

OCEANOGRAPHICAL STATION LIST

VOLUME 88

COASTAL INVESTIGATIONS OFF MARIA ISLAND,
TASMANIA, 1961-66

DIVISION OF FISHERIES AND OCEANOGRAPHY
COMMONWEALTH SCIENTIFIC AND INDUSTRIAL
RESEARCH ORGANIZATION, AUSTRALIA 1968

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MELBOURNE, 1968

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VOLUME 88

Coastal Investigations off Maria Island,
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I. INTRODUCTION

This report records the data collected during the regular working of the 50 m station off Maria Island, in 1961-66. The Maria Island station is latitude 42°36'S., longitude 148°14'E.

II. METHOD OF COLLECTION AND ANALYSIS OF SAMPLES

1. Physics

Temperature.—Water temperatures were taken with deep-sea reversing thermometers, and readings were corrected for thermal expansion.

Sigma-t.—Sigma-t values were computed from temperature and chlorinity values using the equations of Knudsen (La Fond 1951).

2. Chemistry

Chlorinity.—A chlorinity-temperature meter of the conductivity type (Hamon 1956) was used to measure chlorinity.

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 (Rochford 1963). Duplicate titrations were made on approximately every tenth sample. Saturation values were computed using the simpler of the equations given by Richards and Corwin (1956) -

$$O_2(\%) = \frac{O_2(\text{ml/l}) \times (33.5 + T^\circ\text{C}) \times 100}{332.4 - (1.854 \times S\%)} \quad (1)$$

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 dispensed automatically 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 begun within 10 min of adding reagents, and completed within 10 min. At air temperatures greater than 25°C, batches of 6 were analysed; readings were commenced within 5 min of adding reagents, and completed within 7 min. 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 day a complete calibration was made using standards up to 3.25 µg-atom/l. Results are given as µg-atom/l with no correction for salt error, and are precise to $\pm 10\%$ for values less than 0.5 µg-atom/l and $\pm 5\%$ for higher values. To correct for salt effects, the results given should 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% v/v 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 hr to allow the salts to dissolve. Phosphate was then determined as described above for inorganic phosphate. To correct for salt effects, the results given should be multiplied by 1.15.

Nitrate.—After collection, water samples were stored in plastic bottles and preserved with 2 drops of saturated HgCl₂. Nitrate was determined at Cronulla by the strychnidine method (Rochford 1947). The reagent was prepared by adding 0.64 g of strychnidine to a litre of nitrate-free sulphuric acid. Five ml of this reagent were added, with minimum agitation, to 5 ml sea-water or standard nitrate solution. The standards were made up in a mixture of equal volumes of artificial sea-water and nitrate-free sulphuric acid. The standards and samples were shaken to distribute the reagent, and the colour developed for 2 hr. The solutions were read in a Unicam SP 600 spectrophotometer at a wavelength of 530 mµ using a 5 mm cell. Samples with an absorbance greater than that of the standard corresponding to 14.4 µg-atom/l were diluted with artificial sea-water/sulphuric acid mixture before reading. Results are given in µg-atom/l.

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III. DATA

The data were processed in a C.D.C. 3600 Computer. An explanation of headings used is given at the beginning of the listing.

DATA

PART 1

HYDROLOGY

EXPLANATION OF HEADINGS

<u>Part 1</u>	<u>Hydrology</u>
DATE	Given as day/month/year
TIME	Given in Zone Time, and is Eastern Australian Standard Time, GMT +10 hr, Code K
LATITUDE LONGITUDE	Given in degrees and minutes
DEPTH	Actual sampling depth, given in metres
TEMP.	Sea temperatures recorded in °C
CHLORINITY	Given in parts per thousand
SIGMA-T	Sigma-t to 2 decimal places
OXYGEN	Given in ml/l
OXYGEN % SAT.	Oxygen percentage saturation
I.P., TOTAL P, and NITRATE	Inorganic phosphorus, total phosphorus, and nitrate given in µg-atom/l
*** or a blank indicate no data available	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			4 / 1 / 61		0850 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN.	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	15.90	19.41	25.84	5.82	103	0.29	***	0.45	0.0	
10	15.60	19.41	25.91	5.88	104	0.32	***	0.45	0.0	
20	15.25	19.40	25.97	5.88	103	0.39	***	0.52	7.1	
30	14.80	19.38	26.04	5.82	101	0.42	***	0.52	10.7	
40	14.70	19.38	26.06	5.77	100	0.42	***	0.52	10.7	
50	14.70	19.38	26.06	5.77	100	0.42	***	0.52	10.7	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			17 / 1 / 61		0843 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	16.80	19.48	25.73	5.79	105	0.32	***	0.42	0.0	
10	16.10	19.46	25.86	5.89	105	0.32	***	0.42	0.0	
20	15.90	19.46	25.91	5.89	105	0.39	***	0.42	0.0	
30	15.90	19.46	25.91	5.76	102	0.39	***	0.42	0.0	
40	15.70	19.46	25.95	5.76	102	0.39	***	0.45	0.0	
50	15.50	19.46	26.00	5.76	102	0.42	***	0.48	0.0	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		7 / 2 / 61		0856 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	18.40	19.60	25.50	5.48	103	0.29	***	0.32	7.1
10	18.20	19.57	25.51	5.53	103	0.29	***	0.32	7.1
20	17.95	19.56	25.56	5.56	103	0.26	***	0.33	3.6
30	17.55	19.54	25.63	5.58	103	0.26	***	0.33	0.0
40	17.25	19.52	25.67	5.63	103	0.23	***	0.32	10.7
50	16.90	19.52	25.76	5.67	103	0.26	***	0.45	3.6

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		21 / 2 / 61		0858 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	18.40	19.57	25.46	5.53	103	0.35	***	0.35	3.6
10	18.00	19.57	25.56	5.56	103	0.35	***	0.35	0.0
20	17.80	19.57	25.61	5.56	103	0.35	***	0.35	3.6
30	17.55	19.56	25.66	5.50	101	0.39	***	0.39	0.0
40	17.00	19.53	25.75	5.40	98	0.39	***	0.42	3.6
50	16.70	19.53	25.82	5.40	98	0.42	***	0.45	7.1

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		8/ 3/61		0857 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	17.70	19.61	25.69	5.28	97	0.35	***	0.35	0.0
10	17.65	19.61	25.70	5.31	98	0.35	***	0.35	3.6
20	17.60	19.61	25.71	5.31	98	0.35	***	0.35	3.6
30	17.40	19.60	25.79	5.33	98	0.35	***	0.35	0.0
40	17.05	19.58	25.81	5.28	96	0.39	***	0.39	3.6
50	16.80	19.58	25.86	5.19	94	0.42	***	0.42	14.3

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		23/ 3/61		0907 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	18.15	19.69	25.69	5.43	101	***	***	0.29	0.0
10	18.15	19.69	25.69	5.43	101	***	***	0.32	0.0
20	18.10	19.68	25.69	5.43	101	***	***	0.32	0.0
30	17.80	19.67	25.75	5.47	101	***	***	0.32	3.6
40	17.80	19.67	25.75	5.47	101	***	***	0.35	0.0
50	17.80	19.67	25.75	5.47	101	***	***	0.39	0.0

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		9 / 4 / 61		0900 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	17.60	19.70	25.84	5.43	100	***	***	0.32	0.0
10	17.55	19.70	25.85	5.46	101	***	***	0.32	0.0
20	17.50	19.70	25.86	5.46	100	***	***	0.39	0.4
30	17.45	19.70	25.88	5.46	100	***	***	0.39	0.4
40	17.45	19.70	25.88	5.43	100	***	***	0.39	0.4
50	17.05	19.67	25.93	5.18	94	***	***	0.45	1.1

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		25 / 4 / 61		0859 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	16.85	19.64	25.94	5.47	99	***	***	0.39	0.0
10	16.85	19.65	25.95	5.47	99	***	***	0.39	0.0
20	16.85	19.65	25.95	5.50	100	***	***	0.32	0.0
30	16.70	19.64	25.97	5.50	100	***	***	0.35	0.4
40	16.60	19.63	25.98	5.50	99	***	***	0.35	0.7
50	16.60	19.63	25.98	5.47	99	***	***	0.39	0.4

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		11/ 5/61		0913 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	15.55	19.64	26.24	5.55	98	0.39	***	0.39	0.77
10	15.55	19.63	26.22	5.57	98	0.39	***	0.52	0.77
20	15.55	19.63	26.22	5.58	99	0.39	***	0.45	0.77
30	15.45	19.63	26.25	5.58	98	0.39	***	0.48	0.77
40	15.40	19.65	26.28	5.58	98	0.39	***	0.68	0.77
50	15.20	19.66	26.34	5.64	99	0.45	***	0.45	0.4

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		30/ 5/61		0925 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	14.00	19.49	26.37	5.72	98	0.42	***	0.42	1.4
10	14.00	19.49	26.37	5.72	98	0.42	***	0.45	1.4
20	14.00	19.49	26.37	5.72	98	0.35	***	0.42	1.4
30	14.00	19.49	26.37	5.72	98	0.42	***	0.45	0.7
40	14.00	19.49	26.37	5.72	98	0.42	***	0.48	0.7
50	14.00	19.49	26.38	5.72	98	0.45	***	0.45	1.1

STATION		DATE		TIME	LATITUDE	LONGITUDE			
MARIA ISLAND		28 / 6/61		0659 K	42 36 S	148 14 E			
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.80	19.43	26.53	5.88	98	0.42	***	0.42	1.4
10	12.80	19.43	26.53	5.88	98	0.42	***	0.42	1.4
20	12.80	19.43	26.53	5.88	98	0.42	***	0.42	1.4
30	12.80	19.43	26.53	5.88	98	0.45	***	0.45	1.1
40	12.80	19.43	26.53	5.88	98	0.42	***	0.42	1.1
50	12.80	19.43	26.53	5.88	98	0.42	***	0.42	1.1

STATION		DATE		TIME	LATITUDE	LONGITUDE			
MARIA ISLAND		11 / 7/61		0900 K	42 36 S	148 14 E			
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.35	19.41	26.59	5.94	98	0.45	***	0.42	21.4
10	12.35	19.41	26.59	6.01	99	0.45	***	0.48	21.4
20	12.35	19.41	26.59	5.94	98	0.45	***	0.45	17.9
30	12.35	19.41	26.59	6.01	99	0.45	***	0.45	17.9
40	12.35	19.41	26.60	5.94	98	0.45	***	0.55	17.9
50	12.35	19.41	26.60	5.94	98	0.45	***	0.45	17.9

