	•00	•0	0	20	58	22	LENGTH 140 CM
WT TAP	0	•00	0	•00	•0	0	11	67	22	
109 021	41	32.57	70	54.14	15.4	0	0	0	0	TWO ATTEMPTS
0- 2	0	•00	0	•00	•0	0	43	44	13	FIRST CUTTER ONLY FLUID
20- 22	0	•00	0	•00	•0	0	23	59	18	MUD OVER GRAVEL
40- 42	0	•00	0	•00	•0	1	29	51	18	SECOND ATTEMPT
60- 62	0	•00	0	•00	•0	0	40	45	15	DARK GRAY SY 4/1 VERY
80- 82	0	•00	0	•00	•0	0	36	50	14	SILTY LUTITE WITH SOME
100-102	0	•00	0	•00	•0	6	40	42	12	PEBBLES + SHELL FRAGMENT
CUTTER	0	•00	0	•00	•0	0	32	57	12	LENGTH 114 CM
WT TAP	0	•00	0	•00	•0	0	19	22	59	
CUTTER	0	•00	0	•00	•0	4	31	51	14	FIRST ATTEMPT SAMPLE
110 022	41	36.60	70	52.65	8.8	0	0	0	0	
0- 2	0	•00	0	•00	•0	1	52	39	8	BLACK SY 2.5/2 TO DARK
10- 12	0	•00	0	•00	•0	0	32	55	14	OLIVE GRAY SILTY LUTITE
20- 22	0	•00	0	•00	•0	10	67	17	6	GRADES TO SAND THEN TO
40- 42	0	•00	0	•00	•0	13	65	16	5	GRAVEL
60- 62	0	•00	0	•00	•0	30	57	8	5	LENGTH 63 CM
CUTTER	0	•00	0	•00	•0	28	59	10	3	
111 023	41	35.52	70	52.63	7.9	0	0	0	0	DARK OLIVE GRAY SY 3/2 T

STATION NUMBER	LATITUDE		LONGITUDE		DEPTH UNCOR	PERCENT IN FRACTION				LITHOLOGY - COMMENTS	
	DEG	MIN	DEG	MIN		GRAVEL	SAND	SILT	CLAY		
0-	2	0	00	0	00	0	1	78	16	4	BLACK 5Y 2.5/2
10-	12	0	00	0	00	0	0	77	18	5	MUDDY SAND WITH SOME
20-	22	0	00	0	00	0	0	72	21	7	SHELL FRAGMENTS AND
37-	39	0	00	0	00	0	17	65	14	4	GRAVEL
CUTTER			00	0	00	0	19	68	10	3	LENGTH 38 CM
112 024	41	35.45	70	53.14	8.8	0	0	0	0	0	BLACK FLUID MUD
0-	15	0	00	0	00	0	1	23	61	15	LENGTH 15 CM
CUTTER			00	0	00	0	0	40	51	9	
113 025	41	34.89	70	53.58	8.8	0	0	0	0	0	BLACK 5Y 2.5/2 TO DARK
0-	2	0	00	0	00	0	4	36	44	14	OLIVE GRAY 5Y 3/2
10-	12	0	00	0	00	0	1	37	46	16	SANDY MUD HOMOGENEOUS
20-	22	0	00	0	00	0	1	56	32	11	EXCEPT FOR SCATTERED
30-	32	0	00	0	00	0	0	55	31	14	SHELL FRAGMENTS
40-	42	0	00	0	00	0	0	60	25	15	
50-	52	0	00	0	00	0	2	66	19	12	
76-	76	0	00	0	00	0	30	53	12	5	
CUTTER			00	0	00	0	6	69	20	5	LENGTH 78 CM
114 026	41	34.90	70	54.22	7.9	0	0	0	0	0	BLACK 5Y 2.5/2 TO DARK
0-	2	0	00	0	00	0	12	18	54	16	OLIVE GRAY 5Y 3/2
10-	12	0	00	0	00	0	1	41	45	13	MUDDY SAND CONCENTRATION
20-	22	0	00	0	00	0	1	60	29	10	OF SHELLS AT 0-3 72-73
30-	32	0	00	0	00	0	1	47	40	12	AND 79-82 CM
40-	42	0	00	0	00	0	0	48	38	15	
60-	62	0	00	0	00	0	1	63	25	10	
84-	86	0	00	0	00	0	1	71	20	8	
CUTTER			00	0	00	0	13	52	28	8	LENGTH 86 CM
115 027	41	35.40	70	54.71	5.8	0	0	0	0	0	
0-	2	0	00	0	00	0	2	75	14	9	COARSE GRAY SAND WITH
13-	15	0	00	0	00	0	5	85	7	3	SHELLS
CUTTER			00	0	00	0	9	81	8	2	LENGTH 15.2 CM
116 028	41	37.88	70	54.59	7.6	0	0	0	0	0	
0-	2	0	00	0	00	0	20	64	11	4	BLK 5Y 2.5/2 TO DR 9LV
10-	12	0	00	0	00	0	3	36	48	14	GRY SND MD W SHL FR COAL
20-	22	0	00	0	00	0	3	57	31	8	BLK 5Y 2.5/2 TO DR 9LV
40-	42	0	00	0	00	0	15	68	12	4	GRY SLTY MD + MD SND
56-	58	0	00	0	00	0	0	10	60	30	9LV 5Y 5/3-5/1 SLT MD
CUTTER			00	0	00	0	0	14	63	23	LENGTH 58 CM
117 029	41	38.94	70	54.93	8.2	0	0	0	0	0	
0-	2	0	00	0	00	0	0	13	61	16	DARK OLIVE GRAY 5Y 3/2
10-	12	0	00	0	00	0	0	10	66	24	SILTY MUD WITH SCATTERED
20-	22	0	00	0	00	0	0	10	67	23	
30-	32	0	00	0	00	0	0	6	73	21	
40-	42	0	00	0	00	0	0	6	69	24	
50-	52	0	00	0	00	0	0	17	64	18	DARK OLIVE GRAY 5Y 3/2
56-	58	0	00	0	00	0	16	59	19	6	SANDY MUD W SHELL FR
CUTTER			00	0	00	0	0	84	12	4	LENGTH 58 CM COAL

Section IV - Chemical Data

Three sets of data, carbon and nitrogen values, as well as heavy metal concentrations, are presented in this section. Heavy metal analyses were done by the staff of the Institut für Sedimentforschung, Universität Heidelberg. The carbon and nitrogen analyses were accomplished at Woods Hole.

Subsamples of sediments used for carbon and nitrogen analyses were first dried at 70°C; they were then ground to a powder and stored in glass vials. For nitrogen analyses, samples weighing more than 0.09 gms, but less than 0.1 gms were used. Nitrogen analyses for all bottom samples were run in triplicate. Nitrogen values reported are the average of three determinations. Samples for carbon analyses weighed not less than 0.24 gms or more than 0.25 gms. All carbon values reported are the average of duplicate runs. Values reported as total carbon represent the carbon values for all materials contained in the sample. To obtain data reported as organic carbon, pre-weighed samples were treated with dilute HCL to remove carbonate. Samples were then washed onto glass fiber filters (Gelman, Type A-E), which have been pre-combusted at 500°C for 1 hour. Nitrogen analyses were carried out using a modified LECO Tn-14 nitrogen determinator. Nitrogen data obtained with this instrument are ±0.05% accurate. Carbon values were obtained with a LECO WR-12 carbon determinator. Carbon data are ±0.5% accurate. Calcium carbonate values for all samples can be calculated by using the relationship $(C_T - C_O)/.12$ where:

C_T = the total carbon value and

C_O = the organic carbon value

Heavy metal studies were carried out on samples from 106 stations, 87 grabs and 19 cores. Samples collected from New Bedford Harbor were subsampled at Woods Hole; the subsamples were then sent to the Institut für Sedimentforschung for analysis. In Heidelberg, analyses were accomplished with a Perkin-Elmer 300B atomic absorption spectrophotometer, using a Perkin-Elmer HGA 72 graphite furnace atomizer and, in analyses involving wave lengths smaller than 3000A, a deuterium background corrector. The accuracy of the method is ±5 to 8 percent, depending on the element analyzed. Detailed descriptions of the methods used are available in Analytical Methods (Perkin-Elmer, 1973). Heavy metal concentrations reported in Table V are those found in the clay fraction. Data presentation in Table V are as follows:

Station Number.

