

## Appendix A-2. Surface water hydrochemistry results

Location ID	Location Name	Water Type	Well Depth (ft)	Latitude (N)	Longitude (W)	Sampling Round	Date of Collection	Time of Collection
SW-BPI	Black Point Inshore	SW	0	25.526	-80.330	1	8/22/02	8:20
SW-BPI	Black Point Inshore	SW	0	25.526	-80.330	2	6/24/03	17:00
SW-BPI	Black Point Inshore	SW	0	25.526	-80.330	3	9/24/03	16:24
SW-BPI	Black Point Inshore	SW	0	25.526	-80.330	4	12/17/03	14:00
SW-BPI	Black Point Inshore	SW	0	25.526	-80.330	5	3/31/04	8:25
SW-BKP	Black Point	SW	0	25.526	-80.324	1	nd	nd
SW-BKP	Black Point	SW	0	25.526	-80.324	2	6/25/03	15:15
SW-BKP	Black Point	SW	0	25.526	-80.324	3	9/24/03	15:05
SW-BKP	Black Point	SW	0	25.526	-80.324	4	12/17/03	12:50
SW-BKP	Black Point	SW	0	25.526	-80.324	5	3/29/04	11:40
SW-MB	Mid Bay	SW	0	25.484	-80.267	1	8/22/02	15:15
SW-MB	Mid Bay	SW	0	25.484	-80.267	2	6/24/03	12:10
SW-MB	Mid Bay	SW	0	25.484	-80.267	3	9/24/03	12:30
SW-MB	Mid Bay	SW	0	25.484	-80.267	4	12/15/03	15:00
SW-MB	Mid Bay	SW	0	25.484	-80.267	5	3/29/04	13:30
SW-BYP	Billy's Point	SW	0	25.428	-80.212	1	8/21/02	12:20
SW-BYP	Billy's Point	SW	0	25.428	-80.212	2	6/24/03	9:30
SW-BYP	Billy's Point	SW	0	25.428	-80.212	3	9/24/03	9:10
SW-BYP	Billy's Point	SW	0	25.428	-80.212	4	12/16/03	12:30
SW-BYP	Billy's Point	SW	0	25.428	-80.212	5	3/29/04	10:55
SW-PP	Petrel Point	SW	0	25.415	-80.204	1	8/21/02	9:30
SW-PP	Petrel Point	SW	0	25.415	-80.204	2	6/25/03	9:00
SW-PP	Petrel Point	SW	0	25.415	-80.204	3	9/23/03	14:55
SW-PP	Petrel Point	SW	0	25.415	-80.204	4	12/16/03	10:00
SW-PP	Petrel Point	SW	0	25.415	-80.204	5	3/29/04	8:50
SW-AR	Alina's Reef	SW	0	25.386	-80.163	1	8/20/02	13:25
SW-AR	Alina's Reef	SW	0	25.386	-80.163	2	6/26/03	9:10
SW-AR	Alina's Reef	SW	0	25.386	-80.163	3	9/23/03	12:10
SW-AR	Alina's Reef	SW	0	25.386	-80.163	4	1/14/04	13:15
SW-AR	Alina's Reef	SW	0	25.386	-80.163	5	3/30/04	8:20
SW-PR	Pacific Reef	SW	0	25.371	-80.142	1	8/20/02	10:45
SW-PR	Pacific Reef	SW	0	25.371	-80.142	2	6/25/03	11:45
SW-PR	Pacific Reef	SW	0	25.371	-80.142	3	9/23/03	10:10
SW-PR	Pacific Reef	SW	0	25.371	-80.142	4	1/14/04	10:15
SW-PR	Pacific Reef	SW	0	25.371	-80.142	5	3/30/04	11:45
SW-Gulf Stream	Gulf Stream	SW	0	nd	nd	1	nd	nd
SW-Gulf Stream	Gulf Stream	SW	0	25.377	-80.132	2	6/25/03	13:45
SW-Gulf Stream	Gulf Stream	SW	0	25.372	-80.128	3	9/23/03	9:10
SW-Gulf Stream	Gulf Stream	SW	0	25.349	-80.122	4	1/14/04	9:20
SW-Gulf Stream	Gulf Stream	SW	0	25.349	-80.122	5	3/30/04	11:10

[nd, no data]

Appendix A-2. Surface water hydrochemistry results, Cont.

