

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA

Lower Susquehanna Basin Lower Susquehanna-Swatara Subbasin

LOCATION.--Lat 40°15′17″, long 76°53′11″ referenced to North American Datum of 1927, Dauphin County, PA, Hydrologic Unit 02050305, on east bank of City Island, 60 ft downstream from Market Street bridge in Harrisburg, 3,670 ft upstream from sanitary dam, and 1.7 mi upstream from Paxton Creek.

DRAINAGE AREA.--24.100 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD .-- October 1890 to current year.

- REVISED RECORDS.--WSP 711: 1929. WSP 1502: 1891-1923, 1926(M), 1928. WSP 1702: 1953 (total runoff in inches), 1958 (1957 calendar year mean discharge).
- GAGE.--Water-stage recorder. Concrete control since Aug 29, 1916. Datum of gage is 290.01 ft above National Geodetic Vertical Datum of 1929. Prior to Oct 1, 1928, nonrecording gage at Walnut Street Bridge 600 ft upstream, and Oct 1, 1928, to Aug 31, 1975, water-stage recorder at site 3,170 ft downstream, all gages at same datum. Satellite and landline telemetry at station.
- COOPERATION.--Funding for the operation of this station is provided by Exelon Generation, the Pennsylvania Department of Environmental Protection, and the U. S. Geological Survey through the Cooperative Water Program and the National Streamflow Information Program.
- REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow slightly regulated by 15 flood-control reservoirs which have a combined capacity of 1,571,000 acre-ft.
- EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known during period 1786 to 1890, 26.8 ft at Walnut Street bridge, Jun 2, 1889, discharge, 654,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013 DAILY MEAN VALUES

[e, estimated]

	•					e, estimated						
Day	0ct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11,800	108,000	11,900	37,100	158,000	34,900	32,200	32,100	28,200	64,100	13,700	8,960
2	11,800	93,800	11,600	34,500	188,000	35,800	34,700	29,300	30,700	65,200	13,800	9,950
3	12,100	70,600	11,300	32,700	136,000	36,800	38,600	27,300	32,600	85,300	12,700	9,400
4	12,100	53,200	11,100	30,800	99,400	34,600	45,100	25,800	26,500	98,400	12,000	9,860
5	12,000	43,200	10,900	28,400	80,200	31,000	45,100	23,500	21,600	79,900	10,900	10,200
6	11,400	37,000	10,800	27,600	64,700	28,300	40,800	21,500	18,600	65,200	10,200	18,300
7	11,000	32,700	11,100	26,200	56,100	26,300	37,000	19,900	17,800	53,100	10,100	20,600
8	10,200	28,200	11,600	25,800	49,200	25,000	34,600	19,300	17,100	43,100	10,100	16,800
9	9,610	25,000	13,600	25,600	43,100	23,300	32,800	26,900	16,300	36,800	9,620	13,100
10	8,940	22,500	16,300	24,900	38,700	21,900	31,600	29,800	17,000	34,900	9,360	10,900
11	8,440	20,500	19,900	24,400	35,200	21,500	32,100	33,100	25,700	34,000	10,300	9,260
12	8,130	18,700	26,900	25,700	33,300	22,400	37,900	38,500	30,100	33,800	29,900	8,910
13	7,770	18,400	34,500	31,100	32,900	30,400	70,900	46,000	27,400	33,400	31,900	8,650
14	7,550	18,900	40,400	42,500	31,700	76,400	92,100	43,800	32,900	31,000	24,200	9,100
15	7,310	19,300	37,300	75,500	31,000	99,000	91,500	38,300	49,600	26,400	20,400	11,100
16	7,130	19,300	32,900	108,000	30,700	87,700	78,600	34,400	52,200	22,100	17,600	14,500
17	7,120	20,400	29,400	100,000	30,000	71,700	67,200	30,900	54,200	19,100	15,900	14,300
18	7,040	20,500	27,800	83,500	28,500	59,800	59,300	27,600	48,500	16,700	16,200	12,500
19	7,450	19,200	33,600	67,800	26,700	53,500	57,000	24,700	38,700	15,100	13,900	11,100
20	7,660	17,700	59,300	58,300	24,900	48,800	58,100	22,100	31,200	13,700	11,900	9,870
21	10,200	16,600	88,600	52,900	e23,000	46,200	61,700	20,200	26,300	12,600	10,600	8,970
22	12,900	15,600	124,000	e46,000	e22,000	43,400	62,900	18,700	22,700	12,300	10,400	8,570
23	12,600	15,100	130,000	e39,000	21,000	40,100	58,900	17,800	19,800	12,200	9,110	8,060
24	13,300	14,400	108,000	e32,000	19,500	37,300	53,000	18,600	17,200	12,100	8,720	8,020
25	14,300	13,900	82,500	e25,000	19,000	35,200	47,900	18,300	15,600	11,800	8,150	8,470
26	13,600	13,500	66,100	e22,000	18,600	33,900	44,700	18,500	15,300	12,400	7,520	8,630
27	13,700	13,300	58,200	e22,000	20,500	33,000	41,300	21,300	14,800	24,300	7,210	9,560
28	14,600	13,000	53,200	e21,500	31,000	32,400	38,500	21,700	22,600	20,100	7,080	8,730
29	15,600	12,700	48,000	e23,500		31,800	35,900	20,200	37,200	16,800	7,110	7,750
30	52,200	12,300	43,100	e26,500		31,300	33,400	23,500	55,700	15,000	7,060	7,130
31	98,800		39,700	51,600		31,300		27,100		13,800	6,870	
Total	458,350		1,303,600					820,700		1,034,700	394,510	321,250
Mean	14,790	28,250	42,050	41,050	49,750	40,810	49,850	26,470	28,800	33,380	12,730	10,710
Max	98,800	108,000	130,000	108,000	188,000	99,000	92,100	46,000	55,700	98,400	31,900	20,600
Min	7,040	12,300	10,800	21,500	18,600	21,500	31,600	17,800	14,800	11,800	6,870	7,130
Cfsm	0.61	1.17		1.70	2.06	1.69	2.07	1.10	1.20	1.38	0.53	0.44
ln.	0.71	1.31	2.01	1.96	2.15	1.95	2.31	1.27	1.33	1.60	0.61	0.50

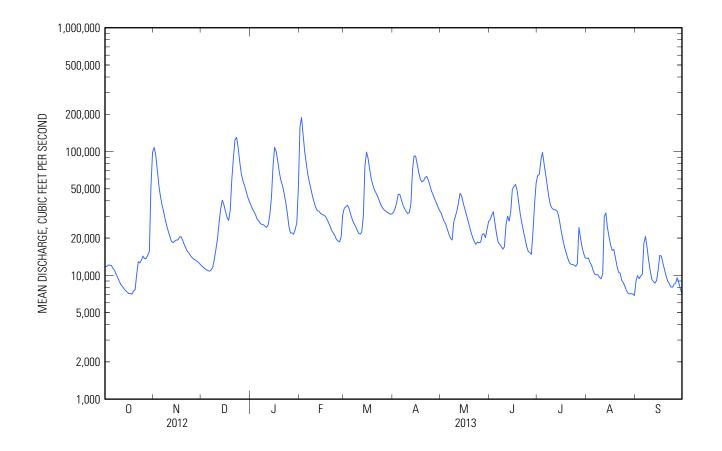
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1891 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	18,240	27,240	36,020	38,030	40,540	73,910	71,410	44,550	26,400	15,450	11,970	13,340
Max	75,150	83,540	98,870	103,100	153,500	216,100	217,000	103,900	166,800	71,450	44,960	122,200
(WY)	(1977)	(1927)	(1997)	(1996)	(1891)	(1936)	(1993)	(1894)	(1972)	(1902)	(1994)	(2011)
Min	2,356	2,303	3,835	3,876	9,122	26,080	20,380	12,750	6,226	3,315	2,878	2,066
(WY)	(1931)	(1931)	(1931)	(1931)	(1931)	(2006)	(1946)	(1941)	(1999)	(1965)	(1930)	(1964)

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

SUMMARY STATISTICS

	Calendar Y	ear 2012	Water Yea	r 2013	Water Yea	rs 1891 - 2013
Annual total	10,283,320		11,470,410			
Annual mean	28,100		31,430		34,720	
Highest annual mean					61,120	2011
Lowest annual mean					16,940	1965
Highest daily mean	130,000	Dec 23	188,000	Feb 2	954,000	Jun 24, 1972
Lowest daily mean	5,650	Sep 1	6,870	Aug 31	^a 1,	700Nov 29, 1930
Annual seven-day minimum	5,940	Jul 13	7,290	Aug 25	1,790	Sep 17, 1964
Maximum peak flow			200,000	Feb 2	1,020,000	Jun 24, 1972
Maximum peak stage			12.74	Feb 2	c ₃₂	2.57Jun 24, 1972
Instantaneous low flow			6,660	Aug 31	^a 1,	600Nov 29, 1930
Annual runoff (cfsm)	1.17	1	1.30		1.44	
Annual runoff (inches)	15.87	1	17.71		19.57	
10 percent exceeds	57,800		63,400		79,400	
50 percent exceeds	21,800		24,900		20,800	
90 percent exceeds	7,110		9,500		5,500	



a Result of freezeup.

b Minimum daily discharge since construction of sanitary dam and not affected by freezeup is 1,700 ft³/s, Sep 18, 1964.

c From floodmark.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1944 to 1953, 1956 to 1995, 2008, 2009, 2013.

PERIOD OF DAILY RECORD.—

ON EASTERN BANK OF CITY ISLAND:

WATER TEMPERATURE: October 1945 to August 1979; May 2008 to September 2011 (seasonal), October 2011 to current year. SPECIFIC CONDUCTANCE: May 1974 to August 1979; May 2008 to September 2011 (seasonal), October 2011 to current year. DISSOLVED OXYGEN: May 1974 to August 1979; May 2008 to September 2011 (seasonal), October 2011 to current year. pH: May 1974 to June 1979; May 2008 to September 2011 (seasonal), October 2011 to current year.

IN EASTERN CHANNEL AT WALNUT STREET BRIDGE:

WATER TEMPERATURE: July 2013 to current year (seasonal).

SPECIFIC CONDUCTANCE: July 2013 to current year (seasonal).

DISSOLVED OXYGEN: July 2013 to current year (seasonal).

pH: July 2013 to current year (seasonal).

INSTRUMENTATION.--Water-quality monitor interfaced with a data collection platform with 30-minute recording interval.

REMARKS.—

ON EASTERN BANK OF CITY ISLAND: Water temperature, pH, and dissolved oxygen records rated good. Specific conductance records rated fair, except those for the period January 10 to May 1, which are poor. Daily values tables for data collected at the City Island location appear on pages 12-23 of this report.