Carbon, total and organic as a percent by weight.

Cu, Cd, Zn, Pb, Cr, and Mn in PPM; Fe as percent; Hg and Ag in PPM.

Additional data from the heavy metal analysis program are given in Tables VI, VII and VIII. Table VI gives bulk analyses data for selected samples. Table VII presents the grain size relationships for grab 77. Table VIII is a comparison of the clay fraction and bulk analyses for four selected cores.

TABLE V

CHEMICAL DATA

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STATION NUMBER	CARBON			CU PPM	CD PPM	ZN PPM	PB PPM	CR PPM	MN PPM	FE %	HG PPM	AG PPM
	TOT	ORG	NITR									
1 G 1	.26	.20	.04	100	1.9	209	130	200	412	5.4	.0	1.4
2 G 2	.25	.15	.05	84	10.0	240	80	188	400	5.3	.0	.8
4 G 4	.37	.13	.05	69	.9	269	113	213	432	5.0	.4	.5
5 G 5	1.70	1.54	.30	68	.5	260	102	170	400	4.9	.0	.5
6 G 6	.20	.18	.03	80	.6	288	110	170	430	5.3	.0	1.2
7 G 7	.43	.39	.02	84	.7	350	130	206	430	5.3	1.1	2.1
8 G 8	.35	.23	.04	84	1.0	320	116	190	430	5.4	.0	2.2
9 G 9	1.15	.92	.13	730	4.0	540	220	370	398	4.6	.0	2.6
10 G10	.42	.30	.05	84	1.0	300	100	190	400	4.8	1.7	2.4
12 G12	.45	.44	.05	208	1.4	320	116	230	400	4.8	1.4	1.4
13 G13	.31	.18	.04	96	1.2	320	100	192	400	4.6	1.5	1.6
13 G8	.21	.18	.02	125	3.0	238	120	225	355	4.8	.0	1.3
14 G14	.89	.18	.05	110	2.3	310	210	275	410	5.0	1.0	1.5
14 G8	.76	.19	.05	127	2.5	277	148	204	359	5.0	.0	1.8
15 G15	.31	.24	.07	112	1.7	324	116	200	390	5.0	.0	1.6
16 G16	.81	.65	.13	132	1.2	363	124	210	424	5.4	1.6	1.5
17 G17	1.62	1.50	.23	62	.5	300	50	150	412	4.8	.0	.4
18 G18	1.38	1.08	.22	92	.5	306	90	170	386	4.8	.0	.9
19 G19	2.66	.45	.10	66	.7	336	118	140	398	5.4	.0	1.7
B	2.53	.63	.10	0	.0	0	0	0	0	.0	.0	.0
20 G20	1.73	1.32	.22	86	.8	310	74	188	430	4.8	.0	1.2
21 G21	1.33	1.32	.23	68	1.0	320	112	186	430	5.3	.0	2.2
22 G22	1.72	1.43	.27	98	1.2	320	86	180	400	1.5	1.0	1.5
23 G23	1.82	1.52	.30	120	1.7	294	90	170	380	4.8	1.5	2.0
24 C 1	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	2.20	1.82	.34	112	1.4	300	96	190	356	5.0	.0	3.2
20- 22	1.35	1.23	.24	16	.3	140	14	100	320	3.5	.0	.8
40- 42	1.70	1.25	.23	20	.6	130	19	100	380	4.4	.0	.9
60- 62	1.48	1.29	.21	16	.6	130	16	110	380	4.1	.0	.8
80- 82	1.63	1.18	.19	14	.2	110	10	70	320	3.1	.0	.6
110-112	1.39	1.38	.22	20	.7	170	20	130	430	5.3	.0	.6
CATCHER	1.52	1.21	.22	0	.0	0	0	0	0	.0	.0	.0
CUTTER	1.32	1.12	.19	12	.4	180	26	112	460	4.8	.0	.6
WT T&P	1.65	1.19	.20	0	.0	0	0	0	0	.0	.0	.0
26 G25	1.49	1.29	.22	94	1.2	270	88	186	366	4.6	1.1	1.5
27 G26	.20	.17	.01	120	2.3	396	164	180	380	4.9	.0	2.6
25 G24	1.63	1.18	.23	94	.7	360	80	220	433	5.3	.0	2.2
A	.31	.21	.06	104	.3	544	195	239	491	5.6	.0	.0
29 G28	2.09	1.62	.30	0	.0	0	0	0	0	.0	.0	3.0
30 G29	.47	.41	.05	178	1.1	350	150	290	400	5.2	.0	3.4
31 G30	.13	.10	.03	168	5.3	768	171	263	500	5.4	1.5	2.4
32 C 2	.00	.00	.00	0	.0	0	0	0	0	.0	.0	2.2
32A G31	6.33	1.07	.23	1100	6.6	580	280	890	310	4.0	3.0	2.2
33 G32	3.22	2.34	.30	1064	9.6	736	290	924	316	4.3	3.6	9.6
34 G33	3.39	2.48	.60	920	9.7	532	235	730	300	4.0	2.6	4.2
36 G35	3.93	3.11	.81	540	7.3	380	238	540	336	4.1	2.0	6.2
37 G36	3.13	2.60	.63	376	7.9	440	220	480	324	4.4	1.9	4.2
38 G37	3.25	3.22	.79	530	1.7	450	276	400	316	3.9	2.0	7.0
39 G38	2.22	1.77	.37	260	3.5	400	130	300	405	4.6	1.8	5.4
40 G39	1.37	.32	.06	172	4.0	349	174	279	400	5.2	.0	5.3

