

OCEANOGRAPHICAL STATION LIST

**of Investigations made by the Division of Fisheries,
Commonwealth Scientific and Industrial Research
Organization, Australia**

Volume 14

**Onshore Hydrological Investigations in
Eastern and South-western Australia, 1951**

Compiled by D. J. Rochford

**COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH
ORGANIZATION, AUSTRALIA
MELBOURNE 1953**

OCEANOGRAPHICAL STATION LIST
ONSHORE HYDROLOGICAL INVESTIGATIONS IN EASTERN AND SOUTH-WESTERN
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I. INTRODUCTION

In this volume the results of analyses of onshore waters in eastern and south-western Australia during 1951 are given. In addition, surface chlorinity values of South Australian onshore waters during 1949-51 are given.

II. METHODS

Methods of analysis are the same as those given by Rochford (1951).

III. UNITS

Units are those used by Rochford (1951).

IV. LOCATION OF STATIONS

The locations of these onshore stations have been given in previous volumes.

The positions of the stations sampled in South Australian coastal waters are shown in Figure 1.

V. PERSONNEL

The laboratory analyses of the data have been the responsibility of Mr. R. Spencer, Mr. A. Middleton, and the hydrology staff at Cronulla and Perth. Messrs. C. Brown, G. Kitchen, R. Pickup, and C. Wirrell were responsible for the field collecting.

VI. REFERENCES

ROCHFORD, D. J. (1951).—Studies in Australian estuarine hydrology. I. Introductory and comparative features. *Aust. J. Mar. Freshw. Res.* 2: 1-116.

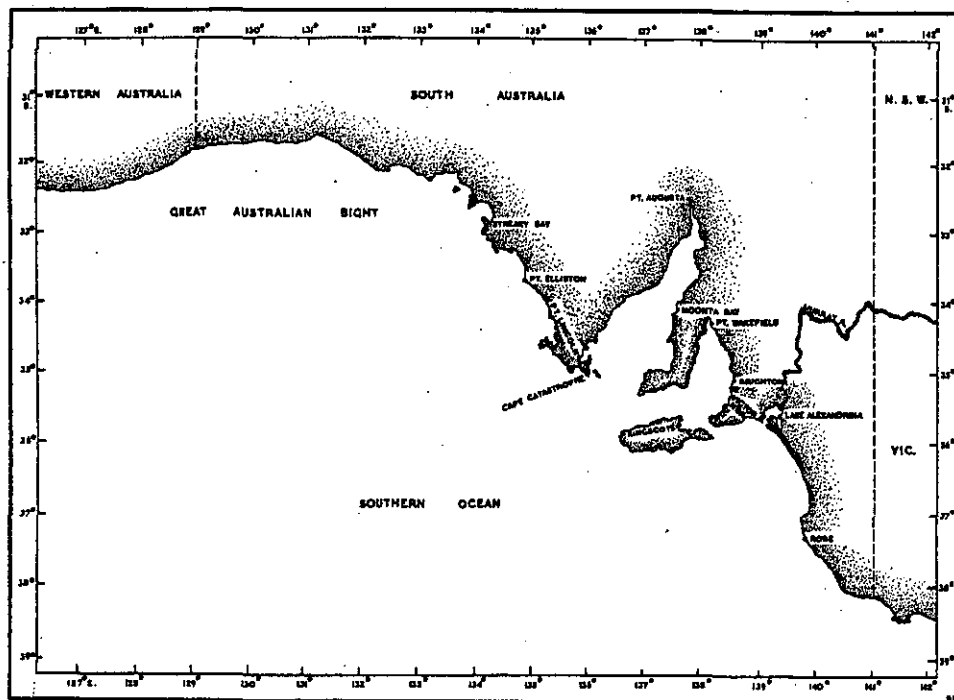
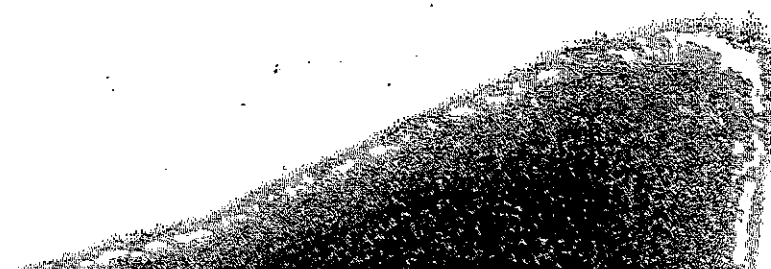


Fig. 1.—Location of stations sampled in South Australian waters.



Station: SOUTH CHANNEL - STRADBROKE ISLAND

Latitude: 27° 22' S.

Longitude: 153° 33' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
5.11	0	24.80	18.44	21.99	4.82	96		6-7	0
	10	24.00	19.11	23.15	4.81	96		7-8	0
	20	24.10	19.27	23.49	4.80	96		7-8	0
	30	23.25	19.32	23.80	4.70	93		8-9	0
	40	22.70	19.45	24.14	4.50	88		9-7	0
	50	19.60	19.72	24.93	3.92	73		17-5	29
7.111	0	26.90	19.29	22.65	4.79	100		0-11	0
	10	26.50	19.33	22.83	4.57	95		2-9	0
	20	26.50	19.33	22.83	4.72	98		0-9	0
	30	25.90	19.34	23.04	4.78	99		1-11	0
	40	25.50	19.35	23.17	4.70	96		0-11	0
	50	25.20	19.40	23.33	5.48	112		2-11	0
15.vi	0	21.20	19.51	24.64	5.12	98	8.22	7-9	3
	10	21.30	19.51	24.61	5.14	98	8.21	7-11	7
	20	18.10	19.64	25.62	4.13	75	8.15	16-8	119
	30	18.10	19.64	25.45	4.10	75	8.14	20-3	117
	40	18.00	19.62	25.62	4.20	76	8.17	16-3	78
	50	18.00	19.61	25.48	4.20	76	8.11	22-5	114
7.viii	0	18.60	19.70	25.58	5.59	102	8.18	5-9	3
	10	18.50	19.70	25.61	5.40	99	8.21	6-15	5
	20	18.20	19.70	25.69	5.18	94	8.20	15	19
	30	17.40	19.70	25.88	4.50	81	8.11	13-13	64
	40	17.15	19.65	25.87	4.46	80	8.11	14-9	83
	50	17.00	19.66	25.92	4.40	78	8.14	15-12	82

Station: COFF'S HARBOUR

Latitude: 30°17' S.

Longitude: 150°16' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ _t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
19.i	0	23.40	18.91	23.20	4.94	97	8.14	9-6	0
	10	23.40	18.91	23.20	4.97	98	8.18	9-6	11
	20	23.30	18.94	23.27	5.13	101	8.16	9-9	42
	30	20.50	19.13	24.31	5.12	96	8.15	5-16	0
	40	19.00	19.18	24.77	4.71	86	8.14	6-9	21
	50	18.80	19.40	25.12	4.41	81	8.05	4-14	46
23.11	0	24.70	19.64	23.81	4.95	100	8.20	6-6	0
	10	24.60	19.62	23.81	4.77	96	8.19	5-4	0
	20	24.20	19.60	23.91	4.23	85	8.18	6-12	0
	30	23.30	19.67	24.27	4.53	90	8.18	8-7	0
	40	18.80	19.90	25.81	4.34	80	8.15	16-0	23
	50	18.50	19.97	25.98	5.07	93	8.11	6-8	66
1.1v	0	24.00	19.47	23.79	5.16	104	8.09	4-5	0
	10	24.00	19.42	23.72	5.20	104	8.11	2-4	0
	20	23.70	19.36	23.74	5.03	100	8.09	2-6	0
	30	22.00	19.38	24.27	4.53	87	8.06	4-8	17
	40	21.20	19.53	24.67	4.10	78	8.03	6-11	45
	50	21.10	19.56	24.74	4.04	77	7.97	11	47
27.1v	0	22.50	19.56	24.35	4.97	97	8.01	5-2	0
	10	22.60	19.57	24.34	4.96	97	8.08	8-0	0
	20	22.40	19.54	24.35	5.00	97	8.04	6-0	0
	30	22.20	19.58	24.47	5.02	97	8.05	4-3	0
	40	21.20	19.57	24.73	5.00	95	8.07	8-0	0
	50	20.20	19.55	24.97	4.30	81	8.01	14-3	0
26.v	0	21.20	19.62	24.79	5.07	97	8.17	2-4	32
	10	21.20	19.61	24.78	5.26	100	8.21	0-6	0
	20	21.20	19.63	24.81	5.24	100	8.21	0-3	0
	30	21.20	19.60	24.77	5.24	100	8.20	0-2	2
	40	21.20	19.58	24.75	5.24	100	8.20	0-3	10
	50	20.40	19.67	25.08	4.47	84	8.13	2-0	3

Station: COFF'S HARBOUR

Latitude: 30°17' S.

Longitude: 150°16' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 29.viii	0	18.40	19.71	25.66	5.50	101	8.16	0	0
	10	18.20	19.69	25.68	5.37	98	8.17	0	0
	20	18.20	19.73	25.73	5.37	98	8.17	4-5	0
	30	18.20	19.68	25.66	5.40	98	8.17	2-8	2
	40	18.20	19.67	25.65	5.46	99	8.17	5-4	4
	50	18.20	19.70	25.69	5.30	97	8.15	2-6	4
19.x	0	19.00	19.63	25.39	5.56	103	8.15	6-3	0
	10	19.00	19.62	25.37	5.52	102	8.15	6-6	0
	20	18.90	19.65	25.45	5.33	98	8.13	6-13	0
	30	18.60	19.64	25.50	5.22	95	8.11	5-29	0
	40	18.10	19.64	25.63	4.78	87	8.12	11-7	19
	50	18.00	19.63	25.64	4.51	82	8.10	11-2	47
17.xi	0	19.40	19.67	25.34	5.84	109	8.13	10-0	22
	10	19.00	19.67	25.45	5.42	100	8.12	10-4	0
	20	18.60	19.71	25.61	5.27	97	8.08	12-0	2
	30	18.20	19.65	25.62	4.61	84	8.10	16-0	3
	40	18.20	19.67	25.65	4.60	84	8.07	15-0	13
	50	18.20	19.68	25.66	4.22	77	8.10	16-5	16

Station: PORT MACQUARIE

Latitude: 30° 56' S.

Longitude: 150° 10' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ _t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
18.i	0	22.40	18.64	23.12	5.10	98	8.13	3-22-0	0
	10	22.40	18.79	23.33	5.16	100	8.03	3-10-8	0
	20	22.40	18.97	23.38	5.14	99	8.13	4-6-17	0
	30	22.30	19.00	23.64	5.10	98	8.00	2-5-20	0
	40	22.30	19.03	23.69	4.97	96	8.04	3-4-16	0
	50	21.30	19.05	23.98	5.13	97	8.03	4-3-29	0
30.iii	0	24.90	19.41	23.44	5.18	105	8.13	3-7-0	0
	10	24.90	19.41	23.44			8.15	2-6-0	0
	20	24.60	19.44	23.57	4.92	99	8.13	2-10-8	5
	30	24.60	19.52	23.69	4.93	100	8.10	3-7-3	12
	40	23.60	19.60	24.09	4.31	86	8.05	0-10-4	39
	50	23.40	19.64	24.20	4.06	80	7.97	12-0-1	50
24.v	0	19.40	19.62	25.27	4.72	88	8.14	6-5-11	28
	10	19.20	19.63	25.34	4.52	84	8.14	8-7-7	22
	20	17.50	19.64	25.78	4.27	77	8.16	9-9-8	76
	30	16.90	19.70	26.00	4.27	76	8.15	9-11-5	89
	40	16.70	19.68	26.02	6.48	115	8.17	8-1-8	48
	50	16.80	19.64	25.94	4.22	75	8.12	12-10	98
21.vi	0	18.80	18.39	23.74	5.37	97			2
	10	18.70	18.71	24.20	5.16	94			0
	20	17.80	19.21	25.11	5.16	92			3
	30	17.00	19.36	25.22	4.92	87			6
	40	17.00	19.39	25.55	4.80	85			6
	50	17.00	19.42	25.59	4.86	86			14
26.viii	0	18.10	19.69	25.70	5.42	99	8.12	4-7-0	0
	10	18.10	19.68	25.68	5.60	102	8.17	3-4-2	0
	20	18.10	19.67	25.67			8.12	6-6-0	0
	30	18.10	19.70	25.71	5.60	102	8.16	6-5-0	0
	40	17.90	19.69	25.75	5.36	97	8.15	4-5-3	0
	50	17.60	19.63	25.74	5.27	95	8.16	6-5-0	0

Station: PORT MACQUARIE

Latitude: 30° 56' S.

