

Table S1. Field and analytical data for  $^{36}\text{Cl}$  samples from the Bishop Creek area.

Map Number													
Sample Number			BCS92-2CR	BCS92-3CR	BCS92-4CR	1 BCR89-1	2 BPCR90-27	3 BPCR90-28	4 BPCR90-29	5 BPCR90-30	6 BPCR90-31	7 BPCR90-32	8 BPCR90-5
R <sub>36</sub>	sample <sup>36</sup> Cl/Cl ratio	( <sup>36</sup> Cl/10 <sup>15</sup> Cl)	1149	1128	1044	18643	11195	15978	13991	16410	8452	3875	2101
±R <sub>36</sub>	sample <sup>36</sup> Cl/Cl 1σ uncertainty	( <sup>36</sup> Cl/10 <sup>15</sup> Cl)	100	68	45	967	653	158	785	622	464	219	116
ρ <sub>b</sub>	bulk density	(g cm <sup>-3</sup> )	1.62	1.62	1.62	2.65	2.7	2.7	2.7	2.75	2.75	2.85	2.85
l <sub>s</sub>	sample thickness	(cm)	3	3	3	3	3	3	3	3	3	3	3
θ <sub>avg</sub>	water content	(cm <sup>3</sup> /cm <sup>3</sup> )	0.1	0.1	0.1	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Elev		(m)	1630	1630	1630	2350	1970	1980	2010	2030	2030	2030	1750
lat			37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315
long			118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522
S <sub>snow</sub>	snow shielding	(unitless)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
S <sub>T</sub>	total shielding	(unitless)	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Λ <sub>f</sub>	effective atten. length	(g cm <sup>-2</sup> )	170	170	170	170	170	170	170	170	170	170	170
LOI	loss on ignition	(wt %)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Na <sub>2</sub> O		(wt %)	3.51	3.51	3.51	3.51	3.41	3.52	3.07	3.29	3.03	4.05	4.06
MgO		(wt %)	0.69	0.71	0.71	0.32	0.24	0.52	0.44	0.53	1.62	3.10	3.59
Al <sub>2</sub> O <sub>3</sub>		(wt %)	15.10	13.90	13.90	11.76	12.32	12.06	11.78	13.79	13.78	17.19	21.97
SiO <sub>2</sub>		(wt %)	70.50	71.70	71.70	77.26	76.03	76.14	77.53	73.43	71.21	61.71	58.64
P <sub>2</sub> O <sub>5</sub>		(wt %)	0.02	0.03	0.03	0.03	0.03	0.02	0.03	0.10	0.13	0.28	0.23
K <sub>2</sub> O		(wt %)	3.65	3.67	3.67	4.33	4.54	4.42	4.60	4.44	3.94	2.26	2.04
CaO		(wt %)	2.90	2.45	2.45	0.52	0.56	0.65	0.55	1.77	2.53	5.11	5.65
TiO <sub>2</sub>		(wt %)	0.20	0.22	0.22	0.08	0.09	0.09	0.07	0.23	0.29	0.75	0.82
MnO		(wt %)	0.04	0.04	0.04	0.02	0.03	0.03	0.03	0.03	0.06	0.11	0.10
Fe <sub>2</sub> O <sub>3</sub>		(wt %)	1.71	1.89	1.89	0.53	0.70	0.67	0.70	1.68	2.64	6.16	6.85
Cl		(ppm)	46.0	46.0	46.0	18.0	24.0	12.0	15.0	13.0	22.0	67.0	96.0
B	(may be estimated)	(ppm)	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	7.20
Sm	(may be estimated)	(ppm)	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	4.30
Gd	(may be estimated)	(ppm)	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	4.30
