

Water-Data Report 2011

01549909 Frozen Run near Ralston, PA

West Branch Susquehanna Basin
Lower West Branch Susquehanna Subbasin

LOCATION.--Lat 41°29'12", long 76°58'25" referenced to World Geodetic System of 1984, Lycoming County, PA, Hydrologic Unit 02050206.

DRAINAGE AREA.--6.86 mi².

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; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft³/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; R, radchem non-detect, below sslc]

Date	Sample start time	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)
08-02-2011	1430	741	33.3	.54	9.9	113	4.9	25	20.4

01549909 Frozen Run near Ralston, PA—Continued

WATER-QUALITY DATA

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 6

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Date	Sample start time	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	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 ₃ (00419)	Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)	Bromide, water, filtered, mg/L (71870)
08-02-2011	1430	3.0	1.77	.558	.57	.96	2	E 2	.013

WATER-QUALITY DATA

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 6

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Date	Sample start time	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrite, water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)
08-02-2011	1430	.78	< .04	4.54	7.18	.07	< .010	.20	< .001	< .004

WATER-QUALITY DATA

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 4 of 6

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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)
08-02-2011	1430	< .02	< .02	59.1	26.9	.092	.140	< .06	.100	< .50

01549909 Frozen Run near Ralston, PA—Continued

WATER-QUALITY DATA

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 5 of 6

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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)
08-02-2011	1430	7.0	.163	1.30	21.6	<.014	2.5	<.005	17.0	17.4

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 radio-activity, 30-day count, water, filtered, Th-230 curve, picocuries per liter (62639)	Gross alpha radio-activity, 72-hour count, water, filtered, Th-230 curve, picocuries per liter (62636)	Gross beta radio-activity, 30-day count, water, filtered, Cs-137 curve, picocuries per liter (62645)	Gross Beta radio-activity, 72-hour count, water, filtered, Cs-137 curve, picocuries per liter (62642)	Uranium (natural), water, filtered, µg/L (22703)
08-02-2011	1430	.036	.12	6	.05	R .2	.35	.8	.5	.015