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**HYDROGRAPHIC DATA
FROM OREGON WATERS
1971**

by

Bruce Wyatt, Richard Tomlinson,
William Gilbert, Louis Gordon
and Dennis Barstow

Office of Naval Research
Contract N00014-67-A-0369-0007
Project NR 083-102
NSF Grant GA 12113

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Data Report 53 Reference 72-14

May 1972

DEPARTMENT OF OCEANOGRAPHY

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OREGON STATE UNIVERSITY

Corvallis, Oregon 97331

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John V. Byrne
Chairman

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INTRODUCTION

Hydrographic Data from Oregon Waters, 1971, is the latest in a series of reports on the water masses along the Oregon coast. Reports for time periods beginning in 1955 are listed on page 9.

DATA COLLECTING AND PROCESSING

Data were collected by Oregon State University personnel aboard the R/V YAQUINA and the R/V CAYUSE. Most of the cruises were concerned with surveying hydrographic conditions along a latitudinal track at 44° 39.1'N and studying the Columbia River plume.

Most stations are identified by a letter-number code. Numerals having a prefix listed below are the distance offshore in nautical miles. Thus NH-85 is a hydrographic station 85 miles off the coast from Newport, Oregon. All stations that have other letter prefixes were numbered sequentially with the letter prefix designating either a particular station. Cruise tracks are included to facilitate location of stations.

Explanation

Letter

AH	Off Astoria, Oregon, along 46° 14.0'N
BH	Off Brookings, Oregon, along 42° 00.0'N
CH	Off Coos Bay, Oregon, along 43° 20.6'N
DB	Off Depoe Bay, Oregon, on a line between 44° 48.8'N 124° 05.4'W and 45° 00.0'N, 124° 34.6'W
FH	Off Florence, Oregon, along 43° 59.0'N
NH	Off Newport, Oregon, along 44° 39.1'N
UH	Off Umpqua River, Oregon, along 43° 39.0'N
YH	Off Yachats, Oregon, along 44° 20.0'N

Depth

Depth determinations were made by the "depth-difference" method described in the U.S. Hydrographic Office Publication 607 (1968).

Depth estimates have an approximate accuracy of 1.5 percent at 750 m depth. Depths of the second cast are followed by an asterisk if two or more casts were used as a single station. Depths followed by a letter C indicate a CTD cast. Our conductivity-temperature-depth probe was manufactured by Geodyne. Depths followed by a letter A indicate a value of 2.50 was assumed for total alkalinity for the purpose of calculating the pH temperature correction.

Temperature

Thermometers were calibrated at Oregon State University using the Oceanography Department's calibration tank. A quartz thermometer system Hewlett-Packard Model 2801A was the standard. It was calibrated against a platinum resistance thermometer and a Mueller bridge calibrated by the U.S. Bureau of Standards. Intercalibration tests were also made with the University of Washington Department of Oceanography. Comparisons of results from five thermometers from the University of Washington indicated corrections obtained from our tests averaged within 0.007°C of corrections obtained from University of Washington calibrations for the previous year. This was only a preliminary attempt at intercalibration and a more conclusive test is planned for the Oceanographic Instrumentation Center to standardize our procedures and to reduce further the errors in temperature measurements resulting from procedure, time between calibrations, and the accuracy of the two standard thermometers.

The accuracy of reduced temperature readings is believed to be $\pm 0.02^{\circ}\text{C}$ for the reversing thermometers. All sampling bottles were equipped with two reversing thermometers. Those used below 200 m also have an unprotected thermometer for determination of thermometric depth.

Salinity

Salinity was determined with an inductive salinometer, Model 11, manufactured in Australia by Industrial Manufacturing Engineers Pty. Ltd. and with a Hytech salinometer, Model 6220. The method was described by Brown and Hamon (1961). Substandard water was prepared from seawater that had been collected 100 miles off Oregon and stored for three months. Copenhagen water was used as standard seawater.

Precision Comparison of Salinometers

Eleven sets of samples at different concentrations were prepared containing six replications. Each set of replications was considered a

separate experiment. Within these six replications, three samples were analyzed with the Hytech salinometer and three were analyzed with the Australian salinometer. The hypothesis was tested that there was no difference in salinity determinations between the two salinometers. The two-tailed t-test was used (p. 100, Li 1964). For 8 of the 11 sets of samples ranging in concentration from 32‰ to 37‰, the hypothesis was accepted at the 95% confidence interval. For samples at 30‰, the hypothesis was accepted at the 99% confidence level. For sets at 15‰ and 20‰ the hypothesis was rejected at the 99% confidence level.

The standard error (standard deviation/(number of samples)^{1/2}), a measure of precision, was less for the Hytech salinometer, i.e., the Hytech was more precise. The average standard error was 0.0026‰ for the Hytech compared to 0.0015‰ for the Australian salinometer.

Accuracy of Inductive Salinometers

To obtain an estimate of accuracy for inductive salinometers in use at Oregon State University Department of Oceanography, the following experiment was conducted. Artificial seawater samples prepared by the National Oceanographic Instrumentation Center (NOIC) were accepted as the primary standard. These samples were assumed to be unbiased and precise to within ± 0.004 ‰. The samples consisted of six replications of samples from each of four salinity concentrations. The mean difference of salinity determinations for each set of six samples is given below:

NOIC Sample Concentration (‰)	Standard Error in ‰ of OSU Determinations (UNESCO Tables)
31.080	0.0001
34.248	0.0006
36.262	0.0013
39.212	0.0026

The mean standard error is 0.0012‰ which lies within the precision claimed (± 0.004 ‰) for preparation of the standard seawater.

These samples were analyzed with the Australian salinometer, but there is no difference in salinity determinations made between the Australian and the Hytech salinometer (see previous section). It is therefore concluded that both the Hytech and the Australian salinometer have an accuracy within the range of the precision for preparation of the artificial seawater.

Oxygen

Most of the oxygens were run at sea. The modified Winkler method (Strickland and Parsons, 1968) was used.

Oxygen Determination Precision

The precision of oxygen analysis was examined from seven sets of observations, each of a different concentration. Each set of observations contained seven replications. The standard error and the standard deviation were calculated for each of the sets (p. 44, Li 1964). The standard error in most cases is within the precision given by Strickland and Parsons (p. 23-26, 1968) of $0.0336/n^{1/2}$ ml/L in the range of from 0.06 to 89.6 ml/L.

Comparison of Standard Errors
for Oxygen Analysis

Number of Observations	Mean	Standard Error	Strickland and Parsons Precision
5	4.22	± 0.005 ml/L	$\pm .015$ ml/L
5	3.60	± 0.014	$\pm .015$
7	2.47	± 0.017	$\pm .013$
5	2.50	± 0.000	$\pm .015$
7	2.53	± 0.005	$\pm .013$
7	1.33	± 0.017	$\pm .013$
7	0.56	± 0.014	$\pm .013$

Automated Nutrient Analysis

The nutrient analysis procedures for cruises Y7103-E and Y7106-B have been described in detail by Atlas et al. (1971) and by Wyatt et al. (1971).

TABLE 1. Summary of Precision Estimates for Automated Nutrient Analyses

Cruise	Y7103-E			Y7106-B		
	mean	2s	no. samples	mean or range	2s	no. samples
PO ₄ (μM)	0.84	0.03	5	0.63 ^c	0.04	6 ^b
	1.74	0.06	5	2.74 ^c	0.16	6 ^b
	1.80	0.04	5	3.12	0.03	10 ^b
	2.75	0.02	5	5.28 ^c	0.04	5
	2.99	0.02	9	0.28-3.50 ^a	0.07	18 pairs
	3.03	0.03	5			
	3.26	0.06	10			
NO ₃ +NO ₂ (μM)	7.02	0.29	5	6.14 ^c	0.21	6 ^b
	8.40	0.36	5	29.25 ^c	0.43	6 ^b
	20.63	0.60	5	42.23	0.89	10 ^b
	34.33	0.43	5	44.44 ^c	0.13	6
	36.85	1.50	10	0.10-45.77 ^a	0.45	17 pairs
	38.07	0.60	10			
	37.94	0.45	5			
SiO ₄ (μM)	8.53	0.57	5	19.80 ^c	0.50	6 ^b
	13.17	0.22	5	86.68	2.24	10 ^b
	25.53	0.47	5	93.91 ^c	1.09	6 ^b
	60.58	0.89	5	192.55 ^c	1.86	6
	69.54	0.99	10	2.78-141.52 ^a	0.87	16 pairs
	72.46	2.13	5			
	79.94	1.23	10			

^aPrecision estimates calculated from a series of duplicate samples using the relationship, $s = (\sum(X_1 - X_2)^2 / 2n)^{1/2}$, where X_1 and X_2 are the values of duplicate samples, and n is the number of duplicate sets.

^bReplicate samples run interspersed among other samples, rather than consecutively.

^cStandard

Various sizes of sampling tubes were used with the Auto Analyzer® to give ranges of 0-12 μ M, 0-50 μ M and 0-200 μ M for silicate, and 0-40 μ M and 0-60 μ M for nitrate and nitrite. Sample to sample precisions were estimated for sets of replicate samples. These results are listed in Table 1.

Problems were encountered with the nitrate reduction columns used on cruise Y7103-E. The pertinent nitrate + nitrite data was corrected for column drift assuming linear changes between standards run at the beginning and end of lots of 18 samples each. Table 2 lists the samples corrected in this manner.

pH

pH values were determined according to the method described by Wyatt et al. (1970). Precision estimated for cruise Y7106-B was ± 0.01 pH units at 2σ for 5 samples.

Alkalinity

The procedure used for the alkalinity determinations has been outlined by Wyatt et al. (1971). For both Y7103-E and Y7106-B, 1.5 ml of 0.01N hydrochloric acid was used, rather than 15 ml of 0.01N acid, as specified by the technique of Anderson and Robinson (1946). The value of the activity coefficient of hydrogen ions determined by Culberson et al. (1970) was used for the reduction of the present data.

TABLE 2. Y7103-E Nitrate Nitrite Samples Corrected for Effect of Reduction Column Drift.

<u>Station</u>	<u>Sample Depth</u>
NH 5	All depths
10	"
15	"
25	"
35	0-100m
45	2m, 20m, 50m, 150m, 600m
65	All depths
85	"
DB 5	"

Computations

All hydrographic data were processed with the aid of the CDC 3300 computer. Auxiliary temperature corrections and index corrections obtained from laboratory thermometer calibrations were applied with a computer program. Property values at standard depths are determined 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 anomaly, dynamic height, and sigma-t were computed by using interpolated properties. The same computer program has been used in all Oregon State University hydrographic data reports.

Weather codes and cloud cover codes were adopted from the National Oceanographic Data Center Manual "Processing Physical and Chemical Data from Oceanographic Stations," Publication M-2 (Rev. Aug. 1964).

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TABLE 3: Cruise Dates, Stations, Observations, and Personnel for Hydrographic Cruises for 1971

CRUISE	DATE	STATIONS	OBSERVATIONS	PERSONNEL
Y7101-B	7-16 Jan.	Off Newport and Yachats, Ore. (5 to 205 miles)	Temperature, Salinity, O ₂ BT, Secchi Disc, Drift Bottles, CTD	7-16 Jan. Bruce Wyatt, Dennis Barstow, Lyndal Brixius, John Berman, Burlie Brunson, Thomas Caufield From Univ. of Washington: Gary Robinson, Stephan Lord, Walter Braithwaite
	20-29 Jan.	Off Florence, Ore. (35 to 105 miles) Off Umpqua River, Ore. (35 to 125 miles). Off Coos Bay, Ore. (25 to 85 miles) Off Brookings, Ore. (45 to 100 miles)	Same as Leg 1 plus drogue and cloud nuclei and aiken nuclei samples	From Clatsop Community College: Robert Stein, Mark Shelton, Frank Hoffman, Perry Shoemaker, James Coughlin, Robert Truitt 20-29 Jan. Bruce Wyatt, William Elliott, James Washburn, Lyndal Brixius, John Berman, Gary Rosknecht, Dan Frye, Jack Shreffler From Univ. of Washington: Charles Cox, David Boroughs, Pat McQuire, Richard Washburn, Danny Granberd. From Clatsop Community College: Richard Kerstner, Curt McNeely,
Y7101-C	30-31 Jan.	Off Newport, Ore. (5 to 45 miles)	Temperature, Salinity O ₂ , Secchi Disc, DTD, BT	Charles Miller, Chris Marlowe, Earl Krygier, Richard Miller, Hossein Emadi, Jose Canon, Enrique Carrillo, Leif Viker, Kirk Jonasson, Craig McDougall, Elizabeth Nuckolls, Joyce Gnagy, Bruce Frey, Bill Fitzgerald, Jerry Exon, Randy Yamada, Charles Moreland
C7101-G	25-29 Jan.	Off Depoe Bay, Ore. 9 miles	Temperature, Salinity, Secchi Disc, BT	June Pattullo, Dr. and Mrs. Wayne Burt, Elizabeth Strong, Mark Halsey, Henry Pittock, Glenna Pittock, Robert Bourke
C7102-C	8-9 Feb.	Off Depoe Bay, Ore. 9 miles	Temperature, Salinity, Secchi Disc, BT	Dennis Barstow, Mark Halsey, Dean Freitag
Y7103-B	6-8 March	Off Newport, Ore. (3 to 105 miles)	Temperature, Salinity CTD, BT, Drift Bottles	Lyndal Brixius, Ron Jones, John Berman, Dave Army, Dave Enfield From Univ. of Washington: Linda Mangum, Scott Cooper, David Feinberg, Douglas Hojem From Clatsop Community College: Ron Peek, Bruce Prator, Sharon Gramberg, Janie Watchorn
C7103-C	8-9 March	Off Depoe Bay, Ore., 9 miles	Temperature, Salinity, BT	Mark Halsey, Henry Pittock, John McKitterick
Y7103-C	8-14 March	Off Newport, Ore. (15 and 25 miles) Off Yachats, Florence, and Umpqua River, Ore., (5 to 105 miles)	Temperature, Salinity, CTD, BT, Drift Bottles	Lyndal Brixius, Ron Jones, John Berman, Dennis Barstow From Univ. of Washington: Karen Hillary, Nancy Cunningham, Mal Walden, Gary Andrilences.
Y7103-E	28-31 March	Off Newport, Ore. (5 to 105 miles) Off Depoe Bay, Ore. (5 to 15 miles)	Temperature, Salinity, O ₂ , BT, CTD, Secchi Disc, PO ₄ , NO ₃ , SiO ₄ , pH, Alkalinity, C-N analysis, PCO ₂ & CO ₂	Louis Gordon, Richard Tomlinson, Saul Alvarez-Borrego, John Berman, Lyndal Brixius, John Callaway, David Gossler, James Haefner, Steven Hager, Hewitt Jeter, Ron Jones, Kent Kantz, Harold O'Connors, Ed Siefert, Donald Wauchope From Scripps Institute of Oceanography: Arnold Mantyla
Y7104-B	15-21 April	Off Newport, Ore. (3 to 165 miles) Off Yachats, Ore. (25 to 145 miles) Off Florence, Ore. (35 to 105 miles) Off Umpqua River, Ore. (65 to 105 miles)	Temperature, Salinity, CTD, BT	Dennis Barstow, Lyndal Brixius, Robert Kapaun, Buck Williams From Physics Dept., OSU: David Army, Ted Van Auker From Univ. of Washington: Paul Kleckner, Rosie Evans, Carol Marsh, Cyreis Schmitt From Clatsop Community College: David Stemwedel, Vincent Zegowitz, Jon Garland, Scott Wills, George Fowler

TABLE 3 (Continued)

CRUISE	DATE	STATIONS	OBSERVATIONS	PERSONNEL
Y7106-B	12-16 June	Off Newport, Ore. (1 to 105 miles) Off Depoe Bay, Ore. (1 to 15 miles)	Temperature, Salinity, O ₂ , BT, CTD, Secchi Disc, PO ₄ , NO ₃ , SiO ₄ , pH, Alka- linity, C-N Analysis, PCO ₂ , Σ CO ₂ , Analysis of atmospheric condensation nuclei and air salt par- ticles	William Elliott, Lou Gordon, Richard Tomlinson, Dennis Barstow, Lyndal Brixius, Ron Jones, Robert Kapaun, Ed Seifert, Saul Alvarez- Borrego, Eliot Atlas, James Haefner, Hewitt Jeter, Kent Kantz, Harold O'Connors, Gary Rossknecht, David Standley, John Callaway From Scripps Institute of Oceanography: Kenneth LeVeille
C7106-E	18 June	Off Newport, Ore. (125 and 145 miles)	Temperature, Salinity, Secchi Disk, BT	Peter Becker, Mark Halsey, Douglas Coughenower, Charles Samuelson Carl First, Bruce Stoffer, John Pequegnat
Y7107-C	29 July - 2 August	Off Depoe Bay, Ore. (10 to 40 miles)	Temperature, Salinity, BT, Drogue, CTD, Secchi Disk	Lyndal Brixius, Mark Halsey, Ron Jones, Robert Kapaun, Taylor Poynter Lillie Muller, Dean Freitag, Kay Sokell, Charles Woods From Univ. of Oregon: Steve Crane From Univ. of Washington: Linda Blair, Doris Overland, Rikel Getty
C7107-E	17-18 July	Off Depoe Bay, Ore. 9 miles	Temperature, Salinity, BT	Mark Halsey, Henry Pittcock, Burlie Brunson
C7108-H	23-28 Aug.	Off Newport and Astoria, Ore. (5 to 165 miles)	Temperature, Salinity, BT, CTD	John Butler, Lyndal Brixius, Robert Kapaun, Barry Laing From Univ. of Washington: Greg Starypan
C7109-D	10-14 Sept.	Off Coos Bay, Ore. (10 to 80 miles)	Temperature, Salinity, BT	Dennis Barstow, Lyndal Brixius, David Gosser, Dan Tracy From Dept. of Fisheries & Wildlife; OSU: Clarence McNeil From Dept. of Education, OSU: Walter Mudge From Univ. of Washington: David Kingma, James VanKooten
C7110-A	2-5 Oct.	Off Newport, Ore. (3 to 155 miles)	Temperature, Salinity BT, Secchi Disk, Drift Bottles	Dennis Barstow, Lyndal Brixius, Richard Tomlinson, Ed Seifert, John Callaway From Clatsop Community College: Thomas Orr, John Brumbach, Kevin Miller, J. Robinson
C7112-C	7-8 Dec.	Off Newport, Ore. (5 to 45 miles)	Temperature, Salinity, CTD	Lyndal Brixius, James Washburn, Peter Rothlisberg, Victor Sierpina, Observer: Terry Tidwell

TABLE 4. Hydrographic Data.

OBSERVED				INTERPOLATED				COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD	
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)	
NH 5	44	39.1	N	124	10.5	W	DATE 08 JAN 71	0140	GCT	WIRE
DRY 47.4	WET 47.4	CRUISE Y71018	WIND DIRECTION 30	VEL 02	KTS	BAR 30				
SWELL DIRECTION 32	H 03	T 07	CLOUD	AMT 9	WEATHER 45					
00	8.72	31.41		0	8.72	31.42	24.38	356.0		0
50	9.11	31.60		10	10.08	32.06	24.68	328.3		.034
110	10.27	32.16		20	10.25	32.39	24.90	307.3		.066
230	10.25	32.39		30	10.08	32.52	25.03	294.7		.096
240	10.14	32.48								
350	9.93	32.62								
370	9.88	32.64								

NH 5 44 39.1 N 124 10.5 W DATE 08 JAN 71 0140 GCT WIRE
 DRY 47.4 WET 47.4 CRUISE Y71018 WIND DIRECTION 30 VEL 02 KTS BAR 30
 SWELL DIRECTION 32 H 03 T 07 CLOUD AMT 9 WEATHER 45

00	8.70	31.33		0	8.70	31.33	24.33	361.7		0
50	8.78	31.40		10	9.25	31.75	24.56	339.1		.035
120	9.49	31.90		20	10.25	32.16	24.72	324.0		.068
190	10.25	32.13								
260	10.25	32.32								
290	10.27	32.35								

NH 5 44 39.1 N 124 10.5 W DATE 08 JAN 71 0140 GCT WIRE
 DRY 47.4 WET 47.4 CRUISE Y71018 WIND DIRECTION 30 VEL 02 KTS BAR 30
 SWELL DIRECTION 32 H 03 T 07 CLOUD AMT 9 WEATHER 45

00	8.71	31.31								
110	9.28	31.63								
210	10.01	32.22								

NH 15 44 38.9 N 124 24.6 W DATE 08 JAN 71 0503 GCT WIRE
 DRY 48.7 WET 48.7 CRUISE Y71018 WIND DIRECTION 24 VEL 08 KTS BAR 29
 SWELL DIRECTION 30 H 03 T 06 CLOUD AMT 9 WEATHER 45

00	9.57	32.07		0	9.57	32.07	24.77	319.6		0
10	9.57	32.07		10	9.58	32.11	24.80	316.9		.032
100	9.58	32.11		20	9.78	32.25	24.87	309.8		.063
200	9.78	32.25		30	10.01	32.50	25.02	295.8		.093
300	10.01	32.49		50	9.85	32.53	25.08	290.7		.152
530	9.85	32.53								

NH 25 44 39.1 N 124 38.1 W DATE 08 JAN 71 0635 GCT WIRE
 DRY 48.3 WET 48.3 CRUISE Y71018 WIND DIRECTION 27 VEL 13 KTS BAR 28
 SWELL DIRECTION 30 H 03 T 09 CLOUD AMT 9 WEATHER 45

00	9.90	32.35		0	9.90	32.35	24.93	303.9		0
100	9.90	32.35		10	9.90	32.35	24.93	304.1		.030
210	9.85	32.36		20	9.85	32.36	24.94	303.3		.061
310	9.91	32.44		30	9.91	32.43	24.99	298.8		.091
500	9.44	32.46		50	9.44	32.46	25.09	289.5		.150
600	9.40	32.57		75	9.58	33.16	25.61	240.8		.216

OBSERVED				INTERPOLATED				COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD	
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)	
760	8.96	33.07		100	7.95	33.52	26.15	183.7		.259
1000	7.95	33.52		150	7.47	33.81	26.44	162.6		.347
1520	7.45	33.81		200	6.79	33.89	26.60	148.2		.424
2020	6.76	33.89		250	6.09	33.88	26.69	140.3		.496
2500	6.09	33.88		300	5.74	33.93	26.77	133.3		.565
3010	5.74	33.93		400	5.29	34.02	26.89	122.1		.692
4010	5.29	34.02		500	4.96	34.13	27.02	111.0		.809
5020	4.95	34.13		600	4.65	34.21	27.11	102.6		.916
6060	4.63	34.21		700	4.32	34.28	27.21	94.2		1.014
7010	4.32	34.28		800	4.07	34.31	27.26	89.9		1.106
8020	4.07	34.31								

NH 65 44 39.1 N 125 37.2 W DATE 08 JAN 71 1628 GCT WIRE 04
 DRY WET CRUISE Y71018 WIND DIRECTION 27 VEL 16 KTS BAR 24
 SWELL DIRECTION 32 H 04 T 08 CLOUD AMT 9 WEATHER

0	9.11	32.546	6.50							
500	4.98	34.172	0.73							
600	4.65	34.250	0.44							
700	4.36	34.306	0.44							
800	4.10	34.350	0.40							
900	3.72	34.376	0.38							
1000	3.49	34.416	0.40							

NH 85 44 39.4 N 126 03.0 W DATE 08 JAN 71 2030 GCT WIRE
 DRY 50.0 WET 49.3 CRUISE Y71018 WIND DIRECTION 27 VEL 22 KTS BAR 21
 SWELL DIRECTION 29 H 04 T 06 CLOUD 6 AMT 8 WEATHER 02

00	9.04	32.52		0	9.04	32.52	25.20	278.2		0
10	9.04	32.52		10	9.04	32.52	25.20	278.6		.028
140	9.04	32.52		20	9.04	32.52	25.20	278.8		.056
210	9.04	32.52		30	9.04	32.52	25.20	279.0		.084
310	9.04	32.52		50	9.02	32.54	25.22	277.5		.139
530	9.00	32.57		75	8.30	33.36	25.97	206.2		.200
700	8.68	33.11		100	7.87	33.60	26.22	183.1		.248
760	8.23	33.41		150	7.42	33.83	26.47	160.0		.334
870	8.00	33.46		200	6.79	33.89	26.60	148.2		.411
1010	7.86	33.61		250	6.17	33.93	26.71	138.0		.483
1500	7.41	33.83		300	5.97	33.98	26.78	132.2		.550
2020	6.76	33.89								
2520	6.15	33.93								
3000	5.97	33.98								

700	9.76	33.03	100	8.83	33.36	25.89	214.4	.273
740	9.60	33.14	150	8.08	33.75	26.31	175.3	.370
900	9.33	33.30	200	6.74	33.97	26.67	141.3	.449
1010	8.78	33.37						
1250	9.54	33.58						
1500	8.08	33.75						
1750	7.06	33.93						
2100	6.74	33.97						
2230	6.49	34.01						

NH 35 44 39.1 N 124 52.1 W DATE 08 JAN 71 0817 GCT WIRE
 DRY 48.0 WET 47.5 CRUISE Y71018 WIND DIRECTION 27 VEL 12 KTS BAR 27
 SWELL DIRECTION 30 H 03 T 07 CLOUD 6 AMT 8 WEATHER 02

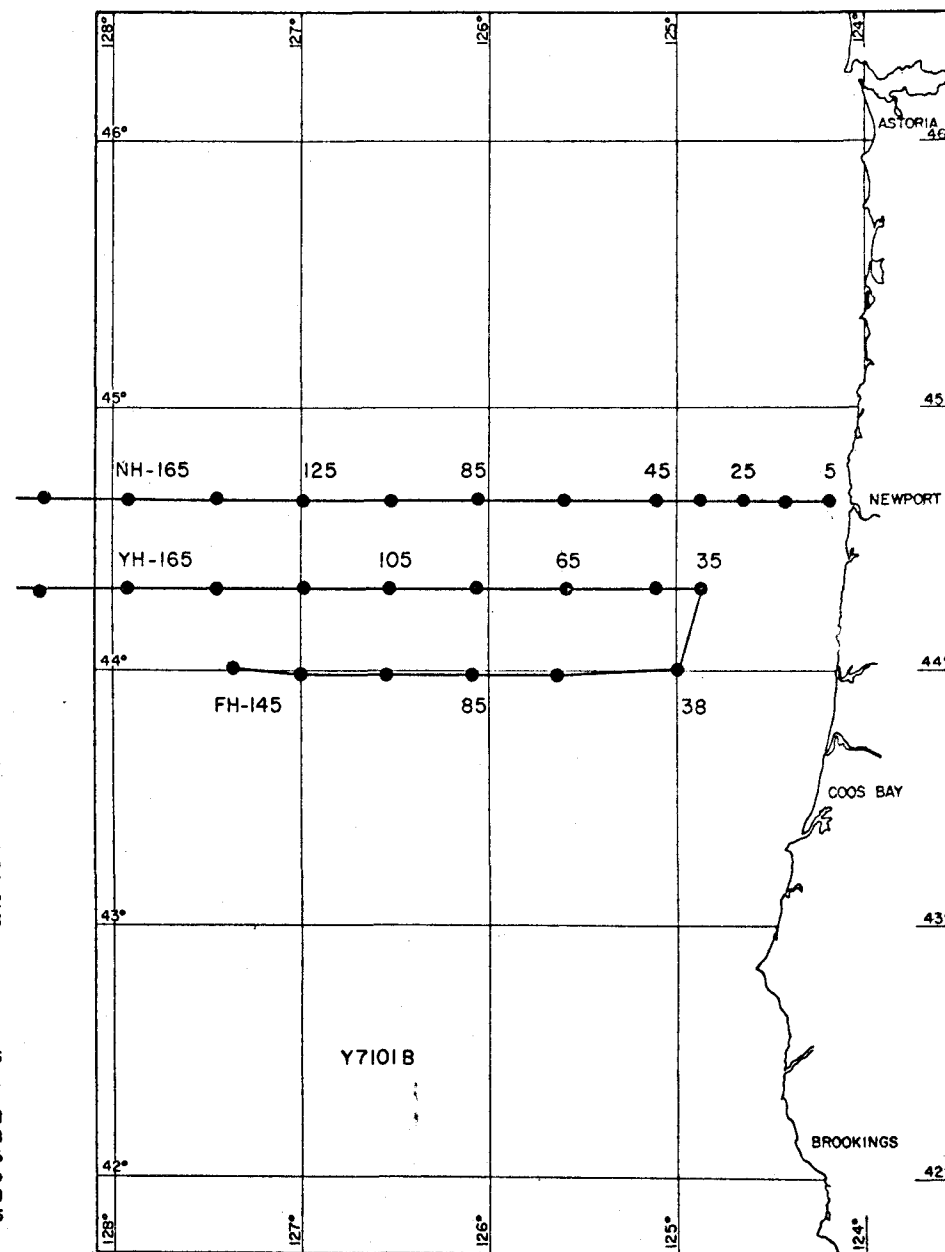
00	9.94	32.42	0	9.94	32.42	24.98	299.3	0
10	9.94	32.42	10	9.95	32.41	24.97	300.6	.030
170	9.95	32.41	20	9.96	32.43	24.98	299.7	.060
230	9.97	32.44	30	9.98	32.45	24.99	298.5	.090
310	9.99	32.46	50	9.99	32.47	25.01	297.8	.150
520	9.99	32.48	75	9.72	32.92	25.40	260.3	.219
690	9.77	32.89	100	9.13	33.23	25.74	229.1	.280
790	9.66	32.94	150	8.48	33.60	26.13	192.4	.386
880	9.36	33.07	200	7.05	33.85	26.53	154.6	.473
1010	9.12	33.24	250	6.69	33.90	26.62	146.8	.548
1540	8.42	33.62						
2060	6.89	33.87						
2500	6.69	33.90						

NH 45 44 39.1 N 125 06.0 W DATE 08 JAN 71 1015 GCT WIRE
 DRY 43.1 WET 46.8 CRUISE Y71018 WIND DIRECTION 27 VEL 14 KTS BAR 27
 SWELL DIRECTION 30 H 03 T 07 CLOUD 6 AMT 8 WEATHER 02

00	9.94	32.39	0	9.94	32.39	24.96	301.6	0
10	9.94	32.39	10	9.93	32.39	24.95	302.0	.030
110	9.93	32.39	20	9.81	32.39	24.98	300.1	.060
220	9.73	32.39	30	9.79	32.41	24.99	298.8	.090
310	9.79	32.41	50	9.58	32.54	25.13	286.2	.149
520	9.55	32.55	75	9.11	33.00	25.57	244.9	.215
660	9.47	32.55	100	8.49	33.47	26.02	201.8	.271
750	9.11	33.00	150	7.59	33.82	26.44	163.2	.362
890	8.63	33.36	200	6.97	33.86	26.56	152.5	.441
1050	8.45	33.49	250	6.51	33.88	26.63	146.0	.516
1500	7.59	33.82	300	6.40	33.93	26.69	141.0	.587
2000	6.97	33.86	400	5.57	33.97	26.82	128.9	.722
2540	6.48	33.88	500	4.94	34.11	27.00	112.5	.843
3000	6.39	33.93						
4200	5.57	33.97						
5020	4.93	34.11						

NH 65 44 39.1 N 125 35.0 W DATE 08 JAN 71 1403 GCT WIRE
 DRY 43.6 WET 48.5 CRUISE Y71018 WIND DIRECTION 27 VEL 18 KTS BAR 25
 SWELL DIRECTION 30 H 04 T 08 CLOUD 6 AMT 8 WEATHER 02

00	9.09	32.52	0	9.09	32.52	25.19	278.9	0
100	9.09	32.51	10	9.09	32.51	25.19	279.8	.028
210	9.09	32.53	20	9.09	32.53	25.20	278.9	.056
290	9.09	32.52	30	9.09	32.52	25.19	279.6	.084
520	9.08	32.53	50	9.08	32.53	25.20	279.3	.140
690	9.08	32.53	75	8.98	33.03	25.61	241.1	.205



OBSERVED				INTERPOLATED				COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD	
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)	
NH 105 44 39.0 N 126 30.9 W DATE 09 JAN 71 0115 GCT WIRE										
DRY 49.4 WET 49.0 CRUISE Y71018 WIND DIRECTION 27 VEL 25 KTS BAR 19										
SWELL DIRECTION 29 H 04 T 08 CLOUD 7 AMT 8 WEATHER 02										
00	9.01	32.55		0	9.01	32.55	25.23	275.5	0	
10	9.01	32.55		10	9.01	32.55	25.23	275.7	.028	
100	9.01	32.55		20	9.01	32.54	25.22	276.6	.055	
210	9.01	32.54		30	9.01	32.54	25.22	276.7	.083	
300	9.01	32.54		50	9.01	32.56	25.24	275.6	.138	
500	9.01	32.56		75	9.02	32.61	25.27	272.5	.207	
620	9.01	32.56		100	8.01	33.50	26.12	192.6	.265	
780	9.02	32.68		150	7.54	33.83	26.45	161.8	.353	
890	8.41	33.37		200	6.94	33.90	26.59	149.6	.431	
1020	7.95	33.52		250	6.44	33.94	26.68	140.8	.504	
1520	7.52	33.84		300	6.08	33.97	26.76	134.1	.572	
2010	6.93	33.90		400	5.40	34.02	26.88	123.4	.701	
2540	6.41	33.94		500	4.96	34.10	26.99	113.4	.819	
3000	6.08	33.97		600	4.56	34.17	27.09	104.4	.928	
4010	5.39	34.02		700	4.22	34.26	27.21	94.1	1.027	
5030	4.95	34.10		800	3.85	34.29	27.27	88.4	1.118	
6030	4.55	34.17		1000	3.46	34.40	27.39	77.8	1.285	
7000	4.22	34.26								
8000	3.85	34.29								
10020	3.46	34.40								

NH 105 44 39.0 N 126 30.9 W DATE 09 JAN 71 0124 GCT WIRE 13										
DRY 49.4 WET 49.0 CRUISE Y71018 WIND DIRECTION 27 VEL 25 KTS BAR 19										
SWELL DIRECTION 29 H 04 T 08 CLOUD 7 AMT 8 WEATHER 02										
0	9.02	32.552	6.45	0	9.02	32.56	25.23	275.5	0	
20	9.03		6.38	10	9.05	32.54	25.21	277.2	.028	
30	9.01	32.549	6.54	20	9.03	32.54	25.22	276.9	.055	
50	9.02	32.557	6.54	30	9.01	32.55	25.23	276.1	.083	
74	9.06	32.605	5.67	50	9.02	32.56	25.23	276.0	.138	
99	8.05	33.549	3.87	75	9.02	32.64	25.30	270.2	.206	
124	7.79	33.725	3.52	100	8.03	33.56	26.17	188.0	.264	
149	7.55	33.878	3.39	150	7.53	33.88	26.49	158.3	.350	
175	7.15	33.899	3.07	200	7.08	33.94	26.60	148.6	.427	
200	7.08	33.932	2.82	250	6.62	33.98	26.69	140.3	.499	
299	6.10	34.004	1.86	300	6.09	34.00	26.78	132.0	.567	
399	5.45	34.056	1.29	400	5.45	34.06	26.90	121.2	.694	
499	5.07	34.137	0.89	500	5.07	34.14	27.01	111.6	.810	
599	4.68	34.182	0.65	600	4.68	34.18	27.09	104.6	.918	
699	4.39	34.257	0.48	700	4.38	34.26	27.18	96.5	1.019	
798	4.01	34.235	0.40	800	4.00	34.24	27.21	94.4	1.114	
898	3.76	34.372	0.40	1000	3.49	34.40	27.39	78.1	1.287	
999	3.49	34.397	0.39	1200	3.07	34.47	27.49	69.1	1.434	
1197	3.08	34.473	0.65							

NH 125 44 39.1 N 126 58.9 W DATE 09 JAN 71 0646 GCT WIRE										
DRY 50.0 WET 49.5 CRUISE Y71018 WIND DIRECTION 25 VEL 24 KTS BAR 16										
SWELL DIRECTION 29 H 04 T 08 CLOUD 6 AMT 8 WEATHER 02										
00	9.18	32.47		0	9.18	32.47	25.14	284.0	0	

OBSERVED				INTERPOLATED				COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD	
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)	
0	9.25	32.457	6.54	0	9.25	32.46	25.12	286.0	8	
20	9.28	32.460	6.54	10	9.32	32.46	25.11	287.4	.029	
30	9.24	32.462	6.54	20	9.28	32.46	25.12	286.6	.057	
50	9.22	32.465	6.54	30	9.24	32.47	25.13	286.0	.086	
75	9.13	32.480	6.34	50	9.22	32.47	25.13	285.8	.143	
100	7.98	33.290	6.21	75	9.13	32.48	25.16	283.7	.214	
150	7.79	33.787	3.36	100	7.98	33.29	25.96	207.2	.276	
201	7.13		2.82	150	7.80	33.79	26.38	168.4	.370	
251	6.62	33.954	2.44	200	7.14	33.95	26.60	148.5	.449	
300	6.11	33.976	2.02	250	6.63	33.95	26.67	142.1	.521	
401	5.34	34.029	1.35	300	6.11	33.98	26.76	134.0	.590	
501	4.95	34.128	0.81	400	5.35	34.03	26.89	122.1	.718	
602	4.62	34.213	0.65	500	4.95	34.13	27.02	111.1	.835	
802	4.06	34.321	0.56	600	4.63	34.21	27.12	101.9	.941	
1003	3.49	34.405	0.40	700	4.34	34.27	27.20	94.9	1.040	
1204	3.00	34.465	0.56	800	4.07	34.32	27.27	89.0	1.132	
				1000	3.50	34.40	27.39	77.8	1.298	
				1200	3.01	34.46	27.48	69.1	1.445	

NH 185 44 39.6 N 128 22.1 W DATE 10 JAN 71 2225 GCT WIRE										
DRY 42.5 WET 41.4 CRUISE Y71018 WIND DIRECTION 29 VEL 25 KTS BAR 05										
SWELL DIRECTION 28 H 08 T 06 CLOUD 8 AMT 7 WEATHER 18										
00	9.09	32.52		0	9.09	32.52	25.19	278.9	0	
20	9.09	32.52		10	9.09	32.53	25.20	279.0	.028	
170	9.09	32.53		20	9.09	32.53	25.20	278.5	.056	
200	9.09	32.53		30	9.09	32.53	25.20	279.0	.084	
410	9.09	32.53		50	9.09	32.53	25.20	279.0	.139	
500	9.09	32.53		75	9.04	32.57	25.24	276.1	.209	
660	9.05	32.56		100	8.06	33.20	25.88	215.2	.270	
770	9.02	32.57		150	7.31	33.78	26.44	163.0	.365	
880	8.66	32.90		200	6.54	33.88	26.63	145.2	.442	
1040	7.86	33.29		250	5.97	33.88	26.70	139.0	.513	
1550	7.25	33.79								
2000	6.53	33.88								
2520	5.95	33.88								

NH 205 44 39.0 N 128 50.0 W DATE 11 JAN 71 0247 GCT WIRE										
DRY 40.5 WET 37.2 CRUISE Y71018 WIND DIRECTION 29 VEL 20 KTS BAR 07										
SWELL DIRECTION 30 H 08 T 07 CLOUD 6 AMT 5 WEATHER 01										
00	9.08	32.55		0	9.08	32.55	25.22	276.5	0	
10	9.08	32.55		10	9.08	32.55	25.22	277.0	.028	
130	9.08	32.55		20	9.08	32.55	25.22	277.2	.055	
220	9.08	32.55		30	9.08	32.54	25.21	278.0	.083	
310	9.08	32.54		50	9.08	32.54	25.21	278.4	.139	
510	9.08	32.54		75	8.31	33.13	25.78	224.2	.202	
640	9.09	32.55		100	7.61	33.57	26.24	181.4	.252	
750	8.31	33.12		150	7.33	33.84	26.49	158.2	.337	
870	7.95	33.40		200	6.69	33.90	26.62	146.1	.413	
1030	7.54	33.60		250	6.05	33.91	26.71	137.9	.484	
1550	7.31	33.85		300	5.64	33.97	26.81	129.0	.551	
2020	6.66	33.90								
2560	5.98	33.91								
3010	5.63	33.97								

1C	9.18	32.47		10	9.18	32.47	25.14	284.4	.028
12C	9.18	32.47		20	9.18	32.47	25.14	284.3	.057
20C	9.18	32.47		30	9.18	32.46	25.13	285.4	.085
32C	9.18	32.46		50	9.18	32.47	25.14	285.3	.142
51C	9.17	32.47		75	8.24	32.70	25.46	254.8	.210
62C	8.84	32.54		100	7.57	33.04	25.83	220.1	.269
76C	8.19	32.71		150	7.63	33.78	26.40	167.1	.366
87C	7.90	32.82		200	7.16	33.88	26.55	153.4	.446
100C	7.57	33.04		250	6.77	33.92	26.63	146.4	.521
151C	7.64	33.79		300	6.28	33.95	26.71	138.5	.592
203C	7.15	33.88							
251C	6.76	33.92							
301C	6.27	33.95							

NH 145 44 39.2 N 127 26.7 W DATE 09 JAN 71 1205 GCT WIRE 09
 DRY 52.4 WET 49.6 CRUISE Y71018 WIND DIRECTION 27 VEL 24 KTS BAR 14
 SWELL DIRECTION 29 H 05 T 08 CLOUD 6 AMT 8 WEATHER 02

0	9.22	32.463	6.54	0	9.22	32.47	25.13	284.6	0
20	9.24	32.463	6.54	10	9.24	32.47	25.13	285.3	.028
30	9.22	32.458	6.54	20	9.24	32.47	25.13	285.7	.057
49	9.24	32.465	6.46	30	9.22	32.46	25.13	286.0	.086
74	9.04	32.558	6.46	50	9.23	32.47	25.13	286.0	.143
99	7.78	33.067	5.21	75	8.99	32.58	25.25	274.8	.213
123	7.55	33.418	4.55	100	7.76	33.08	25.83	219.8	.275
148	7.73	33.778	3.63	150	7.72	33.79	26.39	167.5	.372
174	7.53	33.872	2.99	200	7.26	33.92	26.56	152.5	.451
198	7.28	33.914	2.79	250	6.69	33.95	26.66	142.8	.525
297	6.19	33.969	2.13	300	6.17	33.97	26.75	135.4	.595
397	5.52	34.046	1.45	400	5.50	34.05	26.89	122.5	.724
497	4.98	34.110	0.89	500	4.97	34.11	27.00	112.4	.841
595	4.67	34.187	0.81	600	4.65	34.19	27.10	103.8	.949
695	4.36	34.252	0.56	700	4.32	34.25	27.19	96.0	1.049
695*	4.35		0.48	800	3.92	34.31	27.27	88.2	1.141
793*	3.94	34.304	0.40	1000	3.45	34.42	27.41	76.2	1.305
893*	3.69	34.358	0.39	1200	3.10	34.47	27.48	69.9	1.451
993*	3.46	34.414	0.39						
1191*	3.12	34.466	0.65						

NH 165 44 39.1 N 127 54.8 W DATE 09 JAN 71 1828 GCT WIRE
 DRY 53.0 WET 49.0 CRUISE Y71018 WIND DIRECTION 26 VEL 24 KTS BAR 12
 SWELL DIRECTION 29 H 05 T 08 CLOUD 6 AMT 8 WEATHER 60

0C	9.13	32.42		0	9.13	32.42	25.11	286.9	0
1C	9.13	32.42		10	9.14	32.43	25.11	286.8	.029
11C	9.14	32.42		20	9.14	32.42	25.11	287.4	.057
20C	9.14	32.42		30	9.14	32.43	25.11	287.2	.086
31C	9.14	32.43		50	9.14	32.46	25.13	285.7	.143
50C	9.14	32.45		75	8.84	32.78	25.44	257.1	.211
62C	9.14	32.42		100	7.93	33.29	25.97	206.8	.269
78C	8.70	32.89		150	7.78	33.72	26.32	173.9	.364
87C	8.06	33.11		200	7.05	33.83	26.52	155.7	.447
101C	7.92	33.30		250	6.53	33.90	26.64	144.8	.522
153C	7.77	33.73		300	6.06	33.94	26.73	136.4	.592
200C	7.04	33.83							
251C	6.52	33.90							
302C	6.04	33.94							

NH 165 44 39.1 N 127 54.8 W DATE 09 JAN 71 1918 GCT WIRE 05
 DRY 53.0 WET 49.0 CRUISE Y71018 WIND DIRECTION 26 VEL 24 KTS BAR 12
 SWELL DIRECTION 29 H 06 T 08 CLOUD 6 AMT 8 WEATHER 60

YH 205 44 19.2 N 128 51.2 W DATE 11 JAN 71 0545 GCT WIRE
 DRY 40.0 WET 37.2 CRUISE Y71018 WIND DIRECTION 28 VEL 18 KTS BAR 06
 SWELL DIRECTION 29 H 08 T 08 CLOUD 8 AMT 6 WEATHER 02

0C	9.03	32.53		0	9.03	32.53	25.21	277.3	0
1C	9.03	32.53		10	9.04	32.53	25.21	277.6	.028
10C	9.04	32.53		20	9.03	32.53	25.21	277.6	.055
20C	9.03	32.53		30	9.04	32.52	25.20	278.9	.083
31C	9.04	32.52		50	9.04	32.53	25.20	278.8	.139
52C	9.04	32.53		75	8.21	33.21	25.86	216.8	.201
64C	9.01	32.58		100	7.68	33.57	26.23	182.5	.251
75C	8.21	33.20		150	7.05	33.85	26.54	153.5	.335
88C	7.78	33.47		200	6.41	33.91	26.66	141.9	.409
102C	7.67	33.58		250	5.90	33.92	26.74	135.2	.478
150C	7.04	33.85		300	5.39	33.95	26.82	127.5	.544
201C	6.40	33.91		400	5.04	34.06	26.95	116.3	.665
253C	5.87	33.92		500	4.71	34.13	27.05	108.0	.777
302C	5.37	33.95							
402C	5.04	34.06							
500C	4.71	34.13							

YH 185 44 18.0 N 128 23.7 W DATE 11 JAN 71 1400 GCT WIRE
 DRY 36.0 WET 34.0 CRUISE Y71018 WIND DIRECTION 30 VEL 30 KTS BAR 05
 SWELL DIRECTION 30 H 10 T 07 CLOUD 6 AMT 6 WEATHER 02

0C	8.93	32.55		0	8.93	32.55	25.24	274.3	0
1C	8.93	32.55		10	8.93	32.56	25.24	274.4	.027
18C	8.93	32.56		20	8.93	32.55	25.24	274.8	.055
25C	8.93	32.53		30	8.93	32.53	25.22	276.6	.082
36C	8.93	32.53		50	8.93	32.54	25.23	276.2	.138
51C	8.93	32.55		75	8.09	33.41	26.04	199.9	.197
68C	8.27	33.25		100	7.54	33.72	26.36	169.8	.243
82C	7.93	33.52		150	6.92	33.85	26.55	151.9	.324
94C	7.68	33.66		200	6.61	33.91	26.64	144.4	.398
103C	7.47	33.74		250	6.09	33.93	26.73	136.5	.468
173C	6.81	33.91		300	5.68	33.96	26.80	129.7	.535
203C	6.59	33.91		400	5.03	34.01	26.91	119.7	.659
259C	5.99	33.94		500	4.73	34.15	27.06	106.9	.772
300C	5.67	33.96		600	4.16	34.20	27.16	97.4	.875
401C	5.02	34.01							
502C	4.72	34.15							
600C	4.16	34.20							

YH 165 44 18.9 N 127 55.4 W DATE 11 JAN 71 1945 GCT WIRE
 DRY 36.2 WET 33.5 CRUISE Y71018 WIND DIRECTION 30 VEL 18 KTS BAR 05
 SWELL DIRECTION 30 H 10 T 08 CLOUD 8 AMT 7 WEATHER 72

0C	8.96	32.54		0	8.96	32.54	25.23	275.5	0
1C	8.96	32.54		10	8.96	32.54	25.23	276.0	.028
15C	8.96	32.54		20	8.97	32.55	25.23	275.6	.055
27C	8.97	32.55		30	8.97	32.54	25.23	275.4	.083
33C	8.96	32.53		50	8.98	32.59	25.26	273.3	.138
53C	8.98	32.60		75	8.69	32.88	25.53	248.3	.203
62C	8.96	32.58		100	7.84	33.57	26.20	184.9	.257
75C	8.69	32.87		150	7.25	33.72	26.40	166.1	.345
87C	8.09	33.32		200	6.71	33.94	26.65	143.1	.422
101C	7.83	33.58		250	6.34	33.95	26.71	138.3	.492
153C	7.22	33.73		300	5.70	33.94	26.78	131.7	.560
214C	6.58	33.99		400	4.97	34.02	26.93	118.3	.685
252C	6.33	33.95		500	4.58	34.11	27.04	108.1	.798
307C	5.60	33.94		600	4.24	34.19	27.14	99.1	.902

OBSERVED

INTERPOLATED

COMPUTED

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
419C	4.90	34.04							
502C	4.57	34.11							
601C	4.24	34.19							

YH 145 44 19.0 N 127 26.8 W DATE 11 JAN 71 2330 GCT WIRE
 DRY 39.9 WET 34.7 CRUISE Y71018 WIND DIRECTION 25 VEL 12 KTS / BAR 04
 SWELL DIRECTION 30 H 10 T 07 CLOUD 8 AMT 6 WEATHER 02

0C	9.01	32.45		0	9.01	32.46	25.15	282.9	0
9C	9.01	32.50		10	9.01	32.50	25.19	279.7	.028
22C	9.01	32.49		20	9.01	32.49	25.18	280.3	.056
29C	9.01	32.49		30	9.01	32.49	25.18	280.7	.084
51C	9.02	32.49		50	9.02	32.49	25.18	281.2	.140
69C	9.02	32.50		75	9.02	32.53	25.21	278.8	.210
77C	9.02	32.55		100	7.69	33.17	25.91	212.7	.272
85C	8.60	32.77		150	7.60	33.85	26.45	161.5	.365
100C	7.68	33.16		200	6.78	33.92	26.63	145.4	.442
126C	7.92	33.71		250	6.32	33.96	26.72	137.2	.513
151C	7.58	33.85		300	5.92	33.99	26.79	130.9	.580
175C	7.21	33.91		400	5.07	34.06	26.95	116.5	.703
200C	6.77	33.92		500	4.70	34.15	27.07	106.1	.814
250C	6.32	33.96		600	4.46	34.23	27.15	98.6	.917
302C	5.90	33.99		700	4.05	34.28	27.23	91.1	1.012
401C	5.06	34.06		800	3.79	34.36	27.32	83.0	1.099
503C	4.70	34.15		1000	3.49	34.41	27.39	77.3	1.259
601C	4.46	34.23							
703C	4.04	34.28							
803C	3.78	34.36							
900C	3.70	34.39							
1001C	3.49	34.41							

YH 125 44 19.0 N 126 58.8 W DATE 12 JAN 71 0955 GCT WIRE 07
 DRY 36.6 WET 31.0 CRUISE Y71018 WIND DIRECTION 29 VEL 11 KTS BAR 03
 SWELL DIRECTION 30 H 06 T 07 CLOUD 8 AMT 4 WEATHER 01

0	8.79	32.529	6.54	0	8.79	32.53	25.25	273.8	0
20	8.84	32.532	6.46	10	8.83	32.53	25.24	274.8	.027
30	8.82	32.534	6.78	20	8.84	32.54	25.24	274.6	.055
50	8.83	32.538	6.54	30	8.82	32.54	25.25	274.4	.082
75	8.59	33.435	4.24	50	8.83	32.54	25.25	274.6	.137
100	7.81	33.718	3.63	75	8.59	33.44	25.99	204.9	.197
124	7.57	33.789	3.47	100	7.82	33.72	26.33	173.1	.244
149	7.33	33.856	3.71	150	7.32	33.86	26.50	157.0	.327
174	7.18	33.907	3.23	200	6.83	33.92	26.62	146.3	.403
199	6.84	33.921	2.71	250	6.33	33.96	26.72	137.7	.474
299	5.96	33.999	1.81	300	5.95	34.00	26.80	130.6	.541
394	5.25	34.054	1.29	400	5.24	34.06	26.93	118.8	.665
493	4.93	34.147	.97	500	4.92	34.15	27.04	109.1	.779
597	4.43	34.196	0.73	600	4.42	34.20	27.13	100.5	.884
697	4.30	34.292	0.73	700	4.30	34.29	27.22	92.8	.981
796	4.11	34.344	0.65	800	4.10	34.35	27.28	87.5	1.071
895	3.77	34.384	0.48	1000	3.46	34.41	27.40	76.9	1.235
995	3.47	34.408	0.60	1200	3.07	34.47	27.49	69.1	1.381
1194	3.08	34.471	0.81						

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
148	7.84	33.760	3.73	150	7.82	33.77	26.36	170.2	.369
174	7.55	33.888	3.31	200	7.26	33.91	26.55	153.1	.450
199	7.27	33.907	3.23	250	6.66	33.95	26.66	142.9	.524
297	6.16	33.988	2.42	300	6.14	33.99	26.77	133.5	.593
397	5.53	34.081	1.15	400	5.52	34.08	26.92	120.1	.719
497	5.12	34.146	0.92	500	5.11	34.15	27.01	111.4	.835
596	4.73	34.207	0.65	600	4.72	34.21	27.11	103.1	.942
696	4.40	34.279	0.42	700	4.39	34.28	27.20	94.8	1.041
795	4.10	34.340	0.52	800	4.09	34.34	27.28	87.6	1.132
894	3.89	34.387	0.52	1000	3.52	34.42	27.40	77.2	1.297
994	3.54	34.414	0.48						

YH 65 44 18.9 N 125 35.0 W DATE 12 JAN 71 2335 GCT WIRE 05
 DRY 38.7 WET 36.0 CRUISE Y71018 WIND DIRECTION 25 VEL 20 KTS BAR 99
 SWELL DIRECTION 29 H 06 T 08 CLOUD 8 AMT 7 WEATHER 22

0	8.89	32.516	6.54	0	8.89	32.52	25.22	276.2	0
20	8.91	32.528	6.54	10	8.91	32.53	25.22	276.3	.028
30	8.89	32.525	6.54	20	8.91	32.53	25.23	276.0	.055
50	8.90	32.547	6.54	30	8.89	32.53	25.23	276.1	.083
74	8.06	33.093	5.08	50	8.90	32.55	25.25	274.9	.138
99	8.08	33.526	4.15	75	8.06	33.11	25.81	221.4	.200
124	7.80	33.762	3.79	100	8.07	33.54	26.14	190.4	.251
149	7.68		3.71	150	7.67	33.86	26.46	161.4	.339
173	7.39	33.891	3.47	200	7.07	33.93	26.59	149.2	.417
198	7.09	33.924	2.95	250	6.53	33.97	26.69	139.8	.489
297	6.08	33.991	2.02	300	6.05	33.99	26.78	132.3	.557
396	5.21	34.046	1.29	400	5.19	34.05	26.93	118.6	.683
495	4.95	34.159	0.89	500	4.94	34.16	27.05	108.2	.796
594	4.67	34.229	0.76	600	4.65	34.23	27.13	100.6	.900
693	4.38	34.289	0.48	700	4.36	34.29	27.21	93.7	.997
792	4.14	34.329	0.56	800	4.12	34.33	27.27	88.8	1.089
891	3.93	34.375	0.48	1000	3.57	34.41	27.39	78.0	1.255
990	3.60	34.409	0.44	1200	3.10	34.48	27.49	68.9	1.402
1188	3.13	34.477	0.60						

YH 45 44 19.0 N 125 06.0 W DATE 13 JAN 71 0445 GCT WIRE
 DRY 42.0 WET 39.5 CRUISE Y71018 WIND DIRECTION 26 VEL 22 KTS BAR 00
 SWELL DIRECTION 29 H 04 T 07 CLOUD 8 AMT 2 WEATHER 01

0C	9.50	32.45		0	9.50	32.46	25.07	290.3	0
10C	9.51	32.49		10	9.51	32.50	25.10	287.7	.029
20C	9.51	32.48		20	9.51	32.48	25.10	288.6	.058
30C	9.52	32.47		30	9.52	32.47	25.09	289.6	.087
49C	9.60	32.52		50	9.61	32.53	25.11	287.5	.144
68C	9.68	32.77		75	9.61	32.96	25.45	255.6	.212
75C	9.61	32.96		100	8.79	33.46	25.98	206.4	.270
86C	9.33	33.21		150	8.07	33.78	26.33	173.3	.365
99C	8.82	33.45		200	7.09	33.93	26.59	149.4	.445
124C	8.32	33.70		250	6.45	33.96	26.70	139.2	.518
151C	8.06	33.78		300	6.08	34.00	26.77	132.6	.586
201C	7.07	33.93		400	5.45	34.07	26.91	120.2	.712
251C	6.44	33.96		500	5.03	34.16	27.03	109.6	.827
300C	6.08	33.99		600	4.78	34.22	27.11	103.1	.933
399C	5.46	34.07		700	4.49	34.28	27.19	96.0	1.033

YH 105 44 19.0 N 126 31.2 W DATE 12 JAN 71 1251 GCT WIRE 13
 DRY 38.5 WET 34.0 CRUISE Y71018 WIND DIRECTION 24 VEL 12 KTS BAR 02
 SWELL DIRECTION 30 H 04 T 08 CLOUD 8 AMT 6 WEATHER 02

