



Water-Data Report 2010

01465865 BARTON RUN AT TUCKERTON ROAD, NEAR MEDFORD, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°52'43", long 74°51'37" referenced to North American Datum of 1983, Medford Township, Burlington County, NJ, Hydrologic Unit 02040202, at bridge on Tuckerton Road, 1.5 mi upstream from Southwest Branch Rancocas Creek, and 2.5 mi southwest of Medford.

DRAINAGE AREA.--12.0 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 2001-02, 2005-10. Occasional low-flow measurements, water years 2002-06.

GAGE.--Reference point only.

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

Date	Discharge, in ft³/s
Nov 9, 2009	12.4

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 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

Part 1 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; 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	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per centimeter		Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)
				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)				
11-09-2009	0930	772	10.1	.666	.522	12	8.8	75	6.5
02-17-2010	1030	754	3.8	.414	.322	--	11.4	83	6.2
05-05-2010	1030	760	19.0	.823	.646	--	5.5	61	6.7
08-11-2010	1000	758	24.6	.279	.219	--	3.0	39	6.8

WATER-QUALITY DATA

WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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Date	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)	Magnesium, water, filtered, mg/L (00925)
02-17-2010	425	1.1	5.5	221	E 206	39.9	6	11.8	2.54
05-05-2010	194	20.2	5.6	127	96	36.5	3	10.3	2.63
08-11-2010	252	27.0	3.9	150	E 125	41.6	< 1	10.2	3.94

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WATER-QUALITY DATA
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Date	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint (pH 4.5)	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)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)
			titration, laboratory, mg/L as CaCO ₃ (90410)							
11-09-2009	2.43	14.7	20	.61	23.6	< .08	< .06	6.5	12.1	.50
02-17-2010	2.02	52.0	17	.47	104	E .05	< .06	5.4	16.9	.38
05-05-2010	2.25	20.1	21	.90	33.4	.09	< .06	3.5	10.7	.61
08-11-2010	2.97	28.3	28	.43	50.3	E .06	< .06	1.2	10.9	.45

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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Date	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)	Barium, water, unfiltered, recover- able, μg/L (01007)
		11-09-2009	.079	.16	.014	.05	.019	.067	.67
02-17-2010	.093	.37	E .010	.04	.018	.041	.75	.79	39.0
05-05-2010	.116	.23	--	.11	.041	.105	.84	.95	--
08-11-2010	.079	.08	--	.04	.050	.070	.53	.57	39.0

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WATER-QUALITY DATA
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Date	Beryllium, water, unfiltered, recoverable, µg/L (01012)	Cadmium, water, unfiltered, µg/L (01027)	Chromium, water, unfiltered, recoverable, µg/L (01034)	Copper, water, unfiltered, recoverable, µg/L (01042)	Iron, water, unfiltered, recoverable, µg/L (01045)	Lead, water, unfiltered, recoverable, µg/L (01051)	Manganese, water, unfiltered, recoverable, µg/L (01055)	Mercury, water, unfiltered, recoverable, µg/L (71900)	Nickel, water, unfiltered, recoverable, µg/L (01067)	Silver, water, unfiltered, recoverable, µg/L (01077)
11-09-2009	--	--	--	--	--	--	--	--	--	--
02-17-2010	E .03	.11	.82	2.6	985	1.26	44.7	< .010	1.2	E .01
05-05-2010	--	--	--	--	--	--	--	--	--	--
08-11-2010	< .04	< .04	E .25	< 1.4	1,080	.50	37.3	< .010	.52	< .02

WATER-QUALITY DATA
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Date	Zinc, water, unfiltered, recoverable, µg/L (01092)	Arsenic, water, filtered, µg/L (01000)	Arsenic, water, unfiltered, µg/L (01002)	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)
11-09-2009	--	--	--	--	--	.61	13.5
02-17-2010	16.9	.53	.67	19	.13	.47	8.1
05-05-2010	--	--	--	--	--	.90	16.1
08-11-2010	E 1.3	.94	1.1	28	.12	.43	5.2

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), recoverable, µg/L (49295)	2,6-Diethyl-aniline, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82660)	2-Chloro-2',6'-diethyl-acetanilide, water, filtered, recoverable, µg/L (61618)	2-Chloro-4-isopropyl-amino-6-triazine, water, filtered, recoverable, µg/L (04040)	2-Ethyl-6-methyl-aniline, water, filtered, recoverable, µg/L (61620)	3,4-Dichloro-aniline, water, filtered, recoverable, µg/L (61625)	3,5-Dichloro-aniline, water, filtered, recoverable, µg/L (61627)	4-Chloro-2-methyl-phenol, water, filtered, recoverable, µg/L (61633)	Acetochlor, water, filtered, recoverable, µg/L (49260)
05-05-2010	1030	< .04	< .006	< .010	E .013	< .010	< .004	< .003	< .003	.020

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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)
	05-05-2010	.010	<.006	.030	<.04	<.120	<.014	E .005	<.060

WATER-QUALITY DATA
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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)
	05-05-2010	<.010	<.014	<.006	<.022	<.016	<.020	<.008	E .010	E .004

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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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)
	05-05-2010	<.02	<.08	<.009	<.006	<.01	<.04	<.014	<.002	<.02

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WATER-QUALITY DATA
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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)
05-05-2010	< .016	< .053	< .08	< .03	E .008	E .009	E .011	< .004	< .008	< .014

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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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)
05-05-2010	< .006	< .010	< .080	< .016	< .007	< .006	< .01	< .008	.054	< .012

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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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)
05-05-2010	< .003	< .010	< .010	< .012	< .03	< .020	< .05	< .034	E .01	< .006

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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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)	Terbutyl- azine, water, filtered, recover- able, µg/L (04022)	Thioben- carb, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82681)
05-05-2010	< .010	< .02	< .004	.043	< .03	< .010	< .04	< .02	< .01	< .016

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER
2010

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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)
05-05-2010	< .02	< .018	< .018