Water-Data Report 2010

371450076460401 Local number 56F 59

Northern Atlantic Coastal Plain aquifer system
Patuxent Formation

James City, VA

LOCATION.--Lat 37°14'50.16", long 76°46'03.69" referenced to North American Datum of 1983, James City, VA, Hydrologic Unit 02080206.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 1,193 ft. Upper casing diameter undefined; top of first opening undefined, bottom of last opening undefined.

DATUM.--Land-surface datum is 55 ft above National Geodetic Vertical Datum of 1929. Measuring point: Undefined.

REMARKS.--Well is located in Lower Potomac aquifer of Cretaceous age.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
Part 1 of 3
[CaCO3, calcium carbonate; SiO2, silicon dioxide; ft, feet; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; 217PTXN, Patuxent Formation; <, less than; E, estimated; d, diluted sample: method hi range exceeded]

Date	Sample start time	Medium name	Sample type	Geologic unit code	Depth to water level, ft below land surface (72019)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Flow rate, instantaneous, gallons per minute (00059)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)
05-14-2010	1015	Groundwater	Regular	217PTXN	184.00	< 1.0	1,500	7.5	4,760	23.9

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
Part 2 of 3
[CaCO3, calcium carbonate; SiO2, silicon dioxide; ft, feet; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; 217PTXN, Patuxent Formation; <, less than; E, estimated; d, diluted sample: method hi range exceeded]

Date	Turbidity, water, unfiltered, laboratory, Hach 2100AN, nephelometric turbidity units (99872)	Depth of well, feet below land surface datum (72008)	Depth to bottom of sample interval, feet below land surface datum (72016)	Depth to top of sample interval, feet below land surface datum (72015)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO3 (39086)
05-14-2010	1.0	1,193	1,173	808	2,640	22.1 d	5.29 d	12.0 d	961 d	328

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 3 of 3

[CaCO3, calcium carbonate; SiO2, silicon dioxide; ft, feet; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; 217PTXN, Patuxent Formation; <, less than; E, estimated; d, diluted sample: method hi range exceeded]

Date	Bicarbon ate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)	Bromide, water, filtered, mg/L (71870)	Carbonate, water, filtered, inflection-point incremental titration method, field, mg/L (00452)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO2 (00955)	Sulfate, water, filtered, mg/L (00945)	Iron, water, filtered, µg/L (01046)	Manga nese, water, filtered, µg/L (01056)
05-14-2010	E 397	5.10 d	E 1	1,360 d	1.16	22.9 d	96.7 d	113 d	66.8 d