U	(may be estimated)	(ppm)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Th	(may be estimated)	(ppm)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
M <sub>sample</sub>	sample mass	(g)											
M <sub>spike</sub>	mass <sup>35</sup> Cl spike solution	(g)											
C <sub>spike</sub>	conc. spike solution	(g g <sup>-1</sup> )											
S/S	analytical stable isotope ratio	( <sup>35</sup> Cl/( <sup>35</sup> Cl+ <sup>37</sup> Cl))											

[illegible]



9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
BPCR90-6	BPCR90-7	BPCR90-8	BPCR90-9	BPCR90-12	BPCR90-1	BPCR90-2	BPCR90-3	BPCR90-4	BPCR90-10	BPCR90-11	BCV-1	BPCR90-58	BPCR90-59	BPCR90-60
14106	3155	5306	1633	7050	2831	2829	2241	7983	3183	3079	1466	4816	2399	4389
660	132	370	117	357	99	140	95	458	262	432	44	257	106	271
2.7	2.8	2.7	2.75	2.7	2.8	2.8	2.8	2.7	3	2.75	2.75	2.7	2.8	2.7
3	3	3	3	3	3	3	3	3	3	3	4	3	3	3
0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.016	0.005	0.005	0.005
1750	1750	1750	1770	1750	1790	1790	1810	1810	1850	1840	2005	1610	1610	1610
37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.3	37.315	37.315	37.315
118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.5	118.522	118.522	118.522
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0.98	0.98	0.98	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
170	170	170	170	170	170	170	170	170	170	170	169	170	170	170
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.30	0.30	0.30
3.09	3.13	2.52	3.63	4.23	3.17	3.81	3.29	3.65	2.20	3.10	3.25	3.39	3.29	3.77
0.38	1.82	0.61	2.97	0.52	2.29	2.30	2.77	0.51	12.49	1.97	2.20	1.05	2.12	0.33
11.64	15.35	10.61	16.58	12.20	16.02	16.07	21.45	12.17	12.72	15.31	16.20	12.49	15.59	11.37
76.53	67.52	81.05	60.87	78.42	65.39	61.55	67.11	77.23	48.00	66.04	62.80	76.77	66.16	76.57
0.02	0.17	0.04	0.24	0.03	0.14	0.25	0.10	0.03	0.48	0.16	0.22	0.04	0.11	0.02
4.48	3.62	4.38	2.17	3.32	3.37	2.10	3.16	4.32	2.29	3.21	2.24	4.63	3.02	3.41
0.43	3.60	0.52	5.44	0.64	4.26	4.71	4.22	0.57	8.70	4.09	5.00	0.67	4.19	0.56
0.07	0.40	0.07	0.64	0.09	0.48	0.63	0.46	0.01	1.79	0.49	0.50	0.09	0.42	0.06
0.04	0.07	0.01	0.10	0.02	0.08	0.08	0.08	0.04	0.18	0.07	0.10	0.05	0.07	0.02
0.76	3.58	0.33	5.99	0.65	4.61	5.45	4.51	0.71	14.05	4.74	5.25	0.75	4.43	0.38
7.0	48.0	15.0	171.0	9.0	79.0	63.0	78.0	19.0	68.0	71.0	205.0	29.0	82.0	26.0
6.60	6.60	6.60	9.80	6.60	6.60	6.60	6.60	6.60	6.60	6.60	7.00	6.60	6.60	6.60
3.90	3.90	3.90	4.50	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.50	3.90	3.90	3.90
