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HYDROGRAPHIC DATA FROM OREGON WATERS

1962 through 1964

by
Bruce Wyatt
and
William E. Gilbert

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Data Report No. 24

Reference 67-1

March 1967

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Corvallis, Oregon 97331

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Contract Nonr 1286(10)
Project NR 083-102

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Wayne V. Burt
Chairman

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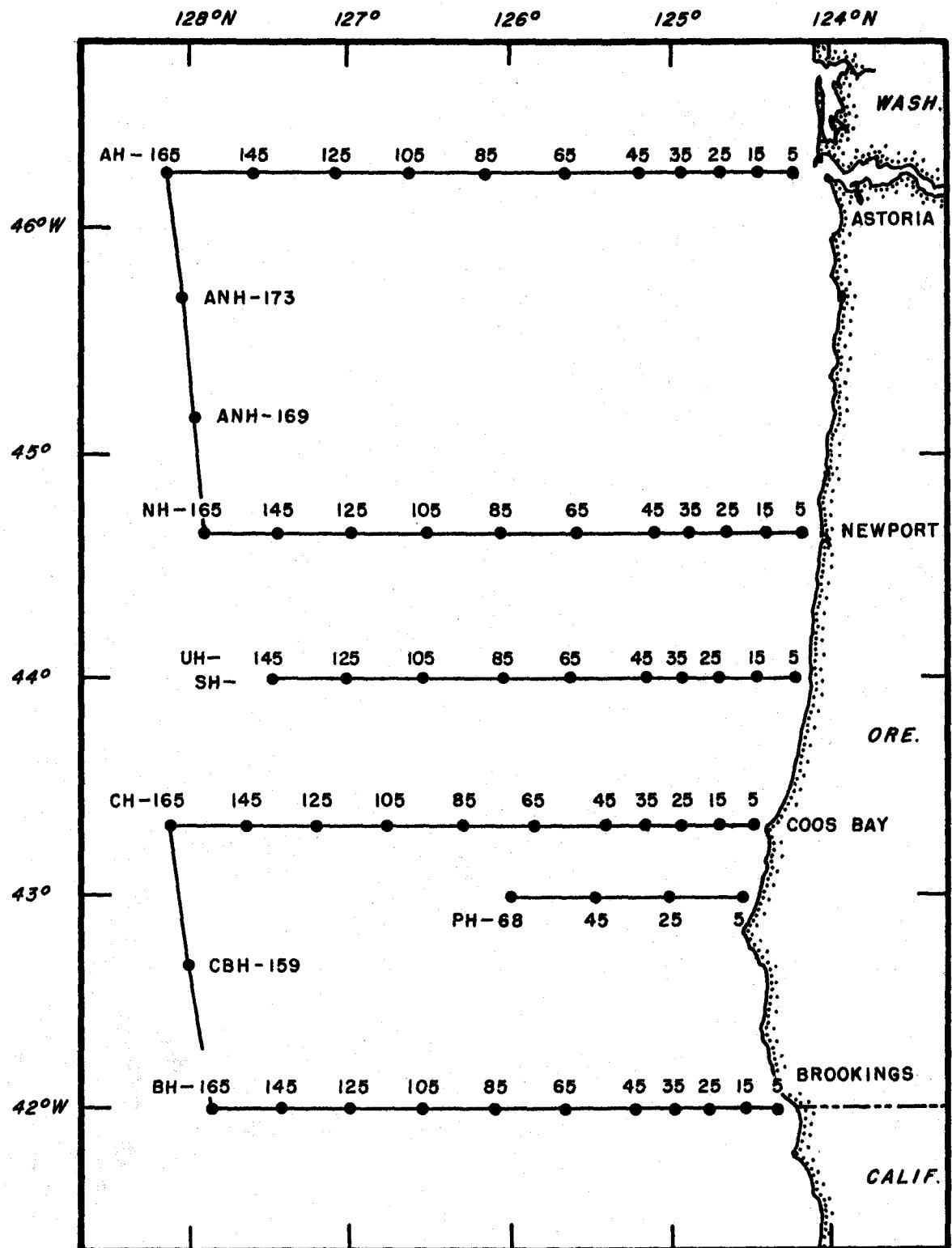
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Locations of stations occupied by Oregon State University, 1962-1964.

INTRODUCTION

This is the fifth report of data collected during a study designed to determine the currents and water masses along the Oregon coast. The first four reports cover the period from July 1958 to December 1961 (Wyatt and Callaway, 1961; Wyatt and Kujala, 1961; Wyatt and Kujala, 1962; Wyatt and Kujala, 1963). The present report includes hydrographic data collected off the Oregon coast by the Department of Oceanography, Oregon State University, from January 1962 through December 1964.

DATA COLLECTION AND PROCESSING

Data were collected by Oregon State University personnel aboard the vessels R/V ACONA and R/V YAQUINA. The observations were planned to survey conditions off the Oregon coast but particularly to monitor temperature and salinity distributions along a latitudinal tract at 44°39'N. Each station is identified by a two-letter, two-number code that identifies the station latitude and distance from shore. Latitude is represented by a letter, e.g. N (for Newport) at 44°39.1'N, and similar choices for the other parallels (see table below). Letter H indicates a hydrographic station. Numerals give distance from shore in nautical miles. Thus, NH 45 is a hydrographic station on the "Newport line" (44°39.1'N) 45 miles off the coast.

Standard Lines

Letters	Coastal City	Latitude
AH	Astoria	46°14.4'N
NH	Newport	44°39.1'N
CH	Coos Bay	43°20.1'N
BH	Brookings	42°20.0'N

Special Lines

Letters	Coastal City	Latitude
YH	Yachats	44°19.2'N
SH	Siuslaw	43°59.2'N
UH	Umpqua	43°47.0'N
PH	Port Orford	43°00.0'N

Salinity

Salinity determinations were made mostly in the shore laboratory with an inductive salinometer model Mk. II manufactured in Australia by Industria Manufacturing Engineers Pty. Ltd. The method used for the determinations was described by Brown and Hamon (1961). Substandard water was prepared from sea water that had been collected 100 miles off Oregon and stored for three months.

The inductive salinometer is subject to some drift in conductivity because of changes in room temperature during analysis of a series of

samples from a station. However, the approximate average accuracy of determinations was believed to be 0.003‰ as reported by Brown and Hamon (1961). On cruise 6411 salinity determinations made at sea had a precision error of \pm 0.03‰. The added error resulted when unregulated ship's power was accidentally used to energize the inductive salinometer.

Temperature

Thermometer calibrations were done by our personnel using Scripps Institution of Oceanography standard thermometers and tank. The accuracy of temperature readings is believed to be \pm 0.02°C for reversing thermometers and \pm 0.1°C for bucket thermometers. In all cases two protected reversing thermometers were mounted on each Nansen bottle. One unprotected reversing thermometer was mounted on each bottle.

Depth

Depth determinations were made by the "depth-difference" method described in Hydrographic Office Pub. 607, 1955. At least once each year three to six calibration casts were made to monitor the pressure coefficients (Q) for unprotected thermometers. Depth estimates have an approximate accuracy of 1.5 percent at 750 m depth.

Oxygen

The modified Winkler method of oxygen analysis as described by Strickland and Parsons (1955) was employed. Precision was believed to be at \pm 0.03 ml/L of dissolved oxygen.

Computations

All hydrographic data were processed with the aid of the CDC 3300 computer. Auxillary temperature corrections and index corrections obtained from laboratory calibrations were completed with a computer program. Interpolation of property values to standard depths was accomplished by three-point parabolic interpolation. (Two observed property points above the standard depth and one point below were interpolated parabolically; the result was averaged with similar interpolation by using one observed point above the standard depth and two points below.) The specific volume anomalies, σ_t and ΔD , were all computed by using interpolated properties.

Graphic plots were made of temperature against depth, temperature against salinity, and thermosteric anomaly against depth. Pre-trip and post-trip detection was made possible with this type of presentation, and data from such casts are not shown in the table.

ACKNOWLEDGMENTS

Robert Still, Norman Kujala and Dennis Barstow collected much of the data, made the temperature corrections and depth determinations, and plotted temperature and salinity values. George Crandell completed most of the data processing for cruises 6207 and 6208. Sue Borden made most of the computer calculations. Kilho Park evaluated the chemical methods and aided in supervision of the determinations.

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TABLE I

Cruise Dates, Stations, Observations, and Personnel for Hydrographic Cruises from January 1962 to December 1964.

CRUISE	DATES	STATIONS	OBSERVATIONS*	PERSONNEL
6201-A ^a	13-16 Jan	NH ^b -5 to 145 AH-5 to 165 CH-5 to 145	CB ^c , MWT ^d	Norman Kujala ^e , Lyle Hubbard, Carl Lehman, Neil Maloney, Walter DeBen, William Volmer
6202-A	3-5 Feb	NH-5 to 165	CB	Bruce Wyatt, Carl Lehman, Malcolm Oliphant, Warren Denner, Roger Woodruff, Walter DeBen
6204-A	27 Mar- 6 Apr	NH-5 to 165 AH-5 to 165	CB, MWT	Norman Kujala, Herbert Curl, Lyle Hubbard, Malcolm Oliphant, Carl Lehman, Walter DeBen, Timothy Noland
6205-A	30 Apr- 3 May	NH-5 to 165 NH-15 to 165	CB, phosphate MWT	Norman Kujala, Herbert Curl, Carl Lehman, Walter DeBen, Malcolm Oliphant, Jackson Blanton, Timothy Noland, Gerald Wiese, James Rich
6206-A	4-8 June	NH-5 to 165 AH-5 to 165	CB, MWT, phosphate	Norman Kujala, Herbert Curl, Lawrence Small, Lyle Hubbard, Malcolm Oliphant, James Stanley, Walter DeBen, Timothy Noland
	11-17 June	CH-5 to 165 BH-5 to 165	CB, MWT, phosphate	Norman Kujala, Malcolm Oliphant, Walter DeBen, Michael Laurs, Jackson Blanton, Ward Renshaw, Neil Maloney
6207-A	23-27 July	AH-5 to 165 NH-5 to 165	CB, MWT, phosphate	Norman Kujala, Lawrence Small, Harry Freund, Malcolm Oliphant, James Stanley, David Bushnell, Michael Healy, Timothy Noland, Roy Yamamoto
6208-A	30 July- 4 Aug	CH-5 to 165 BH-5 to 165	CB, MWT, phosphate	Norman Kujala, Herbert Curl, Malcolm Oliphant, James Stanley, Michael Laurs, Robert Lane, Jackson Blanton, Roy Yamamoto
6209-B	4-7 Sept	NH-5 to 165	CB, MWT, anchor dredge	Norman Kujala, Andrew Carey, Richard Morita, Malcolm Oliphant, Paul Maughan, Roy Yamamoto, Bruce Johnson
6210-B	15-18 Oct	NH-5 to 105 AH-5 to 105	CB, MWT, phosphate	Norman Kujala, Lyle Hubbard, Malcolm Oliphant, Donald Day, Timothy Noland, Sargon Tont
	22-26 Oct	BH-5 to 165 CH-35	CB, MWT, phosphate	Norman Kujala, Donald Day, Michael Laurs, Curtis Collins, Victor Neal, Robert Still
6212-D	16-20 Dec	NH-5 to 165 AH-5 to 165	CB, MWT, phosphate	Norman Kujala, Lyle Hubbard, Malcolm Oliphant, Jackson Blanton, Erwin Runge, Darvel Lloyd
	27-30 Dec	CH-5 to 125	CB, MWT, phosphate	Norman Kujala, Michael Laurs, Ronald Verity, Timothy Noland, Arthur Albin, Dennis Barstow, Malcolm Oliphant

6302-C	21-26 Feb	NH-5 to 145 AH-5 to 145	CB, MWT	Norman Kujala, James Stanley, Malcolm Oliphant, Ronald Verity, Warren Denner, James Winslow, Adrian Matson
	1-7 Mar	BH-5 to 165 CH-5 to 165	CB, MWT	Norman Kujala, Robert Still, Malcolm Oliphant, Michael Laurs, Ronald Verity, James Winslow, Curtis Collins
6305-A	13-21 May	BH-5 to 145 CH-5 to 145	MWT, CB, one-meter net tow	Norman Kujala, James Stanley, Malcolm Oliphant, Michael Laurs, Ronald Verity, Timothy Noland, William Watkins, James Mason
	24-27 May	NH-5 to 165	MWT, CB, one-meter net tow	Bruce Wyatt, Lyle Hubbard, Robert Still, George Crandell, Ronald Verity, Jackson Blanton, Lon Bentsen, John Frietag
6307-C	16-19 July	NH-5 to 165 UH-25 to 85	MWT, CB, one-meter net tow	Norman Kujala, Kilho Park, Robert Still, Lon Bentsen, Roy Yamamoto, Ronald Verity, William North, David Minard, Raj Natarajah, Curtis Collins
	19-27 July	CH-5 to 165 BH-5 to 165	MWT, CB, one-meter net tow, phosphate	Norman Kujala, Michael Laurs, Dennis Barstow, Ronald Verity, Lon Bentsen, Roy Yamamoto, Raj Natarajah, Adrian Matson, Roger Haight
6308-B	6-9 Aug	NH-23	Drogue tracking and anchor station	Robert Still, June Pattullo, Elizabeth Strong, Robert Smith, Timothy Noland, Paul Maughan, David Minard
6309-B	10-16 Sept	CH-5 to 165 BH-5 to 165	MWT, CB, one-meter net tow, chlorophyll analysis, phosphate	Robert Still, Dennis Barstow, Hugh Dobson, Michael Laurs, Roy Yamamoto, William North, Adrian Matson, Merritt Stevenson
	18-23 Sept	NH-5 to 165 AH-5 to 165	MWT, CB, one-meter net tow, chlorophyll analysis, phosphate	Robert Still, Dennis Barstow, Ronald Verity, Hugh Dobson, Victor Neal, Roy Yamamoto, Rodney Eagle, David Jennings, Iver Duedall, Kimball Crocker
6311-B	29 Nov-2 Dec	NH-45 to 145	MWT, CB, one-meter net tow, chlorophyll analysis, phosphate	Bruce Wyatt, Robert Still, Lyle Hubbard, Norman Cutshall, Victor Neal, Douglas Manske, Edward Thornton, Hugh Dobson, Donald Conners
6312-B	10-14 Dec	NH-25 to 65	MWT, VMT ^f	Lyle Hubbard, Ward Renshaw, William North, Arthur Albin, Michael McCormick, Merritt Stevenson, Herman Wyandt

*Drift bottle releases and bathythermograph casts were made at all stations.

^aCruise number gives date of occurrence. First two figures are the year; second two, the month. The letter suffix indicates the order of the cruise within a month.

^bStation identification code is explained in the text.

^cCB stands for Clarke-Bumpus oblique tow; depth was usually 200 meters.

^dMWT stands for Isaacs-Kidd midwater trawl; tows were oblique and depth was usually 200 meters.

^eFirst person listed was party chief.

^fVMT stands for vertical meter-net; depth was 200 meters.

CRUISE	DATES	STATIONS	OBSERVATIONS	PERSONNEL
6402-A	2-6 Feb	NH-5 to 165 CH-5 to 165	MWT, VMT	Robert Still, Lyle Hubbard, Dennis Barstow, Hugh Dobson, Merton Ingham, Arthur Albin, Lawrence Swanson, Kimball Crocker
6404-B	9-16 Apr	CH-5 to 165 BH-5 to 165	MWT, VMT, CB, chlorophyll analysis	Robert Still, Lyle Hubbard, George Crandell, Hugh Dobson, Merton Ingham, Douglas Manske, Niels Skov, Donald Connors
	17-22 Apr	NH-5 to 165 AH-35 to 165	MWT, VMT, CB, chlorophyll analysis	Norman Kujala, Dennis Barstow, Hugh Dobson, John Hardy, Arthur Albin, Normal Cutshall, Edward Thornton, David Jennings, Hans Nelson
6405-D	29 May- 2 June	NH-25 to 45	Drogue tracking	Bruce Wyatt, June Pattullo, Elizabeth Strong, Timothy Noland, Leverett Ropes, Merritt Stevenson, Robert Swanson
6407-C	11-16 July	AH-5 to 165 NH-5 to 165	MWT, VMT, chlorophyll analysis	Robert Still, Timothy Noland, Patrick O'Shea, Merritt Stevenson, Kimball Crocker, Iver Duedall, Hugh Dobson, Donald Connors, George Kennedy, John Hardy
	18-23 July	CH-5 to 165 UH-25 to 165 YH-35 to 145	MWT, VMT, chlorophyll analysis	Dennis Barstow, Carey Haag, Gale Griswold, George Morrison, Hans Nelson, Hugh Dobson, David Minard, Vernon Johnson
6411-A	6-9 Nov	NH-5 to 145 CH-5 to 145	MWT, VMT	Bruce Wyatt, Carey Haag, Steven Slavic, Iver Duedall, Patrick O'Shea, Hugh Dobson, John Hardy, Lawrence Bauer, Kenneth Russell, Lawrence Frederick
	12-15 Nov	AH-5 to 145	MWT, VMT	Robert Still, Dennis Barstow, Carey Haag, William Renfro, Hugh Dobson, John Hardy, Patrick O'Shea, Lawrence Bauer, Daniel Panshin, Dana Kester, William Allen
6412-A	16-18 Dec	NH-5 to 45	Drogue tracking	Bruce Wyatt, June Pattullo, Elizabeth Strong, Merritt Stevenson, John Cronin, Lawrence Bauer, Patrick O'Shea, Timothy Noland, Hugh Dobson, John Long

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	σ _t	S × 10 ⁶	Δ D
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NH 65 44 39.1 N 125 35.0 W DATE 9 JAN 62 1225 GCT WIRE 5 DRY 47.0 WET 47.5
 WIND DIRECTION 4 VEL 4 KTS BAR 30 SWELL DIRECTION 28 H 2 T 7 CLOUD 6 AMT 10 WEATHER 02

0	10.02	32.455	.38	0	10.02	32.46		.38	24.99	298.1	0
10	10.03	32.410	.34	10	10.03	32.42		.34	24.96	301.8	.030
30	10.04	32.412	.34	20	10.04	32.41		.34	24.95	302.2	.060
50	10.19	32.420	.34	30	10.04	32.42		.34	24.96	302.1	.090
100	8.14	33.434	1.39	50	10.19	32.42		.34	24.94	304.2	.151
150	7.52	33.767	1.58	75	9.29	32.88		.82	25.44	256.7	.221
200	6.83	33.901		100	8.14	33.44		1.40	26.05	198.7	.278
206	6.87	33.909	1.66	150	7.53	33.77		1.58	26.41	166.0	.369
291	5.86	33.983	1.98	200	6.84	33.90		1.65	26.60	148.0	.448
306	5.80	33.979	1.92	250	6.50	33.97		1.88	26.70	139.1	.519
				300	5.82	33.98		1.95	26.80	130.3	.587

NH 85 44 39.2 N 126 3.1 W DATE 9 JAN 62 1717 GCT WIRE 4 DRY 49.0 WET 49.0
 WIND DIRECTION 2 VEL 4 KTS BAR 32 SWELL DIRECTION 27 H 2 T 7 CLOUD 0 AMT 10 WEATHER 02

0	10.09	32.427	.52	0	10.09	32.43		.52	24.96	301.3	0
10	10.10	32.417	.52	10	10.10	32.42		.52	24.95	302.4	.030
30	10.10	32.415	.52	20	10.10	32.42		.52	24.95	302.9	.060
50	10.12	32.419	.52	30	10.10	32.42		.52	24.95	302.8	.091
100	8.16	33.357	1.46	50	10.13	32.42		.52	24.95	303.2	.151
150	7.36	33.807	1.74	75	9.25	32.84		.95	25.41	259.4	.222
206	6.85	33.959	1.83	100	8.16	33.36		1.46	25.99	204.7	.280
306	5.61	33.950	2.13	150	7.36	33.81		1.74	26.46	160.8	.371
400	5.05	34.016	2.28	200	6.90	33.95		1.82	26.64	144.7	.447
589	4.62	34.146	2.56	250	6.29	33.96		1.96	26.72	137.4	.518
				300	5.68	33.95		2.11	26.79	130.5	.585
				400	5.06	34.02		2.28	26.92	119.4	.710
				500	4.71	34.09		2.43	27.01	111.0	.825
				600	4.62	34.15		2.58	27.07	106.4	.934

NH 105 44 39.1 N 126 31.2 W DATE 9 JAN 62 2116 GCT WIRE 12 DRY 47.0 WET 47.0
 WIND DIRECTION 4 VEL 3 KTS BAR 30 SWELL DIRECTION 29 H 6 T 10 CLOUD 6 AMT 6 WEATHER 01

0	9.54	32.534		0	9.54	32.54			25.13	284.8	0
20	9.55	32.497		10	9.55	32.50			25.10	287.9	.029
40	9.54	32.493		20	9.55	32.50			25.10	288.0	.057
90	9.55	32.466		30	9.55	32.49			25.10	288.6	.086
140	7.58	33.834		50	9.54	32.49			25.09	289.3	.144
195	7.06			75	9.55	32.47			25.08	290.8	.217
198	7.08	33.950		100	9.18	32.73			25.34	266.5	.286
205	7.06	0		150	7.36	33.91			26.54	153.3	.391
296	6.18	34.027		200	7.08	33.95			26.61	147.3	.466
306	6.16			250	6.62	34.00			26.71	138.1	.538
393	5.44	34.059		300	6.17	34.03			26.79	131.2	.605
490	4.98	34.146		400	5.40	34.06			26.91	120.3	.731
589	4.55	34.201		500	4.93	34.15			27.04	108.7	.845
783	4.06	34.329		600	4.52	34.21			27.13	101.1	.950
978	3.48	34.410		700	4.25	34.28			27.21	93.6	1.047
				800	4.01	34.34			27.29	87.0	1.137
				1000	3.41	34.42			27.41	75.7	1.300

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S‰	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	δ × 10 ⁶	Δ D	
NH 125 44 38.7 N 126 59.1 W DATE 10 JAN 62 012A GCT WIRE 17 DRY 49.0 WET 49.0 WIND DIRECTION 3 VEI 3 KTS BAR 31 SWELL DIRECTION 28 H 4 T 9 CLOUD - AMT 0 WEATHER 01													
0	9.70	32.497			.63	0	9.70	32.50		.63	25.08	290.0	0
10	9.69	32.474			.60	10	9.69	32.48		.60	25.06	291.7	.029
20	9.70	32.437			.60	20	9.69	32.45		.60	25.04	294.2	.058
40	9.69	32.516			.58	30	9.70	32.44		.60	25.03	295.1	.088
97	8.32	33.285			1.42	50	9.65	32.54		.61	25.12	286.9	.146
145	7.54	33.777			1.74	75	9.02	32.91		1.00	25.50	250.7	.213
199	7.00	33.846				100	8.26	33.33		1.45	25.95	208.8	.271
202	6.92	33.921			1.83	150	7.52	33.78		1.75	26.42	165.1	.364
297	6.06	34.003				200	6.97	33.87		1.83	26.56	151.9	.443
298	6.07	34.009			2.26	250	6.49	33.96		2.03	26.70	139.4	.516
393	5.50	34.107			2.51	300	6.06	34.02		2.27	26.80	130.6	.584
488	5.04	34.156			2.56	400	5.46	34.11		2.52	26.94	117.6	.708
584	4.62	34.166			2.68	500	4.98	34.16		2.58	27.04	108.9	.821
774	4.14	34.317			2.68	600	4.57	34.18		2.68	27.10	104.1	.927
965	3.62	34.422			2.76	700	4.30	34.25		2.68	27.19	96.1	1.027
						800	4.07	34.33		2.69	27.28	87.9	1.119
 NH 145 44 39.1 N 127 27.0 W DATE 10 JAN 62 0552 GCT WIRE 7 DRY 51.0 WET 49.0 WIND DIRECTION 33 VEI 2 KTS BAR 31 SWELL DIRECTION 29 H 2 T 8 CLOUD - AMT 0 WEATHER 02													
0	9.84	32.468				0	9.84	32.47			25.03	294.3	0
10	9.84	32.441				10	9.84	32.45			25.01	296.5	.030
20	9.85	32.450				20	9.85	32.44			25.01	296.9	.059
40	9.42	32.439				30	9.85	32.44			25.01	296.9	.089
96	8.13	33.250				50	9.76	32.46			25.04	294.4	.148
145	7.68	33.747				75	8.93	32.84			25.47	254.2	.217
197	7.03	33.922				100	8.07	33.30			25.96	207.8	.274
202	6.84	33.935				150	7.67	33.77			26.38	168.0	.368
294	6.08	34.009				200	6.92	33.93			26.61	146.8	.447
299	6.06	34.010				250	6.44	34.00			26.73	136.1	.518
395	5.37	34.080				300	6.05	34.01			26.79	131.0	.584
492	4.88	34.151				400	5.34	34.08			26.94	118.2	.709
590	4.55	34.205				500	4.85	34.16			27.05	107.4	.822
785	3.94	34.308				600	4.52	34.21			27.13	101.0	.926
983	3.52	34.410				700	4.19	34.26			27.21	93.8	1.023
						800	3.90	34.32			27.28	87.3	1.114
						1000	3.48	34.42			27.40	76.6	1.277
 NH 165 44 39.1 N 127 55.0 W DATE 10 JAN 62 0922 GCT WIRE 2 DRY 51.0 WET 49.0 WIND DIRECTION 4 VEI 2 KTS BAR 31 SWELL DIRECTION 29 H 1 T 8 CLOUD 6 AMT 2 WEATHER 02													
0	10.06	32.481				0	10.06	32.49			25.01	296.8	0
10	10.06	32.447				10	10.06	32.45			24.98	299.5	.030
30	10.05	32.455				20	10.05	32.45			24.98	299.6	.060
50	10.05	32.445				30	10.05	32.46			24.99	299.1	.090
100	7.94	33.472				50	10.06	32.45			24.98	300.3	.150
150	7.36	33.826				75	9.12	32.91			25.49	252.1	.219
205	6.75	33.887				100	7.98	33.48			26.11	193.6	.274
209	6.52	33.905				150	7.36	33.83			26.47	159.4	.363
305	5.48	33.977				200	6.90	33.88			26.58	150.2	.440
308	5.44	33.965				250	6.08	33.92			26.72	137.4	.512
407	4.82	34.031				300	5.53	33.92			26.79	131.0	.579
506	4.72	34.119				400	4.88	34.03			26.94	117.0	.703
606	4.39	34.223				500	4.72	34.13			27.05	107.7	.815
805	3.79	34.335				600	4.41	34.22			27.15	99.2	.919
1003	3.42	34.414				700	4.09	34.28			27.23	91.2	1.014
						800	3.80	34.33			27.30	84.9	1.102
						1000	3.42	34.41			27.40	76.3	1.263

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S‰	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
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ANH169 45 10.9 N 127 58.1 W DATE 10 JAN 62 1521 GCT WIRE 5 DRY 51.0 WET 49.0
WIND DIRECTION 36 VEL 1 KTS BAR 31 SWELL DIRECTION 27 H 3 T 7 CLOUD 1 AMT 2 WEATHER 02

0	9.98	32.500			0	9.98	32.50			25.04	294.2	0
10	9.96	32.446			10	9.96	32.45			25.00	298.0	.030
30	9.90	32.472			20	9.94	32.45			25.00	297.9	.059
50	9.76	32.496			30	9.90	32.48			25.03	295.4	.089
100	8.05	33.295			50	9.76	32.50			25.07	291.8	.148
150	7.40	33.774			75	8.96	32.85			25.47	254.0	.216
205	6.66	33.908			100	8.05	33.30			25.96	207.8	.274
209	6.62	33.906			150	7.41	33.78			26.43	163.8	.367
306	5.94	33.975			200	6.72	33.90			26.61	146.7	.444
310	5.88	33.996			250	6.39	33.94			26.69	140.2	.516
409	5.26	34.055			300	6.00	33.96			26.75	134.4	.584
509	4.78	34.161			400	5.28	34.05			26.92	120.0	.712
609	4.52	34.269			500	4.82	34.15			27.05	107.4	.825
809	4.00	34.333			600	4.54	34.26			27.17	97.5	.928
1009	3.52	34.425			700	4.28	34.31			27.23	91.5	1.022
					800	4.02	34.33			27.28	87.5	1.112
					1000	3.54	34.42			27.40	77.1	1.276

ANH173 45 42.7 N 128 1.8 W DATE 10 JAN 62 2035 GCT WIRE 15 DRY 51.0 WET 51.0
WIND DIRECTION 32 VEL 3 KTS BAR 32 SWELL DIRECTION 25 H 3 T 9 CLOUD 0 AMT 9 WEATHER 02

0	10.10	32.509			0	10.10	32.51			25.02	295.4	0
10	10.09	32.486			10	10.09	32.49			25.01	297.1	.030
30	10.08	32.464			20	10.08	32.47			24.99	298.5	.059
50	10.06	32.467			30	10.08	32.47			24.99	298.9	.089
100	7.94	32.971			50	10.06	32.47			25.00	298.7	.149
150	7.46	33.693			75	9.08	32.66			25.30	269.8	.220
203	6.85	33.879			100	7.94	32.98			25.72	230.3	.283
204	6.89	33.880			150	7.46	33.70			26.36	170.7	.383
303	5.49	33.985			200	6.88	33.87			26.57	150.9	.463
305	5.52	33.940			250	6.55	33.93			26.66	142.7	.537
401	4.98	34.034			300	5.57	33.98			26.83	127.1	.604
500	4.69	34.107			400	4.99	34.02			26.93	118.7	.727
599	4.30	34.187			500	4.69	34.11			27.03	108.9	.841
796	3.83	34.348			600	4.30	34.19			27.14	100.1	.945
995	3.38	34.407			700	4.03	34.28			27.23	91.1	1.041
					800	3.82	34.35			27.31	83.8	1.128
					1000	3.37	34.41			27.41	76.0	1.288

AH 165 46 14.4 N 128 3.8 W DATE 11 JAN 62 0215 GCT WIRE 7 DRY 52.0 WET 50.0
WIND DIRECTION 35 VEL 4 KTS BAR 32 SWELL DIRECTION 35 H 4 T 7 CLOUD 0 AMT 7 WEATHER 02

0	9.16	32.526			0	9.16	32.53			25.19	279.6	0
10	9.15	32.466			10	9.15	32.47			25.14	284.1	.028
30	9.16	32.456			20	9.15	32.46			25.14	284.9	.057
50	9.14	32.508			30	9.16	32.46			25.13	285.2	.085
100	7.52	33.197			50	9.14	32.51			25.18	281.4	.142
150	7.34	33.765			75	8.38	32.81			25.53	264.4	.208
203	6.73	33.946			100	7.53	33.20			25.96	207.7	.265
205	6.74	33.910			150	7.34	33.76			26.42	164.4	.358
304	5.80	33.975			200	6.75	33.94			26.64	144.1	.435
306	5.70	33.980			250	6.31	33.94			26.70	138.9	.506
402	5.19	34.057			300	5.94	33.93			26.74	135.3	.574
501	4.76	34.113			400	5.20	34.06			26.93	118.6	.701
601	4.37	34.189			500	4.76	34.11			27.03	109.6	.815
800	3.64	34.343			600	4.37	34.19			27.13	101.0	.921
996	3.18	34.392			700	3.99	34.27			27.24	90.9	1.016
					800	3.65	34.35			27.33	82.0	1.103
					1000	3.17	34.39			27.41	75.0	1.260

OBSERVED				INTERPOLATED				DERIVED			
D	T°C	S%	O ₂ ml/l	Z	T	S	O ₂	PO ₄ ≡	σ _T	δ × 10 ⁶	Δ D

AH 145 46 14.8 N 127 35.0 W DATE 11 JAN 62 0633 GCT WIRE 8 DRY 52.0 WET 50.0
WIND DIRECTION 36 VEL 4 KTS BAR 31 SWELL DIRECTION 27 H 4 T 6 CLOUD - AMT - WEATHER 51

0	9.77	32.519		0	9.77	32.52		25.08	289.5	0
10	9.76	32.466		10	9.76	32.47		25.04	293.4	.029
30	9.74	32.460		20	9.75	32.46		25.04	294.0	.058
50	9.64	32.478		30	9.74	32.46		25.04	293.8	.088
100	7.96	33.219		50	9.64	32.48		25.07	291.2	.146
150	7.44	33.725		75	8.86	32.80		25.45	256.1	.215
205	6.84	33.902		100	7.96	33.22		25.91	212.1	.273
207	6.85	33.902		150	7.44	33.73		26.38	168.0	.368
306	5.45	33.984		200	6.86	33.90		26.60	148.1	.447
307	5.85	34.029		250	6.47	33.94		26.68	141.1	.520
405	5.10	34.045		300	5.92	33.98		26.78	131.7	.588
506	4.62	34.148		400	5.15	34.04		26.93	118.9	.713
607	4.27	34.206		500	4.64	34.14		27.06	106.1	.825
806	3.92	34.354		600	4.29	34.20		27.15	98.9	.928
1001	3.37	34.414		700	4.09	34.28		27.23	91.6	1.023
				800	3.93	34.35		27.30	85.1	1.111
				1000	3.37	34.41		27.41	75.7	1.272

AH 125 46 14.4 N 127 6.1 W DATE 11 JAN 62 1105 GCT WIRE 9 DRY 45.0 WET 45.0
WIND DIRECTION 3 VEL 5 KTS BAR 29 SWELL DIRECTION 25 H 4 T 8 CLOUD 0 AMT 6 WEATHER 03

0	9.68	32.489		0	9.68	32.49		25.08	290.3	0
10	9.68	32.457		10	9.68	32.46		25.05	292.8	.029
30	9.46	32.446		20	9.58	32.45		25.06	292.5	.058
50	9.32	32.441		30	9.46	32.45		25.08	290.5	.088
100	7.84	33.274		50	9.32	32.45		25.10	289.1	.146
150	7.16	33.813		75	8.63	32.80		25.48	252.8	.213
205	6.74	33.930		100	7.84	33.28		25.97	206.4	.271
206	6.62	33.930		150	7.17	33.82		26.49	157.7	.362
305	5.88	33.904		200	7.02	33.92		26.59	149.0	.438
306	5.85	34.000		250	6.29	33.96		26.72	137.2	.510
404	5.08	34.029		300	5.92	33.98		26.78	131.8	.577
502	4.97	34.164		400	5.11	34.03		26.92	119.6	.703
602	4.36	34.176		500	4.97	34.15		27.03	109.6	.817
798	3.85	34.316		600	4.37	34.18		27.12	101.9	.923
996	3.46			700	4.04	34.23		27.20	94.5	1.021
				800	3.85	34.32		27.29	86.6	1.111
				1000	3.45	34.41		27.40	76.6	1.274

AH 105 46 14.5 N 126 37.3 W DATE 11 JAN 62 1508 GCT WIRE 9 DRY 48.0 WET 46.0
WIND DIRECTION 35 VEL 4 KTS BAR 27 SWELL DIRECTION 25 H 4 T 7 CLOUD 0 AMT 08 WEATHER 02

0	10.12	32.539		0	10.13	32.54		25.04	293.5	0
10	10.11	32.476		10	10.11	32.48		24.99	294.2	.030
30	10.04	32.468		20	10.09	32.47		24.99	294.6	.059
50	9.74	32.456		30	10.04	32.47		25.00	294.0	.089
100	8.07	33.190		50	9.74	32.46		25.04	294.4	.148
150	7.60	33.748		75	8.91	32.77		25.41	259.5	.218
205	6.80	33.895		100	8.07	33.20		25.87	215.8	.277
208	6.72	33.931		150	7.60	33.75		26.38	168.5	.373
306	5.75	33.963		200	6.90	33.87		26.57	150.9	.453
309	5.70	33.909		250	6.16	33.94		26.72	136.9	.525
409	4.96	34.056		300	5.78	33.96		26.79	131.3	.592
509	4.62	34.137		400	4.98	34.05		26.95	116.3	.716
610	4.40	34.211		500	4.64	34.13		27.05	106.9	.827
810	3.94	34.331		600	4.42	34.20		27.14	100.3	.931
1010	3.59	34.401		700	4.19	34.27		27.21	93.3	1.028
				800	3.96	34.33		27.28	87.3	1.118
				1000	3.60	34.40		27.37	79.4	1.284

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	σ _t	Sx10 ⁶	Δ D
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AH 85 46 14.4 N 126 9.0 W DATE 11 JAN 62 1907 GCT WIRE 10 DRY 53.0 WET 50.0
WIND DIRECTION 34 VEL 3 KTS BAR 27 SWELL DIRECTION 25 H 4 T 7 CLOUD 6 AMT 9 WEATHER 02

0	9.24	32.478			0	9.24	32.48			25.14	284.4	0
10	9.24	32.437			10	9.24	32.44			25.11	287.6	.029
20	9.16	32.432			20	9.16	32.44			25.11	286.9	.057
50	9.02	32.425			30	9.13	32.43			25.12	287.0	.086
100	7.96	33.067			50	9.02	32.43			25.13	285.7	.143
150	7.62	33.732			75	8.51	32.59			25.42	259.0	.211
202	7.06	33.890			100	7.96	33.07			25.79	223.4	.272
207	6.88	33.930			150	7.63	33.74			26.36	170.0	.370
302	6.10	33.980			200	7.11	33.88			26.55	152.7	.451
307	6.02	33.988			250	6.30	33.95			26.71	137.8	.523
407	5.34	34.061			300	6.12	33.98			26.76	134.1	.591
505	4.84	34.116			400	5.36	34.06			26.91	120.4	.718
606	4.52	34.216			500	4.86	34.11			27.02	110.7	.834
804	4.02	34.335			600	4.54	34.21			27.13	101.2	.940
1003	3.49	34.404			700	4.27	34.28			27.21	93.4	1.037
					800	4.03	34.33			27.28	87.5	1.128
					1000	3.50	34.40			27.39	77.9	1.293

AH 65 46 14.4 N 125 39.7 W DATE 11 JAN 62 2255 GCT WIRE 4 DRY 45.0 WET 45.0
WIND DIRECTION 0 VEL 3 KTS BAR 23 SWELL DIRECTION 28 H 4 T 9 CLOUD 6 AMT 9 WEATHER 02

0	9.04	32.443			0	9.04	32.45			25.14	284.0	0
10	9.04	32.436			10	9.04	32.44			25.14	284.6	.028
30	9.02	32.438			20	9.03	32.44			25.14	284.9	.057
50	9.00	32.455			30	9.02	32.44			25.14	284.5	.085
100	7.96	33.535			50	9.00	32.46			25.16	283.2	.142
149	7.26	33.869			75	8.55	32.95			25.61	240.5	.208
203	6.66	33.940			100	7.96	33.54			26.16	188.7	.261
205	6.70	33.920			150	7.23	33.88			26.53	154.2	.347
303	5.93	34.030			200	6.69	33.94			26.65	143.3	.421
305	6.00	34.064			250	6.17	33.97			26.75	134.7	.491
403	5.42	34.041			300	5.93	33.99			26.79	131.1	.557
503	4.94	34.136			400	5.50	34.04			26.88	123.2	.684
603	4.50	34.197			500	4.95	34.13			27.02	110.4	.801
803	4.08	34.325			600	4.51	34.20			27.12	102.0	.907
1003	3.53	34.405			700	4.27	34.26			27.20	94.9	1.006
					800	4.08	34.32			27.27	88.9	1.097
					1000	3.54	34.40			27.39	78.3	1.264

AH 45 46 14.5 N 125 10.6 W DATE 12 JAN 62 0433 GCT WIRE 12 DRY 49.0 WET 46.0
WIND DIRECTION 34 VEL 3 KTS BAR 22 SWELL DIRECTION 25 H 4 T 7 CLOUD - AMT 7 WEATHER 02

0	9.52	32.508			0	9.52	32.51			25.12	286.4	0
10	9.52	32.457			10	9.52	32.46			25.08	290.3	.029
29	9.53	32.461			20	9.53	32.46			25.07	290.7	.058
48	9.36	32.477			30	9.52	32.46			25.08	290.6	.087
97	8.32	33.519			50	9.32	32.51			25.15	284.1	.144
145	7.48	33.822			75	8.83	33.01			25.61	240.3	.210
199	6.80	33.923			100	8.26	33.55			26.12	192.1	.264
202	6.74	33.933			150	7.43	33.83			26.47	160.1	.352
296	6.00	33.988			200	6.78	33.93			26.63	145.2	.428
300	5.97	34.016			250	6.22	33.96			26.73	136.1	.499
398	5.34	34.046			300	5.97	34.02			26.81	129.2	.565
498	4.97	34.132			400	5.33	34.05			26.91	120.7	.690
597	4.64	34.186			500	4.96	34.13			27.02	110.4	.805
795	4.06	34.354			600	4.63	34.19			27.10	103.9	.913
993	3.54	34.411			700	4.33	34.28			27.20	94.6	1.012
					800	4.05	34.36			27.30	86.0	1.102
					1000	3.52	34.41			27.39	77.6	1.265

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	S × 10 ⁸	Δ D	
AH 36 46 14.5 N 124 56.2 W DATE 12 JAN 62 0735 GCT WIREF 9 DRY 48.0 WET 46.0 WIND DIRECTION 33° VEL 3 KTS BAR 23 SWELL DIRECTION 25 H 4 T 7 CLOUD 6 AMT 6 WEATHER 01													
0	9.06	32.367			0	9.06	32.37			25.08	289.9	0	
10	9.06	32.368			10	9.06	32.37			25.08	290.0	.029	
20	9.20	32.475			20	9.12	32.39			25.09	289.5	.058	
30	9.36	32.563			30	9.20	32.44			25.11	287.4	.087	
40	8.26	33.597			50	9.36	32.57			25.19	280.6	.144	
50	7.93	33.878			75	8.88	33.07			25.66	236.2	.208	
60	7.57	33.954			100	8.25	33.61			26.17	187.7	.261	
70	7.52	33.957			150	7.92	33.88			26.43	163.4	.349	
80	6.37	34.003			200	7.65	33.95			26.53	155.3	.429	
90	6.40	33.990			250	6.98	33.98			26.64	144.7	.504	
100	5.25	34.049			300	6.39	34.00			26.74	136.0	.574	
110	5.01	34.131			400	5.26	34.05			26.92	119.4	.701	
120	4.78	34.178			500	5.01	34.13			27.01	111.1	.816	
130					600	4.78	34.18			27.08	106.4	.925	
AH 25 46 14.4 N 124 41.7 W DATE 12 JAN 62 1042 GCT WIRE 4 DRY 44.0 WET 42.0 WIND DIRECTION 30° VEL 2 KTS BAR 19 SWELL DIRECTION 26 H 4 T 9 CLOUD 6 AMT 2 WEATHER 02													
0	8.72	30.930			0	8.72	30.94			24.01	391.8	0	
10	9.12	32.009			10	9.13	32.01			24.79	317.5	.035	
20	9.44	32.400			20	9.34	32.37			25.03	294.6	.066	
30	9.40	32.517			30	9.44	32.40			25.05	293.6	.095	
40	8.34	33.616			50	9.40	32.52			25.14	284.7	.153	
50	8.00	33.855			75	8.96	33.00			25.59	242.8	.219	
60	7.59	33.936			100	8.45	33.51			26.06	197.8	.274	
70					150	8.02	33.85			26.40	167.1	.365	
80					200	7.63	33.94			26.52	156.0	.446	
AH 15 46 14.5 N 124 27.5 W DATE 12 JAN 62 1305 GCT WIRE 0 DRY 42.0 WET 41.0 WIND DIRECTION 26° VEL 3 KTS BAR 17 SWELL DIRECTION 26 H 2 T 8 CLOUD 7 AMT 9 WEATHER 03													
0	8.32	28.930			0	8.32	28.94			22.51	535.4	0	
10	9.24	32.063			10	9.24	32.07			24.81	315.3	.043	
20	9.32	32.296			20	9.28	32.18			24.90	307.7	.074	
30	9.41	32.440			30	9.32	32.30			24.98	299.5	.104	
40	8.30	33.563			50	9.41	32.44			25.08	290.5	.163	
50	7.49	33.922			75	9.01	32.93			25.52	248.7	.230	
60	7.04	33.958			100	8.44	33.45			26.02	201.8	.287	
70					150	7.56	33.91			26.51	156.4	.376	
80					200	7.07	33.95			26.61	147.0	.452	
AH 5 46 14.4 N 124 13.7 W DATE 12 JAN 62 1515 GCT WIRE 0 DRY 47.0 WET 45.0 WIND DIRECTION 30° VEL 3 KTS BAR 16 SWELL DIRECTION 26 H 4 T 7 CLOUD 6 AMT 9 WEATHER													
0	8.10	24.180			0	8.10	24.19			18.83	888.4	0	
10	8.82	29.700			10	8.82	29.71			23.04	484.9	.069	
20	9.24	32.013			20	9.24	32.02			24.78	319.2	.109	
30	9.45	32.448			30	9.45	32.45			25.08	290.2	.139	
40	9.27	32.716			50	9.27	32.72			25.32	267.9	.195	
CH 5 43 20.3 N 124 28.9 W DATE 13 JAN 62 1244 GCT WIRE 2 DRY 48.0 WET 46.0 WIND DIRECTION 16° VEL 1 KTS BAR 18 SWELL DIRECTION 32 H 2 T 8 CLOUD 9 AMT 2 WEATHER 02													
0	9.20	32.356			0	9.20	32.36			25.05	292.8	0	
10	9.72	32.700			10	9.72	32.71			25.23	275.4	.028	
20	9.50	33.079			20	9.50	33.08			25.57	244.1	.054	
30	9.24	33.336			30	9.24	33.34			25.81	221.2	.078	
40	9.18	33.583			50	9.18	33.59			26.01	202.3	.120	
50	9.10	33.658			75	9.10	33.66			26.08	195.9	.170	

OBSERVED INTERPOLATED DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	S × 10 ⁶	Δ D
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CH 15 43 20.4 N 124 43.1 W DATE 13 JAN 62 1443 GCT WIRE 5 DRY 50.0 WET 48.0
 WIND DIRECTION 9 VEL 2 KTS BAR 19 SWELL DIRECTION 27 H 4 T 7 CLOUD 9 AMT 8 WEATHER 03

0	9.50	32.514			0	9.50	32.52			25.12	285.6	0
10	9.52	32.517			10	9.52	32.52			25.12	285.9	.029
30	9.60	32.649			20	9.56	32.54			25.13	285.3	.057
50	9.60	33.306			30	9.60	32.65			25.21	277.6	.085
100	8.99	33.752			50	9.60	33.31			25.73	229.3	.136
149	8.18	33.916			75	9.36	33.65			26.03	200.6	.190
198	7.87	34.011			100	8.99	33.76			26.17	187.7	.238
248	7.34	34.051			150	8.17	33.92			26.43	164.3	.326
					200	7.85	34.01			26.55	153.5	.406
					250	7.32	34.05			26.65	143.9	.480

CH 25 43 20.4 N 124 55.3 W DATE 13 JAN 62 1630 GCT WIRE 3 DRY 47.0 WET 43.0
 WIND DIRECTION 32 VEL 4 KTS BAR 20 SWELL DIRECTION 28 H 5 T 6 CLOUD 6 AMT 6 WEATHER 01

0	9.30	32.416			0	9.30	32.42			25.08	289.9	0
9	9.41	32.518			10	9.43	32.55			25.16	282.7	.029
28	9.72	33.087			20	9.61	32.84			25.35	264.1	.056
47	9.65	33.372			30	9.71	33.13			25.56	244.4	.081
94	9.20	33.690			50	9.63	33.40			25.79	223.0	.128
142	8.34				75	9.43	33.60			25.98	205.4	.182
196	7.82	33.947			100	9.09	33.72			26.12	192.3	.231
294	6.96				150	8.25	33.88			26.38	168.6	.322
401	6.04	34.088			200	7.78	33.95			26.51	157.1	.403
501	5.34	34.159			250	7.34	34.01			26.62	147.4	.479
701	4.58	34.271			300	6.91	34.05			26.71	139.3	.551
					400	6.09	34.09			26.85	127.2	.684
					500	5.35	34.16			26.99	113.2	.804
					600	4.84	34.22			27.10	104.2	.913
					700	4.58	34.27			27.17	97.9	1.014

CH 35 43 20.3 N 125 10.5 W DATE 13 JAN 62 1917 GCT WIRE 3 DRY 49.0 WET 47.0
 WIND DIRECTION 36 VEL 3 KTS BAR 20 SWELL DIRECTION 30 H 4 T 7 CLOUD 8 AMT 6 WEATHER 02

0	9.50	32.830			0	9.50	32.83			25.37	262.2	0
10	9.48				10	9.48	32.45			25.07	290.6	.028
29	9.48	32.883			20	9.48	32.68			25.25	273.8	.056
48	9.74	33.316			30	9.49	32.90			25.43	257.4	.082
95	9.32	33.681			50	9.74	33.34			25.73	229.0	.131
144	8.74				75	9.60	33.60			25.95	208.5	.186
197	8.00	33.950			100	9.27	33.70			26.09	195.8	.236
204	7.94	33.965			150	8.65	33.88			26.32	174.4	.329
303	6.74	33.973			200	7.97	33.96			26.48	159.5	.412
403	6.14	34.050			250	7.39	33.97			26.58	151.0	.490
503	5.43	34.132			300	6.78	33.97			26.67	143.2	.563
603	4.94	34.214			400	6.15	34.05			26.81	131.1	.700
802	4.23	34.373			500	5.45	34.13			26.96	116.7	.824
1001	3.65				600	4.95	34.21			27.08	106.1	.936
					700	4.56	34.29			27.19	96.1	1.037
					800	4.24	34.37			27.29	87.1	1.128
					1000	3.65	34.41			27.38	79.1	1.294

CH 45 43 20.5 N 125 24.6 W DATE 13 JAN 62 2227 GCT WIRE 24 DRY 48.0 WET 44.0
 WIND DIRECTION 34 VEL 3 KTS BAR 21 SWELL DIRECTION 32 H 5 T 7 CLOUD 8 AMT 5 WEATHER 01

0	9.48	32.769			0	9.48	32.77			25.33	266.4	0
9	9.48	32.786			10	9.48	32.78			25.33	265.8	.027
28	9.48	32.782			20	9.48	32.78			25.33	265.9	.053
47	9.77	33.055			30	9.51	32.80			25.35	265.0	.080
95	9.24	33.711			50	9.77	33.10			25.54	247.2	.131
143	8.43	33.977			75	9.59	33.47			25.85	217.9	.189
197	7.78	34.010			100	9.16	33.75			26.14	190.9	.240
295	6.98	34.072			150	8.33	33.94			26.42	164.8	.329
					200	7.75	34.01			26.56	152.0	.408
					250	7.29	34.06			26.66	143.1	.482
					300	6.94	34.08			26.73	137.8	.552

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S‰	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
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CH 85 43 20.5 N 126 18.9 W DATE 14 JAN 62 0712 GCT WIRE 7 DRY 51.0 WET 48.0
WIND DIRECTION VEL C KTS BAR 25 SWELL DIRECTION 30 H 4 T 7 CLOUD AMT 1 WEATHER 01

0	10.02	32.652			0	10.02	32.66			25.15	283.5	0
10	10.04	32.651			10	10.04	32.66			25.14	284.1	.028
30	9.96	32.654			20	10.00	32.65			25.15	283.8	.057
50	10.06	32.653			30	9.96	32.66			25.16	282.9	.085
100	8.78	33.356			50	10.06	32.66			25.14	284.9	.142
150	8.12	33.810			75	9.52	32.96			25.46	254.6	.209
204	7.56	33.959			100	8.78	33.36			25.90	213.9	.268
205	7.50	33.956			150	8.12	33.81			26.35	171.3	.364
303	6.68	34.014			200	7.69	33.95			26.52	156.0	.446
305	6.64	34.014			250	7.12	33.98			26.63	146.4	.521
402	6.17	34.089			300	6.71	34.01			26.70	139.7	.593
502	5.34	34.064			400	6.18	34.09			26.84	128.4	.727
601	4.87	34.176			500	5.36	34.06			26.92	120.3	.851
800	4.11	34.320			600	4.87	34.17			27.06	107.9	.965
1000	3.66	34.420			700	4.46	34.26			27.17	97.4	1.068
					800	4.11	34.33			27.26	89.1	1.161
					1000	3.66	34.42			27.39	78.5	1.329

CH105 43 20.5 N 126 45.9 W DATE 14 JAN 62 1113 GCT WIRE 5 DRY 50.0 WET 47.0
WIND DIRECTION 23 VEL 4 KTS BAR 26 SWELL DIRECTION 30 H 3 T 7 CLOUD 4 AMT 6 WEATHER 03

0	9.99	32.622			0	9.99	32.63			25.13	285.3	0
10	9.98	32.638			10	9.98	32.64			25.14	284.1	.028
30	9.99	32.642			20	9.98	32.64			25.14	284.5	.057
50	9.98	32.645			30	9.99	32.65			25.14	284.3	.085
100	8.63	33.665			50	9.98	32.65			25.15	284.2	.142
150	8.34	33.925			75	9.36	33.11			25.61	240.6	.208
204	7.86	34.009			100	8.63	33.67			26.16	188.7	.261
205	7.89	33.970			150	8.34	33.93			26.41	166.0	.350
304	7.19	34.026			200	7.90	34.00			26.53	154.9	.430
305	7.02	34.020			250	7.57	34.00			26.57	151.7	.507
402	6.38	34.050			300	7.60	34.02			26.59	150.8	.582
502	5.64	34.103			400	6.39	34.04			26.77	134.5	.725
601	4.97	34.164			500	5.65	34.10			26.91	121.3	.853
800	4.02	34.373			600	4.98	34.16			27.04	109.9	.968
999	3.62	34.437			700	4.43	34.27			27.19	96.2	1.072
					800	4.03	34.38			27.32	84.1	1.162
					1000	3.62	34.44			27.40	76.8	1.322

CH125 43 20.5 N 127 13.7 W DATE 14 JAN 62 1542 GCT WIRE 5 DRY 56.0 WET 53.0
WIND DIRECTION 25 VEL 4 KTS BAR 24 SWELL DIRECTION 24 H 4 T 7 CLOUD 0 AMT 10 WEATHER 02

0	9.86	32.578			0	9.86	32.58			25.12	286.5	0
10	9.87	32.575			10	9.88	32.58			25.11	287.0	.029
29	9.85	32.635			20	9.86	32.59			25.13	285.9	.057
48	9.86	32.800			30	9.85	32.64			25.16	282.5	.086
97	8.97	33.634			50	9.83	32.83			25.32	268.2	.141
146	8.44	33.926			75	9.43	33.26			25.71	231.0	.203
200	7.75	34.016			100	8.93	33.66			26.11	193.8	.256
204	7.58	34.010			150	8.39	33.94			26.41	165.7	.346
298	6.21	33.983			200	7.76	34.02			26.57	151.5	.425
304	5.92	33.977			250	6.97	33.99			26.66	143.7	.499
403	5.58	34.086			300	6.11	33.98			26.76	134.0	.569
503	5.04	34.126			400	5.59	34.08			26.90	121.5	.696
603	4.66	34.216			600	5.06	34.12			27.00	112.2	.813
802	4.10	34.375			600	4.67	34.21			27.12	102.6	.920
1002	3.66	34.424			700	4.36	34.28			27.20	94.6	1.019
					800	4.10	34.33			27.27	88.3	1.110
					1000	3.66	34.42			27.39	78.3	1.277

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁶	Δ D		
CH145	43 20.5 N	127 40.1 W	DATE 14 JAN 62	2025 GCT	WIRE 14	DRY 69.5	WET 49.0							
WIND DIRECTION 29 VEL 5 KTS	BAR 25 SWELL DIRECTION 30 H	4 T	7 CLOUD 0 AMT	9 WEATHER 03										
0	10.18	32.711			0	10.18	32.72			25.17	281.7	0		
10	10.18	32.710			10	10.18	32.71			25.17	282.0	.028		
30	10.18	32.719			20	10.18	32.71			25.16	282.1	.056		
49	10.17	32.728			30	10.18	32.72			25.17	281.6	.085		
98	8.93	33.349			50	10.15	32.74			25.19	280.5	.141		
147	7.65	33.782			75	9.62	33.02			25.49	251.9	.207		
201	7.03	33.918			100	8.87	33.37			25.89	214.4	.266		
202	6.98	33.929			150	7.62	33.78			26.40	166.5	.361		
299	6.35	34.047			200	7.06	33.91			26.58	149.9	.440		
300	6.19	34.054			250	6.67	34.04			26.73	136.4	.511		
399	5.53	34.105			300	6.19	34.06			26.81	129.2	.578		
497	4.93	34.114			400	5.52	34.11			26.93	118.8	.702		
596	4.51	34.210			500	4.91	34.12			27.01	111.1	.817		
793	4.11	34.343			600	4.50	34.21			27.13	100.6	.922		
990	3.57	34.477			700	4.27	34.29			27.22	93.0	1.019		
					800	4.09	34.35			27.28	87.2	1.109		
					1000	3.54	34.43			27.41	76.3	1.273		
CH75S4	43 0.0 N	126 5.3 W	DATE 15 JAN 62	2212 GCT	WIRE 0	DRY 52.0	WET 48.0							
WIND DIRECTION 32 VEL 2 KTS	BAR 30 SWELL DIRECTION 30 H	5 T	CLOUD 8 AMT	2 WEATHER 1										
0	9.82	32.650			0	9.82	32.65			25.18	280.5	0		
27	9.77	32.660			10	11.04	32.52			24.86	310.7	.030		
40	8.80	32.770			20	10.29	32.60			25.06	292.3	.060		
48	8.71	32.810			30	9.53	32.68			25.25	274.2	.088		
65	9.01	33.280			50	8.74	32.86			25.51	249.8	.140		
100	8.46	33.680			75	8.85	33.47			25.97	206.2	.197		
					100	8.46	33.68			26.20	185.1	.246		
CH75S2	43 10.2 N	126 5.3 W	DATE 15 JAN 62	2345 GCT	WIRE	DRY 51.0	WET 47.0							
WIND DIRECTION 33 VEL 1 KTS	BAR 30 SWELL DIRECTION 31 H	5 T	CLOUD 8 AMT	2 WEATHER 1										
0	9.96	32.440			0	9.96	32.44			24.99	298.3	0		
42	9.94	32.570			10	10.31	32.48			24.96	301.4	.030		
63	9.70	32.630			20	10.19	32.51			25.00	297.6	.060		
75	9.10	33.260			30	10.08	32.54			25.04	293.8	.089		
82	9.28	33.420			50	9.92	32.59			25.11	287.4	.148		
110	8.70	33.600			75	9.10	33.26			25.77	225.4	.212		
					100	9.15	33.54			25.98	206.4	.266		
CH70	43 20.4 N	125 58.3 W	DATE 16 JAN 62	0241 GCT	WIRE	DRY 51.0	WET 47.0							
WIND DIRECTION 0 VEL 2 KTS	BAR 29 SWELL DIRECTION 29 H	6 T	CLOUD 8 AMT	2 WEATHER 1										
0	9.60	32.667			0	9.60	32.67			25.23	275.8	0		
57	9.74	33.060			10	12.82	32.71			24.68	327.8	.030		
75	8.56	33.193			20	12.17	32.79			24.87	310.6	.062		
97	8.54	33.563			30	11.51	32.86			25.05	293.7	.092		
105	8.20	33.615			50	10.20	33.01			25.39	261.2	.148		
125	8.26	33.855			75	8.56	33.20			25.80	222.3	.208		
					100	8.41	33.58			26.13	191.8	.260		
CH95S1	43 15.5 N	126 32.6 W	DATE 15 JAN 62	1557 GCT	WIRE 4	DRY 0	WET 0							
WIND DIRECTION 31 VEL 2 KTS	BAR 29 SWELL DIRECTION 32 H	6 T	CLOUD 8 AMT	2 WEATHER 1										
50		32.629			0	9.96	32.67			25.17	281.5	0		
0	9.96	32.633			10	16.67	32.71			23.86	406.1	.034		
90	9.34	33.355			20	15.76	32.79			24.13	381.1	.074		
96	8.79	33.359			30	14.84	32.86			24.38	356.8	.111		
102	9.25	33.576			50	13.01	32.63			24.59	337.9	.180		
108	9.63	33.699			75	10.72	33.16			25.42	258.6	.255		
115	9.55	33.717			100	9.04	33.50			25.96	207.7	.313		
150	8.30	33.853			150	8.30	33.95			26.35	171.0	.408		

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _T	δ × 10 ³	Δ D	
CH 95	43 20.4 N	126 32.6 W	DATE 15 JAN 62	1434 GCT	WIRE 05	DRY	0	WET	0				
WIND DIRECTION 36 VEL 2 KTS	BAR 23 SWELL DIRECTION 32 H	32 H	4 T	CLOUD	AMT	WEATHER							
0 9.87 32.568			0 9.88 32.57			25.11 287.4						0	
50 9.92 32.760			10 11.12 31.96			24.42 353.1						.032	
85 8.87 33.459			20 10.82 32.16			24.63 333.5						.066	
100 8.95 33.769			30 10.52 32.36			24.83 313.9						.099	
150 8.59 33.906			50 9.92 32.76			25.25 274.8						.158	
			75 9.14 33.25			25.75 227.1						.220	
			100 8.90 33.68			26.13 192.1						.273	
			150 8.59 33.91			26.35 171.4						.364	
CH9552	43 10.0 N	126 32.9 W	DATE 15 JAN 62	1645 GCT	WIRE	DRY 48.0	WET 44.0						
WIND DIRECTION 35 VEL 2 KTS	BAR 28 SWELL DIRECTION 32 H	32 H	7 T	CLOUD	8 AMT	3 WEATHER	2						
0 9.94 32.557			0 9.94 32.56			25.09 289.3						0	
20 9.92 32.573			10 10.19 32.50			25.00 297.9						.029	
45 9.25 32.755			20 9.92 32.58			25.10 288.1						.059	
55 9.65 32.937			30 9.58 32.62			25.19 279.7						.087	
70 9.82 33.209			50 9.39 32.81			25.37 262.7						.141	
80 9.54 33.404			75 9.70 33.31			25.71 231.5						.203	
90 9.25 33.606			100 8.90 33.68			26.13 192.1						.256	
CH9554	43 0.0 N	126 32.4 W	DATE 15 JAN 62	1840 GCT	WIRE	DRY 51.0	WET 48.0						
WIND DIRECTION 34 VEL 2 KTS	BAR 32 SWELL DIRECTION 28 H	28 H	8 T	CLOUD	8 AMT	2 WEATHER	1						
0 10.27 32.648			0 10.27 32.65			25.10 287.8						0	
3 10.27			10 10.27 32.58			25.05 293.2						.029	
25 10.21 32.637			20 10.24 32.62			25.08 290.1						.058	
55 9.84 32.749			30 10.20 32.64			25.10 288.2						.087	
75 8.92 33.020			50 9.96 32.71			25.20 279.1						.144	
110 8.34 33.727			75 8.92 33.02			25.61 240.5						.209	
135 8.31 33.878			100 8.41 33.54			26.09 195.1						.263	
160 7.83 33.974			150 8.00 33.91			26.45 162.1						.352	
170 7.87 33.971			200 7.06 33.91			26.58 149.9						.430	
NH 5	44 39.1 N	124 10.7 W	DATE 3 FEB 62	1700 GCT	WIRE	0	DRY 48.0	WET 48.0					
WIND DIRECTION 18 VEL 5 KTS	BAR 24 SWELL DIRECTION 18 H	18 H	3 T	CLOUD	7 AMT	10 WEATHER	01						
0 8.62 32.200	6.88		0 8.63 32.21	6.89		25.02 295.9						0	
10 8.60 32.200	6.94		10 8.60 32.21	6.94		25.02 295.7						.030	
20 8.60 32.201	6.89		20 8.60 32.21	6.90		25.02 295.8						.059	
30 8.50 32.695	5.70		30 8.50 32.70	5.70		25.42 257.8						.087	
40 8.69 33.143	4.40		50 8.73 33.55	3.66		26.05 198.4						.132	
50 8.73 33.544	3.66		75 8.92 33.02			25.61 240.5						.187	
NH 15	44 39.1 N	124 24.7 W	DATE 3 FEB 62	1900 GCT	WIRE	0	DRY 48.3	WET 48.0					
WIND DIRECTION 20 VEL 4 KTS	BAR 24 SWELL DIRECTION 22 H	22 H	3 T	B CLOUD	6 AMT	10 WEATHER	01						
0 9.12 32.529	6.60		0 9.13 32.53	6.60		25.20 278.8						0	
10 9.10 32.528	6.83		10 9.10 32.53	6.83		25.20 278.7						.028	
20 9.00 32.521	6.78		20 9.00 32.53	6.79		25.21 277.9						.056	
30 8.93 32.515	6.75		30 8.93 32.52	6.76		25.22 277.4						.083	
40 8.88 32.520	6.60		50 8.73 32.53	6.44		25.26 273.7						.139	
50 8.23 32.530	6.43		75 8.92 32.52	6.85		25.22 277.6						.207	
75 8.20 32.520	6.85		100 8.41 33.54			26.09 195.1						.267	
NH 25	44 39.0 N	124 38.6 W	DATE 3 FEB 62	2114 GCT	WIRE	0	DRY 51.0	WET 48.0					
WIND DIRECTION 30 VEL 4 KTS	BAR 24 SWELL DIRECTION 22 H	22 H	3 T	7 CLOUD	6 AMT	10 WEATHER	01						
0 9.31 32.550			0 9.31 32.55			25.18 280.1						0	
10 9.27 32.547	7.57		10 9.27 32.55	7.57		25.19 279.8						.028	
20 9.25 32.545	6.64		20 9.25 32.55	6.65		25.19 279.8						.056	
30 9.10 32.522	6.45		30 9.10 32.53	6.45		25.19 279.4						.084	
50 8.82 32.666	6.40		50 8.82 32.67	6.41		25.35 264.9						.138	
99 8.61 33.534	3.76		75 8.69 33.10	5.18		25.70 231.7						.200	
148 8.08 33.878	2.60		100 8.60 33.55	3.72		26.07 197.5						.254	
198 7.66 33.929	2.25		150 8.06 33.89	2.57		26.42 165.1						.345	
			200 7.64 33.92	2.25		26.51 157.1						.425	

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	S × 10 ⁴	AD
NH 35 44 39.1 N 124 53.0 W DATE 3 FEB 62 2320 GCT WIRE 0 DRY 50.0 WET 49.0 WIND DIRECTION 22 VEL 4 KTS BAR 24 SWELL DIRECTION 22 H 2 T 2 CLOUD 6 AMT 10 WEATHER 01												
0	9.31	32.533	6.76		0	9.31	32.54	6.77		25.17	281.3	0
10	9.30	32.529	6.75		10	9.30	32.53	6.76		25.17	281.6	.028
30	9.12	32.559	6.65		20	9.22	32.54	6.71		25.19	279.9	.056
50	8.96	32.557	6.56		30	9.13	32.56	6.66		25.22	277.0	.084
99	8.61	33.499	4.35		50	8.96	32.56	6.57		25.24	275.0	.139
149	8.29	33.874	3.16		75	8.78	32.99	5.54		25.61	240.7	.204
199	7.89	33.969	2.41		100	8.60	33.51	4.32		26.04	200.2	.259
289	6.90	34.016	2.08		150	8.28	33.83	3.14		26.34	172.6	.352
					200	7.88	33.97	2.40		26.51	157.0	.434
					250	7.37	34.00	2.22		26.60	148.9	.511
NH 45 44 39.1 N 125 6.9 W DATE 4 FEB 62 0250 GCT WIRE 0 DRY 48.0 WET 48.0 WIND DIRECTION 15 VEL 2 KTS BAR 24 SWELL DIRECTION 26 H 3 T 8 CLOUD 6 AMT 10 WEATHER 00												
0	9.26	32.515			0	9.26	32.52			25.16	281.9	0
10	9.25	32.512			10	9.25	32.52			25.16	282.1	.028
30	8.95	32.510			20	9.11	32.51			25.18	280.6	.056
50	8.81	32.569			30	8.95	32.51			25.21	278.1	.084
75	9.49	33.044			50	8.81	32.57			25.28	271.9	.139
100	9.20	33.292			75	9.49	33.05			25.54	247.4	.204
115	7.88	33.390			100	9.20	33.30			25.78	225.0	.263
200	7.43	33.937			150	7.63	33.62			26.27	179.1	.364
201	7.36	33.974			200	7.44	33.94			26.55	152.9	.447
300	6.44	33.997			250	6.90	33.99			26.66	143.2	.521
399	5.71	34.050			300	6.44	34.00			26.73	136.7	.591
500	5.23	34.108			400	5.70	34.05			26.87	125.1	.722
					500	5.23	34.11			26.97	115.5	.842
NH 65 44 39.2 N 125 35.4 W DATE 4 FEB 62 0700 GCT WIRE 0 DRY 50.0 WET 49.0 WIND DIRECTION -- VEL - KTS BAR 24 SWELL DIRECTION 26 H 1 T 7 CLOUD 6 AMT 10 WEATHER 00												
0	9.78	32.566	6.73		0	9.78	32.57	6.73		25.12	286.1	0
10	9.79	32.566	6.68		10	9.79	32.57	6.69		25.12	286.4	.029
30	9.71	32.583	6.63		20	9.75	32.57	6.65		25.13	285.8	.057
50	9.71	32.609	6.66		30	9.71	32.59	6.64		25.14	284.2	.086
100	9.27	32.770	6.29		50	9.71	32.61	6.67		25.16	282.6	.142
150	7.92	33.579	4.36		75	9.59	32.64	6.61		25.21	279.1	.213
199	7.15	33.842	3.82		100	9.27	32.77	6.30		25.36	264.7	.281
200	7.14	33.866	3.88		150	7.93	33.58	4.36		26.20	185.6	.393
298	5.96	33.966	2.27		200	7.15	33.87	3.89		26.54	154.2	.478
299	6.05	33.955	2.48		250	6.54	33.92	3.06		26.65	143.5	.552
397	5.31	34.037	1.41		300	6.04	33.96	2.47		26.75	134.9	.622
497	4.97	34.073	1.05		400	5.30	34.04	1.40		26.91	121.1	.750
597	4.61	34.194	.50		500	4.96	34.08	1.03		26.98	114.6	.868
696	4.38	34.276	.23		400	4.60	34.20	.49		27.11	103.0	.976
797	4.13	34.329	.23		700	4.37	34.28	.23		27.20	94.8	1.075
996	3.57	34.410	.19		800	4.12	34.33	.23		27.27	88.8	1.167
					1000	3.56	34.41	.19		27.39	78.0	1.334
NH 85 44 39.2 N 126 3.6 W DATE 4 FEB 62 1117 GCT WIRE 3 DRY 48.0 WET 48.0 WIND DIRECTION 13 VEL 3 KTS BAR 23 SWELL DIRECTION 26 H 1 T 7 CLOUD 6 AMT 10 WEATHER 01												
0	9.66	32.509	6.54		0	9.66	32.51	6.55		25.09	288.5	0
10	9.70	32.509	5.85		10	9.70	32.51	5.85		25.09	289.3	.029
29	9.42	32.520	5.40		20	9.57	32.51	5.46		25.11	287.3	.058
49	9.30	32.529	6.43		30	9.41	32.52	5.44		25.14	284.6	.086
98	8.14	33.241	4.77		50	9.28	32.54	6.42		25.18	281.4	.143
148	7.48	33.790	3.44		75	8.73	32.86	5.90		25.51	250.1	.209
198	6.98	33.895	2.95		100	8.11	33.27	4.71		25.93	210.8	.267
199	6.93	33.913	2.91		150	7.46	33.79	3.42		26.43	163.5	.360
297	5.90	33.961	2.31		200	6.90	33.92	2.90		26.61	147.4	.438
299	5.88	33.976	2.04		250	5.91	33.94	2.60		26.75	133.9	.508
398	5.14	34.036	1.01		300	5.87	33.98	1.97		26.79	131.0	.575
498	4.88	34.140	.70		400	5.13	34.04	1.00		26.92	119.1	.700
598	4.58	34.250	.40		500	4.87	34.14	.69		27.04	104.7	.813
697	4.31	34.277	.39		600	4.57	34.25	.40		27.16	98.6	.917
798	3.98	34.323	.39		700	4.30	34.28	.39		27.21	94.0	1.013
998	3.56	34.407	.47		800	3.97	34.32	.39		27.28	87.6	1.104
					1000	3.56	34.41	.47		27.39	78.2	1.270

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S‰	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁸	Δ D		
NH 125 44 39.5 N 126 59.0 W DATE 4 FEB 62 2126 GCT WTRF 10 DRY 48.0 WET 48.0 WIND DIRECTION 12 VEL 4 KTS BAR 20 SWELL DIRECTION 22 H 2 T 7 CLOUD 6 AMT 10 WEATHER 01														
0	9.44	32.493	6.74		0	9.44	32.50	6.34		25.12	286.3	0		
10	9.45	32.492	6.83		10	9.45	32.50	6.83		25.12	286.7	.029		
30	8.93	32.478	6.40		20	9.22	32.49	6.69		25.14	284.1	.057		
50	8.71	32.479	6.66		30	8.91	32.48	6.41		25.19	280.2	.085		
100	8.79	32.500	4.43		50	8.71	32.48	6.67		25.22	277.2	.141		
150	7.94	33.490	4.48		75	8.75	32.49	5.66		25.22	277.6	.210		
201	7.07	33.920	2.76		100	8.79	32.50	4.43		25.23	277.5	.280		
301	6.04	33.977	2.21		150	7.94	33.50	4.48		26.13	192.5	.397		
401	5.34	34.031	1.44		200	7.09	33.92	2.80		26.5R	150.1	.483		
502	5.06	34.123	.47		250	6.49	33.95	2.27		26.69	140.5	.556		
602	4.69	34.201	.44		300	6.05	33.98	2.22		26.77	133.5	.624		
702	4.30	34.289	.39		400	5.35	34.03	1.45		26.89	122.2	.752		
802	4.00	34.303	.31		500	5.04	34.12	.49		27.00	112.5	.869		
1002	3.61	34.400	.50		600	4.70	34.20	.44		27.10	103.9	.977		
					700	4.31	34.29	.39		27.21	93.4	1.076		
					800	4.01	34.30	.31		27.26	89.5	1.167		
					1000	3.61	34.40	.50		27.37	79.5	1.336		
NH 145 44 39.0 N 127 27.0 W DATE 5 FEB 62 0130 GCT WTRF 8 DRY 48.0 WET 46.0 WIND DIRECTION 15 VEL 5 KTS BAR 19 SWELL DIRECTION 22 H 3 T 7 CLOUD 6 AMT 10 WEATHER 01														
0	9.48	32.490	6.56		0	9.48	32.50	6.57		25.11	287.1	0		
10	9.48	32.497	6.73		10	9.48	32.50	6.73		25.11	286.8	.029		
30	9.12	32.480	6.71		20	9.31	32.49	6.72		25.13	285.2	.057		
49	9.06	32.489	4.40		30	9.13	32.48	6.71		25.16	282.9	.086		
98	8.12	32.508	4.50		50	9.04	32.49	4.40		25.17	281.6	.142		
148	7.57	33.286	3.38		75	8.61	32.50	4.45		25.25	274.8	.212		
198	7.07	33.812	2.51		100	8.09	32.53	4.46		25.35	265.2	.279		
199	7.04	33.916	2.60		150	7.57	33.31	3.24		26.03	201.2	.396		
297	6.11	33.921	1.89		200	7.01	33.92	2.59		26.59	149.0	.483		
299	6.14	33.986	1.96		250	6.56	33.92	2.23		26.65	143.6	.556		
398	5.37	34.035	1.26		300	6.13	34.00	1.95		26.77	132.6	.625		
496	5.11	34.127	.78		400	5.36	34.04	1.25		26.90	121.9	.753		
593	4.68	34.108	.58		500	5.09	34.13	.77		27.00	112.2	.870		
689	4.42	34.251	.43		600	4.66	34.20	.57		27.11	103.3	.977		
786	4.14	34.309	.40		700	4.39	34.26	.43		27.18	96.6	1.077		
908	3.69	34.371	.23		800	4.09	34.32	.39		27.26	89.5	1.170		
NH 165 44 39.0 N 127 55.0 W DATE 5 FEB 62 0620 GCT WTRF 10 DRY 48.0 WET 46.0 WIND DIRECTION 15 VEL 5 KTS BAR 17 SWELL DIRECTION 15 H 3 T - CLOUD 6 AMT 10 WEATHER 02														
0	9.53	32.495	6.21		0	9.53	32.50	6.21		25.10	287.5	0		
10	9.53	32.495			10	9.53	32.50	8.50		25.10	287.7	.029		
30	9.06	32.486			20	9.31	32.49	7.97		25.13	285.2	.057		
50	8.97	32.514	6.39		30	9.06	32.49	7.45		25.17	281.5	.086		
100	7.96	33.471	3.75		50	8.97	32.52	6.40		25.21	278.4	.142		
149	7.53	33.852	2.73		75	8.50	32.95	5.15		25.62	239.8	.206		
197	7.01	33.933	2.91		100	7.96	33.48	3.76		26.11	193.4	.261		
199	6.96	33.935	2.83		150	7.53	33.86	2.75		26.47	159.8	.349		
297	5.93	33.984	1.98		200	6.94	33.94	2.80		26.62	146.5	.425		
299	5.92	33.975	1.98		250	6.18	33.96	2.39		26.74	135.7	.496		
397	5.39	34.057	1.14		300	5.91	33.98	1.97		26.78	131.8	.563		
498	5.00	34.126	.70		400	5.38	34.06	1.12		26.91	120.5	.689		
597	4.58	34.196	.53		500	4.99	34.13	.70		27.01	111.2	.805		
697	4.32	34.273	.34		600	4.57	34.20	.52		27.12	102.5	.911		
797	4.09	34.322	.30		700	4.31	34.27	.34		27.20	94.4	1.010		
993	3.50	34.409	.30		800	4.08	34.32	.30		27.27	88.8	1.101		
					1000	3.48	34.41	.30		27.40	77.0	1.267		
CH 5 43 20.5 N 124 29.0 W DATE 2 MAR 62 0600 GCT WTRF 10 DRY 44.0 WET 42.0 WIND DIRECTION 24 VEL 30 KTS BAR 11 SWELL DIRECTION 24 H 5 T - CLOUD - AMT - WEATHER 02														
0	9.17	32.552			0	9.17	32.56			25.21	277.8	0		
10	9.22	32.563			10	9.22	32.57			25.21	277.9	.028		
20	9.22	32.570			20	9.22	32.57			25.21	277.5	.056		
29	9.22	32.583			30	9.22	32.58			25.22	277.0	.083		
39	9.24	32.627			50	9.27	32.84			25.41	259.0	.137		
48	9.29	32.801			75	8.50	32.95			25.62	239.8	.199		
73	9.05	33.313			100	7.96	33.48			26.11	193.4	.253		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	Sx10 ⁶	ΔD
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CH 15 43 20.5 N 124 43.1 W DATE 2 MAR 62 0840 GCT WIRE 10 DRY 42.0 WET 40.0
WIND DIRECTION 24 VEL 30 KTS HAR 10 SWELL DIRECTION 27 H 4 T 7 CLOUD 9 AMT 4 WEATHER 02

0	9.75	32.801			0	9.75	32.81			25.31	268.2	0
10	9.76	32.791			10	9.76	32.80			25.30	269.3	.027
20	9.76	32.794			20	9.76	32.80			25.30	269.2	.054
29	9.75	32.796			30	9.74	32.80			25.31	268.8	.081
48	9.46	32.995			50	9.42	33.03			25.54	246.9	.132
73	8.96	33.463			75	8.93	33.48			25.97	206.7	.189
97	8.70	33.624			100	8.67	33.65			26.14	191.1	.239
146	8.15	33.910			150	8.08	33.92			26.44	162.8	.327
196	7.36	33.996			200	7.32	34.00			26.61	146.9	.405
245	7.01	34.033			250	6.97	34.04			26.69	140.3	.476

CH 25 43 20.5 N 124 55.6 W DATE 02 MAR 62 GCT WIRE 10 DRY 0 WET 0
WIND DIRECTION VEL 65 KTS BAR SWELL DIRECTION H T CLOUD AMT WEATHER

0	9.71	32.796			0	9.71	32.80			25.31	268.0	0
10	9.68	32.796			10	9.68	32.80			25.32	267.7	.027
30	9.69	32.803			20	9.69	32.80			25.31	267.9	.054
39	9.64	32.793			30	9.69	32.81			25.32	267.6	.080
48	9.70	32.849			50	9.70	32.86			25.36	264.3	.134
72	9.70	32.882			75	8.93	33.48			25.97	206.7	.192

CH 5 43 20.5 N 124 29.0 W DATE 08 MAR 62 0305 GCT WIRE 1 DRY 48.0 WET 47.0
WIND DIRECTION 35 VEL 2 KTS BAR 21 SWELL DIRECTION 28 H 6 T - CLOUD 1 AMT - WEATHER 01

0	9.68	32.650			0	9.68	32.65			25.20	278.3	0
10	9.58	32.643			10	9.58	32.65			25.21	277.5	.028
20	9.36	32.627			20	9.36	32.63			25.24	275.4	.055
30	9.50	32.673			30	9.50	32.68			25.25	274.3	.083
50	9.44	32.739			50	9.44	32.74			25.31	268.8	.137
75	9.16	32.914			75	9.16	32.92			25.49	252.0	.202

CH 15 43 20.5 N 124 43.2 W DATE 8 MAR 62 0548 GCT WIRE 3 DRY 49.0 WET 48.0
WIND DIRECTION 35 VEL 3 KTS BAR 22 SWELL DIRECTION 28 H 5 T 8 CLOUD - AMT 1 WEATHER 02

0	9.72	32.723			0	9.72	32.73			25.25	273.6	0
10	9.66	32.717			10	9.66	32.72			25.26	273.2	.027
30	9.53	32.761			20	9.59	32.73			25.28	271.3	.055
50	9.49	32.795			30	9.53	32.77			25.31	268.3	.082
100	9.00	33.397			50	9.49	32.80			25.35	265.4	.135
150	8.31	33.769			75	9.29	33.06			25.58	243.1	.198
201	7.80	33.940			100	9.00	33.40			25.89	214.1	.256
251	7.20	34.009			150	8.31	33.77			26.29	177.1	.353
					200	7.81	33.94			26.49	158.5	.437
					250	7.21	34.01			26.64	145.7	.513

CH 25 43 20.5 N 124 55.5 W DATE 8 MAR 62 0805 GCT WIRE 0 DRY 48.0 WET 46.0
WIND DIRECTION 35 VEL 3 KTS BAR 22 SWELL DIRECTION 28 H 5 T 5 CLOUD 6 AMT 9 WEATHER 03

0	9.87	32.694			0	9.88	32.70			25.20	278.0	0
10	9.86	32.693			10	9.86	32.70			25.21	278.1	.028
30	9.84	32.689			20	9.85	32.69			25.20	278.6	.056
50	9.82	32.694			30	9.84	32.69			25.21	278.4	.083
100	9.56	33.222			50	9.82	32.70			25.21	278.1	.139
150	8.60	33.720			75	9.75	32.91			25.39	261.4	.207
200	7.92	33.900			100	9.56	33.23			25.67	235.7	.269
305	6.57	34.004			150	8.60	33.72			26.21	185.0	.374
404	5.63	34.124			200	7.93	33.91			26.45	162.6	.461
504	5.26	34.177			250	7.25	33.97			26.60	149.0	.539
605	4.76	34.233			300	6.63	34.00			26.71	139.0	.611
					400	5.66	34.12			26.93	119.4	.740
					500	5.27	34.18			27.02	111.0	.855
					600	4.79	34.23			27.12	102.7	.962

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
0	9.72	32.786			0	9.72	32.79			25.30	268.9	0
9	9.72	32.782			10	9.72	32.78			25.30	269.6	.027
29	9.62	32.780			20	9.67	32.78			25.30	269.0	.054
48	9.62	32.791			30	9.62	32.78			25.31	268.5	.081
96	9.22	33.263			50	9.61	32.81			25.33	266.8	.134
194	8.24	33.872			75	9.43	33.02			25.53	248.3	.199
290	7.04	33.985			100	9.18	33.30			25.78	224.6	.258
387	5.64	33.982			150	8.71	33.66			26.14	191.5	.362
486	5.19	34.070			200	8.17	33.89			26.40	167.4	.451
581	5.04	34.198			250	7.57	33.97			26.56	153.2	.532
677	4.72	34.252			300	6.88	33.98			26.66	143.7	.606
781	4.42	34.315			400	5.54	33.99			26.84	127.7	.741
978	3.83	34.387			500	5.16	34.09			26.96	116.1	.863
					600	4.98	34.21			27.08	106.4	.974
					700	4.65	34.27			27.16	99.1	1.077
					800	4.36	34.32			27.24	92.1	1.173
					1000	3.76	34.40			27.36	81.6	1.346

CH 35 43 20.5 N 125 10.4 W DATE 8 MAR 62 1030 GCT WIRE 15 DRY 48.0 WET 46.0
WIND DIRECTION 34 VEL 4 KTS BAR 23 SWELL DIRECTION 30 H 3 T 7 CLOUD 6 AMT 9 WEATHER 02

0	9.72	32.786			0	9.72	32.79			25.30	268.9	0
9	9.72	32.782			10	9.72	32.78			25.30	269.6	.027
29	9.62	32.780			20	9.67	32.78			25.30	269.0	.054
48	9.62	32.791			30	9.62	32.78			25.31	268.5	.081
96	9.22	33.263			50	9.61	32.81			25.33	266.8	.134
194	8.24	33.872			75	9.43	33.02			25.53	248.3	.199
290	7.04	33.985			100	9.18	33.30			25.78	224.6	.258
387	5.64	33.982			150	8.71	33.66			26.14	191.5	.362
486	5.19	34.070			200	8.17	33.89			26.40	167.4	.451
581	5.04	34.198			250	7.57	33.97			26.56	153.2	.532
677	4.72	34.252			300	6.88	33.98			26.66	143.7	.606
781	4.42	34.315			400	5.54	33.99			26.84	127.7	.741
978	3.83	34.387			500	5.16	34.09			26.96	116.1	.863
					600	4.98	34.21			27.08	106.4	.974
					700	4.65	34.27			27.16	99.1	1.077
					800	4.36	34.32			27.24	92.1	1.173
					1000	3.76	34.40			27.36	81.6	1.346

CH 45 43 20.5 N 125 24.0 W DATE 8 MAR 62 1415 GCT WIRE 5 DRY 47.0 WET 46.0
WIND DIRECTION 34 VEL 4 KTS BAR 23 SWELL DIRECTION 30 H 2 T 7 CLOUD 6 AMT 10 WEATHER 03

0	9.78	32.771			0	9.78	32.78			25.28	270.9	0
10	9.63	32.766			10	9.63	32.77			25.30	269.1	.027
30	9.61	32.774			20	9.62	32.77			25.30	269.2	.054
55	9.63	32.775			30	9.61	32.78			25.31	268.5	.081
90	8.34	33.377			50	9.63	32.77			25.30	269.3	.135
149	8.72	33.703			75	9.05	33.02			25.59	242.8	.199
199	8.35	33.880			100	8.34	33.39			25.98	205.5	.255
299	7.25	33.974			150	8.72	33.71			26.18	188.0	.353
409	6.33	34.091			200	8.34	33.88			26.37	170.3	.443
508	5.48	34.130			250	7.80	33.95			26.50	158.4	.525
609	4.98	34.239			300	7.24	33.98			26.60	149.4	.602
819	4.20	34.358			400	6.40	34.08			26.80	131.7	.742
1019	3.58	34.414			500	5.54	34.13			26.95	118.0	.867
					600	5.02	34.23			27.09	105.6	.979
					700	4.61	34.30			27.19	95.9	1.079
					800	4.26	34.35			27.27	88.9	1.172
					1000	3.63	34.41			27.38	78.9	1.339

CH 65 43 20.5 N 125 51.4 W DATE 8 MAR 62 1800 GCT WIRE 0 DRY 48.0 WET 46.0
WIND DIRECTION 31 VEL 4 KTS BAR 23 SWELL DIRECTION 31 H 4 T 7 CLOUD 6 AMT 10 WEATHER 03

0	9.64	32.751			0	9.64	32.76			25.29	270.2	0
10	9.64	32.748			10	9.64	32.75			25.28	270.6	.027
30	9.59	32.744			20	9.62	32.75			25.28	270.8	.054
50	9.59	32.819			30	9.59	32.75			25.29	270.4	.081
100	9.34	33.414			50	9.59	32.82			25.35	265.2	.135
155	8.62	33.710			75	9.51	33.10			25.58	243.9	.198
206	7.82	33.934			100	9.34	33.42			25.85	218.1	.256
306	6.41	33.962			150	8.70	33.69			26.17	188.9	.358
411	5.45	34.042			200	7.92	33.91			26.46	161.9	.445
511	5.00	34.150			250	7.16	33.95			26.59	149.5	.523
611	4.44	34.215			300	6.48	33.96			26.70	140.3	.596
812	4.16	34.361			400	5.53	34.03			26.87	124.3	.728
1012	3.60	34.436			500	5.04	34.14			27.01	111.0	.846
					600	4.50	34.21			27.13	100.9	.951
					700	4.26	34.28			27.22	93.3	1.048
					800	4.16	34.35			27.28	87.6	1.139
					1000	3.64	34.43			27.40	77.3	1.304

CH 85 43 20.5 N 125 18.6 W DATE 8 MAR 62 2202 GCT WIRE 15 DRY 47.0 WET 44.0
WIND DIRECTION 34 VEL 6 KTS BAR 23 SWELL DIRECTION 31 H 5 T 7 CLOUD 6 AMT 6 WEATHER 02

0	9.17				0	9.17	32.76			25.36	263.1	0
10	9.18	32.966			10	9.18	32.97			25.53	247.4	.026
29	9.14	32.969			20	9.16	32.97			25.53	247.4	.050
48	9.14	32.970			30	9.14	32.97			25.53	247.2	.075
96	8.30	33.605			50	9.11	32.99			25.56	245.4	.124
150	7.67	33.808			75	8.73	33.30			25.86	217.3	.182
199	6.88	33.926			100	8.25	33.63			26.19	186.0	.232
296	5.86	33.961			150	7.68	33.81			26.42	165.1	.320
398	5.43	34.045			200	6.87	33.93			26.62	146.3	.398
497	5.01	34.173			250	6.26	33.96			26.72	137.0	.469
595	4.73	34.248			300	5.84	33.97			26.78	131.7	.536
795	4.14	34.340			400	5.42	34.09			26.93	118.9	.661
994	3.58	34.415			500	5.00	34.18			27.05	107.7	.774
					600	4.72	34.25			27.14	100.3	.878
					700	4.42	34.30			27.21	93.6	.975
					800	4.13	34.34			27.28	88.0	1.066
					1000	3.56	34.42			27.39	77.6	1.232

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
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CH 5 43 20.2 N 124 29.3 W DATE 27 MAR 62 2035 GCT WIRE 5 DRY 47.0 WET 41.0
WIND DIRECTION 35 VEL 5 KTS BAR 24 SWELL DIRECTION 30 H 3 T 8 CLOUD 8 AMT 2 WEATHER --

0	9.66	30.780			0	9.66	30.78			23.75	416.8	0
10	9.39	32.548			10	9.39	32.55			25.17	281.6	.035
20	9.39	32.604			20	9.39	32.61			25.21	277.6	.063
30	9.37	32.626			30	9.38	32.63			25.23	275.8	.091
50	9.39	32.636			50	9.39	32.64			25.24	275.7	.146
75	9.14	32.851			75	9.14	32.86			25.44	256.3	.212

CH 15 43 20.5 N 124 42.9 W DATE 27 MAR 62 2230 GCT WIRE 6 DRY 47.0 WET 41.0
WIND DIRECTION 01 VEL 5 KTS BAR 24 SWELL DIRECTION 30 H 5 T 8 CLOUD 8 AMT 2 WEATHER 02

0	9.52	32.711			0	9.52	32.72			25.27	271.3	0
10	9.46	32.718			10	9.46	32.72			25.29	270.1	.027
30	9.38	32.831			20	9.41	32.77			25.34	265.8	.054
50	9.36	32.857			30	9.38	32.84			25.39	260.8	.080
100	8.57	33.641			50	9.36	32.86			25.41	258.8	.132
150	7.97	33.912			75	9.02	33.22			25.75	227.7	.193
201	7.39	34.006			100	8.57	33.65			26.15	189.6	.245
251	6.92	34.035			150	7.97	33.92			26.45	161.6	.333
					200	7.40	34.01			26.61	147.7	.410
					250	6.93	34.03			26.69	139.9	.482

CH 25 43 20.6 N 124 55.8 W DATE 28 MAR 62 0023 GCT WIRE 6 DRY 46.0 WET 44.0
WIND DIRECTION 01 VEL 5 KTS BAR 24 SWELL DIRECTION 30 H 4 T 7 CLOUD 8 AMT 6 WEATHER 03

0	9.43	32.675			0	9.43	32.68			25.26	272.6	0
10	9.42	32.673			10	9.42	32.68			25.26	272.8	.027
30	9.17	32.728			20	9.30	32.70			25.30	269.6	.054
50	9.20	32.759			30	9.17	32.73			25.34	265.2	.081
99	8.61	33.603			50	9.20	32.76			25.36	263.7	.134
200	7.57	33.937			75	8.95	33.15			25.70	231.7	.196
299	6.73	34.046			100	8.60	33.61			26.12	192.5	.249
398	5.64	34.062			150	8.06	33.90			26.43	163.8	.338
504	5.31	34.157			200	7.57	33.94			26.53	154.9	.418
603	4.66	34.302			250	7.15	34.01			26.65	144.6	.492
					300	6.72	34.05			26.73	137.0	.563
					400	5.63	34.06			26.89	123.3	.693
					500	5.32	34.15			26.99	113.3	.811
					600	4.68	34.30			27.18	96.5	.916

CH 35 43 20.4 N 125 10.4 W DATE 28 MAR 62 0614 GCT WIRE 20 DRY 45.0 WET 40.0
WIND DIRECTION 35 VEL 5 KTS BAR 24 SWELL DIRECTION 27 H 4 T 7 CLOUD - AMT 0 WEATHER 01

0	9.14	32.642			0	9.14	32.65			25.28	270.7	0
9	9.16	32.638			10	9.16	32.64			25.28	271.4	.027
28	9.12	32.738			20	9.15	32.69			25.32	267.7	.054
47	9.04	32.752			30	9.11	32.74			25.36	263.8	.081
94	8.64	33.526			50	9.02	32.79			25.41	258.8	.133
141	7.86	33.789			75	8.84	33.18			25.75	227.7	.194
190	7.56	34.012			100	8.54	33.58			26.10	194.3	.246
291	6.54	34.028			150	7.79	33.84			26.42	164.9	.336
387	5.86	34.044			200	7.46	34.03			26.61	147.0	.414
485	5.22	34.125			250	6.97	34.02			26.68	141.4	.486
586	4.71	34.185			300	6.47	34.03			26.75	135.0	.555
779	3.90	34.302			400	5.77	34.05			26.86	125.7	.686
973	3.54	34.417			500	5.14	34.13			27.00	112.4	.805
					600	4.64	34.19			27.10	103.7	.913
					700	4.19	34.25			27.20	94.6	1.012
					800	3.84	34.31			27.28	86.7	1.102
					1000	3.49	34.43			27.41	75.6	1.264

OBSERVED				INTERPOLATED				DERIVED			
D	T°C	S%	O ₂ ml/l	Z	T	S	O ₂	PO ₄ ≡	σ _t	δ × 10 ⁵	Δ D
CH 65 47 20.5 N 125 0.8 W DATE 28 MAR 62 1445 GCT WIRE 0 DRY 46.0 WET 42.0											
WIND DIRECTION 3 VEL 8 KTS BAR 20 SWELL DIRECTION 03 H 6 T 5 CLOUD - AMT 0 WEATHER 01											
0 9.66 32.814				0 9.66 32.82				25.33 265.9		0	
10 9.67 32.798				10 9.67 32.80				25.32 267.4		.027	
30 9.76 32.823				20 9.72 32.81				25.31 267.9		.053	
50 9.68 32.812				30 9.76 32.83				25.32 267.2		.080	
104 9.64 33.486				50 9.68 32.82				25.33 267.1		.134	
153 8.95 33.672				75 9.66 33.09				25.54 246.9		.198	
203 8.47 33.882				100 9.65 33.43				25.81 222.3		.256	
302 7.30 34.003				150 9.00 33.67				26.10 195.3		.361	
406 6.36 34.072				200 8.50 33.87				26.34 173.5		.453	
506 5.19 34.090				250 7.92 33.97				26.50 158.7		.536	
611 4.96 34.210				300 7.32 34.00				26.61 148.5		.613	
811 4.18 34.378				400 6.41 34.07				26.79 132.8		.753	
1011 3.68 34.425				500 5.25 34.08				26.94 118.0		.879	
				600 4.96 34.19				27.07 107.5		.991	
				700 4.62 34.30				27.19 96.3		1.093	
				800 4.23 34.37				27.29 86.9		1.185	
				1000 3.70 34.42				27.38 78.8		1.351	
NH 5 44 39.1 N 124 10.6 W DATE 7 APR 62 1844 GCT WIRE - DRY 48.0 WET 44.0											
WIND DIRECTION 33 VEL 3 KTS BAR 22 SWELL DIRECTION 29 H 1 T 7 CLOUD 0 AMT 10 WEATHER 02											
0 9.26 31.251				0 9.26 31.26				24.18 375.8		0	
5 31.431				10 8.89 31.96				24.78 318.4		.035	
10 8.89 31.952				20 8.90 32.26				25.02 295.9		.065	
15 32.103				30 8.85 32.47				25.19 279.7		.094	
20 8.90 32.258				50 8.85 33.17				25.74 227.9		.145	
30 8.85 32.469				75 9.66 33.09				25.54 246.9		.204	
50 8.85 33.170				100 9.65 33.43				25.81 222.3		.263	
NH 15 44 39.0 N 124 24.6 W DATE 2 APR 62 2045 GCT WIRE 2 DRY 49.0 WET 45.0											
WIND DIRECTION 33 VEL 3 KTS BAR 22 SWELL DIRECTION 29 H 1 T 7 CLOUD 8 AMT 3 WEATHER 01											
0 9.45 31.354	.21		0 9.45 31.36				.22	24.23 371.0		0	
5 31.354			10 9.46 32.01				.38	24.73 323.0		.035	
10 9.46 32.004	.38		20 9.18 32.31				.54	25.02 296.2		.066	
15 32.229			30 8.86 32.34				.67	25.04 289.9		.094	
30 8.86 32.373	.66		50 8.81 32.41				.67	25.15 284.3		.152	
50 8.81 32.403	.66		75 9.00 32.77				.85	25.40 260.8		.220	
75 9.00 32.762	.84		100 9.65 33.43					25.81 222.3		.281	
NH 25 44 39.3 N 124 38.8 W DATE 2 APR 62 2225 GCT WIRE 0 DRY 48.0 WET 44.0											
WIND DIRECTION 32 VEL 3 KTS BAR 22 SWELL DIRECTION 29 H 1 T 8 CLOUD 8 AMT 4 WEATHER 03											
0 9.44 31.546	.72		0 9.44 31.55				.73	24.38 356.6		0	
5 31.545			10 9.63 31.93				.68	24.65 331.2		.034	
10 9.62 31.927	.67		20 9.10 32.42				.99	25.11 286.9		.065	
15 32.294			30 9.04 32.47				.90	25.16 282.6		.094	
20 9.10 32.419	.98		50 9.14 32.70				1.52	25.32 267.5		.149	
30 9.04 32.468	.90		75 9.05 33.01				1.58	25.58 243.2		.213	
50 9.14 32.694	1.52		100 8.70 33.55				2.16	26.06 198.6		.268	
75 9.05 33.010	1.58		150 7.94 33.89				2.33	26.43 163.4		.358	
100 8.70 33.546	2.16		200 7.26 33.98				2.56	26.60 147.9		.436	
150 7.94 33.882	2.32		250 7.92 33.97					26.50 158.7		.513	
201 7.25 33.980	2.57		300 7.32 34.00					26.61 148.5		.589	
NH 35 44 39.1 N 124 52.8 W DATE 3 APR 62 0025 GCT WIRE 0 DRY 48.0 WET 44.0											
WIND DIRECTION 32 VEL 3 KTS BAR 22 SWELL DIRECTION 29 H 2 T 8 CLOUD 8 AMT 4 WEATHER 03											
0 9.35 31.600	.67		0 9.35 31.60				.68	24.44 351.2		0	
5 31.598			10 9.00 32.20				1.10	24.95 302.2		.033	
10 9.00 32.197	1.09		20 8.92 32.33				.90	25.07 290.9		.062	
15 32.246			30 8.90 32.42				.87	25.15 284.0		.091	
20 8.92 32.370	.90		50 8.93 32.49				1.13	25.35 264.8		.146	
30 8.90 32.420	.86		75 8.88 33.21				2.47	25.76 226.5		.207	
50 8.93 32.699	1.12		100 8.76 33.54				2.79	26.04 199.8		.261	
75 8.88 33.200	2.47		150 8.51 33.76				1.50	26.25 180.7		.356	
99 8.76 33.537	2.81		200 7.68 33.93				2.31	26.51 157.1		.440	
148 8.53 33.757	1.47		250 7.92 33.97					26.50 158.7		.519	
198 7.71 33.924	2.28		300 7.32 34.00					26.61 148.5		.596	

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S‰	O ₂ ml/l	Po ₄ ‡	Z	T	S	O ₂	Po ₄ ‡	σ _t	Sx10 ⁶	ΔD
NH 45 44 39.1 N 125 7.9 W DATE 3 APR 62 0230 GCT WIRE 2 DRY 47.0 WET 43.0 WIND DIRECTION 32 VEL 3 KTS BAR 22 SWELL DIRECTION 28 H 2 T 8 CLOUD 8 AMT 9 WEATHER 02												
0 9.34 32.496 .77	0 9.34 32.50 .78	5 32.525	10 9.06 32.57 .67	10 9.06 32.57 .67	10 9.06 32.57 .67	20 9.15 32.65 .79	20 9.15 32.65 .79	20 9.15 32.65 .79	25.24 275.0 .028	25.24 275.0 .028	25.24 275.0 .028	
10 9.06 32.570 .66	10 9.06 32.57 .67	15 32.589	30 8.98 32.69 .82	30 8.98 32.69 .82	30 8.98 32.69 .82	50 9.00 32.77 1.00	50 9.00 32.77 1.00	50 9.00 32.77 1.00	25.28 270.7 .055	25.28 270.7 .055	25.28 270.7 .055	
20 9.15 32.648 .78	20 9.15 32.648 .78	30 8.98 32.69 .82	75 8.86 33.23 1.54	75 8.86 33.23 1.54	75 8.86 33.23 1.54	100 8.82 33.55 1.77	100 8.82 33.55 1.77	100 8.82 33.55 1.77	25.78 224.2 .195	25.78 224.2 .195	25.78 224.2 .195	
30 8.98 32.644 .81	30 8.98 32.644 .81	50 9.00 32.769 .99	100 8.82 33.55 1.77	100 8.82 33.55 1.77	100 8.82 33.55 1.77	150 8.31 33.79 2.15	150 8.31 33.79 2.15	150 8.31 33.79 2.15	26.04 200.2 .248	26.04 200.2 .248	26.04 200.2 .248	
50 9.00 32.769 .99	50 9.00 32.769 .99	75 8.86 33.23 1.53	150 8.31 33.79 2.15	150 8.31 33.79 2.15	150 8.31 33.79 2.15	200 7.61 33.91 2.30	200 7.61 33.91 2.30	200 7.61 33.91 2.30	26.30 175.8 .342	26.30 175.8 .342	26.30 175.8 .342	
75 8.86 33.23 1.53	75 8.86 33.23 1.53	100 8.82 33.55 1.77	250 6.95 33.97 2.39	250 6.95 33.97 2.39	250 6.95 33.97 2.39	300 6.31 33.98 2.41	300 6.31 33.98 2.41	300 6.31 33.98 2.41	26.64 144.9 .501	26.64 144.9 .501	26.64 144.9 .501	
100 8.82 33.55 1.77	100 8.82 33.55 1.77	200 7.61 33.91 2.30	400 5.69 34.00 2.60	400 5.69 34.00 2.60	400 5.69 34.00 2.60	500 5.13 34.08 2.75	500 5.13 34.08 2.75	500 5.13 34.08 2.75	26.83 128.8 .704	26.83 128.8 .704	26.83 128.8 .704	
500 5.13 34.08 2.75									26.96 116.0 .827	26.96 116.0 .827	26.96 116.0 .827	
NH 65 44 39.1 N 125 35.0 W DATE 3 APR 62 0550 GCT WIRE 0 DRY 46.0 WET 43.0 WIND DIRECTION 33 VEL 1 KTS BAR 23 SWELL DIRECTION 29 H 2 T 8 CLOUD - AMT 8 WEATHER 02												
0 9.18 32.597 .64	0 9.18 32.60 .65	5 32.605	10 9.09 32.77 .77	10 9.09 32.77 .77	10 9.09 32.77 .77	20 9.01 32.98 .79	20 9.01 32.98 .79	20 9.01 32.98 .79	25.39 261.0 .054	25.39 261.0 .054	25.39 261.0 .054	
10 9.17 32.599 .75	10 9.17 32.599 .75	30 9.01 32.971 .79	50 8.98 32.923 1.05	50 8.98 32.923 1.05	50 8.98 32.923 1.05	75 8.89 33.25 1.37	75 8.89 33.25 1.37	75 8.89 33.25 1.37	25.56 244.8 .080	25.56 244.8 .080	25.56 244.8 .080	
30 9.01 32.971 .79	30 9.01 32.971 .79	50 8.98 32.923 1.05	100 8.77 33.64 1.60	100 8.77 33.64 1.60	100 8.77 33.64 1.60	150 8.48 33.82 1.60	150 8.48 33.82 1.60	150 8.48 33.82 1.60	26.30 176.4 .332	26.30 176.4 .332	26.30 176.4 .332	
50 8.98 32.923 1.05	50 8.98 32.923 1.05	75 8.89 33.25 1.37	200 8.12 33.92 2.08	200 8.12 33.92 2.08	200 8.12 33.92 2.08	300 8.57 33.99 2.08	300 8.57 33.99 2.08	300 8.57 33.99 2.08	26.44 164.0 .417	26.44 164.0 .417	26.44 164.0 .417	
75 8.89 33.25 1.37	75 8.89 33.25 1.37	100 8.77 33.64 1.60	400 5.94 34.05 2.32	400 5.94 34.05 2.32	400 5.94 34.05 2.32	600 5.60 34.17 2.31	600 5.60 34.17 2.31	600 5.60 34.17 2.31	26.68 141.9 .570	26.68 141.9 .570	26.68 141.9 .570	
100 8.77 33.64 1.60	100 8.77 33.64 1.60	150 8.48 33.82 1.60	400 5.08 34.08 2.38	400 5.08 34.08 2.38	400 5.08 34.08 2.38	600 4.60 34.17 2.31	600 4.60 34.17 2.31	600 4.60 34.17 2.31	26.96 128.1 .705	26.96 128.1 .705	26.96 128.1 .705	
150 8.48 33.82 1.60	150 8.48 33.82 1.60	200 8.12 33.92 2.08	500 5.08 34.08 2.38	500 5.08 34.08 2.38	500 5.08 34.08 2.38	700 4.26 34.24 2.35	700 4.26 34.24 2.35	700 4.26 34.24 2.35	27.18 96.4 1.038	27.18 96.4 1.038	27.18 96.4 1.038	
200 8.12 33.92 2.08	200 8.12 33.92 2.08	300 8.57 33.99 2.08	800 3.99 34.30 2.38	800 3.99 34.30 2.38	800 3.99 34.30 2.38	1000 3.54 34.41 2.29	1000 3.54 34.41 2.29	1000 3.54 34.41 2.29	26.96 115.8 .826	26.96 115.8 .826	26.96 115.8 .826	
300 8.57 33.99 2.08	300 8.57 33.99 2.08	400 5.08 34.08 2.38	1000 3.54 34.41 2.29	1000 3.54 34.41 2.29	1000 3.54 34.41 2.29				27.26 89.2 1.131	27.26 89.2 1.131	27.26 89.2 1.131	
NH 85 44 39.1 N 126 3.6 W DATE 3 APR 62 0914 GCT WIRE 2 DRY 50.0 WET 45.0 WIND DIRECTION VEL C KTS BAR 23 SWELL DIRECTION N H T CLOUD 8 AMT 1 WEATHER 01												
0 9.04 32.564 .81	0 9.04 32.57 .82	5 32.560	10 9.03 32.56 .76	10 9.03 32.56 .76	10 9.03 32.56 .76	20 9.03 32.54 .80	20 9.03 32.54 .80	20 9.03 32.54 .80	25.27 272.5 .138	25.27 272.5 .138	25.27 272.5 .138	
10 9.03 32.555 .76	10 9.03 32.555 .76	30 9.01 32.541 .86	50 9.02 32.603 .85	50 9.02 32.603 .85	50 9.02 32.603 .85	75 8.53 33.00 1.22	75 8.53 33.00 1.22	75 8.53 33.00 1.22	25.65 236.4 .201	25.65 236.4 .201	25.65 236.4 .201	
30 9.01 32.541 .86	30 9.01 32.541 .86	50 9.02 32.603 .85	100 7.96 33.466 1.69	100 7.96 33.466 1.69	100 7.96 33.466 1.69	150 7.96 33.47 1.70	150 7.96 33.47 1.70	150 7.96 33.47 1.70	26.11 193.8 .255	26.11 193.8 .255	26.11 193.8 .255	
50 9.02 32.603 .85	50 9.02 32.603 .85	75 8.53 33.00 1.22	150 7.40 33.83 2.13	150 7.40 33.83 2.13	150 7.40 33.83 2.13	200 7.40 33.83 2.14	200 7.40 33.83 2.14	200 7.40 33.83 2.14	26.47 159.5 .343	26.47 159.5 .343	26.47 159.5 .343	
75 8.53 33.00 1.22	75 8.53 33.00 1.22	100 7.96 33.47 1.70	200 6.72 33.920 2.03	200 6.72 33.920 2.03	200 6.72 33.920 2.03	300 6.72 33.92 2.03	300 6.72 33.92 2.03	300 6.72 33.92 2.03	26.64 144.6 .419	26.64 144.6 .419	26.64 144.6 .419	
100 7.96 33.47 1.70	100 7.96 33.47 1.70	150 7.40 33.83 2.13	250 6.12 33.95 2.72	250 6.12 33.95 2.72	250 6.12 33.95 2.72	300 6.12 33.95 2.72	300 6.12 33.95 2.72	300 6.12 33.95 2.72	26.74 135.4 .489	26.74 135.4 .489	26.74 135.4 .489	
150 7.40 33.83 2.13	150 7.40 33.83 2.13	200 6.72 33.92 2.03	300 5.64 33.97 2.76	300 5.64 33.97 2.76	300 5.64 33.97 2.76	400 5.64 33.97 2.76	400 5.64 33.97 2.76	400 5.64 33.97 2.76	26.81 128.7 .555	26.81 128.7 .555	26.81 128.7 .555	
200 6.72 33.92 2.03	200 6.72 33.92 2.03	300 5.64 33.97 2.76	400 5.12 34.03 3.10	400 5.12 34.03 3.10	400 5.12 34.03 3.10	500 4.83 34.15 3.08	500 4.83 34.15 3.08	500 4.83 34.15 3.08	26.92 119.4 .679	26.92 119.4 .679	26.92 119.4 .679	
300 5.64 33.97 2.76	300 5.64 33.97 2.76	400 5.12 34.03 3.10	500 4.52 34.45 3.00	500 4.52 34.45 3.00	500 4.52 34.45 3.00	600 4.52 34.45 3.00	600 4.52 34.45 3.00	600 4.52 34.45 3.00	27.05 107.5 .793	27.05 107.5 .793	27.05 107.5 .793	
400 5.12 34.03 3.10	400 5.12 34.03 3.10	500 4.52 34.45 3.00	700 4.21 34.27 3.09	700 4.21 34.27 3.09	700 4.21 34.27 3.09	800 3.93 34.33 3.09	800 3.93 34.33 3.09	800 3.93 34.33 3.09	27.29 86.7 1.084	27.29 86.7 1.084	27.29 86.7 1.084	
500 4.52 34.45 3.00	500 4.52 34.45 3.00	600 4.52 34.45 3.00	1000 3.44 34.45 3.00	1000 3.44 34.45 3.00	1000 3.44 34.45 3.00				27.43 74.0 1.244	27.43 74.0 1.244	27.43 74.0 1.244	
NH 105 44 39.1 N 126 30.9 W DATE 3 APR 62 1325 GCT WIRE 3 DRY 48.0 WET 45.0 WIND DIRECTION 17 VEL 2 KTS BAR 23 SWELL DIRECTION 27 H 2 T 11 CLOUD 0 AMT 9 WEATHER 02												
0 9.04 32.615	0 9.04 32.62	5 32.615	10 8.95 32.61	10 8.95 32.61	10 8.95 32.61	20 8.86 32.60	20 8.86 32.60	20 8.86 32.60	25.29 270.4 .027	25.29 270.4 .027	25.29 270.4 .027	
10 8.95 32.615	10 8.95 32.615	30 8.79 32.603	30 8.79 32.61	30 8.79 32.61	30 8.79 32.61	50 8.75 32.62	50 8.75 32.62	50 8.75 32.62	25.31 268.8 .054	25.31 268.8 .054	25.31 268.8 .054	
30 8.79 32.603	30 8.79 32.603	50 8.75 32.62	75 8.38 32.94	75 8.38 32.94	75 8.38 32.94	100 7.91 33.35	100 7.91 33.35	100 7.91 33.35	26.02 202.0 .253	26.02 202.0 .253	26.02 202.0 .253	
50 8.75 32.62	50 8.75 32.62	75 8.38 32.94	150 7.34 33.83	150 7.34 33.83	150 7.34 33.83	200 6.77 33.93	200 6.77 33.93	200 6.77 33.93	26.47 159.4 .343	26.47 159.4 .343	26.47 159.4 .343	
75 8.38 32.94	75 8.38 32.94	100 7.91 33.35	250 6.27 33.96	250 6.27 33.96	250 6.27 33.96	300 5.85 33.98	300 5.85 33.98	300 5.85 33.98	26.63 145.0 .420	26.63 145.0 .420	26.63 145.0 .420	
100 7.91 33.35	100 7.91 33.35	150 7.34 33.83	400 5.28 34.07	400 5.28 34.07	400 5.28 34.07	500 4.87 34.15	500 4.87 34.15	500 4.87 34.15	26.94 118.2 .681	26.94 118.2 .681	26.94 118.2 .681	
150 7.34 33.83	150 7.34 33.83	200 6.77 33.93	600 4.53 34.22	600 4.53 34.22	600 4.53 34.22	700 4.25 34.29	700 4.25 34.29	700 4.25 34.29	27.04 108.1 .794	27.04 108.1 .794	27.04 108.1 .794	
200 6.77 33.93	200 6.77 33.93	300 5.85 33.98	800 4.01 34.34	800 4.01 34.34	800 4.01 34.34	1000 3.50 34.42	1000 3.50 34.42	1000 3.50 34.42	27.22 92.8 .995	27.22 92.8 .995	27.22 92.8 .995	
300 5.85 33.98	300 5.85 33.98	400 5.28 34.07	800 4.01 34.34	800 4.01 34.34	800 4.01 34.34	1000 3.50 34.42	1000 3.50 34.42	1000 3.50 34.42	27.40 77.0 1.248	27.40 77.0 1.248	27.40 77.0 1.248	

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D	
ANH173	48 42.9 N	128	1.8 W	DATE 4 APR 62 1035 GCT	WIRE 0	DRY 49.0	WET 48.0						
WIND DIRECTION 30 VEL 3 KTS	BAR 22 SWELL DIRECTION 27 H	2 T	8 CLOUD 0 AMT 9 WEATHER 02										
0	8.78	32.609	.60		0	8.78	32.61		.60	25.31	267.8	0	
5		32.583			10	8.75	32.59		.60	25.29	269.6	.027	
10	8.75	32.581	.59		20	8.59	32.58		.61	25.32	267.6	.054	
30	8.43	32.584	.63		30	8.43	32.59		.63	25.35	265.0	.080	
50	8.50	32.585	.54		50	8.50	32.59		.54	25.34	266.2	.133	
100	7.62	33.043	1.01		75	8.12	32.76		.73	25.52	248.6	.198	
150	7.26	33.733	1.27		100	7.63	33.05		1.01	25.82	220.5	.256	
201	6.70	33.898	1.51		150	7.27	33.74		1.27	26.42	165.0	.353	
301	5.56	33.965	1.91		200	6.71	33.90		1.51	26.62	146.4	.431	
405	4.76	34.021	2.11		250	6.12	33.95		1.72	26.74	135.5	.501	
506	4.32	34.086	2.22		300	5.57	33.96		1.91	26.81	128.5	.567	
606	4.09	34.147	2.32		400	4.79	34.02		2.10	26.95	116.5	.689	
807	3.63	34.279	2.39		500	4.34	34.08		2.21	27.05	107.0	.801	
1006	3.28	34.392	2.36		600	4.10	34.14		2.31	27.12	101.2	.905	
					700	3.87	34.21		2.37	27.20	94.2	1.003	
					800	3.65	34.27		2.39	27.27	87.5	1.094	
					1000	3.29	34.39		2.36	27.40	76.6	1.258	
AH 165	46 14.5 N	128	4.0 W	DATE 4 APR 62 1540 GCT	WIRE 0	DRY 49.0	WET 48.0						
WIND DIRECTION VEL C KTS	BAR 23 SWELL DIRECTION 27 H	8 T	1 CLOUD 0 AMT 7 WEATHER 02										
0	8.78	32.563	.59		0	8.78	32.57		.60	25.28	271.2	0	
5		32.561			10	8.78	32.57		.59	25.28	271.3	.027	
10	8.78	32.564	.58		20	8.76	32.56		.57	25.28	271.5	.054	
30	8.74	32.560	.56		30	8.74	32.56		.57	25.28	271.3	.081	
50	8.38	32.562	.55		50	8.38	32.57		.56	25.34	266.2	.135	
100	7.85	33.047	1.13		75	8.07	32.75		.79	25.53	248.3	.199	
150	7.48	33.666	1.70		100	7.85	33.05		1.14	25.79	223.4	.258	
200	6.86	33.899	1.86		150	7.48	33.67		1.71	26.33	173.0	.357	
300	5.54	33.959	2.32		200	6.86	33.90		1.86	26.60	148.0	.438	
405	4.87	34.041	2.57		250	6.17	33.93		2.09	26.71	137.8	.509	
506	4.34	34.108	2.68		300	5.55	33.96		2.33	26.82	128.2	.576	
606	4.20	34.196	2.65		400	4.89	34.04		2.56	26.95	116.3	.698	
806	3.75	34.334	2.95		500	4.36	34.10		2.68	27.06	105.7	.809	
1006	3.26	34.420	2.95		600	4.20	34.19		2.65	27.15	98.8	.911	
					700	4.01	34.27		2.78	27.23	91.4	1.006	
					800	3.77	34.33		2.94	27.30	84.7	1.094	
					1000	3.28	34.42		2.95	27.42	74.2	1.253	
AH 145	46 14.4 N	127	35.0 W	DATE 4 APR 62 1930 GCT	WIRE 4	DRY 48.0	WET 48.0						
WIND DIRECTION 0 VEL 2 KTS	BAR 24 SWELL DIRECTION 26 H	6 T	12 CLOUD 6 AMT 3 WEATHER 01										
0	8.92	32.580	.88		0	8.92	32.58		.89	25.27	272.0	0	
5		32.570			10	8.66	32.57		.90	25.30	269.1	.027	
10	8.66	32.570	.89		20	8.37	32.58		.90	25.35	264.8	.054	
30	8.15	32.588	.93		30	8.15	32.59		.93	25.39	260.8	.080	
50	8.15	32.587	1.03		50	8.15	32.59		1.04	25.39	261.1	.132	
100	7.56	33.041	1.50		75	7.88	32.78		1.25	25.58	243.6	.195	
150	7.42	33.727	1.88		100	7.57	33.09		1.51	25.86	216.9	.253	
200	6.82	33.897	2.06		150	7.43	33.73		1.89	26.39	167.6	.349	
300	5.50	33.950	2.42		200	6.82	33.90		2.07	26.60	147.6	.428	
405	4.86	34.033	2.75		250	6.13	33.95		2.24	26.73	136.0	.499	
506	4.58	34.121	2.89		300	5.51	33.96		2.42	26.82	128.4	.565	
605	4.21	34.184	2.93		400	4.88	34.03		2.74	26.95	116.8	.687	
805	3.80	34.328	2.98		500	4.59	34.12		2.89	27.05	107.3	.799	
1005	3.29	34.427	2.96		600	4.23	34.18		2.93	27.14	99.8	.903	
					700	3.99	34.25		2.96	27.22	92.3	.999	
					800	3.81	34.32		2.98	27.30	85.6	1.088	
					1000	3.30	34.43		2.96	27.43	74.0	1.247	
AH 125	46 14.4 N	127	6.1 W	DATE 4 APR 62 2300 GCT	WIRE 4	DRY 53.0	WET 50.0						
WIND DIRECTION VEL C KTS	BAR 24 SWELL DIRECTION 27 H	8 T	11 CLOUD 1 AMT 4 WEATHER 03										
0	9.48	32.550	.85		0	9.48	32.55		.86	25.16	282.7	0	
5		32.553			10	8.80	32.56		1.01	25.27	271.9	.028	
10	8.80	32.560	1.01		20	8.73	32.56		.95	25.28	271.6	.055	
30	8.67	32.555	.85		30	8.67	32.56		.86	25.29	270.6	.082	
50	8.37	32.544	.95		50	8.38	32.55		.96	25.32	267.4	.136	
100	7.65	33.078	1.86		75	7.98	32.75		1.37	25.54	247.0	.200	
150	7.42	33.752	2.31		100	7.66	33.08		1.86	25.85	218.3	.258	
200	6.98	33.890	2.27		150	7.43	33.76		2.32	26.41	165.8	.354	
300	5.70	33.967	2.98		200	6.98	33.89		2.27	26.58	150.3	.433	
404	5.08	34.033	2.95		250	6.33	33.95		2.60	26.70	138.6	.505	
505	4.67	34.116	3.08		300	5.70	33.97		2.98	26.80	129.5	.572	
604	4.34	34.190	3.29		400	5.10	34.03		2.96	26.92	119.2	.697	
804	3.83	34.317	3.20		500	4.69	34.11		3.07	27.03	108.8	.811	
1004	3.38	34.405	3.35		600	4.35	34.19		3.28	27.13	100.8	.915	
					700	4.08	34.26		3.27	27.21	93.2	1.012	
					800	3.84	34.31		3.20	27.28	86.7	1.102	
					1000	3.39	34.40		3.34	27.40	76.6	1.265	

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D

AH 105 46 14.5 N 126 37.0 W DATE 5 APR 62 0304 GCT WIRE - DRY 47.0 WET 46.0
 WIND DIRECTION 29 VEL 2 KTS BAR 25 SWELL DIRECTION 26 H 8 T 10 CLOUD 8 AMT 6 WEATHER 01

0	9.20	32.551	.66		0	9.20	32.55		.67	25.20	278.4	0
5		32.549			10	9.20	32.55		.69	25.26	273.1	.028
10	8.80	32.544	.88		20	8.55	32.54		.87	25.29	270.0	.055
30	8.42	32.543	.79		30	8.42	32.55		.79	25.31	267.9	.082
50	8.37	32.543	.84		50	8.38	32.55		.85	25.32	267.5	.135
100	7.92	33.330	1.82		75	8.18	32.89		1.29	25.62	239.9	.199
150	7.30	33.789	2.16		100	7.93	33.33		1.83	24.00	203.3	.254
200	6.72	33.867	2.14		150	7.31	33.79		2.16	26.45	161.4	.345
300	5.68	33.960	2.70		200	6.72	33.90		2.15	26.62	146.3	.422
405	5.14	34.039	2.96		250	6.16	33.94		2.39	26.72	136.8	.493
506	4.74	34.128	3.08		300	5.69	33.96		2.71	26.80	129.8	.559
605	4.36	34.189	3.09		400	5.16	34.03		2.95	26.92	119.6	.684
806	3.85	34.314	3.34		500	4.76	34.12		3.08	27.03	108.8	.798
1006	3.44	34.411	3.57		600	4.38	34.19		3.09	27.13	101.2	.903
					700	4.09	34.25		3.19	27.21	93.7	1.001
					800	3.86	34.31		3.33	27.28	87.3	1.091
					1000	3.45	34.41		3.56	27.40	76.9	1.255

AH 85 46 14.4 N 126 9.0 W DATE 5 APR 62 0645 GCT WIRE 0 DRY 49.0 WET 46.0
 WIND DIRECTION VEL C KTS BAR 26 SWELL DIRECTION 27 H 4 T - CLOUD 6 AMT 5 WEATHER 01

0	9.50	32.631	.54		0	9.50	32.64		.54	25.22	277.0	0
5		32.632			10	9.26	32.63		.67	25.25	273.5	.028
10	9.26	32.630	.66		20	9.10	32.65		.64	25.29	270.1	.055
30	9.00	32.677	.63		30	9.00	32.68		.63	25.33	266.4	.082
51	8.88	32.692	.56		50	8.88	32.69		.56	25.36	264.4	.135
100	8.38	33.567	1.70		75	8.67	33.08		1.06	25.70	232.3	.197
150	7.66	33.854	1.89		100	8.38	33.57		1.71	26.12	192.3	.250
200	7.02	33.922	1.95		150	7.67	33.86		1.90	26.45	161.5	.338
300	5.93	33.977	2.29		200	7.03	33.93		1.96	26.60	148.4	.416
405	5.23	34.050	2.46		250	6.43	33.96		2.11	26.70	139.2	.488
506	4.54	34.099	2.70		300	5.94	33.98		2.29	26.78	131.6	.555
605	4.54	34.226	2.81		400	5.26	34.05		2.45	26.92	119.9	.681
805	4.01	34.322	2.77		500	4.57	34.10		2.69	27.03	108.7	.795
1002	3.46	34.398	2.81		600	4.54	34.22		2.81	27.14	100.6	.900
					700	4.33	34.29		2.81	27.21	93.8	.997
					800	4.03	34.32		2.77	27.27	88.4	1.088
					1000	3.47	34.40		2.81	27.39	77.9	1.254

AH 65 46 14.4 N 125 39.6 W DATE 5 APR 62 1044 GCT WIRE 10 DRY 49.0 WET 46.0
 WIND DIRECTION 5 VEL 2 KTS BAR 27 SWELL DIRECTION 27 H 4 T 10 CLCUD 0 AMT 2 WEATHER 01

0	9.25	32.638	.77		0	9.25	32.64		.78	25.26	272.6	0
5		32.638			10	9.20	32.65		.76	25.27	271.7	.027
10	9.20	32.642	.76		20	9.02	32.65		.75	25.31	268.7	.054
30	8.94	32.667	.74		30	8.84	32.67		.75	25.35	264.8	.081
49	8.79	32.693	.98		50	8.78	32.71		1.00	25.39	261.5	.134
98	8.24	33.590	1.78		75	8.55	33.13		1.42	25.75	227.2	.195
147	7.50	33.843	2.04		100	8.21	33.60		1.80	26.17	187.8	.246
196	7.03	33.920	2.12		150	7.47	33.85		2.05	26.48	159.4	.333
294	6.14	34.000	2.64		200	6.99	33.92		2.14	26.60	148.1	.410
397	5.52	34.063	2.64		250	6.52	33.97		2.41	26.70	139.1	.482
496	4.74	34.103	3.05		300	6.10	34.00		2.64	26.78	132.1	.550
595	4.48	34.186	400		500	5.49	34.06		2.65	26.90	121.5	.676
795	3.88	34.341	2.89		500	4.72	34.11		3.05	27.02	109.7	.792
994	3.52	34.408	3.04		600	4.46	34.19		2.99	27.12	101.8	.898
					700	4.16	34.27		3.03	27.22	92.7	.995
					800	3.87	34.34		2.89	27.30	84.9	1.084
					1000	3.51	34.41		3.04	27.39	77.5	1.246

AH 45 46 14.4 N 125 10.6 W DATE 5 APR 62 1445 GCT WIRE 3 DRY 47.0 WET 44.0
 WIND DIRECTION 15 VEL 3 KTS BAR 29 SWELL DIRECTION 27 H 6 T 9 CLOUD 0 AMT 10 WEATHER 03

0	9.29	32.417	.59		0	9.29	32.42		.60	25.08	289.7	0
5		32.472			10	9.21	32.50		.65	25.16	282.4	.029
10	9.21	32.500	.64		20	9.06	32.57		.73	25.24	275.3	.056
30	8.92	32.642	.82		30	8.92	32.65		.83	25.32	267.9	.084
50	8.86	32.709	.87		50	8.86	32.71		.88	25.38	262.3	.137
100	8.44	33.466	1.72		75	8.70	33.06		1.27	25.67	234.6	.199
150	7.65	33.845	2.01		100	8.44	33.47		1.73	26.03	200.7	.253
200	6.88	33.945	2.08		150	7.66	33.85		2.02	26.45	162.0	.344
300	5.96	33.900	2.19		200	6.89	33.97		2.08	26.65	143.4	.420
404	5.20	34.052	2.74		250	6.36	33.98		2.11	26.73	136.6	.490
505	4.94	34.127	2.88		300	5.96	34.00		2.20	26.79	131.0	.557
605	4.58	34.269	2.70		400	5.22	34.05		2.72	26.92	119.3	.682
805	3.94	34.329	3.01		500	4.95	34.12		2.87	27.01	111.0	.797
1003	3.42	34.422	3.04		600	4.60	34.20		2.71	27.12	102.3	.904
					700	4.26	34.27		2.81	27.21	94.1	1.002
					800	3.95	34.33		3.00	27.28	87.1	1.093
					1000	3.43	34.42		3.04	27.41	75.8	1.255

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	Sx10 ⁶	Δ D
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AH 35 46 14.4 N 124 56.2 W DATE 5 APR 62 1700 GCT WIRE 0 DRY 49.0 WET 47.0
 WIND DIRECTION 11 VEL 2 KTS BAR 29 SWELL DIRECTION 27 H 6 T 10 CLOUD 0 AMT 4 WEATHER 01

0	9.28	31.858	.34		0	9.28	31.86		.34	24.65	331.0	0
5		32.103			10	8.96	32.17		.57	24.94	303.5	.032
10	8.96	32.146	.56		20	8.84	32.34		.66	25.09	289.1	.061
30	8.82	32.524	.71		30	8.82	32.53		.72	25.24	275.1	.090
50	8.81	32.765	.90		50	8.81	32.77		.90	25.43	257.4	.143
100	8.59	33.679	1.08		75	8.72	33.24		1.40	25.81	221.2	.203
150	8.30	33.784	2.00		100	8.59	33.68		1.89	26.18	187.1	.254
201	8.10	33.882	2.19		150	8.30	33.79		2.01	26.30	175.9	.344
301	6.53	33.969	2.16		200	8.11	33.88		2.19	26.41	167.0	.430
404	5.49	34.018	2.48		250	7.39	33.94		2.19	26.55	153.6	.510
504	5.00	34.120	2.92		300	6.55	33.97		2.16	26.69	140.5	.584
606	4.61	34.199			400	5.53	34.01		2.45	26.86	125.7	.717
					500	5.01	34.12		2.90	27.00	112.4	.836
					600	4.63	34.20			27.11	103.4	.943

AH 25 46 14.4 N 124 41.6 W DATE 5 APR 62 1910 GCT WIRE 8 DRY 49.0 WET 47.0
 WIND DIRECTION 13 VEL 3 KTS BAR 29 SWELL DIRECTION 26 H 6 T 10 CLOUD 6 AMT 6 WEATHER 03

0	9.69	30.660	.29		0	9.69	30.67		.29	23.65	426.1	0
5		30.881			10	9.50	31.01		.39	23.95	397.9	.041
10	9.50	31.004	.39		20	8.88	32.38		.64	25.12	286.8	.075
15	8.90	31.993	.55		30	8.84	32.48		.74	25.20	279.0	.104
30	8.84	32.476	.73		50	8.80	32.57		.84	25.27	272.1	.159
50	8.80	32.565	.83		75	8.74	32.96		1.14	25.59	242.1	.223
100	8.58	33.408	1.47		100	8.58	33.41		1.48	25.97	207.0	.279
150	7.80	33.715	1.74		150	7.81	33.72		1.74	26.32	173.8	.374
201	6.97	33.940	1.96		200	6.99	33.94		1.96	26.61	147.2	.455

AH 15 46 14.4 N 124 27.2 W DATE 5 APR 62 2054 GCT WIRE 11 DRY 49.0 WET 48.0
 WIND DIRECTION 17 VEL 3 KTS BAR 30 SWELL DIRECTION 27 H 4 T 10 CLOUD 6 AMT 9 WEATHER 03

0	9.38	19.850	7.04	.90		0	9.38	19.85	7.05	.90	15.30	1230.1	0
5		28.978			10	9.14	31.73	6.43	.83	24.56	339.1	.078	
10	9.14	31.723	6.42	.82	20	8.74	32.43	5.02	.94	25.18	280.8	.109	
15	8.71	32.374	4.91	.97	30	8.79	32.56	5.23	.90	25.27	272.6	.137	
30	8.79	32.552	5.23	.89	50	8.58	32.58	5.30	1.11	25.31	268.4	.191	
50	8.58	32.571	5.29		75	8.21	33.13	4.04	1.45	25.81	221.9	.252	
100	7.78	33.776	2.54	1.85	100	7.79	33.78	2.54	1.86	26.37	168.2	.301	
150	6.88	33.955	2.01	1.83	150	6.89	33.96	2.02	1.83	26.64	143.4	.379	
201	6.55	33.980	2.21	2.30	200	6.55	33.98	2.20	2.29	26.70	138.3	.450	

