OCEANOGRAPHICAL OBSERVATIONS
IN THE PACIFIC OCEAN IN 1962
H.M.A.S. *GASCOYNE*
Cruise G 1/62

OCEANOGRAPHICAL CRUISE REPORT NO. 13

DIVISION OF FISHERIES AND OCEANOGRAPHY
COMMONWEALTH SCIENTIFIC AND INDUSTRIAL
RESEARCH ORGANIZATION, AUSTRALIA 1967

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AUSTRALIA

MELBOURNE, 1967

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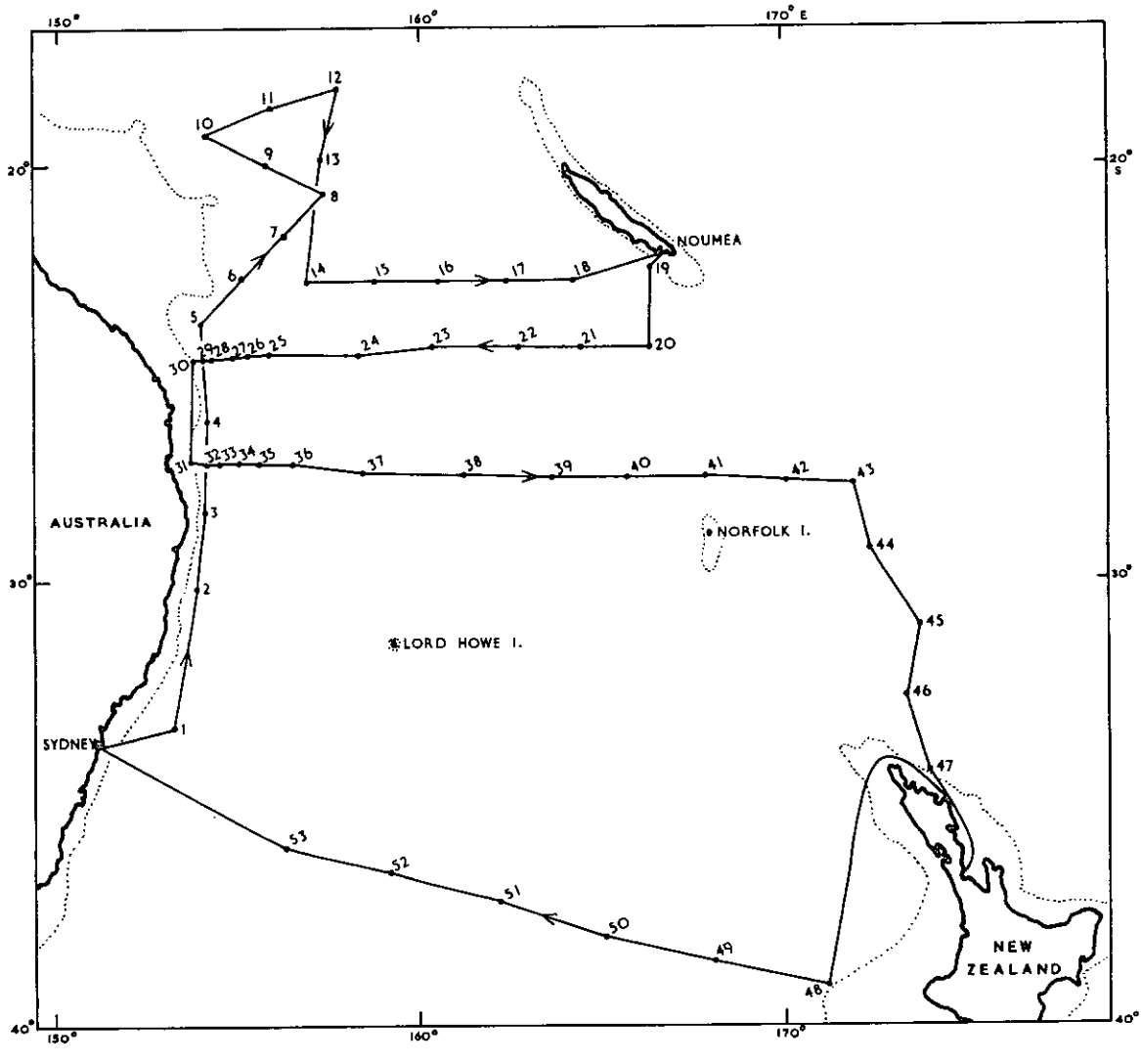
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OCEANOGRAPHICAL CRUISE REPORT

No. 13

Oceanographical Observations in the Pacific Ocean in 1962

H.M.A.S. Gascoyne

Cruise G1/62

January 13 - February 16, 1962

I. INTRODUCTION

This report records the data for the first cruise in 1962 of H.M.A.S. Gascoyne, Royal Australian Navy oceanographical frigate, in the Pacific Ocean.

Objectives

The cruise was planned to complete the network of oceanographic stations in the Coral Sea during the southern summer, to examine the source regions of the East Australian Current and its structure along the coast, and to carry out intercalibration tests off Noumea.

Itinerary

The cruise began at Sydney on January 13, worked a line of stations north to about 20°S., then proceeded south and east to Noumea. From Noumea, two transects were made across the Coral Sea, followed by a southward line of stations to Auckland. From Auckland a line of stations was worked west to Sydney where the cruise ended on February 16 (Fig. 1).

Personnel

E.J.F. Wood (Cruise Leader)
G. Nicholson
W. Prothero
J. Staniforth
B. Scott

The analyses of hydrological samples made in the ship's laboratory were carried out by Messrs Prothero and Staniforth, and samples returned to Cronulla were analysed by Messrs Davies and Walker. The primary production samples were taken, incubated, and counted aboard by Mr Scott. Pigment samples

were taken aboard by Mr Scott and the determinations made at Cronulla by Mr Wootton. Phytoplankton was collected by Mr Scott and counts and identifications were made by Mr Wood. The zooplankton samples were weighed at Cronulla by Mr Tranter.

The data were processed under the direction of Mr Crooks by Mrs Derrick, Mrs Tarbett, and Misses Johnston, Lalor, and Wanstall. The track chart was prepared for publication by Mr Breach and Mrs Cozens.

II. WORK ACCOMPLISHED

Fifty-three stations were worked (G1/1/62 - G1/53/62). Bathythermograph casts were made and subsurface hydrology samples taken at all stations. Primary production and pigment samples were taken at 46 stations, and phytoplankton samples at 45 stations. Zooplankton samples were taken at 17 stations.

Table 1 shows the work done at each station.

TABLE 1

Stn No.	BT	Hydrology	Primary Production	Pig-ments	Zoo-plankton	Phyto-plankton
1	+	+	+	+		+
2	+	+	+	+		+
3	+	+	+	+		+
4	+	+	+	+		+
5	+	+	+	+		+
6	+	+	+	+		+
7	+	+	+	+		+
8	+	+	+	+		+
9	+	+	+	+		+
10	+	+	+	+		+
11	+	+	+	+		+
12	+	+	+	+		+
13	+	+	+	+		+
14	+	+	+	+		+
15	+	+	+	+		+
16	+	+	+	+		+
17	+	+	+	+	+	+
18	+	+	+	+	+	+
19	+	+				
20	+	+	+	+		+
21	+	+	+	+	+	+

TABLE 1 Cont'd...

Stn No.	BT	Hydrology	Primary Production	Pig-ments	Zoo-plankton	Phyto-plankton
22	+	+	+	+	+	+
23	+	+	+	+		+
24	+	+	+	+	+	+
25	+	+	+	+		+
26	+	+				
27	+	+	+	+		
28	+	+				
29	+	+				
30	+	+	+	+	+	+
31	+	+	+	+		+
32	+	+				
33	+	+				
34	+	+	+	+	+	+
35	+	+				
36	+	+	+	+		+
37	+	+	+	+	+	+
38	+	+	+	+		+
39	+	+	+	+	+	+
40	+	+	+	+		+
41	+	+	+	+	+	+
42	+	+	+	+		+
43	+	+	+	+		+
44	+	+	+	+		+
45	+	+	+	+	+	+
46	+	+	+	+	+	+
47	+	+	+	+	+	+
48	+	+	+	+	+	+
49	+	+	+	+		+
50	+	+	+	+	+	+
51	+	+	+	+	+	+
52	+	+	+	+	+	+
53	+	+	+	+		+

BT Bathythermograms

III. METHOD OF COLLECTION AND ANALYSIS OF SAMPLES

1. Physics

Temperature.- Water temperatures were taken with deep-sea reversing thermometers; protected thermometers with a range of -2°C to 30°C and unprotected thermometers with a range

of -2°C to 30°C, or -4°C to 60°C. The accuracy of the temperatures is considered to be ± 0.03 deg C.

Bathythermograph.- A 900 ft bathythermograph was used at the stations indicated in Table 1. A photograph of each slide is filed at Cronulla.

Thermometric Depth.- Depth calculations were made by the method described by Pollak (1950), and are considered accurate to ± 15 m below 1000 m and to 1% above that depth.

Sigma-t.- Sigma-t values were calculated, by computer, using the Table of Sigma-t given by the U.S. Hydrographic Office (1955).

2. Chemistry

Salinity.- Salinity was measured on board using an inductive salinometer (Brown and Hamon 1961).

Dissolved Oxygen.- A version of the standard Winkler method was used to determine the amount of dissolved oxygen in the seawater samples. The version used is a modification of that described by Thompson and Robinson (1939) and differs in some respects from the revision by Jacobsen, Robinson and Thompson (1950). Potassium iodate was used as the iodometric standard, and the reagents necessary to fix the oxygen in solution were used at different concentrations. Duplicate titrations were made on approximately every tenth sample. Saturation values were calculated by computer using the simpler of the equations given by Richards and Corwin (1956) -

$$O_2(\%\ \text{Satn.}) = \frac{O_2(\text{ml/l}) \times (33.5 + T^\circ C) \times 100}{332.4 - (1.854 \times S‰)}$$

Inorganic Phosphate.- The method of Atkins (1923) was used with 1 ml molybdate reagent (300 ml 10% w/v ammonium molybdate and 100 ml 50% v/v sulphuric acid) and 0.1 ml 1% w/v stannous chloride diluted afresh from a 40% stock solution in hydrochloric acid, which was kept under paraffin. The reagents were automatically dispensed by a piston dispenser.

Standard phosphate solutions were made up in distilled water. At air temperatures less than 25°C analyses were carried out in batches of 10; readings were commenced within 10 minutes of adding reagents, and completed within 10 minutes. At air temperatures greater than 25°C batches of six were analysed; readings were commenced within 5 minutes of adding

reagents and completed within 7 minutes. Each batch was compared with a distilled water blank and a 0.65 µg-atom/l standard in a Hilger Spekker absorptiometer using 4 cm cells and Ilford 608 filters. Each week a complete check was made using standards up to 3.25 µg-atom/l. Results are given as µg-atom/l without any correction for salt error and are precise to ± 10% for values less than 0.5 µg-atom/l and ± 5% for higher values. To correct for salt effects, the results given can be multiplied by 1.15.

Total Phosphorus.- 100 ml samples were drawn from the Nansen bottles into 150 ml Pyrex conical flasks, 0.2 ml of 72% perchloric acid was added, and digestion at 200°-250°C carried out immediately on a sand tray. After evaporation of water, heating was continued until fuming of the salt residue commenced. The samples were then allowed to cool and 100 ml of distilled water and 2 drops of 2% w/v phenolphthalein were added. If alkaline, perchloric acid was added until a slight acidity persisted. The flasks were allowed to stand for about 24 hours to allow the salts to dissolve. Phosphate was then determined as described for inorganic phosphate. Results are given as µg-atom/l, without salt correction. To correct for salt effects, the results given can be multiplied by 1.15.

Nitrate.- Samples taken at sea were stored in plastic bottles and preserved with 2 drops of saturated $HgCl_2$. Nitrate was determined at the Cronulla laboratory by the strychnidine method (Rochford 1947). The reagent was prepared by the addition of 0.64 g strychnidine to a litre of nitrate-free sulphuric acid. 5 ml of this reagent were added, with minimum agitation, to 5 ml seawater or standard nitrate solution. The standards were made up in a mixture of equal volumes of artificial seawater and nitrate-free sulphuric acid. The standards and samples were shaken to distribute the reagent, and the colour developed for 2 hours. The solutions were read in a Unicam SP 600 spectrophotometer at a wavelength of 530 mµ using a 5 mm cell. Samples with an extinction greater than that of the standard corresponding to 14.4 µg-atom/l were diluted with artificial seawater-sulphuric acid mixture before reading. Results are given in µg-atom/l.

3. Primary Production

Samples were collected with twin "light" and "dark" 400 ml plastic samplers and incubated in a constant artificial light bath at 1100 ft candles. The ^{14}C techniques used were as described by Dyson et al. (1965) except that Geiger counting was done

on board with a windowless counter, and that the ^{14}C solution used was standardised by the method of Jitts and Scott (1961).

4. Pigments

Water samples were taken with a plastic sampler and filtered within one or two hours through HA Millipore filters. The filters were placed in envelopes and stored in metal desiccators over silica gel. The analyses were carried out at Cronulla using the method given by Humphrey (1960), except that 4 cm spectrophotometer cells were used.

5. Phytoplankton

Samples were collected in a 5 l. plastic sampler (Davis 1957) at 0, 25, 50, 75, 100, and 150 m. The samples were transferred to polythene bottles and centrifuged immediately at 5000 g in a continuous centrifuge (Davis 1957); each 5 l. sample took 15 min. The residue in the cup was carefully washed into a graduated tube and diluted to 10 ml with sea water.

Quantitative Examination.- All counts were made with a Petroff Hausser bacterial counting chamber. If the count was more than five per field, four fields were counted; if the count was less than five per field, ten fields were counted.

Organisms with chlorophyll were counted by using a Wild BG 12 fluorescence filter, a Wild OG 1 exclusion filter, an immersed condenser, and a high-power incandescent lamp. The chloroplasts appeared bright red in the blue-violet light.

Organisms without chlorophyll were calculated as the difference between total living organisms and organisms with chlorophyll. Total living organisms were counted after adding acridine orange to give a final concentration of 2 p.p.m. The living organisms gave a green fluorescence in the blue-violet light produced by the filter system described above.

Total particles were counted with ordinary illumination.

Qualitative Examination.- Twenty minute tows were made with a modified Hardy Indicator. The plankton was washed off the metal grid (120 meshes/in.) with seawater, and formalin was added to give a final concentration of 2%. Identifications were made on board the ship (Tables 2 and 3).

6. Zooplankton

Samples were taken with a modified Clarke-Bumpus sampler carrying a net of No. 4 nylon (mesh aperture 260 μ). Half-hour oblique hauls were made from surface-200 m-surface at a speed of 2-3 knots. Average volume filtered was 24 m^3. Samples were weighed at Cronulla using the method described in Tranter (1962).

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IV. DATA SHEETS AND TABLES

Hydrology data were processed in a C.D.C. 3600 Computer and primary production, pigment, and phytoplankton data in an I.B.M. 1401 Computer. An explanation of the headings for each set of data sheets is given at the beginning of the relevant part.

