

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC

Roanoke Basin
Lower Roanoke Subbasin

LOCATION.--Lat 35°54'54", long 76°43'22" referenced to North American Datum of 1983, Washington County, NC, Hydrologic Unit 03010107, on right bank 10 ft upstream from bridge. Water quality monitor located near center of river on south bridge fender of shipping channel, 10 ft upstream from North Carolina Highway 45 bridge, approximately 1.6 mi upstream from mouth, and 2.7 mi northwest of Westover.

DRAINAGE AREA.--9,660 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1990 to September 1993. August 1996 to current year. Records from August 1996 to September 1997 are unpublished and available from the USGS Water Science Center, Raleigh, NC.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Satellite telemetry at water-quality station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 4.68 ft, September 16, 1999; minimum elevation, -1.20 ft, September 1, 1993.

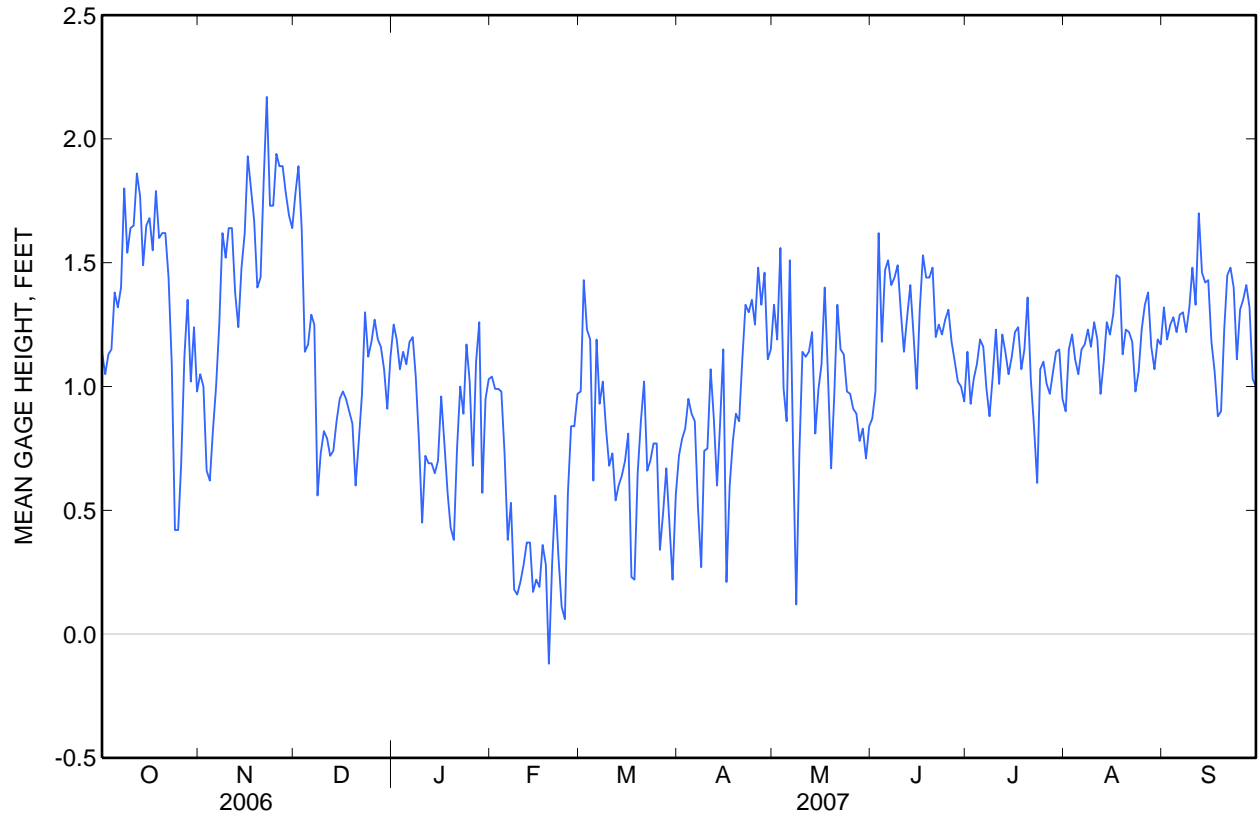
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 3.45 ft, November 22; minimum elevation, -0.58, April 16.

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GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.14	1.05	1.78	1.25	1.04	0.98	0.72	1.33	0.87	1.14	0.90	1.32
2	1.05	1.00	1.89	1.19	0.99	1.43	0.79	1.19	0.98	0.93	1.15	1.19
3	1.13	0.66	1.64	1.07	0.99	1.23	0.83	1.56	1.62	1.03	1.21	1.25
4	1.15	0.62	1.14	1.14	0.98	1.19	0.95	0.99	1.18	1.09	1.11	1.28
5	1.38	0.82	1.17	1.09	0.73	0.62	0.89	0.86	1.47	1.19	1.05	1.22
6	1.32	1.00	1.29	1.18	0.38	1.19	0.86	1.51	1.51	1.16	1.15	1.29
7	1.40	1.25	1.25	1.20	0.53	0.93	0.51	0.76	1.41	0.99	1.17	1.30
8	1.80	1.62	0.56	1.04	0.18	1.02	0.27	0.12	1.44	0.88	1.23	1.22
9	1.54	1.52	0.73	0.78	0.16	0.83	0.74	0.74	1.49	1.04	1.16	1.32
10	1.64	1.64	0.82	0.45	0.21	0.68	0.75	1.14	1.30	1.23	1.26	1.48
11	1.65	1.64	0.79	0.72	0.28	0.73	1.07	1.12	1.14	1.01	1.19	1.33
12	1.86	1.38	0.72	0.69	0.37	0.54	0.87	1.14	1.28	1.21	0.97	1.70
13	1.77	1.24	0.74	0.69	0.37	0.60	0.60	1.22	1.41	1.14	1.10	1.46
14	1.49	1.48	0.86	0.65	0.17	0.64	0.85	0.81	1.21	1.05	1.26	1.42
15	1.65	1.62	0.95	0.70	0.22	0.70	1.15	0.99	0.99	1.12	1.21	1.43
16	1.68	1.93	0.98	0.96	0.19	0.81	0.21	1.09	1.31	1.22	1.29	1.18
17	1.55	1.80	0.95	0.77	0.36	0.23	0.60	1.40	1.53	1.24	1.45	1.06
18	1.79	1.67	0.90	0.57	0.28	0.22	0.78	1.05	1.44	1.07	1.44	0.88
19	1.60	1.40	0.85	0.43	-0.12	0.65	0.89	0.67	1.44	1.15	1.13	0.90
20	1.62	1.44	0.60	0.38	0.28	0.86	0.86	0.97	1.48	1.36	1.23	1.23
21	1.62	1.82	0.78	0.75	0.56	1.02	1.11	1.33	1.20	1.03	1.22	1.45
22	1.44	2.17	0.97	1.00	0.31	0.66	1.33	1.15	1.25	0.84	1.18	1.48
23	1.09	1.73	1.30	0.89	0.11	0.70	1.30	1.13	1.21	0.61	0.98	1.40
24	0.42	1.73	1.12	1.17	0.06	0.77	1.35	0.98	1.27	1.07	1.06	1.11
25	0.42	1.94	1.18	1.02	0.57	0.77	1.25	0.97	1.31	1.10	1.23	1.31
26	0.69	1.89	1.27	0.68	0.84	0.34	1.48	0.91	1.18	1.01	1.33	1.35
27	1.12	1.89	1.19	1.10	0.84	0.49	1.33	0.89	1.10	0.97	1.38	1.41
28	1.35	1.78	1.16	1.26	0.97	0.67	1.46	0.78	1.02	1.06	1.16	1.32
29	1.02	1.69	1.07	0.57	---	0.45	1.11	0.83	1.00	1.14	1.07	1.03
30	1.24	1.64	0.91	0.95	---	0.22	1.15	0.71	0.94	1.15	1.19	1.00
31	0.98	---	1.12	1.03	---	0.56	---	0.84	---	0.95	1.17	---
Total	41.60	45.06	32.68	27.37	12.85	22.73	28.06	31.18	37.98	33.18	36.63	38.32
Mean	1.34	1.50	1.05	0.88	0.46	0.73	0.94	1.01	1.27	1.07	1.18	1.28
Max	1.86	2.17	1.89	1.26	1.04	1.43	1.48	1.56	1.62	1.36	1.45	1.70
Min	0.42	0.62	0.56	0.38	-0.12	0.22	0.21	0.12	0.87	0.61	0.90	0.88

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued



0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (TOP): May 2000 to current year.

SPECIFIC CONDUCTANCE (BOTTOM): November 1997 to current year

pH (TOP): May 2000 to current year.

pH (BOTTOM): November 1997 to current year.

WATER TEMPERATURE (TOP): May 2000 to current year.

WATER TEMPERATURE (BOTTOM): November 1997 to current year.

DISSOLVED OXYGEN (TOP): May 2000 to current year.

DISSOLVED OXYGEN (BOTTOM): November 1997 to current year.

DISSOLVED OXYGEN, PERCENT SATURATION (TOP): May 2000 to current year.

DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM): November 1997 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry from March 1998 to current year.

REMARKS.--Station operated to define water-quality characteristics in the Roanoke River Basin below Roanoke Rapids Dam. Top constituents were monitored at approximately 18 ft above the streambed and bottom constituents, 2 ft above the streambed. Dissolved oxygen, percent saturation is computed using a barometric pressure of 760 mm Hg beginning October 1, 2000. Water-quality measurements and samples for water years 2006 to 2008 were collected by the U.S. Geological Survey and the North Carolina Department of Environment and Natural Resources, Division of Water Quality.

COOPERATION.--Station operated in cooperation with North Carolina Department of Environment and Natural Resources (NCDENR), Division of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (TOP): Maximum recorded, 9,880 microsiemens, February 2, 2002; minimum recorded, 66 microsiemens, June 19, 2006.

SPECIFIC CONDUCTANCE (BOTTOM): Maximum recorded, 11,700 February 2, 2002; minimum recorded, 48 microsiemens, September 21, 1999.

pH (TOP): Maximum recorded, 8.0 standard units, August 19, 2002, June 18, 2007; minimum recorded, 6.0 standard units, June 19, 21, 22, 2001.

pH (BOTTOM): Maximum recorded, 7.7 standard units, June 17, 2000; minimum recorded, 5.8 standard units, March 4, 1998, September 18-22, 1999.

WATER TEMPERATURE (TOP): Maximum recorded, 32.1°C, July 27, 2005; minimum recorded, 2.5°C, January 24, 2003.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 31.3°C, August 8, 9, 2006; minimum recorded, 2.5°C, January 24, 2003.

DISSOLVED OXYGEN (TOP): Maximum recorded, 12.6 mg/L, February 22, 2003; minimum recorded, <1.0 mg/L, on many days during the period.

DISSOLVED OXYGEN (BOTTOM): Maximum recorded, 14.0 mg/L, January 6, 7, 2001, January 11, 2002; minimum recorded, <1.0 mg/L, on many days during the period.

DISSOLVED OXYGEN, PERCENT SATURATION (TOP): Maximum recorded, 119%, June 8, 2007; minimum recorded, <10%, on many days during the period.

DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM): Maximum recorded, 123%, September 15, 2005; minimum recorded, <10%, on many days during the period.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE (TOP): Maximum recorded, 3840 microsiemens, July 20; minimum recorded, 97 microsiemens, November 22.

SPECIFIC CONDUCTANCE (BOTTOM): Maximum recorded, 5930 microsiemens, July 20; minimum recorded, 96 microsiemens, November 22.

pH (TOP): Maximum recorded, 8.0 standard units, June 18; minimum recorded, 6.3 standard units, March 18.

pH (BOTTOM): Maximum recorded, 7.4 standard units, November 5, 6, 7, 8; minimum recorded, 6.2 standard units, March 18, 19.

WATER TEMPERATURE (TOP): Maximum recorded, 32.0°C, August 8; minimum recorded, 4.2°C, February 7.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 30.9°C, August 10; minimum recorded, 4.0°C, February 7.

DISSOLVED OXYGEN (TOP): Maximum recorded, 12.4 mg/L, February 20, 21; minimum recorded, 2.4 mg/L, July 20.

DISSOLVED OXYGEN (BOTTOM): Maximum recorded, 12.2 mg/L, February 23; minimum recorded, 0.2 mg/L, July 15, 20.

DISSOLVED OXYGEN, PERCENT SATURATION (TOP): Maximum recorded, 119%, June 8; minimum recorded, 31%, July 20.

DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM): Maximum recorded, 100%, February 23, March 2, 3, 4; minimum recorded, 3%, July 15, 20.

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

[Remark codes: <, less than.]

Date	Time	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Sus- pended sedi- ment concen- tration mg/L (80154)
Nov							
06...	1240	9.1	7.0	132	14.6	.9	49
Apr							
04...	1000	8.9	6.8	112	15.7	<1.0	--
18...	1045	8.3	6.4	108	14.2	1.2	--
May							
01...	1330	6.2	6.6	114	19.5	<1.0	--
15...	1025	6.4	7.1	130	20.1	<1.0	--
30...	0915	7.3	7.0	140	24.4	1.7	--
Jun							
14...	1105	5.8	7.0	180	26.1	1.3	--
26...	1645	6.2	7.3	170	27.9	1.5	--
Jul							
16...	1110	5.2	7.0	270	29.4	<2.0	--
Aug							
01...	1000	5.0	7.1	191	28.8	<1.0	--
15...	1054	5.5	6.8	192	29.6	<1.0	--
Sep							
04...	1745	6.3	7.3	214	28.2	1.3	--
19...	1025	6.1	7.2	221	24.8	<1.0	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[Remark codes: <, less than.]

