

**NESHAMINY CREEK BASIN**

**01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD NEAR NESHAMINY, PA  
(National Water-Quality Assessment Station)**

**LOCATION.**--Lat 40°13'45", long 75°07'12", Bucks County, Hydrologic Unit 02040201, on left bank just upstream from bridge on Valley Road, 6.8 mi upstream from confluence with Neshaminy Creek, 3.0 mi downstream from Bradford Dam, 2.0 mi downstream from Park Creek, and 1.1 mi east of Neshaminy.

**DRAINAGE AREA.**--26.8 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

**PERIOD OF RECORD.**--November 1998 to current year.

**GAGE.**--Water stage recorder and crest-stage gage.

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

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 1,600 ft<sup>3</sup>/s and maximum(\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Mar. 22	0100	1,640	6.14	Sept. 19	2030	*1,650	*6.15

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	10	15	12	e12	37	32	16	11	5.6	351	12
2	12	62	13	12	e12	32	28	18	9.9	4.5	50	9.8
3	10	71	13	12	e11	28	27	15	8.8	4.5	33	8.3
4	22	21	12	49	e13	24	59	14	7.7	6.8	387	8.7
5	65	15	11	111	e12	22	35	13	7.5	5.3	45	7.2
6	20	14	100	28	e11	20	27	13	17	4.2	26	6.5
7	14	12	44	22	e11	18	24	12	14	3.6	43	5.7
8	12	11	22	18	e10	18	21	11	9.9	3.0	23	5.5
9	11	11	18	17	e10	17	69	10	8.2	2.8	17	5.8
10	110	11	42	55	e11	16	51	11	7.0	3.0	14	5.5
11	44	11	44	52	e10	26	31	15	6.2	3.2	13	4.9
12	20	9.3	22	27	e9.8	116	26	10	18	2.2	21	4.9
13	16	9.3	25	22	e14	36	24	17	48	2.1	13	37
14	16	9.3	435	17	e13	26	17	74	20	4.0	98	11
15	13	8.9	129	15	165	22	21	16	13	22	63	116
16	13	8.2	57	15	127	25	80	13	11	45	24	17
17	12	7.9	36	e12	93	296	128	11	10	21	17	11
18	18	7.7	28	e11	60	59	146	9.7	13	9.3	17	9.1
19	14	7.7	24	e11	241	38	57	62	42	6.8	16	303
20	68	7.8	31	e12	117	31	40	115	14	9.2	12	206
21	36	8.9	50	e11	86	145	75	45	13	5.8	10	30
22	20	9.0	27	e11	77	758	87	26	100	4.5	9.2	18
23	40	8.9	22	e10	79	104	53	23	20	4.0	8.4	14
24	21	8.8	19	e9.8	89	65	38	257	12	3.5	8.7	13
25	19	14	16	e12	85	49	32	65	9.0	3.8	8.2	15
26	13	16	15	e19	70	40	27	29	7.9	64	6.7	285
27	12	295	15	e14	51	36	25	21	13	195	25	62
28	11	39	14	e13	114	259	23	17	7.9	27	66	30
29	11	22	13	e12	49	69	20	15	7.7	15	13	21
30	10	18	13	e15	---	46	18	14	6.6	233	18	18
31	10	---	13	e13	---	37	---	12	---	336	17	---
TOTAL	731	764.7	1338	669.8	1662.8	2515	1341	999.7	493.3	1059.7	1473.2	1300.9
MEAN	23.6	25.5	43.2	21.6	57.3	81.1	44.7	32.2	16.4	34.2	47.5	43.4
MAX	110	295	435	111	241	758	146	257	100	336	387	303
MIN	10	7.7	11	9.8	9.8	16	17	9.7	6.2	2.1	6.7	4.9
CFSM	.88	.95	1.61	.81	2.14	3.03	1.67	1.20	.61	1.28	1.77	1.62
IN.	1.01	1.06	1.86	.93	2.31	3.49	1.86	1.39	.68	1.47	2.04	1.81

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)**

MEAN	23.6	25.5	22.8	46.4	44.8	76.9	36.7	22.8	9.75	17.8	36.9	107
MAX	23.6	25.5	43.2	71.2	57.3	81.1	44.7	32.2	16.4	34.2	47.5	170
(WY)	2000	2000	2000	1999	2000	2000	2000	2000	2000	2000	2000	1999
MIN	23.6	25.5	2.47	21.6	31.7	72.6	28.6	13.3	3.06	1.40	26.3	43.4
(WY)	2000	2000	1999	2000	1999	1999	1999	1999	1999	1999	1999	2000