DATA

PART 1

HYDROLOGY

EXPLANATION OF HEADINGS

Part 1	Hydrology
STATION	Gives the station identification. For example, G1/1/62 signifies the 1st station worked by Gascoyne in 1962, on her 1st cruise for that year
DATE	Given as day/month/year
TIME	Given in Zone Time, and is the time at the beginning of the first cast. The code letter used for the time zone follows the time. Zone Times during the cruise were Codes K, L, and M, G.M.T. + 10, 11, and 12 hours respectively
LATITUDE LONGITUDE	Given in degrees and minutes
SONIC DEPTH	Given in metres, measured at standard sound velocity of 800 fm (1463 m) per second
AIR TEMP. WET DRY	Air temperatures recorded from wet and dry bulb thermometers in °C
WIND DIR. SP.	Wind direction and speed are coded using Tables 8 and 9 in U.S. Hydrogr. Office (1955)
ANEM. HEIGHT	The average height of the anemometer above sea level, given in metres
CLOUD TYPE AMT.	Cloud type and amount are coded using Tables 2 and 3 in U.S. Hydrogr. Office (1955)
VIS.	Visibility is coded using Table 4 in U.S. Hydrogr. Office (1955)
SEA DIR. AMT.	Sea direction and amount are coded using Tables 5 and 8 in U.S. Hydrogr. Office (1955)
SWELL DIR. AMT.	Sea swell direction and amount are coded using Tables 6 and 8 in U.S. Hydrogr. Office (1955)

ATMOS. PRESSURE	Atmospheric pressure given in millibars
WIRE ANGLES CAST 1 CAST 2 CAST 3	Wire angles are measured at the surface and expressed in degrees for each cast
CAST	The cast number corresponding to the wire angle is shown
DEPTH	Actual sampling depth, given in metres
TEMP.	Sea temperatures recorded in °C
SALINITY	Given in parts per thousand
SIGMA-T	Sigma-t to 2 decimal places
OXYGEN	Given in ml/l
OXYGEN % SAT.	Oxygen percentage saturation
INORG. P, TOTAL P, and NITRATE	Given in μg-atom/l

A blank indicates no data available

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/1/62	11/1/62	2200 K	33 27 S	153 18 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
	20.6	22.2	13	3	16	7	8	8	12	1	12	0	1008.5	5		

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	21.76	35.381	24.59	4.85	100	0.16	0.39	0.7
1	25	20.96	35.474	24.88	5.16	105	0.13		0.6
1	49	18.05	35.532	25.68	4.46	86	0.40	0.59	1.7
1	74	16.23	35.466	26.07	4.42	82	0.61		3.7
1	98	15.08	35.418	26.29	4.61	84	0.61	0.71	3.6
1	147	13.45	35.236	26.50	4.53	80	0.79		7.3
1	196	12.75	35.157	26.58	4.59	79	0.85	1.04	7.1
1	294	10.39			4.48		1.08	1.32	11.6
1	490		34.585		4.45		1.36	1.70	17.5
1	687	6.25	34.479	27.13	4.35	64	1.69	1.88	20.7
1	883	5.00	34.476	27.28	4.24	61	1.84	2.05	32.4
1	1079	3.88	34.517	27.44	3.74	52	1.88	2.02	28.4
1	1275	3.19	34.570	27.55	3.63	50	2.02	2.21	37.7
1	1471	2.76	34.619	27.62	3.55	48	2.03	2.22	40.4
1	1961	2.28	34.685	27.72	3.88	52	2.01	2.20	41.1

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/2/62	14/1/62	1400 K	30 18 S	153 57 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
4755	22.8	25.6	11	3	16	8	8	7	11	2	10	1	1016.9			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.61	35.134	22.96	4.63	104	0.13	0.31	0.5
1	48	24.66	35.304	23.69	4.85	106	0.13	0.26	0.6
1	96	22.69	35.594	24.49	3.89	82	0.27	0.48	1.5
1	143	20.57	35.719	25.18	4.71	96	0.25		0.4
1	190	19.39	35.723	25.49	4.57	91	0.33	0.40	1.0
1	285	17.60	35.546	25.81	4.17	80	0.51	0.56	4.6
1	377	15.56	35.356	26.14	4.19	77	0.60		8.5
1	465	12.69	35.086	26.54	4.23	73	0.91	0.95	12.3
1	614	8.95	34.674	26.89	4.40	70	1.29	1.31	
1	715	7.07	34.503	27.04	4.34	66	1.59	1.62	29.5
1	805	6.86	34.512	27.07	4.31	65	1.60	1.62	29.7
1	895	6.17	34.468	27.13	4.33	64	1.61	1.69	24.4
1	970	5.28	34.460	27.24	4.19	61	1.77	1.90	28.3
1	1180	3.90	34.450	27.38	3.72	52	1.97	1.98	32.0

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/3/62	15/1/62	0230 K	28 29 S	154 03 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2195	25.6	26.7	11	4	16	8	8	7	11	2	12	2	1013.9			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.49	35.163	23.02	4.69	105	0.10	0.34	0.3
1	45	25.36	35.302	23.48	4.71	104	0.11	0.36	1.0
1	90	21.65	35.649	24.83	4.19	87	0.32	0.44	1.2
1	130	20.11	35.719	25.30	4.43	89	0.31		1.0
1	170	19.24	35.728	25.53	4.76	94	0.32	0.47	0.8
1	240	18.33	35.686	25.73	4.59	89	0.39	0.49	1.4
1	290	16.28	35.576	26.14	4.54	85	0.41	0.74	1.9
1	335	14.57	35.412	26.40	4.23	76	0.55		4.1
1	415	12.34	35.070	26.60	4.01	69	0.85	1.11	11.3
1	500	10.30	34.912	26.85	4.32	71	1.08	1.19	12.5
1	580	8.91	34.725	26.94	4.38	69	1.24	1.37	14.7
1	665	7.64	34.567	27.01	4.31	66	1.41	1.53	17.4
1	745	6.78	34.486	27.07	4.38	66	1.48	1.66	18.0
1	955	4.88	34.457	27.28	4.01	57	1.74	1.88	32.0

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/4/62	15/1/62	1610 K	26 20 S	154 06 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3200	24.4	26.7	13	4	16	6	7	7	13	3	12	2	1014.2			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	27.68	35.133	22.62	4.57	105	0.10	0.46	0.0
1	44	25.03	35.330	23.60	4.67	102	0.11	0.36	0.3
1	85	21.13	35.719	25.02	4.63	95	0.16	0.43	0.6
1	128	19.71	35.725	25.41	4.52	90	0.30		1.8
1	170	19.11	35.727	25.57	4.62	91	0.30	0.52	1.0
1	255	17.28	35.562	25.90	4.27	81	0.47	0.65	3.5
1	340	14.44	35.281	26.33	4.24	76	0.74		7.1
1	420	12.06	35.002	26.60	4.16	71	0.93	1.27	12.0
1	590	8.70	34.640	26.90	4.23	67	1.44	1.58	20.2
1	760	6.81	34.494	27.07	4.39	66	1.54	1.78	
1	930	5.48	34.457	27.21	4.21	61	1.63	2.00	33.4
1	1100	4.44	34.488	27.35	3.76	53	1.89	2.10	34.7
1	1280	3.71	34.532	27.47	3.58	50	1.95	2.17	34.0
1	1765	1.94	34.634	27.70	3.43	45	2.01	2.08	35.4

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/5/62	16/1/62	0600 K	24 00 S	154 00 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
1554	25.0	26.7	11	4	16	8	8	5	11	2	11	2	1011.9			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	27.66	35.108	22.61	4.63	106	0.07	0.21	0.1
1	46	24.29	35.421	23.89	4.48	97	0.15	0.31	0.2
1	92	20.45	35.625	25.14	3.43	69	0.52	0.32	3.8
1	138	19.47	35.643	25.41	3.99	79	0.42		2.7
1	186	17.39	35.472	25.80	3.80	73	0.55	0.53	3.4
1	281	14.47	35.222	26.28	3.85	69	0.79	0.78	5.7
1	377	11.69	34.972	26.64	4.15	70	0.90		9.3
1	474	8.76	34.694	26.94	4.26	67	0.96	1.31	14.9
1	670	6.75	34.499	27.08	4.30	64	1.52	1.63	20.3
1	866	5.29	34.471	27.24	4.16	60	1.78	1.82	18.9
1	1064	4.22	34.502	27.39	3.77	53	1.95	2.04	18.9
1	1262	3.41	34.553	27.51	3.44	47	2.06	2.20	22.5
1	1460	2.84	34.607	27.61	3.27	44	2.03	2.20	17.3

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/6/62	16/1/62	1430 K	22 54 S	155 05 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3566	23.9	26.7	11	4	16	8	5	7	10	2	10	2	1007.9			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	27.52	35.169	22.70	4.66	106	0.15	0.36	0.5
1	24	27.42	35.157	22.72	4.59	105	0.11		0.5
1	48	24.79	35.375	23.71	5.03	110	0.11	0.19	0.4
1	97	22.12	35.614	24.67	4.77	100	0.19	0.41	0.0
1	145	20.83	35.698	25.09	4.39	90	0.32		0.5
1	193	19.54	35.722	25.45	4.42	88	0.36	0.40	1.0
1	290	17.90	35.610	25.78	4.41	85	0.43	0.43	1.3
1	386	14.92			4.13		0.73		5.5
1	483		35.299		4.25		1.13	1.14	9.4
1	676	7.85			4.35		1.53	1.58	16.5
1	869	5.90	34.582	27.26	4.43	65	1.76	1.84	20.2
1	1062	4.53	34.465	27.33	3.96	56	2.00	2.14	25.3
1	1254	3.78	34.465	27.41	3.66	51	2.10	2.06	20.9
1	1448	3.24	34.527	27.51	3.34	46	2.17	2.21	34.6
1	1930	2.41	34.571	27.62	3.68	49	2.15	2.20	34.6
2	2422	2.00	34.665	27.73	4.16	55	2.06	2.14	31.6
2	2907	1.72	34.716	27.79	4.31	57	1.92	2.16	32.4
2	3381	1.13	34.718	27.83	4.49	58	1.80	2.18	35.9

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/7/62	17/1/62	0135 K	21 53 S	156 18 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
1280	22.8	25.6	10	4	16	8	4	7	10	3	11	2	1006.8			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	27.47	35.100	22.66	4.60	105	0.05	0.33	0.0
1	49	23.72	35.469	24.10	4.77	102	0.06	0.33	0.2
1	98	22.28	35.591	24.61	4.71	99	0.13	0.44	0.1
1	146	21.02	35.684	25.03	4.34	89	0.19		0.6
1	195	20.05	35.708	25.31	4.26	86	0.21	0.57	0.9
1	292	17.85	35.552	25.75	4.22	81	0.42	0.70	3.0
1	390	15.08	35.275	26.18	4.16	76	0.61		6.4
1	487	12.39	35.020	26.55	4.48	77	0.78	0.99	10.4
1	681	7.37	34.536	27.02	4.40	67	1.44	1.70	21.3
1	876	5.14	34.458	27.25	4.11	59	1.79	2.04	
1	1071	4.10	34.556	27.44	3.82	54	1.80	2.16	

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/8/62	17/1/62	1100 K	20 45 S	157 24 S

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2103	23.3	27.8	13	4	16	8	4	7	13	4	12	2	1008.5			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	27.75	35.092	22.57	4.51	103	0.08	0.47	0.3
1	48	24.18	35.699	24.14	4.92	107	0.07	0.42	0.6
1	96	20.99	35.701	25.05	4.46	91	0.15	0.44	0.7
1	145	19.71	35.723	25.41	4.45	89	0.22		1.2
1	193	19.03	35.701	25.57	4.45	88	0.26		1.6
1	290	17.39	35.555	25.86	4.31	82	0.44		4.0
1	386	14.15	35.210	26.34	4.11	73	0.68		8.8
1	483	10.73	34.857	26.73	4.25	70	1.07	1.35	15.2
1	676	7.45	34.539	27.01	4.27	65	1.48	1.84	25.5
1	869	5.49	34.454	27.21	4.07	59	1.79	2.15	29.2
1	1062	4.34	34.487	27.36	3.88	55	1.80	2.22	33.0
1	1255	3.64	34.532	27.47	3.57	49	1.99	2.44	34.0
1	1448	3.20	34.570	27.55	3.39	46	2.12	2.16	34.0
1	1931	2.55	34.631	27.65	3.43	46	2.09	2.54	34.0

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/9/62	17/1/62	2000 K	20 01 S	155 47 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3200	23.9	27.2	14	3	16	8	2	7	14	2	13	2	1007.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	27.38	35.234	22.79	4.22	96	0.16	0.40	0.0
1	49	25.45	35.313	23.46	4.55	100	0.17	0.40	0.0
1	99	22.42	35.598	24.57	4.48	94	0.32	0.53	0.9
1	148	20.87	35.691	25.07	4.40	90	0.37		1.3
1	198	19.74	35.714	25.39	4.40	88	0.40	0.49	0.9
1	297	17.83	35.588	25.78	4.28	82		0.70	2.6
1	395	13.99	35.578	26.65	4.10	73	0.71		6.6
1	494	11.19	34.877	26.66	4.07	68	0.99	1.31	13.6
1	692	7.16	34.573	27.08	4.35	66	1.46	1.61	19.2
1	890	5.11	34.455	27.25	4.07	59	1.82	2.05	25.9
1	1088	4.16	34.498	27.39	3.75	53	1.94	2.14	25.5
1	1286	3.50	34.548	27.50	3.49	48	1.92	2.22	28.7
1	1484		34.586		3.25		2.14	2.22	26.8
1	1978	2.37	34.669	27.70	3.54	47	2.12	2.16	27.4

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/10/62	18/1/62	0530 K	19 12 S	154 02 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2788	23.3	26.7	10	4	16	8	2	7	11	2	11	2	1005.4			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	27.86	35.143	22.57	3.88	89	0.11	0.32	2.1
2	24	27.88	35.148	22.57	4.31	99	0.13		1.0
2	49	25.50	35.366	23.49	3.94	87	0.12	0.36	1.3
2	73	23.73	35.465	24.09	4.78	103	0.20		0.4
2	97	22.75	35.540	24.43	4.71	99	0.20	0.57	0.6
2	122	21.64	35.659	24.84	4.51	93	0.32		1.0
2	146	20.63	35.679	25.13	3.36	68	0.37		0.8
2	195	19.41	35.676	25.45	3.94	78	0.42	0.56	1.3
2	243	18.13	35.584	25.70	4.17	81	0.54		2.1
2	292	16.85	35.471	25.93	4.06	77	0.59	0.77	2.5
2	389	14.03	35.174	26.33	3.99	71	0.85		6.5
2	487	11.26	34.908	26.68	4.28	72	1.08	1.26	8.9
2	681	7.16	34.513	27.03	4.40	67	1.60	1.88	16.5
2	876	5.12	34.461	27.26	4.01	58	1.90	2.20	
1	1071		34.506		3.73		2.09	2.28	21.3
1	1266	3.43	34.545	27.50	3.47	48	1.89	2.39	22.2
1	1460		34.575		3.30		2.20	2.34	25.2
1	1947	2.34	34.654	27.69	3.48	47	2.19	2.47	22.2
1	2436	1.90	34.711	27.77	4.12	54	2.05	1.97	19.2
1	2632	1.69	34.723	27.80	4.21	55	2.03	2.24	16.5

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/11/62	18/1/62	1630 K	18 37 S	155 58 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2286	24.4	28.3	09	3	16	6	1	8	09	1	13	2	1003.8			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	29.08	34.682	21.82	4.34	101	0.16	0.32	0.2
2	25	28.35	34.745	22.11	4.57	105	0.17		0.0
2	50	26.34	35.258	23.14	4.62	104	0.15	0.32	0.2
2	75	24.34	35.311	23.80	4.81	104	0.18		0.0
2	100	23.32	35.414	24.17	4.69	100	0.20	0.36	0.0
2	125	22.31	35.569	24.58	4.23	89	0.33		0.6
2	150	21.48	35.665	24.89	3.99	82	0.32		1.7
2	200	20.57	35.701	25.16	4.22	86	0.37	0.43	1.3
2	250		35.638		4.06		0.51		2.6
1	293	17.53	35.500	25.79	4.09	78	0.65	0.68	3.4
1	391	13.65	35.115	26.37	3.93	69	0.99		8.5
1	490	10.83	34.839	26.70	4.06	67	1.25	1.31	12.8
1	687	6.80	34.501	27.07	4.14	62	1.69	1.72	20.2
1	885	5.04	34.459	27.26	3.99	57	1.89	1.92	22.5
1	1084		34.499		3.48		2.05	2.08	26.2
1	1283	3.43	34.546	27.50	3.47	48	2.15	2.17	24.8
1	1482	3.07	34.577	27.56	3.42	47	2.20	2.24	25.2
1	1981	2.37	34.653	27.69	3.43	46	2.18	2.19	24.6

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/12/62	19/1/62	0230 L	18 20 S	157 43 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3749	24.4	27.2	09	3	16	8	3	8	10	1	10	2	1003.2			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	28.86	34.564	21.80	4.34	101	0.15	0.31	0.4
2	25	28.85	34.558	21.80	4.43	103	0.17		0.2
2	50	25.81	35.206	23.27	4.41	98	0.25	0.33	0.7
2	75	24.02	35.197	23.80	4.68	101	0.19		0.1
2	100	23.38	35.336	24.10	4.59	98	0.25	0.30	0.1
2	125	22.77	35.470	24.38	4.28	90	0.33		0.7
2	150	21.99	35.584	24.68	4.02	84	0.34		1.0
2	200	20.60	35.671	25.13	4.17	85	0.36	0.39	1.2
2	250	19.14	35.613	25.47	4.02	79	0.57		2.6
2	300	17.63	35.494	25.76	3.97	76	0.61	0.62	3.6
2	400	13.42	35.057	26.37	3.92	69	0.96		8.8
2	500	10.14	34.735	26.74	3.93	64	1.43	1.50	15.5
1	666	6.37	34.475	27.11	4.20	62	1.80	1.92	19.0
1	860	4.81	34.482	27.31	3.95	56	2.01	1.99	21.3
1	1056	3.87	34.514	27.44	3.71	52	2.08	2.12	24.4
1	1253	3.43	34.544	27.50	3.53	49	2.19	2.21	23.4
1	1451	3.00	34.589	27.58	3.32	45	2.18	2.22	24.0
1	1950	2.45	34.640	27.67	3.31	44	2.07	2.27	25.4
1	2450	2.13	34.677	27.72	3.54	47	2.21	2.24	24.0
1	2950	1.98	34.697	27.75	3.79	50	2.26	2.31	24.0
1	3450	1.74	34.714	27.78	4.13	54	2.16	2.24	24.0

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/13/62	19/1/62	1300 K	19 50 S	157 26 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2743	25.6	30.0	08	3	16	5	5	7	08	1	15	2	1003.9			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	28.84	34.722	21.93	4.49	104	0.21	0.41	0.0
2	25	26.92	34.925	22.71	4.96	112	0.13		0.0
2	50	24.84	35.173	23.54	4.64	101	0.14	0.42	0.1
2	75	23.65	35.356	24.03	4.57	98	0.25		0.1
2	100	22.95	35.442	24.30	4.31	91	0.27	0.42	0.0
2	125	22.57	35.519	24.47	4.28	90	0.33		0.3
2	150	21.58	35.640	24.84	3.74	77	0.40		2.1
2	200	20.26	35.652	25.21	3.96	80	0.43	0.56	1.9
2	250	18.64	35.490	25.51	3.62	71	0.75		6.0
2	300	17.59	35.560	25.82	3.92	75	0.78	0.80	4.7
2	400	14.99	35.263	26.19	4.09	74	0.79		7.2
2	500	11.46	34.882	26.62	4.03	68	1.16	1.26	18.1
1	683	7.22	34.514	27.03	4.18	63	1.65	1.69	23.3
1	879	5.37	34.454	27.22	4.08	59	1.92	2.01	28.7
1	1077	4.20	34.498	27.39	3.69	52	2.05	2.20	31.6
1	1275	3.55	34.544	27.49	3.45	48	2.18	2.22	32.6
1	1484	3.09	34.581	27.56	3.38	46	1.85	2.01	34.2
1	1982	2.47	34.639	27.67	3.34	45	2.14	2.34	32.6
1	2481	2.11	34.679	27.73	3.60	48	2.09	2.24	30.5