STATION NUMBER	CARBON			CU PPM	CD PPM	ZN PPM	PB PPM	CR PPM	MN PPM	FE %	HG PPM	AG PPM
	TOT	ORG	NITR									
41 G40	1.06	.18	.03	200	4.3	416	192	200	460	5.2	2.0	4.2
42 G41	4.00	.43	.11	170	4.0	320	130	200	400	4.1	.0	11.8
43 G42	.42	.17	.06	128	2.4	500	150	270	400	5.0	.0	5.1
44 G43	1.00	.98	.22	170	1.1	340	110	205	430	4.8	1.6	3.0
45 G44	1.75	1.53	.23	168	1.6	360	130	350	430	5.0	2.2	3.1
46 G45	1.87	1.72	.35	172	1.7	340	130	236	382	4.5	.0	3.5
47 G46	2.28	.34	.06	172	1.8	348	208	270	350	4.8	.0	7.6
48 G47	1.07	.69	.09	268	3.8	420	180	400	382	4.8	3.0	9.6
49 G48	1.44	.27	.08	186	3.5	360	214	300	340	2.4	3.0	14.7
50 G49	1.11	.42	.08	276	3.6	520	250	430	354	4.3	2.7	6.8
51 G50	1.68	.21	.01	284	3.8	532	348	290	276	4.1	2.9	4.0
52 G51	1.90	1.75	.23	350	4.1	494	354	320	340	4.0	3.1	4.1
52A C 3	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0. 2	2.40	1.11	.22	290	5.7	420	290	200	200	3.0	.0	7.0
20. 22	.57	.50	.10	0	.0	0	0	0	0	.0	.0	.0
CATCHER	.49	.29	.03	22	.8	180	21	130	624	5.4	.4	.8
53 G52	1.88	1.84	.30	130	1.8	365	96	220	400	4.8	.0	3.3
54 G53	.20	.20	.01	177	2.9	459	156	260	420	4.6	.0	6.0
55 G54	1.78	.24	.01	208	5.5	440	220	250	460	4.6	.0	20.0
56 G55	1.79	.80	.13	192	3.4	360	130	260	382	4.5	.0	7.9
57 G56	2.11	1.77	.33	220	5.1	320	120	280	380	4.6	2.3	5.0
58 G57	.45	.42	.06	220	3.3	410	150	350	400	5.2	1.9	6.9
59 G58	3.15	3.04	.66	390	.9	316	238	512	316	4.5	2.6	4.2
60 G59	1.60	1.60	.21	740	5.7	480	180	390	354	4.1	2.7	10.0
61 G60	1.70	1.64	.30	168	1.9	400	102	200	405	4.6	2.0	2.1
62 G61	1.99	1.47	.35	264	4.0	360	150	280	400	4.8	1.6	3.0
63 G62	1.31	1.21	.24	336	4.9	400	170	256	400	4.3	.0	5.4
64 G63	1.98	1.27	.25	328	6.6	440	200	450	354	4.1	1.8	14.1
65 G64	2.24	1.55	.40	268	13.2	434	230	370	340	4.5	.0	19.0
B	2.48	1.57	.22	400	9.0	470	168	426	340	4.3	2.1	10.0
67 C 4	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0. 2	3.92	2.77	.38	490	6.3	380	152	426	254	3.4	3.4	15.0
3. 5	.00	.00	.00	600	11.4	620	200	520	340	4.5	.0	2.3
5. 7	.00	.00	.00	675	8.3	575	275	512	357	4.5	.0	7.0
7. 9	.00	.00	.00	462	3.8	337	175	325	262	2.9	.0	6.3
9. 11	.00	.00	.00	675	3.0	512	250	412	350	4.0	.0	1.3
20. 22	2.55	2.36	.28	240	1.9	373	130	150	280	3.0	.0	.6
40. 42	2.46	2.27	.28	190	2.1	320	80	120	256	3.0	2.2	.7
60. 62	.90	.50	.26	16	.5	237	23	112	500	5.0	.6	.8
80. 82	1.46	.48	.07	28	.4	190	17	96	340	3.9	.0	.7
CATCHER	1.33	.66	.14	0	.0	0	0	0	0	.0	.0	.0
CUTTER	1.89	.75	.14	0	.0	0	0	0	0	.0	.0	.0
68 G66	.10	.07	.05	313	6.1	375	188	425	281	4.3	2.1	.0
69 G67	.16	.16	.07	340	8.0	720	256	360	340	4.7	3.4	8.2
70 G68	.20	.14	.07	354	5.7	447	208	416	287	3.8	.0	10.4
71 G69	2.19	1.69	.38	540	5.7	352	238	440	316	3.8	2.4	3.4
72 G70	1.92	1.16	.15	540	5.4	450	134	660	252	3.6	1.8	14.8
73 G71	.84	.46	.03	557	6.9	407	238	501	225	3.8	2.5	9.1
74 G72	.54	.44	.06	663	9.1	605	240	500	265	3.5	.0	9.9
75 G73	2.24	1.91	.20	444	5.9	396	276	480	300	4.1	.0	.0

STATION NUMBER	CARBON			CU PPM	CD PPM	ZN PPM	PB PPM	CR PPM	MN PPM	FE %	HG PPM	AG PPM
	TOT	ORG	NITR									
8	1.47	.99	.00	520	6.3	420	164	410	300	3.7	.0	10.8
76 G74	.13	.11	.01	714	2.9	614	343	643	278	4.3	.0	13.9
77 C 5	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
CUTTER	.34	.26	.02	0	.0	0	0	0	0	.0	.0	.0
78 C 6	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	3.37	1.86	.28	540	5.2	370	140	430	210	2.7	2.8	8.4
2- 4	.00	.00	.00	320	1.6	310	150	180	200	2.1	.0	.7
4- 6	.00	.00	.00	590	3.6	560	180	300	344	3.8	.0	1.9
6- 8	.00	.00	.00	487	2.0	487	175	200	400	4.3	.0	1.0
8- 10	.00	.00	.00	612	2.5	588	200	225	400	4.4	3.5	2.1
20- 22	1.42	1.40	.23	30	.5	130	26	80	338	3.5	.0	.7
40- 42	1.35	.97	.12	16	.7	140	20	90	520	4.1	.9	.4
60- 62	.96	.92	.13	12	.2	100	14	60	440	3.1	.8	.7
CATCHER	1.20	1.00	.14	0	.0	0	0	0	0	.0	.0	.0
80 CM.	1.10	.75	.12	16	1.0	140	20	120	730	4.9	.8	.6
CUTTER	.56	.52	.06	0	.0	0	0	0	0	.0	.0	.0
79 C 7	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
CATCHER	.51	.07	.01	0	.0	0	0	0	0	.0	.0	.0
CUTTER 0	.45	.12	.02	743	1.2	536	250	500	293	4.8	.0	.0
CUTTER	.52	.40	.06	250	.5	276	126	145	342	4.0	.0	.0
80 C 8	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 4	7.19	6.05	1.41	1350	3.0	600	400	1550	275	4.2	.0	24.8
4- 6	.00	.00	.00	1099	12.7	576	380	1233	300	3.2	6.3	16.0
6- 8	.00	.00	.00	2500	55.0	1333	449	1299	300	3.3	.0	7.5
8- 10	.00	.00	.00	2175	48.0	975	312	1550	300	3.0	.0	4.3
15- 17	.00	.00	.00	1060	.0	0	0	0	0	.0	.0	.0
20- 22	5.13	4.64	.98	2700	20.0	920	450	1640	322	4.5	.0	3.7
30- 32	.00	.00	.00	2065	.0	0	0	0	0	.0	.0	.0
34- 36	.00	.00	.00	740	.0	0	0	0	0	.0	.0	.0
40- 42	6.36	6.24	.99	1000	23.0	2480	350	330	256	2.2	.0	3.2
46- 48	.00	.00	.00	1522	.0	0	0	0	0	.0	.0	.0
53- 55	.00	.00	.00	1760	.0	0	0	0	0	.0	.0	.0
60- 62	2.16	2.10	.26	290	1.2	340	126	160	356	3.9	.0	.9
CATCHER	1.94	1.57	.23	0	.0	0	0	0	0	.0	.0	.0
CUTTER	1.65	1.30	.20	100	1.3	244	116	136	444	4.7	.0	.0
0- 2	2.30	2.02	.42	4200	46.0	2280	790	2700	230	9.0	7.6	14.0
81 C 9	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
2- 4	.00	.00	.00	3750	33.0	1400	500	2350	300	3.9	.0	39.0
5- 7	.00	.00	.00	3432	32.0	1416	583	2225	300	3.5	.0	21.0
7- 8	.00	.00	.00	1999	56.0	1285	499	1713	242	3.0	.0	16.0
8- 10	.00	.00	.00	5700	.0	1366	533	3200	333	3.5	16.0	30.0
12- 14	.00	.00	.00	5600	.0	0	0	0	0	.0	.0	.0
20- 22	9.28	9.26	1.38	3900	21.0	5400	790	690	230	2.9	9.3	6.9
30- 32	.00	.00	.00	2000	.0	0	0	0	0	.0	.0	.0
40- 42	4.92	5.40	.62	800	1.9	530	600	160	345	4.7	.0	1.8
60- 62	6.07	6.08	1.00	740	1.6	460	520	116	280	3.4	.0	2.9
77- 79	.00	.00	.00	168	1.4	306	180	120	256	2.8	3.1	1.5
90- 93	.00	.00	.00	100	.0	0	0	0	0	.0	.0	.0
100-102	.44	.38	.06	26	.6	205	35	70	362	4.3	.0	.5
CUTTER	.50	.35	.07	20	.7	144	21	110	400	5.2	.7	.4