3.90	3.90	3.90	4.50	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.50	3.90	3.90	3.90
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.05	4.00	4.00	4.00
6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	4.35	6.00	6.00	6.00



24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
BPCR90-61	BPCR90-62	BPCR91-10	BPCR90-53	BPCR90-54	BPCR90-55	BPCR90-56	BPCR90-57	BPCR90-38	BPCR90-39	BPCR90-40	BPCR90-41	BPCR90-42	BPCR90-43	BPCR90-44
1726	1538	7284	1302	1383	2367	4953	6143	2889	7498	5120	1319	1273	2569	1458
102	55	651	60	84	141	155	182	409	438	203	107	96	78	113
2.85	2.8	2.7	2.8	2.75	2.7	2.7	2.7	2.75	2.7	2.7	2.7	2.7	2.8	2.7
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
1620	1620	1510	1710	1690	1690	1690	1690	1620	1640	1650	1660	1660	1710	1700
37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315	37.315
118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522	118.522
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00	0.99	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99
170	170	170	170	170	170	170	170	170	170	170	170	170	170	170
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
3.84	3.37	3.99	3.11	3.88	3.17	3.10	4.13	3.12	2.93	3.24	3.61	3.42	3.22	3.42
2.85	2.34	0.27	3.86	2.33	0.81	0.58	0.32	2.68	0.39	0.32	0.71	0.42	2.00	0.44
16.20	16.08	14.30	17.82	16.59	11.83	13.46	13.80	18.41	11.91	11.64	13.74	13.20	15.44	13.19
62.59	64.54	74.30	60.51	61.96	77.36	75.74	74.20	67.51	77.26	78.18	73.04	71.22	66.49	71.24
0.23	0.15	0.05	0.31	0.19	0.03	0.06	0.16	0.24	0.04	0.04	0.07	0.05	0.15	0.04
2.55	3.06	4.09	2.50	2.43	4.74	4.90	3.98	3.53	4.95	4.48	4.01	4.18	3.54	4.18
4.82	4.58	1.51	5.63	4.75	0.67	1.44	1.07	3.99	0.69	0.58	1.48	1.38	3.98	1.38
0.67	0.51	0.19	0.75	0.66	0.13	0.20	0.24	0.51	0.18	0.08	0.35	0.21	0.45	0.20
0.08	0.09	0.05	0.11	0.09	0.03	0.04	0.05	0.08	0.05	0.04	0.06	0.03	0.08	0.03
5.56	4.84	1.43	7.82	5.50	0.71	1.42	1.45	4.51	0.62	0.54	2.06	1.59	4.81	1.59
77.0	138.0	19.0	294.0	67.0	50.0	38.0	24.0	64.0	14.0	26.0	131.0	170.0	79.0	78.0
6.60	6.60	6.60	7.20	7.20	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60
3.90	3.90	3.90	4.30	4.30	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
3.90	3.90	3.90	4.30	4.30	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00

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84	85	86	87	88	89	90	91	92	93	94	95	96	97	98
BPCR90-73	BPCR90-74	BPCR90-75	BPCR91-1	BPCR91-2	BPCR91-3	BPCR90-22	BPCR90-23	BPCR90-24	BPCR90-25	BPCR90-26	BpCr96-20	BpCr96-18	BpCR97-8	BpCR97-9
452	350	555	496	158	504	2940	781	373	1965	2700	1263	689	475	571
