2004 Water Year

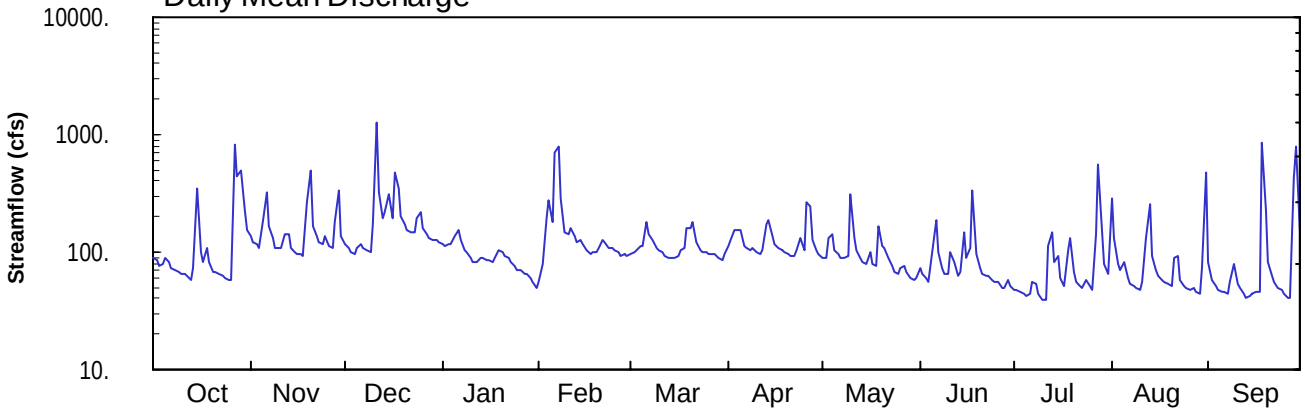
CHRISTINA RIVER BASIN

01480617 West Branch Brandywine Creek at Modena, PA

Latitude: 39°57'42" Longitude: 075°48'06" Hydrologic Unit Code: 02040205

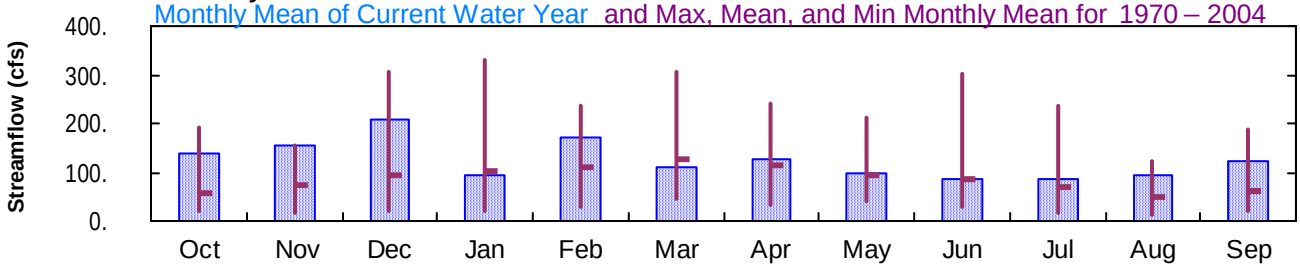
Chester County Datum: 265 feet Drainage Area: 55. mi²

Daily Mean Discharge

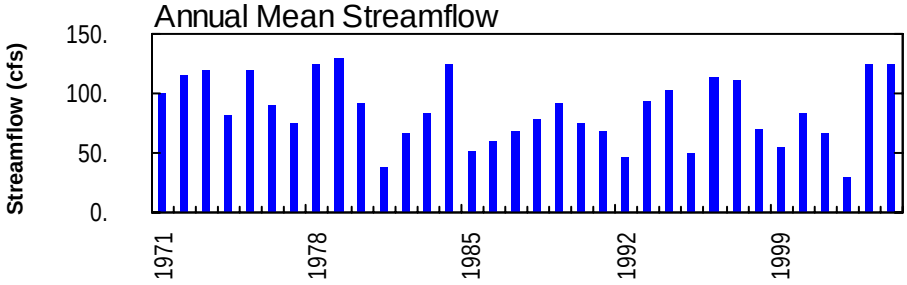


Monthly Statistics

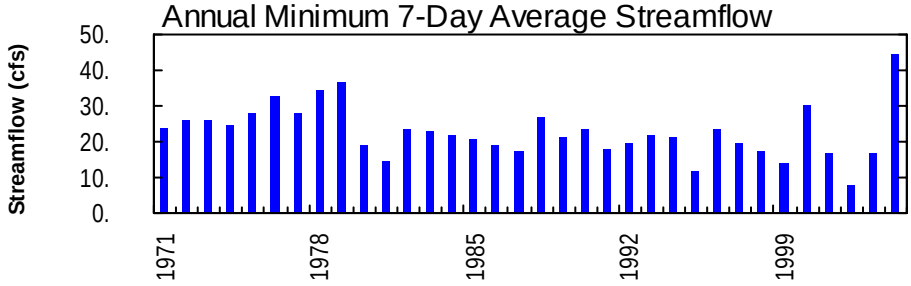
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1970 – 2004



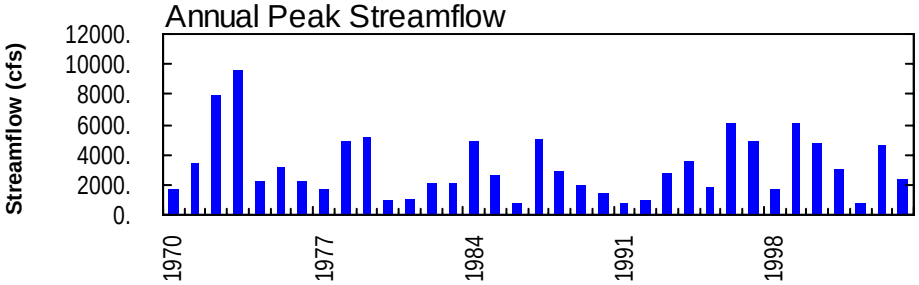
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



01480617--WB Brandywine Creek at Modena

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 mi^2.

