



Water-Data Report 2007

**375705081314001 Local number Ral-0223**

Undefined Aquifer  
 Kanawha Formation  
 Raleigh County, WV

LOCATION.--Lat 37°57'04.6", long 81°31'39.9" referenced to North American Datum of 1983, Raleigh County, WV, Hydrologic Unit 05050009.

**WATER-QUALITY RECORDS**

REMARKS.--During the period of April 25 to June 7, 2007, 30 wells were sampled as part of an ongoing study with the West Virginia Department of Environmental Protection-Division of Water and Waste Management (WV-DEP-DWWM) of ambient ground-water quality in West Virginia. Samples were collected from wells in the following hydrologic units: Coal (05050009), Elk (05050007), Lower Kanawha (05050008), North Branch Potomac (02070002), and Tygart Valley (05020001). Sample analyses included field determinations, major ions, nutrients, microbiological indicators, metals, volatile organic compounds, and radon.

Since 1999, 30 wells have been selected and sampled annually to characterize the ambient quality of West Virginia's ground-water resources. Data for samples collected from 1999-2005 were published in "Water Resources Data-West Virginia-Water Year XXXX, Water-Data Report WV-XX-01". The electronic versions of these reports from 2001-2005 can be found at: <http://pubs.usgs.gov/wdr/#wv>. Data from 1999-2000 can be requested via email at [dc\\_wv@usgs.gov](mailto:dc_wv@usgs.gov). Data from 2006 can be found at: <http://web10capp.er.usgs.gov/imf/sites/adr06/launch2.jsp>.

**WATER-QUALITY DATA**

**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 7

[Remark codes: <, less than; >, greater than; M, presence verified but not quantified.]

Date	Time	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Pump or flow period to sampling, minutes (72004)	Turbidity white light, 90+/-30 corrctd NTRU (63676)	Barometric pressure, mm Hg (00025)	Carbon dioxide, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	pH, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, deg C (00010)	Calcium water unfltrd recover -able, mg/L (00916)	Magnesium, water, unfltrd recover -able, mg/L (00927)
May 10...	1000	100	915	>30	2.0	741	.5	<1.0	8.8	483	14.7	31.3	7.70

**WATER-QUALITY DATA**

**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 7

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Date	Potassium, water, unfltrd recover -able, mg/L (00937)	Sodium, water, unfltrd recover -able, mg/L (00929)	ANC, wat unfltrd fixed end pt, lab, mg/L as CaCO3 (90410)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide, water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC wat unfltrd mg/L (00500)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia, water, fltrd, mg/L (71846)
May 10...	3.24	55.7	176	163	199	<1	.10	38.6	.10	18.0	266	267	.63

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

Part 3 of 7

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Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	Ortho- phos- phate, water, fltrd, mg/L (00660)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L (00665)	Organic carbon, water, unfltrd mg/L (00680)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)	Total coli- form, Defined Tech., MPN/ 100 mL (50569)	Alum- inum, water, recover -able, µg/L (01105)	Anti- mony, water, unfltrd µg/L (01097)
May 10...	.490	<.06	<.002	.54	.102	.033	.044	.9	<1	<1	<1	2	.3

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

Part 4 of 7

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Date	Arsenic water, unfltrd recover -able, µg/L (01002)	Barium, water, unfltrd recover µg/L (01007)	Beryll- ium, water, unfltrd recover µg/L (01012)	Cadmium water, unfltrd recover µg/L (01027)	Chrom- ium, water, unfltrd recover µg/L (01034)	Iron, water, unfltrd recover µg/L (01045)	Lead, water, unfltrd recover µg/L (01051)	Mangan- ese, water, unfltrd recover µg/L (01055)	Mercury water, unfltrd recover µg/L (71900)	Nickel, water, unfltrd recover µg/L (01067)	Selen- ium, water, unfltrd µg/L (01147)	Thall- ium, water, unfltrd µg/L (01059)	Zinc, water, unfltrd recover -able, µg/L (01092)
May 10...	<.20	1,200	<.06	<.02	<.60	292	2.10	28.5	<.010	.27	<.08	<.18	132

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

Part 5 of 7

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Date	1,1,1- Tri- chloro- ethane, water, unfltrd µg/L (34506)	CFC-113 water, unfltrd µg/L (77652)	1,1-Di- chloro- ethane, water, unfltrd µg/L (34496)	1,1-Di- chloro- ethene, water, unfltrd µg/L (34501)	1,2-Di- chloro- benzene water, unfltrd µg/L (34536)	1,2-Di- chloro- ethane, water, unfltrd µg/L (32103)	1,2-Di- chloro- propane water, unfltrd µg/L (34541)	1,3-Di- chloro- benzene water, unfltrd µg/L (34566)	1,4-Di- chloro- benzene water, unfltrd µg/L (34571)	Benzene water, unfltrd µg/L (34030)	Bromo- di- chloro- methane water, unfltrd µg/L (32101)	Chloro- benzene water, unfltrd µg/L (34301)	cis- 1,2-Di- chloro- ethene, water, unfltrd µg/L (77093)
May 10...	<.1	<.1	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1	<.1

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

Part 6 of 7

[Remark codes: &lt;, less than; &gt;, greater than; M, presence verified but not quantified.]

Date	Di-bromo-chloro-methane water, unfltrd µg/L (32105)	Di-chloro-di-fluoro-methane wat unf µg/L (34668)	Di-chloro-methane water, unfltrd µg/L (34423)	Di-ethyl ether, water, unfltrd µg/L (81576)	Diiso-propyl ether, water, unfltrd µg/L (81577)	Ethyl-benzene water, unfltrd µg/L (34371)	Methyl-tert-pentyl ether, water, unfltrd µg/L (50005)	meta-+ para-Xylene, water, unfltrd µg/L (85795)	o-Xylene, water, unfltrd µg/L (77135)	Styrene water, unfltrd µg/L (77128)	t-Butyl ether, water, unfltrd µg/L (50004)	Methyl t-butyl ether, water, unfltrd µg/L (78032)	Tetra-chloro-ethene, water, unfltrd µg/L (34475)
May 10...	<.2	<.2	<.2	<.2	<.2	<.1	<.2	<.2	<.1	<.1	<.1	<.2	<.1

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

Part 7 of 7

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Date	Tetra-chloro-methane water, unfltrd µg/L (32102)	Toluene water, unfltrd µg/L (34010)	trans-1,2-Di-chloro-ethene, water, unfltrd µg/L (34546)	Tri-bromo-methane water, unfltrd µg/L (32104)	Tri-chloro-ethene, water, unfltrd µg/L (39180)	Tri-chloro-fluoro-methane water, unfltrd µg/L (34488)	Tri-chloro-methane water, unfltrd µg/L (32106)	Vinyl chlor-ide, water, unfltrd µg/L (39175)	Rn-222, water, unfltrd pCi/L (82303)
May 10...	<.2	<.1	<.1	<.2	<.1	<.2	<.1	<.2	20