

## OHIO RIVER MAIN STEM

## 03086000 OHIO RIVER AT SEWICKLEY, PA

**LOCATION.**--Lat 40°32'57", long 80°12'21", Allegheny County, Hydrologic Unit 05030101, near left bank 50 ft upstream from Dashields Dam, 1.0 mi downstream from Narrows Run, 1.0 mi northwest of Sewickley, and 13.3 mi downstream from confluence of Allegheny and Monongahela Rivers.

**DRAINAGE AREA.**--19,500 mi<sup>2</sup>, approximately.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1933 to current year.

**REVISED RECORDS.**--WSP 1305: 1938-40 (adjusted monthly runoff). WSP 1435: 1934.

**GAGE.**--Water-stage recorder and fixed-crest concrete dam control. Datum of gage is 680.00 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Nov. 22, 1933, nonrecording gage, Nov. 22, 1933 to May 4, 1981, water-stage recorder at site 1.5 mi upstream, Nov. 14, 1988 to July 12, 1990, nonrecording gage, and July 13, 1990 to June 13, 1991, water-stage recorder at present site at datum 10.41 ft higher.

**REMARKS.**--Records good except those for estimated daily discharges, which are fair. Some regulation by locks, and by many reservoirs above station. Combined capacity of reservoirs and lakes, excluding that of Chautauqua Lake (station 03013946), but including Lake Lynn, Deep Creek Reservoir (station 03076000), and 15 smaller reservoirs, 2,773,000 acre-ft. Several measurements of water temperature were made during the year. Satellite telemetry at station.

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	18300	9380	29400	12800	76100	24000	38300	20500	19400	13300	21900	11000
2	14400	10200	29700	12200	58300	20800	36700	19000	23100	11900	19300	11100
3	15400	10400	27400	12000	58200	19800	35300	16000	32500	14300	15300	8260
4	11900	9590	24700	12000	51400	19600	32000	15500	29900	15500	10800	8640
5	12600	7500	22400	13900	47100	21300	31400	13500	27800	14000	10500	7390
6	16600	7810	21600	11900	39700	22900	35800	11900	29100	18500	8650	6630
7	16700	8840	21000	11500	38000	23800	48100	10600	41400	15300	9630	5210
8	20300	7820	19200	13100	33600	23700	55200	11100	54600	16500	10100	5570
9	19400	8500	16100	14100	30900	25000	56600	11400	38600	23900	7350	5090
10	22100	9480	15900	11600	36200	25400	67200	9410	30500	17800	7890	4190
11	23100	10100	14900	10800	77700	21900	80400	10700	27700	23600	7040	5510
12	23300	14000	18300	12100	72400	19700	100000	11900	23600	23100	6220	5660
13	22300	12800	23000	11100	66000	23800	87200	11600	16600	18300	12300	5480
14	19900	13800	29100	10600	61400	51700	71200	12400	16300	13100	15200	7280
15	16100	14400	40000	10500	65700	64300	59400	14000	12200	10600	10500	5090
16	11200	13000	41300	11300	93200	65600	71100	14900	13300	8490	7930	5780
17	13300	11000	52900	11600	105000	67800	82900	10200	12900	7330	10100	5890
18	12300	12000	82600	15000	100000	70900	81600	11700	10500	8180	5800	5530
19	17700	10200	75200	18900	84200	63100	74900	12500	12700	11700	6270	6130
20	20000	9600	66700	26200	75000	54200	65800	23300	9610	15300	6110	6650
21	16200	10200	59800	30500	63900	52800	53800	25800	9590	10900	6130	7140
22	11900	9260	50500	28600	57200	75100	47100	28500	12300	11200	5530	8420
23	13400	9970	42600	25300	44200	77000	47200	37800	15500	8650	8410	6130
24	11000	9250	30400	23300	35200	65400	47700	44700	22900	7740	7280	5990
25	9940	8620	22200	23800	32200	59400	40900	38000	22100	8080	6360	9990
26	10000	e9730	19500	21100	29300	49200	37200	38600	19300	9760	6680	12200
27	10000	e12400	17500	18500	28500	43300	32400	42000	15100	11400	7010	9790
28	10900	21300	18600	16900	27000	38700	28600	35500	10800	10600	12400	8030
29	9270	27100	17400	14700	---	31000	22600	28300	9570	12200	11300	8680
30	9450	27400	16700	23200	---	31500	21100	27300	7490	37100	9030	6640
31	9170	---	12800	83300	---	31400	---	21400	---	27000	9470	---
TOTAL	468130	355650	979400	572400	1587600	1284100	1589700	640010	626960	455330	298490	215090
MEAN	15100	11860	31590	18460	56700	41420	52990	20650	20900	14690	9629	7170
MAX	23300	27400	82600	83300	105000	77000	100000	44700	54600	37100	21900	12200
MIN	9170	7500	12800	10500	27000	19600	21100	9410	7490	7330	5530	4190
CFSM	.77	.61	1.62	.95	2.91	2.12	2.72	1.06	1.07	.75	.49	.37
IN.	.89	.68	1.87	1.09	3.03	2.45	3.03	1.22	1.20	.87	.57	.41

