Water-Data Report 2011

385343076024201 Local number TA Ce 81

Northern Atlantic Coastal Plain aquifer system
Piney Point Formation

Talbot County, MD

LOCATION.--Lat 38°53'43.5", long 76°02'42.0" referenced to North American Datum of 1983, Talbot County, MD, Hydrologic Unit 02060002.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 320 ft. Upper casing diameter 4 in; top of first opening 300 ft, bottom of last opening 320 ft.

DATUM.--Land-surface datum is 52 ft above North American Vertical Datum of 1988. Measuring point: Undefined.

PERIOD OF RECORD.--May 2011.

COOPERATION.--Samples and field data were collected by the Maryland Geological Survey.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 1 of 8

[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; R, radchem non-detect, below ssLc]

Date	Sample start time	Medium name	Sample type	Color, water, filtered, platinum cobalt units (00080)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	pH, water, unfiltered, laboratory, standard units (00403)	Specific conductance, water, unfiltered, laboratory, µS/cm at 25 °C (90095)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)
05-24-2011	**1500**	Groundwater	Regular	< 1	< 1.0	8.0	8.1	309	307	16.1
05-24-2011	**1501**	Groundwater	Regular	--	--	--	--	--	--	--
05-24-2011	**1502**	Groundwater	Regular	--	--	--	--	--	--	--
05-24-2011	**1503**	Groundwater	Regular	--	--	--	--	--	--	--

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 385343076024201, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/385343076024201.2011.pdf

385343076024201 Local number TA Ce 81—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 2 of 8
[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; R, radchem non-detect, below ssLc]

Date	Sample start time	Sampler type (84164)	Sampling method (82398)	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)	Magne-sium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)
05-24-2011	**1500**	Sbmrsbl pos pressure	Submersible pump	189	84.2	16.9	10.1	15.7
05-24-2011	**1501**	--	--	--	--	--	--	--
05-24-2011	**1502**	--	--	--	--	--	--	--
05-24-2011	**1503**	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 3 of 8
[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; R, radchem non-detect, below ssLc]

Date	Sample start time	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, fixed endpoint (pH 4.5) titration, laboratory, mg/L as $CaCO_3$ (90410)	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as $CaCO_3$ (39086)	Bromide, water, filtered, mg/L (71870)	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)	Ammonia, water, filtered, mg/L as N (00608)
05-24-2011	**1500**	28.0	157	159	< .010	1.38	.30	22.0	4.42	.597
05-24-2011	**1501**	--	--	--	--	--	--	--	--	--
05-24-2011	**1502**	--	--	--	--	--	--	--	--	--
05-24-2011	**1503**	--	--	--	--	--	--	--	--	--

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 4 of 8
[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; R, radchem non-detect, below ssLc]

Date	Sample start time	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrate, water, filtered, mg/L as N (00618)	Nitrite, water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L (00660)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, filtered, mg/L as P (00666)	Aluminum, water, filtered, µg/L (01106)	Barium, water, filtered, µg/L (01005)	Beryllium, water, filtered, µg/L (01010)
05-24-2011	1500	< .02	< .020	< .001	.090	.029	< .02	< 1.7	.41	< .006
05-24-2011	1501	--	--	--	--	--	--	--	--	--
05-24-2011	1502	--	--	--	--	--	--	--	--	--
05-24-2011	1503	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 5 of 8
[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; R, radchem non-detect, below ssLc]

Date	Sample start time	Cadmium, water, filtered, µg/L (01025)	Chromium, water, filtered, µg/L (01030)	Cobalt, water, filtered, µg/L (01035)	Copper, water, filtered, µg/L (01040)	Iron, water, filtered, µg/L (01046)	Iron, water, unfiltered, recoverable, µg/L (01045)	Lead, water, filtered, µg/L (01049)	Lithium, water, filtered, µg/L (01130)	Manganese, water, filtered, µg/L (01056)
05-24-2011	1500	< .016	< .06	< .020	< .50	55.8	61.1	.217	24.0	2.20
05-24-2011	1501	--	--	--	--	--	--	--	--	--
05-24-2011	1502	--	--	--	--	--	--	--	--	--
05-24-2011	1503	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 6 of 8
[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; R, radchem non-detect, below ssLc]

Date	Sample start time	Manganese, water, unfiltered, recoverable, µg/L (01055)	Molybdenum, water, filtered, µg/L (01060)	Nickel, water, filtered, µg/L (01065)	Silver, water, filtered, µg/L (01075)	Strontium, water, filtered, µg/L (01080)	Thallium, water, filtered, µg/L (01057)	Vanadium, water, filtered, µg/L (01085)	Zinc, water, filtered, µg/L (01090)	Antimony, water, filtered, µg/L (01095)
05-24-2011	1500	2.22	.160	< .09	< .005	391	< .010	< .08	< 1.4	< .027
05-24-2011	1501	--	--	--	--	--	--	--	--	--
05-24-2011	1502	--	--	--	--	--	--	--	--	--
05-24-2011	1503	--	--	--	--	--	--	--	--	--

385343076024201 Local number TA Ce 81—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 7 of 8
[ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; R, radchem non-detect, below ssLc]

Date	Sample start time	Arsenate, water, filtered, micrograms per liter as arsenic (62453)	Arsenic, water, filtered, µg/L (01000)	Arsenite, water, filtered, micrograms per liter as arsenic (62452)	Boron, water, filtered, µg/L (01020)	Selenium, water, filtered, µg/L (01145)	Dimethylarsinate ((CH3)2HAsO2), water, filtered, recoverable, micrograms per liter as arsenic (62455)	Monomethylarsonate ((CH3)HAsO3-), water, filtered, recoverable, micrograms per liter as arsenic (62454)	Organic carbon, water, unfiltered, mg/L (00680)	Gross alpha radioactivity, 30-day count, water, filtered, Th-230 curve, picocuries per liter (62639)
05-24-2011	1500	--	16.7	--	120	< .03	--	--	.4	--
05-24-2011	1501	6.5	--	10.0	--	--	< 2.0	< 3.2	--	--
05-24-2011	1502	--	--	--	--	--	--	--	--	--
05-24-2011	1503	--	--	--	--	--	--	--	--	R .0

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 8 of 8
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Date	Sample start time	Gross alpha radioactivity, 72-hour count, water, filtered, Th-230 curve, picocuries per liter (62636)	Gross beta radioactivity, 30-day count, water, filtered, Cs-137 curve, picocuries per liter (62645)	Gross beta radioactivity, 72-hour count, water, filtered, Cs-137 curve, picocuries per liter (62642)	Radon-222, water, unfiltered, picocuries per liter (82303)	Uranium (natural), water, filtered, µg/L (22703)
05-24-2011	1500	--	--	--	--	< .004
05-24-2011	1501	--	--	--	--	--
05-24-2011	1502	--	--	--	500	--
05-24-2011	1503	R .2	14.3	13.8	--	--