

Supplemental Table 1. Core name, research vessel, location, water depth, and carbonate content of core-tops and sediment grabs.

Core Name	Research Vessel	Latitude	Longitude	Water Depth (m)	Carbonate (%)
FR 5/90-PC3	Franklin	-16.717	145.888	36	49.96
FR 5/90-PC4	Franklin	-16.730	145.890	35	45.58
FR 5/90-PC6	Franklin	-16.730	145.900	36	40.98
FR 5/90-PC7	Franklin	-16.350	146.110	706	62.20
FR 5/90-PC8	Franklin	-16.310	146.150	1093	61.72
FR 5/90-PC10a	Franklin	-16.258	146.250	1489	NA
FR 5/90-PC13	Franklin	-16.130	146.320	1701	NA
FR 5/90-PC15	Franklin	-15.068	146.283	1875	64.40
FR 5/90-PC16a	Franklin	-14.923	146.163	2490	68.00
FR 5/90-PC17	Franklin	-15.045	146.155	2369	61.14
FR 5/90-PC20	Franklin	-15.052	145.870	2110	74.82
FR 5/90-PC21	Franklin	-15.022	145.830	1982	62.93
FR 5/90-PC22	Franklin	-15.038	145.943	1907	76.20
FR 5/90-PC23	Franklin	-15.060	145.830	1670	57.45
FR 5/90-PC24a	Franklin	-15.143	145.847	1450	NA
FR 5/90-PC26	Franklin	-15.267	145.960	2210	55.83
FR 5/90-PC27a	Franklin	-15.290	145.950	2163	50.74
FR 5/90-PC28	Franklin	-15.727	146.027	1850	57.53
FR 5/90-PC29	Franklin	-15.710	145.990	1834	54.01
FR 5/90-PC30	Franklin	-16.180	146.550	1798	65.56
FR 4/92-SC3	Franklin	-18.022	146.249	23	32.30
FR 4/92-SC5	Franklin	-17.762	146.222	25	48.59
FR 4/92-SC7	Franklin	-17.511	146.181	25	35.90
FR 4/92-SC9	Franklin	-17.233	146.117	27	29.36
FR 4/92-SC11	Franklin	-17.034	146.020	25	40.92
FR 4/92-SC12	Franklin	-16.930	145.966	33	38.27
FR 4/92-SC13	Franklin	-16.752	146.146	56	62.19
FR 4/92-SC14	Franklin	-17.024	146.096	36	38.26
FR 4/92-SC16	Franklin	-17.241	146.250	40	66.65
FR 4/92-SC18	Franklin	-17.477	146.329	40	59.43
FR 4/92-SC20	Franklin	-17.745	146.342	40	53.13
FR 4/92-SC22	Franklin	-17.946	146.480	38	70.17
FR 4/92-SC24	Franklin	-18.150	146.475	38	NA
FR 4/92-SC27	Franklin	-18.457	146.632	41	39.57
FR 4/92-SC28	Franklin	-18.554	146.745	43	69.60
FR 4/92-SC29	Franklin	-18.647	146.865	42	79.89
FR 4/92-SC30	Franklin	-18.741	146.985	39	68.43
FR 4/92-SC33	Franklin	-18.214	146.083	84	82.07
FR 4/92-PC1c	Franklin	-18.160	147.120	143	77.70
FR 4/92-PC2	Franklin	-18.097	147.217	332	81.23
FR 4/92-PC3	Franklin	-18.020	147.330	870	77.66
FR 4/92-PC4	Franklin	-17.860	147.580	1225	79.77
FR 4/92-PC5	Franklin	-17.700	147.830	1193	83.37
FR 4/92-PC6	Franklin	-17.530	148.080	1193	85.90
FR 4/92-PC7	Franklin	-16.110	147.020	1488	75.54
FR 4/92-PC8	Franklin	-16.548	146.982	1712	65.43
FR 4/92-PC9	Franklin	-16.800	147.180	1616	67.07
FR 4/92-PC10	Franklin	-17.110	147.390	1334	78.49
FR 4/92-PC11	Franklin	-17.570	147.350	1320	79.12
FR 4/92-PC12	Franklin	-17.270	147.140	1443	70.65

