

OCEANOGRAPHICAL STATION LIST

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

Volume 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**

Compiled by D. J. Rochford and R. Spencer

**COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH
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OCEANOGRAPHICAL STATION LIST

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

Compiled by D. J. ROCHFORD and R. SPENCER

I. INTRODUCTION

In this volume the results of analyses of bottom deposits in estuarine systems of eastern and south-western Australia during 1952 are given. In addition, the results are given of twenty-four hourly observations at certain selected stations in eastern and south-western Australia during the same period.

II. METHODS AND UNITS

Methods of collection and analysis and units are those given in previous volumes. The pH values for bottom deposits are obtained on a 3:1 distilled water suspension of the mud.

III. LOCATION OF STATIONS

The locations of the stations are the same as those given in previous volumes.

In this volume, as in Volume 11, the letter S or D after a station number indicates a sample of the bottom deposit taken from the first three inches of the mud surface or at two feet beneath the surface respectively. From May 1952 onwards the surface and two-foot sampling at Shell Point was discontinued and mud cores for analysis at 4-cm intervals downwards were taken instead. The depths given in such data are not corrected for compaction but in our experience this does not introduce a serious error into the depth figures.

IV. PERSONNEL

The laboratory analyses of the data have been the responsibility of Messrs. R. Spencer, A. Middleton, H. Jitts, and the hydrology staff at Cronulla and Perth. Messrs. C. Brown, G. Kitchen, K. Champion, and C. Wirrell were responsible for the field collecting. Misses O. Jacobsen, J. Pincombe, and S. Walden have been responsible for the processing of the data and for the preparation of the typed data sheets prior to printing.

21 MAY 1954

Location: FITZROY RIVER

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
12-	1	22.0	0	659	45.5	8	1.2	59
13.ii	2	45.0	42	623	38.6	10	2.1	91
	4	15.0	114	580	41.0	6	1.3	91
	6	7.0	155	498	39.3	9	1.2	74
	8	10.0	101	515	36.0	7	1.1	65
	10	1.0	136	622	42.3	10	1.5	81

Location: GLADSTONE HARBOUR

Date	Station	Inc. P.	Ads. P.	Total P.	Total Fa	Org. C.	Total N.	% Silt
1952								
13-	3	17.0	18	566	40.3	14	1.8	66
15.11	4	9.0	29	506	39.7	7	1.5	49
	5	6.0	44	440	36.1	15	1.2	72
	7	19.0	90	475	42.8	15	1.6	91

Location: **MARY RIVER**

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
19-	4	22.0	115	658	50.0		2.4	93
20.ii	8	0	195	690	48.0	16	2.1	99
	10	0	171	525	36.0	16	2.2	2
	12	12.0	170	704	47.9	19	2.6	95

Location: SANDY ISLAND STRAITS

Date	Station	Inc. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Site
1952								
19.11	1	1.0	0	569	29.1	26	2.1	6
	2	10.0	9	527	37.8	18	2.1	32
	4	2.0	13	427	24.5	9	1.3	7
	6	1.0	91	428	24.1	28	3.3	8
	8	2.0	1	720	30.4	26	3.4	5

Location: MORETON ISLAND LAGOON

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
1. ii	1	4.0	52	1613	11.4	143	16.7	16
	2	0.5	118	2203	15.8	91	18.9	0.5
28. ii	1	200.0	7	1536	43.3	193	18.7	79
	2	25.0	0	1823	22.4	167	18.2	13
14. iii	1	18.0	291	2197	14.4	134	20.0	19
	2	25.0	629	3410	24.2	175	21.1	22
26. iii	1	17.0	57	1693	22.6	161	19.4	11
	2	17.0	63	419	4.7	36	4.9	31
16. v	1	19.0	73	951	14.9	91	11.6	17
22. v	1	118.0	215	2769	10.5	175	25.5	82
	2	8.0	0	1683	12.6	124	16.0	8
5. vi	1	36.0	148	1784	14.9	130	13.8	15
	2	47.0	0	2862	22.4	171	18.9	24
20. vi	1	70.0	248	1275	21.0	133	14.2	43
	2	0	428	1645	26.7	200	20.5	5

Location: MORETON BAY - BRISBANE RIVER

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silic
1952 23.1v	1a	0.3	89	414	44.8	23	2.4	35

Location: DUNWICH OYSTER LEASE

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Site
1952								
29.ii	S	18.0	13	841	33.1	29	7.7	21
	D	2.0	7	627	58.4	43	3.4	6
4.iv	S	10.0	100	871	26.3	28	3.7	9
	D	2.0	0	574	35.2	28	2.3	4
30.iv	S	2.0	124	1498	57.2	30	3.4	7
	D	2.0	0	917	45.7	33	2.8	5
3.vi	S	3.0	9	772	34.8	34	4.3	7
	D	2.0	0	637	35.4	30	2.6	6
14.vii	S	5.0	3	1111	32.8	39	6.2	8
	D	2.0	8	713	39.9	26	3.1	8
29.viii	S	10.0	6	555	41.1	38	5.2	10
	D	4.0	43	935	48.1	49	3.6	5

Location: DUNWICH OYSTER LEASE

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952	(cm)							
10. ix	2	0	66	1030	36.5	30	5.2	7
	6	0	30	930	35.0	27	5.1	8
	10	0	0	1080	37.5	32	4.5	8
	14	0	16	810	37.2	35	3.7	10
	18	0	10	770	41.5	35	4.5	10
	22	0	9	790	40.5	38	4.3	9
	26	0	0	760	41.8	37	3.8	
	30	0	10	670	38.8	29	2.7	13
	34	0	6	770	44.5	31	2.9	8
	38	0	0	610	37.8	29	3.0	12
	42	0	7	480	31.2	25	2.8	10
	46	0	8	740	33.2	27	2.7	8
	50	0	0	520	35.5	28	2.8	8

Location: SOUTH DUNWICH OYSTER LEASE

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
27.ii	S	1.0	154	632	33.9	40	5.3	3
	D	1.0	65	556	50.2	36	4.5	9
4.iv	S	1.0	10	928	41.4	35	4.4	5
	D	1.0	99	596	44.7	41	3.7	12
1.v	S	1.0	179	1067	49.5	27	3.9	7
	D	0.5	75	683	42.8	31	3.7	15
2.vi	S	0.5	160	664	28.2	28	4.3	7
	D	1.0	112	728	47.0	30	4.6	10
17.vii	S	1.0	122	753	35.9	34	4.4	8
	D	0	83	639	43.6	36	3.9	9
29.viii	S	12.0	0	904	49.4	47	5.0	6
	D	4.0	96	306	46.7	39	3.3	9

Location: SOUTH DUNWICH OYSTER LEASE

Date	Station	Int. P.	Ads. P.	Total P.	Total Fa	Org. C.	Total N.	% Silt
1952	(cm)							
10. ix	2	0	107	690	37.0	27	4.0	6
	6	0.5	105	640	38.0	32	4.1	9
	10	0	78	520	36.2	27	3.9	8
	14	0	97	580	35.5	33	3.7	10
	18	0.5	63	530	35.8	36	4.1	9
	22	0	70	530	35.8	36	3.8	11
	26	0.5	64	500	38.2	37	3.8	5
	30	0.5	73	600	41.2	33	3.8	11
	34	0.5	91	480	37.0	36	3.4	9
	38	3.0	90	710	50.2	42	4.7	18
	42	0	38	720	53.8	54	5.0	7
	46	0.5	38	730	52.5	53	4.8	7

Location: MORETON BAY - LOGAN RIVER

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silk
1952								
5-8.ii	4	5.0	110	811	37.5	15	1.5	24
	5	3.0	156	513	40.0	18	1.2	16
	6	3.0	65	703	41.7	10	2.0	11
	6a	18.0	223	364	55.3	22	1.7	83
11-12.iii	4	16.0	0	690	51.1	16	1.7	10
	5	29.0	166	948	56.5	17	1.9	98
	6	20.0	165	576	53.9	14	1.4	83
	6a	23.0	119	995	63.2	20	1.5	74
	7a	3.0	116	656	62.0	20	3.0	7
26.iii	1	0.5	3	538	0	19	1.1	0.5
8-9.iv	4	3.0	185	1157	53.4	16	2.0	28
	6	20.0	312	1735	74.3	16	2.0	93
	6a	32.0	291	1500	66.5	17	2.0	92
	7a	13.0	256	1654	62.7	22	2.9	67
	8	14.0	219	1493	61.6	10	2.1	78
14-15.v	5	4.0	83	850	55.8	15	1.4	30
	6	15.0	414	1446	83.8	14	1.8	67
	6a	19.0	381	1646	69.4	14	2.4	97
	7a	9.0	298	997	58.7	8	1.2	64
1.vii	8	30.0	309	1378	58.0	15	2.0	99
	9	1.0	61	629	22.3	3	0.8	2
21-24.vii	4	9.0	114	985	45.2	13	1.7	37
	5	29.0	274	1504	63.6	21	2.3	86
	6a	16.0	270	1323	50.9	5	1.7	94
	7a	9.0	199	1519	58.7	17	2.1	30
20.viii	4	7.0	97	1085	47.1	17	1.9	25
	5	66.0	272	1098	65.5	5	2.0	93
	6	47.0	243	1345	53.1	17		98
	6a	13.0	160	668	51.4	16	1.3	61

Location: **NERANG AND COOMERA RIVERS**

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952 1. vii	3	8.0	256	1051	47.3	34	3.6	31
	4	3.0	268	1003	50.9	9	1.8	10

Location: MACLEAY RIVER

Date	Station	Int. P.	Ada. P.	Total P.	Total Fe'	Org. C.	Total N.	% Silt
1952								
19-	2	2.0	46	718	27.6	24	1.9	36
20.1	6	2.0	109	1360	54.4	42	3.65	65
	7	0	37	8340	33.4	24	3.2	3
26.11	2	4.0	96	531	26.6	14	1.41	53
	6	2.0	94	686	26.1	18	1.74	71
	7	0	70	780	29.5	16	1.23	1

Location: MANNING RIVER

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
16-	1	2.5	0	429	11.8	22	2.1	9
17.1	6	0.5	120	518	22.2	17	1.3	5
	9	0	47	225	18.8	8	2.64	1
29.11	6	0.5	134	871	44.2	13	1.4	3
	9	2.0	159	882	31.3	43	4.3	63

Location: PORT STEPHENS - TILLIGERRY CREEK

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
15.1	1	4.5	121	574	27.2	34	2.9	21
	1a	0.5	446	979	24.9	34	2.9	5
	1b	1.5	156	871	28.8	27	2.8	11
	2	1.0	106	710	28.4	44	3.8	11

