

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA

LOCATION.--Lat 39°57'42", long 75°48'06", Chester County, Hydrologic Unit 02040205, on left bank at bridge on SR 15068 at Modena, and 300 ft upstream from Dennis Run.

DRAINAGE AREA.--55.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1970 to current year.

REVISED RECORDS.--WDR PA-74-1: 1971-72(P), 1973. WDR PA-75-1: 1974(m).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 265 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Slight regulation from Rock Run Reservoir 5.6 mi upstream, capacity, 982 acre-ft, and by Lukens Steel Company. Diversion from Rock Run Reservoir for municipal supply of city of Coatesville reenters creek upstream from gage. Satellite and landline telemetry at station.

COOPERATION.--Records of diversion provided by the city of Coatesville.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Dec. 17	1100	*2,990	*7.92	No other peak greater than base discharge.			

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	35	36	37	181	71	147	64	66	34	22	19
2	38	36	34	36	127	68	122	60	101	34	20	17
3	36	34	30	34	92	65	110	60	70	33	21	18
4	57	37	29	36	e73	73	101	57	57	34	65	33
5	212	35	30	35	e128	92	97	57	53	42	26	22
6	68	34	29	38	e124	80	98	53	49	37	20	18
7	49	36	30	36	e108	82	98	50	49	32	21	17
8	41	39	28	37	101	100	92	50	45	32	19	17
9	38	37	30	40	113	114	94	52	42	32	18	17
10	38	60	28	36	401	95	112	49	42	46	28	19
11	37	46	29	37	117	81	111	48	47	58	58	19
12	36	34	31	38	86	73	133	47	47	35	77	18
13	35	33	27	36	84	215	104	45	39	31	243	16
14	34	44	138	37	88	123	89	42	40	29	38	21
15	33	42	86	e63	97	95	85	42	41	28	27	16
16	34	35	57	65	96	113	140	42	66	27	24	16
17	35	34	1140	51	144	152	121	42	63	29	22	16
18	50	33	257	48	86	107	145	45	44	32	23	16
19	55	31	101	258	73	88	127	45	41	30	21	17
20	38	31	78	415	75	80	96	42	37	28	31	44
21	36	31	63	129	74	199	90	81	38	25	24	69
22	35	31	58	80	67	253	87	161	39	24	21	24
23	33	30	45	66	70	120	82	116	281	23	22	20
24	35	28	48	66	67	101	79	66	68	24	20	40
25	33	30	43	61	79	92	75	55	45	25	21	183
26	34	e91	39	53	138	86	71	186	41	26	19	40
27	34	75	41	53	90	81	72	338	37	25	19	27
28	35	44	41	49	78	79	70	109	37	23	20	24
29	34	41	38	45	---	84	64	75	34	22	18	21
30	35	43	40	159	---	520	66	64	35	22	19	21
31	34	---	37	323	---	199	---	55	---	22	18	---
TOTAL	1379	1190	2741	2497	3057	3781	2978	2298	1694	944	1045	865
MEAN	44.5	39.7	88.4	80.5	109	122	99.3	74.1	56.5	30.5	33.7	28.8
MAX	212	91	1140	415	401	520	147	338	281	58	243	183
MIN	33	28	27	34	67	65	64	42	34	22	18	16
CFSM	.81	.72	1.61	1.46	1.99	2.22	1.80	1.35	1.03	.55	.61	.52
IN.	.93	.80	1.85	1.69	2.07	2.56	2.01	1.55	1.15	.64	.71	.59
(†)	0	-.2	+.4	0	0	0	0	0	0	-.3	-.3	0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001			
MEAN	55.6	71.9	92.9	103	108	128	118	95.0	81.7	68.4	46.5	55.2																							
MAX	190	144	306	330	235	308	241	213	302	236	123	186																							
(WY)	1997	1997	1997	1979	1971	1994	1983	1989	1972	1984	1971	1979																							
MIN	21.7	22.8	21.5	20.1	41.9	43.0	39.9	41.5	28.4	18.4	16.8	21.4																							
(WY)	1998	1999	1999	1981	1992	1985	1985	1999	1999	1999	1995	1981																							

† Change in contents from Rock Run Reservoir, equivalent in cubic feet per second.
e Estimated.

CHRISTINA RIVER BASIN

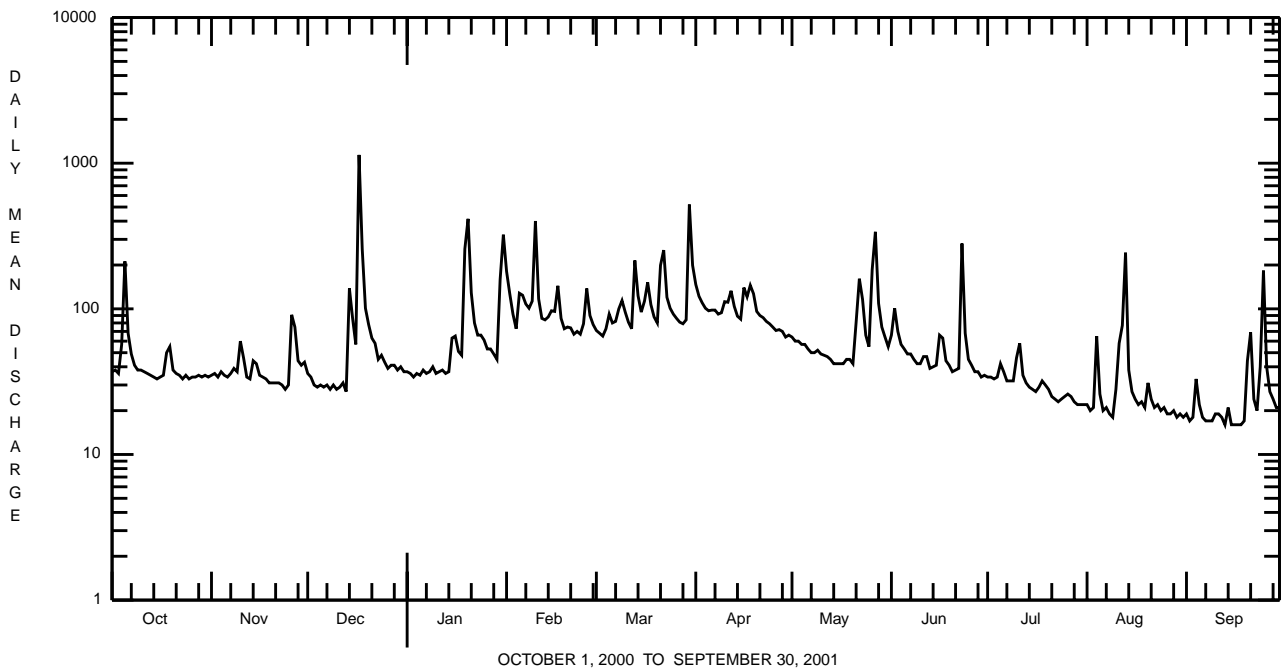
01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1970 - 2001	
ANNUAL TOTAL	30024		24469			
ANNUAL MEAN	82.0		67.0		85.4	
HIGHEST ANNUAL MEAN					130	1979
LOWEST ANNUAL MEAN					37.6	1981
HIGHEST DAILY MEAN	2340	Mar 22	1140	Dec 17	4010	Jun 22 1972
LOWEST DAILY MEAN	27	Dec 13	16	Sep 13 ^a	9.8	Sep 13 1981
ANNUAL SEVEN-DAY MINIMUM	29	Dec 7	17	Sep 13	11	Sep 4 1995
MAXIMUM PEAK FLOW			2990	Dec 17	^b 9600	Jun 29 1973
MAXIMUM PEAK STAGE			^c 7.92	Dec 17	12.47	Jun 29 1973
ANNUAL RUNOFF (CFSM)	1.49		1.22		1.55	
ANNUAL RUNOFF (INCHES)	20.31		16.55		21.09	
10 PERCENT EXCEEDS	133		120		145	
50 PERCENT EXCEEDS	50		42		57	
90 PERCENT EXCEEDS	31		22		26	

