

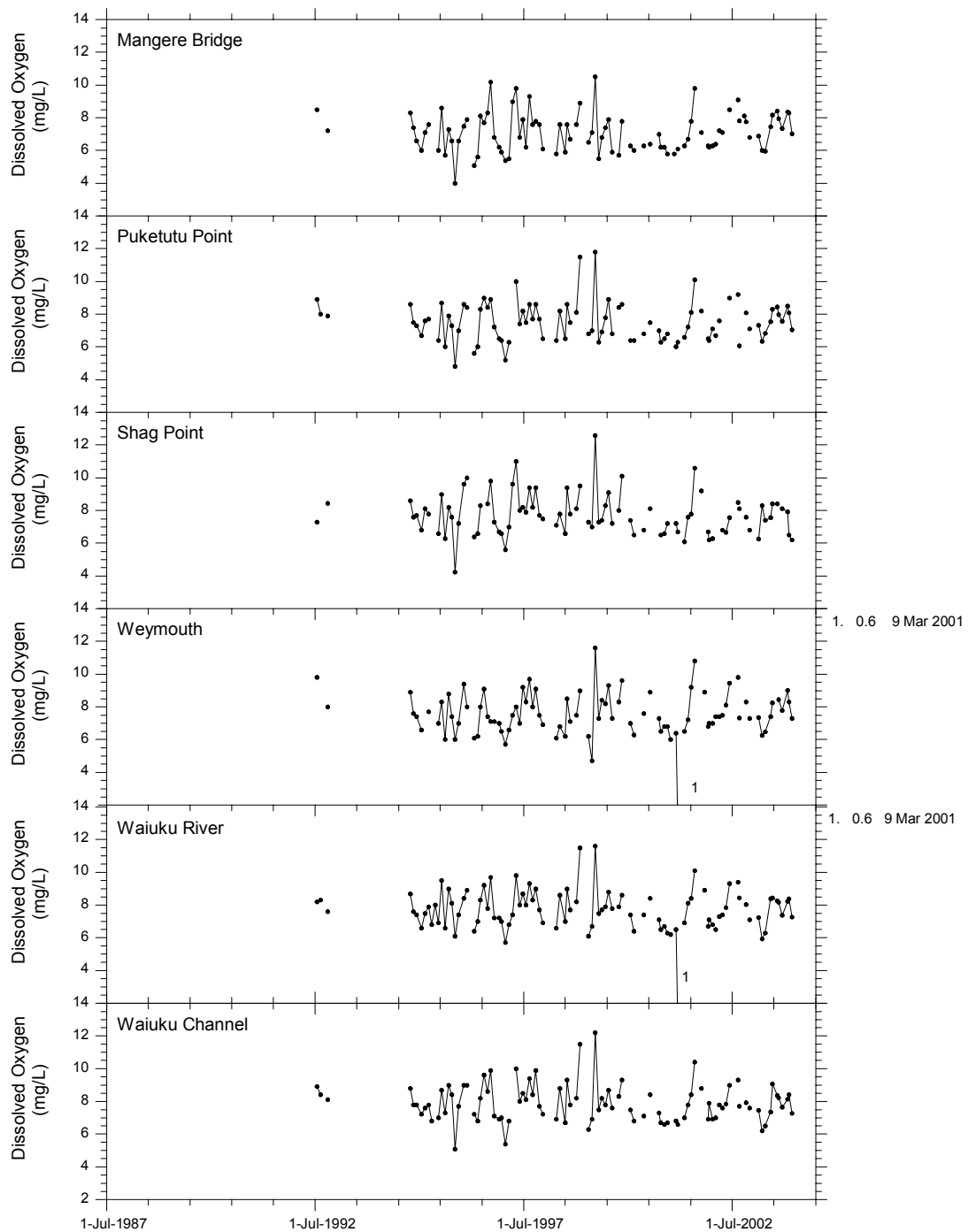
APPENDIX 30: SALINE – DISSOLVED OXYGEN

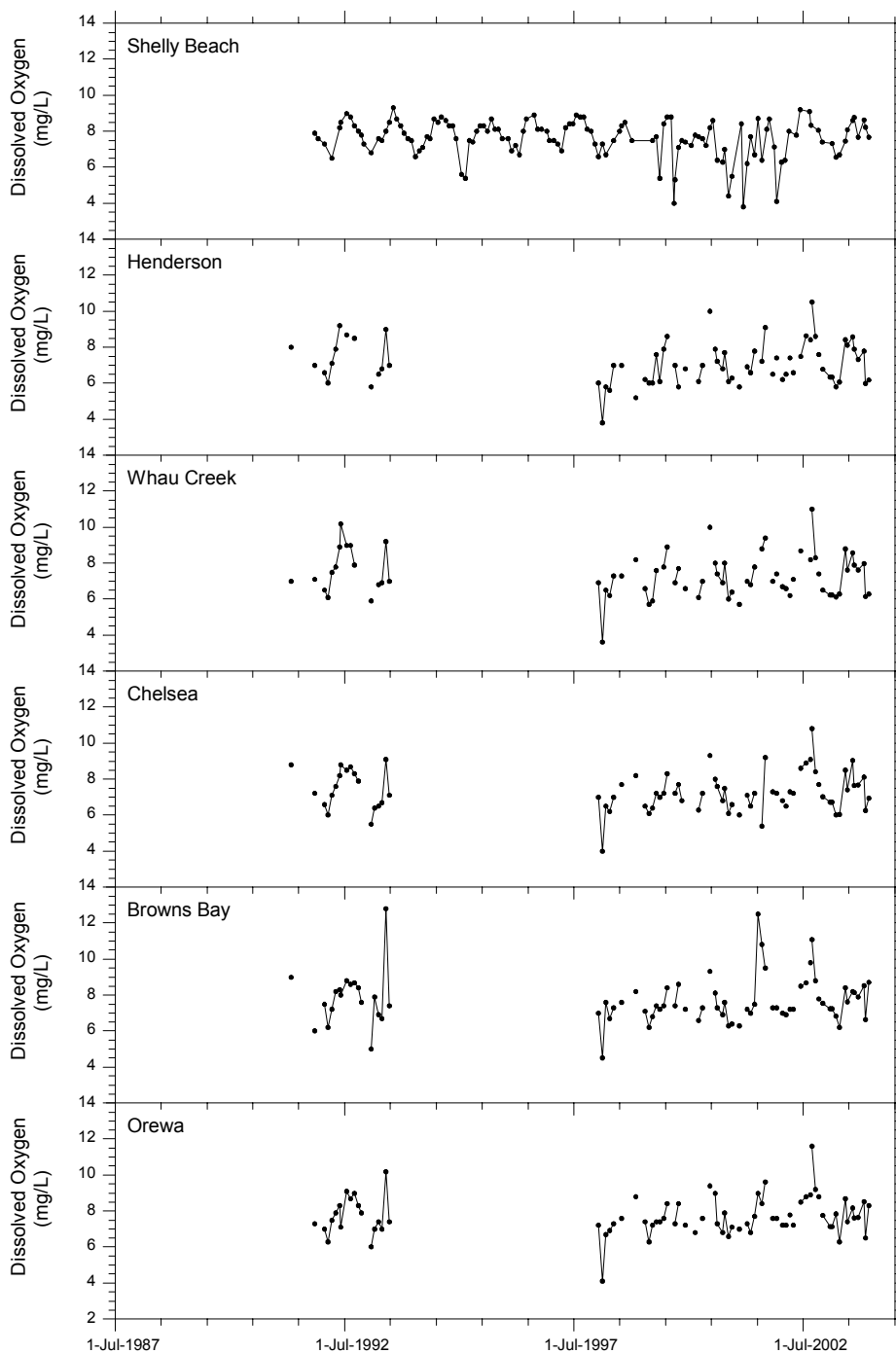
(Note that $\text{g/m}^3 = \text{g m}^{-3} = \text{mg/L}$)

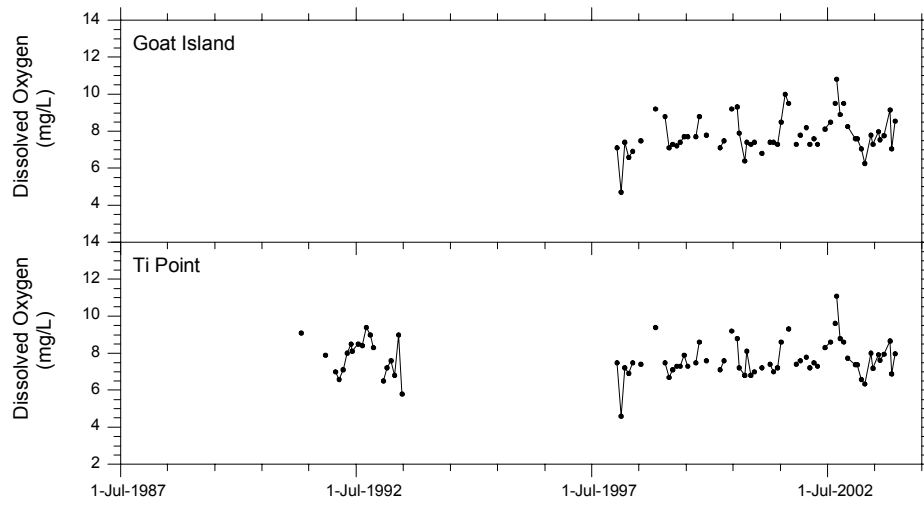
a) Dissolved oxygen (mg/L) for the period January 2003 - December 2003														
Date	Browns	Chelsea	Goat Isl	Henderson	Mangere	Orewa	Puketutu	Shag Point	Shelly	TiPoint	Waiuku Ch	Waiuku Rvr	Weymouth	Whau
3-Feb-03	7.2	6.7	7.6	6.4		7.1				7.4				6.2
17-Feb-03	7.2	6.7	7.6	6.4	6.9	7.1	7.3	7.3	6.3	7.4	7.5	7.2	7.3	6.2
19-Mar-03	6.8	6.0	7.1	5.8	6.0	7.8	6.3	6.6	8.3	6.6	6.2	5.9	6.3	6.1
17-Apr-03	6.2	6.0	6.3	6.1	6.0	6.3	6.8	6.7	7.4	6.3	6.5	6.3	6.5	6.3
3-Jun-03	8.4	8.5	7.8	8.4	7.5	8.7	7.5	7.5	7.6	8.0	7.4	8.4	7.4	8.8
16-Jun-03	7.6	7.4	7.3	8.1	8.2	7.4	8.3	8.1	8.4	7.2	9.1	8.5	8.3	7.6
30-Jul-03	8.2	9.1	8.0	8.6	8.4	8.2	8.4	8.6	8.4	7.9	8.4	8.2		8.6
14-Aug-03	8.2	7.6	7.5	7.9	8.0	7.6	8.0	8.8		7.6	8.2	8.2	8.4	7.9
12-Sep-03	7.9	7.7	7.8	7.3	7.4	7.7	7.6	7.7	8.1	8.0	7.7	7.4	7.8	7.6
29-Oct-03	8.5	8.1	9.2	7.8	8.4	8.5	8.5	8.6	7.9	8.7	8.1	8.2	9.0	8.0
10-Nov-03	6.7	6.3	7.1	6.0	8.3	6.5	8.1	8.2	6.5	6.9	8.4	8.4	8.3	6.1
8-Dec-03	8.7	7.0	8.5	6.2	7.0	8.3	7.1	7.7	6.2	8.0	7.3	7.3	7.3	6.3
Median	7.8	7.2	7.6	6.8	7.5	7.6	7.6	7.7	7.8	7.5	7.7	8.2	7.6	7.0
IQR/Median %	14	16	8	26	17	14	13	13	20	11	13	13	13	25

The dates given are for the East Coast and Waitemata Harbour sites. The Manukau and Kaipara Harbour sites were visited on 13-Jan, 11-Feb, 14-Mar, 14-Apr, 13-May, 13-Jun, 9-Jul, 8-Aug, 8-Sep, 6-Oct, 3-Nov and 2-Dec.

The graphs on the following pages show DO (mg/L) results for the period August 1987 to December 2003 (where data available).