Longitude: 150° 10' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
16. xi	0	19.00	19.68	25.46	5.34	99	8.15	13-0-4	3
	10	18.50	19.68	25.58	5.47	100	8.16	10-5-0	0
	20	18.60	19.67	25.55	5.19	95	8.16	11-0-0	4
	30	18.20	19.65	25.62	5.30	97	8.15	11-0-0	8
	40	17.20	19.63	25.84	4.75	85	8.15	13-0-0	6
	50	17.00	19.65	25.92	5.00	89	8.18	16-0-0	22

Station: PORT STEPHENS

Latitude: 32°43' S.

Longitude: 152°18' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
26.11	0	23.30	19.02	23.38	5.04	99	8.14	9-11	0
	10	22.20	19.51	24.36			8.17	1-11	0
	20	22.00	19.79	24.81	5.17	100	8.18	6-7	0
	30	20.00	19.81	25.38	5.10	96	8.17	11-4	0
	40	18.40	19.86	25.86	5.07	93	8.17	7-6	0
	50	17.00	19.81	26.13	4.53	81	8.17	14-6	0
3.1v	0	24.00	19.35	23.63	5.20	104	8.06	3-7	0
	10	24.00	19.40	23.69	5.04	100	8.02	2-7	0
	20	23.90	19.32	23.62	5.12	102	7.40	2-6	4
	30	23.60	19.34	23.73	4.92	98	7.49	0-10	10
	40	22.80	19.36	24.00	4.78	93	7.04	2-7	0
	50	18.20	19.58	25.53	4.03	73	7.64	12-9	36
29.1v	0	21.60	19.60	24.66	5.02	97	8.08	7	0
	10	21.60	19.60	24.66	4.98	96	8.07	4	0
	20	21.10	19.62	24.82	5.00	95	8.07	4-8	0
	30	21.10	19.60	24.80	4.98	95	8.07	5-3	0
	40	21.00	19.60	24.80	5.17	98	8.09	7-0	0
	50	20.90	19.55	24.78	5.02	95	8.03	7-0	0
29.v	0	18.70	19.23	24.92	5.30	97	8.26	6-29	0
	10	19.00	19.63	25.39	5.33	98	8.24	6-3	0
	20	19.00	19.64	25.40	5.28	97	8.24	2-6	0
	30	19.00	19.61	25.36	5.28	97	8.24	5-4	0
	40	18.80	19.64	25.45	5.30	97	8.26	5-3	0
	50	18.80	19.62	25.42	5.24	96	8.24	12-1	0
5.1x	0	17.20	19.67	25.90	5.33	95	8.20	7-9	2
	10	17.10	19.73	25.99	5.35	95	8.19	7-9	4
	20	17.00	19.65	25.91	5.32	95	8.18	8-12	5
	30	16.90	19.63	25.91	5.30	94	8.17	8-22	6
	40	16.70	19.66	25.99	5.28	93	8.17	8-7	37
	50	17.00	19.62	25.87	5.01	89	8.15	11-0	58

Station: PORT STEPHENS

Latitude: 32°43' S.

Longitude: 152°18' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 22. x	0	18.20	19.61	25.56	5.96	108	8.20	3-4	0
	10	18.10	19.64	25.63	6.02	109	8.19	6-1	0
	20	18.00			5.57		8.19	4-5	0
	30	18.00	19.64	25.65	5.75	104	8.19	7-2	0
	40	17.70	19.62	25.70	5.03	90	8.17	13-0	10
	50	17.00	19.63	25.89	4.76	85	8.10	15-2	44
14. xi	0	18.40	19.67	25.60	6.19	113	8.16	10-3	9
	10	18.40	19.71	25.66	6.19	113	8.15	8-2	1
	20	18.30	19.67	25.62	6.38	116	8.16	8-13	0
	30	18.00	19.67	25.70	6.12	111	8.16	7-0	3
	40	17.40	19.65	25.82	5.16	92	8.14	13-6	10
	50	17.00	19.62	25.87	4.10	73	8.10	20-3	46
13. xii	0	19.70	19.60	25.17	5.54	103	8.15	7-9	4
	10	19.70	19.58	25.15	5.43	101	8.17		0
	20	18.40	19.57	25.46	4.76	87	8.15	13-7	40
	30	17.80	19.59	25.64	4.81	87	8.16	11-9	54
	40	17.60	19.58	25.68	4.73	85	8.14	10-7	60
	50	17.60	19.57	25.66	4.75	85	8.12	8-11	56

Station: BOTANY HEADS

Latitude: 34° 01' S.

Longitude: 151° 15' 30" E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
10.i	0	21.40	19.50	24.58	5.15	98	8.13	3-4	0
	10	20.70	19.58	24.88	4.94	93	8.17	6-6	3
	20	19.20	19.52	25.19	5.01	93	8.13	10-3	8
	30	17.70	19.59	25.66	4.67	84	8.09	15-0	16
	40	16.70	19.54	25.83	4.47	78	8.13	17-0	38
	50	15.90	19.55	26.03	4.09	71	8.06	19-0	58
12.iii	0	22.50	19.45	24.21	5.05	98	8.19	3-7	0
	10	22.00	19.42	24.30	4.92	95	8.22	0-9	0
	20	21.80	19.44	24.38	4.97	96	8.21	14	0
	30	21.10	19.46	24.60	5.97	113	8.22	10-6	4
	40	20.80	19.43	24.64	4.95	94	8.18	16-0	7
	50	20.60	19.45	24.73	5.84	110	8.17	2-13	20
9.iv	0	22.50	19.43	24.18	4.82	94	8.24	3-22	0
	10	22.40	19.47	24.26	4.73	92	8.24	0-12	0
	20	21.80	19.45	24.40			8.17	0-14	0
	30	20.80	19.51	24.75	4.47	85	8.20	3-16	6
	40	21.20	19.47	24.59	4.47	85	8.20	2-10	0
	50	21.30	19.49	24.60	4.60	88	8.20	2-13	10
17.v	0	19.80	19.55	25.07	5.16	96	8.19	3-5	0
	10	19.90	19.54	25.04			8.19	7-0	0
	20	19.70	19.54	25.09	5.03	94	8.18	4-6	2
	30	19.50	19.55	25.15	5.12	95	8.19	8-0	0
	40	19.60	19.54	25.11	5.14	96	8.17	2-8	0
	50	19.60	19.55	25.12	5.16	96	8.14	7-1	0
13.vi	0	17.80	18.54	24.19	5.27	94		7-6	59
	10	18.20	19.29	25.12	5.02	91		9-4	44
	20	18.00	19.35	25.25	4.79	86		8-8	65
	30	17.80	19.37	25.33	4.69	85		10-3	81
	40	17.60	19.37	25.38	4.28	77		10-11	116
	50	17.70	19.39	25.38	4.28	77		10-29	119

Station: BOTANY HEADS

Latitude: 34° 01' S.

Longitude: 151° 15' 30" E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ _t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 12. vii	0	17.00	19.46	25.65	5.56	99	8.25	4-14	7
	10	17.10	19.43	25.59	5.57	99	8.24	5-9	5
	20	17.00	19.42	25.59	5.56	99	8.26	5-10	7
	30	17.30	19.43	25.54	5.49	98	8.23	8-7	12
	40	17.30	19.41	25.51	5.42	97	8.23	8-7	6
	50	17.30	19.44	25.55	5.30	95	8.23	6-23	22
14. viii	0	16.00	19.57	26.04	5.77	101	8.26		17
	10	16.00	19.57	26.04	5.71	100	8.25	7-9	17
	20	15.80	19.57	26.08	5.35	93	8.24	12-3	36
	30	15.80	19.57	26.08	5.56	97	8.25	9-8	26
	40	15.80	19.57	26.08	5.45	95	8.25		27
	50	15.80	19.58	26.10	5.13	90	8.21	9-14	40
10. ix	0	16.80	19.64	25.94	5.85	104	8.20	6-0	0
	10	16.60	19.64	25.99	5.79	102	8.21	8-5	0
	20	16.60	19.65	26.01	5.58	98	8.21	10-3	0
	30	16.50	19.64	26.01	5.49	97	8.18	10-26	0
	40	16.40	19.66	26.07	5.35	94	8.18	8-8	4
	50	16.30	19.64	26.06	5.08	89	8.14	9-6	20
9. x	0	18.10	19.13	24.93	5.65	102	8.22	7-6	0
	10	18.20	19.58	25.53	5.41	98	8.22	2-11	0
	20	18.20	19.61	25.56	5.46	99	8.22	6-3	0
	30	18.20	19.61	25.56	5.67	103	8.25	4-5	0
	40	18.00	19.62	25.62	5.10	92	8.21	6-3	0
	50	18.00	19.64	25.75	4.93	89	8.17	10-3	2
20. xi	0	17.00	19.64	25.90	5.09	91	8.14	20-0	34
	10	16.90	19.66	25.95	4.93	88	8.15	17-2	40
	20	16.80	19.68	26.00	5.23	93	8.15	18-1	24
	30	16.40	19.67	26.08	5.14	90	8.15	13-4	37
	40	16.00	19.66	26.16	4.97	87	8.13	20-0	87
	50	15.80	19.66	26.21	4.94	86	8.13	20-0	50

Station: BOTANY HEADS

Latitude: 34° 01' S.

Longitude: 151° 15' 30" E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
13. xii	0	18.60	19.55	25.38	5.03	92		10-4	20
	10	18.20	19.54	25.47	4.84	88		12-0	24
	20	17.20	19.55	25.73	4.37	78		13-7	44
	30	17.00	19.55	25.77	4.10	73		16-10	62
	40	16.70	19.53	25.81	4.21	75		17-11	62
	50	16.50	19.53	25.86	3.74	66		17-20	74

Station: PORT HACKING

Latitude: 34° 05' S.

Longitude: 151° 13' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ _t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 8.1	0	20.40	19.62	25.01	5.23	98	8.23	8-2-5	0
	10	20.40	19.59	24.97	5.18	97	8.24	7-3-0	2
	20	18.70	19.65	25.50	4.75	87	8.26	13-0-6	16
	30	18.10	19.62	25.60	4.94	90	8.23	13-2-0	30
	40	17.50	19.53	25.62	4.69	84	8.23	13-0-2	42
	50	17.30	19.61	25.78	4.67	83	8.23	15-4-2	44
15.1	0	20.90	19.41	24.59	5.06	96	8.25	11-0	30
	10	20.90	19.40	24.57	5.18	98	8.19	7-0	13
	20	20.90	19.60	24.85	5.24	100	8.24	7-0	0
	30	20.80	19.57	24.84	5.23	95	8.21	6-0-9	0
	40	19.50	19.55	25.15	4.96	92	8.22	3-7-13	0
	50	17.80	19.44	25.43	4.54	82	8.23	3-12-6	0
22.1	0	22.10	17.35	21.38	5.32	100	7.67	9-0-3	10
	10	22.00	19.09	23.61	5.13	99	7.88	8-0-0	0
	20	21.80	19.16	24.00	5.07	97	7.94	3-0-4	0
	30	21.30	19.11	24.07	5.14	98	7.88	7-0-0	0
	40	20.40	19.12	24.33	4.80	90	7.81	6-0-0	0
	50	18.10	19.18	25.00	4.97	90	7.91	7-0-0	2
31.1	0	22.60	17.65	21.43	6.45	123	8.05	11-9-5	0
	10	21.70	19.44	24.41	5.45	105	8.19	4-11-4	0
	20	19.90	19.59	25.11	5.10	95		14-4-0	34
	30	18.20	19.70	25.69	5.05	92	8.38	9-12-2	50
	40	17.40	19.63	25.78	4.85	87	8.31	18-7-2	67
	50	16.50	19.65	26.03	4.93	87	8.31	23-4-8	92
7.11	0	21.40	19.22	24.19	5.42	103		2-3-2	0
	10	21.40	19.22	24.19	5.50	105		2-9-3	0
	20	21.40	19.25	24.23	5.40	103		3-14-8	0
	30	21.40	19.26	24.24	5.47	104		6-11-0	0
	40	21.20	19.28	24.33	5.46	104		3-14-2	0
	50	21.20	19.33	24.39	4.74	90		5-7-2	2

Station: PORT HACKING

Latitude: 34°05' S.

