

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA

LOCATION.--Lat 39°58'07", long 75°40'25", Chester County, Hydrologic Unit 02040205, on left bank at downstream side of Sugars Bridge (U.S. Highway 322), 2,000 ft upstream from Valley Creek, 1.5 mi north of Marshallton, and 3.3 mi southeast of Downingtown.

DRAINAGE AREA.--89.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1972 to current year.

REVISED RECORDS.--WDR PA-75-1: 1972(P), 1973, 1974.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 195 ft above National Geodetic Vertical Datum of 1929, from topographic map. Feb. 1 to Apr. 10, and June 25 to Nov. 17, 1972, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated since November 1973 by Marsh Creek Reservoir (station 01480684) about 7.5 mi upstream. Satellite and landline telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	226	413	255	256	e120	146	167	183	127	80	412	129
2	185	373	240	255	e115	147	197	182	119	78	187	110
3	173	293	226	250	e200	150	261	262	108	75	143	99
4	185	214	223	258	391	167	341	271	99	71	132	93
5	182	394	239	326	227	153	249	196	164	71	141	89
6	168	506	247	282	1330	275	191	189	328	75	111	85
7	161	354	235	237	985	190	180	184	164	77	100	82
8	158	295	227	219	415	177	174	187	137	95	94	83
9	156	265	221	219	308	153	178	174	122	71	90	97
10	153	257	292	194	316	144	162	283	115	65	85	87
11	152	257	1890	e180	308	139	158	187	168	63	83	78
12	146	318	639	e190	250	134	177	174	140	509	191	76
13	143	321	414	e200	233	126	401	159	113	350	750	74
14	147	355	458	e185	229	124	341	149	111	210	211	70
15	538	344	552	e165	213	125	240	143	152	280	170	71
16	168	341	396	e170	192	140	219	174	117	184	172	73
17	147	314	851	e185	186	151	207	146	123	152	178	75
18	179	213	482	e195	187	158	199	139	337	258	159	1350
19	149	502	416	e200	192	257	190	217	141	245	148	431
20	134	728	380	e190	206	242	181	177	118	156	118	239
21	143	274	351	e175	221	280	147	162	107	133	130	202
22	160	233	337	e165	214	190	144	154	101	117	121	178
23	152	238	328	e170	199	165	163	138	105	110	92	157
24	143	265	513	e160	193	157	212	127	97	114	87	142
25	141	281	395	e150	190	158	160	119	98	100	84	128
26	143	251	332	e155	183	152	390	129	97	94	83	118
27	1950	241	313	e155	179	152	358	136	86	154	82	111
28	703	383	296	e160	177	148	224	120	81	471	81	1230
29	944	478	286	e165	174	141	199	110	102	207	79	1900
30	445	278	279	e155	---	134	188	103	85	151	161	427
31	387	---	264	e145	---	153	---	106	---	132	263	---
TOTAL	8961	9979	12577	6111	8333	5128	6598	5180	3962	4948	4938	8084
MEAN	289	333	406	197	287	165	220	167	132	160	159	269
MAX	1950	728	1890	326	1330	280	401	283	337	509	750	1900
MIN	134	213	221	145	115	124	144	103	81	63	79	70
CFSM	3.22	3.70	4.51	2.19	3.20	1.84	2.45	1.86	1.47	1.78	1.77	3.00
IN.	3.71	4.13	5.20	2.53	3.45	2.12	2.73	2.14	1.64	2.05	2.04	3.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

MEAN	96.8	118	175	180	178	219	206	167	129	108	78.5	107
MAX	304	333	577	527	409	525	594	410	477	421	177	396
(WY)	1997	2004	1997	1979	1979	1994	1983	1989	2003	1984	1996	2003
MIN	36.7	41.8	40.8	30.9	49.2	61.6	53.1	75.9	45.5	32.5	28.6	29.5
(WY)	2002	2002	1981	1981	2002	1985	1985	1999	1999	2002	1999	1980

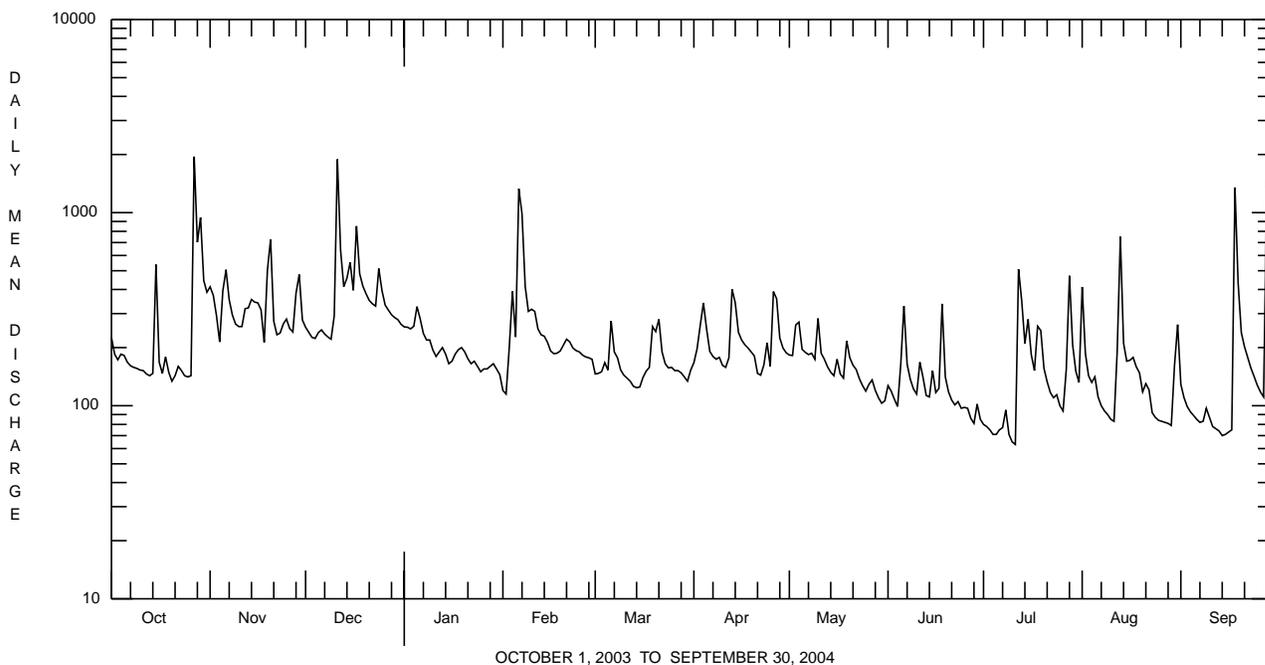
e Estimated.