IN EASTERN CHANNEL AT WALNUT STREET BRIDGE: Water temperature, Specific conductance, pH, and dissolved oxygen records rated good. Daily values tables for data collected at the Walnut Street Bridge location appear on pages 24-35 of this report.

Analyses for pH, water temperature, specific conductance, and dissolved oxygen were performed on site. Inorganic sample analyses were performed at the Pennsylvania Department of Environmental Protection laboratory in Harrisburg, Pa. Occasionally, values for filtered parameters may exceed values for the corresponding unfiltered parameter. These results are within the limits of analytical precision and methods.

COOPERATION.--Continuous daily water quality records were collected by the U.S. Geological Survey in cooperation with the Pennsylvania Department of Environmental Protection.

EXTREMES FOR PERIOD OF DAILY RECORD.—

ON EASTERN BANK OF CITY ISLAND:

SPECIFIC CONDUCTANCE: Maximum, 517 microsiemens/cm, Mar 4, 1978; minimum, 77 microsiemens/cm, Sep 27, 1975. Higher maximum values were published, but are considered unreliable.

pH: Maximum, 10.4, Aug 27, 1975; minimum, 6.1, May 17, 1978.

WATER TEMPERATURE: Maximum, 35.0°C, Jul 22, 2011; minimum, freezing point on many days during Jan and Feb, 1977.

DISSOLVED OXYGEN: Maximum, 15.2 mg/L, Jan 23, 24, 1976; minimum 3.2 mg/L, Jul 8, 2011.

EXTREMES FOR CURRENT YEAR.--

ON EASTERN BANK OF CITY ISLAND:

SPECIFIC CONDUCTANCE: Maximum, 317 microsiemens/cm, Sept. 4; minimum, 106 microsiemens/cm, Dec. 22.

WATER TEMPERATURE: Maximum, 32.7°C, July 18: minimum, 0.0°C, on several days,

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 1 of 5

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Discharge, instanta- neous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	pH, water, unfiltered, laboratory, standard units (00403)	Specific conduc- tance, water, unfiltered, laboratory, µS/cm at 25°C (90095)	Specific conduc- tance, water, unfiltered, µS/cm at 25°C (00095)	Tempera- ture, water, °C (00010)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Hardness, water, mg/L as CaCO ₃ (00900)
10-25-2012	1600	14,300	9.7	8.5	8.1	261	250	15.9	164	93
11-29-2012	1230	12,700	12.8	9.2	7.9	247	252	3.5	160	90
12-27-2012	1230	58,100	13.6	8.9	7.5	145	146	1.8	102	48
01-09-2013	1145	25,600	15.7	9.6	7.4	215	209	1.2	146	79
02-01-2013	1200	162,000	12.4	7.4	7.4	175	170	.5	112	
02-13-2013	1215	32,800	13.5	7.6	7.6	201	225	2.6	126	
03-01-2013	1000	35,000	12.9	6.1	7.5	235	281	3.9	36	
03-12-2013	0900	22,000	12.5	8.2	8.0	252	236	7.5	148	
06-15-2013	1030	50,500	8.4	7.9	7.9	216	222	21.7	142	79
07-27-2013	1000	25,600	8.5	8.1	8.1	248	225	25.9	178	95
09-05-2013	1230	9,840	8.2	8.6	8.5	311	315	24.9	202	110

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 2 of 5

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, unfiltered, recover- able, mg/L (00916)	Magne- sium, water, unfiltered, recover- able, mg/L (00927)	Sodium, water, unfiltered, recover- able, mg/L (00929)	ANC, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, mg/L as CaCO ₃ (00417)	Bromide, water, filtered, mg/L (71870)	Chloride, water, filtered, mg/L (00940)	Sulfate, water, filtered, mg/L (00945)	Ammonia, water, filtered, mg/L as N (00608)
10-25-2012	1600	34	25.2	7.4	12.6	58	< 0.025	20.8	36.9	0.020
11-29-2012	1230	< 5	23.1	7.8	8.3	60	< 0.025	14.2	32.9	< .020
12-27-2012	1230	12	13.4	3.5	6.1	31	< 0.025	9.4	18.2	< .020
01-09-2013	1145	6	22.1	5.7	9.4	49	M	14.9	30.7	< .020
02-01-2013	1200	132	15.3	4.4	10.2	33	< 0.010	17.9	19.8	.060
02-13-2013	1215	14	19.4	5.3	8.6	44	M	14.4	25.8	.030
03-01-2013	1000	24	22.8	6.3	11.4	49	M	21.7	29.4	.050
03-12-2013	0900	< 5	23.3	6.3	13.2	52	M	23.6	32.0	< .007
06-15-2013	1030	56	22.5	5.5	12.0	53	M	19.3	21.8	< .007
07-27-2013	1000	10	25.5	7.6	10.9	54	M	17.9	40.2	.022
09-05-2013	1230	28	28.3	8.9	17.1	75	M	25.0	35.6	.021

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 3 of 5

[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; μ S/cm, microsiemens per centimeter; μ g/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Ammonia, water, unfiltered, mg/L as N (00610)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrate plus nitrite, water, unfiltered, mg/L as N (00630)	Orthophos- phate, water, filtered, mg/L as P (00671)	Orthophos- phate, water, unfiltered, mg/L as P (70507)	Phos- phorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, filtered, mg/L (00602)
10-25-2012	1600	0.020	0.460	0.470	< .010	< .01	< .010	0.037	0.56
11-29-2012	1230	< .020	.810	.800	< .010	< .01	< .010	.016	.85
12-27-2012	1230	.020	.800	.770	.010	.02	.011	.034	.96
01-09-2013	1145	< .020	.950	.940	< .010	< .01	< .010	.020	.99
02-01-2013	1200	.060	1.02	1.04	.015	.02	.022	.179	1.2
02-13-2013	1215	.030	.960	.971	.009	.01	.012	.025	1.1
03-01-2013	1000	.050	1.40	1.40	.028	.03	.033	.076	1.5
03-12-2013	0900	< .007	.748	.755	.003	M	.004	.017	.88
06-15-2013	1030	.015	.827	.827	.010	.01	.013	.094	.94
07-27-2013	1000	.021	.239	.239	.003	M	.007	.022	.34
09-05-2013	1230	.021	.213	.219	.027	.01	.007	.029	.46

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 4 of 5

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Total nitrogen, water, unfiltered, mg/L (00600)	Aluminum, water, unfiltered, recover- able, µg/L (01105)	Barium, water, unfiltered, recover- able, µg/L (01007)	Copper, water, unfiltered, recover- able, µg/L (01042)	Iron, water, unfiltered, recover- able, µg/L (01045)	Lead, water, unfiltered, recover- able, µg/L (01051)	Manga- nese, water, unfiltered, recover- able, μg/L (01055)	Nickel, water, unfiltered, recoverable, µg/L (01067)	Strontium, water, unfiltered, recover- able, micro- grams per liter (01082)
10-25-2012	1600	0.70	300	M	< 4	560	M	130	< 50	170
11-29-2012	1230	.86	< 200	M	< 4	280	< 1.0	50	< 50	200
12-27-2012	1230	.98	400	M	< 4	780	< 1.0	70	< 50	70
01-09-2013	1145	1.0	< 200	M	< 4	240	< 1.0	50	< 50	120
02-01-2013	1200	1.6	2,800	M	M	5,500	M	550	< 13.7856	80
02-13-2013	1215	1.2	200	M	M	400	M	70	< 13.7856	120
03-01-2013	1000	1.6	1,200	M	M	920	M	100	< 13.7856	160
03-12-2013	0900	.95	100	M	M	250	M	100	< 13.7856	130
06-15-2013	1030	1.3	1,000	M	M	2,470	M	300	< 13.7856	90
07-27-2013	1000	.45	200	M	M	520	M	80	< 13.7856	150
09-05-2013	1230	.54	600	M	M	850	M	160	< 13.7856	190

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 5 of 5

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Zinc, water, unfiltered, recover- able, µg/L (01092)	Boron, water, unfiltered, recover- able, micro- grams per liter (01022)	Selenium, water, unfiltered, µg/L (01147)	Organic carbon, water, unfiltered, mg/L (00680)	Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331)	Suspended sediment concen- tration, mg/L (80154)
10-25-2012	1600	< 10	< 200	< 7	2.9		
11-29-2012	1230	< 10	< 200	< 7	1.5		
12-27-2012	1230	20	< 200	< 7	2.4		
01-09-2013	1145	10	< 200	< 7	1.5		
02-01-2013	1200	40	20	< 0.32605	4.5	90	169
02-13-2013	1215	< 5.1325	20	< 0.32605	1.5		
03-01-2013	1000	20	60	< 0.32605	2.9		17
03-12-2013	0900	10	20	< 0.32605	1.7		
06-15-2013	1030	20	20	< 0.32605	3.7	90	61
07-27-2013	1000	M	40	M	2.3	82	17
09-05-2013	1230	20	40	M	2.6		

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 1 of 7

[ft 3 /s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; $^\circ$ C, degrees Celsius; μ S/cm, microsiemens per centimeter; μ g/L, micrograms per liter; --, no data; <, less than; E, estimated]

									2,6-	
Date	Sample start time	Discharge, instanta- neous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	Specific conduc- tance, water, unfiltered, µS/cm at 25°C (00095)	Tempera- ture, water, °C (00010)	alpha- HCH-d6, surrogate, water, filtered (0.7 micron glass fiber filter), percent recovery (91065)	Diazinon- d10, surrogate, water, filtered (0.7 micron glass fiber filter), percent recovery (91063)	Diethyl- aniline, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82660)	2-Chloro-4- isopropyl- amino-6- amino-s- triazine, water, filtered, recover- able, µg/L (04040)
03-12-2013	0900	22,000	12.5	8.2	236	7.5	90.8	73.4	< .0060	E .009
03-14-2013	1000	74,100	13.0	8.1	232	5.2	92.1	80.3	< .0060	E.010
04-11-2013	1000	32,000	10.5	8.0	190	15.6	83.5	73.6	< .0060	E .008
04-15-2013	1030	92,900	12.5	7.6	167	9.9	85.5	70.6	< .0060	E .005
05-13-2013	0915	46,500	9.0	7.7	188	15.3	95.4	70.4	< .0060	E .022
06-06-2013	0930	18,600	8.0	8.7	181	22.3	95.6	80.0	< .0060	E .020
06-17-2013	1000	54,800	8.0	7.6	184	20.7	90.9	84.0	< .0060	E .026
07-10-2013	0900	35,000	6.7	7.8	183	25.6	95.0	75.1	< .0060	E .026
08-13-2013	0930	33,200	8.4	7.8	251	25.0	103	80.7	< .0060	E .015
08-15-2013	0900	20,400	7.2	7.7	185	21.5	107	88.9	< .0060	E .023

