

## SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA  
(Swatara Creek Project)

**LOCATION.**--Lat 40°31'57", long 76°24'09", Schuylkill County, Hydrologic Unit 02050305, on right bank 1.0 mi downstream from Lower Little Swatara Creek, 1.3 mi southwest of Pine Grove, and 1.6 mi upstream from bridge on Interstate Highway 81.

**DRAINAGE AREA.**--116 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1988 to January 1991, October 1991 to current year.

**REVISED RECORDS.**--WDR PA-90-2: 1989.

**GAGE.**--Water-stage recorder. Elevation of gage is 490 ft above sea level, from topographic map.

**REMARKS.**--Records good except those for estimated daily discharges, which are fair. Satellite telemetry at station. Other data for this project presented in tables on pages 350-392.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 1,500 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	0415	*3,330	*11.00	June 26	0500	1,920	8.66

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	533	64	163	122	e90	497	383	158	193	209	271	112
2	305	88	145	119	e90	421	344	158	195	175	695	109
3	216	185	136	121	e85	364	321	141	154	160	517	75
4	230	111	127	134	e85	307	512	133	137	160	536	61
5	286	90	118	147	e80	271	397	131	131	137	256	49
6	212	81	147	112	77	237	339	124	375	120	191	44
7	173	74	146	102	76	213	307	117	243	109	172	43
8	146	71	125	94	74	199	330	110	172	98	129	41
9	133	70	114	92	e70	187	667	106	146	93	107	39
10	276	69	122	234	73	172	538	120	128	94	93	38
11	286	67	127	337	84	240	467	157	117	88	82	39
12	219	62	115	267	92	538	416	118	197	78	76	40
13	186	60	108	235	85	368	355	159	246	75	76	213
14	187	60	352	e180	264	320	316	309	416	76	70	89
15	154	56	648	e150	347	284	291	166	290	198	66	98
16	137	54	465	e140	281	262	276	136	263	182	67	68
17	125	54	346	e120	278	511	314	123	204	106	54	58
18	130	52	281	e125	246	394	318	115	209	88	54	52
19	115	50	238	e110	222	346	264	169	251	80	53	144
20	124	51	244	e110	189	310	239	252	194	81	49	259
21	117	53	267	e105	168	933	266	236	204	71	46	139
22	107	52	214	e100	164	2650	296	229	438	77	46	98
23	101	52	190	e100	202	1230	256	337	267	63	47	81
24	94	52	177	e95	285	813	235	672	208	60	56	78
25	88	107	159	e95	405	627	221	770	294	58	48	72
26	82	139	159	e90	557	521	208	482	1360	56	42	109
27	80	522	154	e90	484	454	215	361	591	60	41	92
28	76	314	143	e95	958	1000	200	305	383	55	82	74
29	72	233	137	e100	659	668	187	260	308	51	55	65
30	68	192	130	e95	---	535	169	222	265	283	48	58
31	65	---	128	e90	---	447	---	197	---	211	45	---
TOTAL	5123	3185	6125	4106	6770	16319	9647	7073	8579	3452	4170	2537
MEAN	165	106	198	132	233	526	322	228	286	111	135	84.6
MAX	533	522	648	337	958	2650	667	770	1360	283	695	259
MIN	65	50	108	90	70	172	169	106	117	51	41	38
CFSM	1.42	.92	1.70	1.14	2.01	4.54	2.77	1.97	2.47	.96	1.16	.73
IN.	1.64	1.02	1.96	1.32	2.17	5.23	3.09	2.27	2.75	1.11	1.34	.81

## STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF DAILY RECORD, BY WATER YEAR (WY)

MEAN	134	218	251	294	253	406	334	272	187	124	78.7	81.3
MAX	361	396	745	683	555	846	874	756	317	378	155	178
(WY)	1997	1993	1997	1996	1998	1994	1993	1989	1989	1989	1994	1999
MIN	34.3	34.6	27.4	91.9	104	185	135	91.9	46.6	23.1	28.0	26.1
(WY)	1998	1999	1999	1992	1993	1990	1995	1999	1999	1999	1999	1995

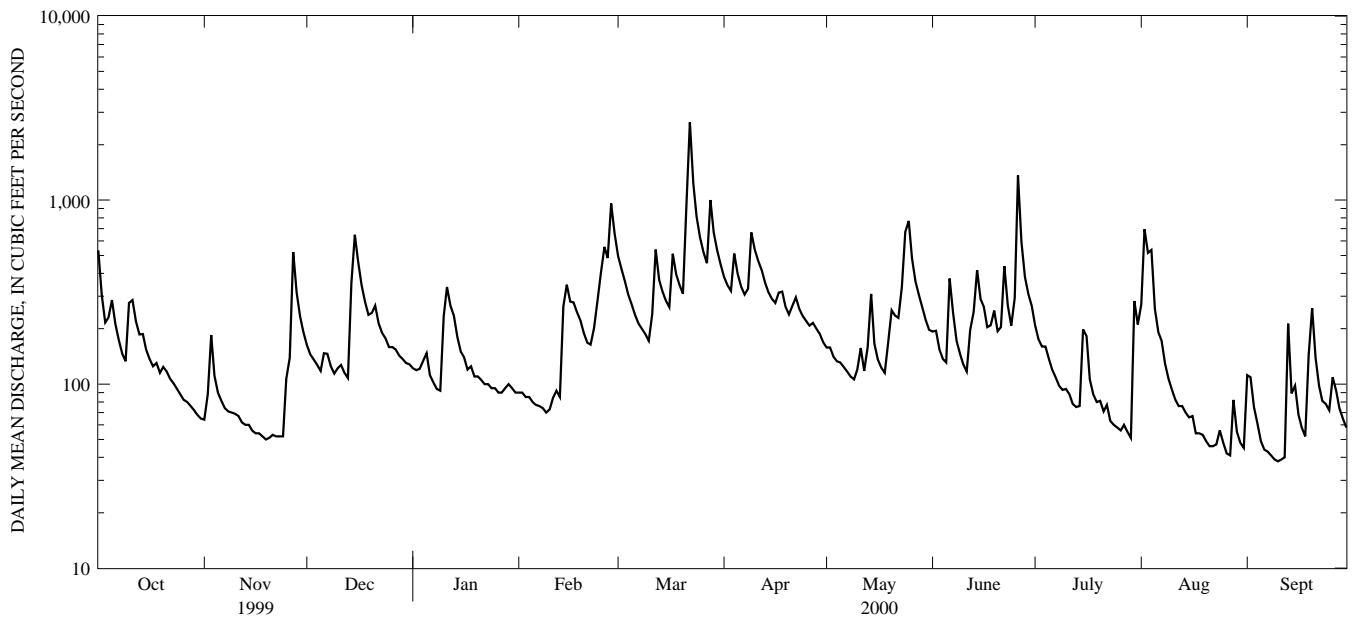
e Estimated.

SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		FOR PERIOD OF DAILY RECORD	
ANNUAL TOTAL	57239		77086			
ANNUAL MEAN	157		211		216	
HIGHEST ANNUAL MEAN					273	
LOWEST ANNUAL MEAN					127	
HIGHEST DAILY MEAN	2240	Jan 24	2650	Mar 22	4130	Nov 28 1993
LOWEST DAILY MEAN	14	Aug 7	38	Sep 10	14	Aug 7 1999
ANNUAL SEVEN-DAY MINIMUM	16	Aug 1	41	Sep 6	16	Aug 1 1999
INSTANTANEOUS PEAK FLOW			3330	Mar 22	a5880	Nov 28 1993
INSTANTANEOUS PEAK STAGE			11.00	Mar 22	14.17	Nov 28 1993
INSTANTANEOUS LOW FLOW			37	Sep 10	14	Aug 8 1999
ANNUAL RUNOFF (CFSM)	1.35		1.82		1.86	
ANNUAL RUNOFF (INCHES)	18.36		24.72		25.29	
10 PERCENT EXCEEDS	304		418		458	
50 PERCENT EXCEEDS	115		144		134	
90 PERCENT EXCEEDS	21		57		38	

a From rating curve extended above 3,300 ft<sup>3</sup>/s on basis of step-backwater analysis.



