

**CONESTOGA RIVER BASIN**

**015765265 NORTH FORK UNNAMED TRIBUTARY TO BIG SPRING RUN NEAR LAMPETER, PA**

**LOCATION.**--Lat 39°59'54", long 76°14'50", Lancaster County, Hydrologic Unit 02050306, on left bank 1000 ft downstream of Lampeter Road, and 0.7 mi northwest of Lampeter.

**DRAINAGE AREA.**--0.32 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

**PERIOD OF RECORD.**--May 1995 to July 2001 (discontinued).

**GAGE.**--Water-stage recorder and wooden weir. Datum of gage is 360.24 ft above sea level.

**REMARKS.**--Records poor.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 50 ft<sup>3</sup>/s (revised) and maximum (\*):

| Date    | Time | Discharge<br>ft <sup>3</sup> /s | Gage Height<br>(ft) | Date                                       | Time | Discharge<br>ft <sup>3</sup> /s | Gage Height<br>(ft) |
|---------|------|---------------------------------|---------------------|--|------|---------------------------------|---------------------|
| June 22 | 2000 | *125                            | *6.30               | No other peak greater than base discharge. |      |                                 |                     |

**REVISIONS.**--The maximum discharge for water year 1996 has been revised to 130 ft<sup>3</sup>/s, June 19, 1996, gage height, 6.35 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB   | MAR   | APR   | MAY  | JUN   | JUL  | AUG | SEP |
|-------|------|------|------|------|-------|-------|-------|------|-------|------|-----|-----|
| 1     | .10  | .00  | .01  | .01  | .65   | .20   | .44   | .12  | .42   | .30  | --- | --- |
| 2     | .07  | .00  | .00  | .01  | .40   | .19   | .36   | .10  | .14   | .13  | --- | --- |
| 3     | .06  | .00  | .00  | .01  | .26   | .17   | .32   | .10  | .08   | .12  | --- | --- |
| 4     | .10  | .00  | .00  | .00  | .22   | .30   | .29   | .10  | .06   | .25  | --- | --- |
| 5     | .08  | .00  | .01  | e.00 | .29   | .44   | .27   | .09  | .05   | .37  | --- | --- |
| 6     | .06  | .00  | .00  | .00  | .31   | .28   | .34   | .07  | .05   | .13  | --- | --- |
| 7     | .05  | .00  | .00  | .00  | .36   | .60   | .26   | .06  | .05   | .12  | --- | --- |
| 8     | .05  | .00  | .00  | e.00 | .32   | .35   | .25   | .06  | .05   | .19  | --- | --- |
| 9     | .05  | .01  | .00  | e.00 | 1.5   | .29   | .37   | .08  | .04   | .33  | --- | --- |
| 10    | .06  | .34  | .00  | .00  | 1.5   | .24   | .23   | .06  | .04   | .19  | --- | --- |
| 11    | .04  | .01  | .00  | .00  | .36   | .22   | .56   | .05  | .04   | .13  | --- | --- |
