

41. GRAIN-SIZE AND CARBON/CARBONATE ANALYSES, LEG 49

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GRAIN-SIZE ANALYSES

Sand-silt-clay distribution was determined on 10-cc sediment samples collected at the time the cores were split and described. The results are listed in Table 1.

The sediment classification used here is that of Shepard (1954) with the sand, silt, and clay boundaries based on the Wentworth (1922) scale (Figure 1). Thus the sand, silt, and clay fractions are composed of particles whose diameters range from 2000 to 62.5 μm , 62.5 to 3.91 μm , and less than 3.91 μm , respectively. This classification is applied regardless of sediment type and origin; therefore, the sediment names used in this table may differ from those used elsewhere in this volume; e.g., a silt composed of nanofossils in this table may be called a nanofossil ooze in a site chapter.

Standard sieve and pipette methods were used to determine the grain-size distribution. The sediment sample was dried and dispersed in a Calgon solution. If a sediment sample failed to disaggregate, it was treated with a sonic probe and, if necessary, hydrogen peroxide. Sediment samples which resisted the above treatment were not analyzed.

The sand fraction was removed by wet sieving, using a 63 μm sieve, and the silt and clay fractions were analyzed by standard pipette analysis. Sampling depths and times were calculated using equations derived from Stokes settling velocity equation (Krumbein and Pettijohn, 1938, p. 95-96):

$$\frac{D}{t^*} = V = \frac{2gr^2(d_1 - d_2)}{9\eta}$$

$$t = \frac{9D\eta}{2gr^2(d_1 - d_2)}$$

where

- V = velocity, in cm/sec
 t = time, in sec*
 D = depth pipette is inserted, in cm
 g = gravity, in cm/sec²*
 r = radius of individual particles, in cm*
 d_1 = density of solid particles arbitrarily set at 2.675 g/cc
 d_2 = absolute density of distilled water at different temperatures (Hodgman et al., 1960, p. 2129)
 η = viscosity of distilled water in poises at different temperatures (Hodgman et al., 1960, p. 2181)

The reproducibility of the grain size analysis has been previously tested (Boyce, 1972), and it was found that over a period of time with several operators the reproducibility for the sand-silt-clay fractions is $\pm 2.5\%$ (absolute). For detailed step-by-step procedures, see Volume 4 of the *Initial Reports of the Deep Sea Drilling Project*.

CARBON AND CARBONATE ANALYSES

Leg 49 sediments were analyzed for total carbon and acid-insoluble (organic) carbon using the LECO WR-12 Analyzer according to the standard technique outlined below. The reproducibility of the LECO has been verified in extensive tests.

The 3-cm³ sediment samples were first dried and ground into a homogenous powder. The ground sediment was redried at 105° to 110°C, and two samples, a 0.1-g and a 0.5-g sample, were weighed into LECO clay crucibles. The 0.5-g sample was acidified with 10 per cent hydrochloric acid and washed with distilled water. The sample was then dried and analyzed for acid-insoluble carbon. The 0.1-g sample was analyzed for total carbon without further treatment. If the sample contained less than 10 per cent CaCO₃, an additional 0.5-g sample was analyzed for greater accuracy. The calcium carbonate percentages were calculated as follows: (% total C - % organic C) \times 8.33 = % CaCO₃. Although older carbonates may be present, all acid-soluble carbon was calculated as calcium carbonate. All results are given in weight percent (Table 2).

Detailed descriptions of the technique and theory may be found in Bader, Gerard, et al., (1970) and Boyce and Bode (1972).

REFERENCES

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- Shepard, F. P., 1954. Nomenclature based on sand-silt-clay ratios, *J. Sediment. Petrol.*, v. 24, p. 151.
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*Five figures were used in calculations to avoid rounding off variations.

TABLE 1
Grain Size Analysis, Leg 49

Sample (Interval in cm)	Sub-Bottom Depth	Sand (%)	Silt (%)	Clay (%)	Classification
Hole 407					
1-1, 4	0.04	32.4	30.5	37.0	Sand-silt-clay
1-1, 28	0.28	22.2	38.3	39.6	Sand-silt-clay
1-2, 8	1.58	30.1	33.4	36.6	Sand-silt-clay
1-2, 89	2.39	30.9	37.4	31.7	Sand-silt-clay
1-3, 22	3.22	17.2	40.7	42.1	Silty clay
1-4, 13	4.63	30.6	43.3	26.1	Sand-silt-clay
1-4, 79	5.29	23.9	43.2	32.9	Sand-silt-clay
2-1, 36	6.36	20.0	33.5	46.5	Silty clay
2-2, 111	8.61	56.8	23.1	20.1	Sand-silt-clay
2-3, 32	9.32	45.3	20.8	33.9	Sand-silt-clay
2-4, 44	10.94	25.5	30.1	44.4	Sand-silt-clay
2-5, 86	12.86	17.9	41.1	41.0	Clayey silt
2-6, 46	13.96	29.3	35.1	35.7	Sand-silt-clay
3-1, 34	15.84	22.3	23.7	54.0	Sand-silt-clay
3-2, 107	18.07	50.5	27.9	21.6	Sand-silt-clay
3-4, 21	20.21	12.4	41.5	46.1	Silty clay
4-1, 104	26.04	9.8	37.8	52.4	Silty Clay
4-2, 40	26.90	14.4	45.8	39.8	Clayey silt
4-3, 92	28.92	16.6	25.0	58.3	Silty Clay
4-4, 87	30.37	12.3	41.1	46.6	Silty clay
5-1, 73	35.23	22.7	35.2	42.1	Sand-silt-clay
5-2, 36	36.36	23.9	42.7	33.5	Sand-silt-clay
5-3, 15	37.65	30.5	43.4	26.0	Sand-silt-clay
6-1, 20	44.20	9.7	39.4	51.0	Silty clay
6-2, 60	46.10	3.3	56.8	40.0	Clayey silt
6-3, 67	47.67	3.1	27.4	69.5	Silty clay
7-1, 90	54.40	0.4	50.8	48.8	Clayey silt
7-2, 71	55.71	6.6	52.7	40.8	Clayey silt
8-2, 70	65.20	10.2	50.5	39.4	Clayey silt
8-2, 140	65.90	7.1	54.0	38.9	Clayey silt
8-3, 15	66.15	7.0	60.9	32.1	Clayey silt
9-2, 40	74.40	3.2	51.1	45.7	Clayey silt
10-1, 90	82.90	7.5	37.4	55.1	Silty clay
10-2, 40	83.90	6.2	37.2	56.6	Silty clay
10-3, 89	85.89	4.1	38.9	57.1	Silty clay
10-4, 23	86.73	4.8	36.1	59.2	Silty clay
11-1, 60	92.10	3.9	42.4	53.7	Silty clay
11-2, 60	93.60	3.9	36.6	59.5	Silty clay
11-3, 60	95.10	3.6	42.1	54.3	Silty clay
11-4, 60	96.60	2.8	39.8	57.5	Silty clay
12-1, 74	101.74	7.5	41.3	51.2	Silty clay
12-2, 74	103.24	5.5	36.4	58.2	Silty clay
12-3, 75	104.75	5.0	37.2	57.8	Silty clay
13-1, 85	111.35	3.8	42.6	53.6	Silty clay
13-2, 83	112.83	2.9	48.5	48.6	Silty clay
13-3, 83	114.33	2.8	41.9	55.3	Silty clay
13-4, 83	115.83	2.7	45.2	52.1	Silty clay
13-5, 55	117.05	0.7	47.0	52.3	Silty clay
13-6, 55	118.55	2.3	43.6	54.1	Silty clay
14-1, 74	120.74	1.3	41.7	57.0	Silty clay
14-2, 74	122.24	4.4	46.0	49.6	Silty clay
14-3, 74	123.74	1.3	44.9	53.7	Silty clay
14-4, 29	124.79	3.4	45.9	50.6	Silty clay
16-1, 82	139.82	1.3	39.6	59.0	Silty clay
16-2, 82	141.32	4.0	33.6	62.4	Silty clay
16-3, 82	142.82	3.1	40.5	56.3	Silty clay
16-4, 10	143.60	4.1	41.5	54.4	Silty clay
17-1, 78	149.28	3.0	37.1	59.9	Silty clay
17-2, 78	150.78	6.6	43.6	49.8	Silty clay
17-3, 78	152.28	12.9	42.9	44.2	Silty clay
18-1, 75	158.75	0.4	37.1	62.4	Silty clay
18-2, 75	160.25	6.8	54.1	39.1	Clayey silt
18-3, 76	161.76	9.0	52.3	38.7	Clayey silt
18-4, 76	163.26	6.9	51.6	41.5	Clayey silt
18-5, 76	164.76	8.1	54.8	37.1	Clayey silt
19-1, 76	168.26	5.8	44.6	49.6	Silty clay
19-2, 76	169.76	4.8	50.0	45.2	Clayey silt

