

Table T1. Lithology, roundness, sphericity, shape, and surface texture of pebbles (>1 cm). (See table notes. Continued on next seven pages.)

Unit	Core, section, interval (cm)	Depth (mbsf)	Lithology	Roundness	Sphericity	Shape	Surface texture
1	178-1095A-						
	1H-2, 84a	2.30	Metavolcanic	0.4	0.713	Sphere	w
	1H-2, 84b	2.30	Granite	0.5	0.677	Disc	
	1H-3, 12	3.05	Diorite	0.6	0.614	Disc	
	1H-3, 49	3.42	Granite	0.3	0.705	Disc	
	1H-3, 91	3.84	Granite	0.4	0.864	Sphere	
	1H-3, 143	4.36	Basalt (scoria)				
	1H-4, 30	4.73	Andesite	0.3	0.482	Disc	w
	1H-4, 51	4.94	Metavolcanic	0.3	0.798	Sphere	w
	1H-4, 90	5.33	Andesite				
	2H-3, 105	9.95	Metavolcanic	0.3	0.605	Rod	
	2H-3, 12	9.02	Granite		0.772	Rod	
	2H-3, 34	9.24	Rhyolite	0.4	0.585	Disc	w
	3H-4, 25	15.15	Basalt	0.5	0.611	Disc	
	3H-4, 139	16.29	Lapilli tuff rhyolite	0.4	0.717	Sphere	s
2	4H-3, 36	24.16	Metavolcanic	0.5	0.661	Disc	s
	5H-1, 0a	30.30	Basalt	0.3	0.687	Sphere	w
	5H-1, 0b	30.30	Metarhyolite	0.4	0.587	Blade	w
	5H-1, 0c	30.30	Granite	0.4	0.626	Blade	
	5H-1, 0d	30.30	Metavolcanic	0.5	0.737	Rod	s
	5H-1, 0e	30.30	Metavolcanic	0.4	0.644	Disc	
	5H-1, 0f	30.30	Metavolcanic	0.4	0.509	Blade	
	5H-1, 0g	30.30	Metavolcanic	0.6	0.572	Blade	
	5H-1, 0h	30.30	Metavolcanic	0.6	0.797	Rod	w
	5H-1, 0i	30.30	Basalt	0.5	0.759	Sphere	
	5H-1, 0j	30.30	Basalt	0.6	0.607	Blade	
	5H-1, 0k	30.30	Rhyolite	0.5	0.916	Sphere	
	5H-1, 0l	30.30	Metavolcanic	0.5	0.629	Disc	
	5H-1, 0m	30.30	Metavolcanic	0.5	0.579	Disc	
	5H-1, 0n	30.30	Metavolcanic	0.5	0.417	Blade	s
	5H-1, 0o	30.30	Rhyolite	0.4	0.765	Sphere	
	5H-1, 0p	30.30	Mudstone	0.4	0.541	Disc	
	5H-1, 0r	30.30	Metarhyolite	0.2	0.497	Disc	w
	5H-1, 0s	30.30	Granite	0.4	0.84	Sphere	
	5H-1, 21a	30.51	Metavolcanic	0.4	0.616	Disc	
	5H-1, 21b	30.51	Metavolcanic	0.5	0.781	Sphere	
	5H-1, 21c	30.51	Granite	0.4	0.763	Rod	
	5H-1, 21d	30.51	Granite				
	5H-1, 24	30.54	Diorite	0.5	0.74	Sphere	w
	5H-1, 34	30.64	Basalt				
	5H-1, 55a	30.85	Metavolcanic	0.4	0.572	Blade	
	5H-1, 55b	30.85	Conglomerate	0.3	0.797	Sphere	
	5H-1, 55c	30.85	Quartz monzonite	0.3	0.466	Disc	s
	5H-3, 8	33.38	Rhyolite	0.4	0.456	Disc	w
	5H-3, 104	34.34	Metavolcanic	0.5	0.7	Sphere	
	5H-3, 115	34.45	Metarhyolite	0.4	0.795	Sphere	w
	5H-6, 1	37.81	Metabasalt	0.3	0.374	Disc	
	6H-1, 3a	39.83	Granite	0.4	0.651	Disc	
	6H-1, 3b	39.83	Metavolcanic	0.5	0.636	Disc	
	6H-1, 3c	39.83	Andesite	0.5	0.573	Disc	
	6H-1, 9	39.89	Gneiss	0.3	0.169	Disc	
	6H-1, 20	40.00	Schist				
	6H-1, 24a	40.04	Metavolcanic	0.5	0.604	Disc	
	6H-1, 24b	40.04	Metavolcanic	0.3	0.704	Sphere	
	6H-1, 24c	40.04	Metavolcanic	0.3	0.622	Blade	
	6H-1, 24d	40.04	Granite	0.5	0.731	Rod	s
	6H-1, 49a	40.29	Granite	0.4	0.876	Sphere	
	6H-1, 49b	40.29	Metavolcanic	0.5	0.839	Sphere	
	6H-1, 86	40.66	Quartzite	0.3	0.695	Sphere	w
	6H-1, 105	40.85	Metavolcanic	0.4	0.626	Disc	
	6H-1, 138a	41.18	Dacite	0.4	0.397	Disc	w
	6H-1, 138b	41.18	Sandstone	0.6	0.577	Disc	w
	6H-2, 57	41.87	Gneiss	0.4	0.566	Blade	w
	6H-2, 109	42.39	Amphibolite	0.5	0.532	Blade	
	6H-3, 25	43.05	Rhyolite	0.5	0.679	Disc	
	6H-3, 68	43.48	Rhyolite	0.5	0.699	Sphere	w
	6H-5, 82a	46.62	Metavolcanic				

Table T1 (continued).