0	8.74	32.533	6.62	0	8.74	32.54	25.26	272.8	0
23	8.78	32.528	6.54	10	8.77	32.53	25.25	274.1	.027
30	8.77	32.528	6.54	20	8.78	32.53	25.25	274.1	.055
50	8.77	32.530	6.57	30	8.77	32.53	25.25	274.1	.082
75	8.84	32.996	5.25	50	8.77	32.53	25.25	274.3	.137
100	8.04	33.624	3.79	75	8.84	33.00	25.60	241.1	.201
125	7.81	33.749	3.55	100	8.04	33.63	26.22	183.3	.254
150	7.47	33.842	3.31	150	7.47	33.85	26.47	159.9	.340
175	7.22	33.902		200	6.99	33.94	26.61	147.2	.417
200	6.99	33.935	2.58	250	6.51	33.98	26.71	138.7	.488
295*	6.05	34.000	2.02	300	6.02	34.00	26.79	131.3	.556
394*	5.19	34.027	1.53	400	5.14	34.03	26.92	119.5	.681
493*	4.65	34.089	1.05	500	4.62	34.10	27.03	109.6	.796
591*	4.37	34.177	0.73	600	4.35	34.18	27.13	100.7	.901
690*	4.16	34.250	0.44	700	4.13	34.26	27.21	93.7	.998
789*	3.87	34.302	0.55	800	3.84	34.31	27.28	87.2	1.088
887*	3.63	34.362	0.40	1000	3.51	34.43	27.41	76.3	1.252
986*	3.53	34.419	0.48	1200	2.97	34.46	27.49	68.6	1.397
1183*	3.01	34.464	0.55						

YH 85 44 18.9 N 126 03.5 W DATE 12 JAN 71 1610 GCT WIRE
 DRY 39.0 WET 34.5 CRUISE Y71018 WIND DIRECTION 22 VEL 23 KTS BAR 01
 SWELL DIRECTION 29 H 07 T 08 CLOUD 8 AMT 6 WEATHER 02

0C	9.05	32.46		0	9.05	32.46	25.15	282.8	0
19C	9.05	32.47		10	9.05	32.47	25.16	282.5	.028
21C	9.05	32.47		20	9.05	32.47	25.16	282.7	.057
31C	9.05	32.48		30	9.05	32.48	25.17	282.2	.085
50C	9.05	32.48		50	9.05	32.48	25.17	282.1	.141
67C	8.45	32.78		75	8.16	32.96	25.67	234.7	.206
75C	8.16	32.95		100	8.12	33.40	26.03	201.1	.260
85C	7.95	33.19		150	7.86	33.86	26.43	164.0	.351
103C	8.12	33.40		200	7.30	33.92	26.56	152.5	.431
125C	8.15	33.62		250	6.63	33.92	26.65	144.5	.505
150C	7.86	33.86		300	6.00	33.94	26.74	135.8	.575
205C	7.24	33.93		400	5.17	34.00	26.89	122.4	.704
253C	6.59	33.92		500	5.06	34.13	27.00	112.6	.821
303C	5.97	33.94		600	4.67	34.21	27.11	102.7	.929
400C	5.16	33.99		700	4.34	34.27	27.19	95.3	1.028
500C	5.06	34.12		800	4.10	34.37	27.30	86.0	1.118
604C	4.65	34.21		1000	3.51	34.41	27.39	77.5	1.282
704C	4.33	34.27							
804C	4.09	34.37							
900C	3.86	34.40							
1003C	3.50	34.41							

YH 85 44 18.9 N 126 03.5 W DATE 12 JAN 71 1751 GCT WIRE 07
 DRY 39.0 WET 34.5 CRUISE Y71018 WIND DIRECTION 22 VEL 20 KTS BAR 01
 SWELL DIRECTION 29 H 06 T 08 CLOUD 8 AMT 6 WEATHER 02

0	9.09	32.491	6.54	0	9.09	32.50	25.17	281.1	0
20	9.08	32.487	6.54	10	9.09	32.49	25.17	281.7	.028
30	9.07	32.485	6.52	20	9.08	32.49	25.17	281.5	.056
49	9.08	32.485	6.46	30	9.07	32.49	25.17	281.7	.084
74	9.01	32.514	6.38	50	9.08	32.49	25.17	282.4	.141
99	8.03	33.172	4.92	75	8.97	32.54	25.22	277.4	.211
124	8.12	33.609	4.04	100	8.03	33.19	25.88	215.4	.272

501C	5.03	34.16		800	4.12	34.36	27.29	86.8	1.124
601C	4.78	34.22							
699C	4.49	34.28							
802C	4.11	34.36							
900C	3.71	34.40							

YH 35 44 19.0 N 124 51.8 W DATE 13 JAN 71 0715 GCT WIRE
 DRY 40.0 WET 35.0 CRUISE Y71018 WIND DIRECTION 25 VEL 20 KTS BAR 01
 SWELL DIRECTION 29 H 05 T 08 CLOUD 8 AMT 4 WEATHER 03

0C	9.44	32.50		0	9.44	32.50	25.12	285.7	0
10C	9.44	32.48		10	9.44	32.48	25.11	287.3	.029
21C	9.44	32.50		20	9.44	32.50	25.12	286.5	.057
31C	9.45	32.49		30	9.45	32.49	25.11	287.3	.086
51C	9.45	32.50		50	9.45	32.50	25.12	287.1	.143
67C	9.46	32.51		75	9.47	32.80	25.35	265.8	.213
76C	9.47	32.84		100	8.70	33.53	25.04	200.3	.271
85C	9.22	33.23		150	7.12	33.92	26.58	149.5	.358
102C	8.63	33.55		200	6.82	33.96	26.65	143.5	.431
125C	7.77	33.83		250	6.66	33.97	26.68	141.3	.503
149C	7.13	33.92		300	6.49	34.00	26.73	137.4	.572
174C	6.92	33.93							
201C	6.82	33.96							
251C	6.66	33.97							
300C	6.49	34.00							

FH 38 43 59.9 N 125 00.0 W DATE 13 JAN 71 1555 GCT WIRE
 DRY 39.5 WET 37.0 CRUISE Y71018 WIND DIRECTION 26 VEL 23 KTS BAR 03
 SWELL DIRECTION 27 H 08 T 08 CLOUD 8 AMT 4 WEATHER 01

0C	9.37	32.52		0	9.37	32.52	25.15	283.1	0
11C	9.37	32.52		10	9.37	32.52	25.15	283.5	.028
22C	9.39	32.51		20	9.39	32.51	25.14	284.6	.057
28C	9.39	32.53		30	9.39	32.53	25.15	283.3	.085
50C	9.33	32.76		50	9.33	32.76	25.34	265.6	.140
60C	9.25	33.07		75	8.97	33.43	25.92	211.4	.200
74C	8.99	33.41		100	8.38	33.72	26.24	181.4	.249
99C	8.40	33.71		150	7.43	33.90	26.52	155.3	.333
126C	7.85	33.87		200	7.10	33.95	26.60	147.9	.409
151C	7.41	33.90		250	6.68	33.98	26.69	140.3	.481
202C	7.09	33.95		300	6.14	34.02	26.79	131.0	.548
250C	6.67	33.98		400	5.53	34.10	26.92	119.2	.673
300C	6.13	34.02		500	5.16	34.16	27.02	111.2	.789
403C	5.52	34.10		600	4.80	34.23	27.11	102.7	.895
502C	5.15	34.16							
601C	4.80	34.23							

FH 65 43 59.0 N 125 37.9 W DATE 13 JAN 71 2240 GCT WIRE
 DRY 40.7 WET 38.3 CRUISE Y71018 WIND DIRECTION 26 VEL 10 KTS BAR 06
 SWELL DIRECTION 27 H 04 T 07 CLOUD 6 AMT 7 WEATHER 03

0C	8.96	32.50		0	8.96	32.50	25.20	278.5	0
9C	8.96	32.51		10	8.96	32.51	25.20	278.1	.028
21C	8.97	32.52		20	8.97	32.52	25.21	277.8	.056
32C	8.97	32.52		30	8.97	32.52	25.21	277.9	.083
48C	8.96	32.53		50	8.96	32.53	25.22	277.3	.139
74C	8.97	32.54		75	8.96	32.57	25.25	275.0	.208
87C	8.75	32.96		100	8.47	33.42	25.99	205.4	.268
100C	8.47	33.41		150	7.61	33.80	26.42	164.9	.361
112C	8.28	33.54		200	7.09	33.92	26.58	150.0	.439

OBSERVED				INTERPOLATED			COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^3$)	(dyn.m)
125C	7.90	33.63		250	6.38	33.94	26.69	139.7	.512
149C	7.62	33.80		300	5.92	33.98	26.78	131.6	.579
175C	7.28	33.88		400	5.22	34.04	26.92	119.4	.705
202C	7.07	33.92		500	4.58	34.13	27.06	106.5	.818
249C	6.39	33.94		600	4.40	34.20	27.13	100.2	.921
301C	5.91	33.98		700	4.16	34.29	27.24	91.2	1.017
409C	5.22	34.04		800	3.91	34.35	27.31	84.7	1.105
501C	4.57	34.13		1000	3.39	34.40	27.40	76.9	1.266
601C	4.40	34.20							
700C	4.16	34.29							
800C	3.91	34.35							
901C	3.60	34.38							
1001C	3.39	34.40							

FH 85 43 59.0 N 126 05.2 W DATE 14 JAN 71 0310 GCT WIRE
 DRY 40.2 WET 39.2 CRUISE Y71018 WIND DIRECTION 26 VEL 18 KTS BAR 06
 SWELL DIRECTION 27 H 06 T 08 CLOUD 8 AMT 8 WEATHER 02

0C	9.00	32.47		0	9.00	32.47	25.17	281.3	0
11C	9.02	32.47		10	9.02	32.47	25.16	282.2	.028
20C	9.01	32.49		20	9.01	32.50	25.18	280.3	.056
30C	9.03	32.48		30	9.03	32.48	25.17	281.5	.084
51C	9.03	32.47		50	9.03	32.47	25.16	282.9	.141
67C	9.03	32.48		75	9.01	32.48	25.18	281.9	.211
75C	9.01	32.48		100	7.94	33.22	25.91	212.2	.273
87C	8.12	33.04		150	7.59	33.82	26.43	163.9	.367
102C	7.91	33.23		200	6.98	33.92	26.60	148.5	.445
124C	7.69	33.61		250	6.07	33.92	26.72	137.3	.517
151C	7.59	33.82		300	5.53	33.93	26.80	130.1	.583
175C	7.31	33.89		400	4.95	34.03	26.94	117.4	.707
202C	6.95	33.92		500	4.65	34.12	27.05	107.9	.820
251C	6.05	33.92		600	4.46	34.23	27.15	98.5	.923
300C	5.52	33.93		700	4.15	34.30	27.24	90.7	1.017
401C	4.95	34.03		800	3.92	34.36	27.31	84.4	1.105
499C	4.65	34.12		1000	3.39	34.40	27.40	76.8	1.266
599C	4.46	34.23							
702C	4.14	34.30							
803C	3.91	34.36							
902C	3.66	34.39							
1000C	3.39	34.40							

FH 105 43 59.0 N 126 32.6 W DATE 14 JAN 71 0940 GCT WIRE
 DRY 44.0 WET 38.9 CRUISE Y71018 WIND DIRECTION 23 VEL 20 KTS BAR 07
 SWELL DIRECTION 27 H 05 T 07 CLOUD 8 AMT 8 WEATHER 02

0C	8.89	32.53		0	8.89	32.53	25.23	275.2	0
11C	8.88	32.55		10	8.88	32.55	25.25	274.1	.027
21C	8.89	32.54		20	8.89	32.54	25.24	274.9	.055
30C	8.89	32.53		30	8.89	32.53	25.23	275.7	.082
50C	8.90	32.54		50	8.90	32.54	25.24	275.4	.138
67C	8.90	32.53		75	8.89	32.54	25.24	276.1	.206
76C	8.89	32.54		100	8.92	32.58	25.27	273.6	.275
86C	8.90	32.54		150	8.03	33.63	26.22	183.5	.389
100C	8.92	32.58		200	8.15	33.85	26.38	169.8	.478
114C	8.75	33.15		250	6.32	33.93	26.70	139.5	.555

OBSERVED			INTERPOLATED			COMPUTED			
D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
FH 140	44 00.4 N	127 21.1 W		DATE 14 JAN 71	1710 GCT	WIRE			
DRY 45.0	WET 42.0	CRUISE Y71018		WIND DIRECTION 22	VEL 12 KTS	BAR 10			
SWELL DIRECTION 27	H 04 T 06	CLOUD 6		AMT 8	WEATHER 02				

0C	8.88	32.57		0	8.88	32.57	25.27	272.1	0
9C	8.88	32.58		10	8.88	32.58	25.27	271.9	.027
33C	8.89	32.56		20	8.88	32.57	25.26	272.6	.054
52C	8.89	32.58		30	8.89	32.56	25.26	273.5	.082
67C	8.89	32.59		50	8.89	32.58	25.27	272.8	.136
75C	8.89	32.58		75	8.89	32.58	25.27	272.7	.205
88C	8.11	33.33		100	7.97	33.55	26.17	187.8	.262
100C	7.97	33.55		150	7.53	33.84	26.46	160.7	.349
124C	7.84	33.71		200	6.84	33.92	26.62	146.3	.426
150C	7.52	33.84		250	6.33	33.96	26.72	137.7	.497
200C	6.84	33.92		300	5.97	34.01	26.80	130.2	.564
251C	6.32	33.96		400	4.90	34.04	26.95	115.9	.687
302C	5.96	34.01							
400C	4.90	34.04							

FH 10 43 58.8 N 124 22.6 W DATE 21 JAN 71 0500 GCT WIRE
 DRY 46.0 WET 41.0 CRUISE Y7101C WIND DIRECTION 30 VEL 06 KTS BAR 33
 SWELL DIRECTION 28 H 03 T 07 CLOUD AMT 0 WEATHER 00

0C	8.97	25.47		0	8.97	25.48	19.72	802.6	0
1C	9.05	31.18		10	9.23	32.53	25.18	280.4	.054
3C	9.25	32.23		20	9.23	32.57	25.21	278.2	.082
4C	9.25	32.34		30	9.24	32.57	25.21	278.0	.110
10C	9.23	32.53		50	9.26	32.67	25.28	271.2	.165
21C	9.23	32.57		75	9.19	32.79	25.39	261.7	.231
30C	9.24	32.57							
40C	9.29	32.65							
50C	9.26	32.67							
61C	9.18	32.71							
70C	9.17	32.73							
75C	9.19	32.79							
84C	9.17	32.85							

FH 20 43 59.2 N 124 36.5 W DATE 21 JAN 71 0645 GCT WIRE
 DRY 61.0 WET 56.0 CRUISE Y7101C WIND DIRECTION 26 VEL 06 KTS BAR 34
 SWELL DIRECTION 28 H 03 T 07 CLOUD 6 AMT 2 WEATHER 03

0C	9.12	32.57		0	9.12	32.57	25.23	275.6	0
1C	9.12	32.58		10	9.13	32.59	25.24	274.5	.028
3C	9.12	32.58		20	9.17	32.60	25.24	274.5	.055
10C	9.13	32.59		30	9.15	32.63	25.27	272.2	.082
20C	9.17	32.60		50	9.14	32.65	25.28	271.4	.137
30C	9.15	32.63		75	8.99	32.98	25.57	244.9	.201
40C	9.16	32.64		100	8.91	33.62	26.08	196.6	.256
52C	9.14	32.65							
60C	9.13	32.67							
71C	9.02	32.76							
79C	8.96	33.22							
89C	8.92	33.57							
102C	8.90	33.63							
120C	8.64	33.73							
128C	8.53	33.75							

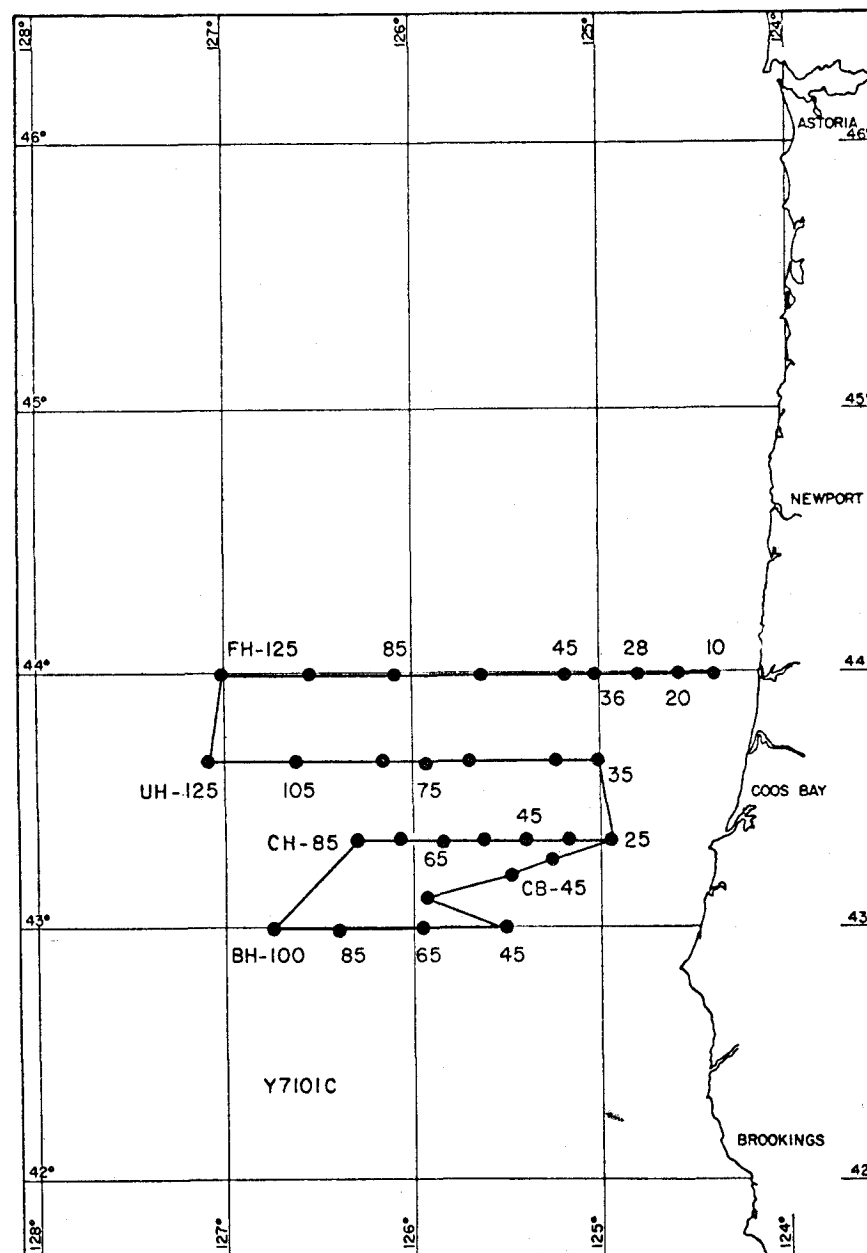
1250	8.46	33.42	300	5.69	33.97	26.81	129.2	.622
1520	8.00	33.64	400	5.11	34.06	26.95	116.6	.745
1730	7.45	33.80	500	4.53	34.14	27.08	104.7	.856
2030	8.15	33.85	600	4.30	34.25	27.18	95.7	.956
2250	6.67	33.92	700	3.98	34.30	27.26	88.6	1.048
2530	6.32	33.93	800	3.79	34.36	27.32	83.0	1.134
3000	5.69	33.97	1000	3.40	34.41	27.40	76.2	1.293
4030	5.11	34.06						
5000	4.52	34.14						
6000	4.30	34.24						
6990	3.98	34.30						
8020	3.79	34.36						
9920	3.62	34.39						
10000	3.40	34.41						

FH 125 43 59.0 N 127 00.0 W DATE 14 JAN 71 1310 GCT WIRE
 DRY 41.9 WET 39.2 CRUISE Y71018 WIND DIRECTION 26 VEL 32 KTS BAR 07
 SWELL DIRECTION 27 H 06 T 08 CLOUD 8 AMT 5 WEATHER 02

00	8.83	32.49	0	8.83	32.50	25.21	277.3	0
100	8.85	32.50	10	8.85	32.50	25.22	277.0	.028
210	8.85	32.50	20	8.85	32.50	25.21	277.5	.055
330	8.85	32.50	30	8.85	32.50	25.22	277.3	.083
500	8.85	32.51	50	8.85	32.51	25.22	276.9	.139
750	8.94	32.54	75	8.94	32.53	25.23	277.1	.208
850	8.83	32.67	100	8.20	33.29	25.93	211.0	.269
900	8.42	33.01	150	7.67	33.79	26.40	167.2	.363
1010	8.18	33.29	200	7.08	33.91	26.57	150.7	.443
1240	7.97	33.61	250	6.51	33.93	26.67	141.8	.516
1510	7.66	33.79	300	5.58	33.93	26.79	131.1	.584
2020	7.06	33.91	400	4.79	34.04	26.96	114.8	.707
2500	6.50	33.93	500	4.55	34.16	27.09	104.0	.816
3010	5.56	33.93	600	4.27	34.24	27.18	95.8	.916
4020	4.78	34.04	700	4.16	34.32	27.26	89.0	1.009
5010	4.55	34.16	800	3.89	34.38	27.33	82.9	1.094
6020	4.27	34.24	1000	3.32	34.41	27.41	75.4	1.253
7000	4.16	34.32						
8000	3.88	34.37						
9030	3.56	34.39						
10020	3.32	34.41						

FH 125 43 59.0 N 127 00.1 W DATE 14 JAN 71 1945 GCT WIRE
 DRY 45.9 WET 45.0 CRUISE Y71018 WIND DIRECTION 18 VEL 22 KTS BAR 08
 SWELL DIRECTION 27 H 04 T 08 CLOUD 7 AMT 8 WEATHER 02

00	8.87	32.54	0	8.87	32.54	25.24	274.2	0
110	8.87	32.53	10	8.87	32.53	25.23	275.3	.027
190	8.87	32.52	20	8.87	32.52	25.23	276.2	.055
310	8.87	32.54	30	8.87	32.54	25.24	275.1	.083
500	8.87	32.54	50	8.87	32.54	25.24	275.0	.138
660	8.87	32.54	75	8.87	32.55	25.25	274.7	.206
750	8.87	32.55	100	8.15	33.42	26.04	200.1	.266
850	8.65	32.88	150	7.69	33.79	26.40	166.8	.357
990	8.16	33.40	200	6.73	33.89	26.61	147.6	.436
1120	8.11	33.61	250	6.04	33.92	26.72	137.1	.507
1250	7.99	33.72	300	5.55	33.93	26.79	130.8	.574
1500	7.69	33.79	400	4.84	34.02	26.94	116.9	.698
2020	6.69	33.89						
3010	5.54	33.93						
4020	4.83	34.02						



OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)

FH 29 43 59.0 N 124 47.1 W DATE 21 JAN 71 0825 GCT WIRE
 DRY 49.5 WET 44.5 CRUISE Y7101C WIND DIRECTION 27 VEL 10 KTS BAR 33
 SWELL DIRECTION 28 H 03 T 07 CLOUD 8 AMT 2 WEATHER 02

0C	9.30	32.38		0	9.30	32.38	25.09	292.4	0
1C	9.30	32.38		10	9.31	32.38	25.05	292.8	.029
103	9.31	32.38		20	9.31	32.45	25.10	288.2	.058
34C	9.26	32.57		30	9.28	32.53	25.17	281.7	.087
50C	9.14	32.66		50	9.14	32.67	25.30	270.1	.142
62C	9.05	32.77		75	8.86	33.37	25.89	213.7	.202
80C	8.78	33.60							
90C	8.64	33.67							

FH 36 43 59.0 N 125 01.1 W DATE 21 JAN 71 1110 GCT WIRE
 DRY 47.1 WET 44.0 CRUISE Y7101C WIND DIRECTION 28 VEL 14 KTS BAR 33
 SWELL DIRECTION 28 H 04 T 07 CLOUD 8 AMT 5 WEATHER 03

0C	9.30	32.58		0	9.30	32.58	25.21	277.6	0
2C	9.30	32.58		10	9.30	32.57	25.20	278.6	.028
13C	9.30	32.57		20	9.30	32.57	25.20	278.7	.056
20C	9.30	32.57		30	9.33	32.60	25.22	277.1	.083
32C	9.33	32.60		50	9.26	32.70	25.31	269.2	.138
53C	9.24	32.73		75	9.07	33.46	25.93	210.2	.198
68C	9.23	33.01		100	8.57	33.67	26.17	187.9	.248
75C	9.07	33.46		150	8.08	33.81	26.36	170.8	.337
89C	8.81	33.56		200	7.68	33.88	26.47	160.7	.420
102C	8.53	33.69		250	6.99	33.95	26.62	146.8	.497
152C	8.07	33.82		300	6.34	34.00	26.75	135.5	.568
205C	7.63	33.89		400	5.77	34.07	26.87	124.3	.697
254C	6.93	33.96		500	5.28	34.12	26.97	115.6	.817
301C	6.33	34.00		600	4.78	34.22	27.11	102.6	.926
402C	5.76	34.07		700	4.39	34.30	27.21	93.5	1.024
502C	5.27	34.12		800	4.01	34.38	27.32	84.1	1.113
603C	4.77	34.22		1000	3.58	34.46	27.43	74.6	1.272
701C	4.39	34.30							
803C	4.00	34.38							
1001C	3.58	34.46							

FH 45 43 59.0 N 125 11.0 W DATE 21 JAN 71 1300 GCT WIRE
 DRY 46.2 WET 44.9 CRUISE Y7101C WIND DIRECTION 27 VEL 20 KTS BAR 33
 SWELL DIRECTION 28 H 04 T 07 CLOUD 8 AMT 6 WEATHER 03

0C	9.13	32.60		0	9.13	32.60	25.25	273.6	0
1C	9.13	32.60		10	9.14	32.59	25.24	274.6	.027
10C	9.14	32.59		20	9.14	32.58	25.23	275.8	.055
22C	9.14	32.58		30	9.14	32.59	25.24	275.5	.082
32C	9.14	32.59		50	9.15	32.61	25.25	274.2	.137
54C	9.15	32.62		75	8.85	33.36	25.89	214.3	.198
63C	9.15	32.66		100	8.64	33.72	26.20	184.9	.248
77C	8.80	33.49		150	8.08	33.88	26.40	166.4	.336
87C	8.78	33.66		200	7.27	33.95	26.58	150.4	.415
109C	8.64	33.72		250	6.77	33.98	26.67	141.9	.488
150C	8.03	33.87		300	6.22	34.03	26.78	132.0	.557
203C	7.22	33.95		400	5.58	34.07	26.90	121.5	.684

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)

FH 105 43 59.2 N 126 32.8 W DATE 22 JAN 71 0030 GCT WIRE
 DRY 49.0 WET 45.1 CRUISE Y7101C WIND DIRECTION 31 VEL 10 KTS BAR 34
 SWELL DIRECTION 30 H 06 T 07 CLOUD 8 AMT 7 WEATHER 02

0C	8.89	32.60		0	8.89	32.60	25.29	270.0	0
2C	8.89	32.60		10	8.89	32.59	25.28	271.1	.027
12C	8.89	32.59		20	8.89	32.60	25.28	270.7	.054
21C	8.89	32.60		30	8.88	32.59	25.28	271.1	.081
30C	8.88	32.59		50	8.87	32.60	25.29	270.5	.135
50C	8.87	32.60		75	8.77	32.64	25.34	266.6	.203
66C	8.81	32.59		100	8.25	33.44	26.04	200.0	.261
79C	8.71	32.72		150	7.59	33.84	26.45	161.7	.351
87C	8.40	33.09		200	7.02	33.89	26.57	151.3	.429
100C	8.25	33.44		250	6.50	33.95	26.68	140.7	.502
150C	7.59	33.84		300	5.79	33.94	26.77	132.9	.571
201C	7.01	33.89		400	4.87	34.00	26.92	115.9	.697
251C	6.49	33.95		500	4.65	34.12	27.04	108.4	.810
302C	5.76	33.94		600	4.27	34.22	27.16	97.4	.913
404C	4.85	34.00		700	4.16	34.33	27.27	88.1	1.006
503C	4.65	34.12		800	3.87	34.40	27.35	80.9	1.090
603C	4.26	34.22		1000	3.31	34.46	27.45	71.5	1.242
700C	4.15	34.33							
803C	3.86	34.40							
1000C	3.31	34.46							

FH 125 43 59.0 N 127 00.2 W DATE 22 JAN 71 0300 GCT WIRE
 DRY 47.0 WET 45.0 CRUISE Y7101C WIND DIRECTION 27 VEL 14 KTS BAR 32
 SWELL DIRECTION 30 H 06 T 08 CLOUD 8 AMT 8 WEATHER 02

0C	8.74	32.55		0	8.74	32.55	25.27	271.5	0
1C	8.74	32.55		10	8.74	32.55	25.27	272.0	.027
11C	8.74	32.55		20	8.75	32.56	25.28	271.2	.054
20C	8.75	32.56		30	8.75	32.55	25.27	272.4	.082
31C	8.75	32.55		50	8.78	32.58	25.28	271.4	.136
52C	8.79	32.58		75	8.82	32.63	25.32	268.0	.203
62C	8.83	32.60		100	7.79	33.51	26.17	188.1	.260
75C	8.82	32.63		150	7.23	33.83	26.50	157.5	.347
90C	7.87	33.35		200	6.83	33.92	26.62	146.2	.423
100C	7.78	33.51		250	6.10	33.92	26.71	137.7	.493
150C	7.23	33.83							
200C	6.83	33.92							
250C	6.10	33.92							

UH 125 43 39.0 N 127 05.0 W DATE 22 JAN 71 0630 GCT WIRE
 DRY 47.0 WET 45.5 CRUISE Y7101C WIND DIRECTION 27 VEL 16 KTS BAR 33
 SWELL DIRECTION 30 H 05 T 07 CLOUD 8 AMT 1 WEATHER 02

0C	9.11	32.62		0	9.11	32.63	25.27	271.8	0
1C	9.11	32.62		10	9.12	32.60	25.25	273.7	.027
11C	9.12	32.60		20	9.12	32.61	25.26	273.0	.055
20C	9.12	32.61		30	9.12	32.61	25.26	273.2	.082
30C	9.12	32.61		50	9.19	32.65	25.28	272.0	.136
51C	9.19	32.65		75	8.86	32.63	25.31	268.8	.204
62C	8.88	32.64		100	8.68	33.25	25.83	220.3	.265
76C	8.86	32.63		150	8.03	33.77	26.33	173.1	.363

251C	6.76	33.98	500	5.07	34.15	27.02	111.0	.800
304C	6.18	34.03	600	4.75	34.22	27.11	103.0	.907
400C	5.58	34.07	700	4.39	34.30	27.22	93.9	1.005
503C	5.06	34.15	800	4.03	34.38	27.32	83.7	1.093
605C	4.74	34.22	1000	3.52	34.47	27.44	73.2	1.250
703C	4.38	34.30						
803C	4.02	34.38						
1002C	3.52	34.47						

FH 65 43 59.0 N 125 37.7 W DATE 21 JAN 71 1515 GCT WIRE
 DRY 45.5 WET 44.0 CRUISE Y7101C WIND DIRECTION 29 VEL 20 KTS BAR 31
 SWELL DIRECTION 28 H 04 T 08 CLOUD 8 AMT 3 WEATHER 03

0C	8.85	32.54	0	8.85	32.54	25.25	273.9	0
1C	8.85	32.54	10	8.85	32.54	25.24	274.3	.027
11C	8.85	32.54	20	8.85	32.54	25.24	274.5	.055
22C	8.85	32.54	30	8.86	32.53	25.24	275.3	.082
34C	8.86	32.53	50	8.87	32.55	25.25	274.2	.137
53C	8.87	32.56	75	8.86	32.59	25.28	272.0	.206
63C	8.87	32.57	100	8.29	33.44	26.04	200.5	.265
77C	8.83	32.59	150	7.46	33.83	26.46	161.2	.355
87C	8.37	33.25	200	6.89	33.95	26.63	145.1	.432
100C	8.29	33.44	250	6.33	33.98	26.73	136.2	.502
151C	7.44	33.83	300	6.12	34.03	26.80	130.5	.569
201C	6.88	33.95	400	5.63	34.08	26.90	121.3	.694
252C	6.31	33.98	500	5.04	34.18	27.05	107.7	.809
301C	6.12	34.03	600	4.59	34.24	27.14	99.5	.912
400C	5.62	34.08	700	4.27	34.30	27.23	92.2	1.008
500C	5.03	34.18	800	4.02	34.37	27.31	84.9	1.097
604C	4.58	34.24	1000	3.45	34.47	27.45	72.4	1.254
704C	4.26	34.30						
803C	4.01	34.37						
1001C	3.45	34.47						

FH 95 43 58.8 N 126 05.4 W DATE 21 JAN 71 2005 GCT WIRE
 DRY 49.0 WET 46.0 CRUISE Y7101C WIND DIRECTION 32 VEL 18 KTS BAR 33
 SWELL DIRECTION 30 H 04 T 07 CLOUD 6 AMT 6 WEATHER 02

0C	9.28	32.60	0	9.28	32.60	25.23	275.8	0
1C	9.28	32.60	10	9.28	32.60	25.23	276.0	.028
10C	9.28	32.60	20	9.28	32.60	25.22	276.5	.055
21C	9.28	32.60	30	9.28	32.61	25.23	275.6	.083
30C	9.28	32.61	50	9.28	32.61	25.23	276.2	.138
51C	9.28	32.61	75	9.30	32.63	25.24	275.9	.207
62C	9.29	32.60	100	8.55	33.08	25.72	231.0	.270
75C	9.30	32.62	150	7.79	33.69	26.30	176.3	.372
87C	9.18	32.72	200	7.15	33.88	26.55	153.3	.455
100C	8.55	33.08	250	6.47	33.95	26.69	140.3	.528
151C	7.79	33.69	300	5.80	33.97	26.79	130.9	.596
200C	7.14	33.88	400	5.13	34.04	26.93	118.2	.720
251C	6.46	33.95	500	4.60	34.13	27.06	106.4	.832
302C	5.78	33.97	600	4.39	34.25	27.18	95.8	.934
400C	5.12	34.04	700	4.14	34.33	27.27	88.3	1.026
500C	4.60	34.13	800	3.90	34.38	27.33	82.2	1.111
603C	4.38	34.25	1000	3.40	34.46	27.44	72.6	1.265
702C	4.13	34.33						
800C	3.99	34.38						
1001C	3.40	34.46						

87C	8.67	32.96	200	7.01	33.89	26.57	150.7	.444
100C	8.68	33.25	250	6.52	33.91	26.65	143.8	.518
150C	8.03	33.77	300	5.82	33.91	26.74	135.6	.588
200C	7.00	33.89	400	4.88	33.98	26.91	119.7	.715
252C	6.50	33.91	500	4.58	34.10	27.04	108.4	.830
303C	5.78	33.91	600	4.44	34.23	27.15	98.4	.933
400C	4.87	33.98	700	4.31	34.31	27.24	91.5	1.028
500C	4.58	34.10	800	3.93	34.37	27.32	83.9	1.115
601C	4.44	34.23	1000	3.46	34.47	27.45	72.5	1.272
700C	4.31	34.31						
803C	3.92	34.37						
1001C	3.46	34.47						

UH 105 43 39.0 N 126 36.9 W DATE 22 JAN 71 1117 GCT WIRE
 DRY 48.8 WET 48.1 CRUISE Y7101C WIND DIRECTION 27 VEL 18 KTS BAR 31
 SWELL DIRECTION 30 H 04 T 07 CLOUD 6 AMT 8 WEATHER 02

0C	9.31	32.62	0	9.31	32.63	25.24	274.8	0
1C	9.31	32.62	10	9.32	32.61	25.23	275.9	.028
10C	9.32	32.61	20	9.32	32.61	25.23	276.3	.055
21C	9.32	32.61	30	9.32	32.62	25.23	276.0	.083
34C	9.32	32.62	50	9.32	32.61	25.23	276.8	.138
52C	9.32	32.61	75	9.33	32.67	25.27	273.1	.207
67C	9.33	32.62	100	8.61	33.36	25.92	211.7	.267
76C	9.32	32.68	150	7.68	33.80	26.41	165.8	.362
88C	8.83	33.05	200	6.94	33.90	26.59	149.1	.440
101C	8.60	33.38	250	6.29	33.92	26.69	140.2	.513
150C	7.67	33.80	300	5.67	33.90	26.76	134.0	.581
200C	6.94	33.90	400	5.14	34.03	26.92	119.7	.708
251C	6.28	33.92	500	4.81	34.13	27.03	109.6	.823
300C	5.66	33.90	600	4.41	34.18	27.12	101.4	.928
401C	5.14	34.03	700	4.13	34.29	27.23	91.3	1.024
500C	4.81	34.12	800	3.95	34.35	27.30	85.5	1.113
600C	4.41	34.18	1000	3.52	34.46	27.43	73.9	1.272
701C	4.13	34.29						
801C	3.95	34.35						
1000C	3.52	34.46						

UH 85 43 39.0 N 126 09.5 W DATE 22 JAN 71 1450 GCT WIRE
 DRY 48.0 WET 47.0 CRUISE Y7101C WIND DIRECTION 27 VEL 18 KTS BAR 30
 SWELL DIRECTION 30 H 05 T 07 CLOUD 6 AMT 8 WEATHER 02

0C	9.26	32.58	0	9.26	32.58	25.21	277.0	0
1C	9.26	32.58	10	9.26	32.58	25.21	277.5	.028
13C	9.26	32.58	20	9.26	32.58	25.21	277.6	.055
22C	9.26	32.58	30	9.26	32.57	25.21	278.4	.083
33C	9.26	32.57	50	9.26	32.58	25.21	278.5	.139
54C	9.26	32.58	75	9.30	32.60	25.22	277.4	.208
63C	9.29	32.59	100	8.65	32.88	25.54	248.1	.274
79C	9.30	32.61	150	7.57	33.60	26.27	179.3	.381
89C	9.23	32.63	200	7.15	33.87	26.54	154.3	.464
100C	8.65	32.87	250	6.41	33.92	26.67	142.0	.538
153C	7.55	33.63	300	5.71	33.93	26.77	132.4	.607
204C	7.12	33.88	400	5.05	34.02	26.92	118.9	.732
250C	6.40	33.91	500	4.55	34.12	27.05	107.2	.845
300C	5.71	33.93	600	4.36	34.21	27.15	99.0	.949
400C	5.05	34.02	700	4.25	34.28	27.21	93.4	1.045
504C	4.54	34.12	800	3.91	34.36	27.32	83.9	1.133
602C	4.36	34.21	1000	3.44	34.45	27.43	73.8	1.291
701C	4.25	34.28						
800C	3.91	34.36						
1002C	3.44	34.45						

OBSERVED

INTERPOLATED

COMPUTED

D T S O₂ Z T S σ_t 8 ΔD
 (m) (°C) (‰) (ml/l) (m) (°C) (‰) (x10³) (dyn.m)
 UH 75 43 38.6 N 125 56.0 W DATE 22 JAN 71 1711 GCT WIRE
 DRY 47.3 WET 46.5 CRUISE Y7101C WIND DIRECTION 28 VEL 20 KTS BAR 30
 SWELL DIRECTION 30 H 04 T 07 CLOUD 6 AMT 6 WEATHER 02

00	8.99	32.57		0	8.99	32.57	25.25	273.7	0
10	8.99	32.57		10	9.00	32.57	25.24	274.3	.027
110	9.00	32.57		20	9.00	32.56	25.24	275.0	.055
260	9.00	32.56		30	9.00	32.56	25.24	275.1	.082
350	9.00	32.57		50	9.00	32.57	25.25	274.7	.137
500	9.00	32.57		75	9.02	32.62	25.28	272.3	.206
620	9.05	32.60		100	8.05	33.15	25.84	218.6	.267
760	9.01	32.62		150	7.63	33.78	26.40	166.6	.363
840	8.64	32.78		200	7.03	33.88	26.56	152.4	.443
1000	8.05	33.15		250	6.38	33.92	26.67	141.6	.517
1500	7.62	33.78		300	5.76	33.94	26.78	132.2	.585
2000	7.02	33.87		400	5.08	34.05	26.94	117.3	.710
2500	6.37	33.91							
3000	5.75	33.94							
4000	5.08	34.05							

UH 65 43 39.0 N 125 41.9 W DATE 22 JAN 71 1915 GCT WIRE
 DRY 47.9 WET 45.1 CRUISE Y7101C WIND DIRECTION 28 VEL 20 KTS BAR 30
 SWELL DIRECTION 30 H 04 T 07 CLOUD 6 AMT 6 WEATHER 02

00	8.93	32.49		0	8.93	32.50	25.20	278.8	0
10	8.93	32.49		10	8.93	32.51	25.21	277.4	.028
100	8.93	32.51		20	8.93	32.49	25.19	279.4	.056
190	8.93	32.49		30	8.93	32.50	25.20	278.5	.084
300	8.93	32.50		50	8.93	32.50	25.20	279.1	.139
490	8.93	32.50		75	8.37	32.52	25.30	269.8	.208
700	8.96	32.51		100	7.97	33.17	25.87	216.0	.269
790	7.95	32.53		150	7.63	33.86	26.46	160.8	.363
900	8.20	32.99		200	7.06	33.96	26.62	146.1	.439
1000	7.97	33.17		250	6.68	33.99	26.69	140.1	.511
1250	7.82	33.69		300	6.27	34.03	26.78	131.9	.579
1490	7.64	33.86		400	5.46	34.04	26.89	122.6	.706
2000	7.05	33.96							
2520	6.67	33.99							
3000	6.26	34.03							
4020	5.44	34.04							

UH 45 43 39.0 N 125 14.0 W DATE 22 JAN 71 2300 GCT WIRE
 DRY 48.0 WET 46.5 CRUISE Y7101C WIND DIRECTION 28 VEL 12 KTS BAR 29
 SWELL DIRECTION 30 H 04 T 07 CLOUD 6 AMT 8 WEATHER 02

00	9.14	32.56		0	9.14	32.56	25.22	276.7	0
20	9.14	32.56		10	9.14	32.56	25.21	277.1	.028
120	9.14	32.56		20	9.14	32.57	25.23	276.3	.055
200	9.14	32.57		30	9.13	32.56	25.22	277.3	.083
310	9.13	32.56		50	9.12	32.60	25.25	274.3	.138
520	9.12	32.63		75	8.67	33.46	25.99	204.9	.198
660	9.01	33.09		100	8.67	33.73	26.21	184.6	.247
750	8.67	33.45		150	8.04	33.93	26.45	162.0	.333
870	8.87	33.64		200	7.30	33.94	26.57	150.9	.412
1000	8.67	33.73		250	6.92	33.98	26.66	143.5	.485
1520	8.02	33.93		300	6.33	34.01	26.75	134.7	.555

OBSERVED

INTERPOLATED

COMPUTED

D T S O₂ Z T S σ_t 8 ΔD
 (m) (°C) (‰) (ml/l) (m) (°C) (‰) (x10³) (dyn.m)
 CH 25 43 20.5 N 124 56.6 W DATE 23 JAN 71 0559 GCT WIRE 00
 DRY 48.0 WET 47.2 CRUISE Y7101C WIND DIRECTION 30 VEL 15 KTS BAR 28
 SWELL DIRECTION 30 H 04 T 07 CLOUD 6 AMT 8 WEATHER 02

0	9.49	32.557	6.46	0	9.49	32.56	25.16	282.2	0
10	9.51	32.560	6.45	10	9.51	32.56	25.16	282.5	.028
20	9.45	32.572	6.42	20	9.45	32.56	25.18	280.8	.056
30	9.46	32.592	6.40	30	9.46	32.60	25.19	279.7	.084
50	9.38	32.623	6.34	50	9.38	32.63	25.23	276.5	.140
67	9.44	32.693	6.12	75	9.16	33.20	25.71	231.3	.203
75	9.16	33.194	4.97	100	8.75	33.56	26.05	199.0	.257
87	8.73	33.385	4.13	150	7.95	33.84	26.39	167.8	.349
100	8.75	33.552	3.91	200	7.07	33.91	26.57	150.7	.429
125	8.47	33.768	3.30	250	6.67	33.98	26.69	140.2	.501
150	7.95	33.827	3.14	300	6.37	34.02	26.76	134.4	.570
200	7.07	33.902	3.12	400	5.55	34.06	26.90	121.9	.698
250	6.66	33.979	2.37						
300	6.37	34.015	1.89						
400		34.064	1.27						

CH 35 43 20.5 N 125 10.2 W DATE 23 JAN 71 0800 GCT WIRE
 DRY 49.0 WET 49.0 CRUISE Y7101C WIND DIRECTION 31 VEL 15 KTS BAR 28
 SWELL DIRECTION 30 H 04 T 07 CLOUD AMT 9 WEATHER 52

00	9.60	32.61		0	9.60	32.61	25.18	280.0	0
10	9.60	32.61		10	9.60	32.59	25.17	281.6	.028
100	9.60	32.59		20	9.60	32.61	25.18	280.3	.056
200	9.60	32.61		30	9.60	32.60	25.17	281.4	.084
320	9.60	32.60		50	9.43	32.64	25.23	276.1	.140
510	9.42	32.65		75	9.03	33.14	25.68	233.8	.204
630	9.48	32.86		100	8.96	33.60	26.06	198.6	.258
790	8.87	33.23		150	7.88	33.89	26.45	162.0	.348
910	8.86	33.45		200	6.81	33.91	26.61	147.0	.425
1030	8.99	33.65		250	6.38	33.97	26.72	137.3	.496
1510	7.84	33.90		300	6.16	34.06	26.81	129.0	.563
2020	6.78	33.91		400	5.65	34.10	26.91	120.4	.687
2540	6.36	33.98		500	5.10	34.17	27.03	110.1	.803
3030	6.15	34.06		600	4.76	34.24	27.13	101.5	.908
4010	5.64	34.10		700	4.34	34.33	27.24	90.7	1.004
5000	5.10	34.16		800	4.06	34.36	27.30	86.1	1.093
6030	4.75	34.24							
7020	4.33	34.33							
8040	4.05	34.36							

CH 35 43 20.5 N 125 10.2 W DATE 23 JAN 71 0822 GCT WIRE 00
 DRY 49.0 WET 49.0 CRUISE Y7101C WIND DIRECTION 31 VEL 15 KTS BAR 28
 SWELL DIRECTION 30 H 04 T 07 CLOUD AMT 9 WEATHER 02

0	9.61	32.608	6.35	0	9.61	32.61	25.18	280.3	0
10	9.61	32.606		10	9.61	32.61	25.18	280.6	.028
20	9.60	32.607		20	9.60	32.61	25.18	280.5	.056
30	9.62	32.621		30	9.62	32.63	25.19	280.0	.084
50	9.49	32.645		50	9.49	32.65	25.23	276.6	.140
62	9.66	32.735		75	8.91	33.26	25.79	223.1	.202
75	8.91	33.253	4.92	100	8.97	33.67	26.10	194.2	.254
87	8.78	33.443	3.82	150	7.94	33.80	26.36	170.2	.345

200C	7.29	33.94	400	5.57	34.08	26.91	120.7	.682
250C	6.91	33.98	500	5.15	34.16	27.02	111.1	.798
302C	6.31	34.01	600	4.68	34.23	27.13	100.8	.904
403C	5.57	34.08	700	4.29	34.31	27.23	91.8	1.000
501C	5.15	34.16	800	4.02	35.09	27.88	31.3	1.062
600C	4.68	34.23	1000	3.52	34.47	27.44	73.1	1.166
701C	4.29	34.31						
801C	4.02	35.10						
1001C	3.52	34.46						

UM 35 43 39.0 N 125 00.5 W DATE 23 JAN 71 0133 GCT WIRE
 DRY 47.0 WET 47.3 CRUISE Y7101C WIND DIRECTION 29 VEL 16 KTS BAR 28
 SWELL DIRECTION 30 H 04 T 08 CLOUD 6 AMT 8 WEATHER 02

0C	9.16	32.55	0	9.16	32.55	25.21	277.7	0
1C	9.16	32.55	10	9.16	32.55	25.20	278.2	.028
11C	9.16	32.55	20	9.16	32.55	25.20	278.4	.056
22C	9.16	32.55	30	9.16	32.56	25.21	277.9	.083
31C	9.16	32.56	50	9.18	32.59	25.23	276.6	.139
55C	9.19	32.59	75	9.12	32.72	25.35	265.8	.207
62C	9.19	32.59	100	8.46	33.47	26.03	200.8	.265
75C	9.12	32.72	150	7.91	33.85	26.42	165.3	.356
87C	8.63	33.27	200	7.28	33.93	26.56	152.0	.436
103C	8.46	33.47	250	6.66	33.98	26.69	140.6	.509
153C	7.90	33.85	300	6.22	34.01	26.77	133.2	.577
202C	7.25	33.93	400	5.47	34.07	26.91	120.7	.704
254C	6.61	33.98	500	5.07	34.14	27.01	111.6	.820
301C	6.21	34.01	600	4.74	34.21	27.11	103.0	.928
404C	5.45	34.07	700	4.32	34.31	27.23	92.0	1.025
501C	5.07	34.14	800	4.13	34.36	27.30	86.4	1.114
600C	4.74	34.21	1000	3.60	34.44	27.41	76.3	1.277
701C	4.32	34.31						
800C	4.12	34.36						
1002C	3.59	34.44						

CH 25 43 20.5 N 124 56.6 W DATE 23 JAN 71 0432 GCT WIRE
 DRY 49.0 WET 47.2 CRUISE Y7101C WIND DIRECTION 30 VEL 15 KTS BAR 28
 SWELL DIRECTION 30 H 04 T 07 CLOUD 6 AMT 8 WEATHER 02

0C	9.54	32.58	0	9.54	32.58	25.17	281.3	0
2C	9.54	32.58	10	9.54	32.58	25.17	281.7	.028
12C	9.54	32.58	20	9.51	32.59	25.18	280.5	.056
26C	9.48	32.60	30	9.47	32.60	25.19	279.6	.084
31C	9.47	32.60	50	9.49	32.67	25.24	275.2	.140
57C	9.50	32.71	75	9.20	33.14	25.66	235.9	.204
66C	9.51	32.77	100	8.65	33.50	26.02	201.9	.258
77C	9.12	33.23	150	8.13	33.81	26.35	171.7	.352
97C	8.88	33.32	200	7.21	33.91	26.56	152.5	.433
101C	8.63	33.51	250	6.68	33.99	26.69	140.0	.506
154C	8.09	33.82	300	6.36	34.01	26.75	134.9	.575
203C	7.15	33.91	400	5.55	34.10	26.92	119.3	.702
251C	6.67	33.99	500	5.11	34.17	27.03	109.9	.816
301C	6.35	34.01	600	4.70	34.26	27.15	99.3	.921
401C	5.54	34.10	700	4.44	34.32	27.23	92.6	1.017
501C	5.11	34.17						
601C	4.70	34.26						
700C	4.44	34.32						

100	9.97	33.661	3.69	200	6.98	33.94	26.61	147.1	.425
125	8.49		2.68	250	6.57	34.02	26.73	136.0	.496
150	7.94		2.71	300	6.24	34.06	26.81	129.7	.562
200	6.98	33.934	2.87	400	5.65	34.08	26.90	121.9	.688
250	6.56	34.018	0.85						
300	6.24	34.055	0.71						
400		34.080	0.61						

CH 45 43 20.5 N 125 24.1 W DATE 23 JAN 71 1135 GCT WIRE
 DRY 49.4 WET 49.1 CRUISE Y7101C WIND DIRECTION 29 VEL 16 KTS BAR 28
 SWELL DIRECTION 30 H 04 T 07 CLOUD 6 AMT 8 WEATHER 02

0C	9.14	32.59	0	9.14	32.59	25.24	274.5	0
0C	9.14	32.59	10	9.15	32.59	25.24	275.0	.027
1C	9.14	32.59	20	9.14	32.60	25.25	274.1	.055
9C	9.15	32.59	30	9.15	32.59	25.24	275.3	.082
20C	9.14	32.60	50	9.18	32.63	25.26	273.5	.137
32C	9.15	32.59	75	8.52	33.45	26.01	203.0	.197
52C	9.18	32.65	100	8.16	33.75	26.29	175.3	.244
68C	8.71	33.22	150	7.55	33.91	26.51	156.6	.327
76C	8.50	33.48	200	7.07	33.96	26.62	146.4	.403
85C	8.36	33.61	250	6.65	34.02	26.72	137.7	.474
99C	8.18	33.74	300	6.18	34.04	26.80	130.4	.541
125C	7.79	33.85	400	5.60	34.11	26.93	119.1	.666
153C	7.53	33.91	500	4.95	34.17	27.05	107.7	.779
200C	7.07	33.96	600	4.58	34.27	27.17	96.7	.881
254C	6.62	34.02	700	4.31	34.34	27.26	89.4	.974
299C	6.19	34.04	800	4.04	34.38	27.32	84.0	1.061
399C	5.61	34.11	1000	3.43	34.42	27.41	75.8	1.221
499C	4.95	34.17						
605C	4.57	34.28						
800C	4.04	34.38						
903C	3.71	34.41						
998C	3.44	34.42						

CH 55 43 20.5 N 125 37.5 W DATE 23 JAN 71 1330 GCT WIRE
 DRY 54.0 WET 49.0 CRUISE Y7101C WIND DIRECTION 29 VEL 18 KTS BAR 27
 SWELL DIRECTION 30 H 05 T 07 CLOUD 6 AMT 8 WEATHER 02

0C	8.92	32.51	0	8.92	32.51	25.21	277.1	0
1C	8.92	32.51	10	8.92	32.51	25.21	277.6	.028
12C	8.92	32.51	20	8.92	32.50	25.21	278.2	.056
20C	8.92	32.50	30	8.92	32.50	25.21	278.4	.083
30C	8.92	32.50	50	8.92	32.50	25.21	278.7	.139
50C	8.92	32.50	75	8.91	32.56	25.25	274.5	.208
63C	8.92	32.52	100	7.86	33.42	26.08	196.1	.267
78C	8.86	32.62	150	7.63	33.85	26.45	161.6	.356
90C	8.13	33.28	200	7.04	33.96	26.62	146.5	.433
104C	7.80	33.43	250	6.57	33.98	26.70	139.0	.505
154C	7.62	33.88	300	6.13	34.02	26.79	131.3	.572
201C	7.03	33.96	400	5.51	34.11	26.94	118.1	.697
250C	6.57	33.98						
301C	6.12	34.02						
401C	5.51	34.11						

CH 55 43 20.5 N 125 37.5 W DATE 23 JAN 71 1450 GCT WIRE 03
 DRY 54.0 WET 49.0 CRUISE Y7101C WIND DIRECTION 29 VEL 18 KTS BAR 27
 SWELL DIRECTION 30 H 05 T 07 CLOUD 6 AMT 8 WEATHER 02

0	8.90	32.488	6.54	0	8.90	32.49	25.20	278.5	0
10	8.93	32.489	6.52	10	8.93	32.49	25.20	279.0	.028

OBSERVED

INTERPOLATED

COMPUTED

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
20	8.92	32.486	6.50	20	8.92	32.49	25.19	279.2	.056
30	8.92	32.486	6.50	30	8.92	32.49	25.19	279.4	.084
50	8.93	32.488	6.52	50	8.93	32.49	25.19	279.7	.140
62	8.91	32.497	6.58	75	8.92	32.53	25.23	276.9	.209
75	8.92	32.530	6.38	100	7.83	33.37	26.05	199.3	.269
87	8.19	33.067	5.34	150	7.74	33.83	26.42	164.6	.360
109	7.83	33.368	4.62	200	7.18	33.96	26.60	148.4	.438
125	7.84	33.669	3.97	250	6.65	33.99	26.70	139.5	.510
150	7.74	33.830	3.32	300	6.21	34.01	26.77	133.0	.578
200	7.17	33.951	2.58	400	5.59	34.09	26.91	120.6	.705
250	6.64	33.985	2.20						
300	6.21	34.007	1.92						
400	5.59	34.088	1.20						

CH 65 43 20.0 N 125 50.8 W DATE 23 JAN 71 1555 GCT WIRE
 DRY 47.1 WET 46.1 CRUISE Y7101C WIND DIRECTION 29 VEL 16 KTS BAR 27
 SWELL DIRECTION 30 H 06 T 08 CLOUD 6 AMT 8 WEATHER 02

00	8.92	32.50	0	8.92	32.50	25.21	277.9	0
20	8.92	32.50	10	8.92	32.49	25.20	279.0	.028
110	8.92	32.49	20	8.92	32.50	25.20	278.7	.056
230	8.92	32.50	30	8.93	32.50	25.20	278.8	.084
330	8.93	32.50	50	8.97	32.55	25.23	276.1	.139
560	8.99	32.56	75	8.96	32.59	25.27	273.0	.208
630	9.00	32.54	100	7.95	33.43	26.08	196.4	.266
750	8.96	32.59	150	7.57	33.83	26.45	162.0	.356
870	8.57	33.16	200	6.89	33.89	26.59	149.6	.434
1000	7.95	33.43	250	6.62	33.96	26.68	141.6	.507
1500	7.56	33.83	300	6.03	33.97	26.77	133.3	.575
2020	6.86	33.89	400	5.53	34.06	26.89	122.2	.703
2510	6.62	33.96	500	5.04	34.15	27.02	110.5	.819
3000	6.02	33.97	600	4.66	34.26	27.16	98.4	.924
4020	5.53	34.06	700	4.35	34.32	27.23	91.6	1.019
5020	5.03	34.15	800	4.05	34.37	27.31	85.3	1.107
6000	4.66	34.26						
7010	4.35	34.32						
8040	4.04	34.37						

CH 75 43 20.5 N 126 04.0 W DATE 23 JAN 71 1815 GCT WIRE
 DRY 48.2 WET 46.3 CRUISE Y7101C WIND DIRECTION 29 VEL 16 KTS BAR 27
 SWELL DIRECTION 30 H 07 T 08 CLOUD 6 AMT 7 WEATHER 01

00	9.03	32.58	0	9.03	32.58	25.25	273.6	0
10	9.03	32.58	10	9.03	32.56	25.24	275.2	.027
120	9.03	32.56	20	9.03	32.56	25.23	275.7	.055
220	9.03	32.56	30	9.03	32.56	25.23	275.8	.083
340	9.03	32.56	50	9.04	32.56	25.23	276.3	.138
530	9.04	32.56	75	9.04	32.56	25.23	276.5	.207
640	9.04	32.56	100	8.50	33.13	25.75	227.3	.270
750	9.04	32.56	150	7.66	33.66	26.30	176.5	.371
900	8.78	32.72	200	7.19	33.90	26.56	152.5	.453
1000	8.50	33.12	250	6.33	33.91	26.68	141.4	.526
1530	7.63	33.69	300	5.65	33.93	26.77	132.3	.595
2000	7.19	33.90	400	4.97	33.99	26.91	120.3	.721
2520	6.29	33.91						
3110	5.53	33.93						

