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## Sea Gram Depository MOSS LANDING MARINE LABORATORIES

Technical Publication 77-1

CALIFORNIA COOPERATIVE OCEANIC FISHERIES INVESTIGATIONS
HYDROGRAPHIC DATA REPORT
MONTEREY BAY
JANUARY TO DECEMBER 1976

by

Stephen R. Lasley

1976

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

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



# Sea Grant Depository

Contributions from the Moss Landing Marine Laboratories No. 48

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### CALCOFI HYDROGRAPHIC DATA REPORT MONTEREY BAY JANUARY TO DECEMBER 1976

#### 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). Sampling was conducted bi-weekly from January through June and was on a monthly basis for the remainder of the year. All observations were made aboard R/V Oconostota.

In December an additional deep station was sampled during an International Decade of Ocean Exploration (IDOE) cruise. These data are included at the end of the regular CalCOFI cruise data.

#### STATION LOCATIONS

NUMBER	LATITUDE N.	LONGITUDE W.	DEPTH (m)
2201	36 <sup>0</sup> 37.61	121 <sup>0</sup> 63.61	46
2202	36 <sup>0</sup> 41.21	121 <sup>0</sup> 57 <b>.</b> 9¹	104
2203	36 <sup>0</sup> 46.7¹	122 <sup>0</sup> 01.2	988
2204	36 <sup>0</sup> 50.91	122 <sup>0</sup> 01.5 <sup>1</sup>	82
2205	36 <sup>0</sup> 55.81	122 <sup>0</sup> 00.7	26
1121	36 <sup>0</sup> 37.6¹	121 <sup>0</sup> 51.2 <sup>1</sup>	18
1154	36 <sup>0</sup> 55.21	121 <sup>0</sup> 52.71	16

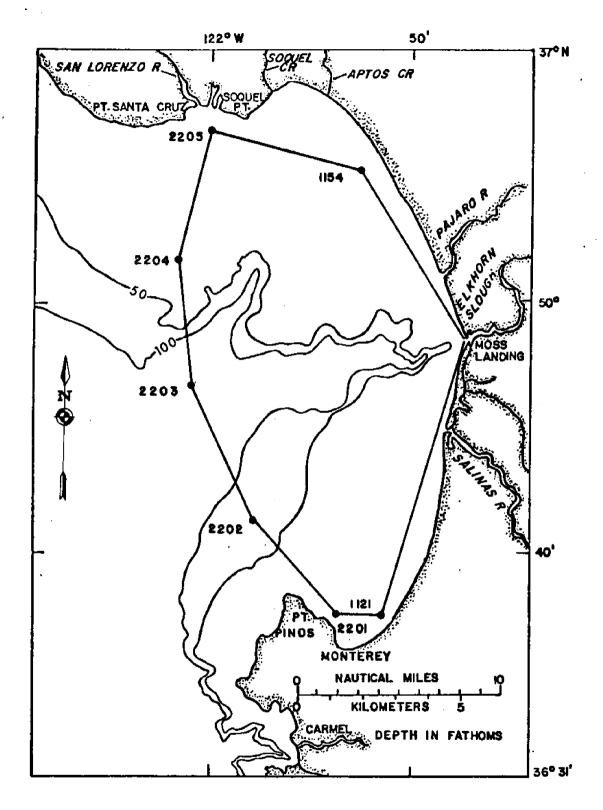


Figure 1. CalCOFI hydrographic station positions. 22 prefixes designate stations originated by Hopkins Marine Station.

#### EXPLANATION OF TABLES

CRUISE Moss Landing Marine Laboratories consecutive hydro-

graphic cruise number.

STATION Permanent hydrographic station numbers. Ilxx

designates 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 Observed station positions corresponding to sampling W LONGITUDE time given above. Drift while on station was gener-

ally 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.

Period of dominant waves according to WMO Code 3155.

WIND

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 oc 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 <u>In situ</u> 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 0<sub>2</sub>-0/liter:

the difference between the observed oxygeñ concentration and the oxygen solubility computed from the <a href="In situ">In situ</a> 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>A</sub>-P/liter.

NITRATE Concentration of dissolved nitrate in µg-atoms

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

NITRITE Concentration of dissolved nitrite in uq-atoms

 $NO_2$ -N/liter.

AMMONIA Concentration of dissolved ammonia in µg-atoms

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

SILICA Concentration of reactive silica in µg-atoms

SiO<sub>2</sub>-Si/liter.

\* Questionable data point. These values are suspect

based upon preliminary analysis of the data and

should be used with caution.

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.

Hydrographic Sampling. 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  $^{\circ}$ C.

Salinity. 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, et al. (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 +0.06 ml/liter (2 SD).

Nutrient lons. At each station a 500 ml sample was filtered and quick frozen aboard ship and refrigerated at -10 °C until analyzed ashore within two weeks of collection. Groups of 43 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. The standard and blanks were read before and after each set of samples. A linear drift correction was used to correct for electronic and chemical drift over the 20-minute reading time.

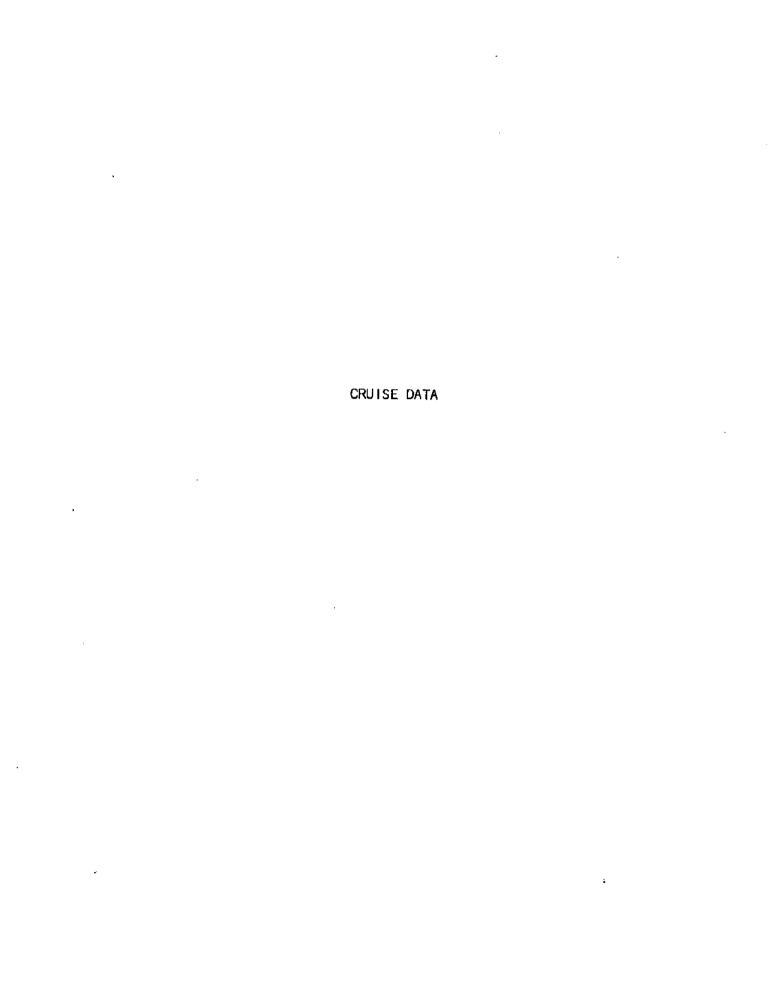
Dissolved reactive phosphate was determined by the methods of Murphy and Riley (1962) described in Strickland and Parsons (1972) using ascorbic acid to reduce the phospho-molybdate complex. The sample absorbance at 880 nm was determined with a 10 cm cell. Precision of the analyses is about ±0.03 µg-at/l (2 SD). Nitrate was determined by the cadmium-reduction method of Wood et al. (1967) followed by the nitrite color development. The sample absorbance was determined with a 1 cm cell. Precision of the analyses is about ±0.5 µg-at/liter (2 SD). Nitrite was determined by the method of Bendschneider and Robinson (1952) described by Strickland and Parsons (1972). The absorbance of the diazo color was determined with a 10 cm cell on the PC-1000 at 545 nm. The precision of the method

is about  $\pm 0.03~\mu g$ -at/liter (2 SD). Ammonia was determined by the indophenol method of Solorzano (1969) with the color absorbance determined with a 10 cm cell on the PC-1000 at 650 nm. Precision of the method is about  $\pm 0.1~\mu g$ -at/liter (2 SD). Reactive silica was determined by the method of Mullin and Riley (1955) as modified by Strickland and Parsons (1972). The silicomolybdate complex was reduced by a metol-sulfite, oxalic acid solution, and the color absorbance at 810 nm was determined with a 1 cm cell on the PC-1000. Precision of the method is about +1  $\mu g$ -at/liter (SD).

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S AMMONIA SILI Ler	Ī
mornate nitrit AMMONIA  ug-atoms/liter  •74 7.7 •25	7°0
mornate nitrate nitrat	7.0
mornate natikati ug-  ug-  74 7-7	
avornate i	
con Control	•
<u> </u>	
7	5 5 5
ug-at/1 186	
#1/1 4.08	2000
, 8g	25 <u>.</u> 96
1 17 c	
ppt 33_699	33,725
°C	10,13
O #	מי
	°C ppt m1/1 ug 10-12 33-699 25-94 4-08

				SILICA	σ,	121
ង	•	VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0.6	.28 .31
ULLI	•7•	UDS ant	7	NITR :oms/	•	• • •
200	122	CLOUDS typ ant	0	RATE ug-at	m n	က တို့ ဆ
취 注		EATH	7	TIN	4.5	14.6 10.8
N LATITUDE W LONGITUDE	36 55,8	AIR TEMP °C WEATH CLOUDS dry wet typ ant	11.8 9.5	'HOSPHATE	1.26	1,23
HOUR	10.7	AIR TE dry	11.8		73	<del>1</del> % %
4	6 JAN 1976 10.7	BAROH nb	0•600	AOU 1g-at/1	051	78
DATE	6 JAN	WIND dir speed	5 1 1009,0	TEMP SALINITY SIGMA T OXYGEN AOU SAT *C PPt ml/l ug-at/l Z	4.48	5.33
STATION	2205			GMA I	25 <sub>9</sub> 98	25.96 25.96 25.96
SI	7	AVES r ht	8 2 2	SI	6,6	1010
CKUISE	ML 35	_ ੜੋਂ ਬੋ	28	LINITY	3,741	33,722 33,715
ប	Σ	TRANSP	9	SA		
		Ħ	•	TEMP • C	10.05	10.07
				DEPTH	0 10	98

				SILICA	7 11	1=	11	12	16
30	÷_	VISIB	^	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	-23 31	18. 18.	38	38	03
ICITUI	122 1.6	CLOUDS typ ant	0	I NIT	•	• •	•	•	
E LOS	122	5 <u>F</u>	0	TRATE	8.2	7	6.0	13.2	16.7
UDE	.6	WEAT	2	TE NI					
N LATITUDE W LONGITUDE	36 50.9	AIR TEMP "C WEATH CLOUDS dry wet typ amt	11,3 9,2	PHOSPHA	.92 1.11	1,12	1.20	1,12	1,37
HOUR	11.7	AIR T dry	11,3	SAT	83	6	93	78	43
<b>2</b>	6 JAN 1976	BAROH	1008,0	OXYGEN AOU ml/l ug-at/l	71.	48	9	119	315
DATE	6 JAN	WIND dir speed	16 1	OXYGEN m1/1	5,35	5.62	5,71	4.83	2.66
STATION	2204	ρ.	3 2 16	SIGMA I	25.94 25.94	25.96	25.95	25.95	26.03
CRUISE	ML 35	P WAVES dir ht	29	SALINITY ppt	33,722 33,718	3,734	3,722	3,717	3,777
ប	X	TRANSP	10	TEMP SA	10 <sub>2</sub> 22 3:				
				DEPTH	0 10	'유'	70	8	ጽ

				SILICA	15	12	19	18	19	20	27
TUDE	1,3	DS VISIB ent	2 7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	24	23	•07	90	<b>-0</b>	04	0.0
M LONGI	122 1,3	ATH CLOUDS typ smt	2 0	NITRATE N ug-ato	14.1	10.8	15.6	12.9	12.7	14.2	19,7
N LATITUDE W LONGITUDE	36 46.7	AIR TEMP °C WEATH dry wet	11.5 10.0	PHOSPHATE	1,31	1,19	1.40	1,18	1.46	130,00	1,85
HOUR	13.0			SAT	83	92	73	71	62	24	29
DATE	6 JAN 1976	BAROM i mb	1007.0	OXYGEN AOU ml/l ug-at/l	09 4		149				
	9	WIND dir speed	24 0		5.47	4.67	S. 4	7.04	۳, چ	3,33	3,70
STATION	2203	<b>.</b>	1 3 3 2	SIGNA I	25 <sub>e</sub> 95 25 <sub>e</sub> 96	25,96	26 <b>.</b> 01	26.04	26.08	26,06	26,13
CRUISE	ML 35	tb di	M	Salinity PPC	33,739 33,737						
•		TRA	01	TEMP	10.24 10.18	10,17*	10 <b>°</b> 02	9.00	9.78	9.16	19 <b>°</b> 6
				DEPTH	0 10	2	20	₹ ;	3	77	86

Paired thermometer read 10,11 \* indicates questionable data

				NIA SILICA	21 20 22 20 20
N LATITUDE W LONGITUDE	121* 57.9*	ATH CLOUDS VISIB	2 0 3 6	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	12.6 .44 12.9 .47 12.8 .45 14.3 .32 13.6 .29 16.9 .18
	36 41.2	AIR TEMP °C WEATH dry wet	12,4 10,7	PHOSPHATE ]	1.24 1.30 1.36 1.54 1.54
HOUR	14.7	AIR II dry	77	SAT	25 88 82 Z
DATE	6 JAN 1976	BAROM Bb	1006.0	OXYGEN AOU ml/l ug-at/l	25 39 73 136 155
2	6 31	WIND dir speed	31 4		5.88 5.73 5.73 4.65 4.65
STATION	2202	WAVES 1	4 3 31	SIGMA T	25 <sub>9</sub> 94 25 <sub>9</sub> 94 25 <sub>9</sub> 95 25 <sub>9</sub> 96 25 <sub>9</sub> 96
CRUISE	MC 35	TRANSP WA	8 31	SALINITY PPC	33,706 33,703 33,707 33,718 33,729
		TE.		TEMP C	10.14 10.13 10.11 10.10 9.99
				DEPTH	888855

				-				
				SILICA	19	<b>1</b> 2	21	1 1
647		VISIB	9	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	<u> </u>	64.2	33	
iru	121* 53.7*	ODDS	2	NITR Coms/	•	•	) (	•
PONO	121	CLOUDS typ mat	0	RATE ug-at	ιŽ.	- 4	) <b>-</b>	
鱼		EATH	7	NIT	9	12.1	17	-
N LATITUDE W LONGITUDE	36 37.6*	AIR TEMP C WEATH CLOUDS dry wet typ amt	11,9 10,5	PHOSPHATE	1.27	1.20	1.80	1 7.6
HOUR	15.9	AIR TED dry	11.9	SAT	8 ;	101 95	79	43
	1976	BAROH seb	0.900	AOU g-at/1	<b>vo</b> 1	-7 28	201	181
DATE	6 JAN 1976	WIND dir speed	31 3 1006.0	TEMP SALINITY SIGMA T OXYGEN AOU  C PPt nl/1 ug-at/1	6.08	5.85	3,93	4.13
NOI	_	W.	अ	<b>H</b>	17	7. 7.	2	1
STATION	2201	WAVES r ht p	3 2	SIGM	25.	25.94	26	26.01
CRUISE	35	끃	<b>*</b>	NITY	698	33,701 33,701	,753	760
CK	녗	TRANSP	1	SALI				
		£ "		TKMP	10,27	21.01	96.6	96-6
				DEPTH	<b>6</b> 4	2	2	۶

				SILICA	16 13 16
		<b>8</b> 1		AMMONIA T	1.6 6
UDE	80	S VISIB	<b>60</b>	rrite s/lite	33 29 41
LONGIT	121° 52 <sub>6</sub> 8°	CLOUDS typ amt	×	RATE NITRITE A ug-atoms/liter	<b>~ a</b> ≈
<b>&gt;</b> 30		WEATH	7	E NITR u	16.7 8.9 14.3
N LATITUDE W LONGITUDE	36 55.2	AIR TEMP °C WEATH CLOUDS dry wet typ amt	16.9 13.4	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.03 .85 1.05
HOUR	8.4	AIR T dry	16.9		101 88 100
	1976	BAROM	1021.5	A0U 18-at/1	
DATE	20 JAN 1976	WIND dir speed	<b>H</b>	OXYGEN m1/1	6,16 5,38 6,12
STATION	1154		1 1 11 1 1021,5	TY SIGMA T OXYGEN AOU SAT n1/1 ug-at/1 Z	25 <sub>e</sub> 88 25 <sub>e</sub> 89 25 <sub>e</sub> 90
CRUISE	8	WAVES dir ht p	15 1	INITY S	33,733 33,736 33,735
5	Ä	TRANSP	7	TEMP SALINIT *C ppt	10,62 33 10,54 33 10,52 33
					0 2 01
				DKPTH	-

				SILICA	m 4 &
		Ħ		AMMONIA F	400
20	•7•	VISIB	80	RATE NITRITE A ug-atoms/liter	210
GITU		CLOUDS typ ant	o ×	NIT	
101	122*	3 5	×	RATE ug~a	တိုက္ခ် ရှိ
<b>≥</b>		EATH	7	MIT	6.9 2.6 6.3
N LATITUDE W LONGITUDE	36° 55 <sub>9</sub> 8°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	16.4 13.0	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.41 .68
		주 12 12	<b>6.</b> 4		
HOUR	9.8	A	Ä	SAT	130
	1976	BAROH	1022•0	TEMP SALINITY SIGMA T OXYGEN AOU SAT  *C ppt m1/1 ug-at/1 Z	-166 -145 -63
DATE	20 JAN 1976	WIND dir speed	1 1022,0	OXYGEN B1/1 '	8.01 7.79 6.89
Z.		W. Tab	<b>&amp;</b>	H	048
STATION	2205	<u>~</u>	×	SIGMA	25.90 25.91 25.96
Ħ.	<b>.</b>	WAVES r ht	15 1 X	Ž.	
CRUISE	H %	% %		AL INI PPt	33,684 33,684 33,708
_	_	TRANSP	10	Ŋ	
		-		TEM C	10.28 10.19 10.05
				DEPTH	0 4 9 6

				SILICA	51 6 11 12 12
		ils.		AMMONIA :T	2 4 6 4 4 9
TLODE	1,6	CLOUDS VISIB	0 8	RATE NITRITE A ug-atoms/liter	38 S S S S S S S S S S S S S S S S S S S
M LONG	122•	<del></del>	2 ×	NITRATE ug-at	10.4 10.6 4.0 4.4 8.6 17.0
N LATITUDE W LONGITUDE	36 50.9	AIR TEMP °C WEATH dry wet	15,9 14,8	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.89 .91 .75 .70 .99
HOUR	11,1	AIR TE dry	15,9	SAT	104 101 101 101 83
법	1976	BAROH	1022.4	oxygen Aou ml/l ug-at/l	2779
DATE	20 JAN 1976	WIND dir speed	7	OXYGEN #1/1	6.30 6.14 6.12 6.04 6.11
STATION	2204	<b>c.</b>	2 X 9	SIGMA T	25,77 25,79 25,79 25,81 25,84 25,93
CKOTSE	₩ 36	(SP WAVES dir ht	7	ALINITY	33,696 33,696 33,691 33,691 33,710
		TRANSP	Ħ	TEMP SALINI;	11,05 10,93 10,93 10,83 10,76 10,40
				DEPTH	0 2 2 2 2 2

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

				SILICA	13	<b>1</b>	. ee	91	81	22	. 24	79	37	33*	36.	9	8	ł 2	107
		1.8		AMMONIA r	7.		5	7	녆	<b>-</b> 1	7	۳,	e.	7	1-0	9			9
TUDE	1,3	JDS VISIB	8	RATE NITRITE A ug-atoms/liter	211		-26	28	•16	•05	8	S <sub>o</sub>	10°	0.0	8	S	90	5	10
W LONGITUDE	122*	WEATH CLOUDS Typ ant	2 X	ITTRATE ) ug-ato	24.1**	7.8	5.6	10.5	15.0	19,3	19,7	20.8	28.8	16.8*	13.9*	27.0*	36.8	43.9	42.0
N LATITUDE	36° 46 <sub>°</sub> 7°		18,2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	<b>3</b> 0	1. 1.	88	1.08	1,35	1,50	1,67	1.91	2,13	2,32	2,35	3.05	3.21	3.25	3,26
HOUR N	13,9 3	AIR TEMP °C dry wet	15.0	SAT PH		103	103	77	29	89	58	49	35	26	19	12	9	6	∞
	JAN 1976 1	BAROH	1020.5	A0U 18-at/1		-18	-15	124	117	178	235	282	368	428	475	527	555	558	574
DATE	20 JAN	WIND dfr speed	m	OXYGEN #1/1	6.3I 4.77	6.27	6.24	4.7I	4.85	4.19	3,58	3,09	2,25	1,68	1,23	£7.	•58	.63	• 58
STATION	2203	ρ.	1 X 8	SIGMA T		25,82	25,82	25.87	25.99	26.04	26.10	26.23	26.40	26.59	26.66	26,85	26,99	27,09	27,25
CRUISE	H 36	SP WAVES dir ht	%	SALINITY ppt	33,704	33,710	33,702	33,725	33,767	33,793	33,827	33,881	33,976	34.072	<b>34.</b> 083	34.160	34.226	34,277	34,367
		TRANSP	7	TEMP S					10,13										
				DEPTH	<b>0</b> M	2	20	<b>A</b>	<b>5</b> 1	5 7	96	145	Lya	243	292	391	491	583	772