1-YEAR HYDROGRAPH  
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000

SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued  
(Swatara Creek Project)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1996 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 2000 to current year.

pH: March 2000 to current year.

WATER TEMPERATURE: March 2000 to current year.

INSTRUMENTATION.--Water-quality monitor (in situ system).

REMARKS.--Specific conductance records rated good except for period July 1-4, which is fair. pH and water temperature records rated good. Interruptions in the record were due to malfunctions in the instrumentation. Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods. Other data for this project presented in tables on pages 350-392.

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

DATE	TIME	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER FIELD (STAND-ARD) UNITS) (00400)	PH WATER WHOLE LAB (STAND-ARD) UNITS) (00403)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT											
01...	0001	80020	1028	776	--	--	7.2	--	133	--	7.83
18...	1100	80020	1028	134	97	10.4	6.8	7.2	142	12.0	11.2
20...	1630	9813	1028	131	97	10.6	5.9	--	150	11.4	--
DEC											
06...	0900	80020	1028	138	94	11.2	6.4	7.2	121	7.8	9.16
14...	1300	80020	1028	164	--	--	6.0	6.9	135	--	10.0
14...	1400	80020	1028	197	--	--	6.2	6.7	131	--	9.73
14...	1500	80020	1028	281	--	--	6.3	6.7	122	--	8.62
14...	1600	80020	1028	444	--	--	6.3	6.7	110	--	8.20
14...	1700	80020	1028	619	--	--	6.4	7.0	107	--	7.94
14...	1800	80020	1028	765	--	--	6.4	6.9	110	--	8.31
15...	0001	80020	1028	762	--	--	6.5	6.3	98	--	7.31
15...	0600	80020	1028	702	7	--	--	6.7	98	--	7.46
15...	1200	80020	1028	644	--	--	6.7	6.8	99	--	7.40
15...	1800	80020	1028	590	--	--	6.7	6.8	101	--	7.50
16...	0001	9813	1028	543	--	--	6.7	--	103	--	--
16...	0600	80020	1028	503	--	--	6.7	7.1	104	--	7.80
17...	0001	80020	1028	394	--	--	6.8	7.2	107	--	8.06
17...	1800	80020	1028	325	--	--	6.8	7.3	111	--	8.08
18...	1200	80020	1028	281	--	--	6.8	7.2	113	--	8.34
19...	0600	80020	1028	246	--	--	6.8	7.1	118	--	8.74
JAN											
19...	0830	9813	1028	172	99	14.3	5.9	--	130	.2	9.84
MAR											
03...	0830	9813	1028	372	96	12.4	6.2	--	123	4.7	7.19
16...	1800	9813	1028	254	--	--	6.3	--	114	--	8.65
17...	0001	9813	1028	321	--	--	6.5	--	111	--	8.53
17...	0200	9813	1028	402	--	--	6.7	--	110	--	8.59
17...	0600	9813	1028	543	--	--	6.7	--	101	--	7.95
17...	1200	9813	1028	596	--	--	6.3	--	100	--	7.54
18...	0001	9813	1028	438	--	--	6.5	--	99	--	7.71
18...	1200	9813	1028	389	--	--	6.7	--	100	--	7.80
19...	0001	9813	1028	367	--	--	6.8	--	103	--	8.15
19...	1800	9813	1028	339	--	--	6.7	--	104	--	8.45
29...	1345	9813	1028	651	--	--	6.6	--	118	--	--
APR											
04...	0045	9813	1028	360	--	--	6.7	6.2	130	12.5	9.36
04...	0600	9813	1028	438	--	--	6.7	6.2	120	12.4	7.96
04...	1200	9813	1028	596	--	--	6.7	6.2	114	12.0	7.26
04...	1800	9813	1028	569	--	--	6.7	6.2	109	11.9	7.02
05...	0001	9813	1028	481	--	--	6.7	6.2	113	9.9	8.09
05...	0600	9813	1028	422	--	--	6.7	6.2	116	8.5	8.41
05...	1200	9813	1028	389	--	--	6.7	6.2	120	8.5	8.80
17...	0900	9813	1028	292	102	10.8	6.6	6.3	130	11.8	8.13
MAY											
19...	0900	9813	1028	128	--	--	7.0	6.4	145	16.2	11.1
19...	1200	9813	1028	190	--	--	7.0	6.4	137	16.1	10.3
19...	1800	9813	1028	226	--	--	7.0	6.4	130	15.6	10.4
20...	0001	9813	1028	192	--	--	6.9	6.4	132	14.4	9.17
20...	0600	9813	1028	179	--	--	6.9	6.4	128	13.3	8.88
20...	1200	9813	1028	273	--	--	6.9	6.4	130	12.5	9.18
20...	1800	9813	1028	312	--	--	6.9	6.4	119	12.9	8.36
21...	0600	9813	1028	250	--	--	6.9	6.4	117	12.6	8.64
22...	1200	9813	1028	190	--	--	6.9	--	127	13.5	--
22...	1300	9813	1028	188	--	--	6.9	6.6	127	13.5	8.58
22...	1800	9813	1028	240	--	--	6.9	6.6	121	13.5	7.90
23...	0001	9813	1028	377	--	--	6.9	6.6	113	13.2	7.99
23...	0600	9813	1028	339	--	--	6.9	6.6	112	13.0	8.15
23...	1800	9813	1028	316	--	--	6.9	6.5	114	13.7	8.20
24...	0001	9813	1028	399	--	--	6.9	6.5	116	13.8	7.91
24...	0200	9813	1028	531	--	--	6.8	6.6	112	13.8	7.30
24...	0600	9813	1028	702	--	--	7.0	6.6	105	13.4	7.18
24...	1000	9813	1028	658	--	--	7.0	6.6	102	13.9	6.89

## SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	ACIDITY (MG/L AS CAC03) (00435)	ACIDITY TOTAL HEATED (MG/L AS CAC03) (70508)	ANC WATER UNFLTRD FET FIELD MG/L AS CAC03 (00410)
OCT										
01...	8.15	3.70	3.95	--	--	4.2	4.2	.0	.00	--
18...	--	6.63	--	--	--	6.3	--	.0	--	--
20...	--	--	--	--	--	--	--	--	--	--
DEC										
06...	--	5.35	--	--	--	5.0	--	5.9	--	13
14...	--	5.42	--	--	--	5.7	--	--	--	--
14...	--	5.20	--	--	--	5.6	--	--	--	--
14...	--	4.80	--	--	--	4.8	--	--	--	--
14...	--	4.19	--	--	--	4.4	--	--	--	--
14...	--	4.00	--	--	--	4.2	--	--	--	--
14...	--	4.20	--	--	--	4.5	--	--	--	--
15...	--	3.32	--	--	--	4.0	--	--	--	--
15...	--	3.59	--	--	--	4.1	--	--	--	--
15...	--	3.61	--	--	--	4.1	--	--	--	--
15...	--	3.77	--	--	--	4.0	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	3.80	--	--	--	4.2	--	--	--	--
17...	--	4.07	--	--	--	4.3	--	--	--	--
17...	--	4.41	--	--	--	4.4	--	--	--	--
18...	--	4.50	--	--	--	4.3	--	--	--	--
19...	--	4.76	--	--	--	4.5	--	--	--	--
JAN										
19...	10.1	6.17	6.37	1.2	1.2	5.5	5.8	--	.00	--
MAR										
03...	7.53	4.70	4.93	1.2	1.2	4.9	5.1	--	.00	--
16...	9.01	5.13	5.40	--	--	5.7	5.9	--	.00	--
17...	8.68	5.14	5.23	--	--	5.9	6.3	--	.00	--
17...	8.94	5.02	5.18	--	--	6.0	6.3	--	.00	--
17...	7.40	4.44	4.10	--	--	5.9	5.5	.0	.00	--
17...	7.28	4.05	3.94	--	--	5.6	5.4	--	.00	--
18...	8.04	4.27	4.38	--	--	5.8	5.6	--	.00	--
18...	7.91	4.51	4.60	--	--	5.6	5.6	--	.00	--
19...	8.31	4.71	4.81	--	--	5.4	5.6	.0	.00	--
19...	8.15	5.07	4.91	--	--	5.5	5.3	.0	.00	--
29...	--	--	--	--	--	--	--	--	--	--
APR										
04...	9.61	5.95	6.14	--	--	5.0	4.9	--	.00	--
04...	8.13	5.20	5.34	--	--	4.8	4.8	--	.00	--
04...	7.72	4.44	4.73	--	--	4.5	4.7	.0	.00	--
04...	7.37	4.27	4.50	--	--	4.3	4.6	.0	.00	--
05...	8.22	4.80	4.84	--	--	4.7	4.4	--	.00	--
05...	8.55	5.13	5.24	--	--	4.8	4.7	--	.00	--
05...	10.9	5.40	6.11	--	--	4.8	5.1	--	.00	--
17...	8.39	6.01	6.17	--	--	4.5	4.4	--	3.6	--
MAY										
19...	11.1	6.55	6.93	--	--	6.0	5.8	--	.00	--
19...	10.3	6.35	6.49	--	--	5.5	5.5	--	.00	--
19...	10.4	6.23	6.32	--	--	5.6	5.8	--	.00	--
20...	9.25	5.47	5.60	--	--	5.2	5.2	--	.00	--
20...	9.52	5.42	5.80	--	--	5.2	5.5	--	.00	--
20...	9.33	5.60	5.81	--	--	5.2	5.2	--	.00	--
20...	8.44	4.87	4.94	--	--	4.8	4.8	--	.00	--
21...	8.51	5.07	4.95	--	--	5.1	4.9	--	.00	--
22...	--	--	--	--	--	--	--	--	--	--
22...	8.72	5.03	5.02	--	--	5.1	5.1	--	.00	--
22...	7.99	4.45	4.50	--	--	4.7	4.6	--	.00	--
23...	8.25	4.38	4.56	--	--	4.4	4.6	--	.00	--
23...	8.31	4.54	4.63	--	--	4.6	4.6	--	.00	--
23...	8.62	4.69	4.98	--	--	4.6	4.7	--	.00	--
24...	8.40	4.41	4.78	--	--	4.1	4.3	--	.00	--
24...	7.64	3.84	4.08	--	--	3.9	4.0	--	.00	--
24...	7.97	3.71	4.25	--	--	4.0	4.3	--	.00	--
24...	7.41	3.58	3.94	--	--	3.8	4.0	--	.00	--

## SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	ANC WATER UNFLTRD FET LAB MG/L AS CACO3 (00417)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXID- ATION RED- UCTION POTEN- TIAL (MV) (00090)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)
OCT										
01...	12	7.0	20.1	--	--	--	--	--	18	<200
18...	--	8.6	36.4	--	--	--	--	384	--	23
20...	--	--	--	--	--	--	--	396	--	--
DEC										
06...	--	7.0	32.3	--	--	--	--	434	--	16
14...	--	7.1	30.4	--	--	--	--	--	--	47
14...	--	7.5	32.1	--	--	--	--	--	--	27
14...	--	7.1	29.2	--	--	--	--	--	--	21
14...	--	6.4	24.3	--	--	--	--	--	--	28
14...	--	6.2	22.1	--	--	--	--	--	--	27
14...	--	6.4	23.4	--	--	--	--	--	--	40
15...	--	6.4	19.3	--	--	--	--	--	--	46
15...	--	6.4	17.2	--	--	--	--	--	--	38
15...	--	6.3	16.6	--	--	--	--	--	--	30
15...	--	6.3	17.0	--	--	--	--	--	--	23
16...	--	--	--	--	--	--	--	--	--	--
16...	--	6.2	17.6	--	--	--	--	--	--	15
17...	--	6.4	19.4	--	--	--	--	--	--	19
17...	--	6.5	21.8	--	--	--	--	--	--	20
18...	--	6.5	24.0	--	--	--	--	--	--	16
19...	--	6.7	25.7	--	--	--	--	--	--	16
JAN										
19...	11	7.1	37.0	--	--	--	--	422	24	<200
MAR										
03...	8	7.8	27.9	--	--	--	--	396	18	<200
16...	10	8.2	28.2	--	--	--	--	--	6	<200
17...	10	8.4	27.0	--	--	--	--	--	8	<200
17...	11	8.5	25.9	--	--	--	--	--	14	<200
17...	11	8.8	21.8	--	--	--	--	--	32	1930
17...	10	8.9	20.8	--	--	--	--	--	18	<200
18...	10	8.4	20.9	--	--	--	--	--	<2	<200
18...	9	8.2	21.5	--	--	--	--	--	8	<200
19...	10	8.0	22.6	--	--	--	--	--	64	<200
19...	9	8.0	24.3	--	--	--	--	--	6	<200
29...	--	.5	--	--	--	--	--	--	--	--
APR										
04...	8	6.6	35.7	.06	1.3	--	.020	--	20	<200
04...	8	6.1	31.6	.05	1.3	--	.020	--	18	<200
04...	8	6.2	28.0	.03	1.2	--	.030	--	20	<200
04...	9	6.2	26.0	.02	1.2	--	.020	--	<2	<200
05...	9	6.0	27.5	<.02	1.2	--	.020	--	16	<200
05...	8	6.3	29.2	.03	1.2	--	.020	--	28	<200
05...	8	6.6	30.7	.02	1.2	--	.020	--	12	<200
17...	8	--	36.4	.07	1.3	.81	.040	432	18	<200
MAY										
19...	14	6.4	37.4	.03	1.3	.88	.040	--	6	<200
19...	14	6.5	37.7	.03	1.3	.87	.040	--	<2	<200
19...	15	6.7	33.5	.03	1.3	.84	.060	--	20	<200
20...	14	6.3	30.9	.03	1.3	.87	.050	--	12	<200
20...	13	6.6	32.0	.03	1.2	.83	.040	--	6	<200
20...	14	6.2	32.1	.04	1.2	.76	.050	--	8	<200
20...	13	6.3	26.9	.04	1.2	.79	.050	--	<2	<200
21...	13	7.3	26.6	.06	1.3	.84	.030	--	<2	264
22...	--	--	--	--	--	--	--	--	--	--
22...	15	6.2	25.2	.03	1.6	1.11	.040	--	16	<200
22...	15	5.5	21.3	.04	1.8	1.13	.050	--	36	<200
23...	15	5.8	21.7	.06	1.6	1.08	.050	--	24	<200
23...	15	5.6	21.6	.04	1.6	1.14	.040	--	18	<200
23...	13	5.7	23.7	.06	1.9	1.24	.060	--	44	<200
24...	14	5.8	23.4	.08	1.9	1.19	.060	--	72	<200
24...	14	5.5	19.1	.05	2.0	1.17	.070	--	82	<200
24...	15	5.3	18.6	.05	2.0	1.16	.070	--	84	<200
24...	14	5.3	17.8	.04	1.7	1.13	.060	--	34	<200

## SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (µG/L AS AL) (01105)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COBALT, TOTAL RECOV- ERABLE (µG/L AS CO) (01037)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	COPPER, TOTAL RECOV- ERABLE (µG/L AS CU) (01042)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (µG/L AS FE) (01045)
OCT										
01...	1140	--	--	--	<50	<50	<10	<10	40	1550
18...	--	--	--	--	--	--	--	--	110	--
20...	--	--	--	--	--	--	--	--	--	--
DEC										
06...	--	--	--	--	--	--	--	--	80	--
14...	--	21	<8.0	<14.0	<13	--	<10	--	20	--
14...	--	19	<8.0	<14.0	<13	--	<10	--	20	--
14...	--	18	<8.0	<14.0	<13	--	<10	--	30	--
14...	--	18	<8.0	<14.0	<13	--	<10	--	20	--
14...	--	18	<8.0	<14.0	<13	--	<10	--	30	--
14...	--	20	<8.0	<14.0	<13	--	<10	--	30	--
15...	--	18	<8.0	<14.0	<13	--	<10	--	30	--
15...	--	20	<8.0	<14.0	<13	--	<10	--	40	--
15...	--	20	<8.0	<14.0	<13	--	<10	--	30	--
15...	--	22	<8.0	<14.0	<13	--	<10	--	30	--
16...	--	--	--	--	--	--	--	--	--	--
16...	--	24	<8.0	<14.0	<13	--	<10	--	30	--
17...	--	25	<8.0	<14.0	<13	--	<10	--	30	--
17...	--	27	<8.0	<14.0	<13	--	<10	--	30	--
18...	--	26	<8.0	<14.0	<13	--	<10	--	40	--
19...	--	27	<8.0	<14.0	<13	--	<10	--	30	--
JAN										
19...	703	--	--	--	--	--	--	--	220	1670
MAR										
03...	393	--	--	--	--	--	--	--	400	1330
16...	<200	--	--	--	<50	<50	11	13	140	490
17...	446	--	--	--	<50	<50	13	118	150	770
17...	1090	--	--	--	<50	<50	19	22	140	2400
17...	264	--	--	--	<50	60	21	71	280	310
17...	1860	--	--	--	<50	<50	10	20	150	1530
18...	1740	--	--	--	<50	<50	<10	26	180	980
18...	370	--	--	--	<50	<50	<10	12	200	600
19...	352	--	--	--	<50	<50	<10	21	240	740
19...	227	--	--	--	<50	<50	17	<10	140	590
29...	--	--	--	--	--	--	--	--	--	--
APR										
04...	761	--	--	--	<50	<50	<10	<10	110	1150
04...	854	--	--	--	<50	<50	<10	<10	100	1480
04...	1000	--	--	--	<50	<50	<10	<10	100	1690
04...	592	--	--	--	<50	<50	<10	<10	120	950
05...	456	--	--	--	<50	<50	<10	<10	110	700
05...	405	--	--	--	<50	<50	<10	<10	150	630
05...	417	--	--	--	<50	<50	<10	12	140	1440
17...	278	--	--	--	<50	<50	<10	<10	150	800
MAY										
19...	666	--	--	--	<50	<50	<10	<10	40	990
19...	495	--	--	--	<50	<50	<10	<10	50	780
19...	1210	--	--	--	<50	<50	<10	<10	50	1790
20...	905	--	--	--	<50	<50	<10	<10	60	1760
20...	446	--	--	--	<50	<50	<10	<10	80	900
20...	1160	--	--	--	<50	<50	<10	<10	70	1600
20...	638	--	--	--	<50	<50	<10	<10	80	1020
21...	<200	--	--	--	<50	<50	<10	<10	60	80
22...	--	--	--	--	--	--	--	--	--	--
22...	715	--	--	--	<50	<50	<10	<10	80	1070
22...	1270	--	--	--	<50	<50	<10	<10	100	1590
23...	868	--	--	--	<50	<50	23	<10	100	1200
23...	462	--	--	--	<50	<50	<10	<10	80	790
23...	1630	--	--	--	<50	<50	<10	<10	90	2370
24...	2500	--	--	--	<50	<50	<10	11	90	4200
24...	2540	--	--	--	<50	<50	<10	10	100	4130
24...	3130	--	--	--	<50	<50	<10	14	100	4570
24...	1850	--	--	--	<50	<50	<10	<10	100	2450

## SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN) (01055)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI) (01067)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)
OCT										
01...	<1	2	--	58	211	<50	<50	--	20	34
18...	--	--	--	231	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
DEC										
06...	--	--	--	222	--	--	--	--	--	--
14...	<100	--	E3.1	187	--	<40	--	47.0	40	--
14...	<100	--	E3.3	116	--	<40	--	46.9	27	--
14...	<100	--	E2.8	97	--	<40	--	44.6	21	--
14...	<100	--	E2.5	61	--	<40	--	43.4	E10	--
14...	<100	--	E2.4	52	--	<40	--	40.6	<20	--
14...	<100	--	E2.5	52	--	<40	--	41.2	<20	--
15...	<100	--	<3.9	42	--	E17	--	34.4	E10	--
15...	<100	--	<3.9	59	--	<40	--	37.0	E12	--
15...	<100	--	<3.9	66	--	<40	--	37.9	<20	--
15...	<100	--	E1.9	79	--	<40	--	39.9	E17	--
16...	--	--	--	--	--	--	--	--	--	--
16...	<100	--	E2.3	84	--	<40	--	40.5	E13	--
17...	<100	--	E2.0	103	--	<40	--	41.0	E13	--
17...	<100	--	E2.2	130	--	<40	--	43.4	E16	--
18...	<100	--	E3.7	159	--	<40	--	42.5	E19	--
19...	<100	--	E2.5	182	--	<40	--	43.6	E10	--
JAN										
19...	--	--	--	285	363	--	--	--	--	--
MAR										
03...	--	--	--	320	355	--	--	--	--	--
16...	<1	<1	--	220	239	<50	<50	--	76	32
17...	<1	2	--	224	257	<50	<50	--	33	35
17...	<1	2	--	212	363	<50	<50	--	29	48
17...	1	<1	--	278	259	<50	60	--	51	69
17...	<1	2	--	153	197	<50	<50	--	27	61
18...	<1	1	--	186	221	<50	<50	--	28	63
18...	<1	2	--	183	194	<50	<50	--	28	27
19...	<1	<1	--	190	207	<50	<50	--	25	31
19...	<1	<1	--	213	215	<50	<50	--	27	25
29...	--	--	--	--	--	--	--	--	--	--
APR										
04...	<1	1	--	283	319	<50	<50	--	40	51
04...	<1	2	--	239	304	<50	<50	--	31	43
04...	<1	2	--	206	287	<50	<50	--	23	39
04...	<1	1	--	198	239	<50	<50	--	25	34
05...	<1	<1	--	234	254	<50	<50	--	33	170
05...	<1	<1	--	245	266	<50	<50	--	35	44
05...	<1	<1	--	260	315	<50	<50	--	38	58
17...	1	2	--	289	304	<50	<50	--	36	37
MAY										
19...	<1	<1	--	121	258	<50	<50	--	21	28
19...	<1	<1	--	80	254	<50	<50	--	18	31
19...	<1	2	--	57	288	<50	<50	--	18	35
20...	<1	1	--	74	232	<50	<50	--	14	26
20...	<1	<1	--	97	202	<50	<50	--	15	24
20...	<1	2	--	137	285	<50	<50	--	16	39
20...	<1	<1	--	144	219	<50	<50	--	14	26
21...	<1	<1	--	213	168	<50	<50	--	22	17
22...	--	--	--	--	--	--	--	--	--	--
22...	<1	1	--	154	203	<50	<50	--	16	23
22...	<1	2	--	99	215	<50	<50	--	15	27
23...	<1	2	--	116	195	<50	<50	--	17	25
23...	<1	<1	--	125	185	<50	<50	--	15	21
23...	<1	3	--	142	284	<50	<50	--	15	34
24...	<1	4	--	146	383	<50	<50	--	11	52
24...	<1	5	--	129	324	<50	<50	--	11	40
24...	<1	4	--	124	345	<50	<50	--	13	43
24...	<1	3	--	123	232	<50	<50	--	10	28

## SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)
JUN												
05...	1230	9813	1028	136	100	10.2	6.9	6.4	148	15.5	13.4	13.4
06...	0215	9813	1028	168	--	--	6.9	6.1	139	14.5	8.72	8.62
06...	0600	9813	1028	271	--	--	6.8	6.1	132	13.8	8.15	8.50
06...	0915	9813	1028	514	--	--	6.8	6.2	118	13.5	7.42	8.02
06...	1200	9813	1028	569	--	--	6.9	6.1	109	13.6	6.91	7.30
06...	1800	9813	1028	412	--	--	6.9	6.1	109	14.0	6.79	6.93
07...	1200	9813	1028	240	--	--	7.0	--	122	14.9	--	--
13...	1600	9813	1028	207	--	--	6.8	6.3	134	17.0	9.57	9.70
JUL												
14...	2345	9813	1028	--	--	--	--	6.3	--	--	11.0	11.8
15...	0600	9813	1028	--	--	--	--	6.2	--	--	12.1	11.7
15...	0800	9813	1028	--	--	--	6.9	6.8	107	--	1.95	.41
15...	1200	9813	1028	--	--	--	--	6.2	--	--	11.4	11.2
15...	1800	9813	1028	--	--	--	--	6.9	--	--	9.34	9.91
16...	0001	9813	1028	--	--	--	--	6.2	--	--	7.02	8.60
16...	0600	9813	1028	--	--	--	--	6.2	--	--	8.62	9.18
16...	1200	9813	1028	--	--	--	--	6.3	--	--	9.72	10.6
30...	0800	9813	1028	56	--	--	--	6.5	115	--	12.7	12.6
30...	1000	9813	1028	271	--	--	--	6.4	115	--	10.9	11.1
30...	1200	9813	1028	404	--	--	--	6.3	112	--	9.84	11.1
30...	1600	9813	1028	462	--	--	--	6.5	102	--	9.32	11.3
30...	1800	9813	1028	520	--	--	--	6.4	95	--	7.80	7.51
31...	0001	9813	1028	358	--	--	--	6.5	83	--	7.36	7.49
31...	1200	9813	1028	200	--	--	--	6.6	108	--	8.62	10.3
AUG												
01...	0001	9813	1028	--	--	--	--	6.6	--	--	9.86	9.60
01...	1200	9813	1028	138	--	--	6.6	6.5	112	21.8	8.82	9.09
01...	1800	9813	1028	144	--	--	6.6	6.4	116	23.0	6.72	7.26
01...	1900	9813	1028	147	--	--	6.9	6.4	128	22.5	6.21	6.91
01...	2000	9813	1028	230	--	--	6.7	6.5	--	21.6	6.73	7.23
02...	0930	9813	1028	722	92	8.3	6.7	7.0	99	20.0	7.35	7.14
02...	1200	9813	1028	623	--	--	6.7	6.4	97	20.2	6.86	7.27
03...	0600	9813	1028	298	--	--	6.7	6.3	109	20.6	5.88	6.24
03...	1600	9813	1028	248	--	--	6.6	6.4	114	21.1	6.87	7.82
03...	1715	9813	1028	367	--	--	6.6	6.4	113	21.2	7.61	8.55
03...	1800	9813	1028	497	--	--	6.4	6.4	113	20.8	7.99	8.50
16...	0315	9813	1028	55	--	--	7.2	6.4	175	--	13.4	13.1
16...	0400	9813	1028	80	--	--	7.2	6.4	163	--	13.4	13.2
16...	0400	9813	1028	80	--	--	7.2	6.4	163	--	13.4	13.2
16...	0600	9813	1028	101	--	--	7.2	6.5	159	--	13.0	13.5
16...	0600	9813	1028	101	--	--	7.2	6.5	159	--	13.0	13.5
16...	0800	9813	1028	95	--	--	7.2	6.5	159	--	13.2	13.1
16...	0800	9813	1028	95	--	--	7.2	6.5	159	--	13.2	13.1
16...	1300	9813	1028	84	--	--	7.2	6.5	166	5.0	13.7	13.8
16...	1300	9813	1028	84	--	--	7.2	6.5	166	5.0	13.7	13.8
SEP												
13...	0930	9813	1028	262	96	8.8	7.1	6.5	141	19.2	10.7	11.8



## SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	ACIDITY (MG/L AS CAC03) (00435)	ACIDITY TOTAL HEATED (MG/L AS CAC03) (70508)	ANC WATER UNFLTRD FET LAB MG/L AS CAC03 (00417)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
JUN											
05...	9.01	8.94	--	--	5.8	5.5	--	.00	11	6.8	56.4
06...	5.83	5.64	--	--	4.6	4.6	--	.00	12	6.6	34.4
06...	5.30	5.60	--	--	4.4	4.5	--	.00	12	6.5	32.5
06...	4.51	4.90	--	--	4.2	4.3	--	.00	13	6.2	27.1
06...	4.01	4.27	--	--	4.2	4.2	--	.00	12	6.1	23.8
06...	3.92	3.99	--	--	4.0	3.9	--	.80	11	6.0	24.2
07...	--	--	--	--	--	--	--	--	--	--	--
13...	5.54	5.63	1.4	1.5	5.2	5.4	.0	.00	14	6.7	33.1
JUL											
14...	6.93	7.52	--	--	5.5	6.0	--	.00	15	7.2	43.2
15...	7.71	7.62	--	--	5.9	5.7	--	.00	14	7.4	46.5
15...	1.17	.40	--	--	1.1	.7	.0	.00	44	1.6	6.6
15...	7.09	6.98	--	--	5.5	5.3	--	.00	13	7.5	39.4
15...	5.56	6.04	--	--	4.3	4.2	--	.00	14	6.0	31.1
16...	3.48	4.61	--	--	3.3	3.5	--	.00	14	4.7	18.7
16...	4.39	5.12	--	--	4.0	4.1	--	3.2	14	5.9	22.8
16...	4.80	5.40	--	--	4.8	5.1	--	.20	14	7.0	28.1
30...	8.08	8.06	--	--	5.8	5.6	--	.00	16	6.9	48.6
30...	6.66	6.70	--	--	4.7	4.4	--	2.4	14	5.5	39.2
30...	5.45	5.90	--	--	3.9	3.8	--	10	15	5.1	31.0
30...	5.09	5.87	--	--	3.9	4.1	--	.00	15	5.2	30.5
30...	4.11	4.08	--	--	3.6	3.4	--	2.2	15	4.3	17.9
31...	3.84	4.03	--	--	3.4	3.4	--	.00	16	4.2	17.1
31...	4.51	5.34	--	--	4.4	5.3	--	.00	18	7.2	28.2
AUG											
01...	5.20	5.39	--	--	5.2	5.0	--	.00	18	6.2	26.3
01...	4.68	5.60	--	--	4.6	4.2	--	.00	16	5.0	16.9
01...	3.29	4.51	--	--	3.5	3.3	--	2.0	14	4.2	13.9
01...	2.96	3.77	--	--	3.1	3.1	--	4.4	15	4.1	13.0
01...	3.18	3.69	--	--	3.2	3.4	--	.00	15	4.8	13.4
02...	3.83	4.31	2.5	2.0	3.7	3.5	--	.00	16	4.9	14.8
02...	3.47	3.79	--	--	3.1	3.4	--	.00	14	4.8	15.3
03...	2.74	3.24	--	--	2.6	2.4	--	10	11	3.4	9.6
03...	3.31	3.78	--	--	3.2	3.6	--	.00	14	5.3	14.8
03...	3.72	4.25	--	--	3.6	4.1	--	.00	15	5.8	16.0
03...	4.08	4.42	--	--	3.9	4.2	--	.00	15	6.3	18.1
16...	7.60	7.35	--	--	6.8	6.5	--	.00	16	7.8	41.9
16...	7.43	7.56	--	--	6.6	6.8	--	.00	16	7.8	41.6
16...	7.43	7.56	--	--	6.6	6.8	--	.00	16	7.8	41.6
16...	6.97	7.23	--	--	6.8	7.0	--	.00	16	8.1	39.5
16...	6.97	7.23	--	--	6.8	7.0	--	.00	16	8.1	39.5
16...	7.01	7.15	--	--	6.9	7.0	--	.00	17	8.1	39.0
16...	7.01	7.15	--	--	6.9	7.0	--	.00	17	8.1	39.0
16...	7.60	7.76	--	--	7.2	7.2	--	.00	17	8.2	42.2
16...	7.60	7.76	--	--	7.2	7.2	--	.00	17	8.2	42.2
SEP											
13...	5.34	5.82	2.6	3.8	5.4	5.4	.0	.00	16	34.5	29.1

## SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXID- RED- UCTION POTEN- TIAL (MV) (00090)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	COBALT, DIS- SOLVED (MG/L AS CO) (01035)	COBALT, TOTAL RECOV- ERABLE (MG/L AS CO) (01037)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)
JUN											
05...	.02	1.1	.73	.020	398	<2	<200	<200	<50	<50	<10
06...	.03	1.4	.94	.030	--	18	--	585	<50	<50	<10
06...	.07	1.7	.79	.140	--	52	<200	2280	<50	<50	<10
06...	.03	1.5	.76	.080	--	134	<200	6000	<50	<50	<10
06...	.03	1.5	.73	.070	--	112	<200	4060	<50	<50	<10
06...	.03	1.3	.74	.040	--	48	<200	1350	<50	<50	<10
07...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	30	<200	672	--	--	--
JUL											
14...	--	--	--	--	--	<2	<200	663	<50	<50	<10
15...	--	--	--	--	--	16	<200	757	<50	<50	<10
15...	--	--	--	--	--	10	<200	<200	<50	<50	<10
15...	--	--	--	--	--	100	<200	3880	<50	<50	<10
15...	--	--	--	--	--	228	<200	5560	<50	<50	<10
16...	--	--	--	--	--	284	<200	7110	<50	<50	<10
16...	--	--	--	--	--	216	<200	6060	<50	<50	<10
16...	--	--	--	--	--	132	<200	5290	<50	<50	<10
30...	--	--	--	--	--	140	<200	1160	<50	<50	10
30...	--	--	--	--	--	146	<200	4070	<50	<50	<10
30...	--	--	--	--	--	322	<200	6700	<50	50	<10
30...	--	--	--	--	--	342	<200	8100	<50	<50	<10
30...	--	--	--	--	--	174	<200	4570	<50	<50	<10
31...	--	--	--	--	--	16	<200	4190	<50	<50	<10
31...	--	--	--	--	--	40	<200	641	<50	<50	<10
AUG											
01...	--	--	--	--	--	58	<200	2770	<50	<50	<10
01...	--	--	--	--	--	468	<200	15200	<50	<50	<10
01...	--	--	--	--	--	422	<200	13400	<50	<50	<10
01...	--	--	--	--	--	240	<200	10500	<50	<50	<10
01...	--	--	--	--	--	82	<200	3860	<50	<50	<10
02...	--	--	--	--	386	62	<200	2520	--	--	--
02...	--	--	--	--	--	54	<200	3090	<50	<50	<10
03...	--	--	--	--	--	328	<200	6830	<50	<50	<10
03...	--	--	--	--	--	--	1090	1090	<50	<50	<10
03...	--	--	--	--	--	--	<200	751	<50	<50	<10
03...	--	--	--	--	--	--	<200	599	<50	<50	<10
16...	--	--	--	--	--	<2	<200	209	<50	<50	10
16...	--	--	--	--	--	10	<200	217	<50	<50	<10
16...	--	--	--	--	--	10	<200	217	<50	<50	<10
16...	--	--	--	--	--	6	<200	<200	<50	<50	<10
16...	--	--	--	--	--	6	<200	<200	<50	<50	<10
16...	--	--	--	--	--	<2	<200	<200	<50	<50	<10
16...	--	--	--	--	--	<2	<200	<200	<50	<50	<10
16...	--	--	--	--	--	8	<200	<200	<50	<50	12
16...	--	--	--	--	--	8	<200	<200	<50	<50	12
SEP											
13...	--	--	--	--	403	178	246	4930	--	--	--

## SWATARA CREEK BASIN

## 01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	COPPER, TOTAL RECOV- ERABLE (µG/L AS CU) (01042)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (µG/L AS FE) (01045)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN) (01055)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI) (01067)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)
JUN											
05...	<10	80	530	<1	<1	430	433	<50	<50	38	36
06...	<10	70	1070	<1	1	224	261	<50	<50	28	34
06...	<10	100	3940	<1	4	145	371	<50	<50	21	51
06...	17	70	10800	<1	10	125	741	<50	<50	96	15
06...	10	80	6200	<1	5	116	366	<50	<50	52	12
06...	<10	90	2280	<1	2	123	238	<50	<50	37	12
07...	--	--	--	--	--	--	--	--	--	--	--
13...	--	150	950	--	--	234	264	--	--	--	--
JUL											
14...	<10	100	820	<1	1	73	272	<50	<50	110	119
15...	<10	60	940	1	<1	50	317	<50	<50	343	348
15...	<10	140	110	<1	<1	13	21	<50	<50	338	356
15...	<10	210	4210	<1	5	38	385	<50	<50	337	371
15...	<10	<20	11200	<1	16	21	1180	<50	<50	343	435
16...	19	100	13500	<1	20	21	688	<50	<50	342	445
16...	16	90	10500	<1	14	16	776	<50	<50	386	419
16...	18	360	10600	<1	13	21	519	<50	<50	345	413
30...	<10	40	1640	<1	2	<10	460	<50	<50	18	44
30...	10	40	5830	<1	11	<10	975	<50	<50	17	96
30...	26	40	17000	<1	18	<10	1720	<50	50	85	265
30...	32	70	23100	<1	17	<10	1680	<50	<50	77	278
30...	16	100	9030	<1	8	<10	597	<50	<50	83	145
31...	<10	90	4470	<1	4	<10	340	<50	<50	<10	44
31...	<10	80	800	<1	3	<10	126	<50	<50	<10	26
AUG											
01...	10	90	3160	<1	3	<10	344	<50	<50	13	41
01...	25	100	21800	<1	19	<10	1100	<50	<50	15	44
01...	17	130	18400	<1	16	<10	833	<50	<50	11	90
01...	12	140	8900	<1	8	<10	397	<50	<50	<10	61
01...	<10	150	3430	<1	4	<10	236	<50	<50	<10	27
02...	--	220	1230	--	--	119	209	--	--	--	--
02...	<10	120	2650	<1	3	15	184	<50	<50	14	36
03...	14	160	9050	<1	10	10	388	<50	<50	16	68
03...	<10	1220	1220	<1	2	57	76	<50	<50	22	22
03...	<10	230	860	<1	1	14	76	<50	<50	14	25
03...	<10	80	710	<1	1	<10	81	<50	<50	<10	22
16...	13	70	370	<1	<1	63	156	<50	<50	41	360
16...	<10	80	380	<1	<1	28	115	<50	<50	23	32
16...	<10	80	380	<1	<1	28	115	<50	<50	23	32
16...	11	110	270	<1	<1	48	80	<50	<50	14	20
16...	11	110	270	<1	<1	48	80	<50	<50	14	20
16...	<10	110	320	<1	<1	63	100	<50	<50	17	16
16...	<10	110	320	<1	<1	63	100	<50	<50	17	16
16...	<10	110	300	<1	<1	82	105	<50	<50	25	27
16...	<10	110	300	<1	<1	82	105	<50	<50	25	27
SEP											
13...	--	530	11000	--	--	183	552	--	--	--	--

## SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	<b>FEBRUARY</b>			<b>MARCH</b>			<b>APRIL</b>			<b>MAY</b>		
1	---	---	---	---	---	---	124	119	122	153	142	146
2	---	---	---	---	---	---	126	123	124	153	147	149
3	---	---	---	---	---	---	131	126	128	153	148	150
4	---	---	---	---	---	---	131	108	116	156	149	152
5	---	---	---	---	---	---	123	113	119	157	145	152
6	---	---	---	---	---	---	126	123	124	150	143	147
7	---	---	---	---	---	---	130	125	128	---	---	---
8	---	---	---	---	---	---	130	114	126	---	---	---
9	---	---	---	---	---	---	116	100	110	---	---	---
10	---	---	---	---	---	---	117	110	114	---	---	---
11	---	---	---	---	---	---	118	115	117	---	---	---
12	---	---	---	---	---	---	124	117	120	---	---	---
13	---	---	---	---	---	---	128	124	126	---	---	---
14	---	---	---	---	---	---	130	127	129	119	100	109
15	---	---	---	---	---	---	133	128	130	136	119	127
16	---	---	---	---	---	---	135	130	132	142	135	138
17	---	---	---	---	---	---	133	127	130	152	139	145
18	---	---	---	---	---	---	134	129	131	154	144	149
19	---	---	---	---	---	---	139	132	135	153	130	140
20	---	---	---	---	---	---	142	137	139	143	116	125
21	---	---	---	---	---	---	141	128	136	124	116	119
22	---	---	---	---	---	---	129	124	127	128	113	123
23	---	---	---	---	---	---	135	128	131	117	111	113
24	---	---	---	---	---	---	135	132	134	116	92	102
25	---	---	---	---	---	---	136	132	134	104	93	98
26	---	---	---	---	---	---	139	135	137	108	102	105
27	---	---	---	---	---	---	139	134	136	112	108	110
28	---	---	---	---	---	---	139	135	138	117	112	113
29	---	---	---	---	---	---	145	139	141	120	117	118
30	---	---	---	114	107	111	145	138	141	127	120	123
31	---	---	---	121	114	117	---	---	---	129	125	127
MONTH	---	---	---	121	107	114	145	100	128	157	92	128
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	<b>JUNE</b>			<b>JULY</b>			<b>AUGUST</b>			<b>SEPTEMBER</b>		
1	138	121	130	122	119	121	---	---	---	---	---	---
2	139	127	132	125	120	122	---	---	---	---	---	---
3	138	130	133	127	122	124	---	---	---	---	---	---
4	144	135	138	126	120	123	---	---	---	---	---	---
5	149	142	145	---	---	---	---	---	---	---	---	---
6	143	105	116	---	---	---	---	---	---	---	---	---
7	132	110	120	---	---	---	---	---	---	---	---	---
8	136	131	134	---	---	---	---	---	---	---	---	---
9	144	136	140	---	---	---	---	---	---	---	---	---
10	152	142	146	---	---	---	---	---	---	---	---	---
11	152	148	150	---	---	---	---	---	---	---	---	---
12	160	104	138	---	---	---	---	---	---	---	---	---
13	137	108	127	---	---	---	---	---	---	---	---	---
14	118	106	109	---	---	---	---	---	---	---	---	---
15	128	111	121	---	---	---	---	---	---	---	---	---
16	130	122	126	---	---	---	---	---	---	---	---	---
17	137	130	133	---	---	---	---	---	---	---	---	---
18	142	129	137	---	---	---	---	---	---	---	---	---
19	134	120	128	---	---	---	---	---	---	---	---	---
20	140	133	137	---	---	---	---	---	---	---	---	---
21	143	108	136	---	---	---	---	---	---	---	---	---
22	122	104	112	---	---	---	---	---	---	---	---	---
23	128	118	123	---	---	---	---	---	---	---	---	---
24	135	125	130	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	160	104	131	127	119	122	---	---	---	---	---	---

## SWATARA CREEK BASIN

## 01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	<b>FEBRUARY</b>			<b>MARCH</b>			<b>APRIL</b>			<b>MAY</b>		
1	---	---	---	---	---	---	6.6	---	6.5	7.4	6.7	7.0
2	---	---	---	---	---	---	6.6	---	6.6	7.4	6.8	7.0
3	---	---	---	---	---	---	6.7	---	6.6	7.4	6.8	7.0
4	---	---	---	---	---	---	6.8	---	6.7	7.4	6.8	7.0
5	---	---	---	---	---	---	6.7	---	6.7	7.3	6.7	6.9
6	---	---	---	---	---	---	6.8	---	6.7	7.1	6.7	6.8
7	---	---	---	---	---	---	6.8	---	6.7	---	---	---
8	---	---	---	---	---	---	6.8	---	6.7	---	---	---
9	---	---	---	---	---	---	6.8	---	6.7	---	---	---
10	---	---	---	---	---	---	6.8	---	6.7	---	---	---
11	---	---	---	---	---	---	6.8	---	6.7	---	---	---
12	---	---	---	---	---	---	6.8	---	6.7	---	---	---
13	---	---	---	---	---	---	6.8	---	6.7	---	---	---
14	---	---	---	---	---	---	6.8	---	6.7	7.0	---	6.9
15	---	---	---	---	---	---	6.8	---	6.7	7.0	---	6.9
16	---	---	---	---	---	---	6.8	---	6.7	7.0	---	6.9
17	---	---	---	---	---	---	6.8	---	6.7	7.3	---	7.1
18	---	---	---	---	---	---	6.8	---	6.7	7.2	---	7.0
19	---	---	---	---	---	---	6.9	---	6.7	7.0	---	7.0
20	---	---	---	---	---	---	6.9	---	6.8	6.9	---	6.9
21	---	---	---	---	---	---	6.8	---	6.7	6.9	---	6.9
22	---	---	---	---	---	---	6.8	---	6.7	6.9	---	6.8
23	---	---	---	---	---	---	6.9	---	6.7	6.9	---	6.9
24	---	---	---	---	---	---	7.0	---	6.7	7.2	---	7.0
25	---	---	---	---	---	---	7.1	---	6.8	7.1	---	7.0
26	---	---	---	---	---	---	7.0	---	6.8	7.1	---	7.0
27	---	---	---	---	---	---	6.9	---	6.7	7.1	---	7.0
28	---	---	---	---	---	---	7.1	---	6.9	7.1	---	7.0
29	---	---	---	---	---	---	7.2	---	6.9	7.1	---	7.0
30	---	---	---	6.6	---	6.5	7.2	---	7.0	7.1	---	7.0
31	---	---	---	6.6	---	6.5	---	---	---	7.0	---	6.9
MAX	---	---	---	6.6	---	6.5	7.2	---	7.0	7.4	6.8	7.1
MIN	---	---	---	6.6	---	6.5	6.6	---	6.5	6.9	6.7	6.8
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	<b>JUNE</b>			<b>JULY</b>			<b>AUGUST</b>			<b>SEPTEMBER</b>		
1	7.1	---	7.0	---	---	---	7.0	---	6.8	---	---	---
2	7.0	---	7.0	---	---	---	6.7	---	6.6	---	---	---
3	7.0	---	6.9	---	---	---	6.8	---	6.7	---	---	---
4	7.0	---	6.9	---	---	---	6.8	---	6.7	---	---	---
5	7.1	---	6.9	---	---	---	6.9	---	6.8	---	---	---
6	6.9	---	6.9	7.2	6.9	7.0	6.9	---	6.8	---	---	---
7	7.0	---	6.9	7.2	6.9	7.0	7.1	---	6.8	---	---	---
8	7.1	---	6.9	7.3	7.0	7.1	7.1	---	6.9	---	---	---
9	7.0	---	6.9	7.4	6.9	7.1	7.2	---	6.9	---	---	---
10	7.0	---	6.9	7.5	6.9	7.0	7.3	---	6.9	---	---	---
11	7.0	---	6.9	7.4	6.9	7.1	7.5	---	6.9	---	---	---
12	7.1	---	6.9	7.5	6.9	7.1	7.5	---	6.9	---	---	---
13	6.9	---	6.9	7.5	7.0	7.1	7.7	---	6.8	---	---	---
14	6.9	---	6.8	7.5	6.8	7.1	7.7	---	6.9	---	---	---
15	6.9	---	6.8	7.2	---	7.0	7.7	---	6.9	---	---	---
16	6.9	---	6.8	7.0	---	6.9	---	---	---	---	---	---
17	6.9	---	6.8	7.2	---	7.0	---	---	---	---	---	---
18	6.9	---	6.8	7.2	---	6.9	---	---	---	---	---	---
19	7.0	---	6.9	7.1	---	6.9	---	---	---	---	---	---
20	7.1	---	6.9	7.3	---	7.0	---	---	---	---	---	---
21	7.0	---	6.9	7.2	---	6.9	---	---	---	---	---	---
22	6.9	---	6.8	7.2	---	6.8	---	---	---	---	---	---
23	7.0	---	6.9	7.3	---	6.9	---	---	---	---	---	---
24	7.0	---	6.9	7.3	---	6.8	---	---	---	---	---	---
25	---	---	---	7.5	---	6.9	---	---	---	---	---	---
26	---	---	---	7.1	---	6.8	---	---	---	---	---	---
27	---	---	---	7.3	---	6.8	---	---	---	---	---	---
28	---	---	---	7.5	---	6.8	---	---	---	---	---	---
29	---	---	---	7.3	---	6.8	---	---	---	---	---	---
30	---	---	---	6.9	---	6.7	---	---	---	---	---	---
31	---	---	---	6.9	---	6.8	---	---	---	---	---	---
MAX	7.1	---	7.0	7.5	7.0	7.1	7.7	---	6.9	---	---	---
MIN	6.9	---	6.8	6.9	6.8	6.7	6.7	---	6.6	---	---	---

