Water-Data Report 2008

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV

Potomac Basin
South Branch Potomac Subbasin

LOCATION.--Lat 39°26′49″, long 78°39′16″ referenced to North American Datum of 1927, Hampshire County, WV, Hydrologic Unit 02070001, on left bank at highway bridge, 2.0 mi east of Springfield, and at mile 13.5.

DRAINAGE AREA.--1,461 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1894 to February 1896 (fragmentary), July 1899 to December 1901, August 1903 to June 1906, and August 1928 to current year (daily discharge and peaks).

REVISED RECORDS.--WSP 1552: 1903-06, 1929-30(M), 1932-33(M), 1935(M), 1937-40(M), 1942-43(M), 1945(M). WDR WV-97-1: Drainage area. WDR-US-2006: Drainage area. WDR-US-2008: 1901(M).

GAGE.--Water-stage recorder with satellite telemeter. Datum of gage is 561.41 ft above NAVD 88 (VERTCON conversion of 562.02 ft above NGVD 29). June 1894 to February 1896, nonrecording gage at Baltimore & Ohio Railroad bridge 11.2 mi upstream at different datum. July 1, 1899, to Dec. 31, 1901, nonrecording gage at bridge 10.0 mi upstream at different datum. Aug. 28, 1903, to June 30, 1906, nonrecording gage at present site at different datum. Aug. 8 to Sept. 24, 1928, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in November 1877 reached a stage of about 34 ft, from floodmarks, at site and datum in use July 1, 1889, to Dec. 31, 1901, discharge, 140,000 ft^3/s.

REVISIONS.--The maximum discharge for the water year 1901 has been revised to 17,400 ft^3/s (mean daily), Apr. 21, 1901, gage height, 18.40 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 5	2030	*26,300	*16.93
May 12	2000	17,200	13.01

Minimum discharge, 100 ft^3/s, Oct. 11, 12, 14-19, gage height, 1.44 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	134	504	327	1,580	1,150	1,250	1,050	3,080	1,740	420	229	326
2	122	427	318	1,510	2,730	1,220	1,000	2,560	1,370	375	293	282
3	114	390	337	1,320	4,260	1,110	961	2,170	1,170	352	374	255
4	109	377	337	1,090	3,190	1,320	952	1,880	1,640	368	522	232
5	107	360	528	965	2,930	17,100	1,010	1,610	4,920	1,070	369	209
6	106	343	505	929	3,390	13,600	1,070	1,410	3,790	835	304	196
7	105	333	467	1,080	3,740	6,620	1,720	1,250	2,350	761	268	192
8	106	319	424	1,360	3,430	4,740	2,500	1,140	1,720	1,520	243	197
9	106	306	429	1,190	2,700	4,380	2,210	1,110	1,370	1,730	220	197
10	106	302	1,490	1,080	2,160	3,730	1,940	3,860	1,130	1,100	203	188
11	102	293	3,370	1,760	1,750	3,130	1,730	7,260	969	832	189	182
12	105	286	2,230	5,030	1,440	2,700	2,230	13,600	852	669	182	180
13	105	286	1,680	3,930	1,350	2,340	2,920	13,400	765	563	182	190
14	102	281	1,720	2,660	1,410	2,040	2,410	7,890	771	726	188	193
15	100	293	1,620	2,020	1,700	1,910	2,060	5,210	903	592	213	186
16	100	353	1,580	1,620	1,620	1,900	1,780	5,710	831	528	201	171
17	100	516	3,180	1,360	1,490	2,050	1,560	8,260	923	445	207	160
18	100	651	2,800	1,200	1,380	1,960	1,410	5,750	811	380	191	152
19	103	553	1,910	1,110	1,330	2,210	1,270	4,540	664	336	181	145
20	119	492	1,500	997	1,280	3,010	1,400	4,350	597	309	169	140
21	113	456	1,250	834	1,160	4,470	3,890	8,540	555	300	158	136
22	110	435	1,060	631	1,090	3,700	4,110	6,360	538	303	147	135
23	108	409	934	746	1,050	3,030	4,340	4,480	1,060	365	140	131
24	158	375	931	744	1,100	2,460	3,710	3,270	1,140	486	135	124
25	211	354	1,730	665	1,150	2,070	2,940	2,550	822	479	132	123
26	400	337	1,580	570	1,130	1,790	2,480	2,100	640	428	128	128
27	1,250	327	1,350	535	1,320	1,600	2,640	1,970	542	335	124	150
28	1,950	314	1,170	525	1,480	1,490	2,770	1,770	482	288	172	439
29	1,210	328	1,130	506	1,340	1,420	4,180	1,490	460	262	325	600
30	818	347	1,240	511	---	1,260	3,780	1,300	423	248	440	373
31	616	---	1,390	979	---	1,130	---	1,190	---	240	407	---
Total	9,095	11,347	40,517	41,037	55,250	102,740	68,023	131,060	35,948	17,645	7,236	6,312
Mean	293	378	1,307	1,324	1,905	3,314	2,267	4,228	1,198	569	233	210
Max	1,950	651	3,370	5,030	4,260	17,100	4,340	13,600	4,920	1,730	522	600
Min	100	281	318	506	1,050	1,110	952	1,110	423	240	124	123
Cfsm	0.20	0.26	0.89	0.91	1.30	2.27	1.55	2.89	0.82	0.39	0.16	0.14
In.	0.23	0.29	1.03	1.04	1.41	2.62	1.73	3.34	0.92	0.45	0.18	0.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1899 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	615	894	1,252	1,618	2,018	3,019	2,413	1,850	1,039	532	530	509
Max	4,629	12,850	5,000	6,928	6,474	10,490	6,421	5,785	5,231	2,638	3,923	6,538
(WY)	(1977)	(1986)	(1973)	(1996)	(1998)	(1936)	(1987)	(1996)	(1949)	(1949)	(1955)	(1996)
Min	79.4	82.2	147	271	330	594	829	366	217	86.7	73.5	76.6
(WY)	(1931)	(1905)	(1966)	(1981)	(2002)	(2006)	(1976)	(1977)	(1999)	(1999)	(1930)	(1930)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1899 - 2008	
Annual total	447,906		526,210			
Annual mean	1,227		1,438		1,354	
Highest annual mean					2,975	1996
Lowest annual mean					566	1969
Highest daily mean	26,500	Apr 16	17,100	Mar 5	145,000	Nov 5, 1985
Lowest daily mean	100	Oct 15[a]	100	Oct 15[a]	52	Sep 11, 1966[b]
Annual seven-day minimum	101	Oct 13	101	Oct 13	54	Sep 7, 1966
Maximum peak flow			26,300	Mar 5	[c]240,000	Nov 5, 1985
Maximum peak stage			16.93	Mar 5	[d]44.22	Nov 5, 1985
Instantaneous low flow			100	Oct 11[f]	29	Jan 28, 1956[g]
Annual runoff (cfsm)	0.840		0.984		0.927	
Annual runoff (inches)	11.40		13.40		12.59	
10 percent exceeds	2,860		3,380		3,050	
50 percent exceeds	509		930		666	
90 percent exceeds	140		146		154	

[a] Also Oct. 16, 17, 18.

