



Water-Data Report 2009

01411955 GRAVELLY RUN AT LAUREL LAKE, NJ

MAURICE RIVER BASIN

LOCATION.--Lat 39°20'14", long 75°03'03" referenced to North American Datum of 1983, Commercial Township, Cumberland County, NJ, Hydrologic Unit 02040206, at culvert on Battle Lane, 0.3 mi upstream from mouth and Buckshutem Creek, 1.1 mi west of community of Laurel Lake, and 2.5 mi southeast of Millville Municipal Airport.

DRAINAGE AREA.--3.19 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
Nov 24, 2008	0.21
Mar 4, 2009	1.23
May 19, 2009	1.10
Aug 11, 2009	0.86

01411955 GRAVELLY RUN AT LAUREL LAKE, 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 17.

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, 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 (50624)	UV absorb-ance, 280 nm, wat flt units (61726)	Instan-taneous dis-charge, ft³/s (00061)
Nov 24...	1220	Surface water	Regular	763	17.0	.092	.072	.21
Mar 04...	1000	Surface water	Regular	773	-1.5	.086	.067	1.2
May 19...	1215	Surface water	Regular	772	18.0	.132	.104	1.1
Aug 11...	1106	QC sample - Artificial	Field Blank	--	--	--	--	--
11...	1145	Surface water	Regular	757	29.0	.210	.167	.86

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

Part 2 of 6

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

Date	Dissolved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, unfltrd water, field, std units (00400)	Specif-ic conduc-tance, µS/cm @ 25 degC (00095)	Turbdty white light, det ang 90+/-30 degC @ water, corrcrd (00010)	Dis-solved solids, dried @ 180degC wat flt (63676)	Sus-pended solids, Hard-ness, water, mg/L as CaCO3 (70300)	Magnes-iun, water, mg/L (00530)	Magnes-iun, water, mg/L (00915)	Potas-sium, water, mg/L (00925)	Potas-sium, water, mg/L (00935)	Sodium, water, mg/L (00930)
Nov 24...	11.8	91	4.8	33	4.5	6.0	21	4	15	.64	.707	.47
Mar 04...	11.2	77	5.1	31	.4	.9	26	4	1	.60	.658	.51
May 19...	9.4	86	4.5	29	11.1	1.4	22	4	3	.58	.564	.43
Aug 11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	6.5	71	4.7	35	19.8	3.3	33	4	5	.52	.590	.42

01411955 GRAVELLY RUN AT LAUREL LAKE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 6

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

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO ₃ (90410)	Total carbon, suspnd total, mg/L (00694)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Inor- ganic carbon, suspnd total, mg/L (00688)	Silica, water, fltrd, mg/L as SiO ₂ (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Ortho- phosphate, water, fltrd, mg/L as P (00671)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Phos- phorus, water, fltrd, mg/L as P (00666)
Nov 24...	<1.7	2.4	5.11	<.08	<.04	7.7	3.19	E.09	E.005	.13	E.005	.15	<.008
Mar 04...	<1.7	.2	5.44	<.08	E.1	6.6	2.87	.13	E.003	.15	E.004	E.01	<.008
May 19...	<1.7	.9	4.93	<.08	<.04	5.4	2.28	.10	.010	.10	E.004	.05	<.008
Aug 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<1.7	.3	5.55	<.08	<.04	7.9	1.85	.14	.025	.10	E.004	.03	E.004

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 6

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

Date	Phos- phorus, water, unfiltrd mg/L as P (00665)	Total nitro- gen, water, fltrd, 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 recover -able, μg/L (01034)	Copper, water, unfiltrd recover -able, μg/L (01040)	Copper, water, unfiltrd recover -able, μg/L (01042)	Iron, water, unfiltrd recover -able, μg/L (01045)	Lead, water, unfiltrd recover -able, μg/L (01049)	Mangan- ese, water, unfiltrd recover -able, μg/L (01051)	
Nov 24...	.011	E.22	E.37	--	--	--	--	--	--	--	--	--	--
Mar 04...	<.008	.28	E.29	17.8	.05	<.06	<.40	--	<4.0	40	--	.42	5.0
May 19...	<.008	.20	.26	--	--	--	--	--	--	--	--	--	--
Aug 11...	--	--	--	--	--	--	<1.0	--	--	E.05	--	--	--
11...	E.007	.24	.27	20.7	.07	E.05	<.40	--	<4.0	174	--	1.09	4.3

01411955 GRAVELLY RUN AT LAUREL LAKE, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 6

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

Date	Mercury water, filtrd, μg/L (71890)	Mercury water, unfltrd recover -able, μg/L (71900)	Nickel, water, filtrd, μg/L (01065)	Nickel, water, unfltrd recover -able, μg/L (01067)	Silver, water, unfltrd recover -able, μg/L (01077)	Zinc, water, filtrd, μg/L (01090)	Zinc, water, unfltrd recover -able, μg/L (01092)	Arsenic water, filtrd, μg/L (01000)	Arsenic water, unfltrd recover -able, μg/L (01002)	Boron, water, unfltrd recover -able, μg/L (01022)	Selen- ium, water, unfltrd recover -able, μg/L (01147)	Organic carbon, susnd sedimnt total, mg/L (00689)	Organic carbon, water, filtrd, mg/L (00681)	
Nov 24...	--	--	--	--	--	--	--	--	--	--	--	--	2.42	2.3
Mar 04...	--	<.010	--	.45	<.06	--	2.5	.06	<.20	E8	E.06	.17	2.0	
May 19...	--	--	--	--	--	--	--	--	--	--	--	.86	2.7	
Aug 11...	E.007	--	E.09	--	--	E1.4	--	<.06	--	--	--	--	--	
11...	--	E.006	--	.67	<.06	--	E3.5	.14	E.17	E13	E.06	.27	4.4	