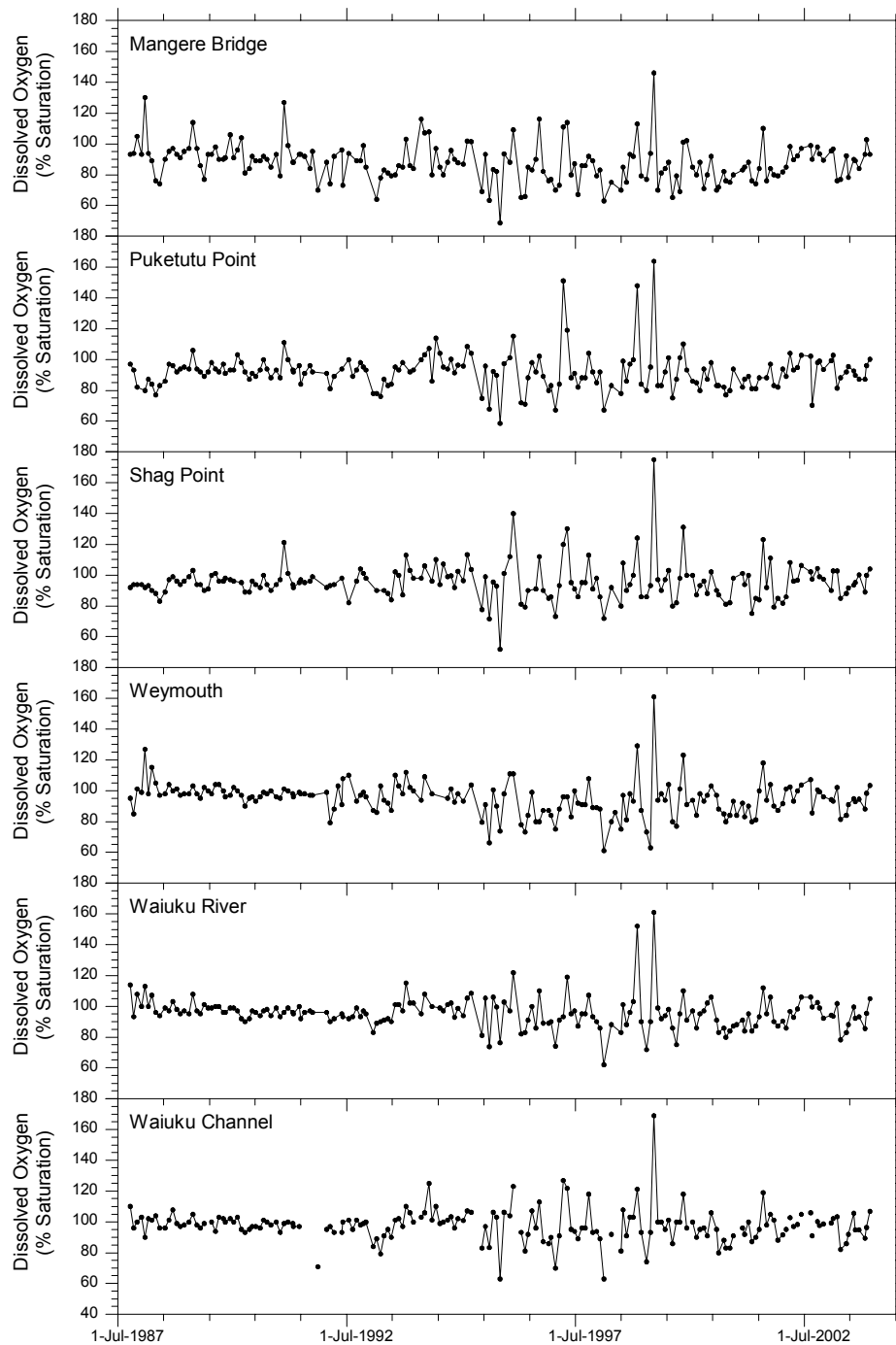


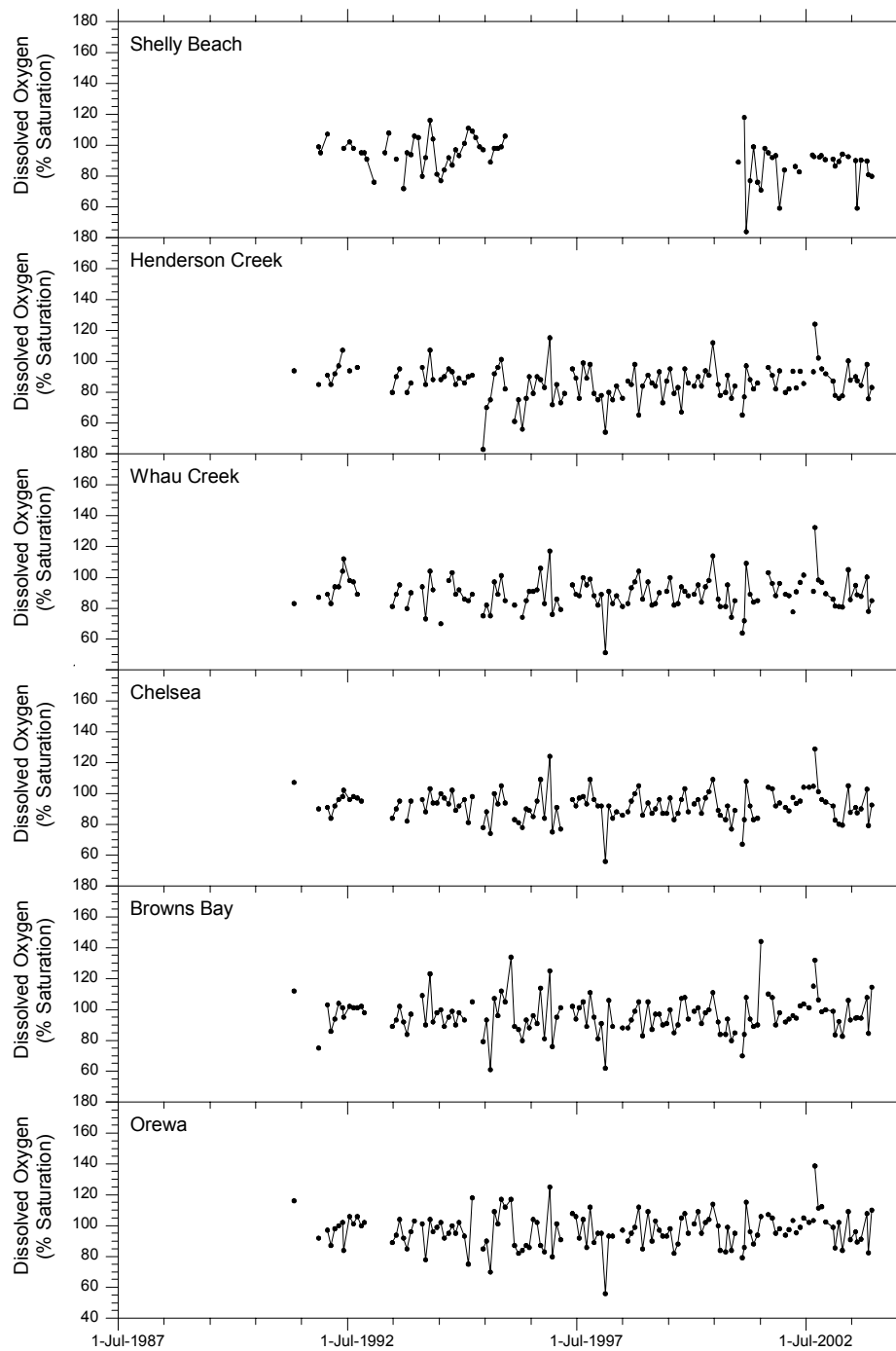
APPENDIX 31: SALINE – DISSOLVED OXYGEN, % SATURATION

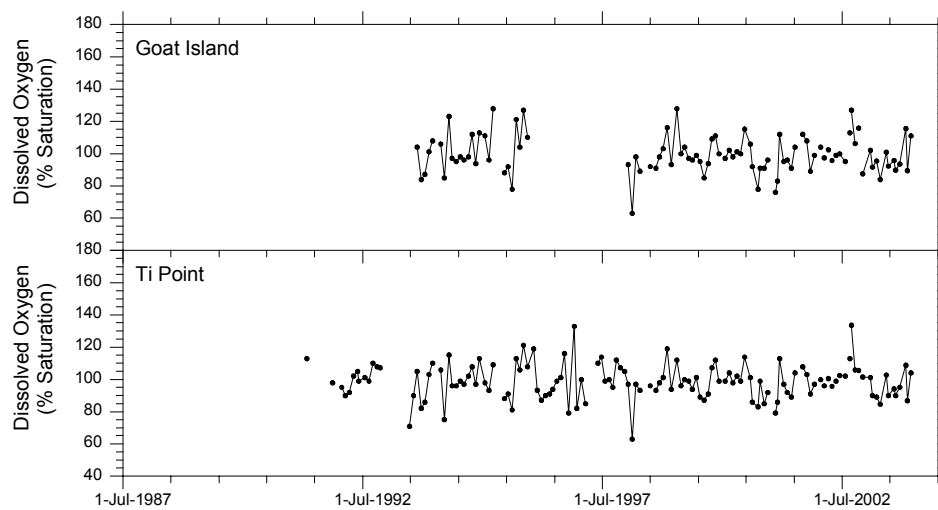
Date	Browns	Chelsea	Goat Isl	Henderson	Mangere	Orewa	Puketutu	Shag Point	Shelly	TiPoint	Waiuku Ch	Waiuku Rvr	Weymouth	Whau
3-Feb-03	99.0	92.0	102.0	87.0	95.4	99.0	99.3	90.1	91.1	101.0	99.3	94.1	94.2	86.0
17-Feb-03	83.7	82.7	91.7	78.0	96.6	85.6	102.9	102.6	86.6	90.1	102.0	93.5	93.0	81.5
19-Mar-03	92.3	80.2	95.4	76.1	75.9	102.0	81.4	102.9	89.4	89.1	103.3	101.9	102.2	81.0
17-Apr-03	82.6	79.5	84.0	77.6	77.0	84.0	88.0	85.0	94.2	84.5	81.9	78.3	81.5	80.7
3-Jun-03	106.0	104.8	100.7	100.3	92.4	109.0	91.8	88.0	92.7	102.9	86.0	83.0	84.0	105.1
16-Jun-03	93.1	87.8	92.2	87.9	78.4	90.8	95.5	91.5		90.0	91.9	88.1	90.9	85.7
30-Jul-03	94.4	90.8	95.7	90.0	90.1	95.9	92.7	93.6	90.2	94.2	105.6	99.7	94.7	94.9
14-Aug-03	94.9	87.6	89.6	87.6	89.1	89.4	89.8	95.3	59.0	90.1	94.7	92.2	92.8	88.7
12-Sep-03	94.5	90.0	93.4	84.1	84.0	91.2	87.2	100.1	90.4	95.1	94.8	93.0	94.5	87.9
29-Oct-03	107.7	102.6	115.4	98.0	93.2	107.8	87.3	89.0	89.6	108.9	89.2	85.5	88.0	100.1
10-Nov-03	84.7	79.3	89.5	75.7	102.9	82.5	95.9	100.0	80.8	86.7	96.3	95.4	98.2	77.9
8-Dec-03	114.4	92.5	110.9	83.0	93.2	110.1	100.3	103.9	80.0	104.2	106.8	105.0	103.5	85.1
Median	94.5	88.9	94.4	85.6	91.3	93.6	92.3	94.5	89.6	92.2	95.6	93.3	93.6	85.9
IQR/Median %	11	11	10	12	12	16	10	12	8	13	12	10	6	10

The dates given are for the East Coast and Waitemata Harbour sites. The Manukau and Kaipara Harbour sites were visited on 13-Jan, 11-Feb, 14-Mar, 14-Apr, 13-May, 13-Jun, 9-Jul, 8-Aug, 8-Sep, 6-Oct, 3-Nov and 2-Dec.

The graphs on the following pages show DO (% saturation) results for the period August 1987 to December 2003 (where data available).







APPENDIX 32: SALINE – AMMONIA NITROGEN

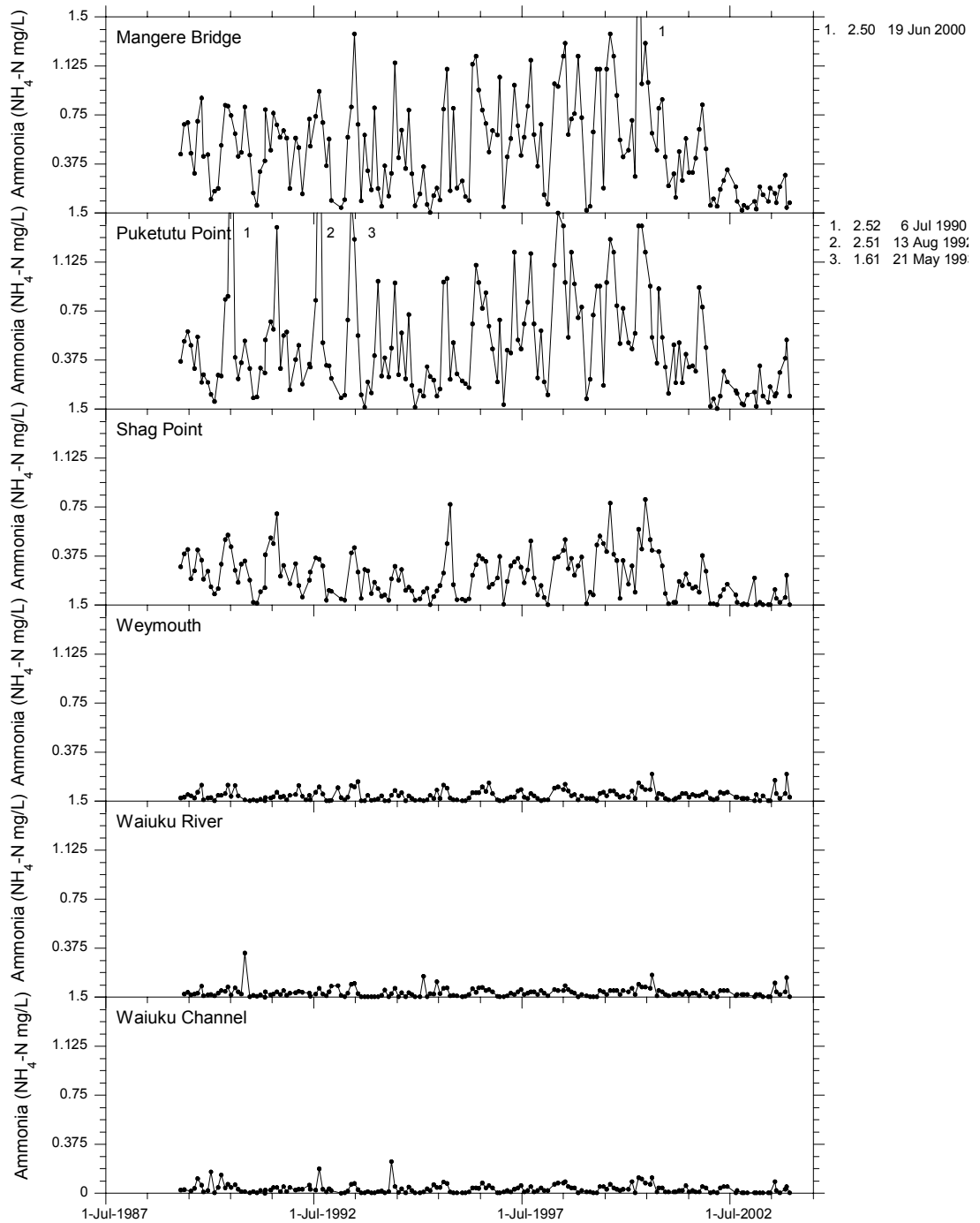
(Note that $\text{g/m}^3 = \text{g m}^{-3} = \text{mg/L}$)