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
1510	7.83	33.81		300	6.22	34.00	26.76	133.6	.582
2040	7.05	33.91		400	5.58	34.06	26.89	122.7	.711
2500	6.65	33.95							
3000	6.22	34.00							
4010	5.58	34.06							

BH 100 43 00.0 N 126 45.0 W DATE 24 JAN 71 0135 GCT WIRE 00
 DRY 47.0 WET 45.0 CRUISE Y7101C WIND DIRECTION 29 VEL 16 KTS BAR 25
 SWELL DIRECTION 30 H 06 T 08 CLOUD 6 AMT 7 WEATHER 02

0	9.22	32.586	6.51	0	9.22	32.59	25.23	275.9	0
10	9.14	32.582	6.51	10	9.14	32.59	25.23	275.2	.028
20	9.22	32.587	6.52	20	9.22	32.59	25.23	276.2	.055
30	9.24	32.578	6.50	30	9.24	32.58	25.22	277.4	.083
50	9.24	32.577	6.52	50	9.24	32.58	25.22	277.8	.138
62	9.24	32.579	6.49	75	9.33	32.64	25.25	275.1	.207
75	9.33	32.638	6.36	100	8.50	33.44	26.00	204.3	.267
87	9.08	32.970	5.54	150	7.79	33.84	26.42	165.0	.360
100	8.50	33.431	4.46	200	7.07	33.94	26.60	148.5	.438
125	7.84	33.709	3.78	250	6.69	33.99	26.69	140.1	.510
150	7.78	33.831	3.28	300	6.20	34.00	26.77	133.6	.578
200	7.07	33.932	2.85	400	5.64	34.07	26.89	122.9	.707
250	6.68	33.984	2.38						
300	6.20	33.997	2.06						
400	5.64	34.066	1.27						

BH 85 42 59.3 N 126 24.0 W DATE 24 JAN 71 0359 GCT WIRE
 DRY 46.6 WET 44.6 CRUISE Y7101C WIND DIRECTION 30 VEL 14 KTS BAR 25
 SWELL DIRECTION 30 H 06 T 08 CLOUD 8 AMT 2 WEATHER 01

00	9.39	32.65	0	9.39	32.65	25.25	273.8	0
10	9.39	32.65	10	9.39	32.65	25.25	274.2	.027
130	9.39	32.65	20	9.39	32.65	25.25	274.4	.055
210	9.39	32.65	30	9.39	32.64	25.24	275.2	.082
330	9.39	32.64	50	9.40	32.65	25.24	275.2	.137
520	9.40	32.65	75	9.42	32.72	25.30	270.4	.206
630	9.42	32.66	100	8.47	33.38	25.96	207.6	.265
750	9.42	32.72	150	7.83	33.78	26.37	169.7	.360
880	9.05	33.01	200	7.19	33.92	26.56	151.8	.440
1000	8.47	33.38	250	6.65	33.96	26.67	142.0	.513
1510	7.82	33.79	300	6.04	33.97	26.76	133.8	.582
2000	7.19	33.91	400	5.57	34.07	26.90	121.4	.710
2560	6.59	33.96	500	5.02	34.17	27.04	108.8	.825
3030	6.00	33.97	600	4.55	34.23	27.14	99.7	.929
4000	5.57	34.07	700	4.31	34.31	27.23	91.9	1.025
5020	5.01	34.17	800	4.04	34.36	27.30	85.8	1.114
6010	4.55	34.23	1000	3.52	34.45	27.42	74.6	1.274
7020	4.31	34.31						
8010	4.04	34.36						
10020	3.51	34.45						

BH 65 43 00.0 N 125 57.5 W DATE 24 JAN 71 0808 GCT WIRE
 DRY 49.2 WET 46.0 CRUISE Y7101C WIND DIRECTION 29 VEL 12 KTS BAR 25
 SWELL DIRECTION 30 H 06 T 08 CLOUD 8 AMT 2 WEATHER 02

409C 4.95 34.00

CH 75 43 20.5 N 126 04.0 W DATE 23 JAN 71 1926 GCT WIRE 00
 DRY 48.2 WET 46.3 CRUISE Y7101C WIND DIRECTION 29 VEL 16 KTS BAR 27
 SWELL DIRECTION 30 H 07 T 08 CLOUD 6 AMT 7 WEATHER 01

0	9.04	32.571	6.50	0	9.04	32.58	25.24	274.4	0
10	9.05	32.552	6.50	10	9.05	32.56	25.23	276.1	.028
20	9.02	32.549	6.51	20	9.02	32.55	25.23	276.0	.055
30	9.00	32.548	6.50	30	9.00	32.55	25.23	276.0	.083
50	9.02	32.549	6.50	50	9.02	32.55	25.23	276.6	.138
62	9.01	32.547	6.49	75	9.01	32.56	25.23	276.6	.207
75	9.01	32.552	6.49	100	8.57	33.06	25.69	233.0	.271
87	9.02	32.603	6.32	150	7.65	33.64	26.28	177.6	.373
100	8.57	33.058	5.54	200	7.32	33.90	26.54	154.2	.456
125	7.84	33.351	4.41	250	6.44	33.93	26.68	141.2	.530
150	7.64	33.635	4.04	300	5.67	33.94	26.78	131.5	.598
200	7.31	33.899	4.17	400	4.96	33.99	26.91	120.4	.724
250	6.43	33.926	2.98						
300	5.66	33.934	2.43						
400	4.96	33.989	1.59						

CH 85 43 20.5 N 126 17.9 W DATE 23 JAN 71 2055 GCT WIRE
 DRY 47.5 WET 46.0 CRUISE Y7101C WIND DIRECTION 29 VEL 16 KTS BAR 26
 SWELL DIRECTION 30 H 08 T 09 CLOUD 6 AMT 8 WEATHER 02

00	9.33	32.61		0	9.33	32.61	25.23	275.8	0
30	9.33	32.61		10	9.33	32.61	25.22	276.3	.028
130	9.33	32.61		20	9.33	32.60	25.22	276.9	.055
200	9.33	32.60		30	9.33	32.60	25.22	277.1	.083
330	9.33	32.60		50	9.33	32.60	25.22	277.5	.138
500	9.33	32.60		75	9.48	32.67	25.25	275.0	.207
620	9.44	32.67		100	8.95	33.18	25.73	229.6	.271
750	9.48	32.67		150	7.80	33.75	26.35	171.7	.371
880	9.46	32.70		200	7.08	33.87	26.54	153.6	.452
1010	8.90	33.23		250	6.47	33.91	26.66	143.3	.526
1510	7.79	33.76		300	5.69	33.92	26.77	133.2	.595
2050	7.02	33.88		400	5.13	34.00	26.89	121.7	.723
2550	6.41	33.91		500	4.79	34.11	27.02	110.6	.839
3010	5.67	33.92		600	4.42	34.19	27.12	101.1	.945
4010	5.13	34.00		700	4.14	34.25	27.21	93.8	1.042
5030	4.78	34.11		800	4.03	34.34	27.29	86.9	1.133
6020	4.41	34.19		1000	3.52	34.45	27.42	74.6	1.294
7000	4.13	34.25							
8080	4.02	34.35							
10020	3.51	34.45							

BH 100 43 00.0 N 126 45.0 W DATE 24 JAN 71 0045 GCT WIRE
 DRY 47.0 WET 45.0 CRUISE Y7101C WIND DIRECTION 29 VEL 16 KTS BAR 25
 SWELL DIRECTION 30 H 06 T 08 CLOUD 6 AMT 7 WEATHER 02

00	9.24	32.57		0	9.24	32.57	25.21	277.4	0
20	9.24	32.57		10	9.24	32.57	25.21	277.9	.028
120	9.24	32.57		20	9.24	32.59	25.23	276.3	.055
230	9.24	32.59		30	9.24	32.59	25.23	276.5	.083
300	9.24	32.59		50	9.25	32.59	25.22	277.3	.138
510	9.25	32.59		75	9.34	32.69	25.28	272.1	.207
650	9.25	32.60		100	8.52	33.42	25.98	206.1	.267
780	9.35	32.73		150	7.83	33.80	26.38	168.2	.360
870	9.13	32.94		200	7.10	33.91	26.57	151.0	.440
1000	8.52	33.41		250	6.66	33.96	26.67	142.3	.513

00	9.12	32.57		0	9.12	32.57	25.23	275.6	0
10	9.12	32.57		10	9.13	32.57	25.23	276.0	.028
100	9.13	32.57		20	9.14	32.57	25.22	276.6	.055
210	9.14	32.57		30	9.14	32.56	25.22	277.2	.083
300	9.14	32.56		50	9.14	32.57	25.22	277.4	.138
530	9.14	32.57		75	8.85	33.16	25.73	229.1	.202
620	9.16	32.59		100	8.16	33.59	26.17	187.6	.254
790	8.71	33.36		150	7.78	33.84	26.42	164.4	.342
900	8.37	33.53		200	7.18	33.93	26.58	150.0	.420
1020	8.12	33.60		250	6.68	33.90	26.63	146.2	.494
1520	7.77	33.85		300	6.25	33.99	26.75	135.3	.565
2000	7.17	33.93		400	5.44	34.05	26.90	121.6	.693
2500	6.67	33.90		500	4.89	34.12	27.01	111.2	.809
3020	6.23	33.99		600	4.50	34.23	27.15	99.2	.915
4010	5.43	34.05		700	4.33	34.30	27.22	92.9	1.011
5060	4.86	34.12		800	4.07	34.38	27.31	85.1	1.099
6020	4.49	34.23		1000	3.51	34.46	27.43	73.8	1.258
7030	4.33	34.30							
8000	4.07	34.37							
10020	3.50	34.46							

BH 65 43 00.0 N 125 57.5 W DATE 24 JAN 71 0933 GCT WIRE
 DRY 49.2 WET 46.0 CRUISE Y7101C WIND DIRECTION 29 VEL 12 KTS BAR 25
 SWELL DIRECTION 30 H 06 T 08 CLOUD 8 AMT 2 WEATHER 02

0	9.12	32.584	6.51	0	9.12	32.59	25.24	274.6	0
10	9.14	32.581	6.46	10	9.14	32.59	25.23	275.3	.027
20	9.13	32.586	6.38	20	9.13	32.59	25.24	274.9	.055
30	9.15	32.583	6.45	30	9.15	32.59	25.23	275.6	.083
50	9.12	32.586	6.42	50	9.12	32.59	25.24	275.3	.138
62	9.18	32.626	6.27	75	8.87	33.22	25.77	225.6	.200
75	8.87	33.211	4.76	100	8.08	33.65	26.23	182.2	.251
87	8.27	33.526	3.97	150	7.79	33.99	26.54	153.8	.335
100	8.08	33.647	3.99	200	7.19	33.96	26.60	148.8	.411
125	7.81	33.802	3.54	250	6.73	33.99	26.69	140.6	.483
150	7.78	33.982	3.23	300	6.28	34.02	26.77	133.2	.552
200	7.19	33.950	2.67	400	5.47	34.06	26.90	121.1	.679
250	6.73	33.986	2.44						
300	6.27	34.014	2.02						
400	5.47	34.062	1.27						

BH 45 43 00.0 N 125 30.4 W DATE 24 JAN 71 1210 GCT WIRE
 DRY 47.6 WET 45.1 CRUISE Y7101C WIND DIRECTION 26 VEL 12 KTS BAR 25
 SWELL DIRECTION 30 H 04 T 08 CLOUD 6 AMT 8 WEATHER 02

00	9.11	32.03		0	9.11	32.03	24.81	315.6	0
10	9.11	32.03		10	9.07	32.47	25.16	282.5	.030
100	9.07	32.47		20	9.06	32.51	25.19	280.1	.058
210	9.06	32.51		30	9.07	32.53	25.21	278.4	.086
300	9.07	32.53		50	9.07	32.54	25.21	278.4	.142
530	9.07	32.54		75	8.76	33.13	25.72	230.5	.205
630	9.08	32.54		100	8.36	33.52	26.08	196.2	.259
790	8.64	33.33		150	7.75	33.83	26.42	164.8	.349
870	8.55	33.40		200	7.03	33.87	26.55	153.0	.428
1050	8.29	33.56		250	6.52	33.92	26.66	142.8	.502
1520	7.73	33.84		300	6.27	34.03	26.78	132.5	.571
2030	6.99	33.87		400	5.50	34.06	26.90	121.6	.698
2540	6.49	33.93		500	4.97	34.21	27.08	105.5	.812
3010	6.27	34.03		600	4.61	34.27	27.17	97.0	.913
4010	5.49	34.06		700	4.31	34.33	27.25	90.4	1.006
5000	4.97	34.20		800	4.04	34.40	27.33	82.8	1.093
6000	4.61	34.27							

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^{-5}$)	(dyn.m)
701C	4.31	34.33							
800C	4.04	34.40							

BH 45 43 00.0 N 125 30.4 W DATE 24 JAN 71 1357 GCT WIRE 02

 DRY 47.6 WET 45.1 CRUISE Y7101C WIND DIRECTION 26 VEL 12 KTS BAR 25
 SWELL DIRECTION 30 H 04 T 08 CLOUD 6 AMT 8 WEATHER 02

0	9.08	32.418	6.57	0	9.08	32.42	25.12	286.3	0
10	9.08	32.458	6.54	10	9.08	32.46	25.15	283.5	.028
20	9.04	32.515	6.52	20	9.04	32.52	25.20	278.9	.057
30	9.06	32.519	6.54	30	9.06	32.52	25.20	279.0	.084
50	9.06	32.520	6.53	50	9.06	32.52	25.20	279.3	.140
62	9.08	32.542	6.46	75	8.78	33.30	25.85	218.1	.202
75	8.78	33.295	4.75	100	8.27	33.57	26.13	191.2	.254
87	8.51	33.442	4.46	150	7.82	33.89	26.45	161.7	.342
100	8.27	33.562	4.21	200	7.18	33.97	26.61	147.6	.419
125		33.763	3.57	250	6.58	34.01	26.72	137.6	.490
150	7.81	33.882	3.20	300	6.28	34.05	26.80	130.8	.557
200	7.17	33.962	2.87	400	5.57	34.10	26.92	119.7	.683
250	6.58	34.001	2.34						
300	6.27	34.047	1.88						
400	5.57	34.098	1.30						

 CB 65 43 07.0 N 125 56.0 W DATE 27 JAN 71 0205 GCT WIRE
 DRY 50.1 WET 48.5 CRUISE Y7101C WIND DIRECTION 20 VEL 06 KTS BAR 31
 SWELL DIRECTION 28 H 03 T 08 CLOUD 6 AMT 8 WEATHER 02

0C	9.10	32.56		0	9.10	32.56	25.22	276.1	0
3C	9.10	32.56		10	9.02	32.56	25.23	275.4	.028
11C	9.01	32.56		20	9.00	32.55	25.23	275.9	.055
22C	9.00	32.55		30	8.99	32.56	25.24	275.0	.083
30C	8.99	32.56		50	8.98	32.56	25.24	275.4	.138
51C	8.98	32.56		75	8.65	32.79	25.47	253.6	.204
63C	8.97	32.56		100	8.13	33.39	26.02	202.0	.261
75C	8.65	32.79		150	7.82	33.73	26.33	173.1	.355
87C	8.20	33.12		200	7.36	33.88	26.52	156.3	.437
101C	8.12	33.41		250	6.87	33.94	26.63	146.3	.512
150C	7.82	33.73		300	6.42	33.98	26.72	137.6	.583
200C	7.36	33.88		400	5.68	34.05	26.87	124.6	.714
251C	6.86	33.94		500	5.13	34.15	27.01	111.6	.832
300C	6.41	33.98		600	4.70	34.22	27.12	102.2	.939
401C	5.67	34.05		700	4.39	34.30	27.21	93.5	1.037
501C	5.13	34.15		800	4.10	34.36	27.29	86.6	1.127
601C	4.70	34.22		1000	3.53	34.45	27.42	74.7	1.288
701C	4.39	34.30							
803C	4.09	34.36							
1000C	3.53	34.45							

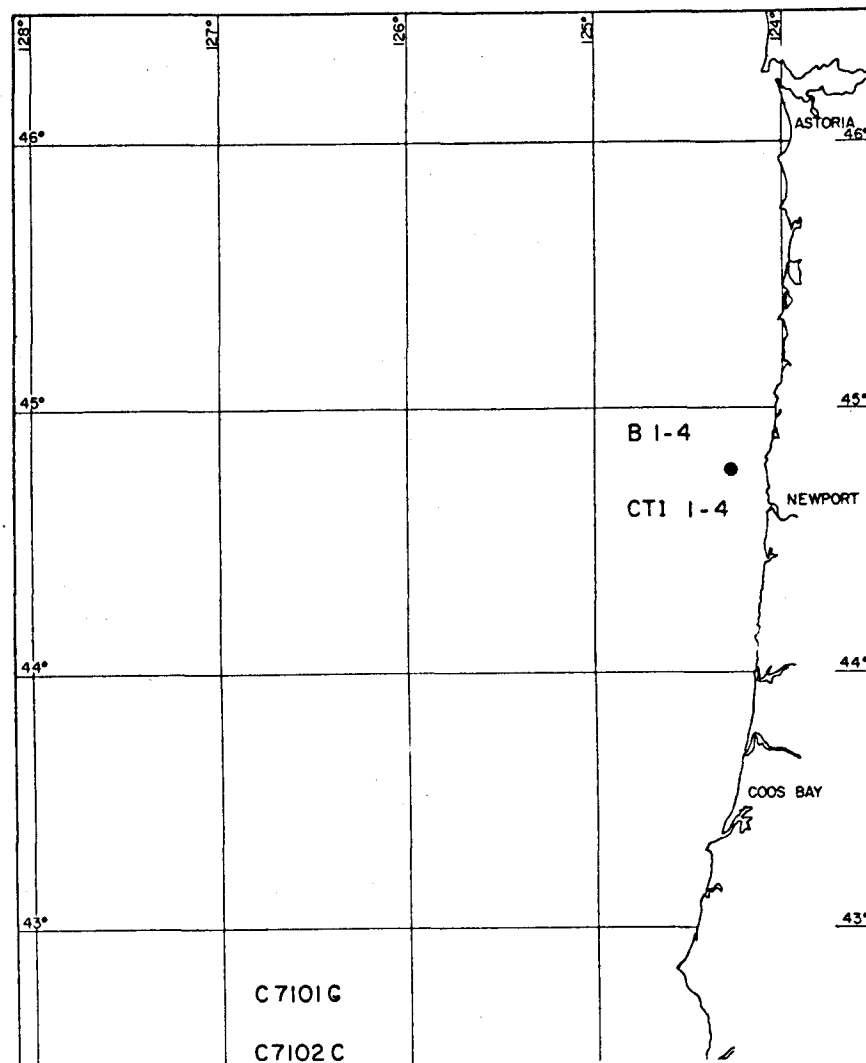
 CB 45 43 12.0 N 125 29.0 W DATE 27 JAN 71 0545 GCT WIRE
 DRY 49.9 WET 48.5 CRUISE Y7101C WIND DIRECTION 00 VEL 08 KTS BAR 30
 SWELL DIRECTION 28 H 03 T 08 CLOUD 8 AMT 2 WEATHER 01

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^{-5}$)	(dyn.m)
280C	7.19	33.87							
255C	6.58	33.94							



00	9.17	32.58	0	9.17	32.58	25.23	275.6	0
20	9.17	32.58	10	9.15	32.57	25.22	276.3	.028
140	9.14	32.57	20	9.14	32.57	25.23	276.3	.055
200	9.14	32.57	30	9.14	32.58	25.23	276.2	.083
320	9.14	32.53	50	9.16	32.61	25.25	274.6	.138
530	9.16	32.64	75	8.67	33.25	25.82	220.5	.200
690	8.78	33.13	100	8.16	33.70	26.26	179.7	.250
750	8.67	33.24	150	7.51	33.87	26.48	158.9	.334
890	8.31	33.56	200	6.92	33.92	26.60	147.9	.411
1030	8.13	33.72	250	6.41	33.96	26.71	138.3	.483
1510	7.50	33.87	300	6.01	33.99	26.78	132.1	.550
2040	6.88	33.92	400	5.52	34.10	26.93	119.2	.676
2500	6.40	33.96	500	5.03	34.15	27.03	109.9	.790
3020	6.00	33.99	600	4.71	34.23	27.12	101.7	.896
4030	5.51	34.10	700	4.36	34.31	27.22	92.5	.993
5000	5.02	34.15	800	4.11	34.36	27.29	86.6	1.082
6030	4.70	34.23	1000	3.54	34.46	27.43	74.1	1.243
7030	4.35	34.31						
8010	4.11	34.36						
10000	3.54	34.46						

CB 35 43 16.0 N 125 15.6 W DATE 27 JAN 71 0713 GCT WIRE
 DRY 54.1 WET 52.5 CRUISE Y7101C WIND DIRECTION 00 VEL 12 KTS BAR 30
 SWELL DIRECTION 28 H 03 T 08 CLOUD 8 AMT 1 WEATHER 01

00	9.37	32.51	0	9.37	32.51	25.14	283.9	0
10	9.37	32.51	10	9.33	32.55	25.18	280.9	.028
130	9.31	32.56	20	9.23	32.53	25.18	281.0	.056
220	9.21	32.52	30	9.17	32.54	25.19	279.7	.084
330	9.17	32.55	50	9.17	32.60	25.24	275.0	.140
500	9.17	32.60	75	9.02	33.45	25.93	210.5	.200
650	9.34	33.25	100	8.65	33.65	26.15	190.2	.251
760	8.98	33.46	150	7.99	33.85	26.40	167.0	.340
900	8.94	33.54	200	7.37	33.89	26.52	156.1	.421
1000	8.65	33.65	250	6.62	33.89	26.62	146.7	.496
1550	7.96	33.85	300	6.26	34.01	26.76	133.8	.566
2010	7.36	33.89	400	5.54	34.09	26.92	120.0	.693
2510	6.61	33.89	500	5.09	34.17	27.03	109.7	.808
3010	6.25	34.01	600	4.66	34.25	27.14	99.7	.913
4050	5.51	34.09	700	4.41	34.32	27.23	91.9	1.008
5030	5.08	34.17	800	4.16	34.38	27.30	85.7	1.097
6000	4.65	34.24	1000	3.65	34.47	27.43	74.6	1.258
7000	4.41	34.32						
8010	4.16	34.38						
10020	3.64	34.47						

CB 25 43 20.4 N 124 56.1 W DATE 27 JAN 71 0930 GCT WIRE
 DRY 50.0 WET 47.5 CRUISE Y7101C WIND DIRECTION 00 VEL 16 KTS BAR 29
 SWELL DIRECTION 28 H 03 T 07 CLOUD 6 AMT WEATHER 01

00	9.53	32.44	0	9.53	32.44	25.06	291.5	0
10	9.53	32.44	10	9.54	32.43	25.05	292.6	.029
140	9.57	32.43	20	9.68	32.47	25.06	292.0	.058
210	9.69	32.48	30	9.37	32.46	25.10	288.0	.087
310	9.32	32.46	50	9.12	32.47	25.15	283.9	.145
530	9.12	32.47	75	8.90	33.21	25.76	226.2	.208
620	9.23	32.74	100	8.74	33.64	26.12	192.4	.261
750	8.90	33.21	150	8.07	33.82	26.37	170.0	.351
890	8.96	33.53	200	7.19	33.88	26.53	154.7	.432
1010	8.72	33.65	250	6.62	33.93	26.66	143.4	.507
1500	8.07	33.82						

B 1 44 46.3 N 124 16.5 W DATE 26 JAN 71 2030 GCT WIRE
 DRY 51.2 WET 48.6 CRUISE C7101G WIND DIRECTION 18 VEL 10 KTS BAR 30
 SWELL DIRECTION 27 H 04 T 08 CLOUD 6 AMT 6 WEATHER 01

0	9.34	0	9.34	32.44	25.09	288.6	0
22	9.33	10	9.34	32.43	25.08	289.5	.029
44	9.32	20	9.33	32.47	25.12	286.6	.058
67	9.33	30	9.33	32.46	25.11	287.4	.086
89	9.27	50	9.33	32.47	25.12	286.9	.144
		75	9.32	33.21	25.70	232.4	.209

B 2 44 46.3 N 124 16.5 W DATE 27 JAN 71 1913 GCT WIRE

DRY 47.5 WET 46.1 CRUISE C7101G WIND DIRECTION 09 VEL 10 KTS BAR 29
 SWELL DIRECTION 29 H 04 T 10 CLOUD 0 AMT 7 WEATHER 02

0	9.15	0	9.15	32.44	25.12	285.7	0
22	9.11	10	9.12	32.43	25.12	286.3	.029
44	9.13	20	9.11	32.47	25.15	283.3	.057
67	9.33	30	9.12	32.46	25.14	284.3	.085
89	8.94	50	9.20	32.47	25.14	285.1	.142
		75	9.25	33.21	25.71	231.5	.207

B 3 44 46.3 N 124 16.5 W DATE 28 JAN 71 1815 GCT WIRE
 DRY 46.8 WET 45.1 CRUISE C7101G WIND DIRECTION VEL KTS BAR 28
 SWELL DIRECTION 28 H 04 T 08 CLOUD 7 AMT 5 WEATHER 02

0	8.70	0	8.70	32.44	25.19	279.1	0
22	9.17	10	9.16	32.43	25.11	286.9	.028
44	9.18	20	9.17	32.47	25.14	284.2	.057
67	9.26	30	9.17	32.46	25.13	285.1	.085
89	8.56	50	9.24	32.47	25.13	285.6	.142
		75	9.09	33.21	25.73	229.0	.207

B 4 44 46.3 N 124 16.5 W DATE 29 JAN 71 2003 GCT WIRE
 DRY 44.4 WET 43.2 CRUISE C7101G WIND DIRECTION VEL KTS BAR 26
 SWELL DIRECTION 30 H 03 T 08 CLOUD 6 AMT 8 WEATHER 02

0	8.62	0	8.62	32.44	25.20	278.0	0
22	9.16	10	9.10	32.43	25.12	286.0	.028
44	9.27	20	9.15	32.47	25.15	283.9	.057
67	8.97	30	9.25	32.46	25.12	286.2	.085
89	8.42	50	9.23	32.47	25.13	285.4	.142
		75	8.80	33.21	25.78	224.6	.206

B 1 44 46.3 N 124 16.5 W DATE 08 FEB 71 2125 GCT WIRE 00
 DRY 49.2 WET 46.9 CRUISE C7102C WIND DIRECTION VEL 02 KTS BAR 24
 SWELL DIRECTION 28 H 04 T 10 CLOUD 3 AMT 1 WEATHER 02

0	8.53	0	8.53	32.44	25.22	276.7	0
10	8.76	10	8.76	32.43	25.17	281.0	.028
20	8.85	20	8.85	32.47	25.19	279.5	.056
30	8.98	30	8.98	32.46	25.16	282.3	.084
50	8.85	50	8.85	32.47	25.19	279.9	.140
75	8.08	75	8.08	33.21	25.89	214.2	.202
85	8.01						

OBSERVED

INTERPOLATED

COMPUTED

D T S O₂ Z T S σ_t δ ΔD
 (m) (°C) (‰) (ml/l) (m) (°C) (‰) ($\times 10^3$) (dyn.m)
 CTI 1 44 46.3 N 124 16.5 W DATE 08 FEB 71 2200 GCT WIRE
 DRY 49.2 WET 46.9 CRUISE C7102C WIND DIRECTION 23 VEL 10 KTS BAR 24
 SWELL DIRECTION 28 H 04 T 10 CLOUD 3 AMT 5 WEATHER 02

0C	8.80	30.10	0	8.80	30.10	23.35	454.7	0
5C	8.70	30.30	10	8.70	30.40	23.60	431.0	.044
10C	8.70	30.40	20	8.80	30.71	23.82	410.3	.086
15C	8.80	30.70	30	9.00	31.00	24.02	391.0	.126
20C	8.80	30.70	50	8.80	32.10	24.91	306.6	.196
25C	8.80	30.80						
30C	9.00	31.00						
35C	9.00	31.50						
40C	9.00	31.70						
50C	8.80	32.10						

CTI 2 44 46.3 N 124 16.5 W DATE 08 FEB 71 2350 GCT WIRE
 DRY WET CRUISE C7102C WIND DIRECTION 23 VEL 10 KTS BAR 24
 SWELL DIRECTION 28 H 04 T 10 CLOUD 3 AMT 5 WEATHER 02

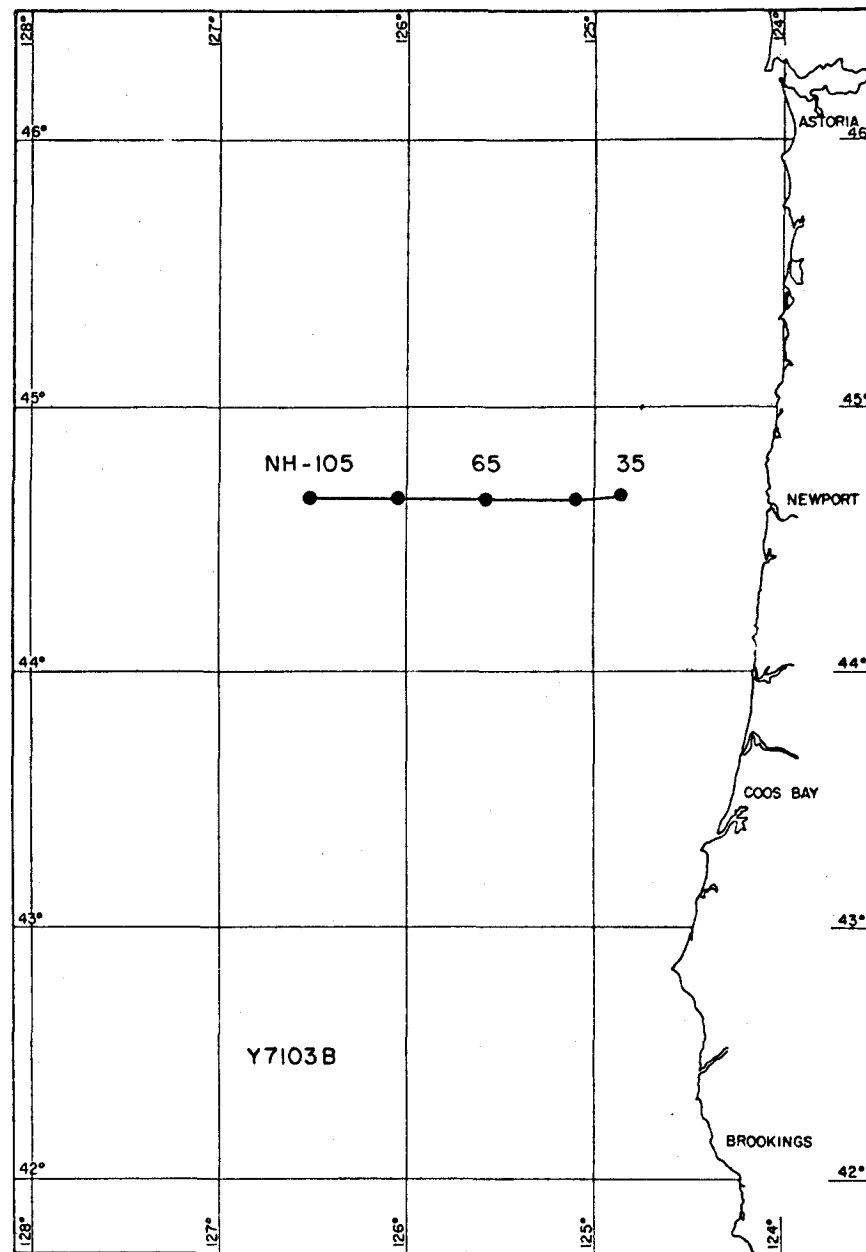
0C	8.48	29.96	0	8.48	29.96	23.29	460.6	0
5C	7.90	29.96	10	8.69	30.73	23.85	407.1	.043
10C	8.69	30.72	20	8.74	30.80	23.91	402.0	.084
15C	8.70	30.66	30	8.20	31.17	24.27	367.7	.122
20C	8.74	30.80	50	8.63	32.34	25.12	286.3	.188
25C	8.76	30.90						
30C	8.20	31.16						
35C	8.91	31.42						
40C	8.90	31.75						
45C	8.81	32.02						
50C	8.63	32.34						

B 2 44 46.3 N 124 16.5 W DATE 09 FEB 71 0100 GCT WIRE 00
 DRY 45.2 WET 45.1 CRUISE C7102C WIND DIRECTION 23 VEL 10 KTS BAR 24
 SWELL DIRECTION 28 H 04 T 10 CLOUD 3 AMT 5 WEATHER 03

0	8.52	0	8.52
10	8.87	10	8.87
20	8.88	20	8.88
30	9.04	30	9.04
50	8.70	50	8.70
75	8.11	75	8.11
85	8.09		

B 3 44 46.3 N 124 16.5 W DATE 09 FEB 71 0500 GCT WIRE
 DRY 45.8 WET 44.7 CRUISE C7102C WIND DIRECTION 16 VEL 10 KTS BAR 24
 SWELL DIRECTION 27 H 05 T 09 CLOUD 6 AMT 8 WEATHER 02

0	8.45	0	8.45
10	8.70	10	8.70
20	8.85	20	8.85
30	8.95	30	8.95
50	8.96	50	8.96
75	8.12	75	8.12
85	7.96		



CTI 3 44 46.3 N 124 16.5 W DATE 09 FEB 71 0555 GCT WIRE
 DRY 45.8 WET 44.7 CRUISE C7102C WIND DIRECTION 16 VEL 10 KTS BAR 24
 SWELL DIRECTION 27 H 05 T 09 CLOUD 6 AMT 8 WEATHER 02

0C	8.40	30.30	0	8.40	30.30	23.56	434.2	0
5C	8.36	30.28	10	8.36	30.60	23.81	411.4	.042
10C	8.36	30.60	20	8.90	30.82	23.91	401.3	.083
15C	8.50	30.73	30	8.75	30.94	24.01	392.0	.123
20C	8.80	30.82	50	9.00	31.90	24.72	324.4	.194
25C	8.75	30.86						
30C	8.75							
35C	8.82	31.12						
40C	8.85	31.44						
45C	8.95	31.75						
50C	9.00	31.90						

B 4 44 46.3 N 124 16.5 W DATE 09 FEB 71 0805 GCT WIRE
 DRY WET CRUISE C7102C WIND DIRECTION 14 VEL 15 KTS BAR 23
 SWELL DIRECTION 27 H 05 T 10 CLOUD 6 AMT 8 WEATHER 02

0	8.61	0	8.61
10	8.71	10	8.71
20	8.90	20	8.90
30	9.00	30	9.00
50	8.97	50	8.97
75	8.19	75	8.19
85	8.06		

NH 65 44 39.1 N 125 35.0 W DATE 07 MAR 71 2300 GCT WIRE
 DRY 46.1 WET 43.2 CRUISE Y7103B WIND DIRECTION 30 VEL 16 KTS BAR 24
 SWELL DIRECTION 32 H 08 T 08 CLOUD 6 AMT 5 WEATHER 01

0C	8.33	32.62	0	8.33	32.63	25.39	260.4	0
1C	8.33	32.62	10	8.34	32.60	25.37	262.2	.026
10C	8.34	32.60	20	8.34	32.59	25.36	263.3	.052
21C	8.34	32.59	30	8.34	32.61	25.38	261.8	.079
30C	8.34	32.61	50	8.34	32.58	25.36	264.3	.131
50C	8.34	32.58	75	8.34	32.60	25.37	263.2	.197
62C	8.34	32.59	100	8.05	33.44	26.07	197.5	.255
75C	8.34	32.60	150	7.61	33.83	26.44	163.4	.345
89C	8.31	33.11	200	7.03	33.90	26.57	150.8	.423
101C	9.02	33.46	250	6.32	33.94	26.70	139.1	.496
152C	7.60	33.84	300	5.68	33.91	26.76	133.8	.564
201C	7.02	33.90	400	5.07	34.04	26.93	118.2	.690
251C	6.31	33.94	500	4.58	34.14	27.06	106.0	.802
302C	5.66	33.91	600	4.49	34.22	27.14	99.7	.905
402C	5.06	34.04	700	4.16	34.30	27.24	90.3	1.000
504C	4.57	34.14	800	3.92	34.35	27.31	84.8	1.087
601C	4.49	34.22	1000	3.41	34.45	27.43	73.4	1.245
700C	4.15	34.30						
800C	3.92	34.35						
1000C	3.41	34.45						

NH 85 44 39.1 N 126 03.1 W DATE 08 MAR 71 0252 GCT WIRE
 DRY 44.6 WET 41.7 CRUISE Y7103B WIND DIRECTION 29 VEL 10 KTS BAR 24
 SWELL DIRECTION 31 H 09 T 09 CLOUD 8 AMT 7 WEATHER 03

0C	8.34	32.55	0	8.34	32.55	25.33	265.8	0
2C	8.34	32.55	10	8.34	32.55	25.33	265.9	.027
10C	8.34	32.55	20	8.35	32.54	25.32	267.2	.053
21C	8.35	32.54	30	8.35	32.54	25.32	267.1	.080
30C	8.35	32.54	50	8.34	32.54	25.32	267.6	.133
51C	8.34	32.54	75	8.39	33.17	25.81	221.6	.195
63C	8.34	32.55	100	8.11	33.55	26.15	189.8	.246
75C	8.39	33.17	150	7.59	33.83	26.44	162.5	.334
87C	8.30	33.43	200	6.84	33.92	26.62	146.6	.411
100C	8.11	33.55	250	6.26	33.93	26.70	139.0	.483
150C	7.59	33.83	300	5.91	33.98	26.79	131.1	.550
203C	6.79	33.92	400	5.33	34.08	26.94	117.7	.674
251C	6.25	33.93	500	4.85	34.15	27.04	108.2	.787
300C	5.90	33.98	600	4.57	34.25	27.15	98.5	.891
400C	5.33	34.08	700	4.31	34.32	27.24	90.7	.985
501C	4.85	34.15	800	4.08	34.39	27.32	84.1	1.073
603C	4.56	34.25						
700C	4.31	34.32						
802C	4.08	34.39						

NH 105 44 39.2 N 126 31.0 W DATE 08 MAR 71 0753 GCT WIRE
 DRY 44.2 WET 39.0 CRUISE Y7103B WIND DIRECTION 23 VEL 10 KTS BAR 25
 SWELL DIRECTION 30 H 07 T 06 CLOUD 6 AMT 8 WEATHER 03

0C	8.17	32.49	0	8.17	32.50	25.31	267.9	0
3C	8.17	32.49	10	8.15	32.53	25.34	264.7	.027
10C	8.15	32.53	20	8.14	32.53	25.35	264.8	.053
20C	8.14	32.53	30	8.14	32.53	25.34	265.2	.080
32C	8.14	32.53	50	8.13	32.54	25.36	264.3	.133
50C	8.13	32.54	75	8.12	32.54	25.36	264.6	.199
62C	8.13	32.53	100	7.88	33.23	25.93	210.2	.258
75C	8.12	32.54	150	7.69	33.73	26.35	171.5	.353
89C	8.00	32.85	200	7.06	33.89	26.56	151.9	.434
100C	7.87	33.23	250	6.57	33.92	26.66	143.3	.508
152C	7.68	33.75	300	6.18	33.95	26.73	137.1	.578
204C	7.00	33.88	400	5.57	34.02	26.86	125.0	.709
250C	6.56	33.92	500	5.10	34.05	26.94	118.6	.831
301C	6.17	33.95	600	4.69	34.15	27.07	106.9	.944
400C	5.56	34.02	700	4.32	34.26	27.19	95.3	1.045
502C	5.09	34.05	800	4.05	34.34	27.29	87.0	1.136
600C	4.69	34.15	1000	3.47	34.46	27.44	73.5	1.296
700C	4.32	34.26						
800C	4.05	34.34						
1004C	3.46	34.46						

NH 45 44 39.1 N 125 06.0 W DATE 08 MAR 71 1528 GCT WIRE
 DRY 44.5 WET 40.0 CRUISE Y7103B WIND DIRECTION 20 VEL 10 KTS BAR 23
 SWELL DIRECTION 26 H 06 T 08 CLOUD 8 AMT 4 WEATHER 03

0C	8.06	32.64	0	8.06	32.64	25.44	255.2	0
7C	8.06	32.64	10	8.06	32.63	25.43	256.8	.026
10C	8.06	32.62	20	8.06	32.61	25.42	257.7	.051
20C	8.06	32.61	30	8.06	32.60	25.41	258.8	.077
31C	8.06	32.60	50	8.07	32.60	25.41	259.3	.129
51C	8.07	32.60	75	8.06	32.59	25.40	260.4	.194
63C	8.07	32.59	100	7.90	33.28	25.97	206.7	.252
76C	8.06	32.59	150	7.67	33.84	26.44	162.7	.345
88C	7.90	32.91	200	6.96	33.96	26.63	145.7	.422

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
100C	7.89	33.28		250	6.57	33.96	26.69	140.5	.493
150C	7.66	33.84		300	5.97	34.00	26.79	131.2	.561
200C	6.96	33.95		400	5.32	34.04	26.90	121.0	.687
250C	6.57	33.96		500	4.68	34.13	27.05	107.3	.801
300C	5.97	33.99		600	4.63	34.21	27.12	102.1	.906
402C	5.31	34.04		700	4.27	34.31	27.23	91.5	1.003
500C	4.68	34.13							
601C	4.63	34.21							
702C	4.26	34.31							

NH 35 44 40.0 N 124 51.8 W DATE 08 MAR 71 1811 GCT WIRE
 DRY 45.5 WET 41.0 CRUISE Y7103B WIND DIRECTION 20 VEL 04 KTS BAR 24
 SWELL DIRECTION 26 H 06 T 09 CLOUD 6 AMT 8 WEATHER 03

25C	8.07	32.66	0	8.06	32.64	25.44	255.2	0
30C	8.07	32.66	10	8.06	32.63	25.43	256.8	.026
51C	8.07	32.65	20	8.06	32.61	25.42	257.7	.051
62C	8.07	32.64	30	8.07	32.67	25.46	254.3	.077
76C	8.06	32.71	50	8.07	32.65	25.45	255.6	.128
93C	7.93	33.30	75	8.06	32.69	25.48	252.6	.191
102C	7.96	33.54	100	7.95	33.51	26.14	190.8	.247
151C	7.61	33.85	150	7.62	33.84	26.45	162.2	.335
201C	6.98	33.93	200	6.99	33.93	26.60	147.9	.413
250C	6.53	34.00	250	6.54	34.00	26.72	137.0	.484
399C	6.04	34.02	300	6.05	34.02	26.80	129.8	.550
402C	5.31	34.12	400	5.32	34.12	26.97	115.2	.673

MSL 1 44 46.4 N 124 16.5 W DATE 09 MAR 71 0030 GCT WIRE
 DRY WET CRUISE C7103C WIND DIRECTION 21 VEL 06 KTS BAR 21
 SWELL DIRECTION 28 H 07 T 09 CLOUD 6 AMT 7 WEATHER 01

0	8.08	0	8.08
10	8.08	10	8.08
20	8.12	20	8.12
30	8.29	30	8.29
50	8.43	50	8.43
75	8.15	75	8.15
90	7.87		

MSL 2 44 46.4 N 124 16.5 W DATE 09 MAR 71 0720 GCT WIRE 00
 DRY WET CRUISE C7103C WIND DIRECTION 17 VEL 13 KTS BAR 19
 SWELL DIRECTION 28 H 07 T 09 CLOUD 3 AMT 7 WEATHER 00

0	8.05	0	8.05
10	8.07	10	8.07
20	8.23	20	8.23
30	8.20	30	8.20
50	8.30	50	8.30
75	8.35	75	8.35
90	8.18		

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
MSL 3	44 46.4 N	124 16.5 W							
DRY	WET	CRUISE C7103C		DATE 09 MAR 71	1300 GCT	WIRE 15			
SWELL DIRECTION	28 H 07 T 08	CLOUD 6 AMT 8	WEATHER 00	WIND DIRECTION	17 VEL 22 KTS	BAR 18			
0	8.04	0	8.04						
10	8.04	10	8.04						
20	8.18	20	8.18						
30	8.23	30	8.23						
50	8.31	50	8.31						
75	8.39	75	8.39						
90	8.03								

NH 15 44 39.1 N 124 24.4 W DATE 09 MAR 71 0347 GCT WIRE
 DRY 46.0 WET 42.8 CRUISE Y7103C WIND DIRECTION 22 VEL 05 KTS BAR 21
 SWELL DIRECTION 28 H 06 T 08 CLOUD 6 AMT 8 WEATHER 02

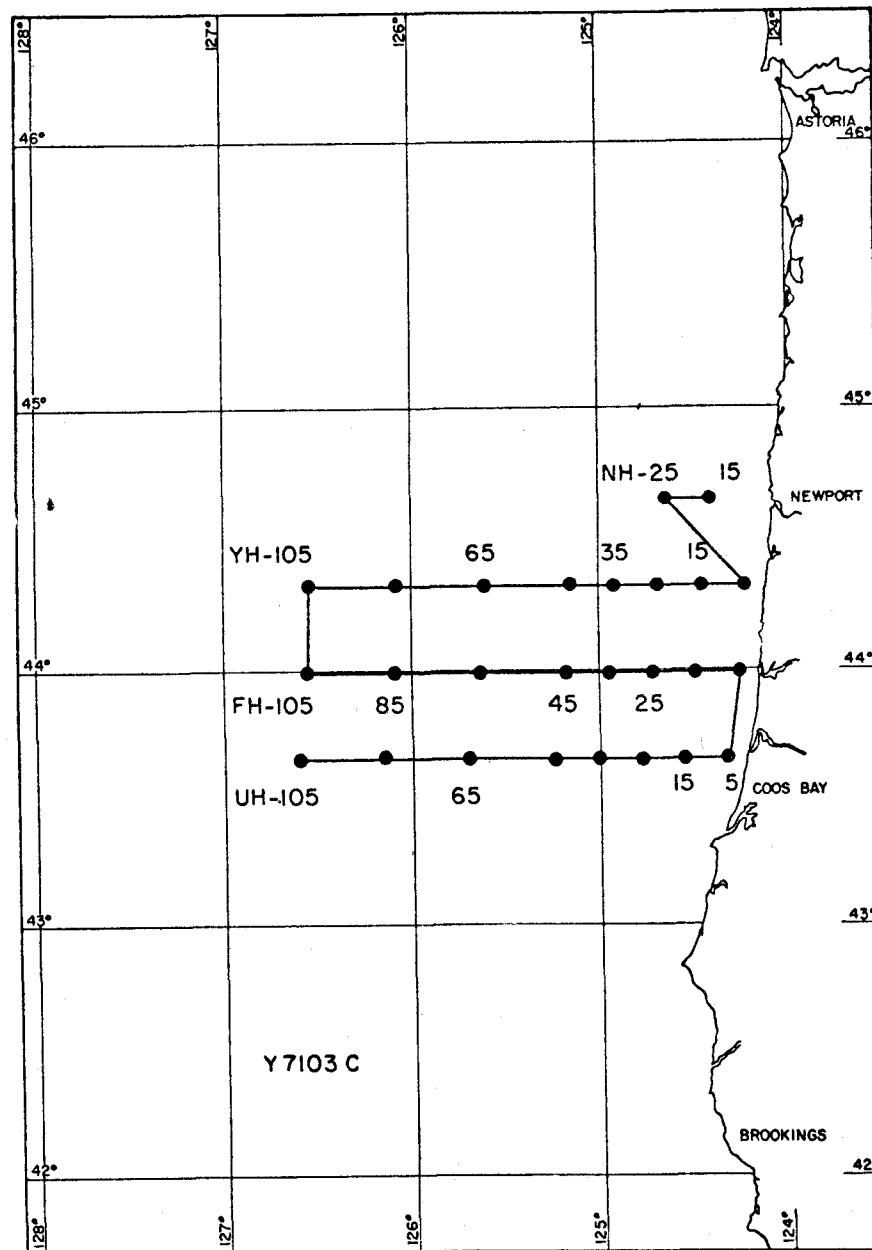
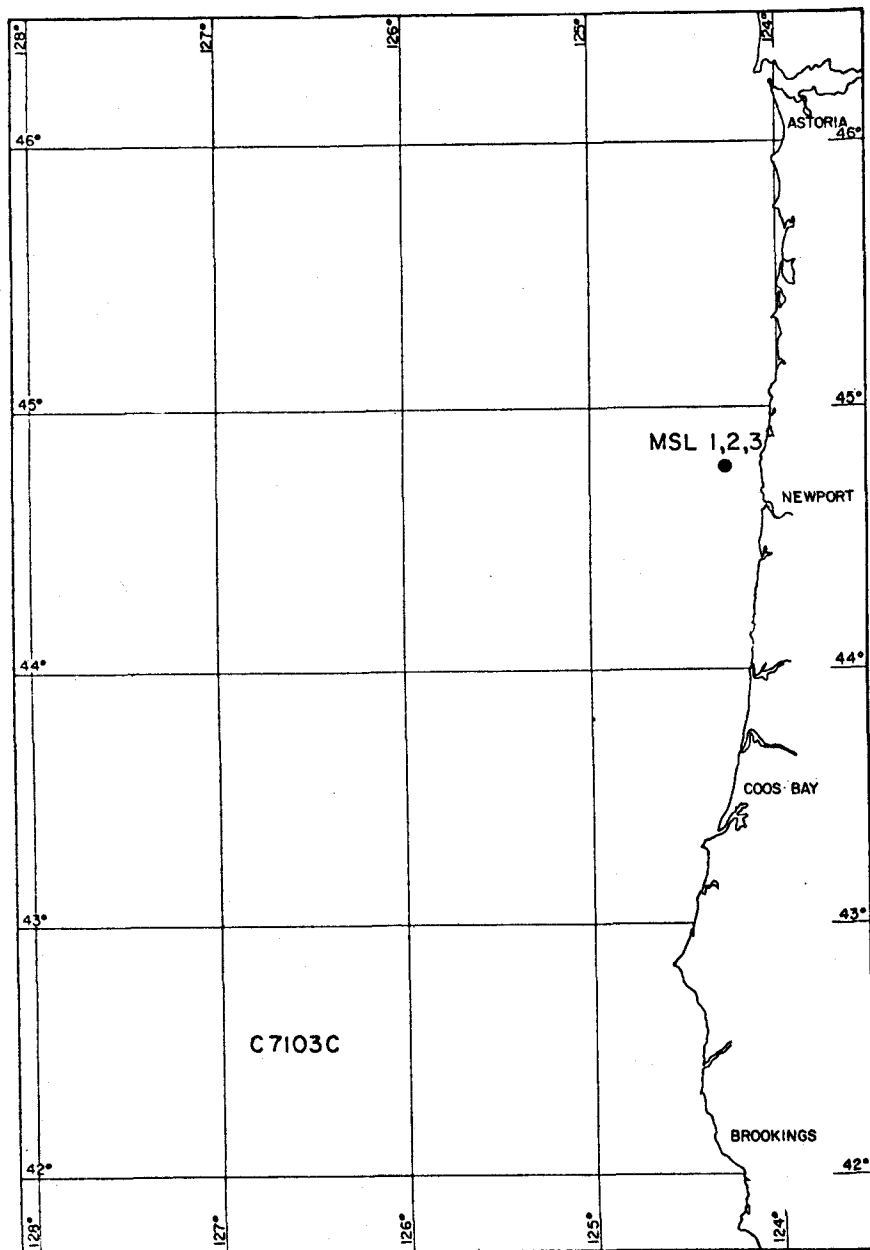
0C	8.28	32.58	0	8.28	32.58	25.36	262.7	0
1C	8.28	32.58	10	8.27	32.56	25.35	264.3	.026
11C	8.27	32.56	20	8.28	32.55	25.34	265.2	.053
20C	8.28	32.55	30	8.30	32.55	25.34	265.7	.079
30C	8.30	32.55	50	8.41	32.93	25.62	239.3	.130
50C	8.41	32.93						

NH 25 44 39.1 N 124 38.5 W DATE 09 MAR 71 0505 GCT WIRE
 DRY 45.2 WET 42.7 CRUISE Y7103C WIND DIRECTION 18 VEL 08 KTS BAR 20
 SWELL DIRECTION 27 H 06 T 09 CLOUD 3 AMT 6 WEATHER 01

92C	8.27	33.50	0	8.28	32.58	25.36	262.7	0
101C	8.08	33.64	10	8.27	32.56	25.35	264.3	.026
121C	7.79	33.81	20	8.28	32.55	25.34	265.2	.053
155C	7.25	33.90	30	8.30	32.55	25.34	265.7	.079
201C	6.58	33.97	50	8.41	32.93	25.62	239.3	.130
			75	8.39	32.69	25.43	257.3	.192
			100	8.09	33.63	26.21	183.8	.247
			150	7.33	33.90	26.53	154.3	.332
			200	6.59	33.97	26.69	139.7	.405

YH 5 44 19.0 N 124 13.2 W DATE 09 MAR 71 0911 GCT WIRE
 DRY 44.5 WET 43.2 CRUISE Y7103C WIND DIRECTION 18 VEL 14 KTS BAR 21
 SWELL DIRECTION 27 H 06 T 07 CLOUD 3 AMT 8 WEATHER 02

0C	8.06	32.17	0	8.06	32.17	25.08	290.2	0
1C	8.06	32.17	10	8.08	32.20	25.09	288.9	.029
11C	8.08	32.20	20	8.10	32.21	25.09	288.8	.058
20C	8.10	32.20	30	8.11	32.21	25.10	288.3	.087
30C	8.11	32.21						



OBSERVED				INTERPOLATED				COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD	
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁻⁵)	(dyn.m)	
YH 15	44 19.0 N	124 27.1 W		DATE 09 MAR 71	1115 GCT	WIRE				
DRY 47.0	WET 46.2	CRUISE Y7103C		WIND DIRECTION 18	VEL 16 KTS	BAR 20				
SWELL DIRECTION 27	H 06 T 07	CLOUD 4	AMT 8	WEATHER 02						
0C	8.01	32.35		0	8.01	32.35	25.22	276.1	0	
2C	8.01	32.35		10	8.01	32.35	25.22	276.2	.028	
10C	8.01	32.35		20	8.06	32.42	25.26	272.6	.055	
20C	8.06	32.41		30	8.10	32.47	25.31	268.8	.082	
30C	8.10	32.47		50	8.25	32.63	25.40	260.1	.135	
50C	8.25	32.62								
62C	8.14	33.37								

YH 25	44 19.0 N	124 41.0 W		DATE 09 MAR 71	1306 GCT	WIRE				
DRY 44.5	WET 44.1	CRUISE Y7103C		WIND DIRECTION 19	VEL 24 KTS	BAR 19				
SWELL DIRECTION 27	H 06 T 08	CLOUD 6	AMT 8	WEATHER 60						
0C	8.06	32.58		0	8.06	32.58	25.40	259.6	0	
1C	8.06	32.58		10	8.07	32.58	25.39	260.2	.026	
11C	8.07	32.58		20	8.07	32.59	25.40	259.7	.052	
21C	8.07	32.59		30	8.06	32.60	25.41	259.2	.078	
32C	8.06	32.60		50	8.18	32.71	25.47	253.1	.129	
50C	8.18	32.70		75	7.96	33.52	26.15	189.5	.184	
64C	8.31	33.10								
75C	7.96	33.52								

YH 35	44 19.0 N	124 55.2 W		DATE 09 MAR 71	1510 GCT	WIRE				
DRY 45.9	WET 44.9	CRUISE Y7103C		WIND DIRECTION 18	VEL 26 KTS	BAR 18				
SWELL DIRECTION 22	H 06 T 08	CLOUD 6	AMT 8	WEATHER 63						
0C	8.02	32.60		0	8.02	32.60	25.42	257.6	0	
3C	8.02	32.60		10	8.02	32.59	25.41	258.7	.026	
11C	8.02	32.59		20	8.01	32.60	25.42	258.1	.052	
21C	8.01	32.60		30	8.01	32.59	25.41	258.6	.077	
30C	8.01	32.59		50	7.99	32.60	25.42	257.9	.129	
50C	7.99	32.60		75	8.16	32.85	25.59	242.3	.192	
62C	7.99	32.60		100	7.96	33.62	26.22	182.9	.245	
76C	8.18	32.88		150	7.24	33.92	26.56	151.7	.328	
87C	8.46	33.28		200	6.86	33.96	26.65	143.6	.402	
101C	7.91	33.64		250	6.48	34.00	26.73	136.8	.472	
150C	7.24	33.91		300	6.25	34.03	26.78	132.2	.539	
200C	6.86	33.96		400	5.32	34.13	26.98	113.8	.662	
252C	6.47	34.00		500	4.75	34.23	27.12	101.2	.770	
301C	6.25	34.03								
400C	5.31	34.13								
503C	4.74	34.23								

YH 45	44 19.1 N	125 09.2 W		DATE 09 MAR 71	1752 GCT	WIRE				
DRY 47.3	WET 46.1	CRUISE Y7103C		WIND DIRECTION 18	VEL 23 KTS	BAR 18				
SWELL DIRECTION 26	H 06 T 09	CLOUD 6	AMT 8	WEATHER 02						
0C	8.34	32.56		0	8.34	32.56	25.34	265.0	0	
1C	8.34	32.56		10	8.34	32.56	25.34	265.2	.027	
10C	8.34	32.56		20	8.34	32.57	25.34	265.1	.053	
22C	8.34	32.57		30	8.34	32.58	25.35	264.4	.079	
31C	8.34	32.58		50	8.34	32.58	25.35	264.6	.132	

