

APPENDIX II. CARBON/CARBONATE AND NITROGEN ANALYSES, LEG 64, GULF OF CALIFORNIA¹

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We analyzed Leg 64 sediments for total carbon and acid-insoluble (organic) carbon using a LECO WR-12 Analyzer. We first dried the 3–5 cm³ sediment samples at 105°–110°C (some shallow sediments used for the C-H-N analyses were dried at 45–55°C) and then ground them to a homogeneous powder. The ground sediment was redried and two samples (0.1 g and 0.5 g) were then weighed in LECO clay crucibles. The 0.5-g sample was acidified with a 10% hydrochloric acid solution and then washed with distilled water. We then dried and analyzed the sample for acid-insoluble carbon, listed in Table 1 as “organic” carbon. The 0.1-g sample was analyzed for total carbon without further treatment. If the result showed less than 10% CaCO₃, we analyzed an additional 0.5-g sample for greater accuracy.

We calculated the calcium carbonate percentages as follows: (% total C – % organic C) × 8.33 = % CaCO₃. Although other carbonates may be present, all acid-soluble carbon was calculated as calcium carbonate. All results are given in weight percentage (Table 1).

The calcium carbonate values listed in parentheses in Table 1 were determined on shipboard by the carbonate bomb method. Detailed descriptions of these techniques and theory may be found in Bader et al. (1970) and Boyce and Bode (1972).

For all samples analyzed onboard by the C-H-N method, the nitrogen content was also calculated from the data (Table 1). We computed the atomic C/N ratio using the organic carbon and nitrogen values (Table 1). This ratio was useful in assessing the thermal maturity of the sedimentary organic matter.

At various intervals during the cruise and on shore, we analyzed standard sediments for calibration. The precision of the method for carbon and nitrogen was the same as we reported for carbon (Boyce and Bode, 1972).

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Boyce, R. E., and Bode, G. W., 1972. Carbon and carbonate analyses, Leg 9, Deep Sea Drilling Project. In Hays, J. D., et al., *Init. Repts. DSDP, 9*: Washington (U.S. Govt. Printing Office), 797–816.