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/14/62	20/1/62	0530 K	22 58 S	156 57 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2195	23.9	26.1	09	2	16	8	3	7	10	1	11	2	1004.7			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	27.05	35.251	22.91	4.26	97	0.06	0.19	0.7
1	25	27.02	35.250	22.92	4.36	99	0.07		0.2
1	50	25.80	35.272	23.32	4.27	95	0.07	0.27	0.7
1	74	24.57	35.385	23.79	4.86	106	0.13		0.0
1	99	23.23	35.508	24.27	4.51	96	0.17	0.33	0.2
1	148	21.89	35.642	24.76	3.77	78	0.31		1.4
1	198	20.52	35.688	25.17	3.98	81	0.37	0.44	1.7
1	297	18.71	35.661	25.62	4.26	84	0.40	0.52	1.7
1	497	13.43	35.129	26.42	4.01	70	0.81	0.95	7.5
1	696	8.34	34.614	26.94	4.38	68	1.37	1.50	15.1
1	895	5.86	34.476	27.18	4.26	62	1.73	1.85	17.4
1	1093	4.55	34.478	27.33	3.92	56	1.96	2.03	20.7
1	1291	3.70	34.532	27.47	3.63	50	2.03	2.17	23.3
1	1489	3.13	34.578	27.56	3.40	46	2.09	2.22	23.3
1	1983	2.38	34.662	27.69	3.63	49	2.08	2.21	24.4

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/15/62	20/1/62	1500 L	22 54 S	158 42 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2560	25.0	28.3	04	2	16	8	8	7	04	1	11	1	1004.3			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.61	35.137	22.97	4.58	103	0.11	0.31	0.0
1	25	24.90	35.417	23.71	4.97	109	0.13		0.0
1	50	22.71	35.687	24.56	5.08	107	0.14	0.24	0.0
1	74	21.00	35.731	25.07	4.89	100	0.17		0.0
1	99	19.90	35.704	25.34	4.37	88	0.37	0.42	1.3
1	148	19.06	35.720	25.57	4.38	86	0.34		1.2
1	198	18.45	35.696	25.71	4.49	88	0.38	0.40	1.4
1	296	16.79	35.522	25.98	4.32	82	0.56	0.58	3.3
1	493	11.58	34.960	26.66	4.26	72	1.05	1.11	11.9
1	690	7.45	34.530	27.01	4.48	68	1.60	1.67	20.5
1	886	5.38	34.461	27.23	4.18	61	1.94	2.03	24.6
1	1083		34.507		3.80		2.07	2.16	27.6
1	1280	3.43	34.555	27.51	3.47	48	2.13	2.21	28.7
1	1477	3.02	34.592	27.58	3.40	46	2.21	2.23	30.2
1	1970	2.49	34.651	27.67	3.55	48	2.12	2.20	28.7
1	2465	2.05	34.702	27.75	3.42	45	2.12	2.16	25.2

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/16/62	21/1/62	0115 L	22 56 S	160 32 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
1920	22.8	24.4	06	4	16	8	8	7	06	2	09	2				

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.61	35.049	22.90	4.52	102	0.19	0.34	0.0
1	25	25.74	35.255	23.33	4.75	105	0.19		0.0
1	50	22.82	35.548	24.42	4.87	103	0.20	0.27	0.0
1	75	21.57	35.647	24.85	4.90	101	0.21		0.0
1	100	21.25	35.652	24.94	4.93	101	0.19	0.34	0.0
1	149	20.84	35.687	25.08	4.51	92	0.32		0.3
1	199	20.41	35.741	25.24	4.58	93	0.26	0.44	0.3
1	298	18.57	35.709	25.69	4.57	89	0.38	0.99	1.3
1	496	13.31	35.144	26.46	4.24	74	0.94	1.29	8.5
1	694	8.12	34.595	26.96	4.49	70	1.52	1.57	19.8
1	891	5.73	34.463	27.18	4.33	63	1.84	1.91	26.1
1	1088	4.54	34.486	27.34	3.88	55	2.02	2.12	28.3
1	1285	3.82	34.531	27.45	3.64	51	2.05	2.21	31.3
1	1482	3.21	34.578	27.55	3.46	47	2.14		29.4
1	1679	2.88	34.607	27.60	3.42	46	2.13	2.53	28.9

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/17/62	21/1/62	1030 L	22 53 S	162 24 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2103	25.0	26.7	06	3	16	8	8	8	06	1	10	2	1008.1			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.50	35.099	22.97	4.65	104	0.14	0.31	0.4
1	25	26.32	35.195	23.10	4.57	102	0.08		0.1
1	50	23.96	35.567	24.10	4.88	105	0.06	0.31	0.5
1	75	22.51	35.722	24.64	5.06	106	0.10		0.1
1	99	20.88	35.727	25.10	4.98	102	0.14	0.38	0.3
1	149	19.54	35.751	25.47	4.65	93	0.19		0.7
1	199	19.01	35.737	25.60	4.54	90	0.26	0.51	0.8
1	298	17.43	35.621	25.90	4.57	87	0.41	0.60	1.8
1	497	11.78	34.990	26.64	4.37	74	1.02	1.12	6.6
1	695	7.50	34.538	27.01	4.47	68	1.50	1.60	13.4
1	894	5.56	34.462	27.20	4.28	62	1.79	2.03	15.1
1	1092	4.44	34.497	27.36	3.91	55	1.80	2.14	18.6
1	1291	3.62	34.565	27.50	3.62	50	2.00	2.28	19.2
1	1490		34.577		3.45		2.02	2.18	20.7
1	1985	2.83	34.658	27.65	3.41	46	2.16	2.32	25.2

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/18/62	21/1/62	2015 L	22 52 S	164 13 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2834	25.0	27.2	07	2	16	0	7	7	09	1	10	2	1007.5			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.93	35.281	22.97					
1	25	25.96	35.293	23.29					
1	48	23.52	35.600	24.26					
1	74	21.76	35.658	24.80					
1	99		35.710						
1	148	19.88	35.735	25.37					
1	198	19.09	35.734	25.58					
1	296	17.74	35.663	25.86					
1	494	11.47	34.930	26.65					
1	692	7.59	34.537	26.99					
1	889	5.49	34.480	27.23					
1	1087		34.495						
1	1285	3.59	34.547	27.49					
1	1482	3.06	34.586	27.57					
1	1976	2.35	34.644	27.68					

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/19/62	25/1/62	1100 L	22 31 S	166 25 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2195	23.3	25.0	10	5	16	8	5	7	10	5	11	2	1009.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.94	34.971	22.74	4.58	103	0.11	0.33	1.0
1	25	26.90	34.978	22.75	4.60	104	0.11		0.4
1	50	24.96	35.234	23.55	4.77	104	0.11	0.31	0.7
1	75	23.71	35.408	24.06	5.03	108	0.10		0.2
1	100	22.41	35.557	24.54	5.00	105	0.12	0.34	0.1
1	199	19.79	35.715	25.38	4.48	90	0.33	0.45	0.8
1	298	17.88	35.652	25.82	4.65	90	0.36	0.55	1.8
1	397	14.66	35.277	26.28	4.24	76	0.74		5.9
1	497	11.18	34.908	26.69	4.25	71	1.08	1.21	12.2
1	695	7.18	34.536	27.05	4.44	67	1.57	1.68	17.7
1	894	5.01	34.462	27.27	4.17	60	1.90	2.06	21.6
1	1093	4.26	34.503	27.39	3.88	55	2.04	2.32	26.7

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/20/62	26/1/62	0001 L	24 37 S	166 25 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2997	24.4	25.0	10	5	16	8	5	7	10	4	12	2	1011.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	25.87	35.187	23.24	4.69	104	0.07	0.34	0.0
2	25	25.83	35.202	23.26	4.79	106	0.11		0.0
2	50	23.25	35.512	24.27	4.78	102	0.12	0.37	0.5
2	74	22.17	35.579	24.63	5.15	108	0.13		0.3
2	98	20.95	35.725	25.08	5.04	103	0.13	0.37	0.5
2	148	19.42	35.732	25.49	4.52	90	0.34		1.0
2	197	18.57	35.696	25.68	4.62	90	0.37	0.54	1.3
2	296	16.81	35.528	25.98	4.48	85	0.51	0.73	3.6
2	493	11.30	34.919	26.68	4.39	73	1.00	1.24	10.8
2	690	7.25	34.515	27.02	4.62	70	1.55	1.67	18.9
2	887	5.49	34.464	27.21	4.35	63	1.85	1.90	25.1
1	1078	4.37	34.487	27.36	3.99	56	1.95	2.20	25.3
1	1274	3.58	34.542	27.49	3.74	52	2.07	2.12	28.8
1	1470	3.08	34.581	27.57	3.56	49	2.14	2.25	28.8
1	1959	2.39	34.644	27.68	3.53	47	2.14	2.28	29.8
1	2449	2.06	34.673	27.73	3.62	48	2.14	2.37	30.2
1	2743	2.01	34.683	27.74	3.66	48	2.12	2.31	30.2

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/21/62	26/1/62	1030 L	24 34 S	164 28 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3109	24.4	27.8	12	4	16	3	3	7	09	4	12	2	1010.8			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	25.73	35.170	23.27	4.74	105	0.11	0.33	0.5
1	50	21.90	35.675	24.78	5.20	108	0.07	0.31	0.3
1	100	19.07	35.711	25.56	4.81	95	0.31	0.42	0.8
1	149	18.32	35.689	25.74	4.61	90	0.33		1.3
1	199	17.23	35.575	25.92	4.45	85	0.49	0.57	3.1
1	298	15.19	35.352	26.22	4.44	81	0.65	0.79	5.3
1	397	12.82	35.080	26.51	4.30	74	0.84		9.5
1	497	10.31	34.809	26.77	4.39	72	1.16	1.29	14.3
1	696	7.37	34.523	27.01	4.53	69	1.47	1.61	20.8
1	895	5.38	34.441	27.21	4.40	64	1.79	1.84	26.0
1	1093	4.16	34.502	27.40			2.02	2.08	29.4
1	1292	3.40	34.559	27.52	3.69	51	2.09	2.20	28.1
1	1491	3.01	34.591	27.58	3.51	48	2.12	2.20	28.7
1	1988	2.32	34.646	27.68	3.54	47	2.20	2.25	29.0

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/22/62	26/1/62	1930 L	24 34 S	162 42 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
1372	22.8	28.3	12	4	16	8	4	7	12	3	11	2				

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	25.90	35.454	23.43					
1	49	23.44	35.656	24.32					
1	98	19.97	35.735	25.35					
1	147	18.82	35.727	25.64					
1	196	18.04	35.668	25.79					
1	294	15.61	35.379	26.15					
1	392	13.28	35.124	26.45					
1	490	10.43	34.820	26.76					
1	686	7.52	34.526	26.99					
1	882	5.53	34.442	27.19					
1	1078	4.35	34.485	27.36					
1	1274	3.50	34.550	27.50					

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/23/62	27/1/62	0715 L	24 33 S	160 22 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
1829	22.2	25.0	11	4	16	8	2	8	12	2	12	2	1010.8			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.02	35.412	23.36	4.61	103	0.11	0.36	0.0
1	50	21.84	35.707	24.82	5.26	109	0.11	0.34	0.4
1	100	19.57	35.743	25.46	4.76	95	0.27	0.47	0.4
1	150	18.98	35.727	25.60	4.63	91	0.29		0.9
1	200	18.17	35.691	25.78	4.63	90	0.40	0.55	1.4
1	300	16.06	35.463	26.11	4.46	83	0.59	0.73	3.1
1	400	14.13	35.269	26.39	4.48	80	0.70		5.2
1	500	11.57	34.968	26.66	4.46	75	0.97	1.19	6.7
1	700	7.36	34.523	27.01	4.55	69	1.52	1.64	15.5
1	900	5.24	34.446	27.23	4.36	63	1.84	1.90	21.6
1	1100	4.24	34.497	27.38	3.94	55	1.99	2.12	20.1
1	1300	3.56	34.546	27.49	3.63	50	2.03	2.23	20.3
1	1500	3.09	34.580	27.56	3.59	49	2.15	2.25	25.3
1	1700	2.73	34.619	27.63	3.48	47	2.03	2.23	26.4

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/24/62	27/1/62	1715 L	24 40 S	158 20 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2743	22.2	26.1	14	4	16	0	2	7	12	4	13	2	1009.3			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	26.80	35.253	22.99	4.64	105	0.10	0.32	0.2
2	25	26.79	35.264	23.00	4.78	108	0.05		0.2
2	50	23.84	35.418	24.03	4.65	100	0.11	0.34	0.2
2	75	23.11	35.536	24.33	4.31	92	0.26		0.4
2	100	21.44	35.673	24.90	4.41	91	0.27	0.43	0.7
2	150	19.88	35.724	25.36	4.58	92	0.24		1.1
2	200	18.64	35.675	25.65	4.37	86	0.38	0.54	1.4
2	300	16.48	35.443	25.99	4.46	84	0.52	0.71	3.9
2	500	11.28	34.914	26.68	4.34	73	1.04	1.13	10.9
1	662	7.94	34.575	26.97	4.54	70	1.34	1.50	18.1
1	854	5.92	34.458	27.16	4.48	66	1.60	1.79	22.2
1	1048		34.487		4.03		1.86	2.01	27.3
1	1243	3.83	34.525	27.45			1.90	2.12	27.4
1	1439	3.29	34.573	27.54	3.56	49	2.02	2.20	28.1
1	1932	2.49	34.652	27.67	3.65	49	2.10	2.19	28.1
1	2428	1.99	34.714	27.77	4.11	54	1.97	2.08	27.9

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/25/62	28/1/62	0600 K	24 42 S	155 50 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
4572	21.1	25.0	12	4	16	0	4	7	12	4	13	2	1010.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	26.87	35.155	22.90	4.58	103	0.10	0.32	0.5
2	24	26.90	35.153	22.89	4.62	104	0.10		0.6
2	47	24.59	35.268	23.69	4.59	100	0.11	0.31	0.5
2	69	23.70	35.285	23.97	4.65	100	0.20		0.2
2	92	22.24	35.471	24.53	4.29	90	0.31	0.45	0.5
2	137	21.33	35.632	24.90	4.19	86	0.36		0.9
2	182	19.44	35.727	25.48	4.58	91	0.33	0.44	0.7
2	270	17.83	35.710	25.88	4.62	89	0.38	0.43	0.8
2	440	14.89	35.263	26.22	3.89	70	0.86	0.88	6.4
2	595	10.35	34.852	26.80	4.19	69	1.19	1.22	8.8
2	736	7.63	34.584	27.02	4.49	69	1.46	1.53	15.9
2	883	6.21	34.477	27.13	4.48	66	1.65	1.69	12.9
1	1291	3.90	34.524	27.44	3.73	52	2.06	2.14	21.0
1	1486	3.38	34.568	27.53	3.51	48	2.06	2.12	23.2
1	1975	2.38	34.668	27.70	3.73	50	2.01	2.09	24.5
1	2465	1.91	34.727	27.78	4.20	55	2.01	2.01	21.0
1	2956	1.46	34.727	27.82	4.42	58	2.00	2.06	23.2
1	3446	1.17	34.733	27.84	4.55	59	1.92	1.99	22.0

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/26/62	28/1/62	1020 K	24 42 S	155 22 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
4572	23.3	27.2	13	4	16	0	4	7	13	4	11	2	1011.4			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.86	35.192	22.93					
1	49	24.46	35.384	23.82					
1	98	22.97	35.561	24.39					
1	147	21.30	35.700	24.96					
1	196	20.26	35.698	25.24					
1	294	18.52	35.675	25.68					
1	391	16.06	35.425	26.08					
1	489	12.71	35.072	26.52					
1	685	7.76	34.567	26.99					
1	880	5.77	34.454	27.17					
1	1076	4.71	34.471	27.31					
1	1272	3.88	34.522	27.44					
1	1467	3.34	34.566	27.53					
1	1956	2.42	34.648	27.68					

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/27/62	28/1/62	1350 K	24 45 S	154 49 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
4297	23.3	27.8	13	4	16	0	4	7	13	3	12	2	1009.8			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.88	35.281	22.99					
1	50	24.62	35.442	23.81					
1	100	22.57	35.650	24.57					
1	150	21.12	35.687	25.00					
1	200	19.90	35.638	25.29					
1	300	17.26	35.475	25.83					
1	400	14.62	35.244	26.26					
1	500	10.92	34.843	26.69					
1	700	7.25	34.536	27.04					
1	900	5.47	34.460	27.21					
1	1100	4.37	34.485	27.36					
1	1300	3.63	34.543	27.48					
1	1500	3.13	34.585	27.56					
1	2000	2.32	34.674	27.71					

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/28/62	28/1/62	1700 K	24 50 S	154 20 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
4206	23.3	26.7	13	3	16	2	4	6	13	3	12	2	1009.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	27.65	35.098	22.60					
1	50	26.85	35.243	22.97					
1	99	22.00	35.617	24.71					
1	148	20.32	35.642	25.18					
1	197	18.46	35.552	25.60					
1	295	15.67	35.280	26.06					
1	393	13.42	35.103	26.41					
1	491	10.35	34.803	26.76					
1	688	6.65	34.494	27.09					
1	884	4.85	34.465	27.29					
1	1080		34.534						
1	1277	3.16	34.575	27.55					
1	1473	2.78	34.614	27.62					
1	1964	2.31	34.676	27.71					