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2001, BY WATER YEAR (WY)

MEAN	15150	25800	39990	44820	49850	65270	56440	37800	24270	15830	13140	11700
MAX	51010	83490	88890	132000	91820	147900	124500	90380	70490	50770	48180	39450
(WY)	1955	1986	1973	1937	1939	1936	1940	1996	1989	1972	1956	1996
MIN	3073	3991	6705	10470	11610	18670	16790	9593	5001	3892	3565	3081
(WY)	1964	1954	1961	1977	1934	1969	1946	1934	1934	1966	1957	1946

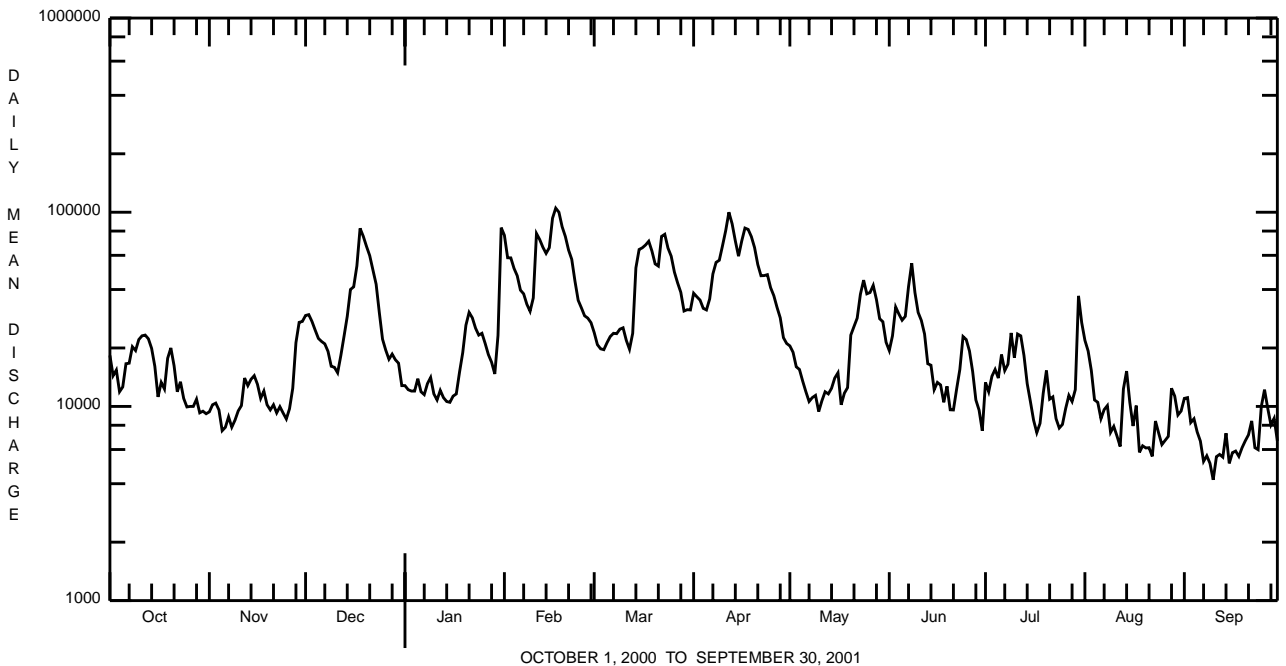
e Estimated.

OHIO RIVER MAIN STEM

03086000 OHIO RIVER AT SEWICKLEY, PA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1934 - 2001	
ANNUAL TOTAL	10600110		9072860			
ANNUAL MEAN	28960		24860		33250	
HIGHEST ANNUAL MEAN					46520	
LOWEST ANNUAL MEAN					21110	
HIGHEST DAILY MEAN	163000	Feb 20	105000	Feb 17	465000	Mar 18 1936
LOWEST DAILY MEAN	7500	Nov 5	4190	Sep 10	2100	Sep 4 1957
ANNUAL SEVEN-DAY MINIMUM	8510	Nov 4	5240	Sep 7	2330	Sep 1 1957
MAXIMUM PEAK FLOW			112000	Feb 17	<sup>a</sup> 574000	Mar 18 1936
MAXIMUM PEAK STAGE			18.65	Feb 17	<sup>b</sup> 34.75	Mar 18 1936
INSTANTANEOUS LOW FLOW					1800	Sep 4 1957
ANNUAL RUNOFF (CFSM)	1.49		1.27		1.71	
ANNUAL RUNOFF (INCHES)	20.22		17.31		23.17	
10 PERCENT EXCEEDS	63400		59400		74000	
50 PERCENT EXCEEDS	20200		16600		22800	
90 PERCENT EXCEEDS	9880		7780		5980	

**a** From rating curve extended above 535,000 ft<sup>3</sup>/s.  
**b** From floodmarks in gage house, site and datum then in use.