				SILICA	17 12 15 16 17
		19		AMMONIA T	2,52,54,4
ITUDE	57,91	UDS VISIB	0 8	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
N LATITUDE W LONGITUDE	121* 57.9*	H CLOUDS typ amt	×	TRATE   ug-ato	9.9 8.7 11.6 12.6 13.2
TUDE	1,2	WEATH	7	ATE NI	
N LATI	36 41.2*	AIR TEMP °C dry wet	15,0 17,5	PHOSPIL	.97 .94 .93 .97
HOUR	16.1	AIR I dry	15,0		113 99 97 75
<b>1</b> 23	20 JAN 1976	BAROM	1020,0	OXYGEN AOU SAT ml/l ug-at/l Z	15 13 134 140
DATE	20 JAN	WIND dir speed	ч	OXYGEN #1/1	6.80 5.89 5.74 4.53
STATION	2202	۵.	1 X 35	SIGM I	25.71 25.78 25.80 25.83 25.84 25.86
CRUISE	M. 36	_ <del>1</del>	0		33,684 33,683 33,683 33,691 33,714
0	E	TRANSP	12	TEMP SALINITY •C ppt	11,34 3 10,94 3 10,86 3 10,71 3 10,62 3
				DEPTH 1	0 2 2 2 2 3

Paired thermometer read 10,77 \* indicates questionable data

				SILICA	18	15	1	18	12
		<b>13</b>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	7	2	, [	9	, -
呂	*	VISIB	00	RITE /lite	-26	23	-22	35	72
GITO	53	CLOUDS typ amt	0	NIT					
Š	121 53,7*	g <b>F</b>	×	KATE	οž	ထ္	4	4	۲,
<b>&gt;</b>		EATH.	7	NIT	ගේ	9	<u> </u>	12.4	0
	9.2	3		LATE	<b>ک</b> ر	ស	EJ.	Ή	<u>-</u>
	36" 37.6"	AIR TEMP °C WEATH CLOUDS dry wet typ amt		OSPH		•		16.	• (
z	m	TEM		置					
HOUR N LATITUDE W LONGITUDE	18.4	AIR		SAT	109	105	66	76	
	1976	BAROM		AOU 18-at/1	Ŧ	-28	4	35	
DATE	20 JAN 1976	WIND dir speed	0	OXYGEN AOU SAT ml/l ug-at/l Z	6.52	6,37	10°9	5.68	
Z		H. dår	69		<b>D</b> \	00	<b>D</b>	2	2
STATION	2201	<u>α</u>	×	SIGMA T	25.6	25.7	25.7	25.82	25.8
		WAVES r ht p	×		_				
CRUISE	8	ੂ ਚੰ	0	SALINITY ppt	691	687	688	33,698	769
ğ	보	TRANSP		SAL					
		<b>11</b>		TEMP C	11.46	10,96	10,90	10,78	10,77
				DEPTH	0	'n	ន	23	8

				SILICA	17
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.5,
떮	•.	VISIB	90	RATE NITRITE A ug-atoms/liter	20
IT.	51,1	UDS and	٥	NITR Oms/	• •
2	121	CLOUDS typ ant	о ×	LATE IB-at	α ο
<b>≥</b>	_	HLTY	2	NITH	0, 80 80 0
55	37.7	13		IATE	5 H 4
HOUR N LATITUDE W LONGITUDE	36° 37°7° 121° 51°1°	AIR TEMP °C WEATH CLOUDS dry wet typ amt		PHOSPE	88 16
HOUR	18,9	AIR		SAT	114
	20 JAN 1976 18 <sub>9</sub> 9	BAROM		TEMP SALINITY SIGMA T OXYGEN AOU SAT	-37
DATE	JAN	ed	_	CEN 1/1 u	6.81 6.48
	70	WIND Lr spe	0		\$ \$ \$ \$
STATION	1	4 4	67	⊬ <b>≤</b>	22.88
STA	1121	WAVES WIND rht p dir speed	×	SIĢ	25.72 25.78 25.80
넍	8	WAVES .r ht	0	Ž.	0
CRUISI	불	SP 1		ALINI PPC	33,692 33,686 33,697
•		TRANSP		8	
				TEM O.C.	11,33 10,96 10,97
				DEPTH	0 2

				SILICA	11 8 6
		<b>IB</b>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	- C 8
UDE	80	S VISIB	4	RATE NITRITE A ug-atoms/liter	60 80 80
NGIL	. 52	CLOUDS typ smt	<b>60</b>	E NIT	
91 ≯	121 52.8	E ₽	œ	TRAT ug-	3.4 3.6 3.5
UDE	•2•	WEAT	77	TE N	
N LATITUDE W LONGITUDE	36" 55,2"	AIR TEMP °C WEATH CLOUDS dry wet typ smt	10.0 10.0	PHOSPHA	. 84 . 78 . 92
HOUR	8.6	AIR T	10.0		107 93 110
EÚ	3 FEB 1976	BAROH	1013,5	SIGMA T OXYGEN AOU SAT ml/l ug-at/l Z	-34 38 -55
DATE	3 FEB	WAVES WIND dir ht p dir speed	1 x 10 2 1013,5	OXYGEN B1/1	6.36 5.55 6.66
ION	æ	E T	2	H	8 5 2
STATION	1154	S. E.	×	SIGK	25.68 25.69 25.76
Ħ.	7.	WAVES Lr ht	26 1	Ħ	<b>ភិ</b> ជី សិ
CRUISE	¥£ 37		7	TEMP SALINITY  C ppt	11.62 33.706 11.54* 33.702 11.11 33.695
_	_	TRANSP #	•	જ ~	52 * 11
		•		Mar O	222
				DEPTH	0 2 01

Paired thermometer read 11,60 \* indicates questionable data

				SILICA	6 11 22
		<b>E</b> I.	_	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	4.2 5.4 5.4
M	•	VISIB	'n	ITE	03 00 26 55
	•7•	UDS	œ	NITR Oms/	44.
LONG	122	CLOUDS ENT	œ	RATE NITRITE A ug-atoms/liter	1.7 .3* 3.9 2.6
<b>≥</b>		EXTE	44	NITR	
TOD	5.8	5	4	ATE	00 00 00 00 00 00 00 00 00 00 00 00 00
N LATITUDE W LONGITUDE	36 55.8	AIR TEMP °C WRATH CLOUDS dry wet typ smt	8.8 9.3	HOSPH	46 37 66 1.56
		AIR TE dry	<b>α</b>	E	•
HOUR	9.7	AIS	œ	SAT	97 119 99 74
м	3 FEB 1976	BAROM	1013,5	AOU ug-at/1	14 -98 141
DATE	3 FEB	WIND dir speed	35	OXYGEN AOU SAT ml/l ug-at/l Z	5.82 7.09 5.97 4.48
<b>7</b>		4tr	*	H	: HH5H
STATION	2205	•	х	SALINITY SIGMA T ppt	25.71 25.71 25.71 25.77
		WAVES Ir ht p	_	<b>52</b>	
CKUISE	37	_ <del>1</del>	26	INII	33,721 33,719 33,714 33,714
3	捒	TRANSP	9	SALI	
		E.		o.	11.48 11.50 11.12 10.90
				DKPTH	0 10 20 70

Nitrate appears amomalously low \* indicates questionable data

				SILICA	71	14	2 5	) (	5 57
		IB		APPONIA T	4	4.5	. "	) (°	4
ITUDE	1.6	UDS VISIB	•	RAIE NITRITE A ug-atoms/11ter	• 34	98	84	2.9	.57
W LONGITUDE	122 1.6	TH CLOUDS typ amt	∞	ITRATE   ug-ato	7.9	6.2 7.9	9	6	<b>9</b> •6
N LATITUDE	36 50.9*	AIR TEMP °C WEATH dry wet	9.7 44	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	16.	1,0	83	1.05	96•
HOUR N	10,7	AIR TEN dry	9.9 9.7		103	<b>7</b> 01	101	101	83
	3 FEB 1976	BAROM	1013.8	OXYGEN AOU SAT ml/l ug-at/l %	-16	-19 -21	φ	7	92
DATE	3 FEB	WIND dir speed	0	OXYGEN n1/1	6,19	6.26 6.26	6,10	6009	5.03
STATION	2204	<b>_</b>	1 X 29	SIGMA I	25.72	25 <b>.</b> 75	25,77	25,79	25.82
CRUISE	ML 37	SP WAVES dir ht	29	ALINITY PPt	33,698	33 <b>,</b> 703	33,714	33 <b>°</b> 711	33,715
-	<b></b>	TRANSP	9	TEMP SALINITA *C PPt		11,23			
				DEPTH	0	ាន	2	용	ጽ

				SILICA	10	2	] [	12	;	12	17	i č	7.	2 5	3 8	3 9	*00	<u> </u>	15	; eg	
		I.B		APPIONTA :r	6	2	۳ • (	9 (	×		4	2	9	ç	9	9	2	•	2 9	90	
TUDE	1,3	CLOUDS VISIB typ amt	80	RATE NITRITE A ug-atoms/liter	32	27	31	07*	42	4.9	43	.37	-15	Ş	8	Ę	Ş	3	8	8	
E W LONGITUDE	122	WEATH CLO	8 44	NITRATE ug-at	11,1	9.3	9-6	8.2	7.3	14.2	12.9	14.0	16.7	14.3	22-0	21.3	22-0	20-0	205.5	35,7#	
N LATITUDE	36° 46 <sub>•</sub> 7°		<b>5°6</b>	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	96	• 76	*85	-92	92	1,10	1,26	1,26	1.64	2.22	2.43	2.66	2.43	56	3,26	3.55	
HOUR	13,2	AIR TEMP °C dry wet	10.0	SAT	105	105	86	98	95	78	83	75	<b>S</b> 6	3	78	24	2.5	10	۰	Ŋ	
ы	FEB 1976	BAROM	1012,8	XYGEN AOU m1/1 ug-at/1	-23	-24	<b>∞</b>	90	<b>5</b> 6	117	96	135	241	339	419	444	805	543	578	-592	
DATE	3 PER	WIND dir speed	8	OXYGEN BL/1 u	6.26	6.27	5.90	5.9I	5.74	4.75	5.04	<b>4.</b> 60	3,49	2.54	1.78	1.56	96	89	14.	•36	
STATION	2203	AVES W	1 x 20	SIGMA I	25.70	25,70	25,70	25,72	25,75	25,80	25,87	25,90	26.05	26,33	26.56	26,66	26,80	26.96	27,10	27,23	
CRUISE	ML 37	d ii	0 21	SALINITY	33,682	33,679	33,681	33,681	33,683	33,697	33,723	33,733	33,800	33,936	34-049	34.092	34,151	34,214	34,289	34,355	
		TRANSP	07	TEMP :	11,42	11,38*	11,38	11,30	11,14	10.89	10.64	10.49	9.93	8. 86	7.91	7. 50	6.82	5.98	5,26	<b>4.04</b>	
				DEPTH	0	Ŋ	2	<b>20</b>	8	ያ	75	100	147	190	240	<b>58</b> 8	388	<b>68</b> 7	585	778	

				SILICA	2110 4 214
		118		AMMONTA T	
TUDE	57.98	JDS VISIB	8	RATE NITRITE A ug-atoms/liter	44 62 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
N LONG	121° 57 <sub>0</sub> 9°	TH CLOUDS typ sant	œ	TERATE   ug-ato	7 6 6 8 8 9 8 9 8 9
N LATITUDE W LONGITUDE	36° 41,2°	AIR TEMP °C WEATH dry wet	77 0°1	PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	. 75 . 80 . 90 . 90 . 98 . 98
		IR TEMP dry we	10,2 11,0		
HOUR	76 15 <sub>e</sub> 3	Ж		U SAT at/1 %	10 98 108 80 36 93 128 76 100 81
DATE	3 FEB 1976		1010,3	OXYGEN AOU ml/l ug-at/l	5.88 5.59 5.59 5.59 5.69 5.69 5.69 5.69 5.69
ž		WIND dir speed	26 3		
STATION	2202	WAVES r ht p	3 2 2	SICHA T	25.69 25.68 25.68 25.72 25.75
CRUISE.	М. 37	ਚ	23	LINITY PP¢	33,675 33,671 33,667 33,667 33,681
J	<b>2</b> 1	TRANSP	01	TEMP SALINITY	111643 111643 111643 111612 111612

DEPTH

0 4 0 2 8 8

				SILICA	122°1
		11.		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	£2424
UDE	•7•	S VISIB	9	FRITE 8/11te	31 40 50 81
LONGIT	121* 53.7*	CLOUDS typ amt	<b>&amp;</b>	RATE NITRITE A ug-atoms/liter	<b>* *</b> • • • • • • • • • • • • • • • • • • •
E ₩		JEATH (	77	NITR	6.7 6.7 6.6 2.1 6.2
N LATITUDE W LONGITUDE	36" 37.6"	AIR TEMP °C WEATH CLOUDS dry wet typ amt	9.7	OSPHATE	77 81 75 67
		AIR TEM dry	10.8 9.7		24442
HOUR	17.4			7 N	104 104 104 104 104
描	3 FEB 1976	BAROM	1010.8	AOU ug-at/	-18 -19 -22 -42
DATE	3 FEB	WIND dir speed	2	OXYGEN AOU SAT ml/l ug-at/l z	6.08 6.18 6.19 6.23 5.50
STATION	2201	W p dir	X 26	SIGMA I	25.65 25.65 25.65 25.66 25.66
ឆ	.,	WAVES r bt	8		пинии
CRUISE	ML 37	_ <del>1</del>	32	TEMP SALINITY •C ppt	33,665 33,661 33,668 33,667 33,667
ប	昱	TRANSP		SAI	
		Ħ		TEMP C	11.61 11.60 11.59 11.57
				DEPTH	38550

				SILICA	12 12
		13		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	777
芦	•	VISIB	9	RATE NITRITE A ug-atoms/liter	# # # # # # # #
III	51,	UDS BILL	<b>&amp;</b> &	NIT	
Š	121° 51.1°	CLOUDS typ ant	∞	ATE 8-at	987
>		ATH	ঞ	NITR	6.6 6.8 7.4
	, 7	E.	4		
ATI	36" 37,7"	et c	10.8 9.7 44	SPHA	71 • 73 • 69
Z.	%	IR TEMP *( dry wet	ω.	PHO	
HOUR N LATITUDE W LONGITUDE	18.0	AIR TEMP °C WEATH CLOUDS dry wet typ amt	10	SAT	106 106 106
	3 FEB 1976 18.0	BAROH	1010.8	AOU 1g-at/1	-31
LATE	PEB	ed		CEN /1 °	6.32 6.33 6.31
	m	WIND dir speed	26 2	OXX E	<b>6.00</b>
<u> </u>	_	W ddr	26	H	444
STATION	1121		2 *	NOI:	25.64 25.64 25.64
/1		WAVES dir ht p	7	v3 ►	
CKULSE	37	W. dir	8	NIT	33,659 33,658 33,657
3	捒	TRANSP m		SALI	ដូច្ចដ
		TRA		TEMP SALINITY SIGMA T OXYGEN AOU SAT *C ppt ml/1 ug-at/1 %	11,60 11,62 11,59
				DEPTH	0 v Q

				SILICA	22
		g		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	02
GITUDE	52.8	VISIB	~	RATE NITRITE Al ug-atoms/liter	200
		CLOUDS typ amt	0	NIT! toms,	•
2 2 2	121	프 타 당	×	TRATE ug-a	2 5
NE PE	2.	WEATE	7	E NI	
HOUR N LATITUDE W LONGITUDE	¥ 55•	AIR TEMP °C WEATH CLOUDS dry wet typ amt	11.0 9.2	IOSPHAT	.01 1.2
×	•••	IR TEMP °( dry wet	0		•
	9.2	AII.	귀	SAT	112
CKUISE STATION DATE	9 MAR 1976 9.2 36 55.2° 121 52.8°	BAROM d mb	1015.6	A0U 1g-at/1	63
	9 MAR	WAVES WIND dir bpeed	25 0 x 0 0 1015 <sub>e</sub> 6	OXYGEN E1/1	6.64 -63 112
<u>z</u>		WI dar	0	H	
STATE	1154	ρ.	×	SICHA	25.51 25.57
CKUTSE		WAVES r ht	•	». ≽ı	
	M 38	dir	25	INIT	•579 •576
	붓	TRANSP	<b>9</b> .	SAL	60 C
		Ħ		TEMP C	11.98 33.579
				DEPTH TEMP SALINITY SIGMAT OXYGEN AOU SAT m °C ppt m1/1 ug-at/1 %	0 9

				<b>5</b>	96	18
				SILI	20	, <u>, , , , , , , , , , , , , , , , , , </u>
		VISIB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	4.5	٦,
E C	•7•	t Vi	7	RATE NITRITE A ug-atoms/liter	9° 51	45
MCIT		CLOUD Eyp amt	0 X	E Z I		
Ö1 ≭	122	WEATH CLOUDS Cyp amt	×	[TKAT] ug≕	2.2	8 6
呂	<b>*</b>	WE	7	E E		
N LATITUDE W LONGITUDE	36° 55 <sub>8</sub> 8	AIR TEMP °C day wet	10,3 9,2	IOSPHAT	.24 .31	25,75
	• •	E T	e,	E		
HOUR	10.1	AIR	2	SAT	911	106
N3	9 MAR 1976	BAROH	1015,1	AOU 1g-at/1	151	-32 123
DATE	9 MAR	WIND dir speed	-	TEMP SALINITY SIGMA T OXYGEN AOU SAT	6.51 6.54	6.36
75		dir.	24	H	N 00	<b>.</b>
STATION	2205	WAVES dir ht p	0 X 24	SIGMA	25 <b>.</b> 52 25 <b>.</b> 58	25 <b>.</b> 59
ea.	œ	AAVE r bt		Ł	10 st	e -
CRUISE	ML 38	SP dt	25	ALINI PPt	33 <b>,</b> 566 33 <b>,</b> 564	33.56 33.61(
		TRANSP m	90	S)		
		H		TEMP.	11.90	11.4
				DEPTH	0 %	98

<b>6-3</b>	•	VISIB	7
ITUD	1.6	UDS ant	0
LONG	122	g <b>?</b>	×
N LATITUDE W LONGITUDE	9	AIR TEMP °C WEATH CLOUDS dry wet typ amt	13 <sub>6</sub> 0 9 <sub>6</sub> 5 2 X 0
LATIT	6 50	P °C	9.5
z	C)	R TEM	3.0
HOUR	11,1	7	7
	9 MAR 1976 11.1 36° 50.9° 122° 1.6°	WIND BARON Hr speed ab	12 27 0 X 18 0 1015 <sub>0</sub> 0
DATE	D MAN	ID Ipeed	0
ION		WIN dir s	81
STATION	2204	<b>p.</b>	×
•		WES	0
RUISE	HC 38	WA dir	27
CRI	捒	TRANSP WAVES m dir ht p	12

SILICA	2 1 2 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
AMMONIA T	สูงกูงสูสู
PHOSPHATE NITRATE NITRITE AMMONIA ug-atoms/liter	11. 11. 12. 12. 14. 16.
S NITRATE ug-a	5.07 5.05 5.04 19.88
PHOSPHATI	22 22 23 23 27 1021
SAT	105 95 100 89 62
AOU 18-at/1	-23 29 79 -1 7
OXYGEN AOU ml/l ug-at/1	5.02 5.02 5.02 3.94 3.94
SIGM I	25.52 25.59 25.61 25.63 25.63
SALINITY ppt	33,556 33,573 33,573 33,578 33,586
TEMP C	11,86 11,52 11,36 11,36 11,25
DEPTH	2888