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/29/62	28/1/62	1900 K	24 50 S	154 06 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
4023	25.6	26.7	13	3	16	2	4	7	13	3	12	2	1010.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.75	35.305	23.05	4.47	101	0.15		0.5
1	46	26.67	35.488	23.21	4.58	103	0.18		0.5
1	91	20.98	35.603	24.98	3.73	76	0.55		2.2
1	137	18.89	35.569	25.50	3.56	70	0.65		3.4
1	183	17.68	35.478	25.73	3.66	70	0.79		4.3
1	275	15.32	35.265	26.12	3.78	69	0.87		5.5
1	366	11.96	34.945	26.57	3.96	67	1.12		10.7
1	459		34.547		4.22		1.35		12.4
1	644	6.34	34.484	27.12	4.30	64	1.82		20.2
1	830	5.10	34.467	27.26	4.08	59	2.01		21.0
1	1020	4.07	34.514	27.41	3.65	51	2.09		25.1
1	1212	3.55	34.550	27.50	3.52	49	2.17		24.5
1	1406	3.07	34.592	27.57	3.43	47	2.24		25.1
1	1895	2.37	34.674	27.70	3.71	50	2.12		25.7

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/30/62	28/1/62	2230 K	24 52 S	153 42 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
246	23.3	26.7	12	3	16	8	6	7	12	3	13	2	1009.4			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	27.03	35.240	22.91					
1	25	25.91	35.522	23.48					
1	50	21.79	35.667	24.80					
1	75	20.88	35.661	25.05					
1	100	20.12	35.627	25.23					
1	125	19.29	35.610	25.43					
1	150	18.43	35.590	25.63					
1	200	17.14	35.529	25.90					

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/31/62	29/1/62	1130 K	27 19 S	153 48 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
188	20.6	25.0	11	3	16	8	3	8	11	4	11		1012.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	27.34	35.177	22.76	4.62	105	0.12		0.0
1	24	27.17	35.190	22.83	4.62	105	0.11		0.3
1	47	26.32	35.280	23.17	4.68	105	0.11		0.3
1	71	23.76	35.470	24.09	4.34	93	0.23		0.4
1	94	20.76	35.631	25.06	4.10	84	0.41		1.2
1	118	18.57	35.548	25.57	3.77	74	0.56		3.5
1	142	17.80	35.524	25.74	3.87	74	0.55		4.6
1	189	16.93	35.441	25.89	3.92	74	0.61		5.2

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/32/62	29/1/62	1400K	27 23 S	154 10 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3383	20.6	25.6	11	3	16	0	2	7	11	2	11	2	1011.7			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	27.08	35.219	22.88	4.51	102	0.11	0.38	0.0
1	44	26.04	35.225	23.21	4.53	101	0.10	0.34	0.5
1	89	24.06	35.374	23.93	4.63	100	0.19	0.40	0.3
1	134	22.16	35.624	24.67	3.74	78	0.42		1.7
1	178	20.56	35.669	25.14	3.58	73	0.51	0.63	3.5
1	267	17.35	35.453	25.80	3.80	72	0.76	0.82	6.2
1	356	15.03	35.266	26.19	3.68	67	0.67		7.7
1	446	12.26	35.023	26.58	4.21	72	0.94	1.14	12.2
1	624	8.84	34.671	26.91	4.40	69	1.27	1.51	15.7
1	803	6.48	34.484	27.10	4.40	66	1.65	2.04	24.9
1	982	5.17	34.471	27.26	4.07	59	1.81	2.61	25.1
1	1160	4.15	34.508	27.40	3.76	53	2.00	2.09	28.7
1	1338	3.56	34.553	27.50	3.58	49	2.03	2.20	28.7
1	1785	2.48	34.655	27.68	3.63	49	2.03	2.20	31.7

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/33/62	29/1/62	1700 K	27 24 S	154 32 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
4390	22.2	26.7	10	3	16	2	2	7	10	2	12	2	1009.9			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	26.40	35.268	23.13					
1	50	24.64	35.425	23.79					
1	100	23.16	35.533	24.31					
1	150	20.69	35.733	25.15					
1	200	19.49	35.729	25.47					
1	300	18.29	35.730	25.78					
1	400	15.51	35.440	26.22					
1	500	13.04	35.192	26.55					
1	700	8.58	34.648	26.93					
1	900	6.27	34.479	27.13					
1	1100	4.76	34.475	27.31					
1	1300	3.87	34.526	27.44					
1	1500	3.26	34.580	27.55					
1	2000	2.38	34.670	27.70					

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/34/62	29/1/62	2100 K	27 20 S	155 02 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3109	21.7	25.0	09	3	16	0	3	7	10	2	11	2	1011.8			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	25.04	35.362	23.62					
1	48	24.47	35.440	23.85					
1	97	21.79	35.671	24.81					
1	146	20.38	35.723	25.23					
1	195	19.39	35.742	25.51					
1	293	18.21	35.652	25.74					
1	392	16.00	35.434	26.10					
1	491		35.232						
1	690	8.45	34.634	26.94					
1	890	6.21	34.481	27.14					
1	1089	4.85	34.480	27.30					
1	1289	3.89	34.528	27.44					
1	1488	3.13	34.587	27.57					
1	1988	2.36	34.673	27.70					

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/35/62	30/1/62	0145 K	27 20 S	155 36 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
4846	21.7	26.1	08	2	16	8	1	8	08	1	09	1	1010.9			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	25.07	35.373	23.62					
1	49	24.43	35.419	23.85					
1	99	20.73	35.723	25.14					
1	148	19.17	35.704	25.53					
1	198	18.78	35.728	25.65					
1	297	16.69	35.514	26.00					
1	396	13.69	35.218	26.44					
1	495	11.76	35.035	26.68					
1	693	8.11	34.606	26.97					
1	891	6.13	34.479	27.15					
1	1090	4.80	34.477	27.31					
1	1288	3.92	34.524	27.44					
1	1486	3.35	34.572	27.53					
1	1981	2.43	34.663	27.69					

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/36/62	30/1/62	0615 K	27 20 S	156 35 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
4846	21.7	25.0	09	3	16	8	2	8	10	1	10	2	1010.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	24.85	35.435	23.74	4.81	105	0.11	0.30	0.4
2	24	24.79	35.451	23.77	4.85	106	0.14		0.5
2	47	24.10	35.480	24.00	4.83	104	0.12	0.27	0.5
2	94	20.66	35.715	25.15	4.85	99	0.20	0.29	0.0
2	141	19.52	35.705	25.44	4.50	90	0.33		1.8
2	187	19.09	35.741	25.58	4.64	92	0.27	0.49	1.8
2	274	16.94	35.566	25.98	4.28	81	0.52	0.65	3.8
2	432		35.268		4.46		0.76	1.08	10.9
2	574	9.76	34.807	26.86	4.47	72	1.17	1.58	21.3
2	697	7.74	34.593	27.01	4.52	69	1.42	1.64	27.2
1	1058	5.00	34.482	27.29	4.04	58	1.88	1.96	42.9
1	1250	4.06	34.524	27.42	3.73	52	1.92	1.99	51.4
1	1442	3.33	34.574	27.54	3.44	47	2.14	2.12	48.0
1	1923	2.49	34.665	27.68	3.61	48	2.04	2.09	49.7
1	2404	2.04	34.723	27.77	3.47	46	1.92	2.01	48.9
1	2884	1.62	34.744	27.82	4.30	56	1.91	2.10	45.9
1	3365	1.26	34.732	27.83	4.53	59	1.94	2.01	44.6

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/37/62	30/1/62	1800 L	27 29 S	158 38 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3566	21.1	23.9	08	3	16	8	5	8	08	1	09	2				

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	25.41	35.500	23.61	4.75	105	0.21	0.25	0.5
1	47	23.41	35.711	24.37	5.07	108	0.81	0.25	0.4
1	93	20.79	35.734	25.13	5.05	103	0.19	0.29	0.2
1	138	19.58	35.743	25.46	4.69	94	0.31		0.5
1	185	19.10	35.743	25.58	4.73	93	0.34	0.42	0.7
1	280	18.21	35.687	25.76	4.50	87	0.51	0.56	1.3
1	376	16.03	35.467	26.12	4.46	83	0.61		2.9
1	474	13.51	35.195	26.46	4.46	78	0.86	0.93	6.3
1	671	9.22	34.730	26.89	4.46	71	1.35	1.49	11.3
1	870	6.61	34.498	27.10	4.50	67	1.55	1.62	19.9
1	1069	5.22	34.470	27.25	4.23	61	1.92	2.04	21.1
1	1268	4.15	34.516	27.41	4.44	62	2.02	2.10	22.4
1	1468	3.34	34.572	27.53	3.59	49	2.09	2.18	22.5
1	1968	2.44	34.662	27.69	3.67	49	2.14	2.19	25.1

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/38/62	31/1/62	0600 L	27 30 S	161 12 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
1746	21.7	21.7	00		16	8	5	7	15	1	16	2	1010.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	24.91	35.472	23.75	4.80	105	0.13	0.30	0.4
1	50	22.61	35.697	24.59	5.20	110	0.14	0.29	0.5
1	100	19.73	35.731	25.41	4.69	94	0.21	0.36	0.7
1	150	18.57	35.723	25.70	4.85	95	0.23		0.5
1	200	17.72	35.625	25.84	4.45	86	0.42	0.52	2.2
1	300	15.74	35.451	26.17	4.49	83	0.55	0.80	4.0
1	400		35.167		4.35		0.76		7.6
1	500	10.85	34.893	26.74	4.42	73	1.06	1.28	12.5
1	700	7.75	34.574	27.00	4.32	66	1.46	1.69	15.7
1	900	5.92	34.468	27.16	4.32	63	1.78	1.82	25.8
1	1100	4.58	34.491	27.34	3.92	56	1.90	2.05	19.7
1	1300	3.68	34.548	27.48	3.68	51	1.98	2.17	25.8
1	1500	3.01	34.598	27.59	3.41	46	2.12	2.24	26.7
1	1600	2.82	34.620	27.62	3.39	46	2.05	2.12	27.8

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/39/62	31/1/62	1645 L	27 32 S	163 28 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
1701	23.9	25.6	09	4	16	8	5	8	09	2	11	2	1008.5			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	25.39	35.325	23.49	4.77	105	0.11	0.25	0.7
1	25	25.00	35.423	23.68	4.86	107	0.08		0.9
1	50	22.65	35.672	24.56	5.24	111	0.08	0.29	1.1
1	75	20.07	35.716	25.31	5.13	103	0.15		0.4
1	100	19.02	35.715	25.58	4.71	93	0.27	0.33	0.9
1	150	17.94	35.674	25.82	4.60	89	0.33		2.9
1	200	17.27	35.625	25.95	4.59	87	0.38	0.43	2.7
1	300	15.50	35.385	26.18	4.38	80	0.59	0.69	5.2
1	400	13.09	35.132	26.50	4.36	76	0.76		10.5
1	500	10.99	34.898	26.72	4.34	72	1.04	1.09	15.4
1	700	8.02	34.601	26.98	4.45	69	1.40	1.42	28.1
1	900	5.94	34.459	27.15	4.48	66	1.68	1.79	34.0
1	1100	4.66	34.473	27.32	4.00	57	1.90	1.98	40.0
1	1200	4.25	34.503	27.39	3.83	54	1.86	1.95	42.5

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/40/62	1/2/62	0345 L	27 33 S	165 40 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3611	21.1	24.4	09	3	16	6	8	7	09	1	10	1	1008.6			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	24.92	35.340	23.64	4.87	107	0.11	0.32	0.0
2	25	24.90	35.352	23.66	4.83	106	0.10		0.0
2	50	24.73	35.376	23.73	4.81	105	0.11	0.29	0.0
2	75	23.43	35.496	24.20	5.00	107	0.15		0.0
2	100	22.29	35.537	24.56	4.83	101	0.14	0.30	0.0
2	150	20.79	35.656	25.07	4.59	94	0.23		0.9
2	200	19.53	35.734	25.46	4.94	98	0.31	0.34	0.5
2	300	18.01	35.698	25.82	4.71	91	0.33	0.48	0.9
2	500	13.17	35.121	26.47	4.31	75	0.82	0.94	8.1
2	700	7.87	34.570	26.98	4.52	70	1.43	1.69	18.0
2	900	6.36	34.479	27.12	4.42	66	1.65	1.74	22.4
1	1079	5.08	34.462	27.26	4.14	59	1.84	1.88	23.8
1	1275	4.19	34.511	27.40	3.84	54	1.87	2.08	24.2
1	1471	3.38	34.573	27.53	3.60	49	2.03	2.13	27.1
1	1961	2.47	34.653	27.68	3.48	47	2.02	2.20	25.5
1	2452	2.11	34.683	27.73	3.49	46	1.99	2.12	26.8
1	2942	1.99	34.697	27.75	3.56	47	2.13	2.02	27.9
1	3432	1.94	34.702	27.76	3.66	48	1.96	2.13	29.5

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/41/62	1/2/62	1530 L	27 33 S	167 56 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2926	23.3	25.6	09	4	16	8	7	7	09	3	09	2	1006.2			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	24.78	35.677	23.94	4.87	107	0.10	0.32	0.0
1	50	22.47	35.674	24.62	5.22	110	0.11	0.27	0.0
1	100	19.51	35.734	25.47	4.82	96	0.17	0.32	0.3
1	150	18.54	35.744	25.72	4.74	93	0.30		0.7
1	200	17.69	35.662	25.87			0.29	0.48	1.5
1	300	15.63	35.397	26.15	4.43	82	0.63	0.69	4.0
1	400	13.09	35.121	26.49	4.34	76	0.75		7.8
1	500	10.10	34.791	26.79	4.40	72	1.10	1.14	14.0
1	700	7.61	34.552	27.00	4.57	70	1.48	1.61	18.3
1	900	5.72	34.454	27.18	4.45	65	1.65	1.80	24.4
1	1100	4.61	34.473	27.32	3.93	56	1.81	1.92	24.9
1	1300	3.64	34.532	27.47	3.76	52			24.2
1	1500	2.99	34.589	27.58	3.66	50	2.05	2.19	24.6
1	2000	2.24	34.650	27.69	3.46	46			27.3

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/42/62	2/2/62	0230 L	27 37 S	170 03 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3566	22.2	23.9	09	4	16	8	5	7	09	2	10	2	1003.2			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	23.92	35.744	24.25	4.90	106	0.06	0.26	0.0
1	46	20.73	35.748	25.16	5.56	113	0.06	0.27	0.3
1	93	17.79	35.669	25.85	4.91	95	0.23	0.41	0.8
1	140	17.23	35.844	25.97	4.87	93	0.37		1.6
1	187	16.71	35.599	26.06	4.89	92	0.39	0.50	2.1
1	281	14.67	35.352	26.33	4.69	85	0.61	0.73	5.2
1	375	12.35	35.060	26.59	4.46	76	0.72		6.1
1	469	10.48	34.874	26.79	4.44	73	0.99	1.22	11.2
1	658	8.16	34.633	26.98	4.51	70	1.30	1.52	17.9
1	846	6.25	34.516	27.16	4.40	65	1.62	1.76	25.3
1	1034	4.96	34.486	27.29	4.14	59	1.68	1.94	23.3
1	1222	3.87	34.512	27.43	3.93	55	1.87	2.03	27.5
1	1410	3.24	34.567	27.54	3.69	51	1.90	2.02	28.6
1	1880	2.36	34.646	27.68	3.50	47	2.01	2.09	30.4

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/43/62	2/2/62	1200 L	27 40 S	171 57 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3611	23.9	24.4	09	6	16	8	8	5	11	4	10	4	1002.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	24.92	35.256	23.58	4.93	108	0.11	0.32	0.7
2	25	24.74	35.339	23.70	4.87	106	0.10		0.5
2	49	22.73	35.630	24.51	5.07	107	0.17	0.25	0.8
2	74	20.46	35.722	25.21	5.24	106	0.17		0.3
2	98	18.89	35.713	25.61	5.16	102	0.24	0.34	0.3
2	147	17.88	35.678	25.84	4.80	93	0.39		1.9
2	197	17.34	35.638	25.94	4.80	92	0.42	0.45	2.0
2	295	15.16	35.324	26.20	4.35	79	0.65	0.76	6.1
2	492	10.70	34.864	26.74	4.49	74	1.09	1.25	15.9
2	688	7.64	34.522	26.97	4.74	73	1.40	1.42	22.5
2	885	6.03	34.407	27.10	4.71	69	1.66	1.73	25.5
1	1020	5.17	34.407	27.21	4.41	63	1.85	1.95	28.7
1	1205	4.02	34.478	27.39	3.98	56	1.97	2.14	32.5
1	1390	3.34	34.545	27.51	3.75	51	2.02	2.15	31.9
1	1855	2.42	34.636	27.67	3.49	47	2.03	2.16	36.1
1	2320	1.99	34.669	27.73	3.55	47	2.03	2.26	34.4
1	2780	1.89	34.681	27.75	3.53	47	2.06	2.16	35.3
1	3245	1.85	34.683	27.75	3.65	48	2.01	2.23	31.2