Table 1. Carbon and nitrogen analyses of samples from Leg 64.

Sample (interval in cm)	Sub-bottom Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃ ^a (%)	Organic Nitrogen (%)	Atomic C/N
474-1-2, 39	1.89	3.4	2.6	6		
2-2, 5	3.55	3.5	2.2	11		
3-2, 48	13.48	5.0	2.5	21		
4-2, 79	23.29	5.9	3.1	23		
5-1, 55	31.05			(7)		
5-3, 46	33.96	4.2	2.6	13		
5-3, 105	44.05	4.7	2.8	(16)	0.22	15
6-4, 41	44.91			(17)		
6-4, 68	45.18	3.9	1.1	24		
6-5, 32	46.32	1.5	1.1	(3)	0.11	12
6-6, 50	48.00			(38)		
7-3, 51	53.01			(20)		
7-5, 109	56.59	3.2	0.3	25		
8-2, 49	60.99	2.6	0.6	17		
8-5, 38	65.38			(9)		
11-2, 12	89.12	3.6	2.8	6		
12-1, 38	97.38	4.4	2.5	15		
13-1, 47	106.97	3.0	2.0	8		
13-1, 104	107.54			(17)		
14-2, 45	117.95	2.7	2.5	2		
14-2, 56	118.06			(1)		
16-3, 0	138.00	5.0	2.8	18		
16-3, 8	138.08	1.4	0.8	5		
17-1, 7	144.57	3.7	1.4	19		
17-1, 75	145.25			(22)		
17-5, 49	150.99			(21)		
17-6, 93	152.93	2.5	1.6	(7)	0.15	12
18-3, 36	157.36	4.0	1.4	22		
19-2, 89	165.89	3.3	2.1	10		
474A-1-4, 7	168.07	2.4	1.7	6		
1-4, 78	168.78			(4)		
1-4, 84	168.84	2.0	1.6	3		
1-4, 99	168.99	1.7	0.1	13 (9)		
2-1, 111	174.11	1.3	0.6	6 (9)		
2-1, 135	174.35	0.8	0.4	4		
3-5, 33	188.83	1.8	1.5	3		
3-5, 76	189.26	3.2	1.5	14		
3-5, 109	189.59	3.4	0.6	24		
3-5, 114	189.64			(24)		
3-5, 132	189.82	4.0	0.6	28		
4-4, 71	197.21			(5)		
4-4, 75	197.25	1.8	1.4	3		
6-1, 97	211.97	3.4	1.6	15		
6-1, 147	212.47	2.5	0.5	17		
6-1, 148	212.48			(20)		
7-2, 107	223.07	2.2	1.4	(6)	0.12	15
7, CC	224.68	2.2	1.8	3		
8-5, 67	236.67			(20)		
9-3, 61	243.11	3.8	2.2	13		
9-4, 55	244.55			(12)		
10-2, 62	251.12	2.1	1.7	3		
10-4, 58	255.08			(22)		
12-3, 6	271.06	3.4	1.9	12		
12-4, 121	273.71	2.4	1.7	(6)	0.14	14
13-3, 58	281.08			(19)		
13-4, 115	283.15	4.0	1.9	18		
16-3, 65	309.65	2.8	1.8	8		
17-4, 81	320.81	2.7	1.8	7		
19-2, 48	328.98	1.7	1.4	2		
19-2, 55	329.05			(5)		
21-5, 76	350.76			(7)		
21-5, 77	350.77	1.1	0.7	3		
21-6, 46	351.96	2.3	1.7	(5)	0.14	14
23-1, 92	363.92	2.1	1.3	6		
23-4, 85	368.35	2.3	2.0	2		
23-4, 112	368.62	2.4	1.6	7		
24-2, 137	375.37	2.5	1.5	(8)	0.11	15

