

APPENDIX I. PHYSICAL PROPERTIES DATA, DEEP SEA DRILLING PROJECT LEG 93, SITES 603, 604, AND 605¹

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On Leg 93, physical properties measurements were made of vertical and horizontal sonic velocity, acoustic impedance, vane shear strength, and penetrometer strength, using procedures discussed in Boyce (1973, 1976, 1984). Gravimetric procedures were used to determine wet-bulk density, grain density, porosity, and water content, using either the chunk method (Boyce, 1973) or the cylinder method (Boyce, 1984). Calcium carbonate content of Leg 93 sediments was determined by the carbonate bomb (Müller and Gastner, 1971; Dunn, 1980).

SONIC VELOCITY

Compressional-wave velocities were measured on the Hamilton Frame Velocimeter by timing a 400-kHz pulse between two transducers and by measuring the distance across the sample with a dial gauge. Velocities in unconsolidated sediments were generally measured on the split core. Correction factors established by Boyce (1976) were used to compensate for increased thickness and travel time (0.242 cm and 1.108 μ s, respectively) caused by the polycarbonate liner. For consolidated sediments, a piece was removed from the core and trimmed carefully to form two parallel surfaces to insure good contact with the transducer heads. Salt water was used to make an acoustic contact between the sample and the transducers. On indurated sediments, measurements were made of both horizontal (perpendicular to the core axis) and vertical (parallel to the core axis) sonic velocities. By measuring aluminum, Lucite, and brass standards of known lengths and assumed velocities, correction factors were determined for the oscilloscope.

Horizontal sonic velocities were determined for Hole 603 sediments (Table 1). Both horizontal and vertical velocity were measured in Hole 603B (Table 2) and Hole 605 (Table 5). Vertical velocities were determined for Hole 603C (Table 3) and Hole 604 (Table 4) sediments. Acoustic impedance of Leg 93 sediments was determined from the vertical sonic velocity, and impedance data are listed for Holes 603B (Table 2), 603C (Table 3), 604 (Table 4), and 605 (Table 5).

VANE SHEAR AND PENETROMETER STRENGTH

A Soiltest Torvane and a Soiltest CL-700 Pocket Penetrometer were used to determine the shear strength and the unconfined compression strength of Leg 93 sediments and sedimentary rocks. The Torvane blades were buried about 0.5 cm below the sediment surface of the split core halves, with the vane axis oriented parallel to the bedding plane of the sediment. The Torvane was hand-rotated at a rate designed to reach failure in about 10 s with constant loading. Measurements were made in the least-disturbed sections of the split core, parallel to the core axis, and were discontinued when cracking of the sediments was observed, indicating failure by fracturing rather than by shear. Vane shear data was determined for sediments in Cores 603-1 and -2 (Table 1), and for the entire recovered section of Hole 603C (Table 3) and Hole 604 (Table 4). Two blades on the Torvane fractured in the last sample from Hole 604, preventing the determination of shear strength values for Hole 605 samples.

The Pocket Penetrometer measured compression strength parallel to bedding. It was pushed into undisturbed sections of the split core, perpendicular to the split face of the core. Unconfined compression strength was determined for sediments from Hole 604 (Table 4) and for Cores 605-3 to -6 (Table 5).

GRAVIMETRIC PROCEDURES

Wet-bulk density, grain density, porosity, and water content were all determined for sample intervals at which sonic velocities were determined, generally at intervals of 1.5 m (one sample per core section). The cylinder technique (Boyce, 1984) was used on soft or stiff sediments. Samples were taken with stainless steel or brass cylinders of known volume and weight, and were tightly enclosed to retain moisture until they could be weighed. For indurated sediment and hard rock, the gravimetric chunk technique (Boyce, 1973) was used, in which samples cut out of the core for measurement of sonic velocities were stored under seawater. Chunk volume was determined by weighing both in air and suspended under water.

Sample volume and weight yield the wet-bulk density without a buoyancy correction. Wet-water content and porosity were calculated from the water loss after drying

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at 110°C for 24 hr. Water content is related to the weight of the wet samples and therefore is defined here as wet-water content. All wet-water content and porosity data were corrected for salt content, using the correction factors for seawater (Boyce, 1976). The approximate grain density was calculated from the gravimetric data. Porosity was calculated by assuming that the sediments were water-saturated. This may not be true for all samples, because some undergo adiabatic expansions if the *in situ* pressure is released when cores are brought from the seafloor to the shipboard laboratory. The effect of the volume increase of the samples due to elastic rebound, caused by the removal of *in situ* overburden pressure (Hamilton, 1976), was not taken into account.

CARBONATE CONTENT

Calcium carbonate percentages of Leg 93 sediments were determined by the "Karbonat-Bombe" procedure of Müller and Gastner (1971), modified to eliminate the gas vapor pressure effect of using concentrated hydrochloric acid in the bombs (Dunn, 1980). Dried samples of sediment and rock were ground, and approximately 1 g of sample was reacted with concentrated HCl in a closed cylinder. The resulting increase in pressure was measured on a manometer gauge. Pressure increase caused by formation of CO₂ gas is proportional to the concen-

tration of CaCO₃ in the sample, and carbonate percentages of samples were determined by analyzing standards of known carbonate content.

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Table 1. Summary of physical properties data for samples from Hole 603.

Core-Section (interval in cm)	Sub-bottom depth(m)	Horizontal sonic velocity (km/s)	Shear strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
1-1, 20	0.20		15.80					
1-1, 20	0.20		26.71					
1-1, 70	0.70		23.71					
1-1, 120	1.20		23.45					19
1-2, 30	1.80		24.01					
1-2, 80	2.30		23.36					
1-2, 130	2.80		23.53					
1-3, 90	3.90		27.00					
1-4, 30	4.80		26.96					
1-4, 130	5.80		26.82					
1-5, 80	6.80		26.95					
1-6, 80	8.30			1.47	2.60	72	96	17
2-1, 90	9.90		17.62					
2-3, 83	12.83			1.69	2.72	61	57	11
2-5, 32	15.32			1.67	2.71	61	59	6
3-1, 17	83.97			1.65	2.63	61	60	14
4-1, 80	123.00			1.65	2.53	59	56	8
4-1, 93	123.13	1.517						
4-2, 80	124.50	1.296						
4-2, 80	124.50	1.296						
4-2, 80	124.50	1.546						
4-2, 80	124.50			1.68	2.64	59	56	15
4-3, 40	125.60	1.502						
4-3, 80	126.00			1.67	2.74	63	61	10
4-3, 99	126.19	1.553						
4-3, 148	126.68	1.466						
4-4, 23	126.93	1.437						
4-4, 23	126.93	1.499						
4-4, 80	127.50			1.74	3.35	69	68	6
4-4, 98	127.68	1.474						
4-4, 142	128.12	1.505						
4-5, 23	128.43	1.499						
4-5, 80	129.00			1.62	2.60	62	64	14
4-5, 128	129.48	1.500						
4-6, 70	130.40			1.58	2.57	64	70	7
5-1, 84	132.64			1.59	2.49	62	65	1
5-2, 80	134.10			1.70	2.57	57	51	13
5-3, 80	135.60			1.74	2.64	56	49	12
5-4, 80	137.10			1.62	2.42	57	56	18
7-1, 80	180.60			1.67	2.57	58	54	
7-2, 80	182.10			1.65	2.31	51	46	
7-3, 80	183.60			1.70	2.56	56	50	
7-4, 80	185.10			1.64	2.58	61	60	8
7-5, 80	186.60			1.65	2.57	59	57	3
7-6, 80	188.10			1.66	2.57	59	55	3
8-1, 80	199.80			1.74	2.62	55	47	13
8-2, 60	201.10			1.74	2.62	55	47	19
8-3, 45	202.45			1.53	2.27	59	64	10
9-1, 80	209.40			1.69	2.45	54	47	15
9-1, 130	209.90	1.538						
9-2, 80	210.90			1.72	2.50	53	45	6
9-2, 130	211.40	1.585						
9-3, 80	212.40	1.525						
9-3, 80	212.40			1.77	2.55	51	42	8
9-4, 80	213.90			1.69	2.58	57	52	19
9-4, 117	214.27	1.518						
9-4, 117	214.27	1.548						
10-1, 80	219.00							
10-2, 80	220.50			1.78	2.62	53	43	10
10-2, 130	221.00	1.548						
10-3, 80	222.00			1.80	2.66	53	42	10
10-4, 80	223.50			1.79	2.65	53	43	1
10-4, 81	223.51	1.241						
10-5, 80	225.00			1.78	2.58	51	41	4
10-6, 72	226.42	1.453						
11-1, 80	228.60			1.61	2.46	60	60	9
11-2, 35	229.65			1.73	2.55	54	46	7
11-3, 80	231.60			1.71	2.51	54	47	
11-4, 80	233.10			1.62	2.54	61	60	7
11-5, 80	234.60			1.77	2.80	58	50	6
11-6, 32	235.62			1.69	2.63	59	54	7
12-1, 80	267.00			1.69	2.52	55	49	
12-2, 80	268.50			1.80	2.65	53	42	2
12-2, 105	268.75	1.395						
12-3, 60	269.80	1.524						
12-3, 80	270.00			1.76	2.51	50	41	2
12,CC	270.50	1.877						

APPENDIX I

Table 1 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Horizontal sonic velocity (km/s)	Shear strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
13-1, 80	276.60			1.81	2.64	52	41	7
13-2, 80	278.10			1.78	2.53	50	40	9
13-3, 80	279.60			1.81	2.64	52	41	17
13-4, 80	281.10			1.73	2.36	47	38	
13-5, 80	282.60			1.64	2.18	47	41	11
13-6, 80	284.10			1.80	2.60	51	41	5
14-1, 79	314.99			1.61	2.32	55	52	10
14-2, 72	316.42	1.468						
14-2, 80	316.50			1.71	2.57	56	50	11
14-3, 79	317.99			1.68	2.33	50	42	8
14-3, 81	318.01	1.550						
14-4, 7	318.77	1.538						
14-4, 79	319.49			1.68	2.30	49	42	11
14-5, 11	320.31			1.80	2.61	51	41	13
15-1, 74	324.54	1.154						
15-1, 78	324.58			1.75	2.67	56	48	16
15-2, 52	325.82	1.577						
15-2, 78	326.08							1
15-3, 78	327.58			1.65	2.48	57	54	1
15-4, 78	329.08			1.73	2.57	54	47	6
15-4, 100	329.30	1.551						
15-5, 6	329.86	1.560						
15-5, 78	330.58			1.75	2.68	56	48	1
15-6, 78	332.08			1.66	2.56	58	55	2
16-1, 69	362.89	1.564						
16-1, 80	363.00			1.74	2.37	47	38	17
16-2, 69	364.39	1.363						
16-2, 80	364.50			1.70	2.32	48	40	18
16-3, 80	366.00			1.79	2.52	49	38	1
16-4, 40	367.10	1.557						
16-4, 80	367.50			1.78	2.48	48	38	4
17-1, 10	371.90			1.75	2.50	51	41	6
17-1, 14	371.94	1.679						
17-2, 52	373.82	1.592						
17-2, 55	373.85			1.80	2.54	49	38	
17-5, 14	377.94	1.655						
17-5, 15	377.95			1.80	2.52	48	37	5
18-1, 14	410.34			1.75	2.40	48	38	
18-1, 93	411.13	1.678						
18-1, 93	411.13	1.640						
19-1, 79	420.59	1.114						
19-1, 80	420.60			1.69	2.32	48	41	6
19-3, 79	423.59	1.183						
19-3, 80	423.60			1.79	2.57	50	39	4
19-5, 80	426.60			1.82	2.53	48	36	
20-1, 80	449.40			1.75	2.51	51	42	
20-2, 52	450.62	1.476						
20-2, 80	450.90			1.81	2.46	46	34	
20-3, 50	452.10	1.517						
20-3, 80	452.40			1.74	2.22	40	31	
20-4, 80	453.90	1.598						
20-4, 80	453.90			1.81	2.48	46	34	
20-5, 20	454.80			1.85	2.50	44	31	1
21-1, 79	458.99			1.70	2.18	42	34	2
21-1, 80	459.00	1.448						
21-1, 80	459.00	1.489						
21-2, 76	460.46			1.88	2.52	43	30	
21-2, 80	460.50	1.597						
21-3, 80	462.00			1.87	2.51	44	33	
21-3, 80	462.00	1.814						
21-4, 32	463.02	1.546						
22-1, 80	468.60			1.82	2.38	43	33	3
22-2, 80	470.10	1.411						
22-2, 80	470.10			1.83	2.50	47	37	
22-3, 88	471.68			1.86	2.53	46	36	
22-3, 88	471.68	1.591						
22-4, 84	473.14	1.572						
22-4, 84	473.14			1.88	2.57	46	35	
22-5, 80	474.60							3
22-5, 80	474.60	1.521						
22-6, 79	476.09			1.90	2.61	46	34	
22-6, 79	476.09	1.261						
23-1, 82	507.02	1.525						
23-1, 82	507.02			1.83	2.52	47	38	
23-2, 83	508.53			1.87	2.57	47	36	
23-2, 83	508.53	1.573						
23-3, 89	510.09	1.608						