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/44/62	2/2/62	2245 L	29 26 S	172 20 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2834	20.0	22.8	11	4	16	8	2	7	10	3	10	2	1006.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	23.80	35.727	24.27	4.89	105	0.13	0.31	0.0
1	50	20.27	35.719	25.26	5.25	106	0.16	0.33	0.3
1	100	18.18	35.686	25.77	4.84	94	0.31	0.48	1.2
1	150	17.42	35.637	25.92	4.77	91	0.42		2.1
1	200	16.60	35.565	26.06	4.69	88	0.47	0.58	2.5
1	300	14.55	35.336	26.35	4.43	80	0.67	0.78	4.7
1	400	12.03	35.028	26.62	4.42	75	0.87		10.6
1	500	10.24	34.836	26.80	4.44	73	1.04	1.30	15.2
1	700	7.77	34.602	27.02	4.42	68	1.41	1.54	23.9
1	900	6.20	34.515	27.17	4.28	63	1.68	1.79	26.1
1	1100	4.96	34.500	27.31	4.11	59	1.99	2.20	27.0
1	1300	3.85	34.537	27.46	3.86	54	2.00	2.20	33.2
1	1500	3.15	34.570	27.55	3.67	50	1.90	2.27	31.0
1	2000	2.36	34.641	27.68	3.55	47	1.73	1.96	32.7

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/45/62	3/2/62	0900 M	31 07 S	173 37 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
1097	20.6	23.3	10	2	16	0	2	7	10	2	09	2	1007.8			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	23.48	35.793	24.41	4.88	105	0.12	0.29	0.0
1	50	18.15	35.667	25.76	5.55	108	0.10	0.35	0.5
1	100	17.09	35.644	26.00	4.92	93	0.29	0.43	2.0
1	150	16.42	35.571	26.11	4.85	91	0.39		3.4
1	200	15.91	35.507	26.18	4.73	88	0.41	0.58	4.2
1	300	14.48	35.376	26.39	4.88	88	0.53	0.69	5.3
1	400	12.51	35.103	26.59	4.51	78	0.80		11.9
1	500	10.94	34.923	26.75	4.39	73	0.95	1.14	14.7
1	700	8.24	34.633	26.97	4.42	69	1.34	1.55	22.1
1	900	6.07	34.506	27.17	4.37	64	1.61	1.81	30.6
1	1000	5.43	34.504	27.25	4.26	62	1.68	1.91	35.7

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/46/62	3/2/62	1800 M	32 43 S	173 22 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
2286	19.4	23.3	11	2	16	8	1	8	11	1	08		1008.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	23.52	35.773	24.39	4.88	105	0.07	0.20	0.7
1	50	19.79	35.708	25.38	5.41	108	0.13	0.24	3.3
1	100	18.15	35.705	25.79	5.26	102	0.17	0.32	0.2
1	150	17.37	35.687	25.97	5.02	96	0.30		0.7
1	200	17.04	35.657	26.03	4.95	94	0.31	0.40	1.4
1	300	15.93	35.512	26.17	4.86	90	0.51	0.54	3.2
1	400	14.23	35.315	26.40	4.68	84	0.68		8.1
1	500	12.52	35.107	26.59	4.51	78	0.85	0.94	9.1
1	700	8.91	34.703	26.92	4.42	70	1.31	1.45	21.7
1	900	6.64	34.526	27.12	4.38	66	1.58	1.69	23.4
1	1100	5.49	34.503	27.24	4.28	62	1.78	1.88	33.6
1	1300	4.31	34.473	27.36	3.91	55	1.96	2.02	36.1
1	1500	3.31	34.577	27.54	3.70	51	2.02	2.09	32.9
1	2000	2.24	34.656	27.70	3.54	47	2.12	2.24	38.3

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/47/62	4/2/62	0400 M	34 29 S	173 57 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
1134	19.4	21.1	24	3	16			8	23	1	03	3	1011.7			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	22.56	35.718	24.62	5.04	106	0.05		1.6
1	25	21.01	35.667	25.02	5.27	108	0.08		0.8
1	49	18.83	35.509	25.47	5.59	110	0.12		0.7
1	74	17.39	35.473	25.80	5.22	100	0.31		1.0
1	98	15.91	35.366	26.07	5.14	95	0.51		2.2
1	147	15.36	35.390	26.21	4.92	90	0.60		3.3
1	196	14.57	35.363	26.36	4.73	85	0.62		2.8
1	294	13.25	35.206	26.52	4.51	79	0.67		5.6
1	392	11.41	34.978	26.70	4.49	75	0.87		10.8
1	490	9.56	34.766	26.86	4.45	72	1.10		11.5
1	686	7.70	34.582	27.01	4.45	68	1.39		23.2
1	883	5.89	34.485	27.18	4.32	63	1.59		33.2
1	981	5.42	34.474	27.23	4.27	62	1.73		31.9

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/48/62	11/2/62	1145 L	39 13 S	171 06 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
1829	21.1	23.3	31	3	16	8	8	6	31	2	02	2	1007.6			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	19.66	35.365	25.15	5.26	105	0.13	0.38	0.0
1	24	19.66	35.374	25.15	5.30	106	0.13		0.0
1	48	19.67	35.374	25.15	5.15	103	0.11	0.33	0.0
1	72	15.24	35.363	26.22	6.06	111	0.19		0.0
1	96	14.27	35.360	26.43	5.59	100	0.37	0.61	1.3
1	144	13.61	35.289	26.51	5.17	91	0.54		3.9
1	192	13.24	35.283	26.58	5.29	93	0.57	0.69	3.2
1	288	12.46	35.197	26.67	5.27	91	0.64	0.80	4.1
1	383	11.22	34.995	26.75	5.00	84	0.87		8.0
1	479		34.763		4.77		1.17	1.19	9.9
1	671	7.86	34.566	26.97	4.62	71	1.47	1.51	14.8

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/49/62	11/2/62	2330 L	38 30 S	168 10 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
850	19.4	21.1	31	5	16	8	6	7	31	3	32	2	997.4			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	19.65	35.465	25.23	5.31	106	0.13	0.39	0.2
1	25	19.56	35.471	25.25	5.25	104	0.14		0.3
1	50	17.74	35.420	25.68	5.74	110	0.17	0.34	0.4
1	75	15.59	35.398	26.16	5.51	101	0.34		0.7
1	100	14.17	35.367	26.45	5.24	94	0.38	0.61	2.7
1	150	13.50	35.309	26.55	5.28	93	0.51		3.6
1	200	13.23	35.282	26.58	5.36	94	0.52	0.68	3.8
1	300	12.22	35.140	26.67	4.94	85	0.71	0.86	6.3
1	400	11.53	35.030	26.72	4.71	79	0.84	1.06	9.5

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/50/62	13/2/62	0200 L	38 04 S	165 10 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
1646	14.4	17.8	18	3	16	8	2	8	18	3	23	2	1011.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	20.84	35.618	25.03	5.16	105	0.10	0.31	0.5
1	24	20.84	35.626	25.03	5.12	104	0.11		0.4
1	47	19.51	35.577	25.35	5.51	110	0.10	0.29	0.7
1	70	20.93	35.613	25.00	5.37	110	0.11		0.5
1	93	18.78	35.570	25.53	5.28	104	0.13	0.33	0.4
1	139	15.57	35.471	26.23	4.97	91	0.35		3.1
1	185	14.57	35.399	26.39	5.15	93	0.40	0.62	4.5
1	277	12.83	35.182	26.59	4.76	83	0.67	0.80	5.3
1	643	9.48	34.623	26.76	4.41	71	1.35	1.43	12.7
1	829	7.28	34.525	27.03	4.22	64	1.61	1.67	15.9
1	1013	5.44	34.448	27.21	4.22	61	1.72	1.87	21.9
1	1197	4.69	34.484	27.32	3.98	57	1.76	1.93	15.5
1	1381	3.68	34.528	27.47	3.76	52	1.80	1.87	40.5

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/51/62	13/2/62	1545 L	37 25 S	162 15 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
3848	15.0	18.9	16	4	16	8	4	7	16	3	24	4	1016.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	22.07	35.517	24.61	5.15	107	0.13		0.0
2	25	22.06	35.528	24.62	5.15	107	0.11		0.0
2	50	19.10	35.627	25.49	5.22	103	0.18		0.0
2	75	16.21	35.509	26.11	4.92	92	0.40		1.9
2	100	15.48	35.459	26.24	4.71	87	0.55		4.0
2	150	14.43	35.389	26.41	4.85	87	0.64		4.7
2	500	13.53	35.290	26.53	4.87	86	0.67		7.2
2	300	12.33	35.070	26.60	4.90	84	0.74		8.9
2	500	8.93	34.682	26.90	4.82	76	1.24		18.5
2	700	7.44	34.547	27.02	4.52	69	1.47		22.9
2	900	5.88	34.474	27.17	4.30	63	1.76		28.6
1	1087	4.79	34.480	27.31	4.05	58	1.80		30.4
1	1285	3.84	34.530	27.45	3.79	53	1.94		29.7
1	1482	3.13	34.580	27.56	3.60	49	2.07		29.5
1	1973	2.50	34.656	27.68	3.79	51	1.99		31.0
1	2460	2.00	34.745	27.79	4.16	55	1.92		32.4
1	2947	1.52	34.742	27.82	4.49	59	1.91		32.4
1	3431	1.23	34.728	27.83	4.56	59	1.76		30.2

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/52/62	14/2/62	0600 L	36 37 S	159 14 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
5166	14.4	18.3	08	2	16	8	1	8	09	1	12	2	1014.0			

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
2	0	21.55	35.471	24.72	5.15	106	0.08		0.0
2	25	21.51	35.484	24.74	5.09	105	0.07		0.0
2	50	20.41	35.528	25.07	5.43	110	0.12		0.1
2	75	17.20	35.534	25.89	5.21	99	0.30		0.1
2	100	15.42	35.462	26.25	5.04	92	0.42		2.1
2	150	13.95	35.347	26.48	4.84	86	0.61		6.3
2	200	12.98	35.226	26.59	4.78	83	0.70		7.6
2	300	11.19	34.969	26.74	4.54	76	0.94		11.7
2	500		34.644		4.78		1.23		14.9
2	700	7.05	34.528	27.06	4.44	67	1.51		21.3
2	900	5.61	34.467	27.20	4.27	62	1.72		22.3
1	1083	4.53	34.473	27.33	4.33	57	1.93		22.9
1	1277	3.73	34.525	27.46	3.75	52	2.04		25.2
1	1470	3.15	34.593	27.57	3.62	49	2.05		25.8
1	1955	2.45			3.80		1.97		24.4
1	2439	1.96	34.732	27.78	4.16	55	1.93		25.7
1	2922	1.63	34.731	27.81	4.43	58	1.92		25.2
1	3406	1.30	34.723	27.82	4.53	59	1.89		25.4

STATION	DATE	TIME	LATITUDE	LONGITUDE
G1/53/62	15/2/62	0001 K	36 10 S	156 25 E

SONIC DEPTH	AIR TEMP. WET	AIR TEMP. DRY	WIND DIR.	WIND SP.	ANEM. HEIGHT	CLOUD TYPE	CLOUD AMT.	VIS.	SEA DIR.	SEA AMT.	SWELL DIR.	SWELL AMT.	ATMOS. PRESSURE	WIRE ANGLES CAST1	CAST2	CAST3
4572			20	1	16	8	8	5	20	3						

CAST	DEPTH	TEMP.	SALINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	INORG. P	TOTAL P	NITRATE
1	0	22.68	34.982	24.03	4.91	103	0.08		0.0
1	10	22.89	35.467	24.34	4.92	104	0.07		0.0
1	25	19.63	35.649	25.37	5.24	105	0.13		0.4
1	40	17.73	35.588	25.81	4.55	87	0.34		1.7
1	55	16.74	35.528	26.00	4.38	83	0.52		3.1
1	85	14.89	35.486	26.39	4.61	84	0.53		3.2
1	235	14.73	35.469	26.41	4.70	85	0.53		3.9
1	295	13.24	35.429	26.69	4.94	87	0.67		1.9
1	415	10.38	34.937	26.86	4.53	74	1.02		10.1
1	535	8.68	34.698	26.95	4.53	71	1.19		16.2
1	665	7.44	34.573	27.04	4.41	67	1.44		20.6
1	785	6.40	34.495	27.12	4.30	64	1.64		22.2
1	905	5.34	34.521	27.28	4.19	61	1.75		24.5
1	1215	3.72	34.462	27.41	3.76	52	2.08		28.8

DATA

PART 2

PRIMARY PRODUCTION

EXPLANATION OF HEADINGS

Part 2	Primary Production
STATION	Gives the station identification. For example G1/1/62 signifies the 1st station worked from the Gascoyne in 1962, on her 1st cruise for that year
DATE	Given as day/month/year
TIME	Given in Zone Time (see p.12)
LATITUDE LONGITUDE	Given in degrees and minutes
INCUBATION METHOD	ARTIFICIAL CONSTANT LIGHT: At 1100 ft for 4 hours
ACTIVITY CPM	Activity of the ^{14}C stock used in counts per minute
BACKGROUND	Activity in counts per minute
DEPTH	Depth of sampling in metres
LIGHT	The counts per minute of the filter from the clear bottle
DARK	The counts per minute of the filter from the dark bottle. If this is more than 50 and also more than 10% of the LIGHT count it is assumed to be aberrant and the symbol "B" is placed after it
DARK USED	Usually the same as DARK. However, if this is aberrant or not done, the mean of the other DARK counts at that station which are not aberrant is used, and the symbol "E" is placed after it
NETT	LIGHT minus DARK USED. If this is negative it is assumed to be equal to zero for further calculations and the symbol "G" is placed after it
INC. PER.	Incubation period

PRODUCTION A	The calculated rate of production at the depth sampled per hour of incubation
PRODUCTION B	The integrated rate of production per day under one square metre of sea surface from the surface to the depth given. The production per day is assumed to equal 10 times the hourly production
**	Indicates no data available

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 1/62	11/ 1/62	2315 K	33 27 S	153 18 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM		DARK USED CPM		NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	148	34		34		114	04.00	00.08	00.00
25	713	80	B	20	E	693	04.00	00.47	00.07
50	467	23		23		444	04.00	00.30	00.17
75	56	13		13		43	04.00	00.03	00.21
100	27	10		10		17	04.00	00.01	00.21
150	89	24		24		65	04.00	00.04	00.22

B ABERRANT VALUE, NOT USED
E MEAN NON-ABERRANT DARK USED

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 2/62	14/ 1/62	1015 K	30 18 S	153 57 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	125	15	15	110	04.00	00.08	00.00
25	247	27	27	220	04.00	00.15	00.03
50	222	18	18	204	04.00	00.14	00.07
75	351	23	23	328	04.00	00.22	00.11
100	75	14	14	61	04.00	00.04	00.14
150	76	57 B	19 E	57	04.00	00.04	00.16

B ABERRANT VALUE, NOT USED
E MEAN NON-ABERRANT DARK USED

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 3/62	15/ 1/62	0400 K	28 29 S	154 03 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	140	21	21	119	04.00	00.08	00.00
25	243	31	31	212	04.00	00.15	00.03
50	677	17	17	660	04.00	00.45	00.10
75	228	5	5	223	04.00	00.15	00.18
100	28	11	11	17	04.00	00.01	00.20
150	10	44	44	- 34 G	04.00	00.00	00.20

G NEGATIVE VALUE, ASSUMED ZERO

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 4/62	15/ 1/62	1645 K	26 20 S	154 06 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	137	40	40	97	04.00	00.07	00.00
25	174	9	9	165	04.00	00.11	00.02
50	833	11	11	822	04.00	00.56	00.11
75	90	34	34	56	04.00	00.04	00.18
100	26	27	27	- 1 G	04.00	00.00	00.19
150	21	34	34	- 13 G	04.00	00.00	00.19

G NEGATIVE VALUE, ASSUMED ZERO

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 5/62	16/ 1/62	0640 K	24 00 S	154 00 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	338	15	15	323	04.00	00.22	00.00
25	1236	5	5	1231	04.00	00.84	00.13
50	848	10	10	838	04.00	00.57	00.31
75	183	10	10	173	04.00	00.12	00.40
100	19	23	23	- 4 G	04.00	00.00	00.41
150	54	16	16	38	04.00	00.03	00.42

G NEGATIVE VALUE, ASSUMED ZERO

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 6/62	16/ 1/62	1500 K	22 54 S	155 05 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	58	10	10	48	04.00	00.03	00.00
25	138	13	13	125	04.00	00.09	00.02
50	90	19	19	71	04.00	00.05	00.03
75	82	21	21	61	04.00	00.04	00.04
100	198	13	13	185	04.00	00.13	00.07
150	24	5	5	19	04.00	00.01	00.10

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 7/62	17/ 1/62	0230 K	21 53 S	156 18 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	65	21	21	44	04.00	00.03	00.00
25	62	36	36	26	04.00	00.02	00.01
50	73	24	24	49	04.00	00.03	00.01
75	148	10	10	138	04.00	00.09	00.03
100	106	11	11	95	04.00	00.06	00.05
150	20	6	6	14	04.00	00.01	00.06

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 8/62	17/ 1/62	1150 K	20 45 S	157 24 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	53	7	7	46	04.00	00.03	00.00
25	139	26	26	113	04.00	00.08	00.01
50	113	10	10	103	04.00	00.07	00.03
75	172	16	16	156	04.00	00.11	00.06
100	290	12	12	278	04.00	00.19	00.09
150	26	9	9	17	04.00	00.01	00.14

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 9/62	17/ 1/62	2040 K	20 01 S	155 47 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	34	14	14	20	04.00	00.01	00.00
25	67	22	22	45	04.00	00.03	00.01
50	62	30	30	32	04.00	00.02	00.01
75	79	26	26	53	04.00	00.04	00.02
100	115	16	16	99	04.00	00.07	00.03
150	30	10	10	20	04.00	00.01	00.05

