

## 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.

**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 fair. pH records rated fair except for periods Nov. 2-16, Dec. 21-Jan. 20, Feb. 3-Apr. 12, May 12-May 31, and July 12-Sept. 14, which are 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 350-392. Figure 9 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, 902 microsiemens, Sept. 22, 1999; 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, 11.0°C, several days during winters.

**EXTREMES FOR CURRENT YEAR.**--

SPECIFIC CONDUCTANCE: Maximum, 864 microsiemens, Oct. 1; minimum, 210 microsiemens, Mar. 3.

pH: Maximum, 6.3, several days; minimum, 3.5, Oct. 2, 3.

WATER TEMPERATURE: Maximum, 12.5°C, many days; minimum 11.0°C, several days during winter.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD ARD (STAND- UNITS) (00400)	PH WATER WHOLE LAB ARD (STAND- UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT											
19...	1500	80020	1028	--	87	9.3	4.3	4.3	419	12.0	18.0
NOV											
16...	1230	80020	1028	--	80	8.5	6.2	5.8	285	11.5	14.0
16...	1330	9813	1028	--	86	9.5	6.5	--	280	11.0	--
DEC											
07...	1345	9813	1028	--	86	9.2	5.6	--	300	12.0	16.3
JAN											
20...	1330	9813	1028	--	85	9.2	5.6	--	317	12.0	15.9
FEB											
16...	1100	9813	1028	2.4	100	11.0	5.2	4.0	355	11.5	17.0
MAR											
01...	1500	9813	1028	3.8	66	7.0	5.5	--	300	13.5	12.1
APR											
18...	1215	9813	1028	11	60	6.6	4.7	4.5	301	11.7	11.8
MAY											
16...	0945	9813	1028	6.4	97	10.5	5.0	--	370	12.1	--
JUN											
19...	1430	9813	1028	6.6	85	9.1	4.9	4.8	348	12.0	16.2
AUG											
01...	0930	9813	1028	2.4	84	9.0	4.0	4.2	391	12.2	18.2
SEP											
14...	1145	9813	1028	12	88	9.4	3.9	4.0	543	12.3	27.0

## SWATARA CREEK BASIN

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	ACIDITY (MG/L AS CAC03) (00435)	ACIDITY TOTAL HEATED (MG/L AS CAC03) (70508)	ANC WATER UNFLTRD FET FIELD MG/L AS CAC03 (00410)	ANC WATER UNFLTRD FET LAB MG/L AS CAC03 (00417)
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXID- ATION RED- UCTION POTEN- TIAL (MV) (00090)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	ALUM- INUM, TOTAL RECOV- ERABLE (µG/L AS AL) (01105)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (µG/L AS FE) (01045)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN) (01055)
OCT 19...	--	28.0	--	--	--	3.9	--	--	--	--	--
NOV 16...	--	21.0	--	--	--	3.6	--	--	--	--	--
NOV 16...	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	16.2	25.5	25.3	1.5	1.6	3.8	3.7	--	15	--	6
JAN 20...	15.1	24.5	24.1	<1.0	<1.0	3.2	3.3	--	15	--	7
FEB 16...	--	24.0	--	--	--	4.2	--	36	--	1	--
MAR 01...	12.3	22.6	22.9	1.2	1.2	3.5	3.5	--	9.2	--	12
APR 18...	12.1	21.4	21.9	1.1	1.1	2.9	3.1	--	20	--	0
MAY 16...	--	--	--	--	--	--	--	--	--	--	--
JUN 19...	16.0	25.3	25.3	1.2	1.0	3.6	3.5	--	20	--	2
AUG 01...	17.6	31.9	31.3	1.7	1.4	4.1	3.8	--	30	0	0
SEP 14...	27.1	46.6	47.5	1.7	1.8	4.8	4.4	--	40	0	0
OCT 19...	3.7	190	--	502	--	1500	--	7000	--	2900	--
NOV 16...	4.2	120	55	293	--	52	--	9900	--	2200	--
NOV 16...	--	--	--	292	--	--	--	--	--	--	--
DEC 07...	3.5	141	--	399	6	254	1220	6940	7740	2280	2270
JAN 20...	3.2	136	--	105	16	274	1260	7270	7620	2140	2100
FEB 16...	3.8	150	55	135	--	650	--	6600	--	2400	--
MAR 01...	3.8	121	--	621	12	210	1680	8040	9510	2070	2090
APR 18...	2.8	156	--	502	16	1020	1310	3450	5850	1790	1920
MAY 16...	--	--	--	475	--	--	--	--	--	--	--
JUN 19...	2.9	165	--	456	14	964	1690	5680	7350	2290	2290
AUG 01...	3.0	202	--	456	8	1220	1930	6830	9000	2790	2720
SEP 14...	2.8	290	--	606	30	3190	3620	8010	9240	3270	3380