OBSERVED				INTERPOLATED				COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD	
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁻⁵)	(dyn.m)	
YH 105	44 19.0 N	126 32.5 W		DATE 10 MAR 71	0643 GCT	WIRE				
DRY 49.6	WET 49.2	CRUISE Y7103C		WIND DIRECTION 18	VEL 16 KTS	BAR 13				
SWELL DIRECTION 26	H 06 T 08	CLOUD 7	AMT 8	WEATHER 03						
0C	8.48	32.56		0	8.48	32.56	25.32	267.0	0	
7C	8.48	32.56		10	8.48	32.55	25.31	268.0	.027	
11C	8.48	32.55		20	8.47	32.56	25.32	267.2	.054	
20C	8.47	32.56		30	8.42	32.56	25.33	266.9	.080	
31C	8.41	32.56		50	8.41	32.55	25.32	267.8	.134	
51C	8.41	32.55		75	8.40	32.58	25.35	265.6	.200	
62C	8.41	32.57		100	8.13	33.43	26.05	199.0	.258	
75C	8.40	32.58		150	7.43	33.81	26.45	161.9	.349	
87C	8.38	32.71		200	6.83	33.93	26.63	145.8	.425	
100C	8.13	33.43		250	6.10	33.93	26.72	137.0	.496	
151C	7.42	33.82		300	5.63	33.94	26.79	131.0	.563	
201C	6.82	33.93		400	5.26	34.05	26.92	119.4	.688	
253C	6.06	33.93		500	4.71	34.16	27.07	105.9	.801	
301C	5.62	33.94		600	4.34	34.24	27.17	96.5	.902	
406C	5.25	34.06		700	4.13	34.28	27.23	91.5	.996	
502C	4.70	34.16		800	3.86	34.35	27.31	84.1	1.084	
602C	4.33	34.24		1000	3.36	34.47	27.45	71.4	1.239	
700C	4.12	34.28								
800C	3.86	34.35								
1003C	3.35	34.47								

FH 105	43 59.1 N	126 33.5 W		DATE 10 MAR 71	1040 GCT	WIRE				
DRY 49.4	WET 49.4	CRUISE Y7103C		WIND DIRECTION 18	VEL 20 KTS	BAR 10				
SWELL DIRECTION 29	H 06 T 07	CLOUD 6	AMT 8	WEATHER 61						
0C	8.80	32.68		0	8.80	32.68	25.36	262.7	0	
3C	8.80	32.68		10	8.80	32.67	25.35	263.8	.026	
11C	8.80	32.67		20	8.80	32.67	25.35	264.1	.053	
23C	8.80	32.67		30	8.78	32.64	25.33	266.2	.079	
32C	8.77	32.63		50	8.69	32.64	25.34	265.5	.132	
52C	8.68	32.64		75	8.60	32.65	25.37	263.5	.199	
62C	8.66	32.65		100	8.62	33.20	25.79	223.7	.259	
76C	8.59	32.65		150	8.01	33.75	26.32	174.3	.359	
90C	8.51	32.78		200	7.41	33.92	26.53	154.6	.441	
102C	8.65	33.29		250	6.94	33.97	26.65	144.5	.516	
150C	8.01	33.75		300	6.10	33.94	26.73	136.8	.586	
200C	7.40	33.91		400	5.24	34.02	26.90	121.1	.715	
250C	6.93	33.97		500	4.54	34.09	27.04	108.7	.830	
301C	6.08	33.94		600	4.37	34.24	27.17	96.9	.933	
400C	5.24	34.02		700	3.90	34.27	27.24	90.1	1.026	
506C	4.51	34.10		800	3.84	34.36	27.33	83.0	1.113	
601C	4.37	34.24		1000	3.42	34.48	27.46	71.3	1.267	
701C	3.90	34.27								
800C	3.83	34.36								
1001C	3.42	34.48								

FH 85	43 59.1 N	126 05.7 W		DATE 11 MAR 71	0227 GCT	WIRE				
DRY 49.5	WET 47.8	CRUISE Y7103C		WIND DIRECTION 24	VEL 20 KTS	BAR 13				
SWELL DIRECTION 26	H 07 T 06	CLOUD 3	AMT 5	WEATHER 01						
0C	8.95	32.66		0	8.95	32.67	25.33	266.4	0	
3C	8.95	32.66		10	8.95	32.66	25.32	266.9	.027	

51C	8.34	32.58	75	8.39	32.67	25.42	258.8	.198
67C	8.33	32.58	100	8.28	33.54	26.12	193.0	.254
75C	8.39	32.67	150	7.45	33.90	26.52	155.3	.341
87C	8.38	33.41	200	6.99	33.95	26.62	146.6	.417
100C	8.28	33.54	250	6.58	33.99	26.71	138.7	.488
150C	7.45	33.90	300	6.04	34.03	26.81	129.0	.555
202C	6.98	33.95	400	5.39	34.12	26.96	115.9	.677
251C	6.57	33.99						
303C	6.03	34.03						
401C	5.39	34.12						

YH 65 44 19.0 N 125 36.7 W DATE 09 MAR 71 2315 GCT WIRE
 DRY 50.9 WET 48.2 CRUISE Y7103C WIND DIRECTION 22 VEL 10 KTS BAR 18
 SWELL DIRECTION 26 H 07 T 07 CLOUD 8 AMT 7 WEATHER 01

0C	8.64	32.63	0	8.64	32.63	25.35	264.1	.0
1C	8.64	32.63	10	8.64	32.63	25.35	264.3	.028
10C	8.64	32.63	20	8.63	32.63	25.35	264.3	.053
20C	8.63	32.63	30	8.63	32.64	25.36	264.1	.079
31C	8.63	32.64	50	8.63	32.63	25.35	264.8	.132
50C	8.63	32.63	75	8.64	32.63	25.35	265.3	.198
62C	8.63	32.64	100	8.08	33.42	26.05	199.6	.256
75C	8.64	32.63	150	8.01	33.86	26.41	166.2	.348
89C	8.32	33.14	200	6.91	33.84	26.54	153.7	.428
102C	8.05	33.45	250	6.08	33.88	26.69	140.2	.501
150C	8.01	33.86	300	5.93	33.96	26.76	133.5	.570
203C	6.83	33.83	400	5.36	34.03	26.89	122.1	.697
254C	6.04	33.89	500	4.95	34.15	27.03	109.5	.813
303C	5.92	33.96	600	4.62	34.24	27.14	100.0	.918
401C	5.35	34.03	700	4.36	34.30	27.22	93.2	1.014
501C	4.95	34.15	800	4.08	34.38	27.31	85.2	1.104
605C	4.61	34.24	1000	3.54	34.49	27.45	72.0	1.261
701C	4.36	34.30						
800C	4.08	34.37						
1001C	3.54	34.49						

YH 85 44 19.0 N 126 04.8 W DATE 10 MAR 71 0300 GCT WIRE
 DRY 48.7 WET 47.6 CRUISE Y7103C WIND DIRECTION 18 VEL 12 KTS BAR 16
 SWELL DIRECTION 26 H 06 T CLOUD 8 AMT 4 WEATHER 01

0C	8.49	32.54	0	8.49	32.54	25.30	268.7	.0
2C	8.49	32.54	10	8.49	32.49	25.26	273.1	.027
11C	8.49	32.48	20	8.46	32.54	25.30	268.8	.054
21C	8.46	32.55	30	8.42	32.55	25.32	267.4	.081
30C	8.42	32.55	50	8.41	32.57	25.33	266.5	.134
53C	8.41	32.57	75	8.41	32.58	25.34	266.0	.201
62C	8.41	32.56	100	8.00	33.31	25.98	206.0	.260
77C	8.41	32.59	150	7.41	33.78	26.43	163.5	.352
89C	8.41	32.71	200	6.82	33.88	26.59	148.9	.430
100C	8.00	33.31	250	6.16	33.90	26.69	140.0	.503
150C	7.40	33.78	300	5.56	33.92	26.79	131.2	.570
200C	6.81	33.88	400	4.80	34.01	26.94	116.7	.694
251C	6.15	33.90	500	4.54	34.13	27.06	106.5	.806
303C	5.55	33.92	600	4.40	34.21	27.14	99.4	.909
403C	4.80	34.01	700	4.14	34.30	27.25	90.1	1.003
500C	4.54	34.12	800	3.88	34.39	27.34	81.7	1.089
601C	4.40	34.21	1000	3.36	34.46	27.45	72.1	1.243
700C	4.13	34.30						
802C	3.87	34.39						
1003C	3.35	34.46						

11C	8.95	32.66	20	8.97	32.64	25.31	268.7	.053
21C	8.97	32.64	30	8.95	32.65	25.32	267.7	.080
30C	8.95	32.65	50	8.97	32.67	25.32	267.6	.134
50C	8.97	32.66	75	8.98	32.66	25.32	268.4	.201
62C	8.97	32.66	100	8.87	33.21	25.76	226.9	.263
76C	8.98	32.66	150	8.15	33.78	26.32	174.1	.363
88C	9.02	32.73	200	7.46	33.86	26.49	159.2	.446
100C	8.87	33.20	250	6.65	33.89	26.62	146.6	.523
150C	8.15	33.78	300	5.96	33.92	26.73	136.7	.593
204C	7.40	33.87	400	4.98	34.00	26.92	119.5	.721
250C	6.64	33.89	500	4.55	34.08	27.03	109.5	.836
301C	5.95	33.92	600	4.30	34.16	27.12	101.7	.942
400C	4.98	34.00	700	4.23	34.32	27.24	90.4	1.038
500C	4.55	34.08	800	3.97	34.36	27.31	84.6	1.125
607C	4.29	34.17	1000	3.37	34.47	27.45	71.6	1.281
703C	4.23	34.32						
800C	3.97	34.36						
1003C	3.36	34.47						

FH 65 43 58.9 N 125 38.3 W DATE 11 MAR 71 0643 GCT WIRE
 DRY 49.1 WET 48.4 CRUISE Y7103C WIND DIRECTION 18 VEL 14 KTS BAR 15
 SWELL DIRECTION 25 H 06 T 07 CLOUD 8 AMT 6 WEATHER 03

0C	8.61	32.58	0	8.61	32.58	25.32	267.4	.0
3C	8.61	32.58	10	8.61	32.59	25.32	266.9	.027
13C	8.61	32.60	20	8.61	32.60	25.33	266.5	.053
21C	8.61	32.60	30	8.62	32.59	25.32	267.3	.080
30C	8.62	32.59	50	8.62	32.58	25.31	268.4	.134
50C	8.62	32.58	75	8.69	32.61	25.33	267.6	.201
62C	8.62	32.59	100	8.25	33.42	26.03	201.4	.259
76C	8.70	32.62	150	8.12	33.81	26.35	171.5	.352
88C	8.69	32.82	200	7.22	33.93	26.57	151.1	.433
100C	8.25	33.42	250	6.58	33.92	26.65	143.8	.507
150C	8.12	33.81	300	5.82	33.92	26.75	134.5	.576
204C	7.14	33.93	400	5.13	34.04	26.93	118.8	.703
252C	6.56	33.92	500	4.70	34.15	27.06	106.5	.815
300C	5.82	33.92	600	4.58	34.23	27.14	100.0	.919
401C	5.13	34.04	700	4.30	34.33	27.25	89.8	1.014
502C	4.69	34.15	800	4.04	34.40	27.34	82.5	1.100
601C	4.58	34.23	1000	3.58	34.46	27.43	74.5	1.257
700C	4.30	34.33						
800C	4.04	34.40						
1003C	3.57	34.46						

FH 45 43 59.0 N 125 10.7 W DATE 11 MAR 71 1023 GCT WIRE
 DRY 48.1 WET 46.7 CRUISE Y7103C WIND DIRECTION 18 VEL 14 KTS BAR 13
 SWELL DIRECTION 28 H 06 T 08 CLOUD 6 AMT 8 WEATHER 03

0C	8.59	32.59	0	8.59	32.59	25.33	266.4	.0
1C	8.59	32.59	10	8.59	32.57	25.31	268.2	.027
11C	8.59	32.57	20	8.59	32.61	25.34	265.8	.053
21C	8.59	32.61	30	8.59	32.61	25.34	265.4	.080
30C	8.59	32.61	50	8.59	32.61	25.34	265.7	.133
50C	8.59	32.61	75	8.59	32.66	25.38	262.8	.199
62C	8.60	32.60	100	8.45	33.45	26.02	202.3	.257
80C	8.58	32.68	150	7.55	33.81	26.43	153.9	.349
90C	8.55	33.25	200	6.96	33.93	26.61	147.2	.427
102C	8.43	33.47	250	6.42	34.03	26.74	135.4	.497
153C	7.49	33.81	300	6.09	34.05	26.82	129.8	.563
200C	6.96	33.93	400	5.53	34.10	26.93	119.1	.687
250C	6.41	34.00	500	5.09	34.17	27.03	109.6	.801
305C	6.06	34.05	600	4.67	34.26	27.15	98.9	.906

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
4020	5.52	34.10		700	4.39	34.30	27.21	93.5	1.002
5020	5.09	34.17		800	3.99	34.36	27.31	84.9	1.091
6020	4.66	34.26		1000	3.54	34.49	27.45	72.0	1.248
7010	4.39	34.30							
8030	3.99	34.36							
10010	3.54	34.49							

FH 35 43 59.0 N 124 56.9 W DATE 11 MAR 71 1316 GCT WIRE
 DRY 47.7 WET 46.9 CRUISE Y7103C WIND DIRECTION 15 VEL 20 KTS BAR 10
 SWELL DIRECTION 28 H 06 T 08 CLOUD 6 AMT 8 WEATHER 62

00	8.38	32.57		0	8.38	32.57	25.34	264.9	0
10	8.38	32.57		10	8.38	32.56	25.33	265.9	.027
20	8.37	32.56		20	8.37	32.56	25.33	266.1	.053
30	8.36	32.56		30	8.36	32.56	25.34	265.8	.080
40	8.36	32.56		40	8.36	32.56	25.36	263.9	.133
50	8.36	32.59		50	8.36	32.59	25.36	263.9	.133
60	8.36	32.59		60	8.36	32.59	25.36	263.9	.133
70	8.36	32.59		70	8.36	32.59	25.36	263.9	.133
80	8.36	32.59		80	8.36	32.59	25.36	263.9	.133
90	8.36	32.59		90	8.36	32.59	25.36	263.9	.133
100	8.36	32.59		100	8.36	32.59	25.36	263.9	.133
110	8.36	32.59		110	8.36	32.59	25.36	263.9	.133
120	8.36	32.59		120	8.36	32.59	25.36	263.9	.133
130	8.36	32.59		130	8.36	32.59	25.36	263.9	.133
140	8.36	32.59		140	8.36	32.59	25.36	263.9	.133
150	8.36	32.59		150	8.36	32.59	25.36	263.9	.133
160	8.36	32.59		160	8.36	32.59	25.36	263.9	.133
170	8.36	32.59		170	8.36	32.59	25.36	263.9	.133
180	8.36	32.59		180	8.36	32.59	25.36	263.9	.133
190	8.36	32.59		190	8.36	32.59	25.36	263.9	.133
200	8.36	32.59		200	8.36	32.59	25.36	263.9	.133
210	8.36	32.59		210	8.36	32.59	25.36	263.9	.133
220	8.36	32.59		220	8.36	32.59	25.36	263.9	.133
230	8.36	32.59		230	8.36	32.59	25.36	263.9	.133
240	8.36	32.59		240	8.36	32.59	25.36	263.9	.133
250	8.36	32.59		250	8.36	32.59	25.36	263.9	.133
260	8.36	32.59		260	8.36	32.59	25.36	263.9	.133
270	8.36	32.59		270	8.36	32.59	25.36	263.9	.133
280	8.36	32.59		280	8.36	32.59	25.36	263.9	.133
290	8.36	32.59		290	8.36	32.59	25.36	263.9	.133
300	8.36	32.59		300	8.36	32.59	25.36	263.9	.133
310	8.36	32.59		310	8.36	32.59	25.36	263.9	.133
320	8.36	32.59		320	8.36	32.59	25.36	263.9	.133
330	8.36	32.59		330	8.36	32.59	25.36	263.9	.133
340	8.36	32.59		340	8.36	32.59	25.36	263.9	.133
350	8.36	32.59		350	8.36	32.59	25.36	263.9	.133
360	8.36	32.59		360	8.36	32.59	25.36	263.9	.133
370	8.36	32.59		370	8.36	32.59	25.36	263.9	.133
380	8.36	32.59		380	8.36	32.59	25.36	263.9	.133
390	8.36	32.59		390	8.36	32.59	25.36	263.9	.133
400	8.36	32.59		400	8.36	32.59	25.36	263.9	.133
410	8.36	32.59		410	8.36	32.59	25.36	263.9	.133
420	8.36	32.59		420	8.36	32.59	25.36	263.9	.133
430	8.36	32.59		430	8.36	32.59	25.36	263.9	.133
440	8.36	32.59		440	8.36	32.59	25.36	263.9	.133
450	8.36	32.59		450	8.36	32.59	25.36	263.9	.133
460	8.36	32.59		460	8.36	32.59	25.36	263.9	.133
470	8.36	32.59		470	8.36	32.59	25.36	263.9	.133
480	8.36	32.59		480	8.36	32.59	25.36	263.9	.133
490	8.36	32.59		490	8.36	32.59	25.36	263.9	.133
500	8.36	32.59		500	8.36	32.59	25.36	263.9	.133
510	8.36	32.59		510	8.36	32.59	25.36	263.9	.133
520	8.36	32.59		520	8.36	32.59	25.36	263.9	.133
530	8.36	32.59		530	8.36	32.59	25.36	263.9	.133
540	8.36	32.59		540	8.36	32.59	25.36	263.9	.133
550	8.36	32.59		550	8.36	32.59	25.36	263.9	.133
560	8.36	32.59		560	8.36	32.59	25.36	263.9	.133
570	8.36	32.59		570	8.36	32.59	25.36	263.9	.133
580	8.36	32.59		580	8.36	32.59	25.36	263.9	.133
590	8.36	32.59		590	8.36	32.59	25.36	263.9	.133
600	8.36	32.59		600	8.36	32.59	25.36	263.9	.133
610	8.36	32.59		610	8.36	32.59	25.36	263.9	.133
620	8.36	32.59		620	8.36	32.59	25.36	263.9	.133
630	8.36	32.59		630	8.36	32.59	25.36	263.9	.133
640	8.36	32.59		640	8.36	32.59	25.36	263.9	.133
650	8.36	32.59		650	8.36	32.59	25.36	263.9	.133
660	8.36	32.59		660	8.36	32.59	25.36	263.9	.133
670	8.36	32.59		670	8.36	32.59	25.36	263.9	.133
680	8.36	32.59		680	8.36	32.59	25.36	263.9	.133
690	8.36	32.59		690	8.36	32.59	25.36	263.9	.133
700	8.36	32.59		700	8.36	32.59	25.36	263.9	.133
710	8.36	32.59		710	8.36	32.59	25.36	263.9	.133
720	8.36	32.59		720	8.36	32.59	25.36	263.9	.133
730	8.36	32.59		730	8.36	32.59	25.36	263.9	.133
740	8.36	32.59		740	8.36	32.59	25.36	263.9	.133
750	8.36	32.59		750	8.36	32.59	25.36	263.9	.133
760	8.36	32.59		760	8.36	32.59	25.36	263.9	.133
770	8.36	32.59		770	8.36	32.59	25.36	263.9	.133
780	8.36	32.59		780	8.36	32.59	25.36	263.9	.133
790	8.36	32.59		790	8.36	32.59	25.36	263.9	.133
800	8.36	32.59		800	8.36	32.59	25.36	263.9	.133
810	8.36	32.59		810	8.36	32.59	25.36	263.9	.133
820	8.36	32.59		820	8.36	32.59	25.36	263.9	.133
830	8.36	32.59		830	8.36	32.59	25.36	263.9	.133
840	8.36	32.59		840	8.36	32.59	25.36	263.9	.133
850	8.36	32.59		850	8.36	32.59	25.36	263.9	.133
860	8.36	32.59		860	8.36	32.59	25.36	263.9	.133
870	8.36	32.59		870	8.36	32.59	25.36	263.9	.133
880	8.36	32.59		880	8.36	32.59	25.36	263.9	.133
890	8.36	32.59		890	8.36	32.59	25.36	263.9	.133
900	8.36	32.59		900	8.36	32.59	25.36	263.9	.133
910	8.36	32.59		910	8.36	32.59	25.36	263.9	.133
920	8.36	32.59		920	8.36	32.59	25.36	263.9	.133
930	8.36	32.59		930	8.36	32.59	25.36	263.9	.133
940	8.36	32.59		940	8.36	32.59	25.36	263.9	.133
950	8.36	32.59		950	8.36	32.59	25.36	263.9	.133
960	8.36	32.59		960	8.36	32.59	25.36	263.9	.133
970	8.36	32.59		970	8.36	32.59	25.36	263.9	.133
980	8.36	32.59		980	8.36	32.59	25.36	263.9	.133
990	8.36	32.59		990	8.36	32.59	25.36	263.9	.133
1000	8.36	32.59		1000	8.36	32.59	25.36	263.9	.133

FH 25 43 59.0 N 124 42.8 W DATE 11 MAR 71 1500 GCT WIRE
 DRY 47.6 WET 47.2 CRUISE Y7103C WIND DIRECTION 15 VEL 20 KTS BAR 07
 SWELL DIRECTION 28 H 06 T 08 CLOUD AMT 9 WEATHER 61

00	8.29	32.41		0	8.29	32.42	25.23	275.5	0
10	8.29	32.41		10	8.29	32.42	25.23	275.6	.028
20	8.29	32.41		20	8.31	32.46	25.27	272.4	.055
30	8.31	32.46		30	8.32	32.53	25.32	267.5	.082
40	8.32	32.53		40	8.33	32.58	25.36	264.2	.135
50	8.33	32.58		50	8.33	32.58	25.36	264.2	.135
60	8.40	33.04		60	8.40	33.04	25.36	264.2	.135

FH 15 43 59.0 N 124 29.1 W DATE 12 MAR 71 1600 GCT WIRE
 DRY 44.9 WET 44.2 CRUISE Y7103C WIND DIRECTION 22 VEL 18 KTS BAR 00
 SWELL DIRECTION 25 H 10 T CLOUD AMT 9 WEATHER 62

00	8.32	32.49		0	8.32	32.50	25.29	270.0	0
10	8.32	32.49		10	8.32	32.51	25.30	268.6	.027
20	8.32	32.51		20	8.33	32.50	25.29	269.8	.054
30	8.33	32.50		30	8.34	32.49	25.28	270.9	.081
40	8.34	32.49		40	8.40	32.55	25.32	267.4	.135
50	8.40	32.55		50	8.40	32.55	25.32	267.4	.135
60	8.39	32.56		60	8.39	32.56	25.40	260.2	.201
70	8.39	32.56		70	8.39	32.56	25.40	260.2	.201
80	8.39	32.56		80	8.39	32.56	25.40	260.2	.201
90	8.39	32.56		90	8.39	32.56	25.40	260.2	.201
100	8.39	32.56		100	8.39	32.56	25.40	260.2	.201
110	8.39	32.56		110	8.39	32.56	25.40	260.2	.201
120	8.39	32.56		120	8.39	32.56	25.40	260.2	.201

11C	8.32	32.42	20	8.32	32.44	25.25	274.0	.055
20C	8.32	32.44	30	8.32	32.46	25.26	273.4	.082
30C	8.32	32.45	50	8.34	32.48	25.28	271.8	.137
50C	8.34	32.48						

UM 5 43 39.1 N 124 19.7 W DATE 12 MAR 71 2058 GCT WIRE
 DRY 46.0 WET 44.5 CRUISE Y7103C WIND DIRECTION 14 VEL 16 KTS BAR 96

SWELL DIRECTION 26 H 15 T 09 CLOUD 6 AMT 8 WEATHER 10

0C	8.28	32.15	0	8.28	32.15	25.03	294.7	0
3C	8.28	32.15	10	8.27	32.17	25.04	293.8	.029
11C	8.27	32.17	20	8.26	32.19	25.06	291.8	.059
25C	8.26	32.21	30	8.28	32.23	25.09	289.5	.088
33C	8.29	32.24	50	8.30	32.27	25.12	286.8	.145
50C	8.30	32.27	75	8.34	32.40	25.22	278.1	.216
62C	8.32	32.30						
75C	8.34	32.40						

UM 15 43 39.2 N 124 33.2 W DATE 12 MAR 71 2235 GCT WIRE
 DRY 46.9 WET 45.2 CRUISE Y7103C WIND DIRECTION 12 VEL 16 KTS BAR 94
 SWELL DIRECTION 26 H 15 T CLOUD 6 AMT 8 WEATHER 62

0C	8.53	32.41	0	8.53	32.42	25.19	278.9	0
1C	8.53	32.41	10	8.53	32.43	25.21	277.6	.028
10C	8.53	32.43	20	8.53	32.44	25.22	277.0	.056
20C	8.53	32.44	30	8.53	32.45	25.22	276.8	.083
31C	8.53	32.45	50	8.54	32.46	25.23	276.4	.139
51C	8.54	32.46	75	8.58	32.50	25.25	274.9	.207
62C	8.56	32.47	100	8.13	33.50	26.11	193.8	.266
75C	8.58	32.49	150	7.31	33.93	26.56	151.5	.352
87C	8.41	32.99						
101C	8.11	33.54						
150C	7.31	33.93						

UM 25 43 38.8 N 124 46.7 W DATE 13 MAR 71 0656 GCT WIRE
 DRY 47.0 WET 44.2 CRUISE Y7103C WIND DIRECTION 30 VEL 18 KTS BAR 08
 SWELL DIRECTION 27 H 09 T 10 CLOUD 6 AMT 8 WEATHER 02

0C	8.36	32.48	0	8.36	32.48	25.27	271.3	0
3C	8.36	32.48	10	8.35	32.49	25.28	270.5	.027
13C	8.34	32.50	20	8.34	32.49	25.28	270.7	.054
21C	8.34	32.49	30	8.36	32.47	25.27	272.5	.081
31C	8.36	32.47	50	8.36	32.46	25.26	273.5	.136
50C	8.36	32.46	75	8.37	32.78	25.50	250.7	.201
63C	8.36	32.52	100	8.08	33.58	26.18	187.1	.256
76C	8.37	32.81	150	7.43	33.92	26.54	153.4	.341
98C	8.15	33.36	200	6.70	33.95	26.66	142.6	.415
100C	8.08	33.58	250	6.20	34.00	26.77	132.7	.484
150C	7.42	33.92	300	5.85	34.02	26.83	127.5	.549
202C	6.67	33.95	400	5.30	34.11	26.96	115.5	.670
250C	6.20	34.00						
300C	5.85	34.02						
400C	5.30	34.11						

UM 35 43 39.2 N 125 00.5 W DATE 13 MAR 71 0938 GCT WIRE
 DRY 45.1 WET 41.1 CRUISE Y7103C WIND DIRECTION 27 VEL 14 KTS BAR 11

66C	8.55	32.63	100	8.62	33.48	26.01	202.8	.257
75C	8.58	32.65	150	7.88	33.82	26.39	167.9	.349
89C	8.62	33.33	200	7.22	33.94	26.58	149.9	.429
101C	8.62	33.45	250	6.76	33.98	26.68	141.4	.501
151C	7.86	33.82	300	6.32	34.02	26.76	133.8	.570
207C	7.22	33.94	400	5.71	34.09	26.89	122.2	.698
250C	6.75	33.98	500	5.17	34.15	27.01	112.1	.815
301C	6.31	34.02	600	4.73	34.27	27.15	98.9	.921
403C	5.70	34.09	700	4.44	34.32	27.23	92.6	1.016
502C	5.16	34.15	800	4.19	34.39	27.31	85.0	1.105
601C	4.73	34.27	1000	3.51	34.45	27.42	74.6	1.265
701C	4.44	34.32						
804C	4.19	34.39						
1001C	3.51	34.45						

UM 85 43 39.5 N 126 09.0 W DATE 13 MAR 71 2006 GCT WIRE
 DRY 49.0 WET 45.2 CRUISE Y7103C WIND DIRECTION 21 VEL 12 KTS BAR 16

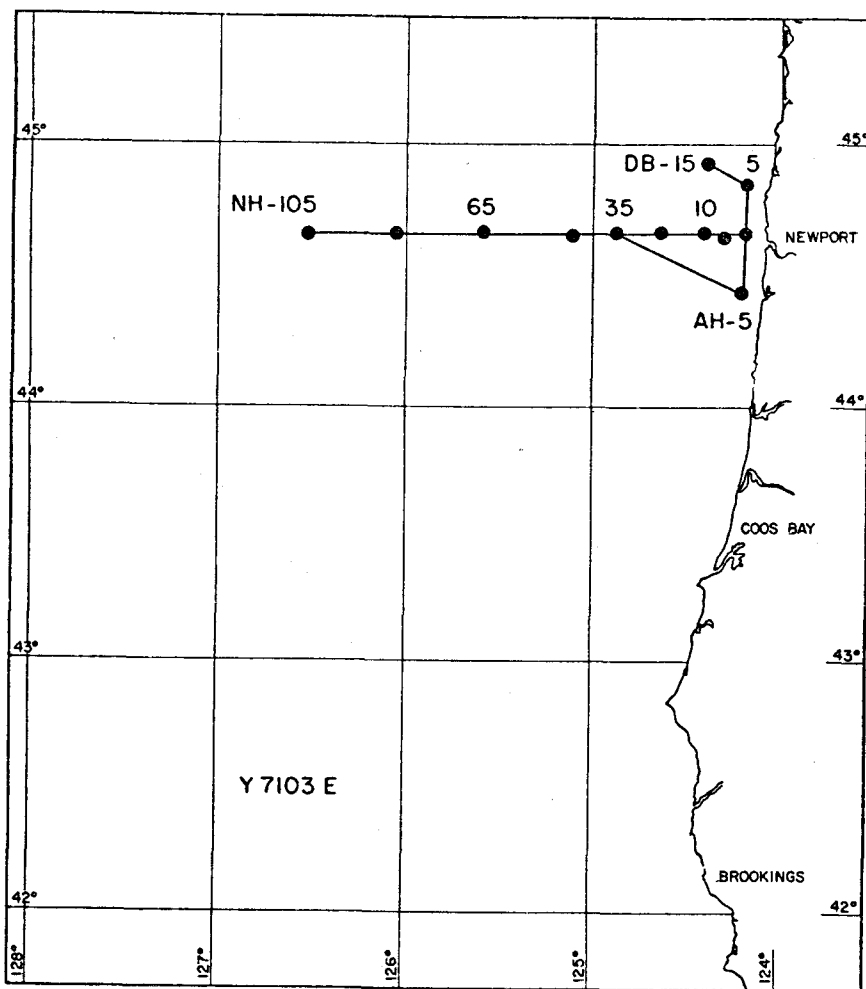
SWELL DIRECTION 29 H 07 T 08 CLOUD 8 AMT 4 WEATHER 03

0C	8.77	32.65	0	8.77	32.65	25.35	264.5	0
3C	8.77	32.65	10	8.77	32.64	25.34	265.6	.027
11C	8.77	32.64	20	8.73	32.65	25.35	264.7	.053
21C	8.73	32.65	30	8.73	32.65	25.35	264.4	.079
30C	8.73	32.65	50	8.72	32.65	25.35	264.6	.132
50C	8.72	32.65	75	8.73	32.65	25.35	265.5	.199
64C	8.73	32.65	100	8.66	33.29	25.86	217.1	.259
76C	8.73	32.65	150	8.39	33.75	26.26	180.6	.358
88C	8.76	32.68	200	7.55	33.92	26.51	156.6	.443
100C	8.66	33.29	250	6.68	33.93	26.65	144.0	.518
150C	8.39	33.74	300	6.18	33.95	26.73	137.1	.588
200C	7.54	33.91	400	4.97	34.01	26.92	119.1	.716
250C	6.67	33.93	500	4.37	34.05	27.02	110.1	.831
301C	6.17	33.95	600	4.40	34.21	27.14	99.5	.935
402C	4.95	34.01	700	4.27	34.30	27.23	91.7	1.031
502C	4.36	34.05	800	3.97	34.36	27.31	85.1	1.119
601C	4.40	34.21	1000	3.47	34.49	27.46	71.2	1.275
708C	4.25	34.31						
804C	3.96	34.36						
1001C	3.47	34.49						

UM 105 43 39.0 N 126 36.2 W DATE 13 MAR 71 2331 GCT WIRE
 DRY 47.5 WET 43.9 CRUISE Y7103C WIND DIRECTION 18 VEL 24 KTS BAR 14
 SWELL DIRECTION 28 H 10 T 07 CLOUD 8 AMT 8 WEATHER 03

0C	8.95	32.66	0	8.95	32.67	25.33	266.4	0
3C	8.95	32.66	10	8.95	32.66	25.32	266.9	.027
11C	8.95	32.66	20	8.95	32.65	25.32	267.7	.053
21C	8.95	32.65	30	8.95	32.65	25.31	268.0	.080
31C	8.95	32.65	50	8.92	32.66	25.33	267.3	.134
55C	8.91	32.66	75	8.91	32.67	25.33	266.8	.200
62C	8.91	32.65	100	8.90	32.84	25.47	254.0	.266
76C	8.91	32.67	150	8.10	33.72	26.28	178.4	.374
90C	8.94	32.66	200	7.41	33.88	26.50	157.6	.458
102C	8.89	32.89	250	6.82	33.92	26.62	146.7	.534
151C	8.08	33.73	300	6.05	33.96	26.75	135.0	.604
200C	7.40	33.87	400	5.34	34.03	26.90	121.6	.732
250C	6.82	33.92	500	4.84	34.09	27.00	112.2	.849
300C	6.04	33.95	600	4.31	34.17	27.12	101.4	.956

OBSERVED										INTERPOLATED			COMPUTED		
D	T	S	O ₂	PO ₄	pH	Alk.	NO ₃	SiO ₂	ΣCO ₂	Z	T	S	σ _t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(μM)		(meq/l)	(μM)	(μM)	(mM)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)
400C	5.34	34.03								700	3.91	34.26	27.23	91.2	1.052
500C	4.84	34.09								800	3.78	34.34	27.31	84.4	1.140
601C	4.31	34.17								1000	3.36	34.47	27.45	71.4	1.296
704C	3.90	34.26													
802C	3.78	34.34													
1001C	3.36	34.47													



NH 45 44 38.5 N 125 06.1 W DATE 28 MAR 71 2346 GCT WIRE 02 DRY 49.3 WET 48.5 CRUISE Y7103E
 WIND DIRECTION 18 VEL 18 KTS BAR 26 SWELL DIRECTION 27 H 06 T 06 CLOUD 8 AMT 8 WEATHER 02

2	8.17	6.67	.97
20	8.18	6.67	.96
30	8.16	6.67	
50	8.08	6.68	
74	8.08	6.08	1.15
100	7.98	4.00	1.87
150	7.28	2.58	2.49
200	6.49	1.96	2.67
250	6.12	1.79	2.84
275	6.00	1.63	2.91
300	5.85	1.47	2.95
325	5.71	1.30	2.97
350	5.64	1.26	3.09
375	5.53	1.14	3.14
400	5.46	1.03	3.20
500	4.94	.75	3.30
600	4.70	.49	3.60

6.7	12	0	0
7.7	11	10	8.18
		20	8.18
6.8	10	30	8.16
11.5	15	50	8.08
22.5	29	75	8.08
32.1	45	100	7.98
34.3	57	150	7.29
35.9	62	200	6.49
36.8	66	250	6.13
36.9	68	300	5.85
37.5	71	400	5.46
37.2	73	500	4.94
37.7	74	600	4.70
37.1	77		
39.2	89		
40.5	91		

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	PO ₄	pH	Alk.	NO ₃	SiO ₂	ΣCO ₂	Z	T	S	σ _t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(μM)		(meq/l)	(μM)	(μM)	(mM)	(m)	(°C)	(‰)		(x10 ³)	(dyn.m)
NH 65	44	39.5 N	125	35.0 W	DATE 29	MAR 71	0605	GCT	WIRE 01	DRY 48.5	WET 48.1	CRUISE Y7103E			
WIND DIRECTION 19 VEL 18 KTS					BAR 24 SWELL DIRECTION 27 H 07 T 08					CLOUD AMT 9 WEATHER 47					

0	8.10	0	6.81	.67			5.1	9	0	8.10	0
20	8.11	32.538	6.81	.74			5.0	8	10	8.11	0
30	8.11	32.538	6.83	.76	8.152	2.280	5.2	8	20	8.11	32.54
49	8.05	32.534	6.79	.74	8.182	2.290	5.4	8	30	8.11	32.54
75	8.06	32.546	6.74	.78	8.088	2.270	5.8	8	50	8.05	32.53
100	7.96	33.020	5.31	1.34	8.036	2.290	15.3	18	75	8.06	32.55
124	7.71	33.685	3.62	2.06	7.849	2.350	27.0	33	100	7.96	33.02
150	7.50	33.873	2.94	2.27	7.782	2.390	30.5	40	150	7.51	33.88
199	6.81	33.946	2.58	2.47	7.723	2.390	33.7	48	200	6.80	33.95
250	6.33	33.966	2.32	2.62	7.687	2.380	35.2	53	250	6.33	33.97
275	6.21	34.007	2.01	2.74			36.8	59	300	5.99	34.01
300	5.99	34.007	1.88	2.82	7.578	2.400	37.8	62	400	5.46	34.08
326	5.91	34.037	1.75	2.93			38.8	65	500	5.02	34.14
375	5.62	34.057	1.39	3.04	7.631	2.400	39.8	71	600	4.71	34.22
400	5.46	34.073	1.21	3.12	7.636	2.400	40.9	75	700	4.34	34.28
600	4.71	34.215	.56	3.43	7.516	2.420	44.0	97	800	4.10	34.34
799	4.10	34.335	.40	3.68	7.600	2.470	42.6	110	1000	4.37	34.42
999	4.37	34.418	.46	3.60	7.595	2.520	43.8	130			

NH 85	44	39.0 N	126	03.1 W	DATE 29	MAR 71	1241	GCT	WIRE	DRY	WET	CRUISE Y7103E			
WIND DIRECTION 18 VEL 20 KTS					BAR 20 SWELL DIRECTION 29 H 07 T 07					CLOUD AMT 9 WEATHER 02					

0	8.53	32.596	6.69	.83			6.0	14	0	8.53	32.60	25.34	264.9	0
20	8.52	32.595	6.69	.78			5.3	11	10	8.52	32.59	25.34	265.5	.027
30	8.52	32.597	6.68	.79			5.3	9	20	8.52	32.60	25.34	265.2	.053
49	8.47	32.597	6.67	.78			5.4	9	30	8.52	32.60	25.34	265.2	.080
74	8.48	32.603	6.67	.82			5.7	8	50	8.47	32.60	25.35	265.1	.133
99	8.48	32.625	6.59	.83			6.5	9	75	8.48	32.60	25.35	265.1	.199
123	7.74	33.621	3.86	1.89			23.6	32	100	8.45	32.66	25.40	260.5	.265
149	7.61	33.794	3.27	2.09			27.1	40	150	7.60	33.80	26.42	165.1	.371
197	6.94	33.916	2.91				29.2	47	200	6.89	33.92	26.61	147.3	.449
248	6.16	33.927	2.83	2.53			30.6	56	250	6.15	33.93	26.71	137.6	.520
273	5.99	33.940	2.56	2.52			32.4	60	300	5.73	33.94	26.78	132.0	.588
298	5.75	33.942	2.42	2.60			33.8	65	400	4.72	33.98	26.92	118.7	.713
320	5.51	33.945	2.20	2.71			35.4	69	500	4.53	34.09	27.04	108.3	.826
372	5.11	33.951	2.00	2.85			36.7	74	600	4.33	34.21	27.15	99.2	.930
397	4.74	33.975	1.63	2.98			38.6	82	700	4.17	34.29	27.23	91.7	1.025
595	4.34	34.201	.56	3.34			42.7	108	800	3.98	34.35	27.38	85.6	1.114
793	4.00	34.347	.32	3.70			43.2	122	1000	3.45	34.42	27.41	76.2	1.276
991	3.47		.41	3.64			43.4	138						

NH 105	44	39.1 N	126	31.0 W	DATE 29	MAR 71	1931	GCT	WIRE 06	DRY 48.2	WET 48.1	CRUISE Y7103E			
WIND DIRECTION 20 VEL 22 KTS					BAR 17 SWELL DIRECTION 26 H 07 T 08					CLOUD AMT 9 WEATHER 02					

0	8.54		6.73	.81			6.5	11	0	8.54	32.60	25.34	265.1	0
20	8.55		6.75	.80			6.1	8	10	8.54	32.59	25.33	265.8	.027
30	8.56		6.75	.80			6.2	8	20	8.55	32.60	25.34	265.6	.053
49	8.54		6.71	.79			6.2	8	30	8.56	32.60	25.34	265.8	.080
75	8.54		6.68	.88			6.4	9	50	8.54	32.60	25.34	266.1	.133
100	8.09		4.98	1.44			16.9	20	75	8.54	32.60	25.34	266.1	.199
124	7.68		3.86	1.95			24.5	32	100	8.09	32.66	25.46	255.5	.265
150	7.45		3.26	2.15			29.1	40	150	7.45	33.80	26.44	163.1	.369
199	6.81		2.83	2.61			32.2	49	200	6.80	33.92	26.62	146.1	.446
250	6.18	33.932	2.70	2.52	7.823	2.340	34.0	56	250	6.19	33.94	26.72	137.4	.517
275	5.85	33.941	2.42	2.62	7.797	2.380	35.4	59	300	5.66	33.96	26.80	129.8	.584
300	5.65	33.955	2.17	2.72	7.768	2.370	36.7	66	400	5.04	34.03	26.93	118.6	.708
323	5.52	33.969	1.89	2.85	7.732	2.370	37.6	69	500	4.63	34.09	27.03	109.5	.822
375	5.18	34.006	1.51	3.02	7.692	2.380	40.6	77	600	4.31	34.21	27.15	99.0	.926
400	5.03	34.029	1.29		7.671	2.370			700	4.07	34.29	27.24	90.6	1.021
799	3.91		.35	3.49			45.5	115	800	3.91	34.35	27.31	84.7	1.109
999	3.39		.39	3.50			45.6	132	1000	3.39	34.42	27.41	75.5	1.269

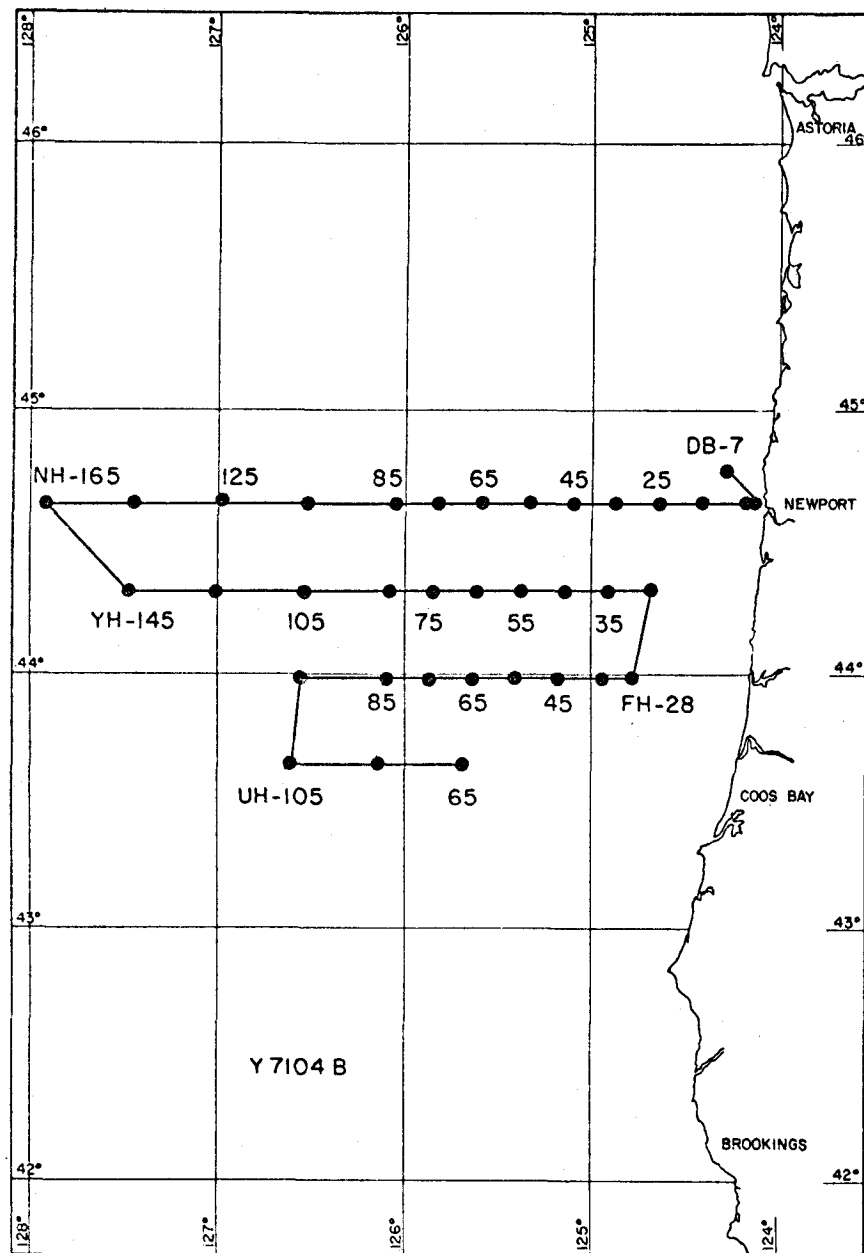
NH 5	44	39.2 N	124	10.5 W	DATE 30	MAR 71	1111	GCT	WIRE	DRY 47.0	WET 43.7	CRUISE Y7103E			
WIND DIRECTION 23 VEL 14 KTS					BAR 14 SWELL DIRECTION 28 H 05 T 07					CLOUD 8 AMT 8 WEATHER 03					

0	8.55	32.132	6.65	.98	8.169	2.410	7.4	15	0	8.55	32.14	24.97	299.7	0
7	8.56	32.130	6.65	.97	8.163	2.240	7.3	15	10	8.56	32.14	24.98	299.7	.030
17	8.56	32.166	6.65	.97	8.164	2.220	7.1	15	20	8.56	32.22	25.04	293.5	.060
27	8.55	32.368	6.65	.93	8.171	2.250	6.4	13	30	8.55	32.40	25.18	280.8	.088
37	8.56	32.435	6.62	.92	8.174	2.250	6.2	12	50	8.57	32.44	25.21	278.3	.144
54	8.57	32.439	6.62		8.164	2.260	6.2	12						

NH 10	44	38.1 N	124	17.5 W	DATE 30	MAR 71	1426	GCT	WIRE 02	DRY 47.0	WET 45.0	CRUISE Y7103E			
WIND DIRECTION 18 VEL 18 KTS					BAR 13 SWELL DIRECTION 28 H 04 T					CLOUD 6 AMT 8 WEATHER 03					

0	8.50	32.445	6.59	.90			6.3	12	0	8.50	32.45	25.23	275.7	0
6	8.51	32.443	6.58	.89			6.4	12	10	8.50	32.44	25.22	276.3	.028
22	8.50	32.444	6.59	.89	8.115		6.4	12	20	8.50	32.44	25.22	276.4	.055
26	8.53	32.448	6.60	.89			6.6	12	30	8.52	32.45	25.22	276.6	.083
46	8.50	32.448	6.56	.88			6.8	12	50	8.50	32.45	25.23	276.5	.134
71	8.50	32.458	6.54	.91	8.123	2.150	6.8	11						

OBSERVED										INTERPOLATED										COMPUTED		
D	T	S	O ₂	PO ₄	pH	Alk.	NO ₃	SiO ₂	ΣCO ₂	Z	T	S	σ _t	θ	ΔD							
(m)	(°C)	(‰)	(ml/l)	(μM)		(meq/l)	(μM)	(μM)	(mM)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)							
NH 15 44 39.2 N 124 24.3 W										DATE 30 MAR 71	1710 GCT	WIRE 02	DRY 46.2	WET 43.2	CRUISE Y7103E							
WIND DIRECTION 24 VEL 20 KTS										BAR 13	SWELL	DIRECTION 26	H 04 T 07	CLOUD 8	AMT 6	WEATHER 02						
0	8.46	32.538	6.61	.96	8.129	2.190	8.5	13		0	8.46	32.54	25.31	268.2	0							
10	8.46	32.547	6.60	.95	8.117	2.210	8.3	13		10	8.46	32.55	25.31	267.7	.027							
20	8.45	32.563	6.60	.99	8.135	2.190	8.4	13		20	8.45	32.57	25.33	266.6	.054							
30	8.44	32.596	6.50	1.00	8.130	2.190	8.6	13		30	8.44	32.60	25.35	264.1	.080							
39	8.42	32.608	6.48	1.03	8.126	2.180	8.8	14		50	8.37	32.66	25.41	258.9	.132							
59	8.32	32.757	5.94	1.20	8.090	2.190	11.3	17														
74	8.21	33.053	4.89	1.61	8.002	2.280	17.4	26														
NH 25 44 39.4 N 124 38.1 W										DATE 30 MAR 71	2119 GCT	WIRE 01	DRY 49.7	WET 45.3	CRUISE Y7103E							
WIND DIRECTION 24 VEL 20 KTS										BAR 14	SWELL	DIRECTION 26	H 04 T 07	CLOUD 8	AMT 5	WEATHER 01						
0	8.46	32.350	6.75	.86	8.146	2.230	6.8	13		0	8.46	32.35	25.16	282.2	0							
10	8.48	32.349	6.75	.85	8.154	2.220	6.7	13		10	8.48	32.35	25.15	282.7	.028							
20	8.49	32.428	6.92	.89	8.150	2.230	7.0	14		20	8.49	32.43	25.21	277.2	.056							
30	8.46	32.536	6.50	.98	8.140	2.210	8.2	15		30	8.46	32.54	25.30	268.9	.084							
49	8.30	32.829	5.63	1.29	8.073	2.230	12.2	19		50	8.28	32.87	25.59	242.3	.135							
62	8.07	33.307	4.28	1.80	7.951	2.310	20.0	30		75	7.95	33.44	26.09	195.2	.189							
75	7.95	33.439	3.83	1.97	7.922	2.270	22.4	33		100	7.86	33.78	26.37	169.0	.235							
88	7.89	33.664	3.51	2.05	7.886	2.270	24.3	34		150	7.34	33.92	26.55	152.3	.315							
100	7.86	33.780	3.50	2.05	7.889	2.280	24.8	34		200	7.09	33.95	26.61	147.4	.390							
124	7.54	33.876	3.04	2.25	7.851	2.280	27.1	40		250	6.56	33.99	26.71	138.2	.461							
150	7.34	33.918	2.66	2.41	7.801	2.280	28.8	44														
175	7.22	33.943	2.50	2.45	7.793	2.290	29.5	47														
201*	7.08	33.952	2.40	2.52	7.789	2.290	30.2	49														
252*	6.53	33.994	1.98	2.74			33.0	56														
NH 35 44 39.1 N 124 52.4 W										DATE 31 MAR 71	0233 GCT	WIRE 03	DRY 45.9	WET 43.1	CRUISE Y7103E							
WIND DIRECTION 33 VEL 18 KTS										BAR 17	SWELL	DIRECTION 26	H 06 T	CLOUD 8	AMT 6	WEATHER 01						
0	8.35	32.426	6.67	1.06	8.146	2.250	8.1	16		0	8.35	32.43	25.23	275.0	0							
10	8.34	32.426	6.67	.98	8.151	2.220	7.4	13		10	8.34	32.43	25.24	275.0	.027							
20	8.35	32.427	6.68	1.05	8.139	2.240	7.5	14		20	8.35	32.43	25.23	275.2	.055							
30	8.29	32.452	6.64	1.00	8.143	2.240	7.5	11		30	8.29	32.46	25.26	272.7	.082							
49	8.25	32.499	6.50	1.02	8.126	2.240	8.0	12		50	8.25	32.50	25.30	269.1	.137							
61	8.23	32.514	6.44	1.13	8.126	2.250	8.7	16		75	8.20	32.72	25.48	252.3	.202							
75	8.20	32.718	5.76	1.32	8.077	2.250	11.7	20		100	7.97	33.56	26.17	187.5	.257							
87	8.03	33.361	4.06	1.98	7.934	2.280	20.5	34		150	7.19	33.92	26.56	150.8	.341							
100	7.97	33.552	3.61	2.12	7.899	2.290	23.3	35		200	6.36	34.00	26.74	134.6	.413							
124	7.63	33.800	3.06	2.38	7.838	2.300	28.6	45		250	6.02	34.04	26.82	127.8	.478							
150	7.19	33.911	2.51	2.55	7.792	2.390	31.2	50		300	5.74	34.06	26.87	123.5	.541							
199	6.37	33.995	2.07	2.79	7.735	2.390	34.5	59		400	5.43	34.10	26.94	118.3	.662							
250	6.01	34.033	1.61	3.03	7.684	2.370	36.4	66														
300	5.74	34.055	1.37	3.14	7.666	2.370	37.6	71														
400	5.43	34.097	1.05	3.26	7.634	2.420	38.2	77														
AH 5 44 25.5 N 124 12.0 W										DATE 31 MAR 71	1421 GCT	WIRE 00	DRY 46.8	WET 42.1	CRUISE Y7103E							
WIND DIRECTION 27 VEL 04 KTS										BAR 29	SWELL	DIRECTION 27	H 06 T	CLOUD 8	AMT 6	WEATHER 02						
0	8.53	32.164	6.58	1.01	8.120	2.220	8.4	16		0	8.53	32.17	25.00	297.1	0							
10	8.55	32.162	6.61	.98			8.0	16		10	8.55	32.17	25.00	297.6	.030							
20	8.65	32.235	6.64	.87	8.141	2.210	6.7	13		20	8.65	32.24	25.04	293.8	.059							
30A	8.59	32.255	6.64	.86	8.136		6.5	13		30	8.59	32.26	25.06	291.6	.089							
44	8.60	32.263	6.62	.88	8.136	2.190	6.5	13														
DB 5 44 50.3 N 124 10.3 W										DATE 31 MAR 71	1808 GCT	WIRE 02	DRY 47.0	WET 42.3	CRUISE Y7103E							
WIND DIRECTION 20 VEL 09 KTS										BAR 32	SWELL	DIRECTION 26	H 04 T 08	CLOUD 8	AMT 4	WEATHER 01						
0	8.53	30.609	6.80		8.073		9.7	26		0	8.53	30.61	23.79	412.8	0							
10	8.47	32.449	6.56		8.105	2.200	7.5	13		10	8.47	32.45	25.23	275.2	.034							
20	8.47	32.469	6.54		8.114	2.200	7.4	13		20	8.47	32.47	25.25	273.8	.062							
30	8.50	32.507	6.51		8.118	2.210	7.3	13		30	8.50	32.51	25.27	271.6	.089							
39	8.55		6.61				7.6	13		50	8.54	32.50	25.26	273.3	.144							
49	8.54		6.56				7.8	13														
59	8.54		6.55				7.8	13														
DB 15 44 55.2 N 124 22.6 W										DATE 31 MAR 71	2025 GCT	WIRE 00	DRY 48.4	WET 43.3	CRUISE Y7103E							
WIND DIRECTION 19 VEL 14 KTS										BAR 32	SWELL	DIRECTION 27	H 06 T 08	CLOUD 0	AMT 7	WEATHER 03						
0	8.52	32.323	6.70	.88	8.121	2.210		13		0	8.52	32.33	25.13	285.1	0							
10	8.47	32.323	6.77	.86	8.141	2.230		13		10	8.47	32.33	25.14	284.5	.028							
20	8.43	32.338	6.69	.89	8.143	2.210		13		20	8.43	32.34	25.15	283.0	.057							
30	8.43	32.366	6.62	.98	8.139	2.230		13		30	8.43	32.37	25.18	281.1	.085							
49	8.40	32.573	6.26	1.05	8.109	2.230		15		50	8.39	32.60	25.36	263.9	.140							
61	8.25	32.948	5.22	1.46	8.036	2.250		21		75	7.80	33.51	26.16	188.2	.196							
74	7.81	33.497	3.44	2.14	7.879	2.270		38		100	7.67	33.65	26.29	176.4	.242							
86	7.75	33.553	3.26	2.19	7.854	2.290		39		150	7.22	33.88	26.53	153.6	.324							
99	7.68	33.644	3.00	2.33	7.826	2.280		43														
124	7.48	33.768	2.72	2.41	7.809	2.290		44														
149	7.23	33.878	2.53	2.51	7.781	2.290		47														



OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁻³)	(dyn.m)
0C	9.63	31.26		0	9.63	31.26	24.13	380.6	0
1C	9.63	31.26		10	9.42	31.67	24.47	347.9	.036
10C	9.42	31.66		20	8.90	32.34	25.08	289.8	.068
20C	8.90	32.34		30	8.88	32.34	25.09	289.7	.097
30C	8.88	32.34							

NH 25 44 39.1 N 124 38.2 W DATE 16 APR 71 0350 GCT WIRE
 DRY 46.0 WET 41.5 CRUISE Y7104B WIND DIRECTION 35 VEL 10 KTS BAR 19
 SWELL DIRECTION 32 H 06 T CLOUD 1 AMT 4 WEATHER 03

39C	8.67	32.54		0	9.63	31.26	24.13	380.6	0
50C	8.32	32.87		10	9.42	31.67	24.47	347.9	.036
62C	8.15	33.22		20	8.90	32.34	25.08	289.8	.068
75C	7.94	33.46		30	8.88	32.34	25.09	289.7	.097
87C	7.67	33.74		50	8.32	32.88	25.59	242.5	.150
100C	7.57	33.78		75	7.94	33.46	26.10	193.7	.205
150C	7.12	33.92		100	7.57	33.78	26.41	165.1	.250
				150	7.12	33.92	26.58	149.6	.328