Date	Time	Sample type	Instan- taneous dis- charge, cfs (00061)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)
Oct								
02...	1345	Environmental	--	6.6	7.3	237	24.9	<1.0
02...	1350	Replicate	--	6.6	7.3	237	24.9	<1.0
15...	1130	Environmental	--	4.6	7.0	739	23.0	<1.0
Nov								
05...	1445	Environmental	485	7.7	7.3	2,440	17.1	<1.0
05...	1500	Blank	--	7.7	7.3	2,440	17.1	<1.0

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	184	168	174	159	144	150	117	113	115	137	121	126
2	196	170	178	161	148	151	118	113	115	136	119	124
3	188	170	177	199	135	153	116	113	115	127	120	124
4	207	178	194	137	130	133	117	112	115	135	122	128
5	187	161	177	137	131	134	118	111	117	138	126	130
6	195	140	152	135	125	130	119	114	118	131	121	125
7	178	148	162	138	130	133	114	113	114	132	121	124
8	221	142	170	143	127	133	118	112	113	127	120	123
9	182	143	154	144	131	135	119	116	117	124	116	119
10	162	137	151	152	131	140	119	116	117	118	109	114
11	143	133	138	141	131	136	118	111	115	111	109	110
12	147	132	138	144	122	133	113	111	112	114	108	110
13	162	127	139	151	123	133	113	112	112	114	111	112
14	147	134	139	134	121	129	113	111	112	113	110	111
15	153	136	141	131	123	127	116	111	113	112	110	111
16	148	134	139	137	126	129	117	115	116	111	109	110
17	140	132	137	131	118	123	118	115	116	110	108	109
18	144	131	136	137	121	125	118	116	117	110	108	109
19	138	130	133	127	121	125	119	117	118	110	106	108
20	139	131	133	126	109	118	121	117	119	107	105	106
21	146	131	136	119	109	115	121	119	120	108	106	106
22	140	131	135	178	97	118	125	119	122	110	105	107
23	142	133	136	104	100	101	127	122	124	109	107	107
24	146	133	138	113	102	107	129	121	123	109	107	108
25	134	127	131	117	109	112	130	124	127	109	106	108
26	137	129	133	117	109	111	129	122	126	108	106	107
27	138	130	134	114	99	110	144	121	127	108	106	107
28	139	130	136	114	100	109	130	123	126	108	104	106
29	145	131	136	115	101	110	129	116	124	106	102	104
30	185	132	144	117	102	112	119	108	114	105	103	105
31	151	139	146	---	---	---	134	117	122	105	101	103
Month	221	127	147	199	97	126	144	108	118	138	101	113

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	103	101	102	128	120	124	135	121	128	116	113	114
2	102	100	100	125	115	120	129	119	123	119	113	115
3	103	100	101	129	110	115	130	119	125	127	116	121
4	105	102	104	127	104	112	124	110	114	123	115	118
5	106	103	104	119	107	113	128	108	112	118	114	116
6	108	104	106	152	110	120	125	114	118	137	108	120
7	125	107	113	126	111	120	127	112	117	169	112	120
8	116	109	112	171	114	127	123	114	116	133	124	128
9	122	109	115	142	118	126	123	114	118	140	131	135
10	137	120	128	130	117	122	127	111	117	141	130	135
11	149	120	129	132	121	126	118	111	114	139	127	135
12	140	123	129	135	117	128	115	111	112	145	130	136
13	142	133	137	156	133	143	118	110	112	153	131	138
14	158	122	142	166	146	159	122	116	119	148	127	134
15	202	121	145	172	158	164	120	112	117	148	130	139
16	173	134	145	219	159	170	114	101	106	152	131	139
17	157	137	144	186	138	154	118	103	106	159	131	139
18	155	124	136	154	134	140	116	106	109	149	130	136
19	128	119	123	139	129	134	115	109	111	140	130	134
20	123	113	117	131	110	117	113	107	109	147	135	140
21	122	99	111	129	104	111	112	108	110	151	129	142
22	105	99	102	112	107	108	115	109	111	188	127	144
23	109	99	104	113	107	110	115	110	112	141	120	129
24	112	104	107	114	107	110	116	110	112	140	123	129
25	119	107	113	119	108	110	114	109	111	139	123	128
26	117	107	112	110	104	108	115	109	112	154	129	140
27	131	114	118	108	105	106	115	108	110	147	136	142
28	134	120	127	128	108	112	114	110	111	148	136	143
29	---	---	---	122	112	116	112	109	111	148	129	143
30	---	---	---	125	118	120	114	110	112	158	128	143
31	---	---	---	130	119	125	---	---	---	143	125	131
Month	202	99	119	219	104	125	135	101	114	188	108	132

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	144	123	132	194	157	172	203	162	186	179	131	159
2	149	126	140	176	126	157	210	162	188	184	123	160
3	153	123	138	187	147	165	218	173	197	182	143	167
4	196	132	155	187	157	177	197	173	184	213	152	176
5	169	129	147	192	162	175	536	168	201	212	155	191
6	182	150	162	815	169	228	1,180	175	308	197	145	181
7	182	165	172	235	165	181	362	195	235	178	141	166
8	173	151	162	181	154	162	1,440	216	354	205	162	175
9	177	149	158	329	154	186	482	218	278	192	146	175
10	176	127	160	407	180	227	715	243	311	198	164	175
11	156	140	150	247	159	207	244	142	166	204	191	195
12	187	142	153	529	154	202	173	155	161	1,250	197	547
13	211	121	178	193	180	186	182	172	178	253	165	203
14	200	115	165	229	175	190	198	146	178	227	158	190
15	188	151	167	363	175	211	203	185	198	198	164	178
16	172	155	166	2,040	190	525	242	161	184	187	149	169
17	177	156	164	1,290	234	422	1,560	205	498	247	174	226
18	185	154	171	2,900	166	722	990	169	290	230	147	218
19	198	161	181	1,470	158	333	207	164	188	229	138	206
20	187	148	174	3,840	240	869	1,990	151	415	193	169	185
21	165	141	149	482	259	352	1,130	219	398	---	---	---
22	152	146	149	443	267	357	519	214	273	253	215	240
23	168	134	151	328	191	274	217	146	199	271	207	240
24	154	135	144	224	178	193	206	187	193	260	212	252
25	153	136	144	236	206	218	206	184	196	249	205	232
26	175	146	165	227	172	207	184	151	164	303	204	220
27	174	160	166	186	163	171	190	153	164	458	206	268
28	184	161	169	190	161	177	190	137	167	280	219	226
29	263	170	189	267	184	200	179	146	164	232	171	189
30	226	177	192	305	200	215	189	149	172	225	151	202
31	---	---	---	219	159	202	183	141	168	---	---	---
Month	263	115	160	3,840	126	267	1,990	137	231	---	---	---

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	183	172	175	159	142	148	119	115	117	138	121	127
2	194	171	178	159	145	149	120	116	118	137	120	125
3	189	174	179	196	134	152	119	116	118	128	121	125
4	208	177	194	139	129	132	120	116	118	137	124	129
5	199	162	182	135	130	132	122	117	120	139	127	131
6	187	140	152	134	123	128	122	117	121	132	122	127
7	177	148	163	136	129	131	118	116	117	133	122	126
8	211	151	169	142	125	131	119	113	115	129	122	125
9	178	143	154	143	129	135	121	118	119	125	119	121
10	161	139	151	153	131	139	120	118	119	120	112	116
11	144	133	138	142	131	137	120	112	116	126	109	111
12	146	132	138	145	121	133	114	112	113	114	108	110
13	153	128	138	150	123	133	114	113	114	114	111	112
14	146	136	140	134	122	129	114	113	114	112	110	111
15	152	137	142	130	124	127	118	113	114	112	109	111
16	147	134	139	135	126	128	118	116	117	111	109	111
17	139	131	136	131	117	122	119	116	117	110	108	109
18	144	129	134	135	121	124	120	117	118	110	108	109
19	137	129	131	126	121	124	120	118	119	109	105	108
20	139	129	132	125	111	118	122	119	121	107	104	105
21	143	129	135	117	108	114	123	120	122	107	105	106
22	139	129	134	181	96	117	127	121	123	110	104	107
23	142	132	135	104	100	102	129	122	125	109	106	107
24	145	132	137	114	103	108	130	123	125	109	107	108
25	134	125	130	118	110	113	131	125	128	109	106	108
26	135	127	132	118	111	112	130	123	127	108	105	107
27	137	128	133	115	100	111	145	122	128	108	103	107
28	139	129	134	115	101	110	131	124	127	107	104	106
29	143	129	135	117	103	111	130	117	125	106	102	104
30	173	130	141	119	104	114	121	110	116	105	103	104
31	151	138	144	---	---	---	135	119	123	104	101	102
Month	211	125	147	196	96	125	145	110	120	139	101	113

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	103	101	102	127	118	123	137	122	129	117	113	115
2	102	97	100	124	115	119	128	119	124	120	114	116
3	103	99	101	128	109	114	128	119	124	128	117	121
4	105	102	103	127	105	112	124	108	114	124	117	119
5	106	102	104	117	107	111	127	108	111	119	114	117
6	108	103	106	155	108	119	124	114	118	138	108	121
7	126	108	113	124	109	119	125	111	115	177	114	122
8	115	109	112	166	113	124	121	112	114	134	123	130
9	123	109	114	139	117	124	123	113	117	142	132	137
10	137	119	127	126	115	120	125	109	116	143	131	137
11	151	120	130	131	119	124	117	109	112	141	131	137
12	140	122	129	133	114	125	114	110	111	146	130	137
13	143	133	138	150	129	139	118	108	111	155	131	139
14	157	121	143	161	142	155	122	115	118	148	129	134
15	202	121	147	165	153	158	120	112	117	148	131	139
16	173	135	145	208	155	165	114	101	105	150	131	139
17	157	137	145	183	135	150	118	102	105	162	129	139
18	155	124	135	150	130	136	115	106	109	152	131	137
19	128	119	123	136	125	130	114	110	111	139	130	134
20	123	112	117	126	109	115	114	108	110	146	136	140
21	121	98	110	127	104	110	114	109	111	152	137	143
22	105	99	102	110	106	107	116	110	112	191	128	145
23	108	99	104	112	107	109	115	109	112	145	121	131
24	112	104	107	113	107	109	115	109	112	143	124	130
25	118	107	112	117	107	110	114	110	111	140	127	131
26	117	106	111	109	102	107	115	111	112	155	130	142
27	133	112	118	107	103	105	115	109	111	150	139	144
28	134	119	126	127	106	111	114	109	111	150	140	145
29	---	---	---	122	113	116	112	105	111	152	138	145
30	---	---	---	126	117	120	115	111	112	161	128	144
31	---	---	---	129	119	125	---	---	---	145	125	132
Month	202	97	119	208	102	123	137	101	114	191	108	134

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	144	123	132	1,790	145	490	202	160	190	179	140	161
2	149	126	140	172	128	155	209	160	187	195	133	160
3	154	120	138	182	144	161	216	174	199	182	143	167
4	186	134	154	183	153	173	194	171	187	213	155	177
5	159	130	139	185	157	168	2,570	166	499	214	183	197
6	180	138	157	1,170	167	435	2,920	214	1,770	199	165	186
7	187	168	174	1,040	163	224	3,070	2,680	2,880	182	160	170
8	170	159	162	1,350	152	209	3,400	3,070	3,300	207	164	180
9	206	155	168	1,800	1,350	1,600	3,360	2,490	3,280	194	157	183
10	195	153	179	1,920	1,710	1,880	3,310	263	1,630	199	166	174
11	156	142	152	1,900	204	778	263	141	168	234	193	200
12	191	143	153	2,470	175	1,150	172	154	161	1,490	207	1,000
13	215	128	181	3,030	191	2,120	182	172	177	253	168	209
14	201	116	164	3,200	193	1,440	199	147	181	230	161	185
15	188	138	164	2,970	215	2,010	201	191	197	1,010	166	254
16	175	159	162	3,570	2,020	2,510	1,830	162	519	192	152	171
17	174	159	164	4,290	943	3,730	2,280	483	1,470	248	176	225
18	191	174	184	4,540	920	3,420	2,290	176	879	231	147	217
19	195	175	185	5,530	4,090	4,660	207	168	195	231	140	207
20	188	145	172	5,930	4,050	5,650	2,150	152	1,100	193	155	174
21	162	139	147	4,540	482	2,370	2,150	838	1,970	232	187	207
22	151	142	146	691	277	371	1,670	268	653	571	199	246
23	165	132	148	325	235	274	285	138	204	1,490	263	837
24	150	131	140	987	190	354	203	188	193	532	198	320
25	148	133	140	1,780	190	982	204	185	197	737	207	386
26	170	142	163	248	188	224	185	153	166	624	205	417
27	168	157	161	194	168	180	191	154	165	674	222	538
28	830	157	320	1,320	161	276	191	137	171	763	222	298
29	1,100	817	967	2,530	894	2,100	181	147	166	236	172	192
30	1,050	224	754	2,710	325	2,340	189	150	173	217	149	201
31	---	---	---	2,530	161	863	185	140	172	---	---	---
Month	1,100	116	210	5,930	128	1,400	3,400	137	755	1,490	133	275

