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Technical Publication 76-1

CALIFORNIA COOPERATIVE OCEANIC FISHERIES INVESTIGATIONS
HYDROGRAPHIC DATA REPORT
MONTEREY BAY
JANUARY TO DECEMBER 1975

by

William W. Broenkow, Stephen R. Lasley, and George C. Schrader

Supported by
STATE OF CALIFORNIA, MARINE RESEARCH COMMITTEE
CALIFORNIA COOPERATIVE OCEANIC FISHERIES INVESTIGATIONS
and
OFFICE OF SEA GRANT
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
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UNIVERSITY OF CALIFORNIA SEA GRANT COLLEGE

Moss Landing Marine Laboratories
California State University and Colleges
Fresno, Hayward, Sacramento, San Francisco, San Jose, and Stanislaus

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U.S. DEPARTMENT OF COMMERCE

Moss Landing Marine Laboratories of the California State University and Colleges Fresno, Hayward, Sacramento, San Francisco, San Jose and Stanislaus

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## CALCOFI HYDROGRAPHIC DATA REPORT MONTEREY BAY JANUARY TO DECEMBER 1975

### INTRODUCTION

The data contained in this report were obtained as a continuance of the nearly bi-weekly hydrographic observations initiated by personnel at Hopkins Marine Station over two decades ago. These observations have been supported through the years by the State of California Marine Research Committee, California Cooperative Oceanic Fisheries Investigations. Since July 1974 the hydrographic sampling program has been carried out by investigators at Moss Landing Marine Laboratories in conjunction with an interdisciplinary study of the squid, Loligo opalescens, supported by the National Office of Sea Grant via the University of California Sea Grant College Project Number R/F-15.

Five of the original CalCOFI stations (2201, 2202, 2203, 2204, and 2205) have been retained in our sampling routine, and additional inner-bay stations have been added (1125 and 1154). Station 1121 is sometimes sampled in place of 1125 when the latter is inaccessible during use of the Fort Ord firing ranges.

Observations were made aboard ST 908 until September 1975 and aboard R/V OCONOSTOTA thereafter.

### STATION LOCATIONS

NUMBER	LATITUDE N.	LONGITUDE W.	DEPTH m
2201	36°37.6'	121°63.6'	46
2202	36°41.2'	121°57.9'	104
2203	36°46.7'	122°01.2'	988
2204	36°50.9'	122°01.5'	82
2205	36°55.8'	122°00.7'	26
1121	36°37.6'	121°51.2'	18
1125	36°40.0'	121°50.8'	42
1154	36°55.2'	121°52.7'	16

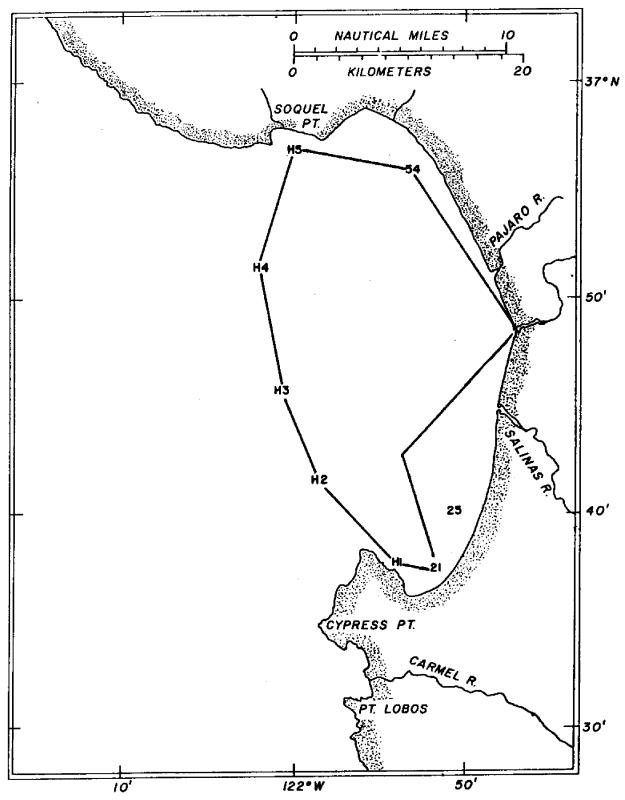


Figure 1. CalCOFI hydrographic station positions. H prefixes designate stations originated by Hopkins Marine Station.

### EXPLANATION OF TABLES

CRUISE Moss Landing Marine Laboratories consecutive hydro-

graphic cruise number.

STATION Permanent hydrographic station numbers. 11xx desig-

nates Moss Landing Marine Laboratories numbers, 22xx CalCOFI numbers as originated by Hopkins Marine Station.

DATE Local date of sampling.

HOUR Local sampling time (Pacific Standard Time). Time

of messenger release is given for one-cast stations,

median time on station is given for multi-cast stations. For two-cast stations the time on-station

was generally under one hour.

N LATITUDE W LONGITUDE Observed station position corresponding to sampling time given above. Drift while on station was generally less than 0.5 miles. When greater drift was experienced, the ship was brought back to the sta-

tion for subsequent casts.

TRANSP Secchi disk depth, meters (not observed at night).

WAVES

dir Direction from which the dominant waves were coming,

in tens of degrees, according to WMO Code 0885.

ht Height of dominant waves according to WMO Code 1555.

p Period of dominant waves according to WMO Code 3155.

MIND

dir Direction from which the wind was blowing, in tens

of degrees, according to WMO Code 0877.

speed Wind speed in knots.

BAROM Pressure in millibars.

AIR TEMP °C Air temperatures were obtained about 2 m above surface.

dry Dry-bulb air temperature in degrees centigrade.

wet Wet-bulb air temperature in degrees centigrade.

WEATH Present weather according to WMO Code 4677.

CLOUDS

typ Cloud type according to WMO Code 0500.

amt Cloud amount in eights according to WMO Code 2700.

VISIB Sea level visibility according to WMO Code 4300.

DEPTH Accepted depth in meters from which the sample was

obtained, determined from wire length, wire angle

and thermometric depth calculation.

TEMP In situ water temperature in degrees centigrade.

SALINITY Salinity in grams/kilogram (0/00 or ppt).

SIGMA T Potential density anomaly, computed from the equa-

tions in Knudsen's Hydrographical Tables (1901).

OXYGEN Dissolved oxygen concentration in ml(STP)/liter.

AOU Apparent oxygen utilization in µg-atoms 02-0/liter:

the difference between the observed oxygen concentration and the oxygen solubility computed from the in situ temperature and salinity using the equations

of Truesdale, et al. (1955).

SAT Per cent of oxygen saturation computed from the in

situ temperature and salinity using the equations

of Truesdale, et al. (1955).

PHOSPHATE Concentration of reactive phosphate in µg-atoms

PO<sub>4</sub>-P/liter.

NITRATE Concentration of dissolved nitrate in µg-atoms

NO<sub>3</sub>-N/liter.

NITRITE Concentration of dissolved nitrite in µg-atoms

 $NO_2-N/liter.$ 

AMMONIA Concentration of dissolved ammonia in µg-atoms

NH<sub>3</sub>-N/liter.

SILICA Concentration of reactive silica in ug-atoms

SiO2-Si/liter.

\* Questionable data point. These values are suspect

based upon preliminary analysis of the data and

should be used with caution.

### METHODS

Station Position. Station positions were determined using radar ranges with an accuracy of about  $\pm 0.2$  n mile near shore and  $\pm 0.5$  n mile at station 2203.

<u>Hydrographic Sampling</u>. Eight 5-liter Niskin plastic sampling bottles were used to obtain discrete water samples at the standard sampling depths: 0, 5, 10, 20, 30, 50, 75, 100, 150, 200, 250, 300, 500, 600, and 800 m. Accepted sampling depths were determined from wire angle for depths less than 100 m and from a combination of wire angle and thermometric depth calculations for depths greater than 100 m.

<u>Temperature</u>. The <u>in situ</u> temperature was determined from paired reversing thermometers. The average temperature is recorded when the thermometers agreed to within 0.05° C.

<u>Salinity</u>. Salinity was determined using a Beckman RS-7B precision induction salinometer. Analyses were made in the laboratory and salinity was computed from conductivity ratio using the equations of Cox, <u>et al</u>. (1967). Substandard seawater was used to calibrate the salinometer before and after each set of 24 or fewer samples. Copenhagen water was used each month to standardize the substandard water.

<u>Dissolved Oxygen</u>. Water samples were treated aboard ship to fix the oxygen in the basic form. The samples were acidified and

titrated in the laboratory within 12 hours of the sampling time using Carpenter's (1965) modification of the Winkler method. The total sample is titrated with approximately 0.02 N sodium thiosulfate to the starch endpoint. Precision of the analyses is about  $\pm 0.06$  ml/liter (2 SD).

Nutrient Ions. The 500 ml samples were quick frozen in dry ice aboard ship and were refrigerated at -10° C until analyzed ashore within two weeks of collection. Groups of 44 samples were quick-thawed in the laboratory just prior to the analyses for phosphate, nitrate, nitrite, ammonia, and silica. Standards and reagent blanks were prepared fresh daily and were determined with each set of samples. When the probe colorimeter was used to determine sample absorbances, standards were read before and after samples. A linear drift correction was used to correct for electronic and chemical drift over the 20-minute reading time.

Dissolved reactive phosphate was determined by the method of Murphy and Riley (1962) described in Strickland and Parsons (1968) using ascorbic acid to reduce the phospho-molybdate complex. The sample absorbance at 885 nm was determined in 10 cm cells on a Beckman DU II Spectrophotometer, or by a Brinkman PC-1000 probe colorimeter at 880 nm. Precision of the analyses is about  $\pm 0.03$   $\pm 0.03$   $\pm 0.03$ 

Nitrate was determined by the cadmium-reduction method of Wood et al. (1967) followed by the nitrite color development. The sample

absorbance was determined in 1 cm cells using a Spectronic 20 Colorimeter at 543 nm, or the PC-1000 probe colorimeter at 545 nm. Precision of the analyses is about  $\pm 0.5~\mu g$ -atoms/liter (2 SD).

Nitrite was determined by the method of Bendschneider and Robinson (1952) described by Strickland and Parsons (1967). The absorbance of the diazo color was determined with 10 cm patch length on the Beckman DU at 543 nm, or on the PC-1000 at 545 nm. Precision of the method is about  $\pm 0.03~\mu g$ -atoms/liter (2 SD).

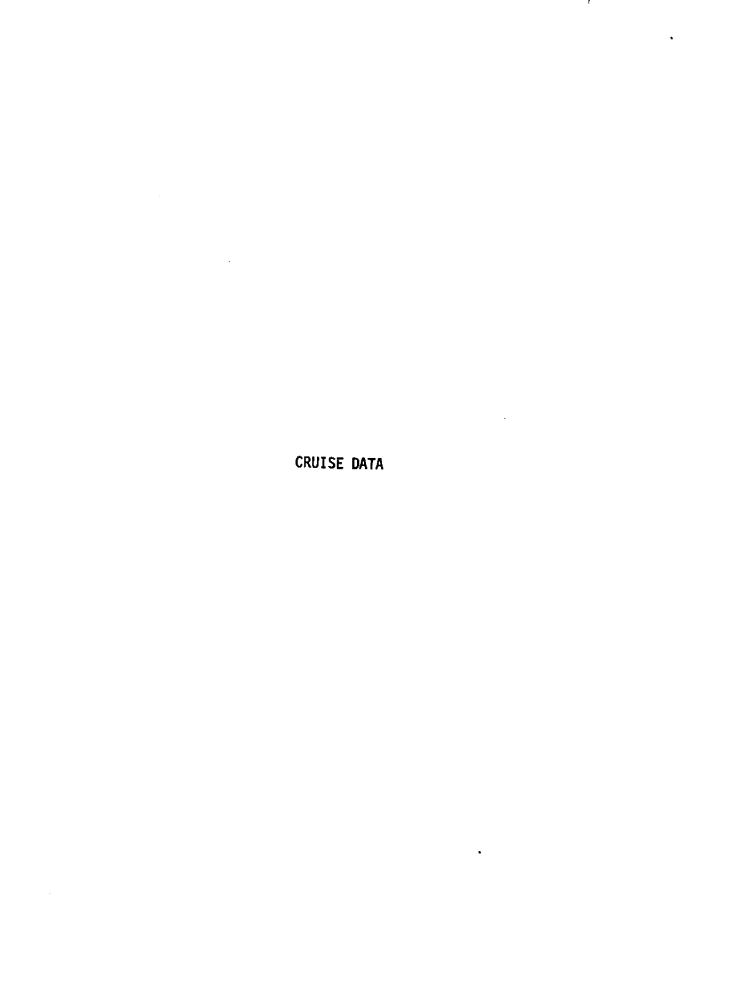
Ammonia was determined by the indophenol method of Solorzano (1969) with the color absorbance determined with a 10 cm path length on the Beckman DU at 640 nm, or on the PC-1000 at 650 nm. Precision of the method is about  $\pm 0.1~\mu g$ -atoms/liter (2 SD).

Reactive silica was determined by the method of Mullin and Riley (1955) as modified by Strickland and Parsons (1968). The silicomolybate complex was reduced by a metol-sulfite, oxalic acid solution, and the color absorbance at 810 nm was determined in 1 cm cells on a Spectronic 20, or on the PC-1000. Precision of the method is about  $\pm 1~\mu g$ -atoms/liter (2 SD).

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				SILICA	244
			œ	AMMONIA	999
ITUDE	52,81	UDS VISIB		RATE NITRITE A ug-atoms/liter	. 25. 25. 25. 25.
W LONG	121° 52.8	TH CLOUDS typ amt	×	IITRATE   ug-at	10.9 10.7 11.3
N LATITUDE W LONGITUDE	36* 55.2*	AIR TEMP °C WEATH CLOUDS dry wet typ ant	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.25 1.24 1.25
HOUR N	3.4	AIR TEI dry			98 100 100
	3 JAN 1975	BAROM	1025.4	AOU u <b>g-at/1</b>	e de
DATE	3 JAN	WIND r speed	Ħ	OXYGEN AOU SAT m1/1 ug-at/1 %	6.09 6.00 6.13
STATION	1154	<b>P</b>	2 X 10	SIGMA T	25.79 25.79 25.79
CRUISE	ML 12	뒥	63	TEMP SALINITY •C ppt	33 <b>.</b> 592 33 <b>.</b> 592 33 <b>.</b> 592
		TRANSP		TEMP S	10.48 10.51 10.49
				DKPTH	o & 91

				SILICA	φ	• ;	11 21
		<b>E</b>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0	<b>0</b> (	<b>0</b> C
떰	•	VISIB	∞	ITE 11te	•32	<u>۾</u> ۽	7.5
G II	.7.	UDS	0	NITR Oms/	•	•	• •
LONG	122	CLOUDS typ amt	×	RATE NITRITE A ug-atoms/liter	eļ ·	<u>ب</u> د	<b>.</b>
<b>:</b>		(ATH	7	NITH	8	0,	77.
CTODE	55.8'	5		IATE	<b>4</b>	<b>20</b> 9	<u>7</u>
N LATITUDE W LONGITUDE	36° 55,8'	AIR TEMP °C WEATH CLOUDS dry wet typ amt		HOSPI	<b>.</b>		1,15
		R TE					
HOUR	2.4	A		SAT	8	76	9 6
<b>1</b>	1975	BAROM	1026,1	SIGMA T OXYGEN AOU ml/1 ug-at/1	8	9 8	, 4 0 0
DATE	3 JAN 1975	WIND dir speed	0	OXYGEN m1/1	5.87	16.4	5.60
Z O		W)	0	H	ي مِي	<u>ი ყ</u>	o ēv
STATION	2205	<b>.</b>	×	SIGM.	25.7	20 K	25.79
		WAVES r ht p	0	<b>&gt;</b> -		_	
CKUISE	ME 12	퓽	0	LINET	33,593	7.50T	3,598
<u>ວ</u>	물	TRANSP III		SA			
		E.		TEMP SALINITY S	10.68	10,61	10.52
				DEPTH	0 4	ם פ	8

				SILICA	12	122	14
		VISIB	<b>a</b> o	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0,0	999	00
ca)	-	Ž,		HH	25	2,2	32
N LATITUDE W LONGITUDE	122 1.6'	AIR TEMP °C WEATH CLOUDS dry wet typ amt	0	NITR toms/	• 1	• • •	• • •
	22.	5 등	о ж	tate 18-a	٦,	্কু ন	40
<b>:</b>		E E	7	NITH	<b>4</b> =	112	13,51
(10E	36° 50.9°	A K		35	~		~ 10
ATIT	<b>.</b>	et c		SPH	9.5	90	1.07
j Z	፠	îăAP *		PHO			
HOUR	1.0	AIR 7		SAT	87	) (A) (A)	0 88
	1975	BAROM	1026.8	AOU 18-at/1	72	4 <b>8</b> ^	¥2
DATE	3 JAN 1975	WIND dir speed	0 0	OXYGEN AOU ml/1 ug-at/1	5.24	5.72	5.45 5.39
×		H T	0		0.0		~ ~ ~
STATION	2204		7	SIGMA T	K. 23	in in	25.72 25.78
ĸ	7	WAVES Lr ht	7	S		• • • • •	
ISE	17	WAVES dir ht p	24 2 2	SALINITY S ppt		283 283 283 283	
CE	보	FRANSP IB		SAL.	8, 2		8 8
		TRA		TEMP	10.98	99	10.93 10.62
				DKPTH	0 4	ងេដ	88

PHOSPHATE NITRATE NITRITE AMMONIA SILICA 113 116 20 20 25 48 48 71 71 107 13 13 000 000000000000 VISIB ug-atoms/liter  $\infty$ •25 •27 •26 W LONGITUDE 1,31 CLOUDS typ amt 0 122° 18.4\* × 16.7 22.0 22.0 13.1 14.1 16.3 23.5 24.2 33.4 34.9 34.9 41.0 WEATH N LATITUDE 36° 46.7" AIR TEMP °C 1.02 1.06 1.14 1,45 1,72 1,96 1,96 2,45 2,45 3,08 3,08 Wet dry HOUR 23,2 SAT H ml/1 ug-at/1 BAROM 1025,7 3 JAN 1975 OXYGEN AOU 45 36 80 172 247 370 406 449 483 500 522 569 26 37 自 DATE 4.19 3,46 dir speed 5.55 5.74 5.64 5.71 5.19 5.19 1.92 1.62 1.23 1,10 .93 •63 0 WIND 8 SIGMA I STATION 25.68 25.69 25.42 25.88 26.12 26.62 26.80 26.83 25,75 25.78 26.40 27,16 2203 ρ, × WAVES dir ht -SALINITY 27 33,597 33,604 CRUISE 33,607 33,583 33,819 34,133 7 33,636 34,121 34,220 34,265 33,699 34.060 34,185 ppt 녓 TRANSP 8.40\* E 11.02 10.94 10.73 10.43 9.62 11.13 6.41 4.61 7.88 6.72 8.9 11,13 TER DEPTH 147 197 247 296 394 495 695 E

\* indicates questionable data: Paired thermometer read 9.4 Nitrate appears anomalously low

				SILICA	130141
		<b>E</b>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	000000
TUDE	.6°2	DS VISIB mt	8	RATE NITRITE A ug-atoms/liter	26 28 31 31 31 31
W LONGITUDE	121 57.9	H CLOUDS typ amt	×	TRATE N ug-ato	11.7
N LATITUDE	36* 41.2	C WEATH	4	HATE NI	1.00 1.00 1.00 1.13 1.13
	*	AIR TEMP °C dry wet		PHOSE	ੱਜੋਂ ਜੋ ਜੋ ਜੋ ਜੋ
HOUR	21.9		_	SAT /1 %	484446
題	4 JAN 1975	BAROM	1026.1	OXYGEN AOU ml/l ug-at/l	822828
DATE	4 JA	WIND dfr speed	<b>н</b>	OXYGE B1/1	5.79 5.79 5.69 5.64 5.88
STATION	2202	Ω.	27 2 X 27	SICMA I	25.68 25.68 25.77 25.70 25.72
CRUISE	M. 12	P WAVES	27	SALINITY ppt	33,595 33,594 33,693* 33,606 33,617
J	, Ai	TRANSP		TEMP SA	11,10 11,00 11,00 10,94
•				DEPTH B	o " 2888

\* indicates questionable data: Salinity appears anomalously high Paired thermometer read 10.88

				SILICA	11011
		VISIB	00	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	00000
N LATITUDE W LONGITUDE	121° 53,7		0 ×	RATE NITRITE A) ug-atoms/liter	7
DE W		WEATH	7	E NITR	11.7 12.3 9.4 11.0
N LATITU	36° 37.6°	AIR TEMP °C WEATH CLOUDS dry wet typ amt		PHOSPHAT	1,01 1,04 ,95 1,02 1,18
HOUR	20.5	AIR		SAT	9 9 9 9 8 2 4 4 8
	4 JAN 1975	BAROM	1026.4	AOU ug-at/1	31 47 47 47
DATE	4 JAN	WIND dir speed	H	OXYGEN AOU : ml/l ug-at/l	5.00 5.71 5.54 5.54
STATION	2201	ō.	49 1 X 18	SIGMA T	25.70 25.70 25.70 25.36 25.36
CRUISE	MC 12		67	SALINITY PPt	33,596 33,596 33,601 33,150*
		TRANSP		TEMP S	11.05 10.04 10.97 10.97
				DEPTH	988500

\* indicates questionable data; Salinity appears anomalously low

				SILICA	<b>1111</b>
		Ŕ		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0000
岡		VISTB	œ	RATE NITRITE AN ug-atoms/liter	22 26 26 19
GIIO	8	CLOUDS typ amt	o ×	NIT	
2 2 2	121 50.8	표 역 년	×	CRATE uS-4	9.4 11.7 12.1
	•	WEAT	8	E NE	~ AAA
N LATITUDE W LONGITUDE	36* 40.0	پر ن		SPHAT	1.06
Z	8	AIR TEMP °C WEATH CLOUDS dry wet typ amt		PHO	
HOUR	19,7	AIR		SAT	98 97 96
		BAROM Th	1026.8	AOU 1g-at/1	o 9 %
DATE	4 JAN 1975	WIND dir speed	0	SIGMA T OXYGEN AOU SAT n1/1 ug-at/1 %	5.84 5.84 5.80
NO		WIND dir sp	0	H	8224
STATION	1125	S P	×	SIGM	25.56 25.70 25.73 25.74
ISE	12	WAVES dir ht p	49 1 X		605 594 578
CRUIS	녗			SALINITY ppt	8 8 8 8 8 8 8 8
		TRANSP		TEMP S	11.84 10.99 10.72
				DEPTH	0 th 05

				SILICA	8 11
		EB		AMONIA F	000
UDE	8	S VISIB	æ	rRITE /	21 36 39
LONGIT	121° 52.8'	CLOUDS typ amt	o ×	RATE NITRITE A ug-atoms/liter	80 A0 AV
DE W		WEATH	2	E NITR u	1.8 7.6 10.5
N LATITUDE W LONGITUDE	36° 55.21	AIR TEMP °C WEATH CLOUDS dry wet typ amt		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.59 1.00 1.25
HOUR	19,9	AIR dry		SAT %	117 95 15
e-1	18 JAN 1975	BAROM mb	1015,9	AOU ig-at/1	-90 28 15
DATE	18 JAN	WIND dir speed	3 0 1015,9	OXYGEN m1/1	7.00 5.76 5.93
STATION	1154	<b>c.</b>	0 0 X 3	SIGMA T OXYGEN AOU SAT m1/1 ug-at/1 %	25.53 25.70 25.74
CRUISE	M 13	<del>i</del>	0	TEMP SALINITY °C ppt	33.496 33.547 33.561
		TRANSP		TEMP C	11.51 10.83 10.67
				DEPTH	0 5 10

				SILICA	15	3 %
		8		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/líter	00	00
D-3	_	VISIB	<b>&amp;</b>	ITE 11 te	28	18 41
E CE	.7	UDS am t	0	NITR Ome/	• •	• •
LONG	122° ,7'	5 F	2 x 0	RATE NITRITE A ug-atoms/liter	<u>ش</u> 0	<b>ش</b> س
3	_	EATH	8	MITI	3.3	<b>ਰ</b> ਜੋ
	55.8	≨ ∵		HATE	.73	70 28*
N LATITUDE W LONGITUDE	36" 55.8"	AIR TEMP °C WEATH CLOUDS dry wet typ amt		PHOSP	• •	• •
HOUR	20.7	AIR		SAT	109	87 64
	1975	BAROM	.015.9	SIGMA T OXYGEN AOU SAT m1/1 ug-at/1 %	8 <del>7</del> <del>1</del>	
DATE	18 JAN 1975	WIND dir speed	6 1 1015,9	XYGEN m1/1 '	6.61	5,30 3,89*
Z		WIND III spe	9	H		
STATION	2205		×	IGM	25.6 25.6	25.70 25.75
		WAVES dir ht p	0 1 X	ω M		
CRUISE	ME 13		0	TEMP SALINITY °C ppt	33,496 33,509	33,544 33,580
Ö	Œ	TRANSP m		3		
		Ħ		TEMP C	01 0.01	10.80 10.67
				DEPTH	φ <b>ν</b> 1	98

\* indicates questionable data: Paired thermometer read 10.83
Oxygen appears anomalously low
Phosphate appears anomalously low

				SILICA	16	#	20	11	12	14
		IB		PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	o,	o.	<b>Q</b>	0	<b>.</b>	<b>•</b>
rude	1.6	DS VISIB	8	RATE NITRITE AI ug-atoms/liter	20	• 20	20	•19	• 20	•25
W LONGITUDE	122° 1.6'	H CLOUDS typ amt	о ×	TRATE N ug-ato	7.5	5.4	7,1	7.9	8.2	9.0
	36° 50°9°	AIR TEMP °C WEATH dry wet	2	HATE NI					.85	
N LATITUDE	36	TEMP .		PHOSP	•	•	•	•	•	ı,
HOUR	21.8			SAT 1 %					84	
ĒĪ.	18 JAN 1975	BAROM	1016,3	OXYGEN AOU ml/l ug-at/l					86	
DATE	18 JA	WIND dir spæed	33 1	OXYGE m1/1	5.54	5,53	5,48	5,29	5.05	4.40
STATION	2204	WAVES W		SIGMA I	25,62	25,64	25,65	25,66	25,66	25,75
CRUISE	ML 13	ਚੌ	27 2 2	SALINITY ppt	33,594	33,597	33,604	33,602	33,594	33,628
	-	TRANSP		S TEMP S					11,24	
				DKPTH m	0	S	01	ଯ	ଛ	ጽ

				SILICA	9	9	9	œ	9	17	18	8	34	04	47	42	52	77	92	101
		ø		WMONIA	•2	<b>့</b>	o,	o,	o,	o.	o.	0	<b>•</b>	<b>•</b>	Q.	<b>•</b>	<b>°</b>	<b>•</b>	0	0
TUDE	1,31	DS VISIB mt	8	RAIE NITRITE A ug-atoms/liter	•15	•13	දි	•18	•15	•13	•01	<b>*</b> 0	•13	•07	•05	•12	•0 <u>7</u>	•05	•05	90•
W LONGITUDE	122°	TH CLOUDS typ amt	×	IITRATE N ug-ato	8,9	7.9	8,3	10.4	11,3	17.0	13.6	16.4	23,8	26.8	27.7	23,7*	25.9*	33,8	36.7	35.9
N LATITUDE	36° 46 <sub>•</sub> 7°	TP °C WEATH wet	N	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	8	• 70	• 76	•78	•93	1.09	1,21	1,55	2,04	2,19	2,36	2,30	2,56	3.03	3,19	3,12
HOUR N	23.0 3	AIR TEMP °C dry wet		SAT PH	103	63	102	81	92	63	63	47	36	ጽ	23	91	17	<b>1</b> 6	91	12
	JAN 1975	BAROM	1016,3	N AOU ug-at/1	-17	<b>500</b>	-12	102	130	202	207	297	361	398	447	474	492	210	514	620
DATE	18 JAN	WIND dir speed	0	OXYGEN m1/1 '	6,19	3,75*	6.14	<b>4</b> •89	4.62	3,89	3,89	2.94	2,28	1.94	1.46	1,23	1.14	1.07	1,10	•95
STATION	2203	ρ,	2 2 23	SIGMA I	25,61	25.60	25.62	25,68	25,77	25.91	26,00	26.07	26,32	26.47	26.59	26,68	26.82	26,99	27,08	27,63
CRUISE	五 13	ISP WAVES dir ht	56	SALINITY ppt													34,167	34.245	34,289	34,386
		TRANSP		TEMP S	11,45	11,47	11,39	11,11*	10.77	10,24	9.82	9,37	8,91	8,41	7,93	7.44	6.72	5.87	5,43	
				DEPTH m	0	'n	ខ	20	8	ያ	75	100	150	200	250	80	400	20 20	9	<b>8</b>

\* indicates questionable data: Paired thermometer read 11.05
Oxygen appears anomalously low
Nitrates appear anomalously low

				SILICA	2 6 2 3 4 A
		E .		AMMONIA F	700008
TUDE	57.91	JDS VISIB	8 0	RATE NITRITE A ug-atoms/liter	26 14 22 22 14
W LONG	121 57,9	TH CLOUDS typ amt	×	NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	9.7 7.2 10.5 8.2 11.3
N LATITUDE W LONGITUDE	36° 41.2°	AIR TEMP °C WEATH dry wet	7	PHOSPUATE N	90 70 92 83 102 98
HOUR	1,3	AIR TE dry		SAT	98 82 85 88
	1975	ВАКОМ	1016.3	OXYGEN AOU ml/l ug-at/l	10 8 97 84 141 63
DATE	19 JAN 1975	WIND dir speed	7	OXYGEN m1/1	5.93 5.95 5.95 5.05 5.03
STATION	2202	ρ.	œ	SIGMA I	25.67 25.66 25.68 25.70 25.73
CRUISE	ML 13	SP WAVES dir ht	27 4 X	SALINITY ppt	33.562 33.562 33.564 33.557 33.646
		TRANSP		TEMP S	11.05 11.11 10.99 10.86* 10.79
				DKPTH	200 5 0 49 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

