SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA
(National Water-Quality Assessment Station)

LOCATION.--Lat 40°24'48", long 76°10'19", Berks County, Hydrologic Unit, 02040203, on left bank 30 ft downstream from Mill Road bridge at Kricks Mill, 0.4 mi upstream from Mill Creek, and 3.5 mi west of Bernville.

DRAINAGE AREA.--66.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1974 to current year.

REVISED RECORDS.--WDR PA-96-1: 1975-83(P), 1988(P), 1990(P), 1993-94(P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 311.26 ft above sea level (Pennsylvania Department of Transportation datum).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1972 reached a stage of about 9.5 ft, from information by local resident, discharge about 6,000 ft^3/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 950 ft^3/s and maximum (*****):

Date	Time	Discharge ft^3/s	Gage Height (ft)	Date	Time	Discharge ft^3/s	Gage Height (ft)
Jan. 18	2000	*3,950	*8.08	Sept. 16	2400	1,970	6.33

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	49	36	e30	114	119	98	74	39	40	21	28
2	48	49	33	e28	185	98	97	72	39	41	21	26
3	47	43	37	e230	159	100	92	71	49	41	20	25
4	58	43	41	e90	141	136	89	71	41	39	19	28
5	54	42	48	e70	134	125	92	69	38	38	22	34
6	51	42	52	e65	128	131	87	66	37	37	25	42
7	49	42	49	e45	134	131	85	68	37	36	26	81
8	108	48	45	e40	135	119	83	73	36	33	31	46
9	96	49	46	e250	131	117	94	71	35	33	32	44
10	169	41	45	154	127	118	126	67	35	32	28	44
11	92	40	44	86	110	114	103	65	34	31	25	39
12	79	37	44	75	115	110	110	63	33	28	24	37
13	73	40	48	95	126	105	99	62	33	31	24	34
14	70	43	49	e90	124	107	94	61	37	32	63	34
15	67	49	43	e80	114	113	90	60	43	32	58	39
16	65	49	44	e80	105	105	93	60	33	32	36	636
17	62	41	45	e60	101	108	93	59	38	31	34	530
18	61	37	48	e1100	118	104	89	59	73	33	33	162
19	61	37	44	591	113	97	85	59	51	33	28	135
20	59	38	41	219	114	95	89	58	49	33	29	117
21	57	40	47	187	110	100	87	55	46	32	30	113
22	56	47	44	296	111	197	88	55	45	35	31	116
23	54	47	35	247	105	145	90	58	44	34	32	97
24	53	38	34	359	105	135	95	67	42	32	29	88
25	53	38	33	245	103	126	86	51	43	29	30	82
26	42	66	e32	189	102	118	83	46	43	25	35	78
27	49	57	e30	169	100	115	80	44	44	24	35	74
28	51	51	e30	155	119	112	79	42	42	24	31	71
29	51	45	e32	143	---	107	77	40	41	25	30	72
30	50	41	e34	131	---	101	75	39	41	25	30	205
31	49	---	e30	117	---	98	---	39	---	24	30	---
TOTAL	1984	1329	1263	5716	3383	3606	2728	1844	1241	995	942	3157
MEAN	64.0	44.3	40.7	184	121	116	90.9	59.5	41.4	32.1	30.4	105
MAX	169	66	52	1100	185	197	126	74	73	41	63	636
MIN	42	37	30	28	100	95	75	39	33	24	19	25
CFSM	.96	.67	.61	2.77	1.82	1.75	1.37	.89	.62	.48	.46	1.58
IN.	1.11	.74	.71	3.20	1.89	2.02	1.53	1.03	.69	.56	.53	1.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1999, BY WATER YEAR (WY)

MEAN	81.8	97.7	117	135	133	166	149	115	97.5	86.6	67.2	68.7
MAX	250	181	288	385	264	468	367	277	208	216	129	181
(WY)	1977	1997	1997	1979	1979	1994	1993	1989	1982	1984	1976	1975
MIN	35.5	38.7	40.7	33.6	48.6	67.5	58.8	59.5	41.4	32.1	30.4	29.7
(WY)	1998	1982	1999	1981	1992	1981	1985	1999	1999	1999	1999	1991

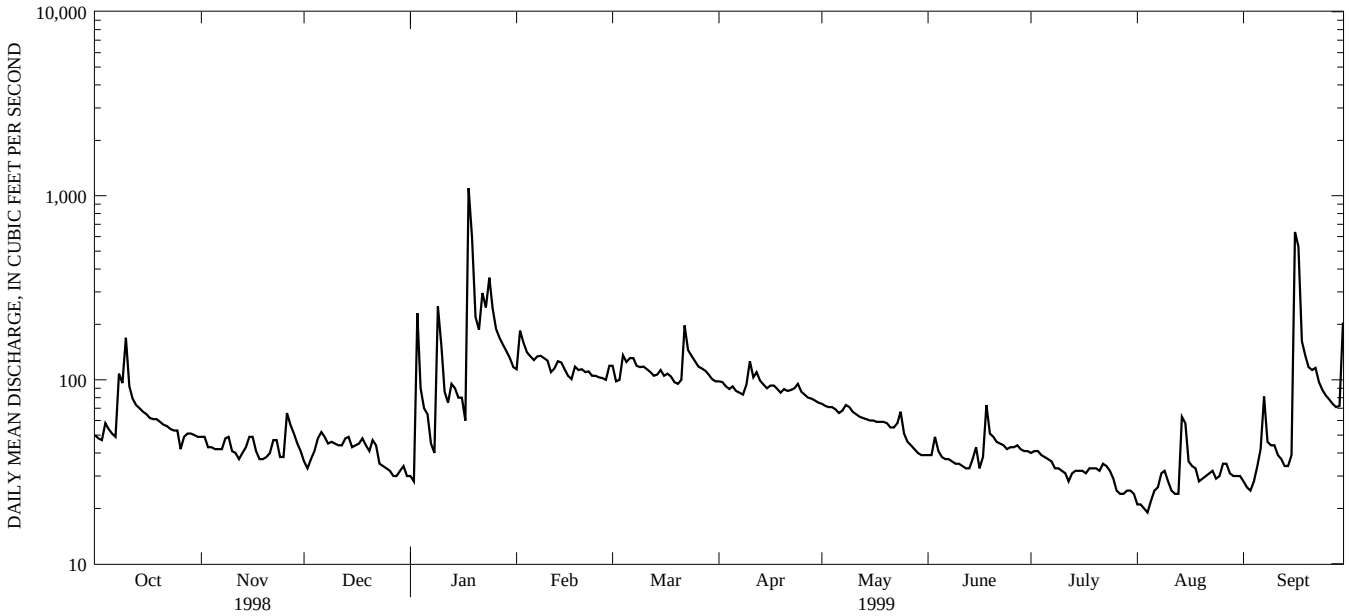
e Estimated.

