

Table 2. Chemical parameters and analytical data for selected components, Harvard pit waters.

Sample ID	Date	pH, pH units	Eh, mV	S.C., μS	DOx, ppm	Alk, ppm as HCO3	Fe2+,ppb	Fe total,ppb	Fe total,ppb	As(III),ppb	As(III),ppb	As, Tl, ppb	As, Tl, ppb	As(V),ppb	As(V),ppb	F, ppm	Cl, ppm	SO4, ppm	NO2+NO3,ppm	SiO2, ppm
Subsample—		in situ/RU	in situ	RU	in situ/RU	FU	FA	FA	RA	FA	RA	FA	RA	FA	RA	FU	FU	FU	FU	FU
98RA-HP1-0	3/11/98	8.03		1810	9.99	123.1	<2	<1.36		2.67						0.1	30	870	13	
98RA-HP1-75	3/11/98	8.07		1820	9.08	108*	<2	<1.36		2.88						0.1	30	870	13	
98RA-HP1-150	3/11/98	8.04		1820	8.95	110.5	<2	<1.36		3.03						0.1	30	870	13	
98RA-HP1-200	3/11/98	8.06		1850	8.43	105.0	<2	<1.36		3.11						0.1	30	880	13	
98RA-HP1-240	3/11/98	7.97		2120	5.00	118.3	<2	<1.36		3.14						0.1	30	870	13	
98RA-HP2	3/12/98	8.22	220	3600	6	201.8	<2	<1.36		2.74						0.2	42	2300	15	
98RA-HP3	3/12/98	8.17	223	3560	6-8	161*	<2	<1.36		2.03						<0.1	49	2200	40	
FB-03-11-98	3/11/98							<1.36								<0.1	0.9	<0.2	<0.02	
98RA1-HP1-0	6/1/98	8.07	267	1850	8.95	136.0	<2.9	<1.7		3.09		778		775			29	870	E12	16
98RA1-HP1-75	6/1/98	8.07	306	1840	8.74	131.4	4.3	<1.7		3.96		783		779			30	870	E13	16
98RA1-HP1-150	6/1/98	8.07	333	1840	7.73	133.3	<2.9	<1.7		3.78		778		774			30	870	E13	16
98RA1-HP1-200	6/1/98	8.07	342	1860	7.46	133.6	<2.9	<1.7		4.05		803		799			30	870	E13	16
98RA1-HP1-250	6/1/98	7.71	352	2310	0.61	130.5	<2.9	<1.7		3.48		793		790			30	950	E14	16
98RA1-HP2	6/3/98	8.11	269	3600	8-10	225.7	<2.9	<1.7		5.48		5.35		<0.003			39	2300	E12	19
98RA1-HP3	6/3/98	8.18	236	3500	8-10	202.4	<2.9	<1.7		3.32		5.85		2.54			43	2100	E36	33
98RA-FB-06-01	6/1/98						<2.9	<1.7		<0.004		0.090		0.090			<0.1	<0.2	<0.28	<0.03
98RA2-HP1-0	10/22/98	8.18	35	2030~	9.06~	137.8	<1.0	<1.0		9.24		783		774			31	970	<14	17
98RA2-HP1-75	10/22/98	7.87~		1889~	8.85~	135.3	12.7	12.7		11.6		785		774			32	880	13	16
98RA2-HP1-150	10/22/98	7.84~		1877~	7.55~	135.2	<1.0	<1.0		13.2		1043		1030			32	880	14	16
98RA2-HP1-200	10/22/98	7.78~		1887~	6.00~	140.5	<1.0	<1.0		9.62		955		946			32	880	14	16
98RA2-HP1-250	10/22/98	7.78	46	2038~	1.82~	138.4	<1.0	<1.0		8.56		766		757			31	880	13	16
98RA2-HP2	10/23/98	8.15	25	3980	6	239.5	<1.0	<1.0		1.80		6.01		4.20			48	2700	12	18
98RA2-HP3	10/23/98	8.10	-4	3650	6-8	181.1	<1.0	<1.0		3.53		6.19		2.67			46	2300	38	33
98RA-FB-10-22	10/22/98						<1.0	<1.0									1.3	<0.2	<0.02	0.05
98KS-HP1-0	10/28/98	8.15	130	2000		148.3	<0.38	1.64				942					29	970	14	17
98KS1-HP4-0	10/28/98	8.01	134	1919		154.7	<0.38	<0.77		6.30		885		879			26	900	13	17
98KS-HP5	10/28/98	8.42	122	478	7	203.7	<0.38	1.64		1.16		1.75		0.591			13	71	0.78	22
98KS1-HP1-0	11/8/98	8.10	156					2.09				949					31	990		17
98KS1-HP1-75	11/8/98	8.06	89					1.64				961					32	990		17
98KS1-HP1-150	11/8/98	8.17	132			140.4		<0.77				1020					31	910		16
98KS1-HP1-200	11/8/98	7.93	159			145.8		<0.77				997					31	910		16
98KS1-HP1-250	11/8/98	7.78	143	1916				<0.77				1110					31	900		16
98KS2-HP4-0	11/8/98	7.63#	108#	1935			<0.38	<0.77		6.70		811		805			29	900		17
98KS-HP6-0	11/8/98	7.91#	104#	1972			<0.38	<0.77		5.80		956		950			31	910		17
98KS-HP6-8	11/8/98	7.95#	107#	1972			<0.38	<0.77		5.27		961		956			31	920		17
98KS-HP7-10	11/8/98	7.92#	112#	1975			<0.38	<0.77		5.78		940		934			31	980		17