OHIO RIVER MAIN STEM

03086000 OHIO RIVER AT SEWICKLEY, PA--Continued  
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

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

REMARKS.--All water-quality samples were collected and analyzed by the U.S. Geological Survey. An explanation of selected abbreviations used in the water-quality tables is given on pages 36-37. Some values for 'dissolved' parameters exceed values for the corresponding 'total' parameter. These results are within the limits of analytical precision and methods. Other data for this station can be found on pages 193-194.

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

DATE	TIME	MEDIUM CODE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-DITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	UV ABSORB-ANCE 280 NM, WTR FLT (UNITS /CM) (61726)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)
NOV 14...	1130	9	15500	2.5	--	.053	.040	739	9.6	7.9	400
DEC 07...	1045	9	24000	4.0	--	.078	.059	739	14.3	8.0	302
JAN 10...	1000	9	12400	--	--	.054	.041	745	14.2	7.5	374
FEB 27...	1015	9	31800	6.8	--	.051	.038	748	14.2	7.3	270
MAR 20...	0845	9	57100	7.1	9.7	.048	.037	750	12.3	7.3	280
APR 10...	0900	9	63900	21	14	.045	.035	740	11.3	7.4	336
APR 10...	0910	R	63900	23	24	.045	.034	740	11.3	7.4	336
APR 16...	0900	9	70400	23	27	--	--	739	10.8	7.6	241
MAY 29...	0935	9	29600	--	17	.054	.040	739	8.8	7.7	293
MAY 29...	0945	R	29600	--	17	.054	.039	739	8.8	7.7	293
JUN 14...	0920	9	22000	--	<15	.048	.034	742	8.4	7.9	288
JUL 10...	1000	9	19600	--	12	.049	.035	742	7.5	7.7	386
AUG 21...	0935	9	6480	--	--	.059	.042	742	7.2	7.4	367
SEP 14...	1100	Q	--	--	--	--	--	--	--	--	--
SEP 14...	1110	9	8650	--	11	.051	.035	748	9.8	7.3	446
SEP 14...	1120	R	8650	--	--	.051	.036	748	9.8	7.3	446

DATE	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SI02) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
NOV 14...	11.5	34.0	9.26	2.33	25.2	46	25.6	.2	2.6	84.1	225
DEC 07...	2.5	25.3	6.40	2.14	19.6	38	24.0	E.1	4.4	57.4	174
JAN 10...	.5	29.5	7.47	1.98	26.6	41	37.1	E.1	4.9	61.8	204
FEB 27...	2.5	21.8	5.56	1.42	15.5	30	22.6	E.1	4.7	49.6	151
MAR 20...	5.0	23.2	5.97	1.46	15.9	28	24.4	<.2	4.7	52.3	177
APR 10...	11.5	28.2	7.11	1.53	17.7	40	24.3	E.1	3.8	66.9	190
APR 10...	11.5	30.3	7.54	1.56	18.8	40	23.5	E.1	4.2	73.0	196
APR 16...	12.0	21.5	5.39	1.43	13.6	28	20.5	E.1	4.7	44.5	150
MAY 29...	18.0	27.0	7.16	1.64	14.9	34	17.6	E.1	4.5	65.3	179
MAY 29...	18.0	27.3	7.21	1.90	15.0	34	18.3	E.1	4.4	65.6	193
JUN 14...	21.0	25.7	6.69	1.65	15.6	42	19.3	E.1	4.7	57.4	163
JUL 10...	25.5	29.8	7.86	1.70	22.5	38	20.8	.2	4.2	97.2	241
AUG 21...	25.5	31.1	8.06	2.29	25.4	40	30.9	E.1	3.1	83.1	227
SEP 14...	--	<.01	<.008	--	<.1	--	--	--	<.1	--	--
SEP 14...	25.0	36.6	9.88	2.65	33.8	49	36.1	.2	2.3	107	276
SEP 14...	25.0	36.2	9.75	2.53	33.1	49	35.5	.2	2.3	105	271