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1975 - 1999	
ANNUAL TOTAL	38144		28188			
ANNUAL MEAN	105		77.2		108	
HIGHEST ANNUAL MEAN					164	1994
LOWEST ANNUAL MEAN					55.7	1981
HIGHEST DAILY MEAN	437	Mar 21	**e**1100	Jan 18	2140	Jan 26 1978
LOWEST DAILY MEAN	**e**30	Dec 27,28,31	19	Aug 4	19	Aug 4 1999
ANNUAL SEVEN-DAY MINIMUM	**a**32	Dec 25	22	Jul 30	22	Jul 30 1999
INSTANTANEOUS PEAK FLOW			**b**3950	Jan 18	**b**7140	Jan 24 1979
INSTANTANEOUS PEAK STAGE			8.08	Jan 18	10.16	Jan 24 1979
ANNUAL RUNOFF (CFSM)	1.57		1.16		1.63	
ANNUAL RUNOFF (INCHES)	21.34		15.77		22.13	
10 PERCENT EXCEEDS	178		127		183	
50 PERCENT EXCEEDS	91		51		85	
90 PERCENT EXCEEDS	44		31		43	

a Computed using estimated daily discharges.
b From rating curve extended above 740 ft^3/s on basis of contracted-opening measurement at 3,900 ft^3/s, gage height 8.01 ft.
e Estimated.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued
(National Water-Quality Assessment Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1998 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Water years 1978 to current year.

INSTRUMENTATION.--Temperature recorder since October 1977. Temperature probe interfaced with a data collection platform since 1986 water year.

REMARKS.--The following samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (NAWQA). Fish tissue, bed sediment, and fish community data for this site are presented on pages 433-471. Interruptions in the record were due to malfunctions of the equipment.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 28.5°C, July 6, 1999; minimum, 0.0°C, many days during winters.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 28.5°C, July 6; minimum, 0.0°C, several days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
OCT 1998											
26...	1535	ENVIRONMENTAL	40	761	116	12.3	8.3	559	19.0	12.5	270
DEC											
09...	*1035*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
09...	1040	ENVIRONMENTAL	45	765	103	12.0	8.3	563	9.0	9.0	260
JAN 1999											
12...	0915	ENVIRONMENTAL	74	754	96	13.3	8.2	593	-.5	1.5	270
FEB											
03...	0930	ENVIRONMENTAL	160	755	96	11.6	8.1	506	9.0	6.5	240
MAR											
03...	0930	ENVIRONMENTAL	101	747	107	12.9	8.2	563	9.5	6.5	270
23...	1150	ENVIRONMENTAL	150	757	113	13.6	8.2	532	9.5	7.0	250
APR											
07...	0930	ENVIRONMENTAL	86	755	107	11.6	8.2	568	17.0	11.0	260
22...	*1059*	*FIELD BLANK*	--	--	--	--	--	--	--	--	--
22...	1100	ENVIRONMENTAL	90	753	119	12.9	8.2	559	16.5	11.0	240
28...	0850	ENVIRONMENTAL	80	760	95	10.0	8.1	565	13.0	13.0	270
MAY											
05...	0900	ENVIRONMENTAL	69	753	94	9.3	8.1	569	22.0	15.5	270
11...	0830	ENVIRONMENTAL	66	761	89	8.8	8.1	570	15.5	15.5	260
18...	1420	ENVIRONMENTAL	59	755	119	11.1	8.3	576	28.0	18.5	260
26...	1230	ENVIRONMENTAL	46	748	102	9.9	8.1	550	24.5	16.0	270
JUN											
02...	0930	ENVIRONMENTAL	38	752	97	8.5	8.1	572	30.0	20.5	260
08...	0910	ENVIRONMENTAL	36	750	93	7.9	8.1	569	32.0	22.5	260
16...	0820	ENVIRONMENTAL	33	757	112	10.2	8.1	540	17.5	19.5	240
23...	0910	ENVIRONMENTAL	44	758	127	11.5	8.2	564	25.5	19.5	250
JUL											
01...	0910	ENVIRONMENTAL	40	755	--	--	8.3	572	22.0	21.5	270
07...	0800	ENVIRONMENTAL	37	759	--	--	8.0	574	28.5	--	260
15...	1130	ENVIRONMENTAL	33	757	102	9.2	8.2	576	30.5	20.0	260
20...	0900	ENVIRONMENTAL	33	754	86	7.2	8.1	576	27.0	23.5	250
AUG											
04...	1010	ENVIRONMENTAL	20	753	--	--	8.2	583	28.5	20.5	260
17...	0920	ENVIRONMENTAL	39	756	84	7.3	8.1	577	22.0	22.0	260
SEP											
01...	0830	ENVIRONMENTAL	29	758	--	--	8.2	588	22.0	17.5	260
16...	1450	ENVIRONMENTAL	520	718	97	8.8	8.1	332	17.5	17.5	130

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT 1998												
26...	73	20	3.1	10	212	193	236	--	21	.1	5.8	32
DEC												
09...	*<.02*	*<.004*	*<.1*	*<.06*	*1.7*	--	--	--	*<.1*	*<.1*	*<.05*	*<.1*
09...	71	20	3.5	11	207	196	224	7	21	<.1	6.4	31
JAN 1999												
12...	78	19	4.1	14	207	208	254	--	27	<.1	8.4	32
FEB												
03...	70	15	3.5	11	180	E170	E207	--	22	<.1	7.7	30
MAR												
03...	76	19	3.1	11	--	202	246	--	22	.1	4.5	31
23...	72	16	3.2	12	--	178	217	--	24	.1	7.0	30
APR												
07...	73	18	3.1	11	--	199	243	--	23	<.1	3.7	30
22...	--	--	--	--	--	--	--	--	--	--	--	--
22...	69	18	3.1	11	--	197	240	--	23	<.1	4.3	31
28...	77	19	3.0	11	--	E237	E289	--	23	.1	5.5	30
MAY												
05...	77	19	3.1	11	--	198	242	--	23	.1	6.2	31
11...	74	19	3.0	11	--	188	229	--	23	<.1	5.9	30
18...	71	19	2.9	11	--	191	223	5	23	.1	4.9	31
26...	76	19	3.3	11	--	194	237	--	23	<.1	7.2	32
JUN												
02...	72	20	3.2	12	--	204	249	--	23	<.1	6.8	33
08...	72	19	3.2	11	--	195	238	--	23	<.1	6.7	30
16...	68	18	4.1	12	--	185	226	--	24	.1	7.6	29
23...	68	19	3.4	12	--	E224	E273	--	27	<.1	6.2	30
JUL												
01...	74	21	3.4	12	--	183	223	--	24	.1	6.2	31
07...	69	20	3.9	13	--	200	244	--	27	<.1	5.8	29
15...	69	21	3.5	13	--	200	244	--	27	.1	6.2	30
20...	68	20	3.8	12	--	200	234	--	25	.1	6.2	31
AUG												
04...	66	22	3.5	13	--	200	244	--	25	<.1	6.6	30
17...	71	20	4.3	12	--	198	242	--	27	<.1	7.9	30
SEP												
01...	69	22	3.5	12	--	201	245	--	27	<.1	5.6	29
16...	39	9.2	5.4	6.1	--	100	122	--	13	<.1	6.4	25

