

Cave water and coastal groundwaters, springs, and seawater samples from Barbados in June and November of 1989

Field and analytical procedures are those listed for analyses in the Yucatan papers of the 1980s and 1990s

Approximate longitude and latitude given below table

June 24-27 1989	Temp	pH	Na	K	Mg	Ca	Sr	Fe	Mn	SiO ₂	Cl	NO ₃	PO ₄	SO ₄	Alk as	chg bal	tds	
	°C	units	mmolal													HCO ₃ /l	meq/	ppm
	+_0.5	+ -0.05	+ -2%	+ -3%	+ -2%	+ -2%	+ -5%	+ -10%	+ -10%	+ -2%	+ -5%	+ -8%	+ -2%	+ -8%	+ -0.03	kg H ₂ O		
Bottom Bay Borehole depth ft +-0.5 below surface																		
45.5	32.0	7.50	5.40	0.236	0.721	1.34	0.014	0.0056	0.0005	0.376	4.74	0.282	0.0031	0.615	3.25	+0.29	670	
50.5	31.0	7.73	5.31	0.224	0.745	1.46	0.014	0.0054	0.0005	0.375	4.69	0.282	0.0019	0.620	3.52	+0.25	690	
55.5	29.5	7.60	4.96	0.207	0.753	1.51	0.013	0.0039	<0.0002	0.378	4.41	0.305	0.0026	0.616	3.61	+0.16	680	
60.5	28.5	7.65	5.31	0.207	0.807	1.64	0.014	0.0070	0.0002	0.380	4.69	0.373	0.0030	0.643	3.73	+0.36	720	
70.5	32.0	7.50	57.2	1.29	6.90	2.53	0.023	0.0018	0.0004	0.308	63.6	0.215	0.0013	3.82	3.69	+2.26	4490	
100.5	30.0	7.45	257.9	5.58	29.1	6.54	0.062	0.0018	0.0009	0.175	304.8	0.0574	0.0019	16.3	3.11	-5.70	19,310	
surf. seawater	29.3	8.00	471.4	10.06	53.2	10.02	0.079	0.0028	0.0004	0.0026	547.7	b.d.	b.d.	29.3	2.30	-0.56	34,100	
Deebles Point spring	31.0	7.40	4.34	0.162	0.741	2.31	0.011	0.0048	<0.0002	0.350	4.23	0.268	0.0031	0.624	4.33	+0.55	730	
surf. seawater	29.0	8.00	471.1	10.06	53.3	10.05	0.079	0.0028	0.0004	0.0015	547.7	b.d.	b.d.	28.9	2.30	+0.30	34,060	

Three Houses spring	27.0	7.10	1.94	0.0527	0.428	2.18	0.011	0.0045	<0.0002	0.241	1.75	0.534	b.d.	0.256	4.15	+0.29	530
Bath spring	27.0	7.50	2.80	0.116	0.343	1.92	0.0071	0.0028	0.0004	0.226	2.78	0.875	0.0011	0.331	3.15	+0.30	540
Harrison Cave underground lake	28.0	8.10	1.40	0.0785	0.164	1.68	0.0026	0.0048	<0.0002	0.166	1.16	0.542	b.d.	0.320	2.42	+0.41	370
June 24-27 1989	Temp °C +_0.5	pH units +-0.05	Na +-2%	K +-3%	Mg +-2%	Ca +-2%	Sr +-5%	Fe +-10%	Mn +-10%	SiO ₂ +-2%	Cl +-5%	NO ₃ +-8%	PO ₄ +-2%	SO ₄ +-8%	Alk as HCO ₃ /l +-0.03	chg bal meq/kg H ₂ O	tds ppm
Bottom Bay Borehole depth ft +-0.5 below surface																	
45.5	27.3	7.63	2.72	0.164	0.486	1.23	0.0083	0.0043	n.m.	0.285	2.53	0.119	0.0037	0.208	2.94	+0.33	444
70.5	27.2	7.40	3.29	0.198	0.519	1.25	0.0089	0.0022	n.m.	0.331	3.13	0.169	0.0050	0.250	3.37	-0.14	519
87	27.2	7.50	5.14	0.361	0.856	1.72	0.014	0.0050	n.m.	0.336	5.87	0.169	0.0040	0.490	3.73	-0.07	738
100.5	27.2	7.40	50.3	2.03	6.61	2.88	0.032	0.0144	n.m.	0.331	61.5	0.191	0.0051	3.26	3.13	+0.06	4,214

121	27.2	7.40	163.3	3.60	19.9	5.33	0.046	0.00036	n.m.	0.246	197.7	0.090	0.0031	10.1	2.94	-3.50	12,615
137	27.2	7.45	198.0	4.62	23.85	5.83	0.048	0.0029	n.m.	0.213	239.4	0.124	0.0014	11.9	2.92	-4.21	15,150
Deebles Point spring	32.5	7.60	4.70	0.199	0.832	2.25	0.011	0.0054	n.m.	0.358	5.31	0.316	0.0014	0.646	4.25	+0.01	780
surf. seawater	32.6	8.13	478.0	11.0	55.0	10.65	0.083	0.0024	n.m.	0.0024	570.6	b.d.	b.d.	29.0	2.44	-10.70	35,079
Three Houses spring	31.5	7.02	1.35	0.0752	0.355	1.97	0.0086	0.0054	n.m.	0.261	1.45	0.410	0.0015	0.219	3.83	-0.03	470
Bath spring	26.6	7.20	2.47	0.139	0.348	1.97	0.0073	0.0038	n.m.	0.238	2.69	0.913	b.d.	0.292	3.38	-0.30	551
Home Ag. Station well	27.3	7.42	3.58	0.168	0.741	1.70	0.0073	0.0054	n.m.	0.166	3.87	0.331	b.d.	0.417	3.39	+0.23	590
Harrison Cave underground lake	n.m.	8.12	0.871	0.0893	0.160	1.82	0.0031	0.0047	n.m.	0.191	0.880	0.465	b.d.	0.240	3.08	+0.03	383

Sample Bottom Bay Deebles Pt.	Approx. Latitude & Longitude N13°08'12" & W59°25'31" N13°09'46" & W59°25'43"	Sample Three Houses Bath	Approx. Latitude & Longitude N13°09'28" & W59°27'22" N13°11'12" & W59°28'37"	Samples Home Ag. Station Harrison Cave	Approx. Latitude & Longitude N13°06'36" & W59°27'18" N13°10'57" & W59°33'56"
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