## OHIO RIVER MAIN STEM

## 03086000 OHIO RIVER AT SEWICKLEY, PA--Continued

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

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	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)	
NOV										
14...	.146	.32	.40	.723	.031	<.022	<.060	.019	E.047	
DEC										
07...	.196	.39	.51	.794	.013	.071	<.060	E.012	E.030	
JAN										
10...	.173	.34	.36	1.05	.029	.074	.015	.019	.031	
FEB										
27...	.134	.28	.27	1.01	.014	.061	.007	<.007	.030	
MAR										
20...	.079	.21	.30	1.00	.012	.078	.006	<.007	.033	
APR										
10...	.049	.23	.40	.684	.011	.102	.109	<.007	.055	
10...	.059	.25	.37	.705	.011	--	E.005	<.007	.054	
16...	E.041	.17	.38	.715	.009	--	.006	<.007	.065	
MAY										
29...	E.029	.18	.30	.642	.014	.124	.008	<.007	.045	
29...	E.026	.19	.30	.663	.015	.096	.009	<.007	.047	
JUN										
14...	<.040	.12	.26	.771	.020	.077	.008	E.004	.036	
JUL										
10...	.041	.17	.29	.706	.024	.115	.007	<.007	.038	
AUG										
21...	E.029	.25	.41	.859	.015	.156	.015	.010	.048	
SEP										
14...	.009	--	--	.009	<.001	<.022	--	<.007	--	
14...	.053	.24	.51	.936	.024	.132	.013	.008	.059	
14...	.047	.25	.45	.919	.024	.122	.013	.008	.056	
DATE	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (MG/L AS SB) (01095)	ARSENIC DIS- SOLVED (MG/L AS AS) (01000)	BARIUM, DIS- SOLVED (MG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (MG/L AS BE) (01010)	CADIUM DIS- SOLVED (MG/L AS CD) (01025)
NOV										
14...	.3	<.1	2.2	.3	15	.13	<2.0	43.6	<.06	E.03
DEC										
07...	1.9	<.1	3.1	1.9	15	.09	<2.0	40.1	<.06	.06
JAN										
10...	.6	--	1.8	--	16	.07	.2	42.5	<.06	.04
FEB										
27...	.4	--	1.9	--	19	.05	E.2	38.2	<.06	.04
MAR										
20...	.5	<.1	1.7	.5	23	.07	E.1	39.3	<.06	.05
APR										
10...	.8	.1	1.8	.7	38	.51	.3	38.7	<.06	.10
10...	--	--	1.7	--	42	.29	.3	38.0	<.06	E.03
16...	--	--	--	--	26	.11	.3	38.4	<.06	E.02
MAY										
29...	.8	<.1	2.3	.7	23	<.05	.2	40.2	<.06	E.03
29...	.7	<.1	2.3	.7	23	<.05	.2	40.3	<.06	E.02
JUN										
14...	.5	<.1	2.1	.5	27	.09	.3	39.7	<.06	.04
JUL										
10...	.8	<.1	2.0	.8	21	.10	.4	41.7	<.06	<.04
AUG										
21...	.8	<.1	2.6	.8	16	.18	.4	48.2	<.06	.04
SEP										
14...	<.1	<.1	.95	<.1	4	<.05	<.2	<1.0	<.06	<.04
14...	.9	<.1	2.2	.9	16	.15	.4	50.6	<.06	E.02
14...	.8	<.1	2.3	.8	16	.15	.4	50.5	<.06	E.03

## OHIO RIVER MAIN STEM

## 03086000 OHIO RIVER AT SEWICKLEY, PA--Continued

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

DATE	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (µG/L AS SB) (01095)	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)
NOV										
14...	.3	<.1	2.2	.3	15	.13	<2.0	43.6	<.06	E.03
DEC										
07...	1.9	<.1	3.1	1.9	15	.09	<2.0	40.1	<.06	.06
JAN										
10...	.6	--	1.8	--	16	.07	.2	42.5	<.06	.04
FEB										
27...	.4	--	1.9	--	19	.05	E.2	38.2	<.06	.04
MAR										
20...	.5	<.1	1.7	.5	23	.07	E.1	39.3	<.06	.05
APR										
10...	.8	.1	1.8	.7	38	.51	.3	38.7	<.06	.10
10...	--	--	1.7	--	42	.29	.3	38.0	<.06	E.03
16...	--	--	--	--	26	.11	.3	38.4	<.06	E.02
MAY										
29...	.8	<.1	2.3	.7	23	<.05	.2	40.2	<.06	E.03
29...	.7	<.1	2.3	.7	23	<.05	.2	40.3	<.06	E.02
JUN										
14...	.5	<.1	2.1	.5	27	.09	.3	39.7	<.06	.04
JUL										
10...	.8	<.1	2.0	.8	21	.10	.4	41.7	<.06	<.04
AUG										
21...	.8	<.1	2.6	.8	16	.18	.4	48.2	<.06	.04
SEP										
14...	<.1	<.1	.95	<.1	4	<.05	<.2	<1.0	<.06	<.04
14...	.9	<.1	2.2	.9	16	.15	.4	50.6	<.06	E.02
14...	.8	<.1	2.3	.8	16	.15	.4	50.5	<.06	E.03