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	October			November			December			January		
1	6.9	6.9	6.9	7.0	6.9	6.9	6.7	6.6	6.6	6.8	6.7	6.8
2	7.0	6.9	6.9	7.0	6.9	6.9	6.7	6.6	6.6	6.8	6.6	6.7
3	7.0	6.9	6.9	7.0	6.9	6.9	6.7	6.6	6.7	6.7	6.6	6.7
4	7.0	6.9	7.0	7.0	6.8	6.8	6.7	6.6	6.7	6.9	6.7	6.8
5	7.0	6.9	7.0	7.2	7.0	7.1	6.7	6.7	6.7	7.0	6.8	6.9
6	7.0	6.9	7.0	7.2	7.2	7.2	6.8	6.7	6.8	6.9	6.8	6.9
7	7.0	7.0	7.0	7.2	7.2	7.2	6.7	6.7	6.7	6.9	6.8	6.8
8	7.1	7.0	7.0	7.2	7.1	7.2	6.9	6.7	6.8	6.9	6.8	6.8
9	7.0	6.9	7.0	7.2	6.8	6.9	7.0	6.9	6.9	6.8	6.8	6.8
10	7.0	7.0	7.0	6.8	6.7	6.8	7.0	7.0	7.0	6.8	6.8	6.8
11	7.0	6.9	7.0	6.7	6.6	6.7	7.0	7.0	7.0	6.9	6.8	6.8
12	7.0	6.9	6.9	6.7	6.6	6.6	7.0	7.0	7.0	6.8	6.8	6.8
13	7.0	7.0	7.0	6.8	6.7	6.7	7.0	6.9	7.0	6.8	6.7	6.8
14	7.0	7.0	7.0	6.7	6.6	6.7	6.9	6.8	6.8	6.8	6.7	6.8
15	7.0	7.0	7.0	6.7	6.6	6.7	6.8	6.8	6.8	6.8	6.7	6.8
16	7.1	7.0	7.0	6.7	6.7	6.7	6.8	6.8	6.8	6.8	6.8	6.8
17	7.1	7.0	7.0	6.7	6.6	6.7	6.8	6.8	6.8	6.8	6.8	6.8
18	7.2	7.0	7.2	6.6	6.6	6.6	6.9	6.8	6.8	6.8	6.8	6.8
19	7.2	7.1	7.1	6.6	6.6	6.6	6.8	6.8	6.8	6.8	6.8	6.8
20	7.1	7.0	7.1	6.6	6.6	6.6	6.8	6.8	6.8	6.8	6.8	6.8
21	7.1	7.0	7.0	6.9	6.6	6.7	6.9	6.8	6.8	6.8	6.8	6.8
22	7.0	7.0	7.0	7.0	6.6	6.9	6.9	6.8	6.8	6.8	6.8	6.8
23	7.0	6.9	7.0	6.6	6.5	6.6	6.9	6.9	6.9	6.8	6.8	6.8
24	7.0	6.9	6.9	6.6	6.5	6.6	6.9	6.9	6.9	6.8	6.8	6.8
25	6.9	6.9	6.9	6.6	6.6	6.6	6.9	6.7	6.7	6.8	6.8	6.8
26	7.1	6.9	7.0	6.6	6.6	6.6	6.7	6.6	6.7	6.8	6.8	6.8
27	7.1	7.1	7.1	6.6	6.5	6.6	6.7	6.6	6.6	6.9	6.8	6.9
28	7.2	7.1	7.2	6.6	6.5	6.6	6.6	6.6	6.6	6.9	6.8	6.9
29	7.1	7.1	7.1	6.6	6.5	6.6	6.7	6.6	6.6	6.9	6.8	6.8
30	7.2	7.0	7.1	6.6	6.6	6.6	6.7	6.6	6.6	6.9	6.8	6.9
31	7.1	7.0	7.0	---	---	---	6.8	6.7	6.8	6.9	6.9	6.9
Max	7.2	7.1	7.2	7.2	7.2	7.2	7.0	7.0	7.0	7.0	6.9	6.9
Min	6.9	6.9	6.9	6.6	6.5	6.6	6.6	6.6	6.6	6.7	6.6	6.7

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	February			March			April			May		
1	6.9	6.8	6.9	7.1	6.9	7.0	6.6	6.6	6.6	6.5	6.5	6.5
2	6.8	6.8	6.8	7.0	6.9	6.9	6.6	6.6	6.6	6.5	6.5	6.5
3	6.8	6.8	6.8	7.0	6.9	6.9	6.8	6.6	6.7	6.8	6.5	6.8
4	6.8	6.8	6.8	7.0	6.9	6.9	6.8	6.7	6.8	6.8	6.7	6.8
5	6.8	6.8	6.8	6.9	6.8	6.9	6.9	6.8	6.8	6.8	6.7	6.7
6	6.8	6.7	6.8	6.8	6.7	6.8	6.9	6.8	6.9	7.1	6.7	6.9
7	6.8	6.7	6.7	6.7	6.7	6.7	6.9	6.8	6.9	7.0	6.8	6.9
8	6.8	6.7	6.8	6.8	6.7	6.7	6.9	6.8	6.9	6.9	6.9	6.9
9	6.8	6.8	6.8	6.7	6.7	6.7	6.9	6.9	6.9	6.9	6.8	6.9
10	6.9	6.8	6.8	6.7	6.5	6.6	6.9	6.8	6.9	6.8	6.8	6.8
11	6.9	6.8	6.9	6.6	6.6	6.6	6.8	6.8	6.8	6.8	6.8	6.8
12	6.9	6.8	6.9	6.6	6.6	6.6	6.8	6.8	6.8	6.9	6.8	6.8
13	6.9	6.9	6.9	6.7	6.6	6.6	6.8	6.8	6.8	6.9	6.8	6.9
14	6.9	6.8	6.9	6.7	6.5	6.6	6.8	6.8	6.8	6.9	6.8	6.9
15	7.0	6.8	6.9	6.6	6.5	6.6	6.9	6.8	6.8	7.0	6.9	6.9
16	7.0	6.8	6.9	6.7	6.5	6.6	6.8	6.6	6.6	7.0	6.9	7.0
17	7.0	6.9	6.9	6.7	6.5	6.6	6.6	6.6	6.6	7.0	7.0	7.0
18	7.0	6.9	6.9	6.5	6.3	6.4	6.7	6.6	6.6	7.0	6.9	7.0
19	7.0	6.9	6.9	6.5	6.4	6.4	6.7	6.6	6.7	7.0	6.9	7.0
20	7.1	7.0	7.1	6.8	6.5	6.6	6.8	6.7	6.8	7.0	7.0	7.0
21	7.2	7.1	7.1	6.9	6.8	6.8	6.8	6.8	6.8	7.1	7.0	7.0
22	7.1	7.1	7.1	6.8	6.8	6.8	6.8	6.7	6.8	7.1	6.9	7.0
23	7.1	7.1	7.1	6.8	6.7	6.7	6.7	6.6	6.7	7.1	7.0	7.0
24	7.1	7.0	7.1	6.8	6.7	6.7	6.7	6.6	6.6	7.2	7.0	7.0
25	7.0	6.9	7.0	6.7	6.6	6.6	6.6	6.5	6.6	7.2	7.0	7.0
26	7.0	6.9	7.0	6.6	6.5	6.6	6.6	6.5	6.6	7.3	7.1	7.1
27	7.0	6.9	7.0	6.6	6.5	6.5	6.5	6.5	6.5	7.3	7.1	7.2
28	7.1	7.0	7.0	6.6	6.5	6.5	6.5	6.5	6.5	7.2	7.1	7.1
29	---	---	---	6.6	6.5	6.6	6.5	6.5	6.5	7.3	7.0	7.1
30	---	---	---	6.6	6.5	6.6	6.5	6.5	6.5	7.3	7.1	7.2
31	---	---	---	6.6	6.6	6.6	---	---	---	7.5	7.1	7.1
Max	7.2	7.1	7.1	7.1	6.9	7.0	6.9	6.9	6.9	7.5	7.1	7.2
Min	6.8	6.7	6.7	6.5	6.3	6.4	6.5	6.5	6.5	6.5	6.5	6.5

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	June			July			August			September		
1	7.3	7.1	7.1	7.4	7.0	7.1	7.3	7.0	7.1	7.0	6.9	6.9
2	7.2	7.1	7.1	7.3	7.0	7.1	7.3	7.1	7.1	7.1	6.9	7.0
3	7.2	7.1	7.1	7.4	7.0	7.1	7.3	7.1	7.2	7.1	6.9	7.0
4	7.2	7.1	7.2	7.3	6.9	7.2	7.3	7.1	7.1	7.1	6.8	7.0
5	7.3	7.0	7.1	7.3	7.1	7.2	7.3	7.0	7.1	7.2	6.9	6.9
6	7.3	7.0	7.1	7.4	7.1	7.3	7.2	7.1	7.1	7.3	6.8	6.9
7	7.6	7.1	7.2	7.6	7.1	7.2	7.3	7.1	7.2	7.1	6.8	6.9
8	7.6	7.1	7.2	7.5	7.1	7.2	7.5	7.1	7.2	7.1	6.8	6.9
9	7.5	7.0	7.2	7.4	7.1	7.2	7.4	7.2	7.2	7.0	6.8	6.9
10	7.6	7.0	7.2	7.6	7.1	7.3	7.3	7.1	7.2	7.1	6.8	6.9
11	7.6	7.0	7.1	7.5	7.2	7.4	7.2	7.0	7.1	7.0	6.9	6.9
12	7.5	7.0	7.1	7.5	7.2	7.3	7.4	7.1	7.1	7.1	6.8	6.9
13	7.4	7.0	7.1	7.4	7.2	7.3	7.2	7.1	7.2	7.0	6.7	6.8
14	7.2	7.0	7.1	7.5	7.2	7.3	7.4	7.1	7.2	7.0	6.7	6.8
15	7.1	6.8	6.9	7.5	7.2	7.3	7.2	7.0	7.1	6.9	6.8	6.8
16	7.3	6.7	6.8	7.5	7.1	7.3	7.1	7.0	7.0	6.9	6.8	6.8
17	7.3	6.8	6.8	7.5	7.2	7.3	7.2	7.0	7.1	6.9	6.8	6.9
18	8.0	6.8	6.9	7.4	7.1	7.3	7.2	7.0	7.1	7.0	6.8	6.9
19	7.5	6.8	6.9	7.6	7.2	7.3	7.2	7.1	7.1	7.0	6.8	6.9
20	7.0	6.9	6.9	7.5	7.1	7.3	7.3	7.0	7.0	6.9	6.8	6.9
21	6.9	6.8	6.9	7.5	7.3	7.4	7.3	7.0	7.1	---	---	---
22	7.2	6.9	6.9	7.3	7.2	7.3	7.4	7.0	7.1	7.0	6.8	6.9
23	7.1	6.9	6.9	7.4	7.2	7.3	7.3	7.0	7.1	7.2	6.8	6.8
24	7.6	7.0	7.0	7.7	7.1	7.2	7.6	6.8	7.0	7.2	6.9	6.9
25	7.6	6.9	7.1	7.6	7.1	7.2	7.2	6.8	6.9	7.1	6.8	6.9
26	7.5	7.0	7.1	7.6	7.1	7.2	7.0	6.8	6.9	7.2	6.8	6.8
27	7.4	7.0	7.1	7.7	7.1	7.2	7.1	6.9	6.9	7.2	6.7	6.8
28	7.3	7.0	7.1	7.3	7.0	7.1	7.2	6.9	7.0	7.2	6.7	7.0
29	7.4	7.0	7.1	7.2	7.0	7.1	7.2	6.9	7.0	7.2	7.1	7.1
30	7.4	7.0	7.2	7.2	7.1	7.1	7.1	6.9	7.0	7.2	7.1	7.2
31	---	---	---	7.4	7.1	7.1	7.0	6.9	7.0	---	---	---
Max	8.0	7.1	7.2	7.7	7.3	7.4	7.6	7.2	7.2	---	---	---
Min	6.9	6.7	6.8	7.2	6.9	7.1	7.0	6.8	6.9	---	---	---

