

Water-Data Report 2011

**01549903 Red Run at Ralston, PA**

West Branch Susquehanna Basin  
Lower West Branch Susquehanna Subbasin

LOCATION.--Lat 41°30'33", long 76°57'13" referenced to World Geodetic System of 1984, Lycoming County, PA, Hydrologic Unit 02050206.

DRAINAGE AREA.--5.78 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--August 2011 to September 2011.

REMARKS.--Analyses for pH, water temperature, specific conductance, and dissolved oxygen were performed on site. Analyses for major ions, nutrients, and trace metals were performed at the USGS National Water Quality Laboratory in Denver, Colorado. Radiochemical analyses for gross alpha and gross beta were performed at the Eberline Services Laboratory in Richmond, California.

COOPERATION.--Water-quality samples were collected and analyzed in cooperation with the Williamsport Municipal Water Authority as part of the Lycoming Creek Basin Ambient Water-Quality Snapshot Project.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 1 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Discharge, instantaneous, ft <sup>3</sup> /s (00061)	Dissolved oxygen, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broadband light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)
08-01-2011	1330	737	25.3	.51	9.9	110	103	18.6	1.0

## 01549903 Red Run at Ralston, PA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 2 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, inflection-point, incremental titration method, field, mg/L as CaCO <sub>3</sub> (00419)		Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)		Bromide, water, filtered, mg/L (71870)
							mg/L as CaCO <sub>3</sub> (00419)	mg/L as CaCO <sub>3</sub> (00419)	mg/L as CaCO <sub>3</sub> (00453)	mg/L as CaCO <sub>3</sub> (00453)	
08-01-2011	1330	78	6.48	3.63	.78	1.09	.0	E 4			.012

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 3 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO <sub>2</sub> (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)		Nitrate plus nitrite, water, filtered, mg/L as N (00631)		Orthophosphate, water, filtered, mg/L as P (00671)
						mg/L as N (00608)	mg/L as N (00608)	mg/L as N (00631)	mg/L as N (00631)	
08-01-2011	1330	1.01	.08	5.87	36.0	.06	< .010	.21	.001	< .004

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 4 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Aluminum, water, filtered, µg/L (01106)	Barium, water, filtered, µg/L (01005)	Beryllium, water, filtered, µg/L (01010)	Cadmium, water, filtered, µg/L (01025)	Chromium, water, filtered, µg/L (01030)	Cobalt, water, filtered, µg/L (01035)	Copper, water, filtered, µg/L (01040)

## 01549903 Red Run at Ralston, PA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 5 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Iron, water, filtered, µg/L (01046)	Lead, water, filtered, µg/L (01049)	Lithium, water, filtered, µg/L (01130)	Manganese, water, filtered, µg/L (01056)	Molybdenum, water, filtered, µg/L (01060)	Nickel, water, filtered, µg/L (01065)	Silver, water, filtered, µg/L (01075)	Strontium, water, filtered, µg/L (01080)	Zinc, water, filtered, µg/L (01090)
08-01-2011	1330	22.1	1.18	11.8	641	<.014	30.8	<.005	52.8	90.4

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 6 of 6

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Date	Sample start time	Antimony, water, filtered, µg/L (01095)	Arsenic, water, filtered, µg/L (01000)	Boron, water, filtered, µg/L (01020)	Selenium, water, filtered, µg/L (01145)	Gross alpha radioactivity, 30-day count, water, filtered, Th-230 curve, picocuries per liter (62639)	Gross alpha radioactivity, 72-hour count, water, filtered, Th-230 curve, picocuries per liter (62636)	Gross beta radioactivity, 30-day count, water, filtered, Cs-137 curve, picocuries per liter (62645)	Gross beta radioactivity, 72-hour count, water, filtered, Cs-137 curve, picocuries per liter (62642)	Uranium (natural), water, filtered, µg/L (22703)
08-01-2011	1330	.033	.19	7	.28	1.2	2.1	1.5	.7	.026