Location ID	Sampling Round	Sp. Conductance (µS/CM)	Salinity (ppt)	Diss. Oxygen (mg/L)	Diss Oxy (%)	pH	Temp (°C)	Redox (mV)	Li (ppb)	Be (ppb)	B (ppb)	Na (ppb)	Mg (ppb)
SW-BPI	1	5210	2.8	5.22	nd	7.91	28.2	nd	nd	nd	nd	nd	nd
SW-BPI	2	9330	5.3	5.75	74.0	8.13	28.3	-52.0	31.1	bmdl	853	1650000	180000
SW-BPI	3	11000	6.3	nd	nd	8.25	nd	nd	bmdl	bmdl	1030	1940000	236000
SW-BPI	4	28900	17.8	6.88	89.3	8.11	23.1	-9.5	115	bmdl	2500	5750000	687000
SW-BPI	5	47735	31.1	3.85	55.0	8.10	23.3	137.6	170	bmdl	3900	9740000	1170000
SW-BKP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BKP	2	9500	5.4	7.07	91.5	7.86	34.4	4.0	56.9	bmdl	1110	2750000	320000
SW-BKP	3	19260	11.5	nd	nd	8.16	nd	nd	bmdl	bmdl	1760	4060000	455000
SW-BKP	4	28910	17.9	9.05	115.8	8.22	22.5	156.0	123	bmdl	2780	5790000	721000
SW-BKP	5	49019	32.1	8.73	123.5	8.27	23.4	94.9	179	bmdl	4160	10200000	1250000
SW-MB	1	54400	36.0	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-MB	2	48300	31.7	4.55	57.9	8.16	28.0	-51.0	181	bmdl	2390	10100000	1150000
SW-MB	3	49900	32.5	nd	nd	7.70	nd	nd	172	bmdl	4430	11700000	1420000
SW-MB	4	47940	31.3	6.77	90.2	8.14	20.4	202.0	174	bmdl	4110	10200000	1200000
SW-MB	5	54718	36.3	6.57	94.0	8.13	22.7	49.0	205	bmdl	4560	11200000	1390000
SW-BYP	1	53200	35.1	7.73	nd	8.06	30.3	nd	nd	nd	nd	nd	nd
SW-BYP	2	50600	33.3	4.58	57.9	8.14	31.6	24.0	187	bmdl	2480	10700000	1240000
SW-BYP	3	54200	35.7	nd	nd	7.78	nd	nd	182	bmdl	4870	12700000	1510000
SW-BYP	4	51720	34.1	6.86	93.4	8.08	20.6	117.5	193	bmdl	4450	10500000	1380000
SW-BYP	5	55858	37.1	5.62	82.0	8.18	23.4	22.3	213	bmdl	4940	12400000	1450000
SW-PP	1	54600	36.2	7.23	nd	7.79	29.0	nd	nd	nd	nd	nd	nd
SW-PP	2	53500	35.5	5.26	66.5	7.98	27.1	39.0	209	bmdl	3390	11500000	1330000
SW-PP	3	51800	34.4	19.90	193.8	8.69	32.9	nd	185	bmdl	4500	13000000	1320000
SW-PP	4	51410	33.8	6.45	88.1	8.01	20.9	165.0	187	bmdl	4480	10500000	1310000
SW-PP	5	54476	36.1	5.33	75.2	8.19	22.0	121.8	204	bmdl	4760	11800000	1440000
SW-AR	1	54304	36.0	4.43	nd	nd	30.3	nd	nd	nd	nd	nd	nd
SW-AR	2	53800	35.8	7.73	99.5	8.20	30.6	43.0	202	0.185	2780	11800000	1360000
SW-AR	3	52900	35.1	7.12	94.5	8.33	29.1	nd	190	bmdl	4740	13800000	1370000
SW-AR	4	53120	35.1	6.44	90.0	8.12	21.8	24.7	188	bmdl	4440	11100000	1380000
SW-AR	5	54020	35.7	6.35	91.3	8.13	23.3	128.4	198	bmdl	4550	11400000	1400000
SW-PR	1	53763	35.6	4.22	nd	nd	29.8	nd	nd	nd	nd	nd	nd
SW-PR	2	53700	35.7	7.40	95.2	8.22	28.4	47.0	212	bmdl	3020	11700000	1340000
SW-PR	3	52900	35.1	6.35	84.4	8.36	29.2	nd	192	bmdl	4930	12700000	1450000
SW-PR	4	53702	35.5	6.00	86.4	8.13	23.3	122.2	180	bmdl	4050	11200000	1390000
SW-PR	5	53892	35.6	6.69	99.1	8.19	25.1	66.7	205	bmdl	4700	11200000	1350000
SW-Gulf Stream	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-Gulf Stream	2	53600	35.6	7.28	94.0	8.20	28.6	-62.0	200	bmdl	2610	11900000	1370000
SW-Gulf Stream	3	52900	35.1	5.56	72.8	8.33	29.3	nd	189	bmdl	4810	13200000	1420000
SW-Gulf Stream	4	53829	35.6	5.90	86.7	8.11	24.6	180.8	178	bmdl	4350	11200000	1390000
SW-Gulf Stream	5	53868	35.6	6.36	94.4	8.16	25.1	34.5	201	bmdl	4810	11400000	1350000

[bmdl, below method detection limit; nd, no data]

Appendix A-2. Surface water hydrochemistry results, Cont.