^a Also Sept. 15-18.

^b From rating curve extended above 7,800 ft³/s on basis of slope-area measurement at gage height 11.48 ft.

^c Maximum recorded 7.75 ft.



CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1969 to October 1978, August 1981 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1971 to October 1977, August 1981 to current year.
 pH: May 1971 to October 1977, August 1981 to current year.
 WATER TEMPERATURES: May 1971 to October 1977, August 1981 to current year.
 DISSOLVED OXYGEN: May 1971 to October 1977, August 1981 to current year.

INSTRUMENTATION.--Water-quality monitor May 1971 to October 1977, August 1981 to current year.

REMARKS.--Specific conductance records rated good except for periods Mar. 21-29, May 23-31, July 5-9, Aug. 29 to Sept. 7, which are poor. pH and water temperature records rated good. Dissolved oxygen records rated good except for periods Oct. 12-22, Nov. 7-10, Mar. 29 to Apr. 25, June 16, 23, and Aug. 15 to Sept. 19, which are fair. 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, 858 microsiemens, Jan. 10, 1977; minimum, 72 microsiemens, Nov. 16, 1985.
 pH: Maximum, 10.0, Dec. 21, 1971; minimum, 5.9, July 14, 1991.
 WATER TEMPERATURE: Maximum, 33.5°C, July 19, 1977; minimum, 0.0°C, many days during winters.
 DISSOLVED OXYGEN: Maximum, 19.5 mg/L, Sept. 2, 1990; minimum, 0.6 mg/L, Nov. 1, 3, 1974.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)
OCT 2000 12...	0800	80020	1028	36	10.4	7.6	339	10.0	27.8	9.16	4.74	17.6
DATE	ANC UNFLTRD IT FIELD (MG/L AS CACO3)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (MG/L AS AL)	ARSENIC DIS-SOLVED (MG/L AS AS)	BORON, DIS-SOLVED (MG/L AS B)	
OCT 2000 12...	73	29.8	12.9	27.5	<.041	4.56	.029	.113	16	<2.0	63	
DATE	CADMIUM DIS-SOLVED (µG/L AS CD)	CHRO-MIUM, DIS-SOLVED (µG/L AS CR)	COPPER, DIS-SOLVED (µG/L AS CU)	IRON, DIS-SOLVED (µG/L AS FE)	LEAD, DIS-SOLVED (µG/L AS PB)	MANGA-NESE, DIS-SOLVED (µG/L AS MN)	MERCURY DIS-SOLVED (µG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (µG/L AS MO)	NICKEL, DIS-SOLVED (µG/L AS NI)	ZINC, DIS-SOLVED (µG/L AS ZN)		
OCT 2000 12...	<.14	2.1	2.0	40	<1.00	22.5	<.23	23.5	4.14	<20		

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)
MAR 2001									
08...	1230	1028	1028	96	14.8	8.7	322	5.1	500
21...	1555	1028	1028	282	11.4	7.8	215	6.8	1200
APR									
03...	1220	1028	1028	111	12.8	8.2	283	8.5	110
17...	1220	1028	1028	121	13.2	8.6	260	10.7	550
MAY									
02...	1205	1028	1028	61	11.0	8.1	304	17.3	540
14...	1200	1028	1028	45	11.1	7.9	329	15.9	660
23...	1440	1028	1028	101	9.7	7.4	239	18.7	5100
JUN									
05...	1430	1028	1028	55	9.9	8.0	316	20.1	840
13...	1445	1028	1028	38	8.7	7.7	348	23.7	630
26...	1220	1028	1028	42	8.9	7.7	328	22.2	1100
JUL									
09...	1515	1028	1028	32	10.4	8.4	346	24.8	500
16...	1630	1028	1028	27	10.7	8.6	373	24.0	2800
23...	1330	1028	1028	24	10.5	8.2	364	24.0	3100
AUG									
01...	1430	1028	1028	24	10.3	8.2	380	23.4	3100
15...	1320	1028	1028	26	8.5	7.7	348	23.8	3500
SEP									
13...	1450	1028	1028	16	10.6	8.6	392	21.6	240
25...	1520	1028	1028	145	9.4	7.8	245	19.2	26000

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
MAR							
13...	1059	0	--	--	--	--	0
13...	1100	.50	13.1	7.5	221	5.6	5
13...	1101	.50	13.1	7.5	220	5.6	10
13...	1102	.50	13.1	7.5	220	5.6	15
13...	1103	.50	13.1	7.5	219	5.6	20
13...	1104	.50	13.1	7.5	219	5.6	25
13...	1105	.50	13.1	7.5	219	5.6	30
13...	1106	.50	13.1	7.5	218	5.6	35
13...	1107	.50	13.0	7.5	218	5.6	40
13...	1108	.50	13.0	7.5	217	5.6	45
13...	1109	.50	13.0	7.5	216	5.6	50
13...	1110	.50	13.0	7.5	218	5.6	55
13...	1111	.50	12.9	7.5	218	5.6	60
13...	1112	.50	12.8	7.5	217	5.6	65
13...	1113	0	--	--	--	--	67
13...	1114	0	--	--	--	--	81
13...	1115	.50	12.8	7.5	214	5.6	85
13...	1116	.50	12.9	7.5	215	5.6	90
13...	1117	.50	12.8	7.5	215	5.6	95
13...	1118	.50	12.8	7.5	217	5.6	100
13...	1119	0	--	--	--	--	102

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

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 3.2 m².