\* indicates questionable data: Paired thermometer read 10.80

				SILICA	13 8 16 16
		<b>8</b>		AMMONIA f	0,040
LTUDE	53.7	UDS VISIB	8	RATE NITRITE A ug-atoms/11ter	19 24 24 24
W LONG	121° 53.7	ATH CLOUDS typ amt	2 X 0	NITRATE : ug-at	10.1 7.9 10.0 14.3
N LATITUDE W LONGITUDE	36* 37.6	AIR TEMP °C WEATH dry wet		PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	.94 .77 .94 1.14
HOUR N	2,1	AIR TE dry		SAT	97 96 98 88
	1975	BAROM	1015.9	AOU ug-at/]	14 33 98 88
DATE	19 JAN 1975	WIND dir speed	0	OXYGEN AOU ml/l ug-at/l	5.88 5.83 5.70 5.37
STATION	2201	<b>Q</b> .	2 X 15	SIGM I	25.70 25.71 25.74 25.74 25.79
CRUISE	M. 13	ISP WAVES dir ht	27	SALINITY	33,617 33,608 33,602 33,627 33,640
		TRANSP		TEMP S	11.09 11.02 10.85 10.67
				DEPTH m	o n 3 8 8

				SILICA	14 12 13
		1B		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	9999
Ħ	- &	VISIB	80	RATE NITRITE A ug-atoms/liter	91 91 91 91
TI	121° 50,8°	CLOUDS typ amt	0 X	NIT LOMB	
LONG	121°	ty Ct	×	rate ug-a	10.9 11.0 11.8
<b>3</b> ₹	•	WEATH	7	E NI	2222
Trop	36 40.0	۳ . م		PHAT	92 95 86 99
N LATITUDE W LONGITUDE	3%	IR TEMP °( dry wet		PHOS	
HOUR	3.2	AIR TEMP °C WEATH CLOUDS dry wet		SAT	95 97 87 86
五	1975	BAROM mb	1015.9	AOU g-at/1	26 16 72 76
DATE	19 JAN 1975	eed	9 3 1	SIGMA T OXYGEN AOU SAI m1/1 ug-at/1 %	5.78 5.88 5.26 5.25
<del>-</del>		WIND dir sp	6	H	10 × 10 C
STATION	1125		×	IGMA	25.75 25.74 25.75 25.80
S	_	WAVES r ht p	7 4 X	os ≱∗	
CRUISE	. 13		27	INII	33.612 33.612 33.612 33.628
28	보	rransp m		SAL	
		TB		TEMP SALINITY °C ppt	10.84 10.89 10.84 10.61
				DEPTH	20 5 0

				SILICA	9	œ	σ	∞	0	6	1		22	<b>5</b> 6	45	57	<b>#8</b> 7	82	88	81*
		æ		MMDNIA	0	•	•	<b>.</b>	<b>့</b>	0.	o,		<b>°</b>	0	•	o.	۲.	•	•	°.
TUDE	1,3	DS VISIB	80	RATE NITRITE A ug-atoms/liter	•31	• 24	•31	•25	8.	• 29	•25		•13	*0 <b>*</b>	•03	8.	8	0	8	8
W LONGITUDE	122	WEATH CLOUDS typ amt	8	NITRATE N ug-ato	8.1	8.2	8.8	7.5	9.3	8.0	10.0		12.4	16.4	28.1	35.1	22.9*	35.5	30.8	26.0
N LATITUDE	36° 46.7"		10.3	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	89•	•65	•72	•63	.71	٠,70	.81		1,38	1.63	2,25	2,53	2,32*	3.01	3.07	2.86
HOUR N	13,1	AIR TEMP °C dry wet	10.0	SAT	108	107	105	103	103	103	93	92	<b>79</b>	43	ສ	28	16	01	O.	7
	FEB 1975	BAROM	1016.6	AOU ug-at/1	-40	-37	-24	-14	-14	-15	40	131	199	321	378	420	498	547	556	583
DATE	4 FEB	WIND dir speed		OXYGEN ml/l '	6,43	<b>6.</b> 40	6,25	6.14	6.14	6,15	5,56	4.64	3,95	2,74	2,19	1,81	1,08	• 65	19*	.47
STATION	2203	p.	5 4 30	SIGMA I	25.55	25,55	25,55	25,55	25,56	25,55	25,64	25,83	25,98	26.34	26.51	26.65	26,83	27.00	27,06	27,25
CRUISE	ML 14	(SP WAVES dir ht	23	SALINITY ppt	33,539	33,539	33,538	33,539	33,540	33,540	33,588	33,661	33,732	33,942	34.043	34,102	34,173	34,247	34.278	34,373
		TRANSP		TEMP :	11,62	11,62	11,62	11.60	11,58	11,62	11,31	10.56	10.03	8.81	8.24	7.54*	6.67	5.88	5.55	4.59
				DEPTH			97													

\* indicates questionable data: Paired thermometers read 7.66
Phosphate appears anomalously low Nitrate appears anomalously low Silicates appear anomalously low

				SILICA	13 9 7
		VISIB	7	. AMMONIA	941
TLODE	121° 52.8'		œ	RATE NITRITE A ug-atoms/liter	36.40
W LONG		ATH CLC TYP	2 88	NITRATE ug-at	6.8 8.4 4.7
N LATITUDE W LONGITUDE	36 55.2	AIR TEMP °C WEATH CLOUDS dry wet typ amt	9.2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	84 94 68
HOUR	4•0		10.0	SAT 1 %	101 100 99
м	1975	BAROM	1015,9	XYGEN AOU ml/l ug-at/l	406
DATE	20 FEB 1975	WIND dir speed	<b>~</b>	OXYGEN AOU ml/1 ug-at/	6.08 6.03 5.97
STATION	1154	D <sub>4</sub>	3 2 3 27	SIGM T	24.94 25.27 25.39
CRUISE	ML 15	끂	23	TEMP SALINITY °C ppt	32,721 33,126 33,287
		TRANSP			11.50
				DEPTH	0 5 0

				SILICA	22 7 7 12 12
		. α		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	4000
Ħ	•	VISIB	7	RATE NITRITE A ug-atoms/liter	36 35 46
TIOD	•7•	CLOUDS typ amt	<b>&amp;</b>	NITE Lords/	
LONG	122	द्वे ह	Φ	RATE ug-ai	6.2 6.3 6.3
<b>(4)</b>		EATH	7	TIN	V 4 9 9
611	36* 55.8	) မ		HATE	.95 .60 .67
N LATITUDE W LONGITUDE	36•	AIR TEMP °C WEATH CLOUDS dry wet typ amt		PHOSE	
HOUR	3.0	AIR dry		SAT	99 97 96
	20 FEB 1975	BAROM	1016.6	TEMP SALINITY SIGMA T OXYGEN AOU °C ppt m1/1 ug-at/1	7745
DATE	FEB		-	GEN L/1 u	6.01 6.05 5.86 5.79
	20	WIND dir speed	0		ശ്ശ്ശ്ശ്
STATION	5			¥.	24.71 25.42 25.47 25.49
STA	2205	RS t p	4 2 2	SIG	4222
SE	17	WAVES dir ht p	24	IIIY ot	337 357 381
CRUISE	斉	2		SALD	33, 339 33, 307 33, 357 33, 381
		TRANS		TEMP °C	11.10 11.32 11.28 11.25
				DEPTH m	0 2 2 8

				SILICA	10 5 7 7 41,
		<b>四</b>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	000000
TUDE	1.6'	DS VISIB mt	8 7	RATE NITRITE A ug-atoms/liter	27 23 23 31 31 64 64 64
N LATITUDE W LONGITUDE	122°	H CLOUDS	80	TRATE N ug-ato	23.2 23.2 23.2 23.1
TUDE	36°50,91	C WEATH	2	aate ni	
N LAT	8	AIR TEMP °C dry wet	10.6 9.5	PHOSPI	.58 .50 .52 .71 .90
HOUR	1.8	•		SAT 1 %	101 102 101 100 81 81
M	20 FEB 1975	BAROM	1017.6	OXYGEN AOU ml/l ug-at/l	102 102 103 103
DATE	20 FEI	WIND dir speed	0 0	OXYGEN m1/1	6.09 6.14 6.04 6.03 4.91
STATION	2204	ρ.	4 2 0	SIGMA I	25.51 25.51 25.50 25.69 25.69 26.21
CRUISE	M. 15	书	27	SALINITY ppt	33,435 33,424 33,414 33,407 33,560 33,823
		TRANSP		TEMP S	11.37 11.33 11.37 11.39 10.95
				DEPTH	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

\* indicates questionable data: Silicate appears anomalously high

				PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	99	ដដ	8	77	33	¥
		<b></b>		AMMONIA c	00	ဝှ ဝ	0	o.	<b>.</b>	0
JOE	34	S VISIB	7	RATE NITRITE Al ug-atoms/liter	33	4.8 E	• 39	<b>.</b>	•05	90
W LONGITUDE	122 1.3	CLOUDS typ amt	<b>ω</b>	ATE NI 8-atom	m 0	o -1	e	m	4	_
		_	7	E NITR	16.3	12.	17.	23.	25.4	<b>5</b>
N LATITUDE	36° 46.7'	AIR TEMP °C WEATH dry wet	6*8 6*6	HOSPHATI	8. 18.	2 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	1,15	1.50	1.94	2.02
HOUR N	4	AIR TEMP °C dry wet	6*6	SAT P	96	95 88	8	<b>8</b>	<b>3</b>	33
	FEB 1975	BAROM	1017.6	AOU 1g-at/1	22	24	101	229	339	349
DATE	20 FEB	WIND dir speed	2	OXYGEN AOU m1/1 ug-at/1	5.88 5.73	5.78	4.91	3.64	2,53	2,50
STATION	2203	Δ.	27	SIGMA I	25.68	25.68	25,82	26.06	26,30	26.46
CRUISE	M 15	P WAVES	27 4 3	SALINITY ppt	33 <b>.</b> 570 33 <b>.</b> 559	33,563 33,613	33,645	33,786	33,913	34,008
J	Æ	TRANSP		TEMP SA	11.00	10.97	10.56	*08°6	8,93	8,35
				DEPTH m	0 v	92				

\* indicates questionable data: Paired thermometer read 9.90

				SILICA	11	I 6	11 22
		<b>1</b> 1		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	00	ှဲ ဝ	79
DE	<b>.</b>	VISIB	7	RATE NITRITE AI ug-atoms/liter	.35 .28	¥ 5	•37 •18
GITU	57	CLOUDS typ amt	∞	NIT			
ŽŎ,	121° 57,9°	के दि	<b>∞</b>	ATE 18-a	ન ૦,	4 Q	0 1
X Y		ÆATH	7	NITH	14.1	3 6	181
N LATITUDE W LONGITUDE	36 41.2	AIR TEMP °C WEATH CLOUDS dry wet typ amt	1.1	SPHATE	.77	.73	•78 1•33
Z	8	IR TEMP °C dry wet	10,0 11,1	PHO			
HOUR	22,0	AIR dry	10.	SAT	102 101	101	8 Z
	19 FEB 1975	BAROM mb	1017.6	OXYGEN AOU SAT ml/lug-at/l %	9-1-	<del>ا</del>	7 161
DATE	FEB	WIND dir speed		YGEN 1/1 u	6.13 6.11	200	5.94 4.33
_	Ħ	WIND Lt spe	27 2	ö ª	~~	v	-14
STATION	2202			SIGMA T	25.58 25.59	5,59	25 <b>.</b> 60 25 <b>.</b> 91
ξή.	••	WAVES r ht p	4 2		.,,,,,	• • •	
CRUISE	25	끃	27	SAL INITY ppt	33,497	498	514 706
g	捒	TRANSP m		SAL	2 2 2	38	2 2
		TR.		TEMP • C	11.25	11,23	11.21
				DEPTH B	0 2 5	8	83

				SILICA	14	13 13
		81		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	e 6	N44
JDE	.7.	S VISIB	7	RATE NITRITE A ug-atoms/liter	E. E.	35 82 42 42
NGIT	121° 53.7'	CLOUDS typ amt	<b>60</b>	E NI		
W LONGITUDE	121	-	∞	LTRAT	8.0 8.6	8.7 8.8 112.7
JOE	9	WEAT	61	TE N		
N LATITUDE	36° 37,6	AIR TEMP °C WEATH dry wet	11.7 10.6	ноѕрна	. 78	. 82 . 76 1.08
		IR TE iry	11.7		00	0 40 40
HOUR	22,5	¥		SA.	108	96
м	19 FEB 1975	BAROM	1017,6	OXYGEN AOU SAT ml/l ug-at/l %	-42	-51 23 73
DATE	FEB	eed		YGEN 11/1	5.44	6,55 5,73 5,21
	13	WIND dir speed	27 3			
STATION	2201			SIGMA T	25,21	25.23 25.38 25.65
SI	7	WAVES r ht p	7 3 3	SI		
CRUISE	ML 15	T T	27	TEMP SALINITY S  *C ppt	33 <b>.</b> 145	33,164 33,321 33,567
0	22	TRANSP m		75 G		
		57		TE C	11,79	11.77 11.59 11.17
				DEPTH	0 4	ានន

				SILICA	2121
		VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	2002
JOE JOE	<b>ω</b>		.,	RATE NITRITE AI ug-atoms/liter	35 32 37 37
NGIT	121° 50.8'	CLOUDS typ amt	8	E NIT	
N 1.0		표 2 년	∞	TRAT ug-	9.4 8.2 9.0
UDE	0	WEAT	7	TE NJ	
N LATITUDE W LONGITUDE	36" 40.0"	AIR TEMP °C WEATH CLOUDS dry wet typ amt	10.0 8.9	HOSPHA.	79 72 78 82
		IR TEMP °( dry wet	0.0		
HOUR	20.6	AI	-	SAT	103 104 102
f+1	1975	BAROM mb	1016.6	AOU 18-at/1	60 11 11
DATE	19 FEB 1975 20.6	WIND dir speed	29 2	OXYGEN AOU ml/1 ug-at/1	5.31 6.18 6.21 6.12
STATION	1125	c.		SIGMA I	25.42 25.43 25.43 25.44
8		WAVES r ht p	6 3		NNNN
CKUISE	51	급	26	SALINITY PPt	33,366 33,383 33,363 33,363
3	¥	TRANSP TR		SAL	
		Ę		TEMP C	1.58 11.58 11.52
				DEPTH	2 F 2 0

				တ	
		ma		PHOSPHATE NITRITE AMMONIA S ug-atoms/liter	000
3 2	•	VISIB	7	RATE NITRITE Al ug-atoms/liter	.01 .01
TI	52.	JUDS	∞	NIT	
	121	£ 6	×	RATE ug-a	7.1
<b>≥</b>	36 55,2' 121 52,8'	AIR TEMP °C WEATH CLOUDS dry wet typ amt	10.2 10.1 45 X 8	NIT	
	55.2	Σ	_	HATE	90 98 88
I.	36	MP .	10	HOSP	• • •
Z		可にな	0.2		
HOUR N LATITUDE W LONGITUDE	0.61	AIF	Ħ	SAT	150 145 95
	28 FEB 1975 19.0	BAROM mb	1012,9	TEMP SALINITY SIGMA T OXYGEN AOU SAT	8,92 -266 8,66 -241 5,81 25
DATE	28 FEB	WAVES WIND dir ht p dir speed	0 1 X 0 0 1012.9	OXYCEN m1/1	8,92 8,66 5,81
NO		H H	0	н	821
STATION	1154	<b>P</b>	×	IGM	25.33 25.37 25.71
		AVES ht	7	55 5⊶	
CRUISE	M 16	TRANSP WAVES m dir ht	0	INIT	33,344 33,350 33,526
3	보	ANSP		SAL	
		TR		TEMP	12.00 11.80 10.68

DEPTH

				SILICA	0 0 4 19
		VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1,020
ITUDE	.7.	UDS		NITRI oms/1	.09 .09 .30 .28
LONG	122	CLOUDS typ amt	×	RATE NITRITE A) ug-atoms/liter	0 1.7 4.6 8.3*
JDE W		WEATH	45	E NIT	148
N LATITUDE W LONGITUDE	36°55,8	AIR TEMP °C WEATH CLOUDS dry wet typ amt	11.1 10.6 45 X 8	PHOSPHAT	9895
HOUR	20.4	AIR T) dry	11.1		131 123 108 56
வ	1975	BAROM mb	1013,9	AOU 1g-at/1	-162 -124 -41 240
DATE	28 FEB 1975	WIND dir speed	ਜ	OXYGEN El/l	7.75 7.37 6.48 3.48*
STATION	2205	p,	0 1 X 15 1 1013.9	TEMP SALINITY SIGMA T OXYGEN AOU SAI °C ppt ml/1 ug-at/1 %	25.23 25.41 25.57 25.98
CRUISE	ML 16		0	SALINITY ppc	33,241 33,375 33,490 33,739
		TRANSP		TEMP S	12.08 11.65 11.29 10.05
				DEPTH	0 5 10 20

\* indicates questionable data: Oxygen appears anomalously low Nitrate appears anomalously high

				SILICA	00	0	4	O.	76
		E		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0,0	0	°.	<b>•</b>	o
TUDE	1.6'	DS VISIB	8 7	RATE NITRITE Al ug-atoms/liter	00.00	0.	• 18	•13	11.
N LATITUDE W LONGITUDE	122° 1.6'	H CLOUDS typ amt	×	TRATE N ug-ato	0,0	<b>.</b> •	<b>5</b> .6	9.7	19,1
ITUDE	36 50.91	C WEATH	0 45	HATE NI	86				
N LAT	36	AIR TEMP °C dry wet	10.6 10.0	PHOSP	• •	•	•	-	-Ī
HOUR	22.7			SAT	135	134	107	72	20
핃	28 FEB 1975	BAROM	1013.9	OXYGEN AOU SAT m1/1 ug-at/1 %	-183 -188		8	151	
DATE	28 FE	WIND dir speed	17 2	OXYGE m1/1	8.02	8,01	6,17	4.43	3,16
STATION	2204	۵	7	SIGMA I	25 <b>.</b> 51	25.52	25,75	25,91	26,23
CRUISE	М. 16	书	1,7 2	SALINITY ppt	33,520	33,519	33,606	33,724	33,884
		TRANSP		TEMP S	11.72	11.66	10.80	10,41*	9.24
				DEPTH	o •	` ន	20	ଝ	67

\* indicates questionable data: Paired thermometer read 10.21

				SILICA	0	0	1	25	8	32	) (°	37
		BI		A-POONTA	∢.	0	•	9	9	9	9	9
TUDE	1,3'	UDS VISIB	8 7	RATE NITRITE A ug-atoms/liter	•07	•04	•25	.18	.14	.12		•12
W LONGITUDE	122 1,3	WEATH CLOUDS typ amt	×	ITRATE   ug-ato	.7	۲.	11,5	22.8	25,2	24.8	•	27.4
N LATITUDE	36* 46.7*		10.6 45	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.27	• 29						2,03
HOUR N	22.7 3	AIR TEMP °C dry wet	11,1 10,6	SAT PH	119	125	91	29	57	55	ጜ	45
	FEB 1975 2	BAROM mb	1013,5	OXYGEN AOU ml/l ug-at/l	86-	-130	52	184	240	251	282	309
DATE	28 FEB	WIND dir speed	m	OXYGEN m1/1	7,10	7.46	5. \$	4.16	3,59	3,48	3,14	2,88
STATION	2203	<b>6</b> .	20 4 2 21	SIGMA T	25,58	25,58	25,86	26.11	26.24	26,25	26,30	26,36
CRUISE	ML 16	ISP WAVES dir ht	20	SALINITY ppt	33,543	33,543	33.676	33,816	33,888	33,896	33,934	33,963
		TRANSP		TEMP S	11,47							
				DEPTH	0	n (	2	20	8	ጸ	75	9

\* indicates questionable data: Phosphate appears anomalously low

				SILICA	0 0 9 0	8 %
		<u>.</u>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0000	00
UDE	•9•	S VISIB	9	RATE NITRITE AI ug-atoms/11ter	9 0 0 0 2 2 2 2	110
W LONGITUDE	121° 57.9	CLOUDS typ amt	<b>∞</b>	RATE NI ug-atom	<b>►</b> ∞ = 4	7.7
		WEATH	45	TE NITI	7.1 1.8 1.4	
N LATITUDE	36° 41.2°	AIR TEMP °C WEATH dry wet	14.2 10.6	HOSPHA	.37 .24 .24	1.87
HOUR N	<b>⊣</b>	AIR Ti dry	14.2		123 125 123	50 50 40 50 40 5
	1975	BAROM mb	1014,2	OXYGEN AOU SAT ml/l ug-at/l %	-124 -132 -121	249 261
DATE	1 MAR 1975	WIND dir speed	m	OXYGEN m1/1	7.42	3.49
STATION	2202		2 20	SIGMA T	25.63 25.64 25.63	26.21 26.25
CRUISE	М. 16	P WAVES dfrht p	20 4 2	TEMP SALINITY °C ppt	33,551 33,555 33,539	33.862 33.892
3	Ai	TRANSP		TEMP S4	11,22	•
				DEPTH R	0 5 0	888

				SILICA	0 ° 8 ° 13 8 ° 21 7 8
		VISIB	<b>v</b> o	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	00000
TTUDE	53,7		œ	RATE NITRITE A ug-atoms/liter	20 117 21 115 118
W LONGITUDE	121° 53,7	TH CLOUDS Typ amt	×	TRATE   ug-ato	1.5 6.1 9.6 14.2 19.5
N LATITUDE	36° 37.6°	C WEATH	0 45	HATE NI	.00 .26 .50 .95
N LAT	36	AIR TEMP °C dry wet	10.8 10.0	PHOSP	* • • • • • • • • • • • • • • • • • • •
HOUR	1.2			SAT	144 116 111 77 66
2	1 MAR 1975	BAROM	1013,9	OXYGEN AOU SAI m1/l ug-at/l %	-233 -87 -57 127 192
DATE	1 MA	WIND dir speed	<b>H</b>	OXYGE m1/1	8.57 7.05 6.75 4.09
STATION	2201		0 X 18	SIGMA I	25.44 25.74 25.83 26.01 26.15
CRUISE	91	WAVES dir ht p	0	SALINITY :	33,451 33,614 33,670 33,764 33,839
ਤ	보	TRANSP m		SAL	
		T.		TEMP	11.82 10.90 10.60 9.98 9.53
				DEPTH m	9886

		-		∢
e-3		AIR TEMP °C WEATH CLOUDS VISIB dry wet typ amt	7	PHOSPHATE NITRATE NITRITE AMMONIA ug-atoms/liter
TTODE	50.8	SUDS amt	<b>∞</b>	NITR Coms/
LONG	121	यु ह	50 × 8	RATE ug-a
DR W	•	WEATH	ß	E NIT
N LATITUDE W LONGITUDE	40.	et c	10.6 10.6	SPHAT
	36	TEMP	9.	
HOUR	2.0	AIR	2	SAT
	1 MAR 1975 2.0 36 40.0' 121° 50.8'	BAROM	.012,5	AOU 18-at/1
DATE	1 MAR	WAVES WIND BAROM dir ht p dir speed mb	0 1 X 18 1 1012.5	SIGMA T OXYGEN AOU SAT ml/l ug-at/l Z
NS NS		WI dir	18	H
STATION	1125	ςς Cu	×	SIGM
		AVE r ht	1	E
CRUISE	ML 16	_	•	LINIT ppt
ច	昱	RANSP		S
		E		TEMP SALINITY C ppt

\* indicates questionable data: Silicate appears anomalously high

15\* 24 24 23

0000

25. 16. 19.

3.4 4.0 14.1 17.1

.05 .16 1.16 1.21

136 120 79 59

-192 -105 117 227

8.09 7.18 4.83

25.43 25.60 25.94 26.14

33,475 33,552 33,730 33,842

11.96 10.26 9.57

0 2 2 8

DEPTH

SILICA

				SILICA	<b>∞ υ</b> ο α
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	000
TUDE	2.8	AIR TEMP °C WEATH CLOUDS VISIB dry wet typ amt	8	RATE NITRITE A ug-atoms/liter	88.
HOUR N LATITUDE W LONGITUDE	36° 55.2° 121° 52.8°	1 CLOUDS typ amt	α,	RATE N ug-ato	6.2
TUDE	5.2	WEAT	7	ATE NII	
N LATI	36°5	IR TEMP °C dry wet	10,3 10,6	PHOSPH	. 85 . 80 . 63
HOUR	19,3	AIR 1 dry	10.	SAT	112 111 109
	23 MAR 1975 19.3	BAROM mb	1017.6	AOU 18-at/1	79 199 189
DATE	23 MAR	WIND r speed	., H	OXYGEN m1/1. t	6.69 6.64 6.53
STATION	1154	TP d	23 4 3 23 1 1017.6	SALINITY SIGMA T OXYGEN AOU SAF ppt m1/1 ug-at/1 Z	25.06 25.08 25.18
CRUISE	М. 17		23	ALINITY ppt	32,968 32,998 33,086
		TRANSP		TEMP S	11.85 11.86 11.69
				DEPTH	0 4 0

				SILICA	ដ្ឋក្នុង
		EI		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.00.0
ÿ.		VISIB	•	RATE NITRITE A ug-atoms/liter	66 58 66
GITU	122° .7'	CLOUDS typ amt	8	NIT	
	122°	그 유 및	∞	TRATE ug-a	4.8 6.7 9.6 10.4
選	* *	WEATH	7	Z NI	
HOUR N LATITUDE W LONGITUDE	36° 55.81	AIR TEMP °C WEATH CLOUDS dry wet typ amt	10.6 12.2	HOSPHATI	1.00 1.20 1.84* 2.13*
HOUR	20.3		10.6	SAT	95 95 89
	1975	BAROM	1017.6	AOU ug-at/1	130 27 44 59
DATE	23 MAR 1975	WIND r speed	0	OXYGEN m1/1	4.54 5.74 5.57 5.41
STATION	2205	₽ a	22 1 2 27 0	SIGMA T OXYGEN AOU ml/1 ug-at/1	25.04 25.52 25.59 25.65
CRUISE	MC 17	P	22	TEMP SALINITY °C ppt	32.888 33.373 33.444 33.484
ပ	Œ	TRANSP m		₩S.	
		• '		TEM C	11.62 11.09 10.97 10.83
				DEPTH n	20°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°

\* indicates questionable data: Phosphates appear anomalously high

				SILICA	01 8 8 51 12 12 12 12 12 12 12 12 12 12 12 12 12
		IB		AMMONIA F	000000
TILDE	1,6	CLOUDS VISIB typ amt	80	RATE NITRITE A ug-atoms/liter	40 40 40 40 40 40 40
E W LONC	122	WEATH CLC typ	2 8	NITRATE ug-at	7.8 9.4 8.2 9.0 11.8
N LATITUDE W LONGITUDE	36 50.9	MP °C wet		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.88 .88 1.00 1.52
HOUR	21.7	AIR TE dry		SAT	100 102 84 78 51
ы		BAROM mb	1017.6	AOU ug-at/1	-12 -12 88 122 274
DATE	23 MAR 1975	WIND dir speed	0	OXYGEN AOU m1/1 ug-at/1	6.08 6.20 5.08 4.72 3.18
STATION	2204	WAVES W r ht p dir	2 3 18	SICMA I	25.26 25.51 25.54 25.59 25.72 26.13
CRUISE	ML 17	VSP dt	21	TEMP SALINITY °C ppt	33,151 33,342 33,393 33,429 33,550
		TRA		TEMP °C	11.54 11.01 11.04 10.94 10.73*
				DEPTH m	288850

\* indicates questionable data: Paired thermometer read 10.65

				SILICA	o.	70	9	œ	σ.	11	23	29	04	48	46	54	*87	5	2 2
		<b>e</b>		MMONIA	0	•	o	0	0	Q	9	0	0	0	9	9	9	9	•
TUDE	1,3	JDS VISIB	8 7	RATE NITRITE A ug-atoms/liter	35	•24	• 26	36	• 35	04	•18		80	•16	90•	÷0.	03	0.05	•02
W LONGITUDE	122°	WRATH CLOUDS typ amt	<b>60</b>	NITRATE N ug-ato	9•9	4.9	5.6	7.4	10.8	9,3	16.4		28.5	29.1	28,9	29.9	24.9*	35,7	29.2
N LATITUDE	36° 46.7"		10.9 61	PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	8	• 76	• 74	.81	• 79	1,23	1.75	2,12	2.28	2.60	2,51	2,61	2,90	3,25	2,92
HOUR N	23,4	AIR TEMP °C dry wet	11.1	SAT P	108	108	107	103	100	17	65	45	38	27	23	15	<b>∞</b>	7	9
	MAR 1975	BAROM nd	1017,6	XYGEN AOU ml/l ug-at/l	-42	<b>44</b> -	-35	-15	(C)	158	286	311	361	424	453	505	<b>3</b> 25	569	589
DATE	24 MAR	WIND dîr speed	-	OXYGEN m1/1	6.50	6.52	6.43	6,22	6.01	4.35	3,06	2,85	2.43	1.76	1.49	1.01	• 56	15.	•45
STATION	2203	P	2 X 18	SIGMA I	25,31	25,32	25.44	25,55	25,54	25,81	26.15	26,32	26.60	26.66	26.72	26.84	26.98	27,11	27.29
CRUISE	ML 17	ISP WAVES dir ht	67	SALINITY ppt	33,183	33,188	33,312	33.422	33,471	33,612	33,803	33,917	34.083	34.111	34.132	34.173	34.241	34,297	34,391
		TRANSP		TEMP S	11,39	11.40	11,26	11,10	11.11	10,48	9*36	8.85	7.84	2.60	7.24	6.61	5.97	5.28	4.31
				DEPTH	0	'n	10	20	8	ጽ	75	100	197	246	295	394	492	290	788