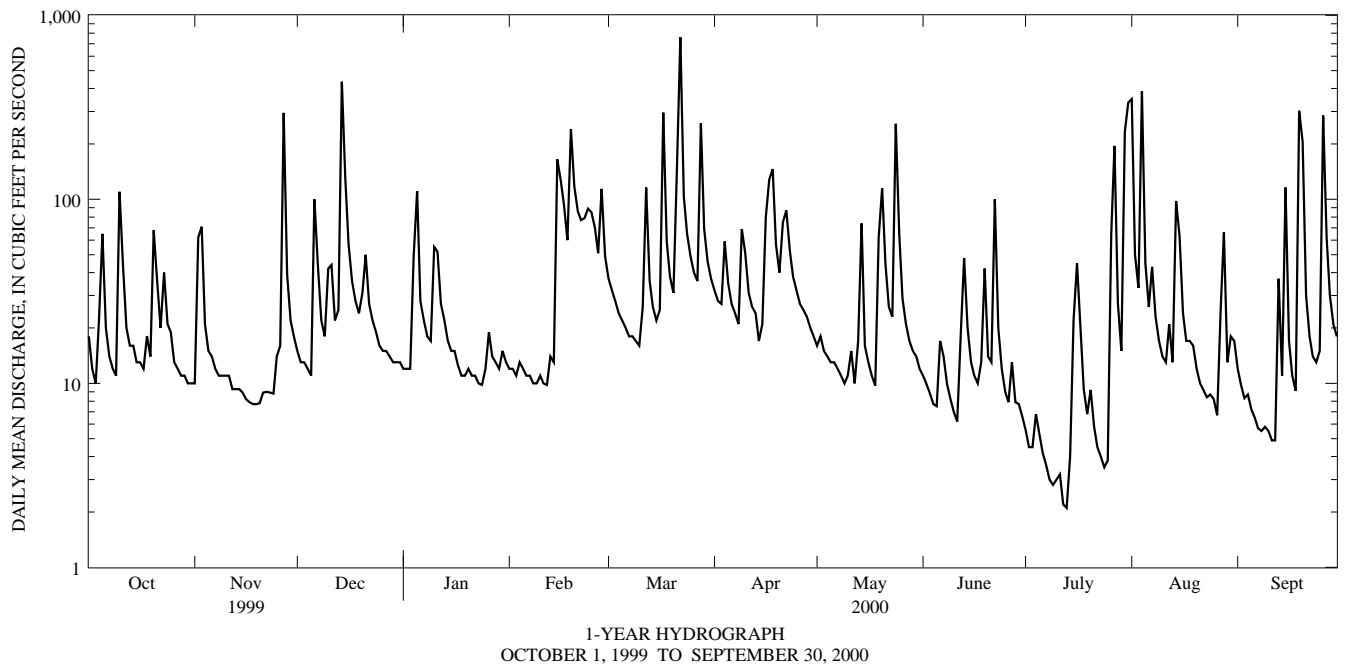
e Estimated.

NESHAMINY CREEK BASIN

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD NEAR NESHAMINY, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	15499.24		14349.1			
ANNUAL MEAN	42.5		39.2		39.2	
HIGHEST ANNUAL MEAN					39.2	
LOWEST ANNUAL MEAN					39.2	
HIGHEST DAILY MEAN	2760	Sep 16	758	Mar 22	2760	Sep 16 1999
LOWEST DAILY MEAN	.24	Aug 2,5	2.1	Jul 13	.24	Aug 2 1999
ANNUAL SEVEN-DAY MINIMUM	.27	Aug 1	2.8	Jul 7	.27	Aug 1 1999
INSTANTANEOUS PEAK FLOW			a1650	Sep 19	a7200	Sep 16 1999
INSTANTANEOUS PEAK STAGE			6.15	Sep 19	11.68	Sep 16 1999
INSTANTANEOUS LOW FLOW			1.9	Jul 14	.15	Aug 8 1999
ANNUAL RUNOFF (CFSM)	1.58		1.46		1.46	
ANNUAL RUNOFF (INCHES)	21.51		19.91		19.87	
10 PERCENT EXCEEDS	62		85		72	
50 PERCENT EXCEEDS	13		17		14	
90 PERCENT EXCEEDS	1.7		7.7		2.3	

a From rating curve extended above 758 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow.



## NESHAMINY CREEK BASIN

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD NEAR NESHAMINY, PA--Continued  
(National Water-Quality Assessment Station)

## WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: February 1999 to June 1999.

REMARKS.--These samples were collected as part of the Delaware River Basin National Water Quality Assessment Program (NAWQA). Streambed sediment and fish community data for this site are presented on pages 467-481.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

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)
OCT 1999									
05...	1120	ENVIRONMENTAL	72	759	93	9.2	7.8	370	17.0
19...	1250	ENVIRONMENTAL	13	764	145	15.4	8.5	454	16.5
NOV									
03...	0940	ENVIRONMENTAL	60	749	91	9.3	7.6	290	10.0
17...	1329	FIELD BLANK	--	--	--	--	--	--	--
17...	1330	ENVIRONMENTAL	7.5	758	192	24.7	8.6	498	9.0
DEC									
02...	1140	ENVIRONMENTAL	13	765	100	13.7	8.0	447	5.0
15...	1500	ENVIRONMENTAL	98	760	95	11.6	7.7	221	9.0
JAN 2000									
06...	1230	ENVIRONMENTAL	26	769	105	13.7	7.8	270	7.5
19...	1250	ENVIRONMENTAL	E11	753	108	15.5	8.6	470	1.5
FEB									
07...	1050	ENVIRONMENTAL	E11	758	103	14.9	8.0	947	5.5
14...	1420	ENVIRONMENTAL	E13	748	103	14.4	6.5	687	11.0
MAR									
08...	1040	ENVIRONMENTAL	16	754	62	6.9	8.3	502	25.5
08...	1041	SPLIT REPLICATE	--	--	--	--	--	--	--
21...	1410	ENVIRONMENTAL	30	765	100	12.3	8.1	448	5.0
APR									
04...	1410	ENVIRONMENTAL	63	741	121	11.8	8.0	407	19.5
17...	1500	ENVIRONMENTAL	101	760	115	12.1	7.5	325	7.0
MAY									
02...	0910	ENVIRONMENTAL	19	755	89	8.9	7.8	475	17.0
17...	0800	ENVIRONMENTAL	11	760	90	8.8	7.7	447	18.0
30...	1550	ENVIRONMENTAL	13	762	--	--	8.4	451	18.0
JUN									
14...	1630	ENVIRONMENTAL	19	757	95	9.0	7.9	385	17.0
28...	1320	ENVIRONMENTAL	7.0	760	--	--	8.2	469	27.5
JUL									
10...	0850	ENVIRONMENTAL	3.1	750	69	5.7	8.0	612	26.0
AUG									
01...	1420	ENVIRONMENTAL	181	760	93	7.9	7.6	222	27.0
15...	0930	ENVIRONMENTAL	58	757	104	9.5	7.8	271	24.0
28...	1600	ENVIRONMENTAL	28	757	75	6.2	7.7	300	27.5
SEP									
13...	0910	ENVIRONMENTAL	63	757	81	7.0	7.5	397	21.5

