



Water-Data Report 2006

384834079330601 Local number Ran-0279

Greenbrier Limestone

Randolph County, WV

LOCATION.--Lat 38°48'34.4", long 79°33'05.9" referenced to North American Datum of 1983, Randolph County, WV, Hydrologic Unit 05020004.

WATER-QUALITY RECORDS

REMARKS.--During the period of April 19 to June 23, 2006, 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: Cheat River (05020004), Shenendoah River (02070007), South Branch Potomac River (02070001), the Upper Kanawha River (05050006), and the northern section of the Ohio River (05030101). 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 these samples are published in "Water Resources Data-West Virginia-Water Year XXXX, Water-Data Report WV-XX-01". The electronic versions of these reports can be found at the following url: <http://pubs.usgs.gov/wdr/#wv>.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 1 of 7

[Remark codes: <, less than; >, greater than; E, estimated; 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 prior to sampling, minutes (72004)	Turbidity white light, 90+/-30 corrected NTRU (63676)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfiltered mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, unfiltered field, standard units (00400)	Specific conductance, unfiltered 25 degC (00095)	Temperature, deg C (00010)	Calcium water unfiltered recoverable, mg/L (00916)
May 08...	1750	500	3,000	>60	3.7	684	1.2	2.7	28	8.5	444	12.2	15.2

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 2 of 7

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

Date	Magnesium, water, unfiltered recoverable, mg/L (00927)	Potassium, water, unfiltered recoverable, mg/L (00937)	Sodium, water, unfiltered recoverable, mg/L (00929)	ANC, water unfiltered fixed end pt, lab, mg/L as CaCO3 (90410)	Alkalinity, water filtered increment field, mg/L as CaCO3 (39086)	Bicarbonate, water filtered increment field, mg/L (00453)	Carbonate, water filtered increment field, mg/L (00452)	Bromide, water, filtered, mg/L (71870)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Sulfate, water, filtered, mg/L (00945)	Residue on evaporation, 105degC, water unfiltered, mg/L (00500)	Residue on evaporation, 180degC, water filtered, mg/L (70300)
May 08...	1.72	1.97	81.5	200	214	261	<1	.20	28.7	.38	.34	287	346

384834079330601 Local number Ran-0279—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 3 of 7

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

Date	Ammonia	Nitrite + Nitrate	Nitrite	Total Nitrogen	Ortho-phosphate	Ortho-phosphate	Phosphorus	Organic Carbon	E coli, Defined Substr.	Fecal coli-form, M-FC	Total coli-form, Defined Tech., MPN/	Aluminum, water, unfltrd recover-able, ug/L	Antimony, water, unfltrd ug/L
	water, fltrd, mg/L as N (00608)	water, fltrd, mg/L as N (00631)	water, fltrd, mg/L as N (00613)	wat unf by anlysis, mg/L (62855)	water, fltrd, mg/L (00660)	water, fltrd, mg/L as P (00671)	water, unfltrd mg/L (00665)	water, unfltrd mg/L (00680)	water, Tech., MPN/ 100 mL (50468)	0.7u MF col/ 100 mL (31625)	MPN/ 100 mL (50569)	(01105)	(01097)
May 08...	<.04	<.06	E.004	1.60	2.54	.828	.74	11.8	1	<1	26	27	E.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 4 of 7

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

Date	Arsenic	Barium	Beryllium	Cadmium	Chromium	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Thallium	Zinc
	water unfltrd recover-able, ug/L (01002)	water unfltrd recover-able, ug/L (01007)	water unfltrd recover-able, ug/L (01012)	water unfltrd recover-able, ug/L (01027)	water unfltrd recover-able, ug/L (01034)	water unfltrd recover-able, ug/L (01045)	water unfltrd recover-able, ug/L (01051)	water unfltrd recover-able, ug/L (01055)	water unfltrd recover-able, ug/L (71900)	water unfltrd recover-able, ug/L (01067)	water unfltrd recover-able, ug/L (01147)	water unfltrd recover-able, ug/L (01059)	water unfltrd recover-able, ug/L (01092)
May 08...	6.0	140	<.06	<.04	.27	835	1.97	1,060	<.010	1.04	.10	<.18	7

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 5 of 7

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

Date	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	CFC-113 water unfltrd ug/L (77652)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water unfltrd ug/L (34501)	1,2-Di-chloro-benzene, water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water unfltrd ug/L (32103)	1,2-Di-chloro-propane, water unfltrd ug/L (34541)	1,3-Di-chloro-benzene, water unfltrd ug/L (34566)	1,4-Di-chloro-benzene, water unfltrd ug/L (34571)	Benzene, water unfltrd ug/L (34030)	Bromo-di-chloro-methane, water unfltrd ug/L (32101)	Chloro-benzene, water unfltrd ug/L (34301)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)
	May 08...	<.1	<.1	<.1	<.1	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.1

384834079330601 Local number Ran-0279—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 6 of 7

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

Date	Di-bromo-chloro-methane	Di-chloro-di-fluoro-methane	Di-chloro-methane	Di-ethyl ether,	Diiso-propyl ether,	Ethyl-benzene	Methyl-tert-pentyl ether,	meta-+ para-Xylene,	o-Xylene,	Styrene	t-Butyl ether,	Methyl-t-butyl ether,	Tetra-chloro-ethene,
	water unfltrd	wat unf	unfltrd	water, unfltrd	water, unfltrd	water unfltrd	water, unfltrd	water, unfltrd	water, unfltrd	water unfltrd	water, unfltrd	water, unfltrd	water, unfltrd
	ug/L (32105)	ug/L (34668)	ug/L (34423)	ug/L (81576)	ug/L (81577)	ug/L (34371)	ug/L (50005)	ug/L (85795)	ug/L (77135)	ug/L (77128)	ug/L (50004)	ug/L (78032)	ug/L (34475)
May 08...	<.2	<.2	<.2	<.2	<.2	<.1	<.2	<.2	<.1	<.1	<.1	<.2	<.1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Part 7 of 7

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

Date	Tetra-chloro-methane	Toluene	trans-1,2-Di-chloro-ethene,	Tri-bromo-methane	Tri-chloro-ethene,	Tri-chloro-fluoro-methane	Tri-chloro-methane	Vinyl chloride,	Rn-222,
	water unfltrd	water unfltrd	water, unfltrd	water unfltrd	water, unfltrd	water unfltrd	water unfltrd	water, unfltrd	water, unfltrd
	ug/L (32102)	ug/L (34010)	ug/L (34546)	ug/L (32104)	ug/L (39180)	ug/L (34488)	ug/L (32106)	ug/L (39175)	pCi/L (82303)
May 08...	<.2	<.1	<.1	<.2	<.1	<.2	<.1	<.2	50