\* indicates questionable data: Nitrate appears anomalously low Silicate appears anomalously low

4.4 .30 .6 7	9.5 .40 .7 15	
		•32
4.4	9.5	7
4.4	5.6	N
		9
		7
•62	86•	1,48
		•
,	90	22
	54	<b>5</b> 66
,	5.45	3,28
ώ (	Q.	4
25.4	25.6	26,14
347	3,467	3.812
% 11:	00°11	9.43
2 50	3 8	것
	11.36 33.347 25.45	.62 5.45 54 90 .98

				SILICA	77339
		VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	ব্ৰব্তগ
TUDE	3.7			RATE NITRITE A ug-atoms/liter	232114
M LONG	121° 53,7	TH CLOUDS typ amt	ဆ	CTRATE 1 ug-ato	
HOUR N LATITUDE W LONGITUDE	36" 37.6"	AIR TEMP °C WEATH CLOUDS dry wet typ amt	.1 2	PHATE N	
N		IR TEMP °C dry wet	11.7 11.1		
HOUR	2.9			SAT /1 Z	121 126 126 94 58
뙨	24 MAR 1975 2.9	BAROH	1015.9	N AOU ug-at	-109 -136 -114 31 232
DATE	24 MA	WIND dir speed	0 6	OXYGE m1/1	7.12 7.43 7.23 5.71 3.62
STATION	2201	۵.	49 1 X 9	SIGMA T OXYGEN AOU ml/l ug-at/l	25,20 25,22 25,29 25,64 26,06
CRUISE	Ж. 17		67	TEMP SALINITY • C PPC	33,265 33,265 33,284 33,500
		TRANSP		TEMP S	12,33 12,25 11,92* 10,94
				DKPTH m	3,265,0

\* indicates questionable data: Paired thermometer read IL.86 Sillcate appears anomalously high

				SILICA	6 7 15 15
		VISIB	_	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	4.0.0
JDE	8		••	rrite s/11te	19 22 18 24
ONGITI	121° 50.8	CLOUDS typ amt	80	RATE NITRITE A ug-atoms/liter	
Z Z		lath E	7	NITRA ug	9 2 2 8 9 2 2 8 9 5 8 9
N LATITUDE W LONGITUDE	36° 40,6°	AIR TEMP °C WEATH dry wet t	10.0	OSPHATE	44. 50. 83.
HOUR N	3,9 3	AIR TEMP (dry wet	10.7 10.0	SAT PH	119 115 102 83
		BAROM	015.9	_	-102 1 -80 1 -11 1
DATE	24 MAR 1975	WIND dir speed	2 0 1015,9	OXYGEN AOU ml/l ug-at/l	7.09 6.87 6.12 5.05
STATION	1125	ρ.	1 X 2	SIGMA I	25,15 25,30 25,40 25,57
CRUISE	ML 17	SP WAVES dir ht	24	TEMP SALINITY °C ppt	33,120 33,242 33,325 33,391
		TRANSP		S THAT	12.00 11.74 11.53 10.84*
				ркетн m	0 10 20

\* Indicates questionable data: Paired thermometer read 10.91

				SILICA	80 GV GV
		, M		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	δ.v.δ.
Ħ.	*	VISIB	∞	RATE NITRITE AI ug-atoms/liter	16 15
irro	52.	CLOUDS typ amt	o ×	NIT	
	.21	यु ह	×	RATE ug-ai	1.8 1.3 2.5
N LATITUDE W LONGITUDE	36 55,2' 121" 52,8'	AIR TEMP °C WEATH CLOUDS dry wet typ amt	2	HIN	444
	55.2	<b>5</b>		HATE	1.58* .45 .48
LAT	36° !	IR TEMP (dry wet	10,6 10,6	HOSPI	Ä
		~ t	9.0		
HOU	8°61	AII	Ħ	SAT Z	137 137 135
	1154 18 April 1975 19.8	BAROM mb	1022.7	TEMP SALINITY SIGMA T OXYGEN AOU SAT	-197 -198 -187
DATE	3 Apríl	WAVES WIND r ht p dir speed	7 2 2 6 1 1022.7	OXYGEN m1/1	8,25 8,26 8,14
NO	18	W) dfr	9	H	223
STATION	1154	<u> </u>	7	)ICM	25.70 25.70 25.69
()		WAVES r ht	7	<b>.</b> .	
CRUISE	18	W/ dir	27	INIT	33,609 33,615 33,607
25	보	TRANSP		SAL	
		TR		TEMP °C	11.09 11.12 11.10
				DEPTH m	0 4 8

\* indicates questionable data: Phosphate appears anomalously high

				SILICA	70	21	21	53
		VISIB	œ	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	7.	ထ္	4.	1,0
TUDE	•7•			RATE NITRITE A ug-atoms/11ter	•25	•25	•26	•28
LONGI	122°	CLOUDS typ amt	×	RATE N ug-ato	ς.	0*6	ထ္	ω,
UDEW	œ	Weath	2	TE NIT				18.8
N LATITUDE W LONGITUDE	36° 55.8° 122° ,7°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	10,4 8,9	ноѕрна'	1,01	1.04	1,19	1.69
HOUR N		AIR TEMP *C	10.4		106	108	86	79
	1975 2	BAROM mb	1022,0	AOU g-at/1	-33			
DATE	Apr11	WIND dir speed	27 2 1	OXYGEN m1/1 u	6.48	9.60	6,01	4.92
STATION	2205 18 April 1975 21.0		2 27	SIGMA T OXYGEN AOU SAT m1/1 ug-at/1 %	25,77	5,75	5.91	6.04
	18 2	WAVES Ir ht p	49 1 2	ES YII.				
CRUISE	보	TRANSP m d1	7	SALINITY ppt	33,596			
		TR		TEMP °C	10,65	10.70	10.26	9.82
				DEPTH	0	Ŋ	ន	20

				SILICA	12	*67	<b>☆</b>	17	28
		<b>81</b>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	m m	, m	4.	4.	ထ္
UDE	<b>.</b> 9•	S VISIB	<b>∞</b>	RATE NITRITE A ug-atoms/liter	26 28	•25	•22	•26	• 29
W LONGITUDE	122° 1.6'	CLOUDS typ amt	о ×	LATE NI 18-atoh	<b>6</b> 6 41	ਜ਼	ี่	7	κĵ
		WEATH	7	E NITE	8 6 8 4	α,	ထိ	1	23,
N LATITUDE	36° 50,9°	AIR TEMP °C WEATH dry wet	<b>9.</b> 4	ноѕрнат	85	.85	.87	•95	1.64
HOUR N	22.1	AIR TE dry	10.3 9.4	SAT P	103	·	102	82	79
Ħ	975 22	BAROM	1022.7	-	133				114
DATE	2204 18 Apríl 1975		1 10	OXYGEN AOU ml/l ug-at/l	6.20		6.20	96*5	7.93
ION	4 18	WIND dir speed	26	0					
STATION	220	WAVES r ht p	e H	SIGN	25.63	25.	25,67	25	<b>56</b>
CRUISE	ML 18	Ħ	33	ALINITY PPt	33,517	33,518	33,546	33,577	33,763
•		TRANSP		TEMP SALINITY SIGMA I	10.07				
		·		DEPTH m	0 v	្ន	20	ଞ	ያ

\* indicates questionable data: Silicates appear anomalously high

				SILICA	11	12	14	01	15	8	29	24	28	38	43	R	69	75	66	100
		EB		AMMONIA f	•2	•5	Ç	.7	7	'n	4	٣,	ູ້	ູ	2		.2	-5	7	4.
TUDE	1,31	JDS VISIB	0	RATE NITRITE A ug-atoms/11 ter	•22	•22	•25	• 20	•22	•19	• 22	90	01.	•07	•05	8	ခို	05	0.	•03
W LONGITUDE	122°	WEATH CLOUDS typ amt	7 X	NITRATE 1 ug-ato	7.8	10.4	10.8	0.6	12,6	17.2	24.3	16.7	20.1	25.2	28.6	28,1	34.2	33.0	36,6	35,6
N LATITUDE	36° 46.7		9.2	PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	-67	•78	.83	•73	06•	1,14	1,52	1,27	1,75	2,08	2,23	2,28	2.87	2,76	3,15	3,05
HOUR N	23.4 3	AIR TEMP °C dry wet	10.6	SAT PH	100	101	101	102	84	26	55	51	48	77	38	**	16	01	9	٣
		BAROM mb	1022.0	OXYGEN AOU ml/l ug-at/l	0	<u>.</u>	-5	-11	68	18	251	275	596	316	354	385	<b>76</b> 7	542	572	601
DATE	18 April 1975	WIND dir speed	<b>-</b>	OXYGEN m1/1	6.07	6.12	60°9	6,19	5.08	5.92	3.48	3,24	3.02	2,83	2,47	2,24	1,08	99•	•39	•23
STATION	2203 1	<u>a</u> .	3 2 30	SIGMA I	25,67	25.66	25.67	25.67	25.74	25,87	26,23	26.29	26,33	26.40	26,50	26.63	26,81	26.95	27,02	27.21
CRUISE	ML 18	SP WAVES	26 3	SALINITY ppt	33,547	33.543	33,543	33,545	33,589	33,676	33,875	33,897	33,926	33,968	4.023	¥•039	<b>4.188</b>	4.231	¥•264	<b>4.</b> 361
J	<i>*</i> **	TRANSP		TEMP SA	96°01															
				DEPTH	0 :	Ωį	3	20	ଛ	67	74	86	148	197	246	295	394	492	291	787

				SILICA	12	17	14	28	13	14*
		13		AMMONIA K	4.	9	۳,	m,	9.	۳,
ITUDE	57.91	UDS VISIB amt	8	RATE NITRITE A ug-atoms/liter	•14	<b>60°</b>	<b>90°</b>	60°	•14	•14
M LONG	121° 57,9	ATH CLOUDS typ amt	2 X 0	NITRATE ug-at	13,0	11,9	8.9	12.6	15.0	12,9
N LATITUDE W LONGITUDE	36° 41.2'	AIR TEMP °C WEATH dry wet	9.4 9.2	PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	497	•92	<b>8</b>	<b>8</b> 8	1,03	1,15
HOUR N	1.8	AIR TEMP °C dry wet	<b>9.</b> 4	SAT %	110	110	104	109	90	<b>9</b>
	1975	BAROM mb	1022,4	OXYGEN AOU ml/1 ug-at/1	-52	-52	<b>-</b> 20	닭	26	181
DATE	2202 19 April 1975	WIND dir speed	33 2	OXYGEN m1/1	6.67	6.67	6,32	6.65	5.50	4.21
STATION	2202	Ω.	2 2 33	SIGMA I	25,80	25,80	25,80	25, 79	25,85	26.08
CRUISE	ML 18	d.	8	SALINITY ppt	33,664	33,661	33,660	33,657	33,652	33,770
		TRANSP		TIEND S	10,74	10,77	10,74	10,76	10,41	9.59
				DEPTH	0	5	얶	8	8	ß

\* indicates questionable data: Silicate appears anomalously low

				SILICA	*	11	18	23	51*
		118	_	PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	4.	ຕູ	ئ،	4.	• 5
TUDE	53,71	JDS VISIB	0	RATE NITRITE A ug-atoms/liter	•14	60	•12	•19	•17
N LATITUDE W LONGITUDE	121° 53,71	WEATH CLOUDS typ amt	0 ×	TRATE   ug-atc	0	3.4	11.2	21.1	13,5
ILUDE	36° 37.6¹	C WEAT	4 2	HATE NI	32	.71			1,23
N LAT	36	AIR TEMP °C dry wet	10.5 9.4	PHOSP	•	•	•	4	ri F
HOUR	2.8			SAT	164	138	107	2	68
된	1 1975	BAROM mb	1021.7	N AOU ug-at/		'			
DATE	9 Aprt.	WIND dir speed	<b>T</b>	OXYGE m1/1	9.74	8,26	6.51	4,31	4.22
STATION	2201 19 April 1975		. 2 36	SIGMA T OXYGEN AOU ml/l ug-at/l	25.60	25,69	25,78	26.00	26.05
CRUISE	ME 18	P WAVES dir ht p	3 1 2	LINITY	3,648	33,656	3,658	13,720	3,755
3	Σ	TRANSP		TEMP SALINITY S		11,36 3			
				DEPTH m	0	'n	ន	20	ጽ

\* indicates questionable data: Silicate appears anomalously low at 0 m; high at 30 m

				SILICA	14	718
		VISIB	œ	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	4.0	1.3
JDE	8			RATE NITRITE A ug-atoms/liter	90,00	13
NGIT	121° 50.8	CLOUDS typ amt	0 ×	E NI		
Ø. 12	121	E Q D		ITRAT ug-	4	10.7 13.4
UDE	.0	WEAT	7	TE N.		
N LATITUDE W LONGITUDE	36 40.0	AIR TEMP °C WEATH CLOUDS dry wet typ amt	8,9 8,3	PHOSPHA	.37	1.16
HOUR	3.9	AIR T	8,9		149	9 8 10
		BAROM	1019,3	XXGEN AOU SAT ml/1 ug-at/1 %	-257	<b>2</b> 2
DATE	1125 19 April 1975	WIND dir speed	12 0 1	OXYGEN AOU ml/l ug-at/	8 8 8 8 8 8	5.56
KON	5 19	WI dir	12		60	87
STATION	112	WAVES r ht p		SIGMA I	25.60	25.75 25.87
ESE	18	WAVES dir ht	30 1 2	INITY	520	544 686
CRUISE	뎦	SP		SALD	33.	33.644 33.686
		TRAD		TEMP SALINITY °C ppt	11.70	10.96
				DEPTH	Οv	25

\* indicates questionable data: Silicate appears anomalously low

				SILICA	11 16 24
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.2
벍	<u>.</u>	VISIB	9	IIE 11te	0008
SITUI	52.	CLOUDS typ amt	0	NITI Coms/	• • •
LON	121° 52.8'	ct.	0 ×	RATE NITRITE A ug-atoms/liter	4.0 9.0 9.0
Ē] }≊	•	eath	7	TIN	്പ്യ്
N LATITUDE W LONGITUDE	36" 55.2"	AIR TEMP °C WEATH CLOUDS dry wet typ amt	11.6 11.1	10SPHATE	00 40 88
		IR TEMP "( dry wet	9•1	ᅜ	
HOUR	20.1	AII) d	Ħ	SAT %	145 120 79
	1975	BAROM mb	8 6001	TEMP SALINITY SIGMA T OXYGEN AOU SAT °C ppt ml/1 ug-at/1 %	-233 -105 115
DATE	29 APR 1975	WIND d1r speed	6 1 1009,8	OXYGEN m1/1	8,48 7,18 4,86
NO.	. 4	W.	9	H	9 9 9
STATION	1154	WAVES r ht p	24 2 2	SIGM	25.40 25.66 25.96
CKUISE	13	WAVES dfr ht	54	MITY	574 527 756
S S S	보	4SP		SALID	33.574 33.627 33.756
		TRA		TEMP C	12,52 11,37 10,23
				DEPTH	0 20

				SILICA	3 8 14 25
		VISIB	9	PUOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	
TUDE	.7.		0	ITRITE ms/lit	.00 .00 .10
LONGI	122°	CLOUDS typ amt	0 X	RATE NITRITE A ug-atoms/liter	1.1 .0 5.0
IDE W		WEATH	7	E NIT	A-1
H LATITUDE W LONGITUDE	36°55.8°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	11.7 11.1	PHOSPHAT	.05 .03 1.11 1.64
HOUR	21.4	AIR T dry		SAT L %	133 134 79 60
[e]	1975	BAROM	1009,8	AOU ug-at/]	-176 -182 118 219
DATE	29 APR 1975 21.4	WIND dir speed	0 9	OXYGEN AOU SAT ml/l ug-at/l %	7.92 8.00 4.87 3.76
STATION	2205			SIGMA I	25.51 25.58 26.02 26.07
CRUISE	L 19	P WAVES dir ht p	24 1 2	*C ppt	33,547 33,604 33,753 33,731
ច	별	TRANSP		nde sal	11.87 3 11.71 3 9.88 3 9.70 3
					0 11 5 11 20 9
				DEP TH m	रण ४४

				SILICA	21 7 17 24
		TB		PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	440,74
LUDE	.9•1	S VISIB	9 0	TRITE es/11te	4001188
LONGI	122° 1.6°	CLOUDS typ amt	×	RATE NITRITE A ug-atoms/liter	4.2 4.3 6.3 10.7 15.9
'UDE W		WEATH	7	TE NIT	
N LATITUDE W LONGITUDE	36°50.9	AIR TEMP °C WEATH dry wet	11.1 10.6	PHOSPHA	33 108 108 147
HOUR	22.9	AIR TE dry	11.1	SAT	106 90 93 64 57
ഥ	29 APR 1975	BAROM mb	1009.8	OXYGEN AOU ml/1 ug-at/1	-33 56 39 240 312
DATE	29 APR	WIND dir speed	27 0	OXYGEN m1/1	2,449 2,449 2,489 2,489 8,118 8,118
STATION	2204	۵	4 2 27	SIGMA T	25.88 25.88 25.93 26.11 26.20 26.34
CRUISE	ML 19	NSP WAVES dir ht	27	TEMP SALINITY °C ppt	33,715 33,715 33,730 33,730 33,830
		TRANSP		TEMP S	10.50 10.51 10.28 9.47 9.14 8.77
				DEPTH	5888 <sub>50</sub> 0

				SILICA	17	18	16	14	15	ጽ	9	48
		E3		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	5.	5	.7	5.	• 7	۲•	٦.	Ç
TUDE	1,31	S VISIB	9	RATE NITRITE A ug-atoms/liter	•03	<b>60</b>	90°	<b>*</b> 0	8	00	င္မ	00
N LATITUDE W LONGITUDE	122° 1.3	CLOUDS typ amt	×	TRATE N. ug-aton	8.8	9*1	9•1	7.0	6.1	<b>3</b> *3	19,7	2.0
UDE v	•7•	WEATH	7	TE NI								
LATIT	36° 46 <sub>•</sub> 7¹	AIR TEMP °C WEATH dry wet	10.6 10.1	HOSPILA	1,08	1,14	1.08	1,09	1,31	1,63	1,76	1.88
HOUR		AIR TE dry	10.6	SAT %	90	83	8	18	63	45	ያ	34
	1975	BAROM mb	1010.2	OXYGEN AOU m1/1 ug-at/1	57	69	58	901	210	308	284	376
DATE	30 APR 1975	WIND dir speed	30 4	OXYGEN m1/1	5.58	5.40	5.5	5.01	3.94	2,88	3,19	2,17
STATION	2203	<u>α</u>		SIGMA I	25.42	26,02	26.02	26.04	26.16	26,32	26,41	26.45
CRUISE	MC 139	P WAVES dir ht	30 5 2	SALINITY PP¢		3,771	13,770	13,778	13,788	13,925	33,987	4.013
ပ	Σ	TRANSP		TEMP SA	96	66	94	88	21	87	8,60	လ္က
				DEPTH m	0	'n	01	50	ଛ	20	7.4	98

				×	_					19*	
				SILIC	Ū		4 Q	, ,	-	4 F	
		118	_	PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter		ď	1 4		<u>`</u>	,	
DE	•	VISIB	9	RATE NITRITE AI ug-atoms/liter	10	0		6		116	
GITU	57.	CLOUDS typ amt	o ×	NIT							
NO.	121° 57,9°	F F	×	RATE ug-a	Ç	α.		9.9	×	4	
<b>≥</b>		EATH	7	LIN	9	. (~	יט נ	9	-	14.4	
ITOD	41.2	;≊ ⊖	<b>.</b>	HATE	38	35	25	65.	<u>ب</u> ب	Ν	
N LATITUDE W LONGITUDE	36° 41.2°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	10.3 9.4	HOSPI				• •	-	1,55	
		IR TE dry	0.3				_				
HOUR	2.5	₹ ,	-	SAT	80	113	116	104	2	54	
en en	1975	BAROM mb	1009.8	AOU ug-at/1	94	77-	-85	-19	168	260	
DATE	30 APR 1975	WIND dir speed	30 7	OXYGEN AOU SAT m1/1 ug-at/1 %	4.99	6.84	2,00	6.28	4.33	3,38	
N		W] dår	ଞ	H	œ	و	7	0	'n	7	
STATION	2202	<u>a</u>	7	SIGMA I	25.7	25.76	25.7	25.8	26.0	26.2	
		WAVES r ht	21 4 2	<i>v</i> i							
CRUISE	19	끂	21	SALINITY ppt	<b>69</b>	33,690	691	<b>969</b>	.757	853	
ಕ	보	TRANSP m		SAL							
		T.		TEMP C	11.04	11.09	11.04	10,91	9.72	9,15	
				п	0	ĸ'n	10	50	ጽ	67	

\* indicates questionable data: Silicate appears anomalously low

				SILICA	H004	14
		8		VMMONIA :	7049	1.1
댎	7,	VISIB	7	RATE NITRITE A ug-atoms/liter	8888	•08 •
	53,	UDS amt	0 x	NITA Come		
FONG FONG	121° 53,7	creus	×	RATE ug-at	9.7	0.0
) (원	•_	PEATH	7	CIN 2		
N LATITUDE W LONGITUDE	36" 37,6"	AIR TEMP °C WEATH CL&UDS dry wet typ amt	10.6 9.4	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.02 .00 .84*	1.59
		A TE	9*(	P4		
HOUR	3.6	AII	Ħ	SAT %	134 141 144 87	54
r+1	1975	BAROM mb	1009.8	AOU ug-at/1	-173 -212 -231 73	259
DATE	30 APR 1975	WIND dir speed	27 1	OXYGEN AOU SAT ml/l ug-at/l %	7.85 8.24 8.48 5.28	3,36
<b>z</b>		WI	27		6727	9
STATION	2201		7 2 2	SIGMA T	25.49 25.47 25.52 25.87	26.1
		WAVES dir ht p	77	÷-		
CRUISE	61 7		27	SALINITY PPt	33,667 33,663 33,661 33,721	3,823
<u>5</u>	Ä	FRANSP m		SAJ		
		IR		TEMP :	12.46 12.52 12.28 10.60	9,35
				DEPTH m	2 P 5 0	ଛ

\* indicates questionable data: Phosphate appears anomalously high

				SILICA	e a u è
		1.B		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	ر د از کر د
TUDE	8.0	DS VISIB mt	7 0	RATE NITRITE A ug-atoms/liter	800
N LATITUDE W LONGITUDE	121° 50,8	AIR TEMP °C WEATH CLOUDS dry wet typ amt	0 X	TRATE N. ug-ator	1 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
TUDE	36° 40.01	WEAT	7	ATE NI	
N LAT	36 4	IR TEMP •C dry wet	10.8 10.0	PHOSPH	.18 .20 .31
HOUR	<b>4</b> •6		10.	SAT L Z	116 114 107 68
Бi	30 APR 1975	BAROM mb	1009.8	OXYGEN AOU SAT ml/l ug-at/l Z	-81 -70 -35
DATE	30 AP	WIND Tr speed	30 2	OXYGEN R1/1	6.75 6.67 6.30 4.16
STATION	1125	WAVES WIND rht p dir speed	24 3 2 30	SIGM I	25.41 25.48 25.53 25.97
CRUISE	ML 19	书	24	TEMP SALINITY °C PPt	33,623 33,638 33,644 33,757
		TRANSP		TEMP :	12.66 12.36 12.16 10.18
				DEPTH m	0 10 20

te1	_	VISIB	9
[TMD]	52.8	UDS	<b>∞</b>
LONG	.21°	CLO Ty	×
HOUR N LATITUDE W LONGITUDE	36° 55,2' 121° 52,8'	AIR TEMP °C WEATH CLOUDS VI dry wet typ amt	11.3 11.1 0 X 8 6
ATIT	. 55	et C	1,1
L N	36	remp W	3 1
HOUR	20°0		
	ML 20 1154 17 MAY 1975 20.0	BAROM mb	21 0 X 6 0 1009,1
DATE	MAY	WAVES WIND dir ht p dir speed	_
	17	UNI!	
STATION	4	ų th	ŭ
TAI	115	ο.	×
63		WES	0
CRUISE	20	WA dir	21
CRI	뵤	TRANSP m d	

11081
9 1.0
.01 .18 .24
6.0 13.8
.36 .83 1.31
137 114 86
-190 -72 74
7.93 6.78 5.27
25.48 25.83 25.99
33,776 33,881 33,846
12.93* 11.53 10.51*
0 5 01

\* indicates questionable data: Paired thermometers read 12.77 at 0 m; 10.57 at 10 m

				SILICA	6 4 27
		1.8		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	4555
<b>6-1</b>	_	VISIB	9	IE	0000
N LATITUDE W LONGITUDE	•7•	CLOUDS	∞ .	RATE NITRITE A ug-atoms/liter	888%
LON	122	<u> </u>	×	ATE 8-al	8
M ⊒		AIR TEMP °C WEATH dry wet	0	NITR	1.8 .5 .6 20.2
CTOD	55.8	28 C)		HATE	28 30 46 193
I.A.	36°55,8	IR TEMP °( dry wet	11.7 11.1	HOSPI	28 30 46 1.93
		A TE	-1	A	
HOUR	21.2	AIR	7	SAT	130 142 114 62
	17 MAY 1975	BAROM mb	9 2 1009,5	SIGMA T OXYGEN AOU SAT m1/1 ug-at/1 %	-158 -218 -76 212
DATE	MAY	ed	-	GEN /1 u	7.62 8.31 6.84 3.84
	17	WIND dir speed	7	OXX E	٠ ٩ ٩
NO		W]	6	Ħ	8004
STATION	2205	Δ	e	\$65	25.58 25.60 25.80 26.14
໙໌		WAVES rht p	12 2 3	83	
CRUISE	20	WA	12	INITY ppt	802 804 831 877
CK CK	보	tsp		SALI	33,802 33,804 33,831 33,831
		TRAN		TEMP SALINI	12.53 12.44 11.49 9.73
				DKPTH	2002

;1

				SILICA	13	12	22	<b>5</b> 6	28	36
		118		PHOSPHATE NITRATE NITRITE ANMONIA SILICA ug-atoms/liter	8	۲.	.7	3.4	4.7	o•
<u> </u>	9	S VISIB		TRITE ES/11te	•18	•19	•28	• 24	•25	8
ONGITU	122° 1.6'	CLOUDS typ amt	×	RATE NITRITE AI ug-atoms/liter	0.9	ထ္	ئ.	21.9	*2*	<b>•</b>
)E w 1		WEATH	45	IE NIT	9					
N LAITTUDE W LONGITUDE	36° 50.9°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	11.0 11.0	110SPHA	•72	•79	1,63	1,83	1.76	2,53
HOUR	1•1	AIR TE dry	11.0	SAT %	117	114	8		17	43
HO	1975 2	ВАКОМ mb	1009.8	AOU g-at/1	68	-76	111		116	325
DATE	17 MAY 1975 21.1	eq	24 0 1(	OXYGEN ml/l u	7.07	<b>96*9</b>	46.4		4.47	2.74
STATION	2204	ō.		SIGMA T OXYGEN AOU : ml/l ug-at/l	25.94	25.96	26.09	26.15	26.26	26.39
	8	WAVES dir ht p	24 1 X	SALINITY S PPt						33.948
CRUISE	보	TRANSP m		P SAL.						
		-		TEMP C	9. 2.					8,56
				m m	0	er)	គ	8	8	K

\* indicates questionable data: Nitrate appears anomalously high

				SILICA	22	21	23	2	33	37	8	37	35*	32*	45	43	32*	\$3	282	28
		118		AMMONIA :e	7.	9	•	9•	1.0	100	5	1.7	9	1.2	9	_	ິຕຸ	2	2	, <b>့</b>
TUDE	1,3	DS VISIB	8	RATE NITRITE A ug-atoms/liter	£1.	•16	-28	19	33	35	20	60	.22	.21	ਲ	0.05	•16	05	<b>6</b>	0
W LONGITUDE	122	TH CLOUDS typ amt	×	IITRATE N ug-ato	16.0	15,8	29.1*	23.0	26.4	28.0	25,3	21,5	26.6	20.3	29.4	25,5	33,3*	31,2	37.4	34.0
N LATITUDE	36° 46.7°	ΥΡ °C WEATH Wet	10,6 45	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter															3,09	
HOUR N	£ 4•	AIR TEMP °C dry wet	11,1	SAT PHO	78		78	75	65	55	47	47	35	32	27	23	51	11	9	13
	1975	BAROM	1009.8	XYGEN AOU ml/1 ug-at/1	122		120	139	196	251	303	302	375	390	422	452	294	533	572	247
DATE	18 MAY 1975	WIND dir speed	7	OXYGEN m1/1	4.78	4.92	<b>79.8</b>	<b>4</b> •66	<b>60°</b>	3,49	2,97	2,98	2,22	2,07	1.76	1.48	3,37	•75	07.	<b>68</b>
STATION	2203	<u>α</u> ,	1 2 15	SIGMA T	25.97		26.03	26.05	26.18	26,26	26,36	26.41	26.49	26,52	<b>26.60</b>	26.70	26.68	26.93	27,04	27,25
CRUISE	M. 20	SP WAVES dir ht	27	SALINITY	33,765	33,770	33,781	33,766	33,825	33,892	33,935	33,963	34.021	34.038	34.082	34.129	33.976*	34,223	34.280	34,368
		TRANSP		TEMP S	10,25	ı	9.95	9.75*	9,23	9 <b>°</b> 07	8,65	8,45	8.27	8,11	7.81	7.40	99.9	6.27	5.70	4*49
				DEPTH	0	<u>ب</u>	9	8	ଛ	<b>3</b>	75	0 1 1	148	197	747	294	386	485	281	772

