

Table 10. Lead isotopic data from bed sediments, Boulder River watershed, northern Jefferson County, Montana

Site Number (fig. 1)	Sample	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2\text{ s}$ mean	$\frac{^{207}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2\text{ s}$ mean	$\frac{^{208}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2\text{ s}$ mean	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	$\pm 2\text{ s}$ mean	$\frac{^{208}\text{Pb}}{^{206}\text{Pb}}$	$\pm 2\text{ s}$ mean
Boulder River											
1S	97-BMS-137	18.146	0.011	15.577	0.014	38.248	0.046	0.85845	0.00026	2.1078	0.0013
	98-BMS-114	18.112	0.011	15.548	0.014	38.167	0.046	0.85848	0.00026	2.1074	0.0013
2S	96-BM-135	18.080	0.011	15.581	0.014	38.228	0.046	0.86181	0.00026	2.1144	0.0013
3S	97-BMS-115	18.263	0.011	15.590	0.014	38.371	0.046	0.85362	0.00026	2.1010	0.0013
	98-BMS-113	18.318	0.011	15.568	0.014	38.416	0.046	0.84992	0.00026	2.0973	0.0013
4S	96-BM-121	18.425	0.011	15.589	0.014	38.397	0.046	0.84604	0.00025	2.0839	0.0013
5S	96-BM-125A	18.014	0.011	15.539	0.014	38.126	0.046	0.86257	0.00026	2.1164	0.0013
	96-BM-125B	18.190	0.012	15.564	0.014	38.224	0.047	0.85563	0.00026	2.1014	0.0013
6S	96-BM-124A	18.123	0.012	15.575	0.015	38.223	0.047	0.85942	0.00026	2.1091	0.0013
	96-BM-124B	18.033	0.011	15.549	0.014	38.055	0.046	0.86225	0.00026	2.1103	0.0013
7S	97-BMS-114	18.062	0.013	15.553	0.016	38.126	0.049	0.86108	0.00027	2.1108	0.0013
8S	96-BM-127A	18.073	0.011	15.563	0.014	38.148	0.046	0.86114	0.00026	2.1108	0.0013
	96-BM-127B	18.035	0.011	15.558	0.014	38.127	0.046	0.86266	0.00026	2.1141	0.0013
9S	96-BM-128A	18.031	0.011	15.561	0.014	38.145	0.046	0.86303	0.00026	2.1156	0.0013
	96-BM-128B	17.972	0.011	15.557	0.014	38.060	0.046	0.86561	0.00026	2.1177	0.0013
10S	97-BMS-112	18.018	0.011	15.554	0.014	38.088	0.046	0.86325	0.00026	2.1139	0.0013
	98-BMS-116	18.067	0.011	15.552	0.014	38.108	0.046	0.86083	0.00026	2.1093	0.0013
11S	96-BM-130A	18.026	0.016	15.568	0.017	38.148	0.055	0.86366	0.00028	2.1163	0.0016
	96-BM-130B	18.011	0.011	15.554	0.014	38.083	0.046	0.86358	0.00026	2.1144	0.0013
12S	96-BM-129A	18.030	0.011	15.566	0.014	38.145	0.046	0.86336	0.00026	2.1157	0.0013
	96-BM-129B	18.065	0.012	15.557	0.015	38.141	0.047	0.86122	0.00027	2.1114	0.0013
13S	96-BM-137A	18.067	0.012	15.594	0.015	38.254	0.048	0.86312	0.00027	2.1174	0.0013
	96-BM-137B	18.059	0.011	15.555	0.014	38.132	0.046	0.86136	0.00026	2.1115	0.0013
14S	97-BMS-111	18.052	0.012	15.551	0.015	38.104	0.048	0.86145	0.00031	2.1108	0.0013
15S	96-BM-138	18.056	0.011	15.556	0.014	38.121	0.046	0.86154	0.00026	2.1113	0.0013

Table 10. Lead isotopic data from bed sediments, Boulder River watershed, northern Jefferson County, Montana—(continued)

