



Water-Data Report 2007

0145240 MERRILL CREEK NEAR STEWARTSVILLE, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 40°40'56", long 75°06'29" referenced to North American Datum of 1983, Greenwich Township, Warren County, NJ, Hydrologic Unit 02040105, on unimproved road 175 feet east from CR 637, 920 feet upstream from confluence with Pohatcong Creek, and .8 miles south from Stewartsville.

DRAINAGE AREA.--6.14 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2006 to August 2007.

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). Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 1.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, suspended residue, ammonia-plus-organic nitrogen in bed sediment, and phosphorus in bed sediment were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 5

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

Date	Time	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorb- ance, 254 nm, wat flt units (50624) /cm	UV absorb- ance, 280 nm, wat flt units (61726) /cm	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
Dec 04...	0845	2.9	.019	.012	759	11.3	85	8.0	137	2.5	3.3	50	13.9
Mar 14...	1130	1.6	.033	.025	752	12.2	100	8.1	143	17.0	6.8	46	12.5
May 24...	0830	3.8	.035	.027	768	10.6	92	7.7	126	16.0	9.6	44	11.7
Aug 09...	1030	4.8	.039	.028	754	8.9	89	7.6	138	30.0	15.2	49	13.5

01455240 MERRILL CREEK NEAR STEWARTSVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 5

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

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total non-filterable, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
Dec 04...	3.76	1.40	5.93	34	7.92	E.06	4.6	16.1	76	88	8	.22	.017
Mar 14...	3.62	1.37	6.96	28	12.7	E.08	4.2	17.3	78	82	1	.14	.014
May 24...	3.47	1.23	5.52	31	8.13	E.05	3.3	16.2	69	87	5	.21	<.010
Aug 09...	3.79	1.43	5.90	35	8.67	E.05	3.4	14.6	74	72	4	.16	.039

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 5

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

Date	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Particulate nitrogen, susp, water, mg/L (49570)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd, mg/L (00600)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Arsenic water, fltrd, µg/L (01000)	Arsenic water, unfltrd, µg/L (01002)
Dec 04...	.47	.04	.69	.73	E.006	E.006	.017	.5	<.1	.5	1.8	--	--
Mar 14...	.48	.03	.62	.65	E.006	<.008	.011	.4	<.1	.4	1.9	.12	.21
May 24...	.31	.05	.53	.57	E.005	E.007	.020	.6	<.1	.6	2.1	--	--
Aug 09...	.42	.06	.57	.64	.013	.016	.030	.6	<.1	.6	2.1	.18	.20

01455240 MERRILL CREEK NEAR STEWARTSVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 5

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

Date	Barium, water, unfltrd recover- able, µg/L (01007)	Beryll- ium, water, unfltrd recover- able, µg/L (01012)	Boron, water, fltrd, µg/L (01020)	Boron, water, unfltrd recover- able, µg/L (01022)	Cadmium water, unfltrd µg/L (01027)	Chrom- ium, water, unfltrd recover- able, µg/L (01034)	Copper, water, unfltrd recover- able, µg/L (01042)	Iron, water, unfltrd recover- able, µg/L (01045)	Lead, water, unfltrd recover- able, µg/L (01051)	Mangan- ese, water, unfltrd recover- able, µg/L (01055)	Mercury water, unfltrd recover- able, µg/L (71900)	Nickel, water, unfltrd recover- able, µg/L (01067)	Selen- ium, water, unfltrd µg/L (01147)
Dec 04...	--	--	8.5	--	--	--	--	--	--	--	--	--	--
Mar 14...	18.1	<.06	7.2	E7	<.02	<.60	E.7	111	.19	56.4	<.010	.24	.12
May 24...	--	--	8.7	--	--	--	--	--	--	--	--	--	--
Aug 09...	16.0	<.06	8.5	10	E.01	<.60	1.7	179	.85	29.1	<.010	.33	.11

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006
TO SEPTEMBER 2007

Part 5 of 5

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

Date	Silver, water, unfltrd recover- able, µg/L (01077)	Zinc, water, unfltrd recover- able, µg/L (01092)
Dec 04...	--	--
Mar 14...	<.02	E2
May 24...	--	--
Aug 09...	E.01	3.9

