

SWATARA CREEK BASIN

403542076263201 ROWE DRAINAGE TUNNEL, SITE E2-244, NR JOLIETT, PA
(Swatara Creek Project)

LOCATION.--Lat 40°35'42", long 76°26'32", Schuylkill County, Hydrologic Unit 02050305, on left bank above weir, 350 ft downstream from drainage tunnel. Located on Schuylkill County property.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,000 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Outflow is from mine drainage tunnel and is regulated by mining activity. Other data for this project presented in tables on pages 439-497.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	16	9.8	8.3	4.0	3.3	4.8	6.6	5.5	e4.5	3.5	3.9
2	9.0	15	9.3	8.4	4.2	2.3	5.3	7.6	5.2	e5.0	2.8	3.3
3	9.1	13	9.7	8.2	3.1	3.2	5.6	7.8	6.0	4.1	4.0	4.4
4	8.9	13	10	7.6	3.8	3.9	4.9	7.4	5.4	2.8	3.6	3.6
5	8.5	12	9.3	6.8	4.0	3.3	5.1	8.6	4.9	2.8	2.7	3.0
6	7.4	11	8.8	7.5	3.5	4.0	5.6	9.3	6.3	3.5	3.9	4.0
7	7.3	9.8	9.0	7.6	3.0	5.1	5.0	9.0	5.7	3.8	3.9	3.5
8	7.1	8.4	8.4	7.1	3.2	5.3	e6.0	8.6	6.6	3.8	2.7	2.7
9	6.7	8.8	7.6	7.5	4.0	6.3	e6.5	8.9	7.3	2.5	3.7	4.2
10	7.0	8.7	8.2	7.9	2.8	6.1	e5.4	8.5	6.7	3.1	3.9	3.5
11	5.8	7.9	9.7	7.9	3.2	5.7	e5.6	7.5	7.3	3.5	2.7	2.8
12	6.4	7.7	15	7.0	3.8	6.5	e6.3	8.1	7.5	2.7	3.4	4.0
13	6.1	7.9	18	7.5	2.6	6.4	5.2	7.7	6.7	3.8	4.4	3.4
14	5.2	7.1	18	7.5	3.3	5.8	6.0	6.4	6.7	3.8	3.8	2.5
15	6.0	7.5	17	6.5	3.7	6.4	8.2	7.1	7.0	2.9	4.4	3.8
16	6.3	6.7	15	6.4	2.5	5.9	9.0	6.8	6.1	4.0	5.7	3.1
17	5.4	6.6	13	6.7	3.0	5.9	9.2	5.6	5.6	4.0	5.1	2.3
18	5.9	7.0	12	5.9	3.8	6.2	9.7	6.2	6.2	3.1	5.5	17
19	6.3	6.4	11	5.4	2.4	5.1	9.7	6.3	5.7	4.4	6.1	30
20	5.2	6.5	9.6	5.9	3.1	5.4	9.5	5.6	4.5	4.0	5.2	30
21	5.8	8.1	8.7	5.3	3.5	5.8	9.0	5.0	5.4	3.2	5.3	28
22	6.0	8.6	8.6	4.6	2.2	4.6	8.5	5.8	4.6	4.5	5.8	26
23	5.8	9.1	8.1	5.4	2.9	5.3	7.9	5.3	4.9	4.0	4.9	23
24	6.1	10	8.0	4.9	3.5	5.6	7.0	4.7	5.0	3.1	4.7	19
25	6.3	9.8	7.6	3.9	2.2	4.9	7.0	5.6	3.8	4.2	5.4	16
26	6.3	8.5	9.7	5.1	2.9	5.2	7.2	5.2	4.7	3.8	4.6	13
27	5.9	9.0	11	5.1	3.3	5.8	6.7	4.5	4.5	2.9	4.3	11
28	8.1	9.1	10	3.7	2.2	5.1	6.2	5.6	3.4	4.2	5.0	11
29	12	8.4	11	4.4	3.0	5.2	7.2	5.3	e4.8	3.5	4.3	10
30	14	9.0	10	4.7	---	5.8	7.2	4.7	e4.9	2.7	3.8	10
31	15	---	9.7	3.3	---	5.2	---	5.9	---	4.0	4.7	---
TOTAL	231.9	276.6	330.8	194.0	92.7	160.6	206.5	207.2	168.9	112.2	133.8	302.0
MEAN	7.48	9.22	10.7	6.26	3.20	5.18	6.88	6.68	5.63	3.62	4.32	10.1
MAX	15	16	18	8.4	4.2	6.5	9.7	9.3	7.5	5.0	6.1	30
MIN	5.2	6.4	7.6	3.3	2.2	2.3	4.8	4.5	3.4	2.5	2.7	2.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	3.50	4.50	7.14	5.15	3.97	7.16	8.75	6.97	6.86	4.00	3.87	4.59
MAX	7.48	9.22	10.7	7.23	4.49	11.5	9.97	10.6	12.4	5.54	7.15	10.1
(WY)	2004	2004	2004	2003	2001	2003	2003	2002	2003	2003	2003	2004
MIN	1.49	1.23	2.62	3.01	3.20	5.18	6.88	4.65	4.34	2.47	1.51	1.25
(WY)	2002	2002	2002	2002	2004	2004	2004	2001	2001	2002	2002	2002

e Estimated.