## NESHAMINY CREEK BASIN

## 01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD NEAR NESHAMINY, PA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	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)	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)
OCT 1999											
05...	15.5	130	32.5	11.0	3.3	20.9	E118	E144	--	27.4	.1
19...	12.5	160	41.2	14.1	3.9	28.5	120	146	--	38.7	.1
NOV											
03...	13.5	96	23.8	8.77	4.1	17.1	72	88	--	23.3	.1
17...	--	--	.03	<.01	<.2	E.1	--	--	--	<.3	<.1
17...	4.5	180	45.7	15.3	4.2	34.8	140	--	--	49.7	<.1
DEC											
02...	2.5	160	41.6	13.8	3.3	26.0	104	127	--	37.5	.1
15...	7.0	77	19.2	7.01	2.5	11.3	51	62	--	14.4	.1
JAN 2000											
06...	4.5	99	25.4	8.57	2.9	14.5	64	78	--	25.0	<.1
19...	.5	150	38.7	13.7	3.1	30.3	--	--	--	45.0	.1
FEB											
07...	.0	220	55.9	19.1	4.8	90.5	104	127	--	197	.1
14...	1.0	150	37.4	13.4	2.8	69.3	53	65	--	160	.1
MAR											
08...	10.0	150	37.6	13.4	2.3	40.8	91	101	5	79.7	<.1
08...	--	150	37.3	13.3	2.5	40.3	--	--	--	80.4	<.1
21...	6.5	130	32.1	11.4	2.4	33.1	78	94	--	60.1	<.1
APR											
04...	15.0	130	32.5	11.6	2.5	29.8	82	99	--	48.7	<.1
17...	13.0	97	24.6	8.56	2.5	23.7	66	80	--	40.7	<.1
MAY											
02...	14.5	150	37.6	12.8	2.6	33.9	98	119	--	55.2	<.1
17...	16.5	130	32.6	11.2	3.0	31.4	89	109	--	51.6	.1
30...	17.5	150	38.3	12.3	3.4	30.4	104	122	2	48.0	.1
JUN											
14...	17.5	110	29.0	9.74	3.4	29.4	81	99	--	41.7	.1
28...	25.5	150	38.6	13.4	3.1	34.0	122	149	--	48.8	.1
JUL											
10...	24.0	170	44.8	14.7	4.1	49.5	129	158	--	73.5	.1
AUG											
01...	23.0	70	18.2	6.09	3.8	11.5	55	67	--	13.5	.1
15...	19.5	83	21.3	7.28	3.9	15.8	72	88	--	21.2	.1
28...	24.0	93	23.7	8.20	4.7	18.1	--	--	--	24.2	.1
SEP											
13...	22.0	--	<31.2	9.27	4.1	27.4	85	103	--	38.8	.1
DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)
OCT 1999											
05...	6.6	38.7	.042	.42	.70	1.4	1.00	1.7	.017	.065	.048
19...	8.7	48.2	<.020	.28	.39	1.7	1.38	1.8	.014	.086	.067
NOV											
03...	5.9	26.7	<.020	.51	.59	1.2	.678	1.3	.010	.105	.070
17...	<.1	<.3	<.020	<.10	<.10	--	<.050	--	<.010	<.006	<.010
17...	7.0	53.1	<.020	.34	.45	2.6	2.24	2.7	<.010	.064	.043
DEC											
02...	10.9	48.2	.032	.31	.48	2.9	2.59	3.1	.010	.108	.089
15...	6.8	23.9	.029	.43	.65	1.7	1.23	1.9	.013	.069	.060
JAN 2000											
06...	7.3	31.4	.020	.42	.59	1.8	1.38	2.0	.015	.046	.042
19...	9.3	47.5	.056	.28	.37	2.7	2.42	2.8	.017	.042	.034
FEB											
07...	7.0	45.5	.625	3.7	3.9	6.2	2.54	6.4	.030	.019	.013
14...	4.9	24.3	.164	.48	1.7	1.7	1.26	3.0	.012	.046	.035
MAR											
08...	4.8	41.0	<.020	.32	.35	1.8	1.50	1.9	.025	.024	.014
08...	4.8	41.1	<.020	.35	.58	1.8	1.49	2.1	.025	.025	.014
21...	7.0	35.2	<.020	.34	.41	2.1	1.79	2.2	.018	.030	.017
APR											
04...	6.5	32.8	.036	.25	.48	1.6	1.35	1.8	.021	.034	.023
17...	5.3	25.1	.097	.54	.73	1.6	1.02	1.7	.022	.049	.031
MAY											
02...	6.3	39.7	.021	.37	.40	1.9	1.52	1.9	.019	.059	.041
17...	5.9	33.7	.038	.51	.62	1.8	1.29	1.9	.020	.094	.071
30...	9.4	37.8	<.020	.37	.40	1.7	1.37	1.8	.013	.109	.090
JUN											
14...	7.1	33.8	.066	.52	.67	1.9	1.35	2.0	.029	.112	.085
28...	7.3	39.5	<.020	.39	.52	1.3	.930	1.5	<.010	.119	.096
JUL											
10...	8.6	53.0	.069	.51	.61	2.2	1.66	2.3	.024	.149	.123
AUG											
01...	6.4	19.8	.026	.59	.90	1.5	.962	1.9	.011	.111	.073
15...	6.7	19.3	<.020	.58	.75	1.2	.652	1.4	.015	.099	.065
28...	5.4	26.0	<.020	.54	.93	1.6	1.07	2.0	.018	.131	.102
SEP											
13...	<.1	29.8	.051	.44	.70	1.6	1.14	1.8	.011	.121	.096