STATION	DATE	TIME	LATITUDE	LONGITUDE					
MARIA ISLAND	27 / 7 / 61	0901 K	42 36 S	148 14 E					
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.90	19.42	26.69	6.10	100	0.92	***	0.58	25.0
10	11.90	19.42	26.69	***	***	0.92	***	0.55	28.6
20	11.90	19.42	26.69	***	***	0.48	***	0.48	28.6
30	11.90	19.42	26.69	***	***	0.48	***	0.48	25.0
40	11.90	19.42	26.69	6.12	100	0.48	***	0.48	25.0
50	11.90	19.42	26.69	6.10	100	0.48	***	0.48	25.0

STATION	DATE	TIME	LATITUDE	LONGITUDE					
MARIA ISLAND	9 / 8 / 61	0857 K	42 36 S	148 14 E					
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.60	19.39	26.71	6.03	98	0.42	***	0.52	21.4
10	11.60	19.39	26.71	6.03	98	0.45	***	0.52	21.4
20	11.60	19.39	26.71	6.07	99	0.45	***	0.55	21.4
30	11.60	19.39	26.71	***	***	0.45	***	0.58	21.4
40	11.60	19.39	26.71	6.03	98	0.45	***	0.55	21.4
50	11.60	19.39	26.71	6.03	98	0.45	***	0.58	21.4

STATION		DATE	TIME	LATITUDE	LONGITUDE				
MARIA ISLAND		29/ 8/61	0844 K	42 36 S	148 14 E				
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.70	19.40	26.70	6.00	98	0.45	***	0.45	25.0
10	11.70	19.40	26.70	6.03	98	0.42	***	0.42	21.4
20	11.70	19.40	26.70	6.13	100	0.45	***	0.52	21.4
30	11.70	19.40	26.70	6.13	100	0.45	***	0.48	21.4
40	11.70	19.40	26.70	6.10	99	0.48	***	0.55	17.6
50	11.70	19.40	26.70	6.07	99	0.48	***	0.48	17.6

STATION		DATE	TIME	LATITUDE	LONGITUDE				
MARIA ISLAND		12/ 9/61	0846 K	42 36 S	148 14 E				
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.80	19.41	26.70	6.26	102	0.45	***	0.48	10.7
10	11.80	19.41	26.70	6.32	103	0.45	***	0.48	10.7
20	11.80	19.41	26.70	6.32	103	0.45	***	0.55	7.1
30	11.80	19.41	26.70	6.26	102	0.42	***	0.55	10.7
40	11.80	19.41	26.70	6.26	102	0.42	***	0.42	7.1
50	11.80	19.41	26.70	6.26	102	0.45	***	0.48	10.7

STATION	DATE		TIME		LATITUDE		LONGITUDE	
	MARIA ISLAND	28/ 9/61	0833 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P NITRATE
0	11.85	19.40	26.67	6.32	103	0.35	***	0.10
10	11.80	19.40	26.68	6.19	101	0.35	***	0.42
20	11.75	19.40	26.69	6.19	101	0.42	***	3.6
30	11.75	19.40	26.69	6.17	101	0.42	***	3.6
40	11.75	19.40	26.69	6.14	100	0.42	***	3.6
50	11.75	19.40	26.69	6.07	7	0.45	***	7.1

STATION	DATE		TIME		LATITUDE		LONGITUDE	
	MARIA ISLAND	21/10/61	0827 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P NITRATE
0	12.90	19.44	26.52	6.21	104	0.32	***	0.45
10	12.80	19.44	26.54	6.24	104	0.32	***	3.6
20	12.75	19.44	26.55	6.24	104	0.35	***	3.6
30	12.60	19.44	26.58	6.21	103	0.35	***	3.6
40	12.60	19.44	26.58	6.18	103	0.35	***	3.6
50	12.50	19.44	26.60	6.13	102	0.42	***	7.1

STATION		DATE	TIME	LONGITUDE					
MARIA ISLAND		8/11/61	0847 K	42 36 S 148 14 E					
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	13.40	19.43	26.41	6.17	104	0.35	***	0.42	0.0
10	13.40	19.43	26.41	6.17	104	0.35	***	0.45	0.0
20	13.40	19.43	26.41	6.17	104	0.35	***	0.45	0.0
30	13.30	19.43	26.43	6.23	105	0.42	***	0.45	0.0
40	13.30	19.43	26.43	6.23	105	0.42	***	0.45	3.6
50	13.30	19.43	26.43	6.23	105	0.42	***	0.45	3.6

STATION		DATE	TIME	LONGITUDE					
MARIA ISLAND		24/11/61	0836 K	42 36 S 148 14 E					
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	14.00	19.43	26.28	6.10	104	0.35	***	0.42	3.6
10	13.65	19.43	26.36	6.18	105	0.39	***	0.45	0.0
20	13.50	19.43	26.39	6.07	103	0.39	***	0.45	3.6
30	13.40	19.43	26.41	6.07	102	0.42	***	0.45	7.1
40	13.25	19.43	26.44	5.96	100	0.42	***	0.45	7.1
50	13.00	19.43	26.49	5.89	99	0.39	***	0.48	14.3

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		7/12/61		0836 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	14.60	19.45	26.18	6.18	107	***	***	0.39	0.0
10	14.55	19.45	26.19	6.23	106	***	***	0.42	0.0
20	14.50	19.45	26.20	***	***	***	***	0.45	0.0
30	14.25	19.45	26.26	6.08	104	***	***	0.45	0.0
40	13.90	19.45	26.33	6.08	104	***	***	0.48	7.1
50	13.90	19.45	26.33	5.91	101	***	***	0.48	3.6

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		20/12/61		0835 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	14.60	19.44	26.17	6.06	105	0.32	***	0.45	0.0
10	14.60	19.44	26.17	6.08	105	0.32	***	0.42	0.0
20	14.50	19.44	26.19	6.02	104	0.32	***	0.46	0.0
30	14.50	19.44	26.19	6.06	105	0.32	***	0.46	0.0
40	14.45	19.44	26.20	5.92	102	0.35	***	0.52	0.0
50	14.10	19.44	26.28	5.70	98	0.39	***	0.52	0.0

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAKIA ISLAND		3/ 1/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGN-A-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	15.65	19.45	25.95	5.78	102	0.37	***	***	0.0
10	15.40	19.48	26.05	5.75	101	0.48	***	***	0.0
20	15.25	19.44	26.03	5.81	102	0.47	***	***	0.0
30	15.20	19.44	26.04	5.75	101	0.46	***	***	0.0
40	14.95	19.43	26.08	5.64	98	0.40	***	***	0.0
50	14.60	19.43	26.16	5.53	96	0.49	***	***	0.0

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAKIA ISLAND		24/ 1/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGN-A-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	16.40	19.52	25.88	5.44	***	***	***	***	0.0
10	16.45	19.53	25.88	5.56	98	***	***	***	0.0
20	16.40	19.53	25.89	5.50	100	***	***	***	0.0
30	16.30	19.53	25.91	5.50	99	***	***	***	0.0
40	16.25	19.53	25.92	***	***	***	***	***	0.0
50	16.20	19.52	25.92	5.50	98	***	***	***	0.0

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		22/ 2/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	17.05	19.64	25.89	5.41	99	0.43	***	***	0.0
10	17.00	19.64	25.90	5.44	99	0.55	***	***	0.0
20	17.00	19.64	25.90	5.47	100	0.67	***	***	0.0
30	16.90	19.63	25.91	5.41	98	0.54	***	***	0.0
40	16.80	19.62	25.92	5.75	104	0.54	***	***	0.0
50	16.60	19.62	25.97	5.27	95	0.54	***	***	0.0

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		10/ 3/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	16.20	19.58	26.01	5.50	98	0.75	***	***	0.0
10	16.05	19.58	26.04	5.40	96	0.54	***	***	0.0
20	15.99	19.57	26.05	5.39	96	0.44	***	***	0.0
30	15.95	19.57	26.05	5.41	96	0.43	***	***	0.4
40	15.90	19.54	26.02	5.30	94	0.43	***	***	0.0
50	15.70	19.54	26.06	5.27	93	0.57	***	***	0.0

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		28/ 3/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	16.50	19.62	25.99	5.50	99	0.38	***	***	0.8
10	16.40	19.60	25.99	5.41	97	0.32	***	***	0.7
20	16.20	19.60	26.03	5.39	97	0.43	***	***	0.7
30	16.20	19.60	26.03	5.36	96	0.48	***	***	0.2
40	16.20	19.59	26.02	5.41	97	0.62	***	***	0.5
50	16.00	19.59	26.07	5.30	95	0.57	***	***	0.5

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		14/ 4/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	15.10	19.48	26.12	5.54	97	0.92	***	***	0.0
10	15.10	19.48	26.12	5.55	97	0.45	***	***	1.0
20	15.10	19.49	26.13	5.50	96	0.31	***	***	0.0
30	15.10	19.55	26.21	5.56	97	0.37	***	***	1.0
40	15.10	19.52	26.17	5.57	97	0.38	***	***	0.7
50	15.10	19.49	26.13	5.56	97	0.39	***	***	0.0

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			11/ 5/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	14.40	19.54	26.35	5.53	95	0.62	***	***	0.6	
10	14.40	19.54	26.35	5.52	95	0.68	***	***	0.7	
20	14.40	19.54	26.35	5.52	95	0.60	***	***	1.0	
30	14.40	19.54	26.35	5.57	96	0.74	***	***	0.9	
40	14.40	19.55	26.37	5.52	95	0.85	***	***	0.6	
50	14.40	19.54	26.35	5.35	92	0.70	***	***	0.8	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			27/ 5/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	13.45	19.48	26.47	5.74	97	1.11	***	***	1.1	
10	13.50	19.48	26.46	5.76	97	0.84	***	***	1.1	
20	13.50	19.47	26.44	5.79	98	0.82	***	***	1.4	
30	13.50	19.49	26.47	5.84	99	0.71	***	***	0.9	
40	13.50	19.49	26.47	5.62	95	0.80	***	***	1.2	
50	13.50	19.47	26.44	5.60	95	0.72	***	***	1.4	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		21 / 6/62		0820 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.50	19.53	26.73	5.79	96	0.78	***	***	1.2
10	12.50	19.53	26.73	5.68	94	1.09	***	***	2.0
20	12.50	19.53	26.73	5.77	96	1.07	***	***	1.7
30	12.50	19.53	26.73	5.82	97	0.80	***	***	1.6
40	12.60	19.52	26.70	5.79	96	0.74	***	***	1.6
50	12.60	19.53	26.71	5.82	97	0.60	***	***	1.6