| 12    | .04  | .01  | .00  | .00  | .28   | .26   | .30   | .05  | .03   | e.11 | --- | --- |
| 13    | .04  | .01  | .00  | .00  | .27   | 1.5   | .26   | .04  | .03   | e.09 | --- | --- |
| 14    | .04  | .16  | 1.7  | .00  | .30   | .37   | .27   | .04  | .03   | e.08 | --- | --- |
| 15    | .04  | .01  | .11  | .19  | .27   | .30   | .42   | .04  | .07   | e.07 | --- | --- |
| 16    | .04  | .01  | .26  | .07  | .59   | .44   | .84   | .05  | .97   | e.06 | --- | --- |
| 17    | .11  | .01  | 5.6  | .05  | .49   | .46   | .63   | .04  | .29   | e.05 | --- | --- |
| 18    | .16  | .01  | .29  | .03  | .28   | .32   | 1.5   | .05  | .05   | e.04 | --- | --- |
| 19    | .04  | .01  | .19  | 2.7  | .24   | .26   | .42   | .04  | .04   | e.04 | --- | --- |
| 20    | .03  | .01  | .15  | 1.2  | .23   | .23   | .32   | .03  | .71   | e.03 | --- | --- |
| 21    | .02  | .01  | .12  | .30  | .21   | 2.0   | .25   | .69  | .09   | e.03 | --- | --- |
| 22    | .02  | .01  | .10  | e.20 | e.18  | .66   | .23   | .36  | 11    | e.02 | --- | --- |
| 23    | .02  | .01  | .07  | e.15 | .20   | .37   | .21   | .15  | 1.9   | e.01 | --- | --- |
| 24    | .01  | .01  | .07  | e.13 | .18   | .29   | .19   | .07  | .32   | e.01 | --- | --- |
| 25    | .00  | .01  | .09  | e.11 | .51   | .25   | .18   | .13  | .22   | e.00 | --- | --- |
| 26    | .00  | .40  | .05  | e.10 | .30   | .21   | .17   | 1.2  | .18   | e.00 | --- | --- |
| 27    | .00  | .02  | .05  | e.10 | .24   | .20   | .17   | .69  | .16   | e.00 | --- | --- |
| 28    | .00  | .01  | .04  | .10  | .22   | .18   | .15   | .16  | .14   | e.00 | --- | --- |
| 29    | .00  | .07  | e.10 | .10  | ---   | .86   | .13   | .11  | .13   | e.00 | --- | --- |
| 30    | .00  | .02  | e.05 | 1.7  | ---   | 5.9   | .12   | .10  | .12   | e.00 | --- | --- |
| 31    | .00  | ---  | e.01 | 1.5  | ---   | .71   | ---   | .10  | ---   | e.00 | --- | --- |
| TOTAL | 1.33 | 1.17 | 9.07 | 8.76 | 11.16 | 19.05 | 10.45 | 5.03 | 17.50 | 2.90 | --- | --- |
| MEAN  | .043 | .039 | .29  | .28  | .40   | .61   | .35   | .16  | .58   | .094 | --- | --- |
| MAX   | .16  | .40  | 5.6  | 2.7  | 1.5   | 5.9   | 1.5   | 1.2  | 11    | .37  | --- | --- |
| MIN   | .00  | .00  | .00  | .00  | .18   | .17   | .12   | .03  | .03   | .00  | --- | --- |
| CFSM  | .13  | .12  | .91  | .88  | 1.25  | 1.92  | 1.09  | .51  | 1.82  | .29  | --- | --- |
| IN.   | .15  | .14  | 1.05 | 1.02 | 1.30  | 2.21  | 1.21  | .58  | 2.03  | .34  | --- | --- |