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL TOTAL	98981		84799			
ANNUAL MEAN	271		232		147	
HIGHEST ANNUAL MEAN					257	1984
LOWEST ANNUAL MEAN					57.0	2002
HIGHEST DAILY MEAN	3000	Sep 15	1950	Oct 27	3080	Sep 16 1999
LOWEST DAILY MEAN	59	Aug 29	63	Jul 11	19	Sep 14 2002
ANNUAL SEVEN-DAY MINIMUM	68	Aug 23	74	Jul 5	22	Sep 9 2002
MAXIMUM PEAK FLOW			a5670	Sep 28	b8160	Jun 22 1972
MAXIMUM PEAK STAGE			12.83	Sep 28	c14.79	Sep 16 1999
ANNUAL RUNOFF (CFSM)	3.02		2.58		1.63	
ANNUAL RUNOFF (INCHES)	40.96		35.09		22.17	
10 PERCENT EXCEEDS	476		390		281	
50 PERCENT EXCEEDS	186		176		96	
90 PERCENT EXCEEDS	92		94		41	

- a From rating curve extended above 3,600 ft³/s on basis of runoff comparison with nearby stations.
- b From rating curve extended above 3,600 ft³/s on basis of slope-area measurement of peak flow at gage height 13.40 ft.
- c Discharge, 7,200 ft³/s on basis of runoff comparison with nearby stations.



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01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1965 to September 1966, October 1970 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1972 to current year.

pH: February 1972 to current year.

WATER TEMPERATURES: February 1972 to current year.

DISSOLVED OXYGEN: February 1972 to current year.

INSTRUMENTATION.--Water-quality monitor since February 1972.

REMARKS.--Specific conductance record rated good. pH record rated good. Water temperature record rated good. Dissolved oxygen record rated fair, except for periods Oct. 5-10, Mar. 4-23, Apr. 10-26, and June 12 to July 13, which are poor. Data collection discontinued during winter months since 1981 water year. Other interruptions in the record were due to malfunctions of the equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 891 microsiemens, Mar. 5, 2001; minimum, 67 microsiemens, July 1, 1984.

pH: Maximum, 9.9, May 13, June 5, 1973; minimum, 5.4, Oct. 24, 26, 1973.

WATER TEMPERATURE: Maximum, 33.0°C, July 18, 1977; minimum, 0.0°C, many days during winters.

DISSOLVED OXYGEN: Maximum, 19.4 mg/L, Mar. 18, 1989; minimum, 0.8 mg/L, July 23, 1984.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, deg C water, (00010)	Fecal coli- form, M-FC col/ 100 mL (31625)
MAR									
09...	1300	1028	1028	151	15.0	8.0	307	7.8	9
11...	1310	1028	1028	139	15.7	8.1	300	8.9	5
23...	1330	1028	1028	160	14.2	7.9	310	7.8	4
APR									
07...	1035	1028	1028	184	11.3	7.7	290	9.4	53
20...	1450	1028	1028	180	10.3	8.2	282	18.3	120
MAY									
04...	1200	1028	1028	249	10.4	7.7	253	13.0	460
11...	1500	1028	1028	173	10.6	7.8	287	20.2	290
25...	1300	1028	1028	117	8.6	7.6	302	22.9	2500
JUN									
01...	1345	1028	1028	120	9.0	7.7	307	19.7	450
16...	1100	1028	1028	104	7.4	7.0	306	16.5	820
23...	1450	1028	1028	107	9.8	7.9	311	22.8	240
JUL									
01...	1300	1028	1028	75	9.8	7.9	331	22.2	250
13...	1330	1028	1028	235	7.5	7.4	215	22.3	3700
22...	1245	1028	1028	125	9.5	7.7	298	23.6	820
AUG									
04...	1350	1028	1028	129	8.4	7.9	297	26.0	490
18...	1315	1028	1028	157	9.0	7.7	268	21.4	210
26...	1305	1028	1028	86	9.6	7.9	352	21.9	390
SEP									
07...	1325	1028	1028	79	9.3	7.8	327	22.3	550
22...	1420	1028	1028	178	9.0	7.6	262	20.2	300

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, 25 degC (90095)	Specif. conductance, wat unfltrd lab, 25 degC (00095)	Temperature, deg C (00010)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
OCT 22...	1300	1028	80020	164	10.5	7.7	7.8	268	300	13.6	24.9	8.91	3.41	
Date		Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd, titr., field, mg/L as CaCO3 (00419)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + Nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, µg/L (01106)	Arsenic, water, fltrd, µg/L (01000)	Boron, water, fltrd, µg/L (01020)	Cadmium, water, fltrd, µg/L (01025)
OCT 22...	16.2	66	29.1	12.4	16.0	<.04	2.63	E.006	.09	17	<2	85	<.2	
Date		Chromium, water, fltrd, µg/L (01030)	Copper, water, fltrd, µg/L (01040)	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Manganese, water, fltrd, µg/L (01056)	Mercury, water, fltrd, µg/L (71890)	Molybdenum, water, fltrd, µg/L (01060)	Nickel, water, fltrd, µg/L (01065)	Zinc, water, fltrd, µg/L (01090)				
OCT 22...		<.8	1.8	69	<1	15.0	<.02	E1.3	E1.3	4				

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BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATESREMARKS.--Samples were collected using a Hess sampler with a mesh size of 500 µm. Each sample covered a total area of 2.4 m².