DATE	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)
NOV										
14...	<.8	.40	1.6	40	.12	8.0	104	2.0	3.34	<2.4
DEC										
07...	<.8	.69	1.4	30	E.07	6.2	83.1	.8	4.11	<2.4
JAN										
10...	<.8	1.74	1.1	40	E.07	6.2	165	1.3	5.57	E.2
FEB										
27...	<.8	1.74	1.1	40	.09	5.0	166	.7	4.78	E.3
MAR										
20...	<.8	1.64	1.0	30	E.07	4.9	171	.6	4.98	E.2
APR										
10...	<.8	1.16	2.2	30	.25	6.9	146	.9	4.49	.6
10...	<.8	1.01	2.1	20	.21	7.1	113	.9	4.34	.5
16...	<.8	.54	1.9	30	E.07	4.4	84.0	.6	2.92	E.2
MAY										
29...	E.4	.21	1.6	20	E.06	5.6	59.8	.7	2.32	<.3
29...	E.5	.20	1.6	10	.11	5.5	59.4	.7	2.32	E.2
JUN										
14...	<.8	.18	1.9	10	E.06	5.3	45.0	.9	2.38	E.3
JUL										
10...	<.8	.12	2.1	<10	E.05	6.1	4.8	1.2	1.15	.5
AUG										
21...	<.8	.11	2.9	<10	<.08	7.2	3.2	2.1	.65	.4
SEP										
14...	<.8	<.02	<.2	<10	<.08	<.3	<.1	<.2	E.04	<.3
14...	<.8	.17	3.1	<10	<.08	8.6	6.9	2.3	.88	<.3
14...	<.8	.17	3.3	<10	<.08	8.6	7.6	2.3	.96	<.3

## OHIO RIVER MAIN STEM

## 03086000 OHIO RIVER AT SEWICKLEY, PA--Continued

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

DATE	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	THAL- LIUM, DIS- SOLVED (µG/L AS TL) (01057)	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
NOV						
14...	<1.0	211	--	<8.0	94	11
DEC						
07...	<1.0	145	--	<8.0	96	5
JAN						
10...	<1.0	145	--	.5	100	1
FEB						
27...	<1.0	124	--	.4	75	15
MAR						
20...	<1.0	123	--	E.1	77	19
APR						
10...	<1.0	164	--	<.2	92	41
10...	<1.0	181	--	E.2	--	--
16...	<1.0	127	--	E.1	--	34
MAY						
29...	<1.0	150	--	<.2	97	18
29...	<1.0	155	--	<.2	97	18
JUN						
14...	<1.0	150	--	.4	98	9
JUL						
10...	<1.0	215	--	<.2	93	16
AUG						
21...	<1.0	221	--	.2	100	5
SEP						
14...	<1.0	.11	<.04	<.2	--	--
14...	<1.0	265	--	.3	100	8
14...	<1.0	262	--	.3	100	11

## OHIO RIVER MAIN STEM

## 03086000 OHIO RIVER AT SEWICKLEY, PA--Continued

**REMARKS.**--The following data are for trace elements and other constituents that were part of the suspended sediment fraction of the water sample. Suspended sediments were dewatered using a continuous flow centrifuge, dried, and analyzed directly for total metals using a nitric, hydrofluoric, perchloric acid digestion. Whole water contributions by the suspended sediment were then calculated using the suspended-sediment concentration in kilograms per liter (kg/L) and the analyte concentration in milligrams per kilogram (mg/kg) from the direct analysis of the suspended sediments, resulting in micrograms per gram ( $\mu\text{G/G}$ ) concentrations. Values reported in percent are the percent of that constituent in the suspended sediment. When no trace element was detected in the sample, the default reporting value is the method detection limit preceded by a less-than sign (<).

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

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS SEDI- MENT SUSP. PERCENT (30292)	CARBON SED. SUSP. PERCENT (30244)	CARBON, ORGANIC SUS- PENDE, TOTAL PERCENT (50465)	ALUM- INUM SED,SUS PERCENT (30221)	AN- TIMONY SED. SUSP. ( $\mu\text{G/G}$ ) (29816)	ARSENIC SED. SUSP. ( $\mu\text{G/G}$ ) (29818)	BARIUM SED. SUSP. ( $\mu\text{G/G}$ ) (29820)	BERYL- LIUM SED. SUSP. ( $\mu\text{G/G}$ ) (29822)	
NOV											
14...	1130	15500	2200	--	--	7.9	1.2	20	640	4	
DEC											
07...	1045	24000	3600	7.5	3.4	7.6	1.9	37	750	5	
JAN											
10...	1000	12400	5200	--	--	6.9	2.1	37	890	6	
FEB											
27...	1015	31800	2000	6.8	4.3	7.0	1.5	19	540	4	
MAR											
20...	0845	57100	2000	5.8	5.6	8.4	1.3	18	580	5	
APR											
10...	0900	63900	1600	4.9	4.6	8.6	1.6	19	600	5	
16...	0900	70400	1600	4.7	4.2	8.9	1.2	19	590	4	
JUN											
14...	0920	22000	2300	5.0	5.0	8.4	1.8	18	660	5	
JUL											
10...	1000	19600	2000	4.6	4.5	7.9	1.9	16	560	4	
AUG											
21...	0935	6480	3500	7.3	7.5	7.6	2.2	18	610	3	
SEP											
14...	1110	8650	2400	5.1	5.1	8.4	1.5	17	680	4	
DATE		CADMIUM SED. SUSP. ( $\mu\text{G/G}$ ) (29826)	CHRO- MIUM SED. SUSP. ( $\mu\text{G/G}$ ) (29829)	COBALT SEDI- MENT SUSP. ( $\mu\text{G/G}$ ) (35031)	COPPER SED. SUSP. ( $\mu\text{G/G}$ ) (29832)	IRON SEDI- MENT SUSP. PERCENT (30269)	LEAD SED. SUSP. ( $\mu\text{G/G}$ ) (29836)	LITHIUM SEDI- MENT SUSP. ( $\mu\text{G/G}$ ) (35050)	MAN- GANESE SED. SUSP. ( $\mu\text{G/G}$ ) (29839)	MERCURY SED. SUSP. ( $\mu\text{G/G}$ ) (29841)	MOLYB- DENUM SED. SUSP. ( $\mu\text{G/G}$ ) (29843)
NOV											
14...	2.0	140	91	80	5.9	98	84	15000	.25	9	
DEC											
07...	2.8	150	150	110	7.0	110	63	16000	.23	9	
JAN											
10...	8.1	270	390	110	8.8	95	61	45000	--	29	
FEB											
27...	2.4	91	120	820	5.3	150	65	10000	.08	6	
MAR											
20...	2.1	130	83	66	6.6	60	66	3800	.12	6	
APR											
10...	1.9	120	86	74	5.9	87	81	1600	.08	5	
16...	1.7	110	70	68	6.0	71	83	2000	.09	5	
JUN											
14...	2.0	120	89	110	5.9	78	90	9300	.30	6	
JUL											
10...	1.4	110	69	65	5.0	85	82	6300	.21	5	
AUG											
21...	2.8	110	61	78	4.8	92	64	7700	.15	5	
SEP											
14...	1.9	97	60	200	5.1	93	77	8400	.25	4	

