

TENMILE CREEK BASIN

462522112172402 08N06W24DDCD02 (LUTTRELL WELL EPA-3S)

LOCATION.--Lat 46°25'21.8", long 112°17'23.5", (NAD 83) in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 24, T.8 N., R.6 W., Lewis and Clark County, Hydrologic Unit 10030101.

HYDROGEOLOGIC UNIT.--Tertiary volcanics.

WELL CHARACTERISTICS.--Drilled in June 2000, casing diameter 2 in., depth 84 ft.

DATUM.--Measuring point, top of PVC casing, 3.10 ft above land surface datum. Elevation of land-surface datum is 7,579.6 ft (NGVD 29).

PERIOD OF RECORD.--October 2001 to current year.

REMARKS.--All water levels are reported as distance, in feet below land-surface datum.

MEASURED WATER LEVEL,  
IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 22	66.41	July 12	32.62
Apr. 26	44.10	Aug. 18	49.13
June 3	25.77	Sept. 10	56.49

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling depth, feet (00003)	Turbidity white light, det ang 90+/-30 NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, mg/L (00915)	Magnesium, water, mg/L (00925)	Potassium, water, mg/L (00935)	
Date		Sodium adsorption ratio (00931)	Sodium, water, mg/L (00930)	Alkalinity, water, ftrd fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, water, ftrd inc tit field, mg/L as CaCO3 (39086)	Chloride, water, ftrd, mg/L (00940)	Fluoride, water, ftrd, mg/L (00950)	Silica, water, ftrd, mg/L (00955)	Sulfate water, ftrd, mg/L (00945)	Residue sum of constituents mg/L (70301)	Residue water, ftrd, tons/ acre-ft (70303)	Aluminum, water, ftrd, ug/L (01106)	Arsenic water, ftrd, ug/L (01000)	Cadmium water, ftrd, ug/L (01025)
APR 26...	1200	--	--	--	210	--	4.1	93	--	16	5.22	.816	2.40	
JUN 03...	1000	.70	45	77.0	9.8	9.1	5.3	68	6.0	22	6.70	1.29	2.27	
SEP 10...	1000	.25	35	80.0	72	6.6	4.2	102	8.5	10	3.08	.594	2.45	
APR 26...		.1	.96	--	<2	1.19	<2	6.24	37.7	E56	E.08	505	.2	.11
JUN 03...		.1	1.26	6	--	.96	<2	5.05	15.5	37	.05	104	.3	.10
SEP 10...		.1	.86	--	<2	1.07	<2	12.5	25.0	E47	E.06	858	E.1	.15

Date	Copper, water, ftrd, ug/L (01040)	Iron, water, ftrd, ug/L (01046)	Lead, water, ftrd, ug/L (01049)	Lithium water, ftrd, ug/L (01130)	Manganese, water, ftrd, ug/L (01056)	Zinc, water, ftrd, ug/L (01090)
APR 26...	3.3	224	5.31	<.6	6.1	20.9
JUN 03...	1.8	91	.63	<.6	20.2	9.6
SEP 10...	24.8	567	9.63	E.5	12.4	45.8

E--Estimated.

462522112172401 08N06W24DDCD01 (LUTTRELL WELL EPA-3)

LOCATION.--Lat 46°25'21.8", long 112°17'23.5" (NAD 83), in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 24, T.8 N., R.6 W., Lewis and Clark County, Hydrologic Unit 10030101.

HYDROGEOLOGIC UNIT.--Boulder batholith quartz monzonite.

WELL CHARACTERISTICS.--Drilled in June 1999, casing diameter 4 in., depth 227 ft.

DATUM.--Measuring point, top of PVC casing, 1.70 ft above land surface datum. Elevation of land-surface datum is 7,579.8 ft (NGVD 29).

PERIOD OF RECORD.-- October 2001 to current year.

REMARKS.--All water levels are reported as distance, in feet below land-surface datum. Well was pumped extensively one day prior to each sampling date in an attempt to remove sediment and standing water from the well casing.

MEASURED WATER LEVEL,  
IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR 2004

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 22	129.50	July 12	118.41
Apr. 26	139.72	Aug. 18	119.23
June 3	133.82	Sept. 10	121.87

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling depth, feet (00003)	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
APR 26...	1300	--	--	--	880	--	6.9	274	3.5	13	4.30	.661	3.94
JUN 03...	1100	.30	38	195	380	<.1	6.8	252	8.5	24	7.43	1.43	4.88
SEP 10...	0900	.60	85	198	>1,000	<.1	6.5	338	7.5	15	4.82	.643	4.71

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, water, fltrd fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, water, fltrd inc tit field, mg/L as CaCO3 (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Aluminum, water, fltrd, ug/L (01106)	Arsenic, water, fltrd, ug/L (01000)	Cadmium, water, fltrd, ug/L (01025)
APR 26...	6	47.6	66	--	1.85	.3	23.9	55.5	178	.24	<1	.3	.26
JUN 03...	4	44.0	64	--	1.66	.4	26.1	55.1	180	.24	18	.3	.11
SEP 10...	7	60.9	97	91	1.63	.4	25.7	63.5	217	.30	E1	2.5	.04

Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Zinc, water, fltrd, ug/L (01090)
APR 26...	1.4	E3	.62	7.7	140	13.2
JUN 03...	.8	57	<.08	10.2	242	17.1
SEP 10...	.9	183	<.08	10.6	160	8.1

E--Estimated.

