



Water-Data Report 2010

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 2004-10.

GAGE.--Reference point only.

**DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Date	Discharge, in ft³/s
Oct 2, 2009	19.8
Jun 24, 2010	11.5
Aug 10, 2010	9.18

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2000, 2004, 2009-10.

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 2009 TO SEPTEMBER 2010

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[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per centimeter (50624)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per centimeter (61726)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)
12-02-2009	1000	Surface water	Regular	764	7.3	.168	.132	9.8	82
02-23-2010	1045	Surface water	Regular	752	4.1	.165	.130	10.2	77
05-12-2010	1000	Surface water	Regular	764	11.5	.175	.141	6.6	67
09-02-2010	0944	<i>QC sample - Artificial Field Blank</i>		--	--	--	--	--	--
09-02-2010	1000	Surface water	Regular	760	26.8	.241	.198	5.8	72

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Date	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, μS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, milligrams per liter (70301)	Hardness, water, mg/L as CaCO ₃ (00900)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)
12-02-2009	5.1	29	7.4	2.4	16	< 16	3.28	6	.71
02-23-2010	4.6	40	3.5	1.1	25	< 16	3.13	3	.69
05-12-2010	4.7	29	15.2	5.0	26	< 14	3.00	14	.67
09-02-2010	--	--	--	--	--	--	--	--	--
09-02-2010	5.2	--	25.1	5.2	23	< 15	3.94	9	.91

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Date	Magne- sium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, mg/L as CaCO ₃ (90410)	Carbon (inorganic plus organic), suspended sediment, total, mg/L (00694)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Inorganic carbon, suspended sediment, total, mg/L (00688)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)
12-02-2009	.368	.41	2.23	< 1.7	1.55	4.15	< .08	< .06	3.7	3.41
02-23-2010	.340	.35	1.92	< 1.7	.39	3.69	< .08	< .06	3.4	4.55
05-12-2010	.326	.40	2.04	< 1.7	1.11	3.72	< .08	< .06	2.6	3.56
09-02-2010	--	--	--	--	--	--	--	--	--	--
09-02-2010	.402	.51	2.19	< 1.7	.70	3.82	< .08	< .06	3.2	2.88

WATER-QUALITY DATA
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Date	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Orthophos- phate, water, filtered, mg/L as P (00671)	Particulate nitrogen, suspended in water, mg/L (49570)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, filtered, mg/L (00602)	Total nitrogen, water, unfiltered, mg/L (00600)
12-02-2009	.14	.054	< .04	< .010	.09	< .008	.011	< .18	< .28
02-23-2010	E .09	< .010	E .04	E .004	.05	< .008	E .007	E .12	E .17
05-12-2010	.25	< .010	< .04	--	.10	< .008	E .028	< .29	< .39
09-02-2010	--	--	--	--	--	--	--	--	--
09-02-2010	.17	.029	< .04	--	.09	< .008	.025	< .21	< .30

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Date	Barium, water, unfiltered, recover- able, μg/L (01007)	Beryllium, water, unfiltered, recover- able, μg/L (01012)	Cadmium, water, unfiltered, μg/L (01027)	Chromium, water, unfiltered, recover- able, μg/L (01034)	Copper, water, filtered, μg/L (01040)	Copper, water, unfiltered, recover- able, μg/L (01042)	Iron, water, filtered, μg/L (01046)	Iron, water, unfiltered, recover- able, μg/L (01045)	Lead, water, filtered, μg/L (01049)	Lead, water, unfiltered, recover- able, μg/L (01051)
12-02-2009	--	--	--	--	--	--	--	--	--	--
02-23-2010	18.0	E .03	.08	< .42	--	7.6	--	561	--	9.94
05-12-2010	--	--	--	--	--	--	--	--	--	--
09-02-2010	--	--	--	--	< 1.0	--	--	--	< .03	--
09-02-2010	18.5	< .04	< .04	E .38	--	5.0	459	4,030	--	10.3