Date	10/12/00
Benthic Macroinvertebrate	Count
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Ancyliidae	
<u>Ferrissia</u> sp	1
Bivalvia (CLAMS)	
Veneroidea	
Sphaeriidae	1
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	4
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	85
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<u>Baetis</u> sp	3
Ephemerellidae	
<u>Serratella</u> sp	4
Heptageniidae	
<u>Stenonema</u> sp	1
Leptohyphidae	
<u>Tricorythodes</u> sp	1
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<u>Cheumatopsyche</u> sp	175
<u>Hydropsyche</u> sp	920
Hydroptilidae	
<u>Leucotrichia</u> sp	43
Philopotamidae	
<u>Chimarra</u> sp	2
Lepidoptera	
Pyralididae (MOTHS)	
<u>Petrophila</u> sp	73
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<u>Optioservus</u> sp	70
<u>Oulimnius</u> sp	9
<u>Stenelmis</u> sp	72
Hydrophilidae	
<u>Berosus</u> sp	4
Psephenidae (WATER PENNIES)	
<u>Psephenus</u> sp	12
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	71
Empididae (DANCE FLIES)	
<u>Hemerodromia</u> sp	21
Tipulidae (CRANE FLIES)	
<u>Antocha</u> sp	43
Total Organisms	1615
Total Taxa	21

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	352	331	343	346	319	336	---	---	---	---	---	---
2	352	327	340	349	319	335	---	---	---	---	---	---
3	362	326	342	342	313	330	---	---	---	---	---	---
4	349	192	330	343	313	331	---	---	---	---	---	---
5	230	143	199	344	316	333	---	---	---	---	---	---
6	275	229	250	345	314	332	---	---	---	---	---	---
7	321	274	291	347	318	335	---	---	---	---	---	---
8	330	302	315	354	305	327	---	---	---	---	---	---
9	341	313	325	337	316	328	---	---	---	---	---	---
10	337	312	326	338	239	295	---	---	---	---	---	---
11	347	314	328	328	274	299	---	---	---	---	---	---
12	353	318	333	338	308	323	---	---	---	---	---	---
13	354	327	340	337	310	325	---	---	---	---	---	---
14	348	317	337	331	264	306	---	---	---	---	---	---
15	347	326	339	316	278	296	---	---	---	---	---	---
16	356	334	345	336	304	319	---	---	---	---	---	---
17	360	326	341	344	317	332	---	---	---	---	---	---
18	335	256	308	342	313	329	---	---	---	---	---	---
19	319	279	300	351	316	334	---	---	---	---	---	---
20	343	314	326	361	320	339	---	---	---	---	---	---
21	346	323	337	361	311	332	---	---	---	---	---	---
22	344	320	335	339	314	330	---	---	---	---	---	---
23	346	326	336	347	319	335	---	---	---	---	---	---
24	347	323	334	344	322	334	---	---	---	---	---	---
25	352	314	332	346	323	336	---	---	---	---	---	---
26	345	316	331	341	207	267	---	---	---	---	---	---
27	345	321	335	278	226	257	---	---	---	---	---	---
28	354	325	340	299	273	285	---	---	---	---	---	---
29	360	329	345	313	288	301	---	---	---	---	---	---
30	356	325	342	305	284	295	---	---	---	---	---	---
31	352	320	333	---	---	---	---	---	---	---	---	---
MONTH	362	143	324	361	207	319	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	271	243	258	304	271	293
2	---	---	---	310	290	299	278	265	270	312	289	300
3	---	---	---	308	291	298	291	271	278	326	306	316
4	---	---	---	408	294	316	303	278	284	327	307	318
5	---	---	---	677	352	496	303	282	290	331	310	319
6	---	---	---	402	342	361	298	277	288	328	304	316
7	---	---	---	370	328	345	292	273	282	328	309	318
8	---	---	---	362	312	332	293	277	283	324	303	314
9	---	---	---	443	296	325	285	268	276	326	309	319
10	---	---	---	313	281	295	277	252	263	326	303	315
11	---	---	---	313	294	302	280	257	269	331	306	320
12	---	---	---	308	288	297	271	244	258	332	310	323
13	---	---	---	371	210	267	291	266	274	331	306	320
14	---	---	---	291	254	267	293	276	282	373	315	338
15	---	---	---	307	283	290	296	272	287	354	311	332
16	---	---	---	299	250	287	274	235	253	339	315	327
17	---	---	---	296	251	278	265	251	258	351	324	338
18	---	---	---	301	277	286	268	240	252	351	327	341
19	---	---	---	307	293	298	273	247	260	341	316	328
20	---	---	---	310	288	298	283	268	273	336	318	329
21	---	---	---	306	192	264	286	277	281	338	224	291
22	---	---	---	268	193	232	289	273	279	271	203	240
23	---	---	---	301	264	284	290	279	284	267	220	242
24	---	---	---	320	297	306	297	279	286	299	259	276
25	---	---	---	324	301	313	300	289	295	325	299	313
26	---	---	---	315	290	304	309	297	301	320	194	247
27	---	---	---	310	292	301	310	292	301	223	143	201
28	---	---	---	307	279	298	302	286	295	275	223	256
29	---	---	---	308	265	301	300	266	293	322	275	307
30	---	---	---	265	159	189	302	272	293	325	300	315
31	---	---	---	246	209	231	---	---	---	329	304	318
MONTH	---	---	---	677	159	299	310	235	278	373	143	304

