

Table T18. Interstitial water geochemistry, Site C0001. (See table notes.) (Continued on next page.)

Core, section	Depth CSF (m)	pH	Alkalinity (mM)	Salinity (refractive index)	Cl (mM)	Br (μ M)	SO ₄ (mM)	PO ₄ (μ M)	NH ₄ (mM)	Na (mM)	K (mM)	Mg (mM)	Ca (mM)	Li (μ M)	B (μ M)	Mn (μ M)
315-C0001E-																
1H-4	3.00	7.69	4.75	1.33933	553.9	902	26.3	7.91	0.23	458	11.3	48.7	8.20	26.0	532	1.53
1H-6	3.91	7.71	5.92	1.33931	554.8	883	22.4	11.1	0.28	466	11.9	49.1	7.99	26.7	502	1.44
1H-7	4.14	7.65	6.14	1.33930	553.4	861	21.8	10.4	0.30	450	12.5	47.7	7.70	26.4	515	1.01
2H-4	8.74	7.88	10.86	1.33916	556.7	922	12.5	21.2	0.57	467	12.0	44.0	5.26	26.1	507	1.06
4H-4	27.52	8.02	19.38	1.33896	556.4	953	0.23	80.3	1.34	470	10.4	35.6	2.27	17.1	437	2.20
5H-4	37.03	7.81	18.53	1.33891	552.6	910	0.18	91.3	1.72	471	10.7	33.3	2.28	16.5	446	1.64
6H-4	46.23	7.73	18.47	1.33887	551.6	981	0.22	66.4	1.99	463	9.89	30.9	2.30	18.3	425	1.56
7H-4	55.83	7.66	18.95	1.33885	551.0	978	0.11	70.6	2.22	478	9.70	29.9	2.67	21.2	419	1.90
8H-4	65.22	7.67	19.12	1.33885	548.4	990	0.17	62.3	2.39	481	9.70	29.0	2.92	27.4	388	2.01
9H-4	74.89	7.67	18.87	1.33884	549.0	990	0.11	40.1	2.57	473	9.76	27.5	3.11	26.4	407	3.12
10H-7	87.27	7.78	18.23	1.33883	544.2	985	0.11	26.3	2.78	474	9.74	26.3	3.21	28.6	381	3.03
11H-4	93.71	7.65	17.67	1.33880	544.2	1010	0.42	38.7	2.74	471	9.65	25.5	3.43	29.7	382	2.27
12H-5	104.62	7.72	16.19	1.33879	545.9	1010	0.24	18.0	2.94	479	9.39	24.4	3.26	29.8	326	3.67
13H-4	112.77	7.66	16.57	1.33876	542.0	1030	0.22	41.5	2.96	471	8.61	21.2	4.29	32.7	332	3.37
315-C0001F-																
1H-4	112.11	7.62	16.91	1.33881	543.9	987	0.13	22.2	2.88	475	9.05	24.2	3.64	32.0	332	3.11
2H-5	123.04	7.64	15.60	1.33879	546.2	1070	0.16	35.4	2.83	484	9.41	25.2	3.56	32.8	306	2.39
4H-3	139.20	7.73	16.12	1.33914	546.4	1120	0.31	28.5	2.96	476	9.23	23.8	3.43	33.8	312	2.54
5H-4	149.98	7.63	15.71	1.33882	547.3	1110	0.21	31.0	2.86	475	8.86	21.8	3.78	40.0	284	3.24
6H-4	158.55	7.6	15.88	1.33875	547.0	1120	0.10	37.0	2.99	484	9.41	25.2	3.56	36.7	290	2.76
7H-12	168.04	7.66	15.62	1.33882	545.4	1150	0.17	26.3	2.85	480	9.15	21.5	4.28	37.7	266	3.13
8H-4	175.11	7.78	14.44	1.33879	549.4	1050	0.15	22.2	2.99	471	9.15	20.9	4.25	39.0	256	2.49
9H-4	184.00	7.59	16.31	1.33881	548.5	1090	0.16	11.4	2.76	502	8.74	21.6	4.72	44.2	284	3.73
10H-10	193.35	7.6	16.52	1.33882	548.9	1110	0.20	23.1	2.78	467	8.71	21.5	4.78	47.0	267	4.94
