

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 350-412.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|
| 1 | 2.2 | 2.4 | e1.8 | 3.2 | 3.6 | 3.8 | 11 | 8.7 | 7.3 | 2.4 | 2.4 | 0.87 |
| 2 | 1.3 | 0.90 | e1.1 | 4.4 | 3.2 | 3.2 | 12 | 10 | 8.0 | 4.2 | 2.0 | 1.4 |
| 3 | 2.7 | 0.89 | e1.2 | 2.9 | 4.9 | 5.0 | 9.8 | 9.4 | 7.2 | 2.7 | 0.93 | 1.9 |
| 4 | 1.4 | 2.3 | e1.8 | 3.3 | 3.7 | 3.4 | 10 | 11 | 6.2 | 2.7 | 2.5 | 0.87 |
| 5 | 1.2 | 0.78 | e0.90 | 4.2 | 3.4 | 3.3 | 9.9 | 11 | 7.6 | 4.0 | 1.4 | 1.1 |
| 6 | 2.7 | 0.85 | e1.3 | 2.8 | 5.0 | 5.0 | 8.6 | 11 | 5.7 | 2.3 | 0.88 | 1.7 |
| 7 | 1.1 | 2.3 | e1.9 | 3.4 | 3.5 | 3.6 | 10 | 12 | 6.3 | 3.2 | 2.5 | 0.75 |
| 8 | 1.2 | 0.75 | e1.5 | 3.8 | 3.7 | 4.0 | 8.4 | 10 | 6.2 | 3.3 | 0.98 | 1.2 |
| 9 | 2.4 | 0.86 | e2.7 | 2.6 | 4.8 | 4.5 | 8.3 | 11 | 4.9 | 1.9 | 1.0 | 1.6 |
| 10 | 1.1 | 2.3 | e2.4 | 3.4 | 3.9 | 3.6 | 8.7 | 11 | 6.4 | 3.1 | 2.5 | 0.76 |
| 11 | 1.4 | 0.75 | e1.5 | 3.5 | 4.5 | 4.3 | 7.1 | 10 | 4.9 | 2.3 | 1.1 | 1.2 |
| 12 | 2.1 | 0.91 | e2.0 | 2.5 | 4.8 | 4.0 | 8.5 | 8.9 | 4.6 | 1.8 | 1.5 | 1.4 |
| 13 | 0.88 | 1.9 | e2.6 | 3.6 | 3.8 | 3.4 | 7.2 | 10 | 5.7 | 3.6 | 2.6 | 0.59 |
| 14 | 1.5 | 0.75 | e2.7 | 2.7 | 4.7 | 4.6 | 7.1 | 8.7 | 5.5 | 1.8 | 1.2 | 1.1 |
| 15 | 2.1 | 0.97 | e3.3 | 2.4 | 4.5 | 3.6 | 8.0 | 8.7 | 4.2 | 2.3 | 1.7 | 1.4 |
| 16 | 0.95 | 1.8 | e3.2 | 3.5 | 4.2 | 3.4 | 6.7 | 9.3 | 5.4 | 3.1 | 2.3 | 0.81 |
| 17 | 1.6 | 0.64 | e2.0 | 3.3 | 5.4 | 4.9 | 8.6 | 8.1 | 4.3 | 1.8 | 1.2 | 1.2 |
| 18 | 1.7 | 0.88 | e3.6 | 2.0 | 4.4 | 3.1 | 8.6 | 10 | 3.9 | 2.7 | 1.8 | 1.4 |
| 19 | 0.88 | 1.6 | 2.7 | 2.5 | 4.2 | 4.0 | 8.9 | 10 | 5.2 | 2.5 | 1.9 | 0.68 |
| 20 | 1.7 | 0.64 | 2.0 | 3.3 | 5.9 | 4.7 | 10 | 12 | 3.4 | 1.6 | 0.99 | 1.3 |
| 21 | 1.6 | 0.93 | 3.2 | 1.9 | 4.2 | 4.1 | 8.9 | 14 | 4.4 | 3.0 | 1.5 | 1.5 |
| 22 | 0.88 | 1.7 | 3.1 | 2.5 | 4.7 | 5.1 | 9.8 | 13 | 4.4 | 2.0 | 1.3 | 0.69 |
| 23 | 1.9 | 0.59 | 2.8 | 2.9 | 5.4 | 6.1 | 9.6 | 14 | 3.4 | 1.6 | 0.78 | 1.5 |
| 24 | 1.4 | 0.91 | 4.2 | 2.1 | 4.0 | 6.3 | 10 | 13 | 4.7 | 3.4 | 1.6 | 1.5 |
| 25 | 0.77 | 1.7 | 3.5 | 2.9 | 4.7 | 8.6 | 9.2 | 12 | 3.3 | 1.6 | 1.2 | 0.67 |
| 26 | 1.7 | 0.71 | 3.0 | 2.8 | 4.8 | 7.7 | 9.1 | 13 | 3.5 | 1.9 | 0.75 | 1.3 |
| 27 | 1.2 | 1.1 | 4.6 | 2.1 | 3.9 | 8.0 | 9.7 | 10 | 4.4 | 3.0 | 1.7 | 1.9 |
| 28 | 0.78 | e1.8 | 3.3 | 3.3 | 4.6 | 10 | 8.3 | 11 | 2.8 | 1.5 | 1.1 | 1.5 |
| 29 | 2.0 | e0.80 | 3.3 | 3.1 | --- | 11 | 9.5 | 9.9 | 3.9 | 1.9 | 0.75 | 1.9 |
| 30 | 0.97 | e1.4 | 4.9 | 2.5 | --- | 13 | 8.6 | 9.1 | 3.5 | 2.3 | 1.8 | 1.7 |
| 31 | 0.88 | --- | 3.0 | 4.0 | --- | 12 | --- | 9.6 | --- | 1.2 | 1.0 | --- |
| TOTAL | 46.19 | 36.81 | 81.10 | 93.4 | 122.4 | 171.3 | 270.1 | 329.4 | 151.2 | 76.7 | 46.86 | 37.39 |
| MEAN | 1.49 | 1.23 | 2.62 | 3.01 | 4.37 | 5.53 | 9.00 | 10.6 | 5.04 | 2.47 | 1.51 | 1.25 |
| MAX | 2.7 | 2.4 | 4.9 | 4.4 | 5.9 | 13 | 12 | 14 | 8.0 | 4.2 | 2.6 | 1.9 |
| MIN | 0.77 | 0.59 | 0.90 | 1.9 | 3.2 | 3.1 | 6.7 | 8.1 | 2.8 | 1.2 | 0.75 | 0.59 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.11 | 1.83 | 4.95 | 3.55 | 4.43 | 6.00 | 9.07 | 7.64 | 4.69 | 3.41 | 2.00 | 1.78 |
| MAX | 2.74 | 2.43 | 7.29 | 4.10 | 4.49 | 6.47 | 9.13 | 10.6 | 5.04 | 4.35 | 2.49 | 2.08 |
| (WY) | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2001 | 2002 | 2002 | 2001 | 2001 | 2000 |
| MIN | 1.49 | 1.23 | 2.62 | 3.01 | 4.37 | 5.53 | 9.00 | 4.65 | 4.34 | 2.47 | 1.51 | 1.25 |
| (WY) | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2001 | 2001 | 2002 | 2002 | 2002 |

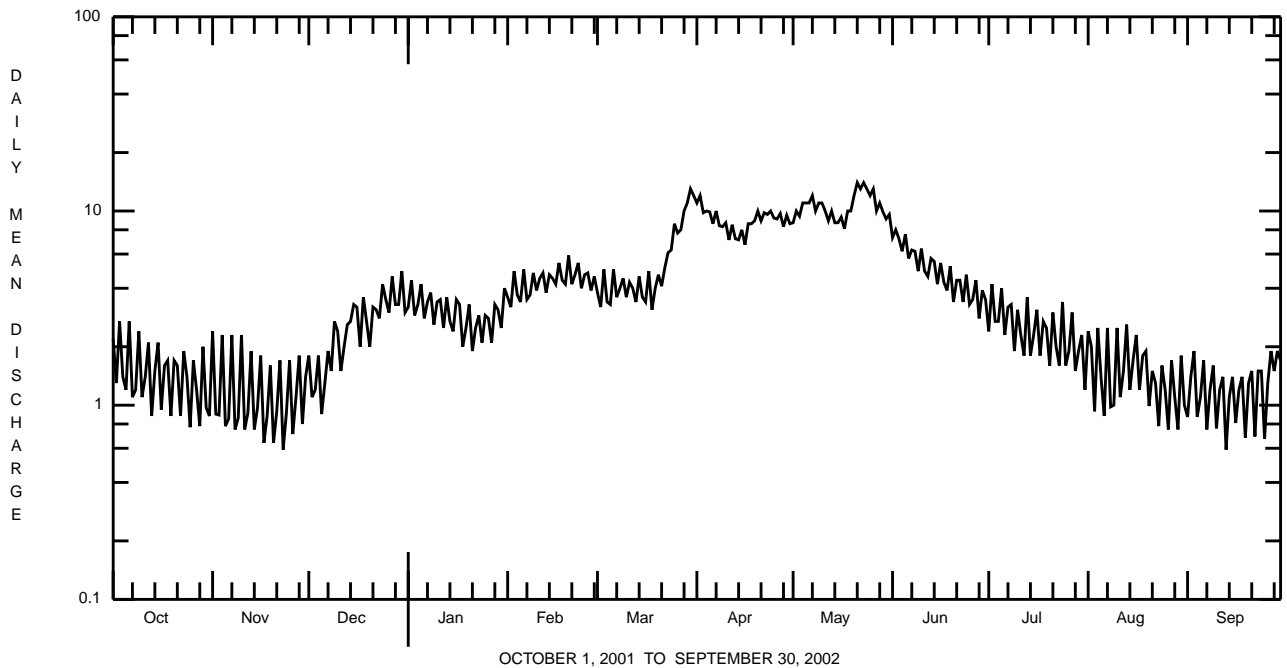
e Estimated.