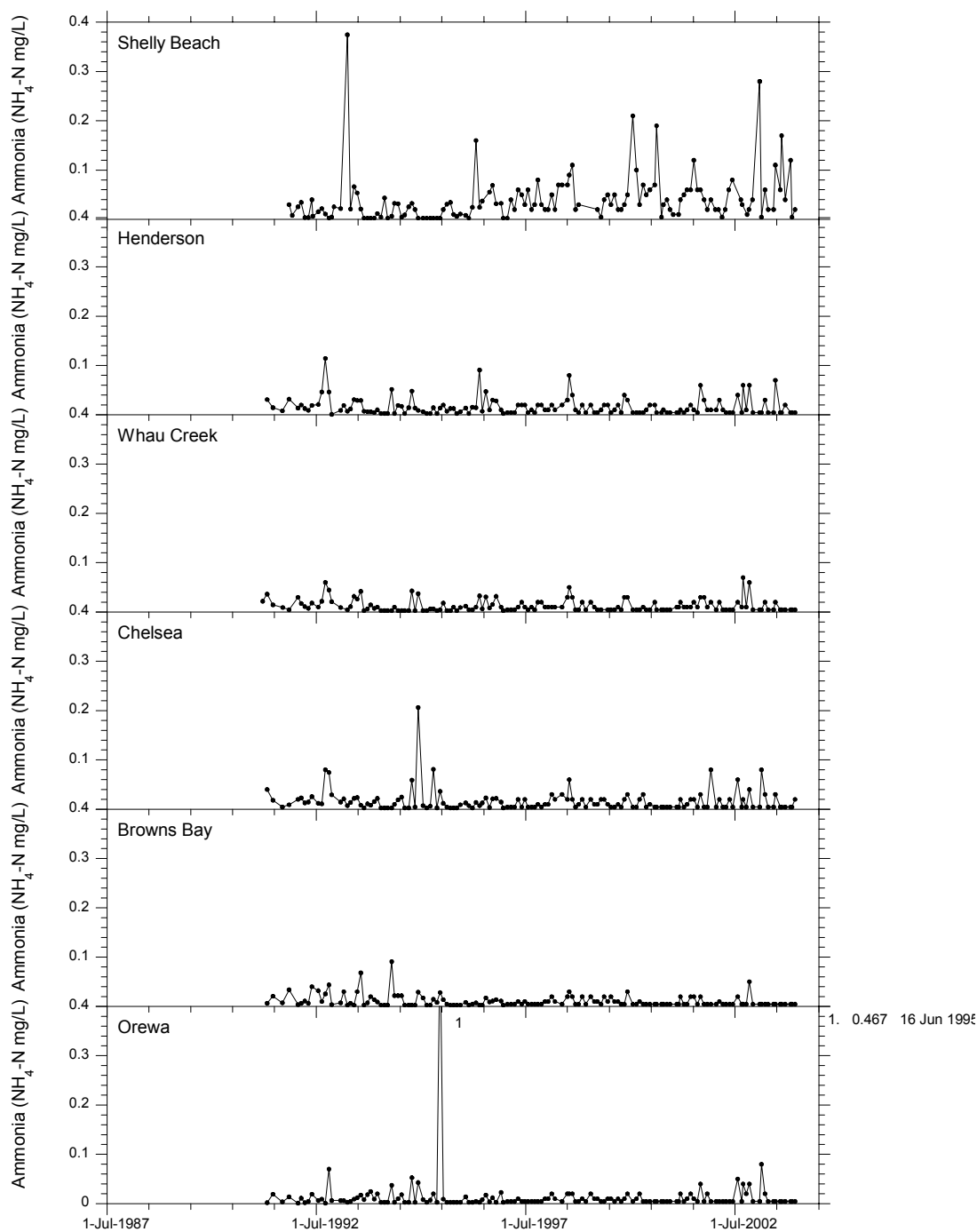
Ammonia nitrogen (mg/L) for the period January 2003 - December 2003														
Date	Browns	Chelsea	Goat Isl	Henderson	Mangere	Orewa	Puketutu	Shag Point	Shelly	TiPoint	Waiuku Ch	Waiuku Rvr	Weymouth	Whau
3-Feb-03	<0.01	<0.01	<0.01	<0.01	0.09	<0.01	0.13	0.21	0.28	<0.01	<0.01	<0.01	<0.01	<0.01
17-Feb-03	<0.01	0.08	<0.01	<0.01	0.03	0.08	0.02	<0.01	<0.01	<0.01	<0.01	0.02	0.05	<0.01
19-Mar-03	<0.01	0.03	0.02	0.03	0.20	0.02	0.33	0.02	0.06	0.02	<0.01	0.02	<0.01	0.02
17-Apr-03	<0.01	<0.01	<0.01	<0.01	0.14	<0.01	0.10	<0.01	0.02	<0.01	<0.01	<0.01	0.04	<0.01
3-Jun-03	<0.01	<0.01	0.02	<0.01	0.09	<0.01	0.05	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01
16-Jun-03	<0.01	0.03	<0.01	0.07	0.19	<0.01	0.17	<0.01	0.11	<0.01	<0.01	<0.01	<0.01	0.02
30-Jul-03	<0.01	<0.01	<0.01	<0.01	0.15	<0.01	0.10	0.12	0.06	<0.01	0.09	0.11	0.16	<0.01
14-Aug-03	<0.01	<0.01	<0.01	<0.01	0.08	<0.01	0.12	0.05	0.17	<0.01	0.02	0.04	0.06	<0.01
12-Sep-03	<0.01	<0.01	<0.01	0.02	0.20	<0.01	0.28	0.02	0.04	<0.01	<0.01	0.02	0.02	<0.01
29-Oct-03	<0.01	<0.01	<0.01	<0.01	0.29	<0.01	0.39	0.06	0.12	<0.01	0.03	0.04	0.06	<0.01
10-Nov-03	<0.01	<0.01	<0.01	<0.01	0.04	<0.01	0.53	0.23	<0.01	<0.01	0.05	0.15	0.21	<0.01
8-Dec-03	<0.01	0.02	<0.01	<0.01	0.08	<0.01	0.10	<0.01	0.02	<0.01	<0.01	<0.01	0.03	<0.01
Median	0.005	0.005	0.005	0.005	0.12	0.005	0.13	0.02	0.050	0.005	0.005	0.02	0.04	0.005
IQR/Median %	0	350	0	75	98	0	154	350	185	0	350	175	157	0

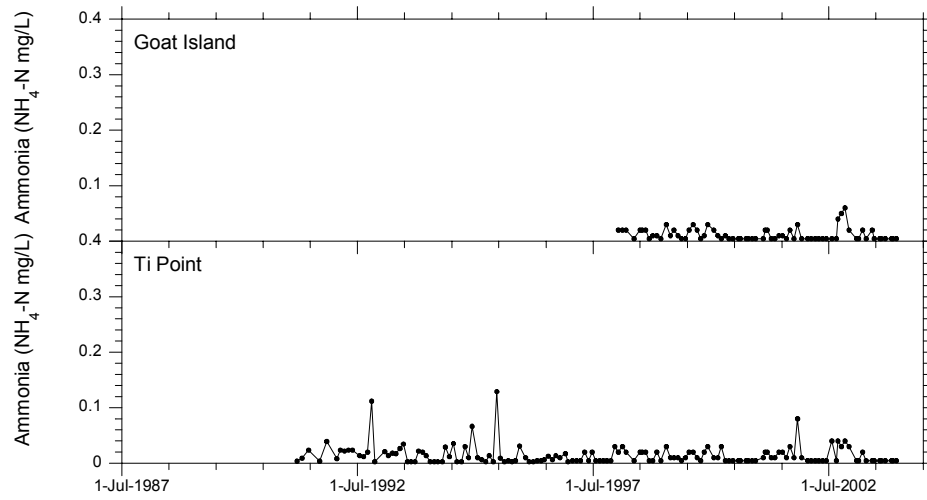
The dates given are for the East Coast and Waitemata Harbour sites. The Manukau and Kaipara Harbour sites were visited on 13-Jan, 11-Feb, 14-Mar, 14-Apr, 13-May, 13-Jun, 9-Jul, 8-Aug, 8-Sep, 6-Oct, 3-Nov and 2-Dec.

Method detection limit is 0.01 mg/L. For summary statistics, a result of “<0.01” is taken to have the value 0.005

The graphs on the following pages show ammonia nitrogen results for the period August 1987 to December 2003 (where data available).







APPENDIX 33: SALINE – NITRITE NITROGEN

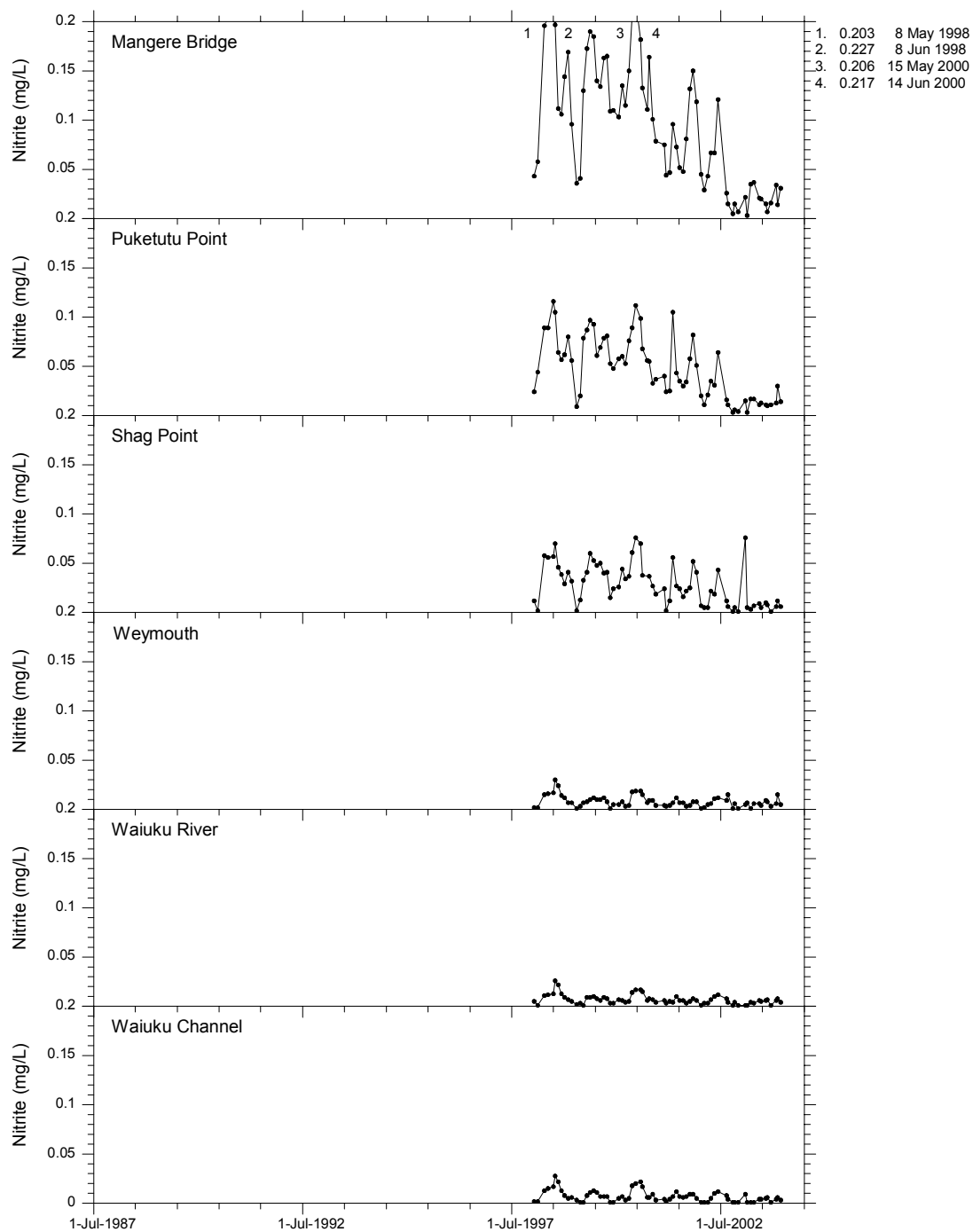
(Note that $\text{g/m}^3 = \text{g m}^{-3} = \text{mg/L}$)