19	38	24	31	21	29	261	53	17	233	372	47	76	22	27
2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.65	2.75	2.7	2.65
3	3	3	3	3	3	3	3	3	3	3	1.5	1	4	3
0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.001	0.005	0.005	0.005	0.023	0.023
1920	1920	1920	1980	1985	1990	1950	1950	1950	1960	1960	2012	2091	2481	2451
37.311	37.311	37.311	37.308	37.307	37.307	37.304	37.304	37.304	37.303	37.303	37.296	37.2148	37	37.2548
118.522	118.521	118.521	118.528	118.5285	118.529	118.529	118.53	118.53	118.531	118.531	118.545	118.6098	118	118.5712
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	0.99
1.00	1.00	0.99	0.99	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.97	0.93	0.99	0.92
170	170	170	170	170	170	170	170	170	170	170	168	165	168	145
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.44	0.40	0.22
4.14	3.92	3.23	4.41	3.75	3.48	2.95	2.06	4.04	3.12	3.75	3.68	3.79	3.44	3.54
2.55	3.41	2.05	2.14	0.26	1.53	0.39	1.30	0.92	1.66	2.13	0.25	1.22	1.79	0.43
17.80	18.35	15.80	18.60	14.70	16.00	11.76	12.50	14.83	12.49	13.90	13.97	15.34	16.04	13.75
60.53	57.74	64.52	60.70	75.50	66.40	76.16	74.17	71.61	79.29	73.20	74.31	68.70	65.76	73.57
0.15	0.17	0.14	0.07	0.04	0.06	0.02	0.05	0.05	0.06	0.08	0.02	0.02	0.04	0.01
2.46	2.03	3.08	1.81	3.77	3.17	4.16	6.02	3.69	4.43	3.60	4.82	2.95	3.08	3.94
5.21	5.88	4.34	5.41	1.90	4.03	1.13	1.35	2.02	0.68	0.39	1.27	3.54	4.13	1.73
0.66	0.77	0.46	0.67	0.13	0.42	0.08	0.20	0.27	0.13	0.22	0.15	0.44	0.47	0.24
0.07	0.11	0.08	0.10	0.04	0.07	0.03	0.04	0.05	0.04	0.04	0.04	0.06	0.08	0.04
5.37	6.76	4.25	5.46	1.49	4.14	0.72	2.06	2.37	0.92	2.41	1.19	3.32	4.48	2.13
78.0	123.0	71.0	64.0	144.0	83.0	9.0	30.0	117.0	14.0	8.0	28.5	40.9	88.0	72.7
7.20	5.70	7.20	8.00	5.40	8.20	6.60	6.60	6.60	10.00	6.60	8.50	9.50	17.00	10.50
4.30	3.80	4.30	3.70	2.30	4.30	3.90	3.90	3.90	6.00	3.90	3.00	4.00	3.50	2.00
4.30	3.80	4.30	3.70	2.30	4.30	3.90	3.90	3.90	5.00	3.90	3.00	4.00	3.50	2.00
2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80	1.00	2.80	4.05	4.05	2.00	1.00
11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	4.00	11.00	4.35	4.35	5.00	0.50
											120.070	120.040	40.500	50.600
											3.040	2.013	3.034	3.021
											0.606	0.606	0.998	0.998
											5.32	4.14	6.58	6.46

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99	100	101	102	102	103	104	105	105	106	107	107	108	109	109
BpCR97-13	BpCR97-14	BpCR97-15	BPCR91-11(1	BPCR91-11(2	BpCr95B-6(9'	BPCR96-1	BpCr96-16	BpCr96-17	BpCr95-3 (99	BPCR96-10	BPCR96-11	BpCr95B-1(9'	BpCR97-3	BpCR97-4
540	419	465	937	966	897	434	1369	703	826	606	703	1337	2566	866
