

Table A1. *Physical and chemical properties of water samples collected from the Boulder River Watershed, Montana, 2001-2005.*

Station name (USGS number)	Site (fig. 1)	Date	Time	Flow ¹ ft ³ /s	SC ² µS/cm	pH	TDS ³ mg/L	As- dis ⁴ µg/L	As- tot ⁵ µg/L	Cd- dis ³ µg/L	Cd- tot ⁴ µg/L	Cu- dis ³ µg/L	Cu- tot ⁴ µg/L	Fe- dis ³ µg/L	Fe- tot ⁴ µg/L	Pb- dis ³ µg/L	Pb- tot ⁴ µg/L	Zn- dis ³ µg/L	Zn- tot ⁴ µg/L
Boulder River upstream from Kleinsmith Gulch																			
6031450	3W	20010427	1045	401	77	7.6	51.8	3.15	12.9	<.04	0.22	4.79	18.3	250	6,550	0.21	5.92	5.61	41.7
6031450	3W	20010516	1100	413	66	7.6	n.d. ⁶	2.72	3.59	<.04	0.05	3.97	5.25	n.d.	n.d.	0.28	1.15	2.52	5.2
6031450	3W	20010809	930	16.9	144	8.2	n.d.	3.80	5.66	<.04	<.035	1.44	2.23	n.d.	n.d.	<.08	<1	1.56	4.0
6031450	3W	20010925	1330	9.3	160	8.5	n.d.	3.14	3.84	<.04	<.035	1.31	2.62	n.d.	n.d.	0.10	<1	1.31	6.0
6031450	3W	20020523	1255	205	73	7.6	n.d.	2.81	3.41	<.04	<.035	3.13	4.13	n.d.	n.d.	0.11	<1	3.28	6.9
6031450	3W	20020613	850	182	77	7.7	60	2.75	3.96	<.04	<.035	3.04	3.77	89	462	0.09	<1	3.77	8.6
6031450	3W	20030220	1240	14.6	144	7.8	104	1.72	<2	<.037	<.035	2.30	3.42	n.d.	n.d.	0.11	0.19	6.12	6.8
6031450	3W	20030512	830	243	103	8.1	n.d.	3.20	4.45	<.037	0.05	3.52	5.79	n.d.	n.d.	0.12	1.19	6.62	11.9
6031450	3W	20030603	840	390	53	7.8	n.d.	3.47	4.77	<.037	<.035	3.84	5.70	n.d.	n.d.	<.08	1.11	4.37	7.6
6031450	3W	20030820	930	7.4	162	7.7	n.d.	3.77	3.78	<.037	<.035	2.51	2.63	n.d.	n.d.	<.08	0.20	1.74	3.1
Boulder River downstream from Little Galena Gulch																			
6032400	58W	20010427	1245	607	81	7.4	54.6	3.50	17.3	0.13	0.95	8.62	32.1	213	5,140	0.29	10.0	26.3	117
6032400	58W	20010516	1330	781	58	6.9	n.d.	3.63	7.20	0.31	0.48	11.5	15.2	n.d.	n.d.	0.47	3.64	43.7	57.4
6032400	58W	20010809	1230	28	143	8.3	n.d.	6.71	8.33	0.42	0.55	8.79	10.6	n.d.	n.d.	<.08	<1	51.0	58.3
6032400	58W	20010926	915	14	172	8.2	n.d.	5.56	6.99	0.85	0.97	8.17	9.46	n.d.	n.d.	0.19	<1	124	133
6032400	58W	20020522	1440	397	65	7.7	n.d.	3.54	7.95	0.35	0.59	10.8	16.7	n.d.	n.d.	0.32	4.38	60.2	81.5
6032400	58W	20020613	1020	404	n.d.	7.5	50.6	3.51	7.00	0.38	0.48	10.8	13.7	90	384	0.25	2.19	55.3	66.9
6032400	58W	20030221	915	18	147	8.1	105	3.42	4.30	0.68	0.76	8.17	10.6	n.d.	n.d.	0.16	0.55	117	135
6032400	58W	20030513	1315	332	98	7.7	n.d.	3.77	5.01	0.23	0.32	7.61	9.66	n.d.	n.d.	0.24	1.14	38.0	50.0
6032400	58W	20030605	1000	497	59	7.8	n.d.	3.95	7.37	0.20	0.43	9.05	17.9	n.d.	n.d.	0.38	4.23	34.3	51.7