Longitude: 151°13' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
12.11	0	22.60	19.29	23.95	4.74	92		2-15-2	7
	10	22.30	19.33	24.09	4.66	90		1-14-0	1
	20	21.70	19.38	24.34	4.74	91		5-9-5	3
	30	20.90	19.40	24.57	4.61	87		12-18	9
	40	20.00	19.49	24.94	4.32	81		9-13-0	36
	50	19.00	19.53	25.25	4.38	81		6-14-0	41
20.11	0	21.40	19.10	24.03	5.49	105		6-7-0	
	10	21.20	19.07	24.03	5.36	102		6-7-0	
	20	19.80	19.16	24.54	4.73	88		5	
	30	18.70	19.17	24.84	4.35	79		11-16	
	40	18.40	19.19	24.94	4.41	80			
	50	16.90	19.18	25.29	4.23	75		11-16	
27.11	0	24.90	19.42	23.45	5.19	105	8.09	2-6-7	0
	10	24.40	19.39	23.56	5.27	106	8.11	1-14-0	0
	20	21.80	19.39	24.31	5.32	102	8.04	8-5-2	0
	30	20.20	19.47	24.86	4.78	90	8.08	11-6-3	5
	40	19.60	19.44	24.97	4.72	88	8.11	10-9-1	12
	50	16.80	19.57	25.85	4.03	71	7.97	19-24	80
5.111	0	23.10	19.69	24.36	5.14	101	8.18	4-23	0
	10	19.20	19.87	25.67	5.35	99	8.20	12-7-1	0
	20	17.40	19.95	26.23	4.72	85	8.13	14-16	32
	30	16.60	19.90	26.35	4.29	76	8.11	15-12	70
	40	15.70	19.85	26.49	4.67	81	8.17	15-13	117
	50	15.60	19.87	26.54	4.45	77	8.05	18-21	86
12.111	0	22.00	19.38	24.16	5.14	99	8.24	0-10-0	0
	10	21.80	19.42	24.35	5.36	103	8.20	3-7-3	0
	20	21.10	19.45	24.59	4.65	88	8.20	3-3-0	6
	30	21.00	19.49	24.68	5.16	98	8.19	4-3-0	8
	40	20.70	19.46	24.71	5.09	96	8.19	3-10-7	8
	50	19.50	19.50	25.09	7.67			10-50	26

Station: PORT HACKING

Latitude: 34° 05' S.

Longitude: 151° 13' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
19.iii	0	21.80	19.46	24.41	4.48	86	8.23	5-1-3	1
	10	20.60	19.53	24.83	4.55	86	8.21	9-3-0	5
	20	20.20	19.57	25.00	4.57	86	8.17	9-2-1	20
	30	19.80	19.65	25.21	4.28	80	8.13	10-5-0	30
	40	19.00	19.70	25.49	4.16	77	8.18	15-2-0	61
	50	18.20	19.61	25.56	4.28	78	8.17	16-0-0	57
27.iii	0	23.30	19.36	23.85	4.92	97	8.19	5-9-3	24
	10	22.40	19.36	24.11	5.06	98	8.19	3-10-0	24
	20	21.80	19.44	24.38	5.03	97	8.15	6-9-0	51
	30	19.20	19.54	25.22	4.44	82	8.13	14-8-0	141
	40	17.50	19.60	25.73	4.22	76	8.11	22-0-0	169
	50	15.90	19.60	26.10	4.00	70	8.09	23-0-0	219
2.iiv	0	23.20	19.48	24.04	5.86	115	8.20	0-7-0	0
	10	23.00	19.43	24.03	4.78	94	8.22	3-9-0	0
	20	22.90	19.43	24.06	4.92	96	8.20	0-10-2	6
	30	22.40	19.44	24.21	4.87	95	8.18	3-5-5	12
	40	19.90	19.49	24.97	4.61	86	8.18	5-10-0	42
	50	16.80	19.62	25.91	4.13	73	8.17	6-27	152
9.iiv	0	22.60	19.45	24.18	4.93	96	8.24	0-12-0	3
	10	22.60	19.47	24.20	4.98	97	8.23	0-8-6	3
	20	22.50	19.48	24.24	4.86	95	8.23	0-4-6	0
	30	22.30	19.45	24.26	4.91	95	8.22	0-14-0	0
	40	22.00	19.43	24.32	4.93	95	8.21	2-18-6	0
	50	21.70	19.45	24.43	4.78	92	8.17	2-12-0	15
16.iiv	0	21.20	19.52	24.66	5.00	95	8.20	4-12-2	0
	10	21.10	19.48	24.63	5.12	97	8.19	4-14-2	0
	20	21.30	19.49	24.59	5.05	96	8.18	3-17-0	0
	30	20.90	19.48	24.68	5.09	97	8.20	4-10-0	0
	40	20.80	19.52	24.77	5.00	95	8.20	4-10-0	11
	50	20.60	19.64	24.98	5.00	95	8.17	7-19-0	35

Station: PORT HACKING

Latitude: 34° 05' S.

Longitude: 151° 13' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 22. iv	0	21.30	19.54	24.66	5.00	95	8.22	0-12-0	0
	10	21.40	19.54	24.63	5.01	96	8.22	1-11-0	0
	20	21.50	19.53	24.58	4.96	95	8.18	1-13-0	0
	30	20.70	19.55	24.83	4.96	94	8.20	2-18-2	0
	40	20.10	19.58	25.04	5.01	94		3-21-2	0
	50	20.00	19.67	25.19	4.99	93	8.21	6-14-0	0
	0	19.60	19.65	25.27	5.17	96	8.08	3-7-4	0
	10	19.60	19.67	25.29	5.12	95	8.11	3-7-0	0
	20	19.60	19.68	25.30	5.17	96	8.12	5-2-0	0
	30	19.60	19.69	25.32	5.11	95	8.11	2-9-1	0
	40	19.60	19.66	25.28	5.11	95	8.09	3-12-0	0
	50	19.50	19.67	25.32	5.07	94	8.11	1-24-1	0
	0	19.80	19.56	25.09	0.52	10	8.18	3-15-0	0
	10	19.80	19.59	25.13	5.00	93	8.14	4-13-0	0
	20	19.60	19.58	25.17	4.87	91	8.16	5-9-16	4
	30	19.60	19.62	25.22	4.82	90	8.14	7-3-4	16
	40	19.20	19.63	25.34	4.57	84	8.15	7-7-12	26
	50	19.10	19.70	25.46	4.62	85	8.19	7-7-10	16
14. v	0	19.60	19.52	25.09	5.33	99	8.19	0-7-4	0
	10	19.80	19.51	25.02	5.27	98	8.19	0-5-2	0
	20	19.90	19.55	25.05	5.21	97	8.19	3-0-3	0
	30	19.90	19.52	25.01	5.33	99	8.19	3-8-14	0
	40	19.70	19.53	25.07	5.27	98	8.17	3-2-1	0
	50	19.40	19.52	25.14	5.04	94	8.19	7-0-0	16
21. v	0	20.20	19.49	24.89	4.96	93		3-3-0	4
	10	20.20	19.49	24.89	5.00	94		5-0-0	0
	20	19.70	19.51	25.04	4.97	93		5-0-1	5
	30	19.40	19.54	25.17	4.89	91		7-0-0	9
	40	18.90	19.54	25.29	4.55	84		12-0-0	32
	50	18.40	19.53	25.40	4.31	79		14-0-0	52

Station: PORT HACKING

Latitude: 34° 05' S.

Longitude: 151° 13' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 29.v	0	19.80	19.81	25.43	5.26	98	8.23	0-6-12	3
	10	19.70	19.73	25.35	5.17	96	8.23	0-18-0	0
	20	19.70	19.69	25.30	5.26	98	8.22	0-18-4	3
	30	19.60	19.70	25.33	5.30	99	8.21	0-28	0
	40	19.40	19.69	25.37	5.26	98	8.20	0-25-0	4
	50	19.20	19.67	25.39	5.26	97	8.20	3-8-0	17
4.vi	0	18.60	19.63	25.49	5.07	93	8.18	10-5-5	14
	10	18.60	19.63	25.49	5.03	92	8.18	9-9-7	32
	20	18.70	19.63	25.47	4.90	90	8.16	8-6-17	22
	30	18.60	19.63	25.49	4.93	90	8.16	10-15	26
	40	18.30	19.62	25.55	4.65	85	8.19	11-21	46
	50	17.80	19.61	25.66	4.62	83	8.17	15-7-0	44
13.vi	0	17.80	19.10	24.96	5.45	98		12-19	71
	10	17.90	19.55	25.55	4.95	90		13-18	81
	20	17.80	19.59	25.64	4.67	84		16-20	104
	30	17.70	19.59	25.66	4.55	82		16-16	114
	40	17.60	19.61	25.71	4.53	81		15-10	114
	50	16.90	19.58	25.85	4.42	79		15-8-2	104
19.vi	0	19.20	19.04	24.53	5.40	99	8.22	10-0-2	35
	10	19.20	19.45	25.10	5.27	97	8.22	13-5-4	16
	20	19.00	19.55	25.28	5.27	97	8.21	10-27	20
	30	19.10	19.55	25.25	5.22	96	8.21	16	14
	40	19.00	19.56	25.30	5.16	95	8.21	10	21
	50	18.60	19.57	25.41	4.73	87	8.21	14	36
25.vi	0	17.50	18.79	24.89	5.69	101		7-7-4	2
	10	18.50	19.07	25.18	5.46	99		7-5-0	3
	20	18.80	19.08	25.20	5.36	98		6-1-0	0
	30	18.70	19.30	25.35	5.09	93		7-4-0	0
	40	17.80	19.31	25.70	4.65	83		14-0-1	58
	50	17.60	19.37	25.81	4.60	82		13-0-0	74

Station: PORT HACKING

Latitude: 34°05' S.

Longitude: 151°13' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
3.vii	0	18.60	19.27	24.61	5.58	102	8.22	5-2-0	3
	10	18.50	19.16	24.89	5.56	101	8.23	6-5-0	3
	20	18.40	19.38	25.24	5.40	98	8.22	5-1-4	0
	30	18.30	19.38	25.25	5.39	98	8.23	5-0-1	0
	40	17.40	19.41	25.49	5.38	96	8.23	2-5-8	0
	50	17.00	19.43	25.56	5.41	96	8.23	2-4-14	0
12.vii	0	16.80	19.39	25.60	5.66	100	8.25	6-12-0	5
	10	16.90	19.40	25.59	5.63	100	8.22	5-10-3	9
	20	16.80	19.39	25.60	5.49	97	8.24	13-25	7
	30	16.80	19.39	25.60	5.63	99	8.26	7-8-3	7
	40	16.60	19.37	25.62	5.75	101	8.25	6-9-0	13
	50	16.50	19.34	25.60	5.85	103	8.21	4-10-1	5
23.vii	0	16.10	19.65	26.13	5.46	96	8.21	13-0-0	23
	10	16.10	19.61	26.07	5.77	101	8.23	13-0-0	26
	20	16.00	19.61	26.09	5.57	97	8.23	12-1-0	30
	30	15.90	19.60	26.10	5.57	97	8.21	13-1-1	27
	40	15.80	19.61	26.14	5.80	101	8.20	14-0-0	24
	50	16.00	19.59	26.07	5.60	98	8.20	11-3-0	24
30.vii	0	16.60	19.54	25.86	5.28	93	8.20	10-8-0	29
	10	16.60	19.55	25.87	5.17	91	8.21	8-7-0	22
	20	16.60	19.58	25.92	5.82	103	8.19	8-7-0	29
	30	16.20	19.64	26.08	4.84	85	8.16	12-5-5	63
	40	16.50	19.63	26.00	4.78	84	8.18	8-12-5	66
	50	16.20	19.64	26.08	4.85	85	8.18	9-33	59
7.viii	0	16.80	19.48	25.73	5.76	102	8.22	4-18-0	0
	10	16.80	19.49	25.75	5.66	100	8.23	4-8-0	0
	20	16.80	19.47	25.72	5.66	100	8.20	5-7-3	9
	30	16.30	19.53	25.91	5.07	89	8.17	8-6-1	25
	40	15.70	19.55	26.08	5.36	93	8.17	6-6-3	18
	50	15.60	19.58	26.15	5.48	95	8.16	6-8-3	18

F.R.V. Warreen

HYDROLOGICAL OBSERVATIONS					PLANKTOLOGICAL OBSERVATIONS								
O ₂	O ₂ %	pH	PO ₄ -P	Z O ₂ Z	Net	Depth (m.)	Duration (min.)	Volume (cc.)	O D	Count			
										I	II	III	IV
4.84	94	8.20	5-6	0									
4.80	91	8.22	6-3	0									
5.20	100	8.22	4-5	0									
4.35	84	8.22	4-4	0									
5.60	109	8.19	0-14	0									
4.80	93	8.23	0-11	0									
5.89	115	8.23	0-6	0									
5.46	107	8.20	0-14	0									
5.43	107	8.21	0-11	0									
5.58	106	8.22	7-0	0									
4.98	91	8.23	8-0	0									
5.48	87	8.22	18-13	105									
5.55	108	8.21	7-7	0									
5.02	97	8.21	5-1	0									
4.98	97	8.21	0-7	0									
4.92	94	8.21	3-5	0									
4.86	92	8.22	0-12	0									
4.89	92	8.21	0-8	0									
5.05	92	8.22	0-6	0									
6.02	98	8.17	1-21	80									
5.02	72	8.02	36-13	340									
5.31	103	8.25	3-3	0									
5.05	98	8.24	8-0	0									
4.86	94	8.24	6-0	0									
4.66	90	8.23	6-0	0									
4.96	93	8.24	2-10	0									
4.89	91	8.25	6-0	0									
5.40	98	8.24	7-6	0									
5.67	91	8.20	17-3	80									
5.29	79	8.14	29	225									
4.80	69	8.09	41-6	325									

