



Water-Data Report 2007

01400823 DEVILS BROOK AT NEW ROAD, NEAR MONMOUTH JUNCTION, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°21'43", long 74°32'42" referenced to North American Datum of 1983, South Brunswick Townshi, Middlesex County, NJ, Hydrologic Unit 02030105, at New road, 820 ft north from Friendship Road, 1.2 mi south from Monmouth Junction, and 2.2 mi upstream from mouth.

DRAINAGE AREA.--3.81 mi².

WATER-QUALITY RECORDS

REMARKS.--Total nitrogen (00600) equals the sum of filtered ammonia-plus-organic nitrogen (00623), filtered nitrite-plus-nitrate nitrogen (00631), and total particulate nitrogen (49570). Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 10.

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. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. EPA, Region II, Division of Environmental Science and Assessment.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 5

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

Date	Time	Sample type	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Baro- metric pres- sure, mm Hg (00025)	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, air, deg C (00020)	Temper- ature, water, deg C (00010)
Nov												
14...	0930	Environmental	7.7	.790	.624	755	5.3	51	6.2	73	13.0	13.3
14...	0930	Split Replicate	--	--	--	--	--	--	--	--	--	--
14...	0931	Concurrent Replicate	--	--	--	--	--	--	--	--	--	--
Mar												
08...	0930	Environmental	3.4	.211	.158	765	10.5	72	6.2	173	-4.5	.2
08...	0930	Split Replicate	--	--	--	--	--	--	--	--	--	--
08...	0931	Concurrent Replicate	--	--	--	--	--	--	--	--	--	--
Jun												
05...	0930	Environmental	8.2	.462	.362	746	4.8	52	6.6	115	24.0	18.4
05...	0930	Split Replicate	--	--	--	--	--	--	--	--	--	--
05...	0931	Concurrent Replicate	--	--	--	--	--	--	--	--	--	--
Aug												
21...	1115	Environmental	9.9	.399	.310	763	5.6	59	6.7	112	17.0	18.2

01400823 DEVILS BROOK AT NEW ROAD, NEAR MONMOUTH JUNCTION, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 5

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

Date	Hard- ness, water, mg/L as CaCO3 (00900)	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	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue	Residue	Residue
						fixed end pt, lab, mg/L as CaCO3 (90410)					water, sum of consti- tuents mg/L (70301)	on evap. at 180degC wat flt mg/L (70300)	total non- filter- able, mg/L (00530)
Nov													
14...	16	3.94	1.44	2.16	6.66	12	9.38	E.06	6.3	4.27	41	67	10
14...	16	3.90	1.50	2.50	6.50	10	8.9	.05	--	4.1	34	81	<10
14...	16	3.90	1.50	2.50	6.50	10	9.2	.06	--	4.2	34	77	<10
Mar													
08...	21	5.11	2.02	1.89	22.1	9	38.0	E.07	7.6	8.42	94	114	3
08...	18	4.50	1.70	1.60	19.0	6	39.0	.07	--	8.1	81	110	<10
08...	19	4.70	1.80	1.70	20.0	6	39.0	.07	--	8.1	83	100	<10
Jun													
05...	20	4.99	1.79	1.60	12.1	17	15.4	E.08	5.1	7.09	60	80	8
05...	19	4.80	1.70	1.60	12.0	15	16.0	<.05	--	6.5	53	80	<10
05...	19	4.80	1.70	1.60	12.0	15	16.0	<.05	--	6.5	53	75	<10
Aug													
21...	22	6.12	1.72	2.25	10.8	21	15.2	E.05	4.7	5.06	59	80	6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 5

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

Date	Ammonia		Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate		Partic- ulate nitro- gen, susp, water, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Ortho- phos- phate, water, unfltrd mg/L as P (70507)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)
	+ org-N, water, fltrd, mg/L as N (00623)	+ org-N, water, unfltrd mg/L as N (00625)			+ nitrite water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)							
Nov													
14...	.63	--	.021	--	E.05	--	.10	--	--	.022	--	.052	.080
14...	E.76	E.65	<.050	<.050	<.050	<.050	--	--	--	.014	.01	.085	.082
14...	E.48	E.67	<.050	<.050	<.050	<.050	--	--	--	.013	.01	.052	.083
Mar													
08...	.35	--	.086	--	.78	--	.06	1.1	1.2	E.007	--	E.006	.028
08...	E.71	E.82	.074	.078	.750	<.050	--	--	--	.018	--	<.050	<.050
08...	E1.0	E.93	.075	.081	.730	<.050	--	--	--	<.010	--	<.050	<.050
Jun													
05...	.54	--	.114	--	.25	--	.04	.78	.83	E.008	--	.022	.069
05...	E.82	E1.6	.130	.140	.240	<.050	--	--	--	<.010	.02	<.050	.054
05...	E.66	E.70	.130	.140	.240	<.050	--	--	--	<.010	<.01	<.050	.067
Aug													
21...	.73	--	.171	--	.17	--	.15	.91	1.1	.012	--	.042	.083