## 462720112165101 TENMILE CREEK ABOVE MONITOR CREEK, NEAR RIMINI, MT

LOCATION.--Lat 46°27'19.0", long 112°16'52.3" (NAD 27), SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 7, T.8N., R.5W., Lewis and Clark County, Hydrologic Unit 10020006, 30 ft above confluence with Monitor Creek and 2.9 mi south of Rimini.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--July 2003 to current year.

GAGE.--None. Elevation at sampling site is 6,230 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
JUN 01...	0930	6.4	12.5	6.5	24	8.0	4.0	7	2.22	.436	.74	.3	1.73
AUG 31...	0915	.21	--	6.2	44	19.5	8.0	14	4.25	.817	.95	.5	4.60

Date	Sodium, percent (00932)	Alkalinity, water, fltrd fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue, water, fltrd, sum of constituents mg/L (70301)	Residue, water, fltrd, tons/ acre-ft (70303)	Residue, water, fltrd, tons/d (70302)	Aluminum, water, fltrd, ug/L (01106)	Arsenic, water, fltrd, ug/L (01000)	Arsenic, water, unfltrd ug/L (01002)	Cadmium, water, fltrd, ug/L (01025)
JUN 01...	31	7	.23	<.2	13.0	3.5	27	.04	.46	207	1.8	E1	.04
AUG 31...	40	16	.27	<.2	15.6	4.0	40	.05	.02	38	1.5	2	.04

Date	Cadmium, water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
JUN 01...	.04	2.2	2.2	119	150	.32	.46	1.3	1.8	4	7.7	8
AUG 31...	E.03	1.3	1.3	120	130	.18	.23	2.1	7.7	9	4.9	5

E--Estimated.

## 462542112173101 MONITOR CREEK SS 12, NEAR RIMINI, MT

LOCATION.--Lat 46°25'41.6", long 112°17'30.6" (NAD 27), NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 24, T.8N., R.6W., Lewis and Clark County, Hydrologic Unit 10020006, 1.95 mi upstream of confluence with Tenmile Creek, 5.4 mi south of Rimini.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--July 2003 to current year.

GAGE.--None. Elevation at sampling site is 7,230 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
JUN 01...	1330	1.0	12.1	3.9	265	17.0	8.0	64	19.2	3.87	5.96	.1	1.28
AUG 31...	1200	.13	--	3.8	271	23.5	8.5	55	16.1	3.60	6.72	.1	1.85

Date	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Aluminum, water, fltrd, ug/L (01106)	Arsenic, water, fltrd, ug/L (01000)	Arsenic, water unfltrd, ug/L (01002)	Cadmium, water, fltrd, ug/L (01025)	Cadmium, water, unfltrd, ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)
JUN 01...	4	.62	<.2	16.5	140	5,940	<.2	<2	7.00	6.89	27.1	28.5
AUG 31...	6	.47	.2	32.5	107	5,840	.5	<2	8.38	7.79	29.9	28.4

Date	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)
JUN 01...	192	210	17.8	18.1	3.4	655	630	532	509
AUG 31...	668	610	33.0	30.9	5.2	661	583	627	599

462721112164801 MONITOR CREEK AT MOUTH (MCM), NEAR RIMINI, MT

LOCATION.--Lat 46°27'21", long 112°16'48" (NAD 27), SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 7, T.8N., R.5W., Lewis and Clark County, Hydrologic Unit 10020006, 20 ft upstream from mouth and 4.0 mi southwest of Rimini.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--July and October 1997, July 2003 to current year.

GAGE.--None. Elevation at sampling site is 6,220 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
JUN 01...	1000	7.3	13.6	6.1	56	8.0	3.5	17	4.88	1.18	1.43	.2	1.58
AUG 31...	0930	.56	--	6.4	103	11.5	7.5	37	10.8	2.35	2.90	.2	2.58

Date	Sodium, percent (00932)	Alkalinity water, fltrd fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)
JUN 01...	15	3	.37	<.2	14.8	18.1	45	.06	.88	275	.6	E2	.98
AUG 31...	12	5	.31	.2	23.2	35.9	82	.11	.12	67	.5	<2	1.78

Date	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
JUN 01...	1.11	4.0	6.3	50	120	1.02	2.55	1.6	75.4	79	90.7	94
AUG 31...	1.74	2.1	2.8	25	60	.30	.76	3.3	69.4	66	168	161

E--Estimated.

## 462544112162001 RUBY CREEK RC2A, ABOVE SCOTT RESERVOIR, NEAR RIMINI, MT

LOCATION.--Lat 46°25'44.1", long 112°16'19.7" (NAD 27), NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 19, T.8N., R.5W., Lewis and Clark County, Hydrologic Unit 10020006, 200 ft above confluence with unnamed tributary, 0.3 mi upstream from Scott Reservoir, and 0.45 mi south of Rimini.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--July 2003 to current year.

