

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 mi².

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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 18	2330	2,010	8.81	Sept. 16	2145	2,330	9.40
Jan. 24	1315	*3,080	*10.62	Sept. 30	0745	1,860	8.55

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	23	29	36	e21	e200	206	192	130	52	32	18	19
2	21	31	33	e20	507	166	189	124	54	32	17	18
3	20	31	32	e120	466	151	170	122	55	30	17	18
4	30	31	31	e200	384	492	161	120	50	29	16	18
5	32	31	31	e100	333	380	158	116	46	28	17	21
6	28	30	30	e90	287	340	145	111	44	27	15	56
7	25	27	30	e70	e260	305	139	109	43	25	14	198
8	81	28	32	e60	e250	243	132	133	42	22	18	83
9	94	30	33	e210	e230	224	199	121	40	22	20	49
10	230	30	31	e240	e220	215	307	106	38	27	17	40
11	113	44	29	e140	e200	200	263	96	38	26	17	34
12	77	38	27	e100	e210	182	304	93	36	25	16	30
13	61	34	26	e90	234	164	264	88	37	25	21	29
14	100	30	27	e95	199	163	240	85	50	25	176	28
15	73	29	27	e90	183	180	221	80	65	25	69	30
16	59	29	27	e90	180	182	220	76	44	24	40	819
17	50	30	27	e90	194	218	206	75	66	21	32	1070
18	46	29	27	e500	211	260	184	75	109	20	28	327
19	43	27	26	882	189	242	171	85	61	22	24	191
20	41	27	24	387	172	217	182	77	49	21	24	131
21	39	28	25	274	160	281	175	67	46	21	27	145
22	37	26	31	407	145	860	178	65	43	21	25	211
23	36	26	28	657	140	577	193	73	40	22	23	150
24	33	27	26	2240	e130	440	212	125	38	19	22	116
25	32	26	23	1240	e120	361	179	108	36	18	21	96
26	34	91	e23	713	e120	304	173	83	33	18	22	80
27	34	70	e22	510	e120	266	165	72	33	18	27	72
28	34	49	e22	417	182	251	155	64	34	18	24	73
29	35	41	e21	357	---	231	147	60	41	18	20	83
30	33	38	e21	288	---	205	138	56	35	18	20	1120
31	32	---	e21	242	---	187	---	53	---	18	20	---
TOTAL	1626	1037	849	10940	6226	8693	5762	2848	1398	717	867	5355
MEAN	52.5	34.6	27.4	353	222	280	192	91.9	46.6	23.1	28.0	178
MAX	230	91	36	2240	507	860	307	133	109	32	176	1120
MIN	20	26	21	20	120	151	132	53	33	18	14	18
CFSM	.45	.30	.24	3.04	1.92	2.42	1.66	.79	.40	.20	.24	1.54
IN.	.52	.33	.27	3.51	2.00	2.79	1.85	.91	.45	.23	.28	1.72

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

MEAN	131	228	256	308	255	394	335	276	178	125	73.2	80.9
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