Location ID	Sampling Round	Al (ppb)	Si (ppb)	K (ppb)	Ca (ppb)	Sc (ppb)	Ti (ppb)	V (ppb)	Cr (ppb)	Mn (ppb)	Fe (ppb)	Co (ppb)	Ni (ppb)	Cu (ppb)	Zn (ppb)	Ga (ppb)	Ge (ppb)	As (ppb)
SW-BPI	1	nd	nd	nd	nd	nd	1.45	nd	nd	12.20	nd	nd	nd	nd	nd	nd	nd	nd
SW-BPI	2	bmdl	2080	55000	110000	bmdl	bmdl	bmdl	bmdl	bmdl	301.00	0.39	331.00	27.50	1.93	0.02	bmdl	8.17
SW-BPI	3	bmdl	bmdl	78900	138000	bmdl	bmdl	7.81	bmdl	bmdl	bmdl	bmdl	157.00	30.60	bmdl	bmdl	bmdl	7.12
SW-BPI	4	30.3	1100	207000	265000	bmdl	6.04	28.50	92.10	4.41	1620.00	0.97	32.10	17.50	bmdl	bmdl	bmdl	25.50
SW-BPI	5	bmdl	bmdl	385000	463000	bmdl	3.56	40.60	141.00	7.72	2410.00	1.36	116.00	34.70	bmdl	bmdl	bmdl	39.30
SW-BKP	1	nd	nd	nd	nd	nd	2.30	bmdl	bmdl	8.61	nd	nd	nd	nd	nd	nd	nd	nd
SW-BKP	2	bmdl	bmdl	92000	146000	bmdl	bmdl	bmdl	bmdl	bmdl	373.00	0.31	406.00	41.30	2.07	0.03	bmdl	13.90
SW-BKP	3	bmdl	bmdl	149000	212000	bmdl	13.80	bmdl	bmdl	bmdl	516.00	bmdl	836.00	116.00	bmdl	bmdl	bmdl	14.00
SW-BKP	4	29.9	764	219000	272000	bmdl	3.82	29.80	94.10	5.57	1730.00	0.94	47.90	22.30	11.30	bmdl	bmdl	27.10
SW-BKP	5	bmdl	bmdl	420000	477000	bmdl	6.39	47.80	161.00	3.45	2480.00	1.33	306.00	62.60	bmdl	bmdl	bmdl	42.70
SW-MB	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-MB	2	bmdl	bmdl	345000	332000	bmdl	10.00	21.80	58.10	1.98	788.00	1.11	1180.00	177.00	6.46	0.09	bmdl	54.20
SW-MB	3	bmdl	bmdl	453000	489000	bmdl	bmdl	bmdl	bmdl	bmdl	1060.00	1.11	549.00	180.00	bmdl	bmdl	bmdl	50.30
SW-MB	4	27.0	bmdl	369000	375000	bmdl	7.73	54.90	193.00	1.39	2660.00	1.46	66.70	39.60	7.81	0.12	bmdl	50.50
SW-MB	5	bmdl	bmdl	453000	493000	bmdl	7.09	57.90	182.00	1.80	2730.00	1.58	257.00	68.50	7.12	bmdl	bmdl	52.10
SW-BYP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BYP	2	2.1	bmdl	362000	350000	bmdl	10.50	29.90	89.30	1.96	853.00	0.82	1070.00	180.00	6.46	0.10	bmdl	58.10
SW-BYP	3	bmdl	bmdl	490000	514000	bmdl	bmdl	45.80	149.00	bmdl	1130.00	1.10	1550.00	317.00	bmdl	bmdl	bmdl	53.90
SW-BYP	4	26.4	bmdl	408000	438000	bmdl	10.20	59.50	197.00	1.60	3140.00	1.84	98.30	44.60	10.60	bmdl	bmdl	56.80
