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Table T1. Major and trace element analyses.

Core, section, interval (cm)	Piece	Depth (mbsf)	Unit	Interval	Grain size	Rock type (IUGS*)			Major elements (wt%) SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO	Na_2O	K_2O	P_2O_5	Volatiles	Total	$Fe_2O_3^{tot}$	Ca#	Mg#	Na#
176-735B-																								
89R-1, 33–45	4a	505.23	VI	495	Medium	Olivine	Gabbro		46.37	0.29	14.80	0.85	5.11	0.11	16.66	11.58	1.64	0.06	0.02	1.64	99.13	6.53	79.59	83.48	8.37
89R-1, 98–108	5	506.08	VI	495	Medium	Olivine	Gabbro		48.01	0.18	21.08	0.65	3.59	0.07	11.33	12.10	2.26	0.02	0.01	0.77	100.07	4.64	74.74	82.86	8.12
91R-1, 15–25	2a	517.62	VI	503	Medium	Olivine	Gabbro		47.44	0.24	22.94	0.30	4.37	0.08	9.93	11.06	2.56	0.05	0.02	1.00	99.98	5.16	70.49	79.21	8.42
93R-4, 101–110	3b	535.90	VI	510	Medium	Disseminated oxide olivine	Gabbro		51.37	0.48	15.94	0.90	5.80	0.14	8.87	12.86	3.07	0.05	0.03	0.65	100.15	7.35	69.84	70.49	13.70
95R-2, 89–93	1d	545.90	VII	518	Fine	Oxide olivine	Gabbro		52.31	0.60	15.86	1.17	6.48	0.16	7.80	11.12	3.74	0.06	0.01	0.59	99.91	8.37	62.17	64.86	16.27
97R-1, 104–113	2b	557.25	VII	526	Coarse	Disseminated oxide	Gabbro	Opx bearing	52.51	1.44	15.13	2.58	6.24	0.18	6.22	10.52	4.32	0.06	0.04	0.86	100.07	9.51	57.36	56.42	19.05
97R-4, 2–5	1	559.85	VII	528	Fine		Gabbro		50.81	0.52	15.55	1.54	5.82	0.17	8.25	11.76	3.45	0.07	0.11	1.24	99.29	8.01	65.31	67.10	15.46
99R-3, 78–89	5	570.28	VII	532	Coarse	Disseminated oxide olivine	Gabbro	Opx bearing	50.70	0.57	14.65	1.00	5.52	0.14	10.15	13.39	2.70	0.07	0.03	0.84	99.76	7.13	73.26	73.81	13.19
101R-3, 49–60	1f	588.51	VII	536	Coarse	Olivine	Gabbro		49.93	0.37	16.78	0.51	6.72	0.14	10.21	11.52	2.92	0.05	0.03	0.67	99.85	7.98	68.56	71.71	12.54
103R-2, 63–73	3d	597.71	VII	542	Coarse		Gabbro	Opx bearing	52.38	0.48	16.95	0.57	3.90	0.11	7.48	14.21	3.12	0.06	0.02	0.58	99.85	4.90	71.56	75.14	13.17
103R-5, 63–73	8	604.10	VIII	548	Medium	Olivine	Gabbro		49.87	0.57	15.95	0.71	5.92	0.13	10.50	12.17	2.80	0.05	0.04	0.70	99.41	7.29	70.60	74.06	12.64
104R-2, 56–61	7	607.34	VIII	548	Medium	Olivine	Gabbro		51.60	0.57	16.25	0.82	5.97	0.15	8.17	11.96	3.37	0.05	0.02	0.59	99.51	7.45	66.22	68.47	14.59
108R-2, 26–36	1c	625.24	VIII	556	Coarse	Olivine	Gabbro		50.51	0.52	15.48	1.58	6.59	0.16	9.48	11.60	3.04	0.07	0.03	0.70	99.77	8.91	67.84	67.84	13.93
112R-4, 55–67	1b	647.03	VIII	560	Coarse	Olivine	Gabbro		51.12	0.55	15.18	0.42	6.38	0.15	9.69	12.79	2.84	0.06	0.05	0.60	99.82	7.51	71.34	71.87	13.36
114R-4, 61–71	2b	658.22	VIII	563	Coarse	Oxide	Gabbronorite		43.64	6.97	12.88	4.09	12.31	0.22	5.80	9.47	3.17	0.06	0.03	1.09	99.72	17.77	62.27	39.24	16.87
115R-2, 54–64	1d	663.94	VIII	564	Coarse		Gabbronorite		52.03	0.52	18.57	0.50	3.98	0.10	6.81	13.26	3.37	0.06	0.04	0.54	99.76	4.92	68.50	73.25	13.01
115R-4, 55–64	3b	666.63	VIII	566	Coarse	Oxide	Gabbronorite		45.89	5.03	12.78	–2.50	17.35	0.25	6.49	9.71	3.21	0.09	0.06	1.52	99.87	16.78	62.56	43.38	17.15
116R-6, 84–90	6	679.96	IX	575	Medium		Gabbronorite		52.09	0.66	18.67	1.26	5.28	0.12	6.34	10.89	4.15	0.08	0.04	0.59	100.17	7.13	59.18	63.80	15.48
117R-3, 56–66	3	685.50	IX	577	Coarse	Olivine	Gabbronorite		51.62	0.55	19.90	1.32	5.89	0.12	6.08	8.90	4.57	0.09	0.03	0.84	99.90	7.87	51.82	60.50	15.91
118R-6, 83–92	8	698.79	IX	586	Coarse	Oxide	Gabbro	Leucocratic	51.49	1.78	13.95	2.85	8.38	0.21	5.74	10.02	4.12	0.20	0.21	0.89	99.83	12.16	57.33	48.32	19.57
119R-2, 110–120	8c	703.88	IX	589	Coarse		Gabbro		51.23	0.47	15.62	1.35	4.56	0.13	9.34	13.37	2.82	0.04	0.02	1.15	100.09	6.42	72.37	74.23	12.95
120R-3, 125–135	6e	714.10	IX	599	Coarse		Gabbro		52.99	0.40	16.18	1.11	4.05	0.10	8.42	11.48	4.01	0.07	0.01	1.13	99.94	5.61	61.28	74.80	16.96
121R-4, 51–61	3a	724.25	X	609	Medium	Olivine	Gabbro		52.16	0.56	19.85	0.45	3.49	0.09	5.78	13.04	3.66	0.07	0.04	0.65	99.84	4.33	66.32	72.55	13.19
122R-4, 51–60	2	733.91	X	617	Coarse	Olivine	Gabbro		51.56	0.55	14.63	1.00	5.12	0.14	9.52	14.01	2.67	0.05	0.05	0.76	100.05	6.69	74.36	73.80	13.08
123R-4, 76–83	2b	743.89	X	621	Fine	Olivine	Gabbro		49.28	0.28	18.17	0.99	5.35	0.12	10.21	11.30	2.90	0.04	0.02	1.31	99.95	6.94	68.28	74.45	11.63
124R-2, 81–91	3a	750.77	X	622	Coarse	Olivine	Gabbro		50.86	0.57	15.17	1.12	5.51	0.14	10.05	13.04	2.69	0.04	0.06	0.55	99.80	7.24	72.82	73.32	12.75
128R-3, 124–130	13	780.36	X	633	Medium	Olivine	Gabbro		50.95	0.32	16.89	0.93	4.82	0.12	9.40	12.87	2.88	0.03	0.02	0.81	100.04	6.29	71.18	74.74	12.32
130R-3, 135–146	13	800.34	X	646	Coarse	Olivine	Gabbro		51.54	0.51	14.22	0.22	5.60	0.14	9.85	14.10	2.66	0.04	0.03	0.65	99.57	6.45	74.54	75.17	13.35
131R-1, 47–54	2a	804.28	X	648	Coarse	Oxide olivine	Gabbro		47.52	5.54	15.94	2.83	9.05	0.19	4.42	8.79	4.38	0.10	0.01	0.90	99.68	12.89	52.58	40.47	18.46
131R-1, 125–128	11	805.57	X	649	Fine		Gabbro	Leucocratic	51.47	0.53	16.74	0.65	5.68	0.14	8.44	11.90	3.48	0.07	0.07	0.54	99.70	6.96	65.39	70.60	14.63
131R-4, 94–100	9	812.34	X	653	Coarse	Oxide	Gabbro		50.23	0.92	14.20	1.92	6.75	0.18	8.96	13.21	2.66	0.05	0.02	0.85	99.96	9.42	73.30	65.32	13.37
132R-5, 41–51	1	818.50	X	658	Coarse	Olivine	Gabbro		50.11	0.39	16.19	0.53	5.81	0.13	10.43	12.93	2.69	0.03	0.02	0.58	99.84	6.99	72.66	74.72	12.05
134R-6, 105–114	3	840.30	X	668	Graded	Olivine	Gabbro		50.60	0.49	16.28	1.02	5.55	0.13	10.06	12.77	2.81	0.04	0.03	0.56	100.34	7.18	71.52	73.50	12.45
136R-3, 62–69	2b	850.09	X	675	Graded	Olivine	Gabbro		50.15	0.40	15.51	0.61	5.49	0.13	11.48	12.97	2.52	0.03	0.02	0.59	99.90	6.71	73.99	77.22	11.81
137R-6, 142–149	8	859.57	X	682	Fine		Microgabbro	Leucocratic troctolitic	49.70	1.03	15.36	2.69	9.15	0.22	8.32	9.77	3.37	0.07	0.03	0.56	100.25	12.86	61.57	56.17	15.31
138R-6, 97–104	3b	869.49	X	683	Graded	Olivine	Gabbro		50.89	0.51	15.03	1.21	5.85	0.15	10.17	13.17	2.72	0.05	0.04	0.57	100.35	7.71	72.79	72.31	12.98
140R-2, 36–43	2a	882.23	X	687	Coarse	Olivine	Gabbro		51.41	0.41	16.76	0.89	4.72	0.12	9.00	13.28	2.99	0.04	0.02	0.48	100.13	6.14	71.05	74.38	12.82
144R-1, 101–107	3c	913.32	X	693	Graded	Olivine	Gabbro		50.92	0.84	17.79	1.36	4.93	0.13	6.98	12.51	3.37	0.08	0.05	0.76	99.70	6.83	67.22	66.90	13.50
144R-5, 95–102	4b	918.83	X	702	Coarse	Olivine	Gabbro	Leucocratic	52.59	0.85	13.71	1.47	6.31	0.20	7.78	12.92	3.36	0.07	0.02	0.58	99.84	8.48	67.99	64.52	16.80
144R-6, 72–78	5a	919.98	X	702	Coarse	Olivine	Gabbro	Leucocratic	49.20	1.31	15.86	3.73	7.60	0.19	7.71	10.27	3.35	0.06	0.02	0.57	99.87	12.18	62.89	55.64	14.83
146R-4, 77–84	2	936.26	X	705	Coarse	Olivine	Gabbro		51.94	0.35	22.96	0.75	2.45	0.06	4.65	12.86	3.76	0.06	0.02	0.37	100.22	3.47	65.39	72.61	11.89
147R-3, 37–47	1b	944.35	X	708	Fine	Disseminated oxide	Troctolite	Leucocratic	53.79	0.45	17.52	1.56	6.09	0.16	6.11	8.26	4.67	0.17	0.04	1.32	100.12	8.33	49.41	59.23	18.01
149R-3, 24–31	1	963.02	XI	718	Medium		Troctolite		52.40	0.45	16.60	0.91	5.28	0.14	8.14	12.17	3.44	0.05	0.02	0.46	100.05	6.78	66.16	70.40	14.59
