



Water-Data Report 2013

**01479700 WEST BRANCH RED CLAY CREEK NEAR KENNETT SQUARE, PA**

Lower Delaware Basin  
Brandywine-Christina Subbasin

LOCATION.--Lat 39°48'39", long 75°42'18.500" referenced to North American Datum of 1927, Chester County, PA, Hydrologic Unit 02040205, at bridge on Kaolin Road, 2.3 mi south of Kennett Square.

DRAINAGE AREA.--16.9 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

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

REMARKS.--Samples were collected as part of the Chester County Biological Monitoring project.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the Chester County Water Resources Authority.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 1 of 3

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter]

Date	Sample start time	Discharge, instantaneous, ft <sup>3</sup> /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	pH, water, unfiltered, laboratory, standard units (00403)	Specific conductance, water, unfiltered, laboratory, µS/cm at 25°C (90095)	Specific conductance, water, unfiltered, laboratory, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)
11-06-2012	1400	17	13.3	7.9	8.0	485	487	7.1	48.6	19.3

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 2 of 3

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter]

Date	Sample start time	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint titration, (pH 4.5) laboratory, mg/L as CaCO <sub>3</sub> (90410)	ANC, water, unfiltered, inflection-point, incremental titration method, field, mg/L as CaCO <sub>3</sub> (00419)	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)
11-06-2012	1400	7.18	18.5	94.6	100	50.6	0.06	17.4	45.3	0.45

**01479700 WEST BRANCH RED CLAY CREEK NEAR KENNETT SQUARE, PA—Continued****WATER-QUALITY DATA  
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 3 of 3

[ANC, acid neutralizing capacity; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter]

Date	Sample start time	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)	Orthophos- phate, water, filtered, mg/L as P (00671)	Phosphorus, water, unfiltered, mg/L as P (00665)	Iron, water, filtered, µg/L (01046)	Boron, water, filtered, µg/L (01020)
11-06-2012	1400	0.038	5.77	0.019	0.152	0.15	37.0	21	



**01479700 WEST BRANCH RED CLAY CREEK NEAR KENNETT SQUARE, PA—Continued**

Date	11/06/12
Benthic Macroinvertebrate	Count
<i>Microcylloepus</i>	1
<i>Optioservus</i>	61
<i>Oulimnius</i>	21
<i>Stenelmis</i>	101
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	4
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	52
Empididae (DANCE FLIES)	
<i>Hemerodromia</i>	17
Tabanidae	2
Tipulidae (CRANE FLIES)	
<i>Antocha</i>	50
Total Organisms	872