Paired thermometer read 11.42 \* indicates questionable data

				SILICA	17	14	- K	<u>-</u> 2	1 2	61	)   	37	42	48	) r	ğ	3 8	74	2 \$	108
		11B		AMMONIA	4	2	?	,	; ;	9	9		N	9	9 17	9		*		<b>φ</b>
TTUDE	1.3	CLOUDS VISIB	0	RATE NITRITE A ug-atoms/liter	.14	14	14		21	97	7	0	8	8	Ş	0	Ş	Ş	8	Ş
W LONGITUDE	122*	WEATH CLOUDS typ amt	2 *	NITRATE ug-at	8.4	11.0	7.1	10.5	9.9	14.8	18.9	25.4	29.7	29.5	31.1	33,3	35.8	37.2	41.4	41.5
N LATITUDE	36° 46,7°	AIR TEMP °C WE dry wet		PHOSPHATE NITRATE NITRITE AMMONIA SILICA US-atoms/liter	1,00	-52	.41	×	643	95	1.54	1.89	8	2,11	2.40	2,50	2.69	2.81	3-02	3,13
HOUR	12,5	AIR TE dry	13,0	SAT	107	106	706	901	105			4	<u>6</u>	8	28	22	91	11	0	
₩	MAR 1976	BAROM	1014.2	% AOU ug-at/1	-35	-33	-33	-33	-25			8	346	104	4	453	8	534	260	
DATE	9 KAR	WIND dir speed	8	OXYGEN #1/1 t	6,32	6,31	6,36	<b>9</b> 30	6.28			2,89	2.52	1.95	1 <b>.</b> 8	1,47	1,04	•73	3	
STATION	2203	<b>D</b>	т х о	SIGMA T	25.43	25.44	25,52	25.52	25,55	25,77	26.05	26,32	26.46	26.55	26.62	26,69	26.83	26.90	27,04	27,20
CRUISE	38 MT	NSP W	13 29	SALINITY	33,490	33,485	33,489	33,493	33 <b>-</b> 519	33,582	33,735	33 <b>.</b> 911	34,009	34.063	34.086	34.1IB	34.170	34,199	34.254	34,343
		TRA	-	TEMP C	12,05	8 :1	11,58	11,57	11,50	10,59	8	8.77	8 8	& &	2.2	7. 32	<b>6.</b> 72	6,33	5.58	4.77
				DKPTH	0	vo -	9	20	<b>8</b> 1	<b>S</b>	* ;	86 <u>;</u>	146	194	242	282	387	479	276	776

				SILICA	325555
		118	_	AMMONIA e	44444
ITUDE	57.9*	UDS VISIB	0 7	RATE NITRITE A ug-atoms/liter	0100011
N LONG	121 57.9	TH CLOUDS Typ ant	×	ITRATE N ug-ato	2 2 2 2 8 8 8 4 6 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6
N LATITUDE W LONGITUDE	36* 41.2*	AIR TEMP °C WEATH CLOUDS dry wet typ amt	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	32 26 32 26 33 33 33 33 33 33 33 33 33 33 33 33 33
		AIR TEMP dry we	12,0		
HOUR	14.2			. SA ./1	115 119 105 83
DATE	9 MAR 1976	BAROM	1013.1	N AOU ug-at	-80 -99 -25 -25
¥	<b>₩</b>	WIND dir speed	2	OXYGEN AOU SAT ml/l ug-at/l %	6,80 7,08 6,26 6,33
STATION	2202		3 X 28	SICHA T	24.45 25.51 25.51 25.55 26.87
CRUISE	38	WAVES dir ht p	96 8	SALINITY ppt	33,557 33,555 33,553 33,553 33,549 33,543
5	뎦	TRANSP	œ	SAL	
				TEMP • C	12,23 11,87 11,66 11,63 11,56
				DEPTH	0 2 2 2 8 3

				SILICA	717 T R R R R R R R R R R R R R R R R R R
		VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	42095
CTUDE	53,7			RATE NITRITE A ug-atoms/liter	00000
N LONG	121* 53.7*	H CLOUDS typ amt	×	FRATE 1 ug-ato	6 2 6 2 6 6 1 6 6 6 6 6 6 6 6 6 6 6 6 6
	7.6°	WEATH	7	NTE NI	
N LATITUDE W LONGITUDE	36 37.6*	AIR TEMP °C WEATH CLOUDS dry wet typ amt		PHOSPH	20 20 1-022
HOUR	15.0	AIR TI dry	12.2		113 113 94 82
	9 MAR 1976	BAROM	1013,0	OXYGEN AOU SAT ml/l ug-at/l Z	-129 -70 33 35
DATE	9 MAR	WIND dir speed	7	OXYGEN m1/1	7.35 6.69 5.55 5.60 4.94
STATION	2201		ж Э	SIGMA T	25.45 25.46 25.46 25.63 25.63
UISE	8	WAVES dir ht p	31 0 X	INITY	33.554 33.554 33.551 33.602 33.654
CRO	ğ	TRANSP	∞	*C PPt	12.19 33 12.16 33 11.98 33 11.45 33
				DEPTH B	9,25,5

				SILICA	17
		Ħ		MONIA :	<b>"</b> 0"
벌	•	VISIB	7	RATE NITRITE A ug-atoms/liter	888
GIIG	51.	CLOUDS typ ant	×	NIT! Coms,	- 0
	121° 51.1°	3 5	×	RATE ug-a	200
	ę	EATH	8	TIN	-
HOUR N LATITUDE W LONGITUDE	36* 37.7*	AIR TEMP °C WEATH CLOUDS dry wet typ amt		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	19 29
JUK N		AIR TEMP *C	12,0		136
	9 MAR 1976 15.5	BAROH	1013,5	TEMP SALINITY SIGMA T OXYGEN AOU SAT *C ppt m1/1 ug-at/1 Z	
DATE	9 MAR	WAVES WIND dir ht p dir speed		OXYCEN m1/1 u	7.97 -187 7.46 -139
STALLON	1121	dir	3 x 31 2	MA T	25.40 25.44 25.48
	=	TES IT	۳ ۳	SIG	222
CKUISE	ML 38		31	INITY	33,547 33,544 33,544
3	捒	TRANSP	9	SAL	
		Ħ _		TEMP • C	12,45 12,21 12,06
				DEPTH m	0 ~ 5

			,	STLICA	នងន
		13		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0,79
DE	<b>.</b>	VISIB	7	RATE NITRITE A ug-atoms/liter	11.00.01
GITU	52	CLOUDS typ ant	о ж	LONG	
2	121 52.8	9 %	×	RATE US-8	2°33
) 3		ЕАТН	8	HIN	848
ITM	55.2	) ပ	0	HATE	1,20
N LATITUDE W LONGITUDE	36 55,2*	AIR TEMP °C WEATH CLOUDS dry wet typ amt	13,0 11,0	HOSP	ក់ក់ក
		로 1년 1년 1년	3,0		
HOUR	8.6	AI	+	SAT	99 78
	1976	BAROH	1020°0	TEMP SALINITY SIGMA T OXYGEN AOU SAT	-104 120
DATE	30 HAR 1976	WIND dir speed	1 1020,0	OXYGEN m1/1	7.19 -104 5.99 4 4.74 120
N		H H	32	H	0 7 0
STATION	1154		1 2	I GWA	25.80 25.82 25.90
Ċ.	-	WAVES Ir ht	-	<b>5</b>	
CRUISE	8	Ü	27	Wir.	33, 767 33, 763 33, 775
2	첫	TRANSP	ო	SAL	ញ្ចីញីញី ក
		JI.		TEMP C	11,18* 11,09 10,68
				DEPTH	៰៷៰

Paired thermometer read 11,12 \* indicates questionable data

				SILICA	23 35 35 35
		VISIB	_	AMMONIA	7000
TUDE	•7•		0 7	RATE NITRITE A ug-atoms/liter	20 16 09
NOT M	122	ATH CLOUDS typ smt	7 ×	NITRATE   ug-at	6.6 7.8 12.5 22.4
N LATITUDE W LONGITUDE	36" 55.8"	AIR TEMP °C WEATH CLOUDS dry wet typ amt		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1,26 1,26 1,22 2,26
HOUR N	10,7	AIR TEMP *( dry wet	13,0 12,0	SAT	102 114 99 48
Fi.	30 MAR 1976	BAROM	1020,0	OXYGEN AOU ml/l ug-at/l	-12 -74 -5 292
DATE	30 MAB	WIND dfr speed	26 0	OXYGEN B1/1	6.12 6.92 6.08 3.01
STATION	2205	•	7	SIGMA T	25.91 25.91 25.99 26.23
CRUISE	7E 33	끃	27	TEMP SALINITY S  C PPC	33,803 33,797 33,797 33,881
		TRANSP	φ	TEM S	11,52 10,73 10,28 9,22
				DEPTH	20 to 0

				SILICA	35	33	38	8	**	*
		IB		AMMONIA T	-5	4.	2			. ·
TUDE	1.6	UDS VISIB	0 7	RATE NITRITE A ug-atoms/liter	•26	•19	-22	•22	•20	•20
N LONG	122 196	ATH CLOUDS Typ amt	2 X 0	NITRATE 1 ug-æt	21,3	22.1	25.4	25.9	20,7	26.6
N LATITUDE W LONGITUDE	36° 50°9°	AIR TEMP °C WEATH CLOUDS dry wet typ amt		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	2,25	2,13	2,27	2,34	2,39	2.62
HOUR N	12,1 3	AIR TEH dry	13,0 12,0	SAT PH	64	67	47	55	R	21
	30 HAR 1976 1	ВАВОН	1020°0	OXYGEN AOU m1/1 ug-at/1	284	<b>787</b>	296	251	281	279
DATE	30 MAR	WIND dir speed	16 0	OXYGEN m1/1	3,09	3.07	2,98	S. 6.	3,18	3,21
STATION	2204	WAVES V Ir ht p dii	1 2 16	SIGMA T	26,22	26,21	26,27	26,30	26,32	26,35
CRUISE	<u>A</u> 39	ਚ	28 1	SALINITY ppc	33,891	13,890	13,905	13,921	13,932	13,952
_	~	TRANSP	6	TEMP SA	9,33					
				DEPTH #	0	'n	ន	2	8	ያ

				SILICA	23	3 6	36	26	, « «	;	<b>;</b>	3 5	. 64	7 7	9	64	, t.	) K	) ç	2 2
		<b>13</b>		AMMONIA F	4	· (F)	} -	4		f	) (C	<u>.</u>	: -	<u>.</u> -	<b>:</b> 7	2	g	, ,	} 9	39
TTUDE		UDS VISIB	0 7	TRATE NITRITE ug-atoms/liter	23	29	23	S	90	S	8	8	12	11	9	0	8	0.0	0	ŏ
W LONGITUDE	122	WEATH CLOUDS typ amt	2 X	NITRATE ug-ato	18.0	17.0	Ì	19.7	20.6	26.3	24.0	900	23.0	28-1	25.4	26.2	22.4	38.3	37.8	33.0
N LATITUDE	36 46.7		11,0	PHOSPHATE NITRATE NITRITE AMMONIA ug-atoms/liter	2,05	1.89	1-68	1,55	1,86	2.06	1.84	2,36	2,66	2,91	3.00	3,20	3,21	3.26	3.58	4.11
HOUR N	13,5	AIR TEMP °C dry wet	12.0	SAT	ž	8	92	<b>68</b>	55	47	36	33	77	23	20	18	14	<b>œ</b>		<b>œ</b>
M	MAR 1976	BAROM mb	1020,0	OXYGEN AOU ml/l ug-at/l	88	101	43	178	252	8	361	382	438	455	4	483	507	554		570
DATE	30 MAR	WIND dfr speed	0	OXYGEN #1/1 ug	5.10	<b>4</b> •96	5.2	4.23	3.44	2,96	2,30	2,13	1,55	1,50	1,31	1,13	96•	\$5		95
STATION	2203	ρ.	2 20	SIGMA T	25,86	25.93	25.98	26.07	26,17	26,31	26,36	26.42	26.54	26.68	26.68	26,71	26 <b>.</b> 8I	26.94	27,08	27,19
CRUISE	ML 39	P WAVES	36	SALINITY PPE	33,727	3,721	3,729	3,779	3,831	3,924								<b>6.</b> 212	4.278	4.344
3	*	TRANSP	97	TEMP S	10,72 3															
				DEP'TH m				, 20												

				SILICA	ដដន	****
		<b>8</b>		AMPONIA :	440	477
ITUDE	57.9*	UDS VISIB	0 7	RATE NITRITE A ug-atoms/liter	•19 •16	18 25 03
W LONGITUDE	121° 57 <sub>6</sub> 9°	WEATH CLOUDS typ ant	<b>2</b>	NITRAIE ) ug-ata	23.4 29.24 22.8	24.2 25.5 25.9
N LATITUDE	36° 41.2°			PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1,87	1.90 2.06 1.99
HOUR N	15,2	AIR TEMP °C dry wet	12.0 11.0	SAT PH	49 848 12	142
	30 MAR 1976	RABOH B	1019.4	A00 ug-at/1	281 291 272	257 251
DATE	30 MAR	WIND dir speed	7	OXYGEN AOU ml/l ug-at/l	3.00 3.21	3,48
STATION	2202	ο.	3 3 29	SIGMA T	26.03 26.17 26.19	26.21 26.25 26.34
CRUISE	ML 39	SP WAVES dir ht	28	TEMP SALINITY •C ppt	33_838 33_865 33_870	33,881 33,897 33,964
		TRANSP	•	TEMP S.		9.35 9.14 8.91
				DEPTH	0 ~ 0	ននន

Nitrate appears anomalously high \* indicates questionable data

				SILICA	19 19 36 47
		13		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	24040
aon	•7•	S VISIB	7	TRITE 8/11te	00 00 02 17
LONGIT	121* 53.7*	CLOUDS Typ amt	o ×	RAIE NITRITE A ug-atoms/liter	9 9 P 9 8
DE V		WEATH	8	E NITR	4 4 7 2 4 6 9 2 7 4 8 2 7 8 8 2 7 8 8
N LATITUDE W LONGITUDE	36 37 6	₩. C	13.0	OSPHAT	34 37 82 198 2°20
HOUR N		AIR TEMP °C WEATH CLOUDS dry wet typ amt	14.0 13.0		139 98 41 33
呈	16,1			SAT 1 %	HH***
61	1976	BAROM	1019•0	AOU 1g-at/1	-202 -157 13 336
DATE	30 MAR 1976	WIND dir speed	7	OXYGEN AOU ml/1 ug-at/1	8,14 7,70 5,92 2,57 2,67
STATION		WIND dir spe	53		31 36 36 36 36
STA	2201	WAVES r ht p	33 3 2	SIGMA T	25.51 25.62 25.62 25.84 26.31
CRUISE	HE 33	书	33	LINITY PPC	33,681 33,703 33,729 33,909 33,936
ວ	昱	TRANSP B	4	SAI	
		TR		TEMP SALINITY °C ppt	12,38,10,90 10,83 8,83 8,66
				DEPTH	9 5 5 0 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Paired thermometer read 12.32 \* indicates questionable data

				SILICA	28 20 20
		<b>9</b>		NO-DNIA F	24.0
JDE	. T.	VISIB	7	RATE NITRITE A ug-atoms/liter	888
NGITI	121° 51.1°	CLOUDS typ ant	×	E NIJ	
<u> </u>	121		×	IRATI ug=1	7.7.4
	*	WEAT	7	E NI:	
HOUR N LATITUDE W LONGITUDE	36° 37°7°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	13,0 12,0	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	64 64 74
HOUR	9•91	AIR TE dry	13,0		146 123 136
	30 KAR 1976 16.6	BAROM nd	1018.7	IY SIGMA I OXYGEN AOU SAI ml/l ug-at/l Z	-237 -119 -187
DATE	30 KAR	WIND dir speed	30 2	OXYGEN EL/1	8.52 -237 7.19 -119 7.96 -187
	-	W.	8	₩	2 5 5 5 2 5 5 5
STATION	1121	AAVES r ht p	е В	SIGA	25.49 25.49 25.49
	Ø.		31 3	Ħ.	287
CRUISE	¥ 8	끃		ALINI; ppt	33 <b>,</b> 685 33 <b>,</b> 686 33 <b>,</b> 687
		TRANSP	e.i	TEMP SALINIT	12,52 12,52 12,52
				DEPTH m	9 2 0

				SILICA	2112
		VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	245
TUDE				RATE NITRITE A ug-atoms/liter	.07 .03
N LATITUDE W LONGITUDE	121 52,8	AIR TEMP °C WEATH CLOUDS dry wet typ amt	×	FRATE N ug-ato	3.1 2.4 9.0
TUDE	5,2	WEAT	2	ATE NI	
N LATI	36" 55,2"	AIR TEMP °C dry wet	13.8 13.0	наѕона	38.38
HOUR	<b>6.7</b>	AIR 1 dry	13.8	SAT	134 133 83
M	1976	BAROM	1020.0	AOU 18-at/1	-174 -173 94
DATE	20 APR 1976	WIND dir speed	28 0 1	OXYGEN m1/1 '	7.80 -174 7.92 -173 5.02 94
STATION	1154			GWA T	25,39 25,58 25,76
		WAVES dir ht p	0 3	ı SI	
CRUISE	ML 40	4SF	3 26	SALINII ppt	33 <sub>6</sub> 596 33 <sub>6</sub> 579 33 <sub>6</sub> 625
		TRA		TEMP SALINITY SIGMA T OXYGEN AOU SAT *C ppt ml/1 ug-at/1 %	12,67 11,61 10,80
				DEPTH B	0 5 0

				SILICA	14 15 18 20
		VISIB	7	AMPONIA ST	4004
ITUDE	•7•		0	RATE NITRITE A ug-atoms/liter	113 113 124 22
W LONG	122	TH CLOUDS Typ amt	×	IITRATE ) ug-at	5.4 5.6 7.3 11.0
N LATITUDE W LONGITUDE	36* 55.8	AIR TEMP °C WEATH CLOUDS dry wet typ amt	12,2 2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	
HOUR N	10.9	AIR TER dry	13,2 12,2		117 116 110 91
ы	20 APR 1976	BAROM	1019•0	AOU ug-at/1	-87 -87 -51 48
DATE	20 APR	WIND dir speed	2	OXYGEN AOU SAT ml/l ug-at/l Z	6.91 6.97 6.60 5.50
STATION	2205	ρ.	1 2 29	SIGMA T	25.53 25.61 25.66 25.71
CRUISE	ML 40	SP WAVES dir ht	26 1	TEMP SALINITY	33,591 33,590 33,598 33,617
-	-	TRANSP	i/h	TEMP S.	11.95* 33.591 11.49 33.590 11.27 33.598 11.05 33.617
				DEPTH	20 P 20

Paired thermometer read 11.88 \* indicates questionable data

				SILICA	24 16	14 32 38 38
		I.B		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0.4	0 4 4 4
	_	VISIB	7	ITE Lite	2, 9	20 20 20 20 20 20 20 20 20 20 20 20 20 2
N LATITUDE W LONGITUDE	122 1.6*	CLOUDS typ amt	O X	RATE NITRITE A ug-atoms/liter	13.13	
ŇOT	22		×	ATE 18-4	ω' 4.	u o 4 u
35 M		AIR TEMP °C WEATH dry wet	8	NITR U	13.	6.3 21.0 19.4 23.3
TO	6.0	33		IATE	2 2	228 822E
3	36 50.9	Wet	12,8 12,2	HOSPE	H H	1.22 1.258 1.89
Z	•	E ×	φ	Ā		
HOUR	12,1	AIR TH	12	SAT	6 001	98 64 53
	20 APR 1976	BAROM mb	1018.0	OXYGEN AOU ml/1 ug-at/1	40	10 203 262 316
DATE	O APR	WIND dir speed		XYGEN	6.00 6.06	5.96 3.96 2.79
<b>'78</b>	N	WIND ir spe	29 3			
STATION	2204	۵.	7	SIGMA I	25 <b>.</b> 79 25 <b>.</b> 79	25.83 26.14 26.20 26.32
S		WAVES r ht p	7			
CRUISE	64	_ <del>1</del>	28	SALINITY PPt	707	33,714 33,847 33,871 33,924
3	호	TRANSP	'n	SAI		
		MI.		TEMP	11,01	10.80 9.58 9.32 8.84
				E BETTH	<b>O</b> 1/1	,5588

33\* PHOSPHATE NITRATE NITRITE AMMONIA SILICA 2 45 53 3 004004000004004 VISIB ug-atoms/liter 86888888 862 858 1,3 N LONGITUDE CLOUDS typ ant 0 122 19.7 13.4\* 27.3 13.2\* × 29.4 16.0 30.8 26.5 27.2 33.7 33.1 41.8 33.8 32.8 20.2 33.4 WEATH ~ N LATITUDE 36 46.7" 1.52 1.78 1.82 1.84 2.20 2.20 2.20 2.56 2.65 2.60 2,57 2,58 2.94 2.66 2.96 AIR TEMP °C 12,2 Vet 12.5 dry HOUR 15,2 22 m1/1 ug-at/1 1015.0 BAROM 20 APR 1976 OXYGEN AOU 205 271 361 408 8 38 451 478 492 532 579 593 ê DATE 4.18 2.15 2.39 dir speed 1.91 1.44 .31 .23 3.87 3.24 2.87 11.03 12.03 24.03 26.03 'n MIND 8 STATION SIGHA T 25.98 26,02 26.19 26,43 26.48 26.80 26.88 27°01 27°10 26,25 26,56 26.62 26,73 26.78 27.24 2203 ρ. 'n WAVES dir ht m SALINITY 34,040 33,798 33,843 33,870 33,970 33,990 34,093 34,203 CRUISE 3 8 33,794 34,160 34,175 34,250 34,300 33,794 34,143 ppt 보 TRAMSP 9 5,85\* 10.08 9,25 9.03 8,35 8,15 7.77 7.24 7.02 6.91 6.51 10,29 7.86 3. TEMP DEPTH 192 239 52225 81 145 287 385 483 577