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	330	245	316	363	341	352	403	368	390	414	304	369
2	292	258	271	371	333	351	404	375	391	395	327	353
3	303	283	293	367	329	352	410	395	401	356	230	327
4	310	292	302	374	336	354	416	133	345	359	149	305
5	323	299	312	355	281	339	378	258	325	329	226	289
6	334	309	321	361	286	344	388	371	381	---	---	---
7	336	310	322	370	331	353	406	375	390	---	---	---
8	338	315	328	367	343	357	423	404	413	412	382	402
9	---	---	---	365	346	355	429	388	410	426	396	414
10	---	---	---	359	249	329	416	255	377	428	321	407
11	---	---	---	336	257	298	358	190	310	402	321	381
12	---	---	---	344	312	331	365	187	311	413	394	405
13	353	325	341	353	327	343	254	157	198	424	383	404
14	359	340	351	372	337	355	335	254	298	419	307	379
15	357	334	347	380	348	366	368	334	350	413	390	403
16	355	215	304	398	361	379	381	359	373	423	392	407
17	302	259	288	398	363	379	394	366	380	430	395	415
18	332	295	313	390	285	363	399	367	384	427	394	409
19	338	318	330	365	314	348	397	372	382	408	374	398
20	342	318	331	376	346	363	383	237	333	421	221	344
21	354	329	345	382	350	370	360	337	346	326	143	270
22	356	330	344	380	351	370	376	346	361	394	326	358
23	349	132	216	387	352	372	381	332	360	406	376	393
24	302	230	267	395	356	378	367	305	350	412	142	389
25	326	298	311	392	352	374	386	331	363	283	142	230
26	343	312	329	402	340	372	390	351	378	365	283	326
27	355	326	340	392	370	382	400	358	383	382	358	371
28	360	336	349	402	377	392	406	355	383	391	366	383
29	360	338	351	422	390	404	405	303	366	399	364	384
30	365	336	353	410	363	385	395	296	365	434	376	401
31	---	---	---	401	372	389	415	358	391	---	---	---
MONTH	365	132	318	422	249	361	429	133	361	434	142	368