AH 5 46 14.5 N 124 13.8 W DATE 5 APR 62 2305 GCT WIRE 10 DRY 50.0 WET 49.0
 WIND DIRECTION 19 VEL 3 KTS BAR 29 SWELL DIRECTION 27 H 4 T - CLOUD 0 AMT 9 WEATHER 03

0	9.48	18.190	6.61	1.00		0	9.48	18.19	6.61	1.01	13.99	1356.5	0
5		22.160			10	8.65	31.15	6.61	.63	24.19	374.8	.087	
10	8.65	31.147	6.61	.63	20	8.55	32.11	6.22	.88	24.95	302.2	.120	
15	8.59	31.974	5.40	.71	30	8.71	32.53	5.70	1.00	25.25	273.7	.149	
20	8.55	32.105	6.22	.87	50	8.58	32.58			25.31	268.4	.203	
29	8.70	32.489	5.76	.98	75	8.21	33.13			25.81	221.9	.265	
39	8.80	32.821	5.12	1.21	100	7.79	33.78			26.37	168.2	.313	

NH 5 44 39.1 N 124 10.7 W DATE 30 APR 62 1829 GCT WIRE - DRY 51.0 WET 48.0
 WIND DIRECTION 20 VEL 5 KTS BAR 20 SWELL DIRECTION 26 H 2 T 8 CLOUD 8 AMT 10 WEATHER 03

0	11.64	29.650	5.85	.35		0	11.64	29.65	5.85	.35	22.54	532.3	0
5	11.56	30.395			10	10.70	31.29	6.16	.28	23.97	395.6	.046	
10	10.70	31.288	6.15	.28	20	10.54	31.76	6.23	.34	24.36	358.8	.084	
15	10.87	31.505			30	10.22	31.88	6.21	.57	24.51	344.7	.119	
20	10.54	31.752	6.23	.34	50	9.60	32.17	5.36	.78	24.84	313.7	.185	
30	10.22	31.876	6.21	.56	75	8.21	33.13			25.81	221.9	.252	
50	9.60	32.167	5.36	.77	100	7.79	33.78			26.37	168.2	.301	

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	Sx10 ⁶	ΔD		
NH 15 44 39.1 N 124 24.6 W DATE 1 MAY 62 1850 GCT WIRE 10 DRY 49.0 WET 50.0 WIND DIRECTION 17 VEL 5 KTS BAR 21 SWELL DIRECTION 24 H 4 T 8 CLOUD 8 AMT 10 WEATHER 02														
0	9.93	31.978	6.47	.46	0	9.93	31.98	6.47	.46	24.64	332.0	0		
5		31.973			10	9.92	31.98	4.96	.42	24.64	332.2	.033		
10	9.92	31.976	4.96	.41	20	9.89	32.00	5.32	.43	24.66	330.3	.066		
15		31.981			30	9.77	32.08	5.43	.44	24.74	322.6	.099		
20	9.89	31.997	5.32	.43	50	8.70	32.77	4.50	.88	25.45	255.4	.157		
30	9.77	32.078	5.42	.44	75	8.21	33.13			25.81	221.9	.216		
49	8.74	32.740	4.55	.85	100	7.79	33.78			26.37	168.2	.265		
73	8.18	33.520	3.15	1.66	150	6.89	33.96			26.64	143.4	.343		
NH 25 44 39.1 N 124 38.8 W DATE 1 MAY 62 2143 GCT WIRE 4 DRY 50.0 WET 51.0 WIND DIRECTION 17 VEL 3 KTS BAR 20 SWELL DIRECTION 26 H 4 T 8 CLOUD 7 AMT 10 WEATHER 02														
0	10.00	31.762		.52	0	10.00	31.77		.52	24.46	349.2	0		
5		31.776			10	9.93	31.83		.51	24.52	343.7	.035		
10	9.93	31.823		.50	20	9.73	32.02		.50	24.70	326.3	.068		
15		31.922			30	9.51	32.21		.51	24.88	309.0	.100		
30		32.207		.50	50	9.00	32.48		.75	25.17	281.6	.159		
49	9.02	32.458		.73	75	8.57	33.06		1.26	25.69	232.8	.223		
103	8.12	33.675	1.80		100	8.17	33.61		1.74	26.18	186.3	.276		
152	7.15	33.936	2.05		150	7.19	33.94		2.05	26.58	149.3	.359		
202	6.59	33.993	2.17		200	6.60	33.99		2.17	26.70	138.1	.431		
NH 35 44 39.2 N 124 52.9 W DATE 2 MAY 62 0032 GCT WIRE - DRY 51.0 WET 51.0 WIND DIRECTION 35 VEL 3 KTS BAR 20 SWELL DIRECTION 27 H 4 T 8 CLOUD 0 AMT 10 WEATHER 10														
0	10.07	32.447	6.44	.52	0	10.07	32.45	6.44	.52	24.98	299.5	0		
5		32.445			10	9.97	32.46	5.46	.57	25.01	297.1	.030		
10	9.97	32.460	5.46	.56	20	9.84	32.47	5.88	.59	25.03	294.7	.059		
15		32.464			30	9.84	32.47	5.85	.60	25.03	294.8	.089		
20	9.84	32.467	5.87		50	9.80	32.50	4.92	.60	25.06	292.8	.148		
30	9.84	32.468	5.85	.60	75	8.85	33.02	4.69	1.27	25.62	239.4	.214		
50	9.80	32.491	4.92	.59	100	8.65	33.46	3.91	1.51	25.99	204.5	.270		
74	8.86	33.003	4.72	1.26	150	7.77	33.84	2.99	2.00	26.42	164.6	.362		
98	8.68	33.435	3.95	1.49	200	7.04	33.95	1.87	2.17	26.62	146.6	.440		
148	7.80	33.829	3.04	1.99	250	6.54	34.01	1.62	2.41	26.73	136.8	.510		
198	7.06	33.950	1.90	2.16	300	6.55	33.97			26.69	140.5	.580		
247	6.57	34.004	1.61	2.40	400	5.53	34.01			26.86	125.7	.713		
NH 45 44 39.1 N 125 6.8 W DATE 2 MAY 62 0255 GCT WIRE 0 DRY 50.0 WET 49.0 WIND DIRECTION 28 VEL 3 KTS BAR -- SWELL DIRECTION 28 H 5 T 8 CLOUD 0 AMT 10 WEATHER 02														
0	10.24	32.497	6.58	.63	0	10.24	32.50	6.58	.63	24.99	298.5	0		
5		32.490			10	10.10	32.50	5.57	.60	25.01	297.0	.030		
10	10.10	32.490	5.56	.59	20	10.01	32.50	6.31	.65	25.02	295.5	.059		
15		32.500			30	9.98	32.49	6.27	.60	25.03	295.5	.089		
20	10.01	32.493	6.30	.65	50	9.38	32.64	4.78	.85	25.24	275.2	.146		
30	9.98	32.488	6.26	.59	75	8.88	33.02	3.93	1.26	25.61	240.3	.210		
50	9.37	32.638	4.77	.84	100	8.51	33.42	3.60	1.65	25.98	205.6	.266		
105	8.45	33.500	3.60	1.73	150	7.68	33.85	3.12	2.07	26.44	162.5	.358		
155	7.60	33.869	3.08	2.09	200	7.13	33.93	2.48	2.11	26.59	149.5	.436		
205	7.09	33.939	2.42	2.11	250	6.63	33.98	2.07	2.24	26.69	140.3	.509		
305	6.12	34.007	1.78	2.46	300	6.16	34.00	1.80	2.44	26.77	132.8	.577		
406	5.42	34.073	1.17	2.90	400	5.46	34.07	1.20	2.88	26.91	120.7	.704		
506	4.81	34.130	.64	2.82	500	4.84	34.13	.67	2.84	27.03	109.5	.819		
NH 65 44 39.1 N 125 35.1 W DATE 2 MAY 62 0746 GCT WIRE 0 DRY 50.0 WET 49.0 WIND DIRECTION 27 VEL 3 KTS BAR 21 SWELL DIRECTION 27 H 3 T 7 CLOUD 23 AMT 07 WEATHER 01														
0	10.17	32.555		.60	0	10.17	32.56		.60	25.05	293.1	0		
5		32.552			10	10.01	32.56		.54	25.07	290.9	.029		
10	10.01	32.553		.54	20	9.92	32.55		.55	25.08	290.0	.058		
30	9.84	32.552		.56	30	9.84	32.56		.57	25.10	288.6	.087		
50	9.50	32.596		.67	50	9.50	32.60		.68	25.19	280.3	.144		
100	8.61	33.402		1.64	75	9.05	32.96		1.13	25.54	247.4	.210		
150	7.92	33.890		1.94	100	8.61	33.41		1.65	25.96	207.9	.267		
200	7.29	34.010		2.25	150	7.93	33.89		1.95	26.44	162.5	.359		
299	6.35	34.038		2.43	200	7.30	34.01		2.26	26.63	145.6	.436		
404	5.24	34.026		2.59	250	6.80	34.02		2.38	26.70	138.9	.508		
503	4.92	34.127		2.82	300	6.34	34.04		2.43	26.78	132.6	.575		
603	4.57	34.195		2.95	400	5.28	34.03		2.58	26.90	121.7	.702		
803	4.02	34.346		3.09	500	4.92	34.12		2.81	27.02	110.7	.819		
1003	3.54	34.430		3.01	600	4.58	34.19		2.95	27.11	103.0	.925		
					700	4.29	34.27		3.04	27.20	94.4	1.024		
					800	4.03	34.34		3.09	27.29	86.7	1.115		
					1000	3.55	34.43		3.01	27.40	76.5	1.278		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
NH 85 44 39.1 N 126 31.0 W DATE 2 MAY 62 1252 GCT WIRE 10 DRY 49.0 WET 48.0												
WIND DIRECTION 30 VEL 2 KTS BAR 22 SWELL DIRECTION 27 H 2 T 7 CLOUD 6 AMT 3 WEATHER 02												
0 10.22 32.563 6.53 .60	0 10.22 32.57 6.54 .60	25.04	293.3	0								
5 32.562	10 10.21 32.57 6.41 .59	25.04	293.4	.029								
10 10.21 32.562 6.40 .58	20 10.15 32.56 6.43 .58	25.05	293.1	.059								
29 10.07 32.557 6.47 .60	30 10.06 32.56 6.46 .60	25.06	292.0	.088								
48 9.90 32.574 6.25 .67	50 9.84 32.60 6.20 .70	25.13	286.0	.146								
96 8.44 33.273 4.84 1.43	75 9.11 32.92 5.54 1.06	25.50	251.1	.213								
144 7.89 33.802 3.29 1.89	100 8.38 33.33 4.69 1.48	25.93	210.4	.270								
193 7.10 33.921 3.00 2.03	150 7.79 33.83 3.22 1.92	26.41	165.5	.364								
295 6.23 34.008 1.98 2.43	200 7.02 33.93 2.94 2.06	26.60	148.1	.443								
394 5.60 34.121 1.08 2.82	250 6.54 33.98 2.46 2.24	26.71	138.7	.514								
493 5.05 34.139 .73 2.93	300 6.19 34.01 1.93 2.45	26.78	132.5	.582								
591 4.60 34.206 .39 2.99	400 5.56 34.12 1.05 2.83	26.94	118.0	.707								
789 4.05 34.316 .36 3.16	500 5.01 34.14 .70 2.93	27.02	110.3	.822								
987 3.52 34.404 .33 3.06	600 4.57 34.21 .38 3.00	27.13	101.4	.927								
	700 4.27 34.28 .37 3.10	27.21	93.4	1.025								
	800 4.02 34.34 .36 3.15	27.29	86.8	1.115								
	1000 3.49 34.41 .33 3.05	27.39	77.3	1.279								

NH 105 44 39.1 N 126 31.0 W DATE 2 MAY 62 1802 GCT WIRE 3 DRY 50.0 WET 48.0
WIND DIRECTION 11 VEL 4 KTS BAR 22 SWELL DIRECTION 26 H 3 T 8 CLOUD 0 AMT 10 WEATHER 03

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
NH 105 44 39.1 N 126 31.0 W DATE 2 MAY 62 1802 GCT WIRE 3 DRY 50.0 WET 48.0												
WIND DIRECTION 11 VEL 4 KTS BAR 22 SWELL DIRECTION 26 H 3 T 8 CLOUD 0 AMT 10 WEATHER 03												
0 10.04 32.561 6.29 .73	0 10.04 32.57 6.30 .74	25.07	290.6	0								
5 32.558	10 9.92 32.56 5.98 .70	25.08	289.6	.029								
10 9.92 32.551 5.98 .69	20 9.88 32.55 5.68 .70	25.09	289.6	.058								
30 9.84 32.544 5.53 .73	30 9.84 32.55 5.54 .74	25.09	289.2	.087								
49 9.64 32.574 6.01 .77	50 9.61 32.59 5.99 .79	25.16	283.0	.144								
98 7.93 33.328 4.26 1.70	75 8.77 32.93 5.30 1.23	25.56	245.1	.210								
148 7.41 33.802 3.36 2.05	100 7.90 33.35 4.21 1.72	26.02	201.6	.266								
198 6.85 33.930 2.67 2.22	150 7.39 33.81 3.33 2.06	26.46	161.2	.357								
297 5.86 34.000 1.87 2.55	200 6.83 33.93 2.65 2.23	26.63	145.4	.433								
403 5.24 34.067 1.15 2.88	250 6.30 33.98 2.20 2.40	26.74	135.5	.503								
503 4.76 34.151 .64 3.02	300 5.84 34.00 1.85 2.56	26.81	129.0	.569								
603 4.47 34.247 .37 3.14	400 5.25 34.07 1.17 2.87	26.93	118.5	.693								
804 3.90 34.342 .36 3.14	500 4.77 34.15 .65 3.02	27.05	107.1	.806								
1004 3.48 34.423 .34 3.20	600 4.48 34.24 .38 3.14	27.16	98.0	.908								
	700 4.18 34.30 .37 3.14	27.24	90.9	1.003								
	800 3.91 34.34 .36 3.14	27.30	85.6	1.091								
	1000 3.49 34.42 .34 3.20	27.40	76.4	1.253								

NH 125 44 39.1 N 126 59.0 W DATE 2 MAY 62 2047 GCT WIRE 9 DRY 50.0 WET 49.0
WIND DIRECTION 16 VEL 5 KTS BAR 19 SWELL DIRECTION 27 H 3 T 8 CLOUD 4 AMT 9 WEATHER 02

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
NH 125 44 39.1 N 126 59.0 W DATE 2 MAY 62 2047 GCT WIRE 9 DRY 50.0 WET 49.0												
WIND DIRECTION 16 VEL 5 KTS BAR 19 SWELL DIRECTION 27 H 3 T 8 CLOUD 4 AMT 9 WEATHER 02												
0 9.93 32.571 .75	0 9.93 32.58 .76	25.10	288.1	0								
5 32.562	10 9.84 32.57 .76	25.11	287.5	.029								
10 9.84 32.562 .76	20 9.79 32.56 .76	25.11	287.5	.058								
30 9.70 32.559 .76	30 9.70 32.56 .76	25.13	285.9	.086								
49 9.15 32.581 .91	50 9.15 32.59 .92	25.24	275.7	.142								
98 9.06 33.194 1.59	75 9.07 32.86 1.25	25.46	254.8	.209								
147 7.55 33.730 2.14	100 9.00 33.22 1.62	25.75	227.6	.269								
196 7.00 33.894 2.21	150 7.50 33.75 2.15	26.39	167.6	.368								
295 5.93 33.961 2.55	200 6.95 33.90 2.22	26.59	149.5	.447								
400 5.24 34.047 2.88	250 6.39 33.95 2.38	26.70	138.9	.519								
499 4.84 34.139 3.05	300 5.89 33.96 2.57	26.78	132.3	.587								
598 4.54 34.206 400	5.24 34.05 2.89	26.92	119.4	.713								
797 3.93 34.330 500	4.84 34.14 3.05	27.04	108.5	.826								
996 3.47 34.413 600	4.53 34.21 27.13	101.4	.931									
	700 4.22 34.27 700	27.21	93.5	1.029								
	3.92 34.33 800	27.29	86.4	1.119								
	3.46 34.41 1000	27.40	76.6	1.281								

NH 145 44 39.0 N 127 26.9 W DATE 3 MAY 62 0044 GCT WIRE 15 DRY 50.0 WET 50.0
WIND DIRECTION 18 VEL 5 KTS BAR 16 SWELL DIRECTION 27 H 3 T 8 CLOUD 9 AMT 10 WEATHER 02

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
NH 145 44 39.0 N 127 26.9 W DATE 3 MAY 62 0044 GCT WIRE 15 DRY 50.0 WET 50.0												
WIND DIRECTION 18 VEL 5 KTS BAR 16 SWELL DIRECTION 27 H 3 T 8 CLOUD 9 AMT 10 WEATHER 02												
0 9.98 32.563 6.47 .54	0 9.98 32.57 6.47 .54	25.08	289.5	0								
5 32.572	10 9.98 32.57 6.44 .46	25.08	289.6	.029								
10 9.98 32.564 6.44 .46	20 9.96 32.56 6.34 .47	25.09	289.6	.058								
29 9.90 32.565 6.24 .51	30 9.89 32.57 6.24 .51	25.10	288.7	.087								
48 9.63 32.570 6.22 .55	50 9.57 32.57 6.21 .56	25.16	283.5	.144								
95 8.20 32.817 5.97 .90	75 8.83 32.66 6.18 .72	25.34	266.0	.213								
143 7.43 33.551 4.30 1.35	100 8.09 32.89 5.81 .95	25.63	238.6	.276								
189 7.07 33.858 3.68 1.56	150 7.37 33.62 4.18 1.39	26.30	175.5	.379								
285 5.82 33.959 2.10 1.97	200 6.93 33.89 3.49 1.61	26.58	150.0	.461								
388 5.20 34.040 1.32 2.27	250 6.28 33.92 2.65 1.83	26.69	139.7	.533								
486 4.79 34.112 .73 2.37	300 5.70 33.97 1.95 2.02	26.80	129.5	.600								
585 4.56 34.184 .52 2.30	400 5.14 34.05 1.23 2.29	26.93	118.4	.724								
784 3.90 34.309 .29 2.41	500 4.75 34.12 .69 2.36	27.03	108.8	.838								
983 3.45 34.304 .32 2.27	600 4.51 34.19 .49 2.31	27.12	102.1	.943								
	700 4.18 34.26 .36 2.36	27.21	94.0	1.041								
	800 3.86 34.32 .29 2.41	27.29	86.7	1.131								
	1000 3.41 34.40 .32 2.26	27.40	77.0	1.295								

OBSERVED INTERPOLATED DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	S × 10 ⁶	Δ D
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NH 165 44 39.1 N 127 55.0 W DATE 3 MAY 62 0454 GCT WIRE 0 DRY 51.0 WET 51.0
WIND DIRECTION 24 VEL 4 KTS BAR 13 SWELL DIRECTION 27 H 6 T - CLOUD - AMT 10 WEATHER 61

0	9.99	32.555	6.74	.80	0	9.99	32.56	6.74	.81	25.08	290.2	0
5		32.550			10	10.00	32.56	6.23	.68	25.07	290.9	.029
10	10.00	32.551	6.23	.67	20	9.99	32.55	6.02	.70	25.07	291.2	.058
30	9.99	32.554	6.01	.78	30	9.99	32.56	6.02	.79	25.08	290.8	.087
50	9.88	32.547	6.30	.84	50	9.88	32.57	6.31	.85	25.10	288.4	.145
105	8.32	33.032	4.92	1.44	75	9.25	32.72	5.86	1.09	25.32	268.0	.215
155	7.44	33.737	3.75	1.71	100	8.49	32.97	5.11	1.38	25.64	238.5	.278
205	6.82	33.888	3.49	1.55	150	7.51	33.67	3.84	1.70	26.33	173.2	.381
305	5.69	33.942	2.37	2.13	200	6.88	33.89	3.50	1.57	26.59	149.4	.461
411	5.19	34.040	1.18	2.49	250	6.26	33.93	3.04	1.75	26.70	138.9	.534
511	4.74	34.108	.83	2.73	300	5.74	33.94	2.44	2.09	26.77	132.4	.601
610	4.38	34.188	.43	2.87	400	5.22	34.03	1.28	2.46	26.91	120.8	.728
809	3.94	34.325	.33	3.08	500	4.79	34.10	.85	2.71	27.01	110.8	.844
1008	3.36	34.407	.39	3.05	600	4.41	34.18	.47	2.86	27.12	102.0	.950
					700	4.17	34.26	.38	2.99	27.20	94.2	1.048
					800	3.96	34.32	.33	3.07	27.28	87.7	1.139
					1000	3.39	34.40	.38	3.06	27.40	76.5	1.303

NH 5 44 39.1 N 124 10.6 W DATE 4 JUN 62 2030 GCT WIRE 5 DRY 53.0 WET 51.0
WIND DIRECTION 17 VEL 5 KTS BAR 17 SWELL DIRECTION 18 H 3 T 7 CLOUD 7 AMT 8 WEATHER 62

0	13.08	27.970	6.35	.34	0	13.08	27.98	6.35	.34	20.98	681.6	0
10	11.01	32.260	7.24	.46	10	11.01	32.26	7.24	.46	24.67	328.9	.051
20	8.17	33.410	3.21	1.74	20	8.17	33.42	3.22	1.74	26.03	199.8	.077
30	7.95	33.690		1.96	30	7.95	33.70	3.17	1.96	26.28	176.0	.096
40	7.88	33.710	3.14	2.18	50	7.82	33.75	2.38	2.15	26.34	170.7	.130
50	7.82	33.740	2.37	2.15	75	9.25	32.72			25.32	268.0	.185

NH 15 44 39.1 N 124 24.8 W DATE 4 JUN 62 2236 GCT WIRE 5 DRY 53.0 WET 51.0
WIND DIRECTION 21 VEL 5 KTS BAR 17 SWELL DIRECTION 26 H 3 T 7 CLOUD 6 AMT 8 WEATHER 02

0	12.82	30.230	5.20	.38	0	12.82	30.23	5.20	.38	22.77	510.1	0
10	9.19	32.190	5.68	.93	10	9.19	32.19	5.69	.93	24.92	305.1	.041
20	8.91	32.350	5.42	.90	20	8.91	32.35	5.43	.90	25.09	289.2	.070
30	8.80	32.490	4.87	.85	30	8.80	32.50	4.88	.86	25.22	277.4	.099
50	8.30	32.960	4.41	1.38	50	8.30	32.96	4.41	1.39	25.56	235.5	.150
75	7.80	33.540	2.98	1.80	75	7.81	33.54	2.98	1.80	26.19	185.7	.203

NH 25 44 39.1 N 124 38.8 W DATE 5 JUN 62 0019 GCT WIRE 7 DRY 53.0 WET 52.0
WIND DIRECTION 26 VEL 3 KTS BAR 18 SWELL DIRECTION 26 H 2 T 7 CLOUD 6 AMT 9 WEATHER 02

0	13.47	29.320	7.11	.14	0	13.47	29.32	7.11	.15	21.95	589.1	0
10	12.91	29.850	7.24	.36	10	12.91	29.85	7.24	.36	22.46	539.9	.056
20	9.95	32.400	6.88	.42	20	9.95	32.40	6.89	.42	24.96	301.4	.099
30	9.62	32.520	6.37	.52	30	9.63	32.52	6.38	.52	25.11	287.5	.128
50	8.83	32.560	5.62	.88	50	8.83	32.56	5.63	.89	25.27	272.9	.184
99	7.92	33.560	3.88	1.93	75	8.27	33.03	4.66	1.43	25.72	230.5	.247
148	7.10	33.920		2.57	100	7.90	33.57	3.85	1.95	26.20	185.2	.299
198	7.56	33.540	3.44		150	7.12	33.92	3.65	2.60	26.58	149.5	.382
					200	7.58	33.52	3.47		26.20	185.9	.466

NH 35 44 39.2 N 124 53.0 W DATE 5 JUN 62 0218 GCT WIRE 3 DRY 54.0 WET 51.0
WIND DIRECTION 30 VEL 5 KTS BAR 18 SWELL DIRECTION 27 H 3 T 7 CLOUD - AMT 8 WEATHER 02

0	12.86	30.920	6.39	.40	0	12.86	30.92	6.40	.40	23.30	460.0	0
10	12.34	30.080	6.57	.42	10	12.34	30.08	6.57	.42	22.75	512.8	.049
20	9.72	32.370	6.09	.49	20	9.72	32.38	6.09	.49	24.98	300.0	.089
30	9.34	32.420	6.35	.77	30	9.34	32.42	6.35	.78	25.08	290.6	.119
50	8.91	32.500	6.21	.90	50	8.91	32.50	6.21	.90	25.21	278.5	.176
75	7.99	33.680	3.18	2.08	75	8.47	33.01	4.93	1.43	25.67	235.0	.240
154	7.15	33.920	2.47	2.23	100	8.07	33.56	3.49	1.97	26.16	188.4	.293
204	6.77	33.970	2.19	2.38	150	7.21	33.92	2.48	2.22	26.56	150.8	.378
					200	6.78	33.97	2.20	2.37	26.66	142.3	.451

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S‰	O ₂ ml/l	PO ₄ ‰	Z	T	S	O ₂	PO ₄ ‰	σ _t	δ × 10 ⁶	Δ D		
NH 45 44 39.2 N 125 7.0 W DATE 5 JUN 62 0405 GCT WIRE 3 DRY 54.8 WET 51.0 WIND DIRECTION 28 VEL 4 KTS BAR 19 SWELL DIRECTION 27 H 3 T 7 CLOUD - AMT 9 WEATHER 02														
0	13.33	29.920	6.09	.26	0	13.33	29.92	6.09	.26	22.43	542.3	0		
10	12.01	31.880	6.57	.27	10	12.01	31.88	6.57	.27	24.20	374.1	.046		
20	10.95	32.580	6.50	.44	20	10.95	32.58	6.51	.44	24.93	304.4	.080		
29	10.44	32.610	5.93	.50	30	10.40	32.61	5.94	.51	25.05	293.5	.110		
51	9.66	32.610	6.18	.68	50	9.69	32.61	6.15	.67	25.17	282.5	.167		
102	8.24	33.630	3.79	1.62	75	8.91	33.05	5.23	1.12	25.63	238.5	.232		
151	7.53	33.870	2.79	1.90	100	8.28	33.58	3.91	1.58	26.15	190.0	.286		
203	7.03	33.940	2.45	2.03	150	7.54	33.87	2.80	1.90	26.48	159.0	.373		
304	6.17	34.070	1.72	2.36	200	7.05	33.94	2.46	2.02	26.60	148.0	.450		
405	5.34	34.060	1.27	2.48	250	6.62	34.01	2.10	2.19	26.72	137.5	.521		
505	4.86	34.140	.79	2.66	300	6.20	34.07	1.75	2.35	26.82	128.7	.588		
606	4.49	34.230	.39	2.82	400	5.38	34.04	1.29	2.48	26.90	121.7	.713		
					500	4.88	34.13	.81	2.65	27.03	109.4	.828		
					600	4.51	34.22	.41	2.81	27.14	99.8	.933		
NH 65 44 39.1 N 125 35.5 W DATE 5 JUN 62 0800 GCT WIRE 11 DRY 54.0 WET 48.0 WIND DIRECTION 30 VEL 4 KTS BAR 21 SWELL DIRECTION 26 H 2 T 7 CLOUD 6 AMT 8 WEATHER 02														
0	13.64	29.170	6.47	.12	0	13.64	29.17	6.47	.13	21.80	603.4	0		
10	13.10	31.220	6.27	.26	10	13.10	31.23	6.28	.26	23.48	442.5	.052		
20	11.31	32.600	6.10	.48	20	11.31	32.60	6.10	.49	24.88	309.0	.090		
30	11.00	32.610	6.33	.51	30	11.00	32.61	6.33	.51	24.95	303.2	.120		
52	9.55		6.00		50	9.69	32.83	6.06	.84	25.33	266.6	.177		
102	8.34	33.560	3.78	1.86	75	8.77	33.15	5.04	1.31	25.73	229.0	.239		
151	7.89	33.870	2.59	2.10	100	8.35	33.53	3.88	1.82	26.09	195.2	.292		
203	7.07	33.940	2.79	2.15	150	7.90	33.87	2.60	2.10	26.43	164.2	.382		
301	6.13	34.010	1.60	2.50	200	7.12	33.94	2.77	2.15	26.59	148.7	.460		
398	5.33	34.020	1.41		250	6.56	33.98	2.28	2.30	26.70	138.9	.532		
496	4.85	34.130	.88	2.94	300	6.14	34.01	1.61	2.50	26.78	132.1	.600		
593	4.62	34.190	.47	3.00	400	5.32	34.02	1.40	2.77	26.89	122.5	.727		
789	4.05	34.310	.32	3.36	500	4.84	34.13	.86	2.94	27.03	109.0	.843		
985	3.58	34.400	.35	3.01	600	4.60	34.19	.46	3.02	27.11	103.1	.949		
					700	4.31	34.26	.32	3.22	27.19	95.7	1.048		
					800	4.02	34.32	.32	3.36	27.27	88.7	1.140		
					1000	3.54	34.41	.35	2.98	27.39	78.1	1.307		
NH 85 44 39.1 N 126 3.1 W DATE 5 JUN 62 1245 GCT WIRE 6 DRY 52.0 WET 49.0 WIND DIRECTION 31 VEL 3 KTS BAR 22 SWELL DIRECTION 29 H 3 T 7 CLOUD 6 AMT 10 WEATHER 03														
0	13.26	30.730	5.76	.18	0	13.26	30.73	5.77	.19	23.07	481.4	0		
10	12.89	31.620	6.12	.22	10	12.89	31.63	6.13	.23	23.83	409.2	.045		
20	11.78	32.440	6.11	.23	20	11.78	32.44	6.11	.24	24.67	329.0	.081		
30	10.68	32.530	6.12	.42	30	10.68	32.53	6.13	.42	24.94	303.8	.113		
53	9.43	32.620	6.07	1.05	50	9.53	32.61	6.10	.97	25.19	280.2	.171		
104	8.54	33.500	3.95	1.82	75	8.88	32.97	5.25	1.45	25.58	243.6	.237		
154	7.85	33.870	3.10	2.32	100	8.56	33.42	4.14	1.78	25.98	205.9	.293		
206	7.26	33.940	2.93	2.22	150	7.90	33.85	3.13	2.30	26.42	165.1	.386		
307	6.01	33.970	1.95	2.62	200	7.33	33.93	2.94	2.24	26.56	152.2	.465		
406	5.30	34.050	1.09	2.90	250	6.69	33.96	2.55	2.35	26.67	142.4	.539		
507	4.78	34.110	.74	3.06	300	6.09	33.97	2.03	2.58	26.75	134.5	.608		
608	4.42	34.190	.45	3.22	400	5.33	34.04	1.13	2.89	26.91	121.0	.736		
807	3.87	34.310	.36	3.26	500	4.81	34.11	.75	3.05	27.02	110.7	.851		
1005	3.48	34.410	.35	3.10	600	4.44	34.18	.47	3.21	27.12	102.1	.958		
					700	4.14	34.25	.36	3.24	27.20	94.3	1.056		
					800	3.89	34.31	.36	3.26	27.27	87.8	1.147		
					1000	3.49	34.41	.35	3.11	27.39	77.4	1.312		
NH 105 44 39.3 N 126 30.7 W DATE 5 JUN 62 1615 GCT WIRE 0 DRY 52.5 WET 50.0 WIND DIRECTION 28 VEL 3 KTS BAR 23 SWELL DIRECTION 28 H 3 T 8 CLOUD 6 AMT 10 WEATHER 02														
0	12.51	32.350	6.11	.33	0	12.51	32.35	6.11	.33	24.47	348.3	0		
10	12.05	32.600	6.18	.52	10	12.05	32.60	6.19	.52	24.75	321.8	.033		
20	11.92	32.620	5.04	.42	20	11.92	32.63	5.08	.42	24.79	318.2	.065		
30	10.56	32.570	6.21	.44	30	10.56	32.57	6.21	.44	24.99	298.8	.096		
51	9.62	32.570	5.86	.62	50	9.63	32.57	5.92	.61	25.14	284.6	.155		
104	8.18	33.250	4.22	1.42	75	8.83	32.82	5.16	.97	25.47	254.0	.222		
153	7.69	33.810	3.11	1.86	100	8.25	33.18	4.35	1.36	25.84	219.2	.281		
206	6.82	33.920	2.61	2.16	150	7.71	33.78	3.16	1.84	26.39	167.8	.378		
307	5.77	33.990	1.59	2.48	200	6.92	33.91	2.65	2.13	26.60	148.5	.457		
408	5.21	34.070	.85	2.54	250	6.28	33.96	2.15	2.34	26.72	136.9	.528		
510	4.77	34.130	.65	2.82	300	5.82	33.99	1.66	2.47	26.80	129.8	.595		
611	4.48	34.220	.37	2.94	400	5.24	34.06	.89	2.54	26.93	118.5	.719		
818	3.95	34.330	.28	3.04	500	4.81	34.12	.66	2.79	27.03	109.3	.833		
1013	3.46	34.400	.35	3.06	600	4.51	34.21	.40	2.93	27.13	100.9	.938		
					700	4.25	34.28	.28	3.00	27.21	93.6	1.035		
					800	3.99	34.32	.29	3.04	27.28	87.8	1.126		
					1000	3.49	34.40	.34	3.06	27.38	78.3	1.292		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S‰	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
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NH 125 44 39.1 N 126 58.8 W DATE 5 JUN 62 2012 GCT WIRE - DRY 53.0 WET 49.0
WIND DIRECTION 32 VEL 3 KTS BAR 24 SWELL DIRECTION 28 H 2 T 7 CLOUD 8 AMT 7 WEATHER 01

0	12.04	32.600	.82		0	12.04	32.60		.83	24.75	321.4	0
10	11.90	32.600	.62		10	11.90	32.60		.63	24.78	319.1	.032
20	11.73	32.600	.55		20	11.73	32.60		.56	24.81	316.3	.064
30	11.03	32.610	.54		30	11.03	32.61		.54	24.94	303.7	.095
53	9.25	32.610	.72		50	9.47	32.61		.69	25.20	279.1	.153
103	7.92	33.370	0		75	8.41	32.90		.95	25.59	242.3	.218
154	7.22	33.840	1.72		100	7.94	33.31		1.20	25.99	205.1	.274
206	6.71	33.940	1.98		150	7.26	33.82		1.68	26.48	159.2	.365
305	5.47	33.960	0		200	6.77	33.94		1.95	26.64	144.0	.441
406	4.83	34.010	3.01		250	6.14	33.95		2.26	26.73	136.0	.511
506	4.41	34.110	3.01		300	5.53	33.96		2.55	26.82	128.4	.577
608	4.27	34.220	3.26		400	4.85	34.01		2.99	26.93	118.2	.700
809	3.81	34.350	3.38		500	4.43	34.10		3.01	27.06	106.4	.813
1007	3.36	34.420	3.49		600	4.28	34.21		3.24	27.16	98.1	.915
					700	4.07	34.29		3.35	27.24	90.5	1.009
					800	3.83	34.35		3.37	27.31	84.3	1.096
					1000	3.38	34.42		3.49	27.41	75.3	1.256

NH 145 44 39.1 N 127 26.8 W DATE 6 JUN 62 0015 GCT WIRE 7 DRY 53.0 WET 49.0
WIND DIRECTION 32 VEL 4 KTS BAR 25 SWELL DIRECTION 30 H 3 T 8 CLOUD 8 AMT 8 WEATHER 02

0	12.04	32.590	.44		0	12.04	32.59		.44	24.74	322.1	0
10	11.77	32.590	.46		10	11.77	32.59		.46	24.79	317.6	.032
20	11.56	32.580	.43		20	11.56	32.58		.43	24.82	314.8	.064
30	11.31	32.580	.46		30	11.31	32.58		.46	24.87	310.7	.095
52	9.78	32.580	.64		50	9.94	32.58		.62	25.10	288.7	.155
103	7.77	33.370	1.62		75	8.65	32.89		1.07	25.55	246.7	.222
153	7.28	33.860	2.06		100	7.84	33.31		1.56	26.00	203.8	.278
206	6.76	33.930	2.25		150	7.29	33.84		2.04	26.49	157.7	.368
307	5.92	33.990	2.54		200	6.82	33.92		2.24	26.62	146.0	.444
407	5.31	34.040	2.65		250	6.37	33.96		2.39	26.71	137.9	.515
507	4.72	34.120	2.82		300	5.97	33.99		2.52	26.78	131.7	.583
608	4.38	34.200	3.26		400	5.35	34.04		2.64	26.90	121.8	.709
809	3.79	34.320	3.02		500	4.76	34.11		2.80	27.03	109.4	.825
1006	3.35	34.410	3.16		600	4.40	34.19		3.23	27.13	100.9	.930
					700	4.09	34.26		3.22	27.22	93.0	1.027
					800	3.81	34.32		3.04	27.29	86.3	1.116
					1000	3.36	34.41		3.15	27.41	76.0	1.279

NH 165 44 39.1 N 127 55.0 W DATE 6 JUN 62 0340 GCT WIRE 5 DRY 52.0 WET 48.0
WIND DIRECTION 30 VEL 4 KTS BAR 25 SWELL DIRECTION 27 H 3 T 8 CLOUD 9 AMT 9 WEATHER 02

0	11.67	32.580	6.42	.56	0	11.67	32.58	6.43	.57	24.80	316.4	0
10	11.35	32.580	6.62	.55	10	11.35	32.58	6.63	.56	24.86	311.0	.031
20	11.06	32.580	6.11	.46	20	11.06	32.58	6.11	.46	24.91	306.2	.062
30	10.11	32.590	6.02	.48	30	10.11	32.59	6.03	.49	25.08	290.0	.092
52	8.94	32.620	6.00	.64	50	9.01	32.61	6.01	.62	25.28	272.0	.148
104	7.64	33.470	4.34	1.44	75	8.17	32.96	5.34	.99	25.68	234.3	.211
155	7.39	33.790	3.67	1.72	100	7.68	33.39	4.49	1.38	26.09	195.6	.265
205	6.89	33.910	2.99	1.90	150	7.40	33.77	3.72	1.71	26.43	164.1	.355
307	5.81	33.960	2.10	2.22	200	6.95	33.90	3.05	1.88	26.59	149.1	.433
407	5.04	34.070	1.24	2.34	250	6.40	33.94	2.56	2.06	26.69	139.6	.506
508	4.42	34.070	.92	2.54	300	5.88	33.96	2.15	2.20	26.77	132.6	.574
609	4.08	34.150	.60	2.74	400	5.09	34.06	1.29	2.33	26.95	116.7	.698
810	3.72	34.290	.30	2.86	500	4.46	34.07	.94	2.52	27.03	109.3	.811
1009	3.33	34.440	.42	2.78	600	4.10	34.14	.63	2.72	27.12	101.4	.916
					700	3.89	34.21	.41	2.83	27.20	94.1	1.014
					800	3.73	34.28	.30	2.85	27.27	87.8	1.105
					1000	3.35	34.43	.41	2.79	27.43	74.0	1.267

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	S × 10 ⁶	Δ D		
ANH169 45 11.0 N 127 58.2 W DATE 6 JUN 62 0916 GCT WIRE 3 DRY 51.0 WET 47.0 WIND DIRECTION 35 VEL 2 KTS BAR 26 SWELL DIRECTION 30 H 2 T 7 CLOUD 6 AMT 8 WEATHER 02														
0	11.39	32.640	5.58	.62	0	11.39	32.64	5.58	.63	24.90	307.1	0		
10	11.40	32.640	5.72	.54	10	11.40	32.64	5.72	.54	24.90	307.4	.031		
20	11.19	32.630	6.29	.50	20	11.19	32.63	6.30	.51	24.93	304.8	.061		
30	11.04	32.620	5.25	.62	30	11.04	32.63	5.26	.63	24.95	303.1	.092		
52	10.02	32.600	5.87	.75	50	10.13	32.60	5.75	.74	25.09	290.1	.151		
103	8.28	33.300	4.53	1.56	75	9.12	32.86	5.47	1.11	25.46	255.3	.219		
154	7.57	33.790	3.78	1.72	100	8.36	33.25	4.65	1.51	25.87	216.0	.278		
206	6.84	33.880	3.32	2.16	150	7.61	33.76	3.82	1.71	26.39	167.9	.374		
306	5.49	33.930	2.44	2.51	200	6.92	33.87	3.37	2.11	26.57	151.3	.454		
407	4.95	34.010	1.26	2.98	250	6.19	33.91	2.95	2.35	26.69	139.5	.526		
508	4.52	34.080	.75		300	5.56	33.93	2.50	2.50	26.79	131.0	.594		
609	4.37	34.160	.42	3.02	400	4.97	34.00	1.34	2.95	26.92	119.7	.719		
810	3.91	34.310	.32	3.26	500	4.55	34.07	.77	3.00	27.02	109.9	.834		
1009	3.30	34.390	.41	3.23	600	4.38	34.15	.44	3.02	27.10	103.7	.941		
					700	4.18	34.23	.37	3.13	27.18	96.0	1.041		
					800	3.94	34.30	.32	3.25	27.27	88.6	1.133		
					1000	3.33	34.39	.40	3.74	27.39	77.1	1.299		
ANH173 45 42.9 N 128 2.3 W DATE 6 JUN 62 1424 GCT WIRE 0 DRY 54.0 WET 49.0 WIND DIRECTION VEL 0 KTS BAR 27 SWELL DIRECTION 28 H 3 T 8 CLOUD 3 AMT 7 WEATHER 01														
0	11.16	32.580	6.31		0	11.16	32.58	6.32		24.89	307.6	0		
10	11.11	32.570	6.38		10	11.11	32.57	6.39		24.90	307.6	.031		
20	10.88	32.580	6.30		20	10.88	32.58	6.31		24.94	303.2	.061		
30	10.57	32.560	5.90		30	10.57	32.56	5.91		24.98	299.7	.091		
52	9.24	32.610	5.79		50	9.37	32.60	5.80		25.21	276.4	.149		
103	7.90	33.310	4.27		75	8.44	32.89	5.15		25.58	243.4	.214		
154	7.24	33.770	3.86		100	7.94	33.26	4.37		25.95	209.0	.271		
206	6.66	33.890	3.74		150	7.28	33.74	3.87		26.42	164.7	.364		
306	5.50	33.930	2.24		200	6.72	33.89	3.76		26.61	147.4	.442		
408	4.79	34.010	1.39		250	6.12	33.92	3.14		26.71	137.9	.514		
510	4.50	34.100	.74		300	5.56	33.93	2.34		26.79	131.1	.581		
610	4.30	34.200	.51		400	4.83	34.00	1.44		26.93	118.2	.705		
810	3.79	34.330	.25		500	4.52	34.09	.79		27.04	108.4	.819		
1010	3.19	34.380	.36		600	4.32	34.19	.52		27.14	100.2	.923		
					700	4.09	34.27	.35		27.22	92.2	1.019		
					800	3.82	34.33	.26		27.30	85.6	1.108		
					1000	3.22	34.38	.35		27.40	76.5	1.270		
AH 165 46 14.4 N 128 4.0 W DATE 6 JUN 62 1900 GCT WIRE - DRY 54.0 WET 50.0 WIND DIRECTION VEL 0 KTS BAR 27 SWELL DIRECTION 28 H 2 T 8 CLOUD 1 AMT 2 WEATHER 02														
0	11.07	32.590	6.76	.56	0	11.07	32.59	6.77	.57	24.92	305.3	0		
10	10.87	32.600	5.51	.63	10	10.88	32.60	5.52	.63	24.96	301.4	.030		
20	10.68	32.590	5.18	.58	20	10.68	32.59	5.19	.59	24.99	299.1	.060		
30	10.57	32.590	5.62	.57	30	10.57	32.59	5.63	.57	25.01	297.5	.090		
50	8.80	32.630	5.48	.67	50	8.80	32.63	5.48	.68	25.33	267.3	.147		
101	7.58	33.140	4.56	1.28	75	7.85	32.83	5.10	.95	25.62	239.1	.210		
150	7.28	33.760	3.42	1.60	100	7.60	33.13	4.58	1.27	25.89	214.4	.267		
201	6.71	33.890	2.95	1.78	150	7.29	33.76	3.42	1.61	26.43	163.2	.361		
302	5.61		2.03	2.26	200	6.72	33.89	2.96	1.78	26.61	147.3	.439		
402	5.03	34.020	1.26	2.50	250	6.14	33.95	2.49	2.02	26.73	136.1	.509		
504	4.64	34.110	.70	2.84	300	5.63	33.99	2.05	2.25	26.83	127.4	.575		
604	4.38	34.190	.51	2.72	400	5.04	34.02	1.27	2.50	26.92	119.4	.699		
804	3.75	34.330	.43	2.76	500	4.65	34.11	.72	2.83	27.03	108.8	.813		
1004	3.33	34.400	.34	2.78	600	4.39	34.19	.51	2.73	27.13	101.2	.918		
					700	4.07	34.26	.45	2.74	27.22	92.5	1.014		
					800	3.76	34.33	.43	2.76	27.30	84.9	1.103		
					1000	3.34	34.40	.34	2.78	27.40	76.3	1.264		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
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AH 85 46 14.4 N 126 9.0 W DATE 7 JUN 62 0903 GCT WIRE 15 DRY 53.0 WET 51.0
 WIND DIRECTION 34 VEL 4 KTS BAR 23 SWELL DIRECTION 28 H 3 T 7 CLOUD - AMT 0 WEATHER 02

0	11.65	32.570	5.93	.60	0	11.65	32.57	5.94	.60	24.80	316.7	0
10	11.63	32.570	5.47	.64	10	11.63	32.57	5.47	.65	24.80	316.6	.032
20	11.31	32.580	5.55	.50	20	11.31	32.58	5.56	.51	24.87	310.5	.063
29	11.10	32.570	5.47	.54	30	11.03	32.57	5.48	.55	24.90	307.2	.094
50	9.48	32.560	5.57	.71	50	9.48	32.56	5.57	.72	25.16	282.7	.153
100	8.26	33.470	3.64	1.58	75	8.59	32.97	4.70	1.14	25.62	239.7	.218
150	7.79	33.810	3.23	1.92	100	8.26	33.47	3.65	1.58	26.06	197.8	.273
202	7.12	33.890	2.86	2.13	150	7.80	33.81	3.23	1.93	26.40	166.6	.364
303	5.95	33.950	2.03	2.50	200	7.15	33.89	2.87	2.12	26.55	152.8	.444
403	5.45	34.040	1.31	2.75	250	6.51	33.92	2.47	2.32	26.66	142.6	.518
502	4.95	34.110	.77	3.00	300	5.98	33.95	2.05	2.49	26.75	134.6	.587
602	4.56	34.180	.48	3.24	400	5.46	34.04	1.33	2.74	26.89	123.1	.716
800	3.99	34.320	.29	3.03	500	4.96	34.11	.78	2.99	27.00	112.2	.833
997	3.57	34.410	.39	3.18	600	4.57	34.18	.48	3.24	27.10	103.5	.941
					700	4.25	34.25	.34	3.17	27.19	95.2	1.040
					800	3.99	34.33	.29	3.04	27.28	87.7	1.132
					1000	3.56	34.41	.39	3.18	27.39	78.0	1.297

AH 65 46 14.4 N 125 39.5 W DATE 7 JUN 62 1234 GCT WIRE 10 DRY 53.0 WET 52.0
 WIND DIRECTION 34 VEL 4 KTS BAR 22 SWELL DIRECTION 30 H 3 T 7 CLOUD 1 AMT 3 WEATHER 02

0	11.83	32.560	6.41	.62	0	11.83	32.56	6.42	.63	24.76	320.6	0
10	11.83	32.560	6.42	.54	10	11.83	32.56	6.43	.54	24.76	320.8	.032
20	11.13	32.570	6.57	.62	20	11.13	32.57	6.57	.63	24.89	308.2	.064
30	11.04	32.570	6.24	.64	30	11.04	32.57	6.24	.65	24.91	306.8	.094
52	9.38	32.590	6.13	.78	50	9.56	32.58	6.13	.76	25.17	282.5	.153
103	8.24	33.470	3.99	1.83	75	8.59	32.95	5.25	1.23	25.60	241.2	.219
154	7.80	33.810	3.03	2.19	100	8.24	33.41	4.14	1.76	26.02	202.3	.274
205	7.33	33.940	2.70	2.20	150	7.82	33.80	3.07	2.18	26.38	168.3	.367
304	5.94	33.970	2.02	2.56	200	7.38	33.93	2.72	2.20	26.55	152.8	.447
404	5.41	34.050	1.19	2.72	250	6.68	33.97	2.40	2.35	26.68	141.5	.520
505	4.86	34.110	.86	2.92	300	5.99	33.97	2.05	2.54	26.77	133.4	.589
605	4.48	34.170	.50	3.00	400	5.42	34.05	1.22	2.72	26.90	121.9	.717
803	3.94	34.310	.32	3.32	500	4.89	34.11	.87	2.91	27.01	111.4	.833
999	3.48	34.410	.40	3.32	600	4.50	34.17	.52	3.00	27.10	104.0	.941
					700	4.20	34.24	.35	3.16	27.19	95.8	1.041
					800	3.95	34.31	.32	3.32	27.27	88.4	1.133
					1000	3.48	34.41	.40	3.32	27.40	77.1	1.298

AH 45 46 14.4 N 125 10.8 W DATE 7 JUN 62 1546 GCT WIRE 12 DRY 54.0 WET 52.0
 WIND DIRECTION 35 VEL 5 KTS BAR 21 SWELL DIRECTION 30 H 3 T 8 CLOUD 1 AMT 2 WEATHER 01

0	12.50	31.980	5.12	.51	0	12.50	31.98	5.13	.51	24.18	375.4	0
10	12.41	32.060	6.23	.43	10	12.41	32.06	6.23	.43	24.26	368.0	.037
19	11.27	32.480	6.85	.46	20	11.11	32.50	6.80	.48	24.83	313.6	.071
29	9.76	32.530	6.15	.69	30	9.69	32.53	6.15	.70	25.10	288.0	.101
50	9.08	32.590	6.25	.80	50	9.08	32.59	6.26	.81	25.25	274.4	.158
100	8.41	33.500	4.01	1.66	75	8.66	33.01	5.28	1.20	25.64	237.5	.222
150	7.78	33.850	2.94	2.13	100	8.41	33.50	4.02	1.67	26.07	197.7	.276
200	7.98	33.940	3.00	2.15	150	7.79	33.85	2.95	2.14	26.43	163.5	.366
299	6.13	33.990	1.55	2.32	200	7.98	33.95	3.01	2.15	26.47	160.5	.447
399	5.46	34.060	1.30	2.68	250	7.16	33.97	2.32	2.21	26.62	147.5	.524
496	4.79	34.110	.82	2.84	300	6.12	33.99	1.55	2.32	26.77	133.3	.594
597	4.50	34.210	.56	2.72	400	5.45	34.06	1.30	2.68	26.90	121.3	.722
795	3.99	34.340	.35	2.96	500	4.77	34.11	.81	2.84	27.03	109.7	.837
993	3.52	34.420	.41	3.04	600	4.49	34.21	.55	2.72	27.14	100.5	.942
					700	4.23	34.29	.41	2.82	27.22	92.6	1.038
					800	3.98	34.34	.35	2.96	27.29	86.2	1.128
					1000	3.50	34.42	.41	3.04	27.40	76.5	1.290

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S‰	O ₂ ml/l	PO ₄ ³	Z	T	S	O ₂	PO ₄ ³	σ _t	δ × 10 ⁶	Δ D		
AH 35 46 14.4 N 124 56.3 W DATE 7 JUN 62 1800 GCT WTRF 10 DRY 54.0 WET 52.5 WIND DIRECTION 35 VEL 4 KTS BAR 21 SWELL DIRECTION 28 H 3 T 7 CLOUD 1 AMT 3 WEATHER 02														
0	12.77	31.640	4.90	.38	0	12.77	31.65	4.91	.38	23.87	405.3	0		
10	12.60	31.710	5.36	.43	10	12.60	31.71	5.36	.43	23.96	397.3	.040		
19	10.50	32.510	5.85	.60	20	10.37	32.53	5.84	.61	24.99	298.6	.075		
30	9.61	32.540	5.74	.66	30	9.61	32.54	5.74	.67	25.13	285.9	.104		
51	8.82	32.610	5.01	.92	50	8.84	32.61	5.05	.90	25.30	269.9	.160		
101	7.85	32.660	3.50	1.80	75	8.24	32.63	4.23	1.35	25.41	259.6	.226		
151	7.36	33.940	2.54	2.18	100	7.86	32.65	3.53	1.78	25.48	253.1	.290		
201	6.76	33.950	2.31	2.23	150	7.37	33.91	2.55	2.18	26.54	153.3	.391		
303	5.97	34.020	1.61	2.40	200	6.77	33.95	2.31	2.23	26.65	143.4	.466		
404	5.27	34.070	1.09	2.56	250	6.34	33.98	1.98	2.31	26.73	136.1	.535		
506	4.90	34.130	.73	2.68	300	5.99	34.02	1.63	2.39	26.81	129.7	.602		
605	4.48	34.210	.34	2.80	400	5.29	34.07	1.11	2.55	26.93	118.8	.726		
					500	4.92	34.13	.75	2.67	27.02	110.4	.841		
					400	4.50	34.21	.36	2.79	27.13	101.2	.946		
AH 25 46 14.4 N 124 41.8 W DATE 7 JUN 62 2000 GCT WTRF 8 DRY 53.0 WET 53.0 WIND DIRECTION 33 VEL 4 KTS BAR 20 SWELL DIRECTION 30 H 3 T 7 CLOUD 1 AMT 1 WEATHER 01														
0	12.45	30.840	6.43	.54	0	12.45	30.84	6.44	.54	23.31	458.5	0		
10	11.79	31.930	6.62	.40	10	11.79	31.94	6.63	.40	24.28	366.6	.041		
21	9.53	32.480	6.04	.75	20	9.73	32.45	6.10	.72	25.04	294.2	.074		
32	9.20	32.510	5.85	.67	30	9.26	32.50	5.88	.69	25.15	283.4	.103		
52	8.44	33.030	4.48	1.26	50	8.51	32.97	4.63	1.18	25.63	238.3	.155		
78	8.12	33.560	3.58	1.70	75	8.14	33.51	3.65	1.66	26.11	193.0	.209		
103	7.69	33.810	2.85	1.92	100	7.74	33.79	2.92	1.90	26.39	167.0	.254		
156	7.10	33.940	2.45	2.09	150	7.15	33.93	2.50	2.08	26.58	149.5	.333		
208	6.63	34.020	2.38	2.13	200	6.70	34.01	2.39	2.12	26.71	137.8	.405		
AH 15 46 14.4 N 124 27.3 W DATE 7 JUN 62 2245 GCT WTRF 17 DRY 54.0 WET 54.0 WIND DIRECTION 33 VEL 5 KTS BAR 20 SWELL DIRECTION -- H 3 T 7 CLOUD 1 AMT 2 WEATHER 03														
0	13.47		7.00	.26	0	13.88	30.84	7.01	.26	23.04	484.8	0		
10	11.66	31.480	6.73	.48	10	11.66	31.48	6.73	.49	23.95	397.5	.044		
20	9.94	32.230	6.30		20	9.94	32.23	6.31	.50	24.83	313.8	.080		
51	8.23	32.910	4.93	.57	30	9.01	32.59	5.91	.52	25.26	273.6	.109		
76	7.45	33.430	3.19	1.93	50	8.23	32.91	4.98	.56	25.63	238.7	.160		
101	7.34	33.850	2.69	2.09	75	7.86	33.41	3.25	1.88	26.07	196.4	.215		
153	6.21	33.990	1.97	2.29	100	7.36	33.84	2.70	2.08	26.48	158.3	.259		
206	5.90	34.010	1.72	2.44	150	6.27	33.97	2.00	2.28	26.73	134.5	.332		
					200	5.94	34.01	1.72	2.43	26.80	128.5	.398		
AH 5 46 14.4 N 124 13.7 W DATE 8 JUN 62 0155 GCT WTRF 7 DRY 54.0 WET 54.0 WIND DIRECTION 34 VEL 5 KTS BAR 18 SWELL DIRECTION 32 H 3 T 7 CLOUD 0 AMT 10 WEATHER 03														
0	13.38		6.94	.69	0	13.38	30.84	6.94	.70	23.13	475.5	0		
10	10.75	31.280	6.02	.99	10	10.75	31.28	6.03	1.00	23.96	397.0	.044		
20	8.57	32.400	3.61	1.80	20	8.57	32.48	3.61	1.80	25.24	274.6	.077		
30	8.05	33.120	3.15	2.18	30	8.05	33.13	3.16	2.18	25.82	219.8	.102		
40	7.77	33.650	2.00	2.52	50	7.33	33.79	1.61	2.80	26.45	160.3	.140		
50	7.33	33.790	1.61	2.80	75	7.86	33.41			26.97	196.4	.184		
CH 5 43 20.5 N 124 29.0 W DATE 12 JUN 62 0112 GCT WTRF 3 DRY 54.0 WET 51.0 WIND DIRECTION 35 VEL 5 KTS BAR 21 SWELL DIRECTION 33 H 4 T 7 CLOUD 0 AMT 10 WEATHER 02														
0	8.46	33.580	3.81		0	8.46	33.58	3.82		26.12	191.0	0		
10	8.29	33.620	3.88		10	8.29	33.63	3.89		26.18	185.7	.019		
20	7.98	33.720	2.89		20	7.98	33.72	2.89		26.30	174.0	.037		
30	7.59	33.800	2.29		30	7.59	33.80	2.29		26.42	162.8	.054		
50	7.21	33.940	1.58		50	7.21	33.95	1.58		26.58	147.5	.085		
75	6.74	34.000	1.70		75	6.74	34.00	1.71		26.70	137.2	.120		

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	S x 10 ⁶	AD	
CH 15 43 20.5 N 124 43.0 W DATE 12 JUN 62 0305 GCT WIRE - DRY 52.0 WET 50.0 WIND DIRECTION 35 VEL 5 KTS BAR 21 SWELL DIRECTION 33 H 5 T 7 CLOUD 0 AMT 1 WEATHER 03													
0	9.57	32.390	4.49		0	9.57	32.39	4.49		25.02	295.9	0	
10	9.58	32.390	4.96		10	9.58	32.39	4.96		25.02	296.2	.030	
20	9.52	32.390	5.77		20	9.52	32.39	5.78		25.02	295.5	.059	
30	9.39	32.400	4.98		30	9.39	32.40	4.98		25.05	292.9	.089	
49	8.53	32.710	3.97		50	8.51	32.74	3.93		25.45	255.4	.143	
99	7.83	33.860	2.47		75	8.05	33.34	3.04		25.99	204.3	.201	
148	6.72	34.000	1.70		100	7.81	33.87	2.45		26.44	162.0	.247	
199	6.29	34.030	1.47		150	6.70	34.00	1.69		26.70	137.8	.322	
248	5.87	34.080	1.17		200	6.28	34.03	1.46		26.78	131.0	.389	
					250	5.85	34.08	1.16		26.87	122.5	.452	
CH 25 43 20.5 N 124 55.5 W DATE 12 JUN 62 0500 GCT WIRE 17 DRY 51.0 WET 49.0 WIND DIRECTION 35 VEL 6 KTS BAR 22 SWELL DIRECTION 34 H 7 T 7 CLOUD 0 AMT 3 WEATHER 03													
0	10.34	32.250	6.73		0	10.34	32.25	6.73		24.78	318.4	0	
10	10.34	32.250	6.81		10	10.34	32.25	6.82		24.78	318.6	.032	
19	10.33	32.280	6.38		20	10.33	32.29	6.39		24.81	316.1	.064	
28	10.25	32.360	6.52		30	10.16	32.39	6.50		24.92	306.0	.095	
49	9.15	32.740	5.96		50	9.11	32.76	5.91		25.38	262.4	.152	
98	8.08	33.710	3.47		75	8.42	33.29	4.63		25.90	213.0	.211	
147	7.59	33.920	2.78		100	8.06	33.73	3.42		26.29	176.1	.260	
196	6.83	33.990	2.03		150	7.54	33.93	2.73		26.52	154.8	.342	
294	6.03	34.060	1.47		200	6.78	33.99	2.00		26.68	140.3	.416	
391	5.67	34.150	.88		250	6.30	34.03	1.65		26.78	131.8	.484	
490	5.00	34.220	.51		300	6.01	34.07	1.43		26.84	126.3	.548	
589	4.52	34.290	.45		400	5.61	34.16	.84		26.96	116.1	.670	
					500	4.94	34.23	.49		27.10	103.2	.779	
					600	4.47	34.30	.46		27.21	93.9	.878	
CH 35 43 20.5 N 125 10.5 W DATE 12 JUN 62 0730 GCT WIRE 25 DRY 54.0 WET 52.0 WIND DIRECTION 0 VEL 5 KTS BAR 22 SWELL DIRECTION 33 H 6 T 7 CLOUD 0 AMT 3 WEATHER 02													
0	12.51	30.910	6.46		0	12.51	30.92	6.46		23.35	454.4	0	
9	12.47	30.950	6.31		10	12.46	30.96	6.32		23.40	450.2	.045	
18	12.02	31.280	6.41		20	11.62	31.51	6.43		23.98	394.9	.087	
28	9.92	32.470	6.46		30	9.74	32.55	6.43		25.11	287.1	.122	
48	9.20	32.670	5.97		50	9.16	32.70	5.90		25.32	267.6	.177	
96	8.62	33.440	4.21		75	8.78	33.10	5.02		25.69	232.8	.240	
146	7.90	33.860	2.63		100	8.56	33.48	4.06		26.03	201.5	.294	
196	7.17	34.050	2.21		150	7.84	33.88	2.57		26.44	162.7	.385	
295	5.96	34.090	1.54		200	7.11	34.03	2.18		26.67	142.0	.461	
392	5.41	34.160	1.09		250	6.45	33.99	1.82		26.73	136.7	.531	
492	4.92	34.160	.68		300	5.92	34.05	1.51		26.84	126.2	.596	
592	4.62	34.240	.31		400	5.37	34.09	1.06		26.94	117.7	.718	
795	4.04	34.370	.40		500	4.89	34.17	.64		27.05	107.1	.831	
995	3.55	34.430	.47		600	4.60	34.25	.31		27.15	99.2	.934	
					700	4.30	34.32	.36		27.24	91.2	1.029	
					800	4.03	34.37	.40		27.31	84.6	1.117	
					1000	3.54	34.43	.47		27.41	76.2	1.277	
CH 45 43 20.5 N 125 24.5 W DATE 12 JUN 62 1040 GCT WIRE 17 DRY 54.0 WET 50.0 WIND DIRECTION 0 VEL 5 KTS BAR 22 SWELL DIRECTION 33 H 6 T 7 CLOUD 0 AMT 10 WEATHER 03													
0	12.18	31.190	6.53		0	12.18	31.19	6.54		23.63	427.9	0	
10	12.20	31.190	6.13		10	12.20	31.19	6.14		23.63	428.4	.043	
19	12.00	31.360	5.87		20	11.97	31.42	5.92		23.85	407.7	.085	
29	11.58	32.040	6.42		30	11.48	32.08	6.42		24.45	350.5	.123	
49	9.32	32.620	5.80		50	9.27	32.65	5.77		25.26	273.5	.185	
96	8.56	33.520	4.35		75	8.90	33.19	4.98		25.74	227.8	.248	
145	7.76	33.900	3.07		100	8.48	33.57	4.22		26.10	194.1	.300	
193	7.57	33.980	2.78		150	7.73	33.92	3.02		26.49	158.2	.388	
287	6.22	34.020	2.16		200	7.48	33.99	2.73		26.58	150.4	.465	
380	5.44	34.090			250	6.79	34.01	2.41		26.69	139.8	.538	
476	5.15	34.170			300	6.08	34.03	2.06		26.80	130.0	.605	
572	4.73	34.210	.55		400	5.36	34.11	1.40		26.95	116.6	.729	
761	4.17	34.330	.39		500	5.05	34.18	.86		27.05	107.9	.841	
951	3.63	34.410	.39		600	4.64	34.23	.50		27.13	101.1	.945	
					700	4.33	34.29	.39		27.21	93.5	1.043	
					800	4.06	34.35	.39		27.29	86.6	1.133	

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S‰	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁵	Δ D
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CH 65 43 20.5 N 125 51.3 W DATE 12 JUN 62 1500 GCT WIRE 8 DRY 54.0 WET 51.0
WIND DIRECTION 33 VEL 5 KTS BAR 22 SWELL DIRECTION 32 H 7 T 7 CLOUD 9 AMT 10 WEATHER 02

0	13.37	30.850	5.57		0	13.38	30.85	5.57		23.14	474.6	0
10	13.36	30.850	5.61		10	13.36	30.85	5.61		23.14	474.6	.047
21	13.33	30.890	5.82		20	13.33	30.86	5.79		23.15	474.2	.095
32	11.44	32.380	6.49		30	11.83	32.09	6.37		24.39	356.1	.136
54	9.61	32.560	6.13		50	9.81	32.53	6.29		25.08	290.6	.201
105	8.75	33.200	4.49		75	8.97	32.81	5.54		25.43	257.5	.270
159	7.81	33.870	2.38		100	8.83	33.13	4.68		25.71	231.7	.331
213	7.00	34.020	1.93		150	7.96	33.78	2.69		26.35	171.8	.432
314	5.92	34.050	1.44		200	7.18	34.01	1.96		26.64	144.2	.511
415	5.26	34.100	1.26		250	6.55	34.05	1.71		26.76	133.8	.580
516	4.87	34.150	.63		300	6.04	34.05	1.48		26.82	128.2	.645
616	4.60	34.230	.46		400	5.34	34.09	1.29		26.94	117.5	.768
820	3.99	34.360	.35		500	4.92	34.14	.73		27.03	109.3	.882
1023	3.39	34.440	.39		600	4.64	34.22	.47		27.12	102.0	.987
					700	4.35	34.29	.39		27.21	93.8	1.085
					800	4.05	34.35	.35		27.29	86.6	1.175
					1000	3.46	34.43	.38		27.42	75.2	1.337

CH 85 43 20.5 N 126 19.5 W DATE 12 JUN 62 1900 GCT WIRE 10 DRY 54.0 WET 52.0
WIND DIRECTION 34 VEL 5 KTS BAR 22 SWELL DIRECTION 33 H 10 T 8 CLOUD 9 AMT 10 WEATHER 02

0	13.36	30.870	6.03		0	13.36	30.88	6.04		23.16	472.9	0
10	13.36	30.880	6.14		10	13.36	30.88	6.15		23.17	472.4	.047
21	13.32	30.940	6.04		20	13.32	30.90	6.04		23.19	470.6	.094
32	9.95	32.560	6.41		30	10.62	32.24	6.34		24.72	324.2	.134
54	8.97	32.940	5.58		50	9.15	32.87	5.80		25.46	254.9	.192
105	8.58	33.420	4.45		75	8.67	33.18	5.04		25.77	225.2	.252
159	7.83	33.780	3.46		100	8.62	33.39	4.53		25.94	209.4	.306
223	7.07	33.940	2.78		150	7.96	33.73	3.60		26.31	175.1	.402
325	6.02	34.000	1.96		200	7.33	33.90	2.99		26.54	154.2	.485
427	5.16	34.050	.88		250	6.77	33.97	2.56		26.66	142.8	.559
520	4.63	34.110	.77		300	6.26	34.00	2.16		26.75	134.6	.628
622	4.53	34.230	.39		400	5.36	34.04	1.13		26.90	122.0	.757
827	3.94	34.360	.37		500	4.72	34.09	.79		27.02	110.4	.873
1031	3.36	34.410	.48		600	4.54	34.20	.47		27.12	101.7	.979
					700	4.34	34.28	.38		27.21	94.0	1.077
					800	4.03	34.33	.37		27.28	87.7	1.167
					1000	3.45	34.40	.45		27.39	77.4	1.332

CH 105 43 21.0 N 126 45.5 W DATE 12 JUN 62 2310 GCT WIRE 32 DRY 53.0 WET 51.0
WIND DIRECTION 35 VEL 6 KTS BAR 22 SWELL DIRECTION 33 H 8 T 8 CLOUD 0 AMT 10 WEATHER 02

0	13.38	31.780			0	13.38	31.78			23.86	406.4	0
9	13.39	31.780			10	13.38	31.79			23.86	406.1	.041
19	13.33	31.890			20	13.27	31.96			24.01	392.2	.081
29	12.66	32.570			30	12.60	32.59			24.63	333.1	.117
48	11.64	32.630			50	11.50	32.65			24.89	309.3	.181
94	8.92	33.290			75	9.94	32.98			25.41	259.3	.252
142	8.27	33.810			100	8.77	33.37			25.91	212.9	.311
193	7.96	33.940			150	8.22	33.85			26.36	170.4	.407
287	6.34	34.040			200	7.85	33.95			26.50	158.0	.489
384	5.35	34.000			250	7.02	34.02			26.67	142.2	.564
481	4.68	34.080			300	6.18	34.04			26.79	130.7	.632
578	4.37				400	5.22	34.01			26.89	122.2	.759
773	3.88	34.320			500	4.60	34.10			27.03	108.8	.874
969	3.56	34.400			600	4.31	34.19			27.14	99.9	.978
					700	4.04	34.28			27.23	91.3	1.074
					800	3.83	34.34			27.31	84.3	1.162

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S‰	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
CH 125	43 20.5 N	127	13.6 W	DATE 13 JUN 62	0333 GCT	WIRE 10	DRY 52.0	WET 50.0				
WIND DIRECTION 34 VEL 5 KTS												
BAR 21 SWELL DIRECTION 34 H 6 T 7 CLOUD 0 AMT 10 WEATHER 02												

0	12.23	32.740	6.01		0	12.23	32.75	6.02		24.82	314.5	0
10	12.24	32.730	5.92		10	12.24	32.73	5.93		24.81	315.6	.031
21	12.24	32.730	5.99		20	12.24	32.73	5.99		24.81	316.1	.063
32	12.23	32.730	5.69		30	12.23	32.73	5.75		24.81	316.1	.095
54	9.72	32.870	5.82		50	10.25	32.84	5.79		25.25	274.7	.154
105	9.15	33.350	3.35		75	9.49	33.06	4.91		25.55	246.7	.219
159	8.27	33.830	2.94		100	9.21	33.30	3.63		25.78	224.9	.278
214	7.55	33.990	2.57		150	8.42	33.76	3.01		26.27	179.6	.379
315	6.49	34.020	1.95		200	7.72	33.97	2.66		26.53	154.8	.463
416	5.77	34.040	1.52		250	7.13	34.00	2.33		26.64	145.2	.538
518	5.11	34.140	.74		300	6.63	34.02	2.03		26.72	138.0	.608
617	4.72	34.190	.60		400	5.87	34.03	1.59		26.83	128.4	.741
819	4.17	34.330	.32		500	5.21	34.12	.87		26.98	114.4	.863
1020	3.63	34.430	.42		600	4.78	34.18	.60		27.08	106.1	.973
					700	4.47	34.25	.46		27.16	98.4	1.075
					800	4.21	34.32	.34		27.25	90.9	1.170
					1000	3.68	34.42	.39		27.39	78.6	1.339

CH 145	43 20.5 N	127	40.0 W	DATE 13 JUN 62	0710 GCT	WIRE 15	DRY 52.0	WET 50.0				
WIND DIRECTION 35 VEL 5 KTS												
BAR 21 SWELL DIRECTION 34 H 8 T 8 CLOUD - AMT 10 WEATHER 02												

0	12.68	32.730	6.12	1.10	0	12.68	32.73	6.13	1.11	24.73	323.4	0
10	12.68	32.740	5.92	1.02	10	12.68	32.73	5.93	1.02	24.73	323.6	.032
21	12.68	32.740	6.12	.88	20	12.68	32.74	6.10	.89	24.73	323.4	.065
31	12.68	32.730	6.12	.84	30	12.68	32.73	6.12	.84	24.73	324.3	.097
43	10.74	32.750	6.12	1.18	50	10.12	32.76	6.12	1.31	25.21	277.9	.157
104	8.65	33.040	5.55	1.80	75	8.71	32.86	5.97	1.66	25.51	249.8	.223
158	8.47	33.650	3.81	1.84	100	8.79	33.01	5.62	1.80	25.62	240.0	.284
212	7.70	33.900	2.94	2.87	150	8.50	33.56	4.08	1.82	26.10	195.6	.393
313	6.18	33.940	2.84	2.84	200	7.90	33.87	3.09	2.63	26.43	165.0	.483
415	5.63	34.060	1.22	3.52	250	7.08	33.92	2.48	2.86	26.58	150.8	.562
517	5.05	34.160	.80	3.66	300	6.35	33.93	1.97	2.84	26.69	140.4	.635
618	4.70	34.200	.72	3.79	400	5.68	34.04	1.29	3.41	26.86	125.6	.768
821	4.05	34.340	.40	3.87	500	5.14	34.15	.85	3.66	27.01	111.6	.887
1024	3.57	34.420	.48	3.64	600	4.75	34.19	.72	3.77	27.09	105.0	.995
					700	4.42	34.26	.58	3.86	27.18	97.2	1.096
					800	4.11	34.33	.43	3.86	27.26	89.1	1.189
					1000	3.62	34.41	.45	3.68	27.39	78.5	1.356

CH 165	43 20.5 N	128	7.8 W	DATE 13 JUN 62	1210 GCT	WIRE 7	DRY 51.0	WET 50.0				
WIND DIRECTION 35 VEL 5 KTS												
BAR 21 SWELL DIRECTION 33 H 8 T 8 CLOUD 9 AMT 10 WEATHER 02												

0	12.54	32.750			0	12.54	32.75			24.77	319.4	0
10	12.54	32.770			10	12.54	32.77			24.79	318.1	.032
21	12.54	32.780			20	12.54	32.78			24.79	317.9	.064
32	12.53	32.750			30	12.54	32.76			24.77	319.8	.096
55	11.96	32.750			50	12.14	32.75			24.84	313.5	.159
107	8.16	33.360			75	10.52	32.94			25.28	272.0	.232
160	7.46	33.890			100	8.68	33.26			25.83	220.2	.294
215	6.75	33.940			150	7.47	33.81			26.44	162.3	.389
317	5.73	33.990			200	6.94	33.93			26.61	147.3	.466
419	5.05	34.060			250	6.36	33.96			26.71	138.0	.538
521	4.82	34.160			300	5.87	33.98			26.79	130.8	.605
622	4.42	34.230			400	5.15	34.05			26.93	118.7	.730
824	4.07	34.360			500	4.86	34.14			27.04	108.7	.843
1027	3.33	34.430			600	4.51	34.22			27.14	100.4	.948
					700	4.27	34.28			27.22	93.2	1.045
					800	4.11	34.35			27.28	87.4	1.135
					1000	3.45	34.42			27.41	75.8	1.298

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S‰	O ₂ ml/l	PO ₄ ±	Z	T	S	O ₂	PO ₄ ±	σ _t	S × 10 ⁸	Δ D		
CRH159 42 40.9 N 128 0.0 W DATE 13 JUN 62 1900 GCT WIRE 11 DRY 52.0 WET 50.0 WIND DIRECTION 33 VEL 5 KTS BAR 19 SWELL DIRECTION 34 H 8 T 8 CLOUD 9 AMT 10 WEATHER 02														
0	12.54	32.650	6.22	.50	0	12.54	32.65	6.22	.51	24.69	326.7	0		
10	12.53	32.650	6.06	.58	10	12.53	32.65	6.07	.59	24.69	326.8	.033		
20	12.52	32.650	6.18	.50	20	12.52	32.65	6.19	.51	24.70	326.8	.065		
31	12.07	32.660	6.25	.49	30	12.13	32.66	6.25	.49	24.77	319.7	.098		
52	9.69	32.890	5.86	.91	50	9.94	32.86	5.91	.86	25.32	267.7	.156		
104	8.43	33.420	4.42	1.62	75	8.68	33.14	5.24	1.28	25.74	228.6	.218		
156	7.83	33.810	3.35	1.90	100	8.53	33.38	4.54	1.58	25.95	208.4	.273		
208	7.00	33.930	3.09	2.16	150	7.89	33.78	3.44	1.88	26.36	170.9	.368		
310	6.05	34.020	1.84	2.54	200	7.13	33.92	3.11	2.12	26.58	150.2	.448		
412	5.26	34.040	1.47	2.70	250	6.54	33.98	2.58	2.34	26.71	138.6	.520		
515	4.53	34.120	.86	2.90	300	6.12	34.02	1.96	2.51	26.79	131.4	.588		
616	4.08	34.170	.62	2.96	400	5.35	34.04	1.50	2.69	26.90	121.7	.714		
818	3.95	34.360	.54	3.14	500	4.63	34.11	.94	2.87	27.04	108.4	.829		
1021	3.45	34.480	.48	3.06	600	4.13	34.16	.64	2.95	27.13	100.2	.933		
					700	3.99	34.25	.55	3.05	27.22	92.8	1.030		
					800	3.96	34.34	.55	3.13	27.29	86.1	1.119		
					1000	3.52	34.47	.49	3.08	27.44	73.1	1.278		
RH 165 42 0.0 N 127 52.0 W DATE 14 JUN 62 0115 GCT WIRE 3 DRY 56.0 WET 53.0 WIND DIRECTION 34 VEL 5 KTS BAR 17 SWELL DIRECTION 34 H 7 T 7 CLOUD 9 AMT 10 WEATHER 02														
0	12.42	32.780	6.24	.51	0	12.42	32.79	6.24	.51	24.82	315.0	0		
10	12.41	32.750	.44		10	12.41	32.75	5.38	.44	24.80	317.2	.032		
20	12.42	32.750	.49		20	12.42	32.75	5.41	.49	24.79	317.6	.063		
31	12.40	32.750	5.44	.50	30	12.41	32.75	5.45	.50	24.79	318.0	.095		
52	10.72	32.720	5.50	.61	50	10.91	32.72	5.48	.60	25.05	294.0	.156		
104	9.26	32.830	5.74	.88	75	9.79	32.72	5.70	.71	25.24	276.2	.228		
155	8.49	33.400	4.42	1.42	100	9.29	32.81	5.72	.85	25.38	262.5	.295		
208	7.71	33.810	3.61	1.86	150	8.55	33.34	4.57	1.36	25.91	212.9	.414		
309	6.06	33.940	2.80	2.36	200	7.83	33.76	3.71	1.80	26.35	171.8	.510		
411	5.30	34.020	1.54	2.73	250	6.98	33.92	3.24	2.10	26.60	149.2	.590		
513	4.59	34.060	1.23	2.75	300	6.19	33.93	2.86	2.33	26.71	138.9	.662		
614	4.23	34.170	.63	2.96	400	5.36	34.01	1.66	2.70	26.88	123.6	.793		
815	3.78	34.320	.42	3.22	500	4.67	34.05	1.25	2.75	26.99	112.9	.912		
1015	3.41	34.430	.57	3.01	600	4.27	34.15	.71	2.93	27.11	102.3	1.019		
					700	4.01	34.24	.44	3.11	27.21	93.4	1.117		
					800	3.81	34.31	.44	3.21	27.29	86.6	1.207		
					1000	3.44	34.42	.55	3.04	27.41	75.7	1.369		
RH 145 42 0.0 N 127 26.0 W DATE 14 JUN 62 1600 GCT WIRE - DRY 55.0 WET 54.0 WIND DIRECTION 33 VEL 4 KTS BAR 15 SWELL DIRECTION 33 H 7 T 7 CLOUD 0 AMT 9 WEATHER 01														
0	12.90	32.740	5.71	.50	0	12.90	32.75	5.71	.51	24.69	326.8	0		
10	12.91	32.740	5.80	.52	10	12.91	32.75	5.81	.52	24.69	327.2	.033		
20	12.91	32.740	5.50	.46	20	12.91	32.75	5.51	.46	24.69	327.4	.065		
31	12.90	32.750	5.92	.43	30	12.90	32.75	5.87	.43	24.70	327.1	.098		
52	12.55	32.740	5.64	.51	50	12.61	32.74	5.70	.50	24.75	322.6	.163		
104	9.15	32.950	5.20	1.05	75	11.10	32.78	5.47	.71	25.06	293.4	.240		
156	8.42	33.660	4.02	1.72	100	9.43	32.92	5.24	1.00	25.45	256.4	.309		
208	7.62	33.900	3.21	2.07	150	8.44	33.58	4.17	1.65	26.12	193.5	.421		
309	5.98	33.930	2.69	2.32	200	7.75	33.88	3.31	2.03	26.46	161.6	.510		
411	5.39	34.040	1.37	2.88	250	6.88	33.91	2.96	2.19	26.61	148.3	.587		
514	4.52	34.060	1.22	2.88	300	6.11	33.93	2.72	2.30	26.72	137.9	.659		
616	4.19	34.160	.55	3.12	400	5.43	34.03	1.50	2.83	26.88	123.4	.790		
819	3.74	34.330	.49	3.06	500	4.63	34.06	1.24	2.88	27.00	112.2	.907		
1020	3.38	34.430	.39	3.18	600	4.22	34.14	.74	3.08	27.11	102.7	1.015		
					700	3.98	34.24	.50	3.10	27.21	93.4	1.113		
					800	3.77	34.32	.50	3.08	27.29	85.8	1.202		
					1000	3.41	34.42	.40	3.16	27.41	75.4	1.363		

OBSERVED INTERPOLATED DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
RH 125 42 0.0 N 126 59.7 W DATE 14 JUN 62 2045 GCT WIRE 7 DRY 56.0 WET 55.0 WIND DIRECTION 35 VEL 5 KTS BAR 15 SWELL DIRECTION 33 H 6 T 8 CLOUD 0 AMT 10 WEATHER 02												
0	12.40	32.610	6.15	.43	0	12.90	32.61	6.16	.43	24.59	336.3	0
10	12.91	32.610	6.15	.43	10	12.91	32.61	6.16	.43	24.59	336.7	.034
20	12.86	32.620	6.06	.43	20	12.86	32.63	6.07	.43	24.61	335.3	.067
31	12.84	32.610	6.03	.40	30	12.84	32.61	6.03	.40	24.60	336.0	.101
52	12.84	32.610	6.03	.39	50	12.84	32.61	6.03	.39	24.60	336.5	.168
104	9.36	33.260	5.08	1.18	75	11.45	32.85	5.70	.69	25.05	294.0	.247
156	8.46	33.680	4.05	1.62	100	9.67	33.20	5.18	1.10	25.63	239.6	.314
208	7.73	33.880	3.60	1.80	150	8.49	33.64	4.16	1.58	26.16	189.5	.421
309	6.24	33.940	2.98	2.07	200	7.84	33.86	3.65	1.78	26.43	164.7	.509
410	5.32	34.000	2.29	2.48	250	7.08	33.93	3.33	1.91	26.59	149.6	.588
512	4.62	34.060	1.18	2.71	300	6.36	33.93	3.03	2.05	26.69	140.6	.660
608	4.35	34.140	.67	2.90	400	5.39	33.99	2.37	2.44	26.86	125.5	.793
815	3.88	34.320	.35	2.97	500	4.69	34.05	1.31	2.69	26.99	113.2	.913
1016	3.46	34.430	.30	3.01	600	4.36	34.13	.70	2.89	27.09	105.0	1.022
					700	4.13	34.22	.45	2.96	27.18	96.1	1.122
					800	3.91	34.31	.35	2.96	27.27	88.0	1.214
					1000	3.49	34.42	.30	3.01	27.41	76.3	1.378

**RH 105 42 0.0 N 126 32.0 W DATE 15 JUN 62 0050 GCT WIRE 5 DRY 56.0 WET 55.0
WIND DIRECTION 34 VEL 5 KTS BAR 14 SWELL DIRECTION 34 H 6 T 7 CLOUD 0 AMT 10 WEATHER 20**

0	12.95	32.620	5.85	.50	0	12.95	32.63	5.85	.51	24.59	336.5	0
10	12.95	32.610	5.63	.43	10	12.95	32.61	5.64	.43	24.58	337.5	.034
20	12.93	32.600	4.84	.44	20	12.93	32.60	4.84	.44	24.58	338.0	.067
31	12.87	32.650	5.67	.43	30	12.88	32.64	5.57	.43	24.62	334.3	.101
52	12.37	32.750	5.99	.54	50	12.44	32.74	5.96	.52	24.78	319.6	.168
103	9.74	33.170	5.04	1.16	75	11.23	32.92	5.72	.79	25.14	285.6	.242
155	8.29	33.710	3.99	1.78	100	9.91	33.14	5.13	1.12	25.54	247.6	.309
208	7.64	33.910	3.70	1.97	150	8.38	33.66	4.08	1.73	26.19	186.4	.417
309	6.17	33.970	2.54	2.21	200	7.71	33.89	3.73	1.96	26.47	160.3	.504
411	5.33	33.990	1.81	2.58	250	7.01	33.96	3.24	2.07	26.63	146.3	.580
514	4.88	34.070	1.33	3.00	300	6.29	33.96	2.65	2.19	26.72	137.5	.651
615	4.57	34.160		3.08	400	5.40	33.99	1.87	2.54	26.85	126.0	.783
814	4.05	34.330	.35	3.38	500	4.93	34.06	1.39	2.95	26.96	115.7	.904
1012	3.52	34.450	.42	3.02	600	4.61	34.15	.95	3.08	27.07	106.8	1.015
					700	4.34	34.24	.61	3.24	27.17	97.6	1.117
					800	4.08	34.32	.37	3.37	27.26	89.2	1.211
					1000	3.55	34.44	.40	3.06	27.42	75.5	1.375

**RH 85 42 0.0 N 126 6.5 W DATE 15 JUN 62 0800 GCT WIRE 10 DRY 0 WET 0
WIND DIRECTION 34 VEL 5 KTS BAR 14 SWELL DIRECTION 34 H 6 T 7 CLOUD 0 AMT 10 WEATHER 20**

0	12.98	32.720	6.03	.59	0	12.98	32.72	6.04	.60	24.66	329.7	0
10	12.98	32.740	6.14	.59	10	12.98	32.76	6.15	.60	24.69	327.0	.033
20	13.00	32.720	6.05	.57	20	13.00	32.72	6.06	.57	24.66	330.5	.066
31	12.97	32.720	5.85	.58	30	12.97	32.72	5.87	.58	24.66	330.5	.099
52	12.92	32.740	6.06	.64	50	12.94	32.74	6.03	.63	24.68	329.2	.165
103	9.70	33.110	4.99	1.20	75	11.60	32.87	5.72	.85	25.03	295.8	.243
155	8.66	33.690	3.81	1.90	100	9.92	33.08	5.09	1.16	25.49	252.3	.311
207	7.94	33.890	3.38	2.08	150	8.70	33.64	3.91	1.84	26.12	193.0	.423
307	6.46	33.980	2.40	2.53	200	8.03	33.88	3.42	2.07	26.41	166.1	.512
405	5.60	34.060	1.25	3.02	250	7.27	33.95	2.98	2.26	26.58	150.7	.592
504	5.17	34.130	.78	3.00	300	6.56	33.97	2.48	2.50	26.70	140.2	.664
603	4.65	34.200	.56	3.30	400	5.63	34.06	1.30	3.00	26.88	123.8	.796
802	4.14	34.370	.41	3.42	500	5.18	34.13	.79	3.00	26.99	113.5	.915
1003	3.60	34.420	.47	3.26	600	4.67	34.20	.56	3.29	27.10	103.7	1.023
					700	4.36	34.29	.45	3.42	27.21	94.0	1.122
					800	4.14	34.37	.41	3.42	27.30	86.2	1.212
					1000	3.61	34.42	.47	3.26	27.39	78.0	1.376

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	O ₂	S x 10 ⁶	Δ D
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RH 65 42 0.0 N 125 38.9 W DATE 15 JUN 62 1153 GCT WIRE - DRY O WET O
WIND DIRECTION 36 VEL 5 KTS BAR 14 SWELL DIRECTION 32 H 8 T 6 CLOUD - AMT 9 WEATHER 20

0	12.72	32.010	.61	0	12.72	32.01		.62	24.16	377.2	0
10	12.72	32.020	.52	10	12.72	32.02		.52	24.17	376.6	.038
20	12.71	32.070	.51	20	12.71	32.07		.51	24.21	373.0	.075
31	12.87	32.260	.53	30	12.85	32.24		.53	24.31	363.7	.112
52	12.80	32.720	.59	50	12.83	32.68		.58	24.65	331.5	.181
100	9.75	33.180	1.31	75	11.50	32.99		.90	25.15	284.7	.259
150	8.14	33.660	1.85	100	9.75	33.18		1.32	25.60	241.9	.324
201	7.63	33.920	2.12	150	8.14	33.67		1.86	26.23	182.7	.430
300	6.57	34.000	2.53	200	7.63	33.92		2.12	26.50	157.6	.515
390	5.75	34.050	2.85	250	7.10	34.00		2.34	26.64	145.0	.591
498	5.07	34.160	3.02	300	6.57	34.00		2.53	26.72	138.2	.662
597	4.71	34.210	3.24	400	5.74	34.05		2.85	26.86	125.5	.794
797	4.16	34.330	3.30	500	5.06	34.16		3.02	27.03	109.5	.911
995	3.68	34.400	3.30	600	4.70	34.21		3.24	27.11	103.0	1.017
				700	4.41	34.27		3.27	27.19	95.7	1.117
				800	4.15	34.33		3.30	27.27	89.1	1.209
				1000	3.67	34.40		3.30	27.37	79.9	1.378

RH 45 42 0.0 N 125 17.5 W DATE 15 JUN 62 1645 GCT WIRE 6 DRY 53.0 WET 52.0
WIND DIRECTION 36 VEL 5 KTS BAR 14 SWELL DIRECTION 34 H 6 T 8 CLOUD 0 AMT 6 WEATHER 01

0	11.61	32.520	.84	0	11.61	32.52		.85	24.77	319.7	0
10	11.58	32.520	.67	10	11.58	32.52		.68	24.77	319.4	.032
20	11.11	32.620	.74	20	11.11	32.63		.75	24.93	304.1	.063
31	10.50	32.700	.82	30	10.56	32.69		.81	25.09	289.9	.093
52	9.49	32.830	1.14	50	9.57	32.82		1.10	25.34	265.5	.148
104	8.58	33.610	2.01	75	8.94	33.17		1.56	25.72	230.1	.210
155	7.88	33.860	2.14	100	8.61	33.55		1.95	26.07	197.4	.264
207	7.51	33.950	2.35	150	7.94	33.85		2.13	26.41	166.0	.355
309	6.11	34.000	2.76	200	7.56	33.94		2.32	26.54	154.5	.435
410	5.18	34.040	3.03	250	6.95	33.98		2.53	26.65	144.0	.509
510	4.82	34.130	3.08	300	6.24	34.00		2.73	26.76	134.3	.579
610	4.60	34.210	3.26	400	5.25	34.04		3.01	26.91	120.7	.706
810	4.13	34.350	3.54	500	4.84	34.12		3.08	27.02	110.0	.821
1011	3.56	34.420	3.48	600	4.62	34.20		3.24	27.11	102.8	.928
				700	4.40	34.28		3.41	27.20	95.1	1.027
				800	4.16	34.34		3.53	27.28	88.2	1.118
				1000	3.58	34.42		3.49	27.39	77.8	1.284

RH 35 42 0.0 N 124 58.8 W DATE 15 JUN 62 1825 GCT WIRE - DRY 52.0 WET 51.0
WIND DIRECTION 35 VEL 5 KTS BAR 14 SWELL DIRECTION 34 H 7 T 8 CLOUD 0 AMT 7 WEATHER 02

0	9.63	32.740	6.31	1.15	0	9.63	32.75	6.32	1.15	25.28	270.9	0
10	9.61	32.740	5.91	1.03	10	9.61	32.75	5.92	1.04	25.28	270.7	.027
20	9.54	32.750	5.69	1.02	20	9.54	32.75	5.69	1.02	25.30	269.1	.054
30	9.53	32.750	6.05	1.08	30	9.53	32.75	6.06	1.08	25.30	269.1	.081
49	9.19	32.910	4.94	1.14	50	9.17	32.92	4.91	1.15	25.40	251.2	.133
100	8.29	33.660	3.84	1.82	75	8.70	33.70	4.21	1.44	25.86	217.2	.192
151	7.81	33.900	2.68	2.42	100	8.29	33.67	3.85	1.83	26.21	184.1	.242
203	7.06	34.010	2.14	2.49	150	7.82	33.90	2.70	2.41	26.46	160.7	.328
303	5.92	34.000	2.00	2.71	200	7.11	34.01	2.21	2.49	26.65	143.6	.404
403	5.39	34.000	1.06	2.89	250	6.46	34.01	2.09	2.59	26.73	135.9	.474
503	5.19	34.190	.59	3.14	300	5.95	34.00	2.00	2.70	26.80	130.3	.540
603	4.65	34.250	.54	3.35	400	5.40	34.09	1.09	2.88	26.93	118.7	.665
800	4.05	34.360	.49	3.26	500	5.20	34.19	.60	3.13	27.04	109.2	.779
					600	4.67	34.25	.54	3.35	27.14	99.9	.883
					700	4.28	34.31	.51	3.31	27.23	91.7	.979
					800	4.05	34.36	.49	3.26	27.30	85.8	1.068

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ #	Z	T	S	O ₂	PO ₄ #	σ _t	S × 10 ⁶	Δ D	

RH 25 41 59.8 N 124 46.2 W DATE 15 JUN 62 2109 GCT WIRE 15 DRY 52.0 WET 50.0
WIND DIRECTION -- VEL 0 KTS BAR 14 SWELL DIRECTION 32 H 8 T 6 CLOUD 0 AMT 1 WEATHER 01

0	9.28	33.220	5.76	1.45	0	9.28	33.22	5.77	1.46	25.71	229.9	0
10	9.27	33.220	5.69	1.32	10	9.27	33.22	5.69	1.33	25.71	229.9	.023
19	9.21	33.240	5.75	1.28	20	9.20	33.24	5.71	1.30	25.74	227.8	.046
28	9.11	33.270	5.27	1.56	30	9.07	33.30	5.19	1.61	25.80	221.7	.068
49	8.64	33.630	4.58	2.02	50	8.61	33.64	4.54	2.04	26.14	189.8	.109
99	7.67	33.920	3.08	2.45	75	8.00	33.85	3.71	2.34	26.40	165.9	.154
148	6.96	33.950	2.81	2.28	100	7.46	33.92	3.07	2.45	26.53	153.2	.194
197	6.40	33.990	2.57	2.33	150	6.94	33.95	2.80	2.28	26.63	144.7	.268
295	5.81	34.030	1.67	2.62	200	6.38	33.99	2.55	2.34	26.73	135.1	.338
393	5.24	34.120	.85	2.96	250	6.04	34.01	2.11	2.47	26.79	130.0	.404
492	5.03	34.210	.55	2.80	300	5.78	34.03	1.62	2.64	26.84	125.8	.468
591	4.72	34.250	.51	2.71	400	5.22	34.13	.82	2.96	26.90	113.5	.588
					500	5.01	34.22	.54	2.79	27.08	104.9	.697
					600	4.69	34.25	.52	2.70	27.15	99.8	.799

RH 15 42 0.0 N 124 32.8 W DATE 16 JUN 62 0001 GCT WIRE 0 DRY 52.0 WET 50.0
WIND DIRECTION 34 VEL 6 KTS BAR 12 SWELL DIRECTION 32 H 10 T 6 CLOUD 0 AMT 1 WEATHER 02

0	8.73	33.540	4.72		0	8.73	33.54	4.72	0	26.05	197.9	0
10	8.72	33.550	4.58	1.99	10	8.72	33.55	4.58	1.99	26.06	197.2	.020
20	8.63	33.590	4.51	1.82	20	8.63	33.58	4.52	1.83	26.09	193.8	.039
30	8.27	33.690	4.29	2.22	30	8.27	33.70	4.29	2.22	26.23	180.5	.058
51	7.79	33.840	3.81	1.97	50	7.81	33.83	3.83	1.99	26.41	163.8	.092
78	7.51	33.940	3.07	2.19	75	7.53	33.93	3.15	2.15	26.53	153.2	.132
105	7.20	34.030	2.59	2.54	100	7.26	34.01	2.66	2.47	26.63	143.7	.169

RH 5 42 0.0 N 124 19.4 W DATE 16 JUN 62 0225 GCT WIRE 0 DRY 49.0 WET 48.0
WIND DIRECTION 33 VEL 7 KTS BAR 10 SWELL DIRECTION 33 H 9 T 7 CLOUD - AMT 2 WEATHER 02

0	6.50	34.060	1.90	2.52	0	6.51	34.06	1.90	2.52	26.78	128.8	0
10	6.49	34.070	1.52	2.10	10	6.49	34.08	1.52	2.10	26.78	128.0	.013
20	6.47	34.070	2.59	2.84	20	6.47	34.08	2.60	2.85	26.79	127.9	.026
30	6.47	34.070	2.52	2.73	30	6.47	34.08	2.52	2.73	26.79	128.0	.038

AH 5 46 14.5 N 124 13.7 W DATE 24 JUL 62 0437 GCT WIRE 3 DRY 56.2 WET 56.2
WIND DIRECTION 34 VEL 5 KTS BAR 18 SWELL DIRECTION 34 H 4 T 8 CLOUD 0 AMT 10 WEATHER 00

0	13.20	22.320			0	13.20	22.32			16.61	1102.3	0
10	10.09	32.834			10	10.09	32.84			25.28	271.3	.069
20	7.64	33.612			20	7.65	33.62			26.27	177.4	.091
30	6.82	33.906			30	6.82	33.91			26.61	144.7	.107
40	6.56	33.949			50	6.41	33.97			26.72	135.0	.135
50	6.40	33.967										

AH 15 46 14.4 N 124 27.4 W DATE 24 JUL 62 0630 GCT WIRE 7 DRY 57.5 WET 57.0
WIND DIRECTION 34 VEL 4 KTS BAR -- SWELL DIRECTION 34 H 4 T 7 CLOUD - AMT 10 WEATHER 02

0	12.25	32.555	.39		0	12.25	32.56	.39		24.67	328.5	0
10	9.15	32.610	1.80		10	9.15	32.61	1.80		25.26	273.4	.030
20	7.92	32.820	1.93		20	7.93	32.83	1.93		25.61	240.2	.056
30	7.68	33.138	2.20		30	7.69	33.14	2.21		25.89	213.3	.078
51	7.40	33.554	2.17		50	7.41	33.54	2.17		26.24	180.3	.118
77	7.02	33.838	2.85		75	7.05	33.82	2.79		26.51	154.6	.160
103	6.69	33.918	2.97		100	6.73	33.91	2.96		26.63	144.0	.197
154	6.17	34.000	2.75		150	6.20	34.00	2.77		26.76	131.8	.266
205	6.11	33.994	2.83		200	6.12	34.00	2.81		26.77	131.3	.332

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ ³	Z	T	S	O ₂	PO ₄ ³	σ _t	δ × 10 ³	Δ D
AH 25 46 14.4 N 124 61.9 W DATE 24 JUL 62 0821 GCT WIRE 6 DRY 56.0 WET 56.0												
WIND DIRECTION 34 VEL 4 KTS BAR 19 SWELL DIRECTION 34 H 3 T 7 CLOUD - AMT 10 WEATHER 02												
0 13.87 32.282	.42	0 13.88 32.29	.42	24.15 378.9	0							
10 13.57 32.245	.40	10 13.57 32.26	.40	24.18 376.0	.038							
20 9.95 32.340	1.08	20 9.95 32.34	1.08	24.92 305.8	.072							
30 9.84	0	30 9.84 32.47	1.28	25.03 295.0	.102							
51 8.17 32.846	1.30	50 8.26 32.83	1.29	25.56 245.2	.156							
77 7.80 33.481	1.88	75 7.83 33.44	1.84	26.10 194.0	.211							
103 7.80 33.650	2.08	100 7.80 33.64	2.07	26.26 178.7	.257							
154 7.17 33.900	2.24	150 7.23 33.89	2.23	26.54 153.6	.340							
205 6.63 33.959	2.46	200 6.68 33.95	2.44	26.66 141.9	.414							
AH 35 46 14.4 N 124 51.2 W DATE 24 JUL 62 1030 GCT WIRE 7 DRY 57.0 WET 57.0												
WIND DIRECTION -- VEL - KTS BAR 19 SWELL DIRECTION 31 H 3 T 7 CLOUD - AMT 10 WEATHER 02												
0 14.94 32.178	.24	0 14.94 32.18	.25	23.84 407.9	0							
10 14.98 32.181	.28	10 14.98 32.19	.28	23.84 408.7	.041							
20 12.72 32.569	.34	20 12.72 32.57	.34	24.60 336.4	.078							
30 10.68 32.575	.67	30 10.68 32.58	.68	24.97 300.4	.110							
52 8.47 32.614	.92	50 8.93 32.60	.90	25.28 271.6	.167							
78 8.44 33.124	1.67	75 8.49 33.06	1.57	25.70 231.8	.230							
104 8.11 33.495	2.35	100 8.16 33.45	2.26	26.06 198.3	.284							
156 7.66 33.880	2.30	150 7.71 33.86	2.35	26.45 162.3	.374							
208 7.13 33.940	2.55	200 7.21 33.93	2.50	26.57 150.7	.452							
305 6.16 34.000	2.77	250 6.68 33.97	2.69	26.68 141.4	.525							
404 5.58 34.056	2.62	300 6.20 34.00	2.77	26.76 133.9	.594							
501 5.02 34.131	2.87	400 5.60 34.05	2.63	26.88 123.6	.723							
599 4.66 34.184	3.08	500 5.03 34.13	2.87	27.01 111.4	.840							
		600 4.66 34.18	3.08	27.09 104.5	.948							
AH 45 46 14.6 N 125 10.5 W DATE 24 JUL 62 1300 GCT WIRE 0 DRY 59.0 WET 59.0												
WIND DIRECTION 34 VEL 5 KTS BAR 19 SWELL DIRECTION 34 H 4 T 7 CLOUD 0 AMT 10 WEATHER 02												
0 15.39 32.276	5.76	.34	0 15.39 32.28	5.77	.34	23.82 410.0	0					
10 15.41 32.276	5.85	.35	10 15.41 32.28	5.85	.35	23.82 410.6	.041					
20 15.40 32.280	5.66	.24	20 15.40 32.28	5.67	.25	23.82 410.4	.082					
30 15.37 32.282	5.74	.31	30 15.38 32.29	5.74	.31	23.83 409.8	.123					
51 13.39 32.534	6.79	.62	50 13.51 32.52	6.74	.60	24.40 356.2	.200					
102 8.48 33.688	3.05	2.54	75 10.80 33.09	5.38	1.53	25.35 265.2	.277					
153 8.26 33.821	2.61	2.66	100 8.63 33.65	3.25	2.47	26.14 190.5	.334					
204 7.92 33.901	2.19	2.59	150 8.27 33.81	2.64	2.65	26.33 173.6	.425					
305 7.03 33.980	2.15	3.25	200 7.95 33.90	2.22	2.59	26.44 163.6	.510					
407 5.82 34.032	1.67	3.08	250 7.55 33.95	2.17	2.88	26.54 155.1	.589					
508 5.76 34.099	.95	3.08	300 7.08 33.98	2.15	3.21	26.63 147.0	.665					
609 4.91 34.160	.66	3.30	400 5.89 34.03	1.62	3.10	26.83 129.1	.803					
810 4.18 34.295	.39	3.35	500 5.76 34.09	.99	3.08	26.89 123.3	.929					
1012 3.63 34.412	.50	3.59	600 5.00 34.15	.68	3.28	27.03 110.8	1.046					
1212 3.17 34.470	.46	3.11	700 4.49 34.22	.49	3.34	27.14 100.5	1.151					
			800 4.20 34.29	.39	3.35	27.23 92.8	1.248					
			1000 3.66 34.41	.49	3.58	27.38 79.5	1.420					
			1200 3.20 34.47	.47	3.16	27.47 70.7	1.570					
AH 65 46 14.5 N 125 38.8 W DATE 24 JUL 62 1645 GCT WIRE 10 DRY 59.9 WET 59.6												
WIND DIRECTION 34 VEL 5 KTS BAR 20 SWELL DIRECTION 34 H 5 T 7 CLOUD 9 AMT 10 WEATHER 00												
0 15.50 32.358	5.74	.30	0 15.50 32.36	5.74	.30	23.86 406.3	0					
10 15.50 32.318	5.74	.33	10 15.50 32.32	5.74	.33	23.83 409.4	.041					
20 15.49 32.318	5.72	20 15.49 32.32	5.72	23.83 409.5	.082							
30 13.67 32.375	5.27	.38	30 13.67 32.38	6.28	.38	24.26 368.9	.121					
51 10.05 32.563	6.34	.70	50 10.19 32.55	6.34	.68	25.04 294.7	.187					
76 8.82 32.724	5.74	.93	75 8.83 32.72	5.78	.92	25.38 262.0	.257					
101 8.41 33.134	4.67	1.60	100 8.42 33.12	4.71	1.57	25.76 226.7	.318					
151 7.61 33.783	3.13	2.10	150 7.63 33.77	3.35	2.10	26.39 157.3	.416					
202 6.97 33.946	2.46	2.45	200 6.99 33.95	2.49	2.44	26.62 146.6	.495					
300 6.06 34.017	1.72	2.87	250 6.48 34.00	2.01	2.70	26.73 136.6	.565					
400 5.35 34.092	1.20	2.94	300 6.07 34.02	1.73	2.88	26.40 130.3	.632					
499 4.96 34.126	.80	3.16	400 5.35 34.10	1.20	2.95	26.95 117.4	.756					
597 4.61 34.195	.49	3.28	500 4.96 34.13	.80	3.16	27.02 110.8	.870					
796 4.07 34.311	.21	3.30	600 4.60 34.20	.48	3.28	27.11 103.0	.977					
994 3.60 34.405	.37	3.40	700 4.31 34.26	.34	3.29	27.19 95.6	1.076					
			800 4.06 34.31	.31	3.30	27.26 89.4	1.168					
			1000 3.59 34.41	.37	3.40	27.38 78.5	1.336					

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ ⁵	Z	T	S	O ₂	PO ₄ ⁵	σ _t	δ × 10 ⁸	Δ D
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AH 85 46 14.4 N 126 9.0 W DATE 24 JUL 62 2045 GCT WIRE 4 DRY 0 WET 0
 WIND DIRECTION 34 VEL 5 KTS BAR 21 SWELL DIRECTION 34 H 5 T 8 CLOUD 9 AMT 7 WEATHER 02

0	15.40	32.559	.38		0	15.40	32.56	.38	24.03	389.5	0
10	15.37	32.557	.43		10	15.38	32.56	.43	24.04	389.2	.039
20	14.71	32.572	.55		20	14.71	32.58	.56	24.19	374.8	.077
30	13.02	32.586	.54		30	13.02	32.59	.54	24.55	341.0	.113
52	9.66	32.582	.42		50	9.90	32.58	.88	25.11	287.9	.176
77	8.90	32.602	.94		75	8.96	32.59	.94	25.27	273.0	.246
103	8.60	32.994	1.46		100	8.62	32.94	1.39	25.59	242.7	.310
154	8.06	33.759	2.18		150	8.11	33.71	2.14	26.27	178.8	.416
205	7.12	33.877	2.20		200	7.22	33.87	2.20	26.52	155.6	.499
305	6.03	33.982	2.70		250	6.54	33.94	2.42	26.67	141.9	.574
405	5.35	34.025	2.72		300	6.07	33.98	2.67	26.76	133.5	.642
504	4.55	34.043	3.28		400	5.38	34.02	2.72	26.88	123.1	.771
604	4.53	34.209			500	4.58	34.04	3.25	26.99	112.8	.889
805	4.00	34.342	3.42		600	4.53	34.20	3.32	27.12	101.8	.996
1004	3.59	34.409	3.40		700	4.31	34.29	3.37	27.22	93.0	1.093
					800	4.02	34.34	3.42	27.29	86.8	1.183
					1000	3.60	34.41	3.40	27.38	78.6	1.348

AH 105 46 14.3 N 126 37.8 W DATE 25 JUL 62 0050 GCT WIRE 8 DRY 60.2 WET 59.1
 WIND DIRECTION 34 VEL 5 KTS BAR 21 SWELL DIRECTION 34 H 5 T 8 CLOUD - AMT 3 WEATHER 02

0	15.68	32.299	5.80	.31	0	15.68	32.30	5.81	.31	23.77	414.4	0
10	15.49	32.351	5.79	.32	10	15.49	32.36	5.80	.32	23.86	406.8	.041
20	15.05	32.478	5.90	.27	20	15.05	32.48	5.91	.27	24.05	388.6	.081
30	13.77	32.566	6.35	.43	30	13.77	32.57	6.35	.43	24.38	356.8	.118
52	9.61	32.664	6.16	.84	50	9.96	32.66	6.21	.80	25.16	283.3	.182
77	8.73	32.807	5.73	1.17	75	8.80	32.79	5.78	1.14	25.45	256.2	.250
103	8.55	33.344	4.34	1.91	100	8.55	33.28	4.52	1.82	25.87	216.7	.309
154	8.01	33.817	2.19		150	8.06	33.80	3.11	2.17	26.35	171.4	.406
205	7.52	33.957	2.62	2.34	200	7.57	33.95	2.62	2.33	26.54	154.0	.487
305	6.45	34.071	2.00	2.82	250	7.04	34.01	2.28	2.56	26.66	143.2	.561
407	5.66	34.064	1.24	2.99	300	6.50	34.03	2.02	2.80	26.75	135.3	.631
507	4.95	34.129	.79	3.30	400	5.61	34.06	1.29	2.98	26.89	123.1	.760
604	4.46	34.224	.46	3.39	500	4.99	34.12	.81	3.28	27.01	111.4	.877
802	3.92	34.318	.32	3.33	600	4.48	34.22	.47	3.39	27.14	99.8	.983
1000	3.41	34.304	.32	3.25	700	4.16	34.28	.34	3.38	27.22	92.3	1.079
					800	3.92	34.32	.32	3.33	27.28	87.5	1.169
					1000	3.41	34.39	.32	3.25	27.39	77.5	1.334

AH 125 46 14.4 N 127 6.5 W DATE 25 JUL 62 0500 GCT WIRE 5 DRY 58.0 WET 58.0
 WIND DIRECTION 34 VEL 5 KTS BAR 21 SWELL DIRECTION 34 H 5 T 7 CLOUD 9 AMT 10 WEATHER 02

0	15.66	32.187	5.79	.50	0	15.66	32.19	5.80	.51	23.60	422.2	0
10	15.67	32.189	5.76	.36	10	15.67	32.19	5.77	.36	23.60	422.5	.042
20	15.40	32.283	5.70	.40	20	15.40	32.29	5.70	.40	23.82	410.2	.084
30	14.51	32.575	6.06	.46	30	14.51	32.58	6.07	.46	24.24	370.8	.123
52	10.54	32.592	6.52	.71	50	10.90	32.59	6.51	.68	24.94	303.7	.190
77	9.15	32.728	5.76	1.23	75	9.19	32.71	5.85	1.18	25.32	267.8	.262
103	8.56	33.219	4.58	1.91	100	8.60	33.16	4.72	1.84	25.76	226.3	.324
154	7.72	33.781	3.13	2.33	150	7.77	33.75	3.20	2.32	26.34	170.8	.423
205	7.24	33.931	2.70	2.52	200	7.28	33.93	2.72	2.51	26.56	151.9	.503
305	6.18	34.033	1.76	2.90	250	6.75	34.00	2.27	2.69	26.69	140.3	.576
406	5.53	34.092	1.10	3.22	300	6.23	34.03	1.81	2.88	26.79	131.7	.644
506	4.86	34.124	.66	3.34	400	5.56	34.08	1.13	3.20	26.91	121.2	.771
606	4.54	34.206	.44	3.53	500	4.90	34.12	.68	3.33	27.02	110.5	.887
806	3.97	34.375	.31	3.64	600	4.55	34.20	.45	3.52	27.12	102.1	.993
1004	3.41	34.397	.47	3.53	700	4.27	34.29	.33	3.62	27.22	92.4	1.090
					800	3.99	34.37	.31	3.64	27.31	84.2	1.178
					1000	3.42	34.40	.46	3.53	27.30	77.5	1.340

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	σ ₁	δ × 10 ⁶	Δ D	

AH 145 46 14.4 N 127 35.0 W DATE 25 JUL 62 0835 GCT WIREF 3 DRY 58.0 WET 57.0
WIND DIRECTION 32 VEL 5 KTS BAR 23 SWELL DIRECTION 34 H 5 T 8 CLOUD 0 AMT 10 WEATHER 20

0	15.17	32.566	.43		0	15.17	32.57		.43	24.09	384.2	0
10	15.18	32.564	.53		10	15.18	32.57		.54	24.09	384.8	.038
20	15.18	32.564	.43		20	15.18	32.57		.43	24.09	385.0	.077
30	13.95	32.506	.53		30	14.09	32.59		.52	24.34	361.4	.114
52	10.83	32.580	.64		50	11.12	32.58		.63	24.90	307.9	.181
78	8.88	32.663	1.11		75	9.02	32.64		1.04	25.30	270.4	.253
104	8.06	33.104	1.72		100	8.13	33.03		1.63	25.73	229.3	.316
156	7.77	33.850	2.48		150	7.80	33.78		2.42	26.38	169.0	.415
208	7.02	33.955	2.70		200	7.15	33.94		2.69	26.59	149.2	.495
310	5.67	33.967	2.99		250	6.41	33.96		2.84	26.70	138.9	.567
413	5.08	34.031	3.21		300	5.78	33.96		2.97	26.78	131.6	.635
515	4.80	34.128	3.48		400	5.12	34.02		3.18	26.91	120.4	.760
616	4.39	34.192	3.48		500	4.84	34.11		3.45	27.02	110.4	.876
818	3.86	34.307	3.64		600	4.46	34.18		3.48	27.12	102.3	.982
1019	3.30	34.401	3.54		700	4.15	34.24		3.55	27.20	94.9	1.081
					800	3.90	34.30		3.63	27.26	88.7	1.172
					1000	3.35	34.39		3.56	27.39	77.0	1.338

AH 165 46 14.6 N 128 3.8 W DATE 25 JUL 62 1245 GCT WIREF 3 DRY 60.0 WET 58.0
WIND DIRECTION 32 VEL 5 KTS BAR 23 SWELL DIRECTION 34 H 6 T 8 CLOUD 9 AMT 10 WEATHER 02

0	15.27	32.555	5.81	.44	0	15.27	32.56	5.82	.44	24.06	387.1	0
10	15.27	32.505	5.96	.44	10	15.27	32.60	5.96	.44	24.09	384.4	.039
20	14.84	32.503	5.04	.45	20	14.84	32.60	5.94	.45	24.18	375.9	.077
31	14.21	32.611	6.15	.46	30	14.29	32.61	6.13	.46	24.31	364.2	.114
52	9.99	32.590	6.47	.78	50	10.41	32.59	6.46	.74	25.03	295.4	.180
78	8.87	32.830	5.72	1.20	75	8.88	32.79	5.85	1.15	25.44	257.1	.249
104	8.02	33.225	4.66	1.68	100	8.13	33.16	4.82	1.61	25.84	219.1	.308
156	7.24	33.791	4.01	1.91	150	7.29	33.74	4.03	1.91	26.42	164.9	.404
208	6.66	33.901	3.51	2.12	200	6.74	33.90	3.59	2.09	26.61	146.6	.482
310	5.66	33.975	1.80	2.79	250	6.21	33.94	2.80	2.41	26.72	137.3	.553
413	5.07	34.040	1.10	2.88	300	5.74	33.97	1.97	2.73	26.80	130.0	.620
515	4.82	34.171	.67	3.03	400	5.12	34.03	1.15	2.87	26.92	119.5	.744
606	4.44	34.207	.42	2.94	500	4.85	34.12	.72	3.01	27.02	110.3	.859
818	3.83	34.319	.41	3.22	600	4.47	34.20	.43	2.95	27.13	101.0	.965
1019	3.33	34.398	.31	3.22	700	4.14	34.26	.42	3.04	27.21	93.2	1.062
					800	3.87	34.31	.41	3.19	27.28	87.3	1.152
					1000	3.37	34.39	.32	3.22	27.39	77.3	1.317

ANH173 45 42.5 N 128 2.0 W DATE 25 JUL 62 1821 GCT WIREF 4 DRY 59.0 WET 61.0
WIND DIRECTION 34 VEL 5 KTS BAR 24 SWELL DIRECTION 34 H 6 T 8 CLOUD 9 AMT 7 WEATHER -

0	15.79	32.196	.37		0	15.79	32.19		.38	23.66	425.0	0
10	15.79	32.232	.38		10	15.78	32.24		.38	23.70	421.6	.042
20	13.64	32.678	.67		20	13.64	32.68		.68	24.50	345.8	.081
30	12.72	32.669	.65		30	12.72	32.67		.65	24.67	329.3	.114
52	9.47	32.692	.86		50	10.12	32.69		.84	25.16	283.5	.176
77	8.63	32.711	1.01		75	8.68	32.71		1.00	25.40	260.3	.244
102	7.98	32.809	1.23		100	8.02	32.80		1.21	25.57	244.7	.307
152	7.33	33.630	1.91		150	7.35	33.59		1.88	26.29	176.7	.412
203	6.86	33.884	2.26		200	6.89	33.88		2.25	26.58	150.1	.494
313	5.70	33.951	2.71		250	6.35	33.91		2.48	26.68	141.4	.567
405	5.02	34.023	3.01		300	5.83	33.94		2.67	26.77	133.3	.635
505	4.41	34.095	3.26		400	5.05	34.02		3.00	26.92	119.5	.762
606	4.04	34.157	3.28		500	4.44	34.09		3.25	27.05	107.4	.875
807	3.65	34.302	3.38		600	4.06	34.15		3.28	27.13	100.0	.979
1007	3.36	34.463	3.46		700	3.82	34.22		3.32	27.21	92.8	1.075
					800	3.66	34.30		3.38	27.29	86.0	1.164
					1000	3.37	34.46		3.46	27.44	72.4	1.323

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	Sx10 ⁶	Δ D		
ANH169	46 10.9 N	127 58.3 W	DATE 26 JUL 62	2240 GCT	WIRE 0	DRY 64.0	WET 61.0							
WIND DIRECTION 35 VEL 5 KTS	BAR 24	SWELL DIRECTION 35 H	6 T	8 CLOUD	9 AMT	2 WEATHER 01								
0	16.44	31.260	5.74	.22	0	16.44	31.26	5.74	.24	22.81	506.6	0		
10	16.46	31.255	5.77	.16	10	16.46	31.26	5.78	.29	22.80	507.6	.051		
20	14.52	32.388	6.22	.37	20	14.52	32.39	6.22	.33	24.09	384.4	.095		
30	13.53		6.52	.44	30	13.53	32.46	6.53	.44	24.35	360.0	.133		
51	11.51	32.624	6.78	.50	50	11.60	32.62	6.78	.56	24.84	313.7	.200		
102	7.94	32.785	6.17	1.20	75	9.50	32.68	6.69	.82	25.25	275.1	.273		
153	7.81	33.612	4.12	2.04	100	8.03	32.78	6.22	1.17	25.55	246.4	.339		
204	7.11		3.23	2.19	150	7.82	33.56	4.24	2.00	26.20	185.9	.447		
305	6.16	33.967	2.01	2.58	200	7.17	33.90	3.28	2.18	26.56	152.1	.531		
407	5.46	34.056	1.29	3.20	250	6.63	33.84	2.60	2.35	26.58	150.4	.607		
507	4.54	34.080	.90	3.04	300	6.20	33.96	2.06	2.56	26.73	136.9	.679		
607	4.20	34.155	.54	3.37	400	5.51	34.05	1.33	3.17	26.89	122.5	.808		
806	3.78	34.296	.57	3.41	500	4.64	34.08	.92	3.06	27.01	110.7	.925		
1007	3.24	34.376	.34	3.15	600	4.22	34.15	.56	3.34	27.11	102.1	1.031		
1207	2.98	34.490	.53	3.10	700	3.98	34.23	.55	3.39	27.20	94.3	1.129		
					800	3.79	34.29	.56	3.41	27.27	87.8	1.220		
					1000	3.26	34.37	.35	3.16	27.39	77.3	1.385		
					1200	2.98	34.49	.52	3.10	27.50	67.0	1.530		
NH 165	44 39.4 N	127 55.0 W	DATE 26 JUL 62	0330 GCT	WIRE 3	DRY 62.0	WET 60.5							
WIND DIRECTION 34 VEL 5 KTS	BAR 23	SWELL DIRECTION 34 H	6 T	7 CLOUD	0 AMT	4 WEATHER 03								
0	16.68	31.207	5.70	.22	0	16.69	31.21	5.70	.23	22.71	515.7	0		
10	16.71	31.224	5.76	.16	10	16.71	31.23	5.77	.17	22.72	515.3	.052		
20	15.46	31.924	5.92	.37	20	15.46	31.93	5.93	.38	23.53	437.7	.099		
30	14.39	32.352	6.66	.43	30	14.39	32.36	6.67	.43	24.09	384.7	.140		
52	11.75	32.610	6.91	.53	50	11.99	32.59	6.89	.52	24.75	322.7	.211		
77	9.35	32.610	6.41		75	9.50	32.61	6.47	.85	25.20	280.1	.286		
103	8.36	32.883	5.50	1.32	100	8.42	32.84	5.61	1.26	25.55	247.0	.352		
154	7.60	33.655	3.80	1.99	150	7.63	33.60	3.91	1.95	26.25	180.4	.459		
205	6.99	33.888	3.23	2.13	200	7.05	33.89	3.26	2.13	26.56	151.5	.542		
306	5.75	33.943	2.60	2.55	250	6.41	33.92	2.95	2.32	26.67	141.8	.615		
406	4.94	34.014	1.39	2.73	300	5.82	33.94	2.64	2.53	26.77	133.3	.684		
506	4.49	34.076	.95	3.05	400	4.98	34.01	1.46	2.72	26.92	119.4	.810		
606	4.24	34.167	.59	3.07	500	4.51	34.07	.96	3.03	27.02	109.7	.925		
806	3.74	34.315	.26	3.20	600	4.25	34.16	.61	3.07	27.12	101.6	1.030		
1004	3.32	34.403	.38	3.23	700	4.00	34.24	.37	3.13	27.21	93.2	1.128		
					800	3.75	34.31	.26	3.20	27.29	86.0	1.217		
					1000	3.33	34.40	.37	3.23	27.40	76.0	1.379		
NH 145	44 39.5 N	127 27.3 W	DATE 26 JUL 62	0730 GCT	WIRE 10	DRY 61.0	WET 59.0							
WIND DIRECTION 35 VEL 5 KTS	BAR 23	SWELL DIRECTION 35 H	5 T	8 CLOUD	- AMT	0 WEATHER 00								
0	16.59	31.233	5.63	.29	0	16.59	31.24	5.64	.29	22.75	511.8	0		
10	16.58	31.230	5.55	.25	10	16.58	31.23	5.56	.25	22.75	512.1	.051		
20	16.58	31.249	5.60	.20	20	16.58	31.25	5.60	.21	22.77	510.9	.102		
30	13.64	32.441	6.30	.48	30	13.64	32.45	6.31	.49	24.31	363.4	.146		
52	10.80	32.588	7.01	.69	50	10.93	32.57	7.00	.68	24.93	305.2	.213		
76	9.27	32.629	6.19	.95	75	9.31	32.62	6.25	.94	25.24	276.0	.286		
102	8.25	33.112	4.61	1.63	100	8.31	33.07	4.73	1.58	25.74	228.6	.349		
152	7.46	33.750	3.63	2.16	150	7.48	33.73	3.64	2.15	26.38	168.3	.448		
203	6.68	33.912	2.98	2.32	200	6.72	33.91	3.01	2.32	26.63	145.6	.526		
304	5.56	33.956	2.00	2.74	250	6.09	33.95	2.48	2.52	26.74	135.0	.596		
406	4.92	34.015	1.31	3.01	300	5.59	33.95	2.03	2.72	26.80	129.5	.662		
505	4.55	34.086	.84	3.12	400	4.95	34.01	1.34	3.00	26.92	118.9	.787		
604	4.20	34.171	.50	3.31	500	4.57	34.08	.86	3.12	27.07	109.6	.901		
800	3.85	34.321	.29	3.33	600	4.21	34.17	.51	3.30	27.13	100.7	1.006		
995	3.37	34.400	.31	3.40	700	4.01	34.25	.34	3.32	27.22	92.7	1.103		
					800	3.85	34.33	.29	3.34	27.29	86.0	1.192		
					1000	3.36	34.40	.31	3.40	27.40	76.4	1.354		

OBSERVED					INTERPOLATED					DERIVED					
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D			
NH 125	44 39.4 N	126 59.0 W	DATE 26 JUL 62	1210 GCT	WTRF 14	DRY 62.0	WET 59.0								
WIND DIRECTION 35 VEL 5 KTS	HAR 22 SWELL DIRECTION 34 H	8 T B CLOUD - AMT 0 WEATHER 02													
0	16.65	31.064	5.64	.16	0	16.65	31.07	5.65	.17	22.61	525.5	0			
10	16.68	31.095	5.75	.20	10	16.69	31.10	5.76	.21	22.63	524.1	.052			
20	15.58	31.984	5.75	.23	20	15.58	31.99	5.76	.24	23.55	435.8	.100			
29	13.83	32.552	6.30	.40	30	13.61	32.57	6.33	.42	24.42	353.4	.140			
50	10.05	32.500	6.47	.80	50	10.05	32.59	6.47	.81	25.09	289.4	.204			
75	9.15	32.673	6.20	1.03	75	9.15	32.68	6.20	1.04	25.30	269.7	.274			
100	8.25	33.102	4.97	1.62	100	8.25	33.11	4.97	1.63	25.78	225.0	.336			
149	7.39	33.765	3.71	2.21	150	7.38	33.77	3.70	2.22	26.43	164.1	.433			
197	6.80	33.888	3.27	2.38	200	6.76	33.89	3.24	2.40	26.61	147.5	.511			
293	5.63	33.948	2.28	2.94	250	6.12	33.94	2.73	2.71	26.72	136.7	.582			
390	4.95	34.023	1.28	2.83	300	5.56	33.95	2.20	2.94	26.81	129.3	.649			
487	4.78	34.161	.77	3.19	400	4.92	34.04	1.21	2.86	26.95	116.6	.771			
586	4.44	34.208	.44	3.26	500	4.74	34.17	.72	3.21	27.07	105.1	.882			
786	3.84	34.333	.31	3.33	600	4.39	34.22	.41	3.27	27.15	99.1	.984			
986	3.42	34.409	.53	3.25	700	4.08	34.28	.37	3.31	27.23	91.4	1.079			
					800	3.80	34.34	.31	3.33	27.31	84.4	1.167			
					1000	3.39	34.41	.55	3.24	27.41	75.8	1.327			
NH 105	44 39.5 N	126 35.2 W	DATE 26 JUL 62	1635 GCT	WTRF 11	DRY 53.8	WET 60.7								
WIND DIRECTION 35 VEL 5 KTS	HAR 22 SWELL DIRECTION 35 H	8 T 7 CLOUD - AMT 0 WEATHER 02													
0	16.53	30.605	5.71	.15	0	16.53	30.61	5.71	.15	22.29	556.4	0			
10	16.53	30.609	5.67	.18	10	16.53	30.61	5.68	.19	22.29	556.4	.056			
20	15.91	32.466	5.57	.28	20	15.91	32.47	5.57	.28	23.85	407.5	.104			
31	14.80	32.646	5.92	.43	30	14.92	32.63	5.88	.42	24.19	375.3	.143			
52	12.01	32.734	6.50	.52	50	12.29	32.73	6.46	.51	24.80	317.9	.212			
78	9.12	32.673	6.42	.97	75	9.37	32.68	6.48	.91	25.27	272.8	.286			
101	8.73	33.024	5.34		100	8.75	33.01	5.39	1.25	25.62	239.7	.350			
154	7.43	33.576	4.38		150	7.52	33.54	4.40	1.77	26.23	182.9	.456			
206	7.00	33.881	4.15	2.14	200	7.03	33.86	4.17	2.11	26.54	153.8	.540			
305	5.83	33.950	2.39	2.66	250	6.47	33.91	3.43	2.41	26.66	143.0	.614			
406	5.26	34.034	1.32	2.85	300	5.89	33.95	2.49	2.64	26.76	133.7	.683			
505	4.47	34.094	.91	3.14	400	5.29	34.03	1.36	2.84	26.90	121.6	.811			
605	4.31	34.200	.52	3.19	500	4.51	34.09	.92	3.13	27.04	108.3	.926			
805	3.79	34.313	.32	3.34	600	4.31	34.19	.54	3.19	27.14	99.8	1.030			
1004	3.44	34.414	.36	3.21	700	4.07	34.26	.36	3.27	27.22	92.5	1.126			
					800	3.80	34.31	.33	3.34	27.29	86.6	1.215			
					1000	3.45	34.41	.36	3.22	27.40	76.6	1.378			
NH 85	44 39.5 N	126 3.4 W	DATE 26 JUL 62	2032 GCT	WTRF -	DRY 63.0	WET 60.0								
WIND DIRECTION 35 VEL 5 KTS	HAR 22 SWELL DIRECTION 35 H	8 T 8 CLOUD - AMT 0 WEATHER 00													
0	16.18	31.324	5.84	.21	0	16.18	31.33	5.84	.22	22.92	496.3	0			
10	16.15	31.327	5.80	.20	10	16.15	31.33	5.81	.21	22.92	495.7	.050			
20	16.12	31.370	5.51	.17	20	16.13	31.38	5.52	.17	22.96	492.1	.099			
31	14.44	32.513	6.14	.40	30	14.63	32.40	6.07	.37	24.08	386.2	.143			
52	11.07	32.675	6.40	.67	50	11.36	32.66	6.38	.65	24.92	306.3	.212			
77	9.18	32.810	5.96	1.02	75	9.27	32.80	6.02	.99	25.38	262.7	.283			
103	8.16	33.169	5.13	1.47	100	8.24	33.12	5.23	1.42	25.79	223.6	.344			
154	7.48	33.793	4.05	1.92	150	7.49	33.70	4.12	1.90	26.35	171.0	.443			
206	7.24	33.933	2.98	2.24	200	7.26	33.92	3.09	2.21	26.56	152.0	.523			
306	5.99	33.951	2.30	2.73	250	6.71	33.94	2.59	2.50	26.65	143.9	.597			
407	5.46	34.057	1.31	2.73	300	6.07	33.95	2.32	2.71	26.74	135.7	.667			
504	4.81	34.114	.82	3.23	400	5.49	34.05	1.38	2.73	26.89	122.5	.796			
606	4.57	34.280	.52	3.21	500	4.83	34.11	.83	3.21	27.02	110.6	.913			
806	4.02	34.325	.35	3.14	600	4.58	34.27	.53	3.22	27.17	97.3	1.017			
1006	3.49	34.407	.34	3.57	700	4.32	34.32	.40	3.15	27.24	91.0	1.111			
					800	4.04	34.32	.36	3.14	27.27	88.3	1.200			
					1000	3.51	34.40	.34	3.15	27.39	77.9	1.366			