NH 35 44 39.0 N 124 52.4 W DATE 17 APR 71 1735 GCT WIRE

DRY 48.0 WET 45.2 CRUISE Y7104B WIND DIRECTION 35 VEL 28 KTS BAR 09
 SWELL DIRECTION 30 H 08 T 08 CLOUD 8 AMT 7 WEATHER 01

0C	8.92	32.56		0	8.92	32.56	25.25	273.4	0
1C	8.92	32.56		10	8.92	32.57	25.26	272.8	.027
10C	8.92	32.57		20	8.91	32.57	25.26	272.9	.055
20C	8.91	32.57		30	8.89	32.59	25.28	271.2	.082
30C	8.89	32.59		50	8.21	33.01	25.71	230.5	.132
50C	8.21	33.01		75	8.08	33.56	26.16	188.2	.184
62C	8.18	33.30		100	7.78	33.79	26.39	167.1	.229
75C	8.08	33.56		150	7.20	33.96	26.60	147.4	.307
87C	7.82	33.75		200	6.65	34.00	26.71	137.7	.379
100C	7.77	33.79		250	6.20	34.05	26.80	129.3	.445
150C	7.20	33.96		300	5.95	34.09	26.87	123.8	.509
200C	6.64	34.00							
251C	6.19	34.05							
300C	5.95	34.09							

NH 45 44 39.1 N 125 06.1 W DATE 17 APR 71 2155 GCT WIRE
 DRY 46.5 WET 45.0 CRUISE Y7104B WIND DIRECTION 33 VEL 24 KTS BAR 12
 SWELL DIRECTION 30 H 06 T 09 CLOUD 6 AMT 8 WEATHER 03

0C	8.87	32.54		0	8.87	32.54	25.24	274.2	0
1C	8.87	32.54		10	8.87	32.52	25.23	276.0	.028
11C	8.87	32.52		20	8.85	32.57	25.27	272.0	.055
20C	8.85	32.57		30	8.79	32.54	25.26	273.4	.082
32C	8.77	32.54		50	8.28	33.12	25.79	223.5	.132
53C	8.20	33.23		75	8.11	33.47	26.09	195.3	.184
62C	8.15	33.34		100	7.76	33.79	26.39	166.9	.229
75C	8.11	33.47		150	7.34	33.90	26.54	153.8	.310
90C	7.90	33.77		200	6.78	33.92	26.63	145.4	.384
100C	7.75	33.79		250	6.20	34.02	26.78	131.7	.454

OBSERVED INTERPOLATED COMPUTED

D T S O₂ Z T S σ_t θ ΔD
(m) (°C) (‰) (ml/l) (m) (°C) (‰) (x10⁵) (dyn.m)

OB 7 44 46.4 N 124 16.6 W DATE 16 APR 71 1030 GCT WIRE
DRY 44.8 WET 42.0 CRUISE Y7104B WIND DIRECTION 06 VEL 08 KTS BAR 12
SWELL DIRECTION 31 H 04 T 08 CLOUD 6 AMT 8 WEATHER 03

0C	9.76	30.98	0	9.76	30.98	23.89	403.3	0
1C	9.76	30.98	10	9.30	32.14	24.86	310.5	.036
11C	9.23	32.30	20	8.92	32.36	25.10	288.6	.066
20C	8.92	32.36	30	8.92	32.47	25.18	280.6	.094
30C	8.92	32.47	50	8.66	32.52	25.26	273.7	.150
51C	8.63	32.53	75	8.04	33.31	25.97	206.2	.209
62C	8.22	32.92						
75C	8.04	33.31						
89C	7.69	33.63						

OB 7 44 46.7 N 124 16.1 W DATE 16 APR 71 2045 GCT WIRE
DRY 50.5 WET 49.0 CRUISE Y7104B WIND DIRECTION 18 VEL 22 KTS BAR 05
SWELL DIRECTION 19 H 04 T 06 CLOUD 8 AMT 7 WEATHER 02

0C	9.36	31.65	0	9.36	31.65	24.47	347.5	0
1C	9.36	31.65	10	9.05	32.20	24.95	302.7	.033
12C	8.95	32.35	20	8.75	32.48	25.22	277.2	.061
20C	8.75	32.48	30	8.72	32.46	25.20	278.4	.089
30C	8.72	32.46	50	8.61	32.54	25.28	271.2	.144
51C	8.59	32.56	75	7.92	33.33	26.00	203.6	.204
62C	8.18	32.96						
76C	7.91	33.35						

OB 7 44 46.4 N 124 16.8 W DATE 17 APR 71 0110 GCT WIRE
DRY 47.8 WET 46.0 CRUISE Y7104B WIND DIRECTION 19 VEL 20 KTS BAR 03
SWELL DIRECTION 21 H 04 T N CLOUD 6 AMT 8 WEATHER 02

0C	9.22	32.29	0	9.22	32.29	24.99	297.9	0
1C	9.22	32.29	10	9.22	32.30	25.00	297.3	.030
10C	9.22	32.30	20	9.16	32.30	25.01	296.6	.059
20C	9.16	32.30	30	8.98	32.46	25.16	283.0	.088
30C	8.98	32.45	50	8.64	32.50	25.25	274.6	.144
50C	8.64	32.50	75	8.16	33.00	25.71	230.9	.207
64C	8.32	32.81						
75C	8.16	33.00						

NH 3 44 39.1 N 124 07.7 W DATE 15 APR 71 2245 GCT WIRE
DRY 43.2 WET 42.3 CRUISE Y7104B WIND DIRECTION 33 VEL 12 KTS BAR 23
SWELL DIRECTION 30 H 06 T 08 CLOUD 8 AMT 3 WEATHER 00

0C	9.78	31.40	0	9.78	31.40	24.21	372.5	0
2C	9.78	31.40	10	9.51	31.69	24.48	347.0	.036
10C	9.51	31.69	20	9.14	32.06	24.83	314.1	.069
20C	9.14	32.06	30	8.76	32.42	25.16	282.7	.099
30C	8.76	32.41						

NH 5 44 39.2 N 124 10.6 W DATE 16 APR 71 0030 GCT WIRE
DRY 49.5 WET 43.5 CRUISE Y7104B WIND DIRECTION 31 VEL 08 KTS BAR 22
SWELL DIRECTION 30 H 06 T CLOUD 8 AMT 7 WEATHER 03

150C	7.34	33.90	300	5.80	34.07	26.87	123.5	.517
200C	6.77	33.92	400	5.26	34.13	26.98	113.6	.636
251C	6.19	34.02	500	4.87	34.21	27.09	104.2	.745
406C	5.24	34.13	600	4.61	34.28	27.18	96.6	.845
504C	4.86	34.21						
600C	4.61	34.28						

NH 55 44 39.1 N 125 20.1 W DATE 18 APR 71 0105 GCT WIRE
DRY 47.5 WET 45.0 CRUISE Y7104B WIND DIRECTION 33 VEL 28 KTS BAR 15
SWELL DIRECTION 32 H 10 T CLOUD 6 AMT 8 WEATHER 03

0C	8.76	32.51	0	8.76	32.51	25.24	274.8	0
1C	8.76	32.51	10	8.76	32.47	25.21	277.9	.028
10C	8.76	32.47	20	8.76	32.50	25.23	275.9	.055
20C	8.76	32.50	30	8.76	32.49	25.22	276.9	.083
31C	8.76	32.49	50	8.74	32.50	25.23	276.8	.138
50C	8.74	32.49	75	8.11	33.08	25.78	224.2	.201
63C	8.19	32.69	100	7.93	33.63	26.23	181.9	.252
76C	8.10	33.12	150	7.35	33.93	26.55	152.2	.335
89C	7.99	33.47	200	6.85	33.99	26.67	141.7	.409
100C	7.92	33.62	250	6.43	34.02	26.75	134.5	.478
151C	7.34	33.93	300	6.02	34.04	26.82	128.0	.543
202C	6.83	33.99	400	5.41	34.13	26.96	115.6	.665
251C	6.42	34.02	500	4.95	34.20	27.07	105.7	.776
300C	6.01	34.04	600	4.61	34.29	27.18	95.0	.876
404C	5.39	34.13	700	4.31	34.34	27.26	89.6	.959
502C	4.94	34.20	800	4.05	34.40	27.33	82.6	1.055
603C	4.60	34.29	1000	3.64	34.47	27.43	74.6	1.212
702C	4.30	34.34						
800C	4.05	34.40						
1001C	3.64	34.47						

NH 65 44 39.0 N 125 35.3 W DATE 17 APR 71 0545 GCT WIRE
DRY 49.9 WET 41.8 CRUISE Y7104B WIND DIRECTION 32 VEL 24 KTS BAR 18
SWELL DIRECTION 32 H 08 T 09 CLOUD 6 AMT 6 WEATHER 03

0C	8.71	32.66	0	8.71	32.67	25.36	262.9	0
2C	8.71	32.66	10	8.71	32.63	25.34	265.4	.026
11C	8.71	32.63	20	8.71	32.66	25.36	263.8	.053
21C	8.71	32.66	30	8.71	32.66	25.36	264.0	.079
34C	8.71	32.65	50	8.71	32.65	25.35	264.7	.132
53C	8.70	32.65	75	8.06	32.85	25.61	240.7	.195
67C	8.58	32.66	100	7.92	33.54	26.17	188.1	.249
75C	8.06	32.85	150	7.56	33.85	26.47	160.4	.336
87C	8.00	33.23	200	7.14	33.92	26.57	150.9	.414
101C	7.91	33.56	250	6.53	33.96	26.69	140.4	.487
150C	7.55	33.85	300	6.08	34.01	26.79	131.4	.555
200C	7.13	33.91	400	5.41	34.07	26.92	120.0	.680
253C	6.49	33.96	500	4.93	34.18	27.06	107.1	.794
301C	6.07	34.01	600	4.56	34.25	27.16	97.9	.896
404C	5.39	34.07	700	4.29	34.34	27.26	89.0	.990
503C	4.92	34.18	800	4.00	34.38	27.32	83.9	1.076
600C	4.56	34.25						
700C	4.29	34.34						
804C	3.99	34.38						

NH 75 44 39.1 N 125 49.2 W DATE 18 APR 71 0830 GCT WIRE
DRY 45.2 WET 42.0 CRUISE Y7104B WIND DIRECTION 32 VEL 16 KTS BAR 20
SWELL DIRECTION 32 H 06 T 09 CLOUD 6 AMT 2 WEATHER 01

0C	8.89	32.69	0	8.89	32.69	25.36	263.3	0
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OBSERVED			INTERPOLATED			COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(dyn.m)
10	8.89	32.69		10	8.90	32.68	25.35	264.3
160	8.90	32.68		20	8.90	32.71	25.37	262.3
200	8.90	32.71		30	8.91	32.70	25.36	263.5
330	8.91	32.69		50	8.90	32.69	25.35	264.6
520	8.90	32.69		75	8.62	32.78	25.47	253.9
630	8.88	32.70		100	8.13	33.42	26.04	200.5
750	8.62	32.78		150	7.50	33.83	26.46	161.2
890	8.23	33.27		200	6.95	33.96	26.64	144.8
1030	8.13	33.41		250	6.44	34.00	26.73	136.2
1510	7.49	33.84		300	5.79	34.02	26.83	127.1
2000	6.95	33.96		400	4.92	34.06	26.97	114.4
2520	6.42	34.00		500	4.38	34.10	27.06	106.0
3010	5.78	34.02		600	4.34	34.26	27.19	94.6
4030	4.92	34.06		700	4.17	34.36	27.29	86.5
5000	4.37	34.10		800	3.96	34.42	27.36	80.0
6030	4.34	34.26		1000	3.49	34.49	27.46	71.3
7010	4.17	34.36						1.212
8000	3.95	34.42						
10000	3.49	34.49						

NH 85 44 39.1 N 126 03.0 W DATE 18 APR 71 1218 GCT WIRE
 DRY 46.0 WET 43.9 CRUISE Y71048 WIND DIRECTION 30 VEL 12 KTS BAR 21
 SWELL DIRECTION 32 H 06 T 03 CLOUD 8 AMT 6 WEATHER 01

120	8.97	32.71	0	8.89	32.69	25.36	263.3	0
230	8.97	32.70	10	8.90	32.68	25.35	264.3	.026
310	8.97	32.70	20	8.97	32.70	25.35	264.4	.053
510	8.97	32.69	30	8.97	32.70	25.35	264.6	.079
630	8.97	32.69	50	8.97	32.69	25.34	265.6	.132
780	8.94	32.69	75	8.95	32.69	25.35	265.8	.199
870	8.87	32.72	100	8.80	32.98	25.60	242.4	.262
1020	8.79	33.03	150	8.17	33.81	26.34	172.7	.366
1540	8.10	33.85	200	7.22	33.97	26.61	147.7	.446
2020	7.18	33.98	250	6.32	34.00	26.74	135.0	.517
2500	6.32	33.99	300	5.84	33.97	26.79	131.0	.583
3010	5.84	33.97	400	5.09	34.06	26.95	116.5	.707
4380	4.86	34.11	500	4.52	34.14	27.07	105.1	.818
5010	4.52	34.14	600	4.45	34.26	27.18	96.3	.918
6010	4.45	34.26	700	4.14	34.33	27.27	88.4	1.011
7020	4.13	34.33	800	3.87	34.41	27.36	80.2	1.095
8030	3.86	34.41	1000	3.38	34.52	27.49	67.9	1.243
10010	3.33	34.52						

NH 105 44 39.1 N 126 31.0 W DATE 18 APR 71 1515 GCT WIRE
 DRY 47.0 WET 45.0 CRUISE Y71048 WIND DIRECTION 25 VEL 08 KTS BAR 22
 SWELL DIRECTION 29 H 06 T 03 CLOUD 6 AMT 6 WEATHER 02

00	9.05	32.65	0	9.05	32.65	25.30	268.7	0
10	9.05	32.65	10	9.05	32.65	25.30	269.1	.027
130	9.05	32.65	20	9.05	32.67	25.31	268.3	.054
200	9.05	32.66	30	9.05	32.66	25.31	268.7	.081
330	9.05	32.66	50	9.05	32.67	25.31	268.8	.134
500	9.05	32.66	75	8.77	32.69	25.37	263.4	.201
620	9.05	32.68	100	8.44	33.38	25.96	207.8	.260
770	8.72	32.70	150	7.90	33.83	26.40	166.8	.353
920	8.49	33.10	200	7.27	33.97	26.60	148.8	.432

OBSERVED			INTERPOLATED			COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(dyn.m)
NH 165	44 39.1 N	127 55.0 W		0	8.70	32.61	25.32	266.5
DRY 48.0	WET 47.0	CRUISE Y71048		10	8.61	32.60	25.33	266.1
SWELL DIRECTION 29 H 06 T 10				20	8.55	32.60	25.34	265.7
				30	8.54	32.61	25.34	265.1
				50	8.53	32.61	25.35	265.1
				75	8.45	32.60	25.35	265.1
				100	7.78	33.07	25.82	220.7
				150	7.48	33.82	26.45	161.7
				200	6.73	33.94	26.65	143.8
				250	6.30	33.97	26.73	136.6
				300	5.79	34.02	26.84	126.6
				400	5.25	34.07	26.94	117.9
				500	4.79	34.16	27.06	106.8
				600	4.49	34.27	27.18	95.6
				700	4.17	34.33	27.26	88.7
				800	3.91	34.39	27.34	82.1
				1000	3.37	34.49	27.47	69.9
								1.233

YH 145 44 19.0 N 127 28.4 W DATE 19 APR 71 0627 GCT WIRE
 DRY 48.0 WET 46.0 CRUISE Y71048 WIND DIRECTION 22 VEL 08 KTS BAR 21
 SWELL DIRECTION 29 H 06 T 09 CLOUD 6 AMT 8 WEATHER 02

00	9.06	32.70	0	9.06	32.71	25.34	265.1	0
10	9.06	32.70	10	8.88	32.66	25.34	265.6	.027
110	8.86	32.66	20	8.83	32.68	25.35	264.1	.053
210	8.83	32.68	30	8.82	32.69	25.37	262.8	.079
300	8.82	32.69	50	8.81	32.67	25.35	265.1	.132
550	8.81	32.66	75	8.81	32.67	25.35	265.2	.198
640	8.81	32.67	100	7.97	33.35	26.01	202.6	.257
760	8.81	32.67	150	7.17	33.83	26.50	156.9	.347
880	8.30	32.84	200	6.65	33.94	26.66	142.7	.422
1000	7.97	33.35	250	6.12	33.98	26.76	133.6	.491
1540	7.13	33.87	300	5.56	33.97	26.82	127.5	.556
2010	6.64	33.94	400	4.79	34.08	27.00	111.3	.675
2520	6.10	33.98	500	4.38	34.18	27.12	100.6	.781
3000	5.55	33.97	600	4.22	34.26	27.21	93.3	.878
4000	4.78	34.08	700	3.98	34.34	27.29	86.0	.968
5030	4.37	34.18	800	3.78	34.41	27.37	79.1	1.050
6000	4.22	34.26	1000	3.36	34.49	27.47	69.8	1.199
7040	3.97	34.34						
8010	3.78	34.41						
10000	3.36	34.49						

YH 125 44 18.8 N 127 00.2 W DATE 19 APR 71 0943 GCT WIRE
 DRY 49.3 WET 47.1 CRUISE Y71048 WIND DIRECTION 22 VEL 08 KTS BAR 20
 SWELL DIRECTION 29 H 04 T 09 CLOUD 6 AMT 8 WEATHER 02

00	9.28	32.67	0	9.28	32.67	25.28	270.6	0
10	9.28	32.67	10	9.02	32.67	25.32	266.9	.027

101C	8.44	33.41	250	6.32	33.96	26.72	137.2	.504
153C	7.86	33.86	300	6.01	34.01	26.79	130.8	.571
201C	7.26	33.97	400	5.13	34.05	26.93	117.9	.695
250C	6.32	33.96	500	4.68	34.16	27.07	105.7	.807
303C	6.00	34.01	600	4.38	34.26	27.18	95.8	.907
401C	5.12	34.05	700	4.12	34.32	27.26	88.8	1.000
503C	4.67	34.16	800	3.81	34.39	27.35	81.0	1.035
605C	4.37	34.26						
702C	4.11	34.32						
803C	3.89	34.39						

NH 125 44 39.6 N 126 58.9 W DATE 18 APR 71 1940 GCT WIRE
 DRY 49.3 WET 46.2 CRUISE Y7104B WIND DIRECTION 23 VEL 06 KTS BAR 23
 SWELL DIRECTION 29 H 06 T 09 CLOUD 8 AMT 5 WEATHER 01

0C	8.98	32.75	0	8.98	32.75	25.39	260.2	
1C	8.98	32.75	10	8.91	32.69	25.36	263.8	.026
10C	8.91	32.69	20	8.88	32.67	25.34	265.3	.053
21C	8.88	32.67	30	8.88	32.67	25.34	265.9	.079
30C	8.88	32.66	50	8.87	32.66	25.33	266.4	.132
52C	8.87	32.66	75	8.51	32.74	25.45	255.4	.198
65C	8.87	32.66	100	8.00	33.27	25.95	209.0	.256
77C	8.43	32.77	150	7.36	33.84	26.48	159.2	.348
91C	8.15	33.08	200	6.76	33.96	26.66	142.8	.423
100C	8.00	33.27	250	6.08	34.01	26.79	130.8	.492
153C	7.33	33.85	300	5.63	34.03	26.84	126.5	.556
201C	6.75	33.96	400	4.89	34.08	26.99	112.9	.675
253C	6.04	34.01	500	4.46	34.14	27.08	104.5	.784
302C	5.62	34.00	600	4.25	34.28	27.21	92.7	.883
401C	4.88	34.08	700	3.97	34.35	27.30	85.0	.971
503C	4.45	34.14	800	3.74	34.39	27.35	80.1	1.054
602C	4.25	34.28						
703C	3.96	34.35						
802C	3.74	34.39						

NH 145 44 39.1 N 127 27.0 W DATE 18 APR 71 2320 GCT WIRE
 DRY 48.2 WET 46.1 CRUISE Y7104B WIND DIRECTION 22 VEL 12 KTS BAR 22
 SWELL DIRECTION 29 H 06 T 08 CLOUD 8 AMT 8 WEATHER 03

0C	8.65	32.65	0	8.65	32.65	25.36	262.8	0
1C	8.65	32.65	10	8.35	32.64	25.40	259.4	.026
10C	8.35	32.64	20	8.33	32.66	25.41	258.3	.052
21C	8.33	32.66	30	8.32	32.67	25.42	257.8	.078
30C	8.32	32.66	50	8.32	32.63	25.40	260.3	.130
50C	8.32	32.63	75	8.00	32.71	25.51	250.5	.193
62C	8.32	32.62	100	7.84	33.43	26.09	195.2	.249
76C	7.98	32.73	150	7.52	33.83	26.45	161.7	.338
88C	8.05	33.22	200	6.96	33.93	26.61	147.5	.416
102C	7.80	33.45	250	6.42	34.00	26.73	135.9	.486
153C	7.51	33.84	300	5.92	34.04	26.83	127.3	.552
202C	6.93	33.93	400	5.32	34.12	26.97	115.1	.673
251C	6.41	34.00	500	4.78	34.21	27.10	103.2	.782
303C	5.89	34.04	600	4.32	34.24	27.17	96.3	.882
401C	5.32	34.12	700	4.06	34.33	27.27	87.7	.974
500C	4.77	34.20	800	3.77	34.37	27.34	82.0	1.059
604C	4.30	34.24	1000	3.23	34.49	27.48	68.5	1.209
705C	4.05	34.33						
803C	3.76	34.37						
1001C	3.23	34.49						

10C	9.02	32.67	20	8.97	32.67	25.32	267.1	.054
20C	8.97	32.66	30	8.97	32.67	25.33	266.9	.080
31C	8.97	32.67	50	8.96	32.67	25.33	267.0	.134
52C	8.96	32.67	75	8.76	32.67	25.36	264.4	.200
63C	8.96	32.67	100	8.00	33.27	25.95	209.1	.259
76C	8.73	32.67	150	7.24	33.89	26.54	153.4	.350
87C	8.26	32.92	200	6.59	33.96	26.68	140.8	.423
101C	7.99	33.30	250	6.02	34.00	26.79	130.8	.491
153C	7.20	33.90	300	5.59	34.04	26.87	123.2	.555
200C	6.59	33.95	400	5.13	34.12	26.99	113.0	.673
251C	6.01	34.00	500	4.53	34.21	27.13	100.3	.779
302C	5.58	34.04	600	4.15	34.27	27.22	92.2	.876
404C	5.12	34.12	700	4.04	34.34	27.28	86.6	.965
500C	4.52	34.20	800	3.68	34.39	27.36	79.1	1.048
602C	4.15	34.27	1000	3.36	34.50	27.48	69.1	1.196
703C	4.04	34.34						
800C	3.68	34.39						
1001C	3.36	34.50						

YH 105 44 19.0 N 126 32.4 W DATE 19 APR 71 1320 GCT WIRE
 DRY 48.2 WET 46.6 CRUISE Y7104B WIND DIRECTION 18 VEL 06 KTS BAR 19
 SWELL DIRECTION 29 H 03 T 07 CLOUD 6 AMT 8 WEATHER 02

0C	9.14	32.63	0	9.14	32.63	25.27	271.5	0
1C	9.14	32.63	10	9.03	32.64	25.29	269.8	.027
13C	8.98	32.64	20	8.96	32.65	25.31	268.0	.054
21C	8.96	32.65	30	8.96	32.63	25.30	269.7	.081
33C	8.96	32.62	50	8.95	32.64	25.31	268.8	.135
50C	8.95	32.64	75	8.26	32.79	25.53	248.6	.199
62C	8.94	32.65	100	8.00	33.14	25.84	218.7	.258
76C	8.21	32.80	150	7.35	33.85	26.49	158.0	.352
87C	8.08	32.95	200	6.64	33.93	26.66	142.8	.427
100C	8.00	33.14	250	6.15	33.96	26.74	135.4	.497
153C	7.30	33.88	300	5.68	34.00	26.83	127.2	.562
200C	6.63	33.93	400	5.18	34.08	26.95	116.4	.684
253C	6.12	33.96	500	4.79	34.18	27.08	105.3	.795
302C	5.66	34.00	600	4.32	34.23	27.17	96.6	.896
401C	5.18	34.08	700	4.07	34.31	27.26	85.7	.988
501C	4.79	34.18	800	3.78	34.39	27.35	80.9	1.073
600C	4.32	34.23	1000	3.41	34.49	27.47	70.4	1.224
700C	4.07	34.31						
805C	3.77	34.39						
1001C	3.41	34.49						

YH 85 44 19.1 N 126 05.0 W DATE 19 APR 71 1612 GCT WIRE

DRY 49.2 WET 46.8 CRUISE Y7104B WIND DIRECTION 16 VEL 08 KTS BAR 16
 SWELL DIRECTION 26 H 04 T 08 CLOUD 6 AMT 8 WEATHER 01

0C	9.23	32.65	0	9.23	32.65	25.27	271.3	0
3C	9.23	32.65	10	9.10	32.64	25.28	270.5	.027
11C	9.08	32.64	20	9.06	32.64	25.29	269.9	.054
20C	9.06	32.64	30	9.05	32.63	25.28	270.9	.081
31C	9.05	32.63	50	9.05	32.63	25.28	271.7	.135
50C	9.05	32.62	75	8.73	32.73	25.41	259.4	.202
63C	8.96	32.64	100	8.57	33.11	25.73	229.8	.263
78C	8.68	32.75	150	8.05	33.82	26.37	169.7	.363
88C	8.65	32.72	200	7.37	33.97	26.58	150.1	.443
106C	8.52	33.35	250	6.80	33.98	26.67	141.9	.516
153C	8.05	33.82	300	6.20	34.00	26.76	133.8	.585

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^3$)	(dyn.m)
203C	7.33	33.97		400	5.34	34.01	26.88	123.6	.713
250C	6.79	33.98		500	4.52	34.13	27.07	105.5	.828
307C	6.12	34.00		600	4.24	34.23	27.18	95.7	.928
405C	5.30	34.01		700	4.11	34.33	27.27	87.6	1.020
504C	4.49	34.14		800	3.86	34.40	27.35	80.8	1.104
603C	4.24	34.23		1000	3.42	34.50	27.47	69.9	1.255
703C	4.11	34.33							
801C	3.86	34.40							
1002C	3.42	34.50							

YH 75 44 19.0 N 125 50.9 W DATE 19 APR 71 1830 GCT WIRE
 DRY 49.0 WET 47.2 CRUISE Y71048 WIND DIRECTION 16 VEL 10 KTS BAR 16
 SWELL DIRECTION 28 H 04 T 08 CLOUD 6 AMT 8 WEATHER 03

0C	9.29	32.67		0	9.29	32.67	25.28	270.8	0
1C	9.29	32.67		10	9.09	32.67	25.31	268.3	.027
13C	9.01	32.67		20	8.97	32.68	25.33	266.0	.054
22C	8.97	32.68		30	8.96	32.66	25.32	267.3	.080
34C	8.96	32.65		50	8.96	32.64	25.31	269.2	.134
51C	8.96	32.64		75	8.93	32.67	25.33	267.2	.201
62C	8.96	32.65		100	8.64	33.25	25.83	219.8	.262
74C	8.92	32.68		150	7.77	33.71	26.32	174.5	.360
89C	8.81	32.80		200	7.28	33.90	26.54	154.0	.442
100C	8.64	33.25		250	6.59	33.98	26.69	139.8	.516
157C	7.66	33.77		300	6.09	33.99	26.77	133.0	.584
204C	7.21	33.91		400	4.90	34.04	26.95	116.1	.709
253C	6.55	33.98		500	4.28	34.13	27.09	103.2	.818
303C	6.06	33.99		600	4.29	34.25	27.19	94.7	.917
402C	4.88	34.04		700	4.17	34.32	27.25	89.5	1.009
501C	4.28	34.13							
600C	4.28	34.25							
703C	4.17	34.32							

YH 65 44 19.0 N 125 37.0 W DATE 19 APR 71 2045 GCT WIRE
 DRY 49.4 WET 47.5 CRUISE Y71048 WIND DIRECTION 20 VEL 14 KTS BAR 15
 SWELL DIRECTION 26 H 04 T 10 CLOUD 6 AMT 8 WEATHER 02

0C	8.81	32.60		0	8.81	32.60	25.30	269.8	0
1C	8.81	32.60		10	8.70	32.59	25.31	268.3	.027
11C	8.68	32.59		20	8.54	32.58	25.33	266.8	.054
22C	8.51	32.58		30	8.50	32.56	25.31	267.9	.080
31C	8.50	32.56		50	8.49	32.56	25.31	268.3	.134
52C	8.49	32.56		75	8.41	32.59	25.35	265.0	.201
63C	8.50	32.57		100	7.91	33.33	26.00	203.8	.259
75C	8.41	32.59		150	7.68	33.82	26.42	164.7	.351
87C	8.05	32.80		200	7.08	33.96	26.62	146.6	.429
101C	7.90	33.37		250	6.28	33.98	26.74	135.5	.500
151C	7.68	33.83		300	6.09	34.06	26.83	127.8	.565
200C	7.08	33.96		400	5.42	34.13	26.96	115.7	.687
252C	6.25	33.98		500	4.95	34.22	27.09	103.8	.797
305C	6.08	34.07		600	4.61	34.30	27.19	95.2	.896
400C	5.41	34.12		700	4.36	34.35	27.26	89.5	.989
500C	4.95	34.22		800	4.11	34.40	27.33	83.3	1.075
601C	4.61	34.30		1000	3.53	34.49	27.45	71.8	1.230
702C	4.36	34.35							
800C	4.11	34.40							

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^3$)	(dyn.m)
150C	7.26	33.95		300	5.82	34.09	26.89	121.7	.519
202C	6.49	34.02		400	5.38	34.14	26.98	114.2	.637
250C	6.16	34.04							
300C	5.81	34.09							
403C	5.37	34.14							

YH 25 44 19.1 N 124 41.2 W DATE 20 APR 71 0952 GCT WIRE
 DRY 45.2 WET 44.2 CRUISE Y71048 WIND DIRECTION 21 VEL 12 KTS BAR 12
 SWELL DIRECTION 28 H 04 T 08 CLOUD 6 AMT 8 WEATHER 02

0C	9.08	32.52		0	9.08	32.52	25.20	278.8	0
3C	9.08	32.52		10	9.09	32.49	25.17	281.3	.028
11C	9.09	32.49		20	9.08	32.50	25.17	281.1	.056
22C	9.07	32.50		30	8.97	32.50	25.19	279.9	.054
30C	8.97	32.49		50	8.41	32.89	25.59	242.3	.136
50C	8.41	32.89		75	7.88	33.46	26.11	192.7	.191
63C	8.19	33.16							
75C	7.87	33.46							

FH 28 43 59.0 N 124 47.0 W DATE 20 APR 71 1215 GCT WIRE
 DRY 44.0 WET 43.0 CRUISE Y71048 WIND DIRECTION 32 VEL 18 KTS BAR 14
 SWELL DIRECTION 28 H 04 T CLOUD 6 AMT 9 WEATHER 00

0C	9.12	32.37		0	9.12	32.38	25.07	290.5	0
2C	9.12	32.37		10	9.12	32.37	25.07	291.0	.029
12C	9.12	32.37		20	9.12	32.38	25.07	290.8	.058
20C	9.12	32.37		30	9.05	32.40	25.11	287.7	.087
30C	9.05	32.40		50	8.44	32.89	25.58	243.0	.140
51C	8.41	32.92		75	8.10	33.39	26.01	202.6	.196
64C	8.24	33.15							
75C	8.10	33.37							
88C	7.94	33.58							

FH 35 43 59.0 N 124 56.7 W DATE 20 APR 71 1328 GCT WIRE
 DRY 46.0 WET 42.5 CRUISE Y71048 WIND DIRECTION 31 VEL 21 KTS BAR 14
 SWELL DIRECTION 28 H 04 T CLOUD 8 AMT 8 WEATHER 02

0C	8.76	32.55		0	8.76	32.55	25.27	271.8	0
3C	8.76	32.55		10	8.75	32.54	25.26	272.6	.027
10C	8.75	32.54		20	8.70	32.56	25.28	271.2	.054
22C	8.69	32.56		30	8.61	32.56	25.30	269.4	.081
30C	8.61	32.56		50	8.31	32.71	25.45	255.0	.134
50C	8.31	32.70		75	8.00	33.50	26.13	191.5	.190
65C	8.07	33.16		100	7.91	33.74	26.32	173.5	.235
75C	8.00	33.50		150	6.96	34.00	26.67	141.2	.314
87C	7.95	33.68		200	6.60	34.06	26.76	133.3	.383
104C	7.89	33.74		250	6.10	34.06	26.82	127.3	.448
150C	6.96	34.00							
203C	6.59	34.06							
250C	6.10	34.06							

FH 45 43 59.0 N 125 10.9 W DATE 20 APR 71 1535 GCT WIRE
 DRY 47.0 WET 42.5 CRUISE Y71048 WIND DIRECTION 32 VEL 18 KTS BAR 15
 SWELL DIRECTION 28 H 06 T CLOUD 8 AMT 4 WEATHER 02

1001C 3.53 34.49

YH 55 44 19.0 N 125 22.9 W DATE 19 APR 71 2300 GCT WIRE
 DRY 49.6 WET 47.8 CRUISE Y71048 WIND DIRECTION 17 VEL 16 KTS BAR 14
 SWELL DIRECTION 29 H 06 T 10 CLOUD 6 AMT 7 WEATHER 03

0C	8.95	32.50	0	8.95	32.50	25.20	278.3	0
4C	8.95	32.50	10	8.94	32.50	25.20	278.7	.028
12C	8.94	32.50	20	8.76	32.51	25.23	275.5	.056
22C	8.71	32.51	30	8.70	32.51	25.24	274.7	.083
33C	8.70	32.51	50	8.54	32.53	25.28	271.6	.138
54C	8.45	32.57	75	8.08	33.28	25.94	209.0	.198
62C	8.14	32.80	100	7.91	33.64	26.25	180.3	.246
76C	8.08	33.32	150	7.41	33.91	26.53	154.6	.330
90C	7.96	33.59	200	6.57	33.90	26.64	144.4	.405
103C	7.90	33.65	250	6.23	33.95	26.72	136.9	.475
153C	7.37	33.92	300	6.00	33.99	26.78	131.9	.542
201C	6.55	33.90	400	5.42	34.05	26.90	121.5	.669
255C	6.21	33.96	500	4.94	34.13	27.02	110.8	.785
302C	5.99	33.99	600	4.60	34.21	27.12	101.4	.891
402C	5.41	34.05	700	4.35	34.28	27.20	94.5	.989
501C	4.94	34.13						
600C	4.60	34.21						
700C	4.35	34.28						

YH 45 44 19.0 N 125 08.9 W DATE 20 APR 71 0255 GCT WIRE
 DRY 49.0 WET 47.5 CRUISE Y71048 WIND DIRECTION 18 VEL 18 KTS BAR 12
 SWELL DIRECTION 28 H 04 T 09 CLOUD 8 AMT 8 WEATHER 03

180C	6.59	33.91
203C	6.39	33.92
251C	5.85	33.95
301C	5.80	34.03
403C	4.75	34.00
501C	4.92	34.18
600C	4.62	34.27
703C	4.22	34.31
801C	4.06	34.32
1000C	3.56	34.47

YH 35 44 19.0 N 124 54.5 W DATE 20 APR 71 0529 GCT WIRE
 DRY 46.7 WET 46.3 CRUISE Y71048 WIND DIRECTION 25 VEL 12 KTS BAR 12
 SWELL DIRECTION 28 H 06 T 08 CLOUD 5 AMT 8 WEATHER 03

0C	9.06	32.55	0	9.06	32.55	25.22	276.2	0
2C	9.06	32.55	10	9.07	32.59	25.25	273.6	.027
10C	9.07	32.59	20	9.06	32.58	25.25	274.3	.055
20C	9.06	32.58	30	8.79	32.60	25.30	269.0	.082
30C	8.79	32.60	50	8.70	32.60	25.32	268.0	.136
50C	8.70	32.60	75	8.08	33.48	26.09	194.8	.194
66C	8.14	33.30	100	7.93	33.78	26.36	170.0	.239
76C	8.08	33.49	150	7.27	33.96	26.59	149.0	.319
89C	7.97	33.70	200	6.52	34.02	26.74	135.0	.390
100C	7.92	33.78	250	6.17	34.04	26.80	129.2	.456

0C	8.61	32.58	0	8.61	32.58	25.32	267.4	0
1C	8.61	32.58	10	8.61	32.58	25.32	267.6	.027
10C	8.61	32.58	20	8.61	32.57	25.30	268.7	.054
21C	8.61	32.57	30	8.61	32.59	25.32	267.8	.080
32C	8.61	32.59	50	8.57	32.59	25.33	267.2	.134
53C	8.56	32.59	75	8.08	32.75	25.52	248.8	.198
64C	8.50	32.60	100	7.96	33.50	26.13	191.4	.253
76C	8.04	32.77	150	7.45	33.90	26.51	155.8	.340
93C	7.99	33.41	200	6.99	33.98	26.64	144.4	.415
103C	7.95	33.53	250	6.34	33.98	26.73	136.3	.485
153C	7.41	33.91	300	5.76	34.00	26.82	128.4	.551
202C	6.97	33.98	400	4.77	34.05	26.98	113.5	.672
253C	6.30	33.98	500	4.83	34.19	27.08	105.0	.782
300C	5.75	33.99	600	4.62	34.30	27.19	95.3	.882
407C	4.73	34.06	700	4.27	34.33	27.25	89.8	.974
501C	4.83	34.19	800	3.99	34.38	27.32	83.8	1.061
602C	4.61	34.30	1000	3.51	34.51	27.47	70.2	1.215
702C	4.26	34.33						
802C	3.99	34.38						
1002C	3.51	34.51						

FH 55 43 59.0 N 125 24.5 W DATE 20 APR 71 1800 GCT WIRE
 DRY 46.7 WET 42.2 CRUISE Y71048 WIND DIRECTION 32 VEL 18 KTS BAR 17
 SWELL DIRECTION 28 H 06 T 09 CLOUD 8 AMT 4 WEATHER 01

0C	8.95	32.63	0	8.95	32.63	25.30	268.7	0
3C	8.95	32.63	10	8.94	32.62	25.30	269.4	.027
13C	8.94	32.62	20	8.94	32.60	25.28	271.2	.054
21C	8.94	32.60	30	8.93	32.60	25.28	271.4	.081
33C	8.92	32.60	50	8.83	32.60	25.29	270.3	.135
52C	8.80	32.60	75	8.06	32.65	25.45	256.1	.201
62C	8.43	32.55	100	7.97	33.55	26.17	187.8	.256
76C	8.04	32.67	150	7.67	33.86	26.45	161.8	.344
88C	8.02	33.34	200	7.13	33.92	26.58	150.5	.422
101C	7.96	33.56	250	6.48	33.96	26.69	139.8	.494
153C	7.65	33.86	300	5.91	33.98	26.78	131.6	.562
201C	7.12	33.92	400	4.94	34.03	26.94	117.3	.687
254C	6.43	33.96	500	4.50	34.12	27.06	106.7	.799
304C	5.87	33.98	600	4.11	34.19	27.16	97.7	.901
403C	4.92	34.03	700	4.22	34.31	27.24	90.9	.995
505C	4.49	34.12	800	4.03	34.38	27.32	84.3	1.083
603C	4.10	34.19						
702C	4.22	34.31						
804C	4.02	34.38						

FH 65 43 58.8 N 125 38.3 W DATE 20 APR 71 2049 GCT WIRE
 DRY 44.9 WET 40.5 CRUISE Y71048 WIND DIRECTION 32 VEL 18 KTS BAR 18
 SWELL DIRECTION 28 H 06 T 08 CLOUD 8 AMT 4 WEATHER 02

0C	8.97	32.59	0	8.97	32.59	25.27	271.9	0
1C	8.97	32.59	10	8.96	32.63	25.29	269.6	.027
11C	8.96	32.63	20	8.96	32.59	25.27	272.1	.054
20C	8.96	32.59	30	8.94	32.61	25.29	270.5	.081
30C	8.94	32.61	50	8.93	32.61	25.29	271.0	.135
52C	8.93	32.61	75	8.68	32.67	25.37	263.0	.202
63C	8.91	32.61	100	8.14	33.30	25.95	208.8	.261
75C	8.68	32.67	150	7.69	33.75	26.37	169.8	.356
87C	8.50	33.01	200	7.26	33.92	26.56	152.6	.436
100C	8.14	33.30	250	6.86	33.95	26.64	145.4	.511
150C	7.69	33.75	300	6.16	33.99	26.76	134.0	.581
200C	7.25	33.91	400	5.20	34.03	26.91	120.3	.708
251C	6.85	33.95	500	4.54	34.10	27.04	108.4	.822

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
301C	6.15	33.99		600	4.21	34.19	27.15	98.9	.926
402C	5.19	34.03		700	4.22	34.33	27.25	89.5	1.020
503C	4.52	34.10		800	4.01	34.38	27.32	83.9	1.106
602C	4.21	34.19							
703C	4.22	34.33							
803C	4.00	34.38							

FH 75 43 58.7 N 125 52.0 W DATE 20 APR 71 2305 GCT WIRE
 DRY 44.5 WET 44.0 CRUISE Y71048 WIND DIRECTION 31 VEL 18 KTS BAR 19
 SWELL DIRECTION 28 H 06 T 08 CLOUD 8 AMT 4 WEATHER 02

0C	9.14	32.61	0	9.14	32.61	25.26	273.0	0	
3C	9.14	32.61	10	9.13	32.63	25.27	272.1	.027	
12C	9.13	32.63	20	9.10	32.61	25.26	273.4	.055	
21C	9.10	32.60	30	9.06	32.53	25.20	278.8	.082	
31C	9.06	32.52	50	9.03	32.58	25.25	274.5	.137	
51C	9.03	32.59	75	8.71	32.63	25.34	266.7	.205	
63C	8.91	32.61	100	8.35	33.21	25.84	219.2	.266	
75C	8.69	32.63	150	7.99	33.79	26.36	171.1	.363	
94C	8.55	32.65	200	7.33	33.92	26.55	153.4	.444	
100C	8.35	33.20	250	6.53	33.92	26.66	142.8	.518	
150C	7.99	33.79	300	6.17	34.01	26.78	132.3	.587	
201C	7.31	33.92	400	5.39	34.05	26.90	121.0	.714	
250C	6.52	33.92	500	4.40	34.04	27.01	111.1	.830	
303C	6.16	34.02	600	4.42	34.18	27.12	101.9	.936	
403C	5.36	34.05	700	4.28	34.27	27.20	94.5	1.034	
503C	4.38	34.04	800	4.02	34.34	27.28	87.2	1.125	
601C	4.42	34.18	1000	3.47	34.49	27.46	71.1	1.283	
701C	4.23	34.27							
805C	4.00	34.34							
1000C	3.47	34.49							

FH 85 43 58.8 N 126 05.8 W DATE 21 APR 71 0130 GCT WIRE
 DRY 46.0 WET 41.0 CRUISE Y71048 WIND DIRECTION 30 VEL 18 KTS BAR 19
 SWELL DIRECTION 28 H 06 T 07 CLOUD 8 AMT 4 WEATHER 02

0C	9.31	32.66	0	9.31	32.67	25.27	271.8	0	
1C	9.31	32.65	10	9.31	32.66	25.27	272.3	.027	
12C	9.31	32.65	20	9.32	32.65	25.26	273.0	.054	
27C	9.32	32.65	30	9.31	32.65	25.26	273.4	.082	
38C	9.28	32.65	50	9.24	32.65	25.27	272.4	.136	
50C	9.24	32.65	75	9.14	32.65	25.28	271.6	.204	
66C	9.23	32.65	100	8.51	33.31	25.90	213.6	.265	
79C	9.07	32.65	150	8.00	33.84	26.39	167.7	.360	
91C	8.63	32.96	200	7.69	33.94	26.52	156.5	.441	
102C	8.49	33.39	250	7.12	33.99	26.63	146.0	.517	
153C	7.98	33.87	300	6.63	34.02	26.72	137.9	.588	
200C	7.69	33.94	400	5.82	34.07	26.87	124.5	.719	
251C	7.11	33.99	500	5.16	34.16	27.02	111.3	.837	
305C	6.58	34.02	600	4.78	34.25	27.14	100.4	.943	
400C	5.82	34.07	700	4.50	34.31	27.21	94.2	1.040	
502C	5.15	34.16	800	4.11	34.39	27.32	84.5	1.129	
600C	4.77	34.25	1000	3.45	34.47	27.45	72.3	1.286	
704C	4.49	34.31							
801C	4.11	34.39							
1000C	3.45	34.47							

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
FH 105	43 59.0 N	126 33.5 W							
DATE	21 APR 71	0500 GCT	WIRE						
DRY 44.8	WET 41.2	CRUISE Y71048	WIND DIRECTION 22	VEL 14	KTS	BAR 20			
SWELL DIRECTION 28	H 06 T 09	CLOUD 8	AMT 3	WEATHER 02					
0C	9.23	32.67	0	9.23	32.67	25.28	270.6	0	
4C	9.23	32.66	10	9.23	32.66	25.28	271.1	.027	
12C	9.23	32.64	20	9.23	32.63	25.26	273.5	.054	
21C	9.23	32.63	30	9.19	32.63	25.26	273.1	.082	
32C	9.18	32.63	50	9.15	32.63	25.27	272.8	.136	
56C	9.14	32.63	75	8.31	32.70	25.45	255.4	.202	
63C	8.64	32.66	100	8.13	33.08	25.78	225.1	.262	
80C	8.29	32.73	150	7.34	33.78	26.44	162.8	.359	
90C	8.29	32.83	200	6.85	33.89	26.59	149.1	.437	
101C	8.11	33.11	250	6.16	33.93	26.72	137.3	.509	
151C	7.33	33.79	300	5.61	33.96	26.80	129.6	.575	
201C	6.84	33.89	400	5.11	34.08	26.96	115.1	.698	
250C	6.15	33.93	500	4.73	34.17	27.07	105.4	.808	
306C	5.56	33.96	600	4.47	34.23	27.15	98.7	.910	
400C	5.11	34.08	700	4.08	34.28	27.23	91.5	1.005	
503C	4.72	34.17	800	3.87	34.33	27.29	86.2	1.094	
602C	4.46	34.23							
704C	4.07	34.28							
803C	3.87	34.33							

UH 105 43 39.0 N 126 37.0 W DATE 21 APR 71 0807 GCT WIRE
 DRY 44.9 WET 41.1 CRUISE Y71048 WIND DIRECTION 31 VEL 06 KTS BAR 20
 SWELL DIRECTION 28 H 06 T 08 CLOUD 8 AMT 2 WEATHER 01

0C	9.21	32.66	0	9.21	32.67	25.28	270.3	0	
1C	9.21	32.66	10	9.23	32.67	25.29	270.0	.027	
10C	9.23	32.67	20	9.23	32.64	25.27	272.5	.054	
21C	9.23	32.64	30	9.23	32.63	25.26	273.6	.081	
31C	9.23	32.63	50	9.06	32.65	25.30	269.7	.136	
50C	9.06	32.65	75	8.46	32.67	25.40	260.5	.202	
62C	8.96	32.65	100	8.17	33.07	25.76	226.8	.263	
75C	8.46	32.66	150	7.47	33.73	26.38	168.2	.362	
89C	8.33	32.81	200	6.88	33.93	26.62	146.0	.440	
106C	8.08	33.22	250	6.24	33.95	26.72	137.4	.511	
150C	7.47	33.73	300	5.83	33.99	26.80	129.9	.578	
200C	6.87	33.93	400	5.22	34.06	26.94	117.9	.702	
252C	6.22	33.95	500	4.89	34.19	27.07	105.9	.813	
303C	5.81	33.99	600	4.45	34.24	27.16	97.9	.915	
400C	5.22	34.06	700	4.13	34.30	27.24	90.5	1.009	
503C	4.88	34.19	800	3.85	34.39	27.35	81.0	1.095	
605C	4.43	34.24	1000	3.32	34.46	27.45	71.7	1.248	
701C	4.13	34.30							
800C	3.85	34.39							
1001C	3.32	34.46							

UH 85 43 39.0 N 126 08.6 W DATE 21 APR 71 1120 GCT WIRE
 DRY 45.0 WET 40.0 CRUISE Y71048 WIND DIRECTION 31 VEL 04 KTS BAR 20
 SWELL DIRECTION 28 H 04 T 08 CLOUD 8 AMT 2 WEATHER 02

0C	9.15	32.63	0	9.15	32.63	25.27	271.6	0	
1C	9.15	32.63	10	9.15	32.66	25.29	269.8	.027	
13C	9.15	32.67	20	9.15	32.65	25.29	270.5	.054	

OBSERVED INTERPOLATED COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
20C	9.15	32.65		30	9.15	32.64	25.28	271.4	.081
30C	9.15	32.64		50	9.07	32.64	25.29	270.6	.135
50C	9.07	32.64		75	8.66	32.64	25.35	265.1	.202
65C	8.94	32.65		100	8.32	33.39	25.99	205.1	.261
77C	8.59	32.64		150	7.89	33.83	26.40	166.9	.354
88C	8.17	32.75		200	7.13	33.94	26.60	148.6	.433
103C	8.39	33.57		250	6.54	33.99	26.71	138.3	.505
157C	7.74	33.87		300	5.80	33.96	26.78	131.5	.572
200C	7.12	33.94		400	4.89	34.02	26.93	117.7	.697
253C	6.51	33.99		500	4.77	34.15	27.06	106.9	.809
303C	5.76	33.96		600	4.45	34.25	27.16	97.4	.911
404C	4.87	34.02		700	4.33	34.34	27.25	90.0	1.005
504C	4.77	34.16		800	4.09	34.39	27.32	84.2	1.092
600C	4.45	34.24							
703C	4.33	34.34							
801C	4.09	34.39							

UH 65 43 39.0 N 125 41.6 W DATE 21 APR 71 1417 GCT WIRE
 DRY 46.5 WET 42.0 CRUISE Y7104B WIND DIRECTION VEL 00 KTS BAR 19
 SWELL DIRECTION 31 H 05 T 08 CLOUD 8 AMT 2 WEATHER 02

0C	9.29	32.20		0	9.29	32.21	24.91	305.7	0
1C	9.29	32.20		10	9.31	32.18	24.89	307.6	.031
12C	9.31	32.18		20	9.30	32.33	25.01	296.9	.061
21C	9.30	32.35		30	9.21	32.44	25.11	287.5	.090
34C	9.16	32.46		50	9.06	32.48	25.16	282.7	.147
53C	9.00	32.48		75	8.17	33.19	25.85	217.6	.210
65C	8.41	32.84		100	7.91	33.66	26.26	178.9	.259
77C	8.14	33.25		150	7.42	33.91	26.52	154.8	.343
91C	8.09	33.53		200	6.83	33.93	26.63	145.8	.418
103C	7.84	33.70		250	6.16	33.93	26.71	137.7	.489
151C	7.42	33.91		300	5.61	33.94	26.79	130.5	.556
205C	6.76	33.93		400	5.42	34.10	26.94	117.5	.680
253C	6.12	33.93		500	4.89	34.20	27.08	105.1	.791
300C	5.61	33.94		600	4.59	34.26	27.17	97.5	.892
404C	5.41	34.11		700	4.33	34.33	27.25	90.2	.986
504C	4.87	34.20		800	4.06	34.39	27.33	83.5	1.073
600C	4.59	34.26		1000	3.47	34.49	27.46	71.1	1.227
700C	4.33	34.33							
800C	4.06	34.39							
1000C	3.47	34.49							

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	PO ₄	pH	Alk.	NO ₃	SiO ₂	Σ CO ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(μ M)		(meq/l)	(μ M)	(μ M)	(mM)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)

1 45 36.2 N 122 46.5 W DATE 11 JUN 71 1432 GCT WIRE DRY 55.5 WET 55.2 CRUISE Y7106B
 WIND DIRECTION VEL 00 KTS BAR 17 SWELL DIRECTION H T CLOUD 6 AMT 6 WEATHER

0			1.41		4.9	150
3	14.53		1.43		15.5	
10	14.35		1.24		15.0	

2 45 39.3 N 122 45.4 W DATE 11 JUN 71 1608 GCT WIRE DRY 54.2 WET 52.1 CRUISE Y7106B
 WIND DIRECTION VEL 00 KTS BAR 17 SWELL DIRECTION H T CLOUD 6 AMT 8 WEATHER 03

8	13.29		9.03	.80	4.8	134
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3 46 11.0 N 123 10.8 W DATE 11 JUN 71 1945 GCT WIRE 30 DRY 59.7 WET 54.7 CRUISE Y7106B
 WIND DIRECTION 25 VEL 04 KTS BAR 17 SWELL DIRECTION H T CLOUD 6 AMT 8 WEATHER 02

0	0		0.80		5.2	145
3	13.43		8.78	1.60	5.4	142

4 46 15.1 N 124 39.0 W DATE 11 JUN 71 2353 GCT WIRE 04 DRY 57.0 WET 52.6 CRUISE Y7106B
 WIND DIRECTION 22 VEL 08 KTS BAR 17 SWELL DIRECTION H T CLOUD 6 AMT 2 WEATHER 01

8	13.86		8.10		1.89	
5	10.83		6.43		1.89	

OBSERVED										INTERPOLATED										COMPUTED		
D	T	S	O ₂	PO ₄	pH	Alk.	NO ₃	SiO ₂	ΣCO ₂	Z	T	S	σ _t	δ	ΔD							
(m)	(°C)	(‰)	(ml/l)	(μM)		(meq/l)	(μM)	(μM)	(mM)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)							
5 46 10.5 N 124 11.0 W DATE 12 JUN 71 0337 GCT WIRE DRY 57.5 WET 53.8 CRUISE Y7106B																						
WIND DIRECTION 22 VEL 09 KTS BAR 16 SWELL DIRECTION29 H 03 T 05 CLOUD 6 AMT 2 WEATHER 02																						
0	14.08	23.867	7.01	.25	8.358	2.040	.2	34 1.70	0	14.08	23.87	17.64	1002.9	0								
4	12.90	25.590	7.46	.12	8.370	2.140	.1	26 1.77	10	9.32	31.95	24.71	324.8	.066								
7	10.57	30.303	7.31	.48	8.262	2.280	2.7	11 1.98	20	7.67	32.52	25.40	259.4	.096								
10	9.32	31.949	6.68	.91	8.167	2.340	5.8	7 2.13	30	7.53	33.13	25.90	212.0	.119								
20	7.66	32.512	5.06	1.61	8.014	2.440	17.5	24 2.13														
30	7.52	33.125	3.89	2.22	7.877	2.490	22.2	30 2.11														
45	7.21	33.652	2.19	2.50	7.725	2.510	29.8	46 2.25														
NH 1 44 39.0 N 124 06.2 W DATE 13 JUN 71 1430 GCT WIRE DRY 53.0 WET 53.0 CRUISE Y7106B																						
WIND DIRECTION 20 VEL 18 KTS BAR 16 SWELL DIRECTION23 H 04 T 07 CLOUD 6 AMT 6 WEATHER 01																						
0	12.69	30.200	7.21	.13			.3	9 1.66	0	12.69	30.21	22.77	509.7	0								
4	12.69	30.203	7.15	.16			.4	10 1.91	10	12.66	30.22	22.79	508.3	.051								
7	12.68	30.203	7.14	.15			.1	9 1.91	20	9.89	33.05	25.48	252.1	.089								
10	12.65	30.215	7.16	.15			.2	9 1.93														
15	12.67	30.258	7.19	.18			.0	9 1.93														
20	9.89	33.050	6.74	.88			6.1	16 2.10														
NH 5 44 39.4 N 124 10.6 W DATE 13 JUN 71 1900 GCT WIRE 06 DRY 56.1 WET 54.2 CRUISE Y7106B																						
WIND DIRECTION 20 VEL 20 KTS BAR 17 SWELL DIRECTION20 H 04 T 06 CLOUD 6 AMT 8 WEATHER 62																						
0	12.54	30.344	7.00	.29			-0	8 1.92	0	12.54	30.35	22.91	496.4	0								
5	12.52	30.336	7.00	.23			-1	8 1.94	10	12.13	30.93	23.44	446.6	.047								
10	12.13	30.924	7.04	.15			.0	8 1.96	20	9.21	32.92	25.48	251.5	.082								
15	9.33	32.235	5.88	1.20			10.6	18 2.10	30	7.84	33.59	26.22	182.1	.104								
20	9.21	32.916	6.70	1.04			9.6	16 2.05	50	7.27	33.84	26.50	155.8	.138								
30	7.84		2.79	2.27			26.1	37 2.21														
40	7.38	33.769	2.14	2.48			31.4	48 2.23														
50	7.26	33.836	1.66	2.59			31.4	52 2.22														

