



Water-Data Report 2007

375033081375001 Local number Boo-0264

Undefined Aquifer
 Kanawha Formation
 Boone County, WV

LOCATION.--Lat 37°50'33.2", long 81°37'49.5" referenced to North American Datum of 1983, Boone 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. 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.]

Date	Time	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Pump or flow period prior to sampling, minutes (72004)	Turbidity white light, 90+/-30 corrctd NTRU (63676)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	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)
May 10...	1415	300	1,200	>10	1.0	729	4.8	2.2	26	8.0	588	20.4	1.09

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

Part 2 of 7

[Remark codes: <, less than; >, greater than.]

Date	Magnesium, water, unfltrd recover-able, mg/L (00927)	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)
May 10...	.221	.67	134	249	234	285	<1	.16	44.7	.54	.26	332	340

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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 (71846)	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 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)	Hydro- gen ion, water, fltrd, calcd, mg/L (00191)	Organic carbon, water, unfltrd mg/L (00680)	E coli, Defined Substr. Tech., MPN/ 100 mL (50468)	Fecal coli- form, M-FC col/ 100 mL (31625)	Total coli- form, Defined Tech., MPN/ 100 mL (50569)
May 10...	.12	.093	<.06	<.002	.15	.483	.157	.162	.00001	1.1	<1	<1	<1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 7

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Date	Alum- inum, water, unfltrd recover -able, µg/L (01105)	Anti- mony, water, unfltrd µg/L (01097)	Arsenic water, unfltrd µg/L (01002)	Barium, water, unfltrd recover -able, µg/L (01007)	Beryll- ium, water, unfltrd recover -able, µg/L (01012)	Cadmium water, unfltrd µg/L (01027)	Chrom- ium, water, unfltrd recover -able, µg/L (01034)	Iron, water, unfltrd recover -able, µg/L (01045)	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan- 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 µg/L (01147)
May 10...	2	<.2	<.20	68.7	<.06	<.02	<.60	99	.31	3.6	<.010	.28	<.08

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 5 of 7

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Date	Thall- ium, water, unfltrd µg/L (01059)	Zinc, water, unfltrd recover -able, µg/L (01092)	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)
May 10...	<.18	50.8	<.1	<.1	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	.8

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 6 of 7

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Date	Chloro- benzene water, unfltrd µg/L (34301)	cis- 1,2-Di- chloro- ethene, water, unfltrd µg/L (77093)	Di- bromo- chloro- methane water, unfltrd µg/L (32105)	Di- chloro- di- fluoro- methane wat unfltrd 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 ethyl ether, water, unfltrd µg/L (50004)
May 10...	<.1	<.1	1.5	<.2	<.2	<.2	<.2	<.1	<.2	<.2	<.1	<.1	<.1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 7 of 7

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Date	Methyl t-butyl ether, water, unfltrd µg/L (78032)	Tetra- chloro- ethene, water, unfltrd µg/L (34475)	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	<.2	<.1	<.1	1.6	<.1	<.2	.6	<.2	100