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 National Geodetic Vertical Datum of 1929, 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 Pennsylvania American Water Company.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*****):

Date	Time	Discharge ft^3/s	Gage Height (ft)
Oct. 27	1800	1,430	6.11
Dec. 11	1600	*2,360	*7.27
Feb. 6	2330	1,580	6.32
July 28	0900	1,080	5.56
Aug. 31	1100	1,600	6.34
Sept. 18	1130	1,700	6.48
Sept. 28	2230	1,950	6.79

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	88	138	118	117	e55	96	112	90	72	48	291	82
2	84	122	108	114	e80	100	129	90	64	48	129	58
3	77	115	99	117	191	106	154	132	61	47	78	52
4	78	110	98	117	276	112	153	145	56	45	70	48
5	89	190	108	137	178	111	154	105	101	43	83	45
6	81	323	117	156	714	179	114	97	185	45	61	46
7	73	165	108	127	806	139	107	90	101	55	55	44
8	70	129	102	106	284	124	103	91	74	54	52	56
9	68	110	99	100	147	109	108	94	65	45	49	80
10	66	106	174	89	142	102	99	306	65	40	48	54
11	65	106	1290	82	162	98	96	130	99	39	55	49
12	62	144	318	84	137	94	104	102	84	114	131	44
13	57	140	191	88	124	89	175	89	63	146	256	41
14	73	110	219	89	124	88	184	82	68	81	94	42
15	342	99	305	87	118	88	137	79	148	93	72	43
16	101	95	196	86	103	94	115	102	89	60	63	45
17	82	95	472	84	98	103	108	79	108	51	57	46
18	106	92	345	89	100	109	104	77	333	106	56	850
19	81	261	200	104	101	161	101	168	97	132	54	223
20	68	502	172	101	110	162	97	111	74	67	53	81
21	68	165	156	93	127	180	94	109	65	55	88	62
22	65	134	147	88	122	122	93	89	62	51	91	55
23	63	120	145	81	107	105	104	77	64	50	57	49
24	60	117	193	77	106	100	129	68	57	58	52	47
25	57	136	215	e70	103	98	104	65	57	52	49	44
26	59	114	159	e70	101	98	267	74	55	48	47	41
27	820	107	140	e65	94	97	248	75	50	139	49	41
28	433	177	130	e65	95	95	125	67	50	551	46	418
29	496	338	125	e60	93	88	104	60	58	149	44	782
30	226	138	127	e55	---	86	96	57	51	79	73	154
31	155	---	121	e50	---	95	---	59	---	64	485	---
TOTAL	4313	4698	6497	2848	4998	3428	3818	3059	2576	2655	2888	3722
MEAN	139	157	210	91.9	172	111	127	98.7	85.9	85.6	93.2	124
MAX	820	502	1290	156	806	180	267	306	333	551	485	850
MIN	57	92	98	50	55	86	93	57	50	39	44	41
CFSM	2.53	2.85	3.81	1.67	3.13	2.01	2.31	1.79	1.56	1.56	1.69	2.26
IN.	2.92	3.18	4.39	1.93	3.38	2.32	2.58	2.07	1.74	1.80	1.95	2.52
(†)	0	0	0	0	0	0	0	0	0	-0.2	-0.2	-0.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	57.1	73.0	95.4	101	108	127	116	93.5	86.2	67.6	48.2	59.7
MAX	190	157	306	330	235	308	241	213	302	236	123	186
(WY)	1997	2004	1997	1979	1971	1994	1983	1989	1972	1984	1971	1979
MIN	20.0	17.8	21.5	20.1	30.2	43.0	34.7	41.5	28.4	15.4	11.8	20.6
(WY)	2002	2002	1999	1981	2002	1985	2002	1999	1999	2002	2002	2002

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

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

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	52859		45500			
ANNUAL MEAN	145		124		86.1	
HIGHEST ANNUAL MEAN					130	1979
LOWEST ANNUAL MEAN					29.7	2002
HIGHEST DAILY MEAN	1820	Jun 21	1290	Dec 11	4010	Jun 22 1972
LOWEST DAILY MEAN	**e**27	Feb 16	39	Jul 11	7.4	Aug 23 2002
ANNUAL SEVEN-DAY MINIMUM	**a**31	Feb 11	44	Sep 11	8.1	Aug 17 2002
MAXIMUM PEAK FLOW			2360	Dec 11	**b**9600	Jun 29 1973
MAXIMUM PEAK STAGE			7.27	Dec 11	12.47	Jun 29 1973
ANNUAL RUNOFF (CFSM)	2.63		2.26		1.56	
ANNUAL RUNOFF (INCHES)	35.75		30.77		21.26	
10 PERCENT EXCEEDS	284		191		149	
50 PERCENT EXCEEDS	99		97		57	
90 PERCENT EXCEEDS	44		50		25	

a Computed using estimated daily discharges.
b From rating curve extended above 7,800 ft^3/s on basis of slope-area measurement at gage height 11.48 ft.
e Estimated.

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 record rated good. pH record rated good. Water temperature record rated good. Dissolved oxygen record rated good except for periods Feb. 25 to Mar. 23, Apr. 7-26, May 11-27, June 23 to July 1, and Aug. 16-30, 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, 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 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)	Specif. conduct-ance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)
MAR 2004									
09...	1150	1028	1028	107	15.0	8.6	301	7.4	82
11...	1245	1028	1028	98	15.9	9.0	302	7.9	26
23...	1230	1028	1028	98	14.2	8.4	292	6.3	18
APR									
07...	0940	1028	1028	106	12.1	8.0	295	8.6	110
20...	1330	1028	1028	97	12.0	9.0	300	18.3	53
MAY									
04...	1100	1028	1028	155	10.4	7.8	248	12.7	1600
11...	1400	1028	1028	125	9.2	7.8	263	21.0	2500
25...	1200	1028	1028	65	8.5	7.7	327	21.8	1200
JUN									
01...	1220	1028	1028	71	9.5	7.7	305	19.0	590
16...	1010	1028	1028	88	9.8	7.8	303	19.9	2100
23...	1530	1028	1028	67	8.5	8.3	336	22.4	860
JUL									
01...	1200	1028	1028	47	9.2	7.9	326	21.1	490
13...	1230	1028	1028	85	8.4	7.7	241	20.9	E130000
22...	1335	1028	1028	48	9.1	8.1	343	23.3	1200
AUG									
04...	1300	1028	1028	65	8.4	7.7	322	24.5	2100
18...	1200	1028	1028	58	10.6	7.9	340	21.4	560
26...	1200	1028	1028	48	9.5	7.7	352	21.0	540
SEP									
07...	1215	1028	1028	45	9.5	8.0	355	20.9	470
22...	1515	1028	1028	55	9.6	8.1	332	19.6	570