01400823 DEVILS BROOK AT NEW ROAD, NEAR MONMOUTH JUNCTION, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 5

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

Date	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Arsenic water, fltrd, µg/L (01000)	Arsenic water, unfltrd, µg/L (01002)	Barium, water, unfltrd recover-able, µg/L (01007)	Beryll-ium, water, unfltrd recover-able, µg/L (01012)	Boron, water, fltrd, µg/L (01020)	Boron, water, unfltrd recover-able, µg/L (01022)	Cadmium water, unfltrd, µg/L (01027)	Chrom-ium, water, unfltrd recover-able, µg/L (01034)	Copper, water, unfltrd recover-able, µg/L (01042)
Nov													
14...	1.0	<.1	1.0	15.0	--	--	--	--	17	--	--	--	--
14...	--	--	--	18.0	--	--	--	--	20	--	--	--	--
14...	--	--	--	19.0	--	--	--	--	20	--	--	--	--
Mar													
08...	.5	<.1	.5	5.4	.40	.46	55.2	.12	9.8	9	.08	E.48	1.3
08...	--	--	--	5.7	--	--	--	--	<10	--	--	--	--
08...	--	--	--	6.1	--	--	--	--	<10	--	--	--	--
Jun													
05...	.5	<.1	.5	10.6	--	--	--	--	16	--	--	--	--
05...	--	--	--	13.0	--	--	--	--	10	--	--	--	--
05...	--	--	--	12.0	--	--	--	--	10	--	--	--	--
Aug													
21...	1.1	<.1	1.1	7.6	2.2	2.3	41.9	E.05	19	18	.04	E.55	1.8

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 5 of 5

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

Date	Mangan-								
	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, unfltrd recover-able, µg/L (01051)	ese, water, unfltrd recover-able, µg/L (01055)	Mercury water, unfltrd recover-able, µg/L (71900)	Nickel, water, unfltrd recover-able, µg/L (01067)	Selen-ium, water, unfltrd recover-able, µg/L (01147)	Silver, water, unfltrd recover-able, µg/L (01077)	Zinc, water, unfltrd recover-able, µg/L (01092)	
Nov									
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
Mar									
08...	484	.59	55.8	<.010	1.23	.10	<.02	21	
08...	--	--	--	--	--	--	--	--	
08...	--	--	--	--	--	--	--	--	
Jun									
05...	--	--	--	--	--	--	--	--	
05...	--	--	--	--	--	--	--	--	
05...	--	--	--	--	--	--	--	--	
Aug									
21...	1,740	1.10	41.8	E.008	.85	.16	<.02	4.0	

01400823 DEVILS BROOK AT NEW ROAD, NEAR MONMOUTH JUNCTION, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 1 of 7

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

Date	1-Naphthol, water, fltrd 0.7u GF µg/L (49295)	2,6-Diethyl-aniline water, fltrd 0.7u GF µg/L (82660)	2Chloro-2',6'-diethyl acet-anilide wat flt µg/L (61618)	CIAT, water, fltrd, µg/L (04040)	2-Ethyl-6-methyl-aniline water, fltrd, µg/L (61620)	3,4-Di-chloro-aniline water, fltrd, µg/L (61625)	3,5-Di-chloro-aniline water, fltrd, µg/L (61627)	4-Chloro-2methyl phenol, water, fltrd, µg/L (61633)	Aceto-chlor, water, fltrd, µg/L (49260)	Ala-chlor, water, fltrd, µg/L (46342)	alpha-Endo-sulfan, water, fltrd, µg/L (34362)	Atra-zine, water, fltrd, µg/L (39632)	Azin-phos-methyl oxon, water, fltrd, µg/L (61635)
Nov 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jun 05...	<.09	<.006	<.006	E.025	<.010	<.004	<.012	E.003	E.007	<.005	<.011	.031	<.04
Aug 21...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 7

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

Date	Azin-phos-methyl, water, fltrd 0.7u GF µg/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF µg/L (82673)	Car-baryl, water, fltrd 0.7u GF µg/L (82680)	Carbo-furan, water, fltrd 0.7u GF µg/L (82674)	Chlor-pyrifos oxon, water, fltrd, µg/L (61636)	Chlor-pyrifos water, fltrd, µg/L (38933)	cis-Per-methrin water fltrd 0.7u GF µg/L (82687)	cis-Propi-cona-zole, water, fltrd, µg/L (79846)	Cyana-zine, water, fltrd, µg/L (04041)	Cyflu-thrin, water, fltrd, µg/L (61585)	lambda-Cyhalo-thrin, water, fltrd, µg/L (61595)	Cyper-methrin water, fltrd, µg/L (61586)	DCPA, water, fltrd 0.7u GF µg/L (82682)
Nov 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jun 05...	<.080	<.010	E.012	<.020	<.06	<.005	<.010	<.013	<.018	<.053	<.014	<.046	<.003
Aug 21...	--	--	--	--	--	--	--	--	--	--	--	--	--