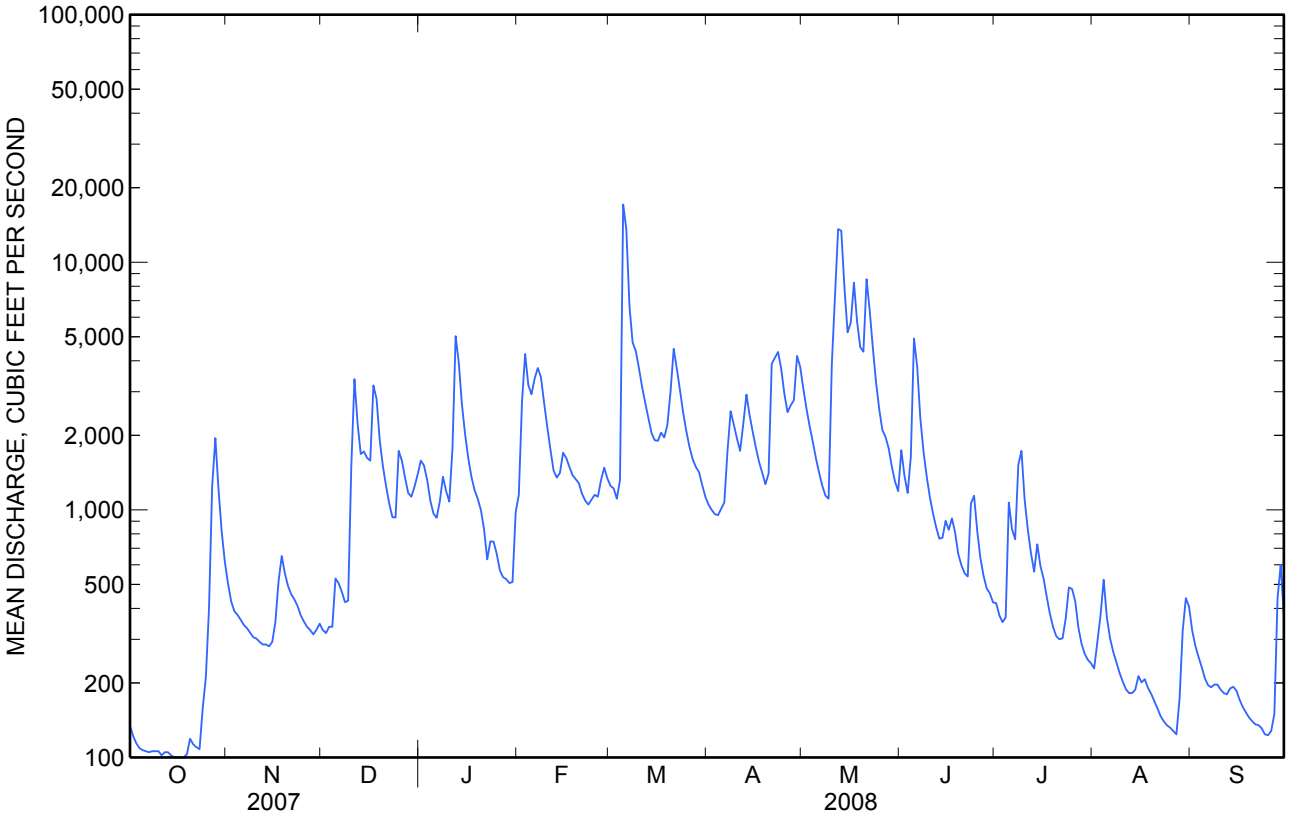
[b] Also Sept. 12, 1966.

[c] From rating curve extended above 145,000 ft³/s on basis of slope-area measurement of peak flow, highest since 1878.

[d] From floodmarks.

[f] Also Oct. 12, 14, 15-18, 19.

[g] Jan. 28, 1956 (result of freeze-up), July 30, 1966 (result of temporary dam).



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 2005 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 2005 to current year.
pH: October 2005 to current year.
WATER TEMPERATURE: October 2005 to current year.
DISSOLVED OXYGEN: October 2005 to current year.
TURBIDITY: December 2005 to current year.

INSTRUMENTATION.--Water-quality monitor October 2005 to current year

REMARKS.--Records good of water temperature, pH, specific conductance, and dissolved oxygen. Records fair for turbidity.

COOPERATION.--This site is sampled as part of the Chesapeake Bay Program's Non-Tidal Monitoring Network in cooperation with the West Virginia Department of Environmental Protection, Division of Water and Waste Management.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 327 microsiemens, Oct. 29, 2005; minimum recorded, 112 microsiemens, Apr. 16, 2007.
pH: Maximum recorded, 9.8 units, Sept. 25, 2008; minimum recorded, 7.0 units, Feb. 22, 2007.
WATER TEMPERATURE: Maximum recorded, 31.8°C, Aug. 3, 2006; minimum recorded, -0.1°C, Dec. 11, 13, 19, 2005.
DISSOLVED OXYGEN: Maximum recorded, 17.4 mg/L, Nov. 6, 2006; minimum recorded, 5.2 mg/L, June 1, 2, 2006.
TURBIDITY: Maximum recorded, 1470 turbidity units, Mar. 26, 2007; minimum recorded, 0.0 tubidity units, many days 2007.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 324 microsiemens, Oct. 15, 16; minimum recorded, 118 microsiemens, Mar. 5.
pH: Maximum recorded, 9.8 units, Sept. 25; minimum recorded, 7.4 units, Mar. 5.
WATER TEMPERATURE: Maximum recorded, 30.4°C, July 19; minimum recorded, 0.0°C, several days in January.
DISSOLVED OXYGEN: Maximum recorded, 16.9 mg/L, Feb. 21, 24; minimum recorded, 6.0 mg/L, July 31.
TURBIDITY: Maximum recorded, greater than 1000 turbidity units, Dec. 10; minimum recorded, 0.1 tubidity units, many days.

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 1 of 2
[Remark codes: <, less than; E, estimated.]

Date	Time	Sample Type	Gage height, feet (00065)	Instantaneous discharge, ft3/s (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inf tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt infl pt titr., field, mg/L (00453)
Oct												
17...	0955	Environmental	1.44	100	--	9.6	--	8.7	308	16.9	106	129
Nov												
05...	1525	Environmental	1.94	356	739	13.5	123	8.7	267	10.0	--	--
Dec												
10...	1520	Environmental	3.40	1,730	--	12.9	--	8.2	214	4.4	--	--
20...	0930	Environmental	3.21	1,520	--	13.4	--	8.3	180	2.6	--	--
Jan												
14...	1435	Environmental	4.08	2,550	741	13.2	108	8.3	152	5.5	--	--
Feb												
05...	0950	Environmental	4.25	2,780	741	12.8	103	7.9	157	5.1	--	--
11...	1445	Environmental	3.36	1,680	--	15.7	--	8.8	158	2.9	--	--
Mar												
07...	0955	Environmental	7.07	6,750	744	12.4	104	7.8	144	6.9	--	--
11...	1450	Environmental	4.37	3,040	745	13.2	110	7.9	171	6.7	--	--
Apr												
14...	1530	Environmental	3.79	2,340	745	12.7	126	8.6	163	13.9	--	--
May												
14...	0955	Environmental	7.92	8,100	--	10.0	--	7.6	146	13.3	--	--
21...	1500	Environmental	8.39	8,850	734	10.3	102	7.7	148	13.0	--	--
Jun												
16...	1435	Environmental	2.43	811	743	8.6	106	8.1	240	24.6	--	--
Jul												
14...	1500	Environmental	2.48	803	748	9.4	123	8.3	233	28.1	--	--
Aug												
11...	1530	Environmental	1.61	188	744	9.7	119	8.6	266	24.5	--	--
Sep												
09...	0915	Environmental	1.65	188	748	8.1	98	8.5	278	23.9	--	--

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 2 of 2
[Remark codes: <, less than; E, estimated.]

Date	Carbonate, wat flt infl pt titr., field, mg/L (00452)	Residue total non-filterable, mg/L (00530)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water fltrd, mg/L as N (00631)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unf by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L as P (00665)	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
Oct													
17...	<1	<10	E.011	<.04	--	<.002	.12	.131	.156	25	38	<.5	--
Nov													
05...	--	<10	<.020	.45	.45	.003	.59	.067	.075	5	17	1	.96
Dec													
10...	--	38	<.020	.37	.37	.002	.84	.046	.183	210	180	33	154
20...	--	<10	<.020	.92	.92	.003	1.05	.023	.032	E43	E60	2	8.2
Jan													
14...	--	<10	<.020	.81	.81	.002	.99	.008	.022	15	31	6	41
Feb													
05...	--	<10	<.020	.77	.77	.003	1.02	.009	.029	10	--	7	53
11...	--	12	<.020	.65	.65	.003	.84	E.011	.030	--	--	45	204
Mar													
07...	--	40	E.018	1.06	1.06	.003	1.44	.008	.064	240	140	47	857
11...	--	<10	E.010	1.08	1.07	.002	1.24	.012	.032	3	10	5	41
Apr													
14...	--	10	E.013	.41	.40	.003	.66	.012	.039	24	19	51	322
May													
14...	--	23	E.017	.61	.61	.002	.83	.012	.043	400	150	28	612
21...	--	41	<.020	.56	.55	.003	.93	.012	.065	540	480	30	717
Jun													
16...	--	11	.025	.55	.54	.008	.74	.047	.065	47	12	3	6.6
Jul													
14...	--	<10	.027	.41	.40	.007	.66	.069	.087	45	16	4	8.7
Aug													
11...	--	<10	<.020	.09	.09	.003	.36	.093	.109	6	1	1	.51
Sep													
09...	--	<10	<.020	.05	E.05	E.002	.93	.111	.131	63	1	2	1.0