STATION NUMBER	CARBON			CU PPM	CD PPM	ZN PPM	PB PPM	CR PPM	MN PPM	FE %	HG PPM	AG PPM
	TOT	ORG	NITR									
82 G75	7.71	3.33	.33	4495	13.6	1407	704	1440	209	3.5	.0	.0
83 C10	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	3.57	2.39	.27	3500	16.5	1000	450	1880	180	2.9	6.2	11.8
20- 22	1.04	.49	.10	22	.4	180	30	100	460	4.7	.4	.4
CUTTER	.23	.18	.05	50	.7	210	35	225	410	4.4	.6	.0
84 C11	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	7.00	6.61	1.32	3350	30.0	1225	675	3200	350	3.9	12.0	12.4
2- 4	.00	.00	.00	2856	71.0	2177	750	2570	321	3.7	.0	6.0
4- 6	.00	.00	.00	2825	7.1	1812	680	1900	300	4.3	.0	5.3
6- 8	.00	.00	.00	1140	8.3	2280	340	520	236	1.9	7.7	1.3
20- 22	5.49	5.51	.71	540	1.0	440	380	98	280	3.0	6.5	1.4
40- 42	3.57	1.79	.33	98	1.9	240	80	110	250	2.9	2.7	.5
60- 62	1.12	1.26	.19	16	.3	94	13	70	240	2.5	.0	.5
80- 82	1.50	1.15	.25	22	.8	136	20	110	326	4.1	.0	.7
100-102	1.29	.77	.21	16	.4	116	20	80	290	3.0	.5	.4
120-122	.90	.00	.17	20	.4	136	20	70	300	3.7	.4	.5
CUTTER	.90	.82	.14	0	.0	0	0	0	0	.0	.0	.0
84A G76	5.68	5.68	.89	4500	11.4	1100	544	2400	290	3.0	5.2	8.9
85 C12	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	7.44	7.16	1.54	8054	51.0	1200	888	3330	266	3.8	.0	17.0
3- 5	.00	.00	.00	4670	.0	7221	555	2421	344	3.7	.0	.0
5- 7	.00	.00	.00	5150	.0	4857	736	1545	335	3.2	.0	4.0
7- 9	.00	.00	.00	4540	.0	1600	842	1680	282	3.9	.0	7.0
12- 14	.00	.00	.00	1520	.0	5100	328	344	260	1.8	.0	2.4
17- 19	.00	.00	.00	820	.0	498	264	98	268	2.7	.0	1.0
20- 22	4.79	2.36	.40	600	1.0	500	300	60	256	2.8	.0	1.2
38- 40	2.74	2.51	.47	104	.6	264	140	70	280	3.6	.0	.7
CUTTER	1.65	1.43	.28	70	.4	148	66	110	370	4.6	.0	.0
85A G77	4.37	4.34	.65	6400	78.0	1480	710	3250	280	3.5	.0	.0
86 C13	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	7.90	4.84	.95	6750	10.0	650	500	1750	275	3.7	.0	33.5
3- 5	.00	.00	.00	3300	.0	2022	441	2338	404	3.2	.0	28.0
5- 7	.00	.00	.00	1000	.0	1344	138	568	240	1.7	.0	2.0
10- 12	.00	.00	.00	613	.0	649	200	472	351	3.7	.0	1.9
15- 17	.00	.00	.00	600	.0	1410	160	362	690	2.8	.0	1.2
20- 22	1.40	1.31	.16	2600	21.0	1720	230	614	370	2.8	.0	1.9
27- 29	2.80	3.05	.40	2400	24.0	1800	440	1300	240	3.0	.0	3.7
31- 33	.32	.35	.50	960	5.2	800	292	330	356	4.4	.0	2.5
40- 42	.08	.12	.00	60	1.0	170	48	100	430	5.3	.0	1.1
60 - 62	.00	.10	.00	68	.3	170	50	120	452	7.0	.0	1.8
CUTTER	.04	.04	.00	60	.7	160	40	110	518	6.0	.0	1.4
87 C14	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	6.12	5.77	1.44	2720	12.1	672	580	2480	316	4.0	.0	42.0
4- 6	.00	.00	.00	1600	.0	0	0	0	0	.0	.0	.0
10- 12	.00	.00	.00	2600	.0	0	0	0	0	.0	.0	.0
20- 22	7.24	7.62	1.38	3260	26.4	2260	780	1850	256	3.7	.0	2.3
30- 32	.00	.00	.00	2400	.0	0	0	0	0	.0	.0	.0
40- 42	1.30	1.26	.10	817	2.3	833	330	166	259	2.5	.0	1.9
CUTTER	1.05	1.03	.16	960	2.6	604	480	240	390	4.9	.0	.0
88 G78	.90	.36	.08	853	7.7	632	265	529	212	2.9	.0	7.6

STATION NUMBER	CARBON			CU PPM	CD PPM	ZN PPM	PB PPM	CR PPM	MN PPM	FE %	HG PPM	AG PPM
	TOT	ORG	NITR									
89 C15	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
CUTTER	.62	.38	.05	0	.0	0	0	0	0	.0	.0	.0
CUTTER	.40	.20	.00	0	.0	0	0	0	0	.0	.0	.0
90BG79B	.98	.83	.14	120	.7	290	124	170	400	5.4	1.1	1.1
91 G80	.63	.20	.05	75	.7	280	125	200	375	5.0	.0	.5
92 C16	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0= 2	1.26	.89	.19	500	4.2	290	148	660	220	3.2	.0	4.8
20= 22	.96	.89	.22	28	.6	180	18	110	324	3.9	.0	.7
40= 42	.64	.60	.10	16	.5	130	17	114	385	4.4	.0	.8
60= 62	.46	.42	.08	20	1.1	154	20	115	420	4.7	.0	.7
77= 79	3.20	.29	.04	16	.2	134	8	86	380	4.4	.0	.6
CUTTER	1.20	1.00	.01	26	1.2	180	25	130	780	5.4	.0	.7
93 G81	1.53	1.51	.24	68	1.2	290	104	186	430	5.4	.9	3.1
94 G82	1.44	1.24	.20	160	1.8	210	152	240	344	3.2	.0	.0
95 G83	1.92	1.92	.24	100	1.1	240	60	176	356	4.1	.0	3.4
96 G84	1.97	1.70	.26	94	1.1	320	90	180	434	4.8	1.2	1.4
97 C17	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0= 2	1.01	.97	.17	90	.9	280	78	160	352	4.1	.0	1.3
20= 22	.65	.58	.08	30	.6	170	36	90	430	4.7	.0	.8
40= 42	.65	.56	.10	16	.6	130	10	90	380	3.9	.0	.8
60= 62	.79	.67	.09	20	.5	140	14	75	460	4.7	.0	.8
80= 82	.72	.62	.09	20	.4	136	15	100	400	3.9	.0	.7
CUTTER	3.52	.73	.11	20	.6	190	12	150	600	5.4	.6	.9
WT. T8P	.81	.56	.17	0	.0	0	0	0	0	.0	.0	.0
99 C18	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0= 2	1.25	1.08	.23	16	.4	120	13	80	280	3.5	.6	.5
20= 22	1.15	1.02	.20	20	.7	130	18	80	356	4.1	.7	1.0
40= 42	1.12	1.01	.21	16	.3	118	20	114	429	4.5	.0	.8
60= 62	.98	1.08	.13	16	.4	130	16	100	380	4.2	.0	.9
80= 82	1.09	1.00	.21	22	.4	136	20	88	430	4.6	.0	.8
100=102	1.13	1.01	.19	20	.6	154	20	100	400	4.4	.0	.8
120=122	.88	.80	.12	0	.0	0	0	0	0	.0	.0	.0
CUTTER	1.15	.90	.20	16	.5	180	14	130	540	5.4	.4	.6
BAR T8P	1.55	1.42	.30	0	.0	0	0	0	0	.0	.0	.0
WT T8P	1.12	1.11	.20	22	.0	136	23	80	400	4.2	.0	.0
100 C19	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0= 2	1.32	1.22	.25	112	2.0	300	106	160	320	3.7	2.7	2.5
2= 4	.00	.00	.00	68	.8	375	145	249	416	4.8	.0	2.3
4= 6	.00	.00	.00	172	1.5	270	60	244	400	5.3	1.7	1.5
7= 9	.00	.00	.00	76	.3	250	75	162	437	5.0	.0	1.2
20= 22	1.01	.92	.15	36	.4	190	35	75	322	3.6	.0	.7
40= 42	.88	.85	.18	16	.4	156	16	90	354	3.9	.0	.8
60= 62	.48	.43	.06	20	.6	160	17	100	384	4.0	.0	.4
80= 82	.33	.29	.02	20	.4	160	16	100	400	4.4	.0	.8
CUTTER	.79	.29	.09	14	.5	200	14	160	564	5.6	.4	.8
101 G87	4.17	4.16	.73	2300	20.5	784	498	1240	300	4.1	3.8	11.8
102 G87	5.71	4.36	.62	2400	11.6	770	432	1320	280	3.8	4.2	20.0
103 G88	5.85	4.80	.91	4625	24.0	1188	675	2188	238	3.3	.0	10.5
104 G89	8.03	4.60	.65	4860	32.5	1400	840	2540	300	3.9	6.4	6.2
105 G90	.43	.16	.02	556	6.3	322	267	378	234	2.9	.0	13.9