SWATARA CREEK BASIN

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

| SUMMARY STATISTICS | FOR 2001 CALENDAR YEAR | | FOR 2002 WATER YEAR | | WATER YEARS 2000 - 2002 | |
|--------------------------|------------------------|--------|---------------------|---------------------|-------------------------|--------------------------|
| ANNUAL TOTAL | 1438.50 | | 1462.85 | | | |
| ANNUAL MEAN | 3.94 | | 4.01 | | 4.28 | |
| HIGHEST ANNUAL MEAN | | | | | 4.54 2001 | |
| LOWEST ANNUAL MEAN | | | | | 4.01 2002 | |
| HIGHEST DAILY MEAN | 11 | Apr 4 | 14 | May 21,23 | 19 | Dec 19 2000 |
| LOWEST DAILY MEAN | 0.59 | Nov 23 | 0.59 | Nov 23 ^a | 0.59 | Nov 23 2001 ^a |
| ANNUAL SEVEN-DAY MINIMUM | 1.00 | Nov 17 | 1.00 | Nov 17 | 1.00 | Nov 17 2001 |
| MAXIMUM PEAK FLOW | | | 14 | Mar 30 ^b | 20 | Dec 20 2000 |
| MAXIMUM PEAK STAGE | | | 1.74 | May 21 | 1.99 | Dec 20 2000 |
| INSTANTANEOUS LOW FLOW | | | 0.59 | Nov 17 ^c | 0.59 | Nov 17 2001 ^c |
| 10 PERCENT EXCEEDS | 7.9 | | 9.6 | | 9.0 | |
| 50 PERCENT EXCEEDS | 3.2 | | 3.1 | | 3.3 | |
| 90 PERCENT EXCEEDS | 1.3 | | 0.92 | | 1.4 | |

- ^a Also Sept. 13, 2002.
- ^b Also May 20, 21, 23, 24.
- ^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 fair. pH records rated fair except for periods Oct. 1 to Nov. 6, Jan. 8 to Feb. 4, and Sept. 12-30, which are poor. The pH probe is subject to fowling 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 350-412. 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, 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, 904 microsiemens, Sept. 28; minimum, 230 microsiemens, Sept. 16.

pH: Maximum, 6.6, Oct. 23, 26, 31; minimum, 3.5, Sept. 12, 26.

WATER TEMPERATURE: Maximum, 13.5°C, Sept. 27; minimum 10.5°C, Oct. 28, 29, Nov. 11, 12, 20, 21, 23.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

| Date | Time | AGENCY COL-LECTING SAMPLE NUMBER (00027) | AGENCY ANA-LYZING SAMPLE NUMBER (00028) | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | OXID-ATION RED-UCTIION POTEN-TIAL (MV) (00090) | OXYGEN, DIS-SOLVED OXYGEN, (MG/L) (00300) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301) | PH WATER WHOLE FIELD-ARD UNITS) (00400) | PH WATER WHOLE LAB (STAND-ARD UNITS) (00403) | SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095) |
|-------|------|--|---|---|--|---|---|---|--|---|
| NOV | | | | | | | | | | |
| 28... | 1530 | 1028 | 930 | 2.1 | 630 | 8.1 | 76 | 4.0 | 3.8 | 476 |
| DEC | | | | | | | | | | |
| 18... | 1530 | 1028 | 930 | 3.8 | 570 | 10 | 98 | 4.8 | 3.8 | 399 |
| JAN | | | | | | | | | | |
| 08... | 1115 | 1028 | 930 | 4.5 | 440 | 9.6 | 89 | 5.5 | 4.7 | 326 |
| 24... | 1430 | 1028 | 930 | 2.3 | -- | -- | -- | 5.8 | 6.4 | 266 |
| 24... | 1530 | 1028 | 930 | 2.3 | -- | -- | -- | 5.8 | 6.4 | 267 |
| 24... | 1730 | 1028 | 930 | 2.3 | -- | -- | -- | 5.8 | 6.3 | 266 |
| 24... | 1930 | 1028 | 930 | 1.9 | -- | -- | -- | 5.8 | 6.0 | 271 |
| 24... | 2130 | 1028 | 930 | 1.9 | -- | -- | -- | 5.8 | 5.8 | 280 |
| 24... | 2330 | 1028 | 930 | 1.9 | -- | -- | -- | 5.8 | 5.9 | 284 |
| 25... | 0130 | 1028 | 930 | 1.9 | -- | -- | -- | 5.8 | 6.1 | 284 |
| 25... | 0330 | 1028 | 930 | 1.9 | -- | -- | -- | 5.8 | 5.9 | 284 |
| 25... | 0530 | 1028 | 930 | 1.9 | -- | -- | -- | 5.8 | 5.9 | 284 |
| 25... | 0730 | 1028 | 930 | 1.9 | -- | -- | -- | 6.0 | 5.9 | 284 |
| 25... | 0930 | 1028 | 930 | 1.9 | -- | -- | -- | 6.0 | 6.1 | 285 |
| 25... | 1130 | 1028 | 930 | 1.9 | -- | -- | -- | 6.0 | 5.9 | 287 |
| 29... | 1730 | 1028 | 930 | 2.4 | 270 | 9.6 | 89 | 5.7 | 5.7 | 302 |
| FEB | | | | | | | | | | |
| 10... | 1200 | 1028 | 930 | 3.8 | -- | -- | -- | 6.3 | 6.5 | 286 |
| 10... | 2000 | 1028 | 930 | 4.0 | -- | -- | -- | 6.3 | 6.1 | 282 |
| 11... | 1400 | 1028 | 930 | 3.8 | -- | -- | -- | 6.3 | 6.2 | 287 |
| 11... | 1600 | 1028 | 930 | 5.4 | -- | -- | -- | 5.3 | 4.3 | 356 |
| 11... | 2000 | 1028 | 930 | 5.6 | -- | -- | -- | 5.4 | 4.4 | 348 |
| MAR | | | | | | | | | | |
| 02... | 1300 | 1028 | 930 | 3.2 | -- | -- | -- | 6.1 | 6.1 | 267 |
| 02... | 2300 | 1028 | 930 | 3.6 | -- | -- | -- | 6.1 | 6.2 | 263 |
| 03... | 0500 | 1028 | 930 | 5.4 | -- | -- | -- | 5.8 | 4.6 | 297 |
| 04... | 0100 | 1028 | 930 | 5.1 | -- | -- | -- | 5.2 | 6.0 | 324 |
| 04... | 0700 | 1028 | 930 | 3.2 | -- | -- | -- | 5.3 | 6.3 | 301 |
| 11... | 0500 | 1028 | 930 | 3.8 | -- | -- | -- | 6.5 | 4.2 | 296 |
| 11... | 0830 | 1028 | 930 | 3.8 | -- | -- | -- | 6.5 | 4.1 | 298 |
| 11... | 1200 | 1028 | 930 | 4.2 | -- | -- | -- | 6.5 | 4.7 | 299 |
| 11... | 1530 | 1028 | 930 | 4.9 | -- | -- | -- | 5.5 | 5.2 | 361 |
| 12... | 0530 | 1028 | 930 | 4.9 | -- | -- | -- | 5.9 | 6.2 | 337 |
| 12... | 0900 | 1028 | 930 | 4.9 | -- | -- | -- | 6.0 | 6.0 | 336 |
| 12... | 1245 | 1028 | 930 | 3.2 | -- | -- | -- | 6.4 | 6.2 | 298 |
| 12... | 1615 | 1028 | 930 | 3.2 | -- | -- | -- | 6.5 | 6.2 | 296 |
| 13... | 0245 | 1028 | 930 | 3.2 | -- | -- | -- | 6.5 | 6.2 | 295 |
| 13... | 1600 | 1028 | 930 | 3.6 | 400 | 9.8 | 90 | 6.4 | 4.1 | 293 |
| APR | | | | | | | | | | |
| 13... | 0100 | 1028 | 930 | 8.7 | -- | -- | -- | 5.6 | 5.5 | 314 |
| 13... | 0400 | 1028 | 930 | 8.7 | -- | -- | -- | 5.6 | 5.5 | 314 |
| 13... | 0700 | 1028 | 930 | 6.8 | -- | -- | -- | 6.0 | 5.7 | 285 |
| 14... | 1300 | 1028 | 930 | 6.6 | -- | -- | -- | 6.0 | 4.5 | 284 |
| 14... | 1900 | 1028 | 930 | 8.4 | -- | -- | -- | 5.3 | 4.6 | 331 |
| 23... | 1445 | 1028 | 930 | 10 | 430 | 9.1 | 85 | 5.7 | 4.4 | 309 |
| MAY | | | | | | | | | | |
| 29... | 1530 | 1028 | 930 | 9.0 | 440 | 9.2 | 86 | 5.5 | 5.1 | 287 |
| JUN | | | | | | | | | | |
| 19... | 1530 | 1028 | 930 | 5.6 | 440 | 10 | 97 | 5.5 | 4.1 | 320 |
| JUL | | | | | | | | | | |
| 31... | 1500 | 1028 | 930 | 1.2 | 120 | 9.0 | 84 | 6.1 | 5.5 | 301 |
| AUG | | | | | | | | | | |
| 19... | 1430 | 1028 | 930 | 1.0 | -- | 9.7 | 91 | 4.9 | 4.7 | 343 |