TABLE 1 - Continued

Sample (Interval in cm)	Sub-Bottom Depth	Sand (%)	Silt (%)	Clay (%)	Classification
19-3, 76	171.26	5.2	45.4	49.3	Silty clay
19-4, 76	172.76	10.5	52.3	37.1	Clayey silt
19-5, 76	174.26	7.0	48.7	44.3	Clayey silt
20-1, 47	177.47	1.2	44.9	53.8	Silty clay
20-2, 47	178.97	0.3	32.9	66.8	Silty clay
21-1, 47	186.97	1.0	44.9	54.0	Silty clay
22-1, 76	196.76	5.2	47.2	47.6	Silty clay
22-2, 76	198.26	1.9	47.7	50.3	Silty clay
22-3, 76	199.76	1.4	45.8	52.8	Silty clay
23-1, 76	206.26	1.4	32.7	65.9	Silty clay
23-2, 76	207.76	2.2	42.0	55.8	Silty clay
23-3, 76	209.26	0.7	41.2	58.1	Silty clay
24-1, 76	215.76	4.0	52.7	43.3	Clayey silt
24-2, 76	217.26	4.7	46.0	59.3	Silty clay
24-3, 76	218.76	4.6	39.0	56.5	Silty clay
24-4, 76	220.26	7.1	44.9	48.0	Silty clay
24-6, 76	223.26	4.2	51.5	44.3	Clayey silt
24-7, 17	224.17	2.4	48.0	49.6	Silty clay
25-1, 4	224.54	1.4	39.9	58.7	Silty clay
26-1, 40	234.40	2.6	40.2	57.2	Silty clay
28-1, 65	253.65	11.8	46.6	41.6	Clayey silt
28-2, 65	255.15	16.4	48.1	35.5	Clayey silt
28-3, 65	256.65	9.1	55.4	35.5	Clayey silt
28-4, 65	258.15	14.4	56.8	28.8	Clayey silt
28-5, 67	259.67	5.3	50.6	44.0	Clayey silt
29-1, 60	263.10	8.4	51.6	39.9	Clayey silt
29-5, 17	268.67	13.8	48.7	37.5	Clayey silt
30-1, 69	272.69	4.4	53.0	42.6	Clayey silt
30-2, 68	274.18	3.7	51.2	45.1	Clayey silt
30-3, 59	275.59	4.1	50.4	45.5	Clayey silt
30-4, 70	277.20	2.8	51.3	45.9	Clayey silt
30-5, 71	278.71	3.8	50.5	45.7	Clayey silt
30-6, 29	279.79	2.5	41.2	56.3	Silty clay
31-1, 67	282.17	7.4	47.3	45.2	Clayey silt
31-2, 67	283.67	18.0	46.6	35.4	Clayey silt
31-3, 65	285.15	10.4	46.2	43.3	Clayey silt
31-4, 67	286.67	4.0	50.9	45.0	Clayey silt
31-5, 60	288.10	9.6	45.6	44.8	Clayey silt
31-6, 67	289.67	33.0	42.3	24.7	Sand-silt-clay
31-7, 20	290.70	26.9	42.9	30.2	Sand-silt-clay
32-1, 27	291.27	35.1	27.9	36.9	Sand-silt-clay
Hole 408					
1-1, 60	0.60	36.7	24.8	38.5	Sand-silt-clay
1-2, 19	1.69	51.9	26.9	21.2	Sand-silt-clay
1-3, 29	3.29	50.5	24.3	25.3	Sand-silt-clay
1-4, 82	5.32	33.6	38.5	27.9	Sand-silt-clay
1-5, 41	6.41	36.9	35.8	27.3	Sand-silt-clay
1-6, 22	7.72	38.9	37.7	23.3	Sand-silt-clay
2-1, 99	10.49	15.7	37.4	46.9	Silty clay
2-2, 10	11.10	23.3	30.4	46.3	Sand-silt-clay
2-3, 69	13.19	30.3	30.6	39.1	Sand-silt-clay
2-4, 30	14.30	28.4	71.0	0.6	Sandy silt
2-5, 30	15.80	55.6	23.3	21.1	Sand-silt-clay
3-1, 34	19.34	22.1	43.1	34.8	Sand-silt-clay
3-2, 18	20.68	36.3	35.5	28.2	Sand-silt-clay
3-3, 25	22.25	31.9	32.1	36.0	Sand-silt-clay
3-4, 19	23.69	11.9	44.9	43.2	Clayey silt
3-5, 6	25.06	15.2	50.5	34.3	Clayey silt
4-1, 10	28.60	30.6	37.1	32.3	Sand-silt-clay
4-2, 30	30.30	23.0	46.9	30.0	Sand-silt-clay
4-3, 120	32.70	11.7	47.6	40.8	Clayey silt
4-4, 29	33.29	39.4	31.7	28.9	Sand-silt-clay
4-5, 29	34.79	21.5	50.1	28.5	Sand-silt-clay
5-1, 39	38.39	12.8	46.7	40.5	Clayey silt
5-3, 54	41.54	8.2	46.4	45.4	Clayey silt
5-4, 20	42.70	4.5	23.0	52.5	Silty clay
5-5, 7	44.07	6.2	60.9	33.0	Clayey silt

TABLE 1 – Continued

Sample (Interval in cm)	Sub-Bottom Depth	Sand (%)	Silt (%)	Clay (%)	Classification
6-1, 24	47.74	11.5	48.0	40.6	Clayey silt
6-2, 39	49.39	9.8	56.8	33.4	Clayey silt
6-3, 20	50.70	7.4	58.0	34.6	Clayey silt
7-1, 30	57.30	18.0	0.2	41.8	Silty clay
7-2, 6	58.56	9.0	47.0	44.0	Clayey silt
8-1, 43	66.93	5.2	40.1	54.7	Silty clay
8-2, 58	68.58	7.5	43.1	49.3	Silty clay
9-1, 46	76.46	5.8	38.9	55.3	Silty clay
9-2, 46	77.96	5.8	45.8	48.4	Silty clay
10-1, 56	86.06	6.6	17.1	76.2	Clay
10-2, 56	87.56	9.6	47.8	42.5	Clayey silt
10-3, 56	89.06	6.8	44.4	48.8	Silty clay
10-4, 56	90.56	4.5	48.0	47.5	Clayey silt
10-5, 26	91.76	4.9	39.3	55.8	Silty clay
11-1, 56	95.56	6.3	45.0	48.7	Silty clay
11-2, 56	97.06	2.2	55.8	42.0	Clayey silt
11-3, 56	98.56	5.7	44.0	50.4	Silty clay
11-4, 56	100.06	3.9	42.7	53.3	Silty clay
11-5, 56	101.56	6.2	40.5	53.3	Silty clay
11-6, 36	102.86	3.5	50.5	46.0	Clayey silt
12-1, 56	105.06	4.3	46.9	48.8	Silty clay
12-2, 56	106.56	7.3	44.0	48.6	Silty clay
13-1, 56	114.56	6.5	43.2	50.3	Silty clay
13-2, 56	116.06	3.0	41.9	55.1	Silty clay
13-3, 56	117.56	3.1	39.6	57.3	Silty clay
15-1, 56	133.56	5.2	49.5	45.2	Clayey silt
15-2, 96	135.46	4.5	56.6	38.9	Clayey silt
15-3, 56	136.56	3.2	52.5	44.2	Clayey silt
15-4, 56	138.06	3.8	43.0	53.2	Silty clay
15-5, 56	139.56	5.1	45.5	49.4	Silty clay
16-1, 106	143.56	2.5	35.7	61.8	Silty clay
16-2, 56	144.56	3.1	40.6	56.4	Silty clay
16-3, 26	145.76	5.5	34.8	59.7	Silty clay
17-1, 54	152.54	20.8	37.3	41.9	Sand-silt-clay
17-2, 54	154.04	16.9	36.8	46.2	Silty clay
17-3, 56	155.56	12.6	36.3	51.1	Silty clay
17-4, 56	157.06	16.0	32.4	51.6	Silty clay
17-5, 56	158.56	21.3	37.4	41.3	Sand-silt-clay
18-1, 106	162.56	14.5	45.3	40.2	Clayey silt
18-2, 26	163.26	8.6	40.8	50.6	Silty clay
18-3, 56	165.06	12.8	45.2	42.0	Clayey silt
18-4, 16	166.16	6.9	44.0	49.1	Silty clay
19-1, 26	171.26	14.9	37.2	48.0	Silty clay
19-2, 56	173.06	8.9	36.4	54.7	Silty clay
19-3, 56	174.56	8.6	32.7	58.7	Silty clay
19-4, 56	176.06	8.4	37.9	53.6	Silty clay
19-5, 56	177.56	5.6	38.0	56.4	Silty clay
19-6, 56	179.06	7.1	46.4	46.6	Silty clay
19-7, 16	180.16	12.0	36.2	51.7	Silty clay
20-1, 56	181.06	11.1	34.6	54.3	Silty clay
20-2, 56	182.56	9.1	30.6	60.3	Silty clay
21-1, 56	190.56	5.0	45.4	49.6	Silty clay
21-2, 56	192.06	5.1	45.7	49.2	Silty clay
21-3, 56	193.56	4.6	43.9	51.5	Silty clay
21-4, 56	195.06	6.1	47.8	46.1	Clayey silt
22-1, 21	199.71	3.7	39.2	57.0	Silty clay
22-2, 21	201.21	7.5	39.9	53.5	Silty clay
22-3, 30	202.80	5.2	36.0	58.8	Silty clay
23-1, 40	209.40	4.4	36.2	59.3	Silty clay
23-2, 34	210.84	7.4	37.2	55.4	Silty clay
23-3, 16	212.16	7.8	39.8	52.3	Silty clay
24-1, 28	218.78	7.9	38.1	54.1	Silty clay
24-2, 28	220.28	10.2	41.1	48.6	Silty clay
24-3, 11	221.61	7.7	39.2	53.1	Silty clay
24-5, 19	224.69	6.3	40.9	52.7	Silty clay
24-6, 20	226.20	3.5	38.2	58.3	Silty clay
25-1, 19	228.19	5.3	27.3	67.4	Silty clay
25-2, 18	229.68	3.0	24.4	72.6	Silty clay

