Appendix 3.1. Water quality analytical results

STATION	DATE	TIME	82048 DEPTH OF SMPL METERS	00002 HSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00020 AIR TEMP CENT	00041 WEATHER WMO CODE 4501	00067 TIDE STAGE CODE	00076 TURBIDITY TRBIDMTR NTU	00300 DO MG/L	00301 % DO SAT SATURATION PERCENT	00310 BOD 5 DAY MG/L	00400 PH SU	00402 CONDUCTIVITY UMHOS/CM		00410 ALKALINITY CACO3 MG/L	00480 SALINITY PPTH
BROAD CREEK																	
INTERTIDAL																	
I-1	08/20/1997	1445	0.3	50	31	37	0		32	5.4	72	4.6	7.35	42000		108	25
I-4	08/20/1997	1330	0.3	50	31	37	0		39	4.3	57.3	2.2	7.4	47000		104	27
I-6	08/20/1997	1330	0.3	99.9	30.5	33	1	2000	37	5.5	71.7	1.8	7.8	50000	L	107	31
I-6	08/20/1997	1332	0.65		30.5					5.5	72.4			50000	L		31.5
I-6	08/20/1997	1331	1.1		30.5					5.6	73.7			50000	L		31.5
SUBTIDAL																	
R-1	08/20/1997	1450	0.3	50	32	37	0		45	5.4	73	3.8	7.4	42000		108	24
R-2	08/20/1997	1440	0.3	50	31.5	35	1	2000	20	6.1	81.3	2.4	7.3	44000		108	25.5
R-2	08/20/1997	1441	1		31.5					5.9	78.7			44000			25.5
R-2	08/20/1997	1442	2		31.5					5.8	77.3			44000			25.5
R-3	08/20/1997	1420	0.3	50	30	36	1	2000	25	5	65.8	1.6	7.1	43000		107	25
R-3	08/20/1997	1426	5.5		30					4.9	64.5			44000			26
R-3	08/20/1997	1424	11		30					5	65.8			44000			26
R-4	08/20/1997	1345	0.3	70	30	35	1	2000	21	5.8	75.7	1.5	8	46000		107	27
R-4	08/20/1997	1351	3		30					5.7	75			46000			27
R-4	08/20/1997	1350	6		30					5.6	73.7			46000			27
R-5	08/20/1997	1325	0.3	80	30	34	1	2000	20	5.9	77.6	0.8	8.1	45000		106	27
R-5	08/20/1997	1328	2.5		30					5.7	75			47000			27.5
R-5	08/20/1997	1326	5		30					5.7	75			47000			28
R-6	08/20/1997	1300	0.3	60	31	34	1	2000	23	7.5	100	1.8	8.1	48500		106	29
R-6	08/20/1997	1301	3		30					7.3	95.4			48500			29
R-6	08/20/1997	1259	6.5		30					7.3	95.4			48500			29
TIDE CREEK																	
T-1	08/20/1997	1422	0.3	50	29	29	1		18	3.3	42.3	2	6.7	11500		68	11
T-2	08/20/1997	1455	0.3	50	34	36	1	2000	75	6.7	93.7	4	7.45	43500		106	25.5
T-3	08/20/1997	1415	0.3	50	31	37	1		7	4.5	59.3	2.4	7.2	28500		86	16
T-3	08/20/1997	1417	0.7		31					4.5	59.3			28000			16
T-3	08/20/1997	1416	1.4		31					4.5	59.3			28500			16
T-4	08/20/1997	1325	0.3	50	28.5	30	1		200	2.4	30.4	2	6.45	42000		39	27
T-5	08/20/1997	1300	0.3	50	32	37	0		12	4.8	64.9	3.3	7.2	48000		106	28
T-6	08/20/1997	1300	0.3	50	29	37	1		8.2	3.9	50	2.3	7.1	18000		91	10.5
T-6	08/20/1997	1302	1		29					3.6	45.5			34000			16.5
T-6	08/20/1997	1301	2		29.5					3.1	39.1			45500			28

K = Actual value below detection limits

L = Actual value exceeds test limits

Appendix 3.1. Water quality analytical results

STATION	DATE	TIME	00530 TSS TOT NFLT MG/L	00610 NH3+NH4-NTOTAL MG/L	00625 TKN N MG/L	00630 NO2&NO3 N TOTAL MG/L		00665 PHOS-TOT MG/L P	00680 T ORG C C MG/L	31615 FECAL COLIFORM MPNECMED /100ML		32209 CHLOROPHYLL A UG/L
BROAD CREEK												
INTERTIDAL												
I-1	08/20/1997	1445	50	0.08	0.73	0.02	K	0.19	40	65		31.3
I-4	08/20/1997	1330	57	0.11	0.72	0.02	K	0.17	40	210		17.1
I-6	08/20/1997	1330	45	INTERFERENCE	0.44	0.02	K	0.1	58	50		9.8
I-6	08/20/1997	1332										
I-6	08/20/1997	1331										
SUBTIDAL												
R-1	08/20/1997	1450	68	0.1	0.84	0.02	K	0.21	38	80		32.3
R-2	08/20/1997	1440	41	0.56	0.57	0.02	K	0.15	42	30		25.1
R-2	08/20/1997	1441										
R-2	08/20/1997	1442										
R-3	08/20/1997	1420	41	INTERFERENCE	0.54	0.02		0.15	38	26		14.1
R-3	08/20/1997	1426										
R-3	08/20/1997	1424										
R-4	08/20/1997	1345	33	INTERFERENCE	0.46	0.03		0.11	39	1600		16.5
R-4	08/20/1997	1351										
R-4	08/20/1997	1350										
R-5	08/20/1997	1325	29	INTERFERENCE	0.4	0.02		0.08	53	50		13.8
R-5	08/20/1997	1328										
R-5	08/20/1997	1326										
R-6	08/20/1997	1300	59	INTERFERENCE	0.36	0.02	K	0.06	40	110		16
R-6	08/20/1997	1301										
R-6	08/20/1997	1259										
TIDE CREEK												
T-1	08/20/1997	1422	26	0.31	1	0.34		0.19	27	1600		18.1
T-2	08/20/1997	1455	110	0.68	1.22	0.02	K	0.32	44	900		51.1
T-3	08/20/1997	1415	10	0.14	0.68	0.05		0.35	36	1600	L	23
T-3	08/20/1997	1417										
T-3	08/20/1997	1416										
T-4	08/20/1997	1325	96	0.32	1.6	0.22		0.72	33	1600	L	18
T-5	08/20/1997	1300	17	INTERFERENCE	0.39	0.02	K	0.08	46	1600	L	9.1
T-6	08/20/1997	1300	12	0.27	0.92	0.07		0.68	42	1600	L	32.6
T-6	08/20/1997	1302										
T-6	08/20/1997	1301										

K = Actual value below detection limits
L = Actual value exceeds test limits

Appendix 3.1. Water quality analytical results

STATION	DATE	TIME	82048 DEPTH OF SMPL METERS	00002 HSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00020 AIR TEMP CENT	00041 WEATHER WMO CODE 4501	00067 TIDE STAGE CODE	00076 TURBIDITY TRBIDMTR NTU	00300 DO MG/L	00301 % DO SAT SATURATION PERCENT	00310 BOD 5 DAY MG/L	00400 PH SU	00402 CONDUCTIVITY UMHOS/CM		00410 ALKALINITY CACO3 MG/L	00480 SALINITY PPTH	00530 TSS TOT NFLT MG/L
OKATEE RIVER																		
INTERTIDAL																		
I-2	08/19/1997	1415	0.3	50	32	40	2	2000	14	4.3	58.1	2.6	7.3	48000		109	28	20
I-2	08/19/1997	1416	0.5		31.5					4.5	59.3			37000			27	
I-2	08/19/1997	1417	0.7		31.5					5.6	74.7			47000			26.5	
I-2	08/19/1997	1418	0.9		31.1					4.4	58			47000			27	
I-4	08/19/1997	1430	0.3	1	32	37	2	2000	30	6.1	82.4	2.2	7	50000		110	29	44
I-6	08/19/1997	1325	0.3	1	31	35	1	2000	7.3	3.1	40.7	1.4	7.1	50000	L	111	31	10
I-6	08/19/1997	1326	0.95		30					3.3	42.8			50000	L		31.5	
SUBTIDAL																		
R-1	08/19/1997	1500	0.3	50	32.5	35	2	2000	70	5.9	79.1	3.4	6.8	45000		104	25.5	110
R-1	08/19/1997	1501	1		32.3					5.9	79.1			45000			25	
R-1	08/19/1997	1502	1.2		32.3					5.8	78.4			45000			25	
R-2	08/19/1997	1601	0.3	50	32.6	37	1	2000	32	5.5	75.3	2.7	7.5	46000		106	27	51
R-2	08/19/1997	1602	1		32.2					5.4	72.7			46000			27	
R-3	08/19/1997	1543	0.3	40	31.5	39	1	2000	45	6	79.7	2.6	7.1	46000		108	27	78
R-3	08/19/1997	1547	1		31.8					5.2	69.6			46000			27	
R-3	08/19/1997	1545	2		31.9					5.1	68.9			46000			27	
R-4	08/19/1997	1508	0.3	60	31	39	1	2000	31	5.5	73.3	1.8	6.9	44500		108	26	48
R-4	08/19/1997	1530	2		31					4.8	64			46000			27	
R-4	08/19/1997	1520	4		31					5.3	70.7			47000			27.5	
R-5	08/19/1997	1420	0.3	60	30.5	39	1	2000	30	3	39.5	1.4	6.9	47000		108	26	54
R-5	08/19/1997	1424	2.5		30.5					2.8	36.8			47000			28	
R-5	08/19/1997	1422	5		30.5					2.5	32.9			47000			28	
R-6	08/19/1997	1334	0.3	60	30.5	39	1	2000	33	3.5	46.1	1.6	6.2	47000		110	30	51
R-6	08/19/1997	1348	2		30.5					3.5	46.1			47000			27	
R-6	08/19/1997	1345	4		30.5					3.5	46.1			47000			28	
TIDE CREEK																		
T-1	08/19/1997	1517	0.3	50	29	34	1		45	6.4	81.4	1.6	6.9	18000		25	19.5	50
T-2	08/19/1997	1452	0.3	50	32	35	2	2000	40	4.7	62.8	1.4	7.25	46500		108	27	56
T-3	08/19/1997	1443	0.3	50	30.5	34	1		30	6.6	86.3	5.9	7.2	12225		91	18	53
T-4	08/19/1997	1355	0.3	50	33.2	40	2	2000	13	5	68.5	2.4	7.3	48000		110	28	23
T-4	08/19/1997	1356	0.5		31.2					5.1	67.6			48000			28	
T-4	08/19/1997	1357	0.7		31.2					5.2	68.7			48000			28	
T-5	08/19/1997	1400	0.3	50	32	36	2	2000	27	5	67.6	1.9	7.4	50000	L	111	29	42
T-6	08/19/1997	1315	0.3	50	31.1	40	0	2000	16	4.6	61.3	1.6	6.4	49000		111	29	24
T-6	08/19/1997	1316	0.6		31					4.6	60.7			49000			29	
T-6	08/19/1997	1317	0.8		31					4.6	60.7			49000			29	

K = Actual value below detection limits
L = Actual value exceeds test limits

Appendix 3.1. Water quality analytical results

STATION	DATE	TIME	00610 NH3+NH4-NTOTAL MG/L	00625 TKN N MG/L	00630 NO2&NO3 N TOTAL MG/L		00665 PHOS-TOT MG/L P	00680 T ORG C C MG/L	31615 FECAL COLIFORM MPNECMED /100ML		32209 CHLOROPHYLL A UG/L
OKATEE RIVER											
INTERTIDAL											
I-2	08/19/1997	1415	LAB ERROR	0.52	0.02	K	0.07	5.1	13		17.1
I-2	08/19/1997	1416									
I-2	08/19/1997	1417									
I-2	08/19/1997	1418									
I-4	08/19/1997	1430	LAB ERROR	0.59	0.02	K	0.13	5.7	13		21
I-6	08/19/1997	1325	0.1	0.36	0.02	K	0.09	4.2	2	K	6.1
I-6	08/19/1997	1326									
SUBTIDAL											
R-1	08/19/1997	1500	LAB ERROR	0.97	0.02	K	0.16	8.5	90		38.5
R-1	08/19/1997	1501									
R-1	08/19/1997	1502									
R-2	08/19/1997	1601	0.74	0.85	0.02	K	0.12	5.2	40		30
R-2	08/19/1997	1602									
R-3	08/19/1997	1543	0.68	0.97	0.02	K	0.1	7.2	13		22.8
R-3	08/19/1997	1547									
R-3	08/19/1997	1545									
R-4	08/19/1997	1508	0.42	0.68	0.02	K	0.12	6.1	8		15.1
R-4	08/19/1997	1530									
R-4	08/19/1997	1520									
R-5	08/19/1997	1420	0.48	0.68	0.02		0.12	5.7	4		8.9
R-5	08/19/1997	1424									
R-5	08/19/1997	1422									
R-6	08/19/1997	1334	0.46	0.76	0.02	K	0.1	5.6	2	K	10.5
R-6	08/19/1997	1348									
R-6	08/19/1997	1345									
TIDE CREEK											
T-1	08/19/1997	1517	0.33	0.88	0.1		0.28	8.4	280		9.1
T-2	08/19/1997	1452	LAB ERROR	0.82	0.02	K	0.16	6.6	23		7
T-3	08/19/1997	1443	0.14	1.08	0.02	K	0.19	10.3	1600		40
T-4	08/19/1997	1355	LAB ERROR	0.53	0.02	K	0.1	6.3	30		24.5
T-4	08/19/1997	1356									
T-4	08/19/1997	1357									
T-5	08/19/1997	1400	LAB ERROR	0.55	0.02	K	0.12	5.9	23		15.1
T-6	08/19/1997	1315	LAB ERROR	0.56	0.02	K	0.08	4.7	2		12
T-6	08/19/1997	1316									
T-6	08/19/1997	1317									

K = Actual value below detection limits
L = Actual value exceeds test limits

Appendix 3.2. Hydrolab data summary statistics.

	Dissolved Oxygen (mg/l)								Percent Dissolved Oxygen Saturation								Salnity (ppt)					
Station	N	Min	Max	Range	Avg	Var	N<2	%<2	N	Min	Max	Range	Avg	Var	N<28	%<28	N	Min	Max	Range	Avg	Var
BROAD CREEK																						
R-1	48	1.63	6.63	5	4.222	1.9935	4	8.33	48	24.5	105.2	80.7	65.72	532.001	3	6.25	48	25.8	28.9	3.1	27.97	0.606
R-2	51	2.44	5.97	3.53	4.382	0.9660	0		51	37.8	94.2	56.4	68.14	245.441	0		51	27.6	29.5	1.9	28.58	0.291
R-3	50	3.53	5.43	1.9	4.622	0.3326	0		50	54.6	86.0	31.4	72.51	92.051	0		50	26.4	29.7	3.3	27.83	1.169
R-4	50	3.63	5.68	2.05	4.627	0.3004	0		50	56.3	89.8	33.5	72.46	79.959	0		50	26.5	30.3	3.8	28.08	1.703
R-5	51	3.92	5.51	1.59	4.964	0.1255	0		51	58.4	85.0	26.6	75.68	36.151	0		51	29.7	31.8	2.1	30.82	0.525
R-6	51	4.25	5.78	1.53	5.085	0.1682	0		51	64.5	90.1	25.6	78.57	46.783	0		51	30.4	33.2	2.8	31.65	0.690
T-1	40	0.72	6.09	5.37	3.628	2.0214	7	17.50	40	10.5	95.5	85.0	54.91	514.605	5	12.50	40	6.4	28.7	22.3	24.01	41.109
T-2	38	2.20	6.48	4.28	4.298	1.4947	0		38	33.6	102.7	69.1	66.52	399.880	0		38	26.9	28.9	2.0	28.31	0.227
T-3	36	2.43	5.10	2.67	3.389	0.4598	0		36	35.9	77.5	41.6	52.11	103.698	0		36	16.6	26.9	10.3	23.43	15.733
T-4	35	1.84	4.29	2.45	3.297	0.3792	1	2.86	35	28.3	67.6	39.3	51.46	103.684	0		35	15.2	28.8	13.6	27.05	6.505
T-5	51	0.08	8.08	8	3.923	3.5516	10	19.61	51	1.1	126.8	125.7	59.80	867.162	10	19.61	51	30.4	31.9	1.5	31.34	0.178
T-6	51	3.11	6.36	3.25	4.700	0.7866	0		51	42.4	96.5	54.1	69.28	233.428	0		51	4.7	31.8	27.1	25.79	41.898
OKATEE RIVER																						
R-1	51	3.03	7.00	3.97	5.233	1.2911	0		51	45.4	111.0	65.6	81.24	351.753	0		51	24.5	30.1	5.6	28.98	1.945
R-2	50	4.05	6.92	2.87	5.225	0.8673	0		50	62.3	108.8	46.5	81.02	229.523	0		50	29.1	30.2	1.1	29.71	0.107
R-3	51	3.27	6.08	2.81	4.310	0.7342	0		51	51.9	99.0	47.1	69.07	210.623	0		51	28.1	29.8	1.7	28.95	0.292
R-4	51	3.00	5.88	2.88	4.154	0.6791	0		51	47.5	95.1	47.6	66.23	192.200	0		51	26.7	29.6	2.9	28.60	0.463
R-5	50	4.65	6.32	1.66	5.405	0.1957	0		50	69.6	96.5	26.9	81.89	56.435	0		50	30.0	31.2	1.2	30.70	0.093
R-6	51	4.62	6.51	1.89	5.441	0.1956	0		51	68.2	99.5	31.3	82.39	55.535	0		51	30.8	31.4	0.6	31.10	0.031
T-1	42	2.67	7.03	4.36	4.653	1.4484	0		42	37.4	100.7	63.3	69.49	359.972	0		42	2.4	28.8	26.4	22.74	73.106
T-2	49	1.02	6.66	5.64	4.616	1.5633	1	2.04	49	14.7	105.1	90.3	71.66	406.020	1	2.04	49	27.0	30.1	3.1	29.56	0.474
T-3	36	3.12	6.67	3.55	3.897	0.6083	0		36	49.4	108.3	58.9	62.18	168.500	0		36	28.1	29.3	1.2	28.79	0.136
T-4	50	3.55	7.42	3.87	4.619	1.1294	0		50	46.0	118.2	72.2	70.93	349.363	0		50	10.1	28.3	18.2	23.92	42.748
T-5	49	3.13	8.95	5.82	5.466	1.5883	0		49	44.3	135.9	91.6	82.63	403.123	0		49	30.2	31.2	1.0	30.82	0.059
T-6	44	3.00	8.10	5.1	4.553	0.7836	0		44	45.6	114.2	68.6	69.89	175.936	0		44	9.1	31.6	22.5	30.45	22.126

N<2 = Number of dissolved oxygen measurements less than 2.0 mg/l
%<2 = Percentage of dissolved oxygen measurements less than 2.0 mg/l
N<28 = Number of percent dissolved oxygen values less than 28%
%<28 = Percentage of percent dissolved oxygen values less than 28%

Appendix 3.2. Continued

Station	pH (SU)						Temperature (°C)						Depth (m)					
	N	Min	Max	Range	Avg	Var	N	Min	Max	Range	Avg	Var	N	Min	Max	Range	Avg	Var
BROAD CREEK																		
R-1	48	7.13	7.62	0.49	7.415	0.0167	48	27.32	33.02	5.70	29.381	1.2207	51	0.00	1.90	1.90	0.900	0.4880
R-2	51	7.12	7.46	0.34	7.348	0.0090	51	28.99	30.98	1.99	29.721	0.2742	51	0.00	1.90	1.90	0.900	0.4880
R-3	50	7.17	7.59	0.42	7.370	0.0165	50	29.32	31.22	1.90	30.121	0.3373	50	3.30	7.10	3.80	5.624	1.4582
R-4	50	7.18	7.76	0.58	7.419	0.0310	50	29.10	30.93	1.83	29.937	0.2212	50	1.80	5.70	3.90	4.138	1.3514
R-5	51	7.53	7.91	0.38	7.734	0.0124	51	26.83	28.58	1.75	27.842	0.2881	51	4.60	6.50	1.90	5.600	0.3572
R-6	51	7.50	7.93	0.43	7.731	0.0172	51	27.59	29.03	1.44	28.325	0.2543	51	4.60	6.50	1.90	5.600	0.3572
T-1	40	2.50	7.33	4.83	5.317	1.6187	40	26.50	32.31	5.81	29.178	1.9362	51	0.00	1.95	1.95	0.917	0.5168
T-2	38	7.12	7.66	0.54	7.427	0.0155	38	27.64	33.76	6.12	29.350	2.1640	51	0.00	1.46	1.46	0.574	0.3185
T-3	36	7.44	7.81	0.37	7.668	0.0099	36	29.30	32.01	2.71	30.540	0.5878	51	0.00	2.02	2.02	0.840	0.5788
T-4	35	7.44	7.88	0.44	7.656	0.0201	35	26.15	33.22	7.07	30.018	1.1281	51	0.00	2.17	2.17	0.944	0.6912
T-5	51	6.97	7.80	0.83	7.373	0.0526	51	22.88	29.88	7.00	26.860	4.7518	51	0.29	2.02	1.73	1.167	0.3908
T-6	51	7.17	7.87	0.70	7.530	0.0549	51	24.73	29.09	4.36	27.210	1.8049	51	0.05	1.97	1.92	1.125	0.4065
OKATEE RIVER																		
R-1	51	7.10	7.51	0.41	7.349	0.0111	51	28.62	32.25	3.63	29.848	1.1082	51	0.20	2.80	2.60	1.580	0.7212
R-2	50	7.28	7.53	0.25	7.402	0.0043	50	28.67	30.89	2.22	29.621	0.3947	50	0.90	3.80	2.90	2.634	0.8309
R-3	51	7.29	7.56	0.27	7.395	0.0048	51	29.89	32.31	2.42	30.909	0.5257	51	2.00	5.30	3.30	3.986	1.1168
R-4	51	7.34	7.57	0.23	7.423	0.0048	51	29.57	32.07	2.50	30.736	0.5486	51	1.30	4.50	3.20	3.259	1.0617
R-5	50	7.43	7.57	0.14	7.490	0.0015	50	26.48	28.97	2.49	27.921	0.6701	50	3.40	5.80	2.40	4.844	0.6188
R-6	51	7.37	7.55	0.18	7.449	0.0015	51	26.22	29.02	2.80	27.760	0.6642	51	2.50	5.40	2.90	4.375	0.6083
T-1	42	6.90	7.45	0.55	7.246	0.0208	42	26.28	31.86	5.58	29.493	1.8065	51	0.00	2.10	2.10	0.998	0.5714
T-2	49	7.16	7.53	0.37	7.346	0.0083	49	26.35	33.98	7.63	29.647	2.0160	51	0.00	2.40	2.40	1.243	0.7421
T-3	36	7.32	7.67	0.35	7.438	0.0074	36	29.97	32.08	2.11	30.769	0.2817	52	0.00	1.97	1.97	0.805	0.5255
T-4	50	6.99	7.72	0.73	7.386	0.0435	50	25.06	32.04	6.98	29.820	3.6792	50	0.03	2.57	2.54	1.235	0.7538
T-5	49	7.19	7.59	0.40	7.404	0.0095	49	22.41	30.04	7.63	27.586	2.6405	51	0.00	2.30	2.30	1.280	0.5976
T-6	44	7.14	7.59	0.45	7.343	0.0081	44	27.05	30.40	3.35	28.008	0.4041	52	0.00	1.94	1.94	0.904	0.4779

