

# OCEANOGRAPHICAL STATION LIST

Volume 37

Hydrological Investigations From F.R.V. *Derwent Hunter*, 1957

Compiled by D. J. Rochford



Division of Fisheries and Oceanography  
Commonwealth Scientific and Industrial  
Research Organization, Australia

Melbourne 1959

Printed by C.S.I.R.O., Melbourne

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HYDROLOGICAL INVESTIGATIONS FROM F.R.V. DERWENT HUNTER, 1957

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## I. INTRODUCTION

In previous years the results of analyses of water samples collected by F.R.V. *Derwent Hunter* were published in the volume containing the results of all oceanic investigations. This year they have been published separately because the sampling was greatly increased. Included in this volume are the results of analyses of sea-water samples collected from H.M.A.S. *Warrego*.

## II. METHODS AND UNITS

The hydrological methods and units have been given in a previous volume (C.S.I.R.O. Aust. 1957), but this year the unit  $\mu\text{g at./l.}$  instead of  $\mu\text{g/l.}$  has been used for nutrients.

Times have been given as ship's time. On cruise 6/56 the zone correction to G.M.T. is  $-10$  hr for stations 53/56-1/57 and  $-11.5$  hr for the remainder. On all other cruises of F.R.V. *Derwent Hunter* and of H.M.A.S. *Warrego* the zone correction to G.M.T. is  $-10$  hr.

## III. PERSONNEL

The sampling was the responsibility of Messrs. C. Walker, D. Black, and J. Staniforth. The laboratory analyses have been carried out by Messrs. C. Walker, F. Davies, K. Champion, and G. Dal Pont at Cronulla, and Messrs. A. Middleton and N. Dyson at Perth. Misses O. Jacobsen, E. Mayman, F. Luce, and R. Weidenhofer, and Mrs. R. Birks have been responsible for the processing of the data and the preparation of the typed sheets, under the general direction of Mr. A. D. Crooks.

## IV. REFERENCE

C.S.I.R.O. AUST. (1957).—Onshore and oceanic hydrological investigations in eastern and south-western Australia, 1955. *C.S.I.R.O. Aust. Oceanogr. Sta. List* 27: 1-145.

F.R.V. "Derwent Hunter"

Cruise 6  
Part 1 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 53      DATE: 31/12/56      TIME: 1100 hrs.  
LAT: 44°12'S.      LONG: 153°38'E.

0	12.90	19.29	5.76	95	26.31	0.64
21	12.92	19.29	5.96	98	26.31	0.55
42	12.83	19.27	6.06	100	26.30	0.55
64	11.86	19.25	5.68	92	26.46	0.58
98	11.22	19.27	5.65	90	26.61	0.81
125	11.00	19.27	5.93	94	26.65	0.58
150	10.75	19.25	5.93	94	26.67	0.71
169	10.48	19.28	6.00	94	26.76	0.71
205	10.15	19.27	5.68	89	26.80	0.87
305	8.74	19.17	5.76	87	26.89	0.42
383	8.54	19.15	5.70	86	26.89	0.90

STATION: 1      DATE: 2/1/57      TIME: 1545 hrs.  
LAT: 41°40'S.      LONG: 160°03'E.

0	15.60	19.47	5.60	97	25.99	0.55
28	15.40	19.48	5.63	97	26.05	0.55
57	15.23	19.47	5.63	97	26.08	0.55
85	13.78	19.47	5.65	95	26.39	0.58
110	13.44	19.50	5.52	92	26.50	0.55
161	12.88	19.44	5.36	89	26.53	0.71
210	12.14	19.38	5.40	88	26.59	0.74
257	11.55	19.36	4.90	79	26.68	0.71
295	11.13	19.32	4.82	77	26.69	0.87
450	9.05	19.18	4.99	76	26.85	0.90
740	7.30	19.09	4.50	66	26.99	0.90
968	5.83	19.06	4.31	62	27.15	1.36
1259	4.63	19.06	3.82	53	27.29	1.84

F.R.V. "Derwent Hunter"

Cruise 6  
Part 1 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 2                      DATE: 3/1/57                      TIME: 0925 hrs.  
LAT: 41°20'S.                      LONG: 161°45'E.

0	15.21	19.42	5.43	93	26.00	0.64
27	15.18	19.41	5.57	96	26.00	0.52
54	15.15	19.41	5.57	96	26.01	0.48
81	13.23	19.46	5.55	92	26.48	0.52
106	12.76	19.46	5.36	88	26.58	0.64
156	12.14	19.36	5.57	91	26.56	0.71
208	11.49	19.32	5.67	91	26.63	0.77

STATION: 3                      DATE: 3/1/57                      TIME: 1622 hrs.  
LAT: 41°14'S.                      LONG: 162°21'E.

0	15.55	19.38	5.60	97	25.88	0.52
27	15.30	19.42	5.67	98	25.98	0.52
54	15.15	19.40	5.67	97	25.99	0.48
81	13.47	19.46	5.60	94	26.43	0.58
104	12.84	19.43	5.26	87	26.52	0.71
153	12.11	19.39	5.43	88	26.61	0.71
204	11.45	19.33	4.99	80	26.65	0.87
256	10.73	19.28	4.96	78	26.71	0.90
295	10.53	19.27	4.96	78	26.74	0.81
488	8.75	19.15	4.81	73	26.86	1.29
740	7.55	19.09	4.66	69	26.95	0.58
928	5.88	19.04	4.36	62	27.11	1.52
1321	3.38	19.06	3.98	53	27.42	2.09

F.R.V. "Derwent Hunter" Cruise 6 1957  
Part 1

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 4                              DATE: 4/1/57                      TIME: 1545 hrs.  
 LAT: 40°53'S.                      LONG: 165°11'E.

0	15.70	19.36	5.60	97	25.82	0.36
27	15.70	19.40	5.63	98	25.86	0.42
54	15.70	19.37	5.63	98	25.83	0.29
82	13.52	19.45	5.50	92	26.41	0.58
109	12.97	19.43	5.44	90	26.50	0.52
162	12.51	19.41	5.44	89	26.56	0.58
208	11.73	19.32	5.11	83	26.58	1.00
225	11.42	19.34	4.87	78	26.67	1.00
254	11.14	19.31	4.93	79	26.68	0.94
410	9.11	19.16	5.09	78	26.82	1.00
640	7.90	19.06	4.96	74	26.86	1.36
874	6.28	19.05	4.49	65	27.07	1.42
1458	3.38	19.08	3.74	50	27.45	2.00

STATION: 5                              DATE: 5/1/57                      TIME: 1500 hrs.  
 LAT: 40°34'S.                      LONG: 169°02'S.

0	17.11	19.48	5.50	98	25.65	0.48
23	16.70	19.46	5.50	97	25.72	0.29
56	16.70	19.44	5.57	98	25.69	0.29
68	15.18	19.50	5.70	98	26.13	0.36
92	13.95	19.51	5.66	95	26.40	0.48
136	13.55	19.50	5.30	89	26.47	0.48
180	13.30	19.48	5.20	87	26.50	0.48
215	12.83	19.43	5.02	83	26.53	0.71
250	12.28	19.40	4.85	79	26.58	0.71
385	10.72	19.32	4.58	72	26.77	
777	6.97	19.09	4.51	66	27.04	1.58

F.R.V. "Derwent Hunter" Cruise 6 1957  
Part 1

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 6                      DATE: 6/1/57                      TIME: 1009 hrs.  
 LAT: 40°13'S.                      LONG: 171°29'E.

0	17.00	19.45	5.52	98	25.64	0.42
28	17.00	19.44	5.11	91	25.62	0.52
56	16.95	19.48	5.55	98	25.69	
84	14.77	19.51	5.87	100	26.23	0.42
110	14.05	19.52	5.50	93	26.40	0.58
145	13.77	19.51	5.34	90	26.44	0.52
153	13.72	19.51	5.34	90	26.45	0.58
201	13.46	19.53	5.26	88	26.53	0.29
243	12.95	19.48	5.17	86	26.57	0.58
295	10.88	19.33	4.49	71	26.75	0.77

F.R.V. "Derwent Hunter"

Cruise 6 1957  
Part 2

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 8                      DATE: 24/1/57                      TIME: 1510 hrs.  
 LAT: 39°28'S.                      LONG: 172°17'E.

0	18.21	19.19			24.98	0.52
35	17.81	19.20			25.09	
69	15.54	19.42			25.93	
95	14.03	19.46			26.31	
123	13.95	19.49			26.38	
160	13.74	19.50			26.44	
195	13.52	19.50			26.48	0.81

STATION: 9                      DATE: 25/1/57                      TIME: 0920 hrs.  
 LAT: 39°06'S.                      LONG: 170°33'E.

0	18.60	19.51	5.50	101	25.33	0.42
25	17.50	19.52	5.50	99	25.62	0.52
50	16.64	19.51	5.70	101	25.80	0.52
73	14.54	19.52	5.70	97	26.30	0.52
95	13.93	19.52	5.38	91	26.43	0.48
140	13.70	19.51	5.24	88	26.45	0.71
198	13.38	19.49	5.24	87	26.50	0.71
235	13.10	19.46	5.17	86	26.51	0.77
280	12.56	19.43	4.97	83	26.58	0.77
470	10.19	19.26	4.49	70	26.78	1.16
615	8.34	19.15	4.49	67	26.92	1.45



## F.R.V. "Derwent Hunter"

Cruise 6  
Part 2 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 10                      DATE: 26/1/57                      TIME: 1515 hrs.  
LAT: 36°32'S.                      LONG: 169°07'E.

0	21.39	19.64	5.24	100	24.77	0.48
25	20.53	19.63	5.50	104	24.99	0.64
50	17.70	19.60	5.70	103	25.68	0.64
75	16.64	19.61	5.55	98	25.94	0.42
100	16.02	19.61	5.12	90	26.09	0.77
150	15.21	19.58	4.97	86	26.24	0.81
205	14.64	19.54	4.67	80	26.30	0.71
264	13.81	19.51	4.29	72	26.43	1.29
290	13.11	19.46	4.45	74	26.50	0.94
520	9.98	19.26	4.35	68	26.81	1.58
754	7.56	19.13	4.40	65	27.01	1.81
1003	5.80	19.08	4.23	60	27.18	1.78

STATION: 11                      DATE: 27/1/57                      TIME: 1225 hrs.  
LAT: 37°51'S.                      LONG: 171°49'E.

0	20.28	19.54			24.94	0.36
32	18.17	19.53			25.46	
64	16.06	19.54			25.98	
88	14.73	19.54			26.28	
112	14.26	19.56			26.41	1.23
155	13.85	19.53			26.45	
198	13.52	19.51			26.49	

STATION: 12                      DATE: 28/1/57                      TIME: 0545 hrs.  
LAT: 38°49'S.                      LONG: 173°42'E.

0	20.20	19.37			24.72	
28	19.49	19.37			25.16	0.52
56	15.51	19.49			26.04	
84	14.44	19.52			26.32	

F.R.V. "Derwent Hunter" Cruise 6 1957  
Part 2

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 13                      DATE: 31/1/57                      TIME: 1300 hrs.  
LAT: 37°17'S.                      LONG: 172°47'E.

0	20.99	19.55			24.75	0.58
25	19.57	19.52			25.10	
50	17.68	19.52			25.57	
75	15.42	19.53			26.11	
100	14.67	19.54			26.29	0.77
153	14.06	19.52			26.40	
203	13.42	19.49			26.49	
254	12.60	19.41			26.54	1.13

STATION: 14                      DATE: 1/2/57                      TIME: 1420 hrs.  
LAT: 34°42'S.                      LONG: 171°10'E.

0	20.20	19.55	5.38	101	24.97	0.36
25	20.05	19.55	5.38	101	25.01	0.42
50	19.08	19.57	5.60	103	25.29	0.29
74	16.79	19.54	5.55	98	25.81	0.58
98	15.82	19.54	5.24	91	26.04	0.58
143	14.77	19.51	4.79	82	26.23	0.77
192	14.02	19.48	4.62	78	26.35	0.64
240	12.91	19.42	4.62	76	26.49	1.00
285	12.72	19.40	4.49	74	26.50	0.81
434	10.13	19.27	4.35	68	26.81	1.13
650	8.37	19.18	4.29	65	26.96	1.45
872	6.73	19.11	4.16	60	27.10	1.65
1323	3.78	19.08	3.70	50	27.41	2.00

## F.R.V. "Derwent Hunter"

## Cruise 6 Part 2 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 15                      DATE: 2/2/57                      TIME: 1020 hrs.  
 LAT: 33°18'S.                      LONG: 170°11'E.

0	20.05	19.53	5.18	97	24.98	0.39
21	20.05	19.53	5.38	101	24.98	0.32
42	20.00	19.54	5.38	101	25.01	0.32
50	19.54	19.56	5.38	100	25.16	0.42
85	17.04	19.57	5.32	95	25.79	0.58
124	15.28	19.57	5.11	88	26.20	0.71
175	14.37	19.53	4.79	81	26.34	0.71
214	13.26	19.49	4.62	77	26.52	0.32
312	12.74	19.42	4.49	74	26.52	0.97
448	9.40	19.24	4.29	66	26.88	1.29
670	8.00	19.18	4.16	62	27.02	1.03
898	5.91	19.12	3.97	57	27.22	1.78

STATION: 16                      DATE: 3/2/57                      TIME: 1025 hrs.  
 LAT: 31°15'S.                      LONG: 168°52'E.

0	23.34	19.65	5.07	100	24.23	0.39
26	23.05	19.72	5.24	103	24.41	0.48
52	21.06	19.72	5.50	105	24.97	0.39
79	19.49	19.70	5.24	97	25.39	0.64
106	18.27	19.69	4.91	90	25.66	0.58
162	17.27	19.66	4.74	85	25.86	0.74
212	16.42	19.62	4.49	79	26.00	0.81
262	15.60	19.59	4.45	77	26.16	0.71
370	14.62	19.53	4.45	76	26.28	1.03
513	11.83	19.37	4.40	71	26.63	1.13
750	8.41	19.18	4.45	67	26.95	1.45
986	6.33	19.11	4.40	63	27.15	1.52
1454	3.65	19.12	3.80	51	27.48	2.03

F.R.V. "Derwent Hunter" Cruise 6 Part 2 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 17                      DATE: 3/2/57                      TIME: 1815 hrs.  
 LAT: 31°12'S.                      LONG: 168°20'E.

0	23.80	19.68			24.13	
30	23.09	19.73			24.41	0.32
60	21.51	19.70			24.82	
90	19.38	19.68			25.36	0.32
112	18.55	19.67			25.56	0.39
157	17.43	19.65			25.81	
207	16.26	19.60			26.02	0.39
257	15.45	19.57			26.16	

STATION: 18                      DATE: 4/2/57                      TIME: 1000 hrs.  
 LAT: 31°04'S.                      LONG: 166°50'E.

0	23.49	19.70	4.97	99	24.25	0.32
27	23.03	19.74	5.02	99	24.44	0.32
54	20.86	19.69	5.32	101	25.01	0.32
81	18.97	19.69	5.07	94	25.48	0.39
106	18.60	19.69	4.91	90	25.58	0.42
156	18.04	19.68	4.80	87	25.70	0.48
209	17.69	19.67	4.74	86	25.77	0.48
262	16.72	19.64	4.56	81	25.96	0.42
390	13.97	19.47	4.45	75	26.35	0.74
536	11.39	19.35	4.16	67	26.69	0.87
775	8.08	19.16	4.45	67	26.98	1.13
1020	6.09	19.12	4.40	63	27.20	1.39
1500	3.34	19.14	3.70	50	27.54	1.71

F.R.V. "Derwent Hunter"

Cruise 6 1957

Part 2

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 19      DATE: 6/2/57      TIME: 0805 hrs.  
 LAT: 30°06'S.      LONG: 167°35'E.

0	23.55	19.71			24.26	
26	21.28	19.70			24.88	0.48
52	19.51	19.69			25.34	
78	18.74	19.69			25.54	
106	18.16	19.68			25.67	0.39
162	17.69	19.67			25.77	
209	17.03	19.64			25.89	0.42
256	15.51	19.57			26.15	

STATION: 20      DATE: 7/2/57      TIME: 0920 hrs.  
 LAT: 31°32'S.      LONG: 163°44'E.

0	23.20	19.73	4.91	97	24.38	0.23
24	23.25	19.73	4.91	97	24.36	0.26
48	21.42	19.69	4.91	94	24.83	0.26
72	19.54	19.69	4.74	88	25.34	0.42
95	18.52	19.68	4.62	85	25.58	0.48
144	17.88	19.67	4.49	81	25.73	0.58
190	17.02	19.65	4.62	82	25.91	0.42
236	15.90	19.60	4.45	78	26.10	0.58
318	14.52	19.54	4.40	75	26.33	0.87
446	11.51	19.37	4.56	73	26.69	1.06
684	7.89	19.15	4.49	67	26.99	1.68
942	5.88	19.10	4.10	59	27.20	1.23

F.R.V. "Derwent Hunter" Cruise 1 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 21                      DATE: 16/3/57                      TIME: 0440 hrs.  
 LAT: 34°09'S.                      LONG: 151°28'E.

0	21.37	19.51	4.52	86	24.60
19	21.05	19.59	5.20	99	24.80
36	18.40	19.62	4.36	80	25.52
55	15.90	19.60	4.46	78	26.10
66	16.06	19.60	4.63	81	26.07
89	15.68	19.58	4.63	80	26.13
147	14.72	19.52	4.75	81	26.26
155	13.83	19.48	4.60	77	26.39

STATION: 22                      DATE: 20/3/57                      TIME: 0015 hrs.  
 LAT: 34°14'S.                      LONG: 151°37'E.

0	22.37	19.63	5.04	98	24.48
29	22.36	19.62	4.93	96	24.47
57	19.23	19.61	4.36	81	25.30
86	17.97	19.62	4.52	82	25.63
114	16.57	19.58	4.58	81	25.92
160	14.86	19.52	4.75	81	26.23
207	13.15	19.43	4.60	76	26.46
332	11.19	19.32	4.48	72	26.68
551	8.92	19.17	4.75	72	26.86

STATION: 23                      DATE: 20/3/57                      TIME: 0500 hrs.  
 LAT: 34°20'S.                      LONG: 151°54'E.