TABLE 1 – Continued

Sample (Interval in cm)	Sub-Bottom Depth	Sand (%)	Silt (%)	Clay (%)	Classification
25-3, 20	231.20	4.7	28.2	67.1	Silty clay
25-4, 35	232.85	3.2	31.3	65.4	Silty clay
25-5, 29	234.29	4.8	26.4	68.8	Silty clay
25-6, 32	235.82	3.9	35.1	61.0	Silty clay
26-1, 35	237.85	4.1	29.9	66.0	Silty clay
26-2, 30	239.30	5.9	31.7	62.5	Silty clay
26-3, 30	240.80	5.0	33.2	61.8	Silty clay
26-4, 30	242.30	7.6	36.1	56.3	Silty clay
26-5, 30	243.80	8.4	40.0	51.6	Silty clay
27-1, 30	247.30	12.7	40.1	47.2	Silty clay
27-2, 30	248.80	5.2	28.6	66.2	Silty clay
27-3, 30	250.30	8.2	35.6	56.2	Silty clay
27-4, 30	251.80	15.6	34.6	49.7	Silty clay
27-5, 30	253.30	28.1	31.6	40.3	Sand-silt-clay
27-6, 30	254.80	12.3	36.8	50.9	Silty clay
28-1, 30	256.80	7.0	44.0	49.0	Silty clay
28-2, 30	258.30	12.7	36.9	50.3	Silty clay
28-3, 30	259.80	6.6	42.2	51.2	Silty clay
29-1, 30	266.30	5.0	35.0	60.0	Silty clay
29-2, 30	267.80	2.9	35.7	61.5	Silty clay
30-1, 56	276.06	14.3	39.5	46.2	Silty clay
30-2, 56	277.56	15.8	43.8	40.3	Clayey silt
30-3, 56	279.06	18.0	39.7	42.3	Silty clay
30-4, 56	280.56	4.8	35.3	59.9	Silty clay
30-5, 56	282.06	4.5	35.0	60.5	Silty clay
31-1, 56	285.56	50.8	32.1	17.1	Silty sand
31-2, 56	287.06	32.5	46.0	21.5	Sand-silt-clay
31-3, 56	288.56	37.4	40.5	22.1	Sand-silt-clay
31-4, 56	290.06	39.2	39.9	20.9	Sand-silt-clay
31-5, 56	291.56	31.3	43.9	24.8	Sand-silt-clay
31-6, 56	293.06	33.1	41.6	25.3	Sand-silt-clay
32-1, 56	295.06	36.4	35.7	28.0	Sand-silt-clay
32-2, 56	296.56	23.6	41.5	34.9	Sand-silt-clay
32-3, 56	298.06	28.9	39.6	31.4	Sand-silt-clay
32-4, 56	299.56	38.6	35.9	25.5	Sand-silt-clay
32-5, 56	301.06	20.0	55.2	24.8	Clayey silt
32-6, 56	302.56	19.6	59.6	20.9	Clayey silt
33-1, 56	304.56	37.7	41.5	20.8	Sand-silt-clay
33-2, 56	306.06	35.5	37.5	27.0	Sand-silt-clay
33-3, 56	307.56	28.7	43.5	27.8	Sand-silt-clay
33-4, 56	309.06	29.3	38.3	32.3	Sand-silt-clay
33-5, 56	310.56	35.8	36.1	28.1	Sand-silt-clay
33-6, 56	312.06	26.5	38.8	34.7	Sand-silt-clay
34-1, 56	314.06	20.9	38.3	40.8	Sand-silt-clay
34-2, 56	315.56	21.0	37.2	41.8	Sand-silt-clay
34-3, 56	317.06	24.7	25.4	50.0	Sand-silt-clay
34-4, 56	318.56	15.6	46.0	38.4	Clayey silt
34-5, 56	320.06	3.9	57.2	38.9	Clayey silt
Hole 409					
2-1, 56	25.06	45.8	33.5	20.7	Sand-silt-clay
2-2, 56	26.56	15.2	29.3	55.4	Silty clay
2-3, 56	28.06	41.6	31.5	26.9	Sand-silt-clay
4-1, 56	44.06	12.2	37.4	50.4	Silty clay
4-2, 56	45.56	31.8	39.5	28.7	Sand-silt-clay
4-3, 56	47.06	41.2	36.9	22.0	Sand-silt-clay
4-4, 56	48.56	39.2	30.2	30.5	Sand-silt-clay
4-5, 8	49.58	34.2	42.2	23.5	Sand-silt-clay
5-1, 56	53.56	36.2	38.2	25.6	Sand-silt-clay
5-2, 56	55.06	59.2	27.8	13.0	Silty sand
5-3, 56	56.56	46.0	34.1	20.0	Silty sand
5-4, 66	58.16	59.7	22.1	18.1	Silty sand
6-1, 68	63.18	17.1	48.9	33.9	Clayey silt
6-2, 79	64.79	23.4	45.2	31.4	Sand-silt-clay
6-3, 70	66.20	5.9	48.6	45.5	Clayey silt
7-1, 79	72.79	19.9	45.4	34.8	Clayey silt
7-2, 45	73.95	35.4	34.4	30.2	Sand-silt-clay
7-3, 130	76.30	10.5	51.0	38.5	Clayey silt

TABLE 1 - Continued

Sample (Interval in cm)	Sub-Bottom Depth	Sand (%)	Silt (%)	Clay (%)	Classification
7-3, 130	76.30	10.5	51.0	38.5	Clayey silt
7-4, 89	77.39	29.6	40.3	30.1	Sand-silt-clay
7-5, 82	78.82	37.9	38.4	23.7	Sand-silt-clay
7-6, 35	79.85	29.7	42.2	28.2	Sand-silt-clay
Hole 410					
1-1, 30	0.30	16.5	22.6	60.9	Silty clay
1-2, 28	1.78	12.7	35.2	52.1	Silty clay
1-3, 28	3.28	14.5	19.2	66.3	Silty clay
1-4, 40	4.90	15.3	33.4	51.3	Silty clay
1-5, 38	6.38	14.4	34.4	51.2	Silty clay
2-1, 58	8.08	9.1	23.0	67.9	Silty clay
2-2, 40	9.40	18.1	29.8	52.1	Silty clay
2-3, 94	11.44	5.6	17.7	76.6	Clay
2-4, 28	12.28	11.1	16.3	72.7	Silty clay
3-1, 120	18.20	7.2	18.4	74.4	Silty clay
3-2, 30	18.80	6.5	12.6	80.9	Clay
3-3, 30	20.30	11.3	12.2	76.5	Clay
3-4, 30	21.80	16.8	24.7	58.5	Silty clay
4-1, 30	26.80	12.1	17.3	70.6	Silty clay
4-2, 43	28.43	14.7	31.0	54.4	Silty clay
4-3, 37	29.87	19.1	24.9	56.0	Silty clay
4-4, 40	31.40	16.6	29.7	53.7	Silty clay
5-1, 60	36.60	25.7	26.9	47.3	Sand-silt-clay
5-2, 56	38.06	13.1	18.6	68.3	Silty clay
5-3, 60	39.60	16.7	23.1	60.2	Silty clay
5-4, 70	41.20	16.7	20.9	62.4	Silty clay
5-5, 30	42.30	15.4	33.3	51.2	Silty clay
5-6, 80	44.30	8.8	40.3	50.8	Silty clay
6-1, 80	46.30	11.7	26.2	52.1	Silty clay
6-2, 30	47.30	9.0	26.0	65.0	Silty clay
6-3, 41	48.91	14.8	27.4	57.8	Silty clay
7-1, 30	55.30	11.8	24.4	63.8	Silty clay
7-2, 10	56.60	12.1	29.2	58.6	Silty clay
8-1, 40	64.90	10.5	32.5	57.0	Silty clay
8-2, 40	66.40	11.4	24.5	64.1	Silty clay
8-3, 40	67.90	11.4	27.0	61.6	Silty clay
8-4, 70	69.70	10.7	28.8	60.6	Silty clay
8-5, 40	70.90	13.1	25.5	61.5	Silty clay
8-6, 58	72.58	7.4	31.6	61.0	Silty clay
10-1, 56	84.06	12.9	27.2	59.9	Silty clay
10-2, 56	85.56	13.4	28.5	58.1	Silty clay
10-3, 56	87.06	13.7	25.0	61.3	Silty clay
10-4, 56	88.56	8.0	28.9	63.1	Silty clay
10-5, 56	90.06	9.1	29.7	61.2	Silty clay
10-6, 56	91.56	11.2	26.4	62.4	Silty clay
10-7, 26	92.76	11.9	24.1	64.0	Silty clay
11-1, 56	93.56	11.5	22.9	65.5	Silty clay
11-2, 54	95.04	10.9	26.1	63.0	Silty clay
11-3, 56	96.56	14.8	26.1	59.1	Silty clay
11-4, 56	98.06	13.0	25.5	61.4	Silty clay
11-5, 56	99.56	10.9	27.2	61.9	Silty clay
11-6, 56	101.06	7.9	35.7	56.4	Silty clay
11-7, 26	102.26	8.5	22.9	68.5	Silty clay
13-1, 56	112.56	8.0	27.2	64.8	Silty clay
13-2, 56	114.06	10.1	28.1	61.8	Silty clay
14-1, 56	122.06	7.7	31.6	60.7	Silty clay
14-2, 56	123.56	7.3	30.6	62.1	Silty clay
14-3, 56	125.06	5.8	30.1	64.1	Silty clay
14-4, 56	126.56	11.2	27.5	61.3	Silty clay
14-5, 56	128.06	6.3	26.6	67.2	Silty clay
14-6, 56	129.56	8.6	28.1	63.3	Silty clay
14-7, 26	130.76	8.0	31.6	60.4	Silty clay
15-1, 56	131.56	7.6	27.6	64.9	Silty clay
15-2, 86	133.36	8.6	27.5	63.9	Silty clay
15-3, 86	134.86	8.0	27.8	64.2	Silty clay
15-4, 86	136.36	10.5	25.3	64.2	Silty clay
15-5, 56	137.56	11.3	23.0	65.7	Silty clay