Appendix 3.3. Hydrolab results, Broad Creek site R-1

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
100000	1.7	7.41	28.8	60.9	28.33	90397	44.5	4.01	14.3
103000	1.8	7.42	28.8	61.9	28.36	90397	44.5	4.08	14.3
110000	1.7	7.43	28.8	62.8	28.4	90397	44.5	4.13	14.3
113000	1.6	7.43	28.7	66.7	28.54	90397	44.3	4.38	14.3
120000	1.4	7.44	28.5	70.7	28.73	90397	44.1	4.63	14.4
123000	1.2	7.46	28.4	76.9	29.01	90397	43.9	5.02	14.3
130000	1	7.47	28.1	82.1	29.3	90397	43.5	5.34	14.3
133000	0.6	7.46	27.7	83.7	29.76	90397	43	5.41	14.3
140000	0.4	7.48	27.9	84.4	29.97	90397	43.2	5.44	14.3
143000	0.2	7.48	27.4	89.8	30.57	90397	42.6	5.74	14.3
150000	0	7.48	26.7	94.8	31.18	90397	41.6	6.02	14.3
153000	0	7.45	25.8	93.9	31.71	90397	40.4	5.94	14.3
160000	0								
163000	0								
170000	0	7.53	26.3	99.5	33.02	90397	41.1	4.76	14.3
173000	0.1	7.59	26.9	103.6	32.03	90397	41.8	6.48	14.3
180000	0.2	7.61	27	105.2	31.5	90397	42	6.63	14.3
183000	0.4	7.62	27.3	102.7	30.9	90397	42.4	6.53	14.3
190000	0.7	7.6	27.6	100.2	30.58	90397	42.8	6.39	14.3
193000	1	7.56	27.9	93.2	30.16	90397	43.2	5.98	14.3
200000	1.2	7.53	28.2	85.2	29.7	90397	43.7	5.5	14.2
203000	1.4	7.55	28.4	86.2	29.61	90397	44	5.56	14.3
210000	1.6	7.53	28.5	80.5	29.42	90397	44.1	5.21	14.2
213000	1.7	7.53	28.7	78.3	29.35	90397	44.3	5.07	14.3
220000	1.9	7.51	28.7	75.2	29.37	90397	44.3	4.87	14.3
223000	1.9	7.51	28.8	72.3	29.29	90397	44.4	4.68	14.3
230000	1.8	7.5	28.6	73	29.34	90397	44.3	4.73	14.3
233000	1.7	7.49	28.6	73	29.33	90397	44.2	4.73	14.3
0	1.5	7.45	28.5	67.5	29.31	90497	44.1	4.38	14.3
3000	1.3	7.41	28.4	63.5	29.33	90497	44	4.12	14.3
10000	1.1	7.35	28.2	56.1	29.35	90497	43.7	3.64	14.3
13000	0.8	7.27	28	45.3	29.33	90497	43.4	2.94	14.3
20000	0.5	7.23	27.9	37.2	29.28	90497	43.2	2.42	14.3
23000	0.3	7.24	28	37.3	29.15	90497	43.4	2.43	14.2
30000	0.1	7.18	27.5	30.4	29.22	90497	42.8	1.98	14.2
33000	0	7.14	27	27.7	29.14	90497	42	1.82	14.2
40000	0	7.13	26.5	26	28.81	90497	41.3	1.72	14.2
43000	0								
50000	0	7.2	26.8	30.8	27.32	90497	41.7	2.09	14.2
53000	0	7.17	27.4	24.5	28.44	90497	42.5	1.63	14.2
60000	0.2	7.28	27.2	39.4	28.7	90497	42.3	2.6	14.2
63000	0.4	7.24	27.5	35.3	28.46	90497	42.7	2.33	14.2
70000	0.6	7.31	27.9	42.5	28.62	90497	43.2	2.8	14.2
73000	0.9	7.31	28	43.3	28.58	90497	43.4	2.85	14.2
80000	1.1	7.35	28.4	47.8	28.65	90497	43.9	3.14	14.2
83000	1.3	7.38	28.5	52.3	28.69	90497	44.1	3.42	14.2
90000	1.5	7.41	28.7	56.3	28.64	90497	44.3	3.69	14.2
93000	1.7	7.43	28.7	57.8	28.57	90497	44.4	3.79	14.2
100000	1.8	7.44	28.8	57.3	28.48	90497	44.5	3.76	14.2
103000	1.8	7.48	28.9	61	28.45	90497	44.6	4.01	14.2
110000	1.8	7.47	28.8	58.5	28.33	90497	44.5	3.85	14.2

Appendix 3.3. (Continued). Hydrolab results, Broad Creek site R-2

Time HHMMSS	Depth meters*	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
103000	1.7	7.12	29	62.6	28.99	90397	44.8	4.07	15
110000	1.8	7.31	29	63.5	29.01	90397	44.8	4.13	14.9
113000	1.7	7.33	29	63.7	29.01	90397	44.8	4.14	15
120000	1.6	7.34	28.8	65.9	29.07	90397	44.4	4.29	14.9
123000	1.4	7.35	28.5	70.1	29.23	90397	44.1	4.55	14.9
130000	1.2	7.36	28.5	74.2	29.41	90397	44	4.8	14.9
133000	1	7.37	28.4	77.1	29.55	90397	43.9	4.99	14.9
140000	0.6	7.38	28.1	80.8	29.79	90397	43.6	5.21	14.9
143000	0.4	7.39	28	81.8	30.05	90397	43.4	5.26	14.9
150000	0.2	7.41	27.7	89.6	30.35	90397	43	5.73	14.9
153000	0	7.43	27.6	92.8	30.7	90397	42.9	5.91	14.9
160000	0	7.44	27.6	94.2	30.98	90397	42.8	5.97	14.9
163000	0	7.45	27.6	91	30.96	90397	42.9	5.76	14.9
170000	0	7.43	27.7	91.5	30.9	90397	43	5.8	14.9
173000	0	7.45	28	91.8	30.68	90397	43.4	5.84	14.9
180000	0.1	7.45	28.1	93	30.6	90397	43.6	5.91	14.9
183000	0.2	7.45	28.3	88.4	30.29	90397	43.7	5.65	14.9
190000	0.4	7.44	28.3	86.7	30.23	90397	43.9	5.54	15
193000	0.7	7.46	28.5	88.2	30.21	90397	44.1	5.64	14.9
200000	1	7.43	28.6	81.1	29.89	90397	44.2	5.2	14.9
203000	1.2	7.43	28.8	79.4	29.87	90397	44.5	5.09	14.9
210000	1.4	7.43	29	76.5	29.78	90397	44.8	4.91	14.8
213000	1.6	7.43	29.2	74.8	29.73	90397	45	4.8	14.8
220000	1.7	7.43	29.3	74.1	29.71	90397	45.1	4.75	14.8
223000	1.9	7.44	29.4	72.8	29.69	90397	45.3	4.67	14.8
230000	1.9	7.43	29.3	72.3	29.69	90397	45.2	4.64	14.8
233000	1.8	7.43	29.3	72.3	29.71	90397	45.1	4.63	14.8
0	1.7	7.4	28.9	71.1	29.73	90497	44.6	4.57	14.8
3000	1.5	7.38	28.7	69.8	29.75	90497	44.4	4.49	14.8
10000	1.3	7.34	28.7	65.6	29.77	90497	44.3	4.22	14.8
13000	1.1	7.3	28.5	60	29.79	90497	44.1	3.86	14.8
20000	0.8	7.28	28.5	57.5	29.77	90497	44.1	3.7	14.8
23000	0.5	7.26	28.3	53	29.77	90497	43.9	3.41	14.8
30000	0.3	7.23	28.2	49.1	29.71	90497	43.6	3.17	14.8
33000	0.1	7.2	28.1	45.9	29.77	90497	43.6	2.96	14.8
40000	0	7.17	28	40.8	29.67	90497	43.4	2.63	14.8
43000	0	7.18	27.9	50.5	29.61	90497	43.3	3.27	14.8
50000	0	7.16	28.1	37.8	29.65	90497	43.5	2.44	14.8
53000	0	7.18	28.2	41.6	29.47	90497	43.7	2.7	14.8
60000	0	7.19	28.4	42.5	29.49	90497	44	2.75	14.8
63000	0.2	7.22	28.5	46	29.39	90497	44.1	2.98	14.8
70000	0.4	7.25	28.6	51.2	29.41	90497	44.3	3.31	14.8
73000	0.6	7.27	28.7	53.1	29.41	90497	44.3	3.44	14.8
80000	0.9	7.29	28.8	55.5	29.39	90497	44.5	3.59	14.7
83000	1.1	7.32	28.9	57.8	29.36	90497	44.6	3.74	14.7
90000	1.3	7.35	29.1	61.3	29.25	90497	44.9	3.97	14.7
93000	1.5	7.36	29.2	61.9	29.21	90497	45.1	4	14.7
100000	1.7	7.38	29.3	63.3	29.13	90497	45.2	4.1	14.7
103000	1.8	7.39	29.4	63	29.09	90497	45.3	4.08	14.7
110000	1.8	7.41	29.4	63.2	29.06	90497	45.4	4.09	14.7
113000	1.8	7.42	29.5	63.6	29.04	90497	45.4	4.12	14.7

*Depths are from zone 1 since probe malfunctioned here

Appendix 3.3. (Continued). Hydrolab results, Broad Creek site R-3

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
123000	7	7.53	29.3	73	29.54	82197	45.2	4.66	12.9
130000	6.8	7.48	28.9	72.2	29.64	82197	44.7	4.62	12.8
133000	6.6	7.44	28.6	71.7	29.74	82197	44.2	4.59	12.9
140000	6.2	7.41	28.2	73.4	30.04	82197	43.7	4.68	12.9
143000	5.9	7.44	27.9	82.4	30.58	82197	43.3	5.21	12.9
150000	5.5	7.37	27.3	80.6	30.6	82197	42.5	5.12	12.9
153000	5.2	7.37	27.1	82.5	30.83	82197	42.1	5.22	12.9
160000	4.8	7.34	26.9	81.5	30.95	82197	41.8	5.16	12.9
163000	4.3	7.33	26.6	81.9	30.99	82197	41.5	5.18	12.9
170000	3.7	7.35	26.6	83.3	31.15	82197	41.4	5.26	12.9
173000	3.4	7.35	26.5	84.1	31.2	82197	41.3	5.31	12.9
180000	3.3	7.35	26.4	86	31.22	82197	41.2	5.43	12.9
183000	4.1	7.33	26.6	80.6	31.11	82197	41.4	5.1	12.9
190000	4.5	7.33	26.6	81.5	31.11	82197	41.4	5.15	12.9
193000	5	7.33	26.7	80.8	30.95	82197	41.6	5.12	12.9
200000	5.3	7.34	26.9	80.5	30.89	82197	41.9	5.1	12.9
203000	5.6	7.34	27.2	79	30.77	82197	42.2	5	12.9
210000	6	7.39	27.7	79.8	30.62	82197	42.9	5.06	12.9
213000	6.3	7.4	27.8	79.2	30.52	82197	43.2	5.02	12.9
220000	6.5	7.46	28.3	80.7	30.42	82197	43.8	5.11	12.9
223000	6.8	7.54	28.9	82.5	30.22	82197	44.7	5.22	13
230000	6.9	7.56	29.1	82.5	30.16	82197	44.9	5.22	12.9
233000	7.1	7.57	29.3	82.3	30.14	82197	45.1	5.2	12.9
0	7	7.59	29.5	81.1	30.04	82297	45.5	5.13	12.9
3000	6.8	7.59	29.5	79.6	30	82297	45.5	5.04	12.9
10000	7	7.53	29.1	78.9	30.06	82297	44.9	5	12.9
13000	6.7	7.51	29	78.6	30.1	82297	44.7	4.99	12.9
20000	6.5	7.42	28.5	71.9	30.04	82297	44.1	4.58	12.9
23000	6.2	7.34	28.2	66	29.88	82297	43.7	4.22	12.9
30000	5.9	7.3	27.8	65.4	29.94	82297	43.1	4.19	12.9
33000	5.5	7.26	27.5	59.9	29.96	82297	42.6	3.84	13
40000	5.1	7.2	27.2	58.2	29.82	82297	42.2	3.74	12.9
43000	4.7	7.19	26.9	59.5	29.82	82297	41.8	3.84	12.9
50000	4.2	7.18	26.8	58.6	29.76	82297	41.7	3.78	12.9
53000	3.8	7.17	26.7	56.9	29.66	82297	41.6	3.68	12.9
60000	3.4	7.17	26.6	54.6	29.72	82297	41.5	3.53	12.9
63000	3.5	7.17	26.6	57.4	29.76	82297	41.5	3.71	12.9
70000	3.9	7.17	26.7	58.7	29.86	82297	41.6	3.79	12.9
73000	4.4	7.18	26.6	58.2	29.7	82297	41.5	3.77	12.9
80000	4.9	7.19	26.8	58	29.8	82297	41.7	3.75	12.9
83000	5.3	7.21	27	60	29.76	82297	42	3.87	12.9
90000	5.7	7.24	27.4	61.1	29.76	82297	42.5	3.93	12.9
93000	6	7.29	27.8	64.5	29.6	82297	43.1	4.15	12.9
100000	6.4	7.32	28.1	65	29.56	82297	43.5	4.18	12.9
103000	6.6	7.39	28.7	67.8	29.32	82297	44.4	4.36	12.9
110000	6.8	7.46	29.1	70.7	29.32	82297	45	4.54	12.9
113000	7	7.47	29.2	71.1	29.32	82297	45	4.56	12.9
120000	7.1	7.5	29.4	72.8	29.32	82297	45.3	4.67	12.9
123000	7	7.54	29.6	74.5	29.38	82297	45.6	4.76	12.9
130000	7	7.55	29.7	74.3	29.38	82297	45.7	4.75	12.9

Appendix 3.3. (Continued). Hydrolab results, Broad Creek site R-4

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
103000	5.4	7.66	30.1	78	29.12	82097	46.2	5	12.9
110000	5	7.69	30.2	77.8	29.1	82097	46.4	4.98	12.9
113000	5.4	7.69	30.1	78.5	29.12	82097	46.3	5.03	13
120000	5.3	7.61	29.6	73.8	29.2	82097	45.6	4.73	13
123000	5.1	7.52	29.1	70	29.26	82097	44.9	4.5	13
130000	4.8	7.46	28.5	71.2	29.52	82097	44.1	4.57	13
133000	4.5	7.4	28	71.4	29.7	82097	43.4	4.58	13
140000	4.1	7.35	27.5	68.8	29.88	82097	42.7	4.42	13
143000	3.8	7.31	27.1	68.7	30.1	82097	42.2	4.4	13
150000	3.4	7.28	26.9	69	30.28	82097	41.9	4.41	13
153000	3	7.28	26.7	71.3	30.48	82097	41.6	4.55	13
160000	2.7	7.28	26.6	73.5	30.66	82097	41.4	4.68	13
163000	2.2	7.3	26.7	77.1	30.85	82097	41.6	4.89	13
170000	2	7.31	26.6	78.1	30.93	82097	41.5	4.95	13
173000	2.5	7.29	26.5	78.1	30.87	82097	41.4	4.95	13
180000	3	7.27	26.7	71.4	30.66	82097	41.5	4.55	13
183000	3.3	7.29	26.8	73	30.6	82097	41.7	4.65	13
190000	3.7	7.34	27.1	76.8	30.54	82097	42.2	4.88	13
193000	4.1	7.38	27.4	77.5	30.48	82097	42.5	4.93	13
200000	4.5	7.42	27.7	80.5	30.38	82097	43	5.11	13
203000	4.8	7.51	28.4	82.5	30.26	82097	43.9	5.23	13
210000	5.1	7.54	28.6	82.9	30.1	82097	44.3	5.27	13
213000	5.3	7.56	28.9	81.6	29.98	82097	44.7	5.18	13
220000	5.5	7.62	29.5	82.5	29.8	82097	45.4	5.24	13
223000	5.7	7.69	29.9	86.3	29.72	82097	46	5.48	13
230000	5.6	7.74	30.2	89.2	29.7	82097	46.4	5.65	13
233000	5.4	7.76	30.3	89.8	29.7	82097	46.6	5.68	13
0	5.5	7.74	30.2	88.6	29.7	82197	46.4	5.61	13
3000	5.3	7.66	29.8	83.8	29.74	82197	45.8	5.32	13
10000	5	7.56	29.1	78.3	29.88	82197	44.8	4.98	13
13000	4.8	7.48	28.5	73.6	30	82197	44	4.69	13
20000	4.4	7.42	28	72.8	30.08	82197	43.4	4.64	13
23000	4.1	7.35	27.5	69.5	30.1	82197	42.7	4.44	13
30000	3.7	7.3	26.6	66.5	30.12	82197	41.5	4.27	13
33000	3.3	7.25	26.7	62.8	30.1	82197	41.6	4.03	13
40000	3	7.21	26.8	60.9	30.1	82197	41.8	3.91	13
43000	2.6	7.19	26.7	58.7	30.06	82197	41.6	3.77	13
50000	2.1	7.19	26.8	56.7	29.94	82197	41.7	3.65	13
53000	1.8	7.18	26.7	56.3	29.9	82197	41.6	3.63	13
60000	2.2	7.18	26.7	57.5	29.86	82197	41.6	3.71	13
63000	2.8	7.18	26.8	57.3	30	82197	41.7	3.69	13
70000	3.2	7.2	27	58.8	29.98	82197	41.9	3.78	13
73000	3.6	7.23	27.2	60.9	29.88	82197	42.3	3.92	13
80000	4	7.28	27.5	62.6	29.74	82197	42.7	4.03	13.1
83000	4.4	7.31	27.8	63.6	29.66	82197	43.1	4.09	13
90000	4.7	7.39	28.5	66.8	29.46	82197	44.1	4.29	13
93000	5	7.45	28.8	68.7	29.42	82197	44.5	4.41	13
100000	5.2	7.48	29	70.3	29.38	82197	44.8	4.51	13
103000	5.4	7.54	29.5	72.8	29.4	82197	45.5	4.66	13
110000	5.6	7.61	29.9	76	29.38	82197	46	4.85	12.9

Appendix 3.3. (Continued). Hydrolab results, Broad Creek site R-5

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
130000	5.9	7.78	31.1	77	28.33	90497	47.6	5	14.2
133000	5.8	7.76	30.9	77.5	28.35	90497	47.4	5.04	14.2
140000	5.6	7.72	30.7	75.6	28.4	90497	47.1	4.92	14.2
143000	5.4	7.68	30.5	75.5	28.42	90497	46.8	4.92	14.2
150000	5.2	7.66	30.2	76	28.46	90497	46.5	4.95	14.2
153000	5	7.64	30	76.8	28.47	90497	46.1	5.01	14.2
160000	4.9	7.63	29.8	78	28.48	90497	45.9	5.09	14.2
163000	4.7	7.63	29.7	78.9	28.49	90497	45.8	5.15	14.2
170000	4.7	7.64	29.8	77.1	28.58	90497	45.9	5.03	14.2
173000	4.8	7.64	29.8	79.5	28.53	90497	45.9	5.18	14.2
180000	4.9	7.64	29.8	79.7	28.51	90497	45.9	5.2	14.2
183000	5.2	7.65	30	76.9	28.51	90497	46.2	5.01	14.2
190000	5.4	7.71	30.4	82.8	28.48	90497	46.7	5.38	14.2
193000	5.5	7.7	30.4	79.8	28.45	90497	46.7	5.19	14.2
200000	5.7	7.74	30.7	81	28.41	90497	47.1	5.27	14.2
203000	5.9	7.79	31	83.5	28.36	90497	47.5	5.43	14.2
210000	6	7.84	31.4	83.2	28.27	90497	48	5.4	14.3
213000	6.2	7.87	31.5	83.9	28.23	90497	48.2	5.45	14.3
220000	6.2	7.9	31.7	85	28.22	90497	48.4	5.51	14.3
223000	6.4	7.91	31.8	84.8	28.19	90497	48.6	5.5	14.2
230000	6.4	7.91	31.8	82.6	28.18	90497	48.6	5.36	14.3
233000	6.4	7.9	31.8	82.7	28.11	90497	48.6	5.37	14.2
0	6.2	7.89	31.7	82.6	28.11	90597	48.5	5.37	14.2
3000	6.1	7.86	31.6	81.7	28.07	90597	48.3	5.32	14.2
10000	5.9	7.82	31.4	79.3	28.01	90597	48	5.17	14.1
13000	5.7	7.77	31.1	77.6	27.93	90597	47.6	5.08	14.1
20000	5.6	7.71	30.8	74.7	27.85	90597	47.2	4.91	14.2
23000	5.4	7.67	30.5	72.1	27.75	90597	46.9	4.75	14.2
30000	5.2	7.63	30.3	70.1	27.64	90597	46.5	4.63	14.1
33000	5	7.6	30.1	68.9	27.55	90597	46.3	4.57	14.1
40000	4.8	7.59	30	68.4	27.49	90597	46.1	4.54	14.1
43000	4.6	7.58	29.9	67.5	27.44	90597	46	4.49	14.1
50000	4.6	7.53	30.1	58.4	26.83	90597	46.2	3.92	14.1
53000	4.6	7.56	29.9	63.7	27.2	90597	46	4.25	14.1
60000	4.7	7.57	29.9	66.7	27.25	90597	46	4.45	14.1
63000	4.9	7.58	30	66.5	27.3	90597	46.1	4.43	14.1
70000	5.2	7.64	30.5	67.6	27.23	90597	46.8	4.49	14.1
73000	5.4	7.63	30.5	67	27.3	90597	46.8	4.45	14.1
80000	5.6	7.65	30.6	67.5	27.28	90597	47	4.48	14.1
83000	5.7	7.69	30.9	69	27.19	90597	47.4	4.58	14.1
90000	6	7.78	31.3	72.1	27.28	90597	48	4.76	14.1
93000	6.1	7.8	31.5	73.8	27.15	90597	48.2	4.88	14.1
100000	6.2	7.81	31.5	74	27.17	90597	48.3	4.89	14.1
103000	6.3	7.85	31.7	76.3	27.26	90597	48.5	5.03	14.1
110000	6.4	7.86	31.8	76.3	27.31	90597	48.6	5.03	14.1
113000	6.5	7.88	31.8	75.7	27.42	90597	48.6	4.97	14.1
120000	6.4	7.87	31.8	75.1	27.42	90597	48.7	4.94	14.2
123000	6.3	7.86	31.7	77.5	27.33	90597	48.5	5.1	14.1
130000	6.2	7.84	31.6	76.9	27.24	90597	48.3	5.07	14.1
133000	6	7.81	31.4	76.8	27.24	90597	48.1	5.08	14.1
140000	5.8	7.78	31.2	78	27.28	90597	47.7	5.16	14.1