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		7 / 7/62		0200 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.95	19.49	26.58	5.88	98	0.76	***	***	1.2
10	12.95	19.49	26.58	5.85	98	0.67	***	***	1.1
20	12.95	19.48	26.57	5.83	98	0.74	***	***	2.4
30	12.95	19.49	26.56	5.82	97	0.68	***	***	0.9
40	12.95	19.48	26.57	***	***	0.71	***	***	0.9
50	12.95	19.49	26.58	5.82	97	0.82	***	***	0.9

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		28/ 7/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.90	19.47	26.76	5.93	97	***	***	0.66	1.4
10	11.90	19.47	26.76	5.89	96	***	***	0.68	2.2
20	11.90	19.47	26.76	5.92	97	***	***	0.98	1.9
30	11.90	19.47	26.76	5.92	97	***	***	0.76	1.4
40	11.90	19.47	26.76	5.86	96	***	***	0.72	1.7
50	11.90	19.47	26.76	5.91	97	***	***	0.67	2.1

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		16/ 8/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.90	19.49	26.79	5.92	97	***	***	0.66	1.4
10	11.90	19.49	26.79	5.98	98	***	***	0.73	1.6
20	11.90	19.49	26.79	5.94	97	***	***	0.66	1.1
30	11.90	19.48	26.78	5.94	97	***	***	0.64	1.5
40	11.90	19.48	26.78	6.03	99	***	***	0.65	1.9
50	11.90	19.48	26.78	5.97	98	***	***	0.98	1.2

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		14/ 9/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.40	19.44	26.81	6.09	99	***	***	0.90	1.6
10	11.30	19.45	26.85	6.14	99	***	***	1.01	1.6
20	11.30	19.45	26.85	6.08	99	***	***	0.98	2.1
30	11.30	19.45	26.85	6.08	99	***	***	0.66	1.7
40	11.30	19.45	26.85	6.08	99	***	***	0.63	1.6
50	11.30	19.46	26.86	6.11	99	***	***	0.68	2.1

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		11/10/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.45	19.41	26.76	6.05	98	***	***	0.86	1.4
10	11.40	19.41	26.77	5.98	97	***	***	0.81	1.0
20	11.40	19.41	26.77	6.10	99	***	***	0.89	1.1
30	11.40	19.41	26.77	5.88	95	***	***	0.81	1.0
40	11.40	19.41	26.77	5.98	97	***	***	0.81	0.9
50	11.35	19.41	26.78	5.77	93	***	***	0.67	1.0

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MAKIA ISLAND			31/10/62				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE	
0	12.00	19.36	26.59	5.87	96	***	***	0.84	0.0	
10	12.00	19.37	26.60	6.10	100	***	***	1.00	0.3	
20	11.90	19.39	26.65	5.98	98	***	***	1.03	0.2	
30	11.90	19.39	26.65	6.10	100	***	***	0.89	0.2	
40	11.80	19.40	26.68	5.85	95	***	***	0.83	0.5	
50	11.80	19.40	26.77	5.73	93	***	***	0.83	0.3	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MAKIA ISLAND			2/11/63		1020		42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE	
0	15.75	19.46	25.94	5.68	101	***	***	0.40	0.2	
10	15.10	19.45	26.07	5.72	100	***	***	0.43	0.2	
20	14.90	19.47	26.15	5.76	100	***	***	0.30	0.2	
30	14.65	19.45	26.17	5.74	99	***	***	0.34	0.2	
40	14.10	19.45	26.29	5.65	97	***	***	0.52	0.5	
50	13.40	19.44	26.42	5.38	91	***	***	0.56	1.2	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		21/ 1/63		0555		42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	15.20	19.44	26.04	5.63	99	***	0.41	0.43	
10	15.20	19.45	26.05	5.66	99	***	0.41	0.43	
20	14.80	19.46	26.15	5.51	96	***	0.65	0.73	
30	14.70	19.45	26.16	5.46	95	***	0.56	0.65	
40	14.50	19.46	26.22	5.64	97	***	0.53	0.59	
50	14.50	19.45	26.20	5.47	94	***	0.58	1.1	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		17/ 2/63		0802		42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN ~ OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	16.20	19.56	25.98	5.41	97	***	0.52	0.0	
10	16.20	19.55	25.96	5.30	93	***	0.57	0.0	
20	16.15	19.55	25.98	5.44	97	***	0.68	0.0	
30	16.15	19.56	25.99	5.25	94	***	0.73	0.0	
40	16.10	19.56	26.00	5.47	98	***	0.58	0.1	
50	15.40	19.53	26.12	4.91	86	***	0.95	1.0	

STATION	DATE	TIME	LATITUDE				LONGITUDE			
			42	36 S	42	36 S	148	149 E		
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	16.45	19.55	25.91	5.38	97	***	0.58	0.10		
10	16.40	19.57	25.95	5.42	97	***	0.80	0.10		
20	16.35	19.58	25.97	5.42	97	***	0.67	0.10		
30	16.00	19.56	26.02	5.36	96	***	0.65	0.11		
40	15.70	19.56	26.09	5.03	89	***	0.77	0.16		
50	15.40	19.53	26.12	5.11	90	***	0.60	1.13		

STATION	DATE	TIME	LATITUDE				LONGITUDE			
			42	36 S	42	36 S	148	149 E		
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	16.00	19.56	26.02	5.44	97	***	0.89	0.12		
10	16.00	19.55	26.01	5.52	98	***	0.89	0.12		
20	15.90	19.55	26.03	5.38	96	***	1.08	0.15		
30	15.85	19.55	26.04	5.23	93	***	1.05	0.15		
40	15.80	19.55	26.06	4.96	88	***	0.77	0.15		
50	15.80	19.55	26.06	4.96	88	***	0.61	0.14		

STATION			DATE	TIME	LATITUDE	LONGITUDE			
MAKIA ISLAND			6/ 4/63	42 36 S	148 16 E				
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	15.85	19.59	26.10	5.54	99	***	0.39	0.6	
10	15.60	19.61	26.18	5.50	97	***	0.36	0.7	
20	15.50	19.58	26.16	4.33	76	***	0.44	0.7	
30	15.35	19.56	26.17	5.46	96	***	0.36	0.7	
40	15.20	19.55	26.19	5.35	94	***	0.33	0.8	
50	15.10	19.55	26.21	5.49	96	***	0.37	0.8	

STATION			DATE	TIME	LATITUDE	LONGITUDE			
MARIA ISLAND			18/ 4/63	42 36 S	148 16 E				
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	14.65	19.59	26.37	5.61	97	***	0.92	0.7	
10	14.65	19.59	26.37	5.58	97	***	**	0.5	
20	14.40	19.59	26.42	5.61	97	***	0.70	0.5	
30	14.40	19.59	26.42	5.61	97	***	0.89	0.5	
40	14.40	19.59	26.42	5.58	96	***	0.02	0.1	
50	14.30	19.59	26.44	5.63	97	***	0.89	0.1	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			5 / 5 / 63				42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	13.95	19.57	26.49	1.77	30	***	***	0.60	1.1	
10	13.95	19.57	26.49	5.54	95	***	***	0.62	0.6	
20	13.99	19.57	26.49	5.58	95	***	***	0.54	0.8	
30	13.95	19.56	26.47	5.63	96	***	***	0.58	0.8	
40	13.95	19.56	26.47	***	***	***	***	0.66	0.7	
50	13.95	19.55	26.46	5.62	96	***	***	0.58	0.7	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			24 / 5 / 63				42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	14.60	19.63	26.43	5.58	97	***	***	0.74	1.8	
10	14.50	19.66	26.50	5.49	95	***	***	0.91	1.6	
20	14.50	19.66	26.50	5.53	96	***	***	0.72	1.6	
30	14.50	19.65	26.48	5.44	94	***	***	0.72	1.7	
40	14.30	19.65	26.53	5.54	95	***	***	0.74	1.3	
50	14.10	19.65	26.54	5.48	94	***	***	0.74	0.9	

STATION	DATE	TIME	LATITUDE			LONGITUDE		
			42	36 S		148	16 E	
MARIA ISLAND	7/ 6/63							
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P NITRATE
0	13.70	19.68	26.69	5.76	98	***	0.58	1.3
10	13.85	19.68	26.66	5.57	95	***	0.67	1.4
20	13.85	19.70	26.69	5.71	98	***	0.62	1.4
30	13.85	19.68	26.66	5.53	94	***	0.52	1.3
40	13.80	19.68	26.67	5.55	95	***	0.57	1.4
50	13.60	19.70	26.74	5.52	94	***	0.46	1.4

STATION	DATE	TIME	LATITUDE			LONGITUDE		
			42	36 S		148	16 E	
MARIA ISLAND	21/ 6/63							
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P NITRATE
0	12.35	19.61	26.87	5.89	97	***	0.62	6.6
10	12.45	19.59	26.82	5.85	97	***	0.62	5.8
20	12.45	19.59	26.82	5.81	96	***	0.70	6.0
30	12.45	19.59	26.82	5.79	96	***	0.84	6.2
40	12.45	19.59	26.82	5.73	95	***	0.79	5.7
50	12.20	19.62	26.91	5.72	94	***	0.70	6.5

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAKIA ISLAND		6 / 7 / 63				42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.45	19.56	26.78	5.88	97	***	0.84	4.0	
10	12.45	19.56	26.78	5.78	96	***	0.82	4.6	
20	12.40	**	**	5.81	***	***	***	4.9	
30	12.40	19.56	26.79	5.74	95	***	0.83	5.8	
40	12.35	19.54	26.77	5.84	97	***	0.82	5.3	
50	12.35	19.54	26.77	5.85	97	***	1.00	7.4	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAKIA ISLAND		25 / 7 / 63				42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.85	19.55	26.88	5.81	95	***	0.59	4.2	
10	11.85	19.56	26.90	5.92	97	***	0.64	4.7	
20	11.85	19.56	26.90	5.89	96	***	0.87	4.2	
30	11.85	19.55	26.88	5.86	96	***	0.66	3.6	
40	11.85	19.55	26.88	5.82	95	***	0.60	4.0	
50	11.85	19.55	26.88	5.81	95	***	0.77	4.3	