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 10/62	18/ 1/62	0605 K	19 12 S	154 02 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	144	9	9	135	04.00	00.09	00.00
25	244	9	9	235	04.00	00.16	00.03
50	126	13	13	113	04.00	00.08	C0.06
75	113	45	45	68	04.00	00.05	C0.08
100	109	10	10	99	04.00	00.07	00.09
150	16	11	11	5	04.00	00.00	00.11

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 11/62	18/ 1/62	1710 K	18 38 S	155 58 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	46	13	13	33	04.00	00.02	00.00
25	83	17	17	66	04.00	00.05	00.01
50	48	18	18	30	04.00	00.02	00.02
75	36	21	21	15	04.00	00.01	00.02
100	30	27	27	3	04.00	00.00	00.02
150	26	8	8	18	04.00	00.01	00.03

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 12/62	19/ 1/62	0315 K	18 02 S	157 43 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	156	10	10	146	04.00	00.10	00.00
25	257	11	11	246	04.00	00.17	C0.03
50	213	33	33	180	04.00	00.12	00.07
75	580	20	20	560	04.00	00.38	00.13
100	222	18	18	204	04.00	00.14	C0.20
150	41	21	21	20	04.00	00.01	C0.24

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 13/62	19/ 1/62	1345 K	19 50 S	157 26 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	70	7	7	63	04.00	00.04	00.00
25	101	25	25	76	04.00	00.05	00.01
50	196	29	29	167	04.00	00.11	00.03
75	103	30	30	73	04.00	00.05	00.05
100	103	24	24	79	04.00	00.05	00.06
150	26	6	6	20	04.00	00.01	00.08

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 14/62	20/ 1/62	0615 K	22 58 S	156 57 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH	LIGHT	DARK	DARK USED	NETT	INC. PER.	PRODUCTION A	PRODUCTION B
M	CPM	CPM	CPM	CPM	HOURS	MG.C/HR./CU.M.	G.C/DAY/SQ.M.
0	192	41	41	151	04.00	00.10	00.00
25	238	49	49	189	04.00	00.13	00.03
50	247	45	45	202	04.00	00.14	00.06
75	267	49	49	218	04.00	00.15	00.10
100	238	24	24	214	04.00	00.15	00.14
150	44	36	36	8	04.00	00.01	00.18

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 15/62	20/ 1/62	1525 K	22 54 S	158 42 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	57	10	10	47	04.00	00.03	00.00
25	126	28	28	98	04.00	00.07	00.01
50	304	24	24	280	04.00	00.19	00.05
75	302	12	12	290	04.00	00.20	00.09
100	27	5	5	22	04.00	00.02	00.12
150	21	13	13	8	04.00	00.01	00.13

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 16/62	21/ 1/62	0200 L	22 56 S	160 32 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	79	12	12	67	04.00	00.05	00.00
25	91	20	20	71	04.00	00.05	00.01
50	77	18	18	59	04.00	00.04	00.02
75	63	20	20	43	04.00	00.03	00.03
100	95	12	12	83	04.00	00.06	00.04
150	28	12	12	16	04.00	00.01	00.06

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 17/62	21/ 1/62	1115 L	22 53 S	162 24 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	118	21	21	97	04.00	00.07	00.00
25	239	24	24	215	04.00	00.15	00.03
50	347	17	17	330	04.00	00.23	00.08
75	549	14	14	535	04.00	00.37	00.15
100	274	22	22	252	04.00	00.17	00.22
150	61	27	27	34	04.00	00.02	00.27

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 18/62	21/ 1/62	2030 L	22 52 S	164 13 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	25	12	12	13	04.00	00.01	00.00
25	42	30	30	12	04.00	00.01	00.00
50	33	27	27	6	04.00	00.00	00.00
75	63	35	35	28	04.00	00.02	00.01
100	85	12	12	73	04.00	00.05	00.02
150	14	11	11	3	04.00	00.00	00.03

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 20/62	26/ 1/62	0050 L	24 37 S	166 25 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	61	23	23	38	04.00	00.03	00.00
25	119	33	33	86	04.00	00.06	00.01
50	44	32	32	12	04.00	00.01	00.02
75	62	44	44	18	04.00	00.01	00.02
100	131	32	32	99	04.00	00.07	00.03
150	32	34	34	- 2 G	04.00	00.00	00.05

G NEGATIVE VALUE, ASSUMED ZERO

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 21/62	26/ 1/62	1110 L	24 34 S	164 28 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	67	19	19	48	04.00	00.03	00.00
25	89	23	23	66	04.00	00.05	00.01
50	96	23	23	73	04.00	00.05	00.02
75	137	32	32	105	04.00	00.07	00.04
100	201	19	19	182	04.00	00.12	00.06
150	28	13	13	15	04.00	00.01	00.09

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 22/62	26/ 1/62	2005 L	24 34 S	162 42 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	33	18	18	15	04.00	00.01	00.00
25	24	18	18	6	04.00	00.00	C0.00
50	51	30	30	21	04.00	00.01	C0.00
75	68	20	20	48	04.00	00.03	00.01
100	141	26	26	115	04.00	00.08	00.02
150	26	20	20	6	04.00	00.00	C0.04

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 23/62	27/ 1/62	0740 L	24 33 S	160 22 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	165	18	18	147	04.00	00.10	00.00
25	188	22	22	166	04.00	00.11	00.03
50	185	30	30	155	04.00	00.11	00.05
75	214	15	15	199	04.00	00.14	00.09
100	252	17	17	235	04.00	00.16	00.12
150	27	15	15	12	04.00	00.01	00.17

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 24/62	27/ 1/62	1800 L	24 40 S	158 20 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	65	18	18	47	04.00	00.03	C0.00
25	70	26	26	44	04.00	00.03	00.01
50	127	29	29	98	04.00	00.07	00.02
75	310	32	32	278	04.00	00.19	00.05
100	59	15	15	44	04.00	00.03	00.08
150	77	9	9	68	04.00	00.05	00.10

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 25/62	28/ 1/62	0640 L	24 42 S	155 50 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	230	13	13	217	04.00	00.15	00.00
25	279	25	25	254	04.00	00.17	00.04
50	411	**	19 E	392	04.00	00.27	00.10
75	273	23	23	250	04.00	00.17	00.15
100	353	19	19	334	04.00	00.23	00.20
150	40	15	15	25	04.00	00.02	00.26

E MEAN NON-ABERRANT DARK USED

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 27/62	28/ 1/62	1410 L	24 15 S	154 49 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	104	15	15	89	04.00	00.06	00.00
25	192	27	27	165	04.00	00.11	00.02
50	171	**	18 E	153	04.00	00.10	00.05
75	502	16	16	486	04.00	00.33	00.10
100	98	22	22	76	04.00	00.05	00.15
150	16	13	13	3	04.00	00.00	00.16

E MEAN NON-ABERRANT DARK USED

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 30/62	28/ 1/62	2310 L	24 52 S	153 42 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	43	14	14	29	04.00	00.02	00.00
25	215	62 B	8 E	207	04.00	00.14	00.02
50	167	7	7	160	04.00	00.11	00.05
75	62	7	7	55	04.00	00.04	00.07
100	21	8	8	13	04.00	00.01	00.08
150	14	4	4	10	04.00	00.01	00.08

B ABERRANT VALUE, NOT USED
E MEAN NON-ABERRANT DARK USED

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 31/62	29/ 1/62	1210 L	27 19 S	153 49 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	183	12	12	171	04.00	00.12	00.00
25	379	56 B	17 E	362	04.00	00.25	00.05
50	784	23	23	761	04.00	00.52	00.14
75	170	29	29	141	04.00	00.10	00.22
100	224	16	16	208	04.00	00.14	00.25
150	34	7	7	27	04.00	00.02	00.29

B ABERRANT VALUE, NOT USED
E MEAN NON-ABERRANT DARK USED

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 34/62	29/ 1/62	2115 L	27 20 S	155 02 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM		INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	67	15	15	52		04.00	00.04	00.00
25	76	28	28	48		04.00	00.03	00.01
50	103	23	23	80		04.00	00.05	00.02
75	227	22	22	205		04.00	00.14	00.04
100	94	8	8	86		04.00	00.06	00.07
150	6	12	12	- 6	G	04.00	00.00	00.08

G NEGATIVE VALUE, ASSUMED ZERO

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 36/62	30/ 1/62	0655 L	27 20 S	156 35 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	351	11	11	340	04.00	00.23	00.00
25	474	13	13	461	04.00	00.32	00.07
50	501	14	14	487	04.00	00.33	00.15
75	1554	22	22	1532	04.00	01.05	00.32
100	398	16	16	382	04.00	00.26	00.49
150	43	7	7	36	04.00	00.02	00.56

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 37/62	30/ 1/62	1835 L	27 29 S	158 38 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	86	17	17	69	04.00	00.05	00.00
25	84	31	31	53	04.00	00.04	00.01
50	162	16	16	146	04.00	00.10	00.03
75	249	21	21	228	04.00	00.16	00.06
100	422	17	17	405	04.00	00.28	00.12
150	17	16	16	1	04.00	00.00	00.19

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 38/62	31/ 1/62	0640 L	27 30 S	161 12 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	162	15	15	147	04.00	00.10	00.00
25	212	14	14	198	04.00	00.14	00.03
50	318	14	14	304	04.00	00.21	00.07
75	294	17	17	277	04.00	00.19	00.12
100	546	9	9	537	04.00	00.37	00.19
150	36	4	4	32	04.00	00.02	00.29

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 39/62	31/ 1/62	1720 L	27 32 S	163 28 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	95	26	26	69	04.25	00.04	00.00
25	138	22	22	116	04.25	00.07	00.01
50	206	21	21	185	04.25	00.12	00.04
75	374	16	16	358	04.25	00.23	00.08
100	99	10	10	89	04.25	00.06	00.12
150	7	4	4	3	04.25	00.00	00.13

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 40/62	1/ 2/62	0435 L	27 33 S	165 40 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	°268	14	14	254	04.00	00.17	00.00
25	358	19	19	339	04.00	00.23	00.05
50	335	12	12	323	04.00	00.22	00.11
75	291	9	9	282	04.00	00.19	00.16
100	367	10	10	357	04.00	00.24	00.21
150	53	12	12	41	04.00	00.03	00.28

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 41/62	1/ 2/62	1600 L	27 33 S	167 56 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	165	1	1	164	04.00	00.11	C0.00
25	266	6	6	260	04.00	00.18	C0.04
50	294	16	16	278	04.00	00.19	C0.08
75	410	19	19	391	04.00	00.27	00.14
100	123	27	27	96	04.00	00.07	00.18
150	19	18	18	1	04.00	00.00	C0.20

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 42/62	2/ 2/62	0310 L	27 37 S	170 03 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	130	31	31	99	04.00	00.07	00.00
25	165	25	25	140	04.00	00.10	00.02
50	241	19	19	222	04.00	00.15	00.05
75	324	12	12	312	04.00	00.21	00.10
100	257	4	4	253	04.00	00.17	00.15
150	36	9	9	27	04.00	00.02	00.19

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 43/62	2/ 2/62	1255 L	27 40 S	171 57 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	291	7	7	284	04.00	00.19	00.00
25	558	2	0	558	04.00	00.38	00.07
50	503	18	18	485	04.00	00.33	00.16
75	435	16	16	419	04.00	00.29	00.24
100	383	12	12	371	04.00	00.25	00.31
150	23	12	12	11	04.00	00.01	00.37

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 44/62	3/ 2/62	2300 L	29 26 S	172 20 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	74	21	21	53	04.00	00.04	00.00
25	75	24	24	51	04.00	00.03	00.01
50	111	**	16 E	95	04.00	00.06	00.02
75	322	23	23	299	04.00	00.20	00.05
100	29	9	9	20	04.00	00.01	00.08
150	14	6	6	8	04.00	00.01	00.08

E MEAN NON-ABERRANT DARK USED

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 45/62	3/ 2/62	1835 M	32 43 S	173 22 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	109	18	18	91	04.00	00.06	00.00
25	330	13	13	317	04.00	00.22	00.04
50	305	23	23	282	04.00	00.19	00.09
75	621	10	10	611	04.00	00.42	00.16
100	118	18	18	100	04.00	00.07	00.22
150	21	10	10	11	04.00	00.01	00.24

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 46/62	4/ 2/62	0435 M	34 29 S	173 57 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	39	18	18	21	04.00	00.01	C0.00
25	86	33	33	53	04.00	00.04	C0.01
50	66	24	24	42	04.00	00.03	00.02
75	190	37	37	153	04.00	00.10	C0.03
100	322	16	16	306	04.00	00.21	00.07
150	51	24	24	27	04.00	00.02	00.13

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 47/62	12/ 2/62	0025 L	39 13 S	171 06 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	153	30	30	123	04.00	00.08	00.00
25	370	44	44	326	04.00	00.22	C0.04
50	1354	36	36	1318	04.00	00.90	00.18
75	590	12	12	578	04.00	00.40	00.34
100	80	19	19	61	04.00	00.04	C0.40
150	30	17	17	13	04.00	00.01	00.41

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 48/62	12/ 2/62	1237 L	38 30 S	168 10 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	185	28	28	157	04.00	00.11	00.00
25	344	28	28	316	04.00	00.22	00.04
50	404	28	28	376	04.00	00.26	C0.10
75	660	17	17	643	04.00	00.44	C0.19
100	510	14	14	496	04.00	00.34	00.29
150	33	29	29	4	04.00	00.00	00.37

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 49/62	13/ 2/62	0250 L	38 04 S	165 10 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	15 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	219	13	13	206	04.00	00.14	00.00
25	475	25	25	450	04.00	00.31	00.06
50	701	27	27	674	04.00	00.46	00.15
75	529	25	25	504	04.00	00.34	00.25
100	157	18	18	139	04.00	00.10	00.31
150	25	11	11	14	04.00	00.01	00.34

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 50/62	13/ 2/62	1620 L	37 25 S	162 15 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	15 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	189	22	22	167	04.00	00.11	00.00
25	348	30	30	318	04.00	00.22	00.04
50	243	30	30	213	04.00	00.15	00.09
75	569	33	33	536	04.00	00.37	00.15
100	161	14	14	147	04.00	00.10	00.21
150	20	14	14	6	04.00	00.00	00.24

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 51/62	14/ 2/62	0640 L	36 37 S	159 14 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	15 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	252	28	28	224	04.00	00.15	00.00
25	392	31	31	361	04.00	00.25	00.05
50	643	52	52	591	04.00	00.40	00.13
75	130	12	12	118	04.00	00.08	00.19
100	17	5	5	12	04.00	00.01	00.20
150	11	15	15	- 4 G	04.00	00.00	00.21

G NEGATIVE VALUE, ASSUMED ZERO

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 52/62	15/ 2/62	0105 K	36 10 S	156 25 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	7.24 MILLION	15 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	421	21	21	400	04.10	00.27	C0.00
25	598	29	29	569	04.10	00.38	00.08
50	875	31	31	844	04.10	00.56	00.20
75	1331	23	23	1308	04.10	00.87	C0.38
100	84	14	14	70	04.10	00.05	C0.49
150	16	18	18	- 2 G	04.10	00.00	00.51

G NEGATIVE VALUE, ASSUMED ZERO

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 53/62	15/ 2/62	0105 K	36 10 S	156 25 E

INCUBATION METHOD	PERIOD	14C STOCK	ACTIVITY CPM	BACKGROUND
ARTIFICIAL CONSTANT LIGHT	4 HOURS	NO. 10	8.97 MILLION	10 CPM

DEPTH M	LIGHT CPM	DARK CPM	DARK USED CPM	NETT CPM	INC. PER. HOURS	PRODUCTION A MG.C/HR./CU.M.	PRODUCTION B G.C/DAY/SQ.M.
0	218	32	32	186	04.00	00.13	00.00
25	280	31	31	249	04.00	00.17	00.04
50	348	35	35	313	04.00	00.21	00.09
75	631	15	15	616	04.00	00.42	00.16
100	107	17	17	90	04.00	00.06	00.22
150	41	22	22	19	04.00	00.01	00.24

DATA

PART 3

PIGMENTS

EXPLANATION OF HEADINGS

Part 3	Pigments
STATION	Gives the station identification. For example, G1/1/62 signifies the 1st station worked by Gascoyne in 1962, on her 1st cruise for that year
DATE	Given as day/month/year
TIME	Given in Zone Time (see p.12)
LATITUDE LONGITUDE	Given in degrees and minutes
DEPTH	Actual sampling depth given in metres
CHLOROPHYLL A B C	A and B given in mg/m^3 C given in $MSPU/m^3$
ASTACIN NON-ASTACIN	Given in $MSPU/m^3$

