

Table A2. Major and trace element concentrations from total digestions of streambed sediment from the Boulder River watershed study area, Montana, collected in July 2001 and Sept. 2003. The first two digits of the field number indicate the sampling year.

Field No.	Site	Al	Ca	Fe	K	Mg	Na	P	Ti	Ag	As	Ba	Cd	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sr	V	Zn
		(percent)										(parts per million)											
Boulder River																							
01-BMS-010	2S	8.2	3.0	3.1	2.2	1.1	2.5	0.08	0.44	<2	<10	930	3	8	43	22	1,200	<2	15	22	730	94	110
03-BMS-110	2S	8.1	2.6	2.7	2.1	0.86	2.3	0.04	0.40	<2	10	960	<2	7	40	18	1,300	3	15	24	690	83	110
01-BMS-011	6S	7.9	3.2	4.5	2.0	1.0	2.6	0.09	0.56	<2	26	840	4	13	52	110	980	<2	14	32	700	150	250
03-BMS-111	6S	8.2	2.8	2.9	2.1	0.90	2.5	0.08	0.40	<2	20	860	4	8	39	87	1,300	2	14	38	680	92	490
01-BMS-014	9S	7.4	2.8	5.9	2.0	0.92	2.4	0.09	0.58	<2	39	830	7	18	62	65	1,100	<2	15	47	630	200	440
03-BMS-114	9S	8.1	2.7	3.2	2.2	0.84	2.4	0.08	0.38	<2	47	860	9	11	42	110	1,500	3	15	65	640	100	660
01-BMS-017	12S	7.8	2.8	5.1	2.2	0.75	2.5	0.08	0.40	<2	220	830	7	15	55	110	1,200	3	13	100	670	170	690
03-BMS-117	12S	7.8	2.7	5.4	2.1	0.83	2.3	0.10	0.52	2	270	820	10	18	55	120	1,700	4	15	120	580	180	1,000
01-BMS-018	13S	7.9	2.8	5.3	2.2	0.88	2.4	0.09	0.47	<2	210	880	8	16	57	96	1,200	<2	14	89	670	180	760
01-BMS-018-d	13S	7.7	2.8	5.4	2.2	0.86	2.4	0.09	0.46	<2	170	850	8	15	57	86	1,100	<2	15	91	640	180	740
03-BMS-118	13S	7.8	2.5	4.1	2.8	1.5	1.8	0.13	0.46	<2	34	650	8	20	27	100	1,400	5	20	68	380	110	670
01-BMS-019	15S	7.3	2.4	5.8	2.2	0.82	2.2	0.08	0.42	4	260	880	8	19	59	120	1,100	<2	15	120	600	190	880
03-BMS-119	15S	7.4	2.5	8.6	2.2	0.81	2.0	0.11	0.58	3	390	810	8	26	89	120	1,400	5	18	120	490	300	860
Basin Creek Drainage																							
01-BMS-001	20S	7.4	2.3	15.0	2.3	1.0	1.5	0.24	0.91	<2	60	610	11	52	150	36	1,400	6	26	78	290	630	280
03-BMS-101	20S	8.3	2.4	9.1	2.6	0.86	1.7	0.20	0.65	<2	66	590	4	28	78	25	1,100	6	17	75	330	370	240
01-BMS-002	21S	7.7	2.4	8.9	2.3	1.0	1.6	0.17	0.66	5	2,500	560	11	33	72	110	1,700	3	18	1,000	330	330	800
03-BMS-102	21eS	8.8	2.6	6.2	2.4	1.2	1.8	0.18	0.60	<2	460	570	5	23	49	54	1,000	5	18	260	360	230	440
01-BMS-006	24S	7.5	1.4	3.5	2.6	0.61	1.3	0.10	0.34	<2	130	760	6	14	22	48	1,200	3	14	180	280	89	410
01-BMS-008	26S	7.4	1.9	4.6	2.4	0.84	1.5	0.12	0.46	2	410	700	10	28	35	220	1,500	4	14	220	310	140	790
01-BMS-009	31S	6.9	1.8	5.4	2.6	0.68	1.6	0.11	0.48	<2	120	750	8	22	50	88	1,400	2	14	150	340	180	600
03-BMS-109	31S	7.8	1.8	3.5	2.9	0.68	1.6	0.09	0.38	<2	140	800	7	13	26	90	1,300	4	12	150	330	110	640
01-BMS-007	42S	7.0	2.7	6.0	2.3	1.2	1.6	0.15	0.65	3	490	620	13	35	50	290	1,700	3	17	270	330	200	1,300
03-BMS-107	42S	7.5	2.3	5.2	2.3	1.0	1.6	0.11	0.44	4	620	660	20	42	37	430	2,400	6	19	320	320	150	2,200
Cataract Creek Drainage																							
01-BMS-003	46S	7.1	2.8	15.0	2.0	0.86	2.2	0.14	0.83	<2	28	670	11	45	140	29	1,200	<2	21	48	450	580	210
03-BMS-103	46S	7.3	2.7	15.0	1.8	0.86	2.1	0.13	0.81	<2	74	660	5	40	140	33	1,300	4	22	30	430	620	220
01-BMS-004	49S	7.9	2.7	5.1	2.3	0.88	2.3	0.11	0.44	5	120	670	6	13	40	120	1,100	<2	14	130	500	170	600
03-BMS-104	49S	6.0	2.3	19.0	1.7	0.60	1.8	0.12	1.2	4	110	750	8	56	190	100	1,800	5	25	74	360	820	360
01-BMS-005	50S	7.1	2.4	10.0	2.2	0.64	2.1	0.10	0.74	6	570	690	22	61	84	740	2,500	2	17	360	430	360	1,800
03-BMS-105	50S	8.0	2.4	5.9	2.4	0.74	2.2	0.11	0.59	13	720	650	22	43	41	770	2,500	6	14	510	440	180	2,300
03-BMS-105R	50S	7.8	2.4	5.8	2.3	0.72	2.1	0.10	0.58	11	670	630	22	42	41	740	2,400	6	14	490	420	180	2,200

