

Table T14. Interstitial water geochemistry, Site C0002. (See table notes.) (Continued on next page.)

Core, section	Depth CSF (m)	pH	Alkalinity (mM)	Salinity (refractive index)	Cl (mM)	Br (μM)	SO ₄ (mM)	PO ₄ (μM)	NH ₄ (mM)	Na (mM)	K (mM)	Mg (mM)	Ca (mM)	Li (μM)	B (μM)	Mn (μM)
315-C0002B-																
1R-2	476.58	7.60	18.74	1.33706	370.2	807	0.98	21.2	9.73	347	5.50	11.0	4.14	51.9	200	4.22
4R-2	504.76	7.71	16.85	1.33698	366.9	809	0.89	10.7	8.91	339	5.62	10.3	4.49	35.6	203	1.63
8R-2	534.57	7.56	17.36	1.33748	403.8	162	0.66	8.92	8.38	398	5.92	13.2	5.87	38.5	181	3.44
9R-3	545.15	7.63	17.72	1.33730	395.5	855	1.26	8.25	8.25	367	5.60	11.8	5.59	52.7	166	2.54
10R-2	553.56	7.60	17.55	1.33718	414.4	815	1.62	12.7	8.00	357	5.27	10.3	5.19	56.3	172	3.11
11R-3	564.47	7.66	15.98	1.33775	381.5	864	3.25	6.46	8.25	400	6.14	12.7	6.01	63.7	178	3.31
13R-2	582.07	7.66	16.73	1.33736	402.4	759	0.14	6.46	7.57	374	5.61	11.0	5.83	58.6	160	2.07
16R-3	611.61	7.64	13.61	1.33762	425.3	892	1.25	2.20	6.79	402	5.85	12.7	6.47	71.3	208	3.02
19R-3	640.52	7.58	12.70	1.33772	438.6	919	1.96	7.13	6.76	417	5.44	12.8	6.78	85.2	313	2.44
21R-3	659.10	7.63	11.45	1.33762	429.4	935	0.91	3.32	5.93	391	5.51	10.7	5.76	97.7	367	2.07
23R-3	678.03	7.81	12.48	1.33745	413.4	874	1.19	3.99	5.09	407	5.97	10.6	5.72	88.5	338	2.06
24R-2	686.12	7.81	9.35	1.33754	434.7	675	0.21	2.20	5.47	402	6.82	10.3	5.13	96.7	316	1.07
27R-2	714.27	7.78	11.20	1.33768	443.3	909	1.25	4.44	4.60	394	6.48	11.4	6.63	110	330	2.61
29R-2 (GRIND)	733.52	7.92	8.06	1.33706	385.4	840	0.60	2.87	4.01	363	5.71	8.49	5.18	94.1	255	1.53
30R-2	743.07	7.73	10.68	1.33787	460.4	949	1.17	5.78	4.63	418	6.81	11.9	7.24	124	349	2.40
32R-5	764.50	7.69	9.30	1.33795	474.8	945	1.40	4.89	4.07	429	6.28	12.8	8.23	125	304	3.74
33R-2	771.20	7.74	9.50	1.33799	467.7	962	1.67	3.77	4.13	434	6.32	12.8	8.50	118	297	3.75
37R-2	807.12	7.95	9.88	1.33804	479.3	933	1.18	5.03	3.55	431	6.10	12.1	8.58	137	230	3.56
38R-3	818.03	7.75	10.13	1.33802	477.0	953	0.76	4.79	3.51	445	6.91	11.8	8.33	166	253	3.00
40R-2	835.62	7.76	10.38	1.33816	482.1	932	1.81	ND	3.49	452	7.29	13.2	8.33	194	264	2.66
41R-3	846.53	7.82	9.33	1.33882	478.1	945	1.14	ND	3.47	429	6.92	11.7	7.77	222	263	2.06
43R-5	867.95	7.55	8.67	1.33799	474.1	955	0.71	5.27	3.51	436	6.65	11.5	8.28	239	293	1.20
46R-4	895.01	7.47	7.53	1.33793	472.1	952	1.09	5.27	2.99	440	6.23	11.9	9.13	256	313	2.37
48R-5	915.45	7.48	6.99	1.33790	467.1	948	0.82	ND	2.76	415	5.37	11.7	10.6	254	312	2.81
49R-3	922.11	7.50	5.80	1.33785	465.9	928	0.50	3.34	2.51	410	4.87	11.8	11.0	248	262	3.71
51R-5	943.91	8.02	6.82	1.33742	462.8	913	1.39	ND	2.17	415	3.50	13.1	14.1	219	253	8.01
55R-2	977.70	7.86	4.19	1.33788	460.4	932	1.40	ND	2.16	379	2.65	12.3	16.2	209	220	4.68
