



Water-Data Report 2008

**06075785 SOUTH FORK SMITH RIVER AT MCGUIRE BRIDGE, NEAR WHITE SULPHUR SPRINGS, MT**

Upper Missouri Basin  
Smith Subbasin

LOCATION.--Lat 46°31'24", long 110°57'20" referenced to North American Datum of 1927, in SW ¼ NW ¼ SE ¼ sec.22, T.9 N., R.6 E., Meagher County, MT, Hydrologic Unit 10030103, on left bank, 50 ft upstream from McGuire Ranch bridge, 1.3 mi downstream of Hot Springs Creek, 3.0 mi southwest of White Sulphur Springs, and at river mile 3.0.

DRAINAGE AREA.--157.7 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--October 2007 to April 2008.

GAGE.--None. Elevation at site is 4,915 ft, referenced to the National Geodetic Vertical Datum of 1929.

REMARKS.--This site was sampled as part of a study of the Smith River watershed.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 3

Date	Time	Instantaneous discharge, ft <sup>3</sup> /s (00061)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, μS/cm 25 degC (00095)	Temperature, 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)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt lab, mg/L as CaCO <sub>3</sub> (29801)	Chloride, water, fltrd, mg/L (00940)
Oct 16...	1050	5.3	8.0	787	5.5	260	70.7	20.9	5.13	1.8	68.7	289	27.5
Apr 10...	0930	10	--	775	--	--	--	--	--	--	--	--	--

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 3

[Remark codes: <, less than.]

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO <sub>2</sub> (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, dissolved, tons/d (70302)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Arsenic water, fltrd, μg/L (01000)	Boron, water, fltrd, μg/L (01020)	Lithium water, fltrd, μg/L (01130)	Strontium, water, fltrd, μg/L (01080)	Zinc, water, fltrd, μg/L (01090)
Oct 16...	.97	20.2	98.2	493	.67	7.03	1.24	.085	1.8	994	30.8	670	<1.8
Apr 10...	--	--	--	--	--	--	--	--	--	--	--	--	--

**06075785 SOUTH FORK SMITH RIVER AT MCQUIRE BRIDGE, NEAR WHITE SULPHUR SPRINGS, MT—Continued**

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2007  
TO SEPTEMBER 2008**

Part 3 of 3

Date	Deuterium/ Protium ratio, water, unfltrd per mil (82082)	O-18 / O-16 ratio, water, unfltrd per mil (82085)
<b>Oct</b>		
<b>16...</b>	-137	-17.18
<b>Apr</b>		
<b>10...</b>	-142	-18.33