STATION NUMBER	CARBON			CU PPM	CD PPM	ZN PPM	PB PPM	CR PPM	MN PPM	FE %	HG PPM	AG PPM
	TBT	ORG	NITR									
106 G91	.73	.16	.04	530	6.0	378	238	510	336	3.8	.0	.0
107 G92	1.75	.36	.05	417	7.4	438	242	375	354	3.8	2.7	.0
108 C20	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	2.30	2.10	.51	60	.0	260	45	90	303	3.3	.0	.0
2- 4	.00	.00	.00	48	.0	247	65	107	317	3.3	.0	.0
4- 6	.00	.00	.00	360	.0	170	37	84	248	2.8	.0	.0
6- 8	.00	.00	.00	28	.0	270	36	100	306	3.2	.0	.0
8- 10	.00	.00	.00	20	.0	150	23	94	306	3.2	.0	.0
10- 12	1.93	1.75	.46	36	.0	177	19	103	344	4.2	.0	.0
20- 22	1.98	1.65	.44	25	.0	150	23	105	376	3.8	.0	.0
40- 42	1.42	1.18	.28	22	.0	150	14	100	336	3.4	.0	.0
60- 62	1.60	1.30	.34	16	.0	120	12	105	328	3.3	.0	.0
80- 82	1.52	1.31	.00	16	.0	130	10	70	284	2.8	.0	.0
100-102	1.40	1.25	.31	16	.0	150	10	105	386	4.2	.0	.0
120-122	1.48	1.34	.34	16	.0	140	9	90	360	3.6	.0	.0
138-140	1.42	1.30	.18	16	.0	160	10	103	366	4.2	.0	.0
CUTTER	1.34	1.26	.16	16	.0	120	30	62	290	3.0	.0	.0
WT TSP	1.60	1.40	.18	0	.0	0	0	0	0	.0	.0	.0
109 C21	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
CUT-1	1.34	1.20	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	1.66	1.45	.24	60	.0	150	37	103	284	3.0	.0	.0
20- 22	1.59	1.36	.23	0	.0	0	0	0	0	.0	.0	.0
40- 42	1.77	1.16	.20	0	.0	0	0	0	0	.0	.0	.0
60- 62	1.33	1.15	.18	0	.0	0	0	0	0	.0	.0	.0
80- 82	1.32	1.07	.17	0	.0	0	0	0	0	.0	.0	.0
100-102	1.56	.87	.13	0	.0	0	0	0	0	.0	.0	.0
CUT-2	1.16	1.05	.16	0	.0	0	0	0	0	.0	.0	.0
WT TSP	1.67	1.29	.22	0	.0	0	0	0	0	.0	.0	.0
110 C22	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	1.55	1.19	.17	0	.0	0	0	0	0	.0	.0	.0
10- 12	1.18	1.25	.16	0	.0	0	0	0	0	.0	.0	.0
20- 22	.44	.36	.07	0	.0	0	0	0	0	.0	.0	.0
40- 42	.43	.40	.04	0	.0	0	0	0	0	.0	.0	.0
60- 62	.28	.16	.00	0	.0	0	0	0	0	.0	.0	.0
CUTTER	.69	.10	.01	0	.0	0	0	0	0	.0	.0	.0
111 C23	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	.87	.60	.10	0	.0	0	0	0	0	.0	.0	.0
10- 12	.52	.40	.04	0	.0	0	0	0	0	.0	.0	.0
20- 22	.59	.48	.06	0	.0	0	0	0	0	.0	.0	.0
37- 39	.66	.32	.02	0	.0	0	0	0	0	.0	.0	.0
CUTTER	.22	.15	.03	0	.0	0	0	0	0	.0	.0	.0
112 C24	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 15	3.64	2.80	.48	0	.0	0	0	0	0	.0	.0	.0
CUTTER	2.64	2.30	.36	0	.0	0	0	0	0	.0	.0	.0
113 C25	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	3.52	2.74	.54	0	.0	0	0	0	0	.0	.0	.0
10- 12	2.50	2.19	.36	0	.0	0	0	0	0	.0	.0	.0
20- 22	.98	.54	.09	0	.0	0	0	0	0	.0	.0	.0
30- 32	.81	.66	.14	0	.0	0	0	0	0	.0	.0	.0
40- 42	.92	.88	.15	0	.0	0	0	0	0	.0	.0	.0

STATION NUMBER	CARBON			CU PPM	CD PPM	ZN PPM	PB PPM	CR PPM	MN PPM	FE %	HG PPM	AG PPM
	TST	ORG	NITR									
60- 62	.60	.51	.08	0	.0	0	0	0	0	.0	.0	.0
76- 78	3.32	.44	.10	0	.0	0	0	0	0	.0	.0	.0
CUTTER	.97	.30	.00	0	.0	0	0	0	0	.0	.0	.0
114 C26	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	3.63	1.82	.38	0	.0	0	0	0	0	.0	.0	.0
10- 12	1.42	1.19	.20	0	.0	0	0	0	0	.0	.0	.0
20- 22	.79	.66	.14	0	.0	0	0	0	0	.0	.0	.0
30- 32	1.03	.91	.16	0	.0	0	0	0	0	.0	.0	.0
40- 42	1.14	.89	.17	0	.0	0	0	0	0	.0	.0	.0
60- 62	.66	.55	.11	0	.0	0	0	0	0	.0	.0	.0
84- 86	.46	.40	.08	0	.0	0	0	0	0	.0	.0	.0
CUTTER	1.71	.47	.00	0	.0	0	0	0	0	.0	.0	.0
115 C27	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	.94	.72	.13	0	.0	0	0	0	0	.0	.0	.0
13- 15	.30	.23	.05	0	.0	0	0	0	0	.0	.0	.0
CUTTER	.34	.14	.00	0	.0	0	0	0	0	.0	.0	.0
116 C28	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	2.64	.81	.11	0	.0	0	0	0	0	.0	.0	.0
10- 12	9.18	1.60	1.99	0	.0	0	0	0	0	.0	.0	.0
20- 22	.69	1.20	.16	0	.0	0	0	0	0	.0	.0	.0
40- 42	1.41	.64	.08	0	.0	0	0	0	0	.0	.0	.0
56- 58	.14	.14	.04	0	.0	0	0	0	0	.0	.0	.0
CUTTER	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
117 C29	.00	.00	.00	0	.0	0	0	0	0	.0	.0	.0
0- 2	3.58	3.94	.78	0	.0	0	0	0	0	.0	.0	.0
10- 12	4.88	5.55	.90	0	.0	0	0	0	0	.0	.0	.0
20- 22	4.79	5.42	.87	0	.0	0	0	0	0	.0	.0	.0
30- 32	3.96	5.74	.85	0	.0	0	0	0	0	.0	.0	.0
40- 42	3.47	6.26	.83	0	.0	0	0	0	0	.0	.0	.0
50- 52	1.45	1.80	.25	0	.0	0	0	0	0	.0	.0	.0
56- 58	2.80	.80	.13	0	.0	0	0	0	0	.0	.0	.0
CUTTER	.94	.94	.00	0	.0	0	0	0	0	.0	.0	.0