TABLE 1 - Continued

Sample (Interval in cm)	Sub-Bottom Depth	Sand (%)	Silt (%)	Clay (%)	Classification
15-6, 56	139.06	7.3	28.9	63.7	Silty clay
16-1, 56	141.06	8.5	25.5	66.1	Silty clay
16-2, 56	142.56	12.0	26.5	61.5	Silty clay
16-3, 56	144.06	9.4	27.3	63.2	Silty clay
16-4, 56	145.56	6.8	28.3	64.9	Silty clay
16-5, 56	147.06	7.2	29.3	63.6	Silty clay
16-6, 56	148.56	8.9	28.1	63.0	Silty clay
18-1, 80	160.30	6.5	34.2	59.4	Silty clay
18-2, 80	161.80	7.6	37.0	55.5	Silty clay
18-3, 70	163.20	4.4	36.8	58.8	Silty clay
18-4, 50	164.50	5.0	32.3	62.8	Silty clay
18-5, 40	165.90	5.2	29.6	65.3	Silty clay
19-1, 92	169.92	4.5	31.7	63.8	Silty clay
19-2, 50	171.00	5.1	36.3	58.7	Silty clay
19-3, 40	172.40	5.1	28.3	66.6	Silty clay
19-4, 90	174.40	6.9	38.4	54.7	Silty clay
19-5, 58	175.58	5.1	32.9	62.1	Silty clay
19-6, 20	176.70	4.9	42.2	53.0	Silty clay
20-1, 90	179.40	5.6	42.0	52.4	Silty clay
20-2, 69	180.69	5.2	40.1	54.7	Silty clay
20-3, 33	181.83	5.0	40.2	54.8	Silty clay
21-1, 98	188.98	3.8	38.5	57.7	Silty clay
21-2, 70	190.20	3.2	36.1	60.8	Silty clay
21-3, 60	191.60	3.9	33.2	62.8	Silty clay
21-4, 40	192.90	2.0	38.3	59.7	Silty clay
21-5, 88	194.88	2.0	36.3	61.7	Silty clay
21-6, 31	195.81	2.3	36.4	61.3	Silty clay
21-7, 10	197.10	2.7	37.8	59.5	Silty clay
22-1, 100	198.50	2.3	39.9	57.8	Silty clay
22-2, 90	199.90	2.1	38.1	59.8	Silty clay
22-3, 88	201.38	2.3	38.3	59.4	Silty clay
22-4, 50	202.50	2.6	39.2	58.2	Silty clay
22-5, 70	204.20	2.0	92.8	5.3	Silt
22-6, 70	205.70	2.4	40.2	57.5	Silty clay
22-7, 24	206.74	2.4	35.7	61.9	Silty clay
23-1, 74	207.74	1.9	39.0	59.1	Silty clay
23-2, 100	209.50	2.0	38.5	59.5	Silty clay
23-3, 80	210.80	1.5	39.3	59.3	Silty clay
23-4, 90	212.40	1.1	37.9	61.0	Silty clay
23-5, 70	213.70	1.9	41.6	56.5	Silty clay
23-6, 40	214.90	1.7	32.1	66.2	Silty clay
24-1, 68	217.18	2.7	31.0	66.4	Silty clay
24-2, 87	218.87	2.2	33.8	63.9	Silty clay
24-3, 68	220.18	2.0	37.9	60.1	Silty clay
24-4, 46	221.46	2.2	34.1	63.7	Silty clay
24-5, 78	223.28	2.7	31.6	65.8	Silty clay
24-6, 18	224.18	2.4	31.7	65.9	Silty clay
24-7, 18	225.68	1.2	32.2	66.6	Silty clay
25-1, 78	226.78	2.4	34.6	63.0	Silty clay
25-2, 56	228.06	2.3	34.3	63.4	Silty clay
25-3, 68	229.68	3.8	35.6	60.6	Silty clay
25-4, 56	231.06	2.4	33.0	64.5	Silty clay
25-5, 56	232.56	3.3	35.6	61.1	Silty clay
25-6, 56	234.06	2.4	33.0	64.6	Silty clay
25-7, 26	235.26	2.0	41.6	56.4	Silty clay
26-1, 36	235.86	4.1	41.2	54.7	Silty clay
26-2, 36	237.36	2.1	40.6	57.3	Silty clay
26-3, 36	238.86	3.5	41.8	54.7	Silty clay
27-1, 56	245.56	8.2	39.1	52.7	Silty clay
27-2, 56	247.06	4.8	36.5	58.7	Silty clay
27-3, 56	248.56	4.3	38.8	56.9	Silty clay
28-1, 56	255.06	9.1	37.7	53.2	Silty clay
28-2, 56	256.56	7.6	43.6	48.9	Silty clay
28-3, 56	258.06	5.6	40.2	54.3	Silty clay
28-4, 56	259.56	7.4	33.3	59.3	Silty clay
29-1, 56	264.56	5.9	31.7	62.4	Silty clay
29-2, 45	265.95	10.3	33.1	56.6	Silty clay
29-3, 56	267.56	6.1	36.1	57.8	Silty clay

TABLE 1 – Continued

Sample (Interval in cm)	Sub-Bottom Depth	Sand (%)	Silt (%)	Clay (%)	Classification
29-4, 56	269.06	6.7	33.7	59.6	Silty clay
29-5, 26	270.26	8.2	39.0	52.7	Silty clay
30-1, 56	274.06	8.3	31.1	60.7	Silty clay
30-2, 56	275.56	5.6	36.8	57.6	Silty clay
30-3, 56	277.06	7.5	37.0	55.6	Silty clay
30-4, 56	278.56	5.3	36.9	57.7	Silty clay
30-5, 56	280.06	7.4	40.8	51.7	Silty clay
30-6, 56	281.56	4.4	42.8	52.7	Silty clay
30-7, 26	282.76	4.4	41.3	54.3	Silty clay
31-1, 83	283.83	4.1	42.5	53.4	Silty clay
31-2, 77	285.27	4.8	42.4	52.8	Silty clay
31-3, 60	286.60	3.7	46.7	49.6	Silty clay
31-4, 33	287.83	3.9	45.8	50.2	Silty clay
32-1, 61	293.11	2.6	35.0	62.3	Silty clay
32-2, 50	294.50	3.0	42.5	54.5	Silty clay
32-3, 79	296.29	2.1	42.1	55.8	Silty clay
33-1, 57	302.57	3.7	46.4	49.9	Silty clay
33-2, 45	303.95	3.5	50.6	45.9	Clayey silt
34-1, 15	311.65	26.	11.7	85.7	Clay
34-2, 80	313.80	2.9	45.8	51.3	Silty clay
35-1, 76	321.76	3.0	50.2	46.8	Clayey silt
35-2, 75	323.25	1.8	49.8	48.4	Clayey silt
36-1, 70	331.20	2.6	48.2	49.2	Silty clay
36-2, 136	333.36	3.5	48.4	48.2	Clayey silt
36-3, 49	333.99	1.1	50.6	48.2	Clayey silt
Hole 410A					
1-1, 70	325.70	25.7	40.6	33.7	Sand-silt-clay
1-2, 90	327.40	18.7	22.5	58.8	Silty clay
1-3, 60	328.60	22.4	22.9	54.7	Sand-silt-clay
1-4, 70	330.20	18.3	22.0	59.6	Silty clay
1-5, 87	331.87	1.6	37.4	61.0	Silty clay
1-6, 19	332.69	4.2	47.5	48.2	Silty clay
Hole 411					
1-1, 0	74.00	77.8	10.1	12.1	Sand
Hole 412					
1-1, 53	0.53	12.6	29.0	58.4	Silty clay
1-1, 107	1.07	8.2	29.1	62.7	Silty clay
1-2, 56	2.06	8.5	32.4	59.2	Silty clay
2-1, 56	4.56	9.7	30.0	60.3	Silty clay
2-2, 56	6.06	9.1	31.0	59.9	Silty clay
2-3, 56	7.56	9.8	28.4	61.7	Silty clay
2-4, 56	9.06	8.4	30.2	61.4	Silty clay
2-5, 56	10.56	6.5	29.0	64.5	Silty clay
2-6, 66	12.16	11.2	24.5	64.3	Silty clay
3-1, 56	14.06	8.7	25.2	66.1	Silty clay
3-2, 56	15.56	6.5	31.3	62.2	Silty clay
3-3, 56	17.06	6.1	29.6	64.3	Silty clay
3-4, 56	18.36	9.8	28.1	62.1	Silty clay
3-5, 66	20.16	9.6	28.2	62.2	Silty clay
3-6, 56	21.56	5.6	29.2	65.2	Silty clay
4-1, 56	23.56	6.7	31.1	62.2	Silty clay
4-2, 56	25.06	9.0	30.3	60.7	Silty clay
4-3, 56	26.56	9.0	24.7	66.3	Silty clay
4-4, 56	28.06	7.0	17.2	75.9	Clay
4-5, 56	29.56	7.1	19.4	73.4	Silty clay
4-6, 56	31.06	8.7	20.5	70.8	Silty clay
5-1, 56	52.06	4.2	16.6	79.2	Clay
5-2, 56	53.56	6.4	17.7	75.9	Clay
5-3, 56	55.06	3.5	16.0	80.5	Clay
5-4, 56	56.56	5.1	12.4	82.5	Clay
6-1, 56	80.56	7.6	22.1	70.3	Silty clay
6-2, 56	82.06	15.7	26.0	58.3	Silty clay
6-3, 56	83.56	9.4	28.7	61.8	Silty clay
6-4, 36	84.86	14.8	24.0	61.2	Silty clay