Date	10/22/03
Benthic macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	4
Nematoda (NEMATODES)	2
Nemertea (PROBOSCIS WORMS)	
Enopla	
Hoplonemertea	
Tetrastemmatidae	
<i>Prostoma</i>	12
Mollusca	
Bivalvia (CLAMS)	
Veneroida	
Corbiculidae	
<i>Corbicula fluminea</i>	4
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	12
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	30
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	12
<i>Baetis</i>	5
Ephemerellidae	
<i>Serratella</i>	3
Heptageniidae	
<i>Stenonema</i>	10
Plecoptera (STONEFLIES)	
Perlidae	1
Megaloptera	
Corydalidae (FISHFLIES AND DOBSONFLIES)	
<i>Corydalus</i>	2

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BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES--Continued

Date	10/22/03
Benthic macroinvertebrate	Count
Trichoptera (CADDISFLIES)	
Brachycentridae	
<i>Micrasema</i>	1
Glossosomatidae	
<i>Glossosoma</i>	2
Hydropsychidae	
<i>Cheumatopsyche</i>	201
<i>Hydropsyche</i>	201
Hydroptilidae	
<i>Leucotrichia</i>	7
Philopotamidae	
<i>Chimarra</i>	12
Rhyacophilidae	
<i>Rhyacophila</i>	1
Lepidoptera	
Pyralididae (MOTHS)	
<i>Petrophila</i>	3
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Ancyronyx</i>	2
<i>Optioservus</i>	282
<i>Oulimnius</i>	7
<i>Stenelmis</i>	106
Hydrophilidae	
<i>Berosus</i>	1
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	23
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	
	221
Empididae (DANCE FLIES)	
<i>Hemerodromia</i>	23
Simuliidae	
<i>Simulium</i>	47
Tipulidae (CRANE FLIES)	
<i>Antocha</i>	12
Total Organisms	1249
Total Taxa	30

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SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	294	281	288	---	---	---	---	---	---	---	---	---
3	301	294	296	---	---	---	---	---	---	---	---	---
4	297	283	290	---	---	---	---	---	---	---	---	---
5	292	281	285	---	---	---	---	---	---	---	---	---
6	296	292	293	---	---	---	---	---	---	---	---	---
7	303	290	295	---	---	---	---	---	---	---	---	---
8	303	289	297	---	---	---	---	---	---	---	---	---
9	300	293	296	---	---	---	---	---	---	---	---	---
10	300	286	294	---	---	---	---	---	---	---	---	---
11	305	285	300	261	253	256	---	---	---	---	---	---
12	303	289	296	259	244	249	---	---	---	---	---	---
13	310	294	303	253	227	243	---	---	---	---	---	---
14	310	268	297	233	227	230	---	---	---	---	---	---
15	268	167	200	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	268	260	264	---	---	---	---	---	---
19	---	---	---	268	143	236	---	---	---	---	---	---
20	---	---	---	229	143	176	---	---	---	---	---	---
21	295	275	287	259	229	247	---	---	---	---	---	---
22	283	275	277	269	259	264	---	---	---	---	---	---
23	285	274	279	274	253	266	---	---	---	---	---	---
24	281	274	278	256	250	253	---	---	---	---	---	---
25	283	277	279	257	243	250	---	---	---	---	---	---
26	---	---	---	257	248	253	---	---	---	---	---	---
27	---	---	---	257	251	254	---	---	---	---	---	---
28	---	---	---	256	180	239	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	310	167	286	274	143	245	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	294	278	285	306	287	298	285	276	279
2	---	---	---	293	281	286	298	276	289	289	282	285
3	---	---	---	292	284	288	296	273	281	285	245	266
4	---	---	---	328	290	305	288	226	268	269	236	251
5	---	---	---	308	301	304	281	239	265	283	268	274
6	---	---	---	328	274	294	288	281	285	283	276	278
7	---	---	---	299	280	293	305	277	289	283	277	280
8	---	---	---	309	294	300	295	290	292	283	272	276
9	---	---	---	310	296	302	292	281	287	284	272	280
10	---	---	---	311	299	303	298	282	291	284	232	253
11	---	---	---	304	298	301	295	281	291	287	268	275
12	---	---	---	306	289	300	292	257	285	291	269	280
13	---	---	---	307	302	305	258	231	241	292	278	285
14	---	---	---	307	303	304	264	233	246	292	286	289
15	---	---	---	305	297	302	276	264	269	292	285	288
16	---	---	---	575	301	362	275	270	272	291	271	279
17	---	---	---	681	518	610	277	273	275	292	284	287
18	---	---	---	518	409	452	280	274	276	296	288	291
19	---	---	---	624	397	494	280	275	278	294	252	265
20	---	---	---	481	334	393	286	276	279	277	254	264
21	---	---	---	334	275	285	298	286	295	283	277	280
22	---	---	---	307	291	300	297	290	293	288	278	282
23	---	---	---	312	300	308	302	267	296	302	283	291
24	---	---	---	303	298	300	291	262	274	302	292	296
25	---	---	---	309	299	304	298	290	293	304	299	302
26	---	---	---	303	293	299	294	180	253	305	288	298
27	276	270	273	302	296	299	251	190	222	305	280	296
28	274	270	271	303	297	300	274	251	263	311	302	306
29	285	267	271	305	299	301	280	272	275	322	308	313
30	---	---	---	310	296	303	284	273	279	325	314	319
31	---	---	---	306	293	301	---	---	---	323	302	316
MONTH	285	267	272	681	274	325	306	180	277	325	232	285