## NESHAMINY CREEK BASIN

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD NEAR NESHAMINY, PA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028)	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 PARTIC- ULATE TOTAL (MG/L AS C) (00689)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)
OCT 1999											
05...	.156	222	--	41	51	20	23	4.6	.4	4.1	21
19...	.103	275	262	6	75	20	8	4.0	.2	.14	4
NOV											
03...	.210	175	156	--	44	100	33	9.1	1.3	6.3	39
17...	<.008	<10	--	--	<16	<10	<3	--	--	--	1
17...	.083	294	304	5	94	50	11	3.5	.2	.05	2
DEC											
02...	.139	262	256	12	--	40	34	4.0	.3	.24	7
15...	.153	134	122	83	25	70	40	6.0	.8	8.9	34
JAN 2000											
06...	.122	179	160	62	40	60	35	6.2	.5	1.9	26
19...	.062	279	265	4	68	30	32	2.8	<.2	--	2
FEB											
07...	.040	525	495	3	68	20	73	4.1	.3	--	2
14...	.245	398	350	--	22	40	89	4.6	4.2	--	166
MAR											
08...	.052	297	281	9	48	40	67	3.9	.2	.20	5
08...	.053	298	--	--	45	40	66	--	--	--	5
21...	.076	254	235	12	36	40	58	3.4	.6	.47	6
APR											
04...	.071	228	219	18	36	60	53	3.6	.4	1.2	7
17...	.097	193	175	85	32	50	52	6.2	1.2	11	41
MAY											
02...	.091	264	254	8	54	30	39	4.1	<.2	.41	8
17...	.135	253	229	9	58	50	68	5.1	<.2	.31	10
30...	.128	266	248	8	52	60	39	3.8	<.2	.19	5
JUN											
14...	.168	224	209	34	60	40	31	5.4	.6	.89	17
28...	.149	297	263	16	74	30	38	4.1	.3	.27	14
JUL											
10...	.174	355	334	--	120	10	67	4.6	.6	.11	13
AUG											
01...	.247	136	117	170	31	50	18	7.3	1.1	42	86
15...	.200	164	142	59	37	60	16	7.1	1.7	4.9	31
28...	.238	173	159	89	57	30	14	6.7	.9	3.2	42
SEP											
13...	.197	216	--	58	<16	30	32	5.1	.5	8.7	51

## NESHAMINY CREEK BASIN

## 01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD NEAR NESHAMINY, PA--Continued

## WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES

REMARKS.--Selected samples were analyzed for volatile organic compounds (VOCs) on schedule 2020 (listed with minimum reporting levels on pages 464-465). Only VOCs identified by the analyses in one or more samples are listed in the water-quality tables.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLE TYPE	BENZENE				ACETONE	BENZENE	
			1,2,4-TRI-CHLORO-WAT REC	1,1-DI-CHLORO-ETHANE TOTAL	1,1-DI-CHLORO-ETHANE TOTAL	1,2-DI-CHLORO-PROPANE TOTAL		123-TRI-METHYL-WATER UNFLTRD RECOVER	1,1,1-TRI-CHLORO-ETHANE TOTAL
			(µG/L) (34551)	(µG/L) (34496)	(µG/L) (34501)	(µG/L) (34541)	(µG/L) (81552)	(µG/L) (77221)	(µG/L) (34506)
OCT 1999									
05...	1120	ENVIRONMENTAL	<.2	<.07	<.04	<.07	<7	<.1	E.01
19...	1250	ENVIRONMENTAL	<.4	<.13	<.08	<.14	<14	<.2	<.06
NOV									
03...	0940	ENVIRONMENTAL	<.4	<.13	<.08	<.14	E7	<.2	E.01
17...	1330	ENVIRONMENTAL	<.2	<.07	E.01	<.07	E2	<.1	E.03
DEC									
02...	1140	ENVIRONMENTAL	<.2	<.07	E.02	<.07	<7	<.1	E.04
15...	1500	ENVIRONMENTAL	<.2	<.07	<.04	<.07	E2	<.1	E.02
JAN 2000									
06...	1230	ENVIRONMENTAL	<.2	<.07	E.02	<.07	E1	<.1	E.03
06...	1231	SPLIT REPLICATE	<.2	<.07	E.02	<.07	E1	<.1	E.03
19...	1250	ENVIRONMENTAL	<.2	E.02	E.06	<.07	E3	<.1	E.09
FEB									
07...	1050	ENVIRONMENTAL	<.2	E.01	E.04	<.07	E1	<.1	E.06
14...	1420	ENVIRONMENTAL	<.2	<.07	E.01	<.07	E3	<.1	E.01
MAR									
08...	1040	ENVIRONMENTAL	<.2	E.01	E.03	<.07	<7	<.1	E.04
21...	1410	ENVIRONMENTAL	<.2	<.07	E.04	<.07	<7	<.1	E.04
APR									
04...	1410	ENVIRONMENTAL	<.2	<.07	<.04	<.07	<7	<.1	E.03
17...	1500	ENVIRONMENTAL	<.2	<.07	<.04	<.07	E2	<.1	E.03
MAY									
02...	0910	ENVIRONMENTAL	<.2	<.07	E.02	<.07	E2	<.1	E.04
JUN									
14...	1630	ENVIRONMENTAL	<.2	<.07	<.04	<.07	<7	<.1	E.03
JUL									
10...	0850	ENVIRONMENTAL	<.2	<.07	<.04	<.07	<7	<.1	<.03
AUG									
15...	0930	ENVIRONMENTAL	<.2	<.07	<.04	<.07	<7	<.1	E.01
SEP									
13...	0910	ENVIRONMENTAL	<.2	<.07	<.04	<.07	45	<.1	E.01