SWATARA CREEK BASIN

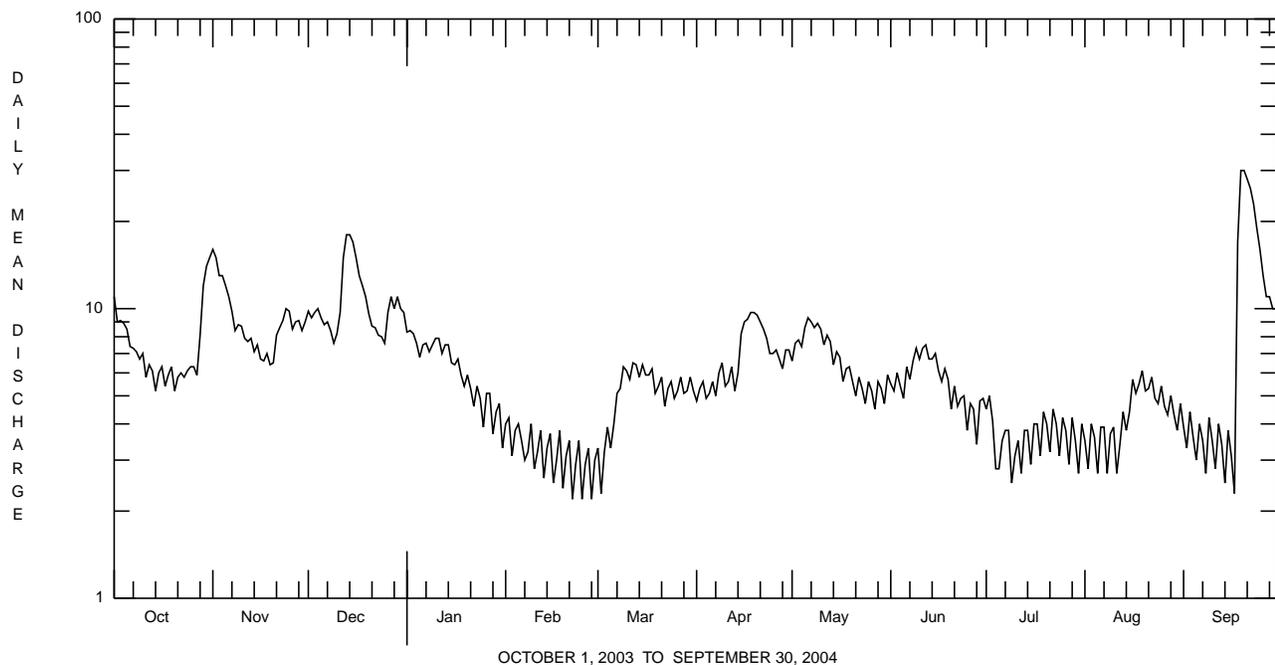
403542076263201 ROWE DRAINAGE TUNNEL, SITE E2-244, NR JOLIETT, PA--Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	3002.2		2417.2			
ANNUAL MEAN	8.23		6.60		5.59	
HIGHEST ANNUAL MEAN					7.22	
LOWEST ANNUAL MEAN					4.01	
HIGHEST DAILY MEAN	30	Mar 23	30	Sep 19,20	30	Mar 23 2003
LOWEST DAILY MEAN	2.9	Feb 19,22, Aug 3	2.2	Feb 22,25,28	0.59	Nov 23 2001 ^a
ANNUAL SEVEN-DAY MINIMUM	3.4	Feb 19	2.7	Feb 22	1.00	Nov 17 2001
MAXIMUM PEAK FLOW			31	Sep 19	31	Sep 19 2004
MAXIMUM PEAK STAGE			2.32	Sep 19	2.32	Sep 19 2004
INSTANTANEOUS LOW FLOW			2.2	Feb 22 ^b	0.59	Nov 17 2001 ^c
10 PERCENT EXCEEDS	13		10		10	
50 PERCENT EXCEEDS	7.2		5.8		4.7	
90 PERCENT EXCEEDS	4.2		3.2		1.9	

^a Also Sept. 13, 2002.

^b Also Feb. 23-26, 28, 29, Sept. 16, 17.

^c Also Nov. 18, 20-24, 2001, Sept. 12-15, 19, 2002.



SWATARA CREEK BASIN

403542076263201 ROWE DRAINAGE TUNNEL, SITE E2-244, NR JOLIETT, PA--Continued
(Swatara Creek Project)

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1999 to current year.

pH: April 1999 to current year.

WATER TEMPERATURE: April 1999 to current year.

INSTRUMENTATION.--Water-quality monitor (in situ system).

REMARKS.--Specific conductance records rated good except for periods Dec. 30 to Feb. 20, and Mar. 4-29, which are fair. pH records rated good except for period Mar. 4 to June 7, which is fair and Aug. 3 to Sept. 7, which is poor. The pH probe is subject to fouling from precipitation of iron, adhesion of lime on electrodes, and occasional burial by sediment. Water temperature records rated good. Interruptions in the record were due to malfunctions of the instrumentation. Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods. Instantaneous discharge data provided by the Pottsville Mining office of the Pennsylvania Department of Environmental Protection. Other data for this project presented in tables on pages 439-497. Figure 10 shows the location of sites sampled as part of the Swatara Creek Project. Abbreviations used: E, estimated.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 904 microsiemens, Sept. 28, 2002; minimum, 141 microsiemens, Aug. 13, 1999.

pH: Maximum, 7.0, June 26, 27, 1999; minimum, 3.4, Sept. 8, 17, 1999.

WATER TEMPERATURE: Maximum, 14.5°C, Sept. 30, 1999; minimum, 10.0°C, Dec. 17, 2000.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 613 microsiemens, Sept. 18; minimum, 203 microsiemens, Sept. 22.

pH: Maximum, 6.2, Sept. 7-11; minimum, 4.6, Oct. 16, Nov. 2-4, Sept. 18.