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	294	287	290	248	240	244	249	242	247	186	177	182
2	295	290	292	254	248	251	250	242	247	186	179	182
3	298	291	293	260	254	257	245	242	243	181	178	180
4	306	293	297	265	260	262	243	241	242	184	179	181
5	313	301	305	268	264	267	242	237	240	186	182	184
6	313	305	309	271	268	269	245	239	244	189	184	186
7	317	306	311	273	271	272	244	225	236	190	183	187
8	317	308	312	273	268	270	225	215	219	188	165	180
9	316	305	310	270	266	268	220	217	218	165	158	161
10	313	304	308	280	269	275	221	213	217	164	160	162
11	313	303	307	283	280	281	213	151	165	166	146	158
12	318	308	312	282	275	278	164	151	158	177	142	156
13	322	314	317	278	271	275	173	164	168	150	145	147
14	323	316	320	276	273	274	188	172	178	153	146	149
15	324	316	320	274	267	271	189	176	185	161	153	157
16	324	313	318	272	267	269	176	174	175	168	161	164
17	319	303	311	276	272	274	206	174	189	172	168	170
18	313	305	308	274	257	267	184	175	180	178	172	175
19	315	305	312	257	229	240	179	175	177	184	178	182
20	314	308	311	229	222	225	185	179	183	191	184	188
21	319	313	314	222	217	219	190	185	187	198	190	193
22	319	314	316	225	220	222	195	190	192	197	192	194
23	318	314	316	229	225	227	199	195	197	204	196	199
24	314	296	303	233	228	230	200	198	199	209	204	208
25	305	296	299	235	228	231	204	167	195	210	198	206
26	307	303	305	231	226	228	167	162	164	209	204	207
27	316	294	303	231	226	229	167	161	163	211	205	208
28	295	240	263	231	228	230	169	167	168	212	206	210
29	240	234	238	235	231	232	172	169	171	213	207	210
30	234	230	232	242	235	238	185	172	178	211	206	208
31	240	232	236	---	---	---	186	177	182	220	210	214
Month	324	230	300	283	217	252	250	151	197	220	142	183

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	220	169	197	183	175	179	198	193	196	158	156	157
2	202	169	178	184	177	180	203	198	201	161	156	159
3	180	150	164	182	176	179	205	203	204	168	161	165
4	154	150	152	184	149	178	207	204	205	174	168	170
5	159	154	157	162	118	140	210	205	207	179	167	174
6	158	150	154	143	137	139	213	209	211	183	179	180
7	151	146	149	154	143	148	210	204	207	189	183	187
8	149	143	144	162	154	159	209	171	185	195	189	193
9	147	144	146	170	162	167	171	164	166	203	194	199
10	152	147	149	167	165	165	169	165	166	202	169	192
11	160	152	156	171	167	169	174	169	171	170	134	147
12	168	160	162	175	171	172	176	164	171	135	122	128
13	174	168	172	179	174	177	181	159	168	141	126	133
14	186	174	178	183	179	181	166	159	163	155	141	148
15	194	186	190	187	183	185	170	166	168	166	154	160
16	188	184	186	194	187	192	173	170	171	174	161	169
17	184	179	181	194	191	193	177	173	175	175	154	158
18	180	176	179	192	184	186	188	177	180	166	156	161
19	183	179	181	185	175	180	187	181	184	172	165	170
20	186	181	183	180	167	171	190	185	187	173	165	170
21	186	181	183	181	153	168	185	155	172	171	146	155
22	186	181	184	154	152	153	155	150	153	155	147	150
23	193	185	190	158	153	156	150	146	148	166	155	160
24	197	193	195	164	158	161	151	146	148	175	166	171
25	198	189	194	172	164	168	155	149	152	183	175	180
26	190	185	189	178	172	175	161	155	159	197	183	191
27	194	188	191	183	178	180	166	161	164	202	191	197
28	202	191	199	188	183	185	169	159	165	216	194	203
29	197	179	186	191	188	189	169	157	163	222	205	209
30	---	---	---	193	189	191	162	157	159	223	207	214
31	---	---	---	197	191	194	---	---	---	226	211	217
Month	220	143	175	197	118	173	213	146	176	226	122	173

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	226	207	217	251	245	248	261	258	260	295	285	290
2	216	202	211	249	241	245	263	248	257	290	279	286
3	221	207	212	256	245	251	265	260	263	280	271	276
4	224	202	217	260	252	257	269	259	264	273	269	271
5	227	166	193	261	228	247	280	269	276	272	266	269
6	169	155	159	256	230	241	272	260	265	274	265	269
7	180	163	172	263	256	260	261	255	259	275	271	273
8	196	179	188	262	230	250	257	252	254	278	272	275
9	207	188	198	230	216	223	261	256	258	280	270	276
10	214	203	208	216	206	208	266	261	263	279	273	276
11	223	212	219	219	208	213	272	265	268	282	276	279
12	228	221	224	228	219	224	277	272	273	284	277	281
13	231	226	230	233	228	231	280	276	278	280	273	277
14	235	226	229	236	219	232	282	278	280	277	271	274
15	245	232	236	219	199	207	281	275	278	285	275	278
16	244	240	243	238	216	228	275	269	271	290	285	287
17	241	224	234	247	238	242	282	272	276	293	288	290
18	243	224	234	249	243	246	287	282	284	295	290	292
19	247	243	246	249	245	247	288	284	286	296	290	293
20	247	242	244	254	248	252	286	282	284	296	291	293
21	248	245	246	258	247	255	289	285	287	291	285	289
22	251	247	249	252	247	250	290	286	287	285	280	281
23	253	242	249	251	239	245	289	282	286	285	277	280
24	245	216	233	241	238	239	284	280	281	296	283	289
25	222	216	217	247	239	242	284	279	281	303	293	296
26	231	222	227	263	247	255	287	281	284	303	295	299
27	237	230	233	270	260	265	294	285	289	301	279	297
28	241	237	239	264	255	260	289	280	284	289	267	279
29	244	238	242	263	255	259	291	284	288	271	255	266
30	249	243	246	263	256	259	285	276	280	281	255	269
31	---	---	---	261	258	259	298	285	294	---	---	---
Month	253	155	223	270	199	243	298	248	275	303	255	282

	Max	Min	Mean
Year	324	118	221

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	October			November			December			January		
1	8.7	8.3	8.4	8.3	8.0	8.2	9.0	8.6	8.9	8.9	8.2	8.6
2	8.7	8.3	8.5	8.5	8.0	8.2	8.9	8.7	8.8	9.0	8.2	8.7
3	8.8	8.3	8.5	8.6	8.1	8.3	8.9	8.5	8.7	9.1	8.3	8.7
4	8.9	8.2	8.6	8.6	8.2	8.4	8.9	8.4	8.6	9.1	8.4	8.7
5	8.8	8.1	8.5	8.7	8.3	8.5	8.8	8.4	8.6	9.0	8.4	8.6
6	8.8	8.0	8.5	8.7	8.3	8.6	8.8	8.3	8.5	9.0	8.2	8.6
7	8.9	8.0	8.5	8.6	8.4	8.6	8.7	8.3	8.5	9.2	8.3	8.8
8	8.8	8.0	8.5	8.8	8.4	8.6	8.8	8.2	8.5	9.2	8.5	8.9
9	8.8	8.1	8.4	8.8	8.6	8.7	8.5	8.1	8.4	9.3	8.4	8.9
10	8.7	8.0	8.4	8.7	8.5	8.6	8.3	7.9	8.1	9.2	8.6	8.9
11	8.8	8.0	8.4	8.8	8.4	8.6	7.9	7.8	7.8	8.7	7.8	8.4
12	8.7	8.0	8.4	8.9	8.5	8.7	7.9	7.8	7.8	8.1	7.7	7.8
13	8.7	8.0	8.4	8.9	8.6	8.8	8.0	7.9	7.9	8.0	7.8	7.9
14	8.7	8.1	8.5	8.9	8.6	8.8	8.3	7.9	8.1	8.3	7.6	8.1
15	8.8	8.1	8.5	8.8	8.5	8.7	8.1	8.0	8.0	8.7	8.0	8.3
16	8.8	8.1	8.5	8.9	8.4	8.7	8.3	7.9	8.1	8.9	8.1	8.5
17	8.8	8.1	8.4	8.7	8.3	8.5	8.0	7.9	7.9	8.7	8.2	8.4
18	8.6	8.0	8.3	8.5	8.2	8.3	8.1	7.9	8.0	8.9	8.0	8.5
19	8.5	7.8	8.1	8.5	8.2	8.3	8.1	8.0	8.0	9.0	8.2	8.5
20	8.4	7.8	8.0	8.4	8.1	8.2	8.4	8.0	---	9.1	8.2	8.6
21	8.4	7.9	8.2	8.8	8.0	8.4	8.4	8.0	8.1	9.1	8.4	8.7
22	8.4	8.0	8.2	8.8	8.0	8.5	8.3	8.0	8.1	9.0	8.4	8.7
23	8.4	7.8	8.2	8.9	8.1	8.7	8.4	8.0	8.1	9.0	8.2	8.6
24	8.2	7.8	7.9	9.0	8.3	8.7	8.7	8.0	8.3	9.0	8.4	8.7
25	7.9	7.7	7.8	9.0	8.4	8.8	8.6	8.2	8.3	9.1	8.4	8.8
26	8.1	7.7	8.0	8.9	8.4	8.8	8.6	8.1	8.3	9.0	8.5	8.7
27	8.0	7.9	7.9	8.8	8.3	8.6	8.6	8.1	8.2	9.0	8.4	8.7
28	7.9	7.9	7.9	9.0	8.4	8.7	8.6	8.0	8.2	9.1	8.3	8.8
29	8.2	7.9	8.0	9.0	8.5	8.8	8.9	8.0	8.4	8.9	8.4	8.7
30	8.3	8.0	---	9.0	8.6	8.8	8.6	8.2	8.4	9.1	8.2	8.8
31	8.4	8.0	8.2	---	---	---	8.9	8.0	8.5	9.1	8.5	8.8
Max	8.9	8.3	---	9.0	8.6	8.8	9.0	8.7	---	9.3	8.6	8.9
Min	7.9	7.7	---	8.3	8.0	8.2	7.9	7.8	---	8.0	7.6	7.8

