



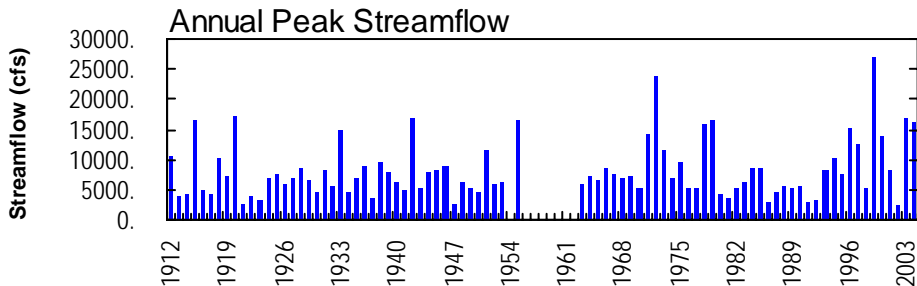
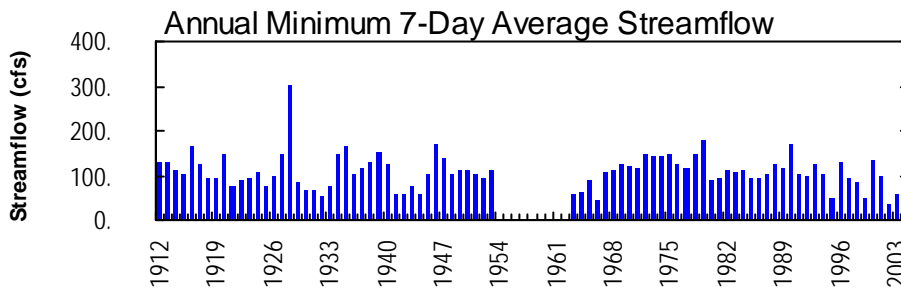
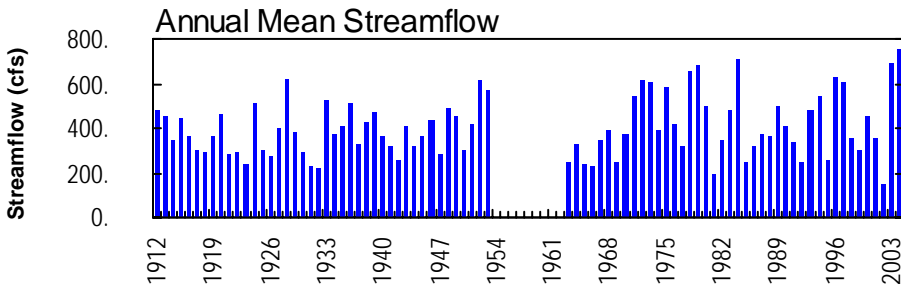
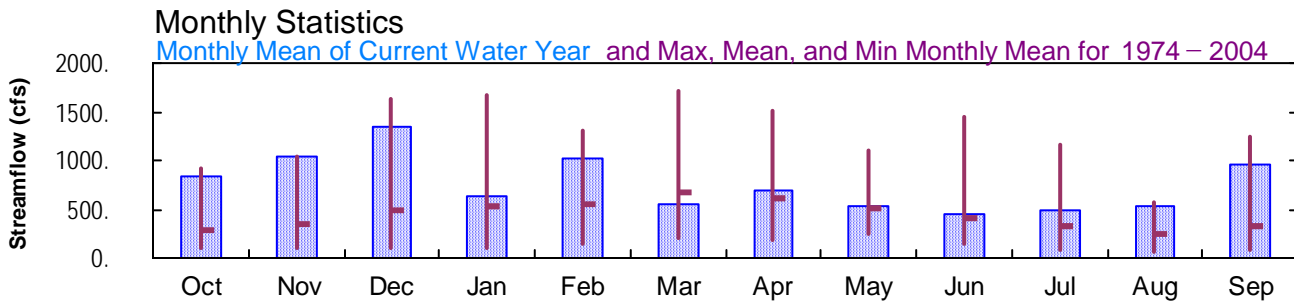
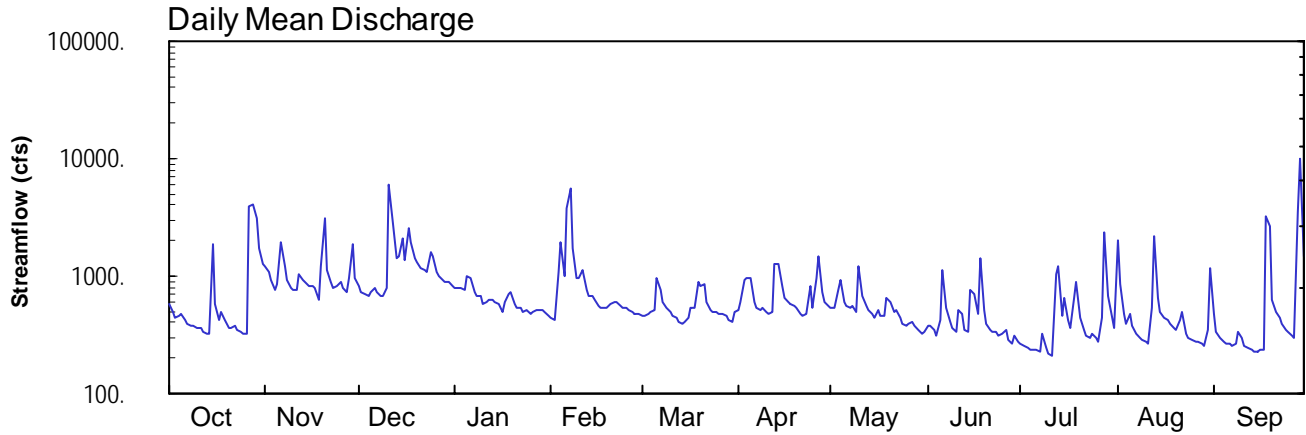
2004 Water Year CHRISTINA RIVER BASIN

01481000 Brandywine Creek at Chadds Ford, PA

Latitude: 39° 52' 11"
Delaware County

Longitude: 075° 35' 37"
Datum: 150.45 feet

Hydrologic Unit Code: 02040205
Drainage Area: 287. mi²



01481000-Brandywine Creek at Chadds Ford

CHRISTINA RIVER BASIN

**01481000 BRANDYWINE CREEK AT CHADDS FORD, PA
(Pennsylvania Water-Quality Network Station)**

LOCATION.--Lat 39°52'11", long 75°35'37", Delaware County, Hydrologic Unit 02040205, on left bank 27 ft upstream from Penn Central Railroad bridge at Chadds Ford, 150 ft upstream from Harvey Run, and 1,200 ft downstream from highway bridge on U.S. Highway 1.

DRAINAGE AREA.--287 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1911 to September 1953, October 1962 to current year. Prior to October 1911, monthly discharge only, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1202: 1917-18(M), 1919-20, 1922-31(M), 1932-33, 1934(M), 1936, 1938(P), 1939(M), 1942, 1944-46(M), WDR PA-98-1: 1996-97 (M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 150.45 ft above National Geodetic Vertical Datum of 1929. Prior to May 21, 1927, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since November 1973 by Marsh Creek Reservoir (station 01480684) about 17 mi upstream. Satellite and landline telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 19, 1955, reached a stage of 14.64 ft, gage datum, discharge, about 16,400 ft³/s.