6032400	58W	20030820	1330	12	171	7.7	n.d.	9.72	9.23	0.30	0.38	8.90	10.1	n.d.	n.d.	0.10	0.34	30.7	37.0
6032400	58W	20040322	1200	61	148	7.8	n.d.	3.72	7.11	0.29	0.55	7.84	11.7	n.d.	n.d.	0.19	1.80	64.8	96.2
6032400	58W	20040524	1330	329	79	7.5	n.d.	2.94	5.18	0.21	0.35	6.90	9.64	n.d.	n.d.	0.14	1.66	39.6	55.0
6032400	58W	20040729	1300	23	149	8.6	n.d.	6.21	7.37	0.37	0.42	7.65	8.24	n.d.	n.d.	0.15	0.22	42.8	47.1
6032400	58W	20040922	1330	105	130	8.1	n.d.	3.46	4.15	0.39	0.53	6.24	7.41	n.d.	n.d.	0.12	0.72	54.3	70.7
6032400	58W	20050502	830	82	111	7.7	n.d.	3.31	4.41	0.29	0.32	6.56	7.96	n.d.	n.d.	0.28	0.76	55.5	61.6
6032400	58W	20050523	930	703	60	7.5	n.d.	3.96	7.60	0.23	0.38	8.12	15.7	n.d.	n.d.	0.38	4.41	35.2	52.7
6032400	58W	20050804	830	32	140	7.9	n.d.	5.81	5.35	0.45	0.45	7.11	7.53	n.d.	n.d.	0.14	0.32	65.4	77.2
6032400	58W	20050922	830	27	158	7.6	n.d.	4.50	5.00	0.46	0.55	5.20	6.10	n.d.	n.d.	0.07	0.39	92.6	99.0
Basin Creek downstream from Buckeye Mine																			
462347112180400	8W	20010426	1300	0.82	86	7.3	52.8	33.7	54.9	0.64	0.65	8.64	9.40	442	807	3.90	8.84	120	120
462347112180400	8W	20010808	1030	0.94	81	7.8	n.d.	20.6	31.3	0.24	0.34	2.60	4.79	n.d.	n.d.	1.22	3.11	50.5	52.7
462347112180400	8W	20010925	915	0.38	88	7.5	n.d.	19.6	31.6	0.19	0.33	1.41	2.99	n.d.	n.d.	0.86	3.51	48.6	54.6
462347112180400	8W	20011115	920	0.52	81	7.1	n.d.	11.9	18.8	0.44	0.47	2.93	4.18	182	360	0.32	<1	79.2	86.8

Station name (USGS number)	Site (fig. 1)	Date	Time	Flow ¹ ft ³ /s	SC ² µS/cm	pH	TDS ³ mg/L	As- dis ⁴ µg/L	As- tot ⁵ µg/L	Cd- dis ³ µg/L	Cd- tot ⁴ µg/L	Cu- dis ³ µg/L	Cu- tot ⁴ µg/L	Fe- dis ³ µg/L	Fe- tot ⁴ µg/L	Pb- dis ³ µg/L	Pb- tot ⁴ µg/L	Zn- dis ³ µg/L	Zn- tot ⁴ µg/L	
462347112180400	8W	20020611	945	2.8	n.d.	7.4	n.d.	13.7	17.6	0.59	0.61	7.39	7.83	141	209	1.31	3.24	96.7	95.4	
462347112180400	8W	20020617	1100	9.3	45	6.8	n.d.	13.6	15.1	0.39	0.40	5.94	5.62	n.d.	n.d.	1.32	2.74	57.2	61.8	
462347112180400	8W	20030324	1230	0.48	83	n.d.	68.8	19.1	24.4	0.23	0.24	2.74	3.03	n.d.	n.d.	0.50	1.02	49.8	52.3	
462347112180400	8W	20030514	1030	1.9	72	7.5	n.d.	44.3	66.9	0.91	0.97	10.2	12.0	n.d.	n.d.	1.24	5.18	187	192	
462347112180400	8W	20030603	1050	11	37	7.3	n.d.	13.4	19.7	0.30	0.32	4.50	5.16	n.d.	n.d.	1.00	4.32	49.5	53.7	
462347112180400	8W	20030821	1255	0.35	86	7.4	n.d.	34.7	37.1	0.15	0.14	2.08	2.20	n.d.	n.d.	1.27	1.45	22.8	22.5	
462347112180400	8W	20040330	1315	0.70	86	7.4	n.d.	16.2	6.09	0.61	0.64	5.80	5.90	n.d.	n.d.	1.04	1.85	113	114	
