

**01571820 SWATARA CREEK NEAR RAVINE, PA**

Lower Susquehanna Basin  
 Lower Susquehanna-Swatara Subbasin

LOCATION.--Lat 40°34'50", long 76°24'18" referenced to North American Datum of 1927, Schuylkill County, PA, Hydrologic Unit 02050305, on right bank 800 ft downstream of Adam's Run, 1,000 ft downstream from State Highway 125 bridge crossing Swatara Creek and 0.4 mi north of Ravine.

DRAINAGE AREA.--43.3 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--July 1996 to July 2007. (Discontinued)

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 590 ft above National Geodetic Vertical Datum of 1929, from topographic map.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the Schuylkill Conservation District and the Pennsylvania Department of Environmental Protection.

REMARKS.--Records fair except those above 1,000 ft<sup>3</sup>/s, which are poor. Station operated as part of the Swatara Creek Mine Drainage Project.

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

<b>Date</b>	<b>Time</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Gage height (ft)</b>
Oct 28	0930	1,780	4.37
Nov 16	1815	*1,810	*4.42
Mar 02	0730	728	2.75
Apr 16	2030	662	2.62

Minimum discharge, 19 ft<sup>3</sup>/s, Jul 10, 11, gage height, 0.73 ft.

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	34	170	119	266	53	42	122	92	64	25	---	---
2	30	239	119	154	54	527	130	122	46	22	---	---
3	29	158	e95	125	51	313	107	93	42	21	---	---
4	44	131	e85	114	48	199	105	82	47	22	---	---
5	e175	120	e80	121	e46	144	96	80	41	33	---	---
6	71	114	e76	236	e44	107	87	76	37	25	---	---
7	56	107	e72	165	43	93	81	72	35	23	---	---
8	51	190	69	413	41	83	78	70	34	23	---	---
9	50	166	67	294	e40	77	73	68	34	21	---	---
10	48	128	66	234	41	78	68	68	32	20	---	---
11	48	115	65	192	e39	99	65	68	32	---	---	---
12	49	118	63	169	40	105	119	64	34	---	---	---
13	43	134	68	153	40	130	87	60	37	---	---	---
14	42	126	65	143	e50	191	75	57	31	---	---	---
15	41	114	61	134	e60	299	425	56	29	---	---	---
16	39	569	58	121	e40	251	537	56	29	---	---	---
17	90	703	56	100	39	207	513	54	27	---	---	---
18	121	437	56	93	40	169	407	51	27	---	---	---
19	70	334	54	91	e39	142	326	50	29	---	---	---
20	125	263	51	84	38	152	258	49	43	---	---	---
21	110	210	49	78	45	150	211	48	30	---	---	---
22	82	181	65	77	47	211	184	45	28	---	---	---
23	78	269	229	76	44	467	159	44	26	---	---	---
24	70	198	97	72	e40	395	142	42	25	---	---	---
25	64	155	96	68	38	340	145	42	25	---	---	---
26	60	140	187	62	38	271	152	50	24	---	---	---
27	59	132	124	61	39	237	129	56	24	---	---	---
28	809	120	106	61	40	201	112	49	29	---	---	---
29	452	115	96	58	---	164	102	42	30	---	---	---
30	281	109	95	56	---	144	96	40	26	---	---	---
31	214	---	90	55	---	131	---	39	---	---	---	---
<b>Total</b>	3,535	6,065	2,679	4,126	1,217	6,119	5,191	1,885	997	---	---	---
<b>Mean</b>	114	202	86.4	133	43.5	197	173	60.8	33.2	---	---	---
<b>Max</b>	809	703	229	413	60	527	537	122	64	---	---	---
<b>Min</b>	29	107	49	55	38	42	65	39	24	---	---	---
<b>Cfsm</b>	2.63	4.67	2.00	3.07	1.00	4.56	4.00	1.40	0.77	---	---	---
<b>In.</b>	3.04	5.21	2.30	3.54	1.05	5.26	4.46	1.62	0.86	---	---	---

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

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	66.9	82.7	118	112	87.1	137	131	82.2	94.8	53.7	38.7	59.2
<b>Max</b>	148	202	284	234	196	220	268	181	279	113	101	242
<b>(WY)</b>	(2004)	(2007)	(1997)	(2005)	(1998)	(2003)	(2005)	(1998)	(2006)	(2006)	(2003)	(2004)
<b>Min</b>	13.2	16.5	11.4	34.3	42.9	48.3	75.4	47.0	18.4	13.5	13.0	13.8
<b>(WY)</b>	(2002)	(1999)	(1999)	(2002)	(2002)	(2006)	(1999)	(1999)	(1999)	(1999)	(2002)	(2005)