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.5	7.6	7.8	8.8	7.5	7.9	---	---	---	---	---	---
2	8.7	7.6	7.9	8.7	7.4	7.9	---	---	---	---	---	---
3	8.9	7.5	8.1	8.8	7.4	8.0	---	---	---	---	---	---
4	9.0	7.5	7.9	8.9	7.4	8.1	---	---	---	---	---	---
5	7.6	7.2	7.4	8.7	7.4	8.0	---	---	---	---	---	---
6	7.6	7.4	7.4	8.7	7.4	7.9	---	---	---	---	---	---
7	7.8	7.4	7.6	8.8	7.4	7.9	---	---	---	---	---	---
8	8.0	7.5	7.7	8.8	7.4	7.9	---	---	---	---	---	---
9	8.0	7.5	7.7	8.5	7.3	7.7	---	---	---	---	---	---
10	8.1	7.6	7.7	7.9	7.3	7.4	---	---	---	---	---	---
11	8.1	7.5	7.7	8.4	7.4	7.6	---	---	---	---	---	---
12	8.6	7.5	7.7	8.6	7.5	7.8	---	---	---	---	---	---
13	8.8	7.6	8.0	8.7	7.5	7.8	---	---	---	---	---	---
14	8.9	7.6	8.2	7.7	7.5	7.5	---	---	---	---	---	---
15	8.9	7.5	8.2	8.5	7.5	7.7	---	---	---	---	---	---
16	8.6	7.5	7.9	8.6	7.5	7.8	---	---	---	---	---	---
17	8.2	7.5	7.7	8.6	7.5	7.8	---	---	---	---	---	---
18	7.8	7.5	7.5	8.7	7.5	7.8	---	---	---	---	---	---
19	8.4	7.5	7.7	8.6	7.5	7.8	---	---	---	---	---	---
20	8.6	7.5	7.8	8.6	7.5	7.8	---	---	---	---	---	---
21	8.6	7.5	7.8	8.7	7.5	7.9	---	---	---	---	---	---
22	8.5	7.4	7.8	8.5	7.5	7.8	---	---	---	---	---	---
23	8.6	7.4	7.9	8.4	7.5	7.7	---	---	---	---	---	---
24	8.8	7.5	8.0	8.5	7.5	7.8	---	---	---	---	---	---
25	8.7	7.5	7.8	8.3	7.5	7.7	---	---	---	---	---	---
26	8.8	7.4	7.9	7.6	7.3	7.4	---	---	---	---	---	---
27	9.0	7.4	8.0	7.5	7.2	7.3	---	---	---	---	---	---
28	8.8	7.4	8.0	7.7	7.3	7.5	---	---	---	---	---	---
29	8.8	7.5	8.0	7.9	7.4	7.5	---	---	---	---	---	---
30	8.8	7.5	7.9	7.8	7.3	7.5	---	---	---	---	---	---
31	8.7	7.5	8.0	---	---	---	---	---	---	---	---	---
MAX	9.0	7.6	8.2	8.9	7.5	8.1	---	---	---	---	---	---
MIN	7.6	7.2	7.4	7.5	7.2	7.3	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	8.1	7.5	7.6	8.8	7.4	7.8
2	---	---	---	9.1	7.6	8.0	8.3	7.5	7.6	8.7	7.4	7.7
3	---	---	---	9.3	7.6	8.1	8.7	7.5	7.7	8.5	7.3	7.6
4	---	---	---	8.6	7.6	7.8	8.8	7.5	7.8	8.3	7.3	7.5
5	---	---	---	9.2	7.7	7.9	8.9	7.5	7.8	8.1	7.3	7.5
6	---	---	---	9.2	7.7	8.0	8.6	7.5	7.7	8.2	7.4	7.6
7	---	---	---	9.3	7.7	8.0	8.8	7.5	7.7	8.2	7.4	7.6
8	---	---	---	9.1	7.6	7.9	9.0	7.5	7.8	8.4	7.4	7.7
9	---	---	---	9.1	7.6	7.9	9.1	7.5	7.9	8.4	7.5	7.6
10	---	---	---	9.2	7.6	8.0	9.1	7.4	7.9	8.4	7.4	7.7
11	---	---	---	9.3	7.6	8.1	8.1	7.5	7.6	8.4	7.4	7.6
12	---	---	---	9.3	7.6	8.2	8.7	7.5	7.7	8.3	7.3	7.6
13	---	---	---	7.9	7.6	7.7	9.0	7.5	7.8	8.4	7.4	7.7
14	---	---	---	8.6	7.6	7.8	9.0	7.5	8.0	8.5	7.4	7.7
15	---	---	---	8.7	7.6	7.8	9.1	7.5	7.9	8.5	7.5	7.8
16	---	---	---	8.8	7.6	7.8	8.7	7.5	7.6	8.6	7.4	7.8
17	---	---	---	8.0	7.6	7.7	9.0	7.5	7.9	8.4	7.4	7.8
18	---	---	---	8.9	7.6	7.9	9.0	7.6	7.8	8.1	7.5	7.6
19	---	---	---	9.0	7.6	8.0	9.1	7.6	8.0	8.5	7.5	7.7
20	---	---	---	9.1	7.6	8.1	9.2	7.5	8.0	8.1	7.4	7.6
21	---	---	---	8.1	7.6	7.7	9.1	7.5	7.9	7.6	7.4	7.5
22	---	---	---	7.7	7.6	7.6	9.3	7.4	8.4	7.5	7.2	7.3
23	---	---	---	8.4	7.6	7.7	9.1	7.4	8.2	7.8	7.2	7.3
24	---	---	---	8.4	7.6	7.8	9.0	7.3	7.9	7.9	7.4	7.6
25	---	---	---	8.7	7.6	7.9	9.2	7.4	8.1	7.9	7.4	7.6
26	---	---	---	8.9	7.6	7.9	9.1	7.5	8.2	7.6	7.4	7.5
27	---	---	---	9.0	7.6	8.0	9.1	7.5	8.2	7.5	7.3	7.4
28	---	---	---	9.0	7.6	8.0	9.1	7.5	8.2	7.6	7.4	7.5
29	---	---	---	8.9	7.6	7.8	9.0	7.5	8.1	7.7	7.5	7.6
30	---	---	---	7.8	7.5	7.5	8.9	7.5	7.9	7.8	7.5	7.6
31	---	---	---	7.8	7.5	7.5	---	---	---	8.1	7.5	7.7
MAX	---	---	---	9.3	7.7	8.2	9.3	7.6	8.4	8.8	7.5	7.8
MIN	---	---	---	7.7	7.5	7.5	8.1	7.3	7.6	7.5	7.2	7.3
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.0	7.6	7.8	8.9	7.4	8.3	8.4	7.5	7.9	8.7	7.3	8.4
2	7.8	7.6	7.6	8.9	7.4	8.3	8.3	7.5	7.9	8.7	7.5	8.5
3	8.0	7.6	7.7	9.0	7.6	8.5	8.5	7.4	8.1	8.8	7.6	8.5
4	8.1	7.6	7.7	8.9	7.6	8.3	8.3	7.2	7.5	8.7	7.5	8.0
5	8.2	7.5	7.7	8.7	7.5	8.1	7.7	7.2	7.4	8.2	7.5	7.8
6	8.1	7.5	7.7	8.6	7.4	8.1	8.0	7.3	7.5	8.4	7.6	8.0
7	8.3	7.6	7.8	8.6	7.5	8.1	8.1	7.3	7.7	8.5	7.6	8.1
8	8.2	7.6	7.8	8.4	7.4	7.9	8.4	7.2	8.0	8.5	7.6	8.2
9	---	---	---	8.5	7.5	7.9	8.4	7.3	8.0	8.5	7.6	8.3
10	---	---	---	8.3	7.3	7.5	8.3	7.2	7.5	8.3	7.4	7.9
11	---	---	---	8.4	7.3	7.7	7.4	7.2	7.3	8.3	7.3	7.9
12	---	---	---	8.4	7.4	7.9	7.9	7.2	7.5	8.4	7.5	8.1
13	8.0	7.4	7.5	8.4	7.4	8.0	7.2	7.1	7.1	8.5	7.6	8.2
14	7.9	7.4	7.5	8.4	7.4	8.0	7.4	7.1	7.3	8.3	7.6	7.9
15	7.8	7.4	7.5	8.5	7.4	8.0	8.1	7.2	7.5	8.4	7.6	8.2
16	7.6	7.3	7.4	8.7	7.3	8.0	8.4	7.4	7.9	8.4	7.7	8.2
17	7.6	7.3	7.5	8.7	7.4	8.2	8.5	7.5	7.9	8.4	7.6	8.2
18	7.6	7.4	7.5	8.2	7.3	7.6	8.7	7.5	8.2	8.5	7.6	8.3
19	7.7	7.3	7.5	8.5	7.3	7.8	8.5	7.4	8.1	8.6	7.6	8.3
20	7.9	7.3	7.6	8.4	7.4	7.9	8.5	7.3	8.0	8.5	7.6	7.7
21	8.2	7.4	7.8	8.5	7.4	7.9	8.7	7.4	8.4	8.6	7.5	7.8
22	8.1	7.5	7.6	8.5	7.4	7.9	8.7	7.5	8.4	8.0	7.4	7.6
23	7.6	7.1	7.2	8.5	7.3	7.9	8.7	7.5	8.4	8.1	7.4	7.8
24	7.6	7.3	7.5	8.4	7.2	7.9	8.8	7.4	8.4	8.2	7.4	7.6
25	7.7	7.5	7.6	8.2	7.2	7.8	8.8	7.4	8.5	8.5	7.4	7.7
26	8.0	7.4	7.6	7.7	7.1	7.4	8.9	7.5	8.5	7.9	7.4	7.6
27	8.3	7.5	7.8	7.9	7.4	7.7	8.8	7.4	8.5	8.0	7.5	7.7
28	8.6	7.5	8.0	8.3	7.4	7.8	8.8	7.3	8.4	8.2	7.5	7.8
29	8.9	7.5	8.4	8.1	7.5	7.8	8.8	7.3	8.5	8.2	7.6	7.8
30	8.9	7.4	8.4	8.3	7.6	8.0	8.7	7.3	8.4	8.2	7.4	7.8
31	---	---	---	8.2	7.5	7.9	8.8	7.3	8.5	---	---	---
MAX	8.9	7.6	8.4	9.0	7.6	8.5	8.9	7.5	8.5	8.8	7.7	8.5
MIN	7.6	7.1	7.2	7.7	7.1	7.4	7.2	7.1	7.1	7.9	7.3	7.6