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)**

|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .31  | .33  | .40  | .64  | .45  | .68  | .38  | .26  | .31  | .19  | .098 | .30  |
| MAX  | 1.08 | .80  | 1.51 | 1.95 | .54  | 1.02 | .64  | .48  | .61  | .51  | .47  | 1.04 |
| (WY) | 1997 | 1996 | 1997 | 1996 | 2000 | 2000 | 1996 | 1998 | 1996 | 1996 | 1996 | 1999 |
| MIN  | .034 | .009 | .002 | .11  | .29  | .39  | .21  | .065 | .022 | .003 | .016 | .004 |
| (WY) | 1998 | 1999 | 1999 | 2000 | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 1998 | 1998 |

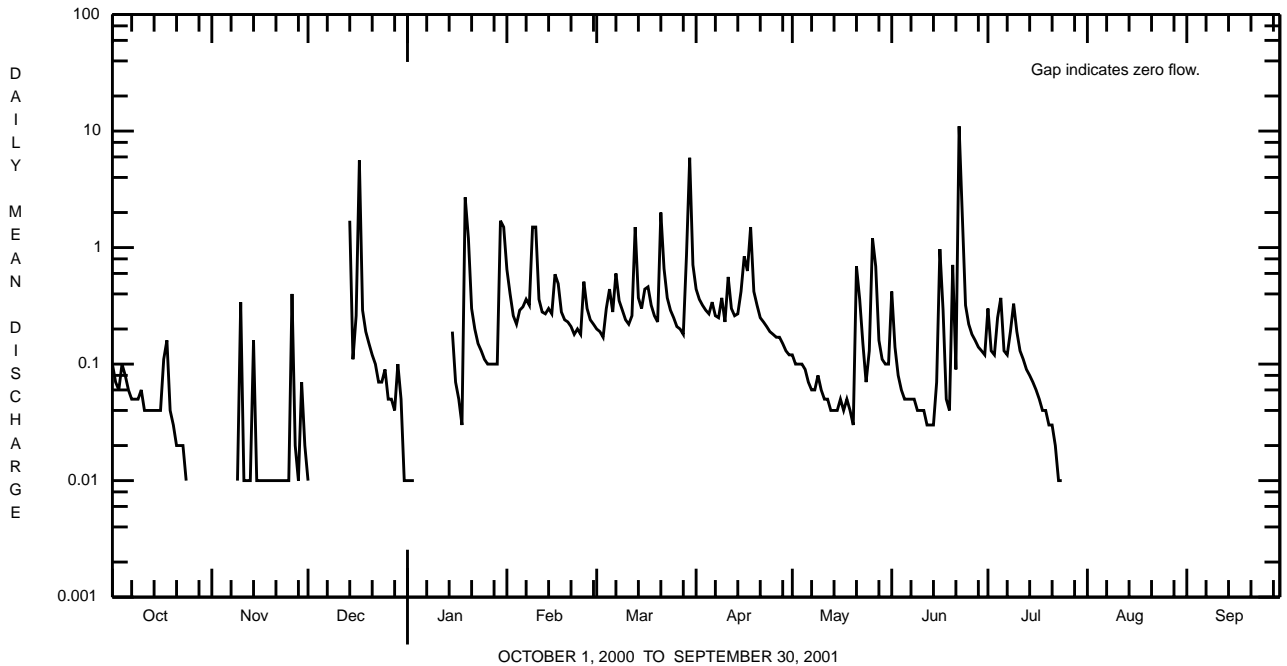
e Estimated.

CONESTOGA RIVER BASIN

015765265 NORTH FORK UNNAMED TRIBUTARY TO BIG SPRING RUN NEAR LAMPETER, PA--Continued

| SUMMARY STATISTICS       | FOR 2000 CALENDAR YEAR |        | FOR 2001 WATER YEAR |         | WATER YEARS 1995 - 2001 |              |
|--------------------------|------------------------|--------|---------------------|---------|-------------------------|--------------|
| ANNUAL TOTAL             | 105.29                 |        |                     |         |                         |              |
| ANNUAL MEAN              | .29                    |        |                     |         | .39                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |         | .60 1996                |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |         | .23 1999                |              |
| HIGHEST DAILY MEAN       | 14                     | Mar 21 | 11                  | Jun 22  | 28                      | Jan 19 1996  |
| LOWEST DAILY MEAN        | .00                    | Aug 2a | .00                 | Oct 25a | .00                     | May 20 1995a |
| ANNUAL SEVEN-DAY MINIMUM | .00                    | Sep 5  | .00                 | Oct 25b | .00                     | Aug 15 1995b |
| MAXIMUM PEAK FLOW        |                        |        | c125                | Jun 22  | c130                    | Jun 19 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 6.30                | Jun 22  | 6.35                    | Jun 19 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | .00                 | Oct 25a | .00                     | Sep 28 1995a |
| ANNUAL RUNOFF (CFSM)     | .90                    |        |                     |         | 1.21                    |              |
| ANNUAL RUNOFF (INCHES)   | 12.24                  |        |                     |         | 16.41                   |              |
| 10 PERCENT EXCEEDS       | .58                    |        | .48                 |         | .63                     |              |
| 50 PERCENT EXCEEDS       | .09                    |        | .10                 |         | .12                     |              |
| 90 PERCENT EXCEEDS       | .00                    |        | .00                 |         | .00                     |              |

- a Many days.
- b First occurrence.
- c From rating curve extended above 74 ft<sup>3</sup>/s.



## CONESTOGA RIVER BASIN

015765265 NORTH FORK UNNAMED TRIBUTARY TO BIG SPRING RUN NEAR LAMPETER, PA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1995 to July 2001 (discontinued).

INSTRUMENTATION.--Automatic pumping sampler for stormflow since May 1995, nutrient and sediment samples since January 1995.