462347112180400	8W	20040524	945	5.2	50	7.1	n.d.	8.55	8.72	0.64	0.63	7.62	7.37	n.d.	n.d.	1.35	2.30	92.2	86.5	
462347112180400	8W	20040729	900	0.75	77	7.3	n.d.	12.5	19.0	0.18	0.22	1.47	2.31	n.d.	n.d.	0.20	1.19	36.1	38.0	
462347112180400	8W	20040922	900	0.92	78	7.6	n.d.	11.7	14.6	0.25	0.28	2.36	3.15	n.d.	n.d.	0.24	0.58	52.8	53.1	
462347112180400	8W	20050504	1410	2.4	80	6.8	n.d.	43.8	56.1	0.70	0.75	7.34	8.42	n.d.	n.d.	1.35	3.42	133	128	
462347112180400	8W	20050524	830	10	43	7.6	n.d.	10.2	12.6	0.26	0.29	3.57	4.59	n.d.	n.d.	0.94	3.23	41.6	44.6	
462347112180400	8W	20050803	900	0.76	75	7.4	n.d.	13.9	14.4	0.11	0.11	1.60	1.62	n.d.	n.d.	0.29	0.58	27.3	29.8	
462347112180400	8W	20050921	900	0.89	82	7.6	n.d.	15.5	20.5	0.06	0.13	0.90	1.70	n.d.	n.d.	0.20	2.15	23.7	24.0	
Jack Creek upstream from Bullion Mine Tributary																				
462155112181500	16W	20030324	1415	0.39	96	7.8	70.8	4.73	3.95	0.26	0.24	3.00	3.23	n.d.	n.d.	<.08	<.05	54.3	40.4	
462155112181500	16W	20030513	1150	2.0	83	7.6	n.d.	3.60	3.65	0.10	0.10	3.17	3.48	n.d.	n.d.	<.08	0.28	19.4	18.7	
462155112181500	16W	20030603	1300	11	41	7.4	n.d.	4.67	7.90	0.07	0.10	4.75	6.36	n.d.	n.d.	0.12	2.05	14.3	21.1	
462155112181500	16W	20030821	1145	0.25	128	7.2	n.d.	6.28	6.42	0.08	0.08	1.85	1.75	n.d.	n.d.	<.08	0.07	10.7	9.4	
462155112181500	16W	20040330	1200	0.57	129	7.4	n.d.	4.72	5.23	n.d.	0.34	n.d.	3.94	n.d.	n.d.	n.d.	<.05	n.d.	47.5	
462155112181500	16W	20040524	1120	3.9	65	7.5	n.d.	4.08	5.07	0.13	0.11	4.79	4.73	n.d.	n.d.	0.11	0.31	21.4	18.9	
462155112181500	16W	20040730	1200	0.48	92	7.3	n.d.	5.97	7.33	0.21	0.21	3.45	3.50	n.d.	n.d.	<.08	0.17	31.0	29.7	
462155112181500	16W	20040923	1200	1.8	86	7.6	n.d.	5.86	5.61	0.09	0.09	3.45	3.15	n.d.	n.d.	0.17	0.20	20.2	12.2	
462155112181500	16W	20050502	1400	0.78	118	7.7	n.d.	3.98	4.12	0.16	0.16	2.79	3.33	n.d.	n.d.	<.08	0.12	27.0	26.4	
462155112181500	16W	20050524	1130	7.7	58	7.4	n.d.	4.01	5.22	0.06	0.07	4.17	25.6	n.d.	n.d.	0.11	0.93	9.01	11.9	
462155112181500	16W	20050803	1100	0.94	86	7.4	n.d.	6.12	5.83	0.10	0.08	2.81	2.42	n.d.	n.d.	<.08	0.11	12.7	14.4	
462155112181500	16W	20050921	1200	0.73	98	7.2	n.d.	5.20	5.30	0.21	0.21	3.00	3.30	n.d.	n.d.	<.08	0.07	31.5	31.0	
Bullion Mine Tributary at mouth																				
462153112181700	17W	20010516	1500	2.6	88	6.0	n.d.	9.04	60.8	11.5	12.3	110	164	n.d.	n.d.	1.27	19.1	1,340	1,350	
462153112181700	17W	20010808	1330	0.32	198	6.2	n.d.	0.55	59.2	34.6	37.6	287	514	n.d.	n.d.	0.13	15.0	4,230	3,830	
462153112181700	17W	20010925	1040	0.17	284	5.1	n.d.	0.56	31.1	57.6	59.2	744	750	n.d.	n.d.	2.73	10.8	6,670	6,810	