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.5	12.5	14.5	11.0	9.0	10.0	---	---	---	---	---	---
2	17.0	13.5	15.0	11.0	8.5	10.0	---	---	---	---	---	---
3	18.5	14.5	16.0	12.0	9.0	10.5	---	---	---	---	---	---
4	19.0	15.5	17.5	13.0	11.0	11.5	---	---	---	---	---	---
5	17.5	17.0	17.0	12.0	9.5	11.0	---	---	---	---	---	---
6	19.0	17.0	17.5	10.0	8.5	9.5	---	---	---	---	---	---
7	17.5	14.5	16.0	10.0	8.0	9.0	---	---	---	---	---	---
8	14.5	11.5	13.0	11.5	9.0	10.5	---	---	---	---	---	---
9	11.5	10.0	11.0	12.5	11.0	12.0	---	---	---	---	---	---
10	11.0	9.5	10.0	13.5	12.0	13.0	---	---	---	---	---	---
11	13.0	9.5	11.0	12.5	11.0	12.0	---	---	---	---	---	---
12	14.0	10.5	12.0	11.5	10.0	11.0	---	---	---	---	---	---
13	14.5	11.0	12.5	11.5	10.0	11.0	---	---	---	---	---	---
14	15.5	12.0	13.5	11.0	9.0	10.5	---	---	---	---	---	---
15	16.0	13.0	14.5	9.0	7.5	8.0	---	---	---	---	---	---
16	15.0	14.0	14.5	8.0	6.5	7.5	---	---	---	---	---	---
17	15.0	14.5	14.5	9.0	7.5	8.0	---	---	---	---	---	---
18	15.5	14.5	14.5	8.0	6.0	7.0	---	---	---	---	---	---
19	15.0	13.0	14.0	7.0	5.5	6.0	---	---	---	---	---	---
20	14.5	11.5	13.0	6.0	4.0	5.0	---	---	---	---	---	---
21	15.5	12.0	13.5	5.0	3.5	4.5	---	---	---	---	---	---
22	15.0	13.0	13.5	4.0	2.5	3.5	---	---	---	---	---	---
23	13.5	10.5	12.0	4.0	2.0	3.0	---	---	---	---	---	---
24	13.5	11.0	12.0	4.0	2.0	3.0	---	---	---	---	---	---
25	15.5	12.0	13.5	4.0	2.0	3.0	---	---	---	---	---	---
26	15.0	13.5	14.0	7.5	4.0	6.5	---	---	---	---	---	---
27	15.5	13.0	14.5	8.0	5.5	7.0	---	---	---	---	---	---
28	14.5	12.0	14.0	9.0	7.0	8.0	---	---	---	---	---	---
29	12.0	9.5	10.5	8.0	6.0	7.0	---	---	---	---	---	---
30	10.5	8.5	9.5	7.5	6.5	7.0	---	---	---	---	---	---
31	11.0	8.5	9.5	---	---	---	---	---	---	---	---	---
MONTH	19.0	8.5	13.5	13.5	2.0	8.2	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	8.5	6.5	7.5	19.0	13.5	16.5
2	---	---	---	7.0	4.5	5.5	9.0	7.5	8.0	20.5	15.0	18.0
3	---	---	---	8.0	6.0	7.0	11.0	6.5	8.5	21.5	16.5	19.0
4	---	---	---	7.0	3.5	5.5	12.5	8.5	10.5	22.0	17.5	20.0
5	---	---	---	4.5	3.0	3.5	12.5	7.5	10.5	21.0	18.0	20.0
6	---	---	---	4.5	2.0	3.5	11.5	9.5	10.0	19.0	15.0	17.0
7	---	---	---	7.0	3.0	5.0	11.0	10.0	10.5	18.0	13.5	15.5
8	---	---	---	6.5	3.5	5.0	10.5	9.0	9.5	18.0	13.5	15.5
9	---	---	---	6.5	4.5	5.5	16.0	9.0	12.0	18.5	14.5	16.5
10	---	---	---	7.0	3.5	5.0	15.5	12.5	14.0	19.5	15.0	17.0
11	---	---	---	7.0	3.5	5.5	13.5	11.5	12.0	21.0	16.0	18.5
12	---	---	---	8.0	4.0	6.0	12.5	11.0	11.5	20.5	17.0	19.0
13	---	---	---	7.0	5.5	6.5	16.0	11.5	13.5	19.5	15.5	17.5
14	---	---	---	7.5	5.5	6.5	15.5	11.5	13.5	18.0	14.0	16.0
15	---	---	---	7.0	5.0	6.0	15.0	11.5	13.5	18.5	13.5	15.5
16	---	---	---	8.5	6.5	7.5	13.5	11.0	12.0	18.0	13.5	15.5
17	---	---	---	7.5	7.0	7.0	11.5	9.5	10.5	16.0	14.5	15.0
18	---	---	---	9.0	5.5	7.0	12.0	8.0	10.0	15.0	14.0	14.5
19	---	---	---	9.0	5.0	7.0	12.5	7.0	10.0	19.0	14.5	16.5
20	---	---	---	8.5	5.5	7.5	11.5	8.5	10.5	17.5	15.5	16.0
21	---	---	---	8.0	6.5	7.0	13.5	11.0	12.5	15.5	14.0	14.5
22	---	---	---	8.0	6.0	7.0	18.5	12.5	15.5	17.0	14.0	15.5
23	---	---	---	10.0	5.5	7.5	20.5	15.0	18.0	19.0	15.5	17.0
24	---	---	---	8.0	6.0	7.0	20.5	17.0	18.5	20.5	16.0	18.0
25	---	---	---	8.5	4.5	6.5	17.5	13.5	14.5	19.0	17.0	18.0
26	---	---	---	8.0	5.5	7.0	16.0	11.0	13.5	17.5	15.5	16.0
27	---	---	---	7.5	4.0	6.0	16.5	11.5	14.0	17.5	15.0	16.5
28	---	---	---	8.5	4.0	6.5	17.0	13.0	15.0	19.5	16.0	17.5
29	---	---	---	7.5	5.5	6.5	16.0	11.5	14.0	19.0	15.0	17.0
30	---	---	---	7.0	5.5	6.0	17.0	11.5	14.5	19.0	15.5	17.0
31	---	---	---	8.0	5.5	6.5	---	---	---	18.0	13.5	15.5
MONTH	---	---	---	10.0	2.0	6.2	20.5	6.5	12.3	22.0	13.5	16.8