TABLE 1 – Continued

Sample (Interval in cm)	Sub-Bottom Depth	Sand (%)	Silt (%)	Clay (%)	Classification
7-1, 56	90.06	8.1	27.0	64.9	Silty clay
7-2, 56	91.56	9.7	26.7	63.6	Silty clay
8-1, 64	99.64	7.0	28.8	64.2	Silty clay
8-2, 64	101.14	3.8	29.8	66.3	Silty clay
8-3, 64	102.64	4.6	29.4	66.0	Silty clay
8-4, 64	104.14	9.3	28.2	62.5	Silty clay
8-5, 64	105.64	9.8	24.9	65.4	Silty clay
8-6, 64	107.14	9.1	27.0	63.8	Silty clay
8-7, 21	108.21	7.4	29.6	63.0	Silty clay
9-1, 100	109.50	10.5	25.4	64.0	Silty clay
9-2, 70	110.70	9.3	27.2	63.5	Silty clay
9-3, 70	112.20	8.3	25.9	65.9	Silty clay
9-4, 60	113.60	5.6	26.1	68.3	Silty clay
9-5, 0	114.50	6.2	22.6	71.2	Silty clay
9-6, 50	116.50	7.4	27.3	65.3	Silty clay
10-1, 60	118.60	6.2	26.4	67.5	Silty clay
10-2, 60	120.10	8.5	28.0	63.5	Silty clay
10-3, 100	122.00	9.9	28.2	61.9	Silty clay
10-4, 60	123.10	9.0	25.6	65.4	Silty clay
10-5, 10	124.10	9.2	28.3	62.6	Silty clay
10-6, 10	125.60	8.9	26.5	64.6	Silty clay
12-1, 60	137.60	7.2	22.2	70.6	Silty clay
12-2, 60	139.10	12.0	27.4	60.5	Silty clay
12-3, 10	140.10	11.6	25.9	62.5	Silty clay
13-1, 7	146.57	15.2	25.6	59.2	Silty clay
14-1, 58	156.58	5.5	30.7	63.8	Silty clay
14-2, 60	158.10	6.3	30.7	63.0	Silty clay
14-3, 60	159.60	6.0	33.8	60.2	Silty clay
14-4, 50	161.00	3.7	34.3	62.1	Silty clay
14-5, 60	162.60	3.7	32.8	63.5	Silty clay
14-6, 60	164.10	2.6	32.9	64.6	Silty clay
14-7, 10	165.10	17.1	28.7	54.2	Silty clay

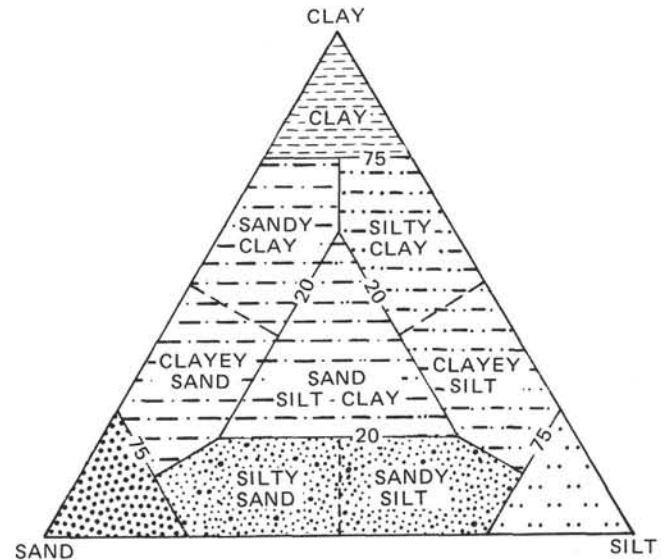


Figure 1. Sediment classification after Shepard (1954) with the sand, silt, and clay size fractions based on the Wentworth (1922) Grade Scale: Sand, silt, and clay size particles having respective diameters of 2000 to 62.5 μm, 62.5 to 3.91 μm, and less than 3.91 μm. Shepard's (1954) sediment classification is a function of sand, silt, and clay size percentages and not composition.

TABLE 2
Carbon and Carbonate Analyses, Leg 49

Sample (Interval in cm)	Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃
Hole 407				
1-1, 3	0.03	7.4	0.1	61
1-1, 26	0.26	1.9	0.1	15
1-2, 6	1.56	4.2	0.1	34
1-2, 87	2.37	2.7	0.1	22
1-3, 20	3.20	2.2	0.1	18
1-4, 12	4.62	2.0	0.1	16
1-4, 78	5.28	1.4	0.2	10
2-1, 33	6.33	1.5	0.1	11
2-1, 119	7.19	6.7	0.1	56
2-3, 41	9.41	8.1	0.1	67
2-4, 41	10.91	2.0	0.1	16
2-5, 85	12.85	1.7	0.1	13
2-6, 45	13.95	2.6	0.1	20
3-1, 42	15.92	6.1	0.1	50
3-2, 114	18.14	2.4	0.1	19
3-4, 28	20.28	1.7	0.2	12
4-1, 92	25.92	1.9	0.1	15
4-2, 34	26.84	1.0	0.2	7
4-3, 98	28.98	6.9	0.1	57
4-4, 82	30.32	0.9	0.1	6
5-1, 81	35.31	2.3	0.1	18
5-2, 33	36.33	1.0	0.1	8
5-3, 8	37.58	1.5	0.1	12
6-1, 23	44.23	1.2	0.1	9
6-2, 59	46.09	6.2	0.1	51
6-3, 62	47.62	8.1	0.1	67
7-1, 75	54.25	8.3	0.1	69
7-2, 69	55.69	8.1	0.1	67
8-1, 30	63.30	7.6	0.1	62
8-2, 30	64.80	7.5	0.1	62
8-3, 10	66.10	8.9	0.1	74
9-2, 70	74.70	8.5	0.1	70
10-1, 10	82.10	9.1	0.1	75
10-2, 10	83.60	9.5	0.1	79
10-3, 92	85.92	9.7	0.1	80
10-4, 20	96.70	9.5	0.1	79
11-1, 71	92.21	9.4	0.1	78
11-2, 71	93.71	9.6	0.1	80
11-3, 71	95.21	9.0	0.1	74
11-4, 71	96.71	10.2	0.1	84
12-1, 70	101.70	10.1	0.1	83
12-2, 70	103.20	10.5	0.1	87
12-3, 70	104.70	9.8	0.1	81
13-1, 70	111.20	9.7	0.1	80
13-2, 79	112.79	9.3	0.1	77
13-3, 79	114.29	9.8	0.1	81
13-4, 79	115.79	9.4	0.1	78
13-5, 50	117.00	9.3	0.1	77
13-6, 50	118.50	8.7	0.1	72
14-1, 70	120.70	8.4	0.1	69
14-2, 70	122.20	9.6	0.1	79
14-3, 70	123.70	8.4	0.1	69
14-4, 25	124.75	0.9	0.1	7
16-1, 87	139.87	8.0	0.1	66
16-2, 87	141.37	9.9	0.1	82
16-3, 87	142.87	9.2	0.1	76
16-4, 3	143.53	9.4	0.1	78
17-1, 70	149.20	10.0	0.1	83
17-2, 70	150.70	8.5	0.1	70
17-3, 70	152.20	9.8	0.1	81
18-1, 70	158.70	9.0	0.1	74
18-2, 70	160.20	4.0	0.1	32
18-3, 70	161.70	7.4	0.1	61
18-4, 70	163.20	7.6	0.1	63
18-5, 70	164.70	7.4	0.1	61
19-1, 70	168.20	7.7	0.1	63
19-2, 70	169.70	7.5	0.1	62