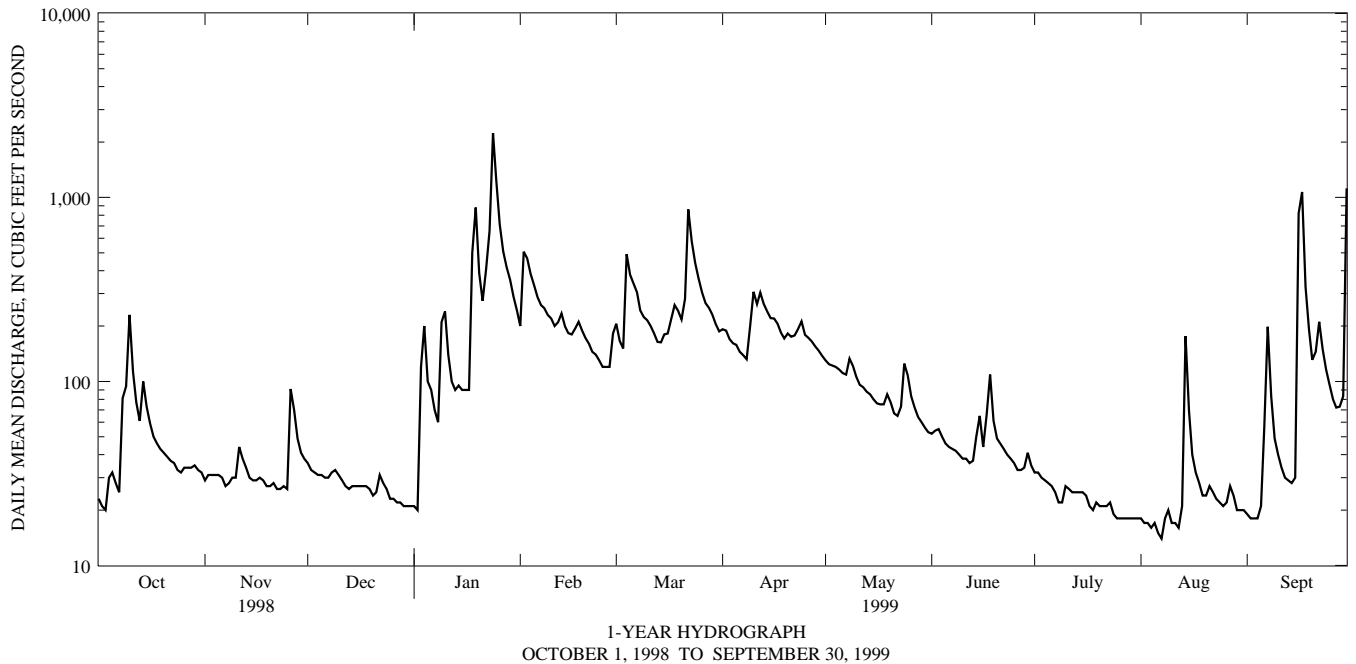
e Estimated.

SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		FOR PERIOD OF DAILY RECORD	
ANNUAL TOTAL	85471		46318			
ANNUAL MEAN	234		127		216	
HIGHEST ANNUAL MEAN					273	
LOWEST ANNUAL MEAN					127	
HIGHEST DAILY MEAN	1870	Feb 24	2240	Jan 24	4130	Nov 28 1993
LOWEST DAILY MEAN	20	Oct 3	14	Aug 7	14	Aug 7 1999
ANNUAL SEVEN-DAY MINIMUM	a22	Dec 25	16	Aug 1	16	Aug 1 1999
INSTANTANEOUS PEAK FLOW			3080	Jan 24	b5880	Nov 28 1993
INSTANTANEOUS PEAK STAGE			10.62	Jan 24	14.17	Nov 28 1993
INSTANTANEOUS LOW FLOW			14	Aug 7,8	14	Aug 7,8 1999
ANNUAL RUNOFF (CFSM)	2.02		1.09		1.87	
ANNUAL RUNOFF (INCHES)	27.41		14.85		25.35	
10 PERCENT EXCEEDS	568		263		463	
50 PERCENT EXCEEDS	111		56		132	
90 PERCENT EXCEEDS	27		21		36	

a Computed using estimated daily discharges.
 b From rating curve extended above 3,300 ft³/s on basis of step-backwater analysis.



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.

REMARKS.--Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods.