WATER TEMPERATURE: Maximum, 13.5°C, July 12, Sept. 18; minimum 11.0°C, several days in Feb.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Oxi- da- tion re- poten- tial, mV (00090)	Tur- bi- dity, water, unfltrd field, NTU (61028)	Dis- sol- ved oxy- gen, field, mg/L (00300)	Dis- sol- ved oxy- gen, per- cent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)
OCT										
26...	2100	1028	89203	6.3	--	--	--	--	5.1	4.7
27...	0500	1028	89203	5.4	--	--	--	--	5.0	5.9
27...	1500	1028	89203	6.1	--	--	--	--	5.3	5.7
28...	0500	1028	89203	6.5	--	--	--	--	5.2	4.7
28...	0900	1028	89203	7.7	--	--	--	--	5.1	4.8
28...	1430	1028	89203	8.6	438	26	9.7	90	4.9	4.9
NOV										
19...	0800	1028	89203	7.0	--	--	--	--	5.3	4.1
19...	1100	1028	89203	5.8	--	--	--	--	5.6	4.0
19...	1700	1028	89203	6.1	--	--	--	--	5.7	5.7
20...	0200	1028	89203	6.1	--	--	--	--	5.7	5.5
24...	1430	1028	89203	10	440	32	10.0	92	5.3	5.1
DEC										
30...	1500	1028	89203	10	374	26	9.2	85	5.2	5.1
MAR										
01...	1500	1028	89203	4.0	403	15	10.5	98	5.4	5.3
APR										
12...	1700	1028	89203	6.3	--	--	--	--	5.4	5.2
13...	1100	1028	89203	6.1	--	--	--	--	5.4	5.1
13...	2300	1028	89203	6.1	--	--	--	--	5.4	5.8
14...	1400	1028	89203	6.5	--	--	--	--	5.5	5.7
14...	1700	1028	89203	7.0	--	--	--	--	5.4	5.6
20...	1345	1028	89203	10	401	23	9.9	92	5.3	5.4
JUN										
02...	1415	1028	89203	5.6	340	11	9.8	91	5.5	6.2
JUL										
14...	0630	1028	89203	4.9	--	--	--	--	5.0	4.7
14...	1030	1028	89203	4.7	--	--	--	--	5.0	4.8
14...	1430	1028	89203	4.9	--	--	--	--	5.0	4.7
14...	1630	1028	89203	4.9	--	--	--	--	5.0	5.0
14...	1830	1028	89203	4.9	--	--	--	--	5.0	5.8
14...	2230	1028	89203	3.8	--	--	--	--	5.0	5.9
19...	1500	1028	89203	5.4	369	10	10.1	95	5.2	5.7
AUG										
12...	1200	1028	89203	4.9	--	--	--	--	5.3	4.3
12...	1500	1028	89203	3.8	--	--	--	--	5.3	5.7
12...	2100	1028	89203	4.9	--	--	--	--	5.4	4.4
13...	0000	1028	89203	5.1	--	--	--	--	5.3	4.5
13...	1200	1028	89203	5.4	--	--	--	--	5.1	4.3
SEP										
13...	1430	1028	89203	3.6	316	8.0	10.4	97	5.9	6.0

SWATARA CREEK BASIN

403542076263201 ROWE DRAINAGE TUNNEL, SITE E2-244, NR JOLIETT, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Specif. conduc- tance, wat unfltrd µS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Calcium water unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)	Magnes- ium, water, unfltrd recover- able, mg/L (00927)	Potas- sium, water, fltrd, mg/L (00935)	Potas- sium, water, unfltrd recover- able, mg/L (00937)	Sodium, water, fltrd, mg/L (00930)	Sodium, water, unfltrd recover- able, mg/L (00929)
OCT										
26...	276	12.1	12.7	12.8	20.6	20.9	1.20	1.20	2.90	3.30
27...	274	11.9	10.0	10.2	18.6	19.1	1.10	1.10	1.10	1.90
27...	258	11.8	11.6	11.7	27.0	27.6	1.30	1.30	2.00	3.40
28...	308	11.6	13.4	13.5	28.8	29.0	1.30	1.30	2.80	3.80
28...	335	11.8	12.5	12.5	25.3	25.4	1.30	1.30	3.80	2.80
28...	338	11.8	--	--	--	--	--	--	--	--
NOV										
19...	272	12.1	9.60	9.70	21.0	21.4	1.00	1.00	1.70	1.70
19...	254	11.9	8.80	9.00	17.0	17.6	.900	.900	1.60	1.70
19...	243	11.8	10.6	10.9	18.5	19.0	1.00	1.00	1.60	1.70
20...	282	11.7	11.2	11.6	19.0	19.7	1.00	1.00	1.70	1.70
24...	259	11.9	9.50	9.60	17.1	17.2	.900	.900	3.40	3.50
DEC										
30...	262	11.8	10.0	9.80	19.0	18.8	1.20	1.20	3.30	3.20
MAR										
01...	335	12.1	14.6	14.7	24.6	24.7	1.30	1.30	3.10	3.40
APR										
12...	265	12.0	12.7	12.8	21.5	21.6	1.30	1.30	3.30	3.40
13...	270	11.9	12.6	12.5	20.0	19.9	1.20	1.30	3.20	3.00
13...	264	11.7	10.5	10.7	21.3	21.8	1.20	1.30	3.30	3.40
14...	297	11.6	11.7	11.6	26.3	26.7	1.40	1.40	3.60	3.50
14...	302	11.6	11.7	11.7	26.5	26.6	1.40	1.40	3.60	3.80
20...	269	12.0	11.5	11.3	18.8	18.5	1.20	1.20	3.70	3.60
JUN										
02...	256	12.0	10.5	10.4	21.0	21.2	1.20	1.20	3.20	3.10
JUL										
14...	431	12.2	18.6	18.1	38.2	35.5	1.20	1.20	3.90	3.60
14...	426	12.2	18.8	17.8	37.3	35.3	1.20	1.20	3.90	3.60
14...	420	12.2	16.5	16.5	32.4	32.4	1.20	1.20	3.30	3.20
14...	417	12.2	17.1	17.5	34.3	35.3	1.20	1.20	3.60	3.60
14...	409	12.3	14.5	14.3	36.5	37.2	1.10	1.20	3.70	3.60
14...	409	11.9	15.0	14.6	40.3	39.4	1.20	1.20	3.70	3.70
19...	364	12.2	14.4	14.5	25.8	27.1	1.20	1.30	3.10	3.40
AUG										
12...	331	12.2	15.0	14.9	25.3	25.7	1.30	1.30	3.50	3.50
12...	327	12.2	11.5	11.9	24.3	24.9	1.10	1.20	3.40	3.30
12...	321	12.2	15.2	15.0	27.3	27.6	1.40	1.30	3.70	3.60
13...	333	12.2	14.1	14.9	25.9	26.6	1.30	1.30	3.40	3.60
13...	372	12.2	16.3	16.3	32.5	32.8	1.40	1.40	3.70	3.80
SEP										
13...	308	12.1	13.8	13.8	24.6	25.2	1.20	1.20	3.90	3.80