GAGE.--None. Elevation at sampling site is 7,380 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
JUN 01...	1200	1.5	12.4	6.6	15	14.0	3.5	5	1.63	.246	.44	.2	.80
AUG 31...	1100	.002	--	6.1	24	23.0	7.5	8	2.63	.382	.63	.2	1.06

Date	Sodium, percent (00932)	Alkalinity, water, fltrd fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Aluminum, water, fltrd, ug/L (01106)	Arsenic, water, fltrd, ug/L (01000)	Arsenic, water, unfltrd ug/L (01002)	Cadmium, water, fltrd, ug/L (01025)
JUN 01...	24	4	.32	<.2	6.50	1.1	14	.02	.06	145	1.3	2	E.03
AUG 31...	21	8	.31	<.2	7.80	1.5	20	.03	<.01	98	1.1	E2	E.03

Date	Cadmium, water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Lithium, water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
JUN 01...	<.04	2.0	2.0	55	60	.19	.22	E.4	.9	1	3.7	4
AUG 31...	E.02	1.7	1.8	86	80	.21	.21	E.5	5.6	6	4.3	2

E--Estimated.

462657112143501 BANNER CREEK AT BRIDGE, 0.5 MILE ABOVE CITY DIVERSION, NEAR RIMINI, MT

LOCATION.--Lat 46°23'57", long 112°15'25" (NAD 27), in NW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> sec. 16, T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, at bridge near the downstream edge of meadow, about 0.5 mi upstream from city diversion, and 2.5 mi south of Rimini.

DRAINAGE AREA.--2.6 mi<sup>2</sup>.

PERIOD OF RECORD.--April 2000 to current year.

GAGE--None. Elevation at site is 6,700 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
MAR 30...	1415	.20	7.1	83	9.0	6.5	34	10.4	1.93	.8	E2	.28	.31
MAY 25...	1300	10	7.3	40	4.5	1.5	16	4.94	.842	1.4	E1	.12	.16
AUG 02...	0900	.31	7.5	74	16.0	11.5	29	9.03	1.66	.9	<2	.08	.10
SEP 21...	0830	.49	7.6	74	0.5	1.0	29	8.99	1.69	.6	<2	.06	.08

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR 30...	2.2	2.5	.23	.54	46.6	47	59	14	.01
MAY 25...	2.9	4.6	.10	2.20	22.2	25	51	23	.63
AUG 02...	1.2	1.8	<.08	.25	13.3	14	88	1	<.01
SEP 21...	1.4	1.5	<.08	.24	14.5	15	80	2	<.01

E--Estimated.

462838112143901 POISON CREEK AT MOUTH, NEAR RIMINI, MT

LOCATION.--Lat 46°28'38", long 112°14'39" (NAD 27), in SW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> sec. 4, T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, at culvert crossing on Rimini Road about 1 mi south of Rimini.

DRAINAGE AREA.--0.32 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1999 to current year.

GAGE--None. Elevation at site is 5,500 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
APR 27...	1030	.07	6.1	--	--	4.5	45	14.0	2.35	11.4	14	12.9	12.5
MAY 25...	1345	.40	6.3	97	6.0	3.5	33	10.4	1.74	13.4	108	8.41	8.72
AUG 02...	0930	.04	5.9	95	17.0	12.0	30	9.24	1.73	20.0	28	6.61	6.50
SEP 21...	0930	.07	6.5	117	2.5	3.5	41	12.7	2.19	15.0	23	8.16	8.08

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
APR 27...	46.9	46.8	2.91	5.30	1,840	1,850	75	1	<.01
MAY 25...	29.6	44.1	1.45	46.8	1,220	1,220	77	15	.02
AUG 02...	25.1	25.9	1.83	5.59	1,060	1,050	91	2	<.01
SEP 21...	26.2	26.4	.84	3.47	1,350	1,340	75	1	<.01



## TENMILE CREEK BASIN

462853112144101 TENMILE CREEK ABOVE CITY DIVERSION, NEAR RIMINI, MT

LOCATION.--Lat 46°28'53", long 112°14'10" (NAD 27), in NW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> sec. 4, T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, about 0.25 mile upstream from city diversion, about 100 feet west of Rimini road, and 0.125 mi south of Rimini.

DRAINAGE AREA.--15.2 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1999 to current year.

GAGE--None. Elevation at site is 5,350 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
APR 27...	1100	15	7.2	55	13.5	4.0	20	5.88	1.19	2.6	3	.64	.70
MAY 25...	1150	32	7.3	42	8.0	1.5	15	4.46	.902	2.2	4	.60	.62
AUG 02...	1015	1.3	7.4	80	17.0	13.0	29	8.55	1.75	6.7	9	1.72	1.80
SEP 21...	1000	3.5	7.1	79	5.0	3.5	28	8.41	1.73	3.7	6	1.34	1.27

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
APR 27...	3.6	4.0	.69	2.45	121	120	80	6	.24
MAY 25...	3.8	4.3	.57	2.01	100	100	91	3	.26
AUG 02...	3.1	3.6	.41	1.25	361	375	80	2	.01
SEP 21...	3.1	3.2	.36	1.55	295	272	61	4	.04

## 462758112123001 BEAVER CREEK TRIBUTARY NO. 2 NEAR RIMINI, MT

LOCATION.--Lat 46°27'58", long 112°12'30" (NAD 27), in SW<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> sec. 3, T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, about 40 ft upstream from inlet structure to Banner Creek flume, about 100 ft. upstream from Banner Creek flume, and about 2.5 mi southwest of Rimini.