56R-2	986.85	8.03	3.58	1.33822	476.0	928	2.64	ND	2.16	410	2.77	13.7	17.8	200	219	9.65
59R-2	1011.12	8.11	3.19	1.33785	457.9	882	3.02	ND	1.55	411	2.17	13.1	18.9	187	222	9.87
61R-3	1021.53	8.22	3.30	1.33764	432.5	850	1.97	ND	1.56	369	2.15	10.0	18.0	184	251	6.81
62R-2	1024.21	7.86	2.85	1.33795	464.0	910	3.70	ND	1.78	356	1.78	12.7	20.6	178	173	7.29
64R-2	1043.20	7.69	3.90	1.33789	455.5	878	3.16	ND	1.92	411	2.92	12.0	20.0	192	325	12.7
315-C0002D-																
1H-2	1.52	7.78	6.90	1.33938	548.9	862	26.2	12.9	0.19	485	11.4	47.9	9.50	72.9	520	8.14
1H-5	4.35	8.27	13.49	1.33930	554.6	898	15.6	25.2	0.78	500	11.9	45.9	6.48	69.6	523	0.80
2H-3	8.81	8.40	27.27	1.33910	556.9	928	1.25	42.9	1.53	464	11.1	40.8	3.15	53.1	528	0.39
2H-7	13.06	8.30	26.05	1.33906	557.1	973	0.78	44.3	2.36	470	11.6	38.8	2.64	48.9	487	0.35
3H-4	19.54	8.10	25.53	1.33901	552.7	966	0.86	62.1	3.75	468	11.1	35.5	2.40	56.2	451	0.46
4H-4	29.20	7.81	17.58	1.33895	547.4	1040	0.13	93.5	5.18	483	10.1	32.3	1.88	59.2	448	0.53
5H-4	38.71	7.76	22.40	1.33895	553.3	1090	0.15	98.9	6.93	489	10.9	30.6	1.93	60.6	418	0.57
6H-5	49.43	7.74	24.65	1.33896	549.8	1120	0.01	96.2	7.86	479	10.1	30.2	2.35	63.1	436	1.30
7H-4	57.74	7.81	13.38	1.33899	554.3	1140	0.09	92.1	9.30	476	10.2	30.2	2.64	57.4	396	1.97
8H-4	66.92	7.77	25.37	1.33896	548.7	1110	0.09	75.7	9.85	481	10.2	29.9	2.83	62.6	378	2.78
9H-5	78.10	7.76	23.92	1.33893	546.0	1170	ND	58.0	11.0	494	10.1	28.1	2.85	61.3	375	3.01
10H-4	86.21	7.72	23.82	1.33891	548.0	1200	ND	59.3	11.9	483	9.47	28.3	2.80	61.1	373	1.80
11H-5	96.72	7.64	23.80	1.33890	536.8	1180	0.09	64.8	11.7	491	9.54	27.5	2.96	55.4	350	1.94
11H-6	98.06	7.82	23.58	1.33884	547.6	1160	0.11	60.7	11.0	464	9.81	27.4	2.80	61.8	339	1.75
12H-5	106.41	7.62	23.99	1.33890	544.7	1170	0.10	88.0	12.0	492	9.33	26.6	3.03	60.2	320	1.63
13H-5	115.81	7.77	24.66	1.33887	542.5	1190	0.11	67.5	12.4	480	9.24	26.5	3.10	56.6	319	1.18
14H-3	121.92	7.82	21.97	1.33779	451.9	992	0.77	82.5	10.3	395	6.78	22.0	2.65	45.2	240	1.47
14H-5	124.74	7.60	25.33	1.33886	539.0	1200	0.08	308	13.3	473	8.79	25.1	3.10	49.0	285	1.46
15X-5	133.18	7.68	29.07	1.33884	532.1	1220	0.28	328	14.2	459	8.61	26.0	3.22	52.2	288	1.51
16H-6	157.09	7.72	29.12	1.33876	528.1	1220	0.09	354	13.1	470	8.79	25.6	2.99	51.8	256	1.17
17X-4	159.77	8.23	9.69	1.33478	153.8	359	1.65	88.0	4.64	148	2.68	4.9	0.65	16.5	88.5	0.45
18H-1	200.42	7.98	25.22	1.33730	503.6	868	2.31	85.3	10.8	376	6.44	18.7	2.38	52.8	191	1.02
18H-2	200.60	7.76	35.52	1.33862	382.2	1200	0.19	259	13.0	470	8.35	25.2	2.96	65.7	258	1.08

Notes: CSF = core depth below seafloor. * = data from shore-based analyses. VSMOW = Vienna standard mean ocean water. ND in SO₄ column = <0.01 mM, ND in PO₄ column = <3.3 μM, ND in Cu column = <35 nM, ND in Pb column = <0.4 nM, NA = not analyzed.