Location: HAWKESBURY RIVER

Date	Station	Int. P.	Ads. P.	Total P.	Total Fa	Org. C.	Total N.	% Sit
1952								
22-	1	4.0	93	1980	13.0	26	2.43	12
24. i	3	12.0	258	965	8.0	43	2.5	78
	6	4.0	159	756	12.8	26	2.25	91
	9	0	171	667	13.9	33	1.94	75
	11	0	199	708	9.0	29	2.4	91
	15	41.0	113	625	10.6	28	2.4	85
	21	0.5	140	584	8.9	22	1.3	12
15. ii	21	0.5	60	215	18.5	25	1.6	13
26-	1	0.5	87	653	30.4	27	1.9	23
29. ii	3	4.5	165	719	22.1	52	2.8	67
	6							71
	8							92
	9	2.5	23	469	24.4	25	1.8	47
	11	2.0	51	485	33.0	26	2.0	45
	15	2.5	64	451	22.4	28	1.9	81
26-	6	4.0	46	614	21.7	23	2.0	29
28. iii	8	2.0	41	432	18.4	40	2.3	75
	15	3.0	17	274	21.3	25	2.4	93
18-	21	0	97	395	22.8	16	1.2	41
19. iv								
6-	1	0	0	1141	29.4	38	4.1	3
8. v	6	0	108	568	21.2	28	1.42	8
	8	0.5	97	543	32.0	27	1.8	52
	15	0	50	511	29.5	32	1.1	97
6. vi	21	0	74	501	30.4	24	1.1	19

Location: BOTANY BAY - GEORGE'S RIVER

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silc
1952								
15-	11	0.5	99	697	22.7		2.3	4
17.i	21	0.5	92	489	37.6	16	1.3	5
13-	11	0	199	1096	46.5	27	2.6	2
14.ii	21	0	82	486	45.2	14	1.58	4
6-	11	0	9	958	25.1	26	1.2	5
7.iii	21	0	42	525	40.4	13	1.3	6
17.iv	21	0.5	81	394	17.2	20	1.6	19
7.vii	1	3.0	450	3230	29.6		12.0	9
18.ix	1			1850	25.8	40	5.7	5

Location: SHELL POINT OYSTER LEASE

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Sic
1952								
8.1	2.S	5.5	120	769	24.4	39	3.2	21
	D	5.0	67	719	25.5	73	4.3	25
	7.S	4.0	136	700	19.2	35	3.0	16
	D	3.0	84	859	23.7	58	4.4	7
	10.S	7.0	0	794	25.6	45	3.3	12
	11.S	6.0	0	948	18.4	39	4.9	8
	D	42.0	0	843	29.4	41	3.0	34
	12.S	6.0	26	1080	24.0	48	4.2	15
	D	14.0	0	900	28.6	52	3.9	22

Location: SHELL POINT STATION NUMBER 2

Date	Station	Inc. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952	(cm)							
16.v	2	0	83	864	27.3	41	2.6	28
	6	9.5	83	872	23.2	46	2.3	25
	10	8.0	49	763	25.0	40	2.1	31
	14	3.0	113	920	29.6	55	2.8	35
	18	3.5	56	880	26.9	62	2.8	15
	22	3.0	53	698	25.0	53	2.3	50
10.vi	2	9.5	142	847	29.2	44	3.9	25
	6	3.5	119	905	30.5	41	3.4	31
	10	7.0	106	965	32.5	53	4.2	12
	14	0	83	849	34.3	50	4.1	25
	18	12.0	83	780	29.6	41	3.1	31
	22	0	103	1625	32.8	42		32
	26	12.5	78	721	31.6	72	3.5	34
	30	13.0	84	821	38.3	62	4.2	30
	34	15.0	78	733	32.9	64	3.7	30
	38	16.0	91	855	41.1	70	4.8	24
	42	8.0	98	854	35.6	50	5.4	21
	46	0	103	880	37.0	77	5.6	20
	50	0	83	836	44.3	68	4.9	20
	54	0	54	734	40.9	62	4.2	20
58	0	60	833	83.9	74	5.8	20	
62	0	39	946	41.6	68	5.0	21	
15.vii	2	0	142	745	33.5	33	3.3	
	6		77	700	25.2	37	3.5	
	10	0	61	625	24.0	38	3.1	30
	14		52	700	27.0	40	3.5	
	18		35	565	23.8		2.9	
	22	0	20	390	14.8	24	2.3	30
	26		49	610	27.5	49	3.7	
	30		48	590	30.0	42	3.1	
	34		42	550	23.2	47	3.7	30
	38		42	620	28.0	66	4.5	
	42		31	600	25.8	71	4.6	
	46	10	60	1100	51.5	102	7.8	22
	50		80	1420	75.0	137	10.4	
	54		14	660	28.2	57	4.2	
58	4	12	535	23.4	46	3.0	24	

Location: SHELL POINT STATION NO. 2

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Nit
1952	(cm)							
7. viii	2		152	790	34.5	52	4.9	
	6	1.5	94	525	26.2	35	2.9	27
	10		72	595	29.2	39	3.2	
	14	2.0	43	480	27.5	37	3.1	28
	18		36	385	19.5	33	2.3	
	22		51	540	31.5	46	3.3	
	26	4.0	42	640	31.5	61	4.0	27
	30		85	895	45.0	74	5.3	
	34		75	650	35.1	53	3.8	
	38	1.5	46	720	30.8	61	4.1	24
	42		29	685	39.0	52	3.9	
	46		23	585	33.5	44	3.0	
	50	1.0	22	625	38.5	52	3.1	24
4. ix	2	5.5	147	660	25.8	38	3.2	27
	6		135	600	24.5	37	2.9	
	10		110	580	21.2	35	2.8	
	14	1.5	82	690	26.0	40	3.5	23
	18		53	600	27.0	43	3.1	
	22		49	530	23.5	40	3.0	
	26	2.5	83	650	32.0	51	3.7	35
	30		64	570	26.0	51	3.7	
	34		80	760	34.5	61	4.7	
	38	1.0	67	850	40.5	66	4.3	21
	42		56	790	39.5	64	4.1	
	46		63	650	33.8	64	4.6	
	50	1.5	42	720	38.0	62	4.6	23
	54		41	720	39.5	67	4.4	
	58		19	690	40.0	63	4.4	
	62	1.5	23	720	35.2	54	3.9	23

Location: SHELL POINT STATION NO. 7

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952	(cm)							
16.v	2	15.5	139	1219	31.3	70	5.0	13
	6	21.0	344	1646	33.3	69		20
	10	15.0	318	1300	33.8	67	4.9	40
	14	6.5	266	1115	26.9	57	2.4	21
	18	13.5	419	1295	39.8	79	6.2	20
10.vi	2	0.5	203	1166	38.1	54	4.5	11
	6	3.0	198	890	48.2	50	4.3	36
	10	3.0	184	1300	54.4	65	4.8	26
	14	2.5	246	1040	40.5	70	5.1	21
	18	13.0	314	943	30.0	53	4.5	44
	22	7.0	448	1280	40.9	67	5.3	37
	26	0	148	1035	32.1	63	4.3	8
	30	0	73	1160	25.0	62	4.0	8
	34	0	156	893	20.2	78	4.7	5
	38	0	80	750	39.7	46	4.0	7
	42	0	153	862	41.7	73	4.5	10
	46	1.5	146	770	34.0	61	5.4	17
	50	3.5	86	904	27.7	64	4.5	20
	54	1.5	72	780	31.0	69	4.5	19
	58	2.0	56	893	38.3	81	5.5	21
15.vii	2		120	880	25.8	43	3.5	
	6	1.5	105	710	25.6	47	3.7	16
	10		100	835	26.8	55	4.2	
	14		172	1010	33.5	68	5.0	
	18	1.5	197	1050	32.8	63	4.8	23
	22		81	1080	27.5	53	3.0	
	26		97	715	20.0	36	2.6	
	30		87	770	18.6	42	3.0	
	34		63	760	35.0	57	3.3	
	38		75	605	29.2	66	4.5	
42	1.0	114	755	28.0	63	4.1	16	

Location: SHELL POINT STATION NO. 7

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt	
1952 7. viii	(cm)								
	2	1.0	171						
	6		163	925	37.5		3.7	7	
	10		175	965	37.5	53	4.0		
	14	1.5	179	925	30.8	59	4.3		
	18		153	925	30.2	55	4.3	19	
	22		140	1080	32.0	44	4.5		
	26	0	36	600	24.0	48	4.7		
	30		62	880	38.5	34	2.6	4	
	34		21	660	27.8	55	3.9		
	38	0	12	680	25.5	42	3.3		
	42		15	820	35.0	43	3.4	7	
	46		92	750	36.5	67	5.1		
	50		63	770	38.2	50	5.3		
	54	1.5	75	830	40.0	51	5.6		
	58		97	820	39.8	75	5.6	22	
	62	1.0	64	810	35.0	80	5.1		
	66		43	730	33.8	52	5.7	22	
	4. ix	2	1.0	145	980	28.5	45	4.0	9
		6		170	1050	32.0	52	4.3	
10			227	1400	39.8	69	5.8		
14		8.5	263	1160	34.0	54	4.8	28	
18		1.0	165	970	23.8	45	3.8	11	
22		1.5	42	1620	36.5	76	7.2	12	
26		0.5	64	1320	28.5	42	4.7	9	
30		0.5	131	1440	38.5	62	5.7	6	
34		0.5	138	1300	38.2	62	4.2	5	
38		0	37	1070	34.5	66	4.6	9	
42		0.5	31	1050	38.5	72	5.3	9	
46		2.5	65	920	37.8	70	5.3	24	
50		2.0	65	760	34.0	71	5.7	20	
54		1.5	68	850	39.8	73	4.9	17	
58	3.5	57	790	38.5	49	5.1	20		

Location: SHELL POINT STATION NO. 11

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952	(cm)							
16.v	2	8.5	133	1297	33.3	61	3.2	15
	6	14.5	104	1154	27.4	61	2.5	15
	10	20.0	144	1254	35.6	55	2.6	15
	14	11.0	199	1485	42.2	57	2.9	16
	18	48.0	609	2500	38.4	74	3.7	17
	13.vi	2	16.5	39	1354	30.0	53	6.2
6		9.0	29	1336	33.2	53	5.2	13
10		9.5	42	1169	41.2	55	5.2	14
14		14.0	42	1306	33.9	60	6.2	18
18		40.0	0	1270	30.4	54	4.8	16
22		5.5	50	1155	41.5	52	4.1	19
26		6.5	26	789	35.0	56	3.7	16
30		11.0	17	766	39.8	60	3.8	16
34		6.5	5	736	40.0	60	3.8	14
38		4.5	23	793	45.6	65	3.6	28
42		5.5	19	779	41.4	67		18
46		4.0	14	778	50.9	70	3.6	28
15.vii		2	0	18	730	25.0	48	2.6
	6	0	115	830	29.4	37	3.0	
	10	0	89	905	32.5	49	4.3	
	18		49	1066	41.8	57	4.5	
	22		53	820	39.0	58	4.3	
	26	0	31	675	42.0	57	3.7	19
	30		21	740	40.5	64	4.0	
	34		17	645	42.5	56	3.6	
	38	0	33	605	44.0	59	3.2	13