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 1/62	11/ 1/62	2200 K	33 27 S	153 18 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.08	0.06	0.40	0.10	0.02
25	0.15	0.07	0.45	0.09	0.01
50	0.16	0.09	0.65	0.12	0.02
75	0.11	0.06	0.53	0.10	0.00
100	0.10	0.08	0.54	0.11	0.01
150	0.08	0.08	0.60	0.12	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 2/62	14/ 1/62	1400 K	30 18 S	153 57 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.04	0.05	0.34	0.07	0.01
25	0.07	0.05	0.40	0.09	0.00
50	0.08	0.06	0.45	0.11	0.01
75	0.14	0.10	0.59	0.11	0.01
100	0.19	0.11	0.97	0.09	0.05
150	0.15	0.10	0.62	0.11	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 3/62	15/ 1/62	0230 K	28 29 S	154 03 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.02	0.01	0.07	0.04	0.01
25	0.03	0.02	0.20	0.07	0.01
50	0.08	0.06	0.43	0.10	0.01
75	0.06	0.05	0.34	0.07	0.00
100	0.14	0.10	0.76	0.16	0.02
150	0.06	0.07	0.48	0.13	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 4/62	15/ 1/62	1610 K	26 20 S	154 06 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.06	0.03	0.26	0.07	0.01
25	0.09	0.08	0.46	0.09	0.02
50	0.08	0.06	0.42	0.08	0.00
75	0.08	0.05	0.31	0.16	0.03
100	0.14	0.09	0.64	0.11	0.01
150	0.06	0.05	0.40	0.08	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 5/62	16/ 1/62	0600 K	24 00 S	154 00 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.06	0.05	0.34	0.07	0.00
25	0.07	0.04	0.28	0.06	0.00
50	0.17	0.06	0.46	0.07	0.01
75	0.11	0.05	0.36	0.07	0.02
100	0.03	0.02	0.20	0.05	0.02
150	0.05	0.05	0.34	0.07	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 6/62	16/ 1/62	1430 K	22 54 S	155 05 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.04	0.03	0.35	0.07	0.00
25	0.09	0.07	0.45	0.08	0.02
50	0.04	0.02	0.34	0.03	0.03
75	0.04	0.03	0.22	0.06	0.02
100	0.18	0.15	0.82	0.11	0.02
150	0.11	0.08	0.53	0.10	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 7/62	17/ 1/62	0135 K	21 53 S	156 18 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.07	0.05	0.44	0.09	0.01
25	0.03	0.04	0.21	0.05	0.01
50	0.10	0.08	0.52	0.08	0.01
75	0.13	0.06	0.38	0.07	0.03
100	0.14	0.08	0.45	0.08	0.02
150	0.10	0.06	0.42	0.07	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 8/62	17/ 1/62	1100 K	20 45 S	157 24 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.06	0.05	0.44	0.09	0.00
25	0.09	0.08	0.52	0.09	0.00
50	0.07	0.08	0.41	0.10	0.01
75	0.08	0.07	0.30	0.06	0.02
100	0.08	0.08	0.65	0.14	0.02
150	0.13	0.10	0.63	0.12	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 9/62	17/ 1/62	2000 K	20 01 S	155 47 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.02	0.02	0.20	0.06	0.00
25	0.05	0.04	0.36	0.08	0.01
50	0.05	0.03	0.32	0.08	0.02
75	0.06	0.04	0.29	0.05	0.00
100	0.17	0.14	0.62	0.10	0.02
150	0.06	0.04	0.30	0.06	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 10/62	18/ 1/62	0530 K	19 12 S	154 02 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.02	0.02	0.20	0.04	0.01
25	0.05	0.03	0.22	0.05	0.00
50	0.06	0.05	0.37	0.08	0.01
75	0.07	0.06	0.37	0.07	0.01
100	0.04	0.03	0.20	0.05	0.01
150	0.08	0.06	0.57	0.13	0.03

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 11/62	18/ 1/62	1630 K	18 37 S	155 58 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.04	0.02	0.36	0.08	0.02
50	0.04	0.03	0.30	0.07	0.00
75	0.06	0.04	0.41	0.08	0.01
100	0.06	0.05	0.33	0.07	0.01
150	0.08	0.12	0.78	0.12	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 12/62	19/ 1/62	0230 L	18 20 S	157 43 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.04	0.03	0.24	0.05	0.02
25	0.03	0.02	0.15	0.05	0.00
50	0.02	0.03	0.23	0.05	0.00
75	0.18	0.09	0.55	0.08	0.02
100	0.12	0.07	0.49	0.09	0.01
150	0.10	0.08	0.53	0.08	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 13/62	19/ 1/62	1300 K	19 50 S	157 26 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.04	0.03	0.25	0.06	0.01
25	0.06	0.04	0.34	0.07	0.01
50	0.07	0.05	0.44	0.10	0.01
75	0.06	0.06	0.30	0.07	0.01
100	0.06	0.04	0.38	0.08	0.01
150	0.08	0.06	0.44	0.08	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 14/62	20/ 1/62	0530 K	22 58 S	156 57 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.04	0.04	0.31	0.06	0.00
25	0.04	0.03	0.33	0.07	0.02
50	0.07	0.06	0.43	0.08	0.01
100	0.07	0.04	0.33	0.06	0.01
150	0.09	0.07	0.54	0.09	0.03

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 15/62	20/ 1/62	1500 L	22 54 S	158 42 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.06	0.05	0.46	0.08	0.01
25	0.07	0.05	0.39	0.08	0.01
50	0.22	0.17	0.96	0.09	0.02
75	0.16	0.09	0.59	0.09	0.02
100	0.11	0.07	0.38	0.07	0.01
150	0.06	0.04	0.43	0.07	0.02

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 16/62	21/ 1/62	0115 L	22 56 S	160 32 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.06	0.04	0.31	0.06	0.02
25	0.05	0.04	0.37	0.07	0.00
50	0.08	0.05	0.44	0.08	0.02
75	0.10	0.05	0.37	0.06	0.01
100	0.12	0.09	0.50	0.09	0.00
150	0.08	0.04	0.38	0.06	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 17/62	21/ 1/62	1030 L	22 53 S	162 24 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.02	0.02	0.16	0.04	0.01
25	0.06	0.04	0.32	0.07	0.01
50	0.08	0.05	0.44	0.10	0.03
75	0.10	0.06	0.43	0.08	0.00
100	0.13	0.07	0.38	0.05	0.04
150	0.12	0.08	0.50	0.09	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 18/62	21/ 1/62	2015 L	22 52 S	164 13 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.04	0.03	0.20	0.05	0.00
25	0.04	0.05	0.34	0.07	0.01
50	0.04	0.05	0.34	0.07	0.02
75	0.07	0.06	0.35	0.07	0.00
100	0.12	0.09	0.59	0.09	0.01
150	0.10	0.08	0.52	0.11	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 20/62	26/ 1/62	0001 L	24 37 S	166 25 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
25	0.11	0.08	0.57	0.13	0.01
50	0.05	0.05	0.31	0.08	0.01
75	0.12	0.09	0.75	0.17	0.01
100	0.14	0.11	0.79	0.15	0.01
150	0.16	0.11	0.63	0.11	0.02

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 21/62	26/ 1/62	1030 L	24 34 S	164 28 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.06	0.05	0.37	0.08	0.01
25	0.07	0.07	0.41	0.08	0.01
50	0.07	0.06	0.40	0.08	0.00
75	0.10	0.08	0.53	0.09	0.01
100	0.15	0.07	0.45	0.06	0.04
150	0.10	0.07	0.68	0.13	0.02

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 22/62	26/ 1/62	1930 L	24 34 S	162 42 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.06	0.05	0.34	0.07	0.01
25	0.06	0.05	0.35	0.07	0.01
50	0.08	0.05	0.41	0.08	0.01
75	0.06	0.04	0.32	0.05	0.01
100	0.08	0.06	0.37	0.06	0.00
150	0.13	0.10	0.61	0.11	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 23/62	27/ 1/62	0715 L	24 33 S	160 22 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.02	0.02	0.13	0.04	0.01
25	0.06	0.05	0.35	0.07	0.00
50	0.08	0.06	0.48	0.09	0.01
75	0.07	0.05	0.42	0.15	0.05
100	0.13	0.08	0.46	0.08	0.00
150	0.08	0.06	0.39	0.08	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 24/62	27/ 1/62	1715 L	24 40 S	158 20 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.06	0.05	0.35	0.07	0.00
25	0.06	0.06	0.37	0.08	0.01
50	0.09	0.06	0.41	0.08	0.01
75	0.28	0.14	0.74	0.11	0.03
100	0.11	0.09	0.50	0.07	0.02
150	0.09	0.07	0.43	0.12	0.02

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 25/62	28/ 1/62	0600 K	24 42 S	155 50 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.07	0.06	0.41	0.15	0.03
25	0.08	0.06	0.44	0.09	0.01
50	0.06	0.05	0.31	0.07	0.00
75	0.10	0.07	0.62	0.10	0.01
100	0.12	0.08	0.52	0.09	0.01
150	0.11	0.09	0.50	0.09	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 27/62	28/ 1/62	1350 K	24 45 S	154 49 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.08	0.05	0.44	0.07	0.01
25	0.06	0.05	0.42	0.08	0.01
50	0.06	0.05	0.35	0.07	0.01
75	0.26	0.12	0.73	0.10	0.03
100	0.25	0.11	0.65	0.10	0.03
150	0.10	0.07	0.54	0.09	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 30/62	28/ 1/62	2230 K	24 52 S	153 42 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.09	0.07	0.51	0.10	0.02
25	0.07	0.05	0.36	0.08	0.01
50	0.21	0.11	0.62	0.10	0.01
75	0.16	0.11	0.56	0.10	0.00
100	0.15	0.11	0.60	0.09	0.02
150	0.10	0.07	0.44	0.10	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 31/62	29/ 1/62	1130 K	27 19 S	153 48 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.04	0.03	0.20	0.06	0.00
25	0.04	0.04	0.23	0.06	0.01
50	0.08	0.05	0.32	0.07	0.00
75	0.81	0.13	1.22	0.17	0.07
100	0.17	0.07	0.43	0.10	0.03
150	0.08	0.05	0.43	0.08	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 34/62	29/ 1/62	2100 K	27 20 S	155 02 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.04	0.05	0.29	0.08	0.00
25	0.02	0.02	0.17	0.05	0.01
50	0.07	0.05	0.44	0.08	0.01
75	0.12	0.06	0.55	0.09	0.00
100	0.17	0.12	0.79	0.13	0.00
150	0.08	0.06	0.48	0.10	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 36/62	30/ 1/62	0615 K	27 20 S	156 35 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.04	0.03	0.34	0.06	0.01
25	0.06	0.04	0.38	0.08	0.01
50	0.07	0.06	0.49	0.10	0.03
75	0.40	0.11	0.90	0.12	0.05
100	0.21	0.13	0.60	0.11	0.01
150	0.09	0.06	0.48	0.09	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 37/62	30/ 1/62	1800 L	27 29 S	158 38 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.07	0.05	0.40	0.07	0.01
25	0.06	0.06	0.42	0.08	0.01
50	0.03	0.03	0.20	0.04	0.00
75	0.10	0.06	0.45	0.08	0.00
100	0.21	0.11	0.59	0.09	0.04
150	0.03	0.02	0.16	0.05	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 38/62	31/ 1/62	0600 L	27 30 S	161 12 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.06	0.06	0.39	0.08	0.01
25	0.06	0.05	0.38	0.08	0.02
50	0.06	0.04	0.41	0.07	0.00
75	0.06	0.04	0.39	0.07	0.00
100	0.22	0.12	0.77	0.12	0.01
150	0.07	0.05	0.31	0.08	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 39/62	31/ 1/62	1645 L	27 32 S	163 28 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.08	0.06	0.40	0.07	0.00
25	0.08	0.06	0.52	0.08	0.00
50	0.06	0.05	0.34	0.07	0.01
75	0.12	0.08	0.60	0.09	0.01
100	0.21	0.12	0.75	0.11	0.03
150	0.08	0.06	0.45	0.08	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 40/62	1/ 2/62	0345 L	27 33 S	165 40 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.13	0.08	0.55	0.09	0.02
25	0.12	0.08	0.56	0.10	0.01
50	0.08	0.07	0.42	0.09	0.01
75	0.09	0.07	0.42	0.09	0.00
100	0.13	0.09	0.58	0.11	0.02
150	0.18	0.10	0.68	0.10	0.02

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 41/62	1/ 2/62	1530 L	27 33 S	167 56 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.06	0.05	0.37	0.07	0.01
25	0.07	0.06	0.44	0.08	0.00
50	0.09	0.09	0.53	0.10	0.02
75	0.19	0.10	0.67	0.10	0.01
100	0.16	0.10	0.61	0.10	0.01
150	0.08	0.06	0.54	0.10	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 42/62	2/ 2/62	0230 L	27 37 S	170 03 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.10	0.08	0.56	0.11	0.02
25	0.08	0.06	0.46	0.09	0.01
50	0.08	0.06	0.42	0.08	0.00
75	0.14	0.09	0.61	0.11	0.01
100	0.29	0.14	0.81	0.12	0.04
150	0.12	0.09	0.69	0.10	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 43/62	2/ 2/62	1200 L	27 33 S	165 40 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.07	0.07	0.42	0.09	0.00
25	0.10	0.08	0.56	0.10	0.01
50	0.10	0.07	0.51	0.10	0.01
75	0.09	0.05	0.55	0.09	0.00
100	0.20	0.12	0.74	0.12	0.02

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 44/62	2/ 2/62	2245 L	29 36 S	172 20 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.09	0.08	0.54	0.11	0.01
25	0.07	0.05	0.39	0.09	0.00
50	0.11	0.08	0.50	0.10	0.00
75	0.16	0.10	0.56	0.08	0.02
100	0.14	0.10	0.63	0.13	0.00
150	0.05	0.05	0.33	0.07	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 45/62	3/ 2/62	0900 M	31 07 S	173 37 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.07	0.06	0.44	0.08	0.00
25	0.08	0.06	0.41	0.09	0.00
50	0.18	0.11	0.72	0.08	0.02
75	0.23	0.15	0.76	0.13	0.02
100	0.14	0.09	0.61	0.09	0.01
150	0.10	0.08	0.55	0.10	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 46/62	3/ 2/62	1800 M	32 43 S	173 22 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.07	0.07	0.49	0.10	0.02
25	0.08	0.06	0.43	0.09	0.00
50	0.10	0.09	0.62	0.07	0.01
75	0.12	0.08	0.53	0.08	0.02
100	0.17	0.12	0.74	0.11	0.01
150	0.14	0.11	0.88	0.06	0.02

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 47/62	4/ 2/62	0400 M	34 29 S	173 57 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.07	0.06	0.46	0.09	0.01
25	0.09	0.06	0.56	0.10	0.01
50	0.25	0.14	0.82	0.12	0.02
75	0.25	0.14	0.77	0.10	0.01
100	0.10	0.07	0.43	0.08	0.01
150	0.04	0.03	0.25	0.05	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 48/62	11/ 2/62	1145 L	39 13 S	171 06 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.09	0.06	0.41	0.08	0.00
25	0.10	0.07	0.52	0.10	0.01
50	0.14	0.09	0.77	0.12	0.03
75	0.32	0.17	0.98	0.14	0.02
100	0.23	0.12	0.78	0.13	0.01
150	0.07	0.05	0.40	0.08	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 49/62	11/ 2/62	2330 L	38 30 S	168 10 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.08	0.06	0.43	0.08	0.01
25	0.08	0.07	0.43	0.09	0.03
50	0.16	0.11	0.67	0.11	0.01
75	0.15	0.10	0.60	0.11	0.00
100	0.12	0.08	0.57	0.10	0.01
150	0.07	0.06	0.44	0.09	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 50/62	13/ 2/62	0200 L	38 04 S	165 10 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.08	0.06	0.40	0.09	0.01
25	0.10	0.08	0.54	0.10	0.02
50	0.14	0.10	0.62	0.12	0.02
75	0.25	0.17	0.73	0.12	0.02
100	0.15	0.09	0.51	0.09	0.02
150	0.09	0.07	0.47	0.09	0.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 51/62	13/ 2/62	1545 L	37 25 S	162 15 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.08	0.07	0.41	0.08	0.01
25	0.06	0.05	0.31	0.07	0.01
50	0.19	0.11	0.68	0.12	0.00
75	0.27	0.14	0.79	0.11	0.02
100	0.06	0.05	0.31	0.07	0.01
150	0.05	0.05	0.36	0.07	0.01

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 52/62	14/ 2/62	0060 L	36 37 S	159 14 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.08	0.06	0.42	0.08	0.01
25	0.09	0.06	0.45	0.09	0.00
50	0.12	0.08	0.57	0.10	0.03
75	0.34	0.16	0.99	0.14	0.02
100	0.16	0.09	0.62	0.10	0.01
150	0.13	0.09	0.47	0.07	0.02

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 53/62	15/ 2/62	0001 K	36 10 S	156 25 E

DEPTH	CHLOROPHYLL A	CHLOROPHYLL B	CHLOROPHYLL C	ASTACIN	NON-ASTACIN
0	0.06	0.04	0.32	0.11	0.04
25	0.08	0.06	0.54	0.10	0.01
50	0.09	0.06	0.44	0.11	0.02
75	0.20	0.13	0.78	0.13	0.00
100	0.14	0.07	0.54	0.11	0.01
150	0.07	0.07	0.42	0.10	0.01

DATA

PART 4

PHYTOPLANKTON

EXPLANATION OF HEADINGS

Part 4	Phytoplankton
STATION	Gives the station identification. For example, G1/1/62 signifies the 1st station worked by Gascoyne in 1962, on her 1st cruise for that year
DATE	Is given as year, month, day
TIME	Given in Zone Time (see p.12)
LATITUDE LONGITUDE	The position of each station is given in degrees and minutes
DEPTH	Actual sampling depth is given in metres
WITH & WITHOUT CHLOROPHYLL and TOTAL PARTICLES	The counts of organisms with and without chlorophyll, and total particles are expressed as log numbers per litre

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 1/62	11/ 1/62	2217 K	33 27 S	153 18 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.30	04.40	06.56
25	04.18	04.70	06.54
50	04.65	04.65	06.30
75	04.48	04.60	06.56
100	00.00	03.30	05.88
150	00.00	00.00	06.60