13H-2	203.23	7.72	16.23	1.33884	547.0	1010	0.88	15.5	2.67	473	8.51	21.9	5.06	53.6	258	5.38
14H-4	211.32	7.64	16.25	1.33883	549.5	1110	0.23	16.5	2.64	486	8.46	21.1	5.12	64.5	261	4.28
15H-4	217.30	7.74	16.09	NA	549.2	1110	0.24	21.5	2.48	494	7.87	21.4	5.56	65.6	211	4.32
18H-4	222.72	7.67	16.89	1.33883	548.7	1080	0.16	16.8	2.36	489	8.21	21.1	5.63	70.3	232	5.12
19H-4	228.34	7.66	15.97	1.33883	549.5	1020	0.16	18.4	2.25	485	7.93	20.8	5.78	70.7	202	4.03
20X-5	235.34	7.54	15.62	1.33884	546.5	1220	0.90	17.1	2.38	483	7.92	21.1	5.89	81.8	246	4.72
21X-4	243.42	7.54	15.72	1.33882	545.0	1080	0.96	13.9	2.25	475	7.78	21.0	6.21	78.6	240	4.80
315-C0001H-																
1R-3	232.63	7.79	15.84	1.33883	549.4	1110	0.08	13.0	2.32	473	7.92	20.6	5.79	76.0	248	4.05
3R-4	253.02	7.74	14.15	1.33881	549.6	1050	0.13	14.2	2.43	463	7.72	20.1	6.47	87.0	230	6.83
4R-4	262.54	7.84	14.72	1.33871	540.0	1060	0.07	10.8	2.17	471	7.21	18.3	6.98	92.6	192	9.34
5R-3	270.64	7.58	14.37	1.33880	550.7	1092	0.07	10.1	2.34	485	8.10	19.4	7.46	106	202	11.7
6R-2	278.71	7.53	13.20	1.33879	552.5	1080	0.07	6.96	2.15	476	7.52	18.6	7.82	110	204	10.9
7R-4	291.06	7.69	13.53	1.33882	550.0	1080	0.06	7.59	2.34	483	7.77	17.1	8.42	116	161	11.1
8R-4	300.93	7.68	11.76	1.33879	551.8	1060	0.15	2.85	2.09	489	7.60	18.2	8.61	117	173	12.3
10R-4	316.06	7.52	13.80	1.33879	552.0	1080	0.03	6.96	2.36	476	7.22	15.3	9.48	130	194	12.0
11R-4	325.55	7.66	11.70	1.33885	551.1	1080	0.13	6.96	2.13	480	7.12	16.1	9.95	139	155	8.84
12R-4	335.06	7.55	11.25	1.33878	553.9	1090	0.04	4.43	2.15	480	6.69	15.1	9.89	142	169	9.60
13R-5	345.95	7.57	11.13	1.33878	555.4	1190	0.02	8.23	2.24	478	6.92	14.3	10.4	159	154	8.16
14R-4	354.04	7.7	10.39	1.33875	552.0	1100	0.04	7.91	2.11	490	6.54	14.0	10.3	152	144	6.47
16R-4	373.04	7.49	10.18	1.33877	553.8	1090	0.02	5.38	2.18	472	6.04	12.8	11.1	164	154	7.38
18R-3	390.64	NA	NA	1.33882	556.0	1070	0.10	5.70	2.45	485	6.61	13.2	11.7	164	165	9.28
19R-3	400.12	7.5	7.60	1.33862	542.1	1030	0.09	0.95	2.27	480	5.90	11.9	11.7	172	155	7.70
21R-3	415.12	7.55	7.73	1.33877	557.2	1020	0.08	2.53	2.21	493	5.97	12.1	12.6	181	140	7.89
23R-2	430.57	7.66	7.48	1.33875	552.4	1100	0.02	3.80	2.15	492	5.45	11.2	13.4	194	142	12.3
24R-2	440.14	7.43	7.05	1.33879	548.8	1090	0.03	6.96	2.05	482	5.13	10.9	13.2	176	143	12.0

Notes: CSF = core depth below seafloor. * = shore-based analyses. NA = not analyzed.