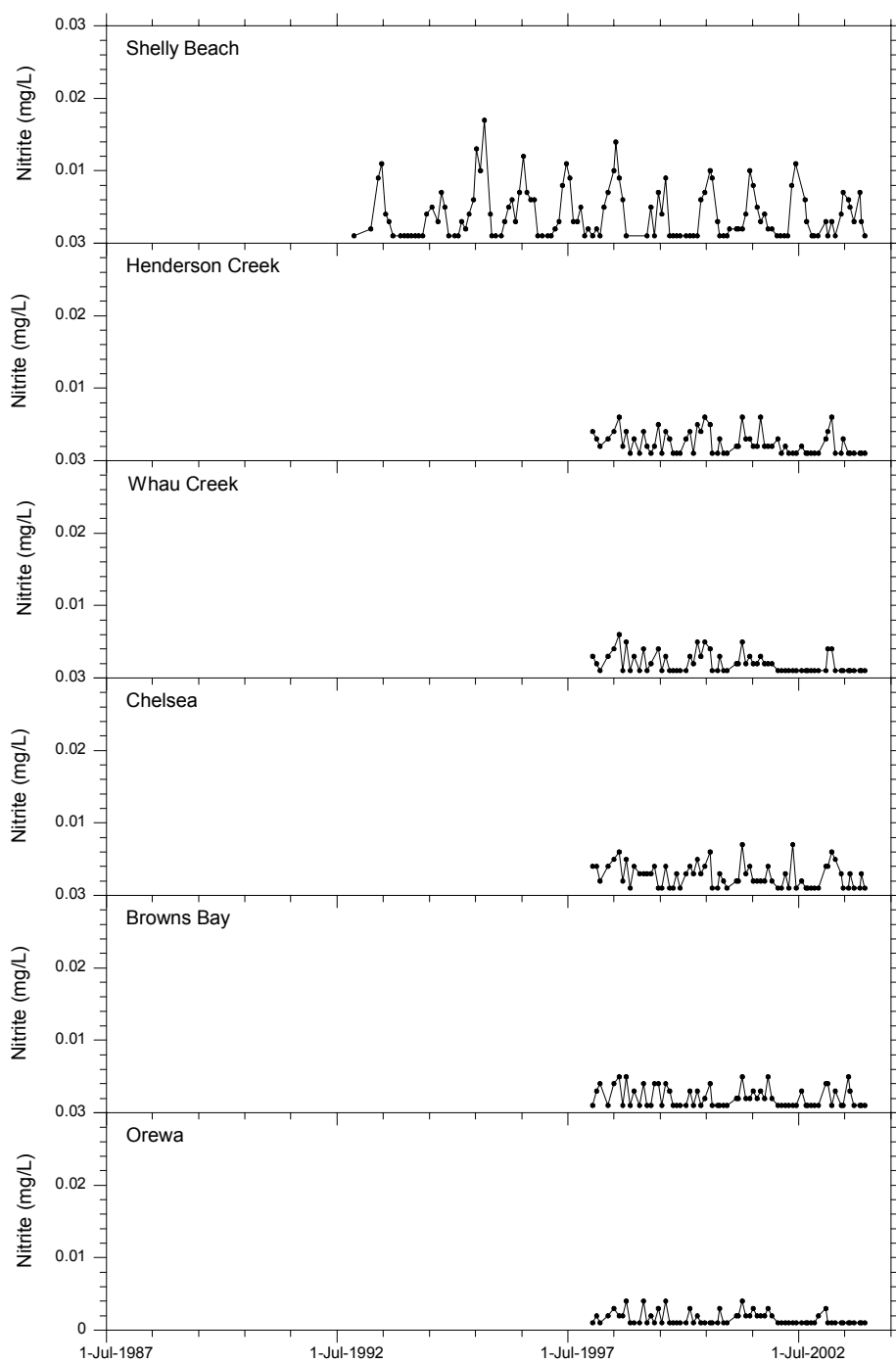
Nitrite nitrogen (mg/L) for the period January 2003 - December 2003														
Date	Browns	Chelsea	Goat Isl	Henderson	Mangere	Orewa	Puketutu	Shag Point	Shelly	TiPoint	Waiuku Ch	Waiuku Rvr	Weymouth	Whau
3-Feb-03	0.004	0.004	0.003	0.003	0.022	0.003	0.015	0.076	0.003	0.003	0.009	<0.002	0.005	<0.002
17-Feb-03	0.004	0.006	0.003	0.004	0.003	<0.002	0.003	0.005	<0.002	<0.002	<0.002	<0.002	0.007	0.004
19-Mar-03	<0.002	0.005	<0.002	0.006	0.035	<0.002	0.017	0.003	0.003	<0.002	<0.002	0.004	<0.002	0.004
17-Apr-03	0.003	0.003	<0.002	<0.002	0.037	<0.002	0.017	0.007	<0.002	<0.002	<0.002	0.003	0.006	<0.002
3-Jun-03	<0.002	<0.002	0.005	<0.002	0.021	<0.002	0.011	0.009	0.004	0.003	0.004	0.006	0.006	<0.002
16-Jun-03	<0.002	<0.002	0.005	0.003	0.020	<0.002	0.013	0.005	0.007	0.004	0.004	0.005	0.004	<0.002
30-Jul-03	0.005	0.003	0.003	<0.002	0.015	<0.002	0.011	0.010	0.006	<0.002	0.005	0.006	0.009	<0.002
14-Aug-03	0.003	<0.002	0.004	<0.002	0.007	<0.002	0.010	0.008	0.005	<0.002	0.006	0.007	0.008	<0.002
12-Sep-03	<0.002	<0.002	<0.002	<0.002	0.016	<0.002	0.011	<0.002	0.003	<0.002	<0.002	<0.002	0.003	<0.002
29-Oct-03	<0.002	0.003	<0.002	<0.002	0.034	<0.002	0.013	0.006	0.007	<0.002	0.004	0.006	0.006	<0.002
10-Nov-03	<0.002	<0.002	0.005	<0.002	0.014	<0.002	0.030	0.012	0.003	<0.002	0.006	0.008	0.015	<0.002
8-Dec-03	<0.002	<0.002	<0.002	<0.002	0.031	<0.002	0.014	0.006	<0.002	<0.002	0.003	0.004	0.005	<0.002
Median	0.001	0.002	0.003	0.001	0.021	0.001	0.013	0.007	0.003	0.001	0.004	0.005	0.006	0.001
IQR/Median %	225	113	108	200	83	0	35	65	92	50	106	78	42	0

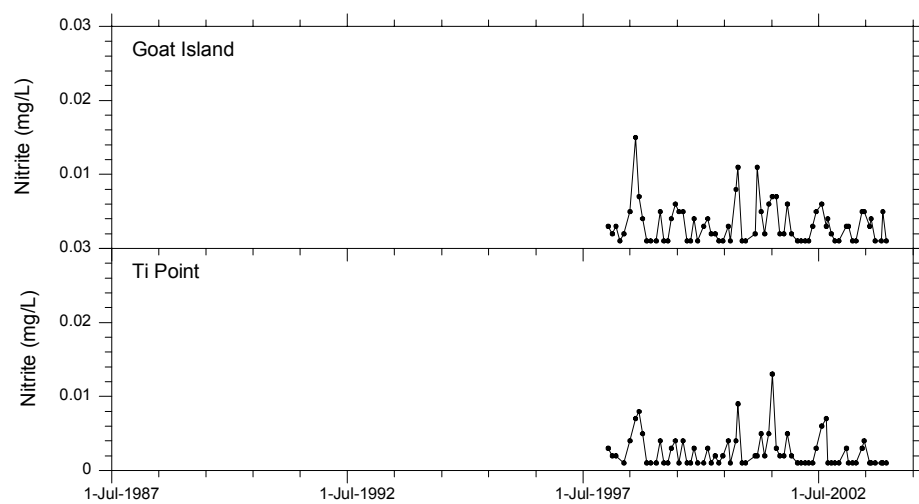
The dates given are for the East Coast and Waitemata Harbour sites. The Manukau and Kaipara Harbour sites were visited on 13-Jan, 11-Feb, 14-Mar, 14-Apr, 13-May, 13-Jun, 9-Jul, 8-Aug, 8-Sep, 6-Oct, 3-Nov and 2-Dec.

Method detection limit is 0.002 mg/L. For summary statistics, a result of “<0.002” is taken to have the value 0.001

The graphs on the following pages show nitrite nitrogen results for the period August 1987 to December 2003 (where data available)







APPENDIX 34: SALINE – NITRATE NITROGEN

(Note that $\text{g/m}^3 = \text{g m}^{-3} = \text{mg/L}$)

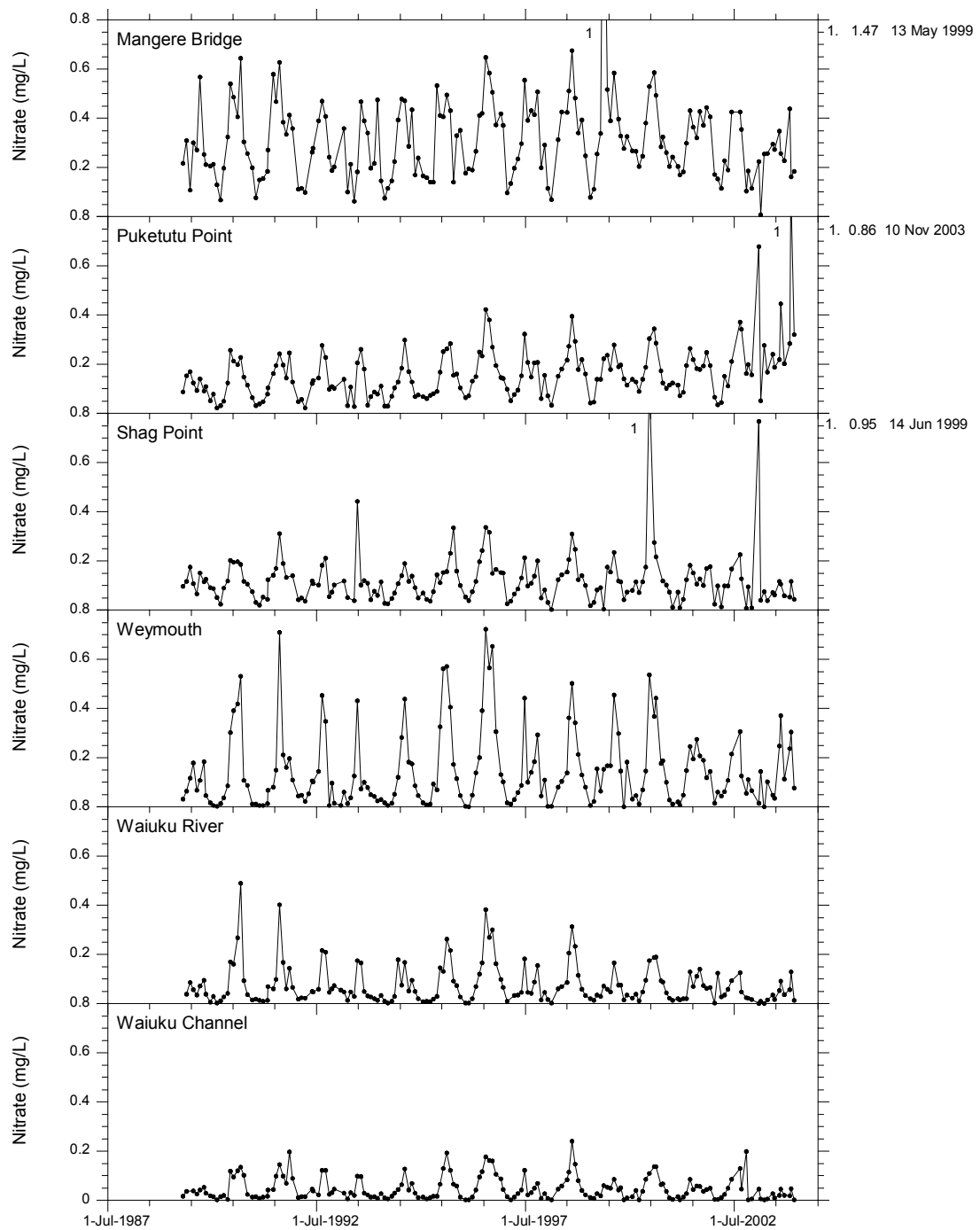
Nitrate nitrogen (mg/L) for the period January 2003 - December 2003