## 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 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	864	764	819	348	290	306	334	288	308	283	278	281
2	764	704	729	369	318	337	288	280	284	280	254	268
3	731	574	667	371	299	320	330	279	313	283	251	270
4	574	512	537	350	297	305	328	278	291	284	260	273
5	615	511	586	355	336	346	279	273	276	261	254	255
6	589	473	530	338	293	307	329	270	306	267	254	257
7	473	450	461	303	289	292	323	269	304	291	267	283
8	451	430	442	343	303	336	270	262	268	292	269	282
9	430	417	423	332	292	305	269	263	267	285	263	269
10	546	407	485	325	288	292	327	266	300	300	280	294
11	548	475	507	337	309	325	318	301	308	280	267	271
12	475	441	456	309	273	287	301	261	275	315	268	293
13	448	421	437	273	264	268	262	258	260	314	282	298
14	421	371	380	334	271	320	325	258	307	294	279	281
15	422	360	394	323	288	305	324	292	305	320	294	314
16	415	363	401	349	282	304	292	281	285	317	280	289
17	363	351	356	341	281	326	316	277	296	317	279	292
18	364	346	349	281	278	279	292	282	286	320	288	311
19	407	333	372	337	271	289	283	251	259	288	280	282
20	397	331	360	337	299	326	282	246	259	317	281	300
21	383	361	370	299	263	270	283	266	278	296	255	263
22	366	324	355	322	260	268	266	246	249	301	255	269
23	324	317	321	333	319	326	279	247	261	301	254	289
24	372	318	358	319	263	274	279	252	274	254	252	253
25	346	313	324	294	259	262	252	246	247	298	252	283
26	367	309	318	333	294	324	279	245	262	296	247	266
27	367	336	349	376	318	362	288	261	274	290	245	249
28	342	301	314	359	314	331	261	250	254	294	253	290
29	359	298	307	347	298	314	251	228	234	253	235	240
30	359	331	344	349	334	344	251	229	240	281	232	254
31	331	292	303	---	---	---	278	251	264	283	233	266
MONTH	864	292	431	376	259	308	334	228	277	320	232	277