SWATARA CREEK BASIN

403542076263201 ROWE DRAINAGE TUNNEL, SITE E2-244, NR JOLIETT, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Alum- inum, water, fltrd, µg/L (01106)	Alum- inum, water, recover- able, µg/L (01105)	Bromine water unfltrd mg/L (71871)
OCT										
26...	.900	3.20	<.010	115	.010	<.030	<.020	200	600	.060
27...	7.90	3.31	<.010	97.7	<.010	<.030	<.020	<100	400	.030
27...	5.20	3.10	<.010	134	.010	<.030	<.020	<100	700	.050
28...	1.10	3.26	<.010	153	.010	<.030	<.020	700	1500	.060
28...	1.90	3.21	<.010	133	.010	<.030	<.020	500	1100	.060
28...	2.80	--	--	--	--	--	--	--	--	--
NOV										
19...	.000	5.82	<.010	113	<.010	<.030	<.020	200	500	.040
19...	.000	5.77	<.010	93.8	<.010	<.030	<.020	<100	400	.050
19...	4.80	8.68	<.010	106	<.010	<.030	<.020	600	600	.090
20...	3.60	6.93	<.010	111	<.010	<.030	<.020	600	700	.060
24...	3.00	3.49	<.010	106	<.010	<.030	<.020	600	800	.080
DEC										
30...	2.40	3.45	<.010	109	<.010	<.030	<.020	600	800	.120
MAR										
01...	3.50	3.08	--	142	--	--	--	500	900	--
APR										
12...	2.30	3.08	<.010	119	.020	<.030	<.020	<100	1100	.020
13...	2.30	3.06	<.010	113	.020	<.030	<.020	<100	1900	.020
13...	7.50	3.36	<.010	110	.010	<.030	<.020	<100	400	.010
14...	4.50	3.47	.010	134	.020	<.030	<.020	<100	1500	.020
14...	3.30	3.50	<.010	134	.020	<.030	<.020	<100	1600	.020
20...	4.30	3.64	--	110	--	--	--	500	800	--
JUN										
02...	14.8	3.48	--	108	--	--	--	200	800	--
JUL										
14...	1.20	3.57	--	168	.020	--	--	300	700	--
14...	.800	3.20	--	165	.020	--	--	300	800	--
14...	1.40	2.95	--	154	.020	--	--	200	600	--
14...	1.50	3.20	--	164	.010	--	--	200	700	--
14...	5.20	3.59	--	159	.010	--	--	<100	600	--
14...	5.60	3.62	--	171	.020	--	--	<100	700	--
19...	4.90	3.24	--	140	.030	--	--	300	--	--
AUG										
12...	.000	3.50	<.010	131	.020	<.030	<.020	500	900	.090
12...	3.20	3.80	<.010	113	.020	<.030	<.020	<100	600	.060
12...	.000	3.65	<.010	135	.010	<.030	<.020	500	800	.070
13...	.000	3.57	<.010	132	.020	<.030	<.020	500	900	.080
13...	.000	3.53	<.010	158	.030	<.030	<.020	600	1000	.100
SEP										
13...	11.6	3.93	.010	125	.050	<.030	<.020	<100	700	.030

SWATARA CREEK BASIN

403542076263201 ROWE DRAINAGE TUNNEL, SITE E2-244, NR JOLIETT, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover -able, µg/L (01045)	Mangan- ese, water, fltrd, µg/L (01056)	Mangan- ese, water, unfltrd recover -able, µg/L (01055)	Nickel, water, fltrd, µg/L (01065)	Nickel, water, unfltrd recover -able, µg/L (01067)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)
OCT								
26...	1300	5200	1940	1940	74.0	75.0	194	188
27...	2200	5860	1750	1770	57.0	57.0	126	127
27...	3200	6330	1740	1760	70.0	70.0	161	159
28...	3480	8340	1920	1950	90.0	93.0	229	230
28...	3300	5980	1850	1880	88.0	86.0	216	226
28...	--	--	--	--	--	--	--	--
NOV								
19...	3190	4830	1580	1610	58.0	52.0	152	160
19...	3030	4760	1600	1640	57.0	58.0	136	135
19...	320	2750	1730	1770	65.0	69.0	165	172
20...	240	2700	1780	1830	69.0	69.0	188	192
24...	2620	4210	1560	1590	60.0	69.0	218	182
DEC								
30...	2840	4510	1630	1620	74.0	73.0	210	204
MAR								
01...	4720	5710	2080	2090	75.0	75.0	190	190
APR								
12...	1050	8450	1890	1900	70.0	70.0	160	165
13...	960	15000	1890	1910	70.0	70.0	160	160
13...	3140	5530	1790	1790	60.0	65.0	120	125
14...	3260	8870	1850	1860	75.0	75.0	165	170
14...	3360	9290	1870	1830	80.0	80.0	170	175
20...	4090	5340	1470	1470	75.0	75.0	205	205
JUN								
02...	7000	7740	1740	1760	60.0	60.0	115	115
JUL								
14...	2470	5980	1520	1510	95.0	85.0	230	215
14...	2660	7000	1560	1520	95.0	90.0	225	210
14...	2350	5860	1450	1450	85.0	80.0	200	195
14...	2680	6630	1500	1490	85.0	85.0	200	210
14...	3920	7330	1410	1420	70.0	70.0	145	145
14...	4540	7600	1360	1380	75.0	75.0	160	145
19...	4470	5050	1880	1900	85.0	85.0	106	111
AUG								
12...	130	8470	1570	1590	80.0	80.0	195	195
12...	110	8510	1440	1480	60.0	60.0	105	110
12...	180	6950	1610	1590	80.0	85.0	210	210
13...	110	7950	1570	1580	75.0	80.0	180	190
13...	110	7540	1620	1640	85.0	90.0	205	210
SEP								
13...	7090	7970	2000	2020	65.0	60.0	135	140

