



Water-Data Report 2009

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°45'54", long 74°31'47" referenced to North American Datum of 1983, Harding Township, Morris County, NJ, Hydrologic Unit 02030103, at bridge on Camp Trail Road in Morristown National Historical Park, 20 ft downstream of unnamed tributary, 500 ft west of Mount Kemble, and 2.4 mi northeast of Bernardsville.

DRAINAGE AREA.--1.07 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1998 to current year.

GAGE.--Staff gage.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Date	Discharge, in ft ³ /s
Dec 4, 2008	0.72
Feb 18, 2009	0.95
May 27, 2009	1.26
Aug 19, 2009	1.01

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1998 to current year.

REMARKS.--Cooperative Network Site Descriptor: Background, NJ Department of Environmental Protection Watershed Management Area 6.

COOPERATION.--Physical measurements and samples for laboratory analysis were collected in cooperation with the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 1 of 6

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

Date	Time	Medium name	Sample type	Baro-metric pressure, mm Hg (00025)	Temper-ature, air, deg C (00020)	UV absorb-ance, 254 nm, wat flt units /cm (50624)	UV absorb-ance, 280 nm, wat flt units /cm (61726)	Instan-taneous discharge, ft³/s (00061)
Dec 04...	1130	Surface water	Regular	752	6.5	.037	.027	.72
Feb 18...	0925	QC sample - Artificial	Field Blank	--	--	--	--	--
18...	1040	Surface water	Regular	756	2.0	.031	.025	.95
May 27...	0945	Surface water	Regular	752	13.0	.042	.033	1.3
Aug 19...	1110	QC sample - Artificial	Field Blank	--	--	--	--	--
19...	1150	Surface water	Regular	750	26.0	.057	.045	1.0

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 2 of 6

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

Date	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, unfltrd field, std units (00400)	Specif-ic conduc-tance, wat unf 25 degC (00095)	Turbdty white light, 90+/-30 degC (00010)	Dis-solved solids, det ang 180degC (NTRU (63676))	Dis-solved solids, sum of constituents, wat flt (70300) mg/L	Sus-pended solids, Hard-ness, water, mg/L as CaCO3 (70301) mg/L	Magnes-iun, water, mg/L (00915)	Potas-sium, water, mg/L (00925)			
Dec 04...	13.0	102	7.2	120	4.5	1.1	87	E88	44	1	11.2	3.89	.68
Feb 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	13.6	98	7.2	117	2.0	.7	90	E87	43	5	10.8	3.89	.59
May 27...	10.5	97	7.7	117	11.1	2.5	94	E88	44	2	11.3	3.84	.70
Aug 19...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	8.6	94	6.8	128	18.9	3.2	88	E93	46	7	11.9	3.98	.81

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 6

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

Date	Sodium, water, filtrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO ₃ (90410)	Total carbon, susnd sedimnt total, mg/L (00694)	Chlor- ide, water, filtrd, mg/L (00940)	Fluor- ide, water, filtrd, mg/L (00950)	Inor- ganic carbon, susnd sedimnt total, mg/L (00688)	Silica, water, filtrd, mg/L as SiO ₂ (00955)	Sulfate water, filtrd, mg/L (00945)	Ammonia + org-N, water, filtrd, mg/L as N (00623)	Ammonia water, filtrd, mg/L as N (00608)	Nitrate + nitrite water, filtrd, mg/L as N (00631)	Ortho- phosphate, water, filtrd, mg/L as P (00671)	Partic- ulate nitro- gen, susp, water, mg/L (49570)
	mg/L (00930)	mg/L (90410)	mg/L (00694)	mg/L (00940)	mg/L (00950)	mg/L (00688)	mg/L (00955)	mg/L (00945)	mg/L (00623)	mg/L (00608)	mg/L (00631)	mg/L (00671)	mg/L (49570)
Dec 04...	5.11	37	<.2	4.80	E.07	<.04	24.7	14.5	.14	E.007	.16	E.007	<.02
Feb 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	5.42	33	E.1	4.83	E.08	<.04	24.0	16.7	E.07	E.009	.26	E.008	<.02
May 27...	5.67	35	.4	4.93	E.07	<.04	25.3	14.3	E.06	E.010	.26	.010	.05
Aug 19...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	5.52	39	.8	5.78	E.07	<.04	26.5	13.6	<.10	<.010	.33	.017	.05