462153112181700	17W	20011115	1030	0.20	207	6.5	n.d.	0.78	12.8	34.4	34.7	187	264	<10	492	0.10	5.78	4,420	4,140	
462153112181700	17W	20020523	1045	1.6	n.d.	7.3	n.d.	5.52	35.8	10.2	9.51	106	119	n.d.	n.d.	1.24	12.9	1,270	1,160	
462153112181700	17W	20020611	1325	2.0	n.d.	7.2	n.d.	14.9	40.6	8.04	8.03	101	123	476	861	1.85	10.4	884	901	
462153112181700	17W	20030324	1340	0.15	136	7.6	135	0.69	3.57	22.0	22.2	93.8	150	n.d.	n.d.	0.10	2.87	2,640	2,690	
462153112181700	17W	20030513	1225	0.60	123	7.7	n.d.	1.45	9.19	10.9	11.1	41.1	117	n.d.	n.d.	0.14	3.53	1,210	1,250	
462153112181700	17W	20030603	1230	5.7	54	7.3	n.d.	8.03	54.6	3.15	3.47	52.0	71.1	n.d.	n.d.	1.58	19.4	347	391	

Station name (USGS number)	Site (fig. 1)	Date	Time	Flow ¹ ft ³ /s	SC ² µS/cm	pH	TDS ³ mg/L	As- dis ⁴ µg/L	As- tot ⁵ µg/L	Cd- dis ³ µg/L	Cd- tot ⁴ µg/L	Cu- dis ³ µg/L	Cu- tot ⁴ µg/L	Fe- dis ³ µg/L	Fe- tot ⁴ µg/L	Pb- dis ³ µg/L	Pb- tot ⁴ µg/L	Zn- dis ³ µg/L	Zn- tot ⁴ µg/L
462153112181700	17W	20030821	1130	0.23	626	4.3	n.d.	5.05	15.3	77.1	76.7	1099	1066	n.d.	n.d.	12.9	15.2	8,110	7,810
462153112181700	17W	20031028	1250	0.14	278	5.0	n.d.	0.40	7.65	50.7	48.8	472	625	n.d.	n.d.	3.54	6.13	5,290	5,280
462153112181700	17W	20040330	1140	0.15	176	7.0	n.d.	3.51	3.14	20.2	n.d.	128	n.d.	n.d.	n.d.	2.09		2,380	
462153112181700	17W	20040524	1150	1.8	86	7.2	n.d.	5.93	14.5	6.38	6.26	71.5	73.4	n.d.	n.d.	1.47	4.57	774	716
462153112181700	17W	20040706	1315	0.68	122	6.8	n.d.	0.97	24.1	15.7	15.4	38.7	224	n.d.	n.d.	0.08	4.41	1,780	1,760
462153112181700	17W	20040730	1230	0.21	231	4.9	n.d.	0.67	26.9	37.7	38.1	533	555	n.d.	n.d.	2.53	9.40	4,520	4,270
462153112181700	17W	20040827	1400	0.30	108	6.0	n.d.	0.65	12.2	28.2	27.7	121	313	n.d.	n.d.	<.08	4.65	784	3,110
462153112181700	17W	20040923	1130	0.65	153	6.8	n.d.	1.15	8.72	18.1	18.6	47.8	217	n.d.	n.d.	0.34	4.57	1,980	2,120
462153112181700	17W	20041109	830	0.17	185	6.2	n.d.	1.01	4.24	24.2	22.9	115	197	n.d.	n.d.	0.32	2.68	2,540	2,760
462153112181700	17W	20050502	1430	0.30	147	7.5	n.d.	1.97	17.4	12.1	12.7	40.0	137	n.d.	n.d.	0.64	7.15	1,350	1,480
462153112181700	17W	20050524	1200	3.6	60	7.2	n.d.	5.13	28.5	3.11	3.20	36.5	53.4	n.d.	n.d.	1.98	18.2	340	370
462153112181700	17W	20050712	1200	1.1	118	7.2	n.d.	2.24	37.8	17.1	18.1	112	294	n.d.	n.d.	0.34	5.11	1,950	2,080
462153112181700	17W	20050803	1130	0.37	218	4.5	n.d.	2.05	40.8	36.4	35.5	604	659	n.d.	n.d.	4.39	9.78	4,240	4,510