SWATARA CREEK BASIN

403542076263201 ROWE DRAINAGE TUNNEL, SITE E2-244, NR JOLIETT, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	274	261	270	262	256	258	272	263	268	262	246	250
2	262	257	260	256	253	254	264	248	255	268	247	261
3	279	258	271	254	240	244	266	247	257	268	265	266
4	285	279	283	256	253	254	266	261	263	268	249	262
5	285	281	282	259	241	253	264	246	257	288	250	261
6	284	259	269	263	259	260	262	244	249	294	288	291
7	288	259	275	268	246	261	263	261	262	293	285	289
8	288	259	277	253	249	251	269	250	263	285	260	268
9	289	259	275	275	252	272	264	247	250	276	258	266
10	290	286	288	277	272	274	270	263	266	277	273	274
11	287	257	264	275	252	263	365	269	321	273	270	271
12	290	257	280	275	252	261	361	283	320	271	253	256
13	289	260	283	281	261	277	283	267	273	274	255	268
14	264	251	257	281	257	266	267	256	261	274	272	273
15	318	264	299	284	280	282	256	249	253	274	259	266
16	323	314	320	281	260	270	250	247	248	277	259	267
17	318	293	305	278	258	267	247	236	243	279	276	278
18	302	288	295	281	273	277	254	236	246	276	262	272
19	302	297	300	279	241	262	258	254	255	268	259	261
20	297	274	283	309	271	289	258	243	250	281	268	278
21	281	270	275	307	282	294	261	243	253	282	278	281
22	284	265	273	282	249	265	265	261	263	278	271	273
23	283	259	271	264	245	252	266	263	264	280	273	277
24	284	264	277	264	258	261	296	264	276	285	279	282
25	284	282	283	263	259	261	286	280	283	281	267	274
26	282	276	279	262	244	246	289	276	283	291	267	282
27	290	254	268	266	246	262	276	266	271	291	288	290
28	342	290	325	267	262	263	266	250	257	289	266	274
29	325	287	296	273	258	262	263	248	256	291	265	277
30	289	263	280	275	259	268	264	260	261	294	291	293
31	265	256	261	---	---	---	262	261	262	294	272	282
MONTH	342	251	281	309	240	264	365	236	264	294	246	273
	FEBRUARY			MARCH			APRIL			MAY		
1	297	270	280	---	---	---	280	255	260	260	253	255
2	299	297	298	---	---	---	285	258	277	275	253	272
3	298	267	282	---	---	---	286	283	284	295	272	290
4	301	266	282	---	---	---	283	256	267	295	271	278
5	304	301	303	340	294	312	280	255	269	283	268	279
6	304	279	291	305	282	293	278	272	275	280	273	277
7	300	275	288	304	274	298	272	243	254	274	255	266
8	321	275	292	293	270	280	---	---	---	268	252	257
9	325	321	324	293	288	291	---	---	---	268	266	268
10	325	300	314	289	261	277	---	---	---	273	262	268
11	323	295	304	269	258	261	---	---	---	262	249	252
12	328	323	327	281	268	277	---	---	---	271	249	268
13	327	305	318	282	274	279	273	263	267	272	249	261
14	321	298	305	278	257	266	308	263	289	251	229	230
15	331	321	327	283	256	278	310	280	296	255	229	249
16	331	316	326	284	257	274	280	253	265	261	237	254
17	316	303	309	284	256	269	254	244	248	242	237	240
18	330	314	325	289	283	286	264	243	254	268	239	257
19	330	313	324	289	262	271	270	260	264	269	267	268
20	---	---	---	288	261	275	270	268	270	269	244	261
21	---	---	---	307	288	297	271	269	270	265	242	246
22	---	---	---	309	289	296	270	268	269	267	264	266
23	---	---	---	314	290	305	270	267	269	265	239	256
24	---	---	---	317	313	315	270	247	254	258	236	240
25	---	---	---	315	289	302	272	247	262	264	258	262
26	---	---	---	310	288	295	281	268	274	268	232	260
27	---	---	---	312	310	311	290	270	281	260	232	253
28	---	---	---	311	290	305	291	271	277	288	258	281
29	---	---	---	291	284	286	291	277	288	290	279	288
30	---	---	---	289	285	288	285	259	279	279	270	272
31	---	---	---	286	258	274	---	---	---	283	271	280
MONTH	331	266	306	340	256	287	310	243	270	295	229	263