F.R.V. Warren

Date	Station	Position	Sounding (fathoms)	HYDROLOGICAL OBSERVATIONS				
				Depth (m.)	Temp °C.	Cl°/oo	S°/oo	σ _t
1951 24.11	5/51	32° 03' S. 114° 17' E.		0	22.13	19.69	35.57	24.63
				16	22.03	19.70	35.59	24.67
				40	21.27	19.79	35.75	25.04
				83	18.78	19.80	35.77	25.68
				124	18.08	19.82	35.81	25.89
				166	16.70	19.75	35.68	26.12
				248	14.18	19.61	35.43	26.50
				413	10.04	19.30	34.87	26.86
				639	7.97	19.14	34.58	26.97
				790	4.88	19.02	34.36	27.20
	6/51	32° 03' S. 113° 30' E.		0	22.08	19.75	35.68	24.73
				19	22.03	19.78	35.73	24.79
				49	20.00	19.91	35.97	25.52
				98	18.78	19.91	35.97	25.84
				147	17.16	19.89	35.93	26.21
				196	16.09	19.85	35.86	26.41
				294	13.11	19.68	35.55	26.82
				491	8.98	19.28	34.83	27.01
				749	6.45	19.16	34.61	27.21
				921	4.23	19.16	34.61	27.38
6.vii	13/51	32° 02' S. 114° 53' 30" E.		0	17.62	19.78	35.73	25.95
				21	18.51	19.74	35.66	25.67
				52	18.49	19.75	35.68	25.68
				105	18.20	19.80	35.77	25.83
				158	16.98	19.80	35.77	26.13
				210	15.33	19.67	35.53	26.33
				315	11.71	19.40	35.05	26.69
				526	9.11	19.20	34.69	26.85
				800	5.28	19.04	34.40	27.19
	14/51	32° 03' S. 114° 41' E.		0	19.21	19.69	35.57	25.42
				20	19.21	19.65	35.50	25.36
				51	19.31	19.68	35.55	25.38
				102	18.40	19.77	35.71	25.73
				130	18.15	19.79	35.75	25.82
				162	17.58	19.78	35.73	25.96

F.R.V. Warreen

HYDROLOGICAL OBSERVATIONS					PLANKTOLOGICAL OBSERVATIONS								
O ₂	O ₂ /‰	pH	PO ₄ -P	Σ O ₂ N	Net	Depth (m.)	Duration (min.)	Volume (cc.)	D.O.	Count			
										I	II	III	IV
6.63	129	8.25	6-6	0									
6.43	125	8.24	2-9	0									
6.02	115	8.26	6-4	0									
6.54	120	8.27	2-6	0									
5.99	109	8.25	2-7	0									
5.89	105	8.25	7-9	0									
5.59	95	8.25	11-3	27									
5.46	85	8.19	17-5	135									
5.23	78	8.14	29-17	300									
4.23	59	8.04	45-9	410									
5.70	110	8.26	4-7	0									
5.52	107	8.27	4-5	0									
6.05	115	8.27	2-7	0									
5.92	109	8.27	5-6	0									
5.89	105	8.28	5-5	0									
6.02	105	8.27	7-5	0									
6.23	104	8.25	9-9	32									
6.19	95	8.19	23-12	200									
5.23	76	8.10	39-10	350									
4.80	66	8.04	48-15	455									
5.49	99	8.22	1-14	5									
5.43	100	8.22	5-0	0									
4.95	91	8.22	10-8	0									
5.35	97	8.20	11-0	6									
5.43	97	8.18	11-6	9									
5.52	95	8.15	14-2	20									
5.88	95	8.08	25-0	113									
5.95	91	7.99	30-0	240									
4.63	66	7.82	62-0	440									
5.40	100	8.23	7-6	2									
5.40	100	8.25	6-7	0									
5.50	102	8.25	6-4	0									
5.35	98	8.24	15-0	0									
5.35	97	8.22	9-4	3									
5.37	96	8.20	17-0	5									

F.R.V. Warreen

Date	Station	Position	Sounding (fathoms)	HYDROLOGICAL OBSERVATIONS				
				Depth (m.)	Temp °C.	Cl°/oo	S°/oo	σ _t
1951 6.vii	14/51	32° 03' S. 114° 41' E.		222	15.44	19.67	35.53	26.30
				342	10.59	19.32	34.90	26.79
				570	8.67			
				723	7.15	19.08	34.47	27.00
	15/51	32° 03' S. 114° 17' E.		0	20.20	19.58	35.37	25.01
				26	20.35	19.59	35.39	24.98
				64	20.20	19.58	35.37	25.01
				126	19.19	19.74	35.66	25.49
				173	18.90	19.79	35.75	25.63
				221	18.66	19.82	35.81	25.74
				316	14.53	19.63	35.46	26.48
				505	9.49	19.22	34.72	26.84
				789	6.53	19.07	34.45	27.07
				978	4.26	19.04	34.40	27.30
	16/51	32° 03' S. 113° 30' E.		0	20.24	19.59	35.39	25.01
				22	20.08	19.59	35.39	25.06
				55	20.22	19.59	35.39	25.02
				108	19.20	19.68	35.55	25.41
				155	19.10	19.77	35.71	25.56
				203	18.70	19.81	35.79	25.71
				297	14.17	19.59	35.39	26.47
				487	9.49	19.21	34.70	26.83
				756	6.65	19.06	34.43	27.04
				935	4.12	19.06	34.43	27.35
7.vii	18/51	32° 03' S. 115° 05' E.		0	26.60	19.58	35.37	23.15
				20	20.24	19.60	35.41	25.03
				49	18.99	19.73	35.64	25.53
				98	18.37	19.82	35.81	25.82
				131	18.37	19.85	35.86	25.86
				165	16.32	19.81	35.79	26.29
				233	15.12	19.66	35.52	26.36
				367	10.91	19.45	35.14	26.92
	17/51	32° 03' S. 115° 16' E.		0	24.07	19.58	35.37	23.93
				21	20.29	19.58	35.37	24.99
				54	20.42	19.57	35.35	24.94
				106	19.80	19.67	35.53	25.24

Station: ULLADULLA

Latitude: 35° 22' S.

Longitude: 150° 35' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ _t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 7.viii	0	15.40	19.63	26.26	5.46	94	8.16	3-10	6
	10	15.30	19.60	26.24	5.42	94	8.15	6-12	27
	20	15.20	19.61	26.27	5.35	92	8.14	8-9	27
	30	15.20	19.62	26.28	5.45	94	8.15	8-9	42
	40	15.10	19.62	26.30	5.48	94	8.15	8-17	23
	50	15.10	19.62	26.30	5.58	96	8.15	7-8	26
10.ix	0	16.90	19.68	25.97	5.57	99	8.23	13-0	10
	10	16.60	19.68	26.05	5.58	99	8.23	8-9	8
	20	16.50	19.66	26.04	5.46	96	8.22	10-2	16
	30	16.30	19.68	26.12	5.45	96	8.22	13-0	16
	40	16.00	19.68	26.19	5.47	96	8.22	9-3	17
	50	16.00	19.67	26.18	5.60	98	8.24	7-9	20
10.x	0	17.40	19.45	25.55	5.96	106	8.23	9-4	2
	10	17.30	19.49	25.63	5.95	106	8.22	9-1	4
	20	17.60	19.65	25.77	5.40	97	8.20	10-0	16
	30	16.60	19.58	25.92	5.07	89	8.17	17-0	45
	40	15.70	19.59	26.14	4.38	76	8.12	21-0	98
	50	16.10	19.56	26.00	4.83	85	8.10	25-0	137
1.xi	0	17.10	19.66	25.90	6.13	109	8.21	4-6	0
	10	16.90	19.67	25.96	5.80	103	8.21	3-7	0
	20	16.80	19.66	25.97	6.05	107	8.21	2-7	0
	30	16.50	19.66	26.04	5.94	105	8.21	1-9	0
	40	16.50	19.64	26.01	5.73	101	8.21	4-6	0
	50	16.50	19.64	26.01	5.75	101	8.21	1-11	4

Station: EDEN

Latitude: 37° 04' S.

Longitude: 150° 05' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 7.iii	0	20.80	19.22	24.35	5.22	98	7.99	3-6	0
	10	20.60	19.24	24.44	5.21	98	8.08	3-3	0
	20	19.80	19.35	24.80	4.82	90	8.01	8-2	0
	30	19.20	19.38	25.00	4.15	76	7.97	11-0	12
	40	19.00	19.43	25.12	4.24	78	7.95	17-3	20
	50	18.80	19.42	25.15	3.93	72	7.88	16-5	45
11.iv	0	20.00	19.53	24.99	5.40	101	8.21	3-2	0
	10	20.00	19.55	25.02	5.23	98	8.15	4-0	0
	20	20.00	19.54	25.01	5.52	103	8.18	5-2	0
	30	19.90	19.53	25.02	5.12	96	8.18	5-0	0
	40	19.80	19.54	25.06	5.18	96	8.15	3-7	4
	50	19.60	19.57	25.15	4.65	86	8.17	17-9	17
7.vi	0	16.80	19.66	26.03	5.46	97	8.06	2-10	0
	10	16.70	19.40		5.49	97	8.11	5-7	4
	20	16.10	19.40	26.19	5.43	95	8.02	4-12	12
	30	15.50	19.67	26.29	5.10	88		6-7	37
	40	15.30	19.67	26.33	5.27	91	8.04	9-0	35
	50	15.10	19.67	26.38	5.25	91	8.09	9-9	38
26.vii	0	13.15	19.61	26.71	5.21	87		0-46	19
	10	13.15	19.63	26.74	5.27	88		0-11	11
	20	13.15	19.62	26.72	5.58	93		0-9	11
	30	13.15	19.62	26.72	5.49	92		0-11	30
	40	13.15	19.61	26.71	5.58	93		0-12	23
	50	13.20	19.67	26.78	4.87	81		0-14	31
11.ix	0	14.90	19.32	25.94	6.51	111	8.27	5-5	0
	10	14.10	19.31	26.09	6.38	108	8.24	9-7	0
	20	14.10	19.38	26.20	5.74	97	8.24	13-3	0
	30	14.10	19.38	26.20	5.52	93	8.20	13-5	43
	40	14.00	19.47	26.34	5.29	89	8.18	14-3	47
	50	14.00	19.45	26.31	5.22	88	8.18	16-0	51

Station: PORT PHILLIP HEADS

Latitude: 38° 22' S.

