Table 2. Water-quality data for surface-water samples collected in the Miller Creek watershed, Montana, August 30-31, 2000

[Site numbers represent location and indicate distance, in feet, downstream from either that tracer-injection site on Miller Creek, or downstream from site E0, the most upstream site on East Fork Miller Creek. Sites in bold print are surface-inflow sites. Abbreviations: L/s, liters per second; mg/L, milligrams per liter; µg/L, micrograms per liter. Symbols: --, no data; <, less than minimum reporting level; E, estimated]

Site number (feet)	Date	Time	Tracer-calculated streamflow (L/s)	Physically measured streamflow (L/s)	pH, field (standard units)	Calcium, dissolved (mg/L)	Sodium[1], dissolved (mg/L)	Chloride[1], dissolved (mg/L)	Sulfate, dissolved (mg/L)
				Miller Creek sites					
0	08-30-00	1100	--	--	8.2	34	0.46	<0.29	11
25	**08-30-00**	**0840**	**--**	**0.07**	**8.4**	**55**	**.32**	**<.29**	**40**
190	08-30-00	0855	0.69	--	8.2	42	284	440	16
400	**08-30-00**	**0905**	**.08**	**.03**	**8.4**	**6.0**	**.44**	**<.29**	**3.8**
420	08-30-00	0920	.78	--	8.3	42	244	392.5	15
1,020	08-30-00	0940	.83	--	8.0	59	206	365.9	26
1,135	**08-30-00**	**0930**	**1.37**	**1.12**	**8.3**	**39**	**.31**	**<.29**	**18**
1,170	08-30-00	0945	2.21	--	8.2	47	79	138.2	21
1,850	08-30-00	0950	2.32	--	8.2	50	66	131.5	25
2,225	08-30-00	1000	2.68	--	8.2	49	57	114.1	26
2,310	**08-30-00**	**1005**	**.16**	**.01**	**7.8**	**22**	**.34**	**<.29**	**6.9**
2,645	**08-30-00**	**1010**	**.16**	**.01**	**7.1**	**46**	**.53**	**<.29**	**83**
2,995	08-30-00	1025	2.99	--	8.2	51	45	102.1	31
3,205	**08-30-00**	**1035**	**6.5**	**3.83**	**8.3**	**36**	**.96**	**<.29**	**38**
3,225	08-30-00	1036	9.49	--	8.3	41	15	32.29	35
3,450	08-30-00	1040	9.36	--	8.1	41	15	32.73	36
3,455	**08-30-00**	**1045**	**.82**	**.27**	**8.2**	**57**	**1.4**	**<.29**	**66**
3,910	08-30-00	1105	10.2	--	8.3	43	13	30.1	38
3,915	**08-30-00**	**1100**	**8.86**	**4.59**	**8.5**	**21**	**.51**	**<.29**	**11**
4,100	08-30-00	1108	19.0	--	8.4	32	7.3	16.17	25
4,220	**08-30-00**	**1110**	**.48**	**.04**	**8.2**	**24**	**1.9**	**<.29**	**36**
4,310	08-30-00	1115	19.5	--	8.3	32	6.8	15.78	25
4,680	**08-30-00**	**1120**	**.47**	**.71**	**8.4**	**30**	**.48**	**<.29**	**4.7**
4,710	08-30-00	1140	20.0	--	8.4	31	6.4	15.41	25
4,890	**08-30-00**	**1145**	**1.13**	**.35**	**8.2**	**16**	**1.3**	**<.29**	**28**
5,030	**08-30-00**	**1150**	**.45**	**.10**	**8.3**	**38**	**.73**	**<.29**	**12**
5,190	08-30-00	1155	21.6	--	8.3	32	6.3	14.29	24
5,245	**08-30-00**	**1200**	**.04**	**.02**	**8.1**	**30**	**1.2**	**<.29**	**17**
5,790	**08-30-00**	**1210**	**.28**	**.14**	**8.5**	**36**	**.41**	**<.29**	**6.9**

5,945	**08-30-00**	**1220**	**.04**	**.02**	**8.0**	**6.2**	**1.3**	**<.29**	**4.3**
6,100	08-30-00	1225	21.9	--	8.3	32	5.8	14.06	24
6,450	08-30-00	1230	23.0	--	8.4	32	4.5	13.43	23
6,465	**08-30-00**	**1235**	**1.41**	**.57**	**8.4**	**4.8**	**1.2**	**<.29**	**14**
6,605	08-30-00	1245	24.4	--	8.4	31	5.3	12.66	24
6,750	**08-30-00**	**1250**	**1.14**	**.36**	**8.2**	**5.8**	**1.2**	**<.29**	**16**
7,120	08-30-00	0835	25.5	20.2	7.7	31	4.6	12.1	24
7,835	**08-30-00**	**1220**	**--**	**.01**	**7.7**	**28**	**.78**	**<.29**	**11**
8,845	08-30-00	1235	--	--	8.1	31	3.9	10.64	25
9,735	**08-30-00**	**1250**	**--**	**.05**	**7.8**	**42**	**.64**	**.39**	**17**
10,120	08-30-00	1310	--	--	7.6	32	3.1	9.35	25
10,280	**08-30-00**	**1320**	**--**	**.11**	**8.0**	**38**	**.84**	**.29**	**37**
10,955	08-30-00	1400	--	--	7.9	31	2.5	8.48	26