Unit	Core, section, interval (cm)	Depth (mbsf)	Lithology	Roundness	Sphericity	Shape	Surface texture
	6H-5, 82b	46.62	Metavolcanic	0.5	0.641	Disc	
	6H-5, 113a	46.93	Metavolcanic	0.3	0.572	Disc	
	6H-5, 113b	46.93	Metavolcanic	0.5	0.687	Rod	
	6H-6, 134a	48.64	Rhyolite	0.4	0.554	Disc	
	6H-6, 17	47.47	Metavolcanic				
	7H-7, 36	58.66					
	7H-7, 53a	58.83	Andesite				
	7H-7, 53b	58.83	Metarhyolite	0.5	0.602	Disc	
	7H-7, 53c	58.83	Amphibolite				
	7H-7, 59	58.89	Metavolcanic				
	7H-7, 67	58.97	Basalt				
	8H-2, 66	60.96	Schist	0.5	0.68	Sphere	w
	8H-2, 108	61.38	Amphibolite				
	8H-3, 106	62.86	Rhyolite	0.3	0.558	Disc	w
	9H-3, 50	71.80	Andesite	0.5	0.66	Disc	
3	10H-3, 45	81.25	Metarhyolite	0.5	0.617	Disc	
	10H-3, 64	81.44	Andesite	0.3	0.736	Disc	w, s
3	178-1095B-						
	1H-1, 8a	83.08	Andesite				
	1H-1, 8aa	83.08	Metavolcanic	0.5	0.667	Rod	
	1H-1, 8b	83.08	Metavolcanic	0.5	0.568	Disc	s
	1H-1, 8bb	83.08	Granite	0.4	0.686	Disc	
	1H-1, 8c	83.08	Metavolcanic	0.5	0.672	Rod	
	1H-1, 8cc	83.08	Metasandstone	0.4	0.447	Blade	
	1H-1, 8d	83.08	Trachyte	0.5	0.768	Sphere	
	1H-1, 8dd	83.08	Metavolcanic	0.3	0.664	Disc	w
	1H-1, 8e	83.08	Metarhyolite	0.5	0.656	Disc	s
	1H-1, 8f	83.08	Metavolcanic	0.5	0.593	Disc	
	1H-1, 8g	83.08	Lapilli tuff rhyolite	0.4	0.666	Disc	w
	1H-1, 8h	83.08	Rhyolite	0.5	0.5	Disc	
	1H-1, 8i	83.08	Metarhyolite	0.5	0.557	Disc	
	1H-1, 8j	83.08	Metavolcanic	0.4	0.774	Sphere	
	1H-1, 8k	83.08	Rhyolite	0.4	0.775	Sphere	
	1H-1, 8l	83.08	Andesite	0.5	0.645	Disc	w
	1H-1, 8m	83.08	Rhyolite	0.3	0.776	Sphere	w
	1H-1, 8n	83.08	Metarhyolite	0.6	0.765	Sphere	w
	1H-1, 8o	83.08	Metarhyolite	0.6	0.749	Sphere	
	1H-1, 8p	83.08	Rhyolite	0.4	0.542	Blade	
	1H-1, 8q	83.08	Granite	0.4	0.704	Sphere	
	1H-1, 8r	83.08	Metavolcanic	0.5	0.699	Disc	
	1H-1, 8t	83.08	Metavolcanic	0.4	0.523	Disc	
	1H-1, 8u	83.08	Metavolcanic	0.4	0.521	Blade	
	1H-1, 8v	83.08	Granite	0.4	0.71	Disc	
	1H-1, 8w	83.08	Metavolcanic	0.5	0.409	Blade	
	1H-1, 8x	83.08	Andesite	0.4	0.623	Disc	w
	1H-1, 8y	83.08	Metavolcanic	0.5	0.436	Disc	
	1H-1, 8z	83.08	Metagranite	0.5	0.678	Disc	s
	1H-1, 68a	83.68	Metarhyolite	0.5	0.53	Disc	
	1H-1, 68b	83.68	Metavolcanic	0.5	0.64	Disc	
	1H-1, 68c	83.68	Rhyolite	0.4	0.872	Sphere	
	1H-1, 68d	83.68	Metavolcanic	0.5	0.666	Rod	w, s
	1H-1, 68e	83.68	Metavolcanic	0.4	0.424	Disc	
	1H-1, 68f	83.68	Metavolcanic	0.5	0.645	Disc	
	1H-1, 68g	83.68	Metasandstone	0.5	0.659	Disc	
	1H-1, 68h	83.68	Metavolcanic	0.4	0.772	Sphere	
	1H-1, 68i	83.68	Metarhyolite	0.4	0.649	Disc	s
	1H-1, 68k	83.68	Andesite	0.4	0.636	Disc	
	1H-1, 68l	83.68	Metavolcanic	0.5	0.727	Rod	
	1H-1, 68m	83.68	Metavolcanic	0.4	0.527	Blade	
	1H-1, 68n	83.68	Gneiss	0.6	0.72	Sphere	
	1H-1, 68o	83.68	Metarhyolite	0.5	0.75	Sphere	s
	1H-1, 68p	83.68	Rhyolite	0.4	0.74	Sphere	w
	1H-1, 101	84.01	Granite	0.4	0.818	Rod	
	1H-2, 2	84.52	Metasandstone	0.4	0.47	Blade	
	1H-2, 29	84.79	Metasandstone	0.4	0.642	Disc	
below 3	178-1095B-						
	1H-4, 39	not listed	Lithic wacke	0.3	0.754	Disc	
	1H-4, 54	not listed	Quartz monzonite				