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	October			November			December			January		
1	7.0	6.9	6.9	7.1	7.0	7.1	6.6	6.6	6.6	6.8	6.7	6.8
2	7.0	6.9	6.9	7.2	7.1	7.1	6.6	6.6	6.6	6.8	6.7	6.7
3	7.0	6.9	6.9	7.2	7.1	7.1	6.6	6.6	6.6	6.8	6.8	6.8
4	7.0	6.9	6.9	7.2	7.0	7.1	6.6	6.6	6.6	7.0	6.8	6.9
5	7.1	6.9	7.0	7.4	7.2	7.3	6.7	6.6	6.6	7.1	7.0	7.0
6	7.1	7.0	7.1	7.4	7.4	7.4	6.7	6.7	6.7	7.1	7.1	7.1
7	7.1	7.0	7.0	7.4	7.4	7.4	6.7	6.7	6.7	7.1	7.0	7.1
8	7.2	7.0	7.1	7.4	7.3	7.4	6.8	6.7	6.8	7.1	7.0	7.0
9	7.2	7.0	7.1	7.3	6.9	7.0	6.8	6.8	6.8	7.0	7.0	7.0
10	7.2	7.0	7.1	6.9	6.7	6.8	6.8	6.8	6.8	7.0	7.0	7.0
11	7.1	7.0	7.0	6.7	6.6	6.7	6.8	6.8	6.8	7.1	7.0	7.1
12	7.0	6.9	7.0	6.8	6.6	6.7	6.8	6.8	6.8	7.1	7.0	7.0
13	7.0	6.9	7.0	6.8	6.7	6.7	6.8	6.7	6.8	7.0	7.0	7.0
14	7.0	7.0	7.0	6.8	6.7	6.7	6.7	6.7	6.7	7.0	6.9	6.9
15	7.1	6.9	7.0	6.8	6.7	6.7	6.7	6.7	6.7	6.9	6.9	6.9
16	7.1	7.0	7.0	6.8	6.7	6.7	6.8	6.7	6.7	6.9	6.9	6.9
17	7.1	7.1	7.1	6.8	6.6	6.7	6.8	6.8	6.8	6.9	6.9	6.9
18	7.3	7.0	7.3	6.7	6.6	6.6	6.8	6.8	6.8	7.0	6.9	6.9
19	7.3	7.1	7.2	6.6	6.6	6.6	6.8	6.7	6.8	6.9	6.9	6.9
20	7.2	7.1	7.1	6.6	6.6	6.6	6.8	6.7	6.8	6.9	6.9	6.9
21	7.1	7.1	7.1	6.8	6.6	6.7	6.8	6.8	6.8	6.9	6.9	6.9
22	7.1	7.0	7.1	7.0	6.6	6.8	6.8	6.8	6.8	7.0	6.9	6.9
23	7.1	7.0	7.1	6.6	6.5	6.5	6.8	6.8	6.8	6.9	6.9	6.9
24	7.1	7.0	7.1	6.6	6.5	6.5	6.9	6.8	6.8	6.9	6.9	6.9
25	7.1	7.0	7.1	6.6	6.6	6.6	6.8	6.8	6.8	6.9	6.9	6.9
26	7.2	7.1	7.2	6.6	6.5	6.5	6.8	6.7	6.7	6.9	6.9	6.9
27	7.3	7.2	7.3	6.6	6.5	6.5	6.7	6.6	6.7	7.0	6.9	7.0
28	7.3	7.2	7.3	6.5	6.5	6.5	6.7	6.6	6.6	7.0	6.9	7.0
29	7.3	7.2	7.2	6.6	6.5	6.5	6.7	6.6	6.7	7.0	6.9	6.9
30	7.3	7.2	7.2	6.6	6.5	6.6	6.7	6.6	6.7	7.0	7.0	7.0
31	7.2	7.1	7.2	---	---	---	6.8	6.7	6.8	7.0	7.0	7.0
Max	7.3	7.2	7.3	7.4	7.4	7.4	6.9	6.8	6.8	7.1	7.1	7.1
Min	7.0	6.9	6.9	6.5	6.5	6.5	6.6	6.6	6.6	6.8	6.7	6.7

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	February			March			April			May		
1	7.0	6.8	7.0	7.0	6.9	7.0	6.7	6.7	6.7	6.6	6.6	6.6
2	6.8	6.8	6.8	6.9	6.9	6.9	6.7	6.7	6.7	6.6	6.6	6.6
3	6.8	6.8	6.8	6.9	6.8	6.8	6.9	6.7	6.8	6.6	6.6	6.6
4	6.8	6.8	6.8	6.9	6.8	6.8	7.0	6.9	6.9	6.6	6.6	6.6
5	6.8	6.8	6.8	6.9	6.7	6.8	7.0	6.9	7.0	6.6	6.5	6.5
6	6.8	6.7	6.8	6.8	6.6	6.7	7.0	6.9	7.0	6.9	6.6	6.7
7	6.8	6.7	6.7	6.6	6.6	6.6	7.1	7.0	7.0	6.8	6.7	6.7
8	6.8	6.7	6.7	6.7	6.6	6.6	7.0	6.9	7.0	6.8	6.7	6.8
9	6.8	6.7	6.8	6.6	6.6	6.6	7.0	7.0	7.0	6.8	6.7	6.7
10	6.9	6.8	6.8	6.6	6.4	6.4	7.0	6.9	7.0	6.7	6.7	6.7
11	6.9	6.8	6.9	6.5	6.5	6.5	7.0	6.9	6.9	6.7	6.7	6.7
12	6.9	6.8	6.8	6.5	6.4	6.5	7.0	6.9	7.0	6.8	6.7	6.7
13	6.9	6.8	6.8	6.5	6.5	6.5	7.0	6.8	6.9	6.9	6.7	6.8
14	6.9	6.8	6.9	6.6	6.4	6.5	7.0	6.9	6.9	6.8	6.8	6.8
15	7.0	6.8	6.9	6.5	6.4	6.4	7.0	6.9	7.0	6.8	6.8	6.8
16	6.9	6.7	6.8	6.6	6.4	6.5	7.0	6.7	6.8	6.9	6.8	6.9
17	6.8	6.7	6.8	6.5	6.4	6.4	6.8	6.7	6.7	6.9	6.8	6.9
18	6.8	6.7	6.8	6.4	6.2	6.3	6.8	6.7	6.7	6.9	6.8	6.9
19	6.9	6.8	6.8	6.4	6.2	6.3	6.8	6.8	6.8	6.9	6.8	6.8
20	7.0	6.9	6.9	6.8	6.4	6.5	6.9	6.8	6.9	6.9	6.8	6.9
21	7.0	7.0	7.0	7.0	6.8	6.9	7.0	6.8	6.9	6.9	6.8	6.9
22	7.0	6.9	7.0	7.0	6.9	7.0	7.0	6.8	6.9	7.0	6.8	6.8
23	7.1	6.9	7.1	7.0	6.9	6.9	6.8	6.7	6.8	6.9	6.8	6.8
24	7.1	7.0	7.1	6.9	6.8	6.9	6.8	6.7	6.7	6.9	6.8	6.8
25	7.0	6.9	7.0	6.9	6.8	6.8	6.7	6.6	6.7	7.0	6.8	6.9
26	7.0	6.9	6.9	6.8	6.7	6.8	6.6	6.6	6.6	7.0	6.9	6.9
27	7.0	6.9	6.9	6.8	6.7	6.7	6.6	6.6	6.6	7.0	6.9	7.0
28	7.0	7.0	7.0	6.7	6.6	6.7	6.6	6.6	6.6	7.0	6.9	6.9
29	---	---	---	6.7	6.7	6.7	6.6	6.6	6.6	7.0	6.9	6.9
30	---	---	---	6.8	6.6	6.7	6.6	6.6	6.6	7.0	6.8	6.9
31	---	---	---	6.8	6.6	6.7	---	---	---	7.0	6.8	6.9
Max	7.1	7.0	7.1	7.0	6.9	7.0	7.1	7.0	7.0	7.0	6.9	7.0
Min	6.8	6.7	6.7	6.4	6.2	6.3	6.6	6.6	6.6	6.6	6.5	6.5

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	June			July			August			September		
1	7.0	6.9	6.9	7.0	6.5	6.8	7.0	6.8	6.9	7.1	6.9	7.0
2	7.0	6.9	6.9	7.0	6.7	6.8	6.9	6.8	6.9	7.1	6.9	7.0
3	7.0	6.8	6.9	6.9	6.8	6.9	7.0	6.8	6.9	7.0	6.9	6.9
4	7.0	6.8	6.9	7.0	6.8	6.9	7.0	6.8	6.9	7.0	6.8	6.9
5	7.0	6.8	6.8	7.0	6.9	7.0	6.9	6.6	6.9	7.0	6.8	6.8
6	6.9	6.8	6.9	7.0	6.8	7.0	7.0	6.6	6.7	6.8	6.8	6.8
7	7.0	6.8	6.9	7.0	6.9	6.9	6.7	6.6	6.7	6.9	6.8	6.8
8	7.0	6.8	6.9	7.0	6.7	6.9	6.7	6.7	6.7	7.0	6.8	6.8
9	7.0	6.8	6.8	6.7	6.7	6.7	6.8	6.6	6.6	7.0	6.8	6.9
10	7.0	6.8	6.8	6.7	6.7	6.7	7.0	6.6	6.8	7.0	6.9	6.9
11	7.0	6.7	6.8	7.0	6.6	6.9	6.9	6.8	6.9	7.0	6.8	7.0
12	6.9	6.7	6.8	7.0	6.7	6.8	7.0	6.9	6.9	7.1	6.8	7.0
13	7.0	6.8	6.9	7.2	6.7	6.7	7.0	6.9	7.0	7.0	6.8	6.9
14	7.0	6.7	6.9	7.2	6.7	7.0	7.0	6.9	6.9	7.0	6.7	6.8
15	7.0	6.8	6.8	7.0	6.7	6.8	7.0	6.9	6.9	7.0	6.8	6.9
16	6.9	6.7	6.8	6.8	6.8	6.8	7.0	6.7	6.9	6.9	6.8	6.8
17	6.9	6.7	6.8	7.1	6.8	6.8	7.0	6.8	6.9	7.0	6.9	6.9
18	6.9	6.7	6.7	7.0	6.7	6.8	7.1	6.8	6.9	7.0	6.8	6.9
19	7.0	6.6	6.8	6.8	6.8	6.8	7.1	7.0	7.0	7.0	6.8	7.0
20	7.0	6.8	6.8	6.9	6.8	6.8	7.0	6.8	6.9	6.9	6.8	6.9
21	6.8	6.7	6.8	7.2	6.8	7.0	7.1	6.8	6.9	7.0	6.9	6.9
22	6.8	6.7	6.8	7.1	7.0	7.1	7.1	6.8	6.9	7.0	6.8	6.9
23	6.9	6.7	6.8	7.1	7.0	7.0	7.0	6.9	6.9	6.9	6.8	6.9
24	6.8	6.7	6.8	7.0	6.9	6.9	7.0	6.9	6.9	7.0	6.8	6.9
25	6.8	6.7	6.8	7.1	6.8	6.9	7.1	6.9	7.0	7.0	6.8	6.8
26	6.9	6.7	6.8	7.2	7.0	7.1	7.1	6.9	7.0	7.0	6.8	6.8
27	7.0	6.7	6.8	7.0	6.8	6.9	7.1	6.9	6.9	6.9	6.8	6.8
28	6.9	6.6	6.8	7.0	6.6	6.9	7.1	6.9	7.0	7.1	6.9	6.9
29	6.7	6.6	6.6	6.9	6.6	6.7	7.1	6.9	7.0	7.2	7.0	7.0
30	6.8	6.6	6.7	7.2	6.7	6.7	7.1	6.9	7.0	7.1	7.0	7.1
31	---	---	---	7.1	6.7	6.9	7.1	6.9	7.0	---	---	---
Max	7.0	6.9	6.9	7.2	7.0	7.1	7.1	7.0	7.0	7.2	7.0	7.1
Min	6.7	6.6	6.6	6.7	6.5	6.7	6.7	6.6	6.6	6.8	6.7	6.8

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	23.8	23.2	23.6	16.6	15.8	16.1	14.5	13.2	13.9	10.6	9.7	10.1
2	23.7	23.2	23.5	16.4	15.9	16.2	14.6	14.0	14.5	10.5	10.1	10.3
3	24.4	22.9	23.5	15.9	15.2	15.5	14.0	12.4	13.2	10.6	10.0	10.3
4	24.1	22.8	23.3	15.2	14.5	14.8	12.4	11.7	12.1	11.0	10.2	10.7
5	23.7	22.9	23.2	14.9	14.5	14.7	11.7	10.4	11.1	11.3	10.8	11.0
6	23.5	22.6	23.0	14.7	14.3	14.5	10.4	9.8	10.1	11.9	11.0	11.5
7	22.6	22.0	22.3	14.6	14.4	14.5	10.4	9.8	10.1	11.9	11.7	11.8
8	22.3	21.8	22.1	15.1	14.5	14.7	10.2	8.6	9.5	12.4	11.9	12.2
9	22.3	21.8	22.0	15.4	14.7	15.0	8.6	7.3	7.9	12.1	11.2	11.7
10	22.5	21.8	22.1	15.5	15.1	15.3	7.3	7.1	7.2	11.2	10.0	10.5
11	22.2	21.1	21.6	15.6	15.0	15.3	7.6	7.1	7.4	10.0	9.1	9.5
12	21.4	20.5	21.0	15.4	14.9	15.3	8.1	7.6	7.9	9.1	8.8	9.0
13	21.4	20.4	20.9	15.1	14.7	14.9	8.8	7.9	8.5	9.6	8.9	9.3
14	20.4	19.9	20.1	15.4	14.9	15.0	9.7	8.8	9.4	10.4	9.6	10.1
15	20.2	19.4	19.7	15.4	14.9	15.1	10.3	9.7	10.0	11.2	10.4	10.9
16	20.0	19.4	19.7	15.5	15.0	15.2	10.3	9.9	10.2	11.6	11.2	11.5
17	19.8	19.4	19.5	15.2	14.7	15.0	10.0	9.7	9.9	11.4	9.4	10.6
18	20.1	19.4	19.8	15.0	14.3	14.7	10.2	9.7	10.0	9.4	8.0	8.6
19	20.1	19.8	19.9	14.3	13.8	14.0	10.4	10.1	10.3	8.2	8.0	8.1
20	20.7	19.9	20.2	13.9	13.2	13.6	10.2	9.6	10.0	8.2	7.5	7.9
21	20.2	19.6	19.9	13.2	12.0	12.6	9.6	9.4	9.5	7.5	6.6	7.1
22	20.0	19.2	19.6	12.6	11.6	12.3	10.1	9.4	9.7	6.6	6.5	6.6
23	19.2	18.4	18.9	12.3	11.6	12.0	10.6	10.1	10.4	6.9	6.5	6.7
24	18.4	16.8	17.5	11.6	11.4	11.5	10.9	10.5	10.7	7.0	6.8	6.9
25	16.8	16.2	16.4	11.6	11.2	11.5	11.1	10.5	10.7	7.0	6.6	6.8
26	16.3	15.8	16.1	11.3	11.0	11.2	11.2	11.0	11.1	6.6	5.7	6.1
27	16.2	16.0	16.1	11.5	11.0	11.3	11.2	10.9	11.0	6.0	5.6	5.8
28	16.5	16.0	16.2	11.9	11.4	11.7	10.9	10.6	10.7	7.0	6.0	6.6
29	16.0	15.4	15.6	12.5	11.8	12.2	10.6	10.2	10.4	7.1	5.8	6.6
30	16.1	15.3	15.6	13.2	12.5	12.9	10.2	9.9	10.0	5.8	5.1	5.4
31	16.0	15.4	15.7	---	---	---	10.2	9.7	9.8	5.2	4.9	5.1
Month	24.4	15.3	20.0	16.6	11.0	14.0	14.6	7.1	10.2	12.4	4.9	8.9