Longitude: 144° 36' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
12.11	0	19.30	20.07	25.92	5.09	95		2	
	10	19.30	20.10	25.96	3.35	62		4	
	20	19.30	20.08	25.93	5.23	97		7	
	30	19.20	19.78	25.55	5.31	98		4	
	40	19.00	19.78	25.60	5.35	99		8	
	50	18.90	19.78	25.63	5.22	96		8	
14.11	0	19.80						0	0
	20	18.50	19.73	25.65				0	0
	50	16.80	19.73	26.07				12	23
18.1v	0	16.20	19.69	26.16	5.53	97		2-9	0
	10	16.00	19.67	26.18	5.43	95		5-37	2
	20	15.50	19.70	26.33	5.42	94		5-37	0
	30	15.00	19.68	26.41	5.43	93		3-1	0
	40	14.60	19.68	26.50	5.60	96		3-3	0
	50	13.60	19.64	26.66	5.47	92		3-0	3
18.v	0	13.00	19.61	26.74	5.75	96		5-12	0
	10	12.70	19.64	26.84	5.69	94		9-1	28
	20	12.25	19.65	26.95	5.69	93		4-7	0
	30	11.60	19.60	27.00	5.66	91		8-2	0
	40	11.00	19.62	27.13	5.62	90		3-7	4
	50	10.60	19.60	27.19	5.74	91		7-3	8
20.vi	0	13.60	19.42	26.35	4.77	80		4-7	0
	20	14.00	19.56	26.47	5.10	86		4-12	0
	50	14.00	19.60	26.52	5.41	91		6-6	0
5.vii	0	13.10	19.57	26.66	5.27	88		5-6	0
	20	13.20	19.57	26.64	4.75	79		4-3	0
	50	13.30	19.57	26.62	5.56	93		3-8	0

Station: **PORT PHILLIP HEADS**

Latitude: **38° 22' S.**

Longitude: **144° 36' E.**

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 17. viii	0	11.90	19.37	26.66	6.17	100		12-0	7
	10	12.00	19.63	26.95	6.04	98		10-3	6
	20	12.00	19.42	26.66	6.24	101		10-3	7
	30	12.00	19.57	26.94	6.38	104		11-2	5
	40	12.00	19.34	26.64	6.18	101		9-3	5
	50	12.10	19.56	26.96	6.30	103		15-0	5
11. ix	0	13.30	19.60	26.67				0-6	0
	10	12.60	19.63	26.85				0-11	0
	20	12.20	19.64	26.94	6.17	101		0-14	0
	30	12.20	19.64	26.94				0-10	0
	40	12.20			5.78			2-10	0
	50	12.30	19.64	26.92	5.67	93		0-7	0
9. x	0	14.20	19.57	26.43	6.05	103		3-9	0
	10	13.20	19.57	26.64	6.16	102		7-6	0
	20	13.10	19.57	26.66	6.01	100		5-7	0
	30	12.90	19.58	26.72	5.49	91		6-11	0
	40	12.70	19.61	26.80	4.94	81		4-15	2
	50	12.70	19.63	26.83	4.78	79		10-11	8
14. xi	0	14.60	19.66	26.47	5.57	95		7-6	0
	10	14.50	19.69	26.54	6.00	102		8-0	0
	20	14.50	19.69	26.54	5.91	101		5-5	0
	30	14.50	19.69	26.54	5.84	99		7-3	0
	40	14.50	19.68	26.52	5.86	100		8-5	0
	50	14.50	19.65	26.48	5.82	99		7-5	0

Station: LOW HEAD

Latitude: 40° 55' S.

Longitude: 146° 46' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
5.iii	0	18.70	19.70	25.56	5.22	96		14-24	0
	20	18.60	19.71	25.61	4.94	91		9-9	0
	50	17.70	19.62	25.70	5.02	90		14-3	0
12.iv	0	16.42	19.63	26.02	5.22	92		5-26	0
	20	16.40	19.64	26.04	5.28	93		6-11	0
	50	16.40	19.64	26.04	5.28	93		9-1	0
28.v	0	14.30	19.47	26.28	5.43	92		2-12	0
	20	14.40	19.47	26.26	5.06	86		6-16	0
	50	14.40	19.49	26.29	5.61	95		4-9	0
10.vii	0	12.40	19.63	26.89	5.80	95		8-2	0
	20	12.90	19.76	26.97	4.74	79		12-2	0
	50	12.90	19.79	27.01	3.68	61		8-7	13

Station: ST. HELENS

Latitude: 41° 18' S.

Longitude: 148° 30' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
2.iii	0	19.30	19.60	25.27	5.20	96		7-2	0
	20	18.10	19.57	25.54	5.28	96		7-6	0
	50	15.50	19.46	25.99	4.90	85		20-0	16
18.iv	0	16.75	19.75	26.11	5.36	95		4-1	0
	20	16.80	19.73	26.07	5.49	98		3-0	0
	50	16.80	19.69	26.02	5.52	98		5-6	0
23.v	0	13.70	19.50	26.44	5.77	97		15	4
	20	13.70	19.47	26.40	5.32	89		7	5
	50	13.70	19.47	26.40	4.80	81		10	6
6.vii	0	12.75	19.54	26.69	5.56	92		7-11	17
	25		19.56					7-3	15
	50		19.53					6	20
15.xi	0	12.70	19.36	26.45	6.36	105		10-3	0
	20	12.75	19.38	26.48	6.47	107		10-3	4
	50	12.40	19.38	26.54	6.13	100		11-6	4

Station: MARIA ISLAND

Latitude: 42° 36' S.

Longitude: 148° 16' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
1.iii	0	17.40	19.49	25.60	5.29	95		11-6-4	0
	20	17.10	19.49	25.67				7-5-0	3
	50	15.40	19.47	26.04	5.05	87		12-11	8
19.iv	0	14.40	19.42	26.18	5.65	96		12-0-5	10
	20	14.38	19.41	26.17	5.77	98		7-8-10	8
	50	14.30	19.41	26.19	5.77	98		6-11-0	0
20.v	0	13.70	19.51	26.45	5.55	93		8-3-3	18
	20	13.60	19.49	26.45	5.40	90		10-0-4	8
	50	13.65	19.46	26.39	5.65	95		7-5-0	12
6.vii	0	13.25	19.46	26.48	5.96	99		11-21	22
	25	13.25	19.45	26.47				6-16-3	22
	50	13.25	19.43	26.44	5.77	96		6	11
5.x	0	12.60	19.39	26.51				18-0	0
	20	11.90	19.38	26.64				16-1-4	8
	50	11.75	19.39	26.68				17-5-0	8
16.xi	0	12.15	19.40	26.61	6.29	102		23	34
	20	12.00	19.38	26.62	6.46	105		8	14
	50	12.00	19.40	26.64	6.32	103		13	24

Station: CAPE PILLAR

Latitude: 43°13' S.

Longitude: 148°07' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
1.111	0	16.75	19.45	25.70	5.26	93		8-8	0
	20	16.60			5.27			12-15	0
	50	16.38	19.51	25.86	5.28	93		14-3	6
24.1v	0	14.30	19.44	26.23	5.57	94		9-11	5
	20	14.20	19.45	26.27	5.95	101		11-9	0
	50	14.20	19.45	26.27	5.77	98		15-4	6
19.v	0	13.10	19.24	26.20	5.82	96		6-12	14
	20	13.55	19.42	26.36	5.56	93		5-13	10
	50	13.65	19.45	26.39	5.54	93		9-9	16

Station: GERALDTON - ABROLHOS ISLANDS TRAVERSE

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
24. vi	0	20.80	19.51	24.75	6.35	120	8.27	3-8	12
(2)	40	20.80	19.52	24.77	6.50	123	8.30	5-2	0
(4)	0	21.50	19.50	24.55	6.05	116	8.26	4-9	0
	50	21.50	19.49	24.54	6.45	124	8.26	7-1	0
(6)	0	21.50	19.81	24.56	6.10	117	8.28	5-6	0
	30	21.50	19.50	24.55	6.35	122	8.35	5-4	0
19. vii									
(2)	0	19.20	19.48	25.13	5.44	101	8.25	5-5	0
	40	19.30	19.49	25.13	5.50	102	8.26	5-3	0
(4)	0	20.00	19.48	24.92	5.37	100	8.26	7-3	0
	50	20.00	19.49	24.94	5.34	100	8.26	7-2	0
(6)	0	20.30	19.51	24.89	5.37	100	8.27	7-2	0
	30	20.10	19.50	24.93	5.47	102	8.27	6-3	0
15. viii									
(2)	0	19.20	19.55	25.23	5.36	99	8.23	4-0	2
	40	18.20	19.52	25.45	5.39	98	8.23	5-0	1
(4)	0	19.80	19.55	25.07	5.36	100	8.24	4-0	1
	50	19.60	19.54	25.45	5.23	97	8.24	3-1	1
(6)	0	20.20	19.54	24.96	5.23	98	8.24	4-2	0
	30	19.80	19.54	25.06	5.11	95	8.23	8-5	0
13. xii									
(2)	0	20.70	19.67	25.00	5.61	106	8.19	7-11	
	40	20.80	19.66	24.96	6.65	126	8.19	7-5	
(4)	0	20.70	19.65	24.97	5.10	97	8.19	8-3	
	50	20.70	19.67	25.00	4.68	89	8.18	3-8	

Station: GERALDTON - AEROLHOS ISLANDS TRAVERSE

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
13. x 11									
(6)	0	20.60	19.63	24.97	5.05	96	8.18	6-3	
	30	20.70	19.61	24.91	5.10	97	8.19	6-7	

Station: ABROLHOS ISLANDS

Latitude: 28° 50'S

Longitude: 113° 46'E

Date	Depth (m.)	Temp. °C.	Cl ‰	σ _t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
24.vi	0	22.00	19.49	24.40	6.00	116	8.27	5-3	0
	10	22.00	19.48	24.38	6.05	117	8.26	7-5	0
	20	21.90	19.48	24.41	6.23	121	8.27	5-5	0
	30	21.90	19.49	24.43	6.35	123	8.27	9-8	0
	40	21.70	19.47	24.45	5.87	113	8.27	7-4	0
	50	21.70	19.46	24.43	6.20	120	8.27	5-3	0
19.vii	0	20.80	19.49	24.73	5.34	101	8.27	7-3	0
	10	20.80	19.52	24.77	5.32	101	8.27	9-2	0
	20	20.50	19.51	24.83	5.37	101	8.27	7-6	0
	30	20.20	19.52	24.93	5.44	102	8.26	8-3	0
	40	20.20	19.51	24.91	5.47	103	8.26	7-3	0
	50	20.10	19.52	24.96	5.47	103	8.27	7-5	0
15.viii	0	20.40	19.55	24.91	5.08	96	8.23	3-4	0
	10	20.35	19.54	24.92	5.15	97	8.23	3-2	0
	20	20.35	19.53	24.90	5.11	96	8.23	3-2	0
	30	20.30	19.53	24.91	5.15	97	8.23	3-2	0
	40	20.30	19.55	24.94	5.15	97	8.23	4-3	0
	50	20.30	19.54	24.93	5.05	95	8.23	3-2	0
13.xii	0	20.90	19.63	24.89	5.05	96	8.19	7-6	
	10	20.80	19.64	24.93	5.10	97	8.18	4-5	
	20	20.90	19.63	24.89	5.19	99	8.18	3-8	
	30	20.80	19.62	24.90	5.05	96	8.18	6-4	
	40	20.90	19.63	24.89	5.19	99	7.87	3-9	
	50	20.80	19.63	24.92	5.26	100	8.12	4-5	

Station: ROTTNES ISLAND

Latitude: 32° 00'S

Longitude: 115° 25'E

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 18.1v	0	22.40	19.68	24.54	5.07	98	8.25	5	0
	10	22.50	19.72	24.57	4.45	87	8.25	11-0	0
	20	22.40	19.68	24.54	5.05	98	8.25	5	0
	30	22.40	19.67	24.53	4.35	85	8.25	7-10	0
	40	22.40	19.67	24.53	5.68	111	8.25	5	0
	50	22.40	19.68	24.54	5.47	106	8.24	5-10	0
5.vii	0	20.40	19.54	24.90	5.70	108	8.23	6-1	0
	10	20.40	19.54	24.90	5.87	111	8.23	5-2	0
	20	20.40	19.55	24.91	6.02	114	8.23	6-0	0
	30	20.40	19.53	24.88	6.02	114	8.23	8-1	0
	40	20.20	19.56	24.99	5.81	109	8.23	7-1	0
	50	19.80	19.55	25.07	6.73	126	8.23	6-0	0
30.viii	0	19.15	19.62	25.33	5.39	100	8.21	4-3	0
	10	18.60	19.65	25.52	5.45	100	8.22	5-0	0
	20	18.60	19.63	25.49	5.45	100	8.21	5-0	0
	30	18.60	16.65	25.52	5.39	99	8.21	4-3	0
	40	18.55	19.68	25.57	5.18	95	8.21	5-0	0
	50	18.50	19.67	25.57	5.30	97	8.20	4-1	0
4.x	0	19.30	19.65	25.34	5.45	101	8.20	5-7	0
	10	18.70	19.63	25.47	5.35	98	8.19	6-3	0
	20	18.60	19.64	25.50	5.38	98	8.18	2-5	3
	30	18.60	19.64	25.50	5.38	98	8.19	2-6	3
	40	18.60	19.63	25.49	5.25	96	8.19	2-5	2
	50	18.60	19.57	25.41	5.23	96	8.20	1-10	0
30.x	0	19.00	19.67	25.45	5.55	103	8.16	7-6	0
	10	18.70	19.70	25.56	5.51	101	8.17	4-7	0
	20	18.60	19.68	25.56	5.51	101	8.17	3-19	0
	30	18.40	19.69	25.63	5.51	100	8.17	2-14	0
	40	18.30	19.69	25.65	5.41	98	8.17	4-15	0
	50	18.40	19.69	25.63	5.50	100	8.17	7-8	0

Station: ROTTNESST ISLAND

Latitude: 32° 00'S

Longitude: 115° 25'E

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 27.xi	0	19.40	19.69	25.37	5.53	105	8.14	5-0	0
	10	19.20	19.72	25.46	5.53	105	8.14	7-50	0
	20	19.20	19.71	25.45	5.51	104	8.14	6-4	0
	30	19.20	19.70	25.43	5.51	104	8.14	7-25	0
	40	19.00	19.69	25.48	5.51	101	8.15	6-2	0
	50	18.80	19.71	25.56	5.50	101	8.15	7-0	0