Table T1 (continued).

Unit	Core, section, interval (cm)	Depth (mbsf)	Lithology	Roundness	Sphericity	Shape	Surface texture
	1H-5, 81	89.81	Rhyolite	0.5	0.725	Sphere	s
	1H-6, 117	91.67	Andesite	0.4	0.7	Disc	
	2H-2, 38	not listed	Metavolcanic				
	2H-3, 99a	96.49	Andesite	0.4	0.644	Disc	
	2H-3, 99b	96.49	Metavolcanic	0.5	0.777	Sphere	w
	2H-3, 111	not listed	Conglomerate				
	2H-4, 61	not listed	Andesite				
	2H-4, 79	not listed	Metavolcanic				
	3H-5, 117	109.17	Trachyte	0.3	0.657	Disc	
	3H-5, 20	108.20	Metarhyolite	0.5	0.704	Sphere	
	7H-3, 38	143.35	Granite	0.4	0.653	Disc	
	7H-3, 55	143.52	Gneiss	0.5	0.748	Sphere	
	7H-6, 48	147.95	Granite	0.3	0.456	Disc	
	7H-6, 125a	148.72	Basalt				
	7H-6, 125b	148.73	Metavolcanic				
	7H-6, 125c	148.74	Metavolcanic				
	8H-1, 66	150.16	Lapilli tuff rhyolite				
	8H-1, 143	150.93	Lithic wacke	0.5	0.669	Disc	
	10H-1, 13	168.63	Gneiss	0.5	0.537	Disc	
	11H-4, 127	183.77	Andesite	0.3	0.593	Disc	
	11H-4, 30	182.80	Andesite	0.4	0.756	Rod	
	12H-4, 121	193.21	Granite	0.2	0.682	Rod	
	12H-6, 13	195.13	Sandstone	0.3	0.456	Disc	
	12H-6, 23	195.23	Sandstone	0.3	0.536	Disc	
	12H-6, 39	195.39	Sandstone	0.2	0.407	Disc	
	12H-6, 54	195.54	Sandstone	0.3	0.529	Disc	
	12H-6, 117	196.17	Sandstone	0.3	0.358	Disc	
	12H-6, 127a	196.27	Sandstone	0.4	0.591	Blade	
	12H-6, 127b	196.27	Sandstone	0.3	0.595	Blade	
	12H-6, 132	196.32	Metavolcanic	0.5	0.505	Disc	
	12H-6, 139	196.39	Sandstone				
	12H-7, 3	196.53	Sandstone				
	12H-7, 11	196.61	Sandstone				
	13H-3, 109a	200.01	Granodiorite				
	13H-3, 109b	200.01	Granodiorite	0.2	0.832	Blade	w
	13H-3, 109c	200.01	Granodiorite	0.2	0.83	Rod	w
	14X-4, 46a	209.91	Metarhyolite	0.5	0.775	Rod	
	14X-4, 46b	209.91	Rhyolite	0.4	0.634	Disc	
	14X-4, 46c	209.91	Metavolcanic	0.3	0.585	Disc	
	15X-1, 38	215.08	Amphibolite	0.4	0.741	Sphere	
	20X-1, 60	263.30	Metavolcanic				
	20X-2, 87	265.07	Metavolcanic	0.3	0.716	Disc	w
	20X-2, 82	265.02	Metavolcanic	0.4	0.309	Disc	
	22X-2, 97	284.57	Granodiorite				
	37X-1, 1	425.81	Andesite?				
	37X-1, 8a	425.88	Quartz monzonite				
	37X-1, 8b	425.88	Quartz monzonite				
	37X-1, 12	425.92	Trachyte				
	38X-1, 0	435.50	Metavolcanic				
	39X-1, 0	445.10	Diamictite				
	40X-1, 0	454.80	Andesite				
	45X-1, 10	498.10	Metavolcanic	0.4	0.531	Blade	s
	47X-1, 0a	512.70	Granite				
	47X-1, 0b	512.70	Granite	0.3	0.777	Sphere	
	47X-1, 0c	512.70	Granite	0.4	0.748	Sphere	
	47X-1, 0d	512.70	Granodiorite	0.2	0.642	Disc	
	47X-1, 8	512.78	Granite				
	48X-1, 91	523.31	Siltstone				
	48X-1, 101	523.41	Basalt				
	50X-1, 1.5	541.72	Metavolcanic				
	50X-1, 7	541.77	Metarhyolite				
	50X-1, 10.5	541.80	Metavolcanic				
	51X-1, 0	551.40	Metavolcanic				
	51X-1, 4b	551.44	Basalt	0.2	0.625	Rod	
	51X-1, 4c	551.44	Basalt	0.2	0.401	Disc	
	51X-1, 8	551.48	Granite				
	51X-1, 11	551.51	Granite				
	52X-1, 0	560.80	Metavolcanic				
	52X-1, 1.5	560.82	Dacite				

Table T1 (continued).