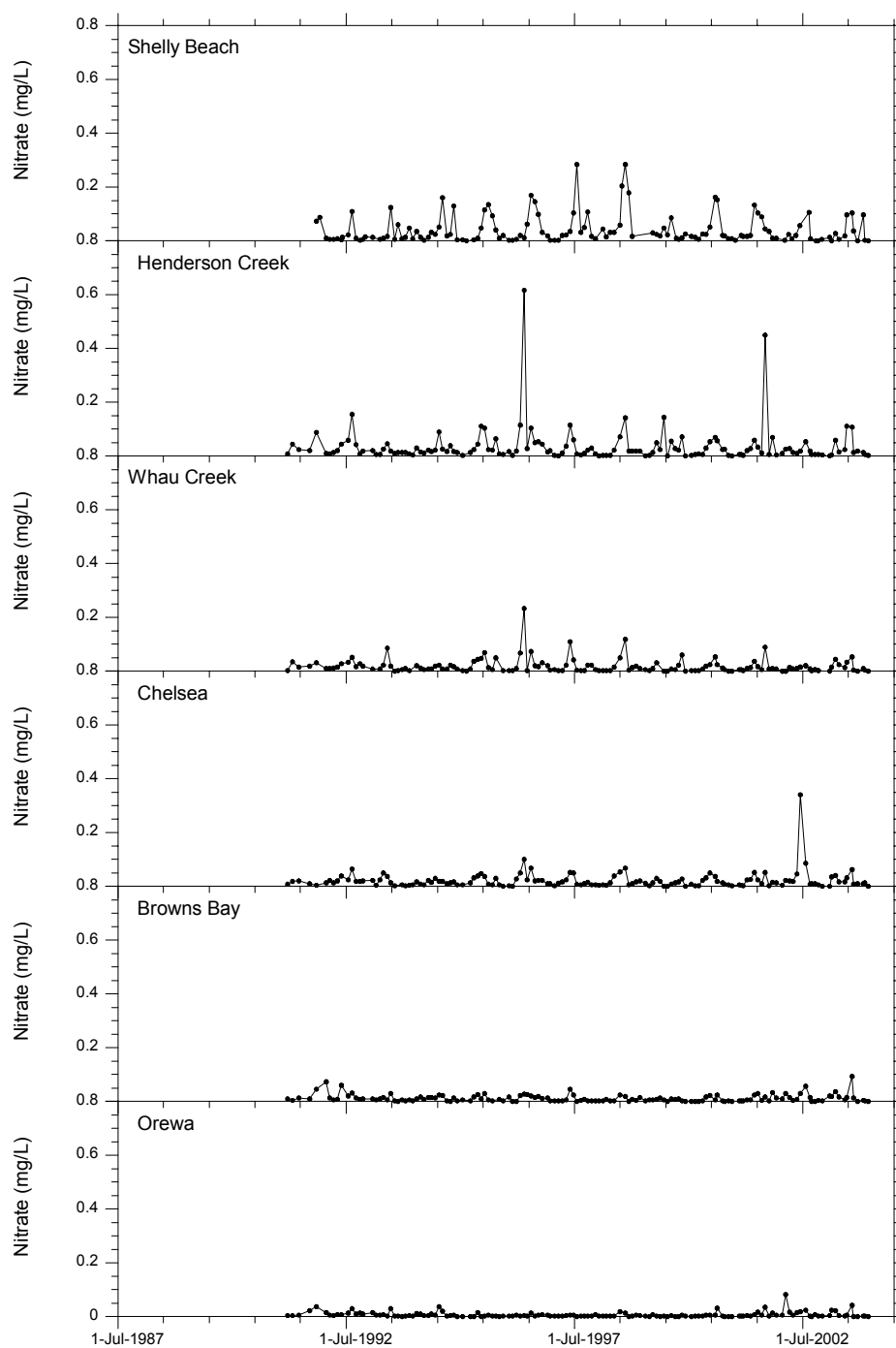
Date	Browns	Chelsea	Goat Isl	Henderson	Mangere	Orewa	Puketutu	Shag Point	Shelly	TiPoint	Waiuku Ch	Waiuku Rvr	Weymouth	Whau
3-Feb-03	0.020	0.000	0.009	0.000	0.223	0.004	0.679	0.768	0.012	0.021	0.046	0.001	0.014	0.000
17-Feb-03	0.018	0.034	0.024	0.004	0.007	0.025	0.052	0.040	0.000	0.024	0.006	0.010	0.143	0.015
19-Mar-03	0.037	0.040	0.035	0.059	0.255	0.023	0.276	0.075	0.028	0.018	0.003	0.000	0.000	0.044
17-Apr-03	0.016	0.016	0.016	0.015	0.256	0.004	0.167	0.039	0.006	0.014	0.006	0.014	0.102	0.024
3-Jun-03	0.006	0.017	0.033	0.024	0.295	0.002	0.241	0.072	0.018	0.017	0.028	0.034	0.047	0.013
16-Jun-03	0.014	0.032	0.035	0.111	0.273	0.005	0.187	0.062	0.097	0.024	0.009	0.016	0.034	0.033
30-Jul-03	0.093	0.062	0.044	0.107	0.347	0.041	0.218	0.117	0.104	0.033	0.021	0.053	0.248	0.053
14-Aug-03	0.012	0.007	0.018	0.013	0.257	0.000	0.446	0.106	0.037	0.017	0.045	0.091	0.372	0.004
12-Sep-03	0.001	0.009	0.007	0.018	0.228	0.000	0.202	0.058	0.000	0.000	0.020	0.036	0.113	0.001
29-Oct-03	0.004	0.009	0.005	0.013	0.438	0.003	0.283	0.053	0.097	0.005	0.019	0.056	0.237	0.010
10-Nov-03	0.002	0.013	0.002	0.005	0.163	0.003	0.860	0.116	0.002	0.005	0.047	0.130	0.303	0.004
8-Dec-03	0.001	0.001	0.004	0.002	0.185	0.000	0.321	0.044	0.001	0.000	0.003	0.012	0.077	0.001
Median	0.013	0.015	0.017	0.014	0.256	0.004	0.259	0.067	0.015	0.017	0.020	0.025	0.108	0.012
IQR/Median %	115	166	159	200	25	229	60	86	335	99	135	169	182	200

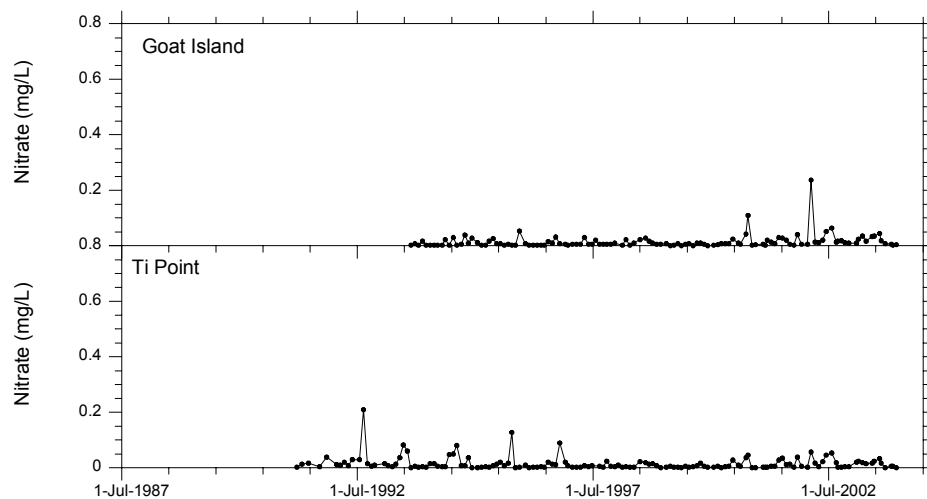
The dates given are for the East Coast and Waitemata Harbour sites. The Manukau and Kaipara Harbour sites were visited on 13-Jan, 11-Feb, 14-Mar, 14-Apr, 13-May, 13-Jun, 9-Jul, 8-Aug, 8-Sep, 6-Oct, 3-Nov and 2-Dec.

The graphs on the following pages show nitrate nitrogen results for the period August 1987 to December 2003 (where data available).

$\text{NO}_3\text{-N}$ is calculated from the difference between NNN and $\text{NO}_2\text{-N}$. Zero or negative results may be obtained and are recorded as zero.







APPENDIX 35: SALINE – DISSOLVED REACTIVE PHOSPHORUS

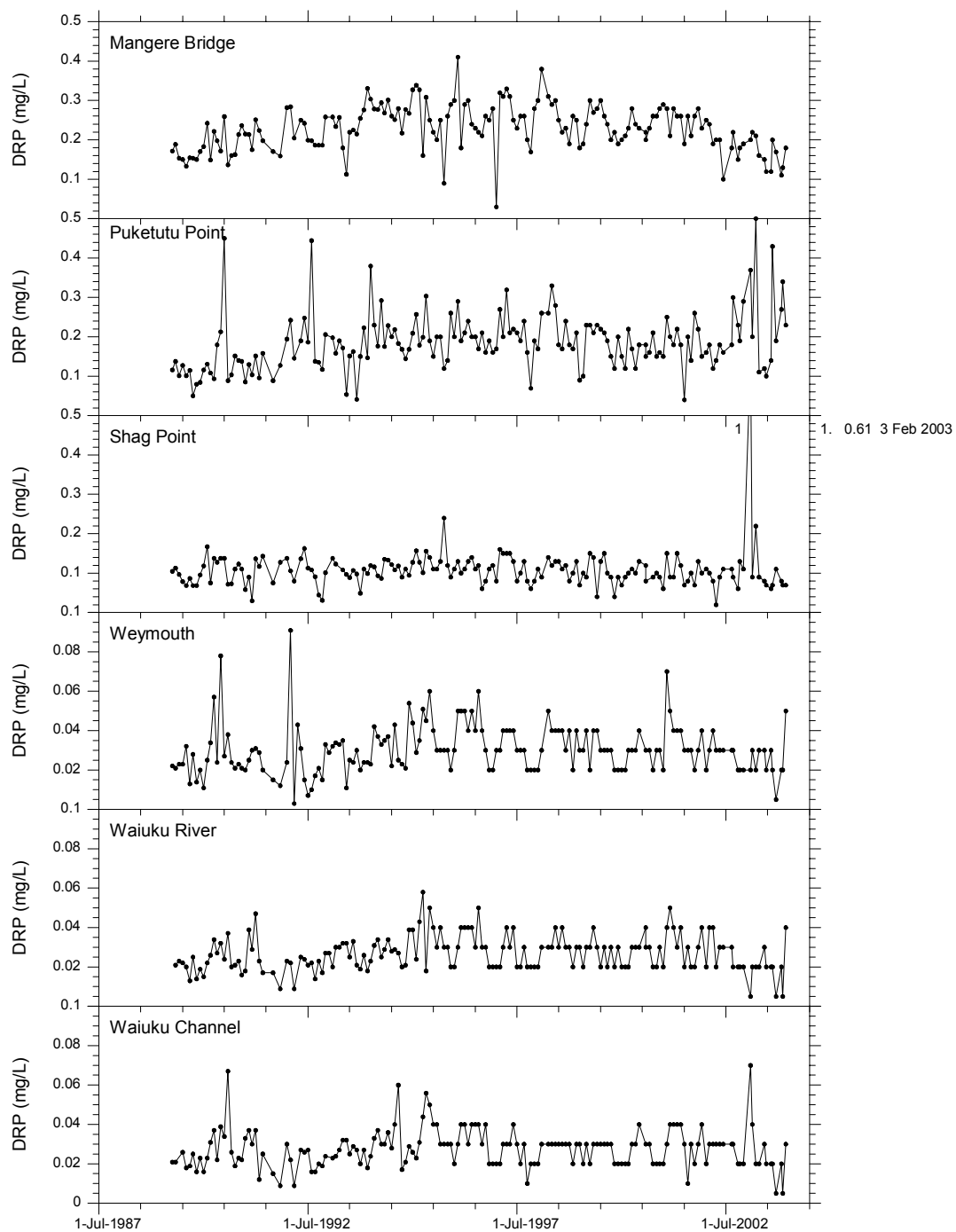
(Note that $\text{g/m}^3 = \text{g m}^{-3} = \text{mg/L}$)

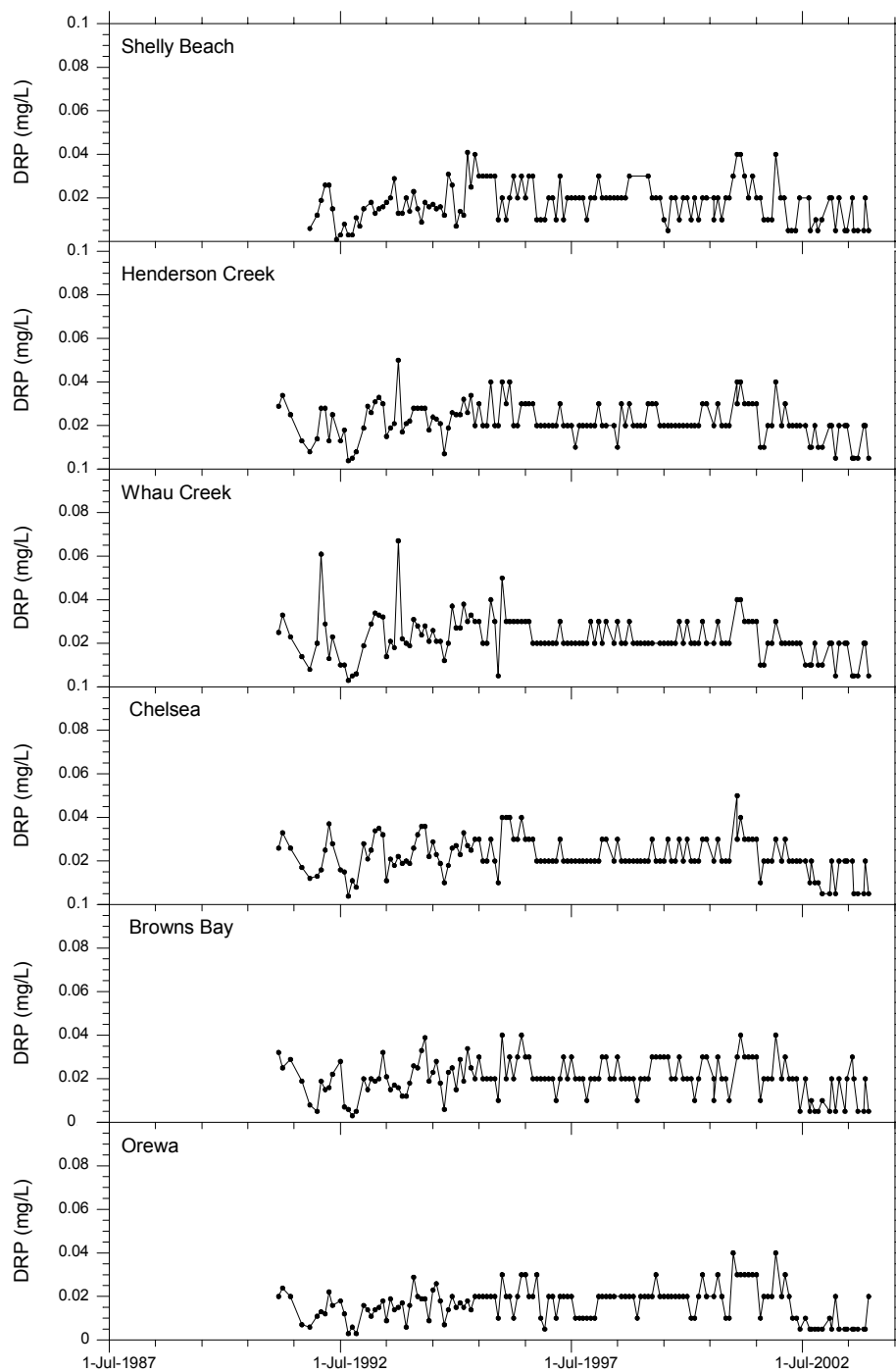
a) Dissolved reactive phosphorus (mg/L) for the period January 2003 - December 2003														
Date	Browns	Chelsea	Goat Isl	Henderson	Mangere	Orewa	Puketutu	Shag Point	Shelly	TiPoint	Waiuku Ch	Waiuku Rvr	Weymouth	Whau
3-Feb-03	<0.01	<0.01	<0.01	0.02	0.20	<0.01	0.37	0.61	0.02	<0.01	0.07	<0.01	0.02	0.02
17-Feb-03	0.02	0.02	0.02	0.02	0.22	0.02	0.20	0.09	0.02	0.02	0.04	0.02	0.03	0.02
19-Mar-03	<0.01	<0.01	<0.01	<0.01	0.21	<0.01	0.50	0.22	<0.01	<0.01	0.02	0.02	0.02	<0.01
17-Apr-03	0.02	0.02	<0.01	0.02	0.16	<0.01	0.11	0.09	0.02	<0.01	0.02	0.02	0.03	0.02
3-Jun-03	<0.01	0.02	<0.01	0.02	0.15	<0.01	0.12	0.08	<0.01	<0.01	0.03	0.03	0.03	0.02
16-Jun-03	0.02	0.02	0.02	0.02	0.12	<0.01	0.10	0.07	<0.01	<0.01	0.02	0.02	0.02	0.02
30-Jul-03	0.03	0.02	<0.01	<0.01	0.12	<0.01	0.14	0.06	0.02	<0.01	0.02	0.02	0.03	<0.01
14-Aug-03	0.02	<0.01	<0.01	<0.01	0.20	<0.01	0.43	0.07	<0.01	<0.01	0.02	0.02	0.02	<0.01
12-Sep-03	<0.01	<0.01	<0.01	<0.01	0.17	<0.01	0.19	0.11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
29-Oct-03	<0.01	<0.01	<0.01	0.02	0.11	<0.01	0.27	0.08	<0.01	<0.01	0.02	0.02	0.02	0.02
10-Nov-03	0.02	0.02	0.02	0.02	0.13	0.02	0.34	0.07	0.02	0.02	<0.01	<0.01	0.02	0.02
8-Dec-03	<0.01	<0.01	<0.01	<0.01	0.18	<0.01	0.23	0.07	<0.01	<0.01	0.03	0.04	0.05	<0.01
Median	0.013	0.013	0.005	0.020	0.17	0.005	0.21	0.08	0.005	0.005	0.020	0.020	0.020	0.020
IQR/Median %	120	120	75	75	44	0	94	31	300	0	50	19	50	75