Table 1 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Horizontal sonic velocity (km/s)	Shear strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
23-3, 89	510.09			1.77	2.36	45	37	
23-4, 84	511.54			1.85	2.55	47	37	5
23-4, 84	511.54	1.520						
23-5, 20	512.40	1.170						
23-5, 20	512.40			1.86	2.57	47	37	4
24-1, 80	516.60	1.577						
24-1, 80	516.60			1.79	2.43	46	38	3
24-2, 81	518.11	1.540						
24-2, 84	518.14			2.02	2.98	50	36	
24-3, 81	519.61			1.89	2.71	50	39	2
24-3, 81	519.61	1.549						
24-4, 80	521.10	1.498						
24-4, 80	521.10			1.85	2.58	48	38	1
24-5, 80	522.60	1.476						
24-5, 80	522.60			1.88	2.65	48	38	
24-6, 81	524.11	1.536						
25-1, 40	545.00			1.84	2.81	56	47	2
25-1, 60	545.20	1.575						
25-2, 60	546.70			1.82	2.63	51	43	
25-2, 80	546.90	1.513						
25-3, 84	548.44	1.464						
25-3, 84	548.44			1.64	2.15	47	44	
25-4, 83	549.93	1.554						
25-4, 83	549.93			1.82	2.54	49	40	3
25-5, 6	550.66			1.82	2.62	51	43	
25-5, 85	551.45	1.487						
25-6, 80	552.90	1.538						
25-6, 80	552.90			1.84	2.61	49	40	2
25-7, 33	553.93	1.567						
25,CC	554.40			1.86	2.61	49	38	3
26-1, 90	555.10	1.447						
26-1, 130	555.50			1.85	2.57	48	38	
26-2, 92	556.62	1.708						
26-2, 130	557.00			1.87	2.70	51	40	
26-3, 95	558.15	1.760						
26-3, 130	558.50			1.85	2.63	50	40	
26-4, 94	559.64	1.570						
26-4, 130	560.00			1.82	2.57	50	41	2
26-5, 96	561.16	1.524						
26-5, 130	561.50			1.84	2.60	49	39	
26-6, 65	562.35			1.84	2.62	50	41	
26-6, 66	562.36	1.372						
27,CC	564.00	1.722						
27,CC	564.00			1.78	2.38	45	37	2
28-1, 33	563.33	1.509		1.83	2.45	45	35	5
29-1, 53	573.93	1.646						
29-1, 135	574.75			1.85	2.54	47	37	3
29-2, 53	575.43	1.725						
29-2, 135	576.25			1.89	2.68	49	37	2
29-3, 51	576.91	1.737						
29-3, 135	577.75			1.88	2.62	47	36	
29-4, 51	578.41	1.587						
29-4, 135	579.25			1.87	2.60	47	37	4
29-5, 115	580.55	1.564						
29-5, 135	580.75			1.88	2.68	50	39	2
30-1, 98	583.98			1.86	2.79	54	44	1
30-1, 139	584.39	1.539						
30-2, 77	585.27			1.86	2.67	50	70	
30-2, 81	585.31	1.471						
30-3, 77	586.77			1.87	2.61	48	37	
30-3, 81	586.81	1.666						
30-4, 77	588.27			1.89	2.60	46	35	
30-4, 81	588.31	1.598						
30-5, 12	589.12			1.89	2.64	48	37	1
30-5, 17	589.17	1.471						
31-1, 71	593.31	1.674						
31-2, 119	595.29			1.88	2.68	49	38	2
31-2, 121	595.31	1.791						
31-3, 71	596.31			1.89	2.57	45	34	2
31-3, 72	596.32	1.404						
32-1, 55	602.75	1.746						
32-1, 58	602.78			1.91	2.61	45	34	1
32-2, 58	604.28			1.90	2.62	46	35	
32-2, 94	604.64	1.702						
33-1, 69	612.49	1.669						
33-1, 70	612.50			1.90	2.60	46	35	
33-2, 70	614.00	1.784						

APPENDIX I

Table 1 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Horizontal sonic velocity (km/s)	Shear strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
33-2, 70	614.00			1.91	2.70	48	37	
33-2, 70	614.00	1.722						
33-3, 66	615.46	1.687						
33-3, 67	615.47	1.651						
33-3, 67	615.47	1.660						
33-3, 67	615.47		1.92	2.60	44	32		2
33-3, 69	615.49	1.707						
33-4, 67	616.97		1.89	2.59	46	35		
33-5, 75	618.55		1.92	2.57	43	32		
33-6, 28	619.58		1.95	2.68	45	33		6
34-1, 81	622.21	1.573		1.94	2.66	45	33	2
34-2, 76	623.66	1.525		1.94	2.68	45	33	2
34-3, 80	625.20	1.710		1.95	2.75	47	35	2
34-4, 77	626.67	1.652		1.68	2.11	41	34	6
35-1, 79	631.79	1.641		1.93	2.70	47	35	
35-2, 80	633.30	1.707		1.92	2.65	46	34	
35-3, 81	634.81	1.676		1.96	2.73	46	34	2
35-4, 77	636.27	1.653		1.95	2.74	47	34	6
35-5, 77	637.77	1.594		1.92	2.77	50	38	5
35-6, 75	639.25	1.659		1.95	2.69	45	33	
36-1, 73	641.33			1.95	2.93	52	40	
36-1, 77	641.37	1.628		1.93	2.67	46	34	
36-1, 81	641.41	1.610						13
36-2, 80	642.90			1.92	2.76	49	37	1
36-2, 81	642.91	1.615		1.95	2.65	44	32	
36-2, 81	642.91	1.511						
36-3, 73	644.33	1.603		1.90	2.70	49	38	12
36-3, 77	644.37	1.665						
36-4, 75	645.85	1.606		1.95	2.68	45	33	2
36-4, 83	645.93	1.651						
37-1, 66	650.86	1.587		1.92	2.73	48	36	
37-2, 55	652.25	1.693		1.95	2.73	47	34	6
37-3, 15	653.35	1.635		1.95	2.67	45	32	
38-1, 80	660.60	1.558						
38-1, 80	660.60	1.615						
38-1, 80	660.60			1.93	2.66	46	34	
38-2, 80	662.10	1.607						
38-2, 80	662.10			1.94	2.65	45	33	3
38-3, 14	662.94	1.624						
38-3, 14	662.94			1.93	2.68	46	34	2
39-1, 70	670.10	1.678		1.93	2.66	46	33	3
39-2, 51	671.41	1.581		1.93	2.81	51	39	
40-1, 81	679.81	1.692		1.92	2.70	47	36	
40-2, 79	681.29	1.660		1.95	2.66	44	32	
40-3, 75	682.75	1.642		1.90	2.69	49	37	
40-4, 79	684.29	1.539		1.91	2.77	50	39	4
40-5, 82	685.82	1.650		1.92	2.74	49	37	3
40-6, 80	687.30	1.670		1.92	2.71	48	36	1
41-1, 80	689.40	1.780		1.93	2.64	45	32	3
41-2, 80	690.90	1.809		1.93	2.69	47	34	3
41-3, 80	692.40			1.92	2.80	51	39	6
41-4, 80	693.90	1.809		1.90	2.67	48	37	6
41-5, 80	695.40	1.679		1.91	2.67	47	36	5
41-6, 80	696.90	1.766		1.88	2.63	48	37	2
42-1, 74	698.94	1.731		1.86	2.66	50	70	5
42-2, 74	700.44	1.702		1.87	2.73	51	41	4
42-3, 74	701.94	1.671		1.82	2.62	41	43	4
42-4, 74	703.44	1.710		1.85	2.66	51	41	4
43-1, 72	708.52	1.775						
43-1, 72	708.52	1.876						
43-1, 74	708.54			1.89	2.69	49	38	4
44-1, 55	717.95	1.734		1.88	2.62	48	37	2
44-2, 55	719.45	1.727		1.85	2.56	47	37	3
44-3, 55	720.95	1.783		1.84	2.59	49	39	3
44-4, 55	722.45	1.802		1.91	2.61	45	33	2
45-1, 70	727.70	1.807		1.88	2.64	48	37	3
45-2, 70	729.20	1.791		1.88	2.62	47	36	3
45-3, 70	730.70	1.732		1.87	2.70	50	39	
45-4, 70	732.20	1.745		1.87	2.64	48	38	2
45-5, 69	733.69	1.715		1.88	2.63	48	37	3
46-1, 80	737.40	1.640		1.78	2.54	51	44	6
46-2, 90	739.00	1.681		1.80	2.49	48	40	3
46-3, 80	740.40	1.655		1.75	2.50	52	46	
46-4, 77	741.87	1.722						
46-4, 78	741.88	1.608		1.83	2.49	46	36	3
46,CC	742.65	1.720		1.89	2.56	45	33	10
47-1, 70	746.90	1.597		1.88	2.53	44	34	4

Table 1 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Horizontal sonic velocity (km/s)	Shear strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
47,CC	748.17	1.818		2.00	2.52	36	23	
48-1, 80	756.60	1.830						3
49-1, 80	766.20	1.806		1.86	2.51	45	35	6
49-2, 80	767.70	1.797		1.85	2.45	43	32	4
49-3, 58	768.98	1.717						
49-3, 58	768.98	1.799		1.89	2.52	44	33	4
50-1, 76	775.76	1.811		1.85	2.51	46	36	4
50-2, 82	777.32	1.768		1.80	2.51	49	41	4
50-3, 82	778.82	1.757		1.79	2.47	48	40	3
50-4, 86	780.36	1.799		1.78	2.50	50	42	2
51-1, 48	785.08	1.527		1.91	2.57	43	32	3
51-1, 48	785.08	1.671						
51-2, 48	786.58	1.671		1.86	2.50	44	33	3
52-1, 80	795.00			1.81	2.49	48	39	
52-1, 80	795.00	1.662						
52-2, 80	796.50			1.84	2.52	47	37	4
52-3, 80	798.00	1.729		1.90	2.51	42	31	7
52-4, 80	799.50	1.678		1.91	2.60	45	33	
52-5, 10	800.30	1.614		1.90	2.58	45	33	4
53-1, 41	804.21	1.496		1.91	2.56	44	32	2
54-1, 74	823.74	1.751						

APPENDIX I

Table 2. Summary of physical properties data for samples from Hole 603B.