SWATARA CREEK BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

| Date | TEMPER- ATURE WATER (DEG C) (00010) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | 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 TOTAL HEATED (MG/L AS CAC03) (70508) |
|-------|---|---|--|---|--|--|---|---|--|--|
| NOV | | | | | | | | | | |
| 28... | 12.5 | 22 | 21 | 34 | 32 | 1.5 | 1.5 | 3.7 | 3.5 | 12 |
| DEC | | | | | | | | | | |
| 18... | 12.0 | 20 | 20 | 32 | 31 | 1.4 | 1.5 | 4.0 | 4.0 | 26 |
| JAN | | | | | | | | | | |
| 08... | 11.9 | 18 | 17 | 26 | 25 | 1.5 | 1.4 | 3.8 | 3.5 | <5.0 |
| 24... | 11.7 | 14 | 14 | 21 | 21 | 1.1 | 1.3 | 3.5 | 3.6 | -- |
| 24... | 11.7 | 14 | 14 | 21 | 20 | 1.1 | 1.2 | 3.6 | 3.4 | -- |
| 24... | 11.7 | 14 | 13 | 22 | 20 | 1.3 | 1.2 | 3.8 | 3.6 | -- |
| 24... | 11.7 | 14 | 13 | 23 | 23 | 1.1 | 1.2 | 3.7 | 3.6 | -- |
| 24... | 11.6 | 14 | 13 | 24 | 23 | 1.3 | 1.2 | 3.9 | 3.7 | -- |
| 24... | 11.6 | 14 | 14 | 24 | 23 | 1.2 | 1.2 | 3.9 | 3.7 | -- |
| 25... | 11.5 | 14 | 14 | 23 | 22 | 1.2 | 1.5 | 3.8 | 3.7 | -- |
| 25... | 11.4 | 14 | 13 | 23 | 23 | 1.2 | 1.2 | 3.8 | 3.7 | -- |
| 25... | 11.3 | 14 | 14 | 23 | 23 | 1.1 | 1.2 | 3.8 | 3.7 | -- |
| 25... | 11.2 | 14 | 14 | 24 | 22 | 1.2 | 1.2 | 3.8 | 3.7 | -- |
| 25... | 11.4 | 14 | 14 | 23 | 23 | 1.1 | 1.2 | 3.7 | 3.6 | -- |
| 25... | 11.3 | 15 | 14 | 24 | 23 | 1.2 | 1.2 | 3.9 | 3.7 | -- |
| 29... | 11.9 | 13 | 12 | 24 | 23 | 1.2 | 1.2 | 3.7 | 3.6 | -- |
| FEB | | | | | | | | | | |
| 10... | 11.8 | 14 | 13 | 19 | 18 | 1.2 | 1.2 | 3.5 | 3.4 | -- |
| 10... | 11.9 | 13 | 12 | 19 | 18 | 1.1 | 1.1 | 3.5 | 3.4 | -- |
| 11... | 11.5 | 12 | 12 | 20 | 19 | 1.3 | 1.1 | 3.6 | 3.5 | -- |
| 11... | 11.9 | 17 | 16 | 25 | 24 | 1.4 | 1.4 | 3.7 | 3.7 | 110 |
| 11... | 11.9 | 17 | 16 | 24 | 23 | 1.4 | 1.3 | 3.7 | 3.5 | 110 |
| MAR | | | | | | | | | | |
| 02... | 11.7 | 13 | 13 | 19 | 19 | 1.2 | 1.3 | 3.7 | 3.7 | -- |
| 02... | 11.7 | 13 | 13 | 19 | 18 | 1.3 | 1.2 | 3.6 | 3.6 | -- |
| 03... | 12.1 | 18 | 18 | 26 | 25 | 1.5 | 1.4 | 3.8 | 3.7 | 24 |
| 04... | 12.0 | 13 | 13 | 21 | 21 | 1.2 | 1.3 | 3.7 | 3.8 | -- |
| 04... | 11.3 | 15 | 15 | 19 | 18 | 1.3 | 1.2 | 3.4 | 3.5 | -- |
| 11... | 11.4 | 17 | 16 | 26 | 25 | 1.3 | 1.3 | 3.6 | 3.6 | 27 |
| 11... | 11.5 | 16 | 16 | 26 | 25 | 1.3 | 1.3 | 3.5 | 3.5 | 29 |
| 11... | 11.6 | 16 | 16 | 25 | 24 | 1.2 | 1.4 | 3.4 | 3.4 | 15 |
| 11... | 12.0 | 16 | 15 | 24 | 23 | 1.3 | 1.3 | 3.3 | 3.3 | 21 |
| 12... | 12.1 | 12 | 12 | 21 | 20 | 1.2 | 1.1 | 3.5 | 3.5 | -- |
| 12... | 12.1 | 12 | 12 | 20 | 20 | 1.1 | 1.1 | 3.5 | 3.5 | -- |
| 12... | 11.9 | 12 | 12 | 21 | 20 | 1.1 | 1.1 | 3.5 | 3.5 | -- |
| 12... | 11.9 | 12 | 12 | 20 | 19 | 1.1 | 1.1 | 3.5 | 3.5 | -- |
| 13... | 11.8 | 12 | 12 | 20 | 20 | 1.1 | 1.1 | 3.5 | 3.4 | -- |
| 13... | 11.8 | 16 | 16 | 25 | 24 | 1.4 | 1.4 | 3.8 | 3.7 | <5.0 |
| APR | | | | | | | | | | |
| 13... | 12.2 | 11 | 11 | 20 | 19 | 1.1 | 1.1 | 3.4 | 3.3 | 6.8 |
| 13... | 12.2 | 11 | 11 | 20 | 20 | 1.1 | 1.1 | 3.3 | 3.3 | 6.7 |
| 13... | 12.0 | 11 | 11 | 20 | 19 | 1.1 | 1.1 | 3.3 | 3.2 | 5.3 |
| 14... | 12.1 | 15 | 14 | 25 | 25 | 1.3 | 1.2 | 3.4 | 3.3 | 18 |
| 14... | 12.2 | 15 | 14 | 24 | 23 | 1.2 | 1.2 | 3.4 | 3.2 | 14 |
| 23... | 12.0 | 13 | 13 | 23 | 22 | 1.2 | 1.2 | 3.8 | 3.6 | 19 |
| MAY | | | | | | | | | | |
| 29... | 11.9 | 10 | 9.6 | 20 | 19 | 1.1 | 1.1 | 3.2 | 3.0 | 11 |
| JUN | | | | | | | | | | |
| 19... | 12.4 | 15 | 15 | 24 | 23 | 1.3 | 1.3 | 3.3 | 3.1 | 23 |
| JUL | | | | | | | | | | |
| 31... | 12.3 | 12 | 12 | 21 | 21 | 1.0 | 1.2 | 3.6 | 3.6 | 19 |
| AUG | | | | | | | | | | |
| 19... | 12.3 | 13 | 12 | 21 | 20 | 1.2 | 1.2 | 4.0 | 3.7 | 8.9 |

SWATARA CREEK BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

| Date | ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106) | ALUM- INUM, TOTAL RECOV- ERABLE (µG/L AS AL) (01105) | ARSENIC DIS- SOLVED (µG/L AS AS) (01000) | ARSENIC TOTAL (µG/L AS AS) (01002) | BARIUM, DIS- SOLVED (µG/L AS BA) (01005) | BARIUM, TOTAL RECOV- ERABLE (µG/L AS BA) (01007) | CADMIUM DIS- SOLVED (µG/L AS CD) (01025) | CADMIUM WATER UNFLTRD TOTAL (µG/L AS CD) (01027) |
|-------|--|--|--|---|---|--|---|--|---|--|
| NOV | | | | | | | | | | |
| 28... | -- | 210 | 1400 | 1700 | <40 | <40 | 30 | 31 | <3.0 | <3.0 |
| DEC | | | | | | | | | | |
| 18... | -- | 200 | 1200 | 1800 | <40 | <40 | 29 | 29 | <3.0 | <3.0 |
| JAN | | | | | | | | | | |
| 08... | -- | 160 | 350 | 1100 | <40 | <40 | 33 | 33 | <3.0 | <3.0 |
| 24... | 9.9 | 110 | <20 | 13000 | <40 | <40 | 31 | 56 | <3.0 | <3.0 |
| 24... | 10 | 110 | <20 | 12000 | <40 | <40 | 33 | 54 | <3.0 | <3.0 |
| 24... | 5.2 | 120 | <20 | 5500 | <40 | <40 | 31 | 40 | <3.0 | <3.0 |
| 24... | 5.2 | 120 | <20 | 7100 | <40 | <40 | 28 | 36 | <3.0 | <3.0 |
| 24... | <5.0 | 130 | <20 | 4500 | <40 | <40 | 31 | 38 | <3.0 | <3.0 |
| 24... | 5.2 | 130 | <20 | 4400 | <40 | <40 | 29 | 37 | <3.0 | <3.0 |
| 25... | 16 | 120 | <20 | 22000 | <40 | <40 | 30 | 63 | <3.0 | 3.0 |
| 25... | 6.4 | 130 | <20 | 7200 | <40 | <40 | 30 | 41 | <3.0 | <3.0 |
| 25... | 5.6 | 130 | <20 | 5200 | <40 | <40 | 29 | 39 | <3.0 | <3.0 |
| 25... | 5.0 | 130 | <20 | 3800 | <40 | <40 | 29 | 37 | <3.0 | <3.0 |
| 25... | 5.2 | 130 | <20 | 4100 | <40 | <40 | 29 | 37 | <3.0 | <3.0 |
| 25... | 5.2 | 130 | <20 | 5400 | <40 | <40 | 29 | 39 | <3.0 | <3.0 |
| 29... | <5.0 | 130 | 100 | 1100 | <40 | <40 | 30 | 33 | <3.0 | <3.0 |
| FEB | | | | | | | | | | |
| 10... | 6.4 | 110 | <20 | 2700 | <40 | <40 | 30 | 42 | <3.0 | <3.0 |
| 10... | <5.0 | 100 | <20 | 1700 | <40 | <40 | 30 | 35 | <3.0 | <3.0 |
| 11... | <5.0 | 110 | <20 | 2500 | <40 | <40 | 31 | 37 | <3.0 | <3.0 |
| 11... | -- | 160 | 90 | 2300 | <40 | <40 | 31 | 36 | <3.0 | <3.0 |
| 11... | -- | 150 | 60 | 2400 | <40 | <40 | 32 | 36 | <3.0 | <3.0 |
| MAR | | | | | | | | | | |
| 02... | <5.0 | 100 | <20 | 2400 | <40 | <40 | 30 | 32 | <3.0 | <3.0 |
| 02... | 5.2 | 100 | <20 | 2600 | <40 | <40 | 30 | 34 | <3.0 | <3.0 |
| 03... | -- | 160 | 140 | 3300 | <40 | <40 | 31 | 33 | <3.0 | <3.0 |
| 04... | <5.0 | 120 | <20 | 2200 | <40 | <40 | 30 | 32 | <3.0 | <3.0 |
| 04... | 9.5 | 100 | 20 | 4000 | <40 | <40 | 28 | 32 | <3.0 | <3.0 |
| 11... | -- | 160 | 200 | 1300 | <40 | <40 | 30 | 30 | <3.0 | <3.0 |
| 11... | -- | 160 | 190 | 1300 | <40 | <40 | 30 | 30 | <3.0 | <3.0 |
| 11... | -- | 150 | 60 | 1200 | <40 | <40 | 30 | 31 | <3.0 | <3.0 |
| 11... | -- | 140 | <20 | 1000 | <40 | <40 | 31 | 32 | <3.0 | <3.0 |
| 12... | <5.0 | 110 | <20 | 840 | <40 | <40 | 31 | 31 | <3.0 | <3.0 |
| 12... | <5.0 | 110 | <20 | 810 | <40 | <40 | 31 | 31 | <3.0 | <3.0 |
| 12... | <5.0 | 110 | <20 | 900 | <40 | <40 | 30 | 31 | <3.0 | <3.0 |
| 12... | <5.0 | 110 | <20 | 790 | <40 | <40 | 31 | 31 | <3.0 | <3.0 |
| 13... | <5.0 | 110 | <20 | 840 | <4.0 | <3.0 | 30 | 31 | 1.0 | 1.0 |
| 13... | <5.0 | 160 | 600 | 1300 | <80 | <40 | 27 | 27 | <6.0 | <3.0 |
| APR | | | | | | | | | | |
| 13... | -- | 110 | <20 | 1600 | <40 | <40 | 29 | 33 | <3.0 | <3.0 |
| 13... | -- | 110 | 50 | 1000 | <40 | <40 | 29 | 32 | <3.0 | <3.0 |
| 13... | -- | 110 | 70 | 960 | <40 | <40 | 29 | 33 | <3.0 | <3.0 |
| 14... | -- | 150 | 130 | 1300 | <40 | <40 | 30 | 32 | <3.0 | <3.0 |
| 14... | -- | 140 | 130 | 1200 | <40 | <40 | 29 | 32 | <3.0 | <3.0 |
| 23... | -- | 140 | 710 | 1300 | <40 | <40 | 28 | 29 | <3.0 | <3.0 |
| MAY | | | | | | | | | | |
| 29... | -- | 110 | 440 | 980 | <40 | <40 | 26 | 27 | <3.0 | <3.0 |
| JUN | | | | | | | | | | |
| 19... | -- | 150 | 400 | 1200 | <40 | <40 | 29 | 29 | <3.0 | <3.0 |
| JUL | | | | | | | | | | |
| 31... | -- | 120 | 50 | 910 | <40 | <40 | 29 | 29 | <3.0 | <3.0 |
| AUG | | | | | | | | | | |
| 19... | -- | 120 | <20 | 730 | <40 | <40 | 28 | 29 | <3.0 | <3.0 |