Location: SHELL POINT STATION NO. 11

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt.
1952	(cm)							
7. viii	2	2.0	122	1070	27.2	40	3.9	12
	6		71	965	29.4	44	4.0	
	10		96	1220	31.0	51	4.5	
	14	1.0	97	1200	32.8	51	4.2	14
	18		83	1350	21.8	54	4.4	
	22		63	1290	30.8	54	4.6	
	26	1.0	60	890	35.0	56	4.0	20
	30		42	700	38.0	61	3.9	
	34		32	570	34.8	53	3.3	
	38	1.0	7	580	34.4	50	3.0	15
4. ix	2	5.0	160	970	36.8	38	3.5	29
	6		167	890	33.5	44	3.6	
	10		120	1020	33.2	45	3.9	
	14	1.0	130	865	30.0	41	3.9	15
	18		101	1440	31.0	47	4.0	
	22		18	1010	40.8	32	4.5	
	26	0.5	12	710	26.8	50	3.1	19
	30		9	620	31.5	62	3.5	
	34		7	780	32.0	71	3.2	
	38	1.0	9	730	32.2	61	3.3	18
	42		5	740	34.5	55	3.3	

Location: SHELL POINT STATION NO. 12

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silic
1952	(cm)							
16.v	2	13.5	143	1260	31.8		3.0	23
	6	9.5	167	1390	38.9	77	5.4	18
	10	3.5	77	855	24.3	47	3.5	20
	14	0	136	1250	28.8	64	2.9	23
	18	14.5	137	1214	30.9	68	2.8	21
12.vi	2	13.0	82	1120	37.1	55	5.2	21
	6	0	28	843	31.9		4.1	19
	10	9.0	68	1324	42.9	58	4.8	25
	14	44.5	13	1270	40.9	61	5.3	25
	18	18.5	10	935	35.2	56	4.4	14
	22	11.5	85	1204	45.6	76	5.2	17
	26	9.0	39	937	48.2	77	5.2	21
	30	8.0	18	838	48.8	80	4.7	18
	34	4.0	21	814	48.0	74	4.4	28
	38	4.0	16	802	44.6	70	3.6	22
	42	0	0			54	2.4	25
	46	5.5	9	826	54.7	71	3.7	25
	50	8.0	6	755	47.7	63	3.3	31
15.vii	2		44	915	28.0	40	3.4	
	6		220	2510	79.0	57	4.5	
	10	3.0	90	1110	29.7	57	4.0	18
	14		154	2300	34.0	41	4.0	
	18		9	3540	35.0	49	4.2	
	22	3.0	52	1300	36.6	68	3.9	15
	26		22	710	42.5	65	3.6	
	30		11	615	33.0	60	2.8	
34	6.0	6	1570	40.8	54	3.1	18	
38		46	3240	28.0	52	3.8		

Location: SHELL POINT STATION NO. 12

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952 7.viii	(cm)							
	2	6.0	113	825	31.8	45	3.8	26
	6		125	875	30.5	42	3.8	
	10		93	885	32.4	51	4.1	
	14	1.0	115	955	30.8	56	4.7	18
	18		104	950	32.0	55	4.2	
	22		61	655	34.8	55	4.3	
	26	1.0	43	630	28.8	51	4.1	25
	30		24	590	42.5	62	4.2	
	34		11	610	46.5	64	3.8	
	38	0	17	650	43.5	82	4.4	28
	42		7	540	33.5	56	2.9	
4.ix	2	2.0	39	1440	36.2	54	4.2	18
	6		55	2220	41.5	57	4.7	
	10		6	2640	34.2	55	4.9	
	14	3.0	27	1190	38.8	68	4.9	18
	18		59	3060	36.8	61	4.8	
	22		19	740	36.2	60	3.6	
	26		15	670	36.8	67	3.5	
	30	1.5	7	470	34.0	57	3.7	25
	34		8	575	33.2	47	3.2	
	38	1.5	2	580	36.5	55	2.9	21
	42		76	600	34.0	52	2.7	
	46		10	660	34.5	46	2.2	
50	2.0	44	910	30.5	50	4.0	20	

Location: SHELL POINT MARSH

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
8.1	6	2.0	118	662	5.5	55	5.4	6
	9	1.0	27	564	8.3	32	3.6	6
23. vi	6	6.0	124	977	16.7	106	8.8	25
	9	1.0	60	1700	42.6	79	11.1	5
28. xi	6	0.5	2	100	3.0	6	0.5	4
	9	6.0	165	900	11.0	84	6.1	17

Location: PORT HACKING

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silc
1952								
3.i	4	46.0	0	1131	30.4	72	5.1	89
	8	3.0	141	685	24.5	59	2.5	31
10.i	4	30.0	0	1048	21.6	49	4.8	33
14.i	4	5.0	0	989	20.2	65	4.6	82
	8	0	173	988	27.8	56	3.7	13
21.i	4	27.0	0	799	23.1	61	4.8	81
29.i	4	54.5	0	1336	32.2	54	5.35	44
	8	2.0	109	963	38.2	71	4.27	13
8.ii	4	54.0	0	1122	28.1	69	5.7	86
12.ii	4	81.0	0	1100	31.0	62	6.0	81
	8	2.0	81	858	28.1	59	4.63	7
20.ii	4	52.0	0	1008	26.9	58	4.8	82
25.ii	4	42.5	1	1655	32.0	67	5.5	74
	8	0.5	129	530	28.6	65	4.9	8
5.iii	4	8.0	11	1310	27.5	66	5.7	89
11.iii	4	10.0	33	1427	24.2	65	5.8	47
	8	2.0	178	1248	36.7	62	4.6	31
20.iii	4	7.0	4	786	19.3	65	5.5	93
24.iii	4	16.0	2	734	28.4	88	7.1	90
	8	1.0	62	1420	36.8	66	4.9	8
31.iii	4	0	21	995	24.8	66	5.1	93
10.iv	4	0	24	1127	17.9	67	6.36	88
	8	1.0	82	916	28.8	50	3.38	29

Location: PORT HACKING

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
17. iv	4	0	17	670	26.6	61	4.75	96
	8	1.0	155	1032	29.2	64	4.02	23
22. iv	4	0	41	963	26.2	56	4.23	54
28. iv	4	0	29	1224	26.4	58	4.92	90
	8	0	145	1058	21.6	56	3.05	12
14. v	4	0	23	1025	28.1	70	5.1	85
	8	0	104	971	22.2	68	3.6	22
23. v	4	4.0	35	1160	23.2	79	5.9	91
28. v	4	8.0	10	580	22.8	67	3.6	84
	8	1.0	83	849	23.3		1.6	30
19. vi	4	4.0	39	701	25.9	49	4.5	75
	8	0	171	945	66.0	84	3.1	8
3. vii	4	6.0	23	1022	30.7	46	3.4	36
	8	1.0	172	918	46.4	79	1.5	13
21. vii	4	10.0	4	725	18.8	59	4.6	91
30. vii	4	7.0	13	1180	26.0	61	3.9	80
	8	0	72	735	34.0	57	3.9	9
8. viii	4	5.0	9	1080	23.8	62	5.0	87
19. viii	4	3.0	22	750	21.0	36	3.6	92
	8	2.0	106	740	33.0	49	2.9	47
22. viii	4	6.0	17	770	24.0	44	4.0	93
16. ix	4	6.0	11	970	26.5	62	5.1	76
	8	0.5	148	920	41.8	71	4.4	12

Location: PORT HACKING

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
26. ix	4	6.0	27	1110	31.0	63	5.8	86
30. ix	4	1.0	11	910	24.0	50	4.7	26
	8	4.0	37	630	44.0	61	3.7	5
8. x	4	12.0	11	890	27.5	70	5.6	89
15. x	4	0	30	830	26.5	70	5.3	92
	8	2.0	87	1050	38.0	63	4.1	33
30. x	8	1.0	96	700	27.0	38	2.7	40
6. xi	4	6.0	12	960	22.0	42	3.8	46
11. xi	4	6.0	28	1110	28.0	52	5.0	50
	8	0.5	61	810	35.0	58	3.5	10
21. xi	4	32.0	7	1000	27.0	61	4.9	83
2. xii	4	24.0	23	850	23.0	54	5.3	78
	8	6.0	190	900	24.0	61	4.2	9
10. xii	4	20.0	9	1000	29.0	55	6.8	52
	8	3.0	185	800	39.0	82	5.0	33
19. xii	4	9.0	9	725	35.8	74	6.0	66
23. xii	4	4.0	6	900	24.0	41	4.2	29
	8	0.5	116	700	35.0	76	4.2	19

Location: MATANBAR - PORT HACKING

Date	Station	Inc. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
4.i	1	2.0	10	706	8.5	42	3.9	8
	2	6.0	0	986	13.5	99	7.8	12
	3	21.0	0	706	16.6	91	6.4	34
	4	29.0	0	1098	29.4	81	4.6	55
17.i	1	2.0	17	954	10.6	50	5.5	5
	2	1.0	0	836	3.4	40	4.2	2
	3	36.0	0	1655	13.4	109	8.1	44
	4	18.0	0	1060	26.0	81	4.6	41
30.ii	1	0.5	0	947	12.8	73	7.8	1
	2	0	44	775	15.3	113	10.74	5
	3	4.0	0	864	19.2	112	10.4	9
	4	1.0	59	413	12.8	108	6.6	12
14.iii	3	2.0	27	1862	35.5	127	10.0	47
	4	2.0	10	1230	25.0	94	5.73	57
25.iii	2	0	48	2539	27.1	117	14.4	4
	3	1.0	59	1633	25.7	135	10.5	22
	4	6.0	62	1010	25.2	147	7.6	73
16.v	1	0	55	3375	25.0	75	8.0	
	2	0	39	1270	16.1	121	8.6	6
	3	0	48	1270	27.4	89	6.5	59
	4	0	82	1200	26.6	96	5.7	30
3.vii	1	2.0	116	2918	107.9	473	10.5	4
	2	3.0	92	290	79.8	202	15.9	7
	3	19.0	68	1344	49.3	127	9.2	65
	4	34.0	219	1056	36.2	122	2.1	60
8.viii	1	3.0	18	1620	35.6	94	6.5	10
	2	0	29	1450	23.4	116	11.2	6
	3	4.0	44	1340	28.0	100	6.3	63
	4	6.0	63	1350	29.5	103	6.1	69

