

## Water-Data Report 2007

**01461000 DELAWARE RIVER AT LUMBERVILLE, PA**

## DELAWARE RIVER BASIN

LOCATION.--Lat 40°24'27", long 75°02'16" referenced to North American Datum of 1927, Solebury Township, Bucks County, PA, Hydrologic Unit 02040105, at pedestrian bridge at Lumberville, 1.4 mi upstream from Lockatong Creek, and at river mile 155.4.

DRAINAGE AREA.--6,598 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1976 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of filtered ammonia-plus-organic nitrogen (00623), filtered nitrite-plus-nitrate nitrogen (00631), and total particulate nitrogen (49570). Cooperative Network Site Descriptor: Delaware River Main Stem, NJ Department of Environmental Protection Watershed Management Area 11. The sample on Feb 8 included a Volatile Organic Compound assessment.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 3

[Remark codes: &lt;, less than; E, estimated.]

Date	Time	Turbdty Instan- taneous dis- charge, cfs (00061)	UV white light, det ang 90+/-30 corctd	UV absorb- ance, 254 nm, wat flt	UV absorb- ance, 280 nm, wat flt	Baro- metric pres- sure, mm Hg	Dis- solved oxygen, mg/L (00025)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, μS/cm 25 degC (00095)	Temper- ature, wat unf air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO <sub>3</sub> (00900)
Nov 20...	1030	34,400	12	.129	.099	764	9.0	78	8.4	120	10.9	9.2	34
Feb 08...	1030	E6,080	1.1	.047	.035	759	15.2	106	8.0	252	3.4	.5	80
May 31...	1030	4,780	2.4	.054	.041	764	7.8	91	--	248	24.2	22.9	84
Sep 04...	1000	3,860	1.1	.065	.050	760	7.0	82	8.8	254	26.0	22.6	83

## 01461000 DELAWARE RIVER AT LUMBERVILLE, PA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 3

[Remark codes: &lt;, less than; E, estimated.]

Date	ANC, wat unf fixed						Chlor- ide, lab, mg/L as CaCO <sub>3</sub>	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total non- filter- able, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	end pt, lab, mg/L as CaCO <sub>3</sub>									
Nov 20...	9.12	2.60	1.00	5.90	24	8.64	<.10	4.6	8.94	58	61	15	.27	
Feb 08...	20.1	7.25	1.37	12.8	59	19.9	E.07	4.4	16.9	124	118	2	.20	
May 31...	21.0	7.72	1.65	12.9	65	20.6	E.09	4.0	17.6	130	124	4	.23	
Sep 04...	20.8	7.66	1.61	12.8	63	21.2	E.07	.7	19.9	126	138	<1	.32	

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 3

[Remark codes: &lt;, less than; E, estimated.]

Date	Nitrate water, fltrd, mg/L as N (00608)	Nitrite water fltrd, mg/L as N (00631)	Partic- ulate nitro- gen, susp, water, fltrd, mg/L (49570)	Total nitro- gen, water, fltrd, unfltrd mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phosphate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic water, fltrd, mg/L (00681)	Boron, water, fltrd, µg/L (01020)	
Nov 20...	.028	.56	.09	.83	.92	.013	.020	.050	.7	<.1	.7	3.2	9.5	
Feb 08...	.034	1.26	.05	1.5	1.5	.030	.036	.044	.3	<.1	.3	1.7	14	
May 31...	.012	1.19	.13	1.4	1.6	.031	.047	.061	.7	<.1	.7	2.0	18	
Sep 04...	.023	.81	.06	1.1	1.2	.017	.030	.032	.3	<.1	.3	2.1	19	

## 01461000 DELAWARE RIVER AT LUMBERVILLE, PA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 7

[Remark codes: &lt;, less than; E, estimated; M, presence verified but not quantified.]

Date	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd	1,1,1- Tri- chloro- ethane, water, unfltrd	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd	CFC-113	1,1,2- Tri- chloro- ethane, water, unfltrd	1,1-Di- chloro- ethane, water, unfltrd	1,1-Di- chloro- ethene, water, unfltrd	1,1-Di- chloro- propene	1,2,3,4 -Tetra- methyl- benzene	1,2,3,5 -Tetra- methyl- benzene	1,2,3- Tri- chloro- benzene	1,2,3- Tri- chloro- propane	1,2,3- Tri- methyl- benzene	
	µg/L (77562)	µg/L (34506)	µg/L (34516)		µg/L (77652)	µg/L (34511)	µg/L (34496)	µg/L (34501)	µg/L (77168)	µg/L (49999)	µg/L (50000)	µg/L (77613)	µg/L (77443)	µg/L (77221)
Feb 08...	<.04	<.04	<.10	<.04	<.04	<.06	<.02	<.04	<.04	<.1	<.1	<.1	<.12	<.1

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 7

[Remark codes: &lt;, less than; E, estimated; M, presence verified but not quantified.]

Date	1,2,4- Tri- chloro- benzene water, unfltrd	1,2,4- Tri- methyl- benzene water, unfltrd	Dibromo- propane	1,2-Di- bromo- ethane, water, unfltrd	1,2-Di- chloro- benzene water, unfltrd	1,2-Di- chloro- ethane, water, unfltrd	1,2-Di- chloro- propane water, unfltrd	1,3,5- Tri- methyl- benzene water, unfltrd	1,3-Di- chloro- benzene water, unfltrd	1,3-Di- chloro- propane water, unfltrd	1,4-Di- chloro- benzene water, unfltrd	2,2-Di- chloro- propane water, unfltrd	2- Chloro- toluene water, unfltrd	
	µg/L (34551)	µg/L (77222)	µg/L (82625)	µg/L (77651)	µg/L (34536)	µg/L (32103)	µg/L (34541)	µg/L (77226)	µg/L (34566)	µg/L (77173)	µg/L (34571)	µg/L (77170)	µg/L (77275)	
Feb 08...	<.1	<.04	<.5	<.04	<.04	<.1	<.02	<.04	<.04	<.1	<.04	<.06	<.06	<.04

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 7

[Remark codes: &lt;, less than; E, estimated; M, presence verified but not quantified.]