SWATARA CREEK BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

| Date | CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030) | CHRO- MIUM, TOTAL RECOV- ERABLE (µG/L AS CR) (01034) | COBALT, DIS- SOLVED (µG/L AS CO) (01035) | COBALT, TOTAL RECOV- ERABLE (µG/L AS CO) (01037) | COPPER, DIS- SOLVED (µG/L AS CU) (01040) | COPPER, TOTAL RECOV- ERABLE (µG/L AS CU) (01042) | IRON, DIS- SOLVED (µG/L AS FE) (01046) | IRON, TOTAL RECOV- ERABLE (µG/L AS FE) (01045) | LEAD, DIS- SOLVED (µG/L AS PB) (01049) | LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051) |
|-------|--|---|---|--|---|--|---|--|---|--|
| NOV | | | | | | | | | | |
| 28... | <3.0 | <3.0 | 74 | 71 | <3.0 | <3.0 | 5600 | 5800 | <40 | <40 |
| DEC | | | | | | | | | | |
| 18... | <3.0 | <3.0 | 73 | 73 | <3.0 | <3.0 | 6500 | 9000 | <40 | <40 |
| JAN | | | | | | | | | | |
| 08... | <3.0 | <3.0 | 65 | 63 | <3.0 | <3.0 | 7600 | 8600 | <40 | <40 |
| 24... | <3.0 | <3.0 | 35 | 54 | <3.0 | 15 | 2400 | 160000 | <40 | <40 |
| 24... | <3.0 | <3.0 | 36 | 53 | <3.0 | 13 | 3000 | 150000 | <40 | <40 |
| 24... | <3.0 | <3.0 | 38 | 43 | <3.0 | 5.0 | 5000 | 65000 | <40 | <40 |
| 24... | <3.0 | <3.0 | 40 | 45 | <3.0 | 20 | 5200 | 49000 | <40 | <40 |
| 24... | <3.0 | <3.0 | 42 | 44 | <3.0 | <3.0 | 5800 | 67000 | <40 | <40 |
| 24... | <3.0 | <3.0 | 39 | 43 | <3.0 | <3.0 | 5500 | 73000 | <40 | <40 |
| 25... | <3.0 | <3.0 | 38 | 59 | <3.0 | 40 | 3400 | 350000 | <40 | 51 |
| 25... | <3.0 | <3.0 | 39 | 45 | <3.0 | 4.0 | 5500 | 110000 | <40 | <40 |
| 25... | <3.0 | <3.0 | 40 | 46 | <3.0 | <3.0 | 5700 | 83000 | <40 | <40 |
| 25... | <3.0 | <3.0 | 40 | 42 | <3.0 | <3.0 | 6300 | 56000 | <40 | <40 |
| 25... | <3.0 | <3.0 | 40 | 44 | <3.0 | <3.0 | 6000 | 55000 | <40 | <40 |
| 25... | <3.0 | <3.0 | 40 | 46 | <3.0 | <3.0 | 5800 | 68000 | <40 | <40 |
| 29... | <3.0 | <3.0 | 41 | 39 | <3.0 | <3.0 | 11000 | 11000 | <40 | <40 |
| FEB | | | | | | | | | | |
| 10... | <3.0 | <3.0 | 38 | 42 | <3.0 | 9.0 | 2900 | 36000 | <40 | <40 |
| 10... | <3.0 | <3.0 | 38 | 38 | <3.0 | <3.0 | 5100 | 24000 | <40 | <40 |
| 11... | <3.0 | <3.0 | 39 | 38 | <3.0 | 5.0 | 6000 | 32000 | <40 | <40 |
| 11... | <3.0 | <3.0 | 66 | 64 | <3.0 | 9.0 | 6300 | 27000 | <40 | <40 |
| 11... | <3.0 | <3.0 | 65 | 62 | <3.0 | 5.0 | 6400 | 28000 | <40 | <40 |
| MAR | | | | | | | | | | |
| 02... | <3.0 | <3.0 | 38 | 39 | <3.0 | <3.0 | 5200 | 29000 | <40 | <40 |
| 02... | <3.0 | <3.0 | 36 | 37 | <3.0 | <3.0 | 5300 | 32000 | <40 | <40 |
| 03... | <3.0 | <3.0 | 65 | 63 | <3.0 | <3.0 | 4600 | 34000 | <40 | <40 |
| 04... | <3.0 | <3.0 | 40 | 41 | 4.0 | <3.0 | 8200 | 26000 | <40 | <40 |
| 04... | <3.0 | <3.0 | 36 | 38 | <3.0 | <3.0 | 3300 | 46000 | <40 | <40 |
| 11... | <3.0 | <3.0 | 66 | 63 | <3.0 | <3.0 | 7600 | 10000 | <40 | <40 |
| 11... | <3.0 | <3.0 | 65 | 63 | <3.0 | <3.0 | 7500 | 11000 | <40 | <40 |
| 11... | <3.0 | <3.0 | 61 | 59 | <3.0 | <3.0 | 7600 | 9500 | <40 | <40 |
| 11... | <3.0 | <3.0 | 57 | 55 | <3.0 | <3.0 | 7700 | 8900 | <40 | <40 |
| 12... | <3.0 | <3.0 | 40 | 38 | <3.0 | <3.0 | 7600 | 10000 | <40 | <40 |
| 12... | <3.0 | <3.0 | 39 | 37 | <3.0 | <3.0 | 6700 | 9900 | <40 | <40 |
| 12... | <3.0 | <3.0 | 39 | 39 | <3.0 | <3.0 | 8900 | 11000 | <40 | <40 |
| 12... | <3.0 | <3.0 | 39 | 38 | <3.0 | <3.0 | 9000 | 10000 | <40 | <40 |
| 13... | <4.0 | <4.0 | 40 | 39 | <8.0 | <5.0 | 9800 | 11000 | <10 | <10 |
| 13... | <6.0 | <3.0 | 61 | 59 | <6.0 | <3.0 | 6900 | 8400 | <80 | <40 |
| APR | | | | | | | | | | |
| 13... | <3.0 | <3.0 | 43 | 41 | <3.0 | <3.0 | 1900 | 16000 | <40 | <40 |
| 13... | <3.0 | <3.0 | 42 | 41 | <3.0 | <3.0 | 3300 | 10000 | <40 | <40 |
| 13... | <3.0 | <3.0 | 42 | 41 | <3.0 | <3.0 | 4000 | 9500 | <40 | <40 |
| 14... | <3.0 | <3.0 | 61 | 58 | <3.0 | <3.0 | 5600 | 9200 | <40 | <40 |
| 14... | <3.0 | <3.0 | 60 | 58 | <3.0 | <3.0 | 6100 | 8500 | <40 | <40 |
| 23... | <3.0 | <3.0 | 61 | 59 | <3.0 | <3.0 | 6200 | 8100 | <40 | <40 |
| MAY | | | | | | | | | | |
| 29... | <3.0 | <3.0 | 50 | 48 | <3.0 | <3.0 | 5500 | 7200 | <40 | <40 |
| JUN | | | | | | | | | | |
| 19... | <3.0 | <3.0 | 60 | 58 | <3.0 | <3.0 | 6100 | 7600 | <40 | <40 |
| JUL | | | | | | | | | | |
| 31... | <3.0 | 5.0 | 39 | 40 | <3.0 | <3.0 | 10000 | 11000 | <40 | <40 |
| AUG | | | | | | | | | | |
| 19... | 19 | <3.0 | 41 | 39 | <3.0 | <3.0 | 11000 | 11000 | <40 | <40 |