Station: FREMANTLE - ROTTNESST ISLAND TRAVERSE

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
21.11									
(1)	0	22.60	19.93	24.83	6.92	136	8.29	8-0	0
	10	22.10	19.90	24.93	6.86	134	8.27	4	0
(2)	0	22.00	19.86	24.90	7.27	141	8.27	7	0
	10	21.90	19.86	24.93	6.83	133	8.27	2-4	0
(3)	0	21.90	19.82	24.88	6.98	136	8.27	6-0	0
	10	21.70	19.88	25.01	7.09	138	8.27	5	0
(4)	0	21.50	19.83	25.00	5.37	103	8.25	8	0
	10	21.50	19.83	25.00	5.40	104	8.26	8-0	0
(5)	0	21.80	19.80	24.88	7.28	140	8.26	10-0	0
	10	21.80	19.83	24.92	4.92	95	8.24	7	0
(6)	0	21.90	19.80	24.85	4.89	95	8.25	8-0	0
	10	21.70	19.84	24.95	7.01	136	8.25	7	0
	20	21.40	19.82	25.02	4.84	93	8.24	6-0	0
17.1v									
(1)	0	21.50	19.75	24.88	4.57	87	8.24	4-11	0
	10	21.40	19.79	24.97	5.95	115	8.25	11-2	0
(2)	0	21.50	19.78	24.93	5.42	104	8.24	9-6	0
	10	21.60	19.77	24.89	6.10	117	8.24	8-7	0
(5)	0	21.50	19.78	24.93	4.78	92	8.23	8-7	0
	10	21.50	19.75	24.88	4.93	95	8.23	5-10	0
5.vii									
(2)	0	16.65	19.51	25.80	6.00	106	8.15	7	0
	10	16.60	19.51	25.81	6.25	110	8.15	5	0
(5)	0	18.30	19.55	25.46	6.65	121	8.20	13	0
	10	17.00	19.54	25.76	6.15	109	8.16	6	45

Station: FREMANTLE - ROTTNESST ISLAND TRAVERSE

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
30.viii									
(2)	0	17.55	19.60	25.71	5.63	101	8.23	4	0
	10	15.80	19.51	26.00	5.73	100	8.20	5	0
(5)	0	18.30	19.71	25.68	5.52	101	8.22	7	0
	10	18.20	19.71	25.71	5.55	101	8.23	5	0
4.x									
(2)	0	18.20	19.32	25.17	5.96	108	8.16	3	0
	10	17.40	19.38	25.45	5.78	103	8.16	5	0
(5)	0	18.40	19.61	25.51	5.75	105	8.18	3	0
	10	18.25	19.65	25.61	5.78	105	8.19	5	0
30.x									
(2)	0	19.50	19.51	25.10	5.74	106	8.16	2	0
	10	18.60	19.57	25.41	5.77	105	8.16	2	0
(5)	0	19.20	19.67	25.39	5.50	102	8.16	3	0
	10	18.70	19.66	25.51	5.53	102	8.16	2	0
27.xi									
(2)	0	21.40	19.65	24.78	5.51	106	8.12	6	0
	10	20.60	19.65	25.00	5.50	104	8.11	7	0
(5)	0	22.30	19.62	24.48			8.10	7	0
	10	19.70	19.60	25.17			8.12	7	0

F.R.V. Warren

Date	Station	Position	Sounding (fathoms)	HYDROLOGICAL OBSERVATIONS				
				Depth (m.)	Temp °C.	Cl°/oo	S°/oo	σ _t
1951								
23.11	1/51	32° 03' S. 115° 16' E.		0	21.90	19.83	35.82	24.89
				17	21.06	19.86	35.88	25.16
				42	21.31	19.88	35.91	25.12
				84	21.21	19.87	35.90	25.14
	2/51	32° 03' S. 115° 05' E.		0	22.17	19.75	35.82	24.70
				17	21.81	19.72	35.62	24.76
				42	21.90	19.71	35.61	24.73
				83	21.20	19.75	35.68	24.97
				125	21.10	19.77	35.71	25.02
				167	20.45	19.77	35.71	25.20
				251	18.11	19.81	35.79	25.86
				418	10.88	19.32	34.90	26.74
	3/51	32° 03' S. 114° 53' 30" E.		0	22.02	19.70	35.59	24.68
				15	22.02	19.70	35.59	24.68
				38	21.84	19.71	35.61	24.75
				76	21.21	19.72	35.62	24.93
				113	21.00	19.75	35.68	25.02
				151	19.97	19.73	35.64	25.27
				227	18.21	19.80	35.77	25.83
				378	12.00	19.29	34.85	26.49
				982	6.09	19.04	34.40	27.09
	4/51	32° 03' S. 114° 41' E.		0	22.03	19.66	35.52	24.62
				16	22.05	19.66	35.52	24.61
				40	22.12	19.70	35.59	24.65
				80	21.20	19.67	35.53	24.87
				125	20.60	19.70	35.59	25.07
				160	19.56	19.80	35.77	25.48
				240	17.97	19.78	35.73	25.86
				400	11.79	19.39	35.03	26.66
				644	8.36	19.18	34.65	26.96
				760	5.78	19.11	34.52	27.22

Station: PORT HACKING

Latitude: 34° 05' S.

Longitude: 151° 13' E.

Date	Depth (m.)	Temp. °C.	Cl ‰/‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
14.viii	0	15.90	19.55	26.03	5.85	102	8.26	10-0-0	0
	10	15.90	19.56	26.05	5.65	99	8.28	3-8-1	3
	20	15.90	19.56	26.05	5.63	98	8.29	3-9-0	7
	30	15.90	19.55	26.03	5.59	98	8.27	6-5-0	13
	40	15.60	19.58	26.15	5.23	91	8.23	9-5-1	24
	50	15.40	19.59	26.20	5.26	91	8.25	6-5-9	33
20.viii	0	16.20			5.59		8.21	12-2-4	7
	10	16.40			5.56		8.21	17-11	11
	20	16.40			5.42		8.20	4-17-0	21
	30	16.40			5.33		8.19	13-0-0	24
	40	16.20			5.30		8.19	12-0-0	25
	50	15.90			5.06		8.18	15-0-0	47
28.viii	0	16.40	19.67	26.08	5.60	99	8.16	7-0-5	30
	10	16.40	19.71	26.14	5.58	98	8.19	7-0-5	26
	20	16.20	19.62	26.05	5.58	98	8.19	7-0-7	25
	30	16.20	19.65	26.10	5.47	96	8.16	6-0-9	35
	40	16.30	19.67	26.11	5.62	99	8.18	2-7-6	0
	50	16.20	19.64	26.08	5.56	98	8.17	3-9-5	0
5.ix	0	16.10	19.58	26.03	4.55	80	8.17	7-15-0	43
	10	16.10	19.61	26.07	4.98	87	8.17		31
	20	16.10	19.60	26.06	4.76	84	8.16	10-15	85
	30	16.00	19.60	26.08	4.67	82	8.17	10-8-2	78
	40	16.10	19.59	26.04	4.26	75	8.16	13-2-3	74
	50	16.00	19.58	26.06	4.62	81	8.16	20-22	87
10.ix	0	16.70	19.65	25.99	5.81	103	8.19	8-9-1	0
	10	16.40	19.62	26.01	5.33	94	8.16	13-2-2	3
	20	16.40	19.62	26.01	5.27	93	8.16	10-4-3	3
	30	16.40	19.65	26.06	5.24	92	8.15	13-1-1	5
	40	16.30	19.64	26.06	4.86	86	8.12	16-4-5	41
	50	16.30	19.63	26.05	4.71	83	8.12	16-6-0	45

Station: PORT HACKING

Latitude: 34° 05' S.

Longitude: 151° 13' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
24. ix	0	17.60	19.64	25.75	5.91	106		10-14	0
	10	17.60	19.65	25.77	5.65	102		8-6-0	0
	20	17.40	19.65	25.82	5.67	102		8-7-2	0
	30	16.20	19.61	26.04	5.05	89		17-4-5	33
	40	15.30	19.57	26.20	4.36	75		23-13	78
	50	15.20	19.58	26.24	4.59	79		23-11	69
2. x	0	17.80	19.53	25.55	5.54	100	8.18	6-8-0	2
	10	17.80	19.52	25.54	5.66	102	8.18	5-9-7	2
	20	17.60	19.55	25.63	5.34	96	8.19	8-4	2
	30	17.30	19.60	25.77	5.77	103	8.19	12-5-2	4
	40	17.40	19.58	25.73	5.31	95	8.19	11-9-0	2
	50	17.30	19.60	25.77	5.20	93	8.19	9-10-3	4
9. x	0	18.20	19.50	25.42	5.46	99	8.21	11-2-0	2
	10	18.20	19.59	25.54	5.97	109	8.22	11-0-0	0
	20	18.20	19.60	25.55	5.53	101	8.22	13-0-0	0
	30	18.20	19.60	25.55	5.19	94	8.22	13-0-1	0
	40	18.00	19.66	25.68	5.10	93	8.22	14-0-0	3
	50	17.20	19.66	25.88	4.41	79	8.17	19-0-2	26
16. x	0	17.70	19.53	25.57	5.29	95	8.12	3	34
	10	17.20	19.57	25.76	5.32	95	8.04	5	5
	20	16.60	19.58	25.92	4.38	77	8.05	11	52
	30	16.40	19.57	25.94	5.83	103	8.05	4-35	8
	40	16.00			5.29		8.05	16-10	35
	50	16.00	19.57	26.04	4.36	76	8.06	16-6-2	77
25. x	0	16.20	19.62	26.05	5.64	99	8.17	16-17	32
	10	15.90	19.64	26.15	5.55	97	8.12	10-16	30
	20	16.20	19.62	26.05	5.90	104	8.16	16-10	25
	30	16.00	19.62	26.10	5.33	93	8.17		52
	40	15.90	19.63	26.14	5.57	97	8.17	10-12	34
	50	15.90	19.64	26.15	5.39	94	8.17	10-0-0	42

Station: PORT HACKING

Latitude: 34° 05' S.

Longitude: 151° 13' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ _t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
30. x	0	17.50	19.68	25.83	5.15	92	8.17	3-0-4	0
	10	17.50	19.68	25.83	5.50	99	8.17	2-1-3	0
	20	17.30	19.68	25.88	5.84	104	8.18	2-6-13	0
	30	17.30	19.67	25.87	6.00	107	8.18	3-0-4	0
	40	16.90	19.66	25.95	5.90	105	8.18	4-8-0	0
	50	16.80	19.68	26.00	5.71	101	8.18	3-5-0	0
15. xi	0	17.60	19.65	25.77	5.82	105	8.15	6-4-2	4
	10	17.40	19.65	25.82	5.84	105	8.13	6-6-0	4
	20	17.40	19.63	25.79	5.80	104	8.13	9-4-0	5
	30	17.30	19.70	25.91	5.77	103	8.15	5-7-0	3
	40	17.00	19.65	25.92	5.59	99	8.15	8-0-2	3
	50	17.00	19.60	25.85	5.11	91		10-2-0	14
20. xi	0	16.80	19.63	25.93	5.03	89	8.16	18-2-0	28
	10	16.60	19.64	25.99	4.79	85	8.16	16-5-0	44
	20	16.50	19.66	26.04	5.05	89	8.14	16-5-0	16
	30	16.40	19.65	26.06			8.14	19-3-0	21
	40	16.10	19.65	26.13	4.89	86	8.14	13-0-0	52
	50	16.10	19.64	26.11	4.63	81	8.10	16-0-0	52
5. xii	0	19.50	19.63	25.26	5.49	102	8.09	6	0
	10	18.90	19.64	25.43	5.54	102	8.07	7	0
	20	18.50	19.63	25.52	5.22	95	8.08	9	0
	30	18.60	19.62	25.47	4.94	90	8.07	10	4
	40	18.30	19.56	25.47	4.78	87	8.06	10	16
	50	18.00	19.61	25.61	5.01	91	8.05	13	10
12. xii	0	20.60	19.72	25.10	5.01	95		10-18	16
	10	18.80	19.67	25.50	5.04	93		10-4-0	29
	20	18.20	19.69	25.68	4.98	91		17-0-0	50
	30	17.90	19.68	25.73	4.67	85		14-3-2	69
	40	17.30	19.69	25.90	4.67	84		16-4-1	89
	50	17.00	19.69	25.97	4.51	80		17-6-2	90

Station: ULLADULLA

Latitude: 35° 22' S.