0	22.05	19.60	4.95	96	24.53
18	22.06	19.60	5.04	97	24.53
36	22.08	19.60	5.10	99	24.52
54	18.57	19.62	4.75	87	25.48
76	16.98	19.58	4.58	81	25.83
118	15.18	19.53	4.58	79	26.16
174	13.64	19.45	4.55	76	26.39
286	11.24	19.31	4.60	74	26.66
426	10.09	19.24	4.60	72	26.77
601	7.80	19.11	4.48	66	26.95
801	6.09	19.06	4.36	62	27.11
1249	3.79	19.08	3.82	52	27.41

F.R.V. "Derwent Hunter" Cruise 1 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 24                      DATE: 20/3/57                      TIME: 1215 hrs.  
 LAT: 34°31'S.                      LONG: 152°18'E.

0	24.25	19.59	4.58	92	23.88
19	24.26	19.57	4.78	96	23.85
38	24.10	19.62	4.78	96	23.96
63	20.80	19.61	4.90	93	24.89
81	17.58	19.60	4.27	77	25.71
128	15.88	19.57	4.44	77	26.06
183	14.44	19.48	4.25	72	26.26
292	12.28	19.36	4.36	71	26.54
495	8.65	19.17	4.51	68	26.91
748	6.99	19.07	4.39	64	27.00
1002	5.02	19.06	4.08	57	27.24
1505	3.00	19.11	3.56	47	27.53

STATION: 25                      DATE: 20/3/57                      TIME: 1735 hrs.  
 LAT: 34°42'S.                      LONG: 152°36'E.

0	23.87	19.58	4.79	96	23.99
14	23.91	19.59	4.79	96	23.99
28	23.81	19.59	4.55	91	24.02
42	23.70	19.60	4.92	98	24.06
74	23.46	19.60	4.79	95	24.13
137	20.34	19.66	4.35	82	25.08
160	18.40	19.62	3.82	70	25.52
207	15.72	19.56	4.00	70	26.09
395	11.46	19.31	4.26	68	26.62
645	8.10	19.12	4.35	65	26.92
895	6.54	19.07	4.66	67	27.07
1382	3.70	19.10	3.57	48	27.45

F.R.V. "Derwent Hunter" Cruise 1 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 26                      DATE: 21/3/57                      TIME: 0140 hrs.  
 LAT: 34°48'S.                      LONG: 153°08'E.

0	23.86	19.58	4.79	96	23.99
22	23.82	19.58	4.79	96	24.00
47	23.66	19.61	4.79	95	24.08
67	22.10	19.65	4.40	85	24.59
90	20.77	19.67	3.97	75	24.98
143	19.15	19.67	4.44	82	25.41
189	18.20	19.65	4.38	80	25.62
281	15.53	19.55	4.40	76	26.11
480	9.59	19.20	4.35	67	26.79
728	8.06	19.12	4.44	66	26.93
970	6.17	19.07	4.32	62	27.11
1471	4.54	19.09	3.57	49	27.34

STATION: 27                      DATE: 21/3/57                      TIME: 1000 hrs.  
 LAT: 35°03'S.                      LONG: 154°10'E.

0	23.85	19.58	4.90	98	23.99
20	23.82	19.59	4.87	97	24.01
35	23.74	19.60	4.87	97	24.05
58	23.13	19.61	4.82	95	24.23
78	20.21	19.68	4.39	83	25.14
131	18.28	19.66	4.58	83	25.61
183	17.10	19.61	4.46	80	25.83
260	14.46	19.48	4.27	73	26.25
416	11.61	19.32	4.32	70	26.61
610	8.70	19.14	4.39	66	26.86
843	6.85	19.07	4.42	64	27.02
1268	3.90	19.08	3.77	51	27.40



F.R.V. "Derwent Hunter" Cruise 1 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 28                      DATE: 22/3/57                      TIME: 0035 hrs.  
 LAT: 35°30'S.                      LONG: 155°47'E.

0	20.83	19.66	5.07	96	24.95
27	20.71	19.65	5.10	96	24.97
55	20.19	19.66	5.14	97	25.12
82	18.81	19.62	4.92	90	25.42
109	16.89	19.59	4.58	81	25.86
155	15.37	19.57	4.98	86	26.18
201	14.09	19.49			26.35
312	12.11	19.37	4.66	76	26.58
516	9.42	19.19	4.69	72	26.81
771	7.13	19.07	4.51	66	26.96
1033	5.26	19.05	4.22	59	27.20
1600	3.12	19.15	3.58	48	27.57

F.R.V. "Derwent Hunter" Cruise 2 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 36                      DATE: 27/3/57                      TIME: 0830 hrs.  
 LAT: 35°43'S.                      LONG: 151°21'E.

0	21.41	19.69	5.02	96	24.84	0.29
23	21.20	19.69	5.11	98	24.89	0.36
45	20.78	19.71	5.02	95	25.04	0.10
68	20.32	19.69	5.11	96	25.13	0.26
101	17.97	19.64	4.57	83	25.66	0.36
137	16.33	19.60	4.44	78	26.00	0.13
184	15.47	19.57	4.52	78	26.16	0.48
281	13.82	19.49	4.81	81	26.41	0.55
474	10.09	19.25	3.64	57	26.78	1.03

STATION: 37                      DATE: 29/3/57                      TIME: 0845 hrs.  
 LAT: 38°48'S.                      LONG: 151°13'E.

0	20.01	19.69	5.02	94	25.21	0.29
27	19.80	19.70	5.07	95	25.28	0.26
53	19.21	19.67	5.07	94	25.39	0.23
79	18.21	19.62	4.57	83	25.57	0.36
106	16.77	19.60	4.54	80	25.90	0.52
160	14.84	19.54	4.54	78	26.26	0.64
213	13.73	19.50	5.24	88	26.44	0.55
319	11.78	19.37	4.49	73	26.64	0.64
531	8.91	19.17	4.54	69	25.86	1.13

STATION: 38                      DATE: 30/3/57                      TIME: 0900 hrs.  
 LAT: 40°31'S.                      LONG: 150°16'E.

0	18.41	19.65	4.67	85	25.57	0.39
15	18.37	19.71	4.85	89	25.67	0.29
30	18.21	19.65	5.06	92	25.62	0.36
47	17.82	19.61	4.76	86	25.66	0.45
64	17.19	19.60	4.67	83	25.80	
97	15.67	19.54	4.13	72	26.07	0.52
130	14.16	19.48	4.37	74	26.32	0.58
192	12.72	19.43	4.49	74	26.55	0.81
322	10.41	19.25	4.45	70	26.73	1.06

F.R.V. "Derwent Hunter" Cruise 2 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 39                      DATE: 31/3/57                      TIME: 0850 hrs.  
 LAT: 41°09'S.                      LONG: 149°11'E.

0		19.69	4.90			0.32
25	17.78	19.69	4.66	84	25.78	0.23
50	16.77	19.60	4.84	87	25.90	0.39
75	15.49	19.52	5.07	88	26.09	0.42
101	14.60	19.50	5.30	90	26.25	0.42
152	13.24	19.44	5.11	85	26.45	0.55
203	12.48	19.41	4.90	80	26.56	0.23
308	11.43	19.36	5.04	81	26.70	0.61
523	8.89	19.16	4.90	74	26.85	1.19

STATION: 40                      DATE: 1/4/57                      TIME: 0900 hrs.  
 LAT: 41°55'S.                      LONG: 150°15'E.

0		19.72	4.78			0.36
23	18.30	19.71	4.04	74	25.68	0.23
47	18.41	19.70	4.41	81	25.64	0.32
70	18.43	19.71	5.02	92	25.65	0.36
94	18.43	19.70	4.90	90	25.63	0.29
140	17.20	19.63	4.38	78	25.84	0.52
188	15.88	19.59	4.04	71	26.09	0.48
281	13.85	19.49	4.63	78	26.40	0.64
469	11.05	19.31	4.41	70	26.69	0.64

STATION: 41                      DATE: 7/4/57                      TIME: 0820 hrs.  
 LAT: 42°07'S.                      LONG: 148°51'E.

0	16.42	19.60	5.19	91	25.98	0.32
20	16.31	19.59	3.79	67	26.00	0.26
40	16.42	19.58	4.78	84	25.96	0.32
60	16.34	19.59	4.66	82	25.99	0.32
80	16.39	19.58	4.72	83	25.97	0.26
120	14.55	19.47	4.66	79	26.22	0.42
163	13.54	19.46	4.34	73	26.42	0.52
255	11.97	19.39	3.95	64	26.63	0.45
446	9.32	19.19			26.83	0.87

F.R.V. "Derwent Hunter" Cruise 2 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 42                      DATE: 8/4/57                      TIME: 0915 hrs.  
 LAT: 39°52'S.                      LONG: 150°13'E.

0	18.20	19.65	5.15	94	25.62	0.36
25	18.04	19.66	4.17	76	25.67	0.29
50	18.10	19.65	5.26	96	25.65	0.23
75	16.58	19.54	5.02	89	25.86	0.42
100	15.77	19.58	4.60	80	26.11	0.45
150	14.46	19.54	4.44	76	26.34	0.52
200	13.14	19.45	4.54	75	26.49	0.74
303	11.40	19.40	4.63	74	26.74	0.77
511	8.91	19.19	4.57	69	26.89	1.13

STATION: 43                      DATE: 8/4/57                      TIME: 0845 hrs.  
 LAT: 38°34'S.                      LONG: 150°47'E.

0	18.16	19.66	5.09	93	25.64	0.32
20	18.17	19.66	5.20	95	25.64	0.36
40	18.00	19.66	5.43	99	25.68	0.36
60	18.02	19.66	5.24	95	25.68	0.36
80	17.17	19.61	5.02	90	25.82	0.10
120	15.30	19.51	4.75	82	26.11	0.55
160	13.53	19.49	4.69	78	26.47	0.64
237	12.52					
395	9.92	19.25	4.63	72	26.81	1.06

STATION: 44                      DATE: 10/4/57                      TIME: 0830 hrs.  
 LAT: 38°09'S.                      LONG: 153°44'E.

0	18.37	19.65	4.49	82	25.58	0.32
20	18.39	19.67	4.38	80	25.60	0.29
40	18.41	19.67	3.89	71	25.60	0.23
60	18.42	19.66	5.08	93	25.58	0.26
80	17.80	19.62	5.02	91	25.67	0.29
121	15.58	19.57	4.77	83	26.13	0.29
163	14.28	19.49	4.54	77	26.31	0.64
249	12.24	19.39	5.08	83	26.58	0.67
428	9.60	19.20	4.65	72	26.79	1.00

F.R.V. "Derwent Hunter" Cruise 2 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 45                      DATE: 11/4/57                      TIME: 0645 hrs.  
 LAT: 37°04'S.                      LONG: 151°40'E.

0	19.80	19.71	4.90	92	25.30	0.29
20	19.80	19.70	3.92	73	25.28	0.23
40	19.81	19.71	4.75	89	25.30	0.23
60	19.83	19.71	4.60	86	25.29	0.23
80	19.83	19.70	4.72	88	25.27	0.10
121	18.60	19.67	4.54	83	25.55	0.36
163	17.75	19.65	4.60	83	25.73	0.32
249	16.69	19.61	4.60	81	25.93	0.42
428	13.06	19.43	4.49	74	26.48	0.64

F.R.V. "Derwent Hunter" Cruise 3 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 46                      DATE: 13/4/57                      TIME: 1530 hrs.  
 LAT: 34°20'S.                      LONG: 151°32'E.

0	21.45	19.54	5.07	97	24.62	0.42
25	20.60	19.54	5.02	95	24.85	0.32
52	18.85	19.61	4.56	84	25.40	0.26
78	18.40	19.61	4.35	79	25.51	0.42
100	17.80	19.59	4.35	79	25.64	0.52
148	15.55	19.51	4.40	76	26.05	0.64
200	14.40	19.46	4.44	75	26.24	0.55
278	12.50	19.34	4.40	72	26.46	0.71

STATION: 47                      DATE: 18/4/57                      TIME: 1850 hrs.  
 LAT: 34°25'S.                      LONG: 151°40'E.

0	23.05	19.56	5.38	106	24.20	0.16
13	22.70	19.58	5.32	104	24.33	0.26
27	22.35	19.58	4.79	93	24.43	0.16
40	22.05	19.59	4.74	92	24.52	0.23
53	21.30	19.60	4.10	78	24.74	0.29
79	20.00	19.60	3.85	72	25.09	0.42
105	18.90	19.60	4.29	80	25.38	0.32
150	18.20	19.58	4.29	78	25.53	0.23
260	14.10	19.41	4.40	74	26.23	0.58
390	10.65	19.23	4.56	72	26.66	1.03

STATION: 48                      DATE: 18/4/57                      TIME: 2245 hrs.  
 LAT: 34°35'S.                      LONG: 151°54'E.

0	22.05	19.61	5.07	98	24.54	0.03
25	22.05	19.61	5.12	99	24.54	0.03
50	22.00	19.62	5.02	97	24.57	0.36
75	21.80	19.63	5.38	104	24.64	0.32
100	20.20	19.63	4.40	83	25.08	0.39
150	19.00	19.63	4.62	85	25.39	0.42
200	18.20	19.61			25.56	0.42
250	17.05	19.56	4.44	79	25.78	0.58
390	12.50	19.35	4.74	78	26.47	0.74
600	9.45	19.13	4.74	73	26.72	0.90
820		19.06	4.49			1.06
1270	3.75	19.02	3.80	51	27.32	1.71

F.R.V. "Derwent Hunter" Cruise 3 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 49                      DATE: 19/4/57                      TIME: 0450 hrs.  
 LAT: 34°54'S.                      LONG: 152°23'E.

0	21.80	19.63	4.86	94	24.64	0.16
25	21.80	19.63	4.86	94	24.64	0.29
50	21.90	19.62	4.91	95	24.59	0.29
75	22.00		4.86			
100	21.90	19.63	4.91	95	24.61	0.36
150	19.90	19.64	4.49	81	25.17	0.36
200	19.15	19.61	4.56	84	25.32	0.55
280	17.25	19.56	4.40	79	25.73	0.48
300	17.25	19.56	4.40	79	25.73	0.74
450	13.40	19.39	4.40	73	26.35	0.77
560	10.45	19.21	4.44	70	26.66	1.23
770	7.40	19.06	4.44	65	26.94	

STATION: 50                      DATE: 19/4/57                      TIME: 1430 hrs.  
 LAT: 35°16'S.                      LONG: 153°02'E.

0	21.80	19.61	4.86	94	24.61	0.16
21	21.90	19.61	4.86	94	24.58	0.13
42	21.80	19.62	4.91	95	24.62	0.23
63	21.80	19.61	5.02	97	24.61	0.19
83	20.90	19.62	4.49	85	24.87	0.26
124	19.50	19.62	4.44	83	25.24	0.23
165	18.80	19.60	4.86	89	25.40	0.19
245	17.25	19.56	4.49	80	25.73	0.48
405	14.60	19.44	4.40	75	26.17	0.61
610	10.20	19.19	4.40	69	26.68	0.97
815	7.80	19.05	4.40	65	26.86	1.19
1220	4.55	19.01	3.97	55	27.23	1.65

F.R.V. "Derwent Hunter" Cruise 3 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 51                      DATE: 20/4/57                      TIME: 0215 hrs.  
 LAT: 34°21'S.                      LONG: 153°55'E.

0	21.10	19.60	5.07	97	24.80	0.32
25	21.10	19.59	5.02	96	24.78	0.29
50	20.40	19.61	4.44	84	25.00	0.29
75	19.70	19.62	5.02	93	25.19	0.36
100	18.60	19.62	5.17	95	25.47	0.32
150	15.70	19.51	4.86	85	26.02	0.58
200	14.30	19.46	4.91	83	26.26	0.55
300	12.00	19.31	4.79	78	26.52	0.81
480	9.60	19.19	4.86	75	26.78	1.13
708	7.40	19.04	4.49	66	26.91	0.87
895	5.80	19.00	4.49	64	27.06	1.81
1236	4.50	19.06	3.97	55	27.30	1.97

STATION: 53                      DATE: 21/4/57                      TIME: 0040 hrs.  
 LAT: 35°14'S.                      LONG: 155°39'E.

0	21.25	19.60	4.86	93	24.75	0.10
28	21.20	19.60	5.02	96	24.77	0.06
56	21.20	19.60	4.35	83	24.77	0.09
83	18.30	19.58	4.40	80	25.51	0.42
111	17.15	19.56	4.40	78	25.76	0.39
167	15.35	19.50	4.40	76	26.09	0.48
227	13.70	19.40	4.49	75	26.30	0.84
340	11.45	19.28	4.44	71	26.58	0.77
545	8.93	19.10	4.44	67	26.77	1.23
795	6.45	19.01	4.40	64	27.00	1.42
1045	4.85	19.00	4.10	57	27.18	1.84
1541	3.15	19.07	3.91	52	27.45	2.04



F.R.V. "Derwent Hunter" Cruise 3 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P. µg.at/l
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STATION: 56                      DATE: 21/4/57                      TIME: 1620 hrs.  
 LAT: 35°58'S.                      LONG: 157°00'E.

0	20.00	19.61	5.24	98	25.10	0.23
25	18.80	19.62	5.45	100	25.42	0.10
50	18.60	19.60	5.32	97	25.45	0.16
75	17.40	19.53	5.38	96	25.65	0.32
100	15.75	19.51	4.68	81	26.01	0.42
150	14.35	19.45	5.07	86	26.24	0.39
200	13.55	19.42	4.86	81	26.36	0.48
300	11.70	19.31	4.79	77	26.57	0.58
455	9.40	19.14	4.91	76	26.73	0.90
675	7.75	19.06	4.68	69	26.89	1.03
890	5.80	19.01	4.35	62	27.08	1.16
1310	4.50	19.05	3.70	51	27.28	1.61

STATION: 57                      DATE: 22/4/57                      TIME: 0520 hrs.  
 LAT: 36°19'S.                      LONG: 158°29'E.