\* indicates questionable data: Paired thermometer read 9,84
Salinity appears anomalously low
Nitrate appears anomalously high
Silicates appear anomalously low

ы	-	AIR TEMP °C WEATH CLOUDS VISIB dry wet typ amt	m
GILD	57.9	OUDS	œ
2 2 2	121°	ਜ਼ ਸ਼੍ਰੇ ਨੂੰ	×
JUE -	2.	WEAT	45
ATIT	. 41,	et c	0.0
Z	36	TEMP	6
HOUR N LATITUDE W LONGITUDE	ML 20 2202 18 MAY 1975 2.1 36° 41.2' 121° 57.9'		16 2 2 16 3 1009.8 9.9 10.0 45 X 8 3
ьı	1975	BAROH	1009.8
DATE	MAY	eed	e
	18	(TIND	٠.
IOI	2	di.	Ä
STAT	220	т С	7
		AVE:	7
CRUISE STATION	8	dir	16
ig S	보	TRANSP WAVES WIND BAROH m dir ht p dir speed mb	

A SILICA	17	1 27	22	36	33
AMMON12	1.0	9	1,1	1.6	1.0
IITRITE /	15	18	24	44	•23
NOSPHATE NITRATE NITRITE AMMONIA ug-atoms/liter	21.9*	14.1	*8*	25.1	21.0
PIIOSPHATE	1.28	1,34	1,52	2,17	1.90
SAT %	83	71	82	57	
OXYGEN AOU ml/l ug-at/l	58	157	26	240	
_	5.47	4.37	<b>2.</b> 08	3,58	3,19
SIGMA T	25,95	25.99	26.05	26.20	
SALINITY ppt	33, 782	33,814	33,816	33,871	
TEMP °C	10.42	10,35	10,02	9,32	8,93
DEPTH m	0 50	) CI	20	8	ጽ

\* indicates questionable data: Nitrate appears anomalously high at 0 m; low at 20 m

				SILICA	8 23 28 8
		13		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.0
JDE	.7.	S VISIB	7	RATE NITRITE AU ug-atoms/liter	11 01 23 21 27
ONGIT	121° 53,71	CLOUDS typ amt	∞ ×	YTE NI'	~ ~ ~ ·
E W I		WEATH CLOUDS typ amt	0	NITRA	3.7 1.9 15.8 18.5
N LATITUDE W LONGITUDE	36° 37,6°	IP °C W	10,0	OSPHATE	.66 .53 1.52 1.74 2.12
HOUR N	3,3	AIR TEMP °C dry wet	9.4 10.0	SAT PI	128 136 90 65
		BAROM	1009.8	AOU S ug-at/1	-146 1 -188 1 53 195
DATE	18 MAY 1975	WIND dir speed	-	OXYGEN m1/1	7.55 8.07 5.49 4.06 3.42
STATION	2201	Δ.	3 1 2 21	TY SIGMA T OXYGEN AOU ml/1 ug-at/1	25.69 25.77 25.96 26.20 26.30
CRUISE	ML 20	ਜ਼	33	ALINITY ppt	33,834 33,835 33,838 33,904 33,937
		TRANSP		TEMP SALINI	12.06 11.64 10.63 9.48 9.06
				DEPTH m	30 50 00 30 00 00

				SILICA	o	7	22	33
		<b>E</b> 1		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	o.	Ç	ထ္	1.3
ल	•	VISIB	7	RATE NITRITE AV ug-atoms/11ter	00	00	•18	.23
irub	50.8	CLOUDS typ amt	80	NITH toms/	•	•	Ī	•
NO NO NO	121° 50,8°	ty of	×	RATE ug-al	۲.	٠,	12,3	7.
별 33		EATH	0	TIN :			12	18.7
HOUR N LATITUDE W LONGITUDE	36° 40,0°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	9.4 10.1	IOSPHATE	•21	• 36	1,30	1,76
Z		IR TEMP °(	<b>9.</b> 4					
HOUR	4.1	AII	•	SAT	145	136	76	99
	1975	BAROM mb	1009,8	SALINITY SIGMA T OXYGEN AOU SAT ppt m1/1 ug-at/1 %	-235		31	176
DATE	18 MAY 1975	WAVES WIND r ht p dir speed	30 1 X 15 0	OXYGEN m1/1	8,52	8,01	5,71	4.25
NO.	10	WI d1r	15	H	55	88	33	91
STATION	1125	S G	×	SIGM	25.0	25.	25,93	26,16
	0	WAVES r ht	0 1	Ţ	펁	<u>ب</u>	ıΩ	
CRUISE	ML 20	끃	m	ALINI PPt	33,83	33,82	33,845	33.88
•		TRANSP		TEMP S.			10,83	
					0		10	
				DEPTH m	-		-	7

				SILICA	
		IB		AMMONIA	2612040
TLODE	1,3	CLOUDS VISIB	0	RATE NITRITE A ug-atoms/liter	14 06 12 14 19 12 18
W LONGITUDE	122°	_	×	IIRATE ug-at	8.3 5.2 8.5 8.5 9.7 14.7 22.5
N LATITUDE	36° 46.7'	AIR TEMP °C WEATH dry wet	11,2 2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.92 .78 .99 1.24 1.67 1.94
HOUR N	2,5 3	AIR TEM dry	12,2 11,2	SAT PH	108 107 105 79 69 68
	JUN 1975	BAROM mb	1008,5	OXYGEN AOU m1/1 ug-at/1	-41 -36 -27 113 168 177
DATE	3 JUN	WIND dir speed	7	OXYGEN m1/1	6.35 6.35 6.22 4.87 4.24 4.24 4.08
STATION	2203	Δ.	4 3 27	SIGMA I	25.40 25.41 25.49 25.87 25.97 26.07
CRUISE	ML 21	TRANSP WAVES m dir ht	27	TEMP SALINITY °C PPt	33,530 33,531 33,531 33,659 33,768
		TRA		TEMP	12,34* 12,30 12,07 10,31 10,37 9,67
				DEPTH	0 5 119 28 47 70 94

\* indicates questionable data: Paired thermometers read 12.25 at 5 m; 9.27 at 94 m

				SILICA	4	0	<b>1</b> 6	19	20	22
		113		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	• 5	1.1	۲.	ŗ,	ຕຸ	2.2
TUDE	7.91	OS VISIB mt	0	RATE NITRITE A ug-atoms/liter	•03	•05	•05	60•	01.	•13
N LATITUDE W LONGITUDE	121° 57,9	H CLOUDS	o ×	ITRATE N ug-ato	1.8	<b>1.</b> 8	<b>9.</b> 4	13,3	13,5	17,3
ITUDE	36° 41.2°	C WEAT	2	иате и					1,31	
	36°	AIR TEMP °C WEATH dry wet	12.5 12.2	PHOSE						
HOUR	1.6			SAT /	127					98
DATE	3 JUN 1975	BAROM 1 mb	1000-1	OXYGEN AOU SAT ml/l ug-at/l %	7 -138		'	6 12		3 75
	3 4	WIND dir speed	27 2	OXYG]	7,3	7.5	7.9	5,8	5.79	5.2
STATION	2202	<u>c</u>	m	SIGMA T	25,34	25,34	25,56	25,72	25,75	25.88
CRUISE	ia. 21.	#	27 '	LINITY PP <sup>t</sup>	33,574	3.574	3,644	3,702	3,713	3,772
Ö	Ħ	TRANSP		TEMP SALINITY S  C PPt					11,27 3	
				DEPTH 7					29	

W LONGITUDE	121° 53,7'	
HOUR N LATITUDE	36° 37,6°	
HOUR	22.4	
DATE	2 JUN 1975	
STATION	2201	
CRUISE	ML 21	

		8	
118	_	PHOSPHATE NITRITE AMMONIA ug-atoms/liter	1.001
VISIB	80	RATE NITRITE AI ug-atoms/liter	000001
CLOUDS typ amt	ю	NIT	
D ty	×	'RATE ug-a	2.0 .2 .2 .3.9
WEATH CLOUDS typ amt	ю	TIN 2	7 7
AIR TEMP °C v dry wet	11.7 10.0 3 X 3 8	HOSPHATI	.39 .33 .39 .62 1.30
TE ~	-	P4	
AIR	11	SAT %	148 147 145 126 83
BAROM	1000*1	OXYGEN AOU ml/l ug-at/l	-249 -240 -230 -132 93
WIND dir speed	29 4 3 27 2	OXYGEN m1/1	8.57 8.48 8.36 7.32 4.98
H H	27	₽	78779
WAVES dir ht p	m	SIGM I	25.27 25.28 25.27 25.37 25.37
H ZE	4		
dir	29	SALINITY ppt	33,566 33,568 33,567 33,581 33,702
TRANSP m		SAI	22222
TRA		TEMP	13.17 13.15 13.17 12.74 11.13

DEPTH

				SILICA	117 117 107
		IB		APPIONIA :e	w 0 0 4
ା	<b>8</b>	VISIB	80	RATE NITRITE A ug-atoms/liter	18 16 16 19
ITUD	8	CLOUDS typ amt	о ×	NIT	
CONG	121° 50.8'	អ្ន ស្ព	×	RATE ug-a	98.89 6.84.80 8.84.80
3		eath	7	LIN	00000
N LATITUDE W LONGITUDE	36° 40.0	AIR TEMP °C WEATH CLOUDS dry wet typ amt	12,6 12,2	MIOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	89 87 87 87
z		R TE ry	2.6		
HOUR	21.4	A b	-	SAT	11,8
	2 JUN 1975 21.4	BAROM mb	1009•1	OXYGEN AOU SAT ml/l ug-at/l %	50 79 62 438
DATE	2 JUN	WIND dir speed	30 2	OXYGEN m1/1	6.49 5.27 6.54 6.95
N		W. d1r	30	Ħ	8558
STATION	1125	o. 10	က	SIGMA I	25,36 25,35 25,35
Ś	1	WAVES r ht p	27 4 3		<b>8008</b>
CRUISE	MC 21		2	TEMP SALINITY °C PPt	33,563 33,560 33,560 33,583
8	æ	TRANSP		S	
		H		TEMP °C	12.71 12.72 12.71
				DEPTH	20 20 20

	_
W LONGITUDE	10.67 01
N LATITUDE	360 86 31
HOUR	י או
DATE	C 21 2501 MIT 31
STATION	1154
CRUISE	M. 22
Ü	Σ

VISIB		7
SOLO	amt	0
5	typ	×
WEATH	typ amt	2
о С	vet	12,2
AIR TE	dry wet	13,4
BAROM	뎔	1011,9
MIND	lir speed	
3	dir	23 2 2 27 2
	Д	7
VES	lit	7
ΜĀ	dir lit p	23
FRANSP	且	

SILICA	000
VMMONIA	ຕູຕູ້
NITRITE / oms/liter	000
NITRATE UG-at	2.6 1.9
PHOSPHATE MITRATE NITRITE AMMONIA SILICA ug-atoms/liter	. 38 34 99
	142 141 119
AOU 18-at/1	-208 -204 -99
OXYGEN AOU SAT ml/l ug-at/l %	7.96 7.93 6.89
ITY SIGMA T t	24.99 25.02 25.27
SALINITY ppt	33,567 33,568 33,576
TEMP .	14.55 14.41 13.19
PTH	0 2

				SILICA	17	0 ^ 0
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	4 6	2.4
30	•7•	VISIB	7	RATE NITRITE Al ug-atoms/liter	8 8	88
GITO		CLOUDS typ amt	0	NIT		٠
Š	122°	g ç	×	RATE ug-a	2.1	0 0
N LATITUDE W LONGITUDE		AIR TEMP °C WEATH CLOUDS dry wet typ amt	7	NIT	2, -	1 71
TUDE	5.8	13		LATE	58	ដ្ឋា
LATI	36° 55.8°	¥et Ket	14.7 13.6	OSPH	•	1.25
	m	IR TEMP °(	.7	置		
HOUR	14.2	AIR	14	SAT	133	133
ы	16 JUN 1975 14.2	BAROM	1009.8	OXYGEN AOU SAT ml/l ug-at/l %	-169	-169 -37
DATE	16 JUN	WIND dir speed	27 4	OXYGEN m1/1	7.60	7.61 6.27
X.		VI dir			<b>~</b> ~	· ν· <del>-</del>
STATION	2205	ρ.	27 3 2	SIGMA I	25.13	25.15 25.41
เง	••	WAVES r ht	m			
CRUISE	22	WAVES dir ht p	27	SALINITY ppt	560	33,563 33,599
CRU	보	TRANSP m		SALJ	E S	វត្តត
		TRA		TEMP C	13.84	13.74 12.59*
				DEPTH	<b>0</b>	10 20

\* indicates questionable data: Paired thermometer read 12.53

W LONGITUDE	122° 1.6'	
HOUR N LATITUDE W LONGITUDE	36° 50.91	
HOUR	12.5	
DATE	16 JW 1975	
CKUISE STATION	2204	
CKUISE	M. 22	

VISIB		7
LOUDS	typ amt	7 8
ວ	ty	<b>∞</b>
WEATH		7
TEMP °C	wet	12,8
AIR TE	dry wet	13,3
BAROM	슅	1012,2
IND	lir speed	28 3
Ξ	dir	28
	ር	7
VES	þt	23 5 2
WAVES	dir	23
TRAMSP	e	

SILICA	3 7 13 16 20
VMMONIA c	ww.r.s. s
RATE NITRITE A ug-atoms/liter	.00 .00 .02 .11
NITRATE ) ug-at	1.1 1.3 1.8 9.3
PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.14 .19 .38 .96 1.00
SAT %	152 151 142 113 111
AOU g~at/1	-258 -253 -213 -67 -56
OXYGEN AOU m1/1 ug~at/1	8.49 8.44 8.07 6.64 5.33
SIGMA I	24.95 24.95 25.10 25.41 25.51
SALINITY ppt	33,567 33,572 33,562 33,538 33,563
TEMP C	14.73 14.73 14.00 12.35* 11.91*
DEPTH п	0 10 20 64 30 30 64

\* indicates questionable data: Paired thermometers read 12.28 at 20 m; 12.07 at 30 m

				SILICA	16	6	ន	~1	17	51	<b>5</b> 6	34	35	20	77	94	53	75	85	87
		<b>13</b>		AMMONIA T	9•	'n	4.	4.	4.	1.9	1.2	1.3	 	ຕຸ	9.	9.	۳,	۳,	°.	•5
TUDE	1,31	JDS VISIB	8 7	RATE NITRITE A ug-atoms/liter	• 10	•07	1,85	•04	• 20	•25	• 23	<u>ક</u>	.12	•24	80•	8	8	8	8	00•
W LONGITUDE	122	ITH CLOUDS typ amt	×	IITRATE I ug-at	8,5	6 <b>.</b> 8	0.4	9•9	20.1	12.6	17.4	25,3	27.4	28.6	27.1	27.9	34.1	35.6	36.9	9.4°
N LATITUDE	36° 46.7°	P°C WEATH wet	11.4	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.92	<b>.</b> 85	•75	.70	86*	1.46	1.80	2,44	2,57	2,66	2.47	2,73	3,27	3,53	3,71	3,43
HOUR N 1	10.0	AIR TEMP °C dry wet	12.8	SAT PH	116	118	120	121	107	93	72	53	4.5	36	32	8	20	13	9	7
	1975	BAROM	1012,2	AOU ug-at/1	-82	-92	<b>-</b> 101	-106	<del>,</del>	38	152	263	316	366	394	412	480	522	572	578
DATE	16 JUN	WIND dir speed	n	OXYGEN m1/1	99.9	<b>6.</b> 76	6.88	7.03	6,35	5,59	4.46	3,34	2,87	2,33	2,10	1.95	1,32	&	•42	• 48
STATION	2203	<b>P</b>	1 2 30	SIGMA T	25,15	25,15	25,19	25,32	25,55	25,71	26,01	26.24	26.47	26.53	26,63	26,69	26.84	26.96	27.07	27.22
CRUISE	ML 22	P WAVES	98	SALINITY ppt	13,547	33,544	33,546	33,523	33,561	33,670	33, 790	33,892	34.009	34.052	34.081	34.098	34,131	34,250	34.301	34,374
0	×	TRANSP		TEMP SA	13,70	13,68	13,51	12,74	11,11	11,26*	10,10	9.21	8,32	8.17*	2,68	2,38	04.9	6.14	5.61	4.86
				DEPTH m																767

\* indicates questionable data: Paired thermometers read 11,20 at 48 m; 7,96 at 180 m

		м		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter		1,2 11	57 ° ° '	1.04 3 / 32	
ONGITUDE	121° 57.9'	CLOUDS VISIB	8 8 7	RATE NITRITE AN ug-atoms/liter	•03	60° 5	8-	<b>1</b> %	.22
N LATITUDE W LONGITUDE		AIR TEMP °C WEATH CLOUDS dry wet typ amt	2 8	ATE NITRAT ug-		6.1			13.8
	36* 41.2	IR TEMP °C dry wet	12.3 11.2	PHOSPHA	69•	•81 47	10-1	1.48	1,59
HOUR	8,1	AIB	17	SAT Z	117	117	113	86	81
DATE	16 JUN 1975	eed mb	2 1011.9	OXYGEN AOU ml/l ug-at/1		6.76 -91			
STATION	2202 16	ES WIND t p dir speed	3 3 27	SIGMA T OX	25,16 6			25,58 5	
CRUISE	ML 22	FRANSP WAVES m dir ht	27	TEMP SALINITY °C ppt	33,536				
		H		TEMP ° C	13.61	13.61	12,74	11,88	10.62
				DEPTH	0 10	) S	50	ຊ :	64

\* indicates questionable data: Paired thermometer read 10.56

				ţ
		æ		
		VISIB	7	
N LATITUDE W LONGITUDE	53,7'	UDS	∞	E
LONG	21.	CLO Lyp	œ	
3 2	-	EATH	2	
TIL	37.6	) မ	7.	
Z Z	36°	EMP vet	1	
HOUR	16 JUN 1975 7.2 36° 37.6° 121° 53.7°	AIR TEMP °C WEATH CLOUDS V dry wet typ amt	27 3 2 27 1 1012,2 10,3 11,7 2 8 8	
	1975	WIND BAROM AIR p dir speed mb dr	012,2	;
DATE	NDS	peg	ř ř	
*	16	WIND fr sp	27	i
STATION	2201	r <del>i</del> Da	7	
ស	•••	VES ht	m	
CRUISE	ML 22	WA dir	27	
CRL	보	TRANSP WAVES m dirht p		;
		T.		[
				:

SILICA	7	9	_	17	24
AMMONTA : T	• 5	۲.	ۍ.	4	1.1
FRATE NITRITE AN ug-atoms/liter	•23	Q.	8	•05	.11
H	4.2*	<b>.</b>	1.4	1.2	6.2
PHOSPHATE	• 22	•21	• 35	•48	*6*
SAT	146	144	138	128	113
OXYGEN AOU ml/l ug-at/l	-231	-221	-193	-143	99-
OXYGEN m1/1 1	8,26	8,14	7.87	7,36	6.57
SIGMA I	25.08	25.06	25,13	25,23	25,36
SALINITY ppt				33,578	
TEMP C	14,09	14.20	13,85*	13,41	12,79
DEPTH 18	0	'n	07	20	ଛ

\* indicates questionable data: Paired thermometer read 13.92 Nitrate appears anomalously high

				SI	
		8		PHOSPHATE NITRATE NITRITE AMMONIA SI ug-atoms/liter	0.4.4
30	<b>.</b>	VISIB	89	RATE NITRITE A ug-atoms/liter	27.7
GITU	52.	ctouns typ amt	0	NIT!	
LON	121°	돷	×	ATE 18-a1	বুল্ব
N LATITUDE W LONGITUDE	36 55,2' 121 52,8'	AIR TEMP °C WEATH CLOUDS dry wet typ amt	14.4 10.3 2 X 0	NITH	.4 18.3 23.4
IT UD)	55.2	≨ :	m	HATE	.15 2.10* 1.84
LAT	36	AIR TEMP °C dry wet	10	HOSPI	24 H
		R TE	4.4		
HOUR	8.7		+	SAT	161 80 60
	375	BAROM	15.2	.ou .at/1	808 112 121
DATE	ži Z		5	# % # .	γ H G
ă	30 JUN 1975	WAVES WIND dir ht p dir speed	24 1 2 13 1 1015.2	SIGMA T OXYCEN AOU SAT m1/1 ug-at/1 %	9.11 -308 161 4.90 112 80 3.77 221 60
N		WIND lir spe	13	н	
STATION	1154	Δ.	7	CGAS.	25 <sub>0</sub> 17 26 <sub>0</sub> 01 26 <sub>0</sub> 17
	•	WAVES itr ht	7	ivi N	
CRUISE	ML 23	WA dir	24	INITY ppc	716 792 858
25	보	TRANSP		SAI	8 8 8 8 8
		T.		TEMP °C	14.24 33.716 10.13 33.792 9.49 33.858
				PTH n	0 5 0

ILICA

21 32 32

944

27 24 24

2,10\* 1,84

\* indicates questionable data: Phosphate appears anomalously high

DEPTH

				SILICA
6-3		AIR TEMP °C WEATH CLOUDS VISIB dry wet typ amt	8	PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter
TODE		DS mt	_	TITR)
N LATITUDE W LONGITUDE	22°	CLOU typ 8	2 x 0	ATE N g-ato
3	-	ATH	8	MITR
TUDE	5.8	A.K		ATE
IVI	9	P °C	12,8 11,7	OSPH
	m	ZE A	ဆ္	
HOUR	0.01	AIR	12	SAT
	30 JUN 1975 10.0 36° 55.8° 122° .7'	WAVES WIND BAROM A dir ht p dir speed mb	49 1 X 32 3 1015.2	EMP SALINITY SIGMA T OXYGEN AOU SAT •C PPt mi/1 ug-at/1 Z
DATE	JUN	ee d	., m	KCEN 1/1
	30	WIND r sp	8	O X
STATION	2	ੂ ਸ਼ੁੰ	Ä	₹ H
STA	2205	S	×	SIG
Ħ	<u>ლ</u>	WAVI	ۆ	. IX
CRUISE	ML 23	TRANSP WAVES m dir ht	4	SALINI PP¢
		TR		S. C.

44.4

0,9,0

8844

1.6 1.6 24.4 27.1

13 21 1.91 2.06

160 155 53 47

-303 -285 263 297

9.06 8.98 3.31 2.99

25.18 25.40 26.20 26.29

33,695 33,703 33,878 33,913

14.10 13.07 9.38 8.97

0 ° 9 8

DEPTH m

				SILICA	24 25 30 36 42
		8118	~	AMMON LA ; t	40mm40
GITUDE	122° 1.6°	CLOUDS VISIB	8	RATE NITRITE A' ug-atoms/liter	21 20 18 17 17
E W LON		WEATH CLOUDS typ amt	2 X	NITRATE ug-a	17.1 16.7 16.7 21.8 25.7 26.9
N LATITUDE W LONGITUDE	36°50.9	MP °C wet	11.4 10.6	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.35 1.34 1.34 1.64 2.91
HOUR	11,2	AIR TE dry	11.4	SAT %	90 90 75 58 50
DATE	30 JUN 1975	BAROM leed mb	1 1015,2	OXYGEN AOU : ml/l ug-at/l	5.48 56 5.49 56 5.43 62 4.65 139 3.65 237 3.19 284
STATION	2204 30	ES WIND t p dir speed	2 3 28	SIGMA T	26.00 5 26.00 5 26.02 5 26.13 4 26.28 3
CRUISE	ML 23	TRANSP WAVES m dir ht	27	TEMP SALIMITY °C ppt	10,45 33,847 10,41 33,843 10,35 33,850 9,76* 33,873 9,03 33,907 8,57 33,960
				DEPTH	288850

\* indicates questionable data: Paired thermometer read 9.69

				SILICA	43	94	22	8	69	8	88	103
		m		PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	o,	<b>7.</b>	o.	<b>•</b>	o,	o.	•5	0
DE		VISIB	œ	RATE NITRITE A ug-atoms/liter	13	•25	•05	8	S,	8	8	8
III	г <del>,</del>	CLOUDS typ amt	0	NIT								
W LONGITUDE	122° 1,3	CLOUDS typ amt	×	ATE 18-a	<b>-</b>	ص	o,	<u>0</u>	٠ و	۲.	ᅼ	ထ္
સ ૐ		AIR TEMP °C WEATH dry wet	2	Z NITR	29	29.	33	33	35.6	37,	37,	3
N LATITUDE	36° 46.7°	ಬ	0	HAT	16	53	37	54	2.91	94	10	90
Y	• %	æ vet	11.7 10.0	IOSP	2	4	7	7	7	7	ฑ้	๛้
z	(1)	TEN Y	۲.	교								
HOUR	1.0	AIR	11	SAT	42	ጽ	ጸ	23	23	12	9	-
	1975	BAROM mb	1015.2	OXYGEN AOU ml/l ug-at/l	332	370	410	453	459	529	247	612
DATE	1 JUL 1975	WIND dir speed	30	OXYGEN m1/1	2,70	2,31	1,93	3.5	1.52	8.	99•	•07
ž.		W]	용	H	•	ب	Ŋ	ښ د	:1	စ္	ញ	œ
STATION	2203	Ω.	7	SIGMA I	26.5	26.5	26.6	26.7	26.8	26.9	27.0	27,18
જ	•	WAVES r ht	2 2									
CRUISE	23	끂	8	SALINITY ppt	.035	.055	.092	134	.179	.246	.283	34,354
ජි	첫	FRANSP m		SAL								
		TR.		TEMP • C	8_22	7.98	7.55	7.20	6.64	6_13	5.81	5.02
				DEPTH	150	200	250	299	399	495	591	787

				STLICA	<del>더</del> 더 더 더
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	7.488
떶	*	VISIB	m	XITE / 11te	8888
N LATITUDE W LONGITUDE	121° 52.8'	AIR TEMP °C WEATH CLOUDS dry wet typ amt	6	RATE NITRITE A ug-atoms/liter	
ZOT ≥	121	ж <b>Су</b>	х 6	TRATE ug-2	4 <b>1.</b> 4 1.
UDE	2.	WEAT	45	re ni	
ATIT	36° 55•2¹	e c	11.6 11.6 45	)SPHA.	90.
	æ	IR TEMP °( dry wet	9	PHC	
HOUR	0-9	AIR	7	SAT	152 144 147
	1975	BAROM	1000*1	SALINITY SIGMA T OXYGEN AOU SAT ppt ml/1 ug-at/1 Z	-263 -224 -237
DATE	22 JUL 1975	D peed	0	XYGEN m1/1	8,24 8,38
N.		WIND dir speed	66	E	
STATION	1154	<del>a</del>	X 0 69	SIGMA	25.19 25.29 25.30 25.30
<b>0</b> 1		WAVES r ht	0	<b>.</b>	
CRUISE	24	늄	69	INITY Ppt	33,690 33,706 33,714
క	첫	TRANSP m		SAL	8 8 8 8
		TRAN		TEMP C	14.04 13.62 13.60
				DEPTH	0 10 20

				SILICA	64 64
		138		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	2°0 2°0 3°9
~1	_	VISIB	m	11 H	8887
GITUDE	.1.	CLOUDS typ amt	6	RATE NITRITE A ug-atoms/liter	***
Ř NO. M	122°	H Cy Typ	×	TRATE ug-a	2,2 ,9 1,5
ODE.	8	WEAT	45	ITE NI	
N LATITUDE W LONGITUDE	36° 55.8†	AIR TEMP °C WEATH CLOUDS dry wet typ amt	12,2 11,7 45	PHOSPH4	.12 .10 .19 .19
HOUR	<b>6.</b> 4	AIR T dry	12,2	SAT	160 160 152 81
	22 JUL 1975 4.9	BAROM	8*800	AOU ug-at/1	-303 -304 -273 101
DATE	22 JUL	ND speed	99 0 1008,8	OXYGEN m1/1	9.11 9.14 8.93 4.96
STATION	2205	WAVES WIND r ht p dir speed	49 O X 99	TEMP SALINITY SIGMA T OXYGEN AOU SAT *C ppt m1/1 ug-at/1 %	25.28 25.31 25.54 25.90
CRUISE	54	WAVES dir ht	67	INITY PPt	33,712 33,715 33,717 33,762
8	五	TRANSP m		SAL	
		TRA		TEMP .c	13.70 13.53 12.38 10.64
				DEPTH m	2000

				SILICA	m	∞	13	22	25	*
		VISIB	2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1,0	2.0	1,1	4-4	1.4	3.4
TUDE	1.6			RATE NITRITE AI ug-atoms/liter	•18	•18	•18	-23	-26	•24
N LATITUDE W LONGITUDE	122° 1.6'	H CLOUDS typ amt	×	TRATE N	8.1	7.0	*8*8	5.1*	1.8*	32.6
ITODE	36°50.91	с WEATH	7 45	HATE NI			94			
N LAT	36	AIR TEMP °C dry wet	11.7 11.7	PHOSP	٠	•	•	-1	1	1.84
HOUR	3.5		'i	SAT 1 %	124	117	95	75	65	54
Þ.	1975	BAROM	1009.1	AOU ug-at/	-126	<del>-</del> 92	<b>5</b> 6	139	193	258
DATE	22 JUL 1975	WIND dir speed	0 66	OXYGEN AOU SAT m1/1 ug-at/1 %	7,32	7.00	5.77	4.63	4.07	3,37
STATION	2204	WAVES W dir ht p dir	49 1 X 99	SIGMA I	25.55	25.69	25.84	26.02	26.11	26.21
CRUISE	ML 24		46	SALINITY ppt	33,679		33,743			33,886
		TRANSP		TEMP S	12,16	11,65	10,89*	9°94	9,59	9,35
				DEPTH m	0	Ŋ	9	20	ଛ	ዴ