TABLE VI
BULK ANALYSES

Station N.B.	Sample Depth cm	Cu ppm	Zn ppm	Pg ppm	Cr ppm	Mn ppm	Fe %	Ag ppm	Cd ppm
24	top	51	105	61.02	86	356	2.78	2.3	0.5
24	6	44	95	37.97	69	330	2.56	0.2	0.28
33	6	158	82	46.1	90	138	0.78	0.3	0.33
67	top	220	194	112.54	270	298	2.6	10.5	3.44
67	top	20	42	25.43	34	260	1.34	0.2	0.23
78	top	158	126	197.12	140	366	1.62	2.1	1.52
78	15	18	53	16.61	45	323	2.26	0.1	0.36
80	top	520	229.6	100	436	246	2.3	8.2	1.26
80	65	164	167	102.75	72	298	2.4	0.4	0.67
81	top	700	108	138	600	260	1.82	15	1.34
81	90	24	56	36.61	62	315	3.02	1	0.32
83	top	640	215	125.12	450	167	1.32	2.9	2.54
84	top	740	152	200	1180	246	2.76	6.7	0.76
84	30	178	194	178.94	78	298	2.8	1.9	0.9
84	50	51	91.8	71.87	50	260	2.34	0.2	0.36
85A		2500	436	210.4	1800	292	2.8	17.9	6.4
87	top	1460							
87	46	86	91	111.14	45	192	1.48	0.2	0.18
92	top	24	53	48.82	53	292	1.62	0.8	0.2
92	6	24	60	34.24	58	308	1.86	1.4	0.12

TABLE VII

GRAIN SIZE RELATIONS FOR NB 85 A - G 77

Size Fraction	Cu ppm	Zn ppm	Pg ppm	Cr ppm	Mn ppm	Fe %	Cu ppm	Ag ppm	Ni ppm
Bulk	2500	595	210	1800	292	2.8	6.4	17.9	
763 μ	230	86	56	70	216	0.9	3.2	1.6	60
20-63 μ	900	110	118	400	370	1.7	3.8	3.5	116
6.3-20 μ	1460	310	436	740	400	3.3	16.4	10	168
2-6.3 μ	5000	820	686	3500	490	5.5	25	30.4	305
0.63-2 μ	7000	780	926	6100	336	5.2	33.2	36.1	290
<0.63 μ	8500	2030	1140	9020	270	4.8	43	40	285

TABLE VIII

CLAY FRACTION VERSUS BULK ANALYSES

Station No.	Core No.	Sample Depth	Weight	<2 μ	Bulk	<2 μ	Bulk	<2 μ	Bulk	<2 μ	Bulk	<2 μ	Bulk	
99	18	Top	22	15	136	54	23	14	80	40	400	4.2	2.7	
108	20	Top	16	14	120	64	30	14	62	45	290	3	3.1	
		0-2	60	22	260	104	45	21	90	70	303	3.29	3.3	
		2-4	48	22	247	110	65	15	107	70	317	3.27	3.75	
		4-6	36	22	170	108	37	15	84	72	248	2.85	3.15	
		6-8	38	22	270	93	36	9	100	60	306	3.15	3.3	
		8-10	20	16	150	88	23	6	94	60	306	3.15	3	
		10-12	36	16	177	71	19	6	103	70	344	4.25	3.85	
		20-22	25	12	150	70	23	6	105	60	376	3.8	3	
		40-42	22	10	150	64	14	6	100	60	336	3.45	3	
		60-62	16	12	120	56	12	6	105	55	328	3.3	2.85	
109	21	80-82	16	8	130	44	10	6	70	45	284	2.85	2.24	
		100-102	16	10	150	54	10	6	105	55	386	4.25	2.6	
		120-122	16	10	140	56	9	6	90	55	360	3.6	2.75	
		138-140	16	10	160	47	10	6	103	55	366	4.25	2.5	
		0-2	60	22	150	76	37	17	103	76	284	3	2	
		0-2	1260	880	510	380	200	168	650	550	248	370	2.5	2.85
		10-12	1080	760	624	370	305	200	450	340	264	336	3.05	2.75
		20-22	1020	630	650	420	300	230	310	230	464	346	3.45	3
		30-32	1279	580	726	370	400	170	351	160	200	350	3.52	2.85
		40-42	840	560	460	350	220	150	160	150	200	360	2.2	3
117	29	50-52	590	280	360	188	170	100	101	60	346	2.5	2.35	
		56-58	60	30	130	66	50	60	80	30	240	2.6	1.45	

Section V - Biologic Data

The initial biologic sampling scheme for this portion of the New Bedford Harbor program was designed to determine the influence of benthic organisms on fine-grained sediment dynamics. The first quantitative, benthic survey was conducted from the R/V ASTERIAS on November 25 and 26, 1975. Bottom samples were taken at seven outer (P.1, P.3, P.7, P.9, P.11, P.17 and P.19) and two (H4 and H5) inner harbor stations (Figure 3). Two grabs were made at each station using a small van Veen grab. A small subsample of sediment was retained; the remaining sample was immediately sieved through a 0.42 mm screen. Specimens obtained were preserved in a 5% buffered solution of formalin in sea water. Polychaetes were identified to family, and mollusks to genus and species, where possible. Taxonomic identifications were not done for oligochaetes or sipunculids. Table IX is a summary of quantitative results. Table X presents biomass data from this quantitative survey. Carbon/nitrogen ratios presented in Table X are for sediment samples collected at five stations.

A qualitative faunal survey was conducted at four of the nine quantitative stations (P.3, P.17, P.19 and H5) in June and July, 1976 from the R/V ASTERIAS. Field procedures were similar to those used for the quantitative survey. In the laboratory, samples were elutriated and organisms retained on a 0.42 mm screen were identified to give a qualitative index of the macrobenthos present at each station. Table XI presents the results of this qualitative survey.

The collection of samples for the determination of metal levels was undertaken aboard the R/V CORSAIR (Southeastern Massachusetts University) in April, 1977. Samples were collected at P.9, P.17, H5 and station O.B., located to the east of the navigation channel adjacent to station H5A (Figure 3). Bottom collections were made by dredge. Samples obtained were sorted on deck; living mollusks and crustaceans were washed with sea water and immediately frozen. The preparation of tissue samples for trace metal analysis was taken from Anderson (1972). Samples were thawed, thoroughly rinsed with double-distilled water and a wet weight was then determined. All samples were then dried for 48 hours at 100°C, or until a constant weight was obtained and then ashed at 450-500°C for 16 to 20 hours. Two to four mls. of concentrated, reagent-grade nitric acid were added to ashed samples. One hour was allowed for digestion. The digested samples were then filtered through 0.45 μ , Whatman, silicon filters. The filtrate was then transferred to a volumetric flask and diluted

to a volume dependent on presumed metal levels because of the need to keep metal concentrations within the operation ranges of the equipment used. The diluted filtrate was kept between 5 to 10% nitric acid.

Only soft body parts were used for metal analyses on mollusks. Several individuals were sometimes pooled to obtain sufficient material for analysis. Metal analyses were performed on whole crabs. *Libinia emarginata* (spider crab) were heavily covered with algae and detritus, most of which was removed. The coatings, which could not be cleaned from the carapace, were included in the metal analyses. Other crab species posed no such problem.