\* indicates questionable data

Silicate appears anomalously low

Mitrate appears anomalouly low

Paired thermometer read 5.79

				SILICA	20	28	5 °	77	12 ×	
		<b>E</b>		AMMONIA T	Q	7	<b>-</b>	•	0	
TUDE	7.9*	DS VISIB mt	2 0	RATE NITRITE A ug-atoms/liter	•20	•29	7 8	3 -	0.05	
N LATITUDE W LONGITUDE	121 57.9	TH CLOUDS Typ amt	×	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	6•0	21.0	λ. α.π.	9 5	1.6#	low 1ow
rrude	36* 41.2*	AIR TEMP °C WEATH dry wet	7	HATE NI		29			2,42	Nitrate appears anomalously low Silicate appears anomalously low
	38.	LIR TEMP *( dry wet		PHOSE	•	٠,	¥'	T	2	S amona I's anon
HOUR	17.4			XYGEN AOU SAT ml/l ug-at/l %		88		, <sub>2</sub>	9	appear e appea
DATE	20 APR 1976	BAROM		OXYGEN AOU ml/l ug-at/		78		363		ítrate ilícat
ď	20 AP	WIND dir speed	en (	OXYGE m1/1	6.16	5,23	3.81	2.28	2,58	z v
STATION	2202	<u>.</u>	3 3 30	SIGMA I	25.64	25 <b>.</b> 95	26.09	26,33	26,43	æ æ
CRUISE	M. 40	TRANSP WAVES	90	SALINITY ppt	36.644	33,793	33,812	33,910	33,973	nable data
		TRA		TEMP C	11,58	10,50	9.73	8,75	8,41	questio
				DEPTH	0	n č	20	8	S,	* indicates questionable

				SILICA	15 16 38 38
		<b>1</b> B		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	44660
M	•	VISIB	7	ITE 11te	23222
TTOD	51.1	UDS	0	NITR Odes/	
LONG	121° 51 <sub>0</sub> 1°	CLOUDS typ amt	×	RATE NITRITE A ug-atoms/liter	ဝတ္တလုတ္
N LATITUDE W LONGITUDE		AIR TEMP °C WEATH CLOUDS dry wet typ amt	2	NITH	25.0 25.0 25.0 27.0 8.0 8.0 8.0 8.0 8.0
	17.71	<b>F</b>		LATE	400000
LAE	36° 37°7°	æ•C væt	12.0 12.0	IOSPE	. 64 1. 60 1. 46 1. 95
*	6.)	ス 20 20 20 20 20 20 20 20 20 20 20 20 20	0	盂	
HOUR	18.4	AIB	7	SAT	118 109 69 31 39
	20 APR 1976 18.4	BAROM	1014.2	IY SIGMA T OXYGEN AOU SAT ml/l ug-at/l X	-92 -44 171 391
DATE	20 APR	WIND dir speed	28 2	OXYGEN #1/1	6.93 6.93 1.98 2.98 2.98
TON	<b>H</b>	W df.r	28	H	552 53 54 54
STATION	2201	S) E	4 2	Sign	25.44 25.52 26.03 26.37 26.44
闰	Q	WAVES r ht	31 4	Ħ	က်ပုံကိုလုပ်နှီ (၂၈၈)
CRUIS	H 40	4. 1.15	(V)	LINI;	33,546 33,577 33,776 33,945 33,984
•	-	TRANSP		3	ୟ <b>ଓ</b> ଲିଲ୍ଲ
				TEMP SALINIT	112.24 11.90 9.91* 8.63
				DEPTH	30,550

Paired thermometer read 9.97 \* indicates questionable data

				ILICA	ଟେମମ
		VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	7,9
SITUDE	52,8		æ	RATE NITRITE A ug-atoms/liter	.15 .03
NOT A	121	# 6 # 6	∞	ITRATE ug-at	1.5 1.8 1.8
HOUR N LATITUDE W LONGITUDE	36 55.27 121 52.8	AIR TEMP °C WEATH CLOUDS dry wet typ amt	12.8 12.8 2	PHOSPHATE N	30°06
HOUR	7.7	AIR T	12.8		135 137 115
	1976	BAROH	1016.0	AOU 1g-at/1	-183 -195 -80
DATE	4 MAY 1976	WIND dir speed	0 0 1016.0	OXYGEN m1/1 .	7.96 8.11 6.89
STATION	1154		1 3 0	T AM	25,70 25,72 25,82
ST	H	WAVES fr ht p	-	SI	
CRUISE	FF 41	_ <del>1</del>	27	ALINITY PPC	33, 843 33, 846 33, 852
		TRANSP	5	TEMP SALINITY SIGNA T OXYGEN AOU SAI	12,06* 33,843 11,97 33,846 11,43 33,852
				DKP TH	0 5 0

Paired thermometer read 11,99

\* indicates questionable data

				SILICA	en c	27.8
		<u>e</u>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	, <b>~</b>	3.9
		VISIB	7	TE /	0 1	<b>~ m m</b>
N LATITUDE W LONGITUDE	•7•	CLOUDS typ ant	<b>&amp;</b>	RATE NITRITE A ug-atoms/liter	4,0	333
10M	122	ਜ਼ੂ <u>ਦੂ</u>	∞	ATE 8-at	_	80
<b>≥</b>		AIR TEMP °C WEATH CLOUDS dry wet typ amt	7	NITR	•	10.2 14.0
EFF	55.8	න ප		HATE	보통	*##
LAI	36* 55,8*	¥₽•.	11.5 12.0	HOSFI		# # # # # # # # # # # # # # # # # # #
		AIR TE dry	1.5			
HOUR	9.1	A A	H	SAT	129	55
	1976	BAROM	1016.2	TEMP SALINITY SIGMA T OXYGEN AOU SAI	-151	180
DATE	4 MAY 1976	WIND dir speed	m	OXYGEN B1/1		4°18
¥		11. de r	29	H	~ ~	
STATION	2205	<u>c</u>	7	SICMA	25.70	26.14 26.21
		WAVES r ht	7 1 2	<b>&gt;</b> •		
CRUISE	41	d i	27	INIT ppt	8 8	33,891
8	捒	TRANSP	'n	SAL.		
		TRA		TEMP • C	12.05 11.88	9.80
				DEPTH	0 10	20 00

				SILICA	•	=	3 5	3 6	3 %	3 7
		3.1.B	_	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	6	( C	, "	9		3 4
TUDE	1,6	DS VISIB	8	RATE NITRITE AI ug-atoms/liter	•17	-29		24	22	16
N LATITUDE W LONGITUDE	122 1.6	AIR TEMP °C WEATH CLOUDS dry wet typ amt	<b>∞</b>	TRATE N ug-aton	2	9.	13-1	ļ	23	17.6
1000	.6	WEATH	7	TE NI						
LATIT	36 50,9*	Met • c	11.7 10.5	HOSPHA	-28	69	1,35	1-68	1.58	1.26
HOUR	10•1	AIR TE dry	11.7		108	73	28	74	99	42
	4 MAY 1976	BAROH	1016.0	OXYGEN AOU SAT ml/l ug-at/l %	-43	146	236	314	192	327
DATE	4 MAY	WIND dir speed	30 2	OXYGEN m1/1	6.52	4.53	3.6I	2,75	4.12	2,70
NO.		H.	8	H	2	<u></u>	Ħ	<u>ញ</u>	4	∞_
STATION	2204	Ω Φ	m	SIGMA T	25.90	26.0	26.2	26.2	26.2	26
		WAVES dir ht p	31 3 3		_	m		<b>6.</b> 1	٠.	4
CRUISE	M. 41		R	SALINITY ppt	33,859					
•	2;	CRANSP Th	4							
		Ħ		TEMP • C	11,06*	9	9	9.29	9.2	8
				DEPTH	0	'n	91	20	욹	ጽ

Paired thermometer read 11,00 \* indicates questionable data

Mitrate appears anomalously high at 30 m Mitrate appears anomalously low at 385 m and 777 m Paired thermometer read 9.98 \* indicates questionable data

				SILICA	18	6	14	14	70	26	35	3	28	41	44	33	62	77	787	85	
		3.I.B		AMPONIA 17	2.2	188	1.9	0	ויין	0	7	7	Q	9	, -	•	-1	0	9	9	
ITODE	1,3	CLOUDS VISIB	8 7	RATE NITRITE A ug-atoms/liter	8	22	27	•19	51	19	04	-14	-22	17	TO	8	Ö	8	8	8	
W LONGITUDE	122	WEATH CLOUDS typ seet	2 8	NITRATE ug-at	0.6	7.0	8.3	8.6	29.1*	18.5	14.2	16.2	14.1	29.4	25.3	29.1	19.28	34.2	36.7	23.94	
N LATITUDE	36* 46.7*		10.5	PHOSPHATE NITRATE NITRITE AMPONIA ug-atoms/liter	1,26	8	1,06	1,03	1.42	1,69	2,00	2,42	1,60	2,27	2,10	2.49	3.01	2,78	2,90	2,89	
HOUR N	11,3	AIR TEMP °C dry wet	12,5	SAT PI	16	88	%	75	74	65	43	94	8	25	27	22	14	σ	∞	7	
	MAY 1976	BAROH	1017,0	i AOU ug-at/1	64	<b>99</b>	92	137	147	198	324	307	392	434	423	94	514	<b>X</b> :	262	575	
DATE	4 MAY	WIND dfr speed	. 71	OXYGEN #1/1	5.62	5,42	5.3X	4.71	4.60	4.07	2,73	2.96	2.04	1.60	1.78	1.42	16	•62	.52	• 52	
STATION	2203	2	4	SIGMA T	26.07	26.09	26,10	26.17	26.18	26.24	26,38	26.44	26.50	26.56	26,62	26,70	26.84	26.95	27,04	27,22	
CRUISE	ML 41	W. dir	70	SALINITY PPt	33,856	33,855	33,852	33,863	33,866	33,882	33,936	33 <b>°</b> 986	34°009	34.048	34.064	34°092	34,174	34,230	34.274	34,365	
		TRANSP	δ.	TEMP S	4		87	9 <b>°</b> 5I	\$	91	Ä			7.92					5.69		
				DEPTH	0	S.	ន	20 20	ଛ	ያ	75	100	120	196	244	290	385	481	280 80	777	

				<					
				SILIC	12	42	12	7 -	29
		<b>8</b>		PHOSPHATE NITRATE NITRITE ANYONIA SILICA ug-atoms/liter	α <u>υ</u>	ر ش د	\	· -	11
No.		VISIB	-	ITE /	•29	28 28	·	ı v	. i.i
ITUD	57.9	E CO	œ	NITRI Desse / 1	7			,	7
LONG	121° 57.9°	CLOUDS typ emt	∞	RATE NITRITE A ug-atoms/liter	<b>&amp;</b>	<b>~</b> a	· LO		- ~1
<b>)</b>		.A.T.H.	7	NITR	7.8	7,02	1	-	23
TUDE	1.2	7 <u>7</u>		ATE	_	N	_	.4	· <b>F</b> .
N LATITUDE W LONGITUDE	36* 41.2*	AIR TEMP °C WEATH CLOUDS dry wet typ amt	12,5 11,5	10SPH.	1,20	H H	1.00	1.44	1.80
Z	-	N TE	٠,	딦		į.			
HOUR	13,2	AIR TI dry	12	SAT	68	<del>გ</del> ფ	8	వే	63
	4 MAY 1976 13.2	BAROH	1016.5	AOU 18-at/1	8 :	289	29	87	210
DATE	4 MAY	WIND dir speed	2	OXYGEN AOU m1/1 ug-at/1	5.47	5.42	5.52	5.23	3,93
<b>7</b>		A T	28		<b>10</b> 0	20 Pol	r i	<b>~</b>	_
STATION	2202		ო	Signa t	25.96	26.03	26.0	26.03	26.2
		WAVES r ht p	4						
CRUISE	41	Ą	53	PPt	33,750	773	883	<b>812</b>	862
రో	뵤	TRANSP		SAL					
		TR		TEMP SALINITY •C ppt	10.22	96.6	96.94	9.79	9,23
				DKPTH	0 v	9	2	8	ß

			·	SILICA	2 6 10 17
		81 13		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	4444 66874
30	1.	VISIB	7	RATE NITRITE A ug-atoms/liter	20113
iru	53	CLOUDS typ amt	∞	NIT	
ZONG ZONG	121° 53 <sub>0</sub> 7°	身	œ	ATE 8-at	48089
<b>∌</b> ₩		EATH	7	NITR	1.3 8.6 16.0 10.2
	7.6	<b>5</b>		ATE	мн <i>г</i> ма
N LATITUDE W LONGITUDE	36° 37•6°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	13,0 11,5	HOSPH	23 51 67 93
		2 LE	9,0		
HOUR	14.1	AII.	H	SAT	93 77 80 64 54
	4 MAY 1976 14.1	BAROM	1016.5	AOU 1g-at/1	35 122 106 199 256
DATE	4 MAY	WIND dir speed	8	OXYGEN AOU ml/l ug-at/l	5.63 4.70 4.90 3.89
3		te ¥	28	H	## ## ## ## ## ## ## ## ## ## ## ## ##
STATION	2201	Q.	2 3	SIGHA T	25.88 25.93 25.96 26.00 26.14
		AAVES r ht		o, >	
CRUISE	41	A T	33	LNIT PPC	33,849 33,833 33,833 33,837 33,836
ਤੁ	첫	TRANSP	4	SALI	
		TRA		TEMP SALINITY •C PPt	11.010 10.76 10.62 10.33 9.56
				DEPTH	38550

				SILICA	o n c
		<b>5</b>		AMHONIA r	N 60 -
JE	# T	VISIB	7	RATE NITRITE A ug-atoms/liter	555
GILD	51.	CLOUDS Typ and	00	NIT	
Š	121° 51.1°	g 5	œ	RATE ug-a	40,4
)3 (4)	•	EATH	7	NIT	10.4
N LATITUDE W LONGITUDE	36° 37°7°	AIR TEMP C WEATH CLOUDS dry wet typ amt	12,7 11,2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	001
		조 11 12	2.7		
HOH 150H	14.6	Ā	H	SAT	137 136 123
	4 MAY 1976 14.6	ВАВОН	016.5	A0V 1g-at/1	
DATE	4 MAY	WAVES WIND rht p dir speed	33 3 3 28 2 1016 <sub>e</sub> 5	TEMP SALINITY SIGMA T OXYGEN AOU SAT *C PPt ml/1 ug-at/1 X	8 <sub>0</sub> 23 -197 8 <sub>0</sub> 20 -195 7 <sub>0</sub> 41 -122
Z		WI dir	28	H	<b>∞</b> τυ <b>α</b> 0
STATION	1121	23. T	e e	SIGMA	25.86 25.85 25.88
CKUISE	HL 41	WAVES dir ht	33	NITY Pt	33,834 33,839 33,835
3	보	TRANSP	4	SALI	
		JII.		TEMP 0.	11,23
				DEPTH	0 ~ 9

				SILICA	19	) <b>3</b>	17	2	31	76	ጽ	8	<b>E</b>	43	49	57	×	67	2	Ħ
		<b>1</b> 2		AMADNIA F	9	٠ <u>٠</u>	9	7	0	7	9	•5	<b>Q</b>	Ç	<b>°</b>	9	0	Q	q	4
LTUDE	1,3	OUDS VISIB	1 7	RATE NITRITE A ug-atoms/liter	•19	•23	•21	•17	•17	•17	*5I	•30	•23	80	•04	•02	10.	0	03	60
W LONGITUDE	122•	줮동	6	IITRATE P ug-ato	9•6	9.6	19.2	18,1	39.9*	Ī	17,6	21.0	21.0	30.5	41.7	10.9	12,544	33,3	37.7	54.5
N LATITUDE	36* 46.7*	P°C WEATH	14.0 2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1,13	1,28	1,31	1,28	1.63			1,66								
HOUR N 1	13.0 3	AIR TEMP °C dry wet	13.0	SAT PHC																
		ВАВОН	1016.5	XYGEN AOU S ml/l ug-at/l																
DATE	11 MAY 1976	WIND dir speed	3 1	OXYGEN BI/1 u	5.67	<b>6.</b> •30	4.59	5,33	3,68	8	3°86	2°	Z•73	0007	1.93	4.9H*	7°06	8	ಹ	<b>8</b> 5
STATION	2203	<b>Q</b> .	2 30	SIGNA I																
CRUISE	. 42	dir ht	29 2	SALINITY ppt																
៩	보	TRANSP		TEMP SAI	10,90	10.87	10.45	9.92	9.64	9.45	9.20	1006	3 6	1780	<b>)</b>	7.22	E	6.17	2°60	4.46
				DEPTH								9;								

\* Mitrate appears anomalously high

\* indicates questionable data

60

				SILICA	mma
		1B		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	2-1-4
rude	2.8	OS VISIB	7	RATE NITRITE AI ug-atoms/liter	08 08 27
LONGI	121* 5:	CLOUDS	7	RATE NJ ug-ator	2°0°5
rude 4	5.2*	WEATH	1	ATE NIT	
N LATITUDE W LONGITUDE	36 55.2 121 52.8	AIR TEMP °C WEATH CLOUDS dry wet typ amt	12,0 12,1 1 7 8	PHOSPIL	.15 .22 .88
HOUR	8 8	AIR 1 dry	12,0		128 124 96
	1976	BAROM	1016.5	AOU 18-at/1	-146 -125 22
DATE	25 MAY 1976	WIND r speed	15 0 1016,5	OXYGEN m1/1	7 <sub>6</sub> 55 -146 7 <sub>6</sub> 34 -125 5 <sub>6</sub> 81 22
STATION	1154	P d		TEMP SALINITY SIGMA T OXYGEN AGU SAT °C PPt ml/1 ug-at/1 Z	25 <b>.</b> 72 25 <b>.</b> 76 25 <b>.</b> 95
CRUISE S	ML 43	WAVES dir ht	28 1 2	NITY S pt	33,865 33,864 33,880
	보	TRANSP B	4	SALI	
		r			12,03 11,85 10,84
				DEPTH	0 2 2

				ILICA	13	185	7
		<b>m</b>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0,0	345	)
<b>53</b>		VISIB	9	RATE NITRITE AV ug-atoms/liter	% % %	6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2
	•7•	g g	8	NITR Come/	•	• •	•
1010	122*	CLOUDS typ smt	7 2	LATE 18-at	4 -	! ব !	0
<b>32</b>		SATH	H	NITH	κ α	15.4	5
N LATITUDE W LONGITUDE	36 55.8	AIR TEMP °C WEATH CLOUDS dry wet typ amt		SPHATE	67	1,19	4004
	8	IR TEMP *(	12,8 13,3	PHK			
HOUR	<b>9°6</b>	AIR dry	12,	SAT	102	<b>3</b> 8 8	2
	1976	BAROM	1016,5	A0U 1g-at/1	7 0	101	1
DATE	25 HAY 1976	WIND dir speed	8	TEMP SALINITY SIGMA T OXYGEN AOU SAT	6.05	4.98	7
N N		VI dir	28	Ħ	8 2		4
STATION	2205		7	IGMA	25 <b>.</b> 8	26.03	1
S		WAVES dir ht p	2	S;			
CRUISE	Æ 43	dir	27	INIT	859	33,883	700
5	兌	TRANSP	_	SAI			
		Ħ		TEMP C	11.61	24.0	
				EPT1	0 4	28	7

				SILICA	Ę	2 =	2 -	` <u>~</u>	2 6	27	
		13		AMPONIA r	Q		, ,	7		10	
TUDE	122 1.6"	CLOUDS VISIB	2 6	RATE NITRITE A ug-atoms/liter	37	141	040	30	67	16	
W LONG		WEATH CLOUDS typ amt	1 7 2	NITRATE ug-at	10,1	11.6	11.5	19,3	13.4	21.3	
N LATITUDE W LONGITUDE	36 50.9*	AIR TEMP °C WE dry wet		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.05	1,20	1-23	1,31	1.44	1,99	
HOUR N	10.5	AIR TE dry	14.0 13.7	SAT	97	93	87	75	74	46	
<u>1-3</u>		BAROM	1016.5	AOU ug-at/1	91	41	8	139	142	303	
DATE	25 MAY 1976	WIND dir speed	8	OXYGEN m1/1	5.88	5•65	5,35	4.59	4.59	2,92	
STATION	2204	۵	29 3 2 30	SIGMA T OXYGEN AOU m1/1 ug-at/1	25.96	26.02	26.06	26.07	26.12	26,31	
CRUISE	ML 43	SP WAVES dir ht	53	SALINITY ppt	33,877	33,880	33,884	33,886	33,894	33,935	
		TRANSP	7	TEMP S.	10,80						
				HILAND	0	'n	9	8	8	ጽ	

			ı	NIA SILICA		.0 13		1 14		•2 26										
	:	VISIB	7	NITRATE NITRITE AMMONIA ug-atoms/liter				χ. •		•5I										
W LONGITUDE	1,3	CLOUDS typ amt	7	RATE NITRITE A ug-atoms/liter	¥.	`*	•	`•	•	**	•	~	•	٠,	•	•	•	•	•	
	122	WEATH CI	1 7		9.7	10.6	11,1	11.44	10.3	22.0	13,3	13,5	19.6	26.1	27.9	22.6	33.0	35.5	36.8	1
N LATITUDE	36* 46.7*		12,7	PHOSPHATE	1,15	1,10	1,14	1,00	1.07	1,57	1.60	1,87	2 <b>,</b> 11	2,13	1,96	2.48	2,70	2,93	3.07	1
HOUR N	11.9	AIR TEMP °C dry wet	13,3 12,7	SAT Pi	86	97	95	8	&	99	25	42	42	35	33	27	18	1	2	
	MAY 1976 1	BAROM	1016.6	og-at/1	#	17	28	53	83	161	270	331	330	372	389	425	<b>4</b> 89	535	88 88	
DATE	25 MAY	WIND dir speed	7	OXYGEN m1/1 u	5.93	5.89	5.78	5.44	5.45	<b>4</b> •09	3,27	2.64	2.7I	2,29	2,14	1.78	1,17	.77	98.	
STATION	2203	Δ.	3 3 30	SIGMA T	25.93	25.96	25.97	25,99	26,00	26,15	26,27	26,37	26,46	26.54	26.61	26,66	26.8I	26.95	27,08	,
CRUISE	M. 43	P WAVES dir ht	8	SALINITY PP <sup>t</sup>	3,857	3,857	13,852	3,845	3,856	33,859	3,910	3,972	4.007	4.035	4.076	¥•089	4.163	4.210	4.282	
J	Z	TRANSP	σ	TEMP SA	10,87															
				DRPTH m	0					ያ										