TABLE 2 - Continued

Sample (Interval in cm)	Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃
19-3, 70	171.20	7.3	0.1	60
19-4, 70	172.70	0.7	0.1	5
19-5, 70	174.20	7.2	0.1	59
20-1, 41	177.41	7.6	0.1	62
20-2, 41	178.91	9.2	0.1	76
21-1, 41	186.91	5.1	0.2	42
22-1, 70	196.70	6.3	0.1	52
22-2, 70	198.20	6.1	0.2	49
22-3, 70	199.70	5.7	0.2	46
23-1, 70	206.20	7.2	0.1	59
23-2, 70	207.70	7.5	0.1	61
23-3, 70	209.20	7.9	0.1	65
24-1, 70	215.70	2.4	0.2	18
24-2, 70	217.20	0.4	0.3	1
24-3, 70	218.70	8.7	0.1	72
24-4, 70	220.20	7.3	0.1	60
24-5, 70	221.70	7.7	0.1	63
24-6, 70	223.20	5.8	0.1	47
24-7, 8	224.08	7.2	0.1	59
26-1, 38	234.38	9.3	0.1	77
28-1, 68	253.68	6.1	0.2	49
28-2, 68	255.18	6.5	0.1	53
28-3, 68	256.68	4.1	0.1	33
28-4, 68	258.18	4.9	0.1	40
28-5, 70	259.70	5.4	0.1	44
29-1, 55	263.05	0.4	0.1	3
29-5, 20	268.70	5.3	0.1	43
30-1, 66	272.66	5.7	0.1	47
30-2, 65	274.15	5.4	0.2	44
30-3, 63	275.63	5.8	0.2	47
30-4, 67	277.17	6.2	0.2	50
30-5, 67	278.67	5.8		
30-6, 33	279.83	5.1	0.2	41
31-1, 70	282.20	6.3	0.2	51
31-2, 70	283.70	6.5	0.2	53
31-3, 68	285.18	6.1	0.2	49
31-4, 70	286.70	6.7	0.2	54
31-5, 59	288.09	6.0	0.2	49
31-6, 70	289.70	4.5	0.2	36
31-7, 23	290.73	4.2	0.1	34
32-1, 26	291.26		0.1	
Hole 408				
1-1, 40	0.40	3.0	0.1	24
1-2, 31	1.81	8.0	0.1	66
1-3, 14	3.14	5.7	0.1	47
1-4, 23	4.73	1.8	0.2	14
1-5, 60	6.60	3.7	0.1	30
1-6, 40	7.90	2.5	0.1	20
2-1, 43	9.93	1.4	0.1	11
2-2, 30	11.30	2.4	0.1	19
2-3, 20	12.70	7.0	0.1	57
2-4, 50	14.50	1.9	0.2	14
2-5, 50	16.00	0.4	0.1	3
3-1, 49	19.49	0.6	0.1	4
3-2, 50	21.00	1.1	0.1	8
3-3, 55	22.55	3.1	0.1	25
3-4, 50	24.00	2.8	0.1	23
3-5, 14	25.14	0.4	0.1	3
4-1, 41	28.91	0.3	0.1	1
4-2, 50	30.50	1.7	0.1	14
4-3, 50	32.00	2.8	0.1	22
4-4, 50	33.50	1.3	0.1	10
4-5, 50	35.00	0.5	0.2	3
5-1, 64	38.64	2.8	0.2	22
5-2, 70	40.20	3.3	0.1	27
5-3, 70	41.70	3.9	0.1	31
5-4, 40	42.90	5.5	0.1	45

TABLE 2 – Continued

Sample (Interval in cm)	Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃
6-1, 50	48.00	7.9	0.1	65
6-2, 80	49.80	9.4	0.1	77
6-3, 50	51.00	5.3	0.1	44
7-1, 50	57.50	9.8	0.1	81
7-2, 20	58.70	10.1	0.1	84
8-1, 40	66.90	9.1	0.1	75
8-2, 52	68.52	9.5	0.1	78
9-1, 40	76.40	10.2	0.1	84
9-2, 40	77.90	10.7	0.1	89
10-1, 50	86.00	9.7	0.1	81
10-2, 50	87.50	9.9	0.1	82
10-3, 50	89.00	10.3	0.1	85
10-4, 50	90.50	10.0	0.1	83
10-5, 20	91.70	10.4	0.1	86
11-1, 50	95.50	9.7	0.1	80
11-2, 50	97.00	10.5	0.1	87
11-3, 50	98.50	9.9	0.1	82
11-4, 50	100.00	7.7	0.1	63
11-5, 50	101.50	9.7	0.1	80
11-6, 30	102.80	9.5	0.1	79
12-1, 50	105.00	9.5	0.1	78
12-2, 50	106.50	8.9	0.1	73
13-1, 50	114.50	9.2	0.1	76
13-2, 50	116.00	10.6	0.1	88
13-3, 50	117.50	10.6	0.1	87
15-1, 50	133.50	10.2	0.1	84
15-2, 90	135.40	10.3	0.1	85
15-3, 50	136.50	9.6	0.1	79
15-4, 50	138.00	10.2	0.1	85
15-5, 50	139.50	11.0	0.1	81
16-1, 100	143.50	11.0	0.1	81
16-2, 50	144.50	11.1	0.1	82
16-3, 20	145.70	11.2	0.1	83
17-1, 50	152.50	10.4	0.1	86
17-2, 50	154.00	10.1	0.1	84
17-3, 50	155.50	10.7	0.1	89
17-4, 50	157.00	10.6	0.1	88
17-5, 50	158.50	10.4	0.1	86
18-1, 40	161.90	10.1	0.1	83
18-2, 20	163.20	10.2	0.1	84
18-3, 50	165.00	9.5	0.1	79
18-4, 10	166.10	9.9	0.1	81
19-1, 20	171.20	11.1	0.1	92
19-2, 50	173.00	11.0	0.1	91
19-3, 50	174.50	11.0	0.1	91
19-4, 50	176.00	10.8	0.1	89
19-5, 50	177.50	10.6	0.1	87
19-6, 50	179.00	10.1	0.1	84
19-7, 10	180.10	10.9	0.1	90
20-1, 50	181.00	10.9	0.1	90
20-2, 50	182.50	10.4	0.1	86
21-1, 50	190.50	9.3	0.1	77
21-2, 50	192.00	9.3	0.1	77
21-3, 50	193.50	9.7	0.1	80
21-4, 50	195.00	8.7	0.1	71
22-1, 50	200.00	7.9	0.1	65
22-2, 50	201.50	10.1	0.1	84
22-3, 50	203.00	10.1	0.1	84
23-1, 73	209.73	8.8	0.1	73
23-2, 70	211.20	8.6	0.1	71
23-3, 33	212.33	10.1	0.1	83
24-1, 50	219.00	7.0	0.1	57
24-2, 60	220.60	5.0	0.1	41
24-3, 47	221.97	5.4	0.1	44
24-5, 40	224.90	8.3	0.1	69
24-6, 35	226.35	8.6	0.1	71
25-1, 49	228.49	9.5	0.1	78
25-2, 46	229.96	9.3	0.1	76

TABLE 2 – Continued

Sample (Interval in cm)	Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃
25-3, 59	231.59	8.4	0.1	69
25-4, 60	233.10	8.4	0.1	70
25-5, 67	234.67	8.7	0.1	72
25-6, 66	236.16	8.3	0.1	69
26-1, 66	238.16	8.6	0.1	71
26-2, 60	239.60	7.8	0.1	64
26-3, 50	241.00	8.2	0.1	67
26-4, 50	242.50	7.5	0.1	62
26-5, 60	244.10	7.2	0.1	59
27-1, 60	247.60	6.2	0.1	51
27-2, 60	249.10	8.1	0.1	66
27-3, 60	250.60	7.8	0.1	64
27-4, 66	252.16	6.0	0.1	49
27-5, 60	253.60	5.7	0.1	46
27-6, 60	255.10	7.9	0.1	65
28-1, 60	257.10	3.1	0.1	25
28-2, 60	258.60	6.7	0.1	55
28-3, 60	260.10	7.5	0.1	61
29-1, 60	266.60	7.7	0.2	63
29-2, 60	268.10	8.3	0.1	69
30-1, 50	276.00	5.6	0.2	45
30-2, 50	277.50	4.9	0.1	40
30-3, 50	279.00	4.5	0.1	37
30-4, 50	280.50	8.1	0.1	66
30-5, 50	282.00	8.7	0.1	72
31-1, 50	285.50	4.0	0.1	33
31-2, 50	287.00	4.2	0.1	34
31-3, 50	288.50	6.6	0.1	54
31-4, 50	290.00	6.6	0.1	54
31-5, 50	29.50	7.2	0.1	59
31-6, 50	293.00	6.2	0.1	51
32-1, 50	295.00	5.0	0.1	41
32-2, 50	296.50	4.6	0.1	37
32-3, 50	298.00	3.9	0.1	31
32-4, 50	299.50	3.1	0.1	25
32-5, 50	301.00	3.1	0.1	25
32-6, 50	302.50	2.9	0.1	24
33-1, 50	304.50	3.4	0.2	27
33-2, 50	306.00	3.0	0.1	24
33-4, 50	307.50	3.1	0.1	25
33-4, 50	309.00	2.2	0.1	18
33-5, 50	310.50	2.3	0.1	18
33-6, 50	312.00	3.0	0.1	24
34-1, 50	314.00	5.3	0.1	44
34-2, 50	315.50	6.1	0.1	50
34-3, 50	317.00	5.9	0.1	48
34-4, 50	318.50	6.3	0.1	52
34-5, 50	320.00	3.9	0.1	31
Hole 409				
2-1, 50	25.00	2.5	0.1	20
2-2, 50	26.50	7.2	0.1	59
2-3, 50	28.00	5.1	0.1	42
4-1, 50	44.00	1.1	0.7	3
4-2, 50	45.50	1.4	0.2	9
4-3, 50	47.00	1.5	0.1	11
4-4, 50	48.50	4.8	0.1	39
4-5, 19	49.69	1.4	0.1	11
5-1, 50	53.50	2.9	0.1	23
5-2, 50	55.00	3.4	0.2	26
5-3, 50	56.50	4.4	0.1	36
5-4, 60	58.10	8.9	0.2	72
6-1, 64	63.14	2.1	0.3	15
6-2, 76	64.76	3.3	0.2	26
6-3, 67	66.17	1.4	0.1	11
7-1, 75	72.75	2.5	0.1	20
7-2, 20	73.70	2.9	0.1	23
7-3, 60	75.60	2.4	0.2	18

