

52. CARBON AND CARBONATE ANALYSES, LEG 34

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Leg 34 sediments were analyzed for total carbon and acid-insoluble (organic) carbon using a LECO 70-second analyzer. Detailed descriptions of the technique and theory may be found in Baker, Gerard, et al. (1970) and Boyce and Bode (1972). For control purposes a standard sediment was made up from Deep Sea Drilling material and analyzed for total carbon at predetermined intervals with regular samples. Listed below is the statistical data for this standard.

DSDP Standard	No. of Samples	Total Carbon as % of CaCO ₃	Standard Deviation	Maximum Range
2	7	80.3	0.3%	0.6%

Although the number of standards run was small, the results compare very favorably with those run during analyses of samples from previous legs (see Bode, 1974).

Carbon and carbonate data presented in Table 1 are given in weight percent.

REFERENCES

- Bader, R.G., Gerard, R.D., et al., 1970. Initial Reports of the Deep Sea Drilling Project, Volume 4: Washington (U.S. Government Printing Office).
- Bode, G.W., 1974. Carbon and carbonate analyses, Leg 27, Deep Sea Drilling Project. *In* Veevers, J., Heirtzler, J.R., et al., Initial Reports of the Deep Sea Drilling Project, Volume 27: Washington (U.S. Government Printing Office), p. 499.
- Boyce, R.E. and Bode, G.W., 1972. Carbon and carbonate analyses, Leg 9, Deep Sea Drilling Project. *In* Hayes, J.D., et al., Initial Reports of the Deep Sea Drilling Project, Volume 9: Washington (U.S. Government Printing Office), p. 747.

TABLE 1
Carbon and Carbonate Analyses, Leg 34

Sample (Interval in cm)	Subbottom Depth (m)	Total Carbon (%)	Organic Carbon	CaCO ₃
Hole 319				
1-2, 20	2.0	0.2	0.1	0
1-2, 40	2.2	0.1	0.2	0
1-3, 30	3.6	0.1	0.2	0
1-4, 87	5.6	4.6	0.1	37
1-5, 20	6.5	6.7	0.1	55
1-6, 60	8.4	0.4	0.2	2
2-1, 148	11.0	7.3	0.1	60
2-2, 12	11.1	7.9	0.1	65
2-3, 10	12.6	7.7	0.1	63
2-4, 19	14.2	7.0	0.1	58
3-2, 10	20.6	8.0	0.1	66
3-3, 45	22.5	9.8	0.1	81
4-1, 39	29.1	9.7	0.1	80
4-2, 9	30.3	9.7	0.1	80
4-3, 6	31.8	10.3	0.1	85

TABLE 1 - Continued

Sample (Interval in cm)	Subbottom Depth (m)	Total Carbon (%)	Organic Carbon	CaCO ₃
4-4, 10	33.3	10.0	0.1	83
4-5, 15	34.9	10.8	0.1	89
4-6, 20	36.4	11.2	0.1	93
5-2, 80	40.3	11.5	0.0	95
5-3, 20	41.2	11.4	0.0	95
5-4, 20	42.7	11.5	0.1	95
5-5, 20	44.2	11.5	0.1	95
5-6, 20	45.7	11.5	0.1	95
6-1, 123	48.7	11.5	0.1	95
6-3, 119	51.7	11.5	0.0	96
6-4, 17	52.2	11.5	0.0	95
6-5, 131	54.8	11.3	0.0	94
6-6, 143	56.4	11.5	0.0	95
7-1, 91	58.1	11.2	0.1	93
7-2, 21	58.9	11.5	0.0	95
7-3, 31	60.5	11.5	0.1	95
7-4, 45	62.2	11.4	0.0	94
7-5, 137	64.6	11.4	0.0	95
7-6, 30	65.0	11.3	0.1	94
8-1, 85	67.4	11.3	0.1	93
8-2, 68	68.7	11.0	0.1	91
8-4, 125	72.3	11.3	0.1	93
8-5, 100	73.5	11.0	0.1	92
8-6, 67	74.7	11.5	0.1	95
9-1, 110	77.1	11.0	0.1	91
9-2, 130	78.8	9.2	0.1	76
9-3, 103	80.0	10.3	0.1	86
10-1, 127	86.8	10.8	0.1	89
10-2, 63	87.6	10.9	0.1	90
10-3, 40	88.9	11.2	0.1	93
10-4, 112	91.1	11.1	0.1	92
10-5, 108	92.6	10.7	0.1	89
11-1, 50	95.7	11.0	0.0	91
11-2, 71	97.4	9.9	0.0	82
11-3, 100	99.2	9.3	0.1	77
11-4, 90	100.6	10.4	0.0	86
11-5, 63	101.8	10.4	0.1	86
11-6, 90	103.6	10.8	0.0	90
12-1, 142	105.9	10.9	0.1	90
12-2, 85	106.9	11.0	0.1	91
12-3, 87	108.4	11.3	0.1	93
Hole 320				
1-1, 50	6.8	1.1	1.1	0
1-2, 11	7.9	1.8	1.4	3
1-3, 7	9.4	1.2	1.2	1
1-4, 39	11.2	0.5	0.5	0
1-5, 120	13.5	1.4	1.3	1
1-6, 51	14.3	1.4	1.2	2
2-1, 106	74.6	7.7	0.1	63
2-2, 140	76.4	7.3	0.1	60
3-1, 84	103.3	11.1	0.1	92
3-2, 81	104.8	11.0	0.1	91
3-3, 81	106.3	11.0	0.1	91
3-4, 57	107.6	11.1	0.1	92
3-5, 106	109.6	11.0	0.1	91
3-6, 52	110.5	10.7	0.1	89

