

APPENDIX II. PHYSICAL PROPERTIES DATA FOR SITES 535 AND 540¹

Richard T. Buffler, Institute for Geophysics, The University of Texas at Austin, Austin, Texas

INTRODUCTION

Tables 1 and 2 below contain the data for the physical properties of the material from Sites 535 and 540, respectively. These data are summarized for Site 535 in

Table 23 and Figure 31 in the site chapter, Sites 535, 539, and 540 (this volume). Site 540 data summaries can be found in Table 25 and Figure 37 of the site chapter, Sites 535, 539, and 540 (this volume).

¹ Buffler, R. T., Schlager, W., et al., *Init. Repts. DSDP, 77*: Washington (U.S. Govt. Printing Office).

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Table 1. Summary of physical properties for Site 535.

Core-Section (interval in cm)	Depth (m)	Sonic velocity (km/s)		2-Minute GRAPE Wet-bulk density (g/cm ³)		Gravimetrics			Acoustic impedance (g cm ⁻² s ⁻¹) (vertical)	Torvane shear (kPa)	Thermal conductivity (x 10 ⁻³ cal deg ⁻¹ cm ⁻¹ s ⁻¹)
		H	V	H	V	φ (%)	Wet-bulk density (g/cm ³)	φ (%)			
1-1, 99-101	1.0	1.474	*			1.41	74	52	2.08	2.58	
1-2, 90-92	2.4	1.494	*			1.44	73	51	2.15	3.23	
2-2, 104-106	5.0	1.420	*			1.57	67	43	2.23	7.53	
2-3, 100-102	6.5	1.431	*			1.61	65	41	2.30	13.45	
3-3, 102-104	16.0	1.557	*			1.36	79	58	2.12	16.79	
3-4, 102-104	17.5	1.666	*			1.89	49	26	3.15	20.44	
4-2, 102-104	24.0	1.526	*			1.61	65	40	2.44	16.03	
4-3, 82-84	25.3	1.550	*			1.70	59	35	2.64	20.44	
5-1, 102-104	32.0	1.540	*							17.22	
5-3, 108-110	35.0	1.540	*			1.64	61	37	2.53	30.13	2.76
6-5, 110-112	47.6	1.540	*			1.63	63	39	2.51	22.60	
6-6, 90-92	49.0	1.550	*			1.66	62	38	2.57		2.38
7-3, 116-118	54.0	1.625	*			1.82	52	29	2.96		
7-6, 116-118	58.7	1.552	*							16.14	2.71
8-2, 78-80	61.8	1.566	*			1.69	59	35	2.65		3.10
8-5, 78-80	66.3	1.478	*			1.59	62	39	2.35		
9-1, 102-107	70.0	1.600	*			1.78	55	31	2.85	42.50	
9-2, 100-102	72.0	1.593	*			1.80	53	29	2.87	49.50	
9-3, 100-102	73.0	1.600	*			1.78	55	31	2.85	47.34	3.25
9-4, 100-102	74.0	1.627	*			1.86	50	27	3.03	34.43	
10-1, 101-103	80.0	1.587	*			1.75	56	32	2.78	29.05	
10-2, 101-103	81.0	1.544	*			1.72	58	34	2.66	26.90	
10-3, 101-103	83.0	1.581	*			1.73	55	32	2.74	23.67	3.03
11-1, 101-103	89.0	1.557	*			1.72	58	34	2.68	24.75	
11-2, 101-103	91.0	1.572	*			1.75	57	33	2.75	12.91	
11-3, 101-103	92.0	1.508	*			1.69	59	35	2.55	34.43	
11-4, 101-103	94.0	1.590	*			1.68	60	36	2.67	17.22	
11-6, 101-103	95.0	1.567	*			1.65	63	38	2.59	12.91	
11-7, 39-41	97.0	1.662	*			1.78	55	31	2.96	64.56	
12-3, 101-103	102.0		*			1.75	57	33		22.60	
12-4, 101-103	103.0	1.684	*			1.79	54	30	3.09	29.05	
13-2, 120-122	110.0	1.630	*	1.83	51.9	1.85	50	27	3.02	58.10	
13-4, 120-122	113.0	1.634	*	1.79	54.3	1.85	50	27	3.02	48.42	
14-1, 145-147	118.0	1.566	*	1.70		1.69	60	35	2.65	29.05	
14-3, 111-113	121.0	1.624	*	1.82	52.5	1.81	54	30	2.93	123.74	
15-3, 129-131	130.0	1.584	*	1.94	45.4	1.79	52	29	2.84	74.24	
16-1, 94-96	136.0	1.632	*	1.88	49.0	1.85	51	27	3.01	98.99	
17-2, 63-65	147.0	1.626	*	1.90	47.8	1.87	49	24	3.05	27.97	
CC	155.0									20.44	
18-1, 105-107	156.0	2.616	2.438	2.23	28.1	2.23	28	13	5.44		
18-1, 140-141	156.0	1.958		2.23	28.1						
18-3, 109-111	159.0	2.900	2.796	2.29	24.5	2.28	26	11	6.38		3.92
19-3, 96-98	168.0	2.770	2.671	2.30	23.9	2.29	26	11	6.11		4.05
19-5, 108-110	171.0	2.600	2.437	2.29	24.5	2.28	27	12	5.54		
20-1, 108-110	175.0	3.104	2.876	2.31	23.3	2.31	25	11	6.65		4.50 ^b
20-5, 108-110	181.0	2.388	2.158	2.33	22.1	2.29	25	11	4.95		
21-2, 78-80	185.0	3.229	3.014	2.33	22.1	2.36	22	9	7.10		
21-4, 96-98	188.0	3.063	2.907	2.36	20.3	2.31	24	10	6.72		4.29
22-2, 109-111	195.0	2.831	2.900	2.86	±0	2.28	26	11	6.61		
22-3, 82-84	196.0	2.718	3.766	2.30	23.9	2.27	26	11	6.29		