DATE	1,1,2-TRI-CHLORO-ETHANE TOTAL	BENZENE UNFLTRD RECOVER	BENZENE 135-TRI-METHYL WATER UNFLTRD REC	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC	ISO-PROPYL-BENZENE WHOLE	BENZENE N-BUTYL WATER UNFLTRD REC	BENZENE N-PROPY WATER UNFLTRD REC	BENZENE O-DI-CHLORO-WATER UNFLTRD REC	BENZENE TOTAL	BROMO-FORM TOTAL
	(µG/L) (34511)	(µG/L) (77222)	(µG/L) (77226)	(µG/L) (34566)	(µG/L) (34571)	(µG/L) (77223)	(µG/L) (77342)	(µG/L) (77224)	(µG/L) (34536)	(µG/L) (34030)	(µG/L) (32104)
OCT 1999											
05...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	<.04	<.06
19...	<.12	<.11	<.09	<.11	<.10	<.06	<.4	<.08	<.10	<.07	<.12
NOV											
03...	<.12	<.11	<.09	<.11	<.10	<.06	<.4	<.08	<.10	<.07	<.12
17...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	E.01	<.06
DEC											
02...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	E.02	<.06
15...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	E.01	<.06
JAN 2000											
06...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	E.02	<.06
06...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	E.02	<.06
19...	<.06	<.06	<.04	<.05	E.01	<.03	<.2	<.04	<.05	E.02	<.06
FEB											
07...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	E.02	<.06
14...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	E.02	<.06
MAR											
08...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	E.01	<.06
21...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	<.04	<.06
APR											
04...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	<.04	<.06
17...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	<.04	<.06
MAY											
02...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	<.04	<.06
JUN											
14...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	<.04	<.06
JUL											
10...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	<.04	<.06
AUG											
15...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	<.04	<.06
SEP											
13...	<.06	<.06	<.04	<.05	<.05	<.03	<.2	<.04	<.05	<.04	<.06

## NESHAMINY CREEK BASIN

## 01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD NEAR NESHAMINY, PA--Continued

## WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	CARBON DI- SULFIDE WATER TOTAL (µG/L) (77041)	CARBON TETRA- CHLO- RIDE TOTAL (µG/L) (32102)	CHLORO- BENZENE TOTAL (µG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (µG/L) (32105)	CHLORO- ETHANE TOTAL (µG/L) (34311)	CHLORO- FORM TOTAL (µG/L) (32106)	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- BUTYL ETHYL UNFLTRD RECOVER (µG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (µG/L) (50005)
OCT 1999											
05...	<.07	<.06	<.03	<.2	<.1	E.03	E.03	<.05	<.2	<.05	<.1
19...	<.14	<.12	<.06	<.4	<.2	E.03	E.07	<.10	<.3	<.11	<.2
NOV											
03...	<.14	<.12	<.06	<.4	<.2	E.02	E.04	<.10	<.3	<.11	<.2
17...	<.07	<.06	<.03	<.2	<.1	E.03	E.07	<.05	<.2	<.05	<.1
DEC											
02...	<.07	<.06	<.03	<.2	<.1	E.03	.11	<.05	<.2	<.05	<.1
15...	<.07	<.06	<.03	<.2	<.1	E.03	E.04	<.05	<.2	<.05	<.1
JAN 2000											
06...	<.07	<.06	<.03	<.2	<.1	E.02	E.09	<.05	<.2	<.05	<.1
06...	<.07	<.06	<.03	<.2	<.1	E.02	E.10	<.05	<.2	<.05	<.1
19...	<.07	E.02	<.03	<.2	<.1	E.07	.29	<.05	<.2	<.05	<.1
FEB											
07...	<.07	<.06	<.03	<.2	<.1	E.03	.21	<.05	<.2	<.05	<.1
14...	<.07	<.06	<.03	<.2	<.1	E.03	E.04	<.05	<.2	<.05	M
MAR											
08...	<.07	<.06	<.03	<.2	<.1	E.03	.20	<.05	<.2	<.05	<.1
21...	<.07	<.06	<.03	<.2	<.1	E.02	.13	<.05	<.2	<.05	<.1
APR											
04...	<.07	<.06	<.03	<.2	<.1	E.03	E.06	<.05	<.2	<.05	<.1
17...	<.07	<.06	<.03	<.2	<.1	E.04	E.08	<.05	<.2	<.05	<.1
MAY											
02...	<.07	<.06	<.03	<.2	<.1	E.04	.16	<.05	<.2	<.05	<.1
JUN											
14...	<.07	<.06	<.03	<.2	<.1	E.04	E.05	<.05	<.2	<.05	<.1
JUL											
10...	<.07	<.06	<.03	<.2	<.1	E.02	E.01	<.05	<.2	<.05	<.1
AUG											
15...	E.01	<.06	<.03	<.2	<.1	E.03	E.04	<.05	<.2	<.05	<.1
SEP											
13...	<.07	<.06	<.03	M	<.1	.13	E.08	E.07	<.2	<.05	<.1