## OHIO RIVER MAIN STEM

## 03086000 OHIO RIVER AT SEWICKLEY, PA--Continued

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

DATE	NICKEL SED. SUSP. (µG/G) (29845)	SELE- NIUM SED. SUSP. (µG/G) (29847)	SILVER SED. SUSP. (µG/G) (29850)	STRON- TIUM SEDI- MENT SUSP. (µG/G) (35040)	THAL- LIUM SUS SED (µG/G) (49955)	TITA- NIUM SEDI- MENT SUSP. PERCENT (30317)	VANA- DIUM SED. SUSP. (µG/G) (29853)	ZINC SED. SUSP. (µG/G) (29855)	URANIUM SEDI- MENT SUSP. (µG/G) (35046)	SEDI- MENT SUSP., FLOW- THROUGH CENTRIF (MG/L) (50279)
NOV 14...	210	2	M	170	<50	.430	110	550	<50	10
DEC 07...	240	3	3	160	<50	.410	120	740	<50	6
JAN 10...	770	5	3	170	<150	.310	100	1800	<150	3
FEB 27...	170	2	<1	340	<100	.340	99	790	<100	10
MAR 20...	150	2	<1	150	<100	.440	110	730	<100	14
APR 10...	190	2	M	140	<50	.490	120	660	<50	34
APR 16...	160	2	M	140	<50	.460	110	580	<50	34
JUN 14...	270	2	2	160	<120	.480	110	690	<120	11
JUL 10...	160	2	2	190	<100	.460	95	530	<100	14
AUG 21...	130	2	1	140	<100	.420	100	540	<100	9
SEP 14...	130	2	<.5	160	<50	.470	120	540	<50	12



## OHIO RIVER MAIN STEM

## 03086000 OHIO RIVER AT SEWICKLEY, PA--Continued

**REMARKS.**--The following data are for analytes from the National Water Quality Laboratory (NWQL) schedule 2001-pesticides in filtered water. Samples are filtered through a glass-fiber membrane filter with openings that are 0.7 microns in size to remove sediment and microorganisms. The filtered samples are then sent to the NWQL where they are analyzed by gas chromatography/mass spectrometric detector.

A field-matrix spike containing the series of organic compounds used in the analytical schedule was added to the replicate sample collected on September 14 at 1130. Data from the spiked sample can be used to determine extraction and elution recoveries from the filtered water and to evaluate the accuracy and precision of the results.

The method detection limit (MDL) provides an index to indicate where measurement uncertainty is increased. When an analyte is detected and all criteria for a positive result are met, the concentration is reported. If the concentration is less than the MDL, an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the NWQL will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less-than sign (<). The abbreviations SRG, SURROGT, or SURROG indicate surrogate and recovery is reported in percent.