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	5.0	4.4	4.7	8.6	8.2	8.4	16.3	15.2	15.7	20.0	18.8	19.3
2	4.8	4.3	4.5	9.8	8.6	9.2	16.9	15.7	16.3	20.8	19.4	20.0
3	5.5	4.8	5.2	9.6	9.1	9.3	17.1	16.0	16.3	20.3	19.9	20.1
4	5.5	5.2	5.3	9.4	9.1	9.3	16.6	15.6	16.1	19.9	19.0	19.3
5	5.2	4.9	5.1	9.6	8.9	9.2	16.2	15.7	15.9	19.0	18.8	18.9
6	4.9	4.3	4.6	9.8	8.9	9.3	16.0	15.1	15.5	18.8	18.0	18.7
7	4.6	4.2	4.4	10.3	9.0	9.6	15.5	13.7	14.6	18.2	17.2	17.7
8	4.7	4.5	4.6	10.2	9.3	9.7	14.4	13.6	13.9	17.5	17.0	17.1
9	4.9	4.5	4.7	9.9	9.2	9.6	13.8	13.1	13.4	18.2	17.1	17.5
10	5.2	4.6	4.9	11.1	9.8	10.1	13.6	13.0	13.3	19.0	18.0	18.3
11	5.2	4.7	4.9	11.2	10.0	10.5	13.4	13.1	13.2	20.1	18.7	19.2
12	5.5	4.8	5.1	11.4	10.3	10.7	14.5	13.1	13.6	20.2	19.6	19.9
13	5.9	5.3	5.5	12.3	10.9	11.3	15.0	13.7	14.2	20.1	19.8	20.0
14	6.6	5.7	6.1	12.8	11.4	12.0	14.6	14.1	14.3	20.6	19.4	19.8
15	6.1	5.6	5.9	13.8	12.2	12.9	15.0	14.1	14.4	21.6	20.0	20.6
16	6.2	5.5	5.8	13.4	12.8	13.0	14.9	14.3	14.7	21.8	20.3	20.9
17	6.1	5.6	5.8	12.8	11.8	12.3	14.7	14.0	14.3	21.0	20.2	20.7
18	6.0	5.5	5.8	12.4	11.5	11.9	14.6	14.0	14.3	20.2	19.5	19.8
19	5.5	4.7	5.0	12.1	11.2	11.8	14.4	13.9	14.2	20.7	19.5	19.9
20	5.6	4.6	5.1	11.5	10.5	11.0	14.4	13.5	14.0	21.8	20.0	20.7
21	6.1	5.4	5.7	11.0	10.2	10.6	15.1	13.8	14.4	22.4	20.7	21.3
22	6.8	5.8	6.3	11.0	10.0	10.5	15.8	14.3	15.0	22.4	21.2	21.7
23	6.9	6.2	6.6	12.3	10.9	11.5	16.5	15.1	15.8	22.3	21.1	21.6
24	7.1	6.6	6.9	13.4	12.2	12.7	17.0	15.8	16.4	22.8	21.2	21.7
25	7.5	7.0	7.3	14.4	13.1	13.7	18.1	16.7	17.4	24.1	21.8	22.4
26	8.2	7.4	7.7	15.1	14.0	14.5	18.4	17.8	18.1	24.4	22.4	23.2
27	8.6	7.7	8.1	15.7	14.4	15.0	19.0	18.1	18.5	25.0	23.1	23.8
28	8.6	8.1	8.2	16.0	15.3	15.6	19.3	18.7	18.9	25.4	23.4	24.0
29	---	---	---	15.8	15.5	15.6	19.3	18.6	18.9	25.7	23.8	24.2
30	---	---	---	15.5	14.7	15.0	19.3	18.5	18.8	25.9	24.3	24.8
31	---	---	---	16.0	14.6	15.2	---	---	---	26.9	24.4	24.9
Month	8.6	4.2	5.7	16.0	8.2	11.6	19.3	13.0	15.5	26.9	17.0	20.7

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	26.5	24.8	25.4	29.0	28.2	28.6	30.2	28.8	29.2	29.4	28.9	29.1
2	25.6	25.0	25.3	29.0	27.9	28.4	30.1	28.9	29.3	28.9	28.1	28.5
3	25.6	25.0	25.3	28.9	27.8	28.2	30.7	29.1	29.6	29.0	27.9	28.3
4	26.7	25.2	25.7	28.9	27.4	28.1	30.8	28.9	29.4	28.9	28.0	28.3
5	27.1	25.2	26.0	28.6	27.7	28.1	30.4	29.1	29.5	29.2	28.2	28.4
6	27.2	25.8	26.1	29.5	27.2	28.3	30.1	29.2	29.6	29.3	28.3	28.6
7	27.7	26.1	26.8	30.5	28.5	28.8	31.0	29.6	30.0	28.9	28.0	28.4
8	28.5	26.3	27.0	30.4	28.4	28.9	32.0	29.6	30.6	28.8	27.7	28.2
9	28.2	26.3	27.4	30.0	28.8	29.3	31.2	30.6	30.8	28.5	27.5	27.9
10	28.0	27.1	27.5	30.7	29.0	29.3	31.6	30.6	30.7	29.9	28.0	28.4
11	28.8	26.5	27.0	30.4	28.9	29.5	30.8	30.2	30.6	28.5	27.8	28.2
12	28.2	26.7	27.1	30.1	29.0	29.4	30.8	29.7	30.0	28.4	27.8	28.1
13	27.8	26.8	27.1	30.0	29.6	29.8	30.5	29.5	29.9	28.2	27.4	27.8
14	27.3	25.7	26.3	30.8	29.2	29.8	31.0	29.7	30.1	28.2	27.3	27.8
15	26.2	25.1	25.6	31.0	29.4	30.0	30.7	29.5	29.9	27.9	27.1	27.6
16	27.1	25.6	26.0	30.5	28.2	29.6	30.4	29.4	29.8	27.1	26.0	26.4
17	27.2	25.8	26.1	30.4	28.9	29.6	29.9	28.8	29.4	26.2	25.4	25.8
18	28.7	26.3	27.0	30.4	28.1	29.1	30.1	28.9	29.5	25.5	24.9	25.2
19	28.8	26.7	27.4	31.1	28.9	29.6	29.6	29.0	29.3	25.2	24.5	24.8
20	27.7	27.1	27.2	29.9	28.2	29.3	29.8	27.6	28.7	24.5	23.9	24.2
21	27.1	26.4	26.7	29.5	28.5	29.2	30.4	28.7	29.0	---	---	---
22	28.1	26.5	26.9	28.6	27.8	28.1	30.4	29.3	29.7	25.4	25.0	25.1
23	28.3	27.4	27.6	28.7	27.2	27.8	30.4	29.5	29.9	27.0	25.3	25.6
24	29.6	27.2	27.7	29.2	27.8	28.1	31.3	29.8	30.1	26.9	26.0	26.2
25	29.0	27.0	27.6	29.4	28.0	28.4	31.3	29.8	30.3	26.5	25.7	26.1
26	29.3	27.3	28.0	30.1	28.5	28.9	30.4	29.9	30.1	27.1	25.9	26.2
27	29.3	27.6	28.2	30.5	29.0	29.4	30.3	29.6	29.9	26.8	25.8	26.3
28	30.0	27.9	28.6	30.2	28.6	29.2	30.6	29.5	29.9	26.4	25.9	26.1
29	29.7	28.0	28.6	30.2	29.0	29.4	30.5	29.4	29.8	26.4	25.2	25.7
30	29.5	28.2	28.5	29.5	28.9	29.1	30.0	29.1	29.4	25.3	24.7	25.0
31	---	---	---	30.2	28.6	29.0	29.6	28.8	29.2	---	---	---
Month	30.0	24.8	26.9	31.1	27.2	29.0	32.0	27.6	29.8	---	---	---

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	23.7	23.2	23.5	16.3	15.8	16.0	14.5	13.3	13.9	10.5	9.6	10.0
2	23.6	22.9	23.4	16.4	15.9	16.2	14.7	14.1	14.6	10.4	10.0	10.2
3	23.6	22.8	23.1	15.9	15.1	15.4	14.1	12.5	13.3	10.5	10.0	10.3
4	23.4	22.8	23.0	15.1	14.3	14.7	12.5	11.8	12.2	11.0	10.2	10.6
5	23.4	22.8	23.1	14.9	14.4	14.6	11.8	10.5	11.2	11.2	10.8	11.0
6	23.5	22.6	23.0	14.6	14.2	14.5	10.5	9.9	10.2	11.8	10.9	11.4
7	22.6	21.8	22.2	14.6	14.4	14.5	10.4	9.8	10.2	11.8	11.7	11.7
8	22.3	21.8	22.1	15.0	14.5	14.7	10.2	8.5	9.5	12.4	11.8	12.1
9	22.2	21.8	22.0	15.4	14.7	15.0	8.5	7.3	7.9	12.1	11.2	11.7
10	22.4	21.9	22.1	15.4	15.1	15.3	7.3	7.0	7.1	11.2	10.0	10.5
11	22.2	21.2	21.6	15.6	15.0	15.3	7.6	7.0	7.4	10.0	9.0	9.4
12	21.4	20.5	20.9	15.5	14.8	15.3	8.0	7.5	7.8	9.0	8.7	8.8
13	21.5	20.4	20.9	15.2	14.6	14.9	8.8	7.9	8.4	9.4	8.8	9.1
14	20.4	19.8	20.1	15.3	14.9	15.1	9.6	8.8	9.3	10.3	9.4	9.9
15	20.0	19.4	19.7	15.4	15.0	15.2	10.2	9.6	10	11.0	10.2	10.7
16	19.9	19.4	19.6	15.6	15.1	15.3	10.2	9.9	10.1	11.5	11.0	11.4
17	19.8	19.4	19.5	15.3	14.8	15.0	9.9	9.7	9.8	11.3	9.3	10.4
18	19.9	19.5	19.7	15.0	14.4	14.7	10.2	9.7	9.9	9.3	7.9	8.5
19	20.0	19.8	19.9	14.4	13.8	14.1	10.4	10.1	10.2	8.0	7.8	7.9
20	20.5	19.8	20.1	14.0	13.3	13.6	10.2	9.6	10	8.0	7.3	7.8
21	20.1	19.5	19.8	13.3	11.9	12.6	9.6	9.4	9.4	7.3	6.5	7.0
22	20.0	19.2	19.5	12.6	11.6	12.3	10.1	9.3	9.6	6.5	6.3	6.4
23	19.2	18.4	18.9	12.3	11.7	12.1	10.6	10.1	10.3	6.8	6.3	6.6
24	18.4	16.7	17.4	11.7	11.5	11.6	10.8	10.5	10.7	6.9	6.7	6.8
25	16.7	16.1	16.3	11.7	11.3	11.5	11.0	10.5	10.7	6.9	6.5	6.7
26	16.2	15.6	15.9	11.4	11.1	11.2	11.1	11.0	11.0	6.5	5.5	6.0
27	16.2	15.9	16.1	11.6	11.1	11.4	11.1	10.7	11.0	5.8	5.5	5.6
28	16.4	16.0	16.1	11.9	11.5	11.7	10.9	10.5	10.7	6.9	5.8	6.5
29	16.0	15.3	15.6	12.5	11.8	12.3	10.6	10.2	10.4	7.0	5.7	6.4
30	15.9	15.2	15.5	13.3	12.5	13.0	10.2	9.9	10	5.7	4.9	5.3
31	15.9	15.4	15.7	---	---	---	9.9	9.6	9.7	5.1	4.7	5.0
Month	23.7	15.2	19.9	16.4	11.1	14.0	14.7	7.0	10.2	12.4	4.7	8.8