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 6

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

Date	Phos- phorus, water, filtrd, mg/L as P (00666)	Phos- phorus, water, unfiltrd mg/L as P (00665)	Total nitro- gen, water, filtrd, mg/L (00602)	Total nitro- gen, water, unfiltrd mg/L (00600)	Barium, water, unfiltrd recover -able, μg/L (01007)	Beryll- ium, water, unfiltrd recover -able, μg/L (01012)	Cadmium water, unfiltrd recover -able, μg/L (01027)	Chrom- ium, water, unfiltrd Copper, water, unfiltrd recover -able, μg/L (01034)	Copper, water, unfiltrd recover -able, μg/L (01040)	Iron, water, unfiltrd recover -able, μg/L (01042)	Lead, water, unfiltrd recover -able, μg/L (01049)	Lead, water, unfiltrd recover -able, μg/L (01051)	
	mg/L (00666)	mg/L (00665)	mg/L (00602)	mg/L (00600)	mg/L (01007)	μg/L (01012)	μg/L (01027)	μg/L (01034)	μg/L (01040)	μg/L (01042)	μg/L (01045)	μg/L (01049)	μg/L (01051)
Dec 04...	<.008	E.007	.30	--	--	--	--	--	--	--	--	--	--
Feb 18...	--	--	--	--	--	--	--	<1.0	--	--	<.06	--	--
18...	<.008	E.004	E.33	--	8.7	<.02	<.06	<.40	--	<4.0	19	--	<.10
May 27...	E.007	.012	E.32	E.38	--	--	--	--	--	--	--	--	--
Aug 19...	--	--	--	--	--	--	--	<1.0	--	--	<.06	--	--
19...	.019	.025	--	--	49.2	3.00	1.16	2.6	--	E2.4	30	--	E.09

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 6

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

Date	Manganese, water, unfiltrd recover -able, μg/L (01055)		Mercury water, unfiltrd recover -able, μg/L (71890)		Nickel, water, unfiltrd recover -able, μg/L (01065)		Silver, water, unfiltrd recover -able, μg/L (01067)		Zinc, water, unfiltrd recover -able, μg/L (01090)		Arsenic, water, unfiltrd recover -able, μg/L (01000)		Boron, water, unfiltrd recover -able, μg/L (01022)		Selenium, water, unfiltrd recover -able, μg/L (01147)		Organic carbon, susnd sedimnt total, mg/L (00689)	
	Mercury water, unfiltrd recover -able, μg/L (71900)	Nickel, water, unfiltrd recover -able, μg/L (01065)	Zinc, water, unfiltrd recover -able, μg/L (01092)	Arsenic water, unfiltrd recover -able, μg/L (01002)	Boron, water, unfiltrd recover -able, μg/L (01022)	Selenium, water, unfiltrd recover -able, μg/L (01147)	Organic carbon, susnd sedimnt total, mg/L (00689)											
Dec 04...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<.12		
Feb 18...	--	<.010	--	E.10	--	--	<2.0	--	<.06	--	--	--	--	--	--	--		
18...	2.1	--	<.010	--	E.20	<.06	--	E1.3	.14	E.17	<14	E.07	.13					
May 27...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.35		
Aug 19...	--	<.010	--	<.12	--	--	<2.0	--	<.06	--	--	--	--	--	--	--		
19...	4.9	--	<.010	--	.41	2.33	--	5.8	.46	3.9	19	2.2	.76					

**WATER-QUALITY
DATA
WATER YEAR
OCTOBER 2008 TO
SEPTEMBER 2009**

Part 6 of 6

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

Date	Organic carbon, water, filtrd, mg/L (00681)
Dec 04...	1.2
Feb 18...	--
18...	1.0
May 27...	1.3
Aug 19...	--
19...	1.5

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 7

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

Date	1-Naph-thol, water, 0.7µ GF	2,6-Di-ethyl-aniline water, 0.7µ GF	2Chloro-diethyl water, 0.7µ GF	CIAT, water, 0.7µ GF	2-Ethyl-6-methyl- water, 0.7µ GF	3,4-Di-chloro-aniline water, 0.7µ GF	3,5-Di-chloro-aniline water, 0.7µ GF	4-Chloro-2-methyl- phenol, water, 0.7µ GF	Aceto-chlor, water, 0.7µ GF	Ala-chlor, water, 0.7µ GF	alpha-Endo-sulfan, water, 0.7µ GF	Atra-zine, water, 0.7µ GF	Azin-phos-methyl oxon, water, 0.7µ GF
	µg/L (49295)	µg/L (82660)	µg/L (61618)	µg/L (04040)	µg/L (61620)	µg/L (61625)	µg/L (61627)	µg/L (61633)	µg/L (49260)	µg/L (46342)	µg/L (34362)	µg/L (39632)	µg/L (61635)
May 27...	<.04	<.006	<.010	E.004	<.010	<.004	<.004	<.005	<.010	<.008	<.006	E.004	<.04

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 7

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

Date	Azin-phos-methyl, water, 0.7µ GF	Ben-flur-alin, water, 0.7µ GF	Car-baryl, water, 0.7µ GF	Carbo-furan, water, 0.7µ GF	Chlor-pyrifos oxon, water, 0.7µ GF	Chlor-pyrifos water, 0.7µ GF	Chlor-pyrifos water, 0.7µ GF	cis-Per-methrin water, 0.7µ GF	cis-Propi-conazole, water, 0.7µ GF	Cyana-zine, water, 0.7µ GF	Cyflu-thrin, water, 0.7µ GF	Cyper-methrin, water, 0.7µ GF	DCPA, water, 0.7µ GF	Desulf-inyl-fipro-nil, water, 0.7µ GF
	µg/L (82686)	µg/L (82673)	µg/L (82680)	µg/L (82674)	µg/L (61636)	µg/L (38933)	µg/L (82687)	µg/L (79846)	µg/L (04041)	µg/L (61585)	µg/L (61586)	µg/L (82682)	µg/L (62169)	
May 27...	<.120	<.014	<.200	<.060	<.05	<.010	<.014	<.006	<.040	<.016	<.020	<.006	<.029	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 7