Location: MATANBAR - PORT HACKING

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silc
1952 29.viii	1	0	50	1070	29.5	61	5.7	6
	2	5.0	117	1540	26.0	113	14.2	25
	3	4.0	46	640	17.5	47	2.6	42
	4	13.0	122	1140	29.5	78	6.4	65
22.ix	1	0	21	1980	33.0	78	8.3	4
	2	1.0	63	2500	45.0	169	16.5	4
	3	6.0	44	1260	36.5	109	7.2	52
	4	2.0	75	870	27.5	97	5.8	60
22.x	1	1.0	44	2080	45.0	87	6.6	10
	2	0	61	1950	31.0	136	12.9	11
	3	6.0	51	1460	38.0	110	7.0	42
	4	10.0	58	1250	32.0	104	7.8	61
6.xi	1	0	29	1650	27.0	119	6.4	5
	2	1.0	19	1600	40.0	92	8.5	6
	3	14.0	52	1220	35.0	91	6.1	49
	4	37.0	64	1540	44.0	56	6.9	70
4.xii	1	16.0	0	2000	50.0	96	7.6	4
	2	12.0	0	1550	44.0	136	14.0	11
	3	52.0	31	1100	36.0	102	6.9	58
	4	91.0	39	1250	45.0	120	7.4	91

Location: TAMAR RIVER

Date	Station	Inc. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Sift
1952 20. iv	10	0	44	290	39.7	35	2.6	31
31. vii	10	0	26	300	20.0	21	1.7	35

Location: PITTWATER - TASMANIA

Date	Station	Inc. P.	Ads. P.	Total P.	Total Fe.	Org. C.	Total N.	% Silt
1952 7.i	2	7.0	0	1753	12.8	45		3
	3	1.0	0	306	17.0			1
	4	12.0	86	404	18.8	9.2	0.9	57
29.ii	2	1.0	252	526	22.0	23	5.84	3
	3	1.5	0	959	24.0	69	7.6	4
	4	3.5	132	230	19.8	14	1.58	38
27.iii	2	0	323	1273	57.0	40	6.8	0.5
	3	0	51	1265	25.0	33	7.13	2
	4	0.5	86	316	13.8	11	1.15	41
17.iv	2	5.0	120	1530	30.0	32	4.23	67
	3	0	26	1470	58.8	30	4.15	1
22.v	2	0.5	209	944	37.2	31	3.8	5
	3	0.5	45	2900	35.0	71	10.2	3
	4	2	73	368	21.6	11	1.1	34
26.vi	2	0.5	201	791	56.6	31	4.6	9
	3	1.0	176	1026	54.7	37	4.5	12
	4	11.0	48	274	27.7	10	1.2	77
24.vii	2	1.0	348	1170	38.2	32	3.7	4
	3	1.0	83	2520	35.8	46	6.4	3
	4	2.0	80	385	22.4	11	1.1	53
21.viii	2	3.0	182	580	41.0	25	3.6	23
	3	2.0	0	2700	52.0	45	3.8	3.5
	4	2.0	83	380	28.0	8	1.3	49
25.ix	2	0.5	100	540	19.5	13	2.2	3
	3	2.0	180	2800	50.0	61	10.0	3
	4	4.0	81	300	28.5	19	1.4	53

Location: **PITTWATER - TASMANIA**

Date	Station	Inc. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Site
1952								
23. x	2	1.0	240	900	43.0	29	3.3	4
	3	0	47	1100	10.0	12	2.2	3
	4	0	51	185	14.0	5	0.6	43
27. xi	2	2.0	268	1100	66.0	34	4.2	1
	3	18.0	80	1350	61.0	34	5.3	7
	4	3.0	67	400	28.0	10	0.8	84
22. xii	2	10.0	162	540	39.0	25	3.45	96
	3	0.5	8	1570	32.5	53	7.7	2
	4	5.0	91	370	34.0	13	2.0	96

Location: LAKE DOBSON - TASMANIA

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952 6.111	2	0	34	356	6.6	56	4.2	79

Location: WILSON'S INLET

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
29.11	1	8	70	755	26	48	5.2	15
	2	3	113	665	36	52	5.8	40
	3	0.4	144	655	33	27	3.4	6
	4	2	70	500	40	49	4.4	35
	5	2	112	560	20	42	3.4	4
	6	2	250	1454	55	118	11.5	4

Location: NORNALUP INLET

Date	Station	Inc. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Sitc
1952								
1.iii	2	8	12	535	27	62	4.7	32
	3	18	0	575	21	55	4.2	50
	4	13	0	350	19	55	3.7	38
	5	7	29	580	28	68	2.7	21

Location: **HARDY INLET**

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
5.iii	1	0.1	0	61	2.2	33	0.2	1
	2	3.0	5	920	12.0	46	6.1	11
	3	6.0	7	535	43.0	56	5.2	25
	5	3.0	16	230	44.0	43	3.0	35

Location: LESCHENAULT INLET

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
7.111	1	183	0	1770	50	84	6.7	68
	2a	0	25	340	16	27	1.8	1
	3	1	56	565	35	27	2.8	3
	3a	0	155	475	42	33	3.2	10
	4	0	175	585	32	46	4.75	1
	6	0	85	440	33	31	2.5	2.5

Location: PEARL-HARVEY INLET

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Sift
1952								
30. i	1	2.0	0	455	12.0	19	2.5	4
	2	4.0	30	170	22.0	13	1.7	84
	3a	0	56	200	21.0	15	2.0	10
	5	0	22	230	18.0	19	4.0	1.5
	8	2.0	201	535	64.0	21	2.8	38
	20. iii	1	2.0	0	460	15.0	26	2.5
2	1.0	28	160	22.0	14	1.6	70	
3a	0	26	210	37.0	33	2.0	33	
5	0	30	195	16.0	33	2.4	1	
8	0	215	395	57.0	25	2.4	77	
22. iv	1	5.0	0	1025	31.0	45	8.5	5
	2	1.0	57	380	31.0	32	6.1	7
	3a	0	167	485	34.0	39	5.9	6
	5	0	36	210	70.0	40	4.9	32
	8	0	150	560	41.0	25	5.6	54
	14. v	1	0	32	835	16.0	38	5.0
2		0	24	560	58.0	75	6.6	86
3a		0	35	350	28.0	34	3.8	84
5		0	105	400	25.0	40	5.3	85
8		68.0	20	890	50.0	35	1.9	68
12. vi		1	1.0	12	1270	25.0	44	6.1
	2	4.0	9	160	24.0	16	3.9	82
	3a	0.5	43	405	45.0	34	2.5	4
	5	6.0	21	185	29.0	43	4.6	80
	8	12.0	148	685	105.0	32	3.6	72

Location: SWAN RIVER

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silc	
1952									
16.1	1	11.0	0	850	14.0	43	3.2	27	
	3	4.0	2	605	30.0	30	2.5	11	
	4	47.0	47	940	47.0	32	4.8	50	
	5	11.0	72	520	46.0	31	3.5	82	
	5a	7.0	46	550	28.0	25	3.4	23	
	6	8.0	97	480	35.0	24	1.9	96	
	7	15.0	67	490	40.0	36	3.2	53	
	8	16.0	432	830	40.0	36	3.8	70	
	9	7.0	155	750	45.0	42	5.5	33	
6.11	4	6.0	43	1140	62.0	68	6.1	63	
	5	9.0	70	480	50.0	40	3.9	90	
	5a	2.0	126	695	24.0	31	2.6	2.5	
	6	10.0	25	360	31.0	21	1.6	67	
	7	8.0	152	595	52.0	28	2.9	94	
	8	0	355	970	56.0	42	4.2	70	
	9	1.0	73	535	48.0	42	3.2	20	
	13.111	3	20.0	2	760	20.0	32	3.2	23
		4	27.0	25	585	35.0	28	2.9	32
5		7.0	137	520	40.0	33	3.6	90	
5a		6.0	125	630	23.0	39	3.4	30	
6		9.0	55	510	38.0	29	2.8	47	
7		25.0	115	580	42.0	31	3.4	98	
8		104.0	190	695	45.0	33	3.3	80	
9		14.0	45	465	54.0	45	3.7	31	
2.1v		1	13.0	4	890	8.0	36	4.0	35
	3	26.0	34	2580	23.0	62	13.5	12	
	4	22.0	42	730	30.0	50	5.0	40	
	5	28.0	90	575	33.0	35	4.3	80	
	5a	19.0	105	1180	41.0	41	8.7	17	
	6	54.0	128	530	36.0	26	2.4	95	
	7	45.0	129	625	82.0	34	4.0	97	
	8	5.0	253	1290	62.0	37	4.8	72	

Location: SWAN RIVER

Date	Station	Int. P.	Ads. P.	Total P.	Total Fe	Org. C.	Total N.	% Silt
1952								
7.v	1	11.0	0	1330	10.0	49	4.2	38
	3	19.0		1870	16.0	59	7.4	17
	4	12.0	0	690	20.0	50	4.9	40
	5	20.0	93	555	30.0	28	3.3	93
	5a	43.0		2300	35.0	63	12.0	8
	6	6.0	88	525	23.0	30	2.7	97
	7	27.0	65	515	30.0	41	3.9	97
	8	7.0	264	980	28.0	39	6.0	42
	9	48.0		445	30.0	44	3.7	48
9.vi	1	20.0		1570	14.0	52	5.6	21
	3	12.0		3600	570.0	130	19.0	2
	4	10.0	10	580	33.0	44	4.3	43
	5	12.0	61	495	60.0	34	3.1	87
	5a	40.0		3600	40.0	100	22.5	5
	6	6.0	66	385	33.0	28	2.3	95
	7	17.0	80	430	39.0	31	2.6	98
	8	7.0	123	710	69.0	45	5.0	40
	9	8.0	112	545	53.0	48	4.0	44

Location: RICHMOND RIVER NO. 5 - WARDELL

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952			Sky						
2.11	7am	22	7	25.00	14.84	4.23	82	33	6
	8	20	9	25.40					
	9	18	9	25.30	14.22	4.57	88	37	
	10	22	2	25.50					
	11	28	1	25.70	13.84	4.70	91	37	10
	12 n	33	1	26.00					
	1pm	35	0	25.70	14.48	4.86	94	30	
	2	36	2	25.70					
	3	34	1	26.30	14.29	4.97	97	42	0
	4	31	0	26.90					
	5	24	0	25.80	14.89	5.10	100	30	
	6	19	0	25.90					
7	15	1	25.70	13.78			33	12	
8	12	0	25.70						
9	12	0	25.60	13.40	4.09	78	35		
10	17	0	25.70						
11	24	0	25.70	13.21	4.73	91	36	27	
12 m	30	0	25.50						
3.11	1am	36	1	25.20	14.03	4.73	91	34	
	2	36	1	25.00					
	3	42	1	24.40	15.26	4.79	92	31	3
	4	41		24.50					
	5	37		24.30	16.00	4.84	93	37	
	6	34		24.40					
	7	28		24.30	15.47	4.57	88	24	4