STATION			DATE			TIME			LATITUDE			LONGITUDE		
MAKIA ISLAND			7 / 8 / 63			42 36 S			148 16 E					
DEPTH	TEMP.	CHLORINITY	SIGMAR-T	OXYGEN	OXYGEN X SAT.	I.P.	PART	P	TOTAL P	NITRATE				
0	12.15	19.63	26.94	5.72	94	***	***	0.70		5.5				
10	12.05	19.56	26.86	5.95	98	***	***	0.50		5.6				
20	12.05	19.56	26.86	5.92	97	***	***	0.60		5.2				
30	12.05	19.56	26.86	5.81	95	***	***	0.46		5.0				
40	12.05	19.55	26.84	5.81	95	***	***	0.50		5.3				
50	12.05	19.55	26.84	5.81	95	***	***	0.50		5.0				

STATION			DATE			TIME			LATITUDE			LONGITUDE		
MAKIA ISLAND			20 / 8 / 63			42 36 S			148 16 E					
DEPTH	TEMP.	CHLORINITY	SIGMAR-T	OXYGEN	OXYGEN X SAT.	I.P.	PART	P	TOTAL P	NITRATE				
0	12.10	19.56	26.85	5.58	92	***	***	0.23		5.7				
10	12.00	19.56	26.87	5.64	93	***	***	0.54		5.2				
20	11.90	19.56	26.89	5.40	98	***	***	0.52		4.1				
30	11.90	19.55	26.87	5.72	94	***	***	0.53		4.6				
40	11.90	19.56	26.89	5.89	96	***	***	0.58		4.1				
50	11.90	19.56	26.89	5.89	96	***	***	0.52		4.5				

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		5 / 9 / 63		42 36 S		42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.90	19.53	26.85	6.09	100	***	***	0.46	3.6
10	11.90	19.53	26.85	6.15	101	***	***	0.46	4.4
20	11.90	19.53	26.85	6.01	98	***	***	0.49	4.6
30	11.90	19.92	26.83	5.98	98	***	***	0.50	4.5
40	11.80	19.54	26.88	5.98	98	***	***	0.44	3.9
50	11.80	19.54	26.88	5.92	97	***	***	0.52	3.6

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		18 / 9 / 63		42 36 S		42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.85	19.54	26.87	5.97	98	***	***	0.53	3.1
10	11.80	19.54	26.88	6.01	98	***	***	0.53	3.5
20	11.80	19.53	26.86	5.88	96	***	***	0.66	3.1
30	11.80	19.55	26.89	5.92	97	***	***	0.59	3.1
40	11.80	19.54	26.88	5.94	97	***	***	0.53	2.8
50	11.70	19.53	26.88	5.90	96	***	***	0.63	2.9

STATION	DATE	TIME	LATITUDE			LONGITUDE		
			42	36 S		148	16 E	
MAKIA ISLAND	1/10/63							
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P NITRATE
0	12.35	19.55	26.79	6.08	101	***	0.49	2.0
10	12.30	19.57	26.82	3.04	50	***	0.42	2.3
20	12.30	19.58	26.84	5.97	99	***	0.59	2.2
30	12.20	19.57	26.84	6.15	101	***	0.54	2.1
40	12.10	19.57	26.86	5.91	97	***	0.49	2.0
50	12.00	19.57	26.88	5.95	98	***	0.49	2.3

STATION	DATE	TIME	LATITUDE			LONGITUDE		
			42	36 S		148	16 E	
MAKIA ISLAND	1/10/63							
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P NITRATE
0	14.10	19.50	26.36	5.70	98	***	0.57	0.1
10	13.25	19.49	26.92	5.77	97	***	0.50	0.2
20	13.15	19.49	26.54	6.24	105	***	0.63	0.2
30	12.95	19.49	26.58	6.05	101	***	0.51	0.1
40	12.75	19.50	26.64	5.88	98	***	0.69	1.2
50	12.50	19.52	26.71	5.87	97	***	0.69	1.7

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			6/11/63				42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	13.80	19.56	26.51	6.03	103	***	***	0.32	0.1	
10	13.80	19.55	26.49	5.94	101	***	***	0.26	0.1	
20	13.70	19.58	26.56	5.98	102	***	***	0.25	0.1	
30	13.70	19.55	26.51	5.90	100	***	***	0.30	0.1	
40	13.40	19.55	26.58	5.89	100	***	***	0.58	0.13	
50	13.30	19.55	26.60	6.06	102	***	***	0.27	0.1	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			6/11/63				42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	13.80	19.59	26.55	5.81	99	***	***	0.43	0.3	
10	13.80	19.58	26.53	5.82	99	***	***	0.42	0.3	
20	13.70	19.59	26.57	5.89	100	***	***	0.43	0.1	
30	13.70	19.60	26.58	5.71	97	***	***	0.36	1.0	
40	13.60	19.58	26.58	5.69	97	***	***	0.26	0.2	
50	13.60	19.59	26.59	***	***	***	***	0.43	0.7	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			4/12/63				42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	P	TOTAL P	NITRATE
0	14.95	19.55	26.25	5.27	92	***	***	***	0.0	0.0
10	14.95	19.60	26.32	5.99	105	***	***	0.36	0.2	
20	14.50	19.59	26.40	5.96	103	***	***	0.38	0.0	
30	14.40	19.60	26.43	5.84	101	***	***	0.41	0.1	
40	14.00	19.59	26.51	5.64	97	***	***	0.51	1.1	
50	13.85	19.59	26.54	5.53	94	***	***	0.40	1.8	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			-0/12/63				42 36 S		148 16 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	P	TOTAL P	NITRATE
0	15.20	19.60	26.26	5.53	97	***	***	0.18	0.1	
10	15.20	19.62	26.29	5.65	99	***	***	0.39	0.0	
20	14.70	19.57	26.33	5.54	96	***	***	0.47	0.5	
30	14.40	19.62	26.46	5.45	94	***	***	0.52	1.0	
40	14.40	19.57	26.39	5.46	94	***	***	0.48	0.8	
50	14.20	19.57	26.44	5.28	91	***	***	0.53	2.2	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		7/ 1/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	16.15	19.64	26.10	5.58	100	***	0.43	0.0	
10	16.15	19.64	26.10	5.46	98	***	0.35	0.0	
20	16.10	19.63	26.10	5.50	98	***	0.43	0.0	
30	15.80	19.62	26.15	5.51	98	***	0.30	0.3	
40	15.60	19.62	26.20	5.47	97	***	0.47	0.2	
50	15.60	19.62	26.20	5.46	97	***	0.47	0.4	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		23/ 1/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	15.95	19.67	26.19	5.34	95	***	0.29	0.0	
10	15.90	19.67	26.20	5.40	96	***	0.38	0.0	
20	15.70	19.66	26.23	5.39	96	***	0.43	0.0	
30	15.65	19.66	26.24	5.22	95	***	0.56	0.0	
40	15.60	19.64	26.23	5.22	92	***	0.32	0.2	
50	15.60	19.64	26.23	5.22	92	***	0.44	0.2	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			5 / 2 / 64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	16.40	19.65	26.06	5.42	98	***	0.43	0.6		
10	16.30	19.64	26.07	5.33	96	***	0.46	0.6		
20	16.30	19.64	26.07	5.37	96	***	0.63	0.1		
30	16.20	19.64	26.09	5.37	96	***	0.56	0.2		
40	15.90	19.63	26.14	5.38	96	***	0.40	0.6		
50	15.50	19.61	26.21	5.14	91	***	0.92	0.6		

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			18 / 2 / 64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	16.40	19.65	26.06	5.45	98	***	0.84	0.3		
10	16.20	19.62	26.06	5.44	97	***	0.51	0.6		
20	16.00	19.62	26.11	5.44	97	***	0.76	0.2		
30	15.75	19.63	26.18	5.19	92	***	0.75	0.5		
40	15.55	19.61	26.20	5.07	90	***	0.70	1.2		
50	15.50	19.60	26.19	4.93	87	***	0.66	1.6		

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			4/ 3/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE	
0	15.85	19.51	25.94	5.79	103	***	***	0.55	0.5	
10	15.85	19.54	26.03	5.72	102	***	***	0.54	0.5	
20	15.85	19.54	26.03	5.55	99	***	***	0.52	0.2	
30	15.80	19.55	26.06	5.54	98	***	***	0.64	0.1	
40	15.75	19.56	26.08	5.40	96	***	***	0.52	0.2	
50	15.75	19.58	26.11	5.43	96	***	***	0.56	0.3	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			4/ 3/64		0822		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE	
0	15.90	19.60	26.10	5.33	95	***	***	0.70	0.8	
10	15.90	19.62	26.13	5.42	96	***	***	0.77	0.6	
20	15.90	19.60	26.10	5.41	96	***	***	0.76	0.7	
30	15.90	19.60	26.10	5.51	98	***	***	0.70	0.5	
40	15.90	19.60	26.10	5.50	98	***	***	0.63	0.6	
50	15.90	19.61	26.12	5.44	97	***	***	0.77	0.8	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		1 / 4 / 64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	15.70	19.62	26.18	5.61	99	***	***	0.56	0.0
10	15.70	19.64	26.20	5.66	100	***	***	0.52	0.0
20	15.65	19.63	26.20	5.53	98	***	***	0.57	0.0
30	15.65	19.63	26.20	5.55	98	***	***	0.57	0.0
40	15.65	19.63	26.20	5.50	97	***	***	0.48	0.0
50	15.60	19.61	26.18	5.55	98	***	***	0.53	0.0

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		16 / 4 / 64		0840		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	15.20	19.58	26.23	5.41	95	***	***	0.55	0.0
10	15.20	19.62	26.29	5.40	95	***	***	0.58	0.0
20	15.20	19.61	26.27	5.46	96	***	***	0.55	0.0
30	15.20	19.61	26.27	5.40	95	***	***	0.64	0.0
40	15.20	19.59	26.25	5.45	96	***	***	0.67	0.0
50	15.20	19.62	26.29	5.24	92	***	***	0.57	0.0