\* indicates questionable data: Paired thermometer read 10.82 Nitrates appear anomalously high

				SILICA	6	18	4	7	17	78	29	33		26*	43	52	54	29	72	96
		81		AMMONIA F	ς,	۳,	'n	1,0	1.4	ω	1.0	•5		~	0	7	ຕູ	7	ຸຕູ	1,0
TUDE	1,3	DS VISIB	9	RATE NITRITE A ug-atoms/liter	•16	•15	•15	•18	•22	•22	•25	•23	20	05	03	•05	•05	8	0	•05
W LONGITUDE	122°	WEATH CLOUDS typ amt	×	NITRATE N ug-ato	7.4	10,3*	7.1	7.7	14.2	32,8	47.8*	41.4*	30.4	29.1	32.7	23.1*		*7.77	39.6	53.0
N LATITUDE	36° 46.7'		11.6 45	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	94•	•42	•40	99•	1.27	1.60	1.67	1.89	1,56*	2,20	2,20	2,45	2,59	2.81	3,07	3.03
HOUR N	1,1 3	AIR TEMP °C dry wet	11.7	SAT PH	122	119	119	88	84	<b>2</b> 6	<b>2</b> 6	47	38	35	29	27	20	7	7	Ŋ
	JUL 1975	BAROM mb	1000	r AOU ug-at/1	-118	-101	<b>-</b> 76	63	87	245	244	295	352	369	<del>7</del> 0 <del>7</del>	421	474	555	267	296
DATE	22 JUL	WIND dir speed	0	OXYGEN m1/1	7.28	7.10	5.45	5.28	5.13	3,47	3,53	2.99	2.40	2,24	1,89	1,78	1,31	64.	94.	•32
STATION	2203	ρ. Ο	1 X 99	SIGMA T	25.65	25.66	25.76	25,68	25.84	26.14	26.23	26,31	26,38	26.44	26.53	26.63	26.79	26.90	27.03	27.26
CRUISE	ML 24	ISP WAVES dir ht	27	SALINITY PP <sup>t</sup>	33,693	33.690	33,690	33,674	33,670	33,862	33,914	33,956	33,993	34.026	34.068	34,102	34,151	34,209	34,264	34,382
		TRANSP		75. C	11,70	11,65	11,65	11.49	10,58	89.6	9.37	9*10	8,79	85.	8,25	7.72	6.88	<b>6.</b> 36	5.68	4.57
				DEPTH	0	'n	9	20	8	ጸ	75	100	146	194	241	289	380	471	562	746

Nitrates appear anomalously high at 5, 75, 100, 471 m; low at 289 m Silicate appears anomalously low \* indicates questionable data: Phosphate appears anomalously low

				SILICA	-	ı <del></del>	۱	1 [	, , ,	25.5
		SIB	en.	PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	25		0	, ",	•	6•
TUDE	7.91	DS VISIB mt	6	RATE NITRITE A ug-atoms/liter	10	8	05	2	25	58
N LATITUDE W LONGITUDE	121° 57.9	WEATH CLOUDS typ amt	×	RATE N ug-atol	ဆ္	9	~	9		36.8*
TUDE W	L.2°	WEATH	<b>77</b>	VTE NIT	~	_	*			
N LATI	36° 41.2°	AIR TEMP °C dry wet	12.2 12.2	PHOSP11/	•13	01.	1.0	1.18	1.54	1,58
HOUR	23.5	AIR I dry	12,2	SAT	152	158	145	76	82	2
		BAROM mb	1000	OXYGEN AOU m1/1 ug-at/1	-273	-301	-236	33	66	164
DATE	21 JUL 1975	WIND dir speed	27 0	OXYGEN m1/1	8.93	9.24	8,54	5,70	66.4	4.34
STATION	2202	a	1 X 27	SIGM T	25,56	25.57	25.6I	25.88	25.96	26,08
CRUISE	ML 24	NSP WAVES dir ht	24 1	SAL INITY ppt	33,758	33,757	33,758	33,770	33,813	33,852
		TRANSP		TEMP S	12,43	12,39	12,18	10,77	10,52	10.01
				DEPTH	0	<b>ທ</b> ຸ	유	70	8	ያ

\* indicates questionable data: Phosphate appears anomalously high Mitrate appears anomalously high

				SILICA	6 6 7 17 29
		118		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	2.0 2.7 1.6
ä		VISIB	7	RATE NITRITE A ug-atoms/liter	15 10 11 23
SITU	121° 53.7°	CLOUDS typ amt	0 ×	NIT! toms,	
TON	121°	ţ,	×	RATE ug-a	3.7 3.2 3.5 14.0
) 교		EATH	7	INI.	20 14 3 3 3
TIOD	36° 37.61		ထ္	PHATE	.38 .61 .42 1.66
N LATITUDE W LONGITUDE	<b>%</b>	IR TEMP °C dry wet	13,3 12,8	PHOSI	ँ ँ ने ने
HOUR	22,4	AIR IEMP °C WEATH CLOUDS dry wet typ amt	13,3		134 138 131 84 61
	21 JUL 1975 22,4	BAROM mb	1000	SALINITY SIGMA T OXYGEN AOU SAT ppt m1/1 ug-at/1 %	-178 -194 -162 85 216
DATE	21 JUL	WIND dir speed	21 0	OXYGEN m1/1	7.81 7.99 7.63 5.10
NO		WI	21	H	7.78.02
STATION	2201	<u>σ</u>	×	SIGMA	25.47 25.47 25.48 25.48 25.90
PJ.		WAVES r ht p	27 1 X	ž	00089
CRUISI	ML 24	di	7	LINI: ppt	33,750 33,750 33,750 33,823 33,823
0	Σ	TRANSP m		8	
		H		TEMP C	12.90 12.86 12.84 10.87
				DEPTH	98650

				SILICA	កកកន្ទ
		<b>11</b>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.1 .5. 1.2
	-	VISIB	7	ITE 11 te	8849
TUDE	8.	UDS	0	NITR Oms/	• • • •
ONG	121° 50.8'	CLOUDS typ amt	0 X	RATE NITRITE A ug-atoms/liter	က္ဆစ္က
.⊣  3	<del></del> 4	ATH	7	NITR	2.0 15.3
UDE	0.0	<b>E</b>		ATE	ប្រកួច
HOUR N LATITUDE W LONGITUDE	36° 40.0°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	13,3 13,3	HOSPH	.03 .05 .32
z		VIR TE dry	3,3	ቯ	
	21.4	AII	ä	SAT	166 168 135 99
	21 JUL 1975 21.4	BAROM mb	1009.5	AOU ug-at/1	-337 -347 -184 6
DATE	21 JUL	WIND dir speed	2 X 15 2	SALINITY SIGMA T OXYGEN AOU SAT ppt ml/l ug-at/1 %	9 9 8 0 4 9 9 9
z		W] dir	15	H	7816
STATION	1125	<b>č</b> .	×	Sign	25.37 25.38 25.71 25.89
		WAVES r ht	7	Ł	nano
CKUISE	24	ㅋ	7	PPt	33,745 33,744 33,733 33,800
3	녗	TRANSP		SAI	
		TR		TEMP C	13,38 13,32 11,55 10,87
				DEPTH m	20 P2

		(IB		PHOSPHATE NITRATE NITRITE AMMONIA ug-atoms/liter	1.2 1.8 1.9
ங	-	VISIB		erre '14te	00 03 32
TIOD	121° 52.8	CLOUDS typ amt	8 8 7	RATE NITRITE Al ug-atoms/liter	• • •
LONG	121°	CT.	œ	RATE ug-at	പ്പ് മ
N LATITUDE W LONGITUDE	_	AIR TEMP °C WEATH CLOUDS dry wet typ amt		TIN	1.3 2.3 11.8
run	55.2	≨ ວ	ور	HATE	.20 .55 1.12
LAT]	36" 55,2"	IR TEMP "( dry wet	13,1 12,6 2	HOSP	••-
		R TE	3,1		
HOUR	20.6	AI.	-	SAT %	141 125 85
	375	ВАКОН	9,1	AOU -at/1	-204 -128 30
DATE	G 19		700	7 <del>9</del> 9	7.7
Ŋ	11 AUG 1975 20.6	WIND dir speed	49 1 X 99 0 1009.1	SIGMA T OXYGEN AOU SAT ml/l ug-at/l %	7.90 7.22 5.09
N.		WIND dir spe	66	н	80 C
STATION	1154	<u>.</u>	×	IGMA	25.18 25.50 25.82
ίď	•	VES ht	7		
CRUISE	ML 25	ANSP WAVES m dir ht p	67	SALINITY ppt	33.822 33.824 33.841
CRU	Ή	ANSP		SAL	
		TRA		गुष्टक	14.57 13.04 11.43
				DEPTU	0 5 01

\* indicates questionable data: Silicate appears anomalously high

92\*

0

SILICA

				<b>≪</b> t
				PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter
				S. Y∃
				NON
		TSI	7	E A
UDE	•7•	ה ה		RATE NITRITE A
GIL		CLOUDS typ amt	Φ	E NI atom
103	122	 2	00	[RAT]
<u> </u>	<u>.</u>	ŒATI	7	CIN
HOUR N LATITUDE W LOWGITUDE	55.8	AIR TEMP °C WEATH CLOUDS VISIB dry wet typ amt	13,3 12,2 2 8 8	HATE
TVI	36°	AIR TEMP °( dry wet	12.	HOSP
z		R TE	3,3	ř.
TOUR	21.7		ਜ	SAT %
	2205 11 AUG 1975 21.7 36° 55.87 122° .7°	ВАКОМ mb	1.0	TEMP SALINITY SIGMA T OXYGEN AOU SAT °C ppt m1/1 ug-at/1 %
ы	197	BA	1000	y _ AC _ ug s
DATE	AUG	WAVES WIND BARO dir ht p dir speed mb	49 1 X 99 0 1009•1	YGEN 1/1
	11	WIND r spe	•	X E
ION	5	<del>1</del>	5	A 7
STATION	220	<u>ο</u> .	×	, IGM
		WAVES Lr ht	H	53 54
CRUISE	25	W. dir	49	NIT
CR	첫	TRANSP		SALI
		TRA		<b>9</b> 0
				H H

Silicate appears anomalously high \* indicates questionable data: Nitrates appear anomalously low

125\* 6 22 22 25

1.5 2.6 3.5 3.1

1.7 4.6\* 13.3\* 18.0

143 65 61 70

-211 181 207 160

7.88 3.74 3.58 4.23

24.96 25.47 25.68 25.87

33,795 33,814 33,818 33,833

15.48 13.13 12.05 11.12

ug-atoms/liter

m1/1 ug-at/1

ppt

DEPTH 덛

				SILICA	9	12	12	17	21	29
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atons/liter	2,3	6	٦,	1,3	1.4	0
30	,9	S VISIB	7	RATE NITRITE A ug-atons/liter	23	.41	.41	.57	.52	47
CITI	ri	CLOUDS typ amt	80	NI						
Ž Š	122° 1.6°	C, C,	<b>∞</b>	RATE ug-a	4	9	6	6	7	~
HOUR N LATITUDE W LONGITUDE		AIR TEMP °C WEATH CLOUDS dry wet typ amt	7	E NIT	4	11	10	14	18	29.7
TITO	36°50,9	يد و	• 5	PHAT	56	76.	95	25	53	1,80
S S	36°	IR TEMP °C dry vet	13,3 12,2	PHOS					_	~
~		IR III	13,3					~	•	۵,
HOC1	22.7	¥,		SAT	13]	106	91	ä	7	š
		BAROM mb	1000,1	AOU ug-at/l	-160	-31	-25	63	154	263
DATE	11 AUG 1975	WAVES WIND r ht p dir speed	0	SIGMA T OXYGEN AOU ml/l ug~at/l	7.57	6.21	6,16	5,28	4.34	3,23
ð		W] dir	66	Ħ	'n	9	σ	9	_	0
STATION	2204	۵	×	IGMA	25.4	25,56	25.5	25,7	25.9	26.1
S	,,	WAVES r ht	9 1 X	(x)		•			•	•
CKUISE	25	WA dir	67	INITY PP¢	788	33,760	761	762	808	881
⊋ 3	五	FRANSP m		SAL.I	33	33	33	33	33	33
		TRAN		TEMP SALINITY °C ppt	13,15	12,44	12,32	11,43	10,77	9,98
				DEPTH m	0	'n	91	20	8	ጵ

\* indicates questionable data: Silicates appear anomalously low

				SILICA	4	. 2	1 4	• •	18	19	31	25*	37	42	43	37*		7 00	7.0	Ç (	76
		VISIB	7	AMMONIA er	1.7	8-1	2.2	2.5	2,1	ထ္	9•	9	1.5	1.8	1.2	1.2	-	o o	• -	•	٠,
W LONGITUDE	1,3	CLOUDS VI typ amt	<b>&amp;</b>	RATE NITRITE A ug-atoms/liter	•05	6	•22	.37	2	•03	0.	•03	•03	•05	•05	.01		6		•	20.
	122°	WEATH CL	2 8	NITRATE u <b>g</b> -ai	4.1	3.4	6.3	15,7	12.0	18.6	27.5	20.4	30.1	33,1	31,2	34.0	38,1	46.7	35.0		79.7
N LATITUDE	36° 46.7°	TEMP °C Wet	5 11.7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	•45	-47	• 71	96*	1,23	1.42	1,90	1.63	2.07	2,31	2,19	2.01	2.64	2.88	2.64	2 0 6	0647
HOUR	r,	AIR	12,5	SAT	129	131	118	104	26	9	<b>7</b>	ထ	၉ (	53	<b>5</b> 6	77	18	91	00	ď	>
띰	1975	BAROM mb	1009,1	1 AOU ug-at/1	-148	-161	<b>-</b> 91	-19	131	223	291	346	396	705	427	459	486	538	564	5.0	1
DATE	12 AUG 1975	WIND dfr speed	0	OXYGEN m1/1	7.45	7.60	6,83	60•9	4.56	3,73	00 5	2.42	1.89 	7°7	1.65	1,36	1,16	67.	• 52	77	<u> </u>
STATION	2203	Δ.	1 X 99	SIGM T	25.48	25,48	25,52	25,62	25.86	26.09	20,21	20.29	70°41	TC*07	26.61	26,70	26.82	26,96	27,10	27.25	) 
CRUISE	ML 25	NSP W	65	SALINITY ppt	33,803	33,804	33,814	33,814	33,820	33.792	טיים מעמ	55. V40	34.032	77.	45-1-45	34.179	34.200	34,263	34,330	34.410	i
		TRAI		TEMP °C	13,05	13,03	17.88 17.	25.21	77.0	000	, c	7. Lag	ο α ο α	000	0. TO	(9*/	<b>7°</b> 00	6.24	5,55	<b>4.8</b> 4	
				DEPTH	0 1	<u>،</u>	3 8	3 8	3 5	3 8	2 5	0 × 7	200	27.7	747	067	395	488	582	786	

				SILICA	ო	7	7	53	28	26
		3.I.B	_	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	3 <b>°</b> 8	o,	ο.	1,9	<b>5</b> •	1.4
rude	1.6.7	DS VISIB	8 7	RATE NITRITE AI ug-atoms/liter	<b>60</b>	•04	•04	• 22	•18	•04
N LATITUDE W LONGITUDE	121° 57.9'	CLOUDS typ amt	œ	RATE W ug-ato	4•1	7	3.6	9•	24.7	8.
WDE W		WEATH	7	TE NIT						
N LATIT	36 41.27	AIR TEMP °C dry wet	14,2 13,3	PHOSPH4	•54	5 <b>7.</b>	[9	1,38	1,79	1,64
HOUR	2.4	AIR T	14.2	SAT %	117	115	119	58	26	45
	1975	BAROM	1009,1	OXYGEN AOU mI/1 ug-at/1	-84	<b>-</b> 78	-95	229	241	307
DATE	12 AUG 1975	WIND dir speed	21 1	OXYGEN m1/1	6,71	99°9	6,85	3,54	3.47	2,79
STATION	2202	Q.	9 2 X 21	SIGMA T	25,48	25,50	25,52	26,03	26,12	26,23
CRUISE	ML 25	P WAVES dir ht	67	SALINITY ppt	3,849	3,845	13,862	3,896	3,904	33,960
J	Σ	TRANSP		TEMP SA C	13,21 3					

DEPTH m

0 5 2 2 2 8 8

			SILICA	7	12	19	2	53
	13		AMMONIA r	1.6	1.1	ထူ	ထ္	٠,
.7.		7	rrite 3/11te	8	•18	•26	• 20	• 24
1, 53,	CLOUDS	80	VTE NIT		<b>~</b> 1	~		~
	EATH	7	NITR		11.	12,8	18.	25.8
36° 37.6	MP °C W	11.7	PHOSPHATE	•35	1,16	1,39	1,59	1.83
3.4	AIR TE dry	12,2		132	78	47	28	53
1975	BAROM mb	.009.1	AOU 18-at/1	-159	æ	278	241	258
12 AUG	ND speed	0	OXYGEN m1/1 u	7.44	4.99	2,82	3,45	3,28
2201			SIGMA I	25,29	25,77	25,80	26.11	26,13
L 25	Ŧ	769	LINITY ppt	3,854	33,885	13,897	3,916	3,921
≱i	TRANS		TEMP SA					
			n m	0	'n	01	20	ନ୍ଧ
	5 2201 12 AUG 1975	25 2201 12 AUG 1975 3.4 36° 37.6° WAVES WIND BAROM AIR TEMP °C WEATH dir ht p dir speed mb dry wet	25 2201 12 AUG 1975 3.4 36° 37.6° 121° 53.7°  WAVES WIND BAROM AIR TEMP °C WEATH CLOUDS dir ht p dir speed mb dry wet typ amt 49 1 X 99 0 1009.1 12.2 11.7 2 8 8	TRANSP WAVES WIND BAROM AIR TEMP °C WEATH CLOUDS  m dir ht p dir speed mb dry wet typ amt  49 l X 99 0 1009.1 12.2 11.7 2 8 8  TEMP SALINITY SIGMA T OXYGEN AOU SAT PHOSPHATE NITRATE NITR:  "C ppt ml/l ug-at/l % ug-atoms/l	TRANSP WAVES WIND BAROM AIR T m dir ht p dir speed mb dry 49 l X 99 0 1009,1 12,2  TEMP SALINITY SIGMA T OXXGEN AOU SAT C ppt m1/1 ug-at/1 %  14,15 33,854 25,29 7,44 -159 132	TRANSP WAVES WIND BAROM AIR T  a dir ht p dir speed mb dry  dy 1 x 99 0 1009.1 12.2  TEMP SALINITY SIGMA T OXYGEN AOU SAT  c ppt m1/1 ug-at/1 x  14.15 33.854 25.29 7.44 -159 132  11.85 33.885 25.77 4.99 84 84	TRANSP WAVES WIND BAROM AIR T dir ht p dir speed mb dry dry 25 1 x 99 0 1009,1 12,2  TEMP SALINITY SIGMA T OXYGEN AOU SAT ppt m1/1 ug-at/1 x 33,854 25,29 7,44 -159 132 11,85 33,885 25,77 4,99 84 84 11,75 33,897 25,80 2,82 278 47	TRANSP WAVES WIND BAROM AIR T and dir ht p dir speed mb dry dry 49 1 x 99 0 1009,1 12,2  TEMP SALINITY SIGMA T OXYGEN AOU SAT ppt m1/1 ug-at/1 x 25,29 7,44 -159 132 11,85 33,885 25,77 4,99 84 84 11,75 33,897 25,80 2,82 278 47 10,13 33,916 26,11 3,45 241 56

\* indicates questionable data: Paired thermometer read 9.72

				SILICA	16	-	-	9	
		ĽB		PHOSPHATE NITRATE NITRITE AMIONIA SILICA ug-atoms/liter	9	1,2	0	1,3	
(-)	_	VISIB	7	ITE , Lite:	8	2	8	37	
ET CED	50.8	UDS	တ	NITR Oris/	-	•	•	ė	
N LATITUDE W LONGITUDE	121° 50.8'	AIR TEMP °C WEATH CLOUDS dry wet typ amt	<b>∞</b> ∞	RATE NITRITE A ug-atoms/liter	7	9	m	-	
3		ATH	7	NITR	1,2	•	e.	10,1	
TUDE	0.0	WE		ATE	9	~	_	6	
LATI	36° 40•0'	r°c wet	13,3 12,3	ЮЅРΉ	r,	e.	• 31	• 99	
Z	CI CI	IR TEMP °(	63	EL.					
HOUR	4.1	AIR	13	OXYGEN AOU SAT $_{ m ml}/1$ ug-at/1 $^{\it x}$	131	130	8	65	
		BAROM udo	1009,1	00U -at/1	-154	20	53	185	
DATE	0 16 16		100	/ -Sn .	T	T 			
Ϋ́ A	12 AUG 1975	WIND dir spæed	0 66	SIGMA T OXYGEN AOU m1/1 ug-at/1	7.39	7,35	5.06	3,82	
ž		WIND ir sp	66	E+	_				
STATION	1125		49 1 X	GMA.	25,30	5,33	S. 3	5.71	
SI	-	WAVES r ht p	7	SI	"	C-4	(4	r.vi	
CRUISE	25	WA dir	67	SALIMITY PPt	853	854	854	864	
2 2 2	Ŋ.	rransp m		d SALI	33,852	93	33	33	
		TRA		TEMP :	14.09	14.08	14.06	12,08	
				DEPTH	0	S	엄	20	

				SILICA	0 3 16
		£		AMYONIA T	2.4
	•.	VISIB	4	IIte	00 02 21
rude	52.8	CLOUDS typ amt	∞	NITR coms/	•••
ONGI	121° 52.8'	मुं स	×	RATE NITRITE A ug-atoms/liter	1.1 1.2 5.9
Z.	•	EATH	45	LIN	ല്ല്ഗ്
HOUR N LATITUDE W LONGITUDE	36 55,2	AIR TEMP °C WEATH CLOUDS dry wet typ amt	13,4 13,3 45 X 8	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.16 .22 .70
i Z		IR TEAP °(	3.4		
Ä	7.1	AI	#	SAT.	139 117 103
OH	1975	BAROM	1010,8	AOU ug-at/1	-192 -83 -14
DATE	25 AUG 1975	WAVES WIND rht p dir speed	0 0 1010,8	OXYGEN m1/1	7.75 -192 6.60 -83 5.95 -14
		W] dîr	0	H	<b>49</b> 4
STATION	1154	δ. <del>c</del>		SIGIU	25.04 25.16 25.41
	92	WAVES (r ht	24 1 2	Ĕ.,	222
CRUISE	ML 2	ANSP m di	.,	SALINI	33 <b>.</b> 689 33 <b>.</b> 679 33 <b>.</b> 722
3		TRANSP		TEMP SALINITY SIGHAT OXYGEN AOU SAT °C ppt ml/1 ug-at/1 %	14.75 14.14 13.06
				DEPTH m	9 2 9

		AIR TEMP °C WEATH CLOUDS VISIB dry wet typ amt	4
TUDE	•7	UDS	<b>∞</b>
ONGI	122°	CLO typ	×
স ম	•	Weath	45
TITUD	55.	et c	2.8
Z Z	36	TEMP	π <sub>E</sub>
HOUR N LATITUDE W LONGITUDE	8.2		13,
	25 AUG 1975 8,2 36° 55,8° 122° ,7°	RANSP WAVES WIND BAROM m dir ht p dir speed mb	21 1 2 0 0 1010 <sub>6</sub> 8 13 <sub>6</sub> 3 12 <sub>6</sub> 8 45 X 8 4
DATE	AUG	eed	0
	25	WIND ir sp	0
CRUISE STATION	ML 26 2205	ت رخ	7
S	••	VES ht	Ħ
7. 2.	26	WA dir	21
CKUL	포	TRANSP	

SILICA	0 4 12 12
AMMONIA F	4.0.2.
RATE NITRITE AN ug-atoms/liter	00 00 00 18
NITRATE ug-at	3.1
PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	00 00 1
SAT	153 148 117 84
OXYGEN AOU ml/l ug-at/l	-259 -235 -85 82
OXYGEN m1/1	8,40 8,21 6,72 4,95
SIGMA I	24.84 25.00 25.38 25.56
SALINITY ppt	33.674 33.703 33.733 33.737
TEAP C	15.61 14.95 13.27 12.37*
DEPTH m	20 10 20

\* indicates questionable data: Paired thermometer read 12,31

				SILICA	3 6 12 17 17
		13		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
DE.	• •	VISIB	4	RATE NITRITE A ug-atoms/liter	00 07 13 18 41
GITU	i.	CLOUDS typ amt	×	NIT	
Ž O I	122° 1.6'	-	×	KATE ug-a	1.3 3.0 5.0 10.6
N LATITUDE W LONGITUDE		AIR TEMP °C WEATH dry wet	2	E NIT	46,044
VIITU	36° 50.91	ئا ر ت	3,3	SPHAT)	.22 .37 .39 .56
Z Z	36,	TEMP "C	14.0 13.3	PHOS	,,
HOUR	9.2	AIR TH	14.	SAT %	118 120 118 115 92 76
	1975	BAROM mb	1011.2	AOU 18-at/1	-89 -99 -88 -75 128
DATE	25 AUG 1975	WIND dir speed	0 0	OXYGEN AOU m1/1 ug-at/1	6.71 6.33 6.72 6.61 5.41
Z.		WIND dir spe	0		V 88 89 80 V
STATION	2204		2	SIGM I	25.23 25.23 25.29 25.36 25.56
	١٥.	WAVES r ht p	7 2 2	본	<b>***</b>
CRUISE	ML 26	Ġ.	2.	SAL INITY ppt	33,708 33,710 33,709 33,709 33,709
Ü	X	TRANSP m		SA	
		Ţ		TEMP C	13,70. 13,65 13,60 13,28 12,29* 11,45
				DEPTH m	20 50 50 50 50 50 50 50 50 50 50 50 50 50

 $\begin{smallmatrix} 1 & & \vdots \\ & & \cdot \end{smallmatrix}$ 

\* indicates questionable data: Paired thermometer read 12.23

					STLICA		92	ಘ	디	12	12	15	23	26	21*	31	43	77	20	57	81	88
		/			MACONT A		.7	٥,	<b>-</b> 5	ئ.	1.6	۲.	9	6	۲,	•2	<b>5</b>	<b>2.</b> 8	•5	o,	٦,	•4
UDE	1,31	S VISIB	ų	4	TRITE A	ug-atoms/liter	0.	•04	<b>*</b> 08	•23	• 26	•25	<b>70°</b>	•03	00•	00•	٥ <b>.</b>	8	•05	8	•03	•02
W LONGITUDE	122" 1		cyp amt	×	PHOSPHATE NITRATE NITRITE AMMONIA SILICA	ug-atom	6,0	4.2	9•9	8.4	9.6	12,0	<b>7.6</b>	9•6	6.7	0.4	0.6	3,7	3.7	5.6	2.4	0.5
	.7.	WEATH		0	TN AT																	
N LATITUDE	36° 46.7	AIR TEMP °C	Wet	10.7	7Habolia		99*	67.	•	•78	6	•74	£.1	1,56	1.68	1.8	1.99	1,9	2,2	2,3(	2.6	2.6
HOUR	10.5	AIR 1	dry	15.0		<b>5</b> ×	116	113	116	66	87	73	24	44	೫	27	<b>5</b> 4	21	15	13	7	7
E3	1975	BAROM	쥩	1011,9	T C V	ng-at/]	-78	<b>-6</b> 3	<b>-78</b>	4	<b>6</b> 8	144	257	313	380	419	439	462	503	525	S	'n
DATE	25 AUG 1975	WIND	dir speed	0	NACEN	m1/1 ug-at/1	6,53	6,38	95.9	5.79	5.14	4,44	3,35	2,78	1,97	1,70	1,55	1,34	1,01	•86	•48	•49
STATION	2203	ĽΛ	գ	3 2 0	CTCMA T		25.17	25,21	25,23	25.48	25.62	25.84	26.13	26,27	26.42	26.52	26,63	26,71	26.84	26.93	27,08	27,22
CRUISE	ML 26		dir ht	25	CALTNITY	ppt	33,730	33,724	33,717	33,705	33,752	33,745	33,843	33,929	34.026	34.083	34,126	34.168	34.185	34,207	34,291	34•369
J	<del></del> -	TRANSP	Ħ		TRIMO C							10,88										
					ההממת	i s	0	Ŋ	10	20	8	R	74	86	145	196	247	297	396	967	297	792

\* indicates questionable data: Silicate appears anomalously low

				SILICA	15 0 12 12 16
		IB		AMMONIA r	w
TUDE	57,91	UDS VISIB amt	9	RATE NITRITE A ug-atoms/liter	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
W LONG	121° 57,91	WEATH CLOUDS typ amt	2 ×	NITRATE ) ug-at	1.5 1.5 6.9 6.9 14.2
N LATITUDE W LONGITUDE	36° 41,2°	AIR TEMP°C WE	13,3 11,2	PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	.16 .21 .09 .79 .95
HOUR N	12.5	AIR TE dry		SAT %	143 143 145 101 88 67
DATE	25 AUG 1975	BAROM Inb	1010,8	OXYGEN AOU 8 ml/1 ug-at/1	-215 -214 -224 -4 61 182
	25 AU	WIND dir speed	18 1	OXYGE m1/1	8.02 8.03 8.16 5.87 5.26
STATION	2202	۵	26 3 3 1	SIGMA T	25.08 25.11 25.14 25.47 25.67 25.67
CRUISE	ML 26	USP WAVES dir ht	26	SALINITY ppt	33,712 33,704 33,703 33,739 33,749 33,769
		TRANSP		TIMP S	14.64 14.48 14.30* 12.85* 11.73 10.49
				DEPTH m	20 20 30 50