Location: CLARENCE RIVER NO. 5 - MACLEAN

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952			Sky						
31.1	6pm	34	5	27.90	12.24	4.71	93	12	23
	7	32	7	27.90					
	8	30	7	27.90	16.46	4.93	101		
	9	29	1	27.80					
	10	34	1	27.80	10.09	4.96	95	12	52
	11	39	0	27.80					
	12 m	42	0	27.50	11.30	4.90	95		
1.11	1am	43	0	27.40					
	2	44	0	27.40	11.88	4.55	88	12	28
	3	42	0	27.30					
	4	39	0	27.20	12.68	4.47	87		
	5	37	0	27.20					
	6	35	0	27.10	11.88	4.57	88	20	79
	7	33	0	27.20					
	8	32	0	27.30	10.72	4.73	93		
	9	31	0	27.60					
	10	36	0	28.10	9.49	4.90	94	10	45
	11	37	0	28.00					
	12 n	43	0	28.20	11.09	5.04	98		
	1pm	41	4	28.00					
	2	46	6	27.90	12.02	4.83	95	13	19
	3	44	6	27.90					
	4	44	6	27.70	12.33	4.86	95		
	5	40	7	27.50					
	6	39	7	27.50	11.77	4.80	93	15	26

Location: MACLEAY RIVER NO. 2 - JERSEYVILLE

Date	Time	Tide (In.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952			Sky						
19.1	5pm	20	9	26.20	17.16	5.01	101	9	2
	6	17	9	26.00					
	7	13	8	25.70	15.27	4.98	98	10	0
	8	13	5	25.60					
	9	18	8	25.60	13.63	5.22	100	8	0
	10	25	4	25.60					
	11	31	4	25.60	14.26	5.01	97	13	0
	12 m	37	6	25.40					
20.1	1am	42	8	25.10	16.69	4.94	97	12	0
	2	43	5	24.80					
	3	41	2	24.60	18.15	5.01	100	15	0
	4	35	1	24.50					
	5	28	3	24.50	17.53	4.96	98	14	0
	6	24	3	24.40					
	7	20	3	24.60		5.00			
	8	20	0	24.80					
	9	22	0	24.60	14.35	5.19	99	7	0
	10	27	0	25.00					
	11	33	0	24.80	14.79	5.02	96	12	0
	12 n	38	0	25.00					
	1pm	42	1	25.00	17.04	5.07	100	9	0
	2	42	2	25.20					
	3	38	2	25.20	18.25	4.93	99	13	0
	4	33	2	25.10					
	5	33	2	25.70	17.73	4.93	99	13	11

Location: HASTINGS RIVER NO. 3 - SANCROX

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952			Sky						
18.1	7am	31	10	23.90	17.63	4.86	95	13	0
	8	34	10	24.00					
	9	39	10	24.00	17.47	4.98	97		
	10	44	10	23.60					
	11	50	10	23.00	18.50	5.06	98	10	0
	12 n	54	10	21.40					
	1pm	54	8	21.50	19.42	5.66	108		
	2	54	8	21.40					
	3	49	5	22.10	19.21	5.63	108	12	0
	4	44	4	22.00					
	5	39	4	23.60	18.60	5.03	99		
	6	34	4	24.00					
	7	29	3	24.70	17.81	5.16	102	10	0
	8	27	2	23.90					
	9	30	2	24.80	16.86	5.16	101		
	10	36	0	24.60					
	11	41	9	24.40	17.54	4.99	98	11	0
	12mn	46	9	23.40					
	1am	51	10	21.50	19.10	5.26	100		
	2	52	10	21.40					
	3	49	8	22.00	18.62	5.09	97	10	0
	4	45	8	22.80					
	5	41	8	23.60	17.96	4.86	95		
	6	37	2	23.60					
	7	33	1	24.10	17.37	4.87	95	12	0

Location: MANNING RIVER NO. 6 - TAREE

Date	Time	Tide (In.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952			Sky						
16.i	6pm	18	0	25.50	9.74	4.95	91	13	4
	7	13	0	25.30					
	8	9	0	24.30	8.61	4.74	85		
	9	8	0	25.00					
	10	13	0	25.00	8.88	4.31	78	12	12
	11	18	0	25.70					
	12 m	24	0	26.60	9.63	4.34	81		
17.i	1pm	29	0	25.00					
	2	26	0	25.60	10.35	4.47	83	13	6
	3	24	0	24.80					
	4	19	0	24.70	9.50	4.42	80		
	5	14	0	24.30					
	6	10	0	24.40	8.35	4.22	75	12	0
	7	8	0	24.40					
	8	7	0	24.80	7.87	4.36	78		
	9	11	0	25.10					
	10	17	0	25.70	8.74	4.59	84	6	2
	11	24	0	26.00					
	12 n	30	0	26.50	9.73	4.92	92		
	1pm	36	2	26.40					
	2	39	4	26.10	11.02	4.89	92	15	0
	3	36	2	26.40					
	4	29	2	26.80	10.88	5.06	96		
	5	24	3	26.80					
	6	18	6	26.80	10.28	4.97	94	11	0

Location: HAWKESBURY RIVER - PUMPKIN POINT

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952			Sky						
27.11	9am	52	4	23.40	18.01	4.63	90	7	118
	10	59	4	23.20					
	11	60	5	24.10	18.23	4.50	89		
	12 n	51	3	24.00					
	1pm	45	4	23.90	18.06	4.38	84	7	82
	2	33	6	23.80					
	3	16	4	24.60	17.66	5.29	105		
	4	8	4	24.00					
	5	3	3	24.00	17.23	4.70	92	7	111
	6	10	2	23.90					
	7	25	6	23.90	17.02	4.45	86		
	8	42	6	23.80					
	9	55	3	23.60	17.83	4.53	88	5	107
	10	66	4	23.60					
	11	70	3	23.50	18.13	4.38	85		
	12mn	66	3	23.40					
28.11	1am	56	2	23.40	18.01	4.56	89	8	64
	2	40	4	23.50					
	3	27	1	23.40	17.94	4.77	93		
	4	15	2	23.30					
	5	10	3	23.60	17.44	4.73	91	7	139
	6	12	3	23.50					
	7	27	3	23.70	17.21	4.42	85		
	8	41	6	23.40					
	9	54	6	23.40	17.88	4.45	86	7	91

HAWKESBURY RIVER - PUMPKIN POINT

Location: SURFACE OBSERVATIONS

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952			Sky						
14. vii	4am	48	6	12.00					
	5	42	6	12.60	10.58				
	6	34	5	11.60					
	7	21	5	11.40	7.76				
	8	18	5	11.40					
	9	14	9	11.30	7.34				
	10	15	8	11.60					
	11	24	7	11.50	6.90				
	12 n	29	8	11.80					
	1pm	39	7	11.70	8.15				
	2	51	8	12.20					
	3	56	9	12.20	10.08				
	4	62	0	13.00	11.83				
	5	57	0	13.30					
	6	47	0	12.60	10.52				
	7	39	0	12.60					
	8	29	0	12.20	9.30				
	9	22	0	12.10					
	10	18	0	12.20	8.86				
	11	19	0	11.90					
	12mn	24	0	11.70	7.84				
15. vii	1am	33	0	11.60					
	2	39	0	11.86	8.87				
	3	45	1	12.00					
	4	49	1	11.90	9.64				

HAWKESBURY RIVER - PUMPKIN POINT

Location: OBSERVATIONS AT 12 METRES

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952			Sky						
14. vii	4am			13.40					
	5			13.50	13.62				
	6			13.50					
	7			13.50	13.48				
	8			13.50					
	9			13.00	13.22				
	10			12.00					
	11			13.40	13.24				
	12 n			13.50					
	1pm			13.50	13.51				
	2			13.60					
	3			13.30	13.34				
	4			13.30	13.24				
	5			13.50					
	6			13.50	13.62				
	7			13.40					
	8			13.00	11.74				
	9			12.70					
	10			13.30	11.75				
	11			13.20					
	12mn			13.00	11.98				
15. vii	1am			13.00					
	2			13.00	11.87				
	3			13.40					
	4			12.50	13.61				

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952									
8.1	8am	65	21.10	21.60	19.91	4.75	91	8-16	4
	9	56	21.10	21.80					
	10	46	21.10	21.90	19.57	5.10	98	4-22	
	11	40	20.60	22.10					
	12 n	33	21.10	22.60	19.57	5.25	103	7-20	4
	1pm	31	21.10	23.00					
	2	36	20.60	23.70	19.47	5.65	112	4-35	
	3	42	20.00	23.70					
	4	48	19.40	23.60	19.59	5.50	109	3-17	20
	5	52	20.00	23.80					
	6	57	20.00	24.60	19.81	5.03	102	5-12	
	7	55	20.00	23.90					
	8	52	19.40	22.70	19.76	4.76	93	4-28	8
	9	46	18.90	22.50					
	10	39	18.90	22.50	19.72	4.94	96	6-21	
	11	36	18.90	21.80					
	12 m	34	18.30	21.70	19.80	4.54	87	4-27	11
9.1	1am	36	18.90	21.40					
	2	45	17.20	21.40	19.67	5.02	96	3-17	
	3	54	16.70	21.80					
	4	66	16.70	22.50	19.67	5.28	103	8-19	8
	5	71	16.70	21.90					
	6	75	16.70	21.50	19.63	5.58	107	9-16	
	7	78	17.80	21.60					
	8	69	19.40	21.50	19.66	5.15	99	6-18	8
18.11	8am	33	21.10	23.40	20.23	4.12	82	3-19	2
	9	39	21.10	23.50					
	10	45	20.00	23.30	20.08	4.42	88		
	11	51	20.00	23.30					
	12 n	56	20.60	23.30	20.26	4.60	92	14-10	7
	1pm	62	20.00	22.80					
	2	60	20.00	22.40	20.50	4.95	97		
	3	54	20.60	21.90					
	4	49	20.00	21.60	20.50	4.93	96	9-9	0
	5	40	19.40	21.40					
	6	36	19.40	21.20	20.63	4.70	91		
	7	32	19.40	21.20					
	8	34	19.40	21.10	20.57	4.83	93	5-9	0