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			6/ 5/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	14.60	19.57	26.35	6.11	106	***	***	0.86	1.6	
10	14.50	19.57	26.37	6.11	106	***	***	0.66	2.0	
20	14.50	19.61	26.43	6.11	106	***	***	0.78	1.4	
30	14.50	19.62	26.44	6.10	106	***	***	0.75	0.8	
40	14.50	19.60	26.41	6.05	105	***	***	0.65	0.5	
50	14.45	19.57	26.38	6.02	104	***	***	0.74	0.7	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			21/ 5/64		0935		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	13.20	19.45	26.48	5.67	95	***	***	0.86	3.4	
10	13.20	19.47	26.50	5.63	95	***	***	0.67	3.7	
20	13.20	19.47	26.50	5.70	96	***	***	0.69	2.9	
30	13.20	19.48	26.52	5.69	96	***	***	1.05	3.5	
40	13.20	19.47	26.50	5.63	95	***	***	1.22	3.5	
50	13.20	19.46	26.49	5.65	95	***	***	0.95	3.5	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		9/ 6/64		1124		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.95	19.50	26.60	5.70	95	***	1.18	3.5	
10	12.95	19.49	26.58	5.70	95	***	1.22	3.1	
20	12.90	19.50	26.61	5.70	95	***	1.26	3.5	
30	12.90	19.50	26.61	5.74	96	***	1.24	4.0	
40	12.90	19.51	26.62	5.70	95	***	1.44	3.5	
50	12.90	19.54	26.66	5.70	95	***	1.64	2.6	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		21/ 6/64		0210		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.40	19.48	26.68	5.70	94	***	0.58	3.5	
10	12.40	19.50	26.71	5.64	93	***	0.57	4.2	
20	12.40	19.49	26.69	5.75	95	***	0.64	3.8	
30	12.20	19.49	26.73	5.69	94	***	0.62	4.7	
40	12.05	19.49	26.76	5.77	95	***	0.68	3.9	
50	12.05	19.46	26.72	5.71	94	***	0.62	3.6	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		8/ 1/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.80	19.70	26.91	5.61	94	***	0.50	1.5	
10	12.80	19.71	26.92	5.61	94	***	0.53	2.0	
20	12.60	19.67	26.90	5.58	93	***	0.48	2.0	
30	12.50	19.67	26.92	5.61	93	***	0.52	2.2	
40	12.40	19.66	26.93	5.58	92	***	0.55	2.3	
50	12.00	19.66	27.01	5.61	92	***	0.63	2.6	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		29/ 7/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.90	19.53	26.85	5.64	92	***	0.36	1.5	
10	11.90	19.55	26.88	5.67	93	***	0.39	2.0	
20	11.90	19.60	26.95	5.64	92	***	0.51	2.2	
30	11.70	19.56	26.93	5.72	93	***	0.50	1.6	
40	11.30	19.56	27.01	5.75	93	***	0.48	1.6	
50	11.10	19.53	27.00	5.75	93	***	0.49	1.5	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAIA ISLAND		16 / 8 / 64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.30	19.52	26.76	5.71	94	***	***	0.42	3.0
10	12.20	19.52	26.78	5.81	96	***	***	0.49	3.1
20	12.20	19.52	26.77	5.78	95	***	***	0.52	2.9
30	12.20	19.52	26.77	5.77	95	***	***	0.51	2.7
40	12.20	19.53	26.79	5.77	95	***	***	0.50	2.8
50	12.10	19.54	26.82	5.62	92	***	***	0.43	2.4

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAIA ISLAND		27 / 8 / 64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.00	19.48	26.76	5.85	96	***	***	0.41	**
10	11.95	19.50	26.79	5.89	97	***	***	0.47	2.3
20	11.95	19.50	26.79	5.88	96	***	***	0.44	2.3
30	11.95	19.51	26.81	5.84	96	***	***	0.49	2.4
40	11.90	19.51	26.82	5.86	96	***	***	0.62	2.2
50	11.90	19.51	26.82	5.85	96	***	***	0.51	2.5

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			7/ 9/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	12.00	19.49	26.77	5.51	90	***	0.44	2.2		
10	11.90	19.49	26.79	5.82	95	***	0.42	2.1		
20	11.90	19.49	26.79	5.78	95	***	0.51	2.3		
30	11.90	19.49	26.79	5.81	95	***	0.42	2.1		
40	11.90	19.49	26.79	5.78	95	***	0.41	2.0		
50	11.90	19.49	26.79	5.83	95	***	0.44	2.4		

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			29/ 9/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	11.80	19.45	26.75	5.90	96	***	0.69	3.2		
10	11.80	19.46	26.77	5.93	97	***	0.70	3.0		
20	11.80	19.48	26.79	5.91	97	***	0.78	2.4		
30	11.80	19.48	26.79	5.81	95	***	0.57	2.5		
40	11.80	19.48	26.79	5.96	97	***	0.62	1.6		
50	11.70	19.51	26.86	5.88	96	***	0.59	1.1		

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			15/10/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	P	TOTAL P	NITRATE
0	12.30	19.41	26.60	6.45	106	***	***	0.69	0.6	0.6
10	12.30	19.44	26.64	6.37	105	***	***	0.86	0.6	0.6
20	12.25	19.43	26.64	6.40	105	***	***	0.81	0.6	0.6
30	12.25	19.43	26.64	6.30	104	***	***	1.00	0.4	0.4
40	12.20	19.45	26.68	6.06	100	***	***	0.75	0.2	0.2
50	12.20	19.44	26.66	5.82	96	***	***	0.84	0.9	0.9

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			28/10/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	P	TOTAL P	NITRATE
0	12.70	19.43	26.55	5.75	96	***	***	0.76	0.2	0.2
10	12.70	19.42	26.54	5.68	94	***	***	0.70	0.3	0.3
20	12.20	19.40	26.61	5.91	97	***	***	0.66	1.5	1.5
30	12.15	19.40	26.62	5.85	96	***	***	0.68	1.5	1.5
40	12.15	19.41	26.63	5.64	93	***	***	0.73	1.7	1.7
50	12.15	19.41	26.63	5.67	93	***	***	0.69	1.8	1.8

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		9/11/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE
0	13.10	19.38	26.40	5.96	100	***	0.75	1.7	
10	12.60	19.38	26.50	6.05	100	***	0.72	1.7	
20	12.50	19.38	26.52	5.97	99	***	0.79	1.8	
30	12.50	19.39	26.53	5.91	98	***	0.76	1.6	
40	12.40	19.40	26.57	5.75	95	***	0.75	2.3	
50	12.30	19.41	26.60	5.70	94	***	0.83	2.6	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		24/11/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE
0	13.60	19.41	26.34	5.54	94	***	0.69	0.7	
10	13.30	19.41	26.40	5.56	94	***	0.73	1.6	
20	13.10	19.41	26.44	5.56	93	***	0.76	1.5	
30	12.45	19.40	26.56	5.52	91	***	0.76	2.8	
40	12.40	19.41	26.58	5.49	91	***	0.76	5.0	
50	12.40	19.40	26.57	5.46	90	***	0.83	3.1	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			7/12/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGN-A-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	12.80	19.38	26.46	5.82	97	***	***	0.53	1.1	
10	12.80	19.38	26.46	5.92	99	***	***	0.60	1.2	
20	12.70	19.37	26.47	5.82	97	***	***	0.82	1.5	
30	12.70	19.37	26.47	5.87	98	***	***	0.82	1.5	
40	12.60	19.37	26.49	5.84	97	***	***	0.84	1.7	
50	12.55	19.37	26.50	5.67	94	***	***	0.71	2.5	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			20/12/64				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGN-A-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	13.00	19.36	26.39	5.91	99	***	***	0.74	2.1	
10	13.15	19.36	26.36	5.72	96	***	***	0.78	2.1	
20	13.05	19.36	26.38	5.74	96	***	***	0.64	2.2	
30	13.10	19.36	26.37	5.73	96	***	***	0.65	2.1	
40	13.10	19.36	26.37	5.76	97	***	***	0.62	2.3	
50	12.80	19.42	26.52	5.65	94	***	***	0.67	2.0	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAKIA ISLAND		5/ 1/65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNAT	OXYGEN	OXYGEN % SAT.	I.P.	PART	P	NITRATE
0	14.65	19.38	26.07	5.75	100	***	***	0.63	0.3
10	14.10	19.38	26.19	5.90	101	***	***	0.60	0.2
20	13.90	19.38	26.23	5.86	100	***	***	0.60	0.1
30	13.30	19.37	26.34	5.86	99	***	***	0.60	0.4
40	12.65	19.37	26.47	5.45	90	***	***	0.89	3.1
50	12.50	19.37	26.50	5.36	89	***	***	0.82	4.2

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAKIA ISLAND		21/ 1/65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNAT	OXYGEN	OXYGEN % SAT.	I.P.	PART	P	NITRATE
0	13.80	19.33	26.19	5.69	97	***	***	0.67	0.5
10	13.70	19.33	26.21	5.68	96	***	***	0.67	0.6
20	13.60	19.33	26.23	5.69	96	***	***	0.66	0.9
30	13.50	19.33	26.25	5.69	96	***	***	0.61	0.5
40	13.00	19.31	26.32	5.63	94	***	***	0.64	2.6
50	12.80	19.31	26.36	5.35	89	***	***	0.64	2.5

STATION			DATE	TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			6/ 2/65	42	36 S			148	14 E
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	16.00	19.37	25.76	5.51	98	***	0.60	0.2	
10	15.60	19.37	25.85	5.65	100	***	0.78	0.6	
20	14.45	19.34	26.06	5.78	100	***	0.78	0.6	
30	14.00	19.33	26.14	5.62	96	***	0.80	1.0	
40	13.40	19.34	26.26	5.44	92	***	0.99	2.1	
50	13.20	19.34	26.32	5.32	84	***	0.91	3.2	

STATION			DATE	TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			17 / 2/65	42	36 S			148	14 E
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	14.60	19.39	26.10	5.70	99	***	0.42	0.4	
10	14.60	19.37	26.07	5.61	97	***	0.54	0.6	
20	14.60	19.37	26.07	5.80	100	***	0.43	1.7	
30	14.60	19.38	26.09	5.69	98	***	0.49	0.3	
40	14.60	19.37	26.07	5.72	99	***	0.49	0.2	
50	14.60	19.36	26.05	5.69	98	***	0.47	0.4	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		1/ 3/65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	16.40	19.41	25.73	5.78	104	***	***	0.36	0.13
10	15.30	19.41	25.98	5.64	99	***	***	0.38	0.2
20	15.10	19.41	26.02	5.78	101	***	***	0.43	0.5
30	14.60	19.38	26.09	5.39	93	***	***	0.51	1.0
40	14.20	19.38	26.17	5.19	84	***	***	0.53	2.4
50	14.05	19.38	26.20	4.82	82	***	***	0.61	3.3