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 2 of 7

[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Aceto- chlor, water, filtered, recover- able, µg/L (49260)	Alachlor, water, filtered, recover- able, µg/L (46342)	alpha- HCH, water, filtered, recover- able, µg/L (34253)	Atrazine, water, filtered, recover- able, µg/L (39632)	Azinphos- methyl, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82686)	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82673)	Butylate, water, filtered, recover- able, µg/L (04028)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82680)
03-12-2013	0900	< .010	< .008	< .0040	0.009	< .120	< .014	< .0040	< .060
03-14-2013	1000	< .010	< .008	< .0040	.008	< .120	< .014	< .0040	< .060
04-11-2013	1000	< .010	< .008	< .0040	.008	< .120	< .014	< .0040	< .060
04-15-2013	1030	< .010	< .008	< .0040	.006	< .120	< .014	< .0040	< .060
05-13-2013	0915	.011	< .008	< .0040	.188	< .120	< .014	< .0040	< .060
06-06-2013	0930	< .010	< .008	< .0040	.061	< .120	< .014	< .0040	< .060
06-17-2013	1000	.007	< .008	< .0040	.095	< .120	< .014	< .0040	< .060
07-10-2013	0900	< .010	< .008	< .0040	.068	< .120	< .014	< .0040	< .060
08-13-2013	0930	< .010	< .008	< .0040	.022	< .120	< .014	< .0040	< .060
08-15-2013	0900	< .010	< .008	< .0040	.028	< .120	< .014	< .0040	< .060

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 3 of 7

[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82674)	Chlor- pyrifos, water, filtered, recover- able, µg/L (38933)	cis- Permeth- rin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82687)	Cyanazine, water, filtered, recover- able, µg/L (04041)	DCPA, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82682)	Desulfinyl- fipronil amide, water, filtered, recover- able, µg/L (62169)	Desulfinyl- fipronil, water, filtered, recover- able, µg/L (62170)	Diazinon, water, filtered, recover- able, µg/L (39572)	Dieldrin, water, filtered, recover- able, µg/L (39381)
03-12-2013	0900	< .060	< .0100	< .010	< .022	< .0076	< .029	< .012	< .0060	< .008
03-14-2013	1000	< .060	< .0100	< .010	< .022	< .0076	< .029	< .012	< .0060	< .008
04-11-2013	1000	< .060	< .0100	< .010	< .022	< .0076	< .029	< .012	< .0060	< .008
04-15-2013	1030	< .060	< .0100	< .010	< .022	< .0076	< .029	< .012	< .0060	< .008
05-13-2013	0915	< .060	< .0100	< .010	< .022	< .0076	< .029	< .012	< .0060	< .008
06-06-2013	0930	< .060	< .0100	< .010	< .022	< .0076	< .029	< .012	< .0060	< .008
06-17-2013	1000	< .060	< .0100	< .010	< .022	< .0076	< .029	< .012	< .0060	< .008
07-10-2013	0900	< .060	< .0100	< .010	< .022	< .0076	< .029	< .012	< .0060	< .008
08-13-2013	0930	< .060	< .0100	< .010	< .022	< .0076	< .029	< .012	< .0060	< .008
08-15-2013	0900	< .060	< .0100	< .010	< .022	< .0076	< .029	< .012	< .0060	< .008

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 4 of 7

[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; μ S/cm, microsiemens per centimeter; μ g/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Disulfoton, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82677)	•	Ethal- fluralin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82663)	•	Fipronil sulfide, water, filtered, recover- able, µg/L (62167)	Fipronil sulfone, water, filtered, recover- able, µg/L (62168)	Fipronil, water, filtered, recover- able, µg/L (62166)	Fonofos, water, filtered, recover- able, µg/L (04095)	Lindane, water, filtered, recover- able, µg/L (39341)
03-12-2013	0900	< .040	< .0056	< .006	<.016	<.016	<.024	<.018	<.0048	< .0040
03-14-2013	1000	< .040	< .0056	< .006	< .016	< .016	< .024	< .018	< .0048	< .0040
04-11-2013	1000	< .040	< .0056	< .006	< .016	< .016	< .024	< .018	< .0048	< .0040
04-15-2013	1030	< .040	< .0056	< .006	< .016	< .016	< .024	< .018	< .0048	< .0040
05-13-2013	0915	< .040	< .0056	< .006	< .016	< .016	< .024	< .018	< .0048	< .0040
06-06-2013	0930	< .040	< .0056	< .006	< .016	< .016	< .024	< .018	< .0048	< .0040
06-17-2013	1000	< .040	< .0056	< .006	< .016	< .016	< .024	< .018	< .0048	< .0040
07-10-2013	0900	< .040	< .0056	< .006	< .016	< .016	< .024	< .018	< .0048	< .0040
08-13-2013	0930	< .040	< .0056	< .006	< .016	< .016	< .024	< .018	< .0048	< .0040
08-15-2013	0900	< .040	< .0056	< .006	< .016	< .016	< .024	< .018	< .0048	< .0040

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 5 of 7

[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; μ S/cm, microsiemens per centimeter; μ g/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Linuron, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82666)	Malathion, water, filtered, recover- able, µg/L (39532)	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82667)	Metola- chlor, water, filtered, recover- able, µg/L (39415)	Metri- buzin, water, filtered, recover- able, µg/L (82630)	Molinate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82671)	Naprop- amide, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82684)	p,p'-DDE, water, filtered, recover- able, µg/L (34653)	Parathion, water, filtered, recover- able, µg/L (39542)
03-12-2013	0900	< .060	< .016	< .008	0.008	< .012	< .0080	< .010	< .005	< .020
03-14-2013	1000	< .060	< .016	< .008	.009	< .012	< .0080	< .010	< .005	< .020
04-11-2013	1000	< .060	< .016	< .008	.007	< .012	< .0080	< .010	< .005	< .020
04-15-2013	1030	< .060	< .016	< .008	.005	< .012	< .0080	< .010	< .005	< .020
05-13-2013	0915	< .060	< .016	< .008	.093	.011	< .0080	< .010	< .005	< .020
06-06-2013	0930	< .060	< .016	< .008	.046	< .012	< .0080	< .010	< .005	< .020
06-17-2013	1000	< .060	< .016	< .008	.068	< .012	< .0080	< .010	< .005	< .020
07-10-2013	0900	< .060	< .016	< .008	.056	< .012	< .0080	< .010	< .005	< .020
08-13-2013	0930	< .060	< .016	< .008	.012	< .012	< .0080	< .010	< .005	< .020
08-15-2013	0900	< .060	< .016	< .008	.018	< .012	< .0080	< .010	< .005	< .020

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 6 of 7

[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; μ S/cm, microsiemens per centimeter; μ g/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Pebulate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82669)	•	Phorate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82664)	Prometon, water, filtered, recover- able, µg/L (04037)	Propa- chlor, water, filtered, recover- able, µg/L (04024)	Propanil, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82679)	•	•	Simazine, water, filtered, recover- able, µg/L (04035)
03-12-2013	0900	< .0160	< .012	< .020	< .012	< .006	< .010	< .020	< .0080	< .006
03-14-2013	1000	< .0160	< .012	< .020	< .012	< .006	< .010	< .020	< .0080	.003
04-11-2013	1000	< .0160	< .012	< .020	< .012	< .006	< .010	< .020	< .0080	.003
04-15-2013	1030	< .0160	< .012	< .020	< .012	< .006	< .010	< .020	< .0080	.003
05-13-2013	0915	< .0160	< .012	< .020	.005	< .006	< .010	< .020	< .0080	.018
06-06-2013	0930	< .0160	< .012	< .020	.003	< .006	< .010	< .020	< .0080	.006
06-17-2013	1000	< .0160	< .012	< .020	.003	< .006	< .010	< .020	< .0080	.008
07-10-2013	0900	< .0160	< .012	< .020	.004	< .006	< .010	< .020	< .0080	.005
08-13-2013	0930	< .0160	< .012	< .020	.004	< .006	< .010	< .020	< .0080	.008
08-15-2013	0900	< .0160	< .012	< .020	.004	< .006	< .010	< .020	< .0080	.007

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 7 of 7

[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	glass fiber filter), recover- able, µg/L	glass fiber filter), recover- able, µg/L	glass fiber filter), recover- able, µg/L	Thioben- carb, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L	glass fiber filter), recover- able, µg/L	glass fiber filter), recover- able, µg/L	Suspended sediment, sieve diameter, percent smaller than 0.0625	Suspended sediment concen- tration, mg/L
03-12-2013	0900	(82670) < .028	(82665) < .024	(82675) < .018	(82681) < .016	(82678) < .0046	(82661) < .018	(70331)	(80154)
03-12-2013	1000	< .028	< .024	< .018	< .016	< .0046	< .018	 77	43
03-14-2013	1000	< .028	< .024	< .018	< .016	< .0046	< .018		
04-15-2013	1030	< .028	< .024	< .018	< .016	< .0046	< .018		59
05-13-2013	0915	< .028	< .024	< .018	< .016	< .0046	< .018		
06-06-2013	0930	< .028	< .024	< .018	< .016	< .0046	< .018		
06-17-2013	1000	< .028	< .024	< .018	< .016	< .0046	< .018		63
07-10-2013	0900	< .028	< .024	< .018	< .016	< .0046	< .018		
08-13-2013	0930	< .028	< .024	< .018	< .016	< .0046	< .018		44
08-15-2013	0900	< .028	< .024	< .018	< .016	< .0046	< .018		

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 1 of 7

[--, no data; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Bisphenol A-d3, surrogate, NWQL Waste- water Compound Schedules (WCS), percent recovery (90735)	Decafluoro biphenyl, surrogate, NWQL Waste- water Compound Schedules (WCS), percent recovery (90737)	Fluoran- thene-d10, surrogate, NWQL Waste- water Compound Schedules (WCS), percent recovery (90738)	1,4- Dichloro- benzene, solids, recover- able, dry weight, micro- grams per kilogram (63163)	Atrazine, solids, recover- able, dry weight, micro- grams per kilogram (63182)	Bromacil, solids, recover- able, dry weight, micro- grams per kilogram (63189)	Camphor, solids, recover- able, dry weight, micro- grams per kilogram (63192)	Carbazole, solids, recover- able, dry weight, micro- grams per kilogram (63194)	Chlor- pyrifos, solids, recover- able, dry weight, micro- grams per kilogram (63195)
05-21-2013	1745	50	24	61	< 62	< 120	< 620	< 60	10	< 60
05-22-2013	1315	48	21	73	M	< 90	< 430	< 40	10	< 40
05-22-2013	1430	45	16	53	< 44	< 90	< 440	< 40	10	< 40
08-05-2013	1445	58	26	78	M	< 100	< 520	< 50	M	< 50
08-05-2013	1530	62	25	92	M	M	< 500	< 50	M	< 50
08-05-2013	1531	63	22	83	E 14	< 100	< 500	< 50	10	< 50
08-05-2013	1715	30	19	76	M	< 140	< 700	M	50	< 70