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
OCT 1998											
26...	.04	.2	.3	8.2	8.0	8.3	.10	.07	.07	.07	338
DEC											
09...	*<.02*	*<.1*	*<.1*	--	*<.05*	--	*<.01*	*<.05*	*.01*	*<.05*	*<10*
09...	.17	.4	.5	8.7	8.25	8.7	.12	.08	.07	.10	341
JAN 1999											
12...	.31	.5	.7	9.0	8.5	9.2	.03	.077	.06	.11	346
FEB											
03...	.25	.8	1.0	8.5	7.7	8.7	.05	.091	.08	.17	324
MAR											
03...	.05	.2	.4	8.8	8.5	8.9	.05	.015	.01	.045	333
23...	.08	.4	.5	8.2	7.7	8.3	.04	.038	.02	.076	322
APR											
07...	.07	.3	.4	7.4	7.1	7.5	.07	.03	.02	.054	336
22...	--	--	--	--	--	--	--	--	--	--	--
22...	.07	.3	.4	7.4	7.1	7.5	.07	.035	.03	.053	343
28...	.12	.4	.5	7.1	6.8	7.2	.10	.055	.05	.082	336
MAY											
05...	.16	.2	.6	7.4	7.2	7.8	.13	.067	.06	.11	356
11...	.14	.4	.6	7.8	7.5	8.1	.12	--	.07	.13	350
18...	.03	<.1	.4	--	7.4	7.8	.08	.056	.05	.089	324
26...	.08	.3	.4	9.0	8.7	9.2	.11	.091	.07	.12	347
JUN											
02...	.10	.4	.6	8.5	8.1	8.7	.13	.094	.09	.15	338
08...	.10	.4	.4	7.9	7.5	7.9	.10	.095	.09	.14	344
16...	.05	.4	.7	8.5	8.0	8.8	.11	.11	.09	.19	338
23...	.03	.3	.5	9.1	8.8	9.3	.08	.088	.08	.14	334
JUL											
01...	.03	.3	.4	8.4	8.1	8.5	.08	.093	.09	.14	345
07...	.02	.3	.6	8.0	7.7	8.3	.05	.11	.08	.15	344
15...	.03	.4	.4	7.7	7.2	7.7	.08	.084	.07	.12	340
20...	.04	.4	.5	8.3	7.8	8.4	.07	.094	.09	.13	323
AUG											
04...	.03	.3	.4	7.0	6.7	7.1	.03	.11	.10	.14	328
17...	.04	.2	.5	7.7	7.5	8.0	.07	.11	.08	.16	342
SEP											
01...	.02	.2	.4	8.1	7.8	8.3	.06	.079	.06	.096	338
16...	.24	.7	2.3	4.4	3.8	6.0	.06	.20	.17	1.0	196

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	ARSENIC DIS-SOLVED (µG/L AS AS) (01000)	ARSENIC TOTAL (µG/L AS AS) (01002)	BORON, DIS-SOLVED (µG/L AS B) (01020)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (µG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT 1998											
26...	317	7	4	3	35.9	E10	19	1.7	.3	.59	6
DEC											
09...	--	--	*<1*	--	*<16.0*	*<10*	*<1*	--	--	--	--
09...	318	9	5	--	22.3	E9	22	1.3	.3	.45	4
JAN 1999											
12...	345	20	4	--	22.3	14	25	1.4	.3	2.6	13
FEB											
03...	301	50	7	7	E14.6	16	26	2.5	.4	15	34
MAR											
03...	325	8	4	5	E15.4	11	24	1.1	.4	3.7	13
23...	305	20	--	--	E15.2	11	27	1.7	.4	12	31
APR											
07...	314	10	4	5	20.4	13	38	1.3	.5	4.1	18
22...	--	--	--	--	--	--	--	*<.1*	*<.2*	--	--
22...	309	9	--	--	19.2	15	28	1.5	.3	13	53
28...	--	10	--	--	21.4	20	28	1.7	.5	6.2	29
MAY											
05...	321	20	5	4	20.3	22	29	1.4	.4	6.0	32
11...	312	30	--	--	E14.1	20	28	1.6	.7	7.5	42
18...	311	20	--	--	20.5	E10	21	1.6	.5	3.1	20
26...	328	10	--	--	23.3	13	18	1.7	.5	1.2	10
JUN											
02...	328	30	6	6	26.9	12	13	1.8	1.0	3.1	30
08...	316	20	--	--	20.5	E8	10	1.6	.6	2.3	24
16...	309	46	--	--	18.7	E8	9	3.4	.7	33	368
23...	--	26	--	--	21.1	E9	8	1.9	.5	2.4	20
JUL											
01...	318	21	--	--	29.2	12	11	2.1	.8	2.1	20
07...	323	--	7	--	24.3	<10	7	2.3	.4	1.9	19
15...	323	14	--	--	26.2	E6	11	2.1	.4	1.4	16
20...	316	15	--	--	24.1	<10	9	2.0	.3	--	--
AUG											
04...	316	--	6	7	20.2	E9	8	1.8	.4	.55	10
17...	325	35	--	--	30.0	12	17	2.4	.7	2.1	20
SEP											
01...	324	--	--	--	23.2	E10	8	1.9	.3	1.4	18
16...	181	580	--	--	E15.6	28	64	4.8	>4.0	937	667

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	ALUM-INUM, DIS-SOLVED (µG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (µG/L AS SB) (01095)	BARIUM, DIS-SOLVED (µG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (µG/L AS BE) (01010)	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (µG/L AS CR) (01030)
DEC 1998								
09...	*1035*	*FIELD BLANK*	*<1*	*<1*	*<1*	*<1*	*<1*	*<1*
09...	1040	ENVIRONMENTAL	2	<1	34	<1	<1	2

DATE	COBALT, DIS-SOLVED (µG/L AS CO) (01035)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	MOLYB-DENUM, DIS-SOLVED (µG/L AS MO) (01060)	NICKEL, DIS-SOLVED (µG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (µG/L AS SE) (01145)	SILVER, DIS-SOLVED (µG/L AS AG) (01075)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (µG/L AS U) (22703)
DEC 1998									
09...	*<1*	*<1*	*<1*	*<1*	*<1*	*<1*	*<1*	*<1*	*<1*
09...	<1	<1	<1	<1	<1	<1	<1	<1	<1