SW-BYP	5	bmdl	bmdl	469000	516000	bmdl	6.93	56.50	186.00	1.42	2700.00	1.47	221.00	55.60	6.14	bmdl	bmdl	51.00
SW-PP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-PP	2	3.3	bmdl	356000	368000	bmdl	9.81	31.30	88.50	1.61	803.00	0.95	771.00	155.00	7.77	0.08	bmdl	67.00
SW-PP	3	bmdl	bmdl	450000	472000	bmdl	bmdl	42.30	146.00	bmdl	957.00	1.16	bmdl	93.10	bmdl	bmdl	bmdl	52.70
SW-PP	4	26.8	bmdl	409000	419000	bmdl	10.60	55.90	183.00	1.61	2780.00	1.42	106.00	42.30	10.60	bmdl	bmdl	54.90
SW-PP	5	bmdl	bmdl	465000	503000	bmdl	6.42	51.90	171.00	1.34	2570.00	1.76	216.00	53.60	6.84	bmdl	bmdl	49.40
SW-AR	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-AR	2	bmdl	bmdl	355000	385000	bmdl	8.49	39.30	115.00	0.75	764.00	0.84	1280.00	192.00	7.39	0.07	bmdl	63.70
SW-AR	3	bmdl	bmdl	456000	486000	bmdl	bmdl	43.80	140.00	bmdl	1100.00	0.95	44.20	118.00	bmdl	bmdl	bmdl	52.00
SW-AR	4	bmdl	bmdl	466000	475000	bmdl	11.70	70.10	225.00	1.04	2760.00	1.88	70.90	82.90	13.10	0.11	bmdl	63.20
SW-AR	5	33.4	bmdl	463000	501000	bmdl	7.55	57.90	182.00	1.28	2730.00	1.46	248.00	64.00	bmdl	bmdl	bmdl	49.30
SW-PR	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-PR	2	bmdl	bmdl	342000	370000	bmdl	10.10	19.80	124.00	0.86	857.00	0.95	1240.00	207.00	8.62	0.13	bmdl	71.10
SW-PR	3	bmdl	bmdl	472000	500000	bmdl	bmdl	46.30	152.00	bmdl	1120.00	1.45	122.00	169.00	bmdl	bmdl	bmdl	55.30
SW-PR	4	bmdl	bmdl	448000	462000	bmdl	bmdl	51.80	166.00	1.72	2690.00	1.95	80.40	84.50	8.52	bmdl	bmdl	64.90
SW-PR	5	bmdl	bmdl	456000	503000	bmdl	5.82	58.60	195.00	1.17	2490.00	1.60	330.00	70.10	bmdl	bmdl	bmdl	50.20
SW-Gulf Stream	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-Gulf Stream	2	bmdl	bmdl	420000	384000	bmdl	9.98	30.00	84.20	0.75	806.00	1.84	1250.00	200.00	7.09	0.08	bmdl	62.90
SW-Gulf Stream	3	bmdl	bmdl	465000	493000	bmdl	bmdl	44.60	152.00	bmdl	1200.00	1.25	1540.00	310.00	bmdl	bmdl	bmdl	53.60
SW-Gulf Stream	4	bmdl	bmdl	461000	464000	bmdl	6.94	61.00	205.00	1.42	2750.00	1.87	79.20	91.40	17.50	0.10	bmdl	65.20
SW-Gulf Stream	5	bmdl	bmdl	449000	490000	bmdl	8.34	58.80	192.00	1.01	2530.00	1.77	164.00	60.90	6.81	bmdl	bmdl	49.50