24	20	21	36	40	41	14	86	24	30	22	22	56	105	32
2.65	2.65	2.75	2.85	2.85	2.65	2.7	2.7	2.7	2.7	2.8	2.9	2.65	2.65	2.65
2	1	1.5	3	3	1.5	2	2	4	2	3	2	2.5	4	4
0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.023	0.023
2414	2481	2384	2460	2460	2755	2688	2786	2786	3011	3163	3163	3047	3274	3274
37.2547	37.25345	37.2573	37.251	37.251	37.25	37.2116	37.2148	37.2148	37.17	37.1877	37.1877	37.23	37	37
118.5756	118.5714	118.5767	118.578	118.578	118.59	118.5996	118.6098	118.6098	118.57	118.6201	118.6201	118.61	118	118
0.99	0.99	0.99	1.00	1.00	0.95	1.00	0.92	0.94	0.94	0.93	0.96	0.97	0.97	0.91
0.98	0.98	0.98	0.99	0.99	0.92	0.96	0.86	0.89	0.91	0.91	0.94	0.96	0.86	0.83
170	171	168	168	168	163	174	163	173	170	166	172	167	141	145
0.45	0.32	0.40	0.00	0.00	1.14	0.41	0.81	0.38	2.66	0.67	0.80	2.69	0.42	0.50
3.21	3.43	3.44	3.74	3.74	2.89	3.29	3.33	3.76	3.22	4.31	3.43	3.19	3.31	3.70
1.76	2.23	1.73	0.75	0.75	0.17	1.94	1.08	1.26	1.42	2.28	1.80	1.02	0.71	1.34
15.24	16.21	16.08	13.80	13.80	11.55	15.99	15.42	15.45	14.99	17.45	15.66	14.49	14.04	16.85
66.98	63.99	65.67	70.60	70.60	76.78	65.20	68.80	68.14	65.71	61.52	65.49	67.73	72.23	66.27
0.06	0.03	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.06	0.05	0.03	0.06	0.03	0.04
3.15	2.95	2.94	3.84	3.84	4.55	3.43	3.86	3.03	3.08	1.87	3.08	3.45	4.15	3.16
3.97	4.62	4.41	2.03	2.03	0.74	4.23	3.04	3.61	3.70	4.98	3.98	3.02	2.32	4.29
0.47	0.58	0.48	0.66	0.66	0.14	0.52	0.30	0.47	0.41	0.82	0.51	0.30	0.26	0.35
0.08	0.09	0.08	0.07	0.07	0.03	0.08	0.05	0.06	0.07	0.08	0.08	0.05	0.05	0.06
4.68	5.50	4.64	4.24	4.24	0.93	4.85	3.13	3.48	3.66	5.25	4.62	2.74	2.14	3.52
83.0	121.1	97.5	59.0	59.0	45.4	130.5	29.2	54.7	58.0	101.6	80.3	37.5	20.9	76.7
19.00	15.50	9.50	9.60	9.60	6.60	14.50	11.00	9.00	7.20	16.50	14.50	6.60	12.00	14.00
3.00	3.50	3.00	6.00	6.00	3.90	6.50	3.00	4.50	4.30	4.00	2.50	3.90	3.50	4.00
3.00	3.50	3.00	6.00	6.00	3.90	6.50	3.00	4.50	4.30	4.00	2.50	3.90	3.50	4.00
3.00	2.00	3.00	2.80	2.80	2.10	4.60	4.05	4.05	3.90	3.30	4.10	3.70	2.00	2.00
5.00	1.00	3.00	11.00	11.00	7.05	7.80	4.35	4.35	10.05	8.00	7.40	7.40	4.00	10.00
50.900	40.000	50.000			10.400	50.009	120.040	120.060	70.500	25.000	50.000	87.600	200.000	50.400
3.032	3.018	3.007			3.031	2.017	3.027	2.020	3.021	3.500	3.500	3.004	5.017	3.043
0.998	0.998	0.998			0.997	0.606	0.606	0.606	0.997	0.606	0.606	0.997	0.998	0.998
6.04	5.66	5.63			27.30	3.89	5.26	3.89	6.12	6.52	5.28	6.82	7.97	6.32

313.00	257.00	286.00			119.70	364.30	894.00	591.00	473.00	328.40	458.00	695.00	1159.00	482.00