DATE	ETHYL- BENZENE TOTAL (µG/L) (34371)	FREON- 113 WATER UNFLTRD REC (µG/L) (77652)	FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (µG/L) (81607)	ISO- DURENE WATER UNFLTRD RECOVER (µG/L) (50000)	METHYL TERT- BUTYL ETHER REC (µG/L) (78032)	METHYL- CHLO- RIDE TOTAL (µG/L) (34418)	METHYL ENE CHLO- RIDE TOTAL (µG/L) (34423)	METHYL- ETHYL- KETONE WATER TOTAL (µG/L) (81595)	METHYL ISO- BUTYL KETONE WAT. WH. TOTAL (µG/L) (78133)	META/ PARA- XYLENE WATER UNFLTRD REC (µG/L) (85795)
OCT 1999										
05...	<.03	<.06	<.2	<.2	<.2	<.5	<.4	<.2	<.4	<.06
19...	<.06	<.12	<.4	<.4	<.3	<1.0	<.8	<.3	<.7	<.12
NOV										
03...	<.06	<.12	<.4	<.4	E.1	<1.0	E.1	<.3	<.7	<.12
17...	<.03	<.06	<.2	<.2	E.1	E.1	<.4	<.2	<.4	<.06
DEC										
02...	<.03	<.06	<.2	<.2	.2	<.5	<.4	<.2	<.4	E.02
15...	<.03	<.06	<.2	<.2	.3	<.5	<.4	<.2	<.4	<.06
JAN 2000										
06...	<.03	<.06	<.2	<.2	.2	<.5	M	<.2	E.1	<.06
06...	<.03	<.06	<.2	<.2	.2	<.5	M	<.2	E.1	<.06
19...	<.03	<.06	<.2	<.2	E.1	<.5	M	<.2	<.4	<.06
FEB										
07...	<.03	<.06	<.2	<.2	.3	<.5	M	<.2	<.4	<.06
14...	E.02	<.06	<.2	<.2	.5	<.5	<.4	<.2	E.1	E.06
MAR										
08...	<.03	<.06	<.2	<.2	.3	<.5	<.4	<.2	M	E.02
21...	<.03	<.06	<.2	<.2	E.1	<.5	<.4	<.2	<.4	<.06
APR										
04...	<.03	<.06	<.2	<.2	E.1	<.5	<.4	<.2	<.4	<.06
17...	<.03	<.06	<.2	<.2	E.2	<.5	<.4	<.2	<.4	<.06
MAY										
02...	<.03	<.06	<.2	<.2	E.1	<.5	<.4	<.2	<.4	<.06
JUN										
14...	<.03	<.06	<.2	<.2	<.2	<.5	<.4	<.2	<.4	<.06
JUL										
10...	<.03	<.06	<.2	<.2	<.2	<.5	<.4	<.2	<.4	<.06
AUG										
15...	<.03	<.06	<.2	<.2	.2	<.5	<.4	<.2	<.4	<.06
SEP										
13...	<.03	<.06	<.2	<.2	E.1	M	<.4	<.2	<.4	<.06

## NESHAMINY CREEK BASIN

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD NEAR NESHAMINY, PA--Continued

## WATER-COLUMN VOLATILE ORGANIC COMPOUND ANALYSES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NAPHTH- ALENE TOTAL (µG/L) (34696)	O- CHLORO- TOLUENE WATER TOTAL (µG/L) (77275)	O- XYLENE WATER TOTAL (µG/L) (77135)	P-ISO- PROPYL- TOLUENE WATER TOTAL (µG/L) (77356)	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)	TRI- CHLORO- FLUORO- METHANE TOTAL (µG/L) (34488)
OCT 1999										
05...	<.2	<.04	<.04	<.07	<.04	<.1	<.06	<.05	E.04	<.09
19...	<.5	<.08	<.08	<.14	<.08	<.2	<.12	<.05	E.11	<.18
NOV										
03...	<.5	<.08	<.08	<.14	<.08	M	<.12	<.05	E.05	<.18
17...	<.2	<.04	<.04	<.07	<.04	M	<.06	<.05	E.09	<.09
DEC										
02...	<.2	<.04	<.04	<.07	<.04	M	<.06	E.06	.17	<.09
15...	<.2	<.04	<.04	<.07	E.01	M	<.06	<.05	.10	<.09
JAN 2000										
06...	<.2	<.04	<.04	<.07	<.04	M	<.06	E.04	.22	<.09
06...	<.2	<.04	<.04	<.07	<.04	M	<.06	E.04	.24	<.09
19...	<.2	<.04	<.04	<.07	<.04	E.1	<.06	<.05	.81	<.09
FEB										
07...	<.2	<.04	<.04	<.07	<.04	M	<.06	<.05	.58	<.09
14...	<.2	<.04	E.04	<.07	E.01	M	<.06	.13	.10	<.09
MAR										
08...	<.2	<.04	<.04	<.07	E.01	M	<.06	<.05	.44	<.09
21...	<.2	<.04	<.04	<.07	<.04	M	<.06	<.05	.26	<.09
APR										
04...	<.2	<.04	<.04	<.07	<.04	M	<.06	<.05	.15	<.09
17...	<.2	<.04	<.04	<.07	<.04	M	<.06	<.05	.13	<.09
MAY										
02...	<.2	<.04	<.04	<.07	<.04	M	<.06	<.05	.25	<.09
JUN										
14...	<.2	<.04	<.04	<.07	<.04	M	<.06	<.05	E.06	<.09
JUL										
10...	<.2	<.04	<.04	<.07	<.04	<.1	<.06	<.05	E.02	<.09
AUG										
15...	<.2	<.04	<.04	<.07	<.04	M	<.06	<.05	E.05	<.09
SEP										
13...	<.2	<.04	<.04	M	<.04	M	<.06	<.05	E.03	<.09