APPENDIX II

Table 1. (Continued).

Core-Section (interval in cm)	Depth (m)	Sonic velocity (km/s)		2-Minute GRAPE			Gravimetrics			Acoustic impedance ($\text{g cm}^{-2}\text{s}^{-1}$) (vertical)	Torvane shear (kPa)	Thermal conductivity ($\times 10^{-3}$ cal $\text{deg}^{-1}\text{cm}^{-1}\text{s}^{-1}$)
				Wet-bulk density (g/cm^3)		ϕ (%)	Wet-bulk density (g/cm^3)	ϕ (%)	Water content (%)			
H	V	H	V	H	V					H	V	H
22-5, 56-58	199.0	3.400	3.526	2.30	23.9	2.34	21	9	8.26			
23-2, 77-79	204.0	2.778	2.626	2.30	23.9	2.27	26	11	5.97		1.86(?)	
23-5, 46-48	208.0	2.614	2.733	2.29	24.5	2.29	24	11	6.25			
23-6, 32-34	210.0	2.789	2.755	2.28	25.1	2.29	25	11	6.32			
24-1, 54-56	212.0	2.629	2.578	2.32	22.7	2.28	25	11	5.88			
24-3, 53-55	215.0	2.864	2.813	2.36	20.3	2.30	24	11	6.46		3.93	
25-1, 100-103	222.0	2.887	2.745	2.30	23.9	2.31	23	10	6.35		4.05	
25-3, 74-77	225.0	2.931	2.747	2.33	22.1	2.33	23	10	6.41			
26-1, 31-33	231.0	2.863	2.716	2.31	23.2	2.33	23	10	6.34			
27-1, 62-64	242.0	2.781	2.645	2.34	23.2	2.32	25	11	6.15			
27-3, 35-37	243.0	3.100	2.816	2.38	19.1	2.36	22	9	6.65		4.38	
28-1, 54-57	250.0	2.935	2.735	2.36	20.3	2.35	22	9	6.44			
28-4, 87-90	255.0	2.726	2.550	2.37	19.7	2.35	22	9	5.99		4.11	
28-6, 99-101	258.0	2.860	2.482	2.31	23.2	2.36	22	9	5.88			
30-2, 48-51	271.0	2.807	2.631	2.33	22.1	2.37	21	9	6.23			
30-3, 47-50	272.0	2.692	2.479	2.32	22.7	2.40	20	8	5.95		4.00 ^c	
30-6, 76-79	277.0	3.177	2.931	2.33	22.1	2.33	23	10	6.82			
31-2, 65-68	280.0	3.396	3.100	2.28	25.1	2.34	23	10	7.25		4.19 ^d	
31-5, 93-93	285.0	3.229	3.112	2.33	22.1	2.33	23	10	7.25			
31-6, 40-43	286.0	3.901	3.637	2.40	17.9	2.47	15	6	8.99			
31-6, 121-124	287.0	2.552	2.439	2.30	23.9	2.34	23	10	5.71			
32-1, 62-65	288.0	3.281	3.102	2.35	20.9							
32-1, 143-146	289.0	2.934	3.002	2.25	26.9	2.26	27	12	6.78			
32-3, 66-69	291.0	3.071	3.152	2.30	23.9	2.32	26	11	7.31			
33-3, 76-79	301.0	3.470	3.137	2.41	17.3	2.37	21	9	7.42		4.19	
33-5, 49-52	304.0	2.909	2.655	2.40	17.9	2.38	21	9	6.33			
34-1, 39-42	307.0	3.271	3.172	2.33	22.1	2.35	21	9	7.45			
34-2, 55-58	309.0	3.825	4.389	2.45	14.9	2.43	17	7	10.67		4.19	
35-3, 12-15	319.0	3.266	3.159	2.38	19.1	2.37	20	8	7.49		4.18	
35-6, 61-64	324.0	3.186	2.942	2.58	7.2	2.32	23	10	6.56			
36-1, 38-41	326.0	2.681	2.828	2.29	24.5	2.37	22	9	6.71			
36-5, 129-132	331.0	3.122	3.003	2.37	19.7	2.36	21	9	7.08		4.77 ^e	
37-3, 63-65	339.0	3.129	3.037	2.31	23.3	2.35	22	9	7.14			
37-4, 143-145	341.0	3.147	2.998	2.45	17.9	2.35	21	9	7.05		4.56 ^f	