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952									
18.ii	9pm	41	19.40	21.80					
	10	49	19.40	22.20	20.29	4.54	89		
	11	57	19.40	22.20					
	12 m	64	19.40	22.30	20.17	4.57	88	8-9	15
19.ii	1am	70	19.40	22.10					
	2	72	18.30	22.20	20.19	4.26	83		
	3	69	18.30	21.90					
	4	63	17.80	21.80	20.09	4.45	86	8-9	2
	5	54	19.40	21.60					
	6	46	19.40	21.50	20.10	4.29	83		
	7	39	19.40	21.30					
	8	35	19.40	21.00	20.10	4.35	83	11-6	4
3.iii	8am	33	21.70	22.00	19.52	3.94	76	59-17	8
	9	34	21.70	22.20					
	10	39	21.10	22.30	19.92	4.77	93	39-0	
	11	44	20.00	22.20					
	12 n	49	21.10	21.80	19.71	5.42	105	7-2	6
	1pm	52	20.60	21.80					
	2	52	20.60	22.00	19.96	5.39	105		
	3	50	20.60	22.00					
	4	47	20.60	22.00	19.87	5.57	108	6-1	6
	5	41	20.00	21.90					
	6	39	20.00	21.70	20.14	5.30	103		
	7	37	20.00	21.50					
	8	36	20.00	21.20	19.96	5.02	96	8-3	8
	9	40	19.40	21.20					
	10	45	19.40	21.00	20.18	4.96	95		
	11	51	19.40	21.20					
	12mp	57	18.90	21.00	19.94	5.05	96	8-2	6
4.iii	1am	63	18.90	21.70					
	2	66	18.30	21.90	20.06	4.95	96		
	3	63	18.30	21.90					
	4	60	17.80	21.80	19.92	4.92	95	12	6
	5	55	17.80	21.60					
	6	48	17.80	21.50	20.00	4.77	92		
	7	42	19.40	21.50					
	8	36	19.40	21.50	19.84	4.83	93	13-17	6

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (n.)	Air Temp. °C.	Water Temp. °C.	C' ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952 17.iii	8am	36	20.00	22.20	19.92	4.91	96	10-25	8
	9	45	21.70	22.20					
	10	52	23.90	22.10	19.84	5.36	104		
	11	60	23.90	22.40					
	12 n	63	23.90	22.80	19.81	5.30	104	9-13	5
	1pm	59	23.90	22.50					
	2	51	24.40	23.00	19.94	4.97	98		
	3	43	25.60	23.00					
	4	38	25.00	23.60	20.04	5.86	117	10-44	26
	5	33	24.40	24.00					
	6	30	22.80	24.60	20.08	5.06	103		
18.iii	7	36	22.20	24.70					
	8	42	22.20	24.60	20.08	4.97	101	9-25	5
	9	51	21.70	24.60					
	10	60	21.70	24.60	19.92	5.12	104		
	11	67	20.00	24.00					
	12 m	74	18.30	23.50	19.93	5.04	100	8-23	0
	1am	74	18.30	23.20					
	2	68	17.80	23.40	19.97	4.68	93		
	3	54	17.80	23.30					
	4	46	17.80	23.20	20.00	4.71	93	8-13	10
	5	39	17.20	22.90					
7.iv	6	33	16.70	22.50	19.94	4.41	86		
	7	30	17.80	22.50					
	8	30	18.90	22.50	19.95	4.64	91	11-15	3
	8am	64	18.30	20.80	19.44	4.79	91	6-9	13
	9	55	20.60	21.00					
	10	45	22.80	21.30	19.44	4.83	92	6-10	
	11	36	23.90	21.70					
	12 n	27	25.60	22.30	19.42	5.10	99	7-6	0
	1pm	24	25.00	22.50					
	2	30	23.90	22.30	19.44	5.83	113	7-8	
	3	35	23.30	22.20					
4	47	23.30	22.20	19.39	5.93	114	6-6	3	
5	54	22.80	22.20						
6	63	22.80	21.70	19.41	5.77	110	6-16		
7	67	22.80	21.50						
8	63	21.70	21.50	19.43	5.51	105	7-6	14	

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952									
7. iv	9pm	56	21.10	22.00					
	10	45	20.60	22.50	19.61	5.03	98	8-12	
	11	36	20.00	22.20					
	12 m	29	20.00	21.80	19.51	5.10	98	8-6	8
8. iv	1am	27	19.40	21.80					
	2	29	20.00	21.70	19.52	4.93	95	10	
	3	40	19.40	21.60					
	4	51	19.40	21.60	19.46	5.10	98	7-9	5
	5	61	19.40	21.60					
	6	68	20.00	21.60	19.43	4.93	95	9-6	
	7	72	20.00	21.50					
	8	69	20.60	21.40	19.42	4.87	93	10-5	16
12. v	8am	49	15.00	16.10	17.81	5.06	87	14-30	45
	9	57	16.70	16.10					
	10	63	16.70	16.20	18.01	5.52	95		
	11	60	17.20	16.00					
	12 n	55	17.80	16.10	17.52	5.76	98	12-22	28
	1pm	46	17.80	16.20					
	2	36	17.80	16.40	17.64	5.83	100		
	3	28	16.70	16.40					
	4	29	15.00	16.60	17.60	5.80	100	9-27	19
	5	32	14.40	16.70					
	6	42	15.60	16.70	17.61	4.03	70		
	7	54	16.10	16.70					
13. v	8	66	16.10	16.70	17.77	5.68	98	12-27	30
	9	81	16.70	16.60					
	10	89	16.10	16.80	18.32	5.52	97		
	11	83	16.10	16.90					
	12 m	73	15.60	16.90	18.19	4.97	87	13-10	22
	1am	63	15.60	16.80					
	2	52	15.00	16.50	18.34	5.52	96		
	3	36	15.00	16.40					
	4	29	15.00	16.50	18.66	5.76	101	11-81	22
	5	21	15.00	16.50					
	6	22	15.00	16.50	18.66	5.19	91		
	7	30	15.00	16.30					
	8	39	15.00	16.30	18.05	5.48	95	26-37	30

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952 5. vi	9am	65	12.80	13.30	18.44	6.00	99	12-1	86
	10	45	21.70	12.30					
	11	39	21.70	12.50	18.55	5.66	92		
	12 n	38	21.70	12.70					
	1pm	42	21.70	12.90	18.66	4.45	73	9-5	4
	2	48	21.70	12.80					
	3	60	21.70	13.00	18.69	6.60	108		
	4	72	19.40	12.80					
	5	81	18.90	12.80	18.66	6.05	99	7-2	8
	6	87	17.80	13.00					
	7	82	16.70	13.40	18.72	6.52	108		
	8	75	16.10	13.40					
	9	66	15.00	13.30	18.71	6.52	108	7-2	3
	10	54	15.00	13.20					
6. vi	11	42	13.90	13.00	18.81	6.36	104		
	12mn	36	12.80	12.90					
	1am	33	11.70	12.80	18.73	4.45	73	8-6	6
	2	37	9.44	12.70					
	3	45	9.44	12.60	18.73	6.67	109		
	4	54	9.44	12.50					
	5	63	9.44	12.50	18.58	6.02	98	8-3	6
	6	68	11.10	12.50					
	7	70	10.60	12.40	18.65	6.36	103		
	8	65	10.60	12.30					
9	57	16.70	12.20	18.63	6.05	98	7-1	0	

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952						pH			
17. vi	12 n	41	15.60	12.90	3.79	8.02	88	18-7	486
	1pm	52	15.60	13.00					
	2	63	16.10	13.20	4.78	7.83	88		
	3	71	15.60	13.80					
	4	78	15.60	14.40	4.15	8.03	96	18-5	509
	5	78	15.60	14.60					
	6	72	15.00	14.00	7.53	7.49	92		
	7	65	15.00	13.60					
	8	56	14.40	12.90	4.46	7.78	90	16-2	451
	9	46	13.90	12.80					
	10	41	13.90	12.80	4.57	7.13	90		
	11	36	13.90	12.80					
18. vi	12 m	37	13.30	12.90	4.80	8.00	93	16-10	457
	1am	42	12.20	13.10					
	2	50	12.20	13.80	8.35	7.70	89		
	3	55	11.70	13.90					
	4	63	11.10	14.00	8.23	7.96	92	25-6	219
	5	65	11.10	14.10					
	6	64	10.60	13.10	7.85	7.84	91		
	7	58	11.70	12.90					
	8	52	11.70	13.10	8.10	7.90	88	16-17	436
	9	43	12.80	12.50					
	10	38	13.90	12.80	6.89	7.94	90		
	11	35	15.00	12.10					
12 n	35	16.70	13.10	8.99	7.66		28-2	404	
8. vii	12 n	42	14.40	10.40	18.14	7.98	99	8-2	34
	1pm	30	13.90	10.80					
	2	27	14.40	11.00	18.11	8.17	115		
	3	28	14.40	10.90					
	4	32	14.40	10.90	18.14	8.24	106	7-2	34
	5	43	13.30	10.90					
	6	55	11.70	10.60	17.89	8.24	114		
	7	75	11.10	10.90					
	8	87	12.20	11.00	18.20	8.22	98	7-1	65
	9	90	11.70	11.00					
	10	87	12.20	10.80	18.13	8.25	108		
	11	74	12.20	10.80					
12 m	58	12.20	10.80	18.17	8.25	108	7-14	30	

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952									
9.vii	1am	39	11.70	10.70					
	2	28	11.70	10.80	18.35	8.20	94		
	3	18	12.20	10.80					
	4	12	12.20	10.80	18.39	8.18	97	7-0	30
	5	19	12.20	10.80					
	6	28	11.70	10.60	18.01	8.22	114		
	7	36	10.60	10.70					
	8	50	10.60	10.60	17.80	8.19	93	12-0	35
	9	58	11.70	10.80					
	10	62	16.70	10.80	17.86	8.18	105		
	11	57	16.10	10.80					
	12 n	48	17.20	11.00	17.90	8.18	111	5	29
30.vii	12 n	54	17.80	13.60	4.14	7.71	17	22-16	283
	1pm	62	18.90	14.20					
	2	63	17.20	14.10	3.92	7.70	89		
	3	61	17.20	14.50					
	4	56	17.20	15.20	3.33	7.74	84	18-12	263
	5	51	17.20	15.00					
	6	43	15.60	15.20	3.02	7.76	91		
	7	37	15.60	14.80					
	8	32	13.90	14.50	3.11	7.81	82	22-26	290
	9	32	13.90	14.50					
	10	35	13.30	14.40	3.17	7.80	84		
	11	42	13.90	14.30					
	12mn	36	13.90	14.30	3.55	7.73	81	22-16	294
31.vii	1am	50	12.20	14.20					
	2	53	12.20	14.20	5.32	7.60	79		
	3	52	12.20	14.20					
	4	48	12.20	14.20	3.51	7.76	80	17-15	275
	5	43	12.20	14.00					
	6	36	11.70	13.90	3.63	7.74	78		
	7	32	11.70	13.80					
	8	30	12.20	14.00	3.32	7.74	79	10-25	249
	9	29	12.20	14.00					
	10	36	13.30	14.20	3.35	7.73	84		
	11	43	14.40	14.50					
	12 n	51	14.40	14.40	4.09	7.66	83	24-16	303