\* indicates questionable data: Paired thermometers read 13.96 at 10 m; 12.78 at 20 m

<b>~1</b>	_	VISIB	7
	53.7	UDS	9
TON TON	121°	of p	×
HOUR N LATITUDE W LONGLIUDE	ML 26 2201 25 AUG 1975 13.4 36° 37.6° 121° 53.7°	WEATH	27 2 X 27 2 1010 <sub>6</sub> 8 15 <sub>6</sub> 6 13 <sub>9</sub> 9 2 X 6
LATIT	36° 37,	Wet	13,9
z	`'	8 J	9•6
HOUR	13.4	AII.	Ħ
CRUISE STATION DATE	1975	BAROM	1010.8
DATE	AUG	eed	7
_	25	WIND Ir sp	73
VIION	102	Ð	
SI	5	VES at	8
ISE	26	WA) dir 1	27
CKC CKC	Ä	TRANSP WAVES WIND BAROM AIR TEMP °C WEATH CLOUDS VISIB m dir ht p dir speed mb dry wet typ amt	

SILICA	-	0	9	22	22
AMMONIA T	٠,	٠,	7.	1,3	9
NITRITE coms/11te	8	00	•26	•45	•42
NITRATE ug-at	1.0	6•	8,3	13,2	16.2
PHOSPHATE NITRATE NITRITE AMMONIA ug-atoms/liter	•05	•03	•74	1,15	1,28
SAT	162	160	93	75	99
OXYGEN AOU ml/l ug-at/l	-304	-300	37	133	186
OXYGEN m1/1	8,91	8.94	5.42	4.50	3,98
SIGMA T	24.84	25,01	25,51	25,76	25,89
SALINITY PPt					33,798
ग्रह्म ° ८	15,61	14.90	12,62	11,41*	10,83
DEPTH	0	5	21	20	ନ

\* indicates questionable data: Paired thermometer read 11.27

				SILICA	2 15
		SIB	7	APPONIA 3 t	44.
TUDE	51,1	UDS VISIB		RATE NITRITE A ug-atoms/liter	29
W LONG	121° 51.1'	ATH CLOUDS typ amt	2 X 6	NITRATE ug-at	1.1 0.5 9.5
N LATITUDE W LONGITUDE	36° 37.7'	AIR TEMP °C WEATH CLOUDS dry wet typ amt	16.1 15.1	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.07 .08
HOUR	14.0	AIR TEMP *( dry wet	16,1	SAT **	155 131
Þ	25 AUG 1975	BAROM mb	1010.8	XYGEN AOU m1/1 ug-at/1	-271 -152
DATE	25 AUG	WIND dir speed	24 2	OXYGEN n <b>1/1</b>	8 <u>.</u> 62 7 <u>.</u> 29
STATION	1121	e.	×	SIGMA T OXYGEN AOU ml/l ug-at/l	25.01 25.02 25.53
CRUISE	ML 26		24	TER SALINITY S. C. ppt	33,697 33,693 33,746
		TRANSP		TERP :	14.89 14.82 12.61*
				DEPTH m	0 5 0

\* indicates questionable data: Paired thermometer read 12.55

				SILICA	8 12 14
		IB		AMYONIA F	ው ነሳ ው
10. E	8	S VISIB	9	RATE NITRITE A ug-atoms/11ter	21 21 30
ONGIT	121° 52,8'	CLOUDS typ amt	×	TE NIT	
 :≥ 		EATH t	45	NITRA ug	2.3 5.2 8.0
N LATITUDE W LONGITUDE	36°55.2°	AIR TEAP °C WEATH CLOUDS dry wet typ amt	11.0 10.6 45 X 8	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.31 .49 .65
		IR TEMP °( dry wet	11,0		7.9.0
HOUR	7.4			SA 1/	112 106 100
iri	8 SEP 1975	BAROM mb	1007	AOU ug-at,	-62 -30 1
DATE	8 SEP	WIND r speed	2 1 2 9 1 1007.5	TEMP SALINITY SIGMA T OXYGEN AOU SAT	6.36 6.07 5.77
STATION	1154	WAVES WIND rht p dir speed	2 9	GMA T	25.21 25.33 25.43
SI	-	WAVES r ht	H	S	000
CRUISE	ML 27	đị	22	LINITY	33 <b>°</b> 744 33 <b>°</b> 753 33 <b>°</b> 757
ប	昱	TRANSP	Ŋ	SAJ	
		Ħ		TEMP °C	14.13 13.59 13.10
				DEPTH m	0 5 01

				SILI			4
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILI ug-atoms/liter	7.0	קייל ה	7
딘	_	VISIB	9	ITE Lite	33	444	
CITUD	.7.	CLOUDS typ amt	<b>&amp;</b>	RATE NITRITE A ug-atoms/liter	<b>.</b>	• •	٠
LON	122°	CL ty p	×	RATE ug-a	4.0	) e	2
)E W		ÆАТН	45	TIN 2	4,0	13.0	ì
N LATITUDE W LONGITUDE	36°55,8°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	14.2 13.4	OSPHATI	.02 31	83	į
z	m	TEM	2	PH.			
HOUR	8.9	AIR	14,	SAT %	129	95	ì
	1975	BARO!! mb	1008,5	SIGMA TOXYGEN AOU SAT m1/1 ug-at/1 %	-141 -96	41 169	
DATE	8 SEP 1975	WIND dir speed	24 2 2 99 0	OXYGEN m1/1	7.14	5.47	
NO NO	_	W] dir	66	E	ee m	6 6	ì
STATION	2205	۵	2	IGH	25.0 25.4	25.69 25.82	 
Ś		VES ht	8	<b>ω</b>			
CRUISE	ML 27	WAVES dir ht p	74	SALINITY ppt	739	13,785	
ਲੋ	보	FRANSP m	9	SALI	e e	e e	
		TRA		TEMP C	15.06 12.99	11,87	ı
				n m	0 10	<u>,</u> 8	

				SILICA	σ	, o	10	21	25	1 %
		113		AMMONTA .r	6	00	7	9	7	.7
rude	1,6	JDS VISIB	9 8	RATE NITRITE A ug-atoms/11ter	.31	-24	-24	-28	• 28	11.
W LONGI	122°	TH CLOUDS typ amt	×	ITRATE } ug-at¢	5.2	5,5	4.4	15.2	17.5	18,5
N LATITUDE W LONGITUDE	36°50,91	MP °C WEATH wet	13,3 1	PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/11ter	04.	.43				1,39
HOUR N LA	9.7 36	AIR TEMP °C dry wet	13,8 13,3	SAT PHC	607	801	103	77	71	45
НОГ		BAROM mb	1008,5	ᆏ						304
DATE	8 SEP 1975	WIND dir speed	24 3 1	OXYGEN AOU ml/l ug-at/	6,31	6.29	<b>00°9</b>	79.7	4.34	2,82
STATION	2204	<u>σ</u> ,	6 2 2 24	SIGMA T	25.45	25,45	25.51	25,82	25.92	26,16
CRUISE	ML 27	ij	26 2	PP¢	3,715	3,715	33,726	3,783	3.800	3,873
క	Σ	TRANSP	7	TEMP SALINITY °C ppt	12,85 3					
				DEPTH m	0	īζ	9	20	ጽ	አ

				SILICA	14	ខ	ន	97	18	22	25	24	33	37	51	71*	67	65	99	106*
		8		NWONIA F	ထ္	4.	۳,	<b>7</b> •	0	o,	5,	۳,	ထ္	٠,	9	ထ္	1,1	.7	.7	•5
TUDE	1,3	TDS VISIB unt	9	RATE NITRITE A ug-atoms/liter	•21	£7•	•27	•48	•34	<b>*</b> 08	0,03	60•	0	•03	•05	•05	•05	90•	<b>0</b> 3	60°
W LONGITUDE	122°	WEATH CLOUDS typ amt	1 ×	NITRATE NITRITE AMMONIA ug-atoms/liter	8.7	6.7	7.9	7.5	15.4	21.6	17.3	17.9	27.3	24.3	30,1	31.9	26.6	26.3	25,5	38•1
N LATITUDE	36° 46.7"		13.9	PHOSPHATE 1	•35	67*	•52	•59	1,10	1.45	1.34	1,33	2.07	1,81	2,25	2,25	2,00	2,24	2,24	3,02
HOUR N	10.8	AIR TEMP °C dry wet	14.7	SAT PI	96	109	86	8 <b>6</b>	81	- 19	ጸ	45	36	8	25	23	15	11	ဆ	80
	SEP 1975	BAROM mb	1009.5	XYGEN AOU m1/1 ug-at/1	22	-46	6	임	102	212	278	310	361	366	432	777	504	538	561	572
DATE	8 SEP	WIND dir speed	-1	OXYGEN m1/1	5.54	6.34	5,73	5,75	4.86	3,75	3,13	2,82	2,29	1.94	1,61	1,50	1.00	•73	.57	• 54
STATION	2203	а	3 3 16	SIGA T	25,40	25,45	25.47	25.55	25,75	25,96	26,18	26,28	26,39	26,46	26.58	26.62	26.84	26.96	27.09	27,20
CRUISE	ML 27	SP WAVES dir ht	23	SALINITY PPt	33,699	33°698	33,698	33,729	33,725	33,779	33,877	33,925	34,000	34.045	34.094	34,115	34.185	34.234	34,293	34.352
		TRANSP m	σ,	Tikre s	13,03	12,80	12,68	12,37	11,28	10,34*	6.47	9.10	& &	8,55	90*8	7.87	6.71	6.05	5.42	<b>4</b> •89
				DEРТН m	0	<b>ப்</b>	10	20	ଚ	S	78	102	145	196	246	297	397	7696	296	794

\* indicates questionable data: Paired thermometer read 10,28 Silicates appear anomalously high

				SILICA	m	ን ው	15	23	23
		83		PHOSPHATE NITRATE NITRITE AMIONIA SILICA ug-atoms/liter	9,	စီ ဆီ	۳,	ď,	ιζ
덛	<del>-</del>	VISIB	9	RATE NITRITE AI ug-atoms/11ter	44.	8,8	13	유	60
SITUD	57.9	CLOUDS typ amt	9	NITE toms/	•	•	Ī	·	•
LON	121° 57.9	-	œ	RATE ug-a	٦, ·	γ α α α	6.	7.0	3,5
E E		WEATH	<b>~</b>	E NIT		<b>.</b>	ř	끔	Ä
N LATITUDE W LONGITUDE	36° 41.2°		16.1 14.4	HOSPHAT	.12	g %	1.02	1,38	1,38
HOUR N	12.7	AIR TEMP °C dry wet	16.1	SAT P	68	111 87	69	99	26
	SEP 1975 1	BAROH	1009-1	OXYGEN AOU ml/l ug-at/l	58	င်္လ မိ	169	198	242
DATE	8 SEP	WIND dfr speed	. 0 92	OXYGEN m1/1	5,10	5.17	4.17	3,87	3,45
STATION	2202	p.		SIGM I	25,32	25.44 25.60	25.84	25,89	26.03
	7	WAVES r ht p	5 1 3		<b>.</b>	o 9	₩.	82	5
CRUISE	ML 2.	SP	7	ALINI) ppt	33.68	33 <b>,</b> 710	33,74	33,76	33,81
		TRANSP	7	TEMP SALINITY °C ppt	13,37	12.86 12.04	10,86	10,68	10,13*
				DEPTH m	0	۰ 5	20	ଞ୍ଚ	20

\* indicates questionable data: Paired thermometer read 10.07

				4						
				SILIC.	H	7	20	17	28	
		<u>e</u>		PHOSPHATE NITRATE ANTRITE ANTONIA SILICA ug-atoms/liter	9	9	1.1	1,0	<b>,</b> 4	
Ħ	. /	VISIB	7	RATE NITRITE A ug-atoms/liter	0.1	0.5	41	36	93	
GITÜ	53	CLOUDS typ amt	ī.	NIT! toms,	•		_	H	_	
Ž V	121° 53.7'	CIL Typ	1 8 5	'RATE ug-a	1.1	7.	٦,	ر.	20.2	
조 당		WEATH	т	E NIT			=	2	8	
TITU	36° 37.6°	ָנְיָּ בּ	0	PILAT	00	•13	•25	61	1,60	
Y Z	36°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	16.7 15.0	PHOS			-	_		
HOUR N LATITUDE W LONGITUDE	13,7	AIR dry	16.	SAT 1 %	128	86	53	9	61	
	8 SEP 1975 13.7	BAROM mb	.008.5	AOU ug-at/1	-142	ឧ	253	216	216	
DATE	8 SEP	WIND dir speed	28 1 1008.5	SALINITY SIGMA T OXYGEN AOU ppt ml/1 ug-at/1	7.33	5.64	3,18	3.66	3,71	
110		WIND dfr sp(		H	4	9	2	ξ.	ਜੁ	
STATION	2201		7	SIGM	25.3	25.3	25.8	25.93	26.0	
	27	WAVES r ht p	32 1 2	T.	7	9	œ	ω.	ᆟ	
CRUISE	ML 2	SP dt	e)	ALINI PPt	33,73	33,72	33,79	33,813	33,83	
-		TRANSP m	7	S. Pr						
				reme °C	13,	13.	1.	10,70	10	
				DEPTH	0	'n	ន	ន	R	

				SILICA	40 E
		SIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.2
JDE	1,	S VISIB		RATE NITRITE A ug-atoms/liter	00
MGITI	121° 51.1'	CLOUDS typ amt	7	S NIJ atome	
QI S	121	# 2 \f	80	rrate ug−s	1.0
DE		WEAT	-	E NIT	
N LATITUDE W LONGITUDE	36° 37°7¹	AIR TENP °C WEATH CLOUDS dry wet typ amt	15.0 14.4	HOSPILAT	11.00.75
HOUR N		AIR TEMP °C dry wet	15.0		132 124 99
	8 SEP 1975 14.1	BAROH rab	1007,8	AOU 1g-at/1	-157 -121 6
DATE	8 SEP	WAVES WIND dir ht p dir speed	27 1 X 26 1 1007.8	TEMP SALINITY SIGMA T OXYGEN AOU SAT	7.36 -157 7.02 -121 5.81 6
NO		WI dir	<b>36</b>	Ħ	9 त न
STATION	1121	p.	×	IGWA	25.06 25.21 25.61
	_	AAVES r ht	m -	os ≱:	
CRUISE	. 27		27	INEI PPt	33 <b>.</b> 698 33 <b>.</b> 736 33 <b>.</b> 773
່ວ	护	TRANSP m	~	SAI	
		Ï		TEMP °C	14.68 14.10 12.24
				ре <b>р</b> ти ш	0 2 01

				SILICA	<i>\$</i> 64 64
		SIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.6 1.5 .9
TUDE	2.8	DS VISIB mt		RATE NITRITE A ug~atoms/liter	.09 .13
HOUR N LATITUDE W LONGITUDE	121° 52.8'	AIR TEMP °C WEATH CLOUDS dry wet typ amt	×	FRATE N ug-ato	1.5 2.4 2.8
TUDE	36° 55,2°	WEAT	45	MTE NI	
N LATI	36°5	IR TEMP °C dry wet	12,5 12,2	PHOSPH	.29 .45
HOUR	7.8	AIR dry	12.	SAT	113 121 113
ਸ਼	1975	BAROM mb	1014.2	AOU ug-at/1	-67 -106 -66
DATE	22 SEP 1975	WIND dir speed	H	OXYGEN m1/1	6.45 6.94 6.51
STATION	1154		25 1 7 31 1 1014,2	SALINITY SIGMA T OXYGEN AOU SAT ppt m1/1 ug-at/1 %	25.37 25.47 25.50
CRUISE	МД. 28	ISP WAVES dir ht p	25	ALINITY ppt	33.857 33.876 33.881
		TRANSP		S G.	13,79 13,36 13,23
				DKPTH m	0 20

				SILICA	9 9 18
		VISIB	۲S	: AMMONIA cer	 
GITUDE	•7•		80	RATE NITRITE A ug-atoms/liter	.08 .10 .06
M LON	122°	АТН СЦ. Сур	8 77	NITRATE ug-a	1.7 2.0 1.4 6.8*
N LATITUDE W LONGITUDE	36" 55.8"	AIR TEMP °C WEATH CLOUDS dry wet typ amt	13,3 12,7 4	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.42 .48 .41
HOUR	8.7	AIR 1 dry	13.3	SAT	111 113 117
<u>ല</u>	22 SEP 1975	BAROM mb	1014.6	i AOU ug-at/1	-52 -65 -83 156
DATE	22 SEF	WIND dir speed	0	OXYGES	6.12 6.36 6.60 4.25
STATION	2205	WAVES Water h	24 1 X 49 0	TEMP SALINITY SIGMA T OXYGEN AOU SAT °C ppt ml/1 ug-at/1 %	25.07 25.25 25.33 25.90
CRUISE	ML 28		24	SALINITY ppt	33,865 33,881 33,881 33,912
		TRANSP		TEMP S	15.20 14.43 14.06 11.30
				DEPTH	0 10 20

\* indicates questionable data: Nitrate appears anomalously low

П

				SILICA	10 12 16 23 28
		<b></b>		PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	9
UDE	.9	S VISIB	9	RATE NITRITE A ug-atoms/liter	.17 .19 .14 .39 .21
GIT	r-i	CLOUDS typ amt	00	NI.	
ŇOI	122° 1.6'	CLOUDS typ amt	7	ATE 8-ai	362465
iii 3		EATH	77	NITR	7.2 8.9 11.7 16.5 16.6
CT.	6.09	235		LATE	246444
N LATITUDE W LONGITUDE	36°50,9	AIR TEMP °C WEATH dry wet	12,9 12,2	НОЅРН	.72 .84 .93 1.21 1.21
		R II	2.9		
HOUR	6.6	IV	-	SAT	99 92 75 75 56
	22 SEP 1975	BAROM	1014.2	OXYGEN AOU ml/l ug-at/l	3 44 82 1133 240
DATE	SEP	p		7. EN	ជី កំ <i>ង</i> ដើយ្ណ
_	22	WIND dir speed	0	OXYC	5,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ž		WI Itr	69		
STATION	2204	<u>-</u>	m	SIGMA T	25.65 25.75 25.76 25.93 26.04 26.12
SI	7		-4		222222
in E	28	WAVES dfr ht	27 1 3	Ĕ	797066
CRUISE	보		•	LINI	33,857 33,816 33,807 33,910 33,929 33,959
0	22	TRANSP E		SA	
		Ħ		TEMP SALINITY °C ppt	12.36 11.66* 11.59 11.08 10.54
				DEPTH	20 20 30 50 50

\* indicates questionable data: Paired thermometer read 11,60

				SILICA	37	17	18	22	21	27	29	25	39	97	51	19	<b>S</b> 6	78	90	106
		<b>6</b> 0		-PMON I A	9.	*5	9	0	•2	₹,	1.0	•	0	2.7	•	e.	e.	6	.7	.,
UDE	1,3	S VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug~atoms/liter	•31	•15	<b>0</b>	47	•17	•07	90°	•0°	11.	•16	0.	•03	•03	•05	•03	•31
W LONGITUDE	122° 1	CLOUDS typ amt	×	RATE NI ug-atom	63.1*	6	13.6		14.0	8.	20.1	0		27.6	0.	80		<b>∞</b>	3.2	40.5
		WEATH	н	TE NIT					*											
N LATITUDE	36° 46.7°	AIR TEMP °C dry wet	3 12,7	РНОЅРНА	06*	.81	1.06	1.00	*0/*	1,30	1,39	1,40	1,84	1,93	2,37	2,32	2,16	2,82	2,73	2,96
HOUR	10.5	AIR dry	13,3	SAT	89	88	82		64	28		47	38	53	24	18	17	11	7	99
ьì	SEP 1975	BAROM mb	1015.2	OXYGEN AOU ml/l ug-at/l	59	65	79		196	232		295	351	403	437	477	496	536	999	584
DATE	22 SEP	WIND dir speed	m	OXYGEN m1/1	5.25	5,21	5.09		3,90	3,55		2,93	2.40	1,87	1,56	1.20	1,10	•72	.47	•42
STATION	2203	<b>c</b>	3 28	SIGMA T	25,70	25,72	25,78	25,95	26.02	26,13	26,23	26,31	26.51	26.61	26,72	26,85	26.98	27,06	27,16	27,35
SE	28	WAVES dir ht	26 2	SALINITY S ppt	<b>.</b> 814	<b>•</b> 814	814	•895	• 308	•959	•974	•031	•156	•215	•259	• 313	349	380	•424	•522
CRUI	넔	TRANSP m			5 33	33	12 33	33	77 33	.7 33	5 33	7 34	34	13* 34	14 34	34, 34	33 35	25	7 %	74 34
		Ľ		TEMP C	11,95	11.	1.	10.5	10.	10,1	9.6	7•6	<b>∞</b>	7 ° 8	7.5	7.	<b>9</b>	9	5.6	*
				DEPTH m	0	'n	ន	61	29	48	72	97	142	190	240	288	385	<del>2</del> 84	582	174

\* indicates questionable data: Paired thermometer read 8,36
Phosphate appears anomalously low
Nitrate appears anomalously high

				SILICA	m	4	12	16		24
		118		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	9•	1.4	9•	٣,	۳ <u>.</u>	ທູ
ODE	.6	S VISIB	9	RATE NITRITE A ug-atoms/liter	•03	•18	•14	•36	13	•05
W LONGITUDE	121° 57.9"	CLOUDS typ amt	8	IE NI.						
N		WEATH CLOUDS typ amt	m	NITRA' ug	0	1.1	9.2	11,1	15.9	17.7
N LATITUDE	36° 41.2'	S ME		HATE	13	31	.77	91	1,20	84
n Lat	36°	AIR TEMP °C dry wet	12,8	PHOSP	•	•	•	•	ri	4
HOUR	12.7	AIR TEP dry	13.4	SAT %		116	88	77	62	58
	SEP 1975	BAROM	1014.6	OXYGEN AOU SAT ml/l ug-at/l %		-82	9	125	206	229
DATE	22 SEP	WIND dir speed	ო	OXYGEN m1/1		6.74	5.24	4.60	3,78	3,57
STATION	32		28	SIGMA T	25,48	99	9/•	90	02	12
STA	2202	WAVES r ht p	2 2		25	25	25	25	26	26
CRUISE	28	<del>d.</del>	28 2	TEMP SALINITY °C ppt	33,896	.888	•888	.915	•916	•954
S	덪	TRANSP m		SAL	7 33	5* 33	3 33	8 33	3 33	2 33
		Ħ		TEMP °C	13,37	12,7	11.9	11,2	10.6	10.2

\* indicates questionable data: Paired thermometer read 12.62

DEPTH Ħ 0 5 0 5 0 6 4 6 3 0 5 0 6 4

	•								
				SILICA	Ŋ	12	14	22	31
		pe;		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	÷ 5	7.	5	4.	۲.
된		VISIB	9	RATE NITRITE A ug-atoms/l1ter	•02	910	32	28	36
iru	53.	CLOUDS typ amt	9	NIT					
LONG	121° 53.7'	मु व	∞	tATE ug−al	o	و	۲,	∞_	.7
N LATITUDE W LONGITUDE		WEATH	-	TIN 3		Ä	ខ្ម	o,	18,7
UTI	36* 37.6		m	HATE	•16	32	& &	16	1,40
N LAT	36	AIR TEMP °C dry wet	14.1 13.3	PHOSE	•	•	•	ä	-
	9	AIR TEM dry	14•1		118	<u>م</u>	2	99	63
HOUR	13.			SAT 1 %	=	U	Ů,	•	-,
	22 SEP 1975 13.6	BAROM	1014.9	OXYGEN AOU ml/1 ug-at/1	-89	'n	<b>7</b> 7	181	223
DATE	SEP	ed	-	CEN /1 L	59	69	5,42	07	09
	22	WIND dir speed	2	SX E	•	ห๋	ง	4	ฑ้
ION	-	M THP	29	SIGMA I	18	<b>6</b> 4	9/	97	05
STATION	2201	S <del>C</del>	7	SIGN	25.18	22	25	22	26.
<b>5</b> 1	80	WAVES dir ht	30 1 2	ΤΥ	0	ຕ	_	2	6
CRUISE	ML 21		en.	LINIS	33,880	3.88	3.88	3.91	3,92
ច	¥	TRANSP		SA					
		Ħ		TEMP SALINITY °C ppt	14.78	13,3	11.9	10.8	10.5
				DEPTH	0	'n	ព	20	ଛ

				SILICA	ന	7 21
		<b>8</b> 1		PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	ານີ້ ເ	5.2
DE	<b>.</b>	VISIB	9	RATE NITRITE A ug-atoms/liter	03	80
NGITL	51.	CLOUDS typ amt	9 /	E NII		
ন ≊	121	ATH C		NITRA1 ug-	2.0	1.0
N LATITUDE W LONGITUDE	36° 37°7' 121° 51 <sub>8</sub> 1°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	.1 2	PHATE 1	.21	33.
Y.	36	IR TEMP °( dry wet	14.1 11.1	PHOS		
HOUR	13,9	AIR dry	14.	SAT	118	66
	22 SEP 1975 13.9	BAROM mb	1014.6	TEMP SALINITY SIGMA T OXYGEN AOU SAT °C ppt ml/l ug-at/l %	-87	7 99
DATE	22 SEP	ND speed	29 2 2 28 2 1014 <sub>e</sub> 6	OXYGEN m1/1 1	6.62	5,68
Z O		WIND dir spe	28	H	<b>છ</b> છ	. S
ISE STATION	1121	WAVES WIND dir ht p dir speed	2 2	SIGM	25,28	25,50
UISE	28	WAVES dir ht	53	INITY ppt	876	
3	녗	rransp m		SAL	33.	
		Ħ			14.30 14.23	13,22
				DEPTH m	0 10	91

				SILICA	400
		VISIB	20	PHOSPHATE NITRATE NITRITE AMONIA SILICA ug-atoms/liter	1 1.9 9 2.2 0 2.3
TUDE	52,8"		∞	NITRIÍ	21 119
LONG	121	CLOUDS typ amt	7	RATE NITRITE AV ug-atoms/liter	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
DE W	2	WEATH	777	E NIT	444
HOUR N LATITUDE W LONGITUDE	36° 55,2° 121° 52,8°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	16.1 14.2 44 7 8	PHOSPHAT	•71 •47 •42
HOUR	7.6	AIR TI dry	16.1		115 105 117
	1975	BAROM mb	.007.8	AOU 1g-at/1	-75 -26 -84
DATE	6 OCT 1975	WIND Ir speed	0	OXYGEN m1/1 1	6.56 6.01 6.69
STATION	1154	ъ Б	4 3 2 49 0 1007.8	TEMP SALINITY SIGMA T OXYGEN AOU SAT	25,20 25,22 25,26
CRUISE	. 59		4	LINITY ppt	33 <b>.</b> 631 33.632 33.632
ប	녗	rransp ee	10	AS 4	
		• •			13,75 .13,69 .13,47
				DEPTH m	0 20

				SILICA	in m	4 01
		VISIB	ıσ	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	3.4	1.5 2.0
TUDE	•7•	DS VI.		RATE NITRITE A ug-atoms/liter	•18 •16	17
I LONGI	122°	CLOUDS	7 8	RATE N ug-ato	3.2 4.2	5.1
UDE		WEATH	77	TE NII		
N LATIT	36" 55.8"	AIR TEMP °C WEATH CLOUDS dry wet typ amt	14.4 13.3 44	PHOSPHA	34	.35
HOUR N LATITUDE W LONGITUDE	8,5	AIR TI dry	14.4		116 116	86
	6 OCT 1975	BAROM mb	1008.1	AOU 1g-at/1	-82 -83	<b>∞</b>
DATE	6 oct	WIND Ir speed	0	OXYGEN m1/1	6.62	5.79
STATION	2205	ъ Ф	6 4 2 49 0 1008 <sub>•</sub> 1	SIGMA T OXYGEN AOU SAT ml/1 ug-at/1 %	25 <sub>0</sub> 19 25 <sub>0</sub> 32	25 <b>.</b> 38 25 <b>.</b> 52
CKUISE	М. 29	פי	9	SALINITY ppt	33 <b>.</b> 656 33 <b>.</b> 656	13 <b>.</b> 656 13 <b>.</b> 668
J	æ	TRANSP		TEMP SA	13 <sub>8</sub> 89 3 13 <sub>8</sub> 28 3	
				ОВРТН п	0 %	70 70 70 70 70

				SILICA	7	7	70	12	17	50 20
		81		AMMONIA	တ္	9	ထ္	6	, F.	1,9
TUDE	122° 1.6'	CLOUDS VISIB	8	RATE NITRITE A ug-atoms/liter	•29	•25	•33	30	.37	• 38
M LONG		WEATH CLOUDS typ amt	44 7	NITRATE ug-al	7.4	7.8	10,3	11.6	15.6	16.5
N LATITUDE W LONGITUDE	36, 20.9	AIR TEMP °C WE dry wet	14.2 13.3 4	PHOSPHATE NITRITE ANMONIA SILICA ug-atoms/liter	<b>*</b> 94	<b>*9</b>	-87	76	1,30	1,35
HOUR	9.5	AIR T dry	14.2	SAT %	101	98	8	83	74	69
DATE	6 OCT 1975	BAROM sd mb	1008.5	OXYGEN AOU m1/1 ug-at/1		72 10				7 166
		WIND dir speed	0 67			0 5,72				
STATION	2204	WAVES r ht p	5 4 2	Y SIGHA T		25,40				
CRUISE	ML 29	FRANSP W.	v	TEMP SALINITY °C PPt		33,625				
		TR4			12,78	12,72	12,00	11.49	10,91	10,71
				DEPTH	0	'n	읔	20	ଛ	ያ