462153112181700	17W	20050921	1130	0.25	290	4.0	n.d.	1.50	22.3	49.9	51.2	760	866	n.d.	n.d.	8.95	12.5	5,120	5,740
Jack Creek at mouth																			
462047112201900	63W	20010426	1515	6.7	86	7.3	61	3.49	32.1	2.97	4.61	44.6	170	82	2,500	0.39	12.15	359	514
462047112201900	63W	20010516	1000	18	46	7.2	n.d.	4.23	12.6	1.60	1.80	26.7	32.3	n.d.	n.d.	0.43	4.14	200	215
462047112201900	63W	20010808	1430	1.7	97	7.7	n.d.	6.11	12.6	2.18	2.53	14.3	23.7	n.d.	n.d.	0.26	1.47	243	256
462047112201900	63W	20010925	1130	0.98	113	7.5	n.d.	2.82	7.04	4.11	4.43	10.7	32.6	n.d.	n.d.	<.08	<1	448	537
462047112201900	63W	20020522	940	17	56	8.1	n.d.	4.11	21.0	1.43	2.09	26.5	43.4	n.d.	n.d.	0.38	8.78	192	217
462047112201900	63W	20020611	1115	13	n.d.	7.1	n.d.	5.98	11.3	1.49	1.61	24.9	28.7	143	363	0.52	2.74	184	190
462047112201900	63W	20030423	1100	14	48	7.5	56.9	6.77	64.9	1.83	3.61	35.6	133	n.d.	n.d.	1.12	26.4	237	409
462047112201900	63W	20030513	1335	11	66	7.7	n.d.	4.76	7.68	1.20	1.36	17.5	22.1	n.d.	n.d.	0.25	1.77	160	173
462047112201900	63W	20030604	840	22	42	7.7	n.d.	5.79	20.9	0.80	1.01	18.2	26.7	n.d.	n.d.	0.45	7.17	99.5	123
462047112201900	63W	20030820	1050	1.3	114	7.9	n.d.	5.35	7.97	3.17	3.30	12.3	22.9	n.d.	n.d.	0.12	0.62	372	391
462047112201900	63W	20040322	830	1.36	103	7.9	n.d.	2.79	5.43	2.74	2.85	18.7	36.9	n.d.	n.d.	0.21	1.18	368	379
462047112201900	63W	20040524	1030	12	63	7.4	n.d.	3.74	6.77	1.32	1.41	20.8	24.4	n.d.	n.d.	0.43	1.87	175	174
462047112201900	63W	20040729	1000	1.4	98	7.5	n.d.	3.84	7.53	2.53	2.68	13.6	23.2	n.d.	n.d.	0.11	0.64	331	339
462047112201900	63W	20040922	1000	2.1	103	7.5	n.d.	2.54	4.94	3.83	3.81	19.4	34.8	n.d.	n.d.	0.18	0.81	456	473
462047112201900	63W	20050502	1220	4.9	92	7.6	n.d.	4.08	10.9	1.58	2.04	17.6	33.2	n.d.	n.d.	0.63	4.34	226	261
462047112201900	63W	20050524	945	22	52	7.4	n.d.	4.35	13.0	0.80	0.96	14.1	21.0	n.d.	n.d.	0.44	4.26	93.3	109
462047112201900	63W	20050803	1000	2.3	99	7.4	n.d.	4.42	7.48	3.76	3.43	23.9	40.5	n.d.	n.d.	0.35	1.09	414	434
462047112201900	63W	20050921	1000	1.8	107	7.6	n.d.	2.60	4.70	3.16	3.54	13.6	27.0	n.d.	n.d.	0.08	0.32	406	423
Basin Creek at mouth																			
6031600	24W	20010426	1015	24	86	7.3	61.8	4.28	11.8	0.47	0.70	8.84	14.3	98	675	0.37	2.60	85.1	103
6031600	24W	20010517	830	126	41	7.3	n.d.	4.40	8.48	0.38	0.46	8.73	9.65	n.d.	n.d.	0.57	2.92	61.4	66.9
6031600	24W	20010809	1030	5.8	95	7.8	n.d.	6.45	9.14	0.23	0.33	4.14	5.18	n.d.	n.d.	0.19	<1	40.5	44.7