149R-5, 13–20	1	965.44	XI	719	Graded		Gabbro		51.26	0.56	12.56	1.20	6.63	0.17	11.03	13.57	2.45	0.04	0.02	0.57	100.06	8.57	75.37	71.83	13.85
150R-5, 64–71	1a	975.85	XI	719	Graded		Gabbro		51.38	0.41	16.19	1.09	5.55	0.14	9.00	12.24	3.12	0.04	0.01	0.69	99.81	7.26	68.43	71.07	13.71
151R-1, 25–32	4	980.02	XI	719	Graded		Gabbro		52.04	0.47	15.45	0.92	5.19	0.14	8.97	13.19	3.03	0.03	0.02	0.59	100.04	6.69	70.63	72.64	13.91
153R-1, 20–27	3a	995.91	XI	720	Fine	Olivine	Microgabbro		49.19	0.23	19.17	0.90	5.89	0.12	10.30	10.86	2.99	0.03	0.02	0.43	100.13	7.44	66.74	73.26	11.39
153R-4, 20–27	1	1000.10	XI	722	Coarse	Olivine	Gabbro		51.29	0.51	13.31	1.27	5.57	0.16	10.70	14.08	2.42	0.03	0.02	0.60	99.94	7.46	76.27	73.96	13.03
155R-2, 128–135	3c	1017.72	XI	732	Graded	Olivine	Gabbro		51.13	1.23	14.25	1.49	7.31	0.18	8.91	11.46	3.22	0.06	0.02	1.02	100.28	9.61	66.28	64.73	15.70
156R-8, 70–78	2	1033.95	XI	743	Variable	Olivine	Gabbro		51.55	0.62	14.42	1.24	5.43	0.15	9.41	13.80	2.71	0.05	0.12	0.65	100.14	7.27	73.78	71.94	13.41
157R-2, 98–105	3d	1036.89	XI	748	Coarse	Oxide	Gabbro		51.40	0.62	15.37	1.37	6.81	0.18	9.00	11.79	3.08	0.08	0.09	0.60	100.37	8.93	67.91	66.62	14.18
158R-4, 127–134	5	1048.97	XI	768	Variable	Olivine	Gabbro		50.87	0.39	15.66	1.26	5.77	0.14	10.15	12.66	2.79	0.05	0.02	0.53	100.27	7.67	71.48	72.38	12.80
159R-7, 57–63	3	1063.09	XI	779	Variable	Oxide	Diorite		50.18	2.96	15.33	9.60	7.83	0.12	2.33	4.84	5.68	0.18	0.40	0.56	100.01	18.31	32.00	20.13	23.40
160R-2, 37–43	2	1065.24	XI	780	Variable	Olivine	Gabbro		50.38	0.54	14.82	1.01	6.23	0.15	10.59	12.63	2.64	0.04	0.02	0.70	99.47	7.94	72.55	72.54	12.80
163R-3, 51–58	1	1095.30	XI	798	Variable	Olivine	Gabbro		51.41	0.41	15.30	1.08	5.43	0.14	10.00	13.15	2.81	0.04	0.02	0.60	100.38	7.11	72.11	73.57	13.15
165R-3, 102–107	2a	1107.62	XI	805	Fine	Olivine	Microgabbro		51.14	0.28	17.06	0.99	4.47	0.12	9.61	13.37	2.78	0.02	0.01	0.41	100.25	5.96	72.65	76.15	11.84
166R-2, 81–87	2	1112.97	XI	810	Coarse	Olivine	Gabbro		51.19	0.45	16.93	1.10	5.31	0.13	9.44	12.27	3.02	0.04	0.02	0.50	100.41	7.00	69.19	72.76	12.81
168R-6, 128–137	6	1138.06	XI	812	Variable		Gabbro		45.21	2.51	15.34	7.50	9.01	0.21	5.55	9.20	3.57	0.10	1.03	0.78	100.01	17.51	58.76	38.55	16.09
168R-7, 42–50	4	1138.67	XI	812	Variable		Gabbro		50.78	0.52	15.61	1.38	5.92	0.14	10.36	12.08	2.85	0.04	0.03	0.64	100.36	7.96	70.08	72.05	13.08
169R-6, 85–91	3	1147.95	XI	812	Variable		Gabbro		51.54	0.42	16.26	1.03	5.36	0.13	9.39	12.34	3.11	0.03	0.01	0.64	100.27	6.99	68.68	72.68	13.62
172R-2, 61–68	3	1170.66	XI	829	Variable	Olivine	Gabbro		51.05	0.50	16.04	0.84	5.07	0.13	9.04	13.38	2.80	0.06	0.04	0.67	99.57	6.47	72.53	73.44	12.58
178R-6, 108–115	6a	1218.95	XI	837	Variable	Olivine	Gabbro		48.52	0.54	7.33	1.43	8.59	0.20	17.40	13.47	1.23	0.02	0.04	1.03	99.79	10.97	85.82	75.84	12.15
180R-1, 69–75	3	1231.25	XI	847	Coarse	Olivine	Gabbro		49.75	0.44	16.60	0.84	5.95	0.13	10.83	11.38	2.93	0.06	0.07	0.69	99.67	7.46	68.21	74.20	12.70
183R-4, 63–71	7b	1265.35	XI	867	Variable	Oxide	Gabbro	Leucocratic	50.47	1.61	16.06	2.67	8.03	0.20	4.52	7.65	5.12	0.79	1.39	1.60	100.10	11.59	45.22	43.59	20.81
184R-4, 31–37	1	1274.83	XI	870	Coarse	Olivine	Gabbro		51.75	0.40	16.59	1.01	3.58	0.11	8.72	14.61	2.77	0.03	0.02	0.73	100.31	4.99	74.45	77.57	12.10
186R-5, 103–110	2	1285.39	XI	875	Variable	Disseminated oxide olivine	Gabbro		50.51	0.35	15.32	0.67	5.74	0.13	10.96	13.34	2.46	0.03	0.03	0.75	100.29	7.05	74.98	75.48	11.69
188R-1, 20–27	1	1307.10	XI	878	Variable	Olivine	Gabbro		51.05	0.35	15.79	0.94	4.50	0.12	10.04	14.04	2.52	0.02	0.01	0.58	99.96	5.94	75.48	76.98	11.63
188R-3, 124–131	1d	1311.05	XI	880	Variable	Olivine	Gabbro		49.71	0.20	18.51	0.87	5.15	0.11	10.85	11.44	2.72	0.02	0.02	0.45	100.05	6.59	69.92	76.53	10.80
191R-3, 18–27	2a	1338.72	XII	894	Variable	Olivine	Gabbro		51.12	0.43	16.28	0.74	4.45	0.12	9.64	13.81	2.72	0.03	0.07	0.64	100.05	5.69	73.72	77.04	12.10
191R-3, 80–84	3c	1339.34	XII	895	Fine		Microgabbro	Troctolitic	49.59	0.46	17.12	1.90	7.39	0.16	9.51	10.23	3.23	0.04	0.01	0.59	100.23	10.11	63.64	65.08	13.46
192R-6, 14–21	1	1351.29	XII	902	Variable	Olivine	Gabbro		50.70	0.38	16.73	1.20	4.72	0.12	9.69	12.52	2.80	0.04	0.02	0.91	99.80	6.44	71.19	74.86	12.12
192R-7, 73–79	1	1353.36	XII	902	Variable	Olivine	Gabbro		50.06	0.28	17.92	0.57	5.32	0.11	9.99	12.07	2.76	0.03	0.01	0.56	99.67	6.48	70.72	75.32	11.26
195R-5, 51–57	1	1369.38	XII	906	Coarse	Olivine	Gabbro		51.16	0.60	16.33	0.52	4.48	0.12	9.50	13.59	2.61	0.04	0.05	0.54	99.53	5.50	74.20	77.36	11.64
196R-3, 78–82	2a	1376.59	XII	908	Fine		Microgabbro	Troctolitic	43.89	0.20	8.83	0.45	11.75	0.21	24.99	6.94	1.18	0.01	0.02	0.77	99.22	13.51	76.47	78.55	9.92
196R-4, 119–126	7b	1378.52	XII	909	Coarse		Gabbro	Troctolitic	50.43	0.38	15.91	1.02	5.12	0.12	11.02	12.91	2.60	0.03	0.02	0.54	100.10	6.71	73.29	76.49	11.87
197R-3, 81–94	5a	1385.69	XII	910	Fine	Oxide olivine	Microgabbro		50.98	0.34	17.34	0.82	4.64	0.11	9.08	12.64	2.88	0.03	0.01	0.53	99.40	5.98	70.81	75.06	12.04
197R-4, 25–32	2	1386.19	XII	911	Variable		Gabbro	Troctolitic	50.92	0.44	16.28	0.47	4.58	0.11	9.80	13.75	2.66	0.03	0.02	0.60	99.65	5.56	74.06	77.74	11.87
199R-6, 40–43	3	1400.13	XII	916	Coarse		Gabbro	Troctolitic	48.89	0.29	16.32	0.56	6.31	0.13	13.18	10.63	2.63	0.03	0.02	0.89	99.89	7.57	69.08	77.52	11.73
199R-7, 16–23	1	1401.31	XII	917	Variable	Olivine	Gabbro		51.31	0.41	15.33	1.14	4.89	0.13	10.14	13.54	2.63	0.03	0.02	0.65	100.22	6.58	73.99	75.33	12.39
205R-5, 61–69	3b	1456.09	XII	931	Coarse	Olivine	Gabbro		51.84	0.38	16.35	0.57	3.18	0.10	8.60	15.26	2.66	0.03	0.01	0.70	99.69	4.11	76.02	80.58	11.82
205R-6, 35–42	1c	1457.20	XII	932	Medium	Olivine	Gabbro		50.98	0.26	20.29	0.41	3.90	0.09	7.78	12.08	3.28	0.04	0.01	0.82	99.95	4.75	67.06	76.45	11.76
207R-1, 93–100	4	1470.49	XII	939	Variable	Olivine	Gabbro		51.00	0.28	21.70	0.47	3.45	0.07	6.61	11.98	3.54	0.05	0.02	0.51	99.67	4.31	65.15	75.26	11.85
207R-3, 108–115	2	1473.05	XII	940	Coarse	Olivine	Gabbro		49.77	0.38	15.69	0.71	6.03	0.13	11.63	12.22	2.51	0.03	0.02	0.87	100.00	7.41	72.91	75.67	11.65
208R-3, 48–55	1	1481.71	XII	946	Variable	Olivine	Gabbro		48.82	0.31	15.85	0.79	6.24	0.13	12.40	11.43	2.49	0.03	0.01	1.14	99.64	7.72	71.73	76.06	11.46
208R-4, 17–24	1	1482.71	XII	946	Variable	Olivine	Gabbro		50.97	0.45	15.98	1.06	3.98	0.11	9.80	14.10	2.53	0.03	0.02	0.51	99.53	5.48	75.49	77.98	11.54
208R-6, 10–17	1	1485.24	XII	947	Pegmatitic	Olivine	Gabbro		49.89	0.37	15.76	1.17	5.20	0.12	11.13	12.59	2.64	0.04	0.02	0.78	99.71	6.95	72.50	76.03	12.13
209R-2, 54–60	1c	1490.16	XII	950	Variable	Olivine	Gabbro		51.79	0.41	17.10	0.81	3.53	0.10	8.54	14.32	2.79	0.03	0.02	0.59	100.04	4.73	73.93	78.13	11.85
209R-3, 3–10	1	1491.04	XII	951	Coarse		Gabbro	Troctolitic	51.97	0.32	18.54	1.04	2.87	0.09	7.82	13.85	3.07	0.03	0.01	0.66	100.26	4.23	71.37	78.53	12.01
210R-6, 109–117	4	1506.24	XII	952	Variable	Olivine	Gabbro		51.21	0.30	18.74	1.08	3.51	0.10	8.45	13.06	3.04	0.04	0.02	0.58	100.11	4.98	70.36	77.05	11.79