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952						pH			
19. viii	12 n	30	17.80	16.50	11.56	8.14	90	7-13	88
	1pm	27	18.90	16.60					
	2	28	20.00	16.70	11.56	8.15	92		
	3	34	17.80	16.70					
	4	42	17.80	16.60	11.81	8.01	98	2-15	99
	5	56	17.80	16.60					
	6	65	16.10	16.60	13.64	8.16	94		
	7	76	15.60	17.10					
	8	77	15.00	17.00	14.68	8.13	96	4-9	74
	9	72	13.30	16.60					
	10	63	12.80	16.50	14.05	8.14	92		
	11	49	11.70	16.40					
	12mn	37	11.70	15.80	13.11	8.16	90	4-13	100
20. viii	1am	30	12.80	15.90					
	2	22	13.90	15.70	12.68	8.17	91		
	3	19	13.30	15.90					
	4	28	12.20	16.00	12.32	8.03	89	4-15	86
	5	37	11.70	16.20					
	6	50	11.70	16.00	12.98	8.13	90		
	7	59	11.70	16.20					
	8	62	11.70	15.80	15.86	8.15	87	10-16	70
	9	61	11.70	15.50					
	10	57	11.70	15.40	15.07	8.14	89		
	11	48	11.70	15.30					
	12 n	38	12.20	16.00	15.70	8.15	91	8-13	49
2. ix	12 n	21	20.60	15.50	17.11	8.26	92	7-10	0
	1pm	21	21.70	16.00					
	2	30	21.70	16.00	16.92	8.26	92		
	3	42	22.20	16.00					
	4	56	20.60	15.80	16.81	8.26	97	3-13	0
	5	70	18.90	15.70					
	6	81	18.30	15.50	17.32	8.24	97		
	7	88	18.90	15.70					
	8	81	20.00	15.80	16.83	8.23	95	3-12	0
	9	67	20.00	16.30					
	10	53	19.40	16.20	16.94	8.21	94		
	11	39	18.30	16.10					
	12mn	24	16.70	16.10	17.06	8.19	85	8-17	0

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952 3. ix	1am	17	15.00	16.00		pH			
	2	18	15.60	15.40	16.91	8.24	75		
	3	24	18.90	15.70					
	4	35	19.40	15.70	16.80	8.24	91	6-8	0
	5	48	20.00	15.50					
	6	61	17.80	15.40	16.90	8.24	91		
	7	68	17.80	15.40					
	8	68	17.80	15.50	17.05	8.24	91	3-6	0
	9	61	17.80	15.50					
	10	48	20.00	15.70	17.17	8.24	90		
	11	35	17.80	15.70					
	12 n	25	16.10	15.80	17.48	8.23	88	9-2	0
16. ix	12 n	29	23.30	16.40	18.00	8.14	56	6-6	0
	1pm	32	23.30	16.30					
	2	38	23.30	16.40	17.99	8.15	98		
	3	48	22.80	16.40					
	4	59	23.30	16.40	18.04	8.18	99	4-10	0
	5	66	22.80	16.40					
	6	74	21.10	16.10	17.91	8.19	98		
	7	78	20.00	16.00					
	8	72	19.40	16.00	17.99	8.17	98	6-11	0
	9	62	19.40	16.00					
	10	48	16.10	16.00	17.91	8.13	93		
	11	40	15.60	16.00					
17. ix	12mn	30	15.60	15.90	17.88	8.14	89	3-5	24
	1am	26	15.60	15.90					
	2	24	14.40	15.80	17.95	8.10	93		
	3	32	13.30	15.60					
	4	42	12.20	15.40	17.95	8.11	94	11-5	0
	5	50	11.70	15.40					
	6	58	10.60	15.40	17.89	8.13	90		
	7	63	12.20	15.60					
	8	60	11.10	15.70	17.90	8.13	94	9-4	0
	9	52	13.30	15.70					
	10	44	15.60	16.00	17.95	8.14	96		
	11	36	15.60	16.00					
12 n	30	16.70	16.00	18.18	8.17	99	9-16	0	

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952									
29. ix	12 n	35	20.00	19.10	18.63	8.15	100	9-4	7
	1 pm	44	20.00	19.00					
	2	55	20.00	19.20	18.62	8.15	100		
	3	66	20.00	19.20					
	4	69	20.60	19.10	18.55	8.15	103	6-15	0
	5	69	20.00	18.90					
	6	68	19.40	19.10	18.76	8.15	100		
	7	57	19.40	19.50					
	8	46	18.90	19.80	18.56	8.11	96	5-27	4
	9	33	18.90	19.50					
	10	21	18.30	19.80	18.60	8.13	93		
11	18	18.30	20.00						
30. ix	12 mn	19	17.80	19.80	18.71	8.13	84	6-18	4
	1 am	24	17.20	19.80					
	2	33	15.00	18.90	18.54	8.10	94		
	3	44	13.90	18.60					
	4	53	13.30	18.60	18.44	8.11	93	4-13	4
	5	58	12.20	18.50					
	6	57	13.30	18.40	18.45	8.11	93		
	7	53	15.00	18.20					
	8	46	17.80	18.40	18.52	8.09	87	10-10	0
	9	36	20.60	18.80					
	10	30	24.40	19.40	18.57	8.06	91		
	11	24	23.30	19.90					
12 n	26	22.80	20.30	18.55	8.05	98	8-32	0	
13. x	12 n	43	20.00	17.00	18.38	8.16	99	4-32	0
	1 pm	50	19.40	17.20					
	2	58	18.90	17.40	18.27	8.18	101		
	3	66	19.40	17.40					
	4	69	17.80	17.40	18.17	8.18	104	5-7	5
	5	70	18.30	18.00					
	6	66	17.20	18.20	17.97	8.15	100		
	7	58	16.70	17.60					
	8	50	15.00	17.40	18.04	8.16	98	5-29	0
	9	42	14.40	17.40					
	10	36	14.40	17.20	18.04	8.16	99		
	11	31	13.30	17.10					
12 m	30	13.90	17.20	18.13	8.16	95	5-9	0	

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952						pH			
14. x	1am	36	13.90	17.30					
	2	42	13.30	17.00	18.14	8.15	95		
	3	49	13.30	16.80					
	4	58	13.30	16.80	17.97	8.13	96	4-12	0
	5	61	12.80	16.80					
	6	61	12.20	16.70	17.96	8.14	94		
	7	59	13.30	16.80					
	8	54	16.10	16.80	18.00	8.15	92	3-8	8
	9	44	17.80	17.00					
	10	37	17.80	17.20	17.98	8.14	93		
	11	34	17.80	17.30					
	12 n	36	17.20	17.60	18.00	8.11	102	6-15	0
6. xi	10am	76	20.00	19.80	18.63	8.08	87	7-24	5
	11	78	18.30	20.00					
	12 n	76	17.80	20.20	18.62	8.06	99		
	1pm	70	18.30	20.30					
	2	54	17.80	20.50	18.67	8.06	99	10-9	3
	3	42	17.80	20.70					
	4	39	17.80	20.80	18.63	8.01	100		
	5	31	17.80	21.00					
	6	26	17.20	20.80	18.67	8.01	98	12	7
	7	29	16.70	20.50					
	8	30	16.70	20.50	18.67	8.04	100		
	9	39	17.20	20.50					
	10	50	13.30	20.20	18.65	8.08	96	7-3	5
	11	55	13.30	20.40					
	12 m	56	13.30	20.10	18.58	8.07	95		
7. xi	1am	59	12.20	20.00					
	2	49	11.70	19.70	18.59	8.10	93	7-7	5
	3	39	11.70	19.50					
	4	37	10.60	19.70	18.57	8.19	92		
	5	34	10.60	19.30					
	6	37	11.70	19.20	18.55	8.11	91	7-3	7
	7	40	15.00	19.40					
	8	49	17.20	19.60	18.55	8.12	96		
	9	63	18.90	20.20					
	10	68	20.00	20.30	18.48	8.16		9-2	5

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952						pH			
20. xi	9am	83	21.70	21.20	19.79	8.14	69	0-21	4
	10	87	20.60	21.30					
	11	84	21.70	21.90	19.75	8.10	83		
	12 n	74	20.60	21.80					
	1pm	61	18.30	21.70	19.79	8.05	89	6-25	10
	2	48	18.30	21.80					
	3	35	18.90	22.10	19.83	8.02	84		
	4	13	17.80	21.80					
	5	11	17.20	21.50	19.82	8.00	84	7-53	0
	6	12	16.70	21.20					
	7	21	17.20	21.10	19.85	7.98	86		
	8	42	17.20	21.40					
	9	53	17.20	21.40	19.78	8.01	91	6-33	0
	10	60	17.20	21.20					
	11	61	17.20	21.10	19.69	8.02	90		
	12 m	59	16.70	21.00					
21. xi	1am	50	15.60	20.70	19.76	8.01	85	5-16	0
	2	41	15.60	20.60					
	3	34	14.40	20.50	19.86	8.02	83		
	4	29	14.40	20.00					
	5	32	14.40	20.10	19.92	8.06	82	8-21	0
	6	37	15.00	20.20					
	7	51	16.10	20.40	19.66	8.05	88		
	8	61	16.10	20.50					
	9	70	16.70	20.70	19.72	8.06	68	7-16	4
10. xii	12 n	54	22.80	22.50	19.26		85	78-24	10
	1pm	63	22.80	22.30					
	2	69	22.80	22.40	19.26		96		
	3	68	22.80	22.90					
	4	64	22.80	23.40	19.26		96	26-10	11
	5	57	22.80	23.60					
	6	44	22.80	23.30	19.35		85		
	7	45	22.80	22.40					
	8	40	23.90	22.20	19.31		87	22-3	4
	9	37	23.90	21.00					
	10	39	22.20	21.50	19.18		52		
	11	42	21.70	21.20					
	12 m	47	20.00	21.00	19.30		80	22-2	34

Location: SHELL POINT - GEORGES RIVER

Date	Time	Tide (In.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952									
11. xii	1am	52	19.40	20.90					
	2	57	16.70	20.70	19.22		89		
	3	63	16.70	20.80					
	4	64	15.60	20.70	19.21		87	13-5	2
	5	60	15.00	20.50					
	6	54	14.40	20.30	19.26		88		
	7	47	14.40	20.20					
	8	42	14.40	20.00	19.33		90	19-6	0
	9	42	15.60	20.00					
	10	43	17.20	20.00	19.34		92		
	11	45	17.80	20.40					
	12 n	48	18.30	20.40	19.37		91	21-8	14

Location: TAMAR RIVER NO. 4a - ROSEVEAR

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952			Sky						
18.ii	6pm	129	1	19.00	16.32	5.61	99	6	10
	7	120	1	18.80					
	8	112	1	18.60	16.53	5.71	101		
	9	78	0	18.60					
	10	66	0	18.20	16.13	5.61	98	3	21
	11	42	0	18.40					
	12mm	36	2	18.80	14.89	5.65	98		
19.ii	1am	27	0	18.60					
	2	50	0	18.80	14.76	5.57	97	10	40
	3	68	1	18.20					
	4	90	1	17.60	15.68	6.00	103		
	5	117	2	18.10					
	6	132	2	18.40	16.55	5.71	101	9	20
	7	129	1	18.40					
	8	119	1	18.40	16.68	5.76	101		
	9	84	1	18.40					
	10	68		18.80	16.09	5.76	102	32	10
	11	44		18.80					
	12 n	29		19.20	14.92	5.51	96		27
	1pm	0		19.30					
	2	27		19.80	13.49	5.51	96	10	80
	3	54		20.00					
	4	72		20.00	15.11				46
	5	90		19.70					
	6	117		19.60	16.09	5.43	97	11	20