38-1, 89-92	345.0	3.180	3.101	2.36	20.3	2.34	21	9	7.25			
38-4, 90-92	350.0	3.041	3.014	2.39	18.5	2.34	22	9	7.04		4.40	
38-6, 67-69	353.0	2.963	2.978	2.29	24.5	2.28	25	11	6.79			
39-1, 34-37	354.0	3.276	3.197	2.40	17.9	2.38	20	8	7.61		4.77	
39-4, 55-58	359.0	3.380	3.377	2.41	17.3	2.40	19	8	8.10			
40-1, 10-13	364.0	3.337	3.327	2.41	17.3	2.38	20	8	7.92			
41-1, 38-41	373.0	3.264	3.161	2.41	17.3	2.38	20	8	7.52			
41-4, 36-39	378.0	3.306	3.107	2.41	17.3	2.39	20	8	7.43		4.81	
42-1, 18-21	383.0	2.708	2.527	2.39	18.5	2.36	22	9	5.96		4.38	
42-3, 20-23	386.0	3.754	3.537	2.49	12.5	2.46	15	6	8.70		4.17	
42-5, 19-22	389.0	3.642	3.372	2.40	17.9	2.39	18	8	8.06			
43-2, 70-73	394.0	2.622	2.732	2.42	16.7	2.36	20	9	6.45		3.17(?) ^g	
44-2, 9-12	402.0	2.896	3.183	2.28	25.1	2.27	27	12	7.23			
44-2, 93-96	403.0	4.800	4.887	2.58	7.2	2.57	11	4	12.56			
46-1, 12-15	419.0	3.735	3.543	2.48	13.1	2.38	20	18	8.43		5.10 ^h	
47-1, 36-39	428.0	4.080	3.617	2.42	16.7	2.38	19	8	8.61		4.62	
48-1, 131-135	438.0	3.812	3.586	2.36	20.3	2.41	18	8	8.64			
48-3, 56-59	441.0	3.833	3.737	2.36	20.3	2.43	16	7	9.08		5.10	
48-5, 22-25	443.0	3.346	3.285	2.37	19.7	2.38	19	8	7.82			
49-2, 142-145	449.0	3.239	3.122	2.41	17.3	2.35	21	9	7.34			
49-3, 42-45	449.0	3.592	3.481	2.41	17.3	2.42	17	7	8.42		4.53	
50-1, 43-46	455.0	3.608	3.590	2.41	17.3	2.41	18	7	8.65			
50-2, 55-58	457.0	3.293	3.256	2.43	16.1	2.38	21	9	7.75		4.60	
51-1, 85-88	465.0	3.638	3.510	2.45	14.9	2.41	18	7	8.46		4.53	
51-3, 29-32	467.0	3.049	2.671	2.26	26.3	2.26	25	11	6.04		5.00	
51-4, 53-56	469.0	3.184	3.105	2.31	23.3	2.30	23	10	7.14			
52-1, 67-70	474.0	2.827	2.503	2.30	23.9	2.29	25	11	5.73			
52-4, 102-105	477.0	3.218	2.865	2.31	23.3	2.30	23	10	6.59		4.37	
53-1, 15-18	478.0	2.875	2.626	2.27	23.3	2.27	23	11	5.96			
53-3, 79-82	481.0	3.758	3.608	2.53	10.1	2.39	24	11	8.62		4.07 ⁱ	
54-1, 40-43	487.0	2.795	2.437	2.29	24.5	2.25	26	12	5.48			
54-3, 99-102	491.0	3.750	3.584	2.52	10.7	2.43	16	7	8.71		5.58	
54-5, 18-21	493.0	3.100	2.925	2.33	22.1	2.31	22	9	6.76			
55-2, 0-3	497.0	2.785	2.370	2.17	31.6	2.26	26	11	5.36			
55-4, 96-99	501.0	3.696	3.510	2.41	17.3	2.42	16	7	8.49		5.15	
55-5, 20-23	503.0	4.470	4.246	2.55	9.0	2.53	11	4	10.74			
56-1, 54-57	507.0	4.300	3.774	2.49	12.5	2.48	15	6	9.36			
56-4, 67-70	511.0	4.278	2.360	2.31	23.3	2.23	20	13	5.26		3.44(?)	
56-6, 17-20	514.0	3.824	3.742	2.45	14.9	2.45	16	6	9.17			
57-1, 36-39	516.0	2.931	2.646	2.27	25.7	2.29	24	10	6.06		4.82	
57-3, 49-52	519.0	3.896	3.714	2.43	16.1	2.46	15	6	9.14			

Table 1. (Continued).