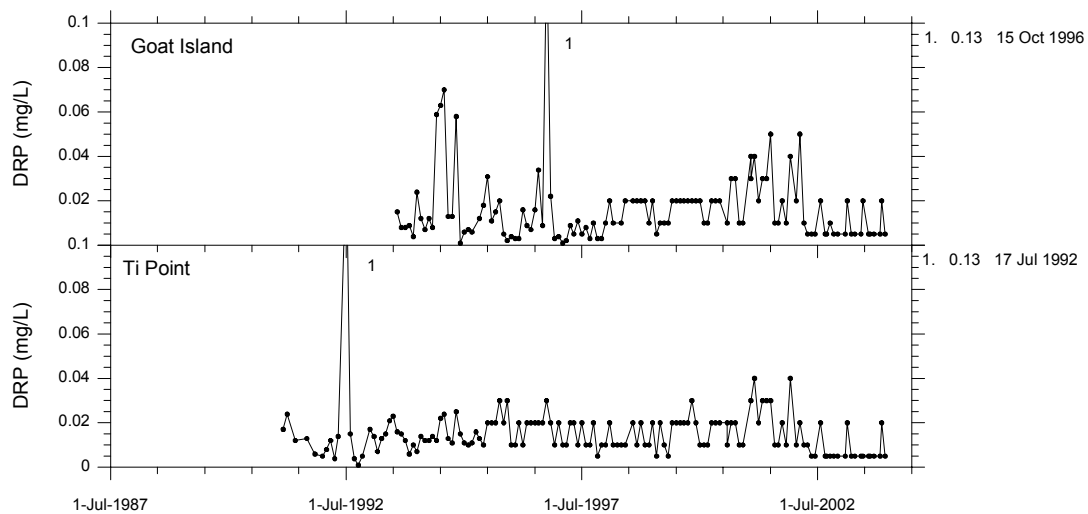
The dates given are for the East Coast and Waitemata Harbour sites. The Manukau and Kaipara Harbour sites were visited on 13-Jan, 11-Feb, 14-Mar, 14-Apr, 13-May, 13-Jun, 9-Jul, 8-Aug, 8-Sep, 6-Oct, 3-Nov and 2-Dec.

Method detection limit is 0.01 mg/L. For summary statistics, a result of “<0.01” is taken to have the value 0.005

The graphs on the following pages show dissolved reactive phosphorus results for the period August 1987 to December 2003 (where data available).







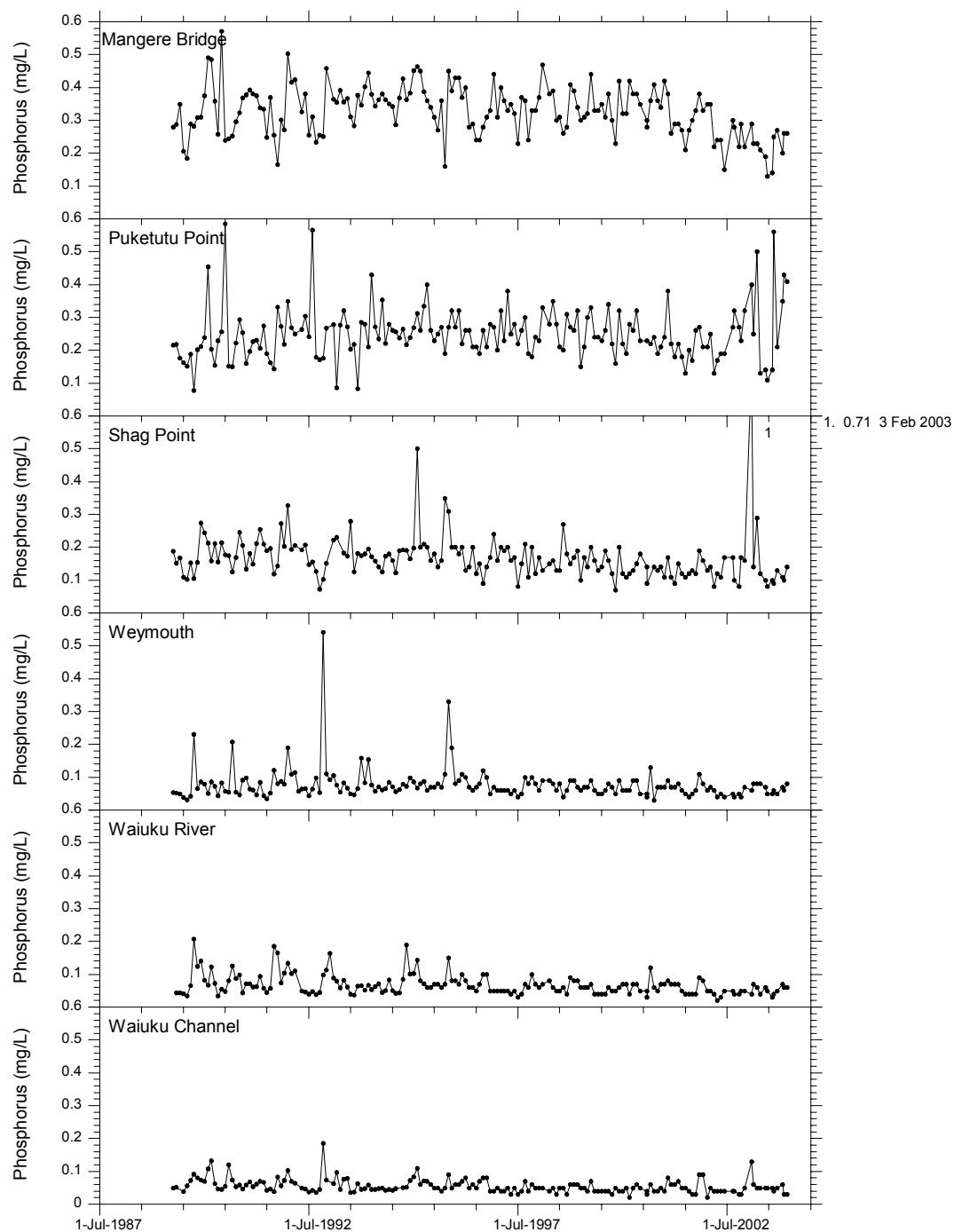
APPENDIX 36: SALINE – TOTAL PHOSPHORUS

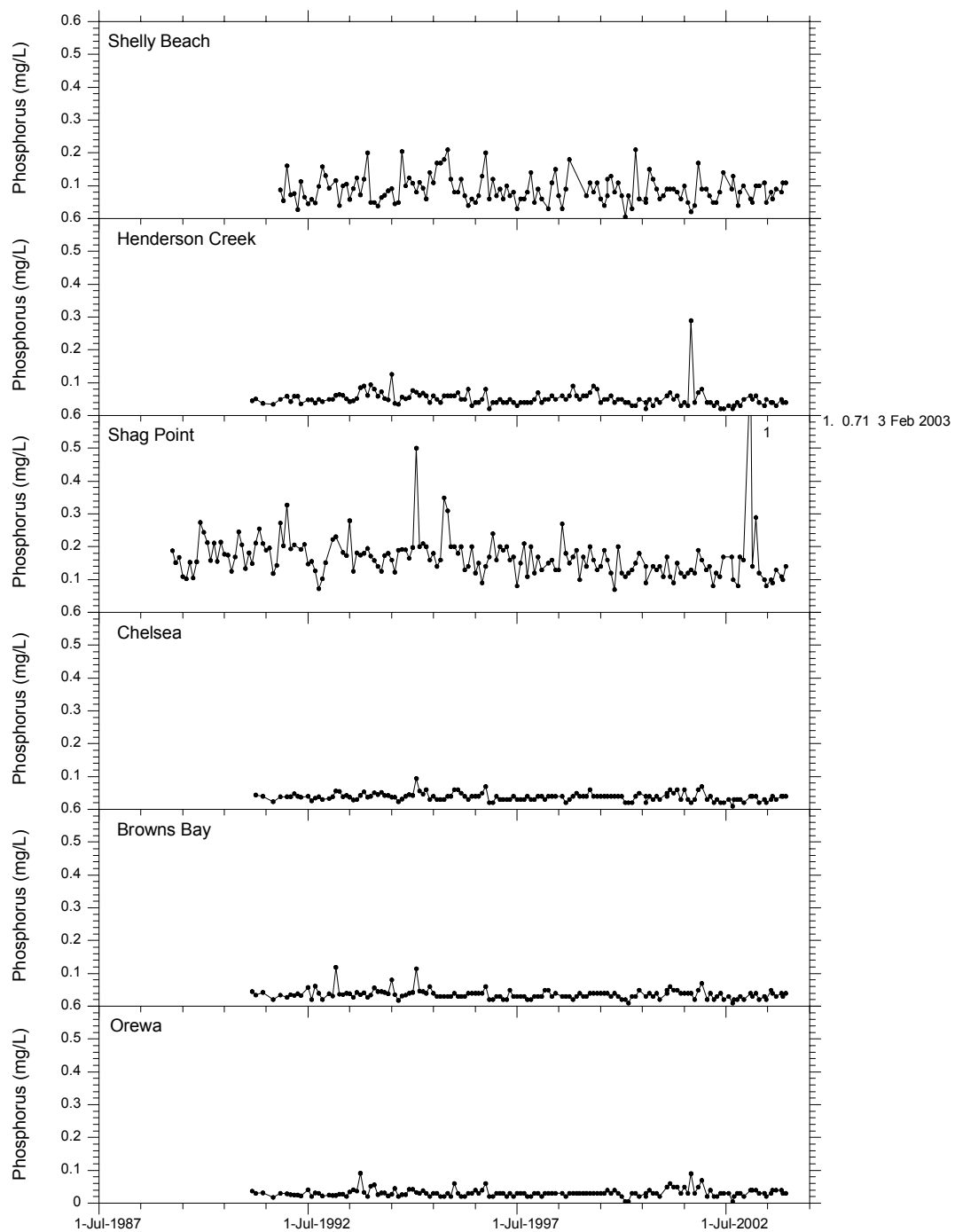
(Note that $\text{g/m}^3 = \text{g m}^{-3} = \text{mg/L}$)

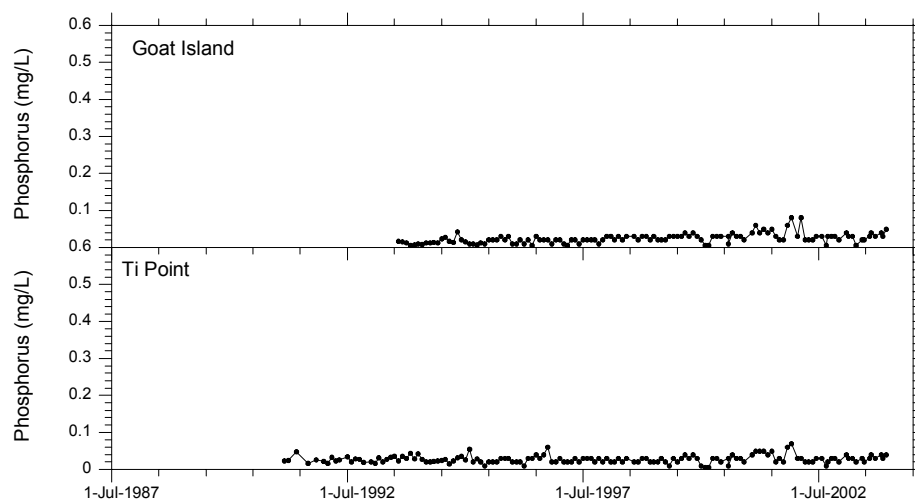
Total phosphorus (mg/L) for the period January 2003 - December 2003														
Date	Browns	Chelsea	Goat Isl	Henderson	Mangere	Orewa	Puketutu	Shag Point	Shelly	TiPoint	Waiuku Ch	Waiuku Rvr	Weymouth	Whau
3-Feb-03	0.04	0.04	0.04	0.06	0.29	0.04	0.40	0.71	0.06	0.04	0.13	0.04	0.06	0.06
17-Feb-03	0.03	0.04	0.03	0.05	0.23	0.04	0.25	0.14	0.05	0.03	0.06	0.07	0.08	0.04
19-Mar-03	0.04	0.04	0.03	0.06	0.23	0.04	0.50	0.29	0.10	0.03	0.05	0.06	0.08	0.05
17-Apr-03	0.02	0.02	0.01	0.04	0.21	0.03	0.13	0.12	0.10	0.02	0.05	0.04	0.08	0.05
3-Jun-03	0.03	0.03	0.02	0.03	0.19	0.03	0.14	0.10	0.11	0.03	0.05	0.06	0.07	0.04
16-Jun-03	0.02	0.02	0.02	0.05	0.13	0.02	0.11	0.08	0.05	0.02	0.05	0.05	0.05	0.04
30-Jul-03	0.05	0.03	0.03	0.04	0.14	0.03	0.14	0.10	0.08	0.03	0.05	0.03	0.05	0.03
14-Aug-03	0.04	0.04	0.04	0.04	0.25	0.04	0.56	0.09	0.06	0.04	0.04	0.04	0.06	0.04
12-Sep-03	0.03	0.03	0.03	0.03	0.27	0.04	0.21	0.13	0.09	0.03	0.05	0.05	0.05	0.03
29-Oct-03	0.04	0.04	0.04	0.05	0.20	0.04	0.35	0.11	0.08	0.04	0.06	0.07	0.07	0.05
10-Nov-03	0.03	0.04	0.03	0.04	0.26	0.03	0.43	0.10	0.11	0.03	0.03	0.06	0.06	0.04
8-Dec-03	0.04	0.04	0.05	0.04	0.26	0.03	0.41	0.14	0.11	0.04	0.03	0.06	0.08	0.04
Median	0.04	0.04	0.03	0.04	0.23	0.04	0.30	0.12	0.09	0.03	0.05	0.06	0.07	0.04
IQR/Median %	29	25	42	25	27	29	92	35	50	33	10	36	35	25

The dates given are for the East Coast and Waitemata Harbour sites. The Manukau and Kaipara Harbour sites were visited on 13-Jan, 11-Feb, 14-Mar, 14-Apr, 13-May, 13-Jun, 9-Jul, 8-Aug, 8-Sep, 6-Oct, 3-Nov and 2-Dec.