[bmdl, below method detection limit; nd, no data]

Appendix A-2. Surface water hydrochemistry results, Cont.

Location ID	Sampling Round	Br (ppb)	Se (ppb)	Rb (ppb)	Sr (ppb)	Y (ppb)	Zr (ppb)	Nb (ppb)	Mo (ppb)	Ru (ppb)	Pd (ppb)	Ag (ppb)	Cd (ppb)	In (ppb)	Sn (ppb)	Sb (ppb)
SW-BPI	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BPI	2	11300	25.1	19.9	2220	0.019	0.032	bmdl	1.660	0.036	0.522	bmdl	bmdl	0.002	bmdl	0.130
SW-BPI	3	12500	bmdl	22.1	1970	bmdl	bmdl	bmdl	bmdl	bmdl	1.030	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BPI	4	37000	85.7	59.6	4450	0.046	bmdl	bmdl	2.280	0.134	0.907	bmdl	bmdl	0.067	bmdl	0.103
SW-BPI	5	66600	117.0	116.0	6840	0.049	bmdl	bmdl	8.120	0.251	1.100	bmdl	bmdl	bmdl	bmdl	0.135
SW-BKP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BKP	2	26000	46.0	32.3	3380	0.016	0.023	bmdl	2.470	0.192	0.101	bmdl	bmdl	bmdl	bmdl	0.134
SW-BKP	3	24200	34.2	39.8	3230	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BKP	4	38600	84.3	62.2	4590	0.087	bmdl	bmdl	1.920	0.323	0.869	bmdl	bmdl	0.089	bmdl	0.138
SW-BKP	5	73500	137.0	118.0	7370	0.051	bmdl	bmdl	8.570	0.490	0.904	bmdl	bmdl	bmdl	bmdl	0.153
SW-MB	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-MB	2	90900	182.0	112.0	9900	0.025	0.013	0.014	9.700	0.958	1.830	bmdl	0.044	0.006	bmdl	0.218
SW-MB	3	73400	125.0	121.0	8630	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-MB	4	65400	180.0	106.0	7660	0.075	bmdl	bmdl	5.450	0.560	1.870	bmdl	bmdl	0.148	bmdl	0.185
SW-MB	5	88900	156.0	137.0	7970	0.081	bmdl	bmdl	11.700	0.916	1.260	bmdl	bmdl	0.011	bmdl	0.214
SW-BYP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BYP	2	102000	195.0	128.0	10600	0.021	0.013	0.011	10.900	3.160	1.020	bmdl	0.047	0.004	0.104	0.229
SW-BYP	3	77500	133.0	123.0	8820	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BYP	4	72900	192.0	116.0	8070	0.065	bmdl	bmdl	5.810	0.683	1.650	bmdl	bmdl	0.141	bmdl	0.153
SW-BYP	5	91600	162.0	141.0	8450	0.061	bmdl	bmdl	11.800	0.608	1.300	bmdl	bmdl	0.012	bmdl	0.154
SW-PP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-PP	2	95400	225.0	134.0	11000	0.022	bmdl	0.025	12.400	0.232	0.491	bmdl	0.057	0.031	bmdl	0.251
SW-PP	3	76700	147.0	124.0	8390	bmdl	bmdl	bmdl	bmdl	bmdl	1.970	bmdl	bmdl	bmdl	bmdl	bmdl
SW-PP	4	71000	203.0	116.0	8160	0.093	bmdl	bmdl	5.640	1.110	1.980	bmdl	bmdl	0.158	bmdl	0.155
SW-PP	5	89600	162.0	136.0	8640	0.060	bmdl	bmdl	12.000	0.673	0.842	bmdl	0.115	bmdl	bmdl	0.184
SW-AR	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-AR	2	102000	220.0	126.0	10600	0.044	0.020	0.019	12.800	2.500	0.402	bmdl	0.043	0.009	bmdl	0.251
SW-AR	3	76400	136.0	124.0	8350	bmdl	bmdl	bmdl	bmdl	bmdl	2.070	bmdl	bmdl	bmdl	bmdl	bmdl
SW-AR	4	73800	215.0	122.0	7560	0.042	bmdl	bmdl	9.440	0.693	0.382	bmdl	bmdl	bmdl	bmdl	0.132
SW-AR	5	87900	153.0	136.0	8070	0.065	bmdl	bmdl	11.100	0.603	1.070	bmdl	bmdl	bmdl	bmdl	0.165
SW-PR	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-PR	2	107000	253.0	138.0	11500	0.048	0.027	0.028	13.200	0.902	1.620	bmdl	0.069	0.019	0.136	0.226
SW-PR	3	78700	140.0	128.0	8490	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-PR	4	79700	234.0	132.0	7680	0.036	bmdl	bmdl	9.210	1.030	0.340	bmdl	bmdl	bmdl	bmdl	0.204
SW-PR	5	89700	150.0	140.0	7820	0.068	bmdl	bmdl	11.100	0.610	1.150	bmdl	bmdl	0.018	bmdl	0.141
SW-Gulf Stream	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-Gulf Stream	2	104000	219.0	134.0	11500	0.038	0.020	0.020	13.000	0.965	0.022	bmdl	0.014	0.006	bmdl	0.222
SW-Gulf Stream	3	76700	133.0	123.0	8510	bmdl	bmdl	bmdl	bmdl	bmdl	2.190	bmdl	bmdl	bmdl	bmdl	bmdl
SW-Gulf Stream	4	76500	241.0	126.0	7650	0.072	bmdl	bmdl	9.330	0.308	0.308	bmdl	bmdl	bmdl	bmdl	0.155
SW-Gulf Stream	5	89600	160.0	141.0	8220	0.062	bmdl	bmdl	10.900	0.922	0.474	bmdl	bmdl	0.015	bmdl	0.304

[bmdl, below method detection limit; nd, no data]

Appendix A-2. Surface water hydrochemistry results, Cont.