Unit	Core, section, interval (cm)	Depth (mbsf)	Lithology	Roundness	Sphericity	Shape	Surface texture
1	52X-1, 4	560.84	Andesite				
	52X-1, 48	561.28	Granite				
	178-1095D-						
	1H-3, 81a	3.81	Basalt	0.3	0.612	Disc	w
	1H-3, 81b	3.81	Basalt	0.3	0.591	Disc	w
	2H-1, 0a	8.60	Basalt	0.4	0.576	Blade	w
	2H-1, 0b	8.60	Latite	0.3	0.672	Rod	w
	2H-1, 128	9.88	Basalt	0.5	0.747	Sphere	w
	2H-5, 130	15.90	Metavolcanic	0.5	0.48	Disc	
	3H-1, 32	18.42	Metavolcanic				
	3H-1, 45	18.55	Metavolcanic	0.4	0.79	Sphere	w
	3H-1, 59	18.69	Metavolcanic	0.5	0.67	Rod	
	3H-1, 66	18.76	Rhyolite	0.4	0.843	Sphere	
2	178-1095D-						
	3H-6, 33a	25.93	Metavolcanic	0.3	0.645	Disc	
	3H-6, 33b	25.93	Granite	0.5	0.742	Sphere	
	3H-6, 33d	25.93	Rhyolite	0.5	0.58	Blade	
	3H-6, 137	26.97	Rhyolite	0.3	0.817	Sphere	
	3H-6, 142	27.02	Metavolcanic				
	5H-2, 133	39.93	Metavolcanic	0.4	0.86	Sphere	
	5H-3, 40	40.50	Metabasalt	0.4	0.741	Sphere	
	5H-4, 59a	42.19	Metavolcanic	0.4	0.665	Disc	
	5H-4, 59b	42.19	Quartzite	0.3	0.565	Disc	
	5H-4, 80a	42.40	Metabasalt	0.3	0.525	Disc	
	5H-4, 80b	42.40	Rhyolite	0.4	0.776	Sphere	
	5H-4, 80d	42.40	Metavolcanic	0.5	0.848	Sphere	
	5H-4, 80e	42.40	Metavolcanic	0.4	0.502	Blade	
	5H-4, 80g	42.40	Metavolcanic	0.2	0.807	Sphere	
	5H-4, 80h	42.40	Metavolcanic	0.4	0.207	Blade	
	5H-4, 124	not listed	Quartz diorite	0.4	0.731	Sphere	
	6H-1, 93	47.53	Metavolcanic	0.4	0.755	Sphere	
	6H-3, 50	49.40	Metavolcanic	0.5	0.869	Sphere	w
	6H-3, 84	49.74	Basalt	0.5	0.591	Disc	
	6H-7, 7	52.28	Rhyolite	0.5	0.846	Sphere	w
	6H-7, 133a	53.54	Granite	0.3	0.554	Blade	
	6H-8, 114	54.85	Rhyolite				
	7H-1, 10a	56.20	Metavolcanic	0.4	0.502	Disc	
	7H-1, 10b	56.20	Rhyolite	0.3	0.602	Rod	
	7H-2, 94	58.54	Metavolcanic	0.3	0.688	Disc	
	8H-3, 43	69.03	Andesite	0.5	0.629	Disc	w
	8H-3, 78	69.38	Basalt	0.5	0.494	Disc	
1	178-1096A-						
	2H-3, 100	11.70	Metavolcanic	0.4	0.569	Disc	
	2H-3, 113	11.83	Rhyolite	0.5	0.732	Sphere	
2	3H-1, 4	17.24	Andesite	0.4	0.638	Disc	
	178-1096B-						
	6H-6, 145	54.65	Rhyolite	0.5	0.6	Blade	w
	7H-3, 111	59.31	Metavolcanic	0.5	0.627	Disc	w
	9H-1, 24.5	74.44	Gneiss	0.3	0.519	Disc	
	9H-5, 77	79.75	Metabasalt				
	9H-5, 126.5a	80.25	Metavolcanic	0.3	0.637	Disc	
	9H-5, 126.5b	80.25	Trachyte	0.4	0.619	Disc	
	9H-6, 16	80.64	Granite				
	9H-6, 22	80.70	Diorite				
	9H-6, 78	81.26	Metavolcanic				
	9H-7, 40	82.35	Andesite	0.4	0.631	Rod	
	11H-3, 1.5	96.21	Granite	0.5	0.744	Sphere	
	13H-1, 4	112.24	Basalt	0.5	0.618	Disc	s
	13H-1, 12	112.32	Metasandstone	0.6	0.643	Disc	
	13H-1, 63	112.83	Metavolcanic	0.4	0.809	Sphere	
	14H-1, 123	122.93	Metavolcanic	0.5	0.63	Disc	
	14H-1, 129a	122.99	Metavolcanic	0.5	0.584	Blade	s
	14H-1, 129b	122.99	Metavolcanic	0.3	0.587	Blade	
	14H-2, 8	123.28	Basalt	0.4	0.572	Disc	
	14H-2, 70	123.90	Gneiss	0.4	0.776	Sphere	
	14H-3, 64	125.34	Basalt	0.5	0.547	Blade	s
	14H-3, 106	125.76	Metabasalt	0.4	0.549	Disc	

Table T1 (continued).