The graphs on the following pages show total phosphorus results for the period August 1987 to December 2003 (where data available).







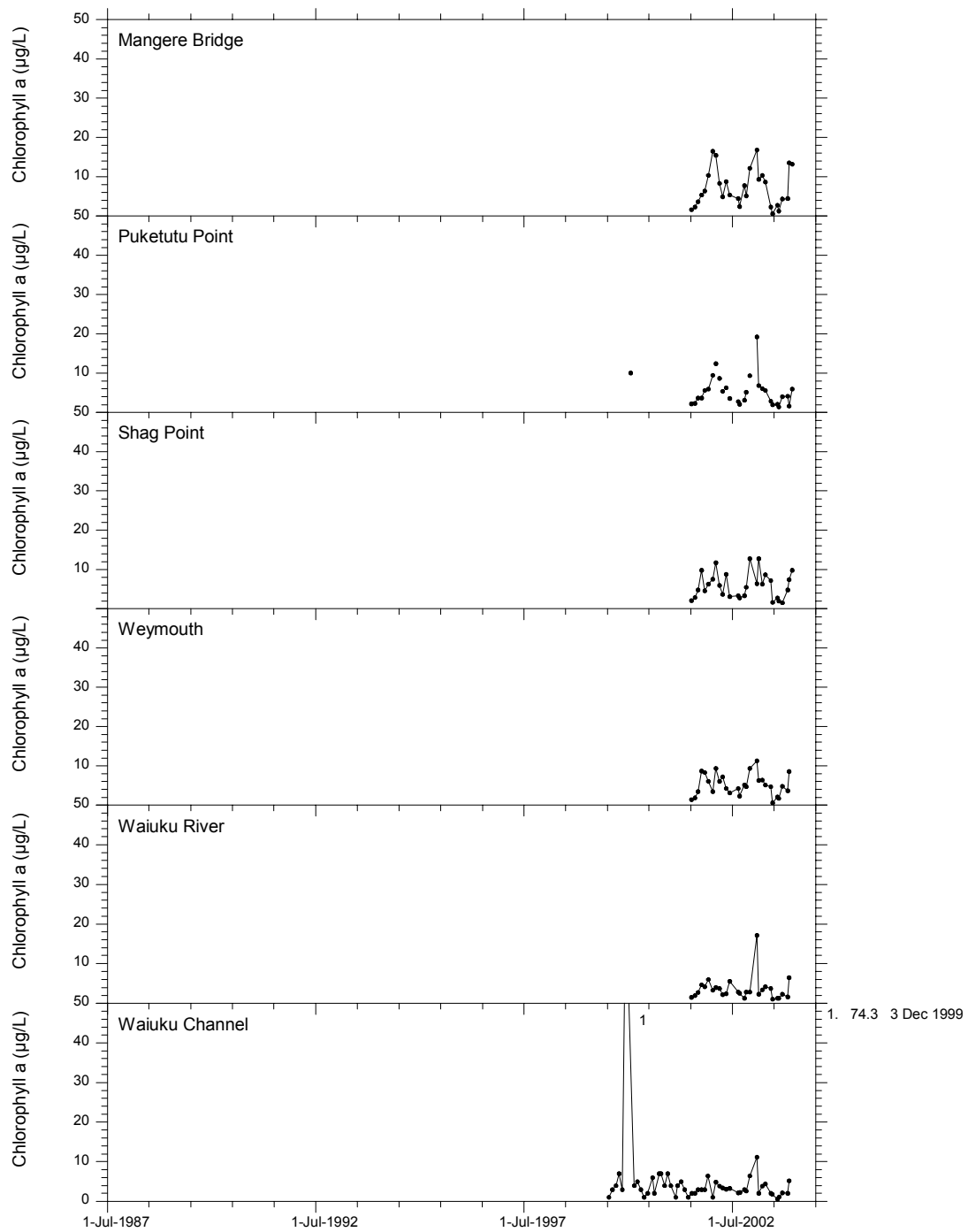
APPENDIX 37: SALINE – CHLOROPHYLL *a*

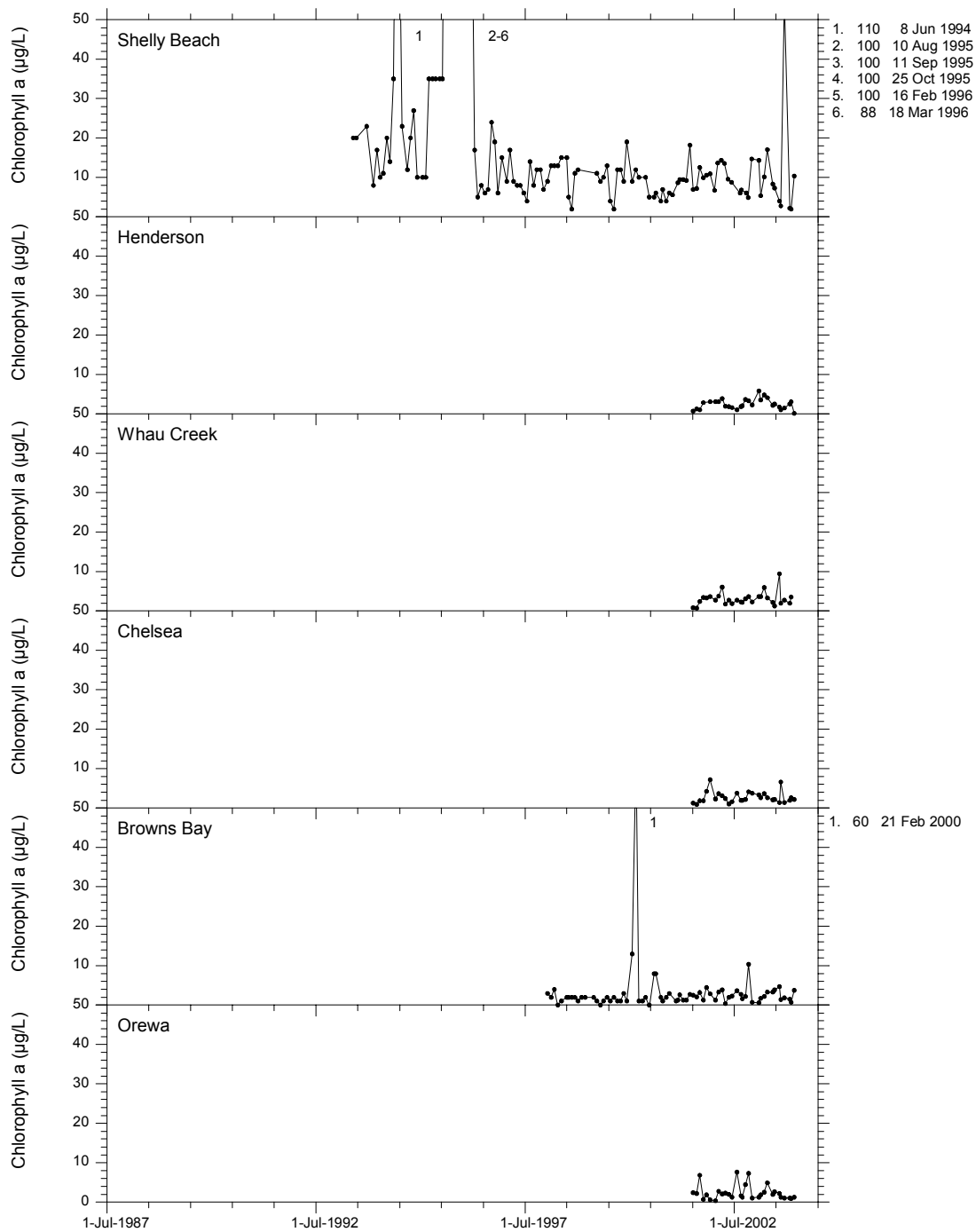
(Note that $\text{mg/m}^3 = \text{mg m}^{-3} = \mu\text{g/L}$)

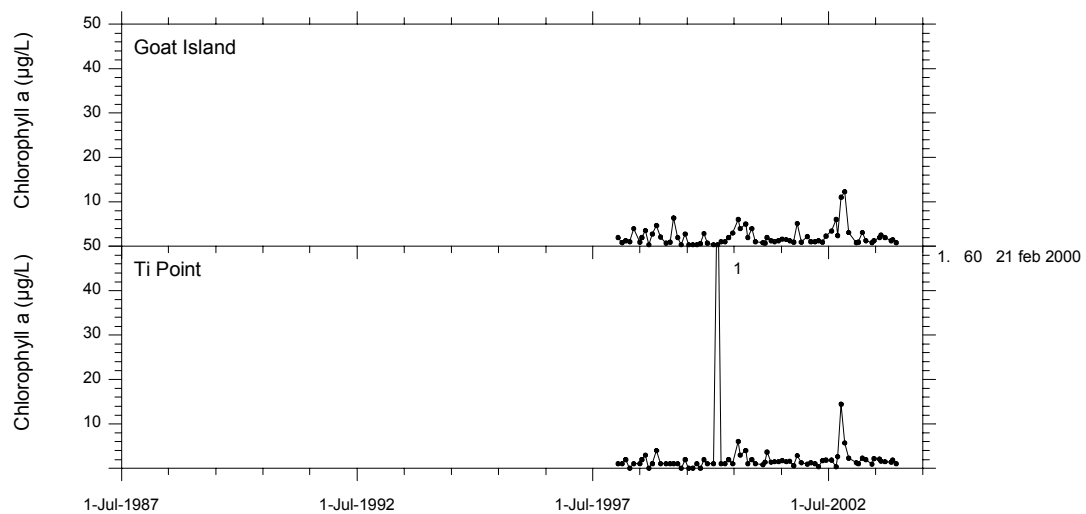
Chlorophyll <i>a</i> ($\mu\text{g/L}$) for the period January 2003 - December 2003														
Date	Browns	Chelsea	Goat Isl	Henderson	Mangere	Orewa	Puketutu	Shag Point	Shelly	TiPoint	Waiuku Ch	Waiuku Rvr	Weymouth	Whau
3-Feb-03	0.6	3.3	0.8	5.8	16.8	1.3	19.2	6.4	14.3	1.2	13.0	7.1	6.6	5.8
17-Feb-03	1.7	2.6	0.9	3.5	9.3	1.8	6.8	12.7	5.3	1.0	11.2	17.1	11.3	3.7
19-Mar-03	2.2	3.6	3.1	4.8	10.4	2.5	6.0	6.2	10.1	2.3	2.1	2.3	6.2	3.7
17-Apr-03	3.3	2.6	1.3	4.1	8.6	4.9	5.6	8.6	17.1	2.0	3.8	3.4	6.4	5.9
3-Jun-03	3.3	2.1	0.8	2.2	2.3	2.0	2.9	7.2	8.3	0.9	4.4	4.2	5.2	3.3
16-Jun-03	3.9	2.2	1.3	2.5	0.6	2.6	2.0	1.6	7.3	2.2	2.1	3.8	4.7	2.2
30-Jul-03	4.7	1.4	2.0	1.7	2.8	2.2	2.1	2.8	4.0	2.1	1.8	1.0	0.6	1.2
14-Aug-03	1.4	6.6	2.5	1.1	1.2	1.3	1.4	2.0	2.8	1.6	0.6	1.2	2.1	9.5
12-Sep-03	1.8	1.4	2.0	1.5	4.3	1.1	4.0	1.5	53.0	1.5	1.2	1.3	1.7	2.0
29-Oct-03	1.5	2.0	1.3	2.5	4.5	1.0	4.1	4.8	2.2	1.4	2.2	2.3	4.8	2.8
10-Nov-03	0.7	2.6	1.6	3.1	13.5	1.0	1.6	7.4	2.0	1.9	2.0	1.6	3.7	2.0
8-Dec-03	3.8	2.2	0.8	0.2	13.2	1.3	5.9	9.8	10.3	1.1	5.2	6.4	8.5	3.5
Median	2.0	2.4	1.3	2.5	6.6	1.6	4.1	6.3	7.8	1.6	2.2	2.9	5.0	3.4
IQR/Median %	98	30	87	80	129	66	95	81	97	55	123	113	63	61

The dates given are for the East Coast and Waitemata Harbour sites. The Manukau and Kaipara Harbour sites were visited on 13-Jan, 11-Feb, 14-Mar, 14-Apr, 13-May, 13-Jun, 9-Jul, 8-Aug, 8-Sep, 6-Oct, 3-Nov and 2-Dec.