98KS-HP7-30	11/8/98	7.95#	109#	1969			<0.38	2.09		6.32		933		927			31	990		17
98RA3-HP1-0	12/15/98	8.12	54	1944	10.02~	146.9		2.6		10.8		747		736			33	920	13	16
98RA3-HP1-75	12/15/98	7.97	61	1944	9.88~	144.5		3.9		10.3		891		881			32	930	13	16
98RA3-HP1-150	12/15/98	8.09	56	1947	9.86~	126.7		<0.7		13		904		891			32	980	14	16
98RA3-HP1-200	12/15/98	8.03	58	1934	9.84~	125.5		<0.7		12.1		842		830			31	930	14	16
98RA3-HP1-250	12/15/98	8.12	56	1945	0.98~	138.5		<0.7		10.8		935		924			31	910	13	16
98KS3-HP4-0	12/14/98	8.00	66	1913	9.34~	132.2		<0.7		12.7		824		811			31	960	13	16
98KS1-HP6-0	12/14/98	8.04	34	1965	9.90~	151.2		<0.7		7.7		882		874			31	930	13	16
98KS1-HP6-8	12/14/98	7.99	77	1945	10.11~	145.6		<0.7		12		888		876			32	980	13	16
98KS1-HP7-10	12/14/98	8.16	140	2070	10.08~	144.8		<0.7		13.7		982		968			31	980	14	0.09
98KS1-HP7-30	12/14/98	8.16	55	1934	10.04~	146.5		<0.7		11.9		842		830			31	970	14	16
98RA-FB-12-15	12/14/98							<0.7				0.15					4.5	<0.2	0.02	0.07
99RA2-HP1-0	6/24/99	8.31	86	2060	8.15~	140.4		0.71		3.56		916.4		913			31	990		18
99RA2-HP1-0.1	6/24/99	8.31	86	2060	8.15~	138.8		1.13	9.95	2.59	3.68	791	1031	788	1027		31	990		18
99RA2-HP1-75	6/24/99	8.12	95	1979~	9.93~	134.6		2.39	11.2	3.15	3.15	941	960	938	957		31	960		17
99RA2-HP1-150	6/24/99	8.07	127	1963~	9.94~	135.2		2.39	9.11	4.46	3.03	930	967	926	964		30	950		17
99RA2-HP1-200	6/24/99	8.16		1965~	8.23~	143.5		2.81		3.21		1012		1009			30	970		17
99RA2-HP1-200.1	6/24/99	8.16		1965~	8.23~	137.6		4.49	25.9	3.56	3.68	1050	1107	1050	1103		31	960		17
99RA2-HP1-250	6/24/99	8.03	128	2059~	5.50~	138.9		1.97	18.8	3.15	3.62	974	1298	971	1294		30	950		17
99RA2-HP2	6/23/99	8.06	98			216.1		2.39		2.1		5.02		2.92			44	2600		20
99RA2-HP2.1	6/23/99	8.06	98			222.8		4.07	1.55	2.22	1.83	4.76	5	2.54	3.17		44	2600		20
99RA2-HP3	6/23/99	8.20	17			159.9		3.23	133	2.54	3.37	5.32	6.83	2.78	3.46		41	2500		37
99RA2-HP5	6/25/99	8.15	160			202.9		2.81	804	1.94	2.79	1.66	4.52	<0.007	1.73		13	61		22
99RA-FB-06-24	6/24/99							1.55				0.147					<0.1	0.2		<0.01
99RA3-HP1-0	9/22/99	8.28	-20	2130	7.21~	143.1		9.1	17.5	4.83	6.44	723	703	718	697		33	1100	13	18
99RA3-HP1-75	9/22/99	8.05	20	2010	6-8	135.3		<3.0	11.7	3.96	4.06	775	858	771	854		31	980	12	16
99RA3-HP1-150	9/22/99	8.05	49	2000	6-8	130.2		5.4	2.5	3.837	4.842	1020	949	1016	944		31	960	12	16
99RA3-HP1-200	9/22/99	8.00	49	1990	8	139.5		7.5	17.5	4.050	3.800	985	982	981	978		31	950	12	16
99RA3-HP1-265	9/22/99	7.83	31	1980	6	136.6		<3.0	26.3	4.291	3.862	910	1150	906	1146		31	960	12	16
99RA-FB-09-22	9/22/99							4.5				0.313					5.9	0.4	<0.02	0.01

EXPLANATION  
 Eh Oxidation-reduction potential (in millivolts)  
 S.C. Specific conductivity (in microSiemens)  
 DOx Dissolved oxygen (in parts per million)  
 Alk Alkalinity, calculated as bicarbonate, average of duplicate measurements, or average of two closest measurements out of three  
 — Not determined  
 # Measured on RU, not in situ  
 † Measured using test strip or field test kit  
 Δ Value from Hydrolab profile  
 \* In alkalinity column, low confidence determination (high variability between duplicate measurements), may be revised pending further data analysis  
 E In NO2+NO3 column, subsample improperly preserved, true value may be higher