				SILICA	14 13 13 13 16
		8I.		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	11 11 12 14 15 15 15 15 15 15 15 15 15 15 15 15 15
TUDE	.6•/	S VISIB		TRITE 8/11te	38 38 38 88
W LONGITUDE	121 57,9	CLOUDS typ amt	7 1	RATE NITRITE A ug-atoms/liter	ಗಳಿಕೆ <b>ಎ</b> ಟ್ಟ
UDE 4		WEATH	2	CE NITS	12.2 11.9 11.6 15.0 9.3 10.2
N LATITUDE	36 41.2*	AIR TEMP °C dry wet	13.8 12.6	ноѕрна	1.06 1.03 1.52 1.15 1.15
HOUR	14.1	AIR TE dry	13.8	SAT F	93 93 90 74
=	1 926 1	BAROM	1016.0	AOU ;-at/1	44 38 39 47 57
DATE	25 MAY 1976	ed		OXYGEN AOU ml/l ug-at/l	2,2,2,2,4,2,2,4,2,4,2,4,2,4,2,4,2,4,2,4
STATION			30 7	SIGMA T 0	25,95 25,95 25,96 25,99 26,00
STA	2202	WAVES r ht p	4.		ห์ห์หัหั <i>หั</i> ชุ้ชั่
CRUISE	M. 43	ੂ ਬ	8	ALINIT PPt	33,873 33,867 33,864 33,858 33,858
		TRANSP	11	TEMP SALINITY C ppt	10.83 10.81 10.71 10.51 10.01
				DEPTH	0 4 5 5 6 6

				ILICA	4 4 14 80 DI
		VISIB	•	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	66644
CODE	3.7		_	TRIT B/11	22.41.25
W LONGITUDE	121° 53 <sub>0</sub> 7°	CLOUDS Typ and	7 1	RAIE NITRIIE A ug-atoms/liter	******
		ET.N	7	NITR/ U	2.8 2.8 7.3 9.3
N LATITUDE	36° 37,6°	AIR TEMP °C WEATH dry wet t	12,5	OSPHATE	25 2 2 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0
HOUR N	16.4	AIR TED dry	13,0 12,5		3 E E E E E
	25 MAY 1976 1	BAROH	1015.8	OXYGEN AOU SAT #1/1 ug-at/1 %	-284 -163 -116 -65
DATE	25 MAY	WIND dir speed	H	OXYGEN #1/1	9.05 7.74 7.26 6.71 5.65
STATION	2201	<u>a.</u>	2 2 27	SICMA I	25.67 25.74 25.79 25.83 25.95
CRUISE	43	WAVES dir ht	35	INITY	33,869 33,876 33,876 33,871 33,871
ទី	보	TRANSP	35	SAL	
		Ħ		TEMP SALINITY	12.22 12.23 12.23 13.23
				DEPTH	P 2 2 2 2

			•	SILICA	H 74
		VISIB	9	AMMONIA er	<b>6</b> 0
)E			_	RITE /11¢	H <sub>0</sub>
GITU	51.	CLOUDS typ amt	7 1	NIT] Louis,	
Ž O I	121 51.1	र्दे ह	7	RATE NITRITE A ug-atoms/liter	8 4
;≥ ⊌		EATH	7	HIN	
N LATITUDE W LONGITUDE	36 37,7	AIR TEMP °C WEATH CLOUDS dry wet typ amt	12.9 12.4	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	ઠ્ઠ
	_	R TB	2.9		
HOUR	16.9	4.0	-	SAI	154
fu3		BAROM	1015,5	TEMP SALINITY SIGMA T OXYGEN AOU SAT	-281 -207
DATE	25 NAY 1976	WIND dir speed	28 2 ]	OXYGEN m1/1	8,96 -281 8,23 -207
N		WI dd r	28	H	ww
STATION	1121	ρ	2 2	SIGMA	25 <b>.</b> 56
CRUISE	ML 43	Ή	31	INITY	33 <sub>8</sub> 856 33 <sub>8</sub> 866
5	五	TRANSP		SAL	
		<b>E</b>		TEMP C	13,29 12,84 12,02
				DEPTH	0 50

				SILICA	'n	7 01
		13		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0	<b>Q</b> Q
	<b>*</b>	VISIB	30	RATE NITRITE A ug-atoms/liter	<b>0</b> 05	ខិន្
	52.	CLOUDS typ amt	•	NIT		
	121	3 €	2 6	RATE ug-a	6	<b>8</b> 63
KGITI		EATH		HIN		χō
3	55.2	ිම ප	6	HATE	91	932 63
원 -	36.	AIR TEMP 'C WEATH CLOUDS dry wet typ amt	12,2 12,0 2	HOSPI	•	• •
ritu		R TE	2.2			
¥ z	17.0	AL	H	SAT	126	
HOUR N LATITUDE W LONGITUDE	8 JUN 1976 17.0 36 55.27 121 52.8"	ВАВОН	1012,4	TEMP SALINITY SIGMA T OXYGEN AOU SAT "C ppt ml/1 ug-at/1 %	-132	5.66 12 5.13 81
	WIL 8	WIND dir speed	i 1 2 27 2 1012 <sub>0</sub> 4	OXYGEN m1/1	7,22	5.66 5.13
DATE		VI dår	27	H	널	년 호
	1154		8	IGMA	25.5	25 <b>.</b> 61 25 <b>.</b> 99
LION		AAVES r ht p	H	vs ≽⊣		
STAT	M. 44	#	26	INIT	.937	33 <b>,</b> 939 33,955
	묫	TRANSP	m	Tys		
CRUISE		TR		TERP C	13,41	12.93 10.98
				DKPTH	0	~ <b>3</b>

			•	SILICA	7 23 40
		E E		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0000
M		VISIB	<b>50</b>	ITE Lite	08 05 07
ITUD	.7.	JDS	2	RATE NITRITE A ug-atoms/liter	9997
ONG	122	CLOUDS typ amt	2 2	IE P	
3	ਸ	Ē		IIRA	3.7 2.8 12.5 28.5
UDE	80	ME	7	TE N	
N LATITUDE W LONGITUDE	36" 55,8"	AIR TEMP °C WEATH CLOUDS dry wet typ amt	12.4 11.8	OSPHA	.45 .36 1.14 1.95
z	m	IR TEMP "( dry wet	4	Ha	
HOUR	15.6	AIR dry	12,	SAT	131 125 75 35
	926T NDF 8	ВАВОН	1013,2	SIGMA T OXYGEN AOU SAT ml/l ug-at/l x	-161 -132 135 367
DATE	s Jun	WIND dir speed	<sub>د</sub>	OXYGEN m1/1 v	7.73 7.43 4.63 2.24
X.		NI dfr	27	H	
STATION	2205	εν Εν	7	COM	25 <b>.</b> 82 25 <b>.</b> 86 26 <b>.</b> 14 26 <b>.</b> 39
S)	••	WAVES r int	27 1 2	ନ୍ତ	NANN
ISE	77	WAVES dir ht	27	INITY	33,956 33,959 33,971 33,994
CRUIS	뎦	TRANSP	m	SAL I	ត្តីត្តីត្តីត
		TRA		TEMP SALINITY	11.91* 11.68 10.18 8.73
				DEPTH	0 10 20 20

Paired thermometer read 11,83 \* indicates questionable data

			•	SILICA	-	<b>†</b> -	1 6	÷	χ. Υ	g ş	}
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILLUA ug-atoms/liter	ď	۳ •	•	•	<b>]</b> -	7.	:
	_	VISIB	20	TE ,	_	1 5	1 0	<b>,</b> ~	٠ ج	, <del>,,</del>	,
GETUDE	122" 1.6"	CLOUDS typ amt	7	RATE NITRITE A ug-atoms/liter	,	ים •	•	•	•	2 .	•
W LUNGETTUDE	122-	_	7	TRATE ug-ai	0	0		) r		27.6	
	-	ÆAT	7	IN :	۳,	, ē		4 17	1 7	,	l
N LATITUDE	36 50.9	AIR TEMP 'C WEATH dry wet	13.8° 13.6°	IOSPHATE	2,15	2-06	2007	7.01	2.21	i X	) •
z	• •	T V	00	E							
HOUR	14,3	AIR '	13	SAT	63	53	67	57	, E	48	
M	8 Jun 1976	BAROM	1013.1	AOU 18-at/1	209	264	287	241	263	297	
DATE	MUC &	WIND dir speed	7	OXYGEN AOU mL/1 ug-at/1	3.90	3.28	3.05	3.60	3,36	3.0I	ı
STATION	2204	<b>D</b> .	2 28	SIGMA T	26.24	26,23	26.27	26,3I	26, 32	26,37	
נט		WAVES dir ht	-								
CRUISE	44	W dd r	23	INITA	951	953	951	958	957	983	
3	뒾	TKANSP	עכ	SALI						33,983	
		H 31 _		TEMP SALINITY	y. y.	9,53	9.28	9,11	70°6	8,82	
				m m	•	n	01	20	झ	94	

\* indicates questionable data P.

Paired thermometer read 9.76 at 0 m; 9.20 at 20 m \* indicates questionable data

				SILICA	04	ጽ የ	3 %	3 %	9	33	77	7) 4 4 4	t t	3 5	2 4	2 5	- 6	8 601 6 601	! !
		18		AMMONIA r	0	<b>0</b>	<b>}</b> ~	<u>ښ</u>	<u>س</u>	o ·	<b>-</b>	<b>2</b> C	ې چ •	Ç	•	•	•	9	I
TTUDE	1,3	UDS VISIB aunt	2 8	RATE NITRITE A ug-atoms/liter	•21	•ZI	.17	• 18	•16	•17	3 8	3 5	8	0	5	2	<b>3</b>	8	
E W LONGITUDE	. 122	WEATH CLOUDS typ amt	2 2	NITRATE ug-at	29.0	30°1	25.8	26.5	27.2	20°0	5 d	32,5	36.1	31,1	39,1	30.05	37.4	45.7	
N LATITUDE	36° 46 <sub>8</sub> 7°	AIR TEMP °C W dry wet	12,9	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	2.03	1.86	1.88	1,88	1.82	1,77	2,20	2-07	2.5I	2,20	2.38	2.88	3-16	3,35	
HOUR	12.7	AIR T dry	13.5	SAT		88	87	76	69	\$5 \$7 \$7	22	21	23	20	15	œ	7	Ŋ	
ы	JUN 1976	BAROH mb	1013,2	l AOU ug-at/l		69	73	137	176	797 316	674	459	447	494	504	550	569	290	
DATE	8 JUN	WIND dir speed	7	OXYGEN m1/1		5.50	5.47	4.77	4.36	2,45	1-40	1,33	1.48	1,32	96•	•57	87*	• 36	
STATION	2203		1 2 27	SIGMA T	26.17	26.27	26,30	26,32	26.43	26.49	26.58	26.62	26.66	26.71	<b>7681</b>	26.93	27.09	27,23	
CRUISE	ML 44	TRANSP WAVES m dir ht	10 27	SALINITY PPt	33 <b>,</b> 940 33,939	33,935	33,950	33,959	326700	34.060	34,112	34.116	34.151	34.167	34.206	34,219	34.296	34,371	
		TRA	-	TENP .c	9.83# 9.66	9.23	9.14*	10°4	9 %	8.44	8,14	7.87	7.97	/•/ •/ •/	100/	6,19	5.42	4.76	
				БЕРТН	0 %	01	2 2	3 8	3 12	88	148	197	245	467 100	700	8	575	765	

				SILICA	39	£ %	33
		<b>M</b>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	00,	7°2	000
S.	•	VISIB	<b>60</b>	RATE NITRITE AI ug-atoms/liter	29 18	ξ. 33.	•37 •18
5	57.	CLOUDS typ ant	9	NIT Cors			
	121° 57 <sub>•</sub> 9°	द्व है	7 6	LATE 18-a	ور م د	٥	24
N LATITUDE W LONGITUDE		AIR TEMP °C WEATH CLOUDS dry wet	7	TIN 2	16.9 15.9	12	26.5 30.2
KTITUD	36 41.2*	Wet Wet	2•0	SPHATI	1.28 1.20	1,21 2,25	2°07
Z	8	E N	12,0 12,0	PISO			
HOUR	11.4	AIR I dry	12,0	SAT	98	103	888
	1976 1	BAROH	1013,7	OXYGEN AOU ml/l ug-at/l	<b>a</b> , d,	<u>-</u> 5	193 365
DATE	8 JUN 1976	peq	28 2 1	OXYGEN B1/1 v	6.03 6.24	6.29	4.10 2.26
STATION	2202			SIGMA T	• 12 • 12	215	26.27 26.40
SIA	22	સ '' જ	1 2		7,00	76	7 7 7
ISE	44	WAVES dir ht	28	INITY	967 971	7967	33 <b>,</b> 967
CRUISE	녗	ASE	9	SALÏ	6 6 6 6	e e	รัศ ศ ราคาศ
		TRANSP	_	TEMP SALINITY *C PPt	10,29	10,27	2 % % % % % % % % % % % % % % % % % % %
				DEPTH	<b>Ö</b> 10	28	283

Silicate appears anomalously high

			•	SILICA	m	2 2	50 40 70
		13		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	<b>°</b>	. 7	1.0
rude	3.7*	DS VISIB at	2 7	RATZ NITRITE A ug-atoms/liter	90	27	08 •15
N LATITUDE W LONGITUDE	121 53,7	AIR TEMP C WEATH CLOUDS dry wet typ amt	2 2	FRATE NJ ug-ator	4.0	, 7 , 7	18,5 3,04
rude	7.6*	WEAT	7	ATE NI			
N LATE	36 37.6	IR TEMP °C dry wet	14.2 13.6	PHOSPH	95	1.5	1.82 2.22
HOUR	8.6	AIR I dry	14.2	SAT	109	88	8
	8 JUN 1976	BAROM	1013,2	XXGEN AOU : ml/l ug-at/l	-49	233	399
DATE	8 Jun	WIND dir speed	8	OXYGEN E1/1	6.48 5.5	3,53	1.e 89
STATION	2201	ρ.	1 2 30	SIGMA T OXYGEN AOU ml/l ug-at/l	25,81 25,96	26.12	26°40
CRUISE	M. 44	_ <del>1</del>	31 1	TEMP SALINITY	33 <b>.</b> 943 33.950	963	066
ប	보	TRANSP	4	SAL			
		Ħ ¯		TEMP C	11.89	10,24	8.65
				DEPTH #	0 10	28	38

Nitrate appears anomalously low

				SILICA	mmvo
		ET.		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	00.
TUDE	1,1	DS VISIB	2 7	RATE NITRITE A) ug-atoms/liter	90,00
N LATITUDE W LONGITUDE	121* 51•1*	AIR TEMP °C WEATH CLOUDS dry wet typ amt	2 2	TRATE N ug-ato	1.01 7.2
rude 4	36* 37.7*	WEATH	7	ATE NIT	
N LATI	36	EMP °C	13.4 12.5	PHOSPIL	40 .55
HOUR	7.9	AIR II dry	13.4	SAT	105 108 104
	1976	BAROM	1013,2	AOU ug-at/1	-27 -41 -19
DATE	8 JUN 1976	WIND dir speed	31 1	OXYGEN EL/1	6.21 6.40 6.25
STATION	1121			TEMP SALINITY SIGMA T OXYGEN AOU SAT *C ppt ml/l ug-at/l Z	25.78 25.82 25.97
		WAVES dir ht p	31 1 2	NIIY S.	
CRUISE	77 74	TRANSP	4	SALI	.0 33 <sub>6</sub> 954 13 33 <sub>6</sub> 943 13 33 <sub>6</sub> 943
		H			12 <b>,10</b> 11 <b>,83</b> 11 <b>,03</b>
				DEPTH	0 5 0

				SILICA	иο«
		<b>9</b> 11		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1.0
吳	•	VISIB	'n	ITE 11te	8 6 5
N LATITUDE W LONGITUDE	36 55.2 121 52.8	AIR TEMP °C WEATH CLOUDS dry wet typ amt	<b>0</b> 0	RATE NITRITE A ug-atoms/liter	• • •
ĬO.	21.	CLOUDS typ ant	œ	ATE 8-at	200
3		ATA	7	NITR	1.2
105	5.2	말		ATE	404
LATI	ق	₽°C wet	13.8 12.6	OSPH	44 42 74
Z	m	IR TEMP *(	80	Ä	
HOUR	7.2	AIR	13	SAT	125 140 111
	20 JUL 1976	BARON	2 2 13 1 1019 <sub>•</sub> 0	AOU g-at/1	7.01 -124 7.89 -199 6.44 -56
DATE	<b>JUL</b>		-	CEN /1 u	
	22	WIND dir speed	Ħ	OXY E1	7,0
5	<b>4</b>	W dir	13	T	82.2
NOT TWIC	1154	۵.	<b>%</b>	1GW	25.18 25.25 25.52
		WAVES Ifrht		<i>5</i> 3	
actura.	첫	뛲	53	INIT	800 804 821
3	보	ANSP B	9	SAL	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
		H _			14,49* 33,800 14,15 33,804 12,91 33,821
				DEPTH	0 2 0
	4	TRANSP	•	DEPTH TEMP SALINITY SIGMA T OXYGEN AOU SAT m °C ppt m1/1 ug-at/1 %	0 14,49* 3

Paired thermometer read 14,43 \* indicates questionable data

				SILICA	<	<b>5</b> M	, ;
		13		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	2,0	1.2	,
		VISIB	ι,	TE ite	40	יש כ	
HOUR N LATITUDE W LONGITUDE	•7•		4	RATE NITRITE A ug-atoms/liter	0.04	•	,
Š	122°	C C	<b>∞</b>	VIE S-at	<b></b>		_
<u> </u>		AIR TEMP °C WEATH CLOUDS dry wet typ amt	2	NITR/ u	۳ <sub></sub> د	, U	
	89	3		\TE	***	. ~	-
KTI	36 55,8	IR TEMP °C dry wet	14.8 13.2	OSPHA	933		1-0.
z	e i	TEH	ထ္	盂			
E CE	8,2	AIR dry	14,	SAT	130	100	6
	92	BAROM	9.2	ou at/1	22 2	30	37
Ħ	19	A E	1019,2	Ā - 8	1, 5	j	
STATION DATE	20 JUL 1976	WIND dir speed		YGEN 11/1	7.93 -152	88	15
	20	WIND r spe	19 0	ő	<b>L</b>	·W	L'I
	5	- <del>1</del>	57	•€	14		72
IAI	2205		7	168	24.14	25.63	25
		WAVES r ht	29 1 2	t/a			
CRUISE	45	WAVES dir ht p	53	IIIY ot	756	22	315
CRU.	MG 45	TRANSP	œ	SALD	33,756	33	33.
		TRA		TEMP SALINITY SIGMA T OXYGEN AOU SAT **C PPt ml/1 ug-at/1 %	14.5I	2,33	1.86
				DEPTH	0 1	` A	70

PHOSPHATE NITRATE NITRITE AMMONIA SILICA 5 118 148 24 200 VISIB ug-atoms/liter ø 24 28 45 39 26 1.6 W LONGITUDE CLOUDS typ ant œ 122\* 00 7.0 7.7 8.7 8.7 112.8 115.6 WEATH N LATITUDE ~ 36. 50.9 .76 .81 .84 1.28 1.45 AIR TEMP °C 14.0 13.2 vet фŢ HOUR 9,3 SAT Z 102 101 103 86 68 m1/1 ug-at/1 BAROM 1019.2 OXYGEN AOU 20 JUL 1976 -2 -13 76 176 196 1 DATE dir speed 5.91 5.90 6.06 5.14 4.09 3.99 0 MIND 20 SIGMA I STATION 25,42 25,54 25,54 25,58 25,76 25,87 26,02 2204 dir ht p N WAVES -SALINITY ᇊ CRUISE **4**5 33,734 33,707 33,617 33,760 33,781 ppt 兌 TRANSP ន 13°09\* 12,35 12,12 11,39 10,87 9.93 TEN C DEPTH 0 5 2 2 2 2 Ħ