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	570	1210	820	800	444	451	517	540	383	260	1980	468
2	488	1070	743	788	423	457	599	532	376	254	843	331
3	449	942	692	786	1090	478	909	750	346	246	471	298
4	464	775	670	774	1940	503	979	933	315	237	397	279
5	481	843	727	993	998	508	947	602	423	233	479	268
6	418	1940	795	945	3820	956	599	561	1100	237	370	264
7	394	1220	725	732	5600	773	545	533	541	231	320	256
8	384	930	681	666	1730	602	522	552	411	321	303	265
9	375	804	665	673	980	528	542	501	360	245	288	332
10	363	759	782	582	944	490	501	1230	336	218	273	293
11	356	748	6110	599	1110	462	475	680	508	212	266	253
12	339	1050	2880	628	764	440	500	558	474	1040	536	242
13	324	931	1430	626	684	410	1280	506	355	1210	2140	232
14	323	884	1480	598	674	399	1240	472	337	462	645	227
15	1840	834	2060	583	625	401	809	449	769	651	492	231
16	572	807	1390	492	554	448	658	517	691	422	440	239
17	428	792	2590	612	534	538	606	465	482	356	431	237
18	494	631	1980	718	536	526	572	462	1410	646	393	3220
19	419	1200	1420	730	539	891	547	643	523	886	368	2650
20	363	3150	1290	577	585	826	528	595	398	434	347	623
21	356	1110	1180	534	610	851	477	502	350	346	424	500
22	372	878	1120	534	609	598	462	511	330	307	501	433
23	354	803	1080	488	546	517	485	433	333	298	322	386
24	332	816	1590	511	534	493	826	398	314	321	300	355
25	318	882	1450	472	532	488	527	372	318	295	284	332
26	320	779	1100	497	506	474	972	387	355	274	279	314
27	3900	727	1010	516	491	472	1460	409	289	432	273	304
28	4060	953	936	525	480	460	742	375	268	2340	264	3480
29	3090	1890	904	516	481	430	608	342	306	676	256	10100
30	1720	947	897	489	---	412	565	323	281	434	350	1460
31	1260	---	833	466	---	497	---	330	---	364	1150	---
TOTAL	25926	31305	42030	19450	29363	16779	20999	16463	13682	14888	16185	28872
MEAN	836	1044	1356	627	1013	541	700	531	456	480	522	962
MAX	4060	3150	6110	993	5600	956	1460	1230	1410	2340	2140	10100
MIN	318	631	665	466	423	399	462	323	268	212	256	227

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	284	341	489	533	555	669	615	510	413	331	248	323
MAX	924	1044	1634	1664	1308	1713	1509	1097	1459	1153	562	1237
(WY)	1997	2004	1997	1979	1979	1994	1983	1989	2003	1975	1996	2003
MIN	99.5	105	112	106	144	195	183	249	153	88.8	64.0	80.2
(WY)	2002	2002	1999	1981	2002	1981	2002	1999	1999	2002	2002	2002

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1974 - 2004

ANNUAL TOTAL		314769		275942								
ANNUAL MEAN		862		754					442			
HIGHEST ANNUAL MEAN									754			2004
LOWEST ANNUAL MEAN									152			2002
HIGHEST DAILY MEAN			10300	Jun 21		10100	Sep 29		10600	Jan 26		1978
LOWEST DAILY MEAN			202	Sep 12		212	Jul 11		33	Aug 22		2002
ANNUAL SEVEN-DAY MINIMUM			a230	Feb 13		237	Sep 11		36	Aug 17		2002
MAXIMUM PEAK FLOW						b16300	Sep 29		b26900	Sep 17		1999
MAXIMUM PEAK STAGE						13.62	Sep 29		17.15	Sep 17		1999
INSTANTANEOUS LOW FLOW						208	Jul 11		8.4	Sep 13		1980
10 PERCENT EXCEEDS			1630			1250			827			
50 PERCENT EXCEEDS			572			524			300			
90 PERCENT EXCEEDS			289			297			124			

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911-1953, 1963-1973, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	219	301	348	444	570	605	530	435	364	309	278	230
MAX	666	625	827	1020	1130	1366	1043	946	1144	802	1089	1050
(WY)	1972	1972	1973	1936	1971	1920	1973	1952	1972	1919	1933	1971
MIN	67.7	98.3	114	145	214	247	226	175	149	91.1	82.1	59.4
(WY)	1964	1942	1966	1966	1934	1931	1963	1926	1963	1963	1930	1932

SUMMARY STATISTICS WATER YEARS 1911-1953 1963-1973

ANNUAL MEAN	385											
HIGHEST ANNUAL MEAN	625					1928						
LOWEST ANNUAL MEAN	218					1932						
HIGHEST DAILY MEAN	9590			Aug 24		1933						
LOWEST DAILY MEAN	42			Sep 12		1966						
ANNUAL SEVEN-DAY MINIMUM	45			Sep 7		1966						
MAXIMUM PEAK FLOW	c23800			Jun 22		1972						
MAXIMUM PEAK STAGE	16.56			Jun 22		1972						
INSTANTANEOUS LOW FLOW	4.9			Oct 2		1942						
ANNUAL RUNOFF (CFSM)	1.34											
ANNUAL RUNOFF (INCHES)	18.23											
10 PERCENT EXCEEDS	700											
50 PERCENT EXCEEDS	274											
90 PERCENT EXCEEDS	118											

a Computed using estimated daily discharges.

b From rating curve extended above 13,200 ft³/s on basis of area-velocity study at gage height 16.56 ft.

c From rating curve extended above 9,000 ft³/s on basis of area-velocity study.

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1965 to current year.
pH: October 1965 to September 1966, December 1971 to current year.
WATER TEMPERATURES: October 1964 to current year.
DISSOLVED OXYGEN: October 1971 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1963 to September 1978.

INSTRUMENTATION.--Water-quality monitor since August 1971.