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	233	230	231	319	277	299	283	255	263	297	242	262
2	271	230	245	278	212	248	256	254	255	306	244	269
3	276	244	265	222	210	216	268	252	257	247	243	245
4	244	231	235	214	211	212	296	252	281	304	243	276
5	281	238	269	242	214	229	300	270	289	310	242	258
6	280	235	257	246	221	228	270	264	267	245	243	244
7	235	230	232	230	226	227	290	264	275	295	243	255
8	285	230	251	279	228	261	294	262	275	289	244	247
9	291	285	288	278	233	235	283	268	276	311	244	284
10	285	243	260	239	235	238	314	283	304	322	247	291
11	277	261	272	297	237	278	305	281	289	248	244	246
12	265	240	249	252	235	249	298	277	285	309	244	262
13	297	238	257	282	249	254	298	260	280	324	226	281
14	301	275	295	299	246	281	260	256	258	258	247	252
15	275	248	256	246	239	243	290	255	278	311	249	268
16	348	248	292	274	238	248	290	251	258	325	247	283
17	299	294	297	294	246	270	284	251	256	248	244	246
18	363	294	319	247	243	245	298	254	285	257	243	246
19	360	289	324	287	243	259	255	252	253	297	243	251
20	290	286	288	293	243	264	297	252	269	345	296	316
21	357	285	332	372	234	253	302	249	272	332	259	281
22	343	279	296	372	311	346	254	249	252	259	254	257
23	315	274	277	311	261	278	303	253	285	313	254	284
24	350	283	338	261	253	256	304	248	257	334	274	302
25	283	275	278	271	252	267	272	247	250	303	279	289
26	335	272	292	252	245	247	302	249	288	320	264	299
27	337	276	315	246	243	245	250	246	248	264	248	255
28	277	271	274	284	243	271	288	244	253	279	244	255
29	323	274	308	291	266	283	302	244	278	289	245	266
30	---	---	---	266	259	262	247	243	245	245	241	243
31	---	---	---	280	258	270	---	---	---	256	239	247
MONTH	363	230	279	372	210	257	314	243	269	345	226	266

## 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 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	313	254	288	352	288	310	---	---	---	---	---	---
2	313	253	280	290	285	288	471	375	435	---	---	---
3	259	254	256	345	286	319	378	369	375	---	---	---
4	314	254	282	350	281	296	374	363	369	---	---	---
5	321	253	275	284	280	282	448	358	423	---	---	---
6	317	250	282	351	281	325	358	344	351	---	---	---
7	351	277	318	350	278	285	345	336	341	---	---	---
8	357	291	307	280	275	278	433	334	389	---	---	---
9	293	287	290	315	273	279	433	322	345	---	---	---
10	347	287	323	354	273	316	322	318	321	---	---	---
11	350	279	292	353	273	306	404	316	342	---	---	---
12	306	274	280	275	268	272	423	317	368	---	---	---
13	354	298	332	307	264	272	317	311	315	---	---	---
14	373	309	322	303	262	270	352	310	314	---	---	---
15	321	315	318	362	261	295	420	327	387	448	427	435
16	369	317	353	373	285	335	327	309	313	428	417	423
17	359	305	314	286	285	285	309	308	309	530	416	486
18	305	293	298	320	285	291	403	306	355	516	390	402
19	357	301	335	318	283	291	404	317	354	454	346	387
20	302	299	301	342	282	306	317	306	310	535	439	468
21	352	283	300	365	284	338	366	303	322	557	442	494
22	357	306	342	285	280	282	385	309	360	442	414	430
23	309	307	308	317	280	285	---	---	---	421	389	403
24	345	302	313	368	286	338	---	---	---	496	379	455
25	351	288	327	286	278	281	---	---	---	379	360	370
26	312	297	302	280	275	278	---	---	---	361	355	358
27	345	298	313	---	---	---	---	---	---	465	355	406
28	354	295	322	---	---	---	---	---	---	465	348	373
29	296	291	294	---	---	---	---	---	---	349	338	344
30	346	293	316	---	---	---	---	---	---	410	334	351
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	373	250	306	373	261	296	471	303	352	557	334	412
YEAR	864	210	306									

## PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	3.9	3.7	3.9	5.8	4.5	5.7	5.5	5.1	5.4	5.5	5.5	5.5
2	3.9	3.5	3.9	4.9	4.5	4.7	5.6	5.5	5.6	5.5	5.5	5.5
3	4.3	3.5	3.6	5.6	4.7	5.3	5.6	5.1	5.2	5.6	5.4	5.5
4	4.6	4.3	4.4	5.6	4.4	5.5	6.1	5.2	6.0	5.5	5.3	5.4
5	4.6	3.6	3.7	4.7	4.4	4.6	6.2	6.1	6.1	5.6	5.5	5.6
6	4.5	3.8	4.2	5.5	4.7	5.3	6.2	5.5	5.6	5.7	5.6	5.6
7	4.6	4.5	4.5	5.5	4.5	5.5	6.2	5.5	5.6	5.6	5.5	5.5
8	4.6	4.4	4.5	4.7	4.4	4.6	6.3	6.2	6.3	5.5	5.4	5.4
9	4.5	4.5	4.5	5.4	4.7	5.3	6.3	6.3	6.3	5.5	5.4	5.4
10	4.5	3.7	3.7	5.4	4.7	5.4	6.3	5.1	5.4	5.4	5.3	5.3
11	3.9	3.7	3.8	4.7	4.6	4.6	5.7	5.4	5.5	5.5	5.3	5.4
12	3.9	3.8	3.9	5.1	4.7	5.0	6.1	5.7	6.1	5.5	5.2	5.4
13	4.2	3.9	4.0	5.1	5.1	5.1	6.2	6.1	6.1	5.3	5.2	5.2
14	4.5	4.2	4.4	5.1	4.7	4.8	6.2	5.2	5.3	5.4	5.3	5.3
15	4.5	4.1	4.4	4.7	4.7	4.7	5.7	5.4	5.7	5.4	5.3	5.3
16	4.2	4.1	4.2	4.8	4.4	4.7	5.8	5.7	5.7	5.4	5.3	5.4
17	4.5	4.2	4.4	6.2	4.7	5.3	5.7	5.1	5.2	5.6	5.4	5.5
18	4.6	4.5	4.5	6.3	6.2	6.3	5.4	5.3	5.4	5.5	5.3	5.3
19	5.8	4.3	4.6	6.3	4.5	6.3	5.5	5.4	5.5	5.4	5.3	5.4
20	5.9	4.4	5.6	6.0	4.6	5.2	5.5	5.3	5.5	5.8	5.4	5.5
21	4.8	4.6	4.7	6.2	6.0	6.1	5.5	5.3	5.4	6.3	5.8	6.3
22	5.8	4.7	5.1	6.2	4.7	6.2	5.6	5.5	5.6	6.3	5.5	6.3
23	5.9	5.8	5.8	5.3	4.7	5.1	5.7	5.5	5.6	6.3	5.6	5.8
24	5.8	4.5	4.8	6.0	5.3	6.0	5.6	5.5	5.6	6.3	6.3	6.3
25	5.8	4.9	5.7	6.0	5.2	6.0	5.7	5.6	5.7	6.3	5.5	5.6
26	5.8	4.4	5.8	5.3	5.0	5.2	5.7	5.6	5.6	6.3	5.7	6.2
27	5.0	4.4	4.8	5.4	5.1	5.3	5.6	5.5	5.5	6.3	5.6	6.2
28	5.8	5.0	5.7	5.5	5.4	5.4	5.6	5.6	5.6	5.8	5.4	5.5
29	5.8	4.5	5.8	5.5	4.9	5.5	5.6	5.6	5.6	6.1	5.8	6.1
30	4.9	4.4	4.7	5.1	4.9	5.0	5.6	5.6	5.6	6.1	5.3	6.0
31	5.7	4.9	5.6	---	---	---	5.6	5.5	5.6	5.9	5.4	5.5
MAX	5.9	5.8	5.8	6.3	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.3
MIN	3.9	3.5	3.6	4.7	4.4	4.6	5.4	5.1	5.2	5.3	5.2	5.2