REMARKS.--Fixed-time, base flow, and stormflow samples collected at streamflow control. Constituent values for stormflow water quality are for discharge-weighted composited samples. Samples with two dates are composited samples; sample time is the composite start time, discharge is the mean for the composited period. Some values for "dissolved" parameters exceed values for the corresponding "total" parameter and some values for dissolved ortho-phosphorus exceed values for dissolved phosphorus. These results are within the limits of analytical precision and methods.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE     | TIME | AGENCY<br>ANA-<br>LYZING<br>SAMPLE<br>(CODE<br>NUMBER)<br>(00028) | AGENCY<br>COL-<br>LECTING<br>SAMPLE<br>(CODE<br>NUMBER)<br>(00027) | DIS-<br>CHARGE,<br>IN<br>CUBIC<br>FEET<br>PER<br>SECOND<br>(00060) | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND<br>(00061) | TUR-<br>BID-<br>ITY<br>(NTU)<br>(00076) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L)<br>(00300) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>DUCT-<br>ANCE<br>UNITS)<br>(00400) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(µS/CM)<br>(00095) | TEMPER-<br>ATURE<br>WATER<br>(DEG C)<br>(00010) | NITRO-<br>GEN,<br>AM-<br>MONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N)<br>(00608) | NITRO-<br>GEN, AM-<br>MONIA +<br>DIS-<br>ORGANIC<br>(MG/L<br>AS N)<br>(00623) |
|----------|------|---|--|--|---|---|--|--|--|---|---|---|
| OCT 2000 |      |   |  |  |   |   |  |  |  |   |   |   |
| 04...    | 1045 | 80020   | 1028   | --   | .06   | 4.9                                     | 9.1  | 8.0  | 726  | 14.9  | <.020   | .20   |
| 16...    | 1045 | 80020   | 1028   | --   | .04   | 3.4                                     | 7.3  | 7.8  | 742  | 12.7  | <.041   | .19   |
| 24...    | 0950 | 80020   | 1028   | --   | .02   | 3.6                                     | 8.3  | 7.7  | 742  | 10.2  | <.041   | .18   |
| NOV      |      |   |  |  |   |   |  |  |  |   |   |   |
| 10-10    | 0337 | 80020   | 1028   | 1.3  | --  | --                                      | --   | --   | --   | --  | .519  | .97   |
| NOV      |      |   |  |  |   |   |  |  |  |   |   |   |
| 14-14    | 0857 | 80020   | 1028   | .91  | --  | --                                      | --   | --   | --   | --  | .345  | .93   |
| 14...    | 1130 | 80020   | 1028   | --   | .29   | --                                      | 9.9  | 7.8  | --   | 10.3  | .370  | .69   |
| DEC      |      |   |  |  |   |   |  |  |  |   |   |   |
| 14-14    | 0245 | 80020   | 1028   | 4.2  | --  | --                                      | --   | --   | --   | --  | .260  | .76   |
| DEC      |      |   |  |  |   |   |  |  |  |   |   |   |
| 16-16    | 1445 | 80020   | 1028   | .93  | --  | --                                      | --   | --   | --   | --  | .224  | 1.7   |
| JAN 2001 |      |   |  |  |   |   |  |  |  |   |   |   |
| 30-30    | 1115 | 80020   | 1028   | 2.7  | --  | --                                      | --   | --   | --   | --  | .701  | 2.3   |
| JAN      |      |   |  |  |   |   |  |  |  |   |   |   |
| 31-31    | 1445 | 80020   | 1028   | 3.7  | --  | --                                      | --   | --   | --   | --  | .153  | 1.2   |
| FEB      |      |   |  |  |   |   |  |  |  |   |   |   |
| 13...    | 0940 | 80020   | 1028   | --   | .26   | 3.0                                     | 15.4   | 8.2  | 766  | 5.0   | <.041   | .13   |
| MAR      |      |   |  |  |   |   |  |  |  |   |   |   |