Location ID	Sampling Round	Te (ppb)	I (ppb)	Cs (ppb)	Ba (ppb)	La (ppb)	Ce (ppb)	Pr (ppb)	Nd (ppb)	Sm (ppb)	Eu (ppb)	Gd (ppb)	Tb (ppb)	Dy (ppb)	Ho (ppb)	Er (ppb)
SW-BPI	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BPI	2	bmdl	17,700	0.061	16,000	0.003	0.006	0.001	bmdl	bmdl	0.001	bmdl	0.003	bmdl	bmdl	bmdl
SW-BPI	3	bmdl	bmdl	bmdl	16,100	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BPI	4	0.657	19,600	0.160	13,200	0.047	0.085	0.016	0.107	bmdl	bmdl	bmdl	0.020	bmdl	bmdl	bmdl
SW-BPI	5	bmdl	521,000	0.295	14,500	bmdl	bmdl	0.014	bmdl	0.021	0.012	bmdl	bmdl	0.014	0.016	bmdl
SW-BKP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BKP	2	0.072	20,500	0.095	16,900	0.001	bmdl	bmdl	bmdl	bmdl	bmdl	0.001	0.001	bmdl	0.002	bmdl
SW-BKP	3	bmdl	bmdl	bmdl	14,600	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BKP	4	0.425	20,800	0.147	12,200	0.049	0.101	0.016	0.081	bmdl	0.017	bmdl	0.017	0.017	bmdl	0.013
SW-BKP	5	0.113	540,000	0.274	11,600	0.031	0.020	0.015	0.058	bmdl	bmdl	0.015	0.015	bmdl	bmdl	bmdl
SW-MB	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-MB	2	0.255	39,400	0.300	10,700	0.038	bmdl	0.012	0.007	0.009	bmdl	0.002	0.004	0.006	0.017	0.002
SW-MB	3	bmdl	0.298	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-MB	4	bmdl	31,300	0.246	7,670	0.056	0.084	0.015	bmdl	0.033	bmdl	bmdl	0.017	0.013	bmdl	bmdl
SW-MB	5	0.442	571,000	0.313	10,400	0.011	bmdl	0.017	bmdl	bmdl	0.016	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BYP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BYP	2	0.357	35,800	0.348	8,050	0.025	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.004	bmdl	0.036	bmdl
SW-BYP	3	bmdl	0.254	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BYP	4	bmdl	40,500	0.271	6,770	0.056	0.091	0.013	bmdl	bmdl	bmdl	bmdl	0.014	bmdl	0.011	bmdl
SW-BYP	5	0.193	557,000	0.341	8,470	0.012	bmdl	0.022	0.099	bmdl	bmdl	bmdl	bmdl	0.029	0.020	bmdl
SW-PP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-PP	2	0.369	35,700	0.354	8,600	0.017	0.005	0.014	0.027	bmdl	0.004	0.014	0.013	0.008	0.014	0.003
SW-PP	3	bmdl	bmdl	0.326	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-PP	4	1.120	43,600	0.269	6,970	0.055	0.091	0.013	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.014	bmdl
SW-PP	5	0.359	558,000	0.345	11,500	0.020	0.022	0.027	bmdl	bmdl	bmdl	0.024	0.010	0.017	0.019	bmdl
SW-AR	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-AR	2	0.357	73,900	0.315	7,850	0.003	0.006	0.018	0.029	bmdl	0.003	bmdl	0.009	0.006	0.047	0.003
SW-AR	3	bmdl	113,000	0.309	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-AR	4	bmdl	732,000	0.309	7,350	0.028	bmdl	bmdl	0.436	bmdl	bmdl	bmdl	bmdl	0.426	bmdl	bmdl
SW-AR	5	0.122	548,000	0.368	7,640	0.022	0.030	0.013	0.055	bmdl	bmdl	bmdl	bmdl	0.012	0.020	bmdl
SW-PR	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-PR	2	0.695	61,800	0.406	9,010	0.073	0.011	0.011	0.011	bmdl	0.002	0.006	0.009	0.018	0.056	0.010
SW-PR	3	bmdl	bmdl	0.282	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-PR	4	0.503	760,000	0.331	7,100	0.016	bmdl	bmdl	0.217	0.021	0.011	0.036	bmdl	0.290	bmdl	bmdl
SW-PR	5	0.226	532,000	0.382	7,740	0.028	bmdl	0.016	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.013	bmdl
SW-Gulf Stream	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-Gulf Stream	2	0.653	61,600	0.327	8,200	0.015	0.004	0.012	bmdl	bmdl	0.002	bmdl	0.005	0.004	0.010	0.003
SW-Gulf Stream	3	bmdl	0.312	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-Gulf Stream	4	0.640	801,000	0.314	7,240	0.022	0.029	bmdl	0.300	bmdl	0.014	bmdl	0.011	0.328	bmdl	bmdl
SW-Gulf Stream	5	0.221	540,000	0.334	8,760	0.024	bmdl	bmdl	0.097	0.027	bmdl	bmdl	0.015	bmdl	0.012	bmdl

[bmdl, below method detection limit; nd, no data]

Appendix A-2. Surface water hydrochemistry results, Cont.