¹ Curray, J. R., Moore, D. G., et al., *Init. Repts. DSDP, 64*: Washington (U.S. Govt. Printing Office).

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Table 1. (Continued).

Sample (interval in cm)	Sub-bottom Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃ (%)	Organic Nitrogen (%)	Atomic C/N
474A-25-1, 58	382.58	3.2	2.7	5		
25-1, 140	383.40	3.5	2.4	(9)	0.18	15
25-2, 15	383.65			(10)		
26-1, 100	392.50	4.6	2.6	16		
27-3, 78	404.78			(28)		
27-4, 79	406.29	2.2	1.7	5		
28-2, 119	413.19	2.9	1.7	(9)	0.15	13
28-4, 74	415.74	2.3	1.3	8		
29-1, 44	420.44			(9)		
29-2, 110	422.60	3.5	2.3	10		
30-1, 69	430.19			(9)		
30-3, 67	433.17	3.3	1.6	14		
31-3, 53	442.53	2.5	1.8	6		
32-2, 120	451.20	3.0	1.9	(9)	0.14	16
32-5, 107	455.57	2.5	2.0	4		
32-7, 20	457.70			(6)		
33-3, 81	461.81	2.1	1.4	6		
35-1, 22	477.22	4.0	2.4	(13)	0.18	16
36-2, 107	489.07	4.4	2.3	17		
37-3, 100	500.00	3.4	2.2	(10)	0.16	16
39-1, 59	515.59	0.7	0.5	2		
39-3, 29	518.29	1.6	1.1	(4)	0.09	13
39-3, 51	518.51			(8)		
39-3, 111	519.11	1.7	0.9	(6)	0.08	12
40-2, 136	527.36	2.2	1.6	(5)	0.11	16
40-3, 5	527.55	1.1	0.6	(4)	0.06	12
40-3, 19	527.69			(38)		
41-1, 120	535.20	1.6	0.4	(10)	0.04	12
41-3, 119	538.19	1.5	0.7	(6)	0.08	12
475-1-2, 61	2.11			(9)		
1-2, 67	2.17	2.6	1.9	6		
2-2, 127	8.77	3.0	2.6	(3)	0.26	12
2-3, 65	9.65	4.6	2.8	15		
2-4, 6	10.56	3.7	2.8	8		
2-4, 16	10.66			(9)		
2-5, 12	12.12	3.3	1.7	13		
3-2, 70	17.70	4.1	1.7	(19)	0.16	12
3-2, 71	17.71	3.3	1.3	16		
5-3, 70	38.20			(11)		
5-4, 7	39.07	1.7	1.4	2		
6-2, 50	46.00	2.1	1.7	(3)	0.15	13
6-2, 53	46.03			(5)		
6-5, 24	50.24	3.2	2.1	9		
6-5, 115	51.15	1.9	1.5	(3)	0.12	14
8-5, 62	69.62	2.1	2.1	0		
8-5, 133	70.33	1.3	1.2	(1)	0.10	14
8-6, 22	70.72	3.7	3.3	(3)	0.25	15
9-3, 29	75.79			(5)		
9-4, 7	77.07	2.5	2.5	0		
11-4, 29	96.29			(1)		
11-6, 15	99.15	1.9	1.7	2		
12-4, 117	106.67	1.4	1.1	(2)	0.10	13
12-5, 29	107.29	2.3	1.3	8		
13-4, 48	115.48			(5)		
13-4, 49	115.49	2.2	1.8	4		
15-2, 79	131.79	1.4	1.3	1		
15-2, 122	132.22			(3)		
15-4, 53	134.53	2.8	2.4	(3)	0.16	17
15-6, 68	137.68	2.3	2.3	0		
16-2, 104	141.54	2.4	2.1	(2)	0.15	16
16-5, 35	145.35	1.5	1.2	3		
17-1, 70	149.20	2.3	2.1	(2)	0.15	16
17-2, 46	150.46	1.0	1.0	0		
17-3, 29	151.79	0.9	0.9	0		
17-4, 45	153.45	2.2	1.9	3		
17-4, 131	154.31	1.8	1.8	(0)	0.14	15
17-5, 5	154.55	2.5	2.4	(1)	0.18	16
475B-1-5, 39	6.39	3.6	2.8	(7)	0.23	14
1-5, 42	6.42			(6)		
1-7, 59	9.59	3.4	1.4	16		
476-1-2, 61	2.11			(5)		
1-2, 147	2.97	3.6	2.3	10		
2-2, 19	10.69	2.1	1.5	(6)	0.14	12
2-3, 75	12.75			(13)		
2-4, 135	14.85	4.6	3.1	13		
3-3, 88	22.38	4.4	3.2	10		
3-4, 120	24.20	3.2	2.7	(4)	0.22	14
3-6, 51	26.51			(21)		
4-3, 5	31.05	2.9	2.5	3		
4-5, 26	34.26			(12)		
5-3, 75	41.25	4.6	0.7	32		
5-3, 136	41.86	2.9	1.3	(12)	0.12	12
5-3, 138	41.88			(12)		