Core-Section (interval in cm)	Sub-bottom depth(m)	Sonic velocity (km/s)		Acoustic impedance (g·10 ⁵ /cm ² ·s)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
		Vertical	Horizontal						
5-1, 75	822.15	1.884	2.146	3.617	1.92	2.60	44	32	
5-2, 75	823.65	1.868	2.101	3.587	1.92	2.54	42	30	7
5-3, 75	825.15	3.086	1.983	5.987	1.94	2.63	44	32	
5-4, 76	826.66	1.822	2.010	4.810	2.64	5.17	62	33	
5-5, 78	828.18	1.830	2.067	3.495	1.91	2.52	42	30	9
6-1, 75	831.75	1.739	2.197	3.321	1.91	2.56	44	32	
6-2, 75	833.25	1.811	2.213	3.531	1.95	2.59	42	30	8
6-3, 75	834.75	1.825	1.884	3.541	1.94	2.59	31	33	
6-4, 20	835.70	1.379	1.755	2.703	1.96	2.48	37	25	
7-1, 50	850.70	1.845	2.202	3.579	1.94	2.59	43	30	
7-2, 70	852.40	1.769	2.259	3.450	1.95	2.55	41	29	8
7-3, 69	853.89	1.854	2.245	3.597	1.94	2.59	43	30	
7-4, 70	855.40	1.943	2.055	3.750	1.93	2.58	42	30	
7-5, 70	856.90	1.816	1.975	3.469	1.91	2.57	44	32	9
7-6, 70	858.40	1.898	2.167						
8-1, 80	870.20	1.974	2.049	3.889	1.97	2.61	42	29	
8-2, 80	871.70	1.745	1.806	3.438	1.97	2.57	40	27	
8-3, 78	873.18	1.418	2.087	2.822	1.99	2.60	40	27	
8-4, 80	874.70	1.869	2.042	3.682	1.97	2.63	42	29	
8-5, 81	876.21	1.767	1.966	3.410	1.93	2.59	43	31	10
8-6, 78	877.68	1.781	2.020	3.420	1.92	2.60	44	32	
8-7, 20	878.60	1.841	2.160	3.590	1.95	2.58	41	29	
8, CC	878.87	1.819	2.100	3.547	1.95	2.61	43	30	
9-1, 20	892.20	1.764	2.004	3.440	1.95	2.58	42	29	8
10-1, 76	898.96	1.826	2.062	3.579	1.96	2.62	42	30	
10-2, 82	900.52	1.821	2.095	3.606	1.98	2.60	41	28	9
10-3, 82	902.02	1.875	2.157	3.731	1.99	2.60	40	27	
10-4, 81	903.51	1.881	2.049	3.724	1.98	2.62	41	28	
10-5, 79	904.99	1.863	2.049	3.651	1.96	2.52	38	26	8
11-1, 80	908.60	1.839	2.079	3.623	1.97	2.59	41	28	
11-2, 78	910.08	1.613	2.004	3.194	1.98	2.64	42	29	10
11-3, 81	911.61	1.829	1.719	3.621	1.98	2.63	42	29	
11-4, 80	913.10	1.807	2.030	3.578	1.98	2.64	41	28	
11-5, 81	914.61	1.896	2.111	3.735	1.97	2.62	42	29	9
11-6, 30	915.60	1.868	1.876	3.699	1.98	2.63	42	29	
12-1, 67	927.67	1.781	1.968	3.491	1.96	2.59	41	29	
12-2, 80	929.30	1.829	2.010	3.621	1.98	2.64	42	29	8
12-3, 70	930.70	1.821	1.981	3.642	2.00	2.59	39	26	
12-4, 87	932.37	1.863	1.939	3.745	2.01	2.69	42	28	
12-5, 80	933.80	1.808	2.048	3.562	1.97	2.62	42	29	8
13-1, 70	937.30	1.834	2.049	3.650	1.99	2.60	40	27	
13-2, 87	938.97	1.852	2.068	3.667	1.98	2.64	42	29	7
13-3, 142	941.02	1.849	2.016	3.513	1.90	2.59	45	34	
13-4, 21	941.31	1.772	1.956	3.544	2.00	2.67	42	29	
14-1, 81	947.01	1.836							
14-2, 81	948.51	1.802							
14-3, 10	949.30	1.781		3.437	1.93	2.51	40	28	2
14-4, 81	951.51	1.817		3.707	2.04	2.58	35	23	6
14-5, 81	953.01	1.776		3.659	2.06	2.65	37	23	1
14-6, 81	954.51	1.820							1
15-1, 83	956.63	1.740		3.497	2.01	2.67	41	28	
15-2, 81	958.11	1.827		3.709	2.03	2.70	41	27	1
15-3, 72	959.52	1.828		3.638	1.99	2.65	41	28	
15-4, 14	960.44	1.965	2.311	3.714	1.89	2.42	39	28	
15-4, 72	961.02	1.896	2.064	3.583	1.89	2.42	39	28	
15-4, 130	961.60	2.112	2.313	3.992	1.89	2.42	39	28	
15-5, 65	962.45	2.136	2.463	3.973	1.86	2.38	39	29	1
16-1, 72	966.12	1.823	2.366	3.591	1.97	2.32	27	17	
16-2, 72	967.62	2.028	2.272	3.671	1.81	2.29	39	30	1
16-3, 72	969.12	2.116	2.278	3.851	1.82	2.31	39	30	
16-4, 72	970.62	2.072	2.376	3.792	1.83	2.33	40	30	
16-5, 72	972.12	2.179	2.383	4.009	1.84	2.34	39	29	1
16-6, 72	973.62	2.357	2.428	4.384	1.86	2.53	46	36	
17-1, 72	975.82	1.585	2.256	2.932	1.85	2.53	38	28	
17-2, 72	977.32	1.935	2.501	3.618	1.87	2.36	38	27	1
17-3, 72	978.82	1.826	2.285	3.433	1.88	2.40	39	28	
17-4, 52	980.12	2.003	2.297	3.746	1.87	2.35	37	27	
17-5, 55	981.65	2.076	2.732						
18-1, 77	985.37	1.998	2.308	3.916	1.96	2.47	36	24	
18-2, 77	986.87	1.996	2.334						
18-3, 77	988.37	1.975	2.325	3.812	1.93	2.44	37	26	
19-1, 76	994.36	1.787	2.182	3.592	2.01	2.57	37	24	
19-2, 105	996.15	1.784	2.179	3.639	2.04	2.59	36	23	
19-3, 89	997.49	2.010	2.221	3.899	1.94	2.47	38	26	
19-4, 6	998.16	2.221							
20-1, 76	1003.36	1.845	2.325	3.579	1.94	2.49	38	27	
20-2, 76	1004.86	1.927	2.362	3.815	1.98	2.54	38	25	

Table 2 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Sonic velocity (km/s)		Acoustic impedance (g·10 ⁹ /cm ² ·s)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
		Vertical	Horizontal						
20-3, 74	1006.34	1.948	2.171						
21-1, 84	1012.44	1.949	2.241	3.781	1.94	2.49	38	27	
21-2, 75	1013.85	1.949	2.238	3.742	1.92	2.44	38	27	1
21-3, 80	1015.40	1.886	2.234	3.621	1.92	2.45	38	27	
21-4, 76	1016.86	2.066	2.343						
21-5, 79	1018.39	1.971	2.175	3.705	1.88	2.40	39	28	1
21-6, 23	1019.33	2.000	2.092	3.740	1.87	2.43	41	31	
22-1, 82	1021.42	1.975	2.278	3.772	1.91	2.48	40	29	
22-2, 54	1022.64	1.909	2.229	3.684	1.93	2.55	42	30	1
22-2, 101	1023.11	2.106	2.229	4.296	2.04	2.65	38	25	1
22-3, 90	1024.50		1.646		2.07	2.63	36	22	1
22-3, 148	1025.08				2.11	2.65	34	21	1
23-2, 105	1032.15	1.820							
24-1, 60	1039.20	1.941	2.307	4.755	2.45	2.68	33	19	
24-2, 13	1040.23	1.860							
25-1, 70	1048.30	1.850		3.774	2.04	2.61	37	24	
25-2, 70	1049.80	1.703		3.508	2.06	2.66	38	24	1
25-3, 70	1051.30	1.568		3.230	2.06	2.62	36	23	
26-1, 60	1057.20	1.648		3.345	2.03	2.62	38	25	
26-2, 60	1058.70	1.655		3.277	1.98	2.57	39	27	1
26-3, 70	1060.30	1.784		3.622	2.03	2.61	37	24	
28-1, 80	1074.00	1.748		3.653	2.09	2.69	37	23	
28-2, 80	1075.50	1.830		3.806	2.08	2.67	37	23	2
28-3, 80	1077.00	1.846		3.877	2.10	2.68	36	22	
28-4, 44	1078.14	1.959		4.114	2.10	2.48	27	16	
28-4, 80	1078.50	1.904							3
29-1, 70	1081.50	2.009		4.139	2.06	2.56	33	21	2
29-2, 70	1083.00	1.888	2.241	4.021	2.13	2.70	35	21	1
29-3, 70	1084.50	1.906	2.279	4.384	2.30	2.70	25	13	
29-4, 70	1086.00	1.971	2.326	4.179	2.12	2.69	35	21	
29-5, 25	1087.05	1.921	2.326	4.149	2.16	2.70	33	19	1
30-1, 67	1091.07	1.776	1.997	3.783	2.13	2.72	36	22	
30-2, 64	1092.54	1.876	1.785	3.977	2.12	2.71	36	22	4
30-3, 75	1094.15	1.635	1.861						
30-4, 64	1095.54	1.807		3.849	2.13	2.66	33	20	
31-1, 78	1100.78	1.740	1.819	3.706	2.13	2.73	36	22	
31-2, 81	1102.31	1.741	1.801	3.691	2.12	2.74	37	23	2
31-3, 80	1103.80	1.785	1.879	3.784	2.12	2.76	38	23	
31-4, 82	1105.32	1.845	1.927	4.059	2.20	2.73	32	18	
31-5, 38	1106.38	1.799	1.759	3.904	2.17	2.73	33	20	1
32-1, 91	1110.41	2.078	2.340	4.551	2.19	2.67	30	17	
32-2, 32	1111.32	1.977	2.268	4.251	2.15	2.71	34	20	2
33-1, 92	1119.42	1.813	2.174	3.644	2.01	2.63	39	26	
33-2, 26	1120.26	2.246	2.430	3.953	1.76	2.13	35	27	2
33-3, 80	1122.30	1.960	2.171	3.606	1.84	2.35	40	30	
34-1, 72	1128.22	1.974	2.159	3.455	1.75	2.13	36	28	1
34-2, 77	1129.77	1.997	2.129	3.475	1.74	2.17	39	32	1
34-4, 75	1132.75	1.970	2.357	4.078	2.07	2.56	33	20	1
34-5, 77	1134.27	2.005	2.110	3.789	1.89	2.31	33	23	
35-1, 70	1137.20	1.788	2.170	3.415	1.91	2.46	40	28	1
35-2, 70	1138.70	1.865	2.185	3.711	1.99	2.59	39	27	1
35-3, 65	1140.15	1.950	2.236	3.939	2.02	2.56	36	23	1
35-4, 55	1141.55	1.769	1.951	3.591	2.03	2.58	36	23	1
36-1, 71	1146.21	1.687	1.641	3.441	2.04	2.63	37	24	
36-2, 71	1147.71	1.786	2.011	3.643	2.04	2.63	38	24	1
36-3, 71	1149.21	1.780	2.189	3.720	2.09	2.67	36	22	
37-1, 72	1155.22	1.881	2.213	3.818	2.03	2.65	39	25	7
37-2, 72	1156.72	1.840	2.318	3.717	2.02	2.62	39	26	1
37-3, 72	1158.22	1.816	2.107	3.705	2.04	2.64	38	25	1
37-4, 72	1159.72	1.787	1.960	3.717	2.08	2.72	39	25	
37-5, 72	1161.22	1.723	1.812	3.480	2.02	2.63	39	26	1
38-1, 52	1164.02	1.785	2.062	3.659	2.05	2.65	38	24	1
38-2, 54	1165.54	1.780	2.134	3.667	2.06	2.68	38	25	
38-3, 52	1167.02	1.805	2.158	3.664	2.03	2.63	38	25	1
38-4, 52	1168.52	1.879	2.053	3.983	2.12	2.72	36	22	1
38-5, 54	1170.04	1.648	1.441						
39-1, 82	1173.32	1.728	1.946	3.646	2.11	2.68	35	21	
39-2, 82	1174.82	1.843	2.228	3.778	2.05	2.63	37	24	1
39-3, 82	1176.32	1.814	1.608	3.682	2.03	2.68	40	26	
39-4, 82	1177.82	2.118	2.081	4.321	2.04	2.68	40	26	
39-5, 79	1179.29	1.793	2.024						1
40-1, 78	1182.28	1.856	2.110	3.879	2.09	2.63	34	21	
40-2, 78	1183.78	1.935	2.178						2
40-3, 79	1185.29	1.872	2.111	3.987	2.13	2.64	32	19	2
40-4, 75	1186.75	1.913	2.161	4.132	2.16	2.73	34	20	
40-5, 79	1188.29	2.035	2.313	4.375	2.15	2.68	33	20	2
40-6, 81	1189.81	1.631	2.291	3.588	2.20	2.72	32	18	

