

Water-Data Report 2006

01401700 PIKE RUN NEAR ROCKY HILL, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°25'12", long 74°38'27" referenced to North American Datum of 1983, Somerset County, NJ, Hydrologic Unit 02030105, at bridge on Millstone River Road, 400 ft upstream of confluence, 1.2 mi downstream of Bridgepoint Lake, and 1.3 mi northwest of Rocky Hill.

DRAINAGE AREA.--22.2 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-62, 1976-78, 1999, 2005 to current year.

REMARKS.--Total nitrogen (00600) equals the sum of filtered ammonia plus organic nitrogen (00623), filtered nitrite plus nitrate nitrogen (00631), and total particulate nitrogen (49570). Bacteria samples were collected synoptically over a 30-day period during the summer.

COOPERATIVE NETWORK SITE DESCRIPTOR: Statewide Status, New Jersey Department of Environmental Protection (NJDEP) Watershed Management Area 10.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJDEP. Bacteria samples were provided by the local county health department under the direction of the NJDEP through the County Environmental Health Act. Determinations of filtered ammonia, filtered orthophosphorus, BOD, total suspended residue, fecal coliform, E. coli, and enterococcus bacteria were performed by the NJ Department of Health and Senior Services. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. EPA, Region II, Division of Environmental Science and Assessment.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 1 of 5

[Remark codes: <, less than; E, estimated.]

Date	Time	Sample type	Turbidity	UV	UV	Barometric pressure, mm Hg	Dissolved oxygen, mg/L	pH	Specific conductance, mhos/cm	Temperature, air, deg C	Temperature, water, deg C
			white light, det ang 90+/-30	absorbance, 254 nm, wat flt units	absorbance, 280 nm, wat flt units			water, unfltrd field, std units			
NTRU			(63676)	(50624)	(61726)	mm Hg (00025)	mg/L (00300)	(00400)	(00095)	(00020)	(00010)
Nov											
02...	0900	Environmental	3.0	.079	.059	765	9.7	87	7.5	291	11.5
02...	0900	<i>Split Replicate</i>	--	--	--	--	--	--	--	--	--
02...	0901	<i>Concurrent Replicate</i>	--	--	--	--	--	--	--	--	--
Mar											
08...	0900	Environmental	7.6	.050	.038	768	15.8	118	8.4	396	4.5
08...	0900	<i>Split Replicate</i>	--	--	--	--	--	--	--	--	--
08...	0901	<i>Concurrent Replicate</i>	--	--	--	--	--	--	--	--	--
May											
09...	0900	Environmental	2.3	.082	.064	764	10.2	97	7.9	375	15.0
09...	0900	<i>Split Replicate</i>	--	--	--	--	--	--	--	--	--
09...	0901	<i>Concurrent Replicate</i>	--	--	--	--	--	--	--	--	--
Sep											
05...	0900	Environmental	27	.135	.101	766	8.3	88	7.4	318	19.5
05...	0900	<i>Split Replicate</i>	--	--	--	--	--	--	--	--	--
05...	0901	<i>Concurrent Replicate</i>	--	--	--	--	--	--	--	--	--

01401700 PIKE RUN NEAR ROCKY HILL, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 5

[Remark codes: <, less than; E, estimated.]

Date	Hard- ness, water, mg/L as CaCO ₃ (00900)	ANC, wat unf						Residue water, fltrd, sum of consti- tuents water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70301)	Residue at 105 deg. C, sus- pended, mg/L (00530)	
		Calcium water, mg/L (00915)	Magnes- ium, water, mg/L (00925)	Potas- sium, water, mg/L (00935)	Sodium, water, mg/L (00930)	fixed end pt, lab, mg/L as CaCO ₃ (90410)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)			
Nov											
02...	85	21.9	7.24	2.50	20.3	43	26.7	.11	14.4	36.8	173
02...	84	21.0	7.60	2.90	20.0	42	28.0	.13	--	36.0	160
02...	84	21.0	7.70	2.90	20.0	45	28.0	.11	--	37.0	163
Mar											
08...	99	25.8	8.39	2.19	32.5	48	54.8	E.09	8.3	43.9	215
08...	95	24.0	8.40	2.30	33.0	46	59.0	.20	--	49.0	213
08...	95	24.0	8.40	2.30	33.0	47	59.0	.17	--	48.0	213
May											
09...	110	30.6	9.25	2.42	25.5	61	35.3	.12	1.1	54.6	204
09...	110	29.0	9.30	2.90	24.0	58	40.0	<.05	--	59.0	208
09...	110	29.0	9.30	2.90	24.0	58	41.0	<.05	--	60.0	210
Sep											
05...	90	24.2	7.31	2.96	24.6	55	29.2	.11	13.7	35.6	189
05...	95	25.0	7.90	3.60	25.0	53	31.0	.11	--	36.0	178
05...	95	25.0	8.00	3.60	25.0	53	31.0	.10	--	36.0	178
											190
											17

01401700 PIKE RUN NEAR ROCKY HILL, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 5

[Remark codes: <, less than; E, estimated.]