Boulder	Boulder	Boulder	Bedrock	Bedrock	Bedrock	Boulder	Bedrock	Boulder	Bedrock	Bedrock	Boulder	Boulder	Boulder	Bedrock

110 BpCR97-2	110 BpCR97-1a	110 BpCR97-1b	111 BpCr96-21	111 BpCr96-22	112 BpCr95-2 (99	113 HB97-1	114 HB97-2	115 HB97-3	116 HB97-4	117 HB97-5	118 BpCR97-10	118 BpCR97-11	119 BpCR97-12	120 BPCR96-2
1554	2285	2686	2994	5614	2586	3737	8737	2892	1055	2135	477	711	2594	621
75	105	110	123	533	88	165	337	85	35	81	23	35	109	25
2.65	2.65	2.65	2.7	2.65	2.6	2.75	2.75	2.75	2.75	2.75	2.7	2.7	2.65	2.7
4	1	3.5	2.5	2.5	4	2	1.5	2	1.5	1.5	5	3	1	2.5
0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.023	0.01	0.005	0.005
3341	3341	3341	3487	3487	3502	3481	3487	3487	3636	3597	3304	3304	3414	3359
37.235	37.235	37.235	37.2398	37.2392	37.15	37.2694	37.2677	37.2677	37.2692	37.2626	37.1759	37.1759	37.1387	37.1681
118.6666	118.6666	118.6666	118.6829	118.6832	118.57	118.7125	118.7135	118.7135	118.6954	118.6823	118.6326	118.6326	118.5757	118.6207
0.82	0.96	0.96	0.89	0.98	0.85	0.97	0.97	0.97	0.96	0.93	0.96	0.92	0.98	1.00
0.78	0.91	0.89	0.87	0.97	0.78	0.96	0.96	0.97	0.92	0.90	0.94	0.90	0.93	0.85
175	175	148	153	168	176	158	159	170	144	165	168	161	166	160
0.38	0.42	0.34	0.48	0.33	0.00	0.32	1.22	0.42	0.36	0.40	0.29	0.62	0.93	0.47
3.34	3.34	3.38	3.13	3.65	3.61	3.55	4.20	3.49	2.43	3.42	3.81	3.28	5.05	3.55
0.61	0.96	0.85	0.76	0.54	0.57	1.06	1.06	1.16	0.46	0.99	1.42	1.85	0.74	1.43
13.97	14.56	14.57	13.94	16.10	13.58	15.85	15.71	15.54	14.34	15.26	16.29	15.70	16.38	15.67
72.56	70.36	70.64	71.47	67.58	72.43	68.43	68.87	69.29	72.39	69.33	66.37	65.99	68.19	66.97
0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.06	0.02	0.03	0.03	0.02	0.02
3.92	3.80	3.89	4.38	4.46	3.46	3.51	4.01	3.44	5.52	3.65	3.22	2.94	3.21	3.13
2.33	2.77	2.79	2.21	2.48	2.05	3.42	1.77	3.43	1.82	3.08	3.84	4.10	2.26	3.75
0.22	0.31	0.33	0.24	0.23	0.22	0.33	0.30	0.32	0.18	0.31	0.46	0.51	0.29	0.51
0.04	0.06	0.05	0.04	0.03	0.04	0.05	0.06	0.06	0.03	0.06	0.06	0.08	0.04	0.06
2.26	2.93	2.73	2.48	1.83	1.96	2.85	2.72	3.05	1.72	2.61	3.90	4.65	2.64	3.82
22.4	24.3	20.1	18.1	11.3	16.3	15.3	6.8	20.8	99.1	30.6	150.3	81.7	16.4	69.3
9.50	12.20	10.50	10.00	8.50	6.60	21.50	16.00	10.00	12.50	13.50	11.50	13.50	10.50	11.50
4.00	5.00	2.00	3.50	2.50	3.90	2.00	2.00	3.50	3.00	3.50	2.50	4.00	3.00	3.50
4.00	5.00	2.00	3.50	2.50	3.90	2.00	2.00	3.50	3.00	3.50	2.50	4.00	3.00	3.50
3.00	3.00	3.00	4.05	2.00	4.05	7.00	12.00	3.00	2.00	2.00	0.50	9.00	2.00	2.80
11.00	4.00	5.00	4.35	2.00	4.35	0.50	0.50	3.00	10.00	1.00	0.50	1.00	0.50	4.00
200.600	50.400	150.000	120.070	110.050	200.700	120.600	120.700	125.000	40.700	120.600	30.600	50.400	100.600	50.000