APPENDIX I

Table 2 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Sonic velocity (km/s)		Acoustic impedance (g·10 ⁹ /cm ² ·s)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
		Vertical	Horizontal						
41-1, 77	1191.27	1.974	2.200	4.284	2.17	2.70	32	19	
41-2, 79	1192.79	1.955	2.239	4.242	2.17	2.73	33	20	
41-3, 87	1194.37	1.946	2.223	4.242	2.18	2.72	33	19	
41-4, 84	1195.84	2.084	2.270	4.564	2.19	2.73	32	19	
42-1, 90	1198.10	2.055	2.110	4.439	2.16	2.71	33	20	
42-2, 80	1199.50	1.905	2.026	3.753	1.97	2.58	40	28	1
42-3, 77	1200.97	1.857	2.094	3.751	2.02	2.63	39	25	1
42-4, 82	1202.52	1.820	2.201	3.676	2.02	2.62	39	26	
42-5, 85	1204.05	1.925	2.188	3.985	2.07	2.64	36	23	2
42-6, 35	1205.05	1.892	2.099	3.879	2.05	2.68	39	26	
43-1, 82	1205.62	2.036	2.281	4.337	2.13				
43-2, 81	1207.11	2.043	2.211	4.454	2.18	2.75	33	19	
43-3, 82	1208.62	2.027	2.310	4.419	2.18	2.74	33	19	
43-4, 82	1210.12	1.954	2.118	4.162	2.13	2.69	34	20	
43-5, 78	1211.58	1.912	2.129	4.168	2.18	2.73	33	19	
43-6, 20	1212.50	1.843	1.980	4.257	2.31	2.69	24	12	
44-1, 77	1215.17	2.006	2.292	4.172	2.08	2.60	34	21	15
44-2, 78	1216.68	1.969	2.200	4.115	2.09	2.59	33	20	13
44-3, 77	1218.17	1.925	2.217	4.043	2.10	2.66	35	22	3
44-4, 81	1219.71	1.823	2.263	3.828	2.10	2.66	35	22	13
45-1, 71	1224.71	1.735		3.644	2.10	2.63	34	21	4
49-1, 141	1263.81	1.879	2.040	3.946	2.10	2.65	34	21	9
49-2, 74	1264.64	1.775	2.128	3.532	1.99	2.59	40	27	40
49-3, 72	1266.12	1.936	2.252	4.124	2.13	2.67	33	20	32
49-4, 72	1267.62	1.882	2.069	3.726	1.98	2.60	40	27	40
49-5, 34	1268.74	1.953	2.218	3.926	2.01	2.56	37	24	78
50-1, 70	1272.70	2.159	2.165	4.620	2.14	2.64	32	19	30
51-1, 73	1282.33	2.128	2.333	4.703	2.21				
51-2, 88	1283.98	2.138	2.519	4.447	2.08	2.62	35	22	90
51-3, 73	1285.33	1.994	2.433	4.227	2.12	2.62	32	19	8
51-4, 90	1287.00	2.348	2.655	5.025	2.14	2.62	31	18	84
51-5, 82	1288.42	2.022	2.254	4.287	2.12	2.65	33	20	39
51-6, 93	1290.03	2.155	2.840	4.612	2.14				
52-1, 79	1291.99	1.890	2.459	3.912	2.07	2.60	35	22	76
52-2, 78	1293.48	2.053	2.188	4.168	2.03	2.54	34	22	76
52-3, 75	1294.95	2.057	2.067	4.258	2.07	2.59	34	21	21
52-4, 81	1296.51	1.889	2.217	3.910	2.07				
52-5, 75	1297.95	2.055	2.146	4.398	2.14	2.65	32	19	15
52-6, 85	1299.55	1.902	2.188	3.899	2.05	2.62	37	23	13
53-1, 73	1301.53	1.941	1.734	4.076	2.10	2.65	34	21	23
53-2, 77	1303.07	1.904	2.154	3.941	2.07	2.65	37	23	16
53-3, 76	1304.56	1.948	2.156	4.071	2.09	2.62	34	21	22
53-4, 79	1306.09	1.870	2.101	3.721	1.99	2.56	38	26	66
53-5, 76	1307.56	2.380	2.474	5.212	2.19	2.65	29	16	79
53-6, 40	1308.70	1.919	2.177	4.049	2.11	2.63	33	20	44
54-1, 79	1311.19	2.078	2.067	4.509	2.17	2.60	28	16	4
54-2, 89	1312.79	1.918	2.215	4.047	2.11	2.62	33	20	34
54-3, 92	1314.32	2.049	1.983	4.344	2.12	2.62	32	19	6
54-4, 85	1315.75	2.056	2.069	4.420	2.15	2.63	31	18	3
54-5, 71	1317.11	1.969	2.133	4.096	2.08	2.62	35	21	25
55-1, 70	1320.70	1.608	2.045	3.393	2.11	2.67	35	21	21
55-2, 72	1322.22	1.633	1.832	3.462	2.12	2.62	32	19	3
55-3, 71	1323.71	4.395	4.143	11.427	2.60	2.70	6	3	35
55-4, 77	1325.27	1.845	2.216	4.004	2.17	2.71	33	19	5
55-5, 92	1326.92	1.767	1.997	3.463	1.96	2.60	42	30	61
56-1, 72	1330.32	2.065	2.077	4.522	2.19	2.65	29	17	5
56-2, 97	1332.07	1.787	2.042	3.663	2.05	2.67	38	25	37
56-3, 97	1333.57	1.828	2.135	3.839	2.10	2.64	34	21	52
57-1, 66	1339.86	1.873	2.337	3.952	2.11	2.63	33	20	5
57-2, 70	1341.40	1.991	2.207	4.042	2.03	2.59	37	24	58
57-3, 69	1342.89	2.060	2.000	4.388	2.13	2.68	34	20	26
57-4, 69	1344.39	3.994	4.166	10.265	2.57	2.73	10	4	27
57-5, 46	1345.66	1.927	1.977	4.220	2.19	2.64	29	16	39
57-6, 67	1347.37	1.941	1.784	4.231	2.18	2.69	32	18	3
58-1, 77	1349.57	2.234	2.347	4.848	2.17	2.66	30	18	75
58-2, 77	1351.07	1.927	1.934	3.950	2.05	2.56	34	22	3
58-3, 80	1352.60	2.036	2.319	4.377	2.15	2.68	33	20	71
58-4, 80	1354.10	2.061	2.061	4.328	2.10	2.60	33	20	5
58-5, 93	1355.73	2.305	2.640	4.956	2.15	2.68	33	19	79
58-6, 37	1356.67	2.103	2.518	4.395	2.09	2.59	33	20	82
59-1, 115	1359.55	3.564	3.903	9.017	2.53	2.66	9	4	27
59-2, 116	1361.06	1.930	2.360	4.207	2.18	2.67	30	17	30
59-3, 128	1362.68	2.722	2.609	5.607	2.06	2.58	34	21	79
59-4, 56	1363.46	1.953	2.290	4.062	2.08	2.56	32	20	79
59-5, 58	1364.98	1.970	2.106	4.236	2.15	2.61	30	17	6
60-1, 71	1368.71	2.037	1.953	4.339	2.13	2.62	31	18	2
60-2, 70	1370.20	2.072	2.145	4.517	2.18	2.66	30	17	4

Table 2 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Sonic velocity (km/s)		Acoustic impedance (g·10 ⁹ /cm ² ·s)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
		Vertical	Horizontal						
60-3, 42	1371.42	2.418	2.598	5.295	2.19	2.67	30	17	75
60-4, 42	1372.92	2.001	2.134	4.342	2.17	2.66	30	17	13
61-1, 78	1378.38				2.65	2.73	5	2	40
61-2, 89	1379.99	2.125	2.095	4.548	2.14	2.66	33	19	7
61-3, 71	1381.31	2.331	2.651	5.082	2.18	2.66	30	17	74
61-4, 101	1383.11	2.169	2.571	4.555	2.10	2.60	33	20	78
61-5, 87	1384.47	1.908	2.109	3.969	2.08	2.66	36	23	19
61-6, 74	1385.84	2.024	2.153	4.412	2.18	2.70	32	18	18
62-1, 79	1387.99	2.109	2.173	4.619	2.19	2.70	31	18	56
62-2, 96	1389.66	2.137	2.555	4.488	2.10	2.62	33	20	71
62-3, 100	1391.20	2.021	2.066	4.244	2.10	2.65	35	21	10
62-4, 86	1392.56	1.991	2.308	4.161	2.09	2.66	35	22	66
62-5, 83	1394.03	2.603	2.582	5.883	2.26	2.69	27	14	79
63-1, 87	1397.07	2.086	2.357	4.506	2.16	2.66	31	18	70
63-2, 85	1398.55	2.334	2.568	5.158	2.21	2.70	30	17	77
63-3, 85	1400.05	2.405	2.667	5.363	2.23	2.68	28	15	80
63-4, 74	1401.44	2.181	2.289	4.733	2.17	2.64	30	17	66
63-5, 77	1402.97	2.329	2.144	4.937	2.12	2.69	35	21	58
63-6, 80	1404.50	2.284	2.612	4.979	2.18	2.63	29	16	77
63-6, 134	1405.04	2.111	2.126	4.518	2.14	2.62	31	18	4
64-1, 76	1406.46	2.044	2.102	4.456	2.18	2.62	28	16	12
64-2, 79	1407.99	2.015	2.506	4.272	2.12	2.64	33	20	78
64-3, 75	1409.45	2.015	2.307	4.171	2.07	2.57	33	20	75
64-4, 85	1411.05	1.888	2.339	3.889	2.06	2.65	37	23	9
64-5, 75	1412.45	2.274	2.426	5.048	2.22	2.64	27	15	81
65-1, 69	1415.39	2.015	2.092	4.131	2.05	2.58	35	22	55
65-2, 81	1417.01	2.210	2.290	4.729	2.14	2.61	30	18	4
65-3, 67	1418.37	2.061	2.300	4.452	2.16	2.65	31	18	27
65-4, 70	1419.90	2.263	2.576	4.865	2.15	2.62	31	18	75
65-5, 77	1421.47	3.222	3.237						84
66-1, 83	1424.53	2.225	2.515	4.917	2.21	2.67	29	16	74
66-2, 93	1426.13	1.971	2.341	4.119	2.09	2.64	35	22	3
66-3, 73	1427.43	1.772	2.281	3.686	2.08	2.62	35	22	17
66-4, 81	1429.01	2.448	2.862	5.435	2.22	2.67	28	16	72
66-5, 75	1430.45	2.028	2.716	4.380	2.16	2.65	31	18	84
67-1, 68	1433.38	2.094	2.562	4.397	2.10	2.62	33	20	78
67-2, 82	1435.02	2.342	2.589	5.082	2.17	2.63	30	17	82
67-3, 71	1436.41	2.271	2.039	4.746	2.09	2.63	34	21	4
67-4, 62	1437.82	2.315	2.479	4.954	2.14	2.66	32	19	80
67-5, 76	1439.46	1.866	2.400	4.012	2.15	2.66	32	19	18
68-1, 73	1442.43	1.913	2.313	3.941	2.06	2.59	35	22	82
68-2, 73	1443.93	1.999	2.116	4.358	2.18	2.63	33	20	6
68-3, 72	1445.42	3.936	2.346	8.266	2.10	2.60	33	20	8
68-4, 97	1447.17	2.577	1.643	5.618	2.18	2.63	29	17	85
68-5, 52	1448.22	1.896	2.242	3.982	2.10	2.62	33	20	17
69-1, 90	1451.60	1.879	2.333	3.983	2.12	2.65	33	20	12
69-2, 72	1452.92	2.214	2.562	4.827	2.18	2.59	27	15	76
69-3, 94	1454.64	3.583	2.411	6.378	1.78	2.14	33	25	76
69-4, 79	1455.99	2.084	2.374	4.293	2.06	2.63	36	23	80
69-5, 70	1457.40	2.112	2.546	4.499	2.13	2.66	33	20	79
70-1, 86	1460.56	1.959	2.425	4.173	2.13	2.65	33	19	15
70-2, 83	1462.03	2.320	2.580	4.965	2.14	2.68	33	20	77
70-3, 85	1463.55	2.157	2.479	4.638	2.15	2.67	32	19	70
70-4, 82	1465.02	2.262	2.509	4.818	2.13	2.66	33	20	80
70-5, 83	1466.53	1.995	2.859	4.329	2.17	2.65	30	17	22
71-1, 80	1469.50	2.135	2.146	4.548	2.13	2.54	28	16	4
71-2, 83	1471.03	2.045	2.489	4.479	2.19	2.64	28	16	25
71-3, 81	1472.51	2.130	2.268	4.665	2.19	2.59	26	15	11
71-4, 85	1474.05	2.106	2.542	4.317	2.05	2.58	35	22	81
71-5, 80	1475.50	2.330	2.540	4.940	2.12	2.57	30	18	77
71-6, 80	1477.00	2.403	2.616	5.166	2.15	2.58	28	16	73
73-1, 72	1483.42	2.007	2.440	4.315	2.15	2.62	30	18	18
73-2, 80	1485.00	2.114	2.359	4.714	2.23	2.67	27	15	14
73-3, 76	1486.46	2.691	2.521	5.866	2.18	2.70	32	18	68
73-4, 78	1487.98	3.636	3.829	8.981	2.47	2.69	13	6	28
73-5, 65	1489.35	1.974	2.378	4.126	2.09	2.74	39	25	77
74-1, 72	1493.02	2.376	2.624	5.132	2.16	2.65	14	18	66
74-2, 70	1494.50	2.456	2.879	5.428	2.21	2.71	30	17	91
74-3, 69	1495.99	2.029	2.325	4.200	2.07	2.62	35	22	70
74-4, 70	1497.50	2.355	2.316	5.181	2.20	2.71	31	17	77
74-5, 69	1498.99	1.949	2.189	4.229	2.17	2.69	32	18	10
74-6, 70	1500.50	2.132	2.436	4.648	2.18	2.69	31	18	68
75-1, 72	1502.62	2.414	2.807	5.407	2.24	2.71	29	16	
75-2, 72	1504.12	1.942	2.516	4.253	2.19	2.81	36	21	28
75-3, 66	1505.56	2.074	2.457	4.521	2.18	2.65	32	19	
75-4, 42	1506.82	2.158	2.600	4.575	2.12	2.64	33	20	
75-5, 42	1508.32	1.927	2.353	4.047	2.10	2.71	37	23	18

