



Water-Data Report 2009

**01464512 DOCTORS CREEK AT RED VALLEY, NJ**

DELAWARE RIVER BASIN

LOCATION.--Lat 40°09'41", long 74°28'07" referenced to North American Datum of 1983, Upper Freehold Township, Monmouth County, NJ, Hydrologic Unit 02040201, at bridge on County Route 526 in Red Valley, 2.3 mi north of Prosptown, and 2.6 mi upstream from Imlaystown Lake.

DRAINAGE AREA.--3.83 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Miscellaneous measurements, water years 2002-04. Occasional low-flow measurements, water year 2009.

GAGE.--Reference point only.

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

Date	Discharge, in ft <sup>3</sup> /s
Aug 18, 2009	1.12

**01464512 DOCTORS CREEK AT RED VALLEY, 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 20.

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 6

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

Date	Time	Medium name	Sample type	Baro-metric pressure, 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)
Nov 25...	0900	Surface water	Regular	750	7.5	.155	.124	10.9
Feb 04...	0930	Surface water	Regular	759	-2.5	.032	.025	12.9
May 26...	0930	Surface water	Regular	765	16.5	.088	.067	5.6
Aug 05...	0930	QC sample - Artificial	Field Blank	--	--	--	--	--
	1000	Surface water	Regular	756	25.5	.357	.294	6.0

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

Part 2 of 6

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

Date	Dis-solved oxygen, percent of saturation (00301)	pH, water, field, std units (00400)	Spec-ific conduc-tance, wat unf std µS/cm @ 25 degC (00095)	Temper-ature, water, deg C (00010)	Turbdty white light, det ang 90+/-30 degC corrcrd (63676) NTRU	Dis-solved solids, 180degC wat flt (70300) mg/L	Dis-solved solids, sum of constituents, CaCO3 (70301) mg/L	Dis-solved solids, Hard-ness, mg/L as water, unfltrd (00900) mg/L	Sus-pended solids, water, unfltrd (00530) mg/L	Magnes-iun, water, fltrd, (00915) mg/L	Potas-sium, water, fltrd, (00925) mg/L	Sodium, water, fltrd, (00935) mg/L
Nov 25...	83	6.9	167	4.0	21	102	E85	36	7	7.65	3.99	4.03
Feb 04...	95	6.6	267	2.4	9.4	134	E130	36	10	7.53	4.19	2.19
May 26...	65	6.9	202	22.3	4.0	139	--	94	37	4	7.84	4.20
Aug 05...	--	--	--	--	--	--	--	--	--	--	--	--
	73	7.0	131	25.0	24	86	E67	25	6	5.30	2.78	2.79
												11.6

## 01464512 DOCTORS CREEK AT RED VALLEY, NJ—Continued

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

Part 3 of 6

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

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO <sub>3</sub> (90410)	Total carbon, suspnd total, mg/L (00694)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Inor- ganic carbon, suspnd total, mg/L (00688)	Silica, water, fltrd, mg/L as SiO <sub>2</sub> (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Ortho- phosphate, water, fltrd, mg/L as P (00671)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Phos- phorus, water, fltrd, mg/L as P (00666)
Nov 25...	19	.5	28.4	.13	<.04	8.3	6.74	.42	.102	.26	E.002	.07	.011
Feb 04...	10	.4	56.1	E.07	<.04	8.9	7.80	.34	.260	1.31	E.003	.06	<.008
May 26...	19	.5	41.0	.13	<.04	1.2	5.23	.39	.056	.34	<.010	.06	.009
Aug 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	16	.4	23.3	.10	E.02	5.8	3.84	.62	.088	.26	E.008	.03	.039

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

Part 4 of 6

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

Date	Phos- phorus, water, unfiltrd mg/L as P (00665)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfiltrd mg/L (00600)	Barium, water, unfiltrd recover -able, μg/L (01007)	Beryll- ium, water, unfiltrd recover -able, μg/L (01012)	Cadmium water, unfiltrd recover -able, μg/L (01027)	Chrom- ium, water, unfiltrd recover -able, μg/L (01034)	Copper, water, unfiltrd recover -able, μg/L (01040)	Copper, water, unfiltrd recover -able, μg/L (01042)	Iron, water, unfiltrd recover -able, μg/L (01045)	Lead, water, unfiltrd recover -able, μg/L (01049)	Lead, water, unfiltrd recover -able, μg/L (01051)	Mangan- ese, water, unfiltrd recover -able, μg/L (01055)
Nov 25...	.051	.68	.75	--	--	--	--	--	--	--	--	--	--
Feb 04...	.021	1.7	1.7	23.0	.02	.20	.58	--	<4.0	1,250	--	.33	123
May 26...	.022	.73	.79	--	--	--	--	--	--	--	--	--	--
Aug 05...	--	--	--	--	--	--	<1.0	--	--	<.06	--	--	--
05...	.074	.89	.91	12.4	.05	<.06	2.0	--	<4.0	2,370	--	.85	34.4

## 01464512 DOCTORS CREEK AT RED VALLEY, NJ—Continued

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

Part 5 of 6

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

Date	Mercury water, filtrd, μg/L (71890)	Mercury water, unfltrd recover -able, μg/L (71900)	Nickel, water, filtrd, μg/L (01065)	Nickel, water, unfltrd recover -able, μg/L (01067)	Silver, water, unfltrd recover -able, μg/L (01077)	Zinc, water, filtrd, μg/L (01090)	Zinc, water, unfltrd recover -able, μg/L (01092)	Arsenic water, filtrd, μg/L (01000)	Arsenic water, unfltrd recover -able, μg/L (01002)	Boron, water, unfltrd recover -able, μg/L (01022)	Selen- ium, water, unfltrd recover -able, μg/L (01147)	Organic carbon, susnd sedimnt total, mg/L (00689)	Organic carbon, water, filtrd, mg/L (00681)
Nov 25...	--	--	--	--	--	--	--	--	--	--	--	.53	3.8
Feb 04...	--	<.010	--	10.7	<.06	--	35.7	.22	.48	E11	<.12	.43	1.3
May 26...	--	--	--	--	--	--	--	--	--	--	--	.48	3.7
Aug 05...	<.010	--	<.12	--	--	<2.0	--	<.06	--	--	--	--	--
05...	--	<.010	--	3.9	<.06	--	6.1	1.0	1.3	16	E.12	.42	5.0