Table T18 (continued).

Core, section, interval (cm)	Depth (mbsf)	Fe (μM)	Si (μM)	Sr (μM)	Ba* (μM)	V* (nM)	Cu* (nM)	Zn* (nM)	Rb* (μM)	Mo* (nM)	Cs* (nM)	Pb* (nM)	U* (nM)	Y* (pM)	$\delta^{18}\text{O}^*$ (‰ VSMOW)	δD^* (‰ VSMOW)
315-C0001E-																
1H-4	3.00	15.5	739	84.6	0.29	22	3.22	94.2	1.64	199	2.81	1.05	4.26	NA	-0.15	1.5
1H-6	3.91	12.2	679	85.9	0.31	35	173	195	1.82	157	2.88	2.42	6.30	NA	-0.15	0.0
1H-7	4.14	10.1	774	76.3	0.31	24	13.9	169	1.67	142	2.98	1.95	3.23	NA	-0.21	-1.8
2H-4	8.74	4.22	806	87.6	0.51	42	8.84	322	1.69	42.2	3.79	0.45	1.69	NA	-0.15	-0.3
4H-4	27.52	3.21	835	86.6	50.6	54	13.3	288	1.20	129	3.25	0.26	1.13	0.31	-0.42	-1.0
5H-4	37.03	4.78	824	88.0	69.8	40	14.3	383	1.16	146	2.85	0.05	2.09	NA	-0.49	-6.0
6H-4	46.23	15.2	867	88.9	73.7	38	35.1	187	1.08	103	3.25	1.05	0.70	NA	-0.67	-3.4
7H-4	55.83	28.8	892	93.6	78.9	34	26.9	474	1.14	105	3.17	0.95	1.36	NA	-0.92	-2.4
8H-4	65.22	35.3	867	98.0	85.5	31	0.33	357	1.07	106	2.84	1.08	1.07	NA	-1.25	0.4
9H-4	74.89	37.5	971	99.9	85.7	35	228	547	1.05	188	2.71	0.92	1.30	NA	-1.24	-4.6
10H-7	87.27	29.8	831	105	94.0	36	213	420	1.17	246	3.83	1.98	4.56	NA	-1.36	-6.5
11H-4	93.71	44.2	830	109	97.3	22	1960	882	1.10	165	3.20	5.45	2.09	NA	-1.59	-7.5
12H-5	104.62	76.7	906	110	113	36	117	389	1.05	399	2.98	1.81	1.34	NA	-1.82	-7.8
13H-4	112.77	57.6	932	115	131	35	87.1	874	1.10	225	3.31	0.31	2.56	NA	-2.24	-4.4
315-C0001F-																
1H-4	112.11	50.5	966	113	125	28	116	354	1.02	136	2.88	2.07	0.92	NA	-1.75	-4.5
2H-5	123.04	42.9	961	113	139	43	64.5	1840	1.05	206	3.20	2.35	2.49	NA	-1.79	-5.0
4H-3	139.20	58.6	994	115	195	47	48.3	452	0.99	405	2.81	2.11	2.51	NA	-2.00	-4.9
5H-4	149.98	81.2	965	121	238	42	743	489	0.93	326	2.43	0.89	6.01	NA	-2.09	-5.1
6H-4	158.55	53.7	1140	117	263	34	522	1020	1.01	240	2.90	1.44	1.21	0.12	-1.92	-8.9
7H-12	168.04	76.4	998	120	294	54	1430	626	0.98	406	2.76	1.66	1.60	NA	-2.31	-10
8H-4	175.11	37.9	976	120	314	28	1210	990	1.03	247	3.12	10.1	1.96	NA	-2.31	-6.5
9H-4	184.00	87.3	981	121	350	30	428	854	0.96	366	2.84	1.97	1.70	NA	-2.39	-7.7
10H-10	193.35	85.6	1030	122	363	30	239	620	0.98	432	3.26	5.25	3.95	NA	-2.47	-9.2