OBSERVED										INTERPOLATED					COMPUTED				
D	T	S	O ₂	PO ₄	pH	Alk.	NO ₃	SiO ₂	ΣCO ₂	Z	T	S	σ _t	δ	ΔD				
(m)	(°C)	(‰)	(ml/l)	(μM)		(meq/l)	(μM)	(μM)	(mM)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)				
NH 10 44 39.1 N 124 17.9 W DATE 13 JUN 71 2021 GCT WIRE 00 DRY 53.8 WET 52.0 CRUISE Y71068																			
WIND DIRECTION 20 VEL 18 KTS BAR 18 SWELL DIRECTION 22 H 04 T 06 CLOUD 8 AMT 7 WEATHER 02																			
0	13.04	29.004	6.51	.26			.1	9 2.00	0	13.04	29.01	21.78	604.3	0					
5	13.00	30.027	6.51	.26			.3	9 1.98	10	12.80	30.30	22.83	504.7	.055					
10	12.80	30.298	6.66	.26			.2	8 1.94	20	9.31	31.97	24.73	323.7	.097					
20	9.31	31.963	6.77	.74			3.5	6 2.08	30	7.75	32.55	25.42	258.0	.126					
31	7.67	32.582	5.54	1.25			13.7	15 2.13	50	7.40	33.61	26.29	175.1	.169					
50	7.39	33.601	2.79	2.24			29.6	40 2.21											
60	7.15	33.825	2.39	2.40			31.6	47 2.26											
NH 15 44 39.0 N 124 24.5 W DATE 14 JUN 71 0347 GCT WIRE 56.1 WET 52.1 CRUISE Y71068																			
WIND DIRECTION 22 VEL 15 KTS BAR 20 SWELL DIRECTION 22 H 04 T 05 CLOUD 6 AMT 3 WEATHER 01																			
0	12.89	29.261	6.52	.31			.2	13 1.96	0	12.89	29.27	22.01	582.6	0					
5	12.68	29.329	6.58	.34			.1	12 1.92	10	10.97	30.56	23.36	453.8	.052					
15	9.04	31.933	6.52	.93			7.4	13 2.04	20	8.30	32.28	25.13	285.5	.089					
25	7.97	32.340	5.78	1.27			11.0	14 2.07	30	7.75	32.47	25.35	264.4	.116					
36	7.64	32.606	5.97	1.17			11.1	14 2.07	50	7.62	33.10	25.87	215.6	.164					
45	7.55	32.888	5.01	1.50			16.6	21 2.09	75	7.28	33.67	26.36	169.1	.212					
55	7.68	33.294	4.13	1.97			22.4	29 2.15											
65	7.50	33.423	3.53	2.43			27.7	39 2.18											
75	7.27	33.665	2.78	2.51			30.6	45 2.22											
NH 25 44 38.8 N 124 38.6 W DATE 14 JUN 71 0645 GCT WIRE 55.0 WET 52.1 CRUISE Y71068																			
WIND DIRECTION 25 VEL 14 KTS BAR 21 SWELL DIRECTION 25 H 04 T 07 CLOUD 8 AMT 2 WEATHER 01																			
0C	13.11	28.31							0	13.11	28.31	21.24	656.8	0					
1C	13.11	28.31							10	10.98	31.30	23.93	399.1	.053					
10C	10.98	31.30							20	9.46	32.22	24.90	307.2	.088					
21C	9.35	32.23							30	8.67	32.50	25.24	274.5	.117					
33C	8.52	32.54							50	7.82	32.69	25.52	248.6	.169					
50C	7.81	32.69							75	7.80	33.22	25.94	209.3	.227					
63C	7.80	32.95							100	7.57	33.66	26.31	174.1	.275					
75C	7.79	33.22							150	7.10	33.85	26.53	154.4	.357					
87C	7.74	33.50																	
101C	7.56	33.67																	
150C	7.10	33.85																	
NH 25 44 38.8 N 124 38.6 W DATE 14 JUN 71 0726 GCT WIRE 55.0 WET 52.1 CRUISE Y71068																			
WIND DIRECTION 25 VEL 14 KTS BAR 21 SWELL DIRECTION 25 H 04 T 07 CLOUD 8 AMT 2 WEATHER 01																			
0A	13.13	28.131	6.34		8.264		.2	16 1.97	0	13.13	28.14	21.10	670.4	0					
10A	11.66	30.181	6.68	.39	8.237		.1	10 2.02	10	11.66	30.19	22.95	493.3	.058					
20A	9.80	31.880	6.84	.52	8.194		.6	7 2.05	20	9.80	31.88	24.58	337.4	.100					
30A	9.15	32.284	6.54	.73	8.103		3.3	8 2.07	30	9.15	32.29	25.00	297.7	.131					
50A	8.00	32.550	6.25	.91	8.142		7.8	10 2.13	50	8.00	32.55	25.38	261.6	.187					
75A	7.82	32.974	5.13	1.40	8.055		15.7	19 2.12	75	7.82	32.98	25.74	228.0	.249					
100A	7.58	33.671	3.28	2.15	7.851		28.1	37 2.18	100	7.58	33.68	26.32	173.2	.299					
125A	7.34	33.818	2.93	2.29	7.853		29.7	41 2.19	150	7.04	33.91	26.58	149.1	.379					
150A	7.03	33.905	2.50	2.51	7.774		32.4	47 2.20	200	6.26	33.99	26.75	134.0	.450					
200A	6.26	33.987	1.91	2.80	7.766		36.2	59 2.19											
NH 35 44 39.5 N 124 52.5 W DATE 14 JUN 71 1103 GCT WIRE 54.8 WET 51.8 CRUISE Y71068																			
WIND DIRECTION 25 VEL 08 KTS BAR 23 SWELL DIRECTION 25 H 03 T 07 CLOUD 8 AMT 2 WEATHER 02																			
0A	13.39	27.223	6.31	.21	8.254		.2	20 1.86	0	13.39	27.23	20.35	742.1	0					
10A	11.24	31.915	6.75	.38	8.256		.1	4 2.01	10	11.24	31.92	24.35	358.0	.055					
21A	10.04	32.599	6.82	.60	8.204		1.6	5 2.09	20	10.10	32.54	25.04	293.8	.088					
31A	9.84	32.606	6.60	.68	8.161		3.1	6 2.04	30	9.85	32.61	25.14	284.8	.117					
50A	8.91	32.642	6.33	.65	8.183		3.0	6 2.08	50	8.91	32.65	25.32	267.9	.172					
75A	8.07	33.084	4.80	1.72	8.017		18.0	23 2.15	75	8.07	33.09	25.79	223.3	.233					
101	7.58	33.569	3.82	1.94			23.5	31 2.13	100	7.59	33.55	26.22	182.5	.284					
150A	7.21	33.872	3.26		7.918		28.4	41 2.25	150	7.21	33.88	26.53	154.0	.368					
200A	6.71	33.936	2.71	2.49	7.832		32.1	49 2.23	200	6.71	33.94	26.65	143.3	.442					
251A	6.24	33.958	2.39		7.790			2.27	250	6.25	33.96	26.72	136.7	.512					
275	6.13	34.002	1.90	2.59			34.7	59 2.27	300	5.96	34.03	26.82	128.2	.578					
300	5.96	34.028	1.66	2.78			33.8	59 2.26	400	5.39	34.09	26.94	118.2	.702					
325	5.84	34.043	1.59	2.86			39.3	67 2.22											
350	5.67	34.062	1.40					2.27											
375	5.52	34.071	1.29	2.98			41.3	74 2.31											
401	5.38	34.092	1.11	3.01			39.7	77											
NH 35 44 39.5 N 124 52.5 W DATE 14 JUN 71 1103 GCT WIRE 54.8 WET 51.8 CRUISE Y71068																			
WIND DIRECTION 25 VEL 08 KTS BAR 23 SWELL DIRECTION 25 H 03 T 07 CLOUD 8 AMT 2 WEATHER 02																			
0C	13.41	27.44							0	13.41	27.44	20.51	726.5	0					
1C	13.41	27.44							10	11.46	31.46	23.97	395.3	.056					
11C	11.17	32.02							20	10.27	32.60	25.06	292.2	.090					
21C	10.22	32.66							30	9.83	32.64	25.16	282.4	.119					
32C	9.76	32.63							50	9.26	32.64	25.26	273.7	.175					
53C	9.17	32.64							75	8.22	32.94	25.65	236.2	.239					
63C	8.70	32.75							100	7.86	33.63	26.24	180.9	.291					

OBSERVED										INTERPOLATED			COMPUTED		
D	T	S	O ₂	PO ₄	pH	Alk.	NO ₃	SiO ₂	ΣCO ₂	Z	T	S	σ _t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(μM)		(meq/l)	(μM)	(μM)	(mM)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)
77C	8.16	32.98								150	7.24	33.92	26.56	151.6	.374
87C	8.06	33.19								200	6.78	33.96	26.66	142.8	.447
100C	7.86	33.62								250	6.26	33.99	26.75	134.5	.517
150C	7.24	33.91								300	5.97	34.04	26.83	127.4	.582
202C	6.76	33.96								400	5.42	34.11	26.95	117.4	.704
251C	6.25	33.99								500	5.04	34.18	27.05	108.0	.817
300C	5.97	34.04													
403C	5.41	34.11													
501C	5.04	34.18													

NH 45 44 39.7 N 125 09.4 W DATE 14 JUN 71 1600 GCT WIRE DRY 53.9 WET 51.3 CRUISE Y7106B
WIND DIRECTION 27 VEL 08 KTS BAR 24 SWELL DIRECTION 27 H 04 T 06 CLOUD 6 AMT 2 WEATHER 02

0C	13.19	29.030								0	13.19	29.03	21.78	605.1	0
1C	13.19	29.03								10	12.08	31.43	23.83	408.6	.051
13C	11.59	32.39								20	11.10	32.56	24.89	308.2	.087
21C	11.05	32.59								30	10.62	32.66	25.05	293.5	.117
33C	10.51	32.66								50	9.95	32.65	25.16	283.4	.174
51C	9.92	32.65								75	8.54	32.81	25.51	250.3	.241
66C	9.22	32.62								100	8.13	33.36	26.00	204.0	.298
76C	8.47	32.84								150	7.51	33.65	26.47	160.2	.389
88C	8.34	33.06								200	6.99	33.96	26.63	145.2	.465
101C	8.11	33.39								250	6.44	33.96	26.71	138.5	.536
152C	7.49	33.85								300	5.67	33.98	26.81	128.6	.603
200C	6.99	33.96								400	5.17	34.06	26.94	118.0	.726
250C	6.43	33.96								500	4.73	34.14	27.05	106.9	.838
304C	5.61	33.98								600	4.62	34.29	27.18	96.6	.940
401C	5.17	34.06													
500C	4.73	34.14													
602C	4.62	34.29													

NH 45 44 39.7 N 125 09.4 W DATE 14 JUN 71 1643 GCT WIRE 0 DRY 53.9 WET 51.3 CRUISE Y7106B
WIND DIRECTION 27 VEL 08 KTS BAR 24 SWELL DIRECTION 27 H 04 T 06 CLOUD 6 AMT 2 WEATHER 02

0	13.29	28.418	6.20	.31	8.269		.3	15	1.81	0	13.29	28.42	21.29	652.1	0
10A	11.64	32.056	6.64	.39	8.265		.1	4	1.99	10	11.64	32.06	24.40	354.5	.050
20A	11.04	32.496	6.85	.43	8.240		.1	2	2.04	20	11.04	32.50	24.85	311.9	.084
30	10.46	32.606	6.65	.51			.0	15		30	10.46	32.61	25.04	294.4	.114
50	9.85	32.624	6.59	.68			3.1	5	2.07	50	9.85	32.63	25.15	283.6	.172
75	8.70	32.699	6.12	.91			7.7	9	2.12	75	8.70	32.70	25.39	261.0	.240
100	8.26	33.206	4.76	1.46			17.5	21	2.14	100	8.26	33.21	25.86	217.3	.300
150	7.63	33.803	3.60	1.93			25.5	35	2.16	150	7.64	33.81	26.42	164.9	.395
201	7.01	33.940	2.88	2.24			30.4	45	2.32	200	7.02	33.94	26.61	147.6	.473
251	6.47	33.958	2.46	2.46			33.5	53	2.28	250	6.48	33.96	26.69	139.7	.545
276	6.18	33.961	2.28	2.56			34.7	57	2.34	300	5.69	33.94	26.78	131.7	.613
301	5.67	33.939	2.27	2.65			36.2	62	2.37	400	5.22	34.03	26.91	120.9	.739
326	5.52	33.947	2.11	2.72			37.2	66	2.30	500	4.79	34.10	27.01	110.9	.855
351	5.33	33.968	1.83	2.84			38.7	70	2.36	600	4.64	34.24	27.14	100.6	.961
376	5.28	34.002	1.57	2.92			40.1	75	2.19	700	4.32	34.31	27.23	91.8	1.057
402	5.21	34.029	1.39						2.31						
502	4.78	34.101	.89	3.13			41.2	86	2.38						
603	4.64	34.240	.56	3.25			43.6	96	2.36						
702	4.31	34.312	.42	3.27			44.3	108	2.44						

NH 65 44 39.0 N 125 35.0 W DATE 14 JUN 71 2221 GCT WIRE 02 DRY 56.7 WET 52.2 CRUISE Y7106B
WIND DIRECTION 29 VEL 02 KTS BAR 26 SWELL DIRECTION 26 H 03 T 07 CLOUD 8 AMT 2 WEATHER 01

0A	13.40	32.298	6.48	.44	8.201		.6	3		0	13.40	32.30	24.25	368.5	0
10A	12.02	32.313	6.58		8.225			22		10	12.02	32.32	24.53	342.2	.036
20A	11.78	32.398	6.69	.44	8.207		.4	2		20	11.78	32.40	24.64	331.9	.069
50A	10.42	32.621	6.62	.54	8.200		1.6	3		30	11.40	32.49	24.78	319.1	.102
75A	8.95	32.608	6.48	.78	8.167		5.1	7		50	10.42	32.63	25.06	293.0	.163
100A	8.44	32.974	5.40	1.16	8.084		13.2	16		75	8.96	32.61	25.28	271.6	.234
150A	7.82	33.713	3.82	1.86	7.941		24.6	31		100	8.44	32.98	25.65	237.2	.297
200A	7.20	33.906	3.37	2.06	7.904		28.1	39		150	7.82	33.72	26.32	174.2	.400
251A	6.42	33.920	2.86	2.31	7.832		32.1	49		200	7.20	33.91	26.56	152.1	.481
276A	6.13	33.933	2.51	2.47	7.803		34.0	55		250	6.43	33.92	26.67	141.9	.555
300A	5.87	33.940	2.30	2.57	7.777		35.4	58		300	5.88	33.94	26.76	133.6	.624
326A	5.69	33.957	2.07	2.69	7.748		36.9	63		400	5.16	34.01	26.90	121.8	.751
350A	5.48	33.968	1.90	2.76	7.725		36.8	67		500	4.72	34.09	27.01	110.8	.868
375A	5.22	33.975	1.69	2.81	7.704		39.3	71		600	4.24	34.16	27.12	101.7	.974
401A	5.16	34.007	1.38	2.95	7.682		40.5	75		700	4.01	34.24	27.21	93.7	1.072
600A	4.24	34.154	.68	3.21	7.630		44.5	101		800	3.86	34.32	27.29	86.7	1.162
800A	3.86	34.314	.35	3.34	7.617		45.8	118		1000	3.54	34.41	27.39	78.1	1.326
1000A	3.53	34.401	.40	3.34	7.638		46.6	131		1200	3.14	34.46	27.47	70.2	1.475
1400A	2.68	34.505	.80	3.26	7.680		46.2	156							

NH 65 44 39.0 N 125 35.0 W DATE 14 JUN 71 2221 GCT WIRE DRY 56.7 WET 52.2 CRUISE Y7106B
WIND DIRECTION 29 VEL 02 KTS BAR 26 SWELL DIRECTION 26 H 03 T 07 CLOUD 8 AMT 2 WEATHER 01

0C	12.88	32.43								0	12.88	32.43	24.46	349.0	0
1C	12.88	32.43								10	12.11	32.39	24.57	338.6	.034
12C	11.90	32.38								20	11.87	32.44	24.65	330.8	.068
21C	11.86	32.45								30	10.95	32.63	24.97	300.9	.099
33C	10.61	32.69								50	10.39	32.70	25.12	287.0	.158

[illegible]

NH 85 44 39.0 N 126 03.0 W DATE 15 JUN 71 0400 GCT WIRE DRY 53.5 WET 51.0 CRUISE Y7106B
WIND DIRECTION 33 VEL 12 KTS BAR 26 SWELL DIRECTION 28 H 04 T 06 CLOUD 8 AMT 4 WEATHER 03

0C	12.74	32.260	0	12.74	32.26	24.35	358.9	0
1C	12.74	32.26	10	12.01	32.29	24.51	343.8	.035
11C	11.88	32.30	20	10.72	32.43	24.85	311.5	.068
23C	10.38	32.49	30	10.10	32.63	25.11	287.5	.098
30C	10.10	32.62	50	9.42	32.67	25.25	274.0	.154
51C	9.39	32.67	75	8.55	32.80	25.50	251.3	.220
63C	8.97	32.70	100	8.30	33.49	26.07	197.5	.276
76C	8.52	32.82	150	7.84	33.89	26.45	161.8	.366
88C	8.31	33.22	200	7.09	33.97	26.62	146.4	.443
102C	8.30	33.52	250	6.51	34.02	26.74	135.5	.513
151C	7.83	33.89	300	6.07	34.05	26.82	128.0	.579
202C	7.06	33.97	400	5.44	34.13	26.96	116.1	.701
251C	6.50	34.02	500	4.86	34.16	27.05	107.4	.812
300C	6.07	34.05	600	4.54	34.26	27.17	97.7	.915
403C	5.42	34.13	700	4.18	34.32	27.25	89.6	1.008
503C	4.85	34.16	800	3.79	34.38	27.35	80.9	1.094
602C	4.53	34.26	1000	3.41	34.51	27.48	69.0	1.243
702C	4.17	34.32						
800C	3.78	34.38						
1000C	3.41	34.51						

NH 85 44 39.0 N 126 03.0 W DATE 15 JUN 71 0416 GCT WIRE DRY 53.5 WET 51.0 CRUISE Y7106B
WIND DIRECTION 33 VEL 12 KTS BAR 26 SWELL DIRECTION 28 H 04 T 06 CLOUD 8 AMT 4 WEATHER 03

0A	12.46	32.124	6.44	.38	8.204	.3	3	8	12.46	32.13	24.30	363.8	0
20A	10.49	32.335	6.97	.47	8.216	.4	3	10	10.91	32.11	24.57	338.5	.035
30A	10.07	32.562	7.01	.48	8.217	.8	2	20	10.49	32.34	24.82	314.7	.068
50A	9.30	32.605	6.50	.73	8.167	4.0	5	38	10.07	32.57	25.07	291.3	.098
75A	8.74	32.671	6.26	1.28	8.144	7.3	7	58	9.30	32.61	25.23	276.5	.155
100A	8.30	33.279	4.62	1.56	8.004	18.8	22	75	8.74	32.68	25.37	263.6	.222
150A	7.94	33.813	3.39	1.94	7.887	26.4		100	8.30	33.28	25.91	212.5	.282
201A	7.29	33.926	2.93	2.14	7.830	29.8		150	7.94	33.82	26.38	168.5	.377
251A	6.67	33.960	2.47	2.35	7.779	33.3	115	200	7.30	33.92	26.56	152.5	.457
276A	6.42	33.971	2.37	2.46	7.768	34.3	134	250	6.68	33.96	26.67	142.1	.531
301	6.19		2.07	2.59		36.1		308	6.20	33.98	26.75	135.0	.600
326A	6.04	33.999	1.91	2.66	7.717	36.5	156	400	5.58	34.06	26.89	123.0	.729
351A	5.89	34.028	1.69	2.76	7.684	38	164	508	5.10	34.12	27.00	112.6	.847
376A	5.72	34.043	1.53	2.83	7.678	38.8	171	608	4.68	34.19	27.10	104.5	.955
402A	5.57	34.060	1.37	2.89	7.667	39.6	179	700	4.26	34.25	27.19	95.8	1.055
603A	4.67	34.191	.63	3.26	7.599	43.6	191	800	3.89	34.30	27.27	88.1	1.147
804A	3.88	34.306	.41	3.24	7.603	44.5		1000	3.46	34.40	27.39	77.4	1.313
1005A	3.45	34.406	.53	3.29	7.620	44.9	302	1200	3.03	34.46	27.48	69.3	1.459
1206A	3.02	34.462	.55	3.25	7.624	44.2	338						
1407A	2.61	34.513	.80	3.20	7.649	43.2	370						

NH 105 44 38.9 N 126 31.0 W DATE 15 JUN 71 1010 GCT WIRE DRY 53.4 WET 51.9 CRUISE Y7106B
WIND DIRECTION 35 VEL 12 KTS BAR 26 SWELL DIRECTION 27 H 03 T 07 CLOUD 8 AMT 2 WEATHER 02

0C	12.26	32.51	8	12.26	32.51	24.64	331.7	0
1C	12.26	32.51	12	12.18	32.51	24.65	330.5	.033
10C	12.18	32.51	20	11.57	32.57	24.81	315.8	.065
20C	11.57		30	10.74	32.64	25.01	297.1	.096
35C	10.37	32.67	50	9.97	32.67	25.17	282.1	.154
50C	9.97	32.67	75	8.72	32.90	25.54	246.9	.220
64C	9.60	32.70	100	8.30	33.65	26.20	184.9	.274
77C	8.57	32.95	150	7.75	33.93	26.49	157.8	.360
92C	8.40	33.50	200	7.20	33.99	26.62	146.2	.436
104C	8.25	33.71	250	6.77	34.04	26.73	136.9	.506
151C	7.74	33.93	300	6.36	34.05	26.79	131.7	.574
201C	7.19	33.99	400	5.65	34.11	26.92	120.3	.699
250C	6.76	34.04	500	4.99	34.19	27.06	106.2	.813
300C	6.36	34.05	600	4.67	34.28	27.17	97.8	.915
405C	5.62	34.11	700	4.41	34.36	27.26	89.4	1.008
500C	4.99	34.19	800	4.10	34.41	27.33	82.7	1.094
602C	4.67	34.28	1000	3.42	34.48	27.46	71.3	1.248
703C	4.40	34.36						
803C	4.09	34.41						

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	PO ₄	pH	Alk.	NO ₃	SiO ₂	ΣCO ₂	Z	T	S	σ _t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(μM)		(meq/l)	(μM)	(μM)	(mM)	(m)	(°C)	(‰)		(x10 ³)	(dyn.m)

1002C 3.41 34.480

NH 105 44 38.9 N 126 31.0 W DATE 15 JUN 71 1020 GCT WIRE 06 DRY 53.4 WET 51.9 CRUISE Y71068
WIND DIRECTION 35 VEL 12 KTS BAR 26 SWELL DIRECTION 27 H 04 T 07 CLOUD 8 AMT 2 WEATHER 02

0A	12.20	32.448	6.53	.43	8.214		-0.0	1 8.6	0	12.20	32.45	24.60	335.2	0
20A	11.27	32.519	6.77	.44	8.223		.0	2 2.07	10	12.19	32.47	24.62	334.0	.033
30A	10.35	32.567	6.92	.54	8.222		.6	3 2.15	20	11.27	32.52	24.83	314.2	.066
50A	9.85	32.620	6.56	.65	8.176		3.1	5 2.10	30	10.35	32.57	25.03	295.4	.096
75A	8.67	32.927	5.53	1.17	8.076		12.1	14 2.13	50	9.85	32.63	25.15	283.9	.154
100A	8.36	33.523	3.96	1.73	7.946		22.0	27 2.17	75	8.67	32.93	25.58	243.6	.220
150A	7.83	33.874	2.88	2.12	7.843		29.4	42 2.26	100	8.36	33.53	26.09	195.3	.275
201A	7.21	33.959	2.44	2.32	7.793		32.7	47 2.20	150	7.83	33.88	26.44	162.4	.364
251A	6.79	33.986	2.20	2.46	7.760		34.1	52 2.26	200	7.22	33.96	26.59	148.8	.442
276A	6.61	34.004	2.00	2.43	7.754		32.6	51 2.26	250	6.80	33.99	26.67	141.8	.515
301A	6.43	34.006	1.97	2.40	7.728		30.7	50 2.21	300	6.44	34.01	26.74	136.3	.584
326A	6.22	34.011	1.83		7.713			46 2.03	400	5.63	34.06	26.88	123.8	.714
351A	6.04	34.020	1.75	2.67	7.700		37.2	63 2.26	500	5.08	34.13	27.01	111.8	.832
376A	5.80	34.041	1.48	2.72	7.670		37.0	65 2.27	600	4.66	34.21	27.12	102.5	.939
402A	5.62	34.057	1.35		7.660			61 2.30	700	4.35	34.28	27.20	94.5	1.038
603A	4.65	34.215	.49		7.592			78 2.34	800	4.08	34.34	27.28	88.0	1.129
804A	4.07	34.337	.33	3.31	7.595		44.7	111 2.31	1000	3.45	34.40	27.39	77.6	1.294
1005A	3.44	34.401	.41	3.30	7.617		45.2	134 2.33	1200	3.09	34.46	27.47	69.9	1.442
1206A	3.08	34.463	.51	3.25	7.632		45.3	145 2.30						
1407A	2.62	34.510	.74	3.21	7.655		44.6	157 2.21						

DB 15 44 55.0 N 124 22.5 W DATE 15 JUN 71 2220 GCT WIRE 05 DRY 58.2 WET 54.0 CRUISE Y71068
WIND DIRECTION 35 VEL 16 KTS BAR 25 SWELL DIRECTION 27 H 03 T 07 CLOUD 8 AMT 3 WEATHER 02

0A	12.98	31.003	6.53	.27	8.284		.1	5 2.10	0	12.98	31.01	23.34	455.9	0
5A	12.91	31.008	6.53	.26	8.286		.1	5 2.10	10	12.55	31.07	23.47	443.4	.045
10A	12.55	31.069	6.74	.24	8.296		.1	5 2.09	20	9.44	32.05	24.77	319.4	.083
20A	9.44	32.048	6.83	.57	8.223		1.5	7 2.08	30	7.90	32.49	25.35	264.5	.112
30A	7.89	32.487	6.26	.94	8.135		7.9	9 2.09	50	7.59	32.79	25.62	238.7	.163
49A	7.59	32.758	5.55	1.30	8.071		14.2	17 2.13	75	7.72	33.51	26.17	187.3	.216
75A	7.72	33.503	3.87	1.90	7.937		24.9	31 2.20	100	7.48	33.77	26.41	164.9	.260
100A	7.48	33.765	3.07	2.17	7.851		28.6	40 2.17	150	6.82	33.94	26.64	143.6	.337
150A	6.81	33.940	2.07	2.18	7.741		29.7	45 2.24						
170	6.53	33.969	1.51	2.82			34.6	60 2.27						

DB 10 44 52.7 N 124 15.3 W DATE 16 JUN 71 0113 GCT WIRE DRY 55.4 WET 52.6 CRUISE Y71068
WIND DIRECTION 00 VEL 20 KTS BAR 23 SWELL DIRECTION 35 H 05 T 04 CLOUD 8 AMT 1 WEATHER 01

0A	13.36	30.312	6.60	.22	8.303		.0	7 1.98	0	13.36	30.32	22.73	513.8	0
5A	13.11	30.364	6.64	.22	8.321		.0	7 1.97	10	12.63	31.05	23.44	446.4	.048
10A	12.63	31.047	6.84	.34	8.319		.0	5 2.02	20	9.77	31.82	24.54	341.5	.087
20A	9.77	31.819	7.50	.45	8.296		.0	5 2.04	30	8.55	32.12	24.96	301.3	.120
30A	8.55	32.117	5.95	1.18	8.139		7.7	13 2.07	50	7.66	33.03	25.80	221.5	.172
50A	7.65	33.025	4.79	1.57	8.029		18.9	24 2.13	75	7.49	33.60	26.28	177.0	.222
75A	7.49	33.598	3.32		7.888			2.09	100	7.11	33.83	26.51	155.1	.263
100A	7.11	33.829	2.46	2.31	7.811		31.9	48 2.25						
119A	6.90	33.928	2.11	2.53	7.776		33.7	56 2.21						

DB 5 44 50.1 N 124 10.2 W DATE 16 JUN 71 0347 GCT WIRE DRY 55.0 WET 52.0 CRUISE Y71068
WIND DIRECTION 35 VEL 26 KTS BAR 23 SWELL DIRECTION 34 H 04 T 05 CLOUD 8 AMT 2 WEATHER 03

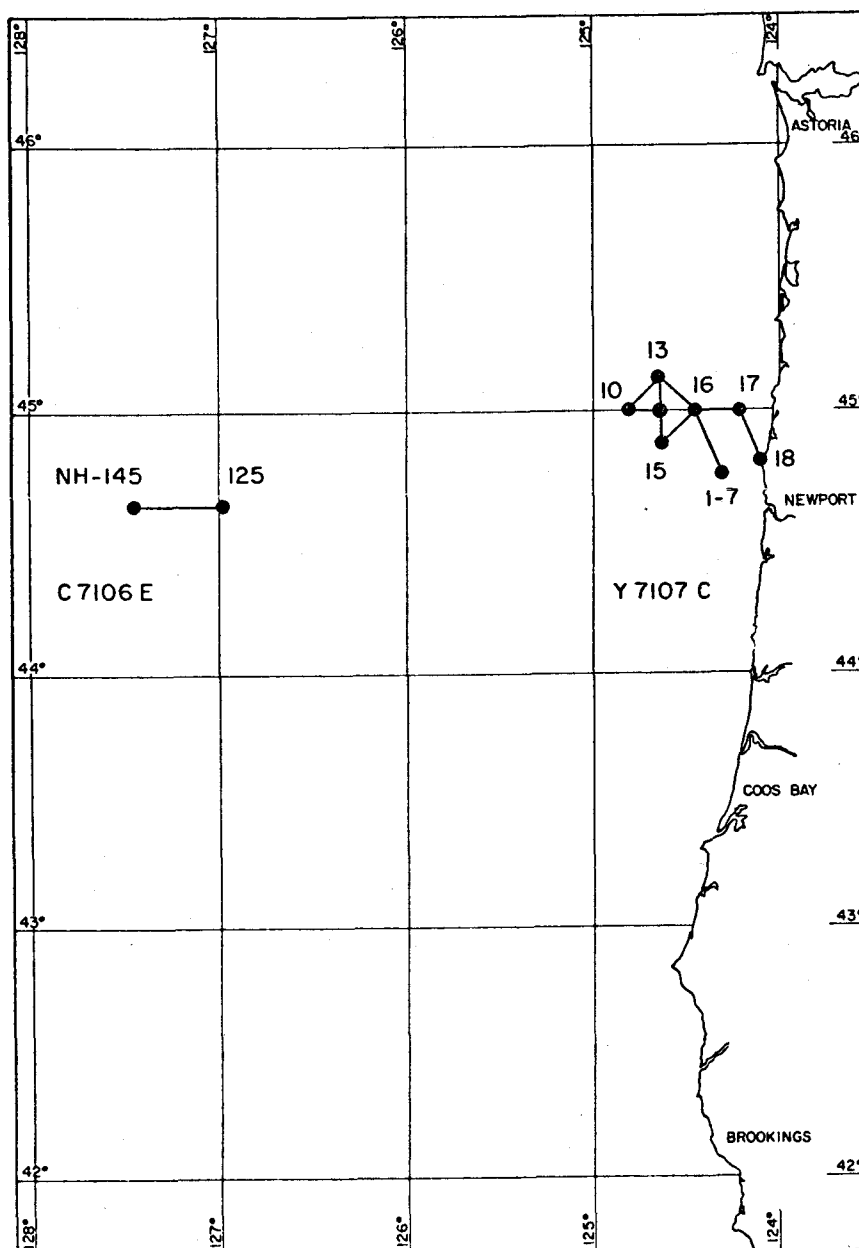
0A	13.20	30.285	6.78	.29	8.338		-0.1	8 1.97	0	13.20	30.29	22.74	512.8	0
5A	12.23	31.195	6.93	.32	8.315		.0	5 1.94	10	10.79	31.64	24.23	371.2	.044
10A	10.79	31.635	6.92	.55	8.302		.1	3 2.04	20	8.76	32.17	24.97	300.3	.078
20A	8.76	32.169	6.42	1.02	8.130		5.8	10 2.08	30	7.52	32.63	25.51	248.9	.105
30A	7.51	32.627	5.09	1.46	8.032		16.1	20	50	7.26	33.76	26.43	161.7	.146
40A	7.46	33.308	3.29	2.07	7.859		25.9	36 2.22						
50A	7.25	33.755	2.63	2.32	7.816		30.8	45 2.20						
60A	7.18	33.846	2.60	2.32	7.817		31.3	46 2.18						

DB 1 44 44.5 N 124 05.7 W DATE 16 JUN 71 0618 GCT WIRE DRY 54.2 WET 50.8 CRUISE Y71068
WIND DIRECTION 00 VEL 22 KTS BAR 23 SWELL DIRECTION 35 H 04 T 05 CLOUD 8 AMT 2 WEATHER 02

0A	12.50	30.395	6.73	.39	8.346		.3	9 1.88	0	12.50	30.40	22.96	492.0	0
5A	11.47	31.266	7.08	.47	8.312		.5	51 9.7	10	9.54	31.90	24.64	332.0	.041
10A	9.54	31.897	6.06		8.155			2.04	20	7.54	33.47	26.16	186.9	.067
20A	7.53	33.462	2.75	2.27	7.804		28.9	42 2.23	30	7.19	33.84	26.50	154.9	.084
30A	7.19	33.832	1.86	2.58	7.725		33.8	54 2.36						

OBSERVED				INTERPOLATED			COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ	$\Delta\sigma$
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁻³)	(dyn.m)
NH 145 44 39.0 N 127 27.0 W DATE 18 JUN 71 1340 GCT WIRE 03									
DRY 54.0 WET 53.1 CRUISE C7106E WIND DIRECTION 22 VEL 05 KTS BAR 05									
SWELL DIRECTION 25 H 06 T 07 CLOUD 6 AMT 8 WEATHER 02									

0	12.80	32.152	0	12.80	32.16	24.26	368.1	0
10	12.66	32.152	10	12.66	32.16	24.28	365.7	.037
30	11.07	32.525	20	11.95	32.33	24.55	340.6	.072
50	9.92	32.602	30	11.07	32.53	24.87	310.6	.105
63	9.69	32.615	50	9.92	32.61	25.12	286.5	.164
76	8.88	32.648	75	8.96	32.64	25.31	269.3	.234



OBSERVED INTERPOLATED COMPUTED

D	T	S	O ₂	Z	T	S	σ _t	θ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)
NH 125	44	39.1	N	126	59.0	W	DATE 18 JUN 71	1710	GCT WIRE 08
DRY 56.1	WET 55.1	CRUISE C7106E	WIND DIRECTION 23	VEL 10	KTS	BAR 06			
SWELL DIRECTION 22	H 05	T 07	CLOUD 6	AMT 7	WEATHER 01				

9	13.10	32.010	0	13.10	32.01	24.09	384.1	0
29	10.45	32.607	10	11.12	32.61	24.92	305.4	.034
49	9.74	32.608	20	10.77	32.61	24.98	299.6	.065
61	9.26	32.670	30	10.41	32.61	25.04	293.8	.094
74	8.72	32.990	50	9.70	32.61	25.16	282.9	.152
86	8.41	33.435	75	8.69	33.03	25.65	236.6	.217
93	8.29	33.567	100	8.28	33.57	26.14	190.8	.270
147	7.96	33.798	150	7.93	33.81	26.37	169.2	.360
197	7.41	33.924	200	7.38	33.93	26.55	153.0	.441
394	5.58	34.040	250	6.85	33.99	26.67	142.4	.515
591	4.58	34.191	300	6.37	34.02	26.76	134.0	.584
787	4.09	34.312	400	5.54	34.04	26.88	123.3	.712
955	3.52	34.390	500	4.96	34.12	27.01	111.6	.830
1132	3.10	34.462	600	4.55	34.20	27.12	102.1	.937
			700	4.28	34.26	27.20	94.9	1.035
			800	4.05	34.32	27.27	89.0	1.127
			1000	3.48	34.40	27.38	78.2	1.294
			1200	3.06	34.47	27.48	69.3	1.442

1 44 46.0 N 124 16.3 W DATE 29 JUL 71 2348 GCT WIRE
 DRY WET CRUISE Y7107C WIND DIRECTION 18 VEL 10 KTS BAR 16
 SWELL DIRECTION 30 H 02 T 08 CLOUD 6 AMT 8 WEATHER 00

0C	15.35	29.21	0	15.35	29.21	21.48	633.8	0
2C	15.35	29.21	10	15.09	29.30	21.60	622.1	.063
10C	15.09	29.30	20	9.31	32.19	24.90	307.4	.109
21C	8.70	32.49	30	7.61	32.86	25.68	233.1	.136
30C	7.61	32.86	50	7.51	33.53	26.21	182.7	.178
51C	7.51	33.55	75	7.21	33.79	26.47	159.1	.221
62C	7.41	33.68						
75C	7.21	33.79						
87C	7.14	33.82						

2 44 45.5 N 124 16.7 W DATE 30 JUL 71 0318 GCT WIRE
 DRY 58.0 WET 56.7 CRUISE Y7107C WIND DIRECTION 18 VEL 08 KTS BAR 16
 SWELL DIRECTION 30 H 02 T 08 CLOUD 7 AMT 8 WEATHER 02

0C	15.37	29.04	0	15.38	29.04	21.34	646.6	0
1C	15.37	29.04	10	10.58	31.94	24.49	346.1	.050
10C	10.58	31.93	20	8.36	32.60	25.37	262.7	.080
20C	8.36	32.60	30	7.63	32.88	25.70	231.7	.105
30C	7.62	32.88	50	7.52	33.48	26.18	186.1	.147
51C	7.52	33.51	75	7.19	33.83	26.50	156.4	.189
62C	7.46	33.68						
77C	7.15	33.84						
87C	7.12	33.84						

3 44 45.5 N 124 19.0 W DATE 30 JUL 71 0602 GCT WIRE
 DRY 57.5 WET 57.0 CRUISE Y7107C WIND DIRECTION 19 VEL 08 KTS BAR 17
 SWELL DIRECTION 30 H 02 T 08 CLOUD AMT 9 WEATHER 10

OBSERVED INTERPOLATED COMPUTED

D	T	S	O ₂	Z	T	S	σ _t	θ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)
10C	13.83	30.44	20	8.84	32.45	25.18	280.9	.096	
21C	8.38	32.64	30	7.58	32.86	25.69	232.7	.121	
30C	7.58	32.86	50	7.55	33.54	25.22	182.3	.163	
51C	7.55	33.57	75	7.39	33.81	26.46	159.9	.205	
62C	7.48	33.73							
75C	7.38	33.81							
88C	7.09	33.89							

8 45 00.3 N 124 28.1 W DATE 31 JUL 71 0115 GCT WIRE
 DRY 57.7 WET 56.7 CRUISE Y7107C WIND DIRECTION VEL 00 KTS BAR 18
 SWELL DIRECTION 32 H 03 T 09 CLOUD 6 AMT 8 WEATHER 01

64C	7.55	33.21	0	16.02	29.82	21.80	602.9	0
67C	7.65	33.29	10	13.83	30.44	22.74	513.6	.056
76C	7.63	33.42	20	8.84	32.45	25.18	280.9	.096
81C	7.68	33.54	30	7.58	32.86	25.69	232.7	.121
100C	7.68	33.79	50	7.55	33.54	26.22	182.3	.163
150C	6.95	33.93	75	7.64	33.41	26.10	193.7	.210
200C	6.58	33.97	100	7.69	33.79	26.40	165.9	.255
251C	6.22	34.02	150	6.95	33.93	26.61	146.3	.333
			200	6.58	33.97	26.69	139.2	.404
			250	6.23	34.02	26.78	132.0	.472

9 45 07.8 N 124 39.8 W DATE 31 JUL 71 0305 GCT WIRE
 DRY 61.9 WET 57.9 CRUISE Y7107C WIND DIRECTION 35 VEL 05 KTS BAR 17

SWELL DIRECTION 31 H 03 T 08 CLOUD 6 AMT 8 WEATHER 02

0C	16.68	29.67	0	16.68	29.67	21.54	628.0	0
2C	16.68	29.67	10	15.47	31.09	22.89	499.1	.056
12C	15.00	31.54	20	13.05	32.11	24.17	376.8	.100
25C	11.89	32.25	30	11.13	32.46	24.80	317.1	.135
34C	10.66	32.58	50	9.56	32.58	25.16	282.8	.195
51C	9.52	32.58	75	8.57	32.80	25.49	252.0	.262
67C	8.81	32.67	100	8.22	33.38	26.00	204.0	.319
77C	8.52	32.84	150	7.52	33.91	26.51	156.1	.409
89C	8.27	33.12	200	6.87	33.99	26.67	141.9	.483
100C	8.22	33.38	250	6.37	34.02	26.76	133.7	.552
156C	7.41	33.92	300	6.04	34.05	26.83	127.5	.617
201C	6.86	33.99	400	5.68	34.10	26.91	121.0	.741
252C	6.35	34.02						
300C	6.03	34.05						
402C	5.68	34.10						

10 45 00.2 N 124 49.3 W DATE 31 JUL 71 0445 GCT WIRE
 DRY 61.8 WET 57.6 CRUISE Y7107C WIND DIRECTION 02 VEL 04 KTS BAR 18
 SWELL DIRECTION 31 H 03 T 08 CLOUD 6 AMT 8 WEATHER 02

0C	16.54	29.85	0	16.54	29.85	21.71	611.8	0
1C	16.54	29.85	10	15.48	30.77	22.64	522.4	.057
12C	15.04	31.07	20	12.69	31.84	24.04	389.8	.102
22C	12.09	32.00	30	10.69	32.36	24.81	316.5	.135

0C	14.37	29.75	0	14.38	29.75	22.10	574.6	0
1C	14.37	29.75	10	10.08	31.96	24.59	336.5	.046
12C	8.98	32.55	20	7.78	32.80	25.61	239.6	.074
23C	7.77	32.80	30	7.49	33.13	25.90	212.0	.097
32C	7.44	33.19	50	7.61	33.65	26.30	174.5	.136
53C	7.61	33.65	75	7.38	33.79	26.44	161.5	.178
64C	7.44	33.71						
76C	7.37	33.80						
87C	7.10	33.86						

4 44 46.9 N 124 17.3 W DATE 30 JUL 71 0915 GCT WIRE
 DRY 53.0 WET 57.8 CRUISE Y7107C WIND DIRECTION 16 VEL 04 KTS BAR 17
 SWELL DIRECTION 30 H 02 T 08 CLOUD 6 AMT 8 WEATHER 02

0C	14.41	29.64	0	14.41	29.65	22.00	583.4	0
1C	14.41	29.64	10	9.59	32.29	24.94	303.7	.044
10C	9.59	32.29	20	7.63	32.83	25.65	236.1	.071
21C	7.58	32.88	30	7.45	33.24	26.00	203.2	.093
31C	7.44	33.27	50	7.54	33.67	26.32	172.3	.131
52C	7.55	33.69	75	7.29	33.85	26.50	155.6	.172
62C	7.41	33.74						
75C	7.28	33.85						
88C	7.09	33.89						

5 44 45.7 N 124 18.9 W DATE 30 JUL 71 1220 GCT WIRE
 DRY 57.2 WET 56.8 CRUISE Y7107C WIND DIRECTION 19 VEL 10 KTS BAR 17
 SWELL DIRECTION 30 H 02 T 08 CLOUD AMT 9 WEATHER 12

0C	14.48	29.78	0	14.48	29.78	22.10	574.5	0
1C	14.48	29.78	10	9.85	32.07	24.72	324.4	.045
11C	9.24	32.37	20	9.51	32.29	24.95	302.7	.076
20C	9.51	32.29	30	7.70	32.89	25.69	232.0	.103
30C	7.70	32.89	50	7.51	33.46	26.17	187.2	.145
50C	7.50	33.46	75	7.40	33.77	26.43	163.0	.189
64C	7.48	33.71						
75C	7.39	33.77						
89C	7.12	33.87						

6 44 44.6 N 124 17.8 W DATE 30 JUL 71 1506 GCT WIRE
 DRY 53.0 WET 56.4 CRUISE Y7107C WIND DIRECTION 20 VEL 03 KTS BAR 18
 SWELL DIRECTION 31 H 02 T 09 CLOUD 6 AMT 8 WEATHER 01

0C	15.07	29.57	0	15.07	29.57	21.81	601.7	0
1C	15.07	29.57	10	10.53	31.80	24.39	355.2	.048
12C	9.23	32.42	20	7.79	32.88	25.66	234.6	.077
22C	7.63	32.88	30	7.50	33.13	25.90	212.0	.100
32C	7.46	33.18	50	7.51	33.62	26.29	175.6	.138
51C	7.52	33.64	75	7.20	33.85	26.51	154.9	.180
63C	7.39	33.75						
77C	7.17	33.86						
87C	7.15	33.87						

7 44 46.0 N 124 19.0 W DATE 30 JUL 71 2118 GCT WIRE
 DRY 61.9 WET 59.0 CRUISE Y7107C WIND DIRECTION 21 VEL 02 KTS BAR 19
 SWELL DIRECTION 31 H 02 T 08 CLOUD 6 AMT 6 WEATHER 03

0C	16.02	29.82	0	16.02	29.82	21.80	602.9	0
1C	16.02	29.82	10	13.83	30.44	22.74	513.6	.056

35C	10.06	32.48	50	8.42	32.65	25.40	260.3	.195
50C	8.42	32.65	75	7.88	32.99	25.74	227.8	.256
67C	8.01	32.87	100	8.10	33.54	26.14	190.4	.309
77C	7.86	33.03	150	7.58	33.88	26.48	159.2	.396
92C	7.99	33.46	200	6.93	33.95	26.63	145.6	.472
101C	8.11	33.55	250	6.40	34.00	26.74	135.6	.542
151C	7.56	33.88	300	6.10	34.05	26.82	128.8	.608
204C	6.88	33.95	400	5.68	34.13	26.93	118.9	.732
251C	6.39	34.00	500	5.37	34.16	26.99	113.8	.849
302C	6.09	34.05	600	4.84	34.24	27.12	102.5	.957
400C	5.67	34.12						
503C	5.36	34.16						
603C	4.82	34.24						

11 45 00.0 N 124 37.8 W DATE 31 JUL 71 0650 GCT WIRE
 DRY 61.2 WET 59.0 CRUISE Y7107C WIND DIRECTION 01 VEL 05 KTS BAR 17
 SWELL DIRECTION 31 H 02 T 08 CLOUD 6 AMT 8 WEATHER 02

0C	17.02	29.52	0	17.02	29.52	21.35	646.3	0
1C	17.02	29.52	10	15.56	31.18	22.94	494.2	.057
12C	15.00	31.64	20	12.59	31.99	24.17	376.8	.101
21C	12.28	32.00	30	10.19	32.36	24.89	308.3	.135
30C	10.19	32.36	50	8.03	32.77	25.55	245.8	.190
50C	8.03	32.77	75	7.94	33.14	25.85	217.9	.248
66C	7.91	33.06	100	7.86	33.63	26.24	181.0	.298
77C	7.95	33.16	150	7.21	33.90	26.55	152.5	.381
88C	7.95	33.45	200	6.66	33.97	26.68	140.5	.455
100C	7.86	33.62	250	6.24	34.02	26.77	132.2	.523
151C	7.20	33.90	300	6.00	34.06	26.84	126.8	.588
201C	6.65	33.97	400	5.50	34.13	26.95	116.5	.709
252C	6.23	34.02						
303C	5.99	34.06						
402C	5.49	34.13						

12 45 00.0 N 124 48.3 W DATE 02 AUG 71 0235 GCT WIRE 00
 DRY 64.2 WET 61.2 CRUISE Y7107C WIND DIRECTION 33 VEL 06 KTS BAR 19
 SWELL DIRECTION 30 H 02 T 10 CLOUD 8 AMT 3 WEATHER 01

0	17.70	29.834	5.95	0	17.70	29.84	21.43	638.5	0
5	16.76	29.959	5.99	10	15.86	30.93	22.68	518.7	.058
10	15.86	30.927	6.11	20	12.63	32.38	24.46	349.1	.101
20	12.62	32.371	6.88	30	11.00	32.53	24.88	309.3	.134
30	11.00	32.527	7.25	50	9.07	32.60	25.26	273.6	.192
40	9.65	32.594	6.68	75	7.90	32.81	25.59	242.0	.257
50	9.07	32.599	6.37	100	7.99	33.46	26.09	195.2	.311
62	8.20	32.619	6.20	150	7.57	33.87	26.48	159.4	.400
75	7.89	32.801	5.65	200	6.80	33.94	26.64	144.2	.476
87	7.94	33.190	4.61	250	6.43	33.99	26.73	136.8	.546
100	7.99	33.454	4.09						
125	7.79	33.753	3.55						
150	7.57	33.867	3.38						
200	6.79	33.939	2.70						
250	6.43	33.989	2.29						

12 45 00.0 N 124 48.3 W DATE 02 AUG 71 0235 GCT WIRE 00
 DRY 64.2 WET 61.2 CRUISE Y7107C WIND DIRECTION 33 VEL 06 KTS BAR 19
 SWELL DIRECTION 30 H 02 T 10 CLOUD 8 AMT 3 WEATHER 01

0C	17.74	29.94	0	17.74	29.94	21.50	631.7	0
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OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
10	17.74	29.94		10	16.13	30.73	22.47	538.9	.059
100	16.13	30.73		20	12.60	32.46	24.53	342.2	.103
200	12.60	32.46		30	11.01	32.65	24.97	300.6	.135
310	10.91	32.67		50	8.73	32.66	25.36	264.1	.191
510	8.65	32.66		75	7.94	33.04	25.78	224.8	.252
660	7.96	32.83		100	8.02	33.55	26.16	189.0	.304
760	7.94	33.07		150	7.58	33.88	26.49	158.6	.391
880	7.95	33.29		200	6.82	33.96	26.65	143.4	.466
1030	8.04	33.61		250	6.42	34.01	26.74	135.2	.536
1510	7.56	33.89		300	6.12	34.03	26.80	130.5	.602
2020	6.79	33.96		400	5.80	34.11	26.90	121.3	.728
2520	6.41	34.01		500	5.29	34.15	27.00	113.4	.845
3020	6.11	34.03							
4000	5.80	34.11							
5010	5.28	34.15							

13 45 07.6 N 124 37.8 W DATE 02 AUG 71 0435 GCT WIRE 03
 DRY 64.5 WET 61.5 CRUISE Y7107C WIND DIRECTION 33 VEL 04 KTS BAR 19
 SWELL DIRECTION 26 H 07 T 08 CLOUD 8 AMT 2 WEATHER 03

0	17.82	29.742	5.90	0	17.82	29.75	21.33	647.9	0
5	18.42	30.189	6.07	10	15.00	31.66	23.43	447.5	.055
10	15.00	31.656	6.20	20	12.30	32.35	24.50	345.4	.094
20	12.30	32.342	7.00	30	11.01	32.53	24.88	309.5	.127
30	11.01	32.526	7.25	50	9.60	32.59	25.16	282.9	.186
40	10.21	32.586	7.09	75	8.21	32.75	25.50	250.6	.253
50	9.60	32.582	6.65	100	8.02	33.31	25.97	206.5	.310
62	8.91	32.632	6.27	150	7.59	33.84	26.45	161.7	.402
75	8.21	32.745	5.87	200	6.96	33.96	26.63	145.6	.479
87	8.12	32.963	5.31	250	6.44	33.97	26.71	138.1	.550
100	8.02	33.308	4.45						
125	7.85	33.754	3.51						
150	7.59	33.840	3.32						
200	6.96	33.951	2.69						
250	6.44	33.973	2.14						

13 45 07.6 N 124 37.8 W DATE 02 AUG 71 0435 GCT WIRE 03

DRY 64.5 WET 61.5 CRUISE Y7107C WIND DIRECTION 33 VEL 04 KTS BAR 19
 SWELL DIRECTION 26 H 07 T 08 CLOUD 8 AMT 2 WEATHER 03

00	17.83	29.85		0	17.83	29.85	21.41	640.3	0
10	17.83	29.85		10	15.24	31.52	23.27	462.9	.055
110	14.81	31.76		20	11.99	32.53	24.70	326.2	.095
210	11.73	32.57		30	10.81	32.61	24.98	300.0	.126
300	10.81	32.61		50	9.60	32.63	25.20	279.4	.184
500	9.60	32.63		75	8.32	32.76	25.50	251.1	.250
630	8.88	32.68		100	8.04	33.31	25.97	207.2	.307
750	8.32	32.76		150	7.57	33.87	26.48	159.5	.399
900	8.10	33.06		200	6.94	33.97	26.65	143.8	.475
1010	8.03	33.33		250	6.40	34.00	26.74	135.6	.545
1530	7.54	33.88		300	6.06	34.03	26.81	129.7	.611
2000	6.93	33.97							
2510	6.39	34.00							
3000	6.06	34.03							

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^5$)	(dyn.m)
15	44 52.5 N	124 37.9 W		DATE 02 AUG 71	0821 GCT	WIRE 00			
DRY 63.5	WET 60.2	CRUISE Y7107C		WIND DIRECTION 32	VEL 08 KTS	BAR 19			
SWELL DIRECTION 26	H 02 T 08	CLOUD 6	AMT 6	WEATHER 02					
00	16.51	29.85		0	16.51	29.85	21.71	611.1	0
10	16.51	29.85		10	10.70	32.09	24.59	336.2	.047
100	10.70	32.09		20	8.28	32.50	25.29	269.7	.078
200	8.28	32.49		30	7.67	32.72	25.56	244.2	.103
300	7.66	32.72		50	7.57	33.27	26.01	202.3	.148
500	7.57	33.27		75	7.53	33.64	26.30	174.6	.195
640	7.59	33.53		100	7.38	33.82	26.47	159.4	.237
770	7.52	33.66		150	7.04	33.94	26.60	147.2	.313
880	7.45	33.75		200	6.59	34.00	26.72	137.1	.384
1000	7.37	33.82		250	6.43	34.04	26.77	133.1	.452
1520	7.03	33.94		300	6.21	34.05	26.80	130.1	.518
2000	6.59	34.00							
2510	6.43	34.04							
3000	6.21	34.05							

16 45 00.0 N 124 27.1 W DATE 02 AUG 71 1041 GCT WIRE 03
 DRY 63.0 WET 59.8 CRUISE Y7107C WIND DIRECTION 33 VEL 06 KTS BAR 19
 SWELL DIRECTION 26 H 02 T 08 CLOUD 6 AMT 8 WEATHER 01

0	17.53	30.361	6.12	0	17.53	30.37	21.87	596.2	0
5	15.29	31.330	6.82	10	12.96	31.59	23.79	412.8	.050
10	12.96	31.588	7.47	20	9.85	32.02	24.58	328.2	.087
20	9.85	32.016	4.87	30	7.77	32.53	25.39	260.3	.117
30	7.76	32.522	5.07	50	7.47	32.92	25.74	227.3	.166
40	7.49	32.703	5.07	75	7.70	33.58	26.23	181.5	.217
50	7.47	32.916	3.61	100	7.57	33.80	26.42	163.9	.260
62	7.69	33.359	4.09	150	6.99	33.90	26.58	149.2	.338
75	7.70	33.578	3.69	200	6.94	33.94	26.62	146.5	.412
82	7.76	33.725	4.10	250	6.72	33.97	26.68	141.7	.484
100	7.57	33.796	3.21						
125	7.02	33.878	1.96						
150	6.99	33.898	2.00						
200	6.93	33.933	2.05						
250	6.72	33.974	2.15						

16 45 00.0 N 124 27.1 W DATE 02 AUG 71 1041 GCT WIRE 03
 DRY 63.0 WET 59.8 CRUISE Y7107C WIND DIRECTION 33 VEL 06 KTS BAR 19
 SWELL DIRECTION 26 H 02 T 08 CLOUD 6 AMT 8 WEATHER 01

00	17.16	30.58		0	17.16	30.58	22.12	571.9	0
10	17.16	30.58		10	12.89	31.67	23.86	406.2	.049
100	12.89	31.66		20	9.90	32.07	24.71	325.3	.085
210	9.68	32.09		30	8.14	32.51	25.33	266.4	.115
300	8.14	32.51		50	7.51	32.94	25.76	226.2	.164
510	7.48	32.96		75	7.76	33.58	26.23	182.1	.215
640	7.67	33.42		100	7.52	33.84	26.46	159.8	.258
750	7.75	33.58		150	6.90	33.93	26.60	147.2	.335
890	7.69	33.77		200	6.90	33.96	26.64	144.5	.408
1000	7.51	33.84		250	6.68	33.99	26.69	140.0	.479
1510	6.98	33.93							
2020	6.90	33.96							
2510	6.67	33.99							

14 44 59.8 N 124 38.0 W DATE 02 AUG 71 0615 GCT WIRE 00
 DRY 66.0 WET 61.9 CRUISE Y7107C WIND DIRECTION 33 VEL 05 KTS BAR 19
 SWELL DIRECTION 26 H 02 T 08 CLOUD 8 AMT 6 WEATHER 03

0	17.61	29.791	5.89	0	17.61	29.80	21.42	639.6	0
5	15.94	31.129	6.72	10	13.68	31.54	23.61	429.9	.053
10	13.68	31.539	6.76	20	10.93	32.31	24.73	323.9	.091
20	10.93	32.310	7.27	30	9.69	32.49	25.07	291.2	.122
30	9.69	32.485	7.30	50	8.27	32.62	25.40	260.4	.177
40	8.80	32.584	6.39	75	7.88	33.11	25.84	218.7	.237
50	8.27	32.619	6.22	100	7.82	33.52	26.17	188.2	.288
62	7.89	32.789	5.63	150	7.35	33.86	26.50	157.1	.374
75	7.87	33.110	4.78	200	6.81	33.94	26.63	144.9	.450
87	7.93	33.332	4.31	250	6.33	33.98	26.73	136.0	.520
100	7.82	33.516	3.80						
125	7.67	33.810	3.43						
150	7.35	33.858	2.96						
200	6.80	33.932	2.61						
250	6.33	33.982	2.15						

14 44 59.8 N 124 38.0 W DATE 02 AUG 71 0615 GCT WIRE 00
 DRY 66.0 WET 61.9 CRUISE Y7107C WIND DIRECTION 33 VEL 05 KTS BAR 19
 SWELL DIRECTION 26 H 02 T 08 CLOUD 8 AMT 6 WEATHER 03

0C	17.65	29.90	0	17.65	29.90	21.49	632.5	0
1C	17.65	29.90	10	14.30	31.54	23.49	441.9	.054
10C	14.30	31.54	20	11.86	32.18	24.46	349.5	.093
20C	11.86	32.18	30	10.19	32.46	24.96	301.6	.126
31C	10.06	32.47	50	8.29	32.68	25.44	256.5	.182
51C	8.24	32.69	75	7.90	33.23	25.93	210.1	.240
63C	7.86	32.96	100	7.82	33.61	26.24	181.2	.289
78C	7.93	33.30	150	7.36	33.88	26.51	155.8	.373
90C	7.89	33.53	200	6.61	33.98	26.69	139.2	.447
100C	7.82	33.61	250	6.30	34.00	26.75	134.3	.515
153C	7.32	33.89	300	6.02	34.03	26.82	128.7	.581
201C	6.60	33.98	400	5.63	34.10	26.91	120.2	.705
252C	6.29	34.00						
303C	6.01	34.03						
400C	5.63	34.10						