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		February			March			April			May	
1	8.8	8.0	8.5	9.4	8.5	9.0	9.0	8.5	8.8	8.2	7.9	8.0
2	8.2	7.7	7.9	9.4	8.5	9.1	9.1	8.5	8.8	8.3	7.9	8.0
3	7.9	7.6	7.7	9.5	8.7	9.2	9.1	8.6	8.9	8.3	7.8	8.0
4	8.0	7.7	7.8	9.2	7.9	8.9	9.0	8.5	8.8	8.5	7.8	8.1
5	8.0	7.7	7.8	8.0	7.4	7.7	9.1	8.5	8.8	8.6	7.9	8.2
6	7.9	7.7	7.8	8.0	7.7	7.8	9.0	8.6	8.7	8.6	7.9	8.3
7	7.8	7.6	7.7	7.8	7.7	7.7	8.6	8.2	8.4	8.7	7.9	8.3
8	8.0	7.6	7.8	7.8	7.7	7.8	8.7	8.0	8.3	8.4	7.9	8.2
9	8.4	7.7	8.0	7.9	7.8	7.8	8.9	8.1	8.4	8.3	7.8	8.0
10	8.6	7.7	8.1	7.9	7.8	7.8	9.0	8.0	8.4	8.0	7.7	7.8
11	8.9	7.8	8.3	7.9	7.8	7.8	8.8	8.0	8.4	7.8	7.7	7.7
12	8.8	8.1	8.4	8.0	7.8	7.9	8.8	7.8	8.2	7.7	7.6	7.7
13	8.7	8.0	8.2	8.0	7.8	7.9	8.1	7.7	7.9	7.8	7.7	7.7
14	9.0	8.0	8.6	8.1	7.8	7.9	8.7	7.8	---	7.8	7.8	7.8
15	8.8	8.2	8.5	8.1	7.8	7.9	8.9	8.0	8.5	7.9	7.8	7.8
16	9.0	8.0	8.6	8.1	7.8	8.0	9.0	8.0	8.6	7.8	7.7	7.8
17	8.9	8.3	8.6	8.2	7.9	8.0	9.2	8.2	8.8	7.8	7.7	7.8
18	9.1	7.9	8.6	8.1	7.9	8.0	9.2	8.3	8.9	7.9	7.8	7.8
19	9.3	8.2	8.9	8.0	7.9	7.9	9.3	8.5	9.0	8.0	7.9	7.9
20	9.2	8.5	8.9	8.0	7.8	7.9	9.0	8.3	8.7	7.9	7.8	7.9
21	9.4	8.4	9.0	8.0	7.8	7.9	8.4	7.7	7.7	7.8	7.7	7.8
22	9.3	8.7	8.9	8.0	7.9	7.9	7.9	7.7	7.8	7.9	7.8	7.9
23	9.2	8.5	8.8	8.2	7.9	8.0	8.0	7.7	7.8	8.0	7.9	8.0
24	9.4	8.4	9.0	8.3	7.9	8.1	8.3	7.8	7.9	8.1	7.9	8.0
25	9.4	8.7	9.1	8.4	7.9	8.1	8.3	7.8	8.0	8.2	7.9	8.1
26	9.1	8.6	8.9	8.5	8.0	8.2	8.2	7.8	8.0	8.3	7.9	8.1
27	9.2	8.2	8.7	8.3	8.0	8.2	8.2	7.8	7.9	8.4	7.9	8.1
28	9.2	8.4	8.9	8.4	7.9	8.2	8.0	7.7	7.8	8.6	7.9	8.2
29	9.3	8.6	9.0	8.8	8.0	8.3	7.8	7.8	7.8	8.8	8.2	8.5
30	---	---	---	9.0	8.2	8.6	8.1	7.8	7.9	9.0	8.3	8.7
31	---	---	---	9.0	8.4	8.7	---	---	---	8.9	8.3	8.7
Max	9.4	8.7	9.1	9.5	8.7	9.2	9.3	8.6	---	9.0	8.3	8.7
Min	7.8	7.6	7.7	7.8	7.4	7.7	7.8	7.7	---	7.7	7.6	7.7

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		June			July			August			September	
1	8.7	7.7	8.4	8.4	7.8	8.1	8.6	8.3	8.5	8.8	8.1	8.5
2	9.0	7.7	8.4	8.5	7.8	8.2	8.6	8.2	8.5	8.8	8.3	8.6
3	9.3	8.0	8.8	8.6	7.8	8.3	8.6	8.0	8.4	8.9	8.5	8.8
4	8.8	7.8	8.3	8.3	7.8	8.1	8.7	7.8	8.4	8.9	8.6	8.9
5	7.8	7.6	7.7	8.0	7.8	7.9	8.6	7.9	8.3	8.9	8.6	8.8
6	7.9	7.6	7.7	7.9	7.7	7.8	8.6	8.0	8.4	8.8	8.4	8.7
7	8.2	7.7	7.9	8.2	7.7	7.9	8.6	8.1	8.5	8.8	8.2	8.7
8	8.4	7.7	8.0	8.0	7.8	7.9	8.6	8.3	8.5	8.9	8.5	8.8
9	8.5	7.7	8.0	7.9	7.7	7.8	8.6	8.1	8.4	9.0	8.4	8.8
10	8.5	7.7	8.0	8.2	7.8	7.9	8.6	8.0	8.4	9.1	8.4	8.9
11	8.5	7.7	8.1	8.3	7.8	8.0	8.6	8.1	8.4	9.1	8.6	8.9
12	8.5	7.7	8.1	8.4	7.8	8.1	8.6	8.1	8.4	9.0	8.6	8.8
13	8.5	7.8	8.0	8.4	7.8	8.1	8.7	8.1	8.4	9.0	8.3	8.8
14	8.3	7.7	7.9	8.4	7.8	8.1	8.6	8.1	8.4	9.1	8.5	8.9
15	8.5	7.7	8.1	8.5	7.7	8.1	8.5	8.0	8.4	9.2	8.7	9.0
16	8.2	7.8	---	8.6	7.8	8.2	8.6	8.1	8.4	9.3	8.8	9.0
17	8.4	7.8	8.1	8.7	7.9	8.3	8.6	8.1	8.5	9.3	8.9	9.2
18	8.5	7.9	8.2	8.8	7.9	8.4	8.7	8.2	8.6	9.4	9.1	9.2
19	8.6	7.9	8.3	8.8	8.0	8.5	8.8	8.3	8.6	9.4	9.2	9.3
20	8.7	8.0	8.4	8.8	8.1	8.6	8.8	8.4	8.7	9.4	9.3	9.4
21	8.8	8.0	8.5	8.8	8.2	8.5	8.9	8.5	8.8	9.4	9.3	9.4
22	8.7	8.0	8.4	8.7	8.1	8.5	8.9	8.6	8.8	9.6	9.3	9.5
23	8.5	7.9	8.3	8.6	7.9	8.3	8.9	8.6	8.8	9.6	9.4	9.6
24	8.5	7.9	8.2	8.6	7.8	8.1	8.8	8.6	8.8	9.7	9.4	9.6
25	8.7	7.9	8.3	8.7	7.8	8.3	8.8	8.5	8.7	9.8	9.3	9.7
26	8.6	7.9	8.3	8.9	8.0	8.5	8.9	8.6	8.7	9.6	9.1	9.4
27	8.6	7.8	8.2	9.0	8.1	8.6	8.9	8.4	8.8	9.3	9.0	9.2
28	8.6	7.8	8.1	9.0	8.5	8.8	8.7	8.1	8.3	9.2	8.7	9.0
29	8.4	7.7	8.1	8.9	8.6	8.8	8.4	7.9	8.1	9.0	8.2	8.6
30	8.5	7.8	8.1	8.9	8.5	8.7	8.6	7.9	8.3	9.0	8.3	8.7
31	---	---	---	8.6	8.4	8.5	8.7	8.0	8.4	---	---	---
Max	9.3	8.0	---	9.0	8.6	8.8	8.9	8.6	8.8	9.8	9.4	9.7
Min	7.8	7.6	---	7.9	7.7	7.8	8.4	7.8	8.1	8.8	8.1	8.5