Core-Section (interval in cm)	Depth (m)	Sonic velocity (km/s)		2-Minute GRAPE			Gravimetrics			Acoustic impedance ($\text{g cm}^{-2}\text{s}^{-1}$) (vertical)	Torvane shear (kPa)	Thermal conductivity ($\times 10^{-3}$ cal $\text{deg}^{-1}\text{cm}^{-1}\text{s}^{-1}$)
				Wet-bulk density (g/cm^3)		ϕ (%)	Wet-bulk density (g/cm^3)	ϕ (%)	Water content (%)			
				H	V							
57-7, 42-45	525.0	2.585	2.552	2.27		25.7	2.26	26	12	5.77		
56-4, 64-67	511.0	2.764 ^j	2.489 ^j	2.31		23.3	2.23	20	13	5.55		
58-1, 76-78	526.0	3.246	3.244	2.33		22.1	2.35	22	10	7.62		
58-3, 93-96	529.0	3.634	3.258	2.34		21.5	2.37	20	9	7.72	4.38	
58-5, 6-9	530.0	3.849	3.619	2.41		17.3	2.44	17	7	8.83		
59-2, 68-71	536.0	3.467	3.268	2.39		18.5	2.38	19	8	7.78	4.87	
59-5, 26-29	540.0	4.070	4.182	2.55		9.0	2.47	14	6	10.33		
60-2, 87-89	545.0	4.310	4.021	2.42		16.7	2.47	15	6	9.93		
60-5, 94-97	550.0	3.098	2.645	2.23		28.1	2.32	22	10	6.14		
61-1, 44-47	552.0	2.579	2.170	2.06		38.2	2.05	28	14	4.45		
61-1, 103-106	553.0	4.040	3.705	2.48		13.1	2.46	15	6	9.11		
61-2, 101-104	555.0	3.666	3.307	2.36		20.3	2.39	19	8	7.90	3.90	
62-4, 48-51	566.0	3.519	3.205	2.43		16.1	2.37	20	8	7.60	4.28	
62-5, 23-26	567.0	4.123	3.888	2.47		13.7	2.47	15	6	9.60		
63-1, 64-67	571.0	4.026	3.893	2.51		11.3	2.47	15	6	9.62	6.44	
63-4, 44-47	575.0	3.487	3.222	2.42		16.7	2.38	20	9	7.67	5.07	
63-5, 67-70	577.0	3.479	3.190	2.38		19.1	2.36	20	9	7.53	4.86	
64-2, 100-103	582.0	2.577	2.467	2.57		7.8	2.23	26	11	5.43		
64-3, 76-79	583.0	3.826	3.614	2.48		13.1	2.43	17	7	8.85	2.11(?)	
65-2, 98-101	591.0	3.807	3.554	2.44		15.5	2.40	18	8	8.53		
65-5, 55-58	595.0	3.152	2.995	2.31		23.3	2.36	21	9	7.07		
65-6, 45-48	596.0	3.715	3.422	2.42		16.7	2.41	19	8	8.25	4.65	
66-1, 17-21	597.0	3.995	3.743	2.41		17.3	2.41	18	7	9.02		
66-2, 50-54	599.0	3.255	2.804	2.30		23.9	2.24	23	10	6.28		
66-6, 20-24	605.0	3.627	3.429	2.42		16.7	2.38	19	8	8.16	1.98(?)	
67-1, 31-33	606.0	2.678	2.496	2.31		23.3	2.31	23	10	5.77		
67-3, 99-102	610.0	3.441	3.306	2.36		20.3	2.37	21	9	7.84	4.63	
68-2, 63-66	613.0	2.702	3.140	2.35		20.9	2.39	19	8	7.50		
68-3, 57-60	614.0	3.951	3.617	2.46		14.3	2.46	16	7	8.90	5.20	
68-4, 37-40	615.0	3.501	3.142	2.39		18.5	2.40	19	8	7.54		
69-2, 91-94	622.0	3.446	3.326	2.40		17.9	2.38	20	8	7.92	4.99	
69-4, 12-14	624.0	3.409	3.117	2.39		18.5	2.38	20	8	7.42		
69-5, 29-32	626.0	4.089	3.802	2.41		17.3	2.42	17	7	9.20		
69-5, 41-44	626.0	3.442	3.068	2.39		18.5	2.37	20	9	7.27		
70-1, 73-76	629.0	3.495	3.258	2.46		14.3	2.41	18	7	7.85		
70-4, 92-94	631.0	3.553	3.477	2.51		11.3	2.46	17	7	8.55	5.10 ^k	
71-1, 42-45	638.0	3.667	3.267	2.44		15.5	2.41	19	8	7.87		
71-3, 51-54	641.0	3.526	3.438	2.41		17.3	2.42	17	7	8.32	4.99	
72-3, 116-119	651.0	3.558	3.113	2.46		14.3	2.40	19	8	7.47		
72-4, 95-98	652.0	3.567	3.400	2.37		19.7	2.35	21	9	7.99		
73-1, 55-58	656.0	3.779	3.402	2.53		10.1	2.42	18	7	8.23	4.19	
73-2, 2-5	657.0	3.609	3.428	2.43		16.1	2.42	17	7	8.30		
74-2, 39-43	666.0	3.823	3.884	2.45		14.9	2.47	16	6	9.59	4.73	
75-1, 57-60	674.0	3.348	3.298	2.40		17.9	2.43	18	7	8.01		
75-3, 5-8	677.0	4.213	4.361	2.64		3.6	2.61	10	4	11.38		
75-3, 30-33	677.0	4.012	3.748	2.58		0.7	2.54	14	5	9.52	4.41	
76-2, 35-38	684.0	3.651	3.457	2.41		17.3	2.44	16	6	8.44	5.39	
76-2, 81-83	685.0	3.676	3.348	2.45		14.9	2.46	16	6	8.32		
77-1, 36-39	692.0	3.671	3.538	2.55	2.54	9.3	2.47	14	6	8.74		
77-2, 85-88	694.0	3.548	3.381	2.44		15.5	2.40	18	7	8.11	5.46	
79-2, 95-97	707.0	5.008	4.887	2.61		5.5	2.58	8	3	12.61		
78-1, 47-50	696.0	3.590	3.448	2.53		10.1				8.72 ^l		
78-1, 102-104	697.0	3.699	2.839	2.45		14.9	2.46	17	7	6.98		
79-1, 28-31	705.0	5.086	5.100	2.61		5.4	2.58	8	3	13.16		
79-1, 143-145	706.0	4.173	4.141	2.55		9.0	2.53	12	5	10.48		
79-2, 29-32	707.0	4.662	4.855	2.58		7.2				12.53 ^l		
79-2, 59-63	707.0	4.691	4.506	2.52		10.7	2.59	9	3	11.67		

