



Water-Data Report 2013

01476450 RIDLEY CREEK AT RT3 NEAR WILLISTOWN, PA

Lower Delaware Basin
Lower Delaware Subbasin

LOCATION.--Lat 39°58'01", long 75°28'58" referenced to North American Datum of 1983, Chester County, PA, Hydrologic Unit 02040202, at State Route 3 bridge, 6.5 mi east of West Chester.

DRAINAGE AREA.--13.9 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2001 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; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/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 ³ /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)
10-11-2012	1300	9.4	11.8	8.0	7.9	363	361	12.6	26.1	14.0

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

Part 2 of 3

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/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 (pH 4.5), laboratory, mg/L as CaCO ₃ (90410)	ANC, water, unfiltered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (00419)	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, water, filtered, mg/L as N (00608)
10-11-2012	1300	2.72	21.3	64.2	66	53.0	< .04	13.7	22.1	< .010

01476450 RIDLEY CREEK AT RT3 NEAR WILLISTOWN, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 3 of 3

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/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	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)	Iron, water, filtered, μg/L (01046)	Boron, water, filtered, μg/L (01020)
10-11-2012	1300	2.25	0.003	0.031	57.4	29

01476450 RIDLEY CREEK AT RT3 NEAR WILLISTOWN, PA—Continued**ECOLOGICAL RECORDS**

PERIOD OF RECORD.--October 2001 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 m².

Date	10/11/12
Benthic Macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	25
Nematoda (NEMATODES)	64
Nemertea (PROBOSCIS WORMS)	
Enopla	
Hoplonemertea	
Tetrastemmatidae	
<i>Prostoma</i>	32
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Ancyliidae	
<i>Ferrissia</i>	2
Bivalvia (CLAMS)	
Veneroidea	
Corbiculidae	
<i>Corbicula fluminea</i>	12
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	

01476450 RIDLEY CREEK AT RT3 NEAR WILLISTOWN, PA—Continued

Date	10/11/12
Benthic Macroinvertebrate	Count
Lumbriculidae	3
Arthropoda	
Acariformes	
Hydrachnidae (WATER MITES)	48
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Baetis</i>	48
Ephemerellidae	
<i>Serratella</i>	21
Heptageniidae	
<i>Maccaffertium</i>	2
Tricorythidae	
<i>Tricorythodes</i>	1
Plecoptera (STONEFLIES)	
Perlidae	11
Hemiptera	
Veliidae	
<i>Rhagovelia</i>	1
Trichoptera (CADDISFLIES)	
Glossosomatidae	
<i>Glossosoma</i>	2
Hydropsychidae	
<i>Cheumatopsyche</i>	233
<i>Hydropsyche</i>	1161
Hydroptilidae	

01476450 RIDLEY CREEK AT RT3 NEAR WILLISTOWN, PA—Continued

Date	10/11/12
Benthic Macroinvertebrate	Count
<i>Hydroptila</i>	7
<i>Leucotrichia</i>	14
Leptoceridae	
<i>Oecetis</i>	1
Philopotamidae	
<i>Chimarra</i>	49
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Ancyronyx</i>	1
<i>Optioservus</i>	183
<i>Oulimnius</i>	54
<i>Promoesia</i>	29
<i>Stenelmis</i>	90
Hydrophilidae	
<i>Berosus</i>	5
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	2
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	457
Empididae (DANCE FLIES)	
<i>Hemerodromia</i>	20
Simuliidae (BLACK FLIES)	
<i>Simulium</i>	112
Tipulidae (CRANE FLIES)	
<i>Antocha</i>	40
<i>Tipula</i>	1

01476450 RIDLEY CREEK AT RT3 NEAR WILLISTOWN, PA—Continued

Date	10/11/12
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Benthic Macroinvertebrate	Count
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Total Organisms	2731
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