APPENDIX I

Table 2 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Sonic velocity (km/s)		Acoustic impedance (g·10 ⁵ /cm ² ·s)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
		Vertical	Horizontal						
76-1, 78	1512.28	2.227	2.576	4.721	2.12	2.62	32	19	
76-2, 70	1513.70	2.048	2.300	4.362	2.13	2.64	32	19	66
76-3, 70	1515.20	2.341	2.642	5.033	2.15	2.60	29	17	
76-4, 70	1516.70	2.160	2.429	4.579	2.12	2.63	32	19	
76-5, 72	1518.22	2.347	2.499	5.210	2.22	2.62	26	14	66
77-1, 81	1521.91	2.597	2.854	5.791	2.23	2.67	28	15	
77-2, 79	1523.39	2.011	3.570	4.525	2.25	2.67	26	14	71
77-3, 78	1524.88	2.221	2.581	4.664	2.10	2.59	32	20	
77-4, 79	1526.39	2.542	2.949	5.694	2.24	2.65	26	14	
77-5, 77	1527.87	3.266	3.285	7.806	2.39	2.69	18	9	89
77-7, 30	1530.40	2.171	2.415	4.668	2.15	2.61	29	17	
78-1, 76	1531.46	2.338	2.606	5.214	2.23	2.64	26	14	
78-2, 74	1532.94	2.174	2.535	4.826	2.22	2.62	25	14	59
78-3, 79	1534.49	2.695	2.704	5.821	2.16	2.58	28	16	
78-4, 76	1535.96	2.769	2.300	5.981	2.16	2.61	29	17	
79-1, 87	1541.07	2.644	3.175	5.923	2.24	2.64	25	14	
79-2, 84	1542.54	2.305	2.726	5.117	2.22	2.62	25	14	58
79-3, 85	1544.05	2.221	2.504	4.953	2.23	2.63	26	14	
79-4, 78	1545.48	2.281	2.602	5.064	2.22	2.63	26	14	
79-5, 84	1547.04	2.381	2.774	5.262	2.21	2.62	26	14	58
79-6, 73	1548.43	2.868	3.219	6.568	2.29	2.63	22	11	
80-1, 79	1549.99	2.247	2.546	5.011	2.23	2.62	25	14	
80-2, 79	1551.49	3.329	3.626	7.990	2.40	2.68	17	8	77
80-3, 80	1553.00	3.002	3.256	7.085	2.36	2.66	19	9	
80-4, 81	1554.51	2.661	2.966	6.174	2.32	2.67	22	11	
80-5, 71	1555.91	2.793	3.094	6.396	2.29	2.65	23	12	68
80-6, 54	1557.24	2.410	2.755	5.374	2.23	2.63	25	14	
81-1, 66	1558.86	2.369	2.730	5.330	2.25	2.64	25	13	
81-2, 62	1560.32	2.350	2.694	5.358	2.28	2.67	24	13	53
81-3, 62	1561.82	2.397	2.778	5.561	2.32	2.66	21	11	
81-4, 62	1563.32	2.884	3.107	6.691	2.32	2.66	21	11	
81-5, 62	1564.82	3.001	3.238	7.082	2.36	2.65	19	9	67
82-1, 76	1567.96	2.604	3.048	6.093	2.34	2.67	21	10	
82-2, 76	1569.46	2.549	2.756	5.863	2.30	2.65	22	12	54
82-3, 74	1570.94	3.164	3.321	7.594	2.40	2.68	17	8	
82-4, 74	1572.44	2.330	2.797	5.266	2.26	2.64	24	13	
82-5, 74	1573.94	2.420	2.954	5.614	2.32	2.69	23	12	73

Table 3. Summary of physical properties data for samples from Hole 603C.

Core-Section (interval in cm)	Sub-bottom depth(m)	Vertical sonic velocity (km/s)	Acoustic impedance (g·10 ⁵ cm ² ·s)	Shear strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
1-1, 83	0.83	1.469	2.321		1.58	2.66	66	43	27
2-1, 130	3.30	1.555	2.472	3.60	1.59	2.67	66	43	
2-2, 75	4.25			3.60	1.53	2.72	70	47	25
2-3, 50	5.50			3.60	1.58	2.82	69	45	
2-4, 25	6.75	1.479							
2-4, 75	7.25	1.531	2.572	2.25	1.68	2.83	64	39	
2-4, 125	7.75	1.496							
2-5, 75	8.75	1.483	2.402	3.42	1.62	2.80	67	42	25
2-6, 75	10.25	1.506							
2-6, 100	10.50	1.511							
2-7, 20	11.20	1.545							
2-7, 75	11.75	1.494							
3-1, 25	11.85	1.505							
3-1, 75	12.35	1.498	2.517	4.32	1.68	2.79	63	38	
3-1, 125	12.85	1.465							
3-2, 25	13.35	1.608							
3-2, 75	13.85	1.499	2.518	2.88	1.68	2.52	57	35	18
3-3, 75	15.35	1.519	2.537	2.88	1.67	2.58	59	36	
3-3, 125	15.85	1.707							
3-4, 25	16.35	1.503							
3-4, 75	16.85	1.497	2.485	2.88	1.66	2.88	66	40	
3-4, 115	17.25	1.496							
3-5, 75	18.35				4.68	1.74	2.97	63	37
3-6, 75	19.85	1.508							28
4-1, 75	21.95	1.489	2.427	3.42	1.63	2.73	65	41	
4-1, 125	22.45	1.493							
4-2, 25	22.95	1.480							
4-2, 75	23.45	1.500		6.84					
4-3, 25	24.45	1.477							
4-3, 75	24.95	1.503	2.450	6.30	1.63	2.74	65	41	26
4-4, 75	26.45	1.525		8.82					
4-5, 75	27.95	1.492	2.447	7.56	1.64	2.74	64	40	31
4-6, 75	29.45	1.508	2.549	8.10	1.69	2.74	61	37	
5-1, 50	31.30	1.488							
5-1, 75	31.55	1.475	2.286	6.30	1.55	2.75	70	46	
5-2, 50	32.80	1.482							
5-2, 75	33.05	1.494	2.241	8.10	1.50	2.44	66	45	20
5-3, 75	34.55	1.496	2.453	9.90	1.64	2.90	67	42	
5-4, 50	35.80	1.497							
5-4, 75	36.05	1.499	2.428	10.44	1.62	2.68	64	41	
5-5, 50	37.30	1.496							
5-5, 75	37.55	1.501	2.477	10.44	1.65	2.78	64	40	28
5-6, 50	38.80	1.501							
6-1, 75	41.15	1.489	2.457	9.00	1.65	2.74	64	40	
6-2, 75	42.65	1.436	2.341	8.28	1.63	2.62	62	39	35
6-3, 75	44.15			9.18	1.65	2.79	65	40	
6-4, 75	45.65	1.441	2.392	9.36	1.66	2.77	64	39	
6-5, 75	47.15	1.470	2.499	9.90	1.70	2.84	63	38	16
7-1, 75	50.65			7.20	1.66	2.73	63	39	
7-2, 75	52.15			10.80	1.65	2.62	61	38	11
7-3, 75	53.65			12.60	1.68	2.71	61	37	
7-4, 75	55.15			10.80	1.70	2.73	61	37	
7-5, 75	56.65			10.80	1.70	2.77	61	37	30
8-1, 75	60.15	1.515	2.560	12.60	1.69	2.76	62	38	
8-2, 75	61.65	1.500	2.565	14.58	1.71	2.89	63	38	15
8-3, 75	63.15	1.689	2.905	14.94	1.72	2.85	62	37	
8-4, 75	64.65	1.504	2.542	16.92	1.69	2.61	58	35	
8-5, 75	66.15	1.512	2.540	17.10	1.68	2.73	62	38	3
9-1, 75	68.55				1.68	2.75	62	38	
9-2, 75	70.05			8.46	1.69	2.85	63	38	12
9-3, 75	71.55			10.62	1.70	2.79	62	37	
9-4, 75	73.05			7.20	1.87	2.74	51	28	
9-5, 74	74.54	1.532	2.558		1.67	2.76	63	39	12
10-1, 80	78.10	1.493	2.568		1.72	2.94	63	38	
10-2, 80	79.60	1.535	2.656		1.73	2.88	62	37	11
10-3, 80	81.10	1.508	2.564	15.84	1.70	2.77	62	37	
10-4, 80	82.60	1.512	2.631	16.02	1.74	2.83	61	36	
10-5, 80	84.10	1.488	2.515	15.12	1.69	2.73	61	37	8
11-1, 80	85.60			12.96	1.71	2.86	63	38	
11-2, 80	87.10			10.26	1.68	2.72	61	37	14
11-3, 80	88.60	1.498	2.487	10.44	1.66	2.71	62	39	
11-4, 80	90.10	1.515	2.545	14.04	1.68	2.71	61	37	
13-1, 80	98.00			7.92	1.61	2.47	59	38	
13-2, 80	99.50	1.451	2.539	10.26	1.75	2.92	62	36	
14-1, 80	107.60	1.467	2.421		1.65	2.59	60	37	
14-2, 75	109.05	1.513	2.466		1.63	2.50	59	37	2
14-3, 75	110.55				1.65	2.57	60	37	

APPENDIX I

Table 3 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Vertical sonic velocity (km/s)	Acoustic impedance (g·10 ⁹ /cm ² ·s)	Shear strength (kPa)	Bulk density (g/cm ³)	Grain density ¹ (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
14-4, 75	112.05	1.433	2.336	9.54	1.63	2.51	59	37	
14-5, 75	113.55	1.504	2.572	9.36	1.71	2.73	60	36	11
14-6, 75	115.05								
15-1, 75	117.15	1.556	2.739	17.10	1.76	2.79	58	34	
15-2, 75	118.65	1.483	2.536	15.30	1.71	2.64	57	34	9
15-3, 75	120.15			9.90					
15-4, 75	121.65	1.544	2.656	12.06	1.72	2.72	59	35	
15-5, 75	123.15	1.608	2.814	18.00	1.75	2.66	56	33	
16-1, 75	126.75				17.10	2.60	58	35	
16-2, 75	128.25	1.497	2.560	48.60	1.71	2.65	58	35	
16-3, 75	129.75			48.60					
16-4, 75	131.25	1.388	2.429	45.00	1.75	2.67	56	33	
16-5, 75	132.75	1.517	2.700	48.60	1.78	2.82	58	33	18
16-6, 75	134.25	1.437	2.515		1.75	2.72	57	33	8
17-1, 75	136.35	1.521	2.586	32.40	1.70	2.60	57	34	
17-2, 75	137.85	1.525	2.623	31.50	1.72	2.72	59	35	
17-3, 75	139.35	1.524	2.667	36.00	1.75	2.76	58	34	
17-4, 75	140.85	1.471	2.515	43.20	1.71	2.68	58	35	
17-5, 75	142.35	1.544	2.656	37.80	1.72	2.71	59	35	
18-1, 75	145.95	1.508	2.594	43.20	1.72	2.69	58	35	
18-2, 75	147.45	1.421	2.501	44.10	1.76	2.82	59	35	14
18-3, 75	148.95	1.544	2.656	48.60	1.72	2.72	59	35	
18-4, 75	150.45	1.495	2.571	48.60	1.72	2.68	58	35	
18-5, 75	151.95	1.552	2.623	50.40	1.69	2.49	54	33	2
19-1, 75	155.55	1.481	2.577	50.40	1.74	2.70	57	34	
19-2, 75	157.05	1.503	2.585	49.50	1.72	2.61	56	33	5
19-3, 75	158.55	1.499	2.563	52.20	1.71	2.61	57	34	
19-4, 75	160.05	1.518	2.657	52.20	1.75	2.65	55	32	
19-5, 75	161.55	1.545	2.750	50.40	1.78	2.69	55	32	12
20-1, 80	165.20	1.488	2.634		1.77	2.69	57	33	
20-2, 80	166.70	1.514	2.755	50.40	1.82	2.97	59	33	13
20-3, 80	168.20	1.523	2.696	52.20	1.77	2.73	56	32	
20-4, 80	169.70	1.503	2.720	32.40	1.81	2.82	56	32	
20-5, 80	171.20	1.500	2.685	30.60	1.79	2.86	59	34	15
20-6, 80	172.70	1.544	2.717	61.20	1.76	2.70	56	33	
21-1, 80	174.80	1.526	2.640	40.50	1.73	2.60	55	33	
21-2, 80	176.30	1.503	2.510	36.00	1.67	2.46	55	34	16
21-3, 80	177.80	1.530	2.555	37.80	1.67	2.73	57	33	
21-4, 80	179.30	1.505	2.634	41.40	1.75	2.69	56	33	
21-5, 80	180.80	1.538	2.722	39.60	1.77	2.78	58	33	9
21-6, 80	182.30								
21-7, 22	183.22	1.517							
22-1, 80	184.40			18.00	1.70	2.61	58	35	
22-2, 80	185.90			32.40	1.77	2.76	57	33	7
22-3, 80	187.40			39.60	1.75	2.70	56	33	
22-4, 80	188.90			43.20	1.68	2.51	56	34	
22-5, 80	190.40			36.00	1.80	2.70	54	31	7
23-1, 80	194.00	1.529	2.875	64.80	1.88	3.22	61	33	
23-2, 80	195.50	1.522	2.755	70.20	1.81	2.75	54	31	1
23-3, 80	197.00	1.501	2.717	61.20	1.81	2.73	54	30	
23-4, 80	198.50	1.518	2.732	63.00	1.80	2.72	54	31	
23-5, 80	200.00	1.520							
23-6, 80	201.50	1.510							
24-1, 80	203.60	1.521	2.783	66.60	1.83	2.72	53	29	
24-2, 80	205.10	1.536	2.826	48.60	1.84	2.85	56	31	19
24-3, 80	206.60	1.547	2.723	63.00	1.76	2.58	53	31	
24-4, 80	208.10	1.474	2.668	64.80	1.81	2.72	54	30	
24-5, 80	209.60	1.538	2.784	66.60	1.81	2.67	52	30	4
25-1, 80	213.20	1.531	2.740	43.20	1.79	2.54	50	29	
25-2, 80	214.70	1.499	2.743	59.40	1.83	2.78	54	30	7
25-3, 80	216.20	1.520	2.706	68.40	1.78	2.59	52	30	
25-4, 80	217.70	1.517	2.746	50.40	1.81	2.71	53	30	
25-5, 80	219.20	1.095	1.851	52.20	1.69	2.42	52	32	4
25-6, 80	220.70	1.517							
25-6, 80	220.70	1.583							
26-1, 80	222.80	1.583	2.818	54.90	1.78	2.69	55	31	
26-2, 80	224.30	1.488	2.678	61.20	1.80	2.68	53	30	8
26-3, 80	225.80			64.80					
26-4, 75	227.25			55.80	1.77	2.61	53	31	
26-5, 75	228.75			57.60	1.76	2.59	53	31	14
27-1, 75	232.35	1.440	2.563	40.50	1.78	2.71	55	32	
27-2, 75	233.85	1.477	2.629	63.90	1.78	2.61	52	30	9
27-3, 75	235.35	1.441	2.637	73.80	1.83	2.80	55	31	
27-4, 75	236.85	1.443	2.583	81.00	1.79	2.59	51	29	
27-5, 75	238.35	1.527	2.779	81.00	1.82	2.62	52	30	4
28-1, 75	241.95	1.497	2.635	54.00	1.76	2.72	56	33	
28-2, 75	243.45	1.502	2.674	54.00	1.78	2.65	53	31	7