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	315	298	305	339	329	333	293	149	226	276	234	260
2	---	---	---	352	336	341	269	222	253	292	276	283
3	---	---	---	355	340	346	290	268	278	302	280	292
4	---	---	---	356	328	343	301	290	296	308	300	304
5	327	242	298	362	336	350	296	276	283	311	303	308
6	260	192	224	354	340	348	309	291	298	319	305	311
7	285	259	275	358	325	352	318	308	312	340	315	325
8	299	285	292	337	289	315	326	311	317	350	336	341
9	304	289	297	361	332	343	328	315	322	341	304	317
10	314	304	309	361	338	348	331	319	327	334	305	316
11	314	257	290	366	343	355	337	324	331	342	315	330
12	315	284	300	367	130	255	335	145	306	340	319	332
13	320	306	311	249	138	203	224	125	170	339	330	334
14	329	307	322	265	217	252	263	224	246	350	333	337
15	312	260	290	252	210	228	276	257	265	361	330	346
16	320	306	312	271	252	261	280	254	270	361	346	352
17	326	282	319	281	264	273	267	262	265	361	344	353
18	282	157	211	281	216	256	280	264	271	356	106	212
19	308	258	282	264	212	240	291	270	280	234	149	196
20	310	295	303	282	263	273	353	286	301	262	233	243
21	321	308	313	299	277	283	357	257	327	---	---	---
22	321	313	316	312	295	301	321	266	291	---	---	---
23	329	310	316	313	303	308	332	319	325	284	251	269
24	334	324	328	317	284	307	338	323	333	291	283	285
25	337	319	331	322	304	313	356	321	336	298	280	287
26	333	317	326	322	309	318	359	335	350	298	282	291
27	339	326	332	324	210	299	358	342	350	310	297	302
28	343	320	335	230	159	187	359	337	350	315	103	263
29	340	310	323	264	225	242	359	337	349	206	98	154
30	330	319	324	283	261	271	359	190	312	---	---	---
31	---	---	---	296	283	288	235	185	210	---	---	---
MONTH	343	157	303	367	130	295	359	125	295	361	98	294

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	7.5	7.4	7.4	---	---	---	---	---	---	---	---	---
3	7.5	7.4	7.4	---	---	---	---	---	---	---	---	---
4	7.6	7.4	7.4	---	---	---	---	---	---	---	---	---
5	7.6	7.4	7.5	---	---	---	---	---	---	---	---	---
6	7.6	7.4	7.4	---	---	---	---	---	---	---	---	---
7	7.7	7.4	7.4	---	---	---	---	---	---	---	---	---
8	7.6	7.3	7.4	---	---	---	---	---	---	---	---	---
9	7.6	7.3	7.3	---	---	---	---	---	---	---	---	---
10	7.7	7.2	7.3	---	---	---	---	---	---	---	---	---
11	7.8	7.3	7.4	7.4	7.3	7.3	---	---	---	---	---	---
12	7.8	7.3	7.4	7.3	7.2	7.2	---	---	---	---	---	---
13	7.5	7.3	7.3	7.4	7.2	7.3	---	---	---	---	---	---
14	7.7	7.3	7.3	7.3	7.2	7.3	---	---	---	---	---	---
15	7.3	7.0	7.0	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	7.4	7.2	7.3	---	---	---	---	---	---
19	---	---	---	7.4	7.0	7.3	---	---	---	---	---	---
20	---	---	---	7.1	7.0	7.1	---	---	---	---	---	---
21	7.6	7.3	7.3	7.2	7.1	7.2	---	---	---	---	---	---
22	7.5	7.3	7.3	7.3	7.2	7.2	---	---	---	---	---	---
23	7.6	7.3	7.4	7.4	7.2	7.3	---	---	---	---	---	---
24	7.5	7.3	7.3	7.4	7.2	7.3	---	---	---	---	---	---
25	7.5	7.3	7.3	7.4	7.2	7.3	---	---	---	---	---	---
26	---	---	---	7.4	7.3	7.3	---	---	---	---	---	---
27	---	---	---	7.4	7.3	7.3	---	---	---	---	---	---
28	---	---	---	7.3	7.2	7.3	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MAX	7.8	7.4	7.5	7.4	7.3	7.3	---	---	---	---	---	---
MIN	7.3	7.0	7.0	7.1	7.0	7.1	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	8.3	7.6	7.7	8.1	7.5	7.5	7.9	7.3	7.5
2	---	---	---	8.4	7.6	7.7	7.7	7.5	7.5	7.8	7.3	7.4
3	---	---	---	8.5	7.6	7.7	7.7	7.5	7.5	7.5	7.3	7.4