Station name (USGS number)	Site (fig. 1)	Date	Time	Flow ¹ ft ³ /s	SC ² µS/cm	pH	TDS ³ mg/L	As- dis ⁴ µg/L	As- tot ⁵ µg/L	Cd- dis ³ µg/L	Cd- tot ⁴ µg/L	Cu- dis ³ µg/L	Cu- tot ⁴ µg/L	Fe- dis ³ µg/L	Fe- tot ⁴ µg/L	Pb- dis ³ µg/L	Pb- tot ⁴ µg/L	Zn- dis ³ µg/L	Zn- tot ⁴ µg/L
6031600	24W	20010925	1230	2.9	112	7.7	n.d.	5.39	6.32	0.27	0.27	2.90	3.42	n.d.	n.d.	0.12	<1	35.4	42.7
6031600	24W	20020522	1050	113	44	7.6	n.d.	3.98	11.7	0.40	0.63	8.57	12.8	n.d.	n.d.	0.48	6.49	70.8	83.2
6031600	24W	20020611	1420	72	n.d.	7.6	41.9	4.08	6.17	0.36	0.38	8.72	8.93	68	200	0.29	1.49	52.2	56.9
6031600	24W	20030220	1000	4.2	102	7.8	74.6	3.12	3.93	0.30	0.33	2.11	2.87	n.d.	n.d.	0.11	0.29	66.9	73.8
6031600	24W	20030513	900	62	49	8.0	n.d.	5.08	7.42	0.30	0.37	6.54	8.05	n.d.	n.d.	0.33	1.42	56.6	68.9
6031600	24W	20030604	1000	106	39	7.5	n.d.	5.16	10.4	0.28	0.36	7.89	10.9	n.d.	n.d.	0.37	3.74	41.1	54.0
6031600	24W	20030820	1140	2.7	108	7.2	n.d.	7.42	7.81	0.24	0.24	3.14	3.26	n.d.	n.d.	<.08	0.24	32.5	32.1
6031600	24W	20040322	1000	7.5	100	7.5	n.d.	3.29	4.44	0.51	0.54	4.11	5.23	n.d.	n.d.	<.08	0.44	91.2	88.9
6031600	24W	20040524	930	67	50	7.2	n.d.	3.29	4.50	0.34	0.37	7.28	9.27	n.d.	n.d.	0.26	1.61	54.7	57.3
6031600	24W	20040729	1130	4.7	92	7.8	n.d.	5.80	7.04	0.25	0.27	4.52	3.97	n.d.	n.d.	0.17	0.26	39.9	40.6
6031600	24W	20040922	1100	7.0	92	7.7	n.d.	3.99	4.91	0.34	0.39	4.15	5.08	n.d.	n.d.	0.09	0.41	64.2	68.5
6031600	24W	20050502	1100	24	76	7.7	n.d.	4.09	5.52	0.28	0.33	5.27	7.19	n.d.	n.d.	0.36	1.21	56.7	62.0
6031600	24W	20050523	1315	131	42	7.4	n.d.	4.24	7.36	0.29	0.38	6.68	9.18	n.d.	n.d.	0.37	3.28	36.4	47.9
6031600	24W	20050803	1300	7.3	85	7.8	n.d.	6.89	6.60	0.24	0.23	4.63	4.76	n.d.	n.d.	0.16	0.30	31.9	37.0
6031600	24W	20050921	1330	4.8	103	8.0	n.d.	4.90	5.40	0.22	0.22	3.80	3.00	n.d.	n.d.	0.13	0.17	37.2	35.0
Uncle Sam Gulch at mouth																			
461904112144400	43W	20010517	1205	5.4	75	7.0	n.d.	3.28	58.8	13.0	13.9	162	260	n.d.	n.d.	0.57	11.6	1,170	1,170
461904112144400	43W	20010809	1430	0.56	167	7.3	n.d.	1.28	8.34	44.1	48.6	69.3	243	n.d.	n.d.	0.25	4.41	4,070	3,920
461904112144400	43W	20010926	1145	0.28	194	n.d.	n.d.	1.02	3.97	52.9	54.6	187	321	n.d.	n.d.	0.38	3.80	4,520	4,700
461904112144400	43W	20011115	1200	0.71	151	7.2	n.d.	1.12	4.51	38.8	39.2	125	237	<10	101	0.28	3.01	3,730	3,520
461904112144400	43W	20020523	1255	4.8	n.d.	7.2	n.d.	5.51	74.9	14.9	15.5	176	345	n.d.	n.d.	1.45	34.2	1,490	1,410
461904112144400	43W	20020612	1220	6.0	n.d.	7.7	n.d.	4.07	47.3	12.5	13.1	177	282	285	991	1.13	9.04	1,120	1,100