DRAINAGE AREA.--0.67 mi<sup>2</sup>.

PERIOD OF RECORD.--April 2000 to current year.

GAGE--None. Elevation at site is 6,330 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
APR 29...	0840	.31	6.1	49	-3.5	0.5	15	4.92	.758	6.9	7	1.55	1.53
MAY 25...	1330	.97	7.1	48	8.0	4.0	15	4.77	.804	5.7	8	1.97	2.04
AUG 03...	1200	.25	7.3	60	22.0	9.0	19	6.09	.980	6.8	7	2.18	2.26
SEP 24...	1130	.21	7.6	62	12.0	5.0	20	6.47	1.03	6.7	8	2.31	2.12

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
APR 29...	10.2	10.4	.22	.78	261	247	69	2	<.01
MAY 25...	11.8	14.0	.56	2.79	357	343	56	2	.01
AUG 03...	5.8	6.6	.15	.60	343	343	62	2	<.01
SEP 24...	8.5	8.5	.23	.59	379	337	71	1	<.01

## TENMILE CREEK BASIN

462922112145401 TENMILE CREEK BELOW SPRING CREEK, AT RIMINI, MT

LOCATION.--Lat 46°29'22", long 112°14'54" (NAD 27), in NW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> sec. 33, T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, at bridge crossing on road to private residence in Rimini.

DRAINAGE AREA.--22.8 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1997 to current year.

GAGE--None. Elevation at site is 5,220 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
APR 27...	0900	21	8.4	61	16.0	3.0	20	6.06	1.19	10.2	22	.75	.86
MAY 25...	1045	36	7.5	46	6.0	2.5	16	4.84	1.02	5.9	11	.65	.72
AUG 02...	1100	.13	6.8	154	20.0	16.0	55	15.4	3.98	39.3	222	6.57	7.06
SEP 21...	1100	.85	7.1	116	6.0	5.0	42	12.4	2.78	64.6	111	3.34	3.11

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
APR 27...	4.2	4.9	.82	4.92	143	145	87	7	.40
MAY 25...	6.0	7.5	.71	2.77	115	115	68	6	.59
AUG 02...	3.5	7.8	E.04	3.56	1,110	1,160	70	6	<.01
SEP 21...	4.7	5.4	1.59	3.96	631	569	77	3	.01

E--Estimated.

462932112145801 MOORES SPRING CREEK AT MOUTH, NEAR RIMINI, MT

LOCATION.--Lat 46°29'32", long 112°14'58" (NAD 27), in NW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> sec. 33 , T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, at culvert crossing on Rimini Road in Rimini.

DRAINAGE AREA.--0.6 mi<sup>2</sup>.

PERIOD OF RECORD.--May 2000 to current year.

GAGE--None. Elevation at site is 5,180 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
APR 27...	1130	.07	7.8	211	18.0	7.5	95	26.7	6.90	59.5	70	4.09	4.11
MAY 25...	1020	.26	7.8	170	4.5	0.5	75	20.6	5.68	42.2	66	5.04	5.69
AUG 02...	1130	.01	7.9	248	22.5	13.5	110	29.6	7.84	84.9	96	3.56	3.56
SEP 21...	1130	.04	7.8	280	6.0	0.5	120	33.2	8.90	59.1	65	6.34	6.00

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
APR 27...	6.0	6.7	.11	3.37	630	677	87	2	<.01
MAY 25...	7.5	9.4	.13	6.35	826	859	80	7	<.01
AUG 02...	5.6	5.6	<.08	.48	471	480	75	1	<.01
SEP 21...	5.6	5.8	<.08	.96	1,120	1,100	50	1	<.01

462917112165601 MINNEHAHA CREEK BELOW ARMSTRONG MINE, NEAR RIMINI, MT

LOCATION.--Lat 46°29'17", long 112°16'56" (NAD 27), in SW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> sec. 31, T. 9 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, 0.6 mi downstream from the Armstrong mine road and 1.4 mi southwest of Rimini.

DRAINAGE AREA.--1.75 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1998 to current year.