SWATARA CREEK BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

| Date | MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056) | MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN) (01055) | NICKEL, DIS- SOLVED (µG/L AS NI) (01065) | NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI) (01067) | SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145) | SELE- NIUM, TOTAL (µG/L AS SE) (01147) | ZINC, DIS- SOLVED (µG/L AS ZN) (01090) | ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092) |
|-------|---|--|---|--|--|---|---|--|
| | NOV | | | | | | | |
| 28... | 2500 | 2400 | 120 | 110 | <100 | <100 | 280 | 260 |
| DEC | | | | | | | | |
| 18... | 2700 | 2700 | 120 | 120 | <100 | <100 | 280 | 270 |
| JAN | | | | | | | | |
| 08... | 2300 | 2300 | 97 | 91 | <100 | <100 | 250 | 220 |
| 24... | 2300 | 2500 | 42 | 61 | <100 | <100 | 47 | 180 |
| 24... | 2300 | 2500 | 45 | 57 | <100 | <100 | 40 | 170 |
| 24... | 2200 | 2200 | 53 | 60 | <100 | <100 | 110 | 150 |
| 24... | 2200 | 2200 | 55 | 61 | <100 | <100 | 150 | 310 |
| 24... | 2100 | 2100 | 57 | 59 | <100 | <100 | 85 | 160 |
| 24... | 2200 | 2200 | 55 | 59 | <100 | <100 | 72 | 130 |
| 25... | 2300 | 2500 | 49 | 74 | <100 | <100 | 42 | 250 |
| 25... | 2200 | 2200 | 55 | 59 | <100 | <100 | 63 | 160 |
| 25... | 2300 | 2500 | 55 | 60 | <100 | <100 | 68 | 140 |
| 25... | 2200 | 2200 | 55 | 58 | <100 | <100 | 73 | 140 |
| 25... | 2200 | 2200 | 56 | 60 | <100 | <100 | 74 | 150 |
| 25... | 2200 | 2300 | 55 | 61 | <100 | <100 | 85 | 160 |
| 29... | 2000 | 2000 | 62 | 56 | <100 | <100 | 100 | 130 |
| FEB | | | | | | | | |
| 10... | 2100 | 2200 | 50 | 51 | <100 | <100 | 68 | 140 |
| 10... | 2200 | 2200 | 47 | 48 | <100 | <100 | 64 | 120 |
| 11... | 2100 | 2000 | 51 | 52 | <100 | <100 | 75 | 130 |
| 11... | 2500 | 2400 | 96 | 93 | <100 | <100 | 230 | 270 |
| 11... | 2600 | 2500 | 92 | 86 | <100 | <100 | 220 | 280 |
| MAR | | | | | | | | |
| 02... | 2100 | 2100 | 50 | 53 | <100 | <100 | 71 | 92 |
| 02... | 2100 | 2100 | 50 | 48 | <100 | <100 | 67 | 88 |
| 03... | 2700 | 2600 | 92 | 92 | <100 | <100 | 210 | 220 |
| 04... | 2100 | 2000 | 65 | 58 | <100 | <100 | 100 | 110 |
| 04... | 2100 | 2100 | 47 | 49 | <100 | <100 | 59 | 91 |
| 11... | 2400 | 2400 | 98 | 92 | <100 | <100 | 230 | 220 |
| 11... | 2500 | 2500 | 94 | 92 | <100 | <100 | 240 | 230 |
| 11... | 2300 | 2300 | 85 | 85 | <100 | <100 | 210 | 200 |
| 11... | 2200 | 2200 | 79 | 78 | <100 | <100 | 180 | 170 |
| 12... | 2000 | 1900 | 53 | 54 | <100 | <100 | 94 | 88 |
| 12... | 2000 | 1900 | 54 | 52 | <100 | <100 | 98 | 86 |
| 12... | 2000 | 2300 | 53 | 52 | <100 | <100 | 84 | 93 |
| 12... | 2000 | 1900 | 52 | 52 | <100 | <100 | 88 | 100 |
| 13... | 2000 | 1900 | 53 | 52 | 6.0 | <6 | 84 | 84 |
| 13... | 2300 | 2300 | 95 | 93 | <200 | <100 | 220 | 220 |
| APR | | | | | | | | |
| 13... | 1900 | 1900 | 58 | 58 | <100 | <100 | 110 | 150 |
| 13... | 1900 | 1900 | 60 | 59 | <100 | <100 | 110 | 150 |
| 13... | 1900 | 1900 | 60 | 56 | <100 | <100 | 110 | 160 |
| 14... | 2100 | 2100 | 89 | 87 | <100 | <100 | 230 | 230 |
| 14... | 2100 | 2100 | 89 | 85 | <100 | <100 | 250 | 230 |
| 23... | 2100 | 2100 | 92 | 89 | <100 | <100 | 210 | 200 |
| MAY | | | | | | | | |
| 29... | 1700 | 1700 | 71 | 68 | <100 | <100 | 160 | 150 |
| JUN | | | | | | | | |
| 19... | 2100 | 2000 | 87 | 85 | <100 | <100 | 220 | 220 |
| JUL | | | | | | | | |
| 31... | 1900 | 1900 | 54 | 57 | <100 | <100 | 84 | 91 |
| AUG | | | | | | | | |
| 19... | 2000 | 1900 | 76 | 58 | <100 | <100 | 85 | 96 |

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 2001 TO SEPTEMBER 2002

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----------------|-----|------|-----------------|-----|------|-----------------|-----|------|----------------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 494 | 473 | 481 | 482 | 369 | 450 | --- | --- | --- | 289 | 265 | 267 |
| 2 | 473 | 460 | 467 | 431 | 359 | 376 | --- | --- | --- | 323 | 289 | 316 |
| 3 | 510 | 457 | 484 | 360 | 353 | 357 | --- | --- | --- | 307 | 267 | 278 |
| 4 | 460 | 442 | 448 | 463 | 359 | 440 | --- | --- | --- | 312 | 267 | 272 |
| 5 | 442 | 426 | 435 | 415 | 367 | 375 | --- | --- | --- | 325 | 302 | 320 |
| 6 | 481 | 426 | 462 | 400 | 341 | 363 | --- | --- | --- | 302 | 268 | 280 |
| 7 | 445 | 424 | 430 | --- | --- | --- | --- | --- | --- | 323 | 268 | 278 |
| 8 | 466 | 421 | 426 | --- | --- | --- | --- | --- | --- | 335 | 277 | 312 |
| 9 | 480 | 428 | 458 | --- | --- | --- | --- | --- | --- | 277 | 273 | 275 |
| 10 | 428 | 409 | 417 | --- | --- | --- | --- | --- | --- | 363 | 274 | 308 |
| 11 | 460 | 403 | 413 | --- | --- | --- | --- | --- | --- | 341 | 271 | 305 |
| 12 | 468 | 407 | 442 | --- | --- | --- | --- | --- | --- | 272 | 268 | 270 |
| 13 | 407 | 394 | 398 | --- | --- | --- | --- | --- | --- | 355 | 267 | 311 |
| 14 | 452 | 395 | 412 | --- | --- | --- | --- | --- | --- | 337 | 272 | 288 |
| 15 | 457 | 433 | 445 | --- | --- | --- | --- | --- | --- | 273 | 269 | 271 |
| 16 | 440 | 430 | 434 | --- | --- | --- | --- | --- | --- | 342 | 271 | 315 |
| 17 | 544 | 432 | 477 | --- | --- | --- | --- | --- | --- | 341 | 287 | 321 |
| 18 | 521 | 447 | 475 | --- | --- | --- | --- | --- | --- | 287 | 275 | 279 |
| 19 | 447 | 437 | 444 | --- | --- | --- | 372 | 324 | 346 | 341 | 271 | 289 |
| 20 | 535 | 434 | 480 | --- | --- | --- | 324 | 315 | 320 | 339 | 283 | 323 |
| 21 | 494 | 422 | 450 | --- | --- | --- | 389 | 313 | 347 | 284 | 273 | 276 |
| 22 | 423 | 414 | 419 | --- | --- | --- | 352 | 297 | 319 | 345 | 275 | 294 |
| 23 | 521 | 413 | 468 | --- | --- | --- | 297 | 284 | 292 | 345 | 284 | 323 |
| 24 | 472 | 401 | 426 | --- | --- | --- | 349 | 284 | 320 | 292 | 273 | 279 |
| 25 | 402 | 396 | 399 | --- | --- | --- | 323 | 276 | 293 | 366 | 291 | 319 |
| 26 | 515 | 397 | 463 | --- | --- | --- | 276 | 267 | 271 | 362 | 310 | 341 |
| 27 | 464 | 398 | 420 | --- | --- | --- | 320 | 267 | 306 | 310 | 304 | 306 |
| 28 | 402 | 392 | 399 | --- | --- | --- | 311 | 266 | 285 | 361 | 303 | 329 |
| 29 | 509 | 392 | 466 | --- | --- | --- | 267 | 263 | 264 | 353 | 305 | 331 |
| 30 | 445 | 380 | 396 | --- | --- | --- | 318 | 264 | 307 | 305 | 298 | 301 |
| 31 | 381 | 370 | 377 | --- | --- | --- | 310 | 266 | 279 | 352 | 298 | 328 |
| MONTH | 544 | 370 | 439 | 482 | 341 | 394 | 389 | 263 | 304 | 366 | 265 | 300 |
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 341 | 290 | 311 | 337 | 282 | 305 | 309 | 276 | 284 | 328 | 293 | 303 |
| 2 | 291 | 287 | 289 | 282 | 278 | 281 | 310 | 281 | 303 | 325 | 296 | 313 |
| 3 | 341 | 287 | 324 | 367 | 274 | 335 | 284 | 281 | 282 | 300 | 296 | 298 |
| 4 | 327 | 293 | 303 | 342 | 308 | 317 | 319 | 281 | 303 | 325 | 294 | 310 |
| 5 | 299 | 292 | 295 | 310 | 305 | 306 | 311 | 286 | 300 | 305 | 278 | 291 |
| 6 | 367 | 291 | 344 | 359 | 310 | 344 | 323 | 284 | 287 | 309 | 276 | 284 |
| 7 | 291 | 286 | 288 | 345 | 307 | 318 | 323 | 309 | 315 | 305 | 279 | 298 |
| 8 | 360 | 286 | 299 | 379 | 305 | 323 | 310 | 282 | 289 | 279 | 274 | 276 |
| 9 | 356 | 289 | 332 | 365 | 287 | 332 | 325 | 281 | 298 | 309 | 274 | 291 |
| 10 | 289 | 280 | 285 | 298 | 292 | 296 | 319 | 284 | 306 | 307 | 276 | 290 |
| 11 | 356 | 280 | 309 | 370 | 293 | 326 | 289 | 284 | 285 | 302 | 276 | 292 |
| 12 | 344 | 286 | 317 | 345 | 295 | 317 | 333 | 285 | 317 | 277 | 274 | 275 |
| 13 | 289 | 281 | 286 | 296 | 292 | 294 | 316 | 283 | 293 | 311 | 275 | 301 |
| 14 | 337 | 277 | 307 | 361 | 291 | 333 | 334 | 284 | 298 | 314 | 283 | 291 |
| 15 | 331 | 289 | 315 | 334 | 287 | 301 | 356 | 308 | 328 | 331 | 290 | 305 |
| 16 | 290 | 282 | 285 | 287 | 281 | 284 | 314 | 307 | 311 | 324 | 290 | 309 |
| 17 | 333 | 282 | 311 | 349 | 281 | 334 | 344 | 303 | 325 | 291 | 284 | 288 |
| 18 | 329 | 283 | 299 | 316 | 275 | 279 | 322 | 288 | 302 | 376 | 279 | 339 |
| 19 | 291 | 283 | 286 | 339 | 273 | 287 | 334 | 270 | 293 | 339 | 311 | 326 |
| 20 | 363 | 290 | 343 | 337 | 303 | 320 | 321 | 293 | 312 | 323 | 294 | 308 |
| 21 | 293 | 289 | 290 | 327 | 319 | 323 | 294 | 286 | 291 | 316 | 284 | 304 |
| 22 | 366 | 289 | 306 | 356 | 317 | 334 | 318 | 277 | 294 | 284 | 278 | 281 |
| 23 | 359 | 292 | 331 | 342 | 290 | 316 | 303 | 274 | 286 | 306 | 276 | 295 |
| 24 | 293 | 290 | 291 | 290 | 281 | 284 | 310 | 292 | 301 | 294 | 273 | 283 |
| 25 | 360 | 288 | 318 | 315 | 279 | 304 | 308 | 281 | 289 | 303 | 272 | 281 |
| 26 | 345 | 286 | 315 | 304 | 266 | 281 | 321 | 281 | 293 | 301 | 273 | 293 |
| 27 | 286 | 276 | 280 | 330 | 272 | 310 | 317 | 280 | 304 | 273 | 269 | 271 |
| 28 | 350 | 276 | 318 | 328 | 286 | 314 | 289 | 277 | 279 | 306 | 269 | 292 |
| 29 | --- | --- | --- | 286 | 277 | 280 | 333 | 289 | 321 | 295 | 270 | 282 |
| 30 | --- | --- | --- | 299 | 276 | 291 | 326 | 298 | 309 | 296 | 257 | 274 |
| 31 | --- | --- | --- | 296 | 276 | 286 | --- | --- | --- | 299 | 274 | 296 |
| MONTH | 367 | 276 | 306 | 379 | 266 | 308 | 356 | 270 | 300 | 376 | 257 | 295 |