Note: H = horizontal, V = vertical, ϕ = porosity.^aAssumed to be equal to horizontal velocity (H).^b20-3, 100-110^c30-3, 145-150^d31-3, 70-80^e36-4, 35-45^f37-5, 140-150^g43-1, 10-20^h46-2, 110-120ⁱ53-3, 120-130^jVelocity remeasured.^k70-4, 65-75^lDensity from x-ray data.

APPENDIX II

Table 2. Summary of physical properties for Site 540.

Core-Section (interval in cm)	Depth (m)	Sonic velocity (km/s)		2-Minute GRAPE Wet-bulk density (g/cm ³)		φ (%)	Gravimetrics Wet-bulk density (g/cm ³)		Water content (%)	Acoustic impedance (g cm ⁻² s ⁻¹) (vertical)	Torvane shear (kPa)	Thermal conductivity (x 10 ⁻³ cal deg ⁻¹ cm ⁻¹ s ⁻¹)
		H	V	H	V		Wet-bulk density (g/cm ³)	φ (%)				
1-1, 91-93	1	1.524					1.50	73	49	2.29	2.87	2.00
1-3, 92-94	4	1.510					1.43	74	52	2.16	2.87	
2-1, 144-146	6	1.539					1.66	61	33	2.56	30.64	
2-3, 130-132	9	1.536					1.61	64	40	2.60	38.30	2.61
3-1, 130-132	15	1.565					1.66	64	38	2.60	43.09	2.75
3-3, 130-132	18	1.547					1.66	63	38	2.57	-	
4-1, 130-132	25	1.556					1.67	61	36	2.60	53.63	2.59
4-3, 130-132	28	1.543					1.63	63	39	2.52	49.80	
5-1, 124-126	34	1.589					1.66	62	38	2.64	42.13	
5-2, 123-125	35	1.638					1.75	54	31	2.87	44.05	2.79
6-1, 130-132	44	1.614					1.64	62	38	2.65	41.18	2.57
7-1, 130-132	53	1.598					1.70	58	34	2.72	28.73	3.05
7-3, 130-132	56	1.614					1.71	58	34	2.76	28.73	
8-2, 130-132	64	1.599					1.63	60	37	2.61	28.73	2.79 ^a
8-4, 130-132	67	1.624					1.67	60	36	2.71	40.22	2.70 ^b
9-2, 130-132	74	1.725					1.68	58	34	2.90	38.30	2.83
9-4, 130-132	77	1.611					1.64	62	38	2.64	41.17	
10-1, 114-116	82	1.714					1.69	58	35	2.90	28.72	3.16 ^c
10-2, 116-118	83	1.676					1.70	58	34	2.85	19.15	2.81 ^c
11-2, 27-30	92	2.508	1.927	1.89		48.4	1.82	51	28	3.51		
11-3, 73-76	94	1.728	1.743	1.72		58.5			37	2.90		
11-6, 15-18	98	1.710	1.699				1.75	56	32	2.92		3.15 ^d
12-2, 95-98	102	2.090	2.040	1.89		48.4	1.84	49	26	3.75		2.70
12-5, 70-73	106	1.762	1.780				1.77	53	30	3.15		
13-2, 40-43	111	1.828							34			
13-4, 96-99	113	1.888	1.952	1.76		56.1	1.78	51	29	3.48		2.75
14-2, 87-90	121	1.724	1.774	1.79		54.3	1.80	53	29	3.19		3.60
14-4, 10-13	123	1.735	1.853	1.65		62.7	1.78	53	30	3.30		
15-1, 8-11	128	1.865	1.949	1.74		57.3	1.74	55	32	3.39		
15-3, 7-10	131	1.856	1.831	1.82		52.5	1.83	49	27	3.35		
16-1, 10-13	138	1.990	2.006	1.85		50.7	1.83	49	27	3.67		4.20
16-5, 0-3	143	1.774	1.800				1.78	53	30	3.20		
17-2, 12-15	149	1.950	1.973	1.82		52.5	1.81	51	28	3.57		4.26
17-6, 0-3	155	1.983	2.004	1.86		50.1	1.85	49	27	3.71		