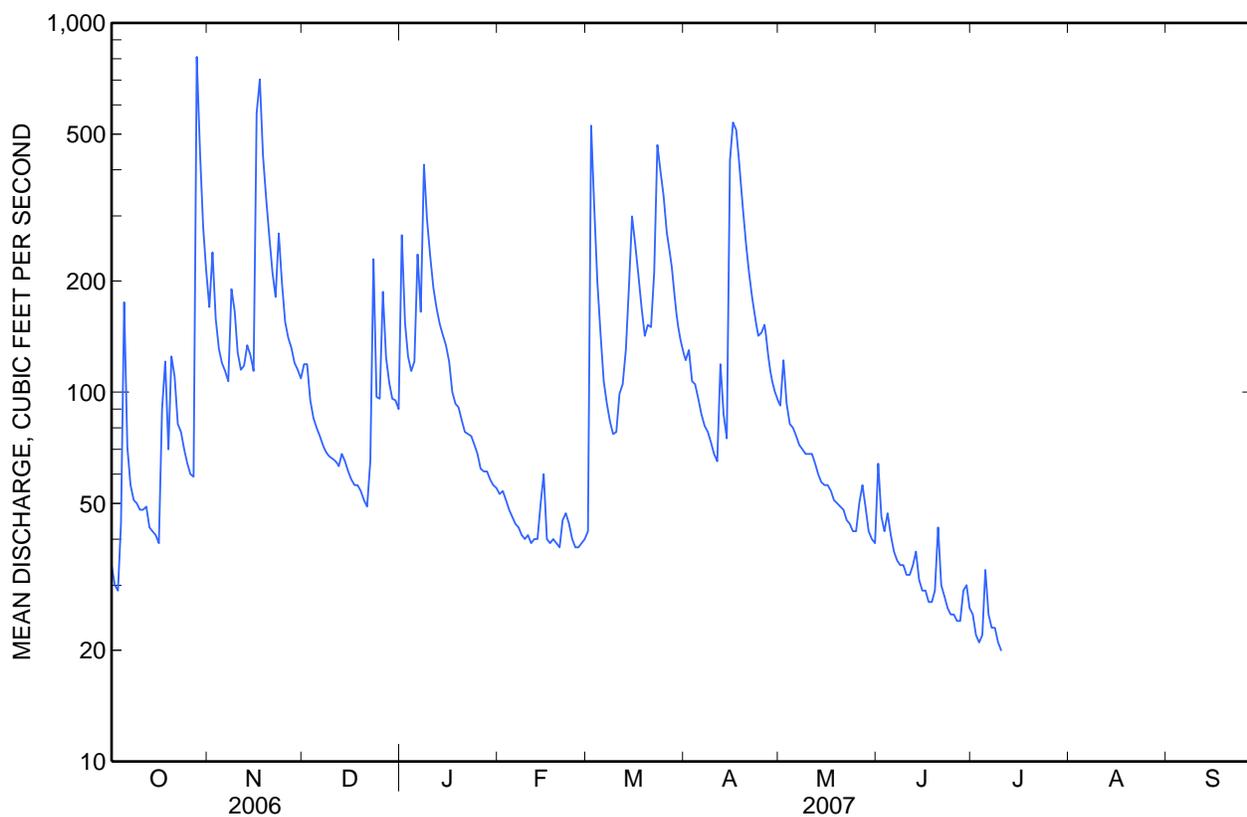
01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

SUMMARY STATISTICS

	Calendar Year 2006		For Period of Daily Record	
<b>Annual total</b>	43,818			
<b>Annual mean</b>	120		87.6	
<b>Highest annual mean</b>			121	2004
<b>Lowest annual mean</b>			44.9	2002
<b>Highest daily mean</b>	2,700	Jun 28	2,710	Sep 18, 2004
<b>Lowest daily mean</b>	21	Aug 25	9.3	Sep 10, 2002
<b>Annual seven-day minimum</b>	24	Aug 19	10	Dec 14, 1998
<b>Maximum peak flow</b>			<sup>a</sup> 5,310	Sep 18, 2004
<b>Maximum peak stage</b>			<sup>b</sup> 8.16	Sep 18, 2004
<b>Instantaneous low flow</b>			9.2	Oct 14, 2001
<b>Annual runoff (cfs)</b>	2.77		2.02	
<b>Annual runoff (inches)</b>	37.65		27.48	
<b>10 percent exceeds</b>	229		166	
<b>50 percent exceeds</b>	63		58	
<b>90 percent exceeds</b>	31		16	

<sup>a</sup> From rating curve extended above 974 ft<sup>3</sup>/s based on a straight line extension.

<sup>b</sup> From floodmark.



**01571820 SWATARA CREEK NEAR RAVINE, PA—Continued**

**WATER-QUALITY RECORDS**

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1996 to July 2007. (Discontinued)

pH: April 1996 to May 2007. (Discontinued)

WATER TEMPERATURE: April 1996 to July 2007. (Discontinued)

INSTRUMENTATION.--Water-quality monitor and submersible pressure transducer (in situ system). Probes interfaced with an electronic data logger since the 1996 water year. Automatic pumping sampler for stormflow samples since July 1996.

REMARKS.--Specific conductance records rated fair. pH records rated fair except for period Mar 29 to May 23, which is poor. Water temperature records rated good. Interruptions in the record were due to malfunctions of the instrumentation. Some values for filtered parameters exceed values for the corresponding unfiltered parameter. These results are within the limits of analytical precision and methods. Station operated as part of the Swatara Creek Mine Drainage Project.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 538 microsiemens, Jan 9, 1999; minimum, 27 microsiemens, Jun 11, 1997.

pH: Maximum, 8.2, Jul 30, 1999; minimum, 4.7, Jun 13, 1998.

WATER TEMPERATURE: Maximum, 26.5°C, Jul 5, 6, 1999, Aug 1, 1999; minimum, 0.0°C, many days during winters.

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 6

[Remark codes: &lt;, less than; E, estimated.]

Date	Time	Instan- taneous dis- charge, cfs (00061)	Oxi- dation re- poten- tial, mV (00090)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif- ic conduc- tance, Temper- ature, deg C 25 degC (00095)	Temp- ature, deg C water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Calcium water unfltrd recover- -able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)	Magnes- ium, water, unfltrd recover- -able, mg/L (00927)
<b>Oct</b>													
05...	0800	175	430	10	99	6.5	6.8	162	14.4	13	13	5.8	6.1
12...	0900	50.3	350	9.7	94	6.7	6.0	246	13.8	--	--	--	--
17...	1515	63.2	--	--	--	6.6	6.7	346	10.3	16	17	11	11
17...	1600	82.6	--	--	--	6.6	6.6	334	10.4	16	16	10	11
17...	1800	151	--	--	--	6.6	6.6	278	10.9	14	14	8.5	8.7
17...	2200	224	--	--	--	6.6	6.2	193	11.5	14	15	7.3	7.4
18...	0600	139	--	--	--	6.4	6.1	167	12.0	12	11	6.5	6.6
18...	1000	122	--	--	--	6.3	5.5	172	12.2	12	12	6.8	6.8
18...	1200	114	--	--	--	6.3	6.8	162	12.5	11	11	6.6	6.5
19...	1110	68.0	--	--	--	6.5	6.9	210	11.8	15	15	8.7	8.5
<b>Nov</b>													
08...	1030	172	--	--	--	6.2	6.8	162	9.50	10	11	7.0	7.0
08...	1400	253	--	--	--	6.1	6.8	150	9.70	9.4	9.9	6.3	6.4
08...	1800	271	--	--	--	6.2	6.6	136	10.1	8.9	9.0	5.6	5.8
08...	2200	232	--	--	--	6.3	6.7	136	10.2	8.9	9.1	5.6	5.7
09...	0200	201	--	--	--	6.2	6.7	136	10.3	9.0	9.0	5.7	5.7
09...	0800	175	--	--	--	5.9	6.8	139	10.4	8.8	9.1	6.0	6.1
14...	0920	128	400	11	98	5.8	6.7	170	10.4	12	12	7.4	7.8
16...	1430	289	--	--	--	6.0	6.8	150	11.9	12	12	8.0	8.2
16...	1600	1,050	--	--	--	6.6	6.8	134	13.6	10	11	6.7	7.0
16...	1630	1,340	--	--	--	6.5	6.8	112	13.6	9.9	10	5.8	6.1
16...	1700	1,540	--	--	--	6.5	6.9	103	13.6	9.9	12	4.8	5.2
16...	1730	1,660	--	--	--	6.6	6.7	111	13.5	8.3	10	4.0	4.4
16...	2000	1,450	--	--	--	6.8	6.8	126	13.2	8.8	12	2.9	3.6
16...	2200	1,120	--	--	--	6.5	6.8	100	13.0	8.3	10	3.1	3.6
17...	0200	986	--	--	--	6.4	6.7	95.0	12.6	7.1	7.6	3.5	3.7
18...	0400	484	--	--	--	6.3	6.6	128	9.40	8.3	8.8	5.6	5.9
<b>Jan</b>													
03...	0930	125	580	13	100	6.5	6.7	142	4.80	9.3	9.4	6.5	6.6
<b>Feb</b>													
22...	0945	45.2	490	E14	E100	6.5	6.5	308	2.20	16	17	9.7	9.8