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ³	Z	T	S	O ₂	PO ₄ ³	σ _t	δx10 ⁶	ΔD		
NH 65 44 39.5 N 125 35.4 W DATE 27 JUL 62 0115 GCT WTRF 8 DRY 62.2 WET 61.0 WIND DIRECTION 35 VEL 5 KTS BAR 20 SWELL DIRECTION 35 H 6 T 8 CLOUD - AMT 0 WEATHER 02														
0	15.41	31.501	5.84	.22	0	15.91	31.60	5.84	.23	23.18	471.0	0		
10	15.41	31.699	5.92		10	15.41	31.69	5.93	.14	23.37	453.6	.046		
20	12.26	32.377	6.57	.47	20	12.26	32.38	6.57	.47	24.54	342.2	.086		
30	10.23	32.546	6.60	.80	30	10.23	32.55	6.60	.81	25.03	295.2	.118		
51	8.41	32.738	6.65	1.26	50	8.45	32.73	5.71	1.24	25.45	255.0	.173		
102	7.89	33.631	3.83	2.02	75	8.17	33.16	4.71	1.68	25.83	219.4	.232		
153	7.56	33.887	2.70	2.30	100	7.91	33.60	3.89	2.00	26.21	183.7	.283		
204	6.80	33.960	2.42	2.58	150	7.58	33.88	2.75	2.29	26.48	158.5	.368		
304	6.15	34.065	1.43	2.55	200	6.86	33.95	2.43	2.56	26.64	144.6	.444		
405	5.72	34.136	.96	2.82	250	6.42	34.01	1.97	2.57	26.74	135.3	.514		
503	5.12	34.205	.74	3.13	300	6.16	34.06	1.47	2.56	26.82	128.6	.580		
600	4.95	34.320	.52	3.23	400	5.74	34.13	.97	2.80	26.93	119.4	.704		
799	4.27	34.404	.26	3.39	500	5.14	34.20	.75	3.12	27.05	107.4	.817		
1000	3.56	34.404	.34	3.43	600	4.95	34.33	.52	3.23	27.17	97.7	.920		
1200	3.10	34.468	.53	3.28	700	4.64	34.38	.35	3.32	27.25	90.5	1.014		
					800	4.27	34.40	.26	3.39	27.31	85.0	1.101		
					1000	3.57	34.41	.34	3.43	27.39	78.2	1.264		
					1200	3.10	34.47	.53	3.28	27.48	69.6	1.412		
NH 45 44 39.4 N 125 7.0 W DATE 27 JUL 62 0530 GCT WTRF 14 DRY 61.0 WFT 60.0 WIND DIRECTION 35 VEL 5 KTS BAR 20 SWELL DIRECTION 35 H 6 T 8 CLOUD 0 AMT 3 WEATHER 03														
0	13.83	32.124	6.70	.36	0	13.83	32.13	6.70	.36	24.03	389.7	0		
10	12.88	32.256	6.85	.43	10	12.88	32.26	6.85	.43	24.32	362.2	.038		
19	10.76	32.523	6.60	.71	20	10.57	32.53	6.58	.73	24.96	302.0	.071		
29	9.21	32.545	6.39	.89	30	9.11	32.55	6.37	.91	25.21	278.0	.100		
49	8.11	32.696	5.90	1.28	50	8.09	32.71	5.84	1.30	25.49	251.1	.153		
74	7.98	33.217	4.43	1.80	75	7.98	33.24	4.38	1.82	25.92	211.1	.210		
99	7.89	33.606	3.53	2.12	100	7.88	33.62	3.52	2.12	26.23	181.8	.260		
146	7.25	33.896	3.18	2.16	150	7.20	33.91	3.31	2.19	26.56	151.6	.343		
197	6.74	33.967	2.38	2.53	200	6.71	33.97	2.34	2.54	26.67	141.1	.416		
294	6.05	34.079	1.60	2.81	250	6.32	34.01	1.86	2.72	26.76	133.7	.485		
394	5.71	34.110	.97	3.04	300	6.04	34.04	1.57	2.82	26.82	128.4	.550		
491	5.12	34.170	.70	3.00	400	5.68	34.11	.94	3.04	26.92	120.1	.674		
					500	5.07	34.18	.67	3.00	27.04	108.5	.789		
NH 35 44 39.5 N 124 52.8 W DATE 27 JUL 62 0820 GCT WTRF 9 DRY 59.0 WET 57.0 WIND DIRECTION 00 VEL 4 KTS BAR 20 SWELL DIRECTION 35 H 3 T 8 CLOUD 0 AMT 10 WEATHER 03														
0	13.46	32.114	6.78	.32	0	13.46	32.12	6.79	.32	24.10	383.4	0		
10	11.88	32.329	6.70	.58	10	11.88	32.33	6.70	.59	24.57	338.7	.036		
20	9.38	32.532	6.45	.91	20	9.38	32.54	6.45	.92	25.16	282.8	.067		
30	8.58	32.581	6.14	1.10	30	8.58	32.59	6.15	1.11	25.32	267.4	.095		
52	8.03	32.911	5.21	1.43	50	8.04	32.87	5.31	1.40	25.63	238.6	.145		
78	7.91	33.473	3.87	1.94	75	7.92	33.41	4.01	1.89	26.07	197.1	.200		
105	7.76	33.630	3.43	2.04	100	7.79	33.62	3.48	2.04	26.24	180.6	.247		
155	7.07	33.950	2.55	2.38	150	7.15	33.92	2.63	2.34	26.58	149.7	.329		
210	6.46	34.003	1.87	2.64	200	6.55	33.99	1.96	2.60	26.71	137.3	.401		
260	6.16	34.032	1.74	2.84	250	6.20	34.03	1.77	2.80	26.79	130.9	.468		
NH 25 44 39.1 N 124 38.6 W DATE 27 JUL 62 1100 GCT WTRF 2 DRY 62.0 WET 56.0 WIND DIRECTION 00 VEL 4 KTS BAR 19 SWELL DIRECTION 35 H 5 T 8 CLOUD 0 AMT 10 WEATHER 02														
0	11.35	32.531	6.27	.99	0	11.35	32.54	6.28	1.00	24.82	314.4	0		
10	10.85	32.610	6.01		10	10.85	32.40	6.02	1.10	24.80	316.5	.032		
20	8.48	32.854	5.12	1.55	20	8.48	32.61	5.13	1.55	25.34	263.7	.061		
30	7.86	32.854	4.39	2.00	30	7.86	32.83	4.99	2.01	25.62	239.2	.086		
50	8.02	33.229	4.49	1.87	50	8.02	33.23	4.49	1.88	25.91	211.6	.131		
80	7.38	33.718	2.66	2.22	75	7.52	33.65	2.96	2.13	26.31	173.8	.179		
100	7.07	33.875	2.28	2.57	100	7.07	33.88	2.28	2.58	26.55	151.2	.220		
150	6.43	34.002	1.78	2.63	150	6.44	34.01	1.79	2.64	26.74	134.0	.291		
210	6.15	34.044	1.56	2.83	200	6.16	34.04	1.57	2.79	26.80	129.0	.357		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	O _T	$\delta \times 10^6$	AD
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NH 15 44 39.1 N 124 24.7 W DATE 27 JUL 62 1913 GCT WIRE 1 DRY 56.0 WET 56.0
WIND DIRECTION 33 VEL 4 KTS BAR 20 SWELL DIRECTION 33 H 3 T 8 CLOUD 0 AMT 10 WEATHER 40

0	10.42	32.817	6.24	1.19	0	10.42	32.82	6.24	1.20	25.21	277.7	0
10	8.88	32.930	4.80	1.62	10	8.88	32.93	4.80	1.63	25.55	245.6	.026
20	7.82	33.137	4.33	1.71	20	7.82	33.14	4.33	1.71	25.87	215.2	.049
30	8.62	33.430	4.52	1.92	30	8.63	33.43	4.53	1.93	25.98	204.9	.070
50	8.28	33.522	3.91	2.00	50	8.28	33.53	3.91	2.01	26.10	193.5	.110
75	7.03	33.922	2.38	2.38	75	7.04	33.93	2.39	2.39	26.60	146.8	.153

NH 5 44 39.1 N 124 10.6 W DATE 27 JUL 62 2135 GCT WIRE 2 DRY 53.0 WET 53.0
WIND DIRECTION 34 VEL 4 KTS BAR 20 SWELL DIRECTION 33 H 3 T 8 CLOUD 0 AMT 10 WEATHER 40

0	8.57	33.703	3.77	2.32	0	8.57	33.71	3.78	2.33	26.20	183.5	0
10	7.82	33.794	3.03	2.42	10	7.82	33.80	3.04	2.42	26.38	166.2	.017
20	7.29	33.960	2.33	2.74	20	7.30	33.96	2.33	2.74	26.59	146.7	.033
30	7.00	33.919	1.70	2.78	30	7.01	33.92	1.71	2.79	26.60	146.1	.048
40	6.60	33.960	1.35	2.80	50	6.56	33.97	1.30	2.84	26.69	137.1	.076
50	6.55	33.965	1.30	2.83								

CH 5 43 20.5 N 124 29.0 W DATE 31 JUL 62 0135 GCT WIRE 0 DRY 54.5 WET 52.5
WIND DIRECTION 35 VEL 2 KTS BAR 18 SWELL DIRECTION 33 H 3 T 8 CLOUD 4 AMT 4 WEATHER 03

0	10.36	33.399	8.50	.66	0	10.36	33.39	8.50	.67	25.66	234.5	0
10	9.18	33.351	5.30	1.58	10	9.18	33.36	5.31	1.58	25.83	218.8	.023
20	8.85	33.430	4.78	1.78	20	8.85	33.43	4.79	1.79	25.94	208.2	.044
30	8.40	33.480	4.05	1.92	30	8.40	33.49	4.05	1.93	26.05	198.0	.064
50	9.49	33.834	2.24	2.47	50	9.49	33.84	2.24	2.47	26.16	188.5	.103
75	7.12	33.980	1.59	2.50	75	7.13	33.99	1.60	2.51	26.63	143.7	.144

CH 15 43 20.5 N 124 43.3 W DATE 31 JUL 62 0320 GCT WIRE 17 DRY 56.5 WET 55.0
WIND DIRECTION 35 VEL 4 KTS BAR 19 SWELL DIRECTION 34 H 3 T 8 CLOUD 4 AMT 8 WEATHER 03

0	11.65	32.564	6.99	.47	0	11.65	32.57	6.99	.47	24.79	317.2	0
10	10.65	32.958	6.99	.84	10	10.65	32.96	6.99	.85	25.28	271.3	.029
19	10.48	33.071	6.45	.88	20	10.44	33.02	6.42	.91	25.36	263.4	.056
28	10.03	33.043	6.19	1.16	30	9.93	33.06	6.09	1.22	25.48	252.6	.082
48	9.14	33.297	5.02	1.71	50	9.08	33.33	4.93	1.75	25.82	220.1	.129
73	8.47	33.629	3.91	2.09	75	8.40	33.65	3.78	2.12	26.18	186.5	.180
97	7.62	33.818	2.47	2.36	100	7.54	33.84	2.39	2.39	26.45	160.7	.223
146	6.77	34.020	1.94	2.67	150	6.75	34.03	1.91	2.68	26.71	136.5	.298
195	6.68	34.078	1.62	2.75	200	6.67	34.08	1.60	2.76	26.76	132.6	.365
244	6.65	34.073	1.51	2.78								

CH 25 43 20.5 N 124 55.6 W DATE 31 JUL 62 0548 GCT WIRE 3 DRY 57.0 WET 55.0
WIND DIRECTION 35 VEL 3 KTS BAR 20 SWELL DIRECTION 34 H 3 T 8 CLOUD 9 AMT 9 WEATHER 03

0	11.74	32.556	7.05	1.16	0	11.74	32.56	7.06	1.17	24.77	319.3	0
10	11.28	32.662	6.97	.66	10	11.28	32.67	6.97	.67	24.94	303.7	.031
20	11.21	32.712	6.98	.59	20	11.21	32.72	6.98	.60	24.99	299.0	.061
30	8.75	32.614	5.83	1.37	30	8.75	32.62	5.83	1.38	25.32	267.4	.090
51	8.17	33.150	4.56	1.86	50	8.20	33.12	4.59	1.86	25.79	222.8	.139
76	8.01	33.522	4.09	1.89	75	8.02	33.51	4.10	1.89	26.13	191.2	.190
101	8.04	33.784	3.25	2.14	100	8.04	33.78	3.28	2.13	26.33	172.2	.236
152	7.51	33.944	2.73	2.26	150	7.54	33.94	2.73	2.26	26.54	153.4	.317
202	7.09	33.983	2.34	2.44	200	7.10	33.98	2.35	2.43	26.63	145.4	.392
303	6.52	34.058	1.46	2.78	250	6.79	34.02	1.89	2.62	26.70	139.0	.463
404	6.04	34.086	1.20	2.84	300	6.53	34.06	1.48	2.77	26.76	133.8	.531
505	5.55	34.103	.95	2.98	400	6.06	34.09	1.20	2.84	26.85	127.0	.661
604	5.18	34.173	.65	3.03	500	5.57	34.10	.96	2.97	26.92	120.3	.785
					600	5.19	34.17	.66	3.03	27.02	112.2	.901

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S‰	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	σ _t	δ × 10 ⁶	Δ D
CH 35 43 20.5 N 125 10.5 W DATE 31 JUL 62 0720 GCT WIRE 3 DRY 58.0 WET 57.0 WIND DIRECTION 35 VEL 3 KTS BAR 20 SWELL DIRECTION 34 H 3 T 8 CLOUD 9 AMT 10 WEATHER 03												
0	13.71	32.243	5.97	.39	0	13.71	32.25	5.97	.39	24.15	378.7	0
50	9.76	33.205	5.54	1.43	10	11.10	32.73	7.15	.96	25.02	295.7	.034
100	8.09	33.795	3.53	2.02	20	10.76	32.85	6.75	1.08	25.17	281.5	.063
150	7.43	33.967	2.80	0	30	10.43	32.97	6.34	1.19	25.32	267.4	.090
255	6.78	34.040	1.98	2.60	50	9.76	33.21	5.55	1.43	25.62	239.3	.141
300	6.54	34.077	.98	2.66	75	8.72	33.55	4.55	1.77	26.05	198.5	.195
401	6.16	34.122		2.90	100	8.09	33.80	3.54	2.02	26.34	171.2	.242
499	5.85	34.169			150	7.44	33.97	2.80	2.34	26.58	149.9	.322
549	5.30	34.137			200	7.05	34.02	2.48	2.54	26.67	141.5	.395
598	5.08		.76	2.97	250	6.80	34.04	2.03	2.58	26.71	138.0	.465
698	4.63	34.235	.45	3.02	300	6.55	34.08	.99	2.66	26.78	132.0	.532
798	4.26	34.308	.37	3.22	400	6.16	34.12	.91	2.90	26.86	125.7	.661
898	4.02	34.366	.35	3.22	500	5.84	34.16	.83	2.91	26.93	119.4	.783
953	3.83	34.391	.24	3.19	600	5.07	34.16	.75	2.97	27.03	111.6	.899
1003	3.67	34.407	.35	3.19	700	4.62	34.24	.45	3.02	27.14	100.9	1.005
					800	4.26	34.31	.37	3.22	27.24	91.9	1.101
					1000	3.68	34.41	.34	3.19	27.37	79.8	1.273

CH 45 43 20.5 N 125 24.2 W DATE 31 JUL 62 1215 GCT WIRE 0 DRY 59.0 WET 56.0 WIND DIRECTION 33 VEL 3 KTS BAR 20 SWELL DIRECTION 34 H 2 T 8 CLOUD 9 AMT 10 WEATHER 02												
0	14.42	32.221	6.06	.32	0	14.42	32.23	6.06	.32	23.98	394.2	0
10	14.39	32.232	6.07	.41	10	14.39	32.24	6.07	.42	24.00	393.0	.039
20	14.25	32.300	6.17	.39	20	14.25	32.30	6.18	.39	24.04	385.5	.078
30	10.93	32.552	6.40	.75	30	10.93	32.56	6.41	.76	24.91	306.3	.113
52	10.10	33.066	5.72	1.44	50	10.18	33.02	5.82	1.39	25.61	259.6	.169
103	8.20	33.491	3.97	1.87	75	9.18	33.33	4.90	1.73	25.81	222.1	.230
154	0	33.883	2.94	2.41	100	8.30	33.48	4.07	1.87	26.06	197.8	.282
205	7.13	33.958	2.67	2.35	150	7.47	33.86	2.99	2.38	26.48	158.8	.371
406	5.71	34.111	1.15	3.04	200	7.14	33.96	2.68	2.37	26.61	147.6	.448
507	5.05		.92		250	6.77	34.01	2.30	2.47	26.69	139.8	.520
608	4.58	34.176	.50	3.00	300	6.39	34.05	1.91	2.63	26.74	132.4	.588
709	4.39	34.264	.39	3.24	400	5.74	34.11	1.19	3.01	26.91	121.3	.715
809	4.26	34.335	.34	3.24	500	5.09	34.14	.93	3.02	27.01	111.7	.831
1010	3.74	34.403	.38	3.26	600	4.61	34.17	.53	3.00	27.09	104.8	.939
1209	3.23	34.464	.40	3.32	700	4.40	34.26	.39	3.22	27.18	96.9	1.040
					800	4.27	34.33	.34	3.24	27.25	90.6	1.134
					1000	3.77	34.40	.37	3.26	27.36	81.2	1.305
					1200	3.25	34.46	.48	3.32	27.46	71.8	1.458

CH 65 43 20.4 N 125 51.3 W DATE 31 JUL 62 1600 GCT WIRE 0 DRY 59.0 WET 58.0 WIND DIRECTION 32 VEL 1 KTS BAR 21 SWELL DIRECTION 32 H 2 T 8 CLOUD 9 AMT 10 WEATHER 02												
0	14.40	32.247	6.09	.44	0	14.40	32.25	6.09	.44	24.01	391.9	0
10	14.36	32.250	6.20	.44	10	14.36	32.25	6.20	.44	24.02	391.1	.039
20	14.07	32.302	6.33	.43	20	14.07	32.31	6.33	.43	24.12	381.8	.078
30	12.00	32.433	6.36	.60	30	12.00	32.44	6.36	.60	24.63	333.6	.114
52	9.50	32.606	5.63	1.16	50	9.63	32.59	5.72	1.11	25.16	283.4	.175
77	8.70	33.173	4.65	1.67	75	8.72	33.12	4.73	1.63	25.72	230.1	.239
103	8.34	33.588	3.53	2.02	100	8.37	33.55	3.65	1.99	26.11	193.8	.292
154	7.64	33.900	3.09	2.29	150	7.73	33.89	3.12	2.28	26.47	160.0	.381
205	7.05	33.990	2.60		200	7.11	33.99	2.79	2.57	26.63	145.1	.457
306	6.01	33.990	2.13	2.62	250	6.54	33.99	2.47	2.61	26.71	138.1	.528
408	5.37	34.047	1.33	2.83	300	6.06	33.99	2.17	2.62	26.77	132.6	.595
509	4.99	34.157	.72	3.12	400	5.41	34.04	1.39	2.81	26.80	122.2	.723
609	4.20	34.208	.51	3.11	500	5.03	34.15	.76	3.10	27.02	110.2	.839
809	4.16	34.324	.35	3.27	600	4.27	34.20	.52	3.12	27.15	98.6	.943
1008	3.65	34.406	.40	3.24	700	4.18	34.26	.40	3.18	27.21	93.9	1.039
					800	4.16	34.32	.35	3.26	27.25	90.1	1.131
					1000	3.68	34.40	.39	3.24	27.37	80.0	1.301

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
CH 85 43 20.5 N 126 18.8 W DATE 31 JUL 62 1925 GCT WIRE 1 DRY 59.0 WET 58.0 WIND DIRECTION 34 VEI 3 KTS BAR 22 SWELL DIRECTION 34 H 3 T 8 CLOUD 9 AMT 10 WEATHER 02												
0	13.48	32.466	6.24	.47	0	13.48	32.47	6.24	.47	24.37	357.9	0
10	12.73	32.561	5.75	.56	10	12.73	32.57	5.76	.57	24.59	337.0	.035
20	12.09	32.592	5.61	.60	20	12.09	32.60	5.61	.60	24.73	323.3	.068
30	10.77	32.709	5.27	.94	30	10.77	32.80	5.28	.95	25.13	285.4	.098
52	9.20	33.061	3.99	1.56	50	9.29	33.04	4.10	1.51	25.57	244.3	.151
77	8.44	33.376	4.04	1.92	75	8.47	33.35	4.02	1.90	25.94	209.6	.208
103	8.20	33.663	3.26	2.09	100	8.21	33.63	3.36	2.08	26.20	185.3	.257
154	7.57	33.901	2.67	2.29	150	7.62	33.89	2.69	2.28	26.49	158.4	.343
205	6.89	33.974	2.26	2.52	200	6.95	33.97	2.29	2.50	26.64	144.2	.419
306	6.01	34.014	1.66	2.70	250	6.45	34.00	1.98	2.62	26.73	136.2	.489
407	5.26	34.070	1.00	2.93	300	6.05	34.01	1.69	2.69	26.79	130.8	.555
507	5.24	34.179	.48	3.11	400	5.30	34.06	1.04	2.91	26.93	119.1	.680
606	4.74	34.194	.43	3.11	500	5.24	34.17	.51	3.10	27.02	110.9	.795
800	4.24	34.327	.29	3.20	600	4.77	34.19	.43	3.11	27.09	105.2	.903
994	3.62	34.431	.30	3.24	700	4.47	34.25	.36	3.15	27.17	97.9	1.005
					800	4.24	34.33	.29	3.21	27.26	90.1	1.099
					1000	3.60	34.43	.30	3.24	27.40	76.8	1.266

CH 105 43 20.5 N 126 45.7 W DATE 31 JUL 62 2300 GCT WIRE 5 DRY 61.0 WET 58.0
WIND DIRECTION 32 VEI 4 KTS BAR 23 SWELL DIRECTION 34 H 3 T 7 CLOUD 9 AMT 10 WEATHER 02

0	14.62	32.243	6.02	.43	0	14.63	32.25	6.03	.43	23.96	396.6	0
10	14.38	32.278	6.13	.38	10	14.38	32.28	6.14	.38	24.04	389.5	.039
20	13.25	32.496	6.30	.55	20	13.25	32.50	6.31	.56	24.44	351.7	.076
30	11.51	32.742	6.56	.76	30	11.51	32.77	6.57	.76	24.97	300.7	.109
52	8.50	32.760	5.24	1.38	50	8.70	32.76	5.41	1.32	25.44	256.4	.165
77	8.17	33.263	4.17	1.83	75	8.20	33.22	4.24	1.80	25.87	215.7	.224
103	8.05	33.651	3.48	2.05	100	8.06	33.61	3.54	2.03	26.20	184.5	.274
154	7.64	33.910	2.77	2.32	150	7.68	33.91	2.80	2.31	26.49	158.2	.359
205	7.11	33.963	2.46	2.40	200	7.17	33.96	2.48	2.40	26.61	147.7	.436
305	5.87	33.990	1.98	2.58	250	6.51	33.98	2.25	2.47	26.71	138.6	.507
405	5.55	34.068	1.17	2.90	300	5.92	33.99	2.01	2.57	26.79	131.0	.575
503	5.28	34.174	.63	3.00	400	5.55	34.06	1.21	2.88	26.89	122.3	.701
602	4.70	34.237	.43	3.22	500	5.29	34.17	.64	3.00	27.01	111.6	.818
802	4.27	34.336	.35	3.12	600	4.71	34.24	.43	3.22	27.13	101.4	.925
1002	3.77	34.318	.48	3.32	700	4.43	34.30	.35	3.20	27.21	94.3	1.022
					800	4.27	34.34	.35	3.12	27.26	90.2	1.115
					1000	3.78	34.32	.48	3.32	27.29	87.3	1.292

CH 125 43 20.5 N 127 8.1 W DATE 1 AUG 62 0225 GCT WIRE 10 DRY 61.0 WET 58.0
WIND DIRECTION 34 VEI 4 KTS BAR 23 SWELL DIRECTION 34 H 3 T 7 CLOUD 9 AMT 10 WEATHER 03

0	16.63	32.126	5.70	.41	0	16.63	32.25	5.70	.42	23.52	438.9	0
10	16.62	32.126	5.71	.37	10	16.63	32.13	5.71	.38	23.43	447.5	.044
20	16.42	32.230	5.72	.56	20	16.42	32.23	5.72	.57	23.55	435.8	.088
30	14.85	32.576	6.12	.47	30	14.85	32.58	6.13	.47	24.17	377.6	.129
52	12.17	32.717	6.57	.60	50	12.38	32.70	6.55	.58	24.76	321.1	.199
77	9.94	32.712	6.32	.93	75	10.08	32.71	6.37	.90	25.18	281.5	.274
103	9.00	33.032	5.46	1.38	100	9.06	32.99	5.58	1.33	25.56	245.8	.340
154	8.34	33.679	3.59	2.08	150	8.36	33.64	3.72	2.04	26.18	188.1	.449
204	7.83	33.895	2.79	2.34	200	7.87	33.89	2.83	2.33	26.45	163.1	.536
302	6.32	33.969	2.23	2.53	250	7.12	33.96	2.46	2.45	26.61	148.0	.614
402	5.54	34.025	1.41	2.89	300	6.35	33.97	2.24	2.53	26.72	138.0	.686
499	5.11	34.111	.90	3.03	400	5.55	34.02	1.43	2.88	26.86	125.2	.817
596	4.57	34.159	.62	2.90	500	5.10	34.11	.90	3.03	26.99	113.7	.937
794	4.10	34.347	.28	3.20	600	4.56	34.16	.61	2.90	27.09	105.0	1.046
991	3.70	34.423	.32	3.18	700	4.27	34.26	.40	3.03	27.19	95.2	1.146
					800	4.09	34.35	.28	3.20	27.29	86.9	1.237
					1000	3.69	34.43	.32	3.18	27.39	78.3	1.402

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S‰	O ₂ ml/l	PO ₄ ‰	Z	T	S	O ₂	PO ₄ ‰	σ _t	8 x 10 ⁶	A.D.		
CH 145	43 20.5 N	127	40.1 W		DATE	1 AUG 62	0615	GCT	WIRE	3	DRY	61.0	WET	59.0
WIND DIRECTION	34	VEL	4 KTS		BAR 23	SWELL	DIRECTION	34 H	2 T	7 CLOUD	9 AMT	10	WEATHER	02
0	16.33	32.248	5.69	.40	0	16.33	32.25	5.69	.40	23.59	432.0	0		
10	16.27	32.345	5.65	.37	10	16.27	32.35	5.66	.38	23.68	423.9	.043		
20	16.20	32.383	5.56	.36	20	16.20	32.39	5.57	.36	23.72	419.8	.085		
30	16.20	32.349	5.61	.41	30	16.20	32.37	5.61	.42	23.71	421.1	.127		
52	12.08	32.730	6.26	.54	50	12.53	32.69	6.20	.52	24.72	324.8	.202		
77	9.69	32.782	5.99	.99	75	9.81	32.78	6.04	.95	25.24	272.1	.276		
103	9.01	33.064	5.27	1.41	100	9.03	33.02	5.37	1.36	25.59	242.6	.341		
154	8.48	33.731	3.27	2.16	150	8.50	33.69	3.42	2.11	26.19	186.4	.448		
205	8.09	33.888	2.62	2.38	200	8.13	33.89	2.65	2.37	26.41	167.0	.536		
306	6.80	33.996	2.14	2.46	250	7.53	33.96	2.44	2.43	26.55	154.0	.616		
408	5.94	34.048	1.64	2.80	300	6.88	33.99	2.34	2.46	26.67	143.0	.691		
508	5.36	34.066	1.14	3.06	400	5.99	34.05	1.70	2.77	26.83	129.2	.827		
608	4.63	34.153	.67	3.20	500	5.40	34.06	1.18	3.04	26.91	121.0	.952		
807	4.15	34.329	.30	3.34	600	4.69	34.14	.70	3.19	27.06	107.8	1.066		
1005	3.73	34.399	.36	3.38	700	4.32	34.24	.43	3.28	27.18	97.1	1.168		
					800	4.16	34.32	.30	3.34	27.26	89.7	1.282		
					1000	3.74	34.40	.35	3.38	27.36	81.0	1.432		
CH 165	43 20.5 N	128	7.8 W		DATE	1 AUG 62	1002	GCT	WIRE	2	DRY	63.0	WET	60.5
WIND DIRECTION	32	VEL	2 KTS		BAR 23	SWELL	DIRECTION	34 H	1 T	7 CLOUD	9 AMT	10	WEATHER	03
0	16.44	31.840	5.58	.65	0	16.44	31.84	5.58	.65	23.25	464.2	0		
10	16.46	32.022	5.60	.42	10	16.46	32.03	5.60	.42	23.39	451.6	.046		
20	16.46	32.062	5.49	.40	20	16.46	32.07	5.49	.40	23.42	448.9	.091		
30	14.27	31.841	6.04	.47	30	14.27	31.85	6.05	.47	23.72	419.8	.134		
52	12.09	32.730	5.85	.62	50	12.21	32.63	5.91	.61	24.74	323.7	.209		
77	9.95	32.762	5.63	.87	75	10.09	32.76	5.64	.85	25.22	278.3	.284		
103	9.08	32.840	5.57	1.12	100	9.14	32.83	5.59	1.09	25.42	258.9	.351		
154	8.51	33.541	3.97	1.91	150	8.53	33.48	4.11	1.85	26.03	202.1	.466		
205	7.83	33.842	3.44	2.08	200	7.90	33.82	3.48	2.08	26.34	168.2	.559		
306	6.41	33.970	2.88	2.45	250	7.17	33.94	3.19	2.25	26.59	149.9	.638		
408	5.49	33.989	1.98	2.75	300	6.49	33.96	2.91	2.43	26.70	140.2	.711		
509	4.88	34.055	1.23	2.96	400	5.55	33.99	1.96	2.73	26.84	127.8	.845		
609	4.70	34.217	.57	3.26	500	4.92	34.05	1.28	2.94	26.96	116.4	.967		
809	4.20	34.297	.20	3.40	600	4.71	34.20	.62	3.23	27.10	103.8	1.077		
1006	3.73	34.401	.34	3.22	700	4.48	34.27	.34	3.38	27.23	96.6	1.177		
					800	4.22	34.30	.30	3.39	27.23	92.5	1.271		
					1000	3.74	34.40	.33	3.23	27.36	81.2	1.445		
CBH159	42 41.0 N	128	0.0 W		DATE	1 AUG 62	1625	GCT	WIRE	4	DRY	63.0	WET	62.0
WIND DIRECTION	30	VEL	3 KTS		BAR 23	SWELL	DIRECTION	34 H	1 T	8 CLOUD	0 AMT	10	WEATHER	60
0	16.58	31.799	5.67	.47	0	16.58	31.80	5.68	.47	23.19	470.2	0		
10	16.48	31.948	5.76		10	16.48	31.95	5.77	-0.06	23.33	457.4	.046		
20	16.19	32.028	5.58		20	16.19	32.03	5.58	.18	23.45	445.6	.092		
30	15.61	32.125	5.77	.43	30	15.61	32.13	5.78	.43	23.66	426.4	.135		
52	12.72	32.680	6.45	.97	50	13.01	32.63	6.39	.92	24.58	338.6	.212		
103	9.20	32.825	5.99	1.08	75	10.67	32.81	6.24	1.06	25.15	284.3	.289		
154	8.67	33.582	3.77	2.13	100	9.30	32.82	6.08	1.07	25.39	262.1	.358		
205	8.14	33.849	2.91	2.21	150	8.71	33.52	3.95	2.05	26.03	201.8	.474		
305	7.02	33.993	2.08	2.61	200	8.19	33.84	2.96	2.20	26.36	171.5	.567		
406	6.06	34.025	1.68	2.73	250	7.63	33.95	2.44	2.19	26.53	155.8	.649		
507	5.09	34.102	1.09	2.92	300	7.08	33.99	2.10	2.59	26.64	146.3	.724		
607	4.87	34.168	.54	3.04	400	6.11	34.02	1.70	2.73	26.79	132.3	.864		
808	4.19	34.347	.25	3.15	500	5.15	34.10	1.13	2.91	26.97	115.4	.987		
1009	3.67	34.411	.27	3.17	600	4.87	34.16	.67	3.03	27.05	108.7	1.099		
1209	3.10	34.491	.46	3.28	700	4.57	34.25	.39	3.11	27.16	98.9	1.203		
					800	4.22	34.34	.26	3.15	27.27	89.2	1.297		
					1000	3.69	34.41	.26	3.17	27.37	79.7	1.466		
					1200	3.13	34.49	.45	3.27	27.49	69.5	1.614		

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	g × 10 ⁶	Δ D		
RH 105 42 0.0 N 126 33.0 W DATE 3 AUG 62 0042 GCT WIRE 3 DRY 63.0 WET 63.0 WIND DIRECTION 21 VEL 4 KTS BAR 14 SWELL DIRECTION 21 H 1 T 8 CLOUD 0 AMT 10 WEATHER 50														
0	16.29	32.034	5.71	.32	0	16.29	32.04	5.71	.32	23.43	446.8	0		
10	15.59	32.233	5.90	.36	10	15.59	32.24	5.91	.36	23.74	417.6	.043		
20	15.05	32.320	5.92	.38	20	15.05	32.32	5.93	.38	23.93	400.2	.084		
30	14.28	32.519	6.20	.47	30	14.28	32.52	6.20	.47	24.24	370.3	.123		
52	11.70	32.698	6.51	.58	50	11.94	32.69	6.50	.57	24.84	314.0	.191		
77	10.17	32.742	6.37	.73	75	10.25	32.74	6.40	.72	25.17	282.3	.266		
103	9.22	32.831	5.83		100	9.30	32.82	5.91	1.01	25.39	262.2	.334		
154	8.31	33.467	4.46	1.69	150	8.36	33.41	4.56	1.64	26.00	204.7	.450		
205	7.56	33.887	3.66	1.94	200	7.61	33.86	3.73	1.92	26.46	161.7	.542		
304	6.47	34.021	2.16	2.49	250	7.00	34.01	2.93	2.20	26.66	142.8	.618		
405	5.62	34.058	1.36	2.82	300	6.51	34.02	2.21	2.47	26.74	136.5	.688		
505	4.97	34.134	.81	3.07	400	5.66	34.06	1.39	2.81	26.88	124.1	.818		
604	4.52	34.191	.41	3.28	500	5.00	34.13	.83	3.06	27.01	111.1	.935		
805	4.08	34.328	.29	3.30	600	4.53	34.19	.42	3.27	27.11	102.8	1.042		
1002	3.56	34.425	.36	3.23	700	4.28	34.26	.35	3.29	27.19	95.3	1.141		
					800	4.09	34.32	.29	3.30	27.27	88.8	1.233		
					1000	3.57	34.42	.36	3.23	27.40	77.1	1.399		
RH 85 42 0.0 N 126 6.5 W DATE 3 AUG 62 0405 GCT WIRE 16 DRY 62.0 WET 62.0 WIND DIRECTION 31 VEL 3 KTS BAR 13 SWELL DIRECTION 31 H 1 T 7 CLOUD 0 AMT 10 WEATHER 59														
0	16.16	32.157	5.75	.48	0	16.16	32.16	5.76	.49	23.56	435.0	0		
10	15.87	32.148	5.79	.45	10	15.88	32.15	5.80	.45	23.62	429.7	.043		
20	15.65	32.237	5.79	.38	20	15.65	32.24	5.80	.38	23.73	418.8	.086		
30	15.25	32.290	5.95	.44	30	15.25	32.29	5.95	.44	23.86	406.8	.127		
52	11.81	32.637	6.51	.60	50	12.17	32.60	6.47	.58	24.73	324.6	.200		
75	9.74	32.686	6.22	.87	75	9.74	32.69	6.22	.88	25.22	277.8	.275		
101	9.18	33.020	5.59	1.20	100	9.18	33.00	5.62	1.19	25.55	246.3	.341		
151	8.05	33.523	4.44	1.76	150	8.07	33.51	4.47	1.75	26.12	192.8	.451		
201	7.76	33.885	2.73	2.32	200	7.76	33.88	2.76	2.31	26.46	162.2	.539		
300	6.66	33.986	2.10	2.63	250	7.26	33.93	2.20	2.54	26.57	151.8	.618		
397	5.63	34.050	1.32	2.86	300	6.67	33.99	2.10	2.64	26.70	140.4	.691		
491	5.15	34.113	.85	3.06	400	5.61	34.05	1.30	2.87	26.88	123.8	.823		
585	4.74	34.184	.50	3.18	500	5.11	34.12	.81	3.07	26.99	113.2	.941		
778	4.11	34.303	.31	3.28	600	4.68	34.19	.47	3.19	27.10	104.1	1.050		
973	3.62	34.397	.38	3.30	700	4.34	34.26	.33	3.26	27.19	95.9	1.150		
					800	4.05	34.31	.32	3.29	27.26	89.1	1.242		
					1000	3.55	34.41	.39	3.30	27.39	78.0	1.409		
RH 65 42 0.0 N 125 40.0 W DATE 3 AUG 62 0835 GCT WIRE 12 DRY 62.0 WET 62.0 WIND DIRECTION 22 VEL 3 KTS BAR 11 SWELL DIRECTION 19 H 1 T 8 CLOUD 0 AMT 10 WEATHER 28														
0	16.08	31.947	5.59	.37	0	16.08	31.95	5.59	.38	23.41	448.6	0		
10	15.98	31.991	5.65	.41	10	15.98	32.00	5.66	.42	23.47	443.5	.045		
20	14.71	32.331	5.95	.50	20	14.71	32.34	5.95	.51	24.01	392.5	.086		
30	11.96	32.725	6.18	.74	30	11.96	32.73	6.19	.75	24.86	311.4	.122		
50	10.76	32.692	6.42	.77	50	10.76	32.70	6.43	.78	25.05	293.5	.182		
75	9.43	32.744	5.79	.97	75	9.43	32.75	5.80	.98	25.32	268.7	.252		
101	8.65	33.076	5.37	1.41	100	8.67	33.02	5.39	1.39	25.65	237.3	.316		
150	8.02	33.733	3.46	2.14	150	8.02	33.74	3.47	2.15	26.31	175.6	.419		
200	7.51	33.922	2.36	2.39	200	7.52	33.93	2.36	2.40	26.53	155.1	.501		
299	6.35	33.956	2.38	2.38	250	6.91	33.94	1.88	2.38	26.62	146.8	.577		
398	5.59	34.032	1.49	2.86	300	6.34	33.96	1.58	2.38	26.71	138.7	.648		
496	4.85	34.074	1.03	3.03	400	5.57	34.03	1.48	2.87	26.87	124.8	.780		
593	4.51	34.169	.54	3.12	500	4.83	34.08	1.01	3.03	26.99	113.0	.899		
786	4.00	34.345	.41	3.28	600	4.49	34.18	.52	3.13	27.11	103.2	1.007		
981	3.50	34.409	.45	3.26	700	4.21	34.27	.47	3.22	27.21	93.3	1.105		
					800	3.96	34.35	.41	3.28	27.30	85.2	1.194		
					1000	3.45	34.42	.45	3.26	27.40	76.4	1.356		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	Sx10 ⁶	ΔD
RH 45	42	0.2 N	125	13.2 W	DATE	1 AUG 62	1235	GCT	WTRE 9	DRY 55.0	WET 55.0	
WIND DIRECTION 30 VFL			4 KTS		HAR 10	SWELL DIRECTION 25 H	3 T	6 CLOUD	0 AMT 10	WEATHER 28		
0	9.57	32.940	5.83	1.22	0	9.57	32.96	5.83	1.23	25.44	253.7	0
10	9.91	33.328	6.14	1.32	10	9.91	33.33	6.15	1.33	25.69	231.9	.024
20	10.34	33.747	6.34	1.35	20	10.34	33.75	6.34	1.36	25.94	208.0	.046
30	9.49	33.745	5.80	1.52	30	9.89	33.77	5.89	1.52	25.04	199.6	.067
52	9.35	33.838	5.27	1.94	50	9.39	33.83	5.32	1.90	26.17	187.4	.105
103	8.06	33.886	3.67	2.26	75	8.72	33.87	4.51	2.15	26.30	174.9	.151
152	7.63	33.958	2.92	2.48	100	8.12	33.89	3.76	2.26	26.41	165.3	.193
202	7.14	33.991	2.20	2.48	150	7.64	33.96	2.94	2.47	26.53	154.0	.273
301	6.26	34.050	1.52	2.82	200	7.06	33.99	2.23	2.48	26.64	144.3	.347
398	5.72	34.144	.81	3.12	250	6.62	34.02	1.81	2.62	26.72	137.0	.418
494	5.31	34.191	.61	3.22	300	6.27	34.05	1.52	2.82	26.79	130.8	.485
590	5.05	34.238	.45		400	5.71	34.15	.80	3.12	26.94	118.2	.609
782	4.27	34.324	.31	3.45	500	5.29	34.19	.60	3.23	27.03	109.9	.723
974	3.52	34.422	.41	3.30	600	5.01	34.24	.44	3.34	27.10	104.5	.830
1169	3.22	34.468	.56	3.39	700	4.62	34.29	.34	3.42	27.18	97.1	.931
					800	4.20	34.33	.31	3.44	27.26	89.5	1.024
					1000	3.56	34.43	.43	3.31	27.41	76.5	1.190

RH	35	42	0.1	N	124	59.8	W	DATE	3 AUG 62	1600	GCT	WIRE	5	DRY	57.0	WET	56.0	
WIND DIRECTION		VEL	C KTS		BAR	11		SWELL DIRECTION	25	H	3 T	7	CLOUD	D	AMT	10	WEATHER	01
0	11.35	32.627	6.32	.79	0	11.35	32.63	6.32	.79		24.90		307.3					
10	9.30	33.380	5.62	1.48	10	9.30	33.38	5.63	1.49		25.83		218.5					
20	9.77	33.818	5.77	1.51	20	9.77	33.82	5.78	1.52		26.10		193.6					
30	9.60	33.906	5.38	1.89	30	9.60	33.91	5.39	1.90		26.19		184.5					
52	9.08	33.902	4.77	1.99	50	9.14	33.90	4.83	1.98		26.26		178.3					
77	8.10	33.979	3.27	2.32	75	8.18	33.94	3.39	2.29		26.44		161.9					
103	7.69	33.982	2.74	2.45	100	7.72	33.98	2.77	2.44		26.54		152.7					
152	7.15	34.006	2.29	2.51	150	7.17	34.01	2.30	2.51		26.64		143.7					
201	6.92	34.034	1.88		200	6.92	34.03	1.89	2.60		26.69		139.2					
296	6.18	34.090	1.17	2.81	250	6.54	34.06	1.49	2.70		26.77		132.6					
391	5.84	34.133	.89	3.01	300	6.16	34.09	1.15	2.82		26.84		126.3					
487		34.168	.69	3.13	400	5.81	34.14	.87	3.02		26.92		120.1					
584	5.19	34.223	.50	3.20	500	5.47	34.18	.66	3.14		26.99		113.6					
778	4.46	34.309	.34	3.30	600	5.13	34.23	.48	3.21		27.08		106.8					
					700	4.76	34.28	.37	3.27		27.16		99.5					
					800	4.38	34.28	.34	3.31		27.23		92.7					

RH	25	42	0.3	N	124	46.2	W	DATE	3 AUG 62	1853	GCT	WIRE	9	DAY	59.0	WET	57.0	
WIND DIRECTION		VEI	C KTS		BAR	13		Swell Direction	29	H	3 T	8	CLOUD	9	AMT	9	WEATHER	01
0	11.12	33.752	6.26		1.43			0	11.13	33.76	6.27	1.43		25.81		220.4		
10	11.79	33.769	5.89		1.38			10	11.79	33.77	5.90	1.39		25.70		231.0		
20	9.46	33.701	4.57		1.86			20	9.46	33.80	4.57	1.86		26.13		190.7		
30	8.67	33.816	3.75		2.16			30	8.67	33.82	3.76	2.16		26.27		177.0		
52	8.33	33.898	3.72		2.40			50	8.36	33.89	3.72	2.40		26.38		167.5		
76	8.10	33.926	3.26		2.33			75	8.11	33.93	3.28	2.33		26.44		161.7		
101	7.82	33.944	2.98		2.44			100	7.83	33.94	2.99	2.43		26.50		156.8		
152	7.54	33.984	2.52		3.15			150	7.55	33.98	2.54	3.13		26.57		150.7		
203	7.00	34.014	2.10		2.62			200	7.03	34.01	2.12	2.66		26.66		142.2		
304	6.53	34.091	1.64		2.88			250	6.72	34.05	1.76	2.63		26.74		135.8		
405	6.28	34.172	1.09		3.11			300	6.54	34.09	1.46	2.85		26.79		131.5		
504	5.66	34.160	.72		3.33			400	6.29	34.12	1.10	3.10		26.85		127.4		
604	5.18	34.219	.50		3.70			500	5.69	34.16	.73	3.32		26.95		117.5		
								600	5.20	34.22	.51	3.68		27.04		108.7		

RH 15 42 0.0 N 124 32.8 W DATE 3 AUG 62 2205 GCT WIRE 0 DRY 56.0 WET 55.0
 WIND DIRECTION 20 VEI 2 KTS BAR 14 SWELL DIRECTION 28 H 2 T 6 CLOUD 9 AMT 9 WEATHER 02

0	10.52	33.786	5.54	1.78	0	10.52	33.79	5.55	1.79	25.94	207.7
10	9.48	33.873	5.03	1.94	10	9.48	33.88	5.04	1.95	26.19	184.8
20	8.73	33.902	3.96	2.14	20	8.73	33.91	3.97	2.15	26.33	171.4
31	8.31	33.933	3.17	2.21	30	8.34	33.93	3.41	2.21	26.41	163.9
52	8.00	33.976	2.90	2.37	50	8.01	33.97	2.93	2.35	26.49	156.4
78	7.89	34.000	2.30	2.64	75	7.90	34.00	2.36	2.61	26.53	153.3
105	7.75	34.009	2.22	2.66	100	7.78	34.01	2.23	2.66	26.55	151.2

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ E	Z	T	S	O ₂	PO ₄ E	σ _t	Sx10 ⁶	A D		
NH 5 42 0.0 N 124 19.5 W DATE 4 AUG 62 0055 GCT WIRE 1 DRY 56.0 WET 55.0														
WIND DIRECTION VEL C KTS BAR 13 SWELL DIRECTION 28 H 3 T 8 CLOUD 9 AMT 7 WEATHER -														
0 11.48 33.849 9.14 .44	0	11.48	33.85	9.14 .44	0	10.48	32.80	6.02	25.18	280.1	0			
10 10.32 33.882 6.79 1.28	10	10.32	33.89	6.40 1.29	10	8.74	33.32	4.44	25.87	214.9	.025			
20 9.04 33.930 3.73 2.83	20	9.04	33.93	3.73 2.84	20	8.04	33.55	2.68	26.16	187.6	.045			
30 8.54 33.936 3.00 2.52	30	8.54	33.94	3.01 2.52	30	7.23	33.86	1.43	26.28	176.4	.063			
									26.52	153.9	.096			
NH 5 44 39.1 N 124 10.6 W DATE 4 SEP 62 1845 GCT WIRE 0 DRY 54.5 WET 54.0														
WIND DIRECTION VEL C KTS BAR 16 SWELL DIRECTION 28 H 1 T 7 CLOUD 0 AMT 10 WEATHER 28														
0 10.48 32.798 6.01	0	10.48	32.80	6.02	0	10.48	32.80	6.02	25.18	280.1	0			
10 8.74 33.316 4.44	10	8.74	33.32	4.44	10	8.74	33.32	4.44	25.87	214.9	.025			
20 8.04 33.549 2.68	20	8.04	33.55	2.68	20	8.04	33.55	2.68	26.16	187.6	.045			
30 7.78 33.653 2.89	30	7.78	33.66	2.90	30	7.79	33.66	2.90	26.28	176.4	.063			
40 7.48 33.784 2.39	40	7.48	33.86	1.43	50	7.23	33.86	1.43	26.52	153.9	.096			
50 7.23 33.868 1.42	50	7.23	33.86	1.43										
NH 15 44 39.1 N 124 24.6 W DATE 4 SEP 62 2055 GCT WIRE 0 DRY 56.0 WET 56.0														
WIND DIRECTION VEL 0 KTS BAR 16 SWELL DIRECTION 31 H 1 T 7 CLOUD 0 AMT 10 WEATHER 28														
0 10.39 32.905 6.26	0	10.39	32.91	6.27	0	10.39	32.91	6.27	25.28	270.7	0			
10 9.58 33.083 5.57	10	9.58	33.09	5.57	10	9.58	33.09	5.57	25.56	244.9	.026			
20 8.46 33.073 4.54	20	8.46	33.08	4.54	20	8.46	33.08	4.54	25.72	229.0	.049			
30 9.54 33.072 4.47	30	9.54	33.08	4.47	30	9.54	33.08	4.47	25.55	245.4	.073			
40 8.46 33.109 4.23	40	8.46	33.11	3.96	50	7.84	33.11	3.96	25.88	214.0	.119			
50 7.84 33.162 3.95	50	7.84	33.11	3.96	75	7.79	33.69	2.83	26.30	174.8	.168			
75 7.78 33.682 2.82	75	7.78	33.68	2.83										
NH 25 44 39.1 N 124 38.7 W DATE 4 SEP 62 2250 GCT WIRE 3 DRY 56.0 WET 56.0														
WIND DIRECTION 30 VEL 2 KTS BAR 15 SWELL DIRECTION 30 H 2 T 8 CLOUD 0 AMT 10 WEATHER 01														
0 12.68 32.402 6.66	0	12.68	32.41	6.67	0	12.68	32.41	6.67	24.47	347.6	0			
10 10.88 32.660 5.76	10	10.88	32.67	5.77	10	10.88	32.67	5.77	25.01	297.1	.032			
20 9.27 32.800 5.10	20	9.27	32.80	5.10	20	9.27	32.80	5.10	25.38	261.2	.060			
30 8.34 32.950 4.69	30	8.34	32.96	4.69	30	8.34	32.96	4.69	25.65	236.5	.085			
50 7.84 33.176 3.99	50	7.84	33.18	3.99	50	7.84	33.18	3.99	25.90	213.0	.130			
75 7.60 33.580 2.87	75	7.60	33.58	2.88	75	7.60	33.58	2.88	26.25	179.9	.179			
100 7.72 33.780 3.07	100	7.72	33.79	3.08	100	7.72	33.79	3.08	26.39	167.1	.222			
155 7.32 33.934 2.01	155	7.32	33.93	2.13	150	7.37	33.93	2.13	26.55	152.2	.302			
205 7.04 33.978 1.87	205	7.04	33.98	1.88	200	7.06	33.98	1.88	26.63	145.2	.377			
NH 35 44 39.1 N 124 52.3 W DATE 5 SEP 62 0050 GCT WIRE 3 DRY 0 WET 0														
WIND DIRECTION 33 VEL 3 KTS BAR 15 SWELL DIRECTION 30 H 3 T 7 CLOUD 0 AMT 9 WEATHER 01														
0 15.12 31.757 5.80	0	15.13	31.76	5.81	0	15.13	31.76	5.81	23.48	442.4	0			
10 12.78 32.317 5.34	10	12.78	32.32	5.34	10	12.78	32.32	5.34	24.39	355.9	.040			
20 9.78 32.533 5.52	20	9.78	32.54	5.53	20	9.78	32.54	5.53	25.09	288.9	.072			
30 9.16 32.610 5.08	30	9.16	32.61	5.08	30	9.16	32.61	5.08	25.25	273.8	.100			
50 8.32 32.983 4.20	50	8.32	32.99	4.20	50	8.32	32.99	4.20	25.67	234.1	.151			
74 8.05 33.405 3.41	74	8.05	33.42	3.38	75	8.05	33.42	3.38	26.05	198.4	.205			
99 8.04 33.710 2.52	99	8.04	33.72		100	8.03	33.72		26.29	176.4	.252			
154 7.33 33.941	154	7.33	33.94		150	7.39	33.94		26.55	151.8	.334			
204 7.02 33.969	204	7.02	33.97		200	7.03	33.97		26.63	145.6	.408			

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ m/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	δ × 10 ³	Δ D
NH 105	44 39.1 N	125 28.4 W	DATE 6 SEP 62	0600 GCT	WIRE 6	DRY 60.2	WET 59.2					
WIND DIRECTION 35 VEL 4 KTS	BAR 17 SWELL DIRECTION 34 H 4 T 7 CLOUD	- AMT 10 WEATHER 02										

0	17.12	31.694	5.78		0	17.13	31.70	5.79		22.98	489.8	0
10	16.94	31.988	5.80		10	16.94	31.99	5.81		23.25	464.6	.048
20	17.00	32.243	5.69		20	17.00	32.25	5.69		23.43	447.6	.093
30	14.82	32.402	6.01		30	14.82	32.41	6.02		24.04	389.7	.135
40	10.54	32.565	6.41		50	10.42	32.57	6.40		25.01	297.2	.204
75	8.89	32.752	5.75		75	8.89	32.76	5.76		25.41	259.9	.273
100	8.46	33.262	4.56		100	8.46	33.27	4.56		25.87	216.1	.333
150	7.89	33.770	3.28		150	7.90	33.77	3.29		26.35	171.0	.430
201	7.22	33.947	2.60		200	7.23	33.95	2.61		26.58	149.9	.510
300	6.25	34.016	1.64		250	6.70	34.01	2.06		26.70	138.9	.582
399	5.49	34.043	1.29		300	6.26	34.02	1.65		26.77	132.8	.650
500	4.96	34.116	.78		400	5.48	34.04	1.28		26.89	122.9	.778
600	4.56	34.193	.44		500	4.96	34.12	.79		27.01	111.4	.895
801	4.04	34.318	.29		600	4.57	34.20	.44		27.12	102.5	1.002
1001	3.56	34.406	.15		700	4.28	34.26	.31		27.20	95.1	1.100
					800	4.04	34.32	.29		27.27	88.8	1.192
					1000	3.56	34.41	.35		27.38	78.4	1.360

NH 125	44 39.1 N	126 59.1 W	DATE 6 SEP 62	0922 GCT	WIRE 3	DRY 61.0	WET 59.0					
WIND DIRECTION 33 VEL 3 KTS	BAR 17 SWELL DIRECTION 31 H 2 T 7 CLOUD	9 AMT 10 WEATHER 02										

0	17.43	32.194	5.80		0	17.44	32.20	5.81		23.29	460.3	0
10	17.40	32.198	5.87		10	17.40	32.20	5.88		23.30	459.6	.046
20	17.32	32.209	5.79		20	17.32	32.21	5.80		23.33	457.2	.092
30	15.52	32.466	6.37		30	15.52	32.47	6.38		23.94	399.5	.135
50	12.28	32.648	6.57		50	12.28	32.67	6.57		24.76	321.7	.207
75	9.20	32.725	6.35		75	9.20	32.73	6.35		25.34	266.6	.280
101	8.37	33.065	5.40		100	8.38	33.05	5.44		25.71	231.0	.342
151	7.52	33.661	4.00		150	7.53	33.65	4.11		26.31	175.1	.444
203	6.84	33.897	3.26		200	6.88	33.89	3.30		26.59	149.1	.525
303	5.64	33.945	2.23		250	6.24	33.92	2.72		26.70	139.4	.597
403	4.90	34.017	1.30		300	5.67	33.94	2.25		26.79	131.2	.665
504	4.57	34.126	.46		400	4.92	34.01	1.33		26.93	118.3	.789
604	4.32	34.212	.38		500	4.58	34.12	.68		27.05	106.8	.902
805	3.72	34.300	.33		600	4.33	34.21	.39		27.15	98.9	1.005
1006	3.44	34.421	.49		700	4.02	34.26	.36		27.22	92.2	1.100
					800	3.73	34.30	.33		27.28	86.7	1.190
					1000	3.44	34.42	.48		27.41	76.2	1.352

NH 145	44 39.1 N	127 27.3 W	DATE 6 SEP 62	1345 GCT	WIRE 3	DRY 62.0	WET 60.0					
WIND DIRECTION 34 VEL 5 KTS	BAR 17 SWELL DIRECTION 31 H 3 T 7 CLOUD	9 AMT 10 WEATHER 02										

0	17.67	31.878	5.60		0	17.67	31.88	5.60		22.99	488.8	0
10	17.68	31.874	4.65		10	17.69	31.88	4.66		22.99	489.6	.049
20	17.67	31.895	5.37		20	17.67	31.89	5.38		23.00	488.8	.098
30	16.44	32.004	6.00		30	16.48	32.10	6.01		23.44	467.3	.145
50	12.20	32.525	6.59		50	12.20	32.63	6.59		24.76	323.4	.222
76	9.40	32.636	6.40		75	9.46	32.64	6.43		25.22	277.5	.297
102	8.25	33.057	5.01		100	8.30	33.02	5.13		25.70	232.2	.360
152	7.49	33.744	3.57		150	7.50	33.72	3.61		26.37	169.3	.461
204	6.84	33.903	2.54		200	6.89	33.90	2.60		26.60	148.4	.540
304	5.69	33.941	2.15		250	6.27	33.94	2.26		26.71	138.3	.612
405	5.06	34.018	1.24		300	5.73	33.04	2.15		26.78	132.3	.680
507	4.78	34.130	.64		400	5.08	34.01	1.31		26.91	120.3	.806
607	4.40	34.209	.35		500	4.80	34.12	.67		27.03	109.3	.920
807	3.80	34.328	.26		600	4.43	34.20	.36		27.14	100.4	1.025
1006	3.58	34.422	.33		700	4.08	34.27	.31		27.22	92.2	1.122
					800	3.82	34.32	.26		27.29	85.7	1.210
					1000	3.58	34.42	.33		27.39	77.6	1.374

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	O _t	S x 10 ⁶	ΔD		
NH 165 44 39.1 N 127 55.0 W DATE 6 SEP 62 1720 GCT WIRE 6 DRY 61.5 WET 59.8 WIND DIRECTION 34 VEL 5 KTS BAR 18 SWELL DIRECTION 32 H 6 T 7 CLOUD 9 AMT 10 WEATHER 02														
0	17.26	32.310	5.58		0	17.26	32.31	5.58		23.42	448.0		0	
10	17.26	32.295	4.75		10	17.26	32.30	4.76		23.41	449.4	.045		
20	17.26	32.300	5.60		20	17.26	32.30	5.60		23.41	449.3	.090		
30	14.52	32.641	6.55		30	14.52	32.65	6.56		24.29	366.1	.131		
40	11.44	32.671	5.76		50	11.31	32.63	5.76		24.90	307.5	.198		
50	9.12	32.643	6.02		75	9.13	32.65	6.03		25.29	271.4	.270		
60	8.48	32.880	5.49		100	8.48	32.89	5.49		26.58	244.1	.335		
151	8.00	33.637	3.74		150	8.01	33.62	3.77		26.22	183.8	.442		
202	7.16	33.884	3.26		200	7.20	33.88	3.27		26.54	154.2	.526		
302	5.92		2.01		250	6.52	33.97	2.66		26.70	139.0	.599		
402	4.92	34.025	1.20		300	5.94	33.95	2.03		26.76	133.9	.668		
504	4.70	34.143	.62		400	4.94	34.02	1.21		26.94	117.8	.793		
604	4.40	34.224	.36		500	4.70	34.14	.64		27.05	107.0	.906		
806	3.83	34.325	.31		600	4.41	34.22	.37		27.15	99.0	1.009		
1006	3.42	34.397	.33		700	4.12	34.28	.34		27.23	91.8	1.104		
					800	3.85	34.32	.31		27.29	86.2	1.193		
					1000	3.43	34.40	.33		27.39	77.7	1.357		
NH 5 44 39.1 N 124 10.7 W DATE 16 OCT 62 0555 GCT WIRE 0 DRY 54.8 WET 53.4 WIND DIRECTION 36 VEL 13 KTS BAR 30 SWELL DIRECTION 30 H 6 T 9 CLOUD - AMT 0 WEATHER 00														
0	12.79	32.302	5.87		0	12.79	32.40	5.88		24.45	350.3		0	
5	12.79	32.404	5.76		10	12.93	32.39	5.88		26.42	353.3	.035		
15	13.04	32.383	6.07		20	12.90	32.42	6.19		26.44	351.3	.070		
25	12.73	32.457	6.21		30	12.69	32.47	6.01		26.52	343.9	.105		
35	12.66	32.491	5.79											
45	12.47	32.606	5.84											
NH 15 44 39.2 N 124 24.7 W DATE 16 OCT 62 0755 GCT WIRE 3 DRY 56.0 WET 53.0 WIND DIRECTION 01 VEL 12 KTS BAR 30 SWELL DIRECTION 34 H 3 T 7 CLOUD - AMT 0 WEATHER 02														
0	12.47	32.675	6.05		0	12.47	32.68	6.06		24.73	323.6		0	
10	12.47	32.675	6.05		10	12.47	32.68	6.06		24.73	323.8	.032		
20	12.71	32.740	5.99		20	12.31	32.75	5.99		24.81	316.3	.064		
30	12.26	32.725	5.97		30	12.26	32.73	5.97		24.80	316.7	.096		
40	12.02	32.786	5.80		50	12.00	32.79	5.79		24.90	308.0	.158		
73	11.50	32.931	5.57											
NH 25 44 39.1 N 124 38.7 W DATE 16 OCT 62 1034 GCT WIRE 8 DRY 54.0 WET 52.5 WIND DIRECTION 01 VEL 9 KTS BAR 30 SWELL DIRECTION 28 H 4 T 9 CLOUD - AMT 0 WEATHER 02														
0	12.36	32.606	6.18		0	12.36	32.61	6.19		24.69	326.7		0	
10	12.35	32.586	6.12		10	12.35	32.59	6.13		24.68	328.2	.033		
20	12.14	32.638	5.99		20	12.14	32.64	5.99		24.76	320.8	.065		
30	11.31	32.807	5.53		30	11.31	32.81	5.54		25.04	293.9	.096		
50	10.91	32.894	5.31		50	10.91	32.90	5.32		25.18	281.1	.153		
76	8.76	33.473	4.09		75	8.85	33.45	4.14		25.96	207.8	.215		
102	8.07	33.666	3.37		100	8.09	33.66	3.41		26.23	181.7	.263		
154	7.55	33.936	2.40		150	7.57	33.92	2.45		26.52	155.4	.347		
198	7.29	33.967	2.29		200	7.28	33.96	2.30		26.59	149.1	.424		
NH 35 44 39.2 N 124 52.8 W DATE 16 OCT 62 1257 GCT WIRE 8 DRY 54.5 WET 53.0 WIND DIRECTION 01 VEL 12 KTS BAR 30 SWELL DIRECTION 28 H 4 T 9 CLOUD 4 AMT 2 WEATHER 03														
0	11.98	32.664	6.01		0	11.98	32.67	6.02		24.81	315.6		0	
10	11.70	32.670	5.82		10	11.70	32.67	5.82		24.87	310.4	.031		
20	11.29	32.700	5.79		20	11.29	32.71	5.79		24.96	301.3	.062		
30	11.12	32.906	5.35		30	11.13	32.91	5.35		25.15	283.4	.091		
50	10.34	33.107	4.95		50	10.38	33.11	4.95		25.44	256.5	.145		
75	9.03	33.641	4.07		75	9.03	33.65	4.07		26.08	196.1	.202		
103	8.17	33.849	3.24		100	8.23	33.84	3.32		26.35	170.3	.247		
156	7.93	34.005	2.34		150	7.96	34.00	2.41		26.52	155.3	.329		
206	7.54	34.047	2.03		200	7.60	34.04	2.04		26.61	147.7	.405		

OBSERVED					INTERPOLATED					DERIVED					
D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	S × 10 ⁶	ΔD			
NH 45	44 39.1 N	125	7.0 W	DATE 16 OCT 62	1445 GCT	WIRE 18	DRY 54.5	WET 53.5							
WIND DIRECTION 02 VEL 13 KTS	BAR 30 SWELL DIRECTION 28 H	6 T 16 CLOUD 3 AMT	1 WEATHER 02												
0	12.19	32.505	6.05		0	12.19	32.60	6.06		24.72	324.5	0			
10	12.02	32.587	5.93		10	12.02	32.59	5.94		24.74	322.2	.032			
20	11.40	32.684	5.86		20	11.40	32.64	5.86		24.93	304.4	.064			
30	11.36	32.698			30	11.36	32.70	5.71		24.95	302.8	.094			
50	10.84	32.927	5.31		50	10.84	32.93	5.32		25.22	277.5	.152			
76	9.50	33.355	4.81		75	9.56	33.34	4.83		25.75	227.0	.215			
100	8.27	33.679	3.88		100	8.27	33.68	3.89		26.23	182.4	.266			
146	7.92	33.847	3.36		150	7.89	33.88	3.28		26.44	163.0	.353			
194	7.53	34.011	2.41		200	7.50	34.02	2.31		26.60	148.0	.430			
288	6.97	34.061			250	7.21	34.04	1.58		26.66	143.2	.503			
387	5.92	34.035			100	6.85	34.06	2.01		26.72	137.8	.573			
486	5.07	34.053	1.31		400	5.80	34.04	1.63		26.84	127.3	.706			
					500	4.95	34.06	1.46		26.96	116.1	.827			
NH 65	44 39.1 N	125	35.0 W	DATE 16 OCT 62	1818 GCT	WIRE 15	DRY 54.8	WET 53.0							
WIND DIRECTION 02 VEL 14 KTS	BAR 31 SWELL DIRECTION 30 H	8 T 15 CLOUD 3 AMT	1 WEATHER 02												
0	12.62	32.341	6.17		0	12.63	32.35	6.18		24.44	351.0	0			
10	12.59	32.321	6.16		10	12.59	32.33	6.17		24.43	352.1	.035			
20	12.55	32.315	6.17		20	12.55	32.32	6.18		24.43	352.0	.070			
29	12.54	32.311	6.14		30	12.45	32.32	6.14		24.45	350.3	.105			
48	10.39	32.605	5.94		50	10.25	32.65	5.87		25.11	288.1	.169			
100	8.39	33.756	3.85		75	8.91	33.24	4.92		25.78	224.7	.233			
147	7.74	33.904	3.03		100	8.39	33.76	3.85		26.27	178.4	.284			
195	7.09	33.997	2.45		150	7.70	33.91	2.99		26.40	158.1	.368			
293	5.93	34.001	2.09		200	7.02	33.99	2.42		26.65	143.7	.443			
391	5.50	34.065	1.29		250	6.38	33.99	2.21		26.74	135.6	.513			
491	4.93	34.004	.90		300	5.89	34.01	2.03		26.81	129.3	.579			
590	4.45	34.185	.79		400	5.45	34.07	1.24		26.91	120.7	.704			
786	4.12	34.308	.33		500	4.88	34.10	.89		27.00	111.8	.821			
984	3.58	34.408	.39		600	4.43	34.19	.76		27.13	101.2	.927			
1178	3.15	34.479	.54		700	4.23	34.26	.52		27.20	94.5	1.025			
					800	4.08	34.12	.33		27.26	89.4	1.117			
					1000	3.54	34.41	.40		27.39	77.5	1.284			
					1200	3.10	34.49	.56		27.49	68.2	1.429			
NH 85	44 39.1 N	126	3.5 W	DATE 16 OCT 62	2130 GCT	WIRE 12	DRY 56.0	WET 53.5							
WIND DIRECTION 01 VEL 16 KTS	BAR 30 SWELL DIRECTION 31 H	5 T 11 CLOUD 3 AMT	1 WEATHER 02												
0	12.86	32.256	6.22		0	12.86	32.26	6.22		24.33	361.6	0			
10	12.81	32.259	6.17		10	12.81	32.26	6.18		24.34	360.7	.036			
20	12.76	32.286	6.20		20	12.76	32.29	6.20		24.37	358.0	.072			
30	12.52	32.303	5.52		30	12.52	32.31	5.53		24.43	352.5	.108			
50	8.42	32.875	5.23		50	8.42	32.88	5.23		25.57	243.5	.167			
77	8.05	33.287	4.39		75	8.08	33.27	4.46		25.93	210.3	.224			
104	7.96	33.597	3.74		100	7.97	33.56	3.82		26.17	187.4	.274			
152	7.54	33.874	3.04		150	7.56	33.87	3.06		26.47	159.4	.360			
202	6.70	33.94	2.94		200	6.74	33.94	2.94		26.65	143.3	.436			
301	5.80	33.986	2.03		250	6.17	33.97	2.56		26.74	134.9	.505			
398	5.75	34.085	1.07		300	5.81	33.99	2.04		26.80	129.7	.572			
497	5.00	34.192	.63		400	5.34	34.09	1.06		26.94	117.9	.695			
594	4.49	34.245	.46		500	4.98	34.19	.62		27.07	106.2	.807			
789	4.09	34.343	.30		600	4.47	34.25	.45		27.17	97.7	.909			
984	3.51	34.471	.39		700	4.23	34.30	.34		27.23	91.6	1.004			
					800	4.06	34.35	.31		27.29	86.8	1.093			
					1000	3.46	34.44	.40		27.42	74.9	1.255			

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	P _{O₂}	Z	T	S	O ₂	P _{O₂}	σ _t	δ × 10 ⁶	Δ D
NH 105	44 39.1 N	126 30.9 W	DATE 17 OCT 62	0050 GCT	WTRE 5	DRY 56.5	WET 54.5					
WIND DIRECTION 02 VEI 30 KTS	HAR 29 SWELL DIRECTION 30 H				7 T 13 CLOUD	3 AMT	3 WEATHER 03					
0	14.00	32.399	6.09		0	14.00	32.34	6.09		24.16	377.3	0
10	13.99	32.399	6.10		10	13.99	32.33	6.10		24.16	378.0	.038
20	13.90	32.393	6.09		20	13.90	32.34	6.09		24.18	376.2	.075
29	13.88	32.318	6.09		30	13.68	32.33	6.11		24.22	372.8	.113
48	9.20	32.639	6.36		50	9.00	32.68	6.30		25.33	267.0	.177
100	8.16	33.471	4.11		75	8.66	33.11	5.39		25.72	230.2	.239
147	7.47	33.735	3.10		100	8.16	33.48	4.11		26.08	196.3	.292
195	6.98	33.911	2.61		150	7.44	33.75	3.06		26.40	166.5	.383
293	5.91	33.944	1.88		200	6.92	33.92	2.57		26.60	147.7	.462
391	5.37	33.946	1.23		250	6.35	33.93	2.17		26.69	140.1	.533
491	4.96	34.045	.79		300	5.86	33.95	1.83		26.77	133.3	.602
590	4.59	34.118	.50		400	5.33	33.99	1.18		26.86	125.0	.731
787	4.07	34.230	.31		500	4.92	34.05	.76		26.96	116.0	.851
984	3.63	34.306	.31		600	4.56	34.12	.48		27.06	107.8	.963
1179	3.19	34.405	.52		700	4.28	34.19	.35		27.14	100.6	1.067
					800	4.04	34.24	.31		27.20	94.9	1.165
					1000	3.59	34.31	.32		27.31	85.6	1.346
					1200	3.14	34.42	.54		27.43	73.9	1.505
AH 105	46 14.8 N	126 37.4 W	DATE 17 OCT 62	1512 GCT	WTRE 4	DRY 55.2	WET 54.0					
WIND DIRECTION 02 VEI 9 KTS	HAR 27 SWELL DIRECTION 29 H				8 T 12 CLOUD	9 AMT	9 WEATHER 02					
0	12.74	32.296	6.32		0	12.74	32.30	6.32		24.38	356.5	0
10	12.72	32.345	6.19		10	12.72	32.31	6.19		24.39	355.6	.036
20	12.68	32.310	6.09		20	12.68	32.31	6.09		24.40	354.7	.071
30	12.66	32.302	6.02		30	12.66	32.31	6.03		24.40	355.2	.107
49	10.15	32.629	5.42		50	10.07	32.65	5.38		25.13	285.6	.171
102	8.02	33.548	3.71		75	8.56	33.12	4.52		25.74	228.2	.235
151	7.44	33.845	3.09		100	8.02	33.52	3.77		26.13	191.0	.287
201	6.96	33.951	2.65		150	7.44	33.84	3.10		26.47	159.7	.375
303	6.06	34.011	2.15		200	6.97	33.95	2.66		26.62	146.0	.451
404	5.45	34.059	1.16		250	6.50	33.99	2.41		26.72	137.3	.522
505	5.01	34.135	.70		300	6.08	34.01	2.16		26.79	131.4	.589
606	4.72	34.203	.47		400	5.47	34.06	1.20		26.90	121.7	.716
808	4.03	34.336	.28		500	5.03	34.13	.71		27.01	111.4	.832
1011	3.44	34.407	.35		600	4.74	34.20	.48		27.10	104.4	.940
1208	3.00	34.486	.43		700	4.40	34.27	.34		27.19	95.9	1.040
					800	4.06	34.33	.28		27.28	88.0	1.132
					1000	3.51	34.40	.34		27.39	77.9	1.298
					1200	3.02	34.48	.43		27.50	67.6	1.443
AH 85	46 14.4 N	126 8.9 W	DATE 17 OCT 62	2007 GCT	WTRE 14	DRY 56.5	WET 55.0					
WIND DIRECTION 31 VEI 3 KTS	HAR 26 SWELL DIRECTION 30 H				4 T 7 CLOUD	8 AMT	3 WEATHER 01					
0	12.74	32.350	6.08		0	12.74	32.36	6.08		24.43	351.8	0
10	12.67	32.354	6.02		10	12.67	32.36	6.03		24.44	351.1	.035
20	12.64	32.355	6.00		20	12.64	32.36	6.01		24.45	350.7	.070
29	12.59	32.379	5.97		30	12.58	32.38	5.96		24.48	348.1	.105
48	11.75	32.423	5.80		50	11.47	32.47	5.71		24.75	322.2	.172
75	8.14	33.178	4.41		75	8.14	33.18	4.41		25.85	217.4	.240
101	7.91	33.601	3.51		100	7.92	33.59	3.54		26.20	184.4	.290
148	7.39	33.808	2.84		150	7.37	33.90	2.82		26.53	154.2	.374
199	6.90	33.950	2.38		200	6.98	33.95	2.37		26.62	146.1	.449
297	6.13	34.019	1.63		250	6.53	33.99	1.97		26.71	138.1	.520
395	5.52	34.093	1.03		300	6.11	34.02	1.61		26.79	130.9	.588
496	4.95	34.152	.70		400	5.49	34.10	1.01		26.93	119.0	.713
596	4.60	34.193	.50		500	4.93	34.15	.69		27.04	108.5	.826
797	4.05	34.325	.20		600	4.59	34.20	.49		27.11	102.9	.932
995	3.44	34.429	.34		700	4.31	34.26	.36		27.19	95.6	1.031
					800	4.04	34.33	.29		27.27	88.1	1.123
					1000	3.42	34.43	.34		27.42	74.9	1.286

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ #	Z	T	S	O ₂	PO ₄ #	σ _t	$\delta \times 10^8$	Δ D
AH 65 46 14.4 N 125 39.5 W DATE 17 OCT 62 2355 GCT WIRE 0 DRY 56.5 WET 54.5 WIND DIRECTION 31 VEL 9 KTS BAR 24 SWELL DIRECTION 30 H 4 T 7 CLOUD 4 AMT 2 WEATHER 01												
0	12.72	32.390	6.18		0	12.72	32.39	6.19		24.46	349.2	0
10	12.65	32.393	6.13		10	12.65	32.40	6.14		24.47	347.9	.035
20	12.51	32.419	6.08		20	12.51	32.42	6.08		24.52	343.6	.069
30	12.41	32.396	6.02		30	12.41	32.40	6.03		24.52	343.7	.104
50	12.50	32.562	6.17		50	10.50	32.57	6.18		25.00	298.8	.168
78	8.00	32.875	5.62		75	8.20	32.83	5.74		25.57	244.4	.236
105	7.96	33.510	3.68		100	7.97	33.39	4.05		26.04	199.7	.291
155	7.37	33.871	2.69		150	7.44	33.86	2.70		26.49	158.0	.381
207	6.83	33.971	2.26		200	6.90	33.97	2.30		26.65	143.7	.456
310	6.08	34.017	1.58		250	6.48	34.00	1.95		26.73	136.4	.526
411	5.54	34.067	1.10		300	6.14	34.02	1.64		26.79	131.6	.593
515	5.09	34.126	.76		400	5.59	34.06	1.14		26.89	122.9	.720
617	4.69	34.192	.47		500	5.15	34.12	.80		26.99	113.9	.839
820	4.12	34.330	.31		600	4.75	34.18	.51		27.08	106.0	.949
1019	3.62	34.406	.36		700	4.44	34.25	.36		27.17	97.6	1.050
					800	4.17	34.32	.33		27.25	90.3	1.144
					1000	3.67	34.40	.35		27.37	80.0	1.314

AH 45	46 14.4 N	125 10.6 W	DATE 18 OCT 62 0315 GCT	WIRE -	DRY 54.5	WET 53.0						
WIND DIRECTION 01 VEL 9 KTS BAR 23 SWELL DIRECTION 28 H 4 T B CLOUD 0 AMT 9 WEATHER 03												
0	11.90	32.374	6.11		0	11.90	32.38	6.11		24.60	335.6	0
10	11.88	32.397	6.02		10	11.88	32.34	6.03		24.58	338.1	.034
20	11.72	32.341	5.98		20	11.72	32.35	5.98		24.61	335.2	.067
30	11.38	32.317	5.82		30	11.38	32.32	5.82		24.65	331.3	.101
49	9.86	32.693	5.06		50	9.80	32.72	5.02		25.23	276.5	.161
102	7.84	33.672	3.31		75	8.58	33.23	4.11		25.82	220.4	.224
151	7.24	33.912	2.44		100	7.87	33.64	3.36		26.25	179.7	.274
201	6.76	33.972	1.94		150	7.25	33.91	2.45		26.55	151.8	.356
302	6.12	34.007	1.75		200	6.77	33.97	1.95		26.67	141.7	.430
403	5.63	34.077	1.13		250	6.41	33.99	1.81		26.73	136.1	.499
506	5.06	34.103	.80		300	6.13	34.01	1.75		26.78	132.3	.566
607	4.45	34.177	.46		400	5.64	34.07	1.15		26.89	122.5	.694
810	3.97	34.309	.30		500	5.09	34.10	.82		26.98	114.4	.812
1012	3.51	34.405	.32		600	4.49	34.17	.48		27.10	103.6	.921
1211	2.96	34.473	.54		700	4.17	34.24	.33		27.19	95.2	1.020
					800	3.98	34.30	.31		27.26	89.2	1.112
					1000	3.54	34.40	.31		27.38	78.6	1.280
					1200	2.99	34.47	.52		27.49	68.2	1.427

AH 35	46 14.4 N	124 6.3 W	DATE 19 OCT 62 0555 GCT	WIRE 5	DRY 55.7	WET 53.9						
WIND DIRECTION 01 VEL 9 KTS BAR 23 SWELL DIRECTION 28 H 4 T 8 CLOUD 0 AMT 8 WEATHER 02												
0	12.84	32.400	6.04		0	12.84	32.40	6.05		24.44	350.7	0
10	12.83	32.398	5.97		10	12.83	32.40	5.97		24.44	350.8	.035
20	12.67	32.423	5.76		20	12.67	32.43	5.77		24.49	346.2	.070
30	12.31	32.379	5.86		30	12.31	32.38	5.86		24.53	343.1	.104
50	8.78	32.901	4.70		50	8.78	33.00	4.70		25.61	240.2	.163
75	8.06	33.441	3.83		75	8.06	33.45	3.84		26.07	196.7	.217
102	7.86	33.704	3.27		100	7.87	33.69	3.30		26.29	176.1	.264
153	7.34	33.913	2.58		150	7.37	33.91	2.61		26.53	153.8	.346
204	6.89	33.953	2.29		200	6.92	33.95	2.30		26.63	145.4	.421
305	6.23	34.005	1.83		250	6.57	33.98	2.09		26.70	139.3	.492
408	5.53	34.065	1.08		300	6.26	34.00	1.85		26.76	134.2	.561
510	5.13	34.144	.70		400	5.58	34.06	1.14		26.89	122.9	.689
610	4.78	34.198	.47		500	5.16	34.14	.73		27.00	112.6	.807
					600	4.81	34.19	.49		27.08	105.7	.916

AH 25	46 14.7 N	124 41.1 W	DATE 19 OCT 62 0750 GCT	WIRE 2	DRY 55.2	WET 53.0						
WIND DIRECTION 34 VEL 7 KTS BAR 21 SWELL DIRECTION 30 H 4 T 8 CLOUD 4 AMT 1 WEATHER 01												
0	12.84	31.511	6.04		0	12.84	31.52	6.05		23.76	416.1	0
10	12.76	32.353	5.99		10	12.76	32.36	5.99		24.42	352.9	.038
20	12.17	32.367	5.95		20	12.17	32.37	5.95		24.54	341.3	.073
30	11.52	32.442	5.78		30	11.52	32.45	5.79		24.72	324.5	.106
50	9.44	32.886	5.06		50	9.44	32.89	5.06		25.42	257.9	.165
76	8.10	33.379	4.18		75	8.13	33.36	4.21		26.00	203.7	.222
105	7.86	33.649	3.53		100	7.90	33.62	3.63		26.23	182.1	.271
157	7.39	33.900	2.58		150	7.45	33.88	2.69		26.50	157.0	.355
210	7.03	33.971	2.04		200	7.09	33.96	2.11		26.61	147.0	.431

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ‡	Z	T	S	O ₂	PO ₄ ‡	σ _t	δ × 10 ⁶	Δ D		
AH 15	46 14.5 N	124 27.3 W	DATE 18 OCT 62	1047 GCT	WIRE -	DRY 57.0	WET 54.0							
WIND DIRECTION	34 VEL	9 KTS	HAR 20	SWELL DIRECTION	30 H	3 T	8 CLOUD	4 AMT	5 WEATHER	03				
0	12.64	26.820	6.15		0	12.64	26.82	6.16		20.18	758.8	0		
10	13.06	31.106	6.04		10	13.06	31.11	6.05		23.40	450.2	.060		
20	12.82	32.380	5.43		20	12.82	32.38	5.83		24.43	352.2	.101		
30	12.68	32.381	5.86		30	12.68	32.39	5.86		24.46	349.7	.136		
40	11.41	32.521	5.54		50	11.27	32.55	5.48		24.85	312.7	.202		
74	8.24	33.364	3.85		75	8.20	33.38	3.81		26.00	203.4	.266		
103	7.83	33.627	3.17		100	7.87	33.62	3.20		26.24	181.4	.314		
154	7.48	33.848	2.19		150	7.50	33.84	2.43		26.46	160.8	.400		
206	6.97	33.958	2.06		200	7.04	33.95	2.07		26.61	146.8	.477		
AH 5	46 14.4 N	124 13.8 W	DATE 18 OCT 62	1235 GCT	WIRE 1	DRY 56.0	WET 54.0							
WIND DIRECTION	VEL	C KTS	HAR 19	SWELL DIRECTION	30 H	3 T	8 CLOUD	4 AMT	7 WEATHER	03				
0	12.84	23.900	6.07		0	12.84	23.90	6.07		17.89	978.7	0		
10	13.21	31.264	6.15		10	13.21	31.27	6.16		23.49	441.3	.071		
20	12.97	31.598	6.07		20	12.97	31.60	6.07		23.80	412.5	.114		
30	12.86	32.141	5.75		30	12.86	32.15	5.76		24.24	370.7	.153		
40	12.86	32.250	5.76		50	12.84	32.35	5.68		24.40	355.7	.225		
50	12.84	32.345	5.67											
RH 5	42 0.0 N	124 19.5 W	DATE 23 OCT 62	1000 GCT	WIRE -	DRY 50.0	WET 50.0							
WIND DIRECTION	14 VEL	4 KTS	HAR 17	SWELL DIRECTION	14 H	1 T	7 CLOUD	0 AMT	10 WEATHER	28				
0	11.05	32.994	5.36	1.56	0	11.05	33.00	5.36	1.57	25.24	274.8	0		
10	10.79	33.251	5.03	1.48	10	10.79	33.26	5.04	1.49	25.48	252.0	.026		
20	10.57	33.323	4.83	1.76	20	10.57	33.33	4.83	1.77	25.58	243.2	.051		
30	10.52	33.336	4.70	1.63	30	10.52	33.34	4.70	1.64	25.59	241.5	.075		
RH 15	42 0.0 N	124 33.0 W	DATE 23 OCT 62	1545 GCT	WIRE -	DRY 51.0	WET 51.0							
WIND DIRECTION	14 VEL	7 KTS	HAR 19	SWELL DIRECTION	35 H	4 T	7 CLOUD	0 AMT	10 WEATHER	28				
0	11.53	33.047		1.11	0	11.53	33.05		1.11	25.19	279.5	0		
10	11.35	33.132		1.13	10	11.35	33.14		1.14	25.29	270.3	.027		
20	11.21	33.101		1.27	20	11.21	33.20		1.27	25.36	263.7	.054		
30	11.01	33.187		1.24	30	11.01	33.19		1.24	25.39	260.8	.080		
52	10.12	33.465		1.82	50	10.21	33.43		1.76	25.72	230.0	.129		
78	9.07	33.720		1.81	75	9.17	33.70		1.82	26.10	194.5	.183		
105	8.77	33.822		2.34	100	8.83	33.82		2.20	26.24	180.8	.229		
RH 25	42 0.0 N	124 46.3 W	DATE 23 OCT 62	1800 GCT	WIRE 1	DRY 53.2	WET 53.0							
WIND DIRECTION	16 VEL	9 KTS	HAR 19	SWELL DIRECTION	32 H	4 T	8 CLOUD	0 AMT	10 WEATHER	28				
0	11.93	32.808	6.07	1.08	0	11.93	32.90	6.07	1.08	25.00	297.5	0		
10	11.91	32.905	5.98	.98	10	11.91	32.90	5.98	.99	25.00	297.5	.030		
19	11.85	32.920	5.91	1.03	20	11.84	32.93	5.92	1.04	25.03	294.6	.059		
29	11.76	32.999	5.92	1.12	30	11.67	33.01	5.88	1.13	25.14	285.2	.088		
49	9.75	33.322	4.88	1.48	50	9.65	33.35	4.80	1.53	25.75	227.0	.140		
73	9.05	33.617	4.03	2.07	75	9.02	33.64	3.95	2.09	26.07	196.6	.192		
98	8.73	33.800	3.06	2.22	100	8.71	33.81	3.02	2.24	26.26	179.5	.239		
144	8.27	33.919	2.48	2.46	150	8.23	33.93	2.41	2.42	26.43	164.1	.325		
189	7.99	34.005	2.03	2.10	200	7.91	34.01	1.98	2.12	26.54	154.3	.405		
276	7.32	34.036	1.77	2.52	250	7.52	34.04	1.81	2.32	26.61	148.0	.481		
368	6.70	34.082	1.43	2.83	300	7.16	34.05	1.69	2.61	26.67	142.8	.553		
454	6.04	34.111	1.01	3.05	400	6.46	34.09	1.27	2.92	26.80	131.7	.690		
529	5.47	34.146	.74		500	5.69	34.13	.83		26.93	119.5	.816		

OBSERVED				INTERPOLATED					DERIVED			
D	T°C	S‰	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	S × 10 ⁶	Δ D
RH 85 42 0.0 N 126 6.5 W DATE 25 OCT 42 1235 GCT WTRF - DRY 58.2 WFT 54.7												
WIND DIRECTION VEI C KTS BAR 20 SWELL DIRECTION N H T CLOUD - AMT 10 WEATHER 02												
0 13.68 32.862 6.05 .67 0 13.68 32.87 6.06 .68 24.63 332.6 0												
10 13.68 32.843 6.01 .58 10 13.68 32.85 6.02 .59 24.62 334.3 .033												
20 13.67 32.848 6.01 .61 20 13.67 32.85 6.02 .62 24.62 333.9 .067												
30 13.67 32.854 5.96 .70 30 13.67 32.86 5.96 .71 24.63 333.7 .100												
40 12.05 33.023 5.39 1.15 50 11.92 33.04 5.34 1.18 25.11 287.8 .162												
74 9.02 33.548 4.19 1.93 75 9.97 33.56 4.16 1.95 26.02 201.5 .223												
100 8.35 33.763 3.63 2.30 100 8.35 33.77 3.64 2.30 26.28 177.3 .271												
150 7.37 33.937 2.69 2.42 150 7.38 33.94 2.70 2.42 26.56 151.3 .353												
200 6.52 33.979 2.17 2.54 200 6.53 33.98 2.17 2.54 26.71 137.6 .425												
300 5.78 34.040 1.61 2.97 250 6.06 34.01 1.84 2.76 26.79 130.2 .492												
400 5.31 34.084 1.23 3.06 300 5.78 34.04 1.61 2.97 26.85 125.5 .556												
500 4.90 34.186 .54 3.23 400 5.32 34.09 1.23 3.07 26.94 117.5 .677												
600 4.53 34.268 .14 3.31 500 4.91 34.18 .55 3.23 27.07 105.0 .789												
800 3.97 34.345 0 3.41 600 4.54 34.27 .34 3.31 27.17 97.1 .891												
1000 3.48 34.425 .43 3.51 700 4.24 34.31 .36 3.36 27.24 90.8 .984												
					800 3.98 34.34 .38 3.41 27.29 86.1 1.073							
					1000 3.49 34.42 .42 3.51 27.41 76.3 1.235							

	WIND DIRECTION	WIND VELOCITY	WATER TEMPERATURE	WAVE HEIGHT	WAVE PERIOD	WAVE DIRECTION	WAVE SWELL	WAVE SWELL DIRECTION	WAVE SWELL PERIOD	WAVE SWELL AMPLITUDE	WAVE SWELL CLOUD	WAVE SWELL CLOUD PERIOD	WAVE SWELL CLOUD AMPLITUDE	WAVE SWELL CLOUD WEATHER
0	13.84	32.807	5.91	.63	0	13.84	32.90	5.92	.63	24.63	333.2	0	0	0
10	13.84	32.865	5.85	.65	10	13.84	32.87	5.85	.65	24.60	315.8	.033		
20	13.84	32.862	5.88	.62	20	13.84	32.87	5.89	.63	24.60	336.2	.067		
30	13.84	32.864	5.87	.59	30	13.84	32.87	5.88	.60	24.60	336.3	.101		
49	11.10	33.174	5.00	1.89	50	10.98	33.19	4.96	1.91	25.40	260.6	.160		
74	8.81	33.560	4.03	2.00	75	8.77	33.56	4.00	2.01	26.05	198.4	.218		
101	8.21	33.706	3.34	2.23	100	8.21	33.79	3.36	2.22	26.32	173.7	.264		
152	7.19	33.965	2.37	2.37	150	7.22	33.96	2.40	2.37	26.60	147.7	.345		
203	6.73	33.980	2.03	2.55	200	6.75	33.98	2.04	2.54	26.68	140.9	.417		
304	5.88	34.081	1.34	2.68	250	6.32	34.01	1.69	2.61	26.76	133.6	.485		
403	5.22	34.093	.92	3.07	300	5.91	34.05	1.37	2.68	26.84	126.4	.550		
505	4.72	34.146	.63	3.15	400	5.24	34.09	.93	3.06	26.96	116.3	.672		
606	4.39	34.230	.39	3.27	500	4.74	34.14	.64	3.15	27.05	107.1	.783		
808	3.93	34.356	.28	3.35	600	4.41	34.22	.40	3.26	27.15	98.6	.886		
1010	3.40	34.451	.37	3.23	700	4.16	34.29	.30	3.33	27.23	91.3	.981		
					800	3.95	34.35	.28	3.35	27.30	85.2	1.069		
					1000	3.43	34.45	.36	3.24	27.43	73.8	1.228		

RH	125	42	0.0 N	127	0.0 W	DATE	24 OCT 62	1650 GCT	WIRE	10	DRY	57.3	WET	55.0
WIND	DIRECTION	20	VFL	3	KTS	HAR	19	SWELL DIRECTION	15 H	3 T	7 CLOUD	9 AMT	10 WEATHER	02
0	13.35	32.908	5.97	.96		0	13.35	32.91	5.97	.97	24.73	322.9		0
10	13.34	32.900	6.10	.59		10	13.34	32.91	6.10	.60	24.73	323.5		.032
20	13.33	32.903	5.93	.61		20	13.33	32.91	5.94	.62	24.73	323.3		.065
30	13.22	32.908	5.85	.78		30	13.22	32.91	5.85	.79	24.76	321.1		.097
50	9.27	33.430	4.28	1.77		50	9.27	33.43	4.29	1.77	25.88	215.0		.150
75	8.28	33.672	3.55	2.03		75	8.28	33.68	3.55	2.03	26.22	182.7		.200
101	7.97	33.805	3.21	2.06		100	7.98	33.80	3.22	2.06	26.36	169.4		.244
152	7.15	33.949	2.42	2.07		150	7.18	33.95	2.45	2.07	26.59	148.4		.324
204	6.50	33.992	2.01	2.42		200	6.54	33.99	2.03	2.39	26.71	137.3		.395
304	5.61	34.048	1.45	2.95		250	6.03	34.02	1.73	2.70	26.80	129.4		.462
404	5.21	34.115	.88	3.02		300	5.64	34.05	1.47	2.94	26.87	123.2		.525
506	4.87	34.217	.47	3.16		400	5.22	34.11	.90	3.02	26.97	114.6		.644
607	4.45	34.263	.34	3.35		500	4.89	34.21	.49	3.15	27.09	103.8		.753
809	3.86	34.394	.37	3.33		600	4.48	34.26	.34	3.34	27.17	96.8		.853
1009	3.34	34.429	.45	3.06		700	4.15	34.33	.34	3.34	27.26	88.7		.946
						800	3.88	34.39	.33	3.34	27.34	81.7		1.031
						1000	3.41	34.43	.44	3.08	27.42	75.1		1.188

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	s × 10 ⁶	Δ D	
NH 15 44 39.1 N 124 24.7 W DATE 17 DEC 62 0134 GCT WIRE - DRY 53.0 WET 50.0 WIND DIRECTION 29 VEL 4 KTS BAR 13 SWELL DIRECTION 26 H 6 T 11 CLOUD 8 AMT 7 WEATHER 02													
0	11.86	32.489	6.21		0	11.86	32.49	6.21		24.70	326.4	0	
10	11.83	32.493	6.27		10	11.83	32.50	6.28		24.71	325.8	.033	
20	11.84	32.545	6.14		20	11.84	32.55	6.15		24.74	322.3	.065	
30	11.84	32.522	6.07		30	11.84	32.53	6.07		24.73	324.2	.097	
50	11.54	32.646	5.79		50	11.54	32.65	5.80		24.88	310.2	.161	
75	10.42	33.056	4.81		75	10.42	33.06	4.81		25.39	261.4	.232	
NH 25 44 39.2 N 124 38.8 W DATE 17 DEC 62 0350 GCT WIRE - DRY 54.0 WET 50.0 WIND DIRECTION 29 VEL 4 KTS BAR 12 SWELL DIRECTION 26 H 7 T 10 CLOUD 1 AMT 6 WEATHER 01													
0	11.86	32.531	6.24		0	11.86	32.54	6.24		24.73	323.3	0	
10	11.87	32.506	6.18		10	11.88	32.51	6.19		24.71	325.5	.032	
20	11.87	32.504	6.17		20	11.88	32.51	6.18		24.71	325.8	.065	
30	11.84	32.508	6.17		30	11.88	32.51	6.18		24.71	325.9	.098	
50	11.79	32.571	6.11		50	11.79	32.58	6.11		24.77	320.1	.162	
75	10.05	33.180	4.61		75	10.05	33.18	4.61		25.55	246.2	.233	
104	8.98	33.457	4.17		100	9.08	33.43	4.19		25.91	213.0	.290	
158	8.19	33.827	3.32		150	8.25	33.79	3.44		26.31	175.3	.387	
208	7.56	33.941	2.69		200	7.65	33.94	2.78		26.52	156.3	.470	
NH 35 44 39.4 N 124 52.8 W DATE 17 DEC 62 0700 GCT WIRE 4 DRY 52.0 WET 49.0 WIND DIRECTION 32 VEL 9 KTS BAR 14 SWELL DIRECTION 26 H 7 T 10 CLOUD 8 AMT - WEATHER -													
0	11.84	32.514	6.19		0	11.84	32.52	6.19		24.72	324.2	0	
10	11.85	32.515	6.19		10	11.85	32.52	6.19		24.72	324.5	.032	
20	11.85	32.513	6.14		20	11.85	32.52	6.15		24.72	324.8	.065	
30	11.85	32.517	6.13		30	11.85	32.52	6.14		24.72	324.7	.097	
50	10.94	32.868	5.32		50	10.94	32.85	5.32		25.14	285.0	.158	
76	9.27	33.350	4.61		75	9.33	33.33	4.63		25.79	223.8	.222	
105	8.83	33.563	3.73		100	8.85	33.54	3.87		26.03	201.6	.275	
160	7.98	33.891	2.93		150	8.12	33.85	3.00		26.38	169.0	.368	
211	7.54	33.946	2.95		200	7.61	33.93	2.95		26.52	155.9	.449	
NH 45 44 39.2 N 125 7.0 W DATE 17 DEC 62 0910 GCT WIRE 5 DRY 52.0 WET 49.0 WIND DIRECTION 33 VEL 4 KTS BAR 14 SWELL DIRECTION 26 H 6 T 11 CLOUD 8 AMT 2 WEATHER -													
0	11.79	32.546	6.55		0	11.79	32.57	6.56		24.77	319.5	0	
10	11.79	32.512	6.17		10	11.79	32.52	6.18		24.73	323.7	.032	
20	11.78	32.578	6.13		20	11.78	32.58	6.14		24.78	318.8	.064	
30	11.79	32.510	6.08		30	11.79	32.51	6.08		24.73	324.2	.096	
52	11.51	32.681	5.59		50	11.57	32.65	5.66		24.87	310.9	.160	
78	9.52	33.470	4.22		75	9.76	33.38	4.38		25.75	227.2	.227	
109	8.97	33.629	3.49		100	9.02	33.63	3.64		26.07	197.7	.280	
160	8.22	33.847	2.72		150	8.35	33.81	2.83		26.31	175.1	.373	
213	7.62	34.010	2.56		200	7.76	33.98	2.57		26.53	154.8	.456	
315	6.57	34.054	2.20		250	7.22	34.05	2.43		26.67	142.8	.530	
416	5.72	34.049	1.93		300	6.71	34.05	2.25		26.73	136.8	.600	
519	5.25	34.103	1.08		400	5.84	34.05	1.99		26.85	126.8	.732	
619	4.57	34.208	.54		500	5.33	34.09	1.25		26.94	118.2	.854	
					600	4.72	34.18	.62		27.09	105.3	.966	

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
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NH 65 44 39.2 N 125 34.9 W DATE 17 DEC 62 1510 GCT WIRE 14 DRY 51.0 WET 50.0
WIND DIRECTION 36 VEL 9 KTS BAR 15 SWELL DIRECTION 26 H 8 T 8 CLOUD 8 AMT 4 WEATHER 02

0	11.60	32.558	6.13		0	11.60	32.56	6.14		24.80	316.8	0
10	11.59	32.514	6.17		10	11.59	32.52	6.18		24.77	320.0	.032
19	11.60	32.514	6.10		20	11.60	32.51	6.11		24.76	320.7	.064
28	11.60	32.514	6.20		30	11.60	32.51	6.20		24.76	320.8	.096
49	11.60	32.522	6.21		50	11.55	32.54	6.17		24.79	318.4	.160
99	8.54	33.603	3.88		75	10.12	33.04	5.11		25.43	258.0	.232
152	8.12	33.910	3.02		100	8.52	33.61	3.85		26.13	191.2	.288
201	7.72	34.008	2.63		150	8.14	33.91	3.03		26.42	164.6	.377
299	6.51	33.994	2.29		200	7.73	34.01	2.64		26.56	152.2	.456
400	5.09	33.997	1.55		250	7.16	34.00	2.45		26.64	145.5	.530
500	4.75	34.108	.89		300	6.49	33.99	2.28		26.72	137.9	.601
598	4.69	34.218	.45		400	5.09	34.00	1.55		26.90	121.3	.731
795	4.04	34.327	.37		500	4.76	34.11	.90		27.03	109.5	.846
992	3.56	34.418	.50		600	4.68	34.22	.45		27.12	102.3	.952
1189	3.24	34.524	.50		700	4.39	34.28	.41		27.20	94.5	1.050
					800	4.03	34.33	.37		27.28	87.8	1.142
					1000	3.54	34.42	.50		27.40	77.0	1.306
					1200	3.22	34.53	.50		27.52	66.4	1.450

NH 85 44 39.3 N 125 3.1 W DATE 17 DEC 62 1925 GCT WIRE 3 DRY 50.5 WET 46.5
WIND DIRECTION 25 VEL 5 KTS BAR 16 SWELL DIRECTION 27 H 10 T 10 CLOUD 8 AMT 2 WEATHER 01

0	11.60	32.592	6.07		0	11.60	32.60	6.07		24.82	314.2	0
10	11.61	32.584	6.09		10	11.61	32.59	6.09		24.82	315.2	.031
20	11.58	32.549	6.03		20	11.58	32.55	6.04		24.79	317.4	.063
30	11.60	32.552	6.10		30	11.60	32.56	6.10		24.79	317.8	.095

NH 105 44 39.1 N 126 31.2 W DATE 17 DEC 62 2310 GCT WIRE 4 DRY 52.0 WET 47.0
WIND DIRECTION 24 VEL 4 KTS BAR 15 SWELL DIRECTION 27 H 8 T 10 CLOUD 8 AMT 5 WEATHER 03

0	11.46	32.549	6.24		0	11.46	32.55	6.24		24.82	315.0	0
10	11.47	32.539	6.10		10	11.47	32.54	6.10		24.81	316.1	.032
20	11.44	32.541	6.09		20	11.44	32.55	6.09		24.81	315.6	.063
30	11.44	32.568	6.11		30	11.44	32.57	6.11		24.83	313.8	.095
52	11.57	32.573	6.13		50	11.56	32.57	6.13		24.81	316.5	.158
77	9.56	32.932	5.29		75	9.74	32.89	5.38		25.38	262.7	.230
109	8.64	33.500	4.03		100	8.79	33.35	4.36		25.88	214.9	.290
160	7.71	33.805	3.59		150	7.86	33.78	3.61		24.36	170.1	.386
213	6.89	33.944	2.81		200	7.07	33.92	3.00		26.59	149.5	.466
314	5.91	34.004	2.10		250	6.46	33.98	2.51		26.71	137.8	.538
415	5.35	34.095	1.02		300	6.01	34.00	2.18		26.79	131.0	.605
517	5.08	34.182	.58		400	5.41	34.08	1.17		26.93	119.3	.730
616	4.31	34.220	.47		500	5.13	34.17	.62		27.03	109.8	.844
817	3.91	34.383	.28		600	4.44	34.22	.48		27.15	99.2	.949
1016	3.40	34.461	.39		700	4.06	34.29	.37		27.25	90.0	1.043
					800	3.92	34.37	.29		27.32	83.4	1.130
					1000	3.45	34.44	.37		27.42	74.6	1.288

NH 125 44 39.3 N 126 59.0 W DATE 18 DEC 62 0330 GCT WIRE 11 DRY 51.5 WET 47.0
WIND DIRECTION VEL C KTS BAR 15 SWELL DIRECTION 27 H 5 T 8 CLOUD - AMT 4 WEATHER 01

0	11.89	32.519	6.17		0	11.89	32.52	6.18		24.71	324.7	0
10	11.90	32.531	6.17		10	11.90	32.54	6.18		24.72	324.2	.032
20	11.91	32.543	6.15		20	11.91	32.55	6.16		24.73	323.7	.065
29	11.91	32.510	6.03		30	11.91	32.51	6.04		24.70	326.6	.097
50	11.91	32.513	6.17		50	11.91	32.52	6.18		24.71	326.5	.163
75	9.75	32.788	5.66		75	9.75	32.79	5.67		25.30	270.4	.237
105	8.19	33.458	3.93		100	8.38	33.34	4.23		25.95	209.1	.297
155	7.79	33.872	2.74		150	7.83	33.86	2.79		26.43	163.9	.390
205	7.17	33.949	2.51		200	7.23	33.94	2.51		26.58	150.2	.469
304	6.29	34.027	2.13		250	6.73	33.99	2.36		26.69	140.4	.542
403	5.57	34.072	1.21		300	6.32	34.03	2.15		26.77	133.3	.610
503	5.06	34.119	.74		400	5.59	34.07	1.24		26.90	122.2	.738
601	4.67	34.181	.48		500	5.07	34.12	.75		26.99	112.9	.855
797	4.19	34.307	.29		600	4.67	34.18	.48		27.09	105.0	.964
					700	4.38	34.24	.33		27.17	97.4	1.065
					800	4.18	34.31	.29		27.24	91.1	1.159

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	Po ₄ =	Z	T	S	O ₂	Po ₄ =	σ _t	δ × 10 ⁶	Δ D
NH 145	44 39.1 N	127 22.0 W	DATE 18 DEC 62	0630 GCT	WIRE 5	DRY 51.0	WET 46.0					
WTND DIRECTION 18 VEL 4 KTS	BAR 15 SWELL DIRECTION 27 H				5 T	8 CLOUD	8 AMT	3 WEATHER 01				
0	11.84	32.590	6.08		0	11.84	32.59	6.08		24.77	319.3	0
10	11.86	32.564	6.03		10	11.86	32.57	6.04		24.75	321.1	.032
20	11.89	32.579	6.03		20	11.89	32.58	6.04		24.76	320.7	.064
30	11.90	32.547	6.00		30	11.90	32.55	6.01		24.73	323.4	.096
52	11.89	32.550	6.27		50	11.89	32.55	6.26		24.73	323.7	.161
78	8.54	32.492	5.29		75	8.55	32.49	5.44		25.50	251.1	.233
109	8.22	33.421	3.96		100	8.31	33.29	4.33		25.91	212.2	.291
161	7.49	33.821	2.85		150	7.96	33.77	3.00		26.34	172.3	.387
214	7.21	33.925	2.44		200	7.40	33.91	2.51		26.53	154.5	.469
315	6.19	34.018	1.73		250	6.79	33.97	2.19		26.66	143.1	.543
416	5.72	34.091	.96		300	6.31	34.01	1.83		26.76	134.4	.612
518	5.16	34.141	.64		400	5.78	34.08	1.07		26.88	123.8	.741
618	4.74	34.207	.41		500	5.26	34.13	.68		26.98	114.0	.860
818	4.09	34.324	.28		600	4.81	34.19	.44		27.09	105.6	.970
1018	3.57	34.422	.29		700	4.45	34.26	.32		27.18	97.3	1.071
					800	4.14	34.31	.29		27.25	90.2	1.165
					1000	3.61	34.41	.28		27.39	78.4	1.334
NH 165	44 39.1 N	127 55.0 W	DATE 18 DEC 62	1116 GCT	WIRE 10	DRY 53.0	WET 50.0					
WTND DIRECTION 15 VEL 14 KTS	BAR 14 SWELL DIRECTION 27 H				4 T	9 CLOUD	- AMT	7 WEATHER 02				
0	11.54	32.539	6.20		0	11.54	32.54	6.20		24.79	317.1	0
10	11.54	32.568	6.23		10	11.54	32.56	6.23		24.81	315.9	.032
20	11.53	32.531	6.20		20	11.53	32.54	6.20		24.79	317.9	.063
30	11.55	32.545	6.17		30	11.55	32.55	6.18		24.80	317.4	.095
52	11.55	32.529	6.21		50	11.55	32.53	6.21		24.78	319.1	.159
78	9.25	32.817	5.83		75	9.55	32.77	5.90		25.31	268.7	.232
109	8.18	33.354	4.57		100	8.31	33.20	4.95		25.83	219.9	.293
160	7.61	33.837	3.83		150	7.67	33.78	3.90		26.39	167.6	.390
211	6.95	33.940	3.23		200	7.10	33.94	3.35		26.59	148.7	.469
311	5.62	33.967	2.47		250	6.40	33.96	2.90		26.71	138.3	.541
514	4.78	34.116	.89		300	5.75	33.96	2.54		26.79	130.7	.608
613	4.33	34.201	.42		400	5.11	34.02	1.73		26.92	119.9	.733
813	3.88	34.313	.26		500	4.80	34.10	.99		27.01	110.7	.849
1012	3.51	34.420	.33		600	4.39	34.19	.47		27.13	101.0	.954
					700	4.09	34.25	.27		27.21	93.3	1.052
					800	3.90	34.31	.27		27.27	87.9	1.142
					1000	3.53	34.41	.32		27.39	77.5	1.307
ANH169	45 11.0 N	127 58.0 W	DATE 18 DEC 62	1715 GCT	WIRE 16	DRY 52.0	WET 50.0					
WTND DIRECTION 19 VEL 28 KTS	BAR 13 SWELL DIRECTION 18 H				6 T	7 CLOUD	0 AMT	9 WEATHER 03				
0	11.22	32.538	6.17		0	11.22	32.54	6.18		24.85	311.7	0
10	11.22	32.543	6.20		10	11.22	32.55	6.20		24.85	311.5	.031
19	11.22	32.541	6.20		20	11.22	32.54	6.20		24.85	312.1	.062
28	11.24	32.547	6.23		30	11.24	32.55	6.24		24.86	312.2	.094
49	11.23	32.549	6.25		50	11.19	32.55	6.25		24.86	311.3	.156
98	8.64	32.913	5.52		75	9.99	32.68	6.00		25.17	282.1	.230
150	7.52	33.754	3.56		100	8.58	32.95	5.44		25.60	241.4	.295
199	6.98	33.885	3.25		150	7.53	33.76	3.57		26.40	167.0	.398
298	5.75	33.950	2.37		200	6.97	33.89	3.24		26.57	150.7	.477
397	5.21	34.038	1.22		250	6.31	33.93	2.83		26.70	139.3	.549
792	3.90	34.318	.75		300	5.74	33.95	2.35		26.78	131.4	.617
991	3.45	34.400	.25		400	5.20	34.04	1.20		26.92	119.6	.743
1189	2.97	34.451	.42		500	4.78	34.12	.63		27.03	108.9	.857
					600	4.42	34.20	.28		27.13	100.7	.962
					700	4.12	34.26	.48		27.22	92.9	1.058
					800	3.88	34.32	.25		27.29	86.6	1.148
					1000	3.43	34.40	.25		27.40	77.1	1.312
					1200	2.94	34.45	.43		27.48	68.8	1.457
AH 165	46 14.5 N	128 4.0 W	DATE 19 DEC 62	0210 GCT	WIRE 5	DRY 52.0	WET 50.0					
WTND DIRECTION 24 VEL 12 KTS	BAR 13 SWELL DIRECTION 24 H				7 T	8 CLOUD	0 AMT	3 WEATHER 02				
0	11.11	32.534	6.17		0	11.11	32.54	6.18		24.87	310.1	0
10	11.12	32.534	6.15		10	11.13	32.54	6.16		24.87	310.5	.031
20		32.555	6.28		20	11.12	32.56	6.29		24.88	309.0	.062
30	11.12	32.531	6.20		30	11.13	32.54	6.20		24.86	311.1	.093
52	11.10	32.533	6.25		50	11.11	32.53	6.24		24.86	311.4	.155
77	10.61	32.619	6.13		75	10.68	32.61	6.16		24.99	299.3	.232
108	8.13	33.102	5.08		100	8.79	32.96	5.39		25.58	243.7	.299
159	7.48	33.755	3.60		150	7.59	33.66	3.82		26.31	175.0	.404
210	6.84	33.804	3.04		200	6.96	33.89	3.14		26.58	150.1	.485
309	5.78	33.950	2.23		250	6.38	33.94	2.73		26.69	140.0	.558
402	5.08	34.027	1.10		300	5.86	33.95	2.31		26.76	133.5	.626
					400	5.13	34.02	1.29		26.91	120.4	.753

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	O ₃	S x 10 ⁶	AD
AH 145 46 14.2 N 127 35.0 W DATE 19 DEC 62 0610 GCT WIRE 11 DRY 50.0 WET 48.5 WIND DIRECTION 27 VEL 9 KTS BAR 15 SWELL DIRECTION 27 H 6 T 8 CLOUD - AMT 0 WEATHER 01												
0	11.16	32.566	6.28		0	11.16	32.56	6.29		24.88	309.3	0
10	11.19	32.561	6.19		10	11.19	32.57	6.19		24.87	309.7	.031
20	11.22	32.550	6.29		20	11.22	32.55	6.30		24.86	311.2	.062
30	11.20	32.584	6.20		30	11.20	32.56	6.20		24.87	310.7	.093
50	11.20	32.563	6.29		50	11.20	32.57	6.30		24.87	310.4	.155
77	10.18	32.608	6.18		75	10.29	32.61	6.20		25.06	292.8	.231
104	8.27	32.549	5.98		100	8.55	32.56	5.69		25.30	270.0	.301
154	7.47	33.723	3.82		150	7.53	33.62	3.95		26.28	177.7	.413
208	7.04	33.888	3.22		200	7.09	33.86	3.27		26.54	154.1	.496
309	5.92	33.966	1.97		250	6.57	33.94	2.69		26.67	142.2	.570
411	5.34	34.047	1.11		300	6.02	33.97	2.08		26.76	133.9	.639
514	4.96	34.143	.63		400	5.38	34.04	1.18		26.90	122.1	.747
615	4.50	34.220	.43		500	5.01	34.13	.68		27.01	111.2	.889
833	3.83	34.321	.24		600	4.57	34.21	.45		27.12	101.6	.990
1033	3.40	34.442	.26		700	4.20	34.26	.32		27.21	94.0	1.087
					800	3.91	34.31	.25		27.27	88.0	1.178
					1000	3.46	34.42	.24		27.41	76.2	1.343

AH 125 46 14.4 N 127 6.0 W DATE 19 DEC 62 1155 GCT WIRE 4 DRY 51.5 WET 50.0 WIND DIRECTION 25 VEL 9 KTS BAR 19 SWELL DIRECTION 21 H 6 T 9 CLOUD 4 AMT 2 WEATHER 02												
0	10.98	32.542	6.29		0	10.98	32.55	6.30		24.90	307.3	0
10	10.99	32.545	6.25		10	10.99	32.57	6.26		24.91	306.0	.031
20	0	32.542	6.40		20	10.95	32.57	6.41		24.92	305.7	.061
30	10.90	32.526	6.23		30	10.90	32.53	6.23		24.90	307.7	.092
50	10.80	32.540	6.28		50	10.80	32.54	6.29		24.93	305.4	.153
77	9.74	32.646	6.10		75	9.85	32.63	6.15		25.15	284.2	.227
104	8.14	33.345	4.27		100	8.37	33.23	4.56		25.86	217.3	.290
154	7.45	33.849	3.35		150	7.45	33.84	3.36		26.47	160.3	.384
208	6.73	33.931	2.83		200	6.83	33.92	2.89		26.62	146.5	.461
309	5.65	34.004	1.97		250	6.23	33.97	2.46		26.73	135.8	.531
412	4.99	34.092	1.22		300	5.73	34.00	2.04		26.82	127.8	.597
514	4.86	34.141	.66		400	5.04	34.08	1.30		26.97	114.7	.718
616	4.48	34.213	.40		500	4.87	34.13	.72		27.03	109.2	.830
819	3.89	34.345	.31		600	4.55	34.20	.43		27.12	102.0	.936
1021	3.46	34.413	.38		700	4.21	34.27	.32		27.21	93.4	1.033
					800	3.94	34.33	.32		27.29	86.4	1.123
					1000	3.50	34.41	.37		27.39	77.4	1.287

AH 105 46 14.3 N 127 37.8 W DATE 19 DEC 62 1540 GCT WIRE 10 DRY 52.0 WET 49.5 WIND DIRECTION 20 VEL 9 KTS BAR 24 SWELL DIRECTION 26 H 8 T 9 CLOUD 4 AMT 9 WEATHER 02												
0	10.92	32.406	6.29		0	10.92	32.41	6.30		24.80	316.4	0
10	10.93	32.414	6.30		10	10.93	32.42	6.31		24.81	316.1	.032
20	10.93	32.406	6.34		20	10.93	32.41	6.34		24.80	316.9	.063
30	10.94	32.406	6.30		30	10.94	32.41	6.31		24.80	317.2	.095
49	10.92	32.424	6.27		50	10.82	32.44	6.23		24.84	313.2	.158
75	8.21	33.051	4.92		75	8.21	33.06	4.92		25.74	227.8	.226
103	7.90	33.530	3.82		100	7.93	33.49	3.92		26.12	192.0	.278
152	7.47	33.857	3.06		150	7.49	33.85	3.07		26.47	159.5	.366
205	6.89	33.938	2.47		200	6.95	33.94	2.52		26.62	146.6	.442
305	6.01	34.015	1.69		250	6.46	33.98	2.08		26.72	137.7	.514
405	5.46	34.076	1.05		300	6.05	34.01	1.72		26.79	130.8	.581
505	5.00	34.135	.68		400	5.48	34.07	1.08		26.91	120.7	.706
604	4.59	34.206	.42		500	5.02	34.13	.69		27.01	111.2	.822
803	4.05	34.325	.28		600	4.61	34.20	.43		27.12	102.6	.929
1005	3.53	34.423	.31		700	4.30	34.27	.31		27.20	94.9	1.028
					800	4.06	34.32	.28		27.27	88.6	1.119
					1000	3.54	34.42	.31		27.40	77.1	1.285

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	S x 10 ⁶	A D		
AH 45 46 14.4 N 126 8.8 W DATE 19 DEC 62 1935 GCT WIRE 3 DRY 53.0 WET 50.5	WIND DIRECTION 22 VEL 7 KTS BAR 25 SWELL DIRECTION 24 H 7 T 8 CLOUD 4 AMT 5 WEATHER 01													
0 11.12 32.477 6.30					0 11.13 32.44 6.31						24.79 317.5	0		
10 11.11 32.438 6.27					10 11.11 32.44 6.28						24.79 317.4	.032		
20 32.435 6.27					20 11.11 32.44 6.28						24.79 317.8	.063		
30 11.12 32.433 6.21					30 11.13 32.44 6.21						24.79 318.3	.095		
50 11.10 32.437 6.27					50 11.10 32.44 6.28						24.79 318.0	.159		
77 8.32 32.908 5.32					75 8.54 32.86 5.42						25.54 246.9	.230		
105 8.14 33.568 3.87					100 8.17 33.46 4.12						26.06 197.8	.285		
154 7.67 33.882 2.90					150 7.71 33.88 2.93						26.46 160.6	.375		
208 7.18 33.967 2.45					200 7.25 33.96 2.49						26.59 148.7	.452		
309 5.99 33.971 2.03					250 6.66 33.97 2.27						26.68 141.3	.524		
411 5.52 34.074 1.22					300 6.09 33.97 2.06						26.76 134.4	.593		
513 4.97 34.116 .83					400 5.55 34.06 1.31						26.89 122.4	.722		
614 4.48 34.169 .60					500 5.04 34.11 .86						26.99 112.9	.839		
816 4.10 34.309 .32					600 4.54 34.16 .63						27.09 104.9	.948		
1017 3.59 34.400 .35					700 4.28 34.23 .45						27.17 97.4	1.049		
					800 4.12 34.30 .33						27.24 91.2	1.144		
					1000 3.64 34.39 .34						27.37 80.2	1.315		
AH 65 46 14.3 N 125 38.8 W DATE 19 DEC 62 2318 GCT WIRE 4 DRY 53.0 WET 50.5	WIND DIRECTION 18 VEL 7 KTS BAR 27 SWELL DIRECTION 24 H 6 T 8 CLOUD 4 AMT 9 WEATHER 02													
0 10.78 32.430 6.37					0 10.78 32.43 6.38						24.84 312.3	0		
10 10.76 32.423 6.44					10 10.76 32.43 6.44						24.84 312.6	.031		
20 9.89 32.438 6.38					20 9.89 32.42 6.39						24.99 299.0	.062		
30 10.72 32.427 6.27					30 10.72 32.43 6.28						24.86 312.0	.092		
50 9.87 32.668 5.72					50 9.88 32.66 5.72						25.18 281.5	.152		
77 8.40 33.296 4.30					75 8.50 33.25 4.41						25.85 217.7	.214		
105 8.05 33.684 3.19					100 8.07 33.63 3.35						26.22 183.2	.264		
155 7.61 33.869 2.67					150 7.65 33.87 2.68						26.46 160.6	.350		
207 7.14 33.999 2.33					200 7.20 33.93 2.37						26.58 150.3	.428		
309 6.38 33.989 1.97					250 6.80 33.97 2.17						26.66 143.2	.501		
410 5.72 34.048 1.27					300 6.44 33.99 2.00						26.72 137.8	.571		
513 5.23 34.118 .84					400 5.78 34.04 1.34						26.85 126.7	.704		
613 4.83 34.157 .58					500 5.28 34.11 .88						26.96 116.1	.825		
814 4.16 34.301 .31					600 4.88 34.15 .61						27.04 109.6	.938		
1015 3.63 34.385 .37					700 4.52 34.22 .42						27.14 101.1	1.043		
					800 4.20 34.29 .32						27.23 92.7	1.140		
					1000 3.66 34.38 .35						27.35 81.5	1.314		
AH 45 46 14.4 N 125 10.5 W DATE 20 DEC 62 0430 GCT WIRE 1 DRY 52.0 WET 50.0	WIND DIRECTION 14 VEL 7 KTS BAR 28 SWELL DIRECTION 26 H 6 T 8 CLOUD - AMT - WEATHER 02													
0 10.59 32.348 6.40					0 10.59 32.35 6.41						24.81 315.2	0		
10 10.59 32.360 6.34					10 10.59 32.34 6.34						24.81 316.0	.032		
20 10.60 32.342 6.40					20 10.60 32.35 6.41						24.81 316.2	.063		
30 10.56 32.367 6.28					30 10.56 32.37 6.29						24.83 313.8	.095		
50 10.57 32.371 6.30					50 10.57 32.38 6.31						24.84 314.0	.157		
76 8.37 33.122 4.64					75 8.46 33.09 4.71						25.73 228.9	.225		
104 7.96 33.546 3.60					100 8.02 33.50 3.79						26.12 192.2	.278		
154 7.29 33.909 2.72					150 7.34 33.89 2.77						26.53 154.4	.365		
208 6.72 33.974 2.24					200 6.80 33.96 2.29						26.66 142.6	.439		
309 5.93 34.019 1.57					250 6.35 34.00 1.94						26.74 135.1	.508		
411 5.41 34.080 .96					300 5.99 34.02 1.62						26.80 129.7	.574		
514 5.00 34.142 .72					400 5.46 34.08 1.02						26.92 119.8	.699		
615 4.54 34.239 .47					500 5.05 34.13 .74						27.01 111.5	.815		
818 3.87 34.344 .23					600 4.61 34.22 .50						27.13 101.0	.921		
1020 3.41 34.415 .24					700 4.23 34.29 .37						27.23 92.1	1.017		
					800 3.92 34.34 .34						27.30 85.9	1.106		
					1000 3.45 34.41 .33						27.40 76.8	1.269		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	Sx10 ⁶	ΔD
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ANH 37 45 28.8 N 124 51.9 W DATE 21 DEC 62 1210 GCT WIRE 4 DRY 51.0 WET 49.0
WIND DIRECTION 29 VEL 4 KTS HAB 27 SWELL DIRECTION 28 H 4 T 9 CLOUD - AMT - WEATHER 40

0	10.96	32.402			0	10.96	32.41			24.79	317.4	0
10	10.95	32.402			10	10.95	32.41			24.79	317.4	.032
20		32.405			20	10.90	32.41			24.81	316.4	.063
30	10.85	32.416			30	10.85	32.42			24.82	315.0	.095
50	10.84	32.487			50	10.84	32.49			24.88	309.9	.157
76	9.80	32.820			75	9.80	32.80			25.29	271.2	.230
104	8.24	33.315			100	8.45	33.24			25.86	217.5	.291
154	7.90	33.826			150	7.93	33.80			26.37	169.5	.388
207	7.54	33.928			200	7.59	33.91			26.51	157.1	.470
308	6.44	34.064			250	7.08	33.97			26.62	146.7	.545
409	5.67	34.046			300	6.53	34.00			26.72	137.8	.617
510	5.17	34.100			400	5.73	34.04			26.86	126.0	.748
611	4.75	34.176			500	5.21	34.09			26.96	116.4	.870
812	4.09	34.320			600	4.79	34.17			27.07	107.4	.981
1013	3.60	34.405			700	4.43	34.24			27.17	98.1	1.084
					800	4.12	34.31			27.25	90.2	1.178
					1000	3.63	34.40			27.37	79.5	1.348

CH 5 43 20.5 N 124 29.0 W DATE 28 DEC 62 0030 GCT WIRE 4 DRY 49.5 WET 46.5
WIND DIRECTION 22 VEL 11 KTS HAB 22 SWELL DIRECTION 22 H 2 T 6 CLOUD 0 AMT 10 WEATHER 03

0	11.14	32.445	6.24		0	11.14	32.45	6.24		24.79	317.2	0
10	11.15	32.418	6.16		10	11.15	32.42	6.17		24.77	319.5	.032
20	11.16	32.415	6.22		20	11.16	32.42	6.22		24.77	320.1	.064
30	11.30	32.716	5.30		30	11.30	32.72	5.31		24.97	300.5	.095
49	9.69	33.352	4.01		50	9.63	33.38	3.96		25.77	224.8	.147
73	8.84	33.708	3.13									

CH 15 43 20.5 N 124 43.0 W DATE 28 DEC 62 0230 GCT WIRE - DRY 50.3 WET 47.0
WIND DIRECTION 19 VEL 13 KTS HAB 18 SWELL DIRECTION 20 H 2 T 6 CLOUD 0 AMT - WEATHER 02

0	11.33	32.402	6.17		0	11.33	32.41	6.18		24.73	323.6	0
10	11.34	32.437	6.09		10	11.34	32.44	6.09		24.75	321.4	.032
20	11.35		6.19		20	11.35	32.43	6.19		24.74	322.3	.064
29	11.38	32.425	6.16		30	11.39	32.43	6.15		24.73	323.7	.097
47	11.46	32.460	5.96		50	11.37	32.52	5.80		24.81	316.4	.161
68	10.58	33.029	4.68		75	10.22	33.23	4.29		25.56	245.7	.231
96	9.24	33.734	3.73		100	9.15	33.77	3.24		24.16	188.8	.285
148	8.57	33.801	2.75		150	8.54	33.90	2.73		26.35	171.5	.375
197	7.83	33.948	2.44		200	7.78	33.95	2.42		26.51	157.1	.457

CH 25 43 20.5 N 124 45.5 W DATE 28 DEC 62 0445 GCT WIRE 4 DRY 51.1 WET 47.0
WIND DIRECTION 20 VEL 14 KTS HAB 18 SWELL DIRECTION 20 H 3 T 6 CLOUD 0 AMT 10 WEATHER 02

0	11.22	32.418	6.19		0	11.22	32.42	6.19		24.76	320.6	0
10	11.22	32.438	6.10		10	11.22	32.43	6.10		24.77	320.0	.032
20	11.26		6.20		20	11.26	32.44	6.20		24.76	320.5	.064
30	11.33	32.447	5.99		30	11.33	32.45	5.99		24.76	320.8	.096
50	11.59	32.657	5.72		50	11.59	32.66	5.72		24.88	310.2	.159
77	9.92	33.131	5.01		75	10.07	33.09	5.08		25.48	253.3	.230
104	9.32	33.625	3.69		100	9.37	33.56	3.88		25.96	208.2	.287
154	8.38	33.453	2.94		150	8.45	33.83	2.95		26.32	174.6	.383
209	7.61	33.972	2.94		200	7.72	33.96	2.94		26.52	155.6	.465
311	6.72	34.007	2.07		250	7.21	34.00	2.66		26.63	146.4	.541
412	5.91	34.005	1.25		300	6.80	34.00	2.19		26.69	141.2	.613
515	5.28	34.145	1.01		400	6.00	34.08	1.33		26.86	126.4	.747
619	4.74	34.209	.51		600	5.36	34.14	1.03		26.98	114.9	.867
					600	4.83	34.20	.62		27.08	105.7	.977

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	$S \times 10^8$	ΔD
CH 35	43 20.5 N	125 10.4 W	DATE 28 DEC 62	0755 GCT	WTRE	-	DRY	51.5	WET 48.0			
WIND DIRECTION 18 VEL 16 KTS	HAR 18 SWELL DIRECTION 18 H	4 T 6 CLOUD	0 AMT 10 WEATHER 02									

0	11.33	32.689	6.09		0	11.33	32.69	6.09		24.95	302.4	0
10	11.34	32.601	5.96		10	11.34	32.61	5.96		24.88	309.3	.031
20	11.36		6.06		20	11.36	32.60	6.07		24.87	310.2	.062
30	11.36	32.599	5.96		30	11.36	32.60	5.96		24.87	310.1	.093
40	11.35	32.603	5.97		50	11.31	32.63	5.93		24.90	307.9	.154
75	9.95	33.290	4.68		75	9.95	33.29	4.68		25.66	236.5	.222
102	9.17	33.627	3.75		100	9.21	33.61	3.81		26.02	201.8	.277
150	8.54	33.846	2.94		150	8.59	33.85	2.95		26.31	175.6	.371
203	7.83	33.968	2.48		200	7.87	33.96	2.50		26.51	157.5	.455
301	6.86	34.012	2.12		250	7.34	34.01	2.28		26.61	147.7	.531
405	5.60	34.030	1.55		300	6.87	34.01	2.12		26.68	141.6	.603
510	5.28	34.140	.82		400	5.65	34.03	1.58		26.86	126.1	.737
610	4.86	34.202	0		500	5.29	34.13	.89		26.98	114.8	.857
814	4.18	34.310	.39		600	4.90	34.20	.53		27.08	106.6	.968
1017	3.56	34.425	.41		700	4.54	34.25	.55		27.16	98.9	1.071
					800	4.22	34.30	.41		27.24	92.0	1.166
					1000	3.61	34.42	.40		27.39	78.3	1.336

D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	$S \times 10^8$	ΔD
CH 45	43 20.5 N	125 24.4 W	DATE 28 DEC 62	1030 GCT	WTRE	4	DRY	49.5	WET 48.5			
WIND DIRECTION 22 VEL 18 KTS	HAR 20 SWELL DIRECTION 21 H	4 T 6 CLOUD	0 AMT 10 WEATHER 52									

0	11.23	32.486	6.13		0	11.23	32.49	6.14		24.81	315.7	0
10	11.25	32.546	6.03		10	11.25	32.55	6.04		24.85	311.8	.031
20	11.36		6.15		20	11.36	32.61	6.16		24.88	309.3	.062
30	11.39	32.660	6.03		30	11.39	32.67	6.04		24.91	306.2	.093
50	11.44	32.629	6.06		50	11.44	32.63	6.07		24.88	309.7	.155
76	9.79	33.487	4.80		75	9.87	33.45	4.86		25.79	223.5	.221
104	8.77	33.657	3.69		100	8.88	33.63	3.82		26.09	195.2	.274
153	7.90	33.886	3.21		150	7.93	33.88	3.24		26.43	164.0	.363
207	7.44	33.945	2.91		200	7.49	33.94	2.94		26.55	153.5	.443
308	6.36	33.994	2.17		250	6.98	33.97	2.62		26.64	145.4	.518
412	5.62	34.078	1.10		300	6.44	33.99	2.24		26.73	137.5	.588
517	5.15	34.159	.72		400	5.69	34.07	1.30		26.88	123.7	.719
619	4.71	34.211	.46		500	5.22	34.15	.77		27.00	112.5	.837
822	4.09	34.337	.31		600	4.79	34.20	.50		27.09	104.8	.945
1027	3.55	34.424	.39		700	4.44	34.26	.36		27.18	96.8	1.046
					800	4.15	34.32	.33		27.26	89.6	1.139
					1000	3.62	34.41	.37		27.39	78.4	1.307

D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	$S \times 10^8$	ΔD
CH 65	43 20.5 N	125 51.5 W	DATE 28 DEC 62	1550 GCT	WTRE	18	DRY	54.0	WET 49.0			
WIND DIRECTION 19 VEL 16 KTS	HAR 18 SWELL DIRECTION 19 H	4 T 6 CLOUD	0 AMT 10 WEATHER 02									

0	11.51	32.554	6.06		0	11.51	32.56	6.07		24.81	315.5	0
10	11.50	32.554	6.06		10	11.50	32.56	6.07		24.81	315.5	.032
19	11.51		6.07		20	11.51	32.56	6.07		24.81	316.0	.063
28	11.51	32.558	6.09		30	11.51	32.56	6.09		24.81	316.0	.095
47	11.51	32.565	6.05		50	11.47	32.57	6.03		24.83	314.6	.158
73	11.15	32.630	5.90		75	10.95	32.67	5.80		25.00	299.1	.234
99	8.38	33.217	4.46		100	8.34	33.23	4.42		25.86	216.7	.299
146	7.78	33.770	3.39		150	7.73	33.79	3.34		26.39	167.3	.395
196	7.14	33.932	2.94		200	7.10	33.94	2.90		26.60	148.6	.474
293	6.18	33.987	2.07		250	6.58	33.98	2.45		26.70	139.0	.546
392	5.31	34.065	1.23		300	6.11	33.99	2.00		26.77	133.1	.614
493	4.89	34.143	.69		400	5.27	34.06	1.18		26.93	118.9	.740
590	4.52	34.198	.47		500	4.86	34.15	.67		27.04	108.2	.853
788	4.07	34.341	.35		600	4.49	34.21	.46		27.13	101.1	.958
989	3.45	34.411	.38		700	4.25	34.28	.37		27.21	93.4	1.055
					800	4.04	34.35	.35		27.29	86.6	1.145
					1000	3.42	34.41	.38		27.41	76.1	1.307

OBSERVED					INTERPOLATED					DERIVED		
D	T°C	S%	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	σ _t	S × 10 ³	ΔD

CH 85 43 20.5 N 126 14.0 W DATE 28 DEC 62 1955 GCT WIREF - DRY 0 WET 0
WIND DIRECTION 17 VFL 19 KTS BAR 20 SWELL DIRECTION 17 H 5 T 6 CLOUD 0 AMT 10 WEATHER 02

0	11.33	32.518	6.09		0	11.33	32.52	6.09		24.82	315.0	0
10	11.33	32.523	6.03		10	11.33	32.53	6.04		24.82	314.9	.031
20	11.34	32.527	6.07		20	11.34	32.52	6.07		24.81	314.0	.063
30	11.35	32.509	6.04		30	11.35	32.51	6.05		24.81	316.6	.095
50	11.35	32.514	6.09		50	11.35	32.51	6.08		24.81	317.0	.158
76	8.77	33.062	4.91		75	8.90	33.03	4.98		25.62	239.7	.228
103	8.13	33.527	4.06		100	8.20	33.49	4.13		26.08	195.9	.282
152	7.79	33.912	2.93		150	7.80	33.91	2.97		26.47	159.9	.371
205	7.10	33.988	2.38		200	7.17	33.98	2.41		26.62	146.4	.448
306	5.92	33.989	1.88		250	6.53	33.99	2.13		26.72	137.7	.519
410	5.22	34.074	1.05		300	5.98	34.00	1.40		26.79	131.0	.586
515	4.70	34.127	.94		400	5.27	34.07	1.12		26.93	118.7	.710
617	4.38	34.176	.68		500	4.76	34.12	.85		27.03	109.1	.824
820	3.98	34.340	.37		600	4.42	34.19	.71		27.12	101.6	.930
1025	3.43	34.424	.45		700	4.21	34.26	.53		27.20	94.5	1.028
					800	4.02	34.33	.39		27.28	87.9	1.119
					1000	3.50	34.42	.42		27.40	77.0	1.283

CH 105 43 20.5 N 126 45.6 W DATE 28 DEC 62 2350 GCT WIREF - DRY 54.0 WET 51.5
WIND DIRECTION 16 VFL 26 KTS BAR 14 SWELL DIRECTION 16 H 6 T 6 CLOUD 0 AMT 10 WEATHER 02

0	11.69	32.668	6.09		0	11.69	32.67	6.09		24.87	310.2	0
10	11.68	32.681	6.03		10	11.68	32.69	6.04		24.88	309.3	.031
20	11.69	32.686	6.09		20	11.69	32.68	6.09		24.88	309.8	.062
30	11.72	32.686	5.99		30	11.72	32.69	5.99		24.87	310.0	.093
50	11.81	32.711	5.99		50	11.81	32.72	5.99		24.88	310.1	.155
76	11.83	32.736	6.01		75	11.83	32.73	6.01		24.89	309.8	.232
103	9.15	33.312	4.77		100	9.48	33.24	4.93		25.69	233.5	.300
152	8.09	33.789	3.37		150	8.13	33.78	3.41		26.32	174.0	.402
204	7.21	33.928	2.77		200	7.27	33.93	2.80		26.57	151.2	.483
304	6.01	33.988	1.82		250	6.58	33.98	2.30		26.70	139.0	.556
407	5.40	34.050	1.20		300	6.05	34.00	1.45		26.78	132.0	.624
511	4.90	34.128	.79		400	5.43	34.05	1.23		26.90	122.0	.751
611	4.53	34.177			500	4.95	34.12	.83		27.01	111.2	.867
812	3.90	34.319	.32		600	4.57	34.17	.56		27.09	104.4	.975
1006	3.46	34.437	.34		700	4.23	34.24	.40		27.18	96.2	1.075
					800	3.93	34.31	.32		27.27	88.1	1.167
					1000	3.47	34.43	.34		27.42	75.3	1.331

CH 125 43 20.4 N 127 13.2 W DATE 29 DEC 62 0403 GCT WIREF - DRY 54.8 WET 51.0
WIND DIRECTION 18 VFL 28 KTS BAR 13 SWELL DIRECTION 18 H 10 T 7 CLOUD 0 AMT 10 WEATHER 02

0	11.74	32.624			0	11.74	32.63	0		24.82	314.3	0
10	11.74	32.629	5.97		10	11.74	32.63	5.97		24.83	314.2	.031
20	11.75	32.632	5.89		20	11.75	32.63	6.02		24.82	314.6	.063
50	11.40	32.971	5.67		30	11.75	32.64	5.90		24.83	314.5	.094
77	8.93	33.324	4.61		50	11.40	32.98	5.64		25.15	283.8	.154
104	8.42	33.720	3.67		75	9.12	33.32	4.70		25.81	221.7	.217
153	7.94	33.902	2.77		100	8.43	33.68	3.76		26.20	185.0	.268
207	7.56	33.985	2.15		150	7.96	33.89	2.80		26.44	163.3	.355
308	6.48	34.029	1.75		200	7.60	33.98	2.21		26.56	152.6	.434
413	6.11	34.073	1.25		250	7.27	34.02	1.92		26.63	145.9	.509
518	5.43	34.126	.77		300	6.93	34.04	1.77		26.70	140.5	.580
620	4.95	34.201	.53		400	6.20	34.07	1.31		26.82	130.1	.716
					500	5.54	34.12	.84		26.94	118.8	.840
					600	5.03	34.18	.54		27.05	109.0	.954

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	S × 10 ⁸	ΔD		
NH 005 44 39.0 N 124 10.6 W DATE 21 FEB 63 2200 GCT WIRE 00 DRY 53.0 WET 51.5 WIND DIRECTION 19 MPH 07 KTS BAR 27 SWELL DIRECTION 23 H 04 T 10 CLOUD 06 AMT 09 WEATHER														
0	11.22	32.011	6.23		0	11.22	32.02	6.23		24.44	350.6		0	
10	10.54	32.705	6.11		10	10.54	32.71	6.11		25.10	288.2	.032		
20	10.42	32.820	6.07		20	10.42	32.83	6.07		25.21	277.9	.060		
30	10.35	32.878	6.16		30	10.35	32.88	6.17		25.27	272.6	.088		
40	10.32	32.920	6.13		50	10.19	32.95	6.10		25.35	264.8	.141		
50	10.19	32.953	6.10											
NH 015 44 39.1 N 124 24.7 W DATE 22 FEB 63 0020 GCT WIRE 00 DRY 53.1 WET 51.0 WIND DIRECTION 19 MPH 03 KTS BAR 27 SWELL DIRECTION 23 H 04 T 10 CLOUD 06 AMT 09 WEATHER 02														
0	10.47	32.514	6.41		0	10.47	32.62	6.42		25.04	293.6		0	
10	10.29	32.619	6.46		10	10.29	32.62	6.46		25.08	290.5	.029		
20	10.26	32.684	6.33		20	10.26	32.69	6.33		25.13	285.4	.058		
30	10.25	32.726	6.36		30	10.25	32.73	6.36		25.17	282.2	.086		
50	10.13	33.019	5.96		50	10.13	33.02	5.96		25.41	259.0	.140		
75	9.85	33.137	5.97		75	9.85	33.14	5.98		25.55	246.2	.204		
NH 025 44 39.1 N 124 38.7 W DATE 22 FEB 63 0405 GCT WIRE 00 DRY 51.5 WET 50.0 WIND DIRECTION 0 MPH 00 KTS BAR 28 SWELL DIRECTION 25 H 06 T 08 CLOUD - AMT 02 WEATHER 01														
0	10.46	32.699	6.35		0	10.46	32.69	6.35		25.10	287.9		0	
10	10.27	32.685	6.34		10	10.27	32.69	6.34		25.13	285.2	.029		
20	10.20	32.699	6.23		20	10.20	32.69	6.23		25.15	284.0	.057		
30	10.18	32.696	6.22		30	10.18	32.70	6.22		25.15	283.3	.085		
49	9.91	32.937	5.63		50	9.89	32.96	5.58		25.40	260.1	.140		
75	9.40	33.409	4.34		75	9.40	33.41	4.34		25.84	219.0	.200		
101	9.06	34.630	3.78		100	9.06	33.62	3.79		26.06	198.5	.252		
152	8.64	33.831	2.91		150	8.66	33.83	2.94		26.28	178.3	.346		
194	7.81	33.949	2.53											
NH 035 44 39.3 N 124 52.9 W DATE 22 FEB 63 0700 GCT WIRE 10 DRY 51.0 WET 50.5 WIND DIRECTION 0 MPH 00 KTS BAR 29 SWELL DIRECTION 24 H 06 T 07 CLOUD 06 AMT - WEATHER 02														
0	10.43	32.694	6.33		0	10.43	32.69	6.33		25.10	287.7		0	
10	10.32	32.672	6.43		10	10.32	32.68	6.44		25.11	287.0	.029		
20	10.26	32.697	6.23		20	10.26	32.70	6.23		25.14	284.4	.057		
30	10.13	32.765	6.24		30	10.13	32.77	6.24		25.22	277.4	.085		
50	9.50	33.124	5.47		50	9.50	33.13	5.47		26.60	241.2	.137		
76	9.18	33.551	4.24		75	9.19	33.54	4.29		25.97	206.6	.193		
103	8.74	33.816	3.06		100	8.79	33.79	3.17		26.23	181.8	.242		
158	8.17	33.962	2.40		150	8.23	33.96	2.57		26.45	162.0	.328		
209	7.90	33.994	2.30		200	7.99	33.99	2.31		26.52	156.5	.407		
NH 045 44 39.2 N 125 7.0 W DATE 22 FEB 63 0900 GCT WIRE 12 DRY 52.0 WET 49.4 WIND DIRECTION 0 MPH 00 KTS BAR 28 SWELL DIRECTION 23 H 03 T 07 CLOUD 06 AMT 06 WEATHER 02														
0	10.45	32.625	6.46		0	10.46	32.63	6.46		25.05	292.6		0	
10	10.35	32.628	6.46		10	10.35	32.63	6.46		25.07	290.8	.029		
20	10.27	32.629	6.47		20	10.27	32.63	6.47		25.09	289.6	.058		
30	10.22	32.624	6.08		30	10.22	32.64	6.08		25.10	288.6	.087		
50	10.03	32.685	6.23		50	10.03	32.69	6.23		25.17	282.1	.144		
78	9.18	33.421	4.36		75	9.28	33.40	4.60		25.85	218.3	.207		
104	8.65	33.746	3.13		100	8.72	33.72	3.29		26.19	185.9	.257		
207	7.82	34.985	2.35		150	8.23	33.95	2.78		26.44	162.8	.344		
153	8.43	34.902	2.54		200	7.86	33.97	2.40		26.51	157.0	.424		
206	8.70	34.817	2.05		250	7.33	34.00	2.25		26.61	147.7	.500		
407	5.64	34.941	1.46		300	6.77	34.02	2.07		26.70	139.8	.572		
510	5.21	34.124	.69		400	5.70	34.04	1.50		26.86	126.0	.705		
612	4.59	34.237	.50		500	5.24	34.12	.94		26.98	114.5	.825		
					600	4.67	34.22	.54		27.12	101.8	.933		

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	PQ _{0.5}	Z	T	S	O ₂	PQ _{0.5}	O ₃	S x 10 ⁶	A.D.