Field No.	Site	Al	Ca	Fe	K	Mg	Na	P	Ti	Ag	As	Ba	Cd	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sr	V	Zn
		(percent)										(parts per million)											
01-BMS- 013	53S	7.3	2.2	6.9	2.6	0.77	2.0	0.10	0.46	2	160	870	13	30	73	260	1,400	2	17	150	450	240	1,200
03-BMS-113	53S	7.7	2.2	3.9	2.5	0.60	2.2	0.08	0.35	4	310	690	15	20	35	360	1,400	5	12	310	460	130	1,500
01-BMS- 012	57S	6.8	2.1	9.6	2.1	0.67	2.0	0.11	1.2	5	1,200	640	27	62	70	1,400	3,300	4	16	740	380	320	1,600
03-BMS-112	57S	7.3	1.8	5.2	2.2	0.60	1.8	0.10	0.50	8	1,300	550	26	45	30	1,200	2,400	8	12	840	370	140	1,900
High Ore Creek Drainage																							
01-BMS- 015	59S	6.8	1.9	8.8	2.0	0.50	2.1	0.14	0.30	20	2,200	590	19	29	74	230	3,500	7	17	1,200	440	230	2,600
03-BMS-115	59S	6.7	1.8	7.3	2.0	0.47	1.9	0.12	0.27	17	2,000	630	28	37	61	190	11,000	8	23	1,000	420	190	5,900
01-BMS- 016	63S	4.5	1.7	19.0	1.6	0.58	1.0	0.13	0.36	33	6,000	510	37	78	180	520	7,000	15	28	1,200	240	690	5,500
03-BMS-116	63S	5.8	1.9	12.0	2.1	0.66	1.3	0.12	0.36	26	3,000	610	22	41	100	320	5,800	9	21	810	280	400	4,500
NIST Standards																							
SRM 2709	2001	7.0	1.9	3.3	2.0	1.5	1.2	0.06	0.33	<2	<10	900	3	13	120	33	520	3	80	15	230	110	100
SRM 2709	2003	7.4	2.0	3.6	2.0	1.5	1.2	0.07	0.34	<2	24	940	<2	12	120	34	560	4	84	15	230	120	110
SRM 2711	2001	6.4	3.0	2.8	2.4	1.0	1.2	0.09	0.27	5	96	720	35	9	43	120	620	2	21	1,000	250	80	350
SRM 2711	2003	6.6	3.0	2.7	2.4	1.0	1.2	0.09	0.27	5	93	720	35	10	42	110	620	3	22	1,100	230	82	330
SRM 2704	2001	6.3	2.8	4.2	2.1	1.3	0.63	0.11	0.26	<2	21	470	6	19	150	100	590	4	48	150	140	98	450
SRM 2704	2003	6.3	2.8	4.1	2.0	1.2	0.60	0.11	0.32	<2	27	460	4	17	140	96	570	6	46	160	130	98	430