The graphs on the following pages show chlorophyll *a* results for the period August 1987 to December 2003 (where data available).







APPENDIX 38: SALINE – PRESUMPTIVE COLIFORMS

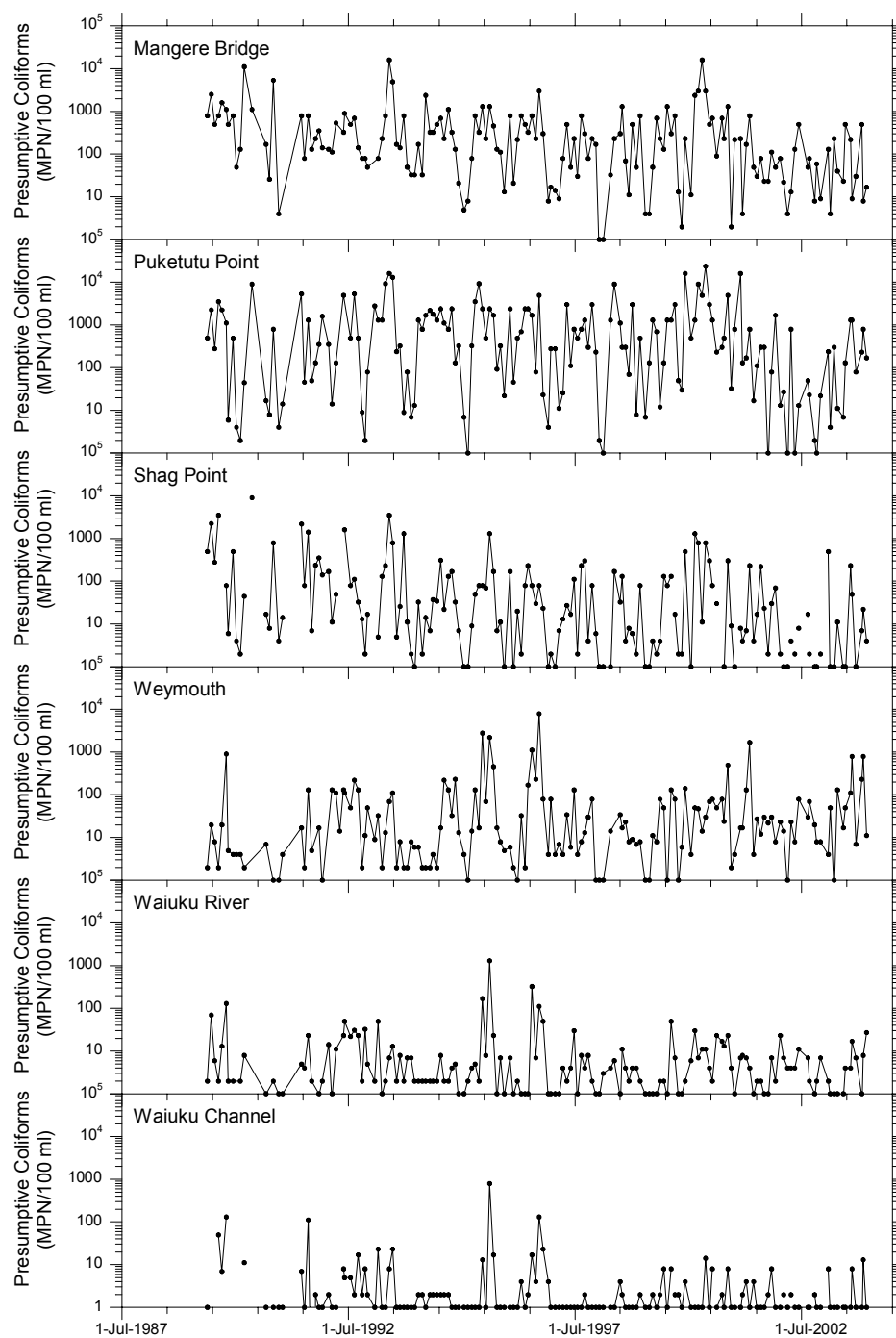
a) Presumptive coliforms (MPN/100mL) for the period January 2003 - December 2003

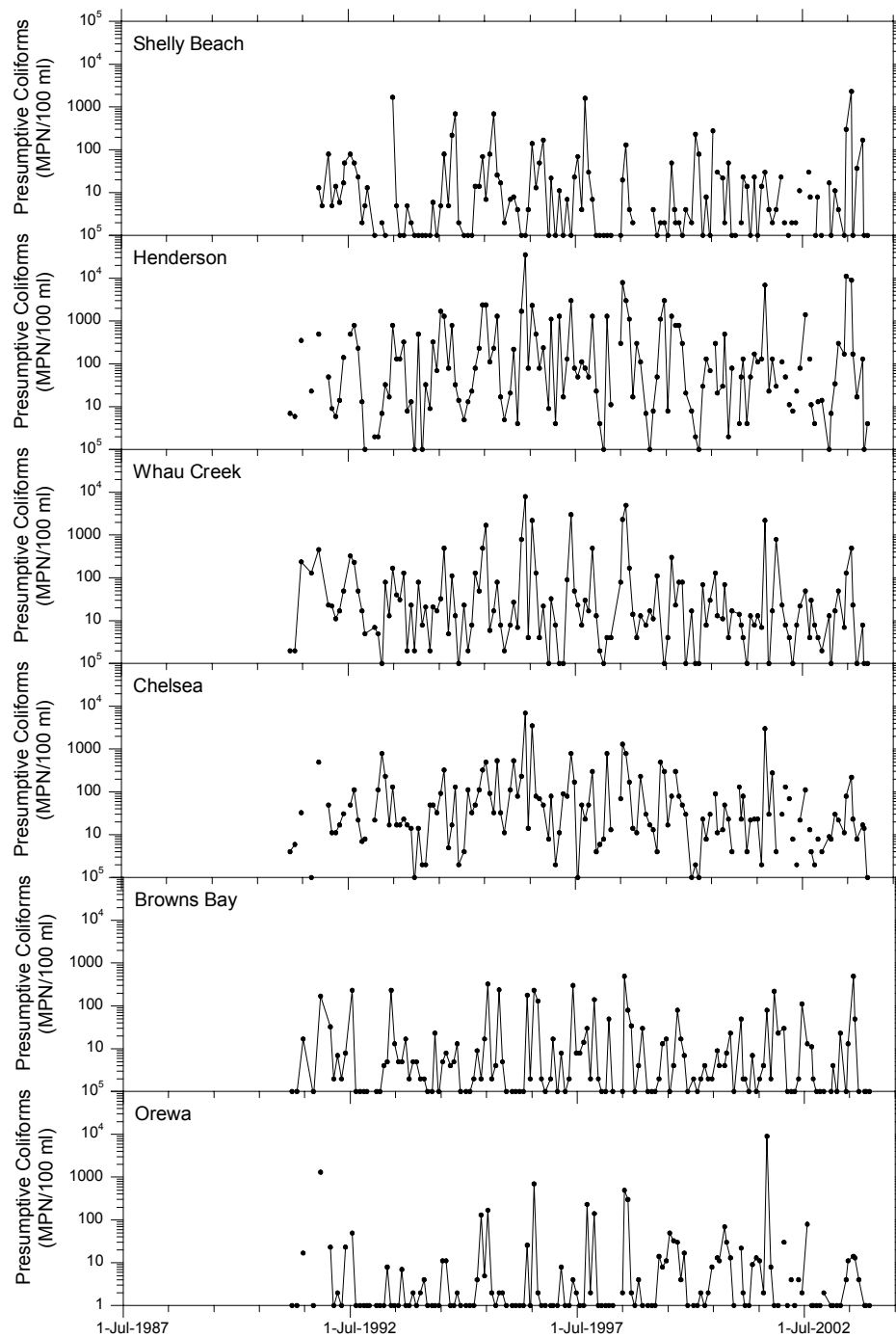
Date	Browns	Chelsea	Goat Isl	Henderson	Mangere	Orewa	Puketutu	Shag Point	Shelly	TiPoint	Waiuku Ch	Waiuku Rvr	Weymouth	Whau
3-Feb-03	<2	9	<2	<2	130	<2	240	500	17	<2	8	<2	4	13
17-Feb-03	4	8	<2	7	4	<2	4	<2	<2	<2	<2	<2	50	<2
19-Mar-03	<2	30	<2	34	230	<2	300	<2	11	8	<2	<2	<2	17
17-Apr-03	23	22	<2	300	40	<2	11	11	4	4	<2	<2	130	50
3-Jun-03	<2	11	<2	170	23	4	7	<2	<2	<2	<2	4	17	7
16-Jun-03	13	80	<2	11000	500	11	130	<2	300	13	<2	4	50	130
30-Jul-03	500	220	<2	9000	220	14	1300	230	2300	230	<2	17	110	500
14-Aug-03	50	23	<2	170	9	13	1300	50	<2	8	8	7	800	23
12-Sep-03	<2	8	<2	17	30	4	80	<2	37	7	<2	<2	7	<2
29-Oct-03	<2	17	<2	130	500	<2	230	7	170	4	<2	8	230	8
10-Nov-03	<2	14	<2	<2	8	<2	800	22	<2	<2	13	27	800	<2
8-Dec-03	<2	<2	<2	4	17	<2	170	4	<2	4	<2	4	11	<2
Median	1	16	1	82	35	1	200	6	8	4	1	4	50	11
IQR/Median %	1450	103	0	239	593	475	181	509	923	175	175	156	290	274

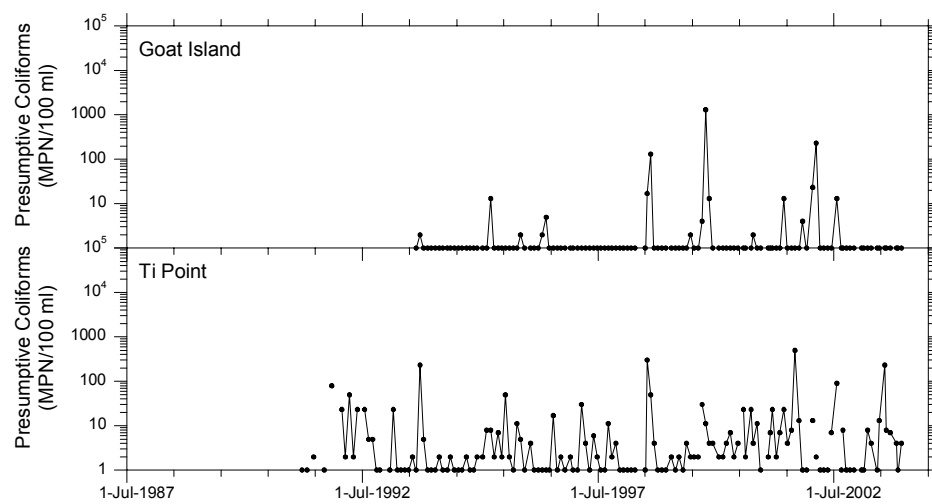
The dates given are for the East Coast and Waitemata Harbour sites. The Manukau and Kaipara Harbour sites were visited on 13-Jan, 11-Feb, 14-Mar, 14-Apr, 13-May, 13-Jun, 9-Jul, 8-Aug, 8-Sep, 6-Oct, 3-Nov and 2-Dec.

Method detection limit is 2 MPN/100 mL. For summary statistics, a result of “<2” is taken to have the value 1.

The graphs on the following pages show presumptive coliform results for the period August 1987 to December 2003 (where data available).







APPENDIX 39: SALINE – FAECAL COLIFORMS

Faecal coliforms (MPN/100mL) for the period January 2003 - December 2003

Date	Browns	Chelsea	Goat Isl	Henderson	Mangere	Orewa	Puketutu	Shag Point	Shelly	TiPoint	Waiuku Ch	Waiuku Rvr	Weymouth	Whau
3-Feb-03	<2	<2	<2	<2	23	<2	22	130	4	<2	8	<2	<2	13
17-Feb-03	<2	<2	<2	4	4	<2	<2	<2	<2	<2	<2	<2	30	<2
19-Mar-03	<2	17	<2	34	80	<2	110	<2	8	8	<2	<2	<2	17
17-Apr-03	23	7	<2	27	30	<2	11	8	<2	<2	<2	<2	30	30
3-Jun-03	<2	<2	<2	22	13	<2	7	<2	<2	<2	<2	4	17	<2
16-Jun-03	<2	30	<2	2200	23	<2	11	<2	130	<2	<2	4	17	27
30-Jul-03	220	30	<2	3000	140	4	80	<2	130	130	<2	17	50	130
14-Aug-03	<2	<2	<2	50	4	4	170	50	<2	<2	<2	4	230	8
12-Sep-03	<2	<2	<2	8	11	<2	8	<2	20	4	<2	<2	4	<2
29-Oct-03	<2	<2	<2	22	110	<2	30	7	170	<2	<2	4	130	8
10-Nov-03	<2	7	<2	<2	4	<2	70	11	<2	<2	<2	22	300	<2
8-Dec-03	<2	<2	<2	<2	11	<2	30	<2	<2	4	<2	<2	8	<2
Median	1	1	1	22	18	1	26	1	3	1	1	3	24	8
IQR/Median %	0	850	0	158	185	0	239	775	1860	300	0	120	268	231

The dates given are for the East Coast and Waitemata Harbour sites. The Manukau and Kaipara Harbour sites were visited on 13-Jan, 11-Feb, 14-Mar, 14-Apr, 13-May, 13-Jun, 9-Jul, 8-Aug, 8-Sep, 6-Oct, 3-Nov and 2-Dec.

Method detection limit is 2 MPN/100 mL. For summary statistics, a result of “<2” is taken to have the value 1.

The graphs on the following pages show faecal coliform results for the period August 1987 to December 2003 (where data available).