NESHAMINY CREEK BASIN

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD NEAR NESHAMINY, PA--Continued

WATER-COLUMN PESTICIDE ANALYSES

REMARKS.--Selected samples were analyzed for pesticides using laboratory schedule 2001 (listed in its entirety, with minimum reporting levels on page 463). Only pesticides identified by the analyses in one or more samples are listed in the water-quality tables.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLE TYPE	ACETO- CHLOR, WATER, FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC (µG/L) (46342)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 µ GF, REC (µG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	CAR- BARYL WATER 0.7 µ GF, REC (µG/L) (82680)
OCT 1999								
05...	1120	ENVIRONMENTAL	<.002	<.002	.022	<.002	<.002	E.025
NOV								
03...	0940	ENVIRONMENTAL	<.002	<.002	.016	<.002	<.002	<.007
DEC								
02...	1139	FIELD BLANK	<.002	<.002	<.001	<.002	<.002	<.003
02...	1140	ENVIRONMENTAL	<.002	<.002	.015	<.002	<.002	<.003
JAN 2000								
06...	1230	ENVIRONMENTAL	<.002	<.002	.013	<.002	<.002	E.007
FEB								
07...	1050	ENVIRONMENTAL	<.002	<.002	.013	<.002	<.002	<.003
14...	1420	ENVIRONMENTAL	<.002	<.002	.010	<.002	<.002	<.003
MAR								
08...	1040	ENVIRONMENTAL	<.002	<.002	.017	<.002	<.002	<.003
21...	1410	ENVIRONMENTAL	<.002	<.002	.015	<.002	<.002	E.030
APR								
04...	1410	ENVIRONMENTAL	<.002	.009	.025	E.001	<.002	E.008
17...	1500	ENVIRONMENTAL	<.002	.006	.026	.009	<.002	E.011
17...	1501	SPLIT REPLICATE	<.002	.005	.025	.009	<.002	E.011
MAY								
02...	0910	ENVIRONMENTAL	<.002	<.005	.022	.005	<.002	E.008
17...	0800	ENVIRONMENTAL	.019	.021	.110	.004	<.002	E.082
30...	1550	ENVIRONMENTAL	<.002	.004	.083	E.002	<.002	E.084
JUN								
14...	1630	ENVIRONMENTAL	.013	.034	.123	<.002	<.002	E.014
28...	1320	ENVIRONMENTAL	<.002	.005	.356	<.002	<.002	E.019
JUL								
10...	0850	ENVIRONMENTAL	<.002	<.002	.117	<.002	<.002	E.045
AUG								
01...	1420	ENVIRONMENTAL	<.002	<.002	.160	E.002	<.002	E.12
15...	0930	ENVIRONMENTAL	<.002	<.002	.045	<.002	<.002	E.082
28...	1600	ENVIRONMENTAL	<.002	<.002	.042	.005	<.002	E2.4
SEP								
13...	0910	ENVIRONMENTAL	<.002	<.002	.011	<.002	<.002	E.14

DATE	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)	FONOFOS WATER DISS REC (µG/L) (04095)	LINDANE DIS- SOLVED (µG/L) (39341)
OCT 1999										
05...	<.003	<.004	<.004	E.002	E.016	.018	<.001	<.002	<.003	<.004
NOV										
03...	<.003	<.004	<.004	<.002	E.015	--	<.001	<.002	--	<.004
DEC										
02...	<.003	<.004	<.004	<.002	<.002	<.002	<.001	<.002	<.003	<.004
02...	<.003	<.004	<.004	<.002	E.017	<.002	<.001	<.002	<.003	<.004
JAN 2000										
06...	<.003	<.004	<.004	<.002	E.013	<.002	<.001	<.002	<.003	<.004
FEB										
07...	<.003	<.004	<.004	<.002	E.021	<.002	<.001	<.002	<.003	<.004
14...	<.003	<.004	<.004	<.002	E.008	<.002	<.001	<.002	<.003	<.004
MAR										
08...	<.003	<.004	<.004	<.002	E.025	<.002	<.001	<.002	<.003	<.004
21...	<.003	<.004	<.004	<.002	E.014	E.003	<.001	<.002	<.003	<.004
APR										
04...	<.003	<.004	<.004	<.002	E.022	.008	<.001	<.002	<.003	<.004
17...	<.003	<.004	<.004	<.002	E.018	.059	<.001	<.002	<.003	<.004
17...	<.003	<.004	<.004	<.002	E.017	.060	<.001	<.002	<.003	<.004
MAY										
02...	<.003	<.004	<.004	<.002	E.029	.010	<.001	<.002	<.003	<.004
17...	<.003	<.004	.024	<.002	E.056	.050	<.001	<.002	<.003	<.004
30...	<.003	<.004	<.004	E.001	E.030	.035	<.001	<.002	<.003	<.004
JUN										
14...	<.003	<.004	.076	<.002	E.031	.040	<.001	<.002	<.003	<.004
28...	<.003	<.004	.118	<.002	E.037	.048	<.001	<.002	<.003	.008
JUL										
10...	<.003	<.004	.028	<.002	E.044	.020	<.001	<.002	<.003	<.004
AUG										
01...	E.11	E.005	.035	<.002	E.066	.436	<.001	<.002	<.003	<.004
15...	<.003	<.004	<.004	<.002	E.029	.212	<.001	<.004	<.003	<.004
28...	<.003	<.004	<.020	<.002	E.018	.312	<.001	<.002	<.003	<.004
SEP										
13...	<.003	<.004	<.004	<.002	E.018	.035	<.001	<.002	<.003	<.004

