

**CONESTOGA RIVER BASIN**

**01576527 NORTH FORK UNNAMED TRIBUTARY TO BIG SPRING RUN AT LAMPETER, PA**

**LOCATION**--Lat 39°59'47", long 76°14'59", Lancaster County, Hydrologic unit 02050306, on right bank 30 ft upstream of box culvert on Mentzer Road, and 0.5 mi northwest of Lampeter.

**DRAINAGE AREA**--0.36 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

**PERIOD OF RECORD**--November 1993 to current year.

**GAGE**--Water-stage recorder and wooden weir control. Datum of gage is 344.19 ft above sea level.

**REMARKS**--Records poor.

**PEAK DISCHARGES FOR CURRENT YEAR**--Peak discharges greater than a base discharge of 30 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Mar. 21	1745	47	3.02	Sept. 13	0505	36	2.85
Mar. 21	2355	41	2.93	Sept. 14	2350	*122	*3.60
May 10	1725	31	2.76				

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.15	.15	.16	e.05	.51	.38	.20	.22	.22	e.07	1.4
2	.22	.52	.14	.16	e.05	.42	.36	.24	.20	.19	e.06	.14
3	.19	.21	.14	.16	e.04	.36	.34	.18	.18	.85	e.06	.24
4	.76	.15	.14	.27	e.05	.31	.46	.18	.18	.32	e.06	e.10
5	.93	.14	.12	.19	e.05	.29	.32	.19	.18	.21	e.06	e.05
6	.34	.14	.90	.16	e.06	.27	.32	.18	.60	.18	e.07	e.03
7	.27	.12	.24	.16	e.06	.26	.30	.16	.24	.22	e.06	e.01
8	.24	.12	.19	.16	e.07	.26	.72	.15	.20	.16	e.05	e.01
9	.23	.12	.17	.20	e.07	.26	1.1	.14	.19	.16	.18	e.00
10	2.3	.12	.46	.64	e.08	.21	.39	1.5	.18	.22	e.06	e.00
11	.49	.09	.23	.28	.39	.72	.36	.27	.16	.15	e.03	e.00
12	.37	.08	.20	.21	.37	.64	.32	.22	.17	.14	e.01	e.00
13	.34	.10	.30	.20	.22	.29	.29	.69	.17	.15	e.00	1.9
14	.33	.10	3.7	.16	1.1	.26	.29	.25	.17	.18	e.02	3.5
15	.27	.09	.72	e.12	.77	.25	.27	.19	.20	1.3	e.01	3.3
16	.23	.08	.43	e.13	1.0	.37	.67	.18	.24	.24	e.05	.25
17	.24	.07	.33	e.12	.68	.78	1.4	.18	.34	.18	e.02	.14
18	.24	.07	.30	e.10	.47	.29	.92	.17	.74	.15	e.01	.12
19	.18	.08	.28	e.10	3.1	.28	.51	.95	.36	.25	e.00	.35
20	.31	.09	.57	e.11	1.4	.26	.41	.92	.21	.17	e.00	.19
21	.18	.11	.42	e.09	.90	11	.58	.40	.73	.14	e.00	.13
22	.19	.06	.33	e.09	1.1	7.0	.40	1.5	.65	e.12	e.00	.12
23	.20	.05	.29	e.09	.98	1.2	.36	.54	.24	e.10	e.04	.12
24	.16	.05	.25	e.09	.80	.81	.34	1.2	.19	e.08	e.03	.12
25	.16	.13	.23	e.09	.67	.63	.31	.44	.84	e.07	e.02	1.2
26	.16	1.2	.23	e.08	.53	.53	.27	.35	.76	.65	e.06	1.9
27	.15	1.2	.22	e.07	.89	.85	.26	.37	.27	.18	e.43	.39
28	.14	.25	.20	e.06	2.5	1.7	.24	.34	.36	.14	e.15	.24
29	.15	.20	.19	e.05	.64	.63	.22	.30	.66	.12	e.05	.19
30	.15	.17	.18	e.05	---	.50	.20	.25	.33	e.10	e.07	.16
31	.18	---	.18	e.05	---	.44	---	.23	---	e.08	e.05	---
TOTAL	10.61	6.06	12.43	4.60	19.09	32.58	13.31	13.06	10.16	7.42	1.78	16.30
MEAN	.34	.20	.40	.15	.66	1.05	.44	.42	.34	.24	.057	.54
MAX	2.3	1.2	3.7	.64	3.1	11	1.4	1.5	.84	1.3	.43	3.5
MIN	.14	.05	.12	.05	.04	.21	.20	.14	.16	.07	.00	.00
CFSM	.95	.56	1.11	.41	1.83	2.92	1.23	1.17	.94	.66	.16	1.51
IN.	1.10	.63	1.28	.48	1.97	3.37	1.38	1.35	1.05	.77	.18	1.68