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 6

[Remark codes: &lt;, less than; E, estimated.]

Date	Potas- sium, water, fltred, mg/L (00935)	Potas- sium, water, recover- able, mg/L (00937)	Sodium, water, fltred, mg/L (00930)	Sodium, water, recover- able, mg/L (00929)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chlor- ide, water, fltred, mg/L (00940)	Sulfate water, fltred, mg/L (00945)	Alum- inum, water, fltred, µg/L (01106)	Alum- inum, water, recover- able, µg/L (01105)	Iron, water, fltred, µg/L (01046)	Iron, water, recover- able, µg/L (01045)	Mangan- ese, water, fltred, µg/L (01056)	Mangan- ese, water, recover- able, µg/L (01055)
<b>Oct</b>													
05...	2.5	2.9	6.1	6.2	9.60	8.2	45	<100	1,900	120	3,300	400	600
12...	--	--	--	--	16.4	--	--	--	--	--	--	--	--
17...	2.5	2.8	7.5	7.2	12.0	10	74	<100	1,900	60	8,700	260	2,300
17...	2.5	2.7	7.4	7.4	9.90	10	70	<100	700	110	3,600	390	810
17...	2.6	2.8	7.3	7.4	12.0	14	58	<100	1,100	110	5,100	250	990
17...	3.0	3.3	7.2	7.3	8.50	22	54	<100	2,200	140	9,200	320	1,500
18...	2.6	2.8	6.4	6.6	5.70	16	46	100	700	200	1,600	420	560
18...	2.6	2.8	6.0	6.7	3.60	10	47	<100	500	200	1,300	410	530
18...	2.3	2.4	6.2	6.2	11.0	9.0	45	<100	500	220	1,500	360	550
19...	3.4	3.4	7.7	7.6	11.0	9.9	64	<100	100	210	540	440	440
<b>Nov</b>													
08...	1.8	4.0	5.7	10	11.0	7.2	48	<100	1,300	90	3,800	440	710
08...	1.7	1.7	5.7	5.1	9.30	7.2	44	<100	600	80	2,300	440	500
08...	1.8	1.8	5.3	5.2	7.50	7.0	40	<100	700	130	2,200	410	460
08...	1.7	1.7	4.9	5.0	7.30	7.0	40	<100	500	130	1,400	440	470
09...	1.6	1.6	4.9	4.7	7.40	6.7	40	<100	300	200	970	430	450
09...	1.7	1.7	5.1	5.0	7.70	7.0	43	<100	200	170	760	450	470
14...	2.6	2.7	5.9	6.1	8.70	7.3	54	<100	600	170	2,300	510	750
16...	2.1	2.2	5.7	5.8	11.0	7.2	50	<100	700	50	2,800	370	610
16...	2.0	2.1	6.3	6.7	9.90	8.6	42	<100	1,800	50	8,000	300	630
16...	2.1	2.3	6.3	6.0	12.0	7.8	37	<100	2,700	210	12,000	190	720
16...	2.3	2.6	6.7	6.7	14.0	8.4	33	<100	4,500	150	18,000	100	1,200
16...	2.2	2.6	5.4	5.0	13.0	6.3	27	200	4,300	260	15,000	60	1,500
16...	2.3	2.9	3.6	3.5	14.0	4.3	22	200	4,400	340	8,500	90	1,400
16...	2.4	2.8	3.6	3.8	12.0	4.7	23	300	2,700	370	5,100	130	810
17...	2.0	2.1	3.6	3.6	7.60	4.6	24	600	900	1,100	1,800	290	400
18...	1.6	1.7	4.4	4.5	6.10	5.9	38	<100	400	210	970	440	490
<b>Jan</b>													
03...	1.5	1.4	4.3	4.6	6.50	6.9	44	<100	200	290	640	410	420
<b>Feb</b>													
22...	2.9	2.9	18	18	12.0	29	64	<100	100	190	680	480	480

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 6

[Remark codes: &lt;, less than; E, estimated.]

Date	Nickel, water, fltrd, µg/L (01065)	Nickel, water, unfltrd recover -able, µg/L (01067)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)
	<b>Oct</b>			
05...	12	21	18	53
12...	--	--	--	--
17...	16	<5.0	34	130
17...	19	25	41	68
17...	14	20	31	63
17...	13	38	37	98
18...	18	18	38	45
18...	13	16	32	44
18...	15	18	30	41
19...	19	14	28	28
<b>Nov</b>				
08...	17	24	30	90
08...	16	16	28	41
08...	13	16	26	39
08...	17	19	33	41
09...	16	17	33	39
09...	18	18	35	40
14...	16	22	35	51
16...	19	21	33	55
16...	13	21	23	68
16...	11	21	17	82
16...	6.0	26	9.0	120
16...	5.0	28	10	110
16...	<5.0	32	7.0	95
16...	7.0	18	10	63
17...	9.0	12	27	37
18...	18	19	49	59
<b>Jan</b>				
03...	16	17	37	39
<b>Feb</b>				
22...	18	19	36	37

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 4 of 6

[Remark codes: &lt;, less than; E, estimated.]