REMARKS.--Specific conductance record rated good except for period Oct. 28 to Nov. 18, which is fair. pH record rated good except for period Nov. 5 to Dec. 1, which is poor. Water temperature record rated fair. Dissolved oxygen record rated fair except for period Oct. 28 to Nov. 5, which is 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, 689 microsiemens, Mar. 6, 2001; minimum, 42 microsiemens, Nov. 26, 1979.
pH: Maximum, 9.8, Apr. 9, 1975; minimum, 6.1, Feb. 22, 1976.
WATER TEMPERATURE: Maximum, 31.0°C, July 4, 2002; minimum, 0.0°C, many days during winters.
DISSOLVED OXYGEN: Maximum, 17.1 mg/L, Dec. 5, 1976; minimum, 3.0 mg/L, June 21, 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 unfltrd μS/cm 25 degC (00095)	Temper-ature, deg C (00010)	Fecal coli-form, M-FC 0.7μ MF col/100 mL (31625)
MAR									
09...	1500	1028	1028	472	14.1	7.8	292	8.4	34
11...	1145	1028	1028	415	14.7	7.7	283	7.1	13
23...	1445	1028	1028	462	13.2	7.7	291	7.1	.0
APR									
07...	1200	1028	1028	507	11.3	7.6	273	9.9	40
20...	1150	1028	1028	492	9.5	7.6	271	17.7	37
MAY									
04...	1400	1028	1028	743	10.2	7.5	238	13.9	1400
11...	1620	1028	1028	605	8.8	7.3	247	20.5	1600
25...	1430	1028	1028	330	8.6	7.5	283	23.4	140
JUN									
01...	1450	1028	1028	338	10.2	7.7	288	19.4	240
16...	1215	1028	1028	578	6.1	7.2	218	22.2	E15000
23...	1315	1028	1028	338	8.4	7.6	287	20.8	250
JUL									
01...	1415	1028	1028	261	10.7	8.2	281	21.7	110
13...	1100	1028	1028	994	7.7	7.3	197	20.7	V12000
22...	1510	1028	1028	300	8.4	7.6	286	23.7	220
AUG									
04...	1530	1028	1028	389	8.4	7.6	286	25.1	260
18...	1435	1028	1028	393	8.4	7.6	281	21.7	120
26...	1400	1028	1028	278	9.1	7.8	313	21.7	130
SEP									
07...	1100	1028	1028	258	8.5	7.6	305	20.0	140
22...	1245	1028	1028	434	8.8	7.6	278	17.4	320

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued
(Pennsylvania Water-Quality Network Station)

PERIOD OF RECORD--April 2002 to current year.

COOPERATION.--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

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, µS/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water unfltrd recover -able, mg/L (00916)	Magnesium, water, unfltrd recover -able, mg/L (00927)
OCT 2003 01...	1400	1028	9813	567	11.0	7.7	7.4	253	239	14.2	93	21.8	9.3
DEC 22...	1730	1028	9813	1100	15.0	7.2	7.6	240	248	4.7	84	20.9	7.8
FEB 2004 24...	1540	1028	9813	529	15.3	7.2	7.8	264	238	5.1	85	21.5	7.7
APR 27...	1330	1028	9813	1260	10.8	7.5	7.7	213	179	14.0	73	17.7	6.9
JUN 29...	1500	1028	9813	330	11.2	8.2	7.8	291	289	21.4	100	24.5	9.8
AUG 19...	1400	1028	9813	367	9.6	7.4	7.5	289	283	21.6	100	23.8	10.0

Date	ANC, wat unfltrd end pt, lab, mg/L as CaCO3 (00417)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat fltrd, mg/L (00515)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, unfltrd, mg/L as N (00610)	Nitrate water, unfltrd, mg/L as N (00620)	Nitrite water, unfltrd, mg/L as N (00615)	Ortho-phosphate, water, unfltrd, mg/L as P (70507)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)	Organic carbon, water, unfltrd, mg/L (00680)	Aluminum, water, unfltrd recover -able, µg/L (01105)	Copper, water, unfltrd recover -able, µg/L (01042)
OCT 2003 01...	59	18.3	260	<2	<.020	2.84	<.040	.04	.059	3.1	2.8	<200	<10
DEC 22...	47	19.4	574	<2	.020	3.31	<.040	.04	.044	3.4	1.7	<200	<10
FEB 2004 24...	48	18.0	12	<2	.030	3.47	<.040	.07	.092	4.0	2.1	<200	<10
APR 27...	47	14.2	160	44	.090	2.16	.050	.04	.139	3.1	5.5	1100	10
JUN 29...	60	18.5	232	2	<.020	3.29	<.040	.06	.089	3.7	2.6	230	<10
AUG 19...	60	18.2	204	8	.020	2.89	<.040	.06	.074	3.1	2.6	<200	<10

Date	Iron, water, unfltrd recover -able, µg/L (01045)	Lead, water, unfltrd recover -able, µg/L (01051)	Manganese, water, unfltrd recover -able, µg/L (01055)	Nickel, water, unfltrd recover -able, µg/L (01067)	Zinc, water, unfltrd recover -able, µg/L (01092)
OCT 2003 01...	260	<1.0	30	<50	<10
DEC 22...	200	<1.0	30	<50	<10
FEB 2004 24...	150	<1.0	30	<50	<10
APR 27...	1590	4.1	100	<50	70
JUN 29...	410	<1.0	60	<50	10
AUG 19...	360	<1.0	40	<50	<10

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

REMARKS.--Samples were collected using a D-Frame net with a mesh size of 500 µm. Samples represent counts per 100 animal (approximate) subsamples.

Date	09/08/03
Benthic macroinvertebrate	Count
Arthropoda	
Crustacea	
Amphipoda (SCUDS)	
Gammaridae	
<i>Gammarus</i>	5
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	10
<i>Baetis</i>	7
Caenidae	
<i>Caenis</i>	1
Ephemerellidae	
<i>Serratella</i>	2
Heptageniidae	
<i>Stenonema</i>	1
Tricorythidae	
<i>Tricorythodes</i>	2
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<i>Cheumatopsyche</i>	11
<i>Hydropsyche</i>	11
Philopotamidae	
<i>Chimarra</i>	10
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Optioservus</i>	20
<i>Oulimnius</i>	1
<i>Stenelmis</i>	23
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	1
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	11
Simuliidae (BLACK FLIES)	
<i>Simulium</i>	6
Total Organisms	122
Total Taxa	16