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	20.8	18.8	20.0	11.9	10.9	11.4	5.1	3.8	4.7	4.8	4.0	4.6
2	21.3	19.2	20.3	11.4	9.3	10.4	4.7	4.1	4.4	4.0	2.1	3.0
3	22.3	19.6	21.0	10.8	8.6	9.9	5.0	3.8	4.6	2.1	0.8	1.4
4	23.4	21.0	22.1	10.3	9.2	9.7	3.8	3.1	3.4	0.8	0.0	0.3
5	23.9	22.0	22.8	10.2	8.3	9.3	3.1	1.9	2.5	1.0	0.2	0.6
6	23.8	21.7	22.7	10.0	8.6	9.5	2.0	0.8	1.4	2.9	1.0	2.0
7	24.4	21.7	23.0	8.7	7.2	8.2	1.2	0.4	0.9	5.3	2.9	4.1
8	25.0	22.5	23.7	7.2	5.9	6.6	2.7	1.2	1.9	7.3	5.2	6.2
9	24.9	23.0	23.8	7.0	6.6	6.8	3.4	2.6	3.0	8.9	7.3	8.2
10	23.2	20.7	22.2	7.1	6.8	6.9	5.5	3.4	4.1	8.0	7.2	7.5
11	20.7	17.9	19.5	7.6	6.5	7.1	8.8	5.5	7.3	7.6	7.0	7.2
12	17.9	16.6	17.4	9.1	7.4	8.2	9.6	8.8	9.3	7.5	6.6	7.0
13	16.9	15.0	16.1	10.4	8.9	9.6	9.3	8.0	8.5	7.0	5.9	6.3
14	16.5	14.6	15.7	11.0	9.4	10.2	8.2	7.5	7.9	5.9	4.9	5.4
15	16.8	14.3	15.6	11.0	9.3	10.4	7.5	5.5	6.6	4.9	3.6	4.2
16	17.6	15.2	16.4	9.3	7.9	8.8	5.5	4.2	5.1	3.8	3.1	3.4
17	18.8	16.4	17.6	7.9	6.7	7.2	4.2	3.3	3.7	3.4	2.4	2.9
18	19.4	17.4	18.3	7.4	7.0	7.2	3.4	2.7	3.1	3.5	2.4	2.8
19	19.8	18.5	19.1	7.2	6.7	7.0	3.2	2.8	2.9	3.2	2.6	2.9
20	18.6	16.7	18.0	7.4	6.7	7.0	3.5	2.5	3.0	2.6	0.2	1.5
21	17.3	15.3	16.5	9.1	7.4	8.2	3.7	3.2	3.4	0.6	0.0	0.2
22	17.5	15.6	16.6	9.7	8.7	9.2	4.5	3.7	4.2	0.3	0.0	0.1
23	19.0	17.4	18.3	8.9	7.1	8.0	5.6	4.5	5.0	0.9	0.0	0.4
24	19.1	17.3	18.4	7.1	5.5	6.4	5.1	4.2	4.7	0.4	0.0	0.1
25	17.3	15.7	16.4	6.9	5.2	6.2	5.2	4.4	4.7	0.4	0.0	0.1
26	15.7	15.2	15.4	7.6	6.9	7.2	4.7	3.9	4.1	0.4	0.0	0.2
27	15.8	14.8	15.2	7.6	6.7	7.4	4.2	3.9	4.1	0.8	0.0	0.5
28	15.0	13.6	14.4	6.8	5.5	6.2	4.3	3.8	4.1	2.2	0.3	1.2
29	13.6	12.3	12.9	6.6	5.3	5.9	5.4	4.3	4.8	2.2	1.4	1.8
30	12.9	---	12.2	5.9	4.3	5.2	4.8	4.5	4.7	3.1	2.0	2.4
31	12.6	10.8	11.7	---	---	---	5.5	4.5	4.9	2.5	1.1	1.9
Month	25.0	---	18.2	11.9	4.3	8.0	9.6	0.4	4.4	8.9	0.0	2.9

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	2.4	1.9	2.3	4.0	2.5	3.1	13.3	10.7	11.8	13.8	11.5	12.6
2	2.5	1.7	2.0	4.6	2.2	3.4	13.6	11.4	12.5	15.1	12.5	13.7
3	4.0	2.2	3.0	7.3	4.3	5.7	12.6	10.9	11.7	17.2	15.1	16.1
4	5.4	4.0	4.6	9.0	6.9	7.7	11.9	10.3	11.0	18.9	16.8	17.7
5	6.1	5.2	5.5	8.8	7.4	8.3	13.4	11.4	12.3	19.2	16.8	18.0
6	8.5	6.1	7.1	7.4	6.5	6.9	12.6	11.9	12.1	19.1	17.0	18.0
7	8.4	7.7	8.1	7.1	6.6	6.9	12.2	11.4	11.7	19.6	16.6	18.1
8	7.7	6.0	6.8	6.8	5.6	6.5	13.0	10.9	11.8	19.1	18.5	18.8
9	6.2	5.2	5.8	5.9	4.7	5.3	15.1	12.5	13.7	18.6	17.6	18.1
10	5.9	3.7	5.2	6.0	4.4	5.2	16.4	14.2	15.3	17.6	15.3	16.5
11	3.7	2.2	2.7	7.4	5.2	6.3	16.8	15.9	16.4	15.3	12.7	13.8
12	2.6	1.1	1.6	8.8	6.7	7.7	18.2	16.4	17.0	12.7	11.3	11.9
13	1.7	1.1	1.4	9.2	7.3	8.3	16.9	14.5	15.4	12.6	11.1	11.8
14	2.6	0.9	1.7	10.2	8.6	9.4	14.5	12.9	13.6	13.9	12.6	13.3
15	3.0	1.9	2.3	11.4	9.9	10.6	13.4	11.2	12.4	15.1	13.5	14.3
16	4.2	2.7	3.5	10.9	9.6	10.3	13.7	11.1	12.5	14.9	14.0	14.7
17	4.7	3.9	4.2	10.1	8.3	9.3	15.4	12.2	13.7	14.1	13.1	13.7
18	6.2	4.7	5.5	9.7	8.5	8.9	17.3	13.8	15.5	14.7	13.4	14.0
19	5.6	4.6	5.1	8.5	8.1	8.2	17.8	15.5	16.7	14.7	13.6	14.1
20	4.6	2.4	3.6	9.0	7.7	8.3	17.2	16.2	16.8	13.8	12.8	13.4
21	2.6	1.1	1.9	9.4	7.9	8.6	16.2	14.2	14.9	13.2	12.3	12.7
22	2.3	1.6	1.9	8.8	7.9	8.2	15.1	14.0	14.4	13.6	12.4	12.9
23	3.2	2.1	2.6	9.0	7.0	8.0	15.6	13.7	14.6	15.0	12.5	13.7
24	4.2	2.2	3.2	8.5	7.2	8.0	17.5	14.5	15.9	16.9	14.0	15.4
25	5.2	4.0	4.5	8.9	6.9	7.9	18.2	15.7	17.0	18.2	15.2	16.7
26	5.0	4.5	4.7	10.5	8.3	9.3	18.4	16.9	17.8	19.4	16.9	18.2
27	4.8	3.7	4.5	10.2	9.8	10.0	18.1	17.1	17.6	20.9	19.3	20.0
28	3.7	2.1	2.9	10.5	9.8	10.1	17.6	15.8	16.5	21.0	19.2	20.1
29	2.9	1.6	2.3	10.8	8.9	9.9	15.8	13.5	14.4	21.3	18.5	19.9
30	---	---	---	10.2	9.0	9.6	13.5	12.1	12.8	21.9	19.0	20.3
31	---	---	---	10.7	9.1	9.8	---	---	---	21.2	20.2	20.7
Month	8.5	0.9	3.8	11.4	2.2	7.9	18.4	10.3	14.3	21.9	11.1	15.9