Core, section, interval (cm)	Trace elements by X-ray fluorescence analysis (ppm) Rb	Ba	Pb	Sr	La	Ce	Nd	Y	Zr	Nb	Zn	Cu	Co	Ni	Sc	V	Cr	Ga
89R-1, 33–45	0.1	2.9	0.7	112.9	1.6	1.3	2.1	7.0	13.3	0.3	39.3	83.0	61.3	434.7	26.8	97.7	1664.6	8.7
89R-1, 98–108	0.3	2.3	1.2	168.8	1.1	1.0	2.7	3.7	6.3	0.3	24.7	73.2	44.4	306.9	11.7	54.1	806.1	10.5
91R-1, 15–25	0.3	ND	0.8	185.7	0.7	ND	1.3	4.9	11.1	0.3	33.1	44.7	42.3	261.1	3.2	36.4	126.7	12.8
93R-4, 101–110	0.3	2.1	1.3	162.3	2.4	2.1	3.7	15.3	30.9	0.6	59.1	75.9	39.4	65.1	43.6	182.4	55.5	16.4
95R-2, 89–93	0.2	6.1	ND	173	0.5	0.5	3.9	14.5	12.6	0.5	44.6	35.7	42.4	35.8	45.9	225.8	11.7	16.4
97R-1, 104–113	0.3	5.6	1.9	191.5	4.9	12.7	11.1	38.1	56.1	1.7	66.4	31.2	32.9	36.5	42.2	215.1	23.1	22.8
97R-4, 2–5	0.3	11.3	3.3	156.2	4.1	18.1	16.4	54.8	1086.1	0.8	80.3	29.9	34.7	72.7	40.6	132.6	176.9	18.5
99R-3, 78–89	0.6	2.6	3.1	137.3	2.2	1.4	3.1	16.5	25.9	0.3	53.9	59.6	40.7	86.7	51.4	211.9	92.4	14.5
101R-3, 49–60	0.4	4.8	2.3	161.5	1.1	1.0	2.7	9.7	13.7	0.2	62.4	108.0	48.9	125.4	32.1	130.1	116.7	14.9
103R-2, 63–73	0.4	8.6	1.8	165.5	3.2	3.4	3.3	15.5	24.8	0.3	41.1	42.2	24.2	47.7	46.0	189.1	109.9	14.8
103R-5, 63–73	0.1	3.0	0.6	152.4	1.3	4.1	3.5	15.3	32.3	0.7	51.4	60.4	44.3	96.2	37.1	167.4	91.7	13.1
104R-2, 56–61	0.1	4.8	1.5	169.9	2.3	1.5	4.3	13.5	16.1	0.4	57.4	48.6	37.2	52.1	40.8	176.1	35.2	17.5
108R-2, 26–36	0.2	6.1	2.8	160.3	1.2	3.9	4.0	12.5	19.6	0.4	63.6	70.6	51.0	70.3	40.2	168.5	92.5	15.5
112R-4, 55–67	0.3	4.7	2.8	149.0	1.1	2.8	4.5	17.5	39.7	0.4	69.1	78.2	42.4	74.7	45.9	196.9	120.1	15.7
114R-4, 61–71	0.2	ND	3.0	144.4	ND	3.7	4.8	24.9	76.0	2.5	129.8	97.2	64.8	55.4	51.2	921.4	26.0	25.4
115R-2, 54–64	0.5	4.0	1.6	183.7	1.8	2.8	2.7	14.3	32.4	0.5	36.1	57.0	25.4	62.8	37.0	163.1	168.2	15.0
115R-4, 55–64	0.2	ND	2.5	138.1	1.2	12.9	12.9	43.3	162.8	5.2	148.6	152.3	56.5	77.5	50.4	684.2	81.6	25.3
116R-6, 84–90	0.2	3.2	2.0	206.5	2.1	6.1	4.0	13.8	28.5	0.3	48.1	38.9	33.4	44.6	28.4	162.5	18.5	17.8
117R-3, 56–66	0.3	2.8	3.2	219.5	0.8	2.1	2.6	7.9	18.0	0.3	56.3	39.3	39.6	50.5	15.4	100.2	8.5	20.6
118R-6, 83–92	0.9	7.3	2.6	147.1	11.0	31.7	28.3	81.1	175.6	6.7	122.7	75.0	38.1	34.7	45.1	358.0	69.7	25.8
119R-2, 110–120	0.4	4.2	1.4	153.1	ND	0.9	3.8	14.3	19.5	0.3	39.9	54.0	37.3	93.8	49.5	195.6	102.2	14.2
120R-3, 125–135	0.6	9.1	1.0	155.4	3.9	13.3	12.4	45.2	41.1	2.4	25.7	31.7	33.8	104.9	34.2	140.6	156.4	15.8
121R-4, 51–61	0.1	3.3	1.9	197.2	1.5	1.6	3.6	15.4	31.0	0.6	36.7	61.5	21.2	62.2	31.4	147.1	127.1	16.5
122R-4, 51–60	0.1	6.0	1.3	139.8	1.3	3.6	5.7	20.2	41.5	0.7	51.0	36.3	34.2	79.7	52.5	215.5	155.9	13.9
123R-4, 76–83	0.1	3.8	0.6	176.7	1.8	0.2	1.5	6.5	12.6	0.4	41.8	72.2	48.4	128.7	24.5	95.3	229.9	14.1
124R-2, 81–91	0.3	6.1	1.5	145.8	2.0	1.4	3.9	15.0	25.2	0.5	60.1	66.3	40.3	94.2	43.5	188.6	101.2	15.5
128R-3, 124–130	0.1	4.0	1.8	155.0	0.2	0.9	2.0	9.2	8.5	0.3	49.8	86.8	38.0	91.6	37.2	146.0	106.8	15.2
130R-3, 135–146	0.3	4.8	1.1	135.2	0.6	1.6	2.8	15.8	20.7	0.4	45.2	85.8	38.2	83.8	54.9	223.4	165.8	12.7
131R-1, 47–54	–0.1	ND	2.1	202.6	ND	0.7	4.0	21.3	71.7	4.1	87.2	87.3	44.1	39.2	35.6	365.1	10.3	24.3
131R-1, 125–128	0.2	4.6	2.1	164.6	3.2	8.0	8.4	25.5	91.1	1.0	59.4	31.6	36.6	68.7	37.1	149.8	48.4	16.0
131R-4, 94–100	0.2	4.7	1.5	144.1	1.5	3.7	5.1	25.6	31.6	0.5	71.2	63.5	40.8	69.8	52.9	268.1	237.0	16.3
132R-5, 41–51	0.4	5.8	0.6	155.4	1.1	1.9	3.8	10.8	29.0	0.3	45.7	88.7	44.0	123.9	36.8	138.6	333.7	12.9
134R-6, 105–114	0.2	3.0	2.9	156.4	2.0	1.2	4.2	12.8	25.7	0.3	60.4	65.7	41.9	111.0	37.1	158.5	134.4	16.3
136R-3, 62–69	0.2	5.1	0.3	141.3	0.9	2.8	3.3	10.8	15.3	0.1	46.6	82.6	45.7	136.4	38.9	153.0	209.6	12.3
137R-6, 142–149	0.3	4.6	1.4	175.2	2.4	7.8	7.7	31.3	46.8	0.9	102.1	54.7	54.6	123.8	33.5	203.2	358.0	21.3
138R-6, 97–104	0.1	1.6	2.2	145.2	0.9	5.4	5.6	19.3	43.5	0.7	60.7	95.0	43.1	100.3	43.3	176.1	158.3	14.6
140R-2, 36–43	0.5	32.1	1.6	160.7	1.1	1.1	3.6	12.2	17.9	0.5	54.2	60.9	34.7	79.7	38.5	157.7	125.0	15.8
144R-1, 101–107	0.2	6.9	2.2	173.6	2.7	6.4	7.2	23.8	53.0	1.0	60.8	271.1	32.4	89.8	35.0	190.5	231.7	16.8
144R-5, 95–102	0.4	7.7	1.5	153.5	1.6	4.0	6.9	34.6	34.7	0.4	61.0	46.0	34.2	58.0	57.3	315.9	195.8	19.1
144R-6, 72–78	0.3	1.3	1.4	176.7	1.0	3.9	5.3	22.6	27.2	0.6	87.9	57.0	51.9	83.2	32.5	326.6	306.6	20.2
146R-4, 77–84	0.1	2.1	1.6	223.4	0.6	2.3	2.7	8.7	14.5	0.2	30.1	50.8	17.5	55.6	18.0	90.2	231.4	16.4
147R-3, 37–47	0.6	14.7	2.5	162.6	9.7	26.3	23.0	77.2	48.8	5.2	61.3	14.9	34.9	63.4	21.0	60.1	68.4	24.1
149R-3, 24–31	0.3	6.0	1.4	174.5	1.1	1.9	3.6	12.8	17.3	0.5	49.3	63.7	38.1	44.6	42.5	185.3	14.3	16.4
149R-5, 13–20	0.3	5.4	2.0	124.1	1.7	3.9	3.9	20.8	30.7	0.5	71.0	63.0	46.5	76.3	59.9	243.6	55.3	16.7
150R-5, 64–71	0.2	6.7	0.8	174.3	2.2	2.2	3.0	11.2	10.3	0.2	41.6	65.5	41.7	59.5	41.6	169.2	28.4	14.4
151R-1, 25–32	0.4	6.6	1.6	158.5	0.9	ND	2.1	13.5	14.6	0.1	50.8	57.6	35.6	58.9	45.7	192.6	32.7	16.2
153R-1, 20–27	ND	0.9	1.7	188.7	0.5	0.8	1.0	5.6	7.4	0.4	50.5	50.3	50.7	109.7	19.7	76.2	192.5	14.4
153R-4, 20–27	0.5	5.2	1.6	129.9	0.9	0.7	3.8	16.2	22.9	0.2	54.5	46.4	41.4	67.6	59.9	230.5	83.1	14.4
155R-2, 128–135	0.2	2.3	1.2	149.2	ND	0.3	2.1	16.7	22.2	0.7	70.5	37.6	46.3	50.1	51.1	274.7	21.2	17.3
156R-8, 70–78	0.3	7.6	2.2	140.3	3.7	9.6	9.8	35.7	82.3	0.9	63.6	73.5	35.8	76.0	51.7	209.9	92.9	15.2
157R-2, 98–105	0.4	6.2	2.2	158.9	4.3	13.4	11.9	38.6	403.2	1.4	78.0	64.4	42.1	76.2	42.2	153.8	71.2	16.2
158R-4, 127–134	0.3	3.7	2.4	155.0	0.4	2.3	2.6	11.0	13.2	0.4	53.6	58.9	44.5	85.0	40.6	164.6	66.1	13.6
159R-7, 57–63	0.3	8.3	5.8	140.8		68.3	50.9	134.6	2303.9	22.4	88.1	11.3	30.3		9.7	125.3	3.8	41.1
160R-2, 37–43	0.1	4.7	1.2	150.2	1.5	3.0	4.5	13.4	19.2	0.4	52.7	89.4	48.0	105.8	44.4	188.4	97.3	13.0
163R-3, 51–58	ND	6.1	1.9	146.6	0.4	2.6	3.2	12.6	15.0	0.3	59.8	51.3	41.2	72.4	46.3	183.6	55.0	15.2
165R-3, 102–107	0.4	4.5	1.9	153.0	1.3	0.0	2.1	8.1	5.6	0.1	47.8	95.7	40.9	84.1	39.2	152.7	211.2	14.6
166R-2, 81–87	0.3	6.0	0.4	164.3	1.3	2.1	2.5	10.7	15.3	0.3	41.4	64.6	41.2	82.8	35.0	150.1	51.6	14.4
168R-6, 128–137	0.4	ND	2.8	189.0	10.1	42.2	38.6	100.9	1273.9	2.5	161.3	69.6	46.6	45.0	27.7	202.0	12.1	30.9
168R-7, 42–50	0.5	7.8	1.7	162.3	1.3	2.2	3.4	12.6	21.8	0.4	52.1	72.0	48.5	85.8	39.7	172.7	52.2	14.4
169R-6, 85–91	0.2	9.1	0.2	172.9	0.9	3.0	3.7	12.3	12.6	0.4	38.5	76.9	40.0	77.5	41.7	163.4	55.4	12.9
172R-2, 61–68	0.2	4.7	1.8	158.7	2.2	6.5	5.3	16.3	47.2	0.7	51.8	41.4	34.7	80.9	43.9	177.7	151.3	14.4
178R-6, 108–115	0.4	5.6	1.5	63.7	1.6	3.8	4.0	19.0	31.9	0.4	78.2	76.2	72.1	186.1	67.7	255.7	239.0	11.2
180R-1, 69–75	0.1	4.7	2.6	163.0	1.2	3.9	5.4	16.5	38.7	0.6	62.8	76.4	47.3	118.1	27.8	110.8	113.2	15.9
183R-4, 63–71	4.5	19.1	3.4	179.6	21.1	73.3	57.4	137.5	1125.1	4.6	100.6	125.6	35.9	49.5	20.1	168.4	28.2	28.4
184R-4, 31–37	0.2	7.0	0.1	162.8	0.2	1.1	2.2	11.8	14.3	0.1	32.4	63.6	28.9	80.9	49.2	188.3	224.6	12.4
186R-5, 103–110	0.1	4.9	0.7	144.8	1.7	1.6	2.9	11.6	16.0	0.3	38.5	118.0	46.9	137.9	43.5	168.1	198.9	12.1
188R-1, 20–27	0.2	5.7	2.0	148.7	0.7	0.5	1.4	10.1	9.7	0.4	49.1	79.6	36.4	101.8	45.1	167.1	205.9	14.0
188R-3, 124–131	0.3	2.3	0.8	174.7	0.2	3.0	1.9	4.7	3.4	0.1	36.0	95.9	50.6	155.8	23.4	88.6	219.1	11.7
191R-3, 18–27	ND	4.3	1.0	156.1	1.9	1.2	1.5	11.7	28.6	0.9	47.6	76.4	34.7	89.8	42.7	165.6	188.5	14.6
191R-3, 80–84	0.3	1.3	2.2	183.8	0.7	2.5	2.4	9.7	10.1	0.2	72.0	89.2	56.5	195.3	26.5	191.1	383.5	18.4
192R-6, 14–21	0.5	3.7	0.9	168.8	1.1	2.2	2.2	9.9	13.1	0.3	42.4	91.0	40.7	104.0	36.0	141.1	76.7	13.9
192R-7, 73–79	0.2	10.8	0.9	181.1	1.3	3.2	2.5	6.9	6.4	0.3	33.2	120.4	43.1	113.9	27.8	106.6	224.6	12.7
195R-5, 51–57	0.3	8.4	2.3	156.7	0.6	2.8	3.7	14.6	37.3	0.6	44.6	98.9	34.2	98.7	41.9	166.4	154.3	14.6
196R-3, 78–82	0.1	5.2	1.9	82.4	1.6	1.6	1.5	4.2	3.8	0.1	87.3	198.4	114.2	364.7	23.8	70.5	352.7	10.2
196R-4, 119–126	0.2	7.6	1.3	148.9	1.4	4.5	3.4	9.9	14.4	0.4	49.3	79.6	41.6	114.0	36.4	135.3	125.1	13.2
197R-3, 81–94	0.2	9.1	1.5	174.1	0.2	2.9	3.1	8.7	6.9	0.2	43.3	69.7	34.8	90.9	35.5	130.3	100.8	14.5
197R-4, 25–32	0.2	12.3	2.4	152.7	1.1	3.8	2.6	10.8	13.4	0.1	41.8	109.3	34.7	105.7	41.9	154.4	187.9	13.4
199R-6, 40–43	0.1	6.6	0.6	153.6	0.5	3.4	3.1	6.7	9.4	0.2	47.3	93.2	58.0	161.6	26.8	94.2	115.0	12.3
199R-7, 16–23	0.4	10.0	1.5	152.5	0.7	3.8	4.0	12.3	12.0	ND	49.3	99.9	37.9	105.0	46.1	173.9	116.6	14.3
205R-5, 61–69	0.2	10.1	0.8	151.4	ND	ND	1.9	12.1	13.9	0.5	26.5	61.8	24.5	71.6	50.2	177.3	276.0	11.9
205R-6, 35–42	0.3	8.6	1.0	195.3	0.9	1.8	1.6	6.3	6.2	0.4	29.1	101.6	31.9	90.9	22.0	83.9	111.6	13.8
207R-1, 93–100	0.2	5.7	0.6	206.5	0.7	4.7	2.5	4.9	5.9	ND	41.5	62.1	28.0	78.9	17.4	69.0	118.2	17.0
207R-3, 108–115	0.4	9.7	1.6	148.8	1.6	1.3	1.7	9.8	12.6	0.4	56.1	122.5	48.2	143.1	34.4	130.8	112.7	14.1
208R-3, 48–55	0.4	6.0	0.5	147.5	1.2	3.3	1.9	7.2	8.4	0.6	48.4	85.0	53.7	153.3	31.1	109.8	146.7	11.5
208R-4, 17–24	0.2	10.6	1.1	151.1	0.6	0.7	1.7	11.5	13.1	0.4	35.7	57.4	33.4	90.9	46.3	167.0	230.6	12.9
208R-6, 10–17	0.3	8.7	1.2	152.7	0.2	ND	2.2	10.0	13.9	ND	47.9	45.9	43.6	117.5	37.8	139.0	117.9	13.2
209R-2, 54–60	ND	9.0	1.6	161.2	0.9	1.4	1.9	11.3	13.2	0.2	35.7	84.8	27.1	79.0	43.4	161.3	169.2	13.6
209R-3, 3–10	ND	12.0	1.6	177.0	0.2	2.6	1.8	8.2	7.3	0.3	32.0	52.7	24.1	69.1	36.6	129.4	134.0	13.8
210R-6, 109–117	0.4	11.1	0.2	179.6	0.9	1.4	1.6	7.6	8.2	0.2	30.9	70.0	31.0	87.3	33.7	119.1	122.0	13.8