0	20.20	19.62	5.17	97	25.06	0.55
25	20.20	19.61	5.07	95	25.05	0.42
50	19.40	19.62	5.17	96	25.27	0.26
75	19.00	19.61	5.17	95	25.36	0.29
100	16.65	19.54	4.49	79	25.85	0.32
150	15.15	19.50	4.68	81	26.13	0.55
195	13.90	19.43	4.74	80	26.31	0.81
290	11.90	19.32	4.56	74	26.55	0.87
475	10.09	19.20	4.68	73	26.71	1.03
700	7.60	19.05	4.44	66	26.89	1.26
920	6.00	19.00	4.35	62	27.04	1.52
1345	3.55	19.06	3.97	54	27.40	1.97

F.R.V. "Derwent Hunter" Cruise 3 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 59                      DATE: 22/4/57                      TIME: 1845 hrs.  
 LAT: 35°25'S.                      LONG: 158°51'E.

0	21.60	19.59	5.07	97	24.65	0.39
25	21.60	19.59	5.12	98	24.65	0.39
50	21.40	19.59	5.07	97	24.70	0.19
75	19.60	19.60	4.49	83	25.20	0.48
100	17.90	19.57	4.35	79	25.58	0.58
150	15.75	19.49	4.35	76	25.99	0.74
200	14.50	10.42	4.35	74	26.16	0.58
300	12.80	19.38	5.02	83	26.47	0.64
455	10.25	19.20	4.56	71	26.68	1.03
694	7.75	19.04	4.62	68	26.86	1.55
950	5.65	19.00	4.35	62	27.08	1.84
1480	3.35	19.05	3.70	50	27.40	2.18

STATION: 61                      DATE: 24/4/57                      TIME: 0045 hrs.  
 LAT: 34°37'S.                      LONG: 155°45'E.

0	21.50	19.53	4.97	95	24.58	0.39
25	21.40	19.57	4.97	95	24.67	0.39
50	21.45	19.57	5.02	96	24.66	0.13
75	17.75	19.51	3.75	68	25.54	0.77
100	15.70	19.47	3.97	69	25.97	0.87
150	13.70	19.39	4.29	72	26.29	0.87
200	12.10	19.31	4.35	71	26.50	1.03
300	9.35	19.15	4.56	70	26.76	1.29
500	7.45	19.05	4.56	67	26.91	1.32
750	5.90	19.00	4.44	63	27.05	1.84
1000	4.50	19.01	4.16	57	27.24	1.65
1500	3.00	19.07	3.70	49	27.47	2.12

F.R.V. "Derwent Hunter" Cruise 3 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 62      DATE: 24/4/57      TIME: 2300 hrs.  
 LAT: 33°57'S.      LONG: 153°58'E.

0	20.20	19.61	5.32	100	25.05	0.32
19	20.20	19.59	5.12	96	25.03	0.29
38	20.20	19.61	5.38	101	25.05	0.42
55	20.00	19.62	5.17	97	25.11	0.42
75	16.85	19.51	4.16	74	25.75	0.87
110	13.90	19.41	4.40	74	26.28	0.87
150	12.60	19.35	4.62	76	26.45	1.03
220	10.35	19.21	4.49	70	26.68	1.19
360	9.35	19.14	4.56	70	26.75	1.26
540	7.50	19.05	4.49	66	26.90	1.55
740	6.10	19.01	4.40	63	27.05	1.65
1175	3.85	19.03	3.80	52	27.33	1.45

STATION: 64      DATE: 26/4/57      TIME: 0545 hrs.  
 LAT: 34°26'S.      LONG: 151°56'E.

0	21.65	19.63	4.97	96	24.68	0.26
25	21.75	19.63	4.91	95	24.66	0.19
50	21.80	19.64	5.07	98	24.65	0.16
75	21.65	19.63	5.12	98	24.68	0.26
100	20.80	19.62	4.79	91	24.90	0.32
150	19.50	19.62	4.40	82	25.24	0.45
200	18.80	19.61	4.68	86	25.41	0.39
300	16.85	19.55	4.44	79	25.81	0.48
500	11.85	19.31	4.74	77	26.54	0.94
750	8.10	19.07	4.49	67	26.84	1.19
1000	5.50	19.00	4.40	62	27.10	1.55
1500	3.35	19.06	3.75	50	27.42	1.87

F.R.V. "Derwent Hunter" Cruise 3 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 69                      DATE: 26/4/57                      TIME: 2400 hrs.  
 LAT: 35°00'S.                      LONG: 152°08'E.

0	21.60	19.63	4.91	94	24.70	0.32
23	21.60	19.63	5.07	98	24.70	0.26
45	21.65	19.64	4.97	96	24.69	0.23
68	21.60	19.63	4.86	93	24.70	0.23
89	20.80	19.62	4.35	82	24.90	0.36
133	19.50	19.64	4.62	86	25.27	0.42
178	18.70	19.63	4.44	81	25.47	0.36
265	17.90	19.55	4.40	80	25.55	0.61
460	12.80	19.35	4.40	72	26.42	0.77
705	9.25	19.12	4.49	69	26.74	1.19
950	6.70	19.01	4.40	64	26.97	1.48

F.R.V. "Derwent Hunter" Cruise 4 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 70                      DATE: 3/5/57                      TIME: 1530 hrs.  
 LAT: 35°21'S.                      LONG: 150°42'E.

0	19.20	19.83			25.61	0.68
25	18.60	19.72			25.62	0.42
50	18.40	19.67			25.60	0.45
75	18.50					
100	16.00	19.71			26.24	0.61

STATION: 71                      DATE: 4/5/57                      TIME: 1040 hrs.  
 LAT: 37°04'S.                      LONG: 150°04'E.

0	18.00	19.70			25.74	0.45
25	17.90	19.70			25.76	0.39
50	17.20	19.65			25.87	0.61
75	16.80	19.62			25.91	0.61

STATION: 72                      DATE: 4/5/57                      TIME: 1310 hrs.  
 LAT: 37°05'S.                      LONG: 150°20'E.

0	18.90	19.75			25.58	0.45
25	19.00	19.75			25.55	0.52
48	19.00	19.75			25.55	0.36
72	19.00	19.72			25.52	0.29
96	18.80	19.75			25.60	0.29
144	18.00	19.68			25.71	0.39
192	16.80	19.71			26.05	0.52
280	16.00	19.69			26.21	0.42
402	15.90	19.70			26.24	0.42

F.R.V. "Derwent Hunter" Cruise 4 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 73      DATE: 5/5/57      TIME: 1005 hrs.  
 LAT: 38°39'S.      LONG: 150°40'E.

0	16.80	19.67			25.99	0.39
25	16.90	19.69			25.99	0.48
50	16.80	19.68			26.00	0.42
75	16.90	19.68			25.97	0.84
100	15.95	19.62			26.11	0.48
150	14.75	19.56			26.31	0.39
200	13.60	19.51			26.47	0.39
300	11.40	19.36			26.70	0.67
500	8.83	19.21			26.93	1.06

STATION: 74      DATE: 6/5/57      TIME: 2200 hrs.  
 LAT: 39°04'S.      LONG: 149°25'E.

0	16.40	19.66			26.07	0.48
25	16.40	19.67			26.08	0.48
50	16.30	19.67			26.11	0.39
75	16.20	19.67			26.13	0.39
100	16.40	19.66			26.07	0.52
150	16.10	19.65			26.13	0.45
200	14.40	19.55			26.36	0.45
300	12.20	19.42			26.63	0.64
500	9.48	19.22			26.84	0.84

STATION: 75      DATE: 7/5/57      TIME: 1200 hrs.  
 LAT: 40°29'S.      LONG: 149°01'E.

0	14.80	19.56			26.30	0.42
25	14.80	19.56			26.30	0.32
50	14.85	19.55			26.26	0.29
75	14.80	19.56			26.30	0.29
100	14.90	19.57			26.28	0.42
150	13.60	19.45			26.40	0.68
200	13.05	19.43			26.48	0.42
300	12.45	19.43			26.60	0.58
500	10.00	19.26			26.81	0.90

F.R.V.

"Derwent Hunter"

Cruise 4

1957

Depth (m)	Temp. °C	Chlor- inity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 76                      DATE: 9/5/57                      TIME: 1545 hrs.  
LAT: 40°45'S.                      LONG: 147°38'E.

0	14.20	19.56			26.42	0.55
25	14.15	19.54			26.40	0.48

STATION: 77                      DATE: 10/5/57                      TIME: 0530 hrs.  
LAT: 40°58'S.                      LONG: 146°47'E.

0	14.20	19.46			26.28	0.39
25	14.20	19.46			26.28	0.36
50	14.60	19.60			26.39	0.36

STATION: 78                      DATE: 11/5/57                      TIME: 0500 hrs.  
LAT: 40°34'S.                      LONG: 147°57'E.

0	14.80	19.67			26.44	0.29
25	14.20	19.59			26.46	0.39

STATION: 79                      DATE: 14/5/57                      TIME: 1850 hrs.  
LAT: 40°01'S.                      LONG: 147°02'E.

0	14.80	19.66			26.43	0.29
25	14.80	19.66			26.43	0.42
50	14.80	19.68			26.45	0.32

STATION: 80                      DATE: 15/5/57                      TIME: 0405 hrs.  
LAT: 40°15'S.                      LONG: 146°00'E.

0	14.30	19.62			26.48	0.39
25	14.40	19.62			26.46	0.36
50	14.50	19.62			26.43	0.42
70	14.50	19.62			26.43	0.39

STATION: 81                      DATE: 15/5/57                      TIME: 1130 hrs.  
LAT: 39°50'S.                      LONG: 145°24'E.

0	14.60	19.61			26.40	0.45
25	14.50	19.61			26.42	0.39
50	14.50	19.60			26.41	0.52

F.R.V. "Derwent Hunter" Cruise 4 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 82                      DATE: 15/5/57                      TIME: 1700 hrs.  
 LAT: 39°47'S.                      LONG: 146°06'E.

0	14.80	19.65			26.42	0.48
25	14.80	19.65			26.42	0.36
50	14.75	19.63			26.40	0.45
75	14.70	19.63			26.41	0.36

STATION: 83                      DATE: 16/5/57                      TIME: 0150 hrs.  
 LAT: 39°26'S.                      LONG: 146°35'E.

0	14.80	19.64			26.40	0.42
25	14.90	19.63			26.37	0.39
50	14.90	19.62			26.35	0.36

STATION: 84                      DATE: 16/5/57                      TIME: 0715 hrs.  
 LAT: 39°22'S.                      LONG: 147°18'E.

0	14.95	19.70			26.45	0.32
25	15.10	19.68			26.39	0.36
50	15.00	19.70			26.44	0.42

STATION: 85                      DATE: 16/5/57                      TIME: 1800 hrs.  
 LAT: 38°48'S.                      LONG: 148°04'E.

0	14.80	19.68			26.45	0.45
25	14.90	19.67			26.42	0.39
50	14.75	19.67			26.46	0.36
75	14.70	19.67			26.47	0.32

STATION: 86                      DATE: 17/5/57                      TIME: 0400 hrs.  
 LAT: 38°51'S.                      LONG: 146°51'E.

0	14.25	19.72			26.63	0.29
15	14.20	19.72			26.65	0.39



F.R.V. "Derwent Hunter" Cruise 4 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
STATION:	87		DATE:	17/5/57	TIME:	0807 hrs.
LAT:	39°10'S.		LONG:	146°24'E.		
0	14.80	19.71			26.50	0.42
25	14.85	19.72			26.50	0.39
50	14.90	19.72			26.49	0.32
STATION:	88		DATE:	17/5/57	TIME:	1645 hrs.
LAT:	39°09'S.		LONG:	145°30'E.		
0	14.80	19.63			26.39	0.48
25	14.80	19.63			26.39	0.39
50	14.80	19.64			26.40	0.39
STATION:	89		DATE:	17/5/57	TIME:	2255 hrs.
LAT:	38°39'S.		LONG:	145°24'E.		
0	14.85	19.72			26.50	0.39
25	14.90	19.72			26.49	0.45
STATION:	90		DATE:	18/5/57	TIME:	0330 hrs.
LAT:	38°35'S.		LONG:	144°50'E.		
0	15.00	19.71			26.46	0.32
25	15.00	19.71			26.46	0.39
50	15.00	19.70			26.44	0.32
STATION:	91		DATE:	18/5/57	TIME:	0745 hrs.
LAT:	38°54'S.		LONG:	144°27'E.		
0	15.20	19.69			26.39	0.36
25	15.30	19.69			26.36	0.36
50	15.40	19.69			26.34	0.42
75	15.30	19.70			26.37	0.45

F.R.V. "Derwent Hunter" Cruise 4 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
STATION: 92                      DATE: 18/5/57                      TIME: 1240 hrs.						
LAT: 39°24'S.                      LONG: 144°27'E.						
0	15.50	19.68			26.30	0.42
25	15.50	19.69			26.32	0.42
50	15.50	19.69			26.32	0.42
STATION: 93                      DATE: 18/5/57                      TIME: 2255 hrs.						
LAT: 38°34'S.                      LONG: 144°10'E.						
0	15.20	19.70			26.40	0.71
25	15.20	19.71			26.42	0.19
50	15.30	19.71			26.39	0.36
STATION: 94                      DATE: 19/5/57                      TIME: 0300 hrs.						
LAT: 38°23'S.                      LONG: 144°39'E.						
0	15.00	19.69			26.43	0.42
25	15.10	19.70			26.42	0.32
50	14.85	19.68			26.44	0.39
STATION: 95                      DATE: 24/5/57                      TIME: 2240 hrs.						
LAT: 38°57'S.                      LONG: 143°31'E.						
0	15.10	19.74			26.47	0.48
25	15.10	19.74			26.47	0.39
50	15.10	19.74			26.47	0.36
STATION: 96                      DATE: 25/5/57                      TIME: 0320 hrs.						
LAT: 39°20'S.                      LONG: 143°29'E.						
0	15.40	19.72			26.38	0.39
25	15.40	19.72			26.38	0.36
50	15.50	19.72			26.36	0.32
75	15.40	19.73			26.39	0.36

F.R.V. "Derwent Hunter" Cruise 4 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 97                      DATE: 25/5/57                      TIME: 1900 hrs.  
 LAT: 38°43'S.                      LONG: 142°50'E.

0	14.75	19.74			26.55	0.39
25	14.80	19.75			26.55	0.32
50	14.60	19.73			26.57	0.32

STATION: 98                      DATE: 26/5/57                      TIME: 0200 hrs.  
 LAT: 38°28'S.                      LONG: 142°19'E.

0	14.65	19.73			26.56	0.36
25	14.60	19.73			26.57	0.36

STATION: 99                      DATE: 26/5/57                      TIME: 0745 hrs.  
 LAT: 39°03'S.                      LONG: 142°09'E.

0	14.65	19.61			26.39	0.45
25	14.65	19.62			26.40	0.45
50	14.65	19.62			26.40	0.39
75	14.65	19.61			26.39	0.29
100	14.80	19.62			26.37	0.39
150	14.40	19.61			26.45	0.36
200	13.40	19.57			26.60	0.48
300	12.20	19.50			26.75	0.61
500	9.39	19.22			26.85	0.84

STATION: 100                      DATE: 26/5/57                      TIME: 2045 hrs.  
 LAT: 40°05'S.                      LONG: 143°00'E.

0	12.65	19.36			26.46	0.45
25	12.65	19.37			26.47	0.36
50	12.80	19.37			26.45	0.42
75	13.10	19.42			26.45	0.39
100	13.30	19.43			26.43	0.45
150	12.25	19.50			26.74	0.55
200	11.50	19.42			26.76	0.61
300	10.10	19.27			26.81	0.67
500	8.77	19.17			26.89	0.97

F.R.V. "Derwent Hunter" Cruise 4 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 101                      DATE: 27/5/57                      TIME: 0800 hrs.  
 LAT: 41°03'S.                      LONG: 143°47'E.

0	14.65	19.60			26.38	0.36
25	14.75	19.61			26.37	0.36
50	14.70	19.61			26.38	0.39
75	14.75	19.62			26.38	0.39
100	14.80	19.61			26.36	0.36
150	14.60	19.60			26.39	0.36
200	13.70	19.48			26.41	0.42
300	12.00	19.47			26.74	0.55
500	9.01	19.19			26.88	0.94

STATION: 102                      DATE: 27/5/57                      TIME: 2050 hrs.  
 LAT: 40°20'S.                      LONG: 144°24'E.

0	14.70	19.65			26.44	0.42
25	14.70	19.65			26.44	0.29
50	14.80	19.65			26.42	0.36

STATION: 103                      DATE: 28/5/57                      TIME: 0240 hrs.  
 LAT: 40°10'S.                      LONG: 144°49'E.

0	14.45	19.60			26.43	0.42
25	14.45	19.61			26.44	0.36
50	14.50	19.60			26.41	0.42

STATION: 104                      DATE: 28/5/57                      TIME: 1040 hrs.  
 LAT: 40°44'S.                      LONG: 145°20'E.

0	12.90	19.48			26.58	0.42
25	12.90	19.48			26.58	1.06

STATION: 105                      DATE: 28/5/57                      TIME: 1735 hrs.  
 LAT: 41°00'S.                      LONG: 145°57'E.

0	13.40	19.52			26.54	0.36
25	13.45	19.52			26.53	0.39

F.R.V. "Derwent Hunter" Cruise 4 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 106                      DATE: 30/5/57                      TIME: 1200 hrs.

LAT: 40°39'S.                      LONG: 148°39'E.

0	13.70	19.45			26.38	0.39
25	13.20	19.45			26.48	0.48
50	13.15	19.50			26.56	0.45

STATION: 107                      DATE: 30/5/57                      TIME: 2256 hrs.

LAT: 39°30'S.                      LONG: 148°39'E.

0	14.15	19.56			26.43	0.42
25	14.00	19.54			26.44	0.48
50	13.60	19.50			26.46	0.48
75	13.35	19.50			26.52	0.58

STATION: 108                      DATE: 31/5/57                      TIME: 0420 hrs.

LAT: 38°59'S.                      LONG: 148°39'E.

0	15.00	19.63			26.34	0.39
25	15.00	19.62			26.32	0.26
50	15.00	19.62			26.32	0.32
75	14.70	19.59			26.36	0.36
100	14.65	19.62			26.40	0.36
150	14.10	19.54			26.42	0.36
200	13.60	19.53			26.50	0.36
300	11.70	19.37			26.66	0.68
500	8.87	19.20			26.91	0.94

STATION: 109                      DATE: 31/5/57                      TIME: 1235 hrs.