Table 1. (Continued).

Sample (interval in cm)	Sub-bottom Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃ (%)	Organic Nitrogen (%)	Atomic C/N
476-6-2, 32	48.82			(13)		
6-4, 69	52.19	5.8	2.6	26		
7-2, 103	59.03			(40)		
7-4, 12	61.12	1.5	1.4	1		
7-6, 108	65.08	2.6	1.8	(7)	0.15	14
8-2, 124	68.74	2.8	1.6	10		
9-2, 52	77.52	2.0	1.5	(4)	0.13	14
10-4, 6	89.56	2.3	2.3	0		
10-6, 114	93.64	3.5	3.2	(2)	0.22	17
11-4, 109	100.09	2.1	1.8	(3)	0.14	15
11-6, 98	102.98	2.4	2.1	2		
13-1, 61	114.11	1.2	0.9	(2)	0.08	13
15-2, 108	135.08	1.1	0.9	(1)	0.09	12
15-3, 75	136.25	1.3	1.2	1		
16-3, 69	145.69	1.2	1.1	1		
17-1, 87	152.37	2.3	1.9	3		
17-3, 82	155.32	2.2	1.7	(4)	0.14	14
18-5, 40	167.40			(4)		
18-5, 67	167.67	2.0	1.7	2		
18-6, 88	169.38	2.2	1.4	(3)	0.10	17
19-1, 88	171.38	1.6	1.6	0		
19-1, 96	171.46			(1)		
19-1, 106	171.56	1.8	1.4	(3)	0.10	16
20-3, 120	184.20			(11)		
20-4, 48	184.98	3.2	1.6	(12)	0.13	14
20-5, 71	186.71	3.2	1.6	13		
21-3, 3	192.53	1.1	1.0	1		
21-3, 46	192.96	0.4	0.4	(0)	0.03	17
21-4, 43	194.43	2.9	2.9	(0)	0.22	15
21,CC	194.55	7.1	7.1	(0)	0.31	27
477-2-2, 136	3.86	2.8	2.1	(6)	0.22	11
3-2, 1	12.01	2.8	2.0	7		
3-2, 28	12.28	4.2	3.3	(8)	0.35	11
3-2, 83	12.83			(11)		
3-2, 115	13.15	3.8	2.6	10		
4-1, 30	20.30	4.2	3.2	(8)	0.32	12
4-1, 43	20.43			(8)		
4-1, 84	20.84	3.7	2.5	10		
5-1, 80	30.30	3.6	2.1	11		
5-1, 89	30.39	3.6	2.6	(8)	0.24	13
5-1, 94	30.44			(9)		
5,CC	39.00	3.9	2.6	(10)	0.19	16
7-1, 27	48.77	3.3	2.4	7		
7-1, 124	49.74	2.8	1.8	(8)	0.10	21
7-2, 14	50.14	1.3	0.7	(4)	0.03	27
15-1, 28	105.28	2.2	1.1	(1)	0.07	17
16-1, 36	115.36	1.1	0.8	(3)	0.07	14
16-2, 29	116.79	1.2	1.1	1		
16-2, 71	117.21			(0)		
16-3, 99	118.99	1.0	0.7	(0)	0.07	12
17-1, 41	124.91	1.0	0.7	(3)	0.06	14
17-3, 29	127.79	0.9	0.9	0		
17-3, 44	127.94	1.0	0.8	(0)	0.07	12
19-2, 138	146.38	1.0	0.5	4		
19-3, 29	146.79	1.1	0.3	(5)	0.03	11
20-2, 51	155.01			(4)		
20-2, 61	155.11	1.6	1.0	(4)	0.04	28
20-2, 88	155.38	1.4	1.4	0		
22-1, 26	172.26	1.6	0.8	(7)	0.02	47
477A-5-1, 44	191.44	1.2	0.6	(6)	0.01	69
7-1, 43	210.43	0.3	0.2	(3)	0.00	∞
9-1, 39	229.39	0.5	0.4	(3)	0.00005	8633
477B-1-1, 14	0.14	2.6	1.9	(5)	0.19	12
1-2, 110	2.60	2.8	2.1	(6)	0.22	12
478-1-1, 15	0.15	2.3	1.7	5		
1-2, 97	2.47	2.8	1.9	(7)	0.18	12
2-2, 2	5.02	4.3	3.1	(10)	0.30	12
2-3, 65	7.15	4.6	2.8	15		
2-3, 78	7.28	2.2	1.9	3		
2-6, 102	12.02	4.6	3.6	(8)	0.38	11
3-1, 19	13.19	2.1	1.4	(6)	0.11	15
4-6, 121	31.21	1.5	1.3	(2)	0.09	16
4,CC	32.00	1.8	1.2	(5)	0.09	15
5-6, 133	40.83	1.7	1.2	(4)	0.08	17
6-3, 33	44.83	2.4	2.2	(2)	0.17	15
8-3, 27	63.77	2.5	1.5	(8)	0.12	15
9-1, 107	71.07	3.4	2.1	(11)	0.19	13
9-3, 107	74.07	4.0	2.3	(14)	0.20	13
10-1, 93	80.43	2.8	2.0	(7)	0.17	13
11-4, 107	94.57	2.2	1.5	(6)	0.12	14
12-2, 81	100.81	3.3	2.5	(6)	0.20	15
13-1, 138	109.38	3.0	2.4	(5)	0.18	15
13-2, 116	110.66	3.3	2.4	(7)	0.21	13

Table 1. (Continued).