Date	Time	Instan- taneous dis- charge, cfs (00061)	Oxi- dation	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH,	pH,	Specif- ic conduc- tance, wat µS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Calcium water, fltred, mg/L (00915)	Calcium water fltred recover- -able, mg/L (00916)	Magnes- ium, water, fltred, mg/L (00925)	Magnes- ium, water, fltred recover- -able, mg/L (00927)
			re- duction poten- tial, mV (00090)			water, unfltred field, std units (00400)	water, unfltred lab, std units (00403)						
<b>Mar</b>													
02...	1400	687	--	--	--	6.3	6.4	163	2.40	8.9	9.3	4.6	4.7
03...	2200	262	--	--	--	6.3	6.4	168	3.20	9.2	9.2	5.8	5.8
04...	1145	194	--	--	--	6.3	6.4	165	3.60	9.1	9.3	5.4	5.4
14...	1545	205	--	--	--	--	6.6	--	--	8.7	8.9	6.1	6.2
14...	2000	271	--	--	--	--	6.6	--	--	8.1	8.1	5.5	5.5
15...	0000	257	--	--	--	--	6.7	--	--	7.4	7.6	5.0	5.1
15...	0800	317	--	--	--	--	6.7	--	--	7.4	7.5	4.9	5.0
15...	2200	298	--	--	--	--	6.5	--	--	7.3	7.4	4.9	5.0
16...	1200	249	--	--	--	--	6.7	--	--	7.7	7.7	5.4	5.4
<b>Apr</b>													
02...	0945	133	600	12	100	6.5	6.5	192	8.30	12	13	7.5	7.5

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 5 of 6

[Remark codes: &lt;, less than; E, estimated.]

Date	Potas- sium, water, fltred, mg/L (00935)	Potas- sium, water, unfltred recover- -able, mg/L (00937)	Sodium, water, fltred, mg/L (00930)	Sodium, water, unfltred recover- -able, mg/L (00929)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chlor- ide, water, fltred, mg/L (00940)	Sulfate water, fltred, mg/L (00945)	Alum- inum, water, fltred, µg/L (01106)	Alum- inum, water, fltred recover- -able, µg/L (01105)	Iron, water, fltred, µg/L (01046)	Iron, water, unfltred recover- -able, µg/L (01045)	Mangan- ese, water, fltred, µg/L (01056)	Mangan- ese, water, unfltred recover- -able, µg/L (01055)
		Sodium, water, fltred, mg/L (00930)											
<b>Mar</b>													
02...	2.1	2.1	12	12	8.70	22	29	<100	1,400	100	3,800	260	520
03...	1.7	1.7	9.9	9.7	5.90	18	35	<100	300	210	710	350	360
04...	1.9	1.9	11	12	6.10	20	33	<100	300	140	710	330	340
14...	1.6	1.7	6.9	7.1	9.40	13	42	<100	400	40	1,100	350	390
14...	1.8	1.9	6.5	6.7	--	13	37	<100	600	50	1,800	340	360
15...	1.6	1.7	6.2	6.4	6.10	12	35	<100	500	70	1,100	310	350
15...	1.6	1.7	7.8	8.0	6.90	14	33	<100	500	100	1,300	310	340
15...	1.4	1.4	7.0	7.8	5.10	14	34	<100	300	90	840	320	350
16...	1.3	1.4	9.3	9.0	5.30	17	36	<100	200	140	710	350	360
<b>Apr</b>													
02...	4.6	2.7	8.7	8.1	7.10	11	59	<100	200	190	1,100	480	500

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 6 of 6

[Remark codes: &lt;, less than; E, estimated.]

Date	Nickel, water, fltrd, -able, µg/L (01065)	Nickel, water, unfltrd recover -able, µg/L (01067)	Zinc, water, fltrd, -able, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)
	<b>Mar</b>			
02...	11	15	29	56
03...	14	15	37	41
04...	13	14	35	39
14...	13	15	30	36
14...	13	13	26	39
15...	13	14	30	36
15...	13	14	30	38
15...	13	14	37	43
16...	14	14	37	39
<b>Apr</b>				
02...	17	20	42	41

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>
	<b>October</b>			<b>November</b>			<b>December</b>			<b>January</b>		
<b>1</b>	253	242	244	157	148	152	187	167	183	191	115	135
<b>2</b>	288	253	279	162	142	149	181	175	178	141	122	133
<b>3</b>	274	259	263	155	143	150	---	---	---	147	141	144
<b>4</b>	267	181	257	159	155	157	---	---	---	148	145	146
<b>5</b>	---	---	---	163	158	161	---	---	---	151	148	150
<b>6</b>	213	179	197	187	163	178	---	---	---	149	123	137
<b>7</b>	218	213	216	178	170	174	---	---	---	153	133	147
<b>8</b>	225	217	219	172	135	153	202	195	198	133	108	117
<b>9</b>	230	225	227	158	135	145	203	200	201	137	118	124
<b>10</b>	234	226	231	176	158	170	202	199	200	142	132	136
<b>11</b>	269	227	252	173	163	165	206	196	200	148	138	143
<b>12</b>	261	240	247	174	160	170	225	203	207	149	143	144
<b>13</b>	246	235	238	171	152	158	241	219	233	151	144	148
<b>14</b>	246	235	240	175	166	171	219	200	205	174	150	159
<b>15</b>	249	243	246	176	166	171	204	198	201	178	155	165
<b>16</b>	281	246	264	179	94	150	208	204	205	162	155	157
<b>17</b>	346	182	262	127	95	111	209	207	208	168	162	164
<b>18</b>	182	161	168	137	127	131	213	204	207	172	168	170
<b>19</b>	208	175	200	152	137	143	253	213	244	172	168	170
<b>20</b>	207	156	190	162	147	159	238	216	222	177	168	173
<b>21</b>	178	160	168	160	141	146	219	213	215	181	177	179
<b>22</b>	187	178	184	144	142	143	218	162	209	211	179	186
<b>23</b>	204	185	196	142	118	127	163	126	140	220	204	214
<b>24</b>	198	195	196	135	124	129	174	159	168	204	185	189
<b>25</b>	201	198	200	148	135	143	169	149	166	188	183	185
<b>26</b>	207	199	201	142	141	141	150	132	139	199	186	191
<b>27</b>	241	207	226	143	140	141	169	141	152	193	192	192
<b>28</b>	222	83	123	150	140	142	161	154	156	192	189	190
<b>29</b>	134	105	123	202	150	180	159	156	158	200	190	195
<b>30</b>	145	132	138	190	185	187	163	158	160	216	198	201
<b>31</b>	151	144	148	---	---	---	191	162	168	254	216	242
<b>Month</b>	346	83	211	202	94	153	253	126	189	254	108	165