\* indicates questionable data

Paired thermometer read 13,00

				SILICA	14	ထ	6	16	17	24	27	32	37	41	65	20	99	74	83	101
		118		AMMONIA T	4.	•2	ټ	٦,	۳,	€,	0•1		ຕູ	o.	0	۴	7.	۳	۲,	o,
LTUDE	1,3	UDS VISIB	9 1	RATE NITRITE A ug-atoms/liter	•19	•19	•22	31	98.	8	•29	.21	•24	£5	ફ	ઇ	50.	03	90•	ું •
W LONGITUDE	122	NTH CLOUDS typ amt	2	IITRATE A ug-at	10.1	9.2	10,1	*0*	*0°	*0 <b>°</b>	1,1*	1.2*	24.6	28.2	31.0	29.7	34.3	37.5	36.4	35.4
N LATITUDE	36° 46 <sub>0</sub> 7°	fP °C WEATH Wet	14.5	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	88	•84	16.													
HOUR N	10.5 3	AIR TEMP °C dry wet	16.0	SAT PHO	104	701	707	8	8		64	<b>7</b>	<b>4</b> 3	33	29	23	15		6	σο
	JUL 1976 10	BAROM mb	0.6101	XYGEN AOU : ml/l ug-at/l	-18				111		283	336	3 <b>2</b> ¢	381	410	448	867		549	571
DATE	20 JUL	WIND dir speed	2 1	OXYGEN ml/l u	00°9	6.05	5.98	5.21	<b>78.4</b>		3,02	2.47	2,68	2,07	1,84	1.48	66•		09	•55
STATION	2203	Ω.	2 2 34	SIGMA T	25,33	25,36	25.48	25,78	25,88	26.04	26,15	26,21	26.27	26.43	26.59	26.65	26.79	26,89	26,98	27,20
CRUISE	ML 45	SP WAVES dir ht	32	SALINITY ppt	33,617	33,624	33,652	33,626	33,747	33,830	33,915	33,927	33,952	34,042	34,126	34 <b>•</b> 119	34.214	34.243	34,266	34,363
_		TRANSP	14	TEMP S.	13,09															
				DEPTH m	0	'n	01	20	ନ	67	73	86	146	194	241	292	389	486	577	763

Nitrate appears anomalously low \* indicates questionable data

				SILICA	6 6 6 23 23 23 23 23 23 23 23 23 23 23 23 23
		VISIB	<b>v</b> o	AMMONIA et	
GITUDE	121* 57.9*		<b>∞</b>	RATE NITRITE A ug-atoms/liter	22 22 23 33 33 33 33
E W LON		EATH CLA	2 8	NITRATE ug-at	1.01 7.8 8.0 8.8 11.9
N LATITUDE W LONGITUDE	36° 41.2°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	14.6 13.9	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	76 276 1 0 0 3 1 0 0 3 1 0 0 3
HOUR	12.4		14.6	SAT	106 105 102 84 74 57
ы	1976	BAROM	1019.0	AOU ug-at/1	-32 -25 -12 87 139 235
DATE	20 JUL 1976	WIND dir speed	8	OXYGEN AOU ml/l ug-at/l	6.18 6.16 6.03 4.40 3.48
STATION	2202	Δ.	2 2 31	SIGMA T	25.42 25.50 25.51 25.51 25.69 26.02
CRUISE	MG. 45	H H	31	TEMP SALINITY *C ppt	33,685 33,660 33,651 33,689 33,742
		TRANS	07	TEMP • C	12.88 12.38 12.26 12.11* 11.68
				DKPTH	2888120

Paired thermometer read 12,05

79

PHOSPHATE NITRATE NITRITE AMMONIA SILICA 28173 625 AIR TEMP °C WEATH CLOUDS VISIB ug-atoms/liter 9 26 24 32 33 33 121 53,7 typ amt ထ 5.5 6.1 11.1 14.2 15.0 2 36 37.6 .68 .57 1.07 1.24 14.0 15.0 Vet dry 119 88 77 13,2 SAI H m1/1 ug-at/1 BAROH 1019.0 73 115 123 20 JUL 1976 OXYGEN AOU 1 dir speed 6.60 6.79 5.00 4.67 2 WIND 8 SIGMA I 25°19 25°27 25°55 25**.**77 25**.**85 2201 ۵. 2 WAVES dir ht SALINITY 32 45 33,753 33,754 33,807 33,821 33,835 PPt 보 TRANSP 앜 14.25\* 13.85 12.70 11.62 11.20 TEMP DEPTH 95228

Paired thermometer read 14,19

\* indicates questionable data

M LONGITUDE

N LATITUDE

HOUR

DATE

STATION

CRITSE

				SILICA	440
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	40°E
呂	<b>.</b>	VISIB	9	RATE NITRITE A ug-atoms/liter	17 14 21
GITU	51.	CLOUDS typ ant	8 7	NIT	·
Į.	121° 51 <sub>0</sub> 1°	요 [	<b>6</b> 0	RATE ug-a	6.7 6.4 8.0
河		RATH	7	NIT 2	<b>⊘</b> 4∞
N LATITUDE W LONGITUDE	36° 37°7°	AIR TEMP °C WEATH CLOUDS dry wet typ ant	15.5 14.0	ноѕрнат	.61 .48 .77
HOUR	13,7	AIR TE dry	15.5		110 117 96
	20 JUL 1976 13.7	BAROM	1018.8	SIGMA T OXYGEN AOU SAT ml/l ug-at/l %	-49 -85 23
DATE	20 JUL	WIND dir speed	7	OXYGEN m1/1	6.19 6.63 5.47
NO.		WI dir	32	H	rn0
STATION	1121	<u>α</u>	1 2	SIGMA	25 <sub>0</sub> 17 25 <sub>0</sub> 23 25 <sub>0</sub> 36
CRUISE	ML 45	꾹	%	TEMP SALINITY •C ppt	33,752 33,752 33,782
ð	抗	TRANSP	œ	SAL	2 A A A
		E T		TEMP C	14,34 14,06 13,54*
				DEPTH	5 01

Paired thermometer read 13.60

				SILICA	488
		18		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	7,7
角	<u>.</u>	VISIB	∞	UTE '11 te	800
GITOD	52.8	CLOUDS typ ant	<b>∞</b>	RATE NITRITE A ug-atoms/liter	
NOT -	121	45	&	RATE ug-a	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
另	<b>:</b> .	ŒATH	7	LIN	
N LATITUDE W LONGITUDE	36° 55,27° 121° 52,8	AIR TEMP C WEATH CLOUDS dry wet typ ant	16.0 15.2	OSPHATE	.61 .19 .20
	es.	AIR TEMP C dry wet	0	T.	
HOUR	7.4	AIR	91	SAT	
		BAROH	1014.2	A0U ug-at/1	
DATE	18 AUG 1976	WIND dir speed	10 2	OXYGEN #1/1	
NOI	•	A T	: 유	A T	67 87 93
STATION	1154	٥.	2 2	SIGM	24.67 24.87 24.93
	9	WAVES ir ht p	22 2	Ĕ.	27.5
CRUISE	ML 46	ਚ	80	ALINI PP	33.612 33.627 33.643
		TRANSP	~	TEMP SALINITY SIGMA T OXYGEN AOU SAT *C ppt ml/1 ug-at/1 Z	16,16 15,28 15,06
				DEPTH #	0 2 01

				SILICA	11 3 4 3
		81.		PHOSPHATE NITRATE NITRITE ANYONIA SILICA ug-atoms/liter	2 4 4 9
		VISIB	∞	E E	8040
N LATITUDE W LONGITUDE	•7•		œ	RATE NITRITE A ug-atoms/liter	00 00 32 32
LONG	122*	AIR TEMP °C WEATH CLOUDS dry wet typ amt	œ	RATE u <b>g-</b> at	0017
<b>&gt;</b>		EATH	7	NIT	ĭ ĭ ĭ M
夏	8	5		빔	
H	55	t C	Ç	PHA	8 228
Y. Z	36° 55 <sub>8</sub> 8°	IR TEMP "( dry wet	16.0 15.0	PHOS	
HOUR	8.9	AIR 1 dry	16.	SAT	
	1976	BAROM	014.5	SIGMA T OXYGEN AOU SAT ml/1 ug-at/1 %	
DATE	18 AUG 1976	WIND dir speed	2 2 15 1 1014,5	KYGEN al/1 u	
	Ä	WIND r spe		ô -	
Z O		* <del>1</del>	ä	H	o H o o
STATION	2205		2	SIGMA	24.20 24.91 25.16 25.36
41		WAVES r ht	7		
CRUISE	97	ੂ ਬ	21	INITY	33 <sub>e</sub> 599 33 <sub>e</sub> 629 33 <sub>e</sub> 664 33 <sub>e</sub> 699
2	捒	TRANSP	<b>∞</b>	SAL	
		TR		TEMP SALINITY S. *C ppt	15,98 15,11 14,07 13,23
				DEPTH	20 to 0

				SILICA	4	t in ;	12	2 2
		<b>8</b>		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	44 4		2.0	9
¥	•	VISIB	•	LITE Hite	200	ខ្លុះ	e E	23
GITUI	122 1.6	CLOUDS typ amt	<b>∞</b>	RATE NITRITE AI ug-atoms/liter	•	••	•	•
NO.	122	- 1 - 1 - 1 - 1 - 1	∞	RATE ug-a	φ <	9 4 V	٥	0
DE 1	•6	WEATH	7	E NII		4 67 4	T -	1 2
N LATITUDE W LONGITUDE	36 50 9	AIR TEMP °C WEATH CLOUDS dry wet typ amt	15.8 15.2	HOSPHATI	22	4.	1-02	1.49
		AIR TE dry	ک 8					
HOUR	6•6	AI	-	SAT	125			
×	1976	BAROM	1014.9	TEMP SALINITY SIGMA T OXYGEN AOU SAT °C ppt nl/1 ug-at/1 %	-126 -118	Ì		
DATE	18 AUG 1976	WIND dir speed	-	OXYGEN #1/1	7.04			
TON	4	ų Th	m	¥	07	<del> </del>	7 72	8
STATION	2204	WAVES r ht p	2 2	SIG	25 <b>.</b>	25.25	25.	26.
SE	94	WAVES dir ht	12	H +	48 46	4 4	3 5	118
CRUISE	捒	ASP	<b>∞</b>	SALIN	33.6	33,654	33.6	33.8
		TRA		TENE C	14.47	13.61	10.97	10,30
				DKPTH	O 1/1	25	8	84

Paired thermometer read 10.90 \* indicates questionable data

Paired thermometer read 11.41 at 30 m; 10.04 at 75 m \* indicates questionable data

				SILICA	•	<b>30</b> 6	<b></b>	ın (	<b>90</b> (	12	13	21	27	<b>25</b>	æ :	42	57	<b>9</b>	<b>7</b> 9	8 2	70
		VISIB	<b>00</b>	AMONTA : r	•	┪.	1.	7.	T <b>*</b> T	1.0	တ္ (	<b>.</b>	<b>3</b> (	<b>)</b>	ې د	·	7.	Ţ.	٠ •	ر ا	•
W LONGITUDE	1,3	UDS and t	80	NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	8	3 8	3	֓֞֞֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	170	27	3	070	97.	1 0	100	<b>1</b>	200	700	/o•	6T.	•
	122	WEATH CLO typ	2 8		•	, . , .	1 ×	T 9	7 0	Y 6	2 0 0 0 T	200	20°C	200	)	* ° °	35.00	21.0	34.0	25.6	) •
N LATITUDE	36° 46.7°	AIR TEMP °C W dry wet	15.8	PHOSPHATE	ō	25		£ 4 4	0		7.0	1 60	1, 37	2.03	2,11	200	2.03	2000	•	1,95	)
HOUR	12,2	AIR TI dry	17.0	SAT		118	122	<u> </u>	76	ξ 5	3 6	47	?	32	]						
wì	AUG 1976	BAROM	1014,3	XYGEN AOU m1/1 ug-at/1		-85	-106	-28	3	10.5	224	90	;	384	· •						
DATE	18 AUG	WIND dir speed	-	OXYGEN m1/1		6.40	6_72	6.11	5-62	96-7	3.67	2.86	•	2.06	•						
STATION	2203	WAVES WI r ht p dir	2 2 26	SIGM I	24.40	24.54	24_82	25,35	25,58	25.83	26.00	26,12	26,18	26.61	26.72	26.65	26.76	26.89	26.99	27,17	
CRUISE	ML 46	NSP 1	1 20	SALINITY ppt	33,410						33,750								34,283	34,359	
		TRA	11	TEMP • C	16,63	16,23	15,37	13,02	11.48*	10,37	486.6	69°6	9.61	8.92	8 <b>.</b> 51	7.87	7.40	69°9	<b>6.14</b>	5,13	
				DEPTH	0	S	9	20	8	ያ	75	001 1	136	184	232	<b>580</b>	376	472	574	89/	

PHOSPHATE NITRATE MITRITE AMONIA SILICA 000000 VISIB ug-atoms/liter 8 882213 CLOUDS typ at 80 ø 2 0 0 0 9 0 0 WEATH Salinity appears anomalously low 19 Paired thermometer read 13,49 15 15 18 48 82 AIR TEM °C 15.2 15.2 200 diy SAT 120 114 125 103 83 m1/1 ug-at/1 MADE 1013,5 DQV -97 -67 -124 -15 95 1 OXYCEN 6.09 6.17 6.17 6.96 dir speed 5.90 N MIN 21 SIGM I 24°42 24°45 24°47 24°47 25°23 25°23 ۵ N WAVES dir ht \* indicates questionable data SALINITY 33**.**646 33**.**406\* 33,433 33,449 33,455 33,629 **71** ppt TRANSP 7 13,59\* 16.49 15.04 10,68 16,54 16.62 TEMP C 052283 DEPTH

W LONGITUDE

N LATITUDE

HOUR .

DATE

STATION

CRUISE

121 57,9

36 41,2

13,2

18 AUC 1976

2202

94

보

9 2 2 2 2

				SILICA	0 0 0 0 0
		VISIB	7	AMMONIA e t	00000
ITUDE	53.7*		œ	RATE NITRITE A ug-atoms/liter	90000
W LONG	121 53.7*	TH CLOUDS typ amt	œ	ITRATE } ug-atc	214 8 8 8 8 4 4 6 0 3 4
N LATITUDE W LONGITUDE	36° 37•6°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	15.0 61	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	15 14 01 26 47
HOUR N	13,9 3	AIR TEM dry	15.0 15.0		120 119 115 104
		BAROH mb	1013.2	AOU 1g-at/1	-96 -92 -72 -19
DATE	18 AUG 1976	WIND dir speed	0	OXYCEN BL/1	6.50 6.48 6.40 5.95
STATION	2201		. 2 34	SIGMA T OXYGEN AOU SAT ml/l ug-at/l Z	24.46 24.54 24.56 25.16 25.26
CRUISE	м. 46	SP WAVES dir ht p	0 1 2	TEMP SALINITY •C ppt	33,424 33,471 33,602 33,637 33,644
		TRANSP	01	TEMP S.	16.41 16.24 14.79 14.19 13.52*
				DKPTH	9888

Paired thermometer read 13,44 \* indicates questionable data

				SILICA	<b>8</b> H 6
		E.		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	000
<b>3</b> 0	•	VISIB	7	RATE NITRITE A ug-atoms/liter	282
)NGITU	1. 51.	CLOUDS typ ant	&D	TE NIT	
ĭ ≥	36° 37°7° 121° 51°11°	ATH (		NITRA1 ug-	40,
TUDE	37.7	2M 0		HATE	18:
ZY Z	<b>%</b>	AIR TEMP °C WEATH CLOUDS dry wet typ amt	15,3 14,8	PHOSP	••
HOUR N LATITUDE W LONGITUDE	4.4	AIR ;	15.	SAT	120
	18 AUG 1976 14.4	BAROM	1013.2	TEMP SALINITY SIGMA T OXYGEN AOU SAT	-98 -86
STATION DATE	8 AUG		25 0 1	XYGEN #1/1 u	6.59 -98 6.47 -86
3		UNIA dir sp	25	H	
STATI	1121	S	33 1 2	SIGMA	24.71 24.76
CRUISE	94	WAVES WIND dir ht p dir speed	33	NITY pt	33,566 33,579
8	ML 46	TRANSP	70	SALI	ต์ ตั้ง เ
		TR		TEMP C	15.79
				DEPTH	0 4 5
				H=4	

				SILICA	- 6 6
		8118	_	ANDINIA 17	444 444
TUDE	2.8°	DS VISIB ent	۲ ۳	RATE NITRITE A ug-atoms/liter	1000
NOT A	121 52.8	TH CLOUDS typ ant	•	ITRATE N ug-ato	1.6 2.0
N LATITUDE W LONGITUDE	36° 55 <sub>6</sub> 2°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	13,6 2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.09 .19
HOUR N	8,3 3	AIR TEMP °( dry wet	14.0 13.6		106 110 3
		BAROM	1014.5	AOU 18-at/1	-27
DATE	20 SEP 1976	WIND dir speed	0 0 1014.5	OXYGEN #1/1	5.87 6.13
STATION	1154		0 × 0	TEMP SALINITY SIGMA T OXYGEN ADU SAT	24 <sub>e</sub> 91 25 <sub>e</sub> 00 25 <sub>e</sub> 14
CRUISE	ML 47	SP WAVES dir ht p	•	ALINITY PPt	33,617 33,628 33,640
		TRANSP	T .	TEMP S	15.06 14.72 14.08
				DEPTH	10.5

				SILICA	- n - a
		VISIB	7	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	4000
rude	•7•	DS VI		TRITE ms/11t	889
LONGI	122	CLOUDS typ amt	ဇာ	RATE NITRITE A ug-atoms/liter	0000
DE ▼		WEATH	7	E NITI	
HOUR N LATITUDE W LONGITUDE	36" 55.8"	AIR TEMP °C WEATH CLOUDS dry wet typ amt	15.6 14.7	HOSPHAT	<b>င်္ဂ နိုင်္ဂ</b>
TOUR N	9.5	AIR TH	15.6		127 113 123 75
	1976	BAROH mb	1014.8	AOU 18-at/1	
DATE	20 SEP 1976	VIND r speed	0	OXYGEN B1/1 u	7.07 -134 6.29 -62 6.92 -114 4.31 128
STATION DATE	2205	P d	0 X 21 0	TEMP SALINITY SIGMA T OXYGEN AOU SAT *C ppt ml/1 ug-at/1 Z	24.91 24.96 25.15 25.28
CRUISE S	ML 47	Ħ	0	NITY S	33,617 33,615 33,710 33,633
<b>3</b>	보	TRANSP	14	P SAL	
					15.07 14.82 14.31 13.38
				DEPTH	0 2 2 2

				SILICA	n n	- 9 E	,
		VISIB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	44	7.5.	•
TUDE	1.6		'n	RATE NITRITE A ug—atoms/liter	9.00	910 848 83	F 7
W LONG	122 1.6	H CLOUDS typ ant	œ	TRATE N ug-ato	ဝ ဖ	5.4 7.7	a
N LATITUDE W LONGITUDE	36° 50°9°	AIR TEMP °C WEATH CLOUDS dry wet typ smt	0 2	HATE NI	10	1 C 8	
N LAI	<b>*</b>	TEMP •(	14.8 14.0	PHOSP	• • •	* • •	_
HOUR	10,5	AIR I dry	14	SAT	124 119	18 %	77
M	SEP 1976	BAROH	1015.2	AOU ug-at/1	-119 -95	98 138	7
DATE	20 SEP	WIND dfr speed	-	OXYGEN AOU m1/1 ug-at/1	6.91 6.68	4.78	3
STATION	2204	<u>α</u>	1 · X 27	SIGMA T	24.94 25.00	25,50 25,63	47017
CRUISE	MC 47	SP WAVES dfrht	76	TEMP SALINITY •C ppt	33,606 33,604 33,610	33,657 33,703	74/077
		TRANSP	14	S TEST		12,34	
				DEPTH	0 ~ 0	ននទ	ţ

AOU appears anomalously high

\* indicates questionable data AOU app

				SILICA	-3	. 4	7	Ś	œ	o	77	91	15	24	18	26	38	07	8	53
		pa j		MMONIA:	0	7	Q	7	9	0	<b>°</b>	0	0		င့	9	0	9	· ·	0
305	1,3	S VISIB	1	rRITE A 3/liter	-02	80.	•16	67.	86	1.07	.50	00	Ş	ပ္ပ	0	00	8	0	0	8
W LONGITUDE	122* 1,	CLOUDS typ amt	8	RATE NITRITE A ug-atoms/liter	<b>-</b>	. 9	∞	2	9			0	6	4	2	9	'n	-4	7	
		WEATH	7	E NITR	<b>-</b> 1	, w	2	4.	7.	ໝື	16	<b>-</b> 1	12.	15.	20	25	29	22	33	24.0
N LATITUDE	36° 46•7°	AIR TEMP °C dry wet	15,2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/líter	ပိ	00	•29	•19	•52	• 59	1.22	94.	•75	66	1,07	1.90	1.79	1,12	2,55	1,28
HOUR	12.0	AIR T dry	16.5	SAT .	124	119	115	96	67	78	75	55	55	64	43	53	21	Ħ	90	œ
ei	1976	BAROM	1015,1	1 AOU ug-at/1	-120	<del>-</del> 94	-74	22	111	115	134	244	248	282	319	<b>4</b> C6	459	534#	558*	572
DATE	20 SEP	WIND dir speed	7	OXYGEN m1/1	6.97	6.71	6,51	5 <b>.</b> 51	4.62	4.59	4.49	3,39	3.40	3.07	2.68	1,83	1,40	•74	•55	•57
STATION	2203	p dár	30	SIGMA T	24,97	5.04	5 <b>•</b> 09	5,28	5.53	25,56	5,73	5.97	<b>6.</b> 08	6,19	26.27	6.53	6,73	6.92	7.05	7.24
SE ST	47 2	WAVES Hr ht	30	È																3
CRUIS	M. 4	TRANSP m di	12 3	SALINI	33,545	33,55	33,56	33,62	33 <b>°</b> 7I	33 <b>,</b> 71	33,72	33,79	33,85	33,92	33.97	34.11	34.17	34.2I	34.29	34, 38
		TE		TEMP • C	14,53	14,23	14.07	13,33	12,42	12,29	11,43	10,35	9.08	<b>9</b> •62	9.41	8.47	7.42	6.25	5,73	4°1I
				DEPTH	0	sO.	얶	20	ଛ	ያ	75	100	120	197	245	292	387	483	576	769