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	4.8	4.3	4.6	8.4	8.1	8.3	16.2	15.2	15.7	19.9	18.9	19.3
2	4.6	4.2	4.4	9.5	8.4	9.0	16.8	15.8	16.2	20.5	19.4	19.9
3	5.3	4.6	5.0	9.4	8.9	9.1	16.7	16.0	16.3	20.4	19.8	20.0
4	5.4	5.1	5.2	9.3	9.0	9.1	16.5	15.6	16.0	19.8	18.8	19.1
5	5.1	4.8	5.0	9.4	8.8	9.0	16.2	15.7	15.9	18.8	18.6	18.7
6	4.8	4.2	4.4	9.6	8.8	9.2	15.9	14.9	15.5	18.7	17.8	18.5
7	4.5	4.0	4.3	9.9	8.8	9.4	15.5	13.8	14.7	18.1	16.7	17.4
8	4.6	4.3	4.4	9.8	9.1	9.5	14.3	13.6	13.9	17.3	16.7	16.9
9	4.7	4.3	4.5	9.7	9.0	9.4	13.9	13.2	13.4	17.9	16.9	17.2
10	5.0	4.5	4.7	10.4	9.6	9.9	13.6	12.9	13.3	18.6	17.8	18.0
11	5.0	4.5	4.7	10.7	9.9	10.2	13.4	13.0	13.2	19.5	18.5	18.8
12	5.2	4.7	4.9	10.9	10.2	10.5	14.2	13.1	13.6	19.8	19.2	19.6
13	5.5	5.1	5.3	11.5	10.7	11.0	14.8	13.7	14.2	19.9	19.6	19.8
14	6.5	5.5	5.9	12.5	11.2	11.6	14.6	14.1	14.3	19.9	19.2	19.5
15	6.0	5.4	5.7	13.1	12.2	12.4	15.0	14.1	14.5	20.9	19.7	20.2
16	6.1	5.3	5.6	13.1	12.6	12.8	15.0	14.3	14.8	21.4	20.0	20.5
17	5.8	5.4	5.6	12.6	11.7	12.2	14.7	14.0	14.3	20.8	20.0	20.5
18	5.9	5.3	5.6	12.3	11.3	11.7	14.6	14.1	14.3	20.0	19.2	19.6
19	5.4	4.6	4.9	12.0	11.1	11.6	14.4	14.0	14.2	19.9	19.2	19.5
20	5.4	4.5	4.9	11.4	10.4	10.9	14.3	13.5	13.9	20.8	19.8	20.2
21	5.8	5.3	5.6	11.1	10.2	10.6	15.0	13.8	14.3	21.7	20.4	20.8
22	6.7	5.7	6.1	11.1	10.1	10.5	15.7	14.4	15.0	21.6	20.9	21.3
23	6.8	6.0	6.4	12.3	10.9	11.5	16.3	15.1	15.7	21.5	20.9	21.1
24	6.9	6.5	6.7	13.2	12.3	12.7	16.9	15.9	16.4	21.8	20.9	21.2
25	7.4	6.8	7.1	14.5	13.2	13.8	17.9	16.8	17.3	22.6	21.6	21.9
26	8.0	7.2	7.6	15.0	14.1	14.6	18.4	17.8	18.1	23.2	22.2	22.6
27	8.3	7.6	7.9	15.6	14.4	15.0	18.8	18.1	18.5	23.8	22.8	23.2
28	8.2	8.0	8.1	16.0	15.4	15.6	19.3	18.7	19.0	23.8	23.1	23.5
29	---	---	---	15.8	15.5	15.7	19.2	18.7	18.9	24.4	23.6	23.8
30	---	---	---	15.6	14.7	15.0	19.1	18.6	18.8	24.6	24.0	24.3
31	---	---	---	15.7	14.5	15.1	---	---	---	24.9	24.1	24.4
Month	8.3	4.0	5.5	16.0	8.1	11.5	19.3	12.9	15.5	24.9	16.7	20.4

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

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

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	25.7	24.5	25.0	28.9	26.5	27.9	29.4	28.7	29.0	29.0	28.6	28.8
2	25.4	24.7	25.1	28.7	27.8	28.1	29.3	28.8	29.0	28.6	27.8	28.1
3	25.4	24.7	25.1	28.3	27.6	27.9	29.8	29.0	29.3	28.2	27.6	27.8
4	25.8	24.9	25.1	28.4	27.4	27.7	29.6	28.8	29.1	28.0	27.6	27.8
5	25.6	24.9	25.2	28.2	27.5	27.9	29.5	28.4	29.1	28.2	27.9	28.0
6	25.7	25.1	25.6	28.1	26.6	27.6	29.6	28.4	28.8	28.4	27.9	28.2
7	26.4	25.6	25.9	29.1	26.8	28.5	28.5	28.4	28.4	28.5	27.8	28.1
8	26.5	25.8	26.0	29.2	27.4	28.4	28.4	28.4	28.4	28.4	27.4	27.8
9	27.0	25.5	26.4	27.4	27.0	27.2	29.1	28.3	28.5	28.3	27.3	27.6
10	27.2	26.6	26.8	27.2	26.9	27.0	30.9	28.4	29.7	28.2	27.7	27.9
11	27.1	26.1	26.5	29.8	26.9	28.4	30.7	30.2	30.5	28.2	27.4	27.9
12	26.8	26.4	26.5	29.7	27.7	28.5	30.3	29.6	29.8	28.1	27.5	27.7
13	27.2	26.5	26.8	29.7	27.5	28.1	30.0	29.4	29.6	28.0	27.2	27.6
14	27.1	25.4	26.1	29.7	27.5	28.6	30.2	29.6	29.8	28.0	27.1	27.4
15	26.0	24.9	25.2	29.7	27.6	28.3	30.1	29.4	29.6	27.7	26.6	27.2
16	26.0	25.3	25.6	28.1	27.3	27.7	29.8	28.4	29.3	26.9	25.5	26.0
17	26.0	25.5	25.7	29.2	27.2	27.4	29.4	28.3	28.7	26.0	25.2	25.5
18	26.6	26.0	26.2	29.0	27.4	27.9	29.6	28.5	29.1	25.2	24.6	24.8
19	27.6	25.8	26.7	27.6	27.4	27.5	29.5	28.8	29.1	24.9	23.9	24.5
20	27.5	27.0	27.2	27.9	27.3	27.3	29.2	27.4	28.2	24.2	23.4	23.8
21	27.1	26.3	26.6	28.9	27.8	28.5	28.7	27.5	27.6	24.6	23.2	23.8
22	27.3	26.4	26.7	28.6	27.5	28.0	29.7	28.0	29.0	24.6	23.6	24.3
23	27.6	27.1	27.4	27.9	27.0	27.4	29.9	29.4	29.6	25.4	23.1	23.5
24	27.5	27.1	27.3	27.8	26.7	27.4	30.0	29.4	29.6	26.0	24.6	25.5
25	27.6	27.0	27.2	28.5	26.2	27.1	30.1	29.5	29.7	26.1	24.7	25.4
26	28.1	27.2	27.4	28.8	28.3	28.5	30.0	29.6	29.8	25.8	25.1	25.4
27	28.5	27.3	27.7	29.0	28.7	28.9	29.9	29.3	29.6	26.2	25.1	25.3
28	28.1	26.7	27.6	29.7	27.9	28.9	30.0	29.3	29.6	26.4	25.6	25.9
29	26.8	26.4	26.6	28.5	27.5	27.8	29.8	29.1	29.4	26.4	25.1	25.5
30	28.0	26.6	27.2	28.9	27.5	27.7	29.5	28.7	29.0	25.2	24.3	24.8
31	---	---	---	29.3	27.6	28.5	29.4	28.5	28.8	---	---	---
Month	28.5	24.5	26.3	29.8	26.2	28.0	30.9	27.4	29.2	29.0	23.1	26.4

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	5.5	4.9	5.2	7.0	6.7	6.8	6.6	6.2	6.4	9.1	8.7	8.8
2	5.6	5.1	5.4	6.9	6.4	6.6	6.3	5.8	6.1	8.9	8.5	8.7
3	6.5	5.3	5.9	7.0	6.3	6.6	6.4	5.8	6.1	8.8	8.4	8.6
4	6.4	5.4	5.9	7.5	6.4	6.8	6.8	6.1	6.4	9.5	8.7	9.1
5	6.4	5.6	5.9	8.5	7.4	8.0	7.4	6.6	6.9	10.0	9.3	9.7
6	6.5	6.0	6.2	8.6	8.3	8.4	7.6	7.1	7.4	10.1	9.6	9.8
7	6.7	6.0	6.3	8.6	8.2	8.4	7.7	7.4	7.6	9.8	9.2	9.5
8	6.7	6.3	6.5	8.5	8.0	8.3	8.1	7.6	7.8	9.5	8.9	9.3
9	6.6	6.1	6.4	8.1	7.1	7.7	8.7	7.9	8.3	9.3	8.8	9.1
10	6.6	6.1	6.4	7.2	5.8	6.5	9.0	8.4	8.7	9.7	9.1	9.3
11	6.6	6.3	6.5	6.0	5.6	5.8	9.1	8.8	8.9	9.6	9.1	9.3
12	6.6	6.4	6.5	6.7	5.5	6.0	9.2	8.8	9.0	9.3	9.0	9.2
13	6.7	6.4	6.5	6.7	6.2	6.5	9.3	8.7	9.0	9.2	8.7	9.0
14	6.8	6.4	6.6	6.4	6.1	6.2	9.0	8.3	8.7	9.0	8.5	8.8
15	7.5	6.6	6.7	6.7	6.1	6.4	8.7	8.0	8.3	8.8	8.4	8.6
16	7.2	6.6	6.9	6.7	6.2	6.4	8.5	8.0	8.2	8.8	8.2	8.5
17	7.1	6.8	6.9	6.4	5.6	6.2	8.5	8.0	8.3	8.8	8.2	8.5
18	7.1	6.8	6.9	5.8	5.4	5.6	8.7	8.0	8.4	9.5	8.6	9.2
19	7.0	6.2	6.6	6.0	5.3	5.7	8.4	7.8	8.2	9.8	9.2	9.5
20	6.6	6.2	6.3	6.4	5.5	5.8	8.5	7.8	8.2	10.0	9.4	9.8
21	6.3	6.1	6.2	8.3	6.3	7.1	8.6	8.2	8.4	10.4	9.7	10.2
22	6.2	5.8	6.0	9.3	6.9	7.8	8.8	8.2	8.5	10.8	10.1	10.5
23	6.0	5.7	5.8	7.0	6.2	6.6	9.0	8.6	8.8	10.6	10.0	10.3
24	6.0	5.6	5.8	6.6	6.3	6.4	9.0	8.3	8.7	10.7	10.2	10.4
25	6.6	5.9	6.1	6.6	6.3	6.5	8.4	7.8	8.1	10.8	10.3	10.6
26	7.5	6.5	7.0	6.7	6.3	6.5	8.0	7.5	7.8	10.9	10.5	10.7
27	7.6	7.4	7.5	6.7	6.4	6.6	7.7	7.2	7.4	11.3	10.7	11.0
28	8.0	7.5	7.8	6.6	6.3	6.5	7.9	7.2	7.5	11.3	10.4	10.9
29	7.8	7.6	7.7	6.6	6.2	6.4	8.5	7.7	8.1	10.9	10.4	10.7
30	7.8	7.4	7.6	6.5	6.2	6.3	9.0	8.2	8.5	11.4	10.6	11.1
31	7.5	6.9	7.2	---	---	---	9.1	8.7	8.9	11.7	11.0	11.4
Month	8.0	4.9	6.5	9.3	5.3	6.7	9.3	5.8	8.0	11.7	8.2	9.7

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	11.8	11.1	11.5	10.8	10.6	10.7	7.6	7.4	7.5	5.8	5.5	5.6
2	11.6	10.9	11.2	10.7	10.5	10.6	7.6	7.4	7.5	5.7	5.3	5.5
3	11.4	10.8	11.1	10.8	10.5	10.7	8.4	7.6	7.9	5.8	5.2	5.6
4	11.7	10.8	11.2	10.7	10.4	10.6	8.8	8.2	8.5	5.7	5.2	5.4
5	11.4	11.0	11.2	10.7	10.4	10.5	8.8	8.5	8.7	5.6	5.0	5.2
6	11.6	10.9	11.1	10.5	10.1	10.3	8.7	8.5	8.6	7.8	5.2	6.4
7	11.2	10.7	11.0	10.1	9.8	9.9	8.9	8.5	8.7	7.4	6.5	6.9
8	11.3	10.8	11.1	10.1	9.4	9.8	8.9	8.5	8.7	7.3	6.7	7.0
9	11.5	10.9	11.2	10.2	9.8	10.0	9.0	8.7	8.9	6.9	6.5	6.7
10	11.5	11.1	11.3	10.0	9.8	9.9	9.0	8.8	8.9	6.7	6.3	6.4
11	11.6	11.1	11.3	10.2	9.8	10	9.0	8.7	8.9	6.7	6.2	6.4
12	11.6	11.0	11.3	10.0	9.7	9.9	9.0	8.8	8.9	6.8	6.4	6.6
13	11.4	10.9	11.1	10.0	9.6	9.8	8.9	8.6	8.7	6.8	6.4	6.6
14	11.3	10.6	11.0	9.7	9.3	9.5	8.7	8.5	8.6	6.8	6.3	6.6
15	11.3	10.4	11.0	9.6	9.2	9.3	8.7	8.4	8.6	6.9	6.4	6.7
16	11.2	10.6	10.9	9.3	8.6	9.0	8.5	7.6	8.0	7.3	6.7	7.0
17	11.2	10.7	11.0	9.3	8.8	9.1	7.9	7.5	7.7	7.2	6.8	7.0
18	11.7	10.8	11.2	9.1	8.7	8.9	8.0	7.7	7.8	7.1	6.8	7.0
19	12.2	11.3	11.7	9.6	8.8	9.2	8.1	7.9	8.0	7.1	6.7	6.9
20	12.4	11.9	12.2	10.2	9.6	10	8.6	8.1	8.4	7.1	6.7	6.9
21	12.4	11.9	12.1	10.4	10.1	10.2	8.7	8.4	8.5	7.2	6.6	6.8
22	12.3	11.8	12.0	10.3	9.9	10.1	8.6	8.2	8.4	7.5	6.4	6.7
23	12.2	11.1	11.6	10.0	9.6	9.8	8.2	7.7	8.0	7.5	6.5	6.9
24	11.2	10.9	11.1	9.6	9.2	9.4	7.7	7.1	7.5	7.7	6.6	6.9
25	10.9	10.5	10.7	9.2	8.7	8.9	7.1	6.6	7.0	7.6	6.5	6.9
26	10.7	10.5	10.6	8.7	8.3	8.5	6.7	6.2	6.5	8.0	6.7	7.1
27	10.6	10.5	10.6	8.4	8.1	8.3	6.4	5.8	6.2	7.8	6.8	7.1
28	10.8	10.5	10.6	8.2	7.8	7.9	5.9	5.5	5.7	7.4	6.4	6.9
29	---	---	---	7.8	7.6	7.7	5.7	5.4	5.5	8.0	6.5	6.8
30	---	---	---	7.8	7.5	7.7	5.8	5.6	5.7	8.0	6.4	7.0
31	---	---	---	7.8	7.6	7.7	---	---	---	8.5	6.4	6.9
Month	12.4	10.4	11.2	10.8	7.5	9.5	9.0	5.4	7.9	8.5	5.0	6.6