TABLE 2 - Continued

Sample (Interval in cm)	Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃
7-5, 35	78.35	3.6	0.1	29
7-6, 47	79.97	4.6	0.1	37
Hole 410				
1-1, 89	0.89	10.8	0.1	89
1-2, 31	1.81	5.5	0.1	45
1-3, 31	3.31	10.5	0.1	87
1-4, 46	4.96	6.6	0.2	54
1-5, 43	6.43	8.3	0.2	67
2-1, 63	8.13	10.7	0.1	89
2-2, 45	9.45	5.9	0.2	48
2-3, 99	11.49	10.9	0.1	90
2-4, 33	12.33	11.0	0.1	91
3-1, 125	18.25	11.3	0.1	93
3-2, 36	18.86	11.5	0.1	95
3-3, 34	20.34	10.7	0.1	89
3-4, 35	21.85	10.3	0.1	85
4-1, 35	26.85	10.9	0.1	90
4-2, 49	28.49	1.7	0.2	12
4-3, 43	29.93	9.1	0.1	75
4-4, 46	31.46	6.7	0.2	54
5-1, 65	36.65	7.6	0.2	62
5-2, 63	38.13	10.2	0.1	84
5-3, 66	39.66	10.4	0.1	86
5-4, 75	41.25	10.7	0.1	89
5-5, 35	42.35	6.3	0.2	51
5-6, 85	44.35	6.1	0.2	50
6-1, 85	46.35	9.8	0.2	81
6-2, 36	47.36	9.9	0.2	81
6-3, 45	48.95	8.8	0.2	72
7-1, 33	55.33	9.4	0.2	77
7-2, 16	56.66	7.6	0.2	62
8-1, 46	64.96	9.4	0.2	78
8-1, 50	65.00	9.4	0.2	77
8-2, 46	66.46	10.7	0.1	89
8-3, 46	67.96	9.4	0.1	77
8-4, 76	69.76	10.4	0.1	86
8-5, 46	70.96	11.1	0.6	87
8-6, 50	72.50	9.8	0.1	81
10-1, 50	84.00	9.3	0.1	77
10-2, 50	85.50	10.2	0.1	84
10-3, 50	87.00	10.3	0.1	85
10-4, 50	88.50	7.7	0.2	62
10-5, 50	90.00	8.3	0.1	68
10-6, 50	91.50	8.8	0.1	72
10-7, 20	92.70	10.9	0.1	90
11-1, 50	93.50	10.6	0.1	87
11-2, 50	95.00	10.1	0.1	83
11-3, 50	96.50	10.5	0.1	87
11-4, 50	98.00	10.7	0.1	89
11-5, 50	99.50	10.5	0.1	86
11-6, 50	101.00	10.6	0.1	88
11-7, 20	102.20	11.1	0.1	92
13-1, 50	112.50	10.7	0.1	88
13-2, 50	114.00	10.2	0.1	84
14-1, 50	122.00	10.0	0.1	83
14-1, 53	122.03	9.8	0.1	81
14-2, 50	123.50	9.9	0.1	82
14-2, 53	123.53	9.8	0.1	80
14-3, 50	125.00	8.6	0.1	71
14-3, 53	125.03	8.6	0.2	71
14-4, 50	126.50	8.1	0.2	66
14-4, 53	126.53	8.3	0.2	68
14-5, 50	128.00	11.4	0.1	94
14-5, 53	128.03	11.3	0.1	94
14-6, 50	129.50	11.1	0.1	92
14-6, 53	129.53	11.2	0.1	93
14-7, 20	130.70	9.6	0.2	78

TABLE 2 - Continued

Sample (Interval in cm)	Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃
14-7, 23	130.73	10.0	0.2	82
15-1, 50	131.50	10.5	0.1	87
15-1, 53	131.53	10.5	0.1	87
15-2, 80	133.30	10.7	0.1	89
15-2, 83	133.33	10.7	0.1	89
15-3, 80	134.80	10.9	0.1	90
15-3, 84	134.84	10.9	0.1	90
15-4, 50	136.00	11.0	0.1	91
15-4, 53	136.03	11.1	0.1	92
15-5, 50	137.50	11.2	0.1	93
15-5, 53	137.53	11.2	0.1	93
15-6, 50	139.00	10.7	0.1	89
15-6, 53	139.03	10.8	0.1	89
16-1, 50	141.00	10.9	0.1	90
16-1, 53	141.03	11.0	0.1	91
16-2, 50	142.50	11.0	0.1	91
16-2, 53	142.53	10.9	0.1	89
16-3, 50	144.00	10.8	0.1	89
16-3, 53	144.03	10.8	0.1	89
16-4, 50	145.50	10.8	0.1	89
16-4, 53	145.53	10.9	0.1	90
16-5, 50	147.00	10.8	0.1	90
16-5, 53	147.03	10.8	0.1	90
16-6, 50	148.50	10.7	0.1	89
16-6, 53	148.53	10.7	0.1	89
18-1, 84	160.34	11.4	0.1	95
18-1, 87	160.37	11.3	0.1	94
18-2, 84	161.84	11.3	0.1	94
18-2, 86	161.86	11.4	0.1	95
18-3, 74	163.24	11.4	0.1	95
18-3, 77	163.27	11.4	0.1	95
18-4, 55	164.55	11.4	0.1	95
18-4, 58	164.58	11.4	0.1	94
18-5, 44	165.94	11.5	0.1	96
18-5, 47	165.97	11.5	0.1	95
19-1, 97	169.97	11.5	0.1	95
19-1, 100	170.00	11.4	0.1	95
19-2, 54	171.04	11.5	0.1	95
19-3, 60	172.60	11.4	0.1	94
19-4, 80	174.30	11.0	0.1	91
19-5, 50	175.50	11.4	0.1	94
19-6, 60	177.10	11.5	0.1	96
20-1, 58	179.08	11.5	0.1	95
20-2, 59	180.59	11.5	0.1	96
20-3, 8	181.58	11.5	0.1	95
21-1, 70	188.70	11.5	0.1	95
21-2, 90	190.40	11.5	0.1	95
21-3, 80	191.80	11.6	0.1	96
21-4, 60	193.10	11.3	0.1	94
21-5, 70	194.70	11.5	0.1	95
21-6, 70	196.20	11.6	0.1	96
21-7, 15	197.15	11.6	0.1	96
22-1, 80	198.30	11.4	0.1	95
22-1, 90	198.40	11.4	0.1	95
22-2, 90	199.90	11.4	0.1	95
22-2, 106	200.06	11.4	0.1	94
22-3, 50	201.00	11.4	0.1	94
22-3, 60	201.10	11.4	0.1	94
22-4, 40	202.40	11.4	0.1	94
22-4, 44	202.44	11.4	0.1	94
22-5, 75	204.25	11.2	0.1	93
22-6, 65	205.65	11.5	0.1	95
22-6, 67	205.67	11.4	0.1	94
22-7, 19	206.69	11.3	0.1	94
22-7, 21	206.71	11.4	0.1	95
23-1, 70	207.70	11.3	0.1	94
23-1, 79	207.79	11.3	0.1	94
23-2, 103	209.53	11.3	0.1	93