TABLE 1 - Continued

Sample (Interval in cm)	Subbottom Depth (m)	Total Carbon (%)	Organic Carbon	CaCO ₃
Hole 320A				
1-1, 130	1.3	1.5	1.2	2
1-3, 67	3.7	1.3	1.1	2
Hole 320B				
1-1, 18	136.5	10.5	0.1	87
1-2, 42	138.2	10.8	0.1	90
1-3, 84	140.1	11.0	0.0	91
1-4, 21	141.0	10.9	0.1	90
1-5, 99	143.3	10.7	0.1	88
1-6, 121	145.0	10.5	0.1	87
2-1, 140	146.9	10.5	0.1	87
2-2, 77	147.8	10.4	0.1	87
2-3, 4	148.5	10.5	0.1	87
2-4, 120	151.2	10.6	0.1	88
2-5, 47	152.0	10.7	0.1	89
Hole 321				
1-1, 50	0.5	0.5	0.4	1
2-1, 39	1.9	0.6	0.3	2
2-2, 10	3.1	0.3	0.3	0
2-3, 9	4.6	0.4	0.3	0
2-4, 17	6.2	0.3	0.2	0
3-1, 90	11.9	0.4	0.4	1
3-2, 10	12.6	0.4	0.4	0
3-3, 14	14.1	0.3	0.3	0
3-4, 10	15.6	0.7	0.6	1
3-5, 10	17.1	0.4	0.4	0
3-6, 18	18.7	0.5	0.4	0
4-2, 30	22.3	0.4	0.3	0
4-3, 6	23.6	0.3	0.3	0
4-4, 9	25.1	0.4	0.3	0
5-2, 20	31.7	0.3	0.3	0
5-3, 10	33.1	0.2	0.2	0

TABLE 1 - Continued

Sample (Interval in cm)	Subbottom Depth (m)	Total Carbon (%)	Organic Carbon	CaCO ₃
5-4, 4	34.5	0.3	0.3	0
5-5, 9	36.1	0.2	0.2	0
5-6, 10	37.6	0.2	0.2	0
6-2, 142	42.4	0.3	0.2	1
6-3, 4	42.5	0.4	0.2	2
6-4, 7	44.1	0.2	0.2	0
6-5, 6	45.6	0.3	0.2	1
6-6, 9	47.1	0.2	0.2	0
7-2, 35	50.9	0.1	0.1	0
7-1, 7	52.1	0.1	0.1	0
7-4, 8	53.6	0.2	0.1	0
7-5, 2	55.0	0.2	0.1	0
7-6, 6	56.6	0.2	0.1	0
7-6, 147	58.0	10.7	0.0	89
8-1, 30	58.8	11.4	0.0	95
8-2, 14	60.1	11.4	0.1	95
8-3, 12	61.6	11.4	0.0	94
8-4, 33	63.3	11.4	0.0	95
8-5, 135	65.9	11.2	0.0	93
8-6, 15	66.2	11.4	0.0	95
9-1, 98	69.2	6.8	0.1	56
9-2, 112	70.8	9.2	0.1	76
9-3, 65	71.9	9.9	0.1	82
9-4, 66	73.4	9.0	0.1	74
9-5, 4	74.2	9.5	0.1	78
9-6, 49	76.2	6.4	0.1	52
10-1, 100	78.5	10.8	0.1	90
10-2, 10	79.1	11.0	0.1	91
10-3, 10	80.6	11.1	0.1	92
11-1, 48	87.5	11.2	0.1	93
11-2, 10	88.6	11.2	0.1	93
11-3, 10	90.1	11.1	0.1	92
11-4, 7	91.6	11.0	0.1	91
13-1, 88	116.4	10.4	0.1	86
13-2, 14	117.1	10.1	0.1	84
13-3, 10	118.6	9.8	0.1	81