Table T14 (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-C0002B-																
1R-2	476.58	87.6	936	56.8	9.78	44	3320	1350	0.74	430	3.35	2.95	0.92	0.00	-0.79	-12
4R-2	504.76	37.8	671	54.6	13.5	28	1120	1450	0.93	119	4.57	1.86	0.68	0.59	-0.99	-12
8R-2	534.57	44.5	830	69.9	15.1	52	6870	2910	1.03	319	4.30	0.97	2.37	NA	-0.78	-10
9R-3	545.15	34.8	785	67.5	15.9	48	13100	2020	0.87	226	3.32	0.54	2.31	NA	-0.91	-11
10R-2	553.56	48.1	969	65.3	16.5	30	918	1450	0.90	322	3.87	1.79	1.20	0.58	-1.17	-13
11R-3	564.47	39.7	979	75.4	15.0	67	5140	1740	1.03	347	3.81	1.23	2.44	0.25	-1.00	-11
13R-2	582.07	37.7	915	68.6	18.2	24	822	1680	1.00	209	4.60	0.78	1.26	0.32	-1.32	-12
16R-3	611.61	26.6	944	83.9	13.3	30	684	1730	1.08	290	5.50	1.81	1.35	0.69	-1.38	-12
19R-3	640.52	70.7	578	100	21.9	26	802	538	0.98	253	5.67	3.19	0.47	NA	-1.56	-17
21R-3	659.10	26.2	1040	106	37.4	22	251	1080	1.02	162	5.09	1.78	1.24	0.45	-1.84	-11
23R-3	678.03	36.1	913	105	50.4	26	646	2040	1.02	215	5.16	0.47	1.94	0.73	-1.77	-15
24R-2	686.12	7.44	770	111	59.4	22	458	1630	1.16	897	6.04	1.13	4.82	0.28	-1.74	-14
27R-2	714.27	40.7	921	125	61.3	19	514	1380	1.03	168	5.92	0.79	1.29	NA	-1.60	-12
29R-2 (GRIND)	733.52	18.4	900	97.0	59.6	5.8	249	1180	1.01	321	6.94	0.94	1.01	NA	NA	NA
30R-2	743.07	39.5	1060	134	54.6	26	207	2190	1.16	140	5.65	0.78	0.78	0.58	-1.69	-9.9
32R-5	764.50	39.8	1070	134	33.0	14	419	2150	1.15	225	5.60	0.68	1.82	0.46	-1.71	-9.9
33R-2	771.20	34.3	1010	130	31.1	10	294	685	1.16	140	5.85	0.60	1.13	0.59	-1.75	-13
37R-2	807.12	21.9	887	134	40.6	39	1240	747	1.17	489	6.45	NA	2.83	NA	-1.89	-11
38R-3	818.03	21.1	927	141	92.1	17	148	1640	1.23	200	6.68	0.85	2.80	NA	-1.76	-14
40R-2	835.62	16.6	1010	140	7.47	16	818	2120	1.12	311	5.71	1.00	2.91	0.59	-1.60	-13
41R-3	846.53	16.4	999	148	93.4	14	600	1110	1.04	473	5.40	0.86	3.26	NA	-1.77	-14
43R-5	867.95	26.0	1290	139	32.7	11	128	880	0.90	139	4.03	0.64	1.45	0.38	-1.91	-12
46R-4	895.01	40.7	1230	136	57.0	10	256	1270	0.90	203	3.88	0.48	0.97	0.20	-2.03	-13
48R-5	915.45	38.8	1340	122	48.3	9.5	106	1090	0.90	317	3.73	0.36	1.15	0.11	-2.10	-14
49R-3	922.11	60.8	1150	114	40.1	18	1390	2320	0.87	478	4.34	0.81	8.22	0.21	-2.11	-16
51R-5	943.91	9.49	546	95.4	26.4	21	975	406	0.72	305	5.60	0.64	1.20	0.45	-2.11	-16
55R-2	977.70	2.81	539	76.3	21.4	38	5130	310	0.81	673	7.96	1.01	9.90	NA	-1.82	-12