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

DATE	TIME	MEDIUM CODE	2,6-DI- ETHYL- ANILINE	ACETO- CHLOR, WATER	ALA- CHLOR, WATER	ALPHA BHC DISS, SOLVED	ATRA- ZINE, WATER, DISS, REC	BEN- FLUR- ALIN WAT FLD	BUTYL- ATE, WATER, DISS, REC
			0.7 µ GF, REC (µG/L) (82660)	FLTRD REC (µG/L) (49260)	REC, (µG/L) (46342)	DIS- (µG/L) (34253)	DIS- REC (µG/L) (39632)	0.7 µ GF, REC (µG/L) (82673)	REC (µG/L) (04028)
OCT 27...	1000	Q	<.002	<.004	<.002	<.005	<.007	<.010	<.002
NOV 14...	1130	9	<.002	<.004	<.002	<.005	.009	<.010	<.002
DEC 07...	1045	9	<.002	<.004	<.002	<.005	.014	<.010	<.002
JAN 10...	1000	9	<.002	<.004	<.002	<.005	.007	<.010	<.002
FEB 27...	1015	9	<.002	<.004	<.002	<.005	E.004	<.010	<.002
MAR 20...	0845	9	<.002	<.004	<.002	<.005	E.006	<.010	<.002
APR 10...	0900	9	<.002	<.004	<.002	<.005	E.005	<.010	<.002
10...	0910	R	<.002	<.004	<.002	<.005	E.005	<.010	<.002
16...	0900	9	<.002	<.004	<.002	<.005	E.007	<.010	<.002
MAY 29...	0935	9	<.002	.005	<.002	<.005	.041	<.010	<.002
29...	0945	R	<.002	.004	<.002	<.005	.039	<.010	<.002
JUN 14...	0920	9	<.002	<.004	<.002	<.005	.077	<.010	<.002
JUL 10...	1000	9	<.002	.006	<.002	<.005	.084	<.010	<.002
AUG 21...	0935	9	<.002	<.004	<.002	<.005	.023	<.010	<.002
SEP 14...	1100	Q	<.002	<.004	<.002	<.005	<.007	<.010	<.002
14...	1110	9	<.002	<.004	<.002	<.005	.033	<.010	<.002
14...	1120	R	<.002	<.004	<.002	<.005	.033	<.010	<.002
14...	1130	R	.717	.889	.964	.749	.825	.708	.741

## OHIO RIVER MAIN STEM

## 03086000 OHIO RIVER AT SEWICKLEY, PA--Continued

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

DATE	CARBON- BARYL WATER FLTRD 0.7 µ GF, REC (µG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 µ GF, REC (µG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD 0.7 µ GF, REC (µG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 µ GF, REC PERCENT (91063)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 µ GF, REC (µG/L) (82677)
OCT 27...	<.041	<.020	<.005	<.018	<.003	<.006	104	<.005	<.005	<.021
NOV 14...	E.006	<.020	<.005	<.018	<.003	E.008	105	E.004	<.005	<.021
DEC 07...	<.041	<.020	<.005	<.018	<.003	E.008	109	E.001	<.005	<.021
JAN 10...	<.041	<.020	<.005	<.018	<.003	E.005	91	<.005	<.005	<.021
FEB 27...	<.041	<.020	<.005	<.018	<.003	E.003	82	<.005	<.005	<.021
MAR 20...	<.041	<.020	<.005	<.018	<.003	E.006	118	<.005	<.005	<.021
APR 10...	<.041	<.020	<.005	<.018	<.003	E.004	91	E.004	<.005	<.021
10...	<.041	<.020	<.005	<.018	<.003	E.005	97	E.005	<.005	<.021
16...	<.041	<.020	<.005	<.018	<.003	E.004	98	E.004	<.005	<.021
MAY 29...	<.041	<.020	<.005	<.018	<.003	E.006	107	<.005	<.005	<.021
29...	<.041	<.020	<.005	<.018	<.003	E.006	97	<.005	<.005	<.021
JUN 14...	<.041	<.020	<.005	<.018	<.003	E.004	113	E.003	<.005	<.021
JUL 10...	<.041	<.020	<.005	<.018	<.003	<.006	90	E.004	<.005	<.021
AUG 21...	E.004	<.020	<.005	<.018	<.003	E.005	105	E.005	<.005	<.021
SEP 14...	<.041	<.020	<.005	<.018	<.003	<.006	101	<.005	<.005	<.021
14...	<.041	<.020	<.005	<.018	<.003	E.007	105	.005	<.005	<.021
14...	<.041	<.020	<.005	<.018	<.003	E.007	105	.006	<.005	<.021
14...	E.854	E.866	.808	.892	.843	E.328	108	.813	.746	.499
DATE	EPTC WATER FLTRD 0.7 µ GF, REC (µG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 µ GF, REC (µG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 µ GF, REC (µG/L) (82672)	FONOFOS WATER DISS REC (µG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 µ GF, REC PERCENT (91065)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 µ GF, REC (82666)	MALA- THION, DIS- SOLVED (µG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 µ GF, REC (µG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 µ GF, REC (µG/L) (82667)
OCT 27...	<.002	<.009	<.005	<.003	96	<.004	<.035	<.027	<.050	<.006
NOV 14...	<.002	<.009	<.005	<.003	100	<.004	<.035	<.027	<.050	<.006
DEC 07...	<.002	<.009	<.005	<.003	103	<.004	<.035	<.027	<.050	<.006
JAN 10...	<.002	<.009	<.005	<.003	80	<.004	<.035	<.027	<.050	<.006
FEB 27...	<.002	<.009	<.005	<.003	86	<.004	<.035	<.027	<.050	<.006
MAR 20...	<.002	<.009	<.005	<.003	92	<.004	<.035	<.027	<.050	<.006
APR 10...	<.002	<.009	<.005	<.003	80	<.004	<.035	<.027	<.050	<.006
10...	<.002	<.009	<.005	<.003	74	<.004	<.035	<.027	<.050	<.006
16...	<.002	<.009	<.005	<.003	79	<.004	<.035	<.027	<.050	<.006
MAY 29...	<.002	<.009	<.005	<.003	92	<.004	<.035	<.027	<.050	<.006
29...	<.002	<.009	<.005	<.003	90	<.004	<.035	<.027	<.050	<.006
JUN 14...	<.002	<.009	<.005	<.003	95	<.004	<.035	E.004	<.050	<.006
JUL 10...	<.002	<.009	<.005	<.003	88	<.004	<.035	<.027	<.050	<.006
AUG 21...	<.002	<.009	<.005	<.003	95	<.004	<.035	<.027	<.050	<.006
SEP 14...	<.002	<.009	<.005	<.003	100	<.004	<.035	<.027	<.050	<.006
14...	<.002	<.009	<.005	<.003	107	<.004	<.035	<.027	<.050	<.006
14...	<.002	<.009	<.005	<.003	106	<.004	<.035	<.027	<.050	<.006
14...	.720	.713	.742	.656	107	.787	1.19	.886	E1.4	.867