Core, section, interval (cm)	Trace elements by instrumental neutron activation analysis (ppm) La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Hf	Ta	Th
89R-1, 33–45	0.458	2.09	ND	0.758	0.319	0.166	0.743	0.0834	0.355	ND	ND
89R-1, 98–108	0.481	1.55	ND	0.429	0.292	0.145	0.331	0.0329	ND	ND	ND
95R-2, 89–93	0.741	2.65	ND	0.76	0.765	0.307	1.21	0.141	0.529	ND	ND
97R-1, 104–113	3.67	11.8	ND	3.13	1.97	1.06	2.59	0.379	2.23	0.123	ND
101R-3, 49–60	0.596	1.86	ND	0.884	0.558	0.239	0.851	0.12	0.45	ND	ND
103R-5, 63–73	1.27	3.39	ND	1.5	0.641	0.448	1.68	0.238	1.02	ND	ND
114R-4, 61–71	1.42	3.86	ND	2.08	1.19	0.516	2.32	0.354	2.44	0.229	ND
115R-2, 54–64	1.31	4.29	ND	1.31	0.756	0.436	1.52	0.185	1.03	ND	ND
117R-3, 56–66	0.994	2.58	1.74	0.81	0.712	0.178	0.88	0.147	0.472	ND	ND
120R-3, 125–135	3.74	13.4	9.65	4.41	0.898	1.16	4.37	0.647	1.85	0.163	0.332
123R-4, 76–83	0.532	1.6	ND	0.537	0.452	0.102	0.575	0.0664	0.343	ND	ND
124R-2, 81–91	0.679	3.1	ND	1.36	0.656	0.457	1.55	0.237	0.761	ND	ND
131R-1, 47–54	1.16	2.94	ND	1.87	1.51	0.48	2.08	0.327	2.21	0.304	ND
140R-2, 36–43	0.856	2.66	ND	1.24	0.631	0.297	1.19	0.279	0.533		
147R-3, 37–47	9.02	28	21.9	7.83	2.38	1.85	8.89	1.25	1.54	0.295	0.162
149R-3, 24–31	0.687	2.82		1.12	0.632	0.27	1.33	0.189	0.477		
150R-5, 64–71	0.46			0.985	0.612	0.239	1.49	0.183	0.431		
157R-2, 98–105	4.36	12.9	ND	4.52	1.58	0.958	3.94	0.592	10.1		
158R-4, 127–134	0.604			1.03	0.589	0.348	1.3	0.199	0.458		
159R-7, 57–63	27.9	69	63.4	16.7	3.68	3.79	15	2.3	59	1.25	0.856
168R-6, 128–137	13.8	43.9	51	13.7	3.32	3.16	7.75	1.18	26.3	0.161	
168R-7, 42–50	0.874	2.04	ND	1.1	0.589	0.39	1.25	0.276	0.702		
169R-6, 85–91	0.567	2.23	ND	1.07	0.592	0.342	1.16	0.152	0.504		
183R-4, 63–71	28.9	84.8	65.3	20.1	4.2	4.15	12.4	1.74	32.1	0.366	0.978
184R-4, 31–37	0.489		ND	1.11	0.559	0.266	0.856	0.143	0.38		
192R-7, 73–79	0.303	ND	ND	0.543	0.391	ND	0.675	0.0727	0.281		
196R-4, 119–126	0.558	ND	ND	0.932	0.498	0.228	1.06	0.108	0.406		
205R-5, 61–69	0.641	ND	ND	1.16	0.531	0.29	1.27	0.167	0.468		
209R-3, 3–10	ND	ND	ND	0.805	0.484	ND	0.771	0.126	0.285		
210R-6, 109–117	0.457	ND	ND	0.73	0.485	ND	0.836	0.0777	0.229		