				SILICA	4 r r r v r
		VISIB	7	AMPONIA	400044
CITUDE	121 57.9		8	NITRITE Coms/11 to	24444 8888 8888 8888
NOT M 3		EATH CLA	2	NITRATE ug-at	4 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
N LATITUDE W LONGITUDE	36 41,2	AIR TEMP °C WEATH CLOUDS dry wet typ amt	16.6 15.3	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1,033 1,033 1,033 1,633 1,633
HOUR	13,5	AIR TE dry	16.6	SAT	105 89 87 83 76 75
쁜	SEP 1976	BAROM	1015,2	OXYGEN AOU	-25 58 68 125 133
DATE	20 SE	WIND dir speed	5		6-08 5-16 7-08 4-85 4-85 4-85
STATION	2202	۵.	2 X 29	SIGMA T	25,43 25,43 25,47 25,51 25,60 25,68
CRUISE	М. 47	TRANSP WAVES m dir ht	ਜ 2	TEMP SALINITY  C PPt	33,642 33,683 33,688 33,704 33,704
		TRA	77	igit S	13.05 12.81. 12.61 12.63 12.03
				E E	28888

Paired thermometer read 12,88 Phosphate appears anomalouly high

93

		EI.		PHOSPHATE NITRATE NITRITE AMMON
色	•	VIS	7	ITE
TT.	53.7	UDS	m	NITR
LONG	121°	CLOUDS typ amt	œ	RATE
얼	•	AIR TEMP °C WEATH CLOUDS VISIB dry wet typ amt	7	IIN :
	37.6	;35 ( )	_	:ATE
S	•	Wet (	15,1	OSPI
Z	(C)	TEM	m	E
HOUR N LATITUDE W LONGITUDE	14.4	AIR TEMP °C dry wet	16.	SAT
	20 SEP 1976 14.4 36 37.6 121 53.7	RANSP WAVES WIND BAROM A m dir ht p dir speed mb	9 32 1 X 29 2 1015e0 16e3 15e1 2 8 3	TEMP SALINITY SIGMA T OXYGEN AOU SAT
DATE	SEP	p e	~ ~	KGEN S
	20	ONI P p	•	ŏ
NO		W d1r	29	H
IAI	2201	р.	×	IGMA
Ś		VES ht	н	S
CRUISE STATION	М. 47 2201	TRANSP WAVES m dir ht	32	INITY
E C	코	ANSP	6	SAL
		TR		TEMP

SILICA	H	-	7	7	7
AMMONIA : r	£.	۲,	۳,	0	0
NITRITE coms/lite	00	00	.57	<b>\$</b> 58	•58
NITRATE ug-at	1.6	Ç	7.5	11.6	9.5
PHOSPHATE NITRATE NITRITE AMMONIA ug-atoms/liter	00	ပ် <b>့</b>	•57	645	643
SAT	122	125	8	85	73
OXYGEN AOU ml/l ug-at/l	-109	-121	53	93	141
OXYCEN m1/1	6.7C	98°9	5.25	<b>7. 9. 9.</b>	4.36
SIGMA T	24.77	24.81	25.49	25.60	25.65
SALINITY ppt	33,649	33.652	33.694	33,712	33,722
TEMP C	15.8I	15,64	12,54	12,08	11,83
DEPTH m	0	ιń	27	20	8

				SILICA	106
		811		AMDONIA II	444
Trung	51,1"	UDS VISIB	m	RATE NITRITE A ug-atoms/liter	0.04 0.02 68
W LONG	121* 51.1	NTH CLOUDS Typ ame	2 8	ITEATE	တီ ကို လ
H LATITUDE W LONGITUDE	36° 37°,7°	AIR TEMP °C WEATH CLOUDS dry wet typ ant		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.17 .01
HOUR		AIR TE dry	17,1 15,3		888
	20 SEP 1976 14.9	BAROM	1015.0	AOU ug-at/1	6 53 71
DATE	20 SEP	WIND r speed	7	OXYGEN m1/1	5.4I 4.90 5.02
STATION	1121	WAVES WIND r ht p dir speed	2 X 26	TEMP SALINITY SIGMA T OXYGEN AOU SAT *C PPt nl/1 ug-at/1 X	24.78 24.82 25.45
CRUISE	五 47	¥	31	ALINITY PPt	33.649 33.649 33.697
		TRANSP	œ	TKMP S °C	15 <sub>6</sub> 78* 33 <sub>6</sub> 649 15 <sub>6</sub> 58 33 <sub>6</sub> 649 12 <sub>6</sub> 79 33 <sub>6</sub> 697
				DEPTH	0 4 6

Paired thermometer read 15,86 \* indicates questionable data

				SILICA	∞ ~ v
		B		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	77
置	<b>.</b>	VISIB	ις.	RATE NITRITE A ug-atoms/liter	78.
GIT	52.	CLOUDS typ amt	<b>x</b>	NIT	
3	36° 55 <sub>0</sub> 2° 121° 52 <sub>0</sub> 8°	7 2 1	×	RATE ug-2	4.2
ñ œ	•.	EATH	45	NII:	<b>4</b> 7 C
TICE TICE TICE TICE TICE TICE TICE TICE	55.2	ε <b>ε</b>	7	HATE	649
N LATITUDE W LONGITUDE	%	AIR TEMP °C WEATH CLOUDS dry wet typ amt	13 <sub>0</sub> 0 12 <sub>0</sub> 2 45	HOSP	• •
	_	R TE	3.0		
HOUR		A.	-	SAT	1118
	19 OCT 1976	BAROM	8 0 1017.5	TEMP SALINITY SIGMA T OXYGEN AGU SAT	<b>7</b> 6 9
DATE	Į,		A	GEN /1 u	6.17 6.64 5.76
•	19	WIND r spe	0	OXX 1	6.17 6.64 5.75
LON	s.	H TPp	<b>∞</b>	H <b>d</b> t	88 C 8
STATION	1154	WAVES WIND rht p dir speed	×	SIGM	24.89 25.05
	m	HAVES r ht	х 0 0	E	10.10.10
CRUISE	ML 48	ੱਚ		PP¢	33,595 33,606
ច	豆	TRANSP	7	SA	****
•		Ē			15.08
				DEPTH	φωç

				SILICA	9977
		18		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0004
₩	•	VISIB	'n	III II te	8898
TTOD	•7•	ant disc	00	NITR Ons/	33.31
ORO1	122•	CLOUDS Typ amt	×	RATE NITRIIE A ug-atoms/liter	00 4 N
<b>3</b>		EATH	45	MITIN	1000
<u> </u>	5.8	<b>5</b>		ATE	® (° O 4
N LATITUDE W LONGITUDE	36 55,8	AIR TEMP °C WEATH CLOUDS dry wet typ amt	13,3 11,9	HOSPH	37.
		TE TE	£.	Рч	
HOUR	8,7	AIJ do	뒤	SAT	1120 100 94
_	976	BAROM	1018,2	OXYGEN AOU SAT ml/l ug-at/l %	25 26 29
DATE	H		9	` 60 23	
ă	19 OCT 1976	VIND dfr speed	7 0	)XXGB	6.61 6.30 5.64 5.38
Z		VIND Hr sp	_	H	
STATION	2205		×	r sigm t	24.80 24.89 25.12 25.18
S)		WAVES r ht p	×	isi	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
CRUISE	8	#	0	INITY	33,584 33,598 33,620 33,616
3	뉲	TRANSP	œ	SALJ	ង្គីដូម៉ូដូ
		TRA		TEMP SALINIT	15,48 15,09* 14,12 13,79
				DEPTH	0 5 D S

Paired thermometer read 15,16 \* indicates questionable data

				SILICA	v	9	'n	9	_	. ∞	
		IB		PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	0	٦,	•1	-5	;	9	
岩	*.	VISIB	9	RATE NITRITE A ug-atoms/liter	908	ဗ္ဗ	60	11.	16	57.	
GITU	ř	CLOUDS typ amt	œ	NIT! toms,	·	Ī	•		_		
W LONGITUDE	122 1,6	4 G	×	RATE ug-a	o.	0	9	æ	'n	10.6	
E E		AIR TEMP °C WEATH dry wet	45	Z NIT					m	2	
TITU	36°50,9°	ر د د د	ဆ	PHAT	•43	41	946	848	• 59	66	
N LATITUDE	* %	EMP °(	13.8 12.8	PHOS		_	•	•			
HOUR	9.5	AIR TI dry	13.8	SAT	. (	88	<u>ဗ</u>	105	101	81	
	1976	BAROM mb	1018,2	AOU 18-at/1	;	9	22	-22	7-	64	
DATE	19 OCT 1976	WIND dir speed	7 0 1	OXYGEN AOU SAT ml/l ug-at/l %	· ;	4 88	5 <b>°</b> 02	5,87	5.8I	4.76	
NO.		W) dfr	7	H	2	24	ភ្	브	2	กั	
STATION	2204	S	×	SIGMA T	24.92	24.9	25.0	25.0	25.2	25.4	
ä	48	WAVES dir ht p	30 1 X	ă.	ლ :	ž.	ō	<b>₫</b>	ñ	<u>_</u>	
CRUISE	걸		-	SALINITY ppt	33,593	33.02	33,60	33,59	33,54	33.64	
		TRANSP	<del>.</del>	TEMP S	14,96	14071	14.61	14,53	13,36	12,56	
				DEPTH	0 1	^	10	8	8	50	

Paired thermometer read 6,30. Phosphate appears anomalously low \* indicates questionable data

			SILICA	638222225388554466
	13		AMPONIA F	7747774000000 <del>0</del>
1,3	UDS VISIB	<b>&amp;</b>	RATE NITRITE A ug-atoms/liter	9999977819999999
122	WEATH CLOUDS typ amt	43 X	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	1000 1000 1000 1177 1177 1177 1170 1170
36° 47,7°		11.9	HOSPHATE	1002 1002 1002 1002 1003 1003 1003 1003
11.0	AIR TEMP °C dry wet	14.8	SAT	108 108 108 108 108 108 108 108 108 108
1976	BAROM	1018,2	A0U 18-at/1	12 12 13 13 13 13 13 13 13 13 13 13 13 13 13
19 OCT	WIND dir speed	H	OXYGEN AOU ml/l ug-at/l	22 94 94 95 95 95 95 95 95 95 95 95 95 95 95 95
2203	ρ.	1 X 5	SIGMA T	24.59 24.59 24.74 24.84 25.33 25.03 26.19 26.19 26.95 27.10
M. 48	W. dir	Ŋ	SALINITY PPt	33,371 33,582 33,582 33,543 33,543 33,662 34,061 34,262 34,315 34,405
Zi.	TRANSP	14	TEMP SA	15.66 11.25.66 11.25.66 11.25.66 11.25.66 11.25.66 11.25.66 11.25.66 11.25.66 11.25.66 12.25.66 12.25.66 12.25.66 12.25.66 13.25.
			DEPTH	20 20 100 150 150 242 283 283 283 283 283

N LATITUDE W LONGITUDE

HOUR

DATE

STATION

CRUISE

				SILICA	የ 4 6 6 4 7
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	007070
6-1		VISIB	9	ITE Lite	00 00 17 17
ETE	57.9	CLOUDS By amt	9	NITR Oms/	*******
5 <b>%</b> 07	121° 57 <sub>6</sub> 9°	_	×	RATE NITRITE A ug-atoms/liter	000000
河		EATH	41	NIT)	4
N LATITUDE W LONGITUDE	36 41,2	AIR TEMP °C WEATH dry wet	15.5 13.8	НОЅРНАТЕ	12 22 22 64 64 64 64
		IR TE dry	5.5		
HOUR	12,3	AI	т	SAT .	110 107 106 107 101 82
	1976	BAROM	1017.2	XYGEN AOU ml/1 ug-at/1	97777
DATE	19 OCT 1976	WIND dir speed	8	OXYGEN AOU ml/l ug-at/	5.95 5.81 5.84 5.84 6.65
Ž		di vi	8		444992
STATION	2202	<u> </u>	×	SIGM I	24.62 24.63 24.63 24.63 24.74 24.94 25.41
63		AVES: ht	-		
CRUISE	ML 48	7 H	33	INITY	33,590 33,592 33,595 33,602 33,598
3	녓	TRANSP	4	SAL	ന്ന്ന്ന്ന് നനനനന
		TRA		TEMP SALINIT	16.24* 16.24* 16.24 15.80 14.86
				DEPTH	2 2 2 C v o

Paired thermometers read 16.30 at 5 m; 12.72 at 50 m

				SILICA	4440-
		81		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	m m n n n
30	7.	VISIB	9	RAIE NITRIIE A ug-atoms/liter	20000
NGITO	121 53,7	CLOUDS	<b>0</b> 0	E NIT atoms	
27 🛪	121	-	∞	ITRAT uB-	00400
TUDE	7.6"	WEA	Ħ	ATE N	N W L D L
N LATITUDE W LONGITUDE	36 37.6"	AIR TEMP °C WRATH dry wet	14,3 13,9	HOSPH	222
		AIR TE dry	<u>و</u>		
HOUR	13,7	₽ ₽	Ä	SAT	110 106 105 107
м	1976	BAROH	1016.8	OXYGEN AOU ml/l ug-at/l	-46 -27 -32 -11
DATE	19 OCT 1976	WIND dir speed	6	OXYGEN B1/1	5.97 5.76 5.74 5.83 5.66
<b>X</b> 0		HI dir	29		<u>р</u> фрнп
STATION	2201	WAVES r ht p	×	SIGM I	24.67 24.68 24.70 24.71 24.83
MS.	84	WAVES Lr ht	г г	Ĕ.	<b>4588</b> 5
CRUISE	첫	NSP dt		SALINI' PPt	33,604 33,607 33,600 33,599
		TRANSP	14	TEMP SALINITY •C ppt	16.13 16.07 15.95 15.90 15.37
				DEPTH	3,2,5,0 3,0,0,0

				SILICA	4-	4 ~4
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	<b>m</b> v	'n
ea .	•	VISIB	•	ITE . 11te	8	90
N LATITUDE W LONGITUDE	121° 51,1	AIR TEMP °C WEATH CLOUDS dry wet typ amt	7	RATE NITRITE A ug-atoms/liter	•	•
rong rong	.21°	CLOUDS typ amt	8 7	WTE 18-at	o <sub>o</sub>	0
<b>36</b>		eath	-	NITE	•	•
	37.7	5≊ ಲ	80	HATE	36	3 2
IAT	36° 37 <sub>*</sub> 7°	IR TEMP ° dry wet	15.8 13.8	HOSP	• 1	• •
		R TE Ity	ئ 8		_	
HOUR	14.1	A a	~	SAT	Š	11
(s)	19 OCT 1976 14.1	BAROM nd	1 X 29 2 1017•0	IY SIGMA T OXYGEN AOU SAT m1/1 ug-at/1 Z	341	-51
DATE	OCT	) eed	7	YGEN 11/1	0	6.04
<b>7</b> .	16	WIND dir speed	59	6 °		
STATION	1121	σ. <del>Q</del>	 ×	I GMA	24.66 24.65	24.68
io		VES	-	Ś		
CRUISE	HT 48	WAVES dir he p	32	INITY ppt	33,599	280
3	보	TRANSP	10	TVS		
		TR	,-,	TEMP SALINIT	16,15	16.01
				DEPTH m	<b>0</b> 4	9

				SILICA	พ๓พ
		<b>13</b>		PHOSPHATE NITRATE NITRITE ANDONIA SILICA ug-atoms/liter	000
<b>1</b>		VISIB	9	ITE	10 08 02
	52.8	SDS Stat	0	NITR Ons/	1,55
	121° 52,8°	CLOUDS typ ant	X	RATE NITRITE AI ug-atoms/liter	က္ခတ္
3	_	KATE	7	NITR	 
ianı:	5.2	**		LATE	824
7	36" 55.2"	AIR TEMP C WEATH CLOUDS dry wet typ ant	15.9 14.8	HOSPE	.18 .22 .41
Z	•	T T	6	Ā	
HOUR N LATITUDE W LONGITUDE	8.4	AII da	뒤	SAT	112
	16 NOV 1976	BAROM	1022,2	IY SIGMA T OXYGEN AOU SAT ml/l ug-at/l Z	- 59 - 70 84
DATE	MOV	ed	<b>H</b>	. 1/	6.19 6.33 4.63
	16	WIND dfr speed	0	OXX E	\$ \$ 4
STATION		H dfr	0	₽	H 22
TAT	1154	A	2 6	i GK	24.72 24.76 24.81
		WAVES r ht p		»÷	
CKULSE	49	ᅻ	25	DPt.	33,472 33,467 33,468
3	녗	TRANSP	7	SAL	2 2 2
		AT.		TEMP SALINIT	15.43 15.26 15.01
				DEPTH	0 20

				SILICA	9 11 10 10
		IB		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	0000
e-t	_	VISIB	9	ITE	0000
N LATITUDE W LONGITUDE	122 • 7"	AIR TEMP °C WEATH CLOUDS dry wet typ amt	0 X	RATE NITRITE AN ug-atoms/liter	
1.0NC	22	₽ £	×	ATE 8-al	9999
<b>[35</b>		Ę	7	MITR	• • • •
	8	ME.	• •	1	
ATIT	36°55 <sub>8</sub> 8°	er c	6•4	SPHA	11 00 10 10 10 10 10 10 10 10 10 10 10 1
r z	36	EME ▼	Ä	PHO	
HOUR	9•6	AIR TEMP °C dry wet	17.8 14.9	SAT	95 86 113 97
==		¥	2	U t/1	
	197	BAROM	1022.5	A.O.	27 -64 13
DATE	16 NOV 1976	ğ		GEN 7	5.27 4.78 6.31 5.44
	16	WIND .r spe	0	OXY II	ญ 4 . ชู ณ
N	_	WIND dir speed	8	댐	ឧធ្ន
STATION	2205		9	I GRA	24.62 24.78 24.81 24.93
į,	- •	AAVES r ht p	2 6	<b>%</b>	
CRUISE	649	WA	26	NITY Pt	33,233 33,411 33,419 33,565
CEC	ML 49	TRANSP	_	SALI	n n n n
		TRA		TEMP SALINITY SIGMAT OXYGEN AOU  C ppt n1/1 ug-at/1	15.06 14.93 14.85
				DEPTH *	202