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 2001 TO SEPTEMBER 2002

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 275 | 272 | 273 | 305 | 295 | 298 | 403 | 300 | 348 | 309 | 285 | 295 |
| 2 | 318 | 272 | 297 | 335 | 295 | 321 | 368 | 301 | 328 | 401 | 284 | 337 |
| 3 | 304 | 274 | 288 | 333 | 313 | 322 | 304 | 301 | 302 | 410 | 374 | 389 |
| 4 | 320 | 273 | 277 | 382 | 313 | 327 | 408 | 301 | 363 | 374 | 312 | 333 |
| 5 | 320 | 298 | 306 | 371 | 322 | 357 | 363 | 293 | 316 | 360 | 308 | 315 |
| 6 | 299 | 268 | 275 | 325 | 321 | 323 | 301 | 298 | 299 | 378 | 360 | 375 |
| 7 | 326 | 275 | 299 | 390 | 322 | 349 | 406 | 298 | 376 | 376 | 324 | 353 |
| 8 | 313 | 280 | 298 | 370 | 322 | 347 | 368 | 295 | 306 | 372 | 310 | 323 |
| 9 | 283 | 280 | 281 | 324 | 314 | 321 | 409 | 294 | 297 | 384 | 372 | 380 |
| 10 | 328 | 280 | 315 | 389 | 320 | 362 | 415 | 296 | 379 | 375 | 319 | 343 |
| 11 | 309 | 275 | 284 | 367 | 321 | 336 | 296 | 285 | 289 | 397 | 309 | 334 |
| 12 | 279 | 276 | 277 | 337 | 317 | 320 | 380 | 277 | 295 | 415 | 289 | 356 |
| 13 | 333 | 277 | 311 | 382 | 337 | 372 | 382 | 302 | 357 | 289 | 283 | 286 |
| 14 | 321 | 281 | 303 | 364 | 316 | 322 | 302 | 279 | 286 | 467 | 282 | 344 |
| 15 | 285 | 280 | 282 | 364 | 312 | 323 | 375 | 276 | 302 | 450 | 257 | 363 |
| 16 | 338 | 284 | 315 | 370 | 343 | 365 | 378 | 289 | 351 | 453 | 230 | 392 |
| 17 | 319 | 287 | 299 | 343 | 300 | 318 | 289 | 274 | 279 | 493 | 385 | 427 |
| 18 | 344 | 285 | 297 | 383 | 300 | 335 | 355 | 271 | 300 | 487 | 403 | 442 |
| 19 | 337 | 291 | 326 | 354 | 304 | 327 | 356 | 288 | 335 | 412 | 404 | 409 |
| 20 | 293 | 289 | 291 | 310 | 306 | 308 | 288 | 278 | 281 | 500 | 406 | 438 |
| 21 | 343 | 289 | 313 | 395 | 308 | 356 | 442 | 275 | 341 | 518 | 397 | 448 |
| 22 | 331 | 286 | 310 | 355 | 309 | 323 | 410 | 291 | 342 | 402 | 354 | 395 |
| 23 | 287 | 282 | 285 | 311 | 309 | 310 | 299 | 291 | 296 | 510 | 356 | 463 |
| 24 | 330 | 282 | 320 | 400 | 309 | 374 | 439 | 295 | 372 | 510 | 487 | 497 |
| 25 | 323 | 283 | 295 | 359 | 308 | 314 | 400 | 295 | 334 | 487 | 464 | 478 |
| 26 | 321 | 281 | 288 | 391 | 306 | 322 | 296 | 292 | 294 | 519 | 459 | 480 |
| 27 | 327 | 307 | 323 | 393 | 308 | 364 | 441 | 292 | 379 | 617 | 407 | 529 |
| 28 | 307 | 290 | 293 | 309 | 297 | 302 | 404 | 289 | 327 | 904 | 617 | 831 |
| 29 | 332 | 291 | 308 | 397 | 296 | 329 | 290 | 281 | 285 | 870 | 656 | 755 |
| 30 | 332 | 305 | 324 | 375 | 300 | 336 | 397 | 281 | 359 | 736 | 626 | 682 |
| 31 | --- | --- | --- | 302 | 300 | 301 | 385 | 309 | 341 | --- | --- | --- |
| MONTH | 344 | 268 | 298 | 400 | 295 | 332 | 442 | 271 | 324 | 904 | 230 | 426 |
| YEAR | 904 | 230 | 333 | | | | | | | | | |

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

| DAY | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN |
|-----|---------|-----|--------|----------|-----|--------|----------|-----|--------|---------|-----|--------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 5.6 | 4.3 | 5.4 | 6.6 | 4.7 | 4.8 | --- | --- | --- | --- | --- | --- |
| 2 | 5.7 | 5.6 | 5.7 | 6.3 | 4.9 | 6.0 | --- | --- | --- | --- | --- | --- |
| 3 | 5.7 | 4.1 | 4.3 | 6.5 | 6.3 | 6.4 | --- | --- | --- | --- | --- | --- |
| 4 | 5.5 | 4.4 | 5.4 | 6.5 | 4.9 | 5.0 | --- | --- | --- | --- | --- | --- |
| 5 | 5.4 | 5.3 | 5.4 | 6.4 | 5.2 | 6.0 | --- | --- | --- | --- | --- | --- |
| 6 | 5.3 | 4.3 | 4.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 5.8 | 4.5 | 5.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 5.8 | 4.6 | 5.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 5.0 | 4.2 | 4.5 | --- | --- | --- | --- | --- | --- | 6.3 | 6.3 | 6.3 |
| 10 | 5.6 | 5.0 | 5.5 | --- | --- | --- | --- | --- | --- | 6.4 | 4.6 | 6.3 |
| 11 | 5.7 | 4.6 | 5.5 | --- | --- | --- | --- | --- | --- | 6.4 | 5.2 | 5.6 |
| 12 | 5.4 | 4.5 | 4.6 | --- | --- | --- | --- | --- | --- | 6.4 | 6.4 | 6.4 |
| 13 | 5.8 | 5.4 | 5.8 | --- | --- | --- | --- | --- | --- | 6.4 | 4.8 | 5.2 |
| 14 | 5.8 | 5.0 | 5.7 | --- | --- | --- | --- | --- | --- | 6.4 | 5.3 | 6.4 |
| 15 | 5.3 | 4.8 | 4.9 | --- | --- | --- | --- | --- | --- | 6.4 | 6.4 | 6.4 |
| 16 | 6.2 | 5.3 | 5.9 | --- | --- | --- | --- | --- | --- | 6.4 | 4.9 | 5.0 |
| 17 | 6.2 | 3.9 | 6.2 | --- | --- | --- | --- | --- | --- | 6.2 | 5.1 | 5.5 |
| 18 | 6.1 | 4.0 | 4.2 | --- | --- | --- | --- | --- | --- | 6.3 | 6.2 | 6.2 |
| 19 | 6.3 | 6.1 | 6.3 | --- | --- | --- | 6.1 | 4.7 | 5.8 | 6.2 | 5.1 | 6.2 |
| 20 | 6.3 | 4.0 | 4.3 | --- | --- | --- | 6.2 | 6.1 | 6.1 | 5.8 | 5.1 | 5.3 |
| 21 | 6.3 | 4.3 | 5.3 | --- | --- | --- | 6.1 | 4.9 | 5.1 | 5.9 | 5.8 | 5.9 |
| 22 | 6.5 | 6.3 | 6.3 | --- | --- | --- | --- | --- | --- | 5.9 | 5.1 | 5.8 |
| 23 | 6.6 | 4.2 | 4.4 | --- | --- | --- | --- | --- | --- | 5.9 | 5.2 | 5.4 |
| 24 | 6.4 | 4.4 | 6.1 | --- | --- | --- | --- | --- | --- | 5.9 | 5.8 | 5.8 |
| 25 | 6.5 | 6.4 | 6.4 | --- | --- | --- | --- | --- | --- | 6.0 | 5.2 | 5.8 |
| 26 | 6.6 | 4.4 | 4.5 | --- | --- | --- | --- | --- | --- | 5.8 | 5.2 | 5.4 |
| 27 | 6.4 | 4.6 | 5.9 | --- | --- | --- | --- | --- | --- | 5.8 | 5.8 | 5.8 |
| 28 | 6.4 | 6.4 | 6.4 | --- | --- | --- | --- | --- | --- | 6.0 | 5.3 | 5.4 |
| 29 | 6.4 | 4.5 | 4.7 | --- | --- | --- | --- | --- | --- | 5.7 | 5.3 | 5.6 |
| 30 | 6.4 | 4.8 | 6.2 | --- | --- | --- | --- | --- | --- | 5.8 | 5.7 | 5.8 |
| 31 | 6.6 | 6.4 | 6.6 | --- | --- | --- | --- | --- | --- | 5.8 | 5.5 | 5.6 |
| MAX | 6.6 | 6.4 | 6.6 | 6.6 | 6.3 | 6.4 | 6.2 | 6.1 | 6.1 | 6.4 | 6.4 | 6.4 |
| MIN | 5.0 | 3.9 | 4.2 | 6.3 | 4.7 | 4.8 | 6.1 | 4.7 | 5.1 | 5.7 | 4.6 | 5.0 |