| 12...    | 0930 | 80020   | 1028   | --   | .21   | 2.5                                     | 13.2   | 7.7  | 723  | 4.7   | <.041   | .24   |
| MAR      |      |   |  |  |   |   |  |  |  |   |   |   |
| 12-13    | 2315 | 80020   | 1028   | 3.6  | --  | --                                      | --   | --   | --   | --  | .253  | .97   |
| MAR      |      |   |  |  |   |   |  |  |  |   |   |   |
| 21-21    | 1515 | 80020   | 1028   | 4.4  | --  | --                                      | --   | --   | --   | --  | .142  | .96   |
| 29...    | 1015 | 80020   | 1028   | --   | .18   | 7.6                                     | 14.9   | 8.4  | 705  | 6.4   | <.041   | .18   |
| APR      |      |   |  |  |   |   |  |  |  |   |   |   |
| 10...    | 1015 | 80020   | 1028   | --   | .21   | 10                                      | 12.1   | 8.2  | 643  | 11.2  | <.041   | .24   |
| 19...    | 1015 | 80020   | 1028   | --   | .50   | 5.5                                     | 13.1   | 7.8  | 656  | 8.0   | <.041   | .35   |
| MAY      |      |   |  |  |   |   |  |  |  |   |   |   |
| 01...    | 1000 | 80020   | 1028   | --   | .14   | 6.9                                     | 10.6   | 7.5  | 710  | 11.8  | E.039   | .18   |
| 09...    | 0900 | 80020   | 1028   | --   | .17   | 23                                      | 7.5  | 7.3  | 710  | 12.9  | .430  | 2.0   |
| 16...    | 1230 | 80020   | 1028   | --   | .05   | 8.0                                     | 10.2   | 7.9  | 665  | 13.8  | .576  | .26   |
| MAY      |      |   |  |  |   |   |  |  |  |   |   |   |
| 21-21    | 0745 | 80020   | 1028   | 1.2  | --  | --                                      | --   | --   | --   | --  | .254  | .93   |
| MAY      |      |   |  |  |   |   |  |  |  |   |   |   |
| 21-21    | 1722 | 80020   | 1028   | 1.1  | --  | --                                      | --   | --   | --   | --  | .113  | .54   |
| MAY      |      |   |  |  |   |   |  |  |  |   |   |   |
| 26-26    | 0532 | 80020   | 1028   | 2.0  | --  | --                                      | --   | --   | --   | --  | .160  | .52   |
| 29...    | 1030 | 80020   | 1028   | --   | .13   | 6.8                                     | 9.0  | 7.7  | 365  | 14.1  | E.023   | .26   |
| JUN      |      |   |  |  |   |   |  |  |  |   |   |   |
| 01-01    | 1945 | 80020   | 1028   | 1.8  | --  | --                                      | --   | --   | --   | --  | <.040   | .48   |
| 07...    | 1000 | 80020   | 1028   | --   | .06   | 5.5                                     | 8.2  | 7.6  | 708  | 15.3  | E.021   | .18   |
| JUN      |      |   |  |  |   |   |  |  |  |   |   |   |
| 16-16    | 1217 | 80020   | 1028   | 2.5  | --  | --                                      | --   | --   | --   | --  | .125  | 1.2   |
| 19...    | 1000 | 80020   | 1028   | --   | .04   | 14                                      | 7.9  | 8.2  | 700  | 17.6  | .240  | .27   |
| JUN      |      |   |  |  |   |   |  |  |  |   |   |   |
| 20-20    | 1822 | 80020   | 1028   | 3.3  | --  | --                                      | --   | --   | --   | --  | .215  | 1.1   |
| JUN      |      |   |  |  |   |   |  |  |  |   |   |   |
| 22-22    | 1327 | 80020   | 1028   | 26   | --  | --                                      | --   | --   | --   | --  | .353  | .93   |
| JUL      |      |   |  |  |   |   |  |  |  |   |   |   |
| 03...    | 1053 | 80020   | 1028   | --   | .12   | 7.8                                     | 8.7  | 7.9  | 710  | 15.8  | E.033   | .26   |