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 2 of 7

[--, no data; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Diazinon, solids, recover- able, dry weight, micro- grams per kilogram (63198)	Metola- chlor, solids, recover- able, dry weight, micro- grams per kilogram (63218)	N,N- Diethyl-m- toluamide (DEET), solids, recover- able, dry weight, micro- grams per kilogram (63219)	p-Cresol, solids, recover- able, dry weight, micro- grams per kilogram (63222)	Prometon, solids, recover- able, dry weight, micro- grams per kilogram (63226)	1-Methyl- naphtha- lene, solids, recover- able, dry weight, micro- grams per kilogram (63165)	2,6- Dimethyl- naphtha- lene, solids, recover- able, dry weight, micro- grams per kilogram (63167)	2-Methyl- naphtha- lene, solids, recover- able, dry weight, micro- grams per kilogram (63168)	3-beta- Copro- stanol, solids, recover- able, dry weight, micro- grams per kilogram (63170)
05-21-2013	1745	< 60	< 60	< 120	250	< 60	20	30	30	E 520
05-22-2013	1315	< 40	< 40	< 90	280	< 40	30	30	60	< 430
05-22-2013	1430	< 40	< 40	< 90	180	< 40	10	E 10	30	< 440
08-05-2013	1445	< 50	< 50	< 100	170	< 50	20	10	30	< 520
08-05-2013	1530	< 50	< 50	< 100	650	< 50	40	20	90	< 500
08-05-2013	1531	< 50	< 50	< 100	350	< 50	40	30	100	< 500
08-05-2013	1715	< 70	< 70	< 140	180	< 70	30	E 50	40	< 700

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 3 of 7

[--, no data; <, less than; E, estimated; M, presence verified but not quantified]

		3-Methyl- 1H-indole, solids, recover- able, dry weight, micro-	3-tert- Butyl-4- hydro- xyanisole, solids, recover- able, dry weight, micro-	4-Cumyl- phenol, solids, recover- able, dry weight, micro-	4-n-Octyl- phenol, solids, recover- able, dry weight, micro-	4-Nonyl- phenol (sum of all isomers), solids, recover- able, dry weight, micro-	4-Nonyl- phenol dietho- xylate (sum of all isomers), solids, recover- able, dry weight, micro-	4-Nonyl- phenol mono- ethoxylate (sum of all isomers), solids, recover- able, dry weight, micro-	4-tert- Octylphen ol di- ethoxylate, solids, recover- able, dry weight, micro-	4-tert- Octyl- phenol mono- ethoxylate, solids, recover- able, dry weight, micro-
Date	Sample start time	grams per kilogram (63171)	grams per kilogram (63172)	grams per kilogram (63173)	grams per kilogram (63174)	grams per kilogram (63175)	grams per kilogram (63200)	grams per kilogram (63221)	grams per kilogram (63201)	grams per kilogram (63206)
05-21-2013	1745	10	< 190	< 60	< 60	< 930	< 1,200	< 620	< 60	< 310
05-22-2013	1315	20	< 130	< 40	< 40	< 640	< 860	< 430	< 40	< 220
05-22-2013	1430	M	< 130	< 40	< 40	< 650	< 870	< 440	< 40	< 220
08-05-2013	1445	M		< 50	< 50	< 780	< 1,000	< 520	< 50	< 260
08-05-2013	1530	20		< 50	< 50	< 760	< 1,000	< 500	< 50	< 250
08-05-2013	1531	20		M	< 50	< 760	< 1,000	< 500	< 50	< 250
08-05-2013	1715	30	< 210	< 70	< 70	< 1,000	< 1,400	< 700	< 70	< 350

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 4 of 7

 $\hbox{[$-$-, no data; $<$, less than; E, estimated; M, presence verified but not quantified]}$

		4-tert- Octylphen ol, solids, recover- able, dry weight, micro-	9,10- Anthra- quinone, solids, recover- able, dry weight, micro-	Aceto- phenone, solids, recover- able, dry weight, micro-	Acetyl hexa- methyl tetrahydro naphtha- lene, solids, recover- able, dry weight, micro-	Anthra- cene, solids, recover- able, dry weight, micro-	BDE congener 47, solids, recover- able, dry weight, micro-	Benzo[a]- pyrene, solids, recover- able, dry weight, micro-	Benzo- phenone, solids, recover- able, dry weight, micro-	beta- Sitosterol, solids, recover- able, dry weight, micro-
Date	Sample start time	grams per kilogram (63176)	grams per kilogram (63181)	grams per kilogram (63178)	grams per kilogram (63179)	grams per kilogram (63180)	grams per kilogram (63166)	grams per kilogram (63183)	grams per kilogram (63184)	grams per kilogram (63185)
05-21-2013	1745	< 60	76	< 190	< 60	40	< 62.0	150	< 60	E 5,600
05-22-2013	1315	< 40	70	< 130	< 40	20	< 43.0	50	< 40	E 4,200
05-22-2013	1430	< 40	50	< 130	< 40	30	< 43.5	110	< 40	E 2,700
08-05-2013	1445	M	41	< 160	< 50	20	< 52.0	90	< 50	E 4,700
08-05-2013	1530	M	54	< 150	< 50	20	< 50.5	40	< 50	E 2,700
08-05-2013	1531	M	79	< 150	< 50	40	< 50.5	140	< 50	E 4,900
08-05-2013	1715	< 70	140	< 210	< 70	80	< 70.0	220	< 70	E 6,200

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 5 of 7

[--, no data; <, less than; E, estimated; M, presence verified but not quantified]

		beta-Stig- mastanol, solids, recover- able, dry weight, micro-	Bis(2- ethylhexyl) phthalate, solids, recover- able, dry weight, micro-	Bisphenol A, solids, recover- able, dry weight, micro-	Chol- esterol, solids, recover- able, dry weight, micro-	Diethyl phthalate, solids, recover- able, dry weight, micro-	D- Limonene, solids, recover- able, dry weight, micro-	Fluor- anthene, solids, recover- able, dry weight, micro-	Hexahydro hexa- methyl cyclopenta benzo- pyran, solids, recover- able, dry weight, micro-	Indole, solids, recover- able, dry weight, micro-
Date	Sample start time	grams per kilogram (63186)	grams per kilogram (63187)	grams per kilogram (63188)	grams per kilogram (63196)	grams per kilogram (63202)	grams per kilogram (63203)	grams per kilogram (63208)	grams per kilogram (63209)	grams per kilogram (63210)
05-21-2013	1745	E 1,000	< 310	E 20	E 2,500	< 120	E 30	250	< 60	190
05-22-2013	1315	E 390	< 220	E 50	E 2,600	< 90	< 40	200	< 40	210
05-22-2013	1430	< 440	< 220	E 40	E 1,400	< 90	< 40	230	< 40	190
08-05-2013	1445	E 670	< 260	M	E 1,700	< 100	< 50	200	M	100
08-05-2013	1530	E 410	< 250	< 50	E 1,100	< 100	< 50	110	< 50	90
08-05-2013	1531	E 710	< 250	E 40	E 1,800	< 100	< 50	360	M	150
08-05-2013	1715	E 860	< 350	< 70	E 3,100	< 140	< 70	E 620	< 70	370

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 6 of 7

[--, no data; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Iso- phorone, solids, recover- able, dry weight, micro- grams per kilogram (63212)	Isopropyl- benzene, solids, recover- able, dry weight, micro- grams per kilogram (63213)	Iso- quinoline, solids, recover- able, dry weight, micro- grams per kilogram (63214)	Menthol, solids, recover- able, dry weight, micro- grams per kilogram (63215)	Naphtha- lene, solids, recover- able, dry weight, micro- grams per kilogram (63220)	Phenan- threne, solids, recover- able, dry weight, micro- grams per kilogram (63224)	Phenol, solids, recover- able, dry weight, micro- grams per kilogram (63225)	Pyrene, solids, recoverable, dry weight, micrograms per kilogram (63227)	Tributyl phosphate, solids, recover- able, dry weight, micro- grams per kilogram (63231)
05-21-2013	1745	< 60	< 120	< 120	< 60	40	120	E 80	230	< 60
05-22-2013	1315	M	< 90	< 90	< 40	100	100	E 80	150	M
05-22-2013	1430	< 40	< 90	< 90	< 40	50	120	< 40	210	< 40
08-05-2013	1445	M	< 100	< 100	< 50	< 60	100	< 50	190	< 50
08-05-2013	1530	M	< 100	< 100	< 50	180	100	< 60	110	< 50
08-05-2013	1531	M	< 100	< 100	< 50	200	200	< 50	350	< 50
08-05-2013	1715	M	< 140	< 140	< 70	40	340	< 70	480	< 70

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

WATER-QUALITY DATA WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 7 of 7

[--, no data; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Triclosan, solids, recover- able, dry weight, micro- grams per kilogram (63232)	Triphenyl phosphate, solids, recover- able, dry weight, micro- grams per kilogram (63234)	Tris(2- butoxy- ethyl) phosphate, solids, recover- able, dry weight, micro- grams per kilogram (63229)	Tris(2- chloro- ethyl) phosphate, solids, recover- able, dry weight, micro- grams per kilogram (63230)	Tris (dichloro- isopropyl) phosphate, solids, recover- able, dry weight, micro- grams per kilogram (63235)
05-21-2013	1745	< 62.0	< 60	< 190	< 120	< 120
05-22-2013	1315	< 43.0	M	< 130	< 90	< 90
05-22-2013	1430	< 43.5	< 40	< 130	< 90	< 90
08-05-2013	1445	5.68	< 50	< 160	< 100	< 100
08-05-2013	1530	< 50.5	< 50	< 150	< 100	< 100
08-05-2013	1531	< 50.5	< 50	< 150	< 100	< 100
08-05-2013	1715	< 105	< 70	< 210	< 140	< 140