LAT: 38°20'S.                      LONG: 148°38'E.

0	14.65	19.60			26.38	0.39
25	14.60	19.60			26.39	0.32
50	14.65	19.60			26.38	0.36
75	14.30	19.56			26.40	0.36
100	14.25	19.57			26.42	0.39
150	14.20	19.58			26.45	0.39
200	13.90	19.60			26.54	0.39
300	12.80	19.52			26.66	0.52

F.R.V. "Derwent Hunter" Cruise 4 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 110                      DATE: 1/6/57                      TIME: 0500 hrs.  
 LAT: 38°17'S.                      LONG: 150°55'E.

0	17.60	19.73			25.88	0.36
25	17.60	19.73			25.88	0.36
50	17.60	19.72			25.87	0.32
75	17.60	19.72			25.87	0.32
100	17.60	19.72			25.87	0.36
150	17.60	19.72			25.87	0.32
200	16.80	19.68			26.00	0.39
300	15.20	19.60			26.26	0.48
500	10.92	19.33			26.74	0.87

STATION: 111                      DATE: 1/6/57                      TIME: 2340 hrs.  
 LAT: 37°04'S.                      LONG: 150°06'E.

0	16.80	19.71			26.05	0.39
25	16.60	19.70			26.08	0.39
50	14.90	19.57			26.28	0.58
70	14.85	19.57			26.29	0.68

STATION: 112                      DATE: 2/6/57                      TIME: 1740 hrs.  
 LAT: 35°22'S.                      LONG: 150°43'E.

0	17.75	19.74			25.85	0.39
25	17.65	19.72			25.85	0.36
50	15.75	19.66			26.22	0.39
75	15.20	19.66			26.34	0.42
100	14.90	19.63			26.37	0.42

F.R.V. "Derwent Hunter" Cruise 5 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 113                      DATE: 11/7/57                      TIME: 0320 hrs.  
 LAT: 34°13'S.                      LONG: 151°29'E.

0	19.00	19.74	5.23	96	25.54	0.90
25	18.70	19.72	5.15	95	25.59	0.32
50	17.91	19.72	5.06	92	25.79	0.36
75	17.63	19.76	5.06	91	25.91	0.39
100	17.68	19.76	5.20	94	25.90	0.32
150	15.88	19.66	4.79	84	26.19	0.48
200	14.55	19.56	4.42	75	26.35	0.67
250	13.59	19.53			26.50	0.64

STATION: 114                      DATE: 11/7/57                      TIME: 1725 hrs.  
 LAT: 34°15'S.                      LONG: 151°35'E.

0	19.50	19.69	5.17	96	25.35	0.42
25	19.42	19.70	4.91	91	25.38	0.45
50	18.82	19.71	5.06	93	25.55	0.39
73	18.31	19.74	4.99	91	25.72	0.36
95	17.77	19.74	5.17	93	25.85	0.32
145	17.16	19.70	4.44	79	25.94	0.42
185	15.40	19.58	4.10	71	26.19	0.64
245	14.10	19.52	3.91	66	26.39	0.61
317	13.29	19.50	4.44	74	26.53	0.71
524	9.90	19.29	4.56	71	26.85	1.16

F.R.V. "Derwent Hunter" Cruise 5 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 115                      DATE: 11/7/57                      TIME: 2050 hrs.  
 LAT: 34°20'S.                      LONG: 151°45'E.

0	18.27	19.72	5.17	94	25.70	0.39
25	18.21	19.72	5.23	95	25.72	0.39
50	17.90	19.72	5.28	96	25.79	0.39
75	17.73	19.72	5.03	91	25.83	0.42
100	17.31	19.72	5.45	98	25.94	0.48
150	16.45	19.69	5.06	89	26.10	0.45
200	15.20	19.59	4.67	81	26.25	0.52
300	12.45	19.54	4.73	78	26.75	0.67
500	9.54	19.26	4.61	71	26.89	1.13
750	7.05	19.11	4.61	67	27.06	1.39
1000	5.30	19.10	4.33	61	27.27	1.58
1500	3.12	19.15	3.63	48	27.57	1.97

STATION: 116                      DATE: 12/7/57                      TIME: 0235 hrs.  
 LAT: 34°28'S.                      LONG: 152°05'E.

0	18.17	19.76	5.45	99	25.78	0.32
25	18.17	19.76	5.17	94	25.78	0.32
50	18.20	19.76	5.37	98	25.77	0.32
75	18.20	19.76	5.17	94	25.77	0.29
100	18.20	19.75	5.45	99	25.75	0.32
150	17.67	19.72	5.02	91	25.85	0.32
200	16.60	19.67	4.56	81	26.04	0.48
300	13.55	19.50	4.60	77	26.47	0.68
490	10.30	19.29	4.44	70	26.80	1.06
740	7.47	19.13	4.56	67	27.02	1.29
990	5.76	19.10	4.29	61	27.22	1.61
1250	5.44	19.17	4.85	69	27.35	1.52



F.R.V. "Derwent Hunter" Cruise 5 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 117      DATE: 12/7/57      TIME: 0915 hrs.  
 LAT: 34°38'S.      LONG: 152°29'E.

0	18.25	19.76	5.23	95	25.76	0.26
25	18.18	19.76	5.43	99	25.78	0.23
50	18.24	19.76	5.43	99	25.76	0.29
75	18.20	19.76	5.30	97	25.77	0.26
100	18.25	19.76	5.43	99	25.76	0.29
150	18.00	19.75	5.71	104	25.80	0.39
200	17.55	19.75	5.49	99	25.91	0.32
300	16.05	19.65	5.11	89	26.14	0.55
495	12.34	19.45	4.78	78	26.65	0.68
745	8.25	19.16	5.07	76	26.96	1.06
995	6.00	19.10	4.78	68	27.19	1.32
1460	3.56	19.14	4.38	59	27.52	1.68

STATION: 118      DATE: 12/7/57      TIME: 1610 hrs.  
 LAT: 34°39'S.      LONG: 153°00'E.

0	18.21	19.76	5.23	95	25.77	0.36
25	18.18	19.76	5.41	99	25.78	0.36
50	18.16	19.76	5.19	95	25.78	0.42
75	18.06	19.75	5.17	94	25.79	0.42
100	18.03	19.75	5.25	95	25.79	0.39
150	17.92	19.72	4.40	80	25.79	0.55
200	15.80	19.65	4.85	85	26.20	0.48
300	13.95	19.56			26.48	0.61
450	11.33	19.38	4.80	77	26.75	0.94
695	8.10	19.16	4.56	68	26.98	1.29
940	6.13	19.10	4.22	61	27.17	1.45
1390	3.60	19.14	3.70	50	27.52	1.87

F.R.V. "Derwent Hunter" Cruise 5 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 119                      DATE: 13/7/57                      TIME: 0120 hrs.  
 LAT: 34°50'S.                      LONG: 153°56'E.

0	16.91	19.72	5.32	95	26.03	0.45
25	16.95	19.72	5.32	95	26.02	0.42
50	16.23	19.68	4.91	86	26.13	0.55
75	15.93	19.67	4.88	85	26.19	0.52
100	15.35	19.60	4.62	80	26.23	0.58
150	14.50	19.60	4.85	83	26.41	0.48
200	13.55	19.54	4.85	81	26.53	0.52
300	11.28	19.37	4.40	71	26.74	0.87
500	8.82	19.20	4.49	68	26.92	1.00
750	6.55	19.11	4.40	64	27.12	1.39
1000	4.89	19.09	4.07	57	27.30	1.68
1520	2.96	19.17	3.53	47	27.62	1.94

STATION: 120                      DATE: 13/7/57                      TIME: 2020 hrs.  
 LAT: 35°20'S.                      LONG: 155°45'E.

0	17.08	19.68	5.34	95	25.93	0.32
25	17.15	19.68	5.38	96	25.92	0.29
50	16.61	19.68	5.08	90	26.04	0.36
75	16.23	19.69	5.06	89	26.15	0.29
100	15.80	19.63	4.85	84	26.17	0.45
150	14.03	19.55	4.49	76	26.44	0.65
200	13.00	19.50	4.62	77	26.59	0.74
300	10.92	19.35	4.62	73	26.77	0.84
500	8.45	19.20	4.56	69	26.97	1.23
750	6.33	19.10	4.47	65	27.14	1.26
1000	4.79	19.15	4.10	57	27.40	1.42
1500	3.06					

## F.R.V. "Derwent Hunter"

## Cruise 5

1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 121                      DATE: 14/7/57                      TIME: 1020 hrs.  
 LAT: 35°46'S.                      LONG: 157°10'E.

0	17.44	19.73	5.88	106	25.92	0.32
25	17.38	19.71	5.62	101	25.91	0.19
50	17.40	19.72	5.76	103	25.91	0.29
75	17.38	19.71	5.36	96	25.91	0.39
96	17.43	19.72	5.66	102	25.91	0.42
145	17.35	19.72	5.60	100	25.93	0.26
190	15.85	19.63	4.65	81	26.15	0.45
283	13.65	19.50	4.90	82	26.45	0.68
500	10.24	19.30	4.78	75	26.83	0.94
750	7.40	19.15	4.84	71	27.06	1.16
1000	5.55	19.12	4.66	66	27.27	1.26
1500	3.31	19.15	3.70	50	27.56	1.74

STATION: 122                      DATE: 14/7/57                      TIME: 2030 hrs.  
 LAT: 34°54'S.                      LONG: 157°18'E.

0	17.43	19.72	5.60	101	25.91	0.32
25	17.31	19.72	5.82	104	25.94	0.32
50	17.29	19.72	5.49	98	25.94	0.23
75	17.30	19.71	5.66	101	25.93	0.29
100	17.25	19.71	5.55	99	25.94	0.32
150	16.05	19.65	5.34	94	26.14	0.55
200	13.75	19.52	5.23	88	26.46	0.71
300	10.53	19.34	4.78	76	26.83	0.97
410	9.04	19.22	5.30	81	26.91	1.26
630	6.93	19.13	5.11	75	27.10	1.42
850	5.56	19.11	4.67	66	27.25	1.65
1295	3.58	19.14	4.10	55	27.52	1.84

F.R.V. "Derwent Hunter" Cruise 5 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 123                      DATE: 15/7/57                      TIME: 1220 hrs.  
 LAT: 34°24'S.                      LONG: 155°52'S.

0	18.42	19.71	5.11	93	25.65	0.52
24	18.37	19.71	5.11	93	25.67	0.61
48	18.00	19.71	5.18	94	25.76	0.55
72	18.00	19.71	5.37	97	25.76	0.42
80	17.56	19.72	5.31	96	25.88	0.45
125	16.88	19.71	5.04	90	26.03	0.52
170	15.75	19.66	4.91	86	26.22	0.55
260	13.39	19.51	4.49	75	26.52	0.87
310	12.25	19.45	4.67	76	26.67	0.77
487	9.59	19.26	5.06	78	26.88	1.09
665	7.75	19.14	4.41	66	27.00	1.52
1055	4.71	19.12	4.04	56	27.37	1.58

STATION: 124                      DATE: 16/7/57                      TIME: 0230 hrs.  
 LAT: 34°02'S.                      LONG: 155°20'E.

0	20.17	19.75	5.01	94	25.25	0.36
25	20.80	19.75	5.06	95	25.27	0.36
50	20.02	19.74	5.37	101	25.28	0.32
75	19.79	19.76	5.25	98	25.37	0.32
100	19.70	19.76	5.31	99	25.39	0.36
150	19.49	19.74	5.06	94	25.41	0.36
180	18.80	19.73	4.72	87	25.58	0.39
200	17.86	19.71	4.44	80	25.79	0.52
270	16.30	19.64	4.61	81	26.06	0.58
325	15.40	19.61	4.56	79	26.23	0.64
417	13.20	19.47	4.50	75	26.51	0.77
624	8.67	19.22	5.25	79	26.97	1.16

F.R.V. "Derwent Hunter" Cruise 5 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 125                      DATE: 16/7/57                      TIME: 1545 hrs.  
 LAT: 33°43'S.                      LONG: 154°43'E.

0	20.22	19.75	5.47	103	25.23	0.32
25	20.36	19.75	5.55	105	25.20	0.39
50	20.20	19.73	5.30	100	25.21	0.36
75	20.17	19.73	5.21	98	25.22	0.39
100	20.21	19.74	5.23	98	25.23	0.45
150	19.55	19.74	4.66	87	25.40	0.45
200	18.48	19.72	4.43	81	25.65	0.48
300	16.60	19.68	5.42	96	26.05	0.61
495	12.10	19.40	5.60	75	26.62	0.87
745	8.22	19.19	4.82	72	27.00	1.29
995	6.25	19.10	4.54	65	27.15	1.39
1495	3.86	19.20	3.99	54	27.57	1.55

STATION: 126                      DATE: 16/7/57                      TIME: 2205 hrs.  
 LAT: 33°37'S.                      LONG: 154°20'E.

0	20.17	19.75	5.36	101	25.25	0.39
25	20.13	19.75	5.49	103	25.26	0.36
50	20.17	19.75	5.60	105	25.25	0.32
75	20.14	19.75	5.11	96	25.25	0.32
100	20.24	19.75	5.30	100	25.23	0.45
150	20.17	19.75	5.76	108	25.25	0.32
200	18.74	19.72	4.60	85	25.58	0.48
300	16.65	19.66	4.78	84	26.01	0.71
400	13.85	19.51	5.36	90	26.42	0.87
650	9.21	19.23	5.21	80	26.90	1.19
880	6.71	19.11	5.11	74	27.10	1.39
1355	4.10	19.14	4.14	57	27.47	1.61

F.R.V. "Derwent Hunter" Cruise 5 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 127                      DATE: 17/7/57                      TIME: 0600 hrs.  
 LAT: 33°30'S.                      LONG: 153°58'E.

0	20.10	19.72	5.30	99	25.23	0.32
25	20.07	19.72	5.23	98	25.24	0.36
50	20.08	19.72	5.23	98	25.24	0.36
75	19.88	19.73	5.55	104	25.30	0.32
100	19.77	19.73	4.78	89	25.33	0.42
150	18.60	19.72	4.49	82	25.62	0.52
200	17.63	19.70	4.53	82	25.83	0.55
300	15.55	19.62	4.44	77	26.20	0.64
500	11.05	19.35	4.66	74	26.75	1.00
750	7.55	19.14	4.60	68	27.03	1.36
990	5.60	19.10	4.57	65	27.24	1.48
1500	3.41	19.12	4.60	62	27.51	1.74

STATION: 128                      DATE: 17/7/57                      TIME: 1315 hrs.  
 LAT: 33°24'S.                      LONG: 153°33'E.

0	21.12	19.70	4.90	94	24.92	0.39
25	21.19	19.68	4.90	94	24.88	0.26
50	21.15	19.68	4.90	94	24.89	0.32
75	21.13	19.70	4.96	95	24.92	0.32
100	21.05	19.70	4.78	91	24.94	0.39
150	19.94	19.75	4.84	91	25.31	0.32
200	17.96	19.70	4.24	77	25.75	0.45
300	15.55	19.59	4.38	76	26.17	0.68
412	13.70	19.50	4.38	73	26.44	0.77
640	9.14	19.21	4.44	68	26.88	1.19
864	6.59	19.10	4.38	63	27.11	1.48
1315	5.06	19.12	3.79	53	27.33	1.39

F.R.V.

"Derwent Hunter"

Cruise 6

1957

Depth (m)	Temp. °C	Chlor- inity o/oo	O <sub>2</sub> ml/l	O <sub>2</sub> o/o sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 134

DATE: 23/7/57

TIME: 1945 hrs.

LAT: 33°26'S.

LONG: 152°13'E.

0	17.00	19.71	5.65	101	26.00	0.42
24	16.73	19.71	5.55	98	26.07	0.45
48	16.60	19.72	5.45	96	26.11	0.45
72	16.53	19.70	5.45	96	26.09	0.48
97	16.55	19.70	5.37	95	26.09	0.55
146	14.70	19.58	5.31	91	26.35	0.74
195	14.40	19.57	5.31	90	26.39	0.71
290	13.45	19.53	4.91	82	26.53	1.06
325	12.30	19.42	4.79	78	26.61	0.94
540	9.34	19.24	4.79	74	26.89	1.16
766	6.68	19.10	4.49	66	27.10	1.29

STATION: 135

DATE: 24/7/57

TIME: 0145 hrs.

LAT: 33°36'S.

LONG: 152°39'E.

0	19.82	19.71	5.02	94	25.29	0.45
23	17.66	19.71	5.17	93	25.84	0.67
47	17.41	19.72	5.37	96	25.91	0.61
70	17.25	19.72	5.23	94	25.95	0.58
95	16.85	19.71	5.15	91	26.04	0.42
140	16.00	19.68	5.11	89	26.19	0.45
185	14.60	19.57	5.45	93	26.35	0.58
280	12.98	19.52	4.73	78	26.62	0.67
318	12.80	19.48	5.01	83	26.60	1.03
357	12.62	19.44	5.09	84	26.58	0.81
480	10.30	19.30	4.85	76	26.82	1.16
557	8.89	19.22	5.43	83	26.94	1.26

F.R.V. "Derwent Hunter" Cruise 6 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 136                      DATE: 24/7/57                      TIME: 0925 hrs.  
 LAT: 33°48'S.                      LONG: 153°09'E.

0	20.30	19.71	4.56	86	25.17	0.32
25	20.29	19.70	5.11	96	25.15	0.36
51	20.25	19.70	5.34	100	25.16	0.29
76	18.75	19.70	5.11	94	25.55	0.55
102	17.95	19.70	5.31	97	25.75	0.45
156	16.70	19.72	5.55	98	26.08	0.67
210	16.35					
300	13.42	19.58	4.35	73	26.62	0.74
367	11.89	19.39	5.15	83	26.65	0.90
568	9.01	19.21	5.02	77	26.91	1.13
770	7.18	19.12	4.64	68	27.06	1.42
1200	4.56	19.09			27.34	1.74

STATION: 137                      DATE: 25/7/57                      TIME: 1110 hrs.  
 LAT: 35°03'S.                      LONG: 154°14'E.