Appendix 3.3. (Continued). Hydrolab results, Broad Creek site R-6

Time HHMMSS	Depth meters*	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
130000	5.9	7.82	32.1	80.9	28.84	90497	49	5.18	14.7
133000	5.8	7.79	31.8	78.7	28.86	90497	48.7	5.04	14.8
140000	5.6	7.75	31.5	77.7	28.86	90497	48.2	4.99	14.7
143000	5.4	7.69	31.2	77.2	28.84	90497	47.7	4.97	14.7
150000	5.2	7.67	31.2	81.1	28.86	90497	47.7	5.22	14.7
153000	5	7.65	30.9	80.5	28.92	90497	47.4	5.18	14.7
160000	4.9	7.63	30.7	79.5	28.98	90497	47.1	5.12	14.7
163000	4.7	7.61	30.6	79.8	29.03	90497	47	5.13	14.7
170000	4.7	7.61	30.5	78.6	29.03	90497	46.9	5.06	14.8
173000	4.8	7.59	30.4	77.9	28.99	90497	46.7	5.02	14.7
180000	4.9	7.59	30.6	76.3	28.99	90497	47	4.92	14.7
183000	5.2	7.62	30.7	80.4	28.98	90497	47.1	5.18	14.7
190000	5.4	7.67	31	82.9	28.92	90497	47.5	5.34	14.7
193000	5.5	7.73	31.4	82.3	28.86	90497	48	5.29	14.7
200000	5.7	7.76	31.6	82.7	28.86	90497	48.3	5.31	15
203000	5.9	7.78	31.7	84.5	28.82	90497	48.5	5.42	14.7
210000	6	7.8	31.9	83.9	28.8	90497	48.7	5.38	14.6
213000	6.2	7.8	31.9	83	28.82	90497	48.8	5.32	14.7
220000	6.2	7.85	32.3	86.3	28.68	90497	49.3	5.53	14.7
223000	6.4	7.89	32.6	87.5	28.64	90497	49.7	5.6	14.7
230000	6.4	7.92	32.8	90.1	28.52	90497	49.9	5.78	14.7
233000	6.4	7.93	32.9	86.5	28.48	90497	50.1	5.55	14.7
0	6.2	7.92	32.8	88.9	28.47	90597	50	5.7	14.7
3000	6.1	7.9	32.7	87.4	28.5	90597	49.8	5.61	14.6
10000	5.9	7.84	32.2	83.9	28.59	90597	49.1	5.39	14.7
13000	5.7	7.76	31.7	78.8	28.39	90597	48.5	5.09	14.6
20000	5.6	7.71	31.7	72.3	28.05	90597	48.4	4.71	14.7
23000	5.4	7.67	31.5	70.3	27.92	90597	48.2	4.59	14.6
30000	5.2	7.63	31.3	69.3	27.86	90597	48	4.53	14.6
33000	5	7.6	31	69.1	27.95	90597	47.5	4.52	14.6
40000	4.8	7.56	30.8	68.2	27.94	90597	47.2	4.47	14.6
43000	4.6	7.54	30.7	67.7	27.94	90597	47	4.44	14.6
50000	4.6	7.52	30.5	66.3	27.94	90597	46.8	4.35	14.6
53000	4.6	7.5	30.5	64.5	27.76	90597	46.8	4.25	14.6
60000	4.7	7.5	30.5	65.8	27.88	90597	46.9	4.32	14.6
63000	4.9	7.53	30.6	67.2	27.86	90597	47	4.42	14.6
70000	5.2	7.57	31	68.8	27.73	90597	47.5	4.52	14.6
73000	5.4	7.66	31.5	72.4	27.9	90597	48.2	4.73	14.6
80000	5.6	7.68	31.6	72.3	27.82	90597	48.3	4.72	14.6
83000	5.7	7.69	31.6	72.6	27.69	90597	48.3	4.76	14.6
90000	6	7.73	31.8	75.4	27.84	90597	48.7	4.92	14.6
93000	6.1	7.76	31.9	76.2	27.96	90597	48.7	4.96	14.6
100000	6.2	7.81	32.2	79.8	28	90597	49.2	5.18	14.6
103000	6.3	7.87	32.7	83.3	27.86	90597	49.8	5.4	14.6
110000	6.4	7.9	32.9	85.3	27.72	90597	50.1	5.54	14.5
113000	6.5	7.92	33	84.9	27.64	90597	50.3	5.52	14.6
120000	6.4	7.93	33.2	84.5	27.59	90597	50.5	5.49	14.6
123000	6.3	7.92	33.1	84.6	27.61	90597	50.4	5.5	14.6
130000	6.2	7.9	32.7	85.9	27.77	90597	49.9	5.58	14.6
133000	6	7.85	32.4	82.7	27.92	90597	49.4	5.37	14.6
140000	5.8	7.78	31.9	80.2	27.92	90597	48.7	5.22	14.7

*Depths are from zone 5 since probe malfunctioned here

Appendix 3.3. (Continued). Hydrolab results, Okatee River site R-1

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l (calculated)	Batt volts
110000	2.5	7.21	29.9	66.8	28.62	90397	46.1	4.38	15
113000	2.5	7.25	30	67.6	28.68	90397	46.1	4.43	14.9
120000	2.1	7.28	29.9	70	28.83	90397	46.1	4.58	14.8
123000	2	7.3	29.8	73.8	28.92	90397	45.9	4.82	15
130000	2	7.32	29.6	76.4	29.15	90397	45.6	4.98	15
133000	1.8	7.36	29.5	85.2	29.46	90397	45.5	5.52	15
140000	1.3	7.39	29.4	89.9	29.79	90397	45.3	5.80	15
143000	1.2	7.42	29.3	96.2	30.03	90397	45.1	6.19	14.9
150000	0.9	7.45	29	102.2	30.51	90397	44.7	6.53	14.9
153000	0.6	7.46	28.5	106.7	31.09	90397	44.1	6.78	14.9
160000	0.4	7.46	27.6	107.6	31.69	90397	42.8	6.80	14.9
163000	0.2	7.46	25.4	107.6	32.03	90397	39.8	6.84	14.9
170000	0.2	7.46	24.5	100.4	32.09	90397	38.5	6.41	14.9
173000	0.2	7.42	26.5	102.2	32.25	90397	41.3	6.44	14.9
180000	0.5	7.47	27.6	110.2	31.85	90397	42.8	6.95	14.9
183000	0.8	7.49	28.6	110.8	31.57	90397	44.2	6.98	14.9
190000	1.2	7.51	28.9	111	31.35	90397	44.7	7.00	14.9
193000	1.4	7.49	29.2	107.1	31.09	90397	45	6.77	14.9
200000	1.7	7.5	29.4	106.1	30.93	90397	45.3	6.72	14.8
203000	1.9	7.47	29.5	100.9	30.6	90397	45.5	6.42	14.9
210000	2.1	7.44	29.6	97	30.4	90397	45.6	6.19	14.9
213000	2.3	7.44	29.7	96.1	30.32	90397	45.8	6.14	14.9
220000	2.5	7.44	29.8	94.4	30.21	90397	45.9	6.04	14.9
223000	2.6	7.43	29.8	92.2	30.13	90397	45.9	5.90	14.9
230000	2.8	7.42	29.9	91	30	90397	46.1	5.84	14.9
233000	2.6	7.41	29.9	89.1	29.97	90397	46	5.72	14.9
0	2.4	7.4	29.9	86.8	29.91	90497	46	5.57	14.9
3000	2.4	7.41	29.8	87.2	30.01	90497	45.8	5.59	14.8
10000	2.3	7.39	29.7	86	30.03	90497	45.7	5.52	14.8
13000	2	7.39	29.6	84.7	29.97	90497	45.6	5.44	14.8
20000	1.6	7.36	29.5	80.3	29.9	90497	45.5	5.17	14.8
23000	1.3	7.34	29.4	76.7	29.88	90497	45.3	4.94	14.8
30000	1.1	7.32	29.3	74.3	29.8	90497	45.1	4.80	14.8
33000	0.9	7.28	29.3	68.5	29.68	90497	45.2	4.43	14.8
40000	0.6	7.22	28.8	59.5	29.45	90497	44.6	3.87	14.8
43000	0.4	7.16	27.3	52.5	29.2	90497	42.4	3.46	14.8
50000	0.2	7.13	24.9	48.4	28.89	90497	39.1	3.25	14.8
53000	0.3	7.1	25.4	45.4	29.04	90497	39.8	3.03	14.8
60000	0.5	7.15	27.8	50.6	29.03	90497	43.1	3.33	14.8
63000	0.7	7.2	28.9	56.9	29.08	90497	44.6	3.72	14.8
70000	1.1	7.23	29.1	59.1	29.02	90497	45	3.87	14.8
73000	1.4	7.25	29.4	61.7	28.97	90497	45.3	4.03	14.8
80000	1.6	7.26	29.6	62.1	28.85	90497	45.5	4.06	14.8
83000	1.8	7.28	29.7	64.8	28.94	90497	45.7	4.23	14.7
90000	2.1	7.29	29.8	65.6	28.89	90497	45.8	4.29	14.7
93000	2.3	7.29	29.9	66.4	28.84	90497	46	4.34	14.7
100000	2.5	7.3	30	67.3	28.73	90497	46.1	4.40	14.7
103000	2.7	7.32	30	69.1	28.65	90497	46.2	4.53	14.7
110000	2.8	7.32	30.1	69.7	28.63	90497	46.2	4.57	14.7
113000	2.8	7.33	30.1	71.1	28.69	90497	46.3	4.65	14.7
120000	2.5	7.34	30.1	70.2	28.62	90497	46.3	4.60	14.7

Appendix 3.3. (Continued). Hydrolab results, Okatee River site R-2

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l (calculated)	Batt volts
120000	3.6	7.28	30.1	65.3	28.67	90397	46.3	4.27	13.9
123000	3.4	7.31	30.1	70.2	28.79	90397	46.2	4.59	13.9
130000	3.2	7.32	30	73.2	28.86	90397	46.1	4.78	13.9
133000	3	7.36	29.8	79.9	29.1	90397	45.9	5.20	13.9
140000	2.8	7.39	29.7	84.9	29.34	90397	45.7	5.51	13.9
143000	2.4	7.42	29.5	90.9	29.66	90397	45.5	5.87	14
150000	2.1	7.44	29.5	96.1	29.89	90397	45.4	6.19	14
153000	1.7	7.47	29.3	100.4	30.21	90397	45.2	6.44	13.9
160000	1.3	7.48	29.2	103.4	30.51	90397	45.1	6.60	13.9
163000	1.1	7.5	29.1	105.2	30.76	90397	44.9	6.69	13.9
170000	0.9	7.51	29.1	105.8	30.89	90397	44.9	6.72	14
173000	1.1	7.51	29.1	106.7	30.88	90397	44.9	6.78	14
180000	1.6	7.53	29.3	108.8	30.75	90397	45.2	6.92	14
183000	1.9	7.51	29.4	106.3	30.65	90397	45.3	6.76	14
190000	2.2	7.5	29.5	103.2	30.5	90397	45.4	6.58	14
193000	2.5	7.49	29.5	101.5	30.41	90397	45.5	6.48	14
200000	2.8	7.5	29.6	102	30.38	90397	45.6	6.51	14
203000	3	7.47	29.7	97	30.18	90397	45.8	6.21	14
210000	3.2	7.47	29.8	95.9	30.09	90397	45.8	6.14	14
213000	3.4	7.44	29.9	90.1	29.91	90397	46	5.79	14
220000	3.5	7.43	29.9	86.6	29.79	90397	46	5.57	14
223000	3.7	7.42	30	84.4	29.71	90397	46.2	5.43	14
230000	3.7	7.42	30.1	82.5	29.63	90397	46.3	5.32	14
233000	3.7	7.41	30.1	75.1	29.62	90397	46.3	4.84	14
0	3.7	7.42	30.1	81.9	29.58	90497	46.3	5.28	14
3000	3.6	7.42	30	83	29.63	90497	46.1	5.35	14
10000	3.3	7.42	29.9	84.3	29.7	90497	46	5.43	13.9
13000	3.1	7.43	29.8	86	29.83	90497	45.8	5.53	13.9
20000	2.9	7.41	29.7	82.7	29.8	90497	45.7	5.33	13.9
23000	2.6	7.4	29.6	81	29.8	90497	45.6	5.22	13.9
30000	2.2	7.39	29.5	78.3	29.77	90497	45.4	5.05	13.9
33000	1.9	7.37	29.4	74.8	29.7	90497	45.3	4.83	14
40000	1.5	7.35	29.4	70.5	29.62	90497	45.3	4.56	14
43000	1.2	7.33	29.4	67.5	29.54	90497	45.3	4.37	14
50000	1	7.32	29.3	64.5	29.48	90497	45.3	4.19	14
53000	1.2	7.31	29.4	62.3	29.33	90497	45.3	4.05	14
60000	1.5	7.33	29.5	64.5	29.34	90497	45.4	4.19	14
63000	1.8	7.34	29.5	66.3	29.37	90497	45.5	4.30	14
70000	2.2	7.33	29.6	65.1	29.24	90497	45.7	4.23	14
73000	2.4	7.33	29.7	64.8	29.22	90497	45.7	4.21	14
80000	2.6	7.34	29.8	64.3	29.13	90497	45.8	4.18	14
83000	2.8	7.35	29.8	65.4	29.02	90497	45.9	4.26	13.9
90000	3.1	7.35	29.9	65.9	28.98	90497	46	4.30	13.9
93000	3.3	7.35	30	65.8	28.93	90497	46.2	4.29	13.9
100000	3.5	7.35	30.1	65.6	28.89	90497	46.3	4.28	14
103000	3.6	7.36	30.1	65.6	28.86	90497	46.3	4.28	13.9
110000	3.7	7.37	30.2	66.4	28.8	90497	46.4	4.33	13.9
113000	3.8	7.38	30.2	65.7	28.79	90497	46.5	4.29	14
120000	3.7	7.38	30.2	64.3	28.75	90497	46.4	4.20	14
123000	3.7	7.39	30.2	69	28.77	90497	46.5	4.51	13.9

Appendix 3.3. (Continued). Hydrolab results, Okatee River site R-3

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
100000	4.9	7.29	29.4	55.1	30.14	82097	45.4	3.48	14.7
103000	5.1	7.3	29.5	54.5	30.17	82097	45.4	3.44	14.7
110000	5.2	7.31	29.6	54.5	30.14	82097	45.6	3.44	14.7
113000	5.3	7.31	29.8	54.1	30.12	82097	45.9	3.41	14.7
120000	5.3	7.32	29.8	51.9	30.12	82097	45.9	3.27	14.7
123000	5.3	7.31	29.8	53.5	30.13	82097	45.9	3.38	14.7
130000	5.1	7.37	29.6	65.6	30.81	82097	45.6	4.09	14.8
133000	4.8	7.38	29.6	67.4	30.91	82097	45.5	4.2	14.6
140000	4.6	7.38	29.4	70.2	30.98	82097	45.3	4.37	14.6
143000	4.3	7.42	29.2	78.5	31.31	82097	45.1	4.87	14.7
150000	4	7.51	28.9	93.3	31.8	82097	44.6	5.75	14.6
153000	3.7	7.56	28.7	94	32.07	82097	44.3	5.77	14.7
160000	3.3	7.46	28.4	91.3	31.87	82097	43.9	5.64	14.7
163000	2.9	7.48	28.3	89.8	32.04	82097	43.7	5.53	14.7
170000	2.5	7.49	28.1	92.9	32.18	82097	43.5	5.72	14.7
173000	2.2	7.5	28.2	93.1	32.28	82097	43.6	5.72	14.7
180000	2.1	7.5	28.1	90.1	32.31	82097	43.6	5.53	14.7
183000	2.4	7.52	28.1	99	32.25	82097	43.6	6.08	14.7
190000	2.9	7.49	28.3	93.3	32.14	82097	43.7	5.74	14.6
193000	3.3	7.47	28.4	87.9	31.92	82097	44	5.42	14.6
200000	3.6	7.46	28.5	86	31.79	82097	44.1	5.31	14.6
203000	3.9	7.46	28.7	83.4	31.7	82097	44.3	5.16	14.6
210000	4.2	7.45	28.9	80.6	31.46	82097	44.6	5	14.6
213000	4.4	7.43	29	76.4	31.33	82097	44.8	4.74	14.6
220000	4.6	7.44	29.2	76.8	31.24	82097	45.1	4.77	14.6
223000	4.9	7.45	29.3	77.4	31.16	82097	45.2	4.81	14.6
230000	5.1	7.44	29.4	75	31.03	82097	45.3	4.67	14.6
233000	5.2	7.43	29.4	71.6	30.86	82097	45.3	4.47	14.6
0	5.3	7.42	29.6	68.4	30.79	82197	45.5	4.27	14.6
3000	5.3	7.41	29.6	62.6	30.75	82197	45.6	3.91	14.6
10000	5.2	7.41	29.7	66.1	30.73	82197	45.7	4.13	14.6
13000	5	7.42	29.6	68	30.72	82197	45.6	4.25	14.6
20000	4.8	7.4	29.4	66.6	30.71	82197	45.4	4.17	14.6
23000	4.5	7.39	29.3	65.6	30.7	82197	45.2	4.11	14.6
30000	4.3	7.36	29.1	63.1	30.57	82197	44.9	3.96	14.6
33000	4	7.33	28.8	58.8	30.42	82197	44.5	3.71	14.6
40000	3.7	7.33	28.7	57.4	30.46	82197	44.4	3.63	14.7
43000	3.3	7.32	28.6	57.4	30.4	82197	44.2	3.63	14.7
50000	2.8	7.32	28.5	57.6	30.45	82197	44.1	3.64	14.5
53000	2.5	7.33	28.4	56.1	30.38	82197	44	3.55	14.5
60000	2.2	7.33	28.3	56.4	30.38	82197	43.9	3.57	14.5
63000	2	7.34	28.3	56	30.34	82197	43.8	3.55	14.5
70000	2.1	7.34	28.2	56.3	30.46	82197	43.7	3.56	14.5
73000	2.7	7.34	28.4	57.8	30.38	82197	43.9	3.66	14.5
80000	3.2	7.34	28.5	56.8	30.41	82197	44.1	3.59	14.5
83000	3.5	7.34	28.6	56.7	30.34	82197	44.3	3.59	14.5
90000	3.9	7.35	28.7	57.1	30.45	82197	44.4	3.61	14.5
93000	4.1	7.34	29	56.5	30.25	82197	44.8	3.57	14.5
100000	4.4	7.35	29.2	55.9	30.09	82197	45.1	3.54	14.5
103000	4.6	7.35	29.3	54.5	30.01	82197	45.2	3.46	14.5
110000	4.8	7.35	29.3	53.5	29.89	82197	45.2	3.39	14.5

Appendix 3.3. (Continued). Hydrolab results, Okatee River site R-4

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
113000	4.2	7.36	29.2	55.9	30.35	82197	45.1	3.52	14.5
120000	4.4	7.37	29.5	56.5	30.2	82197	45.4	3.56	14.5
123000	4.5	7.36	29.5	55.3	30.11	82197	45.5	3.49	14.5
130000	4.5	7.36	29.5	47.5	30.08	82197	45.5	3	14.5
133000	4.5	7.36	29.6	53.5	30.1	82197	45.6	3.38	14.5
140000	4.4	7.38	29.4	58.6	30.39	82197	45.3	3.69	14.5
143000	4.1	7.38	29	62	30.7	82197	44.8	3.89	14.5
150000	3.9	7.39	28.7	64.2	30.89	82197	44.4	4.02	14.5
153000	3.6	7.41	28.6	69.3	31.12	82197	44.2	4.33	14.5
160000	3.3	7.46	28.5	75.9	31.32	82197	44	4.72	14.5
163000	3	7.49	28.3	83.6	31.48	82197	43.7	5.2	14.5
170000	2.6	7.54	28.2	90.7	31.73	82197	43.6	5.62	14.5
173000	2.2	7.55	28	93.9	31.85	82197	43.4	5.81	14.5
180000	1.8	7.57	28	95.1	31.95	82197	43.3	5.88	14.5
183000	1.5	7.57	27.9	95	32.03	82197	43.2	5.87	14.5
190000	1.4	7.56	27.8	87.3	32.07	82197	43.1	5.39	14.5
193000	1.7	7.56	27.9	93.8	32.02	82197	43.3	5.79	14.5
200000	2.2	7.54	28.1	91.7	31.85	82197	43.5	5.67	14.5
203000	2.6	7.53	28.2	86.8	31.72	82197	43.7	5.38	14.5
210000	2.9	7.51	28.3	83.4	31.65	82197	43.7	5.17	14.5
213000	3.2	7.5	28.4	80.7	31.54	82197	44	5.01	14.5
220000	3.4	7.46	28.6	74	31.44	82197	44.2	4.6	14.5
223000	3.7	7.44	28.7	70.5	31.3	82197	44.3	4.39	14.5
230000	3.9	7.44	28.8	69	31.19	82197	44.6	4.3	14.5
233000	4.1	7.43	29.1	69.1	31.12	82197	44.9	4.31	14.5
0	4.3	7.42	29.2	65.3	30.99	82297	45	4.07	14.5
3000	4.4	7.43	29.3	63.3	30.88	82297	45.2	3.95	14.5
10000	4.5	7.44	29.5	60.1	30.82	82297	45.4	3.75	14.5
13000	4.5	7.43	29.5	58.6	30.81	82297	45.5	3.66	14.4
20000	4.5	7.43	29.4	63.6	30.76	82297	45.4	3.98	14.5
23000	4.3	7.42	29.2	64.5	30.8	82297	45.1	4.03	14.5
30000	4	7.42	28.9	65.4	30.86	82297	44.6	4.1	14.4
33000	3.8	7.42	28.6	65.5	30.84	82297	44.2	4.11	14.4
40000	3.5	7.42	28.4	65.1	30.73	82297	44	4.1	14.4
43000	3.2	7.41	28.2	64.5	30.61	82297	43.7	4.07	14.6
50000	2.8	7.4	27.3	63.6	30.5	82297	42.4	4.04	14.5
53000	2.4	7.39	26.8	61.9	30.35	82297	41.7	3.96	14.4
60000	2	7.38	26.7	59.8	30.22	82297	41.6	3.84	14.4
63000	1.7	7.36	27.9	56.7	30.05	82297	43.2	3.62	14.4
70000	1.4	7.35	28.1	53.8	29.88	82297	43.6	3.44	14.4
73000	1.3	7.34	28.1	48	29.75	82297	43.5	3.08	14.4
80000	1.7	7.34	28.2	52.8	29.8	82297	43.7	3.38	14.4
83000	2.1	7.35	28.3	53.4	29.71	82297	43.8	3.42	14.4
90000	2.6	7.36	28.5	54.1	29.57	82297	44	3.47	14.4
93000	2.9	7.36	28.6	54.4	29.67	82297	44.2	3.48	14.4
100000	3.2	7.36	28.7	53.4	29.76	82297	44.3	3.41	14.4
103000	3.5	7.36	28.8	52.7	29.94	82297	44.5	3.35	14.4
110000	3.7	7.37	28.9	53.5	30	82297	44.7	3.4	14.4
113000	4	7.36	29.1	53.2	30.03	82297	44.9	3.37	14.4
120000	4.2	7.37	29.2	53.3	30.05	82297	45.1	3.37	14.4
123000	4.1	7.38	29.5	54.1	29.96	82297	45.4	3.43	14.4