18-2, 36-39	158	1.887	1.958	1.81		53.1	1.80	51	28	3.54		3.78
18-4, 15-18	161	1.853	1.931	1.80		53.7	1.77	54	31	3.42		
19-3, 47-50	169	2.019	2.058	1.91		47.2	1.89	46	24	3.89		3.78 ^e
19-5, 10-13	172	2.010	1.930	1.85		50.7	1.88	47	25	3.63		
20-2, 6-8	177	1.808	1.918	1.83		51.9	1.80	54	30	3.45		4.56
21-2, 90-93	187	1.872	1.836	1.77		55.5	1.78	54	30	3.27		
22-1, 69-72	195	1.958	1.958	1.79		54.3	1.75	55	32	3.43		
23-1, 0-3	204	2.172	2.148	1.83		51.9	1.81	51	28	3.89		3.00
23-4, 10-13	209	2.097	2.126	1.73		57.9	1.69	57	34	3.59		
24-3, 45-48	217	1.970	2.051	1.82		52.5	1.83	50	28	3.75		3.51
24-5, 42-45	220	2.118	2.224	1.89		48.4	1.86	50	27	4.14		
25-1, 3-6	223	2.253	2.257	1.86		50.1	1.86	50	27	4.20		
25-3, 40-43	226	2.227	2.177	2.05		38.8	2.04	40	20	4.44		
26-1, 4-6	233	2.281	2.149	2.06		38.2	2.05	39	19	4.41		3.61
26-3, 8-11	235	2.158	2.128	1.98		43.0	1.96	44	23	4.17		
27-1, 50-53	243	2.065	2.033	2.08		37.0	2.06	39	19	4.19		5.63
28-1, 90-93	252	2.046	2.119	1.91		47.2	1.92	47	25	4.07		4.64
28-1, 95-98	252	3.354	3.287	2.06		38.2	2.07	30	15	6.80		
28-2, 87-90	254	3.326	3.137	2.02		40.6	2.02	35	17	6.34		
29-1, 20-23	261	2.716	2.835	1.92		46.6	1.90	45	24	5.39		4.97
29-2, 87-90	263	2.260	2.251	1.77		55.5	1.87	48	25	4.21		
30-1, 60-63	271	2.061	2.165	1.74		57.3	1.80	54	30	3.90		4.13
30-2, 82-85	273	2.362	2.282	1.86		55.5	1.88	50	27	4.29		
31-1, 52-55	281	2.244	2.163	2.07		44.3	2.09	38	18	4.52		
31-2, 30-33	282	2.296		2.05		45.3	2.08	37	18	4.78		
31-3, 60-63	284	2.289	2.311	2.00		41.8	2.22	30	13	5.13		
32-1, 140-143	291	2.400	2.555	2.27		25.7	2.77	27	12	7.08		
34-1, 70-73	309	2.679	2.754	2.19		30.4	2.28	25	11	6.28		
35-1, 108-110	319	2.893	2.833	2.19		30.4	2.25	26	12	6.37		
36-1, 43-46	328	2.666	3.292	2.27		25.7	2.25	27	12	7.41		
36-1, 75-78	328	3.736	3.657	2.34		21.5	2.37	21	9	8.67		
37-1, 37-40	337	2.615	2.640	2.15		32.8	2.19	31	14	5.78		
38-1, 20-23	347	3.808	3.445	2.28		25.1	2.34	21	9	8.06		
39-1, 98-100	357	5.270	5.203	2.50		11.9	2.56	8	3	13.32		
40-1, 71-73	366	5.182	4.789	2.50		11.9	2.58	8	3	12.36		
41-1, 146-149	376	3.189	3.095	2.25		26.9	2.31	23	10	7.15		
41-2, 14-17	377	2.361	2.292	2.12		34.6	2.19	30	14	5.02		
42-2, 113-116	386	4.650	4.214	2.41		17.3	2.53	11	5	10.66		
42-3, 4-7	388	2.406	2.176	1.83		51.9	1.96	39	20	4.23		
43-1, 91-93	395	5.159	5.078	2.53		10.1	2.63	6	1	13.36		
43-2, 27-30	396	2.459	2.248	2.37		19.7	1.96	42	22	4.40		
44-2, 20-23	405	5.736	5.628	2.64		14.3	2.62	6	2	14.75		