4	---	---	---	8.2	7.5	7.6	7.6	7.4	7.5	7.9	7.4	7.5
5	---	---	---	8.1	7.5	7.6	7.7	7.4	7.5	7.9	7.5	7.6
6	---	---	---	7.7	7.5	7.6	7.7	7.5	7.5	8.0	7.4	7.6
7	---	---	---	8.3	7.5	7.7	8.1	7.4	7.6	8.0	7.4	7.6
8	---	---	---	8.1	7.6	7.7	7.9	7.5	7.6	8.2	7.4	7.6
9	---	---	---	8.3	7.6	7.7	7.9	7.5	7.6	8.2	7.4	7.6
10	---	---	---	8.3	7.6	7.7	8.0	7.5	7.6	7.8	7.3	7.4
11	---	---	---	8.3	7.6	7.7	7.7	7.5	7.6	8.1	7.3	7.5
12	---	---	---	8.5	7.6	7.8	7.8	7.5	7.6	8.2	7.4	7.5
13	---	---	---	8.3	7.6	7.8	7.6	7.4	7.5	8.2	7.4	7.6
14	---	---	---	8.3	7.6	7.8	7.6	7.4	7.5	8.2	7.4	7.5
15	---	---	---	8.4	7.6	7.7	7.8	7.5	7.6	8.2	7.4	7.5
16	---	---	---	7.9	7.6	7.7	7.8	7.5	7.6	8.0	7.3	7.4
17	---	---	---	8.1	7.5	7.6	7.8	7.5	7.6	8.0	7.3	7.5
18	---	---	---	8.1	7.5	7.6	7.9	7.4	7.5	8.0	7.3	7.5
19	---	---	---	7.8	7.5	7.5	8.0	7.4	7.6	7.5	7.3	7.4
20	---	---	---	7.9	7.4	7.5	8.2	7.4	7.6	7.8	7.3	7.5
21	---	---	---	7.8	7.4	7.5	8.2	7.5	7.7	7.6	7.4	7.4
22	---	---	---	7.9	7.4	7.5	8.3	7.6	7.7	7.7	7.3	7.4
23	---	---	---	8.1	7.4	7.6	8.1	7.5	7.6	7.7	7.3	7.4
24	---	---	---	8.3	7.5	7.6	8.0	7.4	7.6	7.7	7.3	7.4
25	---	---	---	8.2	7.5	7.6	7.8	7.5	7.6	7.9	7.3	7.5
26	---	---	---	8.4	7.4	7.6	7.6	7.4	7.5	7.8	7.4	7.5
27	8.2	7.7	7.9	8.2	7.4	7.5	7.6	7.4	7.5	7.8	7.5	7.6
28	8.1	7.6	7.7	8.4	7.5	7.6	7.8	7.4	7.5	7.8	7.5	7.6
29	8.2	7.6	7.7	8.3	7.4	7.6	7.8	7.4	7.5	7.9	7.5	7.6
30	---	---	---	8.2	7.5	7.6	7.9	7.4	7.5	7.9	7.5	7.6
31	---	---	---	8.0	7.5	7.5	---	---	---	7.6	7.5	7.6
MAX	8.2	7.7	7.9	8.5	7.6	7.8	8.3	7.6	7.7	8.2	7.5	7.6
MIN	8.1	7.6	7.7	7.7	7.4	7.5	7.6	7.4	7.5	7.5	7.3	7.4
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.8	7.5	7.6	8.3	7.4	7.6	7.5	7.2	7.3	7.6	7.2	7.3
2	---	---	---	8.2	7.4	7.6	7.5	7.3	7.4	7.7	7.3	7.4
3	---	---	---	8.3	7.4	7.6	7.6	7.4	7.5	7.7	7.3	7.4
4	---	---	---	8.4	7.4	7.6	7.9	7.4	7.6	7.8	7.3	7.4
5	7.6	7.6	7.6	8.2	7.4	7.5	7.9	7.5	7.6	7.5	7.3	7.4
6	7.6	7.5	7.5	8.0	7.3	7.5	8.0	7.6	7.7	7.6	7.3	7.4
7	7.7	7.5	7.6	8.2	7.4	7.5	8.1	7.6	7.7	7.9	7.3	7.4
8	7.7	7.5	7.5	7.9	7.3	7.5	8.0	7.6	7.7	7.6	7.4	7.4
9	7.7	7.4	7.5	8.0	7.4	7.5	8.1	7.5	7.6	7.7	7.4	7.5
10	7.8	7.4	7.5	8.1	7.4	7.6	8.2	7.5	7.7	7.7	7.4	7.4
11	7.6	7.5	7.5	8.2	7.4	7.6	8.1	7.5	7.6	7.7	7.4	7.4
12	7.7	7.5	7.5	7.5	7.1	7.3	8.0	7.3	7.5	7.8	7.4	7.4
13	7.7	7.4	7.6	7.5	7.1	7.3	7.3	7.1	7.2	7.8	7.4	7.4
14	7.6	7.3	7.4	7.6	7.4	7.5	7.4	7.3	7.4	7.7	7.3	7.4
15	7.5	7.2	7.3	7.6	7.3	7.4	7.6	7.3	7.5	7.7	7.3	7.4
16	7.8	7.3	7.5	7.6	7.4	7.5	7.7	7.4	7.4	7.7	7.3	7.4
17	7.7	7.4	7.5	7.7	7.4	7.5	7.7	7.4	7.5	7.6	7.3	7.4
18	7.4	7.2	7.3	7.5	7.4	7.4	7.8	7.5	7.5	7.4	7.0	7.2
19	7.6	7.3	7.4	7.6	7.4	7.4	7.7	7.4	7.5	7.3	7.1	7.2
20	7.6	7.4	7.4	7.7	7.4	7.5	7.8	7.4	7.5	7.4	7.3	7.3
21	7.6	7.4	7.4	7.8	7.4	7.5	7.7	7.4	7.5	---	---	---
22	7.6	7.4	7.5	7.9	7.4	7.6	7.7	7.4	7.5	---	---	---
23	8.0	7.4	7.5	7.7	7.4	7.6	7.9	7.5	7.6	7.3	7.2	7.3
24	8.0	7.5	7.6	7.7	7.3	7.4	7.9	7.5	7.6	7.3	7.2	7.2
25	8.0	7.4	7.6	7.8	7.4	7.5	8.0	7.5	7.6	7.3	7.2	7.2
26	8.0	7.4	7.6	7.9	7.4	7.5	8.1	7.4	7.6	7.4	7.2	7.2
27	8.0	7.5	7.6	7.6	7.4	7.5	8.1	7.5	7.6	7.5	7.3	7.3
28	8.2	7.5	7.6	7.4	7.2	7.3	8.3	7.5	7.6	7.4	7.1	7.3
29	8.0	7.5	7.6	7.7	7.4	7.5	8.2	7.5	7.6	7.2	7.0	7.2
30	8.2	7.4	7.6	7.7	7.4	7.5	7.8	7.2	7.5	---	---	---
31	---	---	---	7.8	7.4	7.5	7.3	7.2	7.2	---	---	---
MAX	8.2	7.6	7.6	8.4	7.4	7.6	8.3	7.6	7.7	7.9	7.4	7.5
MIN	7.4	7.2	7.3	7.4	7.1	7.3	7.3	7.1	7.2	7.2	7.0	7.2