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.0	14.0	14.5	26.0	22.5	24.0	25.0	20.0	22.5	24.5	22.5	23.5
2	17.5	14.0	15.5	23.5	19.5	21.5	25.5	20.0	23.0	23.0	19.5	21.5
3	18.5	16.0	17.0	22.0	18.0	20.0	25.5	21.0	23.5	22.0	18.0	20.5
4	19.5	15.0	17.0	22.5	19.5	20.5	24.5	22.0	23.5	24.0	19.5	21.5
5	21.0	16.5	18.5	23.0	20.0	21.5	26.0	21.5	23.5	22.5	20.0	21.5
6	19.0	17.5	18.5	23.5	19.0	21.0	27.0	23.0	25.0	22.0	18.0	20.5
7	20.5	17.0	18.5	23.5	18.0	21.0	28.0	23.5	26.0	22.5	18.0	20.5
8	21.0	16.5	18.5	22.0	20.0	21.0	28.5	24.0	26.5	23.0	19.0	21.0
9	---	---	---	25.5	20.0	22.5	28.5	24.0	26.5	24.0	20.0	22.0
10	---	---	---	24.5	21.0	23.0	28.0	25.0	26.5	23.5	21.5	22.5
11	---	---	---	25.0	20.5	22.5	26.0	22.5	24.0	23.0	20.5	22.0
12	---	---	---	24.0	20.0	22.0	24.5	22.5	23.0	22.0	18.5	20.5
13	25.0	20.0	22.5	23.0	19.0	21.0	24.5	22.5	23.0	22.0	18.0	20.5
14	23.5	21.0	22.0	23.5	19.0	21.0	25.5	22.0	23.5	21.5	17.5	19.0
15	24.0	20.5	22.0	24.0	19.0	21.5	26.0	22.0	23.5	18.5	15.5	17.5
16	23.0	21.0	21.5	24.5	20.0	22.5	25.5	21.5	23.5	19.0	15.0	17.0
17	24.0	19.5	21.5	25.5	21.0	23.0	25.0	22.5	23.5	19.5	15.5	17.5
18	24.5	19.5	22.0	24.0	21.5	22.5	24.5	21.5	23.0	19.0	16.0	17.5
19	25.0	19.5	22.5	24.5	20.5	22.5	23.0	21.5	22.0	19.5	16.0	18.0
20	25.5	20.5	23.0	24.5	20.0	22.5	25.5	21.5	23.0	20.0	18.5	19.0
21	24.5	21.0	22.5	25.0	19.5	22.0	24.5	21.5	23.0	21.0	18.5	20.0
22	24.0	21.5	22.5	25.0	19.5	22.5	24.5	20.5	23.0	22.0	19.0	20.5
23	23.0	20.5	21.5	26.0	20.5	23.5	23.5	21.0	22.5	22.0	19.0	20.5
24	22.5	19.0	21.0	27.0	22.5	24.5	25.0	21.0	23.0	22.0	19.5	20.5
25	24.0	19.0	21.0	28.5	23.5	26.0	24.5	22.0	23.5	21.5	17.5	19.5
26	25.0	19.5	22.0	27.0	22.5	24.5	24.5	20.5	22.5	17.5	15.0	16.5
27	26.0	20.5	23.0	24.5	20.5	22.5	25.0	21.5	23.0	17.0	15.0	16.0
28	26.5	22.0	24.0	23.5	19.5	21.5	25.5	22.0	23.5	16.0	14.5	15.5
29	26.0	22.0	24.0	22.0	19.5	20.5	25.0	21.5	23.5	16.0	14.5	15.5
30	26.5	22.5	24.5	23.0	19.5	21.0	24.0	21.5	23.0	15.5	13.5	14.5
31	---	---	---	24.0	19.5	21.5	25.5	22.0	24.0	---	---	---
MONTH	26.5	14.0	20.8	28.5	18.0	22.2	28.5	20.0	23.6	24.5	13.5	19.4