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

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>		
<b>1</b>	238	206	215	352	275	289	201	167	177	182	174	178
<b>2</b>	207	202	204	388	156	212	198	171	184	175	162	166
<b>3</b>	216	203	208	172	159	167	178	171	174	177	167	172
<b>4</b>	214	207	210	167	162	165	178	175	177	180	176	177
<b>5</b>	219	212	216	165	160	163	181	177	178	180	178	179
<b>6</b>	224	212	218	173	163	168	185	180	183	213	179	189
<b>7</b>	224	220	222	180	168	172	186	183	185	218	193	209
<b>8</b>	224	220	222	---	---	---	221	185	195	193	185	187
<b>9</b>	222	217	219	---	---	---	229	201	217	189	187	188
<b>10</b>	221	219	220	---	---	---	201	194	195	191	187	188
<b>11</b>	222	215	219	---	---	---	198	194	195	192	188	189
<b>12</b>	261	215	223	---	---	---	198	168	182	193	190	191
<b>13</b>	279	261	275	---	---	---	183	168	176	236	192	203
<b>14</b>	269	230	244	---	---	---	222	183	195	244	212	232
<b>15</b>	231	210	218	---	---	---	226	130	164	212	204	206
<b>16</b>	213	209	211	---	---	---	153	134	145	208	204	206
<b>17</b>	251	212	218	---	---	---	150	141	145	209	204	206
<b>18</b>	251	217	225	---	---	---	142	136	138	208	206	207
<b>19</b>	231	217	224	---	---	---	140	138	138	211	208	210
<b>20</b>	278	218	227	---	---	---	145	139	142	233	211	216
<b>21</b>	348	278	314	---	---	---	148	144	146	253	233	247
<b>22</b>	348	285	310	---	---	---	169	148	156	242	224	229
<b>23</b>	306	254	281	---	---	---	172	159	167	---	---	---
<b>24</b>	254	243	250	---	---	---	161	158	160	218	214	215
<b>25</b>	248	237	242	---	---	---	167	161	164	218	215	216
<b>26</b>	283	237	252	---	---	---	163	155	158	222	197	215
<b>27</b>	316	261	279	---	---	---	162	159	161	240	196	214
<b>28</b>	315	281	292	---	---	---	166	162	164	248	230	240
<b>29</b>	---	---	---	---	---	---	196	166	175	230	208	212
<b>30</b>	---	---	---	166	161	163	205	182	194	214	209	211
<b>31</b>	---	---	---	167	164	165	---	---	---	216	208	213
<b>Month</b>	348	202	238	388	156	185	229	130	171	253	162	204

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>
	<b>June</b>			<b>July</b>			<b>August</b>			<b>September</b>		
<b>1</b>	209	172	187	363	240	320	---	---	---	---	---	---
<b>2</b>	212	191	202	280	238	246	---	---	---	---	---	---
<b>3</b>	253	207	218	243	235	239	---	---	---	---	---	---
<b>4</b>	255	221	241	334	230	252	---	---	---	---	---	---
<b>5</b>	221	205	210	276	205	229	---	---	---	---	---	---
<b>6</b>	210	204	207	222	208	215	---	---	---	---	---	---
<b>7</b>	213	209	211	224	220	222	---	---	---	---	---	---
<b>8</b>	215	210	212	343	221	239	---	---	---	---	---	---
<b>9</b>	215	210	213	345	254	288	---	---	---	---	---	---
<b>10</b>	216	212	214	254	233	240	---	---	---	---	---	---
<b>11</b>	223	213	217	---	---	---	---	---	---	---	---	---
<b>12</b>	227	208	220	---	---	---	---	---	---	---	---	---
<b>13</b>	302	195	267	---	---	---	---	---	---	---	---	---
<b>14</b>	301	234	259	---	---	---	---	---	---	---	---	---
<b>15</b>	234	221	225	---	---	---	---	---	---	---	---	---
<b>16</b>	222	218	220	---	---	---	---	---	---	---	---	---
<b>17</b>	223	220	221	---	---	---	---	---	---	---	---	---
<b>18</b>	234	221	229	---	---	---	---	---	---	---	---	---
<b>19</b>	291	227	241	---	---	---	---	---	---	---	---	---
<b>20</b>	278	217	248	---	---	---	---	---	---	---	---	---
<b>21</b>	267	224	243	---	---	---	---	---	---	---	---	---
<b>22</b>	224	218	222	---	---	---	---	---	---	---	---	---
<b>23</b>	224	218	220	---	---	---	---	---	---	---	---	---
<b>24</b>	224	220	222	---	---	---	---	---	---	---	---	---
<b>25</b>	224	217	220	---	---	---	---	---	---	---	---	---
<b>26</b>	229	222	225	---	---	---	---	---	---	---	---	---
<b>27</b>	230	225	226	---	---	---	---	---	---	---	---	---
<b>28</b>	233	185	223	---	---	---	---	---	---	---	---	---
<b>29</b>	255	193	220	---	---	---	---	---	---	---	---	---
<b>30</b>	241	227	232	---	---	---	---	---	---	---	---	---
<b>31</b>	---	---	---	---	---	---	---	---	---	---	---	---
<b>Month</b>	302	172	224	363	205	249	---	---	---	---	---	---