Appendix 3.3. (Continued). Hydrolab results, Okatee River site R-5

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l (calculated)	Batt volts
133000	5.4	7.45	30.8	75.8	28.62	90497	47.2	4.95	13.8
140000	5.2	7.45	30.8	77.7	28.69	90497	47.2	5.06	13.7
143000	5	7.47	30.7	81.5	28.73	90497	47.1	5.31	13.8
150000	4.8	7.48	30.6	84.3	28.8	90497	47	5.49	13.8
153000	4.6	7.48	30.5	84.7	28.87	90497	46.9	5.51	13.9
160000	4.3	7.48	30.4	85.8	28.9	90497	46.7	5.59	13.9
163000	4	7.48	30.3	87.6	28.93	90497	46.6	5.70	13.9
170000	3.7	7.49	30.3	89.1	28.95	90497	46.5	5.80	13.9
173000	3.5	7.5	30.2	90.1	28.95	90497	46.4	5.87	13.9
180000	3.5	7.5	30.2	90.7	28.97	90497	46.5	5.90	13.9
183000	3.8	7.51	30.3	91.9	28.92	90497	46.6	5.98	13.9
190000	4.1	7.51	30.4	91.5	28.92	90497	46.7	5.96	13.9
193000	4.4	7.51	30.5	90.7	28.86	90497	46.8	5.91	13.9
200000	4.6	7.52	30.6	92.4	28.85	90497	46.9	6.01	13.9
203000	4.9	7.52	30.6	89.8	28.74	90497	47	5.86	13.9
210000	5.1	7.53	30.7	90.9	28.62	90497	47.1	5.94	13.9
213000	5.3	7.57	30.8	96.5	28.44	90497	47.3	6.32	13.8
220000	5.5	7.55	30.8	91.7	28.34	90497	47.3	6.01	13.9
223000	5.6	7.55	30.9	91.4	28.3	90497	47.3	5.99	13.8
230000	5.8	7.54	30.9	89.6	28.28	90497	47.3	5.88	13.8
233000	5.8	7.52	30.9	84.7	28.25	90497	47.4	5.56	13.9
0	5.8	7.54	30.9	85.5	28.18	90597	47.4	5.62	13.9
3000	5.8	7.56	30.9	91.1	28.11	90597	47.4	5.99	13.8
10000	5.7	7.53	30.9	86.6	28.22	90597	47.4	5.69	13.8
13000	5.5	7.52	30.9	85.6	28.2	90597	47.4	5.62	13.8
20000	5.3	7.52	30.8	85.3	28.17	90597	47.3	5.61	13.9
23000	5.1	7.51	30.7	85.5	28.11	90597	47.1	5.63	13.9
30000	4.9	7.49	30.4	82.2	28.05	90597	46.7	5.43	13.9
33000	4.6	7.47	30	79	27.97	90597	46.2	5.23	13.9
40000	4.3	7.45	30.2	77	27.8	90597	46.4	5.11	13.9
43000	4	7.44	30.4	74.9	27.6	90597	46.7	4.98	13.9
50000	3.7	7.43	30.4	73.2	27.44	90597	46.7	4.88	13.9
53000	3.5	7.43	30.4	71.8	27.32	90597	46.7	4.80	13.9
60000	3.4	7.43	30.5	69.6	27.24	90597	46.8	4.65	13.9
63000	3.6	7.43	30.5	71.8	27.18	90597	46.8	4.81	13.9
70000	3.9	7.43	30.6	72	27.24	90597	46.9	4.81	13.9
73000	4.2	7.43	30.6	72	27.29	90597	47	4.81	13.9
80000	4.4	7.43	30.8	70.9	27.08	90597	47.2	4.75	13.9
83000	4.7	7.45	30.8	72.8	27.16	90597	47.3	4.87	13.9
90000	4.9	7.45	30.9	72.7	26.94	90597	47.4	4.88	13.9
93000	5.1	7.46	31.1	73	26.67	90597	47.6	4.91	13.9
100000	5.3	7.48	31.1	74.4	26.48	90597	47.7	5.02	13.9
103000	5.5	7.49	31.1	75.6	26.53	90597	47.7	5.10	13.8
110000	5.7	7.5	31.2	76.6	26.62	90597	47.7	5.16	13.9
113000	5.8	7.5	31.1	77	26.8	90597	47.7	5.17	13.8
120000	5.8	7.5	31.1	77.4	26.9	90597	47.7	5.19	13.9
123000	5.8	7.51	31.1	76.3	26.94	90597	47.7	5.11	13.9
130000	5.8	7.51	31.1	78.6	26.92	90597	47.7	5.27	13.9
133000	5.7	7.5	31.1	79	27.02	90597	47.7	5.29	13.8
140000	5.5	7.5	31.1	78.8	26.95	90597	47.7	5.28	13.8

Appendix 3.3. (Continued). Hydrolab results, Okatee River site R-6

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l (calculated)	Batt volts
140000	4.7	7.37	31	79	28.59	90497	47.5	5.15	14.7
143000	4.5	7.39	31	76.8	28.63	90497	47.5	5.01	14.7
150000	4.3	7.4	31	79.7	28.68	90497	47.5	5.19	14.7
153000	4.1	7.41	30.9	81	28.76	90497	47.4	5.27	14.7
160000	3.8	7.43	30.9	85.5	28.82	90497	47.4	5.56	14.7
163000	3.5	7.45	30.8	88.2	28.89	90497	47.3	5.73	14.7
170000	3.2	7.46	30.8	90.1	28.97	90497	47.2	5.85	14.7
173000	2.9	7.47	30.8	92.8	29.02	90497	47.2	6.02	14.7
180000	3	7.48	30.8	94.5	29.01	90497	47.2	6.13	14.7
183000	3.4	7.48	30.8	93.5	28.89	90497	47.2	6.07	14.7
190000	3.8	7.47	30.8	89.1	28.73	90497	47.3	5.80	14.7
193000	4	7.52	31	96.7	28.59	90497	47.5	6.31	14.7
200000	4.3	7.55	31	99.5	28.43	90497	47.5	6.51	14.7
203000	4.5	7.54	31	99.2	28.34	90497	47.6	6.50	14.7
210000	4.7	7.52	31.1	94.8	28.3	90497	47.6	6.21	14.7
213000	4.9	7.49	31	89.6	28.28	90497	47.6	5.87	14.7
220000	5	7.46	31.1	85.9	28.33	90497	47.6	5.62	14.6
223000	5.2	7.46	31.1	85.3	28.25	90497	47.7	5.59	14.7
230000	5.1	7.46	31.1	83.8	28.02	90497	47.7	5.51	14.6
233000	5.1	7.45	31.1	82.6	28.19	90497	47.7	5.42	14.6
0	5	7.47	31.1	84	27.88	90597	47.7	5.54	14.6
3000	5.2	7.46	31.1	83.8	28.04	90597	47.7	5.51	14.6
10000	5.2	7.46	31.1	84.9	28.05	90597	47.7	5.58	14.6
13000	5.1	7.46	31.1	84.1	28.05	90597	47.7	5.53	14.6
20000	4.8	7.47	31.1	85.9	27.95	90597	47.7	5.66	14.6
23000	4.6	7.46	31.1	83.6	27.8	90597	47.7	5.52	14.6
30000	4.4	7.45	31.1	82.5	27.72	90597	47.7	5.46	14.6
33000	4.1	7.44	31.1	81.3	27.65	90597	47.7	5.38	14.6
40000	3.8	7.44	31.1	80.4	27.63	90597	47.6	5.32	14.6
43000	3.4	7.42	31	78.3	27.64	90597	47.5	5.19	14.6
50000	3.2	7.41	30.9	76.9	27.61	90597	47.4	5.10	14.6
53000	2.9	7.4	30.9	75.8	27.58	90597	47.3	5.03	14.6
60000	2.5	7.39	31	71.7	27.12	90597	47.5	4.79	14.6
63000	3.3	7.4	31	75.1	27.3	90597	47.5	5.00	14.6
70000	3.6	7.38	31.3	68.2	26.22	90597	47.9	4.62	14.6
73000	3.9	7.4	31.3	68.3	26.34	90597	47.9	4.62	14.6
80000	4.1	7.42	31.3	73.3	26.53	90597	47.9	4.94	14.5
83000	4.4	7.43	31.4	74.2	26.32	90597	48	5.01	14.6
90000	4.6	7.44	31.3	75.8	26.38	90597	48	5.12	14.5
93000	4.8	7.44	31.3	77	26.65	90597	47.9	5.18	14.6
100000	5	7.44	31.3	77.5	26.78	90597	47.9	5.20	14.6
103000	5.1	7.44	31.3	76.8	26.89	90597	47.9	5.14	14.6
110000	5.3	7.43	31.3	76.4	26.91	90597	47.9	5.11	14.6
113000	5.4	7.44	31.3	76.8	27.05	90597	47.9	5.13	14.6
120000	5.1	7.44	31.3	75.3	26.99	90597	47.9	5.03	14.6
123000	5	7.44	31.3	75.1	27.2	90597	48	5.00	14.6
130000	5.4	7.45	31.3	78.1	27.11	90597	47.9	5.21	14.6
133000	5.3	7.45	31.3	79.1	27.13	90597	48	5.28	14.5
140000	5.1	7.47	31.3	82.8	27.16	90597	48	5.52	14.5
143000	4.9	7.49	31.3	85.8	27.18	90597	47.9	5.72	14.5
150000	4.6	7.49	31.3	85.6	27.18	90597	47.9	5.70	14.5

Appendix 3.3. (Continued). Hydrolab results, Broad Creek site T-1

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
93000	1.61	7.26	28.3	52.8	27.85	90397	43.8	3.52	14.7
100000	1.74	7.31	28.4	58.6	28.04	90397	44	3.89	14.7
103000	1.82	7.33	28.5	61.5	28.14	90397	44.1	4.07	14.7
110000	1.8	7.33	28.5	62.4	28.18	90397	44.1	4.13	14.7
113000	1.69	7.32	28.2	66.8	28.42	90397	43.7	4.41	14.7
120000	1.53	7.3	27.7	70.1	28.87	90397	43	4.6	14.7
123000	1.32	7.25	26.6	74.6	29.53	90397	41.5	4.87	14.7
130000	1.03	7.21	25.2	76.4	29.72	90397	39.4	5.02	14.7
133000	0.71	7.11	22.4	57.3	29.07	90397	35.5	3.87	14.7
140000	0.42	7.04	16.9	54.2	28.92	90397	27.6	3.79	14.7
143000	0.17	6.9	7.6	53.2	28.05	90397	13.13	3.99	14.7
150000	0								
153000	0								
160000	0								
163000	0								
170000	0								
173000	0								
180000	0.19	2.5	11.9	39.7	32.31	90397	20	2.7	14.6
183000	0.46	3.28	19.4	59.2	32.17	90397	31.2	3.86	14.6
190000	0.74	4.36	23.6	69.7	32.1	90397	37.2	4.44	14.6
193000	0.98	4.6	25	76.4	32.05	90397	39.2	4.83	14.6
200000	1.2	4.72	26.4	86.7	31.85	90397	41.2	5.45	14.6
203000	1.39	4.7	27.5	95.5	30.68	90397	42.8	6.09	14.6
210000	1.57	4.77	28.1	89.3	29.95	90397	43.6	5.74	14.7
213000	1.75	4.89	28.3	84.9	29.68	90397	43.9	5.48	14.7
220000	1.89	5.02	28.5	82.3	29.55	90397	44	5.31	14.6
223000	1.95	5.04	28.5	78.6	29.49	90397	44.1	5.08	14.6
230000	1.91	5.04	28.4	76.9	29.49	90397	44	4.98	14.6
233000	1.8	5	28.4	70.9	29.49	90397	43.9	4.59	14.6
0	1.65	4.91	27.7	63.9	29.56	90497	43	4.14	14.6
3000	1.46	4.75	27.3	46.5	29.59	90497	42.4	3.02	14.6
10000	1.2	4.59	26.4	29.1	29.43	90497	41.2	1.91	14.6
13000	0.85	4.52	24.4	30.8	29.67	90497	38.4	2.04	14.6
20000	0.52	4.43	21.5	33.5	29.82	90497	34.2	2.24	14.6
23000	0.3	4.16	10.8	41	28.48	90497	18.3	2.99	14.6
30000	0.06	4.19	6.4	36.1	28.17	90497	11.31	2.72	14.6
33000	0								
40000	0								
43000	0								
50000	0								
53000	0								
60000	0.09	5.27	9.2	20.7	26.5	90497	15.8	1.58	14.5
63000	0.35	4.96	19.1	11.2	27.85	90497	30.8	0.79	14.6
70000	0.62	4.81	22.8	10.5	28.03	90497	36.1	0.72	14.5
73000	0.9	4.61	24.9	16.3	27.94	90497	39.1	1.1	14.6
80000	1.11	4.58	26.4	19.9	27.83	90497	41.2	1.34	14.6
83000	1.27	4.62	27.3	28.8	27.92	90497	42.5	1.93	14.5
90000	1.44	4.7	28	44	28.08	90497	43.4	2.93	14.6
93000	1.62	4.71	28.5	51.4	28.2	90497	44.1	3.4	14.6
100000	1.78	4.77	28.6	56.5	28.22	90497	44.3	3.73	14.6
103000	1.87	4.83	28.7	58.1	28.22	90497	44.4	3.84	14.6

Appendix 3.3. (Continued). Hydrolab results, Broad Creek site T-2

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
103000	1.34	7.39	28.7	59.7	28.15	90397	44.4	3.94	14.6
110000	1.28	7.38	28.7	58	28.14	90397	44.3	3.84	14.6
113000	1.14	7.4	28.6	61.7	28.3	90397	44.2	4.07	14.6
120000	0.95	7.42	28.4	68	28.48	90397	44	4.48	14.6
123000	0.74	7.46	28.1	77.6	28.81	90397	43.6	5.09	14.6
130000	0.5	7.46	27.8	84.7	29.44	90397	43.1	5.5	14.6
133000	0.21	7.51	27.6	95.7	30.9	90397	42.9	6.07	14.6
140000	0	7.53	27.3	95.8	32.31	90397	42.5	5.95	14.6
143000	0	7.49	26.9	81.6	33.76	90397	41.9	4.96	14.6
150000	0								
153000	0								
160000	0								
163000	0								
170000	0								
173000	0								
180000	0	7.62	27.7	78.8	32.77	90397	42.9	4.85	14.6
183000	0	7.66	27.6	102.7	31.25	90397	42.8	6.48	14.6
190000	0.25	7.63	27.9	100.3	30.89	90397	43.2	6.36	14.6
193000	0.5	7.59	28	96	30.81	90397	43.4	6.09	14.6
200000	0.74	7.57	28.1	93.6	30.53	90397	43.6	5.96	14.6
203000	0.97	7.54	28.4	88.6	30.08	90397	43.9	5.68	14.6
210000	1.16	7.51	28.6	83.4	29.75	90397	44.2	5.37	14.6
213000	1.32	7.5	28.7	80.1	29.6	90397	44.3	5.17	14.6
220000	1.43	7.49	28.7	77	29.51	90397	44.3	4.97	14.6
223000	1.46	7.48	28.7	73.1	29.47	90397	44.4	4.72	14.6
230000	1.39	7.47	28.7	72.4	29.48	90397	44.3	4.67	14.6
233000	1.25	7.44	28.6	69	29.51	90397	44.3	4.45	14.6
0	1.06	7.42	28.5	65.6	29.56	90497	44.1	4.24	14.6
3000	0.85	7.39	28.4	61.5	29.79	90497	43.9	3.96	14.6
10000	0.6	7.29	28.2	47	29.78	90497	43.7	3.03	14.5
13000	0.32	7.19	28.3	36.4	29.29	90497	43.8	2.37	14.6
20000	0.03	7.14	28.3	33.6	28.69	90497	43.8	2.2	14.6
23000	0	7.12	28.2	33.6	28.19	90497	43.7	2.22	14.5
30000	0								
33000	0								
40000	0								
43000	0								
50000	0								
53000	0								
60000	0								
63000	0	7.33	27.8	39.9	27.64	90497	43.1	2.68	14.5
70000	0.15	7.31	28.1	43.4	28.27	90497	43.6	2.87	14.5
73000	0.42	7.3	28.2	43.7	28.01	90497	43.7	2.9	14.5
80000	0.63	7.3	28.3	44.5	27.94	90497	43.9	2.96	14.5
83000	0.82	7.31	28.5	46.1	27.9	90497	44	3.06	14.5
90000	1.03	7.36	28.7	52.5	28.06	90497	44.4	3.48	14.5
93000	1.22	7.4	28.8	57.9	28.09	90497	44.5	3.83	14.6
100000	1.34	7.45	28.9	58.6	28.05	90497	44.6	3.88	14.6
103000	1.39	7.46	28.9	55.5	28	90497	44.7	3.68	14.5
110000	1.39	7.45	28.9	50.4	28.04	90497	44.6	3.33	14.5
113000	1.37	7.47	28.9	59.8	28.05	90497	44.6	3.95	14.5

Appendix 3.3. (Continued). Hydrolab results, Broad Creek site T-3

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
120000	2.02	7.65	26.7	46	29.95	82197	41.6	2.96	15.1
123000	1.9	7.67	26.8	45	29.97	82197	41.7	2.9	15.1
130000	1.7	7.68	26.8	42.2	29.99	82197	41.7	2.72	15
133000	1.45	7.66	26.7	40.7	30.01	82197	41.5	2.62	15.1
140000	1.18	7.66	26.3	46.7	30.07	82197	41	3.01	15.1
143000	0.91	7.74	25.9	57.2	30.31	82197	40.5	3.68	15.1
150000	0.63	7.44	17.4	51.3	31.52	82197	28.3	3.4	15.1
153000	0.32	7.49	17.4	65.5	31.56	82197	28.2	4.34	15.1
160000	0.04	7.51	16.6	74.5	31.75	82197	27.2	4.94	15.1
163000	0								
170000	0								
173000	0								
180000	0								
183000	0								
190000	0								
193000	0								
200000	0.15	7.68	17.2	77.5	32.01	82197	28.1	5.1	15
203000	0.46	7.64	17.3	72.1	31.93	82197	28.1	4.74	15
210000	0.77	7.62	17.3	69.3	31.84	82197	28.2	4.57	15
213000	1.05	7.73	24.1	58.3	31.12	82197	38	3.74	15
220000	1.31	7.74	25.1	56.2	30.99	82197	39.3	3.59	15
223000	1.53	7.74	25.6	56.1	30.86	82197	40	3.58	15
230000	1.71	7.74	26	53.6	30.74	82197	40.5	3.42	15.1
233000	1.85	7.74	26.2	52.4	30.66	82197	40.9	3.34	15
0	1.93	7.74	26.4	51.5	30.61	82297	41.2	3.28	15
3000	1.91	7.74	26.7	47.6	30.58	82297	41.5	3.04	14.9
10000	1.78	7.74	26.7	47.7	30.59	82297	41.6	3.04	15
13000	1.56	7.73	26.7	45.6	30.59	82297	41.6	2.91	15
20000	1.32	7.7	26.6	43.1	30.59	82297	41.5	2.75	15
23000	1.04	7.61	26.2	41.2	30.67	82297	40.9	2.63	15
30000	0.76	7.46	19.4	37.4	31.17	82297	31.2	2.46	14.9
33000	0.46	7.58	19.6	53.4	31.45	82297	31.5	3.5	15
40000	0.17	7.54	18.7	63	30.97	82297	30.2	4.18	14.9
43000	0								
50000	0								
53000	0								
60000	0								
63000	0								
70000	0								
73000	0								
80000	0								
83000	0.14	7.6	18.5	43.6	29.93	82297	29.9	2.95	14.9
90000	0.45	7.55	18.3	39.8	29.83	82297	29.7	2.7	14.9
93000	0.78	7.54	18.4	35.9	29.81	82297	29.8	2.43	14.9
100000	1.08	7.71	24.5	47.5	29.3	82297	38.5	3.13	14.9
103000	1.35	7.73	25.3	48.3	29.35	82297	39.6	3.17	14.9
110000	1.58	7.76	25.8	49.9	29.5	82297	40.4	3.26	14.9
113000	1.76	7.77	26.2	54.8	29.65	82297	40.9	3.56	14.9
120000	1.89	7.79	26.4	52.6	29.78	82297	41.2	3.4	14.9
123000	1.96	7.81	26.6	54.8	29.88	82297	41.5	3.53	14.9
130000	1.93	7.8	26.9	53.6	29.9	82297	41.8	3.45	14.9