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

REMARKS.--Selected samples were analyzed for volatile organic compounds (VOCs) on schedule 2020/2021 (listed with minimum reporting levels on pages 430-431). Only VOCs identified by the analyses in one or more samples are listed in the water-quality tables.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	CARBON DI-SULFIDE WATER WHOLE TOTAL (µG/L) (77041)	1,1,1-TRI-CHLORO-ETHANE TOTAL (µG/L) (34506)	1,1-DI-CHLORO-ETHANE TOTAL (µG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (µG/L) (34501)	ACETONE WATER WHOLE TOTAL (µG/L) (81552)	1,2,3-TRI-CHLORO BENZENE WAT, WH REC (µG/L) (77613)	BENZENE 123-TRI METHYL-WATER UNFLTRD RECOVER (µG/L) (77221)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (µG/L) (34551)	BENZENE 124-TRI METHYL UNFILT RECOVER (µG/L) (77222)
FEB 1999											
03...	0930	ENVIRONMENTAL	<.37	E.00856	<.066	<.044	<5	<.27	<.12	<.19	<.056
MAR											
03...	0930	ENVIRONMENTAL	<.37	<.032	<.066	<.044	<5	<.27	<.12	<.19	<.056
APR											
07...	0930	ENVIRONMENTAL	<.37	<.032	<.066	<.044	<5	<.27	<.12	<.19	<.056
07...	*1730*	*TRIP BLANK*	*<.37*	*<.032*	*<.066*	*<.044*	*<5*	*<.27*	*<.12*	*<.19*	*<.056*
22...	*1058*	*CANNISTER BLANK*	*<.37*	*<.032*	*<.066*	*<.044*	*<5*	*<.27*	*<.12*	*<.19*	*<.056*
22...	*1059*	*FIELD BLANK*	*<.37*	*<.032*	*<.066*	*<.044*	*<5*	*<.27*	*<.12*	*<.19*	*<.056*
22...	1100	ENVIRONMENTAL	<.37	<.032	<.066	<.044	<5	<.27	<.12	<.19	<.056
JUN											
02...	0930	ENVIRONMENTAL	<.37	<.032	<.066	<.044	E1.57	<.27	<.12	<.19	<.056
JUL											
01...	0910	ENVIRONMENTAL	<.37	<.032	<.066	<.044	<5	<.27	<.12	<.19	<.056
AUG											
04...	1010	ENVIRONMENTAL	<.37	<.032	<.066	<.044	<5	<.27	<.12	<.19	<.056
SEP											
16...	1450	ENVIRONMENTAL	<.07	<.032	<.066	<.04	E2.98	<.27	<.12	<.19	<.056

DATE	BENZENE 135-TRI METHYL WATER UNFLTRD REC (µG/L) (77226)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (µG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (µG/L) (34571)	ISO-PROPYL-BENZENE WATER WHOLE REC (µG/L) (77223)	BENZENE N-BUTYL WATER UNFLTRD REC (µG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (µG/L) (77224)	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (µG/L) (34536)	BENZENE TOTAL (µG/L) (34030)	BROMO-FORM TOTAL (µG/L) (32104)	CHLORO-BENZENE TOTAL (µG/L) (34301)	CHLORO-DI-BROMO-METHANE TOTAL (µG/L) (32105)	CHLORO-FORM TOTAL (µG/L) (32106)
FEB 1999												
03...	<.044	<.054	<.05	<.032	<.19	<.042	<.048	E.0186	<.1	<.028	<.18	E.00915
MAR												
03...	<.044	<.054	<.05	<.032	<.19	<.042	<.048	<.1	<.1	<.028	<.18	<.052
APR												
07...	<.044	<.054	<.05	<.032	<.19	<.042	<.048	<.1	<.1	<.028	<.18	<.052
07...	*<.044*	*<.054*	*<.05*	*<.032*	*<.19*	*<.042*	*<.048*	*<.1*	*<.1*	*<.028*	*<.18*	*<.052*
22...	*<.044*	*<.054*	*<.05*	*<.032*	*<.19*	*<.042*	*<.048*	*<.1*	*<.1*	*<.028*	*<.18*	*<.052*
22...	*<.044*	*<.054*	*<.05*	*<.032*	*<.19*	*<.042*	*<.048*	*<.1*	*<.1*	*<.028*	*<.18*	*<.052*
22...	<.044	<.054	<.05	<.032	<.19	<.042	<.048	<.1	<.1	<.028	<.18	<.052
JUN												
02...	<.044	<.054	<.05	<.032	<.19	<.042	<.048	E.00408	<.1	<.028	<.18	<.052
JUL												
01...	<.044	<.054	<.05	<.032	<.19	<.042	<.048	E.00699	<.1	<.028	<.18	<.052
AUG												
04...	<.044	<.054	<.05	<.032	<.19	<.042	<.048	<.1	<.1	<.028	<.18	E.00837
SEP												
16...	<.044	<.054	<.05	<.032	<.19	<.042	<.048	E.0165	<.06	<.028	<.18	E.0100

DATE	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (µG/L) (77093)	BROMO-DI-CHLORO-METHANE TOTAL (µG/L) (32101)	ETHER ETHYL WATER UNFLTRD RECOVER (µG/L) (81576)	ETHER TERT-PENTYL METHYL UNFLTRD RECOVER (µG/L) (50005)	ETHYL-BENZENE TOTAL (µG/L) (34371)	FURAN, TETRA-HYDRO-WATER UNFLTRD RECOVER (µG/L) (81607)	ISO-DURENE WATER UNFLTRD RECOVER (µG/L) (50000)	METHYL TERT-BUTYL ETHER WAT UNF REC (µG/L) (78032)	METHYL-CHLO-RIDE TOTAL (µG/L) (34418)	METHYL ENE CHLO-RIDE TOTAL (µG/L) (34423)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (µG/L) (81595)
FEB 1999											
03...	<.038	<.048	<.17	<.11	<.03	<9	<.2	.172	<.25	<.38	<1.6
MAR											
03...	<.038	<.048	<.17	<.11	<.03	<9	<.2	<.17	<.25	<.38	<1.6
APR											
07...	<.038	<.048	<.17	<.11	<.03	<9	<.2	<.17	<.25	<.38	<1.6
07...	*<.038*	*<.048*	*<.17*	*<.11*	*<.03*	*<9*	*<.2*	*<.17*	*<.25*	*<.38*	*<1.6*
22...	*<.038*	*<.048*	*<.17*	*<.11*	*<.03*	*<9*	*<.2*	*<.17*	*<.25*	*<.38*	*<1.6*
22...	*<.038*	*<.048*	*<.17*	*<.11*	*<.03*	*<9*	*<.2*	*<.17*	*<.25*	*<.38*	*<1.6*
22...	<.038	<.048	<.17	<.11	<.03	<9	<.2	E.0622	<.25	<.38	<1.6
JUN											
02...	<.038	<.048	<.17	<.11	<.03	<9	<.2	<.17	E.0436	<.38	<1.6
JUL											
01...	<.038	<.048	<.17	<.11	<.03	<9	<.2	E.0465	<.25	<.38	<1.6
AUG											
04...	<.038	<.048	<.17	<.11	<.03	<9	<.2	<.17	<.25	<.38	<1.6
SEP											
16...	<.038	<.048	<.17	<.11	<.03	<2.2	<.2	<.17	<.5	<.38	<1.6