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean									
		October			Novembe	r		Decembe	r		January	
1	217	211	214	195	143	160	235	228	232	157	151	154
2	220	214	216	166	144	153	241	230	234	165	157	161
3	222	217	220	187	166	178	239	231	233	170	165	168
4	234	222	229	168	152	160	239	233	235	178	169	173
5	239	234	236	152	147	149	240	233	236	183	176	179
6	244	237	241	147	142	144	244	237	242	187	182	185
7	248	243	246	150	144	147	246	242	244	190	186	188
8	249	246	248	158	150	154	251	245	247	190	186	187
9	255	249	250	166	158	161	250	243	246	195	190	193
10	267	254	259	169	166	168	248	242	243			
11	274	267	270	174	168	172	248	233	240			
12	275	269	272	178	173	176	233	227	229			
13	271	268	269	179	176	177	232	219	227			
14	272	265	270	184	179	181	227	217	222			
15	269	265	266	192	184	188	222	188	205			
16	273	266	270	195	192	194	188	177	182	177	148	162
17	279	272	276	204	192	196	177	167	173	154	135	140
18	284	274	281	207	203	205	167	164	165	143	128	133
19	275	270	273	209	206	207	165	160	163	138	127	131
20	280	274	278	210	207	208	161	134	148	141	127	132
21	286	278	282	214	209	210	158	133	148	143	131	137
22	297	285	291	218	214	216	133	106	120	144	134	138
23	289	270	274	223	215	220	125	110	117	151	140	145
24	270	249	264	225	222	223	126	111	119	168	151	156
25	249	240	246	229	223	226	127	124	125	185	167	173
26	251	240	244	227	223	225	135	127	129	190	176	184
27	267	251	260	229	224	226	132	129	130			
28	270	259	267				135	130	132			
29	259	218	240				149	135	138			
30	243	194	221	230	225	228	147	142	144			
31	194	153	180				151	147	149			
lonth	297	153	253	230	142	188	251	106	187	195	127	161

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February	,		March			April			May	
1				236	215	226	224	189	202	185	169	174
2				228	215	221				179	174	176
3				234	216	227				180	176	178
4							201	185	195	183	178	180
5							209	178	188	186	183	184
6							220	172	178	187	185	186
7										191	187	190
8				251	243	248				192	188	190
9				245	238	242	153	150	152	192	188	191
10				239	234	237	163	152	156	191	169	180
11				245	234	240	179	159	168	181	166	173
12				243	228	235	183	163	172	179	160	171
13				249	225	229	206	166	177	161	148	156
14				233	158	202	197	149	174	148	139	141
15				211	158	179	181	143	161	146	139	143
16	193	187	190	158	142	150	155	137	145	142	137	138
17	210	193	198	142	135	137	187	134	156	148	142	144
18	234	203	221	137	135	136	179	137	159	152	147	149
19	254	223	231	138	135	137	148	129	138	153	150	151
20	254	221	224	149	138	144	144	131	139	156	150	151
21	231	221	224	170	147	154	159	128	146	157	151	154
22				172	157	163	149	126	138	166	156	161
23				176	162	168	148	141	144	181	165	173
24				176	164	168	152	141	147	181	169	176
25				184	167	176	156	138	145	180	175	177
26	241	232	236	192	174	182	163	138	150	180	174	177
27	237	231	234	189	170	179	154	137	143	178	169	173
28	238	232	235	186	169	172	164	145	155	211	178	196
29				211	172	179	174	152	163	213	209	210
30				219	180	190	186	161	174	224	210	214
31				195	184	190				224	212	218
Month	254	187	221	251	135	189	224	126	160	224	137	173

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August		;	Septembe	er
1	212	190	199				227	218	221	302	289	295
2	207	192	201	209	165	187	218	211	213	308	288	298
3	217	198	203	168	148	160	226	213	219	313	298	304
4	215	190	203	148	137	143	234	225	229	317	301	306
5	192	174	181	143	136	140	243	233	237			
6	177	169	173	150	142	146	255	243	249	311	286	305
7	174	167	170	158	149	154	265	252	258	286	264	272
8	182	171	177	161	153	157	260	246	253	278	260	268
9	190	181	187	167	160	164	251	245	249	260	239	251
10	195	139	188	176	166	169	253	245	247	241	234	236
11	197	182	189	182	174	177	260	251	256	258	237	246
12	219	196	212	197	182	190	300	257	274	260	242	253
13	219	206	214	200	195	198	303	249	270	247	232	239
14	209	204	206	196	181	189	249	197	217	243	235	239
15	220	205	213	203	186	194	204	192	196	245	238	242
16	212	190	199	211	201	205	218	204	214	258	243	251
17	196	180	185	215	211	212	222	209	218	287	258	273
18	184	170	179	217	210	212	214	205	210	287	282	285
19	172	164	167				220	205	213	287	275	282
20	166	159	163				230	215	223	278	268	273
21	168	160	163				247	230	240	271	266	269
22	174	164	168				254	239	246	275	267	270
23	181	169	174				269	250	262	275	271	273
24	185	179	181				276	261	267	279	272	275
25	193	185	190	237	231	234	274	262	266	274	264	268
26	199	192	196	239	230	235	285	265	273	267	261	263
27	209	177	200	301	235	256	282	274	277			
28	207	176	198	306	290	298	289	275	282			
29				290	266	280	292	285	288			
30				266	242	252	295	283	288			
31				244	227	236	301	283	289			
Month	220	139	189	306	136	200	303	192	247	317	232	269

	Max	Min	Mean
Year	317	106	203

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		Octobe	r		Novembe	r		Decembe	er		January	1
1	8.7	7.8	8.1	7.6	7.5	7.5						
2	8.5	7.9	8.2	7.5	7.4	7.4						
3	8.5	7.7	7.9	7.6	7.5	7.6						
4	8.5	7.8	8.2	7.6	7.6	7.6						
5	8.8	7.9	8.2	7.7	7.6	7.6						
6	8.6	8.1	8.4	7.8	7.6	7.7						
7	8.5	8.1	8.3	7.8	7.6	7.7						
8	8.6	8.1	8.3	7.8	7.7	7.7						
9	8.8	8.2	8.4	7.8	7.7	7.7						
10	8.9	8.5	8.6	7.8	7.6	7.7						
11	8.9	8.5	8.5	7.8	7.6	7.7						
12	8.8	8.5	8.6	7.8	7.6	7.7						
13	8.9	8.5	8.6	7.9	7.6	7.7						
14	8.7	8.4	8.5	8.0	7.7	7.8						
15	8.6	8.3	8.3	8.0	7.7	7.8						
16	8.7	8.1	8.4	8.0	7.7	7.9						
17	8.8	8.2	8.4	8.0	7.8	7.9						
18	8.8	8.3	8.4	8.0	7.8	7.9						
19	8.5	8.0	8.1	8.1	7.8	7.9						
20	8.6	8.0	8.1	8.1	7.8	8.0						
21	8.6	8.0	8.2	8.1	7.8	8.0						
22	8.6	8.0	8.4	8.2	7.8	8.0						
23	8.4	7.8	8.1	8.1	7.7	8.0						
24	8.5	7.8	8.1	8.0	7.7	7.8						
25	8.2	7.7	7.8	8.0	7.8	7.9						
26	8.0	7.6	7.7	8.1	7.8	8.0						
27	8.0	7.7	7.8	8.0	7.8	7.9						
28	8.1	7.7	7.9									
29	7.9	7.8	7.9									
30	8.0	7.8	7.9									
31	7.9	7.6	7.8									
lax	8.9	8.5	8.6	8.2	7.8	8.0						
lin	7.9	7.6	7.7	7.5	7.4	7.4						

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		Februar	у		March			April			May	
1												
2										8.2	7.4	7.8
3										8.3	7.5	7.8
4										8.4	7.6	7.9
5										8.7	7.6	8.1
6										8.6	7.7	8.1
7										8.6	7.7	8.2
8										8.3	7.6	7.9
9										8.3	7.6	7.8
10										8.0	7.6	7.7
11										7.8	7.6	7.6
12										7.8	7.6	7.7
13										7.7	7.6	7.6
14												
15												
16												
17												
18										7.8	7.5	7.6
19										7.6	7.4	7.5
20										8.1	7.4	7.5
21										8.2	7.5	7.8
22										8.4	7.5	7.8
23										8.4	7.4	7.8
24										8.2	7.5	7.8
25										8.4	7.5	7.8
26										8.5	7.7	8.0
20 27										8.5	7.7	8.2
28										8.6	7.0	8.1
28 29										8.6 9.0	7.7 7.7	8.1
30										9.0 9.0	8.2	8.2 8.7
30 31												
31										9.1	8.2	8.8
Vlax										9.1	8.2	8.8
Viin										7.6	7.4	7.5

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		June			July			August		:	Septemb	er
1	8.9	8.3	8.7	7.5	7.3	7.4	8.5	7.7	8.1	8.6	8.0	8.2
2	8.8	7.9	8.4	7.5	7.4	7.5	8.9	7.8	8.2	8.6	7.8	8.3
3	8.8	7.8	8.4	7.4	7.4	7.4	8.9	7.8	8.3	8.6	7.8	8.2
4	9.0	7.9	8.6	7.4	7.4	7.4	9.1	7.9	8.5	8.6	8.0	8.5
5	9.1	8.0	8.7	7.4	7.4	7.4	9.2	8.0	8.8	8.6	7.9	8.4
6	8.8	8.0	8.4	7.4	7.4	7.4	9.0	8.1	8.7	8.6	7.8	8.2
7	8.1	7.5	7.8	7.5	7.4	7.4	8.8	7.9	8.3	8.1	7.7	7.9
8	8.6	7.4	7.8	7.5	7.4	7.5	9.2	7.8	8.2	8.1	7.7	7.8
9	8.8	7.6	8.3	7.5	7.4	7.5	9.3	8.0	8.8	8.0	7.7	7.8
10	8.4	7.5	7.6	7.6	7.4	7.5	9.4	8.1	8.8	8.2	7.5	7.8
11	8.6	7.4	7.8	7.8	7.5	7.6	9.4	8.3	9.0	8.1	7.5	7.8
12	9.0	7.8	8.6	7.7	7.6	7.6	9.0	8.0	8.3	7.8	7.4	7.6
13	8.6	7.7	8.1	7.7	7.6	7.6	8.1	7.8	7.9	7.9	7.4	7.5
14	8.4	7.6	7.8	7.7	7.5	7.6	7.8	7.6	7.8	8.1	7.6	7.7
15	7.8	7.5	7.7	7.9	7.4	7.6	7.6	7.6	7.6	8.3	7.7	8.0
16	7.6	7.4	7.5	8.0	7.5	7.7	8.1	7.6	7.7	8.2	7.7	8.0
17	7.6	7.5	7.6	8.2	7.5	7.8	8.2	7.6	7.8	8.2	7.7	7.9
18	7.6	7.5	7.6	8.5	7.6	7.9	7.9	7.5	7.7	8.5	7.8	8.1
19	7.7	7.5	7.6	8.4	7.6	8.1	8.0	7.6	7.7	8.4	7.9	8.3
20	7.8	7.5	7.6	8.6	7.6	8.0	8.4	7.6	7.8	8.4	7.9	8.2
21	8.3	7.5	7.8	8.7	7.8	8.3	8.6	7.7	8.0	8.4	7.8	7.9
22	8.8	7.5	8.0	8.6	7.8	8.2	8.5	7.6	8.0	8.2	7.6	7.8
23	9.0	7.8	8.4	8.9	7.7	8.1	8.4	7.7	8.0	8.4	7.9	8.1
24	9.0	7.9	8.7	9.0	8.2	8.6	8.7	7.8	8.2	8.5	8.2	8.3
25	8.9	7.9	8.7	8.9	8.3	8.7	8.7	8.1	8.4	8.6	8.3	8.4
26	8.6	7.7	8.2	9.0	8.3	8.7	8.8	8.2	8.5	8.6	8.3	8.5
27	8.2	7.5	7.8	8.9	8.1	8.6	8.9	8.3	8.5	8.6	8.2	8.5
28	7.9	7.2	7.5	8.8	8.3	8.6	8.7	8.2	8.4	8.5	8.2	8.4
29	7.7	7.2	7.5	9.1	8.5	8.8	8.9	7.9	8.2	8.5	8.3	8.4
30	7.5	7.4	7.4	8.9	8.1	8.5	8.8	8.2	8.3	8.6	8.3	8.5
31				8.6	7.9	8.2	8.8	8.1	8.4			
Max	9.1	8.3	8.7	9.1	8.5	8.8	9.4	8.3	9.0	8.6	8.3	8.5
Min	7.5	7.2	7.4	7.4	7.3	7.4	7.6	7.5	7.6	7.8	7.4	7.5