15 44 52.5 N 124 37.9 W DATE 02 AUG 71 0821 GCT WIRE 00
 DRY 63.5 WET 60.2 CRUISE Y7107C WIND DIRECTION 32 VEL 08 KTS BAR 19
 SWELL DIRECTION 26 H 02 T 08 CLOUD 6 AMT 6 WEATHER 02

0	16.73	29.490	7.04	0	16.73	29.50	21.39	642.2	0
5	11.53	31.891	8.43	10	10.46	32.12	24.65	330.7	.049
10	10.46	32.111	5.98	20	8.29	32.38	25.21	278.0	.079
20	8.29	32.380	4.56	30	7.72	32.66	25.51	249.5	.105
30	7.72	32.659	4.22	50	7.52	33.09	25.87	214.9	.152
40	7.49	32.891	4.75	75	7.52	33.61	26.28	177.0	.201
50	7.51	33.089	4.09	100	7.36	33.81	26.46	160.4	.243
62	8.05	33.485	3.88	150	6.89	33.95	26.63	144.6	.319
75	7.51	33.604	3.44	200	6.64	33.99	26.70	138.5	.390
87	7.49	33.709	3.03	250	6.46	34.00	26.73	136.2	.459
100	7.36	33.805	2.88						
125	7.11	33.904	2.46						
150	6.88	33.941	2.23						
200	6.63	33.988	2.88						
250	6.45	34.002	1.92						

17 45 00.0 N 124 13.1 W DATE 02 AUG 71 1239 GCT WIRE 00
 DRY 61.9 WET 59.5 CRUISE Y7107C WIND DIRECTION 00 VEL 10 KTS BAR 18
 SWELL DIRECTION 27 H 02 T 08 CLOUD 6 AMT 8 WEATHER 02

0	15.97	29.330	6.93	0	15.97	29.33	21.44	637.8	0
5	15.64	29.537	7.09	10	13.34	31.26	23.46	444.4	.054
10	13.34	31.254	7.80	20	8.67	32.34	25.12	286.5	.091
20	8.67	32.339	3.98	30	7.76	32.78	25.60	241.0	.117
30	7.75	32.779	4.25	50	7.45	33.44	26.16	188.0	.160
39	7.44	33.067	4.10	75	7.40				
49	7.43	33.417	3.26	100	7.10				
61	7.60	33.645	3.27						
75	7.39		3.00						
87	7.20		2.38						
100	7.10		2.05						

17 45 00.0 N 124 13.1 W DATE 02 AUG 71 1239 GCT WIRE 00
 DRY 61.9 WET 59.5 CRUISE Y7107C WIND DIRECTION 00 VEL 10 KTS BAR 18
 SWELL DIRECTION 27 H 02 T 08 CLOUD 6 AMT 8 WEATHER 02

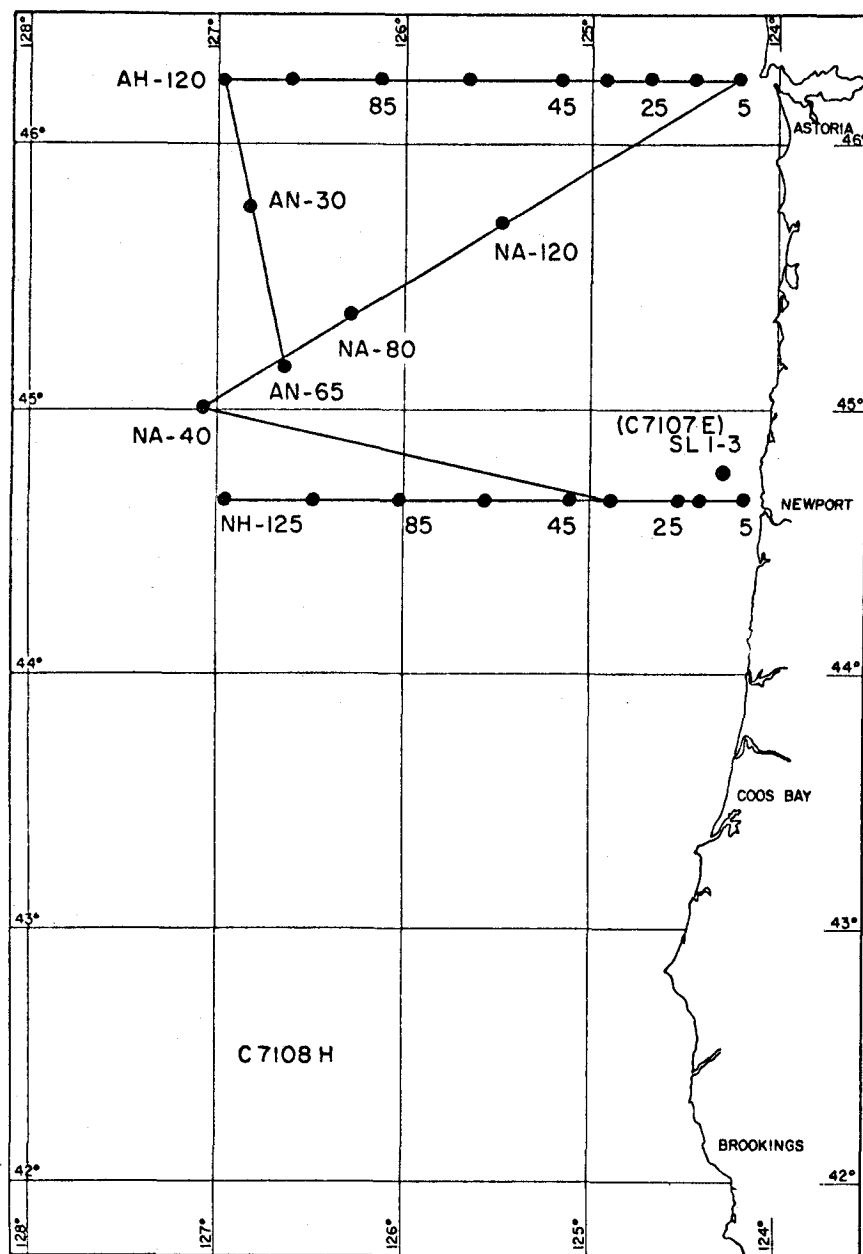
20C	8.66	32.46						
23C	8.28	32.62						
30C	7.74	32.80						
50C	7.41	33.46						
63C	7.56	33.69						
75C	7.39	33.79						
88C	7.19	33.85						
100C	7.11	33.87						

18 44 48.5 N 124 05.7 W DATE 02 AUG 71 1425 GCT WIRE 00
 DRY 57.0 WET 55.5 CRUISE Y7107C WIND DIRECTION 00 VEL 10 KTS BAR 18
 SWELL DIRECTION 27 H 02 T 08 CLOUD 6 AMT 8 WEATHER 02

0	11.84	32.817	7.86	0	11.84	32.82	24.95	301.8	0
5	11.97	33.314	8.88	10	10.40	33.48	25.72	229.0	.027
10	10.40	33.473	7.26	20	7.73	33.62	26.26	178.4	.047
20	7.73	33.614	3.31						

18 44 48.5 N 124 05.7 W DATE 02 AUG 71 1425 GCT WIRE 00
 DRY 57.0 WET 55.5 CRUISE Y7107C WIND DIRECTION 00 VEL 10 KTS BAR 18
 SWELL DIRECTION 27 H 02 T 08 CLOUD 6 AMT 8 WEATHER 02

0C	11.66	32.95		0	11.66	32.96	25.09	288.8	0
2C	11.66	32.95		10	10.45	33.48	25.72	229.3	.026
10C	10.45	33.48		20	7.83	33.72	26.32	171.9	.046
20C	7.83	33.72		30	7.70	33.69	26.32	172.5	.063
30C	7.70	33.69							



OBSERVED

D	T	S
(m)	(°C)	(‰)
30C	8.45	32.72
50C	7.91	33.36
63C	7.68	33.79
77C	7.68	33.79
87C	7.68	33.79

INTERPOLATED COMPUTED

Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)		($\times 10^3$)	(dyn.m)
50	7.92	33.36	26.03	200.3	.159
75	7.68	33.79	26.40	165.8	.204

NH 25 44 39.1 N 124 31.6 W DATE 23 AUG 71 2132 GCT WIRE
 DRY 64.8 WET 62.2 CRUISE C7108H WIND DIRECTION 00 VEL 20 KTS BAR 21
 SWELL DIRECTION 28 H 08 T 10 CLOUD AMT 0 WEATHER 02

0C	16.02	31.61	0	16.02	31.61	23.17	471.9	0
1C	16.02	31.61	10	13.02	32.13	24.19	374.6	.042
12C	12.03	32.29	20	9.08	32.68	25.32	267.6	.074
22C	8.50	32.76	30	8.24	33.01	25.70	231.0	.099
33C	8.14	33.08	50	7.88	33.34	26.01	201.8	.143
51C	7.87	33.35	75	7.56	33.73	26.37	168.2	.189
63C	7.68	33.59						
75C	7.55	33.73						
87C	7.42	33.81						

NH 35 44 39.1 N 124 52.6 W DATE 23 AUG 71 2307 GCT WIRE
 DRY WET CRUISE C7108H WIND DIRECTION 00 VEL 22 KTS BAR
 SWELL DIRECTION 28 H 08 T 10 CLOUD AMT 0 WEATHER

0C	16.43	31.19	0	16.43	31.19	22.76	511.4	0
1C	16.43	31.19	10	14.02	31.60	23.59	432.0	.047
26C	9.14	32.56	20	11.06	32.17	24.59	336.8	.086
29C	8.96	32.64	30	8.90	32.63	25.31	268.5	.115
32C	8.77	32.60	50	7.80	32.88	25.67	234.5	.166
51C	7.77	32.92	75	7.92	33.57	26.19	185.7	.219
63C	7.94	33.41	100	7.74	33.71	26.33	172.7	.263
76C	7.91	33.57	150	7.18	33.96	26.61	147.0	.343
89C	7.77	33.57	200	6.84	34.02	26.69	139.4	.415
101C	7.74	33.73	250	6.57	34.02	26.73	136.0	.484
150C	7.17	33.96	300	6.32	34.03	26.78	132.7	.551
202C	6.83	34.02	400	5.64	34.11	26.92	119.6	.677
250C	6.57	34.02						
300C	6.32	34.03						
400C	5.64	34.11						

NH 45 44 39.1 N 125 06.4 W DATE 24 AUG 71 0114 GCT WIRE
 DRY WET CRUISE C7108H WIND DIRECTION 34 VEL 22 KTS BAR
 SWELL DIRECTION 29 H 06 T 10 CLOUD AMT 0 WEATHER

0C	18.52	30.35	0	18.52	30.35	21.63	619.6	0
1C	18.52	30.35	10	17.55	30.90	22.27	558.3	.059
10C	17.55	30.89	20	10.40	32.28	24.79	317.5	.103
21C	9.69	32.41	30	8.78	32.50	25.23	276.3	.132
30C	8.78	32.50	50	8.11	32.74	25.51	249.8	.185
51C	8.10	32.75	75	7.85	33.22	25.93	210.6	.242
62C	7.80	32.95	100	7.69	33.63	26.27	177.8	.291
76C	7.86	33.24	150	7.24	33.83	26.49	157.9	.375
87C	7.85	33.44	200	6.66	33.93	26.65	143.6	.450
101C	7.68	33.63	250	6.37	33.98	26.73	136.8	.520
155C	7.20	33.85	300	6.02	34.01	26.79	130.6	.587

OBSERVED INTERPOLATED COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^3$)	(dyn.m)

SL 1 44 46.3 N 124 16.9 W DATE 18 JUL 71 0320 GCT WIRE 10
 DRY WET CRUISE C7107E WIND DIRECTION 00 VEL 14 KTS BAR 18
 SWELL DIRECTION 34 H 04 T 07 CLOUD 7 AMT 8 WEATHER 02

0	8.48	32.989		0	8.48	32.99	25.65	235.1	0
10	7.97	33.121		10	7.97	33.13	25.83	218.8	.023
20	8.07	33.251		20	8.07	33.26	25.92	210.1	.044
30	8.00	33.302		30	8.00	33.31	25.97	205.5	.065
50	8.02	33.360		50	8.02	33.36	26.01	201.8	.106
75	7.25	33.781		75	7.30	33.76	26.43	162.6	.151
91		33.926							

SL 2 44 46.3 N 124 16.8 W DATE 18 JUL 71 0625 GCT WIRE 17
 DRY WET CRUISE C7107E WIND DIRECTION 00 VEL 15 KTS BAR 18
 SWELL DIRECTION 34 H 04 T 07 CLOUD 7 AMT 8 WEATHER 03

0	8.57	32.828		0	8.57	32.83	25.52	248.4	0
10	8.47	32.890		10	8.47	32.89	25.58	242.5	.025
20	8.03	33.058		20	8.03	33.06	25.78	223.9	.048
30	7.94	33.299		30	7.94	33.30	25.98	204.9	.069
50	7.55	33.537		50	7.56	33.54	26.22	182.1	.108
75	7.06	33.868		75	7.08	33.86	26.54	152.6	.150
91	6.91	33.917							

SL 3 44 45.8 N 124 16.6 W DATE 18 JUL 71 0905 GCT WIRE 00
 DRY 50.0 WET 49.0 CRUISE C7107E WIND DIRECTION 00 VEL 08 KTS BAR 18
 SWELL DIRECTION 33 H 04 T 06 CLOUD AMT WEATHER 40

0	8.53	32.780		0	8.53	32.78	25.48	251.4	0
10	7.89	33.039		10	7.90	33.04	25.78	223.3	.024
20	7.84	33.312		20	7.84	33.32	26.00	202.4	.045
30	7.92	33.491		30	7.93	33.50	26.13	190.3	.065
50	7.31	33.737		50	7.32	33.74	26.41	164.0	.100
75	7.06	33.861		75	7.06	33.86	26.54	152.4	.140
91	6.83	33.920							

NH 5 44 39.1 N 124 10.6 W DATE 23 AUG 71 1842 GCT WIRE
 DRY 63.0 WET 59.2 CRUISE C7108H WIND DIRECTION 00 VEL 10 KTS BAR 22
 SWELL DIRECTION 28 H 08 T 10 CLOUD AMT 0 WEATHER 01

00	16.05	32.53		0	16.05	32.53	23.87	405.3	0
10	16.05	32.53		10	14.75	32.69	24.27	367.2	.039
110	14.44	32.71		20	9.88	32.82	25.30	269.1	.070
200	9.88	32.82		30	8.06	33.17	25.86	216.2	.095
330	8.06	33.17							

NH 15 44 39.1 N 124 24.6 W DATE 23 AUG 71 2000 GCT WIRE
 DRY 64.0 WET 62.0 CRUISE C7108H WIND DIRECTION 34 VEL 16 KTS BAR 22
 SWELL DIRECTION 28 H 08 T 10 CLOUD AMT 0 WEATHER 02

00	16.89	31.62		0	16.89	31.63	22.98	490.0	0
10	16.89	31.62		10	16.75	31.67	23.05	484.1	.049
110	16.52	31.70		20	9.47	32.65	25.24	275.4	.087
230	9.47	32.65		30	8.45	32.72	25.45	255.2	.113

201C	6.65	33.93		400	5.25	34.09	26.95	116.6	.711
2520	6.36	33.98		500	4.92	34.16	27.04	108.4	.823
301C	6.01	34.01		600	4.66	34.27	27.16	98.2	.926
404C	5.22	34.09		700	4.46	34.33	27.23	92.1	1.022
502C	4.92	34.16							
604C	4.65	34.27							
701C	4.46	34.33							

NH 125 44 39.1 N 126 56.9 W DATE 25 AUG 71 0100 GCT WIRE
 DRY WET CRUISE C7108H WIND DIRECTION 32 VEL 19 KTS BAR
 SWELL DIRECTION 31 H 06 T 09 CLOUD 8 AMT 4 WEATHER

00	18.53	31.15		0	18.53	31.15	22.23	561.6	0
10	18.39	31.15		10	18.39	31.13	22.40	545.8	.055
110	18.35	31.36		20	17.62	31.48	22.70	517.2	.109
220	17.28	31.52		30	14.64	31.86	23.66	425.8	.156
310	14.27	31.91		50	10.03	32.53	25.05	293.8	.228
510	9.89	32.55		75	8.52	32.67	25.39	261.4	.297
630	9.05	32.60		100	8.06	33.20	25.88	215.1	.357
750	8.52	32.66		150	7.55	33.82	26.44	162.5	.451
890	8.18	32.91		200	6.93	33.93	26.61	147.3	.528
1010	8.05	33.23		250	6.43	33.94	26.69	140.5	.600
1500	7.54	33.82		300	5.91	33.98	26.79	131.1	.668
201C	6.92	33.93		400	5.28	34.06	26.92	119.0	.793
251C	6.42	33.94		500	4.85	34.13	27.03	109.7	.907
300C	5.90	33.98		600	4.38	34.21	27.14	99.4	1.012
402C	5.27	34.06		700	4.14	34.29	27.23	91.4	1.107
501C	4.85	34.13		800	3.90	34.38	27.33	82.8	1.194
600C	4.37	34.20		1000	3.41	34.47	27.45	71.9	1.349
703C	4.13	34.29							
803C	3.89	34.38							
1000C	3.41	34.47							

NA 40 45 00.0 N 127 04.3 W DATE 25 AUG 71 1638 GCT WIRE
 DRY 62.5 WET 57.0 CRUISE C7108H WIND DIRECTION 34 VEL 22 KTS BAR 22
 SWELL DIRECTION 30 H 06 T 10 CLOUD 6 AMT 8 WEATHER 02

00	18.29	31.28		0	18.29	31.28	22.39	546.5	0
10	18.29	31.28		10	18.27	31.29	22.40	546.1	.055
140	18.26	31.29		20	16.54	31.38	22.87	501.0	.107
260	14.44	31.64		30	13.30	32.03	24.06	387.3	.151
320	12.76	32.23		50	9.37	32.50	25.13	285.4	.219
530	9.05	32.55		75	8.31	32.70	25.46	255.3	.286
660	8.52	32.65		100	8.04	33.25	25.92	211.8	.345
790	8.24	32.75		150	7.55	33.79	26.41	165.2	.439
880	8.11	32.98		200	6.99	33.92	26.60	148.6	.517
1000	8.04	33.24							
1550	7.49	33.81							
2040	6.94	33.93							

NA 80 45 20.8 N 126 16.9 W DATE 25 AUG 71 2207 GCT WIRE
 DRY 64.2 WET 59.1 CRUISE C7108H WIND DIRECTION 34 VEL 15 KTS BAR 22
 SWELL DIRECTION 30 H 06 T 10 CLOUD 8 AMT 7 WEATHER 02

00	18.57	30.89		0	18.57	30.90	22.02	581.5	0
10	18.57	30.89		10	18.40	31.51	22.54	532.6	.056
100	18.40	31.51		20	15.95	32.19	23.63	429.0	.104
210	15.60	32.24		30	12.19	32.50	24.54	332.8	.142
300	12.19	32.49		50	9.63	32.64	25.20	279.1	.203
500	9.63	32.64		75	8.32	32.77	25.51	250.3	.269
630	9.04	32.67		100	8.21	33.33	25.96	208.2	.327

OBSERVED INTERPOLATED COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)
75C	8.32	32.77		150	8.08	33.87	26.40	166.8	.420
88C	7.75	32.86		200	7.70	33.96	26.53	155.4	.501
101C	8.27	33.37							
151C	8.05	33.88							
200C	7.70	33.96							

NA 120 45 41.5 N 125 29.0 W DATE 26 AUG 71 0358 GCT WIRE

DRY	WET	CRUISE C7108H	WIND DIRECTION	35 VEL	18 KTS	BAR
SWELL DIRECTION	30 H	06 T	10	CLOUD	8 AMT	6 WEATHER
0C	18.07	31.64	0	18.07	31.65	22.72 515.2 0
1C	18.07	31.64	10	18.07	31.63	22.71 516.2 .052
10C	18.07	31.63	20	18.85	32.11	23.59 432.5 .099
21C	15.52	32.17	30	11.88	32.51	24.71 325.6 .137
30C	11.87	32.51	50	9.60	32.61	25.18 281.6 .198
51C	9.49	32.61	75	8.45	32.65	25.39 261.1 .265
64C	8.97	32.66	100	7.67	32.78	25.61 240.7 .328
75C	8.45	32.65	150	7.68	33.71	26.34 172.8 .431
87C	8.32	32.70	200	7.09	33.94	26.60 148.3 .512
100C	7.66	32.78				
153C	7.64	33.77				
202C	7.05	33.95				

AM	5	46 14.0 N	124 12.0 W	DATE 26 AUG 71	1507 GCT	WIRE
DRY	WET	CRUISE C7108H	WIND DIRECTION	00 VEL	15 KTS	BAR
SWELL DIRECTION	30 H	05 T	09	CLOUD	5 AMT	2 WEATHER
0C	15.44	29.20	0	15.44	29.21	21.45 636.3 0
1C	15.44	29.20	10	13.52	30.75	23.03 485.0 .056
11C	13.19	31.02	20	10.49	33.05	25.38 262.0 .093
20C	10.49	33.05	30	8.63	33.30	25.88 214.7 .117
31C	8.51	33.33				

AM	15	46 14.0 N	124 26.4 W	DATE 26 AUG 71	1632 GCT	WIRE
DRY	WET	CRUISE C7108H	WIND DIRECTION	00 VEL	16 KTS	BAR
SWELL DIRECTION	30 H	06 T	10	CLOUD	8 AMT	3 WEATHER
0C	15.92	27.30	0	15.92	27.30	19.90 785.7 0
2C	15.92	27.30	10	16.08	30.45	22.27 558.7 .067
12C	16.12	31.41	20	9.63	32.28	24.92 305.3 .110
20C	9.63	32.28	30	8.26	32.72	25.47 253.0 .138
31C	8.12	32.74	50	7.54	33.49	26.18 185.8 .182
52C	7.48	33.55	75	7.40	33.77	26.43 163.1 .226
65C	7.53	33.69	100	6.99	33.92	26.59 147.5 .265
78C	7.34	33.80	150	6.79	33.94	26.64 143.9 .337
90C	7.13	33.88				
102C	6.96	33.92				
157C	6.76	33.94				

AM 25 46 14.0 N 124 40.8 W DATE 26 AUG 71 1809 GCT WIRE
 DRY WET CRUISE C7108H WIND DIRECTION 35 VEL 18 KTS BAR
 SWELL DIRECTION 30 H 06 T 10 CLOUD 8 AMT 6 WEATHER

OBSERVED INTERPOLATED COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)
100C	7.37	33.14							
152C	7.01	33.79							
200C	6.58	33.93							

AM 85 46 14.0 N 126 07.5 W DATE 27 AUG 71 0455 GCT WIRE
 DRY WET CRUISE C7108H WIND DIRECTION 33 VEL 20 KTS BAR
 SWELL DIRECTION 30 H 06 T 09 CLOUD 8 AMT 1 WEATHER

0C	17.77	31.85	0	17.77	31.85	22.95 493.0 0
1C	17.77	31.85	10	17.77	31.88	22.97 491.7 .049
11C	17.77	31.88	20	15.83	31.92	23.45 445.7 .096
21C	15.52	31.94	30	12.25	32.36	24.52 343.4 .136
30C	12.25	32.36	50	9.32	32.58	25.21 278.7 .198
54C	9.17	32.63	75	8.10	32.67	25.46 254.7 .264
64C	8.57	32.62	100	7.49	33.00	25.80 222.7 .324
78C	7.99	32.69	150	7.22	33.63	26.34 172.2 .423
87C	7.63	32.71	200	6.79	33.92	26.62 146.0 .502
102C	7.49	33.05				
154C	7.20	33.66				
200C	6.79	33.92				

AM 105 46 14.0 N 126 36.0 W DATE 27 AUG 71 0644 GCT WIRE
 DRY WET CRUISE C7108H WIND DIRECTION 35 VEL 20 KTS BAR
 SWELL DIRECTION 30 H 06 T 09 CLOUD 8 AMT 2 WEATHER

0C	17.70	32.02	0	17.70	32.02	23.10 479.0 0
1C	17.70	32.02	10	17.70	32.03	23.10 478.6 .048
10C	17.70	32.03	20	15.60	32.31	23.80 412.3 .092
20C	15.60	32.31	30	12.84	32.45	24.48 347.7 .130
31C	12.56	32.46	50	9.02	32.59	25.26 273.5 .193
50C	9.02	32.59	75	8.00	32.60	25.42 258.4 .259
62C	8.68	32.60	100	7.32	32.63	25.53 247.9 .322
75C	8.00	32.60	150	7.41	33.56	26.26 179.9 .429
88C	7.85	32.62	200	6.80	33.86	26.58 150.5 .512
100C	7.31	32.62				
150C	7.40	33.56				
200C	6.80	33.86				

AM 120 46 14.0 N 126 58.0 W DATE 27 AUG 71 0932 GCT WIRE
 DRY WET CRUISE C7108H WIND DIRECTION 35 VEL 18 KTS BAR
 SWELL DIRECTION 30 H 06 T 10 CLOUD 6 AMT 1 WEATHER

0C	17.61	32.12	0	17.61	32.13	23.19 469.7 0
1C	17.61	32.12	10	17.63	32.15	23.21 468.0 .047
10C	17.62	32.15	20	17.63	32.14	23.21 469.0 .094
20C	17.62	32.14	30	12.01	32.18	24.43 352.4 .135
30C	12.01	32.18	50	9.52	32.60	25.19 280.6 .198
52C	9.27	32.64	75	8.18	32.61	25.40 260.2 .266
63C	8.58	32.64	100	7.33	32.81	25.68 234.0 .327
75C	8.18	32.61	150	7.49	33.73	26.38 169.8 .428
88C	7.42	32.67				
100C	7.33	32.81				
150C	7.49	33.73				

0C	16.64	29.29	0	16.64	29.29	21.26	654.9	0
1C	16.64	29.29	10	16.64	31.71	23.11	478.2	.057
13C	15.64	31.71	20	11.23	32.43	24.76	320.6	.097
21C	10.61	32.43	30	8.09	32.58	25.39	260.7	.126
32C	7.77	32.59	50	7.50	32.84	25.67	234.0	.175
51C	7.49	32.85	75	7.72	33.32	26.03	200.9	.229
62C	7.62	32.99	100	7.57	33.71	26.35	179.9	.276
76C	7.72	33.35	150	7.04	33.93	26.60	147.8	.356
90C	7.70	33.51						
103C	7.56	33.70						
150C	7.04	33.93						

AM 35 46 14.0 N 124 55.2 W DATE 26 AUG 71 2006 GCT WIRE

DRY WET CRUISE C7108H WIND DIRECTION 35 VEL 17 KTS BAR
SWELL DIRECTION 30 H 06 T 10 CLOUD 8 AMT 1 WEATHER

0C	17.26	31.66	0	17.26	31.67	22.92	495.3	0
2C	17.26	31.66	10	16.71	31.73	23.10	479.0	.049
13C	16.71	31.72	20	11.42	32.02	24.41	353.7	.090
23C	9.74	32.13	30	8.78	32.31	25.08	290.5	.123
36C	8.69	32.44	50	7.99	32.52	25.36	264.1	.178
57C	7.77	32.59	75	7.47	33.10	25.89	214.2	.238
67C	7.57	32.94	100	7.69	33.58	26.23	181.9	.287
80C	7.45	33.18	150	7.48	33.85	26.47	159.6	.373
90C	7.56	33.38						
105C	7.74	33.67						
162C	7.21	33.90						

AM 45 46 14.0 N 125 09.5 W DATE 26 AUG 71 2142 GCT WIRE
DRY WET CRUISE C7108H WIND DIRECTION 35 VEL 18 KTS BAR
SWELL DIRECTION 30 H 06 T 10 CLOUD 8 AMT 3 WEATHER

0C	17.02	31.70	0	17.02	31.71	23.01	487.0	0
1C	17.02	31.70	10	16.99	31.70	23.02	486.9	.049
12C	16.98	31.70	20	14.29	31.86	23.73	418.5	.094
20C	14.29	31.86	30	10.02	32.36	24.92	305.9	.130
32C	9.25	32.46	50	8.00	32.81	25.43	257.3	.186
50C	8.00	32.61	75	7.74	32.96	25.74	228.1	.247
62C	7.70	32.70	100	7.81	33.50	26.15	189.3	.299
75C	7.74	32.96	150	7.29	33.90	26.54	153.0	.385
87C	7.84	33.33	200	6.75	33.97	26.67	141.8	.459
101C	7.80	33.51						
150C	7.28	33.90						
201C	6.74	33.97						

AM 65 46 14.0 N 125 39.0 W DATE 27 AUG 71 0057 GCT WIRE
DRY WET CRUISE C7108H WIND DIRECTION 33 VEL 20 KTS BAR
SWELL DIRECTION 30 H 06 T 10 CLOUD 8 AMT 2 WEATHER

0C	18.06	31.53	0	18.06	31.53	22.64	523.0	0
1C	18.06	31.53	10	18.06	31.53	22.64	523.3	.052
10C	18.06	31.53	20	12.82	31.90	24.05	388.2	.098
20C	12.82	31.89	30	10.31	32.47	24.96	302.1	.132
30C	10.31	32.47	50	8.52	32.64	25.38	262.5	.189
50C	8.52	32.64	75	7.57	32.71	25.57	244.4	.252
62C	7.92	32.65	100	7.38	33.14	25.93	210.0	.309
77C	7.54	32.73	150	7.03	33.78	26.48	158.8	.401
91C	7.40	32.92	200	6.58	33.93	26.66	142.5	.476

AN 30 45 45.2 N 126 49.5 W DATE 27 AUG 71 1323 GCT WIRE
DRY WET CRUISE C7108H WIND DIRECTION 35 VEL 18 KTS BAR
SWELL DIRECTION 30 H 06 T 09 CLOUD 6 AMT 4 WEATHER

0C	18.00	31.49	0	18.00	31.50	22.62	524.5	0
1C	18.00	31.49	10	17.99	31.50	22.63	523.8	.052
10C	17.99	31.50	20	17.98	31.53	22.65	521.7	.105
20C	17.98	31.53	30	15.62	31.61	23.26	464.3	.154
31C	15.32	31.63	50	10.27	32.47	24.96	302.4	.231
51C	10.06	32.51	75	9.38	32.60	25.25	274.4	.303
64C	9.52	32.60	100	7.97	32.98	25.72	230.5	.366
76C	9.04	32.60	150	7.83	33.77	26.36	170.7	.466
88C	8.38	32.75	200	6.88	33.90	26.59	148.8	.546
101C	7.95	33.00						
151C	7.83	33.78						
201C	6.85	33.90						

AN 65 45 09.0 N 126 38.0 W DATE 27 AUG 71 1811 GCT WIRE
DRY WET CRUISE C7108H WIND DIRECTION 01 VEL 18 KTS BAR
SWELL DIRECTION 30 H 06 T 09 CLOUD 1 AMT 3 WEATHER

0C	18.45	30.41	0	18.45	30.42	21.69	613.6	0
1C	18.45	30.41	10	18.44	30.43	21.71	612.3	.061
12C	18.44	30.48	20	17.49	31.07	22.42	544.1	.119
23C	16.83	31.34	30	14.13	31.83	23.74	417.7	.167
33C	12.93	32.02	50	10.37	32.58	25.03	295.7	.239
51C	10.31	32.59	75	8.68	32.68	25.35	262.5	.308
62C	9.32	32.60	100	7.98	33.02	25.75	227.9	.370
76C	8.64	32.69	150	7.70	33.77	26.38	168.4	.469
88C	8.16	32.87	200	7.03	33.90	26.58	150.2	.548
102C	7.97	33.04						
150C	7.70	33.77						
202C	6.99	33.91						

NH 105 44 39.1 N 126 29.0 W DATE 27 AUG 71 2200 GCT WIRE
DRY 64.8 WET 61.8 CRUISE C7108H WIND DIRECTION 02 VEL 14 KTS BAR 17
SWELL DIRECTION 30 H 06 T 10 CLOUD 4 AMT 7 WEATHER 02

0C	18.11	30.58	0	18.11	30.58	21.90	593.4	0
2C	18.11	30.58	10	18.08	30.59	21.91	592.7	.059
11C	18.08	30.59	20	14.58	32.15	23.90	403.0	.109
20C	14.58	32.15	30	12.90	32.41	24.44	351.7	.147
31C	12.80	32.44	50	9.80	32.63	25.16	283.3	.210
50C	9.80	32.62	75	8.25	32.80	25.54	247.1	.277
64C	8.72	32.66	100	8.00	33.28	25.95	208.3	.333
76C	8.22	32.82	150	7.71	33.86	26.45	161.9	.426
91C	8.05	33.06	200	7.09	33.92	26.59	149.7	.504
100C	8.00	33.28	250	6.52	33.97	26.70	138.9	.576
150C	7.71	33.86	300	6.15	33.99	26.76	133.8	.644
200C	7.09	33.92	400	5.37	34.05	26.91	120.8	.771
250C	6.51	33.97	500	4.79	34.13	27.03	109.4	.886
304C	6.12	33.99	600	4.44	34.25	27.17	97.0	.990
402C	5.35	34.05	700	4.23	34.31	27.24	90.9	1.083
500C	4.79	34.12	800	3.91	34.36	27.31	84.3	1.171
602C	4.43	34.25	1000	3.41	34.45	27.43	73.5	1.329
704C	4.22	34.31						
802C	3.90	34.36						
1002C	3.41	34.45						

NH 85 44 39.1 N 126 01.3 W DATE 28 AUG 71 0204 GCT WIRE
DRY WET CRUISE C7108H WIND DIRECTION 33 VEL 20 KTS BAR

OBSERVED				INTERPOLATED				COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD	
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)	
SWELL DIRECTION 33 H 06 T 08 CLOUD 6 AMT 8 WEATHER										
0C	17.07	31.27		0	17.07	31.27	22.67	519.5	0	
1C	17.07	31.27		10	16.76	31.38	22.83	505.0	.051	
10C	16.76	31.38		20	16.38	31.46	22.97	491.8	.101	
20C	16.38	31.45		30	10.07	32.32	24.88	309.4	.141	
30C	10.07	32.32		50	8.29	32.68	25.44	256.3	.198	
51C	8.20	32.70		75	7.90	33.39	26.05	198.6	.255	
66C	7.96	33.13		100	7.82	33.67	26.29	176.6	.301	
77C	7.39	33.44		150	7.26	33.91	26.55	152.6	.384	
89C	7.86	33.61		200	6.84	33.93	26.63	145.6	.458	
100C	7.81	33.67		250	6.46	34.02	26.75	135.0	.528	
151C	7.25	33.91		300	6.11	34.04	26.81	129.6	.594	
203C	6.84	33.93		400	5.64	34.13	26.93	118.5	.718	
251C	6.45	34.02		500	5.15	34.17	27.03	110.2	.833	
306C	6.07	34.04		600	4.62	34.22	27.12	101.4	.938	
405C	5.62	34.13		700	4.47	34.32	27.22	93.2	1.036	
501C	5.14	34.17		800	4.20	34.38	27.30	86.2	1.125	
605C	4.60	34.22		1000	3.49	34.46	27.44	73.5	1.285	
704C	4.47	34.32								
801C	4.20	34.38								
1000C	3.49	34.46								

NH 65 44 39.1 N 125 33.8 W DATE 28 AUG 71 0734 GCT WIRE
 DRY 61.8 WET 60.0 CRUISE C7108H WIND DIRECTION 05 VEL 06 KTS BAR 16
 SWELL DIRECTION 30 H 04 T 10 CLOUD 4 AMT 1 WEATHER 01

0C	18.05	30.33		0	18.05	30.33	21.72	610.2	0	
1C	18.05	30.33		10	18.07	30.33	21.72	611.1	.061	
12C	18.07	30.33		20	15.88	31.19	22.88	499.9	.117	
20C	15.87	31.19		30	11.21	32.05	24.47	348.3	.159	
31C	10.74	32.12		50	7.71	32.79	25.61	239.9	.218	
50C	7.71	32.79		75	7.84	33.35	26.02	201.1	.273	
62C	7.85	33.13		100	7.60	33.70	26.34	171.7	.320	
76C	7.84	33.36		150	7.09	33.89	26.56	151.1	.400	
93C	7.85	33.60		200	6.64	33.92	26.64	144.0	.474	
102C	7.55	33.71		250	6.21	34.01	26.77	132.5	.543	
154C	7.07	33.90		300	5.78	33.90	26.74	135.4	.610	
201C	6.63	33.92		400	5.43	34.10	26.94	117.5	.736	
251C	6.20	34.01		500	5.03	34.19	27.05	107.6	.849	
300C	5.77	33.90		600	4.52	34.28	27.18	95.7	.950	
405C	5.42	34.12		700	4.28	34.35	27.27	88.6	1.043	
507C	5.00	34.19		800	4.07	34.41	27.34	82.5	1.128	
602C	4.51	34.28		1000	3.53	34.49	27.45	71.8	1.292	
703C	4.28	34.35								
802C	4.07	34.41								
1000C	3.53	34.49								

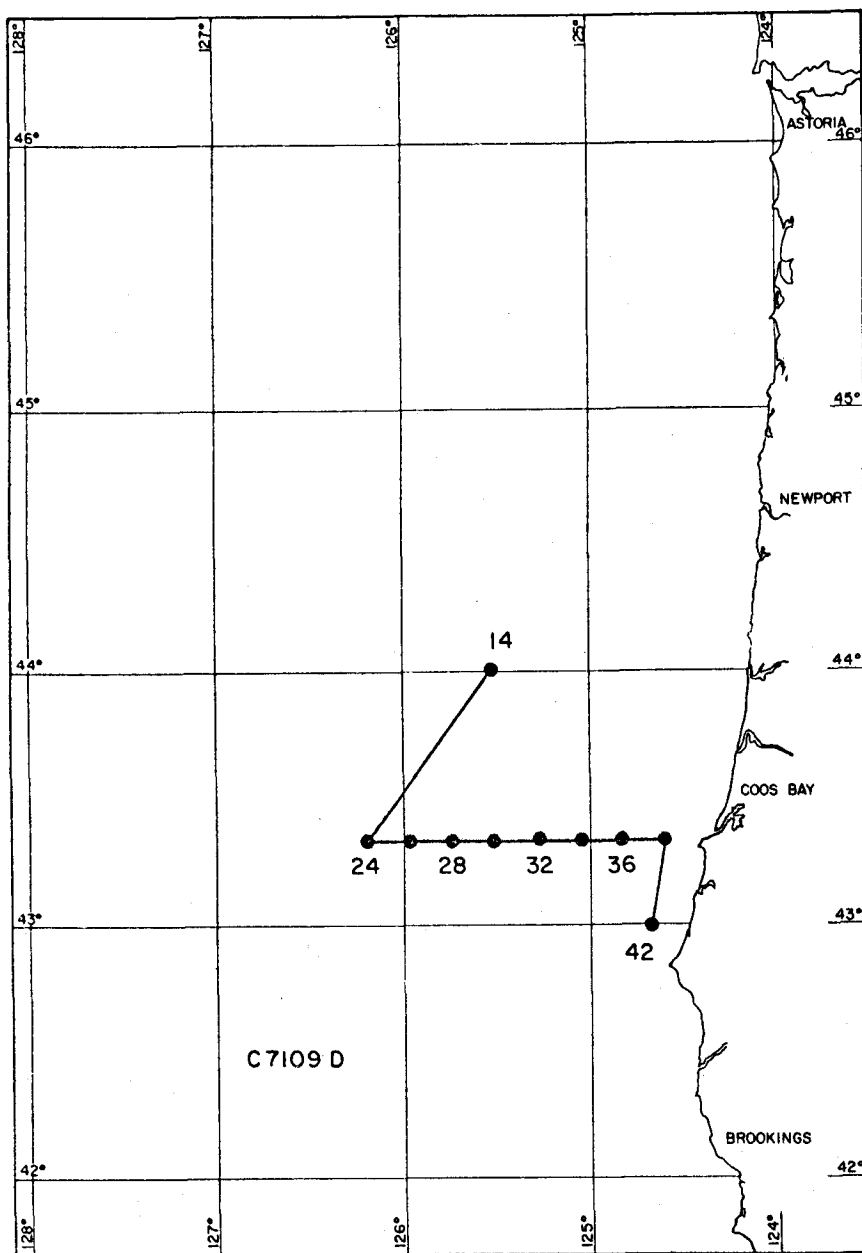
OBSERVED				INTERPOLATED				COMPUTED		
D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD	
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)	
14	44	00.0	N	125	31.3	W	DATE 11 SEP 71	0903	GCT WIRE	
DRY 63.0	WET 59.5	CRUISE C71090		WIND DIRECTION 27	VEL 10	KTS	BAR 19			
SWELL DIRECTION 25	H 05	T 12	CLOUD 3	AMT 1	WEATHER 03					
0	17.42	31.088		0	17.42	31.09	22.45	540.6	0	
10	17.44	31.109		10	17.44	31.11	22.46	539.8	.054	
30	11.85	32.333		20	14.97	31.68	23.45	445.7	.103	
50	8.57	32.658		30	11.85	32.34	24.58	338.3	.142	
75	8.01	33.071		50	8.57	32.66	25.38	261.8	.202	
100	8.04	33.642		75	8.01	33.08	25.79	223.6	.263	
150	7.40	33.897		100	8.04	33.65	26.23	182.0	.314	
200	6.88	33.953		150	7.41	33.90	26.52	154.8	.398	
250	6.58	33.982		200	6.89	33.96	26.64	144.4	.473	
300	6.24	34.013		250	6.58	33.99	26.70	139.0	.544	
400	5.95	34.067		300	6.24	34.02	26.77	132.9	.612	
598	4.76	34.202		400	5.95	34.07	26.85	126.4	.741	
799	4.21	34.333		500	5.36	34.13	26.97	115.5	.862	
999	3.63	34.411		600	4.75	34.20	27.10	104.0	.972	
				700	4.44	34.27	27.19	96.1	1.072	
				800	4.21	34.33	27.26	89.7	1.165	
				1000	3.63	34.41	27.38	78.7	1.333	

24 43 20.0 N 126 12.0 W DATE 11 SEP 71 1630 GCT WIRE 00
 DRY 63.6 WET 59.0 CRUISE C7109D WIND DIRECTION 33 VEL 07 KTS BAR 23
 SWELL DIRECTION 28 H 06 T 09 CLOUD 7 AMT 3 WEATHER

0	17.94	31.211		0	17.94	31.22	22.42	543.5	0	
10	17.95	31.209		10	17.95	31.21	22.42	544.1	.054	
30	16.15	31.655		20	17.42	31.37	22.66	521.2	.108	
50	10.78	32.538		30	16.15	31.66	23.18	472.2	.157	
75	8.85	32.628		50	10.78	32.54	24.93	305.2	.235	
100	8.13	32.820		75	8.85	32.63	25.32	268.6	.307	
150	7.62	33.766		100	8.13	32.82	25.57	244.3	.371	
199	6.94	33.924		150	7.63	33.77	26.39	167.6	.474	
249	6.37	33.966		200	6.93	33.93	26.61	147.3	.553	
299	5.84	33.921		250	6.36	33.97	26.72	137.6	.624	
399	5.22	34.013		300	5.83	33.92	26.75	134.9	.692	
597	4.64	34.188		400	5.22	34.01	26.90	121.6	.820	
797	4.14	34.314		500	4.87	34.11	27.01	111.6	.937	
997	3.64	34.412		600	4.63	34.19	27.10	103.5	1.044	
				700	4.38	34.26	27.18	96.4	1.144	
				800	4.13	34.32	27.26	90.1	1.237	
				1000	3.63	34.41	27.38	78.6	1.406	

26 43 20.0 N 125 58.6 W DATE 11 SEP 71 1955 GCT WIRE
 DRY 65.0 WET 60.5 CRUISE C7109D WIND DIRECTION 34 VEL 08 KTS BAR 24
 SWELL DIRECTION 25 H 05 T 08 CLOUD AMT 0 WEATHER

0	18.06	31.120		0	18.06	31.13	22.32	552.9	0	
10	17.90	31.117		10	17.90	31.12	22.36	549.7	.055	
20	15.50	31.752		20	15.50	31.76	23.39	451.1	.105	
30	13.01	32.217		30	13.01	32.22	24.27	367.9	.146	
50	10.40	32.574		50	10.40	32.58	25.02	295.3	.213	
62	9.71	32.604		75	8.95	32.63	25.31	269.0	.293	
75	8.85	32.623		100	7.97	33.06	25.79	224.3	.345	
87	8.32	32.697		150	7.61	33.67	26.31	174.8	.445	



OBSERVED

D	T	S	O ₂
(m)	(°C)	(‰)	(ml/l)
100	7.97	33.059	
125	7.83	33.438	
150	7.61	33.668	
175	7.35	33.835	
195	7.05	33.897	
250	6.34	33.924	

INTERPOLATED COMPUTED

Z	T	S	σ _t	δ	ΔD
(m)	(°C)	(‰)		(x10 ³)	(dyn./m)
200	6.98	33.91	26.59	149.3	.526
250	6.34	33.92	26.69	140.5	.598

28 43 20.0 N 125 44.8 W DATE 11 SEP 71 2150 GCT WIRE
 DRY 66.2 WET 61.1 CRUISE C7109D WIND DIRECTION 34 VEL 10 KTS BAR 23
 SWELL DIRECTION 26 H 05 T 09 CLOUD 3 AMT 1 WEATHER

0	17.70	31.171	0	17.70	31.18	22.45	540.9	0
9	16.75	31.564	10	16.59	31.61	23.04	484.9	.051
28	13.35	32.249	20	14.88	31.99	23.71	420.8	.097
46	10.45	32.584	30	12.98	32.30	24.33	361.7	.136
69	8.91	32.728	50	10.06	32.62	25.11	288.0	.201
93	8.36	33.037	75	8.71	32.80	25.47	254.3	.268
139	7.99	33.709	100	8.29	33.15	25.81	222.1	.328
185	7.26	33.855	150	7.82	33.77	26.36	170.4	.426
231	6.89	33.962	200	7.12	33.90	26.56	152.2	.507
278	6.43	33.984	250	6.71	33.98	26.88	141.4	.580
370	5.71	34.029	300	6.24	33.99	26.75	134.6	.649
554	5.04	34.176	400	5.57	34.05	26.88	123.1	.778
740	4.38	34.297	500	5.18	34.13	26.99	113.6	.896
925	3.86	34.378	600	4.87	34.21	27.09	105.8	1.005
			700	4.52	34.27	27.18	96.9	1.106
			800	4.20	34.33	27.26	90.0	1.200

30 43 20.0 N 125 31.0 W DATE 11 SEP 71 2350 GCT WIRE
 DRY 68.1 WET 63.1 CRUISE C7109D WIND DIRECTION 00 VEL 18 KTS BAR 23
 SWELL DIRECTION 27 H 05 T 10 CLOUD AMT 0 WEATHER

0	17.57	31.198	0	17.57	31.20	22.50	536.0	0
10	16.81	31.508	10	16.81	31.51	22.91	496.7	.052
20	15.52	31.837	20	15.52	31.84	23.45	445.3	.099
30	12.31	32.363	30	12.31	32.37	24.51	344.3	.138
50	9.46	32.596	50	9.46	32.60	25.19	279.7	.201
62	8.74	32.636	75	8.21	32.79	25.53	247.9	.267
75	8.21	32.782	100	8.41	33.44	26.02	202.5	.323
87	8.19	33.068	150	7.90	33.77	26.35	171.3	.416
100	8.41	33.437	200	7.34	33.90	26.53	154.8	.498
125	8.11	33.575	250	6.97	33.95	26.62	147.1	.573
150	7.89	33.768						
175	7.66	33.842						
195	7.40	33.892						
250	6.97	33.947						

32 43 20.5 N 125 16.4 W DATE 12 SEP 71 0010 GCT WIRE 40
 DRY 63.4 WET 59.6 CRUISE C7109D WIND DIRECTION 33 VEL 20 KTS BAR 22
 SWELL DIRECTION 33 H 03 T 06 CLOUD 7 AMT 1 WEATHER

0	17.23	31.364	0	17.23	31.37	22.71	516.2	0
10	17.24	31.361	10	17.24	31.37	22.70	517.0	.052
30	16.23	31.561	20	16.85	31.45	22.85	502.7	.103
50	14.70	31.722	30	16.23	31.57	23.09	480.8	.152

OBSERVED INTERPOLATED COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)
75	8.94	32.609		50	14.70	31.73	23.54	437.6	.244
100	8.60	32.801		75	8.94	32.61	25.29	271.3	.332
150	8.37	33.556		100	8.60	32.81	25.49	252.5	.398
200	7.98	33.835		150	8.37	33.56	26.11	193.9	.509
250	7.72	33.892		200	7.98	33.84	26.39	169.4	.600
300	7.57	33.916		250	7.72	33.90	26.47	161.2	.682
400	7.27	33.946		300	7.57	33.92	26.52	158.1	.762
599	5.99	34.030		400	7.28	33.95	26.58	153.1	.918
800	4.96	34.116		500	6.67	33.99	26.69	143.5	1.066
1000	4.59	34.239		600	5.98	34.03	26.82	132.3	1.204
				700	5.41	34.07	26.92	123.0	1.331
				800	4.96	34.12	27.01	114.6	1.450
				1000	4.59	34.24	27.15	103.1	1.668

34 43 20.0 N 125 02.9 W DATE 12 SEP 71 0410 GCT WIRE
 DRY 63.0 WET 59.5 CRUISE C71090 WIND DIRECTION 33 VEL 20 KTS BAR 22
 SWELL DIRECTION 27 H 07 T 12 CLOUD AMT 0 WEATHER

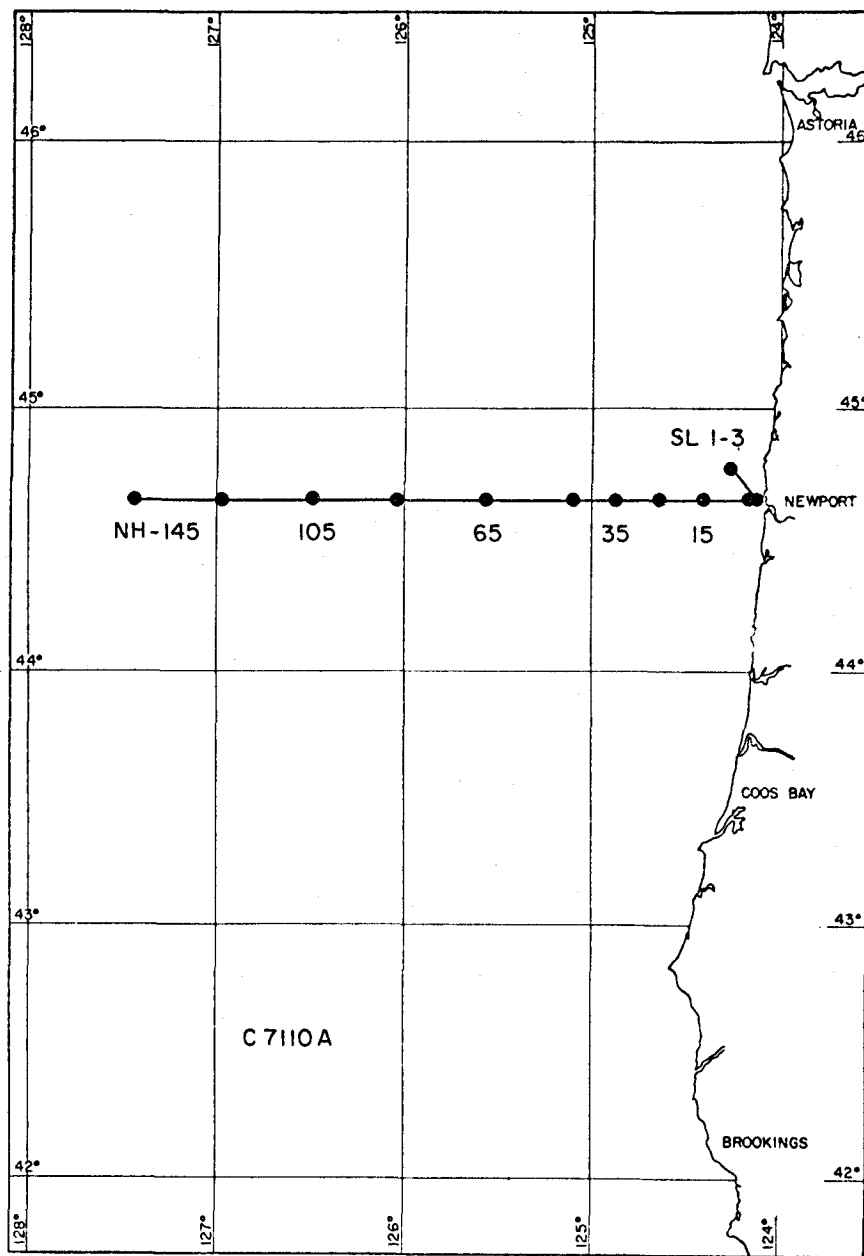
0	17.70	31.135	0	17.70	31.14	22.42	543.5	0
10	17.70	31.132	10	17.70	31.14	22.42	544.0	.054
20	17.31	31.290	20	17.31	31.29	22.63	524.0	.108
30	13.40	32.552	30	13.40	32.56	24.45	350.6	.151
50	9.86	32.591	50	9.86	32.60	25.13	286.3	.215
62	9.22	32.607	75	8.33	32.71	25.45	255.5	.283
75	8.33	32.702	100	8.11	33.26	25.92	212.0	.341
87	8.45	33.023	150	7.86	33.85	26.42	164.9	.436
100	8.11	33.251						
125	8.29	33.727						
150	7.86	33.952						

36 43 20.0 N 124 50.0 W DATE 12 SEP 71 0752 GCT WIRE 20
 DRY WET CRUISE C71090 WIND DIRECTION 34 VEL 20 KTS BAR 22
 SWELL DIRECTION 34 H 07 T 14 CLOUD AMT 0 WEATHER

0	16.73	31.480	0	16.73	31.48	22.91	496.7	0
10	16.74	31.481	10	16.74	31.49	22.91	497.1	.050
20	16.44	31.565	20	16.44	31.57	23.04	484.7	.099
30	13.68	32.131	30	13.68	32.14	24.07	386.9	.142
50	10.00	32.539	50	10.00	32.59	25.10	288.7	.210
62	9.22	32.615	75	8.48	32.71	25.43	257.8	.278
75	8.48	32.700	100	8.03	33.15	25.85	218.4	.338
87	8.26	32.842	150	7.74	33.71	26.33	173.7	.436
100	8.03	33.149						
125	8.00	33.436						
150	7.74	33.707						
175	7.40	33.852						

33 43 20.0 N 124 36.5 W DATE 12 SEP 71 1025 GCT WIRE
 DRY WET CRUISE C71090 WIND DIRECTION 00 VEL 18 KTS BAR 22
 SWELL DIRECTION 27 H 04 T 10 CLOUD AMT 0 WEATHER

0	16.02	31.560	0	16.02	31.56	23.13	475.5	0
10	16.01	31.560	10	16.01	31.56	23.13	475.6	.048
20	15.47	31.625	20	15.47	31.63	23.30	459.7	.094
30	9.49	32.590	30	9.49	32.59	25.19	280.3	.131



OBSERVED				INTERPOLATED				COMPUTED			
D	T	S	O ₂	Z	T	S	σ _t	8	ΔD		
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)		
50	8.44	33.045		50	8.44	33.05	25.70	231.2	.182		
62	8.49	33.359		75	8.28	33.55	26.12	191.9	.235		
75	8.25			100	7.95	33.78	26.35	170.9	.281		
87	8.09	33.663									
100	7.95	33.773									

42 43 00.0 N 124 41.1 W DATE 12 SEP 71 1320 GCT WIRE
 DRY 58.5 WET 57.0 CRUISE C71090 WIND DIRECTION 00 VEL 20 KTS BAR 22
 SWELL DIRECTION 27 H 04 T 10 CLOUD AMT 0 WEATHER

0	13.62	32.271		0	13.63	32.28	24.19	374.8	0
10	13.63			10	13.63	32.61	24.45	350.5	.036
20	10.13	32.796		20	10.13	32.80	25.24	274.9	.068
30	8.25	32.979		30	8.25	32.98	25.68	233.1	.093
50	8.44	33.412		50	8.44	33.42	25.99	204.0	.137
62	8.42	33.570		75	8.34	33.69	26.22	182.4	.185
75	8.34	33.688		100	8.15	33.79	26.33	172.9	.229
87	8.16	33.787							
100	8.15	33.785							

SL 1 44 46.0 N 124 16.5 W DATE 03 OCT 71 0356 GCT WIRE
 DRY WET CRUISE C7110A WIND DIRECTION 33 VEL 07 KTS BAR 22
 SWELL DIRECTION 29 H 05 T 08 CLOUD 7 AMT 1 WEATHER

0	14.70	31.816		0	14.70	31.82	23.61	429.4	0
10	9.96	32.538		10	9.96	32.54	25.07	291.1	.036
20	7.94	32.758		20	7.94	32.76	25.55	245.0	.063
30	8.01	33.071		30	8.01	33.08	25.79	222.8	.086
50	7.92	33.423		50	7.93	33.43	26.08	195.7	.128
63	7.78	33.630		75	7.77	33.72	26.33	172.1	.174
75	7.77	33.726							

SL 2 44 46.0 N 124 16.5 W DATE 03 OCT 71 0810 GCT WIRE 00
 DRY 56.2 WET 53.8 CRUISE C7110A WIND DIRECTION 18 VEL 04 KTS BAR 22
 SWELL DIRECTION 29 H 03 T 08 CLOUD 7 AMT 7 WEATHER 03