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

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 unf lab, µS/cm 25 degC (90095)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT 09...	1200	1028	80020	67	11.1	8.9	8.1	325	342	14.5	29.9	9.89	4.52

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf incrm. 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 09...	18.0	62	32.5	11.0	28.8	<.04	4.00	.008	.03	47	<2	63	<.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 09...	4.9	3.4	55	<1	23.6	<.02	19.8	E1.2	3

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

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

REMARKS.--Samples were collected using a Hess sampler with a mesh size of 500 µm. Each sample covered a total area of 2.4 m^2.

Date	10/09/03
Benthic Macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	6
Nematoda (NEMATODES)	13
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Ancylidae	
Ferrissia	1
Lymnaeidae	
Fossaria	3
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	6
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	27
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
Acentrella	5
Baetis	4
Heptageniidae	
Stenonema	1
Odonata (DRAGONFLIES AND DAMSELFLIES)	
Coenagrionidae	
Argia	1
Megaloptera	
Corydalidae (FISHFLIES AND DOBSONFLIES)	
Corydalus	2
Trichoptera (CADDISFLIES)	
Hydropsychidae	
Cheumatopsyche	105
Hydropsyche	243
Hydroptilidae	
Leucotrichia	23
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
Optioservus	28
Oulimnius	5
Stenelmis	31
Psephenidae (WATER PENNIES)	
Psephenus	2

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

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES--Continued

Date	10/09/03
Benthic Macroinvertebrate	Count
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	121
Empididae (DANCE FLIES)	
Hemerodromia	51
Simuliidae	
Simulium	23
Tipulidae (CRANE FLIES)	
Antocha	1
Total organisms	702
Total number of taxa	22

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, 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	326	311	319	284	267	275	---	---	---	---	---	---
2	334	317	323	292	279	286	---	---	---	---	---	---
3	335	316	325	289	281	286	---	---	---	---	---	---
4	327	297	312	298	283	290	---	---	---	---	---	---
5	317	288	303	298	150	269	---	---	---	---	---	---
6	325	308	314	248	192	221	---	---	---	---	---	---
7	334	307	316	288	248	265	---	---	---	---	---	---
8	338	310	324	295	283	289	---	---	---	---	---	---
9	333	319	327	304	289	297	---	---	---	---	---	---
10	338	322	330	304	290	297	---	---	---	---	---	---
11	339	321	329	312	295	304	---	---	---	---	---	---
12	339	322	331	311	266	282	---	---	---	---	---	---
13	347	317	331	289	276	282	---	---	---	---	---	---
14	349	172	329	298	289	293	---	---	---	---	---	---
15	260	172	221	300	285	294	---	---	---	---	---	---
16	290	260	276	301	287	295	---	---	---	---	---	---
17	309	279	294	302	287	295	---	---	---	---	---	---
18	299	279	286	311	293	303	---	---	---	---	---	---
19	308	293	301	312	153	267	---	---	---	---	---	---
20	315	300	308	228	170	197	---	---	---	---	---	---
21	338	305	320	260	228	247	---	---	---	---	---	---
22	340	325	332	280	259	270	---	---	---	---	---	---
23	344	330	336	287	273	280	---	---	---	---	---	---
24	349	326	336	291	275	284	---	---	---	---	---	---
25	336	321	327	285	267	275	---	---	---	---	---	---
26	334	315	324	291	278	284	---	---	---	---	---	---
27	326	152	187	296	282	289	---	---	---	---	---	---
28	235	171	202	289	207	263	---	---	---	---	---	---
29	235	178	200	228	187	206	---	---	---	---	---	---
30	243	197	225	263	228	246	---	---	---	---	---	---
31	273	229	250	---	---	---	---	---	---	---	---	---
MONTH	349	152	298	312	150	274	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			**MARCH**			**APRIL**			**MAY**	
1	---	---	---	304	277	289	304	278	290	303	291	297
2	---	---	---	313	288	295	288	274	281	304	291	298
3	---	---	---	301	282	290	282	253	267	300	240	263
4	---	---	---	---	---	---	278	217	255	273	232	252
5	---	---	---	---	---	---	277	239	258	288	272	280
6	---	---	---	304	249	280	303	275	285	293	272	283
7	---	---	---	296	279	288	314	289	300	283	251	269
8	---	---	---	294	269	280	316	301	308	296	266	278
9	---	---	---	301	280	291	314	288	298	298	179	277
10	---	---	---	---	---	---	309	295	302	250	184	217
11	---	---	---	309	294	301	312	297	305	275	237	254
12	---	---	---	309	291	297	307	267	294	297	272	284
13	---	---	---	303	290	297	281	241	256	311	289	298
14	---	---	---	303	289	298	282	241	262	315	300	308
15	---	---	---	310	287	295	297	239	277	312	300	306
16	---	---	---	734	298	418	302	255	282	312	277	291
17	---	---	---	516	346	375	299	238	270	312	288	299
18	---	---	---	349	305	320	313	256	297	321	300	309
19	---	---	---	692	292	409	316	285	305	313	216	252
20	---	---	---	330	262	301	329	294	311	293	242	266
21	---	---	---	268	243	257	309	295	302	306	216	284
22	---	---	---	290	264	272	317	302	307	314	293	302
23	---	---	---	308	282	292	318	241	296	315	300	309
24	---	---	---	317	291	301	285	255	271	326	302	315
25	---	---	---	318	295	305	294	275	284	327	306	320
26	306	285	295	311	288	295	286	179	239	323	305	310
27	305	290	298	309	296	303	246	203	222	316	302	308
28	300	285	295	307	284	296	280	245	261	316	303	310
29	299	279	290	311	290	298	294	273	282	331	308	319
30	---	---	---	311	292	301	317	282	296	335	313	324
31	---	---	---	307	290	296	---	---	---	336	307	318
MONTH	306	279	294	734	243	305	329	179	282	336	179	290