CHRISTINA RIVER BASI

01481000 BRANDYWINE CREEK AT CHADDS FORD, 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
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	261	256	258	245	233	238	---	---	---	---	---	---
2	271	260	265	242	239	241	---	---	---	---	---	---
3	273	269	271	270	241	248	---	---	---	---	---	---
4	274	269	272	259	245	255	---	---	---	---	---	---
5	272	266	269	266	252	259	---	---	---	---	---	---
6	270	267	269	256	185	228	---	---	---	---	---	---
7	271	267	270	260	243	249	---	---	---	---	---	---
8	273	268	271	288	260	274	---	---	---	---	---	---
9	273	262	270	277	269	275	---	---	---	---	---	---
10	278	269	274	272	268	270	---	---	---	---	---	---
11	279	274	277	269	267	268	---	---	---	---	---	---
12	278	272	275	267	241	258	---	---	---	---	---	---
13	277	272	275	246	233	239	---	---	---	---	---	---
14	279	252	275	246	235	238	---	---	---	---	---	---
15	252	185	208	236	231	234	---	---	---	---	---	---
16	254	211	236	244	231	236	---	---	---	---	---	---
17	267	254	262	248	236	243	---	---	---	---	---	---
18	274	264	269	265	241	254	---	---	---	---	---	---
19	273	263	267	262	185	248	---	---	---	---	---	---
20	278	273	276	204	157	175	---	---	---	---	---	---
21	277	272	275	245	204	229	---	---	---	---	---	---
22	278	273	275	258	245	253	---	---	---	---	---	---
23	280	275	278	264	258	261	---	---	---	---	---	---
24	276	274	275	265	260	263	---	---	---	---	---	---
25	279	274	277	264	257	261	---	---	---	---	---	---
26	276	269	274	264	257	262	---	---	---	---	---	---
27	269	138	199	268	263	266	---	---	---	---	---	---
28	200	144	169	269	251	266	---	---	---	---	---	---
29	205	164	184	251	213	222	---	---	---	---	---	---
30	222	179	205	257	228	245	---	---	---	---	---	---
31	239	222	232	---	---	---	---	---	---	---	---	---
MONTH	280	138	257	288	157	249	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	274	270	272	284	278	280	275	271	273
2	---	---	---	277	273	274	278	270	273	276	273	275
3	---	---	---	279	274	276	280	265	270	274	254	268
4	---	---	---	288	275	278	275	249	267	254	238	245
5	---	---	---	289	283	286	261	237	248	265	246	258
6	---	---	---	294	272	280	271	261	267	272	265	269
7	---	---	---	283	267	274	286	269	277	274	270	272
8	---	---	---	285	282	284	286	281	284	277	263	271
9	---	---	---	291	281	284	285	280	282	274	265	270
10	---	---	---	287	283	285	281	277	279	265	208	233
11	---	---	---	287	282	284	281	277	279	258	222	241
12	---	---	---	284	281	282	280	267	275	267	254	262
13	---	---	---	283	279	281	267	231	247	274	267	271
14	---	---	---	283	278	280	245	232	238	279	273	277
15	---	---	---	282	277	279	263	245	258	280	277	279
16	---	---	---	285	276	279	270	263	267	281	273	278
17	---	---	---	515	285	403	273	268	271	276	266	270
18	---	---	---	508	369	423	270	265	267	280	270	276
19	---	---	---	477	343	378	269	264	268	279	256	272
20	---	---	---	527	342	419	276	268	271	258	247	252
21	---	---	---	348	282	313	278	272	274	271	254	262
22	---	---	---	293	287	289	278	271	276	271	265	268
23	---	---	---	294	290	291	278	268	276	280	270	276
24	---	---	---	294	288	291	273	247	256	285	280	283
25	283	265	271	290	286	288	276	254	268	291	283	286
26	283	273	276	288	281	285	278	230	268	292	288	290
27	275	271	272	284	282	283	231	202	215	294	282	287
28	273	269	271	286	282	285	260	231	249	296	276	283
29	275	270	271	287	282	284	268	260	265	288	283	286
30	---	---	---	287	281	285	272	268	270	292	287	290
31	---	---	---	285	277	281	---	---	---	295	288	292
MONTH	283	265	272	527	267	299	286	202	266	296	208	271

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, 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	294	287	290	296	290	293	296	147	224	242	160	207
2	294	281	286	301	296	299	247	198	227	275	242	261
3	290	282	285	303	299	301	277	247	264	288	275	283
4	292	286	290	305	302	304	290	277	284	295	287	292
5	293	275	286	305	303	304	293	280	287	303	293	300
6	277	207	231	311	304	307	292	276	285	304	299	301
7	265	221	245	309	296	305	301	292	298	307	300	304
8	283	265	274	303	286	296	304	299	302	313	303	309
9	291	283	287	288	271	279	306	301	304	321	309	316
10	295	289	292	296	288	292	308	303	305	314	295	303
11	293	268	287	297	294	296	318	303	309	311	299	306
12	273	258	264	297	170	254	316	208	286	313	307	310
13	---	---	---	226	155	192	230	150	180	319	310	313
14	---	---	---	265	226	250	250	207	231	325	313	317
15	---	---	---	276	240	256	268	250	261	320	313	317
16	---	---	---	286	244	268	283	268	275	322	317	319
17	---	---	---	295	285	291	283	272	277	324	321	322
18	---	---	---	300	256	288	297	277	281	322	132	232
19	---	---	---	261	233	244	285	280	283	217	138	177
20	---	---	---	288	261	275	289	281	286	253	217	239
21	---	---	---	293	284	290	290	254	279	273	253	264
22	---	---	---	292	283	288	322	251	268	280	273	276
23	---	---	---	297	291	294	284	261	274	286	280	283
24	---	---	---	306	296	301	295	283	291	294	282	290
25	305	292	301	307	298	301	311	295	305	294	291	293
26	299	290	294	306	300	303	326	305	312	297	291	295
27	296	291	293	307	232	299	320	313	317	297	293	295
28	300	294	297	232	157	181	321	316	318	303	74	244
29	301	294	297	242	181	219	317	313	315	181	75	125
30	303	289	297	267	240	254	319	297	310	226	181	209
31	---	---	---	291	267	279	301	158	227	---	---	---
MONTH	305	207	283	311	155	278	326	147	280	325	74	277