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day 1 2 3 4 5 6 7 8 9	19.1 18.6 19.3 20.1 21.1 20.3 18.0 15.3 14.6 16.0	16.3 17.8 17.9 19.0 18.6 18.0 15.3 13.3 12.9 14.3	17.7 18.1 18.5 19.4 19.8 19.3 16.4 14.1	10.3 9.8 9.2 8.4 8.1 7.8 7.0 6.7 7.2	9.8 9.2 8.4 7.9 7.4 6.9 6.0 5.6	10.1 9.4 8.8 8.2 7.7 7.3 6.6	4.0 5.0 7.1 8.2 8.8 6.8 5.3	3.2 4.0 5.0 6.6 6.8	3.6 4.5 6.0 7.4 8.2 5.7	1.1 0.8 0.6 1.0 0.9	0.5 0.3 0.0 0.2 0.0	0.9 0.5 0.3 0.6 0.5
2 3 4 5 6 7 8 9	18.6 19.3 20.1 21.1 20.3 18.0 15.3 14.6 16.0	17.8 17.9 19.0 18.6 18.0 15.3 13.3 12.9	18.1 18.5 19.4 19.8 19.3 16.4 14.1 13.7	9.8 9.2 8.4 8.1 7.8 7.0 6.7	9.2 8.4 7.9 7.4 6.9 6.0	9.4 8.8 8.2 7.7 7.3 6.6	5.0 7.1 8.2 8.8 6.8	4.0 5.0 6.6 6.8 5.0	4.5 6.0 7.4 8.2 5.7	0.8 0.6 1.0 0.9	0.3 0.0 0.2 0.0	0.5 0.3 0.6 0.5
2 3 4 5 6 7 8	18.6 19.3 20.1 21.1 20.3 18.0 15.3 14.6 16.0	17.8 17.9 19.0 18.6 18.0 15.3 13.3 12.9	18.1 18.5 19.4 19.8 19.3 16.4 14.1 13.7	9.8 9.2 8.4 8.1 7.8 7.0 6.7	9.2 8.4 7.9 7.4 6.9 6.0	9.4 8.8 8.2 7.7 7.3 6.6	5.0 7.1 8.2 8.8 6.8	4.0 5.0 6.6 6.8 5.0	4.5 6.0 7.4 8.2 5.7	0.8 0.6 1.0 0.9	0.3 0.0 0.2 0.0	0.5 0.3 0.6 0.5
3 4 5 6 7 8 9	19.3 20.1 21.1 20.3 18.0 15.3 14.6 16.0	17.9 19.0 18.6 18.0 15.3 13.3 12.9	18.5 19.4 19.8 19.3 16.4 14.1 13.7	9.2 8.4 8.1 7.8 7.0 6.7	8.4 7.9 7.4 6.9 6.0	8.8 8.2 7.7 7.3 6.6	7.1 8.2 8.8 6.8	5.0 6.6 6.8 5.0	6.0 7.4 8.2 5.7	0.6 1.0 0.9 1.7	0.0 0.2 0.0	0.3 0.6 0.5
4 5 6 7 8 9	20.1 21.1 20.3 18.0 15.3 14.6 16.0	19.0 18.6 18.0 15.3 13.3 12.9	19.4 19.8 19.3 16.4 14.1 13.7	8.4 8.1 7.8 7.0 6.7	7.9 7.4 6.9 6.0	8.2 7.7 7.3 6.6	8.2 8.8 6.8	6.6 6.8 5.0	7.4 8.2 5.7	1.0 0.9 1.7	0.0	0.6 0.5
5 6 7 8 9	21.1 20.3 18.0 15.3 14.6 16.0	18.6 18.0 15.3 13.3 12.9	19.8 19.3 16.4 14.1 13.7	8.1 7.8 7.0 6.7	7.4 6.9 6.0	7.7 7.3 6.6	8.8 6.8	6.8 5.0	8.2 5.7	0.9 1.7	0.0	0.5
7 8 9	18.0 15.3 14.6 16.0	15.3 13.3 12.9	16.4 14.1 13.7	7.0 6.7	6.0	6.6					0.5	1.1
7 8 9	15.3 14.6 16.0	13.3 12.9	14.1 13.7	6.7			5.3	4.7				
8 9	15.3 14.6 16.0	13.3 12.9	14.1 13.7	6.7				4.7	4.9	1.9	1.3	1.6
9	14.6 16.0	12.9	13.7			6.1	5.6	4.8	5.2	1.6	0.7	1.1
	16.0			1.4	5.3	6.2	6.0	5.6	5.8	1.1	0.6	0.9
10	14 9		15.0	7.3	6.2	6.7	6.1	5.4	5.7	1.9	0.5	1.2
11		13.1	14.1	8.3	6.4	7.4	6.5	5.7	6.1	2.1	1.3	1.7
12	13.9	12.7	13.4	9.7	7.4	8.4	5.7	4.7	5.1	3.2	2.0	2.6
13	13.3	11.3	12.4	9.7	8.6	9.1	5.0	4.2	4.6	3.5	3.0	3.3
14	13.7	12.0	12.7	8.9	7.6	8.2	4.6	3.8	4.2	4.3	3.5	3.9
15	14.7	13.2	13.9	8.0	6.8	7.4	4.4	3.8	4.1	3.9	3.6	3.8
16	14.1	12.9	13.3	7.5	6.3	6.9	4.6	4.1	4.4	3.8	3.5	3.6
17	14.1	12.0	13.0	7.5	5.9	6.8	4.9	4.6	4.8	3.7	3.4	3.5
18	15.1	12.7	13.9	7.1	5.8	6.5	5.5	4.7	5.0	3.5	2.8	3.1
19	15.5	14.3	14.9	7.2	5.6	6.5	5.0	4.4	4.6	3.0	2.2	2.6
20	15.5	14.3	14.8	7.0	5.6	6.4	4.6	4.2	4.5	3.3	2.5	2.8
21	14.5	12.8	13.7	6.8	5.5	6.2	4.8	4.5	4.6	2.5	1.3	2.0
22	14.9	12.7	13.8	6.5	5.1	5.9	4.5	3.8	4.1	1.3	0.0	0.2
23	14.6	13.5	14.1	6.4	5.1	5.8	3.8	3.5	3.6	0.0	0.0	0.0
24	16.5	14.2	15.2	6.0	4.3	5.0	3.5	3.0	3.1	0.0	0.0	0.0
25	16.3	15.7	16.0	4.3	3.5	3.8	3.2	2.9	3.0	0.0	0.0	0.0
26	15.9	15.5	15.7	4.4	3.0	3.6	3.0	1.9	2.3	0.0	0.0	0.0
27	15.9	15.5	15.7	3.8	3.2	3.6	2.1	1.5	1.9	0.0	0.0	0.0
28	15.5	14.0	14.8	3.8	3.1	3.4	2.0	1.5	1.6	0.0	0.0	0.0
29	14.0	11.5	12.6	3.7	2.6	3.1	1.6	0.9	1.2	0.0	0.0	0.0
30	11.6	10.8	11.1	3.8	2.4	3.1	0.9	0.3	0.6	3.2	0.0	0.8
31	10.8	10.2	10.5				0.5	0.0	0.3	3.5	1.8	3.0
Month	21.1	10.2	14.9	10.3	2.4	6.5	8.8	0.0	4.2	4.3	0.0	1.5

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Davi	Max	Min	Maan	WATER YE	Min			Min	Maan	Max	NA:	Mass
Day	IVIAX	Min	Mean	Max	IVIIII	Mean	Max	IVIIII	Mean	Max	Min	Mean
		February			March			April			May	
1	1.8	0.0	0.5	3.4	2.9	3.1	8.0	6.6	7.2	16.7	13.7	15.2
2	0.4	0.0	0.2	3.3	2.7	3.0	7.8	6.2	6.9	18.1	15.0	16.5
3	0.6	0.2	0.4	2.8	2.2	2.6	7.4	6.2	6.6	18.6	16.0	17.3
4	0.5	0.0	0.3	2.9	1.7	2.2	7.2	5.5	6.4	19.2	15.7	17.5
5	0.6	0.3	0.4	3.6	1.4	2.5	8.4	6.3	7.3	19.4	16.2	17.8
6	1.1	0.6	0.8	3.3	2.9	3.1	9.0	6.8	7.9	18.7	16.4	17.7
7	1.0	0.6	0.8	4.5	2.6	3.5	10.0	7.8	8.8	19.6	17.4	18.5
8	1.3	1.0	1.2	4.6	2.9	3.8	11.8	9.2	10.4	20.6	18.6	19.4
9	1.4	0.2	0.8	5.7	2.6	4.2	14.3	11.2	12.7	19.9	18.1	18.9
10	1.6	0.4	1.0	7.0	4.0	5.5	15.8	13.4	14.6	19.7	17.7	18.7
11	1.9	1.2	1.6	7.2	5.2	6.3	16.9	15.0	15.8	18.9	17.8	18.3
12	2.8	1.6	2.1	8.2	7.0	7.5	15.4	12.6	13.6	18.4	16.5	17.7
13	2.1	1.4	1.8	7.7	6.1	6.9	12.8	11.9	12.3	16.5	14.4	15.4
14	3.1	1.4	2.2	6.1	5.2	5.5	11.9	10.4	10.9	15.4	13.8	14.5
15	3.9	2.4	3.1	5.3	4.4	4.7	10.7	9.7	10.2	16.0	14.4	15.0
16	3.8	2.9	3.4	4.5	2.8	3.6	10.8	9.8	10.2	18.1	15.1	16.5
17	2.9	0.5	1.9	3.4	2.6	2.9	12.1	10.7	11.3	19.3	16.2	17.7
18	1.7	0.0	0.8	3.1	2.0	2.5	12.0	11.7	11.9	18.5	17.2	17.7
19	1.5	1.0	1.2	4.0	2.0	2.8	13.6	12.0	12.7	17.5	16.6	17.0
20	1.2	0.0	0.5	4.1	2.8	3.4	13.6	12.4	13.0	20.4	16.8	18.4
21	0.8	0.0	0.2	3.8	2.9	3.4	12.9	11.3	12.2	23.4	19.1	21.2
22	0.9	0.0	0.4	3.5	2.6	3.0	13.0	11.6	12.3	25.2	21.8	23.4
23	2.3	0.3	1.1	4.6	2.4	3.4	13.1	11.9	12.5	24.4	23.0	23.7
24				4.8	3.7	4.2	13.7	12.2	12.9	23.0	17.3	20.4
25				4.4	3.9	4.1	14.2	12.2	13.2	17.5	15.4	16.6
26	2.8	1.6	2.3	5.8	3.8	4.7	15.1	13.0	14.0	19.0	15.3	17.2
27	3.9	2.2	3.0	6.5	5.0	5.6	16.0	13.7	14.8	19.9	17.0	18.6
28	4.2	3.1	3.6	6.2	5.7	5.9	15.6	14.6	15.1	19.5	17.8	18.3
29				7.3	5.4	6.3	14.6	13.7	14.0	21.9	18.0	19.7
30				8.6	5.9	7.2	14.9	13.7	14.2	24.2	20.8	22.6
31				8.0	7.0	7.4				25.4	21.8	23.7
onth	4.2	0.0	1.4	8.6	1.4	4.3	16.9	5.5	11.5	25.4	13.7	18.4

