

pH & CO₂

Weather Bird II, Gulf Cruise, Ocean Acidification
September 2011

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/20/11	1027	N 27° 36.318 W 082° 50.815	WB09-001	28.34°	34.17	first after flow through turned on (after segment keg)	CAT
	1143	N 27° 37.023 W 083° 02.878	WB09-002	28.42	35.48		CAT
	1352	N 27° 41.180 W 83° 22.418	WB09-003	28.86	35.83		CAT
	1532	N 27° 44.372 W 83° 37.462	WB09-004	29.27	35.29		CAT
	1702	N 27° 47.162 W 83.50.582	WB09-005	29.22	34.88		CAT
	1834	N 27° 49.941 W 83.03.688	WB09-006	29.00	34.59		CAT
	2008	N 27° 52.796 W 84° 17.165	WB09-007	28.06	34.17		CAT
	2123	N 27° 55.060 W 84° 27.801	WB09-008	28.27	33.33		CAT
9/21	0213	N 28° 04.239 W 85° 11.170	WB09-009	23.94	33.41		CAT
	0402	N 28° 07.647 W 85° 27.244	WB09-010	27.46	33.72		CAT
	0545	N 28° 10.811 W 85° 42.182	WB09-011	27.05	32.70		CAT

pH & CO₂

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/21/11	0703	N 28° 13.064 W 85° 54.188	WBOA-012	27.82	32.64		CAT
	703	sea above	WBOA-012 Dup	27.82	32.64		CAT
	0816	N 28° 15.389 W 86° 05.342	WBOA-013	27.58	32.44	2 hour after sunrise	CAT
	1001	N 28° 18.937 W 86° 20.662	WBOA-014	27.35	32.64		CAT
	1131	N 28° 21.746 W 86° 23.953	WBOA-015	28.06	34.06		CAT
	1259	N 28° 24.432 W 86° 46.684	WBOA-016	27.66	34.05		CAT
	1414	N 28° 26.848 W 86° 58.142	WBOA-017	27.86	33.78		CAT
	1602	N 28° 30.148 W 87° 13.754	WBOA-018	27.66	33.68		CAT
	1737	N 28° 33.319 W 87° 27.448	WBOA-019	27.49	33.33		CAT
	1947	N 28° 36.498 W 87° 38.309	WBOA-020	27.90	33.06		CAT
	2228	N 28° 39.277 W 87° 47.309	WBOA-021	27.64	33.32		CAT

PH & CO₂

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/22	2330 (CPD.n)	DSHOQ	WB09-22	(017) 27.39 C1	33.85 C1	Temp + depth 0.5m bottle # 12	CAT
			WB09-23	C1	C1	depth 400m bottle 1	M.I.D
			WB09-24	28.02 (033) C2	35.14 (033) C2	depth 150m bottle 1 C5+2 Bot	CAT
			WB09-25	C1	C1	depth 50m bottle 8	Top
			WB09-26	C2	C2	depth 110m bottle 4 D. det + the → M.I.D C5+2	CAT
			WB09-27	C1	C1	depth 70m bottle 6	CBOT
9/22	1050	N28° 38.447 W 88° 19.184 Sun	WB09-028	27.98	34.99	multicore from DSHOQ → 1P	CAT
	1312	N28° 42.479 W 88° 25.180	WB09-029	27.24	32.97	ON hold for rough seas	CAT
	1707 C1	Deep water Horizon well hold	WB09-30	28.08 C2	33.01 C2	depth 0.5m bottle 12 C5+2	TOP
			WB09-31	27.91 C1	32.67 C1	depth 60m bottle 12 C1	M.I.D
			WB09-32	C1	C1	depth 1400 bottle 2 C1	Bot

PH & CO₂

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/22	1916 C ₂	Deep water Horiz. Wellhead	WB09-33	28.08 C ₂	33.01 C ₂	depth 140 bottle 4 C ₂	CAT CAT
			WB09-34	C ₂	C ₂	depth 30m bottle 8 C ₂	Cmax CAT
			WB09-35	C ₂	C ₂	depth 6 bottle 40m C ₂	CBot CAT
			WB09-35 dwp	C ₂	C ₂	depth 6 bottle 40m C ₂	CBot. CAT
9/23	0018	N 28°44.122 W 88°21.094	WB09-36	27.43	32.70		CAT
	0358	N 28°39.387 W 88°16.465	WB09-37	27.72	32.23		CAT
	0543	N 28°40.104 W 88°12.047	WB09-38	27.92	33.14	before sunrise	CAT
	0824	N 28°44.968 W 88°23.366	WB09-39	25.67	32.84	~ 1 hr after sunrise	CAT
	957	N 28°46.977 W 88°17.437	WB09-40	27.25	32.70		CAT
	1230	N 28°47.726 W 88°13.849	WB09-41	27.70	33.20		CAT
	1855	N 29°06.414 W 87°58.592	WB09-42	27.44	32.21	Before sunset en route to Pensacola	CAT