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	7.5	7.4	7.5	7.1	7.0	7.1	---	---	---	---	---	---
2	7.6	7.4	7.5	7.1	7.1	7.1	---	---	---	---	---	---
3	7.6	7.5	7.5	7.1	6.8	7.0	---	---	---	---	---	---
4	7.6	7.5	7.5	7.0	7.0	7.0	---	---	---	---	---	---
5	7.6	7.5	7.5	7.4	6.9	7.0	---	---	---	---	---	---
6	7.6	7.5	7.5	7.3	6.8	6.9	---	---	---	---	---	---
7	7.6	7.5	7.5	7.0	6.9	6.9	---	---	---	---	---	---
8	7.6	7.4	7.5	6.9	6.8	6.9	---	---	---	---	---	---
9	7.7	7.4	7.5	6.9	6.8	6.8	---	---	---	---	---	---
10	8.1	7.4	7.6	6.8	6.8	6.8	---	---	---	---	---	---
11	8.4	7.6	7.9	6.8	6.8	6.8	---	---	---	---	---	---
12	8.2	7.5	7.8	6.8	6.8	6.8	---	---	---	---	---	---
13	7.9	7.5	7.7	6.9	6.8	6.8	---	---	---	---	---	---
14	7.8	7.4	7.6	6.9	6.9	6.9	---	---	---	---	---	---
15	7.6	7.2	7.2	6.9	6.9	6.9	---	---	---	---	---	---
16	7.3	7.2	7.2	6.9	6.8	6.9	---	---	---	---	---	---
17	7.3	7.3	7.3	6.8	6.8	6.8	---	---	---	---	---	---
18	7.4	7.3	7.3	7.4	6.7	6.8	---	---	---	---	---	---
19	7.4	7.3	7.3	7.4	7.2	7.4	---	---	---	---	---	---
20	7.6	7.3	7.3	7.2	7.0	7.1	---	---	---	---	---	---
21	7.6	7.4	7.5	7.0	7.0	7.0	---	---	---	---	---	---
22	7.5	7.4	7.5	7.0	6.9	7.0	---	---	---	---	---	---
23	7.6	7.4	7.5	6.9	6.8	6.8	---	---	---	---	---	---
24	7.6	7.5	7.5	7.1	6.9	7.1	---	---	---	---	---	---
25	7.6	7.4	7.5	7.1	6.9	7.0	---	---	---	---	---	---
26	7.5	7.4	7.5	6.9	6.8	6.9	---	---	---	---	---	---
27	7.4	6.8	7.1	6.8	6.8	6.8	---	---	---	---	---	---
28	7.2	6.8	7.1	7.0	6.8	6.9	---	---	---	---	---	---
29	7.3	7.1	7.2	7.0	6.8	6.9	---	---	---	---	---	---
30	7.2	7.1	7.2	6.8	6.8	6.8	---	---	---	---	---	---
31	7.2	7.1	7.2	---	---	---	---	---	---	---	---	---
MAX	8.4	7.6	7.9	7.4	7.2	7.4	---	---	---	---	---	---
MIN	7.2	6.8	7.1	6.8	6.7	6.8	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, 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	---	---	---	8.1	7.6	7.8	7.8	7.5	7.6	7.4	7.3	7.3
2	---	---	---	8.1	7.6	7.8	7.7	7.5	7.6	7.4	7.2	7.3
3	---	---	---	8.2	7.6	7.9	7.6	7.5	7.5	7.4	7.3	7.3
4	---	---	---	8.0	7.6	7.8	7.5	7.4	7.5	7.6	7.3	7.3
5	---	---	---	7.9	7.6	7.8	7.6	7.4	7.5	7.7	7.5	7.6
6	---	---	---	7.8	7.5	7.6	7.6	7.5	7.6	7.7	7.5	7.6
7	---	---	---	7.8	7.5	7.6	7.9	7.5	7.6	7.7	7.4	7.6
8	---	---	---	7.8	7.6	7.7	7.8	7.5	7.7	7.8	7.4	7.6
9	---	---	---	7.9	7.6	7.7	8.0	7.5	7.7	7.8	7.5	7.7
10	---	---	---	7.9	7.6	7.8	8.2	7.6	7.8	7.7	7.2	7.3
11	---	---	---	7.9	7.7	7.8	8.0	7.6	7.7	7.5	7.2	7.2
12	---	---	---	8.0	7.6	7.8	7.9	7.5	7.7	7.6	7.3	7.4
13	---	---	---	7.9	7.7	7.8	7.7	7.5	7.5	7.6	7.4	7.5
14	---	---	---	7.9	7.7	7.8	7.5	7.4	7.4	7.6	7.4	7.5
15	---	---	---	7.9	7.7	7.8	7.7	7.4	7.5	7.7	7.4	7.5
16	---	---	---	7.8	7.6	7.7	7.7	7.5	7.6	7.6	7.4	7.5
17	---	---	---	7.8	7.6	7.7	7.8	7.5	7.6	7.6	7.3	7.5
18	---	---	---	7.9	7.7	7.8	7.8	7.4	7.6	7.6	7.4	7.5
19	---	---	---	7.9	7.6	7.7	7.9	7.4	7.6	7.5	7.4	7.4
20	---	---	---	7.8	7.6	7.7	8.2	7.4	7.7	7.4	7.3	7.3
21	---	---	---	7.8	7.6	7.7	8.1	7.4	7.7	7.4	7.3	7.3
22	---	---	---	7.8	7.6	7.7	8.2	7.4	7.8	7.5	7.3	7.4
23	---	---	---	7.8	7.5	7.7	8.0	7.4	7.6	7.5	7.4	7.4
24	---	---	---	7.9	7.6	7.7	7.6	7.3	7.4	7.6	7.4	7.5
25	7.9	7.6	7.7	7.8	7.6	7.7	7.6	7.3	7.4	7.7	7.4	7.5
26	7.9	7.6	7.8	7.9	7.5	7.7	7.5	7.3	7.4	7.6	7.4	7.5
27	7.9	7.6	7.8	7.8	7.5	7.7	7.3	7.2	7.2	7.7	7.4	7.6
28	7.9	7.6	7.8	7.9	7.5	7.7	7.4	7.2	7.3	7.7	7.4	7.6
29	8.0	7.6	7.8	7.9	7.6	7.8	7.4	7.3	7.3	7.9	7.5	7.6
30	---	---	---	7.8	7.6	7.7	7.4	7.3	7.3	7.9	7.5	7.7
31	---	---	---	7.8	7.6	7.7	---	---	---	7.8	7.5	7.6
MAX	8.0	7.6	7.8	8.2	7.7	7.9	8.2	7.6	7.8	7.9	7.5	7.7
MIN	7.9	7.6	7.7	7.8	7.5	7.6	7.3	7.2	7.2	7.4	7.2	7.2
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.9	7.5	7.6	8.6	7.8	8.3	7.5	6.9	7.2	7.3	7.2	7.2
2	7.9	7.5	7.7	8.8	7.7	8.3	7.3	7.2	7.2	7.4	7.2	7.4
3	8.0	7.5	7.8	8.8	7.7	8.4	7.4	7.3	7.3	7.5	7.4	7.4
4	8.0	7.5	7.8	8.7	7.7	8.3	7.5	7.3	7.4	7.6	7.4	7.5
5	7.8	7.4	7.5	8.5	7.6	8.1	7.5	7.4	7.4	7.6	7.4	7.5
6	7.5	7.4	7.4	8.3	7.5	7.8	7.6	7.4	7.5	7.7	7.5	7.6
7	7.4	7.3	7.4	8.1	7.5	7.6	7.6	7.4	7.5	7.7	7.5	7.6
8	7.4	7.3	7.4	7.8	7.4	7.6	7.7	7.5	7.6	7.6	7.5	7.5
9	7.5	7.3	7.4	7.7	7.4	7.5	7.8	7.5	7.6	7.6	7.5	7.5
10	7.5	7.3	7.4	7.8	7.5	7.6	8.1	7.5	7.7	7.6	7.5	7.5
11	7.5	7.4	7.4	7.8	7.5	7.6	8.2	7.6	7.7	7.7	7.5	7.5
12	7.5	7.3	7.4	7.6	7.1	7.5	7.8	7.3	7.6	7.7	7.5	7.6
13	---	---	---	7.3	7.1	7.2	7.3	7.1	7.2	7.8	7.5	7.6
14	---	---	---	7.4	7.3	7.3	7.3	7.2	7.3	7.7	7.5	7.6
15	---	---	---	7.4	7.4	7.4	7.4	7.3	7.3	7.7	7.5	7.6
16	---	---	---	7.6	7.3	7.4	7.5	7.3	7.4	7.8	7.6	7.6
17	---	---	---	7.6	7.4	7.4	7.5	7.4	7.4	7.7	7.5	7.6
18	---	---	---	7.4	7.3	7.4	7.7	7.4	7.5	7.6	6.8	7.4
19	---	---	---	7.4	7.3	7.4	7.7	7.5	7.6	7.3	6.8	7.2
20	---	---	---	7.4	7.3	7.4	7.7	7.4	7.6	7.4	7.3	7.4
21	---	---	---	7.5	7.3	7.4	7.6	7.4	7.5	7.5	7.4	7.4
22	---	---	---	7.6	7.4	7.4	7.6	7.4	7.5	7.5	7.4	7.4
23	---	---	---	7.5	7.4	7.4	7.7	7.4	7.5	7.6	7.5	7.5
24	---	---	---	7.6	7.4	7.5	7.7	7.4	7.6	7.6	7.5	7.5
25	7.8	7.6	7.7	7.6	7.4	7.5	7.8	7.5	7.6	7.6	7.5	7.5
26	7.8	7.5	7.6	7.9	7.5	7.6	7.9	7.5	7.6	7.6	7.5	7.5
27	7.9	7.6	7.7	7.6	7.4	7.5	7.9	7.5	7.7	7.6	7.5	7.5
28	8.1	7.6	7.8	7.4	7.0	7.2	7.9	7.5	7.6	7.5	6.8	7.5
29	8.2	7.7	7.9	7.3	7.2	7.3	7.8	7.4	7.6	7.0	6.8	6.8
30	8.5	7.7	8.1	7.4	7.3	7.3	7.6	7.4	7.5	7.3	7.0	7.2
31	---	---	---	7.6	7.3	7.4	7.5	7.2	7.3	---	---	---
MAX	8.5	7.7	8.1	8.8	7.8	8.4	8.2	7.6	7.7	7.8	7.6	7.6
MIN	7.4	7.3	7.4	7.3	7.0	7.2	7.3	6.9	7.2	7.0	6.8	6.8