Appendix 3.3. (Continued). Hydrolab results, Broad Creek site T-4

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
100000	2.08	7.7	28.7	56.1	29.38	82097	44.4	3.61	15.3
103000	2.16	7.71	28.8	51.7	29.42	82097	44.4	3.32	15.3
110000	2.15	7.66	28.7	49.3	29.44	82097	44.3	3.17	15.3
113000	2.04	7.68	28.6	50.7	29.53	82097	44.2	3.26	15.3
120000	1.84	7.67	28.4	52.3	29.72	82097	44	3.34	15.2
123000	1.58	7.55	28.1	42.3	29.64	82097	43.5	2.72	15.3
130000	1.31	7.52	27.7	41.7	29.77	82097	43	2.68	15.3
133000	1.01	7.52	26.8	50.5	30.39	82097	41.7	3.23	15.3
140000	0.69	7.48	26.1	54.1	30.92	82097	40.7	3.44	15.3
143000	0.36	7.44	25.8	44.6	31.21	82097	40.3	2.82	15.3
150000	0								
153000	0								
160000	0								
163000	0								
170000	0								
173000	0								
180000	0								
183000	0								
190000	0.29	7.49	21	54.7	33.22	82097	33.5	3.45	15.2
193000	0.63	7.58	26.2	64.2	32.2	82097	40.8	3.99	15.2
200000	0.95	7.63	26.6	60.1	30.74	82097	41.5	3.82	15.2
203000	1.23	7.71	27.1	64.4	30.6	82097	42.2	4.09	15.2
210000	1.51	7.77	27.8	65.6	30.47	82097	43.1	4.16	15.2
213000	1.74	7.84	28.3	67.6	30.35	82097	43.8	4.29	15.2
220000	1.94	7.86	28.5	67.3	30.26	82097	44	4.27	15.2
223000	2.09	7.87	28.5	66	30.18	82097	44.1	4.19	15.2
230000	2.17	7.88	28.6	61.4	30.13	82097	44.2	3.9	15.2
233000	2.15	7.84	28.6	57.7	30.15	82097	44.2	3.66	15.2
0	2	7.81	28.4	54.2	30.18	82197	44	3.44	15.2
3000	1.79	7.75	28.2	55.2	30.21	82197	43.7	3.51	15.2
10000	1.53	7.66	27.9	46.8	30.26	82197	43.3	2.98	15.2
13000	1.27	7.62	27.7	38.9	30.21	82197	43	2.48	15.1
20000	0.98	7.58	27	43.3	29.87	82197	41.9	2.79	15.1
23000	0.67	7.5	26.4	36.9	29.61	82197	41.1	2.4	15.1
30000	0.31	7.44	26	28.3	29.56	82197	40.7	1.84	15.1
33000	0								
40000	0								
43000	0								
50000	0								
53000	0								
60000	0								
63000	0								
70000	0								
73000	0.17	7.44	15.2	37.3	26.15	82197	25.1	2.75	15
80000	0.54	7.45	25.1	31.3	28.63	82197	39.3	2.08	15
83000	0.85	7.53	26.4	40.8	29.66	82197	41.2	2.64	15
90000	1.15	7.64	27.1	49	29.83	82197	42.1	3.16	15.1
93000	1.43	7.7	27.6	51.1	29.75	82197	42.8	3.28	15.1
100000	1.65	7.79	28.2	54.1	29.66	82197	43.7	3.47	15.1
103000	1.87	7.82	28.4	55.9	29.67	82197	43.9	3.58	15.1
110000	2.01	7.84	28.4	55.8	29.67	82197	44	3.57	15

Appendix 3.3. (Continued). Hydrolab results, Broad Creek site T-5

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
123000	1.71	7.8	31.2	58.9	27.91	90497	47.8	3.86	14.5
130000	1.58	7.71	31.1	70.2	27.95	90497	47.6	4.59	14.6
133000	1.41	7.63	31	88.7	28.05	90497	47.5	5.8	14.5
140000	1.21	7.59	30.8	95	28.34	90497	47.2	6.18	14.5
143000	0.96	7.54	30.8	97.3	28.64	90497	47.2	6.3	14.5
150000	0.71	7.52	30.9	98	29.28	90497	47.4	6.27	14.6
153000	0.5	7.41	30.9	126.8	29.55	90497	47.3	8.08	14.5
160000	0.37	7.47	30.9	57	29.79	90497	47.3	3.62	14.5
163000	0.32	7.4	30.9	76	29.88	90497	47.4	4.81	14.5
170000	0.3	7.37	30.9	71.6	29.84	90497	47.4	4.54	14.6
173000	0.29	7.34	31	69	29.74	90497	47.5	4.38	14.5
180000	0.3	7.31	31	63.2	29.62	90497	47.5	4.02	14.5
183000	0.53	7.26	31	58.2	29.3	90497	47.5	3.72	14.6
190000	0.78	7.27	30.9	64.3	29.01	90497	47.4	4.13	14.5
193000	1.01	7.32	30.8	69.8	28.69	90497	47.3	4.51	14.5
200000	1.23	7.44	30.4	79.1	28.05	90497	46.7	5.18	14.5
203000	1.43	7.47	30.5	78.5	28.11	90497	46.9	5.14	14.5
210000	1.58	7.56	31.1	81.1	28.17	90497	47.7	5.28	14.5
213000	1.73	7.61	31.4	80.8	28.11	90497	48.1	5.26	14.5
220000	1.87	7.64	31.6	55.3	27.96	90497	48.3	3.61	14.5
223000	1.97	7.6	31.6	79.6	27.89	90497	48.4	5.19	14.5
230000	1.99	7.59	31.7	75.2	27.77	90497	48.4	4.92	14.5
233000	1.98	7.52	31.7	67.9	27.5	90497	48.4	4.46	14.5
0	1.9	7.48	31.7	64	27.1	90597	48.4	4.24	14.5
3000	1.77	7.44	31.6	54.5	26.81	90597	48.4	3.62	14.5
10000	1.61	7.36	31.6	49.3	26.38	90597	48.3	3.3	14.5
13000	1.42	7.27	31.5	44.2	25.92	90597	48.1	2.99	14.5
20000	1.19	7.16	31.4	38.2	25.17	90597	48	2.62	14.5
23000	0.93	7.09	31.5	35.4	24.42	90597	48.2	2.46	14.5
30000	0.66	7.07	31.7	33.3	23.86	90597	48.5	2.33	14.5
33000	0.46	7.05	31.7	26	23.7	90597	48.5	1.83	14.5
40000	0.38	7	31.8	16.6	23.53	90597	48.7	1.17	14.5
43000	0.34	7	31.8	12.3	23.43	90597	48.7	0.87	14.5
50000	0.33	6.99	31.9	7	23.28	90597	48.7	0.49	14.4
53000	0.32	6.97	31.9	6.1	23.17	90597	48.7	0.44	14.4
60000	0.31	6.98	31.9	2	22.97	90597	48.8	0.14	14.4
63000	0.32	6.98	31.8	1.1	22.88	90597	48.6	0.08	14.4
70000	0.57	7.01	31.9	3.5	22.91	90597	48.8	0.25	14.4
73000	0.82	7.04	31.7	23.4	23.32	90597	48.5	1.66	14.4
80000	1.06	7.09	31.4	21.9	23.98	90597	48	1.53	14.4
83000	1.29	7.35	30.5	51.5	25.73	90597	46.9	3.52	14.4
90000	1.48	7.47	30.8	64.4	26.73	90597	47.2	4.31	14.4
93000	1.62	7.53	31.3	71.6	26.85	90597	48	4.77	14.4
100000	1.76	7.54	31.5	74.7	26.93	90597	48.2	4.96	14.5
103000	1.9	7.55	31.7	77.9	27.08	90597	48.4	5.15	14.4
110000	1.99	7.56	31.7	78.7	27.2	90597	48.5	5.19	14.5
113000	2.02	7.56	31.7	72.8	27.24	90597	48.5	4.8	14.4
120000	2	7.53	31.7	79.5	27.25	90597	48.5	5.24	14.4
123000	1.91	7.53	31.6	86.6	27.43	90597	48.4	5.69	14.4
130000	1.78	7.52	31.6	92.4	27.61	90597	48.3	6.06	14.4
133000	1.62	7.55	31.4	99.4	27.83	90597	48.1	6.5	14.4

Appendix 3.3. (Continued). Hydrolab results, Broad Creek site T-6

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
130000	1.61	7.72	31	81.8	28.1	90497	47.5	5.34	14.5
133000	1.43	7.71	30.7	89.1	28.28	90497	47.1	5.81	14.4
140000	1.23	7.67	29.7	89.8	28.45	90497	45.8	5.87	14.5
143000	0.99	7.59	28.1	87.2	28.56	90497	43.5	5.74	14.5
150000	0.76	7.5	25.8	85.5	28.71	90497	40.4	5.69	14.5
153000	0.56	7.42	22.8	80.7	28.79	90497	36.1	5.46	14.5
160000	0.37	7.38	22.2	76	28.97	90497	35.2	5.14	14.5
163000	0.21	7.37	20.8	77.6	29.09	90497	33.2	5.29	14.5
170000	0.15	7.36	18.7	80.4	29.05	90497	30.2	5.54	14.5
173000	0.19	7.34	17.2	79.1	28.87	90497	28.1	5.52	14.5
180000	0.31	7.33	16.6	70.4	28.67	90497	27.2	4.95	14.5
183000	0.5	7.33	18.3	72.9	28.83	90497	29.7	5.06	14.5
190000	0.72	7.35	20.5	70.4	28.75	90497	32.8	4.83	14.5
193000	0.94	7.39	22.2	70.4	28.68	90497	35.3	4.79	14.5
200000	1.15	7.53	25.1	85.8	28.6	90497	39.4	5.75	14.5
203000	1.36	7.66	29.2	86.6	28.42	90497	45	5.68	14.5
210000	1.52	7.69	30.4	79.9	28.23	90497	46.6	5.22	14.4
213000	1.66	7.72	30.9	77.4	28.09	90497	47.3	5.06	14.4
220000	1.78	7.77	31.2	76.2	27.97	90497	47.8	4.98	14.4
223000	1.88	7.8	31.5	76.3	27.83	90497	48.2	4.99	14.4
230000	1.92	7.82	31.6	76	27.76	90497	48.3	4.97	14.4
233000	1.91	7.82	31.7	69.9	27.66	90497	48.5	4.58	14.4
0	1.86	7.81	31.7	74.6	27.51	90597	48.5	4.9	14.4
3000	1.77	7.72	31.5	68.5	27.26	90597	48.2	4.52	14.4
10000	1.64	7.66	31.4	65	27.02	90597	48.1	4.31	14.4
13000	1.46	7.57	31	59.1	26.65	90597	47.6	3.96	14.4
20000	1.23	7.49	29.8	57.1	26.57	90597	45.9	3.86	14.4
23000	0.97	7.38	27.6	54	26.45	90597	42.8	3.7	14.4
30000	0.74	7.28	25	49.4	26.14	90597	39.2	3.46	14.4
33000	0.54	7.23	22.1	48.3	25.8	90597	35.2	3.46	14.4
40000	0.35	7.21	21.8	46.8	25.8	90597	34.7	3.36	14.4
43000	0.18	7.2	19.2	49.2	25.62	90597	30.9	3.6	14.4
50000	0.06	7.18	16.9	49.3	25.39	90597	27.6	3.67	14.4
53000	0.05	7.17	4.7	48.1	25.01	90597	8.33	3.88	14.3
60000	0.16	7.18	14.4	43.3	24.9	90597	23.8	3.3	14.3
63000	0.35	7.19	14.7	43	24.73	90597	24.2	3.28	14.3
70000	0.56	7.2	16.2	43.7	24.8	90597	26.6	3.3	14.3
73000	0.79	7.22	18.8	42.4	24.85	90597	30.4	3.15	14.4
80000	1.01	7.24	22	42.6	24.85	90597	35	3.11	14.4
83000	1.24	7.41	27	52.2	25.32	90597	42	3.66	14.4
90000	1.44	7.58	29.9	62.5	26.26	90597	46	4.24	14.4
93000	1.59	7.64	30.6	66	26.56	90597	47	4.44	14.4
100000	1.71	7.71	31.1	69.7	26.69	90597	47.7	4.66	14.4
103000	1.83	7.76	31.4	72.7	26.7	90597	48.1	4.85	14.4
110000	1.93	7.8	31.6	75.9	26.79	90597	48.3	5.05	14.4
113000	1.97	7.84	31.7	76.5	27.03	90597	48.5	5.07	14.4
120000	1.96	7.86	31.8	78.5	27.2	90597	48.6	5.18	14.4
123000	1.89	7.87	31.7	85.5	27.32	90597	48.4	5.64	14.4
130000	1.8	7.81	31.5	84.1	27.23	90597	48.3	5.56	14.4
133000	1.66	7.79	31.3	89.2	27.35	90597	48	5.89	14.4
140000	1.46	7.78	30.9	96.5	27.57	90597	47.4	6.36	14.4

Appendix 3.3. (Continued). Hydrolab results, Okatee River site T-1

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l (calculated)	Batt volts
103000	1.7	7.19	28.4	55.2	28.37	90397	43.9	3.67	13.8
110000	1.9	7.22	28.4	57.9	28.54	90397	43.9	3.83	13.8
113000	1.9	7.24	28.6	61.5	28.75	90397	44.2	4.05	13.8
120000	1.9	7.25	28.6	61	28.8	90397	44.2	4.02	13.8
123000	1.8	7.25	27.9	66.5	29	90397	43.2	4.38	13.9
130000	1.6	7.25	27.6	69.3	29.25	90397	42.8	4.56	13.9
133000	1.4	7.26	26.8	74	29.48	90397	41.7	4.87	13.8
140000	1.1	7.28	25.3	82	29.92	90397	39.7	5.40	13.8
143000	0.8	7.33	22	92.2	30.01	90397	34.9	6.17	13.8
150000	0.4	7.37	14.1	98.9	29.92	90397	23.4	6.93	13.8
153000	0.1	7.35	4.6	94.6	29.49	90397	8.24	7.03	13.9
160000	0								
163000	0								
170000	0								
173000	0								
180000	0								
183000	0.1	7.1	3.4	66.2	30.99	90397	6.16	4.83	13.9
190000	0.3	7.27	9.4	87.1	31.46	90397	16.1	6.10	13.8
193000	0.6	7.43	19.7	100.2	31.86	90397	31.6	6.59	13.9
200000	0.9	7.45	24.1	100.7	31.83	90397	38	6.47	13.8
203000	1.1	7.45	26.4	99.1	31.62	90397	41.1	6.31	13.9
210000	1.3	7.44	27.5	96.3	31.34	90397	42.7	6.12	13.9
213000	1.5	7.44	28	93.9	31.04	90397	43.4	5.98	13.9
220000	1.7	7.43	28.3	91	30.81	90397	43.7	5.81	13.9
223000	1.9	7.41	28.3	87.3	30.59	90397	43.8	5.59	13.9
230000	2	7.4	28.5	84.4	30.42	90397	44.1	5.42	13.9
233000	2.1	7.39	28.6	82	30.32	90397	44.2	5.27	13.9
0	2	7.38	28.6	80.5	30.31	90497	44.2	5.17	14
3000	1.9	7.35	27.9	77.7	30.26	90497	43.3	5.02	13.9
10000	1.7	7.31	27.9	73.7	30.22	90497	43.2	4.76	13.9
13000	1.5	7.26	27.2	68.5	30.21	90497	42.3	4.44	13.8
20000	1.2	7.2	26.4	62.5	30.08	90497	41.2	4.08	13.9
23000	1	7.14	25.3	56.9	29.95	90497	39.6	3.75	13.8
30000	0.6	7.08	19.5	50.3	29.63	90497	31.4	3.44	13.8
33000	0.3	7.02	9.2	46.9	28.73	90497	15.8	3.44	13.8
40000	0	7.04	2.4	54.6	27.43	90497	4.42	4.26	13.8
43000	0								
50000	0								
53000	0								
60000	0								
63000	0	7.07	3.1	53.3	26.28	90497	5.57	4.23	13.8
70000	0.3	6.9	6.1	43.1	26.79	90497	10.8	3.33	13.8
73000	0.6	6.94	17.3	37.4	27.77	90497	28.1	2.67	13.8
80000	0.8	7.03	23.2	39.7	28.12	90497	36.6	2.73	13.8
83000	1	7.1	26.1	43.2	28.28	90497	40.7	2.91	13.8
90000	1.2	7.15	27.5	47.7	28.42	90497	42.6	3.18	13.8
93000	1.4	7.19	28.2	51.1	28.56	90497	43.6	3.39	13.8
100000	1.6	7.22	28.5	54.2	28.53	90497	44.1	3.59	13.8
103000	1.8	7.24	28.6	55.9	28.41	90497	44.3	3.71	13.8
110000	1.9	7.25	28.7	58.1	28.41	90497	44.4	3.85	13.8
113000	2	7.28	28.8	62	28.5	90497	44.5	4.10	13.8

Appendix 3.3. (Continued). Hydrolab results, Okatee River site T-2

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO mg/l	Temp ºC	Date MMDDYY	DO % saturation (calculated)	Batt volts
113000	2.3	7.22	30.1	3.89	28.65	90397	59.41	13.5
120000	2.2	7.23	30	3.86	28.68	90397	58.94	13.5
123000	2	7.29	29.9	4.43	28.94	90397	67.90	13.5
130000	1.8	7.36	29.9	5.16	29.4	90397	79.68	13.5
133000	1.6	7.38	29.8	5.54	29.63	90397	85.83	13.5
140000	1.3	7.45	29.7	6.06	29.97	90397	94.35	13.5
143000	0.9	7.49	29.5	6.48	30.52	90397	101.68	13.5
150000	0.6	7.46	29.3	6.34	31.2	90397	100.46	13.6
153000	0.2	7.44	29.2	6.15	31.96	90397	98.58	13.5
160000	0	7.42	28.9	5.46	33	90397	88.83	13.5
163000	0	7.31	27.5	3.57	33.77	90397	58.35	13.5
170000	0							
173000	0	7.26	27	2.03	33.98	90397	33.20	13.5
180000	0	7.51	29.3	6.5	31.65	90397	103.74	13.6
183000	0.4	7.53	29.3	6.66	30.93	90397	105.08	13.5
190000	0.7	7.48	29.3	6.32	30.66	90397	99.28	13.5
193000	1	7.46	29.5	6.04	30.41	90397	94.60	13.5
200000	1.2	7.46	29.6	6.08	30.33	90397	95.16	13.5
203000	1.4	7.45	29.7	5.97	30.25	90397	93.37	13.5
210000	1.7	7.44	29.7	5.84	30.13	90397	91.16	13.5
213000	1.9	7.43	29.8	5.71	29.99	90397	88.98	13.5
220000	2.1	7.4	29.9	5.43	29.81	90397	84.41	13.5
223000	2.2	7.39	30	5.31	29.72	90397	82.47	13.5
230000	2.3	7.39	30	5.22	29.66	90397	81.00	13.5
233000	2.4	7.38	30.1	4.87	29.63	90397	75.57	13.5
0	2.3	7.37	30	4.93	29.58	90497	76.40	13.5
3000	2.1	7.37	30	4.98	29.58	90497	77.17	13.4
10000	1.9	7.36	29.9	4.82	29.54	90497	74.60	13.5
13000	1.7	7.33	29.9	4.6	29.49	90497	71.14	13.5
20000	1.4	7.31	29.8	4.34	29.38	90497	66.96	13.4
23000	1.1	7.28	29.8	4.02	29.21	90497	61.85	13.5
30000	0.8	7.22	29.7	3.42	28.95	90497	52.37	13.5
33000	0.4	7.18	29.6	2.99	28.54	90497	45.45	13.5
40000	0.1	7.16	29.5	2.67	28.06	90497	40.25	13.4
43000	0	7.17	28.8	2.17	27.42	90497	32.24	13.5
50000	0							
53000	0	7.23	27.1	1.02	26.35	90497	14.74	13.4
60000	0	7.24	29.1	3.15	28.41	90497	47.65	13.4
63000	0.3	7.29	29.5	3.94	28.94	90497	60.26	13.5
70000	0.7	7.29	29.5	4.04	29.01	90497	61.86	13.5
73000	0.9	7.29	29.6	4.07	29.06	90497	62.40	13.5
80000	1.2	7.3	29.7	4.14	29.06	90497	63.51	13.5
83000	1.4	7.31	29.8	4.2	28.99	90497	64.39	13.5
90000	1.6	7.32	29.8	4.26	28.93	90497	65.25	13.5
93000	1.8	7.32	29.9	4.26	28.89	90497	65.24	13.5
100000	2	7.32	30	4.23	28.86	90497	64.79	13.5
103000	2.2	7.32	30.1	4.27	28.85	90497	65.42	13.5
110000	2.3	7.32	30.1	4.23	28.81	90497	64.77	13.5
113000	2.3	7.32	30.1	4.02	28.8	90497	61.54	13.5
120000	2.4	7.35	30.1	4.09	28.73	90497	62.54	13.5
123000	2.3	7.34	30	4.38	28.37	90497	66.54	13.5

