

Water-Data Report 2007

01462800 JACOBS CREEK AT SOMERSET, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 40°16'42", long 74°51'13" referenced to North American Datum of 1983, Ewing Township, Mercer County, NJ, Hydrologic Unit 02040105, on River Road (State Route 29), 300 ft north of Jacobs Creek Road, 400 ft upstream from confluence with Delaware River, and 0.3 miles northwest from Somerset.

DRAINAGE AREA.--13.3 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water Years 1987-88, 2000, 2006 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). Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 11.

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, and suspended residue 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	UV absorb- ance, 254 nm, wat flt units	UV absorb- ance, 280 nm, wat flt units	Baro- metric pres- sure, mm Hg	Dis- solved oxygen, mg/L (00025)	Dis- solved oxygen, percent of sat- uration (00300)	pH, water, unfltrd field, std units	Specif- ic conduc- tance, wat unf μS/cm (00400)	Temper- ature, air, deg C (00095)	Temper- ature, water, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)
Nov 06...	1100	.8	.064	.048	772	13.7	106	8.4	258	9.0	5.2	75	17.3	
Feb 21...	0900	1.1	.043	.031	758	16.1	111	--	562	10.4	.0	140	32.2	
May 16...	1030	.9	.066	.050	752	10.0	108	8.3	296	23.3	18.3	85	20.1	
Aug 08...	0900	.5	.066	.050	754	6.7	82	8.1	434	26.6	25.5	120	28.1	

01462800 JACOBS CREEK AT SOMERSET, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 5

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

Date	Magnes-	Potas-	ANC,			Chlor-	Fluor-	Silica,	Sulfate	Residue	Residue	Residue	Ammonia
	ium, water, fltrd,	sium, water, fltrd,	wat unf fixed	wat unf fixed pt	ide, lab,					water, fltrd,	on evap.	total non- filterable,	+ org-N, water, fltrd, mg/L as N
	mg/L (00925)	mg/L (00935)	Sodium, water, fltrd,	mg/L (00930)	CaCO ₃ (90410)	mg/L (00940)	mg/L (00950)	mg/L (00955)	mg/L (00945)	mg/L (70301)	mg/L (70300)	mg/L (00530)	mg/L as N (00623)
Nov 06...	7.67	1.94	15.4	56	25.5	E.07	11.8	17.3	136	149	1	.20	.027
Feb 21...	14.1	2.10	51.3	59	120	E.07	9.7	22.2	292	306	<1	.27	E.009
May 16...	8.47	2.02	20.2	62	37.3	.12	2.6	18.8	148	172	1	.34	.013
Aug 08...	11.4	3.24	34.7	82	69.3	E.07	7.6	18.4	223	245	6	.15	.030

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)	Partic- ulate nitro- gen, water, fltrd, mg/L (49570)	Total nitro- gen, water, unfltrd mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sediment mg/L (00694)	Inor- ganic carbon, suspnd sediment total, mg/L (00688)	Organic carbon, suspnd sediment total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Arsenic water, fltrd, µg/L (01000)	Arsenic water, unfltrd µg/L (01002)
Nov 06...	1.15	.02	1.3	1.4	.033	.040	.043	<.1	<.1	<.1	2.1	--	--
Feb 21...	1.16	.06	1.4	1.5	E.008	.009	.011	.3	<.1	.3	1.9	.31	.58
May 16...	.27	.06	.61	.67	E.009	.016	.020	.9	<.1	.9	2.6	--	--
Aug 08...	.27	.02	.42	.44	.049	.057	.074	.2	<.1	.2	2.1	.74	.76

01462800 JACOBS CREEK AT SOMERSET, 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, unfltrd recover -able, µg/L (01020)	Boron, water, unfltrd recover -able, µg/L (01022)	Cadmium water, unfltrd recover -able, 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 recover -able, µg/L (01147)
Nov 06...	--	--	35	--	--	--	--	--	--	--	--	--	--
Feb 21...	80.8	<.06	31	31	<.02	<.60	1.4	29	.06	7.1	<.010	.95	.08
May 16...	--	--	39	--	--	--	--	--	--	--	--	--	--
Aug 08...	70.7	<.06	60	66	E.01	<.60	1.5	25	E.04	4.1	E.010	.27	.13

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)
Nov 06...	--	--
Feb 21...	<.02	<2
May 16...	--	--
Aug 08...	<.02	<2.0