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	15.5	13.5	14.0	---	---	---	---	---	---	---	---	---
3	14.0	12.0	13.0	---	---	---	---	---	---	---	---	---
4	13.5	12.0	13.0	---	---	---	---	---	---	---	---	---
5	13.5	12.0	13.0	---	---	---	---	---	---	---	---	---
6	13.5	12.0	13.0	---	---	---	---	---	---	---	---	---
7	13.5	11.5	13.0	---	---	---	---	---	---	---	---	---
8	15.5	13.0	14.0	---	---	---	---	---	---	---	---	---
9	15.5	14.0	15.0	---	---	---	---	---	---	---	---	---
10	16.5	15.5	15.5	---	---	---	---	---	---	---	---	---
11	17.0	15.0	16.0	10.5	8.0	9.5	---	---	---	---	---	---
12	17.0	15.5	16.0	12.0	10.5	11.5	---	---	---	---	---	---
13	17.0	15.0	16.0	12.5	9.5	11.0	---	---	---	---	---	---
14	15.5	14.0	15.0	10.0	8.5	9.5	---	---	---	---	---	---
15	16.0	14.0	15.0	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	11.5	10.0	11.0	---	---	---	---	---	---
19	---	---	---	14.5	11.5	13.0	---	---	---	---	---	---
20	---	---	---	14.0	11.0	12.5	---	---	---	---	---	---
21	14.5	12.5	13.5	11.5	9.5	10.5	---	---	---	---	---	---
22	14.5	12.5	14.0	11.5	10.0	10.5	---	---	---	---	---	---
23	12.5	10.5	11.0	11.5	10.0	11.0	---	---	---	---	---	---
24	11.0	9.0	10.0	12.5	11.0	11.5	---	---	---	---	---	---
25	12.0	9.5	10.5	11.5	9.0	10.0	---	---	---	---	---	---
26	---	---	---	9.5	8.0	9.0	---	---	---	---	---	---
27	---	---	---	10.0	8.5	9.5	---	---	---	---	---	---
28	---	---	---	12.0	10.0	11.0	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	17.0	9.0	13.7	14.5	8.0	10.7	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	8.5	6.0	7.5	11.5	9.5	10.5	19.0	15.0	17.0
2	---	---	---	10.0	7.5	8.5	11.0	9.5	10.0	18.5	16.5	17.5
3	---	---	---	10.5	7.5	9.5	10.0	9.0	9.5	18.0	13.5	15.5
4	---	---	---	10.0	9.0	9.5	9.5	7.0	8.5	15.5	12.0	14.0
5	---	---	---	10.0	9.0	9.5	9.5	5.5	7.5	15.0	12.0	13.5
6	---	---	---	11.0	9.5	10.0	10.5	6.0	8.5	17.0	13.0	15.0
7	---	---	---	11.0	8.5	10.0	13.5	9.0	11.0	17.5	14.5	16.0
8	---	---	---	10.0	8.0	9.0	12.5	10.0	10.5	17.5	15.0	16.0
9	---	---	---	8.5	7.5	8.0	13.5	9.5	11.5	18.0	14.0	16.0
10	---	---	---	8.0	7.0	7.5	13.5	9.5	11.5	19.5	16.5	18.0
11	---	---	---	9.5	6.0	8.0	12.5	10.0	10.5	20.5	17.0	19.0
12	---	---	---	9.0	7.0	8.0	10.5	9.0	10.0	22.5	19.0	21.0
13	---	---	---	8.5	5.5	7.0	10.5	8.5	9.0	23.0	19.0	21.0
14	---	---	---	7.5	5.5	6.5	11.0	10.5	10.5	22.5	19.5	21.0
15	---	---	---	11.0	7.0	8.5	13.5	9.0	11.0	23.0	19.5	21.5
16	---	---	---	9.0	4.5	6.5	14.0	9.0	11.5	22.5	20.0	21.0
17	---	---	---	6.5	4.5	5.5	15.5	10.5	13.0	22.5	19.5	21.0
18	---	---	---	8.5	5.5	7.0	17.5	12.5	15.0	22.0	19.5	21.0
19	---	---	---	8.0	5.0	6.5	18.5	13.5	16.5	21.0	19.5	20.0
20	---	---	---	9.0	4.5	7.0	18.5	15.0	17.0	20.0	18.5	19.5
21	---	---	---	9.5	7.5	8.5	18.0	15.0	16.5	20.0	19.0	19.5
22	---	---	---	8.0	5.5	7.0	19.5	15.0	17.0	22.5	19.0	20.5
23	---	---	---	8.5	4.5	6.5	19.0	16.5	17.5	23.5	20.5	22.0
24	---	---	---	10.0	5.5	8.0	19.0	15.0	17.0	24.5	21.5	23.0
25	---	---	---	10.0	8.5	9.5	17.0	14.0	15.0	24.5	21.5	23.0
26	---	---	---	13.5	9.5	11.5	14.0	13.0	13.5	22.5	20.5	21.0
27	6.5	4.0	5.5	13.0	11.5	12.5	16.0	13.0	14.5	22.0	20.0	21.0
28	7.5	4.0	6.0	14.5	11.5	12.5	15.0	11.5	13.5	22.5	20.5	21.0
29	8.0	4.5	6.5	14.0	10.5	12.0	17.0	11.5	14.5	21.5	18.5	20.0
30	---	---	---	11.5	9.5	10.0	18.5	13.5	16.0	19.5	17.0	18.5
31	---	---	---	10.0	9.0	9.5	---	---	---	18.5	17.5	18.0
MONTH	8.0	4.0	6.0	14.5	4.5	8.6	19.5	5.5	12.6	24.5	12.0	19.1