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	21.4	20.0	20.7	26.0	23.8	24.6	29.3	26.5	28.1	25.5	22.4	24.1
2	22.0	18.8	20.4	26.1	22.2	24.3	28.8	26.6	27.7	25.6	22.8	24.3
3	22.5	20.1	21.3	26.7	23.1	25.2	27.8	25.6	27.0	25.9	23.0	24.7
4	21.5	20.4	21.0	26.1	24.0	24.8	27.8	24.8	26.5	26.3	23.5	25.2
5	20.4	19.0	19.6	24.5	23.3	23.9	27.2	25.4	26.1	26.6	24.0	25.5
6	21.8	18.5	20.1	24.7	23.2	23.9	27.3	25.2	26.4	26.0	24.4	25.3
7	24.1	21.3	22.7	26.4	23.4	24.8	27.6	25.2	26.6	25.6	22.6	24.3
8	26.3	23.6	24.8	26.5	24.2	25.4	27.0	25.0	26.0	26.1	23.0	24.7
9	27.9	24.7	26.3	26.0	24.6	25.4	26.2	23.5	25.1	25.2	23.6	24.3
10	28.5	25.6	27.0	26.5	24.2	25.4	26.1	23.4	24.9	24.2	22.6	23.5
11	28.4	25.6	27.0	27.4	24.0	25.7	24.7	23.1	23.9	23.4	22.2	22.8
12	28.4	25.4	27.0	28.3	25.0	26.7	25.1	21.6	23.5	22.7	21.7	22.2
13	28.0	25.5	26.7	28.2	26.4	27.4	25.7	22.6	24.2	24.2	22.1	23.1
14	26.8	25.3	25.9	28.3	26.0	27.2	26.0	23.6	24.7	26.1	23.1	24.7
15	27.3	24.4	25.8	28.1	24.5	26.5	24.9	23.5	24.2	25.7	24.0	25.0
16	26.2	23.7	24.7	28.7	25.1	27.0	25.7	22.6	24.2	24.0	22.0	22.9
17	23.7	22.2	23.0	29.5	25.4	27.6	25.7	22.5	24.4	23.2	20.8	22.1
18	22.9	20.8	21.9	30.1	26.6	28.6	26.5	23.1	25.0	22.8	20.5	21.8
19	22.5	20.1	21.4	30.4	26.9	28.9	26.7	23.7	25.4	22.0	20.4	21.2
20	23.9	20.6	22.3	30.2	27.3	28.9	26.6	23.8	25.4	21.2	19.4	20.5
21	25.7	21.5	23.7	30.2	27.4	28.9	26.8	23.8	25.4	21.7	19.7	20.7
22	25.9	23.0	24.6	30.1	27.0	28.7	26.4	24.2	25.6	22.1	19.9	21.1
23	25.9	23.3	24.5	29.4	26.2	27.5	26.6	23.9	25.5	21.5	20.5	21.1
24	24.7	23.0	23.9	27.4	24.7	26.0	27.2	24.5	26.0	21.1	19.3	20.3
25	25.5	22.1	23.8	27.6	23.9	25.8	27.2	25.5	26.4	20.5	19.5	20.1
26	26.7	23.4	24.9	28.6	24.8	26.7	26.1	24.6	25.4	19.5	18.8	19.1
27	26.7	24.7	25.8	28.8	26.2	27.5	24.7	22.6	23.8	20.3	18.8	19.5
28	27.6	24.6	26.0	28.1	25.3	27.1	22.6	21.4	21.8	20.6	19.6	20.1
29	27.4	24.9	26.3	29.4	26.2	27.9	23.1	21.2	22.0	21.4	19.6	20.4
30	27.3	24.8	26.1	29.8	27.2	28.5	24.1	21.9	22.9	20.4	18.9	19.6
31	---	---	---	28.2	27.1	27.7	25.6	22.5	24.1	---	---	---
Month	28.5	18.5	24.0	30.4	22.2	26.6	29.3	21.2	25.1	26.6	18.8	22.5

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	11.2	8.2	9.4	10.8	9.9	10.3	14.5	12.2	13.3	14.2	12.4	13.2
2	11.1	8.1	9.3	11.5	10.1	10.8	13.9	12.4	13.1	14.9	12.7	13.6
3	10.8	7.9	9.2	11.8	10.4	11.0	13.8	11.8	12.7	15.8	13.6	14.5
4	11.0	7.7	9.0	12.1	10.2	11.1	14.4	12.3	13.3	16.2	14.3	15.1
5	10.8	7.4	8.8	12.3	10.6	11.4	14.0	12.7	13.3	16.0	14.4	15.0
6	10.4	7.3	8.6	12.6	10.4	11.4	14.9	13.1	13.9	15.8	13.8	14.6
7	11.0	7.3	8.7	12.5	10.9	11.7	15.0	13.7	14.2	15.6	13.2	14.2
8	10.5	7.1	8.5	13.5	11.5	12.5	15.0	13.5	14.2	15.1	12.4	13.5
9	10.2	7.0	8.2	13.0	11.6	12.3	14.1	13.0	13.5	14.0	11.3	12.6
10	9.9	6.8	8.2	13.0	11.4	12.2	13.1	11.6	12.6	13.8	11.3	12.4
11	10.6	7.3	8.7	13.8	11.6	12.6	11.6	10.6	10.9	12.3	11.0	11.7
12	10.8	7.8	9.1	13.9	11.5	12.5	10.8	10.4	10.6	11.7	10.8	11.1
13	10.9	8.3	9.6	13.2	10.9	12.0	11.0	10.5	10.7	11.9	11.1	11.6
14	11.2	8.7	9.8	13.2	10.7	11.8	12.1	10.8	11.3	12.8	11.8	12.2
15	11.4	8.9	10	12.4	10.1	11.1	11.9	11.4	11.6	13.8	12.2	12.9
16	11.3	8.9	9.9	12.9	10.5	11.6	12.7	11.7	12.2	14.8	12.8	13.6
17	10.8	8.3	9.5	12.9	11.0	11.8	12.3	12.2	12.2	14.2	13.0	13.5
18	10.6	8.1	9.1	12.4	11.2	11.7	13.1	12.3	12.8	15.3	13.0	13.9
19	9.7	7.5	8.3	12.6	11.3	11.9	13.2	12.8	13.0	15.2	13.1	14.0
20	10.2	7.4	8.6	12.5	11.4	11.9	13.8	12.8	13.2	15.9	13.2	14.4
21	10.4	8.3	9.2	13.4	11.2	12.0	13.6	12.8	13.1	16.6	14.4	15.3
22	10.7	8.5	9.4	12.7	10.7	11.6	13.2	12.5	12.8	16.5	14.6	15.4
23	10.0	7.7	8.7	13.5	10.7	11.9	13.1	12.2	12.5	16.4	14.2	15.2
24	9.5	7.6	8.3	14.3	11.4	12.7	13.9	12.1	12.8	16.2	14.5	15.2
25	9.2	8.0	8.5	14.5	11.8	13.0	13.6	12.3	12.8	16.8	14.4	15.4
26	9.2	8.4	8.8	13.1	11.5	12.3	13.8	12.5	13.0	16.8	14.6	15.5
27	9.1	8.6	8.8	13.3	11.0	12.1	13.7	12.6	13.0	16.6	14.2	15.3
28	9.2	8.7	8.9	14.2	11.7	12.8	13.8	12.6	13.1	16.8	14.1	15.3
29	10.3	9.2	9.7	13.9	11.8	12.8	14.3	12.4	13.2	15.5	13.7	14.5
30	10.8	9.8	10.3	14.3	12.0	13.1	13.2	12.3	12.7	16.1	13.0	14.5
31	11.1	9.9	10.4	---	---	---	14.3	12.0	13.0	15.9	13.7	14.7
Month	11.4	6.8	9.1	14.5	9.9	11.9	15.0	10.4	12.7	16.8	10.8	14.0