SWATARA CREEK BASIN

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

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
FEBRUARY			MARCH			APRIL			MAY			
1	5.9	5.9	5.9	5.0	5.0	5.0	4.9	4.8	4.9	5.5	4.9	5.5
2	5.9	5.3	5.4	5.4	4.9	5.1	5.0	4.9	4.9	5.3	4.9	5.0
3	5.6	5.4	5.6	5.7	5.4	5.6	5.0	4.9	4.9	5.5	5.3	5.5
4	5.7	5.6	5.7	5.7	5.7	5.7	5.0	4.8	4.9	5.6	5.0	5.4
5	5.6	5.4	5.4	5.7	5.4	5.5	4.9	4.8	4.8	5.5	5.0	5.2
6	5.5	5.4	5.5	5.7	5.4	5.6	4.9	4.9	4.9	5.6	5.5	5.6
7	5.6	5.5	5.6	5.7	5.6	5.6	4.9	4.8	4.9	5.7	5.3	5.5
8	5.6	5.6	5.6	5.6	5.1	5.2	4.9	4.8	4.8	5.8	5.6	5.7
9	5.6	5.5	5.5	5.6	5.1	5.6	4.9	4.9	4.9	5.8	5.2	5.6
10	5.5	5.4	5.5	5.7	5.6	5.7	4.9	4.7	4.8	5.4	5.2	5.2
11	5.5	5.5	5.5	5.7	5.1	5.2	4.8	4.7	4.8	5.7	5.4	5.6
12	5.5	5.4	5.4	5.6	5.2	5.5	5.0	4.4	4.8	5.8	5.6	5.8
13	5.5	5.4	5.4	5.6	5.4	5.5	5.2	4.5	4.7	5.6	5.3	5.4
14	5.5	5.5	5.5	5.4	5.1	5.1	5.2	5.2	5.2	5.6	5.5	5.5
15	5.5	5.5	5.5	5.4	5.2	5.3	5.2	4.6	4.7	5.6	5.5	5.6
16	6.2	5.0	5.5	5.4	5.2	5.4	5.2	4.7	5.2	5.5	5.4	5.4
17	6.2	6.2	6.2	5.2	5.0	5.1	5.3	4.7	5.2	5.5	5.5	5.5
18	6.2	4.4	6.2	5.3	5.2	5.2	5.1	4.6	4.7	5.6	5.5	5.6
19	6.1	4.7	5.2	5.3	5.0	5.2	5.2	5.1	5.1	5.7	5.6	5.7
20	6.1	6.0	6.1	5.2	5.0	5.0	5.2	4.5	5.1	5.7	5.6	5.6
21	6.0	4.4	4.8	5.3	5.2	5.2	5.0	4.5	4.8	5.6	5.5	5.5
22	5.8	4.9	5.8	5.2	4.7	4.8	5.2	5.0	5.1	5.6	5.5	5.5
23	5.8	5.6	5.7	4.8	4.7	4.8	5.2	4.6	4.7	5.6	5.6	5.6
24	5.6	4.5	4.7	4.9	4.8	4.9	5.2	4.7	5.1	5.6	5.5	5.6
25	5.5	5.2	5.5	4.9	4.9	4.9	5.3	5.2	5.2	5.6	5.5	5.5
26	5.5	4.7	5.5	5.0	4.9	4.9	5.3	4.7	4.8	5.6	5.4	5.5
27	5.1	4.7	4.8	5.0	5.0	5.0	5.3	4.9	5.2	5.4	5.4	5.4
28	5.2	5.1	5.2	5.0	4.9	4.9	5.5	5.0	5.4	5.4	5.4	5.4
29	5.2	5.0	5.1	4.9	4.8	4.9	5.3	4.9	4.9	5.5	5.4	5.4
30	---	---	---	4.9	4.9	4.9	5.5	5.3	5.4	5.4	5.4	5.4
31	---	---	---	5.0	4.8	4.9	---	---	---	5.5	5.4	5.4
MAX	6.2	6.2	6.2	5.7	5.7	5.7	5.5	5.3	5.4	5.8	5.6	5.8
MIN	5.1	4.4	4.7	4.8	4.7	4.8	4.8	4.4	4.7	5.3	4.9	5.0