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	METHYL ISO-BUTYL KETONE WAT.WH. TOTAL (µG/L) (78133)	META/ PARA-XYLENE WATER UNFLTRD REC (µG/L) (85795)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (µG/L) (77275)	O-XYLENE WATER WHOLE TOTAL (µG/L) (77135)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (µG/L) (77356)	PREH-NITENE WATER UNFLTRD RECOVER (µG/L) (49999)	STYRENE TOTAL (µG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (µG/L) (34475)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (µG/L) (77220)	TOLUENE TOTAL (µG/L) (34010)	TRI-CHLORO-ETHYL-ENE TOTAL (µG/L) (39180)
FEB 1999											
03...	<.37	E.0151	<.042	<.06	<.11	<.23	<.042	E.0322	<.1	E.0503	E.0113
MAR											
03...	<.37	<.06	E.0108	<.06	<.11	<.23	<.042	E.0314	<.1	<.05	E.0105
APR											
07...	<.37	<.06	<.042	<.06	<.11	<.23	<.042	E.0270	<.1	.103	<.038
07...	*<.37*	*<.06*	*<.042*	*<.06*	*<.11*	*<.23*	*<.042*	*<.1*	*<.1*	*<.05*	*<.038*
22...	*<.37*	*<.06*	*<.042*	*<.06*	*<.11*	*<.23*	*<.042*	*<.1*	*<.1*	*<.05*	*<.038*
22...	*<.37*	*<.06*	*<.042*	*<.06*	*<.11*	*<.23*	*<.042*	*<.1*	*<.1*	*<.05*	*<.038*
22...	<.37	<.06	<.042	<.06	<.11	<.23	<.042	E.0355	<.1	.108	<.038
JUN											
02...	<.37	<.06	<.042	<.06	<.11	<.23	<.042	<.1	<.1	E.0759	E.00631
JUL											
01...	<.37	<.06	<.042	<.06	<.11	<.23	<.042	E.0217	<.1	<.05	<.038
AUG											
04...	<.37	<.06	<.042	<.06	<.11	<.23	<.042	E.0172	<.1	E.0804	<.038
SEP											
16...	<.37	<.06	<.042	<.038	E.0238	<.23	<.042	E.0235	<.06	E.0725	<.038

WATER-COLUMN PESTICIDE ANALYSES

REMARKS.--Selected samples were analyzed for pesticides on schedules 2001 and LCAA (listed with minimum reporting levels on pages 429 and 432). Only pesticides identified by the analyses in one or more samples are listed in the water-quality tables.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLE TYPE	ACETO-CHLOR ESA FLTRD 0.7 µM GF REC (µG/L) (61029)	ACETO-CHLOR OA FLTRD 0.7 µM GF REC (µG/L) (61030)	ACETO-CHLOR, WATER FLTRD REC (µG/L) (49260)	ALA-CHLOR OA FLTRD 0.7 µM GF REC (µG/L) (61031)	ALA-CHLOR, (ESA) WAT FLT GF 0.7U REC (µG/L) (50009)	ALA-CHLOR, WATER, DISS, REC, (µG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (µG/L) (39632)
DEC 1998									
09...	1040	ENVIRONMENTAL	--	--	<.002	--	--	<.002	.154
JAN 1999									
12...	0915	ENVIRONMENTAL	--	--	<.002	--	--	<.002	.150
FEB									
03...	0930	ENVIRONMENTAL	--	--	<.002	--	--	<.002	.126
MAR									
03...	0930	ENVIRONMENTAL	--	--	<.002	--	--	<.002	.137
23...	1150	ENVIRONMENTAL	.08	<.05	<.002	<.05	.460	<.002	.115
APR									
07...	0930	ENVIRONMENTAL	--	--	<.002	--	--	<.002	.142
22...	*1059*	*FIELD BLANK*	*<.05*	*<.05*	*<.002*	*<.05*	*<.050*	*<.002*	*<.001*
22...	1100	ENVIRONMENTAL	.08	<.05	<.002	<.05	.380	<.002	.119
28...	0850	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.460	<.002	.109
MAY									
05...	0900	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.640	<.002	.140
11...	0830	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.580	<.002	.212
18...	1420	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.240	<.002	.199
26...	1230	ENVIRONMENTAL	<.05	<.05	<.01	<.05	.810	<.005	.255
JUN									
02...	0930	ENVIRONMENTAL	<.05	<.05	<.002	<.05	<.050	<.002	.165
08...	0910	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.730	<.002	.168
16...	0820	ENVIRONMENTAL	<.05	<.05	.0125	<.05	1.05	.0738	.786
23...	0910	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.440	<.002	.220
JUL									
01...	0910	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.550	<.002	.175
07...	0800	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.370	<.002	.204
15...	1130	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.120	<.002	.168
20...	0900	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.130	<.002	.172
AUG									
04...	1010	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.070	<.002	.167
17...	0920	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.080	<.002	.175
SEP									
01...	0830	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.180	<.002	.156
16...	1450	ENVIRONMENTAL	<.05	<.05	<.002	<.05	.150	<.002	.0639