NH 105 44 39.1 N 126 31.0 W DATE 22 FEB 63 2315 GCT WIRE 02 DRY 51.1 WET 50.0
WIND DIRECTION C VEL 00 KTS BAR 29 SWELL DIRECTION 25 H 05 T 10 CLOUD 09 AMT 09 WEATHER 03

0	10.64	32.581	6.27		0	10.64	32.59	6.28	24.99	298.8	0
10	10.46	32.580	6.38		10	10.46	32.58	6.39	25.02	296.1	.030
20	10.43	32.578	6.30		20	10.43	32.58	6.31	25.02	295.9	.059
30	10.41	32.578	6.30		30	10.41	32.58	6.31	25.02	295.8	.089
50	10.26	32.590	6.16		50	10.26	32.59	6.17	25.06	292.8	.148
78	9.78	32.692	5.86		75	9.87	32.66	5.92	25.17	282.3	.220
106	8.21	33.302	4.41		100	8.55	33.22	4.75	25.82	220.9	.243
160	7.94	33.858	2.90		150	7.99	33.83	3.09	26.38	168.4	.380
210	7.28	33.952	2.12		200	7.63	33.95	2.23	26.56	152.3	.460
312	6.13	34.005	1.88		250	6.79	33.98	1.94	26.67	141.8	.534
414	5.31	34.049	1.23		300	6.25	34.00	1.91	26.74	134.0	.602
516	4.87	34.146	.72		400	5.40	34.04	1.33	26.90	122.0	.730
617	4.43	34.216	.53		500	4.93	34.13	.78	27.02	110.2	.847
819	4.03	34.333	.35		600	4.50	34.21	.55	27.13	101.1	.952
1019	3.49	34.424	.49		700	4.24	34.27	.42	27.21	94.1	1.050
					800	4.06	34.32	.38	27.27	88.6	1.141
					1000	3.55	34.42	.46	27.39	77.5	1.307

NH 125 44 39.7 N 126 59.0 W DATE 23 FEB 63 0410 GCT WIRE 00 DRY 48.0 WET 46.5
WIND DIRECTION C VEL 00 KTS BAR 30 SWELL DIRECTION 25 H 05 T 09 CLOUD - AMT 10 WEATHER 02

0	10.58	32.551	6.34		0	10.58	32.56	6.34	24.97	300.0	0
10	10.29	32.551	6.49		10	10.29	32.56	6.49	25.02	295.5	.030
20	10.24	32.552	6.37		20	10.24	32.56	6.38	25.03	294.8	.059
30	10.22	32.553	6.35		30	10.22	32.56	6.35	25.04	294.5	.089
50	10.18	32.553	6.31		50	10.18	32.56	6.32	25.04	294.2	.148
78	9.95	32.566	6.20		75	10.00	32.56	6.25	25.08	291.3	.221
106	8.71	33.273	4.55		100	9.00	33.10	4.94	25.66	236.2	.287
160	7.38	33.828	3.51		150	7.55	33.78	3.57	26.41	165.5	.387
210	6.81	33.916	3.07		200	6.89	33.92	3.14	26.61	147.5	.465
312	5.93	34.001	1.96		250	6.43	33.96	2.64	26.76	139.1	.537
413	5.23	34.076	1.08		300	6.02	33.99	2.09	26.78	131.8	.605
515	4.99	34.175	.64		400	5.30	34.07	1.17	26.93	119.0	.730
616	4.57	34.233	.45		500	5.02	34.16	.68	27.04	109.0	.846
812	3.82	34.321	.34		600	4.64	34.23	.47	27.13	101.3	.949
996	3.43	34.409	.34		700	4.22	34.27	.38	27.21	93.6	1.046
					800	3.86	34.32	.34	27.28	86.8	1.137
					1000	3.42	34.41	.34	27.40	76.4	1.300

NH 145 44 39.1 N 127 27.0 W DATE 23 FEB 63 0817 GCT WIRE 02 DRY 51.0 WET 49.8
WIND DIRECTION C VEL 00 KTS BAR 27 SWELL DIRECTION 25 H 04 T 10 CLOUD - AMT - WEATHER 00

0	10.85	32.666	6.24		0	10.85	32.67	6.24	25.02	296.0	0
10	10.86	32.668	6.34		10	10.84	32.67	6.34	25.02	296.2	.030
20	10.79	32.668	6.34		20	10.79	32.67	6.34	25.03	296.2	.059
30	10.78	32.667	6.24		30	10.78	32.67	6.24	25.03	295.3	.089
50	10.72	32.665	6.13		50	10.72	32.67	6.14	25.04	294.8	.148
77	10.63	32.702	6.04		75	10.66	32.69	6.06	25.07	292.6	.221
104	9.14	33.123	5.09		100	9.39	33.05	5.25	25.56	245.9	.288
158	7.73	33.635	4.16		150	7.85	33.58	4.25	26.21	184.7	.396
208	7.15	33.891	3.55		200	7.22	33.86	3.64	26.52	155.9	.481
309	5.77	33.950	2.34		250	6.54	33.92	3.03	26.66	141.9	.556
411	4.92	34.023	1.42		300	5.89	33.94	2.44	26.76	133.8	.625
513	4.51	34.073	.94		400	4.99	34.02	1.50	26.92	119.1	.752
616	4.20	34.196	.54		500	4.55	34.07	1.02	27.01	110.6	.867
817	3.80	34.341	.35		600	4.24	34.18	.60	27.13	100.3	.972
1017	3.75	34.424	.33		700	4.02	34.27	.39	27.23	91.5	1.068
					800	3.83	34.33	.37	27.30	85.3	1.156
					1000	3.39	34.43	.33	27.42	74.8	1.316

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _T	S × 10 ⁶	ΔD	

AH173 45 42.7 N 128 1.5 W DATE 23 FEB 63 2250 GCT WIRE 00 DRY 49.7 WET 49.5
WIND DIRECTION 17 VEL 07 KTS BAR 26 SWELL DIRECTION 26 H 10 T 10 CLOUD 00 AMT 10 WEATHER 28

0	10.18	32.550	6.38		0	10.18	32.53	6.39		25.03	295.1	0
10	10.13	32.526	6.38		10	10.13	32.53	6.39		25.03	294.8	.029
20	10.12	32.531	6.38		20	10.13	32.54	6.36		25.04	294.4	.059
30	10.12	32.527	6.38		30	10.13	32.53	6.39		25.03	294.9	.088
50	10.07	32.530	6.31		50	10.07	32.54	6.32		25.05	293.5	.147
105	9.05	32.776	5.87		75	9.73	32.58	6.22		25.14	285.4	.220
159	7.42	33.691	4.13		100	9.18	32.73	5.95		25.34	266.4	.289
210	7.11	33.920	2.85		150	7.67	33.54	4.45		26.20	185.3	.401
311	5.93	34.003	2.08		200	7.13	33.42	3.06		26.58	150.4	.485
413	5.24	34.071	1.10		250	6.66	34.00	2.42		26.70	139.0	.558
615	4.73	34.120	.67		300	6.06	34.00	2.11		26.78	132.2	.625
617	4.34	34.217	.47		400	5.31	34.06	1.22		26.92	119.2	.751
819	3.95	34.348	.29		500	4.79	34.12	.71		27.03	109.4	.865
1019	3.47	34.414	.41		600	4.43	34.20	.49		27.13	100.6	.970
					700	4.19	34.28	.36		27.22	92.7	1.067
					800	3.98	34.34	.29		27.29	86.6	1.157
					1000	3.52	34.41	.39		27.39	77.6	1.321

AH 145 46 14.4 N 127 35.0 W DATE 24 FEB 63 0829 GCT WIRE - DRY 50.0 WET 49.2
WIND DIRECTION 08 VEL 07 KTS BAR 24 SWELL DIRECTION 26 H 05 T 10 CLOUD 00 AMT 10 WEATHER 28

0	10.11	32.553	6.31		0	10.11	32.56	6.32		25.05	292.3	0
10	10.14	32.514	6.44		10	10.14	32.54	6.44		25.03	294.3	.029
20	9.99	32.531	6.30		20	9.99	32.54	6.31		25.06	292.3	.059
30	9.96	32.530	6.38		30	9.96	32.53	6.39		25.06	292.1	.088
50	9.86	32.550	6.13		50	9.86	32.55	6.14		25.09	289.4	.146
77	9.63	32.578	6.17		75	9.67	32.57	6.17		25.14	285.5	.218
105	8.36	32.962	5.34		100	8.60	32.88	5.52		25.55	246.9	.284
159	7.53	33.708	3.79		150	7.58	33.60	4.03		26.26	179.5	.391
210	7.07	33.929	2.86		200	7.15	33.91	3.01		26.57	151.4	.474
311	5.92	33.942	2.10		250	6.61	33.98	2.48		26.69	139.7	.546
412	5.20	34.052	1.21		300	6.04	33.98	2.15		26.77	133.4	.615
515	4.85	34.127	.75		400	5.26	34.04	1.31		26.91	120.3	.741
617	4.45	34.208	.53		500	4.89	34.12	.80		27.01	110.9	.857
819	3.98	34.344	.40		600	4.51	34.19	.55		27.12	102.1	.963
1019	3.51	34.426	.39		700	4.23	34.27	.44		27.21	93.9	1.061
					800	4.02	34.33	.40		27.28	87.4	1.152
					1000	3.55	34.42	.39		27.40	77.3	1.316

AH 125 46 14.4 N 127 6.2 W DATE 24 FEB 63 1225 GCT WIRE 07 DRY 49.1 WET 48.0
WIND DIRECTION 12 VEL 13 KTS BAR 23 SWELL DIRECTION 26 H 04 T 10 CLOUD 00 AMT 03 WEATHER 01

0	9.79	32.525	6.34		0	9.79	32.53	6.34		25.09	289.3	0
10	9.80	32.522	6.38		10	9.80	32.53	6.39		25.08	289.9	.029
20	9.78	32.518	6.34		20	9.78	32.52	6.34		25.08	290.0	.058
30	9.71	32.515	6.34		30	9.71	32.52	6.34		25.09	289.3	.087
50	9.60	32.527	6.34		50	9.60	32.53	6.34		25.12	287.0	.145
77	8.84	32.722	5.75		75	8.91	32.70	5.82		25.36	264.7	.213
103	7.92	33.331	4.34		100	8.02	33.26	4.51		25.93	210.5	.273
156	7.74	33.824	2.93		150	7.76	33.80	3.02		26.40	167.0	.367
203	7.23	33.932	2.44		200	7.27	33.93	2.46		26.57	151.5	.447
299	6.14	33.989	2.10		250	6.67	33.97	2.25		26.68	141.0	.520
391	5.53	34.052	1.24		300	6.13	33.99	2.09		26.76	133.6	.588
485	4.97	34.095	.90		400	5.48	34.05	1.20		26.90	122.0	.716
575	4.67	34.170	.62		500	4.91	34.11	.85		27.00	111.8	.833
752	4.09	34.277	.32		600	4.59	34.19	.56		27.11	103.4	.941
					700	4.26	34.25	.37		27.19	95.6	1.040

OBSERVED INTERPOLATED DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	Sx10 ⁶	ΔD
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AH 105 46 14.6 N 126 37.5 W DATE 24 FEB 63 1610 GCT WIRE - DRY 49.5 WET 48.0
 WIND DIRECTION 12 VEL 10 KTS BAR 24 SWELL DIRECTION 25 H 04 T 10 CLOUD 00 AMT 06 WEATHER 03

0	9.92	32.532	6.38		0	9.92	32.54	6.39	25.07	290.8	0
10	9.93	32.539	6.38		10	9.93	32.54	6.39	25.07	290.6	.029
20	9.91	32.549	6.34		20	9.91	32.55	6.34	25.08	289.7	.058
30	9.85	32.529	6.37		30	9.85	32.53	6.38	25.08	290.4	.087
40	9.81	32.533	6.31		50	9.79	32.55	6.27	25.10	288.8	.145
50	8.97	33.023	4.91		75	9.01	33.00	4.97	25.58	243.6	.212
104	8.16	33.569	3.63		100	8.26	33.50	3.79	26.08	196.0	.266
157	7.70	33.880	2.69		150	7.72	33.87	2.74	26.46	161.3	.356
207	7.24	33.952	2.49		200	7.30	33.95	2.50	26.58	150.6	.434
307	6.44	33.996	1.96		250	6.88	33.98	2.28	26.66	143.3	.507
407	5.77	34.040	1.36		300	6.49	34.00	2.00	26.72	137.8	.577
508	5.18	34.112	.88		400	5.81	34.04	1.40	26.84	127.5	.710
608	4.74	34.186	.57		500	5.22	34.11	.91	26.97	115.6	.832
809	4.12	34.299	.33		600	4.77	34.18	.59	27.08	106.2	.942
913	3.69	34.345	.32		700	4.45	34.24	.41	27.16	98.7	1.045
1007	3.60	34.409	.39		800	4.15	34.29	.33	27.24	91.8	1.140
					1000	3.61	34.41	.38	27.38	78.9	1.311

AH 085 46 14.4 N 126 9.0 W DATE 24 FEB 63 2030 GCT WIRE 06 DRY 50.0 WET 49.0
 WIND DIRECTION 17 VEL 04 KTS BAR 23 SWELL DIRECTION 23 H 04 T 09 CLCUD 00 AMT 10 WEATHER 28

0	9.50	32.403	6.35		0	9.50	32.41	6.35	25.04	293.9	0
10	9.48	32.404	6.53		10	9.48	32.41	6.54	25.04	293.6	.029
20	9.42	32.406	6.38		20	9.42	32.41	6.39	25.05	292.7	.059
30	9.37	32.411	6.31		30	9.38	32.42	6.32	25.07	291.8	.088
50	9.30	32.453	6.38		50	9.30	32.46	6.39	25.11	287.9	.146
77	9.14	32.543	6.00		75	9.16	32.52	6.06	25.18	281.3	.217
105	8.29	33.413	3.97		100	8.45	33.24	4.36	25.86	217.6	.279
159	7.74	33.855	2.98		150	7.79	33.85	2.98	26.43	163.8	.375
210	7.09	33.933	2.81		200	7.22	33.93	2.82	26.57	150.7	.453
311	6.29	34.068	1.86		250	6.74	33.97	2.46	26.67	142.1	.526
412	5.42	34.050	1.31		300	6.36	34.00	1.97	26.75	135.5	.596
514	4.95	34.136	.68		400	5.51	34.04	1.37	26.88	123.2	.725
616	4.60	34.207	.39		500	5.00	34.12	.76	27.01	111.6	.842
819	3.98	34.338	.32		600	4.65	34.20	.42	27.10	103.6	.950
1019	3.57	34.412	.34		700	4.32	34.27	.36	27.20	95.3	1.049
					800	4.03	34.33	.33	27.28	88.0	1.141
					1000	3.60	34.41	.33	27.38	78.8	1.308

AH 065 46 14.5 N 125 39.5 W DATE 25 FEB 63 0010 GCT WIRE 08 DRY 49.8 WET 49.2
 WIND DIRECTION 18 VEL 09 KTS BAR 25 SWELL DIRECTION - H - T - CLCUD 00 AMT 10 WEATHER 02

0	9.65	32.405	6.43		0	9.65	32.61	6.44	25.02	296.0	0
10	9.54	32.398	6.47		10	9.54	32.60	6.47	25.03	295.0	.030
20	9.46	32.398	6.45		20	9.46	32.60	6.45	25.04	293.9	.059
30	9.38	32.414	6.33		30	9.38	32.62	6.33	25.07	291.7	.088
50	9.50	32.465	6.31		50	9.50	32.67	6.32	25.09	290.0	.146
77	9.03	32.584	5.94		75	9.09	32.56	6.00	25.23	277.2	.217
104	8.10	33.370	4.07		100	8.24	33.24	4.36	25.89	214.5	.279
157	7.54	33.797	3.29		150	7.57	33.79	3.29	26.41	165.2	.374
207	6.95	33.954	2.23		200	7.03	33.94	2.37	26.61	147.4	.452
308	5.77	33.977	2.21		250	6.41	33.96	2.22	26.71	138.3	.523
409	5.23	34.049	1.11		300	5.85	33.98	2.21	26.70	131.1	.591
512	4.94	34.142	.90		400	5.26	34.04	1.21	26.91	120.4	.716
612	4.56	34.207	.52		500	4.97	34.13	.91	27.02	110.7	.832
813	3.99	34.336	.33		600	4.61	34.20	.57	27.11	102.8	.938
1012	3.50	34.407	.42		700	4.29	34.27	.37	27.20	94.7	1.037
					800	4.02	34.33	.34	27.28	87.8	1.128
					1000	3.53	34.40	.41	27.39	78.1	1.294

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _T	δ × 10 ⁶	Δ D	
AH 045 46 14.6 N 125 10.6 W DATE 25 FEB 63 1130 GCT WIRE 10 DRY 51.0 WET 49.5 WIND DIRECTION 12 VEL 20 KTS BAR 22 SWELL DIRECTION 26 H 05 T 10 CLOUD 00 AMT 10 WEATHER 60													
0	10.00	32.494	6.36		0	10.00	32.50	6.36		25.03	294.9	0	
10	10.00	32.496	6.48		10	10.00	32.50	6.48		25.03	294.9	.029	
30	9.72	32.495	6.37		20	9.87	32.50	6.45		25.05	293.4	.059	
49	9.66	32.512	6.26		30	9.72	32.50	6.38		25.07	290.9	.088	
76	9.64	32.766	5.53		50	9.66	32.51	6.25		25.10	289.1	.146	
104	8.33	33.527	3.58		75	9.65	32.75	5.57		25.28	272.0	.216	
157	7.74	33.859	2.84		100	8.54	33.42	3.86		25.98	206.2	.276	
207	7.28	33.958	2.39		150	7.74	33.82	2.94		26.41	165.9	.369	
308	6.06	34.019	1.80		200	7.34	33.95	2.44		26.57	150.9	.448	
410	5.51	34.062	1.16		250	6.74	34.00	2.12		26.69	140.3	.521	
515	5.01	34.149	.73		300	6.15	34.02	1.84		26.78	131.7	.589	
618	4.60	34.235	.69		400	5.55	34.06	1.22		26.89	122.7	.716	
822	3.96	34.339	.62		500	5.08	34.14	.77		27.01	111.7	.833	
1020	3.48	34.412	.37		600	4.67	34.22	.70		27.12	102.0	.940	
1219	2.99	34.481	.55		700	4.32	34.28	.67		27.21	93.8	1.038	
					800	4.02	34.33	.63		27.28	87.6	1.128	
					1000	3.53	34.41	.39		27.39	78.0	1.294	
					1200	3.04	34.47	.51		27.49	68.4	1.440	
AH 035 46 14.6 N 124 56.2 W DATE 25 FEB 63 1445 GCT WIRE - DRY 51.0 WET 50.0 WIND DIRECTION 17 VEL 19 KTS BAR 20 SWELL DIRECTION 22 H 06 T 10 CLOUD 00 AMT 10 WEATHER 61													
0	10.07	32.431	6.45		0	10.07	32.44	6.45		24.97	300.7	0	
9	10.10	32.479	6.41		10	10.11	32.48	6.41		25.00	297.8	.030	
19	10.13	32.529	6.40		20	10.13	32.53	6.39		25.03	294.9	.060	
28	10.06	32.565	6.21		30	10.02	32.61	6.12		25.11	287.6	.089	
49	9.51	33.100	5.05		50	9.49	33.12	5.00		25.60	241.7	.142	
73	9.04	33.453	4.03		75	9.01	33.47	3.96		25.95	208.6	.198	
103	8.67	33.654	3.24		100	8.70	33.64	3.30		26.13	191.7	.248	
151	8.39	33.749	2.88		150	8.39	33.75	2.88		26.26	180.2	.341	
206	7.91	33.921	2.70		200	7.97	33.90	2.72		26.44	163.4	.427	
308	6.62	34.000	2.08		250	7.37	33.98	2.46		26.59	150.2	.505	
411	5.63	34.041	1.45		300	6.72	33.99	2.14		26.69	141.0	.578	
516	4.91	34.117	.80		400	5.72	34.04	1.52		26.85	126.4	.711	
616	4.59	34.184	.52		500	5.00	34.10	.89		26.99	113.0	.831	
					600	4.62	34.17	.54		27.09	104.9	.940	
AH 025 46 14.4 N 124 41.7 W DATE 25 FEB 63 1700 GCT WIRE 05 DRY 50.5 WET 49.5 WIND DIRECTION 17 VEL 15 KTS BAR 20 SWELL DIRECTION 22 H 06 T 10 CLOUD 00 AMT 10 WEATHER 61													
0	10.06	31.411	6.47		0	10.06	31.42	6.47		24.17	376.1	0	
10	10.00	32.428	6.41		10	10.00	32.43	6.42		24.98	300.0	.034	
20	9.87	32.447	6.36		20	9.88	32.47	6.36		25.03	295.2	.064	
30	9.78	32.463	6.40		30	9.78	32.47	6.41		25.04	294.2	.093	
51	9.72	32.542	6.08		50	9.72	32.53	6.11		25.10	288.7	.151	
77	9.27	33.024	4.81		75	9.31	32.98	4.91		25.52	249.5	.219	
108	9.02	33.398	4.40		100	9.08	33.32	4.46		25.82	221.4	.277	
161	8.29	33.714	3.01		150	8.46	33.67	3.30		26.19	187.0	.379	
216	7.39	33.974	2.40		200	7.67	33.88	2.49		26.47	161.1	.466	
AH 015 46 14.4 N 124 27.3 W DATE 25 FEB 63 1940 GCT WIRE 17 DRY 50.5 WET 50.5 WIND DIRECTION 17 VEL 16 KTS BAR 20 SWELL DIRECTION 23 H 07 T 09 CLOUD 00 AMT 10 WEATHER 61													
0	10.11	30.235	6.80		0	10.11	30.24	6.81		23.25	464.1	0	
10	10.10	32.488	6.39		10	10.10	32.49	6.40		25.01	297.1	.038	
20	10.10	32.524	6.26		20	10.10	32.53	6.27		25.03	294.6	.068	
30	10.06	32.560	6.23		30	10.06	32.56	6.23		25.07	291.5	.097	
51	9.82	32.684	5.85		50	9.83	32.67	5.88		25.19	280.0	.154	
76	9.46	33.123	5.16		75	9.48	33.10	5.19		25.59	243.1	.219	
108	8.91	33.498	4.12		100	9.06	33.41	4.39		25.89	214.3	.277	
161	7.55	33.911	2.46		150	7.82	33.85	2.75		26.42	164.6	.371	
216	6.96	33.970	2.10		200	7.05	33.95	2.20		26.61	146.8	.449	

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	σ _t	S × 10 ⁶	ΔD
AH 005 46 14.6 N 124 13.7 W DATE 25 FEB 63 2200 GCT WIRE 10 DRY 49.3 WET 49.3 WIND DIRECTION 17 VEL 36 KTS BAR 19 SWELL DIRECTION 23 H 08 T 09 CLCUD 00 AMT 10 WEATHER 61												
0	10.03	27.175	6.53		0	10.03	27.18	6.54		20.89	690.4	0
10	10.67	30.844	6.16		10	10.67	30.81	6.17		23.60	431.0	.056
20	10.49	31.698	6.12		20	10.49	31.70	6.13		24.33	362.0	.096
30	10.38	32.307	5.81		30	10.38	32.31	5.82		24.82	315.3	.130
40	10.03	32.550			50	9.75	32.84	5.31		25.34	266.4	.188
50	9.75	32.837	5.30		75	9.48	33.10			25.59	243.1	.251

AH 005 42 0.0 N 124 19.5 W DATE 02 MAR 63 1715 GCT WIRE 07 DRY 0 WET 0
WIND DIRECTION 15 VEL 05 KTS BAR 22 SWELL DIRECTION 26 H 07 T 11 CLOUD 00 AMT 10 WEATHER 62

0	10.86	32.565	6.26		0	10.86	32.57	6.27		24.94	303.6	0
7	10.70	32.729	6.11		10	10.67	32.56	5.93		24.96	301.2	.030
17	10.56	32.136	5.42		20	10.44	32.18	5.22		26.71	325.4	.062
27	10.00	32.298	4.76		30	11.70	33.15			25.24	275.5	.092

BH 015 42 0.0 N 124 32.8 W DATE 02 MAR 63 1855 GCT WIRE 07 DRY 47.5 WET 46.0
WIND DIRECTION 11 VEL 03 KTS BAR 21 SWELL DIRECTION 26 H 07 T 11 CLOUD 06 AMT 08 WEATHER 02

0	10.96	32.138	6.41		0	10.96	32.14	6.42		24.59	336.9	0
10	11.10	32.462	6.50		10	11.10	32.47	6.51		24.81	315.5	.033
20	11.10	32.654	6.47		20	11.10	32.66	6.47		24.96	301.5	.063
30	10.97	32.755	6.34		30	10.97	32.76	6.34		25.06	292.0	.093
55	10.50	32.998	5.86		50	10.62	32.94	6.02		25.26	273.2	.150
79	9.55	33.477	4.11		75	9.73	33.39	4.42		25.77	225.5	.212
108	8.40	33.841	2.87		100	8.72	33.76	3.12		26.22	183.0	.263

BH 025 42 0.0 N 124 46.2 W DATE 02 MAR 63 2040 GCT WIRE 00 DRY 49.2 WET 46.4
WIND DIRECTION 28 VEL 16 KTS BAR 20 SWELL DIRECTION 28 H 08 T 10 CLOUD 06 AMT 07 WEATHER 25

0	11.31	32.674	6.44		0	11.31	32.68	6.44		24.94	303.2	0
10	11.35	32.672	6.47		10	11.35	32.68	6.47		24.93	304.2	.030
20	11.30	32.679	6.45		20	11.30	32.68	6.45		24.95	303.0	.061
30	11.71	32.781	6.32		30	11.71	32.79	6.32		24.95	302.8	.091
52	10.85	32.833	6.02		50	10.98	32.83	6.05		25.12	287.2	.150
76	10.09	33.098	5.55		75	10.12	33.08	5.57		25.46	254.7	.218
104	9.35	33.414	4.69		100	9.44	33.37	4.82		25.80	223.3	.277
158	8.49	33.847	3.06		150	8.59	33.83	3.27		26.30	176.8	.377
208	7.78	34.015	2.38		200	7.89	34.01	2.45		26.54	154.5	.460
310	6.68	34.109	1.64		250	7.28	34.07	2.00		26.68	141.9	.534
414	5.94	34.138			300	6.77	34.11	1.69		26.77	133.2	.603
519	5.32	34.197	1.08		400	6.02	34.14	1.37		26.89	122.9	.731
619	4.70	34.282	.53		500	5.43	34.19	1.12		27.01	112.3	.849
					600	4.82	34.26	.65		27.14	100.6	.955

BH 035 42 0.0 N 124 59.7 W DATE 02 MAR 63 2400 GCT WIRE 14 DRY 50.0 WET 47.0
WIND DIRECTION 33 VEL 16 KTS BAR 19 SWELL DIRECTION 28 H 10 T 10 CLOUD 06 AMT 06 WEATHER 02

0	11.62	32.700	6.40		0	11.63	32.71	6.41		24.90	306.6	0
10	11.62	32.694	6.49		10	11.63	32.70	6.49		24.90	307.3	.031
20	11.60	32.731	6.36		20	11.60	32.74	6.36		24.93	304.4	.061
30	11.45	32.748	6.33		30	11.45	32.75	6.33		24.97	300.7	.092
52	10.96	32.879	5.98		50	11.01	32.86	6.04		25.13	285.8	.150
77	10.06	33.424	4.51		75	10.13	33.38	4.63		25.69	233.1	.215
105	9.40	33.584	3.86		100	9.50	33.57	3.94		25.95	209.1	.270
151	8.59	33.848	2.92		150	8.60	33.84	2.94		26.30	176.3	.367
207	8.11	33.956	2.64		200	8.15	33.95	2.65		26.45	162.6	.451
304	7.30	34.054	2.03		250	7.76	34.01	2.39		26.56	153.4	.530
403	6.24	34.110	1.25		300	7.34	34.05	2.06		26.65	145.0	.605
504	5.68	34.156	.80		400	6.27	34.11	1.27		26.84	128.0	.741
605	4.91	34.227	.49		500	5.70	34.15	.81		26.95	118.0	.864
					600	4.95	34.22	.50		27.09	105.2	.976

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _r	S × 10 ⁶	Δ D	
RH 045 42 0.0 N 125 13.1 W DATE 03 MAR 63 1500 GCT WIRE 00 DRY 49.0 WET 49.0 WIND DIRECTION 34 VEI 26 KTS BAR 23 SWELL DIRECTION 32 H 08 T 08 CLOUD 06 AMT 01 WEATHER 02													
0	11.53	32.680	6.36		0	11.53	32.68	6.36		24.91	306.5	0	
9	11.54	32.678	6.40		10	11.55	32.68	6.40		24.90	307.1	.031	
28	11.63	32.829	6.26		20	11.62	32.76	6.35		24.94	303.3	.061	
47	11.14	32.938	5.94		30	11.60	32.84	6.23		25.02	296.6	.091	
70	10.27	33.046	5.65		50	11.04	32.95	5.92		25.20	279.7	.149	
93	9.22	33.364	4.63		75	10.03	33.11	5.45		25.50	251.3	.215	
142	8.73	33.723	3.57		100	9.09	33.43	4.42		25.90	213.1	.273	
192	7.90	33.949	2.87		150	8.61	33.77	3.44		26.24	181.8	.372	
284	6.58	34.024	1.99		200	7.77	33.97	2.78		26.52	155.9	.456	
376	5.84	34.053	1.43		250	7.02	34.00	2.27		26.65	144.0	.531	
470	5.19	34.125	.92		300	6.43	34.03	1.88		26.76	134.4	.601	
564	4.85	34.205	.52		400	5.65	34.07	1.29		26.89	123.1	.730	
754	4.36	34.318	.36		500	5.06	34.15	.77		27.02	110.3	.846	
945	3.76	34.415	.41		600	4.75	34.23	.45		27.12	102.3	.952	
1144	3.32	34.481	.62		700	4.49	34.29	.41		27.20	95.4	1.051	
					800	4.21	34.34	.37		27.27	88.9	1.143	
					1000	3.62	34.44	.45		27.40	76.8	1.309	
RH 065 42 0.0 N 125 39.8 W DATE 03 MAR 63 2000 GCT WIRE 10 DRY 50.0 WET 46.1 WIND DIRECTION 02 VEI 25 KTS BAR 25 SWELL DIRECTION 30 H 10 T 11 CLOUD 06 AMT 02 WEATHER 02													
0	11.58	32.771	6.33		0	11.58	32.78	6.33		24.97	300.7	0	
10	11.57	32.770	6.39		10	11.57	32.77	6.40		24.97	300.8	.030	
20	11.55	32.771	6.36		20	11.55	32.78	6.36		24.97	300.6	.060	
29	11.56	32.773	5.99		30	11.56	32.77	5.99		24.97	301.2	.090	
50	11.49	32.745	6.01		50	11.49	32.77	6.02		24.98	300.5	.150	
74	9.91	33.083	5.41		75	9.86	33.10	5.37		25.52	249.4	.219	
104	8.61	33.538	4.07		100	8.74	33.48	4.25		26.00	204.4	.276	
152	7.74	33.897	3.20		150	7.76	33.89	3.22		26.46	160.5	.367	
204	7.34	33.972	2.50		200	7.36	33.97	2.55		26.58	150.1	.445	
305	6.24	34.028	1.83		250	6.84	34.00	2.14		26.68	140.9	.517	
405	5.60	34.082	1.17		300	6.29	34.03	1.85		26.77	132.9	.586	
508	5.19	34.157	.77		400	5.62	34.08	1.20		26.90	122.0	.713	
609	4.74	34.231	.52		500	5.22	34.15	.79		27.00	112.2	.830	
811	4.04	34.348	.31		600	4.78	34.22	.54		27.11	103.0	.938	
1010	3.63	34.466	.43		700	4.39	34.29	.38		27.20	94.5	1.037	
					800	4.07	34.34	.31		27.28	87.3	1.127	
					1000	3.64	34.46	.42		27.42	75.4	1.290	
RH 085 42 0.2 N 126 6.8 W DATE 03 MAR 63 2400 GCT WIRE 17 DRY 53.0 WET 46.5 WIND DIRECTION 01 VEI 22 KTS BAR 24 SWELL DIRECTION 30 H 08 T 11 CLOUD 00 AMT 01 WEATHER 02													
0	11.18	32.906	6.61		0	11.18	32.91	6.61		25.14	283.8	0	
10	10.80	32.853	6.54		10	10.80	32.86	6.55		25.17	281.5	.028	
19	10.75	32.852	6.48		20	10.72	32.87	6.42		25.19	279.3	.056	
29	10.36	33.068	5.83		30	10.33	33.08	5.80		25.42	257.7	.083	
51	9.80	33.243	5.25		50	9.82	33.24	5.27		25.63	238.1	.133	
77	8.75	33.584	3.96		75	8.83	33.56	4.06		26.04	190.6	.187	
106	8.16	33.830	3.22		100	8.24	33.79	3.33		26.31	174.1	.234	
154	7.91	33.967	2.59		150	7.92	33.96	2.62		26.50	157.3	.317	
207	7.40	34.004	2.43		200	7.47	34.00	2.44		26.59	140.0	.393	
308	6.42	34.085	1.47		250	6.98	34.04	2.04		26.69	140.1	.466	
407	5.58	34.114	1.08		300	6.50	34.08	1.55		26.79	131.6	.534	
508	5.12	34.184	.57		400	5.63	34.11	1.10		26.92	119.6	.659	
608	4.69	34.241	.50		500	5.15	34.18	.60		27.03	109.3	.774	
809	4.02	34.354	.29		600	4.72	34.24	.51		27.13	101.4	.879	
1007	3.56	34.423	.43		700	4.35	34.30	.39		27.22	93.4	.976	
					800	4.05	34.35	.30		27.29	86.5	1.066	
					1000	3.57	34.42	.42		27.40	77.4	1.230	

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	Sx10 ⁶	ΔD
0	10.70	32.752	6.57		0	10.70	32.76	6.57		25.11	287.2	0
10	10.69	32.754	6.50		10	10.69	32.76	6.51		25.11	287.0	.029
20	10.71	32.753	6.53		20	10.71	32.76	6.54		25.11	287.6	.057
30	10.70	32.749	6.54		30	10.70	32.75	6.55		25.11	287.9	.086
51	10.10	33.054	5.83		50	10.14	33.04	5.87		25.42	258.2	.141
76	9.50	33.340	5.02		75	9.52	33.33	5.06		25.75	227.1	.201
107	8.76	33.761	3.33		100	8.92	33.67	3.70		26.12	192.8	.254
155	8.12	33.971	2.69		150	8.17	33.97	2.69		26.46	160.8	.342
209	7.27	33.978	2.42		200	7.41	33.98	2.45		26.58	149.9	.420
310	6.44	34.040	1.78		250	6.86	34.00	2.17		26.68	141.6	.493
408	5.85	34.102	1.15		300	6.50	34.03	1.85		26.75	135.1	.562
510	5.27	34.170	.77		400	5.89	34.10	1.20		26.88	124.1	.691
611	4.61	34.248	.49		500	5.33	34.16	.80		27.00	112.6	.810
					600	4.69	34.24	.52		27.13	100.8	.916

BH 105 42 0.0 N 126 32.4 W DATE 04 MAR 63 0904 GCT WIRE 13 DRY 49.5 WET 46.0
WIND DIRECTION 04 VEL 22 KTS BAR 25 SWELL DIRECTION 30 H 08 T 09 CLOUD 03 AMT 05 WEATHER 02

0	10.70	32.752	6.57		0	10.70	32.76	6.57		25.11	287.2	0
10	10.69	32.754	6.50		10	10.69	32.76	6.51		25.11	287.0	.029
20	10.71	32.753	6.53		20	10.71	32.76	6.54		25.11	287.6	.057
30	10.70	32.749	6.54		30	10.70	32.75	6.55		25.11	287.9	.086
51	10.10	33.054	5.83		50	10.14	33.04	5.87		25.42	258.2	.141
76	9.50	33.340	5.02		75	9.52	33.33	5.06		25.75	227.1	.201
107	8.76	33.761	3.33		100	8.92	33.67	3.70		26.12	192.8	.254
155	8.12	33.971	2.69		150	8.17	33.97	2.69		26.46	160.8	.342
209	7.27	33.978	2.42		200	7.41	33.98	2.45		26.58	149.9	.420
310	6.44	34.040	1.78		250	6.86	34.00	2.17		26.68	141.6	.493
408	5.85	34.102	1.15		300	6.50	34.03	1.85		26.75	135.1	.562
510	5.27	34.170	.77		400	5.89	34.10	1.20		26.88	124.1	.691
611	4.61	34.248	.49		500	5.33	34.16	.80		27.00	112.6	.810
					600	4.69	34.24	.52		27.13	100.8	.916

BH 125 42 0.0 N 126 59.6 W DATE 04 MAR 63 1330 GCT WIRE 06 DRY 49.9 WET 46.1
WIND DIRECTION 04 VEL 09 KTS BAR 25 SWELL DIRECTION 30 H 06 T 09 CLOUD 00 AMT 10 WEATHER 03

0	11.00	32.665	6.43		0	11.00	32.67	6.44		24.99	298.6	0
10	11.00	32.661	6.33		10	11.00	32.67	6.33		24.99	299.1	.030
20	11.00	32.661	6.38		20	11.00	32.67	6.39		24.99	299.2	.060
30	11.00	32.661	6.41		30	11.00	32.67	6.42		24.99	299.4	.090
52	10.87	32.662	6.34		50	10.90	32.66	6.36		25.00	298.3	.149
76	9.80	32.976	5.40		75	9.95	32.93	5.53		25.37	263.4	.220
109	8.50	33.449	4.25		100	8.84	33.32	4.57		25.85	218.1	.280
158	7.86	33.817	3.18		150	7.91	33.80	3.31		26.37	168.5	.377
214	7.01	33.956	2.59		200	7.82	33.95	2.70		26.58	149.7	.457
318	5.89	34.002	1.88		250	6.57	33.98	2.32		26.70	138.8	.529
419	5.19	34.056	1.17		300	6.05	34.00	1.99		26.79	131.6	.596
524	4.86	34.122	.80		400	5.29	34.05	1.29		26.91	120.5	.722
624	4.54	34.197	.52		500	4.92	34.11	.86		27.00	111.9	.838
825	3.87	34.343	.28		600	4.62	34.18	.58		27.09	104.5	.946
1025	3.36	34.431	.47		700	4.28	34.26	.38		27.19	95.4	1.046
					800	3.95	34.33	.29		27.28	87.1	1.138
					1000	3.42	34.42	.42		27.41	75.5	1.300

BH 145 42 0.1 N 127 26.2 W DATE 04 MAR 63 1815 GCT WIRE 4 DRY 51.0 WET 47.5
WIND DIRECTION 04 VEL 7 KTS BAR 25 SWELL DIRECTION 30 H 02 T 08 CLOUD 0 AMT 10 WEATHER 02

0	11.06	32.659	6.52		0	11.06	32.66	6.53		24.97	300.0	0
10	11.06	32.658	6.36		10	11.06	32.66	6.36		24.97	300.3	.030
20	11.05	32.657	6.43		20	11.05	32.66	6.44		24.97	300.4	.060
30	11.05	32.656	6.43		30	11.05	32.66	6.44		24.97	300.6	.090
51	10.90	32.699	6.20		50	10.92	32.69	6.22		25.02	296.2	.150
76	9.83	32.905	5.56		75	9.88	32.89	5.59		25.35	265.1	.220
108	8.39	33.599	4.04		100	8.71	33.42	4.42		25.96	208.2	.279
158	8.08	33.869	3.07		150	8.13	33.46	3.16		26.39	167.7	.373
214	7.15	33.974	2.41		200	7.40	33.96	2.54		26.57	151.1	.453
318	6.24	34.035	1.73		250	6.75	34.01	2.13		26.70	139.7	.525
418	5.71	34.084	1.17		300	6.35	34.03	1.82		26.77	133.2	.594
520	4.84	34.118	.84		400	5.80	34.08	1.26		26.87	124.5	.722
619	4.62	34.200	.56		500	5.00	34.11	.89		27.00	112.6	.841
822	3.91	34.324	.34		600	4.64	34.18	.61		27.10	104.5	.949
1022	3.57	34.423	.43		700	4.34	34.25	.42		27.19	96.2	1.050
					800	3.99	34.31	.34		27.27	88.5	1.142
					1000	3.59	34.41	.41		27.39	78.2	1.309

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	S x 10 ⁶	Δ D
RH 165 42 0.0 N 127 52.6 W DATE 04 MAR 63 2235 GCT WIRE 02 DRY 53.8 WET 49.0												
WIND DIRECTION C VEL 00 KTS BAR 26 SWELL DIRECTION 06 H 03 T 06 CLOUD 00 AMT 08 WEATHER 01												
0	11.41	32.665	6.53		0	11.41	32.67	6.54		24.92	305.6	0
10	11.15	32.660	6.47		10	11.15	32.67	6.47		24.96	301.7	.030
20	11.13	32.664	6.40		20	11.13	32.67	6.41		24.96	301.2	.060
30	11.14	32.667	6.47		30	11.14	32.67	6.47		24.97	301.4	.091
52	10.82	32.693	6.19		50	10.86	32.69	6.23		25.03	295.6	.150
78	10.63	32.802	5.98		75	10.68	32.77	6.04		25.12	287.0	.223
109	8.52	33.669	3.78		100	9.17	33.41	4.45		25.87	216.3	.286
158	7.99	33.820	3.43		150	8.08	33.80	3.49		26.34	172.1	.383
214	7.30	33.956	2.80		200	7.47	33.93	2.96		26.54	154.5	.465
318	6.47	34.020	1.92		250	6.97	33.99	2.47		26.66	143.6	.539
419	5.86	34.090	1.15		300	6.59	34.02	2.06		26.73	137.4	.609
523	5.09	34.113	.94		400	5.97	34.08	1.27		26.85	126.4	.741
624	4.58	34.187	.64		500	5.26	34.11	.97		26.97	115.9	.862
827	3.90	34.312	.39		600	4.69	34.17	.71		27.08	106.1	.973
1027	3.49	34.436	.17		700	4.28	34.24	.50		27.18	97.0	1.075
					800	3.97	34.30	.40		27.26	89.6	1.168
					1000	3.53	34.42	.44		27.40	77.1	1.335

CBH159 42 40.7 N 128 0.0 W DATE 05 MAR 63 1145 GCT WIRE 14 DRY 51.0 WET 48.5
WIND DIRECTION 13 VEL 10 KTS BAR 23 SWELL DIRECTION C H 00 T 00 CLOUD 06 AMT 10 WEATHER 02

0	11.31	32.740	6.61		0	11.31	32.75	6.61		24.99	298.3	0
10	11.30	32.739	6.48		10	11.30	32.74	6.48		24.99	298.4	.030
29	11.31	32.731	6.38		20	11.31	32.73	6.42		24.98	299.3	.060
50	10.98	32.749	6.21		30	11.30	32.73	6.37		24.98	299.6	.090
75	9.99	32.877	5.74		50	10.98	32.75	6.21		25.06	293.0	.149
100	8.83	33.355	4.52		75	9.99	32.88	5.74		25.33	267.7	.219
151	8.26	33.779	3.37		100	8.83	33.36	4.53		25.89	214.7	.279
203	7.72	33.950	2.53		150	8.27	33.78	3.38		26.30	176.4	.377
302	6.88	34.019	1.99		200	7.75	33.94	2.57		26.51	157.1	.460
402	6.19	34.070	1.42		250	7.30	34.00	2.19		26.62	147.1	.536
503	5.62	34.116	1.26		300	6.89	34.02	1.99		26.69	141.5	.608
604	4.87	34.126	.80		400	6.20	34.07	1.43		26.82	130.1	.744
806	4.22	34.304	.35		500	5.64	34.11	1.26		26.93	120.1	.869
1008	3.64	34.413	.41		600	4.90	34.13	.82		27.02	111.8	.985
1210	3.13	34.476	.56		700	4.49	34.20	.52		27.13	101.9	1.092
					800	4.23	34.30	.36		27.23	92.5	1.189
					1000	3.66	34.41	.40		27.38	79.3	1.361
					1200	3.15	34.47	.55		27.48	69.7	1.510

CH 165 43 20.5 N 128 7.7 W DATE 05 MAR 63 1750 GCT WIRE 09 DRY 51.0 WET 49.0
WIND DIRECTION 12 VEL 16 KTS BAR 24 SWELL DIRECTION 27 H 03 T 09 CLOUD 00 AMT 10 WEATHER 02

0	10.76	32.627	6.65		0	10.76	32.63	6.52		25.00	297.4	.030
10	10.76	32.629	6.51		10	10.76	32.63	6.52		25.00	297.9	.059
30	10.77	32.631	6.56		20	10.77	32.63	6.52		25.00	297.8	.089
51	10.75	32.633	6.46		30	10.77	32.64	6.57		25.00	298.1	.149
77	10.38	32.749	6.07		50	10.75	32.63	6.47		25.14	285.4	.222
103	9.85	33.018	5.40		75	10.42	32.74	6.11		25.42	259.5	.290
156	8.03	33.730	3.85		100	9.92	32.98	5.49		26.21	184.6	.401
210	7.61	33.960	2.73		150	8.23	33.66	4.02		26.52	155.8	.486
310	6.52	33.999	2.25		200	7.64	33.94	2.90		26.61	147.7	.562
409	5.72	34.066	1.25		250	7.18	33.98	2.45		26.70	139.6	.634
511	5.17	34.147	.76		300	6.63	34.00	2.26		26.86	125.5	.766
612	4.55	34.236	.47		400	5.78	34.06	1.34		26.99	113.3	.885
814	4.06	34.328	.36		500	5.22	34.14	.79		27.13	101.0	.992
1016	3.59	34.433	.41		600	4.62	34.23	.50		27.21	91.4	1.090
1218	3.13	34.492	.59		700	4.27	34.28	.37		27.27	88.8	1.181
					800	4.08	34.32	.37		27.39	77.7	1.347
					1000	3.63	34.43	.40		27.49	68.9	1.494
					1200	3.17	34.49	.57				

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S‰	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	S × 10 ³	ΔD
CH 145	43 21.6 N	127 40.5 W	DATE 05 MAR 63	2200 GCT	WIRE 04	DRY 51.0	WET 50.5					
WIND DIRECTION 11 VEL 13 KTS	BAR 25 SWELL DIRECTION 27 H 05 T 11 CLOUD 06 AMT 10 WEATHER 59											

0	10.72	32.651	6.66		0	10.72	32.66	6.67		25.03	295.0	0
10	10.72	32.641	7.11		10	10.72	32.65	7.11		25.02	295.9	.030
20	10.72	32.638	6.52		20	10.72	32.64	6.53		25.02	296.3	.059
30	10.72	32.634	6.40		30	10.72	32.64	6.60		25.01	296.7	.089
52	10.67	32.632	6.46		50	10.68	32.63	6.48		25.02	296.9	.148
77	10.31	32.646	6.34		75	10.37	32.64	6.36		25.08	291.6	.222
109	8.14	33.100	5.33		100	8.77	32.95	5.67		25.58	244.1	.289
159	7.86	33.719	3.53		150	7.91	33.63	3.81		26.23	182.3	.395
214	7.24	33.955	3.12		200	7.41	33.92	3.15		26.54	154.0	.479
319	5.96	34.000	2.01		250	6.77	34.00	2.75		26.69	140.4	.553
420	5.38	34.072	1.14		300	6.17	33.99	2.22		26.76	133.9	.621
524	4.84	34.133	.70		400	5.47	34.06	1.29		26.90	121.7	.749
625	4.47	34.238			500	4.95	34.12	.77		27.01	111.5	.866
827	3.95	34.336	.35		600	4.55	34.21	.53		27.13	101.3	.972
1027	3.55	34.438	.37		700	4.25	34.28	.38		27.22	93.1	1.069
					800	4.01	34.33	.38		27.28	87.7	1.160
					1000	3.60	34.42	.36		27.40	77.5	1.325

CH 125	43 20.5 N	127 13.3 W	DATE 06 MAR 63	0135 GCT	WIRE 03	DRY 51.0	WET 51.0					
WIND DIRECTION 12 VEL 13 KTS	BAR 23 SWELL DIRECTION 24 H 05 T 11 CLOUD 06 AMT 10 WEATHER 02											

0	10.57	32.613	6.58		0	10.57	32.62	6.58		25.02	295.3	0
10	10.56	32.610	6.50		10	10.56	32.61	6.51		25.02	295.5	.030
20	10.56	32.624	6.58		20	10.56	32.63	6.58		25.03	294.7	.059
30	10.60	32.632	6.58		30	10.60	32.64	6.58		25.03	294.9	.089
52	10.66	32.644	6.51		50	10.65	32.64	6.53		25.03	296.0	.148
78	9.67	32.977	5.56		75	9.81	32.93	5.69		25.39	261.2	.217
110	8.63	33.441	4.34		100	8.92	33.30	4.71		25.83	220.3	.277
159	8.02	33.855	3.09		150	8.04	33.81	3.26		26.36	170.8	.375

CH 105	43 20.5 N	126 46.0 W	DATE 06 MAR 63	0600 GCT	WIRE 04	DRY 50.5	WET 48.5					
WIND DIRECTION 09 VEL 13 KTS	BAR 23 SWELL DIRECTION 24 H 06 T 09 CLOUD 00 AMT 10 WEATHER 02											

0	10.58	32.571	6.72		0	10.58	32.58	6.72		24.99	298.6	0
10	10.58	32.568	6.58		10	10.58	32.57	6.58		24.99	298.0	.030
20	10.55	32.575	6.64		20	10.55	32.58	6.65		25.00	298.1	.060
30	10.48	32.628	6.60		30	10.48	32.63	6.60		25.05	293.2	.089
52	10.28	32.660	6.30		50	10.31	32.65	6.35		25.10	289.3	.148
78	9.21	33.108	4.98		75	9.35	33.05	5.15		25.56	245.3	.214
109	8.45	33.590	3.81		100	8.63	33.47	4.10		26.00	203.8	.270
159	7.73	33.852	3.08		150	7.83	33.83	3.16		26.41	165.6	.363
214	7.26	33.952	2.39		200	7.37	33.94	2.55		26.56	152.3	.442
319	5.99	34.030	1.55		250	6.83	33.99	2.04		26.67	142.2	.516
420	5.07	34.107	1.26		300	6.23	34.02	1.66		26.78	132.4	.584
523	4.71	34.157	.60		400	5.22	34.09	1.31		26.96	116.0	.709
623	4.33	34.234	.41		500	4.77	34.15	.74		27.05	107.2	.820
823	3.89	34.361	.28		600	4.41	34.22	.43		27.15	99.4	.923
1023	3.47	34.433	.36		700	4.13	34.29	.33		27.23	91.4	1.019
					800	3.93	34.35	.28		27.30	85.2	1.107
					1000	3.52	34.43	.34		27.41	76.3	1.268

CH 085	43 20.5 N	126 18.8 W	DATE 06 MAR 63	1000 GCT	WIRE 04	DRY 51.0	WET 49.0					
WIND DIRECTION 08 VEL 15 KTS	BAR 22 SWELL DIRECTION 24 H 05 T 10 CLOUD 03 AMT 10 WEATHER 02											

0	10.55	32.595	6.68		0	10.55	32.60	6.69		25.01	298.3	0
10	10.56	32.592	6.52		10	10.56	32.60	6.53		25.01	296.8	.030
20	10.54	32.592	6.65		20	10.54	32.60	6.66		25.01	296.7	.059
30	10.55	32.595	6.61		30	10.56	32.60	6.61		25.01	297.0	.089
52	10.56	32.602	6.44		50	10.56	32.78	6.46		25.15	284.0	.147
77	10.11	32.967	5.99		75	10.16	32.95	6.04		25.36	264.9	.216
158	7.36	33.904	2.94		100	9.31	33.25	5.10		25.73	229.9	.278
213	6.80	33.965	2.58		150	7.62	33.82	3.23		26.43	163.8	.376
317	6.10	34.022	1.77		200	6.88	33.95	2.60		26.64	144.7	.453
418	5.56	34.120	1.12		250	6.52	33.99	2.29		26.71	138.0	.524
522	4.98	34.196	.58		300	6.19	34.01	1.90		26.78	132.5	.591
623	4.63	34.251			400	5.65	34.10	1.23		26.91	120.7	.718
825	3.98	34.329	.31		500	5.09	34.18	.68		27.04	108.4	.832
1024	3.46	34.426	.48		600	4.70	34.24	.39		27.13	100.9	.937
					700	4.37	34.28	.42		27.20	94.6	1.035
					800	4.06	34.32	.33		27.27	88.8	1.126
					1000	3.52	34.41	.44		27.40	77.3	1.292

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁶	Δ D
CH 065	43 20.5 N	125 51.8 W	DATE 06 MAR 63	1407 GCT	WTRF 11	DRY 50.5	WET 48.5					
WIND DIRECTION 07 VEL 16 KTS	BAR 20 SWELL DIRECTION 24 H 05 T 10 CLOUD 04 AMT 10 WEATHER 02											

0	11.02	32.744	6.67		0	11.02	32.75	6.68	25.05	293.1	0
10	11.02	32.745	6.24		10	11.02	32.75	6.24	25.05	293.2	.029
20	11.02	32.748	6.58		20	11.02	32.75	6.58	25.05	293.2	.059
30	10.99	32.709	6.47		30	10.99	32.80	6.47	25.09	289.1	.088
52	10.62	33.013	6.07		50	10.66	32.99	6.11	25.30	270.1	.144
78	10.02	33.232	5.60		75	10.10	33.20	5.68	25.56	245.5	.208
109	9.02	33.671	3.77		100	9.31	33.55	4.32	25.96	208.1	.265
159	8.19	33.873	3.05		150	8.29	33.46	3.07	26.36	170.2	.359
214	7.71	34.014	2.40		200	7.81	33.99	2.55	26.53	155.0	.441
319	6.64	34.064	1.61		250	7.35	34.05	2.08	26.65	144.7	.515
419	5.67	34.094	1.12		300	6.84	34.05	1.72	26.72	138.0	.586
524	5.00	34.172	.62		400	5.84	34.09	1.20	26.88	124.1	.717
625	4.67	34.235	.49		500	5.12	34.15	.72	27.02	110.9	.835
828	4.02	34.326	.35		600	4.74	34.22	.50	27.11	102.8	.941
1028	3.47	34.424	.44		700	4.42	34.27	.42	27.19	96.0	1.041
					800	4.11	34.31	.36	27.26	89.8	1.134
					1000	3.54	34.41	.41	27.39	77.9	1.301

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	Δ D
CH 045	43 20.5 N	125 24.5 W	DATE 06 MAR 63	1820 GCT	WTRF 08	DRY 53.0	WET 50.0				
WIND DIRECTION 06 VEL 14 KTS	BAR 20 SWELL DIRECTION 21 H 05 T 10 CLOUD 01 AMT 02 WEATHER 02										

0	10.80	32.722	6.66		0	10.80	32.73	6.67	25.07	291.0	0
10	10.74	32.746	6.53		10	10.74	32.75	6.54	25.10	288.4	.029
30	10.57	32.816	6.37		20	10.65	32.77	6.46	25.13	285.5	.058
51	10.63	33.040	5.90		30	10.57	32.82	6.38	25.18	280.8	.086
76	9.78	33.223	5.04		50	10.63	33.03	5.93	25.33	266.7	.141
102	9.10	33.546	4.16		75	9.82	33.22	5.08	25.62	240.2	.204
156	8.32	33.924	2.78		100	9.15	33.52	4.22	25.96	207.5	.260
211	7.61	33.992	2.35		150	8.38	33.90	2.89	26.38	168.8	.354
312	6.20	34.027	1.90		200	7.75	33.98	2.39	26.53	154.6	.435
413	5.49	34.092	1.16		250	7.03	34.01	2.17	26.66	143.1	.509
516	4.90	34.127	.79		300	6.35	34.03	1.95	26.76	133.8	.579
617	4.58	34.216	.53		400	5.56	34.08	1.25	26.91	120.8	.706
814	4.02	34.352	.34		500	4.98	34.12	.83	27.01	111.5	.822
998	3.53	34.439	.40		600	4.62	34.20	.57	27.11	103.0	.929
					700	4.34	34.28	.41	27.20	94.4	1.028
					800	4.06	34.34	.34	27.29	87.0	1.118
					1000	3.52	34.44	.40	27.42	75.5	1.281

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	Δ D
CH 035	43 20.5 N	125 10.6 W	DATE 06 MAR 63	2215 GCT	WTRF 02	DRY 51.1	WET 47.0				
WIND DIRECTION 03 VEL 13 KTS	BAR 19 SWELL DIRECTION 21 H 05 T 09 CLOUD 01 AMT 01 WEATHER 03										

0	10.70	32.636	6.75		0	10.70	32.64	6.76	25.02	295.7	0
10	10.53	32.645	6.80		10	10.53	32.65	6.81	25.05	292.4	.029
20	10.52	32.640	6.68		20	10.52	32.64	6.69	25.05	292.8	.059
30	10.53	32.646	6.51		30	10.53	32.67	6.52	25.07	291.2	.088
51	10.42	32.946	6.16		50	10.43	32.93	6.18	25.29	270.7	.144
77	9.89	33.242	5.37		75	9.94	33.22	5.45	25.60	241.9	.208
109	8.90	33.669	3.68		100	9.17	33.56	4.15	25.99	205.3	.264
159	8.31	33.924	2.78		150	8.37	33.90	2.85	26.38	168.4	.357
214	7.73	33.996	2.32		200	7.87	33.99	2.41	26.52	155.6	.438
319	6.58	34.071	1.54		250	7.34	34.03	2.02	26.63	145.8	.514
421	5.37	34.055	1.19		300	6.79	34.06	1.66	26.74	136.7	.584
525	4.91	34.114	.88		400	5.59	34.06	1.24	26.89	123.1	.714
626	4.81	34.231	.53		500	4.97	34.09	.95	26.99	113.5	.832
828	4.09	34.366	.33		600	4.83	34.20	.61	27.09	105.5	.942
1028	3.58	34.423	.51		700	4.57	34.29	.40	27.19	96.2	1.043
					800	4.20	34.35	.36	27.28	88.0	1.135
					1000	3.64	34.42	.46	27.39	78.3	1.301

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	S × 10 ³	ΔD
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CH 025 43 20.5 N 124 50.2 W DATE 06 MAR 63 2340 GCT WIRE 03 DRY 54.0 WET 48.1
WIND DIRECTION 01 VEL 16 KTS BAR 18 SWELL DIRECTION 24 H 05 T 12 CLOUD 03 AMT 03 WEATHER 02

0	10.65	32.664	6.79		0	10.65	32.67	6.80		25.05	292.8	0
10	10.46	32.653	6.72		10	10.46	32.66	6.72		25.07	290.7	.029
20	10.66	32.721	6.61		20	10.66	32.73	6.61		25.09	289.1	.058
30	10.40	32.776	5.71		30	10.40	32.78	5.71		25.18	281.0	.087
50	10.15	33.140	5.19		50	10.15	33.14	5.19		25.50	250.3	.140
75	9.33	33.467	4.62		75	9.42	33.44	4.50		25.85	217.5	.198
105	8.85	33.745	3.64		100	8.92	33.70	3.78		26.14	190.8	.249
155	8.27	33.917	2.57		150	8.32	33.91	2.73		26.40	166.9	.339
211	7.80	33.979	2.56		200	7.89	33.97	2.58		26.51	157.0	.420
314	6.58	34.052	1.70		250	7.36	34.01	2.26		26.62	147.4	.496
418	5.36	34.054	1.29		300	6.76	34.05	1.83		26.73	137.6	.567
520	5.09	34.139	.87		400	5.54	34.05	1.35		26.89	122.8	.697
620	4.66	34.245	.53		500	5.11	34.12	.95		26.99	113.4	.815
					600	4.76	34.22	.59		27.11	103.0	.923

CH 015 43 20.5 N 124 35.2 W DATE 07 MAR 63 0212 GCT WIRE 05 DRY 52.0 WET 48.0
WIND DIRECTION 01 VEL 18 KTS BAR 18 SWELL DIRECTION 29 H 05 T 10 CLOUD - AMT - WEATHER 02

0	10.80	32.695	6.72		0	10.80	32.70	6.72		25.05	293.0	0
10	10.80	32.714	6.41		10	10.80	32.72	6.42		25.06	291.8	.029
20	10.72	32.722			20	10.72	32.73	6.52		25.08	290.1	.058
30	10.70	32.735	6.67		30	10.70	32.74	6.68		25.10	288.9	.087
50	10.64	32.989	6.03		50	10.64	32.99	6.04		25.30	269.5	.143
75	9.80	33.376	4.85		75	9.90	33.34	4.98		25.70	232.4	.206
110	9.42	33.571	3.89		100	9.51	33.53	4.15		25.91	212.8	.261
160	8.62	33.823	3.10		150	8.80	33.78	3.22		26.22	184.1	.361
221	7.22	34.027	2.11		200	7.75	33.97	2.45		26.53	155.4	.445

CH 005 43 20.5 N 124 29.0 W DATE 07 MAR 63 0415 GCT WIRE 04 DRY 51.0 WET 48.5
WIND DIRECTION 05 VEL 10 KTS BAR 18 SWELL DIRECTION 29 H 05 T 10 CLOUD - AMT - WEATHER 02

0	10.55	31.970	7.83		0	10.55	31.98	7.83		24.53	342.8	0
10	10.34	32.635	6.89		10	10.34	32.64	6.90		25.08	290.1	.032
20	10.46	32.759	6.66		20	10.46	32.76	6.67		25.16	283.0	.060
30	10.32	32.853	6.18		30	10.32	32.86	6.19		25.25	274.0	.088
50	10.15	33.114	5.89		50	10.15	33.12	5.90		25.48	252.3	.141
75	9.36	33.502	4.32		75	9.36	33.51	4.32		25.92	211.5	.199

BH005 42 0.0 N 124 19.5 W DATE 14 MAY 63 1000 GCT WIRE - DRY 0 WET 0
WIND DIRECTION 09 VEL 05 KTS BAR 17 SWELL DIRECTION 25 H 02 T 07 CLOUD - AMT - WEATHER -

0	12.16	31.557	6.43	.83	0	12.16	31.56	6.44	.84	23.92	400.4	0
10	11.07	32.328	5.93	.96	10	11.07	32.33	5.94	.97	24.71	324.8	.036
20	10.25	32.855	5.09	1.35	20	10.25	32.86	5.09	1.36	25.27	272.5	.066
30	9.74	33.101	4.49	1.57	30	9.74	33.11	4.49	1.58	25.54	246.3	.092

BH015 42 0.0 N 124 32.9 W DATE 14 MAY 63 1238 GCT WIRE - DRY 55.0 WET 54.0
WIND DIRECTION 30 VEL 05 KTS BAR 17 SWELL DIRECTION 25 H 03 T 09 CLOUD 06 AMT 03 WEATHER 03

0	12.28	31.542	6.48	.51	0	12.28	31.55	6.48	.51	23.89	403.7	0
10	11.25	32.338	6.77	.52	10	11.25	32.34	6.78	.52	24.69	327.2	.037
20	10.96	32.602	6.23	.69	20	10.96	32.61	6.23	.70	24.95	302.9	.068
30	11.00	32.614	6.14	.60	30	11.00	32.62	6.15	.60	24.95	302.9	.098
50	10.34	32.809	5.17	.95	50	10.34	32.81	5.18	.96	25.22	277.9	.156
75	9.27	33.310	4.30	1.54	75	9.27	33.31	4.30	1.55	25.78	224.3	.219
100	8.24	33.781	3.10	2.06	100	8.24	33.79	3.10	2.07	26.31	174.4	.269

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ³	Δ D
RH025 42 0.0 N 124 46.2 W DATE 14 MAY 63 1447 GCT WIRE 05 DRY 54.5 WET 53.5												
	WTND DIRECTION 33 VEL 16 KTS					BAR 18 SWELL DIRECTION 27 H 03 T 08 CLOUD 06 AMT 07 WEATHER 02						
0	12.60	30.706	6.48	.54	0	12.60	30.71	6.48	.54	23.18	471.0	0
9	12.39	31.578	6.20	.55	10	12.36	31.70	6.22	.56	23.90	394.1	.043
19	12.14	32.580	6.43	.66	20	12.12	32.61	6.41	.66	24.74	323.1	.079
29	11.99	32.626	6.09	.67	30	11.98	32.63	6.07	.66	24.78	319.2	.111
48	11.64	32.673	5.88	.63	50	11.54	32.69	5.87	.66	24.91	307.2	.174
75	10.12	32.978	5.80	1.12	75	10.13	32.98	5.81	1.13	25.38	262.3	.245
103	8.94	33.341	5.05	1.49	100	9.05	33.30	5.15	1.46	25.81	222.2	.306
157	7.48	33.916	3.09	1.93	150	7.96	33.86	3.33	1.89	26.41	165.7	.402
208	7.18	34.010	2.19	2.20	200	7.27	34.00	2.29	2.16	26.62	146.7	.481
313	6.41	34.120	1.64	2.69	250	6.80	34.07	1.86	2.45	26.74	135.7	.551
420	5.96	34.114	1.09	2.29	300	6.47	34.11	1.66	2.66	26.82	128.8	.617
520	5.64	34.150	.82	2.99	400	6.03	34.12	1.18	2.35	26.88	124.2	.744
620	5.02	34.236	.58	2.80	500	5.71	34.14	.86	2.84	26.94	119.2	.865
					600	5.17	34.21	.63	2.91	27.06	108.5	.979

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ³	Δ D
RH035 42 0.0 N 124 59.8 W DATE 14 MAY 63 1807 GCT WIRE 05 DRY 55.5 WET 53.5												
	WTND DIRECTION 34 VEL 20 KTS				BAR 19 SWELL DIRECTION 28 H 05 T 10 CLOUD 06 AMT 06 WEATHER 02							
0	12.63	31.694	6.40	.47	0	12.63	31.70	6.41	.47	23.94	398.8	0
10	12.65	31.956	6.64	.54	10	12.65	31.96	6.65	.54	24.14	380.0	.039
20	11.86	32.583	6.29	.49	20	11.84	32.59	6.30	.49	24.77	319.8	.074
30	11.84	32.631	6.31	.56	30	11.84	32.64	6.32	.57	24.81	316.2	.106
50	11.53	32.654	6.02	.64	50	11.53	32.66	6.03	.65	24.88	309.4	.168
76	10.88	32.806	5.73	.84	75	10.92	32.80	5.75	.83	25.10	289.2	.243
104	8.74	33.370	4.55	1.76	100	9.05	33.28	4.74	1.62	25.79	223.6	.307
154	8.05	33.800	3.33	2.05	150	8.11	33.78	3.40	2.03	26.33	173.3	.406
209	7.37	33.969	2.48	2.23	200	7.48	33.96	2.59	2.21	26.56	152.5	.488
311	6.28	34.031	1.87	2.16	250	6.90	34.02	2.16	2.19	26.68	140.9	.561
413	5.57	34.068	1.20	2.80	300	6.38	34.02	1.91	2.16	26.76	134.2	.630
518	4.97	34.152	.69	2.34	400	5.65	34.06	1.28	2.73	26.88	123.5	.759
622	4.57	34.223	.43	2.89	500	5.06	34.14	.76	2.42	27.01	111.4	.876
826	3.97	34.381	.46	2.93	600	4.64	34.21	.47	2.75	27.11	102.6	.983
1026	3.55	34.440	.47	3.16	700	4.32	34.29	.44	2.91	27.21	93.5	1.081
					800	4.03	34.36	.44	2.92	27.30	85.4	1.170
					1000	3.60	34.44	.47	3.12	27.41	76.4	1.332

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ³	Δ D
RH045 42 0.0 N 125 13.2 W DATE 14 MAY 63 2030 GCT WIRE 09 DRY 56.0 WET 54.0												
	WTND DIRECTION 35 VEL 12 KTS				BAR 20 SWELL DIRECTION 29 H 05 T 11 CLOUD 06 AMT 02 WEATHER 02							
0	12.65	32.564	6.28	.72	0	12.65	32.57	6.29	.73	24.61	335.1	0
10	12.22	32.597	6.40	.65	10	12.22	32.60	6.41	.65	24.71	325.0	.033
30	11.76	32.623	6.28	.69	20	11.94	32.61	6.38	.65	24.77	319.4	.065
50	11.58	32.669	.73	.73	30	11.76	32.63	6.29	.70	24.82	315.3	.097
76	10.41	32.890	5.57	1.08	50	11.58	32.67	6.06	.74	24.89	309.2	.159
103	8.79	33.327	4.80	1.54	75	10.47	32.88	5.59	1.06	25.24	275.6	.232
151	8.20	33.720	3.72	2.10	100	8.96	33.28	4.89	1.49	25.80	222.7	.295
205	7.65	33.909	2.88	2.38	150	8.21	33.72	3.74	2.09	26.26	180.0	.395
305	6.43	33.998	2.10	2.77	200	7.70	33.90	2.94	2.36	26.48	159.8	.480
408	5.68	34.062	1.23	2.34	250	7.09	33.97	2.47	2.62	26.62	146.7	.557
512	5.15	34.172	.94	1.92	300	6.49	34.00	2.13	2.76	26.73	137.5	.628
617	4.72	34.203	.51	2.67	400	5.73	34.06	1.29	2.39	26.87	124.9	.759
821	4.14	34.337	.36	2.60	500	5.20	34.12	.96	1.94	26.98	114.0	.879
					600	4.78	34.19	.58	2.53	27.09	105.5	.988
					700	4.44	34.26	.45	2.64	27.18	97.2	1.090
					800	4.18	34.32	.38	2.61	27.26	90.0	1.183

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	σ _t	δ × 10 ⁶	Δ D
BH065 42 0.0 N 125 40.0 W DATE 15 MAY 63 01P4 GCT WIRE ~ DRY 55.0 WET 51.5 WIND DIRECTION 31 VEL 20 KTS BAR 20 SWELL DIRECTION 29 H 04 T 11 CLOUD 06 AMT 04 WEATHER 02												
0	12.52	32.296	6.21	.70	0	12.52	32.30	6.21	.71	24.42	352.4	0
10	12.51	32.294	5.32	.50	10	12.51	32.30	5.32	.51	24.42	352.6	.035
20	11.46	32.538	6.43	.77	20	12.25	32.41	5.78	.60	24.56	339.9	.070
40	10.79	32.692	5.89	.92	30	11.80	32.54	6.43	.78	24.75	322.2	.103
74	9.84	33.337	4.53	1.26	50	10.70	32.74	5.79	.94	25.09	284.4	.164
102	9.16	33.683	3.72	1.76	75	9.81	33.35	4.49	1.28	25.73	229.8	.229
151	8.36	33.820	3.08	2.36	100	9.20	33.67	3.76	1.72	26.07	197.5	.282
206	7.63	33.971	2.56		150	8.37	33.82	3.09	2.35	26.32	174.8	.375
306	6.50	34.116	1.60	3.06	200	7.70	33.96	2.61	2.78	26.52	158.6	.458
409	5.61	34.142	1.04	2.46	250	7.10	34.05	2.11	3.02	26.69	140.9	.532
514	4.96	34.209		3.07	300	6.56	34.11	1.65	3.03	26.80	130.1	.600
620	4.56	34.286	.33	2.44	400	5.68	34.14	1.08	2.51	26.94	118.0	.724
825	4.04	34.379	.28	2.70	500	5.03	34.20	.66	2.99	27.06	106.4	.836
1026	3.59	34.445	.43	2.07	600	4.62	34.27	.37	2.59	27.17	97.6	.938
1226	3.16	34.528	.63	2.68	700	4.33	34.33	.31	2.48	27.24	90.7	1.032
					800	4.09	34.37	.29	2.64	27.30	85.5	1.120
					1000	3.65	34.44	.40	2.14	27.40	77.1	1.283
					1200	3.21	34.52	.60	2.53	27.51	67.3	1.427

0	12.72	32.553	6.19	.58	0	12.72	32.56	6.19	.59	24.58	337.2	0
10	12.58	32.560	6.19	.65	10	12.58	32.56	6.19	.65	24.62	334.3	.034
20	11.63	32.564	6.38	.68	20	11.63	32.57	6.39	.68	24.80	317.2	.068
30	10.97	32.625	6.30	.58	30	10.97	32.63	6.31	.59	24.96	301.6	.097
49	10.29	32.801	5.61	1.17	50	10.28	32.82	5.58	1.19	25.23	276.3	.155
76	9.97	33.359	4.76	1.50	75	9.98	33.34	4.79	1.49	25.68	233.7	.219
103	8.98	33.599	3.91	1.83	100	9.10	33.58	4.00	1.80	26.02	202.3	.273
153	7.94	33.903	2.92	1.94	150	7.98	33.89	2.96	1.93	26.43	163.7	.365
208	7.38	34.001	2.30	1.85	200	7.44	34.00	2.37	1.86	26.59	140.0	.443
309	6.20	34.016	1.86	2.15	250	6.87	34.02	2.09	1.90	26.69	139.9	.515
412	5.56	34.129	1.00	3.12	300	6.30	34.04	1.89	2.10	26.78	132.3	.583
517	5.12	34.199	.60	3.03	400	5.61	34.12	1.10	3.02	26.93	119.0	.709
622	4.63	34.287	.41	2.73	500	5.19	34.19	.64	3.09	27.04	109.1	.822
827	4.05	34.385	.41	2.57	600	4.73	34.27	.44	2.80	27.15	99.1	.927
1028	3.52	34.463	.59	3.39	700	4.38	34.33	.41	2.58	27.24	91.0	1.022
					800	4.11	34.38	.41	2.59	27.30	85.3	1.110
					1000	3.59	34.45	.55	3.22	27.42	75.3	1.270

0	12.29	32.650	6.39	.65	0	12.29	32.65	6.40	.65	24.74	322.2	0
10	12.23	32.654	6.03	.63	10	12.23	32.66	6.04	.63	24.76	321.0	.032
20	11.64	32.664	6.50	.81	20	11.64	32.67	6.51	.82	24.87	310.0	.064
29	11.20	32.667	6.48	.65	30	11.17	32.67	6.48	.66	24.96	302.1	.094
49	10.61	32.677	6.25	.85	50	10.56	32.69	6.21	.87	25.08	290.5	.154
75	9.18	33.084	5.03	1.45	75	9.18	33.09	5.04	1.46	25.62	239.7	.220
103	8.37	33.386	4.32	2.28	100	8.43	33.36	4.38	2.21	25.95	208.8	.276
152	7.84	33.802	3.10	1.72	150	7.85	33.79	3.14	1.76	26.37	169.3	.370
207	6.99	33.935	2.72	2.15	200	7.10	33.93	2.74	2.07	26.59	149.2	.450
308	6.00	34.001	1.88	2.59	250	6.50	33.98	2.37	2.42	26.71	138.5	.522
411	5.33	34.070	1.02	2.14	300	6.06	34.00	1.95	2.58	26.78	131.9	.589
516	4.87	34.157	.66	2.59	400	5.39	34.06	1.10	2.19	26.91	120.4	.716
621	4.45	34.235	.38	2.61	500	4.93	34.14	.70	2.51	27.03	109.3	.830
825	3.86	34.348	.32	2.85	600	4.53	34.22	.43	2.61	27.14	100.4	.935
1026	3.45	34.422	.37	3.35	700	4.19	34.28	.36	2.67	27.22	92.4	1.031
					800	3.92	34.34	.33	2.81	27.29	86.0	1.121
					1000	3.49	34.41	.36	3.27	27.40	77.0	1.283

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁶	Δ D
RH125	42	0.0 N	126	59.5 W	DATE 16 MAY 63	1227 GCT	WIRF 05	DRY 52.9	WET 49.2			
WIND DIRECTION 01 VEL 25 KTS					BAR 24	SWELL DIRECTION 30 H 06 T 08	CLOUD 04 AMT 04	WEATHER 01				

0	12.13	32.624	5.99	.62	0	12.13	32.63	5.99	.63	24.75	321.2	0
10	12.12	32.669	6.41	.66	10	12.13	32.67	6.42	.67	24.79	317.9	.032
20	11.79	32.649	6.26	.61	20	11.79	32.65	6.27	.62	24.83	313.7	.064
29	11.41	32.654	6.55		30	11.37	32.66	6.53	.63	24.91	306.2	.095
49	10.56	32.737	6.16	.66	50	10.50	32.76	6.10	.69	25.14	246.7	.154
75	9.14	33.322	4.37	1.62	75	9.14	33.33	4.38	1.63	25.81	221.4	.217
103	8.22	33.678	3.43		100	8.29	33.65	3.50	1.63	26.20	185.1	.268
152	7.53	33.876	2.85	1.65	150	7.55	33.87	2.86	1.65	26.48	158.7	.354
208	6.88	33.949	2.58	2.02	200	6.97	33.94	2.61	1.96	26.62	146.4	.430
309	5.68	34.011	1.62	2.33	250	6.35	33.98	2.19	2.19	26.73	136.3	.501
411	5.10	34.090	1.06	2.39	300	5.78	34.01	1.71	2.32	26.82	127.8	.567
517	4.70	34.162	.63	3.31	400	5.14	34.08	1.11	2.37	26.96	116.0	.688
621	4.36	34.238	.48	3.12	500	4.76	34.15	.68	3.17	27.06	106.7	.800
826	3.84	34.373	.39	3.27	600	4.42	34.22	.50	3.19	27.15	99.0	.902
1027	3.29	34.445		3.20	700	4.15	34.29	.41	3.15	27.24	91.1	.997
					800	3.90	34.36	.40	3.24	27.31	84.2	1.085
					1000	3.37	34.44	0	3.22	27.43	73.7	1.243

RH145	42	0.0 N	127	26.4 W	DATE 16 MAY 63	1611 GCT	WIRF -	DRY 54.0	WET 50.8			
WIND DIRECTION 01 VEL 25 KTS					BAR 24	SWELL DIRECTION 30 H 06 T 09	CLOUD 04 AMT 02	WEATHER 01				

0	12.10	32.638	6.43	.67	0	12.10	32.64	6.44	.68	24.77	319.7	0
10	12.07	32.636	6.34	.70	10	12.07	32.64	6.34	.71	24.77	319.5	.032
20	11.44	32.646	6.57	.60	20	11.44	32.65	6.57	.60	24.90	307.9	.063
30	11.18	32.642	6.45	1.27	30	11.18	32.65	6.45	1.27	24.94	303.9	.094
50	9.85	32.922	5.56	1.67	50	9.85	32.93	5.57	1.68	25.39	261.7	.150
76	8.97	33.370	4.14		75	8.99	33.35	4.19	1.83	25.86	217.2	.210
104	8.11	33.686	3.39	1.83	100	8.22	33.45	3.46	1.82	26.21	184.1	.260
153	7.36	33.902	2.93	1.99	150	7.39	33.90	2.94	1.98	26.52	154.8	.345
208	6.92	33.944	2.56	2.02	200	6.98	33.94	2.61	2.02	26.61	146.9	.421
308	5.76	34.007	1.88	2.45	250	6.43	33.97	2.29	2.17	26.71	139.1	.492
410	5.08	34.087	1.01	2.94	300	5.85	34.00	1.94	2.41	26.81	129.1	.559
514	4.69	34.155	.96	2.66	400	5.13	34.08	1.08	2.91	26.96	116.0	.681
618	4.38	34.245	.43	2.89	500	4.73	34.15	.97	2.71	27.06	106.8	.792
821	3.87	34.367	.50	2.98	600	4.43	34.23	.53	2.84	27.16	98.6	.895
1020	3.47	34.441	.55	3.43	700	4.16	34.30	.46	2.93	27.24	90.7	.990
					800	3.92	34.36	.46	2.97	27.31	84.4	1.077
					1000	3.51	34.44	.55	3.37	27.41	75.6	1.237

RHU001	42	2.5 N	124	16.2 W	DATE 17 MAY 63	1330 GCT	WIRF -	DRY 0	WET 0			
WIND DIRECTION -	VEL -	KTS	BAR -	SWELL DIRECTION -	H -	T -	CLOUD -	AMT -	WEATHER -			

0	11.64	29.400	6.14		0	12.10	32.64			24.77	319.7	0
5	10.95	32.452	5.93		10	12.07	32.64			24.77	319.5	.032
15	9.65	33.167	3.49		20	11.44	32.65			24.90	307.9	.063

RHU005	42	0.0 N	124	19.5 W	DATE 17 MAY 63	1428 GCT	WIRF -	DRY 54.0	WET 52.4			
WIND DIRECTION 08	VEL 04	KTS	BAR 15	SWELL DIRECTION 31	H 04	T 08	CLOUD -	AMT 06	WEATHER 02			

0	10.90	32.296	5.80		0	10.90	32.30	5.81		24.72	324.2	0
10	9.69	33.108	4.60		10	9.69	33.11	4.60		25.56	244.7	.028
20	9.31	33.290	3.75		20	9.31	33.29	3.76		25.76	225.5	.052
30	8.90	33.484	3.58		30	8.90	33.49	3.59		25.98	205.1	.073

RHU015	42	0.0 N	124	32.8 W	DATE 17 MAY 63	1618 GCT	WIRF -	DRY 53.0	WET 52.5			
WIND DIRECTION 25	VEL 04	KTS	BAR 15	SWELL DIRECTION 31	H 05	T 07	CLOUD -	AMT 10	WEATHER 28			

0	11.45	32.325	6.48		0	11.45	32.33	6.48		24.64	331.4	0
10	11.21	32.448	6.45		10	11.21	32.45	6.45		24.78	318.3	.032
20	10.98	32.541	6.23		20	10.98	32.55	6.23		24.90	307.8	.064
30	10.80	32.643	6.09		30	10.80	32.65	6.09		25.01	297.4	.094
50	9.74	33.085	4.69		50	9.74	33.09	4.69		25.53	247.9	.149
75	8.94	33.458	3.93		75	8.94	33.46	3.84		25.95	208.3	.206
100	8.32	33.738	3.08		100	8.32	33.74	3.09		24.26	178.8	.254

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ ²	Z	T	S	O ₂	PO ₄ ²	σ _t	S × 10 ⁶	AD	
RHU025 42 0.0 N 124 46.2 W DATE 17 MAY 63 1817 GCT WIRE - DRY 54.8 WET 53.0 WIND DIRECTION 35 VEL 18 KTS BAR 15 SWELL DIRECTION 32 H 06 T 08 CLOUD - AMT - WEATHER -													
0	12.08	32.320	6.44		0	12.08	32.32	6.44		24.52	342.8	0	
10	11.99	32.316	6.38		10	11.99	32.32	6.39		24.54	341.6	.034	
20	11.96	32.308	6.48		20	11.96	32.39	6.48		24.60	336.0	.068	
30	11.73	32.644	6.33		30	11.73	32.67	6.33		24.86	311.8	.100	
50	11.61	32.729	6.14		50	11.61	32.73	6.15		24.93	305.3	.162	
75	9.78	33.041	5.17		75	9.78	33.05	5.18		25.49	252.2	.232	
104	8.69	33.459	4.28		100	8.78	33.40	4.40		25.93	210.8	.290	
124	8.45	33.707	3.61		150	8.11	33.93	2.93		26.44	162.9	.383	
208	7.24	33.989	2.17		200	7.37	33.96	2.21		26.58	150.5	.461	
RHU035 42 0.0 N 124 59.8 W DATE 17 MAY 63 2033 GCT WIRE 05 DRY 57.0 WET 55.0 WIND DIRECTION - VEL # KTS BAR 15 SWELL DIRECTION 34 H 06 T 08 CLOUD 04 AMT 02 WEATHER 02													
0	12.83	32.386	6.33		0	12.83	32.39	6.33		24.43	381.5	0	
10	12.75	32.387	6.23		10	12.75	32.39	6.23		24.45	350.2	.035	
20	12.69	32.471	5.92		20	12.69	32.48	5.93		24.53	343.1	.070	
30	12.58	32.572	6.28		30	12.58	32.58	6.29		24.62	333.8	.104	
50	11.75	32.681	6.33		50	11.75	32.69	6.33		24.87	311.3	.168	
75	10.76	32.843	5.95		75	10.76	32.85	5.95		25.17	282.8	.242	
105	8.93	33.373	4.57		100	9.21	33.28	4.80		25.77	226.0	.306	
124	8.57	33.530	4.19		150	8.14	33.69	3.72		26.25	180.5	.407	
210	7.29	33.927	2.85		200	7.42	33.90	2.97		26.52	155.6	.491	
309	6.17	33.992	2.09		250	6.79	33.98	2.51		26.67	142.3	.566	
408	5.47	34.082	1.10		300	6.26	33.99	2.15		26.75	135.4	.635	
					400	5.51	34.07	1.19		26.91	121.0	.763	
RHS035 41 50.0 N 124 58.8 W DATE 17 MAY 63 2231 GCT WIRE 05 DRY 58.2 WET 56.8 WIND DIRECTION 01 VEL 10 KTS BAR 15 SWELL DIRECTION 34 H 05 T 08 CLOUD 04 AMT 02 WEATHER 02													
0	13.01	32.196	6.28		0	13.01	32.20	6.29		24.25	368.8	0	
10	12.75	32.190	6.33		10	12.75	32.19	6.33		24.30	364.7	.037	
20	12.58	32.225	6.38		20	12.58	32.23	6.39		24.36	359.2	.073	
30	11.72	32.617	6.49		30	11.72	32.62	6.49		24.82	315.1	.107	
49	11.30	32.689	6.04		50	11.27	32.70	6.01		24.96	301.8	.168	
74	10.28	32.991	5.34		75	10.23	33.00	5.32		25.38	262.5	.239	
104	8.90	33.351	4.69		100	9.06	33.30	4.80		25.81	222.4	.299	
123	8.49	33.598	3.84		150	8.11	33.80	3.15		26.34	172.3	.398	
209	7.54	33.976	2.46		200	7.60	33.97	2.49		26.55	153.0	.479	
309	6.45	34.029	1.78		250	7.08	34.02	2.12		26.67	142.8	.553	
408	5.63	34.087	1.17		300	6.54	34.02	1.82		26.74	136.3	.623	
					400	5.69	34.08	1.22		26.89	122.6	.752	
RHS025 41 50.0 N 124 46.2 W DATE 18 MAY 63 0037 GCT WIRE - DRY 55.0 WET 54.0 WIND DIRECTION 01 VEL 08 KTS BAR 14 SWELL DIRECTION 34 H 05 T 08 CLOUD 04 AMT 04 WEATHER 03													
0	12.83	32.279			0	12.83	32.28			24.35	359.4	0	
10	12.34	32.276	6.48		10	12.34	32.28	6.48		24.44	350.9	.036	
20	12.23	32.289	6.52		20	12.23	32.29	6.53		24.47	348.1	.070	
30	11.98	32.472	6.42		30	11.98	32.48	6.43		24.66	330.4	.104	
49	11.49	32.644	6.22		50	11.43	32.70	6.19		24.93	304.7	.168	
74	9.86	33.044	5.26		75	9.82	33.05	5.24		25.49	252.0	.237	
104	8.83	33.344	4.58		100	8.93	33.34	4.68		25.85	217.8	.296	
123	8.28	33.676	3.80		150	7.74	33.88	2.98		26.46	160.7	.391	
209	7.01	34.016	1.90		200	7.08	33.98	2.00		26.63	145.2	.467	
307	6.39	34.068	1.50		250	6.69	34.06	1.61		26.75	134.8	.537	
405	5.90	34.115	1.17		300	6.42	34.06	1.53		26.79	131.7	.604	
					400	5.92	34.11	1.19		26.89	123.2	.731	
RHS015 41 50.0 N 124 32.9 W DATE 18 MAY 63 0242 GCT WIRE - DRY 53.5 WET 53.0 WIND DIRECTION - VEL - KTS BAR 14 SWELL DIRECTION 34 H 04 T - CLOUD - AMT - WEATHER 12													
0	11.95	32.391	7.00		0	11.95	32.40	7.01		24.60	335.2	0	
10	11.13	32.482	6.41		10	11.13	32.49	6.42		24.82	314.5	.032	
20	11.02	32.513	6.37		20	11.02	32.52	6.38		24.87	310.5	.064	
30	10.84	32.652	6.12		30	10.84	32.66	6.13		25.01	297.4	.094	
50	9.89	33.009	4.96		50	9.89	33.01	4.96		25.45	255.9	.149	
75	8.52	33.615	3.56		75	8.52	33.62	3.57		26.14	190.4	.205	
104	7.99	33.853	3.08		100	8.03	33.84	3.10		26.39	167.2	.250	
124	7.69	33.913	2.94		150	7.38	33.97	2.70		26.58	149.1	.329	
208	7.01	34.027	1.96		200	7.03	34.03	2.08		26.67	141.2	.402	

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	ΔD
RHS005	41 51.4 N 124 19.8 W	DATE 18 MAY 63	0400 GCT	WIRE - DRY 52.0 WET 51.0								
WIND DIRECTION - VEL - KTS	BAR 14 SWELL DIRECTION - H - T - CLOUD - AMT - WEATHER 12											
0	11.68	32.501	6.02		0	11.68	32.60	6.03		24.81	315.7	0
10	10.74	32.508	6.19		10	10.74	32.60	6.19		24.98	299.4	.031
20	9.99	32.976	5.05		20	9.99	32.98	5.05		25.40	259.4	.059
30	9.40	33.265	4.17		30	9.40	33.27	4.17		25.73	228.9	.083
RHR005	42 0.0 N 124 19.5 W	DATE 18 MAY 63	0613 GCT	WIRE - DRY 53.0 WET 52.0								
WIND DIRECTION 13 VEL 12 KTS	BAR 15 SWELL DIRECTION 34 H 03 T - CLOUD - AMT - WEATHER 12											
0	11.87	32.324	6.33		0	11.88	32.33	6.33		24.57	338.7	0
10	9.32	33.309	4.05		10	9.32	33.31	4.05		25.77	224.1	.028
20	9.02	33.445	3.08		20	9.02	33.45	3.09		25.93	209.6	.050
30	8.66	33.585	3.13		30	8.66	33.59	3.14		26.09	194.0	.070
RHN005	42 10.0 N 124 26.1 W	DATE 18 MAY 63	0812 GCT	WIRE - DRY 52.0 WET 52.0								
WIND DIRECTION 18 VEL 20 KTS	BAR 15 SWELL DIRECTION - H - T - CLOUD - AMT - WEATHER 12											
0	11.74	32.291	6.41		0	11.74	32.30	6.42		24.57	338.9	0
10	11.35	32.363	6.30		10	11.35	32.37	6.31		24.69	327.0	.033
25	9.52	33.180	4.37		20	10.16	32.88	5.09		25.30	269.4	.063
50	8.48	33.682	2.98		30	9.19	33.34	3.97		25.81	220.8	.088
75	7.90	33.873	2.33		50	8.48	33.69	2.98		26.20	184.5	.128
					75	7.91	33.88	2.33		26.43	162.3	.171
RHN015	42 10.0 N 124 39.7 W	DATE 18 MAY 63	1052 GCT	WIRE 0 DRY 51.0 WET 51.0								
WIND DIRECTION 18 VEL 04 KTS	BAR 15 SWELL DIRECTION - H - T - CLOUD - AMT - WEATHER 12											
0	11.08	32.507	6.33		0	11.08	32.51	6.33		24.85	311.6	0
10	10.96	32.506	6.31		10	10.96	32.51	6.32		24.87	309.8	.031
20	10.90	32.513	6.31		20	10.90	32.52	6.32		24.89	308.5	.062
30	10.86	32.583	6.18		30	10.86	32.59	6.19		24.95	302.8	.093
50	10.41	32.777	5.64		50	10.41	32.78	5.65		25.18	281.4	.151
75	8.82	33.398	4.18		75	8.82	33.40	4.18		25.92	211.0	.212
105	8.34	33.732	2.95		100	8.38	33.70	3.07		26.22	182.9	.262
124	7.85	33.864	3.08		150	7.34	33.98	2.87		26.60	147.8	.344
208	6.90	33.992	2.40		200	6.91	33.98	2.55		26.66	142.9	.417
RHN025	42 10.0 N 124 52.8 W	DATE 18 MAY 63	1345 GCT	WIRE - DRY 51.8 WET 50.5								
WIND DIRECTION - VEL - KTS	BAR 16 SWELL DIRECTION - H - T - CLOUD - AMT 10 WEATHER 28											
0	12.31	32.161	6.34		0	12.31	32.17	6.34		24.36	358.6	0
10	12.26	32.231	6.36		10	12.26	32.24	6.36		24.42	352.7	.036
20	11.91	32.260	6.49		20	11.91	32.26	6.49		24.51	344.5	.070
30	11.49	32.408	6.42		30	11.89	32.41	6.43		24.63	333.5	.104
49	11.45	32.628	6.31		50	11.42	32.63	6.33		24.88	309.5	.169
74	10.58	32.759	6.36		75	10.51	32.78	6.30		25.16	283.7	.243
103	8.77	33.377	4.41		100	8.94	33.31	4.63		25.83	220.0	.306
123	8.42	33.599	3.87		150	8.01	33.78	3.38		26.34	172.3	.404
208	7.23	33.954	2.71		200	7.33	33.95	2.77		26.57	151.1	.485
306	6.02	34.010	1.85		250	6.66	34.00	2.30		26.71	138.8	.557
405	5.51	34.064	1.08		300	6.08	34.01	1.89		26.78	131.7	.625
					400	5.52	34.06	1.12		26.90	122.0	.751
RHN035	42 10.0 N 125 6.5 W	DATE 18 MAY 63	1500 GCT	WIRE - DRY 55.0 WET 53.0								
WIND DIRECTION 34 VEL 04 KTS	BAR 17 SWELL DIRECTION 34 H 02 T 08 CLOUD - AMT 10 WEATHER 02											
0	12.68	32.644	6.17		0	12.68	32.65	6.18		24.66	329.8	0
10	12.58	32.654	6.27		10	12.58	32.66	6.28		24.69	327.4	.033
20	12.35	32.621	6.50		20	12.35	32.63	6.51		24.71	325.7	.066
30	12.32	32.626	6.36		30	12.32	32.63	6.36		24.72	325.1	.098
49	11.01	32.659	6.34		50	10.97	32.65	6.31		24.98	300.6	.161
74	10.24	32.953	5.42		75	10.20	32.97	5.38		25.36	264.4	.231
103	9.03	33.385	4.56		100	9.15	33.35	4.63		25.83	220.6	.292
123	8.51	33.511	4.24		150	8.13	33.68	3.72		26.24	181.6	.392
207	7.64	33.940	2.75		200	7.68	33.91	2.86		26.49	158.4	.477
306	6.24	33.994	2.29		250	7.01	33.99	2.50		26.65	144.1	.553
405	5.59	34.072	1.17		300	6.32	33.99	2.31		26.74	135.7	.623
					400	5.60	34.07	1.24		26.89	122.6	.752

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	Po ₄	Z	T	S	O ₂	Po ₄	σ _t	Sx10 ⁸	ΔD
RHR035 42 0.0 N 124 59.5 W DATE 18 MAY 63 1812 GCT WIRE - DRY 57.8 WET 55.8 WIND DIRECTION 34 VEL 07 KTS BAR 18 SWELL DIRECTION 32 H 03 T 09 CLOUD - AMT 10 WEATHER 02												
0	13.19	32.414	6.33		0	13.19	32.42	6.33	24.38	356.2	0	
10	12.76	32.493	6.30		10	12.76	32.50	6.31	24.53	342.6	.035	
20	12.60	32.575	6.33		20	12.60	32.58	6.33	24.62	333.8	.069	
30	12.50	32.606	6.26		30	12.50	32.61	6.27	24.67	329.9	.102	
49	11.66	32.672	6.36		50	11.60	32.68	6.33	24.89	308.8	.166	
74	10.19	32.983	5.44		75	10.15	32.99	5.42	25.39	261.9	.237	
104	9.14	33.262	4.86		100	9.25	33.23	4.94	25.72	230.9	.299	
124	8.68	33.485	4.19		150	8.21	33.69	3.62	26.24	182.1	.402	
209	7.39	33.938	2.87		200	7.49	33.92	2.93	26.52	155.5	.486	
309	6.29	33.992	2.26		250	6.89	33.99	2.55	26.67	142.6	.561	
409	5.56	34.060	1.79		300	6.37	33.99	2.29	26.73	136.8	.631	
					400	5.61	34.05	1.83	26.88	123.7	.761	
CHO05 43 20.5 N 124 29.0 W DATE 19 MAY 63 0510 GCT WIRE 07 DRY 54.5 WET 53.0 WIND DIRECTION 03 VEL 10 KTS BAR 19 SWELL DIRECTION 32 H 03 T 08 CLOUD - AMT 02 WEATHER 02												
0	11.71	32.169	6.45		0	11.71	32.17	6.45	24.48	347.4	0	
10	10.69	32.394	6.43		10	10.69	32.40	6.44	24.83	313.6	.033	
20	10.35	32.586	5.94		20	10.35	32.59	5.94	25.04	294.0	.063	
30	10.09	32.776	5.47		30	10.09	32.78	5.47	25.23	276.0	.092	
50	9.30	33.303	4.37		50	9.30	33.31	4.38	25.77	224.9	.142	
74	8.33	33.747	2.83		75	10.15	32.99		25.39	261.9	.203	
CHO15 43 20.5 N 124 43.2 W DATE 19 MAY 63 0651 GCT WIRE 05 DRY 55.0 WET 54.0 WIND DIRECTION 33 VEL 13 KTS BAR 19 SWELL DIRECTION 28 H 03 T - CLOUD - AMT - WEATHER 02												
0	12.46	32.073	6.58		0	12.46	32.08	6.58	24.26	367.8	0	
10	12.34	32.083	6.49		10	12.34	32.09	6.49	24.29	365.1	.037	
20	11.78	32.305	6.68		20	11.78	32.31	6.69	24.57	338.9	.072	
30	11.29	32.633	6.36		30	11.29	32.64	6.36	24.91	306.4	.104	
50	10.63	32.705	5.97		50	10.63	32.71	5.97	25.08	290.3	.164	
74	9.44	33.242	4.82		75	9.41	33.26	4.75	25.72	230.4	.229	
104	8.65	33.685	2.96		100	8.73	33.64	3.19	26.12	192.4	.282	
158	7.57	33.966	2.05		150	7.70	33.95	2.18	26.52	155.0	.368	
208	7.11	34.001	2.24		200	7.15	34.00	2.14	26.63	145.0	.443	
CHO25 43 20.5 N 124 55.2 W DATE 19 MAY 63 0905 GCT WIRE 15 DRY 49.0 WET 44.5 WIND DIRECTION - VEL 15 KTS BAR 18 SWELL DIRECTION 33 H 03 T 08 CLOUD - AMT - WEATHER 02												
0	12.43	32.541	6.45		0	12.43	32.55	6.45	24.63	332.8	0	
9	12.42	32.538	6.54		10	12.41	32.53	6.56	24.62	333.4	.033	
19	12.34	32.532	6.62		20	12.24	32.54	6.60	24.67	329.8	.066	
28	11.37	32.652	6.41		30	11.29	32.65	6.40	24.92	305.3	.098	
48	10.98	32.642	6.23		50	10.90	32.66	6.17	25.00	298.5	.159	
74	9.87	33.001	5.14		75	9.83	33.02	5.08	25.46	254.8	.228	
101	8.96	33.514	3.73		100	8.99	33.50	3.78	25.97	207.0	.285	
154	8.04	33.872	2.85		150	8.08	33.86	2.86	26.60	167.0	.379	
205	7.61	33.953	2.57		200	7.64	33.95	2.59	26.53	155.2	.459	
309	6.40	34.072	1.79		250	7.08	34.01	2.25	26.66	143.6	.534	
414	5.70	34.127	1.06		300	6.50	34.06	1.86	26.78	132.8	.603	
516	5.18	34.210	.72		400	5.77	34.12	1.14	26.91	120.8	.730	
616	4.68	34.247	.73		500	5.26	34.20	.75	27.04	109.2	.845	
					600	4.76	34.24	.73	27.13	101.3	.950	
CHO35 43 20.5 N 125 10.6 W DATE 19 MAY 63 1355 GCT WIRE 05 DRY 53.0 WET 52.0 WIND DIRECTION 01 VEL 30 KTS BAR 18 SWELL DIRECTION 33 H 04 T 07 CLOUD - AMT 10 WEATHER 02												
0	12.86	31.713	6.30		0	12.86	31.72	6.31	23.91	401.6	0	
10	12.85	31.731	6.31		10	12.85	31.74	6.32	23.92	400.3	.040	
20	12.30	32.642	6.41		20	12.30	32.65	6.42	24.73	323.4	.076	
30	11.85	32.632	6.41		30	11.85	32.64	6.42	24.81	316.3	.108	
50	11.24	32.627	6.31		50	11.24	32.63	6.32	24.92	306.4	.170	
76	10.26	32.968	5.59		75	10.30	32.95	5.63	25.33	267.6	.242	
103	8.83	33.381	4.33		100	8.98	33.34	4.47	25.85	218.6	.303	
153	8.07	33.811	3.15		150	8.08	33.80	3.19	26.34	172.1	.401	
209	7.31	33.962	2.55		200	7.42	33.95	2.61	26.56	152.0	.482	
311	6.40	34.004	2.02		250	6.89	34.00	2.31	26.67	142.3	.555	
414	5.70	34.061	1.24		300	6.48	34.00	2.07	26.73	137.3	.625	
519	5.16	34.171	.70		400	5.78	34.05	1.35	26.86	126.1	.757	
623	4.73	34.252	.34		500	5.25	34.15	.78	27.00	112.6	.876	
					600	4.82	34.24	.40	27.12	102.6	.984	

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁶	Δ D
0	12.93	31.920	6.14		0	12.93	31.92	6.15		24.05	387.7	0
10	12.93	31.927	6.31		10	12.93	31.93	6.32		24.06	387.3	.039
20	11.73	32.631	6.36		20	12.39	32.26	6.34		24.42	353.3	.076
30	9.58	33.074	5.11		30	11.67	32.65	6.34		24.85	312.1	.109
40	8.65	33.401	4.44		50	10.62	32.94	5.89		25.26	273.3	.168
50	7.85	33.889	2.94		75	9.54	33.09	5.09		25.56	245.4	.232
60	7.25	33.942	2.62		100	8.68	33.39	4.47		25.93	210.2	.289
70	6.43	34.024	1.87		150	7.84	33.89	2.93		26.46	161.4	.382
80	5.56	34.085	1.16		200	7.28	33.98	2.64		26.60	148.2	.460
90	5.12	34.159	.72		250	6.85	34.01	2.28		26.69	140.5	.532
100	4.72	34.257	.43		300	6.46	34.02	1.90		26.75	135.2	.601
110	4.15	34.371	.33		400	5.61	34.08	1.20		26.90	121.6	.729
120					500	5.16	34.15	.76		27.01	111.5	.846
130					600	4.78	34.24	.46		27.13	101.7	.952
140					700	4.44	34.32	.39		27.22	92.8	1.049
150					800	4.17	34.37	.33		27.29	86.6	1.139

CH045 43 20.6 N 125 24.2 W DATE 19 MAY 63 1620 GCT WIRE 10 DRY 53.0 WET 51.5
WIND DIRECTION 01 VEL 33 KTS BAR 18 SWELL DIRECTION 35 H 06 T 08 CLOUD - AMT 10 WEATHER 02

0	12.93	31.920	6.14		0	12.93	31.92	6.15		24.05	387.7	0
10	12.93	31.927	6.31		10	12.93	31.93	6.32		24.06	387.3	.039
20	11.73	32.631	6.36		20	12.39	32.26	6.34		24.42	353.3	.076
30	9.58	33.074	5.11		30	11.67	32.65	6.34		24.85	312.1	.109
40	8.65	33.401	4.44		50	10.62	32.94	5.89		25.26	273.3	.168
50	7.85	33.889	2.94		75	9.54	33.09	5.09		25.56	245.4	.232
60	7.25	33.942	2.62		100	8.68	33.39	4.47		25.93	210.2	.289
70	6.43	34.024	1.87		150	7.84	33.89	2.93		26.46	161.4	.382
80	5.56	34.085	1.16		200	7.28	33.98	2.64		26.60	148.2	.460
90	5.12	34.159	.72		250	6.85	34.01	2.28		26.69	140.5	.532
100	4.72	34.257	.43		300	6.46	34.02	1.90		26.75	135.2	.601
110	4.15	34.371	.33		400	5.61	34.08	1.20		26.90	121.6	.729
120					500	5.16	34.15	.76		27.01	111.5	.846
130					600	4.78	34.24	.46		27.13	101.7	.952
140					700	4.44	34.32	.39		27.22	92.8	1.049
150					800	4.17	34.37	.33		27.29	86.6	1.139

CH045 43 20.5 N 125 51.5 W DATE 19 MAY 63 2102 GCT WIRE 08 DRY 54.0 WET 52.0
WIND DIRECTION 35 VEL 25 KTS BAR 18 SWELL DIRECTION 34 H 06 T 06 CLOUD 06 AMT 10 WEATHER 02

0	12.35	32.602	6.26		0	12.35	32.61	6.27		24.69	326.8	0
10	12.35	32.603	6.41		10	12.35	32.61	6.42		24.69	326.9	.033
20	12.28	32.600	6.41		20	12.28	32.60	6.42		24.70	326.1	.065
30	11.94	32.604	6.29		30	11.94	32.61	6.30		24.77	319.9	.098
40	10.95	32.668	6.23		50	10.89	32.68	6.19		25.02	296.8	.159
50	9.60	33.090	5.06		75	9.60	33.09	5.06		25.56	245.7	.227
60	8.60	33.502	4.14		100	8.68	33.46	4.22		25.99	204.8	.283
70	7.97	33.799	3.47		150	7.98	33.79	3.48		26.36	170.8	.377
80	7.25	33.942	2.80		200	7.35	33.93	2.89		26.55	152.6	.458
90	6.22	34.030	1.66		250	6.77	33.99	2.28		26.68	140.8	.531
100	5.60	34.090	1.10		300	6.28	34.03	1.73		26.78	132.6	.600
110	5.11	34.150	.73		400	5.64	34.09	1.13		26.90	121.8	.727
120	4.72	34.247	.43		500	5.17	34.14	.77		27.00	112.3	.844
130	4.07	34.344	.39		600	4.78	34.23	.47		27.12	102.7	.951
140	3.63	34.420	.46		700	4.44	34.29	.41		27.21	94.4	1.050
150					800	4.13	34.34	.39		27.27	88.5	1.141
160					1000	3.67	34.41	.45		27.38	79.2	1.309

CH045 43 20.5 N 126 18.6 W DATE 20 MAY 63 0027 GCT WIRE 09 DRY 55.0 WET 51.5
WIND DIRECTION 35 VEL 35 KTS BAR 18 SWELL DIRECTION 35 H 06 T 06 CLOUD - AMT 10 WEATHER 02

0	12.37	32.646	6.31		0	12.38	32.65	6.32		24.72	323.9	0
10	12.36	32.646	6.18		10	12.36	32.65	6.19		24.72	324.0	.032
20	12.35	32.642	6.24		20	12.35	32.65	6.24		24.72	324.3	.065
30	11.54	32.623	6.31		30	11.48	32.63	6.30		24.87	310.5	.097
40	10.45	32.809	5.83		50	10.37	32.83	5.77		25.22	277.1	.155
50	8.67	33.402	4.25		75	8.67	33.41	4.26		25.95	208.4	.216
60	8.25	33.710	3.61		100	8.25	33.70	3.65		26.24	181.3	.265
70	7.68	33.875	3.03		150	7.69	33.87	3.04		26.46	160.7	.350
80	7.31	33.965	2.49		200	7.34	33.96	2.53		26.58	150.3	.428
90	6.35	34.025	1.83		250	6.88	34.00	2.17		26.67	141.8	.501
100	5.78	34.106	1.04		300	6.40	34.02	1.86		26.76	134.5	.570
110	5.08	34.171	.69		400	5.81	34.10	1.08		26.89	122.6	.698
120	4.68	34.234	.49		500	5.13	34.17	.71		27.03	110.0	.815
130	4.03	34.340	.29		600	4.71	34.23	.51		27.12	102.0	.921
140	3.49	34.414			700	4.38	34.28	.37		27.20	94.5	1.019
150					800	4.07	34.33	.30		27.28	87.9	1.110
160					1000	3.52	34.41			27.39	77.6	1.275

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
CH105 43 20.7 N 126 45.2 W DATE 20 MAY 63 0408 GCT WIRE 05 DRY 54.5 WET 51.5 WIND DIRECTION 35 VEL 30 KTS BAR 15 SWELL DIRECTION 35 H 08 T 08 CLOUD - AMT 10 WEATHER 02												
0	12.27	32.654	6.36		0	12.27	32.66	6.36		24.75	321.5	0
10	12.26	32.650	6.31		10	12.26	32.65	6.32		24.75	321.9	.032
20	12.28	32.653	6.30		20	12.27	32.65	6.30		24.74	322.4	.064
40	11.15	32.680	6.54		30	12.24	32.65	6.33		24.75	321.9	.097
70	9.30	33.238	4.59		50	11.08	32.70	6.48		25.00	298.7	.159
100	8.41	33.622	3.71		75	9.36	33.21	4.68		25.69	233.2	.225
150	7.71	33.875	2.98		100	8.48	33.59	3.77		26.12	192.5	.278
200	7.38	33.986	2.23		150	7.73	33.87	3.01		26.45	161.6	.367
300	6.31	34.041	1.49		200	7.42	33.98	2.33		26.58	150.1	.445
400	5.52	34.112	.89		250	6.95	34.02	1.86		26.68	141.3	.518
500	4.94	34.188	.51		300	6.41	34.04	1.54		26.77	133.4	.586
600	4.55	34.244	.38		400	5.59	34.10	.95		26.92	119.8	.713
800	4.08	34.353	.33		500	5.01	34.18	.55		27.05	107.8	.826
1000	3.50	34.423	.42		600	4.62	34.25	.39		27.15	99.2	.930
					700	4.35	34.30	.34		27.22	92.7	1.026
					800	4.13	34.34	.34		27.28	87.8	1.116
					1000	3.58	34.42	.40		27.39	77.9	1.282

**CH125 43 20.5 N 127 13.3 W DATE 20 MAY 63 0828 GCT WIRE 18 DRY 53.0 WET 50.5
WIND DIRECTION 34 VEL 30 KTS BAR 16 SWELL DIRECTION 35 H 08 T 06 CLOUD - AMT 10 WEATHER 02**

0	12.19	32.678	6.27		0	12.19	32.68	6.28		24.78	318.3	0
9	12.19	32.680	7.03		10	12.19	32.68	6.98		24.78	318.6	.032
18	12.20	32.685	6.36		20	12.19	32.68	6.32		24.78	318.7	.064
28	12.17	32.681	6.30		30	12.07	32.69	6.30		24.81	316.4	.095
47	10.93	32.731	6.28		50	10.79	32.76	6.18		25.10	289.3	.156
73	9.81	33.071	5.09		75	9.70	33.11	4.98		25.55	246.2	.223
100	8.41	33.560	3.85		100	8.41	33.56	3.85		26.11	193.3	.278
148	7.58	33.878	3.95		150	7.56	33.89	3.93		26.49	158.1	.366
201	7.20	34.006			200	7.20	34.01	3.38		26.63	145.1	.441
299	6.29	34.017	1.87		250	6.76	34.01	2.69		26.70	139.4	.513
399	5.39	34.091	1.06		300	6.28	34.02	1.86		26.77	133.4	.581
501	5.03	34.162	.67		400	5.39	34.09	1.05		26.94	118.1	.706
602	4.59	34.222	.48		500	5.03	34.16	.67		27.03	109.2	.820
794	4.00	34.336	.39		600	4.60	34.22	.48		27.13	101.2	.925
985	3.53	34.411	.39		700	4.26	34.28	.41		27.22	93.2	1.022
					800	3.98	34.34	.39		27.29	86.6	1.112
					1000	3.49	34.42	.39		27.40	76.8	1.275

**CH145 43 20.5 N 127 40.6 W DATE 20 MAY 63 1240 GCT WIRE 10 DRY 52.5 WET 49.8
WIND DIRECTION 35 VEL 35 KTS BAR 14 SWELL DIRECTION 34 H 08 T 06 CLOUD - AMT 10 WEATHER 02**

0	11.77	32.616	6.34		0	11.77	32.62	6.34		24.81	315.4	0
10	11.76	32.618	6.31		10	11.76	32.62	6.32		24.81	315.3	.032
20	11.77	32.615	6.19		20	11.77	32.62	6.19		24.81	315.9	.063
29	11.23	32.638	6.31		30	11.20	32.64	6.31		24.93	304.6	.094
49	10.79	32.686	6.13		50	10.76	32.69	6.13		25.05	294.0	.154
76	9.87	32.754	5.73		75	9.91	32.75	5.76		25.24	276.2	.225
103	8.80	33.276	4.04		100	8.91	33.21	4.24		25.76	226.9	.288
153	8.06	33.849	3.19		150	8.08	33.83	3.20		26.37	169.7	.387
208	7.27	33.964	2.56		200	7.38	33.95	2.63		26.56	151.8	.468
309	6.17	33.982	2.20		250	6.77	33.97	2.38		26.67	142.4	.541
411	5.38	34.046	1.27		300	6.25	33.98	2.22		26.74	135.8	.611
515	4.59	34.090	.89		400	5.46	34.04	1.37		26.89	123.0	.740
619	4.53	34.228	.48		500	4.68	34.08	.93		27.01	111.0	.857
819	3.96	34.349	.30		600	4.54	34.20	.55		27.12	101.9	.963
					700	4.37	34.30	.31		27.22	93.2	1.061
					800	4.04	34.35	.32		27.29	86.7	1.151

**NHO05 44 38.0 N 124 10.5 W DATE 24 MAY 63 0915 GCT WIRE 10 DRY 0 WET 53.9
WIND DIRECTION 32 VEL 08 KTS BAR 18 SWELL DIRECTION 31 H 03 T 07 CLOUD 08 AMT 01 WEATHER -**

0	10.57	32.254			0	10.57	32.26			24.74	321.8	0
10	9.64	32.811			10	9.64	32.82			25.33	265.9	.029
20	9.35	33.005			20	9.35	33.01			25.53	247.2	.055
30	9.10	33.320			30	9.10	33.33			25.82	220.2	.078
49	8.66	33.592			50	10.76	32.69			25.05	294.0	.130

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ ≡	Z	T	S	O ₂	PO ₄ ≡	σ _t	δ × 10 ⁶	Δ D	
NH015 44 39.4 N 124 23.4 W DATE 24 MAY 63 1105 GCT WIRE - DRY 0 WET 0													
WIND DIRECTION 33 VEL 18 KTS BAR 18 SWELL DIRECTION 33 H 03 T 07 CLOUD 08 AMT 02 WEATHER 03													
0 11.75 30.838					0 11.75 30.84					23.44	446.3	0	
10 11.18 31.842					10 11.18 31.85					24.32	362.6	.040	
20 10.42 32.382					20 10.42 32.39					24.87	310.3	.074	
30 10.32 32.438					30 10.32 32.44					24.93	304.7	.105	
40 10.18 32.456					50 9.75 32.61					25.15	283.6	.164	
50 9.75 32.605					75 9.91 32.75					25.24	276.2	.234	
NH025 44 39.1 N 124 38.6 W DATE 25 MAY 63 0540 GCT WIRE 12 DRY 53.0 WET 51.0													
WIND DIRECTION 02 VEL 28 KTS BAR 22 SWELL DIRECTION 35 H 08 T 06 CLOUD - AMT - WEATHER -													
0 12.72 30.422					0 12.72 30.43					22.94	494.2	0	
10 11.18 30.839					10 11.18 30.84					23.54	436.7	.047	
20 10.98 32.357					20 10.98 32.36					24.75	321.4	.084	
30 10.43 32.417					30 10.43 32.42					24.89	308.0	.116	
40 9.89					50 9.87 32.64					25.16	283.3	.175	
74 9.35 33.015					75 9.32 33.06					25.57	244.1	.241	
98 8.68 33.539					100 8.65 33.56					26.08	196.8	.296	
147 8.07 33.841					150 8.03 33.85					26.39	167.2	.387	
197 7.43 33.940					200 7.39 33.94					26.56	152.5	.467	
NH035 44 39.6 N 124 53.6 W DATE 25 MAY 63 0848 GCT WIRE 08 DRY 52.0 WET 50.0													
WIND DIRECTION 34 VEL 27 KTS BAR 23 SWELL DIRECTION 33 H 06 T 03 CLOUD - AMT - WEATHER 02													
0 13.03 29.929					0 13.03 29.93					22.50	536.1	0	
10 13.05 29.964					10 13.05 29.97					22.52	534.1	.054	
20 11.61 32.134					20 11.61 32.14					24.47	348.6	.098	
30 10.55 32.389					30 10.55 32.39					24.85	312.0	.131	
40 9.99 32.605					50 9.97 32.62					25.13	286.1	.190	
74 9.39 33.044					75 9.36 33.06					25.57	244.4	.257	
99 8.62 33.438					100 8.60 33.45					25.99	204.6	.313	
198 7.34 33.958					150 7.76 33.84					26.42	164.6	.405	
296 6.41 34.054					200 7.32 33.96					26.58	149.8	.484	
395 5.71 34.111					250 6.81 34.04					26.71	138.1	.556	
					300 6.38 34.06					26.79	131.7	.623	
					400 5.67 34.11					26.92	120.0	.749	
NH045 44 39.0 N 125 6.7 W DATE 25 MAY 63 1105 GCT WIRE 21 DRY 53.0 WET 51.0													
WIND DIRECTION 34 VEL 28 KTS BAR 23 SWELL DIRECTION 33 H 06 T 05 CLOUD - AMT - WEATHER 02													
0 13.08 30.521					0 13.08 30.53					22.95	493.4	0	
9 13.05 30.539					10 13.01 30.68					23.08	481.1	.049	
18 12.45 31.916					20 12.20 32.10					24.33	361.6	.091	
28 11.19 32.578					30 11.08 32.58					24.91	306.9	.124	
48 10.60 32.608					50 10.53 32.63					25.04	294.8	.184	
72 9.75 32.989					75 9.63 33.07					25.54	247.6	.252	
96 8.81 33.683					100 8.72 33.74					26.20	185.0	.306	
193 7.62 33.970					150 7.88 33.84					26.41	165.8	.394	
289 6.55 34.031					200 7.53 33.98					26.57	151.7	.473	
386 5.82 34.126					250 6.96 34.02					26.68	141.5	.547	
483 4.92 34.187					300 6.46 34.04					26.76	133.9	.615	
					400 5.70 34.14					26.94	118.7	.742	
NH055 44 39.1 N 125 35.0 W DATE 25 MAY 63 1600 GCT WIRE 10 DRY 53.0 WET 50.0													
WIND DIRECTION 03 VEL 24 KTS BAR 23 SWELL DIRECTION 31 H 08 T 08 CLOUD 06 AMT 07 WEATHER 02													
0 12.77 32.176					0 12.77 32.18					24.28	365.9	0	
10 12.77 32.185					10 12.77 32.19					24.29	365.4	.037	
19 12.70 32.266					20 12.61 32.31					24.41	354.0	.073	
28 11.78 32.647					30 11.66 32.65					24.85	312.0	.106	
48 10.93 32.646					50 10.85 32.67					25.01	297.3	.167	
96 9.34 33.202					75 9.97 32.96					25.39	261.4	.237	
144 8.16 33.808					100 9.24 33.34					25.81	221.9	.297	
181 7.16 33.953					150 7.99 33.84					26.39	167.4	.394	
287 6.34 34.060					200 6.89 33.99					26.67	141.9	.472	
384 5.83 34.114					250 6.44 34.05					26.77	132.2	.540	
482 5.32 34.150					300 6.26 34.07					26.81	129.4	.605	
580 4.94 34.227					400 5.74 34.12					26.92	120.5	.730	
776 4.27 34.331					500 5.24 34.16					27.01	111.6	.846	
971 3.69 34.402					600 4.87 34.24					27.12	102.9	.954	
1170 3.23 34.466					700 4.52 34.30					27.20	95.2	1.053	
					800 4.19 34.34					27.27	88.9	1.145	
					1000 3.61 34.41					27.38	78.6	1.312	
					1200 3.16 34.48					27.48	69.7	1.460	

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	S x 10 ⁶	Δ D
NH085 44 39.2 N 126 4.0 W DATE 25 MAY 63 2115 GCT WIRE 05 DRY 54.0 WET 51.0 WIND DIRECTION 35 VEL 18 KTS BAR 23 SWELL DIRECTION 34 H 04 T 05 CLOUD 08 AMT 07 WEATHER 02												
0	12.38	32.581			0	12.38	32.59			24.67	328.9	0
10	12.39	32.593			10	12.39	32.60			24.68	328.4	.033
20	11.82	32.623			20	11.82	32.63			24.81	316.2	.065
30	10.80	32.587			30	10.80	32.59			24.96	301.5	.096
49	10.54	32.626			50	10.51	32.64			25.05	293.6	.155
98	8.88	33.340			75	9.71	32.97			25.44	256.6	.224
148	7.86	33.743			100	8.83	33.36			25.89	214.5	.283
199	7.56	33.937			150	7.84	33.75			26.34	171.8	.380
297	6.20	33.970			200	7.55	33.94			26.53	154.8	.461
397	5.42	34.067			250	6.88	33.95			26.64	145.2	.536
496	4.68	34.112			300	6.17	33.97			26.75	135.3	.606
596	4.43	34.185			400	5.39	34.07			26.92	120.0	.734
794	4.02	34.331			500	4.66	34.11			27.04	108.3	.848
994	3.57	34.415			600	4.42	34.19			27.12	101.5	.953
1195	3.08	34.477			700	4.21	34.27			27.21	93.9	1.051
					800	4.01	34.33			27.28	87.2	1.141
					1000	3.56	34.42			27.39	77.5	1.306
					1200	3.07	34.48			27.49	68.4	1.451

NH105 44 39.3 N 126 30.9 W DATE 26 MAY 63 0125 GCT WIRE 03 DRY 53.0 WET 0
WIND DIRECTION 35 VEL 25 KTS BAR 22 SWELL DIRECTION 33 H 08 T 08 CLOUD 04 AMT 03 WEATHER 03

0	12.07	32.560			0	12.07	32.56			24.71	324.9	0
10	12.06	32.560			10	12.06	32.56			24.71	324.9	.032
15	12.05	32.553			20	11.96	32.55			24.72	324.1	.065
20	11.96	32.549			30	10.93	32.56			24.92	305.8	.096
30	10.93	32.559			50	9.93	32.55			25.08	290.9	.156
50	9.93	32.544			75	9.40	33.03			25.54	247.5	.223
75	9.40	33.024			100	8.54	33.47			26.02	202.4	.280
100	8.54	33.463			150	7.67	33.85			26.44	162.3	.371
200	7.26	33.927			200	7.27	33.93			26.57	151.3	.449
299	6.21	33.996			250	6.70	33.99			26.69	140.4	.522
399	5.49	34.071			300	6.20	34.00			26.76	133.9	.591
498	4.99	34.138			400	5.48	34.07			26.91	120.8	.718
597	4.59	34.215			500	4.98	34.14			27.02	110.2	.833
795	4.01	34.325			600	4.58	34.22			27.13	101.2	.939
995	3.60	34.412			700	4.26	34.28			27.21	93.6	1.036
					800	4.00	34.33			27.28	87.6	1.127
					1000	3.59	34.41			27.39	78.1	1.292

NH125 44 38.9 N 126 55.0 W DATE 26 MAY 63 2030 GCT WIRE - DRY 50.5 WET 54.5
WIND DIRECTION 35 VEL 08 KTS BAR 23 SWELL DIRECTION 33 H 02 T 05 CLOUD 08 AMT 05 WEATHER 03

0	12.20	32.555			0	12.20	32.56			24.68	327.6	0
10	12.10	32.549			10	12.10	32.55			24.70	326.4	.033
20	12.08	32.548			20	12.08	32.55			24.70	326.3	.065
30	12.07	32.548			30	12.07	32.55			24.70	326.4	.098
50	10.54	32.492			50	10.54	32.50			24.93	304.6	.161
75	9.46	32.576			75	9.46	32.58			25.18	281.6	.234
100	8.51	33.378			100	8.51	33.38			25.95	208.2	.296
149	7.89	33.848			150	7.88	33.85			26.42	165.1	.389
200	7.38	33.931			200	7.39	33.94			26.55	152.7	.468
299	6.24	33.991			250	6.80	33.97			26.66	143.1	.542
399	5.34	34.070			300	6.23	33.99			26.75	134.6	.612
498	4.87	34.159			400	5.33	34.07			26.93	119.1	.738
598	4.44	34.261			500	4.86	34.16			27.05	107.1	.851
796	3.93	34.360			600	4.43	34.26			27.18	96.1	.953
993	3.48	34.450			700	4.15	34.32			27.26	89.0	1.046
					800	3.92	34.36			27.31	84.1	1.132
					1000	3.46	34.45			27.43	73.8	1.290

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	Sx10 ⁶	Δ D	

NH145 44 39.0 N 127 27.1 W DATE 26 MAY 63 1115 GCT WIRF 5 DRY 53.0 WET 51.0
WIND DIRECTION 35 VEL 15 KTS BAR 22 SWELL DIRECTION 32 H 04 T 05 CLOUD - AMT - WEATHER 03