0	16.79	19.71	5.37	95	26.05	0.42
23	16.74	19.69	5.47	97	26.03	0.39
46	16.75	19.71	5.31	94	26.06	0.36
67	16.62	19.69	5.37	95	26.06	0.42
85	16.24	19.66	5.15	91	26.10	0.45
107	15.73	19.56	4.44	78	26.19	0.67
130	14.00	19.44	5.06	89	26.29	0.74
200	13.01	19.36	4.85	80	26.39	0.87



F.R.V. "Derwent Hunter" Cruise 6 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 138                      DATE: 26/7/57                      TIME: 1100 hrs.  
 LAT: 34°29'S.                      LONG: 152°33'E.

0	16.63	19.71	5.45	96	26.09	0.39
25	16.50	19.69	5.25	93	26.09	0.42
50	16.32	19.69	5.23	92	26.13	0.45
75	16.09	19.69	5.37	94	26.18	0.42
100	16.05	19.69	5.45	95	26.19	0.48
150	15.22	19.64	5.37	93	26.31	0.51
200	15.10	19.66	5.45	94	26.36	0.45
300	13.68	19.52	4.91	82	26.48	0.68

STATION: 139                      DATE: 27/7/57                      TIME: 1100 hrs.  
 LAT: 34°01'S.                      LONG: 151°39'E.

0	17.53	19.73	5.56	100	25.84	0.48
25	17.15	19.72	5.23	95	25.98	0.42
50	16.99	19.71	5.17	92	26.00	0.45
75	16.15	19.61	4.40	77	26.06	0.58
100	16.00	19.59	5.37	94	26.07	0.32
150	15.22	19.60	4.96	86	26.26	0.52
200	13.40	19.50	4.67	78	26.51	0.61
300	11.73	19.39	4.77	77	26.68	0.77

F.R.V. "Derwent Hunter" Cruise 7 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 147                      DATE: 4/8/57                      TIME: 1202 hrs.  
 LAT: 34°11'S.                      LONG: 151°33'E.

0	16.88	19.69	5.81	103	26.00	0.29
24	16.83	19.71	5.50	98	26.04	0.36
48	16.84	19.73	5.50	98	26.06	0.26
72	16.81	19.71	5.50	98	26.05	0.23
95	16.59	19.71	5.50	97	26.10	0.55
142	15.67	19.66	5.37	93	26.24	0.52
188	14.96	19.60	5.08	87	26.31	0.48
275	12.95	19.47	5.16	85	26.56	0.67
460	10.24	19.35	4.82	76	26.89	0.90

STATION: 148                      DATE: 4/8/57                      TIME: 1850 hrs.  
 LAT: 34°18'S.                      LONG: 152°02'E.

0	16.06	19.69	5.71	100	26.19	0.48
22	16.11	19.71	5.73	101	26.21	0.32
44	16.01	19.68	5.55	97	26.18	0.45
66	16.00	19.68	5.71	100	26.19	0.45
87	15.68	19.68	5.66	98	26.26	0.39
130	14.85	19.62	5.49	94	26.36	0.45
175	13.80	19.53	5.04	85	26.46	0.52
260	13.20	19.52	5.11	85	26.58	0.67
433	9.75	19.26	4.90	76	26.85	1.00
650	7.47	19.14	4.72	70	27.04	1.36

STATION: 149                      DATE: 5/8/57                      TIME: 0850 hrs.  
 LAT: 34°10'S.                      LONG: 151°28'E.

0	16.82	19.69	5.48	97	26.01	0.48
25	16.83	19.70	5.55	99	26.02	0.39
50	16.80	19.70	5.24	93	26.03	0.39
75	16.80	19.70	5.28	94	26.03	0.39
100	15.90	19.65	5.09	89	26.17	0.52
150	14.55	19.58	4.86	83	26.38	0.55
200	13.85	19.52	4.83	81	26.44	0.78

F.R.V. "Derwent Hunter" Cruise 7 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 150      DATE: 5/8/57      TIME: 1120 hrs.  
 LAT: 34°11'S.      LONG: 151°34'E.

0	16.61	19.70	5.60	99	26.07	0.55
24	16.33	19.70	5.65	99	26.14	0.58
48	16.31	19.70	5.65	99	26.14	0.55
72	15.99	19.69	5.50	96	26.21	0.55
97	15.96	19.67	5.44	95	26.18	0.48
146	15.60	19.67	5.44	94	26.27	0.52
196	14.80	19.61	5.37	92	26.36	0.45
295	12.50	19.54	4.96	81	26.74	0.77
485	9.50	19.25	4.73	73	26.88	1.13
596	8.19	19.17	4.56	68	26.98	1.39

STATION: 151      DATE: 5/8/57      TIME: 1455 hrs.  
 LAT: 34°14'S.      LONG: 151°46'E.

0	17.22	19.72	5.38	96	25.96	0.52
25	17.17	19.76	5.30	95	26.03	0.39
50	17.07	19.72	5.26	94	25.99	0.39
75	16.53	19.69	5.35	95	26.08	0.42
98	16.19	19.69	5.30	93	26.15	0.45
147	15.53	19.65	5.10	88	26.26	0.48
196	14.60	19.58	5.12	87	26.37	0.58
303	12.05	19.40	4.65	76	26.63	0.77
518	8.80	19.19	4.87	74	26.91	1.26
750	6.67	19.10	4.54	66	27.10	1.55

F.R.V. "Derwent Hunter" Cruise 7 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 152                      DATE: 5/8/57                      TIME: 2005 hrs.  
 LAT: 34°20'S.                      LONG: 152°08'E.

0	16.12	19.69	5.64	99	26.18	0.55
24	15.80	19.69	5.45	95	26.25	0.52
47	15.45	19.68	5.47	95	26.31	0.42
71	14.82	19.62	5.02	86	26.37	0.52
95	14.73	19.62	5.45	93	26.39	0.45
140	13.85	19.51	4.92	83	26.42	0.68
188	13.05	19.47	4.57	76	26.54	0.68
280	11.28	19.37	4.72	76	26.74	0.90
467	8.90	19.21	4.57	69	26.92	1.19
702	6.88	19.11	4.34	63	27.08	1.58

STATION: 153                      DATE: 6/8/57                      TIME: 0837 hrs.  
 LAT: 34°11'S.                      LONG: 151°28'E.

0	16.82	19.70	5.49	98	26.02	0.58
24	16.65	19.70	5.55	98	26.06	0.55
47	16.65	19.70	5.57	99	26.06	0.48
71	16.60	19.70	5.60	99	26.08	0.45
93	16.20	19.69	5.23	92	26.16	0.52
102	14.65	19.58	4.87	83	26.36	0.67
211	13.55	19.49	4.90	82	26.46	0.70
243	12.75	19.45	4.81	79	26.57	0.87

F.R.V. "Derwent Hunter"

Cruise 7

1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 154                      DATE: 6/8/57                      TIME: 1120 hrs.

LAT: 34°12'S.                      LONG: 151°33'E.

0	16.85	19.70	5.12	91	26.02	0.36
25	16.61	19.69	5.02	89	26.06	0.45
49	16.33	19.69	5.26	92	26.13	0.39
74	16.15	19.69	5.39	95	26.17	0.42
98	15.98	19.68	5.35	94	26.19	0.36
147	15.73	19.68	5.33	93	26.25	0.39
196	14.60	19.60	5.26	90	26.39	0.42
307	12.03	19.41	5.18	84	26.65	0.90
528	9.01	19.22	4.54	69	26.92	1.23
654	7.81	19.15	4.65	69	27.00	1.39

STATION: 155                      DATE: 6/8/57                      TIME: 1445 hrs.

LAT: 34°15'S.                      LONG: 151°48'E.

0	17.05	19.72	5.45	97	26.00	0.45
25	16.79	19.72	5.07	90	26.06	0.36
50	16.63	19.70	5.48	97	26.07	0.36
75	16.60	19.70	5.38	95	26.08	0.42
100	16.20	19.69	5.38	95	26.16	0.42
150	15.20	19.63	5.12	88	26.30	0.45
200	14.55	19.61	5.32	91	26.41	0.39
307	11.97	19.41	4.40	71	26.66	0.74
523	8.83	19.21	4.56	69	26.93	1.19
764	6.53	19.11	4.49	65	27.13	1.52

F.R.V. "Derwent Hunter" Cruise 7 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 156                      DATE: 6/8/57                      TIME: 2020 hrs.  
 LAT: 34°22'S                      LONG: 152°15'E.

0	18.16	19.70	5.43	99	25.70	0.55
22	16.40	19.69	5.71	101	26.11	0.55
43	16.03	19.69	5.73	100	26.20	0.74
65	16.03	19.68	5.55	99	26.20	0.77
85	15.25	19.62	5.43	94	26.27	0.52
130	14.53	19.59	5.30	90	26.39	0.58
175	13.50	19.51	5.36	90	26.49	0.71
270	11.95	19.42	5.30	86	26.68	0.87
465	9.15	19.23	4.96	76	26.91	1.13
700	6.98	19.11	4.72	69	27.07	1.16

STATION: 157                      DATE: 7/8/57                      TIME: 0825 hrs.  
 LAT: 34°10'S.                      LONG: 151°28'E.

0	16.88	19.68	5.73	102	25.98	0.55
27	16.77	19.68	5.49	97	26.01	0.52
53	16.80	19.69	5.57	99	26.02	0.55
80	16.36	19.68	5.11	90	26.10	0.55
105	15.73	19.64	5.18	90	26.19	0.64
164	13.98	19.53	5.18	87	26.42	0.71
223	13.28	19.49	5.23	87	26.52	0.81
245	12.83	19.47	4.90	81	26.58	0.87

F.R.V. "Derwent Hunter" Cruise 7 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 158                      DATE: 7/8/57                      TIME: 1120 hrs.  
 LAT: 34°12'S.                      LONG: 151°36'E.

0	16.92	19.70	5.73	102	26.00	0.48
25	16.78	19.69	5.71	101	26.02	0.52
49	16.53	19.69	5.66	100	26.08	0.48
74	16.18	19.69	5.55	97	26.16	0.52
98	15.59	19.66	5.30	92	26.25	0.52
147	14.66	19.60	5.30	90	26.38	0.58
196	13.65	19.51	5.11	86	26.46	0.74
304	11.68	19.39	4.75	77	26.69	1.26
522	8.78	19.20	4.81	73	26.92	1.29
750	6.71	19.10	4.66	68	27.09	1.65

STATION: 159                      DATE: 7/8/57                      TIME: 1355 hrs.  
 LAT: 34°16'S.                      LONG: 151°45'E.

0	16.03	19.68	5.71	100	26.18	0.42
25	15.70	19.69	5.71	99	26.27	0.39
49	15.70	19.69	5.71	99	26.27	0.39
74	14.83	19.61	5.46	94	26.35	0.48
98	14.30	19.56	5.07	86	26.40	0.67
147	13.72	19.50	5.11	86	26.44	0.58
195	13.04	19.47	5.02	83	26.54	0.71
305	11.07	19.35	4.84	77	26.75	0.90
524	8.66	19.20	4.72	71	26.94	1.26
770	6.52	19.11	4.54	66	27.13	1.58

F.R.V. "Derwent Hunter" Cruise 7 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 160                      DATE: 7/8/57                      TIME: 1815 hrs.  
 LAT: 34°23'S.                      LONG: 152°07'E.

0	18.28	19.70	5.67	103	25.67	0.32
24	17.58	19.71	5.65	102	25.86	0.32
47	16.31	19.68	5.38	95	26.11	0.39
71	15.87	19.66	5.38	94	26.19	0.58
94	15.84	19.67	5.32	93	26.21	0.39
141	14.60	19.59	5.20	89	26.38	0.45
188	13.45	19.50	4.94	83	26.50	0.58
280	11.65	19.39	4.62	75	26.69	0.84
470	9.00	19.21	4.56	69	26.91	1.23
710	6.93	19.11	4.40	64	27.07	1.55

STATION: 161                      DATE: 8/8/57                      TIME: 0847 hrs.  
 LAT: 34°11'S.                      LONG: 151°29'E.

0	16.58	19.69	5.45	96	26.07	0.45
27	16.60	19.71	5.45	96	26.10	0.42
54	16.11	19.67	5.50	96	26.15	0.32
81	16.00	19.68	5.50	96	26.19	0.32
108	15.30	19.64	5.41	93	26.29	0.36
150	14.15	19.55	4.85	82	26.41	
197	13.10	19.49	4.64	77	26.56	0.90

STATION: 162                      DATE: 8/8/57                      TIME: 1120 hrs.  
 LAT: 34°12'S.                      LONG: 151°34'E.

0	16.43	19.68	5.66	100	26.09	0.48
25	16.34	19.69	5.60	99	26.13	0.39
50	16.25	19.68	5.50	97	26.13	0.55
75	16.27	19.68	5.50	97	26.12	0.48
100	15.87	19.66	5.24	91	26.19	0.45
150	14.63	19.60	4.97	85	26.39	0.52
200	13.49	19.50	4.97	83	26.49	0.68
300	11.55	19.38	4.73	76	26.71	0.90
500	9.06	19.20	4.49	68	26.88	1.23
600	7.67	19.13	4.47	66	27.00	1.36



F.R.V. "Derwent Hunter" Cruise 7 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 163                      DATE: 8/8/57                      TIME: 1415 hrs.  
 LAT: 34°15'S.                      LONG: 151°47'E.

0	16.78	19.70	5.69	101	26.03	0.52
25	16.56	19.70	5.82	103	26.09	0.48
49	16.03	19.69	5.62	98	26.20	0.45
74	16.38	19.68	5.65	99	26.33	0.58
98	15.18	19.66	5.60	97	26.35	0.42
147	13.96	19.54	4.76	80	26.44	0.71
196	13.25	19.50	4.84	81	26.54	0.81
302	11.56	19.39	4.99	80	26.71	0.90
513	8.83	19.22	4.61	70	26.94	1.29
750	6.57	19.12	4.53	66	27.14	1.16

STATION: 164                      DATE: 8/8/57                      TIME: 1925 hrs.  
 LAT: 34°22'S.                      LONG: 152°10'E.

0	18.40	19.69	5.76	105	25.63	0.42
21	16.76	19.69	5.97	106	26.03	0.42
42	16.35	19.69	5.94	105	26.12	0.52
63	16.19	19.69	5.97	105	26.16	0.42
85	15.45	19.65	5.94	103	26.27	0.42
130	14.90	19.64	5.80	99	26.38	0.45
175	13.80	19.52	5.52	93	26.45	0.58
270	12.18	19.42	5.23	85	26.63	0.77
470	9.04	19.21	4.81	73	27.07	1.19
705	6.96	19.11	4.70	69	27.07	1.58

F.R.V. "Derwent Hunter" Cruise 8 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 165      DATE: 10/8/57      TIME: 1313 hrs.  
 LAT: 34°35'S.      LONG: 152°33'E.

0	16.54	19.69	5.57	98	26.08	0.42
20	16.45	19.69	5.66	100	26.10	0.45
40	16.24	19.69	5.60	98	26.15	0.42
60	16.15	19.68	5.60	98	26.15	0.39
80	16.20	19.68	5.71	100	26.14	0.48
128	15.58	19.66	5.55	96	26.26	0.42
175	13.75	19.53	5.07	85	26.47	0.77
275	11.80	19.40	5.02	81	26.68	1.13
303	11.13	19.36	5.02	80	26.75	0.90
505	8.65	19.21	4.84	73	26.96	1.42
689	6.75	19.12	4.93	72	27.11	1.68
1109	4.39	19.11	4.34	60	27.38	

F.R.V. "Derwent Hunter" Cruise 9 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 167      DATE: 20/8/57      TIME: 0821 hrs.  
 LAT: 34°48'S.      LONG: 151°42'E.

0	16.70	19.69	5.55	98	26.04	0.48
23	16.70	19.69	5.50	98	26.04	0.39
46	16.52	19.68	5.40	95	26.06	0.42
69	16.35	19.67	5.25	92	26.09	0.42
92	16.20	19.66	5.23	92	26.11	0.42
138	15.55	19.63	4.94	86	26.22	0.52
184	15.00	19.61	5.02	86	26.31	0.52
276	12.72	19.45	4.54	75	26.58	0.71
485	9.24	19.23	4.48	69	26.90	1.06

STATION: 168      DATE: 21/8/57      TIME: 0820 hrs.  
 LAT: 34°55'S.      LONG: 153°30'E.

0	16.86	19.69	5.55	99	26.00	0.42
24	17.00	19.69	5.59	100	25.97	0.39
47	16.50	19.66	5.52	97	26.04	0.42
71	15.83	19.66	5.40	94	26.20	0.42
94	15.78	19.66	5.33	93	26.21	0.39
142	13.88	19.51	4.69	79	26.42	0.61
189	12.64	19.45	4.78	79	26.59	0.77
285	10.94	19.32	4.45	71	26.73	1.00
500	8.33	19.16	4.51	68	26.95	1.26

F.R.V. "Derwent Hunter" Cruise 9 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 169                      DATE: 22/8/57                      TIME: 0850 hrs.  
 LAT: 34°45'S.                      LONG: 154°25'E.

0	20.20	19.70	5.08	95	25.17	0.42
24	20.30	19.70	4.97	94	25.15	0.39
48	20.30	19.70	5.04	95	25.15	0.39
72	19.35	19.70	5.10	95	25.40	0.39
96	19.00	19.71	4.92	91	25.51	0.39
144	18.55	19.69	4.54	83	25.59	0.39
191	16.25	19.59	4.18	73	26.01	0.58
288	14.21	19.52	4.41	75	26.37	0.77
506	9.94	19.29	4.54	70	26.86	0.97

STATION: 170                      DATE: 23/8/57                      TIME: 0843 hrs.  
 LAT: 35°20'S.                      LONG: 155°14'E.

0	15.93	19.66	5.42	95	26.18	0.42
21	15.93	19.67	5.47	96	26.19	0.42
42	15.90	19.66	5.33	93	26.18	0.42
63	15.93	19.66	5.40	94	26.18	0.39
84	15.90	19.66	5.29	92	26.18	0.45
122	14.48	19.54	4.45	76	26.33	0.68
161	13.90	19.49	4.45	75	26.39	0.71
242	12.30	19.41	4.37	71	26.60	0.84
444	9.03	19.28	4.48	68	27.00	0.97

F.R.V. "Derwent Hunter"

Cruise 10

1957

Depth (m)	Temp. °C	Chlor- inity o/oo	O <sub>2</sub> ml/l	O <sub>2</sub> o/o sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 171                      DATE: 4/9/57                      TIME: 1645 hrs.  
LAT: 34°10'S.                      LONG: 151°27'E.