Location ID	Sampling Round	Tm (ppb)	Yb (ppb)	Lu (ppb)	Hf (ppb)	Ta (ppb)	W (ppb)	Re (ppb)	Os (ppb)	Pt (ppb)	Au (ppb)	Hg (ppb)	Tl (ppb)	Pb (ppb)	Bi (ppb)	Th (ppb)
SW-BPI	1	nd	nd	nd	nd	nd	0.036	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BPI	2	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BPI	3	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BPI	4	bmdl	bmdl	0.066	bmdl	bmdl	bmdl	0.010	bmdl	bmdl	0.031	bmdl	bmdl	2.040	0.176	0.041
SW-BPI	5	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BKP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BKP	2	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.003
SW-BKP	3	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BKP	4	bmdl	0.011	0.055	bmdl	bmdl	bmdl	0.010	bmdl	bmdl	bmdl	bmdl	bmdl	1.670	0.180	0.055
SW-BKP	5	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.028	bmdl	bmdl	3.740	bmdl	bmdl
SW-MB	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-MB	2	bmdl	0.004	bmdl	0.003	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.002
SW-MB	3	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-MB	4	bmdl	bmdl	0.061	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.049	bmdl	bmdl	1.830	bmdl	0.072
SW-MB	5	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.021	bmdl	bmdl	bmdl	bmdl	0.014
SW-BYP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BYP	2	bmdl	bmdl	bmdl	0.004	0.001	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.002
SW-BYP	3	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-BYP	4	bmdl	bmdl	0.057	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.047	bmdl	bmdl	bmdl	0.138	0.093
SW-BYP	5	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-PP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-PP	2	0.001	0.007	0.001	bmdl	bmdl	0.020	bmdl	bmdl	bmdl	bmdl	bmdl	0.005	bmdl	bmdl	bmdl
SW-PP	3	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-PP	4	bmdl	bmdl	0.053	bmdl	bmdl	bmdl	0.015	bmdl	bmdl	0.076	bmdl	bmdl	1.830	0.131	0.077
SW-PP	5	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.026	bmdl	bmdl	1.980	bmdl	bmdl
SW-AR	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-AR	2	bmdl	bmdl	0.002	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.219	0.008	bmdl	0.011	0.005
SW-AR	3	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-AR	4	bmdl	bmdl	bmdl	bmdl	0.022	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	1.700	0.499	bmdl
SW-AR	5	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.027	bmdl	bmdl	1.160	bmdl	bmdl
SW-PR	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-PR	2	0.001	bmdl	0.010	bmdl	bmdl	0.024	0.005	bmdl	bmdl	bmdl	0.277	0.005	bmdl	0.020	0.003
SW-PR	3	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-PR	4	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.129	bmdl	bmdl	bmdl	bmdl	0.307	bmdl
SW-PR	5	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.019	bmdl	bmdl	0.021	bmdl	bmdl	4.360	bmdl	0.011
SW-Gulf Stream	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-Gulf Stream	2	bmdl	0.001	bmdl	bmdl	0.001	bmdl	0.002	bmdl	bmdl	bmdl	0.225	0.008	bmdl	bmdl	0.002
SW-Gulf Stream	3	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl
SW-Gulf Stream	4	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	0.105	bmdl	bmdl	bmdl	bmdl	bmdl	0.012
SW-Gulf Stream	5	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl	bmdl

[bmdl, below method detection limit; nd, no data]

Appendix A-2. Surface water hydrochemistry results, Cont.