0	12.14	32.553			0	12.14	32.56			24.69	326.7	0
10	12.12	32.576			10	12.13	32.58			24.72	324.8	.033
20	12.12	32.603			20	12.13	32.61			24.74	323.0	.065
30	10.27	32.537			30	10.27	32.54			25.02	296.5	.096
40	9.91	32.536			50	9.88	32.54			25.08	290.4	.155
50	8.34	33.166			75	9.11	32.82			25.42	258.4	.223
148	7.18	33.684			100	8.28	33.19			25.84	219.1	.283
199	6.96	33.903			150	7.16	33.70			26.40	166.7	.379
297	5.96	33.962			200	6.95	33.90			26.59	149.1	.458
397	5.30	34.061			250	6.47	33.96			26.70	139.2	.530
496	4.52	34.108			300	5.94	33.97			26.77	132.9	.598
596	4.29	34.209			400	5.27	34.06			26.93	118.9	.724
796	3.80	34.319			500	4.51	34.11			27.05	106.7	.837
997	3.40	34.405			600	4.28	34.21			27.16	98.1	.939
1198	3.02	34.469			700	4.03	34.28			27.23	91.1	1.034
					800	3.79	34.32			27.29	85.7	1.122
					1000	3.39	34.41			27.40	76.5	1.284
					1200	3.02	34.47			27.49	68.5	1.429

NH160 44 39.1 N 127 48.0 W DATE 26 MAY 63 1439 GCT WIRF 02 DRY 52.5 WET 48.5
WIND DIRECTION 33 VEL 10 KTS BAR 23 SWELL DIRECTION 34 H 04 T 08 CLOUD 06 AMT 06 WEATHER 03

0	12.06	32.578			0	12.06	32.58			24.73	323.4	0
10	12.05	32.575			10	12.05	32.58			24.73	323.6	.032
20	12.06	32.571			20	12.06	32.58			24.72	324.3	.065
30	10.51	32.531			30	10.51	32.54			24.97	300.9	.096
50	10.26	32.557			50	10.26	32.56			25.03	295.2	.156
100	8.29	32.867			75	9.28	32.65			25.26	273.6	.227
149	8.15	33.786			100	8.29	32.87			25.59	243.0	.291
200	7.17	33.891			150	8.13	33.79			26.33	173.1	.395
299	5.77	33.936			200	7.18	33.90			26.55	152.8	.477
399	4.96	33.981			250	6.38	33.93			26.68	140.7	.550
498	4.51	34.100			300	5.76	33.94			26.77	132.9	.618
598	4.25	34.169			400	4.95	33.98			26.90	121.1	.745
795	3.83	34.308			500	4.50	34.10			27.05	107.4	.860
989	3.47	34.407			600	4.25	34.17			27.13	100.8	.964
1190	3.08	34.453			700	4.02	34.24			27.21	93.4	1.061
					800	3.82	34.31			27.28	86.7	1.151
					1000	3.45	34.41			27.40	76.7	1.314
					1200	3.06	34.46			27.47	70.1	1.461

NH125 44 38.0 N 126 55.0 W DATE 26 MAY 63 1950 GCT WIRF - DRY 50.5 WET 54.5
WIND DIRECTION 35 VEL 08 KTS BAR 23 SWELL DIRECTION 33 H 02 T 05 CLOUD 08 AMT 05 WEATHER 03

0	12.04	32.543			0	12.04	32.55			24.70	325.6	0
5	12.01	32.545			10	11.97	32.54			24.72	324.8	.033
10	11.97	32.540			20	11.95	32.54			24.72	324.7	.065
20	11.95	32.519			30	10.52	32.48			24.92	305.4	.096
30	10.52	32.472			50	10.26	32.52			25.00	298.3	.157
50	10.26	32.516			75	9.54	32.46			25.38	262.4	.227
75		32.452			100	8.39	33.45			26.03	201.4	.285
100	8.39	33.446			150	8.13	33.79			26.33	173.1	.378

NH 5 44 39.1 N 124 10.6 W DATE 19 JUN 63 1745 GCT WIRF 0 DRY 60.5 WET 56.0
WIND DIRECTION 36 VEL 0 KTS BAR 21 SWELL DIRECTION 32 H 1 T 1 CLOUD 3 AMT 3 WEATHER 01

0	10.40	33.410			0	10.40	33.42			25.67	233.6	0
3	9.17	33.410			10	8.50	33.58			26.11	192.5	.021
5	8.60	33.520			20	8.01	33.70			26.27	176.7	.040
10	8.50	33.570			30	7.68	33.80			26.41	163.9	.057
20	8.01	33.690			50	7.08	33.93			26.60	146.5	.088
30	7.67	33.800			75	9.54	32.86			25.38	262.4	.139
40	7.36	33.860			100	8.39	33.45			26.03	201.4	.197
50	7.08	33.930			150	8.13	33.79			26.33	173.1	.290

NH20 44 39.0 N 124 31.6 W DATE 19 JUN 63 2120 GCT WIRF 0 DRY 59.5 WET 56.0
WIND DIRECTION 32 VEL 4 KTS BAR 22 SWELL DIRECTION 34 H 1 T 2 CLOUD 4 AMT 6 WEATHER 03

0	12.35	31.830			0	12.35	31.83			24.10	383.7	0
5	11.24	31.950			10	10.66	32.09			24.60	335.6	.036
10	10.66	32.000			20	9.63	32.28			24.92	305.3	.068
20	9.63	32.280			30	9.49	32.33			24.98	299.6	.098
30	9.49	32.130			50	8.38	32.92			25.62	239.6	.152
50	8.38	32.920			75	8.13	33.43			26.05	198.5	.207
75	8.13	33.430			100	7.55	33.74			26.37	168.3	.253
100	7.54	33.730			150	8.13	33.79			26.33	173.1	.338
130	6.89	33.900			200	7.18	33.90			26.55	152.8	.420

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	S × 10 ⁸	Δ D		
NH15	44 38.5 N	124 26.0 W	DATE 19 JUN 63	2000 GCT	WIRE 0	DRY 60.5	WET 56.0							
WIND DIRECTION 33 VEL 5 KTS	BAR 22	SWELL DIRECTION 34 H	1 T	1 CLOUD	4 AMT	3 WEATHER 02								
0	14.40	31.760			0	14.40	31.76			23.63	427.6		0	
5	12.53	32.160			10	10.36	32.28			26.80	316.7	.037		
10	10.36	32.280			20	9.30	32.39			25.06	292.1	.068		
20	9.30	32.390			30	8.86	32.67			25.35	264.9	.095		
30	8.86	32.670			50	8.35	33.07			25.73	228.5	.145		
40	8.65	32.810			75	7.73	33.66			26.29	176.3	.195		
60	8.04	33.350			100	7.55	33.74			26.37	168.3	.238		
80	7.65	33.740			150	8.13	33.79			26.33	173.1	.324		
NH20	44 34.2 N	124 34.4 W	DATE 21 JUN 63	0235 GCT	WIRE 10	DRY 58.0	WET 53.5							
WIND DIRECTION 33 VEL 20 KTS	BAR 16	SWELL DIRECTION 27 H	3 T	3 CLOUD	5 AMT	8 WEATHER 16								
0	13.48	31.670			0	13.48	31.67			23.75	416.4	0		
5	13.43	31.650			10	11.84	31.82			24.18	375.6	.040		
10	11.84	31.820			20	9.91	32.21			24.82	315.2	.074		
19	10.02	32.180			30	9.31	32.43			25.09	289.8	.104		
29	9.32	32.410			50	8.54	32.90			25.57	243.9	.158		
39	9.22	32.600			75	8.06	33.48			26.10	193.9	.212		
49	8.58	32.870			100	7.69	33.76			26.37	168.7	.258		
73	8.08	33.450			150	8.13	33.79			26.33	173.1	.343		
98	7.73	33.740			200	7.18	33.90			26.55	152.8	.425		
128	6.81	33.880			250	6.38	33.93			26.68	140.7	.498		
NH20	44 24.2 N	124 34.5 W	DATE 21 JUN 63	0537 GCT	WIRE 10	DRY 58.0	WET 53.5							
WIND DIRECTION 29 VEL 15 KTS	BAR -	SWELL DIRECTION - H	- T	- CLOUD	4 AMT	7 WEATHER 02								
0	12.54	32.104			0	12.54	32.11			24.27	366.9	0		
5	12.56	32.095			10	11.10	32.15			24.57	338.8	.035		
10	11.10	32.146			20	9.86	32.35			24.93	304.2	.067		
19	9.92	32.317			30	9.53	32.62			25.20	279.2	.097		
29	9.54	32.603			50	8.35	33.02			25.69	232.3	.148		
39	9.28	32.733			75	8.08	33.60			26.19	185.4	.200		
49	8.38	32.987			100	7.69	33.76			26.37	168.7	.244		
68	8.17	33.480			150	8.13	33.79			26.33	173.1	.330		
88	7.90	33.741			200	7.18	33.90			26.55	152.8	.411		
NH005	44 39.1 N	124 10.6 W	DATE 16 JUL 63	1807 GCT	WIRE 00	DRY 55.3	WET 53.0							
WIND DIRECTION 34 VEL 05 KTS	BAR 16	SWELL DIRECTION 31 H	03 T	07 CLOUD	01 AMT	07 WEATHER 02								
0	11.15	32.899	6.21		0	11.15	32.90	6.21		25.14	283.8	0		
10	8.51	33.567	2.80		10	8.51	33.57	2.80		26.10	192.8	.024		
20	7.49	33.965	1.58		20	7.49	33.91	1.58		26.52	153.5	.041		
30	7.48	33.914	2.50		30	7.48	33.92	2.51		26.53	152.8	.056		
40	7.47	33.908	1.70		50	7.44	33.92	1.74		26.54	152.2	.087		
50	7.44	33.919	1.74		75	8.08	33.60			26.19	185.4	.129		
NH015	44 39.5 N	124 24.5 W	DATE 16 JUL 63	2102 GCT	WIRE 07	DRY 60.1	WET 56.2							
WIND DIRECTION 34 VEL 09 KTS	BAR 16	SWELL DIRECTION 31 H	03 T	07 CLOUD	04 AMT	07 WEATHER 02								
0	13.54	31.912	6.99		0	13.54	31.92	6.99		23.93	399.7	0		
10	9.97	32.221	6.56		10	9.97	32.23	6.57		24.82	314.8	.036		
20	8.69	32.549	5.09		20	8.69	32.55	5.09		25.28	271.2	.065		
30	8.30	32.822	4.63		30	8.30	32.83	4.64		25.55	245.5	.091		
40	8.28	33.090	4.41		50	8.04	33.30	4.04		26.96	206.9	.136		
50	8.04	33.295	4.03		75	8.08	33.60			26.19	185.4	.185		
NH025	44 39.7 N	124 39.6 W	DATE 16 JUL 63	2307 GCT	WIRE 14	DRY 61.8	WET 57.6							
WIND DIRECTION 35 VEL 15 KTS	BAR 17	SWELL DIRECTION 35 H	03 T	07 CLOUD	06 AMT	07 WEATHER 02								
0	16.21	31.575	5.99		0	16.21	31.58	5.99		23.10	478.6	0		
10	15.98	31.581	6.01		10	15.98	31.59	6.02		23.16	473.5	.048		
19	13.14	32.011	6.63		20	12.88	32.07	6.67		24.17	376.6	.090		
29	11.02	32.495	6.79		30	10.92	32.51	6.78		24.88	309.6	.124		
48	10.08	32.584	6.17		50	9.94	32.62	6.03		25.13	285.8	.184		
72	8.52	33.076	4.41		75	8.43	33.14	4.27		25.77	224.9	.248		
94	8.06	33.495	3.55		100	7.94	33.57	3.31		26.19	185.8	.299		
141	7.30	33.972	2.07		150	7.20	33.98	1.94		26.61	146.4	.382		
191	6.95	33.996	1.93		200	7.18	33.90			26.55	152.8	.457		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
NH035	44 39.4 N	124 52.2 W	DATE 17 JUL 63	0100 GCT	WIRE 04	DRY 61.1	WET 58.7					
WIND DIRECTION 35 VEL 15 KTS	BAR 16 SWELL DIRECTION 33 H 03 T 07 CLOUD 06 AMT 06 WEATHER 00											

0	15.73	31.581	6.02		0	15.73	31.59	6.03		23.21	468.0	0
10	15.29	31.558	6.12		10	15.29	31.56	6.13		23.29	460.7	.046
20	11.80	31.564	6.69		20	11.80	31.97	6.69		24.30	364.4	.088
30	10.14	32.178	5.94		30	10.14	32.18	5.94		24.76	321.0	.122
50	9.25	32.541	5.49		50	9.25	32.55	5.49		25.19	280.6	.182
74	8.62	33.024	4.48		75	8.60	33.05	4.43		25.68	233.9	.246
98	8.18	33.563	3.30		100	8.16	33.59	3.24		26.17	187.9	.299
147	7.77	33.869	2.51		150	7.74	33.88	2.48		26.46	160.8	.386
197	7.15	34.012	2.20		200	7.11	34.02	2.18		26.66	142.7	.462

NH045	44 39.3 N	125 7.0 W	DATE 17 JUL 63	0335 GCT	WIRE 04	DRY 61.0	WET 57.1					
WIND DIRECTION 35 VEL 10 KTS	BAR 17 SWELL DIRECTION 33 H 03 T 06 CLOUD 01 AMT 09 WEATHER 03											

0	15.97	31.383	5.96		0	15.97	31.39	5.96		23.01	487.5	0
10	16.04	31.429	5.86		10	16.04	31.43	5.86		23.03	485.9	.049
20	12.33	32.090	6.66		20	12.33	32.09	6.67		24.30	364.6	.091
30	10.80	32.452	6.64		30	10.80	32.46	6.65		24.86	311.5	.125
49	10.19	32.562	6.03		50	10.14	32.58	5.99		25.07	292.1	.185
75	8.97	33.060	5.01		75	8.97	33.06	5.02		25.63	238.3	.252
103	7.97	33.467	4.35		100	8.05	33.43	4.41		26.06	198.1	.306
152	7.70	33.851	3.35		150	7.71	33.84	3.38		26.43	163.4	.397
205	7.19	33.966	2.72		200	7.24	33.96	2.76		26.60	148.7	.475
307	6.05	34.008	2.43		250	6.65	34.00	2.58		26.70	139.1	.546
407	5.76	34.113	1.13		300	6.12	34.01	2.45		26.78	132.0	.614
508	5.19	34.172	.70		400	5.77	34.11	1.22		26.90	121.9	.741
608	4.82	34.248	.60		500	5.24	34.17	.71		27.02	111.2	.858
					600	4.84	34.24	.61		27.12	102.5	.964

NH065	44 40.0 N	125 33.0 W	DATE 17 JUL 63	0915 GCT	WIRE 14	DRY 61.0	WET 57.0					
WIND DIRECTION 35 VEL 12 KTS	BAR 18 SWELL DIRECTION 34 H 04 T 07 CLOUD	AMT	WEATHER 02									

0	16.53	30.742	5.75		0	16.53	30.77	5.76		22.41	544.9	0
10	16.53	30.734	5.77		10	16.53	30.74	5.78		22.39	547.2	.055
20	15.40	31.378	6.17		20	15.40	31.38	6.18		23.13	476.4	.106
30	11.94	32.422	6.69		30	11.94	32.43	6.69		24.63	333.3	.146
49	10.42	32.579	6.43		50	10.36	32.60	6.39		25.04	294.4	.209
102	8.59	33.474	3.84		75	9.22	33.01	5.25		25.55	246.3	.277
150	8.02	33.863	2.66		100	8.62	33.44	3.95		25.98	205.6	.333
205	7.25	33.975	2.28		150	8.02	33.87	2.66		26.41	165.9	.426
304	5.95	33.970	2.20		200	7.32	33.97	2.29		26.59	149.0	.505
403	5.23	34.118	1.34		250	6.62	33.97	2.24		26.69	140.3	.577
504	4.81	34.178	.79		300	6.00	33.97	2.20		26.77	133.1	.645
605	4.36	34.175	.52		400	5.25	34.03	1.37		26.91	121.0	.772
805	4.08	34.339	.26		500	4.82	34.11	.81		27.02	110.2	.888
1009	3.53	34.412	.31		600	4.38	34.17	.53		27.12	102.2	.994
1213	3.12	34.479	.50		700	4.19	34.25	.35		27.20	94.5	1.092
					800	4.08	34.34	.26		27.28	88.0	1.184
					1000	3.56	34.41	.30		27.39	78.0	1.349
					1200	3.14	34.47	.48		27.48	69.5	1.497

NH085	44 39.1 N	126 3.0 W	DATE 17 JUL 63	1521 GCT	WTRF 05	DRY 58.0	WET 55.5					
WIND DIRECTION 33 VEL 10 KTS	BAR 20 SWELL DIRECTION 31 H 04 T 07 CLOUD	08 AMT	10 WEATHER 02									

0	16.63	31.049	5.74		0	16.63	31.05	5.74		22.60	526.1	0
10	16.63	31.045	5.62		10	16.63	31.05	5.63		22.60	526.7	.053
20	15.09	31.906	5.99		20	15.09	31.91	5.99		23.60	431.3	.101
30	11.81	32.647	6.25		30	11.81	32.33	6.24		24.58	337.9	.139
50	10.63	32.647	6.25		50	10.63	32.65	6.26		25.04	294.6	.202
76	9.52	32.895	5.17		75	9.55	32.89	5.22		25.40	260.4	.272
104	8.84	33.477	3.87		100	8.92	33.39	4.04		25.90	213.6	.331
153	7.85	33.863	3.75		150	7.90	33.84	3.35		26.40	166.5	.426
207	7.25	33.963	2.71		200	7.32	33.96	2.79		26.58	150.1	.505
308	5.90	33.970	2.36		250	6.67	33.97	2.53		26.68	141.6	.578
410	4.91	34.015	1.48		300	6.01	33.97	2.38		26.76	133.5	.647
512	4.74	34.133	.74		400	4.98	34.01	1.57		26.92	119.5	.773
615	4.48	34.223	.44		500	4.74	34.12	.81		27.03	108.9	.887
821	3.95	34.346	.33		600	4.52	34.21	.46		27.13	100.9	.992
1026	3.48	34.436	.62		700	4.26	34.28	.33		27.21	93.4	1.089
					800	4.00	34.34	.34		27.28	87.0	1.179
					1000	3.54	34.43	.56		27.40	76.6	1.343

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
NH105 44 40.8 N 126 30.8 W DATE 17 JUL 63 1830 GCT WIRE 06 DRY 61.1 WET 56.0												
	WIND DIRECTION 31 VEL 20 KTS		BAR 20 SWELL DIRECTION 32 H 04 T 07 CLOUD 06 AMT 08 WEATHER 01									
0	16.77	31.502	5.75		0	16.77	31.51	5.76		22.92	496.1	0
10	16.65	31.535	5.75		10	16.65	31.54	5.76		22.97	491.3	.049
20	16.52	31.611	5.83		20	16.52	31.62	5.83		23.06	483.2	.098
30	13.82	32.544	6.30		30	13.82	32.55	6.31		24.36	359.4	.140
50	11.10	32.671	6.67		50	11.10	32.68	6.68		24.98	300.7	.206
76	9.69	33.087	4.96		75	9.72	33.07	5.04		25.52	249.4	.275
104	8.96	33.497	3.92		100	9.03	33.44	4.04		25.92	211.5	.333
153	8.12	33.876	2.72		150	8.16	33.86	2.77		26.38	168.3	.427
207	7.29	33.979	2.52		200	7.39	33.98	2.55		26.58	149.7	.507
307	6.32	34.047	1.72		250	6.82	34.02	2.19		26.70	139.5	.579
407	5.47	34.081	1.25		300	6.37	34.05	1.78		26.78	132.5	.647
509	4.94	34.141	.79		400	5.52	34.08	1.28		26.91	120.8	.774
611	4.65	34.213	.47		500	4.98	34.13	.83		27.02	110.5	.889
814	4.07	34.335	.37		600	4.68	34.21	.50		27.11	103.2	.996
1017	3.51	34.421	.37		700	4.39	34.27	.38		27.19	95.7	1.096
					800	4.11	34.33	.38		27.27	88.9	1.188
					1000	3.56	34.42	.37		27.39	77.7	1.354

NH117 44 39.9 N 126 48.0 W DATE 17 JUL 63 2135 GCT WIRE 00 DRY 62.2 WET 57.0

WIND DIRECTION 30 VEL 08 KTS BAR 21 SWELL DIRECTION 31 H 03 T 07 CLOUD 06 AMT 07 WEATHER 03

0	16.47	31.555	5.77		0	16.48	31.56	5.78		23.03	485.7	0
10	16.42	31.551	5.83		10	16.42	31.56	5.83		23.04	485.1	.049
20	16.17	31.660	5.87		20	16.17	31.67	5.88		23.17	472.0	.096
30	14.29	32.360	6.09		30	14.29	32.36	6.09		24.12	382.1	.139
50	10.86	32.534	6.89		50	10.86	32.54	6.90		24.91	306.8	.208
76	9.88	32.682	5.85		75	9.88	32.67	5.91		25.18	281.3	.281
104	8.57	33.331	4.36		100	8.75	33.23	4.55		25.80	222.8	.344
154	7.64	33.645	4.17		150	7.67	33.64	4.19		26.28	177.8	.445
209	7.23	33.909	3.31		200	7.28	33.87	3.47		26.52	155.8	.528
311	6.20	33.970	2.31		250	6.84	33.97	2.85		26.66	143.6	.603
413	5.10	33.995	1.48		300	6.32	33.96	2.40		26.72	137.9	.673
515	4.77	34.089	.88		400	5.22	33.99	1.57		26.88	123.6	.804
619	4.36	34.154	.49		500	4.80	34.07	.95		26.99	112.9	.922
825	3.98	34.315	.30		600	4.43	34.14	.55		27.04	105.0	1.031
1030	3.46	34.409	.42		700	4.18	34.22	.35		27.17	97.1	1.132
					800	4.01	34.30	.32		27.25	90.1	1.226
					1000	3.54	34.40	.38		27.38	78.7	1.394

NH145 44 39.1 N 127 27.0 W DATE 18 JUL 63 0333 GCT WIRE 04 DRY 59.5 WET 57.0

WIND DIRECTION 35 VEL 12 KTS BAR 22 SWELL DIRECTION 31 H 04 T 07 CLOUD 08 AMT 10 WEATHER 02

0	16.65	31.581	5.62		0	16.65	31.59	5.63		23.01	487.7	0
10	16.63	31.574	5.77		10	16.63	31.58	5.78		23.00	488.0	.049
20	15.41	32.018	6.04		20	15.41	32.02	6.05		23.62	429.8	.095
30	13.61	32.554	6.23		30	13.61	32.56	6.23		24.41	354.6	.134
50	10.50	32.547	6.84		50	10.50	32.55	6.84		24.98	299.9	.199
77	9.50	32.820	5.48		75	9.51	32.79	5.62		25.33	267.0	.270
104	8.32	33.432	4.07		100	8.48	33.34	4.26		25.93	211.0	.330
153	7.72	33.821	3.19		150	7.73	33.81	3.21		26.41	165.7	.424
207	7.24	33.952	2.48		200	7.30	33.95	2.56		26.57	150.7	.503
308	6.00	33.974	2.03		250	6.70	33.96	2.25		26.67	142.3	.576
410	5.36	34.062	1.08		300	6.10	33.97	2.05		26.76	134.4	.646
511	4.85	34.125	.70		400	5.41	34.05	1.17		26.90	121.3	.773
615	4.44	34.197	.46		500	4.90	34.12	.72		27.02	110.8	.889
820	3.96	34.325	.34		600	4.49	34.19	.49		27.11	102.5	.996
1025	3.40	34.406	.40		700	4.22	34.25	.37		27.20	94.9	1.094
					800	4.00	34.31	.35		27.27	88.6	1.186
					1000	3.47	34.40	.38		27.39	77.9	1.353

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁶	Δ D	

NH165 44 40.0 N 127 54.4 W DATE 18 JUL 63 0940 GCT WTRF 05 DRY 59.5 WET 56.6
WIND DIRECTION 35 VEL 15 KTS BAR 21 SWELL DIRECTION 33 H 03 T 07 CLOUD - AMT 10 WEATHER 00

0	16.48	31.471	5.77		0	16.48	31.48	5.78	22.96	492.0	0
10	16.47	31.468	5.81		10	16.48	31.47	5.82	22.96	492.3	.049
20	16.48	31.469	5.86		20	16.48	31.47	5.86	22.96	492.7	.098
30	14.35	32.252	6.24		30	14.35	32.26	6.24	24.02	391.2	.143
50	11.43	32.544	6.90		50	11.43	32.55	6.91	24.82	315.8	.213
104	8.46	33.241	4.64		75	9.47	32.88	6.17	25.41	259.8	.285
153	7.71	33.849	3.26		100	8.52	33.19	4.90	25.80	222.5	.346
208	6.93	33.946	2.97		150	7.73	33.82	3.32	26.41	165.4	.442
309	5.94	34.001	1.85		200	7.04	33.93	2.98	26.60	148.2	.521
412	5.36	34.073	1.05		250	6.46	33.98	2.53	26.71	137.9	.592
513	4.90	34.164	.50		300	6.01	34.00	1.96	26.79	131.3	.660
615	4.54	34.232	.37		400	5.41	34.06	1.13	24.91	120.6	.785
817	3.86	34.333	.29		500	4.95	34.15	.63	27.04	108.9	.900
1022	3.39	34.425	.34		600	4.59	34.22	.39	27.13	100.9	1.005
1228	3.03	34.469	.50		700	4.24	34.28	.30	27.21	93.3	1.102
					800	3.91	34.33	.30	27.29	86.7	1.192
					1000	3.43	34.42	.33	27.41	76.1	1.355
					1200	3.07	34.47	.47	27.48	69.4	1.500

UH085 44 0.0 N 126 3.2 W DATE 19 JUL 63 0116 GCT WTRF 05 DRY 62.8 WET 58.0
WIND DIRECTION 00 VEL 15 KTS BAR 20 SWELL DIRECTION 01 H 03 T 07 CLOUD 08 AMT 04 WEATHER 03

0	17.00	31.410	5.71		0	17.00	31.42	5.71	22.79	507.9	0
10	16.93	31.393	5.58		10	16.94	31.40	5.58	22.80	507.8	.051
20	14.43	32.464	6.20		20	14.43	32.47	6.20	24.17	377.1	.095
30	12.88	32.635	6.23		30	12.88	32.64	6.23	24.62	334.8	.131
50	10.95	32.708	6.04		50	10.95	32.71	6.05	25.03	295.5	.194
77	9.80	33.101	4.83		75	9.85	33.06	4.94	25.40	251.9	.262
104	8.76	33.560	3.80		100	8.89	33.50	3.94	25.98	205.5	.319
154	8.18	33.872	2.83		150	8.19	33.86	2.87	26.38	168.7	.413
209	7.52	33.986	2.43		200	7.63	33.98	2.47	26.55	153.0	.493
309	6.54	34.059	1.72		250	7.08	34.03	2.13	26.67	142.5	.567
409	5.90	34.115	1.14		300	6.62	34.06	1.78	26.75	134.9	.636
511	5.25	34.163	.78		400	5.95	34.11	1.18	26.88	123.8	.766
614	4.91	34.235	.51		500	5.31	34.16	.81	27.00	112.9	.884
820	4.03	34.340	.32		600	4.95	34.22	.54	27.00	105.0	.993
1025	3.54	34.425	.33		700	4.54	34.28	.39	27.19	96.4	1.093
					800	4.11	34.33	.32	27.27	88.6	1.186
					1000	3.58	34.42	.33	27.39	77.9	1.352

UH065 44 0.0 N 125 36.4 W DATE 19 JUL 63 0552 GCT WTRF 03 DRY 61.5 WET 56.1
WIND DIRECTION 35 VEL 22 KTS BAR 19 SWELL DIRECTION 35 H 05 T 06 CLOUD 09 AMT 10 WEATHER 03

0	16.51	31.406	5.90		0	16.51	31.41	5.91	22.90	498.0	.050
10	16.51	31.401	5.71		10	16.51	31.41	5.71	23.76	416.4	.095
20	13.75	31.766	6.53		20	13.75	31.75	6.54	24.78	318.5	.132
30	11.02	32.407	6.63		30	11.02	32.41	6.64	25.10	289.0	.193
50	9.64	32.568	5.93		50	9.64	32.51	5.94	25.53	248.3	.260
76	8.95	32.948	4.69		75	8.96	32.93	4.72	26.00	204.0	.317
104	8.28	33.492	3.31		100	8.36	33.41	3.50	26.42	164.3	.409
153	7.94	33.886	2.65		150	7.95	33.88	2.65	26.59	149.5	.487
207	7.35	33.989	2.20		200	7.43	33.99	2.25	26.70	139.2	.559
307	6.36	34.074	1.49		250	6.89	34.04	1.86	26.79	131.2	.627
407	5.75	34.110	1.15		300	6.42	34.07	1.53	26.90	121.9	.753
508	5.23	34.105	.62		400	5.78	34.11	1.17	27.03	110.1	.869
610	4.82	34.254	.45		500	5.27	34.19	.66	27.12	102.1	.975
813	4.20	34.370	.29		600	4.86	34.25	.46	27.21	94.5	1.074
1015	3.57	34.476	.43		700	4.53	34.31	.35	27.28	87.7	1.165
					800	4.24	34.36	.29	27.40	77.1	1.329
					1000	3.62	34.43	.41			

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	S × 10 ⁶	Δ D	
UH045	44 1.0 N	125 9.4 W	DATE 19 JUL 63	0936 GCT	WIRE 08	DRY 61+1	WET 57+3						
	WIND DIRECTION 35 VEL 18 KTS	HAR 18 SWELL DIRECTION 32 H 04 T 07 CLOUD - AMT - WEATHER 00											
0	15.85	31.442	6.04		0	15.85	31.45	6.05		23.08	480.7	0	
10	15.81	31.428	6.05		10	15.81	31.43	6.06		23.08	481.1	.048	
20	12.75	31.771	6.48		20	12.75	31.78	6.48		23.97	395.7	.092	
30	10.52	32.296	6.79		30	10.52	32.30	6.80		24.79	318.4	.128	
50	9.65	32.713	5.48		50	9.65	32.72	5.48		25.26	274.0	.187	
76	9.02	33.269	4.30		75	9.04	33.25	4.34		25.77	225.6	.249	
104	8.52	33.656	3.37		100	8.59	33.61	3.48		26.12	192.2	.301	
153	7.70	33.929	2.55		150	7.74	33.92	2.58		26.49	157.9	.389	
208	7.13	33.987	2.13		200	7.20	33.98	2.17		26.61	147.0	.465	
308	6.24	34.048	1.62		250	6.72	34.01	1.91		26.71	138.6	.537	
409	5.83	34.139	.87		300	6.30	34.04	1.66		26.79	131.7	.604	
511	5.37	34.169	.65		400	5.86	34.13	.93		26.91	121.0	.730	
613	4.78	34.219	.42		500	5.42	34.17	.66		26.99	113.6	.848	
818	4.30	34.328	.37		600	4.85	34.21	.45		27.09	104.8	.957	
1023	3.81	34.416	.42		700	4.52	34.27	.40		27.17	97.5	1.058	
					800	4.32	34.32	.37		27.24	92.0	1.153	
					1000	3.87	34.41	.41		27.36	81.9	1.326	
UH025	43 59.8 N	124 45.0 W	DATE 19 JUL 63	1255 GCT	WIRE 02	DRY 58+9	WET 55+9						
	WIND DIRECTION 03 VEL 08 KTS	HAR 18 SWELL DIRECTION 35 H 03 T 07 CLOUD 01 AMT 03 WEATHER 01											
0	13.80	32.001	7.07		0	13.80	32.01	7.07		23.94	398.2	0	
10	13.10	32.093			10	13.10	32.10	6.20		24.15	378.3	.039	
20	9.46	32.358	5.80		20	9.46	32.36	5.81		25.01	296.9	.073	
30	9.09	32.504	5.40		30	9.09	32.51	5.41		25.18	280.6	.101	
50	8.28	32.996	4.13		50	8.28	33.00	4.14		25.69	232.5	.153	
75	7.84	33.649	2.81		75	7.84	33.65	2.82		26.27	178.1	.204	
100	7.40	33.920	2.06		100	7.41	33.92	2.07		26.54	152.3	.245	
CH005	43 20.5 N	124 28.8 W	DATE 20 JUL 63	0323 GCT	WIRE 00	DRY 57+0	WET 55+0						
	WIND DIRECTION 02 VEL 05 KTS	HAR 19 SWELL DIRECTION 31 H 02 T 06 CLOUD 00 AMT 10 WEATHER 03											
0	11.96	32.890	6.79		0	11.96	32.89	6.80		24.99	298.6	0	
10	9.91	33.208	5.94		10	9.91	33.21	5.94		25.60	246.8	.027	
20	8.59	33.369	2.26		20	8.59	33.37	2.27		25.94	208.9	.049	
30	8.06	33.623	3.74		30	8.06	33.63	3.74		26.21	182.5	.069	
50	7.89	33.830	1.25		50	7.90	33.83	1.26		26.40	165.0	.104	
75	7.46	33.947	2.19		75	7.46	33.95	2.20		26.56	150.7	.143	
CH015	43 20.5 N	124 43.1 W	DATE 20 JUL 63	0543 GCT	WIRE 00	DRY 60+5	WET 57+8						
	WIND DIRECTION 01 VEL 10 KTS	HAR 19 SWELL DIRECTION 31 H 03 T 06 CLOUD 00 AMT 10 WEATHER 02											
0	15.51	31.577	6.29		0	15.51	31.58	6.30		23.26	463.7	0	
10	13.57	31.824	6.57		10	13.57	31.83	6.57		23.85	407.0	.044	
20	9.69	32.304	5.65		20	9.69	32.31	5.66		24.93	304.4	.079	
30	8.97	32.478	5.19		30	8.97	32.48	5.19		25.18	280.8	.108	
50	8.60	33.087	4.23		50	8.60	33.09	4.23		25.71	230.4	.159	
76	8.45	33.505	3.63		75	8.45	33.58	3.65		26.12	192.3	.212	
103	8.04	33.813	3.06		100	8.09	33.80	3.12		26.34	171.2	.258	
157	7.70	33.947	2.69		150	7.73	33.94	2.71		26.51	156.2	.340	
207	7.19	34.005	2.25		200	7.27	34.00	2.32		26.62	146.3	.415	
CH025	43 20.2 N	124 55.2 W	DATE 20 JUL 63	0820 GCT	WIRE 00	DRY 60+1	WET 56+9						
	WIND DIRECTION 35 VEL 05 KTS	HAR 19 SWELL DIRECTION 31 H 03 T 07 CLOUD - AMT - WEATHER 02											
0	15.93	31.394	5.96		0	15.93	31.40	5.96		23.02	485.9	0	
10	15.88	31.402	6.02		10	15.88	31.41	6.03		23.04	484.5	.049	
20	13.60	31.909	6.46		20	13.60	31.91	6.46		23.91	401.5	.093	
30	10.27	32.331	6.29		30	10.27	32.34	6.30		24.86	311.8	.128	
50	9.75	32.630	5.78		50	9.75	32.63	5.79		25.17	281.7	.188	
76	8.88	33.651	4.61		75	8.91	33.13	4.66		25.70	232.4	.252	
104	8.52	33.651	3.39		100	8.55	33.58	3.54		26.11	194.0	.305	
153	7.78	33.906	2.91		150	7.83	33.90	2.94		26.46	160.6	.394	
208	7.13	33.988	2.41		200	7.21	33.98	2.48		26.62	146.8	.471	
311	6.44	34.059	1.72		250	6.77	34.03	2.09		26.71	138.1	.542	
					300	6.48	34.06	1.78		26.77	133.1	.610	

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁵	Δ D
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CH035 43 20.4 N 125 10.6 W DATE 20 JUL 63 1051 GCT WTRF - DRY 60.1 WET 56.8
WIND DIRECTION 03 VEL 15 KTS BAR 19 SWELL DIRECTION 01 H 03 T 07 CLOUD - AMT - WEATHER 02

0	16.01	31.542	5.88		0	16.01	31.55	5.89		23.12	476.7	0
10	15.91	31.547	5.64		10	15.91	31.60	5.65		23.18	470.8	.047
20	14.72	32.045	5.93		20	14.72	32.09	5.94		23.82	410.7	.091
30	11.43				30	11.43	32.39	6.26		24.69	327.3	.128
50	10.29		6.40		50	10.29	32.85	6.41		25.25	274.4	.189
76	9.13	33.168	4.80		76	9.17	33.16	4.87		25.68	234.0	.252
104	8.52	33.644	3.62		100	8.58	33.59	3.75		26.10	194.2	.306
153	7.98	33.863	2.98		150	8.00	33.86	2.99		26.41	166.0	.396
206	7.45	33.967	2.56		200	7.51	33.96	2.60		26.56	152.6	.475
296	6.49	34.006	1.93		250	6.99	33.99	2.24		26.65	144.3	.549
					300	6.45	34.00	1.90		26.74	136.6	.620

CH045 43 20.5 N 125 24.5 W DATE 20 JUL 63 1334 GCT WTRF 00 DRY 60.2 WET 57.0
WIND DIRECTION 34 VEL 06 KTS BAR 18 SWELL DIRECTION 32 H 03 T 07 CLOUD 09 AMT 10 WEATHER 02

0	16.01	31.550	5.63		0	16.01	31.55	5.64		23.13	476.2	0
10	16.02	31.555	5.74		10	16.02	31.56	5.74		23.13	476.2	.048
20	14.66	32.245	6.12		20	14.66	32.25	6.13		23.95	397.7	.091
30	13.08	32.553	6.14		30	13.08	32.56	6.15		24.51	344.5	.128
50	10.45	32.577	6.82		50	10.45	32.58	6.82		25.02	296.8	.193
77	9.51	32.859	5.46		75	9.52	32.83	5.61		25.36	264.2	.263
105	8.84	33.482	3.80		100	8.94	33.37	4.07		25.88	215.6	.323
154	8.11	33.869	3.03		150	8.16	33.80	3.04		26.34	172.6	.420
209	7.40	33.948	2.56		200	7.51	33.94	2.62		26.54	154.4	.501
311	6.42	34.008	2.00		250	6.96	33.99	2.33		26.65	143.9	.576
412	5.74	34.079	1.17		300	6.51	34.01	2.06		26.73	137.1	.646
514	5.13	34.128	.79		400	5.81	34.07	1.26		26.87	125.0	.777
617	4.76	34.227	.45		500	5.20	34.12	.83		26.98	114.3	.897
822	4.20	34.344	.40		600	4.81	34.21	.50		27.10	104.5	1.006
1025	3.69	34.471	.42		700	4.52	34.28	.43		27.19	96.3	1.106
					800	4.25	34.33	.41		27.26	90.0	1.199
					1000	3.75	34.42	.41		27.38	79.4	1.369

CH065 43 20.5 N 125 51.5 W DATE 20 JUL 63 1742 GCT WTRF 04 DRY 61.9 WET 58.0
WIND DIRECTION VEL 00 KTS BAR 18 SWELL DIRECTION 31 H 03 T 09 CLOUD 08 AMT 05 WEATHER 02

0	16.33	31.403	5.72		0	16.33	31.41	5.72		22.94	493.8	0
10	16.28	31.404	5.49		10	16.28	31.41	5.49		22.95	492.9	.049
20	15.62	31.808	6.47		20	15.63	31.81	6.47		23.41	449.5	.096
30	13.56	32.545	5.98		30	13.56	32.55	5.98		24.41	354.3	.137
50	11.77	32.794	6.34		50	11.77	32.80	6.34		24.95	303.3	.202
104	8.80	33.416	4.24		75	10.08	33.10	5.62		25.48	253.1	.272
153	8.16	33.829	2.75		100	8.93	33.37	4.46		25.88	215.1	.330
208	7.36	33.966	2.34		150	8.17	33.81	2.82		26.34	172.4	.427
309	6.26	34.012	1.72		200	7.47	33.96	2.36		26.56	152.2	.508
411	5.57	34.123	1.00		250	6.85	34.00	2.08		26.68	141.6	.582
514	5.10	34.189	.63		300	6.34	34.01	1.77		26.75	134.9	.651
618	4.73	34.253	.46		400	5.63	34.11	1.07		26.92	119.7	.778
818	4.12	34.382	.31		500	5.15	34.18	.66		27.04	109.1	.893
1026	3.50	34.435	.38		600	4.79	34.24	.48		27.13	101.8	.998
1215	3.11	34.492	.52		700	4.47	34.31	.37		27.21	93.7	1.096
					800	4.17	34.37	.31		27.30	86.3	1.186
					1000	3.57	34.43	.36		27.40	76.7	1.349
					1200	3.13	34.49	.51		27.49	68.6	1.494

CH085 43 20.5 N 126 19.0 W DATE 20 JUL 63 1328 GCT WTRF 06 DRY 64.0 WET 60.1
WIND DIRECTION 24 VEL 08 KTS BAR 17 SWELL DIRECTION 29 H 03 T 07 CLOUD 09 AMT 08 WEATHER 01

0	17.19	31.304	5.74		0	17.19	31.40	5.74		22.74	513.3	0
10	16.77	31.431	5.71		10	16.77	31.44	5.71		22.86	501.5	.051
20	15.37	32.260	5.94		20	15.38	32.26	5.94		23.81	411.2	.096
30	14.45	32.508	6.06		30	14.45	32.51	6.07		24.20	374.5	.136
49	12.27	32.699	6.47		50	12.17	32.71	6.45		24.80	317.1	.205
75	10.15	32.912	5.56		75	10.15	32.92	5.57		25.33	267.6	.278
103	9.03	33.191	4.31		100	9.11	33.15	4.44		25.68	234.4	.341
152	8.08	33.758	3.26		150	8.10	33.74	3.28		26.29	176.8	.443
207	7.47	33.950	2.96		200	7.53	33.94	2.98		26.54	154.3	.526
308	6.28	34.053	2.00		250	6.93	34.02	2.58		26.68	141.3	.600
409	5.80	34.127	1.18		300	6.36	34.05	2.08		26.78	131.9	.668
511	5.19	34.190	.64		400	5.83	34.12	1.24		26.91	121.5	.795
614	4.79	34.264	.44		500	5.25	34.18	.68		27.03	110.2	.911
819	4.17	34.372	.28		600	4.84	34.25	.45		27.13	101.5	1.017
1023	3.63	34.465	.45		700	4.51	34.31	.33		27.21	93.9	1.114
					800	4.22	34.36	.28		27.28	87.5	1.205
					1000	3.69	34.46	.41		27.41	76.2	1.369

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	S × 10 ⁶	AD
CH105 43 20.5 N 126 45.5 W DATE 21 JUL 63 0436 GCT WIRE 03 DRY 63.1 WET 59.7 WIND DIRECTION 22 VEL 15 KTS BAR 15 SWELL DIRECTION 31 H 03 T 09 CLOUD 00 AMT 10 WEATHER 02												
0	16.95	31.620	5.71		0	16.96	31.63	5.71		22.97	491.4	0
10	16.84	31.660	5.60		10	16.84	31.67	5.60		23.07	486.3	.049
20	16.14	32.270	5.75		20	16.14	32.27	5.76		23.65	426.8	.095
30	15.11	32.570	5.62		30	15.11	32.57	5.63		24.11	383.4	.135
50	13.26	32.610	6.39		50	13.26	32.61	6.40		24.52	344.2	.208
77	10.40	32.720	5.78		75	10.59	32.71	5.86		25.09	290.3	.287
104	9.51	33.110	4.85		100	9.57	33.04	5.00		25.52	249.4	.355
153	8.36	33.700	3.34		150	8.42	33.67	3.41		26.19	186.3	.463
208	7.22	33.960	2.93		200	7.37	33.94	2.95		26.56	152.1	.548
307	5.94	34.020	1.82		250	6.57	34.02	2.46		26.73	136.5	.620
403	5.41	34.100	1.15		300	6.00	34.02	1.90		26.80	130.0	.687
					400	5.42	34.10	1.16		26.94	118.1	.811

CH125 43 20.6 N 127 14.0 W DATE 21 JUL 63 0856 GCT WIRE 04 DRY 62.0 WET 59.5
WIND DIRECTION 22 VEL 20 KTS BAR SWELL DIRECTION 26 H 06 T 07 CLOUD - AMT - WEATHER 50

0	16.91	5.71		0	16.92	31.63	5.71		22.98	490.6	0
10	16.88	5.74		10	16.88	31.67	5.74		23.01	487.2	.049
20	16.03	5.90		20	16.03	32.27	5.91		23.67	424.4	.094
30	13.85	6.29		30	13.85	32.57	6.30		24.37	358.0	.134
50	12.08	6.43		50	12.08	32.61	6.44		24.75	322.4	.202
76	11.21	5.67		75	11.24	32.71	5.71		24.98	301.3	.280
103	9.32	4.97		100	9.53	33.04	5.05		25.53	248.7	.346
153	8.00	3.23		150	8.03	33.67	3.32		26.25	186.6	.456
209	7.40	2.78		200	7.46	33.94	2.80		26.55	153.4	.539
310	6.44	1.79		250	7.00	34.02	2.37		26.67	142.3	.613
412	5.42	1.24		300	6.53	34.02	1.88		26.73	136.8	.683
515	4.96	.79		400	5.53	34.10	1.29		26.92	119.4	.811
619	4.66	.49		500	5.00	34.18	.85		27.05	107.2	.924
825	4.02	.35		600	4.71	34.25	.53		27.14	100.0	1.028
1030	3.58	.40		700	4.40	34.31	.39		27.22	92.6	1.124
				800	4.09	34.36	.37		27.30	86.0	1.213
				1000	3.63	34.46	.38		27.42	75.6	1.375

CH145 43 20.5 N 127 40.8 W DATE 21 JUL 63 1306 GCT WIRE - DRY 60.9 WET 56.5
WIND DIRECTION 22 VEL 15 KTS BAR 12 SWELL DIRECTION 25 H 04 T 07 CLOUD 00 AMT 09 WEATHER 03

0	16.72	31.969	5.64		0	16.73	31.96	5.65		23.28	461.6	0
10	16.43	32.005	5.73		10	16.44	32.01	5.73		23.38	452.2	.046
20	16.25	32.568	5.73		20	16.25	32.57	5.73		23.85	407.4	.089
30	15.83	32.650	5.88		30	15.83	32.65	5.89		24.01	392.6	.129
50	13.08	32.716	6.58		50	13.08	32.72	6.58		24.64	333.0	.201
76	10.15	32.914	5.55		75	10.24	32.90	5.61		25.30	270.1	.277
104	8.72	33.362	4.34		100	8.85	33.29	4.51		25.83	219.8	.338
154	8.06	33.889	3.01		150	8.07	33.86	3.08		26.40	167.1	.434
210	7.28	33.966	2.60		200	7.41	33.94	2.63		26.56	152.5	.514
312	6.33	34.022	1.84		250	6.87	33.99	2.30		26.67	142.6	.588
413	5.48	34.076	1.18		300	6.42	34.02	1.93		26.75	135.3	.658
515	4.95	34.163	.68		400	5.58	34.07	1.26		26.90	122.2	.786
619	4.60	34.255	.42		500	5.01	34.15	.74		27.03	109.8	.902
824	4.11	34.363	.38		600	4.65	34.24	.45		27.14	100.5	1.007
1029	3.50	34.453	.42		700	4.40	34.30	.40		27.22	93.2	1.104
				800	4.16	34.35	.38		27.28	87.6	1.194	
				1000	3.59	34.44	.41		27.41	76.2	1.358	

CH165 43 20.5 N 128 8.0 W DATE 21 JUL 63 1721 GCT WIRE 13 DRY 61.2 WET 59.4
WIND DIRECTION 20 VEL 30 KTS BAR 09 SWELL DIRECTION 22 H 06 T 07 CLOUD 00 AMT 10 WEATHER 20

0	16.51	32.245		0	16.51	32.25		23.55	436.1	0	
10	16.51	32.248		10	16.51	32.25		23.55	436.2	.044	
20	16.34	32.420		20	16.34	32.42		23.72	420.2	.086	
30	15.76	32.576		30	15.76	32.58		23.97	396.6	.127	
49	13.63	32.683		50	13.51	32.69		24.53	343.1	.201	
102	8.73	33.371		75	10.88	33.00		25.26	273.8	.278	
149	7.72	33.826		100	8.86	33.34		25.87	216.5	.340	
201	7.06	33.980		150	7.70	33.83		26.43	164.1	.435	
300	5.87	34.018		200	7.07	33.98		26.63	145.2	.512	
400	5.26	34.090		250	6.43	34.02		26.75	134.6	.582	
502	4.85	34.249		300	5.88	34.02		26.82	127.8	.647	
605	4.54	34.362		400	5.27	34.09		26.95	116.4	.770	
808	4.01	34.362		500	4.86	34.17		27.06	106.5	.881	
1010	3.42	34.449		400	4.55	34.25		27.15	98.8	.984	
1207	2.97	34.509		700	4.29	34.31		27.23	91.8	1.079	
				800	4.03	34.36		27.30	85.7	1.168	
				1000	3.45	34.45		27.43	74.2	1.327	
				1200	2.98	34.51		27.52	65.3	1.467	

OBSERVED					INTERPOLATED					DERIVED						
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	Sx10 ⁶	ΔD				
PH06A	43	0.0 N	126	0 W	DATE 22 JUL 63	0754 GCT	WIRE 20	DRY 61.9	WET 56.9							
WIND DIRECTION 26 VEL 16 KTS	HAR 12 SWELL DIRECTION 26 H 04 T 07 CLOUD - AMT - WEATHER 02															
0	16.72	31.267	5.70		0	16.73	31.27	5.70	22.75	512.2	0					
9	16.75	31.366	5.74		10	16.74	31.39	5.75	22.84	503.8	.051					
19	16.28	31.793	5.88		20	16.14	31.87	5.89	23.34	456.4	.099					
28	14.87	32.451	5.98		30	14.59	32.51	6.05	24.17	377.3	.140					
47	12.55	32.631	6.57		50	12.22	32.63	6.55	24.74	323.3	.211					
72	10.26	32.664	5.93		75	10.09	32.72	5.77	25.18	281.4	.286					
98	9.19	33.197	4.50		100	9.13	33.23	4.43	25.74	229.0	.350					
145	8.30	33.712	3.36		150	8.24	33.74	3.29	26.28	178.3	.452					
196	7.75	33.915	2.83		200	7.70	33.92	2.80	26.50	158.1	.536					
290	6.53	33.988	2.26		250	7.05	33.98	2.49	26.64	145.4	.612					
382	5.59	34.034	1.33		300	6.41	33.99	2.15	26.73	136.9	.682					
475	5.16	34.108	.93		400	5.48	34.05	1.23	26.89	122.6	.812					
570	4.78	34.169	.64		500	5.05	34.12	.84	27.00	112.2	.929					
761	4.22	34.302	.38		600	4.68	34.19	.58	27.10	104.3	1.037					
962	3.76	34.402	.31		700	4.38	34.26	.43	27.19	96.2	1.138					
					800	4.12	34.32	.35	27.26	89.2	1.230					
PH045	43	0.0 N	125	29.0 W	DATE 22 JUL 63	1300 GCT	WIRE -	DRY 60.5	WET 55.0							
WIND DIRECTION 30 VEL 15 KTS	HAR 15 SWELL DIRECTION 28 H 04 T 07 CLOUD 08 AMT 01 WEATHER 02															
0	15.46	31.615			0	15.46	31.62		23.30	459.8	0					
10	14.95	31.716			10	14.95	31.72		23.48	442.2	.045					
20	13.12	32.040			20	13.13	32.04		24.11	382.8	.086					
30	10.83	32.412			30	10.83	32.42		24.82	315.0	.121					
49	9.31	32.735			50	9.26	32.76		25.35	264.7	.179					
75	8.59	33.417			75	8.59	33.42		25.97	206.1	.238					
102	8.23	33.668			100	8.25	33.66		26.21	183.9	.287					
150	7.70	33.870			150	7.70	33.88		26.46	160.9	.373					
205	7.18	33.964			200	7.22	33.96		26.59	148.7	.450					
304	6.46	34.024			250	6.83	34.00		26.68	141.2	.523					
405	5.86	34.110			300	6.49	34.02		26.75	135.7	.592					
507	5.31	34.170			400	5.89	34.11		26.89	123.3	.721					
610	4.82	34.242			500	5.35	34.17		27.00	112.6	.839					
815	4.18	34.352			600	4.86	34.24		27.11	103.3	.947					
1019	3.65	34.421			700	4.50	34.30		27.20	95.2	1.046					
					800	4.22	34.35		27.27	88.8	1.138					
					1000	3.69	34.42		27.38	79.2	1.306					
PH025	43	0.0 N	125	1.5 W	DATE 22 JUL 63	1738 GCT	WIRE 02	DRY 60.7	WET 55.2							
WIND DIRECTION 35 VEL 10 KTS	HAR 17 SWELL DIRECTION 28 H 06 T 08 CLOUD - AMT 04 WEATHER 02															
0	15.80	31.475			0	15.80	31.48		23.12	477.2	0					
10	12.16	32.184			10	12.16	32.19		24.40	354.4	.042					
20	9.42	32.590			20	9.42	32.59		25.20	279.1	.073					
30	8.64	32.831			30	8.64	32.84		25.51	249.7	.100					
50	8.62	33.447			50	8.63	33.45		25.99	204.0	.145					
77	8.21	33.736			75	8.25	33.73		26.26	178.4	.193					
104	7.84	33.889			100	7.89	33.87		26.43	162.9	.235					
154	7.65	34.020			150	7.66	34.02		26.58	149.8	.314					
209	7.16	34.023			200	7.24	34.02		26.64	144.3	.387					
311	6.81	34.078			250	6.99	34.04		26.69	140.0	.458					
413	6.26	34.096			300	6.84	34.07		26.74	136.7	.527					
515	5.67	34.164			400	6.34	34.09		26.82	130.1	.661					
619	5.12	34.217			500	5.76	34.15		26.94	118.8	.785					
824	4.31	34.317			600	5.21	34.21		27.05	109.6	.899					
1027	3.71	34.414			700	4.77	34.26		27.14	101.3	1.004					
					800	4.41	34.31		27.22	94.0	1.102					
					1000	3.78	34.40		27.36	81.3	1.277					
PH005	43	0.0 N	124	33.5 W	DATE 22 JUL 63	2154 GCT	WIRE 08	DRY 61.5	WET 56.2							
WIND DIRECTION 35 VEL 08 KTS	HAR 16 SWELL DIRECTION 33 H 06 T 07 CLOUD - AMT 04 WEATHER 02															
0	14.51	32.127	7.00		0	14.51	32.13	7.01	23.89	402.9	0					
10	9.81	33.197	5.71		10	9.81	33.14	5.71	25.56	244.5	.032					
20	8.70	33.466	3.73		20	8.70	33.47	3.73	25.99	203.3	.055					
30	8.24	33.636	2.60		30	8.24	33.64	2.60	26.20	184.1	.074					
40	8.07	33.806	2.14		50	8.09	33.84	1.96	26.41	164.4	.109					
50	7.88	33.897	1.96		75	8.25	33.73		26.26	178.4	.152					

OBSERVED						INTERPOLATED						DERIVED					
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ ₁	Sx10 ⁶	A.D.					
RH005	42	0.0 N	124	19.5 W	DATE 23 JUL 63	0509 GCT	WIRE	DRY 54.6	WET 52.0								
WIND DIRECTION	34	VEL 20 KTS	HAR 13	SWELL DIRECTION	30 H 04 T 07	CLOUD	- AMT	- WEATHER	00								
0	11.08	33.615	6.57	.77	0	11.08	33.62	6.57	.78	25.71	229.8	0					
10	11.00	33.621	6.07	.69	10	11.00	33.63	6.07	.70	25.73	228.2	.023					
20	9.23	33.745	4.49	1.70	20	9.23	33.79	4.49	1.71	26.16	187.6	.044					
30	8.26	33.840	2.68	2.30	30	8.26	33.88	2.68	2.30	26.39	166.3	.061					
RH015	42	0.0 N	124	33.0 W	DATE 23 JUL 63	1403 GCT	WIRE 00	DRY 58.0	WET 54.3								
WIND DIRECTION	13	VEL 03 KTS	BAR 12	SWELL DIRECTION	33 H 04 T 08	CLOUD 03	AMT 04	WEATHER	02								
0	13.39	32.761	6.92	.40	0	13.39	32.77	6.93	.40	24.61	334.5	0					
10	10.28	32.739	5.92	.74	10	10.28	32.74	5.93	.75	25.17	281.4	.031					
20	9.93	32.964	5.34	1.24	20	9.93	32.97	5.34	1.24	25.40	259.3	.058					
30	9.59	33.185	4.97	1.17	30	9.59	33.19	4.97	1.17	25.63	237.8	.083					
50	8.85	33.571	4.43	1.66	50	8.85	33.58	4.43	1.67	26.05	198.2	.126					
77	8.66	33.756	4.27	2.26	75	8.66	33.75	4.29	2.23	26.22	182.8	.174					
110	7.95	33.867	2.91	1.93	100	8.22	33.85	3.46	2.15	26.36	169.5	.218					
RH025	42	0.0 N	124	46.2 W	DATE 23 JUL 63	1526 GCT	WIRE 18	DRY 60.7	WET 56.0								
WIND DIRECTION	35	VEL 20 KTS	BAR 13	SWELL DIRECTION	34 H 06 T 07	CLOUD 01	AMT 03	WEATHER	03								
0	15.60	32.539	5.84	.52	0	15.60	32.54	5.84	.52	23.98	395.1	0					
9	15.59	32.515	5.97	.43	10	15.59	32.54	5.97	.43	23.97	395.7	.046					
19	15.57	32.535	6.02	.42	20	15.56	32.54	6.04	.41	23.98	395.3	.079					
28	15.18	32.552	6.15	.39	30	14.74	32.55	6.13	.40	24.17	377.2	.118					
47	10.59	32.633	5.97	.67	50	10.32	32.67	5.92	.76	25.11	288.3	.184					
72	9.60	33.016	5.35	1.44	75	9.45	33.07	5.21	1.50	25.57	244.8	.251					
97	8.45	33.474	4.15	1.81	100	8.41	33.51	4.04	1.84	26.07	197.0	.306					
143	8.34	33.847	2.90	2.16	150	8.30	33.92	2.78	2.20	26.41	166.3	.397					
193	7.97	34.012	2.25	2.34	200	7.92	34.02	2.19	2.32	26.54	153.8	.477					
293	7.16	34.042	1.66	1.94	250	7.52	34.07	1.84	2.14	26.64	145.5	.552					
395	6.18	34.103	1.28	2.08	300	7.09	34.08	1.63	1.95	26.71	139.2	.623					
493	5.30	34.099	.85	3.24	400	6.13	34.10	1.26	2.15	26.85	126.7	.756					
593	4.90	34.198	.52	2.53	500	5.26	34.10	.82	3.19	26.96	116.2	.877					
600	4.87				600	4.87	34.20	.50	2.48	27.09	105.6	.988					
BH035	42	0.1 N	124	59.9 W	DATE 23 JUL 63	1238 GCT	WIRE 10	DRY 60.0	WET 56.0								
WIND DIRECTION	01	VEL 24 KTS	BAR 13	SWELL DIRECTION	29 H 08 T 07	CLOUD 00	AMT 02	WEATHER	02								
0	16.26	32.413	5.67	.26	0	16.26	32.42	5.68	.26	23.73	418.4	0					
10	16.26	32.413	5.70	.26	10	16.26	32.42	5.70	.26	23.73	418.7	.042					
20	16.25	32.423	5.85	.95	20	16.25	32.43	5.85	.96	23.74	418.0	.084					
30	15.50	32.564	5.81	.31	30	15.50	32.56	5.82	.31	24.01	392.7	.124					
49	11.22	32.646	6.70	.50	50	11.12	32.65	6.67	.52	24.96	302.6	.194					
75	9.92	32.891	5.44	.96	75	9.92	32.90	5.44	.97	25.35	265.5	.265					
102	9.11	33.153	4.94	1.12	100	9.16	33.13	4.97	1.11	25.66	236.5	.327					
150	8.07	33.806	3.18	1.94	150	8.07	33.81	3.18	1.95	26.36	170.9	.429					
205	7.41	33.912	2.96	2.38	200	7.45	33.90	2.98	2.36	26.52	156.1	.511					
306	6.62	34.012	1.93	2.37	250	7.03	33.97	2.54	2.38	26.63	146.4	.587					
407	5.66	34.074	1.15	3.01	300	6.66	34.01	2.00	2.38	26.71	139.1	.658					
509	5.13	34.180	.74	3.24	400	5.72	34.07	1.19	2.96	26.88	123.9	.789					
612	4.76	34.218	.70	3.05	500	5.16	34.17	.76	3.24	27.03	110.0	.906					
817	4.14	34.355	.31	2.62	600	4.80	34.21	.70	3.08	27.10	104.0	1.013					
1020	3.56	34.479	.41	3.35	700	4.48	34.28	.53	2.80	27.19	96.4	1.113					
					800	4.19	34.34	.34	2.63	27.27	88.6	1.206					
					1000	3.62	34.43	.38	3.23	27.40	77.0	1.371					
BH045	42	0.5 N	125	10.4 W	DATE 23 JUL 63	2300 GCT	WIRE 13	DRY 63.2	WET 57.9								
WIND DIRECTION	32	VEL 16 KTS	BAR 14	SWELL DIRECTION	32 H 03 T 07	CLOUD 08	AMT 09	WEATHER	03								
0	16.63	32.578	5.64	.36	0	16.63	32.58	5.65	.36	23.77	414.4	0					
10	16.62	32.578	5.57	.36	10	16.63	32.58	5.57	.36	23.78	414.5	.041					
19	16.46	32.609	5.70	.34	20	16.41	32.62	5.72	.34	23.85	407.5	.083					
29	15.60	32.696	5.89	.38	30	15.39	32.69	5.91	.38	24.14	380.3	.122					
48	11.18	32.646	6.05	.47	50	10.93	32.67	6.02	.50	25.00	298.6	.190					
100	6.62	33.376	4.53	1.49	75	8.85	32.97	5.42	.95	25.58	243.8	.258					
149	8.08	33.776	3.32	2.07	100	8.63	33.78	4.54	1.49	25.94	210.0	.314					
203	7.44	33.921	3.01	2.04	150	8.07	33.78	3.31	2.07	26.33	173.1	.410					
299	6.48	34.017	1.00	2.66	200	7.48	33.92	3.02	2.05	26.53	155.3	.492					
					250	6.94	33.99	2.56	2.24	26.66	143.1	.567					
					300	6.47	34.02	1.89	2.67	26.74	135.9	.636					

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
RH065 42 0.2 N 125 40.2 W DATE 24 JUL 63 0814 GCT WTRF 18 DRY 60.7 WET 55.7												
	WIND DIRECTION 20 VEI 02 KTS		HAR 15 SWELL DIRECTION 29 H 01 T 08 CLOUD - AMT - WEATHER 00									
0	16.25	32.171	5.81	.32	0	16.25	32.18	5.82	.32	23.55	435.9	0
9	16.43	32.449	5.85	.31	10	16.41	32.48	5.86	.31	23.74	417.5	.043
19	16.19	32.581	5.94	.31	20	16.18	32.69	5.93	.32	23.96	397.3	.083
29	16.12	32.718	5.85	.38	30	15.98	32.72	5.90	.37	24.02	391.3	.123
48	12.80	32.679	6.08	.24	50	12.53	32.68	6.06	.26	24.72	325.5	.195
74	10.17	32.848	5.86		75	10.10	32.86	5.81	.67	25.29	270.8	.269
100	8.89	33.277	4.56	1.30	100	8.89	33.28	4.56	1.30	25.82	221.4	.331
146	8.00	33.775	3.45	2.06	150	7.95	33.80	3.37	2.06	26.36	170.1	.428
197	7.47	33.950	2.68	2.06	200	7.43	33.95	2.66	2.07	26.56	152.0	.509
289	6.32	33.982	2.26	2.36	250	6.80	33.97	2.38	2.21	26.66	143.1	.583
383	5.57	34.022	1.60		300	6.21	33.98	2.19	2.40	26.75	134.9	.652
476	5.36	34.156	.76	2.95	400	5.52	34.05	1.43	2.73	26.88	123.2	.781
572	4.83	34.215	.46		600	5.23	34.18	.65	2.99	27.02	110.6	.898
865	4.28	34.319	.26	3.34	600	4.78	34.22	.39	3.12	27.11	103.1	1.005
966	3.73	34.407	.47	3.48	700	4.59	34.25	.37	3.23	27.16	99.2	1.106
					800	4.40	34.29	.30	3.31	27.21	95.0	1.203

RH085 42 0.0 N 126 6.6 W DATE 24 JUL 63 1345 GCT WTRF 03 DRY 60.8 WET 57.4

WIND DIRECTION 15 VEI 08 KTS HAR 16 SWELL DIRECTION 29 H 03 T 09 CLOUD 04 AMT 09 WEATHER 01

0	16.50	32.671	5.70	.39	0	16.50	32.68	5.70		23.87	404.8	0
10	16.49	32.667	5.80	.29	10	16.50	32.67	5.81		23.87	405.1	.040
20	16.14	32.699	5.76	.30	20	16.14	32.70	5.77		23.98	395.5	.081
30	16.10	32.696	5.80		30	16.10	32.70	5.81		23.98	395.1	.120
50	12.44	32.663	6.84		50	12.44	32.67	6.84		24.72	325.0	.192
76	9.65	32.846	5.65		75	9.72	32.83	5.72		25.33	266.9	.266
104	8.57	33.385	4.28		100	8.65	33.30	4.46		25.87	216.1	.326
153	7.95	33.830	3.21		150	7.96	33.82	3.24		26.38	168.9	.423
208	7.24	33.950	2.79		200	7.34	33.95	2.83		26.57	151.2	.503
309	6.22	34.007	1.88		250	6.79	33.98	2.40		26.67	141.9	.576
410	5.26	34.138	1.29		300	6.30	34.00	1.96		26.75	134.6	.645
512	4.91	34.234	.73		400	5.34	34.12	1.34		26.97	115.2	.770
615	4.59	34.346	.40		500	4.93	34.22	.79		27.09	103.4	.879
818	4.08		.34		600	4.63	34.33	.43		27.21	93.4	.977
1022	3.56	34.448	.42		700	4.37	34.41	.37		27.31	84.9	1.067
					800	4.12	34.39	.35		27.32	84.2	1.151
					1000	3.62	34.44	.40		27.41	76.3	1.311

RH105 42 0.0 N 126 32.2 W DATE 24 JUL 63 1758 GCT WTRF 04 DRY 60.5 WET 58.2

WIND DIRECTION 15 VEI 12 KTS HAR 17 SWELL DIRECTION 29 H 04 T 09 CLOUD 06 AMT 07 WEATHER 02

0	15.90	32.432	5.86		0	15.90	32.44	5.86		23.83	409.3	0
10	15.59	32.490	5.96		10	15.59	32.50	5.96		23.94	398.8	.040
20	15.24	32.526	6.07		20	15.24	32.53	6.07		24.04	389.0	.080
30	14.42	32.593	6.23		30	14.42	32.60	6.23		24.27	367.6	.118
50	12.64	32.668	6.53		50	12.64	32.67	6.54		24.69	328.3	.187
76	11.50	32.781	6.17		75	11.53	32.77	6.19		24.97	301.4	.266
103	10.22	33.228	5.55		100	10.36	33.17	5.63		25.49	252.5	.335
152	8.24	33.695	3.71		150	8.30	33.68	3.78		26.22	183.7	.444
205	7.55	33.924	2.97		200	7.58	33.91	3.01		26.51	157.3	.529
305	6.30	34.008	1.98		250	6.95	33.99	2.47		26.66	143.4	.605
405	5.59	34.061	1.40		300	6.36	34.00	2.02		26.75	135.4	.674
					400	5.61	34.06	1.42		26.88	123.3	.803

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	σ _t	S x 10 ⁶	ΔD		
RH125 42 0.2 N 126 59.9 W DATE 24 JUL 63 2206 GCT WIRE - DRY 62.9 WET 59.9 WIND DIRECTION 11 VEL 10 KTS BAR 20 SWELL DIRECTION 12 H 02 T 08 CLOUD 00 AMT 08 WEATHER 02														
0	16.78	32.534	5.71		0	16.78	32.54	5.71		23.70	421.0	0		
10	16.48	32.554	5.76		10	16.48	32.56	5.77		23.79	413.2	.042		
20	16.06	32.620	5.94		20	16.06	32.63	5.94		23.93	399.5	.082		
29	14.99	32.613	6.09		30	14.78	32.61	6.13		24.21	373.6	.121		
49	10.90	32.661	6.66		50	10.82	32.66	6.64		25.02	296.9	.188		
75	10.05	32.807	5.78		75	10.05	32.81	5.79		25.26	273.8	.259		
102	9.56	33.337	4.71		100	9.59	33.29	4.79		25.72	231.2	.322		
151	8.33	33.787	3.74		150	8.35	33.78	3.26		26.29	177.1	.424		
206	7.56	33.969	2.43		200	7.63	33.96	2.49		26.54	154.2	.507		
307	6.28	33.998	2.04		250	6.96	33.98	2.19		26.65	144.2	.582		
407	5.58	34.056	1.31		300	6.36	34.00	2.05		26.74	136.0	.652		
508	5.03	34.129	.88		400	5.62	34.05	1.36		26.88	124.0	.782		
610	4.61	34.187	.64		500	5.07	34.12	.90		27.00	112.4	.900		
812	3.96	34.348	.31		600	4.65	34.18	.66		27.09	104.7	1.008		
1015	3.46	34.443	.36		700	4.30	34.26	.46		27.19	95.4	1.108		
					800	3.99	34.34	.32		27.29	86.7	1.199		
					1000	3.49	34.44	.34		27.42	75.2	1.361		
RH145 42 0.0 N 127 26.6 W DATE 25 JUL 63 1834 GCT WIRE - DRY 62.2 WET 56.7 WIND DIRECTION 02 VEL 28 KTS BAR 25 SWELL DIRECTION 34 H 07 T 06 CLOUD 08 AMT 05 WEATHER 03														
0	16.54	32.450	5.87		0	16.54	32.46	5.88		23.70	421.8	0		
10	16.53	32.443	5.88		10	16.53	32.45	5.89		23.69	422.4	.042		
20	16.52	32.442	5.88		20	16.52	32.45	5.89		23.69	422.5	.084		
30	16.36	32.474	6.65		30	16.36	32.48	6.66		23.76	416.9	.126		
49	12.54	32.688	6.75		50	12.40	32.70	6.71		24.75	322.0	.200		
76	9.90	32.979	5.48		75	9.96	32.97	5.54		25.40	260.7	.273		
103	8.46	33.361	4.59		100	8.57	33.32	4.68		25.89	213.9	.332		
152	7.80	33.873	3.11		150	7.80	33.86	3.16		26.43	163.5	.427		
207	7.21	33.974	2.53		200	7.28	33.96	2.57		26.59	149.4	.505		
305	6.02	34.007	2.12		250	6.66	34.00	2.34		26.70	139.1	.577		
403	5.45	34.000	1.14		300	6.08	34.01	2.14		26.79	131.5	.645		
501	4.88	34.144	.74		400	5.46	34.09	1.17		26.92	119.4	.770		
601	4.55	34.214	.60		500	4.89	34.14	.74		27.04	108.7	.884		
799	3.90	34.340	.38		600	4.55	34.21	.60		27.13	101.2	.989		
1000	3.51	34.452	.39		700	4.21	34.28	.47		27.22	92.9	1.086		
					800	3.90	34.34	.38		27.30	85.4	1.175		
					1000	3.51	34.45	.39		27.43	74.4	1.355		
RH165 42 0.0 N 127 52.8 W DATE 25 JUL 63 1435 GCT WIRE 08 DRY 62.3 WET 56.9 WIND DIRECTION 02 VEL 30 KTS BAR 26 SWELL DIRECTION 33 H 07 T 06 CLOUD 08 AMT 03 WEATHER 02														
0	16.51	32.496	5.71		0	16.51	32.50	5.71		23.74	417.8	0		
10	16.51	32.472	5.70		10	16.51	32.48	5.70		23.72	419.8	.042		
20	16.60	32.476	5.71		20	16.60	32.48	5.71		23.70	421.8	.084		
30	16.48	32.487	5.69		30	16.48	32.49	5.69		23.74	418.6	.126		
50	16.39	32.513	5.74		50	16.40	32.52	5.74		23.78	415.2	.209		
77	10.88	32.677	6.57		75	11.34	32.66	6.53		24.92	306.7	.300		
104	8.47	33.151	5.00		100	8.68	33.07	5.30		25.69	233.7	.367		
154	7.97	33.824	2.99		150	8.01	33.78	3.11		26.34	171.9	.468		
209	7.32	33.978	2.26		200	7.43	33.98	2.31		26.58	150.2	.549		
311	6.15	34.019	1.84		250	6.84	34.01	2.03		26.69	140.3	.622		
411	5.19		1.21		300	6.27	34.01	1.86		26.77	133.5	.690		
513	4.76		.63		400	5.28	34.08	1.28		26.94	117.9	.816		
616	4.51	34.233	.41		500	4.79	34.15	.69		27.05	107.4	.928		
819	3.91		.31		600	4.54	34.22	.43		27.14	100.5	1.032		
1011	3.41	34.429	.38		700	4.27	34.28	.33		27.21	93.3	1.129		
					800	3.97	34.34	.32		27.29	86.6	1.219		
					1000	3.44	34.42	.37		27.41	75.6	1.381		

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	δ × 10 ⁵	Δ D	
D-NH40	44 38.0 N 124 10.0 W	DATE 07 AUG 63	0212 GCT	WTRE	DRY	62.0	WET	57.8					
WIND DIRECTION 01 VEL 5 KTS	HAR 21 SWELL DIRECTION 01 H	3 T	- CLOUD	6 AMT	6 WEATHER	02							
0 16.71 28.962				0 16.71 28.97				20.99	680.5	0			
29 10.98 32.569				10 12.00 32.54				24.70	325.8	.050			
49 9.91 32.604				20 11.46 32.55				24.82	315.4	.082			
147 7.41 33.946				30 10.90 32.59				24.95	302.9	.113			
197 7.25 33.983				50 7.87 32.62				25.14	284.8	.172			
246 7.14 34.020				75 4.84 32.95				25.56	245.6	.238			
296 6.97 34.028				100 8.14 33.29				25.93	210.1	.295			
				150 7.39 33.95				26.57	150.6	.385			
				200 7.24 33.99				26.61	147.0	.460			
				250 7.13 34.02				26.66	143.5	.532			
				300 6.96 34.04				26.69	140.7	.603			
D-NH23	44 38.0 N 124 36.0 W	DATE 06 AUG 63	2122 GCT	WTRE 29	DRY	59.1	WET	56.0					
WIND DIRECTION 03 VEL 4 KTS	HAR 21 SWELL DIRECTION 32 H	3 T	- CLOUD	6 AMT	2 WEATHER	02							
0 13.02 31.712				0 13.02 31.72				23.88	404.6	0			
8 11.89 31.993				10 11.81 32.02				24.34	360.5	.038			
17 11.46 32.109				20 10.91 32.19				24.63	332.8	.073			
26 9.72 32.373				30 9.30 32.48				25.12	286.1	.104			
44 8.51 32.795				50 8.33 32.91				25.61	239.7	.156			
89 7.99 33.509				75 8.15 33.33				25.97	206.5	.212			
137 7.62 33.904				100 7.91 33.63				26.24	181.2	.261			
184 6.99 34.003				150 7.47 33.95				26.56	151.3	.344			
D-N40A	44 29.0 N 125 10.0 W	DATE 07 AUG 63	1939 GCT	WTRE 0	DRY	0	WET	0					
WIND DIRECTION 00 VEL 5 KTS	HAR 22 SWELL DIRECTION 35 H	4 T	- CLOUD	6 AMT	8 WEATHER	02							
0 15.69 30.721				0 15.69 30.73				22.56	530.1	0			
10 15.27 31.920				10 15.27 31.92				23.57	433.8	.048			
20 11.04 32.473				20 11.04 32.48				24.83	313.8	.086			
30 10.42 32.555				30 10.42 32.56				25.00	297.6	.116			
50 9.42 32.828				50 9.42 32.83				25.38	261.9	.172			
100 8.31 33.653				75 8.71 33.27				25.83	219.4	.232			
150 7.75 33.882				100 8.31 33.66				26.20	184.9	.283			
200 7.15 33.977				150 7.76 33.89				26.46	160.7	.369			
250 6.81 34.001				200 7.16 33.98				26.62	146.1	.446			
300 6.62 34.056				250 6.82 34.01				26.69	140.5	.517			
				300 6.62 34.05				26.75	135.1	.586			
NH 23A	44 38.0 N 124 6.0 W	DATE 08 AUG 63	0919 GCT	WTRE 30	DRY	59.0	WET	56.0					
WIND DIRECTION 35 VEL 2 KTS	HAR 17 SWELL DIRECTION 32 H	4 T	- CLOUD	- AMT	0 WEATHER	01							
0 11.94 32.018				0 11.94 32.02				24.32	362.5	0			
8 11.94 32.024				10 11.75 32.05				24.38	357.1	.036			
17 10.81 32.215				20 10.31 32.31				24.83	314.3	.070			
26 9.38 32.400				30 9.12 32.56				25.22	276.9	.099			
44 8.81 32.785				50 8.59 32.93				25.59	241.9	.151			
69 7.97 33.407				75 7.87 33.52				26.16	188.3	.205			
94 7.65 33.707				100 7.59 33.84				26.45	161.2	.248			
142 7.25 33.952				150 7.19 33.97				26.61	146.8	.325			
194 6.77 34.015				200 7.16 33.98				26.62	146.1	.399			
NH 23B	44 38.0 N 124 38.0 W	DATE 08 AUG 63	1023 GCT	WTRE 0	DRY	58.0	WET	56.0					
WIND DIRECTION 01 VEL 2 KTS	HAR 17 SWELL DIRECTION 35 H	4 T	- CLOUD	- AMT	0 WEATHER	-							
0 11.66 32.061				0 11.66 32.07				24.40	354.5	0			
10 11.56 32.073				10 11.56 32.08				24.43	352.0	.035			
20 9.78 32.462				20 9.78 32.45				25.02	295.6	.068			
30 9.24 32.549				30 9.25 32.55				25.19	279.7	.096			
50 8.41 33.038				50 8.41 33.04				25.70	231.3	.148			
77 8.616				75 7.86 33.58				26.21	183.9	.199			
105 7.56 33.846				100 7.58 33.84				26.45	161.2	.243			
155 7.14 33.959				150 7.21 33.95				26.59	148.5	.320			
210 6.67 34.041				200 6.77 34.03				26.71	137.5	.391			

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ≡	Z	T	S	O ₂	PO ₄ ≡	σ _t	δ × 10 ⁶	Δ D		
NH 23C 44 38.0 N 124 38.0 W DATE 08 AUG 63 1132 GCT WIRE - DRY 58.0 WET 56.2 WIND DIRECTION 00 VEL 2 KTS BAR 17 SWELL DIRECTION 35 H 3 T - CLOUD - AMT 0 WEATHER -														
0	11.74	32.041			0	11.74	32.07			24.39	355.9	0		
10	11.67	32.118			10	11.67	32.12			24.44	350.6	.035		
20	9.76	32.426			20	9.76	32.43			25.01	296.5	.068		
30	9.36	32.539			30	9.36	32.54			25.17	282.1	.097		
50	8.46	32.899			50	8.46	32.90			25.59	242.3	.149		
77	7.92	33.507			75	7.94	33.46			26.10	193.6	.204		
105	7.61	33.866			100	7.65	33.82			26.42	163.5	.248		
155	7.19	33.954			150	7.23	33.95			26.58	149.1	.326		
210	6.69	34.041			200	6.78	34.03			26.71	137.9	.398		
NH 23D 44 38.0 N 124 38.0 W DATE 08 AUG 63 1221 GCT WIRE 8 DRY 57.4 WFT 55.8 WIND DIRECTION 00 VEL 2 KTS BAR 17 SWELL DIRECTION 35 H 4 T - CLOUD 6 AMT 3 WEATHER -														
0	11.13	32.190			0	11.13	32.19			24.60	335.9	0		
10	11.02	32.214			10	11.02	32.22			24.64	332.4	.033		
19	9.82	32.459			20	9.77	32.47			25.04	293.7	.065		
29	9.59	32.550			30	9.55	32.56			25.15	283.5	.094		
49	8.62	32.884			50	8.58	32.91			25.57	243.6	.146		
75	7.90	33.509			75	7.91	33.51			26.15	189.4	.200		
103	7.61	33.807			100	7.63	33.79			26.40	165.5	.245		
152	7.31	33.947			150	7.32	33.95			26.57	150.3	.324		
207	6.70	34.046			200	6.79	34.04			26.71	137.2	.395		
NH 23E 44 38.0 N 124 38.0 W DATE 08 AUG 63 1355 GCT WIRE 11 DRY 56.1 WET 55.5 WIND DIRECTION 00 VEL 2 KTS HAR 17 SWELL DIRECTION 34 H 4 T 5 CLOUD X AMT 9 WEATHER -														
0	11.55	32.239			0	11.55	32.24			24.56	339.4	0		
10	11.39	32.263			10	11.39	32.26			24.60	335.8	.034		
19	10.50	32.262			20	10.38	32.29			24.80	317.0	.066		
29	9.42	32.547			30	9.36	32.56			25.18	280.8	.096		
49	8.77	32.798			50	8.73	32.82			25.48	252.2	.150		
75	7.94	33.445			75	7.94	33.47			26.11	193.2	.205		
103	7.73	33.766			100	7.74	33.75			26.36	170.0	.251		
152	7.27	33.929			150	7.29	33.93			26.56	151.2	.331		
207	6.73	34.022			200	6.80	34.02			26.70	138.9	.403		
NH 23F 44 38.0 N 124 38.0 W DATE 08 AUG 63 1525 GCT WIRE 02 DRY 55.8 WET 55.0 WIND DIRECTION 00 VEL 2 KTS HAR 17 SWELL DIRECTION 34 H 4 T 5 CLOUD X AMT 9 WEATHER -														
0	11.74	32.123			0	11.74	32.13			24.44	351.3	0		
10	11.00	32.251			10	11.00	32.26			24.67	329.4	.034		
19	9.35	32.443			20	9.35	32.45			25.09	288.9	.065		
30	9.11	32.505			30	9.11	32.60			25.25	274.2	.093		
50	8.52	33.137			50	8.52	33.14			25.76	225.5	.143		
77	7.96	33.454			75	7.99	33.44			26.08	196.1	.196		
105	7.72	33.712			100	7.75	33.67			26.29	175.9	.242		
155	7.19	33.977			150	7.24	33.96			26.59	148.2	.323		
210	6.68	34.048			200	6.77	34.04			26.72	137.0	.394		
NH 23G 44 38.0 N 124 38.0 W DATE 08 AUG 63 1657 GCT WIRE - DRY 58.0 WET 55.6 WIND DIRECTION 00 VEL 2 KTS HAR 17 SWELL DIRECTION 34 H 4 T 5 CLOUD X AMT 9 WEATHER -														
0	11.82	32.075			0	11.82	32.08			24.38	356.2	0		
10	11.57	32.167			10	11.57	32.17			24.50	345.3	.035		
20	10.03	32.425			20	10.03	32.43			24.97	300.8	.067		
30	9.20	32.493			30	9.20	32.50			25.16	283.1	.097		
50	8.81	32.466			50	8.81	32.47			25.20	279.6	.153		
77	7.96	33.504			75	8.02	33.42			26.06	198.2	.213		
105	7.55	33.884			100	7.61	33.85			26.46	160.6	.257		
155	6.83	34.011			150	6.89	34.00			26.67	140.6	.333		
210	6.68	34.041			200	6.71	34.04			26.73	136.1	.402		

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D		
NH 23H	44 38.0 N 124 38.0 W	DATE 04 AUG 63 1925 GCT	WTRF 3	DRY 58.0 WET 56.0	WIND DIRECTION 34 VEL 2 KTS BAR 17 SWELL DIRECTION 34 H 5 T - CLOUD X AMT 9 WEATHER 10									
0	12.42	31.932			0	12.42	31.94			24.16	377.4	0		
10	11.73	32.123			10	11.73	32.13			24.44	351.3	.036		
20	9.46	32.460			20	9.46	32.44			25.07	290.8	.069		
30	8.98	32.673			30	8.98	32.68			25.33	266.4	.096		
50	8.53	33.027			50	8.53	33.10			25.73	228.6	.146		
77	7.96	33.520			75	8.00	33.49			26.12	192.4	.199		
105	7.32	33.920			100	7.43	33.88			26.50	156.2	.242		
155	6.49	34.019			150	6.91	34.01			26.68	139.9	.316		
210	6.72	34.036			200	6.73	34.03			26.72	136.6	.385		
NH 23I	44 38.0 N 124 38.0 W	DATE 08 AUG 63 1955 GCT	WTRF 0	DRY 58.0 WET 56.0	WIND DIRECTION 34 VEL 2 KTS BAR 17 SWELL DIRECTION 34 H 5 T - CLOUD X AMT 9 WEATHER 10									
0	12.54	31.907			0	12.54	31.91			24.12	381.5	0		
10	12.33	31.959			10	12.33	31.96			24.20	374.0	.038		
20	9.99	32.419			20	9.99	32.42			24.97	300.6	.071		
30	9.35	32.625			30	9.35	32.63			25.24	275.6	.100		
50	8.37	33.155			50	8.38	33.16			25.80	222.0	.150		
77	7.82	33.603			75	7.85	33.58			26.21	183.9	.201		
105	7.16	33.971			100	7.27	33.92			26.56	150.9	.243		
155	6.87	34.030			150	6.87	34.02			26.69	138.4	.315		
210	6.71	34.049			200	6.73	34.05			26.73	135.6	.383		
NH 23J	44 38.0 N 124 38.0 W	DATE 09 AUG 63 2130 GCT	WTRF 0	DRY 58.7 WET 57.0	WIND DIRECTION 34 VEL 2 KTS BAR 16 SWELL DIRECTION 32 H 3 T - CLOUD 6 AMT 4 WEATHER 01									
0	13.50	31.724			0	13.50	31.73			23.79	412.8	0		
10	11.83	32.065			10	11.83	32.07			24.37	357.3	.039		
20	9.84	32.459			20	9.84	32.46			25.03	295.4	.071		
30	9.29	32.610			30	9.29	32.61			25.23	275.8	.100		
50	8.47	32.822			50	8.47	32.84			25.57	243.7	.152		
77	8.21	33.282			75	8.22	33.25			25.90	213.2	.209		
105	7.77	33.624			100	7.85	33.57			26.20	184.9	.258		
155	7.04	33.991			150	7.10	33.97			26.62	145.6	.341		
210	6.94	34.011			200	6.96	34.01			26.67	141.6	.413		
NH 23K	44 38.0 N 124 38.0 W	DATE 08 AUG 63 2300 GCT	WTRF 33	DRY 60.0 WET 57.9	WIND DIRECTION 00 VEL 2 KTS BAR 15 SWELL DIRECTION 32 H 5 T - CLOUD 6 AMT 4 WEATHER 02									
0	13.90	31.720			0	13.90	31.73			23.71	420.8	0		
8	11.75	32.030			10	11.19	32.12			24.53	342.4	.038		
17	9.67	32.395			20	9.49	32.44			25.07	291.5	.070		
26	9.41	32.490			30	9.24	32.54			25.18	280.6	.098		
44	8.63	32.738			50	8.46	32.85			25.55	246.3	.151		
69	8.04	33.233			75	7.91	33.37			26.03	200.5	.207		
94	7.56	33.735			100	7.50	33.79			26.42	163.4	.252		
142	7.23	33.941			150	7.17	33.96			26.60	147.1	.330		
194	6.93	34.009			200	6.96	34.01			26.67	141.6	.402		
NH 23L	44 38.0 N 124 38.0 W	DATE 09 AUG 63 0025 GCT	WTRF 17	DRY 60.0 WET 58.2	WIND DIRECTION 00 VEL 2 KTS BAR 16 SWELL DIRECTION 34 H 5 T - CLOUD 2 AMT 6 WEATHER 03									
0	13.90	31.662			0	13.90	31.67			23.66	425.0	0		
9	10.51	32.257			10	10.34	32.24			24.81	315.7	.037		
18	9.67	32.478			20	9.59	32.51			25.10	288.1	.067		
27	9.41	32.605			30	9.29	32.67			25.28	271.6	.095		
46	8.63	33.033			50	8.52	33.09			25.73	229.0	.145		
72	8.04	33.386			75	7.98	33.44			26.08	196.0	.198		
99	7.56	33.824			100	7.55	33.83			26.45	161.2	.243		
148	7.23	33.955			150	7.23	33.99			26.59	148.0	.320		
201	6.93	34.010			200	6.95	34.02			26.64	139.3	.392		

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	S × 10 ³	ΔD		
NH 23M	44 38.0 N	124 38.0 W	DATE 09 AUG 63	0155 GCT	WIRE 01	DRY 61.8	WET 58.8							
WIND DIRECTION 00 VEL 3 KTS	BAR 16 SWELL DIRECTION 33 H	4 T 5 CLOUD 1 AMT	6 WEATHER 02											
0 13.62	31.717				0 13.63	31.72				23.76	415.6		0	
10 9.97	32.323				10 9.97	32.33				24.90	307.3	.036		
20 9.73	32.510				20 9.73	32.51				25.08	289.8	.066		
30 9.27	32.608				30 9.27	32.61				25.23	275.6	.094		
50 8.44	32.939				50 8.44	32.94				25.62	239.1	.146		
77 8.10	33.371				75 8.11	33.34				25.98	205.3	.201		
105 7.59	33.835				100 7.68	33.76				26.37	168.2	.248		
155 7.13	33.976				150 7.16	33.96				26.61	146.9	.327		
210 6.88	34.024				200 6.91	34.02				26.69	139.6	.398		
NH 23N	44 38.0 N	124 38.0 W	DATE 09 AUG 63	0326 GCT	WIRE 11	DRY 58.9	WET 57.0							
WIND DIRECTION 35 VEL 3 KTS	BAR 15 SWELL DIRECTION 32 H	4 T 5 CLOUD 2 AMT	6 WEATHER 02											
0 13.11	31.904				0 13.11	31.91				24.01	392.2		0	
10 10.07	32.300				10 10.07	32.30				24.86	310.6	.035		
19 9.65	32.483				20 9.61	32.50				25.09	288.9	.065		
29 9.30	32.650				30 9.26	32.66				25.28	271.6	.093		
49 8.46	32.915				50 8.44	32.93				25.61	239.7	.144		
75 8.02	33.421				75 8.02	33.43				26.06	197.6	.199		
103 7.51	33.863				100 7.56	33.82				26.44	161.9	.244		
152 6.98	34.011				150 6.99	34.00				26.66	141.5	.320		
207 6.88	34.022				200 6.89	34.02				26.69	139.7	.390		
NH 23C	44 38.0 N	124 38.0 W	DATE 09 AUG 63	0456 GCT	WIRE 25	DRY 58.4	WET 56.5							
WIND DIRECTION - VEL - KTS	BAR - SWELL DIRECTION - H - T - CLOUD - AMT - WEATHER	-												
0 12.07	32.138				0 12.07	32.14				24.39	356.0		0	
8 11.05	32.257				10 10.69	32.30				24.76	320.7	.034		
17 9.54	32.473				20 9.31	32.54				25.17	281.2	.064		
26 9.04	32.644				30 8.88	32.70				25.36	263.5	.091		
44 8.48	32.771				50 8.37	32.84				25.56	245.3	.142		
69 8.26	33.203				75 8.02	33.43				26.06	197.6	.197		
NH 23P	44 38.0 N	124 38.0 W	DATE 09 AUG 63	0626 GCT	WIRE 6	DRY 58.5	WET 56.5							
WIND DIRECTION 00 VEL 3 KTS	BAR 16 SWELL DIRECTION 32 H	3 T - CLOUD 8 AMT 4 WEATHER 02												
0 11.83	32.181				0 11.83	32.19				24.46	348.6		0	
10 9.93	32.316				10 9.93	32.32				24.90	307.2	.033		
20 9.52	32.546				20 9.52	32.55				25.15	283.9	.062		
30 8.99	32.681				30 8.99	32.69				25.34	266.0	.090		
49 8.42	32.938				50 8.40	32.96				25.64	237.3	.140		
76 7.93	33.513				75 7.95	33.49				26.12	191.7	.194		
103 7.35	33.924				100 7.41	33.89				26.51	155.0	.237		
153 6.90	34.003				150 6.91	34.00				26.67	140.9	.311		
208 6.77	34.026				200 6.79	34.02				26.70	138.2	.381		
NH 23Q	44 38.0 N	124 38.0 W	DATE 09 AUG 63	0755 GCT	WIRE 12	DRY 58.5	WET 56.5							
WIND DIRECTION 30 VEL 2 KTS	BAR 16 SWELL DIRECTION 35 H	4 T - CLOUD 6 AMT 5 WEATHER 02												
0 11.84	32.100				0 11.84	32.19				24.47	348.1		0	
10 11.20	32.283				10 11.20	32.29				24.66	330.4	.034		
19 9.47	32.385				20 9.39	32.41				25.06	292.3	.065		
29 9.00	32.656				30 8.96	32.68				25.34	265.8	.093		
49 8.44	33.124				50 8.42	33.14				25.78	223.9	.142		
75 8.09	33.568				75 8.09	33.57				26.17	187.7	.193		
103 7.58	33.882				100 7.63	33.86				26.46	160.5	.237		
152 7.00	33.902				150 7.02	33.99				26.65	143.1	.313		
207 6.78	34.021				200 6.78	34.02				26.70	138.5	.383		

OBSERVED					INTERPOLATED				DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁸	Δ D

NH 23R 44 38.0 N 124 38.0 W DATE 09 AUG 63 0920 GCT WIRE 18 DRY 57.3 WET 55.9
WIND DIRECTION 34 VEL 2 KTS BAR 17 SWELL DIRECTION 35 H 4 T - CLOUD 6 AMT 8 WEATHER 02

0	11.73	32.162			0	11.73	32.17			24.47	348.2	0
9	11.40	32.203			10	11.18	32.30			24.67	329.2	.034
18	9.41	32.444			20	9.25	32.50			25.15	283.8	.065
27	9.02	32.686			30	8.91	32.75			25.40	260.1	.092
46	8.39	33.046			50	8.29	33.14			25.80	222.0	.140
72	7.45	33.631			75	7.80	33.67			26.29	176.2	.190
99	7.47	33.887			100	7.46	33.89			26.51	155.4	.231
148	6.26	33.996			150	6.95	34.00			26.66	141.3	.305
201	6.83	34.014			200	6.83	34.01			26.69	139.4	.375

CH 005 43 20.5 N 124 28.5 W DATE 11 SEP 63 0350 GCT WIRE 02 DRY 60.0 WET 58.0
WIND DIRECTION 11 VEL 02 KTS BAR 12 SWELL DIRECTION 22 H 02 T - CLOUD 04 AMT 07 WEATHER 00

0	13.28	33.098	7.07		0	13.28	33.10	7.07		24.89	307.6	0
10	11.49	33.035	6.48		10	11.49	33.04	6.48		25.19	279.8	.029
20	10.08	33.132	5.56		20	10.08	33.14	5.57		25.51	249.3	.056
31	9.14	33.286	4.14		30	9.20	33.27	4.26		25.76	225.7	.080
52	8.92	33.674	3.77		50	8.94	33.64	3.81		26.09	194.8	.122
77	8.70	33.846	2.94		75	8.72	33.84	3.02		26.28	176.6	.168

CH 015 43 20.0 N 124 43.1 W DATE 11 SEP 63 0600 GCT WIRE 03 DRY 61.0 WET 59.0
WIND DIRECTION - VEL KTS BAR 11 SWELL DIRECTION 22 H 02 T 06 CLOUD 04 AMT 04 WEATHER 02

0	15.61	32.147	6.22		0	15.61	32.15	6.22		23.67	424.0	0
10	12.04	32.355	6.59		10	12.04	32.36	6.59		24.56	339.7	.038
20	10.00	32.549	5.95		20	10.00	32.55	5.95		25.07	291.2	.070
30	9.94	32.686	5.53		30	9.94	32.69	5.54		25.19	280.2	.098
50	8.86	33.071	4.54		50	8.84	33.08	4.54		25.66	235.1	.150
75	8.59	33.689	3.63		75	8.59	33.69	3.64		26.19	186.0	.202
108	8.28	33.873	3.15		100	8.35	33.87	3.23		26.36	170.0	.247
158	8.04	33.967	2.35		150	8.06	33.96	2.46		26.48	159.6	.329
215	7.92	33.995	2.21		200	7.94	33.99	2.25		26.51	156.6	.408

CH 025 43 20.5 N 124 55.1 W DATE 11 SEP 63 0906 GCT WIRE 01 DRY 61.3 WET 59.0
WIND DIRECTION 31 VEL 03 KTS BAR 12 SWELL DIRECTION - H 01 T 06 CLOUD 04 AMT 04 WEATHER 02

0	15.40	32.223	6.40		0	15.40	32.23	6.41		23.78	414.1	0
10	13.45	32.303	6.63		10	13.45	32.31	6.64		24.25	369.5	.039
20	10.74	32.590	6.44		20	10.74	32.59	6.44		24.98	300.1	.073
31	10.37	32.750	5.94		30	10.40	32.74	5.99		25.15	284.1	.102
50	9.79	33.697	4.96		50	9.79	33.18	4.96		25.59	242.3	.154
76	8.64	33.697	3.75		75	8.68	33.68	3.79		26.16	188.4	.208
107	8.13	33.823	3.14		100	8.20	33.81	3.23		26.34	171.6	.253
157	7.70	33.960	2.64		150	7.75	33.95	2.68		26.51	156.2	.335
214	7.23	33.995	2.44		200	7.34	33.99	2.47		26.60	147.9	.411
317	6.37	34.021	2.20		250	6.91	34.01	2.39		26.67	141.8	.484
423	5.81	34.069	1.23		300	5.50	34.02	2.26		26.74	136.2	.553
529	5.45	34.144	.84		400	5.91	34.06	1.45		26.85	127.3	.685
636	4.82	34.217	.48		500	5.55	34.12	.92		26.94	118.5	.808
					600	5.06	34.19	.60		27.06	108.8	.921

CH 035 43 20.9 N 125 10.3 W DATE 11 SEP 63 1557 GCT WIRE - DRY 61.0 WET 59.0
WIND DIRECTION 14 VEL 05 KTS BAR 10 SWELL DIRECTION 19 H 03 T 06 CLOUD 09 AMT 09 WEATHER 02

0	15.13	32.169	6.15		0	15.13	32.17	6.16		23.79	412.4	0
10	14.56	32.510	6.41		10	14.56	32.51	6.42		24.18	376.1	.039
20	12.52	33.082	6.14		20	12.52	33.09	6.15		25.03	295.0	.073
31	10.85	33.434	5.12		30	10.98	33.41	5.22		25.57	243.9	.100
51	9.13	33.692	4.08		50	9.18	33.63	4.11		26.04	199.2	.144
77	8.38	33.776	3.38		75	8.40	33.77	3.42		26.27	177.6	.191
108	8.11	33.873	2.96		100	8.15	33.85	3.04		26.38	167.9	.234
159	7.66	33.927	2.64		150	7.75	33.92	2.68		26.49	158.0	.316
215	6.99	33.996	2.13		200	7.17	33.98	2.27		26.62	146.6	.392
316	6.26	34.077	1.38		250	6.69	34.03	1.83		26.72	137.0	.463
422	5.82	34.107	1.06		300	6.35	34.07	1.48		26.80	130.5	.530
527	5.17	34.156	.62		400	5.91	34.10	1.11		26.88	123.8	.657
632	4.50	34.229	.38		500	5.35	34.14	.73		26.94	114.5	.776
837	4.00	34.375	.29		600	4.69	34.21	.44		27.11	103.4	.885
1036	3.48	34.426	.38		700	4.28	34.28	.31		27.21	93.5	.983
					800	4.05	34.35	.31		27.29	86.4	1.073
					900	3.58	34.43	.35		27.40	76.7	1.236

OBSERVED					INTERPOLATED					DERIVED		
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	S × 10 ⁶	A D

CH 045 43 20.4 N 125 24.7 W DATE 11 SEP 63 1915 GCT WIRE 06 DRY 63.0 WET 60.3
WIND DIRECTION 13 VEL 10 KTS BAR 11 SWELL DIRECTION - H 05 T 09 CLOUD 03 AMT 08 WEATHER 01

0	17.49	31.827	5.75		0	17.50	31.83	5.76	23.00	488.4	0
10	14.99	31.965	6.38		10	14.99	31.97	6.39	23.67	424.7	.046
20	9.19	32.537	5.30		20	9.19	32.54	5.31	25.19	279.5	.081
30	8.81	32.803	4.73		30	8.84	32.79	4.76	25.44	256.3	.108
50	8.71	33.201	4.21		50	8.71	33.21	4.21	25.79	223.6	.156
77	8.77	33.766	3.76		75	8.77	33.73	3.79	26.19	185.7	.207
108	8.31	33.861	3.27		100	8.46	33.84	3.39	26.32	173.7	.252
159	7.58	33.952	2.48		150	7.69	33.94	2.61	26.51	156.0	.334
216	7.18	34.036	1.97		200	7.27	34.02	2.09	26.63	145.2	.409
318	6.29	34.083	1.37		250	6.88	34.06	1.74	26.72	137.4	.480
424	5.62	34.113	.89		300	6.45	34.08	1.46	26.80	130.9	.547
520	5.05	34.152	.67		400	5.76	34.11	.98	26.90	121.6	.673
634	4.72	34.226	.39		500	5.16	34.14	.71	27.00	112.1	.790
839	4.07	34.351	.28		600	4.80	34.20	.47	27.09	104.9	.898
1036	3.47	34.424	.70		700	4.51	34.27	.30	27.18	97.2	.999
					800	4.20	34.33	.30	27.26	89.7	1.093
					1000	3.58	34.41	.58	27.39	78.0	1.260

CH 065 43 20.5 N 125 51.4 W DATE 11 SEP 63 2328 GCT WIRE 08 DRY 67.0 WET 63.0
WIND DIRECTION 15 VEL 14 KTS BAR 11 SWELL DIRECTION 20 H 06 T 08 CLOUD 09 AMT 09 WEATHER 02

0	18.66	31.891	5.69		0	18.67	31.90	5.69	22.76	510.8	0
10	18.59	31.894	5.57		10	18.59	31.90	5.57	22.78	509.2	.051
20	13.32	32.404	6.44		20	13.32	32.41	6.44	24.35	359.8	.094
30	11.44	32.508	6.30		30	11.44	32.51	6.31	24.79	318.2	.128
49	9.81	32.667	5.49		50	9.75	32.72	5.44	25.24	275.6	.188
101	8.18	33.745	3.18		75	8.66	33.23	4.24	25.81	221.6	.250
151	7.70	33.929	2.58		100	8.19	33.73	3.22	26.27	178.1	.300
205	7.21	33.996	2.24		150	7.70	33.93	2.58	26.50	157.1	.384
306	6.26	34.048	1.58		200	7.26	33.99	2.26	26.62	146.6	.459
409	5.58	34.109	.91		250	6.77	34.02	1.95	26.71	138.5	.531
512	5.26	34.197	.64		300	6.31	34.05	1.62	26.79	131.7	.598
615	4.66	34.223	.40		400	5.63	34.10	.96	26.92	120.3	.724
818	4.08	34.345	.25		500	5.30	34.19	.66	27.02	110.4	.839
1021	3.52	34.427	.34		600	4.75	34.22	.43	27.11	103.0	.946
					700	4.37	34.27	.30	27.19	95.4	1.045
					800	4.11	34.33	.26	27.27	88.5	1.137
					1000	3.58	34.42	.32	27.39	77.5	1.303

CH 085 43 20.5 N 126 19.1 W DATE 12 SEP 63 0741 GCT WIRE 03 DRY 66.0 WET 64.0
WIND DIRECTION 17 VEL 12 KTS BAR 11 SWELL DIRECTION 20 H 06 T 06 CLOUD 09 AMT 10 WEATHER 03

0	19.03	31.901	5.59		0	19.03	31.91	5.59	22.68	518.9	0
10	19.01	31.899	5.59		10	19.01	31.89	5.59	22.68	519.5	.052
20	17.38	31.900	6.08		20	17.38	31.90	6.08	23.08	481.1	.102
31	16.22	32.216	6.18		30	16.34	32.18	6.18	23.53	437.9	.148
50	11.55	32.545	6.86		50	11.55	32.55	6.86	24.80	317.8	.223
76	9.44	32.840	5.40		75	9.46	32.83	5.48	25.37	263.2	.296
108	8.84	33.473	3.91		100	8.87	33.32	4.23	25.85	218.5	.356
159	8.43	33.781	2.98		150	8.49	33.76	3.06	26.26	180.5	.456
215	7.50	33.948	2.46		200	7.76	33.92	2.57	26.48	159.4	.541
318	6.34	34.027	1.72		250	7.04	33.99	2.19	26.65	144.5	.617
424	5.70	34.088	1.07		300	6.50	34.02	1.84	26.74	135.7	.687
529	4.97	34.154	.66		400	5.82	34.07	1.20	26.87	124.8	.817
634	4.74	34.229	.39		500	5.15	34.14	.75	27.00	112.6	.936
840	4.05	34.351	.27		600	4.79	34.20	.46	27.10	104.6	1.044
1039	3.54	34.420	.37		700	4.53	34.27	.31	27.18	97.1	1.145
					800	4.19	34.33	.29	27.26	89.6	1.238
					1000	3.63	34.41	.33	27.38	78.9	1.407

OBSERVED				INTERPOLATED				DERIVED			
D	T°C	S%	O ₂ ml/l	Z	T	S	O ₂	PO ₄ =	σ _t	g x 10 ⁶	Δ D

CH 105 43 20.3 N 126 45.4 W DATE 12 SEP 63 1238 GCT WIRE 08 DRY 65.1 WET 64.0
WIND DIRECTION 15 VEL 04 KTS BAR 12 SWELL DIRECTION 20 H 04 T 06 CLOUD 09 AMT 10 WEATHER 02

0	18.43	31.864	5.64	0	18.44	31.87	5.65	22.80	507.4	0
10	18.54	31.860	5.60	10	18.54	31.86	5.60	22.77	510.5	.051
20	18.42	32.339	6.05	20	18.42	32.34	6.06	23.64	427.8	.098
30	14.09	32.309	6.38	30	14.09	32.40	6.39	24.19	375.3	.138
50	11.68	32.569	6.30	50	11.68	32.57	6.31	24.79	318.3	.207
76	9.79	32.903	5.15	75	9.84	32.89	5.20	25.36	264.7	.280
108	9.07	33.332	4.36	100	9.15	33.23	4.52	25.73	229.3	.342
159	8.50	33.834	3.40	150	8.57	33.77	3.55	26.25	181.5	.445
215	7.89	33.959	2.63	200	8.06	33.95	2.80	26.47	161.1	.530
317	6.40	33.992	2.12	250	7.38	33.98	2.40	26.59	149.9	.608
423	5.36	34.043	1.31	300	6.65	33.99	2.17	26.69	140.5	.680
520	5.10	34.177	.57	400	5.53	34.03	1.50	26.87	124.7	.813
633	4.57	34.219	.40	500	5.15	34.14	.74	27.01	112.0	.931
839	4.09	34.342	.28	600	4.74	34.21	.42	27.11	103.6	1.039
1038	3.53	34.432	.37	700	4.38	34.26	.33	27.18	96.5	1.139
				800	4.16	34.32	.28	27.25	90.1	1.232
				1000	3.64	34.42	.34	27.39	78.5	1.401

CH 125 43 20.5 N 127 13.3 W DATE 12 SEP 63 1521 GCT WIRE 03 DRY 65.0 WET 64.0
WIND DIRECTION 15 VEL 10 KTS BAR 11 SWELL DIRECTION 20 H 05 T 06 CLOUD 09 AMT 09 WEATHER 01

0	18.29	31.823	5.62	0	18.29	31.83	5.63	22.80	507.1	0
10	18.01	31.818	5.60	10	18.01	31.82	5.60	22.87	501.2	.050
20	17.54	32.374	5.91	20	17.54	32.38	5.92	23.40	450.2	.098
31	14.96	32.376	6.22	30	15.23	32.38	6.19	23.93	400.4	.140
50	11.11	32.577	6.49	50	11.11	32.58	6.49	24.90	307.9	.211
76	9.82	32.765	5.49	75	9.82	32.76	5.54	25.26	274.2	.284
108	9.24	33.493	4.43	100	9.33	33.30	4.68	25.76	226.5	.347
159	8.37	33.873	3.18	150	8.53	33.85	3.36	26.32	174.6	.447
215	7.16	33.961	2.53	200	7.48	33.96	2.66	26.56	152.4	.529
316	6.01	33.995	1.88	250	6.66	33.98	2.27	26.69	140.3	.602
422	5.29	34.056	1.14	300	6.13	33.99	1.96	26.77	133.2	.670
527	4.91	34.132	.67	400	5.41	34.04	1.29	26.90	122.1	.798
632	4.54	34.213	.42	500	4.99	34.11	.77	27.00	112.4	.915
838	3.99	34.366	.27	600	4.65	34.19	.48	27.10	104.2	1.023
1038	3.48	34.440	.37	700	4.34	34.27	.33	27.20	95.3	1.123
				800	4.08	34.34	.27	27.28	87.5	1.214
				1000	3.58	34.43	.33	27.40	76.7	1.378

CH 145 43 20.5 N 127 40.5 W DATE 12 SEP 63 1915 GCT WIRE 05 DRY 69.0 WET 64.0
WIND DIRECTION 13 VEL 08 KTS BAR 11 SWELL DIRECTION 21 H 05 T 07 CLOUD 04 AMT 05 WEATHER 02

0	19.86	31.379	5.53	0	19.86	31.38	5.54	22.07	576.9	0
10	19.72	31.387	5.41	10	19.73	31.39	5.42	22.11	573.2	.058
20	18.81	31.640	5.81	20	18.81	31.65	5.82	22.54	533.2	.113
31	16.63	32.094	6.08	30	16.86	32.05	6.06	23.31	459.0	.162
50	12.07	32.601	6.67	50	12.07	32.61	6.68	24.74	322.9	.241
77	9.87	32.750	5.67	75	9.93	32.74	5.79	25.23	276.8	.316
108	8.80	33.496	4.02	100	8.98	33.25	4.44	25.78	225.1	.378
159	8.06	33.836	2.90	150	8.14	33.81	3.00	26.34	172.0	.478
216	7.36	33.959	2.50	200	7.55	33.94	2.57	26.54	154.2	.559
318	6.29	34.021	1.81	250	6.97	33.99	2.27	26.66	143.7	.634
423	5.63	34.089	1.08	300	6.45	34.02	1.93	26.74	135.7	.703
529	4.93	34.144	.68	400	5.76	34.07	1.23	26.88	124.0	.833
634	4.58	34.217	.42	500	5.11	34.13	.77	27.00	112.5	.951
839	3.96	34.360	.29	600	4.67	34.19	.49	27.10	104.2	1.060
1036	3.46	34.471	.34	700	4.37	34.27	.34	27.19	95.6	1.159
				800	4.07	34.34	.31	27.28	87.8	1.251
				1000	3.54	34.42	.32	27.39	77.5	1.416

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S‰	O ₂ ml/l	Z	T	S	O ₂	PO ₄ ‡	σ ₁	δ × 10 ⁶	Δ D	
CH 165 43 20.5 N 128 8.0 W DATE 12 SEP 63 2415 GCT WIRE 02 DRY 69.7 WET 65.3 WIND DIRECTION 26 VEL 05 KTS BAR 04 SWELL DIRECTION 22 H 03 T 06 CLOUD 04 AMT 05 WEATHER 02												
0	20.21	31.477	5.49	0	20.21	31.48	5.49	22.06	578.5	0		
10	19.66	31.603	5.43	10	19.67	31.61	5.44	22.29	556.0	.057		
19	19.44	31.775	5.51	20	19.29	31.79	5.54	22.53	534.1	.111		
29	17.49	31.948	5.88	30	17.24	31.98	5.93	23.17	472.7	.162		
47	13.13	32.547	6.60	50	12.68	32.59	6.53	24.62	335.1	.242		
99	9.08	32.918	5.32	75	9.96	32.84	6.27	25.30	269.9	.318		
150	8.29	33.732	3.28	100	9.05	32.93	5.28	25.52	249.4	.383		
205	7.40	33.936	2.68	150	8.29	33.74	3.29	26.26	179.6	.490		
307	6.10	33.987	1.93	200	7.48	33.93	2.70	26.54	154.1	.573		
412	5.31	34.066	1.07	250	6.77	33.98	2.33	26.68	141.5	.647		
515	5.01	34.165	.59	300	6.17	33.98	1.98	26.75	134.5	.716		
619	4.60	34.246	.40	400	5.37	34.06	1.16	26.91	120.7	.844		
822	4.03	34.350	.27	500	5.04	34.15	.64	27.02	110.1	.959		
1024	3.51	34.427	.39	600	4.68	34.23	.42	27.13	101.2	1.065		
1218	3.06	34.483	.54	700	4.35	34.29	.31	27.21	93.5	1.162		
				800	4.08	34.34	.27	27.28	87.5	1.253		
				1000	3.57	34.42	.37	27.39	77.5	1.418		
				1200	3.10	34.48	.52	27.49	68.8	1.564		
CBH159 42 50.5 N 128 0.0 W DATE 13 SEP 63 0622 GCT WIRE 03 DRY 67.0 WET 63.0 WIND DIRECTION 26 VEL 10 KTS BAR 14 SWELL DIRECTION - H 04 T 06 CLOUD 06 AMT 02 WEATHER 02												
0	19.34	31.941	5.52	0	19.34	31.97	5.53	22.65	522.0	0		
10	18.02	31.986	5.66	10	18.02	31.99	5.67	22.99	489.2	.051		
20	16.87	32.541	5.93	20	16.88	32.59	5.94	23.72	420.1	.096		
31	15.74	32.643	6.04	30	15.84	32.66	6.04	24.01	392.7	.137		
50	13.56	32.793	6.01	50	13.56	32.80	6.02	24.60	336.5	.210		
77	10.14	33.013	5.26	75	10.36	32.99	5.33	25.35	265.3	.285		
108	9.02	33.428	4.27	100	9.15	33.32	4.52	25.80	222.6	.346		
160	7.74	33.875	3.24	150	7.93	33.82	3.38	26.38	168.6	.444		
217	7.00	33.955	2.79	200	7.18	33.93	2.89	26.58	150.3	.523		
319	5.72	34.016	1.61	250	6.54	33.98	2.41	26.70	138.8	.595		
424	5.22	34.101	.87	300	5.93	34.01	1.83	26.81	129.6	.663		
529	4.61	34.133	.71	400	5.30	34.08	.99	26.94	117.8	.786		
634	4.35	34.243	.42	500	4.77	34.12	.73	27.03	108.9	.899		
840	3.82	34.363	.33	600	4.42	34.20	.51	27.14	100.2	1.004		
1040	3.40	34.417	.46	700	4.18	34.29	.34	27.23	91.7	1.100		
				800	3.92	34.35	.35	27.30	85.3	1.188		
				1000	3.48	34.43	.42	27.41	76.0	1.349		
RH 165 42 0.0 N 127 52.7 W DATE 13 SEP 63 1704 GCT WIRE 11 DRY 70.6 WET 40.0 WIND DIRECTION 33 VEL 14 KTS BAR 18 SWELL DIRECTION 26 H 05 T 07 CLOUD - AMT 07 WEATHER 02												
0	18.95	32.804	5.62	.28	0	18.96	32.81	5.63	.28	23.30	451.3	0
10	18.90	32.795	5.54	.26	10	18.90	32.80	5.55	.26	23.30	451.0	.045
19	16.25	32.848	6.31	.28	20	16.08	32.85	6.31	.30	24.11	383.3	.087
29	14.89	32.899	6.31	.54	30	14.72	32.91	6.28	.57	24.45	350.8	.124
48	11.63	33.112	5.41	1.08	50	11.40	33.14	5.31	1.12	25.20	271.3	.186
99	8.18	33.799	3.30	1.82	75	9.15	33.50	4.17	1.55	25.95	208.7	.246
148	7.52	33.951	2.66	2.33	100	8.15	33.81	3.28	1.83	26.34	171.6	.293
200	7.16	33.985	2.39	2.12	150	7.50	33.95	2.65	2.33	26.55	152.2	.374
299	6.12	34.032	1.66	2.51	200	7.17	33.99	2.40	2.13	26.63	145.6	.449
400	5.42	34.082	1.03	2.91	250	6.64	34.01	2.03	2.25	26.71	137.9	.520
499	4.99	34.178	.56	3.28	300	6.11	34.03	1.65	2.51	26.80	130.1	.586
599	4.58	34.252	.37	3.16	400	5.43	34.09	1.04	2.91	26.93	119.0	.711
797	4.03	34.333	.28	3.13	500	4.99	34.18	.56	3.28	27.05	107.5	.824
996	3.59	34.433	.40	2.59	600	4.58	34.25	.37	3.16	27.16	98.5	.927
1201	3.15	34.482	.58	3.12	700	4.27	34.30	.29	3.16	27.23	92.2	1.022
					800	4.02	34.33	.28	3.12	27.28	87.3	1.112
					1000	3.58	34.43	.40	2.60	27.41	76.5	1.276
					1200	3.15	34.48	.58	3.11	27.48	69.1	1.422

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S‰	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	δ × 10 ⁶	Δ D

RH 145 42 0.0 N 127 27.0 W DATE 13 SEP 63 2150 GCT WIRE 05 DRY 67.6 WET 62.3
WIND DIRECTION 32 VEL 06 KTS BAR 19 SWELL DIRECTION 32 H 05 T 05 CLOUD 04 AMT 06 WEATHER 02

0	19.56	32.595	5.52	.25	0	19.56	32.60	5.53	.25	23.07	481.2	0
10	19.37	32.591	5.50	.27	10	19.38	32.60	5.51	.27	23.12	477.2	.048
20	18.84	32.795	6.17	.31	20	18.84	32.80	6.18	.31	23.89	403.8	.092
30	13.76	32.952	6.27	.61	30	13.76	32.96	6.28	.62	24.68	328.3	.129
50	10.19	33.248	4.85	1.36	50	10.19	33.25	4.85	1.36	25.58	243.0	.186
76	8.96	33.488	4.14	1.70	75	8.97	33.48	4.15	1.69	25.94	207.3	.242
107	8.33	33.735	3.56	1.94	100	8.42	33.69	3.67	1.90	26.20	184.5	.291
157	7.72	33.924	2.81	2.13	150	7.79	33.91	2.90	2.11	26.47	159.5	.377
213	7.06	33.980	2.44	2.41	200	7.21	33.98	2.51	2.35	26.61	147.4	.454
315	5.79	34.019	1.63	2.70	250	6.55	33.99	2.16	2.53	26.71	137.9	.525
411	5.47	34.131	.80	3.04	300	5.95	34.01	1.76	2.66	26.81	129.5	.592
527	4.77	34.162	.57	2.93	400	5.49	34.12	.88	3.01	26.95	117.4	.715
633	4.48	34.250	.34	3.80	500	4.93	34.16	.59	2.93	27.04	108.3	.828
839	3.94	34.360	.29	2.92	600	4.55	34.22	.41	3.53	27.14	100.6	.932
1038	3.43	34.445	.19	3.23	700	4.30	34.29	.32	3.63	27.22	93.3	1.029
					800	4.04	34.33	.30	3.17	27.28	87.5	1.120
					1000	3.53	34.43	.36	3.08	27.41	76.4	1.283

RH 125 42 0.0 N 126 59.4 W DATE 14 SEP 63 0212 GCT WIRE 03 DRY 67.0 WET 61.0
WIND DIRECTION 32 VEL 16 KTS BAR 20 SWELL DIRECTION 32 H 04 T 05 CLOUD 08 AMT 03 WEATHER 02

0	19.18	31.833	5.52	.23	0	19.19	31.84	5.53	.24	22.59	527.4	0
10	19.11	31.856	5.50	.18	10	19.11	31.86	5.51	.19	22.63	524.3	.053
20	18.58	32.023	5.66	.20	20	18.58	32.03	5.67	.21	22.88	499.9	.104
31	16.03	32.430	6.03	.32	30	16.29	32.39	6.00	.31	23.70	421.8	.150
50	13.34	32.918	6.17	.63	50	13.34	32.92	6.18	.63	24.74	323.1	.224
72	10.67	33.084	5.35	1.12	75	10.43	33.12	5.22	1.18	25.44	256.8	.297
108	8.76	33.592	3.92	1.75	100	9.01	33.48	4.21	1.64	25.95	208.7	.355
159	7.83	33.934	3.10	2.00	150	7.91	33.90	3.17	1.98	26.45	161.9	.448
215	7.06	33.956	3.08	2.25	200	7.24	33.95	3.09	2.19	26.59	149.7	.525
317	6.22	34.041	1.73	2.59	250	6.73	33.98	2.67	2.38	26.68	140.9	.598
423	5.40	34.083	1.06	2.89	300	6.33	34.03	1.99	2.54	26.77	133.4	.667
528	4.86	34.157	.72	2.83	400	5.56	34.07	1.16	2.84	26.90	121.6	.794
634	4.40	34.225	.40		500	4.99	34.14	.79	2.86	27.02	110.5	.910
840	3.98	34.363	.28	3.25	600	4.53	34.20	.49	2.94	27.12	101.7	1.016
1039	3.48	34.429	.37	2.87	700	4.24	34.27	.31	3.08	27.21	93.7	1.114
					800	4.04	34.34	.30	3.21	27.28	87.2	1.204
					1000	3.59	34.42	.34	2.98	27.39	77.5	1.369

RH 105 42 0.0 N 126 32.4 W DATE 14 SEP 63 0734 GCT WIRE 00 DRY 66.1 WET 59.9
WIND DIRECTION - VEL - KTS BAR - SWELL DIRECTION - H - T - CLOUD - AMT - WEATHER -

0	19.30	31.801	5.51	.23	0	19.30	31.90	5.52	.24	22.60	526.1	0
10	19.21	31.927	5.49	.14	10	19.21	31.93	5.49	.15	22.65	521.6	.052
20	17.40	32.388	5.91	.26	20	17.40	32.39	5.92	.26	23.45	446.0	.101
31	16.00	32.533	6.05	.39	30	16.12	32.53	6.04	.38	23.85	407.9	.143
50	13.24	32.686	6.25	.53	50	13.24	32.69	6.26	.54	24.58	338.2	.218
77	11.17	32.836	5.79	.67	75	11.28	32.82	5.85	.65	25.06	293.5	.297
108	9.27	33.403	4.40	1.56	100	9.69	33.25	4.77	1.33	25.66	236.1	.363
159	8.25	33.748	3.56	1.54	150	8.32	33.72	3.64	1.54	26.25	181.3	.468
216	7.55	33.966	2.66	2.32	200	7.72	33.92	2.89	2.08	26.49	158.5	.552
318	6.32	34.026	1.82	2.77	250	7.11	34.01	2.31	2.56	26.65	144.2	.628
424	5.54	34.064	1.17	2.74	300	6.52	34.02	1.92	2.75	26.73	136.6	.698
530	5.06	34.155	.68	2.73	400	5.68	34.05	1.30	2.77	26.87	124.6	.829
635	4.57	34.232	.35	2.64	500	5.18	34.13	.80	2.74	26.99	113.5	.948
842	4.10	34.354	.29	2.67	600	4.72	34.21	.44	2.67	27.11	103.6	1.056
1040	3.57	34.474	.43	3.02	700	4.39	34.27	.33	2.65	27.20	95.4	1.156
					800	4.17	34.33	.30	2.66	27.26	89.2	1.248
					1000	3.68	34.42	.39	2.92	27.38	78.7	1.416

OBSERVED INTERPOLATED DERIVED

D	T°C	S‰	O ₂ ml/l	PO ₄ E	Z	T	S	O ₂	PO ₄ E	σ _i	S × 10 ⁶	Δ D
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RH 085 42 0.0 N 126 6.7 W DATE 14 SEP 63 1703 GCT WIRF 02 DRY 66.0 WET 61.0
WIND DIRECTION 34 VEL 10 KTS BAR 18 SWELL DIRECTION 31 H 08 T 10 CLOUD 04 AMT 03 WEATHER 02

0	18.79	31.866	5.66	.24	0	18.79	31.87	5.67	.25	22.71	515.7	0
10	18.16	32.259	5.50	.32	10	18.17	32.26	5.51	.32	23.17	472.6	.049
20	17.64	32.378	5.80	.45	20	17.65	32.38	5.81	.45	23.38	452.2	.096
31	15.25	32.560	6.19	.39	30	15.51	32.54	6.16	.40	24.00	393.9	.138
51	10.57	32.669	6.30	.73	50	10.77	32.67	6.29	.71	25.03	298.9	.207
77	9.16	32.989	5.28	1.30	75	9.16	32.96	5.38	1.26	25.52	248.9	.275
108	8.23	33.429	4.39	1.65	100	8.41	33.42	4.59	1.58	25.92	211.4	.333
160	7.86	33.847	3.44	2.08	150	7.88	33.79	3.59	2.02	26.37	169.3	.428
227	7.30	33.948	2.96	1.96	200	7.54	33.94	3.13	2.02	26.53	154.6	.509
318	6.18	34.006	1.90	2.68	250	7.01	33.97	2.69	2.13	26.63	146.0	.584
423	5.55	34.055	1.26	2.69	300	6.40	34.00	2.11	2.52	26.74	136.3	.654
529	5.16	34.173	.60	3.11	400	5.65	34.04	1.37	2.69	26.87	125.0	.785
634	4.72	34.246	.36	3.23	500	5.26	34.14	.76	2.99	26.99	113.5	.904
841	4.09	34.359	.30	3.28	600	4.86	34.23	.41	3.21	27.10	103.9	1.013
1039	3.60	34.439	.42	2.99	700	4.50	34.29	.30	3.28	27.19	95.8	1.113
					800	4.20	34.34	.31	3.27	27.27	89.0	1.205
					1000	3.69	34.43	.38	3.07	27.39	78.4	1.372

RH 065 42 0.0 N 125 40.0 W DATE 14 SEP 63 2054 GCT WIRF 22 DRY 64.1 WET 60.4
WIND DIRECTION 35 VEL 05 KTS BAR 17 SWELL DIRECTION 30 H 03 T 09 CLOUD 04 AMT 08 WEATHER 02

0	15.22	32.820	6.10	.60	0	15.22	32.83	6.10	.60	24.27	366.6	0
9	14.16	33.181	6.19	.94	10	14.13	33.19	6.20	.92	24.79	317.6	.034
18	13.74	33.256	6.23	.76	20	13.36	33.29	6.22	.81	25.02	296.1	.065
28	11.68	33.414	6.05	1.16	30	11.41	33.44	5.92	1.25	25.51	249.3	.092
46	10.00	33.613	4.60	1.89	50	9.78	33.64	4.49	1.96	25.96	207.4	.138
95	8.57	33.868	3.15	2.09	75	8.82	33.80	3.53	2.01	26.23	181.5	.186
142	8.13	33.967	2.56	2.21	100	8.50	33.88	3.05	2.10	26.35	170.9	.230
194	7.72	33.991	2.50	2.37	150	8.06	33.97	2.54	2.23	26.48	158.7	.313
290	7.20	34.074	1.77	2.57	200	7.69	34.00	2.46	2.38	26.56	152.4	.391
387	6.46	34.126	1.16	2.91	250	7.41	34.04	2.12	2.49	26.63	146.2	.465
484	5.89	34.190	.68	3.11	300	7.12	34.08	1.70	2.61	26.70	140.0	.537
581	5.55	34.201	.55	3.04	400	6.37	34.14	1.08	2.95	26.85	127.4	.670
773	4.57	34.306	.29	3.25	500	5.83	34.19	.65	3.10	26.96	116.8	.792
965	3.95	34.386	.31	3.26	600	5.45	34.21	.52	3.05	27.02	112.5	.907
1160	3.43	34.455	.46	3.40	700	4.95	34.26	.37	3.15	27.12	103.0	1.015
					800	4.47	34.32	.29	3.25	27.22	93.8	1.113
					1000	3.85	34.40	.33	3.28	27.35	82.3	1.289

RH 045 42 0.0 N 125 13.2 W DATE 15 SEP 63 0204 GCT WIRF - DRY 63.0 WET 60.0
WIND DIRECTION 25 VEL 03 KTS BAR 14 SWELL DIRECTION 30 H 05 T 10 CLOUD 09 AMT 09 WEATHER 03

0	15.18	32.995	6.13	.61	0	15.18	33.00	6.14	.62	24.42	353.0	0
10	14.15	33.074	6.25	.65	10	14.15	33.03	6.26	.65	24.66	330.2	.034
20	12.45	33.214	6.13	1.03	20	12.45	33.22	6.14	1.04	25.15	284.0	.065
31	11.59	33.443	5.76	1.24	30	11.64	33.42	5.80	1.23	25.46	254.5	.092
51	10.32	33.570	5.10	1.28	50	10.38	33.57	5.14	1.28	25.80	222.7	.139
77	9.13	33.726	3.82	2.21	75	9.20	33.72	3.91	2.14	26.11	193.5	.192
108	8.53	33.835	3.41	2.01	100	8.63	33.81	3.45	2.13	26.27	178.1	.238
159	7.96	33.939	2.98	1.67	150	8.04	33.93	3.04	1.69	26.45	161.9	.323
216	7.23	33.994	2.50	2.47	200	7.43	33.98	2.64	2.21	26.58	149.8	.401
318	6.64	34.083	1.61	2.62	250	6.99	34.03	2.18	2.59	26.68	141.1	.474
424	5.89	34.075	1.24	3.09	300	6.72	34.07	1.75	2.59	26.75	135.1	.543
529	5.41	34.131	.86	2.58	400	6.05	34.08	1.30	3.01	26.84	127.5	.674
634	4.97	34.199	.50	-	500	5.53	34.11	.96	2.75	26.94	118.9	.797
840	4.24	34.340	.30	3.40	600	5.11	34.18	.61	2.66	27.04	110.6	.912
1038	3.56	34.443	.44	3.36	700	4.73	34.25	.38	2.88	27.14	101.5	1.018
					800	4.37	34.31	.34	3.23	27.23	93.0	1.115
					1000	3.69	34.43	.39	3.37	27.39	78.4	1.286