## CONESTOGA RIVER BASIN

015765265 NORTH FORK UNNAMED TRIBUTARY TO BIG SPRING RUN NEAR LAMPETER, PA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

| DATE     | NITRO-<br>GEN, AM-<br>MONIA +<br>ORGANIC<br>TOTAL<br>(MG/L<br>AS N)<br>(00625) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N)<br>(00631) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N)<br>(00613) | PHOS-<br>PHORUS<br>DIS-<br>SOLVED<br>(MG/L<br>AS P)<br>(00666) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P)<br>(00671) | PHOS-<br>PHORUS<br>TOTAL<br>(MG/L<br>AS P)<br>(00665) | FECAL<br>STREP,<br>KF STRP<br>MF,<br>WATER<br>(COL/<br>100 ML)<br>(31673) | SEDI-<br>MENT,<br>SUS-<br>PENDEED<br>(MG/L)<br>(80154) |
|----------|--|--|--|--|--|---|---|--|
| OCT 2000 |  |  |  |  |  |   |   |  |
| 04...    | .22  | 9.76   | .010   | .020   | --   | .030  | --  | 4  |
| 16...    | 1.4  | 10.1   | .022   | .020   | --   | .033  | --  | 5  |
| 24...    | .24  | 10.5   | .022   | .019   | --   | .029  | 380   | 18   |
| NOV      |  |  |  |  |  |   |   |  |
| 10-10    | 2.5  | 2.45   | .053   | .161   | .126   | .592  | --  | 325  |
| NOV      |  |  |  |  |  |   |   |  |
| 14-14    | 1.3  | 2.73   | .031   | .112   | .085   | .250  | --  | 85   |
| 14...    | .72  | 2.73   | .027   | .115   | --   | .163  | 24000   | 24   |
| DEC      |  |  |  |  |  |   |   |  |
| 14-14    | 1.9  | 1.20   | .016   | .101   | .131   | .518  | --  | 335  |
| DEC      |  |  |  |  |  |   |   |  |
| 16-16    | 1.8  | 3.00   | .028   | .038   | <.018  | .197  | --  | 72   |
| JAN 2001 |  |  |  |  |  |   |   |  |
| 30-30    | 2.7  | 2.25   | .026   | .111   | .091   | .215  | --  | 66   |
| JAN      |  |  |  |  |  |   |   |  |
| 31-31    | 1.9  | 2.77   | .024   | .192   | .216   | .514  | --  | 155  |
| FEB      |  |  |  |  |  |   |   |  |
| 13...    | .22  | 10.9   | .008   | .016   | --   | .018  | 220   | 3  |
| MAR      |  |  |  |  |  |   |   |  |
| 12...    | .16  | 11.0   | .010   | .007   | <.018  | .010  | 54  | 5  |
| MAR      |  |  |  |  |  |   |   |  |
| 12-13    | 2.2  | 2.67   | .026   | .058   | .033   | .482  | --  | 310  |
| MAR      |  |  |  |  |  |   |   |  |
| 21-21    | 3.3  | 2.14   | .023   | .166   | .127   | 1.22  | --  | 761  |
| 29...    | .15  | 10.8   | E.005  | E.005  | --   | .009  | --  | 15   |
| APR      |  |  |  |  |  |   |   |  |
| 10...    | .23  | 9.49   | .011   | .007   | --   | .017  | --  | 15   |
| 19...    | .33  | 8.91   | .012   | .010   | --   | .019  | --  | --   |
| MAY      |  |  |  |  |  |   |   |  |
| 01...    | .21  | 10.6   | .019   | E.005  | --   | .012  | 180   | 9  |
| 09...    | 2.2  | 10.2   | .073   | .052   | --   | .076  | --  | 12   |
| 16...    | .30  | 11.3   | .142   | .011   | --   | .021  | --  | 8  |
| MAY      |  |  |  |  |  |   |   |  |
| 21-21    | 1.7  | 1.94   | .037   | .047   | <.020  | .236  | --  | 153  |
| MAY      |  |  |  |  |  |   |   |  |
| 21-21    | 1.3  | 1.92   | .046   | .038   | --   | .256  | --  | 159  |
| MAY      |  |  |  |  |  |   |   |  |
| 26-26    | 1.2  | 1.41   | .052   | .046   | .025   | .269  | --  | 166  |
| 29...    | .27  | 10.9   | .016   | .023   | --   | .030  | 1400  | 19   |
| JUN      |  |  |  |  |  |   |   |  |
| 01-01    | 2.0  | 2.60   | .047   | .059   | <.020  | .488  | --  | 426  |
| 07...    | .23  | 10.4   | .017   | .023   | --   | .028  | --  | 6  |
| JUN      |  |  |  |  |  |   |   |  |
| 16-16    | 1.9  | 1.44   | .047   | .098   | .078   | .597  | --  | 413  |
| 19...    | .28  | 10.8   | .020   | .030   | E.017  | .036  | 3800  | 28   |
| JUN      |  |  |  |  |  |   |   |  |
| 20-20    | 1.9  | 1.72   | .045   | .086   | <.020  | .373  | --  | 215  |
| JUN      |  |  |  |  |  |   |   |  |
| 22-22    | 4.3  | 4.14   | .059   | .321   | .283   | 2.29  | --  | 1590   |
| JUL      |  |  |  |  |  |   |   |  |
| 03...    | .21  | 11.5   | .013   | .015   | <.020  | .023  | --  | 30   |