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

						IBER ZUIZ II						
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August		;	Septembe	r
1	26.1	23.1	24.6				26.1	24.4	25.3	28.8	26.4	27.5
2	25.4	23.9	24.6	24.6	23.8	24.1	26.2	24.6	25.5	28.9	26.4	27.4
3	24.9	23.7	24.3	23.8	22.9	23.3	25.7	24.3	24.9	27.5	25.1	26.4
4	24.7	21.7	23.3	23.5	22.4	23.0	25.5	23.5	24.4	26.4	23.5	24.8
5	24.8	21.8	23.3	24.3	22.6	23.4	26.4	23.1	24.6	25.4	23.9	24.5
6	23.7	21.0	22.1	25.8	23.9	24.8	25.0	23.2	23.9	24.3	22.1	23.3
7	21.0	20.0	20.3	26.8	25.5	26.0	23.2	22.6	23.0	23.9	21.3	22.7
8	22.6	20.1	21.2	26.6	25.5	26.0	25.5	22.6	23.8	24.3	22.4	23.4
9	24.8	20.8	22.7	26.5	25.6	26.0	27.1	24.5	25.8	22.9	20.9	21.7
10	24.1	22.5	23.0	26.8	25.4	26.0	27.7	25.3	26.3	24.9	21.4	22.9
11	23.6	22.2	22.7	27.6	25.7	26.6	27.5	25.1	26.1	27.6	24.2	25.7
12	24.0	22.0	23.1	26.7	25.1	25.7	27.8	25.9	26.8	26.9	25.6	26.2
13	24.0	21.9	23.1	26.0	24.5	25.2	26.5	24.9	25.7	25.8	22.0	24.1
14	23.1	20.8	22.0	28.0	25.3	26.6	25.1	22.1	23.1	22.0	19.5	20.3
15	23.2	21.6	22.3	29.9	26.6	28.2	24.0	21.2	22.6	21.2	18.6	19.8
16	22.3	20.9	21.6	30.8	27.8	29.3	24.8	21.9	23.4	21.1	19.6	20.4
17	22.4	20.7	21.5	31.5	28.6	30.2	24.9	22.6	23.8	20.2	17.9	19.2
18	22.0	20.9	21.5	32.7	29.6	31.2	24.3	23.0	23.5	20.4	17.7	19.0
19	22.6	20.3	21.4				23.4	22.2	22.8	21.1	18.2	19.6
20	23.6	21.0	22.3				26.0	22.4	24.0	22.2	19.5	20.8
21	25.0	21.8	23.3				26.9	23.9	25.4	21.4	19.4	20.4
22	26.1	22.7	24.4				27.5	25.4	26.4	20.2	18.4	19.2
23	27.4	24.2	25.8				26.5	25.0	25.5	18.5	16.5	17.5
24	28.5	25.6	27.1				26.6	23.3	24.9	19.5	16.4	17.8
25	29.2	26.5	27.9	26.8	24.1	25.5	26.6	23.7	25.1	19.4	17.2	18.2
26	28.4	26.3	27.4	27.8	24.4	26.0	27.2	23.7	25.4	20.2	17.3	18.7
27	27.8	26.0	26.7	27.0	25.5	26.2	28.8	25.4	26.9			
28	26.8	25.4	26.1	26.2	24.6	25.3	27.8	26.4	27.1			
29				26.8	24.5	25.7	27.5	25.3	26.2			
30				26.5	24.1	25.5	28.7	25.8	27.1			
31				26.2	24.2	25.3	28.8	25.8	27.2			
/lonth	29.2	20.0	23.6	32.7	22.4	26.0	28.8	21.2	25.0	28.9	16.4	22.0

	Max	Min	Mean
Year	32.7	0.0	13.0

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
•		October			Novembe			Decembe	r		January	
1	11.0	8.5	9.6	10.2	9.6	10						
2	9.8	8.4	9.1	10.2	10.2	10.5						
3	10.4	8.3	9.2	10.0	10.2	10.8						
4	10.4	8.3	9.2	11.2	10.9	11.1						
5	10.1	8.4	9.5	11.6	11.2	11.4						
6	9.9	8.2	9.1	12.0	11.6	11.8						
7	10.4	8.7	9.4	12.2	11.8	12.0						
8	11.2	9.3	10.2	12.4	11.9	12.1						
9	11.9	10.0	10.9	12.5	12.1	12.3						
10	11.4	9.9	10.6	12.4	12.0	12.2						
11	11.7	9.6	10.5	12.4	11.9	12.1						
12	11.5	10.1	10.7	12.1	11.4	11.8						
13	12.1	10.3	11.0	11.8	11.0	11.4						
14	11.9	10.3	11.0	12.1	11.3	11.7						
15	11.1	9.9	10.4	12.5	11.6	12.0						
16	11.6	9.6	10.5	12.6	11.9	12.2						
17	12.1	10.0	10.9	12.8	12.0	12.4						
18	11.5	10.0	10.7	12.9	12.2	12.5						
19	10.9	9.2	9.9	12.9	12.2	12.5						
20	11.3	9.2	10.1	12.9	12.1	12.4						
21	11.4	9.7	10.5	13.0	12.0	12.5						
22	11.7	9.8	10.7	13.1	12.1	12.6						
23	11.2	9.6	10.3	13.1	12.2	12.6						
24	11.4	9.5	10.3	12.9	12.0	12.5						
25	10.3	9.0	9.4	13.4	12.4	12.9						
26	10.1	8.8	9.3	13.8	12.9	13.3						
27	10.0	8.8	9.4	13.5	12.9	13.2						
28	10.0	8.9	9.4									
29	10.0	9.3	9.7									
30	10.0	9.2	9.8									
31	9.6	9.1	9.4									
Month	12.1	8.2	10.0	13.8	9.6	12.0						
IVIUIIIII	12.1	8.2	10.0	13.8	9.0	12.0						

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February	ı		March			April			May	
1												
2										11.1	9.8	10.5
3										11.1	9.6	10.4
4										11.1	9.6	10.4
5										11.1	9.4	10.2
6										11.1	9.3	10.1
7										10.7	8.8	9.7
8										10.6	8.4	9.4
9										10.4	8.3	9.3
10										9.4	8.7	9.0
11										9.3	8.7	9.0
12										9.9	8.8	9.4
13										9.9	9.4	9.7
14										10.6	9.8	10.2
15										10.6	9.9	10.3
16										10.3	9.7	10.0
17										10.3	9.4	9.9
18										10.0	9.2	9.6
19										9.8	9.1	9.4
20										10.2	8.9	9.5
										10.2	0.7	
21										9.9	8.5	9.2
22										9.6	7.8	8.6
23										9.3	7.2	8.1
24										9.6	7.3	8.5
25										10.5	8.6	9.7
26										10.5	9.1	9.8
27										10.5	8.9	9.7
28										10.5	8.5	9.4
29										11.4	8.3	9.9
30										11.0	8.0	9.6
31										11.1	7.9	9.5
Month										11.4	7.2	9.6