Preliminary analyses were run on a Perkin-Elmer 290B, Atomic Absorption Spectrophotometer located at Southeastern Massachusetts University. When it was found that Cd were below the detection limits of the Perkin-Elmer 290B, analyses for this and all other metals were run on a Perkin-Elmer 603 Atomic Absorption Spectrophotometer located at the Environmental Protection Agency, Environmental Quality Lab; Narragansett, Rhode Island. Appropriate stock solutions were prepared and calibrations run, as described in Analytical Methods (Perkin-Elmer, 1968). Differences in Cu and Zn values between the two instruments were generally less than 5%.

Metal recovery techniques were tested using a standard clam homogenate (*Mercenaria mercenaria*), which was supplied by the Narragansett Environmental Quality Lab. Using "wet ashing" techniques, E.P.A. has established "known" levels of Cd (1.5 ppm), Cu (23 ppm), and Zn (140 ppm) in this standard. Using Anderson's (1972) "dry ashing" techniques similar values for Cd (1.6 ppm), Cu (27.4 ppm), and Zn (142.6 ppm) were obtained.

Tables XII and XIII contain the results of metal analyses for the slipper limpet *Crepidula fornicata*, a species well represented at all sampling stations. Data presented in Table XII is for pooled individuals; no note of the sex or number of individuals was kept. For later analyses of *C. fornicata* (Table XIII), the sex of individual specimens was determined, and if pooling of individuals was required, animals were usually grouped only with individuals at the same sexual stage of development or of similar weight. Table XIX summarizes data for the edible bivalve *Mercenaria mercenaria*. Table XX presents metal analyses data for a variety of species common to New Bedford Harbor.

TABLE IX - QUANTITATIVE DATA

	4	5A	5B	P1	P3A	P3B	P7A	P7B	P9A	P9B	P11A	P11B	P17A	P17B	P19A	P19B
POLYCHAETES																
<i>Ampharetidae</i>																
<i>Capitellidae</i>							2									
<i>Giribulidae</i>		*	100	24	2128	4688	768	1440	436	76	1152	*	252	776	*	150
<i>Dorvilleidae</i>						8		38	206	10	2	2	26	42	1	10
<i>Glyceridae</i>	2	2	2		28	20		2	6				16			
<i>Hessoniidae</i>								14	8			4	4	4	10	16
<i>Lumbrineridae</i>	3						30	68	2			3				
<i>Nereidae</i>				1								1				
<i>Orbinidae</i>		2				48				1		2	2	4	20	34
<i>Paraonidae</i>					20		26	40	102	46		3		14		
<i>Phyllodoceidae</i>	20	20	20			64	4		6			4				
<i>Spionidae</i>	3	14	14		16	80	6	8	4		48	87	8	6	2	
<i>Syllidae</i>	1	8	8	4		48	22	152	112	80	38	24		10		8
<i>Terebellidae</i>								2								
<i>Trichotrichidae</i>								2								
<i>Nephtyidae</i>						4		4		1	14	9			1	2
GASTROPODS																
<i>Acteon</i>																
<i>punctostriatus</i>						6										
<i>C. plana</i>	22		22										6	20	1	2
<i>C. convexa</i>																
<i>C. formicata</i>	18	4	14						40	12			28	39		16
<i>Haminoea solitaria</i>						8						1				
<i>Mitrella lunata</i>						2	2	4	8		1	1				
<i>Nactica pusilla</i>						4	2	4	4		2					
<i>Nass. trivittatus</i>						4										2
<i>Retusa sp.</i>				1							3	2			2	
BIVALVES																
<i>Astarte castanea</i>		1														
<i>Astarte sp.</i>									44							
<i>Anomia simplex</i>			2							5						
<i>Cardita borealis</i>							1	20								
<i>Nucula proxima</i>				4	16	26			4		5	8			9	12
<i>Pandora gouldiana</i>														2		
<i>Pitar morrhana</i>																
<i>Yoldia limatula</i>				1			2				1				5	12
SIPUNCULIDS																
<i>Yoldia limatula</i>					13	20	14	30	8		4	3			1	6
OLIGICHAETES																
<i>*Odobostomia</i>					64	60	2	6	56		8	2			1	18
<i>seminuda</i>			24						16			16	28			4

*Loss of an untold number of Capitellids (accidentally discarded).

***O. seminuda* is an ectoparasite of *Crepidula sp.*; it is a gastropod, but is listed separately in the table.

A and B represent the first and second grab sample at each station.

TABLE X

BIOMASS DATA

Station	Total Biomass	Soft-bodied Biomass (worms)	Mollusk Biomass	Total No. of Individuals	C/N Ratio
4A	3.9441	.667	3.2771	322	4.884
5A	13.1155*	.011	13.1045	29*	-
5B	17.2644	.0462	17.2182	208	-
P1A	.3234	.2418	.0816	41	-
P3A	4.6956	.2296	4.466	2293	-
P3B	1.6729	.8628	.8101	5090	-
P7A	.0806	.0566	.024	879	5.825
P7B	.4482	.2402	.208	1830	5.825
P9A	19.8230	.1964	19.6357	1054	-
P9B	26.5183	.0198	26.4985	251	-
P11A	.3768	.2566	.1202	1279	4.695
P11B	.3364*	.3147	.0217	145	4.695
P17A	13.4017	.0404	13.3613	367	11.092
P17B	19.2492	.074	19.1752	945	11.092
P19A	.361 *	.0859	.2751	53	6.156
P19B	.784	.2158	.5682	292	6.156

All weights are wet weights in grams.

*loss of an unknown amount of Capitellidae (accidentally discarded).

TABLE XII

Metal Analyses - *Crepidula fornicata*, Pooled Individuals

Station	(Grams)		(Concentrations in ppm dry weight)			Number of Individuals
	Wet Wt.	Dry Wt.	Cu	Zn	Cd	
5		2.418	165.4	105.9	3.93	15
5		3.444	139.4	92.9	3.78	18
5	13.697	1.748	185.9	94.4	3.15	
5	14.936	2.06	145.6	99.5	3.4	
5	14.24	1.986	271.9	100.7	2.77	
O.B		1.87	88.3	88.3	2.7	
O.B		2.078	144.4	93.9		
O.B	13.599	2.011	129.3	93.2	2.98	
O.B.	10.97	1.394	129.1	89.6	2.15	
P9		4.316	95.	78.8	1.4	
P9		2.235	93.9	87.2		
P9	13.728	2.209	65.6	90.5	0.9	
P9	13.273	2.334	96.4	70.7	1.1	
P9	15.54	2.318	133.8	79.8	0.86	
P17	10.253	1.699	153.1	78.9		
P17	10.641	2.007	130.	98.		
P17	13.597	2.732	197.7	87.1		
P17	13.361	2.035	176.9	94.3		
P17	16.688	2.278	153.7	82.3	2.19	
P17	13.503	1.674	170.2	77.7	1.19	
P17	14.223	2.028	128.2	91.2	2.47	

TABLE XIII

Crepidula fornicata

STATION 5

(grams)		SEX	(concentrations in ppm dry wt.)			# OF INDIV.	INDIVIDUAL WET WEIGHTS (grams)
WET WT.	DRY WT.		Cu	Zn	Cd		
2.314	.286	F	74.3	120.6	4.37	1	2.315
1.465	.212	F	254.1	172.6	13.0	1	1.465
4.620	.537	F	242.2	128.1	3.26	5	.812, .853, .929, .953, 1.073
4.596	.619	F		156.7	4.04	3	1.586, 1.583, 1.428
2.838	.364	F	237.0	120.2	4.12	2	1.719, 1.119
3.172	.334	F	228.5	119.1	5.99	4	.864, .851, .778, .679
2.763	.303	F	132.0	124.6	4.95	2	1.684, 1.079
2.576	.246	M	325.9	99.8	5.09	2	1.402, 1.174
3.959	.443	M	146.7	94.8	3.39	4	1.137, 1.094, .888, .840
5.547	.587	M	189.5	99.7	3.41	3	2.064, 1.889, 1.594
3.837	.388	M&F	164.5	134.2	5.16	32	.12 (average)
4.426	.419	M&F	265.7	130.2	2.98	8	.55 (average)
4.030	.386	M&F	187.8	121.8	4.53	8	.50 (average)
3.918	.372	M&F	144.6	117.7	4.71	15	.26 (average)

