



Water-Data Report 2008

374627080533101 Local number Sum-0106

Undefined Aquifer
 Hinton Formation
 Summers County, WV

LOCATION.--Lat 37°46'27.4", long 80°53'31.2" referenced to North American Datum of 1983, Summers County, WV, Hydrologic Unit 05050004.

WATER-QUALITY RECORDS

REMARKS.--During the period of April 28 to June 19, 2008, 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: Greenbrier (05050003), Little Kanawha (05030203), Lower New (05050004), Upper New (05050002), and Monongahela (05020003). Sample analyses included field determinations, major ions, nutrients, microbiological indicators, metals, volatile organic compounds, and radon. This site also includes analysis of semi-volatile organic carbon compounds.

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". 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 and 2007 can be found at: <http://wdr.water.usgs.gov/>.

**WATER-QUALITY DATA
 WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 11

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

Date	Time	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	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 μS/cm 25 degC (00095)	Temperature, deg C (00010)	Calcium water unfltrd recover-able, mg/L (00916)
Jun 11...	1005	57	19.83	1,290	>35	3.2	736	97	<1.0	6.7	611	19.3	44.9

**WATER-QUALITY DATA
 WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 11

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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 inf tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt inf pt titr., field, mg/L (00453)	Carbonate, wat flt inf pt 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)
Jun 11...	18.2	.85	63.6	252	235	287	<1	.10	34.3	.16	34.5	366	386

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 11

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Date	Ammonia water, flt'd, mg/L (71846)	Ammonia water, flt'd, mg/L as N (00608)	Nitrate + nitrite water, flt'd, mg/L as N (00631)	Nitrite water, flt'd, mg/L as N (00613)	Organic nitro- gen, water, unflt'd mg/L (00605)	Total nitro- gen, wat un fltrd mg/L (62855)	Ortho- phos- phate, water, flt'd, mg/L (00660)	Ortho- phos- phate, water, flt'd, mg/L as P (00671)	Phos- phorus, water, unflt'd mg/L as P (00665)	Hydro- gen ion, water, unflt'd calcd, mg/L (00191)	Organic carbon, water, unflt'd 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)
Jun 11...	.05	.039	.49	.009	M	.53	.022	.007	E.004	.00020	1.7	<1	<1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 11

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Date	Total coli- form, Defined Tech., MPN/ 100 mL (50569)	Alum- inum, water, unflt'd recovery -able, µg/L (01105)	Anti- mony, water, unflt'd µg/L (01097)	Arsenic water, unflt'd µg/L (01002)	Barium, water, unflt'd -able, µg/L (01007)	Beryll- ium, water, unflt'd recovery -able, µg/L (01012)	Cadmium water, unflt'd µg/L (01027)	Chrom- ium, water, unflt'd recovery -able, µg/L (01034)	Iron, water, unflt'd recovery -able, µg/L (01045)	Lead, water, unflt'd recovery -able, µg/L (01051)	Mangan- ese, water, unflt'd recovery -able, µg/L (01055)	Mercury water, unflt'd recovery -able, µg/L (71900)	Nickel, water, unflt'd recovery -able, µg/L (01067)
Jun 11...	<1	<4	<.1	<.60	276	<.04	.03	<.40	453	.15	1,840	<.010	.68

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 5 of 11

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Date	Selen- ium, water, unflt'd µg/L (01147)	Thall- ium, water, unflt'd µg/L (01059)	Zinc, water, recovery -able, µg/L (01092)	1,2-Di- phenyl- hydraz- ine, water, unflt'd µg/L (82626)	2,4,6- Tri- chloro- phenol, water, unflt'd µg/L (34621)	2,4-Di- chloro- phenol, water, unflt'd µg/L (34601)	2,4-Di- methyl- phenol, water, unflt'd µg/L (34606)	2,4-Di- nitro- phenol, water, unflt'd µg/L (34616)	2,4-Di- nitro- toluene, water, unflt'd µg/L (34611)	2,6-Di- nitro- toluene, water, unflt'd µg/L (34626)	2- Chloro- naphth- alene, water, unflt'd µg/L (34581)	2- chloro- phenol, water, unflt'd µg/L (34586)	2- nitro- phenol, water, unflt'd µg/L (34591)
Jun 11...	.08	<.08	22.5	<.30	<.6	<.39	<.6	<.80	<.43	<.43	<.2	<.42	<.6