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August		;	Septembe	er
1	10.0	7.5	8.9	7.1	6.6	6.9	8.9	6.8	7.8	9.2	6.5	7.7
2	9.9	7.2	8.4	7.3	6.9	7.1	9.8	6.9	8.3	9.4	6.3	7.7
3	10.3	7.0	8.7	7.5	7.2	7.4	9.7	6.9	8.2	9.1	6.5	7.8
4	11.4	7.5	9.5	7.6	7.4	7.5	10.3	7.2	8.8	9.8	6.9	8.2
5	10.8	7.8	9.3	7.6	7.3	7.5	11.0	7.3	9.1	9.5	7.0	8.3
6	9.2	7.4	8.4	7.4	7.1	7.3	9.7	7.0	8.4	9.3	7.3	8.3
7	9.3	7.3	8.3	7.2	6.9	7.1	9.8	7.0	8.2	9.0	7.4	8.2
8	10.5	7.5	9.0	7.2	6.8	7.0	11.0	7.3	8.9	9.0	7.2	8.1
9	10.7	7.8	9.3	7.2	6.9	7.1	10.9	7.1	9.0	9.2	7.2	8.1
10	8.8	7.0	7.9	7.5	7.0	7.2	11.6	6.7	9.0	9.5	7.4	8.4
11	9.8	7.0	8.4	8.0	7.0	7.4	11.8	7.0	9.1	8.9	6.9	7.9
12	11.4	7.6	9.4	7.6	7.0	7.3	8.9	7.0	7.7	7.9	6.3	7.1
13	9.8	7.4	8.5	7.8	7.2	7.4	8.0	6.6	7.1	8.5	6.3	7.4
14	9.7	7.6	8.5	8.1	7.2	7.6	7.4	6.7	7.1	9.4	7.5	8.4
15	8.7	7.7	8.2	8.3	7.1	7.6	7.7	7.0	7.4	9.8	8.2	8.9
16	8.1	7.5	7.8	8.4	6.8	7.5	9.2	7.1	8.0	9.2	8.0	8.6
17	8.2	7.8	8.0	8.5	6.5	7.4	9.4	7.2	8.2	10.0	8.2	9.1
18	8.0	7.6	7.9	8.5	6.2	7.4	8.7	7.0	7.8	10.2	8.6	9.4
19	8.5	7.8	8.1	8.0	6.0	7.0	9.1	7.2	8.0	10.2	8.4	9.3
20	9.0	7.7	8.3	8.2	6.1	7.1	9.6	7.2	8.3	9.9	8.2	9.0
21	9.7	7.7	8.6	8.6	6.3	7.5	9.5	6.9	8.2	9.0	7.7	8.3
22	10.3	7.5	8.9	8.0	6.4	7.3	9.3	6.6	7.9	9.6	7.8	8.7
23	10.7	7.3	9.0	8.6	6.2	7.4	9.0	6.6	7.6	10.2	8.5	9.3
24	10.3	7.0	8.7	8.6	6.7	7.7	9.9	6.9	8.4	10.3	8.7	9.5
25	9.6	6.2	8.0	9.3	7.0	8.2	9.6	7.1	8.4	10.3	8.6	9.5
26	8.9	5.7	7.3	9.3	7.4	8.4	9.8	7.0	8.3	10.3	8.5	9.4
27	8.4	5.9	7.1	8.9	7.2	8.0	9.9	6.9	8.2	10.1	8.3	9.2
28	8.3	5.7	6.8	9.6	7.1	8.2	8.7	6.5	7.6	9.9	8.1	9.0
29	7.6	5.6	6.8	9.8	7.3	8.6	10.0	6.4	7.8	10.2	8.3	9.2
30	7.2	6.7	6.9	9.2	7.1	8.2	9.7	6.8	8.1	10.2	8.4	9.3
31				9.1	7.0	8.1	9.3	6.8	7.9			
Month	11.4	5.6	8.3	9.8	6.0	7.5	11.8	6.4	8.2	10.3	6.3	8.6

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

				WAIEN	EAR UUTU	BER ZUIZ I	J SEP I EIVIE	DEN ZUIS				
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October	•		Novembe	r		Decembe	r		January	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
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18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Month												

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
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22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Month												
141011111												

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			Septembe	r
1							26.1	24.7	25.3	28.8	26.2	27.4
2							26.5	24.7	25.6	29.0	26.4	27.4
3							25.5	24.4	24.9	27.8	25.2	26.5
4							25.5	23.2	24.4	26.7	23.2	24.9
5							26.5	23.0	24.7	25.6	23.6	24.5
											23.0	
6							25.1	23.5	24.1	24.2	22.6	23.3
7							23.5	22.4	22.8	23.6	21.4	22.6
8							25.0	22.5	23.6	24.4	22.5	23.3
9							27.3	24.4	25.8	22.8	21.0	21.6
10							27.8	25.0	26.3	24.8	21.0	22.7
11							27.9	24.8	26.2	27.7	23.9	25.6
12							27.6	26.1	26.8	27.4	25.6	26.3
13							26.3	24.8	25.6	25.9	22.1	24.3
14							24.8	22.1	23.0	22.1	19.9	20.5
15							23.6	21.1	22.4	21.0	17.9	19.6
16							24.7	21.9	23.2	21.1	19.6	20.2
17							24.8	22.7	23.7			
18							23.9	23.0	23.4			
19							23.2	22.1	22.7			
20							26.0	22.3	23.9			
21							27.4	23.6	25.4	21.3	19.6	20.3
22							27.9	25.3	26.5	20.0	18.4	19.2
23							26.6	25.3	25.8	19.0	16.7	17.8
24							26.9	22.9	24.9	19.7	16.0	17.8
25				26.9	24.3	25.7	27.1	23.2	25.1	20.0	16.8	18.3
26				28.0	24.2	26.0	27.1	23.7	25.3	20.6	16.9	18.6
27				26.8	25.6	26.1	28.7	25.4	26.9	21.8	18.6	19.9
28				26.1	24.6	25.3	27.9	26.3	27.1	21.2	19.1	20.0
29				26.8	24.6	25.7	27.9	25.5	26.5	21.0	17.9	19.4
30				26.6	24.5	25.5	28.8	25.8	27.1	21.8	17.8	19.8
31				26.3	24.2	25.2	28.6	26.3	27.3			
/lonth				28.0	24.2	25.6	28.8	21.1	25.0	29.0	16.0	22.0

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

October November December January 1	Day	Max	Min	Mean									
2			October	r		Novembe	r	1	Decembe	r		January	
3	1												
4	2												
5	3												
6	4												
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110	8												
111	9												
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18	16												
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Month													
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01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February	ı		March			April			May	
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01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August		;	Septembe	er
1							224	211	220	295	288	292
2							218	209	213	297	284	291
3							226	215	218	302	292	298
4							233	226	229	305	295	300
5							249	233	239	313	304	310
6							265	249	256	314	285	301
7							271	265	269	285	263	271
8							273	258	266	274	234	258
9							264	255	258	235	195	212
10							264	256	260	195	189	192
11							275	264	269	213	194	199
12							321	275	296	220	197	209
13							320	249	276	210	195	201
14							249	175	209	213	205	210
15							181	166	170	233	212	220
16							198	181	194	250	233	241
17							197	185	192			
18							188	183	186			
19							198	188	193			
20							213	196	203			
21							233	213	220	238	225	229
22							234	218	224	238	227	233
23							241	229	235	241	234	236
24							241	234	238	254	240	246
25				275	214	252	248	237	243	257	253	255
26				293	273	278	258	243	250	261	255	257
27				335	293	313	265	258	262	270	261	265
28				335	318	325	268	263	266	278	270	271
29				318	271	299	273	266	269	279	273	276
30				271	245	256	280	271	277	281	271	275
31				245	224	233	288	279	282			
Month				335	214	279	321	166	238	314	189	252

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Mean									
		October			Novembe	r		Decembe	r		January	
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Month												

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February	ı		March			April			May	
1												
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20 27												
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28 29												
30 21												
31												
Month												

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August		;	Septembe	r
1							9.0	7.4	8.1	9.2	6.8	7.9
2							10.8	7.5	9.0	8.9	6.8	7.8
3							10.2	7.6	8.7	9.2	6.8	8.0
4							10.8	7.7	9.2	9.7	7.3	8.4
5							10.9	7.9	9.4	9.6	7.5	8.5
6							9.6	7.7	8.7	9.0	7.9	8.3
7							9.2	7.7	8.4	8.7	8.0	8.2
8							10.5	7.8	8.9	8.7	7.9	8.2
9							10.3	7.4	8.8	9.2	7.9	8.5
10							10.8	7.1	8.9	9.6	8.3	8.8
11							11.1	7.2	9.0	9.2	7.7	8.4
12							8.9	7.2	7.7	8.4	7.1	7.6
13							7.7	6.8	7.1	9.1	7.0	8.0
14							7.4	6.9	7.3	9.9	8.1	8.9
15							7.7	7.4	7.6	10.2	8.9	9.4
16							8.5	7.6	8.0	9.4	8.7	9.1
17							8.9	7.7	8.2			
18							8.3	7.6	7.9			
19							8.8	7.8	8.2			
20							9.3	7.9	8.5			
21							9.3	7.6	8.3	9.2	8.6	8.9
22							9.2	7.4	8.1	10.3	8.4	9.3
23							9.1	7.1	8.0	10.9	9.2	10
24							10.1	7.6	8.8	11.1	9.5	10.2
25				9.4	7.3	8.3	10.0	7.7	8.8	11.0	9.4	10.1
26				9.8	7.7	8.7	10.1	7.6	8.7	11.1	9.2	10.1
27				9.2	7.6	8.4	9.9	7.2	8.5	10.8	9.2	9.8
28				9.9	7.5	8.5	9.1	6.8	7.9	10.8	9.0	9.7
29				10.5	7.9	9.1	9.6	6.8	8.0	11.1	9.0	10
30				9.5	7.6	8.6	9.4	7.0	8.1	11.2	9.0	10
31				9.4	7.6	8.4	9.2	6.8	8.0			
Month				10.5	7.3	8.6	11.1	6.8	8.3	11.2	6.8	8.9

01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Median									
		October			Novembe			Decembe			January	
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28 29												
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30 31												
Max												
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01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		Februar			March			April			May	
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01570500 SUSQUEHANNA RIVER AT HARRISBURG, PA—Continued

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		June			July			August		:	Septemb	er
1							8.5	8.1	8.2	8.7	8.0	8.5
2							9.0	8.0	8.6	8.6	7.9	8.2
3							8.9	8.3	8.6	8.7	7.8	8.2
4							9.0	8.0	8.6	8.8	8.1	8.4
5							9.1	8.3	8.8	8.7	8.1	8.4
6							8.8	8.3	8.6	8.5	8.0	8.2
7							8.5	8.0	8.2	8.0	7.9	7.9
8							8.7	7.9	8.2	8.2	7.9	8.0
9							8.9	8.1	8.6	8.3	8.0	8.1
10							9.1	8.1	8.7	8.6	8.0	8.1
11							9.1	8.3	8.8	8.8	8.2	8.4
12							9.0	7.9	8.2	8.6	8.2	8.3
13							8.0	7.7	7.9	8.6	8.0	8.2
14							7.7	7.6	7.6	8.9	8.3	8.5
15							7.6	7.5	7.5	9.2	8.5	8.8
16							7.8	7.6	7.7	8.8	8.5	8.7
17							8.0	7.6	7.7			
18							7.8	7.6	7.7			
19							8.0	7.6	7.8			
20							8.5	7.8	8.0			
21							8.6	7.9	8.2	8.9	8.2	8.6
22							8.7	8.0	8.2	8.6	8.0	8.2
23							8.7	8.0	8.3	9.0	8.3	8.8
24							8.9	7.9	8.3	9.1	8.8	9.0
25				8.7	8.2	8.5	9.0	8.2	8.7	9.1	8.9	9.0
26				8.8	8.2	8.5	9.0	8.3	8.8	9.2	8.8	9.0
27				8.6	8.2	8.4	9.1	8.4	8.9	9.1	8.8	8.9
28				8.6	8.2	8.4	8.9	8.2	8.7	9.1	8.7	8.9
29				8.9	8.6	8.7	8.8	8.0	8.4	9.1	8.7	8.9
30				8.6	8.2	8.4	8.8	8.0	8.6	9.2	8.7	9.0
31				8.5	8.1	8.3	8.8	8.2	8.7			
Max				8.9	8.6	8.7	9.1	8.4	8.9	9.2	8.9	9.0
Min				8.5	8.1	8.3	7.6	7.5	7.5	8.0	7.8	7.9