Unit	Core, section, interval (cm)	Depth (mbsf)	Lithology	Roundness	Sphericity	Shape	Surface texture
1	14H-3, 137	126.07	Biotite schist	0.4	0.662	Rod	
	14H-4, 10	126.30	Metavolcanic	0.5	0.768	Sphere	s
	14H-4, 20	126.40	Schist	0.3	0.498	Disc	
	14H-4, 66	126.86	Sandstone	0.2	0.737	Sphere	
	15H-CC, 2	138.37	Rhyolite	0.3	0.596	Disc	s
	178-1096B-						
	2H-1, 82	4.62	Metasandstone	0.5	0.582	Blade	s
	2H-4, 9	8.39	Metavolcanic	0.4	0.463	Blade	w
	3H-6, 59	21.39	Metavolcanic	0.5	0.674	Disc	s
	4H-4, 11.5	26.07	Metavolcanic	0.4	0.739	Rod	
	4H-6, 4.5	29.00	Metavolcanic	0.5	0.621	Disc	
	4H-6, 40	29.35	Metasandstone	0.4	0.574	Disc	
	4H-6, 44a	29.39	Metasandstone	0.2	0.682	Disc	
	4H-6, 44b	29.39	Rhyolite	0.4	0.673	Disc	
	4H-6, 69	29.64	Metavolcanic	0.3	0.578	Disc	
	4H-6, 73	29.68	Metavolcanic	0.5	0.605	Disc	
	5H-7, 52.5	41.83	Granite				
	178-1096B-						
	8H-2, 15	62.45	Metavolcanic	0.5	0.768	Sphere	
	8H-2, 4	62.34	Metavolcanic	0.5	0.696	Rod	
	10H-1, 52	80.32	Metavolcanic	0.5	0.851	Sphere	
	10H-1, 56.5	80.36	Sandstone	0.6	0.622	Blade	
	10H-1, 84	80.64	Metavolcanic	0.1	0.457	Blade	w
	10H-1, 112	80.92	Metavolcanic	0.3	0.502	Blade	
	10H-1, 139	81.19	Basalt	0.5	0.375	Blade	
	10H-2, 7	81.37	Basalt	0.4	0.624	Disc	
	10H-2, 55	81.85	Lithic arenite				
	10H-2, 115	82.46		0.2	0.804	Rod	
	10H-2, 115.5	82.46	Basalt				
2	10H-3, 77.5	83.57	Metasandstone	0.3	0.661	Disc	w
	10H-3, 91	83.71	Quartzite	0.5	0.778	Rod	
	10H-4, 82	85.12	Metabasalt	0.4	0.796	Rod	
	10H-4, 110	85.40	Basalt	0.5	0.648	Rod	w
	11H-2, 31	91.11	Metabasalt	0.3	0.588	Blade	
	12H-1, 18	98.98	Andesite	0.4	0.523	Blade	
	12H-4, 50	103.80	Metavolcanic				
	12H-4, 58	103.88	Metagranite				
	13H-1, 71	109.01	Siltstone	0.5	0.772	Rod	s
	13H-1, 108	109.38	Metavolcanic	0.4	0.162	Disc	
	13H-1, 145a	109.75	Metasandstone	0.4	0.692	Disc	
	13H, 1, 145b	109.75	Basalt	0.5	0.683	Rod	s
	16H-4, 138a	141.08	Metavolcanic	0.5	0.691	Disc	
	16H-4, 138b	141.08	Metabasalt	0.2	0.913	Sphere	
	16H-4, 138c	141.08	Granite	0.3	0.613	Disc	
	16H-4, 138d	141.08	Rhyolite	0.4	0.738	Sphere	
	16H-5, 5	141.25	Granite				
	19H-1, 0	150.70	Diorite	0.5	0.758	Sphere	s
	19H-1, 8	150.78	Metavolcanic	0.4	0.628	Disc	
	19H-1, 26	150.96	Metavolcanic	0.4	0.653	Disc	w
	20H-2, 116	160.36	Metavolcanic	0.5	0.631	Disc	
	20H-2, 149a	160.69	Metavolcanic	0.5	0.671	Sphere	
	20H-2, 149b	160.69	Andesite	0.3	0.508	Disc	
	20H-5, 131.5	165.01	Metavolcanic				
	21H-1, 2b	not listed?	Metasandstone	0.3	0.612	Blade	
	22X-1, 1	166.91	Metavolcanic	0.5	0.736	Sphere	
	23X-1, 4	174.04	Basalt	0.5	0.811	Sphere	
	23X-1, 7	174.07	Basalt	0.6	0.636	Disc	w, s
	23X-1, 12a	174.12	Metavolcanic	0.4	0.608	Disc	w
	23X-1, 12b	174.12	Metarhyolite	0.6	0.559	Disc	w
	23X-1, 12c	174.12	Rhyolite	0.5	0.705	Disc	w
	22X-1, 23	167.13	Metavolcanic				
	23X-1, 51	174.51	Andesite	0.4	0.631	Disc	
	23X-1, 57	174.57	Andesite	0.4	0.514	Disc	
	23X-1, 121	175.21	Basalt	0.5	0.528	Blade	
	23X-2, 13	175.66	Gneiss	0.4	0.646	Disc	w
	23X-2, 33	175.86	Basalt				
3	24X-5, 57	190.08	Quartz monzonite				
	26X-1, 80	203.70	Metavolcanic				