Table 2. Water-quality data for surface-water samples collected in the Miller Creek watershed, August 30-31, 2000 (Continued)

Aluminum, dissolved (μg/L)	Aluminum, total recoverable (μg/L)	Copper, dissolved (μg/L)	Copper, total recoverable (μg/L)	Iron, dissolved (μg/L)	Iron, total recoverable (μg/L)	Lead, dissolved (μg/L)	Lead, total recoverable (μg/L)	Zinc, dissolved (μg/L)	Zinc, total recoverable (μg/L)	Distance, downstream from tracer injection point (feet)
					Miller Creek sites					
3	20	1	2	<10	50	<1	<1	6	8	0
4	**60**	**1**	**3**	**<10**	**210**	**<1**	**15**	**112**	**140**	**25**
3	100	1	2	<10	210	<1	5	16	26	190
2	**10**	**<1**	**<1**	**<10**	**40**	**<1**	**<1**	**6**	**6**	**400**
3	10	1	1	<10	<20	<1	<1	14	14	420
19	30	2	3	<10	100	<1	<1	7	9	1,020
<1	**20**	**<1**	**<1**	**<10**	**20**	**<1**	**<1**	**7**	**6**	**1,135**
7	50	1	3	<10	250	<1	2	6	11	1,170
5	10	<1	1	<10	20	<1	<1	5	5	1,850
14	20	1	1	14	30	<1	<1	6	5	2,225
<1	**10**	**<1**	**<1**	**<10**	**20**	**<1**	**<1**	**1**	**<1**	**2,310**
<1	**60**	**<1**	**4**	**3,200**	**7,400**	**<1**	**6**	**19**	**22**	**2,645**
11	40	1	3	14	200	<1	1	4	6	2,995
2	**10**	**1**	**1**	**<10**	**<20**	**<1**	**<1**	**<1**	**1**	**3,205**
4	10	<1	1	<10	30	<1	<1	2	2	3,225
4	20	<1	2	<10	40	<1	<1	2	2	3,450
<1	**<1**	**<1**	**<1**	**21**	**120**	**<1**	**<1**	**<1**	**<1**	**3,455**
4	40	1	4	<10	410	<1	<1	1	2	3,910
<1	**20**	**<1**	**<1**	**<10**	**20**	**<1**	**<1**	**<1**	**<1**	**3,915**
2	30	<1	2	<10	230	<1	<1	1	1	4,100
2	**60**	**2**	**3**	**<10**	**140**	**<1**	**<1**	**2**	**2**	**4,220**
2	20	<1	2	<10	140	<1	<1	1	1	4,310
1	**<1**	**<1**	**<1**	**<10**	**<20**	**<1**	**<1**	**<1**	**<1**	**4,680**
3	20	<1	1	<10	60	<1	<1	1	1	4,710
2	**30**	**5**	**8**	**<10**	**70**	**<1**	**<1**	**2**	**2**	**4,890**
1	**40**	**<1**	**1**	**<10**	**50**	**<1**	**<1**	**<1**	**<1**	**5,030**
3	20	1	1	<10	40	<1	<1	2	<1	5,190
2	**20**	**4**	**5**	**<10**	**50**	**<1**	**<1**	**2**	**1**	**5,245**

2	**--**	**<1**	**--**	<10	--	**<1**	**--**	**1**	--	**5,790**
4	**40**	**22**	**32**	**190**	**710**	**<1**	**<1**	**5**	**5**	**5,945**
3	10	1	1	<10	<20	<1	<1	2	1	6,100
3	30	2	3	<10	90	<1	<1	2	2	6,450
6	**20**	**66**	**63**	**<10**	**<20**	**<1**	**<1**	**11**	**10**	**6,465**
3	20	4	6	<10	50	<1	<1	1	2	6,605
13	**70**	**13**	**29**	**53**	**840**	**<1**	**<1**	**10**	**12**	**6,750**
3	10	4	5	<10	30	<1	<1	2	2	7,120
2	**10**	**1**	**1**	**59**	**100**	**<1**	**<1**	**1**	**1**	**7,835**
4	30	4	6	<10	80	<1	<1	2	3	8,845
<1	**--**	**1**	**--**	<10	--	**<1**	**--**	**<1**	--	9,735
4	10	4	4	<10	<20	<1	<1	2	2	10,120
2	**--**	**2**	**--**	<10	--	**<1**	**--**	**1**	--	**10,280**
4	10	4	5	<10	<20	<1	<1	2	2	10,955