GAGE--None. Elevation at site is 5,650 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
APR 29...	1000	3.3	6.8	48	--	1.5	14	4.01	.970	4.0	5	2.98	3.06
MAY 25...	1200	5.3	7.1	42	8.0	4.5	12	3.30	.841	3.7	5	2.02	2.05
AUG 03...	0945	.14	7.2	85	21.0	10.5	25	6.95	1.84	10.3	11	6.29	6.33
SEP 24...	0930	.21	7.8	86	10.5	5.0	27	7.60	1.93	10.4	11	6.22	6.48

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
APR 29...	12.5	14.1	.71	2.06	503	426	70	3	.03
MAY 25...	10.2	12.5	1.11	4.13	302	295	55	3	.04
AUG 03...	17.3	19.1	.47	1.00	935	966	50	1	<.01
SEP 24...	19.2	19.5	.79	1.15	1,020	964	71	1	<.01

## 462918112170801 BEATRICE MINE TRIBUTARY AT MOUTH, NEAR RIMINI, MT

LOCATION.--Lat 46°29'18", long 112°17'08" (NAD 27), in SW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> sec. 31, T. 9 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, 400 ft upstream from old logging road crossing, about 1,000 ft upstream from confluence with Minnehaha Creek, and 1.5 mi southwest of Rimini.

DRAINAGE AREA.--0.24 mi<sup>2</sup>.

PERIOD OF RECORD.--May 2000 to current year.

GAGE--None. Elevation at site is 5,660 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
APR 29...	0945	.01	6.6	79	-1.5	0.0	25	7.98	1.34	.9	<2	.04	.04
MAY 25...	1100	3.5	7.2	55	7.0	2.5	16	5.04	.862	1.2	<2	.05	.06
AUG 03...	1015	.02	7.4	103	21.0	11.0	34	10.6	1.73	.7	<2	.06	.05
SEP 24...	1000	.03	7.7	93	11.0	6.0	29	9.07	1.58	.5	<2	.05	.06

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
APR 29...	12.1	16.8	E.06	.64	5.6	5	56	3	<.01
MAY 25...	15.7	18.6	.21	.87	8.0	7	83	5	.05
AUG 03...	7.0	7.6	<.08	E.04	6.6	5	67	1	<.01
SEP 24...	7.6	8.0	<.08	.10	6.0	6	80	1	<.01

E--Estimated.

## TENMILE CREEK BASIN

463023112153701 MINNEHAHA CREEK ABOVE CITY DIVERSION, NEAR RIMINI, MT

LOCATION.--Lat 46°30'23", long 112°15'37" (NAD 27), in NW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> sec. 29, T. 9 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, about 75 feet upstream from city diversion structure, about 200 feet upstream from mouth and about 3 mi north of Rimini.

DRAINAGE AREA.--5.35 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1998 to current year.

GAGE--None. Elevation at site is 5,040 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
APR 27...	1200	4.5	8.0	57	18.0	4.5	18	5.31	1.19	2.7	2	1.57	1.70
MAY 25...	0910	10	7.5	48	4.0	3.0	16	4.59	1.01	2.4	3	1.07	1.29
AUG 02...	1200	.31	7.2	69	23.0	14.5	22	6.28	1.47	3.4	4	1.40	1.62
SEP 21...	1145	.94	7.8	74	7.5	4.0	25	7.25	1.63	2.7	3	1.70	1.68

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
APR 27...	7.9	9.5	.20	1.20	264	261	59	6	.07
MAY 25...	7.7	10.1	.23	1.90	186	194	73	6	.16
AUG 02...	4.4	6.6	E.04	.72	222	244	54	4	<.01
SEP 21...	6.6	7.1	.09	.44	307	291	92	3	.01

E--Estimated.

## 06062500 TENMILE CREEK NEAR RIMINI, MT

LOCATION.--Lat 46°31'27", long 112°15'22" (NAD 27), in NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 20, T.9 N., R.5 W., Lewis and Clark County, Hydrologic Unit 10030101, Helena National Forest, on left bank at U.S. Forest Service Moose Creek campground, 500 ft upstream from Moose Creek, 2.5 mi north of Rimini, and at river mile 20.4.

DRAINAGE AREA.--30.9 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1914 to September 1994, May 1997 to current year. Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1309: 19417, 1921, 1924-25. WSP 1509: 1915, 1916-17(M), 1920(M), 1927(m), 1928-1930, 1947(m), 1948, 1950(M). WSP 1559: Drainage area. WSP 1709: 1959. WDR-MT-97-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,850 ft (NGVD 29). Prior to Dec. 17, 1934, water-stage recorder at site 40 ft downstream at different elevation and different control.