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		17/ 3/65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	14.60	19.38	26.09	5.47	95	***	***	0.60	0.6
10	14.50	19.44	26.19	5.47	94	***	***	0.49	0.6
20	14.40	19.39	26.14	5.36	92	***	***	0.54	1.2
30	14.30	19.40	26.18	5.30	91	***	***	0.56	1.5
40	14.10	19.36	26.16	5.44	93	***	***	0.57	1.9
50	14.10	19.38	26.19	5.30	91	***	***	0.59	1.6

STATION	DATE	TIME	LATITUDE			LONGITUDE		
			42	36 S		148	14 E	
MARIA ISLAND	3/ 4/65							
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P NITRATE
0	14.40	18.85	25.39	5.39	92	***	***	0.7
10	14.40	19.41	26.17	5.43	94	***	***	0.8
20	14.40	19.40	26.16	5.39	93	***	***	1.3
30	14.40	19.40	26.16	5.39	93	***	***	1.1
40	14.40	19.40	26.16	5.40	93	***	***	0.7
50	14.40	19.40	26.16	5.39	93	***	***	1.0

STATION	DATE	TIME	LATITUDE			LONGITUDE		
			42	36 S		148	14 E	
MARIA ISLAND	28/ 4/65							
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P NITRATE
0	13.30	19.32	26.27	5.57	94	***	***	0.44
10	13.30	19.32	26.27	5.52	93	***	***	0.60
20	13.30	19.32	26.27	5.54	93	***	***	0.56
30	13.30	19.32	26.27	5.58	94	***	***	0.57
40	13.30	19.32	26.27	5.58	94	***	***	0.59
50	13.30	19.33	26.29	5.58	94	***	***	0.57

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAHIA ISLAND		14/ 9/65		42 36 S		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	13.25	19.34	26.31	5.55	93	***	***	0.58	1.5
10	13.25	19.34	26.31	5.61	94	***	***	0.52	1.5
20	13.25	19.34	26.31	***	***	***	***	0.56	1.5
30	13.30	19.34	26.30	5.61	94	***	***	0.56	1.4
40	13.30	19.34	26.30	5.55	93	***	***	0.58	2.0
50	13.30	19.34	26.30	5.52	93	***	***	0.56	2.0

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		27/ 5/65		42 36 S		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.50	19.36	26.49	5.64	93	***	***	0.53	2.1
10	12.45	19.36	26.50	5.56	92	***	***	0.38	1.9
20	12.45	19.36	26.50	5.61	93	***	***	0.64	2.4
30	12.45	19.38	26.53	5.64	93	***	***	0.63	2.6
40	12.45	19.36	26.50	5.72	95	***	***	0.72	2.4
50	12.45	19.36	26.50	5.70	94	***	***	0.80	2.2

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAHIA ISLAND		27 / 6 / 65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.70	19.45	26.58	5.53	92	***	0.70	1.3	
10	12.75	19.45	26.57	5.68	95	***	0.31	1.4	
20	12.75	19.45	26.57	5.68	95	***	0.51	1.2	
30	12.65	19.45	26.59	5.65	94	***	0.48	1.3	
40	12.60	19.44	26.58	5.65	94	***	0.49	1.3	
50	12.45	19.42	26.58	5.64	93	***	0.51	1.3	

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STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAHIA ISLAND		18 / 7 / 65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.00	19.53	26.82	5.84	96	***	0.41	1.6	
10	12.00	19.54	26.84	5.84	96	***	0.45	1.4	
20	11.95	19.53	26.83	5.81	95	***	0.37	1.6	
30	11.90	19.53	26.84	5.78	95	***	0.43	1.6	
40	11.90	19.52	26.83	5.78	95	***	0.42	1.7	
50	11.90	19.52	26.83	5.84	96	***	0.44	1.6	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		31/ 7/65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.40	19.56	26.79	5.70	94	***	***	0.38	1.8
10	12.20	19.56	26.83	5.69	94	***	***	0.51	1.8
20	12.15	19.56	26.84	5.75	95	***	***	0.46	1.6
30	12.10	19.56	26.85	5.74	94	***	***	0.50	2.1
40	12.10	19.56	26.85	5.67	93	***	***	0.48	2.1
50	12.05	19.56	26.86	5.72	94	***	***	0.49	2.1

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND.		41/ 8/65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.80	19.53	26.86	5.84	95	***	***	0.44	2.0
10	11.80	19.52	26.85	5.85	96	***	***	0.42	1.4
20	11.65	19.52	26.88	5.91	96	***	***	0.43	1.4
30	11.40	19.50	26.90	5.93	96	***	***	0.46	1.3
40	11.40	19.50	26.90	5.90	96	***	***	0.55	1.7
50	11.40	19.50	26.90	5.90	96	***	***	0.52	1.1

STATION	DATE	TIME	LATITUDE	LONGITUDE					
MARIA ISLAND	26/ 8/65		42 36 S	148 14 E					
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.60	19.48	26.83	5.90	96	***	***	0.45	2.4
10	11.60	19.50	26.86	5.90	96	***	***	0.51	2.7
20	11.60	19.50	26.86	5.84	95	***	***	0.45	2.4
30	11.60	19.50	26.86	5.90	96	***	***	0.42	2.3
40	11.60	19.53	26.90	5.85	95	***	***	0.47	2.3
50	11.60	19.50	26.86	5.89	96	***	***	0.51	2.3

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STATION	DATE	TIME	LATITUDE	LONGITUDE					
MARIA ISLAND	10/ 9/65		42 36 S	148 14 E					
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	11.70	19.47	26.80	6.15	100	***	***	0.47	1.2
10	11.70	19.48	26.81	6.15	100	***	***	0.43	1.0
20	11.70	19.48	26.81	6.13	100	***	***	0.45	0.9
30	11.70	19.47	26.80	6.13	100	***	***	0.46	1.3
40	11.70	19.48	26.81	6.04	98	***	***	0.46	1.1
>0	11.60	19.49	26.83	5.83	95	***	***	0.46	1.4

STATION			DATE		TIME		LATITUDE				LONGITUDE	
MARIA ISLAND			26/ 9/65				42		36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE			
0	11.80	19.47	26.78	6.06	99	***	***	0.54	1.1			
10	11.75	19.48	26.80	6.05	99	***	***	0.54	1.1			
20	11.75	19.48	26.80	6.09	99	***	***	0.39	1.6			
30	11.70	19.49	26.83	6.01	98	***	***	0.48	1.3			
40	11.70	19.48	26.81	6.01	98	***	***	0.49	1.4			
50	11.70	19.50	26.84	5.85	95	***	***	0.48	2.0			

STATION			DATE		TIME		LATITUDE				LONGITUDE	
MARIA ISLAND			10/10/65				42		36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE			
0	11.80	19.52	26.85	6.03	99	***	***	0.45	1.4			
10	11.65	19.49	26.84	6.19	101	***	***	0.47	1.4			
20	11.65	19.48	26.82	6.03	98	***	***	0.43	1.4			
30	11.65	19.47	26.81	6.08	99	***	***	0.46	1.3			
40	11.65	19.48	26.82	6.07	99	***	***	0.48	1.3			
50	11.65	19.47	26.81	6.03	98	***	***	0.48	1.4			

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		26/10/65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE
0	13.15	19.44	26.47	6.11	103	***	0.42	0.7	
10	12.50	19.44	26.60	6.19	103	***	***	0.7	
20	12.40	19.44	26.62	6.16	102	***	0.44	1.0	
30	12.15	19.44	26.67	6.11	100	***	0.57	0.5	
40	11.90	19.44	26.72	5.92	97	***	0.54	2.3	
50	11.90	19.44	26.72	5.88	96	***	0.52	2.4	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		8/11/65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE
0	13.25	19.41	26.41	6.08	102	***	1.05	0.3	
10	13.20	19.41	26.42	6.02	101	***	0.18	0.3	
20	12.95	19.41	26.48	6.08	102	***	0.99	0.6	
30	12.50	19.39	26.53	5.88	97	***	0.35	1.1	
40	12.20	19.39	26.59	5.79	95	***	0.67	2.3	
50	12.20	19.39	26.59	5.78	95	***	0.57	2.3	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			23/11/65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	13.20	19.41	26.42	6.12	103	***	0.60	0.18		
10	13.20	19.42	26.43	6.15	103	***	0.58	1.7		
20	13.00	19.42	26.47	6.24	104	***	0.48	0.3		
30	12.60	19.42	26.55	6.06	101	***	0.51	1.4		
40	12.40	19.42	26.59	5.80	96	***	0.59	2.4		
50	12.40	19.41	26.58	5.75	95	***	0.59	2.7		

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			6/12/65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	13.95	19.40	26.25	6.40	109	***	0.59	0.3		
10	13.90	19.40	26.26	6.41	109	***	0.61	0.4		
20	13.90	19.40	26.26	6.34	108	***	0.52	0.1		
30	13.10	19.40	26.43	6.34	106	***	0.66	0.6		
40	12.85	19.41	26.50	6.17	103	***	0.62	1.6		
50	12.50	19.41	26.56	6.14	102	***	0.63	1.4		

