



Water-Data Report 2007

393554075375001 Local number Dc53-86

Northern Atlantic Coastal Plain aquifer system
 Potomac Formation
 New Castle County, DE

LOCATION.--Lat 39°35'54", long 75°37'50" referenced to North American Datum of 1927, New Castle County, DE, Hydrologic Unit 02040205.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Depth 158 ft. Upper casing diameter 2 in; top of first opening 152 ft, bottom of last opening 157 ft. Drilled, observation well.

DATUM.--Land-surface datum is 50.58 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of inner casing, 2.80 ft above land-surface datum, June 5, 2007, to present.

PERIOD OF RECORD.--June 2007 to current year.

GAGE.--Water-level measurements by U.S. Geological Survey personnel.

REMARKS.--PW-8 - Potomac Aquifer Study at Standard Chlorine, Delaware City.

EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 1.25 ft below sea level, June 5, 2007; lowest measured, 2.19 ft below sea level, September 18, 2007.

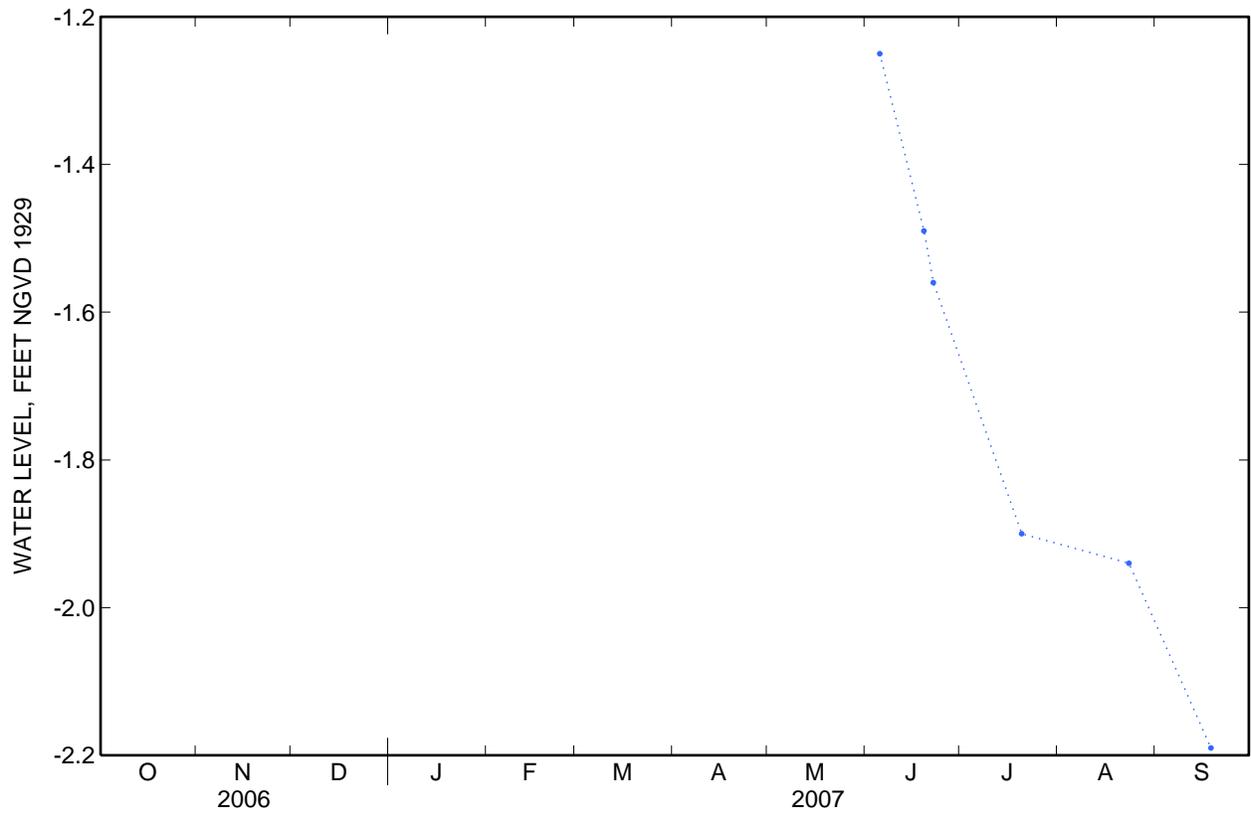
**WATER SURFACE ELEVATION IN FEET NGVD 1929
 WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

[Measurement method: T, electric tape. Water-level status: - , static.]

Date	Water level	Measure-ment method	Water-level status	Date	Water level	Measure-ment method	Water-level status
Jun 5	-1.25	T	--	Jul 20	-1.90	T	--
19	-1.49	T	--	Aug 23	-1.94	T	--
22	-1.56	T	--	Sep 18	-2.19	T	--

Water year 2007; lowest: -2.19 Sep 18, 2007 highest: -1.25 Jun 05, 2007

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water-quality records collected starting in 2007 water year.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 1 of 3

[Remark codes: <, less than.]

Date	Time	Sample type	Geologic unit	Depth of well, feet below LSD (72008)	Flow rate, instantaneous gal/min (00059)	Turbidity, IR LED light, 90 deg, FNU (63680)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (00095)	Temperature, water, deg C (00010)
Sep 10...	1551	Environmental	217PTMC	158	.20	1,560	.1	6.8	6.9	236	229	20.4

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 3

[Remark codes: <, less than.]

Date	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, water fltrd, mg/L as CaCO3 (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat fltrd, mg/L (70300)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrate + nitrite, water, fltrd, mg/L as N (00631)
Sep 10...	42	11.1	3.59	2.92	26.5	77	6.71	.34	12.1	18.0	150	.029	<.060

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 3

[Remark codes: <, less than.]

Date	Nitrite, water, fltrd, mg/L as N (00613)	Total nitrogen, water, fltrd, by analysis, mg/L (62854)	Orthophosphate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, µg/L (01046)	Manganese, water, fltrd, µg/L (01056)
Sep 10...	.006	1.13	.376	5,880	139