Table 3 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Vertical sonic velocity (km/s)	Acoustic impedance (g·10 ⁵ cm ² ·s)	Shear strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
28-3, 75	244.95	1.501	2.717	57.60	1.81	2.75	54	31	
28-4, 75	246.45	1.495	2.661	70.20	1.78	2.74	56	32	
28-5, 75	247.95	1.509	2.716	77.40	1.80	2.65	52	30	8
30-2, 75	262.65	1.386	2.467	72.00	1.78	2.51	49	28	2
31-3, 75	273.75	1.128	2.030	68.40	1.80	2.64	52	30	
31-4, 75	275.25			68.40	1.76	2.53	51	30	
31-5, 75	276.75			68.40	1.83	2.70	52	29	2
33-2, 84	291.54	1.571	2.844	63.00	1.81	2.59	50	28	2
33-3, 71	292.91	1.543	2.731		1.77	2.62	53	31	
33-4, 78	294.48	1.537	2.736	76.50	1.78	2.60	52	30	
33-5, 70	295.90	1.663	3.010	79.20	1.81	2.55	49	28	5
33-6, 70	297.40	1.545	2.627		1.70	2.50	54	33	
34-1, 124	300.04	1.552							14
35-1, 79	309.19	1.561	2.732	45.00	1.75	2.57	53	31	
35-2, 72	310.62	1.460	2.628	70.20	1.80	2.73	55	31	9
35-3, 80	312.20	1.576	2.774	72.00	1.76	2.52	51	30	
35-4, 73	313.63	1.614	2.905	77.40	1.80	2.63	52	30	
35-5, 73	315.13	1.517	2.700	45.00	1.78	2.65	53	31	3
35-6, 76	316.66	1.565							
36-1, 79	318.79	1.503	2.735		1.82	2.64	51	29	
36-2, 72	320.22	1.568	2.822	77.40	1.80	2.68	53	30	7
36-3, 79	321.79	1.574	2.723		1.73	2.50	52	31	
36-4, 79	323.29	1.588	2.843		1.79	2.62	52	30	
36-5, 79	324.79	1.528	2.720	73.80	1.78	2.48	48	28	4
37-1, 80	328.40	1.618	2.945		1.82	2.60	49	27	
37-2, 80	329.90	1.558	2.820	79.20	1.81	2.57	49	28	6
37-3, 79	331.39	1.546	2.891		1.87	2.73	50	27	
37-4, 79	332.89	1.587	2.872		1.81	2.70	53	28	
37-5, 79	334.39	1.576	2.916		1.85	2.74	51	28	2
37-6, 80	335.90	1.592							
38-1, 82	338.02				1.80	2.70	54	31	
38-2, 82	339.52	1.563	2.845		1.82	2.59	49	28	4
38-3, 92	341.12	1.901	3.403		1.79	2.55	50	29	
38-4, 82	342.52	1.570	3.046		1.94	2.73	46	25	20
38-6, 80	345.50				1.81	2.61	50	28	
39-1, 68	347.48	1.518	2.717		1.79	2.57	50	29	
39-2, 73	349.03	1.516	2.714		1.79	2.51	48	28	11
39-3, 75	350.55	1.540	2.849		1.85	2.64	49	27	
39-4, 75	352.05	1.491	2.729		1.83	2.61	49	28	
39-5, 75	353.55	1.469	2.806		1.91	2.68	47	25	2
40-1, 75	357.15	1.591							
40-2, 75	358.65	1.551	2.745		1.77	2.40	46	26	3
40-3, 75	360.15	1.591							
40-4, 75	361.65	1.575							
40-5, 75	363.15	1.592	2.945		1.85	2.67	50	28	14

APPENDIX I

Table 4. Summary of physical properties data for samples from Hole 604.

Core-Section (interval in cm)	Sub-bottom depth(m)	Vertical sonic velocity (km/s)	Acoustic impedance (g·10 ⁵ /cm ² ·s)	Shear strength (kPa)	Unconfined compression strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
1-2, 75	2.25			8.64		1.85	2.75	53	29	14
1-3, 75	3.75			5.94		2.06	2.82	43	21	10
2-1, 75	7.25	1.763	3.632	3.96		2.06	2.93	46	23	10
3-1, 75	16.85	1.652	3.271		27.44	1.98	2.81	47	24	8
5-1, 75	36.05	1.637	3.143	17.10	17.64	1.92	2.72	47	25	
5-2, 75	37.55	1.663	3.259	12.24	6.86	1.96	2.78	47	24	10
6-1, 75	45.65	1.752	3.469	16.20		1.98	2.74	45	23	
6-2, 75	47.15	1.532	2.666	12.24		1.74	2.49	52	30	5
6-3, 75	48.65	1.627	2.815	11.70		1.73	2.68	57	34	
6-4, 75	50.15	1.577	3.249	14.40		2.06	2.78	41	21	
6-5, 25	51.15	1.524	2.713			1.78	2.68	55	31	8
8-1, 79	64.89	1.600	3.200	12.96	17.64	2.00	2.73	43	22	
8-2, 68	66.28	1.570	3.093	10.62	15.68	1.97	2.70	44	23	5
9-1, 75	74.45					1.85	2.79	53	30	
9-2, 75	75.95	1.543	2.870	9.18	14.70	1.86	2.68	49	27	
10-1, 82	84.12	1.550	2.511	5.22	12.74	1.62	2.59	62	40	
10-2, 82	85.62	1.646	2.765	2.34	3.92	1.68	2.62	59	36	9
10-3, 82	87.12	1.247	2.207	5.76	12.74	1.77	3.10	64	37	
10-4, 82	88.62	1.547	2.444	4.14	12.25	1.58	2.52	63	40	
10-5, 9	89.39	1.571			17.64					
10,CC	89.82					1.90	2.57	43	23	
11-1, 72	93.62			7.02	9.80	1.75	2.52	52	30	
11-2, 72	95.12			6.66	17.64	1.75	2.44	49	29	4
11-3, 72	96.62			7.02	16.66	1.88	2.72	49	27	
11-4, 72	98.12	1.669	3.038	6.66	18.62	1.82	2.54	47	27	
11-5, 74	99.64	1.552	3.120		28.42	2.01	2.69	41	21	8
12-1, 82	103.32	1.478	2.734	10.44	13.72	1.85	2.69	50	28	9
13-1, 73	112.83	1.610	3.252	11.34	18.13	2.02	2.72	42	21	
13-2, 73	114.33	1.558	2.695		21.56	1.73	2.51	52	31	7
13-3, 73	115.83			5.40	17.64	1.68	2.66	60	37	
13-4, 73	117.33	1.547	2.382	7.38	17.15	1.54	2.38	62	41	
14-1, 73	122.43	1.525	3.004	6.66	26.46	1.97	2.73	45	23	
14-2, 73	123.93			10.44	23.52	1.69	2.58	57	35	9
14-3, 73	125.43	1.542	2.668	7.92	18.62	1.73	2.45	51	30	
14-4, 73	126.93	1.587	2.682	5.40	21.56	1.69	2.56	57	34	
14-5, 79	128.49	1.630	2.771	7.02	26.46	1.70	2.63	58	35	13
15-1, 73	132.03			7.74	14.70	1.82	2.65	51	29	
15-2, 73	133.53	1.695	3.170	8.28	22.54	1.87	2.59	46	25	19
15-3, 15	134.45	1.510	2.673	8.46	22.54	1.77	2.63	53	31	12
16-1, 73	141.63	1.525	2.806	9.54	11.27	1.84	2.64	50	28	
16-2, 73	143.13	1.556	2.941	15.84	20.58	1.89	2.72	49	27	7
16-3, 73	144.63	1.534	2.669		24.50	1.74	2.56	54	32	
16-4, 73	146.13	1.572	2.782	9.72	25.48	1.77	2.59	53	31	6
17-1, 73	151.23	1.556	2.723	15.12	29.40	1.75	2.53	52	30	
17-2, 73	152.73	1.565	2.707	5.76	17.64	1.73	2.51	52	31	19
17-3, 73	154.23	1.694	2.761	8.10	21.56	1.63	2.48	58	37	
17-4, 73	155.73	1.518	2.672	14.94	19.60	1.76	2.57	52	30	8
18-1, 73	160.83	1.567	2.789	18.00	25.48	1.78	2.69	55	31	
18-2, 73	162.33	1.516	2.835	18.00	33.32	1.87	2.61	47	26	11
18-3, 73	163.83				44.10	1.84	2.66	50	28	
18-4, 73	165.33			12.24	26.46	1.70	2.45	52	32	4
19-1, 75	170.45	1.418	2.396	12.60	19.60	1.69	2.39	51	31	
19-2, 75	171.95	1.543	2.793	5.58	18.72	1.81	2.73	54	31	2
19-3, 75	173.45	1.385			39.20					
19-4, 75	174.95	1.500	2.520		39.20	1.68	2.41	53	32	13
20-1, 75	180.05	1.493	2.583		39.20	1.73	2.53	53	31	
20-2, 75	181.55	1.410	2.369		35.28	1.68	2.44	54	33	8
21-1, 75	189.65	1.421	2.345		41.65	1.65	2.29	51	32	
21-2, 75	191.15	1.422	2.574		44.10	1.81	2.66	52	30	7
21-3, 75	192.65	1.446	2.502		44.10	1.73	2.38	47	28	
21-4, 75	194.15	1.358	2.512		39.20	1.85	2.54	45	25	
22-1, 75	199.25	1.370	2.329		37.24	1.70	2.44	52	31	
22-2, 75	200.75	1.510	2.416		38.22	1.60	2.11	47	30	9
22-3, 75	202.25	1.451	2.394		41.16	1.65	2.55	50	28	
22-4, 75	203.75	1.485	2.658		41.16	1.79	2.52	49	28	
22-5, 75	205.25	1.429	2.301		37.24	1.61	2.31	54	34	9
23-1, 75	208.85	2.039	3.507		32.34	1.72	2.57	55	33	
23-2, 75	210.35	1.535	2.502		27.44	1.63	2.51	59	37	12
23-3, 75	211.85	1.381	2.279		42.14	1.65	2.44	56	35	
25-1, 75	228.05	1.467	2.479		44.10	1.69	2.44	53	32	
25-2, 75	229.55	1.432	2.406		44.10	1.68	2.30	49	30	5
25-3, 75	231.05	1.552	2.514		37.24	1.62	2.41	57	36	
25-4, 75	232.55				24.50	1.70	2.44	52	31	3
26-1, 75	237.65	1.237	2.041		24.50	1.65	2.36	53	33	
26-2, 75	239.15	1.421	2.359		24.50	1.66	2.28	49	31	2
26-3, 75	240.65	1.460	2.482		24.50	1.70	2.33	49	29	
27-1, 75	247.25	1.518	2.292			1.51	2.05	52	35	59
28-1, 75	256.85	1.450	2.581	9.00	14.70	1.78	2.58	52	30	

Table 5. Summary of physical properties data for samples from Hole 605.