Table 2. (Continued).

Core-Section (interval in cm)	Depth (m)	Sonic velocity (km/s)		2-Minute GRAPE			Gravimetrics			Acoustic impedance (g cm ⁻² s ⁻¹) (vertical)	Torvane shear (kPa)	Thermal conductivity (x 10 ⁻³ cal deg ⁻¹ cm ⁻¹ s ⁻¹)
		H	V	Wet-bulk density (g/cm ³)		ϕ (%)	Wet-bulk density (g/cm ³)	ϕ (%)	Water content (%)			
45-1, 75-77	414	2.001	2.154	1.95	44.8	1.99	41	20	4.29			
45-2, 27-30	415	3.667	3.576	2.22	28.7	2.23	29	13	7.97			
45-2, 127-130	416	5.529	5.704	2.62	4.8	2.62	6	2	14.94			
46-1, 70-73	423	5.006	4.893	2.54	9.6	2.52	12	5	4.74			
46-1, 144-148	424	2.395	2.358	2.05	38.8	2.01	39	19	13.51			
46-2, 20-23	424	5.428	5.196	2.62	4.8	2.60	7	3	5.64			
47-1, 106-109	433	2.517	2.601	2.19	30.4	2.17	30	14	4.47			
47-2, 95-98	434	2.043	2.192	2.05	38.8	2.03	38	19	4.45			
48-1, 61-64	442	4.118	3.966	2.49	12.5	2.44	17	7	9.68			
48-1, 123-126	443	2.355	2.465	2.05	38.8	2.11	33	16	5.201			
49-1, 99-103	452	2.635	2.724	2.15	32.8	2.12	35	17	5.775			
50-1, 9-12	461	3.851	3.739	2.39	18.5	2.37	19	8	8.151			
50-2, 13-16	462	2.565	2.513	2.22	28.7	2.18	30	14	5.518			
51-1, 11-13	470	2.586	2.707	2.14	33.4	2.18	31	14	5.901			
52-1, 138-141	481	2.570	3.045	2.33	22.1	2.32	25	11	7.064			
52-2, 96-99	482	2.721	2.802	2.30	23.9	2.25	27	12	6.305			
53-1, 33-36	489	2.387	2.390	2.27	25.7	2.24	28	12	5.354			
53-1, 102-105	490	2.807	2.855	2.31	23.3	2.30	24	10	6.567			
54-2, 99-104	501	2.987	3.150	2.34	21.5	2.30	24	10	7.250			
54-4, 96-100	503	3.089	3.026	2.27	25.7	2.26	26	12	6.839			
54-2, 67-70	501	3.416	3.027	2.33	22.1				7.053			
54-4, 69-73	503	3.287	3.217	2.33	22.1	2.32	24	10	7.463			
55-2, 36-39	510	2.854	2.875	2.25	26.9	2.22	28	13	6.383			
55-3, 144-147	512	2.795	2.885	2.22	28.7	2.18	31	14	6.289			
56-1, 45-48	518	2.758	2.908	2.24	27.5	2.23	28	13	6.485			
56-3, 31-34	521	2.786	2.851	2.28	25.1	2.22	28	13	6.329			
57-1, 22-25	527	2.845	2.972	2.28	25.1	2.25	27	12	6.69			
57-3, 11-14	530	2.848	2.990	2.22	28.7	2.19	31	14	6.55			
58-1, 58-61	537	2.759	2.892	2.18	31.0	2.18	32	14	6.31			
58-2, 68-71	539	2.926	2.940	2.19	30.4	2.19	29	13	6.44			
59-2, 105-108	550	2.801	2.733	2.31	23.3	2.30	25	11	6.28			
59-4, 56-59	551	3.107	2.977	2.30	23.9	2.29	26	11	6.82			
60-2, 15-18	557	2.783	2.952	2.23	28.1	2.22	28	12	6.55			
61-1, 87-90	566	2.896	3.109	2.29	24.5	2.27	26	11	7.06			