Table T1 (continued).

Unit	Core, section, interval (cm)	Depth (mbsf)	Lithology	Roundness	Sphericity	Shape	Surface texture
2	29X-1, 2a	231.72	Metavolcanic	0.3	0.661	Disc	w
	29X-1, 108	232.78	Metavolcanic				
	30X-1, 7	241.37	Metasandstone	0.5	0.663	Disc	
	178-1096C-						
	2H-1, 6a	167.06	Metavolcanic	0.4	0.555	Blade	
	2H-1, 6b	167.06	Rhyolite	0.5	0.78	Sphere	
	2H-1, 18	167.18	Amphibolite	0.4	0.758	Sphere	
	2H-1, 45	167.45	Metavolcanic	0.5	0.684	Disc	
	2H-5, 43a	173.64	Quartz monzonite	0.4	0.692	Disc	
	2H-5, 43b	173.64	Metavolcanic	0.4	0.583	Disc	
	2H-5, 61	173.82	Andesite	0.3	0.502	Disc	
	2H-5, 75	173.96	Basalt	0.3	0.539	Disc	
	2H-5, 135	174.56	Metavolcanic	0.4	0.489	Disc	
	2H-6, 3	174.79	Metavolcanic	0.5	0.691	Disc	
3	5X-1, 49a	212.69	Metavolcanic				
	5X-1, 49b	212.69	Metavolcanic				
	5X-1, 49c	212.69	Metavolcanic				
	5X-2, 103	214.73	Metavolcanic				
	6X-1, 0	221.80	Metavolcanic	0.4	0.702	Disc	w
	6X-1, 29a	222.09	Metavolcanic				
	6X-1, 29b	222.09	Metavolcanic				
	6X-2, 135	224.65	Metavolcanic	0.3	0.636	Disc	
	10X-1, 64	280.64	Granite				
	12X-4, 87.5	303.30	Metavolcanic				
	12X-6, 114	306.57	Metavolcanic				
	12X-7, 18	307.11	Amphibolite				
	12X-7, 81	307.74	Metavolcanic				
	12X-7, 86.5	307.80	Metavolcanic				
below 3	14X-4, 11a	322.00	Metavolcanic	0.4	0.802	Sphere	
	14X-4, 11b	322.00	Basalt	0.4	0.568	Blade	
	14X-4, 110	322.99	Metavolcanic				
	16X-1, 103	338.93	Metavolcanic	0.5	0.727	Sphere	
	17X-1, 58	348.08	Metabasalt	0.5	0.73	Rod	
	21X-1, 0a	386.20	Granite	0.3	0.72	Sphere	w
	21X-1, 0b	386.20	Quartz monzonite				
	21X-1, 0c	386.20	Quartz monzonite				
	21X-3, 50	387.71	Andesite	0.5	0.748	Sphere	
	21X-3, 58	387.79	Andesite?				
	21X-3, 91	388.12	Metavolcanic				
	21X-3, 119	388.40	Metavolcanic				
	21X-4, 144	390.15	Basalt	0.4	0.413	Blade	
	23X-1, 0	405.50	Andesite				
	23X-1, 15a	405.65	Basalt				
	23X-1, 15b	405.65	Metavolcanic				
	23X-1, 15c	405.65	Metavolcanic				
	24X-1, 0a	415.10	Metavolcanic	0.5	0.604	Blade	s
	24X-1, 0b	415.10	Metavolcanic				
	24X-1, 0c	415.10	Metavolcanic	0.4	0.483	Disc	
	24X-1, 0d	415.10	Quartz monzonite	0.4	0.643	Disc	
	24X-1, 0e	415.10	Granite	0.4	0.789	Sphere	
	24X-1, 0f	415.10	Metavolcanic	0.4	0.576	Disc	
	24X-1, 0g	415.10	Metavolcanic	0.5	0.698	Sphere	
	24X-1, 0h	415.10	Amphibolite				
	24X-1, 0i	415.10	Amphibolite				
	26X-1, 111	435.51	Metavolcanic				
	28X-1, 0a	453.60	Andesite				
	28X-1, 0b	453.60	Granite				
	28X-1, 0c	453.60	Quartz monzonite				
	28X-1, 0d	453.60	Metavolcanic	0.3	0.372	Disc	
	30X-1, 0	472.90	Metavolcanic				
	30X-6, 0	480.40	Andesite				
	30X-CC, 6a	482.42	Granite	0.5	0.723	Sphere	
	30X-CC, 6b	482.42	Basalt	0.4	0.428	Disc	
	30X-CC, 12a	482.48	Granite				
	30X-CC, 12b	482.48	Amphibolite?				
	30X-CC, 15	not listed	Metavolcanic				
	30X-CC, 37	482.73	Granite	0.4	0.706	Disc	
	31X-1, 137a	483.87	Lithic arenite				

Table T1 (continued).

