DR2004040

Isotopic and geochemical data for Saratoga springs. Major solute and pH data from Putnam and Young (1985). Concentrations of solutes are in meq/L. SiO_2 is in mmol/L. The pH values are in units. Stable isotopes of water are presented relative to VSMOW, carbon VPDB and for chlorine relative to SMOC. Helium isotopic ratios are relative to atmospheric values.

Spring	No	pH	Ca	Mg	Na	K	Cl	SO_4	HCO_3	Sr
Old Iron	1	6.20	8.0	3.3	22.6	0.87	21.4	0.05	21.0	0.09
Congress	2	6.30	3.5	2.6	15.2	1.00	11.1	0.56	15.9	0.02
Polaris	3	5.50	10.0	6.6	33.5	2.56	40	0.07	17.2	0.05
Orenda	4	6.10	18.7	12.3	100	5.88	117	0.24	53.8	0.16
Geyser	5	5.90	8.0	6.2	27.8	2.81	37	0.13	34.4	0.06
Rosemary	6	6.00	6.7	7.8	25.7	2.23	16	0.20	32.1	0.05
Hathorn #3	7	6.00	23.7	16.9	134	8.18	197	0.04	70.0	0.20
Hathorn #1	8	6.00	10.2	6.6	41.3	3.32	45.7	0.11	36.7	0.06
Big Red	9	5.90	8.2	11.5	47.8	2.56	71.4	0.09	43.6	0.13
Peerless	10	5.80	10.5	4.9	32.2	2.30	28.0	0.11	32.1	0.04
Old Red	11	6.10	7.2	3.7	20.4	0.92	18.6	0.29	22.0	0.06
Hayes	12	6.40	13.2	9.5	84.2	6.60	83.0	0.00	58.3	0.10
Deer Park	13	6.20	5.4	4.0	31.4	2.08	25.5	0.37	31.4	0.02
Governor	14	6.40	6.1	3.3	21.5	0.89	17.6	0.23	29.1	0.04
Siegel Well	15	7.70	0.7	0.2	1.2	0.10	1.0	0.10	1.8	<0.01
State Seal	16	8.00	1.3	0.3	0.4	0.02	0.3	0.26	3.2	<0.01
Lincoln	17	--	--	--	--	--	--	--	--	--

Spring	No	Br	$^{3}He/^{4}He$ (R/R_a)	Mantle He %	He/Ne Relative. Solubility	SiO_2	$\delta^{18}O$	δD	$^{87/86}Sr$	$^{37/35}Cl$	$\delta^{13}C$ CO_2	$\delta^{13}C$ DIC
Old Iron	1	0.23	--			1.61	-10.6	-66.4	--	--	--	-2.7,-3.1
Hathorn #3	2	1.39	0.43	4.8	74	0.43	-10.8, -10.8	-62.2, -65.3	0.71662	0.25	-5.2, -5.0	0.82, 0.35
Polaris	3	0.30	--	--	--	0.75	-10.8	-60.4	--	-0.11	--	--
Orenda	4	0.94	0.35	3.9	135	0.46	-10.8	-64.7	0.716416	-0.4	-8.45, -5.2, -5.2	0.28, 0.23
Geyser	5	0.33	--	--	--	1.61	-10.9, -10.9	-67.2, - 63.7	0.71497, 0.71495	0.15	-7.4, -7.1, -7.0, -7.3,-7.31	-3.5
Rosemary	6	0.24	--	--	--	1.43	-10.6	-64.6	--	-0.08		-3.259
Congress	7	0.08	--	--	--	0.57	-10.3	-64.2	--	-0.09	--	--
Hathorn #1	8	0.37	--	--	--	0.46	-10.9, -10.9	-63.8, -63.8	--	0.10	-7.9, -5.1, -5.2	--
Big Red	9	0.52	--			2.50	-10.9	-66.7	0.713052	0.26		--
Peerless	10	0.28	0.42	--	--	0.57	-10.1	-68.2	--	-0.07	--	-5.7, -5.7, -5.8
Old Red	11	0.19	0.42	--	--	1.64	-10.9	-70.8	--	0.12	--	--
Hayes	12	--	0.42	4.7	313	--	-11.1	-66.4	0.715688	0.05	-5.72	-0.52
Deer Park	13	--	--	--	--	--	-10.4	-69.6	--	0.16	--	--
Governor	14	--	--	--	--	--	-10.7	-69	--	0.18	-6.5, - 6.8, -6.8, -6.8	-3.6
Siegel Well	15	--	--	--	--	--	-10.8	-73.3	--	--	--	--
State Seal	16	--	--	--	--	--	-10.7	-72.4	--	--	--	--
Lincoln	17	--	0.44	4.9	3880	--	--	--	--	--	--	--