461904112144400	43W	20030325	930	0.54	112	7.5	92.5	2.85	3.26	24.2	23.0	74.8	87.9	n.d.	n.d.	0.27	0.82	2,040	2,170
461904112144400	43W	20030513	1035	3.4	74	8.0		4.48	15.2	11.1	11.2	90.2	125	n.d.	n.d.	0.83	8.19	1,010	1,020
461904112144400	43W	20030604	1140	8.4	46	7.4	n.d.	6.23	58.7	4.85	6.28	77.8	173	n.d.	n.d.	1.31	40.0	453	560
461904112144400	43W	20030821	910	0.37	269	8.0	n.d.	4.85	5.01	19.8	19.6	32.5	38.3	n.d.	n.d.	0.18	0.59	1,730	1,650
461904112144400	43W	20040330	1015	1.1	117	7.1	n.d.	4.93	24.9	17.5	20.3	86.2	165	n.d.	n.d.	0.93	3.57	1,720	2,400
461904112144400	43W	20040524	1430	3.6	73	7.2	n.d.	5.55	13.8	8.75	8.48	84.0	101	n.d.	n.d.	1.56	8.68	826	803
461904112144400	43W	20040706	900	1.5	102	7.5	n.d.	4.79	12.0	16.0	15.5	72.6	109	n.d.	n.d.	1.20	5.91	1,460	1,470
461904112144400	43W	20040730	900	0.56	156	7.4	n.d.	2.98	7.28	27.3	28.1	38.0	106	n.d.	n.d.	0.09	2.57	2,470	2,440
461904112144400	43W	20040827	1100	0.79	135	7.5	n.d.	6.28	13.9	22.7	21.7	96.2	116	n.d.	n.d.	2.25	9.31	684	2,035
461904112144400	43W	20040923	830	1.5	121	7.8	n.d.	3.94	21.1	21.1	21.6	97.9	168	n.d.	n.d.	1.34	16.9	1,830	1,940
461904112144400	43W	20041109	1230	0.55	142	6.3	n.d.	3.92	4.31	19.5	18.3	54.3	60.0	n.d.	n.d.	0.33	1.00	1,740	1,850
461904112144400	43W	20050504	1020	1.0	112	7.5	n.d.	4.87	8.86	12.5	12.5	60.9	71.2	n.d.	n.d.	0.63	3.91	1,180	1,200
461904112144400	43W	20050524	1445	7.0	57	7.1	n.d.	7.25	66.4	5.12	7.17	70.1	176	n.d.	n.d.	1.17	38.2	452	578
461904112144400	43W	20050712	830	1.6	101	7.8	n.d.	5.54	17.9	12.6	13.4	75.8	107	n.d.	n.d.	1.03	6.47	1,200	1,300

Station name (USGS number)	Site (fig. 1)	Date	Time	Flow ¹ ft ³ /s	SC ² µS/cm	pH	TDS ³ mg/L	As- dis ⁴ µg/L	As- tot ⁵ µg/L	Cd- dis ³ µg/L	Cd- tot ⁴ µg/L	Cu- dis ³ µg/L	Cu- tot ⁴ µg/L	Fe- dis ³ µg/L	Fe- tot ⁴ µg/L	Pb- dis ³ µg/L	Pb- tot ⁴ µg/L	Zn- dis ³ µg/L	Zn- tot ⁴ µg/L
461904112144400	43W	20050804	1000	0.74	21	7.7	n.d.	6.54	8.22	22.7	21.0	82.8	95.2	n.d.	n.d.	0.99	2.48	1,960	1,990
461904112144400	43W	20050922	1045	0.81	162	7.3	n.d.	4.00	5.50	21.9	23.4	61.2	80.2	n.d.	n.d.	0.41	1.41	1,970	1,950
Cataract Creek at mouth																			
6031960	47W	20010427	900	22.4	99	7.7	67.3	3.14	11.9	3.49	4.02	60.0	103	112	572	0.74	6.71	325	376
6031960	47W	20010517	1300	60	55	7.2	n.d.	2.68	8.97	1.25	1.47	28.7	32.6	n.d.	n.d.	0.39	3.30	134	145
6031960	47W	20010809	1130	3.9	135	7.9	n.d.	3.52	5.17	3.45	4.03	11.7	17.1	n.d.	n.d.	0.09	<1	296	287
6031960	47W	20010926	1025	2.2	155	8.2	n.d.	3.27	4.07	4.70	4.73	11.7	13.5	n.d.	n.d.	0.14	<1	333	381