Unit	Core, section, interval (cm)	Depth (mbsf)	Lithology	Roundness	Sphericity	Shape	Surface texture
	31X-1, 137b	483.87	Metavolcanic				
	33X-1, 0a	501.70	Metavolcanic				
	33X-1, 0b	501.70	Quartz monzonite				
	33X-1, 0c	501.70	Metavolcanic	0.4	0.53	Disc	
	33X-1, 0c2	501.70	Metavolcanic				
	33X-1, 0d	501.70	Rhyolite				
	33X-1, 0e	501.70	Quartz monzonite	0.3	0.779	Sphere	
	33X-1, 0f	501.70	Andesite				
	33X-1, 0g	501.70	Basalt				
	33X-1, 11	501.81	Metavolcanic	0.5	0.544	Disc	w
	33X-1, 16	501.86	Metavolcanic				
	34X-1, 0	511.40	Metavolcanic				
	35X-1, 0a	521.00	Metabasalt	0.4	0.806	Sphere	
	35X-1, 0b	521.00	Metavolcanic	0.4	0.662	Disc	
	35X-1, 0c	521.00	Metavolcanic	0.4	0.55	Blade	
	35X-1, 5a	521.05	Metavolcanic				
	35X-1, 5b	521.05	Rhyolite				
	35X-1, 5c	521.05	Metasandstone	0.5	0.769	Sphere	
	35X-1, 5d	521.05	Metavolcanic	0.3	0.751	Sphere	
	35X-1, 8a	521.08	Metavolcanic				
	35X-1, 8b	521.08	Metavolcanic	0.5	0.622	Disc	w
	35X-1, 8c	521.08	Metavolcanic				
	35X-1, 8d	521.08	Metavolcanic	0.3	0.753	Sphere	
	36X-1, 11	530.81	Metavolcanic				
	36X-1, 15	530.85	Metavolcanic				
	41X-1, 0	579.10	Rhyolite				
	41X-1, 8	579.18	Granite				
	41X-1, 15	579.25	Metavolcanic				
	41X-1, 16	579.26	Quartz diorite	0.4	0.578	Disc	
	42X-1, 0a	588.60	Granite				
	42X-1, 0b	588.60	Basalt	0.5	0.855	Sphere	
	42X-1, 8a	588.68	Metavolcanic	0.6	0.671	Rod	
	42X-1, 8b	588.68	Granite				
	42X-1, 0c	588.68	Amphibolite				
	42X-1, 0d	588.68	Metavolcanic				
	42X-1, 13a	588.73	Metavolcanic	0.5	0.746	Sphere	
	42X-1, 13b	588.73	Granite	0.3	0.724	Sphere	
	43X-CC, 0a	598.10	Granodiorite	0.3	0.618	Blade	
	43X-CC, 0b	598.10	Metavolcanic	0.5	0.747	Rod	
	43X-CC, 0c	598.10	Metabasalt	0.5	0.633	Disc	
1	178-1101-						
	1H-4, 143	5.93	Metarhyolite	0.5	0.587	Blade	s, p
	3H-2, 122	20.92	Andesite	0.3	0.655	Rod	
	3H-3, 143	22.63	Metarhyolite	0.5	0.752	Rod	w, p
	5H-CC, 6	37.75	Diorite	0.4	0.592	Disc	w
	6H-5, 53	44.73	Granite	0.3	0.782	Sphere	
	6H-5, 70	44.90	Granite	0.3	0.674	Disc	
	6H-5, 93	45.13	Metasandstone	0.5	0.635	Disc	s, p
	6H-5, 142	45.62	Basalt	0.5	0.781	Rod	s, p
2	7H-4, 142	53.62	Phyllite	0.3	0.414	Blade	
	8H-2, 86	59.56	Lithic wacke*	0.5	0.767	Sphere	w
	8H-3, 56	60.76	Metasandstone	0.6	0.735	Sphere	s
	8H-4, 23	61.93	Lithic wacke	0.5	0.884	Sphere	w, p, s
	8H-4, 46	62.16	Andesite	0.4	0.787	Sphere	s, p
	8H-4, 49	62.19	Quartz monzonite	0.4	0.594	Blade	
	8H-4, 75	62.45	Andesite	0.5	0.681	Disc	s, p
	8H-5, 23	63.43		0.3	0.551	Disc	
	8H-5, 142	64.62	Andesite	0.5	0.688	Disc	
	8H-6, 87	65.57	Diamict	0.4	0.593	Disc	
	8H-5, 45	63.65	Andesite	0.6	0.729	Disc	
	8H-3, 50	60.70	Metasandstone	0.5	0.688	Rod	p
	8H-6, 70	65.40	Quartz monzonite	0.2	0.599	Disc	
	8H-7, 12	66.32	Metasandstone	0.5	0.589	Disc	
	9H-6, 30	74.50	Granite	0.3	0.799	Sphere	
	10H-1, 29	76.49	Granodiorite	0.2	0.931	Sphere	
	10H-3, 125	80.45	Scoria	0.1	0.762	Sphere	
	10H-4, 38	81.08	Lithic wacke	0.5	0.658	Disc	
	10H-6, 110	84.80	Metasandstone	0.5	0.788	Sphere	

Table T1 (continued).