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-COLUMN PESTICIDE ANALYSES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	BEN-FLUR-ALIN WAT FLD 0.7 µ GF, REC (µG/L) (82673)	CAR-BARYL WATER FLTRD 0.7 µ GF, REC (µG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 µ GF, REC (µG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (µG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD 0.7 µ GF, REC (µG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (µG/L) (04040)	DI-AZINON, DIS-SOLVED (µG/L) (39572)	DI-ELDRIN DIS-SOLVED (µG/L) (39381)	EPTC WATER FLTRD 0.7 µ GF, REC (µG/L) (82668)
DEC 1998										
09...	<.002	<.003	<.003	<.004	<.004	<.002	E.194	<.002	<.001	<.002
JAN 1999										
12...	<.002	<.003	<.003	<.004	<.004	<.002	E.168	E.0021	<.001	<.002
FEB										
03...	<.002	<.003	<.003	<.004	<.004	<.002	E.145	E.0023	<.001	E.0026
MAR										
03...	<.002	<.003	<.003	<.004	<.004	<.002	E.104	<.002	<.001	<.002
23...	<.002	<.003	<.003	<.004	<.004	<.002	E.0941	<.002	<.001	E.0021
APR										
07...	<.002	<.003	<.003	<.004	<.004	<.002	E.145	<.002	<.001	E.0025
22...	*<.002*	*<.003*	*<.003*	*<.004*	*<.004*	*<.002*	*<.002*	*<.002*	*<.001*	*<.002*
22...	<.002	<.003	<.003	<.004	<.004	<.002	E.138	<.002	<.001	<.002
28...	<.002	<.003	<.003	<.004	<.004	<.002	E.110	<.002	<.001	<.002
MAY										
05...	<.002	<.003	<.003	<.004	<.004	<.002	E.178	<.002	<.001	<.002
11...	<.002	E.0079	<.003	<.004	<.004	<.002	E.192	<.002	<.001	<.002
18...	<.002	<.003	<.003	<.004	<.004	<.002	E.149	<.002	<.001	<.002
26...	<.002	E.0103	<.003	<.004	<.004	<.002	E.105	<.002	<.001	<.002
JUN										
02...	<.002	<.003	<.003	<.004	<.004	<.002	E.141	<.002	<.001	<.002
08...	<.002	<.003	<.003	<.004	<.004	<.002	E.102	<.002	<.001	<.002
16...	<.002	E.0098	E.0315	<.004	<.010	<.002	E.166	.0224	<.001	<.002
23...	<.002	<.003	<.030	<.004	<.004	<.002	E.164	<.002	<.001	<.002
JUL										
01...	<.002	E.0077	<.003	<.004	<.004	<.002	E.248	<.002	<.001	<.002
07...	<.002	E.0013	<.003	<.004	<.004	<.002	E.249	<.002	<.001	<.002
15...	<.002	<.003	<.003	<.004	<.004	<.002	E.258	<.002	<.001	<.002
20...	<.002	<.003	<.003	<.004	<.004	<.002	E.333	<.002	<.001	<.002
AUG										
04...	<.002	<.003	<.003	<.004	<.004	<.002	E.315	<.002	<.001	<.002
17...	<.002	<.020	<.040	<.004	<.004	<.002	E.244	.0484	<.001	<.002
SEP										
01...	<.002	<.003	<.003	<.004	<.004	<.002	E.205	<.002	<.001	<.002
16...	<.002	<.003	<.003	<.004	<.004	<.002	E.0656	<.002	<.001	<.002

DATE	LINDANE DIS-SOLVED (µG/L) (39341)	LIN-URON WATER FLTRD 0.7 µ GF, REC (µG/L) (82666)	MALA-THION, DIS-SOLVED (µG/L) (39532)	METHYL AZIN-PHOS WAT FLT 0.7 µ GF, REC (µG/L) (82686)	METOLA-CHLOR ESA FLTRD 0.7 µM GF REC (µG/L) (61043)	METOLA-CHLOR OA FLTRD 0.7 µM GF REC (µG/L) (61044)	METO-LACHLOR WATER DISSOLV (µG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (µG/L) (82630)	NAPROP-AMIDE WATER FLTRD 0.7 µ GF, REC (µG/L) (82684)	P,P' DDE DISSOLV (µG/L) (34653)
DEC 1998										
09...	<.004	<.002	<.005	<.001	--	--	.0071	<.004	<.003	<.006
JAN 1999										
12...	<.004	<.002	<.005	<.001	--	--	.0122	<.004	<.003	<.006
FEB										
03...	<.004	<.002	<.005	<.001	--	--	.0221	<.004	<.003	<.006
MAR										
03...	<.004	<.002	<.005	<.001	--	--	.0114	<.004	<.003	<.006
23...	<.004	<.002	<.005	<.001	1.2	.13	.0103	<.004	<.003	<.006
APR										
07...	<.004	<.002	<.005	<.001	--	--	.0101	<.004	<.003	<.006
22...	*<.004*	*<.002*	*<.005*	*<.001*	*<.05*	*<.05*	*<.002*	*<.004*	*<.003*	*<.006*
22...	<.004	<.002	<.005	<.001	.89	.09	.0138	<.004	<.003	<.006
28...	<.004	<.002	<.005	<.001	.58	.05	.0088	<.004	<.003	<.006
MAY										
05...	<.004	<.002	<.005	<.001	.83	<.05	.0187	<.004	<.003	<.006
11...	<.004	<.002	<.005	<.001	.88	<.05	.0217	<.004	<.003	<.006
18...	<.004	<.002	<.005	<.001	.82	<.05	.0148	<.004	<.010	<.006
26...	<.004	<.002	<.005	<.001	1.1	<.05	.0457	<.004	<.003	<.006
JUN										
02...	<.004	<.002	<.005	<.001	<.05	<.05	.0140	<.004	<.003	<.006
08...	<.004	<.002	<.005	<.001	1.15	<.05	.0143	<.004	<.003	<.006
16...	<.004	<.002	<.005	<.001	1.6	.28	1.03	<.004	<.003	<.006
23...	<.004	<.002	<.005	<.001	.74	.06	.0321	<.004	<.003	<.006
JUL										
01...	<.004	<.002	<.005	<.001	1.08	<.05	.0165	<.004	<.003	<.006
07...	<.004	<.002	<.005	<.001	1.0	<.05	.0124	<.004	<.003	<.006
15...	<.004	<.002	<.005	<.001	.36	<.05	.0141	<.004	<.003	<.006
20...	<.004	<.002	<.005	<.001	.37	<.05	.0124	<.004	<.003	<.006
AUG										
04...	<.004	<.002	<.005	<.001	.24	<.05	.0084	<.004	<.003	<.006
17...	<.004	E.110	<.005	<.001	.28	<.05	.0269	<.004	<.003	<.006
SEP										
01...	<.004	<.002	<.005	<.001	.44	<.05	.0082	<.004	<.003	<.006
16...	<.004	<.002	<.005	<.001	.13	.06	.0209	<.004	<.003	<.006