SWATARA CREEK BASIN

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

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

| DAY | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN |
|------|-----------------|-----|--------|--------------|-----|---------|---------------|-----|--------|------------------|-----|--------|
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 5.6 | 5.6 | 5.6 | 6.1 | 5.1 | 5.8 | 5.6 | 5.4 | 5.6 | 5.7 | 5.1 | 5.7 |
| 2 | 5.8 | 5.6 | 5.6 | 6.1 | 6.1 | 6.1 | 5.9 | 5.4 | 5.6 | 5.5 | 5.0 | 5.2 |
| 3 | 5.8 | 5.8 | 5.8 | 6.1 | 5.2 | 5.2 | 6.0 | 5.9 | 5.9 | 5.5 | 5.4 | 5.5 |
| 4 | 6.3 | 5.8 | 6.2 | 5.7 | 5.2 | 5.5 | 6.0 | 5.5 | 5.6 | 5.4 | 5.0 | 5.1 |
| 5 | 6.3 | 6.3 | 6.3 | 5.8 | 5.7 | 5.7 | 6.0 | 5.6 | 5.6 | 5.3 | 5.0 | 5.2 |
| 6 | 6.3 | 5.2 | 5.6 | 5.8 | 5.3 | 5.4 | 6.1 | 5.5 | 6.0 | 5.7 | 5.2 | 5.3 |
| 7 | 6.4 | 6.3 | 6.4 | 5.6 | 5.3 | 5.4 | 5.6 | 5.5 | 5.6 | 5.6 | 5.2 | 5.4 |
| 8 | 6.4 | 5.4 | 6.3 | 6.4 | 5.3 | 5.6 | 6.1 | 5.6 | 6.0 | 5.6 | 5.6 | 5.6 |
| 9 | 6.4 | 5.4 | 5.7 | 6.5 | 5.5 | 5.9 | 6.0 | 5.3 | 6.0 | 5.7 | 5.1 | 5.3 |
| 10 | 6.4 | 6.3 | 6.3 | 6.5 | 6.4 | 6.5 | 6.1 | 5.5 | 5.6 | 5.6 | 5.1 | 5.2 |
| 11 | 6.3 | 5.3 | 6.3 | 6.5 | 5.4 | 6.5 | 6.1 | 6.0 | 6.0 | 5.5 | 5.2 | 5.2 |
| 12 | 6.4 | 5.6 | 5.8 | 6.5 | 5.8 | 6.2 | 6.0 | 5.3 | 5.5 | 5.6 | 5.4 | 5.5 |
| 13 | 6.4 | 6.3 | 6.4 | 6.5 | 6.4 | 6.4 | 6.0 | 5.6 | 6.0 | 5.4 | 4.8 | 5.0 |
| 14 | 6.3 | 5.4 | 5.6 | 6.4 | 5.4 | 5.7 | 6.0 | 5.3 | 6.0 | 5.5 | 5.0 | 5.4 |
| 15 | 6.2 | 5.6 | 6.1 | 6.5 | 5.9 | 6.4 | 5.9 | 5.3 | 5.5 | 5.4 | 4.6 | 5.3 |
| 16 | 6.2 | 6.1 | 6.1 | 6.4 | 6.3 | 6.4 | 5.9 | 5.8 | 5.9 | 5.6 | 4.7 | 4.8 |
| 17 | 6.2 | 5.5 | 5.6 | 6.3 | 5.4 | 5.6 | 5.8 | 5.1 | 5.2 | 5.6 | 5.6 | 5.6 |
| 18 | 6.0 | 5.5 | 6.0 | 6.2 | 5.7 | 6.2 | 5.7 | 5.3 | 5.6 | 5.6 | 4.7 | 5.0 |
| 19 | 6.3 | 6.0 | 6.0 | 6.2 | 5.5 | 6.2 | 5.6 | 5.0 | 5.6 | 5.5 | 5.2 | 5.5 |
| 20 | 6.3 | 5.3 | 5.6 | 5.7 | 5.3 | 5.4 | 5.3 | 5.0 | 5.1 | 5.5 | 5.0 | 5.5 |
| 21 | 6.3 | 6.1 | 6.3 | 5.8 | 5.7 | 5.8 | 5.4 | 5.3 | 5.4 | 5.5 | 5.0 | 5.2 |
| 22 | 6.3 | 5.3 | 6.3 | 5.8 | 5.4 | 5.8 | 6.5 | 4.9 | 5.4 | 5.5 | 5.4 | 5.5 |
| 23 | 6.3 | 5.4 | 5.7 | 5.6 | 5.4 | 5.4 | 6.4 | 5.6 | 6.2 | 5.5 | 5.0 | 5.2 |
| 24 | 6.3 | 6.2 | 6.3 | 5.7 | 5.6 | 5.7 | 6.0 | 5.6 | 5.7 | 5.5 | 5.3 | 5.5 |
| 25 | 6.2 | 5.2 | 6.2 | 5.8 | 5.6 | 5.7 | 6.0 | 5.7 | 6.0 | 5.5 | 5.1 | 5.5 |
| 26 | 6.1 | 5.3 | 5.5 | 5.6 | 5.6 | 5.6 | 6.0 | 5.3 | 5.9 | 5.4 | 5.1 | 5.2 |
| 27 | 6.1 | 6.0 | 6.1 | 5.8 | 5.6 | 5.7 | 5.9 | 5.3 | 5.5 | 5.5 | 5.4 | 5.5 |
| 28 | 6.0 | 5.0 | 5.1 | 5.8 | 5.6 | 5.7 | 5.9 | 5.8 | 5.9 | 5.6 | 5.1 | 5.2 |
| 29 | --- | --- | --- | 5.6 | 5.6 | 5.6 | 5.8 | 5.2 | 5.3 | 5.5 | 5.2 | 5.3 |
| 30 | --- | --- | --- | 5.6 | 5.6 | 5.6 | 5.7 | 5.3 | 5.7 | 5.7 | 5.1 | 5.5 |
| 31 | --- | --- | --- | 5.6 | 5.5 | 5.6 | --- | --- | --- | 5.5 | 5.0 | 5.1 |
| MAX | 6.4 | 6.3 | 6.4 | 6.5 | 6.4 | 6.5 | 6.5 | 6.0 | 6.2 | 5.7 | 5.6 | 5.7 |
| MIN | 5.6 | 5.0 | 5.1 | 5.6 | 5.1 | 5.2 | 5.3 | 4.9 | 5.1 | 5.3 | 4.6 | 4.8 |
| DAY | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN |
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 5.6 | 5.5 | 5.6 | 6.3 | 6.2 | 6.2 | 6.2 | 3.8 | 4.3 | 5.2 | 5.1 | 5.2 |
| 2 | 5.7 | 4.8 | 5.1 | 6.2 | 5.7 | 5.7 | 6.1 | 4.4 | 6.0 | 5.2 | 3.9 | 4.6 |
| 3 | 5.8 | 5.2 | 5.3 | 6.1 | 5.7 | 6.0 | 6.1 | 6.1 | 6.1 | 4.3 | 3.8 | 3.8 |
| 4 | 5.8 | 4.8 | 5.8 | 6.2 | 4.6 | 6.1 | 6.1 | 3.8 | 4.2 | 4.9 | 4.3 | 4.7 |
| 5 | 5.4 | 4.8 | 5.2 | 6.1 | 4.6 | 5.3 | 6.0 | 4.5 | 6.0 | 5.0 | 3.8 | 4.9 |
| 6 | 5.9 | 5.4 | 5.9 | 6.3 | 6.1 | 6.2 | 6.0 | 5.9 | 6.0 | 4.1 | 3.6 | 3.7 |
| 7 | 5.9 | 4.9 | 5.8 | 6.3 | 4.6 | 6.2 | 6.0 | 3.7 | 4.1 | 4.6 | 4.1 | 4.5 |
| 8 | 5.8 | 5.2 | 5.3 | 6.2 | 5.1 | 5.4 | 6.2 | 4.5 | 5.9 | 4.8 | 3.8 | 4.7 |
| 9 | 5.9 | 5.7 | 5.8 | 6.3 | 6.2 | 6.3 | 6.3 | 4.0 | 6.2 | 4.1 | 3.6 | 3.8 |
| 10 | 5.9 | 4.9 | 5.1 | 6.2 | 4.7 | 5.2 | 6.0 | 3.8 | 4.2 | 4.5 | 4.1 | 4.4 |
| 11 | 5.8 | 5.2 | 5.8 | 6.4 | 5.3 | 6.3 | 6.2 | 6.0 | 6.2 | 4.7 | 3.6 | 4.6 |
| 12 | 6.0 | 5.8 | 5.9 | 6.3 | 6.1 | 6.3 | 6.2 | 3.8 | 6.2 | 6.5 | 3.5 | 4.6 |
| 13 | 6.0 | 4.6 | 4.9 | 6.1 | 4.7 | 5.2 | 6.0 | 3.8 | 4.3 | 6.5 | 6.2 | 6.3 |
| 14 | 5.9 | 5.0 | 5.3 | 6.3 | 5.3 | 6.2 | 6.1 | 6.0 | 6.1 | 6.5 | 3.7 | 6.3 |
| 15 | 6.1 | 5.9 | 6.0 | 6.3 | 5.0 | 6.2 | 6.2 | 3.7 | 6.1 | 6.3 | 3.7 | 4.1 |
| 16 | 6.1 | 4.9 | 5.3 | 5.8 | 4.9 | 5.2 | 5.9 | 3.7 | 4.3 | 6.3 | 5.9 | 6.1 |
| 17 | 6.1 | 5.4 | 6.1 | 6.2 | 5.8 | 6.0 | 6.0 | 5.9 | 5.9 | 6.3 | 3.9 | 6.1 |
| 18 | 6.3 | 4.9 | 6.1 | 6.2 | 4.1 | 5.8 | 5.9 | 3.8 | 5.9 | 5.6 | 4.0 | 4.2 |
| 19 | 6.2 | 4.9 | 5.4 | 6.1 | 4.7 | 5.2 | 5.5 | 3.9 | 4.2 | 5.8 | 5.6 | 5.7 |
| 20 | 6.3 | 6.2 | 6.2 | 6.3 | 6.1 | 6.2 | 5.6 | 5.5 | 5.5 | 5.9 | 4.1 | 5.8 |
| 21 | 6.3 | 5.1 | 6.0 | 6.2 | 4.1 | 4.7 | 5.6 | 3.6 | 5.4 | 5.3 | 4.2 | 4.4 |
| 22 | 6.3 | 5.4 | 5.7 | 6.2 | 4.9 | 6.2 | 6.1 | 3.8 | 5.9 | 5.6 | 5.3 | 5.4 |
| 23 | 6.4 | 6.3 | 6.3 | 6.2 | 6.1 | 6.2 | 6.1 | 6.1 | 6.1 | 5.6 | 4.5 | 5.4 |
| 24 | 6.4 | 5.2 | 5.5 | 6.2 | 4.0 | 4.5 | 6.1 | 3.6 | 3.9 | 5.2 | 4.5 | 4.6 |
| 25 | 6.4 | 5.6 | 6.4 | 6.2 | 4.9 | 6.1 | 5.9 | 3.9 | 5.8 | 5.6 | 5.1 | 5.3 |
| 26 | 6.5 | 5.3 | 6.4 | 6.2 | 4.1 | 6.1 | 6.0 | 5.9 | 5.9 | 5.6 | 3.5 | 5.6 |
| 27 | 6.2 | 5.2 | 5.6 | 6.1 | 4.1 | 4.8 | 5.9 | 3.6 | 3.8 | 4.8 | 3.7 | 3.9 |
| 28 | 6.4 | 6.2 | 6.4 | 6.2 | 6.1 | 6.2 | 5.6 | 3.8 | 5.5 | 4.8 | 4.5 | 4.6 |
| 29 | 6.4 | 5.4 | 5.9 | 6.2 | 3.8 | 6.1 | 5.6 | 5.6 | 5.6 | 4.7 | 3.8 | 4.1 |
| 30 | 6.2 | 5.5 | 5.6 | 6.1 | 4.0 | 4.8 | 5.6 | 3.7 | 3.8 | 4.6 | 3.9 | 4.3 |
| 31 | --- | --- | --- | 6.2 | 6.1 | 6.1 | 5.1 | 3.8 | 4.9 | --- | --- | --- |
| MAX | 6.5 | 6.3 | 6.4 | 6.4 | 6.2 | 6.3 | 6.3 | 6.1 | 6.2 | 6.5 | 6.2 | 6.3 |
| MIN | 5.4 | 4.6 | 4.9 | 5.8 | 3.8 | 4.5 | 5.1 | 3.6 | 3.8 | 4.1 | 3.5 | 3.7 |
| YEAR | MAX | | | MAXIMUM | 6.6 | MINIMUM | 4.1 | | | | | |
| | MIN | | | MAXIMUM | 6.4 | MINIMUM | 3.5 | | | | | |
| | MEDIAN | | | MAXIMUM | 6.6 | MINIMUM | 3.7 | | | | | |