01400823 DEVILS BROOK AT NEW ROAD, NEAR MONMOUTH JUNCTION, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 7

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

Date	Desulf- inyl- fipro- nil, water, fltrd, µg/L (62170)	Diazi- non, water, fltrd, µg/L (39572)	Dicro- tophos, water, fltrd, µg/L (38454)	Diel- drin, water, fltrd, µg/L (39381)	Dimeth- oate, water, fltrd, 0.7u GF µg/L (82662)	Disulf- oton sulfone water, fltrd, µg/L (61640)	Disul- foton, water, fltrd, 0.7u GF µg/L (82677)	Endo- sulfan sulfate water, fltrd, µg/L (61590)	EPTC, water, fltrd, 0.7u GF µg/L (82668)	Ethion monoxon water, fltrd, µg/L (61644)	Ethion, water, fltrd, µg/L (82346)	Etho- prop, water, fltrd, 0.7u GF µg/L (82672)	Fenami- phos sulfone water, fltrd, µg/L (61645)
Nov 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jun 05...	E.004	<.005	<.08	<.009	<.006	<.01	<.02	<.022	<.002	<.02	<.016	<.012	<.053
Aug 21...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 7

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

Date	Fenami- phos sulf- oxide, water, fltrd, µg/L (61646)	Fenami- phos, water, fltrd, µg/L (61591)	Desulf- inyl- fipro- nil amide, wat flt µg/L (62169)	Fipro- nil sulfide water, fltrd, µg/L (62167)	Fipro- nil sulfone water, fltrd, µg/L (62168)	Fipro- nil, water, fltrd, µg/L (62166)	Fonofos water, fltrd, µg/L (04095)	Hexa- zinone, water, fltrd, µg/L (04025)	Ipro- dione, water, fltrd, µg/L (61593)	Isofen- phos, water, fltrd, µg/L (61594)	Mala- oxon, water, fltrd, µg/L (61652)	Mala- thion, water, fltrd, µg/L (39532)	Meta- laxyl, water, fltrd, µg/L (61596)
Nov 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jun 05...	<.04	<.03	<.029	E.002	<.024	<.016	<.006	<.026	<.026	<.011	<.039	<.016	<.007
Aug 21...	--	--	--	--	--	--	--	--	--	--	--	--	--

01400823 DEVILS BROOK AT NEW ROAD, NEAR MONMOUTH JUNCTION, NJ—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 5 of 7

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

Date	Methi- althion water, fltrd, µg/L (61598)	Methyl para- oxon, water, fltrd, µg/L (61664)	Methyl para- thion, water, fltrd 0.7u GF µg/L (82667)	Metola- chlor, water, fltrd, µg/L (39415)	Metri- buzin, water, fltrd, µg/L (82630)	Moli- nate, water, fltrd 0.7u GF µg/L (82671)	Myclo- butanil water, fltrd, µg/L (61599)	Oxy- fluor- fen, water, fltrd, µg/L (61600)	Pendi- meth- alin, water, fltrd 0.7u GF µg/L (82683)	Phorate oxon, water, fltrd, µg/L (61666)	Phorate water, fltrd 0.7u GF µg/L (82664)	Prome- ton, water, fltrd, µg/L (04037)	Prome- tryn, water, fltrd, µg/L (04036)
Nov 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jun 05...	<.009	<.02	<.008	.032	<.012	<.035	E.011	<.017	<.020	<.03	<.020	E.01	<.006
Aug 21...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 6 of 7

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

Date	Propy- zamide, water, fltrd 0.7u GF µg/L (82676)	Pro- panil, water, fltrd 0.7u GF µg/L (82679)	Propar- gite, water, fltrd 0.7u GF µg/L (82685)	Sima- zine, water, fltrd, µg/L (04035)	Tebu- thiuron water, fltrd 0.7u GF µg/L (82670)	Teflu- thrin, water, fltrd, µg/L (61606)	Ter- bufos sulfone water, fltrd, µg/L (61674)	Terbu- fos, water, fltrd 0.7u GF µg/L (82675)	Ter- buthyl- azine, water, fltrd, µg/L (04022)	Thio- bencarb water, fltrd 0.7u GF µg/L (82681)	trans- Propi- cona- zole, water, fltrd, µg/L (79847)	Tribu- phos, water, fltrd, µg/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF µg/L (82661)
Nov 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jun 05...	<.004	<.011	<.02	<.010	<.02	<.003	<.04	<.01	<.01	<.010	<.03	<.035	<.009
Aug 21...	--	--	--	--	--	--	--	--	--	--	--	--	--

01400823 DEVILS BROOK AT NEW ROAD, NEAR MONMOUTH JUNCTION, NJ—Continued

**WATER-QUALITY
DATA
WATER YEAR
OCTOBER 2006 TO
SEPTEMBER 2007**

Part 7 of 7

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

Date	Di- chlor- vos, water, fltred, µg/L (38775)
Nov	
14...	--
Mar	
08...	--
Jun	
05...	<.01
Aug	
21...	--