Longitude: 150° 35' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ _t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
5.i	0	19.30	19.60	25.27	5.40	100	8.00	6-0	1
	10	19.10	19.63	25.37	5.33	98	8.00	11-0	6
	20	17.50	19.66	25.81	5.17	93	8.06	13-4	41
	30	14.70	19.54	26.29	4.75	81	7.98	22-0	94
	40	12.70	19.44	26.56	4.59	75	7.79	24-8	126
	50	12.40	19.40	26.56	4.70	77	7.80	26-0	153
5.iii	0	22.30	19.35	24.12	4.96	96	8.03	7-4	0
	10	21.20	19.38	24.47	4.98	95	8.07	4-1	0
	20	21.60	19.61	24.67	4.96	95	8.00	5-4	0
	30	21.40	19.58	24.69	4.15	79	8.05	7-4	0
	40	22.00	19.52		4.53	87	8.02	7-0	0
	50	18.90	19.50	25.24	4.22	77	7.95	14-0	9
10.iv	0	21.90	19.57	24.53	5.26	102	8.19	3-0	0
	10	21.90	19.58	24.55	5.22	101	8.20	2-4	0
	20	21.90	19.57	24.53	5.15	99	8.19	3-0	0
	30	21.90	19.56	24.52	5.26	102	8.20	3-5	0
	40	21.20	19.60	24.77	5.18	99	8.17	5-1	4
	50	21.50	19.65	24.76	5.22	100	8.20	2-6	0
5.vi	0	18.40	19.36	25.18	5.22	95	8.06	2-10	11
	10	18.00	19.40	25.32	5.40	97	8.01	2-32	10
	20	17.50	19.39	25.43	5.27	94	8.01	6-2	12
	30	17.30	19.45	25.57	5.13	91	8.01	8-0	23
	40	16.30	19.43	25.78	4.95	87		7-4	78
	50	15.90	19.40	25.82	4.77	83	8.00	6-5	95
4.vii	0	17.20	19.32	25.41	5.43	97	8.14	8-2	11
	10	17.40	19.34	25.39	5.43	97	8.17	8-2	15
	20	17.40	19.34	25.39	5.45	97	8.14	9-0	15
	30	17.40	19.35	25.40	5.38	96	8.14	9-1	11
	40	17.80	19.40	25.37	5.36	96	8.16	14-0	11
	50	18.50	19.60	25.48	5.15	94	8.16	4-4	11

F.R.V. Warreen

HYDROLOGICAL OBSERVATIONS					PLANKTOLOGICAL OBSERVATIONS								
O ₂	O ₂ %	pH	PO ₄ -P	Z O ₂ Z	Net	Depth (m.)	Duration (min.)	Volume (ccs.)	O ₂ D	Count			
										I	II	III	IV
5.82	100	8.18	13-0	17									
5.95	94	8.07	25-10	163									
5.10	75	7.90	40-12	325									
5.25	99	8.23	6-6	8									
5.25	99	8.25	7-8	3									
5.25	99	8.25	6-9	2									
5.30	98	8.23	4-56	2									
5.37	99	8.23	10-12	2									
5.27	96	8.20	5-15	2									
5.50	97	8.13	10-11	45									
5.90	94	8.03	32-13	220									
4.90	71	7.81	45-18	455									
4.30	60	7.81	57-24	510									
5.35	101	8.24	5-3	0									
5.27	98	8.23	4-2	0									
4.63	88	8.23	5-1	0									
5.25	97	8.24	6-7	2									
5.35	99	8.23	8-0	0									
5.35	98	8.23	3-0	4									
5.59	95	8.13	6-2	39									
5.90	91	8.02	40-11	235									
4.86	70	7.88	43-8	400									
4.40	60	7.82	51-0	510									
5.32	111	8.22	8-1	0									
5.35	101	8.23	5-2	0									
5.35	99	8.21	9-5	0									
5.47	100	8.20	8-0	0									
5.30	97	8.19	12-0	0									
5.60	97	8.18	10-0	2									
5.52	95	8.16	18-0	25									
5.81	92	8.06	21-0	133									
5.18	104	8.22	7-0	6									
5.30	100	8.23	7-1	2									
5.23	99	8.23	7-1	1									
4.97	92	8.21	5-2	0									

Station: ALBANY

Latitude: 35°05' S.

Longitude: 118°03' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 10. v	0	20.10	19.76	25.28	6.38	120	8.28	4	11
	10	20.10	19.75	25.26	6.10	115	8.28	8-3	5
	20	20.10	19.73	25.24	6.49	123	8.28	10	7
	30	20.10	19.75	25.26	6.15	116	8.27	7-3	4
	40	20.20	19.78	25.29	6.30	119	8.28	5	8
	50	20.20	19.76	25.26	6.38	121	8.28	7-3	6
25. vii	0	16.60	19.61	25.95	5.72	101	8.22	3-0	0
	10	16.70	19.61	25.93	5.78	102	8.22	5-0	0
	20	16.70	19.61	25.93	5.75	102	8.22	6-0	0
	30	16.80	19.63	25.93	5.72	101	8.22	6-0	0
	40	16.80	19.65	25.96	5.75	102	8.21	4-3	0
	50	16.80	19.65	25.96	5.75	102	8.19	4-2	0
23. viii	0	15.50	19.53	26.09	5.95	103	8.20	5-0	0
	10	15.50	19.52	26.08	5.95	103	8.20	5-3	0
	20	15.45	19.51	26.08	5.82	101	8.19	4-3	0
	30	15.30	19.52	26.13	5.85	101	8.18	5-0	0
	40	15.40	19.50	26.08	5.75	99	8.18	5-0	0
	50	15.30	19.49	26.09	5.80	100	8.16	6-1	0
20. ix	0	16.10	19.52	25.95	5.72	100	8.19	4-8	0
	10	16.10	19.50	25.92	5.75	101	8.19	4-8	0
	20	16.20	19.54	25.95	5.82	102	8.20	5-10	0
	30	16.40	19.58	25.96	5.75	101	8.21	3-9	0
	40	16.40	19.58	25.96	5.78	102	8.21	4-9	0
	50	15.70	19.60	26.15	5.85	102	8.21	4-9	0
10. x	0	17.00	19.62	25.87	5.59	100	8.23	8-1	0
	10	17.00	19.60	25.85	5.52	98	8.23	5-2	0
	20	17.00	19.61	25.86	6.44	115	8.21	6-5	0
	30	17.00	19.58	25.82	5.55	99	8.22	9-0	0
	40	17.00	19.60	25.85	5.37	95	8.22	7-4	0
	50	17.00	19.63	25.89	5.59	100	8.21	8-0	0

Station: ALBANY

Latitude: 35° 05' S.

Longitude: 118° 03' E.

Date	Depth (m.)	Temp. °C.	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951 15. XI	0	18.10	19.77	25.81	5.65	103	8.15	5-1	0
	10	18.00	19.76	25.82	5.50	100	8.15	6-1	0
	20	17.95	19.75	25.82	5.65	103	8.15	5-0	0
	30	17.90	19.72	25.79	5.53	100	8.15	3-2	0
	40	17.90	19.72	25.79	5.61	102	8.15	8-0	0
	50	17.90	19.73	25.80	5.56	101	8.15	6-0	0

F.R.V. Warreen

Date	Station	Position	Sounding (fathoms)	HYDROLOGICAL OBSERVATIONS				
				Depth (m.)	Temp °C.	Cl°/oo	S°/oo	σ _t
1951 25. vi	7/51	35° 16'S. 118° 00'E.		0	18.97	19.73	35.64	25.53
				20	18.82	19.71	35.61	25.55
				50	18.81	19.72	35.62	25.56
	8/51	35° 25' 30"S. 118° 00'E.		0	18.91	19.70	35.59	25.51
				25	18.76	19.69	35.57	25.54
				62	18.80	19.71	35.61	25.56
				123	18.10	19.72	35.62	25.74
				147	18.94	19.76	35.70	25.59
				170	16.66	19.73	35.64	26.10
				215	14.44	19.60	35.41	26.43
				309	11.18	19.44	35.12	26.85
				632	8.08	19.27	34.81	27.14
	9/51	35° 36' 30"S. 118° 00'E.		0	17.41	19.68	35.55	25.85
				25	16.43	19.70	35.59	26.12
				64	16.22	19.69	35.57	26.15
				126	16.20	19.69	35.57	26.16
				161	14.78	19.59	35.39	26.34
				197	13.59	19.54	35.30	26.52
				269	11.81	19.20	34.69	26.40
				413	9.64	19.18	34.65	26.76
				770	6.50	19.06	34.43	27.06
				1007	4.03	19.07	34.45	27.36
	10/51	35° 46' 45"S. 118° 00'E.		0	16.84	19.68	35.55	25.99
				20	16.25	19.68	35.55	26.13
				49	16.15	19.68	35.55	26.15
				99	15.45	19.54	35.30	26.36
				148	13.88	19.57	35.35	26.50
				198	13.15	19.50	35.23	26.56
				296	11.35	19.35	34.96	26.69
				494	8.91	19.16	34.61	26.86
				791	6.38	19.05	34.42	27.06
				989	4.27	19.03	34.38	27.29

F.R.V. Warreen

HYDROLOGICAL OBSERVATIONS					PLANKTOLOGICAL OBSERVATIONS								
O ₂	O ₂ %	pH	PO ₄ -P	Z NO ₃	Net	Depth (m.)	Duration (min.)	Volume (cc.)	O. D.	Count			
										I	II	III	IV
5.42	100		1	0									
5.15	94		4	0									
4.08	75		4	0									
5.39	99		2-8	0									
5.30	97		1-6	0									
5.33	98		3-6	0									
5.33	97		2-11	0									
5.35	99		6-4	0									
5.51	97		4-13	14									
5.51	94		6-11										
5.65	90		18-7	280									
5.51	82		24-24										
5.51	99		12-0	0									
5.60	99		3-15	0									
5.60	98		3-12	0									
5.63	99		3-4	0									
5.51	96		5-6	7									
5.48	92		12-1	30									
5.48	89		26-3	345									
5.67	87		27	365									
4.76	69		44-5	615									
4.45	60		54-13	705									
5.39	96		16-1	0									
5.65	100		7-8	0									
5.67	99		9-19	0									
5.51	96		24-7	8									
5.51	92		13-11	0									
5.59	93		23-5	34									
5.70	91		21-7	140									
5.67	86		42-0	380									
4.88	71		49-4	580									
4.62	63		62-8	715									

F.R.V. Warreen

Date	Station	Position	Sounding (fathoms)	HYDROLOGICAL OBSERVATIONS				
				Depth (m.)	Temp °C.	Cl°/oo	S°/oo	σ _t
1951 25. vi	11/51	36° 04' S. 118° 00' E.		0	16.11	19.67	35.53	26.15
				22	15.99	19.67	35.53	26.18
				55	16.20	19.67	35.53	26.13
				110	14.48	19.64	35.48	26.47
				165	13.30	19.51	35.25	26.54
				220	12.21	19.42	35.08	26.63
				330	10.22	19.28	34.83	26.80
				549	8.20	19.15	34.60	26.95
				807	5.10	19.02	34.36	27.18
				944	3.68	19.08	34.47	27.41
	12/51	47° 00' S. 118° 00' E.		0	15.75	19.68	35.55	26.24
				20	15.88	19.68	35.55	26.21
				50	15.71	19.68	35.55	26.25
				100	15.81	19.67	35.53	26.22
				150	13.99	19.56	35.34	26.57
				199	12.34	19.47	35.17	26.68
				299	10.55	19.33	34.92	26.81
				499	8.59	19.16	34.61	26.91
				835	5.81	19.11	34.52	27.22
				893	4.80	19.07	34.45	27.28

F.R.V. Warren

HYDROLOGICAL OBSERVATIONS					PLANKTOLOGICAL OBSERVATIONS								
°O ₂	O ₂ %	pH	PO ₄ -P	Z NO ₃	Net	Depth (m.)	Duration (min.)	Volume (ccs.)	O. D.	Count			
										I	II	III	IV
5.65	99		3-4	0									
5.62	98		2-7	0									
5.62	98		2-5	0									
5.57	98		3-4	0									
5.57	93		7-8	8									
5.70	93		11-5	60									
5.65	88		17-2	205									
5.65	85		16-17	150									
3.99	56		43-9	685									
3.51	49		43-9	585									
5.65	98		6-3	0									
5.72	100		7-5	0									
5.70	99		10-5	0									
5.70	99		9-8	0									
5.59	94		14-1	40									
5.72	93		12-3	32									
5.65	89		19-3	150									
5.75	87		27-5	260									
4.74	68		49-0	450									
4.45	62		60-0	580									

SURFACE CHLORINITY OBSERVATIONS IN SOUTH AUSTRALIAN COASTAL WATERS,
DECEMBER 1949-APRIL 1951

Compiled by I. M. THOMAS and S. J. EDMONDS*

I. INTRODUCTION

As an introduction to the study of intertidal fauna of the South Australian coastline, a survey was made of the fluctuations in surface chlorinity at the 10 selected stations shown in Figure 1. The position of each station and the date of commencement of observations are shown in Table 1.