SWATARA CREEK BASIN

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----------------|------|------|-----------------|------|------|-----------------|------|------|----------------|------|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 12.5 | 12.0 | 12.0 | 12.5 | 11.5 | 12.5 | --- | --- | --- | 12.0 | 11.0 | 11.5 |
| 2 | 12.0 | 12.0 | 12.0 | 12.5 | 12.0 | 12.0 | --- | --- | --- | 12.0 | 11.5 | 12.0 |
| 3 | 12.5 | 12.0 | 12.5 | 12.0 | 11.5 | 12.0 | --- | --- | --- | 11.5 | 11.5 | 11.5 |
| 4 | 12.5 | 12.0 | 12.0 | 12.5 | 11.5 | 12.5 | --- | --- | --- | 12.0 | 11.5 | 11.5 |
| 5 | 12.0 | 12.0 | 12.0 | 12.0 | 11.0 | 11.0 | --- | --- | --- | 12.0 | 11.5 | 12.0 |
| 6 | 12.5 | 12.0 | 12.5 | 11.5 | 11.0 | 11.0 | --- | --- | --- | 11.5 | 11.0 | 11.5 |
| 7 | 12.5 | 11.0 | 11.5 | 12.5 | 11.5 | 12.5 | --- | --- | --- | 12.0 | 11.5 | 11.5 |
| 8 | 12.0 | 11.0 | 11.5 | 12.0 | 11.0 | 11.5 | --- | --- | --- | 12.0 | 11.0 | 11.5 |
| 9 | 12.5 | 11.5 | 12.0 | 12.0 | 11.0 | 11.5 | --- | --- | --- | 11.5 | 11.0 | 11.5 |
| 10 | 12.0 | 11.5 | 11.5 | 12.5 | 11.5 | 12.0 | --- | --- | --- | 12.0 | 11.5 | 12.0 |
| 11 | 12.5 | 11.5 | 12.0 | 11.5 | 10.5 | 11.0 | --- | --- | --- | 12.0 | 11.5 | 12.0 |
| 12 | 12.5 | 12.0 | 12.5 | 11.5 | 10.5 | 11.0 | --- | --- | --- | 11.5 | 11.5 | 11.5 |
| 13 | 12.0 | 12.0 | 12.0 | 12.5 | 11.0 | 12.0 | --- | --- | --- | 12.0 | 11.5 | 11.5 |
| 14 | 12.5 | 12.0 | 12.0 | 11.5 | 11.0 | 11.0 | --- | --- | --- | 12.0 | 11.5 | 11.5 |
| 15 | 12.5 | 11.5 | 12.5 | 12.0 | 11.5 | 11.5 | --- | --- | --- | 11.5 | 11.5 | 11.5 |
| 16 | 12.0 | 11.5 | 11.5 | 12.5 | 11.5 | 12.5 | --- | --- | --- | 12.0 | 11.5 | 12.0 |
| 17 | 12.0 | 11.5 | 12.0 | 11.5 | 11.0 | 11.5 | --- | --- | --- | 12.0 | 11.5 | 12.0 |
| 18 | 12.5 | 11.5 | 12.0 | 12.0 | 11.0 | 11.5 | --- | --- | --- | 11.5 | 11.0 | 11.0 |
| 19 | 11.5 | 11.0 | 11.5 | 12.5 | 11.5 | 12.0 | 12.0 | 11.5 | 12.0 | 12.0 | 11.0 | 11.0 |
| 20 | 12.5 | 11.5 | 12.0 | 11.5 | 10.5 | 11.0 | 11.5 | 11.5 | 11.5 | 12.0 | 11.0 | 11.5 |
| 21 | 12.5 | 12.0 | 12.0 | 12.0 | 10.5 | 11.0 | 12.0 | 11.5 | 11.5 | 11.5 | 11.0 | 11.5 |
| 22 | 12.0 | 11.5 | 12.0 | 12.5 | 11.0 | 12.0 | 12.0 | 11.5 | 11.5 | 12.0 | 11.0 | 11.5 |
| 23 | 12.5 | 11.5 | 12.0 | 11.5 | 10.5 | 11.0 | 11.5 | 11.5 | 11.5 | 12.0 | 11.5 | 12.0 |
| 24 | 12.5 | 12.0 | 12.5 | 12.5 | 11.0 | 11.5 | 12.0 | 11.5 | 12.0 | 11.5 | 11.5 | 11.5 |
| 25 | 12.0 | 11.5 | 12.0 | 12.5 | 11.5 | 12.5 | 12.0 | 11.5 | 11.5 | 12.0 | 11.0 | 11.5 |
| 26 | 12.0 | 11.5 | 12.0 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 12.0 | 11.5 | 12.0 |
| 27 | 12.0 | 11.0 | 11.5 | 12.0 | 11.0 | 11.5 | 12.0 | 11.5 | 11.5 | 12.0 | 11.5 | 11.5 |
| 28 | 11.0 | 10.5 | 11.0 | --- | --- | --- | 12.0 | 11.5 | 11.5 | 12.5 | 11.5 | 12.0 |
| 29 | 12.5 | 10.5 | 12.0 | --- | --- | --- | 11.5 | 11.5 | 11.5 | 12.5 | 12.0 | 12.0 |
| 30 | 12.5 | 11.0 | 11.5 | --- | --- | --- | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 12.0 |
| 31 | 11.5 | 11.0 | 11.5 | --- | --- | --- | 11.5 | 11.0 | 11.5 | 12.0 | 11.5 | 12.0 |
| MONTH | 12.5 | 10.5 | 11.9 | 12.5 | 10.5 | 11.6 | 12.0 | 11.0 | 11.6 | 12.5 | 11.0 | 11.7 |
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 2 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 3 | 12.0 | 11.5 | 12.0 | 12.5 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 4 | 12.0 | 11.0 | 11.5 | 12.0 | 11.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 11.5 | 12.0 |
| 5 | 11.5 | 11.0 | 11.5 | 12.0 | 11.0 | 11.5 | 12.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 |
| 6 | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 11.5 | 12.0 | 12.0 | 12.0 |
| 7 | 12.0 | 11.5 | 11.5 | 12.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 8 | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 9 | 12.0 | 11.5 | 12.0 | 12.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 10 | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 11.5 | 12.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 11 | 12.0 | 11.5 | 11.5 | 12.0 | 11.5 | 11.5 | 12.0 | 12.0 | 12.0 | 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 | 12.0 | 12.0 | 12.0 |
| 13 | 11.5 | 11.5 | 11.5 | 12.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 14 | 12.0 | 11.5 | 11.5 | 12.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 15 | 12.0 | 11.5 | 12.0 | 12.5 | 12.0 | 12.0 | 12.5 | 12.0 | 12.0 | 12.0 | 11.5 | 12.0 |
| 16 | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 17 | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 12.0 | 12.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 18 | 12.0 | 11.5 | 11.5 | 12.0 | 11.5 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 19 | 12.0 | 11.5 | 11.5 | 12.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 11.5 | 12.0 |
| 20 | 12.5 | 12.0 | 12.0 | 12.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 11.5 | 12.0 |
| 21 | 12.0 | 12.0 | 12.0 | 12.0 | 11.5 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 11.5 | 12.0 |
| 22 | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 11.5 | 12.0 |
| 23 | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 12.0 | 12.0 | 11.5 | 12.0 |
| 24 | 12.0 | 11.5 | 11.5 | 12.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 25 | 12.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 26 | 12.5 | 11.5 | 12.0 | 12.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 27 | 11.5 | 11.5 | 11.5 | 12.0 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 28 | 12.0 | 11.5 | 11.5 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| 29 | --- | --- | --- | 12.0 | 12.0 | 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 | 12.5 | 11.0 | 11.8 | 12.5 | 11.0 | 11.9 | 12.5 | 11.5 | 12.0 | 12.0 | 11.5 | 12.0 |