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.8	9.3	10.3	14.3	10.0	11.7	---	---	---	---	---	---
2	11.9	9.1	10.2	14.2	10.0	11.7	---	---	---	---	---	---
3	12.6	9.0	10.3	14.5	10.1	11.8	---	---	---	---	---	---
4	13.6	8.6	10.4	14.6	9.6	11.4	---	---	---	---	---	---
5	9.5	9.1	9.4	13.6	9.3	11.2	---	---	---	---	---	---
6	9.5	8.9	9.2	14.3	9.9	11.7	---	---	---	---	---	---
7	10.6	9.0	9.8	---	9.3	11.9	---	---	---	---	---	---
8	11.6	9.7	10.7	14.1	8.6	10.8	---	---	---	---	---	---
9	12.5	10.4	11.3	13.1	8.2	10.2	---	---	---	---	---	---
10	13.0	10.9	11.8	10.6	8.1	9.3	---	---	---	---	---	---
11	13.3	10.8	11.8	---	---	---	---	---	---	---	---	---
12	13.6	10.5	11.8	---	---	---	---	---	---	---	---	---
13	13.9	10.5	11.8	---	---	---	---	---	---	---	---	---
14	13.9	9.9	11.4	---	---	---	---	---	---	---	---	---
15	14.2	9.3	11.1	---	---	---	---	---	---	---	---	---
16	12.7	8.9	10.2	14.2	10.8	12.1	---	---	---	---	---	---
17	11.2	8.7	9.5	13.5	10.6	11.7	---	---	---	---	---	---
18	9.9	8.5	9.1	14.4	11.0	12.3	---	---	---	---	---	---
19	11.3	8.9	9.8	14.5	11.3	12.5	---	---	---	---	---	---
20	12.5	8.8	10.3	15.2	11.6	13.0	---	---	---	---	---	---
21	12.5	9.1	10.4	15.5	11.9	13.3	---	---	---	---	---	---
22	12.2	9.0	10.3	15.6	12.5	13.7	---	---	---	---	---	---
23	13.2	9.0	10.9	15.5	12.7	13.7	---	---	---	---	---	---
24	13.4	9.6	11.1	15.6	12.8	13.8	---	---	---	---	---	---
25	13.0	9.3	10.7	15.2	12.2	13.6	---	---	---	---	---	---
26	13.0	8.9	10.4	12.3	11.1	11.7	---	---	---	---	---	---
27	13.9	9.0	10.7	12.3	11.1	11.8	---	---	---	---	---	---
28	13.4	8.6	10.4	12.6	10.9	11.5	---	---	---	---	---	---
29	13.8	9.5	11.3	13.3	10.9	11.9	---	---	---	---	---	---
30	14.4	9.7	11.7	13.1	10.5	11.7	---	---	---	---	---	---
31	14.5	10.2	11.8	---	---	---	---	---	---	---	---	---
MONTH	14.5	8.5	10.6	15.6	8.1	12.0	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, PA--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	12.1	9.7	10.9	11.8	8.1	9.7
2	---	---	---	14.0	10.3	11.8	12.4	9.4	10.9	11.2	7.5	9.2
3	---	---	---	14.4	10.3	11.8	12.7	9.9	11.2	10.5	7.4	8.7
4	---	---	---	13.2	10.3	11.6	12.5	9.9	11.1	10.1	7.1	8.4
5	---	---	---	14.7	11.6	12.8	12.8	9.5	11.1	9.8	7.1	8.3
6	---	---	---	15.2	11.5	13.0	12.1	9.6	10.7	10.6	7.9	9.2
7	---	---	---	15.2	11.2	12.8	12.3	9.8	10.8	11.1	8.4	9.7
8	---	---	---	14.8	11.0	12.7	13.1	9.9	11.1	11.4	8.7	9.8
9	---	---	---	14.1	11.1	12.3	13.0	7.9	10.7	11.1	8.6	9.6
10	---	---	---	14.8	10.9	12.6	12.4	7.9	10.2	11.0	8.1	9.5
11	---	---	---	15.0	10.9	12.7	11.1	8.9	9.9	10.9	7.7	9.2
12	---	---	---	15.3	10.5	12.6	12.1	9.6	10.6	10.6	7.7	8.9
13	---	---	---	12.0	10.5	11.3	12.7	8.7	10.4	11.1	7.9	9.2
14	---	---	---	12.7	11.0	11.7	13.0	8.6	10.5	11.4	8.3	9.6
15	---	---	---	13.5	10.9	12.0	13.3	8.6	10.4	11.6	8.2	9.7
16	---	---	---	13.4	10.8	11.6	12.1	8.6	10.2	11.6	8.2	9.7
17	---	---	---	12.1	10.9	11.5	12.9	9.7	11.1	11.1	8.2	9.6
18	---	---	---	13.7	11.1	12.1	13.1	9.9	11.3	10.5	8.6	9.3
19	---	---	---	14.2	10.7	12.3	13.7	9.7	11.7	11.1	8.0	9.4
20	---	---	---	14.4	10.6	12.3	13.8	9.6	11.4	10.5	7.9	9.1
21	---	---	---	12.4	10.6	11.3	13.6	9.0	10.8	9.5	8.4	9.0
22	---	---	---	11.5	11.0	11.3	13.5	7.6	10.5	9.2	8.5	9.0
23	---	---	---	12.4	10.6	11.5	12.9	7.0	9.6	9.6	8.5	9.0
24	---	---	---	12.6	10.7	11.7	12.0	7.0	8.9	9.9	8.3	9.1
25	---	---	---	13.3	10.7	12.0	12.8	7.4	10.1	9.8	8.1	8.9
26	---	---	---	13.4	10.8	11.9	12.9	8.5	10.5	9.3	8.1	8.8
27	---	---	---	13.9	10.8	12.2	13.0	8.2	10.4	9.2	8.5	8.9
28	---	---	---	13.7	10.1	11.9	12.5	8.2	10.1	9.3	8.4	8.8
29	---	---	---	14.1	10.1	11.8	12.8	8.6	10.5	9.5	8.2	8.9
30	---	---	---	11.5	10.2	11.1	12.4	8.4	10.3	9.6	8.3	8.9
31	---	---	---	11.9	9.7	11.1	---	---	---	10.7	8.8	9.6
MONTH	---	---	---	15.3	9.7	12.0	13.8	7.0	10.6	11.8	7.1	9.2
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.5	9.1	9.8	11.3	6.6	8.5	10.4	7.1	8.5	10.4	7.1	8.5
2	10.0	8.8	9.5	11.2	6.3	8.7	10.8	6.6	8.2	11.0	7.5	9.0
3	9.9	8.5	9.2	11.2	7.4	9.1	11.1	6.6	8.2	11.3	7.9	9.3
4	10.2	8.5	9.3	11.0	6.2	8.7	10.5	6.0	7.5	11.1	7.8	9.0
5	10.0	8.1	9.0	10.7	6.4	8.5	8.4	6.6	7.5	10.0	7.9	8.9
6	9.8	7.9	8.9	10.4	6.5	8.4	8.9	6.3	7.4	10.6	8.5	9.3
7	10.0	7.8	8.8	10.8	7.3	8.6	9.5	6.4	7.6	11.0	7.6	9.2
8	9.8	7.9	8.7	10.1	6.5	8.2	10.5	6.2	7.8	10.8	7.5	8.7
9	---	---	---	10.5	7.1	8.4	10.8	5.9	8.1	10.7	7.2	8.6
10	---	---	---	10.1	7.0	8.0	10.9	5.9	7.5	10.2	6.7	8.1
11	---	---	---	9.4	7.3	8.3	7.5	6.3	7.0	12.1	6.6	9.2
12	---	---	---	10.0	7.3	8.4	8.8	7.2	7.8	11.0	7.9	9.1
13	8.9	7.1	7.9	10.8	7.2	8.5	8.0	7.0	7.6	11.4	8.0	9.3
14	9.0	7.1	7.8	10.8	7.2	8.6	7.9	6.9	7.4	10.1	8.1	9.1
15	8.8	7.1	7.8	10.6	7.2	8.6	8.8	6.9	7.6	11.8	8.9	10.2
16	8.0	6.8	7.3	11.0	6.7	8.6	8.8	6.6	7.5	11.4	8.8	9.8
17	8.3	7.0	7.7	11.0	6.6	8.5	9.3	6.4	7.5	11.6	8.8	9.9
18	8.3	7.0	7.7	9.7	6.3	7.5	9.6	6.5	7.8	11.9	8.6	10.0
19	8.8	6.7	7.8	10.0	6.5	8.1	9.6	6.5	7.9	11.6	7.8	9.7
20	8.8	7.1	7.8	10.4	6.6	8.2	9.1	6.6	7.6	8.6	7.3	7.9
21	9.3	7.1	8.0	10.6	6.7	8.3	9.7	6.6	7.9	8.8	7.5	8.1
22	9.1	7.2	7.9	10.7	6.5	8.1	10.0	6.6	8.0	9.6	6.9	8.1
23	8.1	6.9	7.6	10.9	6.3	8.0	9.8	6.6	8.0	9.1	6.4	7.4
24	8.4	7.4	8.0	10.3	6.0	7.7	10.2	6.7	8.2	11.0	6.3	8.1
25	8.7	7.5	8.1	9.8	5.7	7.5	10.0	6.7	8.1	9.3	7.9	8.8
26	9.1	7.2	8.1	7.9	5.6	6.6	10.4	7.0	8.4	10.0	8.4	9.2
27	9.7	7.4	8.3	9.5	6.4	7.8	10.6	6.7	8.3	9.5	7.9	8.7
28	10.4	7.0	8.6	10.3	6.8	8.3	10.5	6.8	8.4	9.5	7.7	8.3
29	11.3	6.9	8.9	9.6	6.9	8.3	10.6	6.7	8.4	9.8	7.7	8.5
30	11.5	7.0	8.8	10.3	7.3	8.6	10.3	7.1	8.5	10.1	7.5	8.5
31	---	---	---	10.7	7.2	8.5	10.5	7.2	8.6	---	---	---
MONTH	11.5	6.7	8.4	11.3	5.6	8.3	11.1	5.9	7.9	12.1	6.3	8.9