## SWATARA CREEK BASIN

## 01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	<b>FEBRUARY</b>			<b>MARCH</b>			<b>APRIL</b>			<b>MAY</b>		
1	---	---	---	---	---	---	11.0	6.5	9.0	14.5	9.0	12.0
2	---	---	---	---	---	---	11.0	8.5	9.5	16.5	12.5	14.0
3	---	---	---	---	---	---	13.5	10.0	11.5	17.0	10.5	13.5
4	---	---	---	---	---	---	12.5	10.0	12.0	18.0	12.0	15.0
5	---	---	---	---	---	---	10.0	8.0	9.0	19.5	14.5	17.0
6	---	---	---	---	---	---	12.0	7.5	9.5	20.0	15.0	17.5
7	---	---	---	---	---	---	11.0	9.0	10.0	21.5	16.0	19.0
8	---	---	---	---	---	---	13.5	9.0	11.0	21.5	17.0	19.5
9	---	---	---	---	---	---	10.0	7.0	8.5	22.5	17.5	20.0
10	---	---	---	---	---	---	11.0	7.0	9.0	20.0	17.0	18.5
11	---	---	---	---	---	---	9.0	7.5	8.5	19.0	15.0	17.0
12	---	---	---	---	---	---	11.0	8.0	9.0	19.5	15.5	17.5
13	---	---	---	---	---	---	11.0	6.5	8.5	19.0	16.0	17.5
14	---	---	---	---	---	---	11.0	7.0	9.0	18.5	15.5	16.5
15	---	---	---	---	---	---	12.0	9.0	10.5	16.5	13.5	15.0
16	---	---	---	---	---	---	16.0	11.0	13.0	15.5	12.0	14.0
17	---	---	---	---	---	---	13.5	9.5	11.5	17.5	13.5	15.5
18	---	---	---	---	---	---	9.5	8.5	9.0	18.5	15.0	16.5
19	---	---	---	---	---	---	13.0	8.5	10.5	17.5	14.5	16.0
20	---	---	---	---	---	---	13.5	11.0	12.0	14.5	12.5	13.0
21	---	---	---	---	---	---	12.0	10.5	11.0	14.0	12.5	13.0
22	---	---	---	---	---	---	10.5	10.0	10.0	13.5	13.0	13.5
23	---	---	---	---	---	---	11.0	9.0	10.0	14.0	13.0	13.5
24	---	---	---	---	---	---	14.0	8.5	11.0	16.0	13.5	14.5
25	---	---	---	---	---	---	13.5	10.5	12.0	15.5	13.5	14.5
26	---	---	---	---	---	---	13.0	10.0	11.5	16.5	13.0	14.5
27	---	---	---	---	---	---	11.0	9.5	10.0	14.5	13.0	13.5
28	---	---	---	---	---	---	13.5	9.5	11.0	14.0	12.5	13.5
29	---	---	---	---	---	---	15.0	9.0	12.0	14.5	13.0	13.5
30	---	---	---	9.5	6.5	8.0	15.5	11.0	13.0	16.0	12.0	14.0
31	---	---	---	10.5	6.5	8.5	---	---	---	15.5	12.0	13.5
MONTH	---	---	---	10.5	6.5	8.2	16.0	6.5	10.4	22.5	9.0	15.4
	<b>JUNE</b>			<b>JULY</b>			<b>AUGUST</b>			<b>SEPTEMBER</b>		
1	19.0	13.5	16.0	20.5	16.5	18.0	23.0	21.0	22.0	---	---	---
2	20.0	16.5	18.0	20.5	16.5	18.5	21.0	20.0	20.5	---	---	---
3	18.5	16.0	17.0	19.0	17.5	18.5	21.0	20.5	21.0	---	---	---
4	17.0	14.0	16.0	20.5	18.0	19.0	20.5	19.0	19.5	---	---	---
5	16.0	15.0	15.5	22.0	18.5	20.0	20.5	17.5	19.0	---	---	---
6	15.0	13.5	14.0	21.0	17.5	19.5	19.0	17.0	17.5	---	---	---
7	17.0	13.0	15.0	20.5	17.5	19.0	21.5	18.0	19.5	---	---	---
8	17.5	14.0	16.0	20.5	16.0	18.0	23.0	19.5	21.0	---	---	---
9	20.0	15.0	17.5	20.5	16.0	18.5	23.0	20.5	21.5	---	---	---
10	21.5	16.5	19.0	22.0	18.5	20.0	23.5	21.0	22.0	---	---	---
11	22.5	18.0	20.0	22.5	19.0	20.5	23.0	20.0	21.5	---	---	---
12	21.0	19.0	20.0	21.5	17.5	19.5	21.5	19.5	20.5	---	---	---
13	19.0	16.5	17.5	20.0	17.5	19.0	20.0	18.5	19.5	---	---	---
14	16.5	15.5	16.0	19.5	18.0	18.5	19.5	18.0	19.0	---	---	---
15	16.0	15.5	15.5	19.0	18.0	18.5	21.0	17.5	19.5	---	---	---
16	18.5	16.0	17.0	20.0	17.5	18.5	---	---	---	---	---	---
17	20.0	17.5	18.5	20.5	18.0	19.0	---	---	---	---	---	---
18	18.5	17.5	18.0	22.5	18.0	20.0	---	---	---	---	---	---
19	18.0	16.5	17.5	20.5	17.0	18.0	---	---	---	---	---	---
20	20.0	15.5	17.5	20.5	16.5	18.5	---	---	---	---	---	---
21	19.0	17.0	18.0	20.0	16.5	18.5	---	---	---	---	---	---
22	19.5	17.5	18.5	21.0	17.5	19.0	---	---	---	---	---	---
23	21.0	17.5	19.0	20.5	16.5	18.5	---	---	---	---	---	---
24	20.0	17.0	18.5	19.0	16.5	17.5	---	---	---	---	---	---
25	---	---	---	20.5	17.0	18.5	---	---	---	---	---	---
26	---	---	---	19.0	17.5	18.0	---	---	---	---	---	---
27	---	---	---	19.5	17.5	18.5	---	---	---	---	---	---
28	---	---	---	21.0	18.5	19.5	---	---	---	---	---	---
29	---	---	---	20.5	19.0	20.0	---	---	---	---	---	---
30	---	---	---	21.0	19.5	20.0	---	---	---	---	---	---
31	---	---	---	23.0	20.5	21.5	---	---	---	---	---	---
MONTH	22.5	13.0	17.3	23.0	16.0	19.0	23.5	17.0	20.2	---	---	---