0	18.38	19.68	5.47	100	25.61	0.39
25	18.24	19.68	5.47	100	25.65	0.52
50	18.13	19.68	5.42	99	25.68	0.39
75	16.37	19.66	5.14	90	26.07	0.64
92	15.70	19.58	4.66	81	26.13	0.58
138	14.55	19.56	4.81	82	26.35	0.61
185	13.13	19.47	4.72	78	26.52	0.87

STATION: 172                      DATE: 4/9/57                      TIME: 1945 hrs.  
LAT: 34°13'S.                      LONG: 151°34'E.

0	17.95	19.67	5.55	101	25.71	0.42
25	17.96	19.67	5.32	97	25.71	0.39
50	16.97	19.67	5.39	96	25.95	0.42
75	16.37	19.68	5.50	97	26.10	0.45
100	15.90	19.68	5.50	96	26.21	0.64
150	15.05	19.62	5.10	88	26.31	0.55
200	13.70	19.51	4.74	80	26.45	0.58
300	12.30	19.45	4.36	71	26.66	0.74
500	9.59	19.23	4.68	72	26.84	1.13
750	7.10	19.11	4.68	69	27.05	1.68

F.R.V. "Derwent Hunter" Cruise 10 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 173                      DATE: 4/9/57                      TIME: 2345 hrs.  
 LAT: 34°17'S.                      LONG: 151°46'E.

0	17.69	19.68	5.47	99	25.78	0.42
25	17.55	19.68	5.54	100	25.82	0.45
50	16.87	19.68	5.63	100	25.98	0.45
75	16.11	19.68	5.52	97	26.16	0.52
100	15.75	19.67	5.42	95	26.23	0.84
150	14.40	19.57	4.98	85	26.39	0.74
190	13.40	19.50	4.78	80	26.51	0.87
280	11.50	19.38	4.81	77	26.72	0.87
480	9.33	19.22	4.69	72	26.88	1.19
730	7.06	19.10	4.54	66	27.04	1.55

STATION: 174                      DATE: 5/9/57                      TIME: 0520 hrs.  
 LAT: 34°35'S.                      LONG: 152°10'E.

0	15.98	19.70	5.50	96	26.22	0.42
25	16.03	19.70	5.55	97	26.21	0.48
50	16.00	19.70	5.59	98	26.22	0.42
75	16.00	19.70	5.55	97	26.22	0.61
100	15.95	19.69	5.50	96	26.22	0.39
150	15.30	19.65	5.25	91	26.31	0.51
200	14.95	19.63	5.17	89	26.36	0.48
300	12.50	19.42	4.50	74	26.57	0.84
500	9.24	19.22	4.56	70	26.88	1.23
750	6.57	19.08	4.50	65	27.08	1.68

F.R.V. "Derwent Hunter"

Cruise 10

1957

Depth (m)	Temp. °C	Chlor- inity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 175                      DATE: 5/9/57                      TIME: 1140 hrs.  
LAT: 34°37'S.                      LONG: 152°44'E.

0	19.92	19.65	5.45	102	25.18	0.42
25	17.82	19.68	5.45	99	25.75	0.48
50	15.90	19.63	5.55	97	26.21	0.42
75	15.78	19.68	5.55	97	26.24	0.51
100	15.80	19.68	5.59	98	26.23	0.42
150	15.30	19.64	5.45	94	26.29	0.51
180	14.96	19.75	5.10	88	26.51	0.32
270	12.89	19.45	4.86	80	26.54	0.81
466	9.27	19.22	4.74	73	26.87	1.13
717	6.82	19.10	4.68	68	27.08	1.52

STATION: 176                      DATE: 5/9/57                      TIME: 1648 hrs.  
LAT: 34°42'S.                      LONG: 153°10'E.

0	20.75	19.63	5.14	97	24.93	0.36
25	20.71	19.63	5.25	99	24.94	0.29
50	20.37	19.66	4.93	93	25.07	0.32
75	18.53	19.70	5.39	99	25.61	0.36
100	16.60	19.69	5.57	98	26.07	0.36
130	15.60	19.67	5.14	89	26.27	0.39
196	14.55	19.57	5.07	86	26.50	0.55
326	11.52	19.37	4.88	79	26.69	0.87
526	8.50	19.18	4.60	69	26.94	1.23

F.R.V. "Derwent Hunter" Cruise 10 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 177                      DATE: 6/9/57                      TIME: 0335 hrs.  
 LAT: 35°08'S.                      LONG: 154°20'E.

0	19.61	19.68	5.05	94	25.30	0.42
25	19.47	19.68	5.14	96	25.34	0.32
50	18.51	19.68	5.18	95	25.58	0.32
75	17.57	19.66	4.63	83	25.79	0.48
100	15.90	19.58	4.12	72	26.08	0.71
150	14.25	19.49	4.22	72	26.32	0.81
200	13.30	19.46	4.48	75	26.47	0.78
300	11.70	19.37	4.54	73	26.66	0.87
500	8.71	19.18	4.63	70	26.91	1.16
750	6.59	19.08	4.38	63	27.08	1.51

STATION: 178                      DATE: 6/9/57                      TIME: 1301 hrs.  
 LAT: 35°29'S.                      LONG: 155°25'E.

0	16.28	19.68	5.55	98	26.12	0.42
25	16.18	19.68	5.50	96	26.14	0.39
50	16.10	19.67	5.55	97	26.15	0.48
72	16.15	19.68	5.47	96	26.15	0.45
94	16.15	19.68	5.50	96	26.15	0.51
147	16.05	19.67	5.32	93	26.16	0.48
170	15.05	19.58	5.06	87	26.27	0.64
255	12.80	19.43	4.68	77	26.53	0.90
435	9.71	19.25	4.74	73	26.85	1.13
680	7.16	19.12	4.68	69	27.06	1.48



F.R.V. "Derwent Hunter" Cruise 10 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 179                      DATE: 7/9/57                      TIME: 0437 hrs.  
 LAT: 35°58'S.                      LONG: 156°53'E.

0	15.92	19.66	5.59	98	26.18	0.42
25	15.99	19.66	5.59	98	26.16	0.45
50	15.90	19.66	5.59	98	26.18	0.42
75	15.85	19.66	5.55	97	26.19	0.39
100	15.85	19.65	5.50	96	26.18	0.48
150	15.55	19.64	5.50	95	26.23	0.48
170	14.95	19.61	5.45	94	26.33	0.52
260	14.30	19.58	5.45	93	26.43	0.48
450	10.63	19.30	4.86	77	26.76	1.03
697	7.52	19.13	4.74	70	27.02	1.39

STATION: 180                      DATE: 7/9/57                      TIME: 2314 hrs.  
 LAT: 34°37'S.                      LONG: 157°10'E.

0	18.19	19.71	5.10	93	25.71	0.36
25	18.24	19.71	5.32	97	25.70	0.32
50	16.60	19.63	4.50	80	25.98	0.52
75	15.80	19.61	4.62	80	26.14	0.58
100	14.60	19.67	5.50	94	26.39	0.42
150	14.20	19.58	5.39	91	26.45	0.55
200	13.40	19.48	4.62	77	26.47	0.74
300	11.30	19.34	4.56	73	26.69	0.94
500	8.19	19.15	4.56	68	26.95	1.29
750	6.04	19.08	4.44	64	27.15	1.58

F.R.V. "Derwent Hunter" Cruise 10 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 181                      DATE: 8/9/57                      TIME: 1230 hrs.  
 LAT: 34°31'S.                      LONG: 155°45'E.

0	16.88	19.68	5.54	98	25.98	0.39
25	16.66	19.68	5.57	99	26.03	0.36
50	16.30	19.68	5.47	96	26.12	0.39
75	15.65	19.63	5.10	89	26.20	0.48
100	15.20	19.60	5.03	87	26.26	0.48
150	13.74	19.50	4.57	77	26.44	0.71
195	12.20	19.40	4.48	73	26.60	0.81
290	10.84	19.32	4.54	72	26.75	0.94
490	8.24	19.15	4.57	68	26.94	1.29
740	6.10	19.08	4.42	63	27.14	1.64

STATION: 182                      DATE: 9/9/57                      TIME: 0529 hrs.  
 LAT: 33°51'S.                      LONG: 154°32'E.

0	19.30	19.71	5.03	93	25.43	0.39
23	19.37	19.72	5.05	94	25.42	0.39
45	19.30	19.71	5.05	94	25.43	0.55
56	19.36	19.71	5.15	96	25.41	0.32
90	19.30	19.72	5.05	94	25.44	0.36
127	19.20	19.72	5.02	93	25.46	0.39
180	19.26	19.72	4.98	92	25.45	0.32
310	16.35	19.62	4.26	75	26.02	0.64
525	12.28	19.40	4.26	70	26.58	0.90

F.R.V. "Derwent Hunter" Cruise 10 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 183                      DATE: 9/9/57                      TIME: 1649 hrs.  
 LAT: 33°34'S.                      LONG: 153°35'E.

0	19.96	19.72	5.10	96	25.27	0.39
21	19.98	19.72	5.17	97	25.26	0.29
42	19.90	19.72	5.17	97	25.28	0.48
65	20.03	19.70	5.10	96	25.22	0.36
88	19.96	19.70	5.10	96	25.24	0.32
134	19.30	19.72	4.96	92	25.44	0.32
150	19.20	19.72	5.17	96	25.46	0.29
235	18.91	19.72	5.17	95	25.54	0.42
425	14.40	19.51	4.36	74	26.31	0.74
675	9.96	19.28	4.50	70	26.85	1.06

STATION: 184                      DATE: 10/9/57                      TIME: 0008 hrs.  
 LAT: 33°45'S.                      LONG: 153°06'E.

0	21.03	19.63	5.07	96	24.85	0.39
25	21.00	19.63	5.10	97	24.86	0.32
50	19.70	19.64	5.30	99	25.22	0.36
75	19.37	19.64	5.14	95	25.31	0.42
100	19.00	19.65	5.22	96	25.42	0.42
135	16.00	19.63	5.07	89	26.12	0.45
150	15.20	19.60	4.34	76	26.26	0.67
190	12.95	19.42	4.28	71	26.48	0.81
305	10.29	19.28	4.42	69	26.79	1.06
465	8.55	19.19	4.42	67	26.97	1.19

F.R.V. "Derwent Hunter" Cruise 10 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 185                      DATE: 10/9/57                      TIME: 0714 hrs.  
 LAT: 33°56'S.                      LONG: 152°36'E.

0	19.38	19.69	5.37	100	25.38	0.32
25	18.57	19.68	5.42	99	25.57	0.32
50	17.50	19.67	5.39	97	25.82	0.48
75	16.60	19.64	5.14	91	25.99	0.64
100	16.00	19.69	5.69	100	26.21	0.42
150	15.75	19.68	5.45	95	26.24	0.42
193	15.45	19.67	5.42	94	26.40	0.42
283	12.73	19.43	4.66	77	26.55	0.84
478	9.16	19.20	4.54	69	26.88	1.29
729	6.72	19.09	4.48	65	27.07	1.36

STATION: 186                      DATE: 10/9/57                      TIME: 1525 hrs.  
 LAT: 33°18'S.                      LONG: 152°13'E.

0	18.68	19.68	5.45	100	25.54	0.32
25	18.61	19.68	5.25	96	25.55	0.32
50	18.30	19.68	5.59	102	25.63	0.32
75	16.75	19.65	5.45	97	25.98	0.45
100	15.40	19.56	4.62	80	26.16	0.71
150	13.71	19.48	4.40	74	26.41	0.74
200	12.86	19.43	4.50	74	26.52	0.84

F.R.V. "Derwent Hunter" Cruise 11 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 187                      DATE: 19/9/57                      TIME: 1110 hrs.  
 LAT: 35°02'S.                      LONG: 154°01'E.

0	16.54	19.64	5.52	97	26.00	0.39
25	16.50	19.63	5.47	96	26.00	0.36
50	16.28	19.63	5.37	94	26.06	0.48
75	15.40	19.59	4.94	85	26.20	0.48
100	15.38	19.64	5.45	94	26.27	0.39
150	15.00	19.62	5.50	95	26.32	
200	14.00	19.52	5.04	85	26.41	0.48
300	11.26	19.36	4.61	74	26.73	0.74

STATION: 188                      DATE: 20/9/57                      TIME: 1053 hrs.  
 LAT: 34°03'S.                      LONG: 153°29'E.

0	19.38	19.70	5.12	95	25.39	0.26
25	19.39	19.69	5.20	97	25.38	0.26
50	19.36	19.69	5.12	95	25.38	0.23
75	19.35	19.69	5.15	96	25.39	0.23
100	18.87	19.70	5.06	93	25.52	0.23
150	18.86	19.70	5.04	93	25.52	0.23
200	18.70	19.70	5.06	93	25.56	0.32
300	17.20	19.63	4.40	79	25.84	0.32

STATION: 189                      DATE: 21/9/57                      TIME: 1055 hrs.  
 LAT: 34°31'S.                      LONG: 151°33'E.

0	17.61	19.65	5.34	96	25.77	0.32
25	16.88	19.64	5.23	93	25.92	0.52
50	16.68	19.66	5.34	95	26.00	0.36
75	16.68	19.65	5.45	96	25.99	0.32
100	15.98	19.65	5.45	95	26.15	0.32
150	15.68	19.64	5.31	93	26.20	0.36
200	14.53	19.55	4.67	80	26.33	0.55
300	11.87	19.39	4.61	75	26.65	0.77

F.R.V. "Derwent Hunter" Cruise 12 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 192                      DATE: 27/9/57                      TIME: 0840 hrs.  
 LAT: 35°04'S.                      LONG: 151°56'E.

0	18.75	19.68	5.20	96	25.52	0.26
24	18.82	19.68	5.17	95	25.50	0.36
48	18.84	19.67	5.08	93	25.49	0.32
72	16.89	19.59	4.40	78	25.86	0.55
95	15.75	19.60	4.77	83	26.14	0.55
142	13.85	19.49	4.43	75	26.40	0.68
188	12.63	19.41	4.32	71	26.53	0.84
275	12.00	19.38	4.47	73	26.62	0.71
402	9.78	19.23	4.45	69	26.81	1.13

STATION: 193                      DATE: 28/9/57                      TIME: 0825 hrs.  
 LAT: 35°31'S.                      LONG: 153°15'E.

0	19.46	19.70	5.20	97	25.37	0.32
23	19.29	19.71	5.28	98	25.43	0.26
45	19.20	19.70	5.28	98	25.43	0.29
68	19.40	19.74	5.13	95	25.44	0.29
90	19.00	19.70	4.88	90	25.49	0.36
135	18.00	19.66	4.59	83	25.68	0.36
180	16.60	19.61	4.23	75	25.95	0.55
268	14.03	19.51	4.35	73	26.38	0.74
444	10.15	19.26	4.53	71	26.78	1.06

F.R.V. "Derwent Hunter" Cruise 12 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 194                      DATE: 29/9/57                      TIME: 0855 hrs.  
 LAT: 35°11'S.                      LONG: 154°42'E.

0	16.00	19.65	5.55	97	26.15	0.48
25	16.09	19.64	5.57	98	26.11	0.42
50	16.10	19.65	5.57	98	26.13	0.39
75	16.00	19.65	5.42	95	26.15	0.39
100	16.00	19.64	5.45	95	26.13	0.45
150	15.28	19.62	5.08	88	26.26	0.84
200	14.95	19.61	5.34	92	26.33	0.61
300	14.60	19.59	5.24	89	26.38	0.48
500	10.85	19.31	4.45	71	26.73	1.09

STATION: 195                      DATE: 30/9/57                      TIME: 0835 hrs.  
 LAT: 36°41'S.                      LONG: 154°43'E.

0	15.50	19.61	5.20	90	26.20	0.36
22	15.19	19.60	5.24	90	26.26	0.36
44	15.10	19.61	5.64	97	26.29	0.42
66	15.00	19.61	5.57	96	26.31	0.39
83	14.60	19.57	5.24	89	26.35	0.42
126	14.40	19.60	5.42	92	26.44	0.39
168	14.20	19.59	5.57	94	26.47	0.64
254	13.60	19.54	5.42	91	26.52	0.52
440	9.76	19.24	4.86	75	26.82	1.06

F.R.V. "Derwent Hunter" Cruise 12 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 196                      DATE: 5/10/57                      TIME: 0833 hrs.  
 LAT: 34°52'S.                      LONG: 151°20'E.

0	16.80	19.68	5.90	105	26.00	0.45
25	16.45	19.67	5.70	101	26.07	0.42
50	15.78	19.60	4.99	87	26.13	0.68
75	15.80	19.64	5.94	103	26.18	0.52
100	15.90	19.65	5.57	97	26.17	0.42
150	15.37	19.60	5.34	92	26.22	0.52
200	14.20	19.50	4.70	80	26.34	0.71
300	12.19	19.39	4.64	76	26.59	0.94
500	9.28	19.21	4.87	75	26.86	1.19

STATION: 197                      DATE: 6/10/57                      TIME: 0823 hrs.  
 LAT: 36°11'S.                      LONG: 150°36'E.

0	16.05	19.67	5.96	104	26.16	0.39
25	15.83	19.67	6.06	106	26.21	0.39
50	15.85	19.67	6.00	105	26.21	0.39
75	15.80	19.68	5.94	104	26.23	0.55
100	15.90	19.67	6.00	105	26.20	0.48
150	15.80	19.67	5.94	104	26.22	0.48
200	15.25	19.63	5.62	97	26.29	0.48
300	13.05	19.46	4.99	83	26.52	0.84
500	9.48	19.22	5.02	77	26.84	1.29



F.R.V. "Derwent Hunter" Cruise 12 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 198                      DATE: 8/10/57                      TIME: 1030 hrs.  
 LAT: 36°56'S.                      LONG: 150°22'E.