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)**

MEAN	.37	.48	.64	.69	.85	1.03	.48	.38	.37	.28	.19	.36
MAX	1.10	1.04	1.88	1.90	2.27	2.36	.81	.77	.68	.53	.54	1.14
(WY)	1997	1997	1997	1996	1995	1994	1998	1998	1996	1996	1994	1999
MIN	.026	.006	.001	.15	.42	.53	.19	.18	.093	.003	.031	.003
(WY)	1998	1999	1999	2000	1999	1999	1995	1999	1999	1999	1999	1998

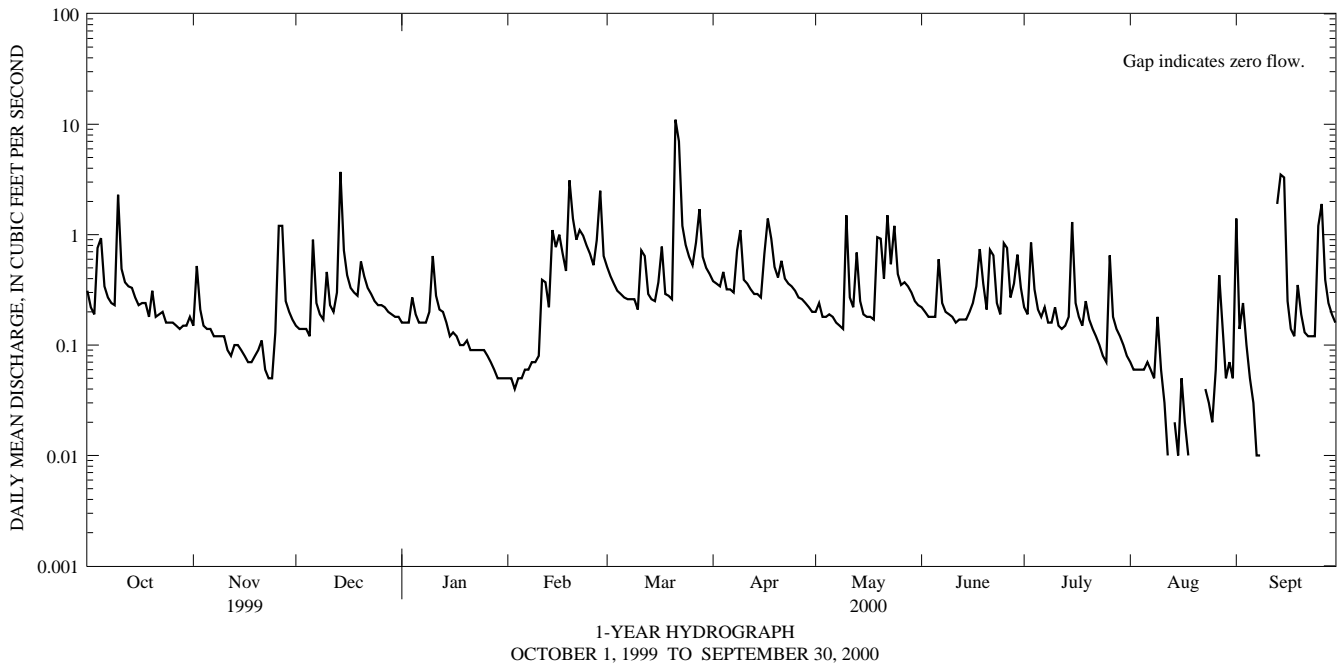
e Estimated.