CRUISE STATION DATE   HOUR N LATITUDE W LONGITUDE						
TRANSP WAVES WIND BAROH AIR T at dir ht p dir speed wb dry  13 29 2 6 34 1 1022.5 17.8  TEMP SALINITY SIGMA T OXYGEN AOU SAT  *C PPt m1/1 ug-at/1 X  15.55 33.571 24.77 5.88 -33 107  15.56 33.575 24.82 5.72 -17 104  15.35 33.586 24.87 5.80 -5 101  15.616 33.578 25.07 5.80 -5 101  15.616 33.578 25.07 5.80 -22 105  14.617 33.578 25.07 5.15 6.5					SILICA	ннаае:
TRANSP WAVES WIND BAROH AIR T at dir ht p dir speed wb dry 15.65 33.671 24.77 5.88 -33 107 15.35 33.572 24.87 5.80 -22 105 15.616 33.578 25.07 5.15 6.5 11.80 15.616 33.578 25.07 5.80 -22 105 15.616 33.578 25.07 5.80 -22 105 15.616 33.578 25.07 5.15 6.5 9.15 15.616 33.578 25.07 5.15 6.5 9.15 15.616 33.578 25.07 5.15 6.5 9.15 15.616 33.578 25.07 5.15 6.5 9.15			81		AMMONTA F	00000
TRANSP WAVES WIND BAROH AIR T at dir ht p dir speed wb dry  13 29 2 6 34 1 1022.5 17.8  TEMP SALINITY SIGMA T OXYGEN AOU SAT  *C PPt m1/1 ug-at/1 X  15.55 33.571 24.77 5.88 -33 107  15.56 33.575 24.82 5.72 -17 104  15.35 33.586 24.87 5.80 -5 101  15.616 33.578 25.07 5.80 -5 101  15.616 33.578 25.07 5.80 -22 105  14.617 33.578 25.07 5.15 6.5	LTUDE	1,68			TTRITE ,	000000 H C 8 9 9
TRANSP WAVES WIND BAROH AIR T at dir ht p dir speed wb dry  13 29 2 6 34 1 1022.5 17.8  TEMP SALINITY SIGMA T OXYGEN AOU SAT  *C PPt m1/1 ug-at/1 X  15.55 33.571 24.77 5.88 -33 107  15.56 33.575 24.82 5.72 -17 104  15.35 33.586 24.87 5.80 -5 101  15.616 33.578 25.07 5.80 -5 101  15.616 33.578 25.07 5.80 -22 105  14.617 33.578 25.07 5.15 6.5	W LONG	122	OT OT E	×	TRATE )	00000
TRANSP WAVES WIND BAROH AIR T at dir ht p dir speed wb dry  13 29 2 6 34 1 1022.5 17.8  TEMP SALINITY SIGMA T OXYGEN AOU SAT  *C PPt m1/1 ug-at/1 X  15.55 33.571 24.77 5.88 -33 107  15.56 33.575 24.82 5.72 -17 104  15.35 33.586 24.87 5.80 -5 101  15.616 33.578 25.07 5.80 -5 101  15.616 33.578 25.07 5.80 -22 105  14.617 33.578 25.07 5.15 6.5	LITODE	50.9	C WEAT		PRATE NI	
TRANSP WAVES WIND BAROH  TRANSP WAVES WIND BAROH  A dir ht p dir speed wb  13 29 2 6 34 1 1022_5  TEMP SALINITY SIGMA T OXYGEN AOU S  TEMP SALINITY SIGMA T OXYGEN AOU S  C PPt M1/1 ug-at/1  15_55 33_571 24_77 5_88 -33 1  15_55 33_557 24_879 5_66 -12 1  15_53 33_556 24_83 5_559 -5 1  15_616 33_586 24_87 5_89 -22 1  14_617 33_578 25_07 5_15 65		<b>%</b>	t TEMP	<b>,</b> 8 15.	PHOSI	
CRUISE HL 49 HL 49 TRANSP WAY) H dir hi 13 29 3 TEMP SALINITY C PPt 15-59 33-571 15-39 33-586 15-39 33-586 15-31 33-586 15-17 33-578	HOUR	10.6		11	SAT	103
CRUISE HL 49 HL 49 TRANSP WAY) H dir hi 13 29 3 TEMP SALINITY C PPt 15-59 33-571 15-39 33-586 15-39 33-586 15-31 33-586 15-17 33-578	M	1976	BAROM	1022.5	AOU ug-at/1	-33 -17 -22 -25
CRUISE HL 49 HL 49 TRANSP WAY) H dir hi 13 29 3 TEMP SALINITY C PPt 15-59 33-571 15-39 33-586 15-39 33-586 15-31 33-586 15-17 33-578	DAT	16 NOV	IND	H	OXYCEN #1/1	5.00 5.00 5.00 5.00 5.00 5.00
CRUISE HL 49 HL 49 TRANSP WAY) H dir hi 13 29 3 TEMP SALINITY C PPt 15-59 33-571 15-39 33-586 15-39 33-586 15-31 33-586 15-17 33-578	STATION	2204			SIGM T	24.77 24.77 24.82 24.83 24.83
		4	ਚ	O.	LINITY :	571 5.571 5.586 5.590 5.586
	ម	Ħ	TRANS	13	SAI C	
<b>X</b> C						
					20	

			ŀ	SILICA	7	7 -	- 7	0	4	<b>o</b> n 	14	22 72	; <del>R</del>	47	<b>29</b> *	8	93*	<b>#</b> 07
		<b>8</b> 3		AMMONTA F	0	<b>Q</b> (	90	9	<b></b>	Ç	Q (	<b>0</b> 0	9	9	9	9	9	0
LTUDE	1,3	UDS VISIB	9	RATE NITRITE A ug-atoms/liter	8	8	38	8	•24	•21	19	0 0 0 0	8	0	03	0.5	0.03	8
W LONGITUDE	122•	ATH CLOUDS TYP AME	×	IITRATE I ug-ato	4	بار در	9	9	1 <b>.</b> 4	9 <b>°</b> 6	က ် ကို ်	17 <b>.</b> 3	18.4	26.4	18.4	31.7	33,2	13,5
N LATITUDE	36° 46 <sub>•</sub> 7°	P°C WEATH Wet	15,8 2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	•21	•19 %	6	.05 50	•33	533	14°	1-12	2,36	2,31	1,29	1-44	3,16	2,13
HOUR N	11,8	AIR TEMP °C dry wet	18,5	SAT PH	108	108	109	109	8	87	<b>9</b> ;	<b>3</b>	88	33	18	12	11	<b>∞</b>
,		MQ.	2.5	υ ιτ/1	<u> </u>	- 38 - 138	វេហ្	5	4	<b>.</b>	<u>_</u> !	197 225	: <del>::</del>	30	# 7	0	9	7,4
M	197	BAROM	707	¥ 86	-38	ï	ī	Ī			ä	7 7	m	38	48	2	Ŋ	iO
DATE	16 NOV 1976		2 1022,2	OXYGEN AOU m1/1 ug-at/1		20 00 N												
STATION DATE	203	WIND p dir speed	4 34 2	SICMA T OXYGEN AC	5.94		6.05	6.08	5.71	5.14	4.2I		2.42	2,13	1,16	•78		92
STATION	49 2203	WAVES WIND dir ht p dir speed	8	SIGMA T	24.57 5.94	24.58 5.94	24.69 6.05	24,82 6,08	25e11 5e71	25.43 5.14	25e73 4e2I	26 <sub>2</sub> 27 3 <sub>2</sub> 78	26.41 2.42	26,58 2,13	26.77 1.16	26,92 ,78	27,05 .72	27,24 ,56
	203	WIND p dir speed	3 4 34 2	Y SIGMA T	33,337 24,57 5,94	20°	33,385 24,69 6,05	33,429 24,82 6,08	33,404 25,11 5,71	33,452 25,43 5,14	33,567 25,73 4,2I	33-813 26-27 3-78	34.011 26.41 2.42	34 <sub>e</sub> 093 26 <sub>e</sub> 58 2 <sub>e</sub> 13	34,176 26,77 1,16	34.216 26.92 .78	34,270 27,005 ,72	34,374 27,24 ,56
STATION	49 2203	WAVES WIND dir ht p dir speed	29 3 4 34 2	SALINITY SIGMA T ppt	15,63 33,337 24,57 5,94	33,335 24,58 5,94	15,29 33,385 24,69 6,05	14,82 33,429 24,82 6,08	13,36 33,404 25,11 5,7I	11,89 33,452 25,43 5,14	10,73 33,567 25,73 4,21	9.09 33.913 26.27 3.78	8e73 34e011 26e41 2e42	8 <sub>6</sub> 05 34 <sub>6</sub> 093 26 <sub>6</sub> 58 2 <sub>6</sub> 13	7,14 34,176 26,77 1,16	6.30 34.216 26.92 .78	5,58 34,270 27,05 ,72	4 <sub>0</sub> 59* 34 <sub>0</sub> 374 27 <sub>0</sub> 24 <sub>0</sub> 56

\* indicates questionable data

AOU and phosphate appear anomalously low Silicate appears anomalously high at 477 and 575 m and low at 771 m

Paired thermometer read 4.65

			,	SILICA	6 H 2 Z Z Z Z
		VISIB	9	AMONTA 15	0000000
TLODE	121° 57.9°	CLOUDS VIS	0	RATE NITRITE A ug-atoms/liter	9000 4 E 04
M LONG		WEATH CLC Typ	2 X	NITRATE ug-at	0000100
N LATITUDE W LONGITUDE	36" 41.2"	AIR TEMP °C WE dry wet	19,8 16,5	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	00 00 24 34 34 34 34
HOUR N	13,5	AIR TE dry	19,8	SAT	111111111111111111111111111111111111111
bá E	16 NOV 1976	BAROH	1020,0	OXYGEN AOU m1/1 ug-at/1	-51 -53 -47 -18 19
DATE	16 NOV	WIND dir speed	7	OXYGEN #1/1	6.06 6.09 6.05 5.74 5.39
STATION	2202	<b>p</b>	2 5 34	SIGMA T	24.75 24.76 24.79 24.86 25.01
CRUISE	ML 49	SP WAVES dir ht	33		33,597 33,594 33,579 33,608 33,611
		TRANSP	9	TEMP SALINITY •C ppt	15,75 15,68 15,48* 15,27 14,61
				DKPTH	o ~ 2 2 2 2

\* indicates questionable data

Paired thermometer read 15,54

				SILICA
		SIB	9	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter
Tude	3,7	DS VI.		RATE NITRITE AN ug-atoms/liter
LONGI	121* 5	CLOUDS typ amt	×	RATE N ug-ato
IDE W	9	WEATH	7	TE NIT
I LATITI	36° 37.6° 121° 53.7°	AIR TEMP °C WEATH CLOUDS VISIB dry wet typ amt	21.5 17.5 2 X 0	PHOSPHA)
HOUR N LATITUDE W LONGITUDE	14.4	AIR II dry	21.5	
	16 NOV 1976 14.4	BAROM Ed	019.2	DEPTH TEMP SALINITY SIGMA T OXYGEN AOU SAT m °C ppt ml/l ug-at/l Z
DATE	YON 9:	WAVES WIND BARC dir ht p dir speed mb	2 1 5 35 1 1019.2	XYGEN m1/1 u
ION		WIND dir spe	35	₽
STATION	2201	WAVES r ht p	1 2	SIGM
CRUISE	ML 49		32	INITY ppt
5	¥	TRANSP	œ	F SAI
		-		TEK C
				DEPTH

Paired thermometer read 15,33 \* indicates questionable data

242.42

11 11 11 14

108 104 106 106 99

-41 -453 -30 -28

5.95 6.01 5.86 5.87 5.50

24.73 24.76 24.85 24.88 24.95

33,573 33,591 33,601 33,601

15,73 15,62 15,27\* 15,16

982500

				SILICA	<b>ທ</b> ຕ ເ
		<b>118</b>		AMPONIA	<b></b>
adu	•1•	S VIS	9	FRITE 1/11te	000
LONGIT	21* 51,	CLOUDS typ amt	0	RATE NITRITE A ug—atoms/liter	
N 3	H •	KATH	7	NITR/ ug	Ç <b>Ç</b> °
N LATITUDE W LONGITUDE	36" 37,7" 121" 51,1"	AIR TEMP °C WEATH CLOUDS VISIB dry wet typ amt	21.5 17.5	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	.18
HOUR	14.9	AIR TEMP * dry wet	21.5		95 106 104
62	1976	BAROH	1019,2	TEMP SALINITY SIGMA T OXYGEN AOU SAT *C ppt ml/l ug-at/l X	-28 -28
DATE	16 NOV 1976	WAVES WIND r ht p dir speed	32 1 5 35 1 1019 <sub>e</sub> 2	OXYGEN B1/1 '	5.17 5.79 5.85
EON EON		WI dar	35	H	نة تو ت
STATION	1121	SS T G	s 1	SIGM	24.67 24.69 24.79
CRUISE	67	WAVES dir ht	32	NITY pt	575 574 587
25	보	TRANSP m	7	SALT	33,575 33,574 33,587
		AL .		TEMP	16,00 15,92 15,50
				DKPTH	0 2 3

				SILICA	<b>~</b> ~ 4
		83		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	000
뙲	<b>.</b>	VISIB	9	RATE NITRITE AI ug-atoms/liter	8 4 0
SITU	52	CLOUDS typ amt	<b>о</b> ×	NIT.	
Š	121 52.8"	4 G	×	KATE 18-al	مَ سَ لَ
<b>3</b>		AIR TEMP °C WEATH CLOUDS dry wet typ amt	7	NITIN	6 13
	55.2	<b>5</b>		<b>LATE</b>	# <b>5</b> 5
Y	36° 55,2°	IR TEMP *( dry wet	10,8 8,2	10SPE	. 39 . 39
Z		Z TE	8	ä	
HOUR N LATITUDE W LONGITUDE	8.3	AII dı	77	SAT Ž	114 93 107
	7 DEC 1976	BAROM	1021.3	AOU -at/1	522
DATE	EC 1		91	EN L	
_	7 D	WIND dfr speed	7	OXYG #1/	6.44 5.27 6.01
<b>3</b>		WI ddr	•	H	87.7
STATION	1154		×	IGM	25.08 25.07 25.07
		WAVES dir ht p	0	01 <b>&gt;</b> +	
CKUISE	20		0	INIT	33,605 33,602 33,608
5	뎦	TRANSP	ø	SAL	200
		¥.		TEMP SALINITY SIGMA T OXYGEN AOU SAT *C ppt m1/1 ug-at/1 Z	14.26 14.29* 14.29
			·	DEPTH	0 5 0

Paired thermometer read 14.23

\* indicates questionable data

			•	SILICA	<b>የጉ</b> ቀታ ላው ላ
		i B		PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	404,
TUDE	•7•	S VISIB		TRITE s/lite	20 20 27
N LATITUDE W LONGITUDE	122	AIR TEMP °C WEATH CLOUDS dry wet typ amt	×	RATE NITRITE A ug-atoms/liter	10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0
TUDE 1	***	WEATH	7	TE NIT	
LITYI N	36 55,8	IR TEMP °C dry wet	12,5 10,0	PHOSPHA	644 600 600 600 600 600 600 600 600 600
HOUR	9•3	AIR II dry	12,5	Z Z	90 90 78
	1976	BAROH Be	1021.3	SIGMA T OXYGEN AOU S ml/l ug-at/l	. 10 48 51 66
DATE	7 DEC 1976	WAVES WIND dir ht p dir speed	-+	OXYGEN BI/1 u	5.50 5.08 5.05 4.91
STATION	92	VI dir	10	± ≰	60000 60000
STA	2205	WAVES r ht p	7 1 3	SIG	25.01 25.02 25.03 25.06
CRUISE	<b>1</b> 4.		11	TEMP SALINITY •C ppt	33,599 33,597 33,596 33,596
ប	Z	TRANSP #	17	R SAI	
		-			14.53 14.52 14.43 14.27
				DKPTH B	200

			,	SILICA	4	m	m	m	'n	4
		1.18	_	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	9	<b></b>	Ç	9	Ç	0
JDE	. 9	S VISIB		RATE NITRITE A ug-atoms/liter	£1.	•17	•16	•15	22	•20
His	ř.	Ĕ	×	N I						
W LONGITUDE	122 1.6	cyp and	×	RATE ug-a	2	9.	<b>ω</b>	2	1.6	Ď
DE E		WEATH	8	E NIT	7	-	7	_	7	7
N LATITUDE	36 50.9	AIR TEMP °C WEATH dry wet	9•3	HOSPHAT	• 35	41	17.	• 35	44	• 39
Z		AIR TE dry	11.0	Pri						
HOUR	10,3	AIR	#	SAT	98	76	92	66	101	112
	7 DEC 1976	BAROM mb	1021.8	AOU 1g-et/1	<b>6</b> ^	29	40	9	7	-58
DATE	7 DEC	WIND dir speed	2	OXYGEN AOU m1/1 ug-at/1	5,51	5.28	5.16	5.54	5.67	6.27
¥		WI Hr	11			_	_	_		_
STATION	2204		1 3	SIGMA T	25 <b>.</b> 01	25.00	25.00	25,00	25.01	25,00
מ		WAVES r ht	7	vs 						
CRUISE	20	- ਚ	#	INITY	33,605	•597	•593	• 596	<b>•</b> 599	589
ទី	보	TRANSP II	15	SAL	33	33	8	33	33	33
		TRA	<b>~</b>	TEMP SALINITY S •C PPt	14.57	14.60	14.60	14.57	14,56	14.57
				DEPTH	0	'n	약	2 <b>0</b>	ጽ	ያ

				SILICA	cc	9 4	ď	۱ ۷		) v	, r	7	<u> </u>	3 1	1 6	\$ \$	γ γ	•	7	7 6
		a i		APBONIA r		9	; -	10	9	9	9	9	9	Ç	•	• r	) G	•	Q	4
TUDE	1,3*	CLOUDS VISIB	0 7	RATE NITRITE A ug-atoms/liter	8	8	10	H	0	20	11	05	03	90	80	<b>1</b>	62		10	0.
E W LONGITUDE	122	WEATH CLOUDS typ ant	2 *	NITRATE ug-at	9•9	ب 1000	2,5	1.5	1.	2.7	5,5	606	4.5	13.1	23.2	29.6	27.8			
N LATITUDE	36 46.7	AIR TEMP °C W	11.5	PHOSPHATE NITRATE NITRITE AMMONIA ug-atoms/liter	938	939	040	• 33	•58	99•	88	444	• 76	1.43	1.57	2.17	2,10		2,78	• 55
HOUR	12.0	AIR I dry	15.5	SAT	105	103	104	114	107	16	78	11	75	ያ		37	28			7
bi	DEC 1976	BARON	1020.8	XYGEN AOU m1/1 ug-at/1	-24	-16	-19	<b>-</b> 68	-32	<b>7</b>	112	120	130	273		357	420			280
DATE	7 DEC	WIND dir speed	8	OXYGEN #1/1 u	5.87	5.79	2,82	6.38	5.97	5.18	<b>6.</b> 51	4.57	4.45	3.05		2,39	1,82			<b>4.</b>
STATION	2203	E.	1 3 8	SIGM I	24.97	24.97	24.97	24.99	24.99	25 <b>.</b> 09	25.25	25.53	25,50	22.90	26.22	26.46	26.66	i (	10°/7	27,23
CRUISE	Б	TRANSP WAVES	15 9	SALINITY pp t	33,591	33,087	35,080	33.600	33.602	33,508	100000	33.65.Z	750000	230/20	33.894	34.022	34,103	100 70	340.237	700.00
		TRA	<b>-</b>	TEMP • C	14,73	T/ %T	2,44	14.65	14°04	13 26	11.00	12	100	1007	T .	20 I	7.	9 6	000 000 000 000 000	70*4
				DEPTH	<b>O</b> M	י בַ	3 8	2 8	3 5	2 2	2 5	135	125	110	077	<b>507</b>	<b>2</b> 2	£ 5	4 6	07/

				SILICA	41004	4 N
		<b>8</b>		PHOSPHATE NITRITE AMMONIA SILICA ug-atoms/liter	สูญสูสูง	7 H
园	•	VISIB	7	RATE NITRITE AI ug-atoms/liter	24 21 20 27	24
itu	57.9	CLOUDS typ amt	Ö	NIT! toms/		
W LONGITUDE	121 57.9		×	RATE ug-a	2°6 3°0 1°7	4 4
		WEATH	7	Z NIT	ивин	8 8
TITO	36* 41.2*	Э.	o,	PHATE	35 43 46	37
N LATITUDE	<b>.</b> 96	EMP °(	17.8 12.0	PHOS	• • •	
HOUR	13,7	AIR TEMP °C dry wet	17.8	SAT	102 100 99 96	81
	7 DEC 1976	BAROM	1019,5	OXYGEN AOU ml/1 ug-at/1	-8 1 22	63
DATE	7 DEC	WIND dir speed	6	OXYGEN m1/1	5.68 5.59 5.37 5.37	16°4
NO		W] dfr	26	H	2222	22
STATION	2202	<b>6</b> .	×	SIGMA I	24,96 25,00 24,99 25,00	25.02 25.02
		AVES ht	•			
CRUISE	ያ	4 T.	•	DPC PPC	33,614 33,615 33,609 33,609	603
2	捒	TRANSP	21	SAL		
		TRA		TEMP SALINITY	14.83 14.67 14.70 14.56	14,53
				DEPTH	2000	88

				YOI,	m m ~ m ·
ts.	•	VISIB	∞	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	16 20 19 20 20 20 20 20 20 20 20 20 20 20 20 20
GITUD	121° 53,7°	CLOUDS typ amt	0	RATE NITRITE A ug-atoms/liter	10.010.0
NOT A	121	표 5 년	×	ITRATE ug-a	1 1 2 1 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1
N LATITUDE W LONGITUDE	36 37 6	AIR TEMP °C WEATH CLOUDS dry wet typ amt	18 <sub>e</sub> 3 15 <sub>e</sub> 1 2	PHOSPHATE N.	8 3 8 4 5
HOUR	14.8	AIR I dry	18,3		103 101 93
	7 DEC 1976	BAROM	1019•3	A0U 1g-at/1	-13 -12 33 33
DATE	7 DEC	WIND dir speed	13 0 1	OXYCEN BL/1 u	5.73 5.67 5.67
STATION	2201		0 X 13	TEMP SALINITY SIGMA T OXYGEN AOU SAT	24.95 24.99 24.99 25.01
CRUISE	7E 50	ISP WAVES dir ht p	0	ALINITY PPt	33,616 33,612 33,612 33,612
		TRANSP	14	TENE S	14.89 14.67 14.69 14.60
				DKPTH m	0 2 2 8

				SILICA	9 5 7
		VISIB	80	AMMONIA et	2 ° 8
TUDE	51,1			RATE NITRITE A ug-atoms/liter	11. 114.
W LONG	121° 51•1	TH CLOUDS typ amt	0 ×	ITRATE   ug-at	1100
N LATITUDE W LONGITUDE	36° 37•7°	AIR TEMP °C WEATH CLOUDS dry wet typ amt	13.8 2	PHOSPHATE NITRATE NITRITE AMMONIA SILICA ug-atoms/liter	 
HOUR N		AIR TEMP °(	15.8 13.8	SAT PH	93
	7 DEC 1976 15.2	BAROM	1019,3	_	37
DATE	7 DEC	WIND dir speed	•	OXYGEN AOU ml/1 ug-at/1	5,16 5,15
STATION	1121	<u>α</u>	96 x 0	SIGMA I	24.94 25.01 25.01
CRUISE	년 8	_ <del>1</del>	•	TEMP SALINITY •C ppt	33,614 33,606 33,603
		TRANSP	15	TEMP S	14.93 14.56 14.57
				DEPTH 8	0 v Q

Represents combined nitrate and nitrite