Notes: Ca# = 100 x Ca/(Ca+Na), Mg# = 100 x Mg/(Mg+Fe^{tot}), Na# = 100 x Na/(Na+Al). * = International Union of the Geological Sciences. ND = not detected.

Chapter 3, Table T1. Major and trace element analyses. (See table notes. Continued on next five pages.)

Core, section, interval (cm)	Piece	Depth (mbsf)	Unit	Interval	Grain size	Rock type (IUGS*)			Major elements (wt%)												
									SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO	Na_2O	K_2O	P_2O_5	Volatiles	Total
176-735B-																					
89R-1, 33–45	4A	505.23	VI	495	Medium	Olivine	Gabbro		46.37	0.29	14.80	0.85	5.11	0.11	16.66	11.58	1.64	0.06	0.02	1.64	99.13
89R-1, 98–108	5	506.08	VI	495	Medium	Olivine	Gabbro		48.01	0.18	21.08	0.65	3.59	0.07	11.33	12.10	2.26	0.02	0.01	0.77	100.07
91R-1, 15–25	2A	517.62	VI	503	Medium	Olivine	Gabbro		47.44	0.24	22.94	0.30	4.37	0.08	9.93	11.06	2.56	0.05	0.02	1.00	99.98
93R-4, 101–110	3B	535.90	VI	510	Medium	Disseminated oxide olivine	Gabbro		51.37	0.48	15.94	0.90	5.80	0.14	8.87	12.86	3.07	0.05	0.03	0.65	100.15
95R-2, 89–93	1D	545.90	VII	518	Fine	Oxide olivine	Gabbro		52.31	0.60	15.86	1.17	6.48	0.16	7.80	11.12	3.74	0.06	0.01	0.59	99.91
97R-1, 104–113	2B	557.25	VII	526	Coarse	Disseminated oxide	Gabbro	Opx bearing	52.51	1.44	15.13	2.58	6.24	0.18	6.22	10.52	4.32	0.06	0.04	0.86	100.07
97R-4, 2–5	1	559.85	VII	528	Fine		Gabbro		50.81	0.52	15.55	1.54	5.82	0.17	8.25	11.76	3.45	0.07	0.11	1.24	99.29
99R-3, 78–89	5	570.28	VII	532	Coarse	Disseminated oxide olivine	Gabbro	Opx bearing	50.70	0.57	14.65	1.00	5.52	0.14	10.15	13.39	2.70	0.07	0.03	0.84	99.76
101R-3, 49–60	1F	588.51	VII	536	Coarse	Olivine	Gabbro		49.93	0.37	16.78	0.51	6.72	0.14	10.21	11.52	2.92	0.05	0.03	0.67	99.85
103R-2, 63–73	3D	597.71	VII	542	Coarse		Gabbro	Opx bearing	52.38	0.48	16.95	0.57	3.90	0.11	7.48	14.21	3.12	0.06	0.02	0.58	99.85
103R-5, 63–73	8	604.10	VIII	548	Medium	Olivine	Gabbro		49.87	0.57	15.95	0.71	5.92	0.13	10.50	12.17	2.80	0.05	0.04	0.70	99.41
104R-2, 56–61	7	607.34	VIII	548	Medium	Olivine	Gabbro		51.60	0.57	16.25	0.82	5.97	0.15	8.17	11.96	3.37	0.05	0.02	0.59	99.51
108R-2, 26–36	1C	625.24	VIII	556	Coarse	Olivine	Gabbro		50.51	0.52	15.48	1.58	6.59	0.16	9.48	11.60	3.04	0.07	0.03	0.70	99.77
112R-4, 55–67	1B	647.03	VIII	560	Coarse	Olivine	Gabbro		51.12	0.55	15.18	0.42	6.38	0.15	9.69	12.79	2.84	0.06	0.05	0.60	99.82
114R-4, 61–71	2B	658.22	VIII	563	Coarse	Oxide	Gabbronorite		43.64	6.97	12.88	4.09	12.31	0.22	5.80	9.47	3.17	0.06	0.03	1.09	99.72
115R-2, 54–64	1D	663.94	VIII	564	Coarse		Gabbronorite		52.03	0.52	18.57	0.50	3.98	0.10	6.81	13.26	3.37	0.06	0.04	0.54	99.76
115R-4, 55–64	3B	666.63	VIII	566	Coarse	Oxide	Gabbronorite		45.89	5.03	12.78	–2.50	17.35	0.25	6.49	9.71	3.21	0.09	0.06	1.52	99.87
116R-6, 84–90	6	679.96	IX	575	Medium		Gabbronorite		52.09	0.66	18.67	1.26	5.28	0.12	6.34	10.89	4.15	0.08	0.04	0.59	100.17
117R-3, 56–66	3	685.50	IX	577	Coarse	Olivine	Gabbronorite		51.62	0.55	19.90	1.32	5.89	0.12	6.08	8.90	4.57	0.09	0.03	0.84	99.90
118R-6, 83–92	8	698.79	IX	586	Coarse	Oxide	Gabbro	Leucocratic	51.49	1.78	13.95	2.85	8.38	0.21	5.74	10.02	4.12	0.20	0.21	0.89	99.83
119R-2, 110–120	8C	703.88	IX	589	Coarse		Gabbro		51.23	0.47	15.62	1.35	4.56	0.13	9.34	13.37	2.82	0.04	0.02	1.15	100.09
120R-3, 125–135	6E	714.10	IX	599	Coarse		Gabbro		52.99	0.40	16.18	1.11	4.05	0.10	8.42	11.48	4.01	0.07	0.01	1.13	99.94
121R-4, 51–61	3A	724.25	X	609	Medium	Olivine	Gabbro		52.16	0.56	19.85	0.45	3.49	0.09	5.78	13.04	3.66	0.07	0.04	0.65	99.84
122R-4, 51–60	2	733.91	X	617	Coarse	Olivine	Gabbro		51.56	0.55	14.63	1.00	5.12	0.14	9.52	14.01	2.67	0.05	0.05	0.76	100.05
123R-4, 76–83	2B	743.89	X	621	Fine	Olivine	Gabbro		49.28	0.28	18.17	0.99	5.35	0.12	10.21	11.30	2.90	0.04	0.02	1.31	99.95
124R-2, 81–91	3A	750.77	X	622	Coarse	Olivine	Gabbro		50.86	0.57	15.17	1.12	5.51	0.14	10.05	13.04	2.69	0.04	0.06	0.55	99.80
128R-3, 124–130	13	780.36	X	633	Medium	Olivine	Gabbro		50.95	0.32	16.89	0.93	4.82	0.12	9.40	12.87	2.88	0.03	0.02	0.81	100.04
130R-3, 135–146	13	800.34	X	646	Coarse	Olivine	Gabbro		51.54	0.51	14.22	0.22	5.60	0.14	9.85	14.10	2.66	0.04	0.03	0.65	99.57
131R-1, 47–54	2A	804.28	X	648	Coarse	Oxide olivine	Gabbro		47.52	5.54	15.94	2.83	9.05	0.19	4.42	8.79	4.38	0.10	0.01	0.90	99.68
131R-1, 125–128	11	805.57	X	649	Fine		Gabbro	Leucocratic	51.47	0.53	16.74	0.65	5.68	0.14	8.44	11.90	3.48	0.07	0.07	0.54	99.70
131R-4, 94–100	9	812.34	X	653	Coarse	Oxide	Gabbro		50.23	0.92	14.20	1.92	6.75	0.18	8.96	13.21	2.66	0.05	0.02	0.85	99.96
132R-5, 41–51	1	818.50	X	658	Coarse	Olivine	Gabbro		50.11	0.39	16.19	0.53	5.81	0.13	10.43	12.93	2.69	0.03	0.02	0.58	99.84
134R-6, 105–114	3	840.30	X	668	Graded	Olivine	Gabbro		50.60	0.49	16.28	1.02	5.55	0.13	10.06	12.77	2.81	0.04	0.03	0.56	100.34
136R-3, 62–69	2B	850.09	X	675	Graded	Olivine	Gabbro		50.15	0.40	15.51	0.61	5.49	0.13	11.48	12.97	2.52	0.03	0.02	0.59	99.90
137R-6, 142–149	8	859.57	X	682	Fine		Microgabbro	Leucocratic troctolitic	49.70	1.03	15.36	2.69	9.15	0.22	8.32	9.77	3.37	0.07	0.03	0.56	100.25
138R-6, 97–104	3B	869.49	X	683	Graded	Olivine	Gabbro		50.89	0.51	15.03	1.21	5.85	0.15	10.17	13.17	2.72	0.05	0.04	0.57	100.35
140R-2, 36–43	2A	882.23	X	687	Coarse	Olivine	Gabbro		51.41	0.41	16.76	0.89	4.72	0.12	9.00	13.28	2.99	0.04	0.02	0.48	100.13
144R-1, 101–107	3C	913.32	X	693	Graded	Olivine	Gabbro		50.92	0.84	17.79	1.36	4.93	0.13	6.98	12.51	3.37	0.08	0.05	0.76	99.70
144R-5, 95–102	4B	918.83	X	702	Coarse	Olivine	Gabbro	Leucocratic	52.59	0.85	13.71	1.47	6.31	0.20	7.78	12.92	3.36	0.07	0.02	0.58	99.84
144R-6, 72–78	5A	919.98	X	702	Coarse	Olivine	Gabbro	Leucocratic	49.20	1.31	15.86	3.73	7.60	0.19	7.71	10.27	3.35	0.06	0.02	0.57	99.87
146R-4, 77–84	2	936.26	X	705	Coarse	Olivine	Gabbro		51.94	0.35	22.96	0.75	2.45	0.06	4.65	12.86	3.76	0.06	0.02	0.37	100.22
147R-3, 37–47	1B	944.35	X	708	Fine	Disseminated oxide	Troctolite	Leucocratic	53.79	0.45	17.52	1.56	6.09	0.16	6.11	8.26	4.67	0.17	0.04	1.32	100.12
149R-3, 24–31	1	963.02	XI	718	Medium		Troctolite		52.40	0.45	16.60	0.91	5.28	0.14	8.14	12.17	3.44	0.05	0.02	0.46	100.05

Table T1 (continued).