0	14.70	19.62	6.27	107	26.39	0.42
25	14.73	19.62	6.43	110	26.38	0.48
50	14.80	19.62	6.46	111	26.37	0.48
75	14.40	19.62	6.35	108	26.46	0.45
100	14.40	19.62	6.30	107	26.46	0.39
150	13.05	19.58	5.65	94	26.69	0.48
200	12.96	19.57	5.88	98	26.69	0.61
300	12.40	19.53	5.62	92	26.74	0.58
500	12.15	19.55	5.88	96	26.82	0.64

STATION: 199                      DATE: 9/10/57                      TIME: 0535 hrs.  
 LAT: 36°37'S.                      LONG: 150°23'E.

0	16.60	19.66	6.09	108	26.02	0.39
25	16.13	19.67	6.06	106	26.15	0.32
50	16.03	19.67	5.94	104	26.17	0.39
75	15.95	19.67	5.79	101	26.19	0.39
100	15.90	19.67	5.97	104	26.20	0.39
150	15.20	19.62	5.53	95	26.28	0.48
200	14.10	19.52	5.17	87	26.39	0.67
300		19.43	5.24			0.84
500	9.78	19.23	4.97	77	26.81	1.13

F.R.V. "Derwent Hunter" Cruise 12 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 200                      DATE: 9/10/57                      TIME: 1315 hrs.  
 LAT: 36°15'S.                      LONG: 150°24'E.

0	16.50	19.67	6.33	112	26.06	0.32
23	16.26	19.67	6.06	107	26.12	0.29
45	16.10	19.67	6.06	106	26.15	0.39
68	15.90	19.67	6.00	105	26.20	0.42
90	16.00	19.67	5.85	102	26.18	0.32
138	15.85	19.66	5.94	104	26.19	0.48
185	15.38	19.67	6.03	104	26.32	0.39
280	12.65	19.60	5.60	92	26.80	0.53
475	11.33	19.43	5.45	87	26.81	0.67

STATION: 201                      DATE: 10/10/57                      TIME: 0030 hrs.  
 LAT: 35°47'S.                      LONG: 150°44'E.

0	16.50	19.67	5.88	104	26.06	0.39
25	16.03	19.67	6.03	106	26.17	0.45
50	15.80	19.66	6.03	105	26.21	0.45
75	15.75	19.66	6.03	105	26.22	0.39
100	15.75	19.66	5.97	104	26.22	0.42
150	15.60	19.65	5.84	102	26.24	0.39
200	15.20	19.60	5.55	96	26.26	0.48
300	12.55	19.42	4.93	81	26.56	0.71
500	9.48	19.21	4.89	75	26.83	1.13

F.R.V. "Derwent Hunter" Cruise 12 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 202                      DATE: 10/10/57                      TIME: 1009 hrs.  
 LAT: 35°20'S.                      LONG: 150°58'E.

0	17.30	19.68	6.06	108	25.88	0.45
25	15.85	19.68	6.09	106	26.22	0.42
50	15.75	19.68	6.15	107	26.24	0.36
75	15.65	19.67	6.00	104	26.26	0.39
100	15.62	19.67	5.94	103	26.26	0.39
150	15.60	19.67	5.72	99	26.27	0.42
200	14.85	19.62	5.40	93	26.36	0.48
300	12.35	19.43	4.96	81	26.62	0.84
500	9.08	19.21	4.91	75	26.89	1.29

STATION: 203                      DATE: 10/10/57                      TIME: 1900 hrs.  
 LAT: 34°52'S.                      LONG: 151°12'E.

0	18.70	19.67	5.82	107	25.52	0.36
25	17.63	19.68	5.79	104	25.80	0.32
50	17.40	19.67	5.73	103	25.84	0.42
75	16.80	19.67	6.00	106	25.99	0.39
100	16.70	19.67	5.90	104	26.01	0.36
145	15.80	19.66	5.94	103	26.21	0.45
190	15.40	19.62	5.62	97	26.24	0.48
288	13.00	19.44	5.02	83	26.50	0.81
475	9.58	19.22	4.87	75	26.82	1.26

STATION: 204                      DATE: 11/10/57                      TIME: 0450 hrs.  
 LAT: 34°12'S.                      LONG: 151°30'E.

0	17.88	19.67	5.76	104	25.73	0.36
60	17.60	19.64	5.75	100	25.75	0.36
150	14.70	19.57	5.32	91	26.33	0.55
350	11.31	19.36	4.85	78	26.72	0.81

F.R.V. "Derwent Hunter" Cruise 13 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 205      DATE: 7/11/57      TIME: 1215 hrs.  
 LAT: 33°45'S.      LONG: 150°50'E.

0	20.69	19.74			25.09	0.36
20	20.04	19.74			25.27	0.32
40	19.45	19.72			25.40	0.32
60	18.86	19.73			25.56	0.32
79	18.44	19.70			25.63	0.39
114	17.35	19.69			25.89	0.32
156	16.01	19.63			26.12	0.48
260	14.52	19.61			26.42	0.45
348	12.42	19.44			26.62	0.90
472	10.26	19.31			26.83	1.32
608	8.28	19.19			26.99	1.09
822	6.52	19.10			27.12	1.23

F.R.V. "Derwent Hunter" Cruise 14 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 206                      DATE: 13/11/57                      TIME: 1225 hrs.  
 LAT: 34°10'S.                      LONG: 151°29'E.

0	19.45	19.70	5.35	99	25.37	0.39
23	18.88	19.70	5.38	99	25.52	0.36
45	18.80	19.70	5.31	98	25.54	0.52
68	18.23	19.69	4.82	88	25.67	0.52
90	17.70	19.68	4.52	82	25.78	0.61
136	16.30	19.62			26.03	0.68
182	15.99	19.69	5.38	94	26.21	0.52
222	15.22	19.68	5.35	92	26.36	0.52

STATION: 207                      DATE: 13/11/57                      TIME: 1550 hrs.  
 LAT: 34°14'S.                      LONG: 151°32'E.

0	19.65	19.78	5.19	97	25.43	0.52
20	19.46	19.75	5.28	98	25.43	0.52
40	19.45	19.74	5.22	97	25.43	0.39
60	19.40	19.74	5.24	97	25.44	0.39
80	19.25	19.73	5.03	93	25.46	0.49
120	18.55	19.71	4.64	85	25.62	0.58
160	18.00	19.69	4.67	85	25.73	0.49
238	16.01	19.62	4.42	77	26.10	0.81
390	13.91	19.56	5.16	87	26.49	0.84
570	11.06	19.38	4.57	73	26.80	1.09

F.R.V. "Derwent Hunter" Cruise 14 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 208                      DATE: 13/11/57                      TIME: 2040 hrs.  
 LAT: 34°22'S.                      LONG: 151°40'E.

0	19.53	19.75	5.24	98	25.41	0.32
25	19.39	19.75	5.28	98	25.45	0.36
50	19.45	19.75	5.24	97	25.44	0.32
75	19.38	19.75	5.24	97	25.45	0.32
100	19.05	19.73	5.00	92	25.51	0.45
150	18.95	19.72	4.93	91	25.53	0.42
200	18.90	19.72	4.93	91	25.54	0.42
300	16.83	19.64	4.47	79	25.94	0.74
350	15.43	19.61	4.73	82	26.22	0.55
520	11.46	19.37	4.42	71	26.70	0.90
700	8.54	19.18	4.53	68	26.93	0.77
1100	5.12	19.08	4.47	63	27.26	1.55

STATION: 209                      DATE: 14/11/57                      TIME: 0305 hrs.  
 LAT: 34°37'S.                      LONG: 151°58'E.

0	19.45	19.74	5.28	98	25.43	0.39
25	19.44	19.74	5.22	97	25.43	0.36
50	19.42	19.74	5.00	93	25.43	0.32
75	19.42	19.74	5.16	96	25.43	0.45
100	19.45	19.74	5.12	95	25.43	0.42
150	19.15	19.73	4.97	92	25.49	0.42
200	19.10	19.72	4.93	91	25.49	0.42
300	18.75	19.71	4.78	88	25.57	0.32
380	16.62	19.62	4.23	75	25.96	0.68
570	11.81	19.40	4.36	71	26.68	0.90
780	8.63	19.18	4.44	67	26.92	1.32
1220	4.91	19.08	4.03	56	27.29	1.71

F.R.V.

"Derwent Hunter"

Cruise 14

1957

Depth (m)	Temp. °C	Chlor- inity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 210                      DATE: 14/11/57                      TIME: 1350 hrs.  
 LAT: 35°08'S.                      LONG: 152°35'E.

0	19.59	19.74	5.32	99	25.39	0.39
25	19.22	19.74	5.35	99	25.48	0.55
50	19.18	19.74	5.25	97	25.49	0.77
75	19.12	19.74	5.19	96	25.51	0.36
100	19.16	19.74	5.19	96	25.50	0.42
150	18.82	19.72	4.92	91	25.56	0.42
200	17.69	19.69	4.54	82	25.80	0.55
300	15.30	19.60	4.73	82	26.24	0.61
430	12.72	19.46	4.52	74	26.59	0.81
590	9.49	19.24	4.52	70	26.87	1.19
780	7.38	19.12	4.60	68	27.03	1.36
1150	4.64	19.09	4.05	56	27.33	1.71

STATION: 211                      DATE: 15/11/57                      TIME: 0515 hrs.  
 LAT: 34°20'S.                      LONG: 153°20'E.

0	17.91	19.69	5.73	104	25.75	0.39
25	17.28	19.68	5.81	104	25.88	0.42
50	15.56	19.64	5.28	92	26.23	0.52
75	15.18					
100	14.34	19.58	5.13	87	26.42	0.52
150	13.99	19.57	5.28	89	26.48	0.58
200	13.11	19.52	5.22	87	26.59	0.68
300	11.08	19.38	4.68	75	26.79	0.90
500	8.94	19.20	4.68	71	26.90	1.13
750	6.81	19.09	4.40	64	27.06	1.42
1000	5.10	19.08	4.08	57	27.27	1.61
1500	3.03	19.14	3.58	48	27.57	2.06

F.R.V. "Derwent Hunter" Cruise 14 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 212      DATE: 15/11/57      TIME: 1600 hrs.  
 LAT: 34°44'S.      LONG: 154°10'E.

0	18.60	19.71	5.52	101	25.61	0.90
23	17.79	19.70	5.60	101	25.79	0.29
45	17.00	19.67	5.63	100	25.94	0.48
68	15.18	19.63			26.31	0.55
90	14.57	19.58	4.81	82	26.37	0.74
134	13.91	19.56	4.98	84	26.49	0.77
180	13.58	19.55	5.13	86	26.53	0.68
266	11.60	19.40	5.13	83	26.71	0.94
316	10.62	19.33	5.16	82	26.80	1.23
480	8.73	19.19	4.47	68	26.92	1.42
660	7.03	19.11	4.43	65	27.06	1.55
1030	4.76	19.09	4.17	58	27.31	1.84

STATION: 213      DATE: 16/11/57      TIME: 0810 hrs.  
 LAT: 35°39'S.      LONG: 155°42'E.

0	18.62	19.72	5.52	101	25.61	0.39
22	18.25	19.72	5.33	97	25.71	0.32
44	17.00	19.68	5.52	98	25.95	0.39
66	15.62	19.63	4.98	87	26.21	0.52
88	15.13	19.60	4.89	84	26.28	0.68
130	13.82	19.54	4.60	77	26.47	0.74
175	12.60	19.44	4.23	70	26.58	1.03
260	10.83	19.34	4.41	70	26.78	1.16
400	8.93	19.21	4.41	67	26.92	1.32
612	6.98	19.11	4.36	64	27.07	1.48
825	5.36	19.08	4.13	58	27.23	1.84
1260	3.46	19.12	3.63	49	27.50	2.15



F.R.V. "Derwent Hunter" Cruise 15 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 214      DATE: 27/11/57      TIME: 1020 hrs.  
 LAT: 34°08'S.      LONG: 151°22'E.

0	18.40	19.72	5.40	99	25.67	0.32
25	18.35	19.72	5.40	99	25.68	0.23
50	18.35	19.71	5.50	100	25.67	0.29

STATION: 215      DATE: 28/11/57      TIME: 0025 hrs.  
 LAT: 34°11'S.      LONG: 151°26'E.

0	18.10	19.70	5.43	99	25.71	0.52
25	18.00	19.70	5.47	99	25.74	0.35
50	16.90	19.70	5.33	95	26.00	0.32

STATION: 216      DATE: 28/11/57      TIME: 0820 hrs.  
 LAT: 34°13'S.      LONG: 151°35'E.

0	17.90	19.73	5.27	95	25.80	0.29
25	17.72	19.72	5.27	95	25.84	0.52
50	17.30	19.71	4.96	89	25.93	0.42
75	15.95	19.58	4.47	78	26.07	0.58
100	15.44	19.61	4.55	79	26.22	0.58
150	15.00	19.64	5.23	90	26.35	0.94
200	14.39	19.61	5.18	88	26.45	0.36
300	12.82	19.50	5.02	83	26.62	0.71

STATION: 217      DATE: 29/11/57      TIME: 0825 hrs.  
 LAT: 34°35'S.      LONG: 152°29'E.

0	18.14	19.73	5.43	99	25.74	0.32
25	18.00	19.72	5.50	100	25.77	0.32
50	17.76	19.71	5.30	96	25.82	0.26
75	15.98	19.64	4.82	84	26.13	0.42
100	15.46	19.64	4.87	84	26.25	0.45
150	14.49	19.61	5.09	87	26.43	0.64
200	13.68	19.56	4.96	83	26.53	0.52
300	12.36	19.48	4.84	79	26.68	0.74

F.R.V. "Derwent Hunter" Cruise 15 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 218                      DATE: 30/11/57                      TIME: 0825 hrs.  
 LAT: 34°58'S.                      LONG: 153°30'E.

0	16.82	19.64	5.60	99	25.94	0.32
25	16.36	19.64	5.72	101	26.05	0.29
50	16.30	19.64	5.63	99	26.06	0.29
75	15.34	19.61			26.24	0.36
100	14.50	19.60	5.37	91	26.41	0.39
150	13.64	19.54	4.84	81	26.51	0.58
200	12.90	19.48	4.96	82	26.58	0.65
300	11.23	19.36	4.58	73	26.74	0.77

F.R.V. "Derwent Hunter" Cruise 16 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 219                      DATE: 4/12/57                      TIME: 2040 hrs.  
 LAT: 34°10'S.                      LONG: 151°28'E.

0	18.13	19.72	5.47	100	25.74	0.29
22	17.99	19.72	5.50	100	25.77	0.26
43	16.93	19.69	5.47	97	25.99	0.52
65	16.13	19.66	5.14	90	26.13	0.52
86	15.40	19.60	4.37	76	26.22	0.61
126	15.00	19.63	4.88	84	26.34	0.48
166	14.60	19.63	5.08	87	26.43	0.55
202	14.06	19.59	5.08	86	26.49	0.61

STATION: 220                      DATE: 5/12/57                      TIME: 0030 hrs.  
 LAT: 34°13'S.                      LONG: 151°36'E.

0	18.51	19.72	5.37	98	25.64	0.32
25	18.45	19.72	5.45	100	25.66	0.39
50	16.90	19.67	4.85	86	25.96	0.45
75	15.80	19.63	4.85	84	26.17	0.64
100	15.25	19.62	4.74	82	26.27	0.61
150	14.93	19.65	5.50	95	26.39	0.52
200	14.74	19.64	5.37	92	26.41	0.52
300	13.95	19.58	5.24	89	26.51	0.52
500	10.10	19.28	4.56	71	26.82	0.90
750	7.55	19.15	4.40	65	27.04	1.42

F.R.V. "Derwent Hunter" Cruise 16 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 221                      DATE: 5/12/57                      TIME: 0605 hrs.  
 LAT: 34°18'S.                      LONG: 151°46'E.

0	18.59	19.69	5.38	99	25.58	0.29
25	18.48	19.69	5.34	98	25.61	0.32
50	17.00	19.66	5.55	99	25.93	0.36
75	16.60	19.68	5.45	96	26.05	0.36
100	16.22	19.67	5.38	95	26.12	0.42
150	15.20	19.64	5.14	89	26.31	0.52
200	14.11	19.58	5.04	85	26.47	0.55
300	13.32	19.53	5.24	87	26.56	0.61
500	9.69	19.24	4.42	68	26.83	1.23
750	7.24	19.10	4.42	65	27.02	1.45
1000	5.49	19.08	4.19	59	27.22	1.48
1500	3.12	19.13	3.57	48	27.54	2.13

STATION: 222                      DATE: 5/12/57                      TIME: 1225 hrs.  
 LAT: 34°26'S.                      LONG: 152°06'E.

0	19.25	19.75	5.30	98	25.49	0.39
25	18.68	19.75	5.40	99	25.63	0.23
50	18.70	19.75	5.33	98	25.63	0.29
75	17.24	19.70	5.10	91	25.92	0.42
100	16.56	19.68	5.10	90	26.06	0.26
150	15.08	19.63	4.99	86	26.33	0.81
200	14.44	19.60	5.06	86	26.43	0.68
290	13.06					
300	12.92	19.51	5.10	84	26.61	0.71
742	7.54	19.13	4.43	65	27.01	1.55
978	5.54	19.09	4.28	61	27.22	1.58
1416	3.41	19.13	3.87	52	27.52	2.07

F.R.V. "Derwent Hunter" Cruise 16 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 223                      DATE: 5/12/57                      TIME: 1953 hrs.  
 LAT: 34°34'S.                      LONG: 152°41'E.

0	19.34	19.74	5.24	97	25.45	0.32
25	18.53	19.73	5.31	97	25.65	0.32
50	18.18	19.72	5.14	94	25.72	0.42
75	16.68	19.67	4.90	87	26.02	0.48
100	16.10	19.68	5.16	90	26.16	0.45
150	15.05	19.63	5.04	87	26.33	0.48
200	14.30	19.59	4.96	84	26.44	0.58
300	12.59	19.46	4.88	80	26.61	0.90
500	9.22	19.21	4.52	69	26.87	1.06
750	6.97	19.17	4.40	64	27.16	1.36
1000	5.32	19.07	4.04	57	27.22	1.55
1500	3.18	19.13	3.49	47	27.54	1.87

STATION: 224                      DATE: 6/12/57                      TIME: 0247 hrs.  
 LAT: 34°46'S.                      LONG: 153°12'E.