Core-Section (interval in cm)	Sub-bottom depth(m)	Sonic velocity (km/s)		Acoustic impedance (g·10 ⁹ /cm ² ·s)	Unconfined compression strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
		Vertical	Horizontal							
3-1, 75	164.65	1.243		2.474	24.50	1.99	2.70	42	21	12
3-2, 75	166.15	1.584		2.962	25.48	1.87	2.69	49	21	
3-3, 75	167.65	1.675		3.400	44.10	2.03	2.73	41	20	8
4-1, 75	174.25	1.577		3.264	39.20	2.07	2.74	39	19	10
4-2, 75	175.75	1.511		3.203	29.40	2.12	2.73	36	17	
4-3, 75	177.25	1.659		3.550	34.30	2.14	2.83	38	18	
5-1, 75	183.85	1.469		3.129	41.65	2.13	2.76	36	17	18
5-2, 75	185.35	1.606		3.469	44.10	2.16	2.76	34	16	
6-1, 75	193.45	1.669		3.438	44.10	2.06	2.63	35	17	9
6-2, 75	194.95	1.652		3.354	44.10	2.03	2.56	34	17	
6-3, 75	196.45	1.678		3.574	44.10	2.13	2.71	34	16	9
7-1, 75	203.05	1.623		2.645		1.63	2.40	57	60	
7-3, 75	206.05					1.60	2.35	58	63	47
7-4, 75	207.55	1.671	1.735	2.690		1.61	2.36	58	62	
7-5, 75	209.05	1.713	1.713	2.775		1.62	2.37	57	61	51
7-6, 75	210.55	1.593	1.676	2.485		1.56	2.30	60	69	
9-1, 75	222.25	1.738	1.814	2.989		1.72	2.45	52	48	60
9-2, 75	223.75	1.740	1.803	3.062		1.76	2.52	52	46	
9-3, 75	225.25	1.758	1.797	3.059		1.74	2.47	52	46	61
9-4, 75	226.75	1.754	1.841	3.017		1.72	2.50	54	50	
10-1, 77	231.87	1.699	1.703	2.752		1.62	2.38	58	61	
10-2, 77	233.37	1.703	1.742	2.759		1.62	2.38	57	60	
10-3, 77	234.87	1.655	1.674	2.648		1.60	2.38	59	65	
10-4, 77	236.37	1.651	1.681	2.675		1.62	2.41	58	62	
10-5, 77	237.87	1.664	1.659	2.729		1.64	2.44	58	60	
11-1, 75	241.45	1.648	1.696	2.521		1.53	2.29	62	75	
11-2, 75	242.95	1.631	1.687	2.495		1.53	2.30	62	76	
11-3, 77	244.47	1.657	1.667	2.486		1.50	2.25	63	82	
11-4, 77	245.97	1.630	1.648	2.412		1.48	2.23	64	86	
11-5, 77	247.47	1.703	1.743	2.810		1.65	2.39	56	56	
12-1, 75	251.05	1.661	1.735	2.674		1.61	2.39	59	64	
12-2, 75	252.55	1.662	1.639	2.510		1.51	2.27	63	79	
12-3, 75	254.05	1.753	1.766	2.875		1.64	2.36	55	55	
12-4, 75	255.55	1.635	1.730	2.600		1.59	2.10	49	49	
12-4, 75	255.55	1.635	1.730	2.600		1.59	2.10	49	49	
12-5, 75	257.05	1.662	1.721	2.593		1.56	2.36	61	71	
13-1, 75	260.65	1.832	1.851	3.169		1.73	2.44	52	47	
13-2, 75	262.15	1.792	1.823	3.136		1.75	2.48	51	45	
13-3, 75	263.65	1.720	1.780	2.804		1.63	2.61	63	70	
13-4, 75	265.15	1.677	1.726	2.767		1.65	2.40	56	56	
13-5, 75	266.65	1.726	1.687	2.813		1.63	2.38	57	59	
14-1, 75	270.25	1.677	1.730	2.784		1.66	2.42	56	55	
14-2, 75	271.75	1.642	1.712	2.742		1.67	2.46	56	56	
14-3, 75	273.25	1.719	1.749	2.836		1.65	2.43	57	58	
14-4, 75	274.75	1.649	1.782	2.770		1.68	2.45	55	54	
14-5, 75	276.25	1.703	1.680	2.912		1.71	2.47	54	51	
15-1, 75	279.85	1.813	1.789	3.064		1.69	2.45	54	52	
15-2, 75	281.35	1.777	1.855	3.039		1.71	2.46	54	50	
15-3, 75	282.85	1.770	1.759	2.850		1.61	2.38	58	63	
15-4, 75	284.35	1.714	1.778	2.845		1.66	2.41	56	56	
15-5, 75	285.85	1.745	1.781	2.879		1.65	2.42	56	57	
16-1, 75	289.45	1.753	1.785	2.928		1.67	2.42	55	54	
16-2, 75	290.95	1.694	1.781	2.727		1.61	2.38	58	63	
16-3, 75	292.45	1.704	1.786	2.863		1.68	2.40	54	52	
16-4, 75	293.95	1.750	1.799	2.800		1.60	2.47	62	70	
16-5, 75	295.45	1.758	1.664	2.918		1.66	2.42	56	55	
17-1, 75	299.05	1.967	2.031	3.265		1.66	2.42	56	55	
17-2, 75	300.55	2.011	2.144	3.338		1.66	2.42	56	56	
17-3, 75	302.05	1.898	1.983	3.170		1.67	2.40	55	53	
17-4, 75	303.55	1.943	2.059	3.264		1.68	2.43	55	53	
17-5, 75	305.05	1.949	1.946	3.274		1.68	2.41	54	52	
18-1, 75	308.65	1.758	1.859	3.006		1.71	2.44	53	49	
18-2, 75	310.15	1.777	1.804	3.110		1.75	2.48	52	46	55
18-3, 75	311.65	1.695	1.766	2.763		1.63	2.34	56	57	
19-1, 75	318.25	1.752	1.849	3.066		1.75	2.42	50	43	
19-2, 75	319.75	1.721	1.779	2.926		1.70	2.44	53	50	49
19-3, 75	321.25	1.741	1.799	3.029		1.74	2.42	50	44	
19-4, 75	322.75	1.884	1.859	3.485		1.85	2.49	45	35	56
19-5, 75	324.25	1.815	1.909	3.321		1.83	2.51	47	38	
20-1, 75	327.85	1.721	1.790	2.840		1.65	2.36	55	54	
20-2, 75	329.35	1.787	1.824	3.074		1.72	2.41	51	46	
20-3, 75	330.85	1.723	1.773	2.912		1.69	2.38	52	49	55
21-1, 75	337.45	1.762	1.868	3.084		1.75	2.39	48	41	49
21-2, 75	338.95	1.799	1.854	3.256		1.81	2.45	46	37	60
21-3, 75	340.45	1.799	1.854	3.256		1.81	2.45	46	37	
21-3, 75	340.45	1.877	1.979	3.566		1.90	2.49	41	30	

APPENDIX I

Table 5 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Sonic velocity (km/s)		Acoustic impedance (g·10 ⁵ /cm ² ·s)	Unconfined compression strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
		Vertical	Horizontal							
21-4, 75	341.95	1.660	1.740	2.623	1.58	2.30	58	64		
21-5, 75	343.45	1.647	1.746	2.652	1.61	2.32	57	60	44	
22-1, 75	347.05	1.880	1.922	3.628	1.93	2.52	40	28		
22-2, 75	348.55	1.825	1.898	3.340	1.83	2.42	44	34	53	
22-3, 75	350.05	2.383	2.494	4.957	2.08	2.51	29	18		
22-4, 75	351.55	1.891	1.867	3.347	1.77	2.40	47	39		
22-5, 75	353.05	1.783	1.869	3.085	1.73	2.39	50	44	35	
23-1, 75	356.65	1.775	1.901	3.213	1.81	2.44	46	37		
23-2, 75	358.15	1.762	1.828	3.154	1.79	2.48	48	40	39	
23-3, 75	359.65	1.980	2.135	3.841	1.94	2.47	38	26		
23-4, 75	361.15	2.230	2.402	4.148	1.86	2.38	39	29		
23-5, 75	362.65	1.872	1.996	3.426	1.83	2.45	45	33	31	
24-1, 75	366.25	1.947	2.091	3.738	1.92	2.51	40	29		
24-2, 75	367.75	1.878	1.851	3.456	1.84	2.44	44	34	31	
24-3, 75	369.25	1.856	2.002	3.304	1.78	2.41	47	39		
24-4, 75	370.75	1.724	1.838	2.983	1.73	2.38	49	43		
24-5, 75	372.25	1.821	1.959	3.260	1.79	2.38	45	36	38	
25-1, 75	375.85	1.890	2.005	3.572	1.89	2.48	41	30		
25-2, 75	377.35	1.737	1.810	3.074	1.77	2.45	49	41	37	
25-3, 75	378.85	1.918	1.960	3.491	1.82	2.50	47	38		
25-4, 75	380.35	1.881	2.058	3.499	1.86	2.45	43	32		
25-5, 75	381.85	2.009	2.125	3.837	1.91	2.45	39	27	41	
26-1, 75	385.45	2.018	2.181	3.996	1.98	2.52	37	25		
26-2, 80	387.00	1.988	2.189	3.896	1.96	2.47	36	25	38	
26-3, 80	388.50	1.821	1.978	3.369	1.85	2.48	44	34		
26-4, 75	389.95	2.082	2.334	4.289	2.06	2.57	34	21		
26-5, 75	391.45	1.884	2.115	3.467	1.84	2.42	43	33	26	
27-1, 75	395.05	1.920	2.072	3.610	1.88	2.51	44	33		
27-2, 75	396.55	1.939	2.131	3.645	1.88	2.44	41	30	32	
27-3, 75	398.05	1.968	2.157	3.759	1.91	2.44	39	28		
27-4, 75	399.55	1.853	2.026	3.428	1.85	2.46	44	34		
27-5, 75	401.05	2.000	2.159	3.820	1.91	2.46	39	28	42	
28-1, 75	404.65	1.942	2.132	3.690	1.90	2.47	40	29		
28-2, 75	406.15	2.095	2.317	4.211	2.01	2.50	34	22		
28-3, 75	407.65	1.956	2.198	3.716	1.90	2.43	39	27	30	
29-1, 75	414.25	1.968	2.210	3.720	1.89	2.40	38	27		
29-2, 75	415.75	2.050	2.268	4.080	1.99	2.46	34	22	39	
29-3, 75	417.25	1.911	2.092	3.593	1.88	2.49	42	31		
29-4, 75	418.75	2.000	2.221	3.980	1.99	2.47	34	22		
29-5, 75	420.25	1.900	2.076	3.496	1.84	2.42	42	32	23	
30-1, 75	423.85	1.994	2.234	3.888	1.95	2.49	38	26		
30-2, 75	425.35	1.999	2.215	3.918	1.96	2.49	37	25	31	
30-3, 75	426.85	1.941	2.123	3.591	1.85	2.44	43	33		
30-4, 75	428.35	2.069	2.549	4.366	2.11	2.57	30	18	52	
31-1, 75	433.45	2.258	2.572	4.855	2.15	2.59	29	17		
31-2, 75	434.95	2.217	2.483	4.700	2.12	2.58	30	18	52	
31-3, 75	436.45	2.113	2.433	4.374	2.07	2.57	33	20		
31-4, 75	437.95	2.219	2.496	4.704	2.12	2.58	30	18		
31-5, 75	439.45	2.129	2.403	4.386	2.06	2.56	33	21	45	
32-1, 75	443.05	2.070	2.259	4.285	2.07	2.55	32	20		
32-2, 75	444.55	2.206	2.510	4.677	2.12	2.56	30	17	53	
32-3, 75	446.05	2.162	2.344	4.454	2.06	2.54	32	20		
32-4, 75	447.55	2.087	2.228	4.299	2.06	2.57	34	21		
32-5, 75	449.05	2.087	2.301	4.299	2.06	2.58	35	22	45	
33-1, 75	452.65	2.197	2.403	4.746	2.16	2.64	31	18		
33-2, 75	454.15	2.108	2.290	4.342	2.06	2.56	33	21	44	
33-3, 75	455.65	2.255	2.383	4.645	2.06	2.52	32	19		
33-4, 75	457.15	2.081	2.260	4.204	2.02	2.52	35	22		
33-5, 75	458.65	2.083	2.286	4.124	1.98	2.44	34	22	43	
34-1, 75	462.25	2.139	2.241	4.385	2.05	2.58	35	22		
34-2, 75	463.75	2.034	2.217	4.170	2.05	2.61	36	23	35	
34-3, 75	465.25	2.049	2.282	4.180	2.04	2.59	36	23		
34-4, 75	466.75	1.921	2.228	3.765	1.96	2.67	44	31		
34-5, 75	468.25	1.975	2.254	3.911	1.98	2.55	39	26	33	
35-1, 75	471.85	2.019	2.144	3.876	1.92	2.47	39	27		
35-2, 75	473.35	1.889	2.150	3.721	1.97	2.58	40	27	27	
35-4, 75	476.35	2.062	2.192	4.042	1.96	2.58	40	28		
35-5, 75	477.85	1.949	2.160	3.859	1.98	2.58	40	27	31	
36-1, 75	481.45	2.045	2.231	4.070	1.99	2.53	36	24		
36-2, 75	482.95	2.108	2.258	4.279	2.03	2.55	35	23	41	
36-3, 75	484.45	2.047	2.258	4.114	2.01	2.52	35	23		
37-1, 75	491.05	1.984	2.211	3.948	1.99	2.51	36	23		
37-2, 75	492.55	1.979	2.193	4.037	2.04	2.47	35	22	28	
37-3, 75	494.05	2.045	2.224	4.090	2.00	2.54	36	24		
37-4, 75	495.55	1.980	2.221	3.980	2.01	2.63	39	26		
37-5, 75	497.05	2.098	2.195	4.259	2.03	2.53	34	22	36	