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, 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	15.5	14.5	14.5	13.5	12.0	13.0	---	---	---	---	---	---
2	14.5	13.0	14.0	14.5	13.0	14.0	---	---	---	---	---	---
3	13.0	11.5	12.5	15.0	13.5	14.5	---	---	---	---	---	---
4	12.5	11.5	12.0	15.5	14.0	15.0	---	---	---	---	---	---
5	13.0	11.5	12.5	15.5	15.0	15.5	---	---	---	---	---	---
6	13.0	11.5	12.0	15.5	15.0	15.5	---	---	---	---	---	---
7	12.5	11.0	12.0	15.0	13.5	14.5	---	---	---	---	---	---
8	14.0	12.5	13.0	13.5	11.0	12.0	---	---	---	---	---	---
9	15.5	13.5	14.5	11.0	8.5	9.5	---	---	---	---	---	---
10	15.5	14.5	15.0	8.5	7.5	8.0	---	---	---	---	---	---
11	16.5	15.0	16.0	9.5	7.5	8.0	---	---	---	---	---	---
12	16.5	15.5	16.0	11.5	9.5	10.5	---	---	---	---	---	---
13	16.5	15.5	16.0	11.5	9.5	11.0	---	---	---	---	---	---
14	15.5	14.5	15.0	9.5	7.5	8.0	---	---	---	---	---	---
15	15.0	14.0	15.0	9.0	8.0	8.5	---	---	---	---	---	---
16	14.0	12.5	13.5	10.0	8.5	9.0	---	---	---	---	---	---
17	13.5	13.0	13.0	11.0	10.0	10.5	---	---	---	---	---	---
18	13.0	12.0	12.5	10.5	10.0	10.0	---	---	---	---	---	---
19	13.0	12.0	12.5	13.5	10.5	12.0	---	---	---	---	---	---
20	12.5	11.5	12.0	13.5	10.5	12.0	---	---	---	---	---	---
21	13.5	12.0	12.5	10.5	9.5	10.0	---	---	---	---	---	---
22	13.5	12.5	13.5	10.0	9.0	9.5	---	---	---	---	---	---
23	12.5	10.0	11.0	10.0	9.0	9.5	---	---	---	---	---	---
24	10.0	8.5	9.0	10.5	9.5	10.0	---	---	---	---	---	---
25	10.0	8.5	9.5	10.5	8.0	9.0	---	---	---	---	---	---
26	13.5	10.0	11.5	8.0	7.0	7.5	---	---	---	---	---	---
27	15.0	13.5	14.5	8.5	7.0	7.5	---	---	---	---	---	---
28	14.5	12.5	13.0	10.5	8.5	9.5	---	---	---	---	---	---
29	12.5	12.0	12.0	10.5	7.5	9.0	---	---	---	---	---	---
30	12.0	11.0	11.5	7.5	7.0	7.0	---	---	---	---	---	---
31	12.5	11.0	11.5	---	---	---	---	---	---	---	---	---
MONTH	16.5	8.5	13.0	15.5	7.0	10.7	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	7.0	5.5	6.5	10.5	9.5	10.0	18.5	16.5	17.5
2	---	---	---	9.0	7.0	8.0	10.5	9.5	10.0	19.0	18.0	18.5
3	---	---	---	10.0	8.0	9.0	9.5	8.5	9.0	19.0	14.5	17.0
4	---	---	---	10.0	9.0	9.5	9.0	7.0	8.5	15.0	13.0	14.0
5	---	---	---	9.5	9.0	9.5	8.0	5.5	7.0	15.0	13.5	14.0
6	---	---	---	10.5	9.5	10.0	9.0	6.0	7.5	16.5	13.5	15.0
7	---	---	---	10.5	9.0	9.5	12.0	8.5	10.5	17.5	15.5	16.5
8	---	---	---	10.0	8.5	9.0	12.0	10.5	11.0	17.5	16.0	17.0
9	---	---	---	8.5	7.5	8.0	12.5	10.0	11.0	18.0	15.0	16.5
10	---	---	---	7.5	6.5	7.0	12.5	10.5	11.5	19.5	17.0	18.0
11	---	---	---	8.0	5.5	7.0	12.5	10.0	11.0	21.0	18.5	19.5
12	---	---	---	8.5	7.0	7.5	10.0	9.5	9.5	22.0	19.5	21.0
13	---	---	---	7.0	5.5	6.5	10.0	8.5	9.0	22.5	20.5	21.5
14	---	---	---	6.5	5.0	6.0	10.5	10.0	10.5	22.5	20.5	21.5
15	---	---	---	9.0	6.0	7.5	12.5	9.5	11.0	23.0	21.0	22.0
16	---	---	---	8.5	4.5	6.5	13.0	10.5	11.5	22.5	21.0	22.0
17	---	---	---	5.0	4.0	4.5	15.0	11.0	13.0	22.0	20.5	21.5
18	---	---	---	7.0	5.0	6.0	17.0	14.0	15.5	22.0	20.5	21.0
19	---	---	---	7.0	5.5	6.5	18.5	15.5	17.0	21.5	19.5	20.5
20	---	---	---	8.0	5.0	6.5	19.0	17.0	18.5	20.0	19.0	19.5
21	---	---	---	9.0	8.0	8.5	18.5	16.5	17.5	19.5	19.0	19.5
22	---	---	---	8.0	6.0	7.0	19.0	16.5	17.5	22.0	19.0	20.5
23	---	---	---	7.0	4.5	6.0	19.0	17.5	18.5	23.5	21.0	22.0
24	---	---	---	8.5	5.5	7.0	18.0	16.0	17.0	24.5	22.5	23.5
25	5.0	3.5	4.0	9.5	8.5	9.0	17.5	14.5	16.0	24.0	22.5	23.5
26	4.5	3.0	4.0	12.5	9.5	10.5	14.5	13.5	13.5	23.5	21.5	22.0
27	5.0	3.5	4.0	13.0	12.0	12.5	15.5	13.0	14.0	22.0	20.5	21.0
28	6.0	4.0	5.0	14.0	12.0	13.0	15.0	12.5	13.5	22.0	21.0	21.5
29	6.5	4.5	5.5	13.0	11.5	12.5	16.0	12.5	14.5	21.5	20.0	20.5
30	---	---	---	12.0	10.0	10.5	18.0	15.0	16.5	20.5	18.5	19.5
31	---	---	---	10.0	9.0	9.5	---	---	---	19.0	18.0	19.0
MONTH	6.5	3.0	4.5	14.0	4.0	8.3	19.0	5.5	12.7	24.5	13.0	19.6