Core, section, interval (cm)	Piece	Depth (mbsf)	Major elements (wt%)				Trace elements by X-ray fluorescence analysis (ppm)																	
			$Fe_2O_3^{tot}$	Ca#	Mg#	Na#	Rb	Ba	Pb	Sr	La	Ce	Nd	Y	Zr	Nb	Zn	Cu	Co	Ni	Sc	V	Cr	Ga
176-735B-																								
89R-1, 33–45	4A	505.23	6.53	79.59	83.48	8.37	0.1	2.9	0.7	112.9	1.6	1.3	2.1	7.0	13.3	0.3	39.3	83.0	61.3	434.7	26.8	97.7	1664.6	8.7
89R-1, 98–108	5	506.08	4.64	74.74	82.86	8.12	0.3	2.3	1.2	168.8	1.1	1.0	2.7	3.7	6.3	0.3	24.7	73.2	44.4	306.9	11.7	54.1	806.1	10.5
91R-1, 15–25	2A	517.62	5.16	70.49	79.21	8.42	0.3	ND	0.8	185.7	0.7	ND	1.3	4.9	11.1	0.3	33.1	44.7	42.3	261.1	3.2	36.4	126.7	12.8
93R-4, 101–110	3B	535.90	7.35	69.84	70.49	13.70	0.3	2.1	1.3	162.3	2.4	2.1	3.7	15.3	30.9	0.6	59.1	75.9	39.4	65.1	43.6	182.4	55.5	16.4
95R-2, 89–93	1D	545.90	8.37	62.17	64.86	16.27	0.2	6.1	ND	173.0	0.5	0.5	3.9	14.5	12.6	0.5	44.6	35.7	42.4	35.8	45.9	225.8	11.7	16.4
97R-1, 104–113	2B	557.25	9.51	57.36	56.42	19.05	0.3	5.6	1.9	191.5	4.9	12.7	11.1	38.1	56.1	1.7	66.4	31.2	32.9	36.5	42.2	215.1	23.1	22.8
97R-4, 2–5	1	559.85	8.01	65.31	67.10	15.46	0.3	11.3	3.3	156.2	4.1	18.1	16.4	54.8	1086.1	0.8	80.3	29.9	34.7	72.7	40.6	132.6	176.9	18.5
99R-3, 78–89	5	570.28	7.13	73.26	73.81	13.19	0.6	2.6	3.1	137.3	2.2	1.4	3.1	16.5	25.9	0.3	53.9	59.6	40.7	86.7	51.4	211.9	92.4	14.5
101R-3, 49–60	1F	588.51	7.98	68.56	71.71	12.54	0.4	4.8	2.3	161.5	1.1	1.0	2.7	9.7	13.7	0.2	62.4	108.0	48.9	125.4	32.1	130.1	116.7	14.9
103R-2, 63–73	3D	597.71	4.90	71.56	75.14	13.17	0.4	8.6	1.8	165.5	3.2	3.4	3.3	15.5	24.8	0.3	41.1	42.2	24.2	47.7	46.0	189.1	109.9	14.8
103R-5, 63–73	8	604.10	7.29	70.60	74.06	12.64	0.1	3.0	0.6	152.4	1.3	4.1	3.5	15.3	32.3	0.7	51.4	60.4	44.3	96.2	37.1	167.4	91.7	13.1
104R-2, 56–61	7	607.34	7.45	66.22	68.47	14.59	0.1	4.8	1.5	169.9	2.3	1.5	4.3	13.5	16.1	0.4	57.4	48.6	37.2	52.1	40.8	176.1	35.2	17.5
108R-2, 26–36	1C	625.24	8.91	67.84	67.84	13.93	0.2	6.1	2.8	160.3	1.2	3.9	4.0	12.5	19.6	0.4	63.6	70.6	51.0	70.3	40.2	168.5	92.5	15.5
112R-4, 55–67	1B	647.03	7.51	71.34	71.87	13.36	0.3	4.7	2.8	149.0	1.1	2.8	4.5	17.5	39.7	0.4	69.1	78.2	42.4	74.7	45.9	196.9	120.1	15.7
114R-4, 61–71	2B	658.22	17.77	62.27	39.24	16.87	0.2	ND	3.0	144.4	ND	3.7	4.8	24.9	76.0	2.5	129.8	97.2	64.8	55.4	51.2	921.4	26.0	25.4
115R-2, 54–64	1D	663.94	4.92	68.50	73.25	13.01	0.5	4.0	1.6	183.7	1.8	2.8	2.7	14.3	32.4	0.5	36.1	57.0	25.4	62.8	37.0	163.1	168.2	15.0
115R-4, 55–64	3B	666.63	16.78	62.56	43.38	17.15	0.2	ND	2.5	138.1	1.2	12.9	12.9	43.3	162.8	5.2	148.6	152.3	56.5	77.5	50.4	684.2	81.6	25.3
116R-6, 84–90	6	679.96	7.13	59.18	63.80	15.48	0.2	3.2	2.0	206.5	2.1	6.1	4.0	13.8	28.5	0.3	48.1	38.9	33.4	44.6	28.4	162.5	18.5	17.8
117R-3, 56–66	3	685.50	7.87	51.82	60.50	15.91	0.3	2.8	3.2	219.5	0.8	2.1	2.6	7.9	18.0	0.3	56.3	39.3	39.6	50.5	15.4	100.2	8.5	20.6
118R-6, 83–92	8	698.79	12.16	57.33	48.32	19.57	0.9	7.3	2.6	147.1	11.0	31.7	28.3	81.1	175.6	6.7	122.7	75.0	38.1	34.7	45.1	358.0	69.7	25.8
119R-2, 110–120	8C	703.88	6.42	72.37	74.23	12.95	0.4	4.2	1.4	153.1	ND	0.9	3.8	14.3	19.5	0.3	39.9	54.0	37.3	93.8	49.5	195.6	102.2	14.2
120R-3, 125–135	6E	714.10	5.61	61.28	74.80	16.96	0.6	9.1	1.0	155.4	3.9	13.3	12.4	45.2	41.1	2.4	25.7	31.7	33.8	104.9	34.2	140.6	156.4	15.8
121R-4, 51–61	3A	724.25	4.33	66.32	72.55	13.19	0.1	3.3	1.9	197.2	1.5	1.6	3.6	15.4	31.0	0.6	36.7	61.5	21.2	62.2	31.4	147.1	127.1	16.5
122R-4, 51–60	2	733.91	6.69	74.36	73.80	13.08	0.1	6.0	1.3	139.8	1.3	3.6	5.7	20.2	41.5	0.7	51.0	36.3	34.2	79.7	52.5	215.5	155.9	13.9
123R-4, 76–83	2B	743.89	6.94	68.28	74.45	11.63	0.1	3.8	0.6	176.7	1.8	0.2	1.5	6.5	12.6	0.4	41.8	72.2	48.4	128.7	24.5	95.3	229.9	14.1
124R-2, 81–91	3A	750.77	7.24	72.82	73.32	12.75	0.3	6.1	1.5	145.8	2.0	1.4	3.9	15.0	25.2	0.5	60.1	66.3	40.3	94.2	43.5	188.6	101.2	15.5
128R-3, 124–130	13	780.36	6.29	71.18	74.74	12.32	0.1	4.0	1.8	155.0	0.2	0.9	2.0	9.2	8.5	0.3	49.8	86.8	38.0	91.6	37.2	146.0	106.8	15.2
130R-3, 135–146	13	800.34	6.45	74.54	75.17	13.35	0.3	4.8	1.1	135.2	0.6	1.6	2.8	15.8	20.7	0.4	45.2	85.8	38.2	83.8	54.9	223.4	165.8	12.7
131R-1, 47–54	2A	804.28	12.89	52.58	40.47	18.46	–0.1	ND	2.1	202.6	ND	0.7	4.0	21.3	71.7	4.1	87.2	87.3	44.1	39.2	35.6	365.1	10.3	24.3
131R-1, 125–128	11	805.57	6.96	65.39	70.60	14.63	0.2	4.6	2.1	164.6	3.2	8.0	8.4	25.5	91.1	1.0	59.4	31.6	36.6	68.7	37.1	149.8	48.4	16.0
131R-4, 94–100	9	812.34	9.42	73.30	65.32	13.37	0.2	4.7	1.5	144.1	1.5	3.7	5.1	25.6	31.6	0.5	71.2	63.5	40.8	69.8	52.9	268.1	237.0	16.3
132R-5, 41–51	1	818.50	6.99	72.66	74.72	12.05	0.4	5.8	0.6	155.4	1.1	1.9	3.8	10.8	29.0	0.3	45.7	88.7	44.0	123.9	36.8	138.6	333.7	12.9
134R-6, 105–114	3	840.30	7.18	71.52	73.50	12.45	0.2	3.0	2.9	156.4	2.0	1.2	4.2	12.8	25.7	0.3	60.4	65.7	41.9	111.0	37.1	158.5	134.4	16.3
136R-3, 62–69	2B	850.09	6.71	73.99	77.22	11.81	0.2	5.1	0.3	141.3	0.9	2.8	3.3	10.8	15.3	0.1	46.6	82.6	45.7	136.4	38.9	153.0	209.6	12.3
137R-6, 142–149	8	859.57	12.86	61.57	56.17	15.31	0.3	4.6	1.4	175.2	2.4	7.8	7.7	31.3	46.8	0.9	102.1	54.7	54.6	123.8	33.5	203.2	358.0	21.3
138R-6, 97–104	3B	869.49	7.71	72.79	72.31	12.98	0.1	1.6	2.2	145.2	0.9	5.4	5.6	19.3	43.5	0.7	60.7	95.0	43.1	100.3	43.3	176.1	158.3	14.6
140R-2, 36–43	2A	882.23	6.14	71.05	74.38	12.82	0.5	32.1	1.6	160.7	1.1	1.1	3.6	12.2	17.9	0.5	54.2	60.9	34.7	79.7	38.5	157.7	125.0	15.8
144R-1, 101–107	3C	913.32	6.83	67.22	66.90	13.50	0.2	6.9	2.2	173.6	2.7	6.4	7.2	23.8	53.0	1.0	60.8	271.1	32.4	89.8	35.0	190.5	231.7	16.8
144R-5, 95–102	4B	918.83	8.48	67.99	64.52	16.80	0.4	7.7	1.5	153.5	1.6	4.0	6.9	34.6	34.7	0.4	61.0	46.0	34.2	58.0	57.3	315.9	195.8	19.1
144R-6, 72–78	5A	919.98	12.18	62.89	55.64	14.83	0.3	1.3	1.4	176.7	1.0	3.9	5.3	22.6	27.2	0.6	87.9	57.0	51.9	83.2	32.5	326.6	306.6	20.2
146R-4, 77–84	2	936.26	3.47	65.39	72.61	11.89	0.1	2.1	1.6	223.4	0.6	2.3	2.7	8.7	14.5	0.2	30.1	50.8	17.5	55.6	18.0	90.2	231.4	16.4
147R-3, 37–47	1B	944.35	8.33	49.41	59.23	18.01	0.6	14.7	2.5	162.6	9.7	26.3	23.0	77.2	48.8	5.2	61.3	14.9	34.9	63.4	21.0	60.1	68.4	24.1
149R-3, 24–31	1	963.02	6.78	66.16	70.40	14.59	0.3	6.0	1.4	174.5	1.1	1.9	3.6	12.8	17.3	0.5	49.3	63.7	38.1	44.6	42.5	185.3	14.3	16.4

Table T1 (continued).

Core, section, interval (cm)	Piece	Depth (mbsf)	Trace elements by instrumental neutron activation analysis (ppm)										
			La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Hf	Ta	Th
176-735B-													
89R-1, 33–45	4A	505.23	0.458	2.09	ND	0.758	0.319	0.166	0.743	0.0834	0.355	ND	ND
89R-1, 98–108	5	506.08	0.481	1.55	ND	0.429	0.292	0.145	0.331	0.0329	ND	ND	ND
91R-1, 15–25	2A	517.62											
93R-4, 101–110	3B	535.90											
95R-2, 89–93	1D	545.90	0.741	2.65	ND	0.76	0.765	0.307	1.21	0.141	0.529	ND	ND
97R-1, 104–113	2B	557.25	3.67	11.8	ND	3.13	1.97	1.06	2.59	0.379	2.23	0.123	ND
97R-4, 2–5	1	559.85											
99R-3, 78–89	5	570.28											
101R-3, 49–60	1F	588.51	0.596	1.86	ND	0.884	0.558	0.239	0.851	0.12	0.45	ND	ND
103R-2, 63–73	3D	597.71											
103R-5, 63–73	8	604.10	1.27	3.39	ND	1.5	0.641	0.448	1.68	0.238	1.02	ND	ND
104R-2, 56–61	7	607.34											
108R-2, 26–36	1C	625.24											
112R-4, 55–67	1B	647.03											
114R-4, 61–71	2B	658.22	1.42	3.86	ND	2.08	1.19	0.516	2.32	0.354	2.44	0.229	ND
115R-2, 54–64	1D	663.94	1.31	4.29	ND	1.31	0.756	0.436	1.52	0.185	1.03	ND	ND
115R-4, 55–64	3B	666.63											
116R-6, 84–90	6	679.96											
117R-3, 56–66	3	685.50	0.994	2.58	1.74	0.81	0.712	0.178	0.88	0.147	0.472	ND	ND
118R-6, 83–92	8	698.79											
119R-2, 110–120	8C	703.88											
120R-3, 125–135	6E	714.10	3.74	13.4	9.65	4.41	0.898	1.16	4.37	0.647	1.85	0.163	0.332
121R-4, 51–61	3A	724.25											
122R-4, 51–60	2	733.91											
123R-4, 76–83	2B	743.89	0.532	1.6	ND	0.537	0.452	0.102	0.575	0.0664	0.343	ND	ND
124R-2, 81–91	3A	750.77	0.679	3.1	ND	1.36	0.656	0.457	1.55	0.237	0.761	ND	ND
128R-3, 124–130	13	780.36											
130R-3, 135–146	13	800.34											
131R-1, 47–54	2A	804.28	1.16	2.94	ND	1.87	1.51	0.48	2.08	0.327	2.21	0.304	ND
131R-1, 125–128	11	805.57											
131R-4, 94–100	9	812.34											
132R-5, 41–51	1	818.50											
134R-6, 105–114	3	840.30											
136R-3, 62–69	2B	850.09											
137R-6, 142–149	8	859.57											
138R-6, 97–104	3B	869.49											
140R-2, 36–43	2A	882.23	0.856	2.66	ND	1.24	0.631	0.297	1.19	0.279	0.533		
144R-1, 101–107	3C	913.32											
144R-5, 95–102	4B	918.83											
144R-6, 72–78	5A	919.98											
146R-4, 77–84	2	936.26											
147R-3, 37–47	1B	944.35	9.02	28	21.9	7.83	2.38	1.85	8.89	1.25	1.54	0.295	0.162
149R-3, 24–31	1	963.02	0.687	2.82		1.12	0.632	0.27	1.33	0.189	0.477		

Table T1 (continued).

