



Water-Data Report 2013

**01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINTS, PA**

Lower Delaware Basin  
Brandywine-Christina Subbasin

LOCATION.--Lat 39°49'10", long 75°41'29" referenced to North American Datum of 1927, Chester County, PA, Hydrologic Unit 02040205, 750 ft upstream of the confluence of the West Branch Red Clay Creek, 1.9 mi south of Kennett Square.

DRAINAGE AREA.--10.20 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--October 1970 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; <, less than]

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, 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	1200	4.3	13.5	7.9	8.0	464	456	6.3	45.1	17.2

**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; <, less than]

Date	Sample start time	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint titration, 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	1200	4.32	18.8	86.1	85	61.1	0.07	19.2	32.4	0.19

## 01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINTS, 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; <, less than]

Date	Sample start time	Ammonia,	Nitrate plus	Nitrite,	Orthophos-	Phosphorus,	Iron,	Boron,
		water, filtered, mg/L as N (00608)	nitrite, water, filtered, mg/L as N (00631)	water, filtered, mg/L as N (00613)	phate, water, filtered, mg/L as P (00671)	water, unfiltered, mg/L as P (00665)	water, filtered, μg/L (01046)	water, filtered, μg/L (01020)
11-06-2012	1200	< .010	3.53	0.005	0.031	0.04	39.3	11

**01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINTS, PA—Continued****ECOLOGICAL RECORDS**

PERIOD OF RECORD.--October 1970 to current year.

REMARKS.--Samples were collected using a Hess sampler with a mesh size of 500 microns. Three samples were collected and composited. Each sample covered a total area of 2.4 m<sup>2</sup>.

Date	11/06/12
Benthic Macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	50
Nematoda (NEMATODES)	14
Nemertea	
Enopla	
Hoplonemertea	
Tetrastemmatidae	
<i>Prostoma</i>	14
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Ancylidae	
<i>Ferrissia</i>	1
Planorbidae	
<i>Gyraulus</i>	1
Bivalvia (CLAMS)	
Veneroida	
Corbiculidae	
<i>Corbicula fluminea</i>	1
Arthropoda	

**01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINTS, PA—Continued**

Date	11/06/12
Benthic Macroinvertebrate	Count
Acariformes	
Hydrachnidae (WATER MITES)	42
Crustacea	
Amphipoda (SCUDS)	
Gammaridae	
<i>Gammarus</i>	17
Isopoda (AQUATIC SOWBUGS)	
Asellidae	
<i>Caecidotea</i>	1
Decapoda	
Cambaridae (CRAYFISH)	3
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	3
Caenidae	
<i>Caenis</i>	14
Ephemerellidae	
<i>Eurylophella</i>	2
Heptageniidae	
<i>Maccaffertium</i>	21
Plecoptera (STONEFLIES)	
Capniidae	
<i>Allocapnia</i>	2
Perlidae	
<i>Acroneuria</i>	1

**01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINTS, PA—Continued**

Date	11/06/12
Benthic Macroinvertebrate	Count
Taeniopterygidae	
<i>Taeniopteryx</i>	3
Trichoptera (CADDISFLIES)	
Glossosomatidae	
<i>Glossosoma</i>	1
Hydropsychidae	
<i>Cheumatopsyche</i>	118
<i>Hydropsyche</i>	333
Hydroptilidae	
<i>Hydroptila</i>	12
<i>Leucotrichia</i>	20
Lepidostomatidae	
<i>Lepidostoma</i>	1
Philopotamidae	
<i>Chimarra</i>	262
Psychomyiidae	
<i>Psychomyia</i>	1
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Ancyronyx</i>	2
<i>Dubiraphia</i>	1
<i>Macronychus</i>	8
<i>Optioservus</i>	287
<i>Oulimnius</i>	55
<i>Stenelmis</i>	56
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	65

**01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINTS, PA—Continued**

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Date	11/06/12
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Benthic Macroinvertebrate	Count
Diptera (TRUE FLIES)	
Athericidae	
<i>Atherix</i>	1
Chironomidae (MIDGES)	
189	
Empididae (DANCE FLIES)	
<i>Hemerodromia</i>	
21	
Simuliidae	
<i>Simulium</i>	3
Tipulidae (CRANE FLIES)	
<i>Antocha</i>	42
Total Organisms	1668

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