Site Number (fig. 1)	Sample	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2 \text{ s}$	$\frac{^{207}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2 \text{ s}$	$\frac{^{208}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2 \text{ s}$	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	$\pm 2 \text{ s}$	$\frac{^{208}\text{Pb}}{^{206}\text{Pb}}$	$\pm 1 \text{ s}$
16S	96-BM-132	18.040	0.012	15.564	0.015	38.175	0.047	0.86278	0.00026	2.1162	0.0013
17S	96-BM-134	18.078	0.011	15.578	0.014	38.214	0.046	0.86171	0.00026	2.1138	0.0013
18S	96-BM-133	18.119	0.012	15.589	0.015	38.289	0.047	0.86041	0.00026	2.1132	0.0013
Basin Creek											
20S	98-BMS-104	18.016	0.013	15.557	0.015	38.038	0.048	0.86352	0.00026	2.1113	0.0013
21aS	97-BMS-101-19	18.004	0.011	15.572	0.014	38.091	0.046	0.86496	0.00026	2.1158	0.0013
21eS	96-BM-136	17.895	0.011	15.552	0.014	38.030	0.046	0.86905	0.00026	2.1252	0.0013
22S	96-BM-107	18.185	0.011	15.572	0.014	38.142	0.046	0.85628	0.00026	2.0975	0.0013
23S	96-BM-109	17.919	0.011	15.546	0.014	38.014	0.046	0.86756	0.00026	2.1214	0.0013
24S	98-BMS-103	18.005	0.012	15.571	0.014	38.105	0.047	0.86483	0.00027	2.1164	0.0013
25S	98-BMS-101	17.969	0.011	15.559	0.014	38.063	0.046	0.86587	0.00026	2.1183	0.0013
26S	98-BMS-102	17.934	0.011	15.545	0.014	37.985	0.046	0.86679	0.00026	2.1180	0.0013
27S	96-BM-110	17.959	0.011	15.560	0.014	38.044	0.046	0.86643	0.00026	2.1185	0.0013
29S	96-BM-122	17.995	0.011	15.556	0.014	38.056	0.046	0.86447	0.00026	2.1148	0.0013
30S	97-BMS-117	17.987	0.011	15.559	0.014	38.058	0.046	0.86499	0.00026	2.1159	0.0013
	98-BMS-110	18.011	0.011	15.559	0.014	38.065	0.046	0.86388	0.00026	2.1135	0.0013
31S	96-BM-126	18.005	0.011	15.548	0.014	38.027	0.046	0.86355	0.00026	2.1121	0.0013
Jack Creek											
32S	97-BMS-102s1	18.079	0.011	15.559	0.014	38.170	0.046	0.86062	0.00026	2.1113	0.0013
34S	96-BM-115	17.927	0.011	15.556	0.014	37.992	0.046	0.86771	0.00026	2.1193	0.0013
35S	97-BMS-104G	17.925	0.011	15.560	0.014	37.997	0.046	0.86805	0.00026	2.1198	0.0013
37S	97-BMS-106G	17.923	0.011	15.555	0.014	38.000	0.046	0.86786	0.00026	2.1202	0.0013
38S	97-BMS-140	17.922	0.011	15.534	0.014	38.003	0.046	0.86678	0.00026	2.1205	0.0013
	99-BMS-107	17.963	0.013	15.513	0.016	38.121	0.050	0.86359	0.00030	2.1222	0.0014
39S	96-BM-112	17.930	0.011	15.552	0.014	38.006	0.046	0.86737	0.00026	2.1197	0.0013

Table 10. Lead isotopic data from bed sediments, Boulder River watershed, northern Jefferson County, Montana—(continued)

