



Water-Data Report 2012

364722075591802 Local number 63C 5 SOW 173B

Northern Atlantic Coastal Plain aquifer system
Pliocene Series

Virginia Beach City, VA

LOCATION.--Lat 36°47'22", long 75°59'18" referenced to North American Datum of 1927, Virginia Beach City, VA, Hydrologic Unit 02080108, at Redwing Park, 0.7 mi northeast of intersection of Oceana Boulevard and Dam Neck Road in Virginia Beach. Owner: City of Virginia Beach.

GROUNDWATER RECORDS

WELL CHARACTERISTICS.--Depth 95 ft. Upper casing diameter 3.00 in; top of first opening 80 ft, bottom of last opening 90 ft. Drilled observation water well, screened 80 to 90 ft.

DATUM.--Land-surface datum is 9 ft above National Geodetic Vertical Datum of 1929. Measuring point: TOP OF CASING, 0.90 ft above land-surface datum, April 25, 1984, to present.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available October 1995 to September 2002 and prior to October 1985 in files of the USGS.

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

REMARKS.--Well is located in Yorktown confining unit of Pliocene age.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.00 ft below land-surface datum, Mar. 20, 1989; lowest measured, 10.16 ft below land-surface datum, Aug. 8, 2007.

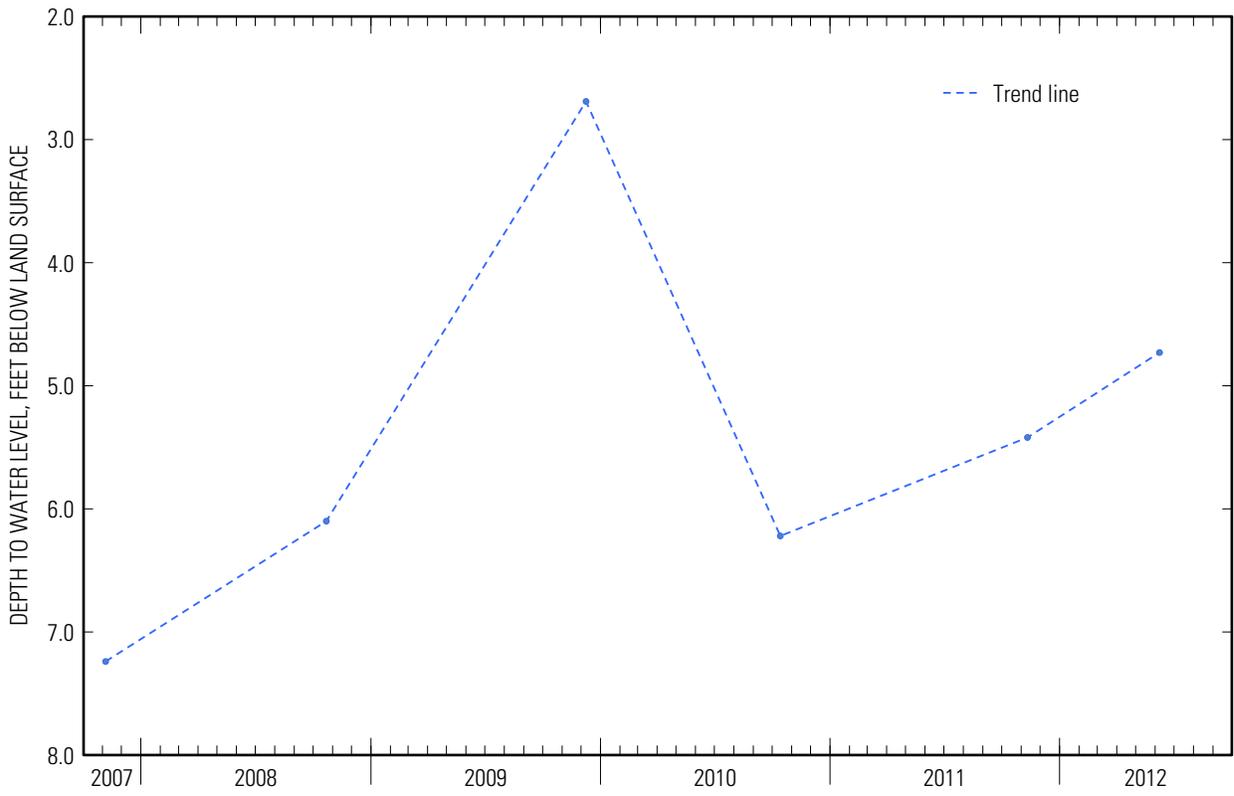
**WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

[Measurement method: S, steel tape; V, calibrated electric tape--accuracy of instrument has been checked. Water-level status: - - , static.]

Date	Water level	Measure-ment method	Water-level status	Date	Water level	Measure-ment method	Water-level status
Nov 10	5.42	S	--	Jun 7	4.73	V	--

Water year 2012 highest: 4.73, Jun 7, 2012; lowest: 5.42, Nov 10, 2011

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WATER-QUALITY RECORDS

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 1 of 4

[CaCO₃, calcium carbonate; NTRU, nephelometric turbidity ratio unit; SiO₂, silicon dioxide; ft, feet; mg/L, milligrams per liter; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; 121PLCN, Pliocene Series; <, less than]

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)
06-07-2012	1652	Groundwater	Regular	121PLCN	4.73	<1.0	2.5	7.4	318	17.5

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 2 of 4

[CaCO₃, calcium carbonate; NTRU, nephelometric turbidity ratio unit; SiO₂, silicon dioxide; ft, feet; mg/L, milligrams per liter; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; 121PLCN, Pliocene Series; <, less than]

Date	Sample start time	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Sampling depth, ft (00003)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)
06-07-2012	1652	1.0	20.0	197	125	29.2	12.7	8.86	14.2

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 3 of 4

[CaCO₃, calcium carbonate; NTRU, nephelometric turbidity ratio unit; SiO₂, silicon dioxide; ft, feet; mg/L, milligrams per liter; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; 121PLCN, Pliocene Series; <, less than]

Date	Sample start time	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (39086)	Bicarbonate, 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 SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)
06-07-2012	1652	135	164	0.065	<1.0	16.5	0.13	32.5	< .09

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 4

[CaCO₃, calcium carbonate; NTRU, nephelometric turbidity ratio unit; SiO₂, silicon dioxide; ft, feet; mg/L, milligrams per liter; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; 121PLCN, Pliocene Series; <, less than]

Date	Sample start time	Sulfide, water, unfiltered, field, milligrams per liter (99119)	Iron, water, filtered, µg/L (01046)	Manga- nese, water, filtered, µg/L (01056)
06-07-2012	1652	10.0	921	77.3