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			19/12/65				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE	
0	13.90	19.40	26.26	6.53	111	***	***	0.5/	***	
10	13.70	19.41	26.32	6.53	111	***	***	0.49	***	
20	13.65	19.42	26.34	6.53	111	***	***	0.55	***	
30	13.65	19.42	26.34	6.46	110	***	***	0.52	***	
40	13.60	19.41	26.34	6.42	109	***	***	0.61	***	
50	13.50	19.41	26.36	6.33	107	***	***	0.66	***	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			6 / 1 / 66				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE	
0	15.55	19.47	26.00	5.70	101	***	***	0.49	0.4	
10	15.35	19.48	26.06	5.71	100	***	***	0.51	0.3	
20	14.90	19.46	26.14	5.89	103	***	***	0.51	0.9	
30	14.70	19.46	26.18	5.84	101	***	***	0.53	0.1	
40	14.70	19.46	26.18	5.75	100	***	***	0.62	0.3	
50	14.50	19.48	26.25	5.58	96	***	***	0.70	0.0	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			21/ 1/66		42 36 S		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNAT	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE	
0	16.30	19.48	25.84	5.57	100	***	***	***	0.1	
10	16.00	19.49	25.93	5.53	99	***	***	***	0.1	
20	15.80	19.49	25.97	5.60	99	***	***	***	0.1	
30	15.50	19.48	26.03	5.63	99	***	***	***	0.0	
40	14.80	19.46	26.16	5.33	93	***	***	***	0.6	
50	14.60	19.46	26.20	5.22	90	***	***	***	0.6	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			6 / 2 / 66		42 36 S		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNAT	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE	
0	16.10	19.54	25.97	5.95	106	***	***	***	0.1	
10	16.10	19.54	25.97	5.35	96	***	***	***	0.1	
20	16.10	19.54	25.97	5.33	95	***	***	***	0.0	
30	16.05	19.59	26.05	5.29	94	***	***	***	0.1	
40	15.90	19.54	26.02	5.08	90	***	***	***	0.1	
50	15.70	19.56	26.10	5.05	89	***	***	***	0.1	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		23 / 2/66				42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	17.59	***	5.22	***	***	***	***	***	0.2
10	16.90	19.53	25.77	5.19	94	***	***	***	0.2
20	16.80	19.54	25.81	5.22	95	***	***	***	0.2
30	16.60	53.34	39.83	5.37	108	***	***	***	0.4
40	16.00	19.62	26.11	5.20	93	***	***	***	0.3
50	15.80	19.54	26.04	5.16	92	***	***	***	0.5

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		9 / 3/66		0938 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	17.90	19.69	25.75	5.26	98	***	***	0.37	0.3
10	17.80	19.69	25.78	5.33	99	***	***	0.42	0.3
20	17.70	19.71	25.83	5.32	98	***	***	0.42	0.2
30	17.40	19.67	25.84	5.13	94	***	***	0.54	0.4
40	16.80	19.63	25.93	5.22	95	***	***	0.58	0.9
50	16.10	19.62	26.08	4.98	89	***	***	0.55	2.0

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			24 / 3/66		1545 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	17.70	19.65	25.75	5.47	101	***	0.44	0.5		
10	17.65	19.65	25.76	5.28	97	***	0.36	0.4		
20	17.60	19.65	25.77	5.28	97	***	0.45	0.4		
30	17.60	19.65	25.77	5.31	98	***	0.43	0.5		
40	17.50	19.65	25.80	5.30	97	***	0.45	0.5		
50	16.90	19.62	25.89	5.62	102	***	0.37	0.3		

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			11 / 4/66		1020 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGNA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	15.80	19.66	26.21	5.15	92	***	0.53	0.6		
10	15.80	19.62	26.15	5.14	91	***	0.46	0.6		
20	15.80	19.62	26.15	5.07	90	***	0.48	0.7		
30	15.70	19.62	26.17	5.18	92	***	0.48	0.7		
40	15.70	19.63	26.19	5.10	90	***	0.46	0.6		
50	15.70	19.63	26.19	5.18	92	***	0.48	0.6		

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		26/ 4/66		1010 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	14.30	19.47	26.27	5.35	92	***	***	0.32	1.4
10	14.30	19.46	26.27	5.45	94	***	***	0.46	1.5
20	14.30	19.46	26.27	5.36	92	***	***	0.46	1.3
30	14.40	19.48	26.27	5.08	88	***	***	0.44	1.2
40	14.60	19.56	26.34	4.85	84	***	***	0.50	0.4
50	14.60	19.57	26.35	5.26	91	***	***	0.44	0.3

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		10/ 5/66		1105 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	13.70	19.44	26.36	5.44	92	***	***	0.50	2.2
10	13.70	19.44	26.36	5.36	91	***	***	0.59	2.3
20	13.70	19.44	26.36	5.44	92	***	***	0.50	2.2
30	13.60	19.44	26.38	5.41	92	***	***	0.50	1.9
40	13.60	19.44	26.38	5.21	88	***	***	0.52	2.2
50	13.70	19.44	26.36	5.35	91	***	***	0.55	2.2

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		25/ 3/66		1423 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	13.20	19.42	26.43	5.37	90	***	***	0.46	2.12
10	13.20	19.42	26.43	5.67	95	***	***	0.50	2.14
20	13.20	19.42	26.43	5.39	91	***	***	0.52	2.12
30	13.20	19.42	26.43	5.48	92	***	***	0.54	2.11
40	13.10	19.43	26.47	5.16	87	***	***	0.54	2.13
50	13.20	19.43	26.45	5.43	91	***	***	0.53	2.14

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		8/ 6/66		1238 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.90	19.40	26.47	5.16	86	***	***	0.60	2.13
10	12.90	19.40	26.47	5.36	90	***	***	0.61	2.14
20	12.80	19.40	26.49	5.71	95	***	***	0.65	2.15
30	12.80	19.41	26.51	5.21	87	***	***	0.61	2.10
40	12.90	19.41	26.49	5.32	89	***	***	0.48	2.11
50	12.90	19.41	26.49	5.07	85	***	***	0.52	2.15

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		23/ 6/66		1230 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.70	19.43	26.55	5.47	91	***	***	0.62	2.1
10	12.70	19.43	26.55	5.66	94	***	0.71	1.6	
20	12.70	19.42	26.53	5.58	93	***	0.56	2.3	
30	12.70	19.42	26.53	5.60	93	***	0.57	2.1	
40	12.60	19.42	26.55	5.44	90	***	0.58	2.5	
50	12.60	19.42	26.55	5.53	92	***	0.61	2.6	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		20/ 7/66		0340 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	12.70	19.47	26.60	2.84	47	***	***	0.66	2.6
10	12.70	19.47	26.60	5.36	89	***	0.66	2.6	
20	12.70	19.47	26.60	5.51	92	***	0.80	2.6	
30	12.70	19.47	26.60	5.42	90	***	0.76	1.9	
40	12.60	19.47	26.62	3.28	54	***	0.64	2.2	
50	12.60	19.47	26.62	5.50	91	***	0.72	2.5	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			11 / 8 / 66		1235 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART	TOTAL P	NITRATE	
0	12.20	19.48	26.72	5.62	93	***	***	0.66	1.4	
10	11.70	19.49	26.83	5.63	92	***	***	0.71	1.4	
20	11.50	19.49	26.87	4.33	70	***	***	0.66	1.5	
30	11.30	19.49	26.90	5.04	81	***	***	0.73	1.6	
40	11.20	19.49	26.92	5.14	83	***	***	0.73	1.4	
50	11.10	19.49	26.94	5.70	92	***	***	0.74	1.5	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			26 / 8 / 66		1150 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART	TOTAL P	NITRATE	
0	11.40	19.49	26.88	5.32	86	***	***	0.86	2.4	
10	11.30	19.49	26.90	5.41	87	***	***	0.75	2.5	
20	11.20	19.49	26.92	5.47	88	***	***	0.78	2.3	
30	11.20	19.49	26.92	3.73	60	***	***	0.78	2.2	
40	11.20	19.49	26.92	4.65	75	***	***	0.78	2.1	
50	11.20	19.48	26.91	5.15	83	***	***	0.77	1.9	

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAKIA ISLAND		9/ 9/66		0312 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE
0	11.60	19.43	26.76	4.93	80	***	***	0.82	2.0
10	11.20	19.43	26.84	5.78	93	***	***	0.77	2.6
20	11.20	19.44	26.85	5.48	88	***	***	0.75	1.5
30	11.20	19.44	26.85	5.75	93	***	***	0.82	2.0
40	11.10	19.44	26.87	5.32	86	***	***	0.90	1.9
50	11.10	19.43	26.85	5.63	91	***	***	0.90	1.8

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MAKIA ISLAND		10/10/66		1535 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE
0	12.10	19.40	26.63	1.91	31	***	***	0.67	0.4
10	11.70	19.40	26.70	5.34	87	***	***	0.62	0.5
20	11.60	19.40	26.72	5.03	82	***	***	0.74	1.0
30	11.60	19.42	26.75	5.30	86	***	***	0.75	1.0
40	11.60	19.42	26.75	5.17	84	***	***	0.82	1.3
50	11.60	19.42	26.75	5.80	94	***	***	0.75	1.5

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		24/10/66		1541 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE
0	14.40	19.21	25.89	5.81	100	***	***	0.60	0.1
10	12.60	19.38	26.50	5.93	98	***	***	0.60	0.3
20	12.30	19.39	26.57	5.65	93	***	***	0.61	0.6
30	12.00	19.37	26.60	5.42	89	***	***	0.81	1.0
40	12.00	19.38	26.62	5.34	87	***	***	0.77	1.2
50	11.80	19.38	26.65	5.26	86	***	***	0.61	1.7

STATION		DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND		12/11/66		0930 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART	TOTAL P	NITRATE
0	14.00	19.39	26.23	5.65	97	***	***	0.51	0.5
10	13.00	19.39	26.43	5.52	92	***	***	0.58	0.6
20	12.60	19.40	26.53	5.74	95	***	***	0.56	1.4
30	12.30	19.39	26.57	5.25	87	***	***	0.59	2.0
40	12.00	19.41	26.66	5.22	86	***	***	0.67	3.1
50	12.00	19.41	26.66	5.07	83	***	***	0.72	3.1

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			2/12/66		0600 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	13.80	19.43	26.32	2.10	36	***	***	0.52	0.5	
10	13.80	19.42	26.31	5.58	95	***	***	0.60	0.5	
20	13.80	19.41	26.30	5.52	94	***	***	0.51	0.5	
30	13.80	19.41	26.30	5.44	93	***	***	0.53	0.5	
40	13.60	19.42	26.35	5.67	96	***	***	0.52	0.5	
50	13.00	19.42	26.47	5.34	89	***	***	0.70	2.0	

STATION			DATE		TIME		LATITUDE		LONGITUDE	
MARIA ISLAND			2/12/66		1700 K		42 36 S		148 14 E	
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN X SAT.	I.P.	PART P	TOTAL P	NITRATE	
0	15.40	19.47	26.03	5.33	94	***	***	0.58	0.2	
10	15.00	19.47	26.12	5.00	87	***	***	0.60	0.3	
20	14.70	19.47	26.19	5.21	90	***	***	0.59	0.2	
30	14.60	19.47	26.21	5.39	93	***	***	0.74	0.5	
40	14.00	19.49	26.37	5.21	89	***	***	0.76	0.7	
50	13.90	19.53	26.44	5.47	93	***	***	0.77	0.9	