CONESTOGA RIVER BASIN

01576527 NORTH FORK UNNAMED TRIBUTARY TO BIG SPRING RUN AT LAMPETER, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1994 - 2000	
ANNUAL TOTAL	130.60		147.40			
ANNUAL MEAN	.36		.40		.48	
HIGHEST ANNUAL MEAN					.66	
LOWEST ANNUAL MEAN					.29	
HIGHEST DAILY MEAN	e26	Sep 16	11	Mar 21	27	Feb 6 1995
LOWEST DAILY MEAN	.00	Jan 1a	e.00	Aug 13b	.00	Aug 29 1995a
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 5c	.01	Sep 6d	.00	Aug 29 1995c
INSTANTANEOUS PEAK FLOW			f122	Sep 14	f157	Jun 19 1996
INSTANTANEOUS PEAK STAGE			3.60	Sep 14	4.25	Jun 19 1996
INSTANTANEOUS LOW FLOW			.00	Aug 13a	.00	Aug 28 1995c
ANNUAL RUNOFF (CFSM)	.99		1.12		1.32	
ANNUAL RUNOFF (INCHES)	13.50		15.23		17.95	
10 PERCENT EXCEEDS	.64		.84		.91	
50 PERCENT EXCEEDS	.19		.20		.20	
90 PERCENT EXCEEDS	.00		.06		.00	

- a Many days.
- b Also Aug. 19-22, Sept. 9-12.
- c First occurrence.
- d Computed using estimated daily discharges.
- e Estimated.
- f From rating curve extended above 100 ft<sup>3</sup>/s.



1-YEAR HYDROGRAPH  
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000

## CONESTOGA RIVER BASIN

## 01576527 NORTH FORK UNNAMED TRIBUTARY TO BIG SPRING RUN AT LAMPETER, PA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1993 to current year.

INSTRUMENTATION.--Automatic pumping sampler since March 1994.

REMARKS.--Fixed-time, base flow, and stormflow samples collected at streamflow control. Constituent values for stormflow water quality are for discharge-weighted composite 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 ortho-phosphorus" exceed values for "dissolved phosphorus". Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods.

## 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, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	ALKA- LINITY WAT DIS TOT IT LAB (MG/L AS CACO3) (39087)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT 1999											
04-04	0807	80020	1028	1.5	--	--	--	--	--	--	.57
06...	1100	80020	1028	--	.36	10.8	7.8	703	15.0	--	.30
OCT											
10-10	0515	80020	1028	4.3	--	--	--	--	--	--	.84
14...	1045	80020	1028	--	.29	11.1	7.8	741	14.3	226	.32
25...	1020	80020	1028	--	.16	9.4	7.6	754	11.8	--	.22
NOV											
02...	1030	80020	1028	--	.16	8.4	7.5	775	15.1	--	.32
NOV											
02-02	1732	80020	1028	2.5	--	--	--	--	--	--	.92
12...	1115	80020	1028	--	.05	11.0	7.7	786	11.4	--	1.4
22...	1100	80020	1028	--	.05	9.8	7.7	773	13.0	--	.38
NOV											
26-27	1740	80020	1028	4.4	--	--	--	--	--	--	.82
DEC											
06-06	0602	80020	1028	3.0	--	--	--	--	--	--	.97
07...	1005	80020	1028	--	.23	11.2	7.7	660	9.8	--	.31
DEC											
10-10	1257	80020	1028	2.2	--	--	--	--	--	--	.94
DEC											
14-14	0822	80020	1028	11	--	--	--	--	--	--	.66
JAN 2000											
05...	1050	80020	1028	--	.18	12.4	7.8	697	7.0	220	.20
FEB											
09...	1045	80020	1028	--	.07	14.0	7.8	835	4.3	--	.25
FEB											
27-28	2257	80020	1028	7.6	--	--	--	--	--	--	.93
MAR											
11-11	1222	80020	1028	3.5	--	--	--	--	--	--	1.4
MAR											
16-17	2250	80020	1028	2.4	--	--	--	--	--	--	.50
MAR											
17-17	0615	80020	1028	2.3	--	--	--	--	--	--	.71
MAR											
21-21	1215	80020	1028	34	--	--	--	--	--	--	.82
24...	0935	80020	1028	--	.98	11.9	7.8	766	10.1	--	.53
APR											
05...	0955	80020	1028	--	.33	13.1	7.8	736	8.6	--	.39
APR											
08-09	2015	80020	1028	2.4	--	--	--	--	--	--	1.6
APR											
08-09	2016	80020	1028	2.4	--	--	--	--	--	--	1.6
APR											
16-16	1752	80020	1028	2.8	--	--	--	--	--	--	.83
APR											
17-17	0907	80020	1028	2.3	--	--	--	--	--	--	.82
19...	0935	80020	1028	--	.51	10.9	7.7	649	9.9	202	.26
25...	0855	80020	1028	--	.26	9.9	7.6	718	10.8	--	.48
MAY											
08...	0755	80020	1028	--	.16	6.6	7.4	724	14.5	--	.25
MAY											
10-10	1650	80020	1028	7.2	--	--	--	--	--	--	3.4
MAY											
13-13	1907	80020	1028	4.6	--	--	--	--	--	--	1.3
17...	0830	80020	1028	--	.18	7.5	7.4	705	13.8	--	.30
MAY											
19-19	0857	80020	1028	3.7	--	--	--	--	--	--	1.6
26...	0945	80020	1028	--	.43	7.9	7.6	672	14.2	--	.32
JUN											
06-06	0352	80020	1028	2.3	--	--	--	--	--	--	.79
07...	0925	80020	1028	--	.23	7.0	7.4	662	14.5	--	.53
JUN											
15-16	2350	80020	1028	1.0	--	--	--	--	--	--	.84
16...	0840	80020	1028	--	.20	6.3	7.4	639	17.2	--	.44
JUN											
17-17	1732	80020	1028	2.0	--	--	--	--	--	--	.73
23...	0900	80020	1028	--	.26	8.0	7.4	710	17.6	--	.40