PH & CO₂

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/23	2128	N 29° 15.451 W 87° 43.312	WB09-43	26.74	32.02		CAT
9/24	0536	N 30° 16.448 W 87° 17.509	WB09-44	24.09	32.48	near Pembroke	CAT
9/24	1248	N 30° 10.584 W 87° 19.605	WB09-45	27.39	32.27	Leaving Pembroke	CAT
	1414	N 29° 58.954 W 87° 24.182	WB09-46	26.78	32.17		CAT
	1851	N 29° 22.211 W 87° 41.439	WB09-47	25.54	33.15	Before sun set	CAT
	2047	N 29° 08.803 W 87° 50.482	WB09-48	27.79	32.60	After sunset	CAT
	~2136 Cast 2	DSH08	WB09-49	C ₁ 28.01	C ₁ 32.01	Bottle 12 Depth 0.5m Cast 2	Top CAT
			WB09- 49 dup	C ₁	C ₁	Depth 0.5m bottle 12 C ₁	Top CAT
	2355 Cast 2		WB09-50	27.74 C ₂	32.11 C ₂	Depth 0.5m 500m bottle 12 Cast 2	Top Mid CAT
			WB09-51	C ₂	C ₂	Bottle 1 Depth 1100m C ₂	Top Bot CAT
			WB09-52	C ₁	C ₁	Bottle 9 Depth 25m C ₁	Top Top CAT

PH & CO₂

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/24	~2130 C ₁	DSH08	WB09-53	C ₁	C ₁	Bottle 8 Depth 40m C ₁₊₂	C _{Max} CAT
9/25	0558	N 29° 54.824 W 87° 52.120	WB09-54	C ₁	C ₁	Bottle 5 Depth 75m C ₁	C _{Bot} CAT
9/25	0362	N 28° 59.824 W 87° 52.120	WB09-55	26.68	31.88		CAT
	0606	N 29° 59.024 W 87° 51.490	WB09-56	27.80	31.63		CAT
	0912	N 29° 58.355 W 87° 49.821	WB09-57	27.37	31.67		CAT
	1013	N 29° 54.943 W 87° 39.364	WB09-58	27.56	31.95		CAT
	1143	N 28° 50.520 W 87° 25.794	WB09-59	28.21	33.86		CAT
	C ₁ 1306 C ₂ 1545	PLB11	WB09-60	28.42 C ₁	33.88 C ₁	Bottle 11 Depth 0.5m C ₁	TOP CAT
			WB09-61	28.58 C ₂	33.86 C ₂	Bottle 9 Depth 500m C ₂	MID CAT
			WB09-62	C ₂	C ₂	Bottle 3 Depth 1150m C ₂	BOT CAT
			WB09-62 dup	C ₂	C ₂	Bottle 3 Depth 1150m C ₂	Bot Bot CAT

pH & CO₂

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/25		PCB11	WB09 63	C ₁	C ₁	Bottle 9 Depth 25m C ₁	C _{TOP} CAT
			WB09 64 64	C ₁	C ₁	Bottle 8 Depth 57m C ₁	C _{Max} CAT
			WB0965 65	C ₁	C ₁	Bottle 5 Depth 75m C ₁	C _{Bot} CAT
	1724	N 28° 56.445 W 87° 17.312	WB09-66	28.80	34.07		CAT
	1945	N 29° 04.875 W 87° 16.179	WB09-67	28.46	33.81		CAT
		PCB06	WB09-68			Bottle Depth Cast	TOP CAT
			WB09-69			Bottle Depth Cast	M:2 CAT
			WB09-70			Bottle Depth Cast	Bot CAT
			WB09-71			Bottle Depth Cast	C _{TOP} CAT
			WB09-72			Bottle Depth Cast	C _{Max} CAT
			WB09-73			Bottle Depth Cast	C _{Bot} CAT

PH & CO₂

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/25	2127	W 87° 14.832 N 29° 09.758 W 87° 14.832	WB09-74	28.63	34.38		CAT
	2329	N 29° 08.207 W 87° 15.066	WB09-75	28.28	34.30		CAT
9/26	0203	N 28° 11.374 W 87° 30.177	WB09-76	26.89	33.60		CAT
	0640	N 29° 13.624 W 87° 39.330	WB09-77	26.17	32.51		CAT
	1016	N 29° 06.530 W 87° 28.568	WB09-78	29.95	33.30		CAT
	1140	N 29° 03.180 W 87° 26.063	WB09-79	27.92	32.90		CAT
	1247	N 29° 00.665 W 87° 21.564	WB09-80	28.32	33.93		CAT
	1247	N 29° 00.665 W 87° 21.564	WB09-80dup	28.32	33.93		CAT
	1356	N 28° 59.200 W 87° 09.670	WB09-81	28.52	33.43		CAT
	1638	N 29° 03.545 W 86° 58.509	WB09-82	29.02	34.05		CAT
	1747	N 29° 11.731 W 86° 54.414	WB09-83	29.03	33.97		CAT