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20.5	17.0	18.5	23.5	20.0	21.5	25.0	23.5	24.0	23.0	20.5	22.0
2	---	---	---	25.0	21.0	22.5	26.0	23.5	24.5	23.0	20.5	22.0
3	---	---	---	25.0	21.5	23.0	26.5	24.5	25.0	23.5	20.5	22.0
4	---	---	---	25.5	21.0	23.0	26.5	24.0	25.5	23.0	20.5	22.0
5	19.5	16.5	18.0	26.0	22.5	24.0	25.0	23.0	24.0	22.0	20.5	21.5
6	17.0	16.0	16.5	26.5	22.5	24.0	23.0	21.0	22.0	22.0	19.5	20.5
7	20.0	16.5	18.0	26.0	21.5	23.5	21.0	19.5	20.5	23.0	20.5	21.5
8	22.5	18.5	20.5	25.5	22.5	23.5	22.5	18.5	20.5	22.5	21.5	22.0
9	24.0	20.0	22.0	24.5	21.5	23.0	23.5	19.5	21.5	23.5	22.0	22.5
10	23.5	21.5	22.5	25.0	20.5	22.5	24.0	21.0	22.5	23.5	21.0	22.0
11	22.5	18.5	20.5	25.5	21.5	23.5	24.0	22.0	23.0	22.5	20.5	21.5
12	21.5	17.5	19.5	23.5	21.0	22.5	23.5	22.0	22.5	22.0	19.5	20.5
13	20.0	18.0	18.5	23.5	21.0	22.0	22.5	22.0	22.0	23.5	20.0	21.5
14	20.5	18.5	19.0	23.0	22.0	22.5	22.5	21.5	22.0	22.0	20.5	21.0
15	22.5	19.5	21.0	23.0	21.0	22.0	23.5	21.5	22.5	20.5	19.5	20.5
16	22.5	21.0	21.5	23.0	21.0	22.0	24.0	21.5	22.5	21.5	20.0	21.0
17	23.5	21.5	22.5	24.0	21.0	22.5	22.5	20.0	21.0	21.5	20.5	21.0
18	24.0	21.5	22.5	23.0	20.5	21.5	22.0	20.0	21.0	21.5	19.0	20.0
19	24.0	22.0	23.0	22.5	20.5	21.0	22.0	20.5	21.0	19.0	17.5	18.5
20	23.0	19.5	21.0	24.0	21.0	22.5	23.5	20.5	22.0	19.5	17.0	18.5
21	22.5	18.5	20.5	24.5	21.5	23.0	23.0	21.5	22.5	---	---	---
22	21.5	20.0	21.0	25.0	22.0	23.5	22.5	19.5	21.0	---	---	---
23	23.0	20.5	21.5	24.0	23.0	23.5	22.5	19.0	20.5	21.0	19.0	20.0
24	24.0	20.0	22.0	23.5	22.0	22.5	22.5	20.0	21.5	21.0	19.5	20.5
25	23.0	21.0	22.0	22.0	21.5	21.5	23.0	21.0	22.0	20.5	19.0	20.0
26	23.0	21.0	21.5	24.5	20.5	22.5	23.0	20.5	21.5	20.0	19.0	19.5
27	22.5	19.0	20.5	23.0	22.0	22.5	24.0	21.0	22.5	20.5	18.5	19.5
28	22.5	19.0	20.5	23.0	21.5	22.5	25.0	22.0	23.5	20.5	19.0	20.0
29	23.0	19.5	21.0	24.5	22.0	23.0	25.5	22.5	24.0	19.5	19.0	19.0
30	23.5	19.0	21.0	25.5	22.5	24.0	24.0	23.0	23.0	---	---	---
31	---	---	---	26.5	23.5	25.0	23.5	22.0	23.0	---	---	---
MONTH	24.0	16.0	20.6	26.5	20.0	22.8	26.5	18.5	22.4	23.5	17.0	20.8