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

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	OXID- RED- ACTION POTEN- TIAL (MV) (00090)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT											
30...	0845	1028	9813	33	237	7.0	6.5	294	8.2	12.0	100
NOV											
24...	0915	1028	9813	27	207	7.1	6.6	422	6.4	11.0	86
DEC											
31...	0915	1028	9813	35	142	7.0	--	--	.0	13.0	89
JAN											
15...	1045	1028	9813	299	--	--	--	--	--	--	--
19...	1500	1028	9813	649	--	--	--	--	--	--	--
24...	0200	1028	9813	1170	--	--	--	--	--	--	--
24...	0900	1028	9813	2570	--	--	--	--	--	--	--
24...	1300	1028	9813	3070	--	--	--	--	--	--	--
25...	0001	1028	9813	1870	--	--	--	--	--	--	--
25...	1800	1028	9813	1020	--	--	--	--	--	--	--
27...	0915	1028	9813	514	112	6.6	--	348	3.1	12.0	87
FEB											
26...	1830	1028	9813	125	144	6.9	--	491	4.6	--	--
MAR											
18...	1345	1028	9813	252	121	6.9	--	392	8.3	13.0	110
APR											
09...	1400	1028	9813	168	--	--	--	--	--	--	--
09...	1800	1028	9813	288	--	--	--	--	--	--	--
10...	0001	1028	9813	348	--	--	--	--	--	--	--
11...	0001	1028	9813	246	--	--	--	--	--	--	--
11...	0600	1028	9813	234	--	--	--	--	--	--	--
11...	1800	1028	9813	292	--	--	--	--	--	--	--
12...	0001	1028	9813	328	--	--	--	--	--	--	--
12...	1800	1028	9813	289	--	--	--	--	--	--	--
13...	1500	1028	9813	262	115	6.9	--	543	11.5	--	--
MAY											
24...	0900	1028	9813	85	--	--	--	--	--	--	--
24...	1015	1028	9813	118	153	6.8	--	466	15.5	9.1	91
24...	1200	1028	9813	131	--	--	--	--	--	--	--
24...	1400	1028	9813	148	--	--	--	--	--	--	--
24...	1800	1028	9813	184	128	6.1	--	--	--	--	--
JUN											
14...	0001	1028	9813	38	180	6.3	--	--	--	--	--
15...	0001	1028	9813	102	195	6.4	--	--	--	--	--
15...	0600	1028	9813	74	166	6.6	--	--	--	--	--
22...	0930	1028	9813	44	185	6.7	--	419	18.5	6.4	67
JUL											
13...	0900	1028	9813	25	216	7.1	--	542	18.0	9.5	--
AUG											
13...	2200	1028	9813	22	334	6.3	--	--	--	--	--
13...	2300	1028	9813	42	482	6.2	--	--	--	--	--
24...	0830	1028	9813	22	231	6.7	--	404	19.0	7.6	82

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01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	ACIDITY (MG/L AS CACO3) (00435)	ACIDITY TOTAL HEATED (MG/L AS CAC03) (70508)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET LAB MG/L AS CACO3 (00417)
OCT											
30...	--	.00	14	14	8.7	7.9	10	10	2.2	1.9	26
NOV											
24...	--	.00	14	14	7.3	7.3	9.0	8.9	2.1	1.9	26
DEC											
31...	--	.00	13	13	7.0	7.0	10	9.5	--	--	18
JAN											
15...	--	.00	9.6	9.9	4.7	4.5	8.6	8.6	--	--	13
19...	--	.00	7.6	7.6	3.5	3.4	7.6	7.6	--	--	9
24...	--	1.6	7.2	6.4	3.7	2.8	5.9	5.6	--	--	9
24...	--	10	6.8	6.2	3.6	2.6	5.6	5.6	--	--	8
24...	--	8.6	6.0	5.5	3.0	2.4	4.7	4.5	--	--	7
25...	--	5.2	6.0	5.7	3.1	2.7	4.4	4.3	--	--	6
25...	--	3.4	6.5	6.2	3.6	3.3	4.5	4.2	--	--	7
27...	--	.00	6.7	6.6	3.9	3.8	5.1	4.9	--	--	7
FEB											
26...	--	.00	9.3	9.2	5.7	5.7	5.8	5.7	--	--	12
MAR											
18...	--	.00	9.7	9.7	5.7	5.7	6.2	6.2	--	--	11
APR											
09...	--	210	8.5	8.2	5.1	4.8	5.0	4.8	--	--	0
09...	--	140	8.0	8.0	4.5	4.5	4.9	4.9	--	--	0
10...	--	120	7.9	7.4	4.5	4.1	5.1	4.6	--	--	0
11...	--	84	6.7	6.5	3.7	3.6	4.5	4.4	--	--	0
11...	--	130	7.1	7.0	4.0	3.9	4.7	4.6	--	--	0
11...	--	160	7.5	7.2	4.3	4.1	4.8	4.5	--	--	0
12...	--	100	7.7	7.3	4.3	4.0	4.8	4.5	--	--	0
12...	--	90	7.4	6.9	4.0	3.7	4.5	4.2	--	--	0
13...	--	.00	7.2	7.2	4.2	3.9	5.0	4.8	--	--	11
MAY											
24...	--	110	9.6	9.6	5.4	5.2	6.0	5.5	--	--	0
24...	--	.00	10	10	6.5	6.5	5.8	5.8	--	--	14
24...	--	28	9.0	8.8	5.1	4.9	5.7	5.4	--	--	0
24...	--	11	8.5	8.1	4.9	4.6	5.3	5.0	--	--	1
24...	--	.00	9.5	8.7	5.6	5.2	5.8	5.3	--	--	13
JUN											
14...	--	.00	10	9.0	6.2	5.6	6.2	5.5	--	--	13
15...	--	.00	15	14	8.2	7.9	8.7	8.4	--	--	15
15...	--	.00	13	13	6.7	6.5	6.8	6.8	--	--	17
22...	--	.00	14	14	7.0	7.0	7.7	7.6	--	--	20
JUL											
13...	--	.00	19	18	11	10	12	11	--	--	19
AUG											
13...	--	.00	16	15	7.4	6.7	6.9	6.7	--	--	18
13...	--	.00	16	16	7.7	7.2	7.5	7.3	--	--	16
24...	.0	.00	19	19	12	12	15	14	2.6	2.6	28

SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, TOTAL (MG/L AS F) (00951)	SILICA TOTAL (MG/L- SIO2) (00956)	RESIDUE	RESIDUE SETTLE- ABLE (MG/L) (00545)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
					TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)					
OCT										
30...	52	9.5	<.2	6.5	6	--	.830	.470	1.9	.030
NOV										
24...	54	9.3	<.2	5.8	6	<.00	.900	.300	1.8	.040
DEC										
31...	45	--	--	--	<2	--	--	--	--	--
JAN										
15...	26	--	--	--	12	--	--	--	--	--
19...	17	--	--	--	60	--	--	--	--	--
24...	14	--	--	--	230	--	--	--	--	--
24...	14	--	--	--	400	--	--	--	--	--
24...	13	--	--	--	240	--	--	--	--	--
25...	15	--	--	--	130	--	--	--	--	--
25...	20	--	--	--	32	--	--	--	--	--
27...	23	--	--	--	12	--	--	--	--	--
FEB										
26...	35	--	--	--	4	--	--	--	--	--
MAR										
18...	35	--	--	--	22	--	--	--	--	--
APR										
09...	34	--	--	--	80	--	--	--	--	--
09...	30	--	--	--	40	--	--	--	--	--
10...	28	--	--	--	58	--	--	--	--	--
11...	25	--	--	--	62	--	--	--	--	--
11...	25	--	--	--	<2	--	--	--	--	--
11...	26	--	--	--	<2	--	--	--	--	--
12...	26	--	--	--	<2	--	--	--	--	--
12...	24	--	--	--	<2	--	--	--	--	--
13...	24	--	--	--	8	--	--	--	--	--
MAY										
24...	38	--	--	--	14	--	--	--	--	--
24...	40	--	--	--	10	--	--	--	--	--
24...	35	--	--	--	50	--	--	--	--	--
24...	26	--	--	--	30	--	--	--	--	--
24...	31	--	--	--	8	--	--	--	--	--
JUN										
14...	32	--	--	--	<2	--	--	--	--	--
15...	53	--	--	--	<2	--	--	--	--	--
15...	40	--	--	--	38	--	--	--	--	--
22...	51	--	--	--	4	--	--	--	--	--
JUL										
13...	70	--	--	--	<2	--	--	--	--	--
AUG										
13...	51	--	--	--	86	--	--	--	--	--
13...	56	--	--	--	210	--	--	--	--	--
24...	76	12	--	--	<2	--	--	--	--	--