Date	Ammonia				Nitrite		Partic-		Ortho-		Ortho-		
	+ org-N, water, filtrd, mg/L as N (00623)	+ org-N, water, unfiltrd mg/L as N (00625)	Ammonia water, filtrd, mg/L as N (00608)	Ammonia water, unfiltrd mg/L as N (00610)	Nitrate water, filtrd, mg/L as N (00618)	nitrate water, filtrd, mg/L as N (00631)	Nitrite water, filtrd, mg/L as N (00613)	partic- ulate nitro- gen, susp, water, mg/L as N (49570)	Total nitro- gen, water, filtrd, mg/L as P (00602)	Total nitro- gen, water, unfiltrd mg/L as P (00600)	phosphate, water, filtrd, mg/L as P (00671)	phosphate, water, unfiltrd mg/L as P (70507)	phosphorus, water, filtrd, mg/L (00666)
Nov													
02...	.31	--	E.004	--	--	3.85	--	.03	4.2	4.2	.049	--	.057
02...	.28	.23	<.050	<.050	--	4.30	<.050	--	4.6	4.5	.051	.05	<.050
02...	.25	.51	<.050	<.050	--	4.30	<.050	--	4.5	4.8	.050	.05	<.050
Mar													
08...	.35	--	.092	--	--	2.17	--	.09	2.5	2.6	.019	--	.013
08...	E.34	E.39	.089	.092	1.98	2.10	.120	--	--	2.5	.011	.01	<.050
08...	E.37	E.38	.075	.092	1.98	2.10	.120	--	--	--	.011	.01	<.050
May													
09...	.36	--	.022	--	--	2.00	--	.08	2.4	2.4	.014	--	.024
09...	E.28	E.35	.050	<.050	--	1.90	<.050	--	--	--	E.010	<.01	<.050
09...	E.51	E.35	<.050	<.050	--	1.90	<.050	--	--	--	<.010	<.01	<.050
Sep													
05...	.47	--	.021	--	--	4.02	--	.15	4.5	4.6	.100	--	.120
05...	E.50	E.76	<.050	<.050	--	3.90	<.050	--	--	--	.089	.11	.091
05...	E.74	E.53	<.050	<.050	--	3.80	<.050	--	--	--	.089	.11	.110

01401700 PIKE RUN NEAR ROCKY HILL, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 4 of 5

[Remark codes: <, less than; E, estimated.]

Date	Phos- phorus, water, unfiltrd	Total carbon, suspnd total, (00665)	Inor- ganic carbon, suspnd total, (00694)	Organic carbon, suspnd total, (00688)	BOD, water, unfiltrd 5 day, 20 degC	Arsenic water, filtrd ug/L (01000)	Arsenic water, unfiltrd ug/L (01002)	Barium, water, unfiltrd recover -able, ug/L (01007)	Beryll- ium, water, unfiltrd recover -able, ug/L (01012)	Boron, water, filtrd, ug/L (01020)	Boron, water, unfiltrd recover -able, ug/L (01022)	Cadmium water, unfiltrd ug/L (01027)
Nov												
02...	.068	.2	<.1	.2	2.8	<1.0	--	--	--	--	85	--
02...	.059	--	--	--	4.6	--	--	--	--	--	90	--
02...	.110	--	--	--	3.6	--	--	--	--	--	90	--
Mar												
08...	.033	.6	<.1	.6	2.3	<1.0	.50	.59	57.5	<.06	79	81
08...	<.050	--	--	--	2.5	--	--	--	--	--	80	--
08...	<.050	--	--	--	2.5	--	--	--	--	--	80	--
May												
09...	.023	.3	<.1	.3	2.7	<1.2	--	--	--	--	119	--
09...	<.050	--	--	--	4.2	--	--	--	--	--	130	--
09...	<.050	--	--	--	4.3	--	--	--	--	--	130	--
Sep												
05...	.165	.8	<.1	.8	3.9	<1.0	1.1	1.2	63.9	E.03	116	106
05...	.110	--	--	--	6.5	--	--	--	--	--	120	--
05...	.140	--	--	--	6.7	--	--	--	--	--	130	--

01401700 PIKE RUN NEAR ROCKY HILL, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 5 of 5

[Remark codes: <, less than; E, estimated.]

