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Water-Data Report 2010

371149076353401 Local number 58F127 SOW 195

Northern Atlantic Coastal Plain aquifer system
Upper Cretaceous Series

James City County, VA

LOCATION.--Lat 37°11'50.04", long 76°35'32.83" referenced to North American Datum of 1983, James City County, VA, Hydrologic Unit 02080206, 1.2 mi. northwest of the intersection of State Highways 60 and 238 and 0.84 mi. south of the State Highway 60 bridge over Skiffes Creek Reservoir.

GROUNDWATER RECORDS

WELL CHARACTERISTICS.--Depth 565 ft. Upper casing diameter 4.0 in; top of first opening 489 ft, bottom of last opening 560 ft. Drilled unused water well, screened 489 to 499 ft, and 520 to 560 ft.

DATUM.--Land-surface datum is 51 ft above National Geodetic Vertical Datum of 1929. Measuring point: TOP OF CASING, 2.30 ft above land-surface datum, Jan. 15, 2002, to present.

PERIOD OF RECORD.--January 2002 to current year.

GAGE.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

REMARKS.--Well is located in Upper Potomac aquifer of Cretaceous age. Records provided by Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 139.30 ft below land-surface datum, Apr. 9, 2002; lowest measured, 151.78 ft below land-surface datum, Feb. 26, 2009.

WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

[Measurement method: S, steel tape. Water-level status: --, static.]

Date	Water level	Measurement method	Water-level status	Date	Water level	Measurement method	Water-level status
Dec 1	149.31	S	--	Apr 20	147.53	S	--
Feb 24	148.16	S	--	Jul 27	148.41	S	--

Water year 2010 highest: 147.53, Apr 20, 2010; lowest: 149.31, Dec 1, 2009

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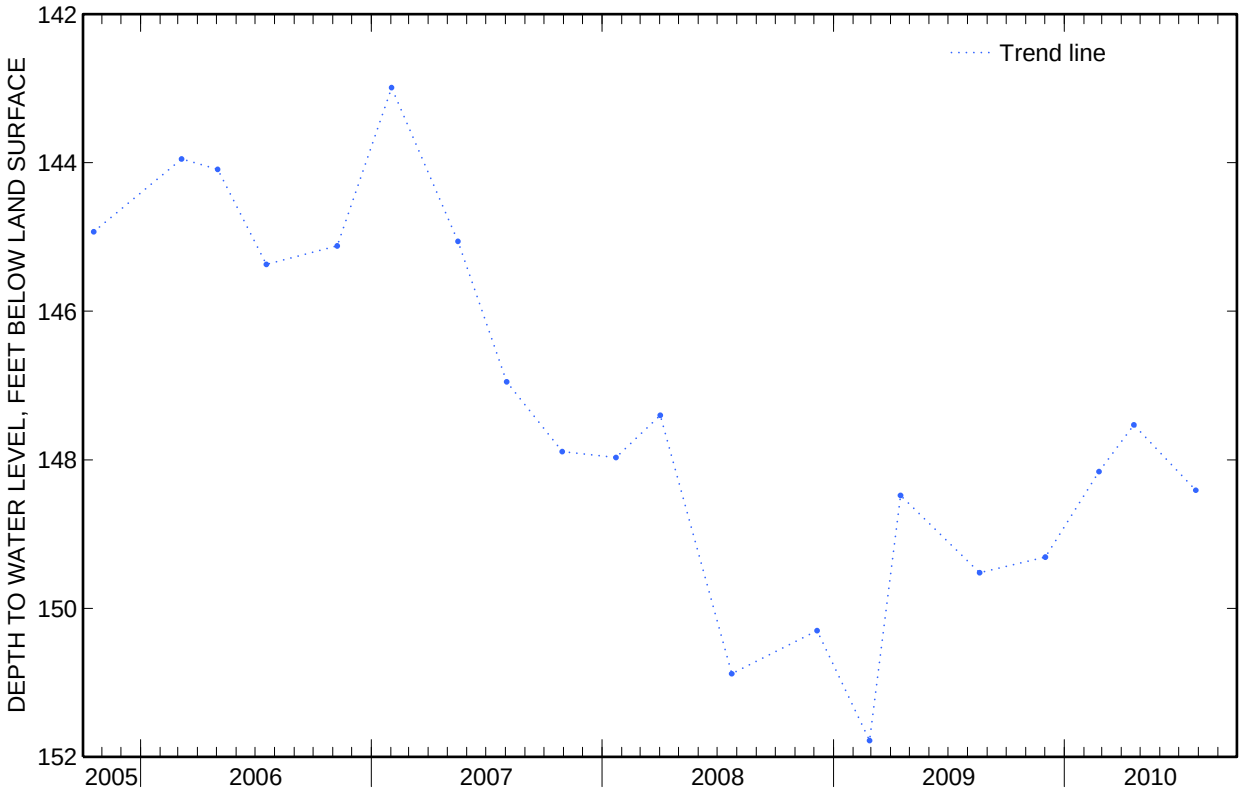

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WATER-QUALITY RECORDS

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 1 of 4

[%, percent; CaCO3, calcium carbonate; SiO2, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; 211CRCSU, Upper Cretaceous Series; <, less than; M, presence verified but not quantified; d, diluted sample: method hi range exceeded]

Date	Sample start time	Medium name	Sample type	Geologic unit code	Barometric pressure, mm Hg (00025)	Depth to water level, ft below land surface (72019)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	Flow rate, instantaneous, gallons per minute (00059)	pH, water, unfiltered, field, standard units (00400)
07-22-2010	1400	Groundwater	Regular	211CRCSU	763	150.69	< 1.0	1	3.0	8.6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 2 of 4

[%, percent; CaCO3, calcium carbonate; SiO2, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; 211CRCSU, Upper Cretaceous Series; <, less than; M, presence verified but not quantified; d, diluted sample: method hi range exceeded]

Date	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, laboratory, Hach 2100AN, nephelometric turbidity units (99872)	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)
07-22-2010	1,980	20.0	2.0	560	489	1,120	2.68	1.50	10.6	408 d

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 3 of 4

[%, percent; CaCO3, calcium carbonate; SiO2, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; 211CRCSU, Upper Cretaceous Series; <, less than; M, presence verified but not quantified; d, diluted sample: method hi range exceeded]

Date	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO3 (39086)	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)	Sulfide, water, unfiltered, field, milligrams per liter (99119)
07-22-2010	353	419	1.53 d	6	397 d	2.67 d	19.1	41.4 d	M

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 4 of 4

[%, percent; CaCO3, calcium carbonate; SiO2, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; 211CRCSU, Upper Cretaceous Series; <, less than; M, presence verified but not quantified; d, diluted sample: method hi range exceeded]

Date	Iron, water, filtered, µg/L (01046)	Manga nese, water, filtered, µg/L (01056)
07-22-2010	9	5.5