Appendix 3.3. (Continued). Hydrolab results, Okatee River site T-3

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
93000	1.21	7.36	28.7	58.5	30.44	82097	44.4	3.69	15.3
100000	1.43	7.35	28.9	52	30.41	82097	44.6	3.28	15.3
103000	1.64	7.35	29	53.1	30.4	82097	44.7	3.35	15.2
110000	1.82	7.37	29.1	53.1	30.36	82097	45	3.35	15.3
113000	1.95	7.38	29.3	54.2	30.37	82097	45.1	3.41	15.3
120000	1.97	7.39	29.3	55.8	30.42	82097	45.2	3.51	15.3
123000	1.85	7.38	29.3	53.6	30.52	82097	45.1	3.37	15.3
130000	1.63	7.37	29.2	49.8	30.6	82097	45	3.12	15.3
133000	1.36	7.36	29.1	52.8	30.7	82097	44.9	3.31	15.2
140000	1.11	7.39	29	60.7	30.91	82097	44.8	3.8	15.2
143000	0.84	7.46	28.8	74	31.35	82097	44.5	4.6	15.3
150000	0.55	7.55	28.4	90.4	31.76	82097	44	5.59	15.3
153000	0.24	7.67	28.2	108.3	32.08	82097	43.6	6.67	15.2
160000	0								
163000	0								
170000	0								
173000	0								
180000	0								
183000	0								
190000	0								
193000	0								
200000	0.19	7.63	28.1	81.6	31.59	82097	43.5	5.07	15.2
203000	0.47	7.58	28.3	79.4	31.59	82097	43.7	4.93	15.2
210000	0.76	7.56	28.5	76.9	31.5	82097	44.1	4.77	15.2
213000	0.97	7.54	28.6	74	31.41	82097	44.2	4.6	15.2
220000	1.19	7.52	28.7	70.2	31.28	82097	44.4	4.37	15.1
223000	1.42	7.51	28.9	70.3	31.17	82097	44.6	4.38	15.1
230000	1.63	7.5	29	65.6	31.09	82097	44.7	4.09	15.1
233000	1.82	7.48	29.1	67.4	31.02	82097	44.9	4.2	15.1
0	1.93	7.47	29.2	65.2	30.86	82197	45.1	4.08	15.1
3000	1.96	7.46	29.2	64.5	30.84	82197	45	4.03	15.1
10000	1.82	7.42	29.1	56.9	30.88	82197	45	3.55	15.1
13000	1.59	7.41	29.1	51	30.86	82197	44.9	3.19	15.2
20000	1.33	7.38	29	49.8	30.79	82197	44.8	3.12	15.1
23000	1.07	7.39	28.8	55.7	30.58	82197	44.4	3.51	15
30000	0.81	7.35	28.7	52.2	30.43	82197	44.3	3.3	15.1
33000	0.54	7.32	28.3	49.4	30.17	82197	43.8	3.14	15.1
40000	0.22	7.33	28.1	50.4	29.97	82197	43.6	3.22	15.1
43000	0								
50000	0								
53000	0								
60000	0								
63000	0								
70000	0								
73000	0								
80000	0								
83000	0.09	7.44	28.1	57.5	30.07	82197	43.5	3.67	15
90000	0.38	7.41	28.4	56.6	30.3	82197	43.9	3.59	15
93000	0.66	7.41	28.6	57	30.22	82197	44.3	3.61	15
100000	0.91	7.42	28.7	57.9	30.26	82197	44.4	3.67	15
103000	1.15	7.42	28.8	57.1	30.27	82197	44.5	3.62	15
110000	1.37	7.42	29	55.6	30.22	82197	44.7	3.52	15

Appendix 3.3. (Continued). Hydrolab results, Okatee River site T-4

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	SpCond mS/cm	DO mg/l	Batt volts
120000	2.37	7.47	28.1	65.7	30.49	82197	43.6	4.16	15
123000	2.52	7.46	28.2	64	30.55	82197	43.6	4.05	15.1
130000	2.57	7.46	28.2	63.3	30.57	82197	43.7	4	15
133000	2.46	7.45	28.2	63.9	30.57	82197	43.7	4.04	15
140000	2.25	7.53	28.1	78.6	30.83	82197	43.5	4.94	15
143000	2.01	7.6	28	90.2	31.12	82197	43.4	5.65	15
150000	1.78	7.66	28	100.6	31.39	82197	43.4	6.28	15
153000	1.53	7.7	27.9	109.3	31.71	82197	43.2	6.79	15
160000	1.26	7.72	27.6	113.7	31.94	82197	42.9	7.04	14.9
163000	0.94	7.72	27.1	117.4	32.04	82197	42.2	7.29	15
170000	0.59	7.67	25.8	118.2	31.82	82197	40.3	7.42	15
173000	0.31	7.51	22.5	108.2	31.27	82197	35.6	6.98	15
180000	0.16	7.32	18.2	92.7	30.78	82197	29.5	6.19	14.9
183000	0.09	7.21	15.1	81.1	30.48	82197	24.9	5.54	14.9
190000	0.06	7.14	13.2	72.1	30.22	82197	22	5	14.9
193000	0.04	7.09	11.9	65.4	29.96	82197	20	4.59	14.9
200000	0.03	7.04	11	58.6	29.69	82197	18.7	4.15	14.9
203000	0.33	7.05	13.5	61.2	29.82	82197	22.5	4.27	14.8
210000	0.71	7.44	26	71.6	31.18	82197	40.6	4.54	15
213000	1.02	7.54	27.7	83.1	31.5	82197	42.9	5.18	14.9
220000	1.28	7.56	27.9	84	31.49	82197	43.3	5.23	14.9
223000	1.5	7.55	28	81.7	31.35	82197	43.4	5.1	14.9
230000	1.72	7.53	28.1	78.9	31.23	82197	43.6	4.93	14.9
233000	1.93	7.52	28.1	75.8	31.14	82197	43.5	4.75	14.9
0	2.13	7.5	28.2	72	30.94	82297	43.7	4.52	14.9
3000	2.31	7.49	28.2	69	30.79	82297	43.7	4.34	14.9
10000	2.42	7.48	28.3	66.9	30.74	82297	43.8	4.21	14.9
13000	2.43	7.47	28.3	62.7	30.79	82297	43.8	3.95	14.9
20000	2.31	7.46	28.3	65.3	30.73	82297	43.8	4.11	14.9
23000	2.11	7.45	28.2	65.5	30.63	82297	43.7	4.13	14.9
30000	1.88	7.43	28.2	63	30.39	82297	43.7	3.99	14.9
33000	1.65	7.4	28.2	60.7	30.08	82297	43.6	3.87	14.9
40000	1.4	7.37	28.1	58.3	29.69	82297	43.5	3.74	14.9
43000	1.11	7.33	27.8	55.9	29.31	82297	43.1	3.62	14.9
50000	0.77	7.27	26.9	54	28.72	82297	41.9	3.55	14.9
53000	0.44	7.19	24.4	52.5	27.82	82297	38.3	3.56	14.9
60000	0.23	7.12	19.7	52.2	26.94	82297	31.7	3.69	14.9
63000	0.14	7.07	15.3	51.8	26.21	82297	25.3	3.8	14.8
70000	0.1	7.05	13	50.2	25.72	82297	21.7	3.78	14.8
73000	0.08	7.03	11.5	48.9	25.35	82297	19.4	3.74	14.8
80000	0.07	7.02	10.7	47.7	25.14	82297	18.1	3.67	14.8
83000	0.07	7.01	10.1	46	25.06	82297	17.2	3.56	14.8
90000	0.29	6.99	11.3	46.5	25.37	82297	19	3.56	14.8
93000	0.7	7.35	26	54.1	27.81	82297	40.6	3.63	14.8
100000	1.01	7.44	27.9	62.7	29.37	82297	43.2	4.05	14.8
103000	1.28	7.46	28.1	64.2	29.61	82297	43.5	4.13	14.8
110000	1.51	7.47	28.2	65.4	29.83	82297	43.7	4.18	14.8
113000	1.74	7.49	28.3	67.4	30.05	82297	43.8	4.3	14.8
120000	1.96	7.51	28.3	71.5	30.31	82297	43.8	4.54	14.8
123000	2.16	7.52	28.3	72.8	30.46	82297	43.8	4.6	14.8

Appendix 3.3. (Continued). Hydrolab results, Okatee River site T-5

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO mg/l	Temp ºC	Date MMDDYY	DO % saturation (calculated)	Batt volts
133000	1.8	7.41	30.8	5.43	28.63	90497	83.22	13.5
140000	1.6	7.44	30.8	5.89	28.8	90497	90.52	13.5
143000	1.4	7.45	30.7	6.09	28.84	90497	93.60	13.5
150000	1.2	7.48	30.6	6.46	29.06	90497	99.59	13.5
153000	0.9	7.56	30.6	7.28	29.55	90497	113.13	13.5
160000	0.6	7.59	30.5	7.53	29.99	90497	117.79	13.5
163000	0.3	7.46	30.5	6.1	30.04	90497	95.50	13.5
170000	0.1	7.29	30.4	4.53	29.85	90497	70.66	13.5
173000	0	7.25	30.3	4.24	29.68	90497	65.92	13.5
180000	0.1	7.27	30.3	4.34	29.15	90497	66.90	13.6
183000	0.3	7.22	30.6	3.56	29.28	90497	55.08	13.4
190000	0.5	7.44	30.5	5.83	28.87	90497	89.55	13.5
193000	0.8	7.53	30.7	6.73	28.86	90497	103.47	13.5
200000	1.1	7.51	30.6	6.49	28.66	90497	99.40	13.5
203000	1.3	7.48	30.6	6.13	28.65	90497	93.87	13.4
210000	1.5	7.51	30.8	6.4	28.6	90497	98.04	13.5
213000	1.7	7.51	30.8	6.36	28.5	90497	97.26	13.5
220000	1.9	7.49	30.9	6.1	28.45	90497	93.26	13.5
223000	2	7.46	30.9	5.83	28.41	90497	89.08	13.5
230000	2.2	7.45	30.9	5.55	28.27	90497	84.60	13.5
233000	2.2	7.44	30.9	5.33	28.06	90497	80.97	13.5
0	2.3	7.42	30.9	5.16	28.08	90597	78.41	13.5
3000	2.2	7.41	30.9	5.16	27.94	90597	78.23	13.5
10000	2.1	7.38	30.9	4.82	27.66	90597	72.74	13.5
13000	1.9	7.36	30.9	4.32	27.51	90597	65.03	13.5
20000	1.7	7.35	31	4.51	27.26	90597	67.65	13.5
23000	1.5	7.32	31	4.15	26.63	90597	61.59	13.5
30000	1.2	7.3	31.1	3.84	25.84	90597	56.27	13.5
33000	0.9	7.28	31.1	3.53	25.4	90597	51.34	13.5
40000	0.6	7.26	31.2	3.49	24.8	90597	50.27	13.5
43000	0.3	7.2	31.1	3.16	24.3	90597	45.10	13.4
50000	0.1	7.19	30.9	3.13	23.91	90597	44.32	13.4
53000	0							
60000	0							
63000	0.1	7.3	30.2	3.57	22.41	90597	49.03	13.3
70000	0.4	7.29	30.7	4.13	24.99	90597	59.51	13.3
73000	0.7	7.35	30.6	4.76	26.55	90597	70.39	13.4
80000	0.9	7.37	30.8	5.05	26.54	90597	74.75	13.4
83000	1.2	7.4	30.7	5.42	26.9	90597	80.67	13.4
90000	1.4	7.41	30.8	5.55	27.08	90597	82.90	13.4
93000	1.6	7.43	31	5.68	26.89	90597	84.67	13.4
100000	1.8	7.42	31	5.65	26.84	90597	84.15	13.4
103000	2	7.42	31.1	5.77	26.87	90597	86.03	13.4
110000	2.1	7.43	31.1	5.96	26.98	90597	89.03	13.4
113000	2.2	7.43	31.1	6.12	27.09	90597	91.59	13.4
120000	2.3	7.43	31	6.24	27.2	90597	93.50	13.4
123000	2.3	7.44	31.1	6.53	27.24	90597	97.97	13.4
130000	2.3	7.45	31.1	6.82	27.33	90597	102.47	13.4
133000	2.1	7.5	31	7.59	27.7	90597	114.68	13.4
140000	1.9	7.45	31	6.58	27.58	90597	99.22	13.4
143000	1.7	7.58	31	8.95	28	90597	135.90	13.4

Appendix 3.3. (Continued). Hydrolab results, Okatee River site T-6

Time HHMMSS	Depth meters	pH units	Salinity ppt	DO % saturation	Temp ºC	Date MMDDYY	DO mg/l	Batt volts
120000	0.2	7.25	31.2	94.9	28.62	91197	6.09	14
123000	0.42	7.37	31.1	82	28.36	91197	5.29	14
130000	0.67	7.34	31.3	73.4	27.72	91197	4.78	14
133000	0.9	7.37	31.4	76.6	27.84	91197	4.98	14
140000	1.11	7.38	31.4	78.1	27.82	91197	5.07	14
143000	1.31	7.38	31.5	77.4	27.8	91197	5.03	14
150000	1.49	7.39	31.5	77.3	27.8	91197	5.02	14
153000	1.64	7.38	31.5	75.4	27.81	91197	4.9	14
160000	1.77	7.39	31.5	75.6	27.91	91197	4.91	14
163000	1.89	7.4	31.5	75.8	27.91	91197	4.92	14
170000	1.94	7.4	31.5	75.5	27.93	91197	4.9	14
173000	1.93	7.41	31.5	76.7	27.96	91197	4.97	14
180000	1.86	7.41	31.5	74	27.97	91197	4.79	14
183000	1.7	7.42	31.5	77.9	28.05	91197	5.04	14
190000	1.49	7.41	31.5	77.4	28.2	91197	5	14
193000	1.27	7.4	31.5	77.5	28.43	91197	4.98	14
200000	1.06	7.38	31.5	75	28.6	91197	4.81	14
203000	0.81	7.36	31.5	73.7	28.66	91197	4.72	14
210000	0.54	7.32	31.5	68.3	28.68	91197	4.37	14
213000	0.29	7.25	31.5	59.5	28.53	91197	3.82	14
220000	0.03	7.19	31.5	51.1	28.22	91197	3.3	14
223000	0							
230000	0							
233000	0							
0	0							
3000	0.14	7.23	31.6	51.6	27.21	91297	3.39	14
10000	0.41	7.3	31.5	62.1	27.69	91297	4.04	14
13000	0.65	7.32	31.2	65.4	27.85	91297	4.25	14
20000	0.88	7.35	31.4	68.8	27.92	91297	4.46	14
23000	1.09	7.36	31.5	68.9	27.9	91297	4.47	14
30000	1.29	7.37	31.5	69.8	27.9	91297	4.52	14
33000	1.46	7.37	31.5	69.2	27.91	91297	4.49	14
40000	1.6	7.37	31.5	69.5	27.82	91297	4.51	14
43000	1.73	7.38	31.5	69.7	27.81	91297	4.53	14
50000	1.81	7.38	31.5	69.4	27.8	91297	4.51	14
53000	1.85	7.39	31.5	69.5	27.79	91297	4.51	14
60000	1.81	7.37	31.6	63.5	27.77	91297	4.13	14
63000	1.69	7.37	31.5	66.6	27.75	91297	4.33	14
70000	1.49	7.31	31.6	61.3	27.59	91297	4	14
73000	1.27	7.26	31.6	54.5	27.43	91297	3.56	14
80000	1.04	7.23	31.6	51.8	27.3	91297	3.4	14
83000	0.79	7.19	31.6	48.2	27.19	91297	3.17	14
90000	0.53	7.15	31.6	45.6	27.05	91297	3	14
93000	0.26	7.14	31.5	46.9	27.16	91297	3.08	14
100000	0.05	7.16	9.2	48.4	27.55	91297	3.6	14
103000	0							
110000	0							
113000	0							
120000	0							
123000	0.03	7.59	9.1	114.2	30.4	91297	8.1	14
130000	0.29	7.49	31.2	93.2	30	91297	5.84	14
133000	0.53	7.39	31.2	73.9	28.72	91297	4.73	14

Appendix 5.1. Total abundance of each species in all intertidal mud flat and subtidal stations sampled. Figures represent total number/0.12 m^2. (A=amphipod; P=polychaete; O=oligochaete; M=mollusk; C=other crustacean; T=other taxa)

		Broad Creek Stations									**Okatee River Stations**								
	Taxon	intertidal			subtidal						intertidal			subtidal					
Species	code	1	4	6	1	2	3	4	5	6	2	4	6	1	2	3	4	5	6
Ampelisca vadorum	A	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	20	3873	0
Streblospio benedicti	P	12	26	84	169	137	135	117	0	258	86	7	23	25	68	151	48	6	9
Parapionosyllis sp.	P	0	0	0	0	0	0	0	0	100	0	0	0	0	1	3	16	1	739
Scoletoma tenuis	P	0	1	12	7	67	86	0	0	52	88	35	36	28	68	67	217	77	4
Tubificoides wasselli	O	0	0	0	0	0	0	1	0	40	0	0	0	0	50	660	49	2	16
Exogone dispar	P	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	605	123	0
Tubificidae	O	0	0	0	163	0	11	32	0	96	0	0	8	0	3	1	22	110	30
Cirrophorus sp.	P	0	0	0	0	0	0	3	0	0	0	0	0	27	112	219	60	1	10
Mediomastus sp.	P	0	0	0	0	7	0	0	0	52	0	0	0	1	13	12	152	136	1
Streptosyllis sp.	P	0	0	0	0	0	0	177	0	2	0	0	0	0	0	14	3	0	132
Actiniaria	T	0	0	0	4	0	4	6	0	4	0	0	0	0	17	47	13	210	4
Enchytraeidae	O	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	206
Ilyanassa obsoleta	M	33	20	29	115	2	0	0	0	0	0	0	0	10	0	0	3	0	0
Monopylephorus rubroniveus	O	0	176	28	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0
Scoloplos rubra	P	0	0	0	3	42	57	0	0	0	0	0	0	2	8	15	51	10	1
Caulleriella sp.	P	0	0	0	0	0	0	0	0	38	0	0	2	1	0	20	83	0	16
Heteromastus filiformis	P	4	24	2	56	36	4	0	0	7	0	0	7	10	1	1	0	3	0
Brania sp.	P	48	0	0	0	0	0	31	0	25	0	0	0	0	0	19	0	7	17
Leptognatha caeca	C	0	0	0	0	0	0	137	0	0	0	0	0	0	0	0	0	0	1
Tubificoides brownae	O	9	1	8	30	2	8	0	0	5	0	0	0	17	14	6	3	17	9
Nereis succinea	P	2	1	0	4	0	0	0	0	0	66	33	1	1	0	1	3	2	0
Sphaerosyllis longicauda	P	0	0	0	0	0	3	2	0	10	0	0	0	0	0	4	61	5	1
Monticellina sp.	P	0	0	0	0	0	0	0	0	47	2	0	2	0	2	0	26	5	0
Polydora sp.	P	5	0	0	58	9	6	0	0	4	0	0	0	0	0	0	0	0	0
Nemertinea	T	5	2	0	0	0	0	2	1	14	3	5	2	5	2	7	0	21	6
Spiochaetopterus costarum	P	1	0	0	1	41	17	0	0	2	0	0	0	1	6	2	0	0	0
Corophium simile	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	36	0
Gastropoda	M	0	0	0	0	0	3	0	0	0	1	13	0	8	0	0	3	39	0
Leitoscoloplos fragilis	P	0	0	0	0	0	0	0	0	0	17	31	14	1	0	0	0	0	0

Appendix 5.1. Continued

		Broad Creek Stations									Okatee River Stations								
	Taxon	intertidal			subtidal						intertidal			subtidal					
Species	code	1	4	6	1	2	3	4	5	6	2	4	6	1	2	3	4	5	6
Cirratulidae	P	0	0	0	0	2	2	17	0	0	0	0	0	0	14	18	0	2	0
Protohaustorius bousfieldi	A	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0
Paracaprella tenuis	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	30	10	0
Streptosyllis pettiboneae	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	43
Terebellidae	P	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	15	0	0
Scolelepis texana	P	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0	0
Achelia sawayai	T	0	0	0	0	0	0	0	0	0	0	0	0	0	1	19	13	0	0
Ampelisca abdita	A	0	0	0	0	17	3	0	0	5	0	0	0	0	0	0	7	1	0
Ammotheidae	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	24	0	0
Aphealochaeta sp.	P	0	0	0	0	0	11	2	0	0	0	0	10	0	0	0	1	1	3
Podarkeopsis levifuscina	P	0	0	0	0	0	0	0	0	2	1	0	2	0	1	0	6	16	0
Pelecypoda	M	0	0	0	1	0	3	0	0	0	0	0	0	12	2	2	3	4	0
Decapoda	C	2	1	0	0	0	0	0	0	1	6	1	1	4	1	5	3	1	0
Aricidea wassi	P	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0
Tellina alternata	M	0	0	0	0	0	0	11	0	11	0	0	0	0	0	0	0	0	0
Exogone sp.	P	0	0	0	0	0	1	0	0	18	0	0	0	0	0	2	0	0	0
Diopatra cuprea	P	0	0	0	0	2	0	0	0	1	0	2	0	0	3	9	2	1	0
Littorina irrorata	M	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0
Corophium aquafuscum	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	4	0
Rhepoxynius epistomus	A	0	0	0	0	0	0	13	6	0	0	0	0	0	0	0	0	0	0
Lysianopsis alba	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	5	3
Mediomastus californiensis	P	0	0	0	0	0	9	1	0	6	0	0	2	0	0	0	0	0	0
Tharyx sp.	P	0	0	0	0	0	1	8	0	4	0	0	5	0	0	0	0	0	0
Brania wellfleetensis	P	0	0	0	0	0	0	5	0	10	0	0	0	0	0	1	0	0	1
Sphaerosyllis sp.	P	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	1	0
Corophium acherusicum	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3	7	0
Glycera americana	P	0	0	0	3	1	4	0	0	3	0	2	2	0	0	0	1	0	0
Hesionidae	P	0	1	0	0	0	0	0	0	0	0	0	2	0	1	3	7	2	0
Polydora cornuta	P	0	0	0	2	0	0	0	0	0	0	0	0	0	0	12	1	1	0
Tharyx acutus	P	0	0	0	0	0	1	1	0	6	1	0	0	0	0	2	5	0	0

Appendix 5.1. Continued

		Broad Creek Stations									Okatee River Stations								
	Taxon	intertidal			subtidal						intertidal			subtidal					
Species	code	1	4	6	1	2	3	4	5	6	2	4	6	1	2	3	4	5	6
Aricidea sp.	P	0	0	0	3	10	2	0	0	0	0	0	0	0	0	0	0	0	0
Uca pugilator	C	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0
Aricidea fauveli	P	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	2
Ampelisca verrilli	A	0	0	0	2	0	0	0	0	1	0	0	0	0	5	5	0	0	0
Arabella mutans	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	5	0
Edotea montosa	C	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	2	6	0
Nereidae	P	1	0	0	3	0	0	1	0	4	0	1	0	0	0	0	0	2	0
Eulalia sanguinea	P	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
Lembos smithi	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	0
Nucula proxima	M	0	0	0	0	0	7	1	0	2	0	0	0	0	0	0	0	0	0
Eobrolgus spinosus	A	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0
Erichthonius brasiliensis	A	0	0	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0
Marionina spartinae	O	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	1	0	3
Aricidea cerruti	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Crepidula fornicata	M	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	5	0	0
Eupolymnia sp.	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7	0
Leitoscoloplos sp.	P	0	1	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0
Scolelepis sp.	P	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0
Sphaerosyllis taylori	P	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	6
Sphenia antillensis	M	0	0	0	0	0	2	4	0	1	0	0	0	0	0	0	1	0	0
Acanthohaustorius intermedius	A	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0
Batea catharinensis	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	3	0
Goniadides sp.	P	0	0	0	0	0	2	0	0	5	0	0	0	0	0	0	0	0	0
Paracaprella sp.	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0
Paranaitis speciosa	P	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
Parapionosyllis longicirrata	P	0	0	0	0	0	0	6	0	0	0	0	0	0	0	1	0	0	0
Autolytus sp.	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
Listriella barnardi	A	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
Lumbrineridae	P	0	0	0	1	0	0	0	0	2	0	0	0	0	2	0	1	0	0
Molgula manhattensis	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0