SWATARA CREEK BASIN

403542076263201 ROWE DRAINAGE TUNNEL, SITE E2-244, NR JOLIETT, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	277	264	274	---	---	---	357	352	354	325	321	322
2	269	256	259	---	---	---	363	357	360	322	296	306
3	276	269	274	316	294	314	369	363	366	324	296	317
4	281	274	276	294	282	284	370	328	360	324	304	319
5	281	271	276	306	278	283	355	347	352	304	295	297
6	305	271	288	317	275	297	369	353	365	325	296	318
7	317	305	310	324	317	321	364	341	359	326	289	312
8	314	304	308	321	315	318	341	326	333	290	287	289
9	304	290	296	316	277	294	342	325	334	331	290	324
10	290	268	274	314	275	291	342	331	340	335	303	320
11	283	266	277	315	304	312	331	313	316	331	301	305
12	283	277	280	336	250	287	333	312	323	335	329	332
13	279	259	267	439	336	404	401	333	369	333	300	318
14	276	257	266	436	409	423	402	372	391	303	297	300
15	276	273	275	427	410	417	372	341	354	333	298	328
16	276	252	264	440	421	430	341	323	332	327	286	313
17	272	250	254	421	387	406	324	292	305	286	273	282
18	278	272	275	387	360	372	307	289	298	613	203	423
19	280	261	278	365	358	362	307	303	306	363	266	296
20	261	255	257	362	343	359	304	275	288	266	235	252
21	284	254	276	344	330	336	303	274	288	238	231	234
22	284	257	271	349	330	345	312	303	309	232	230	231
23	296	261	283	347	336	345	313	291	304	237	229	233
24	300	296	298	336	325	328	305	291	294	241	237	239
25	299	276	280	352	334	349	314	305	310	247	241	244
26	297	279	284	351	339	348	316	305	313	254	247	251
27	306	297	303	339	321	327	305	293	297	258	254	256
28	306	296	303	354	324	351	315	295	310	293	256	267
29	---	---	---	357	329	350	316	302	313	314	287	306
30	---	---	---	330	328	329	302	288	293	312	288	300
31	---	---	---	353	328	346	322	298	316	---	---	---
MONTH	317	250	280	440	250	342	402	274	327	613	203	294
YEAR	613	203	287									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.7	5.4	5.4	4.8	4.8	4.8	5.2	5.2	5.2	5.8	5.5	5.8
2	5.7	5.6	5.7	4.8	4.6	4.7	5.4	5.2	5.4	5.8	5.4	5.5
3	5.7	5.3	5.4	4.8	4.6	4.8	5.5	5.2	5.3	5.5	5.4	5.5
4	5.3	5.2	5.3	5.4	4.6	4.7	5.3	5.2	5.2	5.9	5.5	5.6
5	5.3	5.2	5.3	5.6	5.3	5.4	5.5	5.3	5.3	5.9	5.4	5.9
6	5.6	5.2	5.6	5.4	5.4	5.4	5.6	5.4	5.6	5.4	5.4	5.4
7	5.6	5.0	5.1	5.7	5.4	5.4	5.4	5.3	5.3	5.5	5.4	5.5
8	5.5	5.0	5.1	5.8	5.6	5.8	5.5	5.3	5.3	5.8	5.5	5.7
9	5.5	4.9	5.1	5.8	5.3	5.4	5.6	5.4	5.5	5.7	5.3	5.7
10	5.0	4.9	5.0	5.4	5.3	5.4	5.5	5.3	5.4	5.3	5.2	5.3
11	5.5	5.0	5.5	5.6	5.4	5.5	5.4	4.7	5.1	5.3	5.3	5.3
12	5.5	4.8	4.9	5.6	5.2	5.6	5.2	5.0	5.1	5.5	5.3	5.5
13	5.2	4.8	4.9	5.2	5.2	5.2	5.3	5.0	5.2	5.6	5.3	5.3
14	5.3	5.2	5.3	5.4	5.2	5.4	5.1	5.0	5.1	5.4	5.3	5.3
15	5.2	4.7	4.9	5.4	5.3	5.3	5.2	5.1	5.1	5.6	5.4	5.5
16	4.8	4.6	4.7	5.4	5.3	5.4	5.3	5.2	5.2	5.6	5.4	5.6
17	5.2	4.8	5.0	5.5	5.2	5.4	5.5	5.2	5.3	5.4	5.3	5.4
18	5.3	4.8	5.2	5.4	5.2	5.3	5.5	5.2	5.3	5.5	5.4	5.4
19	4.9	4.8	4.8	5.7	5.3	5.7	5.3	5.2	5.3	5.6	5.5	5.6
20	5.3	4.8	5.2	5.7	5.0	5.6	5.6	5.3	5.3	5.5	5.4	5.4
21	5.3	5.0	5.2	5.3	5.1	5.2	5.6	5.2	5.4	5.5	5.4	5.4
22	5.4	5.0	5.3	5.6	5.2	5.3	5.3	5.1	5.2	5.7	5.5	5.6
23	5.4	5.0	5.1	5.6	5.2	5.6	5.2	5.0	5.1	5.7	5.5	5.6
24	5.4	5.1	5.2	5.3	5.2	5.2	5.1	5.0	5.1	5.5	5.5	5.5
25	5.1	5.0	5.1	5.4	5.3	5.3	5.2	5.1	5.2	5.6	5.5	5.6
26	5.1	5.0	5.1	5.7	5.4	5.7	5.2	4.9	5.0	5.6	5.6	5.6
27	5.4	5.0	5.3	5.7	5.3	5.4	5.1	5.0	5.1	5.6	5.5	5.5
28	5.3	4.8	5.0	5.4	5.4	5.4	5.3	5.1	5.2	5.5	5.5	5.5
29	4.8	4.8	4.8	5.6	5.4	5.6	5.3	5.2	5.2	5.6	5.5	5.6
30	4.9	4.8	4.8	5.6	5.2	5.3	5.5	5.2	5.2	5.5	5.5	5.5
31	4.9	4.8	4.9	---	---	---	5.5	5.5	5.5	5.5	5.4	5.4
MAX	5.7	5.6	5.7	5.8	5.6	5.8	5.6	5.5	5.6	5.9	5.6	5.9
MIN	4.8	4.6	4.7	4.8	4.6	4.7	5.1	4.7	5.0	5.3	5.2	5.3

SWATARA CREEK BASIN

403542076263201 ROWE DRAINAGE TUNNEL, SITE E2-244, NR JOLIETT, PA--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN									
FEBRUARY			MARCH			APRIL			MAY			
1	5.5	5.4	5.5	---	---	---	6.0	5.6	6.0	5.2	5.1	5.2
2	5.5	5.4	5.5	---	---	---	5.9	5.5	5.6	5.2	4.9	4.9
3	5.4	5.4	5.4	---	---	---	5.6	5.5	5.5	4.9	4.9	4.9
4	5.4	5.4	5.4	---	---	---	5.8	5.5	5.8	5.0	4.9	5.0
5	5.4	5.4	5.4	6.0	5.5	6.0	5.8	5.3	5.5	5.0	4.8	4.9
6	5.4	5.4	5.4	6.0	5.6	6.0	5.4	5.3	5.4	4.9	4.8	4.8
7	5.4	5.4	5.4	6.0	5.6	5.7	5.7	5.4	5.6	4.9	4.8	4.9
8	5.4	5.4	5.4	6.1	5.7	6.0	---	---	---	5.0	4.9	5.0
9	5.4	5.4	5.4	5.7	5.7	5.7	---	---	---	5.0	4.9	4.9
10	5.4	5.3	5.4	6.0	5.7	5.7	---	---	---	4.9	4.8	4.9
11	5.4	5.3	5.4	6.0	5.8	5.9	---	---	---	5.0	4.9	5.0
12	5.4	5.4	5.4	5.9	5.7	5.7	---	---	---	5.0	4.9	5.0
13	5.4	5.4	5.4	5.7	5.6	5.7	5.4	5.4	5.4	5.5	4.9	4.9
14	5.4	5.3	5.4	5.9	5.7	5.8	5.5	5.4	5.5	5.7	5.4	5.7
15	5.4	5.4	5.4	5.8	5.4	5.5	5.4	5.1	5.2	5.7	5.4	5.5
16	5.4	5.3	5.4	5.8	5.4	5.5	5.5	5.2	5.4	5.8	5.5	5.5
17	5.4	5.3	5.3	5.9	5.5	5.8	5.5	5.4	5.5	5.8	5.7	5.8
18	5.4	5.3	5.4	5.5	5.5	5.5	5.6	5.4	5.5	5.7	5.3	5.4
19	5.4	5.3	5.3	5.8	5.5	5.7	5.4	5.3	5.4	5.5	5.3	5.4
20	---	---	---	5.9	5.6	5.8	5.3	5.3	5.3	5.7	5.4	5.4
21	---	---	---	5.6	5.5	5.6	5.3	5.3	5.3	5.7	5.3	5.7
22	---	---	---	5.7	5.6	5.7	5.3	5.2	5.3	5.3	5.2	5.2
23	---	---	---	5.8	5.6	5.7	5.3	5.3	5.3	5.5	5.2	5.3
24	---	---	---	5.6	5.5	5.5	5.6	5.3	5.5	5.6	5.4	5.6
25	---	---	---	5.5	5.5	5.5	5.6	5.2	5.3	5.4	5.2	5.2
26	---	---	---	5.7	5.5	5.7	5.2	5.2	5.2	5.2	5.2	5.2
27	---	---	---	5.7	5.6	5.7	5.4	5.2	5.2	5.5	5.2	5.4
28	---	---	---	5.7	5.6	5.6	5.4	5.0	5.4	5.6	5.5	5.5
29	---	---	---	5.7	5.5	5.6	5.0	4.9	4.9	5.6	5.5	5.5
30	---	---	---	5.7	5.6	5.6	5.1	4.9	4.9	5.6	5.5	5.6
31	---	---	---	6.0	5.7	5.7	---	---	---	5.6	5.5	5.6
MAX	5.5	5.4	5.5	6.1	5.8	6.0	6.0	5.6	6.0	5.8	5.7	5.8
MIN	5.4	5.3	5.3	5.5	5.4	5.5	5.0	4.9	4.9	4.9	4.8	4.8