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, 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	319	290	307	341	316	332	---	---	---	295	206	255
2	332	304	319	341	316	328	---	---	---	329	295	311
3	333	303	319	335	310	324	---	---	---	347	316	331
4	329	308	320	335	314	327	---	---	---	351	329	341
5	329	208	291	---	---	---	334	282	316	360	331	346
6	246	185	219	---	---	---	350	325	335	368	329	349
7	302	246	272	366	207	334	346	318	332	382	343	365
8	329	298	310	336	303	323	345	327	338	368	264	341
9	---	---	---	348	321	336	367	325	343	334	288	310
10	---	---	---	361	330	347	369	344	356	336	313	324
11	301	218	271	360	331	345	372	274	346	---	---	---
12	---	---	---	352	189	283	346	118	309	---	---	---
13	---	---	---	281	182	241	261	157	225	---	---	---
14	---	---	---	322	188	289	319	260	291	---	---	---
15	---	---	---	337	267	299	334	312	321	369	341	357
16	327	224	300	341	324	334	347	322	334	364	334	353
17	330	147	300	361	333	346	347	326	337	370	345	359
18	234	159	196	359	251	319	363	333	349	360	111	200
19	---	---	---	302	243	284	366	338	351	270	149	218
20	---	---	---	337	302	321	365	349	357	311	270	289
21	---	---	---	346	324	334	356	194	310	333	305	317
22	338	321	331	350	321	335	315	254	293	349	323	335
23	344	322	332	352	330	342	346	299	322	364	336	348
24	334	304	323	345	310	328	360	329	345	368	346	358
25	331	316	325	344	317	332	369	335	353	364	345	357
26	331	310	320	361	317	341	374	342	359	366	339	354
27	331	312	323	354	216	294	376	346	359	363	338	351
28	339	311	326	---	---	---	364	341	354	370	118	294
29	341	298	315	---	---	---	372	344	360	237	145	184
30	337	301	317	302	264	283	375	198	336	286	237	261
31	---	---	---	327	299	312	261	118	189	---	---	---
MONTH	344	147	302	366	182	319	376	118	327	382	111	316

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	8.0	7.7	7.8	7.3	7.2	7.3	---	---	---	---	---	---
2	8.1	7.6	7.7	7.4	7.2	7.3	---	---	---	---	---	---
3	8.1	7.7	7.8	7.4	7.3	7.3	---	---	---	---	---	---
4	8.1	7.7	7.7	7.6	7.3	7.4	---	---	---	---	---	---
5	8.3	7.6	7.8	7.6	7.3	7.4	---	---	---	---	---	---
6	8.5	7.6	7.8	7.3	7.1	7.2	---	---	---	---	---	---
7	8.7	7.6	7.8	7.6	7.2	7.4	---	---	---	---	---	---
8	8.8	7.6	7.8	7.8	7.6	7.6	---	---	---	---	---	---
9	8.9	7.5	7.8	7.8	7.6	7.6	---	---	---	---	---	---
10	8.8	7.5	7.7	7.8	7.6	7.6	---	---	---	---	---	---
11	8.9	7.6	7.8	7.8	7.6	7.6	---	---	---	---	---	---
12	8.9	7.5	7.8	7.7	7.5	7.6	---	---	---	---	---	---
13	8.7	7.5	7.8	7.8	7.5	7.6	---	---	---	---	---	---
14	8.7	7.5	7.8	7.9	7.6	7.7	---	---	---	---	---	---
15	7.9	7.3	7.4	7.9	7.6	7.6	---	---	---	---	---	---
16	7.6	7.3	7.4	8.0	7.5	7.6	---	---	---	---	---	---
17	7.6	7.4	7.5	8.1	7.5	7.6	---	---	---	---	---	---
18	7.7	7.4	7.6	7.9	7.5	7.6	---	---	---	---	---	---
19	7.8	7.5	7.6	8.3	7.5	7.6	---	---	---	---	---	---
20	8.0	7.5	7.6	7.6	7.4	7.4	---	---	---	---	---	---
21	8.3	7.6	7.7	7.6	7.5	7.5	---	---	---	---	---	---
22	8.3	7.5	7.7	7.7	7.5	7.5	---	---	---	---	---	---
23	8.5	7.6	7.8	7.8	7.5	7.5	---	---	---	---	---	---
24	8.4	7.6	7.8	7.8	7.5	7.6	---	---	---	---	---	---
25	8.6	7.6	7.8	7.8	7.5	7.6	---	---	---	---	---	---
26	8.4	7.5	7.6	7.8	7.6	7.6	---	---	---	---	---	---
27	7.6	7.2	7.3	7.8	7.5	7.6	---	---	---	---	---	---
28	7.3	7.2	7.3	7.6	7.4	7.5	---	---	---	---	---	---
29	7.4	7.3	7.3	7.5	7.4	7.5	---	---	---	---	---	---
30	7.3	7.2	7.3	7.6	7.4	7.5	---	---	---	---	---	---
31	7.3	7.2	7.3	---	---	---	---	---	---	---	---	---
MAX	8.9	7.7	7.8	8.3	7.6	7.7	---	---	---	---	---	---
MIN	7.3	7.2	7.3	7.3	7.1	7.2	---	---	---	---	---	---