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER-COLUMN PESTICIDE ANALYSES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	PENDI-METH-ALIN WAT FLT 0.7 µ GF, REC (µG/L) (82683)	PRO-METON, WATER, DISS, REC (µG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 µ GF, REC (µG/L) (82676)	PRO-PANIL WATER FLTRD 0.7 µ GF, REC (µG/L) (82679)	SI-MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 µ GF, REC (µG/L) (82670)	TER-BACIL WATER FLTRD 0.7 µ GF, REC (µG/L) (82665)	TER-BUTHYL-AZINE, WATER, DISS, REC (µG/L) (04022)	TRI-FLUR-ALIN WAT FLT 0.7 µ GF, REC (µG/L) (82661)
DEC 1998									
09...	<.004	E.0109	<.003	<.004	.0122	E.0066	<.007	--	<.002
JAN 1999									
12...	<.004	E.0153	<.003	<.004	.0284	E.0067	<.007	--	<.002
FEB									
03...	<.004	E.0123	<.003	<.004	.0203	E.0048	<.007	--	<.002
MAR									
03...	<.004	E.0096	<.003	<.004	.0153	E.0092	<.007	--	<.002
23...	<.004	E.0118	<.003	<.004	.0147	<.0767	<.007	--	<.002
APR									
07...	<.004	E.0137	<.003	<.004	.0161	.0113	<.007	--	<.002
22...	*<.004*	*<.018*	*<.003*	*<.004*	*<.005*	*<.010*	*<.007*	--	*<.002*
22...	<.004	E.0128	<.003	<.004	.0139	<.0767	<.007	--	<.002
28...	<.004	E.0116	<.003	<.004	.0112	E.0042	<.007	--	<.002
MAY									
05...	<.004	E.0108	<.003	<.004	.0136	<.0767	<.007	--	<.002
11...	.0074	E.0125	<.003	<.004	.0155	.0100	<.007	--	<.002
18...	<.004	E.0179	<.003	<.004	.913	E.0014	<.007	--	<.002
26...	<.01	E.0138	<.003	<.004	1.19	E.0085	<.007	--	<.002
JUN									
02...	<.004	E.0133	<.003	<.004	.179	E.0016	<.007	<.005	<.002
08...	<.004	.0195	<.003	<.004	.0769	E.0114	<.007	--	<.002
16...	<.004	.0388	<.003	<.004	.0385	.0132	<.007	<.005	E.0040
23...	<.004	E.0148	<.003	<.004	.0315	<.010	<.007	--	<.002
JUL									
01...	<.004	E.0174	<.003	<.004	.0303	E.0123	<.007	<.005	<.002
07...	<.004	.0211	<.003	<.004	.0578	E.0127	<.007	--	<.002
15...	<.004	.0186	<.003	<.004	.0210	<.010	<.007	<.005	<.002
20...	<.004	.0220	<.003	<.004	.0286	E.0170	<.007	<.005	<.002
AUG									
04...	<.004	.0181	<.003	<.004	.0229	E.0069	<.007	--	<.002
17...	<.004	.0275	<.003	<.004	.0141	E.0056	<.007	--	<.002
SEP									
01...	<.004	E.0172	<.003	<.004	.0174	.0155	<.007	--	<.002
16...	<.004	<.018	<.003	<.004	.0112	<.010	<.007	--	<.002

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	18.0	16.0	17.0	10.5	9.0	9.5	9.5	7.5	8.5	.0	.0	.0
2	16.0	13.5	14.5	11.0	9.5	10.0	8.5	6.5	7.5	.0	.0	.0
3	13.5	12.5	13.0	10.0	7.5	9.0	9.0	6.5	8.0	1.5	.0	.5
4	12.5	12.0	12.5	9.5	7.0	8.0	12.0	9.0	10.5	1.5	.0	.5
5	13.5	12.0	13.0	8.0	6.5	7.0	13.0	11.0	12.0	.5	.0	.0
6	13.5	13.0	13.0	8.0	6.5	7.0	12.0	11.0	11.5	.5	.0	.0
7	14.5	13.5	14.0	9.0	7.0	8.0	12.0	10.5	11.5	1.0	.0	.5
8	16.0	14.5	15.5	9.0	8.0	9.0	11.5	10.0	11.0	.5	.0	.0
9	16.0	15.0	15.5	9.5	8.0	8.5	10.0	7.0	8.5	1.5	.0	.5
10	15.0	14.5	15.0	8.5	8.0	8.0	7.0	5.5	6.5	2.0	.0	1.0
11	15.5	13.5	14.5	11.5	8.5	10.0	6.5	5.0	6.0	2.0	1.0	1.5
12	15.5	15.0	15.5	10.5	8.0	9.5	5.5	4.5	5.0	3.5	1.0	2.0
13	16.0	15.5	15.5	9.0	7.5	8.5	6.5	5.0	6.0	5.0	3.5	4.0
14	16.0	14.0	15.5	9.5	8.0	8.5	6.5	4.5	5.5	4.0	.0	1.0
15	14.0	12.5	13.0	10.0	8.5	9.5	5.0	3.0	4.0	.0	.0	.0
16	12.5	11.5	12.0	9.5	8.5	9.0	5.0	3.5	4.0	1.0	.0	.5
17	13.0	11.5	12.5	10.5	9.0	9.5	6.0	4.5	5.5	4.0	1.0	3.0
18	14.5	12.5	13.5	9.5	7.5	9.0	5.5	4.0	5.0	4.5	.0	2.5
19	16.0	14.5	15.0	8.5	7.0	7.5	5.0	4.0	4.5	3.5	.0	2.5
20	14.5	13.0	14.0	9.5	7.5	9.0	7.0	5.0	6.0	5.0	2.5	4.0
21	13.0	11.0	12.5	9.0	7.5	8.5	8.5	7.0	7.5	5.0	4.0	4.5
22	11.0	9.5	10.5	8.0	6.5	7.5	9.5	5.5	8.0	5.0	3.5	4.0
23	10.5	9.0	9.5	8.0	6.0	7.0	5.5	1.5	3.0	6.5	5.0	5.5
24	12.0	10.0	11.0	9.5	7.5	8.5	2.0	1.0	1.5	8.0	6.5	7.5
25	12.0	10.5	11.5	8.5	7.0	7.5	2.0	.0	1.0	6.5	6.0	6.0
26	12.5	11.0	11.5	8.5	7.5	8.0	1.0	.0	.5	7.0	6.0	6.5
27	13.0	12.0	12.5	9.0	7.0	8.5	1.5	.0	.5	7.0	5.0	6.0
28	13.5	12.5	13.0	8.0	6.0	7.0	3.0	1.0	2.5	8.0	6.5	7.0
29	13.5	11.0	12.5	9.0	7.0	7.5	4.0	3.0	3.5	8.0	6.5	7.0
30	11.5	9.5	10.5	10.0	8.0	9.0	4.0	1.0	3.0	6.5	5.0	5.5
31	11.0	9.5	10.0	---	---	---	1.0	.0	.5	5.5	4.0	4.5
MONTH	18.0	9.0	13.2	11.5	6.0	8.4	13.0	.0	5.8	8.0	.0	2.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			**MARCH**			**APRIL**			**MAY**	
1	5.5	3.0	4.0	7.0	6.0	6.5	12.0	10.5	11.0	17.0	13.5	15.5
2	6.0	5.5	6.0	7.0	5.0	6.0	14.0	11.0	12.5	17.0	13.5	15.5
3	8.0	6.0	7.0	9.0	6.5	7.5	14.0	12.5	13.5	15.5	13.5	14.5
4	7.5	6.5	7.0	9.0	6.0	8.0	---	---	---	15.5	13.0	14.5
5	7.0	6.0	6.5	6.5	4.0	5.5	14.0	11.0	12.5	19.0	15.5	17.0
6	6.5	5.5	6.0	6.5	5.5	6.0	12.5	10.5	12.0	18.5	16.0	17.5
7	6.5	6.0	6.0	6.0	4.5	5.0	14.5	11.0	13.0	16.0	14.5	15.0
8	6.0	5.5	5.5	5.0	2.5	4.0	16.0	12.5	14.5	16.0	14.5	15.0
9	6.0	5.0	5.5	5.0	4.0	4.5	15.5	10.5	13.0	16.5	15.0	16.0
10	7.0	5.5	6.5	7.0	4.5	5.5	13.0	9.0	11.0	17.5	14.5	16.0
11	7.5	5.5	6.5	6.5	4.5	6.0	12.5	8.5	10.0	18.5	15.5	17.0
12	8.5	7.0	7.5	6.0	4.0	5.0	11.5	8.5	10.0	19.5	16.5	18.0
13	8.0	5.5	6.5	7.0	4.0	5.5	12.5	9.0	11.0	18.5	14.0	16.5
14	5.5	4.5	5.0	7.0	4.0	6.0	13.0	9.5	11.5	16.0	12.5	14.5
15	6.0	4.0	5.0	6.5	3.5	5.0	12.5	10.5	11.5	17.0	15.0	15.5
16	7.5	5.0	6.0	7.5	5.0	6.5	12.0	10.5	11.5	16.0	14.5	15.5
17	7.5	6.5	7.0	10.0	6.5	8.0	11.0	10.0	10.5	17.0	14.5	16.0
18	7.5	6.5	7.0	11.0	8.5	9.5	11.0	9.5	10.5	19.0	16.0	17.5
19	7.5	6.5	7.0	10.0	7.5	8.5	11.0	9.0	10.0	19.0	17.5	18.5
20	7.0	6.0	6.5	9.5	7.5	8.5	11.0	9.5	10.0	19.0	16.5	17.5
21	6.0	5.0	5.5	9.0	7.0	7.5	11.0	8.5	9.5	19.0	16.0	17.5
22	5.0	3.0	3.5	7.0	6.5	7.0	13.5	10.5	12.0	19.0	17.0	18.0
23	3.5	2.0	3.0	8.5	5.5	7.0	13.5	11.0	12.5	18.5	16.5	18.0
24	5.0	3.5	4.5	9.5	8.0	8.5	13.0	9.0	11.0	16.5	16.0	16.5
25	5.0	4.0	4.5	10.0	7.5	9.0	14.0	10.5	12.5	16.5	15.0	15.5
26	6.0	4.5	5.5	9.5	7.0	8.5	15.0	11.5	13.5	16.5	15.0	16.0
27	6.5	5.0	5.5	10.0	7.0	9.0	16.0	12.5	14.5	17.5	15.5	16.0
28	6.5	6.5	6.5	10.5	9.0	9.5	15.5	13.0	14.5	18.5	16.0	17.0
29	---	---	---	12.5	9.0	11.0	16.5	13.0	15.0	20.5	17.5	18.5
30	---	---	---	12.0	9.5	11.0	16.5	13.5	15.0	22.0	19.0	20.5
31	---	---	---	12.5	9.0	11.0	---	---	---	22.0	20.0	20.5
MONTH	8.5	2.0	5.8	12.5	2.5	7.3	16.5	8.5	12.1	22.0	12.5	16.7