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	14.4	13.4	13.8	16.1	13.4	14.6	12.8	10.7	11.7	10.9	10.1	10.5
2	14.2	13.1	13.5	16.6	13.3	14.8	13.1	10.2	11.5	10.9	9.9	10.4
3	13.2	12.6	12.9	16.0	12.7	14.2	12.7	10.4	11.5	10.3	9.1	9.7
4	13.1	12.4	12.7	13.4	11.0	12.3	12.8	10.4	11.4	10.3	8.5	9.4
5	12.8	12.0	12.4	11.0	9.6	10.3	13.1	10.3	11.6	10.6	8.5	9.5
6	12.0	11.1	11.6	11.6	10.9	11.4	11.5	10.2	10.9	10.5	8.5	9.5
7	11.3	10.7	11.0	11.6	11.3	11.4	11.8	9.7	10.7	10.8	8.5	9.6
8	12.5	11.0	11.8	11.6	11.4	11.4	12.1	10.2	11.0	9.9	8.1	9.1
9	13.6	12.1	12.7	12.2	11.6	12.0	12.2	9.9	10.9	9.8	8.0	8.8
10	13.8	11.9	12.8	12.5	12.1	12.3	12.5	9.2	10.6	8.8	8.3	8.6
11	15.1	12.7	13.8	12.2	11.6	12.0	11.4	8.7	10	9.5	8.7	9.2
12	15.3	13.4	14.2	11.8	11.1	11.5	11.0	8.3	9.5	9.9	9.5	9.7
13	15.1	13.6	14.2	11.8	11.0	11.3	9.6	8.3	8.9	10.1	9.9	10.0
14	15.9	13.6	14.6	11.5	10.6	11.0	11.7	9.1	10.3	10.0	9.6	9.7
15	14.9	13.5	14.1	11.2	10.4	10.7	12.8	10.0	11.3	9.7	9.5	9.7
16	15.7	13.0	14.2	11.3	10.3	10.7	13.3	10.1	11.7	9.5	9.2	9.3
17	14.5	12.7	13.5	11.9	10.8	11.3	13.6	10.0	11.7	9.7	9.2	9.5
18	14.7	11.9	13.1	11.8	10.9	11.3	13.7	9.6	11.5	9.7	9.4	9.5
19	15.3	12.0	13.5	11.6	11.0	11.3	13.4	9.1	11.1	9.8	9.5	9.6
20	15.2	12.5	13.8	11.5	11.1	11.3	10.9	8.6	9.7	9.7	9.6	9.7
21	16.9	13.5	15.0	11.5	11.0	11.2	9.4	8.7	9.1	9.9	9.6	9.7
22	16.4	13.8	14.9	11.6	11.2	11.4	10.0	9.2	9.6	10.2	9.9	10
23	16.1	13.4	14.5	12.1	11.3	11.7	10.3	9.5	9.9	10.3	10.0	10.2
24	16.9	13.2	14.9	12.3	11.4	11.8	10.3	9.4	9.8	10.2	9.7	10
25	16.2	12.9	14.4	12.7	11.5	12.0	10.2	9.1	9.6	10.2	9.4	9.8
26	14.1	12.4	13.2	12.4	11.2	11.8	10.0	8.6	9.2	10.3	9.0	9.6
27	15.3	11.9	13.5	11.6	10.8	11.2	9.8	8.5	9.1	10.0	8.5	9.2
28	15.8	12.8	14.2	11.8	10.5	11.2	9.4	8.3	8.8	10.6	8.4	9.5
29	16.2	13.6	14.8	13.0	10.9	11.9	9.6	9.0	9.3	11.2	8.7	10
30	---	---	---	13.4	11.1	12.2	10.6	9.6	10.1	11.7	8.7	10.2
31	---	---	---	13.0	11.2	12.1	---	---	---	10.2	8.5	9.4
Month	16.9	10.7	13.6	16.6	9.6	11.8	13.7	8.3	10.4	11.7	8.0	9.6

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	10.9	7.8	9.3	9.0	6.2	7.6	9.0	6.4	7.8	10.4	7.5	9.0
2	12.3	7.7	9.9	9.6	6.7	8.2	8.8	6.3	7.6	10.5	7.4	9.1
3	13.4	8.1	10.5	10.0	6.6	8.3	8.8	6.3	7.7	10.7	7.4	9.2
4	10.2	7.6	8.8	8.5	6.3	7.4	9.4	6.5	8.0	10.7	7.2	9.1
5	8.2	7.4	7.9	8.3	6.7	7.5	9.3	6.4	7.7	10.6	7.2	9.0
6	9.1	8.2	8.6	8.2	7.0	7.4	9.4	6.5	8.1	9.8	6.8	8.0
7	9.7	7.9	8.7	9.0	6.9	7.9	9.4	6.3	8.0	10.7	7.3	8.9
8	9.7	7.4	8.5	8.2	7.0	7.5	9.3	6.4	7.9	10.9	7.3	9.1
9	9.6	7.0	8.2	7.8	6.8	7.2	9.6	6.4	8.2	10.3	7.1	8.4
10	9.6	6.7	8.0	8.5	7.0	7.7	9.6	6.6	8.2	11.2	7.3	9.2
11	9.6	6.6	8.0	9.0	7.1	8.0	---	---	---	10.8	7.6	9.0
12	9.6	6.5	8.1	9.1	7.0	8.0	---	---	---	10.6	7.7	8.8
13	9.8	6.5	7.9	8.9	6.6	7.7	---	---	---	11.4	7.5	9.2
14	9.1	6.3	7.4	8.8	6.6	7.7	10.2	6.8	8.4	11.2	7.5	9.2
15	9.5	6.6	8.0	9.3	6.8	8.0	9.9	6.9	8.4	10.8	7.0	8.8
16	8.5	6.7	7.6	9.4	6.8	8.2	10.1	7.3	8.7	11.8	7.6	9.4
17	9.7	7.1	8.4	9.6	6.8	8.3	10.0	7.3	8.7	11.7	8.0	9.6
18	10.1	7.6	8.7	9.7	6.6	8.2	10.1	7.2	8.9	12.1	8.2	9.9
19	10.5	7.6	9.0	9.8	6.4	8.2	10.2	7.2	8.8	12.6	8.2	10.1
20	10.5	7.6	9.1	9.8	6.3	8.0	10.1	7.1	8.7	12.8	8.5	10.3
21	10.6	7.4	9.0	9.5	6.1	7.9	10.7	7.3	9.0	12.1	8.6	9.9
22	10.0	6.9	8.3	9.0	6.2	7.6	10.4	7.3	8.8	12.1	8.4	9.9
23	9.6	6.8	8.2	8.7	6.2	7.3	10.4	7.4	8.8	11.8	8.2	9.6
24	9.6	7.2	8.4	9.6	6.6	8.1	10.1	7.2	8.6	11.9	8.5	9.9
25	10.3	7.3	8.7	10.0	7.1	8.5	10.5	6.9	8.6	12.5	8.4	10.0
26	9.7	6.9	8.2	10.4	7.0	8.7	10.6	7.1	8.8	10.7	8.3	9.1
27	9.3	6.4	7.9	10.3	6.6	8.5	10.2	7.5	8.5	11.6	8.0	9.4
28	9.7	6.3	7.9	10.1	6.7	8.5	8.7	7.4	7.9	10.0	7.8	8.9
29	9.1	6.1	7.6	9.5	6.6	8.2	9.6	7.3	8.4	10.3	7.6	8.9
30	9.3	6.2	7.7	8.9	6.4	7.7	10.3	7.6	8.8	11.0	7.8	9.3
31	---	---	---	8.9	6.0	7.5	10.2	7.5	8.9	---	---	---
Month	13.4	6.1	8.4	10.4	6.0	7.9	---	---	---	12.8	6.8	9.3

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	---	---	---	2.9	0.4	0.9	0.8	0.3	0.4	5.5	1.2	1.7
2	---	---	---	1.6	0.3	0.7	1.5	0.3	0.5	3.1	0.9	1.5
3	---	---	---	3.5	0.1	0.4	1.5	0.5	1.0	1.0	0.7	0.8
4	---	---	---	1.2	0.1	0.3	1.6	0.7	1.1	1.1	0.3	0.6
5	---	---	---	0.8	0.1	0.3	3.4	0.8	1.1	0.7	0.2	0.4
6	---	---	---	2.3	0.1	0.4	1.3	0.7	0.9	0.5	0.1	0.2
7	---	---	---	0.6	0.1	0.2	1.8	0.6	0.8	1.1	0.1	0.4
8	---	---	---	1.0	0.1	0.3	1.3	0.3	0.6	1.6	0.6	0.9
9	---	---	---	0.7	0.1	0.3	2.4	0.3	0.5	2.0	0.8	1.2
10	---	---	---	0.7	0.1	0.3	1,000	1.8	51	9.5	0.6	1.1
11	---	---	---	0.4	0.1	0.2	110	16	33	420	0.6	30
12	---	---	---	0.5	0.1	0.2	24	6.1	10	160	39	76
13	---	---	---	0.6	0.1	0.2	6.2	3.9	4.9	39	12	22
14	---	---	---	0.5	0.1	0.2	5.2	3.1	4.0	12	4.7	7.4
15	---	---	---	1.0	0.1	0.3	4.8	2.3	3.6	4.8	2.4	3.4
16	---	---	---	0.8	0.2	0.4	23	1.8	---	3.1	1.4	2.0
17	---	---	---	2.7	0.3	1.0	34	6.2	19	1.6	0.9	1.2
18	---	---	---	2.0	0.6	1.0	22	6.5	11	1.6	0.7	1.0
19	---	---	---	1.0	0.4	0.6	6.5	3.4	4.6	1.2	0.5	0.8
20	---	---	---	0.9	0.3	0.5	3.5	1.3	2.3	1.6	0.6	0.9
21	---	---	---	0.8	0.2	0.4	2.1	0.8	1.1	1.2	0.7	0.8
22	---	---	---	0.6	0.2	0.4	6.3	0.5	1.5	0.8	0.3	0.5
23	---	---	---	5.4	0.3	0.7	4.5	0.4	1.4	0.8	0.4	0.5
24	---	---	---	1.0	0.2	0.4	2.4	0.5	0.8	1.7	0.4	0.6
25	---	---	---	0.9	0.2	0.4	12	1.9	2.7	12	0.3	1.3
26	---	---	---	1.4	0.2	0.4	3.9	1.1	2.0	0.5	0.3	0.4
27	29	9.5	16	1.1	0.2	0.4	1.4	0.5	0.9	1.4	0.2	0.3
28	40	10	25	1.0	0.2	0.4	1.8	0.2	0.5	0.7	0.2	0.4
29	11	3.2	6.0	1.0	0.2	0.4	1.2	0.5	1.0	0.9	0.1	0.2
30	3.4	1.0	---	1.1	0.3	0.4	1.6	0.8	1.1	2.8	0.1	0.7
31	5.5	0.5	1.2	---	---	---	1.9	1.3	1.6	2.8	0.6	1.4
Month	---	---	---	5.4	0.1	0.4	1,000	0.2	---	420	0.1	5.2