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 6 of 11

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

Date	3,3'-Di chloro- benzi- dine, water, unfltrd µg/L (34631)	4- Bromo- phenyl ether, wat unf µg/L (34636)	4- Chloro- 3- methyl- phenol, wat unf µg/L (34452)	4- Chloro- phenyl ether, wat unf µg/L (34641)	4- Nitro- phenol, water, unfltrd µg/L (34646)	9H- Fluor- ene, water, unfltrd µg/L (34381)	Ace- naphth- ene, water, unfltrd µg/L (34205)	Ace- naphth- ylene, water, unfltrd µg/L (34200)	Anthra- cene, water, unfltrd µg/L (34220)	Benzo- [a]- anthra- cene, water, unfltrd µg/L (34526)	Benzo- [a]- pyrene, water, unfltrd µg/L (34247)	Benzo- [b]- fluorene, water, unfltrd µg/L (34230)	Benzo- [ghi]- per- ylene, water, unfltrd µg/L (34521)
Jun 11...	<.4	<.36	<.55	<.34	<.51	<.33	<.28	<.30	<.39	<.26	<.33	<.40	<.4

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

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Date	Benzo- [k]- fluor- anthene water, unfltrd µg/L (34242)	Benzy- n-butyl phthal- ate, water, unfltrd µg/L (34292)	Bis(2- chloro- ethoxy) methane water, unfltrd µg/L (34278)	Bis(2- chloro- ethyl) ether, water, unfltrd µg/L (34273)	Bis(2- chloro- iso- propyl) ether, wat unf µg/L (34283)	Bis(2- ethyl- hexyl) phthal- ate, wat unf µg/L (39100)	Chrys- ene, water, unfltrd µg/L (34320)	Di- benzo- [a,h]- anthra- cene, wat unf µg/L (34556)	Di- ethyl phthal- ate, water, unfltrd µg/L (34336)	Di- methyl phthal- ate, water, unfltrd µg/L (34341)	Di-n- butyl phthal- ate, water, unfltrd µg/L (39110)	Di-n- octyl phthal- ate, water, unfltrd µg/L (34596)	Fluor- anthene water, unfltrd µg/L (34376)
Jun 11...	<.4	<.7310	<.35	<.30	<.38	<2	<.33	<.4	<.61	<.59	<.4240	<.4	<.30

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Date	Hexa- chloro- benzene water, unfltrd µg/L (39700)	Hexa- chloro- cyclo- penta- diene, wat unf µg/L (34386)	Indeno- [1,2,3- cd]- pyrene, water, unfltrd µg/L (34403)	Iso- phorone water, unfltrd µg/L (34408)	Nitro- benzene water, unfltrd µg/L (34447)	N- Nitroso -di- methyl- amine, wat unf µg/L (34438)	N- Nitroso -di-n- propyl- amine, wat unf µg/L (34428)	N- Nitroso -di- phenyl- amine, wat unf µg/L (34433)	Penta- chloro- phenol, water, unfltrd µg/L (39032)	Phenan- threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Pyrene, water, unfltrd µg/L (34469)	1,1,1- Tri- chloro- ethane, water, unfltrd µg/L (34506)
Jun 11...	<.30	<.4	<.4	<.4	<.21	<.33	<.4	<.4	<.4	<.32	<.4	<.35	<.1

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 9 of 11

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

Date	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)	1,2,4- Tri- chloro- benzene, water, unfltrd µg/L (34551)	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)	Bromo- di- chloro- methane, water, unfltrd µg/L (34030)	Tri- bromo- methane, water, unfltrd µg/L (32101)	Chloro- benzene, water, unfltrd µg/L (32104)	Chloro- benzene, water, unfltrd µg/L (34301)
Jun 11...	<.1	<.1	<.1	<.2	<.1	<.2	<.1	<.1	<.1	<.1	<.1	<.2	<.1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 10 of 11

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Date	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 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)	Hexa- chloro- buta- diene, water, unfltrd µg/L (39702)	Hexa- chloro- ethane, water, unfltrd µg/L (34396)	Methyl tert- pentyl ether, water, unfltrd µg/L (50005)	meta- + para- Xylene, water, unfltrd µg/L (85795)	Naphth- alene, water, unfltrd µg/L (34696)	o- Xylene, water, unfltrd µg/L (77135)
Jun 11...	<.1	<.2	<.2	<.2	<.2	.7	<.1	<.2	<.2	.8	<.2	<.32	<.1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 11 of 11

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Date	Styrene water, unfltrd µg/L (77128)	t-Butyl ethyl ether, water, unfltrd µg/L (50004)	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- 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)
Jun 11...	<.1	<.1	17.4	<.1	<.2	<.1	<.1	<.1	<.2	<.1	<.2	870