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, 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	20.0	17.5	18.5	22.0	20.5	21.5	25.0	23.0	24.0	22.5	21.0	22.0
2	21.0	19.0	20.0	23.5	21.0	22.5	24.5	22.5	23.5	22.0	20.5	21.5
3	21.5	19.5	20.5	24.0	22.0	23.0	25.5	23.5	24.5	22.0	20.5	21.5
4	21.0	20.0	20.5	24.0	22.0	23.0	25.5	23.5	24.5	22.0	20.5	21.5
5	20.5	17.5	19.0	25.5	23.0	24.0	25.0	22.5	23.5	21.5	20.0	21.0
6	17.5	16.5	17.0	25.5	23.5	24.5	22.5	20.5	21.5	20.5	19.0	20.0
7	20.0	17.0	18.0	25.5	23.0	24.0	20.5	19.0	19.5	21.5	19.5	20.5
8	22.0	19.0	20.5	25.0	23.0	24.0	20.0	18.0	19.0	21.5	21.0	21.5
9	23.5	21.0	22.0	24.0	22.5	23.5	21.5	19.0	20.5	22.5	21.5	22.0
10	23.5	22.5	23.0	24.0	21.5	23.0	22.5	20.5	21.5	22.5	21.0	22.0
11	23.0	20.0	21.5	24.5	22.0	23.5	23.5	21.5	22.5	22.0	20.5	21.5
12	21.0	18.5	20.0	24.0	21.0	22.5	22.5	21.5	22.0	21.0	19.5	20.5
13	---	---	---	22.0	20.5	21.0	21.5	21.0	21.5	21.5	19.5	20.5
14	---	---	---	22.0	21.0	21.5	21.5	20.5	21.0	21.0	20.0	20.5
15	---	---	---	21.5	20.5	21.0	22.0	20.5	21.0	20.0	19.5	19.5
16	---	---	---	21.5	20.0	21.0	22.5	20.5	21.5	20.5	19.5	20.0
17	---	---	---	22.5	20.5	21.5	22.0	20.5	21.5	20.5	19.5	20.0
18	---	---	---	22.5	20.5	21.5	22.0	20.5	21.5	21.0	18.0	20.0
19	---	---	---	21.0	19.5	20.0	22.5	21.0	21.5	18.0	17.0	17.5
20	---	---	---	23.0	20.0	21.5	23.5	21.5	22.5	17.5	15.5	16.5
21	---	---	---	24.0	21.5	22.5	23.5	21.5	23.0	17.5	15.5	16.5
22	---	---	---	24.0	22.5	23.5	22.0	20.0	21.0	18.5	16.5	17.5
23	---	---	---	24.0	23.0	23.5	21.0	19.5	20.5	19.5	17.5	18.5
24	---	---	---	23.0	22.5	22.5	21.5	20.0	21.0	20.0	18.5	19.5
25	22.0	21.0	21.5	22.5	21.0	21.5	22.0	20.5	21.0	19.5	18.5	19.0
26	22.0	20.5	21.0	22.5	20.0	21.5	22.0	20.5	21.5	19.0	18.0	18.5
27	21.5	19.5	20.5	22.5	22.0	22.0	23.0	21.5	22.0	19.0	17.5	18.5
28	21.0	19.5	20.5	22.5	21.5	22.0	24.5	22.0	23.0	20.0	19.0	19.5
29	22.0	20.0	21.0	23.5	21.5	22.5	24.5	23.0	24.0	19.5	18.5	19.0
30	22.0	19.5	21.0	24.5	22.0	23.0	24.0	23.0	23.5	18.5	17.5	18.0
31	---	---	---	25.5	23.5	24.5	23.0	22.0	22.5	---	---	---
MONTH	23.5	16.5	20.3	25.5	19.5	22.5	25.5	18.0	22.0	22.5	15.5	19.8