0	14.40	31.785		0	14.40	31.79	23.65	425.7	0
10	9.62	32.524		10	9.62	32.53	25.11	286.8	.036
20	7.98	32.737		20	7.98	32.74	25.53	247.1	.062
30	8.24	33.056		30	8.24	33.06	25.74	227.2	.086
50	7.92	33.402		50	7.93	33.41	26.06	197.3	.128
63	7.91	33.596		75	7.80	33.67	26.28	176.5	.175
76	7.79	33.671							

SL 3 44 46.0 N 124 16.5 W DATE 03 OCT 71 1220 GCT WIRE
 DRY 56.8 WET 56.0 CRUISE C7110A WIND DIRECTION VEL 00 KTS BAR 22
 SWELL DIRECTION 29 H 04 T 07 CLOUD 7 AMT 2 WEATHER 01

0	13.74	31.909		0	13.74	31.91	23.88	403.7	0
10	9.91	32.782		10	9.91	32.79	25.27	272.2	.034
20	8.04	32.892		20	8.04	32.90	25.64	236.4	.059
30	7.92	33.149		30	7.93	33.15	25.86	215.8	.082
50	7.87	33.610		50	7.88	33.61	26.23	181.1	.122
63	7.81	33.674		75	7.75	33.73	26.34	171.1	.166
76	7.75	33.737							

OBSERVED				INTERPOLATED				COMPUTED			
D	T	S	O ₂	Z	T	S	σ _t	8	ΔD		
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)		
SL 4	44 46.0 N		124 16.5 W								
DATE 03 OCT 71 1708 GCT WIRE											
DRY 56.6 WET 55.0 CRUISE C7110A WIND DIRECTION 15 VEL 08 KTS BAR 23											
SWELL DIRECTION 29 H 05 T 08 CLOUD 7 AMT 7 WEATHER 03											

0	14.22	31.823		0	14.22	31.83	23.72	419.4	0
10	12.47	32.130		10	12.47	32.13	24.30	363.9	.039
20	8.07	32.718		20	8.07	32.72	25.50	249.8	.070
30	8.12	33.023		30	8.12	33.03	25.74	228.0	.094
50	7.92	33.400		50	7.93	33.40	26.06	197.4	.136
63	7.82	33.662		75	7.78	33.70	26.31	174.1	.193
76	7.78	33.700							

SL 5 44 46.0 N 124 16.5 W DATE 03 OCT 71 2121 GCT WIRE
 DRY 61.9 WET 58.7 CRUISE C7110A WIND DIRECTION VEL 00 KTS BAR 23
 SWELL DIRECTION 29 H 06 T 08 CLOUD 3 AMT 6 WEATHER 02

0	14.29	31.856		0	14.29	31.86	23.73	418.3	0
10	8.39	32.693		10	8.39	32.70	25.44	256.0	.034
20	7.93	32.790		20	7.94	32.79	25.58	242.5	.059
30	8.07	33.123		30	8.07	33.13	25.82	219.8	.082
50	7.86	33.523		50	7.86	33.53	26.16	187.5	.122
63	7.77	33.655		75	7.74	33.71	26.33	172.4	.167
76	7.74	33.715							

NH 3 44 39.1 N 124 07.8 W DATE 04 OCT 71 1915 GCT WIRE 01
 DRY 61.9 WET 59.9 CRUISE C7110A WIND DIRECTION 00 VEL 12 KTS BAR 22
 SWELL DIRECTION 30 H 06 T 08 CLOUD 0 AMT 1 WEATHER 01

0	13.21	32.181		0	13.21	32.19	24.20	373.6	0
10	11.81	32.517		10	11.81	32.52	24.73	323.6	.035
20	10.32	33.127		20	10.32	33.13	25.47	253.5	.064
30	10.05	33.167		30	10.05	33.17	25.54	246.4	.089

NH 5 44 39.1 N 124 10.6 W DATE 04 OCT 71 2002 GCT WIRE 03
 DRY 57.8 WET 56.1 CRUISE C7110A WIND DIRECTION 00 VEL 12 KTS BAR 21
 SWELL DIRECTION 30 H 06 T 08 CLOUD AMT 0 WEATHER 02

0	13.40	32.172		0	13.40	32.18	24.16	377.8	0
10	12.46	32.343		10	12.46	32.35	24.47	348.0	.036
20	9.60	33.233		20	9.60	33.24	25.67	234.2	.065
30	9.10	33.340		30	9.10	33.34	25.83	218.7	.088
40	8.57	33.416		50	8.22	33.49	26.08	195.1	.129
50	8.22	33.488							

NH 15 44 39.1 N 124 24.6 W DATE 04 OCT 71 2132 GCT WIRE 10
 DRY 59.9 WET 58.7 CRUISE C7110A WIND DIRECTION 00 VEL 15 KTS BAR 20
 SWELL DIRECTION 29 H 04 T 05 CLOUD AMT 0 WEATHER 02

0	13.75	31.995		0	13.75	32.00	23.95	397.6	0
10	8.90	32.624		10	8.90	32.63	25.31	268.5	.033
20	7.88	32.786		20	7.89	32.79	25.58	242.1	.059
30	7.94	33.022		30	7.94	33.03	25.76	225.5	.082
50	7.88	33.489		50	7.89	33.49	26.14	190.3	.124
63	7.82	33.628		75	7.80	33.74	26.34	171.3	.169

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^3$)	(dyn.m)
76	7.80	33.747							

NH 25 44 39.1 N 124 38.6 W DATE 04 OCT 71 2308 GCT WIRE 01
 DRY 61.1 WET 59.8 CRUISE C7110A WIND DIRECTION 34 VEL 18 KTS BAR 19
 SWELL DIRECTION 30 H 06 T 05 CLOUD AMT 0 WEATHER 02

0	15.27	31.674	0	15.27	31.68	23.38	451.5	0
10	15.00	31.749	10	15.00	31.75	23.50	440.7	.045
20	12.04	32.103	20	12.04	32.11	24.36	358.4	.085
30	9.22	32.625	30	9.22	32.63	25.26	273.6	.116
50	8.02	33.062	50	8.02	33.07	25.78	224.0	.166
63	7.96	33.377	75	7.98	33.60	26.20	184.3	.217
76	7.98	33.611	100	7.85	33.76	26.35	171.1	.261
87	7.92	33.702	150	7.42	33.85	26.49	158.5	.344
100	7.85	33.752	200	7.26	33.92	26.56	152.0	.421
125	7.57	33.879	250	7.13	33.93	26.59	150.4	.497
150	7.41	33.850						
203	7.25	33.918						
250	7.13	33.931						

NH 35 44 39.0 N 124 52.6 W DATE 05 OCT 71 0102 GCT WIRE 15
 DRY 61.9 WET 60.3 CRUISE C7110A WIND DIRECTION 00 VEL 17 KTS BAR 18
 SWELL DIRECTION 30 H 06 T 09 CLOUD AMT 0 WEATHER 02

0	15.44	31.814	0	15.44	31.82	23.45	444.7	0
10	15.42	31.777	10	15.42	31.78	23.43	447.3	.045
20	15.19	31.788	20	15.19	31.79	23.49	442.0	.089
30	10.57	32.613	30	10.57	32.62	25.02	295.8	.126
49	8.89	32.407	50	8.83	32.44	25.17	282.3	.184
75	7.92	33.403	75	7.93	33.41	26.06	197.6	.244
100	7.82	33.706	100	7.82	33.71	26.31	174.1	.290
123	7.61	33.811	150	7.50	33.88	26.49	157.9	.373
148	7.51	33.876	200	7.28	33.91	26.55	153.2	.451
198	7.29	33.910	250	7.03	33.94	26.60	148.6	.526
247	7.05	33.936	300	6.67	33.97	26.68	141.8	.599
297	6.69	33.969						
370	5.98	34.055						

NH 45 44 39.1 N 125 06.5 W DATE 05 OCT 71 0316 GCT WIRE
 DRY 60.5 WET 59.2 CRUISE C7110A WIND DIRECTION 00 VEL 15 KTS BAR 19
 SWELL DIRECTION 30 H 06 T 09 CLOUD 7 AMT 2 WEATHER 03

0	15.37	31.676	0	15.38	31.68	23.36	453.4	0
10	15.29	31.684	10	15.29	31.69	23.39	451.4	.045
20	14.59	31.807	20	14.59	31.81	23.63	428.4	.089
49	8.04	32.753	30	12.32	32.11	24.31	363.4	.129
74	7.94	33.207	50	7.99	32.78	25.56	245.1	.190
99	7.81	33.552	75	7.93	33.22	25.92	211.5	.247
124	7.72	33.721	100	7.81	33.56	26.20	185.0	.296
148	7.44	33.854	150	7.41	33.86	26.49	158.0	.382
198	6.79	33.939	200	6.77	33.94	26.64	144.2	.458
247	6.30	33.946	250	6.28	33.95	26.71	137.9	.528
298	6.07	34.006	300	6.05	34.01	26.79	131.1	.595
345	5.48	34.042	400	5.46	34.04	26.89	122.3	.722
444	5.16	34.113	500	5.14	34.12	26.99	113.9	.840

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		($\times 10^3$)	(dyn.m)
802	4.24	34.364	500	4.95	34.14	27.02	110.3	.840	
1002	3.56	34.392	600	4.55	34.22	27.13	100.6	.945	
			700	4.38	34.30	27.21	93.7	1.042	
			800	4.24	34.36	27.28	87.9	1.133	
			1000	3.57	34.39	27.37	79.5	1.300	

NH 125 44 39.1 N 126 58.9 W DATE 05 OCT 71 1708 GCT WIRE
 DRY 59.8 WET 59.8 CRUISE C7110A WIND DIRECTION 33 VEL 07 KTS BAR 21
 SWELL DIRECTION 28 H 04 T 08 CLOUD 7 AMT 8 WEATHER 02

0	15.79	31.765	0	15.79	31.77	23.34	455.7	0
10	15.77	31.770	10	15.77	31.77	23.35	455.1	.046
20	15.77	31.775	20	15.77	31.78	23.35	455.0	.091
30	14.86	31.929	30	14.86	31.93	23.67	425.2	.135
50	9.53	32.598	50	9.53	32.60	25.19	280.7	.206
75	8.24	32.769	75	8.24	32.77	25.52	249.3	.272
100	8.09	33.299	100	8.09	33.30	25.96	208.1	.329
150	7.65	33.815	150	7.66	33.82	26.42	164.4	.422
201	7.10	33.950	200	7.11	33.95	26.60	148.0	.500
301	6.37	34.004	250	6.71	33.99	26.69	140.1	.572
402	5.75	34.062	300	6.38	34.00	26.74	135.7	.641
603	4.78	34.188	400	5.76	34.06	26.87	124.8	.771
804	4.14	34.333	500	5.23	34.12	26.98	114.9	.891
1005	3.58	34.406	600	4.79	34.19	27.08	105.7	1.001
			700	4.45	34.26	27.18	97.0	1.103
			800	4.15	34.33	27.27	89.2	1.196
			1000	3.59	34.41	27.38	78.8	1.364

NH 145 44 39.1 N 127 26.6 W DATE 05 OCT 71 2038 GCT WIRE 07
 DRY 59.8 WET 59.5 CRUISE C7110A WIND DIRECTION 32 VEL 08 KTS BAR 21
 SWELL DIRECTION 29 H 04 T 08 CLOUD 7 AMT 6 WEATHER 01

0	16.10	31.597	0	16.10	31.60	23.14	474.5	0
10	15.96	31.597	10	15.96	31.60	23.17	471.8	.047
20	15.90	31.611	20	15.90	31.62	23.20	469.8	.094
30	16.47	32.196	30	16.47	32.20	23.52	439.6	.140
50	10.12	32.574	50	10.12	32.58	25.07	291.7	.213
75	8.80	32.632	75	8.80	32.64	25.33	267.5	.283
100	8.05	32.778	100	8.05	32.78	25.55	246.3	.347
150	7.17	33.626	150	7.18	33.63	26.34	171.9	.452
200	7.04	33.894	200	7.05	33.90	26.57	150.9	.532
300	5.83	33.964	250	6.47	33.93	26.67	141.8	.605
401	5.28	34.058	300	5.83	33.97	26.79	131.4	.674
601	4.39		400	5.28	34.06	26.92	119.2	.799
802	3.88		500	4.80	34.12	27.03	109.7	.913
1002	3.44		600	4.39	34.19	27.12	101.1	1.019
			700	4.11	34.26	27.21	93.1	1.116
			800	3.88	34.33	27.29	86.2	1.205
			1000	3.44	34.41	27.40	77.1	1.368

593 4.70 34.203 600 4.67 34.21 27.11 102.5 .948

NH 65 44 39.1 N 125 34.6 W DATE 05 OCT 71 0648 GCT WIRE
 DRY 59.1 WET 58.0 CRUISE C7110A WIND DIRECTION 33 VEL 17 KTS BAR 19
 SWELL DIRECTION 29 H 05 T 08 CLOUD 7 AMT 8 WEATHER 03

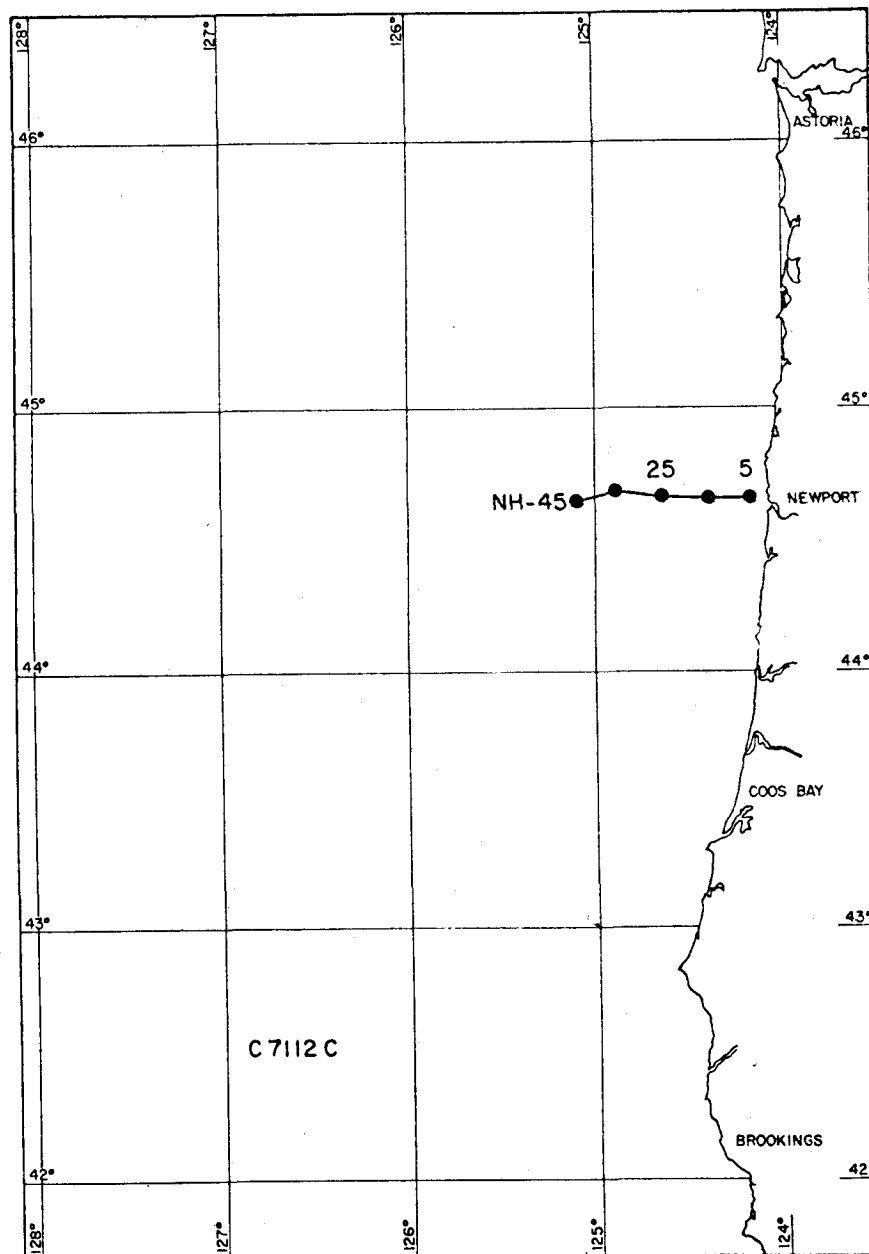
0	14.81	31.862	0	14.81	31.87	23.63	428.3	0
20	11.66	32.305	10	12.97	32.04	24.14	379.7	.040
49	7.85	33.061	20	11.66	32.31	24.59	336.8	.076
74	8.08	33.437	30	10.05	32.58	25.08	290.2	.108
98	7.97	33.697	50	7.86	33.08	25.81	220.7	.159
147	7.34	33.902	75	8.08	33.45	26.07	196.7	.211
193	6.84	33.957	100	7.95	33.71	26.30	175.8	.257
247	6.33	33.989	150	7.31	33.91	26.54	153.1	.340
296	6.06	33.998	200	6.82	33.96	26.65	143.4	.414
395	5.42	34.070	250	6.31	33.99	26.74	135.2	.483
433	4.92	34.142	300	6.03	34.00	26.79	131.5	.550
592	4.58	34.219	400	5.39	34.07	26.92	119.3	.675
793	4.11	34.327	500	4.89	34.15	27.04	108.8	.789
998	3.58	34.412	600	4.56	34.22	27.14	100.2	.894
			700	4.31	34.28	27.21	93.8	.991
			800	4.08	34.33	27.27	88.4	1.082
			1000	3.55	34.42	27.40	77.4	1.247

NH 85 44 39.1 N 126 02.6 W DATE 05 OCT 71 1006 GCT WIRE 15
 DRY 58.6 WET 58.6 CRUISE C7110A WIND DIRECTION 00 VEL 15 KTS BAR 19
 SWELL DIRECTION 30 H 05 T 05 CLOUD 7 AMT 8 WEATHER 10

0	15.30	31.746	0	15.30	31.75	23.43	446.8	0
10	15.05	31.749	10	15.05	31.75	23.49	441.7	.044
20	14.44	31.852	20	14.44	31.86	23.70	422.1	.088
29	10.59	32.218	30	10.32	32.26	24.79	318.3	.125
49	7.79	32.933	50	7.79	32.96	25.73	228.8	.179
73	7.85	33.388	75	7.85	33.42	26.08	195.9	.232
98	7.75	33.671	100	7.73	33.69	26.31	174.7	.279
147	7.23	33.887	150	7.20	33.89	26.55	152.7	.361
197	6.70	33.945	200	6.67	33.95	26.66	142.4	.434
295	5.81	33.994	250	6.19	33.98	26.75	134.7	.503
393	5.24	34.059	300	5.78	34.00	26.82	128.5	.569
593	4.56	34.226	400	5.21	34.06	26.94	117.7	.692
787	3.98	34.346	500	4.82	34.15	27.05	107.8	.805
993	3.52	34.423	600	4.52	34.23	27.15	99.8	.908
			700	4.22	34.30	27.23	91.6	1.004
			800	3.95	34.35	27.30	85.2	1.092
			1000	3.48	34.43	27.41	75.7	1.253

NH 105 44 39.1 N 126 30.0 W DATE 05 OCT 71 1317 GCT WIRE
 DRY 58.0 WET 58.2 CRUISE C7110A WIND DIRECTION 00 VEL 10 KTS BAR 19
 SWELL DIRECTION 30 H 04 T 08 CLOUD 7 AMT 8 WEATHER 02

0	15.70	31.414	0	15.70	31.42	24.09	479.5	0
10	15.36	31.711	10	15.36	31.72	23.39	450.9	.047
20	13.81	31.986	20	13.81	31.99	23.93	399.9	.089
30	10.30	32.477	30	10.30	32.48	24.96	301.4	.124
50	8.59	32.642	50	8.58	32.65	25.37	263.2	.181
75	7.83	32.959	75	7.83	32.96	25.73	229.4	.242
100	7.83	33.366	100	7.83	33.37	26.05	199.5	.296
150	7.38	33.842	150	7.39	33.85	26.48	158.7	.385
200	6.96	33.951	200	6.96	33.96	26.63	145.6	.461
300	5.97	33.998	250	6.45	33.99	26.72	137.1	.532
401	5.44	34.065	300	5.97	34.00	26.80	130.6	.599
600	4.55	34.213	400	5.44	34.06	26.91	120.6	.724



OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)
88C	5.27	33.49		200	7.14	33.96	26.60	148.0	.418
100C	5.22	33.67		250	6.53	33.93	26.67	142.5	.490
150C	7.74	33.93		300	6.27	33.99	26.75	135.3	.560
200C	7.13	33.95							
252C	6.51	33.93							
300C	6.27	33.99							

NH 45 44 39.1 N 125 06.4 W DATE 08 DEC 71 2028 GCT WIRE
 DRY 42.3 WET 42.1 CRUISE C7112C WIND DIRECTION 17 VEL 26 KTS BAR 23
 SWELL DIRECTION 32 H 08 T 05 CLOUD 6 AMT 8 WEATHER

0C	10.27	32.35		0	10.27	32.35	24.87	309.8	0
1C	10.27	32.35		10	10.29	32.35	24.87	310.3	.031
10C	10.29	32.35		20	10.29	32.35	24.86	310.8	.062
22C	10.29	32.35		30	10.29	32.34	24.86	311.6	.093
31C	10.29	32.34		50	9.13	32.65	25.28	271.3	.151
51C	9.04	32.67		75	7.94	32.98	25.73	229.3	.214
62C	8.11	32.89		100	7.95	33.48	26.12	192.7	.267
75C	7.94	32.98							
87C	8.21	33.39							
100C	7.95	33.48							

NH 5 44 39.5 N 124 10.7 W DATE 07 DEC 71 2029 GCT WIRE
 DRY 41.1 WET 38.6 CRUISE C7112C WIND DIRECTION 09 VEL 10 KTS BAR 31
 SWELL DIRECTION 32 H 08 T 05 CLOUD 6 AMT 5 WEATHER

0C	9.59	31.64		0	9.59	31.65	24.43	351.8	0
1C	9.59	31.64		10	9.88	32.07	24.72	324.5	.034
10C	9.88	32.07		20	9.89	32.30	24.89	307.8	.065
20C	9.89	32.30		30	9.90	32.35	24.93	304.5	.096
30C	9.90	32.35		50	9.89	32.38	24.95	303.2	.157
50C	9.89	32.37							

NH 15 44 39.5 N 124 24.2 W DATE 07 DEC 71 2300 GCT WIRE
 DRY 42.1 WET 35.1 CRUISE C7112C WIND DIRECTION 09 VEL 02 KTS BAR 9
 SWELL DIRECTION 32 H 06 T 06 CLOUD 3 AMT 8 WEATHER

0C	9.42	31.79		0	9.42	31.79	24.57	338.0	0
1C	9.42	31.79		10	9.89	32.25	24.86	311.3	.032
10C	9.89	32.25		20	9.89	32.27	24.87	310.5	.064
21C	9.89	32.27		30	9.92	32.27	24.86	311.1	.095
32C	9.93	32.27		50	9.79	32.48	25.05	293.5	.155
50C	9.79	32.48		75	8.19	33.53	26.12	192.0	.216
62C	8.56	33.24							
75C	8.19	33.53							
87C	8.15	33.50							

OBSERVED

INTERPOLATED

COMPUTED

D	T	S	O ₂	Z	T	S	σ_t	δ	ΔD
(m)	(°C)	(‰)	(ml/l)	(m)	(°C)	(‰)		(x10 ⁵)	(dyn.m)
NH 25	44	40.0 N	124	38.6 W	DATE 08 DEC 71	0138 GCT	WIRE		
DRY 43.0	WET 39.1	CRUISE C7112C	WIND DIRECTION 16	VEL 07 KTS	BAR 29				
SWELL DIRECTION 31	H 07 T 06	CLOUD 6	AMT 8	WEATHER					
0C	10.18	32.34		0	10.18	32.34	24.88	309.1	0
1C	10.18	32.34		10	10.17	32.31	24.86	311.3	.031
10C	10.17	32.31		20	10.18	32.35	24.88	309.3	.062
21C	10.18	32.35		30	10.18	32.32	24.86	311.1	.093
30C	10.18	32.32		50	9.79	32.38	24.97	301.6	.154
50C	9.79	32.37		75	8.20	33.13	25.81	221.9	.220
62C	8.87	32.72		100	8.07	33.55	26.16	189.2	.271
75C	8.20	33.13		150	7.82	33.92	26.48	159.6	.358
87C	8.14	33.43		200	7.40	33.98	26.59	149.3	.435
100C	8.07	33.55		250	6.74	34.02	26.71	138.5	.507
150C	7.81	33.91							
200C	7.39	33.98							
251C	6.72	34.02							

NH 35 44 41.3 N 124 53.5 W DATE 08 DEC 71 0528 GCT WIRE
 DRY 41.0 WET 39.5 CRUISE C7112C WIND DIRECTION 16 VEL 10 KTS BAR 27
 SWELL DIRECTION 32 H 07 T 05 CLOUD 6 AMT 8 WEATHER

0C	10.14	32.30		0	10.14	32.30	24.85	311.4	0
6C	10.14	32.30		10	10.15	32.33	24.87	310.2	.031
14C	10.16	32.35		20	10.16	32.34	24.89	309.3	.062
26C	10.16	32.31		30	10.16	32.28	24.83	314.2	.093
32C	10.16	32.27		50	8.95	32.81	25.44	256.6	.150
54C	8.65	32.96		75	8.40	33.40	25.98	205.3	.208
62C	8.50	33.06		100	8.22	33.67	26.23	182.5	.256
76C	8.39	33.42		150	7.74	33.93	26.50	157.1	.341

TABLE 5. Supplementary observations of surface temperature and salinity.

Date 1971	Time GMT	Latitude	Longitude	Temp °C	Sal ‰	Date 1971	Time GMT	Latitude	Longitude	Temp °C	Sal ‰
Y7101B						Jan 21	2005	43°58.8'	126°05.4'	8.4	32.590
Jan 8	0140	44°39.1'	124°10.5'	9.05	31.337	Jan 21	2145	43°59.0'	126°19.3'	9.1	32.645
Jan 8	0503	44°38.9'	124°24.6'	9.4	32.118	Jan 22	0030	43°59.2'	126°32.8'	9.2	32.578
Jan 8	0635	44°39.1'	124°38.1'	10.1	32.372	Jan 22	0155	43°59.0'	126°46.5'	9.3	32.514
Jan 8	0817	44°39.1'	124°52.1'	10.0	32.374	Jan 22	0300	43°59.0'	127°00.2'	9.4	32.531
Jan 8	1015	44°39.1'	125°06.0'	9.91	32.441	Jan 22	0545	43°49.0'	127°02.3'	9.3	32.607
Jan 8	1403	44°30.1'	125°35.0'	9.41	32.543	Jan 22	0630	43°39.0'	127°05.0'	9.6	32.651
Jan 8	1855	44°39.4'	125°48.8'	9.2	---	Jan 22	0713	43°39.0'	126°50.5'	9.4	32.571
Jan 8	2030	44°39.4'	126°03.0'	8.9	---	Jan 22	1117	43°39.0'	126°36.9'	9.5	32.615
Jan 8	2250	44°39.0'	126°17.0'	9.1	32.560	Jan 22	1355	43°39.0'	126°22.4'	9.5	32.526
Jan 9	0115	44°39.0'	126°39.0'	9.3	32.553	Jan 22	1505	43°39.0'	126°09.5'	9.5	32.577
Jan 9	0503	44°38.6'	126°45.2'	9.5	32.513	Jan 22	1711	43°38.6'	125°56.0'	9.1	32.561
Jan 9	0646	44°39.1'	126°58.9'	9.4	32.486	Jan 22	1915	43°39.0'	126°41.9'	9.4	32.520
Jan 9	0920	44°38.8'	127°13.0'	9.4	32.470	Jan 22	2145	43°38.8'	126°27.6'	9.5	---
Jan 9	1120	44°39.2'	127°26.7'	9.5	---	Jan 22	2240	43°39.0'	125°14.0'	9.4	32.569
Jan 9	1750	44°40.0'	127°40.8'	9.5	32.462	Jan 23	0120	43°39.0'	125°00.5'	9.6	32.549
Jan 9	1825	44°39.1'	127°54.8'	9.5	32.460	Jan 23	0330	43°31.1'	125°00.5'	9.5	32.617
Jan 10	1710	44°38.7'	127°55.5'	9.3	32.486	Jan 23	0432	43°20.5'	124°56.6'	9.8	32.565
Jan 10	1930	44°39.1'	128°09.0'	9.0	32.594	Jan 23	0800	43°20.5'	125°10.2'	9.9	32.608
Jan 10	2225	44°39.6'	128°22.1'	9.0	32.556	Jan 23	1135	43°20.5'	125°24.1'	9.5	32.588
Jan 11	0015	44°39.0'	128°36.8'	9.0	32.542	Jan 23	1330	43°20.5'	125°37.5'	9.3	32.519
Jan 11	0247	44°39.0'	128°50.0'	9.2	---	Jan 23	1555	43°20.0'	125°50.8'	9.2	32.505
Jan 11	0545	44°19.2'	128°51.2'	9.0	32.545	Jan 23	1815	43°20.5'	126°04.0'	9.4	32.555
Jan 11	0820	44°18.0'	128°36.2'	8.9	32.582	Jan 23	2055	43°20.5'	126°17.9'	9.3	32.641
Jan 11	0935	44°19.0'	128°23.0'	9.3	---	Jan 23	2330	43°10.2'	126°31.3'	9.2	32.580
Jan 11	1400	44°18.0'	128°23.7'	8.9	32.554	Jan 24	0045	43°00.0'	126°45.0'	9.5	32.601
Jan 11	1805	44°17.8'	128°08.8'	8.9	32.567	Jan 24	0359	42°59.3'	126°24.0'	9.7	32.677
Jan 11	1945	44°18.9'	127°55.4'	8.9	---	Jan 24	0645	42°58.1'	126°12.8'	9.7	32.534
Jan 11	2209	44°19.2'	127°40.8'	8.1	32.544	Jan 24	0808	43°00.0'	125°57.5'	9.4	32.612
Jan 11	2330	44°19.0'	127°26.8'	8.6	32.512	Jan 24	1056	43°00.0'	125°45.0'	9.4	32.514
Jan 12	0200	44°19.0'	127°27.0'	8.5	32.524	Jan 24	1210	43°00.0'	125°30.4'	9.5	32.183
Jan 12	0740	44°18.6'	127°13.2'	9.1	32.525	Jan 24	1815	42°59.8'	126°10.6'	8.8	32.514
Jan 12	1015	44°19.0'	126°58.8'	8.8	32.553	Jan 26	2215	43°00.0'	126°24.0'	9.5	32.525
Jan 12	1117	44°19.1'	126°45.0'	8.5	---	Jan 27	0205	43°07.0'	125°56.0'	9.0	32.562
Jan 12	1404	44°19.0'	126°31.2'	8.7	---	Jan 27	0545	43°12.0'	125°29.0'	9.5	32.593
Jan 12	1500	44°19.0'	126°17.4'	9.2	32.522	Jan 27	0713	43°16.0'	125°15.6'	9.5	32.523
Jan 12	1610	44°18.9'	126°03.5'	9.4	32.499	Jan 27	0930	43°20.4'	124°56.1'	10.0	---
Jan 12	2120	44°18.9'	125°49.0'	8.4	32.498	C7101G					
Jan 12	2245	44°18.9'	125°35.0'	8.6	32.519	Jan 26	2035	44°46.3'	124°16.5'	9.5	---
Jan 13	0120	44°19.0'	125°21.8'	8.7	32.544	Jan 27	1925	44°46.3'	124°16.5'	9.3	---
Jan 13	0445	44°19.0'	125°06.0'	9.6	32.487	Jan 27	2030	44°46.3'	124°16.5'	9.3	---
Jan 13	0715	44°19.0'	124°51.8'	9.6	32.512	Jan 27	2143	44°46.3'	124°16.5'	9.6	---
Jan 13	1050	44°19.2'	124°50.2'	9.4	32.520	Jan 27	2250	44°46.3'	124°16.5'	9.4	---
Jan 13	1555	43°59.9'	125°00.0'	9.3	---	Jan 28	1755	44°46.3'	124°16.5'	8.6	---
Jan 13	1950	43°59.1'	125°21.5'	9.2	---	Jan 28	2155	44°46.3'	124°16.5'	9.1	---
Jan 13	2240	43°59.0'	125°37.9'	8.9	---	Jan 29	1945	44°46.3'	124°16.5'	8.7	---
Jan 14	0120	43°59.0'	125°51.5'	8.9	32.533	C7102C					
Jan 14	0310	43°59.0'	126°05.2'	9.1	32.503	Feb 8	2145	44°46.3'	124°16.5'	8.8	---
Jan 14	0605	43°59.2'	126°17.6'	9.1	32.576	Feb 8	2350	44°46.3'	124°16.5'	8.9	---
Jan 14	0940	43°59.0'	126°32.6'	9.0	32.556	Feb 9	0210	44°46.3'	124°16.5'	8.5	---
Jan 14	1120	43°59.1'	126°46.6'	9.5	32.597	Feb 9	0350	44°46.3'	124°16.5'	8.4	---
Jan 14	1310	43°59.0'	127°00.0'	9.6	32.543	Feb 9	0555	44°46.3'	124°16.5'	8.5	---
Jan 14	1630	44°00.1'	127°13.3'	8.8	---	Feb 9	0740	44°46.3'	124°16.5'	8.5	---
Jan 14	1710	44°00.4'	127°21.1'	9.1	---	Y7103B					
Jan 14	1945	43°59.0'	127°00.1'	8.5	---	Mar 6	1820	44°39.1'	124°07.2'	8.3	31.560
Jan 14	2205	43°59.6'	126°53.1'	9.0	---	Mar 8	0020	44°39.1'	125°35.0'	8.3	32.578
Jan 14	2230	43°59.9'	126°46.2'	9.5	---	Mar 8	0245	44°39.1'	126°03.1'	8.3	32.558
Jan 14	2340	43°59.5'	126°32.8'	9.4	---	Mar 8	0745	44°39.2'	126°31.0'	8.6	---
Y7101C						Mar 8	1510	44°39.1'	125°06.0'	8.5	32.579
Jan 21	0500	43°58.8'	124°22.6'	8.7	24.030	Mar 8	1745	44°40.0'	124°57.8'	8.1	---
Jan 21	0645	43°59.2'	124°26.5'	8.8	32.551	C7103C					
Jan 21	0825	43°59.0'	124°47.1'	9.6	32.352	Mar 8	2030	44°46.4'	124°16.5'	8.4	---
Jan 21	1110	43°59.0'	125°01.1'	9.4	32.557	Mar 9	0015	44°46.4'	124°16.5'	8.2	---
Jan 21	1300	43°59.0'	125°11.0'	9.2	32.582						
Jan 21	1410	43°59.0'	125°24.0'	8.5	32.496						
Jan 21	1515	43°59.0'	125°37.7'	8.9	32.527						
Jan 21	1748	43°59.1'	125°51.9'	8.4	32.547						

Date 1971	Time GMT	Latitude	Longitude	Temp °C	Sal ‰	Date 1971	Time GMT	Latitude	Longitude	Temp °C	Sal ‰
Mar 9	0345	44°46.6'	124°16.5'	8.1	---	Apr 16	1330	44°46.5'	124°16.2'	9.9	30.894
Mar 9	0700	44°46.6'	124°16.5'	8.0	---	Apr 16	2045	44°46.7'	124°16.1'	9.9	31.797
Y7103C						Apr 17	0110	44°46.4'	124°16.8'	9.2	32.258
Mar 9	0330	44°39.1'	124°24.4'	8.5	---	Apr 17	0320	44°46.5'	124°16.5'	9.4	32.260
Mar 9	0450	44°39.1'	124°38.5'	8.2	---	Apr 17	0435	44°46.5'	124°52.4'	9.5	32.286
Mar 9	0840	44°19.0'	124°13.2'	8.4	---	Apr 17	1935	44°39.0'	124°52.4'	9.4	32.541
Mar 9	1045	44°19.0'	124°27.1'	8.3	---	Apr 17	2135	44°39.1'	125°06.1'	8.8	32.493
Mar 9	1250	44°19.0'	124°41.0'	8.3	---	Apr 18	0105	44°39.1'	125°20.1'	9.1	32.465
Mar 9	1450	44°19.0'	124°55.2'	8.3	---	Apr 18	0430	44°39.0'	125°35.3'	8.6	32.589
Mar 9	1730	44°19.1'	125°09.2'	8.6	---	Apr 18	0710	44°39.1'	125°49.2'	9.0	32.617
Mar 9	2255	44°19.0'	125°36.7'	9.1	---	Apr 18	1218	44°39.1'	126°03.0'	9.1	32.629
Mar 10	0245	44°19.0'	126°04.8'	8.7	---	Apr 18	1515	44°39.1'	126°31.0'	9.4	32.629
Mar 10	0630	44°19.0'	126°32.5'	8.8	---	Apr 18	1915	44°39.6'	126°38.9'	9.5	32.612
Mar 10	1050	43°59.1'	126°33.5'	9.3	---	Apr 18	2320	44°39.1'	127°27.0'	9.0	32.597
Mar 11	0130	43°59.1'	126°05.7'	9.4	---	Apr 19	0300	44°39.1'	127°55.0'	9.2	32.598
Mar 11	0625	43°58.9'	125°38.3'	9.0	---	Apr 19	0630	44°19.0'	127°28.4'	9.3	32.635
Mar 11	1015	43°59.0'	125°10.7'	8.9	---	Apr 19	0935	44°18.8'	127°00.2'	9.5	32.624
Mar 11	1250	43°59.0'	124°56.9'	8.6	---	Apr 19	1320	44°19.0'	126°32.4'	9.8	32.608
Mar 11	1440	43°59.0'	124°42.8'	8.5	---	Apr 19	1615	44°19.1'	126°05.0'	9.4	32.586
Mar 12	1545	43°59.0'	124°29.1'	8.5	---	Apr 19	1830	44°19.0'	125°50.9'	9.4	32.632
Mar 12	1745	43°59.0'	124°15.2'	8.6	---	Apr 19	2100	44°19.0'	125°37.0'	9.1	---
Mar 12	2035	43°39.1'	124°19.7'	8.4	---	Apr 19	2300	44°19.1'	125°22.9'	9.1	32.482
Mar 12	2225	43°38.8'	124°33.2'	8.6	---	Apr 20	0325	44°19.0'	125°09.8'	9.5	32.504
Mar 13	0645	43°38.8'	124°46.7'	8.4	---	Apr 20	0530	44°19.0'	124°54.5'	9.2	32.469
Mar 13	0925	43°39.2'	125°00.5'	8.5	---	Apr 20	0905	44°19.1'	124°41.2'	9.3	32.479
Mar 13	1155	43°38.8'	125°14.5'	8.6	---	Apr 20	1215	43°59.0'	124°47.0'	9.3	32.268
Mar 13	1550	43°39.0'	125°42.0'	8.5	---	Apr 20	1328	43°59.0'	124°56.7'	8.8	32.498
Mar 13	1935	43°39.5'	126°09.0'	9.2	---	Apr 20	1535	43°59.0'	125°10.9'	8.8	32.547
Mar 13	2310	43°39.0'	126°36.2'	8.9	---	Apr 20	1800	43°59.0'	125°24.5'	8.9	32.622
Y7103E						Apr 20	2045	43°58.8'	125°38.3'	8.9	32.595
Mar 28	1715	44°38.6'	124°10.4'	8.8	32.165	Apr 20	2305	43°58.7'	126°52.0'	9.1	32.631
Mar 28	1747	44°39.6'	124°17.5'	8.6	---	Apr 21	0130	43°58.8'	126°05.8'	9.0	32.639
Mar 28	1821	44°39.7'	124°24.4'	8.9	---	Apr 21	0500	43°59.0'	126°33.5'	8.9	32.637
Mar 28	1855	44°39.7'	124°31.4'	8.8	32.330	Apr 21	0820	43°39.0'	126°37.0'	9.5	32.626
Mar 28	1932	44°39.6'	124°38.4'	8.8	---	Apr 21	1120	43°39.0'	126°08.6'	9.2	32.626
Mar 28	2030	44°39.2'	124°52.0'	8.6	32.454	Apr 21	1417	43°39.0'	126°41.6'	9.7	32.150
Mar 28	2115	44°38.5'	125°06.1'	8.7	32.544	Y7106B					
Mar 29	0400	44°38.8'	125°20.0'	8.8	32.551	June 12	1430	45°36.2'	122°46.5'	14.9	---
Mar 29	1015	44°39.2'	125°49.0'	8.9	---	June 12	1600	45°39.2'	122°45.3'	13.5	---
Mar 29	1715	44°50.1'	126°17.0'	8.9	---	June 12	1945	46°11.2'	123°10.5'	13.6	---
Mar 29	1844	44°39.1'	126°31.0'	8.8	---	June 12	2353	46°15.1'	124°59.0'	13.4	---
Mar 30	1050	44°39.2'	124°10.5'	8.7	---	June 13	0500	46°00.7'	124°05.9'	14.4	20.222
Mar 30	1403	44°38.1'	124°17.5'	8.8	---	June 13	0600	45°50.2'	124°02.5'	14.7	19.636
Mar 30	1646	44°39.2'	124°24.3'	8.7	---	June 13	0700	45°39.4'	124°02.5'	13.7	26.377
Mar 30	2119	44°39.4'	124°38.1'	8.7	---	June 13	0800	45°28.7'	124°02.6'	13.7	27.445
Mar 31	0125	44°39.1'	124°52.4'	8.5	---	June 13	0900	45°18.1'	124°02.8'	13.5	27.554
Mar 31	0910	44°39.1'	124°06.9'	8.9	---	June 13	1000	45°07.4'	124°03.9'	13.4	28.820
Mar 31	0940	44°31.1'	124°07.3'	8.9	---	June 13	1100	44°56.5'	124°05.6'	13.0	29.170
Mar 31	1010	44°29.2'	124°07.7'	8.9	---	June 13	1200	44°46.1'	124°07.6'	13.0	29.517
Mar 31	1040	44°24.2'	124°08.2'	8.9	---	June 13	1330	44°39.0'	124°06.2'	12.9	---
Mar 31	1110	44°19.3'	124°08.7'	8.9	---	June 13	1900	44°39.4'	124°10.6'	12.4	---
Mar 31	1140	44°14.2'	124°09.1'	8.8	---	June 13	1930	44°39.5'	124°13.5'	12.5	---
Mar 31	1210	44°08.2'	124°09.8'	8.9	---	June 13	2021	44°39.1'	124°17.9'	12.3	---
Mar 31	1355	44°25.5'	124°12.0'	8.6	---	June 14	0330	44°39.0'	124°24.5'	13.1	---
Mar 31	1749	44°50.3'	124°10.3'	8.7	---	June 14	0645	44°38.8'	124°38.6'	13.3	---
Mar 31	2025	44°55.2'	124°22.6'	8.7	---	June 14	1103	44°39.5'	124°52.5'	13.6	33.776
Y7104B						June 14	1600	44°39.7'	125°09.4'	13.2	---
Apr 15	2320	44°39.1'	124°07.7'	10.0	31.531	June 14	1900	44°39.1'	125°21.1'	14.6	27.447
Apr 16	0030	44°39.2'	124°10.6'	10.3	31.044	June 14	2221	44°39.0'	125°35.0'	12.7	---
Apr 16	0230	44°39.2'	124°24.5'	9.3	32.478	June 15	0115	44°38.5'	125°46.0'	13.3	---
Apr 16	0350	44°39.1'	124°38.2'	9.4	32.501	June 15	0400	44°39.0'	126°03.0'	12.6	---
Apr 16	1105	44°46.4'	124°16.6'	9.9	30.888	June 15	0705	44°39.5'	126°17.0'	12.5	---
						June 15	1010	44°38.9'	126°31.0'	12.6	---
						June 15	1300	44°45.0'	126°27.0'	12.3	---
						June 15	1400	44°54.0'	126°19.5'	11.9	---

Date 1971	Time GMT	Latitude	Longitude	Temp °C	Sal ‰	Date 1971	Time GMT	Latitude	Longitude	Temp °C	Sal ‰
June 15	1500	44°53.0'	126°03.3'	12.1	---	Sept 11	2130	43°20.0'	125°44.8'	18.0	---
June 15	1600	44°52.7'	125°58.0'	13.3	---	Sept 11	2250	43°20.0'	125°38.4'	17.6	31.484
June 15	1700	44°52.3'	125°32.6'	13.4	---	Sept 11	2330	43°20.0'	125°31.0'	17.8	---
June 15	1800	44°52.0'	125°17.6'	13.9	---	Sept 12	0000	43°20.0'	125°24.0'	17.3	31.377
June 15	1900	44°52.4'	125°03.5'	13.8	---	Sept 12	0030	43°20.0'	125°16.4'	17.3	---
June 15	2000	44°52.5'	124°47.8'	13.6	---	Sept 12	0310	43°19.8'	125°09.7'	17.7	31.215
June 15	2100	44°53.9'	124°31.8'	13.5	---	Sept 12	0340	43°20.0'	125°02.9'	17.7	---
June 15	2200	44°55.0'	124°22.5'	13.3	---	Sept 12	0555	43°20.0'	124°56.3'	17.9	31.137
June 16	0050	44°52.7'	124°15.3'	13.0	---	Sept 12	0705	43°20.0'	124°50.0'	16.9	---
June 16	0320	44°50.1'	124°10.2'	13.5	---	Sept 12	0924	43°20.0'	124°42.8'	16.4	31.550
June 16	0600	44°48.5'	124°05.7'	12.9	---	Sept 12	1000	43°20.0'	124°36.5'	16.2	---
C7106E						Sept 12	1115	43°15.0'	124°37.7'	14.9	31.826
June 18	1320	44°39.1'	127°27.0'	12.8	32.152	Sept 12	1140	43°10.0'	124°38.7'	14.4	31.894
June 18	1530	44°39.1'	127°13.0'	13.1	32.020	Sept 12	1215	43°05.0'	124°39.7'	14.5	31.913
June 18	1710	44°39.1'	126°59.0'	13.1	32.010	Sept 12	1250	43°00.0'	124°41.1'	14.1	---
June 18	1820	44°39.1'	126°45.0'	13.3	31.687	Sept 12	1415	43°00.0'	124°48.0'	15.0	31.801
June 18	1935	44°39.1'	126°31.0'	13.4	31.777	Sept 14	1700	43°24.2'	124°22.1'	9.1	33.162
June 18	2050	44°39.1'	126°17.0'	13.7	31.722	Sept 14	1730	43°28.0'	124°21.8'	9.4	33.090
June 18	2200	44°39.1'	126°03.1'	13.5	31.759	Sept 14	1800	43°31.7'	124°21.5'	9.4	32.932
June 18	2310	44°39.1'	125°49.0'	13.7	31.593	Sept 14	1830	43°35.5'	124°21.0'	9.3	32.678
June 19	0025	44°39.1'	125°35.0'	13.5	31.678	Sept 14	1900	43°39.7'	124°20.1'	9.9	32.625
June 19	0140	44°39.1'	125°21.0'	13.8	30.575	Sept 14	1930	43°43.4'	124°19.5'	10.4	32.492
June 19	0255	44°39.1'	125°06.9'	13.5	31.095	Sept 14	2030	43°51.0'	124°18.4'	11.3	32.433
June 19	0410	44°39.1'	124°52.8'	14.0	29.024	Sept 14	2100	43°55.0'	124°17.7'	11.7	32.482
June 19	0525	44°39.1'	124°38.7'	13.2	30.864	Sept 14	2130	43°59.0'	124°17.1'	11.1	32.557
June 19	0630	44°39.1'	124°24.7'	13.1	30.880	Sept 14	2200	44°02.5'	124°16.5'	10.9	32.579
June 19	0740	44°39.1'	124°10.6'	12.4	30.899	Sept 14	2230	44°05.9'	124°16.0'	10.4	32.704
Y7107C						Sept 14	2300	44°09.0'	124°15.7'	10.8	32.656
Aug 2	0220	45°00.0'	124°48.3'	17.9	---	Sept 14	2330	44°11.5'	124°15.4'	10.0	32.719
Aug 2	0430	45°07.6'	124°37.8'	17.9	---	Sept 15	0000	44°14.4'	124°14.5'	9.9	32.874
Aug 2	0615	44°59.8'	124°38.0'	17.9	---	Sept 15	0030	44°17.2'	124°13.7'	10.1	---
Aug 3	0815	44°52.5'	124°37.9'	16.7	---	Sept 15	0100	44°20.0'	124°12.9'	10.6	32.814
Aug 3	1035	45°00.0'	124°27.1'	18.9	---	Sept 15	0130	44°22.3'	124°11.7'	10.4	32.925
Aug 3	1200	45°00.0'	124°13.1'	18.4	---	Sept 15	0200	44°24.7'	124°11.1'	9.9	32.978
C7109D						Sept 15	0230	44°27.6'	124°10.2'	10.2	33.009
Sept 10	1925	44°33.3'	124°12.7'	16.2	31.941	Sept 15	0300	44°30.3'	124°09.5'	10.0	33.084
Sept 10	2040	44°30.7'	124°18.7'	15.7	31.971	Sept 15	0330	44°34.0'	124°08.5'	9.4	33.184
Sept 10	2140	44°28.4'	124°25.2'	16.1	31.868	C7110A					
Sept 10	2240	44°25.5'	124°30.7'	16.4	31.605	Oct 3	0400	44°46.0'	124°16.5'	14.6	---
Sept 10	2335	44°22.9'	124°36.7'	16.4	31.596	Oct 3	0825	44°46.0'	124°16.5'	14.4	---
Sept 11	0030	44°29.4'	124°42.7'	16.6	31.520	Oct 3	1230	44°46.0'	124°16.5'	13.4	---
Sept 11	0130	44°17.7'	124°48.6'	16.1	31.458	Oct 3	1705	44°46.0'	124°16.5'	14.1	---
Sept 11	0230	44°15.1'	124°54.5'	16.8	31.327	Oct 3	2135	44°46.0'	124°16.5'	14.9	---
Sept 11	0330	44°12.6'	125°00.7'	16.8	31.212	Oct 4	1925	44°39.1'	124°07.8'	12.4	---
Sept 11	0430	44°09.9'	125°06.5'	16.8	31.340	Oct 4	2015	44°39.1'	124°10.6'	15.2	---
Sept 11	0520	44°07.4'	125°12.5'	16.9	31.383	Oct 4	2125	44°39.1'	124°24.6'	15.7	---
Sept 11	0610	44°05.5'	125°18.8'	17.0	31.211	Oct 4	2310	44°39.1'	124°38.6'	16.2	---
Sept 11	0655	44°02.5'	125°24.8'	17.6	31.114	Oct 4	0115	44°39.1'	124°52.6'	15.6	---
Sept 11	0800	44°00.0'	125°31.3'	17.5	31.191	Oct 5	0115	44°39.1'	125°06.5'	15.4	---
Sept 11	1015	43°56.2'	125°35.1'	17.5	31.164	Oct 5	0230	44°39.1'	125°20.3'	15.4	---
Sept 11	1050	43°52.0'	125°39.8'	17.6	31.095	Oct 5	0505	44°39.1'	125°34.6'	14.5	---
Sept 11	1125	43°48.2'	125°43.4'	17.5	31.099	Oct 5	0715	44°39.1'	125°48.6'	15.3	---
Sept 11	1150	43°44.0'	125°48.0'	17.7	31.193	Oct 5	0820	44°39.1'	126°02.6'	15.2	---
Sept 11	1245	43°40.0'	125°52.0'	17.8	31.433	Oct 5	1030	44°39.1'	126°16.6'	15.2	---
Sept 11	1325	43°36.0'	125°56.0'	17.8	31.464	Oct 5	1145	44°39.1'	126°39.0'	15.7	---
Sept 11	1405	43°32.1'	126°00.1'	17.6	31.242	Oct 5	1420	44°39.1'	126°44.8'	15.9	---
Sept 11	1445	43°28.2'	126°05.0'	17.8	31.271	Oct 5	1525	44°39.1'	126°58.9'	15.9	---
Sept 11	1520	43°22.9'	126°08.6'	18.0	31.254	Oct 5	1715	44°39.1'	127°12.7'	16.1	---
Sept 11	1610	43°20.0'	126°12.0'	18.0	31.241	Oct 5	1850	44°39.1'	127°26.6'	17.1	---
Sept 11	1738	43°20.0'	126°05.0'	18.2	31.194	Oct 5	2110	44°39.1'	127°40.6'	16.7	---
Sept 11	1806	43°20.0'	125°58.2'	18.2	31.141	C7112C					
Sept 11	1846	43°20.0'	125°51.7'	18.3	31.054	Dec 7	2030	44°39.5'	124°10.7'	9.5	31.562
Sept 11	1930	43°20.0'	125°58.6'	18.4	---	Dec 7	2300	44°39.6'	124°24.2'	8.0	---
						Dec 8	0138	44°40.0'	124°38.6'	8.4	---
						Dec 8	0529	44°41.3'	124°53.5'	10.0	---
						Dec 8	2028	44°39.1'	125°06.4'	8.5	---

TABLE 6: Erratum for 1970 Hydrographic Data

<u>Cruise</u>	<u>Station</u>	<u>Date</u>	<u>Time</u>	<u>Page</u>	<u>Correction</u>
Y7005-A	NH-35	6 May 70	1023	62	omit 498m alkalinity
Y7005-A	DB-15	8 May 70	1414	65	omit 100m PO ₄
Y7005-A	DH-8	9 May 70	1329	67	omit all alkalinity insert following NO ₃ Om 3.9 5 3.7 10 3.6 15 3.5 20 5.0
Y7006-A	NH2-7	21 Jun 70	0956		7m pH should be 7.903
Y7006-A	DB2-7	22 Jun 70	1333		salinities should be 0m 33.02‰ 4 33.04 7 33.06 10 33.02 15 33.02 25 33.21 40 33.73 60 33.98
Y7006-A	NH3-20	29 Jun 70	0146		temperatures should be 40m 7.89 60m 7.44 PO ₄ , Alkalinity, and NO ₃ should be switched between these two depths.
Y7006-A	NH3-105	29 Jun 70	2025		NO ₃ SiO ₂ 599m 43.5 104 798m 44.2 126
Y7006-A	NH3-105	29 Jun 70	2319		correct values are listed NO ₃ SiO ₂ 800m 44.4 105 1000 44.6 132 1200 44.6 145 1400 44.2 156

TABLE 6 (Continued)

	NO ₃	SiO ₂
1600	43.5	169
1800	43.3	183
2000	41.9	170
2199	41.1	176
2400	40.6	177
2600	40.3	176

Y7006-A BC1-3 20 Jun 70 1636

correct pH values are

0m	7.920
4	7.926
7	7.928
10	7.866
15	7.805

Y7006-A NH2-20 21 Jun 70 0505

correct values are listed

	PO ₄	pH	Alk	NO ₃	SiO ₂
0m	.46	8.286	2.21	0.7	6
4	.54	8.256	2.17	2.5	22
7	.54	8.271	2.25	2.5	8
10	.60			4.3	10
15	1.07	8.112	2.28	9.6	17
25	1.54	7.943	2.26	12.1	23
40	1.71	7.912		19.5	27
60	1.90	7.860	2.25	24.2	32
80	2.24	7.776	2.23	29.5	40
100	2.23	7.771	2.30	28.8	39

Y7007-B 1-25 5 Aug 70 1538

correct values are listed

	NO ₃	SiO ₂
199m	33.7	70
298	42.1	85
397	44.2	88
597	43.7	110
795	32.6	95
993	43.7	119

Y7007-B 1-26 7 Aug 70 2105

correct values are listed

	NO ₃	SiO ₂
300m	30.9	63
400	36.7	80
500	29.1	88
700	33.9	73

TABLE 6 (Continued)

Y7007-B	1-27	8 Aug 70	1032	correct values are listed		
					N03	SiO ₂
				300m	39.4	89
				399	25.7	73
				498	33.0	92
				698	31.1	112
				997	29.8	125

1970 SiO₂ Data Corrections

The data listed below under numbers 1, 2 and 3 should be corrected according to the following equation:

$$C_{\text{ctd}} = 0.975 \left[0.675 + 0.916(C_{\text{gvn}}) + 0.0026(C_{\text{gvn}})^2 \right]$$

where C_{ctd} = corrected SiO₂ concentration

C_{gvn} = SiO₂ concentration given in 1970 Hydro Data Report (Wyatt et al., 19

1. Cruise C7002-D--all samples for stations SP75, SP77, SP81, SP89, PL90, LG92, LG93, LG95, LG96, LG97, LG98, GG99, GG101, GG104, GG108, GG110, GG112, GG113, GG114, GG115, GG122, GG123, GG124 and GG125.
2. Cruise Y7006-A--for station NH3-105, samples taken from the following depths: 0-498 m, 998 m (first cast) and 1197 m (first cast).
3. Cruise Y7007-B (YALOC-70)--as listed:

Station	Depth	Station	Depth
1-01	All	1-23	0-396 m
1-2A	All	1-25	0-199 m
1-3A	0-249 m	1-26	0-300 m
1-04	0-251 m	1-27	0-300 m
1-05	0-252 m	1-28	0-999 m
1-06	0-299 m	2-29	0-396 m
1-07	0-397 m	2-31	0-400 m
1-09	0-400 m	2-33	0-2495 m
1-10	0-199 m	2-35	All
1-11	0-398 m	2-38	All
1-13	0-597 m	2-40	0-398 m
1-15	0-398 m	2-41	0-398 m
1-17	0-599 m	2-42	All
1-19	All	2-43	All

4. All 1970 SiO_2 data other than that listed under 1, 2 and 3 should be multiplied by the factor, 0.975. This applies also to SiO_2 corrections given elsewhere in this errata section.

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

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13. ABSTRACT Salinity, temperature, oxygen, phosphate, and nitrate observations were taken by Oregon State University during 17 hydrographic cruises in the Northeastern Pacific. Alkalinity, pH and silicate were taken on special occasions.			

