



Water-Data Report 2009

**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 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 2001-02, 2005-09. Occasional low-flow measurements, water years 2002-06.

GAGE.--Reference point only.

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

<b>Date</b>	<b>Discharge, in ft<sup>3</sup>/s</b>
Nov 24, 2008	6.90
Feb 24, 2009	9.76
May 18, 2009	12.5
Aug 13, 2009	14.8

## 01465865 BARTON RUN AT TUCKERTON ROAD, NEAR MEDFORD, NJ—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2008 to August 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: &lt;, less than; E, estimated.]

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)	Instan- taneous dis- charge, ft <sup>3</sup> /s (00061)	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)
Nov 24...	1000	770	.4	.226	.177	6.9	10.8	81	6.5	--	3.2	4.6	122
Feb 24...	1600	770	3.7	.234	.177	9.8	12.0	90	7.0	287	3.3	4.2	166
May 18...	0800	768	10.1	.914	.716	12	5.0	52	6.0	166	17.2	4.9	125
Aug 13...	1000	764	23.0	.977	.767	15	4.0	48	6.3	131	25.0	6.9	97

## WATER-QUALITY DATA

## WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 5

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

Date	Dis- solved solids, sum of consti- tuents, mg/L (70301)	Hard- ness, water, mg/L as CaCO3 (00900)	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)
Nov 24...	E97	39	3	10.3	3.18	2.69	16.0	17	.9	27.1	<.08	<.04	5.0
Feb 24...	E145	42	3	11.5	3.14	2.37	33.4	17	.6	54.8	E.05	<.04	4.5
May 18...	E82	33	2	9.29	2.49	2.05	15.0	18	.8	24.0	E.06	<.04	4.9
Aug 13...	59	24	6	6.35	1.88	1.67	10.1	12	.6	17.7	<.08	<.04	5.4

## 01465865 BARTON RUN AT TUCKERTON ROAD, NEAR MEDFORD, NJ—Continued

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

Part 3 of 5

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

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia	Ammonia	Nitrate	Ortho-	Partic-	Phos-	Phos-	Total	Total	Barium,	Beryll-	Cadmium water, unfltrd mg/L (01027)
		+ org-N, water, fltrd, mg/L as N (00623)	water, fltrd, mg/L as N (00608)	+ nitrite water, fltrd, mg/L as N (00631)	phos- phate, water, fltrd, mg/L as P (00671)	ulate nitro- gen, susp, water, mg/L (49570)	phorus, water, fltrd, mg/L as P (00666)	phorus, water, unfltrd mg/L as P (00665)	nitro- gen, water, fltrd, mg/L (00602)	nitro- gen, water, unfltrd mg/L (00600)	water, unfltrd recover- able, µg/L (01007)	ium, water, unfltrd recover- able, µg/L (01012)	
Nov 24...	22.0	.39	.069	.16	E.006	.08	.017	.045	.55	.64	--	--	--
Feb 24...	23.7	.30	.037	.34	E.005	.07	.013	.028	.64	.71	46.1	.06	.10
May 18...	12.7	.77	.125	.16	.020	.06	.065	.091	.93	.99	--	--	--
Aug 13...	8.30	.86	.129	.09	.024	.13	.060	.112	.95	1.1	35.2	.06	E.05

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

Part 4 of 5

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

Date	Chrom-	Copper,	Iron,	Lead,	Mangan-	Mercury	Nickel,	Silver,	Zinc,	Arsenic water, fltrd, µg/L (01000)	Arsenic	Boron,	Selen-
	ium, water, unfltrd recover- able, µg/L (01034)	water, unfltrd recover- able, µg/L (01042)	water, unfltrd recover- able, µg/L (01045)	water, unfltrd recover- able, µg/L (01051)	ese, water, unfltrd recover- able, µg/L (01055)	water, unfltrd recover- able, µg/L (71900)	water, unfltrd recover- able, µg/L (01067)	water, unfltrd recover- able, µg/L (01077)	water, unfltrd recover- able, µg/L (01092)		water, unfltrd recover- able, µg/L (01002)	water, unfltrd recover- able, µg/L (01022)	ium, water, unfltrd recover- able, µg/L (01147)
Nov 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb 24...	.45	<4.0	758	.79	34.3	<.010	1.3	<.06	16.5	.34	.36	19	E.12
May 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 13...	1.0	<4.0	2,950	2.26	48.2	.012	1.5	<.06	8.1	1.7	2.0	22	.21

01465865 BARTON RUN AT TUCKERTON ROAD, NEAR MEDFORD, NJ—Continued

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

Part 5 of 5

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

Date	Organic carbon, suspd, sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
Nov 24...	.89	5.3
Feb 24...	.58	5.9
May 18...	.78	15.6
Aug 13...	.60	17.8

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

Part 1 of 4

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

Date	Time	Mois- ture, bed sed <2 mm, wsv nat fld dry percent (49282)	pH bed sedimnt std units (70310)	Total carbon, bed sedimnt total, g/kg (00693)	Inor- ganic carbon, bed sedimnt total, g/kg (00686)	Phos- phorus, bed sedimnt total, mg/kg as P (00668)	Cadmium bed sedimnt recover -able, µg/g (01028)	Chrom- ium, 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)	Mangan- ese, bed sedimnt recover -able, µg/g (01053)
Aug 13...	1000	20	6.23	5.8	<.2	E260	.080	51	.9	2	14,000	6.1	6.8

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

Part 2 of 4

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

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)	Sele- nium, bed sedimnt recover -able, µg/g (64848)	p- Cresol, bed sed wsv nat field, µg/kg (49451)	PCBs, bed sedimnt µg/kg (39519)	1,2-Di- methyl- naphth- alene, bed sed <2 mm, µg/kg (49403)	1,6-Di- methyl- naphth- alene, bed sed <2 mm, µg/kg (49404)	1Methyl -9H- fluor- ene, bed sed <2 mm, µg/kg (49398)	1- Methyl- phenan- threne, bed sed <2 mm, µg/kg (49410)	1- Methyl- pyrene, bed sed <2 mm, wsv nat µg/kg (49388)	236Tri- methyl- naphth- alene, bed sed <2 mm, µg/kg (49405)
Aug 13...	<.007	3.4	24	1.5	<.1	<50	<5.00	<50	<50	<50	<50	<50	<50

## 01465865 BARTON RUN AT TUCKERTON ROAD, NEAR MEDFORD, NJ—Continued

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

Part 3 of 4

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

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 field, 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 13...	<50	<50	<50	<50	<50	<50	<50	<50	E40	E39	58	E21	E23

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

Part 4 of 4

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

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 13...	E38	<50	73	E26	<50	<50	<50	<50	54	.0