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	10.9	9.5	10.3	---	---	---	---	---	---	---	---	---
3	11.6	10.4	10.9	---	---	---	---	---	---	---	---	---
4	11.2	10.3	10.8	---	---	---	---	---	---	---	---	---
5	11.5	10.2	10.7	---	---	---	---	---	---	---	---	---
6	11.3	10.0	10.6	---	---	---	---	---	---	---	---	---
7	11.6	9.7	10.6	---	---	---	---	---	---	---	---	---
8	11.2	9.2	10.0	---	---	---	---	---	---	---	---	---
9	11.6	8.9	10	---	---	---	---	---	---	---	---	---
10	10.9	8.7	9.4	---	---	---	---	---	---	---	---	---
11	11.0	8.6	9.5	11.4	10.2	10.9	---	---	---	---	---	---
12	10.9	8.4	9.4	10.4	9.7	10.1	---	---	---	---	---	---
13	10.4	8.4	9.1	10.4	9.6	9.9	---	---	---	---	---	---
14	10.9	8.5	9.3	10.8	9.9	10.4	---	---	---	---	---	---
15	9.1	8.4	8.8	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	10.9	9.9	10.4	---	---	---	---	---	---
19	---	---	---	9.9	8.6	9.5	---	---	---	---	---	---
20	---	---	---	9.5	8.8	9.3	---	---	---	---	---	---
21	10.0	8.7	9.3	10.5	9.5	10	---	---	---	---	---	---
22	9.7	8.6	9.0	10.5	9.5	10	---	---	---	---	---	---
23	10.5	9.1	9.8	10.5	9.5	9.9	---	---	---	---	---	---
24	10.8	9.6	10.1	10.1	9.1	9.6	---	---	---	---	---	---
25	10.8	9.4	10.0	10.6	9.1	9.9	---	---	---	---	---	---
26	---	---	---	10.8	9.8	10.2	---	---	---	---	---	---
27	---	---	---	10.7	9.5	10.1	---	---	---	---	---	---
28	---	---	---	9.5	8.7	9.2	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	11.6	8.4	9.9	11.4	8.6	10.0	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	14.4	11.6	12.8	12.4	9.9	10.8	10.6	7.8	9.1
2	---	---	---	14.0	11.3	12.4	11.8	9.8	10.7	10.0	7.7	8.6
3	---	---	---	14.5	11.1	12.5	12.2	10.4	11.2	9.6	7.7	8.7
4	---	---	---	14.1	11.0	12.2	11.6	10.4	11.1	10.6	8.7	9.7
5	---	---	---	14.0	11.4	12.4	12.8	11.1	11.9	10.9	8.7	9.7
6	---	---	---	12.3	11.4	11.7	12.9	10.3	11.8	10.8	8.4	9.6
7	---	---	---	14.5	11.7	12.9	11.8	9.2	10.7	10.7	8.2	9.2
8	---	---	---	14.8	11.7	13.1	11.7	9.2	10.5	11.0	8.2	9.5
9	---	---	---	15.8	12.7	13.8	11.8	9.5	10.7	11.3	8.0	9.7
10	---	---	---	15.7	12.6	13.9	11.9	9.5	10.7	10.0	7.8	8.7
11	---	---	---	15.3	11.7	13.6	11.5	9.6	10.6	10.6	7.1	8.8
12	---	---	---	15.1	11.6	13.2	12.0	10.6	11.2	10.0	6.9	8.1
13	---	---	---	15.5	12.4	13.8	11.3	10.4	11.1	10.1	6.8	8.2
14	---	---	---	16.0	12.4	14.1	11.1	10.4	10.7	10.2	6.8	8.2
15	---	---	---	15.1	10.9	13.0	11.7	10.2	10.9	10.0	6.9	8.2
16	---	---	---	14.2	10.9	12.8	11.7	10.1	10.9	9.8	6.5	7.9
17	---	---	---	15.7	12.5	14.1	11.4	9.5	10.6	9.9	7.0	8.1
18	---	---	---	15.2	11.6	13.3	11.1	8.8	10.1	9.8	7.0	8.1
19	---	---	---	14.7	11.5	12.9	10.7	8.2	9.5	8.4	6.8	7.6
20	---	---	---	14.6	11.2	13.0	10.3	7.8	8.9	9.4	7.5	8.3
21	---	---	---	13.0	11.1	11.8	10.2	7.8	8.8	8.9	7.4	8.1
22	---	---	---	14.0	11.3	12.5	10.4	8.1	9.0	9.2	7.0	8.1
23	---	---	---	14.3	11.3	12.7	10.4	8.1	9.1	8.8	6.6	7.6
24	---	---	---	14.1	10.4	12.3	10.4	8.3	9.3	8.8	6.6	7.5
25	---	---	---	13.4	10.3	11.6	10.4	8.7	9.6	8.8	6.3	7.5
26	---	---	---	13.5	9.0	11.2	9.8	9.1	9.3	8.6	6.7	7.5
27	14.0	11.9	12.7	12.6	9.0	10.4	10.3	8.8	9.5	8.9	7.2	7.9
28	13.9	11.9	12.8	13.1	9.0	10.6	11.1	8.9	10	8.8	7.0	7.7
29	14.3	11.7	12.9	13.0	9.1	10.7	11.1	8.5	9.9	9.1	7.0	8.0
30	---	---	---	13.4	9.3	11.2	10.6	8.0	9.3	9.7	7.5	8.5
31	---	---	---	12.9	10.2	11.3	---	---	---	8.3	7.4	7.8
MONTH	14.3	11.7	12.8	16.0	9.0	12.5	12.9	7.8	10.3	11.3	6.3	8.4
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.2	7.4	8.1	10.0	6.9	8.1	7.6	7.1	7.3	8.8	7.1	7.8
2	---	---	---	9.8	6.7	7.9	8.1	6.9	7.5	9.1	7.2	8.0
3	---	---	---	10.0	6.5	8.0	8.4	6.8	7.5	9.2	7.3	8.0
4	---	---	---	10.1	6.7	8.1	8.6	6.8	7.5	9.4	7.2	8.1
5	8.4	7.5	8.0	9.8	6.3	7.8	8.9	6.7	7.7	8.6	7.2	7.9
6	8.8	8.3	8.6	9.6	6.1	7.5	9.3	7.5	8.3	9.6	7.4	8.4
7	8.9	7.5	8.4	9.9	6.4	7.6	10.1	7.9	8.9	9.4	7.0	8.1
8	8.6	7.0	7.8	9.3	6.4	7.6	10.3	7.9	9.0	8.8	7.0	7.6
9	8.4	6.6	7.5	9.5	6.6	7.8	10.2	7.6	8.7	8.8	6.9	7.6
10	8.2	6.5	7.3	9.9	6.8	8.1	10.4	7.4	8.6	9.3	7.4	8.1
11	8.0	6.6	7.4	10.0	6.6	8.0	10.3	7.1	8.3	9.6	7.3	8.2
12	8.6	7.1	7.9	7.2	6.4	6.8	10.0	7.2	8.2	9.9	7.4	8.3
13	8.7	7.1	7.9	7.7	7.1	7.4	7.7	7.2	7.5	9.6	7.1	8.1
14	8.3	7.0	7.7	---	---	---	8.3	7.2	7.8	9.6	7.0	8.1
15	8.0	6.5	7.1	---	---	---	8.4	7.2	7.8	9.7	7.3	8.2
16	8.5	6.5	7.4	8.2	7.1	7.7	8.3	7.1	7.6	9.5	7.2	8.1
17	8.5	6.8	7.4	8.5	7.3	7.8	9.2	7.3	8.2	9.5	6.9	7.8
18	7.4	6.8	7.2	8.1	7.3	7.7	9.3	7.7	8.4	8.7	6.8	7.8
19	8.1	6.9	7.4	8.7	7.8	8.3	9.2	7.6	8.2	9.2	8.7	9.0
20	8.6	7.0	7.9	9.0	7.7	8.3	9.4	7.2	8.3	9.6	8.8	9.2
21	9.1	7.5	8.2	9.3	7.6	8.4	8.5	6.9	7.4	---	---	---
22	9.0	7.4	8.1	9.8	7.6	8.5	9.3	7.3	8.1	---	---	---
23	10.0	7.5	8.4	9.3	7.6	8.3	9.7	7.6	8.4	---	---	---
24	9.9	7.8	8.6	9.9	7.6	8.6	9.7	7.4	8.3	---	---	---
25	10.0	7.4	8.5	10.2	8.1	8.9	10.0	7.3	8.3	---	---	---
26	9.7	7.4	8.3	10.6	7.6	9.0	10.1	7.2	8.3	---	---	---
27	9.9	7.6	8.6	9.4	7.5	8.2	10.1	7.1	8.3	---	---	---
28	10.2	7.7	8.7	8.4	7.7	8.2	10.5	7.0	8.3	---	---	---
29	9.7	7.4	8.3	8.9	7.5	8.1	10.3	6.8	8.1	---	---	---
30	10.1	7.1	8.4	9.0	7.4	8.1	9.2	6.7	7.6	---	---	---
31	---	---	---	8.9	7.1	7.9	7.6	6.9	7.3	---	---	---
MONTH	10.2	6.5	8.0	10.6	6.1	8.0	10.5	6.7	8.1	9.9	6.8	8.1

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Sam- pling depth, feet (00003)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Loca- tion in X-sect. looking dwnstrm ft from l bank (00009)
SEP										
09...	1106	1028	1028	106	1.00	8.8	7.6	323	22.1	5
09...	1107	1028	1028	--	1.00	8.8	7.6	323	22.1	10
09...	1108	1028	1028	--	1.00	8.8	7.5	324	22.1	15
09...	1109	1028	1028	--	1.00	8.7	7.5	324	22.1	20
09...	1110	1028	1028	--	1.00	8.7	7.5	323	22.1	25
09...	1111	1028	1028	--	1.00	8.6	7.5	323	22.1	30
09...	1112	1028	1028	--	1.00	8.7	7.5	321	22.0	35
09...	1113	1028	1028	--	1.00	8.7	7.5	321	22.0	40
09...	1114	1028	1028	--	1.00	8.7	7.5	320	22.0	45
09...	1115	1028	1028	--	.50	8.7	7.5	318	22.0	48
09...	1116	1028	1028	--	--	--	--	--	--	50