62-2, 45-48	576	2.928	2.917	2.29	24.5	2.32	22	10	6.77			
63-2, 31-34	586	2.363	2.143	2.25	26.9	2.28	26	11	4.89			
64-1, 47-50	594	2.944	2.910	2.16	32.2	2.30	23	10	6.69			
65-1, 36-39	603	2.733	2.694	2.23	28.1	2.20	30	14	5.92			
66-2, 47-50	614	3.016	3.056	2.31	23.3	2.27	25	11	6.94			
66-2, 92-95	615	2.703	2.840	2.20	29.9	2.20	30	14	6.25			
67-1, 101-103	623	2.735	2.591	2.25	26.9	2.20	30	13	5.70			
67-3, 108-111	626	3.101	3.000	2.31	23.3	2.28	25	11	6.84			
67-4, 5-8	627	2.822	2.792	2.38	19.1	2.28	20	9	6.65			
68-1, 66-69	632	3.229	3.386	2.34	21.5	2.33	22	10	7.92			
68-2, 61-64	634	2.846	2.823	2.32	22.7	2.28	25	11	6.44			
69-1, 56-59	642	2.871	2.866	2.11	35.2	2.23	28	13	6.39			
69-3, 63-67	645	2.680	2.586	2.28	25.1	2.28	25	11	5.90			
69-5, 0-3	647	2.232	2.172	2.42	16.7	2.24	29	13	4.87			
70-1, 147-150	652	2.875	2.656	2.39	18.5	2.38	20	8	6.32			
70-3, 72-75	654	2.858	2.809	2.47	13.7	2.41	19	8	6.77			
70-7, 21-24	660	3.100	3.080	2.32	22.7	2.32	23	10	7.15			
71-1, 143-146	661	3.024	3.022	2.33	22.1	2.32	23	10	7.01			
71-3, 131-134	664	2.806	2.776	2.29	24.5	2.28	26	11	6.33			
72-2, 100-102	642	2.865	2.935	2.33	22.1	2.33	23	10	6.84			
72-5, 97-100	676	2.747	2.793	2.37	19.7	2.35	22	9	6.56			
73-1, 109-112	680	2.702	2.593	2.43	16.1	2.43	21	9	6.30			
73-3, 113-116	683	2.957	3.080	2.30	23.9	2.28	27	12	7.02			
74-3, 21-23	672	2.825	2.745	2.23	28.1	2.23	30	13	6.12			
75-1, 77-80	699	2.916	2.941	2.24	27.5	2.28	26	12	6.71			
76-1, 76-79	708	2.795	2.894	2.20	29.9	2.25	30	13	6.51			
77-1, 68-71	718	2.839	3.114	2.28	25.1	2.25	27	12	7.01			
77-2, 147-150	720	3.222	3.216	2.38	19.1	2.36	21	9	7.59			
77-3, 127-130	721	3.178	2.981	2.32	22.7	2.37	21	9	7.06			
78-2, 88-91	729	3.502	3.201	2.42	16.7	2.40	19	8	7.68			
78-4, 110-114	732	3.240	3.066	2.43	16.1	2.37	20	8	7.27			
78-5, 147-150	734	3.005	2.893	2.43	16.1	2.37	20	9	6.86			
79-1, 71-74	737	3.582	3.212	2.37	19.7	2.35	20	9	7.55			
79-3, 68-71	740	3.098	3.104	2.35	20.9	2.34	23	10	7.26			
79-5, 51-55	743	3.065	2.923	2.36	20.3	2.37	20	9	6.93			
79-6, 113-116	745	3.152	3.218	2.45	14.9	2.36	21	9	7.59			
79-6, 117-120	745	3.680	3.574	2.38	19.1	2.37	21	9	8.47			

Note: H = horizontal, V = vertical, ϕ = porosity.^a8-7, 40-50^b8-7, 80-90^c10-1, 30-40^d11-5, 115-125^e19-2, 80-90