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, 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	---	---	---	9.1	7.6	8.1	8.4	7.4	7.6	8.3	7.6	7.8
2	---	---	---	9.2	7.6	8.1	8.0	7.5	7.6	8.1	7.6	7.7
3	---	---	---	9.3	7.6	8.2	8.2	7.4	7.6	7.8	7.6	7.7
4	---	---	---	---	---	---	7.8	7.5	7.5	8.1	7.6	7.7
5	---	---	---	---	---	---	8.0	7.5	7.6	8.1	7.6	7.7
6	---	---	---	8.1	7.6	7.7	8.2	7.5	7.6	8.3	7.6	7.8
7	---	---	---	8.9	7.7	7.9	9.1	7.4	7.9	8.3	7.6	7.7
8	---	---	---	9.0	7.6	7.8	9.0	7.5	7.9	8.6	7.6	7.8
9	---	---	---	9.1	7.6	8.0	9.4	7.6	8.1	8.6	7.6	7.8
10	---	---	---	---	---	---	9.4	7.6	8.3	7.6	7.1	7.2
11	---	---	---	9.2	7.6	8.0	8.8	7.6	7.9	8.1	7.0	7.3
12	---	---	---	9.3	7.6	8.1	9.0	7.6	7.8	8.2	7.5	7.6
13	---	---	---	9.3	7.7	8.2	8.0	7.6	7.7	8.4	7.5	7.7
14	---	---	---	9.3	7.7	8.3	8.1	7.6	7.7	8.4	7.5	7.6
15	---	---	---	9.5	7.7	8.3	8.9	7.7	8.0	8.4	7.4	7.6
16	---	---	---	8.5	7.7	7.9	8.9	7.6	8.0	8.0	7.3	7.5
17	---	---	---	9.2	7.7	8.2	9.3	7.6	8.2	8.0	7.3	7.4
18	---	---	---	9.4	7.8	8.2	9.3	7.7	8.1	7.7	7.3	7.3
19	---	---	---	8.7	7.8	8.0	9.3	7.7	8.1	7.3	7.1	7.2
20	---	---	---	8.8	7.8	7.9	9.3	7.7	8.0	7.5	7.2	7.4
21	---	---	---	8.6	7.7	7.9	9.2	7.5	8.1	7.7	7.4	7.4
22	---	---	---	8.7	7.8	8.0	9.1	7.5	7.9	7.7	7.3	7.4
23	---	---	---	9.1	7.7	8.0	9.0	7.5	7.8	7.6	7.3	7.4
24	---	---	---	9.3	7.6	8.1	8.5	7.5	7.7	7.6	7.2	7.4
25	---	---	---	9.3	7.6	8.0	8.0	7.5	7.6	8.1	7.2	7.6
26	8.8	7.7	7.9	9.4	7.6	8.2	8.0	7.5	7.5	7.9	7.5	7.7
27	8.8	7.7	7.8	9.2	7.6	8.0	7.6	7.5	7.5	8.1	7.6	7.7
28	8.8	7.7	7.8	9.3	7.5	8.0	7.7	7.5	7.6	8.0	7.6	7.7
29	9.0	7.6	8.0	9.1	7.5	7.9	7.7	7.5	7.5	8.1	7.6	7.8
30	---	---	---	9.0	7.5	7.8	8.3	7.4	7.6	8.1	7.6	7.7
31	---	---	---	8.7	7.4	7.7	---	---	---	7.7	7.4	7.6
MAX	9.0	7.7	8.0	9.5	7.8	8.3	9.4	7.7	8.3	8.6	7.6	7.8
MIN	8.8	7.6	7.8	8.1	7.4	7.7	7.6	7.4	7.5	7.3	7.0	7.2