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	S × 10 ⁶	ΔD		
RH 035 42 0.4 N 124 59.6 W DATE 15 SEP 63 1838 GCT WIRE 01 DRY 63.0 WET 58.0 WIND DIRECTION 30 VEL 10 KTS BAR 12 SWELL DIRECTION 30 H 10 T 09 CLOUD 04 AMT 05 WEATHER 01														
0	14.90	33.089	6.16	.69	0	14.90	33.06	6.17	.70	24.53	342.5	0		
10	13.82	33.110	6.11	.65	10	13.82	33.12	6.11	.65	24.79	317.4	.033		
20	12.62	33.180	6.14	.73	20	12.63	33.18	6.15	.74	25.09	289.6	.063		
30	11.16	33.305	5.56	1.26	30	11.16	33.31	5.57	1.26	25.46	254.6	.091		
50	9.81	33.525	4.74	1.66	50	9.81	33.53	4.74	1.67	25.86	216.4	.138		
76	8.99	33.724	3.92	2.03	75	9.01	33.72	3.94	2.02	26.14	190.4	.188		
108	8.50	33.821	3.54	2.00	100	8.59	33.81	3.60	2.03	26.27	178.0	.235		
160	7.96	33.913	3.05	2.12	150	8.06	33.91	3.14	2.09	26.44	162.9	.320		
217	7.25	34.016	2.44	2.36	200	7.45	33.99	2.63	2.28	26.59	149.3	.398		
319	6.69	34.111	1.38	2.73	250	7.02	34.06	2.05	2.51	26.70	139.5	.470		
425	6.17	34.115	1.14	2.69	300	6.76	34.10	1.55	2.68	26.77	133.6	.538		
531	5.48	34.165	.68	3.12	400	6.30	34.11	1.17	2.70	26.84	128.0	.669		
636	4.98	34.233	.40	3.12	500	5.68	34.15	.82	2.99	26.95	118.2	.792		
842	4.32	34.347	.29	3.25	600	5.13	34.21	.48	3.12	27.06	108.5	.905		
1040	3.54	34.445	.42	3.27	700	4.76	34.27	.32	3.16	27.15	100.1	1.010		
					800	4.44	34.33	.31	3.22	27.23	93.0	1.106		
					1000	3.71	34.43	.38	3.27	27.39	78.6	1.278		
RH 025 42 0.0 N 124 46.3 W DATE 15 SEP 63 1611 GCT WIRE 03 DRY 62.0 WET 59.0 WIND DIRECTION 30 VEL 0.8 KTS BAR 11 SWELL DIRECTION 30 H 08 T 10 CLOUD 09 AMT 10 WEATHER 02														
0	14.95	32.755	6.14	.50	0	14.95	32.76	6.15	.51	24.28	365.8	0		
10	12.80	32.705	6.33	.74	10	12.80	32.80	6.33	.75	24.75	321.1	.034		
20	11.70	32.859	6.14	.70	20	11.70	32.86	6.15	.71	25.01	296.7	.065		
31	10.68	33.154	5.60	1.05	30	10.76	33.12	5.65	1.01	25.38	261.5	.093		
51	10.17	33.563	4.79	1.25	50	10.18	33.55	4.82	1.25	25.81	220.9	.141		
77	9.32	33.674	4.17	1.50	75	9.38	33.67	4.21	1.48	26.04	199.4	.194		
104	8.79	33.785	3.45	1.86	100	8.85	33.77	3.56	1.81	26.20	184.6	.242		
155	8.47	33.970	2.42	2.03	150	8.49	33.96	2.50	2.03	26.41	166.2	.330		
210	7.94	34.038	2.13	2.17	200	8.04	34.03	2.15	2.15	26.53	154.9	.410		
315	7.00	34.059	1.88	1.92	250	7.57	34.05	2.03	2.06	26.62	147.3	.485		
420	6.17	34.089	1.29	2.53	300	7.13	34.06	1.91	1.95	26.68	141.8	.558		
519	5.65	34.163	.77	2.38	400	6.31	34.08	1.41	2.41	26.81	130.7	.694		
621	5.23	34.191	.59	2.62	500	5.74	34.15	.86	2.42	26.94	118.8	.818		
					600	5.31	34.19	.60	2.54	27.02	112.1	.934		
RH 015 42 0.0 N 124 32.9 W DATE 15 SEP 63 1405 GCT WIRE 00 DRY 61.0 WET 59.5 WIND DIRECTION - VEL KTS BAR 10 SWELL DIRECTION 30 H 05 T 09 CLOUD 09 AMT 10 WEATHER 02														
0	15.52	32.794	5.86	.46	0	15.52	32.80	5.86	.46	24.19	374.8	0		
10	14.94	32.829	6.10	.33	10	14.94	32.83	6.10	.33	24.34	360.4	.037		
20	10.36	32.918	5.62	.93	20	10.36	32.92	5.63	.93	25.30	269.6	.068		
31	9.88	33.255	5.02	1.43	30	9.92	33.22	5.07	1.40	25.50	240.6	.094		
51	10.08	33.540	4.79	1.35	50	10.06	33.53	4.79	1.37	25.82	220.2	.140		
76	9.20	33.707	3.80	1.69	75	9.24	33.70	3.84	1.67	26.09	195.1	.192		
102	8.95	33.854	3.10	1.86	100	8.97	33.84	3.14	1.85	26.24	180.9	.239		
RH 5 42 0.4 N 124 59.6 W DATE 15 SEP 63 1120 GCT WIRE 14 DRY 63.0 WET 58.0 WIND DIRECTION 30 VEL 10 KTS BAR 12 SWELL DIRECTION 30 H 8 T 10 CLOUD 4 AMT 5 WEATHER 01														
0	14.17	33.325	7.25		0	14.17	33.33	7.26		24.89	308.3	0		
10	14.08	33.351	7.24		10	14.08	33.36	7.24		24.93	304.8	.031		
20	11.85	33.641	5.48		20	11.85	33.65	5.48		25.59	241.7	.058		
30	10.58	33.714	4.21		30	10.58	33.72	4.21		25.88	214.6	.081		
NH 005 44 39.1 N 124 10.5 W DATE 18 SEP 63 2301 GCT WIRE 02 DRY 62.0 WET 59.0 WIND DIRECTION 34 VEL 0.9 KTS BAR 15 SWELL DIRECTION 34 H 04 T 05 CLOUD - AMT 02 WEATHER 00														
0	15.07	32.424	6.67		0	15.07	32.43	6.68		24.00	392.5	0		
10	13.73	32.675	6.92		10	13.73	32.68	6.93		24.48	347.6	.037		
20	8.67	33.099	3.49		20	8.67	33.10	3.49		25.71	230.1	.066		
30	8.45	33.444	2.97		30	8.45	33.45	2.97		26.02	201.4	.087		
40	8.26	33.663	2.42		50	10.06	33.53			25.82	220.2	.130		
49	8.24	33.665	2.29		75	9.24	33.70			26.00	195.1	.181		

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	s × 10 ⁶	Δ D	
NH 015 44 39.1 N 124 24.8 W DATE 19 SEP 63 0120 GCT WIRE 09 DRY 62.0 WET 59.0 WIND DIRECTION 35 VEL 14 KTS BAR 13 SWELL DIRECTION 35 H 04 T 05 CLOUD - AMT 0 WEATHER 00													
0	15.13	32.438	7.01		0	15.13	32.44	7.02		24.00	392.7	0	
10	11.21	32.956	4.79		10	11.21	32.96	4.79		25.18	280.8	.034	
20	10.05	33.329	3.90		20	10.05	33.33	3.91		25.67	234.2	.059	
30	8.26	33.451	2.77		30	8.26	33.46	2.78		26.05	198.2	.081	
40	8.15		3.06		50	8.08	33.67	3.02		26.24	179.9	.119	
49	8.09	33.662	3.04		75	7.85	33.82	1.55		26.40	165.9	.162	
75	7.85	33.815	1.55		100	8.97	33.84			26.24	180.9	.205	
NH 025 44 39.2 N 124 39.7 W DATE 19 SEP 63 0557 GCT WIRE 26 DRY 63.0 WET 59.0 WIND DIRECTION 35 VEL 22 KTS BAR 14 SWELL DIRECTION 35 H 06 T 06 CLOUD - AMT 0 WEATHER 00													
0	16.44	31.333	5.89		0	16.44	31.34	5.90		22.86	501.3	0	
9	15.80	31.923	6.19		10	15.47	31.99	6.26		23.58	432.9	.047	
18	12.60	32.447	6.63		20	12.04	32.55	6.58		24.71	325.9	.085	
27	10.90	32.567	6.27		30	10.86	32.50	6.17		24.88	309.3	.116	
30	16.44	31.235			50	9.41	32.77	5.38		25.34	266.1	.174	
19	12.96	32.363			75	8.42	33.20	3.97		25.93	219.7	.235	
45	9.76	32.686	5.62		100	8.05	33.51	2.72		26.13	191.9	.286	
70	8.55	33.132	4.30		150	7.87	33.90	2.59		26.45	161.5	.374	
95	8.09	33.457	2.81		200	7.50	33.97	1.95		26.57	151.6	.453	
144	7.90	33.868	2.64		250					-0.09	2730.7	1.173	
197	7.52	33.976	1.99		300					-0.09	2727.9	2.538	
NH 035 44 39.0 N 124 52.9 W DATE 19 SEP 63 0823 GCT WIRE 03 DRY 63.0 WET 59.0 WIND DIRECTION 35 VEL 16 KTS BAR 15 SWELL DIRECTION 35 H 10 T 06 CLOUD - AMT 0 WEATHER 00													
0	18.00	31.657	5.65		0	18.00	31.66	5.66		22.75	512.4	0	
10	18.00	31.644	5.56		10	18.00	31.65	5.57		22.74	513.7	.051	
20	16.17	31.893	6.16		20	16.17	31.90	6.17		23.35	455.0	.100	
30	12.74	32.447	6.43		30	12.74	32.47	6.44		24.51	344.5	.140	
50	10.64	32.563	6.52		50	10.64	32.57	6.53		24.97	301.0	.204	
77	9.30	33.017	4.76		75	9.36	32.98	4.91		25.51	250.5	.273	
104	8.66	33.397	4.01		100	8.73	33.35	4.09		25.89	214.1	.331	
155	7.91	33.854	2.82		150	7.96	33.82	2.91		26.38	168.3	.427	
209	7.39	33.953	2.53		200	7.46	33.94	2.58		26.54	153.6	.507	
NH 045 44 39.0 N 125 7.0 W DATE 19 SEP 63 1049 GCT WIRE 03 DRY 63.0 WET 59.0 WIND DIRECTION 35 VEL 16 KTS BAR 16 SWELL DIRECTION 35 H 10 T 07 CLOUD - AMT 0 WEATHER 00													
0	17.79	31.512	5.44		0	17.79	31.52	5.44		22.69	518.2	0	
10	17.79	31.499	5.61		10	17.79	31.50	5.61		22.68	519.4	.052	
20	16.86	31.715	5.87		20	16.86	31.72	5.88		23.06	483.0	.102	
31	12.22	32.483	6.41		30	12.67	32.41	6.37		24.48	347.4	.144	
50	10.31	32.573	6.15		50	10.31	32.58	6.16		25.04	294.9	.208	
75	9.14	32.985	4.93		75	9.14	32.99	4.93		25.55	246.4	.275	
100	8.55	33.451	3.80		100	8.55	33.46	3.80		26.01	203.4	.332	
149	8.12	33.885	2.94		150	8.11	33.89	2.93		26.41	165.6	.424	
199	7.60	33.974	2.36		200	7.59	33.97	2.35		26.55	152.7	.503	
300	6.87	34.023	1.85		250	7.20	34.01	2.04		26.64	145.5	.578	
401	6.14	34.063	1.43		300	6.88	34.03	1.86		26.70	140.5	.649	
					400	6.15	34.06	1.43		26.82	129.9	.784	
NH 065 44 39.1 N 125 35.9 W DATE 19 SEP 63 1513 GCT WIRE 04 DRY 62.3 WET 60.0 WIND DIRECTION 00 VEL 18 KTS BAR 16 SWELL DIRECTION 00 H 06 T 06 CLOUD 4 AMT 02 WEATHER 03													
0	17.53	31.530	5.72		0	17.53	31.53	5.72		22.76	511.0	0	
10	17.52	31.518	5.51		10	17.52	31.52	5.52		22.74	511.9	.051	
20	11.23	32.473	6.65		20	11.23	32.48	6.66		24.80	317.0	.093	
31	10.29	32.467	6.36		30	10.38	32.47	6.43		24.94	303.7	.124	
50	9.33	32.969	5.05		50	9.33	32.91	5.05		25.46	254.5	.179	
100	8.22	33.886	3.11		75	8.60	33.43	3.89		25.98	205.9	.237	
150	7.78	33.973	2.08		100	8.22	33.81	3.11		26.33	172.3	.284	
199	7.46	34.011	1.93		150	7.79	33.98	2.08		26.53	154.4	.366	
297	6.81	34.045	1.79		200	7.45	34.01	1.93		26.60	148.0	.441	
503	5.70	34.116	.96		250	7.12	34.03	1.85		26.67	142.6	.514	
706	4.81	34.218	.48		300	6.79	34.05	1.78		26.72	138.0	.584	
810	4.43	34.291	.37		400	6.22	34.08	1.40		26.82	129.6	.718	
1014	3.87	34.307	.37		500	5.71	34.11	.97		26.97	121.1	.843	
1220	3.19	34.464	.50		600	5.25	34.16	.69		27.01	113.6	.961	
					700	4.83	34.21	.49		27.10	105.1	1.070	
					800	4.46	34.28	.38		27.19	96.3	1.170	
					1000	3.91	34.39	.37		27.34	83.5	1.350	
					1200	3.26	34.46	.48		27.46	72.1	1.506	

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S‰	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ³	Δ D	
NH 085 44 39.1 N 126 3.0 W DATE 19 SEP 63 2027 GCT WIRE 15 DRY 64.0 WET 61.0 WIND DIRECTION 01 VEI. 10 KTS BAR 17 SWELL DIRECTION 34 H 08 T 08 CLOUD 2 AMT 02 WEATHER 02													
0	17.71	31.606	5.78		0	17.71	31.61	5.79		22.78	509.5	0	
10	17.53	31.594	5.78		10	17.53	31.60	5.79		22.81	506.6	.051	
19	14.79	32.195	6.54		20	14.51	32.23	6.59		23.97	396.2	.096	
30	12.04	32.411	6.72		30	12.04	32.42	6.72		24.60	335.9	.133	
49	9.72	32.667	5.42		50	9.67	32.69	5.35		25.23	276.2	.194	
74	8.96	33.223	4.22		75	8.91	33.23	4.23		25.78	224.8	.256	
101	7.67	33.395	4.69		100	7.71	33.39	4.66		26.08	196.1	.309	
152	7.63	33.866	3.20		150	7.63	33.85	3.28		26.45	161.8	.398	
205	6.91	33.957	2.62		200	6.99	33.95	2.65		26.62	146.3	.475	
305	6.26	34.048	1.50		250	6.56	34.01	2.09		26.72	137.1	.546	
502	5.22	34.157	.67		300	6.28	34.04	1.55		26.79	131.3	.613	
601	4.55	34.174	.53		400	5.76	34.11	.94		26.91	121.2	.740	
703	4.36	34.272	.38		500	5.23	34.16	.67		27.01	111.9	.856	
809	4.09	34.319	.35		600	4.56	34.17	.53		27.10	104.2	.964	
1011	3.51	34.408	.36		700	4.36	34.27	.38		27.19	95.4	1.064	
					800	4.11	34.32	.35		27.26	89.8	1.156	
					1000	3.54	34.40	.36		27.38	78.4	1.324	
 NH 105 44 39.1 N 126 31.3 W DATE 20 SEP 63 0143 GCT WIRE 10 DRY 64.0 WET 61.0 WIND DIRECTION 02 VEI. 10 KTS BAR 16 SWELL DIRECTION 29 H 08 T 10 CLOUD 4 AMT 2 WEATHER 02													
0	18.36	31.633	5.68		0	18.36	31.64	5.69		22.64	522.5	0	
10	18.26	31.659	5.62		10	18.26	31.66	5.63		22.69	518.6	.052	
20	18.22	31.650	5.66		20	18.23	31.65	5.67		22.69	518.6	.104	
30	15.99	32.119	6.24		30	15.99	32.12	6.24		23.57	434.9	.152	
50	11.55	32.583	6.75		50	11.55	32.59	6.76		24.83	315.0	.227	
75	9.79	32.662	5.77		75	9.79	32.67	5.78		25.19	280.4	.301	
102	8.88	33.321	4.26		100	8.93	33.27	4.36		25.80	222.9	.364	
153	7.68	33.729	3.80		150	7.73	33.72	3.83		26.34	172.5	.463	
207	7.27	33.938	2.76		200	7.30	33.92	2.90		26.55	152.6	.544	
306	6.19	33.977	2.10		250	6.80	33.95	2.38		26.65	144.1	.618	
408	5.49	34.036	1.34		300	6.26	33.97	2.12		26.74	136.3	.688	
509	4.98	34.114	.78		400	5.53	34.03	1.40		26.87	124.5	.819	
613	4.51	34.180	.50		500	5.02	34.11	.82		26.99	113.1	.937	
819	3.98	34.331	.29		600	4.56	34.17	.52		27.10	104.4	1.046	
1022	3.47	34.412	.32		700	4.25	34.25	.37		27.19	95.8	1.146	
					800	4.02	34.32	.29		27.27	88.5	1.238	
					1000	3.52	34.41	.31		27.39	77.9	1.404	
 NH 125 44 39.1 N 126 58.7 W DATE 20 SEP 63 0633 GCT WIRE 3 DRY 63.5 WET 59.5 WIND DIRECTION 33 VEI. 5 KTS BAR 16 SWELL DIRECTION 29 H 4 T 10 CLOUD 8 AMT 4 WEATHER 02													
0	18.51	31.511	5.74		0	18.51	31.52	5.74		22.51	534.9	0	
10	18.51	31.510	5.62		10	18.51	31.51	5.63		22.51	535.3	.054	
20	18.46	31.526	5.65		20	18.46	31.53	5.66		22.54	533.2	.107	
31	18.32	31.658	5.69		30	18.39	31.64	5.68		22.64	523.8	.160	
51	11.80	32.584	6.77		50	12.17	32.54	6.72		24.67	329.7	.245	
77	10.06	32.688	5.80		75	10.19	32.68	5.92		25.14	285.8	.322	
105	8.15	33.289	4.67		100	8.45	33.17	4.87		25.80	223.0	.386	
155	7.73	33.822	3.23		150	7.77	33.79	3.35		26.39	168.0	.483	
210	6.68	33.994	2.06		200	6.88	33.98	2.23		26.66	142.3	.561	
310	5.99	34.013	1.79		250	6.32	34.00	1.82		26.75	134.4	.630	
413	5.06	34.030	1.22		300	6.03	34.01	1.82		26.79	130.6	.696	
515	4.71	34.142	.66		400	5.17	34.03	1.30		26.91	120.4	.822	
619	4.42	34.230	.44		500	4.74	34.12	.73		27.04	108.6	.936	
824	3.78	34.331	.33		600	4.47	34.22	.46		27.14	100.0	1.040	
1028	3.41	34.418	.41		700	4.16	34.28	.36		27.22	92.5	1.137	
					800	3.85	34.32	.34		27.29	86.3	1.226	
					1000	3.45	34.41	.39		27.40	77.0	1.389	

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S‰	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	δ × 10 ⁶	Δ D	
NH 145 44 39.0 N 127 27.0 W DATE 20 SEP 63 1106 GCT WIRE 02 DRY 63.0 WET 59.0 WIND DIRECTION 34 VEL 03 KTS BAR 14 SWELL DIRECTION 29 H 02 T 09 CLOUD - AMT 0 WEATHER 00													
0	18.40	31.777	5.88		0	18.40	31.78	5.89		22.74	513.0		0
10	18.36	31.777	5.58		10	18.36	31.78	5.58		22.75	512.3	.051	
20	18.33	31.812	5.63		20	18.33	31.82	5.64		22.78	509.3	.102	
31	17.79	31.850	5.72		30	17.91	31.84	5.70		22.91	497.9	.153	
50	10.58	32.544	6.84		50	10.58	32.55	6.84		24.97	301.4	.233	
76	9.51	32.578	6.01		75	9.55	32.58	6.07		25.16	283.2	.306	
104	8.03	33.185	4.87		100	8.22	33.09	5.04		25.77	226.0	.369	
155	8.04	33.821	2.82		150	8.04	33.78	2.97		26.34	172.4	.469	
210	7.10	33.913	2.91		200	7.30	33.90	2.89		26.53	154.5	.551	
311	5.72	33.944	2.29		250	6.48	33.93	2.75		26.68	141.5	.625	
414	5.12	34.021	1.26		300	5.84	33.94	2.39		26.77	133.3	.693	
516	4.73	34.101	.76		400	5.17	34.01	1.40		26.90	121.7	.821	
621	4.48		.48		500	4.78	34.09	.81		27.00	111.6	.937	
826	3.99	34.326	.28		600	4.52	34.16	.52		27.09	104.7	1.045	
1029	3.44	34.494	.33		700	4.30	34.23	.36		27.17	97.3	1.146	
					800	4.05	34.31	.29		27.26	89.7	1.240	
					1000	3.52	34.47	.31		27.44	73.3	1.403	
 NH 165 44 39.1 N 127 54.8 W DATE 20 SEP 63 1516 GCT WIRE - DRY 64.5 WET 60.0 WIND DIRECTION 19 VEL 10 KTS BAR 14 SWELL DIRECTION 29 H 03 T 10 CLOUD 8 AMT 6 WEATHER 02													
0	18.32	31.780	5.68		0	18.32	31.78	5.69		22.76	510.9		0
10	18.30	31.773	5.51		10	18.30	31.78	5.52		22.76	511.2	.051	
20	17.97		5.69		20	17.98	31.84	5.69		22.89	499.2	.102	
30	15.35	31.987	6.54		30	15.35	31.99	6.55		23.61	431.0	.148	
49	10.89	32.487	7.18		50	10.77	32.51	7.15		24.90	307.6	.222	
98	8.58	33.182	4.68		75	8.73	32.92	6.16		25.56	245.4	.291	
149	8.06	33.738	3.19		100	8.54	33.21	4.60		25.81	221.6	.349	
199	7.36	33.938	2.46		150	8.05	33.74	3.17		26.31	175.4	.449	
297	6.30	33.990	1.91		200	7.35	33.94	2.45		26.56	151.9	.530	
399	5.44	34.032	1.28		250	6.77	33.97	2.10		26.66	142.9	.604	
501	5.00	34.103	1.00		300	6.27	33.99	1.89		26.75	135.2	.674	
703	4.15	34.232	.53		400	5.43	34.03	1.28		26.88	123.1	.803	
807	3.94	34.292	.44		500	5.00	34.10	1.00		26.99	113.2	.921	
1011	3.53	34.395	.46		600	4.55	34.17	.74		27.09	104.4	1.030	
1217	3.08	34.451	.60		700	4.16	34.23	.54		27.18	96.0	1.130	
					800	3.95	34.29	.44		27.25	90.0	1.223	
					1000	3.55	34.39	.45		27.37	79.5	1.392	
					1200	3.12	34.45	.58		27.46	71.2	1.543	
 ANH173 45 42.6 N 128 2.0 W DATE 21 SEP 63 0223 GCT WIRE 04 DRY 66.0 WET 63.5 WIND DIRECTION 18 VEL 14 KTS BAR 10 SWELL DIRECTION 24 H 06 T 06 CLOUD 6 AMT 8 WEATHER 02													
0	18.04	32.428	5.56		0	18.04	32.43	5.57		23.32	457.2		0
10	18.04	32.423	5.47		10	18.04	32.43	5.47		23.32	457.8	.046	
20	17.97	32.455	5.56		20	17.98	32.46	5.57		23.36	454.2	.091	
31	15.40	32.536	6.11		30	15.69	32.53	6.05		23.95	398.8	.134	
50	10.84	32.542	7.12		50	10.84	32.55	7.13		24.92	305.9	.204	
76	9.89	32.571	6.44		75	9.93	32.57	6.49		25.09	289.7	.279	
103	9.12	32.641	5.97		100	9.20	32.63	6.03		25.26	274.6	.349	
154	7.93	33.566	3.95		150	8.00	33.49	4.12		26.11	194.0	.467	
209	7.56	33.808	2.99		200	7.59	33.87	3.09		26.48	160.2	.555	
310	6.40	33.944	1.98		250	7.11	33.98	2.49		26.62	146.6	.632	
414	5.47	34.008	1.51		300	6.52	33.98	2.05		26.70	139.7	.703	
515	4.98	34.103	.78		400	5.57	34.00	1.56		26.85	126.9	.837	
620	4.61	34.179	.55		500	5.04	34.09	.88		26.97	114.7	.957	
826	4.01	34.309	.27		600	4.67	34.17	.57		27.08	106.1	1.068	
1030	3.44	34.390	.33		700	4.37	34.23	.41		27.17	98.1	1.170	
					800	4.08	34.29	.29		27.24	91.0	1.264	
					1000	3.52	34.38	.30		27.37	79.8	1.435	

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S‰	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
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ANH169 45 11.0 N 127 58.0 W DATE 20 SEP 63 2129 GCT WIRE 09 DRY 66.0 WET 64.0
WIND DIRECTION 24 VEL 09 KTS BAR 12 SWELL DIRECTION 24 H 05 T - CLOUD 4 AMT 6 WEATHER 02

0	18.14	32.297	5.62		0	18.19	32.30	5.63		23.19	470.0	0
10	18.14	32.293	5.92		10	18.15	32.30	5.93		23.20	469.6	.047
20	18.06	32.301	5.60		20	18.06	32.31	5.60		23.22	467.5	.094
30	14.83	32.569	6.34		30	14.83	32.57	6.34		24.17	377.7	.136
50	9.95	32.530	6.61		50	9.95	32.53	6.61		25.06	292.3	.203
75	9.07	32.717	5.62		75	9.07	32.72	5.63		25.35	265.2	.273
102	8.28	33.284	4.41		100	8.33	33.24	4.49		25.87	216.2	.333
151	7.52	33.698	3.68		150	7.54	33.69	3.70		26.34	172.5	.430
207	7.38	33.913	2.52		200	7.39	33.90	2.66		26.52	155.7	.512
307	6.42	33.983	2.02		250	7.01	33.97	2.19		26.63	145.8	.587
409	5.70	34.045	1.25		300	6.50	33.98	2.02		26.71	139.1	.659
511	4.88	34.061	1.01		400	5.76	34.04	1.31		26.85	126.6	.791
614	4.37	34.120	.64		500	4.96	34.06	1.03		26.96	115.9	.913
819	4.11	34.304	.30		600	4.42	34.11	.69		27.06	107.3	1.024
1023	3.59	34.403	.33		700	4.22	34.20	.44		27.15	99.1	1.127
					800	4.12	34.29	.31		27.23	92.0	1.223
					1000	3.66	34.40	.31		27.37	80.3	1.395

AH 165 46 14.5 N 128 4.0 W DATE 21 SEP 63 0735 GCT WIRE 07 DRY 62.0 WET 59.0
WIND DIRECTION 33 VEL 06 KTS BAR 11 SWELL DIRECTION 24 H 05 T 08 CLOUD - AMT 9 WEATHER 21

0	18.09	32.371	5.65		0	18.09	32.38	5.66		23.27	462.5	0
10	18.08	32.361	5.56		10	18.08	32.37	5.57		23.26	463.3	.046
20	17.89	32.404	5.62		20	17.90	32.41	5.63		23.34	456.0	.092
30	15.67	32.461	6.22		30	15.67	32.47	6.22		23.90	403.1	.135
49	10.76	32.553	6.98		50	10.63	32.56	6.98		24.97	301.6	.206
98	8.55	32.899	5.54		75	9.59	32.70	6.56		25.25	274.5	.278
148	8.18	33.664	3.43		100	8.52	32.93	5.45		25.60	241.9	.342
198	7.53	33.923	2.64		150	8.16	33.68	3.38		26.24	181.7	.448
297	6.32	34.000	1.89		200	7.50	33.93	2.62		26.53	154.9	.532
399	5.57	34.045	1.26		250	6.86	33.96	2.17		26.65	144.2	.607
501	5.05	34.111	.89		300	6.29	34.00	1.87		26.75	134.7	.677
703	4.29	34.232	.37		400	5.56	34.05	1.26		26.88	123.7	.806
806	4.09	34.320	.27		500	5.05	34.11	.89		26.99	113.2	.924
1010	3.52		.29		600	4.62	34.17	.59		27.08	105.5	1.034
1215	3.04	34.454	.39		700	4.30	34.23	.38		27.17	97.6	1.135
					800	4.10	34.31	.27		27.26	89.7	1.229
					1000	3.55	34.43	.28		27.40	76.7	1.395
					1200	3.07	34.45	.38		27.47	70.6	1.542

AH 145 46 14.5 N 127 35.0 W DATE 21 SEP 63 1303 GCT WIRE - DRY 62.5 WET 60.0
WIND DIRECTION 15 VEL 03 KTS BAR 10 SWELL DIRECTION 16 H 02 T 09 CLOUD - AMT 9 WEATHER 21

0	17.97	32.126	5.58		0	17.98	32.13	5.58		23.11	477.6	0
10	17.98	32.144	5.54		10	17.98	32.15	5.55		23.12	476.8	.048
20	17.95	32.135	5.61		20	17.96	32.14	5.61		23.12	477.0	.095
31	15.32	32.520	6.21		30	15.62	32.48	6.15		23.92	400.7	.139
51	10.21	32.542	7.04		50	10.42	32.54	7.02		24.99	299.3	.209
76	9.52	32.548	6.36		75	9.55	32.55	6.41		25.14	285.5	.282
103	8.50	32.870	5.52		100	8.61	32.82	5.61		25.50	251.1	.349
154	7.18	33.634	4.41		150	7.25	33.58	4.48		26.29	176.6	.456
209	6.92	33.879	3.83		200	6.93	33.86	3.90		26.56	151.8	.538
310	5.76	33.928	2.72		250	6.48	33.90	3.38		26.65	144.0	.612
412	5.02	33.998	1.60		300	5.89	33.92	2.83		26.74	135.4	.682
514	4.74	34.092	1.01		400	5.08	33.99	1.72		26.89	122.2	.811
618	4.30	34.165	.60		500	4.77	34.08	1.07		27.00	112.2	.928
824	3.82	34.323	.41		600	4.38	34.15	.66		27.10	103.6	1.036
1029	3.30	34.396	.32		700	4.08	34.23	.47		27.19	94.9	1.135
					800	3.86	34.31	.43		27.28	87.6	1.226
					1000	3.38	34.39	.33		27.39	77.4	1.391

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	P _{O₂}	Z	T	S	O ₂	P _{O₂}	σ _t	S × 10 ³	ΔD
AH 125 46 14.4 N 127 6.0 W DATE 21 SEP 63 1714 GCT WIRE 07 DRY 63.0 WET 61.0 WIND DIRECTION 05 VEL 14 KTS BAR 09 SWELL DIRECTION 28 H 05 T 09 CLOUD 7 AMT 9 WEATHER 50												
0	18.05	31.815	5.62		0	18.05	31.82	5.63		22.86	502.1	0
10	18.07	31.824	5.59		10	18.07	31.83	5.59		22.86	502.2	.050
20	17.95	31.837	5.62		20	17.96	31.84	5.63		22.90	498.7	.100
30	14.67	32.338	6.43		30	14.67	32.34	6.44		24.02	391.4	.145
50	10.22	32.536	7.16		50	10.22	32.54	7.17		25.02	296.1	.213
77	9.22	32.536	6.35		75	9.29	32.54	6.45		25.17	282.3	.286
105	7.84	33.069	5.31		100	8.07	32.96	5.50		25.69	233.4	.350
154	7.56	33.769	3.50		150	7.58	33.73	3.62		26.36	170.2	.451
210	7.16	33.933	2.91		200	7.24	33.93	2.95		26.57	151.0	.531
310	5.85	33.955	2.44		250	6.65	33.94	2.71		26.66	143.1	.605
410	5.01	34.012	1.47		300	5.99	33.95	2.48		26.75	134.5	.674
512	4.59	34.086	.91		400	5.07	34.01	1.57		26.91	120.8	.802
615	4.23	34.167	.56		500	4.63	34.08	.96		27.01	110.7	.918
813	3.93	34.309	.44		600	4.28	34.16	.60		27.11	102.3	1.024
1017	3.34	34.384	.37		700	4.09	34.23	.46		27.19	96.9	1.123
					800	3.95	34.30	.45		27.26	88.9	1.214
					1000	3.40	34.38	.37		27.38	78.4	1.382
 AH 105 46 14.5 N 126 37.9 W DATE 21 SEP 63 2056 GCT WIRE 10 DRY 66.0 WET 63.5 WIND DIRECTION 15 VEL 06 KTS BAR 08 SWELL DIRECTION 15 H 04 T 06 CLOUD - AMT 9 WEATHER 18												
0	18.36	31.613	5.59		0	18.36	31.62	5.59		22.63	524.0	0
9	18.34	31.618	5.59		10	18.27	31.64	5.64		22.67	520.4	.052
19	16.81	31.912	6.29		20	16.46	31.94	6.38		23.32	457.8	.101
29	13.15	32.211	6.97		30	12.89	32.23	6.94		24.30	365.1	.142
48	9.85	32.463	5.75		50	9.75	32.48	5.66		25.05	293.2	.208
73	9.36	32.963	5.01		75	9.24	32.93	4.98		25.49	231.9	.276
99	7.77	33.267	4.73		100	7.74	33.28	4.72		25.99	205.0	.333
148	7.23	33.579	4.19		150	7.21	33.69	4.17		26.39	167.8	.426
201	6.78	33.900	3.60		200	6.79	33.90	3.61		26.61	147.5	.505
299	5.51	33.927	2.55		250	6.15	33.91	3.07		26.70	138.7	.577
395	4.79	33.983	1.58		300	5.50	33.93	2.54		26.79	130.4	.644
493	4.53	34.102	.73		400	4.77	34.09	1.53		26.93	118.5	.768
595	4.21	34.172	.48		500	4.51	34.11	.70		27.05	107.0	.881
792	3.76	34.206	.30		600	4.20	34.18	.47		27.14	99.9	.985
995	3.41	34.400	.27		700	3.95	34.24	.35		27.21	92.8	1.081
					800	3.74	34.30	.30		27.28	86.7	1.171
					1000	3.40	34.40	.27		27.40	76.8	1.334
 AH 085 46 14.5 N 126 9.1 W DATE 22 SEP 63 0047 GCT WIRE - DRY 65.0 WET 62.0 WIND DIRECTION 15 VEL 08 KTS BAR 07 SWELL DIRECTION 15 H 06 T 06 CLOUD - AMT 9 WEATHER 01												
0	18.34	31.513	5.55		0	18.34	31.52	5.56		22.55	530.8	0
10	18.33	31.510	5.58		10	18.33	31.51	5.58		22.55	531.1	.053
20	17.49	31.881	5.74		20	17.50	31.89	5.74		23.04	485.0	.104
31	12.94	32.311	6.90		30	13.39	32.28	6.79		24.23	371.0	.147
51	9.91	32.513	6.90		50	9.96	32.60	6.90		25.04	294.7	.213
77	9.11	32.579	5.91		75	9.17	32.57	6.02		25.21	278.2	.285
104	8.59	33.364	4.10		100	8.65	33.24	4.37		25.82	221.2	.347
155	7.79	33.828	2.97		150	7.86	33.82	3.01		26.39	167.2	.444
209	7.12	33.974	2.13		200	7.22	33.97	2.24		26.60	148.3	.523
308	6.13	34.017	1.79		250	6.66	34.01	1.92		26.71	138.3	.595
410	5.67	34.102	1.05		300	6.19	34.01	1.80		26.78	132.6	.663
510	5.10	34.174	.62		400	5.71	34.09	1.12		26.90	122.0	.790
616	4.74	34.240	.59		500	5.15	34.17	.65		27.02	110.2	.906
815	3.87	34.303	.46		600	4.79	34.23	.59		27.12	102.6	1.012
1018	3.44	34.402	.44		700	4.36	34.27	.53		27.19	95.4	1.111
					800	3.93	34.30	.47		27.26	88.9	1.203
					1000	3.46	34.39	.44		27.38	78.3	1.370

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	S × 10 ⁶	Δ D
AH 065 46 14.4 N 125 39.1 W DATE 22 SEP 63 0549 GCT WIRE 08 DRY 63.0 WET 61.0 WIND DIRECTION 17 VEL 08 KTS BAR 05 SWELL DIRECTION 17 H 04 T 05 CLOUD 6 AMT 8 WEATHER 02												
0	17.85	31.889	5.60		0	17.85	31.89	5.60		22.96	492.1	0
10	17.84	31.889	5.58		10	17.84	31.89	5.58		22.96	492.1	.049
20	17.40	31.968	5.70		20	17.40	31.97	5.70		23.13	476.6	.098
30	12.85	32.284	6.79		30	13.31	32.25	6.69		24.23	371.1	.140
50	10.02	32.507	6.62		50	10.02	32.51	6.63		25.03	295.1	.207
100	8.67	33.149	4.66		75	8.74	32.82	5.76		25.49	252.8	.275
149	8.17	33.748	2.99		100	8.67	33.15	4.66		25.75	227.6	.335
197	7.51	33.939	2.46		150	8.16	33.79	2.97		26.33	173.3	.435
296	6.40	34.013	1.85		200	7.47	33.94	2.44		26.55	153.3	.517
396	5.78	34.059	1.29		250	6.86	34.00	2.09		26.68	141.6	.591
498	5.14	34.110	.86		300	6.37	34.02	1.83		26.75	134.7	.660
697	4.45	34.258			400	5.75	34.06	1.27		26.87	125.0	.789
797	4.15	34.303	.30		500	5.13	34.11	.85		26.98	114.1	.909
995	3.69	34.389	.33		600	4.73	34.19	.57		27.09	105.3	1.019
1193	3.25	34.454	.42		700	4.44	34.26	.38		27.18	97.1	1.120
					800	4.14	34.30	.30		27.25	91.0	1.214
					1000	3.68	34.39	.33		27.36	80.9	1.385
					1200	3.23	34.46	.62		27.46	72.0	1.538
AH 045 46 14.5 N 125 11.2 W DATE 22 SEP 63 1222 GCT WIRE 13 DRY 62.0 WET 60.0 WIND DIRECTION 15 VEL 04 KTS BAR 04 SWELL DIRECTION 15 H 04 T 06 CLOUD - AMT 9 WEATHER 02												
0	17.21	31.851	5.84		0	17.21	31.86	5.84		23.08	480.4	0
10	17.20	31.846	5.84		10	17.21	31.85	5.84		23.08	480.8	.048
20	15.06	31.759	6.53		20	15.06	31.76	6.54		23.49	441.5	.094
30	12.23	32.415	6.97		30	12.23	32.42	6.97		24.57	339.0	.133
49	9.62	32.542	6.41		50	9.55	32.55	6.37		25.14	285.0	.196
75	8.55	32.767	5.38		75	8.55	32.77	5.39		25.47	253.8	.263
102	7.83	33.295	4.58		100	7.87	33.25	4.64		25.95	208.6	.321
150	7.91	33.866	2.68		150	7.92	33.87	2.68		26.43	164.1	.414
205	7.07	33.969	2.06		200	7.16	33.96	2.08		26.60	147.8	.492
303	6.37	34.034	1.54		250	6.67	34.01	1.76		26.71	138.3	.563
401	5.95	34.092	1.22		300	6.38	34.03	1.55		26.77	133.5	.631
501	5.48	34.127	.86		400	5.95	34.08	1.22		26.84	126.0	.761
604	5.06	34.176	.60		500	5.48	34.13	.86		26.95	117.3	.883
803	4.46	34.266	.35		600	5.08	34.17	.61		27.04	110.3	.996
1006	3.74	34.376	.29		700	4.76	34.22	.45		27.11	103.9	1.103
					800	4.47	34.26	.35		27.18	97.8	1.204
					1000	3.76	34.37	.29		27.34	83.2	1.385
AH 035 46 14.4 N 124 56.3 W DATE 22 SEP 63 1430 GCT WIRE 05 DRY 61.5 WET 59.0 WIND DIRECTION 22 VEL 10 KTS BAR 03 SWELL DIRECTION 27 H 05 T 09 CLOUD 6 AMT 9 WEATHER 02												
0	15.78	31.754	5.99		0	15.78	31.76	5.99		23.33	456.4	0
10	15.70	31.745	6.16		10	15.70	31.75	6.17		23.34	455.6	.046
20	10.96	32.114	4.97		20	10.96	32.12	4.97		24.57	339.0	.085
30	9.49	32.379	5.01		30	9.49	32.38	5.02		25.02	296.0	.117
50	8.56	32.697	4.98		50	8.56	32.64	4.98		25.37	263.2	.173
76	7.89	33.277	3.60		75	7.90	33.25	3.66		25.94	208.9	.232
104	7.88	33.636	3.48		100	7.88	33.60	3.50		26.22	183.1	.281
153	7.61	33.913	2.56		150	7.63	33.91	2.62		26.49	157.6	.366
209	7.11	33.975	2.16		200	7.19	33.97	2.20		26.60	147.9	.442
313	6.39	34.018	1.86		250	6.81	34.00	2.02		26.68	141.0	.515
417	5.75	34.062	1.41		300	6.47	34.02	1.89		26.74	136.0	.584
518	5.37	34.137	.88		400	5.84	34.05	1.49		26.85	126.6	.715
617	4.86	34.181	.62		500	5.43	34.12	.97		26.96	116.9	.837
					600	4.95	34.18	.65		27.05	108.7	.950
AH 025 46 14.3 N 124 41.8 W DATE 22 SEP 63 1702 GCT WIRE 07 DRY 61.5 WET 58.5 WIND DIRECTION 17 VEL 12 KTS BAR 04 SWELL DIRECTION 19 H 05 T 05 CLOUD 6 AMT 9 WEATHER 02												
0	16.41	30.251	5.94		0	16.42	30.26	5.94		22.04	579.7	0
10	14.64	31.409	6.03		10	14.64	31.41	6.04		23.31	458.4	.052
20	10.10	32.296	5.30		20	10.10	32.30	5.31		24.86	311.5	.090
30	9.40	32.496	5.46		30	9.40	32.50	5.46		25.13	285.9	.120
50	8.58	32.766	4.41		50	8.58	32.80	4.41		25.49	251.7	.174
76	8.55	33.517	3.73		75	8.55	33.51	3.75		26.05	199.0	.230
104	8.13	33.731	3.75		100	8.20	33.72	3.39		26.27	178.3	.277
158	7.56	33.935	2.48		150	7.62	33.92	2.59		26.50	156.7	.361
207	7.31	34.014	2.26		200	7.33	34.01	2.29		26.62	146.5	.437

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	O ₃	S × 10 ⁶	Δ D		
AH 015 46 14.4 N 124 27.3 W DATE 22 SEP 63 1942 GCT WIRE 04 DRY 59.5 WET 57.0 WIND DIRECTION 14 VEL 16 KTS BAR 04 SWELL DIRECTION 14 H 05 T 05 CLOUD 6 AMT 8 WEATHER 02														
0	15.18	32.143	6.37		0	15.18	32.15	6.38		23.76	415.4	0		
10	14.63	32.188	5.65		10	14.63	32.19	5.66		23.92	401.1	.041		
20	10.03	32.360			20	10.03	32.36	5.25		24.92	305.6	.076		
30	9.11	32.494	4.91		30	9.11	32.50	4.91		25.17	281.7	.106		
50	8.10	33.200	3.77		50	8.10	33.21	3.78		25.88	214.8	.155		
76	8.37	33.558	3.66		75	8.35	33.55	3.66		26.11	193.0	.206		
103	7.85	33.806	2.58		100	7.92	33.78	2.71		26.36	169.9	.251		
157	7.58	33.903	1.70		150	7.58	33.89	1.75		26.49	158.0	.333		
206	7.52	33.932	1.47		200	7.53	33.93	1.50		26.53	155.0	.412		
AH 005 46 14.5 N 124 13.6 W DATE 22 SEP 63 2028 GCT WIRE 05 DRY 60.0 WET 58.0 WIND DIRECTION 17 VEL 08 KTS BAR 05 SWELL DIRECTION 17 H 04 T 08 CLOUD - AMT 9 WEATHER 03														
0	14.91	27.043	6.71		0	14.91	27.05	6.71		19.91	784.4	0		
10	12.83	30.924	5.32		10	12.83	30.93	5.32		23.30	459.3	.062		
20	9.73	33.151	3.63		20	9.73	33.16	3.64		25.58	242.3	.097		
31	8.02	33.212	3.48		30	8.10	33.21	3.49		25.88	214.4	.120		
40	7.97	33.388	3.57		50	8.00	33.61	2.97		26.21	183.1	.160		
50	8.00	33.608	2.97		75	8.35	33.55			26.11	193.0	.207		
NH 5 44 39.1 N 124 10.6 W DATE 21 NOV 63 0540 GCT WIRE 0 DRY 51.5 WET 47.0 WIND DIRECTION 27 VEL 10 KTS BAR 16 SWELL DIRECTION 27 H 4 T 5 CLOUD - AMT - WEATHER 02														
0	12.49	31.873	5.95		0	12.49	31.88	5.95		24.10	383.1	0		
10	12.67	31.993	6.01		10	12.67	32.00	6.02		24.16	377.7	.038		
20	12.93	32.310	6.15		20	12.93	32.31	6.16		24.35	359.4	.075		
30	12.91	32.378	6.01		30	12.91	32.38	6.02		24.41	354.2	.111		
40	13.05	32.467	6.00		50	13.15	32.60	5.90		24.53	343.3	.180		
50	13.15	32.593	5.89		75	8.35	33.55			26.11	193.0	.247		
NH 15 44 39.1 N 124 24.9 W DATE 21 NOV 63 0755 GCT WIRE 5 DRY 51.5 WET 45.0 WIND DIRECTION 27 VEL 10 KTS BAR 15 SWELL DIRECTION 27 H 6 T 6 CLOUD - AMT 10 WEATHER 02														
0	12.76	32.262	6.01		0	12.76	32.27	6.02		24.35	359.3	0		
10	12.77	32.263	6.03		10	12.77	32.27	6.04		24.35	359.7	.036		
25	13.16	32.622	5.90		20	13.06	32.48	5.98		24.46	349.3	.071		
40	12.52	32.871	5.29		30	13.00	32.71	5.72		24.65	331.7	.105		
65	11.43	33.245	4.32		50	12.09	33.03	4.89		25.07	292.1	.168		
NH 25 44 39.1 N 124 38.5 W DATE 21 NOV 63 1119 GCT WIRE 3 DRY 49.5 WET 44.5 WIND DIRECTION 27 VEL 10 KTS BAR 15 SWELL DIRECTION 27 H 6 T 6 CLOUD - AMT 10 WEATHER 02														
0	12.69	32.460	6.04		0	12.69	32.46	6.05		24.52	343.5	0		
10	12.70	32.460	6.02		10	12.70	32.46	6.03		24.52	343.9	.034		
20	12.74	32.492	6.04		20	12.74	32.49	6.05		24.52	343.2	.069		
30	12.75	32.510	5.98		30	12.75	32.51	5.98		24.54	341.5	.103		
49	12.64	32.773	5.52		50	12.55	32.80	5.44		24.81	316.8	.169		
75	10.05	33.550	3.56		75	10.05	33.55	3.57		25.84	218.9	.236		
102	9.38	33.627	3.22		100	9.39	33.62	3.25		26.00	203.8	.289		
151	8.73	33.823	2.97		150	8.74	33.82	2.97		26.26	180.1	.385		
205	8.09	33.923	2.59		200	8.15	33.92	2.63		26.43	164.8	.471		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁶	Δ D
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NH 45 44 39.1 N 125 6.8 W DATE 21 NOV 63 1826 GCT WIRE - DRY 52.0 WET 46.5
WIND DIRECTION 23 VEL 8 KTS BAR 17 SWELL DIRECTION 29 H 6 T 8 CLOUD 0 AMT 10 WEATHER 02

0	12.08	32.202	6.27		0	12.08	32.21	6.28		24.43	351.5	0
10	12.08		6.21		10	12.08	32.18	6.21		24.41	353.5	.035
20	12.10	32.186	6.29		20	12.10	32.19	6.30		24.42	353.4	.071
30	12.09	32.190	6.16		30	12.09	32.19	6.17		24.42	353.1	.106
40	9.96	32.612	5.78		50	9.89	32.63	5.74		25.15	284.2	.170
76	8.87	33.090	4.75		75	8.88	33.07	4.79		25.66	236.3	.235
103	8.36	33.535	3.97		100	8.40	33.49	4.05		26.06	198.6	.289
153	7.62	33.890	3.07		150	7.66	33.88	3.11		26.47	159.7	.379
207	7.17	33.958	2.67		200	7.22	33.95	2.71		26.59	149.4	.456
309	6.28	34.047	1.66		250	6.79	34.00	2.24		26.69	140.5	.528
410	5.58	34.104	1.08		300	6.36	34.04	1.75		26.78	132.6	.597
513	4.98	34.152	.76		400	5.64	34.10	1.12		26.91	120.7	.723
616	4.57	34.234	.53		500	5.05	34.15	.79		27.02	110.5	.839
					600	4.62	34.22	.56		27.13	101.6	.945

NH 65 44 39.1 N 125 34.8 W DATE 21 NOV 63 2235 GCT WIRE 10 DRY 52.5 WET 48.0
WIND DIRECTION 24 VEL 22 KTS BAR 14 SWELL DIRECTION 29 H 8 T 6 CLOUD 0 AMT 10 WEATHER 02

0	12.09	32.096	5.99		0	12.09	32.10	5.99		24.35	359.4	0
10	12.09	32.096	6.04		10	12.09	32.10	6.05		24.35	359.6	.036
20	12.10	32.096	6.05		20	12.10	32.10	6.06		24.35	360.0	.072
29	12.09	32.102	6.06		30	12.03	32.13	6.01		24.39	356.6	.108
48	10.57	32.860	4.76		50	10.44	32.92	4.67		25.28	272.0	.171
102	8.29	33.718	3.28		75	9.13	33.45	3.75		25.91	211.8	.231
150	7.80	33.892	2.80		100	8.33	33.71	3.30		26.24	181.3	.280
204	7.06		2.19		150	7.81	33.90	2.80		26.46	160.7	.366
303	6.16	34.035	1.58		200	7.12	33.98	2.23		26.62	146.0	.442
401	5.60	34.101	1.14		250	6.58	34.02	1.86		26.73	136.1	.513
501	5.08	34.144	.68		300	6.18	34.03	1.59		26.70	131.0	.580
602	4.62	34.202	.47		400	5.60	34.10	1.14		26.92	120.2	.705
803	4.14	34.306	.31		500	5.08	34.14	.68		27.01	111.1	.821
1005	3.56	34.397	.33		600	4.63	34.20	.47		27.11	103.0	.928
1205	3.16	34.467	.63		700	4.36	34.25	.36		27.18	96.4	1.027
					800	4.15	34.30	.31		27.25	91.0	1.121
					1000	3.57	34.39	.33		27.38	79.4	1.291
					1200	3.17	34.47	.62		27.47	70.5	1.441

NH45-2 44 39.1 N 125 6.9 W DATE 30 NOV 63 0230 GCT WIRE 3 DRY 55.5 WET 51.8
WIND DIRECTION 15 VEL 11 KTS BAR 20 SWELL DIRECTION 27 H 4 T 9 CLOUD - AMT - WEATHER 02

0	11.82	32.204	6.23		0	11.82	32.21	6.23		24.48	346.7	0
10	11.82	32.219	6.20		10	11.82	32.22	6.20		24.49	345.8	.035
20	11.83	32.213	6.23		20	11.83	32.22	6.23		24.49	346.6	.069
30	11.82	32.352	6.19		30	11.82	32.36	6.19		24.60	336.4	.103
50	10.69	33.356	6.00		50	10.69	33.36	6.01		25.58	243.3	.161
76	8.64	33.695	4.05		75	8.71	33.69	4.13		26.17	187.7	.215
103	8.18	33.888	3.36		100	8.19	33.87	3.40		26.39	167.1	.260
153	7.65	33.953	2.86		150	7.68	33.95	2.87		26.52	155.0	.340
208	7.04	34.008	2.71		200	7.13	34.00	2.73		26.64	144.3	.415
312	6.08		1.82		250	6.62	34.04	2.41		26.74	135.4	.485
372	5.63		1.21		300	6.18	34.07	1.95		26.82	128.2	.551
416	5.44	34.094	1.22		400	5.50	34.09	1.22		26.92	119.8	.675

NH 85 44 39.1 N 126 3.0 W DATE 30 NOV 63 1014 GCT WIRE 0 DRY 53.5 WET 48.5
WIND DIRECTION 0 VEL 0 KTS BAR 24 SWELL DIRECTION 27 H 4 T 7 CLOUD - AMT - WEATHER 02

0	11.73	32.314	6.30		0	11.73	32.32	6.31		24.58	337.0	0
20	11.74	32.321	6.28		10	11.73	32.33	6.22		24.60	336.2	.034
30	11.75	32.310	6.34		20	11.74	32.33	6.29		24.59	337.1	.067
50	11.31	32.452	5.79		30	11.75	32.31	6.34		24.58	338.2	.101
76	8.73		3.91		50	11.31	32.46	5.80		24.77	320.5	.167
104	8.46		3.16		75	8.83	32.83	3.98		25.48	253.2	.239
154	7.94	33.949	2.43		100	8.50	33.20	3.22		25.82	221.4	.298
209	7.46	34.029	2.15		150	7.98	33.90	2.47		26.44	163.2	.394
311	6.46	34.047	1.67		200	7.54	34.02	2.18		26.60	148.8	.472
412	5.82	34.105	1.15		250	7.05	34.04	1.96		26.69	140.8	.544
514	5.29	34.156	.73		300	6.56	34.05	1.72		26.75	135.0	.613
618	4.71	34.224	.65		400	5.88	34.10	1.21		26.88	123.9	.743
824	4.19	34.326	.29		500	5.36	34.15	.77		26.99	114.1	.862
1029	3.50	34.407	.57		600	4.80	34.21	.65		27.10	104.2	.971
					700	4.46	34.27	.48		27.18	96.7	1.071
					800	4.23	34.32	.32		27.24	91.2	1.165
					1000	3.61	34.40	.49		27.37	79.6	1.336

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
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NH 105 44 39.1 N 126 31.0 W DATE 30 NOV 63 1607 GCT WIRE 0 DRY 51.5 WET 48.0
WIND DIRECTION 35 VEL 6 KTS BAR 22 SWELL DIRECTION 27 H 4 T 9 CLOUD 4 AMT 3 WEATHER 01

0	11.47	32.303	6.26		0	11.47	32.31	6.27		24.62	333.3	0
20	11.48	32.300	6.20		10	11.46	32.30	6.11		24.62	333.8	.033
30	11.50	32.302	6.29		20	11.48	32.30	6.20		24.62	334.1	.067
49	11.49	32.312	6.21		30	11.50	32.31	6.30		24.62	334.5	.100
75	8.93		4.30		50	11.40	32.33	6.15		24.65	331.6	.167
102	8.46		3.47		75	8.93	32.69	4.30		25.35	265.5	.241
150	8.08	33.914	2.52		100	8.49	33.08	3.51		25.72	230.8	.303
204	7.65	34.000	2.25		150	8.08	33.92	2.52		26.44	163.0	.402
303	6.63	34.052	1.78		200	7.68	33.99	2.26		26.56	152.6	.481
403	5.89	34.063	1.28		250	7.18	34.04	2.03		26.66	143.2	.555
504	5.37		.89		300	6.66	34.05	1.79		26.74	135.8	.624
606	4.96	34.191	.56		400	5.91	34.06	1.29		26.85	126.8	.756
810	4.03	34.305	.28		500	5.39	34.12	.90		26.96	116.9	.877
1012	3.61		.37		600	4.98	34.19	.58		27.06	108.3	.990
					700	4.51	34.25	.38		27.16	98.9	1.093
					800	4.07	34.30	.28		27.25	90.5	1.188
					1000	3.62	34.40	.35		27.37	79.8	1.358

NH 145 44 39.1 N 127 26.8 W DATE 1 DEC 63 0021 GCT WIRE 7 DRY 52.0 WET 48.2
WIND DIRECTION 09 VEL 4 KTS BAR 23 SWELL DIRECTION 27 H 4 T 7 CLOUD 6 AMT 7 WEATHER 03

0	12.04	32.455	6.24		0	12.04	32.46	6.24		24.64	332.1	0
20	11.99	32.457	6.13		10	12.00	32.46	5.99		24.64	331.7	.033
30	12.01	32.456	6.27		20	11.99	32.46	6.14		24.65	331.4	.066
49	10.77	32.567	6.06		30	12.01	32.46	6.28		24.64	332.1	.100
103	8.33	33.184	4.78		50	10.71	32.58	6.04		24.97	301.5	.163
151	7.42	33.698	3.95		75	9.40	32.84	5.48		25.39	261.5	.233
206	7.06	33.915	3.31		100	8.42	33.14	4.86		25.78	224.6	.294
304	5.87	33.956	2.29		150	7.43	33.69	3.96		26.35	170.9	.393
402	5.03	34.039	1.36		200	7.09	33.90	3.37		26.57	150.9	.473
501	4.72	34.122	1.06		250	6.55	33.93	2.84		26.67	142.4	.547
602	4.42	34.188	.42		300	5.92	33.95	2.33		26.76	133.5	.615
803	3.94	34.317	.29		400	5.04	34.04	1.38		26.93	118.1	.741
1005	3.40	34.389	.28		500	4.72	34.12	1.06		27.04	108.5	.854
1201	3.05	34.466	.59		600	4.43	34.19	.43		27.12	101.7	.960
					700	4.18	34.25	.36		27.20	94.4	1.057
					800	3.95	34.32	.29		27.27	87.9	1.149
					1000	3.41	34.39	.28		27.38	78.1	1.314
					1200	3.05	34.47	.59		27.48	69.2	1.462

SH 145 43 59.7 N 127 26.8 W DATE 1 DEC 63 0800 GCT WIRE 3 DRY 53.5 WET 49.0
WIND DIRECTION 13 VEL 5 KTS BAR 19 SWELL DIRECTION 27 H 3 T 9 CLOUD 6 AMT 8 WEATHER 02

0	12.34	32.305	6.01		0	12.34	32.40	6.02		24.53	341.9	0
20	12.33	32.305	6.07		10	12.30	32.40	5.97		24.54	341.5	.034
30	12.36	32.303	6.17		20	12.33	32.40	6.07		24.54	342.1	.068
49	12.00	32.489	6.14		30	12.36	32.40	6.18		24.53	343.0	.103
103	9.12	33.445	4.22		50	11.95	32.50	6.11		24.69	328.1	.170
155	8.29	33.812	3.20		75	10.66	32.92	5.33		25.25	275.4	.245
208	7.72	33.936	2.69		100	9.29	33.39	4.35		25.84	219.7	.307
308	6.52	34.024	1.96		150	8.32	33.79	3.27		26.31	175.8	.406
409	5.75	34.074	1.26		200	7.80	33.93	2.75		26.49	159.1	.490
511	5.20	34.145	.81		250	7.20	33.99	2.36		26.62	147.1	.566
614	4.63	34.198	.53		300	6.61	34.02	2.01		26.73	137.4	.637
820	4.12	34.313	.29		400	5.81	34.07	1.32		26.87	124.9	.768
1025	3.58	34.422	.41		500	5.25	34.14	.85		26.99	113.7	.888
1225	3.14	34.475	.61		600	4.70	34.19	.56		27.09	104.6	.997
					700	4.37	34.25	.38		27.18	96.6	1.097
					800	4.15	34.32	.30		27.26	89.9	1.190
					1000	3.64	34.41	.38		27.38	78.8	1.359
					1200	3.19	34.47	.58		27.47	70.4	1.508

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁵	Δ D
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SH 125 43 59.7 N 126 59.2 W DATE 1 DEC 63 1127 GCT WIRE 4 DRY 52.0 WET 48.8
WIND DIRECTION 0 VEL 0 KTS BAR 21 SWELL DIRECTION 27 H 3 T 7 CLOUD 6 AMT 8 WEATHER 02

0	12.10	32.452	6.12		0	12.10	32.46	6.13	24.62	333.4	0
20	12.11	32.424	6.13		10	12.08	32.43	5.96	24.61	335.0	.033
30	12.14	32.431	6.30		20	12.11	32.43	6.14	24.60	336.0	.067
50	12.09		6.15		30	12.14	32.44	6.31	24.60	336.2	.101
76	9.44	32.772	6.13		50	12.09	32.52	6.16	24.67	329.7	.167
103	8.29	33.198	4.71		75	9.55	32.76	6.14	25.30	269.8	.242
152	8.00	33.813	3.27		100	8.36	33.15	4.89	25.79	223.4	.304
207	7.46	33.983	2.68		150	8.01	33.79	3.31	26.35	171.2	.402
309	6.20	34.072	2.12		200	7.54	33.98	2.72	26.57	151.6	.483
410	5.41	34.061	1.23		250	6.92	34.04	2.42	26.70	139.1	.556
513	4.76	34.090	.92		300	6.31	34.06	2.16	26.80	130.3	.623
617	4.43	34.186	.47		400	5.47	34.06	1.31	26.90	121.3	.749
822	3.91	34.334	.32		500	4.83	34.08	.95	27.00	112.5	.866
1027	3.43	34.429			600	4.47	34.17	.54	27.10	103.6	.974
					700	4.21	34.25	.41	27.20	94.9	1.073
					800	3.96	34.32	.34	27.28	87.6	1.164
					1000	3.49	34.42		27.40	76.6	1.328

SH 105 43 59.7 N 126 31.8 W DATE 1 DEC 63 1558 GCT WIRE 2 DRY 52.0 WET 48.6
WIND DIRECTION 24 VEL 4 KTS BAR 23 SWELL DIRECTION 27 H 3 T 10 CLOUD 6 AMT 8 WEATHER 02

0	12.21	32.437	6.11		0	12.21	32.44	6.11	24.59	336.5	0
20	12.25	32.418	6.11		10	12.24	32.42	5.93	24.57	338.7	.034
29	12.24	32.429	6.27		20	12.25	32.42	6.11	24.57	339.0	.068
48	12.13	32.406	6.15		30	12.23	32.43	6.27	24.58	338.5	.102
73	9.87	32.551	6.18		50	11.97	32.41	6.16	24.61	335.4	.169
98	8.77	32.876	5.35		75	9.75	32.57	6.13	25.13	286.7	.247
145	7.94	33.756			100	8.71	32.92	5.28	25.56	245.8	.313
199	7.47	33.918	2.69		150	7.89	33.79	3.78	26.37	169.6	.417
299	6.13	33.980	2.05		200	7.46	33.92	2.68	26.53	154.9	.498
400	5.40	34.030	1.35		250	6.79	33.97	2.24	26.66	142.8	.573
502	4.83	34.108	.77		300	6.12	33.98	2.04	26.76	134.1	.642
606	4.49	34.221	.43		400	5.41	34.04	1.36	26.89	122.6	.770
812	4.00	34.366	.30		500	4.84	34.11	.78	27.01	111.0	.887
					600	4.51	34.21	.44	27.14	100.5	.992
					700	4.24	34.30	.37	27.23	91.7	1.088
					800	4.02	34.36	.31	27.30	85.4	1.177

SH 85 43 59.1 N 126 3.8 W DATE 1 DEC 63 2036 GCT WIRE 0 DRY 52.5 WET 49.5
WIND DIRECTION 25 VEL 6 KTS BAR 22 SWELL DIRECTION 27 H 3 T 7 CLOUD - AMT 9 WEATHER 02

0	12.07	32.407	6.17		0	12.07	32.41	6.18	24.59	336.2	0
20	12.07	32.455	6.15		10	12.04	32.44	6.01	24.63	333.4	.033
30	12.10	32.441	6.29		20	12.07	32.46	6.16	24.63	333.0	.067
50	12.23	32.532	6.02		30	12.10	32.45	6.30	24.61	334.8	.100
76	9.37	33.300	4.36		50	12.23	32.54	6.03	24.66	330.8	.167
104	8.96	33.698	3.48		75	9.49	33.27	4.43	25.71	231.2	.237
153	8.23	33.934	2.66		100	9.02	33.66	3.57	26.09	195.2	.290
209	7.36	33.971	2.40		150	8.28	33.93	2.69	26.42	164.9	.380
310	6.44	34.050	1.76		200	7.49	33.97	2.42	26.56	152.0	.459
411	5.76	34.082	1.21		250	6.92	34.00	2.15	26.67	142.0	.533
514	5.12	34.171	.66		300	6.51	34.04	1.83	26.76	134.4	.602
618	4.70	34.243	.42		400	5.83	34.08	1.27	26.87	124.6	.731
824	4.12	34.363	.36		500	5.20	34.16	.73	27.01	111.5	.849
1029	3.56	34.426	.43		600	4.76	34.23	.45	27.12	102.3	.956
					700	4.45	34.30	.40	27.21	94.4	1.055
					800	4.18	34.35	.37	27.28	87.9	1.146
					1000	3.64	34.42	.41	27.39	78.2	1.312

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	σ _t	‰ × 10 ³	AD
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SH 65 43 59.7 N 125 36.2 W DATE 2 DEC 63 0142 GCT WIRE 3 DRY 53.8 WET 49.5
 WIND DIRECTION 0 VEL 0 KTS BAR 23 SWELL DIRECTION 27 H 3 T 7 CLOUD 4 AMT 9 WEATHER 02

0	11.92	32.279	6.24		0	11.92	32.28	6.24		24.52	342.9	0
20	11.79	32.285	6.15		10	11.76	32.27	6.16		24.54	341.3	.034
30	11.82	32.300	6.21		20	11.79	32.29	6.16		24.55	340.6	.068
49	9.64	32.650	5.81		30	11.82	32.30	6.21		24.56	340.2	.102
103	8.60	33.578	3.77		50	9.58	32.67	5.77		25.23	276.4	.164
151	7.96	33.911	2.78		75	8.64	33.14	4.85		25.74	227.8	.227
206	7.26	33.980	2.35		100	8.66	33.54	3.89		26.05	199.0	.280
306	6.35	34.053	1.62		150	7.97	33.91	2.79		26.45	162.2	.371
406	5.68	34.097	1.06		200	7.33	33.97	2.38		26.59	149.2	.448
508	5.06	34.149	.69		250	6.82	34.02	2.01		26.70	139.6	.521
611	4.63	34.209	.41		300	6.39	34.05	1.66		26.78	132.4	.589
816	4.08	34.338	.31		400	5.72	34.09	1.09		26.90	122.0	.716
1020	3.62	34.417	.37		500	5.10	34.14	.71		27.01	111.3	.832
					600	4.67	34.20	.43		27.11	103.4	.940
					700	4.36	34.27	.32		27.19	95.5	1.039
					800	4.11	34.33	.32		27.27	88.8	1.131
					1000	3.66	34.41	.36		27.38	79.2	1.299

SH 45 43 59.7 N 125 8.1 W DATE 2 DEC 63 0625 GCT WIRE 0 DRY 52.1 WET 50.0
 WIND DIRECTION 03 VEL 2 KTS BAR 23 SWELL DIRECTION 27 H 2 T 10 CLOUD 4 AMT 2 WEATHER 01

0	12.07	32.420	6.08		0	12.07	32.42	6.08		24.60	335.2	0
20	12.33	32.476	5.80		10	12.16	32.42	5.93		24.58	337.4	.034
30	12.50	32.534	5.85		20	12.33	32.48	5.90		24.60	336.1	.067
50	10.31	33.055	4.69		30	12.50	32.54	5.85		24.61	335.2	.101
76	9.62	33.529	3.89		50	10.31	33.06	4.69		25.41	259.2	.160
104	8.95	33.826	2.68		75	9.62	33.51	3.92		25.88	214.9	.220
153	8.16	33.896	2.71		100	9.04	33.80	2.84		26.20	185.5	.270
208	7.83	33.997	2.15		150	8.19	33.89	2.71		26.40	166.6	.358
309	6.98	34.085	1.53		200	7.86	33.98	2.25		26.52	155.9	.438
410	5.93	34.094	1.06		250	7.51	34.05	1.85		26.62	147.0	.514
512	5.31	34.132	.79		300	7.07	34.08	1.57		26.71	139.1	.585
615	4.80	34.215	.46		400	6.03	34.09	1.10		26.86	126.1	.718
820	4.18	34.322	.29		500	5.37	34.13	.82		26.97	115.9	.839
1025	3.52	34.431	.39		600	4.87	34.20	.50		27.09	105.7	.950
					700	4.51	34.26	.33		27.17	97.6	1.051
					800	4.23	34.31	.31		27.24	91.3	1.146
					1000	3.60	34.42	.36		27.39	78.0	1.315

SH 35 43 59.7 N 124 55.7 W DATE 2 DEC 63 0858 GCT WIRE 0 DRY 52.8 WET 49.0
 WIND DIRECTION 06 VEL 6 KTS BAR 23 SWELL DIRECTION 27 H 3 T 7 CLOUD - AMT 0 WEATHER 01

0	12.15	32.469	6.06		0	12.15	32.47	6.07		24.63	333.0	0
10	12.20	32.454	6.08		10	12.20	32.46	6.08		24.61	335.2	.033
20	12.32	32.520	6.02		20	12.32	32.52	6.03		24.63	332.7	.067
31	12.43	32.650	5.80		30	12.42	32.64	5.83		24.70	326.6	.100
41	12.49	32.841	5.44		50	12.11	33.07	4.83		25.10	289.3	.161
52	11.97	33.178	4.66		75	9.62	33.51			25.88	214.9	.224

SH 25 43 59.7 N 124 40.6 W DATE 2 DEC 63 1033 GCT WIRE 0 DRY 52.6 WET 49.0
 WIND DIRECTION 0 VEL 0 KTS BAR 23 SWELL DIRECTION 27 H 3 T 7 CLOUD - AMT 0 WEATHER 01

0	12.38	32.498	6.00		0	12.38	32.50	6.01		24.61	335.0	0
10	12.33	32.486	6.03		10	12.33	32.49	6.04		24.61	335.2	.034
20	12.33	32.483	6.11		20	12.33	32.49	6.11		24.60	335.6	.067
30	12.32	32.484	6.03		30	12.32	32.49	6.04		24.61	335.6	.101
50	11.75	32.891	5.29		50	11.75	32.90	5.30		25.03	295.8	.164
77	9.70	33.657	3.01		75	9.90	33.59	3.23		25.90	213.7	.227

OBSERVED				INTERPOLATED				DERIVED			
D	T°C	S%	O ₂ ml/l	Z	T	S	O ₂	PO ₄ ³⁻	σ _t	δ × 10 ⁶	Δ D

SH 15 43 59.7 N 124 26.5 W DATE 2 DEC 63 1346 GCT WIRF 10 DRY 49.0 WET 44.3
WIND DIRECTION 09 VEI 13 KTS BAR 23 SWELL DIRECTION 27 H 3 T 6 CLOUD - AMT 0 WEATHER 02

0	12.00	32.304	6.13	0	12.00	32.31	6.14	24.53	342.5	0
10	12.17	32.338	6.11	10	12.17	32.34	6.11	24.52	341.2	.034
20	12.28	32.375	6.18	20	12.28	32.38	6.19	24.53	342.7	.069
30	12.29	32.381	6.07	30	12.29	32.39	6.07	24.53	342.6	.103
40	12.73	32.553	5.80	50	12.73	32.57	5.77	24.59	337.4	.171
76	11.67	33.256	4.52	75	11.74	33.22	4.59	25.28	272.2	.247

SH 5 43 59.7 N 124 13.1 W DATE 2 DEC 63 1509 GCT WIRF 5 DRY 46.0 WET 41.1
WIND DIRECTION 08 VEI 15 KTS BAR 23 SWELL DIRECTION 27 H 3 T 10 CLOUD - AMT 0 WEATHER 02

0	12.13	32.104	6.16	0	12.13	32.11	6.17	24.35	359.6	0
10	12.51	32.385	6.10	10	12.51	32.39	6.10	24.49	345.9	.035
20	12.69	32.481	6.01	20	12.69	32.49	6.02	24.53	342.3	.070
30	12.77	32.507	5.98	30	12.77	32.51	5.98	24.54	342.1	.104
40	12.74	32.532	5.88	50	12.73	32.57		24.59	337.4	.172

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	σ _t	S × 10 ⁸	Δ D		
NH 15	44 39.1 N	124 24.7 W	DATE 3 FEB 64	0138 GCT	WIRE 4	DRY 50.0	WET 47.0							
WIND DIRECTION 36 VEL 12 KTS	PAR 27 SWELL DIRECTION 29 H	6 T	9 CLOUD	5 AMT	4 WEATHER 01									
0 10.64	32.619				0 10.64	32.62				25.02	296.0		0	
27 10.62	32.622				10 10.64	32.62				25.01	296.5	.030		
47 10.59	32.627				20 10.63	32.62				25.02	296.3	.059		
57 10.60	32.674				30 10.61	32.62				25.02	296.1	.089		
67 10.63	32.629				50 10.59	32.65				25.04	294.3	.148		
77 10.66	32.661				75 10.65	32.64				25.03	296.2	.222		
NH 25	44 39.1 N	124 38.9 W	DATE 3 FEB 64	0536 GCT	WIRE 3	DRY 50.0	WET 48.0							
WIND DIRECTION 05 VEL 10 KTS	BAR 28 SWELL DIRECTION 29 H	8 T	9 CLOUD	AMT	WEATHER 01									
0 10.06	32.468	6.53			0 10.06	32.47	6.54			25.00	297.8		0	
10 10.05	32.452	6.36			10 10.05	32.46	6.36			24.99	299.0	.030		
20 10.07	32.450	6.34			20 10.07	32.46	6.34			24.98	299.6	.060		
30 10.02	32.446	6.35			30 10.02	32.45	6.35			24.99	299.3	.090		
50 10.02	32.451	6.32			50 10.02	32.46	6.32			24.99	299.2	.150		
77 10.36	32.748	6.11			75 10.35	32.71	6.17			25.14	285.8	.223		
105 9.62	33.475	3.60			100 9.79	33.34	4.08			25.72	230.6	.287		
155 8.78	33.801	2.86			150 8.85	33.80	2.93			26.23	183.1	.391		
210 8.02	33.948	2.44			200 8.15	33.94	2.49			26.44	163.3	.477		
NH 35	44 39.2 N	124 52.7 W	DATE 3 FEB 64	0735 GCT	WIRE	DRY 50.0	WET 48.0							
WIND DIRECTION 03 VEL 08 KTS	BAR 27 SWELL DIRECTION 29 H	6 T	9 CLOUD	AMT	WEATHER 02									
0 10.29	32.522	6.37			0 10.29	32.53	6.38			25.00	297.5		0	
10 10.29	32.523	6.33			10 10.29	32.53	6.33			25.00	297.6	.030		
20 10.31	32.523	6.32			20 10.31	32.53	6.32			25.00	298.0	.060		
30 10.27	32.546	6.32			30 10.27	32.55	6.32			25.02	295.9	.089		
50 10.26	32.521	6.31			50 10.26	32.53	6.32			25.00	297.9	.149		
77 10.07	32.961	5.05			75 10.09	32.92	5.17			25.34	266.8	.219		
105 9.46	33.650	3.65			100 9.58	33.53	3.88			25.90	213.7	.279		
154 8.84	33.801	3.00			150 8.88	33.76	3.01			26.19	186.5	.379		
210 8.28	33.909	2.55			200 8.37	33.88	2.61			26.37	170.6	.468		
NH 45	44 39.1 N	125 6.8 W	DATE 3 FEB 64	1128 GCT	WIRE 2	DRY 49.6	WET 47.5							
WIND DIRECTION 04 VEL 10 KTS	BAR 25 SWELL DIRECTION 29 H	6 T	9 CLOUD	- AMT	0 WEATHER 02									
0 10.20	32.483	6.39			0 10.20	32.49	6.40			24.99	298.9		0	
10 10.21	32.503	6.38			10 10.21	32.51	6.39			25.00	297.8	.030		
20 10.24	32.484	6.36			20 10.24	32.49	6.36			24.98	299.8	.060		
30 10.23	32.537	6.42			30 10.23	32.54	6.43			25.02	295.9	.089		
50 10.27	32.493	6.29			50 10.27	32.50	6.30			24.98	300.1	.149		
75 9.53	33.503	3.60			75 9.53	33.51	3.60			25.89	214.1	.213		
100 9.19	33.698	3.17			100 9.19	33.69	3.17			26.09	195.5	.265		
149 8.75	33.792	2.85			150 8.74	33.79	2.84			26.24	181.9	.359		
200 8.28	33.927	2.54			200 8.28	33.93	2.54			26.42	165.8	.446		
299 7.26	34.026	2.05			250 7.77	33.99	2.29			26.54	154.6	.526		
399 6.25	34.066	1.44			300 7.25	34.03	2.04			26.64	145.7	.601		
507 5.45	34.172	.84			400 6.24	34.07	1.43			26.81	130.8	.739		
					500 5.49	34.16	.88			26.98	114.7	.862		
NH 65	44 39.1 N	125 35.0 W	DATE 3 FEB 64	1655 GCT	WIRE 2	DRY 51.0	WET 48.0							
WIND DIRECTION 31 VEL 04 KTS	BAR 27 SWELL DIRECTION 26 H	8 T	9 CLOUD	2 AMT	4 WEATHER 03									
0 10.03	32.559	6.42			0 10.03	32.56	6.43			25.07	290.6		0	
10 10.03	32.518	6.33			10 10.03	32.52	6.33			25.04	293.8	.029		
30 10.05	32.496	6.35			20 10.04	32.50	6.34			25.02	295.7	.059		
50 10.03	32.496	6.37			30 10.05	32.50	6.35			25.02	296.0	.088		
77 8.88	33.449	3.87			50 10.03	32.50	6.38			25.02	296.1	.147		
101 8.38	33.763	3.20			75 8.99	33.39	4.07			25.89	214.2	.211		
151 7.81	33.947	2.52			100 8.39	33.75	3.21			26.26	179.4	.260		
205 7.35	33.924	2.23			150 7.82	33.96	2.53			26.51	156.4	.344		
305 6.35	34.075	1.65			200 7.39	33.98	2.25			26.59	149.4	.421		
404 5.72	34.093	1.06			250 6.89	34.01	1.97			26.68	141.5	.493		
505 5.15	34.157	.63			300 6.40	34.03	1.68			26.76	133.8	.562		
607 4.75	34.214	.39			400 5.74	34.09	1.08			26.89	122.6	.690		
810 4.22	34.327	.29			500 5.18	34.15	.65			27.01	111.5	.807		
1010 3.69	34.404	.34			600 4.77	34.21	.40			27.10	104.0	.915		
1215 3.14	34.462	.50			700 4.49	34.27	.30			27.18	97.0	1.016		
					800 4.24	34.32	.29			27.25	90.8	1.109		
					900 3.72	34.40	.33			27.37	80.6	1.281		
					1000 3.18	34.46	.48			27.46	71.2	1.432		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δx10 ⁶	Δ D
NH 85	44 39.1 N	126 30.0 W	DATE 3 FEB 64	0041 GCT	WTRF 4	DRY 52.2	WET 49.2					
WIND DIRECTION 31 VEL 14 KTS	HAR 26 SWELL DIRECTION 26 H	R T 9 CLOUD 4 AMT	3 WEATHER 01									
0	9.67	32.365	6.46		0	9.67	32.40	6.46		25.00	297.1	0
10	9.52	32.360	6.47		10	9.52	32.37	6.47		25.01	296.9	.030
20	9.54	32.370	6.40		20	9.54	32.38	6.49		25.01	297.2	.059
30	9.52	32.371	6.55		30	9.52	32.38	6.56		25.01	297.0	.089
50	9.51	32.375	6.48		50	9.51	32.38	6.48		25.02	296.8	.148
77	9.66	32.681	6.68		75	9.65	32.64	5.77		25.20	279.9	.221
104	8.23	33.574	3.75		100	8.47	33.41	4.04		25.98	205.9	.281
154	7.81	33.876	2.81		150	7.84	33.85	2.81		26.42	164.9	.374
200	7.15	34.008	2.49		200	7.26	34.00	2.43		26.62	146.4	.452
310	6.10	34.028	1.91		250	6.68	34.02	2.13		26.71	137.9	.523
412	5.58	34.038	1.25		300	6.19	34.03	1.86		26.79	131.6	.590
514	5.02	34.104	.76		400	5.63	34.04	1.31		26.86	125.3	.718
617	4.64	34.241	.44		500	5.09	34.09	.82		26.97	115.1	.839
821	4.09	34.358	.29		600	4.73	34.22	.48		27.11	102.9	.948
1025	3.57	34.400	.29		700	4.43	34.31	.33		27.22	93.5	1.046
					800	4.15	34.35	.30		27.28	87.5	1.136
					1000	3.63	34.40	.29		27.37	79.7	1.303

NH 105	44 39.1 N	126 30.8 W	DATE 4 FEB 64	0105 GCT	WTRF 4	DRY 52.1	WET 49.1					
WIND DIRECTION 20 VEL 12 KTS	HAR 24 SWELL DIRECTION 29 H	R T 9 CLOUD 4 AMT	4 WEATHER 03									
0	9.72	32.376	6.39		0	9.72	32.38	6.40		24.98	299.3	0
10	9.58	32.392	6.41		10	9.58	32.40	6.42		25.02	296.1	.030
30	9.61	32.407	6.35		20	9.60	32.40	6.38		25.02	296.0	.059
50	9.64	32.411	6.47		30	9.61	32.41	6.35		25.02	295.7	.089
77	8.72	33.260	4.17		50	9.64	32.42	6.47		25.02	296.2	.148
104	8.21	33.827	2.74		75	8.80	33.19	4.37		25.74	226.7	.213
154	7.85	33.980	2.15		100	8.33	33.75	2.93		26.27	178.2	.264
210	7.55	34.194	2.01		150	7.87	33.97	2.20		26.51	156.4	.348
255	7.20	34.010	1.91		200	7.60	33.99	2.01		26.57	151.6	.425
311	6.60	34.061	1.63		250	7.24	34.01	1.92		26.63	146.2	.499
413	5.88	34.076	1.07		300	6.72	34.05	1.69		26.74	136.7	.570
515	5.27	34.131	.77		400	5.96	34.08	1.14		26.86	126.4	.701
619	4.75	34.223	.45		500	5.35	34.12	.81		26.96	116.1	.822
823	4.09	34.303	.21		600	4.84	34.21	.51		27.09	105.1	.933
1028	3.54	34.329	.37		700	4.45	34.26	.31		27.18	97.0	1.034
					800	4.15	34.30	.22		27.24	91.6	1.128
					1000	3.61	34.38	.32		27.36	80.5	1.300

NH 125	44 39.3 N	126 58.8 W	DATE 4 FEB 64	0544 GCT	WTRF 2	DRY 51.5	WET 50.0					
WIND DIRECTION 22 VEL 10 KTS	HAR 21 SWELL DIRECTION 28 H	R T 10 CLOUD 4 AMT	6 WEATHER 01									
0	9.75	32.467	6.51		0	9.75	32.47	6.52		25.05	293.0	0
10	9.72	32.447	6.43		10	9.72	32.45	6.44		25.04	294.2	.029
30	9.68	32.454	6.37		20	9.70	32.45	6.39		25.04	294.3	.059
50	9.65	32.444	6.39		30	9.68	32.46	6.38		25.05	293.4	.088
76	8.58	33.317	4.19		50	9.65	32.45	6.40		25.05	293.9	.147
104	8.30	33.667	3.39		75	8.62	33.28	4.28		25.86	217.2	.211
154	8.08	33.914	2.57		100	8.31	33.64	3.44		26.19	186.1	.261
210	7.45	34.000	2.19		150	8.10	33.91	2.61		26.43	164.1	.349
255	6.84	34.017	1.90		200	7.58	33.99	2.24		26.57	151.0	.427
311	6.40	34.039	1.64		250	6.90	34.02	1.93		26.68	140.9	.500
413	5.74	34.084	1.06		300	6.47	34.03	1.69		26.76	134.6	.569
515	5.15	34.139	.70		400	5.85	34.08	1.13		26.87	125.0	.699
619	4.75		.44		500	5.24	34.13	.82		26.99	114.0	.818
822	4.09	34.308	.24		600	4.81	34.19	.50		27.08	106.2	.928
1027	3.60	34.401	.36		700	4.46	34.24	.30		27.16	98.6	1.031
					800	4.15	34.30	.26		27.24	91.7	1.126
					1000	3.65	34.39	.33		27.36	80.7	1.298

NH 145	44 39.1 N	127 27.8 W	DATE 4 FEB 64	0941 GCT	WTRF 16	DRY 51.9	WET 49.2					
WIND DIRECTION 25 VEL 14 KTS	HAR 26 SWELL DIRECTION 28 H	R T 10 CLOUD 4 AMT	8 WEATHER 02									
0	9.70	32.441	6.43		0	9.70	32.45	6.44		25.04	294.1	0
10	9.70	32.438	6.45		10	9.70	32.44	6.45		25.03	294.5	.029
30	9.64	32.434	6.44		20	9.68	32.43	6.44		25.03	294.9	.059
50	9.53	32.454	6.32		30	9.64	32.44	6.44		25.04	294.2	.088
72	8.64	33.042	4.20		50	9.53	32.46	6.32		25.07	291.3	.147
99	8.22	33.367	4.23		75	8.57	33.09	4.78		25.72	230.4	.212
146	7.68	33.786	3.27		100	8.21	33.38	4.21		26.00	204.1	.266
200	7.10	33.825	2.94		150	7.64	33.80	3.23		26.42	165.1	.359
244	6.63	33.945	2.66		200	7.10	33.93	2.95		26.59	149.3	.437
299	5.87	33.964	2.08		250	6.54	33.95	2.60		26.68	141.3	.510
390	5.28	34.046	1.19		300	5.86	33.96	2.07		26.78	132.0	.578
500	5.02	34.153	.66		400	5.26	34.05	1.18		26.92	120.0	.704
603	4.54	34.207	.42		500	5.03	34.16	.67		27.03	109.3	.819
806	3.99	34.336	.26		600	4.55	34.20	.42		27.12	102.0	.924
1011	3.35	34.402	.28		700	4.25	34.25	.31		27.19	95.8	1.023
					800	4.00	34.30	.26		27.26	89.5	1.116
					1000	3.39	34.48	.27		27.46	70.9	1.276

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	S × 10 ⁶	ΔD
NH 165 44 39.1 N 127 55.0 W DATE 4 FEB 64 1505 GCT WTRF 13 DRY 50.0 WET 47.5 WIND DIRECTION 28 VEL 17 KTS BAR 28 SWELL DIRECTION 28 H 8 T 8 CLOUD 6 AMT 8 WEATHER 03												
0	9.71	32.575	6.48		0	9.71	32.54	6.48		25.11	287.3	0
10	9.70	32.579	6.42		10	9.70	32.54	6.43		25.11	287.0	.029
30	9.66	32.478	6.41		20	9.68	32.51	6.42		25.09	289.3	.058
50	9.62	32.466	6.48		30	9.66	32.48	6.42		25.07	291.2	.087
72	9.61	32.464	6.42		50	9.63	32.47	6.48		25.07	291.8	.145
95	9.06	32.690	5.89		75	9.55	32.48	6.38		25.09	290.4	.218
143	8.12	33.600	3.74		100	8.95	32.79	5.62		25.42	259.0	.286
194	7.42	33.420	2.86		150	8.01	33.75	3.20		26.32	174.4	.395
290	6.15	33.942	2.42		200	7.33	33.93	2.83		26.56	152.5	.476
389	5.51	34.031	1.55		250	6.64	33.93	2.59		26.65	143.6	.550
488	4.94	34.097	.80		300	6.07	33.95	2.34		26.74	135.7	.620
589	4.44	34.169	.45		400	5.44	34.04	1.45		26.89	122.8	.749
791	4.02	34.345	.27		500	4.87	34.11	.74		27.01	111.5	.866
990	3.50	34.371	.26		600	4.41	34.18	.43		27.12	102.0	.973
1193	3.03	34.437	.37		700	4.17	34.27	.30		27.22	92.9	1.070
					800	4.00	34.35	.27		27.29	86.1	1.160
					1000	3.48	34.37	.26		27.37	79.8	1.326
					1200	3.01	34.44	.37		27.46	70.7	1.476

CH 165 43 20.5 N 128 7.2 W DATE 4 FEB 64 1718 GCT WTRF 18 DRY 48.0 WET 42.8
WIND DIRECTION 03 VEL 18 KTS BAR 36 SWELL DIRECTION 00 H 8 T 5 CLOUD 8 AMT 3 WEATHER 01

0	10.35	32.566	6.36		0	10.35	32.57	6.36		25.02	295.2	0
10	10.34	32.559	6.31		10	10.34	32.56	6.32		25.02	295.7	.030
31	10.36	32.571	6.33		20	10.36	32.56	6.31		25.02	296.3	.059
51	10.22	32.601	6.32		30	10.36	32.57	6.33		25.02	295.8	.089
70	10.05	32.710	5.46		50	10.23	32.60	6.33		25.07	292.0	.148
93	8.87	33.316	4.38		75	9.81	32.83	5.56		25.32	268.6	.218
138	8.39	33.432	2.98		100	8.71	33.44	4.07		25.97	207.0	.277
184	7.99	33.925	2.50		150	8.29	33.48	2.80		26.38	168.9	.371
272	7.00	33.998	2.17		200	7.81	33.94	2.42		26.50	158.1	.453
362	6.28	34.029	1.68		250	7.25	33.98	2.22		26.61	148.3	.529
454	5.66	34.070	1.14		300	6.75	34.00	2.03		26.69	140.8	.601
543	5.16	34.144	.69		400	6.01	34.04	1.45		26.82	129.5	.737
730	4.28	34.227	.38		500	5.39	34.11	.89		26.95	117.6	.860
925	3.95	34.335	.29		600	4.85	34.17	.54		27.06	107.7	.973
1109	3.36	34.423	.27		700	4.39	34.22	.39		27.15	99.7	1.076
					800	4.14	34.27	.33		27.21	93.9	1.173
					1000	3.74	34.37	.27		27.34	83.0	1.350

CH 145 43 20.5 N 127 40.4 W DATE 5 FEB 64 0742 GCT WTRF 6 DRY 47.5 WET 41.0
WIND DIRECTION 04 VEL 18 KTS BAR 37 SWELL DIRECTION 02 H 8 T 5 CLOUD 8 AMT 2 WEATHER 02

0	10.28	32.577	6.55		0	10.28	32.58	6.56		25.04	293.2	0
11	10.28	32.582	6.37		10	10.28	32.58	6.37		25.05	293.2	.029
21	10.30	32.575	6.47		20	10.30	32.58	6.46		25.04	294.3	.059
31	10.27	32.586	6.38		30	10.28	32.58	6.40		25.05	293.6	.088
51	9.70	32.916	5.34		50	9.74	32.99	5.41		25.38	262.3	.144
78	8.95	33.573	3.79		75	9.02	33.51	3.94		25.97	206.3	.202
105	8.66	33.782	3.11		100	8.69	33.76	3.20		26.22	182.7	.251
155	8.23	33.953	2.26		150	8.27	33.95	2.32		26.43	163.7	.337
209	7.88	33.999	2.17		200	7.93	33.99	2.18		26.52	156.5	.417
310	7.32	34.029	1.94		250	7.66	34.01	2.10		26.57	151.9	.495
413	6.54	34.056	1.61		300	7.38	34.03	1.98		26.63	147.5	.569
520	5.60	34.118	.96		400	6.65	34.05	1.67		26.75	137.3	.712
624	4.99	34.182	.51		500	5.77	34.10	1.09		26.90	122.5	.842
828	4.26	34.290	.24		600	5.11	34.17	.60		27.03	111.3	.958
1030	3.63	34.435	.26		700	4.68	34.22	.34		27.12	102.7	1.065
					800	4.34	34.27	.24		27.20	95.5	1.164
					1000	3.72	34.41	.26		27.37	79.8	1.340

CH 125 43 20.5 N 127 13.0 W DATE 5 FEB 64 1223 GCT WTRF 26 DRY 46.5 WET 42.0
WIND DIRECTION 35 VEL 18 KTS BAR 36 SWELL DIRECTION 34 H 8 T 8 CLOUD 8 AMT 6 WEATHER 02

0	10.29	32.576	6.30		0	10.29	32.58	6.40		25.04	293.5	0
10	10.30	32.570	6.36		10	10.30	32.57	6.36		25.04	294.2	.029
30	10.33	32.573	6.35		20	10.32	32.57	6.35		25.03	294.9	.059
50	10.31	32.580	6.35		30	10.33	32.58	6.35		25.03	294.8	.088
77	10.27	32.604	6.23		50	10.31	32.58	6.35		25.04	294.3	.147
100	8.93	33.305	4.33		75	10.30	32.59	6.28		25.05	294.4	.221
146	8.34	33.772	3.39		100	8.93	33.31	4.33		25.83	219.9	.285
197	7.80	33.948	2.54		150	8.30	33.76	3.30		26.28	178.1	.385
238	7.16	33.960	2.54		200	7.76	33.95	2.54		26.51	157.0	.468
277	6.58	33.996	2.18		250	6.97	33.95	2.45		26.63	146.4	.544
378	5.85	34.068	1.29		300	6.36	34.02	1.95		26.76	134.3	.614
465	5.23	34.002	.96		400	5.68	34.07	1.19		26.89	123.1	.743
559	4.86	34.183	.59		500	5.97	34.12	.81		27.00	112.5	.861
756	4.21	34.316	.28		600	4.71	34.22	.49		27.11	102.9	.968
958	3.68	34.402	.26		700	4.38	34.28	.32		27.20	94.5	1.067
					800	4.08	34.34	.28		27.28	87.7	1.158

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
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CH 105 41 20.5 N 126 45.7 W DATE 5 FEB 64 1723 GCT WIRE 7 DRY 47.5 WET 43.0
WIND DIRECTION 02 VEI 22 KTS HAB 35 SWELL DIRECTION 02 H 8 T 7 CLOUD 6 AMT 7 WEATHER 01

0	10.12	32.530	6.48		0	10.13	32.54	6.48		25.04	293.5	0
11	10.10	32.536	6.37		10	10.10	32.54	6.37		25.04	293.8	.029
21	10.13	32.543	6.37		20	10.13	32.54	6.37		25.04	294.0	.059
31	10.13	32.544	6.37		30	10.13	32.54	6.37		25.04	294.1	.088
52	10.13	32.564	6.37		50	10.13	32.56	6.37		25.05	293.2	.147
79	9.99	32.652	5.93		75	10.07	32.61	6.07		25.10	289.0	.220
105	8.16	33.536	3.86		100	8.54	33.36	4.27		25.93	210.6	.282
157	7.56	33.800	3.54		150	7.64	33.76	3.58		26.38	168.2	.377
209	7.11	33.954	3.33		200	7.18	33.93	3.37		26.58	150.1	.456
415	5.34	34.043	1.31		250	6.71	34.00	2.95		26.70	139.4	.529
522	4.88	34.116	.76		300	6.26	34.04	2.48		26.79	131.4	.596
626	4.51	34.199	.46		400	5.45	34.04	1.47		26.89	123.0	.723
831	3.91	34.375	.24		500	4.98	34.10	.85		26.99	112.9	.841
1036	3.40	34.410	.32		600	4.60	34.18	.52		27.10	104.3	.950
					700	4.28	34.25	.33		27.19	95.6	1.050
					800	3.99	34.32	.25		27.27	88.3	1.142
					1000	3.48	34.41	.28		27.39	77.3	1.307

CH 85 43 20.5 N 126 18.9 W DATE 5 FEB 64 2201 GCT WIRE 15 DRY 47.0 WET 43.2
WIND DIRECTION 02 VEI 22 KTS HAB 32 SWELL DIRECTION 00 H 10 T 6 CLOUD 4 AMT 5 WEATHER 03

0	10.25	32.513	6.43		0	10.25	32.52	6.44		25.00	297.5	0
11	10.24	32.511	6.43		10	10.24	32.51	6.44		25.00	297.9	.030
21	10.26	32.517	6.37		20	10.26	32.52	6.37		25.00	298.0	.060
31	10.24	32.515	6.43		30	10.24	32.52	6.42		25.00	298.0	.089
52	10.21	32.514	6.37		50	10.22	32.51	6.39		25.00	298.0	.149
78	9.91	32.702	5.73		75	9.98	32.66	5.84		25.16	283.6	.222
104	8.43	33.358	4.38		100	8.67	33.25	4.59		25.83	220.3	.285
152	8.00	33.426	3.23		150	8.02	33.82	3.26		25.37	169.5	.382
203	7.81	33.979	2.44		200	7.82	33.98	2.48		26.52	155.8	.463
298	6.79	34.045	1.90		250	7.35	34.03	2.11		26.63	145.9	.539
393	5.97	34.002	1.17		300	6.77	34.05	1.88		26.73	137.7	.610
496	5.28	34.177	.72		400	5.92	34.10	1.13		26.88	124.3	.741
599	4.59	34.200	.49		500	5.25	34.18	.71		27.02	110.6	.858
801	3.90	34.324	.28		600	4.59	34.20	.49		27.12	102.5	.964
1004	3.49	34.405	.42		700	4.17	34.26	.34		27.21	94.0	1.063
					800	3.90	34.32	.28		27.29	86.8	1.153
					1000	3.50	34.40	.41		27.39	77.8	1.317

CH 65 43 20.5 N 126 51.6 W DATE 6 FEB 64 0318 GCT WIRE 11 DRY 47.0 WET 44.0
WIND DIRECTION 02 VEI 26 KTS HAB 32 SWELL DIRECTION 02 H 10 T 7 CLOUD 6 AMT 8 WEATHER 03

0	10.26	32.531	6.40		0	10.26	32.54	6.41		25.01	296.3	0
11	10.26	32.535	6.39		10	10.26	32.53	6.39		25.01	296.5	.030
31	10.28	32.528	6.37		20	10.27	32.53	6.35		25.01	297.3	.059
52	10.27	32.603	6.22		30	10.28	32.53	6.31		25.00	297.6	.089
79	9.38	33.493	4.01		50	10.27	32.58	6.28		25.05	293.8	.148
107	9.04	33.737	3.15		75	9.52	33.35	4.35		25.77	225.3	.213
154	8.42	33.904	2.67		100	9.13	33.71	3.28		26.12	193.0	.265
206	7.77	34.000	2.27		150	8.48	33.90	2.69		26.36	170.4	.356
308	6.57	34.054	1.71		200	7.84	33.99	2.31		26.53	154.9	.437
410	5.86	34.109	1.05		250	7.22	34.03	2.02		26.65	143.8	.512
517	5.28	34.180	.64		300	6.65	34.05	1.75		26.75	135.6	.582
619	4.74	34.274	.40		400	5.92	34.10	1.11		26.88	123.9	.712
817	4.12	34.363	.38		500	5.37	34.17	.69		27.00	112.7	.830
1014	3.50	34.428	.30		600	4.83	34.22	.43		27.11	103.7	.938
1210	3.06	34.481	.46		700	4.45	34.29	.39		27.20	95.0	1.037
					800	4.16	34.35	.38		27.28	87.6	1.129
					1000	3.54	34.42	.30		27.40	76.8	1.293
					1200	3.09	34.48	.45		27.49	68.5	1.438

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ #	Z	T	S	O ₂	PO ₄ #	σ _t	δ × 10 ⁶	Δ D	
CH 45 43 20.5 N 125 24.1 W DATE 6 FEB 64 0815 GCT WIRE 12 DRY 48.0 WET 43.5 WIND DIRECTION 02 VEI 22 KTS BAR 30 SWELL DIRECTION 02 H 8 T 7 CLOUD 6 AMT 3 WEATHER 02													
0	10.29	32.604	6.38		0	10.29	32.61	6.39		25.06	291.4	0	
11	10.31	32.603	6.37		10	10.31	32.60	6.37		25.06	292.2	.029	
21	10.35	32.607	6.35		20	10.35	32.61	6.35		25.05	292.8	.058	
31	10.30	32.602	6.38		30	10.31	32.60	6.38		25.06	292.6	.088	
51	10.31	32.612	6.33		50	10.31	32.60	6.35		25.06	292.8	.146	
77	9.64	33.533	3.77		75	9.70	33.46	3.98		25.82	220.5	.210	
102	9.08	33.754	3.06		100	9.12	33.75	3.08		26.15	190.1	.262	
150	8.57	33.912	2.49		150	8.57	33.92	2.49		26.36	170.4	.352	
201	7.93	34.008	2.27		200	7.94	34.01	2.27		26.53	155.3	.433	
301	6.84	34.040	1.74		250	7.37	34.05	2.02		26.64	145.1	.508	
404	5.88	34.042	1.18		300	6.85	34.06	1.75		26.73	137.7	.579	
512	5.32	34.158	.70		400	5.91	34.09	1.20		26.87	124.8	.710	
616	4.86	34.222	.48		500	5.37	34.15	.74		26.99	114.1	.830	
821	4.15	34.323	.28		600	4.93	34.21	.50		27.09	105.7	.939	
1025	3.60	34.430	.06		700	4.54	34.27	.36		27.17	97.9	1.041	
					800	4.21	34.31	.29		27.24	91.1	1.136	
					1000	3.66	34.42	.34		27.38	78.8	1.305	
CH 35 43 20.5 N 125 10.4 W DATE 6 FEB 64 1141 GCT WIRE 31 DRY 47.5 WET 43.0 WIND DIRECTION 02 VEI 22 KTS BAR 29 SWELL DIRECTION 02 H 10 T 6 CLOUD 4 AMT 4 WEATHER 03													
0	10.18	32.536	6.42		0	10.18	32.54	6.43		25.03	294.7	0	
11	10.17	32.525	6.39		10	10.17	32.53	6.39		25.02	295.7	.030	
21	10.21	32.529	6.40		20	10.21	32.53	6.40		25.02	296.3	.059	
31	10.18	32.526	6.38		30	10.18	32.53	6.38		25.02	296.2	.089	
52	0	32.582			50	10.26	32.57	6.22		25.04	294.3	.148	
64	10.32	32.647	6.10		75	9.87	32.97	5.24		25.42	259.2	.217	
87	9.31	33.381	4.22		100	8.93	33.61	3.60		26.07	197.7	.274	
129	8.41	33.861	2.86		150	8.27	33.93	2.59		26.42	164.5	.365	
172	8.18	33.985	2.46		200	7.84	33.98	2.31		26.53	155.5	.445	
258	7.05	34.007	2.11		250	7.17	34.01	2.13		26.64	145.2	.520	
342	6.31	34.030	1.75		300	6.65	34.02	1.92		26.72	138.1	.591	
432	5.73	34.101	1.59		400	5.91	34.07	1.62		26.86	126.3	.723	
CH 25 43 20.5 N 124 56.7 W DATE 6 FEB 64 1530 GCT WIRE 14 DRY 47.0 WET 43.0 WIND DIRECTION 04 VEI 18 KTS BAR 29 SWELL DIRECTION 02 H 8 T 7 CLOUD 4 AMT 2 WEATHER 01													
0	10.50	32.431	6.44		0	10.50	32.44	6.44		24.89	307.6	0	
10	10.50	32.428	6.31		10	10.50	32.43	6.32		24.89	308.0	.031	
20	10.52	32.430	6.37		20	10.52	32.43	6.38		24.89	308.3	.062	
30	10.53	32.449	6.46		30	10.53	32.45	6.46		24.90	307.3	.092	
50	10.38	32.517	6.42		50	10.38	32.52	6.43		24.98	300.1	.153	
75	9.98	33.314	4.48		75	9.98	33.32	4.48		25.67	235.2	.220	
102	9.27	33.573	3.00		100	9.32	33.57	3.82		25.97	207.0	.275	
150	8.40	33.899	2.86		150	8.40	33.90	2.86		26.38	168.8	.369	
205	7.92	33.973	2.43		200	7.95	33.97	2.45		26.50	158.5	.451	
308	6.80	34.041	1.75		250	7.43	34.02	2.11		26.61	147.9	.528	
404	6.01	34.083	1.26		300	6.89	34.06	1.80		26.72	138.5	.599	
502	5.55	34.135	.45		400	6.04	34.08	1.28		26.85	127.0	.732	
601	4.95	34.206	.55		500	5.56	34.13	.86		26.95	117.7	.854	
					600	4.96	34.21	.55		27.08	106.6	.966	
CH 15 43 20.5 N 124 43.1 W DATE 6 FEB 64 1743 GCT WIRE 9 DRY 45.0 WET 40.0 WIND DIRECTION 02 VEI 20 KTS BAR SWELL DIRECTION 02 H 8 T 7 CLOUD 4 AMT 2 WEATHER 02													
0	10.32	32.131	6.38		0	10.32	32.14	6.39		24.69	326.9	0	
10	10.31	32.139	6.39		10	10.31	32.14	6.40		24.70	326.3	.033	
20	10.33	32.125	6.42		20	10.33	32.13	6.43		24.68	327.8	.065	
30	10.35	32.145	6.43		30	10.35	32.15	6.44		24.70	326.8	.098	
50	10.64	32.577	6.23		50	10.64	32.58	6.23		24.98	300.0	.161	
77	10.48	32.823	5.60		75	10.52	32.80	5.67		25.18	282.0	.233	
105	9.34	33.568	3.90		100	9.56	33.43	4.21		25.83	220.5	.296	
155	8.57	33.855	2.91		150	8.61	33.83	2.94		26.29	177.6	.396	
211	7.87	33.981	2.43		200	7.99	33.97	2.47		26.49	158.6	.480	

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
CH 5	43 20.5 N	124 29.0 W	DATE 6 FEB 64	1943 OCT	WTRE 4	DRY 44.5	WET 39.5					
WIND DIRECTION 03 VEL 15 KTS	BAR 28 SWELL DIRECTION 03 H	5 T	7 CLOUD	3 AMT	2 WEATHER 02							
0	10.11	32.050	6.49		0	10.13	32.05	6.49		24.66	329.9	0
10	10.68	32.398	6.25		10	10.68	32.40	6.26		24.84	313.2	.032
20	10.69	32.491	6.28		20	10.69	32.49	6.29		24.90	307.4	.063
30	10.70	32.526	6.25		30	10.70	32.53	6.26		24.93	304.5	.094
50	10.60	32.616	6.22		50	10.60	32.62	6.22		25.02	296.4	.154
77	10.40	33.099	4.85		75	10.42	33.05	5.00		25.39	262.2	.224
CH 5	43 20.5 N	124 29.0 W	DATE 10 APR 64	0740 GCT	WTRE 2	DRY 50.0	WET 45.0					
WIND DIRECTION 04 VEL 3 KTS	BAR 27 SWELL DIRECTION 28 H	4 T	6 CLOUD	6 AMT	6 WEATHER 00							
0	9.71	31.671	6.83		0	9.71	31.68	6.83		24.43	351.4	0
10	9.60	31.672	7.08		10	9.60	31.68	7.08		24.45	349.8	.035
20	9.44	31.741	7.41		20	9.44	31.75	7.42		24.53	342.4	.070
30	8.76	32.604	4.66		30	8.76	32.61	4.66		25.31	268.3	.100
50	8.26	33.767	2.64		50	8.26	33.77	2.65		26.30	175.0	.145
77	7.83	33.951	2.22		75	7.85	33.94	2.25		26.49	157.2	.186
CH 15	43 20.5 N	124 43.1 W	DATE 10 APR 64	1016 GCT	WTRE 6	DRY 50.0	WET 45.0					
WIND DIRECTION 29 VEL 4 KTS	BAR 27 SWELL DIRECTION 27 H	8 T	7 CLOUD	6 AMT	7 WEATHER 03							
0	9.54	31.690	6.42		0	9.54	31.69	6.93		24.48	347.4	0
10	9.56	31.709	6.83		10	9.56	31.71	6.83		24.49	346.4	.035
20	9.51	31.813	6.77		20	9.51	31.82	6.78		24.58	338.1	.069
50	9.03	32.602	5.41		50	9.36	32.02	6.44		24.76	320.6	.102
75	8.90	33.436	3.93		50	9.03	32.61	5.42		25.27	272.8	.161
100	8.18	33.964	2.80		75	8.90	33.44	3.93		25.94	209.3	.221
150	7.41	33.994	2.26		100	8.18	33.95	2.80		26.45	161.4	.268
200	6.96	34.014	2.15		150	7.42	34.00	2.27		26.60	147.6	.345
					200	6.96	34.01	2.15		26.67	141.1	.417
CH 25	43 21.1 N	124 56.3 W	DATE 10 APR 64	1451 GCT	WTRE 1	DRY 49.0	WET 44.0					
WIND DIRECTION 06 VEL - KTS	BAR 28 SWELL DIRECTION 28 H	5 T	8 CLOUD	7 AMT	7 WEATHER 02							
0	9.73	32.041	6.69		0	9.73	32.07	6.69		24.73	322.8	0
10	9.79	32.079	6.66		10	9.79	32.08	6.66		24.74	322.5	.032
20	9.81	32.148	6.65		20	9.81	32.15	6.66		24.79	317.9	.064
30	9.75	32.201	6.64		30	9.75	32.21	6.65		24.84	313.2	.096
50	9.28	32.569	6.29		50	9.28	32.57	6.30		25.20	279.0	.155
77	9.15	33.152	4.32		75	9.16	33.11	4.48		25.64	237.8	.220
105	8.62	33.682	3.28		100	8.73	33.60	3.41		26.09	195.4	.274
154	7.75	34.014	2.65		150	7.81	34.01	2.67		26.55	152.6	.361
210	7.08	34.022	2.12		200	7.18	34.02	2.20		26.65	143.6	.435
306	6.20	34.041	1.46		250	6.69	34.03	1.82		26.72	137.2	.505
401	5.43	34.045	.97		300	6.25	34.04	1.49		26.79	131.3	.572
493	4.97	34.202	.52		400	5.44	34.08	.97		26.93	119.3	.697
581	4.62	34.235	.39		500	4.94	34.21	.60		27.08	104.6	.809
					600	4.54	34.23	.34		27.14	99.7	.911
CH 35	43 20.5 N	125 10.4 W	DATE 10 APR 64	1718 GCT	WTRE -	DRY 49.0	WET 45.0					
WIND DIRECTION 20 VEL 5 KTS	BAR 28 SWELL DIRECTION 28 H	5 T	8 CLOUD	6 AMT	8 WEATHER 03							
0	9.75	32.144	6.69		0	9.75	32.17	6.69		24.81	315.2	0
10	9.73	32.172	6.67		10	9.73	32.18	6.68		24.82	314.7	.031
30	9.53	32.451	6.55		20	9.65	32.30	6.65		24.93	304.4	.062
50	9.15	32.538	6.70		30	9.53	32.46	6.66		25.07	291.2	.092
76	9.18	32.609			50	9.15	32.54	6.70		25.20	279.3	.149
101	8.57	33.481	4.06		75	9.18	32.60	5.57		25.24	275.9	.219
151	7.91	33.894	2.60		100	8.60	33.44	4.11		25.99	205.0	.279
204	7.46	33.940	2.18		150	7.42	33.89	2.71		26.44	162.7	.371
254	6.71	34.020	1.88		200	7.50	33.97	2.20		26.57	151.4	.449
303	6.22	34.031	1.53		250	6.77	34.02	1.90		26.70	139.0	.522
402	5.59	34.067	1.17		300	6.24	34.03	1.55		26.78	131.9	.589
503	4.94	34.139	.60		400	5.60	34.07	1.18		26.89	122.7	.717
602	4.59	34.227	.36		500	4.96	34.14	.62		27.02	110.1	.833
802	3.99	34.370	.27		600	4.60	34.23	.36		27.13	100.8	.938
998	3.40	34.471	.44		700	4.29	34.30	.32		27.23	92.1	1.035
					800	4.00	34.37	.27		27.31	84.5	1.123
					1000	3.39	34.47	.44		27.45	71.6	1.279

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S‰	O ₂ ml/l	PO ₄ ‰	Z	T	S	O ₂	PO ₄ ‰	σ _t	S × 10 ⁶	Δ D
CH 45 43 20.4 N 125 24.1 W DATE 10 APR 64 2051 GCT WTRF 2 DRY 51.0 WET 47.0 WIND DIRECTION 19 VEI 8 KTS BAR 26 SWELL DIRECTION 28 H 5 T 7 CLOUD 6 AMT 8 WEATHER 02												
0	9.45	32.055			0	9.85	32.06			24.71	325.1	0
10	9.76	32.091	6.67		10	9.76	32.09	6.68		24.75	321.9	.032
30	9.73	32.403			20	9.74	32.28	7.67		24.90	307.6	.064
50	9.24	32.592	6.55		30	9.73	32.50	7.30		25.07	291.2	.094
76	9.03	32.814	5.53		50	9.24	32.60	6.56		25.23	276.7	.151
101	8.36	33.523	3.86		75	9.04	32.80	5.63		25.42	258.9	.217
151	7.82	33.429	3.25		100	8.39	33.49	3.93		26.06	198.2	.275
204	7.31	33.466	2.13		150	7.83	33.82	3.26		26.40	166.4	.366
254	6.76	34.017	2.04		200	7.35	33.96	2.39		26.58	150.3	.445
303	6.39	34.030	1.68		250	6.80	34.02	2.05		26.70	139.7	.517
402	5.51	34.007	1.14		300	6.41	34.03	1.70		26.76	134.6	.586
504	5.11	34.167	.64		400	5.51	34.10	1.15		26.92	119.6	.713
603	4.70	34.237	.39		500	5.12	34.16	.66		27.03	110.0	.827
806	3.98	34.346	.33		600	4.71	34.23	.39		27.13	101.5	.933
1004	3.45	34.472	.39		700	4.33	34.29	.36		27.21	93.5	1.030
					800	4.00	34.34	.33		27.29	86.4	1.120
					1000	3.46	34.47	.39		27.45	72.5	1.279

CH 65	43 20.4 N	125 52.0 W	DATE 11 APR 64 0043 GCT	WTRF 4	DRY 51.8	WET 49.0	
WIND DIRECTION 19 VEI 10 KTS BAR 24 SWELL DIRECTION 28 H 5 T 8 CLOUD 6 AMT 8 WEATHER 02							
0	9.92	32.500	6.64	0	9.92	32.50	6.65
10	9.92	32.518	6.62	10	9.92	32.52	6.63
30	9.86	32.506	6.58	20	9.91	32.51	6.62
50	9.62	32.500	6.28	30	9.86	32.51	6.58
76	9.55	33.019	4.89	50	9.63	32.59	6.29
102	8.98	33.691	3.42	75	9.55	33.00	4.95
152	8.23	33.904	2.59	100	9.03	33.59	3.52
205	7.75	34.006	2.34	150	8.25	33.89	2.59
255	7.04	34.043	2.01	200	7.79	34.00	2.35
304	6.68	34.049	1.79	250	7.11	34.04	2.04
402	5.56	34.159	1.38	300	6.71	34.05	1.81
502	5.01	34.193	.77	400	5.58	34.16	1.39
601	4.86	34.213	.42	500	5.02	34.19	.78
812	4.06	34.373	.28	600	4.86	34.21	.42
1002	3.52	34.420	.36	700	4.51	34.29	.29
				800	4.11	34.36	.29
				1000	3.52	34.42	.36

CH 85	43 20.5 N	126 18.8 W	DATE 11 APR 64 0442 GCT	WTRF -	DRY 52.0	WET 49.5	
WIND DIRECTION 26 VEI 16 KTS BAR 23 SWELL DIRECTION 28 H 5 T 9 CLOUD 7 AMT 8 WEATHER 02							
0	9.94	32.484	6.65	0	9.99	32.49	6.66
10	9.97	32.473	6.65	10	9.97	32.48	6.66
30	9.90	32.483	6.67	20	9.95	32.48	6.66
50	9.61	32.601	6.63	30	9.90	32.49	6.68
76	9.06	32.997	5.08	50	9.61	32.61	6.64
101	9.16	33.696	3.32	75	9.08	32.98	5.16
151	8.19	33.862	2.67	100	9.15	33.67	3.38
205	7.47	33.977	2.30	150	8.22	33.86	2.68
254	6.97	34.040	1.92	200	7.53	33.97	2.33
304	6.71	34.068	1.99	250	7.00	34.04	1.94
403	5.87	34.102	1.27	300	6.73	34.07	1.98
505	5.21	34.202	.70	400	5.90	34.10	1.30
604	4.76	34.233	.47	500	5.24	34.20	.72
807	4.06	34.345	.29	600	4.78	34.23	.48
1006	3.54	34.414	.32	700	4.40	34.28	.35
				800	4.08	34.34	.29
				1000	3.55	34.41	.32

CH 105	43 20.4 N	126 45.8 W	DATE 11 APR 64 1103 GCT	WTRF 5	DRY 48.5	WET 44.0	
WIND DIRECTION 30 VEI 14 KTS BAR 22 SWELL DIRECTION 28 H 6 T 8 CLOUD 8 AMT 3 WEATHER 01							
0	9.90	32.464	6.59	0	9.90	32.47	6.59
10	9.89	32.473	6.62	10	9.89	32.48	6.63
30	9.93	32.469	6.55	20	9.92	32.47	6.59
50	9.68	32.519	6.58	30	9.93	32.47	6.56
76	9.14	32.925	3.79	50	9.68	32.52	6.58
101	9.23	33.525	3.79	75	9.20	32.61	5.36
152	8.24	33.803	2.91	100	9.23	33.49	3.86
204	7.64	33.979	2.47	150	8.33	33.87	2.83
253	6.95	34.013	1.04	200	7.69	33.98	2.45
302	6.44	34.095	1.73	250	6.99	34.01	1.92
401	5.67	34.111	1.04	300	6.46	34.09	1.73
502	5.14	34.162	.71	400	5.68	34.11	1.05
600	4.58	34.204	.53	500	5.15	34.16	.71
799	3.99	34.332	.27	600	4.58	34.21	.54
				700	4.19	34.26	.38
				800	3.99	34.33	.27

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ±	Z	T	S	O ₂	PO ₄ ±	σ _t	δ × 10 ⁶	Δ D		
CH 125	43 20.5 N	127 14.2 W	DATE 11 APR 64	1555 GCT	WTRF	6	DRY	49.0	WET 45.0					
WIND DIRECTION 30 VFI 14 KTS	BAR 25 SWELL DIRECTION 28 H	8 T	9 CLOUD	8 AMT	5 WEATHER 01									
0	9.77	32.647	6.53		0	9.77	32.65	6.54		25.18	280.0	0		
10	9.76	32.649	6.52		10	9.76	32.69	6.53		25.22	276.9	.028		
30	9.79	32.674	6.51		20	9.79	32.68	6.51		25.21	278.0	.056		
50	9.68	32.746	6.52		30	9.79	32.68	6.52		25.20	278.8	.083		
77	9.99	32.817	6.24		50	9.69	32.75	6.53		25.24	272.0	.138		
102	9.12	33.379	4.29		75	9.98	32.80	6.34		25.27	273.3	.207		
155	8.10	33.813	3.25		100	9.21	33.33	4.46		25.40	222.6	.269		
204	7.61	32.38			150	8.16	33.80	3.25		26.33	173.0	.367		
254	6.98	34.007	2.17		200	7.64	33.96	2.44		26.53	154.9	.449		
305	6.56	34.041	1.85		250	7.03	34.00	2.18		26.65	143.9	.524		
406	5.85	34.106	1.08		300	6.60	34.08	1.88		26.77	133.2	.593		
507	5.30	34.161	.72		400	5.89	34.10	1.12		26.89	123.4	.722		
608	4.79	34.220	.48		500	5.33	34.16	.74		26.99	113.2	.840		
811	4.02	34.329	.26		600	4.83	34.22	.50		27.10	104.3	.949		
1014	3.56	34.418	.31		700	4.40	34.27	.34		27.19	95.7	1.049		
					800	4.05	34.32	.26		27.27	88.5	1.141		
					1000	3.58	34.41	.30		27.30	78.2	1.307		
CH 145	43 20.4 N	127 40.0 W	DATE 11 APR 64	2045 GCT	WTRF	7	DRY	50.0	WET 46.0					
WIND DIRECTION 30 VFI 18 KTS	BAR 27 SWELL DIRECTION 28 H	9 T	9 CLOUD	8 AMT	4 WEATHER 03									
0	10.03	32.712	6.55		0	10.03	32.72	6.56		25.19	279.2	0		
10	10.01	32.702	6.57		10	10.01	32.71	6.57		25.19	279.8	.028		
30	10.00	32.717	6.60		20	10.00	32.71	6.59		25.19	279.8	.056		
50	9.86	32.724	6.60		30	10.00	32.72	6.60		25.20	278.9	.084		
77	9.87	32.807	6.38		50	9.86	32.73	6.60		25.23	276.5	.139		
100	9.17	33.009	5.48		75	9.87	32.80	6.42		25.28	272.0	.208		
152	8.04	33.794	3.37		100	9.17	33.01	5.48		25.56	245.5	.273		
201	7.56	33.949	2.76		150	8.07	33.77	3.44		26.32	174.2	.377		
250	6.95	34.042	2.33		200	7.57	33.95	2.76		26.54	154.2	.460		
301	6.38	34.013	1.87		250	6.95	34.05	2.33		26.70	139.3	.533		
402	5.76	34.077	1.16		300	6.39	34.01	1.88		26.75	135.1	.602		
503	5.20	34.155	.71		400	5.77	34.07	1.17		26.88	124.1	.731		
604	4.79	34.209			500	5.22	34.15	.72		27.01	112.0	.849		
807	4.11	34.358	.28		600	4.80	34.21	.46		27.10	104.6	.957		
1011	3.53	34.440	.37		700	4.45	34.28	.31		27.19	95.6	1.057		
					800	4.13	34.35	.29		27.29	87.2	1.149		
					1000	3.56	34.44	.36		27.41	76.1	1.312		
CH 165	43 20.4 N	128 39.0 W	DATE 12 APR 64	0223 GCT	WTRF	5	DRY	49.0	WET 45.0					
WIND DIRECTION 30 VFI 17 KTS	BAR 29 SWELL DIRECTION 28 H	9 T	9 CLOUD	8 AMT	3 WEATHER 03									
0	10.08	32.707			0	10.08	32.71			25.18	280.4	0		
10	10.08	32.721			10	10.08	32.73			25.19	279.5	.028		
30	10.01	32.725			20	10.05	32.72			25.19	279.4	.056		
51	10.01	32.773			30	10.01	32.73			25.21	278.5	.084		
77	9.87	32.801			50	10.01	32.77			25.24	275.8	.139		
101	9.46	33.827			75	9.89	32.86			25.33	267.3	.207		
152	8.25				100	9.49	33.78			26.11	193.3	.265		
202	7.82	33.420			150	8.29	33.87			26.37	169.5	.355		
302	6.84	34.053			200	7.83	33.92			26.48	160.2	.438		
403	5.50	34.123			250	7.38	33.99			26.59	149.8	.515		
502	5.05	34.179			300	6.85	34.05			26.72	138.6	.587		
602	4.73	34.238			400	5.54	34.12			26.94	117.8	.715		
802	4.08	34.341			500	5.05	34.18			27.04	108.2	.828		
1003	3.51	34.411			600	4.74	34.24			27.13	101.6	.933		
					700	4.41	34.29			27.21	94.3	1.031		
					800	4.09	34.34			27.28	87.7	1.122		
					1000	3.52	34.41			27.39	77.6	1.287		
CBH159	42 40.3 N	128 0.0 W	DATE 12 APR 64	1035 GCT	WTRF	4	DRY	50.0	WET 47.5					
WIND DIRECTION 22 VFI 15 KTS	BAR 29 SWELL DIRECTION 29 H	12 T	8 CLOUD	8 AMT	5 WEATHER 02									
0	10.31	32.797	6.51		0	10.31	32.79	6.52		25.20	278.2	0		
10	10.31	32.745	6.54		10	10.31	32.75	6.55		25.17	281.5	.028		
30	10.30	32.746	6.56		20	10.30	32.75	6.56		25.17	281.8	.056		
50	9.98	32.764	6.52		30	10.30	32.75	6.57		25.17	281.6	.084		
76	9.79	32.829	6.02		50	9.98	32.77	6.53		25.24	275.4	.140		
100	9.55	33.157	4.99		75	9.80	32.83	6.05		25.32	268.2	.208		
149	8.23	33.615	3.36		100	9.55	33.16	4.90		25.62	240.4	.271		
206	7.57	34.012	2.74		150	8.21	33.82	3.34		26.34	172.1	.375		
252	7.02	34.004	2.26		200	7.62	34.01	2.78		26.58	150.3	.455		
301	6.44	34.075	1.95		250	7.04	34.01	2.28		26.66	143.6	.529		
400	5.56	34.101	1.08		300	6.45	34.07	1.86		26.79	131.4	.597		
503	5.24	34.103	.70		400	5.57	34.10	1.08		26.92	120.0	.723		
602	4.82	34.217	.56		500	4.25	34.19	.71		27.03	109.6	.838		
805	4.19	34.409	.34		600	4.83	34.22	.50		27.10	104.2	.945		
1005	3.71	34.420	.36		700	4.49	34.31	.39		27.21	93.9	1.044		
					800	4.20	34.40	.34		27.32	84.3	1.133		
					1000	3.72	34.42	.36		27.38	79.2	1.296		

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁶	Δ D
RH 165 42 0.0 N 127 52.7 W DATE 12 APR 64 1710 GCT WIRF 3 DRY 51.0 WET 47.0												
WIND DIRECTION 32 VEL 12 KTS BAR 32 SWELL DIRECTION 30 H 14 T 17 CLOUD 6 AMT 8 WEATHER 02												
0 10.25 32.725 6.63					0 10.25 32.73 6.64					25.16 281.8	0	
10 10.25 32.716 6.58					10 10.25 32.72 6.58					25.16 282.6	.028	
30 10.24 32.748 6.59					20 10.24 32.74 6.58					25.18 281.1	.056	
50 9.85 32.714 6.57					30 10.24 32.77 6.59					25.20 279.0	.084	
77 9.43 32.735 6.43					50 9.87 32.72 6.59					25.22 277.5	.140	
103 8.58 33.806 2.75					75 9.24 33.28 4.53					25.76 226.6	.203	
151 8.19 33.978 2.10					100 8.65 33.76 2.89					26.23 182.1	.254	
201 8.01 34.018 2.00					150 8.19 33.97 2.11					26.47 160.5	.340	
301 7.44 34.032 1.86					200 8.01 34.02 2.00					26.53 155.5	.419	
402 7.00 34.044 0					250 7.74 34.03 1.93					26.58 151.5	.495	
500 6.16 34.070 1.30					300 7.45 34.03 1.86					26.62 148.0	.570	
603 5.34 34.118 .84					400 7.01 34.04 1.63					26.69 142.8	.716	
805 4.32 34.304 .28					500 6.17 34.08 1.30					26.83 129.8	.882	
1009 3.78 34.404 .32					600 5.36 34.12 .85					26.96 118.2	.976	
					700 4.77 34.21 .51					27.10 104.9	1.087	
					800 4.34 34.30 .29					27.22 93.3	1.186	
					1000 3.79 34.40 .31					27.36 81.4	1.361	
RH 145 42 0.0 N 127 46.2 W DATE 12 APR 64 2118 GCT WIRF 7 DRY 52.5 WET 48.0												
WIND DIRECTION 33 VEL 14 KTS BAR 34 SWELL DIRECTION 30 H 14 T 14 CLOUD 6 AMT 9 WEATHER 03												
0 10.34 32.688 6.66					0 10.36 32.69 6.67					25.12 286.3	0	
10 10.28 32.686 6.58					10 10.28 32.69 6.58					25.13 285.3	.029	
30 10.02 32.745 6.60					20 10.16 32.71 6.58					25.17 281.7	.057	
50 9.80 32.745 6.51					30 10.02 32.75 6.60					25.22 277.1	.085	
70 9.11 33.301 4.46					50 9.80 32.75 6.52					25.26 274.0	.140	
96 8.63 33.725 3.20					75 8.99 33.40 4.13					25.90 213.3	.201	
142 8.26 33.906 2.46					100 8.58 33.76 3.09					26.24 181.5	.250	
185 7.98 33.970 2.27					150 8.21 33.93 2.40					26.43 164.3	.337	
225 7.68 33.997 2.16					200 7.87 33.99 2.23					26.52 155.6	.417	
264 7.40 34.023 2.02					250 7.49 34.01 2.07					26.60 149.3	.493	
341 7.10 34.089 1.62					300 7.26 34.06 1.84					26.66 143.7	.566	
423 6.40 34.117 1.30					400 6.61 34.11 1.38					26.80 132.4	.704	
505 5.82 34.150 1.00					500 5.85 34.15 1.02					26.92 120.4	.830	
675 4.75 34.262 .41					600 5.18 34.21 .64					27.06 108.8	.945	
843 4.24 34.328 .34					700 4.64 34.27 .37					27.17 98.3	1.048	
					800 4.32 34.32 .36					27.24 92.2	1.144	
RH 125 42 0.0 N 126 59.5 W DATE 13 APR 64 1648 GCT WIRF 14 DRY 51.0 WET 47.0												
WIND DIRECTION 01 VEL 15 KTS BAR 31 SWELL DIRECTION 31 H 14 T 15 CLOUD 6 AMT 4 WEATHER 01												
0 10.30 32.620 6.57					0 10.30 32.63 6.57					25.07 290.4	0	
10 10.29 32.624 6.54					10 10.29 32.63 6.58					25.08 290.1	.029	
30 9.97 32.644 6.45					20 10.14 32.63 6.63					25.10 287.9	.058	
50 9.84 32.755 6.45					30 9.97 32.65 6.66					25.15 283.8	.086	
77 9.79 32.804 5.87					50 9.84 32.76 6.45					25.26 273.9	.142	
98 9.31 33.472 3.91					75 9.80 32.87 5.96					25.35 265.3	.210	
149 8.57 33.911 2.60					100 9.27 33.51 3.80					25.93 210.6	.269	
197 8.09 33.996 2.32					150 8.56 33.91 2.59					26.36 170.3	.364	
246 7.56 34.028 2.04					200 8.06 34.00 2.30					26.51 157.5	.446	
297 6.97 34.035 2.00					250 7.51 34.03 2.04					26.61 148.4	.523	
397 6.21 34.106 1.40					300 6.94 34.04 1.99					26.69 140.7	.595	
516 5.47 34.130 .92					400 6.19 34.11 1.38					26.85 127.1	.729	
595 4.86 34.196 .50					500 5.51 34.13 .94					26.95 117.5	.851	
792 3.99 34.364 .24					600 4.83 34.20 .59					27.09 105.4	.962	
987 3.64 34.423 .34					700 4.32 34.29 .35					27.22 93.4	1.062	
					800 3.97 34.37 .24					27.31 84.2	1.151	
					1000 3.62 34.43 .35					27.40 77.5	1.312	
RH 105 42 0.0 N 126 32.1 W DATE 13 APR 64 2010 GCT WIRF 3 DRY 50.5 WET 47.0												
WIND DIRECTION 00 VEL 17 KTS BAR 29 SWELL DIRECTION 31 H 14 T 14 CLOUD 6 AMT 8 WEATHER 02												
0 10.32 32.298 6.75					0 10.32 32.30 6.76					24.82 314.5	0	
10 10.29 32.295 6.72					10 10.47 32.30 6.72					24.79 317.3	.032	
30 9.98 32.351 6.67					20 10.23 32.31 6.69					24.84 312.9	.063	
50 9.49 32.570 6.10					30 9.98 32.36 6.68					24.92 305.7	.094	
77 9.27 33.331 4.18					50 9.49 32.57 6.10					25.17 282.1	.153	
102 8.55 33.679 3.33					75 9.29 33.27 4.33					25.75 227.7	.216	
154 7.87 33.819 3.21					100 8.61 33.66 3.37					26.16 189.1	.269	
203 7.35 33.900 2.60					150 7.90 33.81 3.22					26.38 168.6	.358	
252 6.79 33.906 2.45					200 7.38 33.98 2.64					26.59 149.2	.437	
304 6.29 34.006 2.06					250 6.81 33.99 2.45					26.67 141.8	.510	
405 5.42 34.076 1.19					300 6.33 34.00 2.09					26.75 135.0	.579	
505 4.90 34.149 .70					400 5.46 34.07 1.23					26.91 120.5	.707	
606 4.52 34.232 .39					500 4.92 34.15 .72					27.03 109.0	.822	
807 3.97 34.329 .30					600 4.54 34.23 .40					27.14 100.0	.926	
1009 3.45 34.430 .38					700 4.24 34.28 .35					27.22 93.0	1.023	
					800 3.99 34.33 .30					27.28 87.5	1.113	
					1000 3.47 34.43 .37					27.41 75.9	1.276	

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S%	O ₂ ml/l	Po ₄	Z	T	S	O ₂	Po ₄	σ _t	δ × 10 ⁵	Δ D
RH 85 42 0.0 N 126 6.8 W DATE 14 APR 64 0128 GCT WIRE 21 DRY 50.5 WET 47.5 WIND DIRECTION 00 VEL 22 KTS BAR 30 SWELL DIRECTION 31 H 14 T 14 CLOUD 6 AMT 4 WEATHER 02												
0	10.27	32.530	6.62		0	10.27	32.53	6.63		25.01	296.6	0
10		32.531	6.61		10	10.71	32.54	6.61		24.94	303.7	.030
30	10.26	32.530	6.61		20	10.49	32.53	6.61		24.97	300.6	.060
50	9.81	32.401	6.52		30	10.26	32.53	6.61		25.01	296.9	.090
77	9.65	32.717	5.82		50	9.81	32.50	6.53		25.06	292.9	.149
99	8.96	33.294	4.45		75	9.67	32.68	5.90		25.23	277.0	.220
148	7.81	33.841	3.30		100	8.90	33.73	4.37		25.85	217.8	.282
196	7.19	33.957	2.66		150	7.78	33.85	3.27		26.43	163.7	.378
243	6.63	33.994	2.28		200	7.14	33.96	2.62		26.61	147.5	.455
293	6.04	34.061	1.77		250	6.54	33.99	2.21		26.72	137.7	.527
389	5.27	34.077	1.19		300	5.97	34.06	1.72		26.84	126.0	.593
483	4.89	34.191	.67		400	5.21	34.09	1.12		26.96	116.2	.714
581	4.62	34.217	.41		500	4.84	34.20	.61		27.09	104.1	.824
770	4.07	34.322	.26		600	4.57	34.22	.37		27.14	100.5	.926
					700	4.28	34.27	.26		27.21	94.0	1.023
RH 65 42 1.0 N 125 41.3 W DATE 14 APR 64 0956 GCT WIRE 10 DRY 50.0 WET 46.5 WIND DIRECTION 00 VEL 22 KTS BAR 29 SWELL DIRECTION 32 H 14 T 9 CLOUD - AMT 0 WEATHER 02												
0	10.17	32.298	6.59		0	10.17	32.30	6.59		24.85	312.1	0
10	10.16	32.294	6.60		10	10.16	32.30	6.60		24.84	312.4	.031
30	10.17	32.333	6.57		20	10.17	32.30	6.59		24.84	312.7	.062
50	9.75	32.560	6.56		30	10.17	32.34	6.57		24.87	310.0	.094
77	9.47	32.601	6.30		50	9.75	32.56	6.57		25.12	286.9	.153
99	8.69	33.207	4.53		75	9.50	32.59	6.36		25.18	281.4	.224
151	7.71	33.792	3.52		100	8.66	33.23	4.49		25.81	222.1	.287
200	7.21	33.945	2.91		150	7.72	33.79	3.54		26.39	167.5	.385
249	6.64	34.001	2.40		200	7.21	33.95	2.91		26.59	149.3	.464
300	6.19	34.087	2.04		250	6.68	34.00	2.39		26.70	138.9	.536
401	5.46	34.083	1.09		300	6.19	34.09	2.04		26.84	126.7	.602
502	4.94	34.142	.66		400	5.47	34.08	1.10		26.92	119.7	.725
603	4.57	34.207	.49		500	4.95	34.14	.66		27.03	109.7	.840
801	4.04	34.308	.41		600	4.58	34.20	.49		27.12	102.1	.946
1011	3.46	34.483	.38		700	4.30	34.30	.43		27.23	92.2	1.043
					800	4.04	34.40	.41		27.33	82.9	1.131
					900	3.49	34.48	.38		27.45	72.0	1.285
RH 45 42 0.0 N 125 13.3 W DATE 14 APR 64 1553 GCT WIRE 10 DRY 51.0 WET 47.0 WIND DIRECTION 00 VEL 26 KTS BAR 28 SWELL DIRECTION 00 H 8 T 6 CLOUD - AMT 0 WEATHER 02												
0	9.91	32.233	6.60		0	9.91	32.24	6.60		24.84	312.8	0
10	9.91	32.234	6.50		10	9.91	32.24	6.51		24.84	312.9	.031
30	9.94	32.236	6.40		20	9.92	32.24	6.43		24.84	313.5	.063
52	9.95	32.464	6.44		30	9.94	32.24	6.41		24.84	313.6	.094
79	9.39	32.597	6.20		50	9.95	32.44	6.44		24.90	299.2	.155
100	8.88	33.417	4.01		75	9.50	32.55	6.34		25.15	284.4	.228
150	8.18	33.886	2.67		100	8.88	33.42	4.02		25.93	210.9	.290
201	7.51	33.982	2.36		150	8.18	33.89	2.67		26.40	166.5	.384
255	6.91	34.007	2.13		200	7.52	33.98	2.36		26.57	151.3	.464
304	6.45	34.044	1.79		250	6.96	34.01	2.15		26.67	142.5	.537
407	5.65	34.103	.99		300	6.49	34.04	1.82		26.76	134.3	.606
516	4.84	34.174	.54		400	5.70	34.10	1.04		26.91	121.4	.734
620	4.61	34.272	.48		500	4.94	34.16	.58		27.05	108.0	.849
825	3.81	34.376	.30		600	4.64	34.25	.49		27.15	99.2	.952
1030	3.36	34.465	.53		700	4.30	34.32	.39		27.24	90.9	1.047
					800	3.91	34.37	.31		27.32	83.6	1.135
					900	3.40	34.45	.47		27.44	73.1	1.291
RH 35 42 0.0 N 124 59.7 W DATE 14 APR 64 1838 GCT WIRE 18 DRY 51.0 WET 47.5 WIND DIRECTION 00 VEL 20 KTS BAR 28 SWELL DIRECTION 00 H 8 T 6 CLOUD - AMT 0 WEATHER 02												
0	9.92	32.193	6.62		0	9.92	32.20	6.63		24.81	316.0	0
11	9.91	32.199	6.64		10	9.91	32.18	6.64		24.80	316.9	.032
31	9.87	32.200	6.41		20	9.91	32.22	6.64		24.83	314.2	.063
52	9.55	32.453	6.52		30	9.88	32.28	6.61		24.88	309.4	.094
79	9.22	32.764	5.66		50	9.59	32.43	6.54		25.05	293.9	.155
97	8.39	33.560	3.77		75	9.30	32.68	5.89		25.28	271.7	.225
146	7.95	33.936	2.57		100	8.33	33.63	3.60		26.17	187.5	.283
197	7.28	33.998	2.26		150	7.90	33.95	2.53		26.49	158.3	.369
250	6.59	34.028	1.98		200	7.24	33.99	2.24		26.67	146.6	.445
298	6.20	34.047	1.64		250	6.59	34.03	1.99		26.74	135.6	.516
400	5.51	34.099	1.01		300	6.18	34.05	1.64		26.80	129.9	.582
506	5.01	34.184	.51		400	5.52	34.09	1.01		26.92	119.5	.707
613	4.59	34.252	.43		500	5.03	34.18	.53		27.05	107.9	.821
808	4.06	34.370	.35		600	4.64	34.24	.44		27.14	99.8	.924
917	3.81	34.408	.34		700	4.31	34.31	.38		27.23	92.1	1.020
					800	4.08	34.37	.35		27.30	85.6	1.109

