



Water-Data Report 2009

01465950 NORTH BRANCH RANCOCAS CREEK AT HANOVER FURNACE, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°58'46", long 74°31'29" referenced to North American Datum of 1983, Pemberton Township, Burlington County, NJ, Hydrologic Unit 02040202, at bridge on Military Road at outlet of Hanover Lake in Hanover Furnace, 1.0 mi upstream of Mirror Lake, and 2.6 mi east from Browns Mills.

DRAINAGE AREA.--13.5 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 2004-09.

GAGE.--Reference point only.

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

Date	Discharge, in ft³/s
Aug 18, 2009	25.0

01465950 NORTH BRANCH RANOCAS CREEK AT HANOVER FURNACE, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2000, 2004, 2009.

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 19.

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 2008 TO SEPTEMBER 2009

Part 1 of 5

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

Date	Time	Baro- metric pres- sure, 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)	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, water, deg C (00010)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Dis- solved solids dried @ 180degC wat flt mg/L (70300)	Hard- ness, water, mg/L as CaCO3 (00900)
Dec 03...	1030	770	1.8	.069	.051	11.1	86	4.6	46	4.7	1.5	20	5
Feb 17...	1000	768	1.7	.099	.076	11.5	88	4.2	44	4.0	1.7	17	4
May 12...	1030	764	15.3	.223	.172	7.4	80	4.2	41	18.6	2.8	32	3
Aug 06...	1000	760	20.7	.210	.163	4.2	52	4.3	36	25.9	3.1	21	3

WATER-QUALITY DATA

WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 5

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Date	Sus- pended solids, water, unfltrd mg/L (00530)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Total carbon, suspnd sedimnt total, mg/L (00694)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
Dec 03...	7	1.05	.499	.47	2.40	<1.7	.7	4.21	<.08	<.04	4.1	5.49	.19
Feb 17...	11	.80	.397	.33	2.00	<1.7	.7	3.29	<.08	<.04	3.8	4.82	.11
May 12...	1	.65	.338	.34	1.94	<1.7	2.3	3.25	<.08	<.04	2.4	3.70	.56
Aug 06...	11	.55	.304	.37	2.04	<1.7	2.0	3.79	<.08	M	3.1	2.20	.20

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 5

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Date	Ammonia water, flt'd, mg/L as N (00608)	Nitrate + nitrite water, flt'd, mg/L as N (00631)	Ortho- phos- phate, water, flt'd, mg/L as P (00671)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Phos- phorus, water, flt'd, mg/L as P (00666)	Phos- phorus, water, unflt'd mg/L as P (00665)	Total nitro- gen, water, flt'd, mg/L (00602)	Total nitro- gen, water, unflt'd mg/L (00600)	Alum- inum, water, flt'd, µg/L (01106)	Barium, water, unflt'd recover- able, µg/L (01007)	Beryll- ium, water, unflt'd recover- able, µg/L (01012)	Cadmium water, unflt'd µg/L (01027)	Chrom- ium, water, unflt'd recover- able, µg/L (01034)
Dec 03...	.016	E.02	E.003	.07	<.008	E.007	E.21	E.27	--	--	--	--	--
Feb 17...	.011	<.04	<.010	.07	<.008	E.007	--	--	--	19.1	.04	.09	<.40
May 12...	<.010	<.04	<.010	.21	.009	.013	--	--	--	--	--	--	--
Aug 06...	E.009	<.04	E.007	.12	<.008	.027	--	--	75.0	13.5	E.02	<.06	.52

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 5

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Date	Copper, water, unflt'd recover- able, µg/L (01042)	Iron, water, flt'd, µg/L (01046)	Iron, water, unflt'd recover- able, µg/L (01045)	Lead, water, unflt'd recover- able, µg/L (01051)	Mangan- ese, water, unflt'd recover- able, µg/L (01055)	Mercury water, unflt'd recover- able, µg/L (71900)	Nickel, water, unflt'd recover- able, µg/L (01067)	Silver, water, unflt'd recover- able, µg/L (01077)	Zinc, water, unflt'd recover- able, µg/L (01092)	Arsenic water, flt'd, µg/L (01000)	Arsenic water, unflt'd µg/L (01002)	Boron, water, unflt'd recover- able, µg/L (01022)	Selen- ium, water, unflt'd µg/L (01147)
	Dec 03...	--	--	--	--	--	--	--	--	--	--	--	--
Feb 17...	7.5	--	604	10.7	28.3	<.010	.69	<.06	16.6	.18	.25	E8	E.09
May 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 06...	8.4	298	3,180	8.59	21.5	<.010	.46	<.06	7.8	.65	.87	<14	.13