56R-2	986.85	0.54	613	74.3	11.8	36	1920	702	0.77	435	7.19	0.93	8.07	0.34	-1.83	-13
59R-2	1011.12	0.68	405	76.5	17.0	33	4210	214	0.50	237	4.27	0.80	3.06	NA	-1.92	-13
61R-3	1021.53	11.7	359	65.8	19.1	5.4	2240	472	0.57	356	5.67	0.45	1.04	NA	-2.10	-12
62R-2	1024.21	1.11	379	79.7	20.2	18	2220	509	0.40	431	3.59	0.56	4.38	NA	NA	NA
64R-2	1043.20	17.6	805	67.8	13.6	15	698	523	0.79	832	5.72	0.64	2.75	0.17	-2.37	-12
315-C0002D-																
1H-2	1.52	1.76	639	90.2	0.45	28	325	154	1.48	84.7	3.53	1.65	8.99	0.61	-0.08	-2.4
1H-5	4.35	0.94	726	87.6	0.68	43	ND	51.3	1.39	32.6	3.60	ND	2.27	NA	-0.01	-3.9
2H-3	8.81	0.69	700	83.5	31.3	44	151	196	1.39	14.4	4.11	0.56	1.54	0.95	0.06	-5.2
2H-7	13.06	0.54	726	82.3	135	61	146	233	1.44	12.6	4.73	1.39	1.86	1.00	0.09	-4.3
3H-4	19.54	0.96	697	85.9	117	59	154	319	1.34	17.9	4.69	0.59	1.66	0.88	0.08	-2.0
4H-4	29.20	1.33	715	80.7	95.8	69	88.1	174	1.24	16.8	4.47	0.28	11.0	0.79	0.02	-0.7
5H-4	38.71	2.50	674	82.1	90.6	82	116	114	1.22	15.0	4.84	0.03	3.63	1.01	-0.09	-4.0
6H-5	49.43	3.29	737	82.6	87.2	65	5570	1620	1.19	21.5	4.89	3.97	2.42	0.64	-0.18	-1.3
7H-4	57.74	1.88	685	81.0	83.6	70	5700	2680	1.19	21.7	6.27	6.16	2.01	5.9	-0.23	-2.4
8H-4	66.92	2.22	717	81.6	75.7	38	3470	727	1.15	29.3	6.06	0.74	1.62	0.53	-0.40	-1.3
9H-5	78.10	1.67	668	78.4	64.2	53	1190	1450	1.19	40.9	7.61	0.68	3.35	0.30	-0.50	-2.2
10H-4	86.21	2.04	779	75.5	52.1	58	1580	1330	1.20	39.9	7.75	0.55	3.58	0.44	-0.55	-0.9
11H-5	96.72	2.49	830	74.4	39.9	39	3840	2290	1.09	33.7	7.16	1.61	3.82	0.70	-0.60	0.5
11H-6	98.06	1.90	802	72.7	38.4	37	2920	995	1.07	34.7	7.45	ND	2.60	NA	-0.54	-3.1
12H-5	106.41	7.80	827	74.6	30.0	35	2010	737	1.03	56.0	7.45	0.81	3.34	0.41	-0.64	-1.5
13H-5	115.81	1.94	589	71.2	20.5	46	1420	568	1.09	131	9.91	0.65	1.89	0.09	-0.70	-3.0
14H-3	121.92	10.5	411	56.4	10.8	38	285	665	0.79	2310	7.58	ND	2.31	NA	-0.23	1.0
14H-5	124.74	41.0	718	71.1	16.5	25	712	693	0.97	241	8.72	1.22	1.08	0.67	-0.78	-3.1
15X-5	133.18	48.6	828	70.7	13.4	28	2060	959	0.88	36.0	5.35	2.70	1.34	0.38	-0.75	-2.8
16H-6	157.09	29.9	728	66.2	10.9	47	664	1590	0.98	265	6.41	2.60	1.89	1.02	-0.87	-3.3
17X-4	159.77	0.71	178	10.7	1.61	70	1590	235	0.31	137	2.15	0.89	3.41	NA	0.90	7.2
18H-1	200.42	27.8	597	46.1	13.0	115	2480	386	0.64	1900	4.86	4.82	6.80	NA	-0.23	0.7
18H-2	200.60	18.3	833	66.7	20.2	38	1680	2450	0.81	277	4.93	12.3	4.72	1.40	-0.96	-3.7