SCHUYLKILL RIVER BASIN

01470779 TULPEHOCKEN CREEK NEAR BERNVILLE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	22.0	20.0	21.0	23.0	21.0	22.0	27.0	24.0	25.5	20.5	17.5	18.5
2	22.5	20.5	21.0	23.0	22.0	22.5	26.5	23.0	24.5	21.0	17.5	19.0
3	21.0	20.0	21.0	24.5	22.0	23.0	25.0	21.0	23.0	21.5	18.0	19.5
4	21.0	19.0	19.5	26.5	23.5	25.0	24.5	20.0	22.5	21.5	19.5	20.5
5	20.5	18.5	19.0	28.0	25.0	26.5	24.5	21.0	22.5	21.5	20.5	21.0
6	21.0	18.5	19.5	28.5	25.5	27.0	24.0	20.5	22.5	22.5	21.0	21.5
7	23.5	19.5	21.5	27.5	25.0	26.0	23.5	20.5	22.0	22.5	21.5	22.0
8	25.0	22.0	23.5	25.5	22.5	24.0	23.5	22.0	22.5	23.0	21.5	22.0
9	24.5	22.5	23.0	24.0	21.5	22.5	23.0	20.5	21.5	22.0	20.0	21.0
10	22.5	19.5	21.5	24.0	22.0	23.0	22.0	19.0	20.5	21.5	19.5	20.5
11	21.0	17.5	19.0	23.0	20.0	21.0	23.0	19.0	21.0	20.5	18.5	19.5
12	21.0	18.5	19.5	21.0	18.5	20.0	24.5	20.5	22.5	20.0	17.5	18.5
13	23.0	19.5	21.0	21.5	18.5	20.0	25.0	22.0	23.5	20.5	17.5	19.0
14	22.5	21.0	22.0	21.5	19.5	20.5	24.0	22.5	23.0	20.5	18.5	19.5
15	22.0	20.0	21.0	22.5	19.0	20.5	23.0	21.5	22.5	19.5	18.5	19.5
16	20.5	19.0	20.0	25.0	20.5	22.5	23.5	21.0	22.0	18.5	16.0	17.5
17	19.0	17.0	18.5	26.0	22.5	24.0	24.5	21.0	22.5	17.0	15.5	16.0
18	18.0	15.5	17.0	26.5	23.5	25.0	24.5	22.5	23.5	16.5	14.5	16.0
19	19.5	17.0	18.0	26.0	24.0	25.0	23.5	21.5	22.5	16.5	14.5	16.0
20	19.5	18.5	19.0	25.0	23.5	24.0	22.5	20.5	21.5	17.5	15.5	16.5
21	18.5	17.5	18.0	24.0	22.5	23.0	20.5	19.0	19.5	17.5	15.0	16.5
22	20.5	17.0	18.5	23.5	22.5	23.0	20.0	18.0	19.0	15.0	13.5	14.5
23	22.5	19.0	20.5	25.5	22.0	23.5	21.5	18.0	19.5	15.0	13.0	14.0
24	22.5	19.5	21.0	25.0	23.0	24.0	21.5	19.0	20.5	16.0	14.0	15.0
25	22.5	20.0	21.0	26.0	22.5	24.0	21.5	19.0	20.5	17.0	15.5	16.0
26	24.0	21.0	22.0	26.0	22.5	24.0	22.0	20.5	21.0	16.5	15.0	16.0
27	24.5	22.5	23.5	26.0	22.0	24.0	23.0	20.5	21.5	16.5	16.0	16.0
28	25.0	23.5	24.0	26.0	22.0	24.0	23.5	21.0	22.0	---	---	---
29	25.0	23.5	24.0	25.5	22.0	24.0	24.0	21.0	22.5	---	---	---
30	23.5	21.5	22.5	25.5	22.0	24.0	21.5	19.0	20.0	---	---	---
31	---	---	---	26.5	22.5	24.5	19.5	17.0	18.5	---	---	---
MONTH	25.0	15.5	20.7	28.5	18.5	23.4	27.0	17.0	21.8	23.0	13.0	18.2
YEAR	28.5	.0	13.0									