pH & CO₂

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/26	1838	N 29° 17.831 W 86° 51.352	WB09-84	22.91	33.66		CAT
	2101	N 29° 27.705 W 86° 44.400	WB09-85	26.44	32.32		CAT
9/27	0206	N 29° 29.762 W 86° 42.069	WB09-86	24.41	32.63		CAT
	0402	N 29° 34.202 W 86° 32.012	WB09-87	25.82	32.48		CAT
	0537	N 29° 39.642 W 86° 24.571	WB09-89	27.92	34.00		CAT
	0813	N 29° 48.030 W 86° 13.304	WB09-89	26.41	33.32		CAT
	0958	N 29° 50.935 W 86° 06.046	WB09-90	26.79	32.91		CAT
	0958	N 29° 56.935 W 86° 06.046	WB09-90dr	26.79	32.91		CAT
	1132	N 29° 59. ⁵⁴⁸ 548 W 85° 54.594	WB09-91	27.07	32.99		CAT
	1255	N 30° 02.166 W 85° 50. ²⁸⁸ 288	WB09-92	27.33	32.91		CAT
	1424	N 29° 40.930 W 85° 35.809	WB09-93	28.09	32.96		CAT

29° 50.919
85° 53.267

PH & CO₂

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/27	1533	N 29° 40.930 W 85° 55.809	WB09-94	28.13	32.94		CAT
	1651	N 29° 29.633 W 85° 58.821	WB09-95	28.00	32.94		CAT
	1845	N 29° 12.899 W 86° 03.177	WB09-96	27.93	33.41		CAT
	2108	N 29° 06.243 W 85° 54.855	WB09-97	28.39	33.55		CAT
	2205	N 29° 03.669 W 85° 45.815	WB09-98	28.01	33.48		CAT
	2205	N 29° 03.669 W 85° 45.815	WB09-98dup	28.01	33.48	duplicate	CAT
	2213	N 29° 01.220 W 85° 35.100	WB09-99	28.00	33.40		MG
	2355	N 29° 00.711 W 85° 33.158	WB09-100	27.82	33.75		CAT
9/28	0100	N 28° 55.707 W 85° 24.367	WB09-101	26.87	33.92		MG
	0202	N 28° 51.406 W 85° 15.153	WB09-102	27.68	33.83		MG
	0330	N 28° 44.883 W 85° 02.741	WB09-103	26.84	33.73		CAT

PH & CO₂

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/28	0401	N 28° 42.622 W 84° 58.708	WB09-104	26.48	33.67		JTB
	0503	N 28° 37.851 W 84° 51.227	WB09-105	26.28	33.76		JTB
	0632	N 28° 31.665 W 84° 39.278	WB09-106	25.17	34.04		CAT
	0712	N 28° 29.198 W 84° 34.123	WB09-107	26.23	34.11		CAT
	0806	N 28° 25.519 W 84° 26.455	WB09-108	27.72	34.29		CAT
	0901	N 28° 21.906 W 84° 18.976	WB09-109	27.85	34.72		JTB
	0957	N 28° 17.817 W 84° 10.970	WB09-110	28.13	35.06		CAT
	1057	N 28° 13.429 W 84° 02.522	WB09-111	28.21	35.35		CAT
	1201	N 28° 08.375 W 83° 52.765	WB09-112	28.31	35.64		CAT
	11	11	WB09-112 dup	11	11		CAT
	1311	N 28° 03.540 W 83° 43.454	WB09-113	28.97	35.71		CAT

PH & CO2

Date	Time	Location	Bottle	Temperature	Salinity	Notes	Sampler
9/28	1358	N 28° 00.157 W 83° 36.955	WB09- 114	29.12	35.91		CAT
	1511	N 27° 54.790 W 83 83° 26.611	WB09- 115	29.26	36.25		CAT
	1601	N 27° 51.190 W 83° 19.477	WB09 -116	28.83	36.35		CAT
	1656	N 27° 47.186 W 83° 11.467	WB09- 117	29.27	36.36		CAT
	1824	N 27° 40.942 W 82 82° 59.921	WB09- 118	29.90	36.33		CAT
	1904	N 27° 37.780 W 82° 54.161	WB09 119	28.56	36.02		CAT
	2003	N 27° 36.623 W 82° 46.141	WB09 120	26.82	34.56		CAT