

TABLE 6.—Chemical analyses of water from the hot springs, cold springs, and wells

[Results in milligrams per liter, except as indicated]

Well or spring number ¹ (fig. 6)	Name of well or spring	Date of collection	Water temperature (°C)	Silica (SiO ₂)	Aluminum (Al)	Total iron (Fe)	Total manganese (Mn)	Zinc (Zn)	Calcium (Ca)	Magnesium (Mg)	Strontium (Sr)	Sodium (Na)	Potassium (K)	Ammonia as NH ₃	Bicarbonate (HCO ₃) (field)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Orthophosphate (PO ₄)	Organic nitrogen as N	Dissolved solids		pH (units) (field)	Dissolved oxygen (DO)	
																						Residue on evaporation at 180°C	Sum of constituents			Specific conductance μmho/cm at 25°C
S8	Happy Hollow Spring	1-24-72	17.5	8.4	0.00	0.00	0.00	0.03	0.2	0.3	0.00	1.3	0.2	---	² 1	1.4	2.3	0.1	0.0	0.03	---	14	11	22	4.58	6.3
W19	Belvedere Country Club well	9-25-72	16.8	6.9	.05	.98	.02	.04	.1	.1	.00	1.0	.2	0.04	5	1.6	1.4	.0	.3	.04	0.08	12	15	15	5.20	.6
W20	Frank Thompson's house well	9-24-72	16.8	7.5	.04	.02	.00	.02	.2	.1	.00	.7	.3	.04	² 0	1.6	.9	.0	.2	.00	.04	12	18	36	4.70	10.2
S10	Sleepy Valley Spring	1-28-72	12.0	11	.40	2.1	.13	.10	3.7	1.0	.01	1.3	.8	---	² 2	14	2.1	.2	.1	.35	---	36	41	47	4.82	3.3
W17	Bill Sargo's well	9-24-72	18.1	8.1	.20	2.0	.03	.02	.8	.5	.00	2.8	1.4	.00	² 0	7.4	3.6	.1	1.7	.06	.10	26	36	44	4.62	1.8
W16	R. B. Yates' well	9-25-72	21.2	7.9	.04	.04	.10	.06	5.9	1.5	.00	5.4	1.4	.02	9	10	6.4	.1	8.3	.02	.01	51	54	77	5.32	4.8
S9	Music Mountain Spring	9-27-72	20.9	2.6	.08	.04	.00	.00	11	1.4	.01	2.4	1.0	---	² 29	8.6	4.7	.1	.7	.01	---	47	60	104	7.12	---
S7	Cluster Spring	9-26-72	20.8	13	.00	.66	.25	.01	42	2.5	.10	4.6	1.7	.08	147	11	2.7	.2	.1	.12	.04	146	149	219	6.72	.0
S11	McLendon Mineral Spring	9-27-72	18.6	11	.00	1.0	.75	.06	40	1.4	.07	1.7	1.0	.06	145	7.2	1.6	.2	.1	.39	.01	131	141	232	7.15	.0
W21	Gulpha Gorge Well	9-27-72	20.4	13	.00	1.2	.13	.02	46	2.8	.08	2.9	1.5	.02	157	10	2.3	.2	.1	.07	.08	152	165	247	7.10	.0
W12	Elizabeth Brown well	9-24-72	17.4	8.7	.00	2.1	.33	.17	55	1.9	.24	1.6	.7	.06	183	7.0	2.0	.1	.31	.05	---	164	173	274	6.92	.0
W26	Whittington Avenue Spring	1-24-72	18.0	9.4	.0	.79	.08	.10	50	2.3	.20	1.5	.9	---	157	14	2.1	.2	.1	.12	---	157	164	276	6.69	.0
W25	Whittington Park well	1-28-72	18.6	11	.0	1.6	.11	.12	63	3.4	.26	1.6	1.4	---	227	9.8	1.9	.2	.1	.00	---	157	164	276	6.69	.0
S5	Echo Valley Spring	1-27-72	20.5	9.7	.0	1.3	.15	.08	67	2.9	.11	1.3	.6	---	219	7.2	2.0	.2	.1	.06	---	193	200	331	7.6	(³)
W24	Diamond Mineral Spring	1-22-72	18.8	12	.0	.37	.12	.06	66	3.6	.11	1.9	1.8	---	211	12	2.0	.3	.1	.00	---	196	202	339	7.25	.0
	Maurice Hot Spring	1-20-72	53.3	42	.0	.00	.10	.05	45	4.8	.11	4.0	1.5	---	156	9.0	1.9	.2	.0	.04	---	189	191	269	7.03	2.0
	Hot Spring No. 17	1-25-72	55.4	41	.0	.00	.00	.05	44	4.6	.11	3.9	1.5	---	160	7.8	1.8	.2	.0	.00	---	184	187	266	7.70	3.6
	Hot Spring No. 23	1-26-72	56.2	41	.0	.00	.09	.03	44	4.6	.11	3.9	1.5	---	159	8.2	1.9	.2	.2	.09	---	185	188	269	7.52	3.9
	Hot Spring No. 33	1-26-72	57.6	42	.0	.04	.27	.08	45	4.8	.11	4.0	1.5	---	164	8.2	1.9	.2	.0	.02	---	188	193	269	7.13	1.1
	Hot Spring No. 46	1-18-72	58.3	42	.0	.33	.25	.07	45	4.8	.11	4.0	1.5	---	164	7.8	1.9	.2	.0	.04	---	187	195	269	7.01	.6
	Hot Spring No. 48	1-25-72	60.0	42	.0	.02	.18	.06	45	4.7	.12	4.0	1.5	---	165	8.6	1.9	.2	.1	.00	---	189	196	276	7.27	2.4
	80,000-gallon reservoir	1-27-72	61.0	42	.0	.00	.20	.04	45	4.8	.12	4.0	1.5	---	165	8.0	1.8	.2	.0	.00	---	188	191	275	7.36	3.3
	Hot Spring No. 42	1-19-72	61.3	42	.0	.01	.23	.02	45	4.8	.11	4.0	1.5	---	159	8.6	1.9	.2	.0	.04	---	188	191	272	6.93	.0
	Hot Spring No. 49	1-21-72	61.8	41	.0	.06	.25	.06	44	4.8	.11	3.8	1.5	---	155	8.2	1.9	.2	.0	.06	---	184	191	268	6.95	.4

¹U.S. Geological Survey station numbers of wells and springs are given in table 7.²Laboratory analysis.³Contains trace of hydrogen sulfide (H₂S).

NOTE.—Differences in implied accuracy of analyses for aluminum due to differences in types of equipment used.