6031960	47W	20020523	1425	51.8	n.d.	7.0	n.d.	3.11	7.83	1.67	1.76	30.6	37.5	n.d.	n.d.	0.98	4.28	198	186
6031960	47W	20020612	900	86.6	n.d.	7.8	n.d.	2.45	7.18	1.17	1.31	25.4	30.7	99	327	0.34	2.76	129	139
6031960	47W	20030220	1115	2.3	130	7.5	91.1	3.12	2.80	3.01	3.07	9.52	10.2	n.d.	n.d.	0.37	0.39	284	307
6031960	47W	20030513	1145	46	71	7.7	n.d.	2.30	4.03	1.19	1.34	16.5	22.0	n.d.	n.d.	0.29	1.65	139	148
6031960	47W	20030604	1300	67.6	50	7.3	n.d.	3.42	11.3	0.84	1.05	19.9	26.9	n.d.	n.d.	0.55	6.21	97.8	118
6031960	47W	20030820	1230	2	155	8.2	n.d.	5.53	5.12	1.91	1.89	7.13	8.59	n.d.	n.d.	<.08	0.15	130	129
6031960	47W	20040322	1100	4.56	132	7.6	n.d.	3.11	3.56	2.22	2.29	10.2	11.3	n.d.	n.d.	0.13	0.39	232	228
6031960	47W	20040524	1200	44.6	57	7.4	n.d.	2.38	3.93	0.98	1.11	15.5	18.7	n.d.	n.d.	0.26	2.00	126	128
6031960	47W	20040729	1200	3.83	129	8.0	n.d.	3.91	4.73	2.44	2.51	8.93	10.8	n.d.	n.d.	0.10	0.41	216	212
6031960	47W	20040922	1230	8.33	112	7.8	n.d.	2.63	3.15	2.97	3.13	17.0	21.6	n.d.	n.d.	0.18	1.05	283	286
6031960	47W	20050502	1000	7.42	104	7.8	n.d.	2.72	3.55	1.34	1.49	12.8	15.9	n.d.	n.d.	0.56	2.23	160	167
6031960	47W	20050523	1230	118	47	7.6	n.d.	2.93	10.8	0.67	0.98	15.7	25.9	n.d.	n.d.	0.52	7.57	77.8	102
6031960	47W	20050803	1400	5.06	123	7.8	n.d.	5.25	5.05	2.07	1.90	11.1	12.1	n.d.	n.d.	0.25	0.76	155	177
6031960	47W	20050922	930	3.30	145	7.8	n.d.	3.70	3.90	2.56	2.66	8.70	8.60	n.d.	n.d.	0.15	0.29	245	245
High Ore Creek at mouth																			
6032300	56W	20010406	1300	1.53	342	8.1	216	18.3	87.6	3.14	6.30	3.39	18.9	<10	1,660	0.09	64.9	1,335	1,800
6032300	56W	20010925	1440	0.41	404	8.3	n.d.	27.1	33.5	3.24	3.58	2.98	4.46	n.d.	n.d.	0.27	3.47	559	607
6032300	56W	20011115	1300	0.44	361	7.9	n.d.	18.9	24.1	4.01	4.17	2.29	3.20	<10	65.0	0.23	3.71	1,140	1,180
6032300	56W	20020522	1400	7.1	238	8.2	n.d.	20.3	52.3	2.63	3.84	5.26	15.6	n.d.	n.d.	1.21	48.1	773	944
6032300	56W	20020612	1335	4	183	8.2	145	18.2	48.6	2.98	4.12	5.51	11.9	38	736	0.76	36.8	720	973
6032300	56W	20020809	945	1.28	347	8.3	n.d.	22.7	32.9	2.91	3.31	4.44	7.98	n.d.	n.d.	5.21	17.6	743	844

¹Streamflow in ft³/s.

²Specific conductance in µS/cm at 25°C.

³Total dissolved solids. Total concentration of material that passes through a 0.45-µm filter.

⁴Dissolved metal concentration. Concentration of a metal that passes through a 0.45-µm filter.

⁵Total concentration is the concentration of a metal in the unfiltered fraction and includes dissolved and suspended material.

⁶Not determined.