Appendix 5.1. Continued

Species	Taxon code	Broad Creek Stations									Okatee River Stations								
		intertidal			subtidal						intertidal			subtidal					
		1	4	6	1	2	3	4	5	6	2	4	6	1	2	3	4	5	6
Xanthidae	C	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	4	0
Capitellidae	A	0	0	0	0	0	2	0	0	3	0	0	0	0	0	0	0	0	0
Laeonereis culveri	P	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
Leitoscoloplos robustus	P	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Melita nitida	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	0
Sphaerosyllis piriferopsis	P	0	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0
Arabella iricolor	P	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	1	0
Caprellidae	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
Corophium sp.	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
Cyathura polita	C	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0
Elasmopus levis	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0
Marphysa sanguinea	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0
Melitidae	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0
Paraonidae	P	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0
Sabellaria vulgaris	P	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
Scoletoma sp.	P	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
Unciola serrata	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0
Bateidae	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Corbula contracta	M	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Corophiidae	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0
Dorvilleidae	P	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Leptocheirus plumulosus	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
Nassarius vibex	M	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0
Neomysis americana	C	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0
Nephtys bucera	P	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
Pinnixa sp.	C	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Poecilochaetus johnsoni	P	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Protohaustorius wigleyi	A	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
Sphaerosyllis aciculata	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Amphipoda	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0

Appendix 5.1. Continued

Species	Taxon code	Broad Creek Stations									Okatee River Stations								
		intertidal			subtidal						intertidal			subtidal					
		1	4	6	1	2	3	4	5	6	2	4	6	1	2	3	4	5	6
Campylaspis sp.	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Clymenella torquata	P	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
Cyathura sp.	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Dipolydora sp.	P	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Eteone heteropoda	P	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
Eunicidae	P	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Leucothoe spinicarpa	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Mediomastus ambiseta	P	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
Melita dentata	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Panopeus herbstii	C	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Polydora caulleryi	P	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Sabellidae	P	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
Sabellinae	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Streblosoma hartmanae	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Synchelidium americanum	A	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Abra aequalis	M	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Acteocina canaliculata	M	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amastigos caperatus	P	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amphinomidae	P	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Anthozoa	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Aoridae	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Aricidea suecica	P	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Astyris lunata	M	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Biffarius biformis	C	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Brania clavata	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Callianassa sp.	C	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Campylaspis affinis	C	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Capitella jonesi	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Cerapus tubularis	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Corbiculidae	M	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix 5.1. Continued

Species	Taxon code	Broad Creek Stations									Okatee River Stations								
		intertidal			subtidal						intertidal			subtidal					
		1	4	6	1	2	3	4	5	6	2	4	6	1	2	3	4	5	6
Glycera dibranchiata	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hemipholis elongata	T	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Jasmineira bilobata	P	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Laonice cirrata	P	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Lepidonotus sublevis	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Lysidice ninetta	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Monopylephorus irroratus	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Mulinea lateralis	M	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysidacea	C	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Nassarius acutus	M	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Nassarius sp.	M	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Nephtys picta	P	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Oligochaeta	O	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Orbiniidae	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Pagurus longicarpus	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Palaemonetes pugio	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Phyllodocidae	P	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Podarkeopsis sp.	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Podocerus sp.	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Polycirrus sp.	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Polydora quadrilobata	P	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Prionospio sp.	P	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Pseudeurythoe ambigua	P	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Pycnogonida	T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Sabellaria sp.	P	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Schistomeringos sp.	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Schistomeringos rudolphi	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Scoloplos sp.	P	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Serpulidae	P	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Sphaerosyllis glandulata	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Appendix 5.1. Continued

		Broad Creek Stations									Okatee River Stations								
	Taxon	intertidal			subtidal						intertidal			subtidal					
Species	code	1	4	6	1	2	3	4	5	6	2	4	6	1	2	3	4	5	6
Spiophanes bombyx	P	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Tubificoides heterochaetus	O	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Turbonilla interrupta	M	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Uca minax	C	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Upogebia affinis	C	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0

Appendix 5.2. Total abundance of each species in all tidal creek stations sampled. Figures represent total number/0.12 m2.(A=amphipod; P=polychaete; O=oligochaete; M=mollusk; C=other crustacean; T=other taxa)

	Abundance/m2	Percent Abundance	Frequency of Occurrence	Rank by Abundance
Broad - BBT1				
Monopylephorus rubroniveus	5921.1	89.5	80.0	1.0
Tubificoides brownae	279.1	4.2	30.0	2.0
Streblospio benedicti	119.6	1.8	30.0	3.0
Monopylephorus irroratus	79.7	1.2	20.0	4.0
Tubificidae	59.8	0.9	20.0	5.0
Fabricia sp.	39.9	0.6	10.0	6.5
Nemertinea	39.9	0.6	20.0	6.5
Ampharetidae	19.9	0.3	10.0	9.5
Eulalia sanguinea	19.9	0.3	10.0	9.5
Heteromastus filiformis	19.9	0.3	10.0	9.5
Nereis succinea	19.9	0.3	10.0	9.5
Num of Species = 11	**Tot Abund = 6618.9**			
Broad - BBT2				
Streblospio benedicti	1656.9	52.7	80.0	1.0
Monopylephorus rubroniveus	925.9	29.5	70.0	2.0
Tubificidae	170.6	5.4	30.0	3.0
Heteromastus filiformis	121.8	3.9	30.0	4.0
Edotea montosa	48.7	1.6	20.0	5.5
Nereis succinea	48.7	1.6	20.0	5.5
Aphealochaeta sp.	24.4	0.8	10.0	10.0
Corbiculidae	24.4	0.8	10.0	10.0
Fabricia sp.	24.4	0.8	10.0	10.0
Glycera americana	24.4	0.8	10.0	10.0
Nemertinea	24.4	0.8	10.0	10.0
Sphaerosyllis longicauda	24.4	0.8	10.0	10.0
Tubificoides brownae	24.4	0.8	10.0	10.0
Num of Species = 13	**Tot Abund = 3143.3**			
Broad - BBT3				
Streblospio benedicti	394.7	42.9	70.0	1.0
Monopylephorus rubroniveus	109.7	11.9	30.0	2.5
Heteromastus filiformis	109.7	11.9	40.0	2.5
Capitomastus aciculatus	65.8	7.1	30.0	4.5
Eteone heteropoda	65.8	7.1	20.0	4.5
Aphealochaeta sp.	21.9	2.4	10.0	9.5
Drilonereis longa	21.9	2.4	10.0	9.5
Fabricia sp.	21.9	2.4	10.0	9.5

Appendix 5.2. Continued

	Abundance/m2	Percent Abundance	Frequency of Occurrence	Rank by Abundance
Glycera americana	21.9	2.4	10.0	9.5
Mercenaria mercenaria	21.9	2.4	10.0	9.5
Nereis succinea	21.9	2.4	10.0	9.5
Tubificidae	21.9	2.4	10.0	9.5
Tubificoides brownae	21.9	2.4	10.0	9.5
Num of Species = 13	**Tot Abund = 921.1**			
Broad - BBT4				
Monopylephorus rubroniveus	1096.5	19.4	60.0	1.0
Streblospio benedicti	921.1	16.3	90.0	2.0
Capitomastus aciculatus	855.3	15.1	70.0	3.0
Heteromastus filiformis	701.8	12.4	80.0	4.0
Tubificidae	657.9	11.6	70.0	5.0
Nereis succinea	329.0	5.8	70.0	6.0
Capitella capitata	285.1	5.0	30.0	7.0
Fabricia sp.	263.2	4.7	40.0	8.0
Tubificoides brownae	241.2	4.3	30.0	9.0
Monopylephorus irroratus	219.3	3.9	60.0	10.0
Leitoscoloplos sp.	21.9	0.4	10.0	12.5
Marionina spartinae	21.9	0.4	10.0	12.5
Mediomastus californiensis	21.9	0.4	10.0	12.5
Polydora cornuta	21.9	0.4	10.0	12.5
Num of Species = 14	**Tot Abund = 5657.9**			
Broad - BBT5				
Monopylephorus rubroniveus	6228.1	78.0	100.0	1.0
Streblospio benedicti	657.9	8.2	60.0	2.5
Heteromastus filiformis	657.9	8.2	80.0	2.5
Tubificidae	109.7	1.4	30.0	4.0
Nereis succinea	87.7	1.1	20.0	5.0
Tubificoides brownae	43.9	0.5	20.0	6.0
Aphealochaeta sp.	21.9	0.3	10.0	11.0
Capitella capitata	21.9	0.3	10.0	11.0
Eteone heteropoda	21.9	0.3	10.0	11.0
Exogone dispar	21.9	0.3	10.0	11.0
Leitoscoloplos sp.	21.9	0.3	10.0	11.0
Marionina spartinae	21.9	0.3	10.0	11.0
Monopylephorus irroratus	21.9	0.3	10.0	11.0
Polydora cornuta	21.9	0.3	10.0	11.0
Sabellidae	21.9	0.3	10.0	11.0
Num of Species = 15	**Tot Abund = 7982.5**			

Appendix 5.2. Continued

	Abundance/m2	Percent Abundance	Frequency of Occurrence	Rank by Abundance
Broad - BBT6				
Heteromastus filiformis	285.1	28.3	40.0	1.5
Capitella capitata	285.1	28.3	40.0	1.5
Streblospio benedicti	153.5	15.2	30.0	3.0
Monopylephorus rubroniveus	131.6	13.0	50.0	4.0
Capitomastus aciculatus	43.9	4.3	20.0	6.0
Laeonereis culveri	43.9	4.3	20.0	6.0
Nereis succinea	43.9	4.3	20.0	6.0
Sabellidae	21.9	2.2	10.0	8.0
Num of Species = 8	**Tot Abund = 1008.8**			
Okatee - OBT1				
Monopylephorus rubroniveus	9495.7	74.8	100.0	1.0
Tubificoides heterochaetus	2763.2	21.8	80.0	2.0
Tubificidae	263.2	2.1	30.0	3.0
Capitella capitata	87.7	0.7	20.0	4.0
Nemertinea	43.9	0.3	20.0	5.0
Rhepoxynius epistomus	21.9	0.2	10.0	6.5
Streblospio benedicti	21.9	0.2	10.0	6.5
Num of Species = 7	**Tot Abund = 12697.5**			
Okatee - OBT2				
Tubificidae	1381.6	50.8	70.0	1.0
Streblospio benedicti	482.5	17.7	60.0	2.0
Monopylephorus rubroniveus	263.2	9.7	50.0	3.0
Nereis succinea	175.4	6.5	40.0	4.5
Tubificoides brownae	175.4	6.5	20.0	4.5
Nemertinea	131.6	4.8	50.0	6.0
Heteromastus filiformis	65.8	2.4	20.0	7.0
Corbiculidae	21.9	0.8	10.0	8.5
Edotea montosa	21.9	0.8	10.0	8.5
Num of Species = 9	**Tot Abund = 2719.3**			
Okatee - OBT3				
Tubificidae	636.0	27.9	50.0	1.0
Tubificoides brownae	526.3	23.1	10.0	2.0
Monopylephorus rubroniveus	416.7	18.3	30.0	3.0
Streblospio benedicti	241.2	10.6	30.0	4.0
Heteromastus filiformis	219.3	9.6	40.0	5.0
Nemertinea	87.7	3.8	30.0	6.0

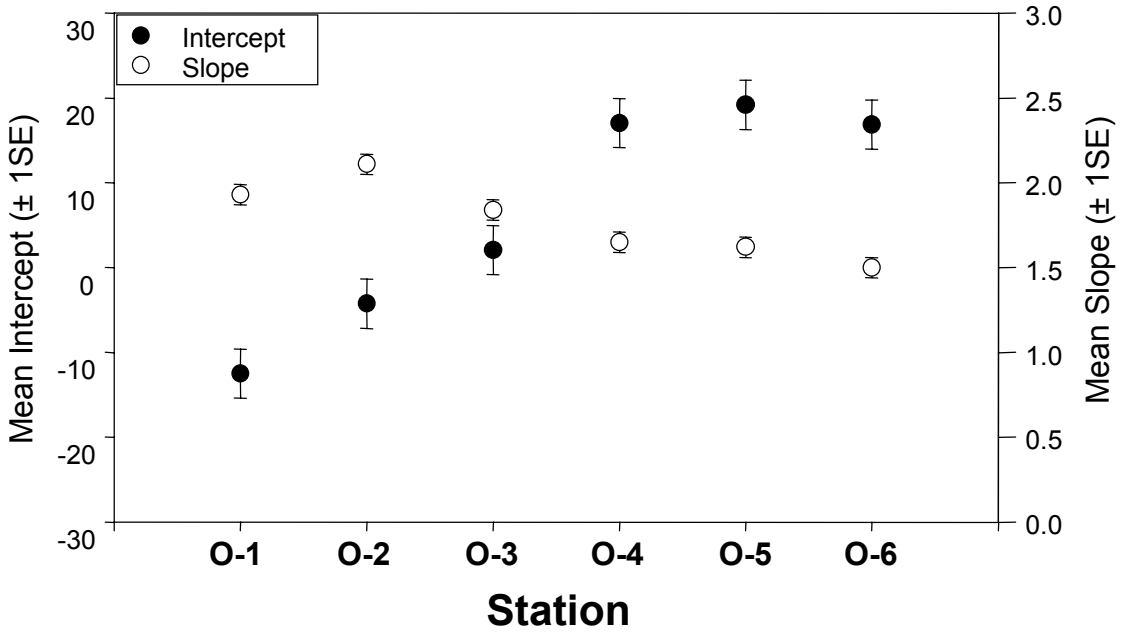
Appendix 5.2. Continued

	Abundance/m2	Percent Abundance	Frequency of Occurrence	Rank by Abundance
Cyathura polita	43.9	1.9	10.0	7.5
Nereis succinea	43.9	1.9	10.0	7.5
Capitella capitata	21.9	1.0	10.0	10.0
Fabricia sp.	21.9	1.0	10.0	10.0
Laeonereis culveri	21.9	1.0	10.0	10.0
Num of Species = 11	**Tot Abund = 2280.7**			
Okatee - OBT4				
Nereis succinea	789.5	45.6	60.0	1.0
Cyathura polita	438.6	25.3	70.0	2.0
Monopylephorus rubroniveus	285.1	16.5	20.0	3.0
Tubificidae	87.7	5.1	20.0	4.0
Streblospio benedicti	65.8	3.8	10.0	5.0
Tubificoides wasselli	43.9	2.5	10.0	6.0
Capitella capitata	21.9	1.3	10.0	7.0
Num of Species = 7	**Tot Abund = 1732.5**			
Okatee - OBT5				
Monopylephorus rubroniveus	1644.7	32.9	70.0	1.0
Nereis succinea	1118.4	22.4	100.0	2.0
Tubificidae	526.3	10.5	50.0	3.0
Fabricia sp.	372.8	7.5	30.0	4.5
Streblospio benedicti	372.8	7.5	30.0	4.5
Monopylephorus irroratus	241.2	4.8	30.0	6.5
Leitoscoloplos sp.	241.2	4.8	30.0	6.5
Tubificoides brownae	109.7	2.2	40.0	8.0
Capitomastus aciculatus	87.7	1.8	20.0	9.0
Capitella capitata	65.8	1.3	10.0	10.5
Nemertinea	65.8	1.3	20.0	10.5
Cyathura polita	43.9	0.9	10.0	12.5
Marionina spartinae	43.9	0.9	10.0	12.5
Hesionidae	21.9	0.4	10.0	15.0
Leptochelia rapax	21.9	0.4	10.0	15.0
Polydora cornuta	21.9	0.4	10.0	15.0
Num of Species = 16	**Tot Abund = 5000.0**			
Okatee - OBT6				
Colembolla	1535.1	47.3	20.0	1.0
Nereis succinea	745.6	23.0	70.0	2.0
Monopylephorus rubroniveus	329.0	10.1	60.0	3.0

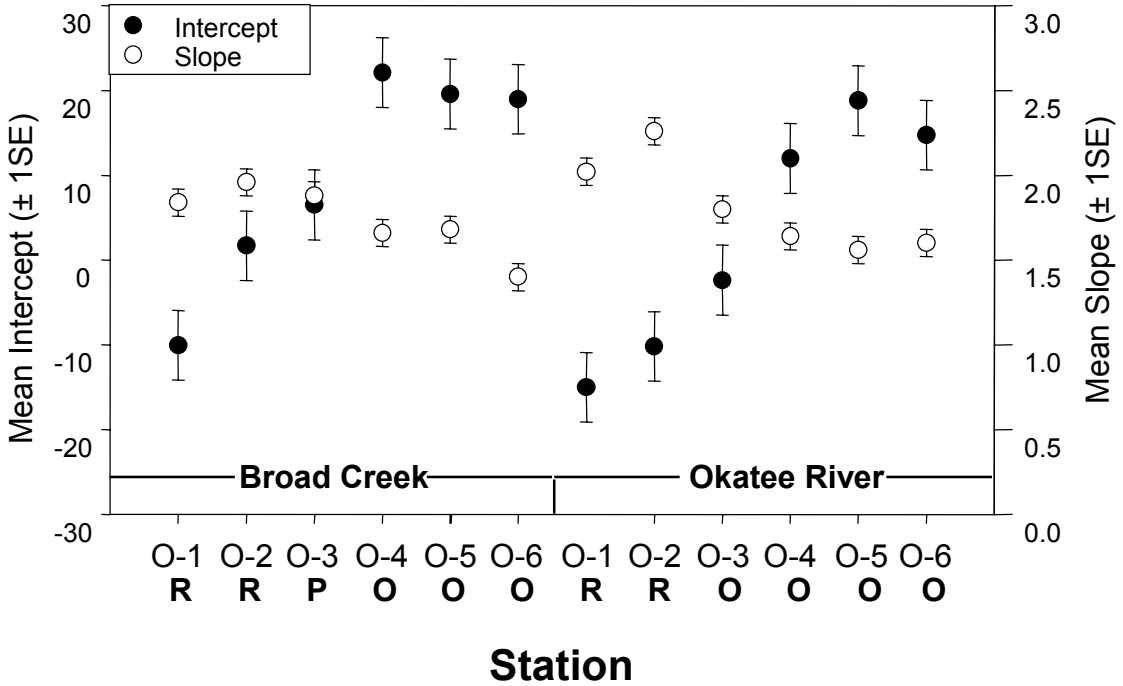
Appendix 5.2. Continued

	Abundance/m2	Percent Abundance	Frequency of Occurrence	Rank by Abundance
Cyathura polita	241.2	7.4	20.0	4.5
Tubificidae	241.2	7.4	40.0	4.5
Tubificoides wasselli	65.8	2.0	10.0	6.0
Tubificoides brownae	43.9	1.4	10.0	7.0
Capitella capitata	21.9	0.7	10.0	8.5
Streblospio benedicti	21.9	0.7	10.0	8.5
Num of Species = 9	**Tot Abund = 3245.6**			

Mean Slope and Intercept Values



Appendix 5.3a. Mean slope and intercept values for oyster size frequency curves at stations 1-6, Broad Creek and Okatee River data combined (n = 10).



Appendix 5.3b. Mean intercept and slope values for oyster size frequency curves at stations 1 - 6 in each drainage system (n = 5). R = restricted; P = prohibited; O = open.

Appendix 5.4. Dermo and MSX results from Broad Creek and Okatee River (n = 25 oysters/station).

Stations		Dermo Intensity	Dermo Prevalence	Mean Height (mm)	MSX Prevalence	MSX Intensity (H-M-L-R)
Broad Creek						
O-1	(Restricted)	1.84	100%	64	12%	0-1-1-1
O-2	(Restricted)	1.24	92%	66	12%	1-1-0-1
O-3	(Prohibited)	2.04	100%	57	4%	0-0-0-1
O-4	(Open)	2	100%	63	33%	2-1-4-1
O-5	(Open)		36%	66	21%	0-2-1-2
O-6	(Open)	2.08	84%	88	8%	0-0-2-0
Grand Mean		**1.66**	**85%**	**67**	**15%**	**3-5-8-6**
Okatee River						
O-1	(Restricted)	1.84	92%	68	4%	0-1-0-0
O-2	(Restricted)	2.28	96%	60	4%	0-1-0-0
O-3	(Open)	1.56	84%	72	12%	1-0-2-0
O-4	(Open)	1.4	88%	73	4%	0-0-1-0
O-5	(Open)	1.72	96%	74	4%	0-1-0-0
O-6	(Open)	1.48	92%	69	8%	0-0-0-2
Grand Mean		**1.71**	**91%**	**69**	**6%**	**1-3-3-2**

Appendix 5.5. Mean infection intensity and prevalence of the 52 stations sampled for *Perkinsus marinus* (Dermo) and *Haplosporidium neloni* (MSX) during August through October 1996. Stations are listed by counties.