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	5.5	4.6	4.7	5.7	4.9	5.7	---	---	---	3.9	3.8	3.8
2	5.6	4.9	5.5	5.8	5.7	5.7	5.9	4.2	4.4	3.9	3.8	3.8
3	5.6	5.6	5.6	5.8	4.7	4.9	5.9	5.9	5.9	4.1	3.8	3.9
4	5.7	4.7	4.9	5.7	4.9	5.7	5.9	5.8	5.9	4.3	4.1	4.3
5	5.7	4.9	5.7	5.7	5.7	5.7	5.8	4.2	4.3	4.3	4.2	4.3
6	5.8	5.6	5.7	5.7	4.6	4.8	5.4	5.3	5.3	4.4	4.3	4.3
7	5.7	4.6	4.8	5.7	4.9	5.6	5.3	5.2	5.2	4.6	4.3	4.5
8	5.7	4.9	5.7	5.7	5.6	5.7	5.2	4.5	4.6	4.5	4.3	4.3
9	5.7	5.7	5.7	5.7	4.8	5.6	5.0	4.5	4.9	4.3	4.2	4.2
10	5.7	4.6	4.8	5.6	4.6	4.7	5.0	5.0	5.0	4.2	4.1	4.2
11	5.8	4.9	5.8	5.5	4.7	5.1	5.1	4.6	5.0	4.2	4.0	4.1
12	5.8	5.7	5.8	5.6	5.5	5.5	4.8	4.6	4.6	4.0	3.9	3.9
13	5.7	4.7	4.9	5.6	5.1	5.5	5.0	4.8	4.9	3.9	3.8	3.8
14	5.5	4.9	5.5	5.5	5.1	5.3	5.0	4.8	5.0	5.3	3.8	3.9
15	5.5	5.3	5.4	5.4	4.8	5.2	4.8	4.5	4.5	5.6	5.3	5.5
16	5.3	4.6	4.8	5.1	4.8	4.8	4.8	4.0	4.7	5.8	5.6	5.7
17	5.3	4.8	5.2	5.2	5.1	5.2	4.8	4.8	4.8	5.8	4.0	4.1
18	5.3	5.3	5.3	5.2	5.1	5.2	4.8	4.3	4.4	5.7	4.2	5.7
19	5.8	4.8	5.0	5.1	5.1	5.1	4.7	4.4	4.6	5.8	5.4	5.7
20	5.8	5.8	5.8	5.2	5.0	5.1	4.7	4.7	4.7	5.4	4.3	5.4
21	5.8	4.8	5.8	5.0	4.9	4.9	4.8	4.4	4.7	5.2	4.3	4.9
22	5.7	4.7	5.1	5.0	4.9	5.0	4.7	4.4	4.5	5.4	5.2	5.3
23	5.7	5.6	5.7	5.1	5.0	5.0	4.8	4.7	4.7	5.6	4.9	5.5
24	5.6	4.7	5.6	5.1	5.1	5.1	4.8	4.4	4.8	5.5	4.6	4.7
25	5.6	4.7	4.9	5.1	5.0	5.0	4.5	4.4	4.4	5.8	5.5	5.7
26	5.6	5.5	5.6	5.0	5.0	5.0	4.7	4.5	4.6	5.9	5.8	5.9
27	5.6	4.7	5.6	---	---	---	4.6	4.5	4.6	5.9	4.9	5.0
28	5.5	4.8	5.3	---	---	---	4.6	4.3	4.4	6.1	5.0	5.8
29	5.7	5.5	5.6	---	---	---	4.3	4.2	4.2	6.2	6.1	6.1
30	5.7	4.6	4.8	---	---	---	4.2	4.0	4.1	6.3	5.4	6.2
31	---	---	---	---	---	---	4.0	3.9	4.0	---	---	---
MAX	5.8	5.8	5.8	5.8	5.7	5.7	5.9	5.9	5.9	6.3	6.1	6.2
MIN	5.3	4.6	4.7	5.0	4.6	4.7	4.0	3.9	4.0	3.9	3.8	3.8

YEAR	MAX	MIN	MEDIAN	MAXIMUM	6.3	MINIMUM	3.9
				MAXIMUM	6.3	MINIMUM	3.5
				MAXIMUM	6.3	MINIMUM	3.6

## SWATARA CREEK BASIN

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

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

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