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	October			November			December			January		
1	6.5	6.5	6.5	6.5	6.1	6.5	6.9	6.7	6.8	6.7	6.6	6.6
2	6.5	6.5	6.5	6.4	6.0	6.3	6.8	6.7	6.7	6.7	6.6	6.6
3	6.5	6.5	6.5	6.3	6.0	6.1	---	---	---	6.7	6.6	6.6
4	6.7	6.5	6.5	6.3	6.0	6.1	---	---	---	6.7	6.6	6.7
5	---	---	---	6.3	6.3	6.3	---	---	---	6.7	6.6	6.7
6	6.9	6.8	6.9	6.3	6.2	6.3	---	---	---	6.7	6.6	6.7
7	6.9	6.9	6.9	6.3	6.2	6.2	---	---	---	6.7	6.6	6.6
8	6.9	6.9	6.9	6.4	6.0	6.2	6.9	6.8	6.9	6.6	6.5	6.5
9	6.9	6.8	6.8	6.4	5.9	6.1	6.9	6.8	6.8	6.5	6.4	6.5
10	6.9	6.8	6.8	6.2	6.0	6.1	6.9	6.7	6.8	6.5	6.5	6.5
11	6.9	6.8	6.8	6.3	6.2	6.2	6.9	6.8	6.8	6.5	6.5	6.5
12	6.8	6.7	6.8	6.2	5.8	5.9	6.9	6.8	6.9	6.5	6.5	6.5
13	6.7	6.6	6.7	6.0	5.8	5.8	6.9	6.9	6.9	6.6	6.5	6.5
14	6.6	6.6	6.6	5.9	5.8	5.9	6.9	6.9	6.9	6.6	6.5	6.6
15	6.6	6.5	6.6	6.0	5.8	5.9	6.9	6.9	6.9	6.7	6.6	6.6
16	6.7	6.6	6.6	7.2	5.8	5.9	6.9	6.9	6.9	6.7	6.6	6.7
17	6.6	6.6	6.6	6.5	6.3	6.4	6.9	6.8	6.8	6.6	6.6	6.6
18	6.6	6.3	6.4	6.5	6.4	6.5	6.9	6.8	6.9	6.7	6.6	6.6
19	6.6	6.4	6.5	6.5	6.3	6.4	6.9	6.9	6.9	6.7	6.7	6.7
20	6.6	6.4	6.6	6.4	6.0	6.2	6.9	6.8	6.8	6.7	6.7	6.7
21	6.6	6.4	6.5	6.6	6.0	6.5	7.0	6.8	6.9	6.8	6.7	6.7
22	6.5	6.4	6.5	6.6	6.4	6.5	7.0	6.8	6.9	6.8	6.7	6.7
23	6.5	6.4	6.4	6.4	6.0	6.2	6.8	6.6	6.7	6.8	6.7	6.8
24	6.4	6.4	6.4	6.1	5.9	6.0	6.8	6.7	6.8	6.7	6.7	6.7
25	6.4	6.3	6.4	6.4	5.9	6.1	6.8	6.7	6.8	6.7	6.7	6.7
26	6.7	6.4	6.4	6.5	6.1	6.2	6.8	6.7	6.7	6.8	6.7	6.8
27	6.8	6.5	6.7	6.6	6.5	6.6	6.8	6.7	6.7	6.8	6.7	6.7
28	6.7	6.2	6.4	6.6	6.6	6.6	6.8	6.7	6.7	6.8	6.7	6.8
29	6.5	6.2	6.4	6.7	6.6	6.7	6.8	6.7	6.7	6.8	6.8	6.8
30	6.4	6.2	6.3	6.8	6.7	6.7	6.7	6.7	6.7	6.8	6.8	6.8
31	6.5	6.4	6.4	---	---	---	6.7	6.7	6.7	6.8	6.8	6.8
<b>Max</b>	6.9	6.9	6.9	7.2	6.7	6.7	7.0	6.9	6.9	6.8	6.8	6.8
<b>Min</b>	6.4	6.2	6.3	5.9	5.8	5.8	6.7	6.6	6.7	6.5	6.4	6.5

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	February			March			April			May		
1	6.8	6.8	6.8	6.9	6.9	6.9	6.5	6.4	6.5	6.6	6.6	6.6
2	6.8	6.8	6.8	6.9	6.4	6.6	6.5	6.4	6.5	6.6	6.5	6.6
3	6.8	6.8	6.8	6.5	6.4	6.5	6.5	6.4	6.5	6.6	6.5	6.6
4	6.8	6.8	6.8	6.5	6.5	6.5	6.5	6.4	6.5	6.7	6.6	6.6
5	6.8	6.7	6.8	6.5	6.5	6.5	6.5	6.4	6.5	6.7	6.6	6.6
6	6.8	6.7	6.8	6.6	6.5	6.5	6.5	6.4	6.5	6.7	6.6	6.6
7	6.8	6.8	6.8	6.6	6.6	6.6	6.6	6.5	6.5	6.7	6.6	6.6
8	6.8	6.8	6.8	---	---	---	6.6	6.5	6.6	6.7	6.6	6.6
9	6.9	6.8	6.8	---	---	---	6.7	6.6	6.6	6.6	6.6	6.6
10	6.8	6.8	6.8	---	---	---	6.7	6.6	6.6	6.6	6.5	6.6
11	6.9	6.8	6.8	---	---	---	6.7	6.6	6.6	6.6	6.5	6.6
12	6.9	6.9	6.9	---	---	---	6.7	6.5	6.6	6.7	6.5	6.6
13	6.9	6.9	6.9	---	---	---	6.6	6.5	6.5	6.7	6.6	6.6
14	6.9	6.8	6.8	---	---	---	6.7	6.5	6.6	6.6	6.6	6.6
15	6.9	6.8	6.8	---	---	---	6.6	6.2	6.3	6.6	6.4	6.5
16	6.9	6.8	6.8	---	---	---	6.2	6.1	6.1	6.5	6.5	6.5
17	6.8	6.8	6.8	---	---	---	6.2	6.1	6.1	6.5	6.4	6.5
18	6.9	6.8	6.8	---	---	---	6.1	6.1	6.1	6.5	6.5	6.5
19	6.9	6.8	6.9	---	---	---	6.1	6.0	6.1	6.5	6.3	6.5
20	6.9	6.8	6.9	---	---	---	6.1	6.1	6.1	6.6	6.3	6.5
21	6.9	6.9	6.9	---	---	---	6.2	6.1	6.1	6.6	6.5	6.5
22	6.9	6.8	6.9	---	---	---	6.2	6.1	6.2	6.7	6.6	6.6
23	6.9	6.9	6.9	---	---	---	6.3	6.2	6.3	---	---	---
24	6.9	6.8	6.9	---	---	---	6.4	6.3	6.4	---	---	---
25	6.9	6.9	6.9	---	---	---	6.5	6.4	6.5	---	---	---
26	6.9	6.9	6.9	---	---	---	6.5	6.4	6.4	---	---	---
27	7.0	6.9	6.9	---	---	---	6.5	6.4	6.5	---	---	---
28	6.9	6.9	6.9	---	---	---	6.5	6.4	6.5	---	---	---
29	---	---	---	---	---	---	6.6	6.5	6.5	---	---	---
30	---	---	---	6.4	6.3	6.4	6.6	6.5	6.6	---	---	---
31	---	---	---	6.5	6.4	6.4	---	---	---	---	---	---
<b>Max</b>	7.0	6.9	6.9	6.9	6.9	6.9	6.7	6.6	6.6	6.7	6.6	6.6
<b>Min</b>	6.8	6.7	6.8	6.4	6.3	6.4	6.1	6.0	6.1	6.5	6.3	6.5