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Date	Manga- nese, water, unfiltered, recover- able, μg/L (01055)	Mercury, water, filtered, μg/L (71890)	Mercury, water, unfiltered, recover- able, μg/L (71900)	Nickel, water, filtered, μg/L (01065)	Nickel, water, unfiltered, recover- able, μg/L (01067)	Silver, water, unfiltered, recover- able, μg/L (01077)	Zinc, water, filtered, μg/L (01090)	Zinc, water, unfiltered, recover- able, μg/L (01092)	Arsenic, water, filtered, μg/L (01000)	Arsenic, water, unfiltered, μg/L (01002)
12-02-2009	--	--	--	--	--	--	--	--	--	--
02-23-2010	27.1	--	< .010	--	.70	< .02	--	15.1	.16	.21
05-12-2010	--	--	--	--	--	--	--	--	--	--
09-02-2010	--	< .010	--	< .12	--	--	< 2.8	--	< .04	--
09-02-2010	27.8	--	< .010	--	.46	< .02	--	5.5	.40	.76

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Date	Boron, water, unfiltered, recoverable, micrograms per liter (01022)	Selenium, water, unfiltered, μg/L (01147)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
12-02-2009	--	--	1.55	3.6
02-23-2010	E 8	E .05	.39	3.6
05-12-2010	--	--	1.10	2.8
09-02-2010	--	--	--	--
09-02-2010	E 7	.13	.70	3.0

WATER-QUALITY DATA
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[μg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	1- Naphthol, water, filtered (0.7 micron glass fiber filter), recover- able, μg/L (49295)	2,6- Diethyl- aniline, water, filtered (0.7 micron glass fiber filter), recover- able, μg/L (82660)	2-Chloro- 2',6'- diethyl- acetanil- ide, water, filtered, recover- able, μg/L (61618)	2-Chloro-4- isopropyl- amino-6- amino-s- triazine, water, filtered, recover- able, μg/L (04040)	2-Ethyl-6- methyl- aniline, water, filtered, recover- able, μg/L (61620)	3,4- Dichloro- aniline, water, filtered, recover- able, μg/L (61625)	3,5-Di- chloro- aniline, water, filtered, recover- able, μg/L (61627)	4-Chloro-2- methyl- phenol, water, filtered, recover- able, μg/L (61633)	Acetochlor , water, filtered, recover- able, μg/L (49260)
05-12-2010	1000	< .04	< .006	< .010	< .014	< .010	< .004	< .003	< .003	< .010

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WATER-QUALITY DATA
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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Alachlor, water, filtered, recover- able, µg/L (46342)	alpha- Endo- sulfan, water, filtered, recover- able, µg/L (34362)	Atrazine, water, filtered, recover- able, µg/L (39632)	Azinphos- methyl oxygen analog, water, filtered, recover- able, µg/L (61635)	Azinphos- methyl, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82686)	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82673)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82680)	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82674)	Chlorpyrifos oxygen analog, water, filtered, recoverable, µg/L (61636)
	05-12-2010	< .008	< .006	< .007	< .04	< .120	< .014	< .060	< .060

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Chlor- pyrifos, water, filtered, recover- able, µg/L (38933)	cis- Permeth- rin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82687)	cis- Propicon- azole, water, filtered, recover- able, µg/L (79846)	Cyanazine, water, filtered, recover- able, µg/L (04041)	Cyfluthrin, water, filtered, recover- able, µg/L (61585)	Cyper- methrin, water, filtered, recover- able, µg/L (61586)	DCPA, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82682)	Desulfinyl- fipronil amide, water, filtered, recover- able, µg/L (62169)	Desulfinyl- fipronil, water, filtered, recover- able, µg/L (62170)	Diazinon, water, filtered, recover- able, µg/L (39572)
	05-12-2010	< .010	< .014	< .006	< .022	< .016	< .020	< .008	< .029	< .012