## CONESTOGA RIVER BASIN

## 01576527 NORTH FORK UNNAMED TRIBUTARY TO BIG SPRING RUN AT LAMPETER, PA--Continued

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

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	TUR- BID- ITY (NTU) (00076)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML) (31673)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
OCT 1999										
04-04	2.1	<.020	2.22	.079	.223	.016	.602	39	--	109
06...	.32	<.020	10.3	.016	.071	--	.077	2.1	--	4
OCT										
10-10	1.7	.026	1.76	.010	.107	.022	.570	74	--	118
14...	.73	<.020	9.62	.019	.073	--	.207	3.4	2900	56
25...	.44	.022	9.56	.025	.082	--	.127	5.1	--	9
NOV										
02...	.41	.044	9.13	.035	.115	--	.165	3.9	44000	12
NOV										
02-02	5.6	.182	3.25	.180	.360	.320	2.27	95	--	852
12...	1.6	.043	9.35	.019	.098	--	.123	2.3	--	5
22...	.79	.057	9.48	.029	.156	--	.314	3.4	--	7
NOV										
26-27	3.6	.150	2.10	.061	.351	.280	1.56	200	--	539
DEC										
06-06	4.4	.255	2.37	.076	.330	.276	1.59	160	--	452
07...	2.6	<.020	9.07	.010	.068	--	.832	5.9	27000	340
DEC										
10-10	2.9	.236	3.52	.052	.229	.203	.935	110	--	213
DEC										
14-14	4.2	.092	2.07	.020	.416	.341	1.89	--	--	902
JAN 2000										
05...	.21	<.020	9.59	<.010	.019	--	.026	1.2	750	1
FEB										
09...	.53	.025	10.8	.013	.020	--	.101	3.7	44	58
FEB										
27-28	3.9	.167	3.26	.033	.212	.187	1.77	--	--	1120
MAR										
11-11	2.7	.488	4.16	.054	.125	.092	.652	--	--	321
MAR										
16-17	1.1	.211	3.37	.031	.022	.014	.168	--	--	88
MAR										
17-17	1.4	.142	4.56	.068	.091	.065	.186	--	--	50
MAR										
21-21	3.4	.082	1.48	.015	.372	.322	1.88	--	--	923
24...	.56	.030	10.9	.010	.098	--	.170	20	4200	17
APR										
05...	.74	.025	9.89	.013	.057	--	.171	16	--	43
APR										
08-09	3.1	.345	3.32	.112	.207	.141	.611	--	--	98
APR										
08-09	3.1	.365	3.52	.119	.216	.156	.605	--	--	85
APR										
16-16	3.6	.268	3.43	.094	.115	.085	1.18	--	--	669
APR										
17-17	1.4	.174	3.60	.027	.152	.110	.320	--	--	75
19...	.31	.022	9.63	.013	.030	--	E.045	9.0	18000	9
25...	1.7	.024	10.1	.020	.077	--	.326	32	--	35
MAY										
08...	.33	.028	9.14	.061	.051	--	.070	11	--	10
MAY										
10-10	16	1.23	2.81	.178	.417	.330	5.13	--	--	1930
MAY										
13-13	4.7	.451	2.88	.164	.123	.015	1.52	--	--	593
17...	.34	.039	9.34	.041	.039	--	.048	4.0	4000	7
MAY										
19-19	4.1	.475	2.19	.118	.307	.287	1.67	--	--	557
26...	.38	.058	9.24	.037	.050	--	.085	29	--	16
JUN										
06-06	2.9	.209	3.84	.157	.116	.095	.864	--	--	628
07...	1.1	.074	7.84	.053	.137	.108	.300	24	--	30
JUN										
15-16	2.9	<.020	5.21	.236	.070	<.010	.725	--	--	214
16...	.58	.034	7.80	.082	.060	--	.078	5.0	--	3
JUN										
17-17	1.8	.114	3.23	.244	.086	.106	.434	--	--	111
23...	.44	.023	7.57	.076	.024	--	.122	5.2	11000	6