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 2/62	13/ 1/62	1405 K	30 18 S	153 57 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.18	04.78	06.18
25	03.70	04.48	05.78
50	04.54	04.20	06.23
75	04.00	04.85	06.11
100	04.30	04.74	06.36
150	04.30	04.78	06.32

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 3/62	14/ 1/62	0200 K	28 29 S	154 03 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	03.70	05.00	06.11
25	04.30	04.70	06.02
50	04.60	05.00	06.18
75	05.00	05.11	05.90
100	04.95	05.00	06.02
150	00.00	04.18	06.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 4/62	15/ 1/62	1600 K	26 20 S	154 06 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	00.00	05.00	05.48
25	03.70	04.65	06.48
50	04.70	05.04	05.60
75	04.78	04.93	06.30
100	03.70	04.70	05.85
150	00.00	04.40	06.20

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 5/62	16/ 1/62	0600 K	24 00 S	154 00 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	03.70	05.26	05.78
25	04.85	05.43	05.78
50	05.20	05.30	06.00
75	05.00	05.38	05.93
100	04.54	05.00	05.90
150	04.30	06.00	05.28

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 6/62	16/ 1/62	1430 K	22 54 S	155 05 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	03.70	05.15	05.78
25	03.70	04.65	06.88
50	04.65	05.40	05.81
75	05.30	05.60	06.18
100	05.70	05.70	06.85
150	04.30	05.24	05.98

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 7/62	17/ 1/62	0230 K	21 53 S	156 18 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	05.70	04.90	05.95
25	05.70	05.26	06.02
50	06.30	05.42	06.10
75	07.30	05.48	05.88
100	06.70	05.18	06.74
150	06.65	05.45	05.40

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 8/62	17/ 1/62	1100 K	20 45 S	157 24 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.40	04.23	06.00
25	04.54	04.58	05.54
50	04.90	04.68	06.88
75	04.40	04.53	06.32
100	04.65	04.42	06.32
150	00.00	04.32	06.08

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 9/62	17/ 1/62	2000 K	20 01 S	155 47 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.60	05.20	06.37
25	04.00	05.43	06.34
50	04.60	05.30	06.02
75	05.04	05.40	05.70
100	06.13	05.57	06.20
125	03.70	05.18	06.56

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 10/62	18/ 1/62	0530 K	19 12 S	154 02 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.40	05.30	06.88
25	04.48	05.20	06.08
50	04.54	05.18	06.49
75	04.53	05.50	05.93
100	04.70	04.70	06.06
150	04.70	06.70	06.42

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 11/62	18/ 1/62	1630 K	18 38 S	155 58 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	00.00	05.30	05.81
25	04.00	05.40	06.32
50	04.60	05.34	06.15
75	04.54	05.30	06.49
100	04.85	05.08	05.60
150	00.00	05.15	06.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 12/62	19/ 1/62	0230 L	18 02 S	157 43 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.00	05.30	05.88
25	04.18	05.22	06.45
50	04.70	05.30	06.08
75	04.88	05.45	05.95
100	04.70	04.93	05.85
150	03.70	04.70	06.11

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 13/62	19/ 1/62	1300 K	19 50 S	157 26 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	00.00	04.90	05.40
25	04.00	05.30	06.20
50	03.70	05.30	05.88
75	04.54	04.90	06.23
100	05.04	05.23	05.90
150	00.00	04.54	06.20

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 14/62	20/ 1/62	0530 K	22 58 S	156 57 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	03.70	04.00	05.65
25	03.70	04.65	05.40
50	04.40	05.23	06.78
75	04.00	04.78	05.60
100	05.00	05.00	05.65
150	04.00	04.78	05.88

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 15/62	20/ 1/62	1440 L	22 57 S	158 42 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	00.00	04.85	06.42
25	00.00	04.48	06.24
50	05.54	05.45	06.70
75	05.48	05.70	06.54
100	04.30	05.23	05.85
150	04.30	05.18	06.00

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 16/62	21/ 1/62	0115 L	22 56 S	160 32 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	03.70	05.42	06.31
25	03.70	04.78	06.18
50	04.60	05.00	06.20
75	04.18	04.74	05.54
100	04.40	05.04	06.88
150	00.00	04.95	06.54

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 17/62	21/ 1/62	1030 L	22 53 S	162 24 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	00.00	04.90	06.08
25	00.00	05.08	06.65
50	04.18	05.04	06.30
75	04.54	05.15	07.10
100	04.74	05.78	06.15
150	03.70	05.18	06.18

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 18/62	21/ 1/62	2015 L	22 52 S	164 13 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	03.70	05.15	07.40
25	04.70	04.65	06.30
50	05.00	05.32	06.40
75	04.70	05.48	06.34
100	05.00	05.08	06.34
150	04.18	05.00	06.65

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 20/62	26/ 1/62	0001 L	24 37 S	166 25 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.70	04.98	05.70
25	04.00	05.08	05.95
50	04.30	05.15	07.02
75	04.60	05.26	05.70
100	05.26	05.32	06.70
150	00.00	04.70	06.18

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 21/62	26/ 1/62	1040 L	24 34 S	164 28 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.00	04.98	06.30
25	04.18	05.32	05.93
50	04.60	05.00	06.20
75	04.54	05.20	06.49
100	04.90	06.98	06.00
125	00.00	06.18	06.04

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 22/62	26/ 1/62	1930 L	24 34 S	162 42 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.30	05.72	06.51
25	03.70	05.15	06.02
50	05.00	05.78	06.49
75	05.23	05.48	06.30
100	04.78	05.78	06.13
150	04.40	05.15	06.54

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 23/62	27/ 1/62	0730 L	24 33 S	160 22 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.00	05.00	06.08
25	00.00	05.02	05.95
50	04.95	05.60	05.90
75	04.70	05.52	05.85
100	04.98	05.40	05.78
150	03.70	05.00	06.79

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 24/62	27/ 1/62	1730 L	24 40 S	158 20 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.85	05.00	06.00
25	04.30	05.23	06.32
50	04.27	05.38	05.78
75	05.00	05.20	05.99
100	04.54	05.04	***
150	04.30	05.00	05.88

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 25/62	28/ 1/62	0600 K	24 42 S	155 50 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.00	04.74	05.70
25	03.48	05.30	05.30
50	04.65	04.95	05.65
75	04.54	04.85	05.65
100	04.40	05.00	05.78
150	04.18	05.04	06.20

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 30/62	28/ 1/62	2220 K	24 52 S	153 42 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.70	05.55	05.70
25	04.54	05.36	05.88
50	05.00	05.40	05.74
75	05.54	05.59	06.62
100	04.90	05.56	06.42
150	03.70	04.90	06.30

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 31/62	29/ 1/62	1130 K	27 19 S	153 49 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.00	05.36	06.04
25	04.40	05.40	06.04
50	04.70	05.42	05.65
75	05.86	05.88	06.23
100	04.30	04.95	06.18
150	04.00	05.26	06.54

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 34/62	29/ 1/62	2105 K	27 20 S	155 02 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.40	05.00	07.10
25	03.70	05.26	06.37
50	04.18	05.11	06.13
75	04.70	04.88	06.11
100	04.90	05.36	06.45
150	04.40	05.16	06.24

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 36/62	30/ 1/62	0600 K	27 20 S	156 35 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.18	05.53	06.45
25	03.70	05.70	06.15
50	05.15	05.30	06.40
75	05.70	05.70	06.18
100	04.90	05.26	06.18
150	03.70	05.08	06.45

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 37/62	30/ 1/62	1800 L	27 29 S	158 38 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.18	05.43	06.51
25	03.70	05.26	06.42
50	05.02	05.43	06.43
75	04.70	05.42	05.70
100	04.70	05.15	06.23
150	03.70	04.81	06.20

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 38/62	31/ 1/62	0600 L	27 30 S	161 12 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.60	05.08	05.85
25	04.40	04.93	05.85
50	04.00	05.42	06.65
75	03.60	05.59	05.60
100	05.08	05.08	06.32
150	00.00	05.08	05.90

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 39/62	31/ 1/62	1630 L	27 32 S	163 28 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	05.06	05.15	06.13
25	04.30	05.08	06.56
50	03.70	05.06	06.54
75	04.90	05.43	06.63
100	04.48	05.48	06.04
150	04.30	04.90	06.38

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 40/62	1/ 2/62	0445 L	27 33 S	165 40 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.60	05.04	06.60
25	04.30	05.02	06.00
50	04.48	05.20	05.85
75	04.60	05.22	06.00
100	04.98	05.02	06.15
150	04.18	04.98	05.74

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 41/62	1/ 2/62	1530 L	27 33 S	167 50 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.70	05.26	06.60
25	04.78	04.98	06.98
50	04.18	05.36	06.32
75	04.60	04.70	06.30
100	04.30	04.70	05.04
150	04.00	04.60	05.81

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 42/62	2/ 2/62	0215 L	27 37 S	170 03 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.74	05.23	05.60
25	04.70	05.15	06.18
50	04.90	05.34	06.38
75	04.30	05.19	06.18
100	05.06	05.10	06.40
150	03.70	04.30	06.40

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 43/62	2/ 2/62	1200 L	27 40 S	171 57 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.65	04.60	06.04
25	04.40	05.08	05.90
50	04.18	04.78	05.90
75	04.48	04.74	06.40
100	04.60	04.95	06.04
150	04.30	05.18	06.38

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 44/62	2/ 2/62	2245 L	27 40 S	171 57 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.54	05.00	06.18
25	04.00	04.90	06.13
50	05.06	05.26	06.75
75	04.70	05.23	05.93
100	04.08	04.90	06.24
150	03.70	04.28	06.02

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 45/62	3/ 2/62	0900 M	31 07 S	173 37 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.54	05.61	06.93
25	04.85	05.60	06.73
50	05.85	05.85	06.70
75	05.68	05.69	06.56
100	04.60	05.15	05.60
150	03.70	04.65	06.16

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 46/62	3/ 2/62	1800 M	32 43 S	173 22 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.00	05.43	06.20
25	04.70	05.15	06.30
50	04.70	05.42	06.18
75	05.40	05.72	06.52
100	05.54	05.70	06.42
150	04.40	04.60	06.70

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 47/62	4/ 2/62	0400 M	34 29 S	173 57 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.30	04.26	06.04
25	04.85	04.45	06.40
50	05.71	04.81	06.34
75	05.85	04.97	06.58
100	04.00	04.15	06.00
150	03.70	04.00	06.26

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 48/62	11/ 2/62	2330 M	36 30 S	171 45 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	05.51	05.67	06.54
25	05.60	05.75	05.88
50	04.54	05.43	05.38
75	06.13	06.15	05.50
100	05.53	05.78	05.70
150	05.20	05.52	05.18

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 49/62	12/ 2/62	1145 L	39 13 S	171 06 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.78	05.81	06.70
25	05.32	05.78	06.70
50	04.90	05.46	06.23
75	05.81	05.86	06.62
100	05.20	05.51	05.93
150	05.00	05.46	06.56

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 50/62	13/ 2/62	0200 L	38 04 S	165 10 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	05.36	05.88	06.40
25	05.15	05.56	06.15
50	05.36	05.70	06.20
75	05.73	05.98	06.59
100	05.18	05.18	06.13
150	04.70	05.30	06.66

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 51/62	13/ 2/62	1545 L	37 25 S	162 15 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	05.04	05.51	06.18
25	05.76	05.85	06.24
50	05.68	05.68	06.35
75	05.34	05.38	06.16
100	04.85	05.28	06.20
150	04.30	05.11	06.62
900	04.70	***	***

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 52/62	14/ 2/62	0400 L	37 25 S	162 15 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.85	05.43	05.98
25	04.40	05.28	05.95
50	05.26	05.30	06.20
75	04.95	05.34	06.04
100	05.00	05.00	05.70
150	03.70	04.90	06.40
900	04.18	***	***

STATION	DATE	TIME	LATITUDE	LONGITUDE
G 1/ 53/62	15/ 2/62	0001 K	36 10 S	156 25 E

DEPTH	WITH CHLOROPHYLL	WITHOUT CHLOROPHYLL	TOTAL PARTICLES
0	04.90	05.30	06.04
25	04.74	05.43	06.11
50	05.32	05.56	06.48
75	05.54	05.54	06.50
100	04.48	05.04	06.22
150	03.40	05.23	06.72

TABLE 2

OCCURRENCE OF DIATOMS

Numbers refer to stations at which organism was found

Asterolampra feullii 15.
A. marylandica 40.

Asteromphalus flabellatus 21, 36, 46, 51.
A. heptactus 22, 23, 36.
A. hookeri 16, 17.

Bacteriastrum varians 4.

Caloneus liber 37.

Cerataulina beyonii 4.
C. pelagica 5, 31, 36.

Chaetoceros affine 4, 5, 37, 43.
C. atlanticum neapolitanum 4, 23, 36.
C. coarcatum 17, 18, 37, 42, 43.
C. dadayi 36, 38.
C. eibenii 5, 20, 30.
C. lorenzianum 8, 27, 36.
C. pendulus 39.
C. teres 5, 20.
C. vanheurckii 24.

Climacodium biconcavum 31, 34.
C. frauenfeldianum 3, 4, 6, 30, 34, 37, 38, 50.

Corethron criophilum 12, 47.

Coscinodiscus concinnus 4, 5.
C. excentricus 21.
C. lineatus 48.
C. marginatus 18.
C. radiatus 5, 10, 15, 27, 31, 39.
C. rothii 8, 12, 24, 30.

Detonula confervacea 6, 10, 16, 18, 22.

Eucampia cornuta 15.

TABLE 3

OCCURRENCE OF DINOFLAGELLATES

Numbers refer to stations at which organism was found

Amphidinium flagellans 23.
A. kesslitzi 10, 21, 46, 47.
A. turbo 2, 5, 27, 37, 41, 50, 52.
A. vasculum 1.

Amphisolenia bidentata 4, 15, 17, 30, 34, 37, 40, 41.
A. globifera 27, 40, 47, 50.
A. thrinax 16.
A. turbo 51.

Blepharocysta paulseni 36, 44, 53.
B. splendor maris 4, 6, 7, 23, 30, 34, 37, 40, 43, 48, 50.

Ceratium arietinum 24, 45, 46, 47.
C. belone 9, 11, 37, 43.
C. breve 16, 17, 30, 31, 36.
C. buceros 1, 3, 5, 8, 16, 18, 23, 24, 25, 34, 41, 44, 45, 50, 51, 53.
C. candelabrum 6, 24, 39.
C. carriense 13, 18, 22, 23, 30, 31, 43, 49, 53.
C. concilians 20, 30, 38, 39, 41, 44, 46.
C. contortum 16, 21.
C. contrarium 17, 21, 22, 24, 31, 34.
C. declinatum 13, 14, 17, 21, 22, 23, 24, 27, 34, 36, 37, 38, 39, 41, 42, 43, 44, 45, 50, 51, 53.
C. deflexum 8, 10.
C. euarcuatum 5.
C. extensum 5, 6, 8, 9, 10, 11, 14, 15, 16, 18, 20, 22, 23, 24, 31, 36, 37, 38, 39, 43.
C. falcatiforme 17, 42, 43, 51, 52.
C. furca 1, 3, 4, 5, 6, 8, 10, 15, 17, 18, 20, 25, 31, 34, 39, 43, 49, 51, 52.
C. fusus 1, 3, 4, 6, 8, 9, 10, 11, 12, 14, 15, 16, 17, 20, 21, 22, 23, 24, 25, 27, 30, 31, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 50, 51, 52.
C. gallicum 5, 6, 8, 12, 16, 20, 36.

Ceratium gravidum 13.
C. hexacanthum 21, 43.
C. humile 4, 20.

DATA

PART 5

ZOOPLANKTON

DOUBLE OBLIQUE TOWS (0–200 m–0) : CLARKE–BUMPUS SAMPLER

STATION	DATE	TIME	LATITUDE	LONGITUDE	VOLUME FILTERED (m^3)	BIOMASS (mg/m^3)
Gl/17/62	21/1/62	1148	22°53'S.	162°24'E.	23.4	22
Gl/18/62	21/1/62	2215	22°52'S.	164°13'E.	30.8	33
Gl/21/62	26/1/62	1150	24°34'S.	164°28'E.	40.7	15
Gl/22/62	26/1/62	2034	24°34'S.	162°42'E.	39.4	31
Gl/24/62	27/1/62	1911	24°40'S.	158°20'E.	18.8	41
Gl/30/62	28/1/62	2330	24°52'S.	153°42'E.	20.2	33
Gl/34/62	29/1/62	2225	27°20'S.	155°02'E.	27.1	72
Gl/37/62	30/1/62	1912	27°29'S.	158°38'E.	19.7	27
Gl/39/62	31/1/62	1738	27°32'S.	163°28'E.	27.3	43
Gl/41/62	1/2/62	1648	27°33'S.	167°50'E.	19.1	33
Gl/45/62	3/2/62	1002	31°07'S.	173°37'E.	23.4	46
Gl/46/62	3/2/62	1915	32°43'S.	173°22'E.	20.1	24
Gl/47/62	4/2/62	0019	36°30'S.	171°45'E.	18.4	64
Gl/48/62	12/2/62	0320	38°04'S.	165°10'E.	15.4	44
Gl/50/62	13/2/62	1816	37°25'S.	162°15'E.	17.8	24
Gl/51/62	13/2/62	0821	36°37'S.	159°14'E.	26.9	23
Gl/52/62	14/2/62	0451	34°29'S.	173°57'E.	24.7	45

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