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Dichlorvos , water, filtered, recover- able, µg/L (38775)	Dicro- tophos, water, filtered, recover- able, µg/L (38454)	Dieldrin, water, filtered, recover- able, µg/L (39381)	Dimetho- ate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82662)	Disulfoton sulfone, water, filtered, recover- able, µg/L (61640)	Disulfoton, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82677)	Endosulfan sulfate, water, filtered, recover- able, µg/L (61590)	EPTC, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82668)	Ethion monoxon, water, filtered, recover- able, µg/L (61644)	Ethion, water, filtered, recover- able, µg/L (82346)
	05-12-2010	< .02	< .08	< .009	< .006	< .01	< .04	< .014	< .002	< .02

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Ethoprop, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82672)	Fenami- phos sulfone, water, filtered, recover- able, µg/L (61645)	Fenami- phos sulfoxide, water, filtered, recover- able, µg/L (61646)	Fenami- phos, water, filtered, recover- able, µg/L (61591)	Fipronil sulfide, water, filtered, recover- able, µg/L (62167)	Fipronil sulfone, water, filtered, recover- able, µg/L (62168)	Fipronil, water, filtered, recover- able, µg/L (62166)	Fonofos, water, filtered, recover- able, µg/L (04095)	Hexa- zinone, water, filtered, recover- able, µg/L (04025)	Iprodione, water, filtered, recover- able, µg/L (61593)
05-12-2010	< .016	< .053	< .08	< .03	< .013	< .024	< .018	< .004	< .008	< .014

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Isofen- phos, water, filtered, recover- able, µg/L (61594)	lambda- Cyhalo- thrin, water, filtered, recover- able, µg/L (61595)	Malaoxon, water, filtered, recover- able, µg/L (61652)	Malathion, water, filtered, recover- able, µg/L (39532)	Metalaxyl, water, filtered, recover- able, µg/L (61596)	Methida- thion, water, filtered, recover- able, µg/L (61598)	Methyl paraoxon, water, filtered, recover- able, µg/L (61664)	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82667)	Metola- chlor, water, filtered, recover- able, µg/L (39415)	Metribuzin , water, filtered, recover- able, µg/L (82630)
05-12-2010	< .006	< .010	< .080	< .016	< .007	< .006	< .01	< .008	E .010	< .012

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Molinate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82671)	Myclo- butanil, water, filtered, recover- able, µg/L (61599)	Oxy- fluorfen, water, filtered, recover- able, µg/L (61600)	Pendi- methalin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82683)	Phorate oxygen analog, water, filtered, recover- able, µg/L (61666)	Phorate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82664)	Phosmet oxygen analog, water, filtered, recover- able, µg/L (61668)	Phosmet, water, filtered, recover- able, µg/L (61601)	Prometon, water, filtered, recover- able, µg/L (04037)	Prometryn, water, filtered, recover- able, µg/L (04036)
05-12-2010	< .003	< .010	< .010	< .012	< .03	< .020	< .05	< .034	< .01	< .006

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	Propanil, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82679)	Propargite, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82685)	Propyz- amide, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82676)	Simazine, water, filtered, recover- able, µg/L (04035)	Tebu- thiuron, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82670)	Tefluthrin, water, filtered, recover- able, µg/L (61606)	Terbufos oxygen analog sulfone, water, filtered, recover- able, µg/L (61674)	Terbufos, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82675)	Terbuthyl- azine, water, filtered, recover- able, µg/L (04022)	Thioben- carb, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82681)
05-12-2010	< .010	< .02	< .004	< .006	< .03	< .010	< .04	< .02	< .01	< .016

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[µg/L, micrograms per liter; <, less than; E, estimated]

Date	trans- Propicon- azole, water, filtered, recover- able, µg/L (79847)	Tribuphos, water, filtered, recover- able, µg/L (61610)	Trifluralin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82661)
05-12-2010	< .02	< .018	< .018