Sample (interval in cm)	Sub-bottom Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃ (%)	Organic Nitrogen (%)	Atomic C/N
478-14-4, 118	123.18	3.0	2.2	(6)	0.17	15
15-3, 80	130.80	2.1	2.0	1		
15-5, 41	133.41	2.0	1.3	(6)	0.10	16
16-3, 61	140.11	1.9	1.8	1		
16-3, 67	140.17			5		
16-4, 110	142.10	1.8	1.2	(5)	0.09	15
17-3, 60	149.60	1.6	1.2	4		
17-4, 118	151.68	1.6	0.9	(6)	0.06	16
19-6, 115	168.15	2.6	1.8	(7)	0.15	14
20-4, 102	170.52	1.4	0.7	(6)	0.06	13
21-3, 50	178.00	3.5	2.0	12		
21-5, 140	181.90	2.0	1.4	(5)	0.11	15
22-3, 53	187.53	2.9	1.7	10		
22-3, 97	187.97	3.0	2.0	(8)	0.15	15
28-4, 118	248.18	2.8	1.7	(9)	0.16	12
28-6, 56	250.56	2.8	1.3	(12)	0.10	16
28-6, 90	250.90	3.5	1.7	(15)	0.17	12
29-1, 57	251.07	4.1	2.1	(16)	0.16	15
29-1, 124	251.77	2.8	2.2	(5)	0.16	16
29-2, 34	252.34	2.9	2.2	(6)	0.16	16
29-2, 108	253.08	2.1	1.7	(3)	0.12	17
29-2, 129	253.29	1.4	1.4	(0)	0.06	26
30-1, 44	256.94	1.7	1.2	(4)	0.13	11
30-1, 87	257.37	3.0	2.0	(8)	0.14	17
30-2, 28	258.28	3.1	2.3	(7)	0.16	17
30-2, 140	259.40	3.1	2.1	(8)	0.16	15
31-4, 122	265.72	2.2	2.1	(9)	0.17	14
32-2, 124	272.24	2.7	1.9	(7)	0.15	15
33-2, 55	281.05	2.2	1.7	(4)	0.13	15
34-3, 50	292.00	3.6	2.3	(11)	0.17	16
35-2, 77	300.27	4.3	2.7	(13)	0.18	17
36-2, 61	309.61	3.1	1.9	(10)	0.15	15
39-3, 58	330.08	2.6	2.3	(3)		
39-3, 84	330.34	2.0	1.5	(4)	0.09	19
40-2, 61	338.11	1.1	1.1	0	0.10	13
479 1-1, 130	1.30	4.0	3.6	(3)	0.39	11
3-2, 99	14.99	3.2	2.8	(3)	0.26	13
5-3, 107	36.57	2.8	2.7	(1)	0.25	13
6-2, 65	43.15	4.1	2.2	16		
6-4, 80	46.30	3.5	2.3	10		
7-5, 108	56.58	2.7	2.7	(0)	0.20	16
8-3, 45	63.45	3.8	2.4	12		
9-3, 99	73.49	5.3	3.0	(19)	0.24	15
10-4, 65	84.15	3.3	2.3	8		
10-6, 25	86.75	3.1	2.8	3		
10-7, 24	89.24	2.8	2.4	(3)	0.21	14
12-6, 111	106.61	2.9	2.4	(3)	0.20	14
13-1, 110	108.60	3.8	2.9	7		
14-2, 52	119.02	3.2	2.6	(5)	0.19	16
15-2, 97	128.97	3.1	2.8	3		
15-5, 108	133.58	3.2	2.9	2		
16-3, 126	140.26	3.6	3.2	(3)	0.24	15
18-1, 82	155.82	2.0	1.9	1		
21-2, 88	185.88	2.8	2.4	3		
21-5, 110	190.60	4.8	2.5	(19)	0.20	15
22-5, 101	200.01	2.9	2.6	3		
23-4, 73	207.73	4.1	2.3	(15)	0.20	13
24-3, 86	215.86	2.8	2.5	2		
25-2, 131	224.31	3.0	2.5	(4)	0.22	13
26-1, 82	231.82	2.6	1.6	9		
27-4, 72	245.72	2.9	2.5	(3)	0.18	16
29-5, 114	266.64	3.0	2.6	(3)	0.20	15
31-5, 69	285.19	2.6	2.6	(0)	0.20	15
31-5, 70	285.20	2.9	2.8	1		
32-1, 63	288.63	3.5	2.5	8		
34-2, 84	309.34	3.3	2.7	(5)	0.22	14
34-5, 108	314.08	3.3	3.0	3		
35-4, 139	322.39	3.0	2.3	5		
36-3, 70	329.70	3.7	2.9	(6)	0.23	15
37-2, 78	337.78	2.9	2.8	1		
38-5, 129	352.29	3.0	3.0	(0)	0.22	16
39-4, 107	360.07	3.6	3.5	1		
40-6, 110	372.60	3.3	2.1	(10)	0.18	14
41-1, 99	374.49	3.7	2.7	8		

Table 1. (Continued).