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	5.5	5.4	5.5	---	---	---	5.5	5.5	5.5	5.9	5.9	5.9
2	5.6	5.4	5.5	---	---	---	5.5	5.5	5.5	5.9	5.8	5.9
3	5.7	5.6	5.7	5.8	5.6	5.7	5.7	5.5	5.5	6.0	5.8	5.9
4	5.7	5.6	5.6	6.0	5.8	5.9	6.0	5.6	5.7	6.0	5.9	6.0
5	5.7	5.6	5.6	6.0	5.6	5.9	6.1	6.0	6.0	6.0	5.8	6.0
6	5.7	5.6	5.7	5.8	5.5	5.6	6.0	5.3	5.5	6.0	5.9	6.0
7	5.9	5.6	5.8	5.5	5.4	5.5	5.5	5.3	5.4	6.2	6.0	6.1
8	5.9	5.5	5.6	5.4	5.4	5.4	5.6	5.5	5.5	6.2	6.2	6.2
9	5.6	5.5	5.6	5.4	5.4	5.4	5.7	5.3	5.4	6.2	5.6	5.7
10	5.9	5.6	5.9	5.5	5.3	5.4	5.4	5.3	5.4	6.2	5.8	5.8
11	5.9	5.6	5.6	5.3	5.1	5.2	5.5	5.4	5.4	6.2	5.6	6.1
12	5.7	5.5	5.6	5.2	5.1	5.2	5.7	5.2	5.4	5.6	5.5	5.6
13	5.8	5.6	5.8	5.3	5.0	5.2	5.3	5.0	5.1	6.1	5.6	5.6
14	5.8	5.5	5.8	5.0	4.9	5.0	5.2	5.0	5.0	6.0	5.9	6.0
15	5.6	5.4	5.5	5.1	4.9	5.0	5.4	5.2	5.3	5.9	5.2	5.3
16	5.8	5.6	5.7	5.2	5.0	5.2	5.3	5.0	5.1	5.7	5.3	5.3
17	5.8	5.5	5.8	5.2	5.0	5.1	5.3	5.1	5.3	5.7	5.6	5.7
18	5.5	5.4	5.4	5.2	5.0	5.1	5.4	5.3	5.4	5.7	4.6	5.0
19	5.4	5.4	5.4	5.3	5.2	5.2	5.5	5.4	5.5	5.2	5.0	5.0
20	5.6	5.4	5.6	5.3	5.1	5.2	5.6	5.5	5.6	5.3	5.2	5.2
21	5.6	5.4	5.5	5.2	5.1	5.2	5.6	5.5	5.5	5.4	5.2	5.3
22	5.5	5.4	5.4	5.3	5.1	5.2	5.6	5.5	5.6	5.2	5.2	5.2
23	5.6	5.5	5.5	5.3	5.2	5.3	5.7	5.6	5.6	5.3	5.2	5.2
24	5.5	5.4	5.4	5.4	5.2	5.3	5.7	5.7	5.7	5.3	5.2	5.2
25	5.4	5.3	5.4	5.5	5.1	5.4	5.7	5.6	5.7	5.2	5.2	5.2
26	5.5	5.4	5.5	5.2	5.1	5.2	5.7	5.5	5.6	5.2	5.1	5.2
27	5.6	5.5	5.6	5.4	5.2	5.3	5.8	5.6	5.6	5.2	5.1	5.1
28	5.6	5.6	5.6	5.4	5.3	5.4	5.8	5.8	5.8	5.1	5.0	5.1
29	---	---	---	5.4	5.4	5.4	5.8	5.7	5.8	5.0	4.9	4.9
30	---	---	---	5.4	5.4	5.4	5.8	5.8	5.8	4.9	4.9	4.9
31	---	---	---	5.5	5.4	5.5	5.9	5.8	5.9	---	---	---
MAX	5.9	5.6	5.9	6.0	5.8	5.9	6.1	6.0	6.0	6.2	6.2	6.2
MIN	5.4	5.3	5.4	5.0	4.9	5.0	5.2	5.0	5.0	4.9	4.6	4.9