4.015	3.012	3.041	4.020	4.004	4.015	5.016	5.010	4.019	3.000	3.006	3.014	3.026	3.024	4.011
0.997	0.997	0.997	0.606	0.606	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.606
6.74	12.87	7.21	7.66	10.91	8.09	13.87	26.18	9.35	6.15	6.43	5.79	6.11	10.47	5.98

817.00	656.00	1328.00	1402.00	1890.00	1152.00	997.00	1219.00	1127.00	602.00	1171.00	287.00	408.00	908.00	363.00
Bedrock	Boulder	Boulder	Bedrock	Boulder	Bedrock	Boulder	Boulder	Boulder	Boulder	Boulder	Boulder	Bedrock	Boulder	Boulder



120 BPCR96-3	120 BPCR96-4	120 BPCR96-5	121 BPCR96-9	122 BPCR96-6	122 BPCR96-7	123 BPCR96-8	124 BigP97-1a	124 BigP97-2	124 BigP97-3
737	381	808	679	523	1235	373	3407	311	350
28	11	15	25	14	27	14	164	18	17
2.7	2.8	2.8	2.75	2.75	2.75	2.7	2.7	2.7	2.7
2.5	5	2.5	1	2	2	4	1	0.75	1
0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
3371	3371	3371	3560	3510	3510	3560	3140	3140	3140
37.1681	37.1681	37.1681	37.1664	37.1567	37.1567	37.1515	37.1217	37.1217	37.1217
118.6196	118.6192	118.6192	118.6169	118.6144	118.6144	118.6194	118.4894	118.4894	118.4894
1.00	0.92	0.90	0.92	0.90	0.92	0.95	0.99	0.99	0.99
0.96	0.88	0.83	0.82	0.80	0.81	0.75	0.97	0.97	0.95
174	173	169	175	177	176	176	168	172	149
0.41	0.34	0.34	0.56	0.45	0.99	1.10	0.09	0.47	1.10
3.13	3.78	3.10	3.48	3.46	3.75	3.98	3.17	5.08	4.38
1.33	1.88	1.86	1.42	1.64	1.17	1.45	0.07	2.95	1.92
15.09	16.71	15.45	15.88	15.85	16.57	15.67	12.28	19.22	17.27
67.84	63.66	65.86	66.28	66.05	65.37	66.18	77.97	53.23	64.07
0.02	0.03	0.02	0.03	0.03	0.02	0.02	0.01	0.04	0.03
3.63	2.54	3.85	3.21	3.03	3.98	3.54	4.89	1.24	2.72
3.32	4.82	3.73	3.93	4.10	3.45	2.78	0.77	7.45	3.28
0.36	0.56	0.57	0.40	0.44	0.31	0.43	0.09	0.96	0.57
0.06	0.07	0.08	0.06	0.07	0.05	0.07	0.02	0.19	0.06
3.41	5.02	5.11	3.84	4.31	3.28	3.94	0.77	8.74	4.86
63.2	183.0	130.5	87.7	115.8	43.3	36.1	14.0	276.0	170.7
12.00	17.00	9.00	11.00	17.00	8.00	15.50	13.00	19.50	25.50
4.50	3.50	4.00	4.50	4.50	2.00	4.50	3.50	3.50	3.00
4.50	3.50	4.00	4.50	4.50	2.00	4.50	3.50	3.50	3.00
2.30	2.30	3.20	3.50	2.50	1.80	2.40	0.50	0.50	2.00
7.20	2.70	7.90	9.90	13.40	1.00	4.40	1.00	0.50	1.00
50.003	50.000	50.003	25.000	50.001	50.000	75.000	70.000	20.500	20.300
3.576	1.063	3.018	3.500	3.051	3.500	3.500	3.009	4.006	3.020
0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.997	0.997	0.997
5.92	3.41	4.27	7.05	4.43	7.10	6.31	15.17	6.00	6.66

434.50	355.70	628.90	342.60	395.00	619.60	208.00	832.00	181.00	186.00
Boulder	Boulder	Boulder	Bedrock	Bedrock	Boulder	Boulder	Boulder	Boulder	Boulder