01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	June			July			August			September		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Max	---	---	---	---	---	---	---	---	---	---	---	---
Min	---	---	---	---	---	---	---	---	---	---	---	---

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	13.8	11.8	12.8	11.5	10.6	11.1	13.2	10.2	11.8	7.0	6.2	6.6
2	13.6	10.6	12.2	11.3	9.4	10.4	10.2	6.8	8.3	6.7	5.3	6.1
3	14.9	11.7	13.3	9.4	8.5	8.8	---	---	---	6.1	4.6	5.3
4	16.0	13.2	14.5	8.5	7.6	8.0	---	---	---	6.4	4.5	5.5
5	---	---	---	8.3	7.6	7.9	---	---	---	9.1	6.2	7.8
6	13.4	11.7	12.5	8.5	7.3	7.9	---	---	---	10.2	8.8	9.6
7	12.2	10.6	11.4	9.0	8.0	8.4	---	---	---	8.8	7.3	7.8
8	13.2	10.3	11.8	10.3	9.0	9.6	3.4	1.8	2.6	7.7	6.2	7.3
9	14.2	10.9	12.7	11.2	10.3	10.7	3.6	2.0	2.8	6.5	5.5	6.0
10	14.9	12.4	13.6	11.0	10.2	10.7	4.9	2.7	3.8	5.7	4.3	5.1
11	14.0	12.7	13.4	10.7	9.3	10.1	6.3	3.7	5.1	4.8	3.5	4.3
12	14.6	11.2	13.6	10.9	9.8	10.5	6.8	5.0	6.0	6.4	4.8	5.7
13	11.2	8.2	9.6	10.2	9.7	9.9	7.9	6.8	7.2	8.0	6.4	7.3
14	9.5	6.8	8.3	10.8	10.2	10.5	7.4	6.0	6.7	8.2	7.8	8.0
15	9.2	6.3	7.9	11.4	10.7	11.0	7.4	5.9	6.6	8.3	7.7	7.9
16	9.5	6.2	8.0	13.7	11.2	12.1	7.1	5.4	6.4	8.3	4.4	6.8
17	11.7	9.1	10.0	12.8	9.9	11.4	7.4	4.7	6.1	4.4	2.9	3.5
18	13.4	11.7	12.5	9.9	9.2	9.5	8.9	6.9	7.9	4.1	2.5	3.4
19	13.6	11.6	12.6	9.3	8.3	8.9	6.9	4.8	5.9	4.9	3.4	4.3
20	13.7	11.4	13.1	8.9	8.4	8.6	5.2	3.6	4.5	3.5	2.0	2.9
21	11.4	10.0	10.7	8.4	7.2	7.8	6.0	4.2	5.0	2.7	1.7	2.2
22	10.6	8.5	9.7	7.6	6.4	7.0	6.3	5.2	5.7	3.6	2.4	3.1
23	10.3	8.8	9.5	8.3	7.6	8.0	7.3	6.3	6.8	4.5	3.4	3.9
24	8.8	8.1	8.4	8.4	7.6	8.0	7.2	5.6	6.7	4.6	3.7	4.1
25	9.1	7.7	8.4	7.8	6.5	7.2	6.2	5.0	5.5	4.0	0.9	3.2
26	9.4	7.4	8.3	8.2	6.5	7.4	7.3	6.2	6.7	1.6	0.1	0.9
27	7.8	6.8	7.3	8.9	7.2	8.0	6.7	4.8	5.9	3.0	1.6	2.3
28	10.0	7.8	9.1	9.1	7.7	8.4	6.3	4.7	5.6	4.2	2.9	3.4
29	9.3	8.6	9.0	9.9	8.8	9.5	6.6	5.1	5.9	3.0	0.8	1.9
30	9.7	8.3	9.0	11.1	9.9	10.5	7.0	5.7	6.5	2.6	0.5	1.5
31	10.9	8.8	9.8	---	---	---	6.5	5.2	5.9	2.1	0.6	1.3
<b>Month</b>	16.0	6.2	10.8	13.7	6.4	9.3	13.2	1.8	6.1	10.2	0.1	4.8