Date	2- Ethyl- toluene water, unfltrd	3- Chloro- propene water, unfltrd	4- Chloro- toluene water, unfltrd	4-Iso- propyl- toluene water, unfltrd	Acetone water, unfltrd	Acrylo- nitrile water, unfltrd	Benzene water, unfltrd	Bromo- benzene water, unfltrd	Bromo- chloro- methane water, unfltrd	Bromo- chloro- methane water, unfltrd	Bromo- ethene, water, unfltrd	Bromo- methane water, unfltrd	Carbon di- sulfide water, unfltrd	
	µg/L (77220)	µg/L (78109)	µg/L (77277)	µg/L (77356)	µg/L (81552)	µg/L (34215)	µg/L (34030)	µg/L (81555)	µg/L (77297)	µg/L (32101)	µg/L (50002)	µg/L (34413)	µg/L (77041)	
Feb 08...	<.04	<.08	<.04	<.08	<.6	<.4	<.02	<.02	<.06	<.04	<.1	<.4	<.06	

## 01461000 DELAWARE RIVER AT LUMBERVILLE, PA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 4 of 7

[Remark codes: &lt;, less than; E, estimated; M, presence verified but not quantified.]

Date	Chloro-benzene water, unfltrd	Chloro-ethane, water, unfltrd	Chloro-methane	cis-1,2-Di-chloro-ethene, water, unfltrd	cis-1,3-Di-chloro-propene	bromo-chloro-methane	Di-bromo-methane	Di-chloro-fluoro-methane	Di-chloro-methane	Di-ethyl ether, water, unfltrd	Diiso-propyl ether, water, unfltrd	Ethyl methacrylate, water, unfltrd	Ethyl methyl ketone, water, unfltrd
	µg/L (34301)	µg/L (34311)	µg/L (34418)	µg/L (77093)	µg/L (34704)	µg/L (32105)	µg/L (30217)	µg/L (34668)	µg/L (34423)	µg/L (81576)	µg/L (81577)	µg/L (73570)	µg/L (81595)
Feb 08...	<.02	<.1	<.1	<.02	<.06	<.1	<.04	<.14	M	<.1	<.06	<.1	<1.6

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 5 of 7

[Remark codes: &lt;, less than; E, estimated; M, presence verified but not quantified.]

Date	Ethyl-benzene water, unfltrd	Hexa-chloro-butadiene, water, unfltrd	Hexa-chloro-ethane, water, unfltrd	Iodo-methane	Iso-butyyl ketone, unfltrd	Iso-propylbenzene	Methyl acrylate, unfltrd	Methyl acrylonitrile, unfltrd	Methyl methacrylate, unfltrd	Methyl tert-pentyl ether, unfltrd	Methyl + para-tert-pentyl ether, unfltrd	Methyl Naphthalene, water, unfltrd	Methyl n-butyl ketone, water, unfltrd
	µg/L (34371)	µg/L (39702)	µg/L (34396)	µg/L (77424)	µg/L (78133)	µg/L (77223)	µg/L (81593)	µg/L (49991)	µg/L (81597)	µg/L (50005)	µg/L (85795)	µg/L (34696)	µg/L (77103)
Feb 08...	<.02	<.1	<.1	<.40	<.2	<.04	<.4	<.4	<.2	<.04	<.08	<.4	<.4

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 6 of 7

[Remark codes: &lt;, less than; E, estimated; M, presence verified but not quantified.]

Date	n-Butyl benzene water, unfltrd	n-Propylbenzene water, unfltrd	o-Xylene, water, unfltrd	sec-Butylbenzene	Styrene	t-Butyl ethyl ether, unfltrd	Methyl t-butyl ether, unfltrd	tert-Butylbenzene	Tetra-chloro-ethene, unfltrd	Tetra-chloro-methane	Tetra-hydrofuran, unfltrd	Tetra-hydrofuran, unfltrd	trans-1,2-Dichloro-ethene, water, unfltrd
	µg/L (77342)	µg/L (77224)	µg/L (77135)	µg/L (77350)	µg/L (77128)	µg/L (50004)	µg/L (78032)	µg/L (77353)	µg/L (34475)	µg/L (32102)	µg/L (81607)	µg/L (34010)	µg/L (34546)
Feb 08...	<.1	<.04	<.04	<.04	<.04	<.04	<.1	<.08	<.04	<.08	<1	E.02	<.02

**01461000 DELAWARE RIVER AT LUMBERVILLE, PA—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 7 of 7

[Remark codes: &lt;, less than; E, estimated; M, presence verified but not quantified.]

Date	trans- 1,3-Di- chloro- propene water, unfltrd	trans- 1,4-Di- chloro- butene, wat unf	Tri- bromo- methane water, unfltrd	Tri- chloro- ethene, unfltrd	chloro- fluoro- methane water, unfltrd	Tri- chloro- methane water, unfltrd	Vinyl chloride, water, unfltrd
	µg/L (34699)	µg/L (73547)	µg/L (32104)	µg/L (39180)	µg/L (34488)	µg/L (32106)	µg/L (39175)
<b>Feb 08...</b>	<.10	<.6	<.08	<.02	<.08	E.03	<.1