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	10.2	9.6	9.9	10.7	9.9	10.4	---	---	---	---	---	---
2	10.4	9.9	10.1	10.6	10.1	10.4	---	---	---	---	---	---
3	10.9	10.2	10.6	10.4	8.7	10.0	---	---	---	---	---	---
4	11.0	10.4	10.6	10.7	9.9	10.4	---	---	---	---	---	---
5	11.0	10.3	10.6	9.9	8.4	9.7	---	---	---	---	---	---
6	11.3	10.4	10.8	9.6	7.2	8.0	---	---	---	---	---	---
7	11.7	10.4	11.0	8.8	7.1	8.2	---	---	---	---	---	---
8	11.4	10.2	10.7	9.7	8.5	9.1	---	---	---	---	---	---
9	11.4	9.7	10.5	10.8	9.7	10.3	---	---	---	---	---	---
10	11.4	9.4	10.2	11.3	10.8	11.0	---	---	---	---	---	---
11	11.4	9.3	10.2	11.2	10.5	10.9	---	---	---	---	---	---
12	11.3	9.1	10.0	10.5	9.3	9.7	---	---	---	---	---	---
13	10.9	9.0	9.9	10.3	9.5	9.8	---	---	---	---	---	---
14	11.0	9.1	9.9	11.3	10.2	10.8	---	---	---	---	---	---
15	9.6	7.2	8.8	11.2	10.5	10.7	---	---	---	---	---	---
16	9.7	9.0	9.3	11.0	10.3	10.7	---	---	---	---	---	---
17	9.9	9.4	9.6	---	---	---	---	---	---	---	---	---
18	10.2	9.6	9.9	---	---	---	---	---	---	---	---	---
19	10.3	9.7	10	---	---	---	---	---	---	---	---	---
20	11.0	9.8	10.3	---	---	---	---	---	---	---	---	---
21	10.6	9.9	10.3	---	---	---	---	---	---	---	---	---
22	10.1	9.4	9.8	---	---	---	---	---	---	---	---	---
23	11.1	9.9	10.5	---	---	---	---	---	---	---	---	---
24	11.7	10.8	11.2	---	---	---	---	---	---	---	---	---
25	11.8	11.0	11.3	11.2	10.2	10.7	---	---	---	---	---	---
26	11.0	9.6	10.4	11.0	10.2	10.7	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	10.1	9.6	9.8	---	---	---	---	---	---	---	---	---
30	10.7	10.1	10.5	---	---	---	---	---	---	---	---	---
31	10.9	10.2	10.7	---	---	---	---	---	---	---	---	---
MONTH	11.8	7.2	10.3	11.3	7.1	10.1	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01481000 BRANDYWINE CREEK AT CHADDS FORD, 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	13.0	13.7	---	---	---	9.6	8.4	8.9
2	---	---	---	13.9	12.6	13.3	---	---	---	9.1	7.9	8.5
3	---	---	---	14.2	12.0	13.1	---	---	---	9.6	8.1	8.7
4	---	---	---	13.8	11.5	12.7	---	---	---	10.8	9.6	10.1
5	---	---	---	13.5	11.8	12.6	---	---	---	11.0	9.9	10.4
6	---	---	---	12.7	11.2	11.8	---	---	---	11.0	10.0	10.4
7	---	---	---	13.5	11.7	12.6	---	---	---	10.5	9.5	9.9
8	---	---	---	13.6	12.1	12.8	11.7	10.3	11.0	10.9	9.3	10.0
9	---	---	---	14.9	12.7	13.7	12.0	10.7	11.3	11.1	9.7	10.3
10	---	---	---	15.1	13.7	14.4	12.4	10.6	11.4	9.8	8.5	8.9
11	---	---	---	14.8	13.8	14.4	11.6	10.4	11.0	8.8	8.2	8.5
12	---	---	---	14.3	13.1	13.8	12.6	11.0	11.7	9.0	8.1	8.5
13	---	---	---	15.0	13.7	14.4	11.8	10.9	11.4	8.9	7.8	8.3
14	---	---	---	15.3	13.9	14.6	10.9	10.5	10.7	9.0	7.2	8.3
15	---	---	---	14.6	13.4	14.0	11.7	10.7	11.1	8.9	7.5	8.2
16	---	---	---	14.3	12.5	13.4	11.6	10.6	11.1	8.6	7.4	8.0
17	---	---	---	15.3	14.2	14.8	11.4	10.1	10.7	8.8	7.4	8.1
18	---	---	---	14.7	13.8	14.4	11.1	9.4	10.1	8.8	7.4	8.1
19	---	---	---	14.2	13.1	13.7	10.7	8.8	9.6	8.1	7.4	7.7
20	---	---	---	14.3	13.0	13.7	10.5	8.1	9.2	7.9	7.4	7.7
21	---	---	---	13.0	12.1	12.6	10.6	8.1	9.3	8.7	7.7	8.0
22	---	---	---	13.7	12.3	13.0	10.8	8.3	9.4	8.8	7.9	8.4
23	---	---	---	---	---	---	10.4	7.9	9.0	8.5	7.5	7.9
24	---	---	---	---	---	---	9.6	8.3	8.8	8.6	7.1	7.7
25	14.1	12.9	13.5	---	---	---	10.4	8.4	9.3	9.1	7.0	7.9
26	14.8	13.4	14.0	---	---	---	9.7	9.2	9.5	8.9	7.4	8.0
27	14.6	13.6	14.1	---	---	---	9.4	8.6	9.0	9.4	7.9	8.6
28	14.6	13.5	14.0	---	---	---	10.3	8.7	9.5	9.5	7.8	8.6
29	14.5	13.3	13.9	---	---	---	10.4	9.4	9.9	10.3	8.0	9.1
30	---	---	---	---	---	---	9.6	8.8	9.2	10.8	8.5	9.5
31	---	---	---	---	---	---	---	---	---	9.5	8.6	9.1
MONTH	14.8	12.9	13.9	15.3	11.2	13.5	12.6	7.9	10.1	11.1	7.0	8.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.5	8.7	9.5	11.1	7.9	9.4	7.8	7.1	7.4	7.8	7.0	7.3
2	10.8	8.4	9.5	11.4	7.6	9.3	7.9	7.6	7.8	8.3	7.1	7.7
3	10.8	8.3	9.4	11.4	7.1	9.1	8.0	7.5	7.7	8.5	7.4	7.8
4	11.0	8.2	9.5	10.9	7.0	8.9	8.4	7.4	7.8	8.6	7.4	7.9
5	9.4	8.2	8.7	9.9	6.6	8.1	8.4	7.6	8.0	8.1	7.4	7.8
6	9.1	8.5	8.9	9.4	6.3	7.7	9.1	8.0	8.6	8.9	7.8	8.2
7	8.6	7.5	8.2	9.2	6.2	7.3	9.7	8.5	9.1	8.8	7.7	8.2
8	8.1	7.1	7.5	8.2	6.2	7.0	10.0	9.0	9.4	8.2	7.4	7.8
9	8.1	6.6	7.3	8.0	6.0	6.9	10.0	8.6	9.2	8.0	7.2	7.5
10	7.9	6.5	7.1	8.5	6.6	7.4	10.1	8.2	9.0	8.4	7.2	7.7
11	8.0	6.7	7.3	8.6	7.1	7.7	10.0	7.7	8.7	8.7	7.5	8.0
12	8.9	7.8	8.3	7.5	7.0	7.2	9.4	7.4	8.1	9.0	7.8	8.3
13	---	---	---	7.9	7.2	7.6	7.6	6.9	7.4	9.0	7.8	8.2
14	---	---	---	7.8	7.5	7.6	8.0	7.5	7.7	8.6	7.6	8.1
15	---	---	---	8.0	7.5	7.8	8.4	7.7	8.0	8.7	7.8	8.2
16	---	---	---	8.2	7.7	7.9	8.3	7.6	7.9	8.9	7.9	8.3
17	---	---	---	8.3	7.7	7.9	8.5	7.5	7.9	8.7	7.7	8.1
18	---	---	---	8.0	7.4	7.7	9.3	7.4	8.0	7.7	6.4	7.2
19	---	---	---	8.2	7.9	8.1	8.7	7.5	8.0	8.3	6.4	7.7
20	---	---	---	8.3	7.6	8.0	8.8	7.4	8.0	8.9	8.3	8.7
21	---	---	---	8.4	7.5	7.9	8.0	6.4	7.3	9.0	8.5	8.7
22	---	---	---	8.4	7.3	7.8	8.5	7.3	7.9	9.0	8.3	8.6
23	---	---	---	8.0	7.2	7.6	9.1	7.7	8.2	8.7	8.1	8.4
24	---	---	---	8.8	7.5	8.1	9.1	7.7	8.3	8.5	7.9	8.2
25	8.6	7.4	7.9	9.0	7.8	8.3	9.3	7.7	8.4	8.8	7.9	8.3
26	8.7	7.3	8.0	9.6	8.3	8.8	9.4	7.7	8.4	8.9	8.1	8.4
27	9.4	7.8	8.5	8.6	7.8	8.1	9.3	7.5	8.3	9.1	7.6	8.6
28	9.9	8.0	8.9	8.0	7.3	7.7	9.1	7.2	8.1	8.3	6.8	7.8
29	10.1	8.0	9.0	8.3	7.8	8.0	8.8	6.9	7.8	7.7	6.5	6.8
30	10.8	8.0	9.3	8.5	7.8	8.0	7.8	6.8	7.3	8.5	7.7	8.2
31	---	---	---	8.4	7.6	7.9	7.4	6.9	7.1	---	---	---
MONTH	11.0	6.5	8.5	11.4	6.0	8.0	10.1	6.4	8.1	9.1	6.4	8.0