## NESHAMINY CREEK BASIN

01464907 LITTLE NESHAMINY CREEK AT VALLEY ROAD NEAR NESHAMINY, PA--Continued

## WATER-COLUMN PESTICIDE ANALYSES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	LIN- URON WATER FLTRD 0.7 µ (µG/L) (82666)	MALA- THION, DIS- SOLVED (µG/L) (39532)	METHYL- AZIN- PHOS WAT FLT 0.7 µ (µG/L) (82686)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (µG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 µ (µG/L) (82684)	P,P' DDE DISSOLV (µG/L) (34653)	PENDI- METH- ALIN WAT FLT 0.7 µ (µG/L) (82683)	PRO- METON, WATER, DISS, REC (µG/L) (04037)
	OCT 1999								
05...	<.002	<.005	<.001	.017	<.004	<.003	<.006	<.004	.033
NOV									
03...	<.002	<.005	<.001	.030	<.004	<.003	<.006	<.004	E.018
DEC									
02...	<.002	<.005	<.001	<.002	<.004	<.003	<.006	<.004	<.018
02...	<.002	<.005	<.001	.012	<.004	<.003	<.006	<.004	E.014
JAN 2000									
06...	<.002	<.005	<.001	.024	<.004	<.003	<.006	<.004	E.008
FEB									
07...	<.002	<.005	<.001	.008	<.004	<.003	<.006	<.004	E.012
14...	<.002	<.005	<.001	.011	<.004	<.003	<.006	<.004	E.014
MAR									
08...	<.002	<.005	<.001	.013	<.004	<.003	<.006	<.004	E.012
21...	<.002	<.005	<.001	.011	<.004	<.003	<.006	<.004	E.009
APR									
04...	<.002	<.005	<.001	.027	<.004	<.003	<.006	.011	E.011
17...	<.002	<.005	<.001	.034	<.004	<.003	<.006	<.040	<.018
17...	<.002	<.005	<.001	.035	<.004	<.003	<.006	<.040	<.018
MAY									
02...	<.002	<.005	<.001	.026	<.004	<.003	<.006	<.008	E.014
17...	<.002	<.005	<.010	.069	<.004	<.003	<.006	<.004	E.017
30...	<.002	<.005	<.001	.047	<.004	<.003	<.006	<.004	.025
JUN									
14...	<.002	<.005	<.001	.094	<.004	<.003	<.006	<.004	.050
28...	<.002	<.005	<.001	.114	<.004	<.003	<.006	<.004	.031
JUL									
10...	<.002	<.005	<.001	.033	<.004	<.003	<.006	<.004	.021
AUG									
01...	<.002	<.005	<.001	.189	<.004	<.003	<.006	<.004	E.040
15...	<.002	<.005	<.001	.051	<.004	<.003	<.006	<.004	.034
28...	<.002	<.050	<.001	.030	<.004	<.003	<.006	<.006	.148
SEP									
13...	<.002	.007	<.001	.007	<.004	<.003	<.006	<.004	<.018
DATE	PRON- AMIDE WATER FLTRD 0.7 µ (µG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 µ (µG/L) (82679)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 µ (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 µ (µG/L) (82665)	TER- BUTHYL- AZINE, WATER, DISS, REC (µG/L) (04022)	TRIAL- LATE WATER FLTRD 0.7 µ (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 µ (µG/L) (82661)
OCT 1999									
05...	<.003	<.007	<.004	.014	<.010	<.007	<.005	<.001	<.002
NOV									
03...	<.003	<.007	<.004	.012	<.010	<.007	<.005	<.001	<.002
DEC									
02...	<.003	<.007	<.004	<.005	<.010	<.007	<.005	<.001	<.002
02...	<.003	<.007	<.004	.008	<.010	<.007	<.005	<.001	<.002
JAN 2000									
06...	<.003	<.007	<.004	.009	<.010	<.007	<.005	<.001	<.002
FEB									
07...	<.003	<.007	<.004	.007	<.010	<.007	<.005	<.001	<.002
14...	<.003	<.007	<.004	<.005	<.010	<.007	<.005	<.001	.006
MAR									
08...	<.003	<.007	<.004	.008	<.010	<.007	<.005	<.001	<.002
21...	<.003	<.007	<.004	.007	<.010	<.007	--	<.001	E.004
APR									
04...	<.003	E.005	<.004	.013	<.010	<.007	--	<.001	E.002
17...	<.003	<.007	<.004	.019	<.010	<.007	--	<.001	.009
17...	<.003	<.007	<.004	.018	<.010	<.007	--	<.001	.010
MAY									
02...	<.003	<.007	<.004	.012	<.010	<.007	--	<.001	.005
17...	<.003	<.007	<.004	.018	<.010	<.007	--	<.001	.004
30...	<.003	<.007	<.004	.012	<.010	<.007	--	<.001	E.002
JUN									
14...	<.003	<.007	<.004	<.005	<.010	<.007	--	<.001	E.001
28...	<.003	<.007	<.004	.009	<.010	<.007	--	<.001	<.002
JUL									
10...	<.003	<.007	<.004	.007	<.010	<.007	--	<.001	<.002
AUG									
01...	<.003	<.010	<.004	<.005	<.010	<.007	--	<.001	E.003
15...	<.003	<.007	<.004	<.005	<.010	<.007	--	<.001	<.002
28...	<.003	<.007	<.004	.006	<.010	<.007	--	<.001	.006
SEP									
13...	<.003	<.007	<.004	.028	<.010	<.007	--	<.001	E.001