YEAR	MAX	MINIMUM	6.2	MINIMUM	4.8
	MIN	MAXIMUM	6.2	MINIMUM	4.6
	MEDIAN	MAXIMUM	6.2	MINIMUM	4.7

SWATARA CREEK BASIN

403542076263201 ROWE DRAINAGE TUNNEL, SITE E2-244, NR JOLIETT, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.5	11.5
2	12.0	11.5	12.0	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	11.5
3	12.0	11.5	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	12.0	12.0
4	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	12.0
5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	11.5
6	12.0	11.5	12.0	12.0	12.0	12.0	11.5	11.5	11.5	12.0	11.5	11.5
7	12.0	11.5	12.0	12.0	11.5	12.0	12.0	11.5	11.5	11.5	11.5	11.5
8	12.0	12.0	12.0	11.5	11.5	11.5	12.0	11.5	11.5	11.5	11.5	11.5
9	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	11.5	11.5	11.5	11.5
10	12.0	12.0	12.0	12.0	11.5	12.0	12.0	12.0	12.0	11.5	11.5	11.5
11	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	11.5	12.0
12	12.0	12.0	12.0	12.0	11.5	12.0	11.5	11.5	11.5	12.0	11.5	11.5
13	12.0	12.0	12.0	12.0	11.5	12.0	11.5	11.5	11.5	12.0	11.5	11.5
14	12.0	12.0	12.0	12.0	11.5	11.5	11.5	11.5	11.5	12.0	11.5	12.0
15	12.0	11.5	12.0	12.0	12.0	12.0	11.5	11.5	11.5	12.0	11.5	11.5
16	12.0	12.0	12.0	12.0	11.5	12.0	11.5	11.5	11.5	12.0	11.5	11.5
17	12.0	11.5	12.0	12.0	11.5	12.0	11.5	11.5	11.5	12.0	12.0	12.0
18	12.0	11.5	12.0	12.0	12.0	12.0	11.5	11.5	11.5	12.0	11.5	12.0
19	12.0	12.0	12.0	12.0	11.5	12.0	11.5	11.5	11.5	12.0	11.5	11.5
20	12.0	11.5	11.5	12.0	11.5	11.5	11.5	11.5	11.5	12.0	12.0	12.0
21	12.0	12.0	12.0	12.0	12.0	12.0	11.5	11.5	11.5	12.0	11.5	12.0
22	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	12.0	11.5	11.5	11.5
23	12.0	11.5	12.0	12.0	11.5	12.0	12.0	12.0	12.0	12.0	11.5	12.0
24	12.0	11.5	12.0	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	12.0
25	12.0	12.0	12.0	12.0	12.0	12.0	11.5	11.5	11.5	11.5	11.5	11.5
26	12.0	12.0	12.0	12.0	11.5	11.5	11.5	11.5	11.5	12.0	11.5	12.0
27	12.0	11.5	12.0	12.0	11.5	12.0	11.5	11.5	11.5	12.0	11.5	12.0
28	12.0	11.5	11.5	12.0	12.0	12.0	11.5	11.5	11.5	12.0	11.5	11.5
29	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	11.5	12.0	11.5	11.5
30	12.0	11.5	12.0	12.0	11.5	11.5	12.0	11.5	12.0	12.0	12.0	12.0
31	12.0	11.5	12.0	---	---	---	12.0	11.5	12.0	12.0	11.5	11.5
MONTH	12.0	11.5	12.0	12.0	11.5	11.9	12.0	11.5	11.6	12.0	11.5	11.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	12.0	11.5	11.5	12.0	12.0	12.0	12.0	11.5	12.0	12.0	12.0	12.0
2	12.0	12.0	12.0	12.0	11.5	11.5	12.0	11.5	12.0	12.0	12.0	12.0
3	12.0	11.0	11.5	---	---	---	12.0	12.0	12.0	12.0	12.0	12.0
4	12.0	11.5	11.5	---	---	---	12.0	11.5	12.0	12.0	11.5	11.5
5	12.0	11.5	12.0	12.0	11.5	12.0	12.0	11.5	11.5	12.0	11.5	12.0
6	12.0	11.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
7	12.0	11.0	11.5	12.0	11.5	12.0	12.0	11.5	12.0	12.0	12.0	12.0
8	11.5	11.0	11.5	12.0	11.5	11.5	---	---	---	12.0	11.5	12.0
9	12.0	11.5	12.0	12.0	12.0	12.0	---	---	---	12.0	12.0	12.0
10	12.0	11.5	11.5	12.0	11.5	12.0	---	---	---	12.0	12.0	12.0
11	11.5	11.5	11.5	12.0	11.5	11.5	---	---	---	12.0	12.0	12.0
12	12.0	11.5	12.0	12.0	11.5	12.0	---	---	---	12.0	12.0	12.0
13	12.0	11.5	11.5	12.0	11.5	12.0	12.0	11.5	12.0	12.0	12.0	12.0
14	12.0	11.0	11.5	11.5	11.5	11.5	12.0	11.5	11.5	12.0	12.0	12.0
15	12.0	11.5	11.5	12.0	11.5	12.0	12.0	11.5	12.0	12.0	12.0	12.0
16	11.5	11.0	11.0	12.0	11.5	11.5	12.0	11.5	11.5	12.0	12.0	12.0
17	12.0	11.0	11.5	12.0	11.5	11.5	12.0	11.5	12.0	12.0	12.0	12.0
18	12.0	11.5	12.0	12.0	11.5	12.0	12.0	11.5	12.0	12.0	12.0	12.0
19	12.0	11.5	11.5	12.0	11.5	11.5	12.0	12.0	12.0	12.0	12.0	12.0
20	12.0	11.5	11.5	12.0	11.5	11.5	12.0	12.0	12.0	12.0	12.0	12.0
21	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
22	12.0	11.0	11.5	12.0	11.5	11.5	12.0	12.0	12.0	12.0	12.0	12.0
23	12.0	11.0	11.5	12.0	11.5	11.5	12.0	12.0	12.0	12.5	12.0	12.0
24	12.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
25	11.5	11.0	11.0	12.0	11.5	12.0	12.0	11.5	12.0	12.5	12.0	12.0
26	12.0	11.0	11.5	12.0	11.5	12.0	12.0	12.0	12.0	12.5	12.0	12.0
27	12.0	11.5	12.0	12.0	12.0	12.0	12.0	11.5	12.0	12.0	12.0	12.0
28	11.5	11.0	11.5	12.0	11.5	12.0	12.0	11.5	11.5	12.0	12.0	12.0
29	12.0	11.5	11.5	12.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0
30	---	---	---	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
31	---	---	---	12.0	12.0	12.0	---	---	---	12.0	12.0	12.0
MONTH	12.0	11.0	11.6	12.0	11.5	11.8	12.0	11.5	11.9	12.5	11.5	12.0