Location: DERWENT RIVER NO. 4 - CLAREMONT

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl. °/oo	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N	
1952 12.11	pm		Sky							
	3.30	24	1	16.90	7.93	6.72	105	10-12	38	
	4.30	24	1	17.80						
	5.30	27	2	17.80	7.68	6.72	106			
	6.30	27	5	16.90						
	7.30	31	9	17.70	8.06	6.65	105	7-10	18	
	8.30	36	9	16.90						
	9.30	42	9	16.50	8.79	6.30	99			
	10.30	41	9	16.50						
	11.30	43	9	16.40	8.74	6.27	98	5-9	22	
	13.11	am								
12.30		40	9	16.40						
1.30		37	9	16.30	8.03	6.38	99			
2.30		35	9	16.20						
3.30		33	9	16.20	7.78	6.55	101	4-8	6	
4.30		34	10	16.10						
5.30		35	10	15.90	7.73	6.60	101			
6.30		38	10	15.90						
7.30		40	10	15.80	7.48	6.52	99	3-11	6	
8.30		45	9	15.90						
9.30		47	9	16.30	7.73	6.60	102			
10.30		46	9	16.70						
11.30		45	4	17.40	7.13	6.47	101	8-18	6	
pm										
		12.30	40	1	17.30					
	1.30	31	1	17.30	7.28	6.65	104			
	2.30	27	1	17.70						
3.30	12	1	17.90	7.21	6.72	106	3-7	3		

SWAN RIVER NO. 2 - FREMANTLE BRIDGE

Location:

SURFACE OBSERVATIONS

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952									
12. vii	9pm	24		14.9	13.74	8.19	103	6	
	10	24		15.1					
	11	26		16.0	15.51	8.24	105	5	
	12	26		15.7					
13. vii	1am	28		15.9	15.07	8.24	105	5	
	2	29		15.1					
	3	30		16.1	17.28	8.27	102	8	
	4	30		16.3					
	5	30		17.0	18.81	8.28	98	7	
	6	30		17.0					
	7	29		17.2	18.24	8.27	79	7	
	8	31		17.0					
	9	30		17.1	19.24	8.29	99	2	
	10	31		17.2					
	11	31		17.2	19.23	8.28	98	4	
	12 n	29		15.9					
	1pm	30		15.9	16.39	8.29	102	6	
	2	29		16.1					
	3	28		15.2	12.93	8.30	116	6	
	4	28		15.0					
	5	28		14.9	9.23	8.31	125	7	
	6	26		17.3					
	7	27		14.6	11.83	8.30	116	8	
	8	28		15.0					
	9	29		14.8	12.48	8.31	107	3	

SWAN RIVER NO. 2 - FREMANTLE BRIDGE

Location:

OBSERVATIONS AT 4 METRES

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952						pH			
12. vii	9pm	24		17.0	18.91	8.27	98	6	
	11	26		16.8	18.87	8.24	99	6	
13. vii	1am	28		17.1	18.75	8.27	101	8	
	3	30		17.2	19.37	8.27	80	7	
	5	30		17.3	19.28	8.28	100	5	
	7	29		17.3	19.36	8.29	99	2	
	9	30		17.2	19.26	8.29	100	6	
	11	31		17.35	19.35	8.30	101	1	
	1pm	30		17.3	19.22	8.31	100	8	
	3	28		17.4	19.23	8.29	103	3	
	5	28		17.3	19.24	8.28	99	8	
	7	27		17.3	19.19	8.29	80	4	
	9	29		17.2	19.06	8.30	67	3	

Location: SWAN RIVER NO. 2

Date	Station	Depth	Temp. °C.	Cl ‰	O ₂	O ₂ %	pH	PO ₄ -P	NO ₃ -N
1952		(m)							
12. vii	2	0	14.90	13.74	6.44	103	8.19	6	
9 p.m.		1	15.20	14.48	6.55	107	8.22	6	
		2	16.00	14.46	6.20	102	8.22	6	
		3	16.90	18.86	5.66	100	8.25	7	
		4	17.00	18.91	5.58	98	8.27	6	
13. vii	2	0	17.20	19.23	5.50	98	8.28	4	
11 a.m.		1	17.24	19.26	5.58	100	8.29	6	
		2	17.24	19.30	5.53	99	8.29	0	
		3	17.35	19.24	5.53	99	8.29	5	
		4	17.35	19.35	5.63	101	8.30	1	

SWAN RIVER NO. 6 - CRAWLEY BAY

Location:

SURFACE OBSERVATIONS

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952						pH			
12. vii	10pm			14.6	7.61	7.93	98	13	
	11			15.1	9.29	8.16	110	11	
	12mn			15.1					
13. vii	1am			14.9	8.28	8.02	105	21	
	2			14.6					
	3			14.5	8.92	8.08	106	10	
	4			13.5					
	5			13.9	13.54	8.05	110	9	
	6			13.8					
	7			14.0	9.27	8.07	96	33	
	8			14.5					
	9			14.1	10.61	8.11	92	13	
	10	23		14.3					
	11	23		15.3	10.81	8.24	49	15	
	12 n	24		14.6					
	1pm	24		15.9	10.02	8.30	126	15	
	2	24		15.6					
	3	25		15.5	10.80	8.31	130	10	
	4	27		15.5					
	5	26		15.3	11.24	8.39	133	9	
	6	26		15.3					
	7			15.5	11.44	8.38	120	9	
	8			15.2					
	9			15.6	10.86	8.39	127	9	

SWAN RIVER NO. 6 - CRAWLEY BAY

Location:

OBSERVATIONS AT 6 METRES

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952						pH			
12. vii	10pm			16.5	17.82	7.74	7	32	
	11			16.4	17.52	7.74	9	27	
13. vii	1am			16.2	17.85	7.76	9	27	
	3			16.5	17.82	7.75	9	20	
	5			16.5	17.92	7.77	7	34	
	7			16.4	17.90	7.79	9	25	
	9			16.5	17.97	7.79	10	25	
	11	23		16.5	16.94	7.82	19	19	
	1pm	24		17.7	18.05	7.78	8	37	
	3	25		16.5	18.04	7.78	7	31	
	5	26		16.4	17.01	7.79	9	47	
	7			16.4	17.89	7.79	10	29	
	9			16.5	17.82	7.76	9	35	

Location: SWAN RIVER NO. 6

Date	Station	Depth	Temp. °C.	Cl. ‰	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1952		(m)							
12. vii	6	0	14.60	7.61	6.60	98	7.93	13	
10 p.m.		1	14.20	8.19	7.40	110	8.22	11	
		2	15.10	12.65	7.83	125	8.33	11	
		3	15.30	13.73	6.13	99	8.22	5	
		4	15.80	16.74	1.48	25	7.81	19	
		5	16.40	17.87	0.38	7	7.75	32	
		6	16.50	17.82	0.38	7	7.74	32	
13. vii	6	0	15.30	10.81	3.12	49	8.24	15	
11 a.m.		1	14.60	11.19	7.02	109	8.23	9	
		2	16.00	16.89	1.78	30	7.84	5	
		3	15.90	17.18	0.80	13	7.82	6	
		4	17.10	17.53	1.10	19	7.81	5	
		5	16.80	18.26	0.60	10	7.78	20	
		6	16.50	16.94	1.10	19	7.82	19	

SWAN RIVER NO. 8 - THE CAUSEWAY

Location:

SURFACE OBSERVATIONS

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl. ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952						pH			
12.vii	9pm	23		15.5	2.40	6.96	72	7	
	10			15.5					
	11	22		15.0	3.35	7.20	68	53	
	12mn	22		14.3					
13.vii	1am	22		14.0	2.30	7.30	63	28	
	2	24		13.5					
	3	25		14.0	3.67	7.38	75	31	
	4	26		15.2					
	5	26		15.5	4.59	7.49	75	37	
	6	27		15.5					
	7	28		15.5	5.12	7.44	47	43	
	8	28		14.5					
	9	29		15.5	4.66	7.39	74	41	
	10	29		15.2					
	11	30		15.6	6.66	7.53	74	40	
	12 n	30		15.5					
	1pm	29		15.5	5.20	7.55	79	29	
	2	29		16.0					
	3	29		15.8	4.14	7.60	49	22	
	4	29		15.8					
	5	28		15.7	3.62	7.50	57	60	
	6	27		15.5					
	7	27		15.5	3.50	7.59	75	29	
	8	27		15.1					
	9	27		14.5	3.14	7.55	73	59	

SWAN RIVER NO. 8 - THE CAUSEWAY

Location:

OBSERVATIONS AT 3 METRES

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ ‰	PO ₄ -P	NO ₃ -N
1952						pH			
13.vii	1am	22		16.0	9.37	7.25	6		
	3	25		15.5	7.59	7.37	73	39	
	5	26			7.56	7.50		20	
	7	28		15.4	9.77	7.27	33	31	
	9	29		16.1	11.54	7.36	20	39	
	11	30		15.9	12.12	7.47	32	45	
	1pm	29		15.6	11.74	7.59	59	65	
	3	29		15.8	13.06	7.42	7	56	
	5	28		15.9	12.65	7.55	44	29	
	7	27		16.4	13.90	7.47	15	52	
	9	27		15.8	12.53	6.90	3	27	

SWAN RIVER NO. 13 - MIDDLE SWAN BRIDGE

Location:

SURFACE OBSERVATIONS

Date	Time	Tide (in.)	Air Temp. °C.	Water Temp. °C.	Cl ‰	O ₂	O ₂ %	PO ₄ -P	NO ₃ -N
1952									
12. vii	9pm	36		12.65	0.97	7.15	82	1	
	10	36		12.65					
	11	35		12.65	1.02	7.15	82	5	
	12am	35		12.65					
13. vii	1am	35		12.80	1.02	7.15	83	8	
	2	35		12.65					
	3	36		12.50	1.08	7.15	77	7	
	4	36		12.50					
	5	37		12.60	1.13	7.16	84	10	
	6	38		12.55					
	7	38		12.40	1.18	7.16	82	8	
	8	39		12.25					
	9	39		12.20	1.23	7.20	82	4	
	10	39		12.20					
	11	39		12.10	1.28	7.26	84	5	
	12 n	39		12.40					
	1pm	39		12.50	1.23	7.28	84	7	
	2	39		12.60					
	3	39		12.65	1.46	7.20	79	4	
	4	39		12.70					
	5	39		12.60	1.43	7.27	85	11	
	6	38		12.60					
	7	37		12.40	1.28	7.30	86	0	
	8	37		12.30					
	9	36		12.20	1.38	7.35	85	5	