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	7.8	6.2	6.9	---	---	---	6.4	4.8	5.4	6.1	5.0	5.5
2	7.1	6.3	6.7	---	---	---	6.9	5.0	5.6	6.4	5.4	5.8
3	6.9	6.0	6.4	---	---	---	6.9	5.0	5.8	6.7	5.0	5.6
4	7.1	5.8	6.4	---	---	---	7.6	5.2	6.0	6.7	4.9	5.6
5	7.3	6.0	6.5	---	---	---	7.2	5.0	6.0	7.4	4.9	5.5
6	8.4	5.8	6.3	---	---	---	6.7	4.7	5.7	8.1	5.1	6.0
7	8.8	6.0	6.9	---	---	---	7.2	4.9	6.0	7.4	5.3	6.1
8	9.2	6.2	7.0	---	---	---	8.0	4.7	6.7	7.2	5.4	6.1
9	8.6	5.5	7.3	---	---	---	7.2	5.7	6.3	7.0	5.7	6.3
10	8.8	6.2	7.1	---	---	---	7.0	4.2	5.7	7.5	5.7	6.2
11	8.9	5.4	6.5	---	---	---	8.2	4.5	5.5	6.4	5.6	5.9
12	9.0	5.4	6.5	---	---	---	7.8	5.6	6.1	7.3	5.4	6.2
13	7.6	5.2	6.2	---	---	---	6.8	5.7	6.1	6.3	5.0	5.5
14	6.6	5.3	5.8	6.4	4.9	5.4	8.5	5.5	6.6	6.7	5.1	5.7
15	6.4	4.9	5.5	6.7	4.6	5.5	7.6	5.4	6.1	6.7	5.7	6.2
16	8.1	5.2	5.9	6.0	3.0	5.0	7.0	5.5	6.1	6.5	5.8	6.1
17	7.5	5.4	6.1	6.0	4.0	5.3	6.8	4.5	5.9	6.4	5.2	5.7
18	9.1	4.9	6.4	6.4	2.8	4.9	---	---	---	7.0	5.6	6.0
19	8.3	4.9	6.2	7.0	4.2	5.6	---	---	---	7.1	6.0	6.3
20	6.4	5.3	5.7	5.9	2.4	4.9	---	---	---	7.0	6.3	6.6
21	6.0	5.3	5.7	6.2	5.0	5.5	---	---	---	---	---	---
22	7.2	5.5	5.9	5.6	4.4	4.9	---	---	---	6.5	4.9	5.6
23	6.5	5.2	5.8	6.5	4.7	5.3	---	---	---	8.4	4.1	5.3
24	8.1	5.4	6.1	8.0	4.5	5.4	---	---	---	8.1	5.1	6.1
25	8.0	5.2	6.0	7.4	4.4	5.3	7.0	4.8	5.8	7.5	5.1	5.9
26	---	---	---	7.6	4.8	5.7	6.0	5.3	5.6	9.2	5.4	6.7
27	---	---	---	7.6	4.9	6.1	6.1	4.8	5.3	8.7	4.2	6.1
28	---	---	---	6.5	4.9	5.6	6.6	5.1	5.6	5.6	4.4	5.0
29	---	---	---	6.0	4.8	5.4	6.9	5.1	5.6	6.6	5.3	6.1
30	---	---	---	5.8	4.8	5.3	6.6	4.8	5.5	6.8	5.8	6.2
31	---	---	---	7.1	4.9	5.4	6.0	5.0	5.3	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	4.7	2.6	3.5	7.1	6.6	6.8	6.7	6.1	6.4	8.7	8.4	8.6
2	4.9	2.4	3.5	7.0	6.3	6.6	6.4	5.8	6.2	8.6	8.3	8.4
3	3.6	1.7	2.8	7.0	6.3	6.7	6.7	5.8	6.2	8.5	8.2	8.4
4	3.8	1.7	3.0	7.4	6.4	6.8	6.9	6.2	6.5	9.2	8.4	8.8
5	6.0	2.7	4.0	8.5	7.3	8.0	7.4	6.6	7.0	9.8	9.2	9.5
6	6.1	3.9	5.2	8.7	8.3	8.5	7.8	7.2	7.4	9.8	9.6	9.7
7	6.1	3.8	5.0	8.6	8.3	8.5	7.8	7.4	7.6	9.6	9.2	9.4
8	6.3	4.8	5.9	8.5	8.0	8.4	7.9	7.6	7.8	9.3	8.8	9.1
9	6.2	5.0	5.7	8.4	7.3	7.8	8.4	7.8	8.0	9.2	8.7	8.9
10	6.4	3.8	5.6	7.4	6.0	6.6	8.7	8.2	8.5	9.5	9.0	9.2
11	6.4	5.8	6.2	6.1	5.6	5.9	8.8	8.5	8.6	9.5	9.2	9.3
12	6.4	4.8	6.0	7.0	5.5	6.1	8.9	8.6	8.7	9.3	9.1	9.2
13	6.5	5.1	6.2	7.2	6.3	6.7	8.9	8.4	8.6	9.2	8.8	9.1
14	6.6	5.4	6.3	6.7	6.3	6.5	8.6	8.1	8.3	8.9	8.6	8.8
15	6.8	5.3	6.4	6.8	6.3	6.6	8.4	7.8	8.1	8.7	8.4	8.6
16	7.0	5.8	6.6	6.8	6.1	6.4	8.1	7.7	7.9	8.6	8.2	8.4
17	6.9	6.6	6.8	6.6	5.5	6.1	8.2	7.7	8.0	8.6	8.2	8.4
18	6.9	6.6	6.8	5.9	5.1	5.5	8.4	7.9	8.1	9.3	8.6	9.1
19	6.8	6.1	6.4	5.9	5.1	5.4	8.1	7.6	7.9	9.5	9.2	9.4
20	6.4	6.0	6.2	6.2	5.2	5.5	8.2	7.6	8.0	9.8	9.4	9.7
21	6.3	6.0	6.1	8.3	6.1	7.0	8.3	8.0	8.1	10.2	9.8	10.1
22	6.1	5.8	5.9	9.8	7.2	8.0	8.5	8.0	8.2	10.5	10.1	10.4
23	5.9	5.6	5.8	7.3	6.3	6.7	8.6	8.3	8.5	10.4	10.0	10.2
24	6.2	5.6	5.8	6.8	6.3	6.5	8.6	8.0	8.3	10.4	10.1	10.3
25	6.6	5.9	6.1	7.0	6.4	6.7	8.1	7.5	7.8	10.6	10.2	10.4
26	7.5	6.6	7.0	7.0	6.5	6.8	7.7	7.4	7.5	10.7	10.3	10.5
27	7.5	7.3	7.4	7.0	6.4	6.8	7.5	7.1	7.3	11.0	10.6	10.8
28	7.8	7.4	7.7	6.9	6.3	6.7	7.6	7.1	7.3	11.0	10.2	10.6
29	7.9	7.5	7.7	6.8	6.3	6.6	8.3	7.5	7.8	10.6	10.2	10.4
30	7.8	7.4	7.6	6.6	6.0	6.4	8.7	8.1	8.4	11.0	10.5	10.9
31	7.6	6.8	7.2	---	---	---	8.7	8.4	8.6	11.3	10.9	11.1
Month	7.9	1.7	5.9	9.8	5.1	6.8	8.9	5.8	7.8	11.3	8.2	9.5

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	11.5	10.7	11.2	11.6	11.2	11.4	8.1	7.7	7.9	6.0	5.5	5.8
2	11.3	10.7	11.0	11.5	11.1	11.3	8.2	7.7	7.9	5.8	5.4	5.6
3	11.1	10.7	10.9	11.5	11.2	11.4	8.9	8.0	8.4	5.7	5.3	5.5
4	11.1	10.7	11.0	11.4	11.1	11.2	9.4	8.7	9.1	5.5	5.0	5.2
5	11.1	10.9	11.0	11.3	10.9	11.2	9.5	8.9	9.2	5.3	4.8	5.0
6	11.0	10.8	10.9	11.1	10.4	10.8	9.3	8.9	9.1	7.6	5.1	6.2
7	11.0	10.6	10.8	10.8	10.1	10.4	9.5	9.0	9.2	7.1	6.2	6.7
8	10.9	10.6	10.8	10.6	10.0	10.4	9.5	8.9	9.2	7.0	6.6	6.8
9	11.1	10.8	10.9	10.7	10.1	10.4	9.6	9.2	9.4	6.6	6.3	6.5
10	11.1	10.8	10.9	10.5	10.0	10.3	9.7	9.2	9.4	6.5	6.2	6.3
11	11.1	10.7	10.9	10.7	10.1	10.4	9.6	9.1	9.4	6.3	6.0	6.2
12	11.1	10.6	10.9	10.6	10.0	10.3	9.6	9.2	9.4	6.6	6.2	6.4
13	10.8	10.3	10.6	10.4	9.7	10.0	9.5	9.0	9.2	6.7	6.2	6.5
14	10.9	10.0	10.5	10.0	9.3	9.7	9.3	8.9	9.1	6.7	6.2	6.4
15	10.8	9.8	10.4	9.6	8.9	9.3	9.3	8.8	9.1	6.8	6.2	6.5
16	10.6	10.1	10.4	9.3	8.8	9.1	8.9	7.9	8.4	7.1	6.6	6.8
17	---	---	---	9.5	8.9	9.3	8.4	7.8	8.1	7.0	6.6	6.8
18	---	---	---	9.4	8.9	9.2	8.4	8.0	8.2	7.0	6.7	6.8
19	---	---	---	10.0	9.0	9.4	8.6	8.1	8.4	6.8	6.5	6.7
20	---	---	---	10.7	9.7	10.2	9.1	8.4	8.8	6.8	6.4	6.6
21	---	---	---	11.0	10.4	10.7	9.1	8.7	8.9	6.7	6.4	6.5
22	---	---	---	10.9	10.3	10.6	8.9	8.3	8.7	6.7	6.1	6.4
23	---	---	---	10.6	10.0	10.4	8.5	7.8	8.2	7.1	6.4	6.6
24	11.9	11.5	11.8	10.3	9.6	9.9	8.0	7.1	7.7	7.0	6.5	6.7
25	11.8	11.2	11.4	9.8	9.1	9.5	7.3	6.7	7.1	7.1	6.4	6.6
26	11.6	11.2	11.4	9.3	8.7	9.0	7.0	6.4	6.7	7.1	6.6	6.8
27	11.6	11.2	11.4	9.0	8.5	8.8	6.7	5.9	6.4	7.2	6.6	6.9
28	11.6	11.3	11.4	8.8	8.1	8.4	6.1	5.6	5.9	7.2	6.2	6.6
29	---	---	---	8.3	7.9	8.1	5.9	5.4	5.7	7.1	6.4	6.6
30	---	---	---	8.4	7.8	8.1	6.0	5.6	5.8	7.3	6.2	6.6
31	---	---	---	8.4	7.8	8.1	---	---	---	7.2	6.2	6.6
Month	---	---	---	11.6	7.8	9.9	9.7	5.4	8.3	7.6	4.8	6.4

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	7.3	6.2	6.6	6.9	2.1	4.9	5.7	4.2	4.8	5.3	4.1	4.6
2	6.8	6.0	6.4	6.5	4.6	5.7	5.3	4.2	4.8	5.7	4.4	5.0
3	6.5	5.7	6.2	6.1	5.2	5.7	6.0	4.5	5.1	5.2	3.9	4.5
4	6.2	5.2	5.8	6.9	4.9	5.8	6.3	4.1	4.9	4.6	3.7	4.2
5	6.2	4.5	5.5	6.9	5.6	6.2	5.7	2.5	4.6	4.6	3.7	4.1
6	5.7	4.8	5.3	6.5	4.6	6.0	5.3	1.7	3.1	4.6	3.6	4.1
7	5.9	4.5	5.1	6.7	5.3	5.9	3.1	2.0	2.4	5.3	3.9	4.4
8	6.1	5.1	5.5	6.6	3.6	5.6	3.3	2.7	3.0	5.1	3.7	4.4
9	6.4	4.2	5.1	4.1	3.2	3.7	3.0	1.6	2.1	5.6	4.1	4.5
10	6.6	3.9	4.6	4.2	3.1	3.6	5.5	1.5	3.3	5.5	4.4	4.9
11	6.6	4.3	5.2	6.6	2.9	4.6	5.3	4.5	5.0	5.0	4.0	4.7
12	5.5	4.1	4.8	6.1	2.0	4.1	5.2	4.5	4.8	5.6	3.6	4.8
13	6.7	4.0	5.2	5.9	0.7	2.2	5.2	4.1	4.8	5.1	4.2	4.5
14	6.2	4.9	5.5	5.1	0.6	3.1	5.1	3.5	4.3	5.3	4.2	4.6
15	5.5	4.5	4.9	4.7	0.2	1.9	4.9	3.6	4.2	5.1	4.1	4.7
16	5.7	4.5	5.1	2.1	0.8	1.6	4.8	3.3	4.2	5.2	4.3	4.7
17	6.0	3.8	4.9	4.5	0.5	1.1	4.5	3.2	3.9	5.2	4.2	4.5
18	5.4	3.4	4.2	4.2	0.7	1.6	5.2	3.4	4.0	5.8	4.5	4.9
19	6.5	3.4	4.8	1.2	0.5	0.8	5.4	4.0	4.6	5.8	4.9	5.2
20	6.5	5.1	5.8	1.3	0.2	0.4	5.4	3.7	4.8	5.9	5.3	5.6
21	6.3	5.5	5.9	5.2	0.7	2.5	5.2	3.8	4.3	5.8	4.6	5.3
22	6.3	5.6	5.9	5.9	4.4	5.0	5.0	2.8	3.6	5.6	3.9	4.5
23	6.2	5.4	5.7	5.6	3.6	4.6	5.9	3.7	4.4	5.5	2.9	4.8
24	6.3	5.3	5.8	4.0	2.9	3.3	4.9	3.9	4.4	5.3	2.8	3.8
25	6.2	5.3	5.8	4.7	2.4	3.6	5.6	4.1	4.8	5.3	2.4	3.8
26	6.5	4.4	5.6	5.3	3.2	4.2	5.6	4.8	5.1	5.9	3.0	4.1
27	6.7	4.5	5.7	5.0	3.5	4.4	5.3	4.1	4.6	4.8	3.2	3.6
28	6.5	4.0	5.6	5.6	2.0	4.6	5.3	4.5	4.8	5.5	3.3	4.6
29	4.3	3.4	3.8	3.8	1.8	2.6	5.4	4.4	4.9	6.8	5.4	5.9
30	5.4	3.1	4.0	4.8	2.4	2.9	5.3	4.2	4.7	6.7	5.8	6.1
31	---	---	---	5.4	2.2	4.1	5.4	4.1	4.6	---	---	---
Month	7.3	3.1	5.3	6.9	0.2	3.8	6.3	1.5	4.3	6.8	2.4	4.6