\* indicates questionable data: Paired thermometer read 10.65

				SILICA	σ	9	'n	10	£	20	27	29	43	43	94	69	75	88	115
		IB		AMMONIA T	6•	6	1:1	6	1.5	ο,	'n	1,0	2,1	7•	ထ္	٥.	0	9•	ထ္
TUDE	1,31	DS VISIB mt	8	RATE NITRITE A ug-atoms/liter	•19	•21	•18	•24	38	•19	•19	8	8	00	8	8	8	S.	8
W LONGITUDE	122	TH CLOUDS	7	ITRATE N ug-ato	7.4	7.5	6.5	9.1	18,1	14.5	21.3	22.5	29.4	27.8	29,3	35.5	32.9	34.4	41.7
N LATITUDE	36° 46 <sub>•</sub> 7°	P°C WEATH wet	13.9 44	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	•57	•62	• <del>2</del> 9	<b>8</b> 33		1,31								2,90	3.20
		AIR TEMP °C dry wet	14.4 1		+	8	4	22	2									9	
HOUR	10.5			SAT 1 Z	101	<b>∞</b>	ᡐ	œ	_	9	'n	4	m	7	7	-			
阳	OCT 1975	BAROM	1009.5	OXYGEN AOU ml/l ug-at/l	1-	103	ଛ	97	191	220	262	304	397	426	426	518	566	577	592
DATE	6 oct	WIND dir speed	0	OXYGEN m1/1	5.82 6.15	4.63	5.52	4.85	4.25	3.70	3,26	2,85	1.97	1.67	1,33	98•	• 45	•42	14.
STATION	2203	<b>P</b>	6 3 20	SIGMA I	25,24	25,33	25.45	25,61	25,80	26.00	26.08	26.20	25,65	26.56	26.66	26.86	27.01	27,12	27,29
CRUISE	ML 29	TRANSP WAVES m dir ht	6	SALINITY PPt	33,613	33,611	33,622	33,664	33,696	33,775	33,827	33,893	34,017	34.081	34,131	34,199	34.256	34,307	34,399
		TRA		TEMP ° C	13,49 13,26	13.06	12,50	11,82	10,91	10,11*	9.87	9.44	8,59	8,10	7.67	6.65	5.84	5.25	4.36
				DEPTH m	0 %	01	8	8	ጸ	75	66	146	195	747	293	391	491	592	171

\* indicates questionable data: Paired thermometers read 10.84 at 50 m; 10.19 at 75 m

				SILICA	6 11 13 16 12
		E3		PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	1 6 4 7 6 8
딛	_	VISIB	'n	RATE NITRITE A ug-atoms/liter	24 33 34 24
HILL	57,9	CLOUDS typ amt	7	NITH Coms/	
LON	121° 57,9°	ty p	4	RATE ug-al	6.3 7.2 11.0 12.9 14.6
ਜ਼ੋ 3≥		EATH	77	INI 3	271741
N LATITUDE W LONGITUDE	36° 41.2°	ο 1 E	7.	PHATE	
N LA	36°	IR TEMP °C dry wet	15.3 14.4	PHOS	ल ल ल
HOUR	12,3	AIR TEMP °C WEATH CLOUDS dry wet typ amt	15,3	SAT	107 83 87 81 75
	6 ocr 1975	BAROM mb	1008.8	OXYGEN AOU : m1/1 ug-at/1	-32 89 67 103 133
DATE	6 ocr	WIND dir speed	27 0 3	OXYGEN m1/1	6.09 4.89 5.18 4.81 4.53
NO	•1	WI dir		H	23 24 23 23 23
STATION	2202	S G	2	SIGMA I	25.23 25.50 25.57 25.64 25.73
	29	WAVES dir ht p	12 5 2	Ž.	88862774
CRUISE	7 7		-	ALINI) ppt	33.638 33.628 33.639 33.652 33.662
	-	TRANSP		TEMP SALINITY °C ppt	13.64 12.25 11.91 11.60 11.19
				DEPTH m	0 n 3 8 8 8

\* indicates questionable data: Paired thermometer read 11.07

				SILICA	7	7	9	ထ	14
		VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	9	1.4	1,3	2.1	œ
园	11		,-	RATE NITRITE A ug-atoms/liter	•17	15	•17	•18	.31
GITU	53.	CLOUDS typ amt	6 7	NIT	·	_			
LON	121° 53,77	g Ç	9	RATE ug-a	42.0	٠,	5.2	5	13.6
E E		ÆATH	H	TIN 3	42	m	Ŋ	_	13
N LATITUDE W LONGITUDE	36° 37.6¹	AIR TEMP °C WEATH CLOUDS dry wet typ amt	15.0	HOSPHATE	.51	•43	9	8	1,13
HOUR N		AIR TEMP °( dry wet	17,8 15,0		115	116	901	16	83
	6 OCT 1975 13.2	BAROM	1000,1	XYGEN AOU SAT ml/l ug-at/l %	-76	-79	-32	94	8
DATE	6 OCT	WIND dir speed	0	OXYGEN AOU ml/l ug-at/	94.9	6.54	6,19	5.46	2.00
STATION	2201	p.	5 2 22	SALINITY SIGMA T ppt	25.01	25,12	25,40	25.65	25, 70
CRUISE	М. 29	Ą	6	ALINITY PPt	33,648	33,649	33,640	33,647	33,659
	<del></del>	TRANSP		TEM S.	14,71				
				DEPTH	0	Ŋ	의	2	8

				SILICA	4 ጠ ጠ
		<b>1</b> 13		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	9 5 7
TUDE	[•1 <sub>1</sub>	S VIȘIB nt	7	CTRITE ns/lite	.17 .16 .16
N LATITUDE W LONGITUDE	121° 51.1	AIR TEMP °C WEATH CLOUDS dry wet typ amt	2 9	RATE NITRITE A ug-atoms/liter	4 • 2 3 • 4 3 • 4
w adv		WEATH	п	KE NIT	
N LATIT	36° 37.2°	IR TEMP °C dry wet	17.2 15.3	РНОЅРНА	43 46 46
HOUR	13.6	AIR T dry	17.2	<u> </u>	113 115 117
	1975	BAROM	1008.1	XYGEN AOU SA7 m1/1 ug-at/1 %	-62 -72 -83
DATE	6 ocr 1975	WIND dir speed	20 0 1	OXYGEN AOU m1/1 ug-at/	6.31 6.44 6.53
STATION	1121			SIGM I	25.03 25.06 25.11
		WAVES r ht p	9 5 2	ry si	
CRUISE	ML 29	rransp 1	•	SALINI; ppt	33 <sub>6</sub> 643 33 <sub>6</sub> 643 33 <sub>6</sub> 643
		TRA		TEMP SALINITY S: *C ppt	14.63 14.46 14.26
				DEPTH m	0 5 01

\* indicates questionable data: Nitrate appears anomalously low Ammonia appears anomalously high

				SILICA	7	• •		-	1 1	7 2	7 7	3 5	7 9	? <b>.</b>		£ 5	2 5	10 0	2 5	<b>3</b>
		•		PONIA	-	<u>س</u>		œ		· -	1 9	•	10	•	<b>-</b>	<b>•</b> C	**		4 0	<b>.</b>
TUDE	1,31	CLOUDS VISIB	8 5	RATE NITRITE AD ug-atoms/liter	-14	20		08-	14	0		Ş	<b>2</b>			<b>3</b> 5	3	3	}	<b>3</b>
DE W LONGITUDE	7' 122°	WEATH CLOUDS typ amt	41 7	PHOSPHATE NITRATE NITRITE ANYONIA SILICA ug-atoms/liter	5.3	5.4		11.2	14.4	14.5	26.3	25.4	31.3	30-8	29-4	38.7	39.8	33.0*	) a	22.0
N LATITUDE	36° 46.7°	TEMP °C wet	7 13.9	РНОЅРНАТІ	•73	.77		1,37	1.22	1,37	2,00	2,13	2,34	2,59	2.38	3-01	3,15	3.29	6 6	70 * 4
HOUR	10.7	AIR dry	14.7	SAT	109	110		81	2	26	67	43	38	25	18	12	00	_	ی د	>
Бī	1975	BAROH mb	1012,5	XYGEN AOU m1/1 ug-at/1	-43	-49		100	165	243	282	320	355	433	476	525	553	268	385	3
DATE	20 OCT 1975	WIND dir speed	4	OXYGEN m1/1	6,23	6,30		4.81	4.22	3.43	3,06	2,70	2,39	1.58	1,19	• 78	.57	•51	42	j F
STATION	2203	در ۳-	4 4 18	SIGMA T	25,23	25.25		25,57	25,82	25,97	26,12	26,29	26,46	26.56	26.70	26.87	26,99	27.13	27.26	)    - 
CRUISE	NE 30	TRANSP WAVE m dirht	27	SALINITY ppt	33,593	33,599		33,642	33,693	33,752	33,847	33,942	34.042	34.084	34,163	34,217	34,263	34,323	34,393	·  -  -  -
		TR		TEMP °C	13,48	13,41	12,43	11,93	10.80	10,20	9.70	9,15	8,57	8,13	7,56	6.65	5.99	5,30	4.63	ŀ
				DEРТН п	0	10	70	ଛ	67	73	97	149	192	236	279	378	477	574	768	

				SILICA	4	'n	7	6	9	14
		83		PHOSPHATE NITRATE NITRITE ANYONIA SILICA ug-atoms/liter	r.	1.9	٠,	<b>5</b>	۲.	<b>.</b>
Œ	-	VISIB	1	RATE NITRITE A ug-atoms/liter	20	•35	•23	•46	040	•57
HIL	57.	CLOUDS typ amt	∞ ×	NIT						
LOM	121° 57 <sub>•</sub> 9'		×	RATE ug-a	ဆ္	۳	7	۲.	5.	ц.
E2 ☐3		катн	41	NIT	4	9	S	유	9.2	2
N LATITUDE W LOWGITUDE	36° 41.2'	AIR TEMP °C WEATH dry wet		PHATE	• 85	•81	•85	910	1,07	•37
N LA	36°	EMP °C	13,9 13,4	PHOS				_		_
HOUR	<b>9</b> •6	AIR TE dry	13,9	SAT Z	108	101	<b>86</b>	16	88	73
	OCT 1975	BAROM mb	1011.5	OXYGEN AOU SAT ml/l ug-at/l 7	-38	<b>-</b> 33	12	45	62	143
DATE	20 OCT	WIND dir speed	12 0 ]	OXYGEN m1/1	6,23	6,19	5,71	5.38	5,21	4.41
NO		WI	12	H	6	Ŋ	<u></u>	_	Q	_
STATION	2202	Δ.	8	SIGMA T	25.2	25,3	25,3	25.4	25,50	25,71
		WAVES dfr ht p	7	<i>5</i> ;						
CRUISE	8		27	INIT ppt	3,566	3.566	3.544	3,601	33,600	3,657
5	보	TRANSP	9	SAI	m	m	რ *	m	'n	m
		T.		TEMP SALINITY °C ppt	13,05	12,92	12,59	12,28	12,14	11,22
				DEPTH m	0	S	9	20	ଛ	64

\* indicates questionable data: Paired thermometer read 12.52

				SILICA	5 8 11 7
		EB.		PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	4 2011
DE	1,	VISIB	Ŋ	RATE NITRITE A ug-atoms/liter	26 30 48 72 39
GIIO	53.	ouds amt	o ×	NIT	
NOT	121° 53.7'	मु ह	×	RATE ug-a	5.0 6.6 10.4 9.2
回		EATH	73	NIT	1200
TIOD	36° 37.6°	μ <b>ε</b> υ	6	'IIATE	1.31* 1.06 1.15 1.36
N LATITUDE W LONGITUDE	36°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	14.4 12.9	PHOSE	ਜੱਜੋਜੋਜੋ
	ю	IR III dry	14.4		M Q P P P A
HOUR	8.5	¥	•	SAT	107 104 94 76 73
F-7	20 OCT 1975	BAROM mb	1012.2	TEMP SALINITY SIGMA T OXYGEN AOU °C ppt ml/1 ug-at/1	-33 -17 31 126 143
DATE	OCT	peq		rgen L/1 1	6.09 5.97 5.50 4.54
	20	WIND dir speed	0 66	O E	ดุพุพุสุส
STATION	<b>#</b>		ð.	T T	25.13 25.25 25.41 25.60 25.71
STA	2201	WAVES r ht p	3	SIG	25.13 25.25 25.41 25.41 25.60
ы	8	WAVES T ht	30 3 2	Ĕ.	7.689.4
CRUISE	넕	H H	.,	LINI PP	33,547 33,563 33,589 33,626 33,651
0	<u></u> 4	TRANSP	2	7S	74 <u>7</u> 54
		r		TEM C	13,77 13,24 12,57* 11,00
				DEPTH m	90 F P P P P P P P P P P P P P P P P P P

\* indicates questionable data: Paired thermometer read 12.50
Phosphate appears anomalously high

				SILICA	117
		E E		PHOSPHATE NITRITE ANYONIA SILICA ug-atoms/liter	1.4 1.3 1.3
f+3	_	VISIB	9	ITE /	09 10 41
TTOD	51.1	CDS amt	ο,	NITR oms/	
CONG	121° 51.1'	CLOUDS typ amt	о . х	RATE NITRITE AI ug-atoms/liter	403
3	H	AIR TEMP °C WEATH CLOUDS dry wet typ amt	2	NITR	2.3 3.0 8.7
Iddri	7.7	WE		ATE	* * *
LATI	36° 37.7"	P°C Wet	15.0 13.3	OSPH	1.92* 1.80* 1.60*
Z	m	IR TEMP °( dry wet	0	H.	
HOUR N LATITUDE W LONGITUDE	8.0	AIR	15	SAT	110 106 94
<b>=</b>		Ϋ́O	<b>*</b> 5	ð t/1	2 C E
缸	197	BAROM	1011,2	AO ug-a	-52 -27 31
DATE	20 ocr 1975	eed	0	TEMP SALINITY SIGMA T OXYGEN AOU SAT °C ppt m1/1 ug-at/1 %	6.30 6.05 5.48
	20	WIND dir speed	66	O B	o o u
NOI	<b>-</b> -	di	ð.	.∺ ≪S	119 24 38
STATION	1121	WAVES dir ht p	32 4 2	SIGE	25 <sub>•</sub> 19 25 <sub>•</sub> 24 25 <sub>•</sub> 38
		WAVES r ht	4	<b>≱</b> ⊣	
CRUISE	8		32	INIT	33,606 33,609 33,596
S	덫	FRANSP m	S	SAL	8 8 8 8 8 8 8 8 8
		TR		မ္သီ ၁	13,72* 13,50 12,71
					227
				DEPTH m	0 2 0

\* indicates questionable data: Paired thermometer read 13.79
Phosphates appear anomalously high

				SILICA	H H O
		8		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug~atoms/liter	m o m
<u> </u>	- <b>6</b> 0	VISIB	7	RATE NITRITE A ug-atoms/liter	0000
GITU	121° 52.8'	CLOUDS typ amt	0	NIT	·
Z T Z		H Lyp	2 x 0	TRATE uga	1.0 1.0 1.0
10 10 1		WEAT		E NE	
ATIT	36° 55.21	AIR TEMP °C WEATH CLOUDS dry wet typ amt	15.4 13.4	SPUAT	.17 .14 .16
z	36	IR TEMP °C dry wet	1 4	PHO	
HOUR N LATITUDE W LONGITUDE	8.7	AIR dry	15,	SAT %	125 110 123
	3 NOV 1975	BAROM mb	1020.5	TEMP SALINITY SIGMA T OXYGEN AOU SAT	7.26 -129 6.36 -48 7.14 -118
DATE	3 1400	WIND dfr speed	99 I X 31 4 1020 <sub>*</sub> 5	OXYGEN m1/1	7.26 6.36 7.14
NOI	4	W	31	₽	333
STATION	1154	d SS	×	SIGN	25,33 25,32 25,33
SE	33	WAVES dir ht p	66	IIY	65
CRUISE	덮	SP	12	SALIN	33,568 33,567 33,565
		TRAIN	ᆏ	D.	12.90 12.90 12.88
				DEPTH	0 20

				SILICA	4 4 7 7 0 7 0 7 0 7 0 1 0 1 0 1 0 1 0 1 0 1 0
		VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0 4 4 4
TUDE	.7.			RATE NITRITE A ug-atoms/liter	.20 .16 .27
N LATITUDE W LONGITUDE	122	H CLOUDS	×	TRATE N ug-ato	3.7 2.8 6.8 14.7
LTUDE	36° 55.81	C WEAT	3	(ATE NI	
N LAT	36	AIR TEMP °C WEATH dry wet	13.9 12.8	PHOSPI	.44 .43 .65 1.32
HOUR	8.6	AIR dry	13,	SAT %	109 107 99 60
FD	3 NOV 1975	BAROM	1020,4	OXYGEN AOU ml/l ug-at/l	-47 -38 5 213
DATE	3 NOV	WIND dir speed	7	OXYGEN m1/1	6.41 6.31 5.85 3.63
STATION	2205		X 21	SIGMA T	25.44 25.45 25.50 25.67
CRUISE	31	WAVES dir ht p	99 1 X	TEMP SALINITY S	33,572 33,582 33,600 33,661
CR	五	TRANSP m	9	SALI	*
		TE			12,34 12,33 12,06* 11,24
				DEPTII	20 P P P P P P P P P P P P P P P P P P P

\* indicates questionable data: Paired thermometer read 12.14

				SILICA	5 9 16 20
		8		PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	1.1
Ħ	÷.	VISIB	7	RATE NITRITE A ug-atoms/liter	113 113 4 13 13 13 13 13 13 13 13 13 13 13 13 13
GITUI	1.6	CLOUDS typ amt	o ×	NITH toms/	
	122° 1.6°	ty G	×	RATE ug-a	2.7 2.2 2.2 3.5 17.2
NDE M		WEATH	7	ee nit	
N LATITUDE W LONGITUDE	36" 50,91	AIR TEMP °C WEATH CLOUDS dry wet typ amt	14,3 12,2	10SPHA	34 28 28 36 1,22 1,40
		in TEMP °C dry wet	4.3		
HOUR	11.0	AI	Ä	SAT	104 87 97 84 68
h-1		ВАКОМ mb	1020.0	AOU ug-at/1	-18 70 13 83
DATE	3 NOV 1975	WIND dir speed	31 1	OXYGEN AOU ml/1 ug-at/1	6.05 5.08 5.72 4.96 4.42
NO		MI dir	31	H	ក្នុងស្ន
STATION	2204	ري م	2	SIGMA T	25.42 25.42 25.43 25.43 25.45
	_	WAVES r ht p	5 2 2	Ľ	404256
CRUISE	ME 31	÷	7	LINI) ppt	33,571 33,572 33,573 33,573 33,635
ວ	Z	TRAINSP	12	SA	
		ij		TEMP SALINITY C ppt	12.66 12.43 12.39 12.27 10.00
				DEPTH	0 2 2 2 2 2

				SILICA	6	4	00	6	14	22	18	77	24	34	32	77	43	17	20	103
		118	_	AMMOULA e t	1.4	1.0	1.5	ထ္	0	0	<b>°</b>	0	ୃ	્	0	0	•	0	0	0
TUDE	1,3	CLOUDS VISIB	0 7	RATE NITRITE A ug-atoms/liter	•14	1.	•23	•25	•14	•07	•03	10.	8	•05	90	00	*01	00	00.	•02
W LONGITUDE	122°	WEATH CLOUDS typ amt	7 X	NITRATE ug-at	5.5	5,3	10.7	9.5	14.2		16.1	19.7	19,3		23.6	29.0	27.6	35.1	33,7	•
N LATITUDE	36° 46.7°	AIR TEAP °C WE dry wet	12,3	PHOSPHATE NITRITE AMONIA SILICA ug-atoms/liter	• 38	•29	<b>*</b> 94	98•	1.10	1.48	1,34	1.52	1,38	1.94	1,90	2,27	2,23	2.89	2,73	2.64
HOUR	12,2	AIR TH dry	14.2	SAT	111	112	83	72	69	62	53	51	48	32	24	24		œ	~	7
떮	NOV 1975	BAROM	1019,3	XYGEN AOU ml/l ug-at/l	-56	-62	96	152	169	208	229	272	290	385	438	439		556	999	584
DATE	3 NOV	WIND dir spæed	7	OXYGEN mI/l 1	6.45	6.55	4.88	4.31	4.24	3,86	3,63	3,18	3.03	2.05	1,53	1.56	1,25	.53	•51	•48
STATION	2203	č.	3 3 32	SIGM I	25,35	25,38	25.54	25.67	25,85	25.99	26.01	26,10	26,21	26,41	26,54	26.61		26.98	27,08	27,27
CRUISE	ML 31	(SP WAVES	28	SALINITY PPt	33,58	33,57	33,59	33,61	33,63	33,71	33,73	33,796	33,86	33,99	34.06	34.10	34.178	34.246	34,295	34,389
		TRANSP	15	TEMP S	12,83	12,64	11,82*	11,30	10,34	9.92	78°6	9,61	9.26	8.63	8.12	7.86		6.01	5.48	4.45
				DEPTH	0	2	ន	20	용	ያ	75	97	138	185	233	281	377	473	269	761

\* indicates questionable data: Paired thermometer read 11.89

				STLICA	ដ	11	11	임	18	17
		8		APMONIA F	0	Ç	0	•	o,	•
TUDE	1.6.7	DS VISIB mt	0 7	RATE NITRITE A ug-atoms/liter	.17	.15	•19	<b>*</b> 08	•05	•05
W LONGI	121° 57.9	TH CLOUDS	×	ITRATE N ug-ato	10,3	7.9	11,5	8.4	18,4	15,5
N LATITUDE W LONGITUDE	36° 41,21	AIR TEMP °C WEATH CLOUDS dry wet typ amt	2.8 2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	•79				1,28	
		AIR TEMP °( dry wet	14,4 12,8		62	87	93		72	
HOUR	1975 14.5	ВАКОМ 1 mb	1017,5	OXYGEN AOU SAT ml/l ug-at/l %					157	
DATE	3 NOV 1975	WIND dir speed	н	OXYGEN ml/1 u	4.65	5.19	5.84	4.12	4.41	3,91
STATION	2202	<b>à.</b>	7 2 3 23	SIGM I	25.45	25,50	25,56	25.79	25.86	26.01
CRUISE	ML 31	늄	7	SALINITY PPt	33,533	33,530	33,538	33,589	33,601	33,677
		TRANSP	6	TEMP S	12,12	11,85	11,56	10,46	10,14	9.59
				DEPTH m	0	S	01	20	ଛ	ያ

\* indicates questionable data: Phosphate appears anomalously high

				SILICA	9 17 12 16 20
		13		PHOSPHATE NITRITE AMONIA SILICA ug-atoms/liter	r4040
rude	3,7*	DS VISIB mt	7 0	RATE NITRITE A ug-atoms/liter	16 19 73 28
N LATITUDE W LONGITUDE	121° 53,7°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	0 X	TRATE N ug-ato	5.2 10.3 9.2 8.0 17.3
TUDE	19*21	WEATH	8	IATE NIT	
I IVI	36° 37.6°	IR TEMP °C dry wet	16.7 14.4	PHOSPH	.58 .95 .87 1.12 1.29
HOUR	15,2	AIR dry		SAT 1 %	128 94 85 79 73
M	3 NOV 1975 15.2	BAROM mb	1017,5	AOU ug-at/)	-142 33 82 116 150
DATE	3 NOV	WIND dir speed	7	OXYGE)	7.33 5.62 5.12 4.78
STATION	2201	WAVES W r ht p dir	8 1 2 29	TEMP SALINITY SIGMA T OXYGEN AOU *C ppt ml/1 ug-at/1	25.21 25.56 25.66 25.74 25.82
CRUISE	ML 31	뀾	28	ALINITY ppt	33,496 33,531 33,565 33,598 33,630
-	1	TRANSP	6	TEMP S.	13.21 11.50 11.12 10.79
				DEPTII	8 2 6 5 0

				SILICA	7 4 11
		8		PHOSPHATE HITRATE NITRITE A:MONIA SILICA ug-atoms/liter	H 2 6
JDE	<u>.</u>	S VISIB	7	RATE NITRITE A ug-atoms/liter	111 112 23
UNGIT	121° 51.1'	CLOUDS typ amt	0 ×	TE NI	
X X		ATH C	7	HITRA ug	3.4 2.9 9.6
N LATITUDE W LONGITUDE	36° 37.7°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	4.9	SPIIATE	44 49 69
	36	IR TEMP °( dry wet	17.2 14.9	PHO	
HOUR	15.7			SAT 1 %	115 119 95
ដៅ	3 NOV 1975	BAROM	1017.0	AOU ug-at/	-78 -99 28
DATE	3 NOV	WIND dir speed	7	SIGMA T OXYGEN AOU ml/1 ug-at/1	6.67 6.95 5.66
NOI	-		8	# #	28 34 54
STATION	1121	WAVES dir ht p	2 3	SIG	25.28 25.34 25.54
CRUISE	31		31	TEMP SALINITY °C ppt	33 <b>.</b> 542 33 <b>.</b> 539 33 <b>.</b> 517
CE	14	TRANSP m	ø	SAL	
		E			13.05 12.71 11.57
				DEPTH	0 5 01

				SILICA	6 8 20
		VISIB	<b>∞</b>	PHOSPHATE NITRATE NITRITE ANMONIA SILICA ug-atoms/liter	
TUDE	52.8"		0	RATE NITRITE A ug-atoms/liter	.12 .15
N LATITUDE W LONGITUDE	121° 52.8'	WEATH CLOUDS typ amt	×	TTRATE 1 ug-ato	5.8 7.1 16.5
TLUDE	36° 55.21	C WEAT	2 2	PHATE N	
	3%	AIR TEAP °C dry wet	9.7 9.2	PHOSI	ੱ ਜੋ
HOUR	8.7			SAT	105 98 71
DATE	17 NOV 1975	BAROM d mb	1019.7	OXYGEN AOU : m1/1 ug-at/1	4 -28 8 12 0 157
	17 N	WIND dir speed	32 3		6.34 5.88 4.30
STATION	1154	p.		SIGMA T	25.65 25.65 25.73
CRUISE	ML 32	Ą	30 2 3	LINITY ppt	33,587 33,581 33,614
Ü	X	TRANSP	Ŋ	TEMP SALINITY S	11.29 3 11.24 3 10.91 3
-				DEPTH 1	0 2 0

				SILICA	15	16	16	17
		VISIB	<b>&amp;</b>	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1,3	1.6	1.0	1,3
rude	.7.	DS VI		RATE NITRITE A ug-atoms/liter	•31	8	• 31	•43
LONGI	122° •7'	CLOUDS typ amt	0 ×	RATE N ug-ato	2.	ဆ္	14.8	٠,5
DE	. 8	WEATH	7	E NIT	13	13	14	13
HOUR N LATITUDE W LONGITUDE	17 NOV 1975 9.7 36°55.8'	AIR TEMP °C WEATH CLOUDS dry wet typ amt	11.2 10.1	PHOSPHAT	1,11	1,13	1,13	1,20
HOUR	7.6	AIR T dry	11.2		29	81	77	73
	1975	BAROM	1020•0	AOU ug-at/1	176	103	122	146
DATE	17 NOV	WIND dir speed	22 1	OXYGEN ¤1/1	4.07	<b>7.</b> 90	4.68	4.42
STATION	2205		28 2 2 22	SIGMA T OXYGEN AOU SAT m1/1 ug-at/1 Z	25.69	25,70	25,70	25,72
CRUISE	. 32	WAVES dir ht p	28 2	SALINITY ppt	3,587	3,588	33,590	3,596
Ü	爿	TRANSP	ស	TEMP SAI			10,99 33	
					0 11			
				DEPTH	_	. •	07	ิ

				SILICA	'n	'n	4	14	13	22
		18		PHOSPHATE NITRATE NITRITE ANGONIA SILICA ug-atoms/liter	'n	7.	7.	ئ.	'n	•5
E	*. .c	VISIB	∞	RATE NITRITE A ug-atoms/liter	80	90	0.	8	119	•05
SITU	<b>.</b>	CLOUDS typ amt	0	NIT	·					
LONC	122° 1.6'	_	×	RATE ug-ai	6	3,3	0	0	7	ψ.
<b>3</b> ≥		EATH	7	NIT	ų	сń	m	13	20	23,3
N LATITUDE W LONGITUDE	36° 50.9	ີ <b>ສ</b> ບຼ	7	HATE	43	07.	33	1.58*	39	52
I.AT	36°	래마 *(	12.	HOSE	•	•	•	ŗ.	r,	, i
HOUR	10.7	AIR TEMP °C WEATH dry wet	12.9 12.2	SAT 1	121	121	120	16	89	
		BAROM mb	1019.2	AOU 18-at/1	-113	-110	-105	48	177	
DATE	17 NOV 1975	WIND dir speed	32 1 ]	OXYGEN AOU ml/l ug-at/l	7.23	7,21	7,15	5,50	4.16	3,66
NO		W dir	32		ίζ	9	ور	6	<u></u>	
STATION	2204	<b>6</b>	7	SIGM I	25.5	25.5	25.5	25,69	25.8	
		WAVES r ht p	8 4 2	<b>&gt;</b> -						
CRUISE	32	Ŧ	28	INIT PP¢	.569	571	.568	33,591	661	.717
ຮັ	덫	TRANSP m	Ŋ	SAL						8
		TI _		TEMP SALINITY °C ppt	11,73	11,67	11,66	11,08	10,32	
				DEPTH	0	'n	2	2	유	49