OBSERVED					INTERPOLATED					DERIVED		
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	S × 10 ⁶	Δ D
RH 25	42	0.0 N	124 46.3 W	DATE 14 APR 64 2151 GCT	WTRF 28	DRY 51.5	WET 47.0					
WIND DIRECTION 00 VEL 26 KTS	BAR 24 SWELL DIRECTION 00 H	B T R CLOUD	- AMT 0 WEATHER 02									
0	9.43	32.125	6.74		0	9.43	32.13	6.74		24.83	313.4	0
10	9.42	32.061	6.74		10	9.42	32.07	6.74		24.78	318.2	.032
20	9.42	32.061	6.75		20	9.42	32.07	6.76		24.78	318.3	.063
30	9.32	32.079	6.78		30	9.32	32.08	6.79		24.81	315.6	.095
52	9.11	32.597	6.19		50	9.13	32.52	6.32		25.19	280.6	.155
68	8.87	33.428	3.91		75	8.73	33.59	3.63		26.09	195.5	.214
95	8.33	33.784	3.59		100	8.25	33.82	3.47		26.33	172.1	.260
136	7.78	33.933	2.58		150	7.67	33.96	2.42		26.53	154.3	.342
184	7.44	33.991	2.19		200	7.24	34.00	2.08		26.63	145.8	.417
266	6.38	34.036	1.68		250	6.60	34.03	1.77		26.74	135.8	.487
353	5.67	34.085	1.17		300	5.05	34.05	1.47		26.83	127.7	.553
447	5.47	34.163	.83		400	5.55	34.12	.98		26.94	117.7	.676
550	4.97	34.211	.54		500	5.25	34.19	.67		27.03	109.5	.789
RH 15	42	0.0 N	124 32.8 W	DATE 15 APR 64 0106 GCT	WTRF -	DRY 50.5	WET 47.0					
WIND DIRECTION 00 VEL 25 KTS	BAR 26 SWELL DIRECTION 00 H	B T 6 CLOUD	- AMT 0 WEATHER 02									
0	8.92	33.170	5.00		0	8.92	33.17	5.01		25.73	228.2	0
10	8.87	33.273	5.03		10	8.88	33.28	5.04		25.82	220.0	.022
20	8.48	33.315	4.88		20	8.88	33.32	4.89		25.85	217.2	.044
30	8.77	33.403	4.86		30	8.77	33.41	4.86		25.93	209.1	.066
53	8.45	33.459	4.23		50	8.84	33.45	4.36		25.95	207.5	.107
79	8.07	33.903	2.55		75	8.21	33.83	2.80		26.35	170.0	.154
106	7.61	33.970	2.27		100	7.68	33.96	2.33		26.53	153.8	.195
RH 5	42	0.0 N	124 19.5 W	DATE 15 APR 64 0323 GCT	WTRF -	DRY 49.5	WET 46.0					
WIND DIRECTION 34 VEL 16 KTS	BAR 23 SWELL DIRECTION 00 H	5 T 6 CLOUD	- AMT 0 WEATHER 02									
0	7.54	34.000	3.05		0	7.55	34.00	3.05		26.59	146.8	0
10	7.25	33.804	2.46		10	7.26	33.90	2.46		26.54	151.0	.015
20	6.99	34.025	1.86		20	6.99	34.03	1.86		26.68	137.9	.029
30	6.95	34.075	1.81		30	6.95	34.04	1.82		26.70	136.8	.043
NH 5	44 39.1 N	124 10.0 W	DATE 18 APR 64 0210 GCT	WTRF 13	DRY 47.7	WET 43.7						
WIND DIRECTION 35 VEL 29 KTS	BAR 21 SWELL DIRECTION 34 H	9 T 6 CLOUD	- AMT 0 WEATHER 02									
0	9.27	32.193	5.95		0	9.27	32.20	5.95		24.91	306.0	0
10	9.27	32.208	5.95		10	9.27	32.21	5.95		24.92	305.0	.031
20	8.59	32.768	4.53		20	8.59	32.77	4.54		25.47	253.5	.058
30	8.17	33.473	2.89		30	8.17	33.48	2.90		26.08	195.2	.081
40	7.46	33.988	2.04		50	7.34	33.98	2.04		26.60	146.4	.115
50	7.34	33.979	2.04		75	8.21	33.83	0		26.35	170.0	.155
NH 15	44 39.1 N	124 25.0 W	DATE 18 APR 64 0422 GCT	WTRF 13	DRY 48.0	WET 44.0						
WIND DIRECTION 36 VEL 24 KTS	BAR 21 SWELL DIRECTION 35 H	10 T 6 CLOUD	- AMT 0 WEATHER 02									
0	9.39	31.102	7.03		0	9.39	31.20	7.04		24.11	382.1	0
10	9.32	31.276	7.07		10	9.32	31.28	7.07		24.19	375.0	.038
20	8.58	32.150	5.45		20	8.58	32.15	5.45		24.98	299.3	.072
30	8.60	32.477	5.93		30	8.60	32.48	5.93		25.24	275.4	.100
50	8.46	33.201	4.33		50	8.46	33.21	4.33		25.82	219.9	.150
75	8.33	33.714	2.82		75	8.33	33.72	2.83		26.24	180.3	.200
NH 25	44 39.1 N	124 38.8 W	DATE 18 APR 64 0638 GCT	WTRF 10	DRY 47.0	WET 43.2						
WIND DIRECTION 35 VEL 25 KTS	BAR 21 SWELL DIRECTION 35 H	10 T 6 CLOUD	8 AMT 3 WEATHER 02									
0	9.22	31.697	6.96		0	9.22	31.70	6.96		24.53	342.1	0
10	9.21	31.702	6.97		10	9.21	31.71	6.97		24.54	341.7	.034
20	9.24	31.711	6.97		20	9.24	31.72	6.97		24.54	341.6	.068
30	8.43	32.266	6.66		30	8.43	32.27	6.67		25.10	288.7	.100
52	8.17	32.496	6.65		50	8.19	32.49	6.65		25.30	269.4	.156
74	8.54	33.449	3.79		75	8.54	33.47	3.73		26.02	201.8	.215
104	8.25	33.707	2.06		100	8.33	33.79	3.07		26.30	175.5	.262
155	7.59	33.993	2.04		150	7.66	33.99	2.28		26.56	151.9	.343
207	6.82	34.023	1.94		200	6.93	34.03	1.95		26.69	139.7	.416

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _T	δ × 10 ⁵	Δ D		
NH 35 44 39.1 N 124 52.7 W DATE 18 APR 64 0923 GCT WIRE 15 DRY 45.5 WET 42.5 WIND DIRECTION 35 VEL 25 KTS BAR 23 SWELL DIRECTION 35 H 10 T 6 CLOUD - AMT 0 WEATHER 01														
0	9.27	31.999	6.89		0	9.27	32.00	6.90		24.76	320.4	0		
10	9.27	31.996	6.89		10	9.27	32.00	6.89		24.76	320.7	.032		
20	9.30	31.997	6.87		20	9.30	32.00	6.88		24.75	321.3	.064		
30	9.28	32.008	6.80		30	9.28	32.01	6.91		24.77	320.3	.096		
52	0	32.484	5.35		50	9.02	32.43	6.43		25.13	285.8	.157		
77	8.61	32.498	5.02		75	8.64	32.95	5.14		25.60	242.0	.223		
108	8.46	33.615	3.46		100	8.50	33.46	3.82		26.01	202.5	.278		
162	7.60	2.54			150	7.41	33.76	2.62		26.35	171.2	.372		
216	7.06	33.994	2.23		200	7.19	33.94	2.26		26.58	149.9	.452		
NH 45 44 39.1 N 125 7.0 W DATE 18 APR 64 1205 GCT WIRE 9 DRY 45.5 WET 42.0 WIND DIRECTION 35 VEL 25 KTS BAR 21 SWELL DIRECTION 35 H 10 T 6 CLOUD - AMT 0 WEATHER 02														
0	9.46	31.976	6.76		0	9.46	31.98	6.77		24.71	325.0	0		
10	9.48	31.976	6.84		10	9.48	31.98	6.84		24.71	325.4	.033		
20	9.46	31.984	6.83		20	9.46	31.99	6.83		24.72	324.6	.065		
30	9.03	32.347	6.80		30	9.03	32.35	6.81		25.07	291.4	.096		
52	8.71	32.406	6.31		50	8.71	32.49	6.39		25.23	276.6	.153		
78	8.81	33.281	4.15		75	8.79	33.19	4.41		25.76	226.6	.215		
110	8.43	33.609	3.47		100	8.58	33.55	3.56		26.07	196.9	.268		
159	7.77	33.934	2.61		150	7.90	33.99	2.74		26.45	162.4	.358		
213	6.92	34.001	2.13		200	7.12	34.00	2.22		26.64	144.2	.435		
303	6.15	34.045	1.53		250	6.55	34.02	1.86		26.74	135.7	.505		
406	5.33	34.104	.93		300	6.17	34.04	1.55		26.80	130.0	.571		
514	4.48	34.173	.74		400	5.37	34.10	.96		26.95	117.3	.695		
					500	5.00	34.16	.76		27.04	108.6	.808		
NH 65 44 39.1 N 125 35.3 W DATE 18 APR 64 1622 GCT WIRE 5 DRY 47.0 WET 43.0 WIND DIRECTION 00 VEL 20 KTS BAR 23 SWELL DIRECTION 00 H 6 T 6 CLOUD 6 AMT 1 WEATHER 03														
0	9.66	31.993	6.76		0	9.66	31.99	6.77		24.69	327.5	0		
10	9.65	31.999	6.73		10	9.65	32.00	6.73		24.70	326.3	.033		
31	9.55	32.424	6.76		20	9.64	32.19	6.74		24.85	312.3	.065		
51	9.01	32.401	6.73		30	9.56	32.40	6.76		25.02	295.6	.095		
77	8.73	32.662	6.09		50	9.04	32.48	6.74		25.17	282.4	.153		
101	8.21	33.301	4.48		75	8.75	32.64	6.17		25.34	266.7	.221		
152	7.63	33.823	3.37		100	8.23	33.27	4.55		25.91	212.4	.281		
204	6.92	33.965	2.66		150	7.65	33.82	3.38		26.42	164.4	.375		
306	5.85	33.978	2.09		200	6.97	33.96	2.70		26.63	145.1	.453		
406	5.25	34.039	1.30		250	6.38	33.97	2.35		26.72	137.4	.523		
509	4.89	34.150	.66		300	5.90	33.98	2.11		26.78	131.6	.591		
607	4.60	34.237	.43		400	5.28	34.03	1.35		26.90	121.1	.717		
809	4.02	34.346	.31		500	4.92	34.14	.70		27.03	109.4	.832		
1016	3.38	34.451	.48		600	4.62	34.23	.44		27.14	100.6	.937		
1213	3.05	34.495	.56		700	4.33	34.29	.33		27.22	93.3	1.034		
					800	4.05	34.34	.32		27.29	87.0	1.124		
					1000	3.42	34.44	.46		27.43	74.0	1.285		
					1200	3.06	34.49	.56		27.50	67.2	1.426		
NH 85 44 39.1 N 126 3.0 W DATE 18 APR 64 2042 GCT WIRE 18 DRY 47.0 WET 44.0 WIND DIRECTION 00 VEL 18 KTS BAR 22 SWELL DIRECTION 00 H 7 T 6 CLOUD - AMT 0 WEATHER 02														
0	9.40	32.460	6.71		0	9.40	32.46	6.71		25.10	288.1	0		
10	9.39	32.473	6.62		10	9.39	32.48	6.63		25.11	287.2	.029		
20	9.43	32.464	6.70		20	9.43	32.47	6.70		25.10	288.6	.058		
30	9.36	32.458	6.77		30	9.36	32.46	6.78		25.10	288.1	.086		
51	8.98	32.403	6.59		50	9.00	32.49	6.61		25.18	281.1	.143		
71	8.84	32.761	5.83		75	8.89	32.89	5.44		25.51	250.0	.210		
94	9.14	33.521	3.49		100	9.17	33.62	3.19		26.03	200.8	.266		
141	8.73	33.855	2.42		150	8.64	33.88	2.36		26.33	173.8	.360		
188	8.23	33.951	2.27		200	8.06	33.97	2.24		26.48	160.0	.443		
281	6.93	34.029	2.01		250	7.36	34.01	2.11		26.62	147.4	.520		
376	6.14	34.083	1.38		300	6.75	34.04	1.89		26.72	137.7	.591		
470	5.46	34.126	1.00		400	5.95	34.09	1.27		26.87	125.0	.722		
567	5.07	34.181	.71		500	5.32	34.14	.90		26.98	114.1	.842		
765	4.36	34.316	.45		600	4.94	34.20	.64		27.08	106.6	.952		
967	3.72	34.420	.51		700	4.58	34.27	.49		27.17	97.8	1.054		
					800	4.24	34.34	.46		27.26	89.8	1.148		

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S‰	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _s	Sx10 ⁶	ΔD	
NH 105	44 39.1 N	126 30.3 W	DATE 19 APR 64	0220 GCT	WIRE 26	DRY 49.1	WET 45.0						
WIND DIRECTION 00 VEL 22 KTS	BAR 21 SWELL DIRECTION 00 H 10 T 6 CLOUD - AMT 0 WEATHER 02												
0	9.62	32.325	6.86		0	9.63	32.33	6.86		24.96	301.5	0	
10	9.60	32.345	6.84		10	9.60	32.35	6.84		24.98	299.9	.030	
20	9.61	32.345	6.74		20	9.61	32.35	6.74		24.98	300.2	.060	
30	9.55	32.323	6.82		30	9.55	32.34	6.82		24.98	300.3	.090	
51	9.42	32.358	6.76		50	9.43	32.35	6.79		25.00	297.8	.150	
72	9.04	32.350	4.99		75	8.99	33.03	4.90		25.61	241.0	.217	
97	8.67	33.516	3.73		100	8.64	33.57	3.64		26.09	195.9	.272	
149	8.11	33.466	2.81		150	8.09	33.47	2.80		26.40	166.8	.362	
192	7.41	33.947	2.64		200	7.31	33.98	2.61		26.60	148.7	.441	
287	6.41	34.016	2.16		250	6.76	34.01	2.37		26.70	139.3	.513	
380	5.42	34.050	1.48		300	6.26	34.02	2.06		26.77	132.9	.581	
468	4.94	34.118	1.05		400	5.29	34.06	1.37		26.93	118.9	.707	
553	4.60	34.172	.77		500	4.80	34.14	.94		27.04	108.1	.821	
671	4.30	34.266	.42		600	4.47	34.20	.61		27.13	100.8	.925	
838	3.93	34.374	.39		700	4.23	34.28	.41		27.21	93.3	1.022	
					800	4.01	34.35	.40		27.29	86.2	1.112	
NH 125	44 39.1 N	126 58.5 W	DATE 19 APR 64	0625 GCT	WIRE 11	DRY 47.3	WET 43.8						
WIND DIRECTION - VEL - KTS	BAR 21 SWELL DIRECTION 00 H 10 T 6 CLOUD - AMT 0 WEATHER 01												
0	9.26	32.509	6.88		0	9.26	32.51	6.89		25.16	282.4	0	
10	9.26	32.507	6.76		10	9.26	32.51	6.77		25.16	282.7	.028	
20	9.28	32.506	6.82		20	9.28	32.51	6.82		25.15	283.2	.057	
30	9.25	32.516	6.80		30	9.25	32.52	6.81		25.17	282.1	.085	
51	9.10	32.540	6.86		50	9.11	32.54	6.86		25.20	279.2	.141	
74	8.80	32.802	6.51		75	8.78	32.91	6.43		25.55	246.5	.207	
99	8.27	33.444	4.24		100	8.26	33.46	4.19		26.05	199.0	.262	
149	7.99	33.857	3.10		150	7.98	33.86	3.08		26.41	165.8	.353	
198	7.45	33.986	2.41		200	7.43	33.99	2.39		26.59	149.4	.432	
297	6.53	34.029	1.88		250	6.94	34.03	2.06		26.69	140.6	.505	
395	5.88	34.072	1.27		300	6.51	34.03	1.86		26.75	135.4	.574	
493	5.39	34.146	.93		400	5.85	34.08	1.25		26.87	125.1	.704	
591	4.94	34.175	.73		500	5.36	34.15	.91		26.99	114.1	.823	
788	4.23	34.307	.39		600	4.90	34.18	.71		27.06	107.9	.934	
					700	4.52	34.24	.53		27.15	99.7	1.038	
					800	4.19	34.32	.37		27.25	90.7	1.133	
NH 145	44 39.1 N	127 27.0 W	DATE 19 APR 64	1053 GCT	WIRE 16	DRY 47.0	WET 43.6						
WIND DIRECTION 00 VEL 22 KTS	BAR 21 SWELL DIRECTION 00 H 10 T 6 CLOUD 8 AMT 6 WEATHER 02												
0	9.37	32.561	6.73		0	9.38	32.57	6.73		25.18	280.2	0	
10	9.38	32.561	6.62		10	9.38	32.57	6.63		25.18	280.5	.028	
20	9.40	32.562	6.69		20	9.40	32.57	6.69		25.18	280.9	.056	
30	9.37	32.564	6.64		30	9.38	32.57	6.65		25.18	280.4	.084	
51	9.24	32.558	6.69		50	9.25	32.56	6.69		25.20	279.6	.140	
77	8.91	32.618	6.41		75	8.94	32.60	6.48		25.27	272.4	.209	
103	8.33	33.481	3.93		100	8.40	33.37	4.24		25.96	207.6	.269	
154	7.89	33.481	2.81		150	7.91	33.71	2.90		26.30	175.9	.365	
205	7.37	33.982	2.46		200	7.42	33.96	2.48		26.57	151.6	.447	
305	6.36	34.080	1.67		250	6.90	34.05	2.09		26.71	138.1	.519	
406	5.53	34.104	1.17		300	6.41	34.08	1.71		26.80	130.8	.586	
504	5.01	34.182	.62		400	5.57	34.10	1.20		26.92	119.6	.711	
601	4.64	34.223	.54		500	5.03	34.18	.64		27.05	107.8	.825	
791	4.11	34.344	.26		600	4.64	34.22	.54		27.13	101.5	.930	
997	3.61	34.414	.31		700	4.34	34.29	.38		27.21	94.0	1.027	
					800	4.09	34.35	.26		27.29	87.0	1.118	
					1000	3.60	34.42	.31		27.39	78.2	1.283	
NH 165	44 39.1 N	127 55.1 W	DATE 19 APR 64	1545 GCT	WIRE 8	DRY 49.0	WET 44.7						
WIND DIRECTION 02 VEL 20 KTS	BAR 22 SWELL DIRECTION 35 H 9 T 6 CLOUD 6 AMT 5 WEATHER 02												
0	9.36	32.574	6.66		0	9.36	32.58	6.67		25.19	279.1	0	
10	9.36	32.562	6.66		10	9.36	32.57	6.67		25.18	280.1	.028	
31	9.38	32.558	6.68		20	9.37	32.56	6.67		25.18	280.9	.056	
51	9.31	32.568	6.66		30	9.38	32.56	6.68		25.18	281.3	.084	
77	8.60	32.706	6.07		50	9.32	32.57	6.67		25.19	280.1	.140	
100	8.30	33.501	3.94		75	8.66	32.68	6.16		25.38	262.3	.208	
151	8.06	33.482	2.78		100	8.30	33.51	3.95		26.08	196.1	.265	
202	7.51	33.991	2.39		150	8.06	33.87	2.80		26.41	166.0	.356	
303	6.36	34.038	1.79		200	7.53	33.99	2.40		26.57	150.8	.435	
402	5.65	34.120	1.06		250	6.94	34.03	2.10		26.69	140.8	.508	
504	5.08	34.182	.63		300	6.39	34.04	1.81		26.77	133.3	.576	
601	4.66	34.247	.46		400	5.64	34.12	1.07		26.93	119.6	.703	
802	4.12	34.328	.32		500	5.10	34.18	.64		27.04	108.6	.817	
1012	3.50	34.471	.14		600	4.66	34.25	.46		27.14	100.0	.921	
1212	3.06	34.506	.49		700	4.37	34.29	.36		27.21	93.9	1.018	
					800	4.12	34.33	.32		27.27	89.1	1.109	
					1000	3.57	34.43	.33		27.40	76.7	1.275	
					1200	3.09	34.50	.48		27.51	66.8	1.418	

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁵	Δ D
ANH169 45 11.0 N 127 58.0 W DATE 20 APR 64 0036 GCT WIRE 7 DRY 47.8 WET 45.7												
WIND DIRECTION 02 VEL 25 KTS HAR 23 SWELL DIRECTION 35 H 9 T 5 CLOUD 00 AMT 10 WEATHER 02												
0	8.92	32.563	6.78		0	8.92	32.57	6.79		25.25	273.3	0
10	8.92	32.573	6.75		10	8.92	32.58	6.76		25.26	272.7	.027
20	8.96	32.580	6.72		20	8.96	32.56	6.72		25.25	274.4	.055
30	8.92	32.565	6.77		30	8.92	32.57	6.78		25.26	273.6	.082
51	8.89	32.568	6.79		50	8.89	32.57	6.79		25.26	273.5	.137
76	8.58	32.592	6.58		75	8.60	32.59	6.60		25.32	268.2	.204
102	8.07	33.131	5.28		100	8.11	33.08	5.39		25.78	224.7	.266
153	7.41	33.783	4.50		150	7.44	33.76	4.51		26.41	165.8	.364
204	7.04	33.923	3.92		200	7.07	33.92	3.96		26.59	149.3	.442
305	5.89	33.933	2.83		250	6.53	33.93	3.43		26.66	142.5	.515
407	5.12	34.017	1.55		300	5.95	33.93	2.89		26.74	135.5	.585
507	4.71	34.092	.89		400	5.16	34.01	1.63		26.90	121.5	.713
608	4.45	34.178	.50		500	4.73	34.09	.92		27.01	111.2	.829
811	3.93	34.325	.28		600	4.47	34.17	.52		27.10	103.3	.937
1014	3.34	34.421	.30		700	4.22	34.25	.34		27.14	95.2	1.036
					800	3.96	34.32	.29		27.28	87.8	1.127
					1000	3.38	34.42	.29		27.41	75.6	1.291

ANH173 45 42.6 N 128 1.9 W DATE 20 APR 64 0752 GCT WIRE 7 DRY 46.4 WET 42.3

WIND DIRECTION 34 VEL 18 KTS HAR 25 SWELL DIRECTION 35 H 8 T 6 CLOUD 6 AMT 8 WEATHER 02

0	8.99	32.404	6.75		0	8.99	32.50	6.76		25.19	279.5	0
10	9.00	32.496	6.73		10	9.00	32.50	6.73		25.19	279.6	.028
20	9.03	32.492	6.74		20	9.03	32.50	6.74		25.18	280.5	.056
30	9.00	32.492	6.81		30	9.00	32.50	6.82		25.19	280.2	.084
51	8.94	32.496	6.70		50	8.95	32.49	6.72		25.19	279.9	.140
75	8.47	32.709	5.65		75	8.47	32.80	5.66		25.51	250.3	.206
101	7.69	33.408	4.24		100	7.72	33.38	4.29		26.07	196.8	.262
152	7.66	2.60			150	7.66	33.90	2.64		26.40	158.3	.351
202	7.11	33.901	2.20		200	7.14	33.98	2.20		26.62	146.0	.427
302	6.19	34.036	1.59		250	6.63	34.01	1.89		26.72	137.5	.498
404	5.65	34.085	1.07		300	6.21	34.04	1.60		26.79	131.1	.565
503	5.09	34.136	.76		400	5.67	34.08	1.09		26.90	122.2	.692
604	4.56	34.180	.54		500	5.11	34.13	.77		27.00	112.1	.809
805	3.99	34.322	.26		600	4.58	34.18	.55		27.10	104.1	.917
1006	3.41	34.414	.28		700	4.25	34.25	.37		27.19	95.8	1.017
					800	4.00	34.32	.26		27.27	88.3	1.109
					1000	3.43	34.41	.28		27.40	76.4	1.273

AH 165 44 14.4 N 128 3.8 W DATE 20 APR 64 1545 GCT WIRE - DRY 40.9 WET 43.5

WIND DIRECTION 34 VEL 23 KTS HAR 27 SWELL DIRECTION 33 H 10 T 6 CLOUD 6 AMT 10 WEATHER 03

0	8.57	32.481	6.79		0	8.57	32.49	6.80		25.24	274.3	0
10	8.57	32.490	6.76		10	8.57	32.50	6.77		25.25	273.8	.027
31	8.61	32.482	6.79		20	8.59	32.49	6.77		25.24	274.8	.055
51	8.56	32.506	6.78		30	8.61	32.48	6.79		25.24	275.4	.082
77	8.11	32.518	6.66		50	8.57	32.50	6.78		25.26	273.5	.137
98	8.07	32.912	5.42		75	8.14	32.51	6.70		25.33	267.5	.205
148	7.64	33.816	2.56		100	8.06	32.96	5.28		25.69	233.3	.267
199	7.29	33.944	1.98		150	7.63	33.83	2.51		26.44	163.2	.367
290	6.72	34.008	1.79		200	7.28	33.95	1.97		26.58	150.6	.445
397	6.06	34.023	1.62		250	7.00	34.00	1.80		26.65	143.7	.518
498	5.30	34.062	1.12		300	6.71	34.01	1.79		26.70	139.8	.589
595	4.70	34.143	.71		400	6.04	34.02	1.61		26.80	131.3	.725
794	3.97	34.207	.29		500	5.29	34.06	1.11		26.93	119.5	.850
1001	3.47	34.303	.31		600	4.68	34.15	.69		27.06	107.5	.964
1200	3.06	34.463	.43		700	4.26	34.23	.43		27.17	97.2	1.066
					800	3.95	34.30	.29		27.26	89.1	1.159
					900	3.47	34.39	.31		27.38	78.4	1.326
					1000	3.06	34.46	.43		27.49	69.5	1.474

AH 145 44 14.3 N 127 35.0 W DATE 20 APR 64 2023 GCT WIRE - DRY 47.2 WET 43.3

WIND DIRECTION 34 VEL 21 KTS HAR 29 SWELL DIRECTION 33 H 10 T 5 CLOUD 8 AMT 8 WEATHER 02

0	8.62	32.457	6.84		0	8.63	32.46	6.84		25.22	276.8	0
10	8.62				10	8.63	32.45	6.76		25.21	278.0	.028
21	8.65	32.454	6.81		20	8.65	32.45	6.81		25.21	278.0	.056
31	8.59	32.460	6.86		30	8.60	32.46	6.86		25.22	277.0	.083
55	8.44	32.481	6.76		50	8.51	32.47	6.79		25.24	275.0	.138
77	8.24	32.572	6.66		75	8.27	32.55	6.70		25.34	265.9	.206
103	7.75	33.263	4.66		100	7.81	33.17	4.92		25.90	213.6	.266
155	7.55	33.872	2.25		150	7.57	33.85	2.39		26.46	161.1	.360
209	7.21	33.960	1.84		200	7.27	33.95	1.94		26.58	150.4	.437
310	6.52	34.007	1.74		250	6.96	33.99	1.79		26.65	143.7	.511
412	5.44	34.035	1.40		300	6.65	34.01	1.74		26.71	139.1	.582
516	4.94	34.080	.95		400	5.93	34.03	1.45		26.82	129.4	.716
615	4.40	34.164	.56		500	5.07	34.07	1.02		26.96	116.3	.839
820	3.87	34.333	.32		600	4.54	34.15	.61		27.08	105.8	.950
1031	3.43	34.304	.31		700	4.20	34.24	.40		27.19	95.6	1.050
					800	3.92	34.32	.32		27.28	87.3	1.142
					900	3.48	34.39	.31		27.38	78.5	1.307

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _s	Sx10 ⁶	ΔD
AH 125 46 14.3 N 127 5.0 W DATE 21 APR 64 0125 GCT WIRE 3 DRY 48.0 WET 43.6 WIND DIRECTION 34 VEL 23 KTS BAR 30 SWELL DIRECTION 33 H 10 T 5 CLOUD 8 AMT 10 WEATHER 02												
0	8.61	32.393	6.86		0	8.61	32.40	6.86		25.17	281.4	0
10	8.60	32.385	6.85		10	8.60	32.40	6.85		25.17	281.2	.028
20	8.63	32.391	6.84		20	8.63	32.40	6.84		25.16	282.1	.056
30	8.58	32.407	6.87		30	8.58	32.41	6.88		25.18	280.3	.084
51	8.57	32.403	6.76		50	8.57	32.49	6.77		25.25	274.7	.140
76	8.27	32.540	6.64		75	8.28	32.54	6.65		25.33	267.4	.208
102	8.09	32.874	5.69		100	8.10	32.81	5.78		25.56	245.2	.272
153	7.47	33.652	3.90		150	7.51	33.61	3.99		26.28	178.0	.377
203	7.08	33.902	3.29		200	7.10	33.90	3.31		26.56	151.7	.460
304	5.97	33.953	2.40		250	6.57	33.93	2.84		26.66	143.2	.534
406	5.18	34.001	1.58		300	6.01	33.95	2.43		26.75	134.9	.603
506	4.62	34.075	.92		400	5.22	34.00	1.63		26.88	123.1	.732
607	4.45	34.192	.46		500	4.65	34.07	.95		27.01	111.4	.849
809	3.82	34.309	.30		600	4.46	34.17	.48		27.11	102.9	.956
1011	3.33	34.409	.32		700	4.18	34.25	.31		27.20	94.7	1.055
					800	3.85	34.30	.31		27.28	87.6	1.146
					1000	3.35	34.40	.31		27.40	76.1	1.310

AH 105 46 14.4 N 126 37.6 W DATE 21 APR 64 0317 GCT WIRE 6 DRY 47.5 WET 43.8
WIND DIRECTION 33 VEL 18 KTS BAR 29 SWELL DIRECTION 33 H 10 T 6 CLOUD 6 AMT 10 WEATHER 02

0	8.77	32.242	6.83		0	8.77	32.25	6.83		25.03	294.9	0
10	8.78	32.240	6.83		10	8.78	32.25	6.83		25.02	295.4	.030
21	8.81	32.244	6.82		20	8.81	32.24	6.82		25.02	296.0	.059
31	8.76	32.248	6.83		30	8.77	32.25	6.83		25.03	295.3	.089
55	8.34	32.430	6.74		50	8.44	32.39	6.76		25.19	280.5	.166
76	8.11	32.529	6.69		75	8.12	32.52	6.70		25.34	266.2	.215
102	7.80	33.059	5.22		100	7.82	33.01	5.36		25.77	225.9	.276
153	7.60	33.769	3.21		150	7.61	33.74	3.29		26.37	169.5	.375
205	7.06	33.937	2.71		200	7.12	33.94	2.72		26.59	149.1	.454
307	5.96	33.974	2.10		250	6.56	33.95	2.42		26.68	141.0	.527
408	5.18	34.031	1.29		300	6.03	33.97	2.14		26.76	133.6	.596
511	4.66	34.113	.70		400	5.23	34.03	1.35		26.90	121.2	.723
610	4.45	34.201	.43		500	4.70	34.10	.75		27.03	109.6	.838
813	3.83	34.322	.29		600	4.47	34.19	.45		27.12	101.7	.944
1022	3.34	34.406	.32		700	4.18	34.26	.32		27.21	93.9	1.042
					800	3.87	34.32	.30		27.28	87.0	1.132
					1000	3.39	34.40	.31		27.40	77.0	1.296

AH 85 46 14.4 N 126 8.7 W DATE 21 APR 64 0916 GCT WIRE 7 DRY 46.9 WET 43.5
WIND DIRECTION 33 VEL 16 KTS BAR 29 SWELL DIRECTION 33 H 10 T 7 CLOUD 6 AMT 8 WEATHER 02

0	8.80	32.302	6.89		0	8.80	32.31	6.90		25.07	290.9	0
10	8.81	32.298	6.84		10	8.81	32.30	6.84		25.06	291.5	.029
21	8.84	32.302	6.84		20	8.84	32.30	6.84		25.06	292.1	.058
31	8.81	32.301	6.93		30	8.82	32.30	6.92		25.06	292.0	.087
51	8.07	32.461	6.75		50	8.11	32.45	6.76		25.29	270.9	.144
77	7.97	32.511	6.73		75	7.98	32.51	6.75		25.35	265.4	.211
102	8.01	32.830	5.40		100	8.01	32.80	5.71		25.57	244.4	.275
154	7.33	34.721	3.99		150	7.40	33.66	4.09		26.34	172.6	.379
207	6.94	33.929	2.87		200	6.99	33.93	2.99		26.60	148.0	.459
309	5.76	33.980	1.92		250	6.44	33.98	2.37		26.71	137.8	.530
410	5.14	34.066	1.01		300	5.86	33.98	1.97		26.79	131.2	.598
513	4.71	34.140	.62		400	5.18	34.06	1.09		26.93	118.3	.722
613	4.31	34.205	.46		500	4.76	34.13	.65		27.04	108.2	.835
817	3.80	34.341	.29		600	4.36	34.20	.47		27.14	100.2	.940
1026	3.36	34.420	.39		700	4.06	34.27	.36		27.22	92.2	1.036
					800	3.83	34.33	.30		27.30	85.4	1.124
					1000	3.41	34.41	.36		27.41	76.1	1.286

AH 65 46 14.4 N 125 39.2 W DATE 21 APR 64 1339 GCT WIRE - DRY 47.5 WET 46.1
WIND DIRECTION 33 VEL 18 KTS BAR 29 SWELL DIRECTION 33 H 10 T 7 CLOUD 6 AMT 10 WEATHER 02

0	8.96	32.195	6.91		0	8.96	32.20	6.92		24.98	299.8	0
10	8.85	32.193	6.92		10	8.85	32.20	6.89		24.98	299.9	.030
21	8.88	32.201	6.88		20	8.88	32.20	6.88		24.97	300.4	.060
31	8.66	32.347	6.90		30	8.69	32.33	6.90		25.11	287.9	.089
51	8.14	32.469	6.88		50	8.20	32.47	6.89		25.28	271.1	.145
76	8.14	32.577	6.76		75	8.14	32.56	6.41		25.37	263.3	.212
101	8.20	33.543	3.78		100	8.20	33.50	3.89		26.04	194.9	.269
152	7.73	33.923	2.66		150	7.76	33.91	2.70		26.48	159.2	.358

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D	
AH 45 46 14.4 N 124 10.5 W DATE 22 APR 64 0937 GCT WIRE 29 DRY 45.8 WET 41.8													
WIND DIRECTION 32 VEL 25 KTS BAR 14 SWELL DIRECTION 29 H 10 T 6 CLOUD 8 AMT 10 WEATHER 02													
0 8.86 32.038 6.97					0 8.86 32.04 6.97					24.85 311.4		0	
10 8.86 32.036 6.94					10 8.86 32.04 6.94					24.85 311.7	.031		
20 8.84 32.046 6.94					20 8.89 32.04 6.94					24.85 311.9	.062		
30 8.84 32.064 6.95					30 8.85 32.06 6.95					24.87 310.4	.093		
50 8.84 32.080 6.60					50 8.86 32.06 6.63					25.25 274.1	.152		
65 8.82 32.091 6.26					75 8.20 33.09 4.95					25.77 225.2	.214		
80 8.13 33.361 4.22					100 8.03 33.77 3.18					26.33 172.7	.264		
122 7.89 33.846 3.00					150 7.37 33.94 2.65					26.56 151.3	.345		
162 7.11 33.950 2.57					200 6.47 33.95 2.52					26.69 139.1	.418		
246 5.87 33.959 2.47					250 5.84 33.96 2.42					26.79 131.2	.485		
330 5.42 34.032 1.41					300 5.52 34.00 1.81					26.85 124.9	.549		
418 5.32 34.098 .95					400 5.34 34.09 1.01					26.94 118.1	.671		
505 4.81 34.153 .63					500 4.84 34.15 .65					27.05 107.8	.783		
596 4.10 34.260 .32					600 4.40 34.21 .42					27.14 99.9	.887		
907 3.63 34.377 .32					700 4.09 34.26 .32					27.22 92.8	.983		
					800 3.83 34.32 .32					27.29 86.3	1.073		
AH 35 46 14.4 N 124 56.2 W DATE 22 APR 64 1237 GCT WIRE DRY 46.5 WET 40.9													
WIND DIRECTION 32 VEL 25 KTS BAR 14 SWELL DIRECTION 29 H 14 T 7 CLOUD 0 AMT 0 WEATHER 0													
0 8.75 32.000 6.96					0 8.75 32.00 6.96					24.84 312.7		0	
10 8.74 31.999 6.96					10 8.74 32.00 6.96					24.84 312.7	.031		
20 8.77 32.001 6.98					20 8.77 32.01 6.98					24.84 313.1	.063		
30 8.76 32.028 6.96					30 8.75 32.03 6.96					24.86 311.0	.094		
52 8.35 32.429 6.32					50 8.38 32.38 6.42					25.19 280.4	.153		
77 8.58 33.244 4.31					75 8.56 33.18 4.48					25.79 223.6	.216		
108 7.96 33.674 3.35					100 8.16 33.60 3.50					26.18 186.6	.267		
152 7.53 33.919 2.67					150 7.54 33.91 2.69					26.51 155.7	.353		
217 6.78 33.986 2.20					200 6.99 33.97 2.26					26.63 144.9	.428		
NH 25 44 39.2 N 124 39.1 W DATE 02 JUN 64 0534 GCT WIRE 4 DRY 56.2 WET 53.0													
WIND DIRECTION 16 VEL 13 KTS BAR 12 SWELL DIRECTION H CLOUD AMT WEATHER													
0 12.45 30.107					0 12.45 30.20					22.82 505.9		0	
10 10.20 32.011					10 10.20 32.02					24.62 334.0	.042		
20 9.71 32.116					20 9.71 32.12					24.78 318.7	.075		
30 8.47 32.157					30 8.47 32.16					25.00 297.6	.105		
50 7.71 32.675					50 7.71 32.68					25.52 244.5	.160		
75 7.73 33.257					75 7.73 33.26					25.98 205.8	.217		
100 7.74 33.760					100 7.74 33.75					26.36 169.6	.264		
125 7.36 33.893					150 7.02 33.97					26.63 144.4	.342		
150 7.01 33.945					200 6.38 34.01					26.75 134.0	.412		
200 6.38 34.007					250 5.84 33.96					26.78 131.2	.478		
NH 455 44 34.5 N 125 14.4 W DATE 01 JUN 64 1619 GCT WIRE 2 DRY 56.0 WET 51.0													
WIND DIRECTION VEL KTS BAR SWELL DIRECTION H T CLOUD 0 AMT 8 WEATHER													
0 11.86 31.465					0 11.86 31.47					23.90 401.9		0	
10 11.51 31.532					10 11.51 31.54					24.02 391.1	.040		
20 10.38 31.744					20 10.38 31.75					24.38 356.8	.077		
30 9.21 32.061					30 9.21 32.07					24.82 315.3	.111		
50 7.82 32.654					50 7.82 32.66					25.49 251.5	.167		
75 7.90 33.148					75 7.91 33.15					25.87 216.2	.226		
100 7.79 33.562					100 7.80 33.57					26.21 184.3	.276		
125 7.78 33.785					150 7.19 33.93					26.58 149.4	.359		
150 7.14 33.928					200 6.49 34.00					26.73 135.6	.430		
200 6.49 34.004					250 5.84 33.96					26.78 131.2	.497		
NH 45 44 39.0 N 125 14.3 W DATE 01 JUN 64 1831 GCT WIRE 2 DRY 56.5 WET 53.5													
WIND DIRECTION 17 VEL 12 KTS BAR 12 SWELL DIRECTION 17 H 4 T 5 CLOUD 6 AMT 6 WEATHER 01													
0 11.82 31.520					0 11.82 31.52					23.95 397.2		0	
10 11.56 31.534					10 11.56 31.54					24.01 391.8	.039		
20 10.25 31.785					20 10.25 31.79					24.43 351.7	.077		
30 9.13 32.106					30 9.13 32.11					24.87 310.8	.110		
50 7.86 32.648					50 7.86 32.65					25.48 252.5	.166		
75 7.92 33.362					75 7.93 33.35					26.01 202.1	.223		
100 7.71 33.692					100 7.71 33.70					26.32 173.5	.270		
125 7.53 33.847					150 7.09 33.95					26.60 147.0	.350		
150 7.09 33.944					200 6.48 34.00					26.73 136.0	.421		
200 6.49 33.999					250 5.84 33.96					26.78 131.2	.487		

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	S × 10 ³	Δ D		
NH 45N 44 44.1 N 125 6.0 W DATE 02 JUN 64 0239 GCT WIRE 02 DRY 0 AMT 0 WET 0 WEATHER 0														
WIND DIRECTION 20 VEL 15 KTS BAR 15 SWELL DIRECTION H T 05 CLOUD														
0 11.99 31.113					0 11.99	31.12				23.61	430.2		0	
10 11.89 31.113					10 11.89	31.12				23.63	428.6	.043		
20 9.21 32.075					20 9.21	32.08				24.83	314.1	.080		
30 8.31 32.265					30 8.31	32.27				25.11	287.0	.110		
50 7.74 32.930					50 7.74	32.93				25.72	229.9	.162		
75 7.95 33.371					75 7.95	33.38				26.03	200.3	.216		
100 7.90 33.572					100 7.91	33.58				26.20	185.1	.264		
125 7.57 33.818					150 7.07	33.93				26.59	148.3	.347		
150 7.07 33.923					200 6.65	34.01				26.71	137.3	.418		
200 6.65 34.010					250 5.84	33.96				26.78	131.2	.486		
AH 005 46 14.4 N 124 15.5 W DATE 12 JUL 64 1035 GCT WIRE 02 DRY 58.0 AMT 0 WET 57.0 WEATHER 01														
WIND DIRECTION 34 VEL 10 KTS BAR 21 SWELL DIRECTION 34 H 05 T 05 CLOUD														
0 15.50 17.600 6.66					0 15.50		6.67							
20 7.31 33.709 2.26					10 7.43		2.15							
30 7.19 33.709 2.37					20 7.32		2.27							
50 7.01 33.956 1.51					30 7.19		2.38							
					50 7.02		1.52							
AH 015 46 14.4 N 124 27.2 W DATE 12 JUL 64 1420 GCT WIRE 15 DRY 57.8 AMT 0 WET 56.2 WEATHER 02														
WIND DIRECTION 32 VEL 09 KTS BAR 21 SWELL DIRECTION 35 H 03 T 05 CLOUD														
0 15.52 17.300 6.62					0 15.52	17.30	6.63			12.34	1517.4		0	
10 13.14 30.143 6.41					10 13.14	30.17	6.42			22.66	521.1	.102		
20 8.52 32.448 4.16					20 8.52	32.45	4.16			25.23	276.3	.142		
30 7.79 32.894 3.64					30 7.80	32.90	3.65			25.68	233.0	.167		
50 7.26 33.664 2.18					50 7.27	33.67	2.18			26.36	168.8	.207		
75 6.91 33.949 1.44					75 6.89	33.96	1.45			26.64	142.6	.246		
100 6.65 33.978 1.54					100 6.66	33.98	1.55			26.69	138.0	.281		
148 6.43 33.995 1.46					150 6.42	34.00	1.46			26.73	134.8	.350		
201 6.33 33.995 1.47					200 6.33	34.00	1.47			26.74	134.3	.417		
AH 025 46 14.4 N 124 41.7 W DATE 12 JUL 64 1705 GCT WIRE 06 DRY 58.0 AMT 0 WET 56.2 WEATHER 02														
WIND DIRECTION 33 VEL 08 KTS BAR 22 SWELL DIRECTION 33 H 03 T 05 CLOUD														
0 15.10 30.788 6.27					0 15.10	30.79	6.28			22.74	513.0		0	
10 14.80 31.980 6.25					10 14.80	31.98	6.26			23.72	419.8	.047		
20 10.87 32.204 7.21					20 10.88	32.21	7.21			24.65	330.8	.084		
30 8.63 32.270 6.44					30 8.63	32.27	6.44			25.07	291.2	.115		
50 7.75 32.651 5.83					50 7.76	32.66	5.83			25.50	250.8	.169		
77 7.60 33.278 4.34					75 7.61	33.23	4.45			25.97	206.1	.227		
104 7.57 33.608 3.50					100 7.57	33.57	3.59			26.24	180.8	.275		
152 7.29 33.947 2.73					150 7.31	33.88	2.75			26.52	154.9	.359		
206 6.94 33.978 2.27					200 6.65	33.97	2.30			26.68	140.4	.433		
AH 035 46 14.4 N 124 56.2 W DATE 12 JUL 64 1935 GCT WIRE 03 DRY 59.8 AMT 0 WET 57.2 WEATHER 02														
WIND DIRECTION 35 VEL 12 KTS BAR 22 SWELL DIRECTION 35 H 05 T 05 CLOUD														
0 15.52 32.010 6.00					0 15.52	32.01	6.01			23.59	432.2		0	
10 15.35 32.023 6.05					10 15.35	32.06	6.06			23.63	427.9	.043		
20 13.19 32.112 6.01					20 13.19	32.12	6.02			24.15	378.8	.083		
30 9.54 32.212 7.05					30 9.54	32.22	7.06			24.88	309.1	.118		
50 7.92 32.408 6.36					50 7.93	32.41	6.36			25.28	271.2	.176		
77 7.90 32.937 5.05					75 7.90	32.89	5.15			25.66	235.5	.239		
104 7.84 33.436 3.86					100 7.85	33.37	4.01			26.04	199.8	.293		
153 7.50 33.873 3.13					150 7.53	33.86	3.15			26.47	159.6	.383		
207 6.69 33.948 1.97					200 6.80	33.96	2.11			26.65	143.3	.459		
304 5.92 34.032 1.59					250 6.28	34.01	1.67			26.76	133.5	.528		
407 5.34 34.089 1.21					300 5.94	34.03	1.61			26.82	128.1	.594		
509 4.94 34.157 .85					400 5.41	34.09	1.24			26.93	118.9	.717		
615 4.47 34.238 .56					500 4.98	34.15	.88			27.03	109.3	.831		
					600 4.54	34.23	.60			27.14	100.1	.936		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁶	Δ D
AH 045	46 14.4 N	125 10.4 W	DATE 12 JUL 64	2305 GCT	WTRF 04	DRY 60.0	WET 57.5					
WIND DIRECTION 35 VFI 15 KTS	BAR 21 SWELL DIRECTION 35 H 05 T 07 CLOUD	AMT 08 WEATHER 02										

0	15.96	31.937	5.90		0	15.96	31.94	5.91		23.43	446.8	0
10	15.56	31.872	5.90		10	15.56	31.88	5.99		23.47	443.3	.045
30	10.41	32.168	7.53		20	13.13	31.99	6.81		24.07	386.7	.086
50	8.71	32.42	6.42		30	10.41	32.17	7.54		24.70	326.1	.122
76	8.08	32.335	5.36		50	8.71	32.23	6.43		25.02	295.8	.184
102	8.33	32.802	5.36		75	8.10	32.33	5.40		25.19	280.2	.256
152	7.47	33.400	2.93		100	8.30	32.76	4.41		25.50	251.2	.322
206	6.86	33.929	2.67		150	7.52	33.38	2.97		26.10	195.0	.434
256	6.37	33.929	2.17		200	6.92	33.89	2.68		26.59	149.4	.520
305	5.87	34.010	1.80		250	6.43	33.98	2.23		26.72	137.6	.592
406	5.19	34.063	1.25		300	5.92	34.01	1.83		26.81	129.5	.658
507	4.78	34.139	.78		400	5.22	34.06	1.28		26.93	118.5	.782
609	4.38	34.212	.50		500	4.80	34.13	.81		27.04	108.5	.896
1014	3.30	34.425	.69		600	4.41	34.21	.52		27.14	100.1	1.000
					700	4.07	34.27	.53		27.23	91.9	1.096
					800	3.77	34.33	.56		27.30	84.9	1.184
					1000	3.32	34.42	.59		27.42	74.7	1.344

AH 085	46 14.6 N	126 9.0 W	DATE 13 JUL 64	0840 GCT	WTRF 06	DRY 58.0	WET 55.0					
WIND DIRECTION 31 VFI 16 KTS	BAR 19 SWELL DIRECTION 33 H 04 T 05 CLOUD	AMT 08 WEATHER 02										

0	15.11	32.235	6.02		0	15.11	32.24	6.03		23.85	407.2	0
10	14.54	32.234	6.16		10	14.54	32.23	6.17		23.96	396.6	.040
30	10.15	32.458	7.04		20	12.43	32.33	6.62		24.46	349.0	.077
50	8.69	32.521	6.76		30	10.15	32.46	7.05		24.97	300.5	.110
76	8.45	32.565	6.62		50	8.69	32.53	6.77		25.26	273.7	.167
101	7.68	32.940	5.24		75	8.46	32.56	6.64		25.32	268.1	.235
151	7.30	33.624	4.17		100	7.71	32.92	5.30		25.71	231.1	.297
204	6.72	33.868	3.76		150	7.30	33.61	4.18		26.31	174.8	.399
254	6.21	33.926	2.96		200	6.77	33.86	3.79		26.58	149.9	.480
304	5.78	33.960	2.20		250	6.25	33.92	3.03		26.70	139.1	.552
404	5.23	34.044	1.30		300	5.81	33.96	2.26		26.78	131.9	.620
505	4.99	34.160	.64		400	5.25	34.04	1.33		26.91	120.3	.746
606	4.54	34.208	.39		500	5.00	34.15	.66		27.03	109.3	.861
809	3.93	34.348	.30		600	4.57	34.21	.40		27.12	101.9	.966
1009	3.36	34.406	.30		700	4.23	34.27	.31		27.21	93.5	1.064
					800	3.95	34.34	.30		27.29	86.0	1.154
					1000	3.38	34.41	.30		27.40	76.4	1.316

AH 065	46 14.4 N	125 39.5 W	DATE 13 JUL 64	0336 GCT	WTRF 0	DRY 59.5	WET 50.5					
WIND DIRECTION 34 VFI 14 KTS	BAR 20 SWELL DIRECTION 34 H 04 T 05 CLOUD	AMT 0 WEATHER 0										

0	16.25	31.249	5.85		0	16.25	31.25	5.85		22.84	503.3	0
10	15.13	31.910	6.07		10	15.13	31.92	6.07		23.60	431.6	.047
30	11.03	32.147	7.16		20	13.14	32.13	6.68		24.17	377.1	.087
50	8.43	32.262	6.41		30	11.03	32.15	7.17		24.58	337.9	.123
77	8.01	32.763	5.52		50	8.43	32.27	6.42		25.09	289.2	.186
101	8.04	33.376	3.99		75	8.04	32.72	5.60		25.50	250.6	.253
151	7.49	33.826	3.04		100	8.04	33.35	4.05		26.00	203.7	.310
204	6.92	33.903	2.52		150	7.50	33.82	3.04		26.45	161.9	.401
304	5.86	34.003	1.78		200	6.96	33.99	2.55		26.65	143.1	.477
404	5.26	34.164	1.00		250	6.40	34.00	2.16		26.74	135.7	.547
504	4.72	34.145	.65		300	5.90	34.00	1.81		26.80	129.6	.613
606	4.37	34.224	.37		400	5.28	34.10	1.03		26.96	116.2	.736
809	3.87	34.379	.25		500	4.74	34.14	.66		27.05	107.0	.848
1009	3.39	34.420	.32		600	4.39	34.22	.38		27.15	98.8	.951
1213	2.99	34.480	.45		700	4.12	34.28	.27		27.23	91.6	1.046
					800	3.89	34.33	.26		27.30	85.8	1.135
					1000	3.41	34.42	.31		27.41	75.9	1.296
					1200	3.01	34.48	.44		27.49	67.9	1.440

AH 105	46 14.4 N	126 37.2 W	DATE 13 JUL 64	1438 GCT	WTRF 04	DRY 55.0	WET 51.5					
WIND DIRECTION 33 VFI 08 KTS	BAR 16 SWELL DIRECTION 33 H 04 T 05 CLOUD 06 AMT 07 WEATHER 02											

0	15.03	32.224	5.96		0	15.03	32.23	5.96		23.86	406.3	0
10	14.63	32.213	6.00		10	14.63	32.22	6.01		23.93	399.3	.040
30	10.33	32.212	7.19		20	12.64	32.21	6.62		24.33	361.5	.078
50	8.14	32.313	6.47		30	10.33	32.22	7.19		24.75	321.5	.112
76	7.75	32.612	5.99		50	8.14	32.32	6.47		25.18	281.3	.173
102	7.58	33.095	4.86		75	7.77	32.60	6.01		25.45	255.8	.240
152	7.16	33.774	3.77		100	7.59	33.06	4.95		25.83	219.4	.299
205	6.75	33.916	3.03		150	7.18	33.76	3.41		26.44	162.5	.395
255	6.16	33.929	2.70		200	6.80	33.90	3.04		26.61	147.3	.472
305	5.73	33.906	2.22		250	6.22	33.94	2.74		26.71	137.8	.543
406	5.09	34.027	1.26		300	5.77	33.98	2.27		26.80	129.7	.610
507	4.73	34.123	.59		400	5.03	34.02	1.31		26.93	118.9	.734
608	4.45	34.257	.41		500	4.74	34.12	.72		27.04	108.4	.848
812	3.80	34.340	.29		600	4.47	34.22	.42		27.14	99.7	.952
1013	3.30	34.420	.34		700	4.15	34.29	.31		27.23	91.7	1.048
					800	3.44	34.34	.30		27.30	85.2	1.136
					1000	3.33	34.42	.33		27.42	75.0	1.296

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	S × 10 ⁸	Δ D
AH 125 46 14.4 N 127 6.1 W DATE 13 JUL 64 1820 GCT WIREF 04 DRY 57.8 WET 53.2 WIND DIRECTION 20 VEI 04 KTS BAR 15 SWELL DIRECTION 27 H 04 T 07 CLOUD 06 AMT 08 WEATHER 02												
0	15.18	32.225	5.98		0	15.18	32.23	5.98		23.83	409.4	0
10	14.17	32.212	6.16		10	14.17	32.22	6.17		24.03	390.2	.040
30	11.48	32.213	7.29		20	12.89	32.21	6.77		24.28	366.1	.078
50	8.66	32.342	6.69		30	11.48	32.22	7.30		24.55	340.7	.113
76	8.26	32.512	6.34		50	8.66	32.35	6.69		25.12	284.6	.176
101	8.00	32.803	5.35		75	8.28	32.50	6.36		25.30	269.7	.245
151	7.22	33.657	4.09		100	8.01	32.98	5.39		25.63	238.7	.309
204	6.81	33.807	3.25		150	7.24	33.64	4.11		26.35	171.6	.411
254	6.24	33.950	2.57		200	6.84	33.89	3.30		26.60	148.5	.491
304	5.93	33.978	2.09		250	6.28	33.95	2.62		26.71	137.8	.563
407	5.11	34.033	1.33		300	5.95	33.98	2.12		26.78	132.3	.630
501	4.70	34.157	.42		400	5.16	34.03	1.38		26.91	120.2	.757
606	4.36	34.210	.47		500	4.70	34.19	.43		27.09	103.5	.868
809	3.71	34.326	.30		600	4.38	34.21	.45		27.14	99.5	.970
1008	3.40	34.443	.49		700	4.04	34.26	.39		27.22	92.1	1.066
					800	3.74	34.33	.31		27.31	84.4	1.154
					1000	3.41	34.44	.48		27.43	74.2	1.312

AH 145 46 14.2 N 127 35.0 W DATE 13 JUL 64 2204 GCT WIREF 04 DRY 59.0 WET 0
WIND DIRECTION 17 VEI 16 KTS BAR 13 SWELL DIRECTION 17 H 04 T 07 CLOUD AMT 08 WEATHER 02

0	14.94	32.196	6.05		0	14.98	32.19	6.06		23.84	408.1	0
10	14.04	32.177	6.24		10	14.04	32.18	6.24		24.03	390.2	.040
30	10.29	32.204	7.13		20	12.21	32.18	6.73		24.39	356.1	.077
50	8.27	32.328	6.58		30	10.29	32.21	7.14		24.75	321.5	.111
76	7.69	32.536	6.37		50	8.27	32.33	6.58		25.17	282.1	.171
101	7.56	33.171	4.54		75	7.71	32.52	6.29		25.40	260.4	.239
151	7.39	33.869	2.97		100	7.56	33.14	4.62		25.91	212.5	.298
204	6.89	33.951	2.59		150	7.39	33.86	2.98		26.49	157.5	.391
254	6.31	33.963	2.41		200	6.94	33.94	2.59		26.62	145.9	.467
303	5.88	33.987	2.18		250	6.36	33.96	2.42		26.71	137.7	.538
404	5.30	34.047	1.16		300	5.90	33.99	2.20		26.79	131.0	.605
504	4.76	34.126	.87		400	5.32	34.06	1.20		26.92	119.4	.730
605	4.38	34.209	.46		500	4.78	34.12	.88		27.03	109.0	.844
807	3.76	34.325	.25		600	4.40	34.20	.48		27.14	100.0	.948
1001	3.35	34.408	.44		700	4.06	34.27	.28		27.23	91.9	1.044
					800	3.78	34.32	.26		27.30	85.5	1.133
					1000	3.35	34.41	.44		27.41	75.9	1.294

AH 165 46 14.4 N 128 3.8 W DATE 14 JUL 64 0235 GCT WIREF 02 DRY 59.0 WET 57.0
WIND DIRECTION 14 VEI 04 KTS BAR 10 SWELL DIRECTION 19 H 04 T 05 CLOUD AMT 08 WEATHER 02

0	14.70	32.201	6.25		0	14.70	32.21	6.26		23.91	401.3	0
10	14.31	32.208	6.27		10	14.31	32.21	6.28		24.00	393.2	.040
30	10.56	32.250	7.27		20	12.59	32.22	6.77		24.35	359.8	.077
50	8.35	32.380	6.95		30	10.56	32.25	7.28		24.74	322.5	.111
77	7.48	32.564	5.86		50	8.35	32.38	6.95		25.20	279.3	.172
102	7.56	33.245	4.51		75	7.49	32.63	5.96		25.52	249.1	.238
152	7.34	33.827	3.07		100	7.54	33.20	4.62		25.95	208.3	.295
206	6.77	33.940	2.68		150	7.40	33.82	3.06		26.46	161.0	.387
305	5.73	33.998	1.70		200	6.85	33.93	2.69		26.62	146.0	.464
406	5.08	34.060	1.13		250	6.28	33.98	2.25		26.74	135.6	.534
506	4.67	34.131	.71		300	5.78	34.00	1.75		26.82	128.5	.600
609	4.26	34.186	.45		400	5.11	34.06	1.16		26.94	117.5	.723
813	3.81	34.326	.27		500	4.69	34.13	.73		27.05	107.7	.836
1013	3.27	34.413	.33		600	4.29	34.18	.47		27.13	100.5	.940
1219	2.94	34.467	.35		700	4.04	34.25	.33		27.21	93.1	1.037
					800	3.83	34.32	.27		27.29	86.4	1.126
					1000	3.30	34.41	.32		27.41	75.3	1.288
					1200	2.96	34.46	.35		27.49	68.3	1.431

ANH173 45 42.9 N 124 1.8 W DATE 14 JUL 64 0735 GCT WIREF 06 DRY 58.5 WET 57.0
WIND DIRECTION 21 VEI 10 KTS BAR 09 SWELL DIRECTION 19 H 04 T 05 CLOUD AMT 08 WEATHER 02

0	14.74	32.461	5.21		0	14.74	32.47	6.21		24.09	383.9	0
10	14.74	32.456	6.46		10	14.74	32.46	6.46		24.29	345.8	.076
30	12.48	32.488	6.96		20	13.87	32.47	6.74		24.58	338.2	.111
50	9.30	32.492	6.93		30	12.48	32.49	6.96		25.13	286.4	.174
75	8.47	32.595	6.51		50	9.30	32.50	6.94		25.32	268.3	.243
101	8.04	32.814	5.71		75	8.47	32.56	6.52		25.57	244.8	.307
149	7.26	33.672	4.31		100	8.05	32.80	5.74		26.37	169.0	.410
202	6.80	33.910	3.65		150	7.25	33.68	4.29		26.61	146.9	.489
251	6.16	34.423	3.10		200	6.82	33.91	3.67		26.71	137.6	.561
301	5.64	34.944	2.64		250	6.17	33.93	3.11		26.79	130.9	.628
400	5.09	34.011	1.55		300	5.65	33.94	2.69		26.91	120.3	.753
601	4.41	34.202	.55		400	5.09	34.02	1.55		27.03	109.4	.868
813	3.91	34.323	.24		500	4.70	34.11	.90		27.13	100.5	.973
1003	3.41	34.410	.36		600	4.41	34.20	.55		27.22	93.0	1.070
					700	4.17	34.27	.33		27.29	86.9	1.160
					800	3.94	34.33	.24		27.40	76.5	1.323
					1000	3.42	34.41	.36				

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δx10 ⁶	Δ D
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ANH169 45 11.0 N 127 58.1 W DATE 14 JUL 64 1304 GCT WIRE 11 DRY 60.5 WET 58.5
WIND DIRECTION 21 VEL 14 KTS BAR 07 SWELL DIRECTION 19 H 05 T 05 CLOUD 06 AMT 08 WEATHER 02

0	14.85	32.457			0	14.86	32.46			24.07	385.8	0
10	14.79	32.460			10	14.79	32.46			24.09	384.4	.039
30	11.33	32.518			20	13.27	32.49			24.42	352.9	.075
50	8.86	32.496			30	11.33	32.52			24.82	315.6	.109
75	8.49	32.541			50	8.86	32.50			25.21	278.1	.168
101	8.14	32.716			75	8.49	32.55			25.30	269.7	.237
150	7.62	33.461			100	8.20	32.71			25.47	254.0	.302
202	7.00	33.886			150	7.63	33.66			26.30	176.0	.410
250	6.41	33.936			200	7.02	33.89			26.56	151.5	.491
299	5.81	33.946			250	6.62	33.94			26.69	140.1	.564
395	4.99	33.906			300	5.80	33.95			26.77	132.6	.632
489	4.53	34.084			400	4.96	34.00			26.91	119.8	.759
585	4.35	34.180			500	4.50	34.10			27.04	107.9	.872
784	3.88	34.303			600	4.32	34.19			27.14	100.1	.976
983	3.45	34.396			700	4.08	34.26			27.22	92.9	1.073
					800	3.84	34.31			27.28	87.0	1.163
					1000	3.41	34.40			27.40	76.9	1.326

NH 165 44 39.1 N 127 55.0 W DATE 14 JUL 64 1805 GCT WIRE 06 DRY 59.8 WET 57.2
WIND DIRECTION 22 VEL 16 KTS BAR 07 SWELL DIRECTION 22 H 05 T 05 CLOUD 06 AMT 08 WEATHER 02

0	15.23	32.488	5.94		0	15.23	32.49	5.94		24.02	391.1	0
10	15.20	32.481	5.96		10	15.20	32.49	5.96		24.02	391.3	.039
30	12.99	32.500	7.57		20	14.30	32.49	6.78		24.21	373.0	.077
50	10.25	32.523	6.83		30	12.99	32.50	7.57		24.49	346.7	.113
77	8.95	32.549	6.55		50	10.37	32.52	6.89		24.98	299.9	.178
102	8.26	32.767	5.86		75	9.00	32.54	6.57		25.22	277.3	.250
153	7.57	33.702	3.70		100	8.30	32.74	5.93		25.49	252.6	.316
204	7.21	33.905	3.30		150	7.59	33.65	3.82		26.30	176.2	.423
305	6.00	33.969	2.43		200	7.24	33.90	3.30		26.55	153.0	.506
408	5.11	34.031	1.58		250	6.68	33.96	2.91		26.67	141.9	.579
508	4.54	34.092	1.05		300	6.06	33.97	2.47		26.75	134.5	.649
609	4.42	34.104	.49		400	5.17	34.03	1.64		26.91	120.4	.776
811	3.89	34.326	.41		500	4.61	34.09	1.09		27.02	109.8	.891
1015	3.41	34.417	.47		600	4.43	34.18	.53		27.12	101.9	.997
1228	2.98	34.483	.65		700	4.20	34.26	.45		27.21	94.0	1.095
					800	3.92	34.32	.41		27.28	87.2	1.185
					1000	3.44	34.41	.46		27.40	76.6	1.349
					1200	3.03	34.48	.62		27.49	68.2	1.494

NH 145 44 39.1 N 127 27.3 W DATE 14 JUL 64 2342 GCT WIRE 05 DRY 60.5 WET 57.5
WIND DIRECTION 21 VEL 18 KTS BAR 07 SWELL DIRECTION 21 H 06 T 05 CLOUD 06 AMT 06 WEATHER 02

0	15.31	32.496	5.93		0	15.31	32.50	5.94		24.01	392.2	0
10	15.29	32.485	6.06		10	15.29	32.49	6.07		24.00	392.8	.039
30	11.92	32.516	7.45		20	13.84	32.50	6.79		24.31	363.2	.077
50	9.15	32.499	6.76		30	11.92	32.52	7.45		24.71	326.0	.112
76	8.60	32.545	6.57		50	9.15	32.50	6.77		25.17	282.2	.172
101	8.14	32.645	6.40		75	8.62	32.54	6.58		25.28	271.8	.242
151	7.45	33.549	4.66		100	8.20	32.66	6.41		25.43	257.5	.308
205	7.01	33.863	4.09		150	7.46	33.53	4.70		26.22	183.1	.418
255	6.65	33.984	2.30		200	7.04	33.45	4.14		26.54	154.2	.502
304	6.11	34.032	1.70		250	6.69	33.98	2.48		26.68	141.0	.576
405	5.18	34.057	1.40		300	6.16	34.03	1.80		26.79	130.9	.644
505	4.73	34.170	.80		400	5.22	34.06	1.41		26.93	118.7	.769
607	4.40	34.204	.49		500	4.75	34.13	.83		27.04	108.4	.882
810	3.91	34.325	.39		600	4.42	34.20	.49		27.13	100.7	.987
1010	3.39	34.416	.36		700	4.16	34.26	.44		27.21	93.5	1.084
					800	3.93	34.32	.39		27.28	87.4	1.174
					1000	3.42	34.41	.36		27.40	76.3	1.338

NH 125 44 39.1 N 126 58.6 W DATE 15 JUL 64 0250 GCT WIRE 21 DRY 58.5 WET 55.8
WIND DIRECTION 27 VEL 14 KTS BAR 10 SWELL DIRECTION 27 H 06 T 05 CLOUD 06 AMT 07 WEATHER 02

0	15.33	32.418	5.89		0	15.33	32.42	5.90		23.94	398.3	0
10	15.33	32.376	6.01		10	15.33	32.38	6.02		23.91	401.7	.040
30	12.04	32.477	7.08		20	13.93	32.41	6.58		24.23	371.0	.079
47	9.67	32.521	5.73		30	12.04	32.48	7.08		24.65	331.1	.114
71	8.77	32.554	6.66		50	9.47	32.52	6.72		25.13	285.5	.175
95	8.18	32.556	5.16		75	8.66	32.56	6.61		25.29	271.0	.245
142	7.51	33.302	4.05		100	8.08	32.75	5.94		25.52	249.3	.310
192	7.21	33.409	3.17		150	7.44	33.67	3.87		26.34	172.2	.415
239	7.02	33.488	2.16		200	7.19	33.83	2.98		26.58	150.3	.496
286	6.40	33.908	1.96		250	6.89	33.99	2.08		26.67	142.5	.569
380	5.49	34.160	1.21		300	6.24	34.01	1.85		26.76	133.7	.638
475	4.99	34.165	.77		400	5.36	34.07	1.10		26.92	119.5	.765
570	4.65	34.181	.49		500	4.89	34.12	.68		27.02	110.3	.879
760	4.10	34.323	.25		600	4.55	34.20	.42		27.12	101.8	.985
					700	4.25	34.28	.28		27.22	93.2	1.083

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁵	A D
0	17.28	26.448	5.80		0	17.28	26.49	5.81		18.98	874.2	0
10	14.55	31.949	6.23		10	14.55	31.95	6.23		23.75	417.0	.065
30	12.48	32.316	6.00		20	13.33	32.13	6.63		24.14	380.1	.104
47	9.56	32.333	6.79		30	12.48	32.32	6.91		24.45	350.8	.141
71	8.30	32.652	5.94		50	9.26	32.35	6.73		25.03	295.1	.206
95	8.75	33.395	4.06		75	8.24	32.77	5.63		25.52	249.2	.274
142	7.58	33.859	3.00		100	8.10	33.48	3.84		26.10	194.7	.329
192	7.09	33.948	2.96		150	7.50	33.89	2.97		26.50	157.0	.417
240	6.48	33.984	2.62		200	6.99	33.96	2.92		26.63	145.7	.493
286	5.99	33.989	2.21		250	6.36	33.99	2.54		26.73	136.1	.563
381	5.46	34.056	1.30		300	5.89	34.00	2.07		26.80	130.0	.630
475	5.02	34.130	.71		400	5.37	34.07	1.15		26.92	119.4	.754
571	4.63	34.101	.48		500	4.91	34.15	.63		27.04	108.8	.868
797	3.99	34.346	.28		600	4.54	34.21	.43		27.13	101.1	.973
994	3.48	34.472	.41		700	4.24	34.28	.31		27.27	93.0	1.070
					800	3.98	34.35	.28		27.30	85.9	1.160
					1000	3.46	34.43	.41		27.42	75.2	1.320

NH 105 44 39.1 N 125 35.1 W DATE 15 JUL 64 0745 GCT WTRF 15 DRY 54.5 WET 58.5
WIND DIRECTION 24 VEI 18 KTS BAR 12 SWELL DIRECTION 24 H 06 T 05 CLOUD 06 AMT 08 WEATHER 02

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁵	A D
0	16.72	28.139	5.70		0	16.73	28.14	5.80		20.36	741.0	0
10	14.26	32.221	6.19		10	14.26	32.23	6.19		24.02	391.3	.057
30	13.15	32.321	6.54		20	13.57	32.27	6.41		24.20	374.5	.095
50	9.19	32.333	6.80		30	13.15	32.33	6.55		24.32	362.9	.132
76	8.34	32.502	6.41		50	9.19	32.34	6.81		25.03	295.1	.198
100	8.00	33.005	4.03		75	8.37	32.49	6.44		25.28	272.2	.268
149	7.69	33.790	3.60		100	8.00	33.10	4.93		25.81	221.9	.330
202	7.09	33.946	3.12		150	7.68	33.80	3.58		26.40	166.4	.427
252	6.30	33.949	3.03		200	7.12	33.94	3.13		26.59	148.7	.506
301	5.62	33.945	2.37		250	6.33	33.95	3.04		26.71	138.4	.578
401	5.04	34.043	1.27		300	5.63	33.96	2.39		26.81	129.2	.645
501	4.96	34.169	.64		400	5.04	34.04	1.28		26.94	117.7	.768
1005	3.42	34.478	.34		500	4.96	34.17	.64		27.05	107.8	.881
					600	4.81	34.27	.58		27.15	100.0	.985
					700	4.58	34.35	.52		27.23	92.1	1.081
					800	4.28	34.40	.46		27.31	85.3	1.169
					1000	3.44	34.44	.34		27.42	74.9	1.329

NH 085 44 39.1 N 126 3.7 W DATE 15 JUL 64 1342 GCT WTRF 10 DRY 58.5 WET 54.2
WIND DIRECTION 26 VEI 18 KTS BAR 14 SWELL DIRECTION 24 H 06 T 06 CLOUD 06 AMT 07 WEATHER 02

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁵	A D
0	16.72	28.139	5.70		0	16.73	28.14	5.80		20.36	741.0	0
10	14.26	32.221	6.19		10	14.26	32.23	6.19		24.02	391.3	.057
30	13.15	32.321	6.54		20	13.57	32.27	6.41		24.20	374.5	.095
50	9.19	32.333	6.80		30	9.19	32.33	6.55		24.32	362.9	.132
76	8.34	32.502	6.41		50	9.19	32.34	6.81		25.03	295.1	.198
100	8.00	33.005	4.03		75	8.37	32.49	6.44		25.28	272.2	.268
149	7.69	33.790	3.60		100	8.00	33.10	4.93		25.81	221.9	.330
202	7.09	33.946	3.12		150	7.68	33.80	3.58		26.40	166.4	.427
252	6.30	33.949	3.03		200	7.12	33.94	3.13		26.59	148.7	.506
301	5.62	33.945	2.37		250	6.33	33.95	3.04		26.71	138.4	.578
401	5.04	34.043	1.27		300	5.63	33.96	2.39		26.81	129.2	.645
501	4.96	34.169	.64		400	5.53	34.11	.97		26.94	118.5	.710
804	4.07	34.257	.25		500	5.05	34.18	.56		27.05	107.9	.823
1006	3.54	34.443	.26		600	4.69	34.25	.38		27.14	100.3	.927
1215	3.12	34.490	.52		700	4.37	34.30	.27		27.22	93.1	1.023
					800	4.08	34.35	.25		27.29	86.5	1.113
					1000	3.55	34.44	.35		27.41	75.7	1.275
					1200	3.15	34.49	.51		27.49	68.6	1.420

NH 065 44 39.1 N 125 35.0 W DATE 15 JUL 64 1804 GCT WTRF 08 DRY 60.0 WET 54.2
WIND DIRECTION 25 VEI 21 KTS BAR 16 SWELL DIRECTION 25 H 07 T 06 CLOUD 06 AMT 07 WEATHER 02

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁵	A D
0	17.08	27.396	5.80		0	17.08	27.39	5.81		19.71	804.0	0
10	14.12	30.606	6.54		10	14.13	30.61	6.55		22.80	507.1	.066
30	9.15	32.102	6.70		20	11.34	31.87	6.62		24.31	363.9	.109
50	7.69	32.693	6.60		30	9.15	32.19	6.70		24.92	305.4	.143
76	7.56	32.263	6.37		50	7.69	32.70	5.60		25.54	246.9	.198
100	7.58	33.653	3.32		75	7.57	33.21	4.46		25.96	207.6	.255
149	7.27	33.930	2.51		100	7.58	33.66	3.33		26.31	174.6	.302
202	6.64	33.991	1.72		150	7.26	33.93	2.49		26.57	150.4	.384
300	6.07	34.082	1.37		200	6.66	33.99	1.75		26.69	139.1	.456
400	5.52	34.105	.96		250	6.31	34.04	1.46		26.78	131.3	.523
498	5.06	34.180	.57		300	6.07	34.09	1.38		26.88	125.6	.588
600	4.59	34.243	.37		400	5.53	34.11	.97		26.94	118.5	.710
804	4.07	34.357	.25		500	5.05	34.18	.56		27.05	107.9	.823
1006	3.54	34.443	.26		600	4.69	34.25	.38		27.14	100.3	.927
1215	3.12	34.490	.52		700	4.37	34.30	.27		27.22	93.1	1.023
					800	4.08	34.35	.25		27.29	86.5	1.113
					1000	3.55	34.44	.35		27.41	75.7	1.275
					1200	3.15	34.49	.51		27.49	68.6	1.420

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ≡	Z	T	S	O ₂	PO ₄ ≡	σ _t	δ × 10 ⁶	Δ D		
NH 035 44 39.1 N 124 53.8 W DATE 16 JUL 64 0010 GCT WIRE 22 DRY 58.0 WET 55.0 WIND DIRECTION 26 VEL 15 KTS BAR 20 SWELL DIRECTION 26 H 04 T 06 CLOUD 06 AMT 07 WEATHER 02														
0	16.67	29.177	5.93		0	16.67	29.18	5.94		21.14	663.9	0		
10	15.44	30.921	6.49		10	15.44	30.93	6.49		22.77	510.5	.059		
20	12.56	32.044	7.32		20	12.56	32.05	7.32		24.22	372.1	.103		
30	10.38	32.178	6.46		30	10.38	32.18	6.46		24.72	324.9	.138		
40	8.11	32.348	6.41		50	7.96	32.39	6.33		25.26	273.3	.197		
50	7.65	32.709	5.46		75	7.63	32.94	5.39		25.66	235.4	.261		
60	7.50	33.175	4.46		100	7.49	33.39	4.40		26.11	193.1	.315		
70	7.16	33.921	1.93		150	7.10	33.96	1.76		26.61	146.2	.399		
80	6.52	34.011	1.65		200	6.78	34.00			26.69	139.3	.471		
NH 025 44 39.1 N 124 38.8 W DATE 16 JUL 64 0311 GCT WIRE 03 DRY 59.5 WET 55.5 WIND DIRECTION 21 VEL 13 KTS BAR 20 SWELL DIRECTION 26 H 08 T 08 CLOUD 06 AMT 08 WEATHER 02														
0	16.15	30.167	5.47		0	16.15	30.17	5.88		22.04	580.3	0		
10	13.11	31.860	6.91		10	13.11	31.86	6.92		23.97	395.6	.049		
20	9.24	32.272	6.90		20	9.24	32.28	6.91		24.98	299.9	.084		
30	8.08	32.442	5.93		30	8.08	32.45	5.94		25.29	270.7	.112		
40	7.51	32.909	4.94		50	7.52	32.91	4.94		25.73	228.3	.162		
50	7.46	33.454	3.83		75	7.46	33.42	3.91		26.14	190.4	.214		
60	7.40	33.812	2.50		100	7.42	33.76	2.72		26.41	164.5	.259		
70	6.85	33.972	1.73		150	6.92	33.97	1.75		26.65	142.9	.335		
80	6.24	34.039	1.47		200	6.39	34.04	1.47		26.77	132.0	.404		
NH 015 44 39.1 N 124 24.7 W DATE 16 JUL 64 0536 GCT WIRE 09 DRY 58.5 WET 54.3 WIND DIRECTION 25 VEL 07 KTS BAR 20 SWELL DIRECTION 25 H 08 T 08 CLOUD 06 AMT 08 WEATHER 02														
0	14.90	31.537	6.17		0	14.90	31.54	6.18		23.36	454.0	0		
10	12.03	31.777	6.10		10	12.03	31.78	6.10		24.11	382.5	.042		
20	7.96	32.762	4.73		20	7.96	32.76	4.73		25.55	245.8	.073		
30	7.42	33.208	3.86		30	7.43	33.30	3.86		26.05	197.9	.095		
40	7.39	33.545	3.26		50	7.43	33.79	2.27		26.44	161.6	.131		
50	7.62	33.789	2.26		75	7.03	33.96	1.58		26.63	144.0	.170		
60	7.02	33.958	1.58		100	7.42	33.76			26.41	164.5	.208		
NH 005 44 39.1 N 124 10.8 W DATE 16 JUL 64 0812 GCT WIRE 04 DRY 56.5 WET 53.5 WIND DIRECTION VEL 00 KTS BAR 27 SWELL DIRECTION 25 H 06 T 06 CLOUD 06 AMT 07 WEATHER 02														
0	10.05	32.717	5.41		0	10.05	32.72	5.42		25.19	279.2	0		
10	8.41	33.396	3.50		10	8.41	33.39	3.51		25.98	204.9	.024		
20	7.47	33.732	2.53		20	7.47	33.74	2.53		26.38	166.1	.043		
30	7.38	33.866	2.35		30	7.39	33.87	2.35		26.50	155.1	.059		
40	7.23	33.909	1.93		50	7.21	33.93	1.21		26.58	148.3	.089		
50	7.21	33.930	1.21		75	7.03	33.96			26.63	144.0	.126		
YH 004 44 10.2 N 124 11.9 W DATE 18 JUL 64 2046 GCT WIRE 06 DRY 60.0 WET 56.0 WIND DIRECTION 30 VEL 06 KTS BAR SWELL DIRECTION 27 H 04 T 06 CLOUD 04 AMT 06 WEATHER 02														
0	14.75	32.238	7.15		0	14.75	32.24	7.16		23.93	399.6	0		
10	10.30	33.140	4.63		10	10.30	33.14	4.64		25.48	252.1	.033		
20	8.85	33.489	2.93		20	8.85	33.49	2.84		25.99	203.8	.055		
30	7.62	33.742	1.57		30	7.63	33.75	1.58		26.37	167.5	.074		
40	7.40	33.839	1.32		50	7.34	33.89	1.05		26.53	153.2	.106		
50	7.33	33.898	.99		75	7.03	33.96			26.63	144.0	.143		
SH 007 43 59.1 N 127 17.9 W DATE 18 JUL 64 2337 GCT WIRE 04 DRY 62.5 WET 58.0 WIND DIRECTION 30 VEL 10 KTS BAR 22 SWELL DIRECTION 27 H 04 T 06 CLOUD 06 AMT 02 WEATHER 02														
0	15.07	32.361	6.93		0	15.07	32.35	6.94		23.94	398.6	0		
10	11.83	33.145	5.57		10	11.83	33.15	5.57		25.21	277.7	.034		
20	8.90	33.495	3.40		20	8.90	33.50	3.41		25.99	204.1	.058		
30	8.06	33.727	2.40		30	8.06	33.73	2.40		26.30	174.8	.077		
40	7.46	33.907	1.49		50	7.38	33.94	1.40		26.56	149.9	.109		
50	7.37	33.937	1.40		75	7.20	33.97	2.63		26.61	145.6	.146		
60	7.20	33.969	2.62		100	7.42	33.76			26.41	164.5	.185		

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ ³⁻	Z	T	S	O ₂	PO ₄ ³⁻	σ _t	δ × 10 ⁶	AD	
CH 008 44 39.2 N 124 32.6 W DATE 19 JUL 64 0229 GCT WTRF 08 DRY 61.0 WET 56.5 WIND DIRECTION 34 VEL 14 KTS BAR 21 SWELL DIRECTION 30 H 04 T 09 CLOUD 04 AMT 01 WEATHER 02													
0	15.16	32.806	7.16		0	15.16	32.81	7.17		24.28	366.4	0	
10	12.24	33.000			10	12.23	33.00	4.37		25.02	295.5	.033	
20	8.16	33.367	3.43		20	8.16	33.35	3.43		25.98	204.3	.058	
30	8.14	33.734	2.49		30	8.14	33.74	2.49		26.29	175.4	.077	
50	7.32	33.921	1.66		50	7.32	33.93	1.67		26.55	150.4	.110	
77	7.12	33.971	1.14		75	7.13	33.97	1.16		26.61	145.1	.147	
102	7.04	33.981	.79		100	7.04	33.98	.81		26.64	143.3	.183	
CH 009 43 20.2 N 124 29.0 W DATE 19 JUL 64 0514 GCT WTRF 05 DRY 59.0 WET 58.0 WIND DIRECTION 02 VEL 14 KTS BAR 21 SWELL DIRECTION 34 H 04 T 05 CLOUD 04 AMT 01 WEATHER 02													
0	14.46	32.259	6.93		0	14.46	32.26	6.94		24.01	392.2	0	
10	11.50	32.609	6.32		10	11.50	32.70	6.32		24.91	306.5	.035	
20	9.25	33.333	4.19		20	9.25	33.34	4.19		25.80	221.4	.061	
30	8.28	33.473	3.20		30	8.28	33.48	3.21		26.06	196.8	.082	
50	7.74	33.817	2.15		50	7.74	33.82	2.15		26.41	163.9	.118	
75	7.27	33.967	1.99		75	7.28	33.97	1.99		26.60	146.7	.157	
CH 015 43 21.0 N 124 46.0 W DATE 19 JUL 64 0908 GCT WTRF 15 DRY 60.0 WET 56.5 WIND DIRECTION 32 VEL 14 KTS BAR 21 SWELL DIRECTION 30 H 04 T 06 CLOUD 00 AMT 00 WEATHER 01													
0	16.18	30.435	6.07		0	16.18	30.44	6.07		22.24	561.4	0	
10	15.20	30.946	6.55		10	15.20	30.95	6.56		22.84	503.8	.053	
20	9.69	32.309	6.21		20	9.69	32.31	6.21		24.93	304.1	.094	
30	8.37	32.610	5.23		30	8.38	32.61	5.23		25.37	262.2	.122	
50	7.85	33.012	4.64		50	7.85	33.02	4.65		25.77	225.3	.171	
77	8.00	33.715	2.77		75	7.98	33.67	2.91		26.26	179.0	.221	
102	7.45	33.808	2.17		100	7.53	33.89	2.20		26.50	156.4	.263	
150	6.84	34.012	2.01		150	6.84	34.02	2.02		26.69	138.6	.337	
200	6.54	34.037	1.67		200	6.54	34.04	1.67		26.75	133.8	.405	
CH 025 43 20.5 N 124 57.4 W DATE 19 JUL 64 1232 GCT WTRF 16 DRY 60.0 WET 55.8 WIND DIRECTION 32 VEL 16 KTS BAR 20 SWELL DIRECTION 30 H 05 T 06 CLOUD 06 AMT 03 WEATHER 02													
0	16.33	30.344			0	16.33	30.35			22.13	571.2	0	
10	15.60	30.819			10	15.60	30.82			22.66	521.3	.055	
25	10.53	32.216	7.06		20	12.30	31.78			24.06	387.5	.100	
40	8.70	32.329	6.25		30	9.68	32.31	6.21		24.93	304.5	.135	
60	8.03	32.981	4.91		50	8.21	32.63	5.59		25.41	258.8	.191	
87	7.91	33.508	3.41		75	7.92	33.31	4.09		25.99	204.7	.249	
110	7.65	33.886	1.68		100	7.77	33.69	2.39		26.31	174.6	.296	
155	7.03	33.902	1.53		150	7.10	33.99	1.55		26.64	144.1	.376	
202	6.62	34.016	1.06		200	6.63	36.01	1.47		26.72	136.7	.446	
289	6.08	34.064	1.35		250	6.30	34.04	1.41		26.78	131.1	.513	
382	5.58	34.129	.95		300	6.02	34.07	1.30		26.84	126.0	.577	
480	5.13	34.165	.73		400	5.49	34.14	.90		26.96	116.2	.698	
578	4.77	34.214	.46		500	5.05	34.17	.68		27.04	108.4	.811	
CH 035 43 20.5 N 125 10.4 W DATE 19 JUL 64 1440 GCT WTRF 19 DRY 60.0 WET 56.0 WIND DIRECTION 01 VEL 15 KTS BAR 10 SWELL DIRECTION 01 H 04 T 05 CLOUD 04 AMT 02 WEATHER 02													
0	16.64	30.269	4.91		0	16.65	30.27	4.91		22.01	583.4	0	
10	16.34	30.454	5.25		10	16.34	30.46	5.26		22.21	563.6	.057	
31	9.10	32.127	6.72		20	13.09	31.22	6.15		23.48	442.4	.108	
48	8.04	32.512	4.83		30	9.56	32.04	6.69		24.74	322.2	.146	
72	8.14	33.031	4.25		50	8.08	32.55	4.74		25.37	262.9	.204	
96	7.93	33.614	3.65		75	8.12	33.11	4.17		25.80	222.5	.265	
144	7.49	33.929	1.97		100	7.89	33.67	3.39		26.27	178.2	.315	
191	7.13	33.984	1.85		150	7.45	33.94	1.92		26.55	152.2	.398	
239	6.60	34.027	1.72		200	7.03	33.99	1.84		26.65	143.6	.472	
284	6.21	34.064	1.30		250	6.50	34.03	1.63		26.75	134.4	.541	
374	5.66	34.097	1.05		300	6.09	34.05	1.23		26.82	128.4	.607	
464	5.28	34.166	.74		400	5.54	34.11	.96		26.93	118.6	.730	
553	4.86	34.202	.45		500	5.11	34.17	.61		27.03	109.6	.844	
743	4.24	34.427	.27		600	4.68	34.24	.37		27.13	100.9	.949	
945	3.74	34.464	.20		700	4.36	34.31	.28		27.23	92.4	1.046	
					800	4.09	34.36	.27		27.30	85.9	1.135	

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ ppm	Z	T	S	O ₂	PO ₄ ppm	σ ₁	δ × 10 ⁶	Δ D	
CH 045 43 20.5 N 125 24.3 W DATE 19 JUL 64 1741 GCT WIRF 08 DRY 61.0 WET 56.0 WIND DIRECTION 02 VEI 14 KTS BAR 20 SWELL DIRECTION 02 H 04 T 05 CLOUD 04 AMT 02 WEATHER 02													
0	17.02	30.121	5.77		0	17.02	30.13	5.78		21.81	602.5	0	
10	13.96	31.528	6.48		10	13.96	31.53	6.48		23.55	436.2	.052	
31	9.26	36.96			20	11.35	32.11	6.88		24.49	346.6	.091	
51	8.10	32.508	6.12		30	9.42	32.46	6.94		25.10	288.8	.123	
77	8.06	33.316	4.18		50	8.11	32.48	6.18		25.31	268.5	.179	
102	7.82	33.494	3.36		75	8.06	33.26	4.33		25.93	210.6	.238	
154	7.30	33.365	2.30		100	7.84	33.66	3.40		26.24	177.7	.287	
206	6.81	34.016	1.96		150	7.41	33.96	2.35		26.57	150.6	.369	
259	6.36	34.072	1.74		200	6.88	34.01	1.98		26.88	140.3	.442	
306	6.04	34.067	1.74		250	6.42	34.03	1.78		26.76	133.5	.510	
408	5.42	34.166	.83		300	6.09	34.06	1.39		26.83	127.5	.575	
506	4.92	34.193	.54		400	5.47	34.16	.86		26.98	114.1	.696	
612	4.59	34.274	.40		500	4.95	34.18	.55		27.06	106.6	.806	
818	4.10	34.345	.26		600	4.62	34.26	.41		27.16	98.3	.909	
1029	3.49	34.454	.37		700	4.37	34.31	.31		27.23	92.5	1.004	
					800	4.14	34.34	.26		27.27	88.2	1.094	
					1000	3.58	34.44	.34		27.41	76.3	1.259	
CH 065 43 20.5 N 125 51.3 W DATE 19 JUL 64 2111 GCT WIRF 06 DRY 61.0 WET 57.0 WIND DIRECTION 02 VEI 10 KTS BAR 20 SWELL DIRECTION 02 H 04 T 06 CLOUD 06 AMT 04 WEATHER 02													
0	16.82	30.924	5.64		0	16.82	30.93	5.65		22.46	539.4	0	
10	15.24	32.029	6.48		10	15.24	32.03	6.48		23.66	425.2	.048	
31	10.20	32.458	6.90		20	12.79	32.39	6.68		24.44	351.2	.087	
51	8.26	32.912	4.75		30	10.43	32.44	6.88		24.91	306.8	.120	
77	7.99	33.574	3.33		50	8.31	32.89	4.88		25.60	241.2	.175	
103	7.79	33.781	3.05		75	8.01	33.53	3.39		26.14	189.7	.229	
154	7.11	34.000	2.14		100	7.81	33.77	3.06		26.36	169.4	.273	
207	6.58	34.031	1.71		150	7.17	33.99	2.21		26.63	144.9	.352	
259	6.15	34.069	1.21		200	6.64	34.03	1.75		26.73	135.9	.422	
309	5.89	34.083	1.16		250	6.22	34.06	1.28		26.81	128.8	.488	
412	5.28	34.142	.90		300	5.93	34.08	1.17		26.86	124.3	.552	
515	4.92	34.216	.49		400	5.35	34.13	.94		26.98	114.5	.671	
615	4.52	34.244	.34		500	4.97	34.21	.55		27.08	105.1	.781	
820	3.94	34.398	.29		600	4.58	34.24	.35		27.16	99.5	.883	
1029	3.61	34.463	.37		700	4.24	34.30	.29		27.23	91.6	.978	
					800	3.98	34.37	.29		27.32	84.0	1.066	
					1000	3.64	34.44	.35		27.41	76.7	1.227	
CH 085 43 20.4 N 126 19.1 W DATE 20 JUL 64 0049 GCT WIRF 04 DRY 63.0 WET 57.2 WIND DIRECTION 31 VEI 06 KTS BAR 19 SWELL DIRECTION 29 H 03 T 06 CLOUD 06 AMT 03 WEATHER 02													
0	16.67	31.377	5.69		0	16.67	31.38	5.69		22.85	503.0	0	
10	12.23	32.150	6.98		10	12.23	32.15	6.98		24.37	358.2	.043	
31	8.58	33.040	4.28		20	9.80	32.67	6.06		25.19	279.4	.075	
51	8.26	33.537	3.11		30	8.63	33.03	4.47		25.66	234.9	.101	
77	7.82	33.474	2.45		50	8.28	33.52	3.15		26.10	193.8	.143	
103	7.60	33.420	2.37		75	7.85	33.82	2.47		26.40	165.8	.188	
154	7.06	33.963	2.00		100	7.62	33.92	2.38		26.50	155.9	.229	
207	6.74	34.010	1.88		150	7.10	33.99	2.03		26.64	144.0	.304	
260	6.19	34.052	1.48		200	6.78	34.01	1.90		26.69	139.1	.374	
310	5.91	34.086	1.17		250	6.29	34.04	1.56		26.79	130.9	.442	
412	5.41	34.135	.78		300	5.96	34.08	1.23		26.86	124.6	.506	
516	4.95	34.189	.52		400	5.47	34.13	.81		26.96	116.3	.626	
616	4.52	34.269	.32		500	5.02	34.18	.55		27.05	107.7	.738	
821	3.91	34.372	.26		600	4.59	34.26	.35		27.16	98.4	.841	
1032	3.33	34.454	.37		700	4.25	34.32	.30		27.24	90.5	.935	
					800	3.96	34.36	.27		27.31	84.5	1.023	
					1000	3.41	34.44	.34		27.43	74.0	1.181	
CH 105 43 20.5 N 126 45.8 W DATE 20 JUL 64 0517 GCT WIRF 04 DRY 61.2 WET 57.2 WIND DIRECTION 20 VEI 08 KTS BAR 17 SWELL DIRECTION 28 H 03 T 09 CLOUD 06 AMT 01 WEATHER 02													
0	16.76	31.157	5.72		0	16.76	31.16	5.72		22.66	521.1	0	
10	16.45	31.470	5.81		10	16.46	31.48	5.82		22.97	491.7	.051	
30	11.91	7.00			20	14.42	31.76	6.42		23.63	428.5	.097	
51	8.61	32.437	6.58		30	11.91	32.02	7.01		24.32	362.8	.136	
77	8.21	32.662	5.97		50	8.72	32.42	6.62		25.17	281.9	.201	
103	7.94	33.475	3.95		75	8.24	32.64	6.04		25.41	259.1	.268	
154	7.50	33.860	3.15		100	8.00	33.38	4.19		26.03	201.3	.326	
205	6.98	33.942	2.94		150	7.63	33.83	3.21		26.44	163.2	.417	
255	6.47	33.979	2.30		200	7.04	33.94	2.96		26.61	147.6	.495	
306	5.96	34.005	1.81		250	6.52	33.98	2.37		26.70	138.8	.566	
410	5.19	34.057	1.09		300	6.02	34.00	1.86		26.79	131.2	.634	
510	4.91	34.125	.73		400	5.25	34.05	1.14		26.92	119.4	.759	
612	4.55	34.226	.39		500	4.84	34.12	.76		27.02	110.1	.874	
815	3.94	34.348	.23		600	4.58	34.21	.42		27.13	101.4	.979	
1020	3.52	34.424	.30		700	4.28	34.29	.26		27.22	93.1	1.077	
					800	3.98	34.34	.24		27.29	86.4	1.166	
					1000	3.55	34.42	.28		27.40	77.1	1.330	

OBSERVED					INTERPOLATED					DERIVED			
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D	

CH 125 43 20.4 N 127 13.1 W DATE 20 JUL 64 1143 GCT WIRE 04 DRY 62.0 WET 60.0
WIND DIRECTION 25 VEI 10 KTS BAR 16 SWELL DIRECTION 25 H 04 T 09 CLOUD 06 AMT 08 WEATHER 02

0	16.30	32.241	5.80		0	16.30	32.25	5.81		23.59	431.9	0
10	16.24	32.254	5.77		10	16.24	32.26	5.78		23.61	429.9	.043
30	13.94	32.428	6.63		20	15.17	32.34	6.11		23.87	405.6	.085
51	9.49	32.517	6.00		30	13.94	32.44	6.54		24.25	369.5	.124
77	8.75	32.643	5.94		50	10.07	32.51	6.90		25.03	295.6	.190
103	8.59	33.188	4.61		75	8.84	32.63	6.05		25.31	268.8	.261
155	7.99	33.745	3.30		100	8.61	33.12	4.58		25.73	229.2	.323
206	7.29	33.920	3.09		150	8.06	33.75	3.33		26.31	175.0	.424
255	6.74	33.996	2.25		200	7.37	33.93	3.11		26.55	153.3	.506
307	6.14	33.997	2.01		250	6.79	33.99	2.34		26.68	141.2	.580
411	5.59	34.089	1.03		300	6.25	34.00	2.03		26.76	134.5	.648
512	5.01	34.150	.61		400	5.64	34.08	1.14		26.90	122.3	.777
614	4.63	34.225	.38		500	5.07	34.14	.64		27.01	111.0	.893
817	4.03	34.350	.24		600	4.67	34.21	.40		27.12	102.5	1.000
1023	3.41	34.436	.12		700	4.36	34.28	.28		27.20	94.5	1.099
					800	4.08	34.34	.25		27.28	87.5	1.190
					1000	3.48	34.43	.30		27.41	75.8	1.353

CH 145 43 20.5 N 127 40.2 W DATE 20 JUL 64 1955 GCT WIRE 03 DRY 62.5 WET 58.5
WIND DIRECTION 25 VEI 04 KTS BAR 15 SWELL DIRECTION 25 H 04 T 05 CLOUD 06 AMT 07 WEATHER 02

0	16.12	32.290	5.75		0	16.13	32.28	5.76		23.66	425.1	0
10	16.12	32.306	5.75		10	16.13	32.31	5.76		23.68	423.5	.042
30	14.47	32.360	6.74		20	15.51	32.33	6.21		23.83	409.3	.084
51	11.38	32.472	7.00		30	14.47	32.36	6.74		24.08	385.7	.124
77	8.89	32.584	6.25		50	11.53	32.47	6.99		24.74	321.6	.195
103	8.48	33.146	4.60		75	9.02	32.57	6.34		25.24	275.8	.270
154	7.73	33.894	3.66		100	8.53	33.07	4.79		25.71	231.4	.333
205	7.19	33.942	3.12		150	7.78	33.80	3.67		26.39	167.5	.433
255	6.64	33.998	2.16		200	7.24	33.93	3.17		26.57	151.0	.512
307	6.28	34.024	1.77		250	6.69	33.99	2.25		26.70	139.7	.585
410	5.69	34.102	1.02		300	6.32	34.02	1.80		26.77	133.6	.653
511	5.13	34.173	.65		400	5.74	34.09	1.08		26.90	122.4	.781
613	4.66	34.220	.40		500	5.19	34.17	.68		27.07	110.7	.898
817	4.02	34.351	.26		600	4.71	34.21	.43		27.11	103.0	1.005
1022	3.46	34.434	.10		700	4.36	34.28	.30		27.20	94.9	1.103
					800	4.06	34.34	.27		27.28	87.4	1.195
					1000	3.52	34.43	.29		27.41	76.3	1.358

CH 165 43 20.4 N 128 36.1 W DATE 20 JUL 64 2023 GCT WIRE 05 DRY 59.5 WET 56.0
WIND DIRECTION 25 VEI 12 KTS BAR 16 SWELL DIRECTION 25 H 04 T 09 CLOUD 06 AMT 08 WEATHER 02

0	16.04	32.407	5.78		0	16.04	32.41	5.79		23.78	414.1	0
10	15.89	32.430	5.83		10	15.89	32.38	5.83		23.79	413.2	.041
31	12.67	32.395	6.72		20	14.57	32.39	6.24		24.08	385.8	.081
51	10.06	32.492	6.78		30	12.86	32.39	6.68		24.43	352.6	.118
77	8.70	32.620	6.12		50	10.17	32.49	6.78		24.99	299.3	.183
102	8.41	33.155	4.65		75	8.74	32.60	6.20		25.31	269.2	.254
154	7.90	33.781	3.58		100	8.41	33.11	4.77		25.75	227.2	.316
206	7.34	33.968	2.64		150	7.94	33.75	3.61		26.33	173.3	.417
309	6.27	34.022	1.91		200	7.41	33.96	2.74		26.57	151.1	.498
411	5.64	34.068	1.17		250	6.85	34.02	2.24		26.69	140.2	.570
515	5.01	34.140	.71		300	6.35	34.02	1.94		26.76	134.3	.639
614	4.70	34.210	.49		400	5.70	34.06	1.24		26.88	124.1	.768
819	4.04	34.317	.20		500	5.09	34.13	.76		27.00	112.3	.886
1028	3.51	34.422	.42		600	4.74	34.20	.51		27.10	104.3	.995
1228	3.03	34.481	.49		700	4.42	34.27	.37		27.19	96.2	1.095
					800	4.10	34.33	.29		27.27	88.8	1.187
					1000	3.58	34.41	.39		27.39	78.1	1.354
					1200	3.10	34.47	.48		27.48	69.1	1.501

UH165A 43 49.1 N 128 0.0 W DATE 21 JUL 64 0005 GCT WIRE 03 DRY 62.0 WET 56.0
WIND DIRECTION 25 VEI 15 KTS BAR 16 SWELL DIRECTION 25 H 04 T 09 CLOUD 06 AMT 05 WEATHER 02

0	15.81	32.539	5.84		0	15.81	32.54	5.84		23.93	399.6	0
10	15.68	32.535	5.88		10	15.68	32.54	5.89		23.95	397.4	.040
20	13.47	32.527	6.75		20	13.47	32.53	6.76		24.42	353.6	.077
30	11.76	32.544	7.17		30	11.74	32.55	7.18		24.76	320.8	.111
51	9.72	32.577	6.93		50	9.78	32.58	6.96		25.12	286.5	.172
76	8.92	32.604	6.56		75	8.93	32.60	6.58		25.28	271.9	.242
102	8.43	32.673	6.21		100	8.46	32.66	6.24		25.40	260.9	.308
154	7.68	33.579	4.41		150	7.72	33.50	4.55		26.17	188.8	.421
205	7.52	33.875	3.51		200	7.53	33.86	3.57		26.48	160.1	.508
307	6.14	33.982	2.22		250	6.97	33.97	2.87		26.64	145.5	.584
410	5.26	34.024	1.45		300	5.25	33.97	2.29		26.74	136.2	.655
511	4.73	34.103	.83		400	5.33	34.02	1.51		26.89	122.7	.784
613	4.51	34.108	.56		500	4.77	34.09	.89		27.01	111.2	.901
816	3.95	34.322	.36		600	4.53	34.19	.58		27.11	102.9	1.008
1022	3.39	34.404	.63		700	4.28	34.26	.41		27.19	95.3	1.107
					800	4.01	34.31	.34		27.27	88.6	1.199
					1000	3.45	34.40	.57		27.39	77.5	1.365

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ±	Z	T	S	O ₂	PO ₄ ±	σ _t	Sx10 ⁸	ΔD		
UH165R 43 47.0 N 128 0.0 W DATE 21 JUL 64 0342 GCT WTRF 04 DRY 60.0 WET 56.3														
WIND DIRECTION 23 VEL 15 KTS HAD 5 SWELL DIRECTION 25 H 05 T 06 CLOUD 0 AMT 0 WEATHER 0														
0 15.76 32.560 5.82					0 15.76 32.55 5.82						23.46 397.7		0	
10 15.58 32.543 5.86					10 15.58 32.55 5.86						23.98 394.7	.040		
20 15.17 32.514 6.12					20 15.17 32.54 6.13						24.07 387.0	.079		
30 12.10 32.515 6.21					30 12.10 32.54 6.22						24.69 327.9	.114		
51 9.56 32.564 6.77					50 9.56 32.56 6.81						25.14 284.7	.176		
76 8.83 32.508 6.43					75 8.83 32.60 6.45						25.29 271.0	.245		
103 8.37 32.749 5.99					100 8.41 32.72 6.05						25.45 255.6	.311		
154 7.76 33.620 4.27					150 7.80 33.56 4.41						26.20 185.7	.421		
205 7.45 33.808 3.54					200 7.48 33.89 3.59						26.50 157.5	.507		
307 6.22 33.971 2.37					250 6.94 33.97 2.98						26.64 144.8	.583		
410 5.32 34.007 1.58					300 6.31 33.97 2.44						26.72 137.6	.653		
511 4.84 34.000 .97					400 5.39 34.00 1.64						26.87 124.8	.784		
613 4.54 34.180 .44					500 4.88 34.08 1.03						26.99 113.4	.903		
816 3.89 34.317 .23					600 4.57 34.17 .50						27.09 104.7	1.012		
1021 3.40 34.411 .26					700 4.26 34.24 .27						27.19 96.0	1.113		
					800 3.94 34.31 .25						27.27 88.3	1.205		
					1000 3.44 34.40 .25						27.39 77.2	1.370		
UH 145 43 47.0 N 127 32.6 W DATE 21 JUL 64 0607 GCT WTRF 05 DRY 59.5 WET 56.0														
WIND DIRECTION 23 VEL 15 KTS HAD 5 SWELL DIRECTION 25 H 05 T 06 CLOUD 06 AMT 07 WEATHER 02														
0 15.84 32.509 5.80					0 15.89 32.51 5.81						23.89 403.5	0		
10 15.91 32.510 5.83					10 15.91 32.51 5.83						23.88 404.1	.040		
20 15.21 32.522 6.25					20 15.21 32.53 6.26						24.05 388.7	.080		
30 12.78 32.549 6.82					30 12.78 32.55 6.82						24.57 339.2	.116		
51 10.06 32.607 6.90					50 10.13 32.60 6.90						25.09 290.0	.179		
77 9.02 32.632 6.60					75 9.04 32.63 6.63						25.29 271.5	.249		
103 8.56 32.646 6.33					100 8.60 32.64 6.37						25.36 264.8	.317		
154 7.76 33.608 4.29					150 7.81 33.52 4.46						26.17 188.6	.430		
205 7.36 33.805 3.95					200 7.39 33.88 3.98						26.51 157.2	.516		
306 6.07 33.949 2.87					250 6.79 33.91 3.52						26.62 147.3	.592		
410 5.40 34.036 1.39					300 6.15 33.94 2.95						26.72 137.7	.664		
510 4.73 34.087 .87					400 5.45 34.03 1.51						26.88 123.8	.794		
612 4.45 34.196 .44					500 4.79 34.08 .90						27.00 112.2	.912		
815 3.83 34.313 .24					600 4.47 34.17 .48						27.11 103.2	1.020		
1020 3.41 34.419 .28					700 4.17 34.25 .29						27.20 94.8	1.119		
					800 3.87 34.31 .25						27.27 87.8	1.210		
					1000 3.44 34.41 .27						27.40 76.8	1.374		
UH 125 43 47.0 N 127 5.0 W DATE 21 JUL 64 0952 GCT WTRF 05 DRY 60.0 WET 56.0														
WIND DIRECTION 23 VEL 14 KTS HAD 16 SWELL DIRECTION 25 H 05 T 08 CLOUD 06 AMT 08 WEATHER 02														
0 15.84 32.493 5.86					0 15.84 32.44 5.86						23.84 408.0	0		
10 15.43 32.437 5.99					10 15.43 32.44 5.99						23.18 471.0	.044		
20 15.77 32.426 5.92					20 15.77 32.43 5.93						23.85 407.5	.088		
30 12.89 32.379 6.78					30 12.89 32.38 6.79						24.42 353.8	.126		
51 8.92 32.422 6.84					50 9.04 32.42 6.84						25.12 286.9	.190		
76 8.43 32.497 6.49					75 8.45 32.49 6.51						25.27 273.0	.260		
102 8.20 32.605 5.99					100 8.21 32.68 6.03						25.45 256.3	.326		
203 7.36 33.935 2.86					150 7.82 33.31 4.49						26.00 204.4	.441		
303 6.13 34.003 1.83					200 7.39 33.90 2.95						26.53 155.3	.531		
404 5.43 34.061 1.15					250 6.77 33.97 2.23						26.66 142.8	.606		
504 5.08 34.150 .62					300 6.17 34.00 1.84						26.77 133.1	.675		
605 4.74 34.216 .42					400 5.45 34.06 1.17						26.90 121.4	.802		
810 4.03 34.338 .20					500 5.09 34.15 .64						27.02 111.0	.918		
1018 3.51 34.426 .20					600 4.76 34.21 .42						27.11 103.6	1.025		
					700 4.40 34.28 .33						27.20 95.4	1.125		
					800 4.06 34.33 .29						27.28 87.9	1.216		
					1000 3.56 34.42 .29						27.40 77.2	1.381		
UH 105 43 47.0 N 126 32.2 W DATE 21 JUL 64 1415 GCT WTRF 00 DRY 60.0 WET 55.8														
WIND DIRECTION 25 VEL 10 KTS HAD 16 SWELL DIRECTION 27 H 06 T 08 CLOUD 06 AMT 08 WEATHER 02														
0 16.49 31.404 5.76					0 16.49 31.41 5.77						22.86 501.5	0		
10 16.39 31.557 5.85					10 16.40 31.56 5.85						23.05 484.0	.049		
20 14.59 32.182 6.51					20 14.59 32.19 6.52						23.92 400.9	.094		
30 12.51 32.397 7.03					30 12.51 32.39 7.04						24.50 346.2	.131		
51 9.10 32.460 6.87					50 9.22 32.46 6.90						25.12 286.7	.194		
77 8.41 32.550 6.46					75 8.46 32.54 6.51						25.30 270.0	.264		
103 8.11 33.015 5.16					100 8.13 32.95 5.33						25.67 234.7	.327		
153 7.83 33.820 2.77					150 7.85 33.78 2.89						26.37 169.7	.428		
206 7.22 33.949 2.05					200 7.30 33.95 2.08						26.58 150.2	.508		
308 6.22 34.061 1.55					250 6.75 34.02 1.77						26.71 138.8	.580		
411 5.55 34.108 1.98					300 6.29 34.04 1.57						26.78 131.8	.648		
512 5.08 34.162 .68					400 5.61 34.09 1.04						26.91 120.8	.774		
614 4.64 34.239 .74					500 5.13 34.15 .71						27.02 110.9	.890		
818 4.02 34.367 .26					600 4.70 34.23 .40						27.13 101.8	.996		
1024 3.45 34.446 .32					700 4.35 34.29 .26						27.21 93.5	1.094		
					800 4.07 34.35 .27						27.29 86.8	1.184		
					1000 3.51 34.44 .30						27.41 75.5	1.346		

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁵	Δ D
UH 045 43 47.0 N 126 9.8 W DATE 21 JUL 64 1755 GCT WTRF 03 DRY 61.0 WET 55.5 WIND DIRECTION 22 VEL 15 KTS BAR 18 SWELL DIRECTION 27 H 06 T 07 CLOUD 06 AMT 07 WEATHER 02												
0	17.54	28.734	5.65		0	17.54	28.74	5.66		20.63	715.4	0
10	17.40	29.456	5.73		10	17.40	29.46	5.73		21.59	623.2	.067
20	12.93	32.076	6.74		20	12.93	32.08	6.74		24.17	376.6	.117
30	10.22	32.141	7.17		30	10.22	32.17	7.18		24.73	323.6	.152
51	8.06	32.647	5.48		50	8.09	32.62	5.60		25.42	258.2	.210
77	8.24	33.476	3.44		75	8.18	33.42	3.57		26.03	200.3	.267
103	8.05	33.714	2.64		100	8.08	33.70	2.69		26.27	178.2	.315
153	7.43	33.952	2.15		150	7.47	33.94	2.16		26.55	152.5	.397
205	6.80	34.010	1.88		200	6.86	34.01	1.90		26.68	140.1	.470
307	5.96	34.032	1.39		250	6.38	34.02	1.66		26.76	133.4	.539
411	5.44	34.116	.85		300	6.00	34.03	1.42		26.81	128.8	.604
511	5.03	34.176	.54		400	5.48	34.11	.90		26.94	118.3	.728
613	4.67	34.244	.35		500	4.07	34.17	.57		27.04	109.0	.841
816	4.01	34.358	.24		600	4.71	34.24	.37		27.13	101.4	.947
1021	3.50	34.434	.15		700	4.37	34.30	.29		27.22	93.2	1.044
					800	4.06	34.36	.29		27.30	85.9	1.133
					1000	3.55	34.43	.34		27.41	76.1	1.295

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁵	Δ D
UH 045 43 47.0 N 125 42.1 W DATE 21 JUL 64 2153 GCT WTRF 11 DRY 65.5 WET 57.0 WIND DIRECTION 25 VEL 12 KTS BAR 18 SWELL DIRECTION 27 H 06 T 07 CLOUD 04 AMT 07 WEATHER 02												
0	17.77	29.842	5.65		0	17.77	29.85	5.66		21.42	639.6	0
10	16.95	30.275	5.85		10	16.96	30.28	5.85		21.94	589.9	.061
20	12.22	31.813	6.97		20	12.22	31.82	6.97		24.11	383.0	.110
30	9.38	32.212	7.19		30	9.38	32.22	7.19		24.91	306.7	.145
51	8.23	32.416	6.30		50	8.28	32.41	6.36		25.23	276.2	.203
75	8.24	32.945	5.19		75	8.24	32.91	5.19		25.62	239.1	.267
100	8.11	33.409	3.48		100	8.11	33.50	3.48		26.11	193.5	.321
148	7.52	33.915	2.86		150	7.50	33.92	2.82		26.53	154.5	.408
199	7.04	33.994	1.91		200	7.03	34.00	1.90		26.65	143.5	.483
295	6.33	34.064	1.41		250	6.67	34.04	1.53		26.74	135.6	.552
393	5.98	34.194	1.03		300	6.31	34.07	1.39		26.80	130.1	.619
488	5.23	34.157	.66		400	5.93	34.13	1.00		26.90	122.3	.745
587	4.83	34.212	.45		500	5.17	34.16	.63		27.02	110.7	.861
786	4.24	34.347	.30		600	4.79	34.22	.43		27.11	103.3	.968
990	3.70	34.421	.33		700	4.47	34.29	.33		27.20	95.2	1.068
					800	4.20	34.35	.30		27.28	88.0	1.159
					1000	3.67	34.42	.33		27.39	78.3	1.325

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁵	Δ D
UH 045 43 47.0 N 125 14.8 W DATE 22 JUL 64 0130 GCT WTRF 08 DRY 64.2 WET 57.8 WIND DIRECTION 25 VEL 06 KTS BAR 18 SWELL DIRECTION 28 H 06 T 09 CLOUD 04 AMT 07 WEATHER 02												
0	17.87	27.465	5.71		0	17.88	27.47	5.71		19.59	815.5	0
10	15.11	31.922	6.17		10	15.11	31.93	6.18		23.61	430.3	.062
20	12.14	32.279	7.12		20	12.14	32.28	7.13		24.48	347.2	.101
30	9.61	32.482	6.91		30	9.61	32.49	6.92		25.08	290.2	.133
51	8.75	32.525	6.52		50	8.79	32.52	6.55		25.24	275.4	.190
74	8.26	32.955	5.23		75	8.24	32.98	5.16		25.68	233.5	.253
99	7.90	33.457	3.63		100	7.89	33.47	3.59		26.27	177.9	.305
147	7.49	33.934	2.33		150	7.46	33.94	2.29		26.55	152.3	.387
198	6.99	34.048	1.99		200	6.97	34.05	1.98		26.70	138.7	.460
297	6.20	34.047	1.50		250	6.54	34.05	1.73		26.76	133.8	.528
399	5.73	34.126	.96		300	6.18	34.05	1.48		26.80	129.8	.594
499	5.20	34.179	.60		400	5.72	34.13	.86		26.92	119.7	.719
600	4.71	34.221	.40		500	5.19	34.18	.60		27.03	109.8	.833
802	4.20	34.338	.27		600	4.71	34.23	.40		27.12	102.1	.939
1006	3.67	34.424	.32		700	4.42	34.28	.30		27.19	95.4	1.038
					800	4.20	34.34	.27		27.26	89.3	1.130
					1000	3.69	34.42	.32		27.39	78.7	1.298

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁵	Δ D
UH 045 43 47.0 N 125 1.0 W DATE 22 JUL 64 0345 GCT WTRF 09 DRY 62.0 WET 57.0 WIND DIRECTION 32 VEL 06 KTS BAR 18 SWELL DIRECTION 28 H 05 T 09 CLOUD 04 AMT 03 WEATHER 02												
0	17.36	30.039	5.86		0	17.36	30.04	5.86		21.66	616.0	0
10	15.81	31.388	6.24		10	15.81	31.39	6.24		23.05	484.0	.055
20	12.26	31.429	6.99		20	12.26	31.83	6.99		24.11	382.5	.098
30	8.73	32.476	5.47		30	8.73	32.48	5.47		25.22	277.4	.131
51	7.63	33.223	3.63		50	7.68	33.20	3.68		25.93	209.3	.180
76	7.64	33.560	2.88		75	7.64	33.65	2.90		26.29	175.6	.228
102	7.31	34.406	1.98		100	7.34	33.97	1.95		26.51	155.1	.269
151	6.94	34.004	1.78		150	6.95	34.00	1.78		26.67	141.1	.343
203	6.50	34.026	1.46		200	6.60	34.02	1.45		26.73	135.5	.413
301	5.93	34.067	1.27		250	6.25	34.04	1.62		26.79	130.2	.479
402	5.52	34.123	.98		300	5.94	34.07	1.28		26.85	125.4	.543
497	5.02	34.147	.56		400	5.53	34.12	.89		26.94	117.6	.664
594	4.75	34.230	.41		500	5.01	34.19	.55		27.06	106.9	.776
793	4.27	34.327	.29		600	4.74	34.23	.40		27.12	101.9	.881
997	3.72	34.411	.31		700	4.49	34.28	.32		27.19	96.0	.980
					800	4.25	34.33	.29		27.25	90.3	1.073
					1000	3.71	34.41	.31		27.38	79.7	1.243

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁵	Δ D
0	16.84	30.860	5.86		0	16.84	30.86	5.86		22.40	545.4	0
10	15.08	31.301	6.37		10	15.08	31.31	6.38		23.14	475.2	.051
20	10.90	32.181	5.92		20	10.90	32.19	5.93		24.63	333.0	.091
30	7.92	33.067	4.29		30	7.93	33.07	4.29		25.80	221.9	.119
50	7.55	33.597	2.76		50	7.56	33.59	2.77		26.26	178.4	.159
75	7.34	33.901	1.95		75	7.34	33.91	1.96		26.54	152.5	.201
104	7.08	33.972	1.74		100	7.11	33.96	1.74		26.61	145.6	.238
153	6.76	34.020	1.69		150	6.78	34.02	1.69		26.70	137.6	.309
209	6.50	34.170	1.44		200	6.54	34.06	1.49		26.77	131.9	.376
307	5.92	34.416	1.06		250	6.26	34.09	1.27		26.83	127.0	.441
407	5.47	34.140	.84		300	5.96	34.10	1.08		26.88	122.9	.503
507	4.95	34.204	.52		400	5.50	34.14	.85		26.96	116.1	.623
					500	4.99	34.20	.55		27.07	105.9	.734

YH 025 43 47.0 N 124 47.1 W DATE 22 JUL 64 0545 GCT WIRE 09 DRY 61.0 WET 56.5
WIND DIRECTION 04 VEL 04 KTS BAR 18 SWELL DIRECTION 28 H 06 T 08 CLOUD 04 AMT 01 WEATHER 01

0	16.84	30.860	5.86		0	16.84	30.86	5.86		22.40	545.4	0
10	15.08	31.301	6.37		10	15.08	31.31	6.38		23.14	475.2	.051
20	10.90	32.181	5.92		20	10.90	32.19	5.93		24.63	333.0	.091
30	7.92	33.067	4.29		30	7.93	33.07	4.29		25.80	221.9	.119
50	7.55	33.597	2.76		50	7.56	33.59	2.77		26.26	178.4	.159
75	7.34	33.901	1.95		75	7.34	33.91	1.96		26.54	152.5	.201
104	7.08	33.972	1.74		100	7.11	33.96	1.74		26.61	145.6	.238
153	6.76	34.020	1.69		150	6.78	34.02	1.69		26.70	137.6	.309
209	6.50	34.170	1.44		200	6.54	34.06	1.49		26.77	131.9	.376
307	5.92	34.416	1.06		250	6.26	34.09	1.27		26.83	127.0	.441
407	5.47	34.140	.84		300	5.96	34.10	1.08		26.88	122.9	.503
507	4.95	34.204	.52		400	5.50	34.14	.85		26.96	116.1	.623
					500	4.99	34.20	.55		27.07	105.9	.734

YH 035 44 19.2 N 124 54.8 W DATE 22 JUL 64 1135 GCT WIRE 10 DRY 61.0 WET 56.0
WIND DIRECTION 00 VEL 06 KTS BAR 18 SWELL DIRECTION 28 H 04 T 08 CLOUD 04 AMT 02 WEATHER 01

0	16.81	29.307	5.63		0	16.81	29.31	5.64		21.23	657.4	0
10	13.80	31.647	5.59		10	13.80	31.65	5.54		23.67	424.4	.054
20	10.19	32.135	5.71		20	10.19	32.14	5.71		24.72	324.8	.092
30	8.31	32.512	4.78		30	8.31	32.52	4.79		25.31	268.7	.121
50	7.48	33.164	4.27		50	7.49	33.17	4.28		25.94	208.9	.169
74	7.82	33.660	3.29		75	7.81	33.67	3.25		26.29	176.4	.217
103	7.45	33.486	2.21		100	7.51	33.87	2.31		26.49	157.4	.259
152	6.86	34.006	1.69		150	6.88	34.00	1.69		26.68	140.0	.333
207	6.67	34.066	1.61		200	6.68	34.06	1.62		26.75	133.9	.402
306	6.15	34.068	1.30		250	6.46	34.07	1.49		26.78	131.2	.468
405	5.67	34.109	1.00		300	6.18	34.07	1.32		26.82	128.4	.533
504	5.16	34.171	.53		400	5.69	34.11	1.02		26.91	120.9	.657
					500	5.18	34.17	.65		27.02	110.5	.773

YH 045 44 19.2 N 125 8.8 W DATE 22 JUL 64 1347 GCT WIRE 05 DRY 61.0 WET 55.8
WIND DIRECTION 34 VEL 07 KTS BAR 18 SWELL DIRECTION 28 H 04 T 10 CLOUD 06 AMT 06 WEATHER 02

0	16.63	30.571	5.74		0	16.63	30.58	5.74		22.24	561.1	0
10	16.52	30.893	5.73		10	16.52	30.90	5.73		22.51	535.4	.055
30	10.34	32.197			20	13.68	31.54	5.63		23.61	430.8	.103
50	8.05	32.768	5.33		30	10.34	32.20	5.71		24.74	322.8	.141
76	7.93	33.465	3.87		50	8.05	32.77	5.33		25.55	246.2	.198
102	7.91	33.700	2.91		75	7.93	33.44	3.93		26.09	195.1	.253
151	7.21	33.979	2.30		100	7.91	33.77	2.87		26.35	170.5	.299
205	6.44	33.908	2.26		150	7.23	33.98	2.31		26.61	146.6	.378
255	6.04	34.026	1.66		200	6.50	34.00	2.27		26.72	136.4	.449
304	5.79	34.069	1.30		250	6.07	34.02	1.73		26.80	129.6	.515
405	5.31	34.126	.85		300	5.81	34.07	1.32		26.87	123.8	.578
506	4.89	34.213	.52		400	5.33	34.12	.87		26.97	115.1	.698
608	4.50	34.255	.34		500	4.91	34.21	.54		27.08	104.3	.807
811	4.04	34.345	.28		600	4.53	34.25	.35		27.16	98.0	.909
1011	3.50	34.467	.40		700	4.27	34.30	.31		27.23	91.7	1.003
					800	4.06	34.36	.28		27.30	86.0	1.092
					1000	3.53	34.44	.39		27.42	75.3	1.253

YH 065 44 19.2 N 125 36.7 W DATE 22 JUL 64 1715 GCT WIRE 04 DRY 61.0 WET 56.5
WIND DIRECTION 35 VEL 14 KTS BAR 18 SWELL DIRECTION 28 H 05 T 09 CLOUD 06 AMT 08 WEATHER 02

0	17.30	28.759	5.79		0	17.30	28.76	5.80		20.70	708.3	0
10	16.91	30.017	5.91		10	16.92	30.02	5.92		21.75	607.9	.066
30	10.95	32.149	6.94		20	14.17	31.21	6.52		23.26	464.0	.119
51	7.93	32.685	5.22		30	10.95	32.15	6.94		24.60	336.4	.159
77	7.89	33.386	4.04		50	8.01	32.68	5.33		25.48	252.5	.218
103	7.86	33.726	3.02		75	7.89	33.34	4.11		26.01	202.3	.275
152	7.23	33.969	2.25		100	7.87	33.70	3.12		26.30	175.4	.322
205	6.57	33.991	2.20		150	7.26	33.97	2.26		26.59	148.0	.403
255	6.19	33.999	1.98		200	6.63	33.99	2.20		26.70	138.5	.475
307	5.56	33.995	1.88		250	6.23	34.00	2.00		26.76	133.4	.543
410	5.37	34.112	.85		300	5.64	33.99	1.90		26.82	127.7	.608
511	4.90	34.195	.64		400	5.39	34.10	.96		26.94	117.8	.731
613	4.56	34.261	.34		500	4.95	34.18	.65		27.06	107.0	.843
816	3.94	34.170	.27		600	4.60	34.25	.38		27.15	98.9	.946
1022	3.47	34.455	.38		700	4.30	34.31	.31		27.24	91.5	1.041
					800	4.02	34.36	.28		27.30	85.2	1.129
					1000	3.52	34.45	.36		27.42	74.9	1.289

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	δ × 10 ⁵	Δ D
YH 085 44 19.1 N 126 4.1 W DATE 22 JUL 64 2045 GCT WTRF 10 DRY 63.0 WET 57.0 WIND DIRECTION 00 VEL 12 KTS BAR 20 SWELL DIRECTION 28 H 04 T 08 CLOUD 06 AMT 08 WEATHER 02												
0	17.45	28.498	5.70		0	17.46	28.44	5.70		20.42	735.1	0
10	16.45	30.670	5.83		10	16.46	30.68	5.83		22.36	549.5	.064
30	11.56	32.296	7.20		20	14.09	31.81	6.59		23.74	418.4	.113
51	9.07	32.420	6.50		30	11.56	32.29	7.30		24.59	336.7	.150
77	8.30	32.422	6.39		50	9.14	32.41	6.57		25.10	288.7	.213
102	8.12	33.406	4.00		75	8.30	32.78	5.48		25.52	249.4	.280
151	7.55	33.374	3.02		100	8.13	33.36	4.11		25.99	204.3	.337
203	7.01	33.949	3.12		150	7.56	33.87	3.02		26.48	158.9	.428
251	6.31	33.966	2.71		200	7.04	33.94	3.11		26.61	147.3	.504
303	5.92	34.004	1.94		250	6.32	33.97	2.72		26.72	137.1	.575
406	4.93	34.078	1.39		300	5.94	34.01	1.98		26.80	129.9	.642
506	4.58	34.140	.64		400	4.98	34.07	1.41		26.97	114.6	.764
606	4.33	34.223	.41		500	4.52	34.14	.68		27.06	105.9	.874
808	3.85	34.341	.26		600	4.34	34.22	.42		27.16	98.4	.976
1010	3.46	34.438	.12		700	4.10	34.28	.30		27.23	91.3	1.071
					800	3.87	34.34	.27		27.30	85.4	1.160
					1000	3.48	34.43	.31		27.42	75.4	1.320

YH 105 44 19.2 N 126 32.0 W DATE 23 JUL 64 0016 GCT WTRF 08 DRY 61.5 WET 56.5
WIND DIRECTION 24 VEL 10 KTS BAR 22 SWELL DIRECTION 28 H 04 T 08 CLOUD 06 AMT 06 WEATHER 01

0	16.41	30.494	5.74		0	16.42	30.50	5.74		22.12	572.8	0
10	15.92	31.828	5.86		10	15.92	31.83	5.86		23.36	454.2	.051
30	12.20	32.344	7.15		20	14.17	32.30	6.52		24.09	384.5	.093
51	9.95	32.372	6.72		30	12.20	32.35	7.16		24.52	343.7	.130
77	8.37	32.401	6.44		50	9.07	32.37	6.76		25.08	290.8	.193
102	8.12	32.402	6.48		75	8.41	32.47	6.48		25.26	274.0	.264
152	7.51	33.760	3.51		100	8.14	32.93	5.17		25.65	236.8	.328
205	7.20	33.918	3.05		150	7.53	33.73	3.54		26.37	169.5	.429
255	6.59	33.974	2.36		200	7.23	33.90	3.07		26.55	153.0	.510
306	6.05	34.012	1.92		250	6.66	33.97	2.43		26.68	141.0	.583
410	5.47	34.083	1.06		300	6.11	34.01	1.88		26.78	131.9	.651
510	5.00	34.153	.86		400	5.51	34.08	1.11		26.91	120.8	.778
612	4.39	34.229	.39		500	5.05	34.15	.87		27.02	110.5	.893
815	3.84	34.328	.26		600	4.46	34.21	.44		27.14	100.5	.999
1020	3.38	34.441	.29		700	4.09	34.27	.33		27.22	92.5	1.095
					800	3.86	34.32	.27		27.29	86.6	1.185
					1000	3.42	34.43	.28		27.42	75.0	1.346

YH 125 44 19.2 N 127 0.0 W DATE 23 JUL 64 0330 GCT WTRF 03 DRY 59.0 WET 55.0
WIND DIRECTION 02 VEL 16 KTS BAR 22 SWELL DIRECTION 28 H 04 T 09 CLOUD 08 AMT 02 WEATHER 02

0	15.85	32.499	5.85		0	15.85	32.50	5.85		23.89	403.4	0
10	15.66	32.497	5.87		10	15.66	32.49	5.88		23.92	400.5	.040
30	10.47	32.530	7.56		20	13.25	32.50	6.74		24.44	351.5	.078
51	8.70	32.566	6.60		30	10.47	32.53	7.57		24.94	300.3	.110
77	8.46	32.611	6.65		50	8.73	32.56	6.67		25.28	271.3	.168
102	7.98	32.636	5.56		75	8.48	32.60	6.64		25.35	265.3	.235
152	7.90	33.365	2.96		100	8.02	32.90	5.67		25.65	236.7	.297
204	7.31	33.961	2.66		150	7.90	33.77	3.05		26.35	171.1	.399
255	6.59	33.973	2.37		200	7.37	33.93	2.68		26.55	152.8	.480
305	6.20	33.991	2.39		250	6.73	33.97	2.39		26.67	141.8	.554
408	5.50	34.078	1.15		300	6.24	33.99	1.99		26.75	135.0	.623
508	4.95	34.143	.71		400	5.55	34.07	1.21		26.90	121.7	.751
609	4.52	34.225	.44		500	4.99	34.14	.74		27.02	110.4	.867
811	3.92	34.342	.26		600	4.55	34.22	.46		27.13	100.9	.973
1015	3.52	34.456	.34		700	4.22	34.28	.31		27.22	92.8	1.070
					800	3.95	34.34	.26		27.29	86.3	1.159
					1000	3.54	34.45	.33		27.42	75.1	1.320