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	65	58	61	71	68	70	64	59	62	81	77	79
2	66	60	63	71	65	67	62	57	60	80	76	78
3	78	63	69	70	64	66	61	56	58	79	75	77
4	76	63	70	74	63	67	63	57	60	86	78	82
5	76	66	70	84	73	79	66	61	63	91	85	88
6	75	70	72	85	81	83	68	64	66	93	88	90
7	77	69	73	85	81	82	69	65	67	91	85	88
8	77	72	75	84	79	82	71	67	69	89	83	86
9	76	70	73	80	71	76	73	68	70	87	81	84
10	76	70	73	72	58	65	75	70	72	86	82	84
11	75	72	74	60	56	58	76	73	75	85	79	82
12	75	71	73	66	55	60	78	74	76	81	78	79
13	75	72	73	66	62	64	79	75	77	81	77	79
14	75	71	73	64	61	62	79	73	76	80	76	78
15	82	72	74	67	61	64	77	71	74	80	76	78
16	79	72	75	67	62	64	76	71	73	81	75	78
17	78	74	75	64	56	61	75	71	73	79	74	77
18	78	74	76	57	53	55	77	71	75	81	75	79
19	77	68	73	58	51	55	75	70	73	83	78	80
20	74	68	70	61	53	56	76	70	73	85	80	83
21	70	67	69	78	60	67	76	72	74	86	81	84
22	68	63	66	86	65	73	78	72	75	88	83	85
23	65	61	63	66	57	61	81	77	79	87	82	85
24	62	58	61	61	58	59	81	75	79	88	84	86
25	67	60	63	61	58	60	76	70	73	89	84	87
26	77	66	71	61	58	59	73	68	71	89	84	87
27	77	75	76	61	58	60	70	65	68	90	85	88
28	82	76	79	61	58	60	71	65	68	92	86	89
29	79	76	78	61	58	60	76	69	72	90	84	87
30	78	74	76	62	58	60	80	73	76	91	85	88
31	76	70	73	---	---	---	81	77	79	92	87	89
Month	82	58	71	86	51	65	81	56	71	93	74	83

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	93	86	90	92	91	91	78	74	76	63	60	61
2	90	85	87	94	91	92	79	75	76	63	59	61
3	90	85	88	94	91	93	87	78	81	64	57	61
4	93	85	89	94	91	92	91	84	87	63	56	59
5	90	86	88	94	90	92	90	86	88	61	54	56
6	90	84	86	91	88	90	88	85	86	83	56	68
7	87	83	85	89	85	87	87	85	86	78	68	73
8	88	84	86	90	83	87	86	82	84	76	70	73
9	90	84	87	90	86	88	86	84	85	73	68	70
10	91	86	88	90	87	88	87	84	85	71	67	69
11	91	86	89	93	87	89	86	83	85	74	67	70
12	91	87	89	92	88	90	89	85	86	75	70	72
13	91	86	89	92	88	90	87	83	85	75	71	73
14	92	86	89	91	86	89	86	83	84	76	69	72
15	91	84	88	92	86	89	86	83	85	78	71	74
16	90	85	88	89	82	86	84	74	79	83	74	79
17	90	86	88	88	82	85	78	73	76	81	76	79
18	93	86	90	84	81	82	79	75	77	79	74	77
19	95	89	92	88	81	85	79	77	78	79	74	76
20	98	92	96	93	87	90	84	79	82	80	74	77
21	99	95	97	93	91	92	86	81	84	83	74	77
22	100	95	98	92	90	91	86	82	84	87	72	76
23	99	91	95	92	88	90	83	78	81	87	73	79
24	93	90	91	91	87	89	80	73	77	90	75	79
25	90	88	89	88	85	86	75	70	73	90	74	79
26	91	88	89	85	82	84	71	66	69	96	77	84
27	91	88	90	85	81	82	69	62	66	94	80	85
28	92	89	90	82	78	80	64	60	62	89	75	82
29	---	---	---	79	76	78	61	58	60	98	78	82
30	---	---	---	78	75	76	63	60	61	99	77	84
31	---	---	---	79	75	77	---	---	---	107	77	84
Month	100	83	90	94	75	87	91	58	79	107	54	74

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	97	75	84	---	---	---	85	62	70	80	65	71
2	87	77	82	---	---	---	92	65	73	83	70	75
3	85	74	79	---	---	---	93	65	77	87	64	72
4	89	71	79	---	---	---	102	68	79	87	63	72
5	92	74	80	---	---	---	96	66	80	97	63	71
6	106	72	78	---	---	---	89	62	75	106	66	78
7	112	74	86	---	---	---	97	65	80	96	68	79
8	119	77	89	---	---	---	110	62	90	93	69	78
9	111	68	92	---	---	---	97	77	85	90	72	80
10	113	78	91	---	---	---	94	56	77	99	73	80
11	116	68	82	---	---	---	109	60	74	83	72	76
12	116	68	82	---	---	---	105	74	81	94	69	80
13	97	65	78	---	---	---	91	75	80	81	64	71
14	81	66	72	86	64	72	115	73	88	86	65	73
15	79	60	68	91	61	73	102	71	81	85	73	79
16	102	64	74	80	39	67	93	73	81	81	72	76
17	94	67	76	80	52	70	90	59	77	79	64	70
18	118	61	80	86	36	64	---	---	---	85	68	73
19	108	62	78	95	55	74	---	---	---	86	72	77
20	82	67	72	78	31	65	---	---	---	83	76	79
21	75	66	72	81	66	72	---	---	---	---	---	---
22	93	69	74	72	56	64	---	---	---	79	60	68
23	84	66	73	84	59	68	---	---	---	106	50	65
24	107	68	77	105	58	70	---	---	---	102	63	76
25	104	66	77	97	57	69	95	64	77	94	63	74
26	---	---	---	101	62	75	80	70	75	116	67	84
27	---	---	---	101	64	80	81	64	70	109	52	77
28	---	---	---	87	64	73	89	67	74	70	54	62
29	---	---	---	80	63	71	92	67	74	82	66	75
30	---	---	---	76	63	69	87	63	72	82	70	75
31	---	---	---	94	64	70	79	65	70	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	56	31	42	72	67	69	65	59	62	77	75	76
2	58	28	42	72	64	67	63	57	61	77	74	75
3	42	20	33	70	64	67	63	57	59	76	73	75
4	45	20	35	73	63	67	64	58	61	84	75	80
5	71	32	47	84	72	79	67	61	64	89	84	86
6	71	46	61	86	81	84	69	64	66	91	87	89
7	71	43	58	85	81	83	70	66	68	89	85	87
8	73	55	68	84	79	83	70	66	68	87	82	85
9	71	57	65	84	73	78	70	66	68	84	80	82
10	74	44	65	74	60	66	72	68	70	85	82	83
11	74	66	71	61	56	59	74	70	72	84	80	82
12	72	54	67	70	55	61	75	72	74	81	79	80
13	73	57	70	71	63	67	76	72	74	80	77	79
14	73	60	70	67	63	65	75	71	73	79	77	78
15	75	58	70	68	63	66	74	70	72	79	76	77
16	77	64	73	68	61	64	72	68	70	79	75	77
17	76	72	74	66	55	61	73	68	71	76	74	75
18	76	72	74	58	50	54	74	70	72	79	75	78
19	75	67	71	58	49	53	72	68	70	80	78	79
20	71	66	68	60	50	53	73	68	71	83	80	82
21	70	66	67	78	58	66	73	70	71	85	82	83
22	67	63	65	91	67	75	75	70	72	86	82	84
23	64	60	62	68	58	62	77	74	76	85	82	83
24	64	58	60	63	58	60	77	72	75	86	83	85
25	67	60	63	64	59	62	73	68	70	87	83	85
26	76	66	71	64	60	62	70	67	68	86	84	85
27	77	74	75	64	59	62	68	64	66	88	84	87
28	80	75	78	63	58	62	68	64	66	89	84	87
29	79	75	77	63	59	61	74	67	70	87	82	84
30	78	74	76	62	57	60	77	72	74	87	83	86
31	77	69	73	---	---	---	77	74	76	89	85	87
Month	80	20	64	91	49	66	77	57	69	91	73	82

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	90	84	87	99	95	97	83	77	79	65	60	63
2	87	83	85	100	96	98	85	79	81	64	60	62
3	87	84	85	100	97	99	91	82	86	63	59	61
4	88	84	87	100	96	98	96	89	92	60	54	57
5	87	85	86	99	95	97	97	90	93	57	51	54
6	86	83	84	96	91	94	94	88	91	81	55	67
7	85	82	83	94	87	91	93	89	91	74	65	70
8	85	82	84	94	88	91	92	86	90	72	68	70
9	86	83	85	94	88	91	92	88	90	68	66	67
10	87	84	85	93	88	91	92	88	90	69	65	67
11	87	84	85	96	90	92	92	87	90	69	64	67
12	86	83	85	95	90	92	94	89	91	73	67	70
13	85	82	84	94	89	91	92	87	90	74	68	71
14	88	80	84	92	86	89	92	87	89	73	68	70
15	87	78	83	90	83	87	91	87	89	76	69	72
16	85	81	83	89	83	86	88	77	83	80	73	76
17	---	---	---	89	83	87	83	76	79	78	73	76
18	---	---	---	87	81	85	83	78	80	77	74	75
19	---	---	---	91	84	87	84	79	82	74	71	73
20	---	---	---	97	88	93	89	82	85	75	70	73
21	---	---	---	99	94	97	90	84	87	76	71	73
22	---	---	---	97	93	95	89	83	86	76	69	73
23	---	---	---	97	92	95	85	80	83	81	72	74
24	98	95	96	97	91	94	82	74	79	79	73	76
25	97	93	95	95	89	92	76	71	74	82	73	76
26	98	93	96	91	86	88	74	68	71	83	76	79
27	99	95	96	89	85	87	71	64	68	86	77	81
28	99	96	97	88	82	84	66	61	64	85	73	78
29	---	---	---	84	80	82	64	58	61	85	76	78
30	---	---	---	84	78	80	65	61	63	88	74	79
31	---	---	---	83	79	80	---	---	---	87	74	80
Month	---	---	---	100	78	91	97	58	83	88	51	71

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	90	75	80	90	26	63	75	55	62	69	53	60
2	83	72	78	84	59	73	69	55	62	74	56	65
3	80	70	76	78	67	73	79	59	66	67	50	57
4	76	63	70	89	62	75	83	54	64	59	47	54
5	76	55	67	89	72	80	75	33	60	59	48	53
6	70	59	65	83	58	76	70	22	41	59	46	52
7	74	55	63	88	68	76	40	26	31	69	50	57
8	76	63	68	86	46	72	43	35	39	66	47	56
9	80	52	64	52	41	47	39	21	27	72	52	57
10	83	49	58	53	39	46	74	20	44	71	56	63
11	83	54	65	87	37	60	71	60	67	64	51	61
12	69	51	60	81	26	54	69	60	64	72	46	61
13	85	50	65	78	9	28	69	54	64	65	53	57
14	77	61	68	67	8	41	67	46	57	68	53	58
15	68	55	60	62	3	25	65	47	55	65	52	60
16	70	55	63	27	10	20	63	43	55	64	53	58
17	74	47	60	59	6	14	59	42	51	63	51	56
18	68	42	52	55	9	20	69	44	53	70	54	59
19	83	42	60	15	6	10	71	52	61	70	59	62
20	82	64	73	17	3	5	71	48	62	70	63	67
21	79	69	74	68	9	33	68	49	55	68	55	63
22	79	70	75	76	56	64	66	37	46	67	47	54
23	79	69	73	72	46	58	78	49	58	65	35	57
24	80	67	73	51	37	42	65	51	58	65	34	47
25	79	67	73	60	30	46	75	54	63	66	29	47
26	84	56	71	69	41	55	74	63	68	73	37	50
27	87	57	73	65	46	57	70	54	61	60	39	44
28	84	50	71	74	26	61	70	59	63	69	41	57
29	54	43	48	49	23	34	71	58	64	83	67	73
30	69	39	51	63	31	37	70	55	62	81	70	74
31	---	---	---	71	28	53	71	53	60	---	---	---
Month	90	39	67	90	3	48	83	20	56	83	29	58