Table 5 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Sonic velocity (km/s)		Acoustic impedance (g·10 ⁹ cm ² ·s)	Unconfined compression strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity (%)	Water content (%)	Carbonate content (%)
		Vertical	Horizontal							
38-1, 75	500.65	2.076	2.277	4.380	2.11	2.60	32	19		
38-2, 75	502.15	2.052	2.203	4.125	2.01	2.53	35	23		39
38-3, 75	503.65	2.048	2.244	4.157	2.03	2.56	36	23		
38-4, 75	505.15	1.988	2.233	4.056	2.04	2.58	35	23		
38-5, 75	506.65	2.049	2.243	4.221	2.06	2.59	35	22		38
39-1, 75	510.25	1.913	2.201	3.845	2.01	2.56	37	24		
39-2, 75	511.75	2.007	2.011	4.074	2.03	2.56	35	23		37
39-3, 75	513.25	2.060	2.290	4.264	2.07	2.58	34	21		
39-4, 75	514.75	2.000	2.177	4.040	2.02	2.54	36	23		
39-5, 75	516.25	2.077	2.181	4.112	1.98	2.49	35	23		35
40-1, 75	519.85	2.029	2.265	4.159	2.05	2.58	35	22		
40-2, 75	521.35	2.033	2.303	4.249	2.09	2.61	33	20		45
40-3, 75	522.85	2.147	2.359	4.487	2.09	2.56	31	19		
40-4, 75	524.35	2.104	2.243	4.355	2.07	2.61	35	22		41
41-2, 75	530.95	2.031	2.252	4.103	2.02	2.55	36	23		34
41-4, 75	533.95	2.037	2.206	4.196	2.06	2.57	34	21		
41-4, 75	533.95	2.094	2.296	4.376	2.09	2.60	33	20		
41-5, 75	535.45	2.052	2.201	4.248	2.07	2.59	34	21		
41-6, 75	536.95	2.079	2.273	4.304	2.07	2.58	34	21		
42-1, 75	539.05	1.996	2.220	4.152	2.08	2.61	34	21		
42-2, 75	540.55	2.043	2.297	4.290	2.10	2.59	32	19		46
42-3, 75	542.05	2.072	2.257	4.351	2.10	2.60	33	20		
42-4, 75	543.58	2.139	2.401	4.513	2.11	2.66	34	21		
42-5, 75	545.05	2.087	2.341	4.362	2.09	2.62	34	21		43
43-1, 75	548.65	2.023	2.143	4.167	2.06	2.60	35	22		
43-2, 75	550.15	2.314	2.430	4.859	2.10	2.55	31	18		52
43-3, 75	551.65	2.132	2.267	4.477	2.10	2.66	35	22		
43-4, 75	553.15	2.330	2.483	5.010	2.15	2.60	29	17		
43-5, 75	554.65	2.404	2.628	5.217	2.17	2.60	28	16		66
44-1, 75	558.25	2.410	2.464	5.157	2.14	2.60	30	18		
44-2, 75	559.75	2.586	2.663	5.560	2.15	2.60	29	17		60
44-3, 75	561.25	2.460	2.575	5.191	2.11	2.57	31	18		
44-4, 75	562.75	2.124	2.324	4.503	2.12	2.60	32	19		
44-5, 75	564.25	2.205	2.051	4.498	2.04	2.60	36	23		40
44-6, 75	565.75	1.967	2.142	3.973	2.02	2.57	37	24		
45-1, 75	567.85	1.950	2.087	3.978	2.04	2.59	36	23		
45-2, 75	569.35	1.993	2.133	4.106	2.06	2.58	34	22		35
45-3, 75	570.85	1.958	2.177	4.014	2.05	2.57	34	22		
45-4, 75	572.35	2.004	2.142	4.128	2.06	2.58	34	21		33
45-5, 75	573.85	2.115	2.157	4.357	2.06	2.55	33	20		
46-1, 75	577.45	2.201	2.418	4.556	2.07	2.58	34	21		
46-2, 75	578.95	1.926	2.100	3.910	2.03	2.59	37	24		28
46-3, 75	580.45	2.036	2.012	4.153	2.04	2.60	36	23		
46-4, 75	581.95	2.062	2.053	4.186	2.03	2.59	37	24		27
47-1, 75	587.05	1.893	2.061	3.862	2.04	2.60	37	24		
47-2, 75	588.55	1.873	2.083	3.783	2.02	2.63	37	26		17
47-3, 75	590.05	1.923	2.085	3.846	2.00	2.58	38	25		
47-4, 75	591.55	1.923	2.105	3.865	2.01	2.60	38	25		
47-5, 75	593.05	1.901	2.117	3.802	2.00	2.57	38	25		25
48-1, 75	596.65	1.879	2.077	3.664	1.95	2.47	36	25		
48-2, 75	598.15	1.914	2.580	3.809	1.99	2.55	38	25		18
48-3, 75	599.65	1.998	2.230	3.956	1.98	2.54	38	26		
48-4, 75	601.15	2.191		4.513	2.06	2.62	36	23		22
49-1, 75	606.25	1.903	2.040	3.692	1.94	2.57	41	29		18
49-2, 75	607.75	1.926	2.036	3.736	1.94	2.57	42	30		
49-3, 75	609.25	2.196	2.367	4.546	2.07	2.57	33	20		
49-4, 75	610.75	1.963	2.042	3.847	1.96	2.45	35	24		
49-5, 75	612.25	2.065	2.270	4.233	2.05	2.56	34	22		42
50-1, 75	615.85	2.058	2.148	4.095	1.99	2.51	36	24		29
50-2, 75	617.35	2.033	2.122	4.046	1.99	2.49	35	23		
50-3, 75	618.85	1.915	2.162	3.868	2.02	2.53	35	23		
50-4, 75	620.35	2.076	2.226	4.297	2.07	2.58	33	21		
50-5, 75	621.85	2.081	2.261	4.266	2.05	2.53	33	21		41
51-1, 75	625.45	1.973	2.172	3.867	1.96	2.51	38	26		
51-2, 75	626.95	2.031	2.217	4.123	2.03	2.54	35	22		41
51-3, 75	628.45	1.966	2.177	3.991	2.03	2.63	38	25		
52-1, 75	635.05	2.061	2.265	4.246	2.06	2.50	31	19		
52-2, 75	636.55	2.070	2.267	4.202	2.03	2.54	34	22		43
52-3, 75	638.05	2.054	2.207	4.170	2.03	2.53	34	21		
52-4, 75	639.55	2.134	2.358	4.481	2.10	2.55	30	18		
52-5, 75	641.05	2.089	2.278	4.366	2.09	2.55	31	19		47
53-1, 75	644.65	1.915	2.146	3.811	1.99	2.58	39	26		9
54-1, 75	649.15	2.085	2.282	4.379	2.10	2.62	33	20		40
55-1, 75	654.25	2.079	2.194	4.324	2.08	2.55	32	20		40
55-2, 75	655.75	2.000	2.219	6.000	3.00	2.58	27	9		40
55-3, 75	657.25	2.081	2.241	4.266	2.05	2.56	34	21		

APPENDIX I

Table 5 (continued).

Core-Section (interval in cm)	Sub-bottom depth(m)	Sonic velocity (km/s)		Acoustic impedance (g·10 ⁵ /cm ² ·s)	Unconfined compression strength (kPa)	Bulk density (g/cm ³)	Grain density (g/cm ³)	Porosity	Water content (%)	Carbonate content (%)
55-4, 75	658.75	2.083	2.279	4.374	2.10	2.59	34	19		
55-5, 75	660.25	2.174	2.313	4.478	2.06	2.54	32	20	41	
56-1, 75	663.85	2.150	2.309	4.558	2.12	2.58	30	18	45	
56-2, 75	665.35	2.107	2.320	4.383	2.08	2.57	32	20		
56-3, 75	666.85	2.170	2.282	4.514	2.08	2.54	31	19		
56-4, 75	668.35	2.031	2.245	4.143	2.04	2.56	35	22		
56-5, 75	669.85	2.325	2.519	4.929	2.12	2.55	29	17	56	
57-1, 75	673.45	1.990	2.236	4.000	2.01	2.49	34	22		
57-2, 75	674.95	2.067	2.310	4.279	2.07	2.57	33	20	37	
57-3, 75	676.45	1.904	2.192	3.789	1.99	2.55	37	25		
57-4, 75	677.95	2.143	2.095	4.522	2.11	2.60	32	19		
57-5, 75	679.45	2.274	2.266	4.730	2.08	2.56	32	20	39	
59-1, 75	692.65	1.882	2.360	3.896	2.07	2.56	33	20		
59-2, 75	694.15	2.040	2.145	4.223	2.07	2.56	33	20	41	
59-3, 75	695.65	1.959	2.229	4.036	2.06	2.50	34	22		
59-4, 75	697.15	1.943	2.253	3.789	1.95	2.50	38	26		
59-5, 75	698.65	2.100	2.230	4.305	2.05	2.52	32	20	42	
60-1, 75	702.25	2.193	2.254	4.649	2.12	2.62	32	19		
60-2, 75	703.75	2.064	2.344						30	
60-3, 75	705.25	2.092	2.239	4.268	2.04	2.53	33	21		
60-4, 75	706.75	2.164	2.327	4.436	2.05	2.51	32	20		
60-5, 75	708.25	2.149	2.323	4.491	2.09	2.62	34	21	41	
61-1, 75	711.85	2.070	2.210	4.140	2.00	2.55	37	25		
61-2, 75	713.35	2.050	2.249	4.141	2.02	2.55	36	23	31	
61-3, 75	714.85	2.054	2.236	4.046	1.97	2.51	37	25		
61-4, 75	716.35	2.116	2.201	3.915	1.85	2.36	39	29		
61-5, 75	717.85	2.174	2.281	4.283	1.97	2.50	37	25	32	
62-1, 75	721.45	2.059	2.217	4.077	1.98	2.51	37	25		
62-2, 75	722.95	2.139	2.376	4.406	2.06	2.65	38	24	36	
62-3, 75	724.45	2.835	2.477							
62-4, 75	725.95	2.174	2.161	4.457	2.05	2.60	36	23		
62-5, 75	727.45	2.187	2.343	4.265	1.95	2.52	39	27	38	
63-1, 75	731.05	2.026	2.188	4.072	2.01	2.55	36	24		
63-2, 75	732.55	2.070	2.231	3.995	1.93	2.54	41	29	26	
63-3, 75	734.05	2.060	2.286	4.017	1.95	2.52	39	27		
63-4, 75	735.55	2.115	2.199	4.040	1.91	2.47	40	28		
63-5, 75	737.05	2.150	2.239	4.085	1.90	2.45	40	28	25	
64-1, 75	740.65	2.653	2.781	5.837	2.20	2.65	28	16		
64-2, 75	742.15	2.759	2.829	6.042	2.19	2.29	8	4	47	
64-3, 75	743.65	2.176	2.443	4.635	2.13	2.69	34	21		
64-4, 75	745.15	2.125	2.379	4.420	2.08	2.66	36	22		
64-5, 75	746.65	1.998	2.138	4.056	2.03	2.61	38	24	18	
65-1, 75	750.25	2.041	2.290	4.102	2.01	2.63	36	26		
65-2, 71	751.71	2.060	2.418	4.223	2.05	2.64	37	24	12	
66-2, 72	761.32	2.008	1.971	4.157	2.07	2.66	37	24	41	
66-3, 72	762.82	2.071	2.185	4.246	2.05	2.66	38	24		
66-4, 72	764.32	2.141	2.263	4.625	2.16	2.67	31	18		
67-1, 75	769.45	2.455	2.601	5.548	2.26	2.68	26	14		
67-2, 46	770.66	2.237	2.266	4.832	2.16	2.65	31	18	62	
67-3, 75	772.45	2.410	2.179	5.085	2.11	2.58	31	18		
67-4, 75	773.95	2.215	2.236	4.474	2.02	2.49	33	21		
68-1, 75	779.05	2.265	2.377	4.938	2.18	2.65	30	17		
68-2, 24	780.04	2.283	2.304	5.000	2.19	2.77	34	20	59	
68-3, 46	781.76	2.356	2.416	5.230	2.22	2.70	29	16		
68-4, 76	783.56	2.385	2.523	5.223	2.19	2.67	30	17		
68-5, 75	785.05	2.466	2.582	5.450	2.21	2.67	28	16	64	
69-1, 75	788.65	2.735	2.804	6.291	2.30	2.69	24	12		
69-2, 75	790.15	2.810	3.073	6.547	2.33	2.68	22	11	69	
69-3, 75	791.65	2.552	2.558	5.665	2.22	2.68	28	16		
69-4, 75	793.15	2.649	2.774	6.013	2.27	2.69	26	14		
69-5, 75	794.65	2.304	2.445	4.931	2.14	2.67	33	20	57	
70-1, 75	798.25	2.307	2.452	5.006	2.17	2.67	31	18		
70-2, 75	799.75	2.324	2.422	5.043	2.17	2.69	32	18	59	
70-3, 75	801.25	2.424	2.550	5.309	2.19	2.70	31	18		
70-4, 75	802.75	2.198	2.354	4.638	2.11	2.66	34	21		
70-5, 75	804.25	2.333	2.465	5.016	2.15	2.69	33	19	57	
71-1, 75	807.85	2.203	2.299	4.582	2.08	2.66	37	23		
71-2, 75	809.35	2.323	2.458	5.064	2.18	2.66	30	17	59	
71-3, 75	810.85	2.588	2.678	5.978	2.31	2.71	24	12		
71-4, 75	812.35	2.224	2.384	4.648	2.09	2.60	33	20		
71-5, 75	813.85	2.243	2.334	4.890	2.18	2.65	30	17	60	