Site Number (fig. 1)	Sample	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2\text{ s}$	$\frac{^{207}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2\text{ s}$	$\frac{^{208}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2\text{ s}$	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	$\pm 2\text{ s}$	$\frac{^{208}\text{Pb}}{^{206}\text{Pb}}$	$\pm 1\text{ s}$
40S	97-BMS-107GA	17.986	0.011	15.581	0.014	38.129	0.046	0.86634	0.00026	2.1200	0.0013
	98-BMS-111	17.927	0.011	15.542	0.014	37.993	0.046	0.86700	0.00026	2.1194	0.0013
42S	96-BM-108	17.949	0.012	15.577	0.015	38.087	0.047	0.86788	0.00026	2.1220	0.0013
43S	96-BM-113	18.046	0.012	15.592	0.015	38.220	0.047	0.86407	0.00026	2.1180	0.0013
	96-BM-114	17.897	0.015	15.544	0.017	37.984	0.051	0.86851	0.00027	2.1224	0.0013
Cataract Creek											
44S	97-BMS-120	18.213	0.021	15.604	0.021	38.348	0.060	0.85675	0.00029	2.1056	0.0013
45S	97-BMS-124	18.024	0.011	15.566	0.014	38.183	0.046	0.86363	0.00026	2.1184	0.0013
46S	96-BM-120	17.990	0.011	15.554	0.014	38.103	0.046	0.86458	0.00026	2.1180	0.0013
	97-BMS-121	18.024	0.011	15.581	0.014	38.194	0.046	0.86447	0.00026	2.1191	0.0013
	98-BMS-109	18.033	0.013	15.556	0.015	38.124	0.048	0.86263	0.00026	2.1141	0.0013
47S	97-BMS-126	17.951	0.011	15.577	0.014	38.151	0.046	0.86779	0.00026	2.1253	0.0013
48S	96-BM-119	17.915	0.011	15.542	0.014	38.028	0.046	0.86755	0.00026	2.1228	0.0013
49S	97-BMS-127	17.945	0.011	15.572	0.014	38.133	0.046	0.86777	0.00026	2.1249	0.0013
50S	96-BM-117	17.929	0.011	15.546	0.014	38.008	0.046	0.86709	0.00026	2.1199	0.0013
	97-BMS-136	17.919	0.011	15.550	0.014	38.001	0.046	0.86777	0.00026	2.1207	0.0013
	98-BMS-118	17.923	0.011	15.548	0.014	38.003	0.046	0.86747	0.00026	2.1204	0.0013
51S	96-BM-131	17.937	0.011	15.558	0.014	38.045	0.046	0.86738	0.00026	2.1210	0.0013
52S	97-BMS-128	18.021	0.011	15.546	0.014	38.126	0.046	0.86268	0.00026	2.1156	0.0013
53S	96-BM-106	17.949	0.013	15.559	0.015	38.076	0.048	0.86682	0.00027	2.1213	0.0013
Uncle Sam Gulch											
54S	97-BMS-108s1	18.055	0.012	15.572	0.015	38.283	0.047	0.86246	0.00026	2.1203	0.0013
55S	96-BM-116	17.921	0.011	15.558	0.014	38.022	0.046	0.86816	0.00026	2.1217	0.0013
57S	96-BM-118	17.925	0.011	15.560	0.014	38.028	0.046	0.86808	0.00026	2.1215	0.0013

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Site Number (fig. 1)	Sample	$\frac{^{206}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2 \text{ s}$	$\frac{^{207}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2 \text{ s}$	$\frac{^{208}\text{Pb}}{^{204}\text{Pb}}$	$\pm 2 \text{ s}$	$\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$	$\pm 2 \text{ s}$	$\frac{^{208}\text{Pb}}{^{206}\text{Pb}}$	$\pm 1 \text{ s}$
High Ore Creek											
58S	98-BMS-115	18.227	0.013	15.578	0.015	38.278	0.048	0.85464	0.00026	2.1001	0.0013
59S	96-BM-101	18.069	0.012	15.548	0.015	38.121	0.047	0.86047	0.00026	2.1098	0.0013
60S	96-BM-102	18.064	0.011	15.548	0.014	38.118	0.046	0.86075	0.00026	2.1102	0.0013
61S	96-BM-103	18.057	0.011	15.541	0.014	38.093	0.046	0.86069	0.00026	2.1097	0.0013
62S	96-BM-104	18.071	0.011	15.557	0.014	38.147	0.046	0.86090	0.00026	2.1110	0.0013
63S	96-BM-105A	18.063	0.011	15.551	0.014	38.124	0.046	0.86089	0.00026	2.1106	0.0013
	97-BMS-118	18.070	0.012	15.555	0.015	38.133	0.047	0.86080	0.00026	2.1103	0.0013
	98-BMS-108	18.070	0.011	15.555	0.014	38.142	0.046	0.86085	0.00026	2.1108	0.0013
Little Boulder River											
19S	96-BM-140	18.224	0.011	15.571	0.014	38.394	0.046	0.85442	0.00026	2.1068	0.0013
	97-BMS-110	18.329	0.012	15.559	0.014	38.456	0.047	0.84890	0.00026	2.0981	0.0013
	98-BMS-105	18.253	0.011	15.557	0.014	38.384	0.046	0.85229	0.00026	2.1029	0.0013