## 01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

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>		
<b>1</b>	3.0	0.8	1.9	4.5	2.2	3.4	8.4	7.9	8.1	13.6	10.6	11.9
<b>2</b>	4.0	2.6	3.2	3.4	0.8	1.8	11.5	7.6	9.4	14.6	11.6	12.8
<b>3</b>	2.7	0.4	1.3	4.0	1.9	3.0	12.1	8.0	10.0	14.7	10.0	12.2
<b>4</b>	1.1	0.0	0.4	3.8	2.5	3.0	10.2	7.4	8.7	14.7	9.4	11.9
<b>5</b>	0.6	0.0	0.1	4.0	1.4	2.9	7.4	5.3	6.4	14.2	9.4	12.0
<b>6</b>	0.4	0.0	0.1	2.0	0.0	0.9	6.9	4.8	5.7	14.2	9.6	11.8
<b>7</b>	0.9	0.0	0.3	2.2	0.4	1.1	6.6	4.6	5.4	14.5	8.9	11.6
<b>8</b>	1.0	0.0	0.3	---	---	---	6.3	4.2	5.0	15.3	9.6	12.4
<b>9</b>	1.0	0.0	0.3	---	---	---	6.4	4.1	5.3	17.1	10.8	13.9
<b>10</b>	1.4	0.2	0.6	---	---	---	7.5	4.4	5.9	17.1	13.6	15.1
<b>11</b>	1.2	0.0	0.5	---	---	---	7.5	4.1	6.0	18.0	14.2	15.8
<b>12</b>	1.5	0.6	1.0	---	---	---	6.8	5.7	6.3	17.5	13.6	15.2
<b>13</b>	1.1	0.0	0.6	---	---	---	7.6	5.8	6.5	15.5	11.8	13.5
<b>14</b>	0.1	0.0	0.0	---	---	---	8.9	4.9	6.9	13.7	9.4	11.8
<b>15</b>	0.0	0.0	0.0	---	---	---	7.6	5.9	6.6	17.0	10.8	14.0
<b>16</b>	0.6	0.0	0.2	---	---	---	5.9	4.2	4.9	16.0	13.8	15.0
<b>17</b>	1.1	0.1	0.6	---	---	---	7.1	5.2	6.1	14.9	12.4	13.7
<b>18</b>	1.1	0.0	0.5	---	---	---	8.1	6.1	7.2	13.6	11.6	12.6
<b>19</b>	0.9	0.0	0.4	---	---	---	9.2	7.4	8.3	13.1	9.9	11.7
<b>20</b>	1.7	0.4	1.0	---	---	---	11.3	7.1	9.2	14.9	10.9	12.9
<b>21</b>	2.4	1.2	1.5	---	---	---	12.3	7.7	10	15.5	11.7	13.4
<b>22</b>	3.2	1.3	2.2	---	---	---	13.2	8.5	10.8	15.1	10.0	12.7
<b>23</b>	2.5	0.0	1.4	---	---	---	14.3	9.4	11.9	---	---	---
<b>24</b>	1.4	0.0	0.7	---	---	---	14.9	11.9	13.1	17.7	12.6	15.1
<b>25</b>	1.8	0.7	1.2	---	---	---	11.9	10.2	11.1	18.3	13.2	15.8
<b>26</b>	2.7	0.8	2.0	---	---	---	10.6	10.0	10.3	19.2	14.8	16.9
<b>27</b>	4.4	2.5	3.3	---	---	---	10.6	9.8	10.2	19.4	15.4	17.1
<b>28</b>	3.7	2.5	3.1	---	---	---	11.6	9.8	10.7	19.2	15.7	17.1
<b>29</b>	---	---	---	---	---	---	14.3	10.0	11.9	18.3	13.7	16.0
<b>30</b>	---	---	---	9.9	5.9	7.8	15.5	10.3	12.6	18.6	13.2	15.9
<b>31</b>	---	---	---	9.5	7.0	8.2	---	---	---	19.5	14.4	17.0
<b>Month</b>	4.4	0.0	1.0	9.9	0.0	3.6	15.5	4.1	8.3	19.5	8.9	14.0

01571820 SWATARA CREEK NEAR RAVINE, PA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

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>		
<b>1</b>	19.6	16.5	18.1	19.6	14.9	17.0	---	---	---	---	---	---
<b>2</b>	20.2	16.5	18.3	18.2	13.3	15.8	---	---	---	---	---	---
<b>3</b>	18.4	16.8	17.5	18.1	12.9	15.8	---	---	---	---	---	---
<b>4</b>	17.6	16.1	16.8	16.6	15.4	15.9	---	---	---	---	---	---
<b>5</b>	18.1	15.4	16.6	18.9	16.2	17.3	---	---	---	---	---	---
<b>6</b>	16.9	14.0	15.4	21.1	16.5	18.6	---	---	---	---	---	---
<b>7</b>	17.6	12.4	15.1	20.6	15.8	18.3	---	---	---	---	---	---
<b>8</b>	20.0	14.8	17.4	21.8	16.3	19.1	---	---	---	---	---	---
<b>9</b>	20.7	17.1	18.5	23.3	17.9	20.5	---	---	---	---	---	---
<b>10</b>	18.9	15.6	17.1	23.4	18.5	20.8	---	---	---	---	---	---
<b>11</b>	20.1	15.6	17.8	---	---	---	---	---	---	---	---	---
<b>12</b>	20.8	16.1	18.0	---	---	---	---	---	---	---	---	---
<b>13</b>	20.1	16.2	17.7	---	---	---	---	---	---	---	---	---
<b>14</b>	16.7	14.0	15.6	---	---	---	---	---	---	---	---	---
<b>15</b>	16.3	13.2	14.8	---	---	---	---	---	---	---	---	---
<b>16</b>	18.4	14.0	16.3	---	---	---	---	---	---	---	---	---
<b>17</b>	19.8	14.5	17.3	---	---	---	---	---	---	---	---	---
<b>18</b>	21.3	16.5	18.8	---	---	---	---	---	---	---	---	---
<b>19</b>	21.9	16.9	19.1	---	---	---	---	---	---	---	---	---
<b>20</b>	20.5	17.2	18.8	---	---	---	---	---	---	---	---	---
<b>21</b>	20.1	15.0	17.6	---	---	---	---	---	---	---	---	---
<b>22</b>	19.0	15.5	17.1	---	---	---	---	---	---	---	---	---
<b>23</b>	18.2	13.2	15.8	---	---	---	---	---	---	---	---	---
<b>24</b>	19.1	12.9	16.1	---	---	---	---	---	---	---	---	---
<b>25</b>	18.6	15.3	16.8	---	---	---	---	---	---	---	---	---
<b>26</b>	21.9	16.8	19.2	---	---	---	---	---	---	---	---	---
<b>27</b>	23.0	18.0	20.3	---	---	---	---	---	---	---	---	---
<b>28</b>	21.9	18.5	20.0	---	---	---	---	---	---	---	---	---
<b>29</b>	20.1	17.9	19.1	---	---	---	---	---	---	---	---	---
<b>30</b>	20.6	16.4	18.3	---	---	---	---	---	---	---	---	---
<b>31</b>	---	---	---	---	---	---	---	---	---	---	---	---
<b>Month</b>	23.0	12.4	17.5	23.4	12.9	17.9	---	---	---	---	---	---