Station Name	County	Dermo Infection Intensity	Dermo Prevalence	MSX Prevalence
Main Creek	Horry	2.48	88%	0%
Weston Creek	Georgetown	2.29	75%	0%
Clambank Creek	Georgetown	2.88	96%	0%
North Jones Creek	Georgetown	0.52	28%	0%
Casino Creek	Charleston		92%	12%
Mathew's Cut	Charleston	1.36	64%	32%
Horsehead Creek	Charleston	2.16	68%	8%
Nellie Creek	Charleston	1.48	76%	4%
Sandy Point Creek	Charleston	2.24	72%	4%
Five Fathom Creek	Charleston	2.04	76%	16%
Key Inlet	Charleston	1.88	68%	12%
Graham Creek	Charleston	1.92	80%	0%
Vanderhorst Creek	Charleston	1.52	76%	0%
Bull Creek	Charleston	0.6	32%	4%
Skipper Munn's	Charleston	1.92	80%	8%
Sewee Bay	Charleston	2.88	100%	0%
Clausen Creek	Charleston	1.32	60%	0%
Copahee Sound	Charleston	1.4	68%	0%
Capers Creek	Charleston	1.6	76%	8%
Swinton Creek	Charleston	1.56	100%	4%
Conch Creek	Charleston	0.92	84%	8%
Church Creek	Charleston	2.2	88%	0%
Clark Sound	Charleston	2	100%	4%
Folly River, North	Charleston	1.84	76%	12%
Cut Off Reach	Charleston	2.88	100%	12%
Folly Creek, Crosby's	Charleston	2.64	92%	8%
Kiawah River	Charleston	1.6	56%	0%
Bass Creek	Charleston	1.8	80%	4%
Capt. Sam's Inlet	Charleston	2.16	84%	4%
Russel Creek	Charleston	1.32	64%	8%
Leadenwah Creek	Charleston	1.29	68%	0%
Bohicket Creek	Charleston	2	76%	8%
Ocella Creek	Charleston	0.68	44%	0%
Big Bay Creek	Charleston	2	68%	12%
Two Sisters Creek	Colleton	1.48	92%	12%
North Fish Creek	Colleton	1.56	68%	12%
South Fish Creek	Colleton	1.72	72%	4%
Lucy Point Creek	Beaufort	0.28	20%	0%
Dataw Island	Beaufort	1.2	56%	0%
Johnson Creek	Beaufort	1.04	84%	0%
Capers Ck/Distant Is.	Beaufort	1.16	48%	0%
Battery Creek	Beaufort	0.72	44%	0%
Chechessee River	Beaufort	0.6	28%	0%
Colleton River	Beaufort	1	52%	4%

Appendix 5.5. Continued

Station Name	County	Dermo Infection Intensity	Dermo Prevalence	MSX Prevalence
Fripp Inlet	Beaufort	1.88	100%	0%
Club Bridge Creek	Beaufort	1.68	92%	0%
Station Creek	Beaufort	1.4	64%	0%
Mackay Creek	Beaufort	2.48	96%	0%
Jarvis Creek	Beaufort	2.4	92%	8%
Bull Creek	Beaufort	2.12	96%	8%
Old House Creek	Beaufort		100%	4%
Broad Creek	Beaufort	2.12	84%	0%

100% positive for Dermo
54% (or 28) positive for MSX

Appendix 5.6. Summary of biomarker analyses conducted with native adult oysters. The data are expressed as mean (standard deviation). Sample sizes are: glutathione (n=10), % lysosomal destabilization (n=15), lipid peroxidation (n=10).

Station	Glutathione (nM/g wet weight)	% Lysosomal Destabilization	Lipid Peroxidation MDA (nM/g wet weight)	Comparable Sediment Contaminant Site
Okatee River				
O-1	766.75 (205.09)	31.70 (6.89)	394.67 (148.65)	R-1
O-2	797.69 (130.94)	37.18 (6.73)	404.00 (131.00)	R-2
O-3	677.75 (158.49)		712.00 (151.61)[a]	R-3
O-4	680.34 (160.77)	33.88 (6.48)	363.67 (63.59)	R-4
O-5	693.26 (92.73)	32.01 (10.19)	433.67 (102.47)	R-5
O-6	609.28 (147.44)[a]	31.98 (8.98)	489.33 (86.02)	R-6,I-6
Broad Creek				
O-1	883.18 (188.73)	33.01 (8.81)	729.33 (160.08)[a]	R-1,I-1
O-2	754.09 (81.32)	41.93 (7.60)[a]	768.67 (216.89)[a]	R-2
O-3	644.16 (110.97)[a]	36.68 (10.83)	754.67 (101.30)[a]	R-3
O-4	671.11 (183.02)[a]	36.99 (8.76)	490.33 (99.94)	I-4,T-4
O-5	852.55 (129.49)	33.62 (6.10)	597.82 (121.94)[a]	R-5
O-6	778.94 (111.86)	35.36 (10.95)	496.36 (166.19)	R-6

Criteria: Lysosomal > 30%; GSH < 400; LPx > 700

[a] Significantly different from minimum value (lysosomomal destabilization and lipid peroxidation) or maximum value (glutathione). One Way Anova using Student-Newman-Keuls to identify different sites ($p<0.05$).

Appendix 5.7. Summary of oyster tissue contaminant samples collected from Broad Creek and the Okatee River. K = Actual value known to be less than value given. All metals and PAH data are in mg/kg Tissue Wet Weight. All PCBs and Pesticides data are in µg/kg Tissue Wet Weight.

River	Station	Date	ALUMINUM	ARSENIC		CADMIUM		CHROMIUM		COPPER	LEAD		MANGANESE	MERCURY		NICKEL		SILVER		TIN		ZINC
Broad	O-1	08/26/1997	25	2	K	0.2	K	0.2	K	16	1	K	3.3	0.25	K	0.4	K	0.6	K	10	K	370
Broad	O-2	08/26/1997	32	2	K	0.2	K	0.2	K	23	1	K	4	0.25	K	0.4	K	0.6	K	10	K	340
Broad	O-3	08/26/1997	42	2	K	0.2		0.2	K	27	1	K	4.6	0.25	K	0.4	K	0.6	K	10	K	350
Broad	O-4	08/27/1997	27	2	K	0.2		0.2	K	16	1	K	3.2	0.25	K	0.4	K	0.6	K	10	K	270
Broad	O-5	08/27/1997	34	2.4		0.2		0.2	K	15	1	K	3.8	0.25	K	0.4	K	0.6	K	10	K	280
Broad	O-6	08/27/1997	20	2.2		0.3		0.2	K	6.5	1	K	3.2	0.25	K	0.4	K	0.6	K	10	K	140
Okatee	O-1	09/10/1997	45	2	K	0.4		0.2	K	10	1	K	4.5	0.25	K	0.4	K	0.6	K	10	K	660
Okatee	O-2	09/10/1997	50	2	K	0.3		0.2	K	12	1	K	4.5	0.25	K	0.4	K	0.6	K	10	K	460
Okatee	O-3	09/10/1997	56	2	K	0.4		0.2	K	12	1	K	3.8	0.25	K	0.4	K	0.6	K	10	K	400
Okatee	O-4	09/11/1997	40	2	K	0.4		0.2	K	12	1	K	3.7	0.25	K	0.4	K	0.6	K	10	K	380
Okatee	O-5	09/11/1997	13	2	K	0.2		0.2	K	7.4	1	K	3	0.25	K	0.4	K	0.6	K	10	K	230
Okatee	O-6	09/11/1997	35	2	K	0.5		0.2	K	16	1	K	4.6	0.25	K	0.4	K	0.6	K	10	K	410

Appendix 5.7. Continued

River	Station	Date	ACENAPTHYLENE		ACENAPTHENE		ANTHRACENE		BENZO(B) FLUORANTHENE		BENZO(K) FLUORANTHENE		BENZO(A) PYRENE		CHRYSENE		FLUORANTHENE		FLUORENE		NAPHTHALENE		PHENANTHRENE		PYRENE	
Broad	O-1	08/26/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K
Broad	O-2	08/26/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K
Broad	O-3	08/26/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K
Broad	O-4	08/27/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K
Broad	O-5	08/27/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K
Broad	O-6	08/27/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K
Okatee	O-1	09/10/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K
Okatee	O-2	09/10/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K
Okatee	O-3	09/10/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K
Okatee	O-4	09/11/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K
Okatee	O-5	09/11/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K
Okatee	O-6	09/11/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K

Appendix 5.7. Continued

River	Station	Date	BENZO(A) ANTHRACENE		DIBENZO(A,H) ANTHRACENE		2-METHYL NAPHTHALENE		BENZO (GHI) PERYLENE		PCB-1221		PCB-1232		PCB-1248		PCB-1260		PCB-1016		PCB-1242		PCB-1254		ALPHA-BHC	
Broad	O-1	08/26/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K
Broad	O-2	08/26/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K
Broad	O-3	08/26/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K
Broad	O-4	08/27/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K
Broad	O-5	08/27/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K
Broad	O-6	08/27/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K
Okatee	O-1	09/10/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K
Okatee	O-2	09/10/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K
Okatee	O-3	09/10/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K
Okatee	O-4	09/11/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K
Okatee	O-5	09/11/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K
Okatee	O-6	09/11/1997	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.05	K	0.005	K

Appendix 5.7. Continued

River	Station	Date	P,P'DDT		P,P'DDD		P,P'DDE		ALDRIN		ENDOSULFAN SULFATE		BETA ENDOSULFAN		ALPHA ENDOSULFAN		ENDRIN ALDEHYDE		CHLORDANE		DIELDRIN		ENDRIN		TOXPHENE	
Broad	O-1	08/26/1997	0.005		0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K
Broad	O-2	08/26/1997	0.005	K	0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K
Broad	O-3	08/26/1997	0.005	K	0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K
Broad	O-4	08/27/1997	0.005	K	0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K
Broad	O-5	08/27/1997	0.005	K	0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K
Broad	O-6	08/27/1997	0.005	K	0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K
Okatee	O-1	09/10/1997	0.005	K	0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K
Okatee	O-2	09/10/1997	0.005	K	0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K
Okatee	O-3	09/10/1997	0.005	K	0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K
Okatee	O-4	09/11/1997	0.005	K	0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K
Okatee	O-5	09/11/1997	0.005	K	0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K
Okatee	O-6	09/11/1997	0.005	K	0.005	K	0.005	K	5	K	0.005	K	0.005	K	0.005	K	0.005	K	25	K	5	K	5	K	125	K

Appendix 5.7. Continued

River	Station	Date	HEPTACHLOR		HEPTACHLOR EPOXIDE		LINDANE		DIAZINON		DURSBAN		BETA-BHC		DELTA-BHC		PERCENT FAT	NO.INDV.
Broad	O-1	08/26/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.5	52
Broad	O-2	08/26/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.5	52
Broad	O-3	08/26/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.6	67
Broad	O-4	08/27/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.6	67
Broad	O-5	08/27/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.6	92
Broad	O-6	08/27/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.9	92
Okatee	O-1	09/10/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.5	61
Okatee	O-2	09/10/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.6	61
Okatee	O-3	09/10/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.6	79
Okatee	O-4	09/11/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.6	79
Okatee	O-5	09/11/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.4	75
Okatee	O-6	09/11/1997	5	K	5	K	5	K	0.005	K	0.005	K	5	K	5	K	0.7	75

Appendix 5.8. Summary of number of mussels and wet biomass (primarily *Geukensia demissa* and *Brachidontes exustus*) in each of the 60 samples and summed for each of the 12 Broad and Okatee Stations.

Site	Station	Replicate	Total Number of Mussels	Total Wet Biomass (g)
Broad	O-1	1	6	1.4854
Broad	O-1	2	0	0
Broad	O-1	3	1	0.161
Broad	O-1	4	0	0
Broad	O-1	5	1	0.207
Broad	O-1	totals	8	1.8534
Broad	O-2	1	4	0.4069
Broad	O-2	2	1	0.26
Broad	O-2	3	28	7.795
Broad	O-2	4	3	0.8736
Broad	O-2	5	17	8.696
Broad	O-2	totals	53	18.0309
Broad	O-3	1	13	4.3292
Broad	O-3	2	10	3.124
Broad	O-3	3	0	0
Broad	O-3	4	0	0
Broad	O-3	5	27	11.702
Broad	O-3	totals	50	19.1552
Broad	O-4	1	40	8.792
Broad	O-4	2	56	9.9536
Broad	O-4	3	35	6.635
Broad	O-4	4	43	8.34
Broad	O-4	5	65	11.95
Broad	O-4	totals	239	45.6706
Broad	O-5	1	64	16.708
Broad	O-5	2	48	9.2026
Broad	O-5	3	10	2.104
Broad	O-5	4	80	18.5659
Broad	O-5	5	49	11.132
Broad	O-5	totals	251	57.7125
Broad	O-6	1	133	27.304
Broad	O-6	2	120	67.51
Broad	O-6	3	148	34.3256
Broad	O-6	4	78	39.03
Broad	O-6	5	228	45.6805
Broad	O-6	totals	707	213.8501
Okatee	O-1	1	2	0.6991
Okatee	O-1	2	0	0
Okatee	O-1	3	0	0
Okatee	O-1	4	0	0
Okatee	O-1	5	1	0.5293
Okatee	O-1	totals	3	1.2281
Okatee	O-2	1	3	2.6087
Okatee	O-2	2	5	2.7145
Okatee	O-2	3	0	0

Appendix 5.8. Continued

Site	Station	Replicate	Total Number of Mussels	Total Wet Biomass (g)
Okatee	O-2	4	4	0.65
Okatee	O-2	5	2	3.4156
Okatee	O-2	totals	14	9.3888
Okatee	O-3	1	1	0.1233
Okatee	O-3	2	0	0
Okatee	O-3	3	3	0.8341
Okatee	O-3	4	2	2.8422
Okatee	O-3	5	4	2.5616
Okatee	O-3	totals	10	6.3612
Okatee	O-4	1	0	0
Okatee	O-4	2	0	0
Okatee	O-4	3	0	0
Okatee	O-4	4	0	0
Okatee	O-4	5	6	5.6777
Okatee	O-4	totals	6	5.6777
Okatee	O-5	1	1	0.0634
Okatee	O-5	2	0	0
Okatee	O-5	3	5	5.8278
Okatee	O-5	4	2	0.479
Okatee	O-5	5	5	5.6733
Okatee	O-5	totals	13	12.0435
Okatee	O-6	1	0	0
Okatee	O-6	2	0	0
Okatee	O-6	3	0	0
Okatee	O-6	4	0	0
Okatee	O-6	5	0	0
Okatee	O-6	totals	0	0

Appendix 5.9. Summary of *Fundulus heteroclitus* population metric data.

		Broad Creek					Okatee River					
Metric	Stat	T-1	T-2	T-3	T-4	T-5	T-1	T-2	T-3	T-4	T-5	T-6
Condition Index	avg	2.46	2.41	2.38	2.32	2.58	2.36	2.27	2.30	2.28	2.35	2.39
	std	0.27	0.20	0.22	0.24	0.21	0.24	0.15	0.17	0.17	0.31	0.21
	min	1.30	1.88	1.39	1.77	2.06	1.77	1.93	1.76	1.71	1.70	1.79
	max	3.70	3.22	3.37	2.91	3.19	2.96	2.80	2.75	2.64	3.95	2.82
Total Length	avg	59.43	52.55	51.52	62.87	66.01	49.96	47.09	45.92	43.27	57.32	44.56
	std	12.88	11.66	11.63	12.96	13.09	8.55	4.47	6.46	6.87	13.81	6.18
	min	38	34	37	37	41	37	36	36	23	39	27
	max	92	80	96	92	103	74	56	77	58	99	56
Standard Length	avg	48.55	42.87	41.97	51.02	54.23	41.06	38.00	36.98	34.86	46.09	36.17
	std	10.60	9.64	9.62	10.93	10.95	7.63	3.73	5.26	5.80	11.16	5.02
	min	31	27	30	31	33	29	29	29	17	32	21
	max	78	67	79	74	87	68	45	63	47	82	46
Weight	avg	3.28	2.25	2.14	3.60	4.71	1.82	1.28	1.25	1.05	2.84	1.21
	std	2.27	1.72	2.02	2.49	2.97	1.19	0.37	0.75	0.46	2.89	0.50
	min	0.65	0.53	0.6	0.66	0.9	0.59	0.51	0.55	0.1	0.73	0.2
	max	11.79	8.46	14.62	11.32	18.07	5.73	2.05	6.58	2.6	14.46	2.66
Abnormalities	number	1	0	2	5	2	2	0	6	0	3	0
	% abnormal	0.8	0.0	0.7	4.5	1.1	3.9	0.0	3.4	0.0	6.4	0.0
Sex Ratio	M : F	49:77	99:129	118:163	50:60	96:90	10:41	23:29	39:135	14:26	18:29	22:31
Immatures	number	2	1	0	2	0	0	4	4	4	0	1
	Number	128	229	281	112	186	51	56	178	44	47	54
	m	49	99.0	118	50	96	10	23	39	14	18	22
	f	77	129.0	163	60	90	41	29	135	26	29	31
	I	2	1.0	0	2	0	0	4	4	4	0	1
	total	128	229	281	112	186	51	56	178	44	47	54
	% female	60.2	56.3	58.0	53.6	48.4	80.4	51.8	75.8	59.1	61.7	57.4

Appendix 5.10. Okatee River and Broad Creek statistical comparisons for grass shrimp (α = 0.05 for all tests)

DATA TYPE	COMPARISONS	PARAMETER	NORMALITY	(p value)	TEST	RESULT	(p value)	MULTIPLE COMPAR. TEST	PAIRWISE COMP.
Grouped	System-wide	Abundance	failed	<0.0001	Mann-Wh.	sign. diff.	0.032		Broad > Okatee
	(Okatee vs. Broad)	Biomass	failed	<0.0001	Mann-Wh.	sign. diff.	0.029		Broad > Okatee
		% Gravid Female	failed	<0.0001	Mann-Wh.	no sign. diff.	0.287		
		Larval	failed	<0.0001	Mann-Wh.	no sign. diff.	0.799		
		Average Size	failed	0.0078	Mann-Wh.	no sign. diff.	0.560		
	Between Habitats	Abundance	failed	<0.0001	Kruskal-Wallis	no sign. diff.	0.823		
	(within Okatee)	Biomass	failed	0.0036	Kruskal-Wallis	no sign. diff.	0.831		
		% Gravid Female	failed	0.029	Kruskal-Wallis	no sign. diff.	0.359		
		Larval	failed	<0.0001	Kruskal-Wallis	no sign. diff.	0.235		
		Average Size	failed	0.0134	Kruskal-Wallis	no sign. diff.	0.217		
	Between Habitats	Abundance	failed	<0.0001	Kruskal-Wallis	no sign. diff.	0.270		
	(within Broad)	Biomass	passed	0.0541	1 way ANOVA	no sign. diff.	0.282		
		% Gravid Female	passed	0.0611	1 way ANOVA	no sign. diff.	0.542		
		Larval	failed	0.0205	Kruskal-Wallis	sign. diff.	0.008	Dunn's	River > Tidal
		Average Size	passed	0.2106	1 way ANOVA	no sign. diff.	0.631		
	Tidal Data	Abundance	failed	0.0022	Mann-Wh.	no sign. diff.	0.174		
	(Okatee vs Broad)	Biomass	* passed	0.1883	Mann-Wh.	no sign. diff.	0.137		
		% Gravid Female	failed	0.0106	Mann-Wh.	no sign. diff.	0.216		
		Larval	failed	<0.0001	Mann-Wh.	no sign. diff.	0.428		
		Average Size	failed	0.0013	Mann-Wh.	no sign. diff.	1.000		
	River Data	Abundance	failed	<0.0001	Mann-Wh.	no sign. diff.	0.373		
	(Okatee vs Broad)	Biomass	failed	0.001	Mann-Wh.	no sign. diff.	0.468		
		% Gravid Female	failed	0.0023	Mann-Wh.	sign. diff.	0.035		Broad > Okatee
		Larval	failed	<0.0001	Mann-Wh.	no sign. diff.	0.200		
		Average Size	* passed	0.385	Mann-Wh.	no sign. diff.	0.718		
	Intertidal Data	Abundance	failed	0.0486	Mann-Wh.	no sign. diff.	0.480		
	(Okatee vs Broad)	Biomass	passed	0.3483	t-test	no sign. diff.	0.408		
		% Gravid Female	passed	0.1209	t-test	no sign. diff.	0.683		
		Larval	passed	0.2446	t-test	no sign. diff.	0.179		
		Average Size	passed	0.084	t-test	no sign. diff.	0.744		

* The Normality Test passed with p>0.05, but the Equal Variance Test failed. Therefore, a nonparametric test was used.

Appendix 5.10. Continued

DATA TYPE	COMPARISONS	PARAMETER	NORMALITY	(p value)	TEST	RESULT	(p value)	MULTIPLE COMPAR. TEST	PAIRWISE COMP.
Ungrouped (site vs site)	System-Wide Okatee vs Broad)	Abundance	failed	<0.0001	Kruskal-Wallis	sign. diff.	0.0001	Dunn's	none
	Tidal (all pairwise)	Abundance	failed	0.0031	Kruskal-Wallis	sign. diff.	0.027	Dunn's	BGT5 > OGT4
		Biomass	passed	0.1558	1 way ANOVA	sign. diff.	<0.0001	Stud.-New.-Keuls	see Chart #2
		% Gravid Female	passed	0.1244	1 way ANOVA	no sign. diff.	0.812		
		Larval	passed	0.615	1 way ANOVA	no sign. diff.	0.491		
		Average Size	failed	<0.0001	Kruskal-Wallis	sign. diff.	0.039	Dunn's	none
	River (all pairwise)	Abundance	failed	<0.0001	Kruskal-Wallis	sign. diff.	0.004	Dunn's	none
		Biomass	passed	0.233	1 way ANOVA	sign. diff.	<0.0001	Stud.-New.-Keuls	see Chart #2
		% Gravid Female	failed	0.0197	Kruskal-Wallis	sign. diff.	0.242	Dunn's	none
		Larval	failed	0.0019	Kruskal-Wallis	sign. diff.	0.004	Dunn's	none
		Average Size	passed	0.3219	1 way ANOVA	no sign. diff.			
	Intertidal (all pairwise)	Abundance	failed	0.0394	Kruskal-Wallis	sign. diff.	0.035	Dunn's	none
		Biomass	passed	0.362	1 way ANOVA	sign. diff.	0.003	Stud.-New.-Keuls	see Chart #2
		% Gravid Female	failed	0.0029	Kruskal-Wallis	no sign. diff.	0.221		
		Larval	failed	<0.0001	Kruskal-Wallis	sign. diff.	0.026	Dunn's	none
		Average Size	failed	<0.0001	Kruskal-Wallis	no. sign. diff.			
GROUPED PAIRED BY SITE		Abundance			Mann-Whitney				BGT5 > OGT5
		Biomass			Mann-Whitney				BGT5 > OGT5
		Size			Mann-Whitney				OGT1 > BGT1
		Size			Mann-Whitney				OGT5 > BGT5
		Eggs per Female			Mann-Whitney				OGR1 > BGR1
		Eggs per Female			Mann-Whitney				OGR2 > BGR2
		Eggs per Female			Mann-Whitney				OGI1 > BGI1
		Larval Abundance			Mann-Whitney				BGR4 > OGR4
		Larval Abundance			Mann-Whitney				OGR2 > BGR2
		Larval Abundance			Mann-Whitney				OGR3 > BGR3
Contaminated vs Uncontaminated Sites (grouped data)		Abundance	failed	<0.0001	Kruskal-Wallis	no sign. diff.	0.099		
		Biomass	failed	<0.0001	Kruskal-Wallis	no sign. diff.	0.160		
		% Gravid Female	failed	0.0008	Kruskal-Wallis	no sign. diff.	0.516		
		Larval	failed	<0.0001	Kruskal-Wallis	sign. diff.	0.044	Dunn's	see Chart #2
		Average Size	failed	0.0019	Kruskal-Wallis	no sign. diff.	0.102		