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	3.6	1.4	2.3	1.6	0.8	0.9	0.9	0.3	0.5	5.8	2.2	3.5
2	36	3.2	14	1.1	0.5	0.7	1.8	0.3	0.6	3.6	1.9	2.8
3	36	14	23	1.0	0.6	0.7	0.9	0.2	0.5	4.1	1.7	2.8
4	14	6.9	9.7	510	0.6	61	0.7	0.1	0.3	4.6	1.1	2.4
5	11	5.8	7.1	930	180	570	0.9	0.1	0.4	2.5	0.6	1.4
6	9.0	6.6	7.9	460	65	180	1.3	0.3	0.6	1.6	0.3	0.9
7	13	8.5	11	65	22	39	260	0.6	8.0	8.0	0.1	1.1
8	12	5.3	8.4	22	14	17	460	3.1	16	10	0.6	1.7
9	5.3	3.2	4.0	15	11	13	11	1.9	4.1	9.2	0.4	2.1
10	4.9	2.8	3.5	11	8.0	9.4	14	1.0	2.0	39	1.3	15
11	3.5	1.3	2.3	13	5.4	7.0	4.1	0.9	1.9	50	24	36
12	4.4	0.8	1.1	6.9	4.4	5.3	11	2.1	5.9	410	25	100
13	1.3	0.5	0.8	5.3	3.4	4.2	21	8.4	13	82	25	44
14	1.7	0.6	0.9	4.0	2.9	3.5	11	1.7	6.0	33	11	17
15	2.0	1.2	1.5	4.0	2.6	3.2	2.9	0.9	1.6	12	5.9	8.3
16	2.9	1.0	1.3	3.8	2.5	3.1	2.4	0.6	1.1	42	5.5	15
17	1.8	0.9	1.2	3.4	2.6	2.9	2.9	0.2	0.8	41	13	24
18	1.5	0.8	1.1	3.5	1.7	2.5	2.4	0.2	0.8	170	1.7	24
19	1.5	0.7	0.9	12	2.5	4.3	1.6	0.3	0.8	6.4	4.0	5.0
20	1.3	0.4	0.6	20	9.6	13	5.2	0.8	1.8	19	3.3	5.8
21	0.7	0.2	0.4	26	12	19	47	5.2	21	34	19	26
22	0.6	0.2	0.3	17	5.4	9.1	28	8.5	12	19	7.9	12
23	0.8	0.1	0.3	6.2	3.2	4.2	12	6.6	9.1	8.5	4.6	6.1
24	11	0.2	0.8	4.1	2.0	2.8	8.5	4.6	6.4	8.9	3.6	4.6
25	1.0	0.4	0.6	2.6	1.2	1.9	310	3.3	23	5.5	2.7	3.8
26	0.9	0.3	0.5	3.0	1.2	1.7	5.4	2.3	3.8	3.9	1.5	2.8
27	2.5	0.7	1.2	2.2	1.1	1.5	8.1	3.5	5.5	3.6	1.5	2.5
28	4.9	1.6	2.7	2.3	1.0	1.5	24	7.3	12	5.2	1.8	3.4
29	3.0	0.9	1.5	4.5	0.6	1.1	32	11	17	2.7	0.9	1.7
30	---	---	---	1.4	0.5	0.9	66	4.8	8.9	6.9	0.6	1.5
31	---	---	---	1.1	0.3	0.7	---	---	---	19	0.9	3.4
Month	36	0.1	3.8	930	0.3	32	460	0.1	6.2	410	0.1	12

01608500 SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV—Continued

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WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	25	2.2	6.6	1.7	0.5	0.9	2.5	0.5	1.0	8.1	0.7	2.0
2	27	5.7	12	1.5	0.6	1.0	24	0.6	4.2	9.7	0.6	1.4
3	13	1.6	3.4	1.6	0.4	0.8	2.9	1.1	1.9	3.3	0.4	0.9
4	95	1.8	15	10	0.7	1.8	8.8	1.3	3.4	4.8	0.4	0.9
5	290	23	59	16	3.0	9.8	6.0	0.9	1.7	22	0.4	2.5
6	35	9.9	21	16	8.6	12	9.2	0.7	1.6	9.5	0.4	1.2
7	10	4.3	6.8	13	5.1	7.5	3.2	0.7	1.2	1.0	0.3	0.7
8	9.1	2.0	3.6	---	---	---	2.0	0.7	1.2	1.4	0.3	0.6
9	4.7	1.0	1.9	---	---	---	3.1	0.8	1.3	0.9	0.2	0.6
10	2.9	0.3	1.1	---	---	---	4.1	0.7	1.2	1.9	0.2	0.7
11	2.0	0.1	0.6	---	---	---	---	---	---	2.1	0.2	0.6
12	3.9	0.5	1.6	---	---	---	---	---	---	1.6	0.3	0.6
13	43	0.5	3.7	---	---	---	---	---	---	1.8	0.4	0.6
14	12	3.5	6.5	---	---	---	1.4	0.4	0.7	1.1	0.2	0.5
15	60	2.0	5.7	8.9	2.4	4.8	1.6	0.5	0.9	1.4	0.2	0.5
16	1.5	1.2	2.2	4.4	1.3	2.4	1.5	0.6	1.0	1.7	0.3	0.5
17	4.4	0.8	2.1	3.0	0.7	1.5	1.8	0.6	1.0	1.7	0.2	0.4
18	10	0.6	3.0	1.8	0.4	1.0	2.5	0.6	1.0	1.3	0.2	0.4
19	3.2	0.4	1.1	3.4	0.4	1.0	2.0	0.5	1.0	0.7	0.2	0.4
20	2.3	0.3	0.7	1.4	0.3	0.7	1.5	0.5	0.9	1.2	0.2	0.5
21	1.3	0.1	0.5	5.2	0.1	0.7	85	0.3	3.1	0.8	0.2	0.4
22	2.3	0.1	0.6	5.2	0.4	1.1	120	0.4	4.4	2.0	0.2	0.6
23	83	0.8	3.6	7.0	0.8	2.1	74	0.4	2.6	1.8	0.1	0.6
24	400	2.7	37	6.0	1.7	3.1	6.2	0.2	0.7	5.8	0.1	1.3
25	3.4	0.9	2.1	4.7	1.2	2.3	3.2	0.2	0.9	9.9	0.3	2.7
26	2.1	0.5	1.2	2.9	0.5	1.4	11	0.1	0.9	22	0.5	7.3
27	1.7	0.3	0.7	4.0	0.4	1.0	4.8	0.3	0.7	21	0.5	9.3
28	17	0.5	1.3	1.4	0.3	0.7	3.5	0.6	1.2	19	2.6	6.5
29	4.6	0.6	1.3	1.4	0.3	0.6	21	1.0	2.9	15	4.0	9.2
30	9.2	0.5	1.1	6.0	0.4	1.0	120	1.5	6.2	17	2.5	8.1
31	---	---	---	1.8	0.5	0.9	13	1.0	2.9	---	---	---
Month	400	0.1	6.9	---	---	---	---	---	---	22	0.1	2.1