\* indicates questionable data: Phosphate appears anomalously high

				SILICA	18	16	17	23	22	23	19	28	56	36	32	77	53	65	74	88
		IB	_	AMMONIA :T	1.7	ထ္	•5	1,1	<b>7.</b>	<b>7.</b>	o.	0	• 5	1,3	∢•	e.	•5	۳,	۲.	<b>.</b>
TUDE	1,31	UDS VISIB	0	RATE NITRITE A ug-atoms/liter	•14	•12	•35	•11	•16	•14	•03	•05	8	0.	•04	8	8	8	8	00•
W LONGITUDE	122	WEATH CLOUDS typ amt	2 X	NITRATE ug-at	18,2	17.8*	16.8	16.4	21,1	25.4	25.9	28.7	<b>56.</b> 6	31.4	25.8	33.6	31.9	37.8	37.0	34.0
N LATITUDE	36° 46.7°		11.8	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1,13	1,78	1,10	<b>*6</b>	1,31	1.56	1.57	1.70	1.64	2.04	1.80	2,10	2.52	2,72	2,59	2,70
HOUR N	12,7	AIR TEMP °C dry wet	12.0	SAT Pi	87	94	87	83	77	99	26	48	42	33	36	18	12	6	7	7
	NOV 1975	BAROM mb	1018,2	XYGEN AOU ml/l ug-at/l	73	293	69	90	126	189	243	290	325	380	363	475	519	547	269	584
DATE	17 NOV	WIND dir speed	ო	OXYGEN m1/1	5.25	2,79	5,29	5.08	4.69	4.05	3.48	3.01	2.68	2,14	2.27	1,15	•87	•62	47	•46
STATION	2203	Q.	8 3 32	SIGMA T	25,77	25.77	25,77	25.80	25,83	25,97	26.05	26.16	26,29	26.43	26,35	26.61	26.81	26.94	27.06	27,25
CRUISE	ML 32	RSP WAVES	5 29	SALINITY ppt	33,645	33,643	33,642	33,650	33,665	33,739	33,782	33,830	33,907	33,984	33,945	34,097	34.164	34.212	34,271	34,368
		TRANSP	12	TEMP :	10.87	10,85	10,85	10,67	10,58	10,09	9,83	9,41	8.97	8,42	8.80	7,86	6.82	<b>6</b> •10	5.52	4.54
				DEPTH m	0	'n	2	2	ଛ	ያ	75	92	142	130	. 220	290	382	465	545	705

\* indicates questionable data: Nitrate appears anomalously low

				SILICA	18	17	15	17	17	16
		VISIB	8	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/líter	1.5	1.	7.	4	2.2	
E	•		w	RATE NITRITE A ug-atoms/liter	15	•26	13	13	•14	31
GITU	57.	CLOUDS typ amt	0 ×	NIT) toms,	·				-	
LON	121° 57.9'	된 단	×	RATE ug-a	9	<u>.</u>	٦,	4.	15,3	82
ਤ ≽		IEATH	7	TIN	18	17	15	18	15	15
N LATITUDE W LONGITUDE	36° 41.2'	ر ت تع	ထ္	PHATE	1,09	60	95	86	1,00	14
N LA	36°	EMP °C	12,2 11,8	PHOS	ਜੱ	٦,	-		٣Ī	
HOUR	14.3	AIR TEMP °C WEATH CLOUDS dry wet typ amt	12,2	SAT	78	78	2	29	69	19
	17 NOV 1975	BAROM mb	1016.5	OXYGEN AOU SAT ml/l ug-at/l %	87	121	162	177	171	212
DATE	17 NOV	WIND dir speed	32 3	OXYGEN m1/1	5.10	4.72	4.26	4,11	4.19	3.76
NOI	2	W	32	₽	62	79	79	82	83	90
STATION	2202	Si Gr	m	SIGMA T	25.79	25	25	25	25	25
ISE	32	WAVES dir ht p	29 7 3	NITY Pt	652	21	653	658	662	10
CRUI	포			SALINITY PPt	33.6					
		TRANSP	07	TEMP S	10,79	10.78	10,77	10.64	10.56	10,34
				п	0	'n	2	20	8	ጽ

				SILICA	15	13	16	8	61
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	'n		8	1.4	5.
ш		VISIB	∞	ITE , lite	10	60	11	14	•15
TLOD	121° 53,7	CLOUDS typ amt	0 x	RATE NITRITE A ug-atoms/liter	•	•	•	•	•
TONC	121°	CLC	×	RATE ug-at	9	ຕ	7	ر. در	.7
M H		EATH	2	NIT:	14	12	15	22.3	18.7
N LATITUDE W LONGITUDE	36° 37•6°	S T	6	PUATE	88	89	02	16	1,25
E LA	36°	EP °C	11.9 10.9	PHOSI	_	_	Ļ	7	₩Ī
HOUR	<b>-</b>	AIR TEMP°C WEATH CLOUDS dry wet typ amt	11.9	SAT %	81	73	79	69	79
至	15,	7				•	•	Ī	•
	1975	BARO11	1016,7	AOU 1g-at/1	101	143	115	166	114
DATE	17 NOV 1975 15.1	WAVES WIND r ht p dir speed	32 4 ]	TEMP SALINITY SIGMA T OXYGEN AOU °C ppt ml/1 ug-at/1	4.89	4.42	4.74	4.23	4.83
Z		WI Hr	32	E-1	_	_	_	_	
STATION	2201	<u>а</u>	٣	IGM	25,69	25,70	25,70	25,78	25.84
S		WAVES r ht	1 4 3	တ					
CRUISE	32	WA\	31	NITY	626	626	625	33,625	929
CRC	掘	rrausp m	70	SALI	33	33	ee ee	33	33
		TRAI	П	TEMP °C	11,20	11,17	11,15	10,69	10.57
				DEPTH m	0	Ŋ	10	20	8

				SILICA	17 16 16
		SIB	ω ω	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	2.0 1.0 1.4
CODE	[•1]	S VISIB		FTRITE ns/lita	113
LONGI	121°51	CLOUDS typ amt	×	RATE NITRITE AI ug-atoms/liter	င် က ဆ
DE W	.7.	WEATH	7	re neti	15.0 15.6 14.8
I LATIT	36° 37.7' 121° 51.1'	AIR TEMP °C WEATH CLOUDS dry wet typ amt	12.1 12.0	PHOS PHA?	93 93
HOUR N LATITUDE W LONGITUDE	15.5	AIR T	12.1	SAT %	96 98 97
	17 NOV 1975 15.5	BAROM mb	1016.2	AOU ug-at/1	52 11 35
DATE	17 NOV	WIND dir speed	32 4 1016,2	OXYGEN m1/1	5.44 5.90 5.63
STATION	1121		2 32	SIGMA T OXYGEN AOU ml/l ug-at/l	25.69 25.70 25.70
	32	WAVES dir ht p	32 4 2	IIIYS	
CRUISE	첫	TRANSP m d		*C ppt	33 <sub>6</sub> 629 33 <sub>6</sub> 641 33 <sub>6</sub> 641
		TR.		TERP.	11.22 11.20 11.21

DEPTH m

				SILICA	16 15 13
		IB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	2.2 1.3 1.3
E	<b>ω</b>	S VISIB		TRITE 18/11te	28 27 27
CONGIL	121° 52.8¹	CLOUDS typ amt	0 2	RATE NITRITE A ug-atoms/liter	861
E W I		REATH	7	3 NITR	7.8 10.9 9.1
N LATITUDE W LONGITUDE	36° 55,2¹	AIR TEMP °C WEATH CLOUDS dry wet typ amt		[OSPHATI	.74 .74 .79
		IR TER "( dry wet	10.2 9.0		78 74 99
HOUR	8.4			SAT /1 %	
<b>6-3</b>	1 DEC 1975	BAROM mb	1010.3	AOU ug-at	119 143 5
DATE	1 DEC	WIND dir speed	2 1 2 17 1	SIGMA T OXYGEN AOU m1/1 ug-at/1	4.81 4.54 6.08
STATION	<b>%</b>		17	MA T	25.93 25.92 25.92
STA.	1154	WAVES r lit p	1 2	SIG	25 25 25
CRUISE	ML 33	<b>4</b>	22	TEMP SALINITY S	33 <b>,</b> 724 33 <b>,</b> 717 33 <b>,</b> 714
១	昱	IRANSP m	9	SAS	
		H		TEM.	10.28 10.29 10.31
				DEPTH	0 5

				SILICA	13	13	14
		VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	2.0	သူဆ	
10E	•7•	Δ.	7	RATE NITRITE AI ug-atoms/liter	•27	25	.22
GITU		CLOUDS typ amt	0 1	NIT			
1.0X	122°	ty CI	0	'RATE uga	Ħ,	10°0	0
IJ 포		REATH	8	TIN 3	14	J 0	12
N LATITUDE W LONGITUDE	36" 55.8" 122"	AIR TEMP °C WEATH CLOUDS dry wet typ amt	11.5 10.0	HOSPHATE	85	1.44*	.83
		IR TENP *( dry wet	11.5		<b></b>	v =4	_
HOUR	9•3	₹ .	-	SA7	6, 9	7 6	-
м	1975	MAROM mb	1010.3	AOU ug-at/1	8	<b>6</b> 1건	127
DATE	1 DEC 1975	WIND dir speed	18 0	SALINITY SIGMA T OXYGEN AOU SAT ppt m1/1 ug-at/1 %	5.74	5.58	4.73
NO		WI dfr	13	H	<u>ლ</u> ჯ	<u> </u>	9
STATION	2205	<u>a</u>	3 1 2	SIGM	25.9	25.94	25.9
CRUISE	33	书	23	INITY	33,718	717	•730
පි	뉟	TRANSP	<b>∞</b>	SAL			
		T.		TENP C	10,23	10,18	10,16
				DEРТН m	0 4	ិ និ	20

\* indicates questionable data: Phosphate appears anomalously high

				SILICA	19	<u>7</u> 1	16	12	;	5 7 7	İ
		<b>E</b> 3		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	7.	4	0	, er	) p=-	: -:	)
TUDE	1,6	DS VISIB mt	0 7	RATE NITRITE A ug-atoms/liter	118	13	.17	-27	80	13	
W LONGITUDE	122° 1,6°	TH CLOUDS	0 X	ITRATE N ug-ato	9• 71	6.4	11.2	11.5	8.0	25.9	
N LATITUDE	36°50,91	AIR TEMP °C WEATH dry wet	3.8 2	PILATE NI	1,02					1.54	
		IR IEMP (dry wet	11.5 9.8							51	
HOUR	975 10,2	BAROM A	1010,3	AOU SAT ;-at/1 %		8					
DATE	1 DEC 1975	WIND B dir speed	9 1 10	OXYGEN AOU ml/l ug-at/l	5,10	5,14	5.07	5.16	3,70	3,21	
STATION	2204	Ω		SIGMA T	25.92	25.93	25,93	25.94	26.05	26,16	
CRUISE	ML 33	SP WAVES dir ht	29 1 2	SAL INITY ppt	33,702	33,707	33, 700	33,713	33,762	33,827	
•	~	TRANSP	17	s arai	10,21						
				DEPTH	0	φ	207	70	ଛ	ጽ	

\* indicates questionable data: Phosphate appears anomalously high

54 **\*** 45 45 65 PHOSPHATE NITRATE NITRITE AMMONIA SILICA 4 4 0 0 0 0 0 0 4 4,40 VISIB ug-atoms/liter W LONGITUDE 1,3 CLOUDS typ amt 0 122 23.0\* 32.1\* 40.7 32,2\* 30,6\* × 26.1\* 28.0 34.0 33.0 16.4 13.5 18.0 12.2 17.9 26.6 WEATH 2 N LATITUDE 36 46.7 .95 1.16 1.48 1,62 1,79 1,95 2,22 2,22 2,22 2,51 2,54 2,73 •68 •92 AIR TEMP °C 15.0 12.0 vet dry SAT 6.9 HOUR 11,7 m1/1 ug-at/1 BAROM 1010,3 1 DEC 1975 515 529 559 OXYGEN AOU 46 74 123 90 154 257 257 367 411 418 445 Ą DATE 4.44 3.03 1.30 1.88 1.88 1.58 .91 .83 .62 64 dir speed 5.58 5.26 4.73 5,13 O WIND SIGMA I STATION 26**.**29 26**.**45 26.63 26.69 25.80 25.81 25.83 25.88 25.95 26,13 26.55 26.93 27.09 27.26 26.84 2203 ۵ N WAVES dir ht -SALINITY 33**.**666 33**.**709 33**.**638 33**.**646 34,039 34,095 34,157 34.196 CRUISE 8 12 33,650 33,797 33,882 33,992 34,281 34.076 ¥.399 ppt 뎦 TRAINSP 17 E 7.62 7.30 6.53 6.06 5.31 10.67 10.65 10.53 10.33 10.10 9.44 8,33 8.87 7.97 69.4 TEMP DEPTH 147 196 244 292 388 583 0 2 2 2 2 2 2 5 8 486 덛

Silicate appears anomalously high \* indicates questionable data: Nitrates appear anomalously low

				SILICA	14	0	14	15	16	14
		TB		AMMONIA T	•5	<b>س</b>	4.	ຕຸ	•2	н.
aon	.6	S VISIB	7	RATE NITRITE A ug-atoms/liter	.24	•25	•24	•22	•26	•18
CONGIT	121° 57.9'	CLOUDS typ sent	0 X	ATE NI g-atom		7	0	-1	2	<b>v</b> o
E E		IEATH	7	NITE.	22.	9.7	16.	19	20.	22.
N LATITUDE W LONGITUDE	36° 41,2°	AIR TEMP °C WEATH CLOUDS dry wet typ smt	13.0 11.2	PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	1.03	.81	1,03	1,05	1,08	1.14
HOUR	13.6	AIR Ti dry		SAT %	78	19	79	74	11	51
	1 DEC 1975	BAROM	1010,3	AOU 18-at/1	117	211	116	145	157	269
DATE	1 DEC	WIND dfr speed	30 2 ]	OXYGEN m1/1 '	4.77	3,76	4.83	4.52	4.39	3,19
STATION	2202		31 1 2 30	SIGMA T OXYGEN AOU ml/1 ug-at/1	25.81	25,87	25,87	25.90	25.92	26.05
w		WAVES r ht p	-	<b>03</b>						
CRUISE	r 33	ਚ	31	SALINITY ppt	33,674	3.676	3.678	3,690	3,705	3,777
घ	보	TRANSP	18	SA		èri	m	m	*	m
		TR		TEMP S	10,75*	10,43	10.41	10.29	10,24	9,83
				DEPTH	0	'n	ន	ឧ	ଛ	ያ

\* indicates questionable data: Paired thermometers read 10.66 at 0 m; 10.18 at 30 m

				SILICA	7	07	<b>00</b>	ස	12
		VISIB	7	PHOSPHATE NITRITE ANYONIA SILICA ug-atoms/liter	9•	1.4	.7	7.	•2
TUDE	3,71		0 7	ITRITE ms/lit	•13	•14	•12	•11	•19
LONGI	121° 53.7'	CLOUI	o ×	RATE NITRITE A ug-atoms/liter	0	٠,	10,3	.7	0
UDE		WEATH	7	TE NIT					
N LATITUDE W LONGITUDE	36° 37•6¹	AIR TEMP °C WEATH CLOUDS dry wet typ amt	17.0 11.2	PHOSPHA	•62	.67	•61	•65	1,09
HOUR	4.4	AIR TI dry	17.0		112	107	106	103	75
	1 DEC 1975 14.4	BAROM mb	1010.3	AOU 1g-at/1	-63	-34	-33	-15	139
DATE	1 DEC	WIND dir speed	2	OXYGEN AOU SAT ml/1 ug-at/1 %	6.76	6.48	6.47	6.28	4.61
STATION	2201		1 2 29	TEMP SALINITY SIGMA T *C PPt	25,76	25.79	25,81	25.82	25.96
CRUISE	ML 33	SP WAVES dir ht p	77	ALINITY PP¢	33,667	33.640	33,656	33,652	33,730
		TRANSP	11	TEMP S			10,66		
				DEPTH	0	ĸλ	9	20	දූ

		<b>8</b> 1		PHOSPHATE NITRATE NITRITE AMMONIA ug-atoms/liter	m & &
DE DE		VIS	7	RATE NITRITE AI ug-atoms/liter	1.51.
GITU	51.	CLOUDS typ amt	0	NIT	
TON P	121	59 g	×	rate ug-a	8 8 8 8 8 8 8 8 8
四	7.	WEATH	7	e nij	w 01 01
HOUR N LATITUDE W LONGITUDE	36° 37,7' 121° 51,1'	AIR TEMP °C WEATH CLOUDS VISIB dry wet typ amt	12.5 II.1 2 X 0 7	HOSPHAT	.76 .68 .65
Z		R TE	2.5		
HOUR	14.8	Ą		SAT	101 108 99
ы	1 DEC 1975 14.8	BAROM mb	1010,3	AOU ug-at/1	-40 -40 5
DATE	1 dec	WAVES WIND dir ht p dir speed	31 1 2 29 2 1010,3	SIGMA T OXYGEN AOU SAT m1/1 ug-at/1 %	6.11 6.55 6.04
NO LO		H. dfr	29	H	<b>522</b>
STAT	112	ε Δ	7	SIGM	25.77 25.82 25.82
		AV民 ht	-	b-i	
CRUISE STATION	MC 33 1121	TRANSP WAVES m dir ht	31	INIT PPt	33.655 33.660 33.652
3	보	ZANSP III	8	SAL	60 60 60 60 60 60
		TR -		TEMP SALINITY •C ppt	10.89 10.65 10.61

DEPTH

~

				S	
		t B	_	PHOSPHATE NITRATE NITRITE AMMONIA SI ug-atoms/liter	3.5 • 7 • 4
		VISIB	80	IIE	26 24 24
HOUR N LATITUDE W LONGITUDE	36°55.2' 121°52.8'	AIR TEMP °C WEATH CLOUDS dry wet typ amt	8.2 7.1 2 X 0	RATE NITRITE A ug-atoms/liter	.,
Ž Ž	.21°	ty g	×	KATE 18-a	400
달 <b>글</b>	• ·	TEATH	2	NITH	8.4 10.2 10.0
	55.2	2		IATE	72 07 19
LAI	• 9	₽°( wet	7.1	OSPI	1.72 1.07 1.19
23	m	TEN,	7	몹	
HOUR	8.7	AIR dry	<b>ట్</b>	SIGMA T OXYGEN AOU SAT ml/l ug-at/1 %	102 94 100
-	75	BARO11	<b>3</b> •3	ou at/1	-10 33 1
121	16	BAR(	101	A( ug-	
DATE	15 DEC 1975	ed		rgen [/1	6.17 5.73 6.09
	15	IMD 8pe		S 3	\$4,4
NO		WIND dir spe	23	H	71 O Q
STATION	1154	<u>α</u> .	m	C GP (A	25 <b>.</b> 72 25 <b>.</b> 79 25 <b>.</b> 80
ίχ		VES		ώ	
CRUISE	*	NSP WAVES WIND n dir ht p dir speed	8 26 1 3 23 1 1010,3	SALINITY ppt	33 <b>.</b> 630 33 <b>.</b> 628 33 <b>.</b> 625
CRU	ML 34	NSP	œ	SALI	
		TRAJ		_	04 63 57
				TEMP C	11.04 10.63 10.57
				DEPTII m	0 2 0

				SILICA	15	15	15	16
		I.B		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1,5	1,5	1.6	2.4
		VISIB	∞	TE , ite	륁	근	금	m
HOUR N LATITUDE W LONGITUDE	.7.		0	RATE NITRITE A ug-atoms/liter	.31	ຕຸ	ຕຸ	e.
	122°	CLOUDS typ amt	о ×	ATE 3-at		m	m	_
  33  M]		AIR TEMP °C WEATH CLOUDS dry wet typ amt	7	NITR	16,1	19	11	13
	5.8	5		ATE	7	φ.	4	_
LATE	36* 55.8	IR TEMP °C dry wet	8.3 7.9	ноѕрн	1,32	1.3	1,3	1.4
z		T T	<u>.</u>	Ā				
HOUR	9.6	AIR	<b>∞</b>	SAT	92	87	92	91
	1975	BAROM ad	.010.3	AOU 18-at/1	46	73	46	48
DATE	15 DEC 1975	WIND dir speed	5 0 X 33 1 1010.3	SIGMA T OXYGEN AOU SAT m1/1 ug-at/1 %	5.60	2°	5.61	5.59
z		WI) Hr	33	H		_		
STATION	2205		×	IGMA	25.85	25.84	25,85	25.85
מע		WAVES r ht p	0	63 No.				
CRUISE	æ	W/ dir	15	INIT	33,660	653	654	656
28	兌	rransp m	9,	SALI				
		TR		TEMP SALINITY S	10.47	10.46	10.40	10,43
				DEP TH m	0	'n	2	20

				SILICA	11	σ	10	12	12	21
		:IB		AMMONIA 3.T	۲.	۲.	ထ္	٣.	∞	0
TUDE	1,6	JDS VISIB	0	RATE NITRITE A ug-atoms/liter	•31	•25	ۍ <b>•</b>	•32	•32	•12
W LONG	122° 1.6'	TH CLOUDS typ amt	0 ×	ITRATE   ug-ato	12,2	11.4	15,3	10.5	12,5	22.4
N LATITUDE W LONGITUDE	36°50.91	AIR TEMP °C WEATH CLOUDS dry wet typ amt	.0.0	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1,12	1,05	1,08	1,11	1,19	1,62
HOUR N 1	11,4 36	AIR TEMP °C dry wet	12,0 10,0	SAT PHO			16	98	97	72
		BAROM mb	1010,3	AOU S g-at/1	13	7	14	13	17	153
DATE	15 DEC 1975	WIND dir speed	7 2 1	OXYGEN ml/1 u	5.92	5.99	5.92	5,93	5,89	4.45
STATION	2204			SALINITY SIGMA T OXYGEN AOU ppt ml/1 ug-at/1	25,75	25,75	25,77	25,76	25,77	25,95
CRUISE	*	WAVES dir ht p	32 2 2	INITY S	3,625	3 <b>.</b> 622	1,629	627	33,625	3,717
ទី	Ä	TRANSP	18	TEMP SAL	10,87 33	10,85* 33	10,76 33	10,80 33	10,76 33	10,14 33

\* indicates questionable data: Paired thermometer read 10.95

288860

DEPTH

E

				SILICA	13	읔	<b>42</b> *	2	σ	53	18	71	R	ま	33	5	19	27*	92	
,		113	_	AMMONTA 1.	1.0	o.	۳,	1.4	1,3	<b>.</b>	1,1	4.7	1:1	ئ.	ຕຸ	9	1.7	4	ę.	6
ITUDE	1,3'	UDS VISIB	8	RATE NITRITE A ug-atoms/liter	• 36	8	Ξ.	ਲ਼•	•29	•38	90	<b>1</b> •	<b>*</b> 0	တ္ခဲ့	010	8	10•	•22	0	8
W LONGITUDE	122*	WEATH CLOUDS typ amt	, ×	NITRATE VG-at	12,8	14.2	31,8	13,8	14.7	15,1	18,2	22.8	30.9	40.3	27.2	15,1*	39.8	21.4	56.9	37.4
N LATITUDE	36° 46.7'		10.8	PHOSPHATE NITRATE NITRITE AMMONIA ug-atoms/liter	1,20	1,03	2 <b>.</b> 38	1,06	66*	1,37	1.41	1,56	2,02	2,16	2,34	2,58	2,94	1.62	3,11	3,27
HOUR N	12.9	AIR TEMP °C dry wet	13.1 10.8	SAT	8	66	86	95	86	83	53	77	43	37	33	25	1.5	9	_	7
rea.	DEC 1975	BAROM	1012,3	i AOU ug-at/1	•	9	*01	<b>5</b> 6	13	93	260	315	324	360	330	441	50	545	266	587
DATE	15 DBC	WIND dir speed	7	OXYGEN m1/1 u	5.98	5.98	5.94	5.77	5,92	5.08	3,30	2,74	2,69	2,35	2,11	1.63	1,03	9.70	•51	•48
STATION	2203	 D-	2 X 7	SIGMA T	25,74	25.74	25,75	25.75	25,77	25.84	26.06	26,19	26,31	26,42	26.56	26.70	26,83	26.95	27,05	27,31
CRUISE	M. 34	SP WAVES dir ht	28	SALINITY ppt	33,642	33,639	33,638	33.636	33,636	33,649	33,775	33,854	33,926	33,990	34,038	34.098	34,146	34,205	34.249	34*403
	,	TRANSP	17	TEMP SA		10,98	10,93	10,92	10,83	10,45	9.72	9,30	8,95	8,52	7.84*	7,25	6,53	5.97	5.48	4.27

Silicate appears anomalously high at 10 m; low at 484 \* indicates questionable data: Paired thermometers read 11.04 at 0 m; 7.77 at 240 Nitrate appears anomalously low AOU appears anomalously low

DEPTH

E

142 191 240 289 386 484 774

				S	
		VISIB	<b>&amp;</b>	PHOSPHATE NITRATE NITRITE AMMONIA S ug-atoms/liter	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
<u>[1]</u>		VI		11. 11.	33 26 32 30 30 24
GITUD]	121° 57.9'	CLOUDS typ amt	0 X	RATE NITRITE A ug-atoms/liter	• • • • •
ron	.21	ty p	×	WTE 18-8	0 / 0 11 11 /
H 전		WEATH CLOUDS typ amt	7	I NITI	17.0 7.7 11.0 10.5 12.5
N LATITUDE W LONGITUDE	36° 41.2°	AIR TEMP °C   dry wet	14.3 12.3	PHOSPHAT	1.08 .85 1.04 .90 1.00
		# E	.3		
HOUR	15,5	AIF	77	SAT %	97 99 98 98 96 78
		BAROM mb	1010,2	AOU 18-at/1	14 7 13 12 20 120
DATE	15 DEC 1975	WIND dir speed	4 2 ]	SIGMA T OXYGEN AOU ml/l ug-at/l	5.90 5.98 5.93 5.94 5.85
Z		MI	4	H	10.10.10.10.5
STATION	2202		4	₽₩ B	25.75 25.75 25.76 25.76 25.77 25.87
SI	7	ES	m	SI	000000
CRUISE	*	WAVES dir ht p	33 3 4	SALINITY PPC	33,634 33,633 33,626 33,626 33,631 33,635
CRU	M	NSP	2	SAL.	ឌុំឌុំឌុំឌុំងូ
	ML TRANSP	TRAN	+	TEMP °C	10.90 10.89 10.81 10.82 10.82
				DEРТН п	20 70 00 00 00 00 00 00 00 00 00 00 00 00

				SILICA	- 1	· r	· 1/7	21
		18		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	<b>7•</b> 1	T.8	1.6	2,1
呂	1,	VISIB	00	RATE NITRITE A ug-atoms/liter	នុន	3 8	-22	-29
HIL	53.	CLOUDS	0 ×	NIT				
LON	121° 53.7	तुं ह	×	ATE 18-a1	و و	> ~-	~	8
N LATITUDE W LONGITUDE		ATH	8	NITH	9 9	0	9	22
ECDE:	7.6	WE		ATE	m ×	+ 10	2	_
AII	36° 37.6°	AIR TEMP °C WEATH dry wet	13,3 11,8	SPH	93	9	00	1,47
z	ř		m m	PHC				
HOUR	17.7	AIR TE dry	Į,	SAT %	108	<u> </u>	110	78
- <b>-</b>	15 DEC 1975 17.7	BAROM nb	1010,2	SIGMA T OXYGEN AOU SAT m1/1 ug-at/1 %	777	741	-51	122
DATE	.5 DEC	WIND dir speed	0	XYGEN m1/1 u	6.55	6.58	6,63	4.75
z	-	WIND ir spe	65	о н				
STATION	2201	<u>ρ</u> ,		IGMA	25.70	25.73	25,71	25,86
		WAVES dir ht	2 2	o, ≽-				
CRUISE	*		33	INIT	33,600	599	109	•685
ຮັ	捒	TRANSP		SAL				
		TR		TEMP SALINITY °C ppt	11,03	11.02	10.97	10,50
				DEPTH.	0 10	, 51	8	ଛ

				SILICA	ထထထ
		83		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.5
된	_	VISIB	80	RATE NITRITE A ug-atoms/liter	29 31 32
GILO	51.	CLOUDS typ amt	0	NIT	
ĽOĽ	121° 51.1'	고 및 및	o ×	'RATE ug-a	7.3 8.0 9.0
સ		ТБАТН	7	E NII	1, 0, 0,
N LATITUDE W LONGITUDE	36° 37.7°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	11.5 9.5	)SPHAT!	90 92 98
	Ä	IR TEMP °( dry wet	ν	PH(	
HOUR	18,1	AIR	11	SAT	101 107 107
63	1975	BAROM	1010,2	AOU ug-at/1	-4 -35 -39
DATE	15 DEC 1975	WAVES WIND r ht p dir speed	31 2 3 1 3 1010,2	TEMP SALINITY SIGMA T OXYGEN AOU SAT	6.10 6.45 6.50
NO		WI	Н	E	5 5 T
STATION	1121	ε P	ю	SIGM	25.70 25.70 25.71
	<b>.</b>	WAVES r ht	1 2	Ĕ	0 6 8
CRUISE	M. 34	Ŧ	m	LINI, ppt	33 <b>.</b> 600 33.599 33.602
ບ	×	TRANSP m		SA	
		Ħ			11.05 11.04 11.00
				DEPTH m	0 2