CONESTOGA RIVER BASIN

01576527 NORTH FORK UNNAMED TRIBUTARY TO BIG SPRING RUN AT LAMPETER, PA--Continued

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, IN CUBIC FEET PER SECOND (00060)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
JUL 2000										
05...	1115	80020	1028	--	.20	7.7	7.5	736	19.9	.33
14...	0920	80020	1028	--	.47	10.0	7.4	737	17.7	.37
JUL										
15-15	0102	80020	1028	3.7	--	--	--	--	--	.96
25...	0915	80020	1028	--	.07	7.2	7.4	755	17.5	.50
JUL										
26-26	0852	80020	1028	1.7	--	--	--	--	--	.73
AUG										
02...	0930	80020	1028	--	.06	6.9	7.4	790	19.5	.61
14...	1004	80020	1028	--	.02	1.6	7.5	806	19.2	.69
AUG										
16-16	0617	80020	1028	.44	--	--	--	--	--	.99
17...	0805	80020	--	--	.02	--	--	--	--	.58
22...	1225	80020	1028	--	.00	.2	7.3	925	20.6	3.7
AUG										
23-23	1727	80020	1028	.62	--	--	--	--	--	1.2
AUG										
27-28	2215	80020	1028	2.4	--	--	--	--	--	1.3
SEP										
01-01	0722	80020	1028	7.5	--	--	--	--	--	1.5
SEP										
03-03	1327	80020	1028	.96	--	--	--	--	--	.74
05...	0720	80020	1028	--	.05	5.1	7.5	714	16.5	.28
05...	0721	80020	1028	--	.05	5.1	7.5	714	16.5	.31
SEP										
13-13	0407	80020	1028	7.0	--	--	--	--	--	1.4
14...	1035	80020	1028	--	.12	7.1	7.8	612	18.5	.36
SEP										
14-15	2237	80020	1028	17	--	--	--	--	--	.88
28...	1020	80020	1028	--	.23	11.5	7.8	653	15.2	.37

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	TUR-BID-ITY (NTU) (00076)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
JUL 2000										
05...	.44	.059	8.01	.084	.106	--	.124	7.3	--	14
14...	.53	.053	7.83	.129	.119	--	.142	8.0	34000	17
JUL										
15-15	1.7	.322	1.93	.139	.228	.192	.572	--	--	153
25...	.79	.103	7.15	.105	.169	--	.233	12	--	12
JUL										
26-26	1.5	.086	2.61	.096	.208	.160	.418	--	--	64
AUG										
02...	1.3	.092	6.14	.185	.318	--	.520	65	--	16
14...	1.2	.168	4.57	.286	.354	--	.502	81	110000	19
AUG										
16-16	16	.197	2.83	.250	.436	.352	3.87	--	--	1010
17...	--	.148	5.11	.188	.291	.255	--	--	--	--
22...	12	.036	--	.010	--	--	6.95	--	--	68
AUG										
23-23	3.8	.025	3.27	.513	.445	.297	1.14	--	--	124
AUG										
27-28	2.0	.281	1.80	.148	.318	.255	.475	--	--	51
SEP										
01-01	9.7	.199	.956	.083	.895	.842	5.69	--	--	1050
SEP										
03-03	2.4	.113	2.56	.254	.210	.184	.786	--	--	188
05...	.40	.050	4.90	.031	.132	--	.143	1.9	--	3
05...	.38	.045	4.95	.031	.132	--	.144	1.9	--	7
SEP										
13-13	4.1	.327	1.38	.108	.696	.657	1.95	--	--	522
14...	.43	.043	4.01	.016	.131	--	.172	43	--	14
SEP										
14-15	3.6	.221	1.67	.043	.592	.573	1.80	--	--	660
28...	.55	<.020	8.49	.010	.086	--	.132	6.3	18000	9