01455240 MERRILL CREEK NEAR STEWARTSVILLE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 1 of 4

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

Date	Time	pH bed sedimnt std units (70310)	Ammonia	Phos- phorus, bed sedimnt total, mg/kg (00668)	Total carbon, bed sedimnt total, g/kg (00693)	Inor- ganic carbon, bed sedimnt total, g/kg (00686)	Arsenic bed sedimnt recover- able, ug/g (64847)	Cadmium bed sedimnt recover- able, ug/g (01028)	Chrom- ium, bed sedimnt recover- able, ug/g (01029)	Cobalt bed sedimnt recover- able, ug/g (01038)	Copper, bed sedimnt recover- able, ug/g (01043)	Iron, bed sedimnt total, ug/g (01170)	Lead, bed sedimnt recover- able, ug/g (01052)
			+ org-N, bed sed total, mg/kg as N (00626)			ium, bed sedimnt recover- able, ug/g (01029)							
Aug 09...	1030	6.90	220	1,200	4.9	<.2	2.8	.100	12	4.8	10	25,000	18

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 4

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

Date	Mangan- ese, bed sedimnt recover- able, ug/g (01053)	Mercury bed sedimnt recover- able, ug/g (71921)	Nickel, bed sedimnt recover- able, ug/g (01068)	Sele- nium, bed sedimnt recover- able, ug/g (64848)	Zinc, bed sedimnt recover- able, ug/g (01093)	1,2-Di- methyl- naphth- alene, bed sed <2 mm, ug/kg (49403)	1,6-Di- methyl- naphth- alene, bed sed <2 mm, ug/kg (49404)	1Methyl -9H- fluor- ene, bed sed <2 mm, ug/kg (49398)	1- Methyl- phenan- threne, bed sed <2 mm, ug/kg (49410)	1- Methyl- pyrene, bed sed <2 mm, ug/kg (49388)	236Tri- methyl- naphth- alene, bed sed <2 mm, ug/kg (49405)	2,6-Di- methyl- naphth- alene, bed sed <2 mm, ug/kg (49406)	2-Ethyl naphth- alene bed sed <2 mm wsv nat ug/kg (49948)
	Aug 09...	220	.010	5.8	.2	50	<52	E18	E9	61	E52	E22	E20

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 4

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

Date	2- Methyl- anthra- cene, bed sed <2 mm, ug/kg (49435)	4H-Cyc- lopenta- [def]- phenan- threne, bs <2mm ug/kg (49411)	9H- Fluor- ene, bed sed <2 mm, wsv nat ug/kg (49399)	Ace- naphth- ene, bed sed <2 mm, wsv nat ug/kg (49429)	Ace- naphth- ylene, bed sed <2 mm, wsv nat ug/kg (49428)	Anthra- cene, bed sed <2 mm, wsv nat field, ug/kg (49434)	Benzo- [a]- anthra- cene, bed sed <2 mm, ug/kg (49436)	Benzo- [a]- pyrene, bed sed <2 mm, wsv nat ug/kg (49389)	Benzo- [b]- fluor- anthene bed sed <2 mm ug/kg (49458)	Benzo- [ghi]- peryl- ene, bed sed <2 mm, ug/kg (49408)	Benzo- [k]- fluor- anthene bed sed <2 mm ug/kg (49397)	Chry- sene, bed sed <2 mm, field, ug/kg (49450)	Dibenzo -[a,h]- anthra- cene, bed sed <2 mm, ug/kg (49461)
	Aug 09...	E39	56	E17	E19	63	<64	220	210	290	E84	E120	250

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 4

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

Date	Fluor- anthene bed sed <2 mm wsv nat field, ug/kg (49466)	Indeno- [1,2,- 3-cd]- pyrene, bed sed <2 mm ug/kg (49390)	Iso- phorone bed sed wsv nat field, ug/kg (49400)	Naphth- alene, bed sed <2 mm wsv nat ug/kg (49402)	PCBs, bed sedimnt ug/kg (39519)	p- Cresol, bed sed wsv nat field, ug/kg (49451)	Phenan- threne, bed sed wsv nat field, ug/kg (49409)	Phenan- thri- dine, bed sed wsv nat ug/kg (49393)	Pyrene, bed sed wsv nat field, ug/kg (49387)	Bed sedi- ment, dry svd sve dia percent <.063mm (80164)	Bed sedi- ment, fall dia dst wat percent <.004mm (80157)
Aug 09...	450	<97	<52	<52	<5.00	E17	220	<52	400	1	.0