Sample (interval in cm)	Sub-bottom Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃ (%)	Organic Nitrogen (%)	Atomic C/N
474-43-2, 82	394.82	3.8	2.6	(10)	0.22	14
44-3, 93	405.93	4.1	1.9	18		
44-5, 21	408.21	3.3	1.7	13		
45-1, 81	412.31	2.3	1.9	(3)	0.19	11
47-4, 108	436.08	2.3	1.2	(9)	0.17	9
480-3,CC	14.20	3.5	2.9	(5)	0.27	12
5,CC	23.60	2.8	2.8	(0)	0.26	13
6,CC	28.40	2.5	2.5	(0)	0.21	14
7,CC	33.10	3.4	2.9	(4)	0.24	14
9,CC	42.60	4.2	3.0	(10)	0.25	14
11,CC	49.10	3.1	2.5	(5)	0.21	14
13,CC	66.30	2.5	2.4	(1)	0.20	14
17,CC	85.40	2.7	2.7	(0)	0.20	16
19,CC	94.90	2.5	2.5	(0)	0.19	15
21,CC	104.20	4.4	3.2	(10)	0.23	16
23,CC	113.90	2.2	2.2	(0)	0.16	16
25,CC	123.40	2.8	2.8	(0)	0.20	16
27,CC	132.90	2.7	2.7	(0)	0.20	16
29,CC	142.40	2.4	2.3	(1)	0.17	16
31,CC	151.90	2.2	2.2	(0)	0.17	15
481-1-2, 57	2.07	2.6	2.1	(4)	0.22	11
2-2, 117	7.42	4.6	1.4	26		
4-1, 85	15.10	5.9	4.3	(13)	0.45	11
7-2, 136	31.36	3.0	2.2	(6)	0.22	12
8-2, 110	35.85	2.4	1.7	6		
9-1, 141	39.41	2.5	2.1	(3)	0.23	11
10-2, 144	45.69	2.2	1.4	7		
10-3, 103	46.78	2.7	1.9	7		
11-1, 121	48.71	2.2	1.8	(3)	0.17	12
481A-1-1, 136	43.36	2.3	1.5	6		
2-1, 70	52.20	3.2	1.0	19		
3-1, 109	62.09	2.1	1.6	(4)	0.14	13
4-2, 74	72.74	3.7	2.7	(8)	0.23	13
4-2, 105	73.05	3.5	2.1	12		
5-6, 26	87.76	2.2	1.3	8		
6-3, 134	93.84	1.4	1.2	(2)	0.09	15
7-4, 125	104.75	2.5	1.9	5		
8-2, 114	111.14	2.6	2.0	5		
8-6, 29	116.29	2.0	1.8	(2)	0.14	15
9-5, 30	124.30	3.5	2.2	11		
10-1, 53	128.03	2.0	1.7	3		
10-2, 104	130.04	1.4	1.3	(1)	0.11	14
11-3, 144	141.44	1.8	1.3	4		
12-1, 107	147.57	1.5	1.3	(2)	0.12	13
12-4, 53	151.53	1.4	1.0	4		
13-1, 132	157.32	1.5	0.9	(5)	0.10	11
13-5, 25	162.25	2.8	1.4	12		
14-3, 50	169.00	1.1	0.8	(2)	0.05	19
14-4, 2	170.02	1.2	0.6	5		
14-4, 52	170.52	0.6	0.4	(2)	0.03	14
18-1, 27	203.77	1.1	0.9	(2)	0.09	12
20-1, 60	223.10	3.5	1.8	14		
20-2, 22	224.22	1.2	1.1	(1)	0.08	16
22-1, 100	242.50	2.5	1.7	6		
22-5, 132	248.82	2.5	2.5	(0)	0.19	15
23-1, 11	251.11	2.2	1.3	7		
24-3, 126	264.76	1.5	1.3	(2)	0.10	15
25-6, 10	279.10	1.8	1.1	6		
26-4, 64	284.64	1.9	1.4	(4)	0.11	15
27-2, 38	290.88	2.1	1.4	6		
27-3, 61	292.61	2.3	1.3	8		
28-3, 131	302.81	1.7	1.3	(3)	0.09	16
29-1, 133	309.33	1.8	1.0	7		
30-2, 137	320.37	2.8	2.0	(7)	0.16	16
30-4, 129	323.29	2.4	1.2	10		
30-5, 46	323.96	1.3	1.1	(2)	0.09	15
30-6, 5	325.05	1.8	1.3	4		
30-6, 46	325.46	1.7	1.2	(4)	0.09	16
31,CC	328.30	2.6	2.1	(4)	0.13	19
33-1, 20	346.20	1.3	0.9	(0)	0.05	20

^a Total carbonates calculated as calcium carbonate; values in parentheses were determined by the carbonate bomb method.