Unit	Core, section, interval (cm)	Depth (mbsf)	Lithology	Roundness	Sphericity	Shape	Surface texture
	11H-4, 48	90.68	Basalt	0.4	0.784	Rod	s
	11H-4, 73	90.93	Monzonite	0.3	0.773	Sphere	
	11H-5, 19	91.89	Metarhyolite	0.4	0.624	Blade	s, w
	11H-5, 61	92.31	Andesite	0.2	0.884	Sphere	
	12H-2, 21	96.91	Andesite	0.5	0.612	Disc	s
	12H-2, 22	96.92	Metarhyolite	0.5	0.689	Rod	p
	12H-2, 24	96.94	Rhyolite	0.2	0.577	Disc	s, C, p
	12H-2, 28	96.98	Metarhyolite	0.3	0.618	Blade	
	12H-2, 66	97.36	Diorite	0.4	0.815	Sphere	s
	12H-2, 77	97.47	Metarhyolite	0.4	0.493	Disc	
	12H-2, 89	97.59	Metarhyolite	0.2	0.59	Disc	
	12H-2, 103	97.73	Rhyolite	0.3	0.781	Sphere	w
	12H-4, 13	99.83	Basalt	0.5	0.724	Sphere	
	12H-5, 24	101.44	Rhyolite	0.3	0.684	Disc	
	12H-5, 120	102.40	Andesite	0.2	0.714	Rod	w
	12H-5, 121	102.41	Granite	0.5	0.688	Disc	
	12H-5, 147	102.67	Andesite	0.5	0.763	Rod	s, p
	13H-1, 107	105.77	Basalt	0.3	0.555	Disc	s
	13H-2, 140	107.60	Lithic wacke	0.2	0.7	Sphere	
	13H-4, 135	110.55	Andesite	0.5	0.625	Disc	
	13H-5, 19	110.89	Andesite	0.5	0.802	Sphere	
	13H-5, 59	111.29	Quartz monzonite	0.2	0.879	Sphere	
	13H-5, 65	111.35	Rhyolite	0.3	0.715	Sphere	
	13H-5, 82	111.52	Andesite	0.4	0.924	Sphere	
	13H-5, 82	111.52	Metaquartzite	0.6	0.687	Rod	
	14H-1, 24	114.44	Andesite	0.3	0.879	Sphere	
	14H-1, 52	114.72	Granite	0.2	0.738	Disc	
	14H-1, 75	114.95	Metasandstone	0.3	0.55	Disc	w
	14H-1, 145	115.65	Amphibolite	0.3	0.57	Rod	
	14H-3, 81	118.01	Granite	0.2	0.441	Disc	
	14H-4, 20	118.90	Granite	0.3	0.639	Disc	
	14H-4, 36	119.06	Lithic wacke	0.5	0.599	Disc	p
	14H-6, 87	122.57	Basalt	0.5	0.607	Rod	
	15H-2, 147	126.67	Rhyolite	0.4	0.665	Disc	
	15H-3, 39	127.09	Metarhyolite	0.4	0.712	Sphere	
	15H-5, 82	129.15	Latite	0.3	0.625	Disc	s, p
	15H-5, 83	129.16	Andesite	0.5	0.774	Sphere	p
	15H-6, 20	129.97	Quartz monzonite	0.5	0.803	Sphere	
3	17X-4, 91	148.11	Andesite	0.5	0.634	Blade	
	17X-6, 132	151.52	Trachyte	0.4	0.607	Disc	p
	18X-2, 36	152.36	Metarhyolite	0.3	0.597	Disc	p
	18X-6, 105	159.05	Andesite	0.4	0.769	Sphere	s, p
	19X-4, 50	165.10	Latite	0.3	0.609	Disc	s
	20X-4, 50	174.70	Rholite	0.4	0.745	Sphere	w, s
	20X-5, 71	176.41	Andesite	0.5	0.667	Rod	w, p
	20X-6, 142	178.62	Feldspathic wacke	0.5	0.637	Disc	
	21X-4, 16	183.96	Quartz monzonite	0.4	0.834	Sphere	w
	21X-4, 65	184.45	Lithic wacke	0.3	0.775	Sphere	
	22X-1, 132	190.22	Basalt	0.5	0.807	Sphere	s, p
	22X-2, 138	191.78	Andesite	0.2	0.525	Disc	s, p
	22X-3, 76	192.66	Trachyte	0.1	0.681	Disc	w
	22X-4, 23	193.63	Latite	0.5	0.703	Disc	
	22X-5, 49	195.39	Rhyolite	0.2	0.641	Disc	s

Notes: Sampled from Sites 1095, 1096, and 1101 of Leg 178 off the western margin of the Antarctic Peninsula. Surface texture symbols: w = weathering, s = striations, p = percussion marks. Sample numbers ending in letters indicate individual pebbles in samples having more than one pebble.