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

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, 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	14.0	14.5	14.5	12.0	13.5	---	---	---	---	---	---
2	14.5	13.0	14.0	15.5	13.5	14.5	---	---	---	---	---	---
3	13.5	11.5	12.5	16.0	13.5	15.0	---	---	---	---	---	---
4	13.0	11.5	12.5	16.0	14.0	15.0	---	---	---	---	---	---
5	13.5	11.5	12.5	17.0	15.0	15.5	---	---	---	---	---	---
6	14.0	11.0	12.5	18.0	15.0	16.0	---	---	---	---	---	---
7	13.5	11.0	12.5	15.0	13.0	14.0	---	---	---	---	---	---
8	15.5	12.5	14.0	13.0	10.0	11.5	---	---	---	---	---	---
9	16.0	13.5	15.0	10.0	8.0	9.0	---	---	---	---	---	---
10	16.5	15.0	15.5	8.5	6.5	7.5	---	---	---	---	---	---
11	17.0	15.0	16.0	10.0	7.0	8.5	---	---	---	---	---	---
12	17.0	14.5	15.5	11.5	10.0	11.0	---	---	---	---	---	---
13	16.5	14.5	15.5	12.0	8.5	10.5	---	---	---	---	---	---
14	16.0	14.0	15.0	8.5	7.0	8.0	---	---	---	---	---	---
15	16.0	13.5	14.5	9.5	8.0	9.0	---	---	---	---	---	---
16	14.0	12.0	13.0	10.0	8.0	9.0	---	---	---	---	---	---
17	13.5	13.0	13.0	11.5	10.0	10.5	---	---	---	---	---	---
18	13.0	11.5	12.5	11.0	9.5	10.0	---	---	---	---	---	---
19	13.5	11.5	12.5	15.0	11.0	12.5	---	---	---	---	---	---
20	13.0	11.0	12.0	12.5	10.0	11.5	---	---	---	---	---	---
21	14.5	12.0	13.0	11.0	9.0	10.0	---	---	---	---	---	---
22	14.5	12.0	13.5	11.0	9.0	10.0	---	---	---	---	---	---
23	12.0	10.0	10.5	11.0	9.5	10.5	---	---	---	---	---	---
24	10.5	8.5	9.5	12.0	10.0	11.0	---	---	---	---	---	---
25	11.0	8.5	10.0	11.0	8.0	9.0	---	---	---	---	---	---
26	14.0	11.0	12.5	8.5	7.0	8.0	---	---	---	---	---	---
27	15.0	13.5	14.5	9.5	7.5	8.5	---	---	---	---	---	---
28	13.5	11.5	12.5	11.5	9.5	10.5	---	---	---	---	---	---
29	12.5	11.5	12.0	10.0	7.5	8.5	---	---	---	---	---	---
30	12.5	10.5	11.5	8.5	7.0	7.5	---	---	---	---	---	---
31	13.0	10.5	12.0	---	---	---	---	---	---	---	---	---
MONTH	17.0	8.5	13.1	18.0	6.5	10.8	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			**MARCH**			**APRIL**			**MAY**	
1	---	---	---	8.5	5.5	7.5	10.5	9.5	10.0	19.5	15.0	17.5
2	---	---	---	10.5	7.5	9.0	10.0	9.0	9.5	19.0	17.0	18.0
3	---	---	---	10.5	8.0	9.5	9.5	8.5	9.0	18.5	13.0	15.5
4	---	---	---	---	---	---	9.0	7.0	8.0	16.0	12.0	14.0
5	---	---	---	---	---	---	9.0	5.0	7.0	15.0	12.0	13.5
6	---	---	---	10.5	9.5	10.0	10.0	5.0	7.5	17.5	12.5	15.0
7	---	---	---	11.0	8.0	9.5	13.5	8.5	11.0	18.0	14.5	16.5
8	---	---	---	9.5	8.0	9.0	12.5	9.5	10.5	17.5	15.0	16.5
9	---	---	---	8.0	7.0	7.5	13.5	9.5	11.0	20.0	14.0	16.5
10	---	---	---	---	---	---	13.0	9.0	11.0	20.5	17.0	18.5
11	---	---	---	9.0	5.5	7.5	12.0	9.5	10.5	22.5	18.5	20.5
12	---	---	---	8.5	6.5	7.5	10.0	9.0	9.5	23.0	19.5	21.0
13	---	---	---	8.0	4.5	6.5	10.5	8.0	9.0	23.5	19.5	21.5
14	---	---	---	7.0	4.5	6.0	11.0	9.5	10.0	23.0	19.5	21.0
15	---	---	---	10.5	6.5	8.0	13.5	8.5	11.0	22.5	20.0	21.5
16	---	---	---	9.0	4.0	6.0	14.0	8.5	11.5	23.0	20.0	21.5
17	---	---	---	6.0	4.0	5.0	16.0	10.0	13.0	22.5	19.5	21.0
18	---	---	---	8.0	5.0	6.5	18.5	13.0	15.5	22.5	20.0	21.0
19	---	---	---	7.5	4.5	6.0	19.5	14.5	17.0	21.0	19.5	20.5
20	---	---	---	9.0	4.0	6.5	19.5	16.0	18.0	20.0	18.5	19.5
21	---	---	---	9.5	7.0	8.0	18.5	15.0	17.0	20.5	19.0	19.5
22	---	---	---	8.0	5.0	6.5	19.0	15.5	17.5	23.0	19.0	20.5
23	---	---	---	8.0	4.0	6.0	19.5	16.5	18.0	24.0	20.0	22.0
24	---	---	---	9.5	5.0	7.5	19.0	15.0	17.0	24.5	21.0	23.0
25	---	---	---	10.0	8.5	9.5	17.0	13.5	14.5	24.0	21.0	22.5
26	5.5	3.5	4.5	13.5	9.5	11.5	14.0	13.0	13.5	22.5	20.5	21.0
27	6.5	4.0	5.0	13.5	11.5	12.5	16.5	13.0	14.5	22.0	20.0	21.0
28	7.5	4.0	5.5	14.5	11.0	12.5	15.5	11.0	13.5	22.5	20.0	21.0
29	8.0	4.5	6.5	14.0	10.0	12.0	17.5	11.5	14.5	21.0	18.5	20.0
30	---	---	---	11.5	9.0	9.5	19.0	14.0	16.5	20.0	17.0	18.5
31	---	---	---	10.0	9.0	9.5	---	---	---	18.5	18.0	18.0
MONTH	8.0	3.5	5.4	14.5	4.0	8.3	19.5	5.0	12.5	24.5	12.0	19.3

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, 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	21.0	17.5	19.0	23.0	20.0	21.5	---	---	---	23.0	20.5	21.5
2	21.5	17.5	19.5	24.5	20.5	22.5	---	---	---	23.0	20.0	21.5
3	22.0	18.5	20.0	24.5	21.0	22.5	---	---	---	23.0	20.0	21.5
4	20.5	18.5	19.5	24.5	21.0	22.5	---	---	---	23.0	20.0	21.5
5	19.5	16.5	18.0	---	---	---	24.5	22.0	23.0	21.5	20.0	20.5
6	17.5	16.5	17.0	---	---	---	22.0	20.0	21.0	21.5	18.5	20.0
7	21.0	17.0	18.5	24.0	20.5	22.5	20.0	18.0	19.0	23.0	20.0	21.0
8	23.0	18.5	20.5	25.0	21.0	23.0	21.5	17.5	19.5	22.0	21.0	21.5
9	---	---	---	23.5	20.5	22.0	23.0	18.5	20.5	23.5	21.5	22.0
10	---	---	---	23.5	19.5	21.5	23.5	20.0	21.5	23.0	20.5	21.5
11	22.0	17.5	19.5	24.5	20.5	22.5	24.0	21.0	22.5	---	---	---
12	---	---	---	23.0	20.5	21.5	23.5	21.0	22.0	---	---	---
13	---	---	---	22.5	20.0	21.0	22.5	21.5	22.0	---	---	---
14	---	---	---	21.0	20.0	20.5	22.0	20.5	21.0	---	---	---
15	---	---	---	21.5	19.0	20.5	22.5	20.5	21.5	20.5	19.0	20.0
16	22.0	19.5	20.5	22.0	19.0	20.5	23.5	20.5	21.5	21.0	19.5	20.0
17	23.0	20.0	21.5	23.0	19.5	21.0	22.5	20.0	21.5	21.0	20.0	20.5
18	23.5	21.0	22.5	21.5	19.5	20.5	23.0	20.5	21.5	22.5	18.5	20.0
19	---	---	---	22.0	19.5	20.5	23.5	21.0	22.0	19.0	17.5	18.0
20	---	---	---	23.5	19.5	21.5	25.0	21.5	23.0	18.5	16.0	17.5
21	---	---	---	24.0	20.5	22.0	24.0	21.5	23.0	19.0	16.0	17.5
22	21.0	19.5	20.0	24.5	21.0	22.5	22.5	20.0	21.0	20.0	17.0	18.5
23	23.0	20.0	21.0	23.0	22.0	22.5	22.5	18.5	20.5	21.0	17.5	19.0
24	23.5	19.5	21.5	22.5	20.5	21.5	23.0	20.0	21.5	21.0	18.5	20.0
25	22.5	20.5	21.5	21.0	20.0	20.5	23.5	21.0	22.0	20.5	18.5	19.5
26	23.0	20.0	21.5	23.5	19.5	21.5	23.0	20.0	21.5	20.0	18.5	19.5
27	22.0	18.5	20.5	22.0	20.5	21.5	24.0	21.0	22.5	20.5	18.0	19.5
28	22.0	18.5	20.5	---	---	---	25.0	21.5	23.0	21.0	19.5	20.0
29	22.5	19.5	21.0	---	---	---	25.0	22.0	23.5	19.5	19.0	19.5
30	23.0	19.0	21.0	25.0	21.5	23.0	24.5	22.5	23.0	19.5	18.5	19.0
31	---	---	---	26.0	22.5	24.0	23.0	22.0	22.5	---	---	---
MONTH	23.5	16.5	20.2	26.0	19.0	21.7	25.0	17.5	21.7	23.5	16.0	20.0