Core, section, interval (cm)	Piece	Depth (mbsf)	Unit	Interval	Grain size	Rock type (IUGS*)			Major elements (wt%)												
									SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO	Na_2O	K_2O	P_2O_5	Volatiles	Total
149R-5, 13–20	1	965.44	XI	719	Graded		Gabbro		51.26	0.56	12.56	1.20	6.63	0.17	11.03	13.57	2.45	0.04	0.02	0.57	100.06
150R-5, 64–71	1A	975.85	XI	719	Graded		Gabbro		51.38	0.41	16.19	1.09	5.55	0.14	9.00	12.24	3.12	0.04	0.01	0.69	99.81
151R-1, 25–32	4	980.02	XI	719	Graded		Gabbro		52.04	0.47	15.45	0.92	5.19	0.14	8.97	13.19	3.03	0.03	0.02	0.59	100.04
153R-1, 20–27	3A	995.91	XI	720	Fine	Olivine	Microgabbro		49.19	0.23	19.17	0.90	5.89	0.12	10.30	10.86	2.99	0.03	0.02	0.43	100.13
153R-4, 20–27	1	1000.10	XI	722	Coarse	Olivine	Gabbro		51.29	0.51	13.31	1.27	5.57	0.16	10.70	14.08	2.42	0.03	0.02	0.60	99.94
155R-2, 128–135	3C	1017.72	XI	732	Graded	Olivine	Gabbro		51.13	1.23	14.25	1.49	7.31	0.18	8.91	11.46	3.22	0.06	0.02	1.02	100.28
156R-8, 70–78	2	1033.95	XI	743	Variable	Olivine	Gabbro		51.55	0.62	14.42	1.24	5.43	0.15	9.41	13.80	2.71	0.05	0.12	0.65	100.14
157R-2, 98–105	3D	1036.89	XI	748	Coarse	Oxide	Gabbro		51.40	0.62	15.37	1.37	6.81	0.18	9.00	11.79	3.08	0.08	0.09	0.60	100.37
158R-4, 127–134	5	1048.97	XI	768	Variable	Olivine	Gabbro		50.87	0.39	15.66	1.26	5.77	0.14	10.15	12.66	2.79	0.05	0.02	0.53	100.27
159R-7, 57–63	3	1063.09	XI	779	Variable	Oxide	Diorite		50.18	2.96	15.33	9.60	7.83	0.12	2.33	4.84	5.68	0.18	0.40	0.56	100.01
160R-2, 37–43	2	1065.24	XI	780	Variable	Olivine	Gabbro		50.38	0.54	14.82	1.01	6.23	0.15	10.59	12.63	2.64	0.04	0.02	0.70	99.47
163R-3, 51–58	1	1095.30	XI	798	Variable	Olivine	Gabbro		51.41	0.41	15.30	1.08	5.43	0.14	10.00	13.15	2.81	0.04	0.02	0.60	100.38
165R-3, 102–107	2A	1107.62	XI	805	Fine	Olivine	Microgabbro		51.14	0.28	17.06	0.99	4.47	0.12	9.61	13.37	2.78	0.02	0.01	0.41	100.25
166R-2, 81–87	2	1112.97	XI	810	Coarse	Olivine	Gabbro		51.19	0.45	16.93	1.10	5.31	0.13	9.44	12.27	3.02	0.04	0.02	0.50	100.41
168R-6, 128–137	6	1138.06	XI	812	Variable		Gabbro		45.21	2.51	15.34	7.50	9.01	0.21	5.55	9.20	3.57	0.10	1.03	0.78	100.01
168R-7, 42–50	4	1138.67	XI	812	Variable		Gabbro		50.78	0.52	15.61	1.38	5.92	0.14	10.36	12.08	2.85	0.04	0.03	0.64	100.36
169R-6, 85–91	3	1147.95	XI	812	Variable		Gabbro		51.54	0.42	16.26	1.03	5.36	0.13	9.39	12.34	3.11	0.03	0.01	0.64	100.27
172R-2, 61–68	3	1170.66	XI	829	Variable	Olivine	Gabbro		51.05	0.50	16.04	0.84	5.07	0.13	9.04	13.38	2.80	0.06	0.04	0.67	99.57
178R-6, 108–115	6A	1218.95	XI	837	Variable	Olivine	Gabbro		48.52	0.54	7.33	1.43	8.59	0.20	17.40	13.47	1.23	0.02	0.04	1.03	99.79
180R-1, 69–75	3	1231.25	XI	847	Coarse	Olivine	Gabbro		49.75	0.44	16.60	0.84	5.95	0.13	10.83	11.38	2.93	0.06	0.07	0.69	99.67
183R-4, 63–71	7B	1265.35	XI	867	Variable	Oxide	Gabbro	Leucocratic	50.47	1.61	16.06	2.67	8.03	0.20	4.52	7.65	5.12	0.79	1.39	1.60	100.10
184R-4, 31–37	1	1274.83	XI	870	Coarse	Olivine	Gabbro		51.75	0.40	16.59	1.01	3.58	0.11	8.72	14.61	2.77	0.03	0.02	0.73	100.31
186R-5, 103–110	2	1285.39	XI	875	Variable	Disseminated oxide olivine	Gabbro		50.51	0.35	15.32	0.67	5.74	0.13	10.96	13.34	2.46	0.03	0.03	0.75	100.29
188R-1, 20–27	1	1307.10	XI	878	Variable	Olivine	Gabbro		51.05	0.35	15.79	0.94	4.50	0.12	10.04	14.04	2.52	0.02	0.01	0.58	99.96
188R-3, 124–131	1D	1311.05	XI	880	Variable	Olivine	Gabbro		49.71	0.20	18.51	0.87	5.15	0.11	10.85	11.44	2.72	0.02	0.02	0.45	100.05
191R-3, 18–27	2A	1338.72	XII	894	Variable	Olivine	Gabbro		51.12	0.43	16.28	0.74	4.45	0.12	9.64	13.81	2.72	0.03	0.07	0.64	100.05
191R-3, 80–84	3C	1339.34	XII	895	Fine		Microgabbro	Troctolitic	49.59	0.46	17.12	1.90	7.39	0.16	9.51	10.23	3.23	0.04	0.01	0.59	100.23
192R-6, 14–21	1	1351.29	XII	902	Variable	Olivine	Gabbro		50.70	0.38	16.73	1.20	4.72	0.12	9.69	12.52	2.80	0.04	0.02	0.91	99.80
192R-7, 73–79	1	1353.36	XII	902	Variable	Olivine	Gabbro		50.06	0.28	17.92	0.57	5.32	0.11	9.99	12.07	2.76	0.03	0.01	0.56	99.67
195R-5, 51–57	1	1369.38	XII	906	Coarse	Olivine	Gabbro		51.16	0.60	16.33	0.52	4.48	0.12	9.50	13.59	2.61	0.04	0.05	0.54	99.53
196R-3, 78–82	2A	1376.59	XII	908	Fine		Microgabbro	Troctolitic	43.89	0.20	8.83	0.45	11.75	0.21	24.99	6.94	1.18	0.01	0.02	0.77	99.22
196R-4, 119–126	7B	1378.52	XII	909	Coarse		Gabbro	Troctolitic	50.43	0.38	15.91	1.02	5.12	0.12	11.02	12.91	2.60	0.03	0.02	0.54	100.10
197R-3, 81–94	5A	1385.69	XII	910	Fine	Oxide olivine	Microgabbro		50.98	0.34	17.34	0.82	4.64	0.11	9.08	12.64	2.88	0.03	0.01	0.53	99.40
197R-4, 25–32	2	1386.19	XII	911	Variable		Gabbro	Troctolitic	50.92	0.44	16.28	0.47	4.58	0.11	9.80	13.75	2.66	0.03	0.02	0.60	99.65
199R-6, 40–43	3	1400.13	XII	916	Coarse		Gabbro	Troctolitic	48.89	0.29	16.32	0.56	6.31	0.13	13.18	10.63	2.63	0.03	0.02	0.89	99.89
199R-7, 16–23	1	1401.31	XII	917	Variable	Olivine	Gabbro		51.31	0.41	15.33	1.14	4.89	0.13	10.14	13.54	2.63	0.03	0.02	0.65	100.22
205R-5, 61–69	3B	1456.09	XII	931	Coarse	Olivine	Gabbro		51.84	0.38	16.35	0.57	3.18	0.10	8.60	15.26	2.66	0.03	0.01	0.70	99.69
205R-6, 35–42	1C	1457.20	XII	932	Medium	Olivine	Gabbro		50.98	0.26	20.29	0.41	3.90	0.09	7.78	12.08	3.28	0.04	0.01	0.82	99.95
207R-1, 93–100	4	1470.49	XII	939	Variable	Olivine	Gabbro		51.00	0.28	21.70	0.47	3.45	0.07	6.61	11.98	3.54	0.05	0.02	0.51	99.67
207R-3, 108–115	2	1473.05	XII	940	Coarse	Olivine	Gabbro		49.77	0.38	15.69	0.71	6.03	0.13	11.63	12.22	2.51	0.03	0.02	0.87	100.00
208R-3, 48–55	1	1481.71	XII	946	Variable	Olivine	Gabbro		48.82	0.31	15.85	0.79	6.24	0.13	12.40	11.43	2.49	0.03	0.01	1.14	99.64
208R-4, 17–24	1	1482.71	XII	946	Variable	Olivine	Gabbro		50.97	0.45	15.98	1.06	3.98	0.11	9.80	14.10	2.53	0.03	0.02	0.51	99.53
208R-6, 10–17	1	1485.24	XII	947	Pegmatitic	Olivine	Gabbro		49.89	0.37	15.76	1.17	5.20	0.12	11.13	12.59	2.64	0.04	0.02	0.78	99.71
209R-2, 54–60	1C	1490.16	XII	950	Variable	Olivine	Gabbro		51.79	0.41	17.10	0.81	3.53	0.10	8.54	14.32	2.79	0.03	0.02	0.59	100.04
209R-3, 3–10	1	1491.04	XII	951	Coarse		Gabbro	Troctolitic	51.97	0.32	18.54	1.04	2.87	0.09	7.82	13.85	3.07	0.03	0.01	0.66	100.26
210R-6, 109–117	4	1506.24	XII	952	Variable	Olivine	Gabbro		51.21	0.30	18.74	1.08	3.51	0.10	8.45	13.06	3.04	0.04	0.02	0.58	100.11

Notes: Ca# = 100 × Ca/(Ca+Na), Mg# = 100 × Mg/(Mg+Fe^{tot}), Na# = 100 × Na/(Na+Al). * = International Union of the Geological Sciences. ND = not detected.

Table T1 (continued).

