



Water-Data Report 2013

01480744 BEAVER CREEK RESERVOIR NEAR GUTHRIESVILLE, PA

Lower Delaware Basin
Brandywine-Christina Subbasin

LOCATION.--Lat 40°01'49.32", long 75°47'00.89" referenced to North American Datum of 1983, Chester County, PA, Hydrologic Unit 02040205, 3.3 mi northwest of Thorndale, PA.

DRAINAGE AREA.--3.01 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.—November 2001; November 2005; June 2007; December 2012.

REMARKS.--Station operated as part of the Chester County Biological Monitoring Project.

COOPERATION.--Water-quality samples were collected with cooperation from the Chester County Water Resources Authority.

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

Part 1 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	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, µS/cm at 25°C (90095)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery (99584)	Decafluoro biphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery (99585)	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery (99586)
12-03-2012	1100	11.2	7.1	7.2	291	278	7.8	81.2	34.5	80.7

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

Part 2 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	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-fixed endpoint titration, mg/L as CaCO ₃ (90410)	ANC, water, unfiltered, inflection-point, incremental titration method, 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)
12-03-2012	1100	25.5	8.79	3.11	13.2	39.4	51	30.3	0.04	11.7

01480744 BEAVER CREEK RESERVOIR NEAR GUTHRIESVILLE, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 3 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Ammonia plus organic nitrogen, water, filtered, mg/L as N		Nitrate plus nitrite, water, filtered, mg/L as N		Nitrite, water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, unfiltered, mg/L as P (00665)	Iron, water, filtered, µg/L (01046)
		Sulfate, water, filtered, mg/L (00945)	Ammonia, water, filtered, mg/L as N (00608)	Ammonia, water, filtered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as N (00631)				
12-03-2012	1100	22.8	0.91	0.329	5.97	0.045	0.008	0.06	88.4

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 4 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Manganese, water, filtered, µg/L (01056)	Boron, water, filtered, µg/L (01020)	1,4-Dichlorobenzene, water, recoverable, µg/L		Bromacil, water, filtered, recoverable, µg/L (04029)	Camphor, water, filtered, recoverable, µg/L (62070)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82680)	Chlorpyrifos, water, filtered, recoverable, µg/L (38933)	Diazinon, water, filtered, recoverable, µg/L (39572)	Metalaxyl, water, filtered, recoverable, µg/L (50359)
				1,4-Dichlorobenzene, water, recoverable, µg/L (34572)	1,4-Dichlorobenzene, water, recoverable, µg/L (34572)						
12-03-2012	1100	131	8.8	< .040	< .36	0.031	< .16	< .16	< .16	< .12	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 5 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Metolachlor, water, filtered, recoverable, µg/L (39415)	DEET, water, filtered, recoverable, µg/L (62082)	p-Cresol, water, filtered, recoverable, µg/L (62084)	Prometon, water, filtered, recoverable, µg/L (04037)	1-Methylnaphthalene, water, filtered, recoverable, µg/L (62054)	2,6-Dimethylnaphthalene, water, filtered, recoverable, µg/L (62055)	2-Methylnaphthalene, water, filtered, recoverable, µg/L (62056)	3-beta-Coprosanol, water, filtered, recoverable, µg/L (62057)	3-Methyl-1H-indole, water, filtered, recoverable, µg/L (62058)

01480744 BEAVER CREEK RESERVOIR NEAR GUTHRIESVILLE, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 6 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	4-Cumyl-phenol, water, filtered, recoverable, µg/L (62060)	4-n-Octyl-phenol, water, filtered, recoverable, µg/L (62061)	4-Nonyl-phenol (sum of all isomers), water, filtered, recoverable, µg/L (62085)	4-Nonyl-phenol diethoxylate (sum of all isomers), water, filtered, recoverable, µg/L (62083)	4-tert-Octyl-phenol diethoxylate, water, filtered, recoverable, µg/L (61705)	4-tert-Octyl-phenol, water, filtered, recoverable, µg/L (62062)	5-Methyl-1H-benzotriazole, water, filtered, recoverable, µg/L (62063)	9,10-Anthraquinone, water, filtered, recoverable, µg/L (62066)	Acetophenone, water, filtered, recoverable, µg/L (62064)
12-03-2012	1100	< .060	< .06	< 2	< 5.0	< 1.0	< .14	< 1.2	< .16	< .4

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 7 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, µg/L (62065)	Anthracene, water, filtered, recoverable, µg/L (34221)	Benzo[a]pyrene, water, filtered, recoverable, µg/L (34248)	Benzo-phenone, water, filtered, recoverable, µg/L (62067)	beta-Sitosterol, water, filtered, recoverable, µg/L (62068)	beta-Stigmasterol, water, filtered, recoverable, µg/L (62086)	Caffeine, water, filtered, recoverable, µg/L (50305)	Cholesterol, water, filtered, recoverable, µg/L (62072)	Cotinine, water, filtered, recoverable, µg/L (62005)
12-03-2012	1100	< .028	< .010	< .06	0.07	E 1	< 2.6	< .06	E .9	< .800

01480744 BEAVER CREEK RESERVOIR NEAR GUTHRIESVILLE, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 8 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	D-Limonene, water, filtered, recoverable, µg/L (62073)	Fluoranthene, water, filtered, recoverable, µg/L (34377)	Hexahydrohexamethylcyclopentabenzopyran, water, filtered, recoverable, µg/L (62075)	Indole, water, filtered, recoverable, µg/L (62076)	Isoborneol, water, filtered, recoverable, µg/L (62077)	Iso-phorone, water, filtered, recoverable, µg/L (34409)	Isopropylbenzene, water, filtered, recoverable, µg/L (62078)	Iso-quinoline, water, filtered, recoverable, µg/L (62079)	Menthol, water, filtered, recoverable, µg/L (62080)
12-03-2012	1100	< .08	< .024	< .052	< .08	< .08	0.008	< .30	< .046	< .32

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 9 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Methylsalicylate, water, filtered, recoverable, µg/L (62081)	Naphthalene, water, filtered, recoverable, µg/L (34443)	Phenanthrene, water, filtered, recoverable, µg/L (34462)	Phenol, water, filtered, recoverable, µg/L (34466)	Pyrene, water, filtered, recoverable, µg/L (34470)	Tetra-chloroethene, water, filtered, recoverable, µg/L (34476)	Tribromomethane, water, filtered, recoverable, µg/L (34288)	Tributyl phosphate, water, filtered, recoverable, µg/L (62089)	Triclosan, water, filtered, recoverable, µg/L (62090)
12-03-2012	1100	0.008	< .040	0.008	< .16	< .042	< .12	< .10	< .16	< .20

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 10 of 10

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Triethyl citrate, water, filtered, recoverable, µg/L (62091)	Triphenyl phosphate, water, filtered, recoverable, µg/L (62092)	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, µg/L (62093)	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, µg/L (62087)	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, µg/L (62088)
12-03-2012	1100	< .16	< .12	< .8	< .10	< .16