REMARKS.--Records good except those below 1.0 ft<sup>3</sup>/s and those for estimated daily discharges, which are poor. Flow regulated by Chessman and Scott Reservoirs on tributaries upstream from station, combined capacity, 2,340 acre-feet. Some small diversions upstream from station. U.S. Geological Survey satellite telemeter at station. Several observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.28	0.51	0.54	e0.28	e0.25	0.42	10	24	45	12	0.59	0.88
2	0.27	0.47	0.58	e0.20	e0.26	0.38	7.1	24	42	11	0.76	0.88
3	0.26	e0.43	0.56	e0.20	e0.30	e0.32	6.4	28	38	9.5	0.80	0.68
4	0.27	e0.40	0.47	e0.14	e0.30	e0.36	9.7	33	36	13	0.68	0.61
5	0.28	e0.32	0.50	e0.13	e0.35	0.37	14	37	37	14	0.69	0.79
6	0.27	e0.36	0.54	e0.20	e0.35	0.40	16	35	39	9.8	0.69	0.66
7	0.26	e0.41	0.53	e0.40	e0.32	0.40	18	33	35	7.4	0.60	0.62
8	0.24	0.39	0.48	0.41	e0.45	0.57	19	32	40	6.2	0.58	0.57
9	0.24	0.38	0.47	0.40	e0.42	0.83	19	28	37	5.2	0.55	0.52
10	0.25	0.45	e0.40	0.40	0.40	1.2	16	26	49	4.7	0.53	0.47
11	0.28	0.47	e0.37	0.39	0.39	1.4	16	25	57	4.4	0.51	0.45
12	0.32	0.45	e0.44	0.37	0.37	1.5	18	22	41	3.6	0.48	0.55
13	0.41	0.43	0.47	0.38	0.36	1.5	22	21	34	2.3	0.46	0.82
14	0.36	0.43	0.54	0.40	0.36	1.5	26	19	31	1.9	0.43	0.60
15	0.34	0.42	0.49	0.38	0.36	1.4	26	17	29	1.6	0.42	0.52
16	0.35	0.43	0.47	0.37	0.36	1.3	22	18	26	1.5	0.42	0.49
17	0.30	0.43	0.47	0.37	0.37	1.6	20	21	22	1.4	0.49	0.46
18	0.27	0.43	0.45	0.36	0.41	3.0	18	19	21	1.3	0.47	0.55
19	0.25	0.55	0.48	0.37	0.43	5.8	18	23	20	1.3	0.43	1.6
20	0.23	e0.48	0.39	0.36	0.40	3.3	18	23	19	1.2	0.38	2.6
21	0.22	e0.28	0.43	0.34	0.38	3.5	16	35	17	1.1	0.34	2.3
22	0.21	e0.26	0.42	e0.32	0.38	4.1	15	52	15	1.1	0.34	1.5
23	0.23	e0.45	0.51	e0.31	0.39	5.9	16	57	14	1.00	9.2	3.2
24	0.24	0.49	0.38	e0.30	0.41	8.4	18	50	13	0.94	4.2	2.4
25	0.24	0.54	0.38	e0.23	0.43	8.2	17	54	13	0.87	4.4	1.2
26	0.22	0.50	0.40	e0.22	0.43	7.1	19	63	13	0.81	4.0	0.84
27	0.21	0.50	e0.39	e0.17	0.41	5.3	24	67	16	0.78	4.8	0.68
28	0.26	0.47	e0.33	e0.18	0.42	4.2	33	67	20	0.77	1.8	0.61
29	3.2	0.50	e0.32	e0.28	0.42	4.1	27	66	15	0.72	1.1	0.53
30	0.96	0.54	e0.27	e0.34	---	5.5	25	57	15	0.68	0.89	0.50
31	0.57	---	e0.30	e0.32	---	8.7	---	51	---	0.64	0.78	---
TOTAL	12.29	13.17	13.77	9.52	10.88	92.55	549.2	1,127	849	122.71	42.81	29.08
MEAN	0.40	0.44	0.44	0.31	0.38	2.99	18.3	36.4	28.3	3.96	1.38	0.97
MAX	3.2	0.55	0.58	0.41	0.45	8.7	33	67	57	14	9.2	3.2
MIN	0.21	0.26	0.27	0.13	0.25	0.32	6.4	17	13	0.64	0.34	0.45
AC-FT	24	26	27	19	22	184	1,090	2,240	1,680	243	85	58

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2004, BY WATER YEAR (WY)\*

MEAN	3.03	2.29	1.74	1.43	1.31	2.50	17.9	82.8	72.2	12.2	2.52	2.32
MAX	23.1	13.6	9.64	6.97	5.05	17.5	66.7	300	346	66.4	22.5	22.4
(WY)	(1966)	(1986)	(1918)	(1918)	(1921)	(1986)	(1926)	(1917)	(1975)	(1969)	(1993)	(1993)
MIN	0.19	0.22	0.17	0.14	0.06	0.07	1.50	6.14	3.01	0.34	0.13	0.23
(WY)	(1974)	(1941)	(1941)	(1941)	(2002)	(2002)	(1975)	(2000)	(2000)	(1985)	(2000)	(1935)