0	19.00	19.74	5.27	97	25.54	0.23
25	18.80	19.74	5.31	98	25.59	0.39
50	18.56	19.73	5.14	94	25.64	0.32
75	16.58	19.70	5.45	96	26.08	0.32
100	15.90	19.69			26.23	0.36
150	14.70	19.60	5.06	87	26.37	0.58
200	13.90	19.57	5.06	85	26.50	0.64
300	12.18	19.44	4.91	80	26.66	0.68
500	8.88	19.19	4.64	71	26.90	1.23
750	6.67	19.09	4.29	62	27.08	1.48
1000	5.07	19.08	4.06	57	27.27	1.78
1500	3.03	19.14	3.60	48	27.57	2.20

F.R.V. "Derwent Hunter" Cruise 16 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 226                      DATE: 6/12/57                      TIME: 1205 hrs.  
 LAT: 35°03'S.                      LONG: 153°59'E.

0	22.36	19.72	4.99	97	24.48	0.39
23	21.55	19.71	5.20	100	24.83	0.32
45	19.25	19.72	5.40	100	25.45	0.36
68	18.03	19.72	5.53	101	25.76	0.39
90	17.59	19.72	5.47	99	25.87	0.39
132	15.58	19.66	5.15	89	26.26	0.45
176	14.27	19.59	5.15	87	26.45	0.61
260	13.05	19.53	5.37	89	26.61	0.61
452	10.06	19.28	4.70	73	26.83	1.09
677	7.32	19.11	4.44	65	27.02	1.45
902	5.66	19.07	4.25	60	27.18	1.61
1348	3.44	19.12	3.62	49	27.50	1.90

STATION: 229                      DATE: 7/12/57                      TIME: 0520 hrs.  
 LAT: 35°35'S.                      LONG: 155°49'E.

0	18.62	19.72	5.34	98	25.61	0.39
25	18.41	19.72	5.40	99	25.67	0.42
50	18.45	19.72	5.37	98	25.66	0.39
75	15.52	19.62	5.04	87	26.21	0.64
100	14.66	19.58	4.88	83	26.36	0.64
150	13.65	19.54	5.15	86	26.51	0.74
200	12.45	19.44	4.82	79	26.61	0.87
300	10.12	19.27	4.55	71	26.81	1.26
490	8.11	19.14	4.42	66	26.95	1.39
730	6.24	19.07	4.34	62	27.10	1.58
972	4.65	19.07	4.02	56	27.30	2.00
1458	2.90	19.15	3.56	47	27.59	2.03

F.R.V. "Derwent Hunter" Cruise 16 1957

Depth (m)	Temp °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 231      DATE: 7/12/57      TIME: 1825 hrs.  
 LAT: 35°56'S.      LONG: 156°59'E.

0	19.21	19.71	5.27	98	25.45	0.42
22	19.03	19.72	5.31	98	25.51	0.42
44	17.50	19.71	5.17	93	25.88	0.36
66	16.47	19.64	4.74	84	26.02	0.64
88	15.50	19.63	4.91	85	26.23	0.67
124	14.42	19.60	4.67	79	26.43	0.77
166	13.48	19.48	4.40	74	26.46	0.87
245	11.71	19.37	4.44	72	26.66	1.03
436	9.46	19.17			26.78	1.39
698	6.91	19.09	4.42	64	27.04	1.61
932	5.21	19.07	4.16	59	27.23	1.87
1400	3.19	19.11	3.57	48	27.51	1.97

STATION: 233      DATE: 8/12/57      TIME: 0920 hrs.  
 LAT: 36°21'S.      LONG: 158°33'E.

0	19.31	19.66	5.24	97	25.35	0.42
25	18.89	19.70	5.20	96	25.51	0.36
50	18.66	19.70	5.31	97	25.57	0.42
75	16.62	19.65	5.14	91	26.01	0.55
100	15.57	19.62	4.85	84	26.20	0.68
150	14.63	19.53	4.49	77	26.28	0.77
200	13.55	19.50	4.55	76	26.47	0.87
300	11.86	19.40	4.76	77	26.66	
490	9.89	19.26	4.49	70	26.83	1.26
728	7.89	19.12	4.44	66	26.95	1.42
960	6.03	19.07	4.29	61	27.13	1.68
1396	3.61	19.10	3.66	49	27.46	1.90

F.R.V. "Derwent Hunter" Cruise 16 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 235      DATE: 9/12/57      TIME: 0550 hrs.  
 LAT: 36°40'S.      LONG: 159°43'E.

0	18.38	19.65			25.58	0.39
25	18.28	19.65			25.60	0.45
50	17.60	19.65	5.16	93	25.77	0.39
75	15.97	19.64	4.99	87	26.14	0.58
100	15.38	19.63	4.88	84	26.26	0.64
150	14.70	19.58	4.74	81	26.35	0.74
200	13.72	19.53	4.79	81	26.48	0.74
300	11.39	19.37	4.47	72	26.72	0.97
479	9.62	19.24	4.44	69	26.85	1.13
714	7.20	19.10	4.40	65	27.02	1.32
950	5.50	19.07	4.13	58	27.20	1.45
1420	3.32	19.12	3.52	47	27.51	2.20

STATION: 238      DATE: 10/12/57      TIME: 1245 hrs.  
 LAT: 35°19'S.      LONG: 158°45'E.

0	20.65	19.72	5.14	97	25.08	0.48
25	18.87	19.72	5.20	96	25.55	0.48
50	18.55	19.72	5.04	92	25.63	0.48
75	17.82	19.70	4.96	90	25.78	0.48
100	16.48	19.65	4.58	81	26.04	0.71
150	15.12	19.59	4.16	72	26.26	0.81
200	14.43	19.58	4.80	82	26.41	0.77
300	12.81	19.57	4.52	75	26.72	0.87
474	10.50	19.31	4.40	69	26.79	1.06
708	7.89	19.14	4.44	66	26.98	1.39
940	5.83	19.08	4.29	61	27.18	1.58
1404	3.50	19.11	3.66	49	27.48	1.78



## F.R.V. "Derwent Hunter"

Cruise 16

1957

Depth (m)	Temp. °C	Chlor- inity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> % sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 239      DATE: 11/12/57      TIME: 1130 hrs.  
 LAT: 34°35'S.      LONG: 157°17'E.

0	23.62	19.71	4.74	94	24.24	0.36
25	23.00	19.70	4.79	94	24.40	0.36
50	20.90	19.73	3.75	71	25.02	0.58
75	19.61	19.69	3.85	72	25.32	0.65
100	18.00	19.67	4.06	74	25.70	0.68
150	17.05	19.69	5.20	93	25.96	0.48
200	15.51	19.65	5.06	88	26.26	0.68
300	13.99		5.02			
335	12.88	19.49	4.70	78	26.60	0.78
500	10.21	19.29	4.34	68	26.81	0.94
674	8.21	19.16	4.40	66	26.96	1.23
1030	5.16	19.08	4.04	57	27.26	1.42

STATION: 242      DATE: 12/12/57      TIME: 0412 hrs.  
 LAT: 34°17'S.      LONG: 156°14'E.

0	23.12	19.70	4.90	97	24.36	0.32
25	22.95	19.70	4.85	95	24.41	0.39
50	22.90	19.70	4.70	93	24.43	0.39
75	20.79	19.73	4.23	80	25.05	0.48
100	20.49	19.73	4.29	81	25.14	0.48
150	19.40	19.73	4.32	80	25.42	0.48
200	18.38	19.69	4.10	75	25.63	0.48
300	16.75	19.63	4.06	72	25.95	0.68
494	13.07	19.45	4.29	71	26.51	0.87
734	8.93	19.19	4.42	67	26.89	1.26
976	6.56	19.09	4.34	63	27.09	1.42
1460	3.62	19.12	3.70	50	27.48	1.78

F.R.V. "Derwent Hunter" Cruise 16 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 243      DATE: 12/12/57      TIME: 1200 hrs.  
 LAT: 34°10'S.      LONG: 155°49'E.

0	22.53	19.73	4.97	97	24.57	0.39
23	21.41	19.76	5.10	98	24.93	0.39
47	20.80	19.77	5.15	98	25.11	0.29
70	20.57	19.77	5.06	96	25.17	0.32
94	19.80	19.74	4.51	84	25.33	0.68
142	18.90	19.73	4.69	87	25.55	1.09
190	18.10	19.70	4.51	82	25.71	1.32
284	16.77	19.66	4.51	80	25.98	0.61
330	16.29	19.64	4.48	79	26.06	0.61
500	12.75	19.45	4.45	73	26.57	1.09
675	9.53	19.24	4.41	68	26.86	1.39
1030	5.22	19.08	4.28	60	27.25	1.87

STATION: 246      DATE: 13/12/57      TIME: 0150 hrs.  
 LAT: 34°10'S.      LONG: 154°04'E.

0	22.28	19.73	4.92	96	24.64	0.42
25	20.94	19.76	5.01	95	25.06	0.19
50	20.70	19.77	5.01	95	25.13	0.58
75	19.39	19.74	4.97	92	25.44	0.42
100	19.10	19.74	4.92	91	25.52	0.39
150	18.70	19.72	4.72	87	25.59	0.55
200	17.95	19.70	4.66	84	25.75	0.55
300	15.22	19.58	4.37	75	26.23	0.71
464	11.87	19.39	4.37	71	26.65	1.06
694	8.34	19.16	4.45	67	26.94	1.45
920	6.08	19.09	4.37	63	27.16	1.55
1380	3.59	19.12	3.66	49	27.49	1.97

F.R.V. "Derwent Hunter" Cruise 16 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 247                      DATE: 13/12/57                      TIME: 0900 hrs.  
 LAT: 34°02'S.                      LONG: 153°20'E.

0	22.86	19.71	4.99	98	24.46	0.48
25	22.53	19.71	4.99	97	24.55	0.42
50	21.55	19.72	4.86	93	24.84	0.45
75	19.22	19.69	4.11	76	25.42	0.52
100	18.02	19.67	3.97	72	25.69	0.74
150	16.48	19.60	4.15	73	25.97	0.77
200	15.16	19.56	4.18	72	26.22	0.77
300	12.94	19.43	4.28	71	26.50	0.87
465	9.90	19.27	4.41	69	26.85	1.16
704	7.49	19.11	4.41	65	26.99	1.45
900	5.69	19.07	4.25	60	27.17	1.68
1290	3.81	19.10	3.76	51	27.44	1.87

STATION: 248                      DATE: 13/12/57                      TIME: 1630 hrs.  
 LAT: 33°44'S.                      LONG: 152°52'E.

0	21.50		5.01			
25	20.48	19.71	5.15	97	25.12	0.36
50	18.50	19.71	5.48	100	25.63	0.36
75	16.82	19.66	5.04	90	25.97	0.42
100	15.88	19.65	4.83	84	26.18	0.61
150	14.79	19.56	4.63	79	26.30	0.65
200	13.75	19.52	4.45	75	26.46	0.77
300	11.73	19.38	4.38	71	26.67	1.06
500	8.89	19.18	4.83	73	26.88	1.16
750	6.68	19.08	4.41	64	27.07	1.55
1000	5.09	19.07	4.02	56	27.25	1.81
1500	3.03	19.14	3.51	47	27.57	2.00

F.R.V. "Derwent Hunter" Cruise 16 1957

Depth (m)	Temp. °C	Chlorinity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: 249      DATE: 13/12/57      TIME: 2155 hrs.  
 LAT: 33°30'S.      LONG: 152°33'E.

0	20.27	19.71	5.25	99	25.17	0.45
25	18.20	19.71	5.50	100	25.71	0.42
50	17.48	19.69	5.45	98	25.86	0.48
75	16.38	19.65	5.53	97	26.06	0.48
100	15.84	19.64	5.33	93	26.17	0.55
150	14.94	19.61	5.06	87	26.33	0.58
200	14.40	19.59	5.22	89	26.42	0.64
300	12.53	19.47	4.94	81	26.64	0.74
315	12.38	19.44	4.89	80	26.62	0.71
480	9.72		4.51			
665	7.71	19.13	4.51	67	26.99	1.61
1020	4.67	19.08	3.92	54	27.31	1.94

STATION: 250      DATE: 14/12/57      TIME: 0412 hrs.  
 LAT: 33°25'S.      LONG: 152°07'E.

0	19.69	19.74	5.33	99	25.36	0.36
20	19.68	19.74	5.30	99	25.37	0.36
40	17.48	19.73	5.18	93	25.91	0.39
60	17.00	19.69	4.94	88	25.97	0.52
100	15.75	19.68	4.97	87	26.24	
139	14.89	19.63	5.08	87	26.37	0.64
179	14.08	19.58	4.75	80	26.48	0.74

## H.M.A.S. "Warrego"

1957

Depth (m)	Temp. °C	Chlor- inity ‰	O <sub>2</sub> ml/l	O <sub>2</sub> ‰ sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: W.7                      DATE: 22/5/57                      TIME: 0947 hrs.  
 LAT: 30°33'S.                      LONG: 153°51'E.

0	24.05	19.55	4.93	99	23.88	0.32
25	24.05	19.55	4.90	98	23.88	
50	24.02	19.55	5.02	100	23.89	0.29
75	24.03	19.55	5.07	101	23.89	0.26
100	24.00	19.55	4.90	98	23.90	0.26
150	20.93	19.65	4.24	81	24.91	0.39
173	19.80	19.66	3.81	71	25.22	0.52
213	17.15	19.58	4.34	77	25.79	0.61
307	14.82	19.44	4.49	77	26.12	0.23

STATION: W.11                      DATE: 22/5/57                      TIME: 1720 hrs.  
 LAT: 29°30'S.                      LONG: 154°00'E.

0	23.90	19.63	4.10	82	24.04	0.42
21	23.90	19.58	4.99	100	23.98	0.32
42	23.90	19.58	4.87	97	23.98	0.32
60	23.90	19.58	4.87	97	23.98	0.39
83	22.60	19.58	5.11	100	24.36	0.29
125	21.15	19.65	4.41	84	24.85	0.39
163	19.40	19.66	5.02	93	25.33	0.36
250	17.10	19.56	4.73	84	25.77	0.55
420	11.67	19.30	4.87	79	26.57	0.81

## H.M.A.S. "Warrego"

1957

Depth (m)	Temp. °C	Chlor- inity o/oo	O <sub>2</sub> ml/l	O <sub>2</sub> o/o sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: W.19                      DATE: 23/5/57                      TIME: 0955 hrs.  
 LAT: 26°46'S.                      LONG: 154°37'E.

0	22.65	19.64	5.46	107	24.41	0.26
20	22.60	19.64	5.50	107	24.43	0.23
39	22.65	19.64			24.41	0.32
59	22.55	19.63	5.50	107	24.43	0.29
78	22.50	19.64	5.71	112	24.46	0.26
117	18.50	19.64	4.72	86	25.53	0.42
157	17.70	19.62	5.39	97	25.70	0.32
235	17.70	19.62	5.09	92	25.70	0.45
397	13.83	19.46	4.99	84	26.36	0.74

STATION: W.23                      DATE: 23/5/57                      TIME: 1710 hrs.  
 LAT: 25°29'S.                      LONG: 154°28'E.

0	24.30	19.55			23.81	0.32
25	24.37	19.55			23.79	0.32
50	24.30	19.56			23.83	0.32
75	24.38	19.55			23.79	0.29
100	24.38	19.56			23.81	0.29
150	22.20	19.65	4.14	81	24.56	0.42
190	19.80	19.65	3.90	73	25.21	0.52
272	17.70	19.61			25.69	0.55
436	13.03	19.41			26.45	0.77

H.M.A.S. "Warrego"

1957

Depth (m)	Temp. °C	Chlor- inity o/oo	O <sub>2</sub> ml/l	O <sub>2</sub> o/o sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: W.37                      DATE: 4/8/57                      TIME: 2154 hrs.  
 LAT: 26°10'S.                      LONG: 154°30'E.

0	22.20	19.62			24.51	0.36
24	22.20	19.63			24.53	0.42
47	21.60	19.68			24.76	0.39
71	21.37	19.69			24.85	0.29
94	21.40	19.71			24.87	0.65
141	21.00	19.71			24.98	0.52
188	19.20	19.68			25.40	0.65
280	15.70	19.58			26.13	0.58
470	11.63	19.37			26.67	0.84

STATION: W.38                      DATE: 9/8/57                      TIME: 2143 hrs.  
 LAT: 24°35'S.                      LONG: 154°23'E.

0	21.40	19.70			24.85	0.32
25	21.40	19.69			24.84	0.52
50	21.40	19.69			24.84	0.48
75	21.37	19.69			24.85	0.48
100	20.90	19.72			25.01	0.39
150	20.50	19.70			24.82	0.74
300	20.40	19.60			24.99	0.55
500	11.03	19.32			26.71	1.03

## H.M.A.S. "Warrego"

1957

Depth (m)	Temp. °C	Chlor- inity o/oo	O <sub>2</sub> ml/l	O <sub>2</sub> o/o sat.	σ <sub>t</sub>	Total P μg.at/l
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STATION: W.39                      DATE: 24/8/57                      TIME: 2122 hrs.  
LAT: 26°10'S.                      LONG: 154°30'E.

0	21.60	19.65			24.73	0.29
25	21.50	19.65			24.76	0.32
50	21.30	19.66			24.82	0.32
75	21.30	19.69			24.87	0.29
100	21.10	19.68			24.90	0.36
150	21.00	19.68			24.93	0.36
200	19.75	19.68			25.26	0.77
300	18.20	19.69			25.68	0.42
500	11.95	19.38			26.63	0.48

STATION: W.40                      DATE: 18/9/57                      TIME: 1905 hrs.  
LAT: 27°04'S.                      LONG: 154°02'E.

0	21.10	19.68			24.90	0.39
25	21.00	19.67			24.92	0.29
50	21.00	19.67			24.92	0.32
75	21.00	19.67			24.92	0.32
100	21.10	19.68			24.90	0.45
150	20.40	19.69			25.11	0.42
200	20.20	19.70			25.17	0.42
300	17.85	19.65			25.71	0.48
400	15.61	19.57			26.13	0.71



## 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

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(Continued)

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
36. Surface sampling in the Tasman and Coral Seas, 1957
37. Hydrological investigations from F.R.V. *Derwent Hunter*, 1957