Date	Chrom-	Copper,	Iron,	Lead,	Mangan-	Nickel,	Selen-	Silver,	Zinc,	
	ium, water, unfltrd recover -able, ug/L (01034)	water, unfltrd recover -able, ug/L (01042)	water, unfltrd recover -able, ug/L (01045)	water, unfltrd recover -able, ug/L (01051)	ese, water, unfltrd recover -able, ug/L (01055)			water, unfltrd recover -able, ug/L (01147)	water, unfltrd recover -able, ug/L (01077)	water, unfltrd recover -able, ug/L (01092)
Nov										
02...	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--
Mar										
08...	1.5	2.9	828	.13	42.8	<.010	2.38	.12	<.16	5
08...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
May										
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
Sep										
05...	2.4	5.2	1,430	.49	42.5	<.010	3.25	.24	<.16	5
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 1 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Time	2,4-D	2,4-DB	CIAT,	CEAT,	OIET,	3-Hydroxy	Aldi-carb	Aldi-carb	Aldi-carb,	Bendiocarb, water, fltrd, ug/L (50299)
		methyl ester, water, fltrd, ug/L (50470)	2,4-D water, water, fltrd, ug/L (39732)	water, fltrd, 0.7u GF (38746)	water, fltrd, 0.7u GF (04040)	water, fltrd, 0.7u GF (04038)	water, fltrd, 0.7u GF (50355)	carbo-furan, wat flt (49308)	sulfone fltrd (49313)	sulf-oxide, wat flt (49314)	
May											
09...	0900	<.016	<.04	<.02	M	<.08	E.007	<.008	<.02	<.022	<.04

01401700 PIKE RUN NEAR ROCKY HILL, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 2 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Benomyl water, fltrd, ug/L (50300)	Bensulfuron-methyl, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd, 0.7u GF ug/L (38711)	Bromo-cil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd, 0.7u GF ug/L (49311)	Caf-feine, water, fltrd, ug/L (50305)	Car-baryl, water, fltrd, 0.7u GF ug/L (49310)	Carbo-furan, water, fltrd, 0.7u GF ug/L (49309)	Chlor-amben, methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-triazine, water, ug/L (04039)	Clopyr-alid, water, fltrd, ug/L (49305)	Cyclo-ate, water, fltrd, ug/L (04031)
May 09...	<.028	<.02	<.01	<.02	<.03	E.012	<.02	<.016	<.02	<.032	<.04	<.02	<.01

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Dacthal mono-acid, 0.7u GF ug/L (49304)	Dicamba water, fltrd, 0.7u GF ug/L (38442)	Di-chlor-prop, 0.7u GF ug/L (49302)	Diphen-amid, water, fltrd, 0.7u GF ug/L (04033)	Diuron, water, fltrd, 0.7u GF ug/L (49300)	Fenuron, water, fltrd, 0.7u GF ug/L (49297)	Flumet-sulam, water, fltrd, 0.7u GF ug/L (61694)	Fluo-meturon, water, fltrd, 0.7u GF ug/L (38811)	Imaza-quin, water, fltrd, 0.7u GF ug/L (50356)	Imaze-thapyr, water, fltrd, 0.7u GF ug/L (50407)	Imida-cloprid, water, fltrd, 0.7u GF ug/L (61695)	Linuron, water, fltrd, 0.7u GF ug/L (38478)	MCPA, water, fltrd, 0.7u GF ug/L (38482)
May 09...	<.03	<.04	<.03	<.01	<.02	<.02	<.04	<.02	<.04	<.04	E.018	<.01	<.03

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 4 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	MCPB, water, fltrd, 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, 0.7u GF ug/L (50359)	Methio-carb, water, fltrd, 0.7u GF ug/L (38501)	Meth-oxyl, water, fltrd, 0.7u GF ug/L (49296)	Metsul-furon, water, fltrd, 0.7u GF ug/L (61697)	Chloro-phenyl), Neburon, water, fltrd, 0.7u GF ug/L (61692)	Nico-sul-furon, water, fltrd, 0.7u GF ug/L (49294)	Norflur-azone, water, fltrd, 0.7u GF ug/L (50364)	Ory-zalin, water, fltrd, 0.7u GF ug/L (49293)	Oxamyl, water, fltrd, 0.7u GF ug/L (49292)	Pic-loram, water, fltrd, 0.7u GF ug/L (38866)	Propham	
May 09...	<.01	<.01	<.010	<.020	<.07	<.04	<.01	<.04	<.02	<.01	<.03	<.03	<.030

01401700 PIKE RUN NEAR ROCKY HILL, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 5 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Propi-conazole, ug/L (50471)	Pro-poxur, water, filtrd 0.7u GF ug/L (38538)	Sulfo-Siduron water, water, filtrd ug/L (38548)	Tebu-thiuron water, water, filtrd ug/L (50337)	Terba-cil, water, filtrd ug/L (82670)	Tri-clopyr, water, filtrd ug/L (04032)	0.7u GF ug/L (49235)
May 09...	<.01	<.008	E.01	<.091	<.026	<.016	<.03

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

[Remark codes: <, less than.]

Date	Time	Enterococci, m-E Temper- ature, water, deg C (00010)	Fecal E coli, m-TEC MF, water, col/ 100 mL (31649)	Fecal ECbroth MF, water, col/ 100 mL (31633)	Fecal water, MPN/ 100 mL (31615)
May					
24...	1105	14.0	4,200	<10	500
31...	1120	22.4	160	10	80
Jun					
07...	1115	16.7	850	10	800
14...	1125	19.8	160	310	500
21...	1110	22.3	20	290	500