YH 145 44 19.2 N 127 27.7 W DATE 23 JUL 64 0644 GCT WTRF 04 DRY 58.5 WET 55.0
WIND DIRECTION 01 VEL 14 KTS BAR 24 SWELL DIRECTION 28 H 05 T 09 CLOUD 08 AMT 05 WEATHER 03

0	15.86	32.477	5.84		0	15.86	32.48	5.84		23.87	405.2	0
10	15.89	32.475	5.94		10	15.89	32.51	6.71		24.23	370.9	.079
30	12.14	32.546	7.45		20	14.27	32.55	7.45		24.69	327.8	.114
51	9.27	32.547	6.87		30	12.14	32.55	7.45		25.17	282.3	.175
77	8.63	32.605	6.67		50	9.37	32.55	6.92		25.32	268.3	.244
102	8.41	32.610	6.60		75	8.68	32.60	6.67		25.36	264.6	.311
152	7.51	33.461	4.66		100	8.42	32.61	6.62		26.14	191.0	.425
204	7.15	33.848	3.00		150	7.55	33.44	4.56		26.52	156.0	.511
254	6.46	33.710	3.50		200	7.18	33.45	3.82		26.65	144.0	.586
306	5.82	33.921	2.76		250	6.52	33.91	3.53		26.74	135.6	.656
409	5.28	34.022	1.33		300	5.89	33.92	2.86		26.88	123.1	.786
509	4.83	34.101	.81		400	5.31	34.01	1.44		27.00	112.2	.903
610	4.58	34.104	.46		500	4.86	34.04	.84		27.10	103.9	1.011
813	4.02	34.341	.26		600	4.60	34.18	.48		27.19	95.3	1.111
1017	3.48	34.420	.20		700	4.06	34.27	.30		27.28	87.8	1.202
					800	4.06	34.33	.25		27.40	77.2	1.367
					1000	3.52	34.42	.28				

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	Sx10 ⁶	ΔD		
NH 5A	44 39.1 N 124 10.6 W	DATE 06 NOV 64	2008 GCT	WTRF 0 DRY 53.0 WET 48.0	WIND DIRECTION 00 VFL 10 KTS	BAR 18 SWELL DIRECTION 31 H	3 T	8 CLOUD	3 AMT	1 WEATHER				
0	11.40	32.410	6.20		0	11.40	32.42	6.20		24.72	324.2	0		
10	11.34	32.409	6.22		10	11.34	32.41	6.22		24.73	323.4	.032		
20	11.32	32.432	6.17		20	11.32	32.44	6.18		24.75	321.6	.065		
30	11.18	32.709	5.06		30	11.18	32.71	5.07		24.99	298.9	.096		
40	11.00	33.736	5.91		50	9.37	32.55			25.17	282.3	.154		
NH 5B	44 39.1 N 124 10.6 W	DATE 06 NOV 64	2024 GCT	WTRF 0 DRY 53.0 WET 48.0	WIND DIRECTION 00 VFL 10 KTS	BAR 18 SWELL DIRECTION 31 H	3 T	8 CLOUD	3 AMT	1 WEATHER				
0	0	32.409	6.22		0	11.40	32.41	6.22		24.72	324.3	0		
10	11.38	32.420	6.28		10	11.38	32.42	6.29		24.73	323.3	.032		
20	11.34	32.430	6.26		20	11.34	32.43	6.27		24.75	322.1	.065		
30	11.26	32.459	6.16		30	11.26	32.46	6.17		24.78	318.8	.097		
40	11.14	32.579	5.99		50	10.84	32.71	5.82		25.05	293.6	.158		
50	10.86	32.708	5.81		75	8.68	32.60			25.32	268.3	.228		
NH 15	44 39.1 N 124 24.5 W	DATE 06 NOV 64	2214 GCT	WTRF 0 DRY 55.5 WET 49.5	WIND DIRECTION 00 VFL 10 KTS	BAR 17 SWELL DIRECTION 32 H	3 T	8 CLOUD	3 AMT	1 WEATHER				
0	12.35	32.072	6.17		0	12.35	32.08	6.18		24.28	365.9	0		
10	12.24	32.081	6.09		10	12.24	32.09	6.09		24.31	363.4	.036		
20	11.77	32.242	6.02		20	11.77	32.25	6.03		24.52	343.4	.072		
30	10.41	32.517	5.37		30	10.41	32.52	5.38		24.98	300.3	.104		
40	9.21	32.996	4.73		50	8.36	33.53	4.23		26.09	194.3	.153		
50	8.36	33.526			75	8.23	33.58	3.58		26.15	189.5	.201		
75	8.23	33.571	3.57		100	8.42	32.61			25.36	264.6	.258		
NH 25	44 39.1 N 124 38.5 W	DATE 07 NOV 64	0013 GCT	WTRF 0 DRY 59.5 WET 52.5	WIND DIRECTION 27 VFL 8 KTS	BAR 17 SWELL DIRECTION 32 H	4 T	8 CLOUD	3 AMT	1 WEATHER				
0	12.98	31.974	6.08		0	12.98	31.98	6.08		24.09	384.6	0		
10	12.83	31.976	6.07		10	12.83	31.98	6.07		24.12	381.9	.038		
20	11.82	32.215	5.67		20	11.82	32.22	5.68		24.49	346.3	.075		
30	8.40	32.403	4.98		30	8.40	32.81	4.98		25.52	248.3	.104		
40	7.93	33.031	4.66		50	7.94	33.21	4.26		25.90	212.5	.151		
50	7.94	33.201	4.25		75	8.19	33.78	3.04		26.31	173.9	.199		
75	8.19	33.773	3.04		100	8.05	33.81	2.79		26.36	170.1	.242		
100	8.05	2.79			150	8.04	33.88	2.64		26.41	165.6	.326		
150	8.04	33.877	2.63		200	7.89	33.85	2.63		26.42	165.9	.409		
200	7.89	2.63			250	6.52	33.91			26.65	144.0	.486		
NH 35	44 39.1 N 124 52.8 W	DATE 07 NOV 64	0056 GCT	WTRF 0 DRY 56.5 WET 53.0	WIND DIRECTION 32 VFL 12 KTS	BAR 17 SWELL DIRECTION 32 H	4 T	8 CLOUD	3 AMT	2 WEATHER 03				
0	13.37	32.133	6.03		0	13.38	32.14	6.04		24.13	380.2	0		
10	13.25	32.135	5.95		10	13.25	32.14	5.95		24.16	378.0	.038		
20	13.38	32.131	6.01		20	13.38	32.14	6.02		24.13	381.0	.076		
30	13.08	32.122	6.02		30	13.08	32.13	6.03		24.18	376.2	.114		
40	9.63	32.384	5.95		50	8.36	32.58	5.61		25.35	264.8	.178		
50	8.36	32.577	5.61		75	7.95	33.01	4.68		25.75	227.5	.239		
75	7.96	33.007	4.68		100	7.57	33.46	3.86		26.16	188.8	.291		
100	7.55	33.458			150	7.67	33.91	2.73		26.49	157.6	.378		
125	7.74	33.485			200	7.34	33.96	2.46		26.58	150.0	.455		
150	7.66	33.906	2.73		250	6.95	33.99	2.28		26.65	143.7	.528		
200	7.34	33.969	2.46		300	6.72	34.02	1.68		26.71	139.2	.599		
250	6.95	33.983	2.28		400	6.60	34.02	1.82		26.73	138.7	.738		
299	6.72	34.016	1.68		500	4.86	34.09			27.00	112.2	.863		
399	6.60	34.024	1.92		600	4.60	34.18			27.10	103.9	.971		
NH 45	44 39.1 N 125 6.9 W	DATE 07 NOV 64	0330 GCT	WTRF 8 DRY 56.5 WET 54.0	WIND DIRECTION 34 VFL 4 KTS	BAR 19 SWELL DIRECTION 30 H	2 T	9 CLOUD	AMT	WEATHER 00				
0	12.47	31.954	6.19		0	12.47	31.96	6.19		24.17	376.4	0		
10	12.48	31.954	6.22		10	12.48	31.96	6.22		24.17	377.1	.038		
20	12.26	31.944	6.20		20	12.26	31.95	6.20		24.20	374.1	.075		
30	10.65	32.289	5.65		30	10.65	32.29	5.66		24.76	321.1	.110		
50	8.02	32.936	4.48		50	8.02	32.94	4.48		25.68	233.3	.165		
75	7.80	33.504	3.34		75	7.81	33.60	3.35		26.23	181.7	.217		
99	7.70	33.749	3.10		100	7.69	33.75	3.10		26.37	169.0	.261		
124	7.48	33.829	3.11		150	7.34	33.88	2.76		26.53	154.4	.342		
149	7.35	33.892	2.77		200	6.75	33.97	2.37		26.67	141.7	.416		
198	6.77	33.967	2.34		250	6.36	33.99	2.06		26.73	135.8	.485		
248	6.37	33.907	2.09		300	6.03	34.02	1.61		26.80	130.0	.552		
296	6.16	34.014	1.64		400	5.43	34.07	1.04		26.92	120.2	.677		
395	5.46	34.064	1.07		500	4.86	34.09			27.00	112.2	.793		

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ ²⁻	Z	T	S	O ₂	PO ₄ ²⁻	σ _t	S × 10 ⁶	Δ D		
NH 65	44 39.1 N	125 35.0 W	DATE 07 NOV 64	1035 GCT	WIRE 14	DRY 54.0	WET 48.0							
WIND DIRECTION 04 VEL 24 KTS	HAR 17 SWELL DIRECTION 35 H	S T CLOUD AMT	WEATHER											
0	13.43	32.164	6.05		0	13.43	32.17	6.05		24.04	388.7	0		
10	13.44	32.161	6.04		10	13.44	32.17	6.05		24.04	389.4	.039		
20	13.41	32.165	6.06		20	13.42	32.16	6.04		24.04	389.4	.078		
30	8.66	32.536	6.30		30	13.91	32.17	6.07		24.06	388.9	.117		
40	7.76	32.563	5.58		50	9.66	32.54	6.40		25.27	272.2	.183		
50	7.97	32.563	5.12		75	7.79	32.83	5.62		25.63	238.8	.247		
102	7.97	32.568	5.12		100	7.94	33.55	5.31		26.17	187.6	.300		
152	7.83	33.804	2.00		150	7.85	33.88	2.04		26.45	162.3	.387		
203	7.31	33.978	1.92		200	7.85	33.98	1.92		26.59	149.1	.465		
253	6.79	34.012	1.81		250	6.82	34.01	1.82		26.69	140.2	.538		
301	6.38	34.036	1.55		300	6.39	34.04	1.56		26.77	133.4	.606		
399	5.87	34.064	1.07		400	5.86	34.08	1.07		26.87	124.6	.735		
498	5.36	34.121	.77		500	5.35	34.12	.76		26.97	115.9	.855		
598	4.82	34.178	.51		600	4.81	34.18	.51		27.07	106.8	.967		
797	4.20	34.235	.30		700	4.47	34.26	.36		27.18	97.3	1.068		
926	3.54	34.413	.30		800	4.19	34.34	.30		27.27	89.1	1.162		
					1000	3.53	34.41	.30		27.40	77.4	1.328		
NH 85	44 39.1 N	125 3.1 W	DATE 07 NOV 64	1555 GCT	WIRE 12	DRY 52.0	WET 45.0							
WIND DIRECTION 01 VEL 25 KTS	HAR 17 SWELL DIRECTION 01 H	S T CLOUD 1 AMT	WEATHER 03											
0	13.05	32.171	6.04		0	13.05	32.18	6.05		24.22	371.4	0		
10	13.03	32.170	6.03		10	13.03	32.17	6.04		24.23	371.3	.037		
21	13.06	32.169	6.06		20	13.06	32.17	6.06		24.22	372.4	.074		
31	13.01	32.166	6.06		30	13.04	32.19	6.06		24.24	370.7	.111		
50	10.17	32.522	6.43		50	10.17	32.53	6.44		25.02	296.4	.178		
76	9.06	32.884	5.38		75	9.07	32.87	5.44		25.47	254.0	.247		
101	8.39	33.176	4.33		100	8.41	33.16	4.37		25.80	222.9	.307		
152	7.91	33.807	2.87		150	7.92	33.87	2.91		26.43	164.0	.403		
203	7.30	33.951	2.52		200	7.34	33.96	2.53		26.57	151.1	.482		
300	6.24	34.071	1.66		250	6.76	33.99	2.10		26.69	140.5	.555		
401	5.53	34.064	1.17		300	6.24	34.04	1.67		26.79	131.6	.623		
502	5.11	34.131	.76		400	5.54	34.06	1.17		26.90	122.0	.750		
					500	5.12	34.13	.77		27.00	112.6	.867		
NH 105	44 39.1 N	125 31.0 W	DATE 07 NOV 64	1931 GCT	WIRE 10	DRY 54.5	WET 46.0							
WIND DIRECTION 01 VEL 28 KTS	HAR 17 SWELL DIRECTION 01 H	S T CLOUD 1 AMT	WEATHER 03											
0	13.27	32.151	6.08		0	13.27	32.16	6.08		24.17	377.0	0		
10	13.37	32.147	6.04		10	13.38	32.15	6.05		24.14	379.4	.038		
21	13.27	32.148	6.03		20	13.31	32.15	6.03		24.15	378.7	.076		
31	12.04	32.375	6.36		30	12.23	32.35	6.32		24.52	344.2	.112		
50	8.43	32.531	6.59		50	8.43	32.54	6.59		25.30	269.2	.173		
76	7.79	32.569	6.52		75	7.81	32.56	6.54		25.41	259.3	.239		
101	8.14	32.933	5.24		100	8.12	32.91	5.30		25.65	237.3	.301		
153	7.77	33.702	3.04		150	7.81	33.75	3.14		26.35	171.7	.404		
205	7.29	33.942	2.27		200	7.34	33.95	2.31		26.57	151.3	.484		
307	5.99	34.005	1.78		250	6.69	34.00	2.00		26.70	139.3	.557		
409	5.54	34.110	.87		300	6.07	34.00	1.80		26.78	131.9	.625		
512	5.12	34.182	.53		400	5.56	34.10	.95		26.92	119.7	.750		
612	4.62	34.233	.33		500	5.17	34.18	.55		27.03	109.8	.865		
816	3.84	34.325	.24		600	4.68	34.23	.35		27.13	101.6	.971		
1026	3.45	34.427	.33		700	4.24	34.27	.25		27.21	93.7	1.068		
					800	3.89	34.32	.25		27.28	87.0	1.159		
					1000	3.48	34.41	.31		27.40	76.8	1.322		
NH 125	44 39.1 N	126 59.0 W	DATE 07 NOV 64	2303 GCT	WIRE 6	DRY 55.5	WET 48.5							
WIND DIRECTION 01 VEL 22 KTS	HAR 16 SWELL DIRECTION 01 H	T 7 CLOUD 6 AMT	WEATHER 9											
0	14.07	32.123	5.93		0	14.07	32.13	5.94		23.98	394.5	0		
10	14.06	32.118	5.94		10	14.06	32.12	5.94		23.98	394.9	.039		
21	14.09	32.120	5.95		20	14.09	32.12	5.95		23.97	395.8	.079		
31	14.06	32.116	5.93		30	14.08	32.12	5.98		23.97	396.1	.119		
50	12.21	32.377	6.35		50	12.21	32.38	6.35		24.54	341.9	.192		
76	8.17	32.587	6.42		75	8.30	32.58	6.42		25.36	264.6	.268		
101	8.19	33.002	4.96		100	8.19	33.07	5.03		25.76	226.8	.330		
152	7.71	33.836	3.14		150	7.74	33.82	3.19		26.41	165.7	.428		
204	7.21	34.006	2.20		200	7.25	34.01	2.25		26.63	145.6	.505		
304	6.56	34.076	1.52		250	6.89	34.06	1.75		26.72	137.3	.576		
405	5.41	34.102	1.52		300	6.58	34.07	1.53		26.77	131.3	.644		
507	5.16	34.174	.75		400	5.85	34.08	1.52		26.87	124.6	.773		
606	4.45	34.198	.34		500	5.20	34.17	.81		27.02	110.9	.890		
808	3.36	34.334	.23		600	4.49	34.20	.40		27.12	101.7	.997		
1015	3.42	34.430	.30		700	4.14	34.26	.25		27.21	93.8	1.094		
					800	3.97	34.33	.24		27.28	87.2	1.185		
					1000	3.46	34.42	.29		27.41	75.9	1.348		

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	s × 10 ⁶	Δ D		
NH 145	44 39.1 N	127 27.0 W	DATE 08 NOV 64	0256 GCT	WTRE 10	DRY 55.0	WET 46.0							
WIND DIRECTION 01 VEL 20 KTS	BAR 15 SWELL DIRECTION 01 H 10 T 8 CLOUD	AMT	WEATHER 00											
0	13.88	32.148	5.99		0	13.88	32.15	5.99		24.04	388.9	0		
10	13.86	32.137	5.99		10	13.86	32.14	5.99		24.04	389.6	.039		
20	13.83	32.162	6.01		20	13.83	32.15	6.02		24.05	388.8	.078		
30	13.72	32.339	5.99		30	13.72	32.34	5.98		24.22	372.5	.116		
50	9.84	32.631	6.16		50	9.84	32.64	6.17		25.16	283.0	.181		
75	9.34	32.920	5.76		75	9.36	32.91	5.79		25.45	255.4	.249		
100	9.13	33.238	4.96		100	9.14	33.23	4.99		25.73	229.3	.309		
153	7.92	33.826	3.94		150	8.00	33.80	3.99		26.36	170.6	.409		
204	7.24	34.955	2.43		200	7.28	33.95	2.54		26.58	149.9	.489		
309	6.17	34.017	1.77		250	6.71	34.00	1.95		26.69	139.8	.562		
406	5.70	34.112	.99		300	5.24	34.02	1.83		26.77	133.0	.630		
509	4.77	34.101	.93		400	5.73	34.11	1.03		26.91	121.2	.757		
609	4.41	34.105	.42		500	4.85	34.10	.84		27.01	111.4	.873		
813	3.89	34.336	.27		600	4.43	34.18	.46		27.12	101.9	.980		
1024	3.39	34.428	.27		700	4.16	34.27	.29		27.21	93.3	1.077		
					800	3.92	34.33	.28		27.29	86.6	1.167		
					1000	3.44	34.42	.27		27.41	75.9	1.330		
CH 145	43 20.5 N	127 40.3 W	DATE 08 NOV 64	1155 GCT	WTRE 15	DRY 54.7	WET 49.0							
WIND DIRECTION 01 VEL 22 KTS	BAR 11 SWELL DIRECTION 01 H 10 T 6 CLOUD	AMT	WEATHER											
0	13.80	32.317	5.91		0	13.80	32.32	5.92		24.19	375.0	0		
10	13.79	32.329	5.93		10	13.79	32.33	5.94		24.20	374.1	.037		
21	13.78	32.313	5.97		20	13.78	32.31	5.97		24.19	375.5	.075		
31	13.77	32.319	5.99		30	13.77	32.32	5.98		24.19	375.4	.112		
50	10.97	32.407	6.52		50	10.97	32.49	6.53		24.86	312.1	.181		
74	8.37	32.567	6.46		75	8.33	32.57	6.45		25.35	265.7	.253		
100	7.91	32.603	6.32		100	7.92	32.61	6.32		25.44	257.2	.319		
151	7.33	33.575	4.41		150	7.34	33.55	4.45		26.26	179.7	.428		
202	7.11	33.910	3.22		200	7.12	33.90	3.26		26.57	151.3	.511		
301	5.84	33.964	2.16		250	6.53	33.94	2.56		26.67	142.0	.584		
401	5.07	34.014	1.77		300	5.85	33.96	2.16		26.78	132.0	.652		
502	4.69	34.095	.81		400	5.08	34.01	1.77		26.91	120.2	.779		
600	4.38	34.210	.41		500	4.70	34.09	.83		27.02	110.3	.894		
803	3.93	34.344	.20		600	4.39	34.21	.42		27.15	99.1	.998		
1012	3.39	34.453	.31		700	4.15	34.29	.23		27.23	91.6	1.094		
					800	3.94	34.34	.20		27.30	85.7	1.182		
					1000	3.42	34.45	.29		27.43	73.7	1.342		
CH 125	43 20.5 N	127 13.0 W	DATE 08 NOV 64	1557 GCT	WTRE 14	DRY 52.0	WET 46.0							
WIND DIRECTION 01 VEL 22 KTS	BAR 11 SWELL DIRECTION 01 H 10 T 10 CLOUD	5 AMT	10 WEATHER 02											
0	12.78	32.339	6.06		0	12.78	32.34	6.07		24.41	354.0	0		
10	12.74	32.340	6.06		10	12.74	32.34	6.05		24.41	354.2	.035		
21	12.72	32.338	6.09		20	12.73	32.34	6.09		24.41	353.8	.071		
30	12.63	32.347	6.06		30	12.63	32.35	6.07		24.44	351.3	.106		
50	9.68	32.722	5.93		50	9.68	32.73	5.94		25.26	273.8	.169		
75	9.24	33.030	5.15		75	9.24	33.04	5.16		25.57	244.6	.233		
100	8.08	33.452	4.00		100	8.08	33.46	4.01		26.08	196.5	.288		
150	7.44	33.760	3.56		150	7.44	33.75	3.57		26.40	166.9	.379		
201	7.27	33.960	2.52		200	7.27	33.96	2.54		26.59	149.6	.458		
302	6.17	34.013	1.67		250	6.76	33.99	1.98		26.68	141.3	.531		
402	5.70	34.058	1.29		300	6.19	34.01	1.68		26.77	132.7	.600		
504	5.10	34.135	.79		400	5.71	34.06	1.30		26.87	124.7	.728		
604	4.37	34.178	.38		500	5.13	34.13	.81		27.00	112.5	.847		
808	3.99	34.326	.23		600	4.40	34.18	.39		27.12	102.1	.954		
1017	3.50	34.431	.33		700	4.10	34.25	.24		27.20	94.2	1.052		
					800	3.99	34.32	.24		27.27	88.1	1.143		
					1000	3.54	34.42	.31		27.40	76.8	1.308		
CH 105	43 20.5 N	125 45.8 W	DATE 08 NOV 64	1945 GCT	WTRE 3	DRY 52.5	WET 46.5							
WIND DIRECTION 01 VEL 24 KTS	BAR 12 SWELL DIRECTION 01 H 10 T 10 CLOUD	1 AMT	8 WEATHER 02											
0	13.25	32.214	6.07		0	13.25	32.22	6.07		24.22	372.0	0		
10	13.21	32.210	6.07		10	13.23	32.21	6.07		24.22	372.1	.037		
21	13.24	32.210	6.09		20	13.23	32.21	6.09		24.22	372.6	.074		
31	13.21	32.212	6.07		30	13.22	32.21	6.07		24.22	372.3	.112		
51	12.01	32.526	6.09		50	12.10	32.60	6.09		24.66	330.8	.182		
77	9.07	33.168	4.22		75	9.29	33.14	5.02		25.64	237.6	.253		
103	7.01	33.426	4.29		100	7.49	33.41	4.35		26.07	197.4	.307		
155	7.37	33.872	3.05		150	7.41	33.84	3.16		26.47	159.7	.397		
207	7.33	34.011	2.31		200	7.34	33.99	2.39		26.61	147.6	.473		
308	6.66	34.033	1.43		250	7.10	34.06	1.86		26.69	140.5	.545		
410	5.92	34.111	1.05		300	6.73	34.09	1.48		26.77	133.8	.614		
513	5.33	34.162	.69		400	5.99	34.11	1.08		26.88	124.3	.743		
613	4.71	34.231	.37		500	5.40	34.15	.73		26.98	114.2	.862		
816	4.01	34.350	.25		600	4.79	34.22	.41		27.11	103.3	.971		
1026	3.47	34.464	.40		700	4.36	34.29	.26		27.21	94.1	1.070		
					800	4.05	34.34	.26		27.28	87.1	1.160		
					1000	3.49	34.43	.37		27.41	75.5	1.323		

OBSERVED INTERPOLATED DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
CH 85 43 20.5 N 125 18.8 W DATE 09 NOV 64 2320 GCT WTRF 4 DRY 55.5 WET 49.5 WIND DIRECTION 35 VEI 20 KTS BAR 10 SWELL DIRECTION 35 H 10 T 5 CLOUD 8 AMT 5 WEATHER 02												
0	12.41	32.210	6.06		0	12.41	32.21	6.07		24.38	356.8	0
10	13.03	32.203	6.06		10	13.03	32.21	6.07		24.25	368.9	.036
20	13.03	32.204	6.15		20	13.03	32.20	6.15		24.25	369.3	.073
30	13.01	32.203	6.18		30	13.02	32.20	6.18		24.25	369.3	.110
50	12.47	32.201	6.15		50	12.53	32.28	6.15		24.41	354.8	.183
75	8.74	32.457	6.09		75	9.03	32.62	6.12		25.28	271.8	.261
100	8.42	33.007	4.89		100	8.46	33.04	5.05		25.69	233.1	.324
155	8.16	33.853	2.88		150	8.18	33.81	3.03		26.34	172.8	.425
207	7.59	33.950	2.49		200	7.68	33.94	2.49		26.51	156.6	.508
308	6.38	34.009	1.87		250	7.05	33.94	2.21		26.64	145.3	.583
410	5.72	34.070	1.26		300	5.47	34.01	1.92		26.73	136.6	.654
512	5.22	34.133	.79		400	5.77	34.06	1.32		26.87	124.9	.784
612	4.82	34.216	.37		500	5.27	34.12	.84		26.98	114.8	.904
816	4.28	34.331	.25		600	4.86	34.21	.41		27.09	105.4	1.014
1025	3.63	34.408	.25		700	4.57	34.27	.25		27.17	97.6	1.116
					800	4.32	34.32	.26		27.24	91.6	1.210
					1000	3.71	34.40	.25		27.37	80.5	1.382

CH 65 43 20.5 N 125 51.7 W DATE 09 NOV 64 0319 GCT WTRF 3 DRY 53.0 WET 48.0
WIND DIRECTION 03 VEI 18 KTS BAR 09 SWELL DIRECTION 01 H T CLOUD AMT WEATHER 02

0	12.56	32.223	6.17		0	12.56	32.23	6.18		24.36	358.5	0
10	12.56	32.222	6.16		10	12.56	32.23	6.18		24.36	358.8	.036
20	12.56	32.227	6.17		20	12.56	32.30	6.30		24.36	358.7	.072
50	9.25	32.508	6.47		30	11.61	32.30	6.30		24.59	336.7	.106
76	8.11	32.703	5.93		50	9.25	32.51	6.47		25.16	283.0	.168
102	8.50	33.248	4.62		75	8.12	32.69	5.96		25.47	253.6	.236
154	7.98	33.872	2.98		100	8.45	33.24	4.73		25.85	217.9	.294
204	7.59	33.993	2.39		150	8.05	33.85	2.97		26.39	167.7	.391
254	7.12	34.003	2.08		200	7.62	33.98	2.40		26.56	152.4	.471
304	6.79	34.014	1.99		250	7.16	34.00	2.10		26.64	145.4	.545
407	5.94	34.141	.73		300	6.81	34.01	1.99		26.69	140.8	.617
507	5.37	34.141	.73		400	6.00	34.06	1.45		26.84	127.9	.751
609	4.98	34.223	.33		500	5.40	34.14	.78		26.97	115.6	.873
810	4.23	34.334	.24		600	5.01	34.22	.36		27.04	106.5	.984
1014	3.65	34.415	.29		700	4.63	34.28	.29		27.17	97.7	1.086
					800	4.26	34.33	.24		27.26	90.3	1.180
					1000	3.68	34.41	.28		27.38	79.5	1.349

CH 45 43 20.5 N 125 24.3 W DATE 09 NOV 64 0620 GCT WTRF 0 DRY 52.0 WET 46.0
WIND DIRECTION 00 VEI 20 KTS BAR 09 SWELL DIRECTION 35 H 3 T 8 CLOUD AMT WEATHER 02

0	12.18	32.213	6.17		0	12.18	32.22	6.18		24.42	352.4	0
10	12.17	32.220	6.22		10	12.17	32.22	6.22		24.43	351.9	.035
20	11.72	32.229	6.34		20	11.72	32.30	6.34		24.59	338.3	.070
30	11.28	32.326	6.35		30	11.28	32.33	6.35		24.68	328.9	.103
50	9.24	32.908	5.45		50	9.28	32.91	5.45		25.47	253.8	.161
76	8.08	33.164	4.35		75	8.10	33.33	4.39		25.98	205.7	.219
102	8.49	33.505	3.74		100	8.44	33.66	3.78		26.18	186.4	.268
147	7.60	33.993	2.44		150	7.57	33.99	2.41		26.57	150.5	.352
202	7.29	34.014	2.21		200	7.29	34.01	2.22		26.63	145.7	.426
304	6.58	34.050	1.72		250	6.95	34.03	1.98		26.69	140.4	.498
403	6.08	34.091	1.28		300	6.61	34.05	1.74		26.75	135.3	.566
503	5.25	34.122	.80		400	5.10	34.08	1.29		26.84	127.9	.698
605	4.75	34.217	.41		500	5.27	34.12	.81		26.97	115.2	.819
807	4.17	34.341	.25		600	4.77	34.21	.43		27.10	103.8	.929
1006	3.70	34.419	.30		700	4.44	34.28	.27		27.20	95.2	1.028
					800	4.18	34.34	.26		27.27	89.0	1.120
					1000	3.71	34.42	.30		27.38	79.3	1.289

CH 35 43 20.5 N 125 10.5 W DATE 09 NOV 64 0901 GCT WTRF 14 DRY 53.0 WET 47.0
WIND DIRECTION 00 VEI 20 KTS BAR 07 SWELL DIRECTION 00 H 4 T 8 CLOUD AMT WEATHER

0	12.32	32.237	6.12		0	12.32	32.24	6.13		24.42	353.2	0
10	12.30	32.229	6.15		10	12.30	32.23	6.16		24.41	353.6	.035
20	12.24	32.261	6.22		20	12.28	32.25	6.22		24.43	352.5	.071
30	11.71	32.405	5.98		30	11.71	32.41	5.98		24.66	330.5	.105
50	9.24	33.165	4.84		50	9.28	33.07	4.84		25.59	242.2	.162
76	8.20	33.503	3.67		75	8.18	33.60	3.64		26.17	187.3	.216
97	7.95	33.725	3.14		100	7.92	33.79	3.12		26.36	169.4	.260
145	7.51	33.925	2.85		150	7.65	33.93	2.80		26.54	153.0	.341
196	6.91	33.974	2.30		200	6.88	33.98	2.27		26.66	142.8	.415
292	6.32	34.195	1.68		250	6.54	34.01	1.92		26.73	136.5	.485
390	5.71	34.166	1.00		300	6.27	34.04	1.62		26.79	131.4	.552
488	5.25	34.133	.73		400	5.66	34.11	.96		26.92	120.2	.677
589	4.73	34.226	.38		500	5.18	34.14	.69		27.00	112.5	.794
790	4.25	34.326	.23		600	4.70	34.21	.36		27.11	102.9	.901
989	3.66	34.419	.31		700	4.43	34.28	.24		27.19	95.7	1.001
					800	4.22	34.33	.23		27.26	90.0	1.093
					1000	3.63	34.42	.31		27.39	77.8	1.261

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
AH 45 46 14.4 N 125 19.5 W DATE 13 NOV 64 1635 GCT WIRE 2 DRY 48.5 WET 44.0 WIND DIRECTION 00 VEL 10 KTS RAR 16 SWELL DIRECTION 04 H 10 T CLOUD 8 AMT 6 WEATHER 01												
0	11.57	31.957	6.00		0	11.57	31.96	6.01		24.34	360.6	0
10	11.58	31.958	6.05		10	11.58	31.96	6.06		24.34	360.9	.036
20	11.59	31.957	6.03		20	11.59	31.96	6.04		24.33	361.3	.072
30	11.58	31.957	6.03		30	11.58	31.96	6.04		24.34	361.3	.108
50	7.91	32.602	5.48		50	7.92	32.70	5.48		25.51	240.9	.169
77	7.79	33.261	4.05		75	7.80	33.23	4.15		25.94	208.9	.227
101	7.64	33.529	3.56		100	7.65	33.52	3.67		26.19	188.6	.276
155	7.32	33.875	3.07		150	7.35	33.86	3.11		26.50	157.4	.362
205	6.96	33.956	2.61		200	7.00	33.95	2.66		26.62	146.1	.438
305	6.46	34.036	1.56		250	6.67	34.00	2.11		26.70	138.9	.509
408	5.89	34.076	1.19		300	5.39	34.03	1.61		26.77	133.5	.577
508	5.42	34.122	.88		400	5.92	34.07	1.20		26.86	126.2	.707
609	4.98	34.173	.51		500	5.46	34.12	.90		26.95	117.6	.829
812	4.04	34.271	.30		600	5.02	34.17	.54		27.04	110.1	.942
1016	3.38	34.332	.25		700	4.55	34.22	.36		27.13	101.3	1.048
					800	4.03	34.27	.31		27.22	93.2	1.145
					1000	3.42	34.33	.34		27.34	82.5	1.321

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
AH 65 46 15.2 N 125 35.0 W DATE 13 NOV 64 2017 GCT WIRE 0 DRY 50.0 WET 42.8 WIND DIRECTION 12 VEL 8 KTS RAR SWELL DIRECTION 30 H 10 T 10 CLOUD 8 AMT 4 WEATHER 02												
0	11.24	31.931	6.22		0	11.24	31.94	6.22		24.38	356.9	0
10	11.20	31.932	6.08		10	11.20	31.94	6.08		24.38	356.3	.036
20	11.20	31.934	6.08		20	11.20	31.94	6.08		24.39	356.3	.071
30	10.76	31.989	5.92		30	10.76	31.99	5.93		24.51	345.1	.106
51	7.86	33.219	3.69		50	8.00	33.15	3.81		25.85	217.3	.163
77	7.56	33.529	3.33		75	7.68	33.62	3.36		26.27	178.1	.212
103	7.51	33.824	3.11		100	7.53	33.81	3.13		26.43	162.6	.255
155	7.13	33.946	2.31		150	7.17	33.96	2.39		26.60	147.1	.332
205	6.76	34.015	1.87		200	6.80	34.01	1.90		26.70	139.0	.403
305	6.06	34.054	1.43		250	6.43	34.04	1.64		26.76	133.1	.471
408	5.56	34.117	.90		300	6.10	34.06	1.45		26.82	128.2	.537
508	5.00	34.158	.54		400	5.60	34.11	.94		26.93	119.2	.660
609	4.65	34.215	.43		500	5.04	34.15	.56		27.03	109.8	.775
811	3.98	34.338	.23		600	4.68	34.21	.43		27.11	102.9	.881
1016	3.55	34.406	.27		700	4.33	34.27	.32		27.20	94.8	.980
					800	4.01	34.33	.24		27.28	87.4	1.071
					1000	3.57	34.40	.26		27.38	78.8	1.237

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
AH 85 46 14.4 N 126 8.8 W DATE 14 NOV 64 0043 GCT WIRE 12 DRY 54.8 WET 44.1 WIND DIRECTION 32 VEL 12 KTS RAR SWELL DIRECTION 29 H 10 T 8 CLOUD 8 AMT 4 WEATHER 02												
0	11.96	32.002	6.20		0	11.96	32.10	6.20		24.37	357.4	0
10	11.94	32.009	6.05		10	11.98	32.09	6.06		24.36	358.2	.036
20	11.94	32.117	6.12		20	11.94	32.12	6.13		24.39	355.6	.071
30	11.90	32.132	6.25		30	11.90	32.14	6.26		24.41	354.0	.107
50	8.31	32.505	5.03		50	8.31	32.51	5.04		25.30	269.5	.169
75	7.84	32.863	5.07		75	7.84	32.87	5.04		25.65	236.6	.233
100	7.70	33.552	3.83		100	7.70	33.56	3.84		26.21	183.8	.285
149	7.45	33.865	2.79		150	7.44	33.87	2.78		26.40	157.7	.370
201	6.99	33.969	2.60		200	7.00	33.97	2.69		26.63	145.0	.446
298	6.18	34.071	1.64		250	6.56	34.01	2.20		26.73	136.7	.516
394	5.72	34.096	1.13		300	6.17	34.03	1.63		26.79	130.9	.583
490	5.10	34.125	.72		400	5.68	34.09	1.10		26.90	122.0	.710
586	4.75	34.194	.47		500	5.06	34.13	.69		27.01	111.7	.826
781	4.18	34.211	.24		600	4.70	34.19	.44		27.10	104.4	.935
					700	4.39	34.26	.29		27.18	96.4	1.035
					800	4.12	34.33	.22		27.27	88.5	1.127

D	T°C	S%	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ⁶	Δ D
AH 105 46 24.5 N 125 38.0 W DATE 14 NOV 64 0430 GCT WIRE 9 DRY 54.0 WET 45.0 WIND DIRECTION 00 VEL 0 KTS RAR SWELL DIRECTION 29 H 10 T 8 CLOUD 8 AMT 6 WEATHER 02												
0	11.80	32.149	6.11		0	11.80	32.15	6.11		24.44	350.4	0
10	11.80	32.151	6.16		10	11.80	32.16	6.17		24.45	350.5	.035
20	11.79	32.154	6.18		20	11.79	32.16	6.19		24.45	350.2	.070
30	11.74	32.155	6.19		30	11.79	32.16	6.19		24.45	350.4	.105
51	7.90	32.508	5.01		50	8.11	32.84	5.09		25.59	241.9	.164
77	7.79	33.224	3.53		75	7.80	33.55	3.49		26.19	185.1	.218
100	7.65	33.424	2.79		100	7.66	33.83	2.79		26.43	162.9	.261
154	7.22	33.466	2.10		150	7.25	33.96	2.13		26.59	148.6	.339
203	7.02	33.994	1.81		200	7.03	33.99	1.82		26.65	143.5	.412
304	6.54	34.040	1.57		250	6.41	34.01	1.64		26.69	139.8	.483
405	5.95	34.123	1.03		300	6.56	34.04	1.58		26.75	135.5	.552
504	5.55	34.130	.92		400	5.98	34.12	1.06		26.89	123.5	.681
607	5.12	34.160	.50		500	5.56	34.13	.83		26.95	118.1	.802
811	4.31	34.306	.35		600	5.15	34.18	.52		27.03	111.1	.916
1014	3.63	34.413	.23		700	4.74	34.24	.38		27.13	102.4	1.023
					800	4.35	34.30	.36		27.22	93.8	1.121
					1000	3.67	34.41	.33		27.37	79.7	1.295

OBSERVED					INTERPOLATED					DERIVED				
D	T°C	S%	O ₂ ml/l	PO ₄	Z	T	S	O ₂	PO ₄	σ _t	S × 10 ⁶	ΔD		
AH 125 44 14.4 N 127 7.0 W DATE 14 NOV 64 0927 GCT WTRF 0 DRY 52.5 WET 42.9														
WIND DIRECTION 00 VEL 0 KTS BAR SWELL DIRECTION 29 H 2 T 4 CLOUD 8 AMT 2 WEATHER 02														
0 12.12 32.173 6.10					0 12.13 32.18 6.10					24.40	354.3	0		
10 12.13 32.174 6.12					10 12.13 32.18 6.13					24.40	354.6	.035		
20 12.12 32.179 6.15					20 12.13 32.18 6.16					24.41	354.2	.071		
30 12.16 32.167 6.13					30 12.16 32.20 6.14					24.41	353.8	.106		
50 8.34 32.494 6.10					50 8.59 32.47 6.11					25.23	276.6	.169		
77 7.75 32.828 5.18					75 7.80 32.80 5.27					25.60	241.1	.234		
103 7.45 33.359 4.36					100 7.47 33.30 4.45					26.04	199.9	.289		
155 7.05 33.875 3.33					150 7.08 33.81 3.41					26.50	156.8	.378		
205 6.80 33.964 2.56					200 6.83 33.95 2.63					26.64	144.0	.453		
307 5.78 34.009 1.63					250 6.76 33.99 2.08					26.74	135.5	.523		
410 5.33 34.075 .94					300 5.85 34.01 1.68					26.81	128.9	.589		
510 4.85 34.143 .56					400 5.36 34.07 .99					26.92	119.5	.713		
612 4.55 34.224 .31					500 4.89 34.14 .59					27.03	109.4	.828		
815 3.97 34.339 .20					600 4.58 34.21 .33					27.13	101.4	.933		
1020 3.48 34.421 .27					700 4.29 34.28 .22					27.21	93.8	1.031		
					800 4.01 34.33 .21					27.28	87.4	1.121		
					1000 3.52 34.41 .26					27.40	77.3	1.286		
AH 145 44 14.4 N 127 35.8 W DATE 14 NOV 64 1337 GCT WTRF 3 DRY 55.0 WET 45.0														
WIND DIRECTION 08 VEL 8 KTS BAR SWELL DIRECTION 29 H 4 T 6 CLOUD 6 AMT 3 WEATHER 03														
0 12.03 32.156 6.06					0 12.03 32.16 6.07					24.41	354.0	0		
10 12.06 32.149 6.11					10 12.06 32.15 6.11					24.40	355.2	.035		
20 12.04 32.155 6.15					20 12.04 32.16 6.16					24.40	354.6	.071		
30 12.05 32.160 6.15					30 12.05 32.15 6.16					24.40	355.3	.106		
50 8.90 32.428 5.80					50 8.90 32.43 5.81					25.15	283.7	.170		
77 7.80 32.970 4.52					75 7.88 32.94 4.63					25.70	232.1	.235		
103 7.84 33.490 3.36					100 7.81 33.44 3.49					26.10	194.2	.288		
155 7.29 33.924 1.63					150 7.36 33.91 1.74					26.53	153.8	.375		
205 6.62 34.012 1.63					200 6.69 34.01 1.63					26.71	137.7	.448		
306 5.73 34.061 1.21					250 6.16 34.04 1.48					26.80	129.2	.515		
409 5.19 34.119 .78					300 5.77 34.06 1.24					26.87	123.7	.578		
509 4.75 34.173 .70					400 5.23 34.11 .81					26.97	114.6	.697		
611 4.45 34.253 .38					500 4.78 34.17 .71					27.07	105.8	.807		
813 3.95 34.347 .35					600 4.48 34.24 .42					27.16	98.0	.909		
1018 3.43 34.475 .30					700 4.22 34.30 .37					27.23	91.5	1.004		
					800 3.98 34.34 .35					27.29	86.3	1.092		
					1000 3.48 34.43 .38					27.41	75.8	1.254		
NH-45 44 39.1 N 125 6.9 W DATE 15 NOV 64 0353 GCT WTRF 2 DRY 48.5 WET 43.5														
WIND DIRECTION 07 VEL 17 KTS BAR SWELL DIRECTION 29 H 5 T 8 CLOUD AMT WEATHER 01														
0 11.29 32.013 6.15					0 11.29 32.02 6.16					24.43	351.7	0		
10 11.29 32.013 6.27					10 11.30 32.01 6.30					24.43	351.8	.035		
20 11.30 32.008 6.29					20 11.30 32.01 6.30					24.43	352.6	.070		
30 10.69 32.108 5.94					30 10.69 32.19 5.55					24.67	329.2	.104		
50 7.89 32.925 5.00					50 7.90 32.93 5.01					25.69	232.3	.161		
77 7.82 33.376 3.94					75 7.83 33.36 4.02					26.04	200.0	.215		
104 7.68 33.608 3.24					100 7.71 33.66 3.35					26.20	176.2	.262		
153 7.23 33.877 3.17					150 7.26 33.87 3.18					26.52	154.7	.344		
203 6.99 33.963 2.33					200 7.00 33.96 2.39					26.63	145.7	.419		
300 6.02 34.012 1.74					250 6.54 34.00 1.96					26.72	137.6	.490		
398 5.45 34.068 1.09					300 6.03 34.02 1.74					26.80	130.2	.557		
498 5.01 34.126 .72					400 5.44 34.07 1.08					26.91	120.5	.682		
					500 5.00 34.13 .71					27.01	111.3	.798		
NH-35 44 39.0 N 124 52.7 W DATE 15 NOV 64 0557 GCT WTRF 6 DRY 50.0 WET 43.5														
WIND DIRECTION 07 VEL 20 KTS BAR SWELL DIRECTION 29 H T 8 CLOUD AMT WEATHER 02														
0 12.18 32.128 6.15					0 12.18 32.13 6.16					24.36	358.7	0		
10 12.16 32.126 6.11					10 12.16 32.13 6.11					24.36	358.7	.036		
20 12.15 32.128 6.17					20 12.15 32.13 6.18					24.36	358.5	.072		
30 12.16 32.131 6.19					30 12.16 32.14 6.19					24.36	358.7	.108		
50 8.88 32.703 5.42					50 8.88 32.71 5.43					25.37	263.0	.170		
72 8.29 33.271 4.49					75 8.30 33.33 4.38					25.95	208.5	.229		
102 8.58 33.741 3.58					100 8.55 33.72 3.63					26.21	183.8	.278		
151 7.46 33.917 2.73					150 7.98 33.91 2.74					26.45	161.9	.364		
199 7.52 33.982 2.41					200 7.51 33.98 2.40					26.57	150.9	.442		

OBSERVED				INTERPOLATED				DERIVED				
D	T°C	S‰	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _t	δ × 10 ³	Δ D
NH-25	44 39.0 N	124 39.0 W	DATE 15 NOV 64	0740 GCT	WTRE 4	DRY 51.0	WET 43.5					
WIND DIRECTION 34 VEL 10 KTS	HAR SWELL DIRECTION 29 H					CLOUD	AMT					WEATHER 02
0	10.72	32.226	6.26		0	10.72	32.23	6.27		24.70	326.4	0
10	10.77	32.258	6.21		10	10.77	32.26	6.21		24.71	325.0	.033
20	10.75	32.285	6.19		20	10.75	32.29	6.19		24.74	322.8	.065
30	10.81	32.332	6.19		30	10.81	32.34	6.19		24.76	320.5	.097
50	8.42	32.978	4.82		50	8.42	32.98	4.82		25.64	235.9	.153
75	8.39	33.573	3.73		75	8.39	33.58	3.73		26.13	191.6	.206
104	8.44	33.747	3.11		100	8.44	33.74	3.16		26.25	180.4	.253
153	8.17	33.841	2.90		150	8.19	33.84	2.90		26.36	170.5	.340
201	7.79	33.916	2.50		200	7.80	33.91	2.51		26.48	160.1	.423
NH-15	44 39.0 N	124 25.0 W	DATE 15 NOV 64	0901 GCT	WTRE 4	DRY 47.5	WET 41.1					
WIND DIRECTION 04 VEL 5 KTS	HAR 32 SWELL DIRECTION					H	T	CLOUD	0 AMT	0	WEATHER 02	
0	11.32	32.198	6.22		0	11.32	32.20	6.22		24.57	338.5	0
10	10.80	32.215	6.25		10	10.80	32.22	6.26		24.67	326.7	.033
20	10.62	32.202	6.08		20	10.63	32.30	6.08		24.77	320.2	.066
30	10.02	32.517	5.68		30	10.02	32.52	5.69		25.04	294.0	.096
40	8.44	33.185	4.26		50	8.60	33.43	4.18		25.98	204.9	.146
50	8.60	33.430	4.18		75	8.56	33.49	4.03		26.03	200.9	.197
75	8.56	33.481	4.02		100	8.44	33.74			26.25	180.4	.245
NH-5	44 39.0 N	124 10.6 W	DATE 15 NOV 64	1023 GCT	WTRE 4	DRY 44.1	WET 38.1					
WIND DIRECTION 1 VEL KTS	HAR SWELL DIRECTION					H	T	CLOUD	AMT	WEATHER		
0	10.52	32.492	6.30		0	10.52	32.49	6.31		24.93	304.2	0
10	10.51	32.479	6.27		10	10.51	32.48	6.28		24.93	304.4	.030
20	10.51	32.481	6.31		20	10.51	32.49	6.32		24.93	304.4	.061
30	10.61	32.538	6.19		30	10.61	32.54	6.19		24.96	302.0	.091
40	10.38	32.841	5.46		50	9.97	32.90	5.48		25.35	265.3	.148
50	9.97	32.808	5.48		75	8.56	33.49			26.03	200.9	.206
NH-25	44 39.1 N	124 38.4 W	DATE 16 DEC 64	0550 GCT	WTRE 17	DRY 41.0	WET 37.0					
WIND DIRECTION 34 VEL 25 KTS	HAR 17 SWELL DIRECTION					33 H 10 T 8	CLOUD	5 AMT	6	WEATHER 02		
0	10.35	32.295			0	10.35	32.30			24.81	315.2	0
9	10.46	32.298			10	10.46	32.30			24.79	317.2	.032
44	10.47	32.303			20	10.46	32.30			24.79	317.4	.063
59	10.18	32.638			30	10.47	32.30			24.80	317.5	.095
70	9.35	33.049			50	10.42	32.41			24.89	309.1	.158
84	8.71	33.192			75	9.00	33.12			25.66	235.8	.226
105		33.573			100	8.37	33.48			26.05	198.8	.280
126	8.14	33.771			150	7.68	33.85			26.42	165.0	.371
148	7.89	33.848			200	7.80	33.91			26.48	160.1	.452
171	7.84	33.863			250	8.54	34.00			26.72	137.6	.527
NH45-S	44 17.8 N	125 5.0 W	DATE 16 DEC 64	1030 GCT	WTRE 05	DRY 42.0	WET 38.0					
WIND DIRECTION 35 VEL 25 KTS	HAR 17 SWELL DIRECTION					H	T	CLOUD	6 AMT	8	WEATHER 03	
0	10.13	32.230			0	10.13	32.23			24.80	316.5	0
10	10.10	32.233			10	10.10	32.24			24.81	316.0	.032
40	10.11	32.235			20	10.10	32.23			24.80	316.4	.063
50	8.59	32.768			30	10.11	32.23			24.80	316.6	.095
60	8.03	32.866			50	8.59	32.76			25.46	254.7	.152
80	7.90	33.134			75	7.93	33.05			25.78	224.5	.212
99	7.86	33.568			100	7.86	33.57			26.20	184.7	.263
124	7.81	33.818			150	7.65	33.90			26.49	158.2	.349
149	7.66	33.899			200	7.13	35.98			26.63	145.6	.425
198	7.15	33.980			250	8.54	34.00					
NH-45	44 39.7 N	125 5.7 W	DATE 16 DEC 64	1415 GCT	WTRE 15	DRY 38.0	WET 33.0					
WIND DIRECTION 00 VEL 25 KTS	HAR 19 SWELL DIRECTION					00 H 7 T 7	CLOUD	6 AMT	8	WEATHER 02		
0	7.70	32.325			0	7.70	32.33			25.25	273.8	0
10	10.33	32.294			10	10.33	32.30			24.82	315.2	.029
40	10.15	32.305			20	10.27	32.30			24.83	314.4	.061
50	8.56	32.641			30	10.21	32.30			24.84	313.3	.092
60	8.70	33.105			50	8.56	32.85			25.53	268.1	.148
70	8.50	33.300			75	8.42	33.35			25.96	208.7	.206
100	8.12	33.606			100	8.12	33.61			26.19	185.7	.255
125	7.91	33.824			150	7.55	33.88			26.49	158.2	.341
150	7.54	33.876			200	7.20	33.97			26.61	147.7	.417
200	7.20	33.968			250	8.54	34.00			26.72	137.6	.488

OBSERVED

INTERPOLATED

DERIVED

D	T°C	S‰	O ₂ ml/l	PO ₄ =	Z	T	S	O ₂	PO ₄ =	σ _T	δ × 10 ⁶	Δ D
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NH45-2 44 40.5 N 125 5.5 W DATE 18 DEC 64 1721 GCT WTRF 02 DRY 47.0 WET 41.0
WIND DIRECTION 23 VEL 12 KTS BAR 03 SWELL DIRECTION 23 H 3 T 4 CLOUD 6 AMT 8 WEATHER 03

0	9.74	32.287			0	9.74	32.29			24.90	306.8	0
10	9.77	32.281			10	9.77	32.29			24.90	307.2	.031
40	9.75	32.280			20	9.76	32.28			24.90	307.6	.061
50	9.06	32.624			30	9.76	32.28			24.90	307.7	.092
60	8.65	33.010			50	9.05	32.63			25.28	271.6	.150
75	8.36	33.384			75	8.36	33.39			25.98	205.2	.210
98	8.02	33.651			100	7.99	33.66			26.25	179.7	.258
123	7.65	33.777			150	7.43	33.89			26.51	155.9	.342
147	7.45	33.880			200	7.03	33.96			26.62	145.8	.417
196	7.06	33.963			250	6.54	34.00			26.72	137.6	.488

NH-25R 44 39.1 N 124 38.4 W DATE 18 DEC 64 2255 GCT WTRF 10 DRY 48.0 WET 43.0
WIND DIRECTION 21 VEL 28 KTS BAR 00 SWELL DIRECTION 21 H 6 T 8 CLOUD 6 AMT 8 WEATHER 02

0	10.26	32.456			0	10.26	32.46			24.95	301.9	0
10	10.26	32.444			10	10.26	32.45			24.94	302.9	.030
30	10.27	32.468			20	10.26	32.45			24.94	303.3	.061
60	10.35	32.575			30	10.27	32.45			24.95	303.1	.091
80	9.85	32.988			50	10.32	32.49			24.97	301.4	.151
90	8.66	33.166			75	10.11	32.89			25.31	269.1	.223
100	8.36	33.307			100	8.36	33.31			25.92	211.3	.283
125	8.11	33.758			150	7.82	33.89			26.46	160.9	.376
150	7.81	33.890			200	7.24	33.13			25.94	210.7	.469
200	7.24	33.128			250	6.54	34.00			26.72	137.6	.556

TABLE III. Supplementary Observations of Surface Temperature and Salinity.

Date	Time	Latitude	Longitude	Temp °C	Sal. ‰		Date	Time	Latitude	Longitude	Temp °C	Sal. ‰
1962		GMT					1962		GMT			
Jan 9	1120	44° 39. 1'	125° 21. 0'	10. 0	32. 45		Apr 3	0435	44° 39. 1'	125° 21. 0'	9. 2	32. 66
Jan 9	1600	44° 39. 2'	125° 49. 2'	9. 9	32. 43		Apr 3	0807	44° 39. 1'	125° 49. 3'	9. 4	32. 70
Jan 9	2010	44° 39. 1'	126° 17. 4'	10. 0	32. 44		Apr 3	1158	44° 39. 1'	126° 17. 2'	9. 2	32. 58
Jan 10	0018	44° 39. 1'	126° 44. 9'	9. 6	32. 42		Apr 3	1600	44° 39. 1'	126° 45. 0'	9. 3	32. 61
Jan 10	0444	44° 39. 1'	127° 12. 3'	9. 7	32. 47		Apr 3	1930	44° 39. 1'	127° 10. 3'	9. 3	32. 58
Jan 10	0812	44° 39. 1'	127° 40. 9'	9. 9	32. 44		Apr 3	2115	44° 38. 8'	127° 21. 2'	9. 5	32. 59
Jan 10	0852	44° 49. 8'	127° 56. 0'	10. 5	32. 46		Apr 4	0303	44° 49. 8'	127° 56. 1'	9. 2	32. 58
Jan 10	1404	45° 05. 0'	127° 58. 0'	10. 4	32. 44		Apr 4	0405	44° 59. 3'	127° 57. 3'	9. 3	32. 58
Jan 10	1810	45° 20. 5'	127° 50. 9'	10. 1	32. 43		Apr 4	0800	45° 21. 5'	127° 59. 0'	9. 3	32. 58
Jan 10	1920	45° 20. 5'	128° 00. 5'	10. 7	32. 44		Apr 4	0915	45° 32. 3'	128° 01. 0'	9. 3	32. 50
Jan 10	2326	45° 53. 3'	128° 02. 3'	10. 5	32. 50		Apr 4	1307	45° 53. 2'	128° 02. 4'	9. 1	32. 59
Jan 11	0052	46° 04. 0'	128° 03. 0'	10. 0	32. 49		Apr 4	1425	46° 04. 0'	128° 03. 0'	8. 6	32. 59
Jan 11	0506	46° 14. 5'	127° 50. 0'	9. 8	32. 49		Apr 4	1813	46° 14. 5'	127° 49. 7'	9. 0	32. 57
Jan 11	0917	46° 14. 4'	127° 20. 8'	9. 8	32. 45		Apr 4	2145	46° 14. 4'	127° 20. 6'	10. 0	32. 57
Jan 11	1357	46° 14. 3'	126° 41. 6'	10. 5	32. 48		Apr 5	0152	46° 14. 4'	126° 52. 0'	9. 6	32. 55
Jan 11	1800	46° 14. 4'	126° 22. 5'	9. 8	32. 47		Apr 5	0545	46° 14. 5'	126° 23. 0'	9. 4	32. 59
Jan 11	2150	46° 14. 4'	125° 54. 5'	9. 2	32. 44		Apr 5	0858	46° 14. 4'	125° 55. 5'	9. 3	32. 57
Jan 12	0319	46° 14. 4'	125° 25. 1'	9. 2	32. 48							
Jan 12	1800	46° 03. 0'	124° 07. 3'	7. 5	23. 87							
Jan 12	1900	45° 53. 9'	124° 07. 2'	8. 9	-----							
Jan 12	2000	45° 44. 2'	124° 06. 7'	9. 0	31. 44							
Jan 12	2100	45° 33. 7'	124° 07. 7'	9. 1	31. 85							
Jan 12	2200	45° 23. 2'	124° 07. 5'	8. 8	31. 26							
Jan 12	2300	45° 13. 8'	124° 08. 1'	9. 0	31. 29							
Jan 12	2400	45° 03. 7'	124° 06. 9'	9. 0	31. 89							
Jan 13	0100	44° 53. 9'	124° 07. 9'	8. 8	31. 85							
Jan 13	0200	44° 50. 0'	124° 08. 2'	8. 8	31. 53							
Jan 13	0500	44° 32. 4'	124° 07. 0'	8. 9	-----							
Jan 13	0600	44° 23. 0'	124° 10. 5'	8. 8	-----							
Jan 13	0700	44° 13. 0'	124° 13. 3'	8. 9	-----							
Jan 13	0800	44° 03. 8'	124° 15. 6'	9. 3	-----							
Jan 13	0900	43° 54. 2'	124° 18. 2'	9. 4	-----							
Jan 13	1000	43° 45. 0'	124° 21. 2'	9. 1	-----							
Jan 13	1100	43° 36. 1'	124° 24. 0'	9. 1	-----							
Jan 13	1200	43° 26. 5'	124° 26. 8'	9. 0	-----							
Jan 14	0140	43° 20. 5'	125° 38. 0'	9. 3	-----							
Jan 14	0607	43° 20. 5'	126° 05. 3'	9. 9	-----							
Jan 14	1005	43° 20. 5'	126° 32. 1'	10. 0	-----							
Jan 14	1425	43° 20. 4'	126° 59. 4'	10. 6	-----							
Jan 14	1856	43° 20. 6'	127° 26. 5'	9. 2	-----							
Jan 14	2342	43° 20. 5'	127° 54. 2'	10. 2	-----							
Feb 4	0550	44° 39. 1'	125° 22. 0'	10. 0	32. 565							
Feb 4	1005	44° 39. 5'	125° 49. 5'	9. 6	32. 598							
Feb 4	1600	44° 39. 1'	126° 17. 0'	9. 6	32. 512							
Feb 4	2010	44° 39. 5'	126° 45. 2'	9. 5	32. 487							
Feb 4	2225	44° 39. 0'	127° 13. 2'	9. 5	-----							
Feb 5	0420	44° 39. 2'	127° 46. 0'	9. 7	32. 516							
Feb 5	1841	44° 39. 1'	125° 35. 0'	9. 8	32. 578							
Feb 5	1953	44° 39. 7'	125° 21. 2'	9. 9	32. 548							
Feb 6	0240	44° 39. 1'	124° 52. 9'	9. 2	32. 533							
Mar 8	1610	43° 20. 5'	125° 38. 0'	9. 5								
Mar 8	1808	43° 20. 5'	126° 05. 2'	9. 7								
Mar 9	0025	43° 30. 4'	126° 18. 5'	9. 2								
Mar 9	0215	43° 40. 7'	126° 16. 0'	9. 2								
Mar 9	0405	43° 50. 0'	126° 14. 0'	8. 9								
Mar 27	1400	43° 21. 0'	125° 14. 5'	9. 2	32. 70							
Mar 27	1500	44° 03. 6'	125° 07. 8'	9. 2	32. 68							
Mar 27	1600	43° 55. 9'	124° 59. 5'	9. 3	32. 74							
Mar 27	1700	43° 48. 8'	124° 53. 0'	9. 2	32. 70							
Mar 27	1807	43° 41. 8'	124° 46. 3'	9. 3	32. 69							
Mar 27	1900	43° 32. 5'	124° 39. 6'	9. 3	32. 62							
Mar 27	2000	43° 24. 0'	124° 31. 6'	9. 7	29. 66							
Mar 28	1235	43° 20. 5'	125° 38. 1'	9. 5	32. 79							
Mar 29	0300	44° 05. 1'	124° 46. 0'	9. 3	32. 67							
Mar 29	0400	44° 06. 7'	124° 37. 0'	9. 4	31. 58							
Mar 29	0500	44° 14. 8'	124° 29. 5'	9. 4	32. 37							
Mar 29	0600	44° 21. 9'	124° 22. 0'	9. 4	31. 74							
Mar 29	0700	44° 29. 0'	124° 16. 0'	9. 2	31. 27							
Mar 29	0800	44° 39. 9'	124° 09. 2'	9. 2	31. 34							
June 5	0733	44° 39. 1'	125° 20. 5'			13. 0						
June 5	1235	44° 39. 1'	125° 49. 0'			13. 4						
June 5	1610	44° 39. 1'	126° 17. 0'			12. 8						
June 5	1956	44° 39. 4'	126° 44. 8'			12. 2						
June 6	0005	44° 39. 1'	127° 13. 2'			12. 0						
June 6	0125	44° 39. 1'	127° 41. 0'			11. 9						
June 6	0752	44° 49. 6'	127° 56. 0'			11. 8						
June 6	0900	45° 00. 3'	127° 57. 0'			11. 6						
June 6	1245	45° 21. 5'	127° 59. 0'			11. 3						
June 6	1400	45° 32. 3'	128° 00. 6'			11. 4						
June 6	1738	45° 50. 7'	128° 02. 3'			12. 0						
June 6	1853	46° 03. 9'	128° 03. 0'			12. 6						
June 6	2233	46° 14. 4'	127° 49. 5'			13. 6						
June 7	0200	46° 14. 4'	127° 20. 8'			13. 0						
June 7	0512	46° 14. 5'	126° 51. 8'			12. 1						
June 7	0900	46° 14. 4'	126° 22. 5'			12. 0						
June 7	1120	46° 14. 4'	125° 54. 0'			11. 8						
June 7	1530	46° 14. 2'	125° 25. 0'			12. 5						
June 8	1100	46° 08. 9'	125° 05. 1'			13. 0						
June 8	1200	46° 00. 2'	124° 59. 4'			13. 6						
June 8	1300	45° 51. 1'	124° 54. 8'			12. 2						
June 8	1400	45° 41. 9'	124° 48. 5'			13. 6						
June 8	1500	45° 37. 6'	124° 43. 7'			13. 6						
June 8	1600	45° 24. 0'	124° 37. 0'			13. 7						
June 8	1700	45° 15. 4'	124° 31. 8'			13. 7						
June 8	1800	45° 06. 4'	124° 27. 4'			13. 1						
June 8	1900	44° 57. 7'	124° 21. 5'			11. 6						
June 8	2000	44° 48. 8'	124° 12. 2'			11. 4						
June 8	2107	44° 38. 5'	124° 06. 2'			9. 7						
June 11	1930	44° 16. 2'	124° 10. 1'			8. 6						
June 11	2030	44° 17. 4'	124° 11. 9'			10. 3						

Date	Time	Latitude	Longitude	Temp. ^o C	Sal. %		Date	Time	Latitude	Longitude	Temp. ^o C	Sal. %
1962	GMT						1962	GMT				
June 11	2130	44° 07. 8'	124° 15. 6'	9. 0	33. 534		July 23	1730	44° 46. 0'	124° 08. 4'	9. 8	33. 84
June 11	2230	43° 57. 8'	124° 19. 7'	11. 5	32. 376		July 23	1830	44° 54. 5'	124° 11. 2'	10. 5	32. 60
June 11	2330	43° 47. 4'	124° 21. 0'	11. 5	32. 117		July 23	1930	45° 02. 7'	124° 12. 2'	11. 5	32. 43
June 12	0030	43° 37. 2'	124° 24. 5'	9. 8	32. 564		July 23	2030	45° 10. 8'	124° 12. 2'	12. 4	32. 35
June 12	0130	43° 26. 5'	124° 27. 0'	9. 1	33. 569		July 23	2130	45° 18. 8'	124° 13. 7'	14. 0	31. 74
June 12	1435	43° 20. 7'	125° 38. 2'	12. 4	31. 182		July 23	2230	45° 26. 9'	124° 12. 5'	14. 1	31. 49
June 12	1830	43° 20. 6'	126° 05. 2'	13. 0	31. 187		July 23	2330	45° 35. 1'	124° 11. 5'	14. 5	31. 14
June 12	2238	43° 20. 5'	126° 32. 2'	13. 4	31. 302		July 24	0030	45° 43. 0'	124° 11. 4'	15. 2	28. 91
June 13	1130	43° 20. 7'	127° 54. 0'	12. 4	37. 751		July 24	0130	45° 51. 9'	124° 12. 0'	14. 6	28. 73
June 13	1607	43° 10. 8'	128° 05. 6'	12. 4	32. 762		July 24	0235	46° 00. 5'	124° 12. 5'	12. 8	30. 58
June 13	1723	43° 00. 5'	128° 03. 5'	12. 5	32. 676		July 24	0330	46° 08. 2'	124° 13. 0'	12. 4	
June 13	1835	42° 50. 6'	128° 01. 6'	12. 6	32. 681		July 24	1530	46° 15. 2'	125° 14. 2'	15. 4	32. 35
June 13	2234	42° 30. 8'	127° 58. 0'	12. 5	32. 700		July 25	0315	46° 14. 5'	126° 51. 5'	15. 8	32. 23
June 13	2355	42° 20. 5'	127° 56. 2'	12. 5	32. 694		July 25	0718	46° 14. 4'	127° 20. 8'	15. 6	32. 35
June 14	0104	42° 10. 5'	127° 54. 2'	12. 5	32. 762		July 25	1120	46° 14. 4'	127° 49. 5'	15. 0	32. 58
June 14	0735	42° 00. 0'	127° 40. 0'	12. 6	32. 789		July 25	1510	46° 03. 8'	128° 03. 0'	15. 6	32. 24
June 14	1945	42° 00. 0'	127° 13. 2'	13. 1	32. 685		July 25	1640	45° 53. 2'	128° 02. 5'	15. 7	32. 15
June 15	0020	42° 00. 0'	126° 45. 8'	13. 1	32. 604		July 25	2012	45° 31. 8'	128° 00. 5'	15. 9	31. 97
June 15	1110	42° 00. 0'	125° 53. 0'	13. 0	32. 698		July 25	2120	45° 21. 3'	127° 59. 8'	16. 2	31. 61
June 15	1530	42° 00. 0'	125° 26. 5'	13. 0	31. 892		July 26	0100	45° 00. 5'	127° 56. 7'	16. 6	31. 18
June 16	1203	42° 01. 1'	125° 01. 0'	11. 2	32. 508		July 26	0215	44° 49. 8'	127° 55. 6'	16. 7	30. 98
June 16	1302	42° 06. 5'	125° 07. 2'	10. 8	32. 583		July 26	0615	44° 39. 5'	127° 41. 0'	16. 7	31. 08
June 16	1401	42° 11. 6'	125° 00. 0'	10. 5	32. 571		July 26	1047	44° 39. 5'	127° 13. 0'	16. 6	31. 39
June 16	1500	42° 17. 5'	124° 54. 5'	9. 8	32. 642		July 26	1510	44° 39. 5'	126° 45. 3'	16. 6	1. 14
June 16	1600	42° 24. 0'	124° 48. 8'	9. 5	33. 266		July 26	1915	44° 39. 5'	126° 17. 3'	16. 7	30. 47
June 16	1700	42° 29. 3'	124° 43. 3'	9. 2	33. 410		July 26	2335	44° 39. 5'	125° 49. 5'	16. 1	31. 27
June 16	1801	42° 36. 8'	124° 43. 2'	9. 5	33. 496		July 27	0405	44° 39. 4'	125° 20. 5'	14. 2	32. 10
June 16	1900	42° 45. 5'	124° 42. 2'	9. 2	33. 619							
June 16	2000	42° 52. 8'	124° 38. 6'	9. 0	33. 673							
June 16	2100	43° 00. 8'	124° 37. 4'	10. 5	32. 780							
June 16	2200	43° 08. 6'	124° 35. 6'	11. 5	32. 941							
June 16	2300	43° 15. 9'	124° 30. 0'	11. 5	32. 227							
June 16	2400	43° 25. 2'	124° 26. 4'	11. 2	33. 203							
June 17	0100	43° 32. 2'	124° 24. 4'	10. 7	32. 610							
June 17	0158	43° 40. 4'	124° 22. 7'	10. 4	32. 640							
June 17	0259	43° 48. 6'	124° 20. 4'	10. 3	32. 788							
June 17	0400	43° 59. 3'	124° 20. 0'	9. 9	32. 751							
June 17	0500	44° 06. 0'	124° 16. 7'	10. 1	33. 094							
June 17	0600	44° 15. 2'	124° 13. 5'	10. 9	33. 463							
June 17	0700	44° 24. 7'	124° 11. 5'	11. 5	33. 460							
June 17	0800	44° 33. 8'	124° 08. 5'	10. 5	33. 656							
June 28		43° 50. 0'	125° 00. 0'		31. 74							
June 29		44° 03. 0'	125° 22. 0'		31. 56							
June 29		44° 17. 0'	125° 44. 0'		30. 32							
June 29		44° 31. 0'	126° 07. 0'		31. 38							
June 30		44° 45. 0'	126° 30. 0'		31. 44							
June 30		44° 52. 0'	126° 07. 0'		29. 49							
June 30		45° 00. 0'	125° 45. 0'		30. 04							
June 30		45° 08. 0'	125° 22. 0'		31. 00							
July 1		45° 15. 0'	125° 10. 0'		31. 44							
July 1		45° 24. 0'	125° 22. 0'		31. 94							
July 1		45° 32. 0'	125° 45. 0'		32. 27							
July 1		45° 41. 0'	126° 07. 0'		32. 56							
July 1		45° 50. 0'	126° 30. 0'		32. 57							
July 2		45° 56. 0'	125° 56. 0'		32. 10							
July 2		46° 00. 0'	125° 30. 0'		32. 11							
July 2		46° 00. 0'	126° 06. 0'		32. 55							
July 2		46° 00. 0'	127° 00. 0'		32. 65							
July 3		45° 40. 0'	127° 00. 0'		31. 04							
July 3		45° 20. 0'	127° 00. 0'		30. 61							
July 3		45° 00. 0'	127° 00. 0'		29. 88							
July 3		44° 40. 0'	127° 00. 0'		31. 94							
July 3		44° 20. 0'	127° 00. 0'		32. 27							
July 4		44° 00. 0'	127° 00. 0'		32. 68							
July 4		43° 40. 0'	127° 00. 0'		32. 60							
July 4		43° 20. 0'	127° 00. 0'		32. 45							
July 4		43° 00. 0'	127° 00. 0'		31. 04							
July 4		42° 40. 0'	127° 00. 0'		31. 19							
July 5		42° 20. 0'	127° 00. 0'		31. 64							
July 5		42° 00. 0'	127° 00. 0'		31. 83							
July 5		42° 00. 0'	126° 35. 0'		32. 59							
July 5		42° 00. 0'	126° 10. 0'		32. 18							
July 5		42° 00. 0'	125° 45. 0'		32. 10							
July 6		42° 00. 0'	125° 20. 0'		32. 27							
July 6		42° 15. 0'	125° 37. 0'		31. 86							
July 6		42° 30. 0'	125° 54. 0'		32. 03							
July 7		42° 45. 0'	126° 12. 0'		31. 61							
July 7		43° 00. 0'	126° 30. 0'		30. 89							
July 7		43° 12. 0'	126° 08. 0'		31. 00							
July 7		43° 24. 0'	125° 35. 0'		31. 35							
July 7		43° 36. 0'	125° 22. 0'		31. 60							

Date	Time	Latitude	Longitude	Temp °C	Sal. ‰
1962	GMT				
Oct 16	1700	44°39.1'	125°21.0'	12.3	
Oct 16	2348	44°39.0'	126°17.4'	13.2	
Oct 17	0430	44°50.0'	126°31.4'	13.8	
Oct 17	0600	45°00.5'	126°32.0'	14.2	
Oct 17	0742	45°11.5'	126°33.0'	14.0	
Oct 17	0845	45°21.2'	126°33.7'	14.1	
Oct 17	1000	45°31.5'	126°34.2'	14.0	
Oct 17	1110	45°42.2'	126°35.0'	14.1	
Oct 17	1228	45°52.8'	126°35.6'	13.9	
Oct 17	1342	46°03.0'	126°36.4'	13.1	
Oct 17	1845	46.14.7'	126°23.0'	12.9	
Oct 17	2240	46°14.4'	125°53.8'	12.9	
Oct 18	0200	46°14.4'	125°25.0'	12.9	
Oct 22	1700	44°36.8'*	124°04.6'	12.6	32.04
Oct 22	1800	44°27.0'	124°10.0'	12.9	32.34
Oct 22	1900	44°18.0'	124°14.2'	13.0	32.42
Oct 22	2000	44°08.0'	124°16.2'	13.2	32.37
Oct 22	2100	43°58.6'	124°19.7'	13.3	32.51
Oct 22	2200	43°49.5'	125°22.1'	13.2	32.61
Oct 22	2400	43°30.5'	124°29.0'	13.5	32.61
Oct 23	0100	43°20.5'	124°31.7'	13.1	32.64
Oct 23	0200	43°10.5'	124°35.0'	12.7	32.64
Oct 23	0300	43°00.5'	124°38.0'	12.5	32.81
Oct 23	0400	42°49.4'	124°41.9'	12.0	32.98
Oct 23	0500	42°40.0'	124°40.5'	10.6	33.47
Oct 23	0600	42°32.3'	124°37.9'	11.2	33.29
Oct 23	0700	42°23.5'	124°33.3'	11.3	33.09
Oct 23	0800	42°14.5'	124°30.4'	11.5	33.10
Oct 23	0900	42°06.4'	124°26.7'	11.8	33.04
Oct 24	0455	42°00.0'	125°26.5'	12.0	32.90
Oct 24	1545	41°59.8'	126°45.6'	13.8	32.89
Oct 24	1905	42°00.0'	127°13.0'	13.5	32.91
Oct 24	2316	42°00.0'	127°39.8'	12.7	33.05
Oct 25	1135	42°00.0'	126°19.4'	14.1	
Oct 25	1500	42°00.2'	125°53.4'	13.2	32.80
Oct 25	1900	42°12.0'	125°36.2'	14.1	32.83
Oct 25	2000	42°21.8'	125°32.0'	13.9	32.84
Oct 25	2100	42°32.5'	125°27.0'	13.5	32.86
Oct 25	2200	42°42.2'	125°25.5'	12.8	32.74
Oct 25	2300	42°51.6'	125°20.3'	12.7	32.81
Oct 25	2400	43°00.5'	125°16.9'	12.8	32.84
Oct 26	0100	43°10.2'	125°12.9'	12.7	32.84
Oct 26	0400	43°28.0'	125°05.0'	13.3	32.58
Oct 26	0500	43°35.0'	125°01.6'	12.9	32.61
Oct 26	0600	43°43.2'	124°53.6'	13.1	32.65
Oct 26	0700	43°51.4'	124°46.5'	12.9	32.69
Oct 26	0800	43°59.6'	124°38.9'	13.1	32.69
Oct 26	0900	44°07.0'	124°30.9'	13.1	32.59
Oct 26	1000	44°16.1'	124°25.5'	13.0	32.39
Oct 26	1100	44°24.0'	124°18.1'	12.9	32.34
Oct 26	1200	44°30.7'	124°13.0'	13.1	32.17
Oct 26	1245	44°35.6'	124°07.9'	13.1	32.90
Dec 17	1321	44°39.0'	125°21.1'	11.4	32.54
Dec 17	1815	44°39.2'	125°49.0'	11.4	32.57
Dec 17	2204	44°39.1'	126°17.1'	11.7	32.53
Dec 18	0225	44°39.2'	126°44.3'	11.6	32.54
Dec 18	0620	44°39.2'	127°13.1'	11.7	32.55
Dec 18	1000	44°39.1'	127°41.0'	11.7	32.59
Dec 18	1445	44°49.7'	127°54.0'	11.4	32.59
Dec 18	1600	45°00.9'	127°57.0'	11.7	32.58
Dec 18	1945	45°21.8'	127°59.9'	11.5	32.57
Dec 18	2100	45°32.0'	128°00.3'	11.6	32.58
Dec 18	2220	45°42.5'	128°01.5'	11.6	32.52
Dec 18	2328	45°53.4'	128°02.3'	11.8	32.53
Dec 19	0045	46°03.6'	128°03.0'	11.1	32.53
Dec 19	0500	46°14.4'	127°49.0'	11.1	
Dec 19	0955	46°14.1'	127°20.5'	11.2	32.59
Dec 19	1420	46°14.4'	126°46.8'	10.6	32.46
Dec 19	1825	46°14.4'	126°22.7'	11.0	32.44
Dec 19	2201	46°14.4'	125°53.8'	11.1	32.46
Dec 19	0320	46°14.1'	125°24.5'	10.7	32.40
Dec 27	1600	44°36.8'*	124°04.6'	10.3	
Dec 27	1700	44°28.5'	124°09.7'	10.3	
Dec 27	1800	44°20.0'	124°12.0'	10.6	
Dec 27	1900	44°11.5'	124°14.5'	10.3	
Dec 27	2000	44°11.8'	124°15.8'	11.3	
Dec 27	2100	43°52.6'	124°18.5'	11.0	
Dec 27	2200	43°43.3'	124°20.8'	10.9	
Dec 27	2300	43°34.0'	124°25.3'	10.8	
Dec 27	2400	43°24.8'	124°28.0'	11.1	
Dec 28	1425	43°20.5'	125°38.0'	11.3	
Dec 29	0225	43°20.5'	126°59.2'	11.7	
* Entrance to Yaquina Bay					

Date	Time	Latitude	Longitude	Temp °C	Sal. ‰
1963	GMT				
Feb 22	1217	44°39.1'	125°21.0'	10.6	32.57
Feb 22	1640	44°39.1'	125°49.2'	10.4	32.57
Feb 22	2005	44°39.1'	126°17.1'	10.6	32.61
Feb 23	0205	44°39.2'	126°44.8'	10.5	32.59
Feb 23	0600	44°39.1'	127°12.8'	10.4	32.61
Feb 23	0720	44°39.1'	127°40.8'	10.6	32.67
Feb 23	1420	44°48.6'	127°57.0'	10.3	32.54
Feb 23	1535	45°00.5'	127°57.2'	10.1	32.56
Feb 23	1916	45°21.5'	128°00.0'	10.2	32.53
Feb 23	2033	45°32.0'	128°00.2'	10.2	32.55
Feb 24	0025	45°53.4'	128°02.2'	10.2	32.53
Feb 24	0145	46°03.7'	128°03.0'	10.4	32.52
Feb 24	0955	46°14.4'	127°20.7'	10.0	32.53
Feb 24	1400	46°14.5'	126°52.0'	10.8	32.54
Feb 24	1820	46°14.7'	126°23.0'	9.9	32.56
Feb 24	2700	46°14.4'	125°54.0'	9.7	32.44
Feb 25	0305	46°14.6'	125°24.5'	10.0	32.49
Feb 26	0500	46°11.4'	124°50.5'	10.3	32.47
Feb 26	0700	45°58.0'	124°53.1'	10.3	32.49
Feb 26	0900	45°41.9'	124°50.9'	10.5	32.53
Feb 26	1300	45°21.0'	124°45.0'	10.2	32.52
Feb 26	1450	45°05.0'	124°30.2'	10.7	32.61
Feb 26	1700	44°49.0	124°16.8'	10.4	32.57
Mar 1	2300	44°33.4'	124°07.5'	11.6	30.34
Mar 2	0000	44°24.4'	124°10.2'	10.6	32.04
Mar 2	0100	44°15.8'	124°13.0'	10.6	32.77
Mar 2	0200	44°06.0'	124°16.0'	10.6	32.69
Mar 2	0300	43°57.5'	124°19.7'	10.5	32.65
Mar 2	0400	43°43.8'	124°21.0'	10.7	32.88
Mar 2	0500	43°39.5'	124°24.3'	10.7	32.75
Mar 2	0600	43°31.2'	124°26.0'	10.8	32.69
Mar 2	0700	43°22.4'	124°30.5'	10.8	32.61
Mar 2	0800	43°13.2'	124°33.5'	11.4	32.53
Mar 2	0900	43°03.8'	124°36.3'	11.4	32.14
Mar 2	1000	42°54.7'	124°39.5'	11.4	32.40
Mar 2	1100	42°46.2'	124°41.8'	11.0	32.48
Mar 2	1200	42°36.9'	124°38.5'	11.0	32.41
Mar 2	1300	42°27.2'	124°34.6'	11.2	32.23
Mar 2	1400	42°17.5'	124°30.0'	11.3	32.24
Mar 2	1500	42°08.5'	124°25.2'	11.4	31.85
Mar 3	1740	42°00.0'	125°26.6'	11.2	32.74
Mar 3	2155	42°00.0'	125°53.7'	10.9	32.81
Mar 4	0635	42°00.0'	126°20.0'	10.8	32.80
Mar 4	1045	42°00.0'	126°46.0'	10.8	32.80
Mar 4	1600	42°00.0'	127°13.3'	11.1	32.69
Mar 4	1930	42°00.0'	127°39.8'	11.0	--
Mar 5	0620	42°08.7'	127°34.0'	11.0	32.59
Mar 5	0730	42°17.0'	127°40.6'	10.8	32.59
Mar 5	0840	42°25.4'	127°47.5'	11.4	32.66
Mar 5	0945	42°33.8'	127°54.5'	11.8	32.77
Mar 5	1320	42°50.5'	128°02.0'	11.2	32.75
Mar 5	1425	43°00.5'	128°04.0'	11.3	32.68
Mar 5	1540	43°10.9'	128°06.3'	11.1	32.68
Mar 5	1950	43°20.5'	127°54.0'	10.8	32.69
Mar 5	2322	43°20.5'	127°27.0'	10.6	32.61
Mar 6	0340	43°20.5'	126°59.1'	10.3	32.63
Mar 6	0740	43°20.5'	126°32.1'	10.4	32.74
Mar 6	1130	43°20.5'	126°05.0'	10.6	32.72
Mar 6	1605	43°20.5'	125°38.0'	11.1	32.82
Mar 7	1000	43°25.0'	125°21.0'	10.4	32.55
Mar 7	1100	43°31.0'	125°11.8'	10.8	32.56
Mar 7	1200	43°41.1'	125°05.1'	10.4	32.66
Mar 7	1300	43°44.5'	124°57.6'	10.2	32.64
Mar 7	1400	43°51.8'	124°50.5'	10.5	32.60
Mar 7	1500	43°59.3'	124°40.0'	10.6	32.71
Mar 7	1600	44°06.8'	124°33.4'	10.3	32.67
Mar 7	1700	44°14.6'	124°25.0'	10.6	32.62
Mar 7	2000	44°29.3'	124°14.8'	11.2	31.50
May 13	1730	Yaquina Bay entrance buoy			11.7
May 13	1830	44°26.7'	124°09.7'	12.1	31.57
May 13	1930	44°17.5'	124°13.3'	12.3	31.48
May 13	2030	44°08.0'	124°16.3'	12.4	31.36
May 13	2130	43°59.2'	124°18.8'	12.9	31.82
May 13	2230	43°49.5'	124°22.0'	12.8	31.74
May 13	2330	43°40.0'	124°25.0'	13.0	32.44
May 14	0030	43°30.8'	124°27.7'	13.5	31.23
May 14	0130	43°22.1'	124°30.2'	12.8	31.51
May 14	0230	43°10.7'	124°33.7'	13.7	29.98
May 14	0330	43°05.4'	124°35.3'	13.6	28.65
May 14	0430	42°55.0'	124°40.0'	13.3	30.72
May 14	0530	42°46.0'	124°42.0'	13.1	30.98

Date 1963	Time GMT	Latitude	Longitude	Temp. °C	Sal. ‰	Date 1963	Time GMT	Latitude	Longitude	Temp. °C	Sal. ‰
May 14	0630	42° 36. 8'	124° 38. 5'	13. 2	30. 80	July 23	0200	42° 26. 9'	124° 37. 4'	13. 3	32. 957
May 14	0730	42° 27. 4'	124° 34. 5'	13. 1	30. 98	July 23	0300	42° 16. 8'	124° 30. 9'	13. 1	33. 129
May 14	0830	42° 17. 7'	124° 32. 2'	12. 8	29. 58	July 23	0400	42° 07. 5'	124° 25. 8'	11. 1	33. 515
May 14	0930	42° 07. 9'	124° 27. 8'	12. 8	30. 65	July 24	0545	42° 00. 0'	125° 26. 8'	16. 2	32. 214
May 15	1930	42° 00. 1'	125° 53. 2'	12. 6	32. 51	July 24	0945	42° 00. 5'	125° 53. 0'	15. 8	32. 391
May 16	1515	42° 00. 0'	127° 12. 5'	12. 1	32. 67	July 24	1600	42° 00. 0'	126° 19. 6'	16. 1	32. 522
May 17	0725	42° 00. 2'	125° 27. 0'	12. 5	32. 50	July 24	2005	42° 01. 9'	126° 44. 0'	16. 9	32. 396
May 18	2105	42° 13. 5'	124° 53. 7'	13. 7	32. 13	July 25	0852	41° 58. 9'	127° 13. 0'	16. 5	--
May 18	3200	42° 21. 9'	124° 50. 9'	13. 3	32. 21	July 25	1628	42° 00. 0'	127° 39. 6'	16. 6	--
May 18	2300	42° 30. 3'	124° 49. 8	13. 2	32. 01	July 25	2100	42° 07. 0'	127° 11. 2'	17. 0	32. 526
May 19	0000	42° 37. 3'	124° 44. 9'	12. 8	32. 54	July 25	2300	42° 12. 9'	126° 56. 1'	17. 0	32. 567
May 19	0100	42° 45. 2'	124° 41. 4'	12. 5	32. 33	July 26	0100	42° 18. 2'	126° 41. 0'	17. 0	32. 191
May 19	0200	42° 52. 3'	124° 38. 8'	11. 8	32. 46	July 26	0300	42° 24. 3'	126° 33. 0'	16. 9	31. 883
May 19	0300	42° 59. 3'	124° 36. 6'	11. 8	32. 21	July 26	2330	43° 36. 0'	124° 35. 0'	13. 8	32. 028
May 19	0400	43° 07. 0'	124° 33. 8'	11. 9	32. 12	July 27	0030	43° 39. 2'	124° 31. 0'	12. 9	32. 178
May 19	0500	43° 15. 3'	124° 32. 2'	11. 9	32. 02	July 27	0130	43° 42. 7'	124° 29. 0'	12. 8	32. 352
May 20	0340	43° 20. 5'	126° 32. 0'	12. 3	32. 66	July 27	0230	43° 48. 1'	124° 24. 6'	12. 4	32. 409
May 20	0740	43° 20. 5'	126° 59. 7'	12. 4	--	July 27	0330	43° 53. 7'	124° 29. 0'	11. 9	32. 709
May 20	1500	43° 22. 5'	127° 31. 0'	11. 7	32. 64	July 27	0430	44° 00. 3'	124° 19. 3'	12. 5	32. 706
May 20	1600	43° 26. 5'	127° 21. 0'	12. 2	32. 69	July 27	0530	44° 07. 9'	124° 15. 0'	12. 7	32. 748
May 20	1700	43° 30. 4'	127° 11. 0'	12. 2	32. 70	July 27	0630	44° 15. 2'	124° 12. 7'	11. 9	33. 007
May 20	1800	43° 33. 2'	127° 00. 5'	12. 3	32. 72	July 27	0730	44° 22. 6'	124° 10. 8'	12. 1	33. 038
May 20	1900	43° 37. 6'	126° 51. 7'	12. 3	32. 70	July 27	0830	44° 39. 9'	124° 08. 6'	12. 0	33. 158
May 20	2000	43° 40. 2'	126° 40. 7'	12. 3	32. 70						
May 20	2100	43° 46. 2'	126° 37. 9'	12. 5	32. 72	Sept 10	2003	44° 21. 9'	124° 10. 9'	16. 15	32. 824
May 20	2200	43° 51. 6'	126° 29. 7'	12. 6	32. 69	Sept 10	2103	44° 14. 2'	124° 13. 3'	16. 0	32. 897
May 20	2300	43° 55. 5'	126° 20. 3'	12. 6	32. 68	Sept 10	2204	44° 05. 9'	124° 15. 7'	14. 8	32. 923
May 21	0000	44° 00. 0'	126° 09. 2'	12. 8	32. 65	Sept 10	0100	43° 57. 5'	124° 18. 1'	16. 6	32. 059
May 21	0100	44° 05. 2'	125° 59. 4'	12. 6	32. 67	Sept 11	0001	43° 48. 5'	124° 22. 1'	17. 1	32. 240
May 21	0200	44° 10. 0'	125° 49. 0'	12. 6	32. 67	Sept 11	0105	43° 40. 2'	124° 23. 6'	16. 4	32. 373
May 21	0300	44° 15. 5'	125° 40. 0'	12. 9	32. 66	Sept 11	0203	43° 31. 4'	124° 25. 7'	14. 0	33. 053
May 21	0400	44° 21. 0'	125° 30. 0'	13. 3	32. 56	Sept 11	0302	43° 22. 7'	124° 27. 6'	14. 8	33. 058
May 21	0500	44° 26. 0'	125° 19. 0'	13. 5	32. 27	Sept 11	2055	43° 20. 4'	125° 37. 2'	17. 2	31. 892
May 21	0600	44° 33. 0'	125° 08. 5'	12. 9	32. 17	Sept 12	0232	43° 20. 5'	126° 04. 8'	19. 1	31. 624
May 21	0700	44° 37. 5'	124° 58. 5'	13. 1	31. 70	Sept 12	0820	43° 20. 3'	126° 32. 3'	18. 8	31. 910
May 25	1444	44° 39. 1'	125° 21. 3'	12. 5	31. 91	Sept 12	1205	43° 21. 8'	127° 01. 8'	18. 5	31. 831
May 25	2000	44° 40. 5'	125° 45. 8'	12. 2	32. 47	Sept 12	1705	43° 20. 5'	127° 26. 6'	18. 8	31. 787
May 26	0021	44° 04. 0'	126° 18. 0'	12. 0	32. 71	Sept 12	2223	43° 20. 5'	127° 53. 9'	20. 0	31. 535
May 26	0630	44° 39. 7'	126° 45. 0'	12. 1	32. 63	Sept 13	0151	43° 10. 7'	128° 05. 7'	20. 0	31. 459
May 26	0937	44° 38. 9'	127° 12. 0'	12. 3	32. 64	Sept 13	0305	43° 00. 5'	128° 04. 2'	19. 8	31. 482
July 17	0000	44° 39. 1'	125° 21. 0'	16. 6	--	Sept 13	0416	42° 50. 8'	128° 02. 2'	19. 5	31. 602
July 17	1315	44° 39. 1'	125° 49. 2'	16. 6	--	Sept 13	0805	42° 30. 0'	127° 58. 0'	19. 3	32. 259
July 17	1815	44° 39. 1'	126° 17. 1'	16. 6	31. 134	Sept 13	0929	42° 20. 0'	127° 57. 0'	19. 4	32. 248
July 17	2100	44° 39. 9'	126° 44. 8'	16. 7	31. 555	Sept 13	1050	42° 10. 0'	127° 55. 0'	19. 4	32. 636
July 18	0140	44° 39. 1'	127° 12. 8'	16. 6	31. 583	Sept 13	2010	42° 00. 0'	127° 40. 0'	19. 4	32. 696
July 18	0653	44° 39. 8'	127° 40. 8'	16. 6	31. 562	Sept 13	0033	42° 00. 0'	127° 12. 8'	19. 4	32. 345
July 18	2010	44° 29. 2'	126° 25. 1'	17. 1	31. 465	Sept 14	0440	42° 00. 0'	126° 46. 0'	19. 1	31. 793
July 18	2127	44° 21. 5'	126° 20. 1'	17. 0	31. 396	Sept 14	0900	42° 00. 0'	126° 20. 0'	19. 2	31. 979
July 18	2250	44° 11. 0'	126° 11. 0'	17. 2	30. 835	Sept 14	1847	42° 00. 0'	125° 53. 5'	19. 2	31. 542
July 19	0250	44° 00. 0'	125° 50. 1'	16. 7	--	Sept 15	0009	42° 00. 0'	125° 27. 0'	15. 1	33. 082
July 19	0715	44° 00. 0'	125° 22. 5'	16. 2	31. 171	Sept 15	2103	42° 13. 2'	124° 55. 0'	14. 9	33. 042
July 19	1400	43° 52. 0'	124° 38. 5'	15. 8	31. 464	Sept 15	2204	42° 21. 5'	124° 52. 5'	15. 4	33. 720
July 19	1500	43° 43. 0'	124° 33. 9'	15. 1	31. 651	Sept 15	2302	42° 28. 5'	124° 49. 7'	15. 8	32. 539
July 19	1600	43° 34. 2'	124° 29. 5'	13. 4	32. 067	Sept 16	0000	42° 35. 7'	124° 49. 2'	15. 9	32. 536
July 19	1700	43° 24. 9'	124° 23. 7'	11. 7	33. 104	Sept 16	0100	42° 43. 5'	124° 48. 4'	15. 0	32. 647
July 19	1800	Buoy No. 12 Coos Bay		9. 9	33. 441	Sept 16	0200	42° 51. 8'	124° 47. 5'	13. 4	33. 349
July 20	1557	43° 20. 5'	125° 37. 6'	16. 3	31. 405	Sept 16	0305	43° 01. 0'	124° 46. 0'	15. 1	32. 399
July 20	2133	43° 20. 5'	126° 05. 4'	16. 9	--	Sept 16	0405	43° 09. 5'	124° 44. 1'	15. 2	32. 240
July 21	0232	43° 20. 5'	126° 31. 7'	17. 2	31. 440	Sept 16	0500	43° 17. 0'	124° 42. 8'	15. 5	32. 161
July 21	0640	43° 20. 5'	126° 59. 0'	17. 0	--	Sept 16	0600	43° 24. 9'	124° 39. 6'	14. 7	32. 411
July 21	1111	43° 18. 8'	127° 25. 0'	16. 6	31. 860	Sept 16	0700	43° 32. 6'	124° 37. 4'	14. 6	32. 308
July 21	1510	43° 20. 5'	127° 53. 8'	16. 6	--	Sept 16	0800	43° 40. 9'	124° 34. 0'	15. 1	32. 302
July 21	1925	43° 19. 4'	127° 50. 9'	16. 6	32. 308	Sept 16	0900	43° 47. 6'	124° 31. 3'	15. 6	32. 069
July 21	2106	43° 19. 9'	127° 26. 1'	16. 5	32. 030	Sept 16	1000	44° 04. 4'	124° 29. 3'	14. 9	31. 532
July 21	2245	43° 18. 2'	127° 23. 0'	16. 9	31. 874	Sept 16	1100	44° 05. 6'	124° 26. 5'	14. 4	31. 803
July 22	0024	43° 18. 0'	127° 13. 9'	16. 7	31. 706	Sept 16	1200	44° 13. 7'	124° 23. 1'	14. 2	32. 010
July 22	0135	43° 16. 2'	126° 58. 2'	16. 9	31. 769	Sept 16	1300	44° 20. 7'	124° 21. 9'	15. 1	32. 555
July 22	0250	43° 12. 5'	126° 46. 0'	16. 8	31. 716	Sept 16	1400	44° 27. 7'	124° 15. 1'	15. 1	32. 275
July 22	0400	43° 09. 3'	126° 33. 4'	16. 9	31. 520	Sept 16	1500	Yaquina Bay Sea Buoy			
July 22	0505	43° 05. 7'	126° 20. 0'	16. 6	31. 301	Sept 19	1252	44° 39. 1'	125° 21. 0'	17. 3	31. 598
July 22	0615	43° 02. 0'	126° 07. 5'	16. 8	31. 163	Sept 19	2340	44° 39. 1'	126° 16. 8'	17. 1	31. 641
July 22	1050	42° 59. 0'	125° 43. 5'	16. 4	31. 685	Sept 20	0420	44° 39. 1'	126° 45. 0'	18. 2	31. 550
July 22	1515	43° 00. 0'	125° 17. 0'	15. 5	31. 546	Sept 20	0615	44° 39. 1'	126° 58. 7'	18. 3	31. 521
July 22	2013	43° 00. 6'	124° 47. 4'	16. 1	31. 638	Sept 20	0908	44° 39. 1'	127° 12. 5'	17. 9	31. 665
July 22	2300	42° 53. 8'	124° 38. 5'	12. 3	33. 217	Sept 20	1323	44° 39. 1'	127° 40. 6'	17. 3	31. 939
July 23	0000	42° 43. 2'	124° 44. 8'	12. 2	33. 025	Sept 20	1807	44° 49. 7'	127° 55. 8'	18. 4	32. 299
July 23	0100	42° 35. 8'	124° 43. 5'	12. 8	33. 074	Sept 20	1930	45° 00. 5'	127° 53. 9'	18. 4	32. 225
July 23						Sept 20	2320	45° 21. 5'	127° 69. 0'	18. 2	32. 297

Date 1963	Time GMT	Latitude	Longitude	Temp. °C	Sal. ‰	Date 1963	Time GMT	Latitude	Longitude	Temp. °C	Sal. ‰
Sept 21	0035	45°36.9'	128°01.0'	18.2	32.341	Sept 27	0244	45°17.0'	124°14.0'	16.8	30.790
Sept 21	0404	45°53.3'	128°02.5'	18.1	32.449	Sept 27	0312	45°17.0'	124°18.2'	16.9	30.946
Sept 21	0524	46°04.0'	128°02.8'	18.1	32.332	Sept 27	0346	45°17.0'	124°22.4'	17.15	31.016
Sept 21	1107	46°14.9'	127°49.0'	18.1	32.329	Sept 27	0419	45°20.0'	124°22.8'	17.25	30.840
Sept 21	1510	46°14.4'	127°20.6'	17.9	31.856	Sept 27	0452	45°20.0'	124°18.6'	16.75	30.781
Sept 21	1905	46°54.5'	126°51.2'	18.2	31.836	Sept 27	0519	45°20.0'	124°14.4'	16.6	30.769
Sept 21	2240	46°14.5'	126°23.0'	17.9	31.414	Sept 27	0546	45°20.0'	124°10.1'	15.8	31.383
Sept 22	0302	46°14.4'	125°53.8'	17.7	31.858	Sept 27	0610	45°20.0'	124°05.8'	15.9	32.178
Sept 22	0905	46°14.5'	125°24.9'	17.5	31.918	Sept 27	0639	45°20.0'	124°01.5'	15.2	32.508
Sept 22	2200	46°07.6'	124°19.4'	14.8	27.928	Sept 27	0708	45°23.0'	123°59.5'	15.1	32.520
Sept 22	2300	46°01.7'	124°23.9'	15.0	29.444	Sept 27	0732	45°23.0'	124°03.2'	15.0	32.488
Sept 23	0000	45°53.5'	124°33.0'	15.9	30.756	Sept 27	0800	45°23.0'	124°07.4'	15.3	31.364
Sept 23	0100	45°49.3'	124°37.5'	16.4	30.797	Sept 27	0848	45°23.0'	124°11.2'	16.0	30.808
Sept 23	0200	45°42.4'	124°43.4'	16.9	31.267	Sept 27	0917	45°23.0'	124°16.0'	16.2	30.478
Sept 23	0300	45°37.0'	124°45.1'	17.0	31.307	Sept 27	0950	45°23.0'	124°20.2'	16.6	30.781
Sept 23	0400	45°30.3'	124°40.3'	17.2	31.373	Sept 27	1021	45°23.0'	124°24.3'	16.8	30.971
Sept 23	0500	45°22.8'	124°34.2'	17.1	31.801	Sept 27	1100	45°26.0'	124°26.1'	16.9	30.866
Sept 23	0600	45°15.0'	124°29.8'	17.6	31.773	Sept 27	1135	45°26.0'	124°21.8	16.9	30.833
Sept 23	0700	45°11.4'	124°25.0'	16.8	31.193	Sept 27	1212	45°26.0'	124°17.5'	16.2	30.740
Sept 23	0800	45°00.5'	124°20.4'	15.9	30.960	Sept 27	1242	45°26.0'	124°13.3'	15.8	31.308
Sept 23	0900	44°52.5'	124°15.4'	14.7	31.404	Sept 27	1318	45°26.0'	124°09.0'	15.5	32.180
Sept 23	1000	43°46.4'	124°14.2'	14.9	31.433	Sept 27	1342	45°26.0'	124°04.8'	15.6	32.213
Sept 25	2050	44°59.0'	124°03.2'	15.65	32.471	Sept 27	1436	45°26.0'	124°00.5'	14.9	32.496
Sept 25	2118	44°59.0'	124°07.4'	16.10	32.158	Sept 27	1503	45°29.0'	123°59.7'	14.8	32.566
Sept 25	2154	44°59.0'	124°11.9'	16.15	31.520	Sept 27	1515	45°29.0'	124°00.9'	15.8	32.500
Sept 25	2219	44°59.0'	124°15.8'	16.60	30.964	Sept 27	1540	45°29.0'	124°05.2'	15.5	32.282
Sept 25	2250	44°59.0'	124°20.0'	17.00	30.966	Sept 27	1607	45°29.0'	124°09.5'	15.4	32.481
Sept 25	2320	44°59.0'	124°24.2'	17.55	30.866	Sept 27	1633	45°29.0'	124°13.7'	16.05	30.871
Sept 25	2350	44°59.0'	124°28.5'	17.42	30.772	Sept 27	1701	45°29.0'	124°18.0'	16.5	31.004
Sept 26	0030	45°02.0'	124°32.0'	17.95	31.775	Sept 27	1727	45°29.0'	124°22.3'	16.7	31.056
Sept 26	0105	45°02.0'	124°27.8'	17.80	31.431	Sept 27	1800	45°29.0'	124°26.6'	16.8	31.033
Sept 26	0139	45°02.0'	124°23.6'	17.6	31.048	Sept 27	1822	45°29.0'	124°30.8'	17.25	31.430
Sept 26	0207	45°02.0'	124°19.4'	17.7	31.382	Sept 27	1856	45°32.0'	124°31.6'	17.2	31.253
Sept 26	0240	45°02.0'	124°15.2'	17.1	30.849	Sept 27	1935	45°32.0'	124°27.5'	16.9	31.276
Sept 26	0308	45°02.0'	124°10.9'	15.7	31.743	Sept 27	2005	45°32.0'	124°23.2'	16.6	30.952
Sept 26	0336	45°02.0'	124°06.7'	15.3	32.179	Sept 27	2034	45°32.0'	124°19.7'	16.2	30.706
Sept 26	0412	45°02.5'	124°02.5'	14.9	32.461	Sept 27	2100	45°32.0'	124°14.7'	16.2	31.009
Sept 26	0435	45°05.5'	124°01.5'	14.9	32.442	Sept 27	2127	45°32.0'	124°10.5'	15.8	32.230
Sept 26	0500	45°05.5'	124°05.7'	15.2	32.211	Sept 27	2204	45°32.0'	124°06.1'	15.8	32.339
Sept 26	0526	45°05.5'	124°09.9'	15.75	31.832	Sept 27	2243	45°32.0'	124°01.5'	15.8	32.487
Sept 26	0556	45°05.5'	124°14.1'	16.5	30.829	Sept 27	2328	45°35.0'	124°58.5'	15.9	32.255
Sept 26	0639	45°05.5'	124°18.3'	16.9	30.920	Sept 28	0005	45°35.0'	124°02.8'	15.4	32.407
Sept 26	0712	45°05.5'	124°22.3'	16.5	30.817	Sept 28	0040	45°35.0'	124°07.3'	15.3	32.373
Sept 26	0750	45°05.5'	124°26.2'	16.9	31.720	Sept 28	0105	45°35.0'	124°11.3'	15.9	31.827
Sept 26	0830	45°05.2'	124°31.0'	16.95	31.700	Sept 28	0131	45°35.0'	124°15.5'	16.0	30.986
Sept 26	0910	45°05.3'	124°35.1'	17.0	31.736	Sept 28	0200	45°35.0'	124°19.7'	16.2	30.869
Sept 26	0947	45°08.0'	124°34.0'	17.3	31.825	Sept 28	0228	45°35.0'	124°23.9'	16.8	31.122
Sept 26	1020	45°08.3'	124°30.2'	16.7	31.353	Sept 28	0254	45°35.0'	124°28.1'	17.1	31.588
Sept 26	1148	45°08.2'	124°25.4'	16.45	31.290	Sept 28	0322	45°35.0'	124°32.3'	17.1	31.500
Sept 26	1225	45°08.3'	124°21.5'	16.60	31.047	Sept 28	0405	45°38.0'	124°38.4'	16.9	31.505
Sept 26	1300	45°08.3'	124°17.5'	16.4	30.975	Sept 28	0432	45°38.0'	124°34.1'	16.7	31.125
Sept 26	1328	45°08.3'	124°13.3'	15.85	31.068	Sept 28	0500	45°38.0'	124°29.8'	16.6	31.142
Sept 26	1403	45°08.3'	124°09.0'	15.4	32.229	Sept 28	0529	45°38.0'	124°25.5'	17.0	31.485
Sept 26	1424	45°08.3'	124°04.8'	15.0	32.288	Sept 28	0600	45°38.0'	124°21.2'	16.7	31.110
Sept 26	1447	45°08.3'	123°59.7'	14.6	32.518	Sept 28	0638	45°38.0'	124°16.9	16.15	30.933
Sept 26	1535	45°11.0'	123°59.2'	14.6	32.449	Sept 28	0711	45°38.0'	124°12.6'	16.1	30.750
Sept 26	1548	45°11.0'	124°00.5'	14.7	32.354	Sept 28	0744	45°38.0'	124°08.3'	15.7	32.376
Sept 26	1612	45°11.0'	124°04.7'	15.4	32.237	Sept 28	0810	45°38.0'	124°04.0'	15.4	32.491
Sept 26	1636	45°11.0'	124°08.9'	15.7	31.798	Sept 28	0840	45°38.0'	123°59.8'	15.1	32.544
Sept 26	1703	45°11.0'	124°13.1'	15.85	31.225	Sept 28	0931	45°41.0'	124°00.7'	14.9	32.531
Sept 26	1730	45°11.0'	124°17.1'	16.5	30.880	Sept 28	1000	45°41.0'	124°05.1'	15.3	32.371
Sept 26	1757	45°11.0'	124°21.5'	17.0	31.234	Sept 28	1033	45°41.0'	124°09.3'	15.9	30.788
Sept 26	1836	45°11.0'	124°25.7'	17.5	31.618	Sept 28	1105	45°41.0'	124°13.6'	15.9	30.777
Sept 26	1910	45°11.0'	124°29.8'	17.4	31.516	Sept 28	1130	45°41.0'	124°17.8'	16.1	30.869
Sept 26	1945	45°11.0'	124°34.1'	17.5	31.816	Sept 28	1205	45°41.0'	124°22.1'	16.2	30.850
Sept 26	2104	45°14.0'	124°21.6'	17.8	31.803	Sept 28	1235	45°41.0'	124°26.4'	16.2	29.427
Sept 26	2135	45°14.0'	124°17.4'	17.8	30.834	Sept 28	1300	45°41.0'	124°30.7'	16.4	29.520
Sept 26	2208	45°14.0'	124°13.1'	17.3	30.904	Sept 28	1332	45°41.0'	124°35.0'	16.3	29.887
Sept 26	2238	45°14.0'	124°09.2'	16.7	31.072	Sept 28	1427	45°41.0'	124°39.3'	16.6	30.740
Sept 26	2337	45°14.0'	124°04.7'	16.3	31.945	Sept 28	1528	45°41.0'	124°43.6'	16.65	31.419
Sept 27	0007	45°14.0'	124°00.6'	15.6	32.463	Sept 28	1604	45°44.0'	124°46.8'	17.25	31.857
Sept 27	0108	45°17.0'	123°59.0'	15.4	32.398	Sept 28	1637	45°44.0'	124°42.5'	17.1	31.837
Sept 27	0108	45°17.0'	123°59.0'	15.4	32.398	Sept 28	1702	45°44.0'	124°38.2'	16.6	30.844
Sept 27	0120	45°17.0'	124°01.4'	15.4	32.401	Sept 28	1732	45°44.0'	124°33.9'	16.0	29.412
Sept 27	0147	45°17.0'	124°05.6'	15.9	32.134	Sept 28	1802	45°44.0'	124°29.6'	16.0	28.929
Sept 27	0220	45°17.0'	124°09.8'	15.9	31.474	Sept 28	1828	45°44.0'	124°25.3'	16.25	28.886

Date 1963	Time GMT	Latitude	Longitude	Temp. °C	Sal. ‰	Date 1963	Time GMT	Latitude	Longitude	Temp. °C	Sal. ‰
Sept 28	1904	45°44.0'	124°21.0'	15.8	29.053	Sept 29	2302	45°56.0'	124°08.6'	17.0	30.430
Sept 28	1925	45°44.0'	124°16.8'	15.8	29.459	Sept 29	2343	45°56.0'	124°04.3'	16.8	31.462
Sept 28	1955	45°43.4'	124°12.5'	16.2	30.816	Sept 30	0005	45°56.0'	124°01.0'	16.8	31.673
Sept 28	2025	45°44.0'	124°08.2'	16.3	30.785	Sept 30	0040	45°59.0'	124°00.1'	16.8	31.454
Sept 28	2105	45°44.0'	124°03.9'	16.2	30.964	Sept 30	0101	45°59.0'	124°04.4'	16.9	31.477
Sept 28	2149	45°44.0'	123°59.6'	15.9	32.448	Sept 30	0128	45°59.0'	124°08.6'	17.1	30.953
Sept 28	2220	45°47.0'	123°59.7'	15.9	32.231	Sept 30	0157	45°59.0'	124°12.9'	16.8	29.439
Sept 28	2244	45°47.0'	124°04.0'	15.7	30.872	Sept 30	0228	45°59.0'	124°17.2'	16.5	28.983
Sept 28	2317	45°47.0'	124°08.3'	16.2	30.819	Sept 30	0251	45°59.0'	124°21.5'	16.6	30.439
Sept 28	2355	45°47.0'	124°12.6'	16.4	30.193	Sept 30	0324	45°59.0'	124°25.8'	16.1	30.574
Sept 29	0022	45°47.0'	124°16.9'	16.5	29.146	Sept 30	0353	45°59.0'	124°30.1'	16.4	29.680
Sept 29	0047	45°47.0'	124°21.2'	16.6	28.823	Sept 30	0422	45°59.0'	124°34.4'	16.1	30.454
Sept 29	0120	45°47.0'	124°25.5'	16.5	28.758	Sept 30	0457	45°59.0'	124°38.7'	17.0	31.738
Sept 29	0155	45°47.0'	124°29.8'	16.0	29.860	Sept 30	0524	45°59.0'	124°43.0'	17.1	31.632
Sept 29	0224	45°47.0'	124°34.1'	16.6	30.026	Sept 30	0555	45°59.0'	124°47.3'	17.2	31.589
Sept 29	0304	45°47.0'	124°38.4'	16.3	30.902	Sept 30	0628	46°02.0'	124°46.2'	17.1	31.604
Sept 29	0341	45°47.0'	124°42.7'	16.5	31.756	Sept 30	0720	46°02.0'	124°41.9'	16.9	31.778
Sept 29	0415	45°50.0'	124°45.4'	17.2	31.811	Sept 30	0800	46°02.0'	124°37.6'	16.2	30.024
Sept 29	0452	45°50.0'	124°41.1'	17.2	31.835	Sept 30	0821	46°02.0'	124°33.3'	16.1	30.648
Sept 29	0522	45°50.0'	124°36.8'	16.5	30.217	Sept 30	0845	46°02.0'	124°29.0'	16.1	29.984
Sept 29	0548	45°50.0'	124°32.5'	16.1	29.806	Sept 30	0915	46°02.0'	124°24.8'	16.3	30.213
Sept 29	0621	45°50.0'	124°28.3'	16.2	30.261	Sept 30	0940	46°02.0'	124°20.5'	16.2	30.243
Sept 29	0651	45°50.0'	124°24.0'	16.1	30.240	Sept 30	1008	46°02.0'	124°16.2'	16.1	28.955
Sept 29	0720	45°50.0'	124°19.7	16.1	28.865	Sept 30	1030	46°02.0'	124°11.9'	16.2	29.062
Sept 29	0751	45°50.0'	124°15.4'	16.0	30.228	Sept 30	1115	46°02.0'	124°07.6'	15.9	30.590
Sept 29	0836	45°50.0'	124°11.1'	16.2	30.838	Sept 30	1148	46°02.0'	124°03.3'	15.7	31.500
Sept 29	0925	45°50.0'	124°06.8'	16.0	31.314	Sept 30	1210	46°02.0'	123°59.0'	15.2	31.501
Sept 29	1002	45°50.0'	124°02.5'	15.6	31.676	Nov 21	1851	44°39.1'	125°21.0'	11.2	32.23
Sept 29	1032	45°50.2'	123°59.4'	15.4	31.674	Nov 30	1320	44°39.1'	126°16.8'	11.6	32.33
Sept 29	1110	45°53.0'	123°59.6'	15.2	31.839	Nov 30	1635	44°39.1'	126°45.0'	11.6	--
Sept 29	1140	45°53.0'	124°03.9'	15.2	30.975	Nov 30	2130	44°39.1'	127°12.8'	11.9	32.51
Sept 29	1210	45°53.0'	124°08.1'	15.4	30.610	Dec 1	0245	44°29.1'	127°26.6'	11.9	32.49
Sept 29	1240	45°53.0'	124°12.4'	15.7	30.271	Dec 1	0840	43°59.7'	127°13.2'	12.3	--
Sept 29	1300	45°53.0'	124°16.6'	16.3	29.824	Dec 1	1310	43°59.7'	126°45.6'	12.0	32.45
Sept 29	1340	45°53.0'	124°20.8'	16.1	28.510	Dec 1	1745	43°59.7'	126°17.8'	12.2	32.45
Sept 29	1430	45°53.0'	124°25.6'	16.0	28.975	Dec 1	2115	43°59.7'	125°49.8'	12.2	--
Sept 29	1506	45°53.0'	124°29.4'	15.9	28.815	Dec 2	0237	43°59.7'	125°22.3'	12.1	32.37
Sept 29	1530	45°53.0'	124°33.6'	15.7	29.584						
Sept 29	1554	45°53.0'	124°37.8'	15.8	30.156						
Sept 29	1642	45°53.0'	124°42.0'	16.2	31.764						
Sept 29	1728	45°53.0'	124°46.2'	16.9	31.629						
Sept 29	1803	45°56.0'	124°47.2'	17.1	31.720						
Sept 29	1855	45°56.0'	124°42.9'	16.8	31.733						
Sept 29	1925	45°56.0'	124°38.6'	16.8	31.737						
Sept 29	2003	45°56.0'	124°34.3'	16.8	30.959						
Sept 29	2027	45°56.0'	124°30.0'	17.1	30.969						
Sept 29	2055	45°56.0'	124°25.7'	17.1	31.106						
Sept 29	2130	45°56.0'	124°21.5'	17.2	29.514						
Sept 29	2156	45°56.0'	124°17.2'	17.3	29.113						
Sept 29	2230	45°56.0'	124°12.9'	17.5	28.964						

Date 1964	Time GMT	Latitude	Longitude	Temp°C	Sal ‰	Date 1964	Time GMT	Latitude	Longitude	Temp°C	Sal ‰
Feb 2	2300	44°39.1'	124°10.6'	10.2	---	Apr 1	1710	44°25.7'	126°47.4'	9.4	
Feb 3	0015	44°39.1'	124°24.7'	10.7	---	Apr 1	2030	44°25.8'	126°48.2'	9.7	
Feb 3	0400	44°39.1'	124°38.9'	10.1	---	Apr 1	2400	44°26.0'	126°46.8'	9.7	
Feb 3	0715	44°39.2'	124°52.7'	10.3	---	Apr 2	0400	44°26.7'	126°48.8'	9.4	
Feb 3	1000	44°39.1'	125°06.8'	10.3	---	Apr 2	0500	44°26.7'	126°48.8'	9.2	
Feb 3	1302	44°39.1'	125°21.0'	9.6	32.456	Apr 2	0800	44°27.5'	126°48.4'	9.0	
Feb 3	1510	44°39.1'	125°35.0'	10.0	---	Apr 2	1100	44°28.5'	126°49.3'	9.6	
Feb 3	1740	44°39.1'	125°49.2'	10.2	32.496	Apr 2	1400	44°28.5'	126°49.4'	9.6	
Feb 3	1900	44°39.1'	125°35.0'	9.6	---	Apr 2	1700	44°32.0'	127°04.5'	8.5	
Feb 3	2200	44°39.1'	126°17.0'	10.2	32.424	Apr 2	1830	44°32.8'	127°11.8'	7.9	
Feb 3	2330	44°39.1'	126°30.8'	9.8	---	Apr 2	2400	44°32.9'	127°11.0'	8.5	
Feb 4	0230	44°39.1'	126°44.8'	10.1	32.655	Apr 3	0430	44°31.7'	127°09.1'	9.0	
Feb 4	0355	44°39.3'	126°58.8'	9.9	---	Apr 4	0030	44°32.1'	127°10.8'	8.7	
Feb 4	0630	44°39.2'	127°12.8'	---	32.453	Apr 9	0800	44°38.0'	125°22.0'	10.5	
Feb 4	0800	44°39.1'	127°27.8'	9.7	---	Apr 9	1300	44°26.0'	125°24.6'	9.9	
Feb 4	1130	44°39.1'	127°40.0'	9.6	32.473	Apr 9	2400	44°36.3'	125°49.3'	9.7	
Feb 4	1539	44°29.2'	127°56.3'	9.2	32.491	Apr 10	1945	44°34.0'	126°16.0'	10.4	
Feb 4	1705	44°19.6'	127°58.2'	8.8	32.545	Apr 10	2145	44°36.0'	125°46.0'	---	
Feb 4	1820	44°09.6'	128°00.0'	8.9	32.631	Apr 10	2345	44°36.8'	125°17.7'	10.1	
Feb 4	2010	43°59.6'	128°01.5'	10.0	32.544	Apr 10	0245	44°36.1'	124°56.2'	9.7	
Feb 4	2145	43°49.5'	128°03.0'	10.4	32.619	Apr 11	0345	44°34.0'	124°56.4'	9.8	
Feb 4	2245	43°39.8'	128°04.0'	10.4	32.545	Apr 11	1000	44°35.0'	124°57.5'	9.3	
Feb 5	0015	43°30.0'	128°04.5'	10.3	32.626	Apr 11	2135	43°20.4'	125°37.9'	9.8	32.274
Feb 5	0420	43°20.5'	127°54.0'	9.8	32.570	Apr 11	0130	43°20.5'	126°05.0'	10.0	32.481
Feb 5	0605	43°20.5'	127°40.0'	9.7	---	Apr 11	0745	43°20.4'	126°33.1'	10.0	---
Feb 5	0900	43°20.5'	127°27.0'	10.3	32.620	Apr 11	1207	43°20.4'	126°59.0'	9.7	32.628
Feb 5	1045	43°20.5'	127°13.0'	10.3	---	Apr 11	1715	43°20.5'	127°26.7'	9.7	32.655
Feb 5	1545	43°20.5'	126°45.7'	9.6	---	Apr 11	2240	43°20.4'	127°54.0'	10.0	32.737
Feb 5	1830	43°20.5'	126°32.0'	9.8	32.567	Apr 12	0436	43°10.5'	128°06.0'	10.2	32.799
Feb 5	2030	43°20.5'	126°18.9'	10.2	---	Apr 12	0555	43°00.6'	128°04.0'	10.1	32.765
Feb 6	0130	43°20.5'	125°51.6'	9.9	---	Apr 12	0723	42°50.6'	128°02.0'	10.3	32.753
Feb 6	0445	43°20.5'	125°37.8'	9.9	---	Apr 12	1124	42°30.2'	128°02.0'	10.5	32.781
Feb 6	0630	43°20.5'	125°24.1'	9.8	---	Apr 12	1250	42°20.0'	127°56.2'	10.6	32.779
Feb 6	1000	43°20.5'	125°10.4'	10.2	---	Apr 12	1400	42°10.0'	127°54.7'	10.2	32.745
Feb 6	1345	43°20.5'	124°56.7'	10.5	---	Apr 12	1750	42°00.0'	127°40.0'	10.2	32.695
Feb 6	1620	43°20.5'	124°43.1'	10.5	---	Apr 13	1723	42°00.0'	126°46.5'	10.2	32.457
Feb 6	2000	43°24.5'	124°23.2'	10.3	32.044	Apr 13	2215	42°00.0'	126°19.6'	10.4	32.310
Feb 6	2100	43°30.6'	124°20.0'	10.4	32.325	Apr 14	0438	42°00.0'	125°48.3'	10.3	32.372
Feb 6	2200	43°37.3'	124°16.7'	10.0	28.393	Apr 14	1105	42°01.0'	125°26.1'	10.2	32.109
Feb 6	2300	43°42.9'	124°14.0'	10.3	32.363	Apr 16	0300	43°13.5'	124°28.0'	9.7	31.270
Feb 6	2400	43°50.6'	124°13.0'	10.4	32.528	Apr 16	0400	43°20.2'	124°26.2'	9.7	30.930
Feb 7	0100	43°57.3'	124°12.9'	10.3	31.736	Apr 16	0500	43°26.7'	124°25.0'	9.5	30.200
Feb 7	0200	44°04.9'	124°12.8'	10.4	32.395	Apr 16	0600	43°32.6'	124°23.7'	9.9	29.838
Feb 7	0300	44°12.4'	124°12.7'	10.3	32.203	Apr 16	0700	43°38.2'	124°22.5'	9.7	29.706
Feb 7	0400	44°20.2'	124°13.1'	10.1	31.496	Apr 16	0800	43°44.4'	124°22.1'	9.6	29.874
Feb 7	0500	44°28.2'	124°11.8'	9.8	30.924	Apr 16	0900	43°51.0'	124°19.1'	9.5	29.985
Feb 7	0600	44°35.1'	124°09.8'	10.0	31.853	Apr 16	1000	43°57.8'	124°17.4'	10.0	29.749
July 5	1900	45°00'	125°01'	15.4	26.646	Apr 16	1100	44°03.7'	124°15.8'	9.6	29.779
July 6	0200	45°00'	125°29'	16.0	26.807	Apr 16	1200	44°10.0'	124°14.1'	9.4	29.597
July 6	0430	45°00'	126°00'	16.3	23.358	Apr 16	1300	44°15.2'	124°13.4'	9.6	30.702
July 6	1730	44°59'	126°30'	16.4	23.529	Apr 16	1500	44°28.7'	124°10.4'	9.2	30.187
July 6	2045	44°59'	126°58'	15.8	26.907	Apr 18	1300	44°39.1'	125°21.0'	9.5	31.926
July 7	0005	44°39'	127°00'	14.9	31.955	Apr 18	1700	44°39.1'	125°49.7'	9.6	---
July 7	0310	44°18'	127°00'	15.4	31.639	Apr 19	0315	44°39.1'	126°45.0'	9.7	32.389
July 7	1530	44°00'	127°01'	14.8	32.264	Apr 19	1200	44°39.1'	127°40.9'	9.5	32.612
July 7	1825	43°39'	126°59'	15.0	32.350	Apr 19	1830	44°49.7'	127°56.0'	9.3	32.588
July 7	2115	43°20'	127°01'	14.9	32.432	Apr 19	2045	45°00.2'	127°57.0'	9.0	32.598
July 10	1510	43°01'	127°00'	15.4	32.105	Apr 20	0225	45°21.4'	127°59.0'	9.0	32.577
July 10	1745	43°41'	127°00'	16.2	32.140	Apr 20	0415	45°32.0'	128°00.5'	9.1	32.486
July 10	2040	42°17'	127°00'	16.0	32.252	Apr 20	0930	45°53.5'	128°02.5'	8.8	32.439
July 10	2245	42°01'	126°59'	16.2	32.275	Apr 20	1135	46°03.9'	128°03.1'	8.8	32.445
July 11	0230	41°30'	127°00'	15.9	32.242	Apr 20	1645	46°14.4'	127°49.3'	8.6	32.545
July 11	0405	41°29'	126°31'	15.6	31.935	Apr 20	2225	46°14.3'	127°20.0'	8.9	32.523
July 11	1630	41°30'	125°56'	14.0	32.807	Apr 21	0220	46°14.4'	126°51.1'	8.6	32.342
July 11	2000	41°31'	125°27'	13.6	33.208	Apr 21	0610	46°14.4'	126°22.3'	8.5	32.347
July 11	2340	41°31'	125°00'	12.4	33.356	Apr 21	1015	46°14.4'	125°53.2'	9.0	---
July 12	0405	41°45'	125°23'	13.3	32.581	Apr 22	0600	46°14.4'	125°24.6'	9.0	32.065
July 12	1635	42°01'	125°46'	14.6	31.977	Apr 22	1700	45°44.3'	124°28.1'	9.3	30.641
July 12	2120	42°14'	126°08'	15.7	31.807	Apr 22	1800	45°37.9'	124°21.5'	9.3	30.351
July 13	0300	42°34'	126°28'	16.0	31.624	Apr 22	1900	45°31.6'	124°14.6'	9.3	29.850
July 13	1545	42°45'	126°05'	16.1	31.408	Apr 22	2000	45°24.9'	124°06.5'	9.4	30.461
July 13	1855	43°01'	125°44'	15.8	31.515	Apr 22	2100	45°16.5'	124°08.0'	9.3	29.875
July 14	0010	43°14'	125°23'	14.3	31.872	Apr 22	2200	45°08.5'	124°08.4'	9.4	30.174
July 14	0300	43°29'	124°59'	15.6	30.667	Apr 22	2300	44°58.6'	124°08.4'	9.6	30.504
July 14	1355	43°44'	125°22'	16.4	30.328	Apr 22	2400	44°48.0'	124°09.0'	9.5	31.506
July 14	1720	44°00'	125°45'	16.4	29.725	Apr 20	0855	43°20.0'	126°58.9'	16.6	31.553
July 14	2100	44°15'	126°08'	17.0	30.659	Apr 20	1500	43°20.5'	127°26.7'	16.3	32.293
July 15	0005	44°30'	126°30'	17.5	27.799	Apr 20	1912	43°20.5'	127°54.0'	16.4	32.296
July 15	0400	44°45'	126°08'	17.0	27.579	Apr 20	2308	43°29.9'	128°04.2'	16.0	32.497
July 15	1455	45°00'	125°45'	16.1	28.719	Apr 21	0525	43°47.0'	127°45.9'	15.8	32.595
July 15	1740	45°15'	125°22'	16.6	27.416						
July 15	2010	45°32'	125°00'	16.2	29.852						

Date 1964	Time GMT	Latitude	Longitude	Temp°C	Sal ‰	Date 1964	Time GMT	Latitude	Longitude	Temp°C	Sal ‰
Apr 21	0850	43°47.0'	127°18.1'	15.8	32.509	Nov 7	0720	44°39.1'	125°21.0'	12.0	---
Apr 21	1320	43°47.0'	126°50.9'	16.0	32.106	Nov 8	2025	43°20.5'	126°32.3'	12.6	---
Apr 21	1658	43°47.0'	126°23.5'	17.1	29.820	Nov 9	0015	43°20.5'	126°05.2'	12.4	---
Apr 21	2050	43°47.0'	125°56.7'	17.1	29.832	Nov 9	0345	43°20.5'	125°38.0'	12.8	---
Apr 22	0045	43°47.0'	125°28.1'	18.0	28.054	Nov 13	0805	46°14.4'	124°41.7'	11.0	---
Apr 22	0835	43°57.6'	124°49.6'	16.4	30.876	Nov 13	1210	46°14.4'	124°56.3'	10.2	---
Apr 22	1025	44°08.5'	124°52.5'	16.6	29.472	Nov. 13	1435	46°14.4'	125°10.5'	11.1	---
Apr 22	1632	44°19.3'	125°23.4'	16.8	30.077	Nov 13	1705	46°14.5'	125°25.4'	10.6	31.928
Apr 22	1945	44°19.1'	125°50.0'	17.1	28.123	Nov 13	1830	46°15.2'	125°40.0'	10.9	---
Apr 22	2320	44°19.1'	126°18.3'	17.0	29.706	Nov 13	2115	46°14.4'	125°54.0'	10.8	32.045
Apr 23	0248	44°19.2'	126°46.0'	16.2	31.952	Nov 13	2255	46°14.4'	126°08.8'	---	---
Apr 23	0600	44°19.2'	127°14.0'	15.6	32.587	Nov 14	0145	46°14.4'	126°23.0'	9.8	32.190
July 11	2100	44°45.2'	124°06.7'	14.1	30.675	Nov 14	0305	46°24.5'	126°38.0'	11.6	---
July 11	2200	44°51.8'	124°05.8'	13.5	30.376	Nov 14	0610	46°14.5'	126°52.5'	11.4	32.159
July 11	2300	44°58.5'	124°05.0'	14.8	29.255	Nov 14	0733	46°14.4'	127°07.0'	10.5	---
July 11	2400	45°04.5'	124°04.5'	15.8	28.518	Nov 14	1045	46°14.4'	127°21.0'	10.5	32.175
July 12	0100	45°11.2'	124°03.4'	14.5	29.998	Nov 14	1200	46°14.4'	127°35.8	11.4	---
July 12	0200	45°15.6'	124°02.9'	13.1	31.069	Nov 14	2100	45°17.0'	126°09.0'	12.6	32.244
July 12	0300	45°20.3'	124°02.0'	15.7	26.209	Nov 14	2200	45°09.0'	125°56.5'	12.6	32.295
July 12	0400	45°31.5'	124°01.4'	15.8	27.738	Nov 14	2300	45°02.0'	125°45.0'	12.5	32.289
July 12	0500	45°38.3'	124°01.6'	15.8	29.332	Nov 14	2400	44°54.5'	125°33.3'	12.3	32.223
July 12	0700	45°45.2'	124°01.1'	15.8	29.818	Nov 15	0220	44°39.1'	125°06.9'	11.0	---
July 12	0800	45°52.8'	124°04.4'	15.8	28.110	Nov 15	0430	44°39.0'	124°52.7'	11.8	---
July 12	0900	45°55.9'	124°08.3'	15.8	26.558	Nov 15	0620	44°39.0'	124°39.0'	10.5	---
July 12	1000	46°07.4'	124°10.8'	13.4	24.791	Nov 15	0740	44°39.0'	124°25.0'	9.8	---
July 13	0230	46°14.4'	125°25.0'	16.4	31.002	Nov 15	0915	44°39.3'	124°11.0'	10.0	---
July 13	0720	46°14.4'	125°14.4'	15.2	32.154	Nov 15	1340	44°39.0'	124°39.0'	10.5	32.237
July 13	1330	46°15.0'	126°23.1'	13.8	---	Nov 15	1630	44°39.0'	124°39.0'	10.8	32.218
July 13	1713	46°14.4'	126°51.4'	15.8	32.220	Nov 15	1848	44°39.0'	124°39.0'	10.9	32.224
July 13	2115	46°14.3'	127°20.2'	15.1	32.193	Nov 15	2130	44°39.0'	124°39.0'	10.5	32.255
July 14	0115	46°14.2'	127°49.3'	14.9	32.232	Nov 15	2350	44°39.0'	124°39.0'	10.5	32.267
July 14	0520	46°03.8'	128°03.0'	14.8	32.205	Nov 16	0105	44°39.0'	124°25.0'	11.0	---
July 14	0640	45°53.1'	128°02.8'	14.8	32.256	Nov 16	0223	44°39.0'	124°11.0'	9.9	---
July 14	1015	45°31.9'	128°00.4'	14.9	32.454						
July 14	1150	45°21.1'	127°59.2'	15.0	32.468						
July 14	1540	45°00.4'	127°57.0'	15.2	32.235						
July 14	1703	44°49.7'	127°55.8'	15.6	32.314						
July 14	2300	44°39.0'	127°41.0'	15.8	33.055						
July 15	0247	44°39.1'	127°13.0'	15.4	32.474						
July 15	0630	44°39.1'	126°45.0'	16.2	30.472						
July 15	1200	44°39.1'	126°16.9'	16.6	27.383						
July 15	1709	44°39.1'	125°49.3'	17.1	26.654						
July 15	2045	44°39.2'	125°20.5'	16.7	28.659						
July 18	2000	44°28.7'	124°08.5'	14.2	31.949						
July 18	2100	44°31.4'	124°11.6'	15.0	32.356						
July 18	2300	44°09.6'	124°14.6'	15.6	32.160						
July 18	2400	44°01.6'	124°12.1'	15.8	32.238						
July 19	0100	43°56.6'	124°18.4'	15.4	32.549						
July 19	0200	43°48.8'	124°20.7'	15.4	32.878						
July 19	2015	43°20.4'	125°38.0'	16.8	30.389						
July 19	2345	43°20.4'	126°05.4'	16.8	30.477						
July 20	0425	43°20.5'	126°32.4'	17.1	30.514						

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