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	10.6	9.5	10.0	10.5	9.4	9.9	---	---	---	---	---	---
2	10.9	9.6	10.2	10.2	9.4	9.7	---	---	---	---	---	---
3	11.3	10.0	10.5	10.4	9.2	9.7	---	---	---	---	---	---
4	11.2	10.0	10.4	10.5	9.1	9.8	---	---	---	---	---	---
5	11.6	10.0	10.6	9.8	8.2	9.3	---	---	---	---	---	---
6	11.9	9.8	10.7	9.6	8.9	9.3	---	---	---	---	---	---
7	12.4	9.8	10.9	10.7	9.5	10.1	---	---	---	---	---	---
8	12.3	9.3	10.5	11.6	10.5	11.2	---	---	---	---	---	---
9	12.3	9.0	10.3	12.6	11.5	12.0	---	---	---	---	---	---
10	12.2	8.9	10.0	12.8	11.8	12.3	---	---	---	---	---	---
11	12.2	8.9	10.1	12.6	11.1	11.9	---	---	---	---	---	---
12	12.0	8.8	10	11.3	10.5	10.9	---	---	---	---	---	---
13	11.7	8.8	9.9	11.5	10.3	11.0	---	---	---	---	---	---
14	11.9	8.7	9.9	12.5	11.5	12.0	---	---	---	---	---	---
15	9.4	8.8	9.1	12.4	11.3	11.8	---	---	---	---	---	---
16	10.2	9.3	9.8	12.7	11.0	11.7	---	---	---	---	---	---
17	10.2	9.4	9.8	12.2	10.8	11.3	---	---	---	---	---	---
18	10.7	9.6	10.2	12.4	10.9	11.5	---	---	---	---	---	---
19	10.8	9.7	10.2	11.2	9.4	10.5	---	---	---	---	---	---
20	11.7	9.8	10.5	10.9	10.1	10.5	---	---	---	---	---	---
21	11.3	9.3	10.3	11.4	10.7	11.1	---	---	---	---	---	---
22	11.4	9.3	10.1	11.7	10.6	11.1	---	---	---	---	---	---
23	12.4	10.0	11.1	11.7	10.7	11.1	---	---	---	---	---	---
24	12.7	10.7	11.5	11.3	10.2	10.8	---	---	---	---	---	---
25	13.1	10.3	11.6	12.2	10.3	11.4	---	---	---	---	---	---
26	11.9	9.3	10.5	12.5	11.2	11.8	---	---	---	---	---	---
27	9.5	8.9	9.3	12.4	10.8	11.6	---	---	---	---	---	---
28	10.1	9.5	9.9	10.8	9.9	10.5	---	---	---	---	---	---
29	10.2	9.9	10.0	11.6	10.5	11.0	---	---	---	---	---	---
30	10.8	10.1	10.4	12.0	11.2	11.6	---	---	---	---	---	---
31	10.7	9.8	10.3	---	---	---	---	---	---	---	---	---
MONTH	13.1	8.7	10.3	12.8	8.2	10.9	---	---	---	---	---	---