## OHIO RIVER MAIN STEM

## 03086000 OHIO RIVER AT SEWICKLEY, PA--Continued

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

DATE	METOLACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER DISSOLV (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 µ GF, REC (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 µ GF, REC (µG/L) (82684)	P,P' DDE DISSOLV (µG/L) (34653)	PARA- THON, DIS- SOLVED (µG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 µ GF, REC (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 µ GF, REC (µG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 µ GF, REC (µG/L) (82687)	PHORATE WATER FLTRD 0.7 µ GF, REC (µG/L) (82664)
	OCT 27...	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
NOV 14...	E.003	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
DEC 07...	E.007	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
JAN 10...	E.003	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
FEB 27...	E.002	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
MAR 20...	E.005	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
APR 10...	E.002	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
10...	E.002	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
16...	E.002	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
MAY 29...	.015	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
29...	.017	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
JUN 14...	.026	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
JUL 10...	.024	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
AUG 21...	E.008	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
SEP 14...	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
14...	E.010	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
14...	E.010	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011
14...	.875	.724	.747	.808	.491	.835	.750	.747	.456	.696
DATE	PRO- METON, WATER, DISS, REC (µG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 µ GF, REC (µG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 µ GF, REC (µG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 µ GF, REC (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 µ GF, REC (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 µ GF, REC (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 µ GF, REC (µG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 µ GF, REC (µG/L) (82681)
OCT 27...	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
NOV 14...	E.003	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
DEC 07...	E.002	<.004	<.010	<.011	<.023	E.005	<.016	<.034	<.017	<.005
JAN 10...	E.002	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
FEB 27...	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
MAR 20...	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
APR 10...	<.015	<.004	<.010	<.011	<.023	E.005	<.016	<.034	<.017	<.005
10...	<.015	<.004	<.010	<.011	<.023	E.006	<.016	<.034	<.017	<.005
16...	E.003	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
MAY 29...	E.007	<.004	<.010	<.011	<.023	E.007	<.016	<.034	<.017	<.005
29...	E.008	<.004	<.010	<.011	<.023	E.006	<.016	<.034	<.017	<.005
JUN 14...	E.005	<.004	<.010	<.011	<.023	.012	<.016	<.034	<.017	<.005
JUL 10...	E.011	<.004	<.010	<.011	<.023	E.011	<.016	<.034	<.017	<.005
AUG 21...	E.015	<.004	<.010	<.011	<.023	E.006	<.016	<.034	<.017	<.005
SEP 14...	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
14...	E.012	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
14...	E.011	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
14...	.803	.816	.866	.938	E.764	.602	.928	E.665	.689	.842

## OHIO RIVER MAIN STEM

## 03086000 OHIO RIVER AT SEWICKLEY, PA--Continued

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

DATE	THIO- BENCARB WATER FLTRD 0.7 $\mu$ GF, REC ( $\mu$ G/L) (82681)	TRI- FLUR- ALIN WAT FLT 0.7 $\mu$ GF, REC ( $\mu$ G/L) (82661)
OCT		
27...	<.005	<.009
NOV		
14...	<.005	<.009
DEC		
07...	<.005	<.009
JAN		
10...	<.005	<.009
FEB		
27...	<.005	<.009
MAR		
20...	<.005	<.009
APR		
10...	<.005	<.009
10...	<.005	<.009
16...	<.005	<.009
MAY		
29...	<.005	<.009
29...	<.005	<.009
JUN		
14...	<.005	<.009
JUL		
10...	<.005	<.009
AUG		
21...	<.005	<.009
SEP		
14...	<.005	<.009
14...	<.005	<.009
14...	<.005	<.009
14...	.842	.724