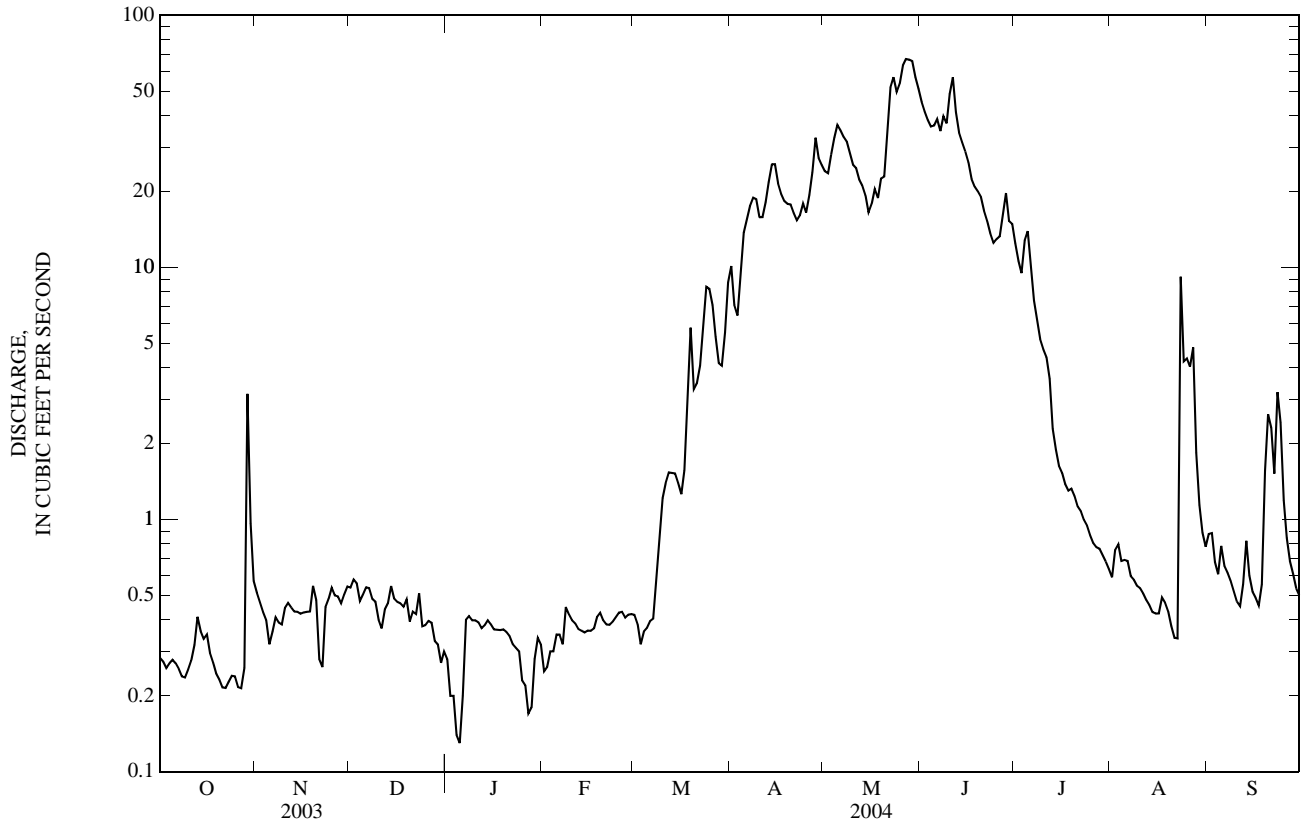


TENMILE CREEK BASIN

06062500 TENMILE CREEK NEAR RIMINI, MT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1915 - 2004*	
ANNUAL TOTAL	4,648.15		2,871.98			
ANNUAL MEAN	12.7		7.85		16.8	
HIGHEST ANNUAL MEAN					53.1	1917
LOWEST ANNUAL MEAN					1.74	2000
HIGHEST DAILY MEAN	170	May 29	67	May 27	1,880	May 22, 1981
LOWEST DAILY MEAN	0.20	Jan 12	0.13	Jan 5	0.00	Aug 31, 1931
ANNUAL SEVEN-DAY MINIMUM	0.22	Oct 21	0.21	Dec 31	0.00	Aug 31, 1931
MAXIMUM PEAK FLOW			73	May 26	3,290	May 22, 1981
MAXIMUM PEAK STAGE			2.49	May 26	6.20	May 22, 1981
ANNUAL RUNOFF (AC-FT)	9,220		5,700		12,140	
10 PERCENT EXCEEDS	44		26		50	
50 PERCENT EXCEEDS	0.50		0.58		2.0	
90 PERCENT EXCEEDS	0.27		0.28		0.40	

\*--During period of operation (1915-1944, May 1997 to current year).  
 e--Estimated.



## 06062750 TENMILE CREEK AT TENMILE WATER TREATMENT PLANT, NEAR RIMINI, MT

LOCATION.--Lat 46°34'22", long 112°12'52" (NAD 27), in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 34, T.10N., R.5W., Lewis and Clark County, Hydrologic Unit 10030101, on left bank near Tenmile Water Treatment Plant, about 0.1 mi south of U.S. Highway 12, and about 8 mi north of Rimini. Formerly published as Tenmile Creek at Helena Water Treatment Plant, near Rimini.