TABLE 1

Station	Latitude	Longitude	Date of Commencement of Observations
Streaky Bay	32°48' S.	134°13' E.	9.xii.1949
Port Elliston	33°39' S.	134°53' E.	21.iii.1950
Port Lincoln	34°43' S.	135°51' E.	11.xii.1949
Port Augusta	32°31' S.	137°46' E.	6.xii.1949
Moonta Bay	34°03' S.	137°34' E.	10.xii.1949
Port Wakefield	34°12' S.	138°09' E.	10.xii.1949
Brighton	35°01' S.	138°31' E.	11.xii.1949
Kingscote	35°40' S.	137°38' E.	6.xii.1949
Victor Harbour	35°34' S.	138°37' E.	10.xii.1949
Robe	37°10' S.	139°45' E.	8.xii.1949

II. METHODS

Samples were collected at the surface in small dispensing bottles fitted with bakelite or aluminium screw caps with either rubber or chemical proof wads. Duplicate chlorinity titrations were carried out on 10-ml aliquots (measured with a N.P.L. pipette), using a 50-ml "blue-line" burette graduated in 0.10 ml. The chlorinity figures thus obtained, after correction according to Knudsen's tables, have been expressed to the nearest 0.05 Cl°/oo.

III. LIMITS OF ACCURACY

In view of the possible titrimetric error with the apparatus used, the data given can be considered reliable to within ± 0.05 Cl°/oo.

IV. ACKNOWLEDGMENTS

The authors are indebted to those people who have made regular collections of sea-water samples at the various stations.

The standard sea-water was provided by the Division of Fisheries, C.S.I.R.O.

The project was largely financed by State and Commonwealth Research Grants.

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Station: STREAKY BAY

Latitude: 32°48' S.

Longitude: 134°13' E.

Date	Depth (m.)	Cl ‰	Temp. °C.	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1949									
9.xii	0	21.00							
23.xii	0	21.20							
1950									
6.i	0	.40							
20.i	0	.55							
3.ii	0	.60							
17.ii	0	.75							
7.iii	0	.50							
30.iii	0	.55							
13.iv	0	.60							
27.iv	0	.55							
11.v	0	.20							
29.v	0	20.95							
11.vi	0	.75							
29.vi	0	.60							
9.vii	0	.45							
23.vii	0	.50							
6.viii	0	.25							
20.viii	0	.20							
3.ix	0	.20							
1.x	0	.50							
15.x	0	.60							
28.x	0	.60							
11.xi	0	.90							
29.xi	0	21.25							
10.xii	0	.65							
27.xii	0	.55							
1951									
6.i	0	.85							
19.i	0	.85							
4.ii	0	22.05							
18.ii	0	.00							
4.iii	0	21.85							
18.iii	0	.75							
13.iv	0	.45							

Station: PORT ELLISTON

Latitude: 33° 39' S.

Longitude: 134° 53' E.

Date	Depth (m.)	Cl ‰	Temp. °C.	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1950									
21.iii	0	19.75							
4.iv	0	.75							
18.iv	0	.85							
2.v	0	.75							
23.v	0	.75							
30.v	0	.55							
13.vi	0	.70							
27.vi	0	.70							
11.vii	0	.60							
25.vii	0	.40							
8.viii	0	.75							
22.viii	0	.60							
12.ix	0	20.00							
19.ix	0	.00							
3.x	0	19.65							
17.x	0	20.05							
31.x	0	.05							
14.xi	0	.00							
28.xi	0	.30							
12.xii	0	.25							
1951									
2.i	0	.14							
16.i	0	19.95							
30.i	0	.95							
6.ii	0	20.10							
20.ii	0	19.85							
6.iii	0	.85							
20.iii	0	20.10							
17.iv	0	19.75							

Station: PORT LINCOLN

Latitude: 34°43' S.

Longitude: 135°51' E.

Date	Depth (m.)	Cl ‰	Temp. °C.	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1949									
11.xii	0	20.05							
23.xii	0	19.95							
1950									
6.i	0	20.05							
20.i	0	19.95							
6.ii	0	20.20							
17.ii	0	.20							
3.iii	0	.20							
16.iii	0	.35							
28.iii	0	.50							
21.iv	0	.40							
3.v	0	.25							
12.v	0	.35							
25.v	0	.10							
13.vi	0	19.90							
27.vi	0	.85							
4.vii	0	.85							
18.vii	0	.80							
7.viii	0	.75							
23.viii	0	.90							
31.viii	0	.80							
15.ix	0	.90							
4.x	0	.85							
17.x	0	.90							
30.x	0	.95							
13.xi	0	20.26							
28.xi	0	.30							
13.xii	0	.60							
22.xii	0	.55							
1951									
10.i	0	.40							
19.i	0	.45							
3.ii	0	.65							
22.ii	0	.80							

Station: PORT LINCOLN

Latitude: 34°43' S.

Longitude: 135° 51' E.

Date	Depth (m.)	Cl ‰	Temp. °C.	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1951									
4.111	0	21.00							
16.111	0	20.75							
13.1v	0	.45							

Station: PORT AUGUSTA

Latitude: 32° 31' S.

Longitude: 137° 46' E.

Date	Depth (m.)	Cl ‰	Temp. °C.	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1949									
6.xii	0	25.10							
30.xii	0	.95							
1950									
6.i	0	.40							
24.i	0	26.10							
3.ii	0	25.65							
17.ii	0	.20							
3.iii	0	.60							
17.iii	0	.50							
31.iii	0	.95							
14.iv	0	.60							
1.v	0	.85							
9.vi	0	24.45							
26.vi	0	.50							
7.vii	0	.50							
21.vii	0	.50							
21.viii	0	.25							
18.ix	0	.65							
20.x	0	26.05							
10.xi	0	25.50							
11.xi	0	26.30							
26.xi	0	.65							
1951									
22.i	0	.80							
12.iv	0	.75							

Station: MOONTA BAY

Latitude: 34° 03' S.

Longitude: 137° 34' E.

Date	Depth (m.)	Cl ‰	Temp. °C.	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1949									
10.xii	0	20.75							
23.xii	0	21.45							
1950									
13.i	0	.20							
1.ii	0	20.65							
18.ii	0	21.00							
4.iii	0	.05							
18.iii	0	.00							
1.iv	0	20.90							
15.iv	0	.85							
29.iv	0	21.05							
14.v	0	20.95							
27.v	0	.85							
10.vi	0	21.10							
24.vi	0	.20							
8.vii	0	.60							
21.vii	0	.40							
5.viii	0	.15							
19.viii	0	.30							
1.ix	0	.45							
14.x	0	.40							
30.x	0	.05							
13.xi	0	.20							
9.xii	0	.40							
29.xii	0	.10							
1951									
13.i	0	.25							
20.i	0	.35							
10.ii	0	.55							
24.ii	0	.80							
10.iii	0	.45							
31.iii	0	.30							
21.iv	0	.10							

Station: PORT WAKEFIELD

Latitude: 34°12' S.

Longitude: 138°09' E.

Date	Depth (m.)	Cl ‰	Temp. °C.	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1949									
10.xii	0	22.20							
23.xii	0	.70							
1950									
8.i	0	24.60							
18.i	0	23.85							
3.ii	0	.20							
17.ii	0	.25							
3.iii	0	.80							
17.iii	0	.90							
31.iii	0	.50							
14.iv	0	.40							
28.iv	0	.20							
9.v	0	.15							
28.v	0	.00							
11.vi	0	22.35							
24.vi	0	.15							
7.vii	0	21.70							
21.vii	0	.85							
4.viii	0	.85							
18.viii	0	22.25							
3.ix	0	21.85							
15.ix	0	22.25							
13.x	0	23.10							
7.xi	0	.05							
24.xi	0	25.00							
8.xii	0	26.05							
29.xii	0	25.30							
1951									
5.i	0	.30							
20.i	0	.05							
9.ii	0	.55							
19.ii	0	.50							
3.iii	0	23.65							
16.iii	0	24.40							
10.iv	0	23.20							

Station: BRIGHTON

Latitude: 35° 01' S.

Longitude: 138° 31' E.

Date	Depth (m.)	Cl ‰	Temp. °C.	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1949									
11. xii	0	20.25							
24. xii	0	.55							
1950									
8. i	0	.60							
22. i	0	.50							
4. ii	0	.60							
19. ii	0	.65							
3. iii	0	.85							
18. iii	0	.65							
2. iv	0	.55							
16. iv	0	.60							
30. iv	0	.65							
14. v	0	.65							
4. vi	0	.20							
11. vi	0	.25							
25. vi	0	.45							
11. vii	0	.45							
23. vii	0	.60							
6. viii	0	.50							
20. viii	0	.20							
4. ix	0	.50							
18. ix	0	.55							
1. x	0	.60							
17. x	0	.60							
28. x	0	.45							
11. xi	0	.70							
26. xi	0	.85							
12. xii	0	.95							
26. xii	0	.85							
1951									
10. i	0	.80							
19. i	0	.95							
5. ii	0	.95							
21. ii	0	.95							
5. iii	0	.75							
14. iii	0	.95							
18. iv	0	.55							

Station: KINGSCOTE

Latitude: 35°40' S.

Longitude: 137°38' E.

Date	Depth (m.)	Cl ‰	Temp. °C.	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1949									
6.xii	0	20.10							
23.xii	0	.60							
1950									
6.i	0	.85							
20.i	0	.80							
3.ii	0	.75							
17.ii	0	.30							
3.iii	0	.65							
17.iii	0	.45							
31.iii	0	.35							
14.iv	0	.30							
28.iv	0	.20							
12.v	0	.25							
26.v	0	.30							
9.vi	0	.00							
23.vi	0	.15							
7.vii	0	19.85							
21.vii	0	20.00							
4.viii	0	19.65							
18.viii	0	.90							
1.ix	0	20.05							
15.ix	0	19.95							
29.ix	0	.95							
13.x	0	.95							
27.x	0	.85							
10.xi	0	.40							
24.xi	0	.65							
8.xii	0	.60							
22.xii	0	.85							
1951									
5.i	0	.50							
19.i	0	.65							
2.ii	0	.70							
16.ii	0	.60							
2.iii	0	.35							
16.iii	0	.70							
8.iv	0	.15							

Station: VICTOR HARBOUR

Latitude: 35° 34' S.

Longitude: 138° 37' E.

Date	Depth (m.)	Cl ‰	Temp. °C.	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1949									
10.xii	0	16.55							
24.xii	0	19.75							
1950									
7.i	0	.65							
21.i	0	.25							
3.ii	0	.60							
18.ii	0	.95							
4.iii	0	.35							
18.iii	0	.85							
1.iv	0	17.30							
15.iv	0	18.40							
29.iv	0	19.75							
12.v	0	.65							
27.v	0	.45							
7.vi	0	.85							
24.vi	0	.55							
8.vii	0	.90							
22.vii	0	20.00							
5.viii	0	16.05							
19.viii	0	19.90							
2.ix	0	.25							
16.ix	0	.90							
30.ix	0	.85							
14.x	0	16.75							
28.x	0	19.50							
11.xi	0	20.15							
30.xi	0	17.45							
9.xii	0	18.90							
23.xii	0	17.90							
1951									
6.i	0	18.80							
20.i	0	19.05							
5.ii	0	18.65							
17.ii	0	19.95							
3.iii	0	.55							
17.iii	0	.75							
14.iv	0	20.20							

Station: ROBE

Latitude: 37°10' S.

Longitude: 139°45' E.

Date	Depth (m.)	Cl ‰	Temp. °C.	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1949									
8.xii	0	19.95							
22.xii	0	20.10							
1950									
5.i	0	.20							
19.i	0	.25							
3.ii	0	.15							
17.ii	0	.60							
3.iii	0	.75							
17.iii	0	.55							
31.iii	0	.65							
14.iv	0	.40							
28.iv	0	.55							
12.v	0	.60							
26.v	0	.50							
9.vi	0	.25							
23.vi	0	.40							
7.vii	0	.05							
21.vii	0	.20							
4.viii	0	.15							
18.viii	0	18.90							
1.ix	0	19.25							
15.ix	0	.55							
29.ix	0	.35							
13.x	0	.40							
27.x	0	.70							
10.xi	0	.80							
27.xi	0	20.20							
7.xii	0	.20							
22.xii	0	19.95							
1951									
5.i	0	20.00							
18.i	0	.30							
2.ii	0	19.95							
15.ii	0	.90							
2.iii	0	.70							
20.iii	0	20.00							
9.iv	0	19.75							