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

Part 5 of 5

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

Date	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
Dec 03...	.68	2.1
Feb 17...	.69	2.4
May 12...	2.31	4.7
Aug 06...	2.00	4.2

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

Part 1 of 4

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Date	Time	Moisture, bed sed <2 mm, fld dry percent (49282)	pH bed std units (70310)	Total carbon, bed sedimnt total, g/kg (00693)	Inorganic carbon, bed sedimnt total, g/kg (00686)	Phosphorus, bed sedimnt total, mg/kg as P (00668)	Cadmium, bed sedimnt recover -able, µg/g (01028)	Chromium, bed sedimnt recover -able, µg/g (01029)	Cobalt, bed sedimnt recover -able, µg/g (01038)	Copper, bed sedimnt recover -able, µg/g (01043)	Iron, bed sedimnt total digest, µg/g (01170)	Lead, bed sedimnt recover -able, µg/g (01052)	Manganese, bed sedimnt recover -able, µg/g (01053)
Aug 06...	1000	20	6.39	.8	<.2	M	.030	5.0	<.1	<2	950	16	6.0

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

Part 2 of 4

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Date	Mercury, bed sedimnt recover -able, µg/g (71921)	Nickel, bed sedimnt recover -able, µg/g (01068)	Zinc, bed sedimnt recover -able, µg/g (01093)	Arsenic, bed sedimnt recover -able, µg/g (64847)	Selenium, bed sedimnt recover -able, µg/g (64848)	p-Cresol, bed sed wsv nat field, mg/kg (49451)	PCBs, bed sedimnt µg/kg (39519)	1,2-Dimethylnaphthalene, bed sed <2 mm, µg/kg (49403)	1,6-Dimethylnaphthalene, bed sed <2 mm, µg/kg (49404)	1Methyl-9H-fluorene, bed sed <2 mm, µg/kg (49398)	1-Methylphenanthrene, bed sed <2 mm, µg/kg (49410)	1-Methylpyrene, bed sed <2 mm, wsv nat µg/kg (49388)	236Tri-methylnaphthalene, bed sed <2 mm, µg/kg (49405)
Aug 06...	<.007	.2	<3.1	.5	.1	E2	<5.00	<50	<50	<50	E2	<50	<50

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Part 3 of 4

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Date	2,6-Di-methyl-naphthalene, bed sed <2 mm, µg/kg (49406)	2-Ethyl-naphthalene, bed sed <2 mm, wsv nat µg/kg (49948)	2-Methyl-anthracene, bed sed <2 mm, µg/kg (49435)	4H-Cyclopenta-[def]-phenanthrene, bs <2mm µg/kg (49411)	9H-Fluorene, bed sed <2 mm, wsv nat µg/kg (49399)	Ace-naphthene, bed sed <2 mm, wsv nat µg/kg (49429)	Ace-naphthylene, bed sed <2 mm, wsv nat µg/kg (49428)	Anthracene, bed sed <2 mm, wsv nat µg/kg (49434)	Benzo-[a]-anthracene, bed sed <2 mm, µg/kg (49436)	Benzo-[a]-pyrene, bed sed <2 mm, wsv nat µg/kg (49389)	Benzo-[b]-fluoranthene, bed sed <2 mm, µg/kg (49458)	Benzo-[ghi]-perylene, bed sed <2 mm, µg/kg (49408)	Benzo-[k]-fluoranthene, bed sed <2 mm, µg/kg (49397)
Aug 06...	<50	<50	<50	<50	<50	<50	M	<50	E6	E5	E10	<50	E4

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 4

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Date	Chrysene, bed sed <2 mm, wsv nat field, µg/kg (49450)	Dibenzo-[a,h]-anthracene, bed sed <2 mm, µg/kg (49461)	Fluoranthene, bed sed <2 mm, wsv nat field, µg/kg (49466)	Indeno-[1,2,3-cd]-pyrene, bed sed <2 mm, µg/kg (49390)	Iso-phorone, bed sed <2 mm, wsv nat field, µg/kg (49400)	Naphthalene, bed sed <2 mm, wsv nat field, µg/kg (49402)	Phenanthrene, bed sed <2 mm, wsv nat field, µg/kg (49409)	Phenanthrene, thri-dine, bed sed <2 mm, wsv nat field, µg/kg (49393)	Pyrene, bed sed <2 mm, wsv nat field, µg/kg (49387)	Bed sediment dry svs, percent mm (80164)
Aug 06...	E4	<50	E21	E3	<50	<50	E4	<50	E17	1.0