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01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	COBALT, TOTAL RECOV- ERABLE (µG/L AS CO) (01037)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (µG/L AS CU) (01042)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (µG/L AS FE) (01045)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	LITHIUM TOTAL RECOV- ERABLE (µG/L AS LI) (01132)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)
OCT 30...	<50	<50	<10	<10	160	120	<10	<10	<30	<25
NOV 24...	<50	<50	<10	<10	110	60	<1	<1.0	<30	<25
DEC 31...	--	--	--	--	210	62	--	--	--	--
JAN 15...	--	--	--	--	300	48	--	--	--	--
19...	--	--	--	--	2800	41	--	--	--	--
24...	<50	<50	<10	<10	9700	60	10	<1.0	--	--
24...	<50	<50	<10	21	25000	110	20	<1.0	--	--
24...	<50	<50	10	<10	13000	120	10	<1.0	--	--
25...	<50	<50	<10	<10	7000	75	7	<1.0	--	--
25...	<50	<50	<10	<10	2000	53	2	<1.0	--	--
27...	--	--	--	--	590	140	--	--	--	--
FEB 26...	--	--	--	--	380	78	--	--	--	--
MAR 18...	--	--	--	--	780	150	--	--	--	--
APR 09...	<50	<50	<10	<10	1500	580	4	3.7	--	--
09...	<50	<50	<10	<10	2300	1000	3	2.2	--	--
10...	<50	<50	<10	<10	1900	810	2	1.7	--	--
11...	<50	<50	<10	<10	780	360	<1	3.2	--	--
11...	<50	<50	<10	<10	520	370	<1	1.0	--	--
11...	<50	<50	<10	<10	390	270	1	1.2	--	--
12...	<50	<50	<10	<10	380	260	2	1.5	--	--
12...	<50	<50	<10	<10	540	250	<1	<1.0	--	--
13...	--	--	--	--	340	120	--	--	--	--
MAY 24...	<50	<50	10	<10	2200	780	6	5.5	--	--
24...	--	--	--	--	740	120	--	--	--	--
24...	<50	<50	11	<10	3400	270	5	2.4	--	--
24...	<50	<50	<10	<10	2400	91	2	<1.0	--	--
24...	<50	<50	<10	<10	1400	79	2	<1.0	--	--
JUN 14...	<50	<50	<10	<10	560	100	<1	<1.0	--	--
15...	<50	<50	13	<10	3500	38	4	<1.0	--	--
15...	<50	<50	<10	<10	3000	120	4	<1.0	--	--
22...	--	--	--	--	540	97	--	--	--	--
JUL 13...	--	--	--	--	290	80	--	--	--	--
AUG 13...	<50	<50	11	<10	5900	52	7	<1.0	--	--
13...	<50	<50	12	<10	6900	63	9	<1.0	--	--
24...	--	--	--	--	290	120	--	--	--	--

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01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	OXID-ATION RED- UCTION POTEN- TIAL (MV) (00090)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
SEP										
05...	2015	1028	9813	21	--	--	--	--	--	--
06...	0001	1028	9813	63	--	--	--	--	--	--
06...	0100	1028	9813	60	--	--	--	--	--	--
06...	0600	1028	9813	74	--	--	--	--	--	--
06...	1800	1028	9813	41	--	--	--	--	--	--
07...	0001	1028	9813	37	--	--	--	--	--	--
07...	0300	1028	9813	45	--	--	--	--	--	--
07...	0500	1028	9813	204	--	--	--	--	--	--
07...	0600	1028	9813	271	--	--	--	--	--	--
07...	1200	1028	9813	264	--	--	--	--	--	--
08...	0001	1028	9813	122	--	--	--	--	--	--
08...	1200	1028	9813	79	--	--	--	--	--	--
09...	1030	1028	9813	49	--	--	--	--	--	--
15...	0945	1028	9813	27	258	7.0	350	19.0	9.3	100
16...	0730	1028	9813	55	--	--	--	--	--	--
16...	0900	1028	9813	80	--	--	--	--	--	--
16...	1200	1028	9813	273	--	--	--	--	--	--
16...	1530	1028	9813	1000	--	--	--	--	--	--
16...	1600	1028	9813	1200	--	--	--	--	--	--
16...	1900	1028	9813	2070	--	--	--	--	--	--
17...	0001	1028	9813	2140	--	--	--	--	--	--
17...	0600	1028	9813	1450	--	--	--	--	--	--
17...	0800	1028	9813	1230	--	--	--	--	--	--
17...	1200	1028	9813	923	--	--	--	--	--	--
18...	0001	1028	9813	469	--	--	--	--	--	--
18...	1200	1028	9813	318	--	--	--	--	--	--
19...	0001	1028	9813	232	--	--	--	--	--	--
19...	1800	1028	9813	172	--	--	--	--	--	--
29...	2330	1028	9813	99	--	--	--	--	--	--
30...	1800	1028	9813	1040	--	--	--	--	--	--