DRAINAGE AREA.--51.1 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1999 to September 2004 (discontinued).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	
DEC	04...	0820	.57	8.1	190	-5.0	0.0	68	20.2	4.36	.12	<.016	<.002
APR	27...	1300	25	7.8	80	--	7.5	29	8.58	1.80	--	--	--
MAY	25...	0740	53	7.5	66	4.0	1.0	24	7.05	1.53	--	--	--
AUG	03...	0830	.68	7.8	166	16.0	14.5	64	19.7	3.65	--	--	--
SEP	21...	1230	4.5	7.8	168	8.5	7.0	65	19.5	3.92	--	--	--

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Arsenic, water, fltrd, ug/L (01000)	Arsenic, water, unfltrd ug/L (01002)	Cadmium, water, fltrd, ug/L (01025)	Cadmium, water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	
DEC	04...	.006	.014	13.9	15	.38	.40	2.2	1.6	<.08	.09
APR	27...	--	--	12.9	16	.66	.74	4.4	5.2	.32	1.96
MAY	25...	--	--	8.1	13	.61	.76	5.8	6.8	.34	2.28
AUG	03...	--	--	23.1	24	.56	.67	2.2	2.5	<.08	.18
SEP	21...	--	--	13.1	15	.45	.44	2.1	2.3	<.08	.39

Date	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)	
DEC	04...	78.1	76	89	1	<.01
APR	27...	138	144	85	5	.34
MAY	25...	134	140	79	6	.85
AUG	03...	91.4	94	80	1	<.01
SEP	21...	85.8	87	88	1	.01

463438112091801 TENMILE CREEK BELOW COLORADO GULCH, NEAR HELENA, MT

LOCATION.--Lat 46°34'38", long 112°09'18" (NAD 27), in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 31, T.10N., R4W., Lewis and Clark County, Hydrologic Unit 10030101, at U.S. Highway 12 bridge over Tenmile Creek, about 0.5 mi below the mouth of Colorado Gulch, and about 5.0 mi west of Helena.

DRAINAGE AREA.--77.8 mi<sup>2</sup>.

PERIOD OF RECORD.--April 2002 to December 2003 (discontinued).

GAGE.--None. Elevation of gage is 4,190 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Nitrite + nitrate water fltrd, mg/L as N (00631)	
DEC 04...	0930	3.1	7.9	312	-1.0	6.0	130	35.8	10.1	E.09	.350	
Date		Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)
DEC 04...	E.001	.013	.016		10.3	11	.07	.09	1.2	1.6	<.08	.06
Date					Zinc, water, unfltrd recover-able, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)			
DEC 04...					13.5	13	86	1	.01			

## 06063000 TENMILE CREEK NEAR HELENA, MT

LOCATION.--Lat 46°36'20", long 112°05'20" (NAD 27), in SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 22, T.10N., R4W., Lewis and Clark County, Hydrologic Unit 10030101, at Williams Street bridge over Tenmile, about 1.2 mi southeast of Fort Harrison, and about 3.5 mi west of Helena.

DRAINAGE AREA.--96.5 mi<sup>2</sup>.

PERIOD OF RECORD.--April 2002 to December 2003 (discontinued).

GAGE.-- Non-recording wire-weight gage on bridge. Elevation at gage is 3,960 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Nitrite + nitrate water fltrd, mg/L as N (00631)	
DEC 04...	1030	3.0	8.1	360	-3.0	.5	120	36.0	8.52	E.09	.241	
Date		Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)
DEC 04...	E.001	E.004	.008	13.7	15	.07	.09	1.4	1.9	<.08	.12	
Date		Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)					
DEC 04...		9.0	10	80	1	.01						

TENMILE CREEK BASIN

463747112033801 SEVENMILE CREEK AT MOUTH, NEAR HELENA, MT

LOCATION.--Lat 46°37'47", long 112°03'38" (NAD 27), in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 13, T.10N., R4W., Lewis and Clark County, Hydrologic Unit 10030101, at railroad bridge over Sevenmile Creek, about 0.15 mi upstream from Tenmile Creek, about 3.2 mi northwest of Helena.

DRAINAGE AREA.--57.2 mi<sup>2</sup>.

PERIOD OF RECORD.--April 2002 to December 2003 (discontinued).

GAGE.--None. Elevation at site is 3,850 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Nitrite + nitrate water fltrd, mg/L as N (00631)
DEC 04...	1100	5.2	7.8	506	5.5	.0	230	59.9	18.7	.14	.302

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)
DEC 04...	.003	.012	.030	8.0	8	<.04	E.02	1.3	1.3	.18	.46

Date	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
DEC 04...	.9	E2	60	22	.31

06064100 TENMILE CREEK AT GREEN MEADOW DRIVE, AT HELENA, MT

LOCATION.--Lat 46°37'54", long 112°02'46" (NAD 27), in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 12, T.10N., R4W., Lewis and Clark County, Hydrologic Unit 10030101, at Green Meadow Drive bridge over Tenmile Creek, about 1.1 mi north of Custer Avenue, and about 3 mi northwest of Helena.

DRAINAGE AREA.--161 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1997 to September 1998, April 2002 to December 2003 (discontinued).

GAGE.--None. Elevation at site is 3,820 ft (NGVD 29).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Nitrite + nitrate water fltrd, mg/L as N (00631)
DEC 04...	1200	7.7	8.2	455	.5	.0	200	52.8	15.4	.16	.143
Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)
DEC 04...	.002	.006	.019	8.7	10	E.04	.06	1.5	1.1	<.08	.37
Date	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)						
DEC 04...	2.9	6	97	3	.06						