Location ID	Sampling Round	U (ppb)	DOC (mg/L)	TOC (mg/L)	NO2- (mg/L)	NO3- (mg/L)	NH4+ (mg/L)	DIN (mg/L)	TSN (mg/L)	TN (mg/L)	SRP (mg/L)	TSP (mg/L)	TP (mg/L)	Soi. SiO2 (mg/L)	SO4 (mM)
SW-BPI	1	nd	nd	nd	0.012	0.075	0.108	0.195	0.842	0.873	0.000	0.000	0.003	5.590	2.0
SW-BPI	2	1.790	9.40	9.9	0.001	0.393	0.156	0.550	0.845	nd	0.001	0.004	nd	4.961	nd
SW-BPI	3	1.520	10.00	nd	0.023	0.283	0.243	0.549	0.760	nd	0.002	0.004	nd	5.932	nd
SW-BPI	4	1.930	5.40	nd	0.033	0.417	2.625	3.075	3.144	nd	0.005	0.005	nd	2.203	nd
SW-BPI	5	2.890	6.27	nd	0.001	0.002	0.029	0.032	0.567	nd	0.011	0.014	nd	0.951	nd
SW-BKP	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-BKP	2	2.190	6.90	7.4	0.002	0.450	0.101	0.553	0.303	nd	0.001	0.002	nd	3.144	nd
SW-BKP	3	2.010	7.30	nd	0.026	0.607	0.179	0.812	0.917	nd	0.007	0.007	nd	3.326	nd
SW-BKP	4	2.150	5.20	nd	0.026	0.570	0.089	0.685	0.965	nd	0.003	0.005	nd	1.155	nd
SW-BKP	5	3.400	3.83	nd	0.003	0.001	0.010	0.014	0.351	nd	0.010	0.012	nd	0.079	nd
SW-MB	1	nd	nd	nd	0.003	0.015	0.010	0.028	0.174	0.186	0.005	0.005	0.005	0.100	27.4
SW-MB	2	3.110	1.40	1.3	0.002	0.118	0.034	0.154	0.115	nd	0.004	0.006	nd	0.630	nd
SW-MB	3	3.310	2.40	nd	0.004	0.038	0.021	0.063	0.063	nd	0.001	0.018	nd	0.000	nd
SW-MB	4	2.590	2.40	nd	0.003	0.039	0.198	0.240	0.267	nd	0.071	0.071	nd	0.000	nd
SW-MB	5	3.750	1.67	nd	0.004	0.006	0.015	0.025	0.312	nd	0.011	0.013	nd	0.106	nd
SW-BYP	1	nd	nd	nd	0.003	0.017	0.015	0.035	0.156	0.176	0.003	0.005	0.006	0.080	28.9
SW-BYP	2	3.340	1.80	1.8	0.002	0.018	0.009	0.029	0.052	nd	0.005	0.007	nd	0.058	nd
SW-BYP	3	3.320	1.70	nd	0.004	0.035	0.016	0.055	0.055	nd	0.014	0.018	nd	0.000	nd
SW-BYP	4	2.720	1.90	nd	0.002	0.011	0.101	0.114	0.114	nd	0.053	0.053	nd	0.000	nd
SW-BYP	5	3.800	0.74	nd	0.004	0.001	0.000	0.005	0.370	nd	0.013	0.016	nd	0.000	nd
SW-PP	1	nd	nd	nd	0.002	0.000	0.005	0.007	0.083	0.176	0.006	0.006	0.020	0.020	29.6
SW-PP	2	3.540	1.50	1.7	0.002	0.000	0.002	0.004	0.004	nd	0.005	0.007	nd	0.142	nd
SW-PP	3	3.160	2.40	nd	0.002	0.003	0.010	0.015	0.015	nd	0.002	0.017	nd	0.000	nd
SW-PP	4	2.830	1.80	nd	0.002	0.003	0.007	0.012	0.076	nd	0.032	0.032	nd	0.000	nd
SW-PP	5	3.840	1.33	nd	0.004	0.000	0.000	0.004	0.198	nd	0.009	0.014	nd	0.001	nd
SW-AR	1	nd	nd	nd	0.002	0.000	0.002	0.004	0.016	0.026	0.004	0.005	0.006	0.030	29.5
SW-AR	2	4.150	1.00	0.9	0.002	0.000	0.002	0.004	0.003	nd	0.005	0.007	nd	0.056	nd
SW-AR	3	3.750	1.10	nd	0.002	0.002	0.004	0.008	0.008	nd	0.020	0.020	nd	0.000	nd
SW-AR	4	3.400	1.13	nd	0.002	0.002	0.001	0.005	0.005	nd	0.004	0.004	nd	0.000	nd
SW-AR	5	3.640	1.36	nd	0.003	0.001	0.000	0.004	0.004	nd	0.015	0.015	nd	0.019	nd
SW-PR	1	nd	nd	nd	0.002	0.000	0.002	0.004	0.010	0.007	0.006	0.005	0.005	0.000	30.1
SW-PR	2	4.200	0.90	1	0.003	0.000	0.000	0.003	0.003	nd	0.005	0.007	nd	0.078	nd
SW-PR	3	3.640	1.10	nd	0.002	0.003	0.011	0.016	0.016	nd	0.002	0.145	nd	0.000	nd
SW-PR	4	3.100	1.04	nd	0.002	0.001	0.000	0.003	0.003	nd	0.003	0.004	nd	0.000	nd
SW-PR	5	3.660	1.03	nd	0.004	0.000	0.001	0.005	0.087	nd	0.007	0.014	nd	0.017	nd
SW-Gulf Stream	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SW-Gulf Stream	2	4.160	nd	nd	0.003	0.000	0.000	0.003	nd	nd	0.005	0.007	nd	0.072	nd
SW-Gulf Stream	3	3.660	1.00	nd	0.002	0.005	0.001	0.008	0.008	nd	0.003	0.008	nd	0.000	nd
SW-Gulf Stream	4	3.360	1.04	nd	0.003	0.000	0.001	0.004	0.004	nd	0.007	0.008	nd	0.000	nd
SW-Gulf Stream	5	3.610	1.75	nd	0.003	0.000	0.018	0.021	0.217	nd	0.015	0.015	nd	0.052	nd

[µmol, below method detection limit; nd, no data]