DATE	ACIDITY (MG/L AS CACO3) (00435)	ACIDITY TOTAL HEATED (MG/L AS CACO3) (70508)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
SEP										
05...	--	.00	18	18	9.8	9.6	14	14	--	--
06...	--	.00	20	18	13	11	9.2	8.3	--	--
06...	--	82	12	12	6.6	6.6	6.3	6.3	--	--
06...	--	28	12	12	6.2	5.6	5.6	5.2	--	--
06...	--	88	13	13	6.4	6.4	6.3	6.3	--	--
07...	--	50	15	14	7.9	7.0	8.8	7.6	--	--
07...	--	36	15	15	7.7	7.2	9.6	9.1	--	--
07...	--	94	9.4	9.4	5.0	4.6	5.5	5.5	--	--
07...	--	70	8.6	8.3	4.3	3.7	4.6	4.6	--	--
07...	--	4.8	9.6	8.1	4.8	3.8	5.2	4.9	--	--
08...	--	.00	14	14	6.1	5.9	6.5	6.3	--	--
08...	--	.00	14	15	8.3	8.3	8.4	8.4	--	--
09...	--	.00	16	16	7.7	7.7	8.6	8.3	--	--
15...	.0	.00	24	24	14	14	12	12	2.5	2.9
16...	--	.00	17	16	9.8	9.2	9.0	8.4	--	--
16...	--	.00	15	16	8.5	8.5	8.0	7.9	--	--
16...	--	.00	13	12	6.1	5.8	6.2	6.2	--	--
16...	--	4.4	13	12	4.9	4.8	5.9	5.9	--	--
16...	--	6.2	12	9.9	5.0	4.1	4.7	5.0	--	--
16...	--	3.6	9.2	8.3	4.1	3.4	4.6	4.6	--	--
17...	--	.00	8.5	7.9	3.8	3.4	4.1	4.1	--	--
17...	--	.00	9.2	8.8	4.2	3.9	4.2	4.2	--	--
17...	--	5.6	9.8	9.3	5.6	5.1	5.0	4.5	--	--
17...	--	.00	9.4	8.8	4.2	3.9	3.9	3.7	--	--
18...	--	.00	10	10	4.9	4.9	4.6	4.9	--	--
18...	--	.00	10	10	4.9	4.9	4.6	4.9	--	--
19...	--	.00	11	11	5.7	5.5	5.3	5.2	--	--
19...	--	.00	12	12	6.2	6.2	6.2	6.2	--	--
29...	--	.00	12	13	7.5	7.2	7.2	7.6	--	--
30...	--	.00	8.5	9.3	4.0	4.2	3.9	4.3	--	--

SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

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

DATE	ANC WATER UNFLTRD FET LAB	SULFATE DIS- SOLVED	CHLO- RIDE, DIS- SOLVED	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED	ALUM- INUM, TOTAL RECOV- ERABLE	ALUM- INUM, SOLVED	COBALT, TOTAL RECOV- ERABLE	COBALT, DIS- SOLVED	COPPER, TOTAL RECOV- ERABLE	COPPER, DIS- SOLVED
	MG/L AS CACO3 (00417)	(MG/L AS SO4) (00945)	(MG/L AS CL) (00940)	(MG/L) (00530)	(MG/L AS AL) (01105)	(MG/L AS AL) (01106)	(MG/L AS CO) (01037)	(MG/L AS CO) (01035)	(MG/L AS CU) (01042)	(MG/L AS CU) (01040)
SEP										
05...	26	77	--	14	<200	<200	<50	<50	<10	<10
06...	18	79	--	14	740	<200	<50	<50	<10	<10
06...	0	55	--	32	1200	210	<50	<50	<10	<10
06...	0	56	--	42	1800	<200	<50	<50	<10	<10
06...	0	63	--	4	900	290	<50	<50	<10	<10
07...	0	72	--	12	670	<200	<50	<50	<10	<10
07...	0	71	--	8	630	<200	<50	<50	<10	<10
07...	0	47	--	200	4700	630	<50	<50	<10	11
07...	0	40	--	200	5100	620	<50	<50	12	<10
07...	15	27	--	370	7800	<200	<50	<50	24	<10
08...	14	46	--	60	2700	<200	<50	<50	<10	<10
08...	20	54	--	16	1100	<200	<50	<50	10	<10
09...	22	53	--	4	<200	<200	<50	<50	<10	<10
15...	26	71	12	<2	<200	<200	--	--	--	--
16...	20	62	--	590	1000	<200	<50	<50	<10	<10
16...	19	50	--	32	1300	<200	<50	<50	<10	<10
16...	19	29	--	300	6600	<200	<50	<50	29	<10
16...	10	36	--	390	7800	<200	50	<50	23	<10
16...	15	23	--	420	12000	<200	70	<50	40	<10
16...	11	20	--	330	8000	<200	60	<50	47	11
17...	14	17	--	110	2800	<200	<50	<50	<10	<10
17...	14	18	--	42	1600	<200	<50	<50	<10	<10
17...	4	46	--	26	2100	<200	<50	<50	17	<10
17...	12	20	--	14	1700	<200	<50	<50	<10	<10
18...	12	23	--	20	660	<200	<50	<50	<10	<10
18...	12	23	--	20	660	<200	<50	<50	<10	<10
19...	12	29	--	4	<200	<200	<50	<50	<10	<10
19...	12	34	--	<2	250	<200	<50	<50	180	<10
29...	16	46	--	20	1100	<200	<50	<50	<10	<10
30...	12	20	--	38	1100	<200	<50	<50	<10	<10