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

Date	Desulf-inyl-fipro-nil, water, 0.7µ GF	Diazi-non, water, 0.7µ GF	Di-chlor-vos, water, 0.7µ GF	Dicro-tophos, water, 0.7µ GF	Diel-drin, water, 0.7µ GF	Dimeth-oate, water, 0.7µ GF	Disulf-oton, water, 0.7µ GF	Disul-foton, water, 0.7µ GF	Endo-sulfan, water, 0.7µ GF	EPTC, water, 0.7µ GF	Ethion-monoxon, water, 0.7µ GF	Ethion, water, 0.7µ GF	Etho-prop, water, 0.7µ GF
	µg/L (62170)	µg/L (39572)	µg/L (38775)	µg/L (38454)	µg/L (39381)	µg/L (82662)	µg/L (61640)	µg/L (82677)	µg/L (61590)	µg/L (82668)	µg/L (61644)	µg/L (82346)	µg/L (82672)
May 27...	<.012	<.005	<.02	<.08	<.009	<.006	<.01	<.04	<.022	<.002	<.02	<.012	<.016

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 7

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

Date	Fenami-													
	Fenami-phos	sulf-	Fenami-phos	Fipro-nil	Fipro-nil	Fipro-	Fonofos	Hexa-	Ipro-	Isofen-	lambda-	Cyhalo-	Mala-	Mala-
water,	oxide,	water,	water,	water,	water,	water,	water,	zinone,	dione,	phos,	water,	thrin,	oxon,	thion,
fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,
µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	(62166)	(04095)	(04025)	(61593)	(61594)	(61595)	(61652)	(39532)
(61645)	(61646)	(61591)	(62167)	(62168)	(62166)	(62166)	(04095)	(04025)	(61593)	(61594)	(61595)	(61652)	(39532)	
May 27...	<.053	<.08	<.03	<.013	<.024	<.040	<.010	<.008	<.014	<.006	<.010	<.080	<.020	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 7

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

Date	Methyl													
	Meta-laxyl,	Methid-athion,	Methyl-oxon,	Methyl-para-thion,	Metola-chlor,	Metri-buzin,	Moli-nate,	Myclo-butanol	Oxy-fluor-fen,	Pendi-meth-alin,	Phorate	Phorate	Phosmet	
water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	
fltrd,	fltrd,	fltrd,	fltrd,	0.7µ GF	fltrd,	fltrd,	0.7µ GF	fltrd,	fltrd,	0.7µ GF	fltrd,	0.7µ GF	fltrd,	
µg/L	µg/L	µg/L	µg/L	µg/L	(82667)	(39415)	(82630)	(82671)	(61599)	(61600)	(82683)	(61666)	(82664)	(61668)
(61596)	(61598)	(61664)	(61664)	(82667)	(39415)	(82630)	(82671)	(61599)	(61600)	(82683)	(61666)	(82664)	(61668)	
May 27...	<.007	<.006	<.01	<.008	<.014	<.016	<.002	<.010	<.006	<.012	<.03	<.020	<.05	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 6 of 7

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

Date	Ter-												
	Phosmet	Prome-ton,	Prome-tryn,	Propanil,	Propar-gite,	Propy-zamide,	Tebu-simazine,	Terbufos	Terbu-	Ter-	Thio-		
water,	water,	water,	water,	water,	water,	water,	water,	oxon	fos,	buthyl-	bencarb		
fltrd,	fltrd,	fltrd,	fltrd,	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	fltrd,	water,	water,	water,		
µg/L	µg/L	µg/L	µg/L	(82679)	(82685)	(82676)	(04035)	(82670)	(61606)	(61674)	(82675)	(04022)	(82681)
(61601)	(04037)	(04036)	(04036)	(82679)	(82685)	(82676)	(04035)	(82670)	(61606)	(61674)	(82675)	(04022)	(82681)
May 27...	<.200	<.01	<.006	<.014	<.02	<.004	<.010	<.02	<.010	<.04	<.02	<.01	<.016

01378780 PRIMROSE BROOK AT MORRISTOWN NATIONAL HISTORICAL PARK, NJ—Continued**WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO
SEPTEMBER 2009**

Part 7 of 7

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

Date	trans- Propi- con-a- zole, water, filtrd, μg/L (79847)	Tribu- phos, water, filtrd, μg/L (61610)	Tri- flur- alin, water, filtrd 0.7μ GF μg/L (82661)
May 27...	<.02	<.035	<.012