Table 2. Water-quality data for surface-water samples collected in the Miller Creek watershed, August 30-31, 2000 (Continued)

Site number (feet)	Date	Time	Tracer-calculated streamflow (L/s)	Physically measured streamflow (L/s)	pH, field (standard units)	Calcium, dissolved (mg/L)	Sodium[1], dissolved (mg/L)	Chloride[1], dissolved (mg/L)	Sulfate, dissolved (mg/L)
				Miller Creek sites--Continued					
12,295	08-30-00	1030	--	--	8.3	32	1.6	6.46	28
13,165	08-30-00	1055	--	19.8	8.4	32	1.4	5.9	29
13,170	**08-30-00**	**1100**	**--**	**1.88**	**8.4**	**41**	**1.4**	**<.29**	**32**
13,410	08-30-00	1115	--	--	8.3	33	1.4	5.6	29
14,160	**08-30-00**	**0925**	**--**	**.67**	**8.1**	**36**	**1**	**<.29**	**28**
14,505	08-30-00	0910	--	--	8.4	33	1.2	4.58	29
14,930	08-30-00	0855	--	26.9	8.3	33	1.2	4.46	30
				East Fork Miller Creek sites[2]					
E0	08-31-00	0925	--	1.04	7.8	29	.97	<.29	31
E265	08-31-00	1035	--	2.24	8.0	29	.96	<.29	32
E280	**08-31-00**	**1030**	**--**	**.31**	**7.8**	**26**	**.92**	**<.29**	**28**
E550	**08-31-00**	**1020**	**--**	**.11**	**8.2**	**31**	**1.1**	**<.29**	**38**
E650	08-31-00	1000	--	3.4	8.5	30	1	<.29	33
E700	**08-31-00**	**1010**	**--**	**.01**	**8.5**	**76**	**.41**	**<.29**	**72**
3,205	08-31-00	0945	--	4.5	8.4	36	.97	<.29	38

[1]Sodium and chloride concentrations in Miller Creek, downstream from the tracer-injection site, are artificially elevated owing to the injected sodium chloride tracer.

[2]East Fork samples were collected upstream from the mouth of the East Fork (site 3,205). These sites were labeled with a prefix E followed by their distance downstream from the uppermost site (E0). Sites E280, E550, and E700 are surface-inflow sites entering the East Fork channel.

Table 2. Water-quality data for surface-water samples collected in the Miller Creek watershed, August 30-31, 2000 (Continued)

Aluminum, dissolved (μg/L)	Aluminum, total recoverable (μg/L)	Copper, dissolved (μg/L)	Copper, total recoverable (μg/L)	Iron, dissolved (μg/L)	Iron, total recoverable (μg/L)	Lead, dissolved (μg/L)	Lead, total recoverable (μg/L)	Zinc, dissolved (μg/L)	Zinc, total recoverable (μg/L)	Distance, downstream from tracer injection point (feet)
					Miller Creek sites--Continued					
4	10	3	3	<10	<20	<1	<1	2	2	12,295
4	10	3	3	<10	<20	<1	<1	2	2	13,165
<1	**10**	**<1**	**1**	**<10**	**20**	**<1**	**<1**	**<1**	**<1**	**13,170**
4	10	3	3	<10	<20	<1	<1	2	1	13,410
<1	**--**	**<1**	**--**	**<10**	**--**	**<1**	**--**	**1**	**--**	**14,160**
4	10	3	3	<10	<20	<1	<1	1	2	14,505
5	10	3	3	<10	<20	<1	<1	1	1	14,930
					East Fork Miller Creek sites[2]					
<1	<1	<1	<1	<10	<20	<1	<1	<1	<1	E0
<1	10	<1	<1	<10	<20	<1	<1	<1	<1	E265
<1	**20**	**<1**	**<1**	**<10**	**50**	**<1**	**<1**	**1**	**2**	**E280**
2	**--**	**<1**	**--**	**<10**	**--**	**<1**	**--**	**<1**	**--**	**E550**
1	10	<1	1	<10	<20	<1	<1	<1	<1	E650
<1	--	5	--	<10	--	<1	--	<1	--	E700
1	10	<1	1	<10	<20	<1	<1	<1	1	3,205