01480617 WEST BRANCH BRANDYWINE CREEK AT MODENA, 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	---	---	---	14.2	10.8	12.3	12.1	9.6	10.5	9.9	8.0	9.0
2	---	---	---	13.8	10.2	11.7	12.0	10.0	10.6	9.5	8.0	8.6
3	---	---	---	13.9	10.0	11.7	12.1	10.3	11.0	9.6	8.0	9.0
4	---	---	---	---	---	---	11.6	10.4	10.9	10.4	9.1	9.8
5	---	---	---	---	---	---	12.7	10.8	11.8	10.5	8.9	9.8
6	---	---	---	11.8	10.3	10.9	13.3	10.1	11.9	10.5	8.5	9.5
7	---	---	---	13.7	10.9	12.0	13.0	9.1	11.1	10.4	8.3	9.1
8	---	---	---	14.0	11.0	12.3	13.1	9.1	10.9	10.6	8.3	9.4
9	---	---	---	15.2	11.8	13.3	13.6	9.4	11.3	---	---	---
10	---	---	---	---	---	---	14.1	9.3	11.4	---	---	---
11	---	---	---	15.8	11.2	13.5	12.9	9.2	10.9	---	---	---
12	---	---	---	15.7	11.2	13.3	13.8	10.4	11.6	9.3	7.5	8.3
13	---	---	---	16.0	12.1	13.8	11.9	10.4	11.2	9.7	7.5	8.5
14	---	---	---	16.5	11.9	14.1	11.7	10.5	11.0	9.9	7.5	8.6
15	---	---	---	15.4	10.8	13.0	12.9	9.8	11.4	10.2	7.6	8.7
16	---	---	---	14.5	10.8	12.8	13.2	9.5	11.3	9.9	7.3	8.4
17	---	---	---	15.7	12.3	13.8	13.3	8.6	10.9	10.5	7.5	8.7
18	---	---	---	15.3	11.6	13.3	12.9	7.9	10.3	10.0	7.3	8.3
19	---	---	---	14.5	11.7	13.0	12.6	7.4	9.7	8.6	6.7	7.9
20	---	---	---	14.5	11.1	12.9	12.1	7.3	9.2	9.5	8.1	8.9
21	---	---	---	12.9	11.2	11.8	11.8	7.3	9.2	9.8	7.6	8.8
22	---	---	---	14.1	11.5	12.6	12.1	7.9	9.4	9.7	7.4	8.6
23	---	---	---	14.5	10.9	12.7	11.6	7.9	9.5	9.5	7.2	8.2
24	---	---	---	14.0	10.0	12.0	11.0	8.5	9.6	9.4	6.2	8.0
25	---	---	---	13.8	10.0	11.4	10.6	8.9	9.7	8.5	6.2	7.5
26	14.2	11.6	12.8	13.7	8.8	11.1	10.0	9.5	9.7	8.7	6.7	7.9
27	14.1	11.5	12.6	12.7	8.8	10.4	---	---	---	9.2	7.6	8.2
28	14.2	11.2	12.5	13.2	8.8	10.6	---	---	---	9.1	7.6	8.1
29	14.1	10.8	12.4	13.3	8.9	10.8	---	---	---	9.7	7.8	8.7
30	---	---	---	13.6	9.3	11.2	---	---	---	10.3	8.2	9.2
31	---	---	---	13.1	9.8	11.0	---	---	---	9.4	8.2	8.6
MONTH	14.2	10.8	12.6	16.5	8.8	12.3	14.1	7.3	10.6	10.6	6.2	8.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	9.9	8.1	8.8	9.5	7.6	8.4	---	---	---	8.3	7.7	8.0
2	9.6	8.0	8.7	---	---	---	---	---	---	8.5	7.7	8.1
3	9.5	8.0	8.7	---	---	---	---	---	---	8.7	7.8	8.2
4	9.9	8.3	9.1	---	---	---	---	---	---	9.2	7.8	8.4
5	9.4	8.4	8.9	---	---	---	8.8	7.0	8.1	9.4	7.9	8.6
6	9.4	8.7	9.1	---	---	---	9.6	8.0	8.8	10.2	8.3	9.2
7	8.9	7.9	8.6	9.5	6.7	7.8	10.4	8.4	9.3	10.1	7.7	8.8
8	8.8	7.3	8.1	8.5	6.8	7.6	11.0	8.4	9.6	8.7	7.6	8.0
9	---	---	---	8.9	7.1	7.9	11.3	7.9	9.4	8.6	7.7	8.0
10	---	---	---	9.3	7.3	8.2	11.6	7.6	9.3	9.1	7.8	8.3
11	10.0	8.1	9.4	9.5	7.1	8.1	11.7	6.8	8.6	---	---	---
12	---	---	---	8.2	7.1	7.6	10.8	7.2	8.7	---	---	---
13	---	---	---	8.4	7.8	8.1	8.3	7.9	8.1	---	---	---
14	---	---	---	8.7	7.9	8.2	9.0	8.0	8.4	---	---	---
15	---	---	---	8.8	8.0	8.4	9.5	7.9	8.6	9.5	7.8	8.5
16	10.0	8.8	9.5	9.0	8.0	8.4	9.8	8.0	8.7	9.2	7.8	8.4
17	10.0	8.4	9.1	9.3	7.8	8.4	10.6	8.0	9.1	9.1	7.7	8.3
18	9.0	8.1	8.7	8.7	7.8	8.3	11.1	7.8	9.2	8.5	7.4	8.1
19	---	---	---	---	---	---	11.1	7.6	8.8	9.0	8.2	8.6
20	---	---	---	---	---	---	11.1	7.4	8.9	9.4	8.6	9.0
21	---	---	---	---	---	---	10.2	7.1	8.0	9.5	8.5	9.0
22	8.6	7.6	8.1	9.0	7.3	8.1	9.5	7.8	8.5	9.8	8.6	9.1
23	8.6	7.6	8.0	8.6	7.3	7.9	10.0	7.4	8.6	10.0	8.7	9.3
24	9.1	7.6	8.3	9.0	7.6	8.2	10.0	7.0	8.2	10.1	8.7	9.3
25	9.4	7.8	8.5	9.2	8.1	8.5	9.8	6.9	8.1	10.5	8.7	9.4
26	9.6	7.9	8.7	9.2	7.4	8.3	10.3	7.1	8.7	11.0	8.7	9.5
27	9.8	8.3	9.0	8.3	7.4	7.8	9.7	7.7	8.7	11.5	8.5	9.7
28	10.0	8.4	9.1	---	---	---	9.0	7.5	8.1	9.7	8.3	8.7
29	9.6	8.3	8.9	---	---	---	8.8	7.5	8.1	8.9	8.6	8.7
30	9.7	8.2	8.9	8.4	7.7	8.1	9.2	7.3	8.3	9.1	8.7	8.9
31	---	---	---	8.4	7.4	7.9	8.0	7.5	7.7	---	---	---
MONTH	10.0	7.3	8.8	9.5	6.7	8.1	11.7	6.8	8.6	11.5	7.4	8.7

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

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

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Sampling depth, feet (00003)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduct-ance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Location in X-sect. looking dwnstrm ft from l bank (00009)
SEP 2004										
09...	1304	1028	1028	76	1.00	9.4	7.9	323	22.3	5.0
09...	1305	1028	1028	--	1.00	9.4	7.8	323	22.3	10.0
09...	1306	1028	1028	--	1.00	9.4	7.8	324	22.3	15.0
09...	1307	1028	1028	--	1.00	9.4	7.8	324	22.3	20.0
09...	1308	1028	1028	--	1.00	9.4	7.8	324	22.3	25.0
09...	1309	1028	1028	--	1.00	9.4	7.8	325	22.3	30.0
09...	1310	1028	1028	--	1.00	9.5	7.9	324	22.3	35.0
09...	1311	1028	1028	--	1.00	9.6	7.9	324	22.3	40.0
09...	1312	1028	1028	--	.50	9.5	7.9	323	22.3	45.0
09...	1313	1028	1028	--	.50	9.5	7.9	311	22.3	50.0
09...	1314	1028	1028	--	.50	9.5	7.9	313	22.4	54.0
09...	1315	1028	1028	--	.00	--	--	--	--	56.0