TABLE 2 - Continued

Sample (Interval in cm)	Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃
23-2, 106	209.56	11.3	0.1	94
23-3, 87	210.87	11.1	0.1	92
23-3, 90	210.90	11.4	0.1	95
23-4, 80	212.30	11.5	0.1	95
23-4, 84	212.34	11.5	0.1	95
23-5, 75	213.75	11.5	0.1	95
23-6, 50	215.00	11.6	0.1	96
23-6, 55	215.05	11.4	0.1	94
24-1, 60	217.10	11.4	0.1	95
24-1, 64	217.14	11.4	0.1	95
24-2, 80	218.80	11.4	0.1	94
24-2, 83	218.83	11.4	0.1	94
24-3, 60	220.10	11.5	0.1	96
24-3, 64	220.14	11.5	0.1	95
24-4, 40	221.40	11.5	0.1	96
24-4, 43	221.43	11.5	0.1	95
24-5, 70	223.20	11.5	0.1	96
24-6, 52	224.52	11.5	0.1	95
24-6, 55	224.55	11.4	0.1	95
24-7, 10	225.60	11.3	0.1	94
24-7, 13	225.63	11.3	0.1	94
25-1, 70	226.70	11.3	0.1	94
25-1, 74	226.74	11.3	0.1	94
25-2, 50	228.00	11.2	0.1	93
25-2, 53	228.03	11.2	0.1	93
25-3, 60	229.60	11.4	0.1	94
25-3, 65	229.65	11.4	0.1	94
25-4, 50	231.00	11.3	0.1	94
25-4, 53	231.03	11.3	0.1	94
25-5, 50	232.50	11.5	0.1	95
25-6, 50	234.00	11.3	0.1	94
25-6, 53	234.03	11.4	0.1	94
25-7, 20	235.20	11.4	0.1	94
25-7, 23	235.23	11.3	0.1	93
26-1, 30	235.80	11.2	0.1	92
26-1, 33	235.83	11.2	0.1	93
26-2, 30	237.30	11.2	0.1	93
26-3, 30	238.80	11.2	0.1	92
26-3, 33	238.83	11.2	0.1	93
27-1, 50	245.50	11.2	0.1	92
27-1, 53	245.53	11.2	0.1	93
27-2, 50	247.00	11.1	0.1	92
27-3, 53	248.53	11.3	0.1	93
27-3, 50	248.50	11.2	0.1	93
28-1, 50	255.00	11.0	0.1	91
28-1, 53	255.03	10.9	0.1	90
28-3, 50	256.50	11.1	0.1	92
28-2, 53	256.53	10.9	0.1	90
28-3, 50	258.00	11.0	0.1	91
28-4, 50	259.50	11.2	0.1	93
28-4, 53	259.53	11.2	0.1	92
29-1, 50	264.50	11.3	0.1	94
29-1, 53	264.53	11.3	0.1	93
29-2, 50	266.00	11.2	0.1	92
29-2, 53	266.03	11.1	0.1	91
29-3, 50	267.50	11.0	0.1	91
29-4, 50	269.00	11.0	0.1	91
29-4, 53	269.03	11.1	0.1	91
29-5, 20	270.20	11.2	0.1	92
29-5, 23	270.23	11.2	0.1	93
30-1, 50	274.00	11.2	0.1	92
30-1, 53	274.03	11.2	0.1	93
30-2, 50	275.50	11.2	0.1	93
30-2, 53	275.53	11.2	0.1	93
30-3, 50	277.00	11.1	0.1	92
30-3, 53	277.03	11.0	0.1	91
30-4, 50	278.50	11.3	0.1	93
30-5, 50	280.00	11.0	0.1	91

TABLE 2 - Continued

Sample (Interval in cm)	Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃
30-5, 53	280.03	11.2	0.1	93
30-6, 50	281.50	11.3	0.1	94
30-6, 53	281.53	11.3	0.1	94
30-7, 20	282.70	11.3	0.1	94
30-7, 23	282.73	11.3	0.1	93
31-1, 88	283.88	11.2	0.1	93
31-1, 90	283.90	11.3	0.1	93
31-2, 79	285.29	11.3	0.1	93
31-3, 65	286.65	11.1	0.1	92
31-3, 68	286.68	11.2	0.1	93
31-4, 35	287.85	11.2	0.1	92
31-4, 37	287.87	11.1	0.1	92
32-1, 65	293.15	11.2	0.1	93
32-1, 57	293.17	11.2	0.1	93
32-2, 54	294.54	11.2	0.1	92
32-3, 82	296.32	11.1	0.1	92
32-3, 84	296.34	11.2	0.1	92
33-1, 71	302.71	11.2	0.1	92
33-2, 40	303.90	1.8	0.1	15
33-2, 41	303.91	11.1	0.1	92
34-1, 17	311.67	11.0	0.1	91
34-2, 78	313.78	11.2	0.0	93
34-2, 79	313.79	11.4	0.1	94
35-1, 76	321.76	11.3	0.1	94
35-1, 77	321.77	11.4	0.1	95
35-2, 77	323.27	11.3	0.1	94
35-3, 66	324.66	11.5	0.1	95
35-3, 67	324.67	11.4	0.1	95
36-1, 75	331.25	10.9	0.1	90
36-1, 78	331.28	11.0	0.1	91
36-2, 135	333.35	11.0	0.1	91
36-3, 47	333.97	10.7	0.1	89
36-3, 52	334.02	10.8	0.1	90
Hole 410A				
1-1, 74	325.74	5.0	0.2	40
1-1, 76	325.76	5.0	0.2	40
1-2, 94	327.44	10.7	0.1	88
1-2, 97	327.47	10.6	0.1	88
1-3, 64	328.64	10.8	0.1	89
1-3, 67	328.67	10.7	0.1	88
1-4, 73	330.23	10.8	0.1	89
1-4, 75	330.25	10.7	0.1	88
1-5, 90	331.90	11.4	0.1	94
1-5, 93	331.93	11.2	0.1	93
1-6, 22	332.72	10.9	0.1	90
1-6, 25	332.75	10.8	0.1	90
Hole 411				
1, CC	74.70	10.7	0.1	89
1-2, 33	75.83	11.1	0.0	92
1-4, 75	79.25	11.3	0.0	94
Hole 412				
1-1, 50	0.50	10.4	0.1	86
1-1, 142	1.42	10.1	0.2	82
1-2, 50	2.0	9.3	0.3	74
2-1, 50	4.50	10.0	0.1	82
2-2, 50	6.00	9.0	0.3	73
2-3, 50	7.50	9.3	0.3	75
2-4, 50	9.00	10.3	0.1	84
2-5, 50	10.50	10.0	0.2	82
2-6, 60	12.10	10.7	0.1	88
3-1, 50	14.00	10.8	0.1	89
3-2, 50	15.50	9.7	0.1	80
3-3, 50	17.00	10.0	0.1	83
3-4, 30	18.30	8.6	0.2	70

TABLE 2 – *Continued*

Sample (Interval in cm)	Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃
3-5, 60	20.10	9.8	0.1	81
3-6, 50	21.50	9.9	0.2	81
4-1, 50	23.50	8.0	0.3	64
4-2, 50	25.00	9.8	0.2	80
4-3, 50	26.50	10.5	0.1	87
4-4, 50	28.00	10.2	0.1	84
4-5, 50	29.50	10.5	0.2	85
4-6, 50	31.00	10.7	0.1	88
5-1, 50	52.00	10.6	0.2	86
5-2, 50	53.50	10.5	0.2	86
5-3, 50	55.00	9.7	0.2	79
5-4, 50	56.50	11.4	0.1	94
6-1, 50	80.50	10.8	0.1	89
6-2, 50	82.00	10.2	0.1	84
6-3, 50	83.50	9.4	0.3	76
6-4, 30	94.80	11.1	0.1	91
7-1, 50	90.00	11.2	0.1	92
7-2, 50	91.50	10.6	0.1	88
8-1, 76	99.76	10.1	0.2	83
8-2, 76	101.26	10.4	0.1	86
8-3, 76	102.76	10.5	0.1	86
8-4, 76	104.26	10.2	0.1	84
8-5, 76	105.76	10.9	0.1	89
8-6, 76	107.26	11.0	0.1	91

TABLE 2 – *Continued*

Sample (Interval in cm)	Depth (m)	Total Carbon (%)	Organic Carbon (%)	CaCO ₃
8-7, 18	108.18	11.0	0.1	90
9-1, 103	109.53	10.9	0.1	90
9-2, 80	110.80	10.5	0.1	86
9-3, 80	112.30	10.7	0.1	88
9-4, 80	113.80	11.0	0.1	91
9-5, 80	115.30	11.4	0.1	94
9-6, 60	116.60	11.1	0.1	91
10-1, 80	118.80	11.0	0.1	90
10-2, 80	120.30	11.1	0.1	91
10-3, 110	122.10	11.0	0.1	91
10-4, 80	123.30	11.1	0.1	91
10-5, 20	124.20	11.0	0.1	91
10-6, 30	125.80	11.2	0.1	92
12-1, 80	137.80	10.9	0.1	90
12-2, 80	139.30	10.9	0.1	90
12-3, 20	140.20	10.9	0.1	90
13-1, 19	146.69	11.2	0.1	92
14-1, 79	156.79	10.7	0.1	88
14-2, 80	158.30	10.4	0.1	86
14-3, 80	159.80	10.2	0.1	84
14-4, 60	161.10	10.2	0.1	84
14-5, 80	162.80	10.0	0.1	83
14-6, 80	164.30	11.1	0.1	91
14-7, 15	165.15	12.1	0.1	100