Core, section, interval (cm)	Piece	Depth (mbsf)	Major elements (wt%)				Trace elements by X-ray fluorescence analysis (ppm)																	
			$Fe_2O_3^{tot}$	Ca#	Mg#	Na#	Rb	Ba	Pb	Sr	La	Ce	ND	Y	Zr	Nb	Zn	Cu	Co	Ni	Sc	V	Cr	Ga
149R-5, 13–20	1	965.44	8.57	75.37	71.83	13.85	0.3	5.4	2.0	124.1	1.7	3.9	3.9	20.8	30.7	0.5	71.0	63.0	46.5	76.3	59.9	243.6	55.3	16.7
150R-5, 64–71	1A	975.85	7.26	68.43	71.07	13.71	0.2	6.7	0.8	174.3	2.2	2.2	3.0	11.2	10.3	0.2	41.6	65.5	41.7	59.5	41.6	169.2	28.4	14.4
151R-1, 25–32	4	980.02	6.69	70.63	72.64	13.91	0.4	6.6	1.6	158.5	0.9	ND	2.1	13.5	14.6	0.1	50.8	57.6	35.6	58.9	45.7	192.6	32.7	16.2
153R-1, 20–27	3A	995.91	7.44	66.74	73.26	11.39	ND	0.9	1.7	188.7	0.5	0.8	1.0	5.6	7.4	0.4	50.5	50.3	50.7	109.7	19.7	76.2	192.5	14.4
153R-4, 20–27	1	1000.10	7.46	76.27	73.96	13.03	0.5	5.2	1.6	129.9	0.9	0.7	3.8	16.2	22.9	0.2	54.5	46.4	41.4	67.6	59.9	230.5	83.1	14.4
155R-2, 128–135	3C	1017.72	9.61	66.28	64.73	15.70	0.2	2.3	1.2	149.2	ND	0.3	2.1	16.7	22.2	0.7	70.5	37.6	46.3	50.1	51.1	274.7	21.2	17.3
156R-8, 70–78	2	1033.95	7.27	73.78	71.94	13.41	0.3	7.6	2.2	140.3	3.7	9.6	9.8	35.7	82.3	0.9	63.6	73.5	35.8	76.0	51.7	209.9	92.9	15.2
157R-2, 98–105	3D	1036.89	8.93	67.91	66.62	14.18	0.4	6.2	2.2	158.9	4.3	13.4	11.9	38.6	403.2	1.4	78.0	64.4	42.1	76.2	42.2	153.8	71.2	16.2
158R-4, 127–134	5	1048.97	7.67	71.48	72.38	12.80	0.3	3.7	2.4	155.0	0.4	2.3	2.6	11.0	13.2	0.4	53.6	58.9	44.5	85.0	40.6	164.6	66.1	13.6
159R-7, 57–63	3	1063.09	18.31	32.00	20.13	23.40	0.3	8.3	5.8	140.8		68.3	50.9	134.6	2303.9	22.4	88.1	11.3	30.3		9.7	125.3	3.8	41.1
160R-2, 37–43	2	1065.24	7.94	72.55	72.54	12.80	0.1	4.7	1.2	150.2	1.5	3.0	4.5	13.4	19.2	0.4	52.7	89.4	48.0	105.8	44.4	188.4	97.3	13.0
163R-3, 51–58	1	1095.30	7.11	72.11	73.57	13.15	ND	6.1	1.9	146.6	0.4	2.6	3.2	12.6	15.0	0.3	59.8	51.3	41.2	72.4	46.3	183.6	55.0	15.2
165R-3, 102–107	2A	1107.62	5.96	72.65	76.15	11.84	0.4	4.5	1.9	153.0	1.3	0.0	2.1	8.1	5.6	0.1	47.8	95.7	40.9	84.1	39.2	152.7	211.2	14.6
166R-2, 81–87	2	1112.97	7.00	69.19	72.76	12.81	0.3	6.0	0.4	164.3	1.3	2.1	2.5	10.7	15.3	0.3	41.4	64.6	41.2	82.8	35.0	150.1	51.6	14.4
168R-6, 128–137	6	1138.06	17.51	58.76	38.55	16.09	0.4	ND	2.8	189.0	10.1	42.2	38.6	100.9	1273.9	2.5	161.3	69.6	46.6	45.0	27.7	202.0	12.1	30.9
168R-7, 42–50	4	1138.67	7.96	70.08	72.05	13.08	0.5	7.8	1.7	162.3	1.3	2.2	3.4	12.6	21.8	0.4	52.1	72.0	48.5	85.8	39.7	172.7	52.2	14.4
169R-6, 85–91	3	1147.95	6.99	68.68	72.68	13.62	0.2	9.1	0.2	172.9	0.9	3.0	3.7	12.3	12.6	0.4	38.5	76.9	40.0	77.5	41.7	163.4	55.4	12.9
172R-2, 61–68	3	1170.66	6.47	72.53	73.44	12.58	0.2	4.7	1.8	158.7	2.2	6.5	5.3	16.3	47.2	0.7	51.8	41.4	34.7	80.9	43.9	177.7	151.3	14.4
178R-6, 108–115	6A	1218.95	10.97	85.82	75.84	12.15	0.4	5.6	1.5	63.7	1.6	3.8	4.0	19.0	31.9	0.4	78.2	76.2	72.1	186.1	67.7	255.7	239.0	11.2
180R-1, 69–75	3	1231.25	7.46	68.21	74.20	12.70	0.1	4.7	2.6	163.0	1.2	3.9	5.4	16.5	38.7	0.6	62.8	76.4	47.3	118.1	27.8	110.8	113.2	15.9
183R-4, 63–71	7B	1265.35	11.59	45.22	43.59	20.81	4.5	19.1	3.4	179.6	21.1	73.3	57.4	137.5	1125.1	4.6	100.6	125.6	35.9	49.5	20.1	168.4	28.2	28.4
184R-4, 31–37	1	1274.83	4.99	74.45	77.57	12.10	0.2	7.0	0.1	162.8	0.2	1.1	2.2	11.8	14.3	0.1	32.4	63.6	28.9	80.9	49.2	188.3	224.6	12.4
186R-5, 103–110	2	1285.39	7.05	74.98	75.48	11.69	0.1	4.9	0.7	144.8	1.7	1.6	2.9	11.6	16.0	0.3	38.5	118.0	46.9	137.9	43.5	168.1	198.9	12.1
188R-1, 20–27	1	1307.10	5.94	75.48	76.98	11.63	0.2	5.7	2.0	148.7	0.7	0.5	1.4	10.1	9.7	0.4	49.1	79.6	36.4	101.8	45.1	167.1	205.9	14.0
188R-3, 124–131	1D	1311.05	6.59	69.92	76.53	10.80	0.3	2.3	0.8	174.7	0.2	3.0	1.9	4.7	3.4	0.1	36.0	95.9	50.6	155.8	23.4	88.6	219.1	11.7
191R-3, 18–27	2A	1338.72	5.69	73.72	77.04	12.10	ND	4.3	1.0	156.1	1.9	1.2	1.5	11.7	28.6	0.9	47.6	76.4	34.7	89.8	42.7	165.6	188.5	14.6
191R-3, 80–84	3C	1339.34	10.11	63.64	65.08	13.46	0.3	1.3	2.2	183.8	0.7	2.5	2.4	9.7	10.1	0.2	72.0	89.2	56.5	195.3	26.5	191.1	383.5	18.4
192R-6, 14–21	1	1351.29	6.44	71.19	74.86	12.12	0.5	3.7	0.9	168.8	1.1	2.2	2.2	9.9	13.1	0.3	42.4	91.0	40.7	104.0	36.0	141.1	76.7	13.9
192R-7, 73–79	1	1353.36	6.48	70.72	75.32	11.26	0.2	10.8	0.9	181.1	1.3	3.2	2.5	6.9	6.4	0.3	33.2	120.4	43.1	113.9	27.8	106.6	224.6	12.7
195R-5, 51–57	1	1369.38	5.50	74.20	77.36	11.64	0.3	8.4	2.3	156.7	0.6	2.8	3.7	14.6	37.3	0.6	44.6	98.9	34.2	98.7	41.9	166.4	154.3	14.6
196R-3, 78–82	2A	1376.59	13.51	76.47	78.55	9.92	0.1	5.2	1.9	82.4	1.6	1.6	1.5	4.2	3.8	0.1	87.3	198.4	114.2	364.7	23.8	70.5	352.7	10.2
196R-4, 119–126	7B	1378.52	6.71	73.29	76.49	11.87	0.2	7.6	1.3	148.9	1.4	4.5	3.4	9.9	14.4	0.4	49.3	79.6	41.6	114.0	36.4	135.3	125.1	13.2
197R-3, 81–94	5A	1385.69	5.98	70.81	75.06	12.04	0.2	9.1	1.5	174.1	0.2	2.9	3.1	8.7	6.9	0.2	43.3	69.7	34.8	90.9	35.5	130.3	100.8	14.5
197R-4, 25–32	2	1386.19	5.56	74.06	77.74	11.87	0.2	12.3	2.4	152.7	1.1	3.8	2.6	10.8	13.4	0.1	41.8	109.3	34.7	105.7	41.9	154.4	187.9	13.4
199R-6, 40–43	3	1400.13	7.57	69.08	77.52	11.73	0.1	6.6	0.6	153.6	0.5	3.4	3.1	6.7	9.4	0.2	47.3	93.2	58.0	161.6	26.8	94.2	115.0	12.3
199R-7, 16–23	1	1401.31	6.58	73.99	75.33	12.39	0.4	10.0	1.5	152.5	0.7	3.8	4.0	12.3	12.0	ND	49.3	99.9	37.9	105.0	46.1	173.9	116.6	14.3
205R-5, 61–69	3B	1456.09	4.11	76.02	80.58	11.82	0.2	10.1	0.8	151.4	ND	ND	1.9	12.1	13.9	0.5	26.5	61.8	24.5	71.6	50.2	177.3	276.0	11.9
205R-6, 35–42	1C	1457.20	4.75	67.06	76.45	11.76	0.3	8.6	1.0	195.3	0.9	1.8	1.6	6.3	6.2	0.4	29.1	101.6	31.9	90.9	22.0	83.9	111.6	13.8
207R-1, 93–100	4	1470.49	4.31	65.15	75.26	11.85	0.2	5.7	0.6	206.5	0.7	4.7	2.5	4.9	5.9	ND	41.5	62.1	28.0	78.9	17.4	69.0	118.2	17.0
207R-3, 108–115	2	1473.05	7.41	72.91	75.67	11.65	0.4	9.7	1.6	148.8	1.6	1.3	1.7	9.8	12.6	0.4	56.1	122.5	48.2	143.1	34.4	130.8	112.7	14.1
208R-3, 48–55	1	1481.71	7.72	71.73	76.06	11.46	0.4	6.0	0.5	147.5	1.2	3.3	1.9	7.2	8.4	0.6	48.4	85.0	53.7	153.3	31.1	109.8	146.7	11.5
208R-4, 17–24	1	1482.71	5.48	75.49	77.98	11.54	0.2	10.6	1.1	151.1	0.6	0.7	1.7	11.5	13.1	0.4	35.7	57.4	33.4	90.9	46.3	167.0	230.6	12.9
208R-6, 10–17	1	1485.24	6.95	72.50	76.03	12.13	0.3	8.7	1.2	152.7	0.2	ND	2.2	10.0	13.9	ND	47.9	45.9	43.6	117.5	37.8	139.0	117.9	13.2
209R-2, 54–60	1C	1490.16	4.73	73.93	78.13	11.85	ND	9.0	1.6	161.2	0.9	1.4	1.9	11.3	13.2	0.2	35.7	84.8	27.1	79.0	43.4	161.3	169.2	13.6
209R-3, 3–10	1	1491.04	4.23	71.37	78.53	12.01	ND	12.0	1.6	177.0	0.2	2.6	1.8	8.2	7.3	0.3	32.0	52.7	24.1	69.1	36.6	129.4	134.0	13.8
210R-6, 109–117	4	1506.24	4.98	70.36	77.05	11.79	0.4	11.1	0.2	179.6	0.9	1.4	1.6	7.6	8.2	0.2	30.9	70.0	31.0	87.3	33.7	119.1	122.0	13.8

Table T1 (continued).

Core, section, interval (cm)	Piece	Depth (mbsf)	Trace elements by instrumental neutron activation analysis (ppm)										
			La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Hf	Ta	Th
149R-5, 13–20	1	965.44											
150R-5, 64–71	1A	975.85	0.46			0.985	0.612	0.239	1.49	0.183	0.431		
151R-1, 25–32	4	980.02											
153R-1, 20–27	3A	995.91											
153R-4, 20–27	1	1000.10											
155R-2, 128–135	3C	1017.72											
156R-8, 70–78	2	1033.95											
157R-2, 98–105	3D	1036.89	4.36	12.9	ND	4.52	1.58	0.958	3.94	0.592	10.1		
158R-4, 127–134	5	1048.97	0.604			1.03	0.589	0.348	1.3	0.199	0.458		
159R-7, 57–63	3	1063.09	27.9	69	63.4	16.7	3.68	3.79	15	2.3	59	1.25	0.856
160R-2, 37–43	2	1065.24											
163R-3, 51–58	1	1095.30											
165R-3, 102–107	2A	1107.62											
166R-2, 81–87	2	1112.97											
168R-6, 128–137	6	1138.06	13.8	43.9	51	13.7	3.32	3.16	7.75	1.18	26.3	0.161	
168R-7, 42–50	4	1138.67	0.874	2.04	ND	1.1	0.589	0.39	1.25	0.276	0.702		
169R-6, 85–91	3	1147.95	0.567	2.23	ND	1.07	0.592	0.342	1.16	0.152	0.504		
172R-2, 61–68	3	1170.66											
178R-6, 108–115	6A	1218.95											
180R-1, 69–75	3	1231.25											
183R-4, 63–71	7B	1265.35	28.9	84.8	65.3	20.1	4.2	4.15	12.4	1.74	32.1	0.366	0.978
184R-4, 31–37	1	1274.83	0.489		ND	1.11	0.559	0.266	0.856	0.143	0.38		
186R-5, 103–110	2	1285.39											
188R-1, 20–27	1	1307.10											
188R-3, 124–131	1D	1311.05											
191R-3, 18–27	2A	1338.72											
191R-3, 80–84	3C	1339.34											
192R-6, 14–21	1	1351.29											
192R-7, 73–79	1	1353.36	0.303	ND	ND	0.543	0.391	ND	0.675	0.0727	0.281		
195R-5, 51–57	1	1369.38											
196R-3, 78–82	2A	1376.59											
196R-4, 119–126	7B	1378.52	0.558	ND	ND	0.932	0.498	0.228	1.06	0.108	0.406		
197R-3, 81–94	5A	1385.69											
197R-4, 25–32	2	1386.19											
199R-6, 40–43	3	1400.13											
199R-7, 16–23	1	1401.31											
205R-5, 61–69	3B	1456.09	0.641	ND	ND	1.16	0.531	0.29	1.27	0.167	0.468		
205R-6, 35–42	1C	1457.20											
207R-1, 93–100	4	1470.49											
207R-3, 108–115	2	1473.05											
208R-3, 48–55	1	1481.71											
208R-4, 17–24	1	1482.71											
208R-6, 10–17	1	1485.24											
209R-2, 54–60	1C	1490.16											
209R-3, 3–10	1	1491.04	ND	ND	ND	0.805	0.484	ND	0.771	0.126	0.285		
210R-6, 109–117	4	1506.24	0.457	ND	ND	0.73	0.485	ND	0.836	0.0777	0.229		