FR 4/92-PC13	Franklin	-16.950	146.920	1507	69.83
FR 4/92-PC14	Franklin	-16.720	146.730	1574	68.29
FR 4/92-PC15	Franklin	-16.440	146.890	1626	63.81
FR 4/92-PC16	Franklin	-17.430	146.890	1043	74.10
FR 4/92-PC22a	Franklin	-17.170	146.620	167	80.80
FR 4/92-PC23	Franklin	-17.540	146.760	225	78.92
FR 4/92-PC24a	Franklin	-17.860	146.890	225	83.18
FR 4/92-PC25	Franklin	-17.728	147.105	984	72.83
FR 4/92-PC30	Franklin	-16.280	146.760	1797	60.46
FR 4/92-PC31	Franklin	-17.410	147.610	1308	81.22
FR 4/92-PC32	Franklin	-17.990	148.040	1134	87.41
FR 4/92-PC33	Franklin	-18.150	147.800	1066	77.33
FR 4/92-PC34	Franklin	-16.160	146.330	1667	64.06
FR 4/92-PC35	Franklin	-16.020	146.550	1857	60.95
FR 4/92-PC36	Franklin	-15.820	146.820	1824	71.77
FR 4/92-PC37	Franklin	-15.660	147.070	1458	83.83
FR 4/92-PC38	Franklin	-15.930	147.280	1340	84.49
FR 4/92-PC39	Franklin	-16.380	147.220	1334	81.14
FR 4/92-PC40	Franklin	-16.210	147.480	1168	86.29
FR 4/92-PC41	Franklin	-16.490	147.700	1218	93.77
FR 4/92-PC42	Franklin	-16.650	147.430	1389	79.88
FR 4/92-PC44	Franklin	-17.240	147.830	79	95.77
1158 K1482	Lady Basten	-17.559	147.065	400	77.19
1158 G1479	Lady Basten	-18.113	147.127	200	86.54
1158 K1481	Lady Basten	-18.090	147.255	400	73.62
1158 K1483	Lady Basten	-17.985	147.120	350	78.77
1158 K1484	Lady Basten	-18.007	147.365	1000	77.00
51 GC-17	Rig Seismic	-15.630	146.200	2085	62.01
51 GC-18	Rig Seismic	-15.620	146.420	2055	62.67
51 GC-19	Rig Seismic	-15.600	146.670	1871	69.35
53 GC-02	Rig Seismic	-15.770	146.370	1995	81.73
75 GC-18	Rig Seismic	-16.600	146.780	1652	65.85
75 GC-19	Rig Seismic	-16.430	147.770	1000	99.20
708 G1291	Harry Messel	-18.255	146.890	35	92.11
708 G1292	Harry Messel	-18.268	147.375	35	92.13
708 G1294	Harry Messel	-18.323	147.298	68	91.10
2393 G5	Lady Basten	-18.212	147.597	880	80.75
2393 G6	Lady Basten	-18.117	147.742	1200	78.67
2393 G7	Lady Basten	-18.033	147.878	1280	85.65
2393 G8	Lady Basten	-17.948	148.020	1200	87.22
2393 G9	Lady Basten	-17.873	148.272	1165	89.12
VM24-157	Vema	-14.590	147.920	1212	94.83
VM24-158	Vema	-15.920	146.850	1754	75.49
VM24-159	Vema	-16.550	146.400	1403	71.07
VM24-160	Vema	-18.120	147.600	1007	80.08
VM24-167	Vema	-15.280	148.050	1143	95.04
VM24-168	Vema	-16.330	146.870	1785	75.18
VM24-179	Vema	-15.820	148.780	1053	99.15
VM24-180	Vema	-17.650	149.650	417	99.86
VM24-181	Vema	-18.500	149.000	1090	96.86
VM24-182	Vema	-17.520	147.500	1369	71.44
VM24-183	Vema	-15.330	146.250	2215	70.32

ODP 815A	JOIDES Resolution	-19.150	149.990	466	95.63
ODP 816A	JOIDES Resolution	-19.200	150.010	438	98.02
ODP 820A	JOIDES Resolution	-16.640	146.300	278	74.53
ODP 821A	JOIDES Resolution	-16.650	146.290	213	77.75
ODP 822A	JOIDES Resolution	-16.420	146.220	955	66.28
ODP 823A	JOIDES Resolution	-16.620	146.780	1638	67.19
ODP 824B	JOIDES Resolution	-16.450	147.760	1002	94.70
51 GC-41	Rig Seismic	-18.167	147.450	690	83.90
51 GC-43	Rig Seismic	-18.117	147.467	896	76.13
76 GC-01	Rig Seismic	-18.750	150.000	942	90.93
GBR 83 VC-35	Febrina	-15.368	145.740	38	79.54
GBR 83 VC-46	Febrina	-15.238	145.622	44	51.21
KG 857 VC-30	James Kirby	-17.277	146.476	62	NA
KG 857 VC-31	James Kirby	-17.274	146.482	53	85.52
KG 857 VC-36	James Kirby	-17.274	146.587	69	86.59
KG 857 VC-40	James Kirby	-17.239	146.553	70	76.28
KG 862 VC-2	James Kirby	-17.093	146.328	44	NA
KG 862 VC-3	James Kirby	-17.083	146.321	44	69.98
KG 862 VC-4	James Kirby	-17.077	146.306	46	64.47
KG 868 VC-5	James Kirby	-17.048	146.292	49	59.02
KG 868 VC-6	James Kirby	-17.063	146.318	43	68.98
KG 868 VC-15	James Kirby	-17.123	146.395	49	73.24
KG 868 VC-29	James Kirby	-17.219	146.411	46	78.43
KG 871 VC-1b	James Kirby	-17.273	146.564	70	79.57

PC - piston core, SC - short core, K - kasten core, G - grab, GC - gravity core, VC - vibra-core