STATION P9

2.377	.322	F	178.3	117.8	2.33	2	1.426, .951
9.425	1.428	F	147.1	84.0	1.40	3	3.274, 3.201, 2.950
4.223	.588	F	352.9	91.0	2.13	1	4.223
10.470	1.458	F	178.3	93.9	1.71		
17.971	2.814	F	155.5	79.9	1.42		
7.678	.818	M	111.5	95.3	1.83	15	
3.244	.383	M	117.5	86.2	1.96	2	1.626, 1.618
3.218	.340	M	77.1	67.6	1.47	1	3.218
3.302	.486	M	61.7	84.3	2.06	2	2.586, .716
14.354	1.909	M	115.2	90.6	1.57		
10.098	1.690	M&F	130.2	89.9	1.78		
11.060	1.741	M&F	201.0	95.4	2.30		

TABLE XIV

Crepidula fornicata

STATION 17

(grams)		SEX	(Concentrations in ppm Dry Wt.)			# OF INDIV.	INDIVIDUAL WET WEIGHTS
WET WT.	DRY WT.		Cu	Zn	Cd		
5.837	.558	M	199.6	112.1	1.79	11	1.254, .808, .759, .643, .526, .466, .450, .26, .234, .220, .214
6.354	.669	M	140.1	89.7	2.62	5	1.500, 1.486, 1.358, 1.144, .866.
7.055	.675	M	196.3	90.4	2.59	10	1.144, .977, .836, .752, .664, .659, .623, .515, .447, .438
7.050	.716	M	137.9	71.9	2.44	3	2.963, 2.166, 1.921
3.315	.383	M	104.4	70.5	1.96	2	1.792, 1.523
5.006	.504	M	263.0	103.2	3.47	3	1.781, 1.646, 1.579
5.442	.516	M	222.6	103.1	2.90	4	1.412, 1.400, 1.397, 1.233
5.500	.671	F	165.8	111.8	2.61	7	1.251, 1.040, .758, .756, .641, .566, .486
2.585	.319	F	195.9	100.3	2.35	1	2.585
2.139	.338	F	306.5	99.0	4.43	1	2.139
4.455	.510	F	183.6	121.4	2.94	3	1.727, 1.680, 1.048
5.404	.578	F	175.2	101.6	3.46	5	1.315, 1.146, 1.092, 1.051, .800
3.306	.427	F	137.6	119.4	2.93	2	1.792, 1.514
4.060	.492	F	129.4	115.2	3.05	1	4.060
4.176	.444	F	306.9	105.9	3.94	1	4.176
2.330	.304	F	127.4	123.3	3.29	3	.880, .770, .680
4.844	.634	F	78.8	97.7	2.36	2	2.510, 2.334
4.184	.592	F	268.2	102.6	4.22	2	2.110, 2.074
4.616	.567	F	216.0	109.8	4.41	2	2.720, 1.896
4.472	.608	F	137.6	81.4	2.46	2	2.480, 1.992
5.757	.774	F	148.6	87.2	3.23	3	1.932, 1.924, 1.901
3.965	.488	F	251.0	86.6	2.56	2	2.242, 1.723
5.583	.669	F	199.9	99.4	2.99	3	2.094, 1.947, 1.542
4.681	.534	F	198.9	116.9	2.81	3	1.830, 1.644, 1.207

TABLE XV

Metal Levels in *Mercenaria mercenaria*

Station	(Grams)		(Concentrations in ppm dry weight)			Number of Individuals	Individual Wet Wts. (grams)
	Wet Wt.	Dry Wt.	Cu	Zn	Cd		
5	8.156	1.068	79.6	262.3	.94	1	8.156
5	11.562	1.561	60.9	297.9	.96	1	11.562
5	17.304	2.235	67.1	90.4	.89	1	17.304
5	7.300	.530	40.1	294.8	2.36	1	7.300
5	12.550	1.454	47.3	158.1	2.06	2	6.510, 6.040
5	11.637	1.459	71.9	398.3	1.88	(rest of body)	
5	3.028	.122	N.D.	26.7	2.05	SAME ANIMAL (foot only)	
O.B.	39.024	5.887	27.2	152.9	.85	1	39.024
O.B.	63.817	10.942	22.8	228.5	1.00	1	63.817
P9	8.314	.726	72.4	186.1	1.61	1	8.314
P9	7.534	.820	21.3	207.2	1.52	4	
P9	4.830	.387	87.2	151.2	1.94	1	4.830
P9	12.674	1.394	41.2	156.9	.90	2	6.603, 6.071
P9	25.004	1.861	70.5	138.4	3.09	1	25.004
P9	18.935	2.386	35.6	90.1	.73	1	18.935
P9	14.154	1.439	18.2	119.9	.87	1	14.154
P9	11.502	1.383	16.3	178.9	.90	1	11.502
P17	7.096	.776	45.1	148.1	1.29	1	7.096
P17	3.973	.463	43.2	155.5		2	
P17	17.869	1.816	31.7	67.8	.69	1	17.869

TABLE XVI

METAL LEVELS BY SPECIES

(grams)		(Concentrations in ppm Dry Wt.)			# OF	INDV. WET
<u>Wet Wt.</u>	<u>Dry Wt.</u>	<u>Cu</u>	<u>Zn</u>	<u>Cd</u>	<u>INDIV.</u>	<u>WEIGHTS</u>
STATION 5 - SPECIES: <i>Anadara transversa</i> (transverse ark)						
2.294	.272	115.1	501.8	16.57	2	
2.215	.287	34.8	513.9	28.70	1	2.215
STATION P9 - SPECIES: <i>Anadara transversa</i> (transverse ark)						
5.894	.793	50.4	214.4	32.16	5	
1.997	.328	30.4	199.4	15.22	3	1.390, .355, .252
STATION 5 - SPECIES: <i>Libinia emarginata</i> (spider crab)						
50.721	25.332	30.4	60.8	.55	1	50.721
79.347	26.706	54.7	73.4	.52	1	79.347
STATION O.B. - SPECIES: <i>Libinia emarginata</i> (spider crab)						
41.096	12.940	42.5	87.3	.62	1	41.096
37.936	12.234	54.8	76.8	.98	1	37.936
STATION P9 - SPECIES: <i>Libinia emarginata</i> (spider crab)						
9.767	2.499	60.0	94.1	.80	1	9.767
14.520	4.816	52.4	86.3	.52	2	
STATION P17 - SPECIES: <i>Libinia emarginata</i> (spider crab)						
35.622	13.562		89.2	.66	1	35.622
45.550	17.142	61.3	89.8	.70	1	45.550
STATION 5 - SPECIES: <i>Neopanope texana</i>						
5.939	2.486	41.2	76.4	.80	2	
6.109	2.644	60.5	82.5	.38	3	
7.979	3.769	47.8	69.8	.53	2	4.173, 3.806
STATION P9 - SPECIES: <i>Neopanope texana</i>						
6.309	3.054	47.5	65.5	.49	2	4.100, 2.209
STATION 5 - SPECIES: <i>Busycon canaliculatum</i> (channeled whelk)						
19.782	2.932		1439.0	3.50	1	19.782
STATION O.B. - SPECIES: <i>Busycon canaliculatum</i> (channeled whelk)						
4.511	.896	429.9	848.7	22.9	1	4.511
STATION 5 - SPECIES: <i>Cancer irroratus</i> (rock crab)						
8.466	2.270	72.7	99.6	1.98	1	8.466
STATION O.B. - SPECIES: <i>Ovalipes ocellatus</i> (lady crab)						
35.102	8.906	60.6	116.8	2.47	1	35.102

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