DATE	IRON, TOTAL RECOV- ERABLE	IRON, DIS- SOLVED	LEAD, TOTAL RECOV- ERABLE	LEAD, DIS- SOLVED	MANGA- NESE, TOTAL RECOV- ERABLE	MANGA- NESE, SOLVED	NICKEL, TOTAL RECOV- ERABLE	NICKEL, DIS- SOLVED	ZINC, TOTAL RECOV- ERABLE	ZINC, DIS- SOLVED
	(MG/L AS FE) (01045)	(MG/L AS FE) (01046)	(MG/L AS PB) (01051)	(MG/L AS PB) (01049)	(MG/L AS MN) (01055)	(MG/L AS MN) (01056)	(MG/L AS NI) (01067)	(MG/L AS NI) (01065)	(MG/L AS ZN) (01092)	(MG/L AS ZN) (01090)
SEP										
05...	180	<20	<1	<1.0	38	<10	<50	<50	10	13
06...	1300	<20	2	<1.0	220	<10	<50	<50	10	<10
06...	1600	270	3	1.7	160	120	<50	<50	20	14
06...	2700	150	4	1.5	330	240	<50	<50	20	12
06...	1300	390	2	1.1	140	140	<50	<50	10	<10
07...	1000	290	1	<1.0	100	97	<50	<50	<10	<10
07...	1000	210	1	<1.0	110	94	<50	<50	10	<10
07...	13000	580	16	6.7	1100	940	<50	<50	100	54
07...	13000	420	15	6.5	1100	920	<50	<50	100	56
07...	22000	49	26	<1.0	2000	70	62	<50	180	<10
08...	4100	40	3	<1.0	480	18	<50	<50	50	<10
08...	1600	41	1	<1.0	310	11	<50	<50	30	12
09...	280	25	<1	<1.0	100	58	<50	<50	10	13
15...	240	80	--	--	81	98	--	--	--	--
16...	1200	20	2	<1.0	310	51	<50	<50	30	21
16...	1900	21	2	<1.0	330	25	<50	<50	40	18
16...	16000	<20	17	<1.0	1900	11	52	<50	160	10
16...	25000	220	17	<1.0	2200	240	61	<50	160	<10
16...	30000	60	27	<1.0	2500	42	82	<50	250	<10
16...	22000	210	17	<1.0	1900	110	65	<50	160	11
17...	5500	250	6	<1.0	670	150	<50	<50	50	<10
17...	3400	220	4	<1.0	580	190	<50	<50	40	<10
17...	2800	150	4	<1.0	700	450	<50	<50	100	96
17...	2100	82	3	<1.0	360	20	<50	<50	50	13
18...	970	140	<1	<1.0	200	42	<50	<50	20	14
18...	970	140	<1	<1.0	200	42	<50	<50	20	14
19...	420	96	<1	<1.0	180	87	<50	<50	20	17
19...	460	71	<1	<1.0	200	130	<50	<50	120	16
29...	1400	25	2	<1.0	320	110	<50	<50	40	20
30...	1500	110	2	<1.0	220	100	<50	<50	30	19