STATION			DATE	TIME	LATITUDE	LONGITUDE			
MARIA ISLAND			14/ 1/67	0715 K	42 36 S	148 14 E			
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	16.00	19.48	25.91	5.44	97	***	***	0.51	***
10	15.60	19.47	25.99	5.53	98	***	***	0.53	***
20	15.40	19.47	26.03	5.57	98	***	***	0.53	***
30	15.40	19.50	26.08	5.60	99	***	***	0.49	***
40	14.70	19.50	26.23	5.54	96	***	***	0.53	***
50	14.20	19.48	26.31	5.42	93	***	***	0.56	***

STATION			DATE	TIME	LATITUDE	LONGITUDE			
MARIA ISLAND			30/ 1/67	0810 K	42 36 S	148 14 E			
DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE
0	15.50	19.43	25.96	5.48	97	***	***	0.49	***
10	15.40	19.43	25.96	5.56	98	***	***	0.51	***
20	15.40	19.41	25.96	5.53	97	***	***	0.45	***
30	15.40	19.42	25.96	5.49	97	***	***	0.52	***
40	15.30	19.41	25.98	5.51	97	***	***	0.52	***
50	15.20	19.45	26.05	5.48	96	***	***	0.55	***

DEPTH	TEMP.	CHLORINITY	SIGMA-T	OXYGEN	OXYGEN % SAT.	I.P.	PART P	TOTAL P	NITRATE	STATION	DATE	TIME	LATITUDE	LONGITUDE
										MARIA ISLAND	13/ 2/67	0745 K	42 36 S	148 14 E
0	16.50	19.48	25.80	5.35	96	***	***	0.72	***					
10	16.50	19.48	25.80	5.37	97	***	***	0.56	***					
20	16.50	19.49	25.81	5.37	97	***	***	0.51	***					
30	16.40	19.49	25.83	5.34	96	***	***	0.58	***					
40	16.20	19.49	25.88	5.40	97	***	***	0.51	***					
50	15.90	19.47	25.92	5.34	95	***	***	0.69	***					

OCEANOGRAPHICAL STATION LISTS

1. Hydrological and planktological observations by F.R.V. *Warreen* in south-eastern Australian waters, 1938-39
2. Hydrological and planktological observations by F.R.V. *Warreen* in south-eastern Australian waters, 1940-42
3. Hydrological and planktological observations by F.R.V. *Warreen* in south-western Australian waters, 1947-50
4. Onshore hydrological investigations in eastern Australia, 1942-50
5. Estuarine hydrological investigations in eastern Australia, 1940-50. Queensland: Nerang and Coomera Rivers, Moreton Bay and Brisbane River, Logan River, Dunwich Oyster Lease; New South Wales: Richmond River, Clarence River, Macleay River, Hastings River, Manning River, Port Stephens, Tilligerry Creek, Hawkesbury River
6. Estuarine hydrological investigations in eastern Australia, 1940-50. New South Wales: Middle Harbour and Port Jackson, Georges River-Botany Bay
7. Estuarine hydrological investigations in eastern Australia, 1940-50. New South Wales: Port Hacking, Lake Illawarra, Shoalhaven River, Jervis Bay, Clyde River, Moruya River, Tuross River, Wagonga Inlet; Victoria: Port Phillip; Tasmania: Tamar River, Derwent River, Huon River, D'Entrecasteaux Channel, Pittwater, Lake Dobson (freshwater), Penna Dam (freshwater)
8. Hydrological investigations in south-western Australia, 1944-50
9. Records of twenty-four hourly hydrological observations at selected stations in eastern Australian estuarine systems, 1942-50. Queensland: Logan River; New South Wales: Richmond River, Clarence River, Macleay River, Hastings River, Manning River, Port Stephens, Hawkesbury River, Georges River, Port Hacking, Clyde River, Tuross River; Tasmania: Tamar River, Derwent River
10. Records of twenty-four hourly hydrological observations at Shell Point, Georges River, New South Wales, 1942-50
11. Analyses of bottom deposits in eastern Australia, 1946-50
12. Estuarine hydrological investigations in eastern and south-western Australia, 1951
13. Analysis of bottom deposits in eastern and south-western Australia, 1951 and records of twenty-four hourly hydrological observations at selected stations in eastern Australian estuarine systems, 1951
14. Onshore hydrological investigations in eastern and south-western Australia, 1951
15. Estuarine hydrological investigations in eastern and south-western Australia, 1952
16. Analysis of bottom deposits in eastern and south-western Australia, 1952 and records of twenty-four hourly hydrological observations at selected stations in eastern Australian estuarine systems, 1952
17. Onshore hydrological investigations in eastern and south-western Australia, 1952
18. Onshore hydrological investigations in eastern and south-western Australia, 1953
19. Onshore planktological investigations in eastern Australia, 1945-54
20. Surface sampling in the Tasman Sea, 1953
21. Estuarine hydrological investigations in eastern and south-western Australia, 1953
22. Further onshore planktological investigations in eastern Australia, 1945-54
23. Planktological investigations made by F.R.V. *Derwent Hunter* in eastern Australian waters, 1952-54
24. Onshore hydrological investigations in eastern and south-western Australia, 1954
25. Surface sampling in the Tasman Sea, 1954
26. Estuarine hydrological investigations in eastern and south-western Australia, 1954
27. Onshore and oceanic hydrological investigations in eastern and south-western Australia, 1955
28. Surface sampling in the Tasman and Coral Seas, 1955
29. Estuarine hydrological investigations in eastern and south-western Australia, 1955
30. Onshore and oceanic hydrological investigations in eastern and south-western Australia, 1956
31. Surface sampling in the Tasman and Coral Seas and the south-eastern Indian Ocean, 1956
32. Estuarine hydrological investigations in eastern and south-western Australia, 1956
33. Coastal hydrological investigations in eastern and south-western Australia, 1957
34. Coastal hydrological investigations at Port Hacking, New South Wales, 1957
35. Coastal hydrological investigations at Eden, New South Wales, 1957

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(Continued)

36. Surface sampling in the Tasman and Coral Seas, 1957
37. Hydrological investigations from F.R.V. *Derwent Hunter*, 1957
38. Coastal hydrological investigations in the New South Wales tuna fishing area, 1958
39. Surface sampling in the Coral and Tasman Seas, 1958
40. Coastal hydrological investigations in south-eastern Australia, 1958
41. Oceanic investigations in eastern Australian waters, F.R.V. *Derwent Hunter*, 1958
42. Coastal investigations at Port Hacking, New South Wales, 1958
43. Oceanic investigations in eastern Australia, H.M.A. Ships *Queenborough*, *Quickmatch*, and *Warrego*, 1958
44. Oceanic observations in Antarctic waters, M.V. *Magga Dan*, 1959
45. Coastal hydrological investigations in eastern Australia, 1959
46. Coastal hydrological investigations in the New South Wales tuna fishing area, 1959
47. Coastal investigations at Port Hacking, New South Wales, 1959
48. Oceanic investigations in eastern Australian waters, F.R.V. *Derwent Hunter*, 1959
49. Coastal hydrological sampling Rottnest Island, W.A., and Port Moresby, Papua, during the I.G.Y. (1957-58), and surface sampling in the Tasman and Coral Seas, 1959
50. Surface sampling in the Coral and Tasman Seas, 1960
51. Coastal hydrological investigations in eastern Australia, 1960
52. Coastal investigations at Port Hacking, New South Wales, 1960
53. Coastal hydrological investigations in the New South Wales tuna fishing area, 1960
54. Investigations by F.R.V. *Derwent Hunter* on the eastern Australian tuna grounds in 1961
55. Investigations by F.R.V. *Weerutta* on the South Australian tuna grounds in 1961
56. Investigations by F.R.V. *Marelda* on the eastern Australian tuna grounds in 1961
57. Investigations by F.V. *Estelle Star* in Western Australian waters in 1961
58. Temperature observations from Australian tuna fishing vessels in 1961
59. Investigations by F.R.V. *Derwent Hunter* on the eastern Australian tuna grounds in 1962
60. Investigations by F.R.V. *Investigator* on the South Australian tuna grounds in 1962
61. Investigations by F.R.V. *Marelda* on the eastern Australian tuna grounds in 1962
62. Investigations by F.V. *Estelle Star* in Western Australian waters in 1962
63. Temperature and salinity observations from Australian tuna fishing vessels in 1962
64. Investigations by F.R.V. *Investigator* on the South Australian tuna grounds in 1963
65. Investigations by F.R.V. *Marelda* on the eastern Australian tuna grounds in 1963
66. Temperature and salinity observations from Australian tuna fishing vessels in 1963
67. Investigations by F.R.V. *Investigator* on the South Australian tuna grounds in 1964
68. Investigations by F.R.V. *Marelda* on the eastern Australian tuna grounds in 1964
69. Temperature and salinity observations from Australian tuna fishing vessels in 1964
70. Investigations by F.R.V. *Investigator* on the South Australian tuna grounds in 1965
71. Investigations by F.V. *Estelle Star* in South Australian and New South Wales waters in 1965
72. Investigations by F.R.V. *Marelda* on the eastern Australian tuna grounds in 1965
73. Investigations by F.V. *Degei* in Queensland waters in 1965
74. Temperature and salinity observations from Australian tuna fishing vessels in 1965
75. Investigations by F.V. *Degei* in New South Wales, South and Western Australian waters in 1966
76. Investigations by F.V. *Estelle Star* in South and Western Australian waters in 1966
77. Temperature and salinity observations from Australian tuna fishing vessels in 1966
78. Drift bottle releases and recoveries in Bass Strait and adjacent waters, 1958-1962
79. Drift bottle releases and recoveries in Western Australia, 1956-1957
80. Investigations by F.R.V. *Lancelin* in Western Australian waters in 1963.
81. Coastal investigations off Port Hacking, New South Wales, in 1961
82. Coastal investigations off Port Hacking, New South Wales, in 1962
83. Coastal investigations off Port Hacking, New South Wales, in 1963
84. Coastal investigations off Port Hacking, New South Wales, in 1964
87. Coastal investigations off Port Jackson and Wollongong, New South Wales, in 1966
88. Coastal investigations off Maria Island, Tasmania, 1961-66