13H-2	203.23	68.8	858	109	18.8	35	229	232	1.05	372	3.50	0.55	0.93	NA	-2.38	-7.6
14H-4	211.32	62.3	901	122	391	28	299	866	1.03	317	2.83	1.49	1.07	NA	-2.51	-8.2
15H-4	217.30	8.73	991	126	388	25	398	641	0.82	384	1.73	0.24	5.53	0.64	-2.55	-12
18H-4	222.72	79.2	992	126	403	58	803	709	0.83	475	1.94	1.56	4.52	NA	-2.27	-11
19H-4	228.34	25.5	1110	126	365	61	1120	1230	0.82	195	1.99	NA	3.23	1.35	-2.59	-9.0
20X-5	235.34	55.4	1110	114	33.6	24	1860	885	0.89	353	1.98	0.40	2.43	NA	-2.49	-16
21X-4	243.42	44.2	1200	111	18.8	27	2210	676	0.79	218	1.67	1.57	1.96	NA	-2.59	-12
315-C0001H-																
1R-3	232.63	35.8	1220	115	38.7	34	1310	1420	0.87	215	2.02	1.21	1.82	NA	-2.44	-14
3R-4	253.02	26.6	1220	108	25.9	21	6160	714	0.81	114	1.94	0.18	1.86	NA	-2.52	-12
4R-4	262.54	47.0	1180	115	49.9	26	5730	1530	0.77	198	2.36	4.13	3.97	0.23	-2.72	-14
5R-3	270.64	80.2	1080	117	45.2	25	2330	911	0.86	403	2.41	2.31	1.09	NA	-2.49	-12
6R-2	278.71	78.4	1150	113	28.7	31	312	415	0.74	391	2.11	1.12	1.08	0.75	-2.10	-11
7R-4	291.06	79.8	999	118	34.2	35	403	387	0.83	590	2.94	1.40	1.19	NA	-2.57	-12
8R-4	300.93	105	1030	109	7.50	22	709	350	0.79	732	2.22	2.23	2.18	NA	-2.39	-10
10R-4	316.06	136	1170	132	240	30	1350	1260	0.83	458	3.36	5.34	0.96	0.12	-2.81	-13
11R-4	325.55	60.0	1150	115	8.7	35	501	715	0.80	368	2.82	0.23	2.07	NA	-2.55	-13
12R-4	335.06	103	1340	128	219	24	720	932	0.71	387	2.36	1.10	1.08	0.96	-2.52	-12
13R-5	345.95	81.9	1220	134	239	21	662	1400	0.74	177	2.58	1.26	0.38	NA	-2.99	-11
14R-4	354.04	47.6	1230	134	219	18	606	1510	0.70	295	2.18	1.84	2.41	NA	-2.93	-10
16R-4	373.04	65.0	1380	135	249	15	813	2460	0.72	116	3.06	2.83	1.50	NA	-3.12	-10
18R-3	390.64	79.4	1190	121	53.5	9.4	163	1030	0.78	209	2.82	1.20	0.29	NA	-3.12	-8.8
19R-3	400.12	56.0	1200	122	25.0	8.1	470	1700	0.76	232	2.77	0.38	0.70	0.57	-2.97	-9.9
21R-3	415.12	34.9	1110	126	30.3	7.5	1830	1400	0.80	183	2.98	1.83	1.16	NA	-3.12	-9.5
23R-2	430.57	104	1180	139	222	23	1480	618	0.76	509	2.75	1.43	0.67	0.28	-3.28	-11
24R-2	440.14	105	1350	119	206	11	303	2430	0.71	278	2.62	4.73	0.74	NA	-3.24	-9.9